

WELCOME

Hager Companies provides single-source solutions for the door hardware industry with a line of quality products that includes:

- Architectural Hinges
- Residential Hinges
- Roton Continuous Geared Hinges
- Stainless Steel Continuous Hinges
- Trim & Auxiliary
- Thresholds & Weatherstripping
- Sliding Door Hardware
- Locks
- Door Closers
- Exit Devices

Since 1849, Hager's focus has been innovative products, exceptional value, and incomparable customer service. Additionally, Hager offers complimentary comprehensive consulting services. Our services include design development assistance, budget preparation, door hardware specification writing, code compliance, submitted schedules review and approval, and technical project support.

We believe that by offering these value-added services, along with our premium quality, value-priced products, you'll see for yourself how Hager gives you "more for your door than any other brand."

So whatever you're looking for—from simple everyday needs to solutions for unconventional applications—you'll find it in our 2011 Catalog.

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A Cleaner, Greener Catalog

Our Paper is FCS (Forest Stewardship Council) Certified, which means that it is sourced from responsibly managed forests. Our paper contains 10% post consumer waste.

Our Printer uses sophisticated ink-mixing technology that reduces VOCs and reduces ink waste to less than one percent. They consistently recycle, reuse, and reduce both paper

and ink consumption.

Our Inks are soy-based, reducing harmful VOCs and preventing harmful chemicals from

entering the wastewater system.

is concerned about how our company and products affect the environment. As a result, we've taken steps to minimize our impact—and we're continually reviewing ways to do more. Throughout the production of this Catalog, we made every effort

to recycle and use both sides of the paper.



Our Company



TERMINOLOGY

Terminology used in this catalog complies with the following ANSI/BHMA standards:

- ANSI A156.1 Butts and Hinges
- ANSI A156.2 Bored and Presassembled Locks and latches
- ANSI A156.3 Exit Devices
- ANSI A156.4 Door Controls-Closers
- ANSI A156.5 Auxiliary Locks and Associated Products
- ANSI A156.6 Architectural Door Trim
- ANSI A156.7 Template Hinge Dimensions
- ANSI A156.8 Door Controls-Overhead Stops and Holders
- ANSI A156.12 Interconnected Locks
- ANSI A156.13 Mortise Locks and Latches
- ANSI A156.14 Sliding and Folding Door Hardware
- ANSI A156.15 Release Devices-Closer Holder,
 Electromagnetic and Electromechanical
- ANSI A156.16 Auxiliary Hardware
- ANSI A156.17 Self Closing Hinges and Pivots
- ANSI A156.18 Materials and Finishes
- ANSI A156.21 Thresholds
- ANSI A156.22 Door Gasketing Systems
- ANSI A156.25 Electrified Locking Devices
- ANSI A156.26 Continuous Hinges
- ANSI A156.28 Keying Systems

ANSI NUMBERING SYSTEM

Letter "A" denotes section "A" of ANSI Standard

First Numeral

The first numeral indicates general type of material used.

- 1 Cast, Forged or Extruded Brass or Bronze
- 2 Wrought Brass or Bronze
- 5 Stainless Steel, 300 Series
- 8 Wrought Steel, Forged Steel or Malleable Iron

Second Numeral

The second numeral identifies type of product.

- 1 Full Mortise Hinges
- 2 Half Mortise Hinges
- 3 Full Surface Hinges
- 4 Half Surface Hinges
- 5 Anchor, Pivot Reinforced or Thrust Pivot Unit and Hinge Sets
- 6 Olive Knuckle Hinges
- 7 Pivot Hinges
- 8 Rescue Hardware

Third Numeral

The third numeral identifies the function or the description of the item or both.

- 1 Anti-Friction Bearing
- 2 Anti-Friction Bearing Swing Clear
- 3 Plain Bearing
- 4 Through 0 Special Conditions

Fourth Numeral

The fourth numeral designates the grade classification of the item.

- 1 Grade 1 4BB Extra Heavy Weight 2,500,000 Cycles
- 2 Grade 2 2BB Standard Weight 1,500,000 Cycles
- 3 Grade 3 Plain Bearing 350,000 Cycles

Information taken from: ANSI A156.1 (Butts and Hinges)

CODES AND ILLUSTRATIONS

Units of Measure

- EACH Item in a box either with or without screws.
- PACK Items poly bagged (1 or more) per bag.
- PAIR Items (1 or more) pair per box.
- SET Items (1 or more) sets per box.

Illustrations

Pictures and illustrations shown in this catalog are for general product information only and are not meant to be used as templates. Contact Hager Companies Sales and Service for templates or installation instructions, or go to www.hagerco.com to download.

Packaging

The following codes have been established to provide clarification of packaging methods. The basic code letter(s) are shown in parenthesis in the unit column of each page. The letter designation refers to the standard Hager Pack.

Hager Companies reserves the right to change the packaging methods when deemed necessary and to increase or decrease quantities to make full case quantities on a specific item.

B = Boxed

PB = Poly Bag

BLK = Bulk Pack

SET = Set

APPROVAL

Hager Companies has been approved by the U.S. Corps of Engineers and by the Veterans Administration for use on all veterans hospitals and on other buildings that would come under their jurisdiction. Approved samples are on file at the National Bureau of Standards, Washington, D.C.





DOOR MATERIALS AND FREQUENCY

	Door Thick	kness	Door Thickness				
Door Material	1-3/8" (35 mm)	1-3/4" (45 mm)	2" (51 mm)	2-1/4" (57 mm)	2-1/2" (64 mm)		
Ash	4.5	5.3	6.0	6.8	7.5		
Birch	3.8	4.3	5.0	5.6	6.3		
Fir	3.0	3.5	4.0	4.5	5.0		
Mahogany	4.5	5.3	6.0	6.8	7.5		
Oak	6.0	7.3	8.0	9.0	10.0		
White Pine	3.0	3.5	4.0	4.0	5.0		
Residential Hollow Core	1.7	2.5	-	-	-		
Institutional Hollow Core	-	3.2	-	-	-		
Staved Core	3.3	4.2	-	5.4	-		
Particle Board Core	4.0	5.0	-	-	-		
Mineral Core	-	4.0	-	-	-		
Acoustical COre	-	8.3	-	10.6	-		
Fiberglass	-	3.8	-	-	-		
Hollow Metal 18 gauge	4.3	4.6	-	-	-		
Hollow Metal 16 gauge	5.4	5.8	-	-	-		
Hollow Metal 15 gauge	6.2	6.5	-	-	-		
Hollow Metal 14 gauge	7.0	7.3	-	-	-		
Hollow Metal 13 gauge	8.3	8.7	-	-	-		
Hollow Metal 12 gauge	9.9	15.5	-	-	-		
Hollow Metal 11 gauge	11.2	11.6	-	-	-		
Hollow Metal 10 gauge	12.8	13.0	-	-	-		
1-3/4" Wood + 1/16" Lead	-	8.7	-	-	-		
1-3/4" Wood + 1/8" Lead	-	12.4	-	-	-		
1-3/4" Wood + 3/16" Lead	-	16.1	-	-	-		
1-3/4" Wood + 1/4" Lead	-	19.8	-	-	-		
1-3/4" Wood + 3/8" Lead	-	27.2	-	-	-		
1-3/4" Wood + 1/2" Lead	-	34.6	-	-	-		

Frequency of Use		
Type of Building	Daily	Yearly
High Frequency		
Large Department Store Entrance	5,000	1,825,000
Large Office Building Entrance	4,000	1,460,000
Hospital Corrifor and Surgical Doors	3,000	1,095,000
School Entrance	1,250	456,250
Office Stairwell	500	182,500
Medium Frequency		
Hospital Consultation Rooms	100	36,500
School Corridor	100	36,500
Office Building Corridor	80	29,200
Storage Room	50	18,250
Low Frequency		
Residential Entrance	30	10,950
Residential Interior	20	7,300

Note: Frequency chart recommendations apply to all average weight doors. Heavy ball bearing hinges should be used for doors having a thickness of 2" (51 mm) or more over a width of 3'4" (1016 mm). Any doors on which a closing device is used should be equipped with bearing hinges, regardless of frequency of use.



TRADE ORGANIZATIONS



The American Hardware Manufacturers **Association**

The purpose of AHMA is to promote the sale of American made products through the Hardware Distribution system. Hager Companies is a member in good standing of the American Hardware Manufacturers Association, the owner of the AHMA registered trademark.



Door and Hardware Institute Door and Hardware Institute

The purpose of the institute is to represent the architectural openings industry as a major component of the construction industry. Hager recommends the service of a qualified A.H.C. for the preparation of hardware specification and schedules. Members of this society are qualified through years of experience and rigid examination to handle the most complex hardware situations.



Builders Hardware Manufacturers Association

The Builders Hardware Manufacturers Association is a national trade group of manufacturers whose products are classified (Standard Industrial Classification #34294) and most familiarly recognized as locks and builders hardware. Where applicable this catalog shows BHMA numbers in conjunction with Hager numbers. The purpose is to advance the interests of the Builders Hardware Industry in all lawful ways.



Association of Millwork Distributors

The Association of Millwork Distributors has continued to be recognized as the leader in the millwork wholesale distribution industry for almost half of a century. The Southern Sash and Door and Northern Sash and Door organizations, joined forces 42 years ago to become the National Sash and Door Jobbers Association (NSDJA). On the 40th Anniversary of NSDJA, the association changed its name to the Association of Millwork Distributors (AMD). This change signified that the leadership and membership of the association recognized the changes in the millwork industry.

AMD represents the millwork industry with over 1,000 distributor, manufacturer, and manufacturer's representative companies, nationally and internationally, that promote the best in products and services that the millwork industry has to offer.

AMD is a chief advocate, actively engaged in issues regarding standards, trends, and resources in the millwork distribution industry. AMD monitors Congressional activity and various regulatory agencies, continually seeking to promote industry benefits for AMD members.

AMD is committed to being an essential resource for its members, providing educational products, networking events, and pertinent industry information to help members stay updated on millwork industry trends and available opportunities.



Florida Building Codes



The following products have been approved for statewide acceptance by the Florida Building Commission pursuant to Rule 9B-72.090, F.A.C., for approval of products and systems for use on Exterior Swinging Door Assemblies, in compliance with the structural requirements of the 2007 Florida Building Code.

Verification of Florida Statewide acceptance can be found at www.floridabuilding.org under the Product Approval section.

Severe Windstorm Resistant Components for Swinging Door Assemblies - ANSI A250.13 - 2003 Standard

Certified Hardware	Assembly Configuration	Door Size	Door Stiffness Class	Design Load	Florida Certification Number (FL#)	
3100 Series Grade 1 Deadbolt	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118	
13100 Series Grade 1 Deadboil	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0110	
3200 Series Grade 2 Deadbolt	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118	
3200 Series Grade 2 Deadboil	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0110	
3400 Series Grade 1 Lockset	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118	
3400 Series Grade 1 Lockset	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0118	
3500 Series Grade 2 Lockset	Single - Out Swing	3-0 x 7-0	-	860 lbf (80 psf)*	7683	
3500 Selles Glade 2 Lockset	Single - Out Swing	4-0 x 8-0	-	860 lbf (50 psf)*	7003	
3800 Series Grade 1 Mortise	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	12932	
3800 Series Grade 1 Moruse	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	12932	
4500 Rim Exit Device	Single - Out Swing	4-0 x 8-0 max.	I	+/- 70 psf - 350 ft-lbs Impact	9481	
4500 SVR Exit Device	Out Swing	8-0 x 8-0 pair max.	I	+/- 50 psf - 350 ft-lbs Impact	13178	
4700 Rim Exit Device	Single - Out Swing	4-0 x 8-0 max.	I	+/- 40 psf - 350 ft-lbs Impact	8293	
780-112 Roton Hinge	Single Swing	4-0 x 8-0 max.	I	1150 lbf (72 psf)* - 350 ft-lbs Impact	6118	
780-111, 780-224, 780-226 Roton Hinge (SD & HD)	Single Swing	4-0 x 8-0 max.	I	1150 lbf (72 psf)* - 350 ft-lbs Impact	13776	
BB1191 Hinge	Single - Out Swing	-	-	1780 lbf**	6118	
1279, 1191, BB1279, BB1168, BB1199	Single - Out Swing	-	-	1780 lbf**	13776	

^{*} Load in parenthesis indicates the equivalent load in pounds per square foot based on indicated door size and door stiffness (if applicable). This load is based on the hardware item taking half of the force applied to the door assembly by the wind load and the hinges taking the other half.

^{**} This load indicates the design load for a single butt hinge. Maximum wind load should be calculated based on door size, number of hinges used, and the other available door hardware on the door assembly.



In the mid 1800s, Charles Hager had a successful business forging metal wheel rims and hinges for wagons headed west. As a smart businessman who valued quality and innovation, Charles soon became a pioneer in product development, designing a revolutionary hinge that became a prototype for more than 5,000 hinges to follow.

Today, the Hager name is synonymous with architectural hinges. In fact, we are the industry's premiere designer and manufacturer of architectural hinges, with a product line that offers one of the widest varieties of sizes, shapes, and finishes--all of which meet or exceed ANSI standards. With legendary quality, time-tested durability, and consistent superior performance, Hager is the one name, and one brand, you can count on to provide it all.



SELECTING A HINGE

Determine Type of Hinge

- What is the door material (wood, stainless steel, fiberglass, or hollow metal)?
- What is the frame material (wood, stainless steel, channel iron, or hollow metal)?

Hinges are manufactured in accordance with ANSI/BHMA A156.1. Self-closing hinges and pivots are in accordance with ANSI/BHMA A156.17 using three hinges per opening on a $3'0'' \times 7'0'' \times 1-3/4''$ (914 mm x 2134 mm x 44 mm) door.

Round corners are available in 1/4" (6 mm) (standard) or 5/8" (16 mm) radius.

Full Mortise

Both leaves are mortised, one leaf in the door and one leaf in the frame (wood door or hollow metal door with wood frame or hollow metal frame).

Example: BB1279, 4-1/2" x 4-1/2" (114 mm x 114 mm), US26D

Half Mortise

One leaf is mortised in the door and the other is surface applied to the frame (hollow metal door with channel iron frame).

Example: BB1109, 4-1/2" (114 mm), US26D

Full Surface

Both leaves are applied to the surface, one to the door and the other to the frame (metal core door or hollow metal door with channel iron frame).

Example: BB2171, 5" (127 mm), USP

Half Surface

One leaf is mortised in the frame and the other is surface applied to the face of the door (wood door with wood frame or metal core door with hollow metal frame). Example: BB1163, 5" (152 mm), US26D

Select the Proper Weight and Bearing Structure

Because of the variety of door sizes and weights, hinges are placed into three groups:

Heavy Weight - Ball Bearing

Example: BB1199, 5" x 5" (127 mm x 127 mm), US32D

Standard Weight - Ball Bearing

Example: BB1279, 4-1/2" x 4-1/2" (114 mm x 114 mm), US26D

Standard Weight - Plain Bearing

Example: 1279, 4" x 4" (102 mm x 102 mm), US10

There are two factors that determine the weight and structure of the hinge: weight of the door and frequency of use. It is advisable to include the approximate weight of additional hardware that will be installed on the door.

Determine the Size of Hinge

The first thing to find is the height of the hinge. Follow the examples below. These are only examples. Job situations will offer many more variables.

Only on the full mortise hinges are there two dimensions, such as a 4-1/2" x 4-1/2" ($114 \times 114 \text{ mm}$). The first dimension indicates the height and the second dimension indicates the width when the hinge is in the open position.

Thickness of Door	Width of Door	Height of Hinge
1-3/8" (35 mm) Door	To 32" (813 mm)	3-1/2" (89 mm)
1-3/8" (35 mm) Door	32" to 36" (813 to 914 mm)	4" (102 mm)
1-3/4" (45 mm) Door	To 36" (914 mm)	4-1/2" (114 mm)
1-3/4" (45 mm) Door	36" to 48" (914 to 1219 mm)	5" (127 mm)
1-3/4" (45 mm) Door	Over 48" (1212 mm)	6" (152 mm)
2", 2-1/4", 2-1/2" Door (51, 57 & 64 mm)	To 42" (1067 mm)	5" (127 mm) Heavy Weight
2", 2-1/4", 2-1/2" Door (51, 57 & 64 mm)	Over 42" (1067 mm)	6" (152 mm) Heavy Weight

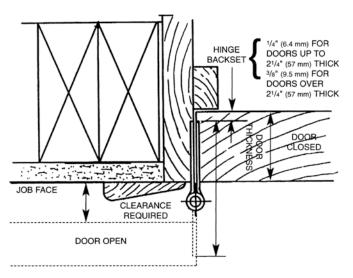
Height of Hinge

There are three dimensions to know in order to determine the minimum width of the hinge: door thickness, backset, and clearance required.

- When figuring the calculations for a wood door and wood frame, the door is flush with the casing or face of the frame. When figuring the calculations for a wood or metal door with a hollow metal frame, the door is inset approximately 1/8" (3.2 mm).
- 2. For doors up to 2-1/4" (57 mm) thick, the hinge is set back 1/4" (6.4 mm) from the back face of the door.
- 3. For doors over 2-1/4" (57 mm) thick, the hinge is set back 3/8" (9.5 mm) from the back face of the door.

Once these dimensions are known, the formula can then be applied. **Take the door thickness, subtract the backset, multiply by two, and add the clearance required.** If the hinge size is not standard, then go to the next larger hinge width. If the width of the hinge is greater than the height of the hinge [example: 4-1/2" x 6" (114 mm x 152 mm)] this is referred to as a wide throw hinge. This would apply only to full mortise hinges.





Door Thickness	Standard Backset	Max. Clearance Provided	Width of Hinge
1-3/8"	1/4" (6.4 mm)	1-1/4" (32 mm)	3-1/2" (89 mm)
(35 mm)		1-3/4" (45 mm)	4" (102 mm)
1-3/4" (45 mm)	1/4" (6.4 mm)	1" (25 mm) 1-1/2" (38 mm) 2" (51 mm) 3" (76 mm)	4" (102 mm) 4-1/2" (114 mm) 5" (127 mm) 6" (152 mm)
2" (51 mm)	1/4" (6.4 mm)	1" (25 mm) 1-1/2" (38 mm) 2-1/2" (64 mm)	4-1/2" (114 mm) 5" (127 mm) 6" (152 mm)
2-1/4"	1/4" (6.4 mm)	1" (25 mm)	5" (127 mm)
(57 mm)		2" (51 mm)	6" (152 mm)
2-1/2"	3/8" (9.5 mm)	3/4" (19 mm)	5" (127 mm)
(64 mm)		1-3/4" (45 mm)	6" (152 mm)

Minimum Width of Hinge

Determine the Number of Hinges

The next determination is the number of hinges per door leaf. A general rule of thumb: one hinge for every 30" (762 mm) of door height or fraction thereof.

<u>Door Height</u>	Number of Hinges
Up to 60" (1524 mm)	2 Hinges
Over 60" (1524 mm) and not over	
90" (2286 mm)	3 Hinges
Over 90" (2286 mm) and not over	
120" (3048 mm)	4 Hinges

For doors with a width greater than 37" (940 mm) to 48" (122 mm), an extra hinge could be used for additional strength. The extra hinge helps support the additional weight and tension applied to the frame created by the wider door width.

Doors up to 60" (1524 mm) in height shall be provided with two hinges and an additional hinge for each additional 30" (762 mm). Where spring hinges are used, at least two shall be provided.

Hinge Type

Full Mortise Hinge Height	Frequency of Use	Max Door Weight	Maximum Door Width	Туре
4-1/2" (114 mm)	Low	75	36" (914 mm)	1279
4-1/2" (114 mm)	Medium	150	36" (914 mm)	BB1279
4-1/2" (114 mm)	High	150	36" (914 mm)	BB1168
5" (127 mm)	Low	100	36" (914 mm)	1279
5" (127 mm)	Medium	175	36" (914 mm)	BB1279
5" (127 mm)	High	175	36" (914 mm)	BB1168
6" (152 mm)	Low	125	36" (914 mm)	1279
6" (152 mm)	Medium	230	36" (914 mm)	BB1279
6" (152 mm)	High	230	36" (914 mm)	BB1168

Minimum Cycle Requirements
Plain Bearing = 350,000
Standard Weight Ball Bearing = 1,500,000
Heavy Weight Ball Bearing = 2,500,000

Determine Type of Material

Steel

This has great strength, but it is a corrosive material. If the atmosphere that steel is used in is not stable, steel will begin to rust. The best application for steel is in a controlled environment, such as inside a building where the temperature and humidity are controlled.

Stainless Steel

This also has great strength. It is rust resistant and can be polished to a satin or bright finish. For highly corrosive areas, 316 grade or clear coat over 304L may be recommended. Hager Companies standard grade stainless steel is 304L.

Brass

This material is noncorrosive, rust resistant, and very decorative. However, it has less strength than the steel or stainless steel material. Brass is often used where appearance is of great concern as it may be polished and plated in various finishes.

Both steel and stainless steel hinges may be used on listed fire rated or labeled door openings. Brass material may not be used on fire rated or labeled openings because of the low melting point.



Determine Type of Finish

All steel and brass material hinges can be plated to match the available finishes that are listed in the American National Standards Institute, standard ANSI/BHMA A156.18 Materials and Finishes.

Special Rust-Resisting Finishes

When using steel base material hinges, special finishing processes can be provided that will afford additional protection to the product. A nickel undercoat may be applied prior to plating. Although this will give added protection and is considered rust-resistant, it is not to be considered rust-proof. If a true rust-resisting hinge is needed, consider using a non-ferrous metal such as brass or stainless steel.

Note: Hager Companies only warrants US10B finish over brass base material. If steel base is necessary, Hager Companies recommends US10A lacquer finish.

Antimicrobial Protection

Hager Companies uses a powder coat process to apply the $AgION^{TM}$ antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. $AgION^{TM}$ is not recommended over stainless steel.

Determine Handing

On some applications it will be necessary to order hinges that are handed. Most manufacturers use the suffix RH (right hand) and LH (left hand). Another general rule of thumb, most manufacturers make the half surface, half mortise and full surface hinges for right hand use. Conversion from right hand to left hand is very simple; take the pin out of the knuckle, remove the bottom plug, turn the hinge over, replace the plug

SINGLE DOORS

INSIDE

OUTSIDE

LEFT HAND DOOR

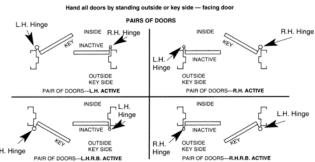
RIGHT HAND DOOR

RIGHT HAND DOOR

RIGHT HAND REVERSE BEVEL DOOR

RIGHT HAND REVERSE BEVEL DOOR

DOOR AND FRAME HANDING CHART



in the bottom and the pin in the top of the knuckle, and the handing is reversed.

- The hand of a hinge is determined from the outside of the door to which it is applied. This is usually the locked side.
- When standing outside, if the door opens away (into the area) to the right, it takes a right hand hinge (also referred to as RH). If it opens to the left, it takes a left hand hinge (also referred to as LH).
- When standing outside, if the door opens (out of the area) toward the right, it takes a left hand hinge (also referred to as right hand reverse bevel RHRB). If it opens to the left, it takes a right hand hinge (also referred to as a left hand reverse bevel LHRB).

ADDITIONAL CONSIDERATIONS Determine Pin and Tip Style

- The standard in the industry is the Flat Button Tip for 5-knuckle hinges.
- The flush/concealed tip is standard on 3-knuckle. If button tip is required, specify Exposed Tip (ET).
- Hospital Tips (HT) are used primarily for security areas in hospitals and in prisons. This tip prevents hanging any objects on the tip of the hinge. Hager provides all hospital tipped hinges with an NRP set screw in the center of the knuckle, two cross pins, stainless steel hinge pin, and an oil port for lubrication purposes. If the hinge is ball bearing, the components used for the bearing are made of stainless steel.
- Decorative tips such as Acorn, Ball, Steeple, and Urn are used in highly decorative areas of offices and residences.
- Fast Riveted Pins (FRP) are spun on both ends, making the pin permanent.





Fire Rated Application

Door Dating (Ur)	Maximum Do	or Size	Minimum Hinge Size		Toma Uinea
Door Rating (Hr)	Width	Height	Height	Thickness	Type Hinge
For 1-3/4" (44.5 mm) or thic	ker doors				
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	10 (3.05)	4-1/2 (114.3)	0.180 (4.57)	Steel, mortise or surface
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	8 (2.44)	4-1/2 (114.3)	0.134 (3.40)	Steel, mortise or surface
1-1/2, 3/4, 1/2, 1/3	3-1/16 (0.96)	8 (2.44)	6 (152.4)	0.225 (5.72)	Steel, olive knuckle or paumelle
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	10 (3.05)	4 (101.6)	0.225 (5.72)	Steel pivots (including top, bottom, and intermediate)
1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	5 (1.52)	4 (101.6)	0.130 (3.30)	Steel, mortise or surface
1-1/2, 1, 3/4, 1/2, 1/3	2 (0.61)	3 (0.91)	3 (76.2)	0.092 (2.34)	Steel, mortise or surface
3, 1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	4-1/2 (114.3)	0.134 (3.40)	Steel, mortise or surface (labeled, self-closing, spring type)
3, 1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	4 (101.6)	0.105 (2.67)	Steel, mortise or surface (labeled, self-closing, spring type)
For 1-3/8" (34.9 mm) doors					
3, 1-1/2, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	3-1/2 (89.9)	0.123 (3.12)	Steel, mortise or surface
3, 1-1/2, 1, 3/4, 1/2, 1/3	2-2/3 (0.81)	7 (2.13)	3-1/2 (89.9)	0.105 (2.67)	Steel, mortise or surface (labeled, self-closing, spring type)

Source: Table 6.4.3.1, NFPA 80-2007. Re-printed with permission.

Underwriter's Laboratories does not specifically apply UL listings to hinges. Instead, their Builder's Product Directory refers to NFPA80 Standard for Fire Doors and Fire Windows 2007 Edition, Table 6.4.3.1 Builders Hardware Mortise, Surface, and Full Length Hinges, Pivots or Spring Hinges for Swinging Doors, listed above.

Notes:

- 1. All hinges or pivots, except spring hinges, shall be of the ball bearing type. Hinges or pivots employing other anti-friction bearing surfaces shall be permitted if they meet the requirements of ANSI A156.1, Standard for Butts and Hinges. Spring hinges shall be labeled and shall meet the requirements of ANSI A156.17, Standard for Self Closing Hinges and Pivots, Grade 1.
- 2. Hinges 4-1/2" (114 mm) high, 0.180" (4.57 mm) thick shall be permitted for use on wide and heavy doors or doors that are subjected to heavy use or unusual stress.
- 3. Some manufacturers can provide fire doors with hinges of lighter weight that are not of the ball bearing type where they are part of a listed assembly and meet the requirements of ANSI A156.1, Standard for Butts and Hinges, and have been tested to a minimum of 350,000 cycles.
- 4. Pivot sets made up of components that are smaller or of a lighter gauge than shown in this table shall be permitted to be used, provided they meet the requirements of ANSI A156.4, Door Controls (Closers) and are in accordance with the manufacturer's label service procedures.

Special Hinges

Spring



NFPA 80 has restricted the use of architectural grade spring hinges to fire rated doors of a maximum size of $3'0'' \times 7'0''$ (914 mm x 2134 mm). Hager spring hinges have been tested and labeled for up to a $4'0'' \times 8'0''$ (1219 mm x 2438 mm) door when a minimum of three springs are used. Spring hinges must be used with ball bearing hinges. Do not use plain bearing hinges with spring hinges.



Special Hinges (Continued)

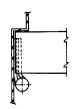
Air Transfer Hinge (ATH)



One other product that can be used for a power transfer hinge is an air or pneumatic transfer hinge. This is used to transfer as much as 120 pounds of air pressure through the hinge in order to operate an air modified lock or exit device. Pneumatic power may be used in explosion-proof areas or where electric power is not sufficient to perform the necessary job.

Raised Barrel

This option is used when the door is set back into the frame. The hinge knuckle is offset to allow it to clear the obstruction of the frame. There are three different types of applications:

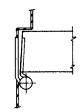


Jamb Surface Mount

On the **Jamb Surface Mount (JSM)** application, the door is mortised to accommodate both hinge leaves; it is sometimes referred to as double mortised. The Jamb Surface Mount may be applied to either a square or beveled edged door.



Raised Barrel Square



Raised Barrel Beveled

The Raised Barrel for Square Edged (RBS) and the Raised Barrel for Beveled Edged (RBB) door applications are mortised into the frame and door as a standard full mortise hinge. Standard offset is 3/8" (10 mm). Depending on the depth of the frame, all three of these applications may restrict the degree of opening.

Swing Clear



This is used when the passage area must be the full width of the opening. Swing clear hinges are designed to swing the door completely clear of the opening when the door is opened 95°.

Detention

Investment cast full mortise hinges (IHTHB953 Series) are the standard $4-1/2" \times 4-1/2"$ (114 mm x 114 mm) size with a mortise depth of 0.187" (4.7 mm). These hinges can carry doors weighing up to 600 pounds.

<u>Anchor</u>



The anchor hinges are intended for use on heavy wood or hollow metal doors in high frequency applications such as hospitals, schools, and public use buildings. These hinges are especially designed for use on doors where additional hardware (door closers or holders) may cause excessive strain or abuse to the door, frame, and/or hinges.

Anchor plates may be attached to either the frame and/or door. Their screws are placed in shear to the screws from the normal hinge plate. With the screws in shear, this prevents the hinges from pulling loose on the door or the frame.

There are two variations of the reinforcing/anchor hinge: one has a single extension leaf which is mortised into the frame only; the second has two extension leaves. One leaf is mortised into the frame and the other leaf is mortised into the top edge of the door. It will be necessary to know if the doors are square edged or beveled edged.

Aluminum Entrance



A slip-in hinge, plain bearing or ball bearing, is used with aluminum doors and frames. These hinges are manufactured for low to average frequency and medium weight aluminum doors and frames.

1277 or BB1277 – Both leaves are drilled and tapped for insertion into a slot in the door and the frame.

1278 or BB1278 – One leaf has the standard template hole punch and countersinking and the other leaf is drilled and tapped for insertion into a slot in the door or frame.

Electric Hinges

The electric hinge provides an easy means to monitor the opening as well as transferring power from the frame into the door.

Electric hinge modifications can be either exposed on the surface of the hinge or concealed in the hinge. When concealed, the modifications are not visible and normally go undetected by personnel using the openings.

All of the Hager Companies electric hinges have been tested through UL in order that our products can be used on fire rated or labeled openings.



Electric Hinges (Continued)

Another important point to remember, an electrically modified hinge is for **low voltage power transfer only (48 volts or under)**. Higher voltages are not allowed because of the potential dangers. Also a consideration is the Amperage rating of the power transfer hinges. Hager hinges include amperage ratings of 3.5 AMPS/continuous duty and 16.0 AMPS/intermittent duty (pulse).

Normally, modifications are made to full mortise hinges. For other applications, consult Hager Engineering for availability.

It is recommended that the **CENTER HINGE LOCATION** be used with all electrically modified hinges.

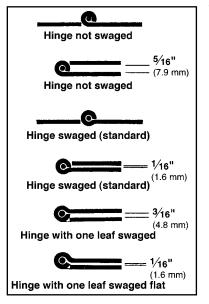
Hager Companies recommends the use of a mortar box or jamb box in order to protect the wire terminations on the inside of the frame. If this box is not used, the grout that may be poured into the frame will destroy the wiring and usually void the warranty on the product.





Swaging

Swaging is a slight offset of the hinge leaf at the barrel. This offset permits the leaves to come closer together when the door is in the closed position. If the hinge were to be left in the natural state after the knuckle was rolled, the hinge would be referred to as a "flatback". A flatback hinge has a gap between the leaves of approximately 5/16" (7.9 mm). This would allow heat and air-conditioning to escape, not to mention the unsightly gap between the door and frame.



The swaging on standard weight and heavy weight full mortise hinges provides 1/16" (1.6 mm) clearance between the leaves when the leaves are in the closed position. Full mortise hinges used on beveled doors will affect lockside clearance, especially for wide throw applications.

Security Features

Three additional features that are commonly used are: Non-Removable Pin (NRP), Safety Stud (SH), and Reverse Security Stud (RSS). **These features are intended as deterrents only.**

Non-Removable Pin



The **Non-Removable Pin (NRP)** has a small set screw in the body of the barrel. This set screw is tightened down against the pin. The pin has a groove in the position where the set screw makes contact, allowing the set screw to seat. The set screw is positioned so it cannot be reached unless the door is opened. If pin removal is necessary, the set screw is merely removed and the pin tapped from the bottom in the usual manner.

Safety Stud



The **Safety Stud (SH)** 3/16" (4.8 mm) projection is a feature that places a stud on one leaf and a locking hole on the other leaf. When the door is closed, the stud is anchored into the opposite leaf. Even if the hinge pin is removed, the door is secure because the leaves are locked together.

Reverse Security Stud



The **Reverse Security Stud (RSS)** 7/16" (11.1 mm) projection is a feature that has a stud projecting from the back of both leaves into the reinforcing plate of both the frame and the door. It is intended to keep the hinge locked in place from abuse of battering or trying to shear the hinge and screws. This feature is primarily used in prisons and psychiatric areas.



BEARING OPTIONS

When using steel based hinges, special options are available such as stainless steel pins, stainless steel bearings and stainless steel raceways.

Ball Bearing (BB) - Ball bearings are engineered to throw the knuckle weight against specially hardened steel raceways, which ride on the bearing surfaces. The one-piece cup protects the bearings from moisture and dust. The cup supports no weight so it is not subjected to functional friction, pressure or wear. Lateral wear is minimized because the pin is held against thrust by the hardened steel top and bottom raceways. The bearing units are securely press-fit to the leaf knuckle to prevent loss when the hinge is disassembled.

Oilite Bearings (OB) - The oilite bearing is made of porous metal that has been press-formed and impregnated with oil. The slight pressure and heat generated when the door is operated causes the oil to come to the surface of the bearing causing the surface to be slick and smooth.

Anti-Friction Nylon Bearings (AB) - These are made of resilient engineering plastics that provide a self-lubricant and very strong bearing surface. The nylon acts as a cushion for the door yet it allows the door to flow smoothly on the surface of the nylon with an extremely low wear factor.

ARCHITECTURAL FINISH SYMBOLS Powder Coat Finishes

Hager	Description	Steel	Brass & Bronze	Stainless Steel	HEWI#
L1	Flat Black	693	693	N/A	N/A
L2	Dark Bronze	695	695	N/A	N/A
L3	Medium Bronze	694	694	N/A	N/A
LS	Luma Sheen [®] Aluminum Paint	689	689	N/A	N/A
13P	White	N/A	N/A	N/A	1
14P	Off White	N/A	N/A	N/A	5A
15P	Grey	N/A	N/A	N/A	5
33P	Yellow	N/A	N/A	N/A	14
34P	Red	N/A	N/A	N/A	33
35P	Green	N/A	N/A	N/A	6
36P	Blue	N/A	N/A	N/A	52
83P	Black	N/A	N/A	N/A	8
84P	Olive	N/A	N/A	N/A	62
85P	Brown	N/A	N/A	N/A	9
86P	Burgundy	N/A	N/A	N/A	30
87P	Dark Green	N/A	N/A	N/A	60
88P	Dark Blue	N/A	N/A	N/A	50

Note: Available only on architectural grade full mortise plain bearing hinges, full mortise ball bearing hinges, both standard and heavy weight, in both steel and brass material.

B.H.M.A. Symbol Base Material

Hager	Description	Steel	Brass & Bronze	300 Series Stainless Steel
2C	Plain Zinc Plate	603	N/A	N/A
Н2Н	Mechanical Galvanized; steel only	N/A	N/A	N/A
3	Bright Brass	632	605	N/A
3A	Bright Brass - Unlacquered	N/A	N/A	N/A
3SC*	Brass SecureCoat [®] Stainless Steel Lifetime Finish	N/A	N/A	N/A
4	Satin Brass	633	606	N/A
5	Satin Brass, Antique	638	609	N/A
9	Bright Bronze	637	611	N/A
9A	Bright Bronze, No Lacquer	N/A	N/A	N/A
10	Satin Bronze	639	612	N/A
10A	Antique Bronze, Lacquered	641	N/A	N/A
10B	Antique Bronze, Oiled	640	613	N/A
10D	Black Nickel, Oiled	N/A	N/A	N/A
14	Bright Nickel	645	618	N/A
14B	Black Nickel, Bright	N/A	N/A	N/A
15	Satin Nickel	646	619	N/A
15A	Antique Satin Nickel, Highlighted	647	620	N/A
17A	Black Nickel, Dull	648	621	N/A
26	Bright Chromium Plated	651	625	N/A
26D	Satin Chromium Plated	652	626	N/A
32	Stainless Steel Metal, Bright	N/A	N/A	629
32D	Stainless Steel Metal, Satin	N/A	N/A	630
Р	Prime Coat	600	600	N/A
PS	Plain Steel	N/A	N/A	N/A

^{*}US3SC only available on AB800, AB850, and CB1191.

CARE AND MAINTENANCE

- Hinges must be free swinging without any binding. The use of shims to align hinges, if required, is satisfactory.
- Hinges should be well greased and checked on a regular basis for lubrication. We recommend that hinges used in commercial, high-frequency applications or those in extreme environmental conditions be lubricated annually to ensure quiet operation and long life.
- Standard hinges are best lubricated by removing the pin, applying a generous coating of lithium grease, and reinserting the pin by driving it completely down to the shoulder of the pin head.
- Hospital Tip (HT) hinges that have fixed hinge pins have an oil port on the knuckle for the purpose of lubrication.
- Water displacing sprays such as WD-40 are not recommended for hinge lubrication.
- To remove dirt, simply wipe with a soft damp cloth. Abrasive cleaners or lacquer thinner should not be used to clean the surface of hinges. To do so will void any warranty for the product.





HINGE SELECTOR - FULL MORTISE AND HALF MORTISE HINGES

	Full Mortise	Half Mortise
Hinge Description	Hollow Metal or Wood Door	Hollow Metal or Wood Door
	Hollow Metal or Wood Frame	Channel Iron Frame
Tri-Con Std. Wt. PB, Steel	700	
Tri-Con Std. Wt. PB, Brass/Stainless Steel	800	
Tri-Con Std. Wt. AB, Steel	AB700	AB701
Tri-Con Std. Wt. AB, Brass/Stainless Steel	AB800	AB801
Tri-Con Hvy. Wt. AB, Steel	AB750	AB751
Tri-Con Hvy. Wt. AB, Brass/Stainless Steel	AB850	AB851
Spring Hinge Std. Wt., Steel	1250	
Std. Wt., PB, Steel	1279	1129
Std. Wt., PB, Brass/Stainless Steel	1191	
2BB, Std. Wt., Steel	BB1279	BB1129
2BB, Std. Wt., Brass/Stainless Steel	BB1191	BB1109
4BB, Hvy Wt., Steel	BB1168	BB1138
4BB, Hvy Wt., Brass/Stainless Steel	BB1199	BB2098
3K/5K Anchor Hinge Steel, One Prong	AB7505/BB1160	
3K/5K Anchor Hinge Brass/Stainless Steel One Prong	AB8505/BB1190	
3K/5K Anchor Hinge Steel, Two Prong, Square Edge Door	AB7506/BB1162	
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Square Edge Door	AB8506/BB1192	
3K/5K Anchor Hinge Steel/Two Prong, Beveled Edge Door	AB7508/BB1166	
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Beveled Edge Door	AB8508/BB1196	
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Square Edge Door	AB7507/BB1165	
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Square Edge Door	AB8507/BB1195	
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Beveled Edge Door	AB7509/BB1167	
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Beveled Edge Door	AB8509/BB1197	
Bronze Pivot Hinge - Top	495	
Bronze Pivot Hinge - Intermediate	496	
Bronze Pivot Hinge - Bottom	497	
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door	AB7001/BB1260	BB1264
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door	AB7002/BB1261	BB1265
3K/5K Swing Clear/Hvy. Wt., BB Steel/Square Edge Door	AB7501/BB1262	AB7511
3K/5K Swing Clear/Hvy. Wt., BB Steel/ Beveled Edge Door	AB7502/BB1263	AB7512
3K/5K Swing Clear/Hvy. Wt., BB Steel		
3K/5K Std. Wt., PB, Wide Throw/Steel	700/1279	
3K/5K Std. Wt., PB, Wide Throw/Brass/Stainless Steel	800/1191	
3K/5K Std. Wt., AB, Wide Throw/Steel	AB700/BB1279	
3K/5K Std. Wt., AB, Wide Throw/Brass/Stainless Steel	AB800/BB1191	
3K/5K Hvy. Wt., AB, Wide Throw/Steel	AB750/BB1168	
3K/5K Hvy. Wt., AB, Wide Throw/Brass/Stainless Steel	AB850/BB1199	

For Hospital Tip, use prefix "HT" on above number. Hospital Tip hinges are available on all architectural hinges with the exception of anchor hinges.

Note: When ordering round corner hinges, please specify a radius of either 1/4" (6.4 mm) or 5/8" (15.9 mm). If radius is not specified, 1/4" (6.4 mm) will be supplied.

Note: For special requirements - In the event a particular hinge is not found to meet your requirements, please contact our Customer Service Department and provide Hager with the specific requirements. The Hager Technical Service Staff will prepare drawings for the appropriate application.





HINGE SELECTOR - FULL SURFACE AND HALF SURFACE HINGES

	Full Surface	Half Surface
Hinge Description	Composite or Tubular Steel Door	Composite or Wood Door
	Channel Iron Frame	Hollow Metal or Wood Frame
Tri-Con Std. Wt. PB, Steel		
Tri-Con Std. Wt. PB, Brass/Stainless Steel		
Tri-Con Std. Wt. AB, Steel	AB702	AB703
Tri-Con Std. Wt. AB, Brass/Stainless Steel	AB802	AB803
Tri-Con Hvy. Wt. AB, Steel	AB752	AB753
Tri-Con Hvy. Wt. AB, Brass/Stainless Steel	AB852	AB853
Spring Hinge Std. Wt., Steel		
Std. Wt., PB, Steel		1173
Std. Wt., PB, Brass/Stainless Steel		
2BB, Std. Wt., Steel	BB2171	BB1173
2BB, Std. Wt., Brass/Stainless Steel	BB2110	BB2112
4BB, Hvy Wt., Steel	BB2168/BB2169	BB1163
4BB, Hvy Wt., Brass/Stainless Steel	BB2108/BB2109	BB2113
3K/5K Anchor Hinge Steel, One Prong		
3K/5K Anchor Hinge Brass/Stainless Steel One Prong		
3K/5K Anchor Hinge Steel, Two Prong, Square Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Square Edge Door		
3K/5K Anchor Hinge Steel/Two Prong, Beveled Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Beveled Edge Door		
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Square Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Square Edge Door		
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Beveled Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Beveled Edge Door		
Bronze Pivot Hinge - Top		
Bronze Pivot Hinge - Intermediate		
Bronze Pivot Hinge - Bottom		
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door		
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel/Square Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel/ Beveled Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel	AB7523/BB1266	AB7534/BB1270
3K/5K Std. Wt., PB, Wide Throw/Steel		
3K/5K Std. Wt., PB, Wide Throw/Brass/Stainless Steel		
3K/5K Std. Wt., AB, Wide Throw/Steel		
3K/5K Std. Wt., AB, Wide Throw/Brass/Stainless Steel		
3K/5K Hvy. Wt., AB, Wide Throw/Steel		
3K/5K Hvy. Wt., AB, Wide Throw/Brass/Stainless Steel		

For Hospital Tip, use prefix "HT" on above number. Hospital Tip hinges are available on all architectural hinges with the exception of anchor hinges.

Note: When ordering round corner hinges, please specify a radius of either 1/4" (6.4 mm) or 5/8" (15.9 mm). If radius is not specified, 1/4" (6.4 mm) will be supplied.

Note: For special requirements - In the event a particular hinge is not found to meet your requirements, please contact our Customer Service Department and provide Hager with the specific requirements. The Hager Technical Service Staff will prepare drawings for the appropriate application.





TWO KNUCKLE HINGES



920

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

AB920

Concealed Anti-Friction Bearing - Standard Weight

Steel with steel pin (ANSI A8112)

AB923

Concealed Anti-Friction Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Handed
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	e Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



AB930

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8111)

AB933

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Handed
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Hole Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12

THREE KNUCKLE HINGES



700

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

800

Plain Bearing - Standard WeightBrass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

- Non-rising removable pin with flush pin and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service



AB700

Concealed Anti-Friction Bearing - Standard Weight

Steel with steel pin (ANSI A8112)

B800

Concealed Anti-Friction Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Non-rising removable pin with flush pin and plug
- AB800 available with SecureCoat[®] Lifetime finish (US3SC)
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	uge of Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12



THREE KNUCKLE HINGES (CONTINUED)



WTAB700

Concealed Anti-Friction Bearing -Standard Weight - Wide Throw Steel with steel pin (ANSI A8112)

WTAB800

Concealed Anti-Friction Bearing -Standard Weight - Wide Throw Brass with stainless steel pin

(ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Wide throw
- Non-rising removable pin with flush pin and plug
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size	Hinge Size		Gauge of Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12



AB750

Concealed Anti-Friction Bearing -Heavy Weight

Steel with steel pin (ANSI A8111)

AB850

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Non-rising removable pin with flush pin and plug
- AB850 available with SecureCoat[®] Lifetime finish (US3SC)
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.190	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.203	10	1/2 x 1/4-20	1-1/2 x 14



THREE KNUCKLE HINGES (CONTINUED)



WTAB750

Concealed Anti-Friction Bearing -Heavy Weight - Wide Throw Steel with steel pin (ANSI A8111)

WTAB850

Concealed Anti-Friction Bearing -Heavy Weight - Wide Throw Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Wide throw
- Non-rising removable pin with flush pin and plug
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size	inge Size Ga		Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 5	114 x 127	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.190	8	1/2 x 12-24	1-1/4 x 12

FIVE KNUCKLE HINGES



1191

Plain Bearing - Standard Weight Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

1279

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- 3-1/2" x 3-1/2" (89 mm x 89 mm) available with reverse hole pattern
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of H	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
2 x 2	51 x 51	0.083	4	-	3/4 x 8
2-1/2 x 2-1/2	64 x 64	0.089	6	-	3/4 x 8
3 x 3	76 x 76	0.097	6	-	1 x 9
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.160	10	1/2 x 1/4-20	1-1/2 x 14



FIVE KNUCKLE HINGES (CONTINUED)



WT1191

Plain Bearing - Standard Weight - Wide Throw

Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

WT1279

Plain Bearing - Standard Weight - Wide Throw

Steel with steel pin (ANSI A8133)

- Wide throw
- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 5	89 x 127	0.119	6	1/2 x 10-24	1 x 9
3-1/2 x 6	89 x 152	0.119	6	1/2 x 10-24	1 x 9
4 x 5	102 x 127	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 6	102 x 152	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 7	102 x 178	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12



CB1191

Concealed Bearing - Standard Weight

- Stainless steel with stainless steel pin (ANSI A5112)
- Non-rising removable pin with button tip and plug
- Only available with SecureCoat[®]
 Lifetime finish (US3SC)
- Specify machine screws

Hinge Size		Gauge of Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	-	1 x 9
4 x 4	102 x 102	0.129	8	-	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	-	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	-	1-1/4 x 12
5 x 4	127 x 102	0.145	8	-	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	-	1-1/4 x 12
5 x 5	127 x 127	0.145	8	-	1-1/4 x 12
6 x 4-1/2	152 x 114	0.160	10	-	1-1/2 x 14
6 x 5	152 x 127	0.160	10	-	1-1/2 x 14
6 x 6	152 x 152	0.160	10	-	1-1/2 x 14



FIVE KNUCKLE HINGES (CONTINUED)



BB1191

Ball Bearing - Standard Weight Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

BB1279



Ball Bearing - Standard Weight Steel with steel pin (ANSI A8112)

- Two ball bearings
- Non-rising removable pin with button tip and plug
- 5" x 5" (127 mm x 127 mm) and 4-1/2" x 4-1/2" (114 mm x 114 mm) BB1279 available with two different leaf sizes
- 3-1/2" x 3-1/2" (89 x 89 mm) BB1279 available with reversible hole pattern
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.160	10	1/2 x 1/4-20	1-1/2 x 14



WTBB1191

Ball Bearing - Standard Weight - Wide Throw

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

WTBB1279

Ball Bearing - Standard Weight - Wide Throw

Steel with steel pin (ANSI A8112)

- Wide throw
- Two ball bearings
- Non-rising removable pin with button tip and plug
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 5	89 x 127	0.119	6	1/2 x 10-24	1 x 9
3-1/2 x 6	89 x 152	0.119	6	1/2 x 10-24	1 x 9
4 x 5	102 x 127	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 6	102 x 152	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 7	102 x 178	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12



FIVE KNUCKLE HINGES (CONTINUED)



BB1168

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8111)

BB1199

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- 5" x 5" (127 mm x 127 mm) and 4-1/2" x 4-1/2" (114 mm x 114 mm) BB1168 available with two different leaf sizes
- For use on heavy weight doors or doors requiring high frequency service



WTBB1168

Ball Bearing - Heavy Weight - Wide Throw

Steel with steel pin (ANSI A8111)

WTBB1199

Ball Bearing - Heavy Weight - Wide Throw

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Wide throw
- Four ball bearings
- Non-rising removable pin with button tip and plug
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal Count		Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.190	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.203	10	1/2 x 1/4-20	1-1/2 x 14
8 x 6	203 x 152	0.203	16	1/2 x 1/4-20	1-1/2 x 14
8 x 8	203 x 203	0.203	16	1/2 x 1/4-20	1-1/2 x 14

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 5	114 x 127	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 6	114 x 152	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 7	114 x 178	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 8	114 x 203	0.180	8	1/2 x 12-24	1-1/4 x 12	
5 x 6	127 x 152	0.190	8	1/2 x 12-24	1-1/4 x 12	
5 x 7	127 x 178	0.190	8	1/2 x 12-24	1-1/4 x 12	
5 x 8	127 x 203	0.190	8	1/2 x 12-24	1-1/4 x 12	



EXPOSED ELECTRIC MODIFICATIONS

The following exposed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with exposed electric modification, please add the modification code to the product number (for example, BB1279 E2).



Electric Contact

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Two contacts minimum required to transfer electrical current
- Design includes insulated copper contacts
- Furnished with non-removable pins

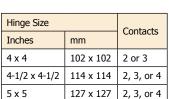




E2/E1S

Electric Contact/Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switch
- Design includes insulated copper contacts
- Furnished with non-removable pins



Contact Maximum Electrical Rating					
Volts	Amperes				
48 VDC	3.5 amps 16.0 amps	CONTINUOUS PULSE			

Hinge Size		
Inches	mm	
4 x 4	102 x 102	
4-1/2 x 4-1/2	114 x 114	
5 x 5	127 x 127	

Contact Maximum Electrical Rating					
Volts	Amperes				
48 VDC	3.5 amps 16.0 amps	CONTINUOUS PULSE			
Switch Maximum Electrical Rating					
24 VDC @ 250 amps					



E1S

Electric Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switch
- Furnished with non-removable pins



Hinge Size		
Inches	mm	
4 x 4	102 x 102	
4-1/2 x 4-1/2	114 x 114	
5 x 5	127 x 127	

Switch Maximum Electrical Rating		
24 VDC @ .250 amps		



CONCEALED ELECTRIC MODIFICATIONS

The following concealed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with concealed electric modification, please add the modification code to the product number (for example, BB1279 EMN).

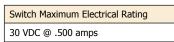




EMN

Electric Monitor Only

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Monitoring capability only
- Concealed subminiature snap action, SPDT switch
- Adjustment feature for a wide range of switch sensitivity
- Preset switching circuit
- For open loop secure, closed loop secure or single pole double throw (SPDT)





ETW

Electric Through-Wire Only

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Low voltage electric current transfer capability only
- 4, 6, 8, 10, 12 continuous electrical conductors

Wire Maximum Electrical Rating			
Volts	Amperes		
48 VDC	3.5 amps 16.0 amps	CONTINUOUS PULSE	



FTM

Electric Through-Wire with Monitoring

- · Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Both continuous electric conductors and monitoring capability
- Concealed monitor switch and 4, 6, 8, or 10 continuous electrical conductors
- Adjustment feature for a wide range of switch sensitivity
- For open loop secure, closed loop secure or single pole double throw (SPDT)

Contact Maximum Electrical Rating			
Volts	Amperes		
48 VDC	3.5 amps CONTINUOUS 16.0 amps PULSE		
Switch Maximum Electrical Rating			
30 VDC @ .500 amps			



CONCEALED AIR TRANSFER

The following hinges are available with a concealed air transfer (ATH) modification. They are available on architectural grade ball bearing and anti-friction bearing full mortise. Please note:

- ATH modification is for doors that require the transfer of compressed air.
- The hinges with ATH modification available use 5/32"
 (4 mm) plastic air tubing, have quick-connect fittings, and are capable of transferring 80-100 PSI through the air tubing.
- Steel or stainless steel hinges are acceptable for use on labeled or fire rated doors.
- Hinge pins are not field removable.
- NRP and safety stud are not available.



AB700

Standard Weight

Steel

AB800

Standard Weight

Stainless steel, brass



AB750

Heavy Weight

Steel



Heavy Weight

Stainless steel, brass



BB1191

Standard Weight Stainless steel, brass

BB1279

Standard Weight

Steel

BB1168

Heavy Weight

Steel

BB1199

Heavy Weight

Stainless steel, brass

Hinge Size				
Inches	mm			
4-1/2 x 4	112 x 102			
4-1/2 x 4-1/2	114 x 114			
5 x 4	127 x 102			
5 x 4-1/2	127 x 114			
5 x 5	127 x 127			





430

Mortar Box

- Galvanized steel 0.040 (1 mm)
- Dimensions 9" (2.29 mm) length with tabs, 7" (1.78 mm) inside, 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Removable back for servicing
- · Serves as mortar shield
- Top and bottom knockouts for standard conduit fittings
- Fits hinge reinforcements for 4-1/2" (114 mm) or 5" (127 mm) architectural grade hinges



SINGLE ACTING

The following single acting spring hinges are for automatic closing of door. They meet codes for hotels, motels, institutions, and commercial buildings. Please note:

- 1150 is not available in $3-1/2" \times 3-1/2"$ (89 mm x 89 mm) and $4" \times 4"$ (102 mm x 102 mm) sizes.
- 1250 is available with raised barrel for straight or beveled doors.
- 1250 approved for use on 4' 0" x 8' 0" (1219 mm x 2438 mm)
- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1150

Square Corner

Stainless steel with stainless steel components (ANSI K51071F)

1250

Square Corner

Steel with Steel components (ANSI K81071F)

1251

1/4" Radius

Steel with Steel components (ANSI K81071F)

1252

5/8" Radius

Steel with Steel components (ANSI K81071F)

1255

Square Corner Set

Steel with Steel components (ANSI K81071F) Two each 1250 and one each AB700

1256

Square Corner Set

Steel with Steel components (ANSI K81071F) Two each 1250 and one each BB1279

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.134	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Series	Size	Recommended Max Door Weight (lbs)	Spring Hinge	Ball Bearing Hinge	
For use o	For use on 1-3/8" (35 mm) door				
1250	3-1/2 x 3-1/2	40	1	2	
1250	3-1/2 x 3-1/2	70	2	1	
1250	3-1/2 x -1/2	90	3	-	
For use o	n 1-3/4" (45 mm) door				
1250	4 x 4	60	1	2	
1250	4 x 4	85	2	1	
1250	4 x 4	110	3	-	
1150	4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2	
1150	4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1	
1150	4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-	
1250	4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2	
1250	4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1	
1250	4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-	
1255	4-1/2 x 4-1/2	115	2	1	
1256	4-1/2 x 4-1/2	115	2	1	





REVERSE ACTION - SINGLE ACTING

The following reverse action, single acting spring hinges are for automatic opening of door. They meet codes for hotels, motels, institutions, and commercial buildings. Please note:

- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1257

Square Corner Steel (ANSI K81071)

1258

1/4" Radius Steel (ANSI K81071)

1259

5/8" Radius

Steel (ANSI K81071)

Hinge Size		Gauge of Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.134	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Size	Recommended Max Door Weight (lbs)	Spring	
For use on 1-3/8" (35 mm) door		
3-1/2 x 3-1/2	40	1	2
3-1/2 x 3-1/2	70	2	1
3-1/2 x 3-1/2	90	3	-
For use on 1-3/4" (45 mm) door		
4 x 4	60	1	2
4 x 4	85	2	1
4 x 4	110	3	-
4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2
4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1
4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-

SWING CLEAR

The following swing clear spring hinge is for automatic closing of door. It provides the features of both a swing clear hinge and a spring hinge. It meets codes for hotels, motels, institutions, and commercial buildings. Please note:

- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1267

Square Corner Steel with steel components (ANSI K81071F)



Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal Count	Machine	Wood	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



FIVE KNUCKLE



EC1100 | EC1100NRP

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

EC1101

Plain Bearing - Standard WeightStainless steel with stainless steel pin
(ANSI A5133) or brass with stainless steel
pin (ANSI A2133)

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service
- EC1100NRP is the same as EC1100 but with a non-removable pin
- EC1101 fasteners are AMS x 1/2 WS
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



ECRC1100

Plain Bearing - Standard Weight

- Steel with steel pin (ANSI A8133)
- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- Round corner with 1/4" (6 mm) radius standard
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12



ECBB1100 | ECBB1100NRP

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8112)

ECBB1101 | ECBB1101NRP

Ball Bearing - Standard WeightBrass with stainless steel pin
(ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- · Two ball bearings
- Non-rising removable pin with button tip and plug
- ECBB1100NRP and ECBB1101NRP are the same as ECBB1100 and ECBB1101, but with a non-removable pin
- ECBB1101 and ECBB1101NRP only available in 4-1/2" x 4-1/2" (114 mm x 114 mm)
- ECBB1101 and ECBB1101NRP fasteners are AMS x 1/2 WS
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



ECRCBB1100

Ball Bearing - Standard Weight

- Steel with steel pin (ANSI A8112)
- Two ball bearings
- Non-rising removable pin with button tip and plug
- Round corner with 1/4" (6 mm) radius standard
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12	



FIVE KNUCKLE (CONTINUED)



ECBB1102 | ECBB1102NRP

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8111)

ECBB1103 | ECBB1103NRP

Ball Bearing - Heavy WeightBrass with stainless steel pin
(ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Four ball bearings
- Non-rising removable pin with flush pin and plug
- ECBB1102NRP and ECBB1103NRP are the same as ECBB1102 and ECBB1103, but with a non-removable pin
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12

SPRING HINGE

The following ECCO single acting spring hinge is for automatic closing of door. It meets codes for hotels, motels, institutions, and commercial buildings. Please note:

- For use on 1-3/4" (45 mm) doors.
- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/misaligned frames, or weatherstripping on doors may require additional spring hinges.



EC1105 Square Corner Steel (ANSI K81071F)



Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Size	Recommended Max Door Weight (lbs)	Spring Hinge	Ball Bearing Hinge
4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2
4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1
4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-



THREE KNUCKLE HINGES



AB701

Concealed Anti-Friction Bearing - Standard Weight

Steel with steel pin (ANSI A8212)

AB801

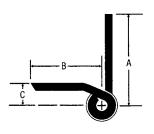
Concealed Anti-Friction Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2212) or stainless steel with stainless steel pin (ANSI A5212)

- Non-rising removable pin with flush pin and plug
- Reversible
- For use on medium weight hollow metal doors with channel iron frames requiring medium frequency service

Hinge Siz	Size Gauge of Hol		Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH	
5	127	0.145	8	1/2 x 12-24 FH	1/2 x 12-24 OH	

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	3/8	10
5	127	2	51	1-1/2	38	3/8	10





AB751

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8211)

AB851

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2211) or stainless steel with stainless steel pin (ANSI A5211)

- Non-rising removable pin with flush pin and plug
- Reversible
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	e	Gauge of Hole Machine Screw		Machine Screw Size	ze		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	7	1/2 x 12-24 FH	1/2 x 12-24 OH		
5	127	0.190	8	1/2 x 12-24 FH	1/2 x 12-24 OH		
6+	152	0.203* 0.190*	9	1/2 x 1/4-20 FH	1/2 x 1/4-20 OH		

Hinge Size		Door Leaf Width "A"		Jamb Lea "B"	of Width	Jamb Leaf Offset "C"	
Inches	mm	Inches	Inches mm Inc		mm	Inches	mm
4-1/2	114	2-1/16	53	1-1/2	38	7/16	11
5	127	2-1/16	53	1-1/2	38	7/16	11
6 x 1-3/4 ⁺	152	2-1/8	, -		38	1/2	12.5

⁺ Door thickness must be specified.

^{* 0.203} for brass and steel. 0.190 for stainless steel.



FIVE KNUCKLE HINGES



1129

Plain Bearing - Standard Weight

- Steel with steel pin (ANSI A8233)
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- Not for use with door closer
- For use on medium weight hollow metal doors with channel iron frames requiring low frequency service

Hinge Siz	Hinge Size Gauge of		Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH	

Hinge Size		Door Lea Width "A		Jamb Lea "B"	of Width	Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	2 51		38	3/8	10



BB1109

Ball Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2212) or stainless steel with stainless steel pin (ANSI A5212)

BB1129

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8212)

- · Two ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on medium weight hollow metal doors with channel iron frames requiring medium frequency service

Hinge Siz	e	Gauge of Hole		Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH	
5	127	0.145	8	1/2 x 12-24 FH	1/2 x 12-24 OH	

Hinge Size		Door Lea Width "A		Jamb Lea "B"	f Width	Jamb Lea Offset "C	
Inches	mm	Inches mm		Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	3/8	10
5	127	2	51	1-1/2	38	3/8	10



BB1138

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8212)

BB2098

Ball Bearing - Heavy Weight

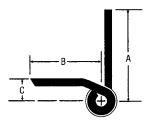
Brass with stainless steel pin (ANSI A2211) or stainless steel with stainless steel pin (ANSI A5211)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- · Beveled surface leaf
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	inge Size Gauge of		Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	7	1/2 x 12-24 FH	1/2 x 12-24 OH		
5	127	0.190	8	1/2 x 12-24 FH	1/2 x 12-24 OH		
6+	152	0.203* 0.190*	9	1/2 x 1/4-20 FH	1/2 x 1/4-20 OH		

Hinge Size		Door Leaf Width "A"		Jamb Lea "B"	of Width	Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-1/16	53	1-1/2	38	7/16	11
5	127	2-1/16	53	1-1/2	38	7/16	11
6 x 1-3/4 ⁺	152	2-1/8	54	1-1/2	38	1/2	12.5

- ⁺ Door thickness must be specified.
- * 0.203 for brass and steel. 0.190 for stainless steel.





THREE KNUCKLE HINGES



AB702

Concealed Anti-Friction Bearing - Standard Weight

Steel with steel pin (ANSI A8312)

AB802

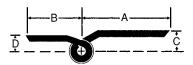
Concealed Anti-Friction Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2312) or stainless steel with stainless steel pin (ANSI A5312)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaves
- For use on medium weight tubular steel doors with channel iron frames requiring medium frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal	Metal Count Door Leaf		Jamb Leaf		
4-1/2	114	0.134	6	2 x 1/4-20 OH	1/2 x 12-24 OH		
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 OH		

Hinge Size		Door Lea		Jamb Leaf Width "B" Jamb Leaf Offset "C"					
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	1/2	12.5	3/8	10
5	127	2-7/8	73	1-1/2	38	1/2	12.5	3/8	10





AB752

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8311)

AB852

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2311) or stainless steel with stainless steel pin (ANSI A5311)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaves
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	nge Size Gauge of		Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	6	2 x 1/4-20 OH	1/2 x 12-24 OH		
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 OH		
6+	152	0.203* 0.190*	9	2 x 1/4-20 OH	1/2 x 12-20 OH		

Hinge S	Hinge Size Door Leaf Width "A"			Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Jamb Leaf Offset "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	9/16	14	7/16	11
5	127	2-7/8	73	1-1/2	38	9/16	14	7/16	11
6 ⁺	152	3-1/4	83	1-1/2	38	5/8	15	1/2	12.5

- + Door thickness must be specified.
- * 0.203 for brass and steel. 0.190 for stainless steel.



FIVE KNUCKLE HINGES



BB2108

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2361) or stainless steel with stainless steel pin (ANSI A5361)

BB2168

Ball Bearing - Heavy Weight

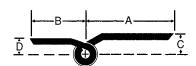
Steel with steel pin (ANSI A8361)

- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on tubular steel doors with channel iron frames requiring high frequency service

Hinge Siz	ze	Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		
6+	152	0.203* 0.190*	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		

Hinge S	Hinge Size Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Jamb Leaf Offset "D"		
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	9/16	14	7/16	11
5	127	2-5/16	59	1-1/2	38	9/16	14	7/16	11
6+	152	2-3/8	60	1-1/2	38	5/8	15	1/2	12.5

- + Door thickness must be specified.
- * 0.203 for brass and steel. 0.190 for stainless steel.





BB2109

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2311) or stainless steel with stainless steel pin (ANSI A5311)

BB2169

Ball Bearing - Heavy Weight

Steel with steel pin (ANSI A8311)

- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on heavy hollow metal or wood composite doors with channel iron frames requiring high frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.180	6	2 x 1/4-20 OH	1/2 x 12-24 OH			
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 OH			
6+	152	0.203* 0.190*	9	2 x 1/4-20 OH	1/2 x 12-24 OH			

Hinge S	Hinge Size Door Leaf Width "A"					Jamb Leaf Offset "C"		Jamb Leaf Offset "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	9/16	14	7/16	11
5	127	2-7/8	73	1-1/2	38	9/16	14	7/16	11
6+	152	3-1/4	83	1-1/2	38	5/8	15	1/2	12.5

- + Door thickness must be specified.
- * 0.203 for brass and steel. 0.190 for stainless steel.



FIVE KNUCKLE HINGES (CONTINUED)



BB2110

Ball Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2312) or stainless steel with stainless steel pin (ANSI A5312)

BB2171

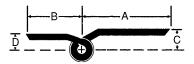
Ball Bearing - Standard Weight

Steel with steel pin (ANSI A8312)

- Two ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on medium weight hollow metal or wood composite doors with channel iron frames requiring medium frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.134	6	2 x 1/4-20 OH	1/2 x 12-24 OH			
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 OH			

Hinge S	Hinge Size Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Jamb Leaf Offset "D"		
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	1/2	12.5	3/8	10
5	127	2-7/8	73	1-1/2	38	1/2	12.5	3/8	10



WELDING HINGES



1850

Plain Bearing - Heavy Weight

- Steel with steel pin
- Flat surface with no swage
- No holes
- Square corners
- Fast riveted pin
- Manufactured with no holes and can easily be welded onto gates, dumpsters, and industrial applications such as bins or warehouse doors

Hinge Size		Gauge of	Pin	Recommended Max	
Inches	mm	Metal	Diameter	Door Weight (lbs)	
4 x 4	102 x 102	0.179	0.312	150	
4-1/2 x 4-1/2	114 x 114	0.179 0.322		150	
5 x 5	127 x 127	0.179 0.322		175	
6 x 6	152 x 152	0.203 0.500		230	
Hinge Size		Door Thick	noss	Max Door Width	
Inches	mm	Door Thickness		Max Door Width	
4 x 4	102 x 102	1-3/8" (35 1-3/4" (45	•	36" (91 cm)	
4-1/2 x 4-1/2	114 x 114	1-3/4" (45 2" (51 mm	•	36" (91 cm)	
5 x 5	127 x 127	1-3/4" (45 mm) to 2-1/2" (64 mm)		42" (107 cm)	
6 x 6	152 x 152	1-3/4" (45 2-1/2" (64	,	48" (122 cm)	

SPRING HINGES



1303

Double Acting

- Steel (ANSI K81041)
- Adjustable

Product	Hinge Size		3 Hinges Max	3 Hinges Max		
Product	Inches	mm	Door Weight	Door Width		
1303-3	3	76	35 lbs 2'-8"			
1303-4	4	102	75 lbs 3'			
1303-5	5	127	90 lbs 3'			
1303-6	6	152	100 lbs 3'			
Product	Min Door Thickness	Min Door Height	Wood Screw			
1303-3	3/4" - 1"	5′-0″	6 x (#6 x 3/4"	FPH WS)		
1303-4	7/8" - 1-1/4"	6′-8″	8 x (#6 x 3/4" FPH WS)			
1303-5	1-1/8" - 1-1/2"	6′-8″	10 x (#8 x 1-1/4" FPH WS)			
1303-6	1-1/4" - 1-3/4"	7'-0"	10 x (#10 x 1-1/4" FPH WS)			



THREE KNUCKLE HINGES



AB703

Concealed Anti-Friction Bearing - Standard Weight

Steel with steel pin (ANSI A8412)

AB803

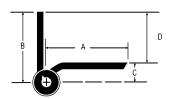
Concealed Anti-Friction Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2412) or stainless steel with stainless steel pin (ANSI A5412)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaf
- For use on medium weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH			
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 FH			

Hinge Size		Door Lea		Jamb Le Width "E		Jamb Le Offset "		Applicat "D"	ion
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38
5	127	2-7/8	73	2	51	1/2	12.5	1-1/2	38





AB753

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8411)

AR853

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2411) or stainless steel with stainless steel pin (ANSI A5411)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaf
- For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

Hinge Siz	Hinge Size		Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH			
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH			
6+	152	0.203* 0.190*	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH			

Hinge Size		Door Lea		Jamb Le Width "E		Jamb Le		Applicat "D"	ion
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2-1/16	52	9/16	14	1-1/2	38
5	127	2-7/8	73	2-1/16	52	9/16	14	1-1/2	38
6+	152	3-1/4	83	2-1/8 or 2-1/2	54 or 64	5/8	16	1-1/2 or 1-7/8	38 or 48

+ Door thickness must be specified.

* 0.203 for brass and steel. 0.190 for stainless steel.



FIVE KNUCKLE HINGES



BB1163

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8411)

BB2113

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2411) or stainless steel with stainless steel pin (ANSI A5411)

- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal Count		Door Leaf	Jamb Leaf		
4-1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH		
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH		
6+	152	0.203* 0.190*	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH		

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2-1/16	38	9/16	14	7/16	11
5	127	2-7/8	73	2-1/16	38	9/16	14	7/16	11
6+	152	3-1/4	83	2-1/8 or 2-1/2	54 or 64	5/8	16	1-1/2 or 1-7/8	38 or 48

- + Door thickness must be specified.
- * 0.203 for brass and steel. 0.190 for stainless steel.



1173

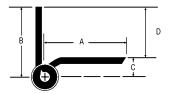
Plain Bearing - Standard Weight

- Steel with steel pin (ANSI A8433)
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring low frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal Count		Door Leaf	Jamb Leaf		
3-1/2*	89	0.119	6	1-3/4 x 10-24 OH	1/2 x 10-24 FH		
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH		
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH		

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
3-1/2*	89	1-5/8	41	1-9/16	31	7/16	11.5	1-1/16	27
4*	102	2-5/16	59	1-13/16	46	1/2	13	1-5/16	33
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38

* For 1-3/8" door





FIVE KNUCKLE HINGES (CONTINUED)

BB1173

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8412)

BB2112

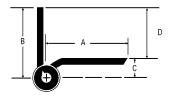
Ball Bearing - Standard WeightBrass with stainless steel pin
(ANSI A2412) or stainless steel with
stainless steel pin (ANSI A5412)

- Two ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

Hinge Size		Gauge of Hole		Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH	
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH	
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-20 FH	

Hinge S	ge Size Door Leaf Jamb Leaf Width "A" Width "B"		Door Leaf Offset "C"		Application "D"				
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4*	102	2-5/16	59	1-13/16	46	1/2	13	1-5/16	33
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38
5	127	2-7/8	73	2	51	1/2	12.5	1-1/2	38

^{*} For 1-3/8" door



SPRING HINGES



1253

Single Acting

- Steel (ANSI K81081F)
- Thru-bolts and grommets for wood door applications
- For maximum versatility use all spring hinges or a combination of spring and ball bearing hinges (do not use plain bearing hinges)
- Full spring tension may not be required on all hinges
- Strong wind conditions, drafts, carpeting drag, twisted/misaligned frames, or weatherstripping on doors may require additional spring hinges
- For automatic closing of door
- Meets codes for hotels, motels, institutions, and commercial buildings

Hinge Siz	Hinge Size Gauge of He		Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	2 x 1/4-20 with grommet nuts	1/2 x 12-24	

Hinge S	Hinge Size Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"		
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2	52	1/2	14	1-1/2	38

Hinge Siz	Hinge Size Recommended Max Door Weight			Spring Hinge	Ball Bearing	Spring Hinge Location	
Inches	mm	lbs	kg	rillige	Hinge	LUCALIUII	
4-1/2	114	70	32	1	2	Center	
4-1/2	114	115	52	2	1	Top or Bottom	
4-1/2	114	150	68	3	-	All	



FIVE KNUCKLE

The following hinges are for use on aluminum doors with aluminum frames. They are applied by inserting the hinge leaves through a slot in the door or frame. These hinges:

- Have a non-rising removable pin with button tip and plug.
- Are handed.
- Use ball bearings with door closer.



1277

Plain Bearing - Standard Weight Both Leaves Tapped

Steel with steel pin [ANSI A8143, 5/16" (8 mm) Swage]

1278

Plain Bearing - Standard Weight One Leaf Tapped

Steel with steel pin [ANSI A8153, 3/16" (5 mm) Swage]

1577

Plain Bearing - Standard Weight Both Leaves Tapped

Brass with stainless steel pin [ANSI A2143, 5/16" (8 mm) Swage] or stainless steel with stainless steel pin [ANSI A5143, 5/16" (8 mm) Swage]

1578

Plain Bearing - Standard Weight One Leaf Tapped

Brass with stainless steel pin [ANSI A2153, 3/16" (5 mm) Swage] or stainless steel with stainless steel pin [ANSI A5143, 3/16" (5 mm) Swage]

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	



BB1277

Ball Bearing - Standard Weight Both Leaves Tapped

Steel with steel pin [ANSI A8142, 5/16" (8 mm) Swage]

BB1278

Ball Bearing - Standard Weight One Leaf Tapped

Steel with steel pin [ANSI A8152, 3/16" (5 mm) Swage]

BB1577

Ball Bearing - Standard Weight Both Leaves Tapped

Brass with stainless steel pin [ANSI A2142, 5/16" (8 mm) Swage] or stainless steel with stainless steel pin [ANSI A5142, 5/16" (8 mm) Swage]

BB1578

Ball Bearing - Standard Weight One Leaf Tapped

Brass with stainless steel pin [ANSI A2152, 3/16" (5 mm) Swage] or stainless steel with stainless steel pin [ANSI A5142, 3/16" (5 mm) Swage]

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	



THREE KNUCKLE HINGES

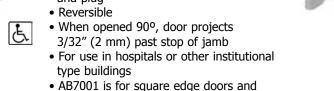


AB7001 | AB7002

Full Mortise - Concealed Anti-Friction Bearing - Standard Weight

- Steel with steel pin (ANSI A8122)
- Non-rising removable pin with flush pin and plug
- AB7001 is for square edge doors and AB7002 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2	114	0.139	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.139	8	1/2 x 12-24 FH	1-1/4 x 12 FH	





AB7511 | AB7512

Half Mortise - Concealed Anti-Friction Bearing - Heavy Weight

- Steel with steel pin (ANSI A8221)
- Non-rising removable pin with flush pin and plug
- Reversible



- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- AB7511 is for square edge doors and AB7512 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
5	127	0.187	8	1/2 x 12-24 FH 1-1/4 x 12 FH	1/2 x 1/4-20 FH 1-1/2 x 14 FH	



AB7501 | AB7502

Full Mortise - Concealed Anti-Friction Bearing - Heavy Weight

- Steel with steel pin (ANSI A8121)
- Non-rising removable pin with flush pin and plug
- Reversible



- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- AB7501 is for square edge doors and AB7502 is for beveled edge doors

Hinge Siz	Hinge Size		Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2	114	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH	



AB7523

Full Surface - Concealed Anti-Friction Bearing - Heavy Weight

- Steel with steel pin (ANSI A8321)
- Non-rising removable pin with flush pin and plug
- Reversible



- Beveled surface leaves
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH	



AB7534

Half Surface - Concealed Anti-Friction Bearing - Heavy Weight Charles in (ANCLASA)

- Steel with steel pin (ANSI A8421)
- Non-rising removable pin with flush pin and plug
- Reversible
- Ė
- Beveled surface leaf
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

Hinge Siz	Hinge Size		Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH





FIVE KNUCKLE HINGES



1260

Full Mortise - Plain Bearing - Standard Weight

- Steel with steel pin (ANSI A8123)
- Non-rising removable pin with button tip and plug
- Reversible



- When opened 90°, door projects 9/64" (4 mm) past stop of jamb for 3-1/2" hinge and 3/16" (5 mm) past stop of jamb for 4" hinge
- For residential and commercial use
- For square edge doors

Hinge Siz	e	Gauge of	Gauge of Hole Screw Size		
Inches	mm	Metal	Count	Machine	Wood
3-1/2	89	0.119	6	1/2 x 10-24 FH	1 x 9 FH
4	102	0.129	8	1/2 x 12-24 FH	1-1/4 x 12 FH



BB1260 | BB1261

Full Mortise - Ball Bearing -Standard Weight

- Steel with steel pin (ANSI A8122)
- Two ball bearings
- Non-rising removable pin with button tip and plug



- Reversible
- When opened 90°, door projects 3/32" (2 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1260 is for square edge doors and BB1261 is for beveled edge doors

Hinge Siz	e	Gauge of Hole		Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2	114	0.134	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.145	8	1/2 x 12-24 FH	1-1/4 x 12 FH	



BB1262 | BB1263

Full Mortise - Ball Bearing -Heavy Weight

- Steel with steel pin (ANSI A8121)
- Four ball bearings
- Non-rising removable pin with button tip and plug



- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1262 is for square edge doors and BB1263 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.180	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.190	8	1/2 x 12-24 FH	1-1/4 x 12 FH



BB1360 | BB1361

Full Mortise - Ball Bearing -Standard Weight

- Stainless steel with stainless steel pin (ANSI A5122)
- Two ball bearings
- Non-rising removable pin with button tip and plug



- Reversible
- When opened 90°, door projects 3/32" (2 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1360 is for square edge doors and BB1361 is for beveled edge doors

Hinge Siz	е	Gauge of	dauge of Tiole	Screw Size	Size	
Inches	mm	Metal		Machine	Wood	
4-1/2	114	0.134	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.145	8	1/2 x 12-24 FH	1-1/4 x 12 FH	



FIVE KNUCKLE HINGES (CONTINUED)



BB1362 | BB1363

Full Mortise - Ball Bearing -Heavy Weight

- Stainless steel with stainless steel pin (ANSI A5121)
- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
 - When opened 90°, door projects 11/64" (4 mm) past stop of jamb
 - For use in hospitals or other institutional type buildings
 - BB1362 is for square edge doors and BB1363 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.180	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.190	8	1/2 x 12-24 FH	1-1/4 x 12 FH



BB1264 | BB1265

Half Mortise - Ball Bearing -Heavy Weight

- Steel with steel pin (ANSI A8221)
- · Four ball bearings
- Non-rising removable pin with button tip and plug



- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1264 is for square edge doors and BB1265 is for beveled edge doors

Hinge Size		Gauge of Hole	Door Leaf Screw Size		
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH
		Jamb Leaf Screw Size			
		Machine	Wood		
				1/2 x 1/4-20 FH	1-1/4 x 12 FH



BB1266

Full Surface - Ball Bearing -Heavy Weight

- Steel with stainless steel pin (ANSI A8321)
- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

Hinge Siz	e	Gauge of Hole Screw Size			
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 1/4-20 FH



BB1270

Half Surface - Ball Bearing -Heavy Weight

- Steel with stainless steel pin (ANSI A8421)
- Four ball bearings
- Non-rising removable pin with button tip and plug
- <u>\$</u> |
 - Reversible
 Beveled surface leaf
 - When opened 90°, door projects 11/64" (4 mm) past stop of jamb
 - For use in hospitals or other institutional type buildings

Hinge Siz	e	Gauge of	Hole	Machine Screw Size	
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH



THREE KNUCKLE HINGES



AB7505

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8511)

AB8505

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- One anchor leaf (frame)
- Must be used with one pair of heavy weight, full mortise hinges (AB750 or AB850) - sold separately
- For use on heavy weight doors receiving high frequency use

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal Count		Machine	Wood
5 x 4-1/2	127 x 114	0.190	12	1/2 x 12-24	1-1/4 x 12



AB7506 | AB7508

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8511)

AB8506 | AB8508

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (AB750 or AB850) - sold separately
- For use on heavy weight doors receiving high frequency use
- AB7506 is for square edge doors and AB7508 is for beveled edge doors
- AB8506 is for square edge doors and AB8508 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	18	1/2 x 12-24	1-1/4 x 12



AB7507 | AB7509

Concealed Anti-Friction Bearing - Heavy Weight

Steel with steel pin (ANSI A8511)

AB8507 | AB8509

Concealed Anti-Friction Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (AB750 or AB850) - sold separately
- For use on heavy weight doors receiving high frequency use and when concealed door closer is used
- AB7507 is for square edge doors and AB7509 is for beveled edge doors
- AB8507 is for square edge doors and AB8509 is for beveled edge doors

Hinge Size		Gauge of	Gauge of Thore		Screw Size	
Inches	mm	Metal Count		Machine	Wood	
5 x 4-1/2	127 x 114	0.190	15	1/2 x 12-24	1-1/4 x 12	





FIVE KNUCKLE HINGES



BB1160

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

BB1190

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- One anchor leaf (frame)
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	12	1/2 x 12-24	1-1/4 x 12



BB1162 | BB1166

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

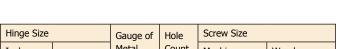
BB1192 | BB1196

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use
- BB1162 is for square edge doors and BB1166 is for beveled edge doors
- BB1192 is for square edge doors and BB1196 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	18	1/2 x 12-24	1-1/4 x 12



BB1165 | BB1167

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

BB1195 | BB1197

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use and when concealed door closer is used
- BB1165 is for square edge doors and BB1167 is for beveled edge doors
- BB1195 is for square edge doors and BB1197 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	15	1/2 x 12-24	1-1/4 x 12





REINFORCING



251

Full Surface

For 3-1/2" (89 mm) wide hinge Handed

252

Full Surface

For 4" (102 mm) wide hinge Non-handed

253

Full Surface

For 4-1/2" (114 mm) wide hinge Non-handed

254

Full Surface

For 5" (127 mm) wide hinge Handed

Product	Butt Hing	Butt Hinge Width		Projection*		ckness
Product	Inches	mm	Inches	Inches mm		mm
251	3-1/2	89	5/8	16	1-3/8	35
252	4	102	1/2	12.5	1-3/4	45
253	4-1/2	114	3/4	19	1-3/4	45
254	5	127	1	25	1-3/4	45

^{*}Projection from centerline of pivot to face of door.

Gauge of	Screw Size		
Metal	Machine	Wood	
0.187	3/4 x 1/4-20	1-1/4 x 14	

BALL AND THRUST BEARING - HEAVY WEIGHT



495

Top

Forged bronze (ANSI C07162)



496

Intermediate

Forged bronze (ANSI C07321)

497

Bottom

Forged bronze (ANSI C07131)



- 3/4" (19 mm) offset
- Two knuckle
- For doors up to and including 3'0" x 8'0" (912 mm x 2438 mm) weighing maximum of 350 pounds, apply all three pivots 495, 496, 497
- For doors over 3'6" (1067 mm) up to 4'0" (1219 mm) in width, add one additional intermediate pivot, 496
- For each additional 12" (305 mm) in door height over 8'0" (2438 mm) add one intermediate pivot, 496

Product	Hala Caumb	Screw Size		
Product	Hole Count	Machine	Wood	
495	8	5/8 x 1/4-20	1-1/2 x 14	
496	10	5/8 x 1/4-20	1-1/2 x 14	
497	8	5/8 x 1/4-20	1-1/2 x 14	



SINGLE ACTING - STANDARD WEIGHT



500 Rack and Pinion

- ANSI A2793
- Pivot opens door to 1050 maximum
- Non-handed
- Concealed
- Adjustable alignment

Designed for:

- 1-3/4" (45 mm) thick door
- Maximum weight not over 80 pounds
- Not to exceed 3' (914 mm) wide and 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size	
Machine	Wood
Upon request	1-1/4 x 12 FH*

^{*}Plastic cinch anchors

SINGLE ACTING - EXTRA HEAVY WEIGHT



Bottom

Extra Heavy Duty Rack and Pinion

- ANSI A2792
- Pivot opens door to 1050 maximum
- Non-handed
- Concealed
- Adjustable alignment

Designed for:

- 1-3/4" (45 mm) thick door
- Maximum weight not over 180 pounds
- Not to exceed 3' (914 mm) wide and 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size				
Machine	Wood			
Upon request	1-1/4 x 12 FH*			

^{*}Plastic cinch anchors

SINGLE ACTING - HEAVY WEIGHT



Bottom

Heavy Duty Rack and Pinion

- ANSI A2792
- Pivot opens door to 1050 maximum
- Non-handed
- Concealed
- Adjustable alignment

Designed for:

- 1-3/4" (45 mm) thick door
- Maximum weight not over 150 pounds
- Not to exceed 3' (914 mm) wide and 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size	
Machine	Wood
Upon request	1-1/4 x 12 FH*

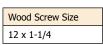
^{*}Plastic cinch anchors

HEAVY WEIGHT



For Frameless Openings ANSI A8782

- For use on doors up to 150 lbs and 1-3/8" - 1-3/4" (35 mm - 44 mm) thick
- Pivot opens door to 180° maximum
- · Screw slots for horizontal or vertical adjustment







CAMTROL DOUBLE ACTING - HOSPITAL SET -RESCUE HARDWARE

The following pivots are for use on:

- Wood or metal doors up to 135 lbs
- Doors not over 3'6" x 7' (1067 mm x 2134 mm)
- Wood or metal frames

Mortise Application in Wood Floors



510

Head and Floor Pivots

ANSI A5702

For use with square edge doors on hinge side

600

Head and Floor Pivots with Door Release (Set)

ANSI A5702



Release

Surface Application in Masonry Floors





Floor



Head and Floor Pivots

ANSI A5702

For use with square edge doors on hinge side

Head and Floor Pivots with Door Release (Set)

ANSI A5702

Door Release



610 **Door Release ANSI A1882**

Mortise Application in Masonry Floors







Floor



Release

511

Head and Floor Pivots

ANSI A5702

For use with square edge doors on hinge side

611

Head and Floor Pivots with Door Release (Set)

ANSI A5702

Item No	Anchor Housing		
Item No	Inches	mm	
510 & 600	3-7/8 x 1-7/8 x 7/8	98 x 48 x 22	
511 & 611	3-7/8 x 1-1/4 x 7/8	98 x 32 x 22	
512 & 612	3-7/8 x 1-1/4 x 7/8	98 x 32 x 22	

Door Mount Brack	ets Screw Size	Head Cam Box Screw Size		Floor Cam Box Screw Size	
Machine	Wood	Machine Wood		Machine	Wood
1/2 x 12-24 FH	1-1/4 x 12 FH	1-1/4 x 12-24 FH	1-1/2 x 12-24 FH	-	1-1/2 x 12 FH

610							
Mortise Depth Face Plate Screw Size							
Inches	mm	Inches	mm	Machine	Wood		
1-13/16	46	1-1/2 x 4-1/2 x 3/16	38 x 114 x 5	1/2 x 12-24 FH	1-1/4 x 12 FH		

^{*}Plastic cinch anchors





DOUBLE LIPPED STRIKE



Center Hung

451

Center Hung Doors

Brass ANSI A1882

452

Center Hung Doors

Brass ANSI A1882

1/8" (3.2 mm) **Inset Hung**

453

1/8" (3.2 mm) Inset Hung Doors

Brass ANSI A1882

1/8" (3.2 mm) Inset Hung Doors

Brass ANSI A1882

- To be used with Hager 600, 611, and 612 pivots and door release - this allows doors to be opened in both directions without damage to frame
- · Standard latchbolt cutout is 1-1/4" x 11/16" (32 mm x 17 mm)
- Standard strike plates are optimized for cylindrical locks/latches mounted on 1-3/4" thick doors
- Mortise lock applications require special latch cutout location (consult specific manufactures for variations of cutout dimensions)
- For use with Camtrol double acting pivot

Product	Face Plate		Gauge of	Hole	Screw Size	
Product	Inches	mm	Metal	Count	Screw Size	
451	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH	
452	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH	
453	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH	
454	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH	

COMBINATION RESCUE DOOR STOP AND TWO **WAY STRIKE PLATE**



Center Hung

Center Hung Doors

Brass ANSI A1882

456

Center Hung Doors

Brass ANSI A1882

1/8" (3.2 mm) Inset Hung

1/8" (3.2 mm) Inset Hung Doors

Brass ANSI A1882

458

1/8" (3.2 mm) Inset Hung Doors

Brass ANSI A1882

- Handed
- To be used with Hager 510, 511, and 512 pivots
- Door release allows doors to be opened in both directions without damage to frame
- Standard latchbolt cutout is 1-1/4" x 11/16" (32 mm x 17 mm).
- Standard strike plates are optimized for cylindrical locks/latches mounted on 1-3/4" thick doors
- Mortise lock applications require special latch cutout location (consult specific manufactures for variations of cutout dimensions)

Dundunt	Face Plate Gauge of		Hole	Hole Screw Size	
Product	Inches	mm	Metal	Count	Screw Size
455	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
456	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH
457	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
458	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH



THREE KNUCKLE HINGES



IHTHB953

Full Mortise - Concealed Bearings - Heavy Weight

- Stainless steel with stainless steel pin (ANSI A5111)
- Two concealed maintenance free bearings
- Investment cast
- Security torx screws
- Hospital tip and reverse security stud are standard
- Additional options include electric monitor (EMN), electric through wire (ETW), and electric through wire and monitor (ETM)
- For use on heavy weight doors ranging from 250-600 lbs

Hinge Size		Pin Diam	eter	Gauge	Hole	Machine
Inches	mm	Inches	mm	of Metal	Count	Screw Size
4-1/2 x 4-1/2	114 x 114	0.370	9	0.187	8	1/2 x 1/4-20 Torx



IHTAB750

Institutional Prison Hinge

Steel with stainless steel pin (ANSI A8111)

IHTAB850

Institutional Prison Hinge

Stainless steel with stainless steel pin (ANSI A5111)

- Concealed maintenance free bearings
- Welded hospital tips and plug
- · Welded knuckles
- Additional options include security torx screws, electric monitor (EMN), electric through wire (ETW), electric through wire and monitor (ETM), reverse safety stud (RSS), and safety stud (SS)
- For use on heavy weight doors ranging from 200-300 lbs

Hinge Size		Pin Diameter		Gauge	Hole	Machine
Inches	mm	Inches	mm	of Metal	Count	Screw Size
4-1/2 x 4-1/2	114 x 114	0.322	8	0.187	8	1/2 x 12-24 FPHM
5 x 4-1/2	127 x 114	0.322	8	0.190	8	1/2 x 12-24 FPHM
5 x 5	127 x 127	0.322	8	0.190	8	1/2 x 12-24 FPHM



990

Full Surface Heavy Weight Prison Utility Hinge

- Steel with steel pin (ANSI A8383)
- Plain bearing
- Welded pin
- · Prime painted
- Torx button head bolt
- Two hinges support the weight of 150 lbs
- For use on small doors, access doors, and observation shutters

Hinge Size		Pin Diameter		Gauge	Hole	Machine Screw
Inches	mm	Inches	mm	of Metal	Count	Size
3 x 4	78 x 102	0.437	11	0.203	4	1 x #16-3/8 Torx



997

Full Surface Heavy Weight Prison Pass Through Hinge with Stop

- Steel with steel pin (ANSI A8383)
- Plain bearing
- Welded pin
- Prime painted
- Torx button head bolt
- Two hinges support the weight of 150 lbs
- For use on small doors, access doors, and observation shutters

Hinge Size		Pin Diam	eter	Gauge	Hole	Machine Screw
Inches	mm	Inches	mm	of Metal	Count	Size
3 x 4	78 x 102	0.437	11	0.203	4	1 x #16-3/8 Torx





100 Set Screw Set

- 1/8" x 10-32 set screws (quantity 300)
- 3/16" x 10-32 set screws (quantity 300)
- 3/32" hex key
- Hand tap "T" wrench
- 10-32 tap
- #21 drill bit
- This set converts removable pin hinges to non-removable pin (set screw in barrel) hinges as required



305

Hinge Reinforcement Plate

- Steel
- For metal frames
- Four (4) holes



263

Sleeve Bolt

- Aluminum
- 9/16" (14 mm) head sex nut with 1/4" 20 internal thread
- Knurled shoulder prevents bolt from turning
- Drill a 3/8" (9.5 mm) hole and insert the sex bolt
- Available in US2C finish only (compatible with US26D, US28, or US32D)
- For use in securing push bars, exposed door closers and other fixtures to doors 1-3/4" (45 mm) thick or greater





417

Back Plate

- Steel
- For wood doors
- For full or half surface hinges



265

Molly Jack Nut (8S JN)

- Aluminum
- For use with the Hager reinforcing pivot hinges (250 Series)
- Easily installed by drilling a 7/16" (11.1 mm) pilot hole and following the instructions provided with each product
- For use in properly anchoring various products to hollow metal frames 3/16" 3/8" (4.8 mm 9.5 mm) thick

Length		Width	Gauge of	
Inches	mm	Inches	mm	Metal
4-1/2	114	1-13/16	46	0.074
5	127	2-1/8 54		0.089
Number of H	loles	Machine Screw Size		
3		1/2 x 12-24		
4		1/2 x 12-24		



DECORATOR TIP KITS



1712
Ball Standard Weight

1713

Ball Heavy Weight



1716 Acorn Standard Weight

1717

Acorn Heavy Weight



1722 Steeple Standard Weight

1723

Steeple Heavy Weight



1728 Urn Standard Weight

1729

Urn Heavy Weight

- Standard weight hinge size 3-1/2" (89 mm), 4" (102 mm), 4-1/2" (114 mm), 5" (127 mm), 6" (152 mm)
- Heavy weight hinge size 4-1/2" (114 mm), 5" (127 mm)
- Solid brass with stainless steel pin
- Conversion tips and pins for architectural grade hinges



Hager residential hinges enhance the design of any home, with finishes that range from bright brass and antique bronze to satin nickel and bright chrome. Homeowners also gain additional peace of mind with Hager features such as interlocking security stud protection, fast riveted pins with rivet heads that are formed on both ends to prevent removal of the hinge pin, and hinges with non-removable pin set screws.



Hager residential hinges are provided without lubrication. We recommend lubricating the hinges after installation. All residential hinges conform to the "Light Weight" requirements of ANSI A156.1.

Finishes (not all hinges are available in all finishes)

US & Hager	Description	Steel	Brass	Stainless Steel
1D	Black	631	N/A	N/A
2D	Brass Tone Dichromate	604	N/A	N/A
2CD	Brushed Zinc Plate	N/A	N/A	N/A
H2H	Mechanical Galvanized	N/A	N/A	N/A
3	Bright Brass	632	605	N/A
3LB	Light Brass	N/A	N/A	N/A
4	Satin Brass	633	606	N/A
10A	Antique Brass, Lacquered	641	614	N/A
10R	Matte Lacquered Antique Bronze	N/A	N/A	N/A
15	Satin Nickel	646	619	N/A
26	Bright Chromium Plated	651	625	N/A
26D	Satin Chromium Plated	652	626	N/A
32	Stainless Steel Metal, Bright	N/A	N/A	629
32D	Stainless Steel Metal, Satin	N/A	N/A	630
Р	Prime Coat	600	600	N/A
ABA/US5	Antique Brass	638	609	N/A
AN/US15A	Antique Nickel	647	620	N/A



FIVE KNUCKLE



1541

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin



RC1542

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin



BB1541

Ball Bearing

- Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Square corners
- Removable pin



RCBB1542

Ball Bearing

- Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Round corners 5/8" (16 mm) radius

Pin

Diameter

0.234

0.234

Screw Size

3/4 x 9 FH

3/4 x 9 FH

(Wood)

Hole

6

8

Count

• Removable pin

Gauge of

Metal

0.085

0.085

mm

89 x 89

102 x 102



RC1541

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin



Hinge Size

3-1/2 x 3-1/2

Inches

4 x 4

1543



- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin



RCBB1541

Ball Bearing

- Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



BB1543

Ball Bearing

- Brass with brass pin (ANSI A2114) or stainless steel with stainless steel pin (ANSI A5114)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



FIVE KNUCKLE (CONTINUED)



1741

Plain Bearing

- Steel with steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin



BB1741

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Reversible
- Square corners
- Removable pin



RC1741 | 7741

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin
- 7741 is RC1741 bulk unassembled



RCBB1741

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size		
Inches	mm	Metal	Count	Diameter	(Wood)		
3 x 3*	76 x 76*	0.085*	6*	0.234*	3/4 x 9 FH*		
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH		
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH		
*3 v 3 not available for RR17/11 or DCRR17/11							



RC1748

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin
- Template hole pattern

Hinge Size		Gauge of	Hole	Pin	Corour Ciro
Inches	mm	Metal	Count	Diameter	Screw Size
3-1/2 x	89 x 89	0.085	6	0.234	1/2 x 10-24 (machine)
3-1/2	09 x 09	0.063	0	0.234	1 x 9 FH (wood)



RC1749

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin
- Template hole pattern

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	Screw Size
4 4	102 102	0.085		0.234	1/2 x 12-24 (machine)
4 x 4	102 x 102	0.085	8	0.234	1-1/4 x 12 (wood)



FIVE KNUCKLE (CONTINUED)



1816

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin
- · Bulk assembled



BB1816

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin



1817

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Assembled left hand
- Square by 5/8" (16 mm) radius
- Removable pin
- Bulk assembled



BB1817

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Assembled left hand
- Square by 5/8" (16 mm) radius
- Removable pin



1848

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Square by 5/8" (16 mm) radius
- Removable pin
- Unassembled 2 per box



8744

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Square by 5/8" (16 mm) radius
- Bulk unassembled

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



1818

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Security stud
- Removable pin
- Bulk assembled



1819

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Assembled left hand
- Square by 5/8" (16 mm) radius
- Security stud
- Removable pin
- Bulk assembled



8746

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Square by 5/8" (16 mm) radius
- Safety stud
- Bulk unassembled

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH





FIVE KNUCKLE (CONTINUED)



RC1842 | RC1841 | 8741

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- RC1841 is RC1842 bulk assembled
- 8741 is RC1842 bulk unassembled



RC1847

ring

- th steel pin (ANSI A8134)
- by 5/8" (16 mm) radius
- security pin
- ilable bulk assembled



RCBB1842

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Siz
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 F





RC1843

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- Security stud

		Plain Bea
		 Steel wit
(3)	0	 Reversible
		 Square b
•		 Riveted s
		 Also avai

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH

SIX KNUCKLE



RC1641 | 8641

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- RC1641 is assembled, 8641 is bulk unassembled

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH





RC1846

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
 Riveted security pin
- Also available bulk assembled
- Not recommended for exterior use

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



SPRING

Spring hinges are for automatic closing of doors. They are light weight for residential use. 1734 and 1744 are also for Timely Style frames.

Hinge Recommendation

Recommended Max	Spring	Butt	Spring Hinge Location
Door Weight (lbs)	Hinge	Hinge	
45	1	2	Center
70	2	1	Top/Btm or Ctr/Btm
90	3	-	All
45	1	2	Center
70	2	1	Top/Btm or Ctr/Btm
90	3	-	All



1734

- Stainless steel (ANSI K51071F)
- Round corners 1/4" (6 mm) radius
- Template hole pattern

1744



- Steel (ANSI K81071F)
- Round corners 1/4" (6 mm) radius
- Template hole pattern

Hinge Size		Gauge of	Hole Count	Screw Size (Wood)
Inches	mm	Metal	Tible Count	
4 x 4	102 x 102	0.106	8	1 x 9 FH



1750

- Steel (ANSI K81071F)
- Square corners

1751

- Steel (ANSI K81071F)
- Round corners 1/4" (6 mm) radius



1752

- Steel (ANSI K81071F)
- Round corners 5/8" (16 mm) radius

1760

- Stainless steel (ANSI K51071F)
- Square corners

1761

- Stainless steel (ANSI K51071F)
- Round corners 1/4" (6 mm) radius

1762

- Stainless steel (ANSI K51071F)
- Round corners 5/8" (16 mm) radius

Hinge Size		Gauge of	Hole Count	Screw Size (Wood)	
Inches	mm	Metal	noie Courit	Screw Size (Wood)	
3-1/2 x 3-1/2	89 x 89	0.106	6	3/4 x 9 FH	
4 x 4	102 x 102	0.106	8	1 x 9 FH	



1754

- Steel (ANSI K81071F)
- Square by 5/8" (16 mm) radius

1764

- Stainless steel (ANSI K51071F)
- Square by 5/8" (16 mm) radius



Hinge Size		Gauge of	Hole Count	Screw Size
Inches	mm	Metal	Tible Count	(Wood)
4 x 4	102 x 102	0.106	8	1 x 9 FH





1710

Residential Ball Tip Kit

Materials: Brass tips and stainless steel

pin

Finishes: US3, US4, US5/ABA, US10A,

US10R, US15, US15A/AN,

US26, US26D

Notes: • Includes 2 ball tips and 1

pin

• For use with 3-1/2" (89 mm) or 4" (102 mm)

hinges

1720

Residential Steeple Tip Kit

Materials: Brass tips and stainless steel

pin

Finishes: US3, US4, US5/ABA, US10A,

US10R, US15, US15A/AN,

US26, US26D

Notes: • Includes 2 steeple tips and

1 pin

• For use with 3-1/2" (89 mm) or 4" (102 mm)

hinges





You design and build structures that need to withstand the realities of daily use. Hager's engineers and product development team understand how building entrances and exits are used in the real world. That's why we design our Roton continuous geared hinges to provide superior performance you can rely on in high-traffic areas. Hager Roton hinges use unique geared hinges to minimize lateral wear on the hinge while evenly distributing door weight along the full length of the frame. Roton hinges are ideal for new construction and retrofit applications.



DOOR AND FRAME PREPARATION

All Roton continuous geared hinges are surface applied. Cutout design and spacing coordination is thereby eliminated in both new construction and restoration work. Reinforcement plates are not required in doors or frames except where the gauge is too thin for the fasteners in relation to the door weight or where abusive operation is anticipated.

Blank frames may be ordered with strike prep only or with a strike prep furnished on both sides to eliminate handing with any Roton model that will cover the frame rabbet. Doors should always be ordered without cutouts except for use in labeled openings in which the tested door assembly may have manufacturing restrictions. Continuous frame mortar guards are desirable for masonry walls to avoid screw fastener interference with the mortar. An effective mortar guard made from an ordinary 1" (25 mm) x 2" (51 mm) stud, fastened to the back side of the frame can also be used. Check with both the frame supplier and the contractor for the best method.

The main cause of door and frame breakdown is "kickback shock" transferred to conventional butt hinges or pivots. Roton bonds the door frame into a single, integrated unit, dissipating impact loads harmlessly.

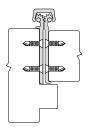
DOOR CLOSERS

Conventional surface or concealed sliding closers may be used with Roton. (Note: Pivot type floor closers with a fixed, conflicting pivot point may not be used.) Closers will last considerably longer, adjust to operating requirements more readily and show consistent settings due to the reduced operating forces of Roton hinging.

PROCESS FOR CHOOSING THE CORRECT ROTON MODEL

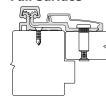
Determine	Select
Door and frame application (flush door and frame, inset door, door thickness, door height, etc.)	Roton model
Frequency of door cycling and weight of door	Light, standard, heavy or extra heavy duty, lead lined
Door and frame material	Fasteners
Door opening finish	Roton finish
Fire rating requirements, if needed	With stud or without stud

ROTON TYPES Concealed



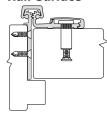
These models have leaves that are concealed between the rabbet of the frame and the hinge edge of the door. Models available include 500-048, 750-134, 750-138, 780-041, 780-041HD, 780-041LL, 780-110, 780-110HD, 780-111, 780-111HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, 1200-600XHD, 1200-650XHD

Full Surface



These models have the frame leaf mounted to the face of the frame. The door leaf is mounted to the face of the door with sex bolts (thru-bolts). Models available include 500-220, 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, 780-257HD

Half Surface



These models have the frame leaf concealed between the rabbet of the frame and the edge of the door. The door leaf is mounted to the face of the door with sex bolts (thru-bolts) or screws. Models available include 500-200, 780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, 780-211HD, 780-300HD

Checking the Load

To assist in the selection of an appropriate Roton hinge series, divide the door weight including the weight of the hardware by the number of bearings in the Roton hinge under consideration, then use the following guideline, with a maximum 4'0" wide door:

750 Series: 5-1/8" Centers (Typical 7' door: 16 bearings) 780 Series: 5-1/8" Centers (Typical 7' door: 16 bearings) 780 HD & LL: 2-9/16" Centers (Typical 7' door: 32 bearings)

Frequency	Load
Low frequency interior doors	20 lbs per bearing
Low frequency, very heavy doors (lead lined x-ray doors, ballistics doors, high security doors) with double rows of fasteners	30 lbs per bearing
Medium frequency interior doors	15 lbs per bearing
Medium frequency exterior doors	10 lbs per bearing
High frequency exterior doors	7.5 lbs per bearing
Very high frequency doors	5 lbs per bearing



FIRE RATINGS - UNDERWRITERS LABORATORY FIRE RATING FILE #A14627



780 Series Roton continuous geared hinges with stainless steel studs are approved for use on 4'x10' metal or wood swing type doors. 780 Series Roton continuous geared hinges without stainless steel

studs are approved for use on 4'x8' single swing metal doors and 4'x10' single swing wood doors used without stainless steel studs limited to 20 minute fire rating without hose stream.

- Hollow metal, tin-clad, sheet-metal and steel covered composite type rated up to and including 3 hours
- Wood composite doors rated up to and including 1-1/2 hours
- Wood core doors rated up to 20 minutes without hose stream, non-studded
- 780 Series Roton Continuous Geared Hinges meet requirements for positive pressure UL10C, UL10B and UBC7-2 Part 1

FULLY CONCEALED WITH STUD

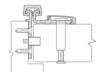
Fully Concealed



These models are concealed between the frame and the hinge edge of the door. Models available include 780-041, 780-041HD, 780-041LL, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, and 780-235HD.

HALF SURFACE WITH STUD

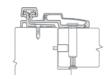
Half Surface



These models have the frame leaf concealed between the frame and the edge of the door. The door leaf is mounted to the door with thru-bolts or screws. Models available include 780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, and 780-211HD.

FULL SURFACE WITH STUD

Full Surface



These models have the frame leaf mounted to the face of the frame and the face of the door. The door leaf is mounted to the face of the door with thru-bolts. Models available include 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, and 780-257HD.

ANSI STANDARDS

- 780 Series Roton continuous geared hinges are approved per ANSI A156.26 Grade 1 for 150 lb. doors
- 780 Series Roton heavy duty hinges are approved per ANSI A156.26 Grade 1 for 300 lb. doors
- 780-111, 780-112, 780-224, 780-226 standard duty and heavy duty Roton continuous geared hinges are Warnock-Hersey certified in accordance with ANSI A250.13 2003 Standard Severe Windstorm Resistant Components

UL10C Fire Rated Roton	Fully Concealed	Full Surface	Half Surface
20 Minute Fire Rated Wood Core Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
20 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Wood Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Metal Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
90 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — Stud	UL — Stud	UL — Stud
90 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
3 Hour Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — Stud	UL — Stud	UL — Stud

NOTES:

- 1. Models for which studs are not required (UL-FF) are no extra charge.
- 2. **Please specify if UL stamp is required.** For example: 780-112LL 83" Clear U/L— FF 780-211HD 95" DB U/L— Stud
- 3. Four studs are required for UL stud hinges.



STANDARD LENGTHS

Roton hinge standard lengths are for 6'8'' doors – 79'', for 7' doors – 83'', for 7'2'' doors – 85'', for 8' doors – 95'' and for 10'' doors – 119'', for convenience in application to nominal doors. This provides for threshold clearance, head clearance and door height allowances for carpeting. Other lengths may be ordered as non-standard items.

Roton hinges are always installed flush with the top edge of the door. Recommended 1/8" (3 mm) for head clearance.

Where many net heights are likely to appear on the same job, group the sizes to 1/2'' (13 mm) increments to be consistent in appearance. Generally, up to 1/2'' (13 mm) of door heel exposure is acceptable, but all Roton hinges should be within 1'' (25 mm) of the net door height.

FIELD MODIFICATIONS

While Roton hinges can be cut in the field, any product modifications may void all warranties. Should in-the-field modifications be required, cut only from the bottom of the hinge. Do not cut through bearings or screw holes. When cutting electric hinges it is extremely important to clamp both hinge leaves securely to prevent hinge "chatter" which can damage the hinge's internal wiring. Consult Hager Technical Service before proceeding.

TEMPLATE HINGES

Hager Companies has developed templated hole patterns for Roton hinge models in standard lengths. Drawings are available upon request by contacting Hager Companies Customer Service or accessing the Hager website at www.hagerco.com. Due to normal variances inherent in the manufacturing process, Roton custom length hinges are deemed by Hager to be non-templated.

STANDARD FINISHES

Roton hinges are available in either satin etched, clear anodized aluminum (similar to US28), or dark bronze exterior anodized coating.

SPECIAL ANODIZING

Roton hinges are available in various colors, including black, and gold, as well as other anodized finishes with fasteners to match. Hager requires that final assembly be completed by Hager because of special non-removable metal coatings applied to all hinges during assembly. Users are cautioned against attempting to refinish any Roton product. All hinges ordered in special colors should be ordered at the same time to guarantee finish uniformity. Supply color chip for best match.

PAINTED HINGES

Hager can supply unfinished materials to selected finishers for special projects which require unusual colors or coatings, but will require that final assembly be completed by Hager. Because of special non-removable metal coatings applied to all hinges during assembly, users are cautioned against attempting to refinish any Roton product.

PAINTED COVER CHANNELS

Painted Roton cover channels in bone white are offered as a standard stock color option. This is only available on the standard Roton cover channel.

POLISHED COVER CHANNELS

Any Roton hinge may be ordered with a polished clear cover channel (similar to US26) to complement clear anodized hinge leaves or a polished gold cover channel (similar to US3) to complement satin gold anodized hinge leaves.

SPECIAL COVER CHANNELS

Special covers for rounded, fluted or decorative effects may be ordered. Not available for hinges with electrical modifications.

Decorative Back (DBCC) for 1/2" Insert

(Decorative insert not available through Hager)





Fluted Back (FLCC)





Rounded Back (RBCC)



Roton Cover Channel Compatibility				
Hinge Model	Flat FBCC	Round	Fluted FLCC	Decorative DBCC
750-134	•	•	•	•
750-138	•	•	•	•
780-041	•	•		
780-045	•	•		
780-046	•	•		
780-053	•	•		
780-054	•	•		
780-057	•	•		
780-110	•	•	•	•
780-111	•	•	•	•
780-112	•	•	•	•
780-113	•	•	•	•
780-114	•	•		
780-155	•	•		
780-157	•			
780-208	•		•	•
780-210	•	•		
780-211	•	•		
780-213	•	•		
780-224	•	•	•	•
780-226	•	•	•	•
780-235	•	•	•	•
780-257	•			
780-259	•	•		
780-300	•			
1200-600	•			
1200-650	•			



EXTRA LONG HINGES

Hager Companies manufactures hinges over 119" (3023 mm) long as two separate lengths with a staggered joint for onsite connection. Hager will select hinge segment lengths from standard sizes for best economics in relation to quantity required. Handing specifications are required to position the cuts inconspicuously and to finish symmetrical pairs in double door applications.

BEARING AT TOP

This application allows for the bearing to be set at the very top of the cover channel. The cover channel is flush with the top of the geared hinge, preventing any obstructions or debris to be inserted in the top channel.

BEARING ON TOP

This application allows for the bearing to be set at the very top of the extended cover channel. The cover channel projects beyond the top edge of the hinge by the height of the bearing. This modification prevents any obstructions or debris from being inserted in the top of the channel.

HOSPITAL TIP

Concealed models only can be prepared with a cover channel tapered at 45° angle at the top of the hinge. These are ideal for use in hospitals and correctional facilities to help provide a clean and safe environment. Please consult the sales office for available models.

TAMPER RESISTANT HINGE

This application is intended for use in hospital psychiatric areas and places of high security. The hinge is prepared with a hospital tip (concealed models only) and every other bearing is supplied with a set screw to lock against the inside of the cover channel for additional security.

DUTCH DOOR HINGES

Hager Companies will prepare any of its hinge models for a dutch door application. The frame leaf is furnished as a continuous extrusion and the door leaf is cut to fit the dutch door heights specified. Upper and lower door leaves are prepped for extra screws. Handing, overall net door height, amount of clearance between the top and bottom doors, their individual heights and door and frame materials should be clearly specified.

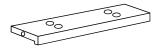
SPECIAL HOLES

Any hinge may be ordered with special hole locations for unusual frame or door conditions. Please provide specifications for each leaf.

BEARING REPLACEMENT KITS

Available in standard or heavy duty and in Clear Anodized or Dark Bronze Anodized finish for 780 and 1200 Series Roton.

MARKING JIGS



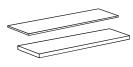
Marking jigs are available to locate the centers of the top end frame screws. These jigs must be ordered at the same time as the hinges to ensure fabrication accuracy.

CENTER PUNCHES



Self-Centering punches are available for #12 countersunk screws that are supplied. To make sure screw heads seat properly, accurate center punching is required.

SHIM STOCK



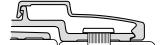
For clearance between the door and frame that may be excessive, a continuous shim is helpful (applied behind the frame leaf only). Anodized aluminum extrusions are supplied with no holes.

ITEM MARKING

Marking and special packaging for job-site identification.

REPLACEMENT MOLDINGS 780-210M

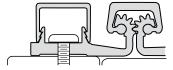
Replacement door leaf molding for 780-210, 780-210HD, 780-211, 780-211HD, 780-213, 780-213HD, 780-045, 780-045HD, 780-046, 780-046HD. Furnished with Allen head set screw and wrench. Shipped in standard lengths for trimming in the field.





780-247M

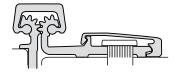
Replacement frame leaf molding for 780-157, 780-157HD, 780-257, 780-257HD. Shipped in standard lengths for trimming in the field.





780-052M

Replacement door leaf molding for 780-053, 780-053HD, 780-054, 780-054HD, 780-155, 780-155HD, 780-057, 780-057HD, 780-157, 780-157HD, 780-257HD, 780-257HD, 780-259HD. Furnished with Allen head screw and wrench. Shipped in standard lengths for trimming in the field.







FASTENERS

Hager Companies uses custom made, carefully engineered, and thoroughly tested fasteners exclusively. Each fastener is designed for ease of use as well as durability. Appropriate fasteners are furnished with each hinge, together with installation instructions for typical metal or wood doors and frames. The standard screw pack includes self-drilling screws. If wood screws are required, please specify on order and wood screws will be substituted.

FASTENERS FOR USE WITH HINGES IN THE 500 SERIES

8 - 18 X 3/4" Truss Phillips head screw

FASTENERS FOR USE WITH HINGES IN THE 750 AND 780 SERIES

Metal Doors or Frames (Undercut Head Phillips Countersunk Screws):

Two types of screws are available for metal doors and frames: the Drill Kwik $^{\circledR}$ screw (with drill point tip) and the thread forming screw (no tapping necessary). The #12-24 x 11/16" self-drilling screw has a machine thread in the screw shank. The #12-24 x 13/32" thread-forming screw has a machine thread in the screw shank.

The standard screw pack contains #12-24 Drill Kwik $^{\circledR}$ self-drilling machine thread. This screw has a hardened steel drill point built into the end of the screw, allowing it to be installed without a pre-drilled hole if the metal thickness is no more than 1/8" (3.2 mm). It forms its own threads as the screw is drilled into the door or frame. It is longer than most screws of the type because of the built-in drill point.

When installing the self-drilling screw, make certain that the installer is familiar with the proper use and torque settings of a screw gun. Proper center-punching is extremely important with self-drilling screws. If center-punching is omitted or incorrectly done, the screw will "walk" in the same way as a drill bit, resulting in cocked screw heads and improperly closing hinge leaves.

The optional self-threading screw is typically used on grout filled frames to prevent bowing of the frame. This screw has a short tapered section at the tip. A drilled pilot hole (range: 0.173'' to 0.185'') is required prior to tapping.

Either of these screws may be used for the attachment of Roton hinges to metal doors or frames, generally without reinforcement except in thin aluminum or with doors of very heavy weight or anticipated abuse. Both types require center-punching to ensure that the screw sits properly in the hinge leaf. Self-centering countersinking center-punches are available.

In all cases, care should be taken to ensure that no drill chips build up behind the hinge. It is best to premark the holes and drill for self-threading screws with the hinge removed, or hold the hinge very tightly against the door or frame when using the self-drilling screws.

Hinges normally requiring sex bolts will be furnished with suitable mounting holes. Blank leaves, special countersinking, or door fastening with pan-head screws are available upon request.

If special fasteners are required, customers must supply them except upon prior agreement. Please consult the factory for alternate fastener recommendations.

FASTENERS FOR USE WITH HINGES IN THE 1200 SERIES

1/4" - 20 x 1" Undercut Flat Phillips Head Screw

SEX BOLTS (THRU-BOLTS)

On all applicable surface-mounted hinges, sex bolt sets are furnished in the hardware package together with a transfer punch for accurate marking of the 3/8" (10 mm) drilled holes required. The 1/4"-20 bolt has a 3/8" (10 mm) shoulder under a 9/16" (14 mm) pan head so that it can be reversed for exterior in-swing doors or for additional security.

Roton sex bolts are intentionally designed to be shorter than the door thickness for proper clamping action with doors of slightly varying thickness and gauge in the 1" (25 mm) - 2-1/2" (63.5 mm) range. Unless otherwise requested, bolts suitable for the 1-3/8" (35 mm) - 1-3/4" (45 mm) range will be shipped. Shorter or longer bolts may be requested. Bolts that are outside the door thickness range of 1" (25 mm) - 2-1/2" (63.5 mm) must be provided by the installer.





DOOR AND FRAME DIMENSIONING

Half Surface Models

780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, 780-155, 780-155HD, 780-211HD, 780-213, 780-213HD, 780-259, 780-259HD, 780-300HD (leaf thickness clearance not required for 780-300HD)

Designed primarily for work involving new doors and frames, one leaf concealed and one leaf surface mounted. They can also be used on retrofit work where a new door can be ordered to fit an existing frame if the existing door is made of wood and can be reduced in size to accommodate the 1/8" (3.2 mm) leaf thickness, or the frame is to be replaced and can be furnished with an oversized header.

Clearance required as follows:

Single Doors (Square and Beveled Edge)

A. Leaf thickness	1/8" (3.2 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
Total	9/32" (7.2 mm)

Pairs of Doors (Square and Beveled Edge)

	, - ,
A. Leaf thickness	1/8" (3.2 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second leaf thickness	1/8" (3.2 mm)
Total	1/2" (12.8 mm)

Full Surface Models

780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, 780-257HD

The above models are designed for retrofit applications and require no special dimensioning. Full surface models are designed to be mounted to the exposed surface of the door and frame. No additional clearance is required except for door and frame painting.

Clearance required as follows:

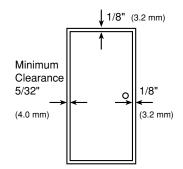
Single Doors (Square and Beveled Edge)

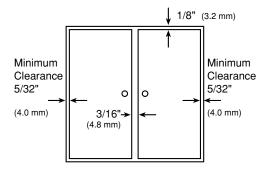
A. Additional allowance for frame irregularities	1/32" (0.8 mm)
B. Lockside clearance for single door	1/8" (3.2 mm)
Total	5/32" (4.0 mm)

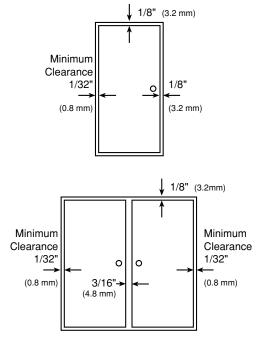
Pairs of Doors (Square and Beveled Edge)

A. Additional allowance for frame irregularities	1/32" (0.8 mm)
B. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
C. Second allowance for frame irregularities	1/32" (0.8 mm)
Total	1/4" (6.4 mm)

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.









DOOR AND FRAME DIMENSIONING (CONTINUED) Concealed Models

750-134, 750-138, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, 780-235HD. The following are not recommended for doors with beveled edged applications – 780-041, 780-041HD and 780-041LL.

Designed primarily for work involving new doors and frames, these models have parallel, fully concealed leaves. They can also be used on retrofit work where a new door can be ordered to fit an existing frame if the existing door is made of wood and can be reduced in size to accommodate the 5/16" (7.9 mm) hinge thickness, or the frame is to be replaced and can be furnished with an oversized header.

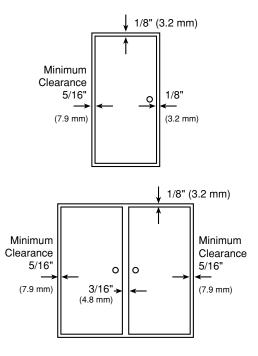
Clearance required as follows:

Single Doors (Square Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
Total	15/32" (11.9 mm)

Single Doors (Beveled Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
D. Allowance for beveled edge	1/32" (0.8 mm)
Total	1/2" (12.7 mm)



Pairs of Doors (Square Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	5/16" (7.9 mm)
Total	7/8" (22.2 mm)

Pairs of Doors (Beveled Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Allowance for beveled edge	1/32" (0.8 mm)
C. Additional allowance for frame irregularities	1/32" (0.8 mm)
D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
E. Second allowance for frame irregularities	1/32" (0.8 mm)
F. Second allowance for beveled edge	1/32" (0.8 mm)
G. Second hinge thickness	5/16" (7.9 mm)
Total	15/16" (23.8 mm)

Concealed Model Exceptions - 780-113, 780-113HD Single Doors (Square Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
Total	31/32" (24.6 mm)

Single Doors (Beveled Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
D. Allowance for beveled edge	1/32" (0.8 mm)
Total	1" (25.4 mm)

Pairs of Doors (Square Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	13/16" (0.6 mm)
Total	1-7/8" (47.6 mm)

Pairs of Doors (Beveled Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Allowance for beveled edge	1/32" (0.8 mm)
C. Additional allowance for frame irregularities	1/32" (0.8 mm)
D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
E. Second allowance for frame irregularities	1/32" (0.8 mm)
F. Second allowance for beveled edge	1/32" (0.8 mm)
G. Second hinge thickness	13/16" (20.6 mm)
Total	1-15/16" (49.2 mm)

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.





DOOR AND FRAME DIMENSIONING (CONTINUED) Concealed Model Exceptions - 780-114, 780-114HD Single Doors (Square Edged)

A. Hinge thickness	15/16" (23.8 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
Total	1-3/32" (27.8 mm)

Pair of Doors (Square Edged)

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A. Hinge thickness	15/16" (23.8 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	15/16" (23.8 mm)
Total	2-1/8" (54.0 mm)

1200-600XHD, 1200-650XHD Single Doors (Square Edged)

15/32" (11.9 mm
1/32" (0.8 mm)
1/8" (3.2 mm)
5/8" (15.9 mm)

Single Doors (Beveled Edged)

A. Hinge thickness	15/32" (11.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
D. Allowance for beveled edge	1/32" (0.8 mm)
Total	21/32" (16.7 mm)

Pair of Doors (Square Edged)

A. Hinge thickness	15/32" (11.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	15/32" (11.9 mm)
Total	1-3/16" (30.2 mm)

Pair of Doors (Beveled Edged)

A. Hinge thickness	15/32" (11.9 mm)
B. Allowance for beveled edge	1/32" (0.8 mm)
C. Additional allowance for frame irregularities	1/32" (0.8 mm)
D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
E. Second allowance for frame irregularities	1/32" (0.8 mm)
F. Second allowance for beveled edge	1/32" (0.8 mm)
G. Second hinge thickness	15/32" (11.9 mm)
Total	1-1/4" (31.8 mm)

780-208, 780-208HD Single Doors (Square Edged)

A. Hinge thickness	1/2" (2.7 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
Total	21/32" (16.7 mm)

Single Doors (Beveled Edged)

A. Hinge thickness	1/2" (12.7 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
D. Allowance for beveled edge	1/32" (0.8 mm)
Total	11/16" (17.5 mm)

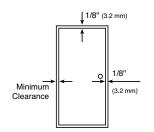
Pair of Doors (Square Edged)

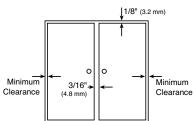
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A. Hinge thickness	1/2" (2.7 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	1/2" (12.7 mm)
Total	11/4" (31.8 mm)

Pair of Doors (Beveled Edged)

A. Hinge thickness	1/2" (12./ mm)
B. Allowance for beveled edge	1/32" (0.8 mm)
C. Additional allowance for frame irregularities	1/32" (0.8 mm)
D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
E. Second allowance for frame irregularities	1/32" (0.8 mm)
F. Second allowance for beveled edge	1/32" (0.8 mm)
G. Second hinge thickness	1/2" (2.7 mm)
Total	1-5/16" (33.3 mm)

780-208/780-208HD = 1/2" (12.7mm) 780-113/780-113HD = 13/16" (20.6mm) 780-114/780-114HD = 15/16" (23.8mm) 1200-600XHD/1200-650XHD = 15/32" (12mm)





780-208/780-208HD = 1/2" (12.7mm) 780-113/780-113HD = 13/16" (20.6mm) 780-114/780-114HD = 15/16" (23.8mm) 1200-600XHD/1200-650XHD = 15/32" (12mm)

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.





ELECTRIC HINGE MODIFICATIONS

Exposed Electric Contacts

- Transfers power to door in closed position
- Must have at least two contacts to transfer power
- Specify handing and the dimension from the top edge of the door to the centerline of the electric contact location
- Templates regarding location of contacts available upon request
- To order, use symbol "E" plus the number of contacts required as a suffix
- Example: 780-112HD 85" Clear E4

Exposed Electric Switches

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door
- Three 12" wire leads
- Each monitoring hinge only needs one E1S switch
- Specify handing and the dimension from the top edge of the door to the centerline of the electric switch location
- Templates regarding location of contact switch available upon request
- To order, use symbol "E1S" as a suffix
- Example: 780-112HD 85" Clear E1S

Concealed Electric Through-Wire

- Transfers power discreetly from building to door hardware
- Four, six, eight or ten wire continuous electric conductors
- Specify handing and the dimension from the top edge of the door to the centerline of electric through-wire location
- Templates regarding location of through-wires available upon request
- To order, use symbol "ETW" plus the number of wire leads, 12" per side required as a suffix
- Example: 780-112HD 85" Clear ETW 4

Removable Electric Through-Wire

- · Transfers power discreetly from building to door hardware
- 4" removable 10 wire ETW module can easily be removed for adjustment or service
- Available on heavy duty models only
- Specify handing and the dimension from the top edge of the door to the centerline of electric monitoring location
- To order 4" removable module only, use component number 7-102-1860 Clear and 7-112-1870 Dark Bronze
- Templates regarding location of module available upon request
- To order, use symbol "RETW"
- Example: 780-112HD 85" Clear RETW

Concealed Electric Monitoring

- Miniature switch is incorporated into the frame leaf
- Three 12" wire leads
- Specify handing and the dimension from the top edge of the door to the centerline of electric monitoring location
- Templates regarding location of monitoring switch available upon request
- To order, use symbol "EMN", as a suffix
- Example: 780-224HD 119" Bronze EMN

Concealed Electric Through-Wire and Monitoring:

- This combines the continuous electric conductors and the miniature switch to provide both power transfer and monitoring
- Four, six, eight or ten continuous electric conductors
- Miniature switch is incorporated into the frame leaf
- Specify handing and the dimension from the top edge of the door to the centerline of each electric modification location
- Templates regarding location of monitoring switch, available upon request
- To order, use symbol "ETM" plus the number of wires required as a suffix
- Example: 780-224LL 85" Bronze ETM 4

Von Duprin EPT 2 or EPT 10 Electric Power Transfer Preparation

- Hinge leaf cutout to accommodate power transfer device
- Specify handing and the dimension from the top edge of the door to the centerline of the power transfer location

Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Companies Customer Service for charges. Please feel free to contact the Hager Companies technical team for further information pertaining to electric modifications.

Mortar Box - 430

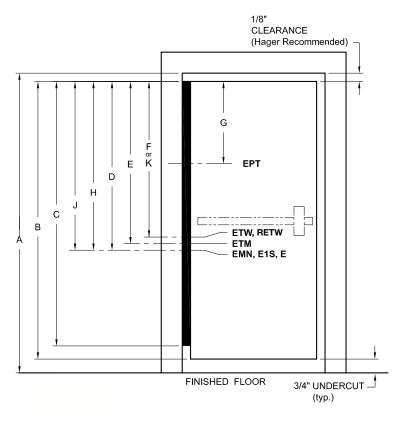


- Serves as a mortar shield
- Overall dimensions: 9" (229 mm) length with tabs, 7" (178 mm) inside, 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Galvanized steel 0.040" (1 mm)
- Top and bottom knockouts for standard conduit fittings





ELECTRICAL MODIFICATIONS (CONTINUED)



- A = Opening
- B = Door height
- C = Actual hinge length
- D = C.L. of <u>EMN</u> (electric monitor)
 E = C.L. of <u>ETM</u> (electric through-wires & monitor)
- $\mathbf{F} = C.L.$ of \overline{ETW} (electric through-wires)
- G = C.L. of \overline{EPT} (electric power transfer)
- $\mathbf{H} = C.L.$ of $\overline{E1S}$ (exposed switch)
- J = C.L. of \overline{E} (exposed contact)
- $\mathbf{K} = C.L.$ of \overline{RETW} (removable electric through-wires)

For ease of ordering, Hager Companies has established standard locations for power transfer cutouts. All standard location dimensions are referenced from the top edge of the door to the centerline of the power transfer cutout. Please specify handing.

NOTE: Full surface hinges are not available with preps.

	Α	В	С	D	Е	F	G	Н	J	К
79 SD	80"	79-1/8"	78-11/16"	42-12"	41-1/4"	40"	24-1/2"	42-1/2"	42-1/2"	_
79 HD	80"	79-1/8"	78-11/16"	42-1/2"	40-5/8"	38-3/4"	24-1/2"	42-1/2"	42-1/2"	41-7/8"
83 SD	84"	83-18"	83"	46-1/2"	44-5/8"	42-3/4"	28-7/16"	46-1/2"	46-1/2"	_
83 HD	84"	83-1/8"	83"	46-1/2"	45-1/4"	44"	28-7/16"	46-1/2"	46-1/2"	44-1/16"
85 SD	86"	85-1/8"	85"	48-1/2"	47-1/4"	46"	30-7/16"	48-1/2"	48-1/2"	_
85 HD	86"	85-1/8"	85"	48-1/2"	46-5/8"	44-3/4"	30-7/16"	48-1/2"	48-1/2"	45-1/16"
95 SD	96"	95-1/8"	95-1/16"	59-3/4"	57-7/8"	56"	40-1/2"	59-3/4"	59-3/4"	_
95 HD	96"	95-1/8"	95-1/16"	59-3/4"	57-7/8"	56"	40-1/2"	59-3/4"	59-3/4"	56-1/2"
119 SD	120"	119-1/8"	119"	83-3/4"	81-7/8"	80"	64-3/8"	83-3/4"	83-3/4"	_
119 HD	120"	119-1/8"	119"	83-3/4"	81-7/8"	80"	64-3/8"	83-3/4"	83-3/4"	80"

SD = Standard Duty

HD = Heavy Duty





ELECTRICAL MODIFICATIONS (CONTINUED)

	Von Duprin EPT 2 or EPT 10 Power Transfer Preparation	Exposed Electric Contacts	Exposed Electric Switches	Concealed Electric Through-Wire	Concealed Electric Monitoring	Concealed Electric Through-Wire and Monitoring	Removable Electric Through-Wire
Part Number	EPT	Е	E1S	ETW	EMN	ETM	RETW
750-134							
750-138							
780-041							
780-041HD							
780-041LL							
780-045	•						
780-045HD	•						
780-046	•						
780-046HD	•						
780-053	•						
780-053HD	•						
780-054	•						
780-054HD	•						
780-110			•	•			
780-110HD	•		•	•			
780-111	•	•	•	•	•	•	
780-111HD	•	•	•	•	•	•	•
780-111LL	•	•	•	•	•	•	
780-112	•	•	•	•	•	•	
780-112HD	•	•	•	•	•	•	•
780-112LL	•	•	•	•	•	•	
780-155							
780-155HD							
780-211HD							
780-224	•	•	•	•	•	•	
780-224HD	•	•	•	•	•	•	•
780-224LL	•	•	•	•	•	•	
780-226	•	•	•	•	•	•	
780-226HD	•	•	•	•	•	•	•
780-226LL	•	•	•	•	•	•	
780-235HD		•	•	•	•		
1200-600	•			•			
1200-650	•			•			





500-048

Light Duty, Conceal Leaf Hinge

Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

Aluminum 6063-T6 -Material:

1/16" (1.5 mm) leaf

thickness

Clearance: 5/16" (8 mm)

#8-18 x 3/4" truss head Fasteners:

Phillips tapping AB zinc plated steel. Painted to match. For sheet metal or

wood applications.

• Standard sizes include Length Options:

24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm) Custom lengths

available

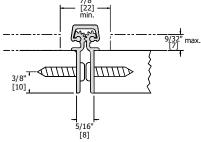
• Bearings spaced to Special Features:

distribute door weight evenly up to 50 lbs

 Can be used for vertical or horizontal applications

 Alignment ribs for easy installation and proper hinge location

 Optional nylon end plugs provide a seal for marine applications





500-200

Light Duty, Half Surface Hinge

(Left hand shown)

Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

Material: Aluminum 6063-T6 -

1/16" (1.5 mm) leaf

thickness

Clearance: 7/32" (5.6 mm) minimum

#8-18 x 3/4" truss head Fasteners:

Phillips tapping AB zinc plated steel. Painted to match. For sheet metal or wood applications. Shorter screws required for openings past 90° when applied as shown in "A" (not provided).

Length Options: · Standard sizes include

24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm)

· Custom lengths

available

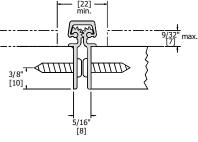
Special Features:

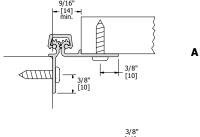
 Bearings spaced to distribute door weight evenly up to 50 lbs

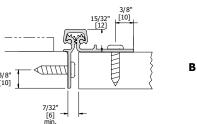
 Can be used for vertical or horizontal applications

 Alignment ribs for easy installation and proper hinge location

 Optional nylon end plugs provide a seal for marine applications













500-220

Light Duty, Full Surface Hinge

Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

Aluminum 6063-T6 -Material:

1/16" (1.5 mm) nominal leaf thickness

Clearance: 1/32" (1 mm) minimum #8-18 x 3/4" truss head Fasteners:

Phillips tapping AB zinc plated steel. Painted to match. For sheet metal or wood applications. Shorter screws required for 90° and 180° openings when applied as shown in "B" (not provided). Shorter screws required for openings past 90° when applied as shown in "C"

(not provided).

Length Options: Standard sizes include

24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm) Custom lengths

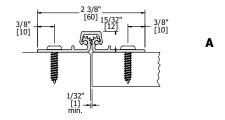
available

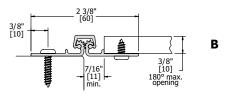
Special Features: · Allows either inset or

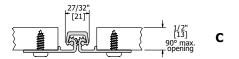
outset applications for recessed or surface

mounting

- Bearings spaced to distribute door weight evenly up to 50 lbs
- · Can be used for vertical or horizontal applications
- Alignment ribs for easy installation and proper hinge location
- Optional nylon end plugs provide a seal for marine applications











750-134

Standard Duty, Concealed Leaf Hinge

For medium frequency, 1-3/4" (44 mm) thick solid core wood interior doors up to 100 pounds.

Aluminum 6063-T6 Material: Clearance:

5/16" (8 mm) hinge side plus standard lockside

clearance Dril-Kwik[®] and wood Fasteners:

screws

Length Options: Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door/Frame Reinforcement: Special Features:

None required

• Door edge protection lip

Offset joint to clear

• Frame leaf alignment rib for proper hinge location



750-138

Standard Duty, Concealed Leaf Hinge For medium frequency, 1-3/8" (35 mm) thick

solid core wood interior doors up to 100 pounds.

Aluminum 6063-T6 Material: Clearance:

5/16" (8 mm) hinge side plus standard lockside

clearance Dril-Kwik[®] and wood Fasteners:

screws

Length Options: Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

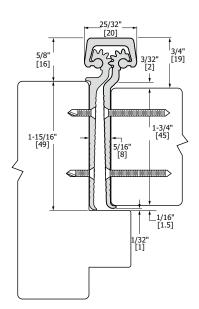
Door/Frame Reinforcement:

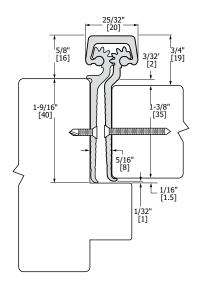
None required

Special Features: · Door edge protection lip

Offset joint to clear

• Frame leaf alignment rib for proper hinge location









780-041 | 780-041HD | 780-041LL

Standard Duty, Heavy Duty, or Lead **Lined Concealed Leaf Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors. For wood or metal doors 1-3/4" (44 mm) thick.



Material: Aluminum 6063-T6

5/16" (8 mm) hinge side Clearance:

plus standard lockside

clearance
Dril-Kwik[®] screws
1/2 Dril-Kwik[®] screws, Fasteners: LL Fasteners:

1/2 wood screws

 Standard sizes include Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door/Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Fire Rating:

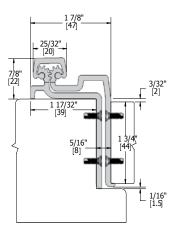
Up to 3 hr. metal and 90 min. wood composite

(with studs)

Special Features:

- · Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (specify "LL")
- Door edge protection lip
- Swing-clear action and ADA compliant for classroom or patient room doors
- Not recommended for doors with a beveled edge on the hinge side See additional fire rating

Notes: details on page 3





780-110 | 780-110HD

Standard Duty or Heavy Duty Concealed Leaf Hinge

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors. For doors 1" (25 mm) to 1-3/8" (35 mm) thick.

Aluminum 6063-T6 Material:

5/16" (8 mm) hinge side Clearance:

plus standard lockside

clearance

Dril-Kwik[®] screws Fasteners:

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door/Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Notes:

Up to 3 hr. metal and Fire Rating:

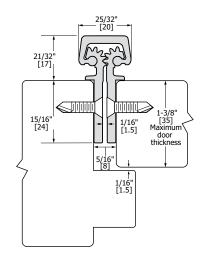
90 min. wood composite

(with studs)

Special Features: Frame and door leaf

alignment ribs for proper

hinge and door location See additional fire rating









780-111* | 780-111HD* | 780-111LL

Standard Duty, Heavy Duty, or Lead **Lined Concealed Leaf Hinge**

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance: Aluminum 6063-T6 5/16" (8 mm) hinge side plus standard lockside

Fasteners: LL Fasteners: clearance Dril-Kwik[®] screws 1/2 Dril-Kwik^(R) screws, 1/2 wood screws

Length Options:

 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

 Custom lengths available

Door/Frame

Reinforcement:

None required to 200 lbs, heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating:

Up to 3 hr. metal and 90 min. wood composite

(with studs)

Special Features:

· Lead lined model for hospital x-ray room doors with

double row of screws to straddle lead (Specify "LL")

 Frame and door leaf alignment ribs for proper hinge and door

location

• 1/8" (3 mm) inset See additional fire rating

details on page 3



780-112* | 780-112HD* 780-112LL

Standard Duty, Heavy Duty, or Lead **Lined Concealed Leaf Hinge**

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance: Aluminum 6063-T6 5/16" (8 mm) hinge side

plus standard lockside

Fasteners: LL Fasteners: clearance Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws,

Length Options:

1/2 wood screws • Standard sizes include

79" (2007 mm)

83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Custom lengths

available

Door/Frame

Reinforcement:

None required to 200 lbs, heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating:

Up to 3 hr. metal and 90 min. wood composite

(with studs)

Special Features:

· Lead lined model for hospital x-ray room

doors with

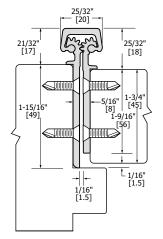
double row of screws to straddle lead (Specify

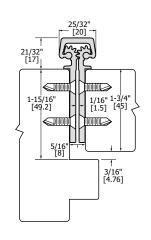
"LL")

· Frame and door leaf alignment ribs for proper hinge and door location hinge location

See additional fire rating

details on page 3







17





780-113 | 780-113HD

Standard Duty or Heavy Duty Concealed **Leaf Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance:

13/16" (21 mm) hinge side plus standard lockside clearance

Dril-Kwik® screws Fasteners:

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

 Custom lengths available

Door/Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel Special Features:

• "Safety Hinge" for early education centers, nursing homes, etc. (when used without

frame stop)

 Door leaf alignment rib for proper door location

• 1/16" (1.5 mm) inset



780-114 | 780-114HD

Standard Duty or Heavy Duty Concealed **Leaf Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance:

15/16" (24 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws

Fasteners: Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Custom lengths

available

Door/Frame

Reinforcement: None required to 200 lbs,

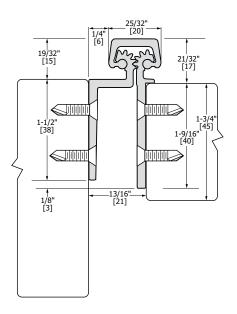
heavier weight use 16 gauge channel

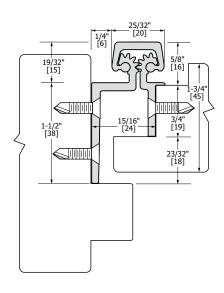
Special Features:

• For deep inset or flushwith-frame (when using rabbeted frames) applications, center hung doors, heavy

cabinets

• For square edged doors on hinge side









780-208 | 780-208HD Standard Duty or Heavy Duty Concealed Leaf Hinge

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6

1/2" (13 mm) hinge side Clearance: plus standard lockside

clearance

Dril-Kwik[®] screws Fasteners:

Length Options: Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

 Custom lengths available

Door/Frame Reinforcement:

None required to 200 lbs, heavier weight use 16

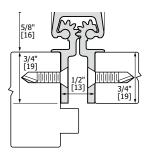
gauge channel

Special Features:

 For millwork, toilet stall doors, windows, and

rabbeted bi-fold doors

 Frame and door leaf alignment ribs for proper hinge and door location





780-224* | 780-224HD* 780-224LL

Standard Duty, Heavy Duty, or Lead **Lined Concealed Leaf Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors. All for doors 1-3/4" (44 mm) thick.



Aluminum 6063-T6 Material: Clearance:

5/16" (8 mm) hinge side plus standard lockside

clearance Dril-Kwik[®] screws Fasteners: 1/2 Dril-Kwik[®] screws, LL Fasteners:

1/2 wood screws

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Custom lengths

available

Door/Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating: Up to 3 hr. metal and 90 min. wood composite

(with studs)

Special Features:

· Lead lined model for hospital x-ray room

doors with

double row of screws to straddle lead (Specify

"LL")

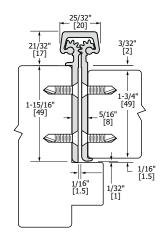
Door edge protection lip

• Frame leaf alignment rib for proper hinge and

door location

• 3/32" (2 mm) inset

See additional fire rating









780-226* | 780-226HD* | 780-226LL

Standard Duty, Heavy Duty, or Lead **Lined Concealed Leaf Hinge**

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors. All for doors 2" (51 mm) thick or greater.



Material:

Aluminum 6063-T6

Clearance:

5/16" (8 mm) hinge side plus standard lockside

. clearance

Fasteners: LL Fasteners: Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws,

1/2 wood screws

Length Options:

Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

 Custom lengths available

Door/Frame

Reinforcement:

None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Fire Rating:

Up to 3 hr. metal and 90 min. wood composite

(with studs)

Special Features:

· Lead lined model for hospital x-ray room

doors with

double row of screws to straddle lead (Specify

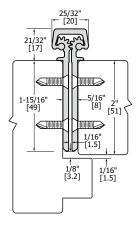
"LL")

 Frame and door leaf alignment ribs for proper hinge and

door location

Notes: See additional fire rating

details on page 3





780-235HD

Heavy Duty Concealed Leaf Hinge

Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6 Clearance:

5/16" (8 mm) hinge side plus allow an additional

1/32" to the standard lockside

clearance

Dril-Kwik[®] screws Fasteners: · Standard sizes include Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Custom lengths

available

Door/Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Up to 3 hr. metal and 90 Fire Rating:

min. wood composite

(with studs)

Special Features:

Wide Throw for

applications that require

extra clearance for door

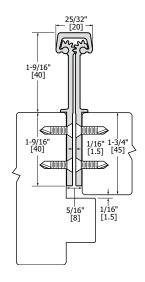
or frame

 Frame and door leaf alignment ribs for proper hinge and door location

• For square edged doors

on hinge side

Notes: See additional fire rating







780-057 | 780-057HD

Standard Duty or Heavy Duty Full **Surface Hinge**

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: 1/32" (1 mm) minimum Clearance:

recommended between doors

Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

None required

Door

Reinforcement:

Optional

Notes:

Fire Rating: Up to 3 hr. metal and

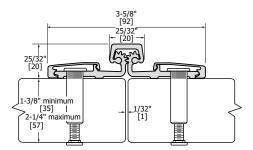
90 min. wood composite

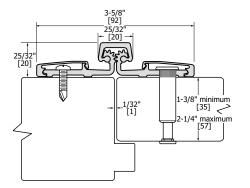
(with studs)

 Bi-fold applications Special Features:

 Security moldings See additional fire rating

details on page 3







780-157 | 780-157HD

Standard Duty or Heavy Duty Full **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material:

Clearance: 1/32" (1 mm) minimum

recommended for hinge side plus standard

lockside clearance $\operatorname{Dril-Kwik}^{\mathbin{f R}}$ screws and

Fasteners:

sex bolts

Length Options: · Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door

Reinforcement: None required

Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

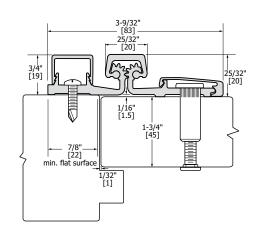
(with studs)

• For surface applications Special Features:

where frame face dimension is limited

 Security moldings • 1/16" (1.5 mm) inset

Notes: See additional fire rating







780-210 | 780-210HD Standard Duty or Heavy Duty Full

Surface Hinge

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6

Clearance: 1/32" (1 mm) minimum

recommended for hinge side plus standard

lockside clearance. 1-5/8" (41 mm) minimum frame face required plus

3/16" (5 mm) rotational

clearance clearance Dril-Kwik[®] screws and

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths

available

Door

Reinforcement: None required

Frame

Notes:

Reinforcement: None required to 200 lbs,

heavier weight use 16 gauge channel

Optional

Fire Rating: Up to 3 hr. metal and

90 min. wood composite

(with studs)

Special Features: • Can be used with any

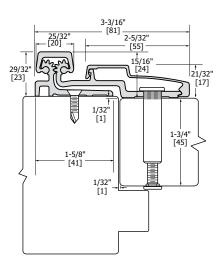
door and frame material

Security molding

• 1/32" (1 mm) inset

See additional fire rating

details on page 3





780-257HD

Heavy Duty Full Surface Hinge

Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6 Clearance: 1/32" (1 mm) minir

1/32" (1 mm) minimum recommended between mullion and door plus

standard lockside clearance. 7/8" (22 mm) to 21/4" (57 mm) mullion

width.

Fasteners: Dril-Kwik[®] screws and

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths

available

Door

Reinforcement: None required

Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

(with studs)

Special Features: • Double hinge for

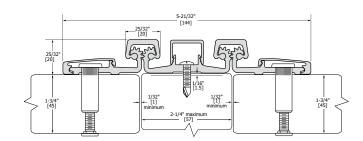
hanging two entrance doors from a fixed

mullion

• Security moldings

• 1/16" (1.5 mm) inset

See additional fire rating







780-045 | 780-045HD Standard Duty or Heavy Duty Half Surface Hinge

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: 5/32" (4 mm) minimum Clearance:

recommended hinge side

plus standard lockside clearance

Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required

Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

(with studs)

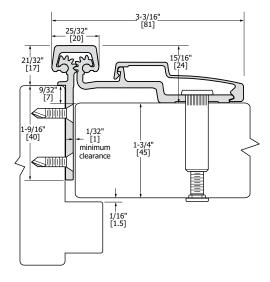
Special Features: • Frame leaf alignment rib

for proper hinge location

Security molding

• 9/32" (7 mm) inset See additional fire rating

details on page 3





780-046 | 780-046HD Standard Duty or Heavy Duty Half **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance:

5/32" (4 mm) minimum

recommended hinge side

plus standard

lockside clearance Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: · Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required

Frame

None required to 200 lbs, Reinforcement:

heavier weight use 16

gauge channel

Optional

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

(with studs)

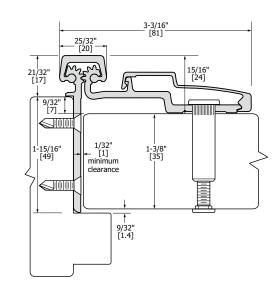
Special Features: • Complete frame rabbet

coverage for 1-3/4" (45 mm) frames, with 1-3/8" (35 mm) doors

• Frame leaf alignment rib for proper hinge location

 Security molding • 9/32" (7 mm) inset

See additional fire rating Notes:







780-053 | 780-053HD Standard Duty or Heavy Duty Half **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance: 5/32" (4 mm) minimum

recommended hinge side plus standard lockside

clearance

Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required

Frame

None required to 200 lbs, Reinforcement:

heavier weight use 16

gauge channel

Optional

Notes:

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

(with studs)

Special Features: • Frame leaf alignment rib

for proper hinge location

 Security molding • 1/8" (3 mm) inset

See additional fire rating

details on page 3



780-054 | 780-054HD

Standard Duty or Heavy Duty Half **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance: 5/32" (4 mm) minimum

recommended hinge side

plus standard

lockside clearance Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door

Reinforcement: None required

Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Optional

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

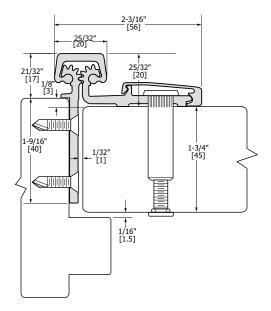
(with studs)

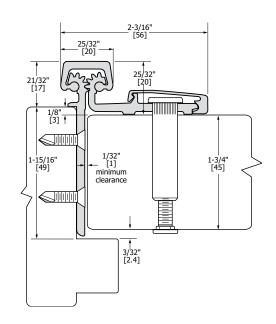
• Frame leaf alignment rib Special Features:

for proper hinge location

 Security molding • 1/8" (3 mm) inset

Notes: See additional fire rating









780-155 | 780-155HD Standard Duty or Heavy Duty Half Surface Hinge

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6 5/32" (4 mm) minimum Clearance:

recommended hinge side

plus standard lockside clearance

Dril-Kwik[®] screws and Fasteners:

sex bolts

Length Options: • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required

Frame

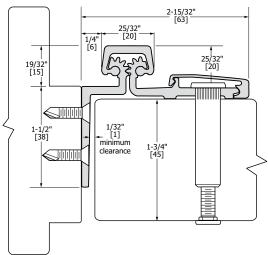
Reinforcement: None required to 200 lbs,

heavier weight use 16 gauge channel

Special Features: • For center hung

and double egress conversions

Security molding





780-211HD

Heavy Duty Half Surface Hinge

(Left Hand Shown)

Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Aluminum 6063-T6 Clearance:

5/32" (4 mm) minimum

recommended hinge side

plus standard

lockside clearance Dril-Kwik[®] screws and Fasteners:

sex bolts

· Standard sizes include Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door

Reinforcement:

None required

Frame

Reinforcement: None required to 200 lbs,

heavier weight use 16

gauge channel

Fire Rating: Up to 3 hr. metal and 90

min. wood composite

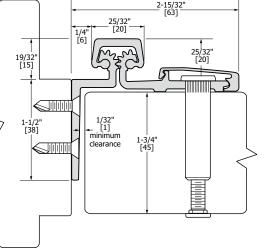
(with studs)

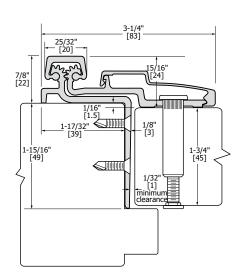
• Frame leaf wrap-around Special Features:

reinforcement for damaged frames

Security molding

• 1/16" (1.5 mm) inset









780-213 | 780-213HD Standard Duty or Heavy Duty Half **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance:

5/32" (4 mm) minimum recommended hinge side

plus standard

lockside clearance Dril-Kwik[®] screws and Fasteners:

sex bolts

 Standard sizes include Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door

Reinforcement: None required

Frame

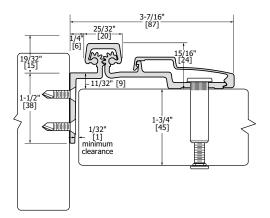
None required to 200 lbs, Reinforcement:

heavier weight use 16 gauge channel

Special Features: For center hung door

where large edge radii or finger guards require

a long reach Security molding





780-259 | 780-259HD Standard Duty or Heavy Duty Half **Surface Hinge**

(Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Aluminum 6063-T6 Material: Clearance: 5/32" (4 mm) minimum

recommended hinge side

plus standard

lockside clearance Dril-Kwik[®] screws and Fasteners:

sex bolts

• Standard sizes include Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door

Reinforcement: None required

Frame

None required to 200 lbs, Reinforcement:

heavier weight use 16 gauge channel

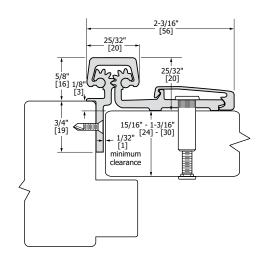
Special Features:

 Frame leaf alignment rib for proper hinge location

 For custom applications with thinner doors

· Security molding

• 1/8" (3 mm) inset







780-300HD

Heavy Duty Half Surface Hinge

(Left Hand Shown)

Heavy duty for high frequency, center hung doors or heavy, medium frequency, center hung doors.

Material: Aluminum 6063-T6

1/32" (1 mm) minimum recommended between Clearance:

door and frame
Dril-Kwik® screws
• Standard sizes include Fasteners: Length Options:

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required to 200 lbs,

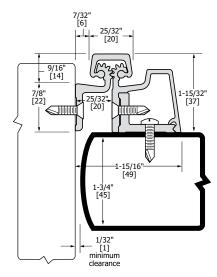
heavier weight use 16

gauge channel

Special Features: • For center hung door

application

• 3/4" (19 mm) minimum inset







1200-600XHD

Extra Heavy Duty Concealed Leaf Hinge Strong enough to swing doors heavier than 600 lbs, wider than four feet, and taller than ten feet. Extra heavy duty for heavy, high frequency doors or extremely heavy, low frequency doors. For doors 1-3/4" (45 mm) to 2-3/8" (60 mm) thick.

Material: Aluminum 6063-T6 Clearance: 15/32" (12 mm) hinge

side plus standard

lockside clearance 1/4"-20 Dril-Kwik[®] Fasteners:

screws or optional 1/4-14 x 11/2" wood screws

· Standard sizes include Length Options:

83" (2108 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

Door

Reinforcement: None required

to 200 lbs, use 16 gauge channel at higher weight

Frame

Reinforcement: Frame reinforcement

recommended for doors in excess of 200 lbs and 3

feet in width

Special Features: · Lead lined model for

hospital x-ray room doors with double row of screws to straddle lead (Specify "LL")

 Frame and door léaf alignment ribs for proper hinge and door

location

1200-650XHD

Extra Heavy Duty Concealed Leaf Hinge Strong enough to swing doors heavier than 600 lbs, wider than four feet, and taller than ten feet. Extra heavy duty for heavy, high frequency doors or extremely heavy, low frequency doors. For doors thicker than 2-3/8" (60 mm).

Material: Aluminum 6063-T6 15/32" (12 mm) hinge Clearance:

side plus standard

lockside clearance 1/4"-20 Dril-Kwik[®] Fasteners:

screws or optional 1/4-14 x 11/2" wood screws

• Standard sizes include Length Options:

83" (2108 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Reinforcement: None required to 200 lbs,

use 16 gauge channel at

higher weight

Frame

Door

Reinforcement:

Frame reinforcement recommended for doors in excess of 200 lbs and 3

feet in width

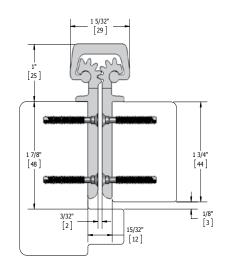
Special Features:

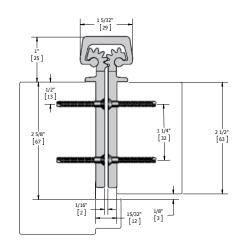
· Lead lined model for hospital x-ray room doors with double row

of screws to straddle lead (Specify "LL")

• Frame and door leaf alignment ribs for

proper hinge and door location







Hager heavy duty stainless steel continuous hinges offer proven reliability that can stand up to the daily rigors of high-traffic, high-impact areas. They're designed and engineered to evenly distribute door weight along the full length of the door, which eliminates localized stresses on the frame. Hager stainless steel continuous hinges also help eliminate stress on closers, automatic operators, and panic and locking hardware by helping doors to stay properly aligned.



CONTINUOUS BENEFITS

Security

Hager 790 Series stainless steel continuous hinges eliminate the gap between the door and frame, so doors cannot be pried open.

Energy Savings

Stainless steel continuous hinges provide a permanent weather barrier and reduce air infiltration by creating a seal from top to bottom of the door at the hinge stile.

Heavy Duty, High-Quality Construction

Hager stainless steel continuous hinges are 14 gauge type 304 stainless steel with lubricated nylon 6/6 bearings between each knuckle and stainless steel pin. They are corrosion resistant for swimming pool buildings, sewage and water treatment plants, and salt spray environments. They are ideal for hospitals and other institutions where doors and frames are subjected to severe abuse.

Improved Hardware Performance

Hager stainless steel continuous hinges allow doors to stay properly aligned, eliminating stress on closers, automatic operators, panic, and locking hardware.

Support Doors Up to 600 lbs.

All models are designed for long life and heavy duty performance.

Ideal for Retrofit

Hager 790 Series stainless steel continuous hinges use the exiting frame and cover the old butt hinge cut out locations.

Ease of Installation

Each hinge has symmetrical, non-handed hole patterns on standard sizes.

Fire Rated



Hager 790 Series stainless steel continuous hinges are stamped with an Underwriters Laboratories Inc. fire label. Refer to the individual catalog pages for UL listing information.

Certification

Hager 790 Series stainless steel continuous hinges are approved for ANSI A156.26 Grade 1 for 150-pound doors.

Privacy

Hager 790 Series stainless steel continuous hinges eliminate the gap or sightline at the hinge edge, offering privacy on hospital or toilet partition applications.

Door Edge Guards

Various models are supplied with a 14 gauge stainless steel channel that wraps the door edge and protects the door edges from damage by carts, beds, and equipment. Other models offer protection to the jamb with a wrap-around guard. Refer to individual catalog pages for additional information. Edge guards for the latch side edge of the door are available through our Trim and Auxiliary product line.

Standard Finish

Hager 790 Series stainless steel continuous hinges are brushed to a satin finish (US32D).

Recommended Lengths

Hager 790 Series stainless steel continuous hinges are always installed flush with the top edge of the door. Recommended head clearance is 1/8'' (3 mm). Order each hinge equal to the net door height. In the field, trimming should be done from the bottom of the hinge only.

Added Features

Moldings are supplied to cover exposed fastener heads on half-surface and full-surface models and are screwed in place. Models with hinge guards are supplied with adjustable screws allowing up to 1/4" (9 mm) width adjustment for doors to be squared accurately and easily in new installations and retrofits.

DOOR AND FRAME PREPARATION

All 790 Series stainless steel continuous hinges are surface applied without cutouts. Cutout design and spacing coordination is thereby eliminated in both new construction and restoration work.

For models other than double edge guard models, reinforcement plates are not required in doors and frames except where the gauge is too thin or the material is too weak for the fasteners in relation to the door weight, or where abusive operation is anticipated. Consult Hager Companies Technical Service for more information.

For double edge guard models to be mounted to a hollow metal door, Hager strongly recommends a 1/8'' (3 mm) thick reinforcement plate at the hinge side of the door for proper strength of the adjustable studs. The added material will allow proper thread engagement and extend the life of the opening.

Blank frames may be ordered with strike prep only or with a strike prep furnished on both sides with any model that will cover the frame rabbet. Doors should always be ordered without cutouts except for use in labeled openings in which the tested door assembly may have manufacturing restrictions. Continuous frame mortar guards are strongly recommended for masonry walls to avoid screw fastener interference with the mortar.





DOOR CLOSERS

Hager Companies stainless steel continuous hinges eliminate stress on closers, automatic operators, panic, and locking hardware. Conventional surface, concealed sliding closers and pivot-type floor closers may be used because doors stay properly aligned.

SPECIAL PRODUCTS

Custom Designs

For special designs and special applications, contact Hager Customer Service for more information.

While such orders become subject to the change and cancellation policy, hole positioning will be optimized to ensure that the appearance and operation of the products are maintained.

Custom Length Hinges

Hager manufactures hinges over 119" (2023 mm) as two separate lengths. Hager will select hinge segment lengths from standard sizes for best economics in relation to length required.

A special length should be specified from the net door height. To order, list the required hinge length dimension along with the "actual length" or "net door height."

Custom Hole Pattern

Any hole pattern or shape other than Hager's standard hole pattern. Contact Hager Customer Service for more information. Available on all models.

No-Hole (Blank) Hinges

Holes omitted for special applications (i.e. welded hinge) is available on all models. Contact Hager Customer Service for more information.

Special Finishes

Hager 790 Series stainless steel continuous hinges are available in custom color painted or powder coated finishes. Color samples are required for matching.

Dutch Door Hinges

The frame leaf is furnished as a continuous leaf and the door leaf is cut to fit the dutch door heights specified. Upper and lower door leaves are prepped for extra screws. Handing, overall net door height, amount of clearance between the top and bottom doors, their individual heights and door and frame materials should be clearly specified.

Non-Rising Pin

The pin is held securely in place and will not rise or fall from the knuckles during use. The top and bottom plugs are permanently secured to the hinge.

Raised Barrel

For applications where the door is set back in the frame, the knuckle is offset to allow the hinge to clear the frame.

Replacement Moldings

Brushed aluminum replacement moldings with molding clips and fasteners are available in stock lengths for trimming in the field. This option is available for 790-903, 790-904, 790-906, 790-909, 790-935.

Sheared Leaf

For narrow door thicknesses, leaf width can be trimmed. This option is available for 790-900, 790-903, 790-905, 790-909, 790-911, 790-915, 790-926, 790-935.

Wide Throw

The width of the hinge leaf can be extended in order to clear the trim or wall conditions.

Dust Free Bearings

Hager dust free bearings are made of long lasting, self-lubricating material. The bearings provide clean and quiet hinge operation and prevent metal on metal wearing. They meet ANSI/BHMA Grade 1 requirements and support doors weighing up to 600 pounds.

Hospital Tips

Concealed models 790-900, 790-905, 790-907, and 790-915 can be prepared with a tapered 45° angle at the top of the hinge. These are ideal for use in hospitals and correctional facilities to help provide a clean and safe environment.

Quick Connect

Fast installation that eliminates field modifications. Wiring quick connect, modular wiring system with keyed, pre-wired, molded connects. Available for ETM, EMN, ETW, and RETW options.



FASTENERS

Hager 790 Series stainless steel continuous hinges are provided exclusively with carefully engineered and thoroughly tested fasteners. Each fastener is designed for ease of use as well as durability. Appropriate fasteners are furnished with each hinge, together with installation instructions for typical metal and wood doors hung on metal frames. The standard screw pack includes Dril-Kwik[®] self-drilling screws for metal doors and frames as well as wood screws for wood doors.

Special adjustment studs and screws are standard on all models with the double door edge protection lip. The special adjustment studs and screws allow correction of door fit problems up to 3/8" (9 mm). Sex bolts are optional and must be requested at time of order. If special fasteners are required, customers must supply them except upon prior agreement. Please consult Hager Technical Service for alternate fastener recommendations.

Optional Sex Bolts

On all applicable full-surface and half-surface mounted hinge models, sex bolts can be ordered. Sex bolts are intentionally designed shorter than the door thickness to ensure proper clamping action of 1-3/4" (44 mm) doors of slightly varying thickness.

Security Fasteners

These fasteners improve building security and reduce hinge tampering. Security Torx are available in place of standard fasteners upon request.

Security Studs

These stainless steel security studs are mounted through the frame leaf into the door frame. Security studs are available in place of standard fasteners upon request.

FASTENER INSTALLATION

Fasteners for both metal and wood applications are supplied standard with each hinge. The Dril-Kwik $^{\circledR}$ self-drilling screw is used in metal door and frame applications and has an undercut head and a machine thread on the screw shank. The type AB wood screw is supplied for wood door and frame applications.

The Dril-Kwik[®] self-drilling screw's drill point allows it to be placed without pre-drilled holes when installed in a hollow metal frame less than 1/8" (3 mm) thick. It forms its own threads as it is drilled into the frame.

Mortar Guards, made of either styrofoam or wood, are recommended for new construction, eliminating the use of masonry bits. For existing grout-filled frames, pre-drilling is required before installation of the Dril-Kwik® self-drilling screws. Here, the screw acts as a machine screw since drilling has already taken place. Center-punching is recommended on both hollow metal and grout-filled frames to ensure that the screw seats properly in the hinge leaf. Stainless steel frames require pre-drilling.

In all cases, care should be taken to ensure that no drill chips build up behind the hinge. It is best to pre-mark the holes and pre-drill with the hinge removed or clamp the hinge very tightly against the door or frame when using the self-drilling screws.

When installing the self-drilling type screw, make certain that the installer is familiar with the proper use and torque settings of a screw gun. Proper center-punching is extremely important with self-drilling screws. If center-punching is omitted or incorrectly done, the screw will "walk" in the same way as a drill bit, resulting in cocked screw heads and improperly closing hinges.



DOOR AND FRAME DIMENSIONING Models 790-900, 790-911, 790-915

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

A. Hinge thickness	7/32"	5.6 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Lockside clearance for single door	<u>1/8"</u>	3.2 mm
Total	3/8"	9.5 mm

Pairs of Doors (Square and Beveled Edged)

A. Hinge thickness	7/32"	5.6 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Clearance between doors (recommended)*	3/16"	4.8 mm
D. Second hinge thickness	7/32"	5.6 mm
E. Second allowance for frame irregularities	<u>1/32"</u>	0.8 mm
Total	11/16"	17.5 mm

- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - For doors that are pre-beveled 1/8" (3.2 mm)-in-2" (51 mm) on the hinge edge, add 1/32" (0.8 mm) per door to the TOTAL clearance shown (Model 790-900 only). For Models 790-911 and 790-915, the hinge edge of the door should not be beveled.

Models 790-905, 790-926

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

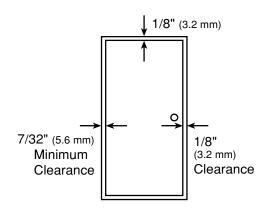
A. Hinge thickness	9/32"	7.1 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Lockside clearance for single door	1/8"	3.2 mm
Total	7/16"	11.1 mm

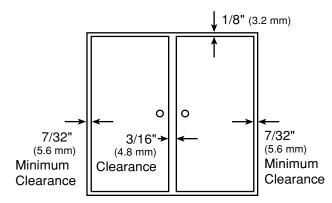
Pairs of Doors (Square and Beveled Edged)

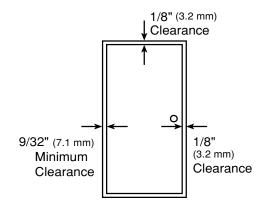
\ .	_	,	
A. Hinge thickness		9/32"	7.1 mm
B. Additional allowance for frame irregularities		1/32"	0.8 mm
C. Clearance between doors (recommended)*		3/16"	4.8 mm
D. Second hinge thickness		9/32"	7.1 mm
E. Second allowance for frame irregularities		<u>1/32"</u>	0.8 mm
Total		13/16"	20.6 mm

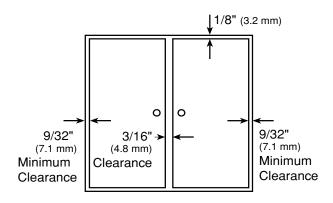
- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - Not recommended for use on doors/panels that have a beveled edge on the hinge side.

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.









6



STAINLESS STEEL CONTINUOUS HINGES

DOOR AND FRAME DIMENSIONING (CONTINUED) Model 790-907

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square Edged)

A. Hinge thickness	3/8"	9.5 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Lockside clearance for single door	<u>1/8"</u>	3.2 mm
Total	17/32"	13.5 mm

Pairs of Doors (Square Edged)

· u o. zoo.s (oqua.e zagea)		
A. Hinge thickness	3/8"	9.5 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Clearance between doors (recommended)*	3/16"	4.8 mm
D. Second hinge thickness	3/8"	9.5 mm
E. Second allowance for frame irregularities	1/32"	0.8 mm
Total	1"	25.4mm

- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - This model is not recommended for use on doors/ panels that have a beveled edge on the hinge side.

Models 790-903, 790-904, 790-906, 790-909, 790-935

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

A. Hinge thickness	1/8"	3.2 mm
3	-, -	
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Lockside clearance for single door	1/8"	3.2 mm
Total	9/32"	7.2 mm

Pairs of Doors (Square and Beveled Edged)

	. ,	
A. Hinge thickness	1/8"	3.2 mm
B. Additional allowance for frame irregularities	1/32"	0.8 mm
C. Clearance between doors (recommended)*	3/16"	4.8 mm
D. Second hinge thickness	1/8"	3.2 mm
E. Second allowance for frame irregularities	1/32"	0.8 mm
Total	1/2"	12.7 mm

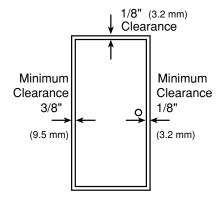
Notes for 790-904 only:

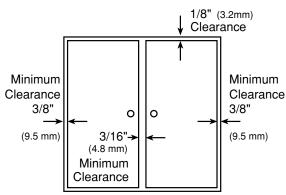
- Some minimal clearance may be required for paint and/or weatherstripping.
- For doors that are pre-beveled 1/8" (3.2 mm)-in-2" (51 mm) on the hinge edge, add 1/32" (0.8 mm) per door to the TOTAL clearance shown.

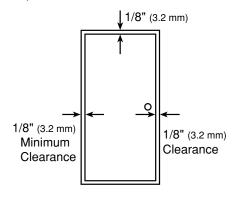
Notes for 790-906 only:

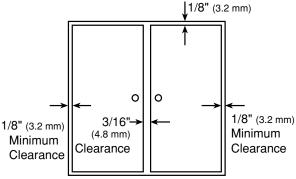
• The hinge edge of the door should not be beveled.

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.











ELECTRIC MODIFICATIONS

Von Duprin EPT2 or EPT10 Electric Power Transfer **Preparation**

- Hinge leaf cutout to accommodate power transfer device.
- Specify handing and dimension from top of hinge to centerline of power transfer cutout location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on models 790-900, 790-903, 790-904, and 790-915.

Exposed Electric Switches:

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door.
- Includes three 12" wire leads.
- To order, use symbol "E1S" as a suffix. Example: 790-900 85" US32D E1S
- Each monitoring hinge only needs one E1S switch.
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Templates regarding location of contact switch available upon request.
- Modification available on models 790-900 and 790-915.

Concealed Electric Through-Wire:

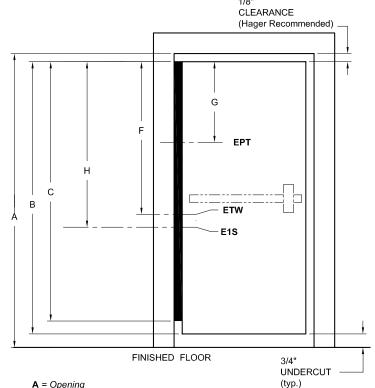
- Transfers power discreetly from building to door hardware.
- Four, eight, or ten 24-gauge wires with 12" wire leads.
- To order, use symbol "ETW" plus the number of wires required, as a suffix.
- Example: 790-900 HD 85" US32D ETW 4
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header. typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on 790-900 and 790-915.

Mortar Box - 430



- Serves as a mortar shield.
- Overall dimensions are 9" (229 mm) length with tabs, 7" (178 mm) (inside), 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension.
- Galvanized steel 0.040" (1 mm).
- Top and bottom knockouts for standard conduit fittings.





A = Opening

B = Door height

C = Actual hinge length

F = C.L. of <u>ETW</u> (electric through-wires)

G = C.L. of \overline{EPT} (electric power transfer)

H = C.L. of E1S (exposed switch)

* For ease of ordering, Hager has established standard locations for power transfer cutouts. All standard location dimensions are referenced from the top edge of the door to the centerline of the power transfer cutout. Please specify handing.

	Α	В	С	F	G	Н
79″	80"	79-1/8"	79-3/16	79-3/16 41-1/2" 2		41-1/2"
83"	84"	83-1/8"	83-1/8"	43-1/2"	28-7/16"	43-1/2"
85"	86"	85-1/8"	85-1/8"	45-1/2"	30-7/16"	45-1/2"
95"	96"	95-1/8"	95″	55-3/8"	40-1/2"	55-3/8"
119"	120"	119-1/8"	118-3/4"	79-1/8"	64-7/16"	79-1/8"





790-900

Door of Any Material

For doors 1-3/4'' (44 mm) thick and up to 600 pounds.



Material: 14 Ga. (0.075" = 1.9 mm) Type

304 stainless steel

Finish: US32D Satin
Clearance: 7/32" (5.6 mm) hinge side plus

standard lockside clearance

Fasteners: $#10-24 \times 5/8"$ S/S Dril-Kwik[®]

(metal frame/door);

#10-16 x 1-1/4" S/S Type AB

(wood door)

Length Options: Standard and custom

Door/Frame Reinforcements: None required to 200 lbs, heavier

weight use 16 gauge channel

Fire Rating: Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless steel

pin

Dual 6/6 nylon bearings between each

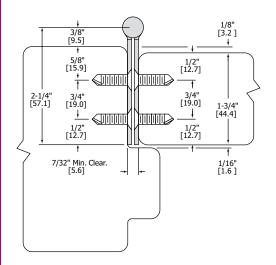
knuckle

May be used with beveled or

square edge doors

• 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27





Finish:

790-905

Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material: 14 Ga. (0.075'' = 1.9 mm) Type

304 stainless steel US32D Satin

Clearance: 9/32" (7.1 mm) minimum hinge side

plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik[®]

Fasteners: #10-24 x 5/8" S/S Dr (metal frame);

 $#1/4-32 \times 3/4"$ S/S machine screw (used with adjustment stud); $#3/8-16 \times 1-3/8"$ S/S adjustment

stud (metal/wood door) Standard and custom

Length Options:

Door/Frame Reinforcements: • Wood – None required

 Metal – Recommended 16 gauge channel at heavier weight

• For metal doors, a 1/8" (3.2 mm) thick reinforcement plate is recommended along the hinge edge for proper thread engagement of

the adjustment studs

Fire Rating: Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless

steel pin

• Dual 6/6 nylon bearings between

each knuckle

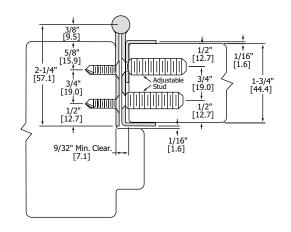
• Door edge protection lip (both faces

of door)

 Not recommended for doors with a beveled edge on the hinge side

• 1/16" (1.6 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27







790-907

Flush Mount - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:

14 Ga. (0.075" = 1.9 mm) Type 304

stainless steel US32D Satin

Finish: Clearance:

3/8" (9.5 mm) minimum clearance

between doors

Fasteners:

#10-32 x 3/4" S/S machine (used with adjustment stud);

#3/8-16 x 1-3/8" S/S adjustment stud

(metal/wood door)

Length Options: Door Reinforcements: Standard

• Wood - None required up to to

200 lbs

• Metal - Recommended 16 gauge channel at heavier weight

• For metal doors, a 1/8" (3.2 mm) thick reinforcement plate is recommended along the hinge edge for proper thread engagement of the

adjustment studs

Frame Reinforcements:

Fire Rating:

Special Features:

None required to 200 lbs, heavier weight use 16 gauge channel Up to 3 hour metal and 90 minute wood composite

• 1/4" (6.3 mm) diameter stainless steel pin

• Dual 6/6 nylon bearings between each knuckle

- · Door edge protection lip (both faces of door)
- · Can be used for door to door mounting
- · Not recommended for doors with a beveled edge on the hinge side



790-911

Swing Clear - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:

14 Ga. (0.075" = 1.9 mm) Type 304

Stainless Steel US32D Satin

Finish: Clearance:

7/32" (5.6 mm) hinge side plus standard lockside clearance

Fasteners:

#10-24 x 5/8" S/S Dril-Kwik[®]

(metal frame/door)

Standard and custom

#10-16 x 1-1/4" S/S Type AB

(wood door)

Length Options:

Door/Frame Reinforcements:

None required to 200 lbs, heavier weight use 16 gauge channel

Fire Rating:

Up to 3 hour metal and 90 minute

wood composite • 1/4" (6.3 mm) diameter stainless

Special Features:

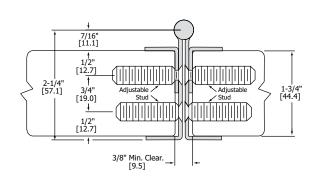
steel pin • Dual 6/6 nylon bearings between

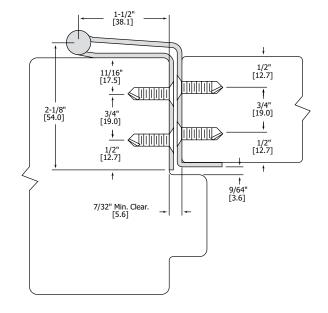
each knuckle

- · Wrap-around frame leaf design for easy installation and protection
- Door edge protection lip (stop side
- only)
- Useful for ADA upgrade work
- Not for use on doors with a beveled edge on the hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27











Finish:

790-915

Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



14 Ga. (0.075" = 1.9 mm) Type 304 Material:

stainless steel US32D Satin

Clearance: 7/32" (5.6 mm) plus standard

lockside clearance

Fasteners: #10-24 x 5/8" S/S Dril-Kwik®

(metal frame/door);

#10-16 x 1-1/4" S/S Type AB

(wood door)

Standard and custom Length Options:

Door/Frame Reinforcements: None required to 200 lbs, heavier

weight use 16 gauge channel

Fire Rating: Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless steel

pin

• Dual 6/6 nylon bearings between each knuckle

• Door edge protection lip (stop side

only)

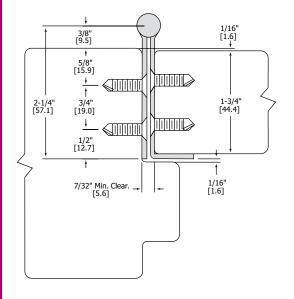
· Not recommended for doors with a beveled edge on the hinge side

• 1/16" (1.6 mm) inset

• Door edge protection lip (stop side

only)

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27





Fasteners:

790-926

Swing Clear - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.





Material: 14 Ga. (0.075" = 1.9 mm) Type 304

stainless steel US32D Satin

Finish: Clearance: 9/32" (7.1 mm) minimum hinge side

> plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik®

(metal frame);

#10-32 x 3/4" S/S machine (used with adjustment stud);

#3/8-16 x 1-3/8" S/S adjustment stud

(metal/wood door)

Length Options: Standard and custom

• None required to 200 lbs, heavier Door/Frame Reinforcements: weight use 16 gauge channel

> • For metal doors, a 1-1/8" (3.2 mm) thick reinforcement plate is strongly recommended along the hinge edge for proper thread engagement of the

adjustment studs

Fire Rating: Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless

steel pin

• Dual 6/6 nylon bearings between

each knuckle

 Wrap-around frame leaf design for easy installation and protection

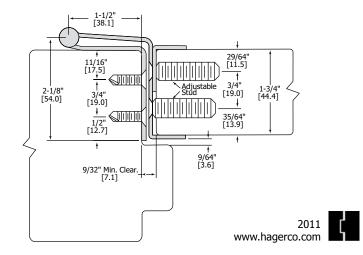
• Door edge protection lip (both faces of door)

• Useful for ADA upgrade work

· Not recommended for doors with a

beveled edge on hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27







790-903

Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:

14 Ga. (0.075'' = 1.9 mm) Type 304

stainless steel

Finish:

US32D Satin

Clearance:

1/8" (3.2 mm) minimum hinge side plus

standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik[®]

Fasteners:

(metal frame); #1/4-20 x 3/4" 2C Dril-Kwik[®]

(metal door);

#1/4-14 x 1" 2C Type AB

(wood door)

Length Options: Door/Frame Reinforcement: Standard None required to 200 lbs, heavier

weight use 16 gauge channel Up to 3 hour metal and 90 minute

wood composite

Special Features:

Fire Rating:

• 1/4" (6.3 mm) diameter stainless

steel pin

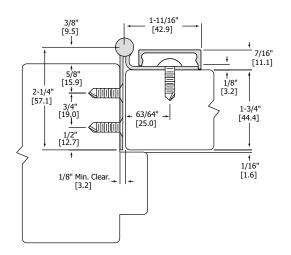
• Dual 6/6 nylon bearings between each

knuckle

Security molding

• 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27





790-935

Swing Clear - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.





Material:

Fasteners:

14 Ga. (0.075" = 1.9 mm) Type 304

stainless steel

Finish: Clearance: US32D Satin 1/8" (3.2 mm) minimum hinge side

plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik®

(metal frame);

#1/4-20 x 3/4" 2C Dril-Kwik[®]

(metal door);

#1/4-14 x 1" 2C Type AB

(wood door)

Length Options: Standard

Door/Frame Reinforcement:

None required to 200 lbs, heavier weight use 16 gauge channel

Fire Rating: Up to 3 hour metal and 90 minute

wood composite

Special Features:

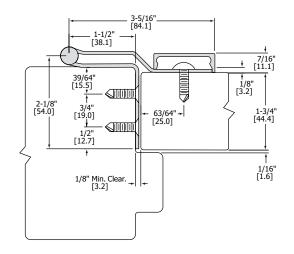
• 1/4" (6.3 mm) diameter stainless steel pin • Dual 6/6 nylon bearings between

each knuckle

· Wrap-around frame leaf design for easy installation and protection

- Useful for ADA upgrade work
- Security molding
- 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27







Fire Rating:

790-904

Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material: 14 Ga. (0.075" = 1.9 mm) Type 304

stainless steel Finish: US32D Satin

Clearance: 1/8" (3.2 mm) hinge side plus

standard lockside clearance

#10-24 x 5/8" S/S Dril-Kwik $^{\circledR}$ Fasteners:

(metal door);

#1/4-20 x 3/4" 2C Dril-Kwik[®]

(metal frame);

#10-16 x 1-1/4" S/S Type AB

(wood door) Standard

Length Options:

Door/Frame Reinforcement: None required to 200 lbs, heavier

weight use 16 gauge channel Up to 3 hour metal and 90 minute

wood composite

• 1/4" (6.3 mm) diameter stainless Special Features:

steel pin

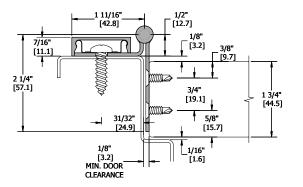
• Dual 6/6 nylon bearings between

each knuckle

• Not recommended for doors with a beveled edge on the hinge side

• 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	13	14	14	15	18





Fasteners:

Fire Rating:

790-906

Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material: 14 Ga. (0.075" = 1.9 mm) Type 304

stainless steel Finish: US32D Satin

1/8" (3.2 mm) minimum hinge side Clearance:

plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik®

(metal door);

#1/4-20 x 3/4" 2C Dril-Kwik[®]

(metal door);

#1/4-14 x 1" 2C Type AB

(wood frame)

Length Options: Standard

Door/Frame Reinforcement:

None required to 200 lbs, heavier

weight use 16 gauge channel Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless

steel pin

• Dual 6/6 nylon bearings between each knuckle

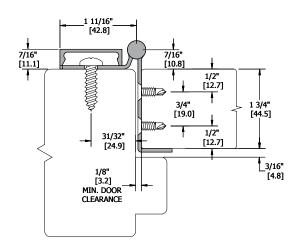
Security molding

• Door edge protection lip (stop side

only)

· Not recommended for doors with a beveled edge on the hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	13	14	14	15	18







Fire Rating:

790-909

Swing Clear - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600 pounds.





14 Ga. (0.075" = 1.9 mm) Type 304 Material:

stainless steel

Finish: US32D Satin

1/8" (0.8 mm) minimum recommended Clearance:

hinge side plus standard lockside

clearance

#10-24 x 5/8" S/S Dril-Kwik $^{\circledR}$ Fasteners:

(metal frame);

#1/4-20 x 3/4" 2C Dril-Kwik[®]

(metal door);

#1/4-14 x 1" 2C Type AB

(wood door)

Length Options: Standard

Door Reinforcement: None required to 200 lbs, heavier weight

use 16 gauge channel Up to 3 hour metal and 90 minute

wood composite

Special Features: • 1/4" (6.3 mm) diameter stainless

steel pin • Dual 6/6 nylon bearings between

each knuckle

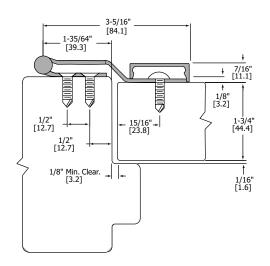
• Useful for ADA upgrade work

Security molding

• For beveled or square edge doors

• 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27





At Hager Companies, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application. Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager trim and auxiliary products give you great looks and proven durability.



MANUFACTURING OPTIONS

Hager Companies can deliver custom door pulls made to your specifications, or choose from our collection of pull designs. Hager's comprehensive selection of door pull hardware includes standard push/pull bars or multiple push bar combinations with center-to-centers made to order.

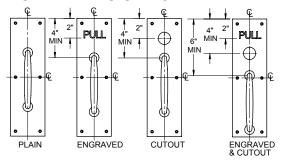
PUSH/PULL PLATE DETAILS Standard Grip Positions

Pulls are centered vertically or lowered when necessary to meet minimum top spacing requirement. Be certain the pull selected will fit on specified plate under these conditions.

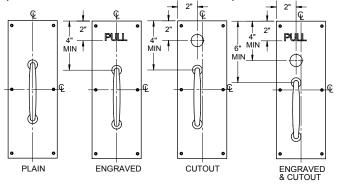
Special Pull Positions

Where pairs of doors are involved and active leaf pull plate is lettered or has a cutout, order pull plate for inactive leaf Grip To Align (WOC). This will ensure horizontal alignment of pull on both plates. Always furnish complete details when ordering non-standard pull positions.

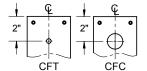
PULL PLATES UP TO 4" WIDE



PULL PLATES OVER 4" WIDE (HANDING REQUIRED WITH CUTOUTS)



Cut Outs



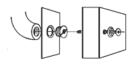
Standard cutout sizes: Cut for Cylinder (CFC) – 1 1/4" (32 mm) diameter; Cut for Thumbturn (CFT) – 3/8" (10 mm) diameter.

All plates may be ordered with cutout option by adding the appropriate suffix (i.e., 30S-CFC).

Standard cutouts are positioned 2" (51 mm) from top of plate where this option has been ordered. Cutouts are centered

on plates up to 4" (102 mm) wide or 2" (51 mm) from edge of plates over 4" (102 mm) wide. The latter are "handed" with cutouts. Furnish hand of door when ordering. Provide complete details for all non-standard cutouts.

Flush Back Mounting





Pull plates using #3, 4, or 10 pull types can be furnished with a flush back (no projections). Specify code FB, (i.e., 33E-FB). Note: Use thru-bolts supplied with mountings for best security.

Back-To-Back Mounting

Many pulls may be ordered back-to-back (BTB) and availability will be noted on each particular product page (refer to product page). Specify the correct part number and center-to-center unless already specified.

Handicap Option

Pulls that must meet the 2-1/2" (64 mm) clearance for ADA requirements are available. Must specify part number with prefix "H" (i.e., H2E). Please refer to each individual part number for availability.

Engraving

Typical engraved lettering is in Helvetica style and colored black. On push or pull plates, standard position is horizontal on a line 2" (51 mm) from top of plate.

PUSH PULL



PUSH

CONE

BUSHING

Fasteners

Illustrated below are various types of fasteners that can be furnished by Hager Companies. Please specify type of fastening desired. All types of fastening cannot be used with all items of hardware. If specified method is not possible, we reserve the right to furnish whatever type we feel is best suited for the installation. When used with tempered glass doors, specify thickness of glass and hole diameter.



Sex bolt and machine screws

(various sizes)



Lead anchor

(used with floor stops in masonry applications)



Plastic anchor and full threaded

(used in drywall or masonry applications)

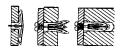


Lag screw and shield



Toggle bolt

(ideal for drywall applications)



Plastic toggle anchor

(used with wall stops in drywall applications)



Thru-bolt and finish washer

(flat or oval head; size as required)



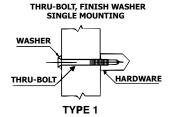
Spanner head machine screws

(various sizes furnished at extra charge)



Security torx head machine screws

(various sizes furnished at extra charge)



SURFACE APPLIED SPECIFY WS OR MS SINGLE MOUNTING FOR FLAT BARS

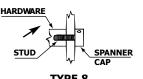


PULL



TYPE 7

SPANNER CAP, SINGLE MOUNTING FOR ROUND BASES ON TEMPERED GLASS DOORS





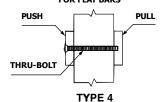
CONCEALED CONE WITH BOLT

BACK-TO-BACK MOUNTING

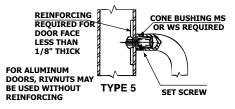
AND SET SCREW

PULL

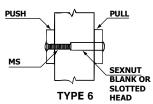
BACK-TO-BACK MOUNTING FOR FLAT BARS



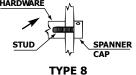
CONCEALED CONE, SINGLE MOUNTING REQUIRES REINFORCING OR RIVNUTS BY OTHERS



SEX BOLT SETS **BACK-TO-BACK MOUNTING**



CONCEALED SPANNER, COLLAR & STUD BACK-TO-BACK MOUNTING SETS WITH ROUND BASES ONLY





METAL FINISH SYMBOLS

US & Hager	Description	Base Material	BHMA Symbol
2C	Zinc Plated Steel	Steel	603
3	Bright Brass	Brass	605
4	Satin Brass	Brass	606
5	Satin Brass, Oxidized	Brass/Bronze	609
9	Bright Bronze	Brass/Bronze	611
10	Satin Bronze	Brass/Bronze	612
10B	Antique Bronze, Oiled	Brass/Bronze	613
10R	Matte Lacquer Antique Bronze	Brass/Bronze	-
15	Satin Nickel	Brass/Bronze	619
15A	Satin Nickel Oxidized	Brass/Bronze	620
19	Flat Black Coated	Brass	622
26	Bright Chromium Plated	Brass/Bronze	625
26D	Satin Chromium Plated	Brass/Bronze	626
28	Satin Anodized Aluminum	Aluminum	628
32	Stainless Steel Metal, Bright	300 Series	629
32D	Stainless Steel Metal, Satin	300 Series	630
L2	Duro	-	-
PC	Clear Plastic	-	-
PK	Plastic Laminate - Black	-	-
CO	Plastic Laminate - Chocolate	-	-
PG	Plastic Laminate - Grey	-	-
S1	Sprayed Aluminum	Cast Iron	-
S2	Sprayed Brass	Cast Iron	-
S3	Sprayed Bronze	Cast Iron	-

Note: For any finish not listed in this catalog, or explained above, availability on request.

ANTIMICROBIAL PROTECTION

Hager Companies' full line of US32D stainless steel door pulls, push bars, push plates, and pull plates are available with AgION antimicrobial protection.

Hager uses a powder coat process to apply the antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. The suppression of bacteria, mold and fungi is as easy as adding antimicrobial treated coating to your Hager products.

Antimicrobial Vital Stats

- US32D stainless steel
- EPA registered
- NSF approved
- FDA listed for food contact
- Designate your product with: MV3 for Trim & Auxiliary



1E

6

152

2E

6

152

2G

8

203

10

254

1G

8

203

1J

10

254

CTC Length

Millimeters

CTC Length

Millimeters

Inches

Inches



1L

12

305

2L

12

305



1

Modified Half Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls Base: 1/2" x 1" (13 mm x 25 mm)

Projection: 2'' (51 mm) Clearance: 1-1/2'' (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H1E)

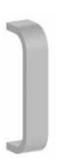
Options: • May be combined with a plate to make a pull plate

• Other centers on special order

Notes: • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• Not suitable for BTB mounting



2

Rectangular Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls Base: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection: 2" (51 mm) Clearance: 1-5/8" (41 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H2E)

Options: • May be combined with a plate to make a pull plate

• Other centers on special order

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Not suitable for BTB mounting



3

Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Clearance: 1-1/2" (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H3E)

Notes: • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

May be combined with a plate to make a pull plate

Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

CTC Length	3E	3G	3J	3L
Inches	6	8	10	12
Millimeters	152	203	254	305





Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1" (25 mm)

Projection: 2-3/4" (70 mm)

Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H4E)

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• May be combined with a plate to make a pull plate

• Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

CTC Length

Millimeters

Inches



P4E

Security Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base: 1" (25 mm) diameter
Projection: 2-1/4" (57 mm)
Clearance: 1-1/4" (32 mm)
CTC Length: 6" (152 mm)
Material: Stainless Steel

Finish: US32D

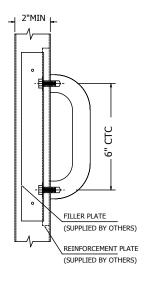
Fasteners: Two (2) 3/8-16 x 1-1/4" "NYLOC" hex head cap

screws

Notes: • For metal doors

• Requires reinforcing plate with an access plate and

Torx screws for door edge



4J

10

254

4H

9

229

4G

8

203

4L

12

305



T4E

Security Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base: 1" (25 mm) diameter Projection: 2-1/4" (57 mm) Clearance: 1-1/4" (32 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 6" (152 mm)
Material: Stainless Steel

Finish: US32D

Fasteners: Two (2) 1/4-20 x 2-1/4" Security Torx thru-bolts





5D

Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

 Base Diameter:
 5/8" (16 mm)

 Projection:
 2-1/8" (54 mm)

 Clearance:
 1-1/2" (38 mm)

 CTC Length:
 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H5D)

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• May be combined with a plate to make a pull plate

• If ordered with tempered glass, specify glass thickness and hole size

· Not suitable for BTB mounting



5N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 6-1/8" (156 mm)

Base: 5/8" x 1-3/16" (16 mm x 30 mm)

Projection: 2" (51 mm)

Clearance: 1-1/2" (38 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D Fasteners: Two (2) 1/4-20 thru-bolts with finish washers Options: May be combined with a plate to make a pull plate

Options: May be combined with a plate Notes: Not suitable for BTB mounting



6N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 6-1/2" (165 mm)

Base Diameter: 1" (25 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers
Options: May be combined with a plate to make a pull plate

Notes: Not suitable for BTB mounting





7N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 7-1/2" (190 mm)

Base Diameter: 2" (51 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Aluminum, brass, bronze

Finishes: US3, US4, US10, US10B, US26, US26D, US28
Fasteners: Two (2) 1/4-20 thru-bolts with finish washers
Options: May be combined with a plate to make a pull plate

Notes: Not suitable for BTB mounting



8N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 7-1/2" (190 mm)

Base Diameter: 2" (51 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Materials: Aluminum, brass, bronze

Finishes: US3, US4, US10, US10B, US26, US26D, US28

Fasteners: Six (6) #8 x 1" OPHWS
Notes: Not suitable for BTB mounting



P8N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 8 - 3/4" (222 mm)

Base: 1-1/2" x 1-5/8" (38 mm x 41 mm)

Projection: 2-1/4" (57 mm)
Clearance: 1-9/16" (40 mm)
CTC Length: 7-3/4" (197 mm)

Materials: Brass

Finishes: US4, US26D

Fasteners: Two (2) 3/8-16 x 3/4" FPHMS Options: Security Torx screws available Notes: Not suitable for BTB mounting

9E

6

CTC Length

Millimeters

11E

152

6

11G

8

11J

10

11L

12

305

Inches

152

CTC Length

Millimeters

Inches



9L

12

305

93

10

254

10L

12

305

10Q

18

457

9G

203

8



9

Oval Wrought Door Pull

Meets ANSI A156.6 for J401 Pulls Certification: Base: 1/2" x 3/4" (13 mm x 19 mm)

Projection: 2" (51 mm) Clearance:

1-1/2" (38 mm) 1-3/4" (45 mm) - Standard Door Thickness: Materials: Brass, bronze, stainless steel

US3, US4, US10, US10B, US26, US26D, US32, US32D Finishes:

Two (2) 1/4-20 thru-bolts with finish washers Fasteners:

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number Handicap:

(i.e., H9E)

 May be combined with a plate to make a pull plate Options:

Other centers on special order

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability

Not suitable for BTB mounting



10

Round Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1-1/4" (32 mm) Projection: 3" (76 mm) Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number Handicap:

(i.e., H10L)

• May be combined with a plate to make a pull plate Options:

• Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

CTC Length

Millimeters

Inches

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 3/4" (19 mm) Projection: 2-1/2" (64 mm)

Offset: 2-1/2" (64 mm); 90° Standard

Clearance: 1-3/4" (45 mm)

1-3/4" (45 mm) - Standard Door Thickness:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number (i.e.,

H11E)

Options: • For 45° offset, add prefix "X" to number (i.e., X11E)

• Other centers available on special orders

• If ordered with tempered glass, specify glass thickness and hole size

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:







12

Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)

Offset: 3" (76 mm); 90° Standard

Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number (i.e.,

H12G)

Options: • For 45° offset, add prefix "X" to number (i.e., X12G)

• Other centers available on special orders

• If ordered with tempered glass, specify glass thickness and hole size

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



13

Round Wrought Door Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Clearance: 1-1/2" (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

CTC Length

Millimeters

CTC Length

Millimeters

Inches

Inches

13E

152

14G

8

203

14H

9

229

14J

10

254

14L

12

305

6

13G

8

203

13J

10

254

13L

12

305

availability



14

Round Wrought Door Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)
Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

5-		-	
Inches	8	10	12
Millimeters	203	254	305

12G 12J 12L

CTC Length

CTC Length

Millimeters

Inches

20L

12

20Q

18

457





19N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 9" (229 mm)

Base Diameter: 1-1/2" (38 mm)

Clearance: 1-11/16" (43 mm)

Projection: 3-1/8" (79 mm)

CTC Length: 6-3/16" (132 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D Fasteners: Four (4) #8 x 1" OPH Tapping Screw

Notes: Suitable for BTB mounting with sex nuts by special quotation



20

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

 Base Diameter:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Clearance:
 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



20N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 9" (229 mm)

Base Diameter: 1-1/2" (38 mm)

Clearance: 1-11/16" (43 mm)

Projection: 3-1/8" (79 mm)

CTC Length: 5-7/32" (132.5 mm)

Door Thickness: 1-3/4" - Standard

Material: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Two (2) 1/4 - #20 x 2-3/16" Undercut FPHMS with finish washers



21

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Pulls

 Base Diameter:
 3/4" (19 mm)

 Projection:
 2-1/2" (64 mm)

 Clearance:
 1-3/4" (45 mm)

Offset: 2-1/2'' (64); 90° - Standard Door Thickness: 1-3/4'' (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

Consists of two (2) pulls back to bac
 Available with 45 degree offset

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

Millimeters

Inches

21E

152

6

21G

203

8

21J

10

254

21L

12

305





22

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)
Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Offset: 3" (76 mm); 90° standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

Consists of two (2) pulls back to backAvailable with 45 degree offset

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

CTC Length

Millimeters

Inches

22G

8

203

22J

10

254

22L

12

305

availability



230

Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Offset Pulls

Base Diameter: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Clearance: 1-3/4" (45 mm)

Clearance: 1-3/4" (45 mm)
Offset: 3-3/4" (96 mm); 90° Standard
Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: 5/16-18 thru bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H23Q)

Options: For 45° offset, substitute "X" for first digit (i.e., X23Q)

Notes:

• If ordered with tempered glass, specify glass thickness and hole size

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



24Q

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Offset Pulls

Base Diameter: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Clearance: 1-3/4" (45 mm)

Offset: 3-3/4" (95 mm); 90° standard Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

Consists of two (2) pulls back to back
Available with 45 degree offset

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for



910P | 910B

Offset Mounting Vertical Pull

Pull Diameter: 1-1/4" (32 mm)

O/A Length: 36" (914 mm), 72" (1829 mm) CTC Lengths: 20" (508 mm), 56" (1422 mm)

Clearance: 2" (51 mm)
Projection: 3-1/4" (82 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 910B is same as 910P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

915P | 915B

Straight Mounting Vertical Pull

Pull Diameter: 1-1/4" (32 mm)

O/A Length: 36" (914 mm), 72" (1829 mm) CTC Lengths: 20" (508 mm), 56" (1422 mm)

Clearance: 2" (51 mm) Projection: 3-1/4" (82 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS w/ finish washers

Notes: • 915B is same as 915P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

920P | 920B

C-Shaped Pull

 Base Diameter:
 1" (25 mm)

 Clearance:
 1-3/4" (45 mm)

 Projection:
 2-1/4" (57 mm)

 CTC Length:
 8-1/2" (217 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 920B is pair of 920P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



921P | 921B

C-Shaped Pull

Clearance: 1-1/2" (38 mm)
Projection: 2-1/8" (54 mm)
CTC Length: 17-1/2" (446 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 921B is pair of 921P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for



922P | 922B

C-Shaped Pull - Continuous

Pull Diameter: 1" (25 mm)
Projection: 2-1/2" (64 mm)

CTC Lengths: 10" (254 mm), 12" (305 mm)

Clearance: 1-1/2" (38 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 922B is pair of 922P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



923P | 923B

C-Shaped Pull - Flanged

Pull Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)

CTC Lengths: 10" (254 mm), 12" (305 mm)

Clearance: 1-3/4" (44 mm) Base Diameter: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 923B is pair of 923P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



924P | 924B

C-Shaped Pull

Projection: 2-1/2" (64 mm)
CTC Length: 14" (356 mm)
Clearance: 1-1/2" (38 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 924B is pair of 924P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



925P | 925B

C-Shaped Pull

Pull Diameter: 1-1/4" (32 mm)

CTC Lengths: 6-1/2" (165 mm), 8-1/2" (217 mm), 12-1/2" (318 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 925B is pair of 925P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





926P | 926B

Curved Pull

 Base Diameter:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Clearance:
 1-13/16" (46 mm)

 Pull Diameter:
 1-3/16" (30 mm)

 CTC Length:
 12" (305 mm)

 Materials:
 Brass, bronze

Finishes: US3, US4, US10, US10B

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 926B is pair of 926P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



930P | 930B

90º Pull

Projection: 3" (76 mm)

CTC Lengths: 14-5/32" - 16-31/32" (360 mm - 431 mm)
Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 930B is pair of 930P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



932P | 932B

S-Shaped Pull

Projection: 3" (76 mm) Clearance: 2" (51 mm) Pull Diameter: 1" (25 mm)

Fasteners: Two (2) 3/8-16 FPHMS w/ finish washers

CTC Length: 30" (762 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 932B is pair of 932P with fasteners for BTB mounting

• Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





933P | 933B

Colonial Style Pull

 Projection:
 2-3/16" (56 mm)

 Clearance:
 1-3/16" (30 mm)

 Pull Diameter:
 1" (25 mm)

 Base Diameter:
 15/16" (24 mm)

 CTC Length:
 6" (152 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US26

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: 933B is pair of 933P with fasteners for BTB mounting



934P | 934B

Offset Pull

 Projection:
 3" (76 mm)

 Clearance:
 1-5/8" (41 mm)

 Pull Diameter:
 1" (25 mm)

 Base Diameter:
 3/4" (19 mm)

CTC Lengths: 12" (305 mm), 16" (406 mm), 18" (457 mm) Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: 934B is pair of 934P with fasteners for BTB mounting



960P | 960B

Square Tip Pull

 O/A Height:
 16" (406 mm)

 Base Diameter:
 1-1/4" (32 mm)

 Pull Diameter:
 1" (25 mm)

 Clearance:
 1-3/4" (45 mm)

 Projection:
 3-1/4" (83 mm)

 CTC Length:
 12" (305 mm)

 Materials:
 Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS w/ finish washers

Notes: • 960B is pair of 960P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





961P | 961B

Steeple Tip Pull

O/A Height: 16-5/16" (414 mm)

Base Diameter: 2" (51 mm)

Pull Diameter: 1" (25 mm)

Clearance: 1-3/4" (45 mm)

Projection: 3" (76 mm)

CTC Length: 12" (305 mm)

Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 961B is pair of 961P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



962P

Acorn Tip Pull

O/A Height 16-5/16" (414 mm)

Base Diameter: 2" (51 mm)
Pull Diameter: 1" (25 mm)
Projection: 3" (76 mm)
Clearance: 1-7/8" (48 mm)
CTC Length: 12" (305 mm)
Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



963P

Acorn Pull - Offset

O/A Height: 16-5/16" (414 mm)
Pull Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)

CTC Lengths: 12" (304 mm), 16" (406 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm)

Materials: Cast brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



967P

Curved Pull

O/A Height: 20-1/2" (520 mm)
Clearance: 3-9/16" (90 mm)
Projection: 5-9/16" (141 mm)
CTC Length: 16" (406 mm)
Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for



970P

Custom Push/Pull Set

 Base Diameter:
 1" (25 mm)

 Pull Projection:
 3" (76 mm)

 Pull Clearance:
 2" (51 mm)

 CTC Length:
 13-1/4" (337 mm)

 Push Projection:
 2-3/4" (70 mm)

 Push Clearance:
 1-3/4" (45 mm)

CTC Length: 34" (864 mm) or to suit door dimension

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D
Fasteners: Type 3 mounting, concealed cone with bolt and set screw

• Pull or push bar can be ordered separately by quotation only

• Pull bar radius can be gue

• Push bar radius can be custom made so the radius points in the

downward direction

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability



974P | 974B

Door Pull

Projection: 2-1/2" (64 mm)

CTC Length: 12" (304 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm),

36" (914 mm), 48" (1219 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US26, US26D, US32D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 974B is pair of 974P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability

975P | 975B

Vertical Pull

Projection: 1-3/4" (44 mm)

O/A Length: 36" (914 mm), 72" (1829 mm) CTC Length: 20" (508 mm), 56" (1422 mm)

Pull Diameter: 1" (25 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 975B is pair of 975P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability



976P | 976B

Door Pull - Offset

29-1/2" (750 mm) O/A Height: Base Diameter: 1-1/4" (32 mm) Pull Diameter: 1-1/4" (32 mm) 5-3/8" (137 mm) Projection: 4-1/8" (105 mm) Clearance: Offset: 1-3/4" (45 mm) 19-13/16" (503 mm) CTC Length: Materials: Stainless steel Finish: US32, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 976B is pair of 976P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

980P | 980B

Segment Shape - Straight

CTC Length: 9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 980B is pair of 980P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

981P | 981B

Segment Shape - Offset

Projection: 2-3/8" (60 mm)

CTC Length: 9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 981B is pair of 981P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

982P | 982B

Straight Pull

Base Diameter: 1-5/16" (33 mm)
Projection: 3-1/8" (79 mm)
Clearance: 1-13/16" (46 mm)
CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 982B is pair of 982P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





983P | 983B

Curved Pull

O/A Height: 21-1/4" (540 mm)

Base Diameter: 1-1/4" (32 mm)

Projection: 3-1/8" (79 mm)

Clearance: 1-7/8" (48 mm)

CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 983B is pair of 983P with fasteners for BTB mounting

· Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



984P | 984B

Curved Pull

Clearance: 1-7/8" (47 mm)
Projection: 3" (76 mm)

CTC Lengths: 12" (305 mm), 20" (508 mm) Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US32, US32D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 984B is pair of 984P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



Curved Pull

O/A Height: 14" (356 mm)

Projection: 3" (76 mm)

Clearance: 1-9/16" (40 mm)

CTC Length: 12" (305 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 985B is pair of 985P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



986P | 986B

Curved Pull

 O/A Height:
 22" (559 mm)

 Pull Diameter:
 1-1/4" (32 mm)

 Base Diameter:
 2" (51 mm)

 Projection:
 3-7/8" (99 mm)

 Clearance:
 2-5/8" (67 mm)

 CTC Length:
 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32 Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 986B is pair of 986P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for







987P | 987B

Double Curved Pull

Base Diameter: 1-1/4" (32 mm)
Clearance: 2" (51 mm)
Projection: 3" (76 mm)
CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 987B is pair of 987P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



988P | 988B

Offset Curved Pull

Projection: 3" (76 mm) CTC Length: 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US26, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 988B is pair of 988P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



990P | 990B

18º Pull

 Pull Diameter:
 1" (25 mm)

 Projection:
 2-3/4" (70 mm)

 Clearance:
 1-3/4" (45 mm)

 CTC Length:
 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 990B is pair of 990P with fasteners for BTB mounting

Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





15C

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls
Description: Cup welded to face plate
Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)
Materials: Stainless steel
Finishes: US32D

Fasteners: Four (4) #6 x 5/8" OPHWS



15N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Four (4) #6 x 5/8" OPHWS



15P

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls

Description: Cup welded to face plate and welded studs for security torx thru-bolt mounting

Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)
Materials: Stainless steel
Finishes: US32D

rillishes: US32D

Fasteners: Two (2) 6-32 x 1-1/2" FPHMS (Security Torx)

Notes: For use on 1-3/4" (44 mm) doors



15S

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls

Description: Concealed mounting by screws within the recessed cup (similar to 16N or 17N)

Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Two (2) #6 x 5/8" PPHWS Notes: Fasteners concealed in cup





16N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 1-15/16" x 3" (49 mm x 76 mm)

Projection: 1/16" (1.5 mm)

Opening: 27/32" x 2-3/8" (22 mm x 60 mm)

Cup Clearance: 5/8" (16 mm)

Fasteners: Two (2) #8 x 3/4" OPHWS

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Notes: Fasteners concealed in cup



Finger Pull Plate

Certification: Meets ANSI A156.6 for combination J301 Pull Plate and J403 Pulls

Face: 4" x 16" (102 mm x 406 mm)

Projection: .050" (1.3 mm)

Opening: 1-3/4" x 3-1/16" (44 x 78 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Ten (10) #6 x 5/8" OPHWS

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D



17N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 2-1/2" x 3-31/32" (64 mm x 101 mm)

Projection: 3/32" (2.4 mm)

Opening: 1-11/32" x 3-13/32" (34 mm x 87 mm)

Cup Clearance: 5/8" (16 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #8 x 13/16" OPHWS Notes: Fasteners concealed in cup



25B

Security Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: $3-1/2" \times 5" (89 \text{ mm } \times 127 \text{ mm})$ Opening: $1-3/4" \times 3-1/16" (45 \text{ mm } \times 78 \text{ mm})$

Projection: 1/8" (3 mm) Cup Clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Stainless steel

Finishes: US32D

Fasteners: Two (2) 6-32 x 1-1/2" FPHMS (Security Torx)

Notes: Security pull thru-bolted to a 15P pull





25C

Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: $3-1/2'' \times 5'' (89 \text{ mm } \times 127 \text{ mm})$ Opening: $1-3/4'' \times 3-1/16'' (45 \text{ mm } \times 78 \text{ mm})$

Projection: 1/8" (3 mm) Cup Clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 6-32 OPHMS sex nuts and bolts

Materials: Stainless steel Finishes: US32D

Notes: Consists of two (2) 15C pulls mounted BTB



25N

Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: 3-1/2" x 5" (89 mm x 127 mm)
Opening: 1-3/4" x 3-1/16" (45 mm x 78 mm)

Projection: 1/8" (3 mm) Cup clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 6-32 OPHMS sex nuts and bolts Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Notes: Consists of two (2) 15N pulls mounted BTB



25P

Security Finger Push/Pull Plate Set

Certification: Meets ANSI A156.6 for combination J301 Push Plate and J403 Flush Pull

Face: 4" x 16" (102 mm x 406 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Six (6) 8-32 x 3/4" FPHMS (Security Torx) with sex nuts and bolts

Materials: Stainless Steel

Finishes: US32D

Notes: Consists of a 15 pull cup welded to a 100T push plate (Mounted in BTB fashion)



26N

Security Finger Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 4" x 5" (102 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-5/8" x 3" (41 mm x 76 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx)

Materials: Brass, stainless steel
Finishes: US4, US26D, US32D
Notes: Cup welded to face





27N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 5" x 5" (127 mm x 127 mm)

Projection: 3/8" (9.5 mm)

Opening: 3" x 3-1/2" (76 mm x 89 mm)

Cup Clearance: 7/8" (22 mm)
Materials: Stainless steel

Finishes: US32D

Fasteners: Four (4) 10-24 FPHMS (Security Torx) sex nuts and bolts

Notes: • ADA Compliant

• Not available for BTB mounting



27P

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 5" x 5" (127 mm x 127 mm)

Projection: 3/8" (9.5 mm)

Opening: 3" x 3-1/2" (76 mm x 89 mm)

Cup Clearance: 7/8" (22 mm)
Materials: Stainless steel

Finishes: US32D

Fasteners: Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx)

Notes: • ADA Compliant

• Not available for BTB mounting





30, 40, 50 Series

Pull Plate

Gauge: 0.050" (1.3 mm) Certification: Meets ANSI A156.6

for J405 Pull Plate



80, 90, 100 Series

Pull Plate

Gauge: 0.125" (3.2 mm) Certification: Meets ANSI A156.6 for J407 Pull Plate



A30, A40, A50 Series

Pull Plate

Gauge: 0.062" (1.6 mm) Certification: Meets ANSI A156.6 for J405 Pull Plate

Materials: Aluminum, brass, bronze, stainless steel

3" x 12" (76 mm x 305 mm), 3-1/2" x 15" (89 mm x 381 mm), 4" x 16" (102 mm x 406 mm), Standard Sizes:

6" x 16" (152 mm x 406 mm)*, 8" x 16" (203 mm x 406 mm)* - *(size not available for 50 and A50 Series)

Six (6) #6 x 5/8 OPH tapping screws Fasteners:

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

	Pull Plate Chart								
	30, 40, 50 Series			A3	0, A40, A50 Se	ries	8	0, 90, 100 Seri	es
Pull	Square Corner	Radius Corner	Rounded Corner	Square Corner	Radius Corner	Rounded Corner	Square Corner	Radius Corner	Rounded Bevel
		•		Pull	Plate Part Nun	nber			
1E	31E	41E	51E	A31E	A41E	A51E	81E	91E	101E
1G	31G	41G	51G	A31G	A41G	A51G	81G	91G	101G
1J	31J	41J	51J	A31J	A41J	A51J	81J	91J	101J
1L	31L	41L	51L	A31L	A41L	A51L	81L	91L	101L
2E	32E	42E	52E	A32E	A42E	A52E	82E	92E	102E
2G	32G	42G	52G	A32G	A42G	A52G	82G	92G	102G
2J	32J	42 J	52J	A32J	A42J	A52J	82J	92J	102J
2L	32L	42L	52L	A32L	A42L	A52L	82L	92L	102L
3E	33E	43E	53E	A33E	A43E	A53E	83E	93E	103E
3G	33G	43G	53G	A33G	A43G	A53G	83G	93G	103G
3J	33J	43J	53J	A33J	A43J	A53J	83J	93J	103J
3L	33L	43L	53L	A33L	A43L	A53L	83L	93L	103L
4G	34G	44G	54G	A34G	A44G	A54G	84G	94G	104G
4J	34J	44]	54J	A34J	A44J	A54J	84J	94J	104J
4L	34L	44L	54L	A34L	A44L	A54L	84L	94L	104L
5D	35D	45D	55D	A35D	A45D	A55D	85D	95D	105D
5N	35N	45N	55N	A35N	A45N	A55N	85N	95N	105N
6N	36N	46N	56N	A36N	A46N	A56N	86N	96N	106N
9E	39E	49E	59E	A39E	A49E	A59E	89E	99E	109E
9G	39G	49G	59G	A39G	A49G	A59G	89G	99G	109G
9J	39J	49J	59J	A39J	A49J	A59J	89J	99J	109J
9L	39L	49L	59L	A39L	A49L	A59L	89L	99L	109L





313L

Antivandal Pull with Latchguard

Certification: Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate

Size: 7-13/32" x 11" (188 mm x 280 mm)

Height: 11" (280 mm)
Projection: 1-7/8" (48 mm)
Clearance: 1-5/8" (41 mm)

Door Thickness: 1-3/4" - 2" (45 mm - 51 mm)

Materials: 11 GA Stainless Steel

Finishes: US32D

Fasteners: 1/4-20 FPHMS with finish washers - Standard

Options: • Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and

1-1/2" (38 mm) diameter standard for mortise lock use]

Plastisol grip available

For use with most mortise locks on in-swinging and out-swinging doors

• For use with many exit devices (thru bolts directly to device)

• Cylinders must be ordered separately

• When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)

• When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim

cylinder (see instructions for more detail)



313S

Notes:

Antivandal Pull

Certification: Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate

Size: 6-11/32" x 11" (161 mm x 280 mm)

 Height:
 11" (280 mm)

 Projection:
 1-7/8" (48 mm)

 Clearance:
 1-5/8" (41 mm)

Door Thickness: 1-3/4" - 2" (45 mm - 51 mm)

Materials: 11 GA Stainless Steel

Finishes: US32D

Fasteners: 1/4-20 FPHMS with finish washers - Standard

Options: • Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and

1-1/2" (38 mm) diameter standard for mortise lock usel

• Plastisol grip available

Notes: • For use with most mortise locks on in-swinging and out-swinging doors

• For use with many exit devices (thru bolts directly to device)

• Cylinders must be ordered separately

 When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)

• When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim

cylinder (see instructions for more detail)



30S | A30S

Square Corner - Beveled Push Plate

Meets ANSI A156.6 for J301 Push Plate Certification:

• 30S - 0.050" (1.3 mm) Gauge:

• A30S - 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Materials:

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

40R | A40R

Radius Corner - Non-Beveled Push Plate

Meets ANSI A156.6 for J301 Push Plate Certification:

• 40R - 0.050" (1.3 mm) • A40R - 0.062" (1.6 mm) Gauge:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

50T | A50T

Round Corner - Non-Beveled Push Plate

Certification: Meets ANSI A156.6 for J301 Push Plate

• 50T - 0.050" (1.3 mm) Gauge:

• A50T - 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Materials:

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16						
Millimeters	76 x 305	89 x 38	102 x 406			





60S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)
Materials: Plastic laminate

Finishes: PG - Grey, PK - Black, CO - Brown Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

70S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)
Materials: Clear plastic laminate

Finishes: PC - Clear

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

80S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	



90R

Radius Corner - Non-Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes					
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16					8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

100T

Square Corner - Rounded Bevel Top and Bottom Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

110S

Half Circle Push Plate

Certification: Meets ANSI A156.6 for J301 Push Plate

Plate: 8" x 16" (203 mm x 406 mm)

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for





120L

Pull Plate with Lip - Non-Beveled

Meets ANSI A156.6 for J303 Plate Certification: Plate: 3-1/2" x 16" (89 mm x 406 mm)

Lip Projection: 1-1/8" (29 mm) 0.125" (3.2 mm) Gauge:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Six (6) #6 x 5/8" OPH tapping screws Fasteners: · Other sizes available, please specify Options:

• May be ordered cut for cylinder (CFC) or engraved

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability



121L

Cylinder Pull - Beveled

Plate: 2" x 3-3/4" (51 mm x 95 mm)

Lip Projection:

1-1/8" (29 mm) 1-1/4" (32 mm) diameter 0.125" (3.2 mm) Cylinder Cutout:

Gauge:

Materials: Aluminum, brass, bronze, stainless steel

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Attached by lock cylinder

• 1/4"-20 x 3/8" stud installed on reverse side to eliminate twisting Notes:

For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



122L

Security Pull/Push Plate Set - Beveled

Certification: Meets ANSI A156.6 for combination J304 Push Plate and J303 Flush Pull

Push Plate: 4" x 16" (102 mm x 406 mm) Pull Plate: 4" x 9-1/4" (102 mm x 235 mm)

2-1/8" (54 mm) Lip Projection: 0.125" (3.2 mm) Gauge:

Four (4) 8-32 FPHMS (Security Torx) sex nuts and bolts Fasteners:

Two (2) 8-32 x 1/2" FPHMS (Security Torx)

Materials: Stainless steel US32D Finishes:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for



125S

Bent Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: $3/8" \times 1-1/4" (10 \text{ mm x } 32 \text{ mm})$

Projection: 2-1/8" (54 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) #8 FPH tapping screws and one (1) 1/4 - 20 OPHMS Options: May be ordered with thru-bolts in place of surface screws



126S

Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: $3/8" \times 1-1/4" (10 \text{ mm} \times 32 \text{ mm})$

Projection: 2-1/8" (54 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Four (4) #8 FPH tapping screws

Options: May be ordered with thru-bolts in place of surface screws



127S

Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection: 3/4" (19 mm)

Base Plate: 1-1/4" x 1-1/4" (32 mm x 32 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) 1/4-20 FPHMS

Options: May be ordered with thru bolts in place of surface screws



128P

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Size: 3/8" x 3" (10 mm x 76 mm)

Projection: 2-1/8" (54 mm)

Base Plate: 1-1/2" x 4-1/2" (38 mm x 114 mm) Fasteners: Eight (8) FPH tapping screws

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D







128S

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Size: 3/8" x 3" (10 mm x 76 mm)

Projection: 2" (51 mm)

1-1/2" x 4-1/2" (38 mm x 114 mm) Base Plate:

1-3/4" (45 mm) - Standard Door Thickness:

Fasteners: Two (2) 1/4 - 20 thru bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

128S is same as 128P, but without base plates Notes:



129P

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

3/8" x 3" (10 mm x 76 mm) Bar Size:

Projection: 3/4" (19 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) 1/4-20 FPHMS

• May be ordered with thru bolts in place of surface screws Options:

• #14 Flat head wood screws available on special order



130S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1" (25 mm) Projection:

2-1/2" (64 mm) 1-3/4" (45 mm) - Standard Door Thickness:

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

May be ordered with Type 5 concealed mountings at extra charge Options:



131S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1" (25 mm) 2-5/8" (67 mm) Projection: Base Diameter: 2" (51 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge



133S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 3/4" (19 mm) Projection: 2-1/4" (57 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4 - 20 thru-bolts with finish washers



134S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

 Bar Stock:
 3/4" (19 mm)

 Projection:
 2-3/8" (60 mm)

 Base Diameter:
 1-1/4" (32 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 1/4 - 20 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge



136S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1-1/4" (32 mm) Projection: 3" (76 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners Two (2) 5/16 - 18 thru-bolts with finish washers

Options: May be ordered with Type 5 concealed mountings at extra charge



137S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3-1/8" (79 mm)

 Base Diameter:
 2" (51 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 5/16 - 18 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge







138P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (64 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4-20 Type 3 concealed cone



139P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm) Projection: 2-1/4" (60 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4-20 Type 3 concealed cone



140P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1-1/4" (32 mm) Projection: 3" (76 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 5/16-18 Type 3 concealed cone



150D | 150V | 150B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 8" (203 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





151D | 151V | 151B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 10" (254 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D



152D | 152V | 152B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



153D | 153V | 153B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (64 mm)
Pull CTC: 10" (254 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



154D | 154V | 154B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (64 mm)

 Pull CTC:
 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.







155D | 155V | 155B

Round Push/Pull Set*

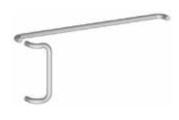
Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (64 mm)

 Pull CTC:
 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D



156D | 156V | 156B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) Pull CTC: 8" (203 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X156D) to number

Notes: Non-reversible; specify handing



157D | 157V | 157B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) Pull CTC: 10" (254 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X157D) to number

Notes: Non-reversible; specify handing



158D | 158V | 158B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter

Projection: 2-1/2" (64 mm)
Pull CTC: 12" (305 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X158D) to number

Notes: Non-reversible; specify handing

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.







159D | 159V | 159B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (76 mm)

 Pull CTC:
 10" (254 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X159D)

Notes: Non-reversible; specify handing



160D | 160V | 160B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (76 mm)
Pull CTC: 12" (305 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X160D)

Notes: Non-reversible; specify handing



161D | 161V | 161B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (76 mm)

 Pull CTC:
 18" (457 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X161D)

Notes: Non-reversible; specify handing



164D | 164V | 164B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Pull CTC:
 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





165D | 165V | 165B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Pull CTC: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



167D | 167V | 167B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Pull CTC:
 18" (457 mm)

Offset: 3-3/4" (96 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Notes: Non-reversible; specify handing



170D

Push/Pull Set

Certification: Meets ANSI A156.6 for J502 Bar Sets Bar Stock: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection of Pull Bar: 2-1/2" (64 mm) Projection of Push Bar: 3/4" (19 mm)

Base: 1-1/4" x 1-1/4" (32 x 32 mm)

Horizontal Spacing CTC: 8" (203 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Notes: • Bars are mounted BTB with 1/4"-20 thru bolt type 4 mounting

• Non-reversible; specify handing

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.



Notes:

TRIM & AUXILIARY

180H | 180K | 180M | 180P | 180Q

Mortise Door Edging

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36" – 42" (914 mm – 1067 mm)

Materials: Aluminum, stainless steel

Gauge: 0.045" - 0.050" (1.1 mm - 1.3 mm)

Finishes: US28, US32D

Fasteners: #6 x 3/4" FPH tapping screws
Options:

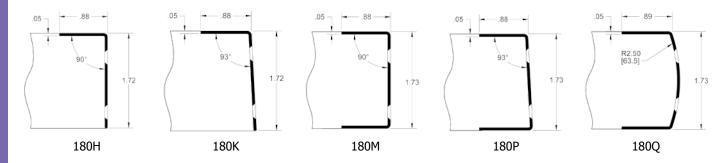
• Other lengths by quotation

Hinge cutout availableLatch cutout availableUL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 180H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



181H | 181K | 181M | 181P | 181Q

Overlap Door Edging

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36'' - 42'' (914 mm - 1067 mm) Materials: Aluminum, stainless steel Gauge: 0.045'' - 0.050'' (1.1 mm - 1.3 mm)

Finishes: US28, US32D

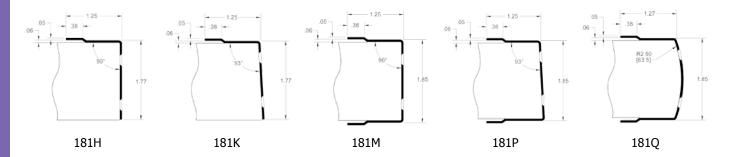
Fasteners: #6 x 3/4" FPH tapping screws
Options: • Other lengths by quotation

Hinge cutout available Latch cutout available UL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 181H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



Notes:



182H | 182K | 182M | 182P | 182Q

Non-Mortise Door Edging

Notes:

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36" – 42" (914 mm – 1067 mm)

Materials: Aluminum, stainless steel

Gauge: 0.045" - 0.050" (1.1 mm - 1.3 mm)

Finishes: US28, US32D

Fasteners: #6 x 3/4" FPH tapping screws
Options:

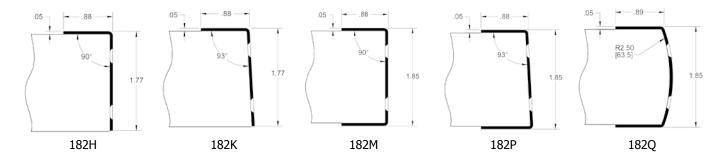
• Other lengths by quotation
• Hinge cutout available

Hinge cutout availableLatch cutout availableUL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 182H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



185**G**

Corner Guard

Certification: Meets ANSI A156.6 for J210

Size: 3" x 3" x 40" (76 mm x 76 mm x 1016 mm)

Gauge: 0.050" (1.3 mm)
Materials: Aluminum, stainless steel

Finishes: US28, US32D

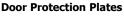
Fasteners: #6 x 3/4" FPH Tapping screws

Options: Mounting with double-stick tape instead of screws

Notes: • 90° bend standard

• Other lengths by quotation

• #6 x 1" screws available upon request



The metal door protection plates below meet ANSI A156.6 for J101 Metal Armor Plate, J102 Metal Kickplate, and J103 Metal Mop Plate. The plastic door protection plates below meet ANSI A156.6 for J105 Plastic Armor Plate, J106 Plastic Kickplate, and J107 Plastic Mop Plate. Options for all plates include countersunk holes, UL armor plate stamped, self-adhesive tape, spanner head screws, torx head screws, round corners, wrap around side and bottom return, and 0.125" (3.2 mm) material. All plates below are supplied standard with #6 x 5/8" truss head screws (unless specified otherwise). They are available in mop plate, kick plate, stretcher plate, and armor plate sizes.

Mop Plate: Protects the bottom of the pull side of doors subject to cleaning and mopping

procedures.

Kick Plate: Protects the bottom of the push side of doors subject to scuffing from foot traffic. Stretcher Plate: Protects doors in specific areas where constant contact is made by stretchers, service

carts, or other equipment.

Armor Plate: Protects lower half of doors from abuse by carts, trucks, and rough usage.

NFPA Note (Applies to 190S, 193S, 194S, 198S, and 225S)

NFPA 80 Standards - 6.4.5 Protection Plates 6.4.5.1 - Factory installed protection plates shall be installed in accordance with the listing of the door. 6.4.5.2 - Field installed protection plates shall be labeled and installed in accordance with their listing. 6.4.5.3 - Labeling shall not be required where the top of the protection plate is not more than 16" (406 mm) above the bottom of the door.

190S Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Materials: Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: None Options: UL Listed for US32 and US32D*

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes:

US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 3 edges

Options: UL Listed for US32 and US32D*

194S

193S

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 4 edges

Options: UL Listed for US32 and US32D*

198S

0.038" (0.8 mm) Gauge: Materials: Stainless steel Finishes: US32D Options: UL Listed*

199B

0.038" (0.8 mm) Gauge: Materials: Aluminum

Finishes: Bright gold anodized

#6 x 5/8" TPH Tapping Screws Fasteners:

220S

Gauge: 0.062" (1.6 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: None **223S**

Gauge: 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 3 edges

224S

Gauge: 0.062" (1.6 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 4 edges

204S

Gauge: 0.125" (3.2 mm) Materials: Clear plastic Bevel: 4 edges

214S

Gauge: 0.125" (3.2 mm) Plastic laminate Materials:

Bevel: 4 edges

Colors: Black, Brown, Grey

Notes: Other colors are available and will be

subject to minimum order quantities;

priced on application

225S

0.060" (1.9 mm) Gauge:

Kydex[®] Materials:

CBO - Calcutta Black, KGO - Beige, Colors:

KHO - Chocolate

Other colors are available and will be Notes:

subject to minimum order quantities;

priced on application

Options: UL Listed*



*Must specify UL stamp.







230W

Convex Wall Stop

Certification: Meets ANSI A156.16 for L02101

Diameter: 2-15/32" (63 mm) Projection: 1-3/32" (28 mm)

Materials: Cast brass, bronze with grey rubber bumper

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #10 x 1-1/2" PPHWS with plastic and toggle anchor.

Notes: • Concealed tamper proof mounting

Easy installation by inserting screwdriver through small hole in bumper
Specify 230T for machine screw and toggle nut screwpack (10 pk)



232W | BL232W

Convex Wall Stop

Certification: Meets ANSI A156.16 for L02101

Diameter: 2-7/16" (62 mm)
Projection: 1" (25 mm)

Materials: Wrought brass, bronze, stainless steel with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D

Fasteners: One (1) $#10 \times 1-1/2"$ PPHWS with plastic and toggle anchor

Notes: • Concealed tamper proof mounting

Easy installation by inserting screwdriver through small hole in bumper
Specify 230T for machine screw and toggle nut screwpack (10 pk)

• BL232W is 232W case quantity 50



234W

Concave Wall Stop

Certification: Meets ANSI A156.16 for L02251

Diameter: 2-15/32" (63 mm) Projection: 1-3/32" (28 mm)

Materials: Cast brass, bronze with grey rubber bumper

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor

Notes:

• Easy installation by inserting screwdriver through small hole in rubber bumper

Concealed tamper proof mounting

• Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 pk)



236W | BL236W

Concave Wall Stop

Certification: Meets ANSI A156.16 for L02251

Diameter: 2-7/16" (75 mm)
Projection: 1" (25 mm)

Materials: Wrought brass, bronze, stainless steel with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D

Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor

Notes: • Easy installation by inserting screwdriver through small hole in rubber bumper

Concealed tamper proof mounting

• Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 Pk)

BL236W is 236W case quantity 50





250W

Convex Wall Stop

Diameter: 1" (25 mm)
Projection: 9/16" (14 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #6 x 3/4" screw with plastic anchor and one (1) 0.052 diameter nail

Notes: • Concealed mounting screw prevents vandalism

For use on drywallCompact design



251W

Concave Wall Stop

Diameter: 1-7/8" (48 mm) Projection: 25/32" (20 mm)

Materials: Adhesive backed rubber bumper

Finish: Grey only

Notes: • Concave bumper prevents damage to locksets with projecting buttons

• For areas where concealed mounting is not required

• Adhesive backing for use on clean smooth flat surfaces only



254S

Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01341

Base Diameter: 2-11/32" (60 mm)
Base Projection: 3-1/2" (89 mm)
Engaged Projection: 5-19/32" (142 mm)
Keeper: 1" x 2" (25 mm x 51 mm)

Fasteners: Five (5) #10 x 1" FPHWS, and three (3) plastic anchors

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on drywall

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less



254W

Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01351

Base Diameter: 2-11/32'' (60 mm)
Base Projection: 3-1/2'' (89 mm)
Engaged Projection: 5-19/32'' (142 mm)
Keeper: $1'' \times 2''$ (25 mm x 51 mm)

Fasteners: Three (3) #10 x 1" FPH tapping screw, one (1) plastic anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 lead anchor

Materials: Cast brass with black rubber bumper Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on concrete walls

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engagea

• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less





255S

Wall Stop

Certification: Meets ANSI A156.16 for L02011

Base Diameter: 2-11/32" (60 mm) Projection: 3-11/16" (94 mm)

Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on drywall

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



255W

Wall Stop

Certification: Meets ANSI A156.16 for L02021

Base Diameter: 2-11/32" (60 mm) Projection: 3-11/16" (94 mm)

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, one (1) 5/16-18 x 2-1/2" combo threaded

stud

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on concrete walls

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



256S

Manual Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01341

Base Diameter: 2-1/4" (57 mm)
Base Projection: 3-3/4" (95 mm)
Engaged Projection: 5-11/16" (145 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US26, US26D

Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Notes: • For use on drywall

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3" (76 mm) or less





256W

Manual Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01351

Base Diameter: 2-1/4" (57 mm)
Base Projection: 3-3/4" (95 mm)
Engaged Projection: 5-11/16" (145 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper
Finishes: US3, US10, US10B, US15, US26, US26D

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded

stud

Notes: • For use on concrete walls

Ideal for interior and exterior applications
Heavy duty - for use in high traffic areas

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3" (76 mm) or less



260W

Angled Wall Stop

Certification: Meets ANSI A156.16 for L02201

Projection: 3-21/32" (93 mm)

Materials: Cast brass with black rubber bumper

Finishes: US26D

Base: 2-3/16"wide x 2-15/16" tall (56 mm x 75 mm)

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, three (3) plastic

anchors, and three (3) 1/4-20 lead anchors

Notes: • For use with drywall or concrete walls

• Sloping design resists vandalism

• Ideal for use with locksets with a projection of 3" (76 mm) or less



324W

Light Duty Wall Bumper

Certification: Meets ANSI A156.16 for L0203

Base Diameter: 1-1/4" (32 mm)
Projection: 3-1/4" (83 mm)
Tip Diameter: 5/8" (16 mm)

Materials: Cast brass, bronze with white rubber tip

Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D

Fastener: $#10 \times 7/8"$ wood thread

Notes: • Replaceable rubber tip available

• Hex shape near the tip allows usage of a wrench for easier installation





326W

Automatic Wall Stop & Holder

Certification: Meets ANSI A156.16 for L0129

Holder Base: 2-13/32" x 2-25/32" (61 mm x 71 mm)

Holder Projection: 2-5/16" (59 mm) Engaged Projection: 3-5/8" (92 mm)

Strike Base: 1" x 2-1/16" (25 mm x 52 mm)

Strike Projection: 2" (51 mm)

Keeper: 1" x 2" (25 mm x 51 mm)

Materials: Cast brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Five (5) #10 x 1" OPHWS, three (3) 10-24 x 1-1/4" FPHMS, and three (3) plastic

anchors

Notes: • For use with wood or metal doors

Holder is mounted on the door

• Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound

and shock

• Ideal for use with locksets with a projection of 3" (76 mm) or less



327W

Automatic Wall Stop & Holder

Certification: Meets ANSI A156.16 for L11291 Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm)

Holder Projection: 1-15/16" (49 mm)
Engaged Projection: 3-1/2" (89 mm)
Strike Diameter: 2-3/8" (60 mm)
Strike Projection: 3-1/16" (78 mm)
Materials: Cast brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, four (4) 12-24 x

1" TPHMS, four (4) #12 x 1" TPHWS, and three (3) 1/4-20 lead anchors

Notes: • For use with wood or metal doors

• For use with drywall or concrete walls

• Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound

and shock

• Strike is adjustable 45° left or right

• Holder has vertical adjustment once mounted on the door

• Ideal for use with locksets with a projection of 3" (76 mm) or less

• For doors up to 500 lbs



271W

Roller Bumper

Certification: Meets ANSI A156.16 for L02191

Base Diameter: 2" (51 mm)
Projection: 4-1/2" (114 mm)

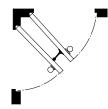
Materials: Cast brass with grey rubber roller Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS and three (3) plastic anchors

Notes: • For use when two doors swing into each other at right angles

(back to back)

• Prevents damage to the door and door hardware





272W

Roller Bumper

Certification: Meets ANSI A156.16 for L02191

Base: 2" (51 mm) diameter Projection: 6-1/4" (159 mm)

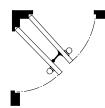
Materials: Cast brass with grey rubber roller Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS, and three (3) plastic anchors

Notes: • For use when two doors swing into each other at right angles

(back to back)

• Prevents damage to the door and door hardware





273W

Curved Roller Bumper

Certification: Meets ANSI A156.16 for L12211

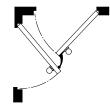
Projection: 2-21/32" (67 mm)

Materials: Cast brass with grey rubber roller Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS and three (3) plastic anchors

Notes: • Used when two doors swing into each other at odd angles

• Prevents damage to the door and door hardware







241F | BL241F

Dome Stop - Low

Certification: Meets ANSI A156.16 for L02141

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 1/8" (3.2 mm)
Overall Height: 1" (25 mm)

Materials: Cast brass with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: • To be used independently or in conjunction with 246B

• For use when no threshold is used (door not undercut)

For use with wood or concrete floors
BL241F is 241F case quantity 50



242F

Dome Stop - Universal

Certification: Meets ANSI A156.16 for L0216

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 7/32" (5.5 mm)
Overall Height: 1-5/8 (41 mm)

Materials: Brass with grey rubber bumper

Finishes: US3, US4, US10B, US15, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: For use with wood or concrete floors



243F | BL243F

Dome Stop - High

Certification: Meets ANSI A156.16 for L02161

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 7/16" (11 mm)
Overall Height: 1-9/32" (33 mm)

Materials: Cast brass with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 1-1/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: • For use with thresholds or undercut doors

For use with wood or concrete floors

BL243F is 243F case quantity 50



244F

Cast Floor Stop

Base: 1-3/4" x 4" (45 mm x 102 mm)

Base Thickness: 5/32" (4 mm) Overall Height: 1" (25 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 3/4" FPHMS, two (2) 1/4-20 lead

anchor, and two (2) plastic anchor

Notes: • Heavy duty - for use in high traffic areas

• For use when no thresholds are used (door not undercut)

• For use with wood or concrete floors





245F

Cast Floor Stop

Base: 1-3/4" x 4" (45 mm x 102 mm)

Base Thickness: 1/2" (13 mm) Overall Height: 1-5/16" (33 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 1-1/4" FPHMS, two (2) 1/4-20 lead

anchor, and two (2) plastic anchor

Notes: • Heavy duty - for use in high traffic areas

• For use with thresholds and undercut doors

• For use on wood or concrete floors



246B

Dome Stop Riser Plate

Diameter: 1-3/4" (45 mm)
Base Thickness: 3/8" (10 mm)

Fasteners: One (1) 1/4-20 x 1" FPHMS

Materials: Cast brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Notes: For use with 241F on carpeted floors or floors with thresholds



248F

Modern Style Universal Stop

Base Diameter: 1-7/16" (37 mm) Height: 1-1/2" (38 mm)

Materials: Brass with black rubber bumper

Finishes: US26D

Fasteners: One (1) #12 x 1-1/4" FPHWS, one (1) plastic anchor, one (1) 1/4-20 x 1" FPHMS,

and one (1) 1/4-20 lead anchor



249F

L-Shaped Floor Stop

Base: 1" x 2-1/2" x 7/32" thick (25 mm x 64 mm x 6 mm)

Base Thickness: 1/4" (6 mm) Overall Height: 2-5/8" (67 mm)

Materials: Steel

Stop face: Resilient black rubber

Fasteners: Two (2) #14 x 1-1/2" FPHWS and two (2) plastic anchors

Notes: 1-1/2" (38 mm) max door to floor clearance





252F

Floor Stop

Certification: Meets ANSI A156.16 for L02131 Base: 1-9/16" x 2-1/2" (40 mm x 64 mm)

Overall Height: 2-11/16" (68 mm)

Materials: Cast brass with black rubber bumper

US3, US10, US10B, US15, US15A, US19, US26, US26D Finishes:

One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead Fasteners:

anchor, one (1) 1/4-20 lead anchor, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud

• Heavy duty - for use in high traffic areas Notes:

• For use on wood or concrete floors

• 2" (51 mm) max door to floor clearance



257F

Floor Stop

Certifications: Meets ANSI A156.16 for L02131 Base: 1-9/16" x 2-15/32" (40 mm x 63 mm)

Overall Height: 2" (51 mm)

Cast brass with black rubber bumper Materials:

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead

anchor, one (1) 1/4-20 lead anchors, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2"

threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud

• 1-3/8" (35 mm) max door to floor clearance Notes:

• Heavy duty - for use in high traffic areas

• For use on wood or concrete floors



258F

Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01371 Base: 1-9/16" x 2-15/32" (40 mm x 63 mm)

Height: 3" (76 mm)

Keeper: 1" x 2" (25 mm x 51 mm)

Materials: Cast brass with black rubber bumper US3, US10, US10B, US15, US26, US26D Finishes:

Two (2) #10 x 1" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead anchor, Fasteners:

one (1) 1/4-20 lead anchors, and one (1) 5/16-18 x 2-1/2" threaded stud

Notes: • 1-3/8" (35 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on concrete floors

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged





259F

Tri Base Floor Stop

Base: 2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)

Overall Height: 1-11/16" (43 mm)

Material: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-32 x 3/4"

FPHMS, and three (3) 10-32 lead anchor

Notes: • 1/2" (13 mm) max door to floor clearance

Heavy duty - for use in high traffic areasFor use on wood or concrete floors



259H

Tri Base Floor Stop - Tall

Base: 2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)

Overall Height: 2-1/4" (57 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchor, three (3) $10-32 \times 3/4$ "

FPHMS, and three (3) 10-32 lead anchors
• 1" (25 mm) max door to floor clearance

Heavy duty - for use in high traffic areas

• For use on wood or concrete floors



267F

Notes:

Cast Floor Stop

Certifications: Meets ANSI A156.16 for L02131

Base Diameter: 2-1/4" (57 mm) Overall Height: 3-1/8" (80 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded

stud

Notes: • 2-3/8" (60 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on concrete floors



267S

Cast Floor Stop

Certifications: Meets ANSI A156.16 for L02121

Base Diameter: 2-1/4" (57 mm) Overall Height: 3-1/8" (80 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Notes: • 2-3/8" (60 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on wood floors





268F

Cast Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01371

Base Diameter: 2-1/4" (57 mm) Height: 3-19/32" (91 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Three (3) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

and one (1) 5/16-18 x 2-1/2" threaded stud • 2-1/2" (64 mm) max door to floor clearance

Notes: • 2-1/2" (64 mm) max door to floor clearanc • Heavy duty - for use in high traffic areas

• For use on concrete floors

Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged



268S

Cast Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01361

Base Diameter: 2-1/4" (57 mm) Height: 3-19/32" (91 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Five (5) #10 x 1" OPHWS and three (3) plastic anchors

Notes:
• 2-1/2" (64 mm) max door to floor clearance
• Heavy duty - for use in high traffic areas

• For use on wood floors

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged



269F

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646)

Bumper Diameter: 2" (51 mm)
Bumper Height: 1-1/2" (38 mm)

Steel Bolt: $5/8 - 11 \times 2-1/2''$ thread Materials: Black rubber (fire-resistant)

Notes: • Designed for high vandalism areas

Ideal for prisons where floor stops are requiredGrouted in concrete to eliminate exposed screws





269T

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test

(Report #91-04-01646)

Bumper Diameter: 2" (51 mm) Bumper Height: 3-1/2" (89 mm)

5/8 - 11 x 2-1/2" thread Steel Bolt: Black rubber (fire-resistant) Materials:

• Designed for high vandalism areas Notes:

• Ideal for prisons where floor stops are required Grouted in concrete to eliminate exposed screws



326F

Automatic Floor Stop and Holder

Meets ANSI A156.16 for L01301 Certifications:

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) 2" x 4-3/32" (51 mm x 104 mm) Floor Strike:

1-1/4" (32 mm) Strike Height: Max Door to Floor Clearance: 1/2" (13 mm) or less

Materials:

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and

four (4) #12 x 1" TPHWS

Notes: For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

Holder has vertical adjustment once mounted on the door



327F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) 2-3/16" x 4-1/8" (56 mm x 105 mm) Floor Strike:

1-3/4" (44 mm) Strike Height:

Max Door to Floor Clearance: 9/16" to 1-1/16" (14 mm to 27 mm)

Materials:

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and

four (4) #12 x 1" TPHWS

Notes: For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

Firm pull releases holding mechanism

Holder has vertical adjustment once mounted on the door





328F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2-3/16" x 4-1/8" (56 mm x 105 mm)

Strike Height: 2-1/4" (57 mm)

Max Door to Floor Clearance: 1-1/8" to 1-9/16" (29 mm to 40 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,

and four (4) #12 x 1" TPHWS

Notes:

• For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door



329F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2-3/16" x 4-1/8" (56 mm x 105 mm)

Strike Height: 2-3/4" (70 mm)

Max Door to Floor Clearance: 1-5/8" to 2-1/16" (41 mm to 52 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,

and four (4) #12 x 1" TPHWS

Notes: • For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door





270C

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L71382 Base: 1-7/16" x 2-1/8" (37 mm x 54 mm)

Arm: 3-13/16" (97 mm)
Materials: Cast iron with rubber tip

Finishes: S1 - Sprayed Aluminum, S2 - Sprayed Brass, S3 - Sprayed Bronze

Fasteners: Four (4) #6 x 3/4" OPH tapping screws

Notes: • Provides simple hold and release with a touch of the foot

• 2-1/4" (57 mm) max door to floor clearance



270D

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L01381 Base: 1-19/32" x 1-25/32" (41 mm x 45 mm)

Arm: 3-1/2" (89 mm)

Materials: Cast brass with rubber tip

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Three (3) #6 x 3/4" OPHWS

Notes: • Provides simple hold and release with a touch of the foot

• 2-1/4" (57 mm) max door to floor clearance



270R

Replacement Rubber Tip

Materials: Rubber

Notes: • For use with 270D and 271D

• Sold in packs of 10



271D

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L01381

Base: 1-19/32" x 1-25/32" (41 mm x 45 mm)

Arm: 4-7/16" (87 mm)

Materials: Cast brass with rubber tip

Finishes: US3, US10, US10B, US26, US26D Fasteners: Three (3) #6 x 3/4" OPHWS

Notes: • Provides simple hold and release with a touch of the foot

• 3-1/4" (83 mm) max door to floor clearance





275D | 276D

Surface Bolt

Certifications: Meets ANSI A156.16 for L04161

1-3/8" (35 mm) Overall Projection: Overall Width: 2-1/32" (52 mm)

3/4" x 1/4" (19 mm x 6 mm) thick 275D - 8" (203 mm) Bar:

Length:

276D - 12" (305 mm)

Throw: 1" (25 mm) Materials: Steel

Finishes: US3, US10, US10B, US26D

Fasteners: Eight (8) #10 x 1-1/4" FPHWS and eight (8) 10-24 x 1" undercut

Notes: Mortise bottom strike and universal top strike included

• Strong tension springs prevent creep

• UL listed for use on inactive leaf of a pair of 3-HR labeled fire doors



278D

Surface Bolt

Bolt Length: 6" (152 mm) 7/16" (11 mm) 31/32" (25 mm) Bolt Width: Bolt Throw: Base Width: 19/32" (15 mm) Knob Diameter: 1/2" (13 mm) Projection: 3/4" (19 mm)

Materials: Brass

Finishes: US3, US10B, US26D Fasteners: Four (4) #5 x 5/8" FPHWS

• Mortise and universal strikes included Notes:

> • Concealed screw design enhances appearance and security • Permanent stop prevents bolt disengagement from track



279D

Surface Bolt

Length: 4" (102 mm) Width: 1-11/16" (43 mm) 3/8" (10 mm) Throw: Half Round Bolt Size: 5/8" (16 mm) Projection: 1-1/4" (32 mm) Knob Diameter: 29/32" (23 mm)

Materials: **Brass**

Finishes: US3, US10, US10B, US26D Fasteners: Twelve (12) #6 x 3/4" FPHWS Mortise and universal strikes included Notes:





280X

Dust Proof Strike

Certifications: Meets ANSI A156.16 for L04021

Face Plate: 1-7/16" x 2-29/32" x 1/8" depth (37 mm x 74 mm x 3 mm)

Barrel Diameter: 1" (25 mm) Barrel Depth: 2-3/16" (56 mm) 3/4" (19 mm) Plunger Diameter:

Materials: **Brass**

Finishes: US3, US4, US9, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #8 x 1" FPHWS, two (2) plastic anchors, and spanner wrench Fasteners: • Packed unassembled with plate, strike, fasteners, and spanner wrench Notes: • May be used with carpet or threshold application by omitting face plate

• Designed for use with the bottom bolt of a flushbolt set

 Spring loaded plunger returns to floor or threshold level anytime flushbolt is retracted, eliminating the need to clean out the bottom strike



281D

Slide Flush Bolt

Certifications: Meets ANSI A156.16 for L04201 Faceplate: 3/4" x 6" (19 mm x 153 mm)

Bolt Diameter: 1/2" (13 mm) 1" (25 mm) Bolt Throw: 7/16" (11 mm) Bolt Backset:

7/8" x 1-3/4" (22 mm x 45 mm) Strike:

Materials: Brass, bronze faceplate with steel components

Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Four (4) #6 x 3/4" FPHWS

Double action spring design provides automatic holding of bolt in projected or Notes:

retracted position



282D

Manual Flush Bolt

Certifications: Fits ANSI A115 door and frame prep

• Meets ANSI A156.16 for L14251 1" x 6-3/4" (25 mm x 172 mm)

Face Plate: Bolt Head: 1/2" (13 mm) square

3/4" (19 mm) Bolt Throw:

12" (305 mm) (center of face to corner of door) Standard Rod Length:

3/4" (19 mm) Bolt Backset:

15/16" x 2-1/4" (24 mm x 57 mm) Mortise Strike: Brass faceplate with steel components Materials:

US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Finishes: Eight (8) #8 x 3/4" combo screws; eight (8) #8 x 1-1/2" combo screws Fasteners:

• For use on hollow metal/fire rated doors Notes:

Non-handed

• Bolt head rods are adjustable · Sold in increments of two.

• 3-Hr fire rating for metal doors up to 4 feet wide by 10 feet tall.

• 282S strike plate bag and 282P bolt head available

 Specify 282R for optional rod length of 18" (457 mm), 25" (635 mm), or 30" (762 mm) (bolt head not included)





283D

Manual Flush Bolt

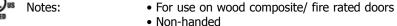
Certifications: Meets ANSI A156.16 for L14261 Face Plate: 1" x 6-25/32" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Eight (8) $\#8 \times 3/4$ " combo screws and eight (8) $\#8 \times 1-1/2$ " combo screws



• Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 10 feet tall



291D

Automatic Flush Bolt Set for Wood Covered Composite Doors

Certifications: B, C, D, and E Label

ANSI A156.3 Type #25

Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) square Bolt Throw: 3/4" (19 mm)

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic

anchors

Notes: • Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

Used in pairs at top and bottom of inactive door

 Fully automatic – bolts retract when active door is opened; bolts extend when active door is closed

• Non-handed

• Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall







292D

Automatic Flush Bolt Set for Metal Doors

Certifications: A, B, C, D, and E Label

ANSI A156.3 Type #25

Face Plate: 1" x 6-3/4" (27 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Ten (10) #8 x 1" combo screws

Notes: • Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

• Used in pairs at top and bottom of inactive door

 Fully automatic – bolts retract when active door is opened; bolts extend when active door is closed

Non-handed

• Bolt head rods are adjustable

• 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



293D

Self Latching Flush Bolt Set for Inactive Metal Doors

Certifications: A, B, C, D, and E Label

ANSI A156.3 Type #27

Face Plate: 1" x 6-3/4" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

T- Strike: 1-1/8" x 2-3/4" (28 mm x 70 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Eight (8) #8 x 1" combo screws

Notes:

• Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

• Consists of one 292S and one 293S for two point latching

 Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released by pressing plunger - Inactive door will relatch automatically when closed

• Non-handed

• Bolt head rods are adjustable

• 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall





294D

Self Latching Flush Bolt Set for Inactive Wood Covered Composite Doors

Certifications: B, C, D, and E Label

ANSI A156.3 Type #27

Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

T- Strike: 1-1/8" x 2-3/4" (28 mm x 70 mm)

Materials: Stainless steel and brass with steel components

Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Four (4) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors

Notes:

• Thermal lock automatically locks inactive door under high fire/heat conditions

- 280X dust proof strikes are recommended for use with these sets
- May be used on doors 4 ft. wide and 9 ft. high
- Consists of one 292S and one 293S for two point latching
- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt Top bolt can be manually released Inactive door will relatch
- automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall



295M

Automatic Flush Bolt Set with Fire Bolt for Metal Doors

Certifications: ANSI/BHMA 156.3 Type #25 Face Plate: 1" x 6-3/4" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Ten (10) #8 x 1" combo screws

Notes: • Fire bolt is activated at 230° Fahrenheit projecting into active door

locking leaves together - This combination eliminates the bottom flushbolt

and eliminates floor preparation

• Fully automatic – Bolt retracts when active door is opened - Bolt extends

when active door is closed

• Non-handed

• Bolt head rods are adjustable

• 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall





295W

Notes:

Automatic Flush Bolt Set with Fire Bolt for Wood Doors

ANSI/BHMA 156.3 Type #25 Certifications: Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) diameter

3/4" (19 mm) Bolt Throw: 3/4" (19 mm) Bolt Backset:

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Finishes:

Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors Fasteners:

• Fire bolt is activated at 230° Fahrenheit projecting into active door locking leaves together - This combination eliminates the bottom flushbolt and eliminates floor

• Fully automatic - Bolt retracts when active door is opened - Bolt extends when active door is closed

Non-handed

• Bolt head rods are adjustable

• 20-min fire rating for wood doors up to 4 feet wide by 9 feet tall



296W

Notes:

Automatic Flush Bolt Set for Wood Doors

ANSI/BHMA 156.3 Type #25 Certifications: 1-1/8" x 2-1/4" (29 mm x 57 mm) Face Plate:

1/2" (13 mm) diameter Bolt Head:

3/4" (19 mm) Bolt Throw: Bolt Backset: 1-1/2" (39 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Four (4) #8 x 1" SMS, two (2) #8 x 3/4" combo screws, two (2) plastic Fasteners:

anchors

Non-handed

ADA compliant

• Ideal for wood veneer doors

• Only two (2) 1-1/8" diameter holes needed for easier door preparation

· Opening active door retracts top and bottom bolts

Smaller profile adds stability to the door

• 1-1/2 hour fire rating for doors up to 4 feet wide by 9 feet tall





297C

Carry Bar

Certifications: ANSI/BHMA A156.3 Type #27

Projection: 25/32" (20 mm)

Base: 1-3/4" x 2-1/4" (45 mm x 57 mm)

Brass and stainless steel Materials:

USP, US3, US10, US10B, US15, US32, US32D Finishes: Fasteners: Two (2) 12-24 x 3/4" PPHMS w/ sex nuts

• Used when it is possible for the inactive door to be Notes:

opened before the active door

• For use on pairs of doors with astragals

• For use in conjunction with a 297D or 298D coordinator

• Prevents damage to the doors and other hardware

• Carry bar is not required when the inactive door is

equipped with flush bolts

Non-handed



297D

Notes:

Coordinating Device

Certifications: ANSI/BHMA A156.3 Type #21A 1-3/4" x 2-1/4" (45 mm x 57 mm) Base:

Steel Materials:

Finishes: Black Prime Coat Maximum Astragal Overlap: 1" (25 mm)

5/8" (16 mm) Stop Height:

Fasteners: Seven (7) 12-24 x 1-1/4" TPHMS and four (4) #8 x 1" FPH

combo screws

• For use with overall frame widths 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm), consult Hager customer service if overall frame width is different than our stock sizes

• Coordinating device is 52" (1321 mm) long for all stock sizes 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm)

• Filler bar is cut to length in field to match customers overall frame width

Non-handed

• Designed for use on pairs of doors when one door needs to close before the other

 Active door lever, located nearest to the active stop, holds the active door open until the trigger mechanism is released by the closing of the inactive leaf

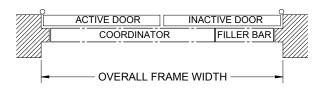
 Coordinator may not span the entire length of stop, 297F filler bar may be needed to fill up the extra space

Compatible with flushbolts

• Optional mounting brackets 297M and 297N may be used when mounting other stop applied hardware

• For use with active door widths 30" (762 mm) – 48" (1219 mm)

• If active and inactive doors are unequal in length, consult Hager customer service for proper sizing









297F

Filler Bar

Stop Height: 5/8" (16 mm)

Length: 18-5/8" (473 mm) (for jamb opening widths 52" - 72");

42-5/8" (1082 mm) (for jamb opening widths 73" - 96")

Notes: For use with 297D coordinator



297M

Mounting Brackets

Jamb Depth: 4-3/4" (121 mm) Stop Height: 5/8" (16 mm) Finishes: Black prime coat

Fasteners: Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS

Notes: • For use with 297D coordinator

• For soffit width 7/8" - 2-1/4" (22 mm - 57 mm)

• Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-

fire rated surface vertical rod strike



297N

Mounting Brackets

Jamb Depth: 4-1/4" (108 mm) Stop Height: 5/8" (16 mm) Finishes: Black prime coat

Fasteners: Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS

Notes: • For use with 297D coordinator

• For soffit width greater than 2-1/4" (57 mm)

 Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-

fire rated surface vertical rod strike



298D

Gravity Coordinator

Certifications: ANSI A156.3 Type #21B

Base: 5-1/2" x 1-1/8" (140 mm x 29 mm)

Projection: 7" (178 mm)

Materials: Brass with rubber roller and nylon cam roller

Finishes: US3, US10, US10B, US26D

Fasteners: Two (2) #12 x 1" OPHWS, two (2) #6 x 3/4" FPHWS, two (2) #8 x

3/4" TPHWS, and one (1) #6 x 3/4" FPHWS

Notes: • Non-handed

Do not use 298D coordinator in conjunction with flushbolts. Use

297D when using flushbolts

• Gravity arm and door bracket are adjustable on the job for ease of

installation

 For use on pairs of doors with astragal on active door up to 4' (1219 mm) wide or with astragal on inactive door up to 3'-4" (1016 mm) wide or with astragal on both doors up to 2'-10"

(864 mm) wide

• Minimum 3" (76 mm) header required

Maximum astragal overlap - 7/8" (22 mm)









311H | 311L

Push/Pull Latch

Certifications: ANSI A156.2 Closest Equivalent (Bored Latch - Series 4000 - Grade 2)

Push & Pull levers: 1-15/16" x 4-1/2" (49 mm x 114 mm) Escutcheons: 3-1/16" x 5" (78 mm x 127 mm)

 Projection:
 2-5/8" (67 mm)

 Bolt Throw:
 1/2" (13 mm)

 Bolt Diameter:
 3/4" (19 mm)

Backset: • 2-3/4" (70 mm) - Standard • 5" (127 mm) - Optional

Strike (TEE) - standard: 1-1/8" x 2-3/4" (29 mm x 70 mm) Strike (ASA) - standard: 1-1/4" x 4-7/8" (32 mm x 124 mm)

Door thickness: 1-3/4" (45 mm)

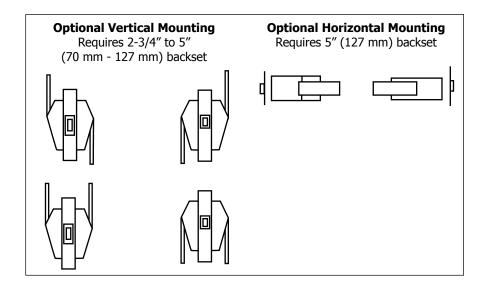
Materials: Zinc and stainless steel

Finishes: US26, US26D, US32, US32D

Notes: • Non-handed

• Engraving is optional

• 311L is same as 311H but for use on lead lined doors





318D

Roller Latch with Tee Strike

Certifications: Meets ANSI A156.16 for E09091 Roller Faceplate: $1'' \times 3-3/8''$ (25 mm x 86 mm) Strike: $1-1/8'' \times 2-3/4''$ (29 mm x 70 mm)

Strike Gauge: 0.063" (1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2

8-32 x 3/4" FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance





318S

Roller Latch with Stop

Certifications: Meets ANSI A156.16 for E0911

Roller Faceplate: 1-7/16" wide x 4-7/16" high x 11/16" angle (37 mm x 111 mm x 18 mm)

Strike: 1-1/8" x 2-1/4" (29 mm x 57 mm)

Strike Gauge: 0.063" (1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS and two (2) 8-32 x 3/4" FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 \bullet Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance



320R

Roller Catch with Tee Strike

Certifications: Meets ANSI A156.16 for E0910 Roller Faceplate: 1-1/8" x 2-1/4" (29 mm x 57 mm)

Strike: 1-1/4" x 2-3/4" x 1/16" thick (32 mm x 70 mm x 1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Four (4) #8 x 1" FPHWS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is adjusted by turning knurled knob on back of the latch

• Max projection of the roller is 7/16" (11 mm) allowing for variance in door and frame

clearance

• For use with wood door and frame



321R

Adjustable Ball Catch with Strike

Roller Faceplate: 1" x 2-1/8" (25 mm x 54 mm) Strike: 1-1/2" x 2-1/8" (38 mm x 54 mm)

Strike Gauge: 0.050" (1.3 mm)

Materials: Brass with steel ball

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26D

Fasteners: Four (4) #6 FPHWS

Notes: • Adjustable threaded barrel compensates for various door clearances

• Adjustable spring tension

• For use with wood door and frame



340D

Latch Protection Plate

Size: 3" x 11" (76 mm x 279 mm) Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) $5/16-18 \times 1-1/2''$ carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

• Non-handed

Frame pin prevents prying of doorFor use with most mortise locks

For use with cylindrical locksets with a 3-3/4" (95 mm) backset or greater





341D

Latch Protection Plate with Lock Cut Out

Size: 3" x 11" (76 mm x 279 mm)
Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

Non-handed

Frame pin prevents prying of door

• For use with cylindrical locksets with a 2-3/4" (70 mm) backset



345D

Latch Protection Plate

Size: 1-5/8" x 10" (41 mm x 254 mm) Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

Non-handed

· For use with cylindrical locksets





1442

Roller Latch with Full Lip Strike

Certifications: Meets ANSI A156.16 for E09091
Roller Faceplate: 1" x 3-3/8" (25 mm x 86 mm)
Strike: 1-11/16" x 2-1/4" (43 mm x 57 mm)

Strike Gauge: 5/32" (4 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2) 8-32 x 3/4"

FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 \bullet Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance



1443

Roller Latch with ASA Strike

Certifications: Meets ANSI A156.16 for E09101
Roller Faceplate: 1" x 3-3/8" (25 mm x 86 mm)
Strike: 1-1/4" x 4-7/8" (32 mm x 124 mm)

Strike Gauge: 0.090" (2.3 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS, two (2) #12 x 3/4" FPHWS, and two (2) 12-24 x 1/2"

FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance





901P

Coat Hook - Short Single

Diameter: 1" (25 mm)
Projection: 1-1/4" (32 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



937P

Coat Hook

Projections: • 3-3/4" (95 mm)

top hook

• 2-1/2" (63 mm) bottom hook

Materials: Brass, bronze Finishes: US3, US26D



902P

Coat Hook - Long Single

Diameter: 1" (25 mm)
Projection: 2-1/2" (63 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



940P

Coat Hook - Double

Overall Height: 4-11/16'' (119 mm) Top Projection: 3-15/16'' (100 mm) Bottom Projection: 2-1/8'' (54 mm) Material Thickness: 1/4'' (6 mm) Fasteners: Two (2) #10 x 1"

FPHWS



903P

Coat Hook - Long Double

Diameter: 1" (25 mm)
Projection: 2-1/2" (63 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



941P

Coat Hook - Single

Overall Height: 2-5/16" (59 mm) Projection: 2-1/8" (54 mm) Material Thickness: 1/4" (6 mm) Fasteners: Two (2) #10 x 1"

FPHWS



936P

Coat Hook Single Angled

Base Diameter: 1-15/16" (49 mm)
Hook Diameter: 11/16" (17 mm)
Projection: 3-5/16" (84 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting





945P

Double Coat Hook - Surface Mounting

Overall Height: 5-1/2" (140 mm)
Projection: 3-5/16" (84 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: Four (4) #10 x 1"

FPHWS w/ anchors



952P

Coat Hook - Single

O/A Height: 2-13/16" (71 mm)
Projection: 2-7/32" (56 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



946P

Double Coat Hook -Concealed Mounting

Overall Height: 5-1/2" (140 mm)
Projection: 3-11/16" (94 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: Two (2) #10 x 1"
FPHWS w/ anchors

Concealed mounting



956P

Double Coat Hook - Angled

Overall Height: 5-11/16" (144 mm)
Projection: 3-23/32" (95 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



951P

Notes:

Coat Hook - Double

O/A Height: 5-3/4" (146 mm)
Projection: 2-3/4" (70 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



957P

Coat Hook

Projection: 1-3/4" (45 mm)
Base Diameter: 3/4" (19 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #10 x 1" wood

thread

Notes: Concealed mounting





22N

Edge Pull for Sliding Doors

Certification: Meets ANSI A156.14 for D2801

Size: 31/32" x 4-1/4" x 3/8" thick (25 mm x 108 mm x 9.5 mm)

Lever Extension: 2-19/32" (66 mm)

Materials: Brass Finishes: US3, US26D

Fasteners: Two (2) #6 x 3/4" FPHWS



330D

Pocket Door Latch

Certification: Meets ANSI A156.14 for D0821 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15A, US19, US26, US26D

Fasteners: Two (2) #6 x 5/8" OPHWS

Notes: For use with 1-3/8" - 1-3/4" (35 mm - 45 mm) door



330L

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Strike Size: 1" x 2-1/4" (25 mm x 57 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15, US15A, US19, US26, US26D Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS

Notes: For use with 1-3/8" (35 mm) door



330M

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Strike Size: 1" x 2-1/4" (25 mm x 57 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15, US15A, US19, US26, US26D Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS

Notes: For use with 1-3/4" (45 mm) door



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (24.5 mm)
Finger Pull Diameter: 3/4" (19 mm)
Pull Clearance: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26D, ABA Notes: • For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads





2620

Flush Cup Pull

Overall Diameter: 2-1/16" (52 mm)
Finger Pull Diameter: 1-11/16" (43 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 5/64" (2 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Notes:

• For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm)
Finger Pull Diameter: 2-1/16" (52 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 3/32" (2.4 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Notes: • For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



2640

Oblong Flush Pull

Size: 1-5/16" x 2-3/4" (33 mm x 70 mm)

Cup Clearance: 5/16" (8 mm)
Materials: 5/16" (8 mm)

Finishes: US3, US4, US5, US10A, US15, US15A, US26D, ABA

Fasteners: Two (2) #6 x 5/8" OPHWS

Notes: For use on bi-fold, by-pass or pocket applications



9558

Wood Knob

Diameter: 1-1/2" (38 mm) Materials: Solid wood

Notes: • For use on bi-fold applications

• Will accept paint or stain



9566

Knob

Diameter: 1-1/4" (32 mm)
Projection: 1" (25 mm)
Materials: Die Cast Zinc

Finishes: US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D Fasteners: One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS

Notes: For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick





9567

Rose

Base Diameter: 1-3/4" (45 mm)
Projection: 15/32" (12 mm)
Materials: Die cast zinc

Finishes: US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D Fasteners: One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS

Notes: • For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick

• For use with 9566 knob



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (40 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS plastic

Notes: • For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



9882

Pocket Door Edge Pull

Face Plate Size: 3/4" x 3 - 7/8" (19 mm x 98 mm)

Finger Pull Extends: 3/4" (19 mm)
Materials: Solid brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #6 x 5/8" FPHWS

Notes: • Ideal for narrow and standard door thicknesses

• Automatic spring return



9884

Pocket Door Edge Pull

Faceplate: 21/32" x 3-1/2" (16.5 mm x 89 mm)

Finger Pull Extends: 1-1/16" (27 mm)
Materials: Die cast zinc

Finishes: US3

Fasteners: Two (2) #6 x 5/8" FPHWS

Notes: Ideal for narrow and standard door thicknesses





336A

Door Edge Filler Plate - 161 Prep

Size: 1-1/8" x 2-1/4"

(29 mm x 57 mm)

Thickness: 0.125" (3.2 mm)
Materials: Primed steel



336G

Door Edge Filler Plate - Square

Size: 1-3/4" x 5"

(38 mm x 127 mm) Thickness: 0.134" (3.4 mm)

Materials: Primed steel



336B

Door Edge Filler Plate - 86 Prep

Size: 1-1/4" x 8"

(32 mm x 203 mm)

Thickness: 0.180" (4.5 mm)
Materials: Primed steel



336H

Door Edge Filler Plate - Beveled

Size: 1-1/2" x 5"

(38 mm x 127 mm)

Thickness: 0.134" (3.4 mm)

Materials: Primed steel

Notes: For handed doors



336C

Door Face Filler Plate - Deadbolt

Size: 1-3/4" (45 mm)

diameter

Thickness: 0.055" (1.4 mm)
Materials: Primed steel



336J

Flush Bolt Strike Filler Plate - Frame

Size: 15/16" x 2-1/4"

(24 mm x 57 mm)

Thickness: 0.083" (2.1 mm)
Materials: Primed steel



336D

Door Face Filler Plate - 161 Prep

Size: 2-5/8" (67 mm)

diameter

Thickness: 0.055" (1.4 mm)
Materials: Primed steel



336K

Flush Bolt Filler Plate - Door

Size: 1" x 6-3/4"

(25 mm x 172 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336E

Door Edge Filler Plate - Square

Size: 1-3/4" x 4-1/2"

(45 mm x 114 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336L

Hinge Filler Plate - Frame

Size: 1-5/8" x 4-1/2"

(41 mm x 114 mm)
Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336F

Door Edge Filler Plate - Bevel

Size: 1-1/2" x 4-1/2"

(38 mm x 114 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel
Notes: For handed doors





336M

Hinge Filler Plate - Frame

Size: 1-5/8" x 5"

(41 mm x 127 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel



337A

Template Hinge Shim

Size: 1-7/16" x 4-1/2" (37 mm x 114 mm)

Thickness: 0.028" (0.7 mm)
Materials: Primed steel



336N

Latch Adapter Filler Plate - 86 to 161 Edge Prep

Size: 1-1/4" x 8"

(32 mm x 203 mm) 0.238" (6 mm)

Thickness: 0.238" (6 mn Materials: Primed steel



337B

Template Hinge Shim

Size: 1-7/16" x 4-1/2"

(37 mm x 114 mm)
Thickness: 0.065" (1.7 mm)
Materials: Primed steel



336P

Deadlock Strike Filler Plate - Frame

Size: 1-1/8" x 2-3/4"

(29 mm x 70 mm)

Thickness: 0.083" (2.1 mm) Materials: Primed steel



337C

Template Hinge Shim

Size: 1-7/16" x 5"

(37 mm x 127 mm)

Thickness: 0.028" (0.7 mm)
Materials: Primed steel



336Q

ASA Strike Filler Plate - Frame

Size: 1-1/4" x 4-7/8"

(32 mm x 124 mm)

Thickness: 0.093" (2.4 mm)
Materials: Primed steel



337D

Template Hinge Shim

Size: 1-7/16" x 5"

(37 mm x 127 mm)
Thickness: 0.065" (1.7 mm)
Materials: Primed steel



336R

Cylindrical Lock Strike Filler Plate - Frame

rranne

Size: 1-1/8" x 2-3/4"

(29 mm x 70 mm)

Thickness: 0.083" (2.1 mm)
Materials: Primed steel



PULL

350H | 350L

Engraved Plastic Sign - Push (350H) and Pull (350L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

MEN

WOMEN

350M | 350W

Engraved Plastic Sign - Men (350M) and Women (350W)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 5" (51 mm x 127 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

635

350R

Engraved Plastic Sign - Number

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering

Notes: Signs are individually packed in a poly bag

P P U L L

351H | 351L

Engraved Plastic Sign - Push (351H) and Pull (351L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 1" x 4-1/2" (25 mm x 114 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

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352M | 352W

Engraved Plastic Sign - Men (352M) and Women (352W)

占 WOMEN

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica

Size: 352M - 2-1/2" x 6" (64 mm x 152 mm) 352W - 2-1/2" x 7" (64 mm x 178 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

Restroom

354A | 354B

Engraved Plastic Sign - Restroom(s)

Restrooms

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 6" (51 mm x 127 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Black (W2) with white lettering

Blue (W3) with white lettering

Notes: Signs are individually packed in a poly bag

MEN

360M | 360W

Engraved Metal Sign - Men (360M) and Women (360W)

WOMEN

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled

Size: 2" x 6" (51 mm x 152 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US28, US32D

Notes: Signs are individually packed in a poly bag

PUSH

361H | 361L

Engraved Metal Sign - Push (361H) and Pull (361L)

PULL

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US10B, US28, US32D

Notes: Signs are individually packed in a poly bag





362H | 362L

Engraved Metal Sign - Push (362H) and Pull (362L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled
Size: 1" x 4-1/2" (25 mm x 114 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US10B, US28, US32D

Notes: Signs are individually packed in a poly bag



364L

Plastic International Handicap Symbol Sign

Certifications: Meets ANSI A156.16 L03201

Materials: 0.125" (3.2 mm) thick plastic 1/32" (0.8 mm) raised HANDICAP symbol

Size: 6" x 6" (152 mm x 152 mm)

Fasteners: Double sided pressure sensitive tape standard or screws (specify)

Colors: • Brown (W4) with raised white symbol

Black (W2) with raised white symbolBlue (W3) with raised white symbol

Notes: Signs are individually packed in a poly bag



364M | 364S

Plastic International Handicap Symbol Sign

Certifications: Meets ANSI A156.16 L03201

Materials: 0.0625" (1.6 mm) thick plastic raised HANDICAP symbol

Size: 364M - 4" x 4" (102 mm x 102 mm) 364S - 3" x 3" (76 mm x 76 mm)

Fasteners: Double sided pressure sensitive tape standard or screws (specify)

Colors: Blue (W3) with raised white symbol Notes: Signs are individually packed in a poly bag



364N

Notes:

Engraved International No Smoking Symbol Sign

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 6" (152 mm x 152 mm)

Fasteners: Pressure sensitive tape standard or screws (specify)

Colors: Red (W4) with raised white symbol

Notes: Signs are individually packed in a poly bag



365M | 365W

ADA Tactile Sign - Men (365M) and Women (365W)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape
Colors:

• Brown (W1) with raised white symbol
• Black (W2) with raised white symbol

Blue (W3) with raised white symbolSigns are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements





325

366R

ADA Tactile Sign - Room Number

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 2-1/2" x 5" (64 mm x 127 mm)
Fasteners: Double sided pressure sensitive tape
Colors: Brown (W1) with raised white lettering
Black (W2) with raised white lettering

Black (W2) with raised white lettering
Blue (W3) with raised white lettering
Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements



366S

Notes:

ADA Tactile Sign - Stairs

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape

Colors: • Brown (1) with white symbol and lettering

Black (2) with white symbol and lettering
Blue (3) with white symbol and lettering
Signs are individually packed in a poly bag

Notes:
Signs are individually packed in a poly bagGrade 2 Braille Translation conforming to section 4.30 requirements



368E

ADA Tactile Sign - Exit

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape
Colors:

• Brown (1) with white symbol and lettering
• Black (2) with white symbol and lettering
• Blue (3) with white symbol and lettering

Notes: • Signs are individually packed in a poly bag

Grade 2 Braille Translation conforming to section 4.30 requirements





368M | 368W

ADA Tactile Sign - Men (365M) and Women (365W) with Handicap

Certifications: Meets ANSI A156.16 L03201 Materials: 0.125" (3.2 mm) thick plastic Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape
Colors: • Brown (1) with white symbol and le

Brown (1) with white symbol and lettering
Black (2) with white symbol and lettering
Blue (3) with white symbol and lettering

Notes: • Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements





368U

ADA Tactile Sign - Unisex

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 8" x 8" (203 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape

Colors: • Brown (1) with white symbol and lettering

Black (2) with white symbol and lettering
Blue (3) with white symbol and lettering

Notes: • Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements



₹→

369L | 369R

Notes:

ADA Tactile Sign - Access Left (369L) and Access Right (369R)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape

Colors:

• Brown (1) with white symbol and lettering
• Black (2) with white symbol and lettering

Blue (3) with white symbol and letteringSigns are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements







370M | 370U | 370W

ADA Tactile Sign - Restroom, Men, and Women

Certifications: Meets ANSI A156.16 L03201
Materials: 9/16" (14.3 mm) plastic

Size: • 370U - 12" (305 mm) diameter

• 370W - 12" (305 mm) diameter • 370M - 10-1/2" (267 mm) side

Fasteners: Double sided pressure sensitive tape

Color: Blue (3) with white raised symbol and lettering Notes: • Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements





274B

Door Guard Protection Plate

Size: 1-1/8" x 1" x 1/2" (28.5 mm x 25 mm x 12.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes:

• Used when additional protective plate is required for frame application

Mounted with double-sided tape
 To be used with the 274D.

• To be used with the 274D



274C

Shim for Door Guard

Size: 1-1/8" x 1-1/16" (29 mm x 27 mm)

Thickness: 3/32" (2.3 mm)
Materials: Black rubber

Notes: To be used with the 274D



274D

Door Guard

Certifications: Meets ANSI A156.16 for L13041

Arm Length: 4-1/2" (114 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Three (3) #6 x 1-1/2" OPHWS, three (3) #6 x 3/4" OPHWS, and three (3) 6-32 x 3/4"

FPHMS

Notes: • Permits door to be slightly opened to allow viewing

• Hinged bar allows the door guard to be positioned 180 degrees away from the door

when not in use

• Includes door guard protective plate 274B



300D

Chain Door Check

Certifications: Meets ANSI A156.16 for L02231

Lengths: • 25-1/2" (648 mm) recommended for use with 36" (914 mm) wide door

• 30-1/2" (775 mm) recommended for use with 42" (1067 mm) wide door

Base Plate: 1-1/2" x 1-1/2" (38 mm x 38 mm)

Materials: Cast brass base with welded steel chain

Finish: US26D

Fasteners: Ten (10) #8 x 1" FPHSMS
Notes: • Tear resistant grey vinyl cover

• Can be ordered through door mounting with grommet nut sets at extra charge

• 440 pound load strength

• Designed for full size exterior doors





301D

Heavy Duty Hinge Pin Stop

Certifications: Meets ANSI A156.16 for L02223
Materials: Wrought steel with rubber bumpers

Finishes: US3, US26D

Notes:

• Works with 1/4" (6 mm) and 5/16" (8 mm) hinge pins

• For use where standard door stops are not desirable

• Positive slip proof design

Adjustable from 70 degrees to 100 degrees

• Must purchase an NRP hinge for use with this pin stop



303W

Handrail Bracket

Certifications: Meets ANSI A156.16 for L03061

Base Diameter: 3-5/32" (80 mm)
Base to Center of Rail: 2-3/4" (70 mm)
Materials: Brass

Finishes: US3, US4, US10, US10B, US15A, US19, US26, US26D

Fasteners: Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-24 x 13/16"

FPHMS, and three (3) 10-24 lead anchors



305D

Wire Pull

Certifications: Meets ANSI A156.9 for B02011

Diameter of Rod: 5/16" (7.9 mm)
Projection: 1-9/32" (32.5 mm)

CTC Lengths: 3" (76 mm), 3-1/2" (89 mm), 4" (102 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) 8-32 x 1" TPHMS



307D

Door Silencer

Certifications: Meets ANSI A156.16 for L03011

Diameter: 1/2" (13 mm)
Projection: 1/8" (3 mm)
Materials: Rubber

Notes: • For use with metal frames

 \bullet Proper installation eliminates door rattle and provides constant tension for door

latches or locks



308D

Door Silencer

Certifications: Meets ANSI A156.16 for L0302

Projection: 9/64" (3.5 mm)

Base: 3/8" x 3/4" (9.5 mm x 19 mm)

Length: 3/4" (19 mm)
Materials: Rubber

Notes: • For use with wood frames

• Eliminates door rattle when door is latched

 Proper installation eliminates door rattle and provides constant tension for door latches or locks





310C

Conversion Kit

Filler Plate: 1-1-8" x 3-3/8" (29 mm x 86 mm) Strike: 1-11/16" x 2-1/4" (43 mm x 57 mm)

Materials: Brass

Finishes: US10B, US26D

Notes: • Packed with filler plate, strike and fasteners

• Change door from Roller Latch to Push/Pull Latch



322V

Wrought Door Knocker with Viewer

Certifications: Meets ANSI A156.16 for L03161 Size: 2-3/16" x 3-1/4" (56 mm x 83 mm)

Materials: Brass

Finishes: US3, US4, US10, US26D Fasteners: Three (3) #6 x 3/4" TPHSMS

Notes: Requires 1/2" (13 mm) hole for viewer



1755

160° Door Viewer

Certifications: Meets ANSI A156.16 for L03222

Materials: Brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D Notes: • For doors up to 2-1/8" (54 mm) thick, adjustable

• Requires 1/2" (13 mm) hole for viewer

Tamper resistant

• 90 minute fire rated

· One way viewer



1756

200° Door Viewer

Certifications: Meets ANSI A156.16 for L03221

Materials: Brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D Notes: • For doors up to 2-1/8" (54 mm) thick, adjustable

• Requires 9/16" (14 mm) hole for viewer

Tamper resistant

• 90 minute fire rated

• One way viewer







208

Kick Down Door Stop

Base: 1-5/8" x 1-7/8" (41 mm x 48 mm)

Arm: 3-7/8" (98 mm) Materials: Aluminum alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Three (3) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with screws

• Provides simple hold and release with a touch of the foot

• 3" (76 mm) max door to floor clearance



209

Floor Door Stop

Height: 1-1/4" (32 mm)

Base Diameter: 1-3/32" (28 mm)

Tip Diameter: 19/32" (15 mm)

Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: One (1) #8 x 2" FPHWS
Notes: • Non-marking white tip

• 3/8" (9.5 mm) max door to floor clearance



BL6209

Floor Door Stop

Height: 1-3/8" (35 mm)
Base Diameter: 13/16" (21 mm)
Tip Diameter: 1/2" (13 mm)
Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: #8 x 11/32" thread
Notes: • Non-marking white tip

• 150 per case

• 1/2" (13 mm) max door to floor clearance

 \bullet Hex shape near the base allows usage of a wrench for easier installation



210

Rigid Door Stop

Projection: 3" (76 mm)

Tip Diameter: 11/16" (17.5 mm)

Base Diameter: 1" (25 mm)

Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: #8 x 5/8" thread
Notes: Bumper made of rubber





211

Flexible Door Stop

Projection: 3-1/8" (79 mm)
Tip Diameter: 9/16" (14 mm)
Base Diameter: 1" (25 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: One (1) #8 x 3/4" PPHWS Notes: • Bumper made of rubber

• Flexible spring



BL6211

Flexible Door Stop

Projection: 3" (76 mm)
Tip Diameter: 7/16" (11 mm)
Base Diameter: 3/4" (19 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

• Flexible spring



212

Hinge Pin Door Bumper

Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Notes:

• Non-marking white plastic tip

• For use with residential hinges

• For use where standard door stops are not desirable

• For use with narrow trim

• Adjustable from 80 degrees to 120 degrees



BL6212

Hinge Pin Door Bumper

Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Notes:

• Non-marking white plastic tip
• For use with residential hinges

• For use where standard door stops are not desirable

For use with narrow trim

• Adjustable from 80 degrees to 120 degrees



1412

Door Guard

Arm Length: 4" (102 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Seven (7) #6 x 3/4" FPHWS

Notes: • Provides extra security from inside door

• Limits door opening when latch is thrown

• Polybag (1 each) with screws





1413

Flush Bolt

Faceplate: 3/4" x 6" (19 mm x 181 mm) Strike: 7/8" x 1-3/4" (22 mm x 45 mm)

Bolt Diameter: 1/2" (13 mm)
Bolt Throw: 15/16" (24 mm)
Bolt Backset: 7/16" (11 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN

Fasteners: Four (4) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

Square corners



1414

Flush Bolt

Faceplate: 3/4" x 6" (19 mm x 181 mm) Strike: 7/8" x 1-3/4" (22 mm x 45 mm)

Bolt Diameter: 1/2" (12.7 mm)
Bolt Throw: 15/16" (24 mm)
Bolt Backset: 7/16" (11 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN

Fasteners: Four (4) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners



1415

Strike Plate

Size: 7/8" x 1-3/4" (22 mm x 45 mm) Finishes: US3, US10A, US15A, US15, US26D

Fasteners: Two (2) #6 x 3/4" FPHWS

Notes: • For use with 1413 and 1414 Flush Bolts

• Packed (1 each) with Polybag and screws



Single Route Flush Bolt

Faceplate: 3/4" x 7-1/8" (19 mm x 181 mm) Strike: 21/32" x 1-1/2" (17 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt Throw: 7/8" (22 mm)
Bolt Backset: 3/8" (9.5 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners

• Single route for quick and simple door prep







1418

Flush Bolt with Extension Rod

Faceplate: 23/32" x 7-3/8" (18 mm x 187 mm) Strike: 5/8" x 1-1/2" (16 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt Throw: 3/4" (19 mm)
Bolt Backset: 3/8" (9.5 mm)
Extension Rod Length: 16" (406 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners

Single route for quick and simple door prep



1419

Flush Bolt with Extension Rod

Faceplate: 3/4" x 7-1/8" (19 mm x 181 mm) Strike: 5/8" x 1-1/2" (16 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt throw: 3/4" (19 mm)
Bolt Backset: 5/16" (8 mm)

Materials: Brass faceplate with steel components

Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS Finishes: US3, US4, US10A, US10R, US15, US26, US26D, ABA, AN

Notes: Single route for quick and simple door prep



1439 | BL6439

Magnetic Catch - Light Weight

Catch: 1-1/16" x 2" (27 mm x 51 mm) Strike: 7/8" x 1" (22 mm x 25 mm)

Materials: Tan plastic case

Fasteners: Two (2) #6 x 1/2" TPHWS and one (1) #4 x 1/2" FPHWS

Notes: • Polybag (1 each) with screws

Double sided magnet, self-aligning, 6 lb. pullSelf aligning magnet insures maximum pull

• BL6439 is Builder's Pack Polybag (1 each) with screws



1445

Roller Latch

Hole Diameter: 13/16" (21 mm)
Hole Depth: 1-1/8" (29 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #4 x 3/4" FPHWS
Notes: • Polybag (1 each) with screws

• Designed for use on cabinets and lightweight doors

Not intended for heavy weight applications





1446

Light Weight Ball Catch

Faceplate: 1" x 2-1/4" (25 mm x 57 mm) Strike: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Hole Diameter: 1'' (25 mm) Hole Depth: 1-1/4'' (32 mm)

Materials: Zinc

Finishes: US3,US4, US5, US10A, US10R, US15A, US15, US26, US26D

Fasteners: Four (4) #6 FPHWS

Notes: • Designed for use on cabinets and light weight doors

• Not intended for heavy weight applications

• Ball adjusts in and out for various door and frame clearances

• Polybag (1 each) with steel screws



1447

Light Weight Ball Catch

Strike: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Faceplate: 1" (25 mm) diameter Hole Diameter: 15/16" (24 mm) Hole Depth: 1-1/4" (32 mm)

Materials: Zinc

Finishes: US3, US4, US5, US10A, US10R, US15A US15, US26, US26D

Fasteners: Two (2) #6 FPHWS

Notes: • Designed for use on cabinets and light weight doors

• Not intended for heavy weight applications

• Ball adjusts in and out for various door and frame clearances

• Polybag (1 each) with steel screws



1448

Strike Plate

Size: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #6 FPHWS

Notes: For use with 1446 and 1447 ball catches



1449

Drive In Ball Catch

Faceplate: 1" (25 mm) diameter Hole Diameter: 15/16" (24 mm) Hole Depth: 1-1/4" (32 mm)

Materials: Zinc Finishes: US4

Packaging: 100 per box

Notes: • Ball catch designed for use on cabinets and light weight doors

• Not intended for heavyweight applications

• Ball adjusts in and out for various door and frame clearances





BL6793

Pole Sockets

Outside Diameter: 2-7/16" (62 mm)

Materials: Steel

Notes: • For poles up to 1-3/8" (35 mm) diameter

• Flange design prevents accidental knock out of pole

• Polybag (2 each) with screws



BL6794

Pole Sockets

Outside Diameter: 2-3/16" (56 mm)

Materials: Plastic

Notes: • For poles up to 1-3/8" (35 mm) diameter

• Polybag (2 each) with screws



1795

Closet Rod

Pole Diameter: 1" (25 mm)

Materials: Steel with bright zinc finish

Finishes: White enamel Notes: • Quick mount end

High strength lock seam tubingPolybag (1 each) with screws



1797

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White Enamel

Fasteners: Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2"

PPH tapping screws

Notes: • For shelf and rod support

• Double welded heavy gauge steel construction embossed for added

strength

• Holds 1-3/8" (35 mm) diameter rod

• Supports 12" (305 mm) shelf

Bulk with screws





1798

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White Enamel

Notes: • For shelf and rod support

• Heavy gauge steel construction embossed for added strength

Holds 1-3/8" (35 mm) diameter rod
Supports 12" (305 mm) shelf

· Bulk with screws



1799

Shelf Bracket - Adjustable

Materials: Steel ANSI B04051 Finishes: White Enamel

Fasteners: Two (2) $\#8 \times 3/4''$ PPH tapping screws and two (2) $\#10 \times 1-1/2''$

PPH tapping screws

Notes: • Adjustable shelf and rod support

• Heavy gauge steel construction embossed for added strength

Holds 1-3/8" (35 mm) diameter rod
Supports 12" (305 mm) shelf
3/4" (19 mm) adjustability

Bulk with screws



1801

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White enamel

Fasteners: Two (2) $\#8 \times 3/4$ " PPH tapping screws and two (2) $\#10 \times 1-1/2$ " PPH

tapping screws

Notes: • Less rod support

• Heavy gauge steel construction embossed for added strength

• Supports 12" (305 mm) shelf

Bulk with screws



6601

Handrail Bracket

Projection: 3-1/4" (82.5 mm)
Base to Center of Rail: 2-3/4" (70 mm)
Materials: Cast aluminum

Finishes: US3, US4, US5, US10A, US10R, US15, US15A, US26, US26D, ABA Fasteners: Three (3) #8 x 1-1/2" OPHWS and two (2) #8 x 3/4" OPHWS

Notes: Polybag (1 each) with wood screws and rail bracket





BL6610

Coat and Hat Hook

Upper Projection: 2-13/16" (71 mm) Lower Projection: 1-5/16" (33 mm)

Material: Cast steel

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #6 x 3/4" FPHWS
Notes: Polybag (1 each) with screws

• Builder's pack



At Hager Companies, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application. Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager trim and auxiliary products give you great looks and proven durability.



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Hager Companies can deliver custom door pulls made to your specifications, or choose from our collection of pull designs. Hager's comprehensive selection of door pull hardware includes standard push/pull bars or multiple push bar combinations with center-to-centers made to order.

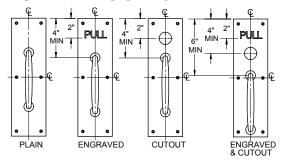
PUSH/PULL PLATE DETAILS Standard Grip Positions

Pulls are centered vertically or lowered when necessary to meet minimum top spacing requirement. Be certain the pull selected will fit on specified plate under these conditions.

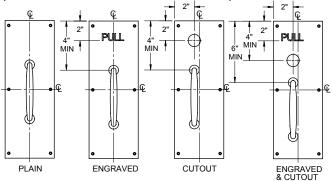
Special Pull Positions

Where pairs of doors are involved and active leaf pull plate is lettered or has a cutout, order pull plate for inactive leaf Grip To Align (WOC). This will ensure horizontal alignment of pull on both plates. Always furnish complete details when ordering non-standard pull positions.

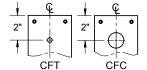
PULL PLATES UP TO 4" WIDE



PULL PLATES OVER 4" WIDE (HANDING REQUIRED WITH CUTOUTS)



Cut Outs



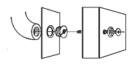
Standard cutout sizes: Cut for Cylinder (CFC) – 1 1/4" (32 mm) diameter; Cut for Thumbturn (CFT) – 3/8" (10 mm) diameter.

All plates may be ordered with cutout option by adding the appropriate suffix (i.e., 30S-CFC).

Standard cutouts are positioned 2" (51 mm) from top of plate where this option has been ordered. Cutouts are centered

on plates up to 4" (102 mm) wide or 2" (51 mm) from edge of plates over 4" (102 mm) wide. The latter are "handed" with cutouts. Furnish hand of door when ordering. Provide complete details for all non-standard cutouts.

Flush Back Mounting





Pull plates using #3, 4, or 10 pull types can be furnished with a flush back (no projections). Specify code FB, (i.e., 33E-FB). Note: Use thru-bolts supplied with mountings for best security.

Back-To-Back Mounting

Many pulls may be ordered back-to-back (BTB) and availability will be noted on each particular product page (refer to product page). Specify the correct part number and center-to-center unless already specified.

Handicap Option

Pulls that must meet the 2-1/2" (64 mm) clearance for ADA requirements are available. Must specify part number with prefix "H" (i.e., H2E). Please refer to each individual part number for availability.

Engraving

Typical engraved lettering is in Helvetica style and colored black. On push or pull plates, standard position is horizontal on a line 2" (51 mm) from top of plate.

PUSH PULL



Fasteners

Illustrated below are various types of fasteners that can be furnished by Hager Companies. Please specify type of fastening desired. All types of fastening cannot be used with all items of hardware. If specified method is not possible, we reserve the right to furnish whatever type we feel is best suited for the installation. When used with tempered glass doors, specify thickness of glass and hole diameter.



Sex bolt and machine screws

(various sizes)



Lead anchor

(used with floor stops in masonry applications)



Plastic anchor and full threaded

(used in drywall or masonry applications)

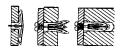


Lag screw and shield



Toggle bolt

(ideal for drywall applications)



Plastic toggle anchor

(used with wall stops in drywall applications)



Thru-bolt and finish washer

(flat or oval head; size as required)



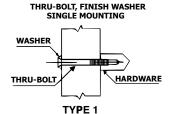
Spanner head machine screws

(various sizes furnished at extra charge)



Security torx head machine screws

(various sizes furnished at extra charge)

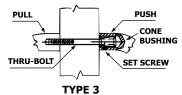


SURFACE APPLIED SPECIFY
WS OR MS SINGLE MOUNTING
FOR FLAT BARS

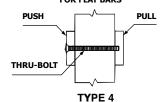
HARDWARE
WS OR MS
AS REQUIRED

TYPE 2

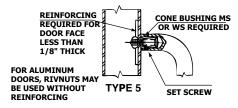
CONCEALED CONE WITH BOLT AND SET SCREW BACK-TO-BACK MOUNTING



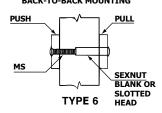
BACK-TO-BACK MOUNTING FOR FLAT BARS



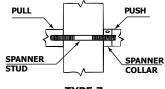
CONCEALED CONE, SINGLE MOUNTING REQUIRES REINFORCING OR RIVNUTS BY OTHERS



SEX BOLT SETS BACK-TO-BACK MOUNTING

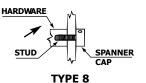


CONCEALED SPANNER, COLLAR & STUD BACK-TO-BACK MOUNTING SETS WITH ROUND BASES ONLY



TYPE 7

SPANNER CAP, SINGLE MOUNTING FOR ROUND BASES ON TEMPERED GLASS DOORS





METAL FINISH SYMBOLS

US & Hager	Description	Base Material	BHMA Symbol	
2C	Zinc Plated Steel	Steel	603	
3	Bright Brass	Brass	605	
4	Satin Brass	Brass	606	
5	Satin Brass, Oxidized	Brass/Bronze	609	
9	Bright Bronze	Brass/Bronze	611	
10	Satin Bronze	Brass/Bronze	612	
10B	Antique Bronze, Oiled	Brass/Bronze	613	
10R	Matte Lacquer Antique Bronze	Brass/Bronze	-	
15	Satin Nickel	Brass/Bronze	619	
15A	Satin Nickel Oxidized	Brass/Bronze	620	
19	Flat Black Coated	Brass	622	
26	Bright Chromium Plated	Brass/Bronze	625	
26D	Satin Chromium Plated	Brass/Bronze	626	
28	Satin Anodized Aluminum	Aluminum	628	
32	Stainless Steel Metal, Bright	300 Series	629	
32D	Stainless Steel Metal, Satin	300 Series	630	
L2	Duro	-	-	
PC	Clear Plastic	-	-	
PK	Plastic Laminate - Black	-	-	
CO	Plastic Laminate - Chocolate	-	-	
PG	Plastic Laminate - Grey	-	-	
S1	Sprayed Aluminum	Cast Iron	-	
S2	Sprayed Brass	Cast Iron	-	
S3	Sprayed Bronze	Cast Iron	-	

Note: For any finish not listed in this catalog, or explained above, availability on request.

ANTIMICROBIAL PROTECTION

Hager Companies' full line of US32D stainless steel door pulls, push bars, push plates, and pull plates are available with AgION antimicrobial protection.

Hager uses a powder coat process to apply the antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. The suppression of bacteria, mold and fungi is as easy as adding antimicrobial treated coating to your Hager products.

Antimicrobial Vital Stats

- US32D stainless steel
- EPA registered
- NSF approved
- FDA listed for food contact
- Designate your product with: MV3 for Trim & Auxiliary



1E

6

152

2E

6

152

3E

6

152

2G

8

203

10

254

3J

10

254

3G

8

203

3L

12

305

1G

8

203

1J

10

254

CTC Length

Millimeters

CTC Length

Millimeters

CTC Length

Millimeters

Inches

Inches

Inches



1L

12

305

2L

12

305



1

Modified Half Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls Base: 1/2" x 1" (13 mm x 25 mm)

Projection: 2" (51 mm) Clearance: 1-1/2" (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H1E)

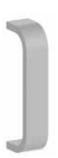
Options: • May be combined with a plate to make a pull plate

• Other centers on special order

Notes: • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Not suitable for BTB mounting



2

Rectangular Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls Base: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection: 2" (51 mm) Clearance: 1-5/8" (41 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H2E)

Options: • May be combined with a plate to make a pull plate

• Other centers on special order

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Not suitable for BTB mounting



3

Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Clearance: 1-1/2" (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders - add prefix "H" to number

(i.e., H3E)

Notes: • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• May be combined with a plate to make a pull plate

Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

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Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1" (25 mm)

Projection: 2-3/4" (70 mm)

Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H4E)

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• May be combined with a plate to make a pull plate

• Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

CTC Length

Millimeters

Inches



P4E

Security Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base: 1" (25 mm) diameter
Projection: 2-1/4" (57 mm)
Clearance: 1-1/4" (32 mm)
CTC Length: 6" (152 mm)
Material: Stainless Steel

Finish: US32D

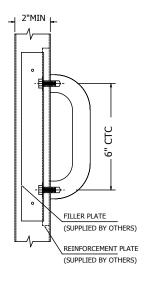
Fasteners: Two (2) 3/8-16 x 1-1/4" "NYLOC" hex head cap

screws

Notes: • For metal doors

• Requires reinforcing plate with an access plate and

Torx screws for door edge



4J

10

254

4H

9

229

4G

8

203

4L

12

305



T4E

Security Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base: 1" (25 mm) diameter Projection: 2-1/4" (57 mm) Clearance: 1-1/4" (32 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 6" (152 mm)
Material: Stainless Steel

Finish: US32D

Fasteners: Two (2) 1/4-20 x 2-1/4" Security Torx thru-bolts





5D

Round Wrought Door Pull

Certification: Meets ANSI A156.6 for J401 Pulls

 Base Diameter:
 5/8" (16 mm)

 Projection:
 2-1/8" (54 mm)

 Clearance:
 1-1/2" (38 mm)

 CTC Length:
 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H5D)

Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

• May be combined with a plate to make a pull plate

• If ordered with tempered glass, specify glass thickness and hole size

• Not suitable for BTB mounting



5N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 6-1/8" (156 mm)

Base: 5/8" x 1-3/16" (16 mm x 30 mm)

Projection: 2" (51 mm)

Clearance: 1-1/2" (38 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D Fasteners: Two (2) 1/4-20 thru-bolts with finish washers Options: May be combined with a plate to make a pull plate

Options: May be combined with a plate Notes: Not suitable for BTB mounting



6N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 6-1/2" (165 mm)

Base Diameter: 1" (25 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers
Options: May be combined with a plate to make a pull plate

Notes: Not suitable for BTB mounting





7N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 7-1/2" (190 mm)

Base Diameter: 2" (51 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Aluminum, brass, bronze

Finishes: US3, US4, US10, US10B, US26, US26D, US28
Fasteners: Two (2) 1/4-20 thru-bolts with finish washers
Options: May be combined with a plate to make a pull plate

Notes: Not suitable for BTB mounting



8N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 7-1/2" (190 mm)

Base Diameter: 2" (51 mm)

Projection: 1-7/8" (48 mm)

Clearance: 1-3/8" (35 mm)

CTC Length: 5-1/2" (140 mm)

Materials: Aluminum, brass, bronze

Finishes: US3, US4, US10, US10B, US26, US26D, US28

Fasteners: Six (6) #8 x 1" OPHWS
Notes: Not suitable for BTB mounting



P8N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 8 - 3/4" (222 mm)

Base: 1-1/2" x 1-5/8" (38 mm x 41 mm)

 Projection:
 2-1/4" (57 mm)

 Clearance:
 1-9/16" (40 mm)

 CTC Length:
 7-3/4" (197 mm)

Materials: Brass

Finishes: US4, US26D

Fasteners: Two (2) 3/8-16 x 3/4" FPHMS Options: Security Torx screws available Notes: Not suitable for BTB mounting

9E

6

CTC Length

Millimeters

11E

152

6

11G

8

11J

10

11L

12

305

Inches

152

CTC Length

Millimeters

Inches



9L

12

305

93

10

254

10L

12

305

10Q

18

457

9G

203

8



9

Oval Wrought Door Pull

Meets ANSI A156.6 for J401 Pulls Certification: Base: 1/2" x 3/4" (13 mm x 19 mm)

Projection: 2" (51 mm) Clearance:

1-1/2" (38 mm) 1-3/4" (45 mm) - Standard Door Thickness: Materials: Brass, bronze, stainless steel Finishes:

US3, US4, US10, US10B, US26, US26D, US32, US32D Two (2) 1/4-20 thru-bolts with finish washers Fasteners:

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number Handicap:

(i.e., H9E)

 May be combined with a plate to make a pull plate Options:

Other centers on special order

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability

Not suitable for BTB mounting



10

Round Pull

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1-1/4" (32 mm) Projection: 3" (76 mm) Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number Handicap:

(i.e., H10L)

• May be combined with a plate to make a pull plate Options:

• Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

CTC Length

Millimeters

Inches

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 3/4" (19 mm) Projection: 2-1/2" (64 mm)

Offset: 2-1/2" (64 mm); 90° Standard

Clearance: 1-3/4" (45 mm)

1-3/4" (45 mm) - Standard Door Thickness:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number (i.e.,

H11E)

Options: • For 45° offset, add prefix "X" to number (i.e., X11E)

• Other centers available on special orders

• If ordered with tempered glass, specify glass thickness and hole size

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:







12

Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 1" (25 mm) Projection: 2-3/4" (70 mm)

Offset: 3" (76 mm); 90° Standard

Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Two (2) 5/16-18 thru-bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number (i.e.,

H12G)

Options: • For 45° offset, add prefix "X" to number (i.e., X12G)

• Other centers available on special orders

• If ordered with tempered glass, specify glass thickness and hole size

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



13

Round Wrought Door Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Clearance: 1-1/2" (38 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

CTC Length

Millimeters

CTC Length

Millimeters

Inches

Inches

13E

152

14G

8

203

14H

9

229

14J

10

254

14L

12

305

6

13G

8

203

13J

10

254

13L

12

305

availability



14

Round Wrought Door Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

Base Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)
Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

CTC Length	12G	12J	12L	
Inches	8	10	12	
Millimeters	203	254	305	
			,	



CTC Length

Millimeters

Inches

20L

12

20Q

18

457





19N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 9" (229 mm)

Base Diameter: 1-1/2" (38 mm)

Clearance: 1-11/16" (43 mm)

Projection: 3-1/8" (79 mm)

CTC Length: 6-3/16" (132 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D Fasteners: Four (4) #8 x 1" OPH Tapping Screw

Notes: Suitable for BTB mounting with sex nuts by special quotation



20

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J401 Pulls

 Base Diameter:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Clearance:
 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



20N

Cast Pull

Certification: Meets ANSI A156.6 for J401 Pulls

O/A Height: 9" (229 mm)

Base Diameter: 1-1/2" (38 mm)

Clearance: 1-11/16" (43 mm)

Projection: 3-1/8" (79 mm)

CTC Length: 5-7/32" (132.5 mm)

Door Thickness: 1-3/4" - Standard

Material: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Two (2) 1/4 - #20 x 2-3/16" Undercut FPHMS with finish washers



21

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Pulls

 Base Diameter:
 3/4" (19 mm)

 Projection:
 2-1/2" (64 mm)

 Clearance:
 1-3/4" (45 mm)

Offset: 2-1/2'' (64); 90° - Standard Door Thickness: 1-3/4'' (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

• Consists of two (2) pulls back to back

Consists of two (2) pulls back to bac
 Available with 45 degree offset

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

Millimeters

Inches

21E

152

6

21G

203

8

21J

10

254

21L

12

305





22

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Pulls

Base Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)
Clearance: 1-3/4" (45 mm)

Door Thickness: 1-3/4" (45 mm) - Standard Offset: 3" (76 mm); 90° standard

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

Consists of two (2) pulls back to backAvailable with 45 degree offset

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

CTC Length

Millimeters

Inches

22G

8

203

22J

10

254

22L

12

305

availability



230

Round Offset Pull

Certification: Meets ANSI A156.6 for J402 Offset Pulls

Base Diameter: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Clearance: 1-3/4" (45 mm)

Clearance: 1-3/4" (45 mm)
Offset: 3-3/4" (96 mm); 90° Standard
Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: 5/16-18 thru bolts with finish washers

Handicap: 2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

(i.e., H23Q)

Options: For 45° offset, substitute "X" for first digit (i.e., X23Q)

Notes:

• If ordered with tempered glass, specify glass thickness and hole size

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



24Q

Round Offset Push/Pull Set

Certification: Meets ANSI A156.6 for J402 Offset Pulls

Base Diameter: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Clearance: 1-3/4" (45 mm)

Offset: 3-3/4" (95 mm); 90° standard Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: • Type 7 mounting - Standard

Consists of two (2) pulls back to back
Available with 45 degree offset

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for



910P | 910B

Offset Mounting Vertical Pull

1-1/4" (32 mm) Pull Diameter:

O/A Length: 36" (914 mm), 72" (1829 mm) CTC Lengths: 20" (508 mm), 56" (1422 mm)

2" (51 mm) Clearance: 3-1/4" (82 mm) Projection:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D Finishes:

Two (2) 3/8-16 FPHMS with finish washers Fasteners:

• 910B is same as 910P with fasteners for BTB mounting Notes:

> • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

915P | 915B

Straight Mounting Vertical Pull

1-1/4" (32 mm) Pull Diameter:

36" (914 mm), 72" (1829 mm) O/A Length: 20" (508 mm), 56" (1422 mm) CTC Lengths:

2" (51 mm) Clearance: Projection: 3-1/4" (82 mm)

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D Finishes:

Two (2) 3/8-16 FPHMS w/ finish washers Fasteners:

Notes: • 915B is same as 915P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

920P | 920B

C-Shaped Pull

Base Diameter: 1" (25 mm) 1-3/4" (45 mm) Clearance: 2-1/4" (57 mm) 8-1/2" (217 mm) Projection: CTC Length:

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 920B is pair of 920P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



921P | 921B

C-Shaped Pull

Clearance: 1-1/2" (38 mm) 2-1/8" (54 mm) Projection: CTC Length: 17-1/2" (446 mm)

Brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US15A, US26, US26D, US32D Finishes:

Two (2) 3/8-16 FPHMS with finish washers Fasteners:

• 921B is pair of 921P with fasteners for BTB mounting Notes:

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for



922P | 922B

C-Shaped Pull - Continuous

Pull Diameter: 1" (25 mm)
Projection: 2-1/2" (64 mm)

CTC Lengths: 10" (254 mm), 12" (305 mm)

Clearance: 1-1/2" (38 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 922B is pair of 922P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



923P | 923B

C-Shaped Pull - Flanged

Pull Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)

CTC Lengths: 10" (254 mm), 12" (305 mm)

Clearance: 1-3/4" (44 mm) Base Diameter: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 923B is pair of 923P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



924P | 924B

C-Shaped Pull

Projection: 2-1/2" (64 mm)
CTC Length: 14" (356 mm)
Clearance: 1-1/2" (38 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 924B is pair of 924P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



925P | 925B

C-Shaped Pull

Pull Diameter: 1-1/4" (32 mm)

CTC Lengths: 6-1/2" (165 mm), 8-1/2" (217 mm), 12-1/2" (318 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 925B is pair of 925P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





926P | 926B

Curved Pull

 Base Diameter:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Clearance:
 1-13/16" (46 mm)

 Pull Diameter:
 1-3/16" (30 mm)

 CTC Length:
 12" (305 mm)

 Materials:
 Brass, bronze

Finishes: US3, US4, US10, US10B

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 926B is pair of 926P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



930P | 930B

90° Pull

Projection: 3" (76 mm)

CTC Lengths: 14-5/32" - 16-31/32" (360 mm - 431 mm)
Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 930B is pair of 930P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



932P | 932B

S-Shaped Pull

Projection: 3" (76 mm) Clearance: 2" (51 mm) Pull Diameter: 1" (25 mm)

Fasteners: Two (2) 3/8-16 FPHMS w/ finish washers

CTC Length: 30" (762 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 932B is pair of 932P with fasteners for BTB mounting

• Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





933P | 933B

Colonial Style Pull

 Projection:
 2-3/16" (56 mm)

 Clearance:
 1-3/16" (30 mm)

 Pull Diameter:
 1" (25 mm)

 Base Diameter:
 15/16" (24 mm)

 CTC Length:
 6" (152 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US26

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: 933B is pair of 933P with fasteners for BTB mounting



934P | 934B

Offset Pull

 Projection:
 3" (76 mm)

 Clearance:
 1-5/8" (41 mm)

 Pull Diameter:
 1" (25 mm)

 Base Diameter:
 3/4" (19 mm)

CTC Lengths: 12" (305 mm), 16" (406 mm), 18" (457 mm) Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US28, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: 934B is pair of 934P with fasteners for BTB mounting



960P | 960B

Square Tip Pull

 O/A Height:
 16" (406 mm)

 Base Diameter:
 1-1/4" (32 mm)

 Pull Diameter:
 1" (25 mm)

 Clearance:
 1-3/4" (45 mm)

 Projection:
 3-1/4" (83 mm)

 CTC Length:
 12" (305 mm)

 Materials:
 Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS w/ finish washers

Notes: • 960B is pair of 960P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





961P | 961B

Steeple Tip Pull

O/A Height: 16-5/16" (414 mm)

Base Diameter: 2" (51 mm)

Pull Diameter: 1" (25 mm)

Clearance: 1-3/4" (45 mm)

Projection: 3" (76 mm)

CTC Length: 12" (305 mm)

Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 961B is pair of 961P with fasteners for BTB mounting

For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



962P

Acorn Tip Pull

O/A Height 16-5/16" (414 mm)

Base Diameter: 2" (51 mm)
Pull Diameter: 1" (25 mm)
Projection: 3" (76 mm)
Clearance: 1-7/8" (48 mm)
CTC Length: 12" (305 mm)
Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



963P

Acorn Pull - Offset

O/A Height: 16-5/16" (414 mm)
Pull Diameter: 1" (25 mm)
Projection: 2-3/4" (70 mm)

CTC Lengths: 12" (304 mm), 16" (406 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm)

Materials: Cast brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



967P

Curved Pull

O/A Height: 20-1/2" (520 mm)
Clearance: 3-9/16" (90 mm)
Projection: 5-9/16" (141 mm)
CTC Length: 16" (406 mm)
Materials: Brass, bronze

Finishes: US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for



970P

Custom Push/Pull Set

 Base Diameter:
 1" (25 mm)

 Pull Projection:
 3" (76 mm)

 Pull Clearance:
 2" (51 mm)

 CTC Length:
 13-1/4" (337 mm)

 Push Projection:
 2-3/4" (70 mm)

 Push Clearance:
 1-3/4" (45 mm)

CTC Length: 34" (864 mm) or to suit door dimension

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D
Fasteners: Type 3 mounting, concealed cone with bolt and set screw

• Pull or push bar can be ordered separately by quotation only

• Pull bar radius can be guet

• Push bar radius can be custom made so the radius points in the

downward direction

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability



974P | 974B

Door Pull

Projection: 2-1/2" (64 mm)

CTC Length: 12" (304 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm),

36" (914 mm), 48" (1219 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US26, US26D, US32D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 974B is pair of 974P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability

975P | 975B

Vertical Pull

Projection: 1-3/4" (44 mm)

O/A Length: 36" (914 mm), 72" (1829 mm) CTC Length: 20" (508 mm), 56" (1422 mm)

Pull Diameter: 1" (25 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US15A, US26, US26D, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 975B is pair of 975P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability



976P | 976B

Door Pull - Offset

29-1/2" (750 mm) O/A Height: Base Diameter: 1-1/4" (32 mm) Pull Diameter: 1-1/4" (32 mm) 5-3/8" (137 mm) Projection: 4-1/8" (105 mm) Clearance: Offset: 1-3/4" (45 mm) 19-13/16" (503 mm) CTC Length: Materials: Stainless steel Finish: US32, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 976B is pair of 976P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

980P | 980B

Segment Shape - Straight

CTC Length: 9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 980B is pair of 980P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

981P | 981B

Segment Shape - Offset

Projection: 2-3/8" (60 mm)

CTC Length: 9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 981B is pair of 981P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

982P | 982B

Straight Pull

Base Diameter: 1-5/16" (33 mm)
Projection: 3-1/8" (79 mm)
Clearance: 1-13/16" (46 mm)
CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 982B is pair of 982P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





983P | 983B

Curved Pull

O/A Height: 21-1/4" (540 mm)

Base Diameter: 1-1/4" (32 mm)

Projection: 3-1/8" (79 mm)

Clearance: 1-7/8" (48 mm)

CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 983B is pair of 983P with fasteners for BTB mounting

· Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



984P | 984B

Curved Pull

Clearance: 1-7/8" (47 mm)
Projection: 3" (76 mm)

CTC Lengths: 12" (305 mm), 20" (508 mm) Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US32, US32D Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 984B is pair of 984P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



Curved Pull

O/A Height: 14" (356 mm)

Projection: 3" (76 mm)

Clearance: 1-9/16" (40 mm)

CTC Length: 12" (305 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 985B is pair of 985P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



986P | 986B

Curved Pull

 O/A Height:
 22" (559 mm)

 Pull Diameter:
 1-1/4" (32 mm)

 Base Diameter:
 2" (51 mm)

 Projection:
 3-7/8" (99 mm)

 Clearance:
 2-5/8" (67 mm)

 CTC Length:
 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32 Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 986B is pair of 986P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for







987P | 987B

Double Curved Pull

Base Diameter: 1-1/4" (32 mm)
Clearance: 2" (51 mm)
Projection: 3" (76 mm)
CTC Length: 20" (508 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 987B is pair of 987P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



988P | 988B

Offset Curved Pull

Projection: 3" (76 mm) CTC Length: 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US26, US32D

Fasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 988B is pair of 988P with fasteners for BTB mounting

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



990P | 990B

18º Pull

 Pull Diameter:
 1" (25 mm)

 Projection:
 2-3/4" (70 mm)

 Clearance:
 1-3/4" (45 mm)

 CTC Length:
 24" (610 mm)

Materials: Brass, bronze, stainless steel

Finishes: US3, US4, US10B, US15A, US26, US26D, US32D Tasteners: Two (2) 3/8-16 FPHMS with finish washers

Notes: • 990B is pair of 990P with fasteners for BTB mounting

Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for





15C

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls
Description: Cup welded to face plate
Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)
Materials: Stainless steel
Finishes: US32D

Fasteners: Four (4) #6 x 5/8" OPHWS



15N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Four (4) #6 x 5/8" OPHWS



15P

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls

Description: Cup welded to face plate and welded studs for security torx thru-bolt mounting

Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)
Materials: Stainless steel
Finishes: US32D

rillisties: USSZD

Fasteners: Two (2) 6-32 x 1-1/2" FPHMS (Security Torx)

Notes: For use on 1-3/4" (44 mm) doors



15S

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls

Description: Concealed mounting by screws within the recessed cup (similar to 16N or 17N)

Face: 3-1/2" x 5" (89 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 3/4" (19 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Fasteners: Two (2) #6 x 5/8" PPHWS Notes: Fasteners concealed in cup





16N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 1-15/16" x 3" (49 mm x 76 mm)

Projection: 1/16" (1.5 mm)

Opening: 27/32" x 2-3/8" (22 mm x 60 mm)

Cup Clearance: 5/8" (16 mm)

Fasteners: Two (2) #8 x 3/4" OPHWS

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Notes: Fasteners concealed in cup



Finger Pull Plate

Certification: Meets ANSI A156.6 for combination J301 Pull Plate and J403 Pulls

Face: 4" x 16" (102 mm x 406 mm)

Projection: .050" (1.3 mm)

Opening: 1-3/4" x 3-1/16" (44 x 78 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Ten (10) #6 x 5/8" OPHWS

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D



17N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 2-1/2" x 3-31/32" (64 mm x 101 mm)

Projection: 3/32" (2.4 mm)

Opening: 1-11/32" x 3-13/32" (34 mm x 87 mm)

Cup Clearance: 5/8" (16 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #8 x 13/16" OPHWS Notes: Fasteners concealed in cup



25B

Security Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: $3-1/2" \times 5" (89 \text{ mm } \times 127 \text{ mm})$ Opening: $1-3/4" \times 3-1/16" (45 \text{ mm } \times 78 \text{ mm})$

Projection: 1/8" (3 mm) Cup Clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Stainless steel

Finishes: US32D

Fasteners: Two (2) 6-32 x 1-1/2" FPHMS (Security Torx)

Notes: Security pull thru-bolted to a 15P pull





25C

Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: $3-1/2'' \times 5'' (89 \text{ mm } \times 127 \text{ mm})$ Opening: $1-3/4'' \times 3-1/16'' (45 \text{ mm } \times 78 \text{ mm})$

Projection: 1/8" (3 mm) Cup Clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 6-32 OPHMS sex nuts and bolts

Materials: Stainless steel Finishes: US32D

Notes: Consists of two (2) 15C pulls mounted BTB



25N

Flush Pull Set

Certification: Meets ANSI A156.6 for J403 Pulls Face: 3-1/2" x 5" (89 mm x 127 mm)
Opening: 1-3/4" x 3-1/16" (45 mm x 78 mm)

Projection: 1/8" (3 mm) Cup clearance: 3/4" (19 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 6-32 OPHMS sex nuts and bolts Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32D

Notes: Consists of two (2) 15N pulls mounted BTB



25P

Security Finger Push/Pull Plate Set

Certification: Meets ANSI A156.6 for combination J301 Push Plate and J403 Flush Pull

Face: 4" x 16" (102 mm x 406 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-3/4" x 3-1/16" (44 mm x 78 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Six (6) 8-32 x 3/4" FPHMS (Security Torx) with sex nuts and bolts

Materials: Stainless Steel

Finishes: US32D

Notes: Consists of a 15 pull cup welded to a 100T push plate (Mounted in BTB fashion)



26N

Security Finger Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 4" x 5" (102 mm x 127 mm)

Projection: 1/8" (3.2 mm)

Opening: 1-5/8" x 3" (41 mm x 76 mm)

Cup Clearance: 13/16" (21 mm)

Fasteners: Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx)

Materials: Brass, stainless steel Finishes: US4, US26D, US32D Notes: Cup welded to face





27N

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 5" x 5" (127 mm x 127 mm)

Projection: 3/8" (9.5 mm)

Opening: 3" x 3-1/2" (76 mm x 89 mm)

Cup Clearance: 7/8" (22 mm)
Materials: Stainless steel

Finishes: US32D

Fasteners: Four (4) 10-24 FPHMS (Security Torx) sex nuts and bolts

Notes: • ADA Compliant

• Not available for BTB mounting



27P

Flush Cup Pull

Certification: Meets ANSI A156.6 for J403 Pulls Face: 5" x 5" (127 mm x 127 mm)

Projection: 3/8" (9.5 mm)

Opening: 3" x 3-1/2" (76 mm x 89 mm)

Cup Clearance: 7/8" (22 mm)
Materials: Stainless steel

Finishes: US32D

Fasteners: Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx)

Notes: • ADA Compliant

• Not available for BTB mounting





30, 40, 50 Series

Pull Plate

Gauge: 0.050" (1.3 mm)
Certification: Meets ANSI A156.6
for J405 Pull Plate



80, 90, 100 Series

Pull Plate

Gauge: 0.125" (3.2 mm)
Certification: Meets ANSI A156.6
for J407 Pull Plate



A30, A40, A50 Series

Pull Plate

Gauge: 0.062" (1.6 mm)
Certification: Meets ANSI A156.6

for J405 Pull Plate

Materials: Aluminum, brass, bronze, stainless steel

Standard Sizes: 3" x 12" (76 mm x 305 mm), 3-1/2" x 15" (89 mm x 381 mm), 4" x 16" (102 mm x 406 mm),

6" x 16" (152 mm x 406 mm)*, 8" x 16" (203 mm x 406 mm)* - *(size not available for 50 and A50 Series)

Fasteners: Six (6) #6 x 5/8 OPH tapping screws

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

				Pull Pla	te Chart				
	3	30, 40, 50 Series		A3	A30, A40, A50 Series		80, 90, 100 Series		
Pull	Square Corner	Radius Corner	Rounded Corner	Square Corner	Radius Corner	Rounded Corner	Square Corner	Radius Corner	Rounded Bevel
	Pull Plate Part Number								
1E	31E	41E	51E	A31E	A41E	A51E	81E	91E	101E
1G	31G	41G	51G	A31G	A41G	A51G	81G	91G	101G
1J	31J	41J	51J	A31J	A41J	A51J	81J	91J	101J
1L	31L	41L	51L	A31L	A41L	A51L	81L	91L	101L
2E	32E	42E	52E	A32E	A42E	A52E	82E	92E	102E
2G	32G	42G	52G	A32G	A42G	A52G	82G	92G	102G
2J	32J	42 J	52J	A32J	A42J	A52J	82J	92J	102J
2L	32L	42L	52L	A32L	A42L	A52L	82L	92L	102L
3E	33E	43E	53E	A33E	A43E	A53E	83E	93E	103E
3G	33G	43G	53G	A33G	A43G	A53G	83G	93G	103G
3J	33J	43J	53J	A33J	A43J	A53J	83J	93J	103J
3L	33L	43L	53L	A33L	A43L	A53L	83L	93L	103L
4G	34G	44G	54G	A34G	A44G	A54G	84G	94G	104G
4J	34J	44]	54J	A34J	A44J	A54J	84J	94J	104J
4L	34L	44L	54L	A34L	A44L	A54L	84L	94L	104L
5D	35D	45D	55D	A35D	A45D	A55D	85D	95D	105D
5N	35N	45N	55N	A35N	A45N	A55N	85N	95N	105N
6N	36N	46N	56N	A36N	A46N	A56N	86N	96N	106N
9E	39E	49E	59E	A39E	A49E	A59E	89E	99E	109E
9G	39G	49G	59G	A39G	A49G	A59G	89G	99G	109G
9J	39J	49J	59J	A39J	A49J	A59J	89J	99J	109J
9L	39L	49L	59L	A39L	A49L	A59L	89L	99L	109L





313L

Antivandal Pull with Latchguard

Certification: Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate

Size: 7-13/32" x 11" (188 mm x 280 mm)

Height: 11" (280 mm)
Projection: 1-7/8" (48 mm)
Clearance: 1-5/8" (41 mm)

Door Thickness: 1-3/4" - 2" (45 mm - 51 mm)

Materials: 11 GA Stainless Steel

Finishes: US32D

Fasteners: 1/4-20 FPHMS with finish washers - Standard

Options: • Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and

1-1/2" (38 mm) diameter standard for mortise lock use]

• Plastisol grip available

For use with most mortise locks on in-swinging and out-swinging doors

• For use with many exit devices (thru bolts directly to device)

• Cylinders must be ordered separately

• When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)

• When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim

cylinder (see instructions for more detail)



313S

Notes:

Antivandal Pull

Certification: Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate

Size: 6-11/32" x 11" (161 mm x 280 mm)

 Height:
 11" (280 mm)

 Projection:
 1-7/8" (48 mm)

 Clearance:
 1-5/8" (41 mm)

Door Thickness: 1-3/4" - 2" (45 mm - 51 mm)

Materials: 11 GA Stainless Steel

Finishes: US32D

Fasteners: 1/4-20 FPHMS with finish washers - Standard

Options: • Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and

1-1/2" (38 mm) diameter standard for mortise lock usel

• Plastisol grip available

Notes: • For use with most mortise locks on in-swinging and out-swinging doors

• For use with many exit devices (thru bolts directly to device)

• Cylinders must be ordered separately

 When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)

• When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim

cylinder (see instructions for more detail)



30S | A30S

Square Corner - Beveled Push Plate

Meets ANSI A156.6 for J301 Push Plate Certification:

• 30S - 0.050" (1.3 mm) Gauge:

• A30S - 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Materials:

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16						
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

40R | A40R

Radius Corner - Non-Beveled Push Plate

Meets ANSI A156.6 for J301 Push Plate Certification:

• 40R - 0.050" (1.3 mm) • A40R - 0.062" (1.6 mm) Gauge:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16						
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

50T | A50T

Round Corner - Non-Beveled Push Plate

Certification: Meets ANSI A156.6 for J301 Push Plate

• 50T - 0.050" (1.3 mm) Gauge:

• A50T - 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Materials:

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Six (6) #6 x 5/8" OPH tapping screws Fasteners:

May be ordered cut for cylinder (CFC) or engraved "PUSH" Options:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16						
Millimeters	76 x 305	89 x 38	102 x 406			





60S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)
Materials: Plastic laminate

Finishes: PG - Grey, PK - Black, CO - Brown Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16						
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

70S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)
Materials: Clear plastic laminate

Finishes: PC - Clear

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

80S

Square Corner - Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16						
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	



90R

Radius Corner - Non-Beveled Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches 3 x 12 3-1/2 x 15 4 x 16 6 x 16 8 x 16						
Millimeters 76 x 305 89 x 38 102 x 406 152 x 406 203 x 406						

100T

Square Corner - Rounded Bevel Top and Bottom Push Plate

Certification: Meets ANSI A156.6 for J304 Push Plate

Gauge: 0.125" (3.2 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

110S

Half Circle Push Plate

Certification: Meets ANSI A156.6 for J301 Push Plate

Plate: 8" x 16" (203 mm x 406 mm)

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

Fasteners: Six (6) #6 x 5/8" OPH tapping screws

Options: May be ordered cut for cylinder (CFC) or engraved "PUSH"

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for





120L

Pull Plate with Lip - Non-Beveled

Meets ANSI A156.6 for J303 Plate Certification: Plate: 3-1/2" x 16" (89 mm x 406 mm)

Lip Projection: 1-1/8" (29 mm) 0.125" (3.2 mm) Gauge:

Aluminum, brass, bronze, stainless steel Materials:

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Six (6) #6 x 5/8" OPH tapping screws Fasteners: · Other sizes available, please specify Options:

• May be ordered cut for cylinder (CFC) or engraved

For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes:

availability



121L

Cylinder Pull - Beveled

Plate: 2" x 3-3/4" (51 mm x 95 mm)

Lip Projection:

1-1/8" (29 mm) 1-1/4" (32 mm) diameter 0.125" (3.2 mm) Cylinder Cutout:

Gauge:

Materials: Aluminum, brass, bronze, stainless steel

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

Fasteners: Attached by lock cylinder

• 1/4"-20 x 3/8" stud installed on reverse side to eliminate twisting Notes:

For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability



122L

Security Pull/Push Plate Set - Beveled

Certification: Meets ANSI A156.6 for combination J304 Push Plate and J303 Flush Pull

Push Plate: 4" x 16" (102 mm x 406 mm) Pull Plate: 4" x 9-1/4" (102 mm x 235 mm)

2-1/8" (54 mm) Lip Projection: 0.125" (3.2 mm) Gauge:

Four (4) 8-32 FPHMS (Security Torx) sex nuts and bolts Fasteners:

Two (2) 8-32 x 1/2" FPHMS (Security Torx)

Materials: Stainless steel US32D Finishes:

Notes: For sizes or finishes not listed in this catalog, contact Hager Customer Service for



125S

Bent Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: $3/8" \times 1-1/4" (10 \text{ mm x } 32 \text{ mm})$

Projection: 2-1/8" (54 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) #8 FPH tapping screws and one (1) 1/4 - 20 OPHMS Options: May be ordered with thru-bolts in place of surface screws



126S

Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: $3/8" \times 1-1/4" (10 \text{ mm} \times 32 \text{ mm})$

Projection: 2-1/8" (54 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Four (4) #8 FPH tapping screws

Options: May be ordered with thru-bolts in place of surface screws



127S

Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Size: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection: 3/4" (19 mm)

Base Plate: 1-1/4" x 1-1/4" (32 mm x 32 mm)

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) 1/4-20 FPHMS

Options: May be ordered with thru bolts in place of surface screws



128P

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Size: 3/8" x 3" (10 mm x 76 mm)

Projection: 2-1/8" (54 mm)

Base Plate: 1-1/2" x 4-1/2" (38 mm x 114 mm) Fasteners: Eight (8) FPH tapping screws

Materials: Aluminum, brass, bronze, stainless steel

Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D







128S

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Size: 3/8" x 3" (10 mm x 76 mm)

Projection: 2" (51 mm)

1-1/2" x 4-1/2" (38 mm x 114 mm) Base Plate:

1-3/4" (45 mm) - Standard Door Thickness:

Fasteners: Two (2) 1/4 - 20 thru bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D Finishes:

128S is same as 128P, but without base plates Notes:



129P

Wide Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

3/8" x 3" (10 mm x 76 mm) Bar Size:

Projection: 3/4" (19 mm)

Base Plate: 1" x 3" (25 mm x 76 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Fasteners: Two (2) 1/4-20 FPHMS

• May be ordered with thru bolts in place of surface screws Options:

• #14 Flat head wood screws available on special order



130S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1" (25 mm) Projection:

2-1/2" (64 mm) 1-3/4" (45 mm) - Standard Door Thickness:

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Fasteners: Two (2) 1/4-20 thru-bolts with finish washers

May be ordered with Type 5 concealed mountings at extra charge Options:



131S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1" (25 mm) 2-5/8" (67 mm) Projection: Base Diameter: 2" (51 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 1/4-20 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge



133S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 3/4" (19 mm) Projection: 2-1/4" (57 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4 - 20 thru-bolts with finish washers



134S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

 Bar Stock:
 3/4" (19 mm)

 Projection:
 2-3/8" (60 mm)

 Base Diameter:
 1-1/4" (32 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 1/4 - 20 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge



136S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

Bar Stock: 1-1/4" (32 mm) Projection: 3" (76 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners Two (2) 5/16 - 18 thru-bolts with finish washers

Options: May be ordered with Type 5 concealed mountings at extra charge



137S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3-1/8" (79 mm)

 Base Diameter:
 2" (51 mm)

Door Thickness: 1-3/4" (45 mm) - Standard

Fasteners: Two (2) 5/16 - 18 thru-bolts with finish washers Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

Options: May be ordered with Type 5 concealed mountings at extra charge







138P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (64 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4-20 Type 3 concealed cone



139P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm) Projection: 2-1/4" (60 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 1/4-20 Type 3 concealed cone



140P

Round Push/Pull Set

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1-1/4" (32 mm) Projection: 3" (76 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D
Fasteners: Two (2) 5/16-18 Type 3 concealed cone



150D | 150V | 150B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 8" (203 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





151D | 151V | 151B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 10" (254 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D



152D | 152V | 152B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 3/4" (19 mm)
Projection: 2-1/4" (57 mm)
Pull CTC: 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



153D | 153V | 153B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (64 mm)
Pull CTC: 10" (254 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



154D | 154V | 154B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (64 mm)

 Pull CTC:
 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.







155D | 155V | 155B

Round Push/Pull Set*

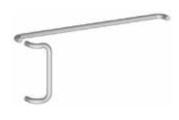
Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (64 mm)

 Pull CTC:
 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D



156D | 156V | 156B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) Pull CTC: 8" (203 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X156D) to number

Notes: Non-reversible; specify handing



157D | 157V | 157B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) Pull CTC: 10" (254 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X157D) to number

Notes: Non-reversible; specify handing



158D | 158V | 158B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 3/4" (19 mm) diameter

Projection: 2-1/2" (64 mm)
Pull CTC: 12" (305 mm)

Offset: 2-1/2" (64 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" (i.e., X158D) to number

Notes: Non-reversible; specify handing

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.







159D | 159V | 159B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (76 mm)

 Pull CTC:
 10" (254 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X159D)

Notes: Non-reversible; specify handing



160D | 160V | 160B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

Bar Stock: 1" (25 mm)
Projection: 2-1/2" (76 mm)
Pull CTC: 12" (305 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X160D)

Notes: Non-reversible; specify handing



161D | 161V | 161B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1" (25 mm)

 Projection:
 2-1/2" (76 mm)

 Pull CTC:
 18" (457 mm)

Offset: 3" (76 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

Options: For 45° offset pull, add prefix "X" to number (i.e., X161D)

Notes: Non-reversible; specify handing



164D | 164V | 164B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Pull CTC:
 12" (305 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





165D | 165V | 165B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J504 Bar Sets

Bar Stock: 1-1/4" (32 mm)
Projection: 3" (76 mm)
Pull CTC: 18" (457 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D



167D | 167V | 167B

Round Push/Pull Set*

Certification: Meets ANSI A156.6 for J505 Bar Sets

 Bar Stock:
 1-1/4" (32 mm)

 Projection:
 3" (76 mm)

 Pull CTC:
 18" (457 mm)

Offset: 3-3/4" (96 mm), 90° Standard

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Notes: Non-reversible; specify handing



170D

Push/Pull Set

Certification: Meets ANSI A156.6 for J502 Bar Sets Bar Stock: 3/8" x 1-1/4" (10 mm x 32 mm)

Projection of Pull Bar: 2-1/2" (64 mm) Projection of Push Bar: 3/4" (19 mm)

Base: 1-1/4" x 1-1/4" (32 x 32 mm)

Horizontal Spacing CTC: 8" (203 mm)

Materials: Aluminum, brass, bronze, stainless steel
Finishes: US3, US4, US10, US10B, US28, US32, US32D

Notes: • Bars are mounted BTB with 1/4"-20 thru bolt type 4 mounting

• Non-reversible; specify handing

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.



Notes:

TRIM & AUXILIARY

180H | 180K | 180M | 180P | 180Q

Mortise Door Edging

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36" – 42" (914 mm – 1067 mm)

Materials: Aluminum, stainless steel

Gauge: 0.045" - 0.050" (1.1 mm - 1.3 mm)

Finishes: US28, US32D

Fasteners: #6 x 3/4" FPH tapping screws
Options:

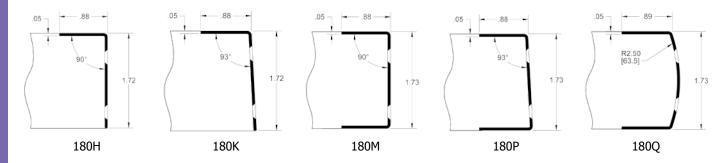
• Other lengths by quotation

Hinge cutout availableLatch cutout availableUL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 180H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



181H | 181K | 181M | 181P | 181Q

Overlap Door Edging

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36'' - 42'' (914 mm - 1067 mm) Materials: Aluminum, stainless steel Gauge: 0.045'' - 0.050'' (1.1 mm - 1.3 mm)

Finishes: US28, US32D

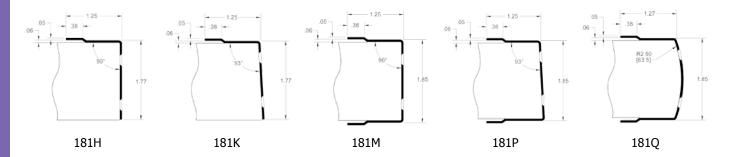
Fasteners: #6 x 3/4" FPH tapping screws
Options: • Other lengths by quotation

Hinge cutout available Latch cutout available UL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 181H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



Notes:



182H | 182K | 182M | 182P | 182Q

Non-Mortise Door Edging

Notes:

Certification: Meets ANSI A156.6 Door Edging Type J201 through J212

Standard Length: 36" – 42" (914 mm – 1067 mm)

Materials: Aluminum, stainless steel

Gauge: 0.045" - 0.050" (1.1 mm - 1.3 mm)

Finishes: US28, US32D

Fasteners: #6 x 3/4" FPH tapping screws
Options:

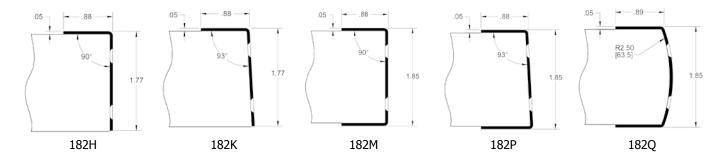
• Other lengths by quotation
• Hinge cutout available

Hinge cutout availableLatch cutout availableUL rated edging available

Order: • Provide actual rather than typical door thickness

Provide item #, size and finish (i.e., 182H - 40"-32D)
Cutout will hand edging; specify handing information

• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors



185**G**

Corner Guard

Certification: Meets ANSI A156.6 for J210

Size: 3" x 3" x 40" (76 mm x 76 mm x 1016 mm)

Gauge: 0.050" (1.3 mm)
Materials: Aluminum, stainless steel

Finishes: US28, US32D

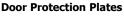
Fasteners: #6 x 3/4" FPH Tapping screws

Options: Mounting with double-stick tape instead of screws

Notes: • 90° bend standard

• Other lengths by quotation

• #6 x 1" screws available upon request



The metal door protection plates below meet ANSI A156.6 for J101 Metal Armor Plate, J102 Metal Kickplate, and J103 Metal Mop Plate. The plastic door protection plates below meet ANSI A156.6 for J105 Plastic Armor Plate, J106 Plastic Kickplate, and J107 Plastic Mop Plate. Options for all plates include countersunk holes, UL armor plate stamped, self-adhesive tape, spanner head screws, torx head screws, round corners, wrap around side and bottom return, and 0.125" (3.2 mm) material. All plates below are supplied standard with #6 x 5/8" truss head screws (unless specified otherwise). They are available in mop plate, kick plate, stretcher plate, and armor plate sizes.

Mop Plate: Protects the bottom of the pull side of doors subject to cleaning and mopping

procedures.

Kick Plate: Protects the bottom of the push side of doors subject to scuffing from foot traffic. Stretcher Plate: Protects doors in specific areas where constant contact is made by stretchers, service

carts, or other equipment.

Armor Plate: Protects lower half of doors from abuse by carts, trucks, and rough usage.

NFPA Note (Applies to 190S, 193S, 194S, 198S, and 225S)

NFPA 80 Standards - 6.4.5 Protection Plates 6.4.5.1 - Factory installed protection plates shall be installed in accordance with the listing of the door. 6.4.5.2 - Field installed protection plates shall be labeled and installed in accordance with their listing. 6.4.5.3 - Labeling shall not be required where the top of the protection plate is not more than 16" (406 mm) above the bottom of the door.

190S Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Materials: Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: None Options: UL Listed for US32 and US32D*

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes:

US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 3 edges

Options: UL Listed for US32 and US32D*

194S

193S

Gauge: 0.050" (1.3 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 4 edges

Options: UL Listed for US32 and US32D*

198S

0.038" (0.8 mm) Gauge: Materials: Stainless steel Finishes: US32D Options: UL Listed*

199B

0.038" (0.8 mm) Gauge: Materials: Aluminum

Finishes: Bright gold anodized

#6 x 5/8" TPH Tapping Screws Fasteners:

220S

Gauge: 0.062" (1.6 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: None **223S**

Gauge: 0.062" (1.6 mm)

Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 3 edges

224S

Gauge: 0.062" (1.6 mm)

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32,

US32D

Bevel: 4 edges

204S

Gauge: 0.125" (3.2 mm) Materials: Clear plastic Bevel: 4 edges

214S

Gauge: 0.125" (3.2 mm) Plastic laminate Materials:

Bevel: 4 edges

Colors: Black, Brown, Grey

Notes: Other colors are available and will be

subject to minimum order quantities;

priced on application

225S

0.060" (1.9 mm) Gauge:

Kydex[®] Materials:

CBO - Calcutta Black, KGO - Beige, Colors:

KHO - Chocolate

Other colors are available and will be Notes:

subject to minimum order quantities;

priced on application

Options: UL Listed*



*Must specify UL stamp.







230W

Convex Wall Stop

Certification: Meets ANSI A156.16 for L02101

Diameter: 2-15/32" (63 mm) Projection: 1-3/32" (28 mm)

Materials: Cast brass, bronze with grey rubber bumper

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #10 x 1-1/2" PPHWS with plastic and toggle anchor.

Notes: • Concealed tamper proof mounting

Easy installation by inserting screwdriver through small hole in bumper
Specify 230T for machine screw and toggle nut screwpack (10 pk)



232W | BL232W

Convex Wall Stop

Certification: Meets ANSI A156.16 for L02101

Diameter: 2-7/16" (62 mm)
Projection: 1" (25 mm)

Materials: Wrought brass, bronze, stainless steel with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D

Fasteners: One (1) $#10 \times 1-1/2"$ PPHWS with plastic and toggle anchor

Notes: • Concealed tamper proof mounting

Easy installation by inserting screwdriver through small hole in bumper
Specify 230T for machine screw and toggle nut screwpack (10 pk)

• BL232W is 232W case quantity 50



234W

Concave Wall Stop

Certification: Meets ANSI A156.16 for L02251

Diameter: 2-15/32" (63 mm) Projection: 1-3/32" (28 mm)

Materials: Cast brass, bronze with grey rubber bumper

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor

Notes:

• Easy installation by inserting screwdriver through small hole in rubber bumper

Concealed tamper proof mounting

• Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 pk)



236W | BL236W

Concave Wall Stop

Certification: Meets ANSI A156.16 for L02251

Diameter: 2-7/16" (75 mm)
Projection: 1" (25 mm)

Materials: Wrought brass, bronze, stainless steel with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D

Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor

Notes: • Easy installation by inserting screwdriver through small hole in rubber bumper

Concealed tamper proof mounting

• Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 Pk)

BL236W is 236W case quantity 50





250W

Convex Wall Stop

Diameter: 1" (25 mm)
Projection: 9/16" (14 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #6 x 3/4" screw with plastic anchor and one (1) 0.052 diameter nail

Notes: • Concealed mounting screw prevents vandalism

For use on drywallCompact design



251W

Concave Wall Stop

Diameter: 1-7/8" (48 mm) Projection: 25/32" (20 mm)

Materials: Adhesive backed rubber bumper

Finish: Grey only

Notes: • Concave bumper prevents damage to locksets with projecting buttons

• For areas where concealed mounting is not required

• Adhesive backing for use on clean smooth flat surfaces only



254S

Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01341

Base Diameter: 2-11/32" (60 mm)
Base Projection: 3-1/2" (89 mm)
Engaged Projection: 5-19/32" (142 mm)
Keeper: 1" x 2" (25 mm x 51 mm)

Fasteners: Five (5) #10 x 1" FPHWS, and three (3) plastic anchors

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on drywall

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less



254W

Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01351

Base Diameter: 2-11/32'' (60 mm)
Base Projection: 3-1/2'' (89 mm)
Engaged Projection: 5-19/32'' (142 mm)
Keeper: $1'' \times 2''$ (25 mm x 51 mm)

Fasteners: Three (3) #10 x 1" FPH tapping screw, one (1) plastic anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 lead anchor

Materials: Cast brass with black rubber bumper
Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on concrete walls

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engagea

• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less





255S

Wall Stop

Certification: Meets ANSI A156.16 for L02011

Base Diameter: 2-11/32" (60 mm) Projection: 3-11/16" (94 mm)

Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on drywall

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



255W

Wall Stop

Certification: Meets ANSI A156.16 for L02021

Base Diameter: 2-11/32" (60 mm) Projection: 3-11/16" (94 mm)

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, one (1) 5/16-18 x 2-1/2" combo threaded

stud

Materials: Cast brass with black rubber bumper

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes: • For use on concrete walls

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



256S

Manual Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01341

Base Diameter: 2-1/4" (57 mm)
Base Projection: 3-3/4" (95 mm)
Engaged Projection: 5-11/16" (145 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US26, US26D

Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Notes: • For use on drywall

Ideal for interior and exterior applicationsHeavy duty - for use in high traffic areas

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3" (76 mm) or less





256W

Manual Wall Stop & Holder

Certification: Meets ANSI A156.16 for L01351

Base Diameter: 2-1/4" (57 mm)
Base Projection: 3-3/4" (95 mm)
Engaged Projection: 5-11/16" (145 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper
Finishes: US3, US10, US10B, US15, US26, US26D

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded

stud

Notes: • For use on concrete walls

Ideal for interior and exterior applications
Heavy duty - for use in high traffic areas

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged

• Ideal for use with locksets with a projection of 3" (76 mm) or less



260W

Angled Wall Stop

Certification: Meets ANSI A156.16 for L02201

Projection: 3-21/32" (93 mm)

Materials: Cast brass with black rubber bumper

Finishes: US26D

Base: 2-3/16"wide x 2-15/16" tall (56 mm x 75 mm)

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, three (3) plastic

anchors, and three (3) 1/4-20 lead anchors

Notes: • For use with drywall or concrete walls

• Sloping design resists vandalism

• Ideal for use with locksets with a projection of 3" (76 mm) or less



324W

Light Duty Wall Bumper

Certification: Meets ANSI A156.16 for L0203

Base Diameter: 1-1/4" (32 mm)
Projection: 3-1/4" (83 mm)
Tip Diameter: 5/8" (16 mm)

Materials: Cast brass, bronze with white rubber tip

Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D

Fastener: $#10 \times 7/8"$ wood thread

Notes: • Replaceable rubber tip available

• Hex shape near the tip allows usage of a wrench for easier installation





326W

Automatic Wall Stop & Holder

Certification: Meets ANSI A156.16 for L0129

Holder Base: 2-13/32" x 2-25/32" (61 mm x 71 mm)

Holder Projection: 2-5/16" (59 mm) Engaged Projection: 3-5/8" (92 mm)

Strike Base: 1" x 2-1/16" (25 mm x 52 mm)

Strike Projection: 2" (51 mm)

Keeper: 1" x 2" (25 mm x 51 mm)

Materials: Cast brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Five (5) #10 x 1" OPHWS, three (3) 10-24 x 1-1/4" FPHMS, and three (3) plastic

anchors

Notes: • For use with wood or metal doors

Holder is mounted on the door

• Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound

and shock

• Ideal for use with locksets with a projection of 3" (76 mm) or less



327W

Automatic Wall Stop & Holder

Certification: Meets ANSI A156.16 for L11291 Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm)

Holder Projection: 1-15/16" (49 mm)
Engaged Projection: 3-1/2" (89 mm)
Strike Diameter: 2-3/8" (60 mm)
Strike Projection: 3-1/16" (78 mm)
Materials: Cast brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, four (4) 12-24 x

1" TPHMS, four (4) #12 x 1" TPHWS, and three (3) 1/4-20 lead anchors

Notes: • For use with wood or metal doors

• For use with drywall or concrete walls

• Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound

and shock

• Strike is adjustable 45° left or right

• Holder has vertical adjustment once mounted on the door

• Ideal for use with locksets with a projection of 3" (76 mm) or less

• For doors up to 500 lbs



271W

Roller Bumper

Certification: Meets ANSI A156.16 for L02191

Base Diameter: 2" (51 mm)
Projection: 4-1/2" (114 mm)

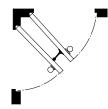
Materials: Cast brass with grey rubber roller Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS and three (3) plastic anchors

Notes: • For use when two doors swing into each other at right angles

(back to back)

• Prevents damage to the door and door hardware





272W

Roller Bumper

Certification: Meets ANSI A156.16 for L02191

Base: 2" (51 mm) diameter Projection: 6-1/4" (159 mm)

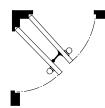
Materials: Cast brass with grey rubber roller Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS, and three (3) plastic anchors

Notes: • For use when two doors swing into each other at right angles

(back to back)

• Prevents damage to the door and door hardware





273W

Curved Roller Bumper

Certification: Meets ANSI A156.16 for L12211

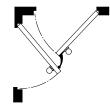
Projection: 2-21/32" (67 mm)

Materials: Cast brass with grey rubber roller Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1" FPHWS and three (3) plastic anchors

Notes: • Used when two doors swing into each other at odd angles

• Prevents damage to the door and door hardware







241F | BL241F

Dome Stop - Low

Certification: Meets ANSI A156.16 for L02141

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 1/8" (3.2 mm)
Overall Height: 1" (25 mm)

Materials: Cast brass with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: • To be used independently or in conjunction with 246B

• For use when no threshold is used (door not undercut)

For use with wood or concrete floors
BL241F is 241F case quantity 50



242F

Dome Stop - Universal

Certification: Meets ANSI A156.16 for L0216

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 7/32" (5.5 mm)
Overall Height: 1-5/8 (41 mm)

Materials: Brass with grey rubber bumper

Finishes: US3, US4, US10B, US15, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: For use with wood or concrete floors



243F | BL243F

Dome Stop - High

Certification: Meets ANSI A156.16 for L02161

Base Diameter: 1-11/16" (43 mm)
Base Thickness: 7/16" (11 mm)
Overall Height: 1-9/32" (33 mm)

Materials: Cast brass with grey rubber bumper

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 1-1/4" FPHMS, one (1) 1/4-20 lead

anchor, and one (1) plastic anchor

Notes: • For use with thresholds or undercut doors

For use with wood or concrete floors

BL243F is 243F case quantity 50



244F

Cast Floor Stop

Base: 1-3/4" x 4" (45 mm x 102 mm)

Base Thickness: 5/32" (4 mm) Overall Height: 1" (25 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 3/4" FPHMS, two (2) 1/4-20 lead

anchor, and two (2) plastic anchor

Notes: • Heavy duty - for use in high traffic areas

• For use when no thresholds are used (door not undercut)

• For use with wood or concrete floors





245F

Cast Floor Stop

Base: 1-3/4" x 4" (45 mm x 102 mm)

Base Thickness: 1/2'' (13 mm) Overall Height: 1-5/16'' (33 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 1-1/4" FPHMS, two (2) 1/4-20 lead

anchor, and two (2) plastic anchor

Notes: • Heavy duty - for use in high traffic areas

• For use with thresholds and undercut doors

• For use on wood or concrete floors



246B

Dome Stop Riser Plate

Diameter: 1-3/4" (45 mm)
Base Thickness: 3/8" (10 mm)

Fasteners: One (1) 1/4-20 x 1" FPHMS

Materials: Cast brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Notes: For use with 241F on undercut doors, doors with thresholds, and carpeted flooring



248F

Modern Style Universal Stop

Base Diameter: 1-7/16" (37 mm) Height: 1-1/2" (38 mm)

Materials: Brass with black rubber bumper

Finishes: US26D

Fasteners: One (1) #12 x 1-1/4" FPHWS, one (1) plastic anchor, one (1) 1/4-20 x 1" FPHMS,

and one (1) 1/4-20 lead anchor



249F

L-Shaped Floor Stop

Base: 1" x 2-1/2" x 7/32" thick (25 mm x 64 mm x 6 mm)

Base Thickness: 1/4" (6 mm) Overall Height: 2-5/8" (67 mm)

Materials: Steel

Stop face: Resilient black rubber

Fasteners: Two (2) #14 x 1-1/2" FPHWS and two (2) plastic anchors

Notes: 1-1/2" (38 mm) max door to floor clearance





252F

Floor Stop

Certification: Meets ANSI A156.16 for L02131 Base: 1-9/16" x 2-1/2" (40 mm x 64 mm)

Overall Height: 2-11/16" (68 mm)

Materials: Cast brass with black rubber bumper

US3, US10, US10B, US15, US15A, US19, US26, US26D Finishes:

One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead Fasteners:

anchor, one (1) 1/4-20 lead anchor, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud

• Heavy duty - for use in high traffic areas Notes:

• For use on wood or concrete floors

• 2" (51 mm) max door to floor clearance



257F

Floor Stop

Certifications: Meets ANSI A156.16 for L02131 Base: 1-9/16" x 2-15/32" (40 mm x 63 mm)

Overall Height: 2" (51 mm)

Cast brass with black rubber bumper Materials:

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead

anchor, one (1) 1/4-20 lead anchors, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2"

threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud

• 1-3/8" (35 mm) max door to floor clearance Notes:

• Heavy duty - for use in high traffic areas

• For use on wood or concrete floors



258F

Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01371 Base: 1-9/16" x 2-15/32" (40 mm x 63 mm)

Height: 3" (76 mm)

Keeper: 1" x 2" (25 mm x 51 mm)

Materials: Cast brass with black rubber bumper US3, US10, US10B, US15, US26, US26D Finishes:

Two (2) #10 x 1" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead anchor, Fasteners:

one (1) 1/4-20 lead anchors, and one (1) 5/16-18 x 2-1/2" threaded stud

Notes: • 1-3/8" (35 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on concrete floors

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged





259F

Tri Base Floor Stop

Base: 2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)

Overall Height: 1-11/16" (43 mm)

Material: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-32 x 3/4"

FPHMS, and three (3) 10-32 lead anchor

Notes: • 1/2" (13 mm) max door to floor clearance

Heavy duty - for use in high traffic areasFor use on wood or concrete floors



259H

Tri Base Floor Stop - Tall

Base: 2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)

Overall Height: 2-1/4" (57 mm)

Materials: Cast brass with grey rubber bumper Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Three (3) $\#10 \times 1-1/4$ " FPHWS, three (3) plastic anchor, three (3) $10-32 \times 3/4$ "

FPHMS, and three (3) 10-32 lead anchors
• 1" (25 mm) max door to floor clearance

Heavy duty - for use in high traffic areas

• For use on wood or concrete floors



267F

Notes:

Cast Floor Stop

Certifications: Meets ANSI A156.16 for L02131

Base Diameter: 2-1/4" (57 mm) Overall Height: 3-1/8" (80 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded

stud

Notes: • 2-3/8" (60 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on concrete floors



267S

Cast Floor Stop

Certifications: Meets ANSI A156.16 for L02121

Base Diameter: 2-1/4" (57 mm) Overall Height: 3-1/8" (80 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Three (3) #10 x 1" OPHWS and three (3) plastic anchors

Notes: • 2-3/8" (60 mm) max door to floor clearance

• Heavy duty - for use in high traffic areas

• For use on wood floors





268F

Cast Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01371

Base Diameter: 2-1/4" (57 mm) Height: 3-19/32" (91 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Three (3) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,

and one (1) 5/16-18 x 2-1/2" threaded stud • 2-1/2" (64 mm) max door to floor clearance

Notes: • 2-1/2" (64 mm) max door to floor clearanc • Heavy duty - for use in high traffic areas

• For use on concrete floors

Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged



268S

Cast Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01361

Base Diameter: 2-1/4" (57 mm) Height: 3-19/32" (91 mm)

Keeper: 25/32" x 1-1/2" (20 mm x 38 mm)

Materials: Cast brass with black rubber bumper

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Five (5) #10 x 1" OPHWS and three (3) plastic anchors

Notes:
• 2-1/2" (64 mm) max door to floor clearance
• Heavy duty - for use in high traffic areas

• For use on wood floors

• Manual holder ideal for interior and exterior applications

• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually

engaged



269F

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646)

Bumper Diameter: 2" (51 mm)
Bumper Height: 1-1/2" (38 mm)

Steel Bolt: $5/8 - 11 \times 2-1/2''$ thread Materials: Black rubber (fire-resistant)

Notes: • Designed for high vandalism areas

Ideal for prisons where floor stops are requiredGrouted in concrete to eliminate exposed screws





269T

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test

(Report #91-04-01646)

Bumper Diameter: 2" (51 mm) Bumper Height: 3-1/2" (89 mm)

Steel Bolt: $5/8 - 11 \times 2 - 1/2''$ thread Materials: Black rubber (fire-resistant)

Notes: • Designed for high vandalism areas

Ideal for prisons where floor stops are requiredGrouted in concrete to eliminate exposed screws



326F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2" x 4-3/32" (51 mm x 104 mm)

Strike Height: 1-1/4" (32 mm)
Max Door to Floor Clearance: 1/2" (13 mm) or less

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and

four (4) #12 x 1" TPHWS

Notes:

• For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door



327F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2-3/16" x 4-1/8" (56 mm x 105 mm)

Strike Height: 1-3/4" (44 mm)

Max Door to Floor Clearance: 9/16" to 1-1/16" (14 mm to 27 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and

four (4) #12 x 1" TPHWS

Notes: • For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door





328F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2-3/16" x 4-1/8" (56 mm x 105 mm)

Strike Height: 2-1/4" (57 mm)

Max Door to Floor Clearance: 1-1/8" to 1-9/16" (29 mm to 40 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,

and four (4) #12 x 1" TPHWS

Notes:

• For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door



329F

Automatic Floor Stop and Holder

Certifications: Meets ANSI A156.16 for L01301

Holder Projection: 1-15/16" (49 mm)

Holder Base: 3-1/16" x 3-1/2" (78 mm x 89 mm) Floor Strike: 2-3/16" x 4-1/8" (56 mm x 105 mm)

Strike Height: 2-3/4" (70 mm)

Max Door to Floor Clearance: 1-5/8" to 2-1/16" (41 mm to 52 mm)

Materials: Brass

Finishes: US3, US10, US10B, US26, US26D

Fasteners: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,

three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,

and four (4) #12 x 1" TPHWS

Notes: • For use on wood or metal doors and wood or concrete floors

• Ideal for heavy traffic situations that require frequent hold open

• Firm pull releases holding mechanism

• Holder has vertical adjustment once mounted on the door





270C

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L71382 Base: 1-7/16" x 2-1/8" (37 mm x 54 mm)

Arm: 3-13/16" (97 mm)
Materials: Cast iron with rubber tip

Finishes: S1 - Sprayed Aluminum, S2 - Sprayed Brass, S3 - Sprayed Bronze

Fasteners: Four (4) #6 x 3/4" OPH tapping screws

Notes: • Provides simple hold and release with a touch of the foot

• 2-1/4" (57 mm) max door to floor clearance



270D

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L01381 Base: 1-19/32" x 1-25/32" (41 mm x 45 mm)

Arm: 3-1/2" (89 mm)

Materials: Cast brass with rubber tip

Finishes: US3, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Three (3) #6 x 3/4" OPHWS

Notes: • Provides simple hold and release with a touch of the foot

• 2-1/4" (57 mm) max door to floor clearance



270R

Replacement Rubber Tip

Materials: Rubber

Notes: • For use with 270D and 271D

• Sold in packs of 10



271D

Kick Down Door Holder

Certifications: Meets ANSI A156.16 for L01381

Base: 1-19/32" x 1-25/32" (41 mm x 45 mm)

Arm: 4-7/16" (87 mm)

Materials: Cast brass with rubber tip

Finishes: US3, US10, US10B, US26, US26D Fasteners: Three (3) #6 x 3/4" OPHWS

Notes: • Provides simple hold and release with a touch of the foot

• 3-1/4" (83 mm) max door to floor clearance





275D | 276D

Surface Bolt

Certifications: Meets ANSI A156.16 for L04161

1-3/8" (35 mm) Overall Projection: Overall Width: 2-1/32" (52 mm)

3/4" x 1/4" (19 mm x 6 mm) thick 275D - 8" (203 mm) Bar:

Length:

276D - 12" (305 mm)

Throw: 1" (25 mm) Materials: Steel

Finishes: US3, US10, US10B, US26D

Fasteners: Eight (8) #10 x 1-1/4" FPHWS and eight (8) 10-24 x 1" undercut

Notes: Mortise bottom strike and universal top strike included

• Strong tension springs prevent creep

• UL listed for use on inactive leaf of a pair of 3-HR labeled fire doors



278D

Surface Bolt

Bolt Length: 6" (152 mm) 7/16" (11 mm) 31/32" (25 mm) Bolt Width: Bolt Throw: Base Width: 19/32" (15 mm) Knob Diameter: 1/2" (13 mm) Projection: 3/4" (19 mm)

Materials: Brass

Finishes: US3, US10B, US26D Fasteners: Four (4) #5 x 5/8" FPHWS

• Mortise and universal strikes included Notes:

> • Concealed screw design enhances appearance and security • Permanent stop prevents bolt disengagement from track



279D

Surface Bolt

Length: 4" (102 mm) Width: 1-11/16" (43 mm) 3/8" (10 mm) Throw: Half Round Bolt Size: 5/8" (16 mm) Projection: 1-1/4" (32 mm) Knob Diameter: 29/32" (23 mm)

Materials: **Brass**

Finishes: US3, US10, US10B, US26D Fasteners: Twelve (12) #6 x 3/4" FPHWS Mortise and universal strikes included Notes:





280X

Dust Proof Strike

Certifications: Meets ANSI A156.16 for L04021

Face Plate: 1-7/16" x 2-29/32" x 1/8" depth (37 mm x 74 mm x 3 mm)

Barrel Diameter: 1" (25 mm) Barrel Depth: 2-3/16" (56 mm) 3/4" (19 mm) Plunger Diameter:

Materials: **Brass**

Finishes: US3, US4, US9, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #8 x 1" FPHWS, two (2) plastic anchors, and spanner wrench Fasteners: • Packed unassembled with plate, strike, fasteners, and spanner wrench Notes: • May be used with carpet or threshold application by omitting face plate

• Designed for use with the bottom bolt of a flushbolt set

 Spring loaded plunger returns to floor or threshold level anytime flushbolt is retracted, eliminating the need to clean out the bottom strike



281D

Slide Flush Bolt

Certifications: Meets ANSI A156.16 for L04201 Faceplate: 3/4" x 6" (19 mm x 153 mm)

Bolt Diameter: 1/2" (13 mm) 1" (25 mm) Bolt Throw: 7/16" (11 mm) Bolt Backset:

7/8" x 1-3/4" (22 mm x 45 mm) Strike:

Materials: Brass, bronze faceplate with steel components

Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Four (4) #6 x 3/4" FPHWS

Double action spring design provides automatic holding of bolt in projected or Notes:

retracted position



282D

Manual Flush Bolt

Certifications: Fits ANSI A115 door and frame prep

• Meets ANSI A156.16 for L14251 1" x 6-3/4" (25 mm x 172 mm)

Face Plate: Bolt Head:

1/2" (13 mm) square

3/4" (19 mm) Bolt Throw:

12" (305 mm) (center of face to corner of door) Standard Rod Length:

3/4" (19 mm) Bolt Backset:

15/16" x 2-1/4" (24 mm x 57 mm) Mortise Strike: Brass faceplate with steel components Materials:

US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Finishes: Eight (8) #8 x 3/4" combo screws; eight (8) #8 x 1-1/2" combo screws Fasteners:

• For use on hollow metal/fire rated doors Notes:

Non-handed

• Bolt head rods are adjustable · Sold in increments of two.

• 3-Hr fire rating for metal doors up to 4 feet wide by 10 feet tall.

• 282S strike plate bag and 282P bolt head available

 Specify 282R for optional rod length of 18" (457 mm), 25" (635 mm), or 30" (762 mm) (bolt head not included)







283D

Manual Flush Bolt

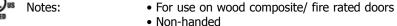
Certifications: Meets ANSI A156.16 for L14261 Face Plate: 1" x 6-25/32" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Eight (8) $\#8 \times 3/4$ " combo screws and eight (8) $\#8 \times 1-1/2$ " combo screws



• Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 10 feet tall



291D

Automatic Flush Bolt Set for Wood Covered Composite Doors

Certifications: B, C, D, and E Label

ANSI A156.3 Type #25

Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) square Bolt Throw: 3/4" (19 mm)

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic

anchors

Notes:

• Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

• Used in pairs at top and bottom of inactive door

 Fully automatic – bolts retract when active door is opened; bolts extend when active door is closed

• Non-handed

• Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall







292D

Automatic Flush Bolt Set for Metal Doors

Certifications: A, B, C, D, and E Label

ANSI A156.3 Type #25

Face Plate: 1" x 6-3/4" (27 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Ten (10) #8 x 1" combo screws

Notes: • Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

• Used in pairs at top and bottom of inactive door

 Fully automatic – bolts retract when active door is opened; bolts extend when active door is closed

Non-handed

• Bolt head rods are adjustable

• 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



293D

Self Latching Flush Bolt Set for Inactive Metal Doors

Certifications: A, B, C, D, and E Label

ANSI A156.3 Type #27

Face Plate: 1" x 6-3/4" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) square Bolt Throw: 3/4" (19 mm)

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

T- Strike: 1-1/8" x 2-3/4" (28 mm x 70 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Eight (8) #8 x 1" combo screws

Notes: • Thermal lock automatically locks inactive door under high fire/heat conditions

• 280X dust proof strikes are recommended for use with these sets

• Consists of one 292S and one 293S for two point latching

 Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released by pressing plunger - Inactive door will relatch automatically when closed

• Non-handed

• Bolt head rods are adjustable

• 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall





294D

Self Latching Flush Bolt Set for Inactive Wood Covered Composite Doors

Certifications: B, C, D, and E Label

ANSI A156.3 Type #27

Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

T- Strike: 1-1/8" x 2-3/4" (28 mm x 70 mm)

Materials: Stainless steel and brass with steel components

Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Four (4) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors

Notes:

• Thermal lock automatically locks inactive door under high fire/heat conditions

- 280X dust proof strikes are recommended for use with these sets
- May be used on doors 4 ft. wide and 9 ft. high
- Consists of one 292S and one 293S for two point latching
- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt Top bolt can be manually released Inactive door will relatch
- automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall



295M

Automatic Flush Bolt Set with Fire Bolt for Metal Doors

Certifications: ANSI/BHMA 156.3 Type #25 Face Plate: 1" x 6-3/4" (25 mm x 172 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Ten (10) #8 x 1" combo screws

Notes:

• Fire bolt is activated at 230° Fahrenheit projecting into active door

locking leaves together - This combination eliminates the bottom flushbolt

and eliminates floor preparation

 Fully automatic – Bolt retracts when active door is opened - Bolt extends when active door is closed

- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall





295W

Notes:

Automatic Flush Bolt Set with Fire Bolt for Wood Doors

Certifications: ANSI/BHMA 156.3 Type #25 Face Plate: 1" x 8-1/2" (25 mm x 216 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 3/4" (19 mm)

Mortise Strike: 15/16" x 2-1/4" (24 mm x 57 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors

 Fire bolt is activated at 230° Fahrenheit projecting into active door locking leaves together - This combination eliminates the bottom flushbolt and eliminates floor

preparation

 Fully automatic – Bolt retracts when active door is opened - Bolt extends when active door is closed

Non-handed

• Bolt head rods are adjustable

• 20-min fire rating for wood doors up to 4 feet wide by 9 feet tall



296W

Notes:

Automatic Flush Bolt Set for Wood Doors

Certifications: ANSI/BHMA 156.3 Type #25 Face Plate: 1-1/8" x 2-1/4" (29 mm x 57 mm)

Bolt Head: 1/2" (13 mm) diameter

Bolt Throw: 3/4" (19 mm) Bolt Backset: 1-1/2" (39 mm)

Materials: Stainless steel and brass with steel components Finishes: US3, US4, US10, US10B, US15, US32, US32D

Fasteners: Four (4) #8 x 1" SMS, two (2)#8 x 3/4" combo screws, two (2) plastic

anchors

Non-handed

ADA compliant

• Ideal for wood veneer doors

• Only two (2) 1-1/8" diameter holes needed for easier door preparation

• Opening active door retracts top and bottom bolts

• Smaller profile adds stability to the door

• 1-1/2 hour fire rating for doors up to 4 feet wide by 9 feet tall





297C

Carry Bar

Certifications: ANSI/BHMA A156.3 Type #27

Projection: 25/32" (20 mm)

Base: 1-3/4" x 2-1/4" (45 mm x 57 mm)

Brass and stainless steel Materials:

USP, US3, US10, US10B, US15, US32, US32D Finishes: Fasteners: Two (2) 12-24 x 3/4" PPHMS w/ sex nuts

• Used when it is possible for the inactive door to be Notes:

opened before the active door

• For use on pairs of doors with astragals

• For use in conjunction with a 297D or 298D coordinator

• Prevents damage to the doors and other hardware

• Carry bar is not required when the inactive door is

equipped with flush bolts

Non-handed



297D

Notes:

Coordinating Device

Certifications: ANSI/BHMA A156.3 Type #21A 1-3/4" x 2-1/4" (45 mm x 57 mm) Base:

Steel Materials:

Finishes: Black Prime Coat Maximum Astragal Overlap: 1" (25 mm)

5/8" (16 mm) Stop Height:

Fasteners: Seven (7) 12-24 x 1-1/4" TPHMS and four (4) #8 x 1" FPH combo screws

• For use with overall frame widths 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm), consult Hager customer service if overall frame width is different than our stock sizes

• Coordinating device is 52" (1321 mm) long for all stock sizes 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm)

• Filler bar is cut to length in field to match customers overall frame width

Non-handed

• Designed for use on pairs of doors when one door needs to close before the other

 Active door lever, located nearest to the active stop, holds the active door open until the trigger mechanism is released by the closing of the inactive leaf

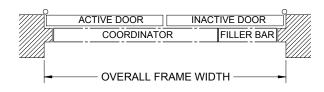
 Coordinator may not span the entire length of stop, 297F filler bar may be needed to fill up the extra space

Compatible with flushbolts

• Optional mounting brackets 297M and 297N may be used when mounting other stop applied hardware

• For use with active door widths 30" (762 mm) – 48" (1219 mm)

• If active and inactive doors are unequal in length, consult Hager customer service for proper sizing







297F

Filler Bar

Stop Height: 5/8" (16 mm)

Length: 18-5/8" (473 mm) (for jamb opening widths 52" - 72");

42-5/8" (1082 mm) (for jamb opening widths 73" - 96")

Notes: For use with 297D coordinator



297M

Mounting Brackets

Jamb Depth: 4-3/4" (121 mm) Stop Height: 5/8" (16 mm) Finishes: Black prime coat

Fasteners: Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS

Notes: • For use with 297D coordinator

• For soffit width 7/8" - 2-1/4" (22 mm - 57 mm)

• Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-

fire rated surface vertical rod strike



297N

Mounting Brackets

Jamb Depth: 4-1/4" (108 mm) Stop Height: 5/8" (16 mm) Finishes: Black prime coat

Fasteners: Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS

Notes: • For use with 297D coordinator

• For soffit width greater than 2-1/4" (57 mm)

 Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-

fire rated surface vertical rod strike



298D

Gravity Coordinator

Certifications: ANSI A156.3 Type #21B

Base: 5-1/2" x 1-1/8" (140 mm x 29 mm)

Projection: 7" (178 mm)

Materials: Brass with rubber roller and nylon cam roller

Finishes: US3, US10, US10B, US26D

Fasteners: Two (2) #12 x 1" OPHWS, two (2) #6 x 3/4" FPHWS, two (2) #8 x

3/4" TPHWS, and one (1) #6 x 3/4" FPHWS

Notes: • Non-handed

• Do not use 298D coordinator in conjunction with flushbolts. Use

297D when using flushbolts

• Gravity arm and door bracket are adjustable on the job for ease of

installation

For use on pairs of doors with astragal on active door up to 4' (1219 mm) wide or with astragal on inactive door up to 3'-4" (1016 mm) wide or with astragal on both doors up to 2'-10"

(864 mm) wide

• Minimum 3" (76 mm) header required

• Maximum astragal overlap - 7/8" (22 mm)







311H | 311L

Push/Pull Latch

Certifications: ANSI A156.2 Closest Equivalent (Bored Latch - Series 4000 - Grade 2)

Push & Pull levers: 1-15/16" x 4-1/2" (49 mm x 114 mm) Escutcheons: 3-1/16" x 5" (78 mm x 127 mm)

Projection: 2-5/8" (67 mm) Bolt Throw: 1/2" (13 mm) Bolt Diameter: 3/4" (19 mm)

Backset: • 2-3/4" (70 mm) - Standard • 5" (127 mm) - Optional

Strike (TEE) - standard: 1-1/8" x 2-3/4" (29 mm x 70 mm) Strike (ASA) - standard: 1-1/4" x 4-7/8" (32 mm x 124 mm)

Door thickness: 1-3/4" (45 mm)

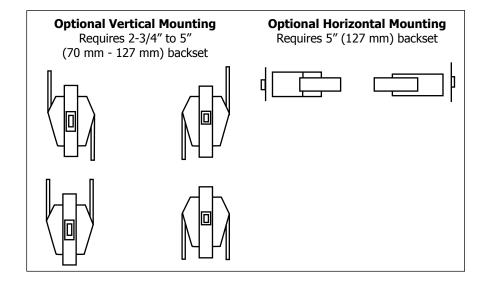
Materials: Zinc and stainless steel

Finishes: US26, US26D, US32, US32D

Notes: • Non-handed

• Engraving is optional

• 311L is same as 311H but for use on lead lined doors





318D

Roller Latch with Tee Strike

Certifications: Meets ANSI A156.16 for E09091 Roller Faceplate: $1'' \times 3-3/8''$ (25 mm x 86 mm) Strike: $1-1/8'' \times 2-3/4''$ (29 mm x 70 mm)

Strike Gauge: 0.063" (1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2

8-32 x 3/4" FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance





318S

Roller Latch with Stop

Certifications: Meets ANSI A156.16 for E0911

Roller Faceplate: 1-7/16" wide x 4-7/16" high x 11/16" angle (37 mm x 111 mm x 18 mm)

Strike: 1-1/8" x 2-1/4" (29 mm x 57 mm)

Strike Gauge: 0.063" (1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS and two (2) 8-32 x 3/4" FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 \bullet Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance



320R

Roller Catch with Tee Strike

Certifications: Meets ANSI A156.16 for E0910 Roller Faceplate: 1-1/8" x 2-1/4" (29 mm x 57 mm)

Strike: 1-1/4" x 2-3/4" x 1/16" thick (32 mm x 70 mm x 1.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Four (4) #8 x 1" FPHWS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is adjusted by turning knurled knob on back of the latch

• Max projection of the roller is 7/16" (11 mm) allowing for variance in door and frame

clearance

• For use with wood door and frame



321R

Adjustable Ball Catch with Strike

Roller Faceplate: 1" x 2-1/8" (25 mm x 54 mm) Strike: 1-1/2" x 2-1/8" (38 mm x 54 mm)

Strike Gauge: 0.050" (1.3 mm)

Materials: Brass with steel ball

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26D

Fasteners: Four (4) #6 FPHWS

Notes: • Adjustable threaded barrel compensates for various door clearances

• Adjustable spring tension

• For use with wood door and frame



340D

Latch Protection Plate

Size: 3" x 11" (76 mm x 279 mm) Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

• Non-handed

Frame pin prevents prying of doorFor use with most mortise locks

For use with cylindrical locksets with a 3-3/4" (95 mm) backset or greater





341D

Latch Protection Plate with Lock Cut Out

Size: 3" x 11" (76 mm x 279 mm)
Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

Non-handed

Frame pin prevents prying of door

• For use with cylindrical locksets with a 2-3/4" (70 mm) backset



345D

Latch Protection Plate

Size: 1-5/8" x 10" (41 mm x 254 mm) Materials: 12GA steel, stainless steel

Finishes: US2C, US32D

Fasteners: Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts

Notes: • For use with 1-3/4" (45 mm) doors

Non-handed

· For use with cylindrical locksets





1442

Roller Latch with Full Lip Strike

Certifications: Meets ANSI A156.16 for E09091
Roller Faceplate: 1" x 3-3/8" (25 mm x 86 mm)
Strike: 1-11/16" x 2-1/4" (43 mm x 57 mm)

Strike Gauge: 5/32" (4 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2) 8-32 x 3/4"

FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

 \bullet Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance



1443

Roller Latch with ASA Strike

Certifications: Meets ANSI A156.16 for E09101
Roller Faceplate: 1" x 3-3/8" (25 mm x 86 mm)
Strike: 1-1/4" x 4-7/8" (32 mm x 124 mm)

Strike Gauge: 0.090" (2.3 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D

Fasteners: Two (2) #10 x 1-1/2" FPHWS, two (2) #12 x 3/4" FPHWS, and two (2) 12-24 x 1/2"

FPHMS

Notes: • Adjustable spring tension with nylon roller

• Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame

clearance





901P

Coat Hook - Short Single

Diameter: 1" (25 mm)
Projection: 1-1/4" (32 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



937P

Coat Hook

Projections: • 3-3/4" (95 mm)

top hook

• 2-1/2" (63 mm) bottom hook

Materials: Brass, bronze Finishes: US3, US26D



902P

Coat Hook - Long Single

Diameter: 1" (25 mm)
Projection: 2-1/2" (63 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



940P

Coat Hook - Double

Overall Height: 4-11/16'' (119 mm) Top Projection: 3-15/16'' (100 mm) Bottom Projection: 2-1/8'' (54 mm) Material Thickness: 1/4'' (6 mm) Fasteners: Two (2) #10 x 1"

FPHWS



903P

Coat Hook - Long Double

Diameter: 1" (25 mm)
Projection: 2-1/2" (63 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #14 x 1-1/4" wood

thread

Notes: Concealed mounting



941P

Coat Hook - Single

Overall Height: 2-5/16" (59 mm) Projection: 2-1/8" (54 mm) Material Thickness: 1/4" (6 mm) Fasteners: Two (2) #10 x 1"

FPHWS



936P

Coat Hook Single Angled

Base Diameter: 1-15/16" (49 mm)
Hook Diameter: 11/16" (17 mm)
Projection: 3-5/16" (84 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting







945P

Double Coat Hook - Surface Mounting

Overall Height: 5-1/2" (140 mm)
Projection: 3-5/16" (84 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: Four (4) #10 x 1"

FPHWS w/ anchors



952P

Coat Hook - Single

O/A Height: 2-13/16" (71 mm)
Projection: 2-7/32" (56 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



946P

Double Coat Hook -Concealed Mounting

Overall Height: 5-1/2" (140 mm)
Projection: 3-11/16" (94 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: Two (2) #10 x 1"
FPHWS w/ anchors

Concealed mounting



956P

Double Coat Hook - Angled

Overall Height: 5-11/16" (144 mm)
Projection: 3-23/32" (95 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



951P

Notes:

Coat Hook - Double

O/A Height: 5-3/4" (146 mm)
Projection: 2-3/4" (70 mm)
Materials: Brass, bronze
Finishes: US3, US26D

Notes: Concealed mounting



957P

Coat Hook

Projection: 1-3/4" (45 mm)
Base Diameter: 3/4" (19 mm)
Materials: Brass, bronze
Finishes: US3, US26D
Fasteners: #10 x 1" wood

thread

Notes: Concealed mounting





22N

Edge Pull for Sliding Doors

Certification: Meets ANSI A156.14 for D2801

Size: 31/32" x 4-1/4" x 3/8" thick (25 mm x 108 mm x 9.5 mm)

Lever Extension: 2-19/32" (66 mm)

Materials: Brass Finishes: US3, US26D

Fasteners: Two (2) #6 x 3/4" FPHWS



330D

Pocket Door Latch

Certification: Meets ANSI A156.14 for D0821 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15A, US19, US26, US26D

Fasteners: Two (2) #6 x 5/8" OPHWS

Notes: For use with 1-3/8" - 1-3/4" (35 mm - 45 mm) door



330L

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Strike Size: 1" x 2-1/4" (25 mm x 57 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15, US15A, US19, US26, US26D Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS

Notes: For use with 1-3/8" (35 mm) door



330M

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Extension of Finger Piece: 1-3/8" (35 mm)

Strike Size: 1" x 2-1/4" (25 mm x 57 mm)

Materials: Brass

Finishes: US3, US5, US10B, US15, US15A, US19, US26, US26D Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS

Notes: For use with 1-3/4" (45 mm) door



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (24.5 mm)
Finger Pull Diameter: 3/4" (19 mm)
Pull Clearance: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26D, ABA Notes: • For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads





2620

Flush Cup Pull

Overall Diameter: 2-1/16" (52 mm)
Finger Pull Diameter: 1-11/16" (43 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 5/64" (2 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Notes:

• For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm)
Finger Pull Diameter: 2-1/16" (52 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 3/32" (2.4 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Notes:

• For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



2640

Oblong Flush Pull

Size: 1-5/16" x 2-3/4" (33 mm x 70 mm)

Cup Clearance: 5/16" (8 mm)
Materials: 5/16" (8 mm)

Finishes: US3, US4, US5, US10A, US15, US15A, US26D, ABA

Fasteners: Two (2) #6 x 5/8" OPHWS

Notes: For use on bi-fold, by-pass or pocket applications



9558

Wood Knob

Diameter: 1-1/2" (38 mm) Materials: Solid wood

Notes: • For use on bi-fold applications

• Will accept paint or stain



9566

Knob

Diameter: 1-1/4" (32 mm)
Projection: 1" (25 mm)
Materials: Die Cast Zinc

Finishes: US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D Fasteners: One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS

Notes: For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick





9567

Rose

Base Diameter: 1-3/4" (45 mm)
Projection: 15/32" (12 mm)
Materials: Die cast zinc

Finishes: US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D Fasteners: One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS

Notes: • For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick

• For use with 9566 knob



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (40 mm)
Pull Clearance: 11/32" (8.7 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS plastic

Notes: • For use on bi-fold, by-pass or pocket applications

• Built-in prong design eliminates the need for screws or brads



9882

Pocket Door Edge Pull

Face Plate Size: 3/4" x 3 - 7/8" (19 mm x 98 mm)

Finger Pull Extends: 3/4" (19 mm)
Materials: Solid brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) #6 x 5/8" FPHWS

Notes: • Ideal for narrow and standard door thicknesses

• Automatic spring return



9884

Pocket Door Edge Pull

Faceplate: 21/32" x 3-1/2" (16.5 mm x 89 mm)

Finger Pull Extends: 1-1/16" (27 mm)
Materials: Die cast zinc

Finishes: US3

Fasteners: Two (2) #6 x 5/8" FPHWS

Notes: Ideal for narrow and standard door thicknesses





336A

Door Edge Filler Plate - 161 Prep

Size: 1-1/8" x 2-1/4"

(29 mm x 57 mm)

Thickness: 0.125" (3.2 mm)
Materials: Primed steel



336G

Door Edge Filler Plate - Square

Size: 1-3/4" x 5"

(38 mm x 127 mm) Thickness: 0.134" (3.4 mm)

Materials: Primed steel



336B

Door Edge Filler Plate - 86 Prep

Size: 1-1/4" x 8"

(32 mm x 203 mm)

Thickness: 0.180" (4.5 mm)
Materials: Primed steel



336H

Door Edge Filler Plate - Beveled

Size: 1-1/2" x 5"

(38 mm x 127 mm)

Thickness: 0.134" (3.4 mm)

Materials: Primed steel

Notes: For handed doors



336C

Door Face Filler Plate - Deadbolt

Size: 1-3/4" (45 mm)

diameter

Thickness: 0.055" (1.4 mm)
Materials: Primed steel



336J

Flush Bolt Strike Filler Plate - Frame

Size: 15/16" x 2-1/4"

(24 mm x 57 mm)

Thickness: 0.083" (2.1 mm)
Materials: Primed steel



336D

Door Face Filler Plate - 161 Prep

Size: 2-5/8" (67 mm)

diameter

Thickness: 0.055" (1.4 mm)
Materials: Primed steel



336K

Flush Bolt Filler Plate - Door

Size: 1" x 6-3/4"

(25 mm x 172 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336E

Door Edge Filler Plate - Square

Size: 1-3/4" x 4-1/2"

(45 mm x 114 mm)

Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336L

Hinge Filler Plate - Frame

Size: 1-5/8" x 4-1/2"

(41 mm x 114 mm)
Thickness: 0.134" (3.4 mm)
Materials: Primed steel



336F

Notes:

Door Edge Filler Plate - Bevel

Size: 1-1/2" x 4-1/2"

(38 mm x 114 mm)

For handed doors

Thickness: 0.134" (3.4 mm)
Materials: Primed steel





336M

Hinge Filler Plate - Frame

1-5/8" x 5"

(41 mm x 127 mm)

0.134" (3.4 mm) Thickness: Primed steel Materials:



337A

Template Hinge Shim

1-7/16" x 4-1/2" (37 mm x 114 mm)

0.028" (0.7 mm) Thickness: Primed steel Materials:



336N

Latch Adapter Filler Plate - 86 to 161 **Edge Prep**

1-1/4" x 8" Size:

> (32 mm x 203 mm) 0.238" (6 mm)

Thickness: Primed steel Materials:



337B

Template Hinge Shim

Size: 1-7/16" x 4-1/2"

(37 mm x 114 mm) 0.065" (1.7 mm) Thickness: Primed steel Materials:



336P

Deadlock Strike Filler Plate - Frame

1-1/8" x 2-3/4" Size:

(29 mm x 70 mm)

0.083" (2.1 mm) Thickness: Materials: Primed steel



337C

Template Hinge Shim

1-7/16" x 5" Size:

(37 mm x 127 mm)

0.028" (0.7 mm) Thickness: Primed steel Materials:



3360

ASA Strike Filler Plate - Frame

Size: 1-1/4" x 4-7/8"

(32 mm x 124 mm)

0.093" (2.4 mm) Thickness: Materials: Primed steel



337D

Template Hinge Shim

Size: 1-7/16" x 5"

(37 mm x 127 mm) Thickness: 0.065" (1.7 mm) Materials: Primed steel



336R

Cylindrical Lock Strike Filler Plate -**Frame**

Size: 1-1/8" x 2-3/4"

(29 mm x 70 mm)

0.083" (2.1 mm) Thickness: Materials: Primed steel

PULL

350H | 350L

Engraved Plastic Sign - Push (350H) and Pull (350L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

MEN

WOMEN

350M | 350W

Engraved Plastic Sign - Men (350M) and Women (350W)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 5" (51 mm x 127 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

635

350R

Engraved Plastic Sign - Number

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering

Notes: Signs are individually packed in a poly bag

P P U L L

351H | 351L

Engraved Plastic Sign - Push (351H) and Pull (351L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 1" x 4-1/2" (25 mm x 114 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

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352M | 352W

Engraved Plastic Sign - Men (352M) and Women (352W)

占 WOMEN

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica

Size: 352M - 2-1/2" x 6" (64 mm x 152 mm) 352W - 2-1/2" x 7" (64 mm x 178 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Brown (W1) with white lettering

Black (W2) with white lettering
Blue (W3) with white lettering
Silver (B1) with black lettering
Gold (B2) with black lettering

Notes: Signs are individually packed in a poly bag

Restroom

354A | 354B

Engraved Plastic Sign - Restroom(s)

Restrooms

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Lettering: 3/4" (19 mm) Helvetica
Size: 2" x 6" (51 mm x 127 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Colors: • Black (W2) with white lettering

Blue (W3) with white lettering

Notes: Signs are individually packed in a poly bag

MEN

360M | 360W

Engraved Metal Sign - Men (360M) and Women (360W)

WOMEN

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled

Size: 2" x 6" (51 mm x 152 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US28, US32D

Notes: Signs are individually packed in a poly bag

PUSH

361H | 361L

Engraved Metal Sign - Push (361H) and Pull (361L)

PULL

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled
Size: 2" x 4" (51 mm x 102 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US10B, US28, US32D

Notes: Signs are individually packed in a poly bag





362H | 362L

Engraved Metal Sign - Push (362H) and Pull (362L)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.050" (1.3 mm) thick metal
Lettering: 3/4" (19 mm) Helvetica black filled
Size: 1" x 4-1/2" (25 mm x 114 mm)

Fasteners: Double sided pressure sensitive tape or screws (specify)

Finishes: US3, US10B, US28, US32D

Notes: Signs are individually packed in a poly bag



364L

Plastic International Handicap Symbol Sign

Certifications: Meets ANSI A156.16 L03201

Materials: 0.125" (3.2 mm) thick plastic 1/32" (0.8 mm) raised HANDICAP symbol

Size: 6" x 6" (152 mm x 152 mm)

Fasteners: Double sided pressure sensitive tape standard or screws (specify)

Colors: • Brown (W4) with raised white symbol

Black (W2) with raised white symbolBlue (W3) with raised white symbol

Notes: Signs are individually packed in a poly bag



364M | 364S

Plastic International Handicap Symbol Sign

Certifications: Meets ANSI A156.16 L03201

Materials: 0.0625" (1.6 mm) thick plastic raised HANDICAP symbol

Size: 364M - 4" x 4" (102 mm x 102 mm) 364S - 3" x 3" (76 mm x 76 mm)

Fasteners: Double sided pressure sensitive tape standard or screws (specify)

Colors: Blue (W3) with raised white symbol Notes: Signs are individually packed in a poly bag



364N

Notes:

Engraved International No Smoking Symbol Sign

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 6" (152 mm x 152 mm)

Fasteners: Pressure sensitive tape standard or screws (specify)

Colors: Red (W4) with raised white symbol

Notes: Signs are individually packed in a poly bag



365M | 365W

ADA Tactile Sign - Men (365M) and Women (365W)

Certifications: Meets ANSI A156.16 L03201
Materials: 0.125" (3.2 mm) thick plastic
Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape
Colors:

• Brown (W1) with raised white symbol
• Black (W2) with raised white symbol

Blue (W3) with raised white symbolSigns are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements





366R

ADA Tactile Sign - Room Number

Meets ANSI A156.16 L03201 Certifications: Materials: 0.125" (3.2 mm) thick plastic Size: 2-1/2" x 5" (64 mm x 127 mm) Fasteners: Double sided pressure sensitive tape Colors: • Brown (W1) with raised white lettering Black (W2) with raised white lettering

• Blue (W3) with raised white lettering · Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements



366S

Notes:

ADA Tactile Sign - Stairs

Certifications: Meets ANSI A156.16 L03201 Materials: 0.125" (3.2 mm) thick plastic 6" x 8" (152 mm x 203 mm) Size:

Fasteners: Double sided pressure sensitive tape

• Brown (1) with white symbol and lettering Colors:

• Black (2) with white symbol and lettering Blue (3) with white symbol and lettering

Notes: Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements



368E

Notes:

ADA Tactile Sign - Exit

Certifications: Meets ANSI A156.16 L03201 Materials: 0.125" (3.2 mm) thick plastic Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape Colors: • Brown (1) with white symbol and lettering • Black (2) with white symbol and lettering • Blue (3) with white symbol and lettering

• Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements





368M | 368W

ADA Tactile Sign - Men (365M) and Women (365W) with Handicap

Certifications: Meets ANSI A156.16 L03201 Materials: 0.125" (3.2 mm) thick plastic 6" x 8" (152 mm x 203 mm) Size:

Double sided pressure sensitive tape Fasteners: Colors:

 Brown (1) with white symbol and lettering • Black (2) with white symbol and lettering • Blue (3) with white symbol and lettering

 Signs are individually packed in a poly bag Notes:

• Grade 2 Braille Translation conforming to section 4.30 requirements





368U

ADA Tactile Sign - Unisex

Meets ANSI A156.16 L03201 Certifications: Materials: 0.125" (3.2 mm) thick plastic 8" x 8" (203 mm x 203 mm) Size:

Fasteners: Double sided pressure sensitive tape

Colors: • Brown (1) with white symbol and lettering

> • Black (2) with white symbol and lettering • Blue (3) with white symbol and lettering

• Signs are individually packed in a poly bag Notes:

• Grade 2 Braille Translation conforming to section 4.30 requirements



369L | 369R

Notes:

ADA Tactile Sign - Access Left (369L) and Access Right (369R)

Meets ANSI A156.16 L03201 Certifications: Materials: 0.125" (3.2 mm) thick plastic Size: 6" x 8" (152 mm x 203 mm)

Fasteners: Double sided pressure sensitive tape

• Brown (1) with white symbol and lettering Colors: • Black (2) with white symbol and lettering

• Blue (3) with white symbol and lettering · Signs are individually packed in a poly bag

• Grade 2 Braille Translation conforming to section 4.30 requirements



370M | 370U | 370W

ADA Tactile Sign - Restroom, Men, and Women

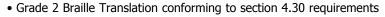
Certifications: Meets ANSI A156.16 L03201 Materials: 9/16" (14.3 mm) plastic

Size: • 370U - 12" (305 mm) diameter

> • 370W - 12" (305 mm) diameter • 370M - 10-1/2" (267 mm) side Double sided pressure sensitive tape

Fasteners: Color: Blue (3) with white raised symbol and lettering

Notes: • Signs are individually packed in a poly bag













274B

Door Guard Protection Plate

Size: 1-1/8" x 1" x 1/2" (28.5 mm x 25 mm x 12.5 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Notes:

• Used when additional protective plate is required for frame application

Mounted with double-sided tape
To be used with the 274D



274C

Shim for Door Guard

Size: 1-1/8" x 1-1/16" (29 mm x 27 mm)

Thickness: 3/32" (2.3 mm)
Materials: Black rubber

Notes: To be used with the 274D



274D

Door Guard

Certifications: Meets ANSI A156.16 for L13041

Arm Length: 4-1/2" (114 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US15, US26, US26D

Fasteners: Three (3) #6 x 1-1/2" OPHWS, three (3) #6 x 3/4" OPHWS, and three (3) 6-32 x 3/4"

FPHMS

Notes: • Permits door to be slightly opened to allow viewing

• Hinged bar allows the door guard to be positioned 180 degrees away from the door

when not in use

• Includes door guard protective plate 274B



300D

Chain Door Check

Certifications: Meets ANSI A156.16 for L02231

Lengths: • 25-1/2" (648 mm) recommended for use with 36" (914 mm) wide door

• 30-1/2" (775 mm) recommended for use with 42" (1067 mm) wide door

Base Plate: 1-1/2" x 1-1/2" (38 mm x 38 mm)

Materials: Cast brass base with welded steel chain

Finish: US26D

Fasteners: Ten (10) #8 x 1" FPHSMS
Notes: • Tear resistant grey vinyl cover

• Can be ordered through door mounting with grommet nut sets at extra charge

• 440 pound load strength

• Designed for full size exterior doors





301D

Heavy Duty Hinge Pin Stop

Certifications: Meets ANSI A156.16 for L02223
Materials: Wrought steel with rubber bumpers

Finishes: US3, US26D

Notes:

• Works with 1/4" (6 mm) and 5/16" (8 mm) hinge pins

• For use where standard door stops are not desirable

• Positive slip proof design

Adjustable from 70 degrees to 100 degrees

• Must purchase an NRP hinge for use with this pin stop



303W

Handrail Bracket

Certifications: Meets ANSI A156.16 for L03061

Base Diameter: 3-5/32" (80 mm)
Base to Center of Rail: 2-3/4" (70 mm)
Materials: Brass

Finishes: US3, US4, US10, US10B, US15A, US19, US26, US26D

Fasteners: Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-24 x 13/16"

FPHMS, and three (3) 10-24 lead anchors



305D

Wire Pull

Certifications: Meets ANSI A156.9 for B02011

Diameter of Rod: 5/16" (7.9 mm)
Projection: 1-9/32" (32.5 mm)

CTC Lengths: 3" (76 mm), 3-1/2" (89 mm), 4" (102 mm)

Materials: Brass

Finishes: US3, US4, US10, US10B, US26, US26D

Fasteners: Two (2) 8-32 x 1" TPHMS



307D

Door Silencer

Certifications: Meets ANSI A156.16 for L03011

Diameter: 1/2" (13 mm)
Projection: 1/8" (3 mm)
Materials: Rubber

Notes: • For use with metal frames

• Proper installation eliminates door rattle and provides constant tension for door

latches or locks



308D

Door Silencer

Certifications: Meets ANSI A156.16 for L0302

Projection: 9/64" (3.5 mm)

Base: 3/8" x 3/4" (9.5 mm x 19 mm)

Length: 3/4" (19 mm)
Materials: Rubber

Notes: • For use with wood frames

• Eliminates door rattle when door is latched

 Proper installation eliminates door rattle and provides constant tension for door latches or locks





310C

Conversion Kit

Filler Plate: 1-1-8" x 3-3/8" (29 mm x 86 mm) Strike: 1-11/16" x 2-1/4" (43 mm x 57 mm)

Materials: Brass

Finishes: US10B, US26D

Notes: • Packed with filler plate, strike and fasteners

• Change door from Roller Latch to Push/Pull Latch



322V

Wrought Door Knocker with Viewer

Certifications: Meets ANSI A156.16 for L03161 Size: 2-3/16" x 3-1/4" (56 mm x 83 mm)

Materials: Brass

Finishes: US3, US4, US10, US26D Fasteners: Three (3) #6 x 3/4" TPHSMS

Notes: Requires 1/2" (13 mm) hole for viewer



1755

160° Door Viewer

Certifications: Meets ANSI A156.16 for L03222

Materials: Brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D Notes: • For doors up to 2-1/8" (54 mm) thick, adjustable

• Requires 1/2" (13 mm) hole for viewer

Tamper resistant

• 90 minute fire rated

· One way viewer



1756

200° Door Viewer

Certifications: Meets ANSI A156.16 for L03221

Materials: Brass

Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D Notes: • For doors up to 2-1/8" (54 mm) thick, adjustable

• Requires 9/16" (14 mm) hole for viewer

• Tamper resistant

• 90 minute fire rated

• One way viewer



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208

Kick Down Door Stop

Base: 1-5/8" x 1-7/8" (41 mm x 48 mm)

Arm: 3-7/8" (98 mm) Materials: Aluminum alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Three (3) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with screws

• Provides simple hold and release with a touch of the foot

• 3" (76 mm) max door to floor clearance



209

Floor Door Stop

Height: 1-1/4" (32 mm)

Base Diameter: 1-3/32" (28 mm)

Tip Diameter: 19/32" (15 mm)

Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: One (1) #8 x 2" FPHWS
Notes: • Non-marking white tip

• 3/8" (9.5 mm) max door to floor clearance



BL6209

Floor Door Stop

Height: 1-3/8" (35 mm)
Base Diameter: 13/16" (21 mm)
Tip Diameter: 1/2" (13 mm)
Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: #8 x 11/32" thread
Notes: • Non-marking white tip

• 150 per case

• 1/2" (13 mm) max door to floor clearance

• Hex shape near the base allows usage of a wrench for easier installation



210

Rigid Door Stop

Projection: 3" (76 mm)

Tip Diameter: 11/16" (17.5 mm)

Base Diameter: 1" (25 mm)

Materials: Zinc alloy

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: #8 x 5/8" thread
Notes: Bumper made of rubber





211

Flexible Door Stop

Projection: 3-1/8" (79 mm)
Tip Diameter: 9/16" (14 mm)
Base Diameter: 1" (25 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: One (1) #8 x 3/4" PPHWS Notes: • Bumper made of rubber

• Flexible spring



BL6211

Flexible Door Stop

Projection: 3" (76 mm)
Tip Diameter: 7/16" (11 mm)
Base Diameter: 3/4" (19 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fastener: #8 x 11/32" thread
Notes: Bumper made of rubber

• Flexible spring



212

Hinge Pin Door Bumper

Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Notes: • Non-marking white plastic tip

• For use with residential hinges

• For use where standard door stops are not desirable

• For use with narrow trim

• Adjustable from 80 degrees to 120 degrees



BL6212

Notes:

Hinge Pin Door Bumper

Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Non-marking white plastic tipFor use with residential hinges

• For use where standard door stops are not desirable

For use with narrow trim

• Adjustable from 80 degrees to 120 degrees



1412

Door Guard

Arm Length: 4" (102 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Seven (7) #6 x 3/4" FPHWS

Notes: • Provides extra security from inside door

• Limits door opening when latch is thrown

• Polybag (1 each) with screws





1413

Flush Bolt

Faceplate: 3/4" x 6" (19 mm x 181 mm) Strike: 7/8" x 1-3/4" (22 mm x 45 mm)

Bolt Diameter: 1/2" (13 mm)
Bolt Throw: 15/16" (24 mm)
Bolt Backset: 7/16" (11 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN

Fasteners: Four (4) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

Square corners



1414

Flush Bolt

Faceplate: 3/4" x 6" (19 mm x 181 mm) Strike: 7/8" x 1-3/4" (22 mm x 45 mm)

Bolt Diameter: 1/2" (12.7 mm)
Bolt Throw: 15/16" (24 mm)
Bolt Backset: 7/16" (11 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN

Fasteners: Four (4) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners



1415

Strike Plate

Size: 7/8" x 1-3/4" (22 mm x 45 mm) Finishes: US3, US10A, US15A, US15, US26D

Fasteners: Two (2) #6 x 3/4" FPHWS

Notes: • For use with 1413 and 1414 Flush Bolts

• Packed (1 each) with Polybag and screws



Single Route Flush Bolt

Faceplate: 3/4" x 7-1/8" (19 mm x 181 mm) Strike: 21/32" x 1-1/2" (17 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt Throw: 7/8" (22 mm)
Bolt Backset: 3/8" (9.5 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners

• Single route for quick and simple door prep







1418

Flush Bolt with Extension Rod

Faceplate: 23/32" x 7-3/8" (18 mm x 187 mm) Strike: 5/8" x 1-1/2" (16 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt Throw: 3/4" (19 mm)
Bolt Backset: 3/8" (9.5 mm)
Extension Rod Length: 16" (406 mm)

Materials: Brass faceplate with steel components

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS

Notes: • Polybag (1 each) with strikeplate and screws

• Rounded corners

• Single route for quick and simple door prep



1419

Flush Bolt with Extension Rod

Faceplate: 3/4" x 7-1/8" (19 mm x 181 mm) Strike: 5/8" x 1-1/2" (16 mm x 38 mm)

Bolt Diameter: 5/16" (8 mm)
Bolt throw: 3/4" (19 mm)
Bolt Backset: 5/16" (8 mm)

Materials: Brass faceplate with steel components

Fasteners: Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS Finishes: US3, US4, US10A, US10R, US15, US26, US26D, ABA, AN

Notes: Single route for quick and simple door prep



1439 | BL6439

Magnetic Catch - Light Weight

Catch: 1-1/16" x 2" (27 mm x 51 mm) Strike: 7/8" x 1" (22 mm x 25 mm)

Materials: Tan plastic case

Fasteners: Two (2) #6 x 1/2" TPHWS and one (1) #4 x 1/2" FPHWS

Notes: • Polybag (1 each) with screws

Double sided magnet, self-aligning, 6 lb. pullSelf aligning magnet insures maximum pull

• BL6439 is Builder's Pack Polybag (1 each) with screws



1445

Roller Latch

Hole Diameter: 13/16" (21 mm)
Hole Depth: 1-1/8" (29 mm)
Materials: Zinc alloy base

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #4 x 3/4" FPHWS
Notes: • Polybag (1 each) with screws

• Designed for use on cabinets and lightweight doors

• Not intended for heavy weight applications





1446

Light Weight Ball Catch

Faceplate: 1" x 2-1/4" (25 mm x 57 mm) Strike: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Hole Diameter: 1'' (25 mm) Hole Depth: 1-1/4'' (32 mm)

Materials: Zinc

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D

Fasteners: Four (4) #6 FPHWS

Notes:

• Designed for use on cabinets and light weight doors

• Not intended for heavy weight applications

• Ball adjusts in and out for various door and frame clearances

• Polybag (1 each) with steel screws



1447

Light Weight Ball Catch

Strike: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Faceplate: 1" (25 mm) diameter Hole Diameter: 15/16" (24 mm) Hole Depth: 1-1/4" (32 mm)

Materials: Zinc

Finishes: US3, US4, US5, US10A, US10R, US15A US15, US26, US26D

Fasteners: Two (2) #6 FPHWS

Notes: • Designed for use on cabinets and light weight doors

• Not intended for heavy weight applications

• Ball adjusts in and out for various door and frame clearances

• Polybag (1 each) with steel screws



1448

Strike Plate

Size: 1-3/8" x 2-1/4" (35 mm x 57 mm)

Finishes: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #6 FPHWS

Notes: For use with 1446 and 1447 ball catches



1449

Drive In Ball Catch

Faceplate: 1" (25 mm) diameter Hole Diameter: 15/16" (24 mm) Hole Depth: 1-1/4" (32 mm)

Materials: Zinc Finishes: US4

Packaging: 100 per box

Notes: • Ball catch designed for use on cabinets and light weight doors

• Not intended for heavyweight applications

• Ball adjusts in and out for various door and frame clearances





BL6793

Pole Sockets

Outside Diameter: 2-7/16" (62 mm)

Materials: Steel

Notes: • For poles up to 1-3/8" (35 mm) diameter

• Flange design prevents accidental knock out of pole

• Polybag (2 each) with screws



BL6794

Pole Sockets

Outside Diameter: 2-3/16" (56 mm)

Materials: Plastic

Notes: • For poles up to 1-3/8" (35 mm) diameter

• Polybag (2 each) with screws



1795

Closet Rod

Pole Diameter: 1" (25 mm)

Materials: Steel with bright zinc finish

Finishes: White enamel Notes: • Quick mount end

High strength lock seam tubingPolybag (1 each) with screws



1797

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White Enamel

Fasteners: Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2"

PPH tapping screws

Notes: • For shelf and rod support

• Double welded heavy gauge steel construction embossed for added

strength

• Holds 1-3/8" (35 mm) diameter rod

• Supports 12" (305 mm) shelf

Bulk with screws





1798

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White Enamel

Notes: • For shelf and rod support

• Heavy gauge steel construction embossed for added strength

Holds 1-3/8" (35 mm) diameter rod
Supports 12" (305 mm) shelf

· Bulk with screws



1799

Shelf Bracket - Adjustable

Materials: Steel ANSI B04051 Finishes: White Enamel

Fasteners: Two (2) $\#8 \times 3/4''$ PPH tapping screws and two (2) $\#10 \times 1-1/2''$

PPH tapping screws

Notes: • Adjustable shelf and rod support

• Heavy gauge steel construction embossed for added strength

Holds 1-3/8" (35 mm) diameter rod
Supports 12" (305 mm) shelf
3/4" (19 mm) adjustability

Bulk with screws



1801

Shelf Bracket

Materials: Steel ANSI B04051 Finishes: White enamel

Fasteners: Two (2) $\#8 \times 3/4$ " PPH tapping screws and two (2) $\#10 \times 1-1/2$ " PPH

tapping screws

Notes: • Less rod support

• Heavy gauge steel construction embossed for added strength

• Supports 12" (305 mm) shelf

Bulk with screws



6601

Handrail Bracket

Projection: 3-1/4" (82.5 mm)
Base to Center of Rail: 2-3/4" (70 mm)
Materials: Cast aluminum

Finishes: US3, US4, US5, US10A, US10R, US15, US15A, US26, US26D, ABA Fasteners: Three (3) #8 x 1-1/2" OPHWS and two (2) #8 x 3/4" OPHWS

Notes: Polybag (1 each) with wood screws and rail bracket





BL6610

Coat and Hat Hook

Upper Projection: 2-13/16" (71 mm) Lower Projection: 1-5/16" (33 mm)

Material: Cast steel

Finishes: US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA

Fasteners: Two (2) #6 x 3/4" FPHWS
Notes: Polybag (1 each) with screws

• Builder's pack



Hager Companies offers a complete line of thresholds and weatherstripping products for virtually any type of door application. What's more, each meets or exceeds ANSI-grade quality, durability, and performance levels. For enhanced levels of safety and security, we also offer intumescent products for positive pressure solutions, including edge sealing and smoke control systems. All of which make Hager threshold, weatherstripping, and door bottom products an excellent choice for standard or custom applications in schools, hospitals, office buildings, and more.



PRODUCT PRESENTATION

Dimensions on bronze and stainless steel extrusions may differ slightly than those detailed. Questions regarding any dimensions should be directed to Hager Companies.

Drawings or illustrations used in the catalog are subject to change without notice. Questions on any dimensions should be obtained by contacting Hager Companies Customer Service.

FABRICATION OPTIONS

- Bevel One Edge of Threshold
- Rip One Edge Width of Threshold
- L-Notch Both Ends of Threshold
- U-Notch Both Ends of Threshold
- Miter Single One End of Threshold
- Miter Single Both Ends of Threshold
- Miter Double One End of Threshold
- Miter Double Both Ends of Threshold
- Tack Weld One Line of Threshold
- Pan for Water Return of Threshold
- Sure Step Anti-Skid Abrasive Finish A rugged, durable coating that can be applied to all Hager Companies' metal thresholds. Ideal for thresholds being used in wet, oily or corrosive environments.

MATERIALS & FINISHES

All aluminum extrusions are of alloy 6063-T5. All bronze extrusions are of alloy CDA385 brass specified as Architectural Bronze in the industry.

For stock finishes, refer to the code listed below each individual item throughout the catalog. Please inquire for the availability on nonstock finishes. ${\bf W}$ -

MIL - mill finish aluminum

MIB - mill finish bronze

CAL - cast aluminumGYP - primed steel grey

DBA - dark bronze anodized aluminum

SCA - Hager Sure Step on aluminum

32D - stainless steel (non-extruded)

GLD - gold anodized aluminum

CLR - clear anodized aluminum

LBA - light bronze anodized aluminum

SCB - Hager Sure Step on bronze

WHP - white paint on aluminum

USP - Prime coat

Notes: Threshold profiles shown refer to aluminum material only, dimensions may vary for mill finish bronze

thresholds.

Gaskets

Gasketing is available in a wide variety of materials. Vinyl is an economical choice and remains flexible down to -40°F (-40°C). EPDM gasketing is supplied both as a solid (dense) and as a closed cell sponge with a tough outer skin. It remains flexible down to -50°F (-49°C). Silicone gasketing provides the best resistance to cold by remaining flexible down to -70°F (-57°C). Gasketing codes are listed below.

B - nylon brush

N - neoprene, solid EPDM, closed cell sponge EPDM, TPE

S - silicone

V - vinyl

W - pile (Thread may be removed to allow expansion)

F - vinyl with fins

ORDERING INFORMATION

When ordering, please specify by product number, length, quantity, finish and fasteners required. Thresholds and weatherstripping are fabricated in standard sizes with 1/2" (12.7 mm) extra on thresholds 50" (1270 mm) and under. Thresholds over 50" (1270 mm) are supplied with 1" (25 mm) extra length for fitting. Exact lengths are available upon request.

All lengths over 12 feet (3.66 m) must be purchased and are billed at 15 feet (4.57 m). All thresholds must be purchased and are billed at 4" (101.6 mm) increments except abrasive cast aluminum thresholds & auto door bottoms. Weatherstripping must be purchased and is billed at 4" (101.6 mm) increments, 42" (1066 mm) and 86" (2184 mm) sizes excluded.

Example:	891S V 36 x 84	MIL	
Item #	Gasketing	Size	<u>Finish</u>
515S	W-pile	36" (914 mm)	MIL - mill finish aluminum
599S	V-vinyl	48" (1219 mm)	DBA - dark bronze anodized aluminum
750S	S-silicone	36" (914 mm)	32D - matte stainless steel
870S	N-neoprene	36" x 84" (914 mm x 2133 mm)	MIB - mill finish bronze
882S	B-nylon Brush	48" x 96" (1219 mm x 2438 mm)	CLR - clear anodized aluminum



FASTENERS

Standard

All products are furnished with appropriate fasteners as listed, except where noted. Most thresholds are furnished with mounting holes and $\#10 \times 1-1/2$ " flat head sheet metal screws. Most weatherstripping products are furnished with slotted holes and $\#6 \times 5/8$ " pan head sheet metal screws. Brass screws are furnished with bronze products.

Optional

Thresholds

#10 wood screws and plastic anchors

#10 wood screws and lead anchors

#10 machine screws and lead anchors

1/4-20 machine screws and lead anchors

#10 stainless steel wood screws

#10 stainless steel wood screws and plastic anchors

#10 stainless steel wood screws and lead anchors

1/4-20 stainless steel machine screws and lead anchors

1/4-20 x 2" flat head sleeve anchor

#10 x 1-1/4" stainless steel flat torx wood screws

 $\#10\text{-}24 \times 1\text{-}1/2$ " stainless steel flat torx machine screw with leach anchor

#10-24 x 1-1/2" stainless steel spanner head wood screw with lead anchor

Cast-on anchors (cast products only)

Tap-con type (1/4" x 1-3/4")

Weatherstripping

#6 x 5/8" pan-head stainless steel screws

#6 x 5/8" self-tapping (TEK) screws

#6 x 5/8" pan-head security torx sheet metal screws

#6 x 5/8" stainless steel self-tapping (TEK) screws

1/4 - 20 x 1-1/4" sex bolts

Two-way self-adhesive tape

GENERAL INSTALLATION INSTRUCTIONS PRESS-ON PRODUCTS:

- Installation should take place after construction has been completed, and final cleaning has taken place
- The frame should be cleaned; isopropyl alcohol is recommended
- Not recommended for unsealed or porous applications
- Do not store these products in extreme heat/cold or for prolonged periods of time

CERTIFICATIONS

Handicap Accessibility



Products denoted by this symbol are designed for applications where handicap accessibility is specified. These products are no greater than 1/2" (12.7 mm) in height and have no more than 1/4"

(6.3 mm) vertical rise or with slope proportions no greater than 1:2 slope. Offset floor conditions greater than 1/2" (12.7 mm) require a 1:12 slope.

Air Infiltration



Products denoted by this symbol have been tested with air/smoke infiltration, all within the 0.500 cfm/ft. maximum allowable leakage at a pressure of a 25 mph wind (1.56 psf). The tests were conducted in accordance with ASTM test procedures and meet ASTM: E283-91.

Sound Tested



Products denoted by this symbol have been sound tested and received the appropriate STC rating. The tests were conducted in accordance with ASTM test procedures and meet ASTM: E90-90 & ASTM: E413-87.

STC Rating Static Door	STC Rating Operable Door	Perimeter Seal Automatic Door Bot- Three		Threshold
44	40	726	743S	520S
41	39	726 (2)	743S	520S

BHMA Certified



BHMA Certification Program was developed as a means for producers of builders hardware to indicate compliance with American National

Standards sponsored by BHMA. Participating manufacturers certify compliance with the standards based on a continuing program of passing the prescribed tests.

Underwriter's Laboratories



Products denoted by this symbol are classified and labeled by Underwriter's Laboratories, Inc.® as gasket material for use on listed steel frames and/ or classified swinging type fire doors of the hollow

metal or steel covered composite type rated up to 3 hours, or wood core fire doors rated up to 1-1/2 hours. Test results show these products do not adversely affect the fire resistance of the door or frame according to its UL rating. All products are regularly checked under a labeling and listing service. The clearance between the door and the frame and between the meeting edges of doors swinging in pairs shall be $1/8'' \pm 1/16''$ (3.18 mm \pm 1.59 mm) for steel doors and shall not exceed 1/8'' (3.2 mm) for wood doors.

Notes: Ratings on some items may vary and are noted on the individual products. Classifications may be viewed at www. ul.com/database.



POSITIVE PRESSURE UBC 7-2 (1997) PART I



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part I of this symbol designates the fire test. Since this symbol is used to designate the positive pressure

fire test and does not differentiate between categories "G" and "J", additional information is needed. Products intended for use as edge sealing systems need to be labeled as such or list category "G" in their literature. Without this information, the product is category "J"; fire tested to the new standard of positive pressure.

Fire Test - Category G

Gaskets that are Edge-Sealing Systems. Category "G" - Edge-Sealing Systems are for use with fire doors requiring an edge seal to meet positive pressure code requirements. These systems are surface-applied to either the perimeter of the door frame or meeting edges of door pairs. Category "G" gaskets are usually intumescent material; this material will swell many times its original size during a fire and help contain the spread of fire by sealing the edges of the door. A category "G" gasket can be used as a smoke control gasket if it passes the UBC 7-2 (1997) Part II test for smoke.

Fire Test - Category J

Products that are positive pressure tested to determine that they do not contribute to flaming during a fire; they do not provide an edge-sealing system. Examples are gaskets used for sound, draft control or automatic door bottoms. A category "J" gasket can be used as a smoke control gasket only if it passes the UBC 7-2 (1997) Part II test for smoke control.

POSITIVE PRESSURE UBC 7-2 (1997) PART II



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part II of this symbol designates the test for smoke. Gaskets passing the smoke test receive a category

"H" rating. This symbol includes the Part I designation since all smoke control gaskets are positive pressure fire tested. Should the gasket pass the Part I fire test with a category "G" rating it would be a combination edge-sealing system and smoke seal gasket. If the gasket passes Part I with a category "J" rating, it is simply a smoke seal, that has passed the new positive pressure fire test to prove that it does not contribute to flaming during a fire.

Smoke and Draft Control Test - Category H



Assigned to gaskets that pass UBC 7-2 (1997) Part II. This is a separate second test that does not involve fire. All gaskets being tested for smoke must initially be fire tested under the requirements of UBC 7-2

(1997) Part I and receive a category "G" or "J" rating before being smoke tested. UBC 7-2 (1997) Part II tests the gasket for its ability to control smoke at an elevated temperature (400°F) (204°C). Smoke seals are used on the frames of doors that have an "S" on their fire-rating label to complete the installation instructions and satisfy the code requirements for a Smoke Control Door.

SOLUTIONS FOR FIRE SAFETY

Hager Companies is committed to life safety by providing sealing systems to contain fire and prevent the spread of smoke.

Gaps needed between a door and its frame for everyday operation create an area of vulnerability for the passage of flames and smoke during a fire. The rapid expansion of gases generated by a fire in a closed room creates an area of positive pressure that forces flames and smoke through these gaps. Hager Companies' Edge Sealing Systems and Smoke Seals create a barrier and aid in securing these areas during a fire.

Hager seals and gaskets stop the spread of fire and smoke. Benefits of Hager Companies' products include:

- Hager Companies' products have extensive approvals and listings from both ITS/Warnock Hersey and Underwriters Laboratories
- Choice of bulb seals or batwing smoke systems for smoke control doors requiring the addition of a smoke seal to validate their "S" label
- Option of co-extruded combination fire and smoke seals offer a superior alternative to separate application of a bulb seal and intumescent edge seal
- Cost-effective, easy retrofit installation solution for positive pressure code compliance
- Unique coordinated designs provide protection against fire and smoke
- Comprehensive range of sizes including customized requirements to suit all applications

In 1997, the International Council for Building Officials (ICBO) approved a change to the Uniform Building Code (UBC) regarding fire-testing methods.

This code change requires fire doors to be fire tested under positive pressure instead of neutral pressure. The main difference between tests performed under positive pressure and neutral pressure is the location of the neutral plane and the introduction of positive pressure as part of the test. Under the new code, everything above 40" (1016 mm) is subject to testing under positive pressure conditions.

The change in the test method has led to a generation of gaskets that incorporate intumescent material to address the demands of positive pressure. Along with these new products are new terminology and new code requirements.





Below are some key phrases that indicate positive pressure requirements:

- UBC 7-2 (1997) UBC Fire Test
- IBC 2003 (and later) International Building Code
- UL 10-C Positive Pressure Fire Test
- ASTME-2074-00 Fire Test of Door Assemblies
- Shall meet positive pressure requirements
- Intumescent seals imply positive pressure

Over 35 states have adopted the new positive pressure requirements. The www.iccsafe.org web site of the International Code Council (ICC) has a map of code adoption by state. This site is frequently updated and by clicking on a state, you can see what states have adopted the new positive pressure requirements. The www.iccsafe.org site also provides information on all other building codes and where available, lists enforcement at the local level.

Basic Requirements for an Opening to be Classified as Fire Rated

The wall, frame, and door all have to be fire rated. This is self-explanatory, as it would not make much sense to put a labeled door in a non-rated wall just as you cannot put a non-labeled door in a rated wall and call the opening fire rated. The purpose of a fire rated opening is to retard fire for a specific length of time. All components of the opening have to be rated. When an opening is also required to be "S" (smoke) labeled then additional gasketing items will be required to comply with the code.

Every swinging fire door must have a listed and labeled selflatching device to engage the strike to be fire rated. Push and pull plates cannot be used on a fire rated door. The door has to latch into the frame when closed so it stays closed. The latch prevents the door from opening during a fire if something falls against it. This means you must use at least a passage lock set on the door. Deadbolts cannot be used in place of a latching device because they are not self-latching.

Steel ball bearings and steel based hinges must be used on fire rated doors. Brass, bronze and other base materials cannot be used, unless tested as an assembly. Continuous hinges are allowed as tested. Plain bearing hinges cannot be used. Bearing hinges minimize wear from everyday operation and help prevent door sag. During a fire, the door needs to operate smoothly so closers and latching devices work properly. Some manufacturers may provide doors with non-bearing type hinges only when they are part of the listed assembly.

The door must be self-closing to be fire rated. A properly sized, listed and labeled closing device is part of basic fire door hardware requirements. If the door is left open during a fire, then that opening cannot retard the fire as it was meant to do; the door needs to close after somebody passes through it. This is usually done by a door closer or, in some cases, spring hinges.

Fire rated and listed louvers can be installed on fire doors but they have to be a fusible link type. This means that once the heat from the fire reaches a certain temperature (usually $105^{\circ}F$) (41° C), the fusible link will melt which causes the louver blades to close. This will help prevent the spread of fire. The maximum size for these louvers is 24" x 24" (610 x 610 mm). There is no glass allowed in a fire rated door if it has a louver and no louvers at all can be installed in a 3-hour rated door.

Basic fire door frames do not have hourly ratings. The exception being frames specially labeled for less than 3 hours. Frames bearing a recognized fire label may support a 3-hour, 1-1/2-hour, 3/4-hour or a 1/3-hour door. Frames used in masonry walls can be used with a maximum 3-hour fire door. While frames in drywall are intended for use with fire doors rated up to 1-1/2-hour, some manufacturers have tested for a 3-hour frame in drywall. Verify with your manufacturer for individual listing.

Remember, these are basic requirements. Codes differ from area to area and are enforced by the Authority Having Jurisdiction (AHJ)



The purpose of a fire rated opening is to retard fire for a specific period of time.

The hourly designation indicates the duration for the fire test exposure and is known as the fire protection rating.

A label: 3-hour rating (for a 4-hour wall): These doors are used for openings in walls separating buildings that are joined together. They are metal doors and glass is allowed as tested. "A" label doors might not require additional seals applied to the frame, check with your individual manufacturer's procedure. Typically, a hollow metal door needs no added seals. Metal and some composite doors expand when heated. The door itself effectively seals the opening and often does not require the addition of an edge sealing system for the fire label. However, this door would still need a smoke gasket if it were functioning as a smoke control door.

B label: 1-1/2-hour rating (for a 2-hour wall): These doors are usually used for stairwell doors but are sometimes used at all the rated walls in a building (i.e., mechanical or electrical rooms). One-hundred square inches of exposed glass per door leaf is allowed. These are mostly wood composite and hollow metal doors. A "B" label 1-hour rating (1-hour wall) exists for use in buildings less than four stories tall; this rating currently only applies to wood doors. "B" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket; check with your manufacturer for availability.

C label: 3/4-hour rating (for a 1-hour wall): These doors are used for openings from a corridor into another room in the same building. 1,296 square inches of exposed glass is allowed per vision light. These are mostly wood composite doors. "C" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket, check with your manufacturer for availability.

D label: 1-1/2-hour rating (for a 2-hour wall): These are hollow metal doors used in exterior walls subject to severe fire exposure from outside the building. One-hundred square inches of exposed glass per door leaf is allowed. Check with your manufacturer's listing for the addition of a category "G" gasket to meet positive pressure requirements.

E label: 3/4-hour rating (for a 1-hour wall): These are hollow metal doors used in exterior walls subject to moderate to light fire exposure from the outside of the building. 1,296 square inches of exposed glass is allowed per vision light. Check with your manufacturers listing for the addition of a category "G" gasket to meet positive pressure requirements.

1/3-hour door: 20-minute rating (for a 1-hour wall): These doors do not have a letter designation for their rating and can be a wood or particle core door. 1,296 square inches of exposed glass is allowed per vision light. They are tested with or without hose stream. Doors tested without hose stream are specially labeled: "Twenty Minute-Rating Without Hose Stream". These doors are used on condo/apartment entrances, offices of a 1-hour rated corridor wall and other applications where smoke and draft control is the primary concern.

S Label: The letter "S" is the designation on a door's fire label indicating it can be used as a Smoke Control Door. Door manufacturers are allowed to put an "S" on a fire label when the door opening has passed the air infiltration test. The door opening does not become approved for a Smoke and Draft Control unit until an approved category "H" gasket system has been installed on the frame. The federal government, many owners and some states require at least some openings to be labeled for smoke as well as fire. This is not limited to 20-minutes but includes all fire labeled doors that are rated 20-minutes and above. The addition of an approved category "H" smoke control gasket completes the installation instructions necessary to validate the labeled door to become a Smoke Control Door.

All of the labels listed above have the capability of being both fire and smoke barrier openings, however, not all openings require smoke labels under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.



New and existing fire doors are classifed/labeled by one of the following designation systems:

👑 Hourly rating designation 👑 Alphabetical letter designation 👑 A combination of both

Common Applications for Hager Positive Pressure Edge Sealing & Smoke Seal Systems

Wall Rating	Door and Frame Rating	Door Application and Use	Door Types		Fire Doors Edge Sealing System	Smoke Doors "S" Label Smoke Seal	Fire & Smoke Doors Combination Seal	
4 Hr.	3 Hour (A Label) 180 Minute	Openings in fire walls and walls that divide a single building into fire areas	Hollow Metal Hollow Metal	Pairs Singles		721, 726, 736 721, 726, 736		
2 Hr.	11/2 Hour (B Label) 90 minute	Openings to stairwells and elevator shafts; vertical communication or egress through a building, including 2-hr. rated partitions providing horizontal fire separations	Wood Composite Hollow Metal Wood Composite Hollow Metal	Pairs Pairs Singles Singles	724, 729 — 724, 729 —	721, 726, 736 721, 726, 736 721, 726, 736 721, 726, 736	719, 720, 722, 734 — 719, 720, 722, 734 —	
2 Hr.	11/2 Hour (D Label) 90 minute	Opening where there is a chance of severe fire exposure from the exterior of the building	Hollow Metal Hollow Metal	Pairs Singles	_ _	721, 726, 736 721, 726, 736		
1 Hr.	*1 Hour (B Label) 60 Minutes	Doors that divide occupancies in a building (building less than 4 stories tall)	Wood Wood	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734	
*Currently rating only applies to wood doors.								
1 Hr.	3/4 Hour (E Label) 45 Minute	Opening in an exterior wall with the potential to be exposed to moderate to light fire from the outside of the building	Hollow Metal Hollow Metal	Pairs Singles	_	721, 726, 736 721, 726, 736	_ _	
1 Hr.	3/4 Hour (C Label) 45 Minute	Openings in walls or partitions between rooms and corridors	Wood Composite Wood Composite	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734	
*	***							
1 Hr.	*1/3 Hour	Openings in corridors where smoke	Wood/Particle Core		724, 729 724, 720	721, 726, 736	719, 720, 722, 734	

Wood/Particle Core Singles

724, 729

721, 726, 736

and draft control is required

*Does not have letter designation



20 Minute

719, 720, 722, 734

^{*}All of the labels listed above have the capability of being both fire and smoke barrier openings. However, not all openings require a smoke label under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.



SADDLE THRESHOLDS

To effectively seal out the elements, use in conjunction with a door bottom, sweep, shoe, or bumper strip.

Fasteners: $\#10 \times 1-1/2"$ sheet metal screws, other screw

types and anchors available upon request Available with Sure Step Non-Slip Abrasive

Avallable with Sure Step Non-Slip /

Coating

Notes:

• MIL finish thresholds are supplied with zinc

plated screws

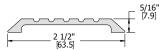
• Brass thresholds are supplied with brass screws

• Color anodized thresholds are supplied with screws plated to match

• Stainless steel thresholds are supplied with stainless steel screws

401S

Options:



Finishes: MIL, [

Certifications:

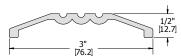
MIL, DBA, GLD, MIB

LISTED US DBC 7.2 BHM PART 1

Notes: MIB threshold will have a

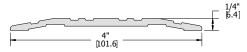
flat surface

402S



Finishes: Certifications: MIL, DBA, GLD

403S



4" [101.6]

Finishes: Certifications: MIL, DBA, GLD, MIB, US32D

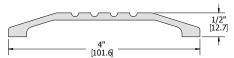
Certifications:

404S



Finishes: Certifications: MIL, DBA, GLD, MIB, US32D

410S

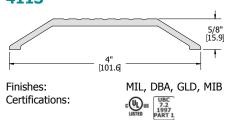


Finishes: Certifications: MIL, DBA, GLD, MIB

LUBC USE 1997 BHM4

CHARLES PARTIFIES

411S



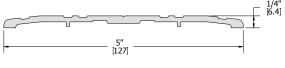
412S



Certifications:



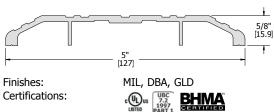
413S



Finishes: Certifications: MIL, DBA, GLD, MIB, US32D

LISTED USC 1997 BHMA
PART 1

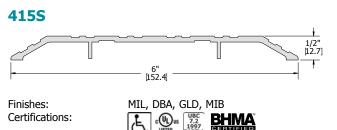
414S

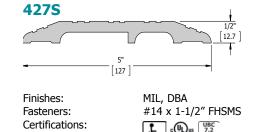


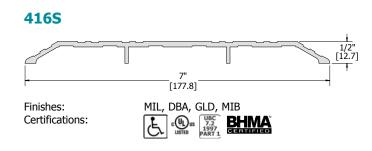


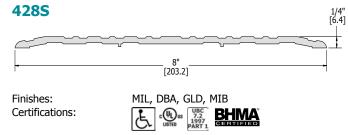


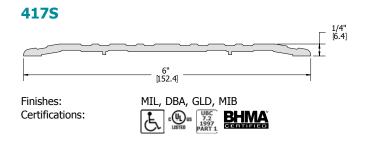
SADDLE THRESHOLDS (CONTINUED)

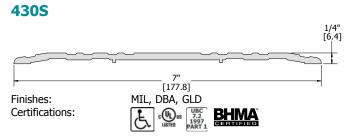


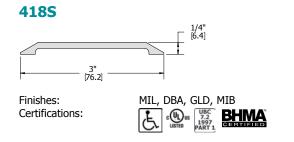


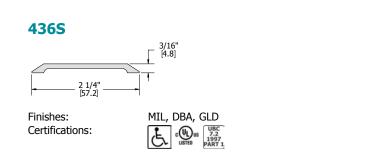


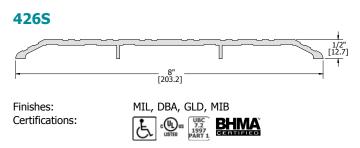


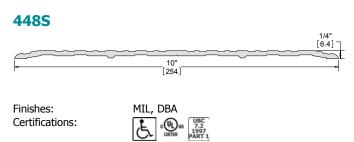








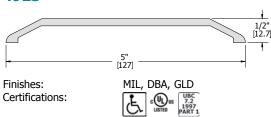






SADDLE THRESHOLDS (CONTINUED)

492S



THERMAL BARRIER SADDLE THRESHOLDS

High strength thermal barrier is permanently bonded in place to block the transfer of heat or cold. To provide a seal, use in conjunction with a door bottom, sweep, shoe or bumper strip.

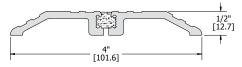
Fasteners:

 $\#10 \times 1-1/2$ " sheet metal screws, other screw types and anchors available upon request

Options: Notes: Available with Sure Step non-slip abrasive coating

- MIL finish
- MIL finish thresholds are supplied with zinc plated screws
 - Brass thresholds are supplied with brass screws
 - Color anodized thresholds are supplied with screws plated to match

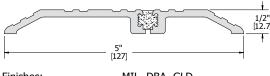
420S



Finishes: Certifications:



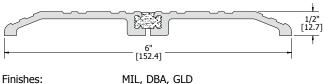
421S



Finishes: Certifications:



422S

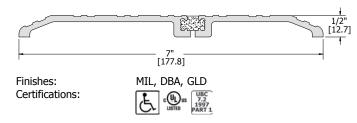


Certifications:

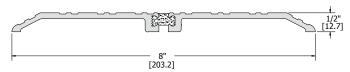




423S



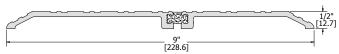
424S



Finishes: Certifications:



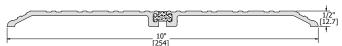
451S



Finishes: Certifications:



452S



Finishes: Certifications:







HALF SADDLE THRESHOLDS

Fasteners:

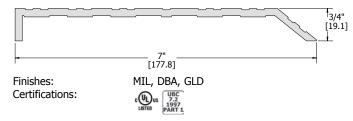
 $\#10 \times 1-1/2"$ sheet metal screws, other screw types and anchors available upon request

Options: Notes: Available with Sure Step non-slip abrasive coating

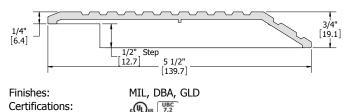
• MIL finish thresholds are supplied with zinc

- plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

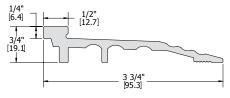
406S



407S

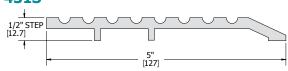


429S



Finishes: Certifications: MIL, DBA, GLD

431S



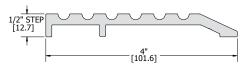
Finishes:

MIL, DBA, GLD, MIB

Certifications:



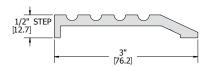
432S



Finishes: Certifications:



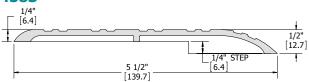
433S



Finishes: Certifications:



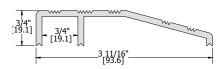
438S



Finishes: Certifications:



500S



Finishes: Certifications:

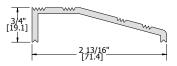






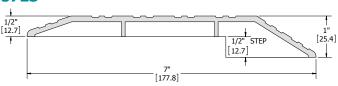
HALF SADDLE THRESHOLDS (CONTINUED)

501S



Finishes: Certifications: MIL, DBA, GLD

572S



Finishes: Certifications: MIL, DBA, GLD

ELEVATOR AND BUMPER STRIPS

Use in conjunction with a threshold

Fasteners: $#10 - 24 \times 5/8"$ Flat head self-tapping screws to

attach bumper strip directly to an existing

threshold

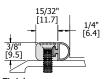
480S



Finishes:

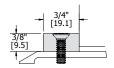
MIL, DBA, MIB

481S



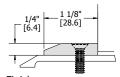
Finishes: Insert: Certifications: MIL, DBA, GLD V, N, S, W

483S



Finishes: Certifications: MIL, DBA, GLD

484S



Finishes: Certifications: MIL, DBA, GLD, MIB

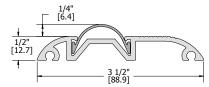




RESIDENTIAL THRESHOLDS

All thresholds appearing in this column are available with Sure Step Non-Slip Abrasive Coating

400S



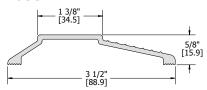
Finishes: MIL, DBA, GLD

Insert: Certifications:

Notes: Vinyl gasket eliminates the need for

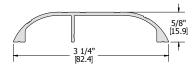
door shoe or sweeps

408S



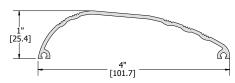
Finishes: Certifications: MIL, DBA, GLD

409S



Finishes: Certifications: MIL, DBA, GLD

419S



Finishes: Certifications: MIL, DBA, GLD



CARPET THRESHOLDS

Fasteners:

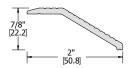
#10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request Available with Sure Step non-slip abrasive coating

Options: Notes:

• MIL finish thresholds are supplied with zinc

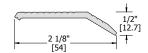
- plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

503S



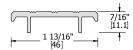
Finishes: Certifications: MIL, DBA, GLD

504S



Finishes: Certifications: MIL, DBA, GLD

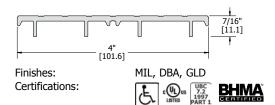
505S



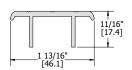
Finishes: Certifications: MIL, DBA, GLD



506S



508S



Finishes: Certifications: MIL, DBA, GLD



BUMPER THRESHOLDS

For use with outswinging doors to seal out the elements

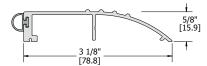
Fasteners:

#10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

Options: Notes: Available with Sure Step non-slip abrasive coating
• MIL finish thresholds are supplied with zinc

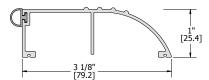
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

434S



Finishes: Insert: Certifications: MIL, DBA, GLD V, N, S, W

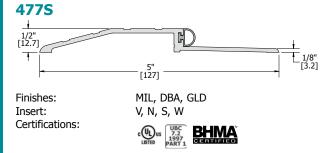
435S



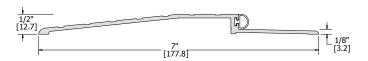
Finishes: Insert: MIL, DBA, GLD V, N, S, W

Certifications:

UBC 7.2 BHMA



478S



Finishes: MIL, DBA, GLD
Insert: V, N, S, W
Certifications:

USERS | USERS | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247 | 1.247

ADA RAMP THRESHOLDS

Ramp threshold that provides a 1:12 slope to meet the requirements of the Americans With Disabilities Act

Order: To create a ramp t

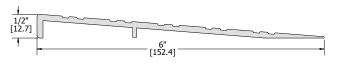
To create a ramp that is a combination of the

442S and 443S, order 444S

Fasteners: #10 x 1-1/2" Flat head sheet metal screws
Options: Available with Sure Step non-slip abrasive coating
Notes: • MIL finish thresholds are supplied with zinc

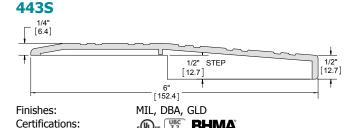
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

442S

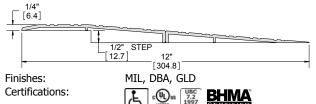


Finishes: Certifications: MIL, DBA, GLD

culus 7.2
1997
PART 1.



444S





FLOOR PLATE ASSEMBLY THRESHOLDS

Floor Plate components for modular threshold system. Used primarily for extra wide door frames or to cover expansion joints or floor joists Plates and plate supports are furnished without

Fasteners:

holes and fasteners unless specified

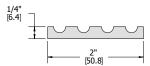
Options:

- Available with Sure Step non-slip abrasive

• Beveled Edges are available

Notes: Plates may be used fluted or smooth side up

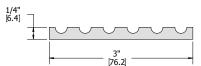
440S



Finishes: Certifications: MIL, DBA, GLD, MIB

<u>BHMA</u>

445S



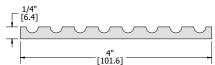
Finishes:

MIL, DBA, GLD, MIB

Certifications:



450S

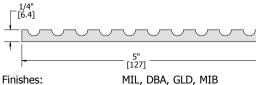


Finishes: Certifications:

MIL, DBA, GLD, MIB



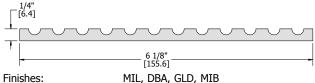
455S



Certifications:

MIL, DBA, GLD, MIB

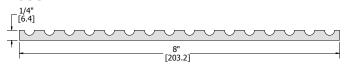
460S



Certifications:

MIL, DBA, GLD, MIB

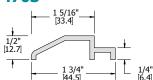
465S



Finishes: Certifications: MIL, DBA, GLD

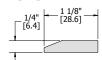


470S



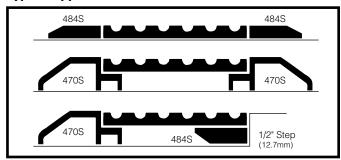
Finishes: Certifications: MIL, DBA, GLD, MIB

484S



Finishes: Certifications: MIL, DBA, GLD, MIB

Typical Applications







PANIC THRESHOLDS

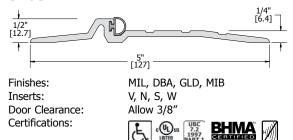
Use in conjunction with surface applied vertical rod exit device Fasteners: #10 x 1-1/2" flat head sheet metal screws, other

screw types and anchors available upon request Available with Sure Step non-slip abrasive coating

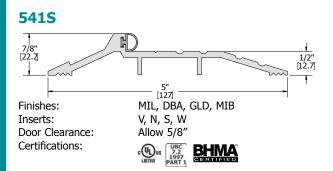
Options: Notes:

- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

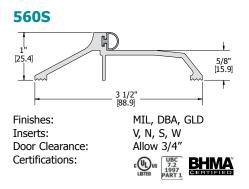
520S

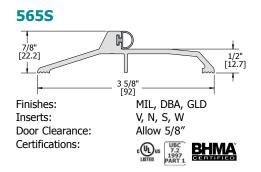


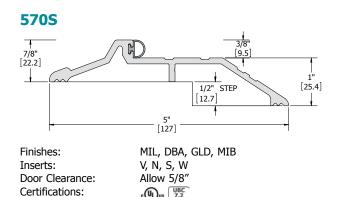
Finishes: MIL, DBA, GLD, MIB Inserts: V, N, S, W Door Clearance: Certifications: MIL, DBA, GLD, MIB V, N, S, W Door Clearance: Allow 3/4" CPU US USEC BHMA



552S 3/4" [19.1] 5" [127] Finishes: MIL, DBA, GLD, MIB Inserts: V, N, S, W Door Clearance: Allow 1/2" Certifications: \$\text{UMS}\$ \$\text{UMS



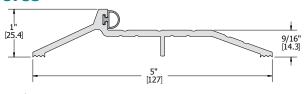






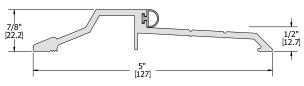
PANIC THRESHOLDS (CONTINUED)

575S



Finishes: MIL, DBA, GLD, MIB
Inserts: V, N, S, W
Door Clearance: Allow 11/16"

580S



Finishes: MIL, DBA, GLD
Inserts: V, N, S, W
Door Clearance: Allow 5/8"

Certifications:

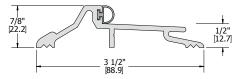
Allow 5/6

Certifications:

Certifications:

Certifications:

599S

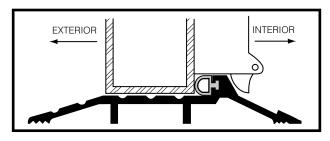


Finishes: MIL, DBA, GLD
Inserts: V, N, S, W
Door Clearance: Allow 5/8"
Certifications:

MIL, DBA, GLD
V, N, S, W

BHMA

Typical Applications



THERMAL BARRIER PANIC THRESHOLDS

Threshold for latching panic devices that have a thermal barrier permanently bonded in place to effectively block the transfer of heat or cold. Use in conjunction with surface applied vertical rod exit device.

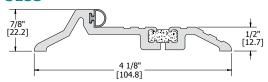
Fasteners: #10 x 1-1/2" Flat head sheet metal screws, other

Screw types and anchors available upon request
Options: Available with Sure Step non-slip abrasive coating

- Notes:

 MIL finish thresholds are supplied with zinc plated screws
 - Brass thresholds are supplied with brass screws
 - Color anodized thresholds are supplied with screws plated to match

515S



Finishes: MIL, DBA, GLD
Inserts: V, N, S, W
Certifications:

MIL, DBA, GLD

V, N, S, W

LUBER

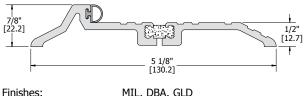
LUBTE

DATE:

1 UBC

1 UB

516S

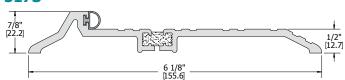


Finishes: MIL, DBA, GLD
Inserts: V, N, S, W
Certifications:

MIL, DBA, GLD
V, N, S, W

Logical State Control of the control o

517S



Finishes: MIL, DBA, GLD
Inserts: V, N, S, W
Certifications:

MIL, DBA, GLD
V, N, S, W

Certifications:

MIL, DBA, GLD
V, N, S, W

Certifications:

MIL, DBA, GLD
V, N, S, W





THERMAL BARRIER PANIC THRESHOLDS (CONTINUED)

518S



Finishes: Inserts: Certifications: MIL, DBA, GLD V, N, S, W

INTERLOCKING THRESHOLDS

Threshold interlocks with hook on the bottom of the door for a superior seal against wind and rain

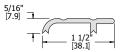
Fasteners:

 $\#10 \times 1-1/2$ " Flat head sheet metal screws, other screw types and anchors available upon request Available with Sure Step non-slip abrasive coating

Options: Notes:

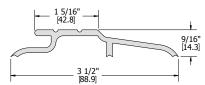
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match
- Thresholds are supplied with the 701S J-Hook

600S



Finishes: Certifications: MIL, DBA, GLD

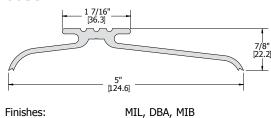
602S



Finishes: Certifications: MIL, DBA, MIB



603S



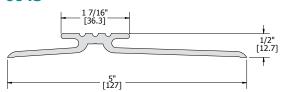
Certifications:

CUL US UBC 7.2 1997 PART 1



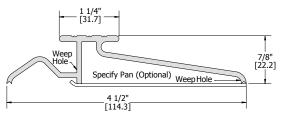
INTERLOCKING THRESHOLDS (CONTINUED)

604S

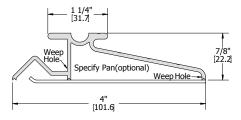


Finishes: Certifications: MIL, DBA, MIB

608S



612S



Finishes: Certifications: MIL, DBA, GLD (612S only), MIB

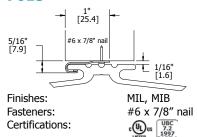
Notes:

 Water return feature designed to catch water and return it to the outside through weep holes

• Optional pan keeps water from coming in contact with the floor

Order: Specify "with pan" when ordering

701S



Notes: J-Hook interlocks with threshold to seal

against wind and rain

ABRASIVE CAST ALUMINUM THRESHOLDS

A heavy duty aluminum threshold with silicon carbide granules integrally cast into the surface. Ideal for high traffic areas where maximum durability is required. The abrasive, skid resistant surface works well under wet, dry or oily conditions.

Fasteners: #14 x 1-1/2" Flat head zinc plated sheet metal

screws with lead anchor

Cast-on anchors available upon request Options: Notes:

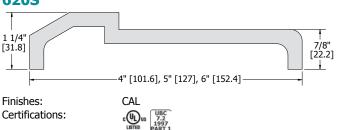
· Furnished with countersunk holes

· Cut with a reinforced abrasive plain surface disk, 1/8" thick, either aluminum oxide or silicon carbide

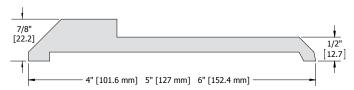
• Maximum length available is 8 feet, not available for floor closers

• Available in 4", 5" and 6" widths

620S



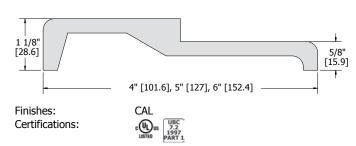
621S



Finishes: Certifications:



622S

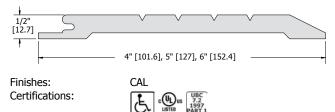




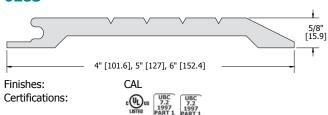


ABRASIVE CAST ALUMINUM THRESHOLDS (CONTINUED)

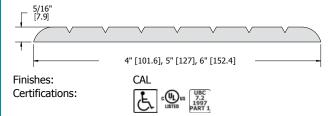




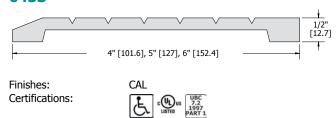
628S



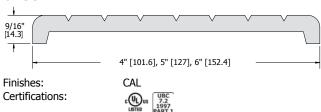
624S



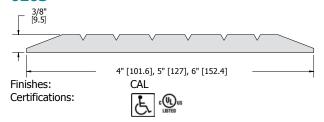
643S



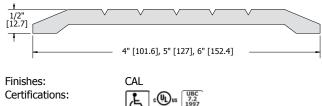
625S



626S









NOSINGS

A heavy duty safety nosing with silicon carbide granules integrally cast into the surface. Designed for new construction of poured concrete, Terrazzo or Steel Pan cement filled stairs. Prevents breaking and chipping of stair edge.

Fasteners: #14 x 1-1/2" flat head zinc plated sheet metal

screws with lead anchor

Cast-on anchors available upon request Options: Notes: • Furnished with countersunk holes

• Cross hatch surface

• Cut with a reinforced abrasive disk, 1/8" thick, either aluminum oxide or silicon carbide

• Maximum length available is 8', except 6" widths which are 7' maximum

• Available in 3", 4", and 6" widths

COVER PLATE ASSEMBLY THRESHOLDS

Used with floor closers either center or offset hung, single/double door application

Fasteners: Options:

Order:

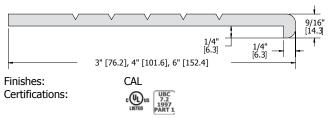
#10 x 1-1/2" flat head sheet metal screws, other screw types and anchors available upon request Available with Sure Step non-slip abrasive coating Specify closer manufacturer, offset, closer model number, thickness of door, width of door opening

and handing

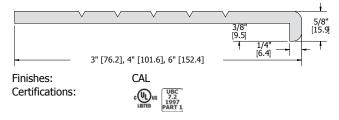
• MIL finish thresholds are supplied with zinc Notes: plated screws

- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

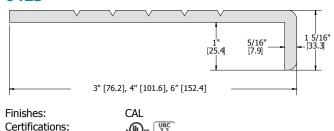
640S



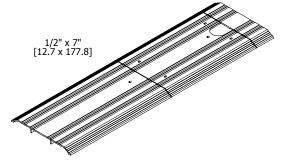
641S



642S



651S



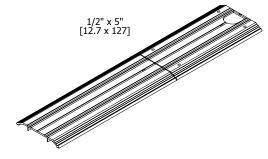
Finishes: Certifications: MIL, DBA, MIB Center hung



Notes:

· Without mitered ends

652S



Finishes: Certifications: MIL, DBA, MIB



Notes:

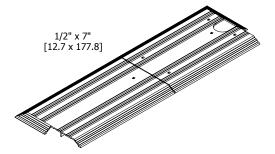
· Center hung · Without mitered ends





COVER PLATE ASSEMBLY THRESHOLDS (CONTINUED)

653S



Finishes: Certifications: MIL, DBA, MIB





Notes:

 Offset hung • With mitered ends

COVER PLATES

Cover Plates are used primarily to cover expansion joints and for situations requiring extra width or strength. Manufactured from solid cold rolled aluminum for extra durability.

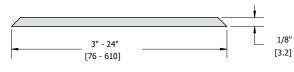
Furnished without holes and fasteners unless Fasteners:

specified

• Available to 96" in length Notes:

• Furnished with both edges beveled

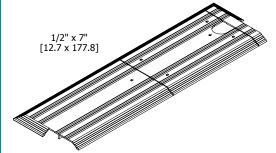
676S



Finishes: Certifications:



654S



Finishes: Certifications: MIL, DBA, MIB

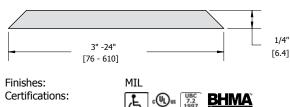




 Center hung Notes:

· With mitered ends

677S



THRESHOLD ANCHORS

Threshold Anchors provide a fully adjustable anchor for concrete installation. Special locking nut assemblies can be positioned to accommodate various mounting hole spacings.

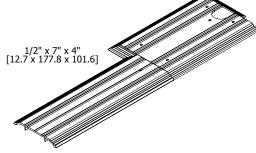
Order: Specify 1/4"-20 mounting holes for any threshold

intended for use with the 619S

1/4"-20 Flat head screws and locking nut Fasteners:

assembly per foot of anchor

655S



Certifications:

Finishes:

Notes:

MIL, DBA, MIB

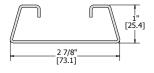




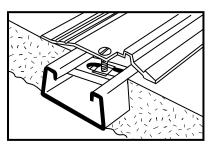
Offset hung

· With mitered ends

619S



Finishes:



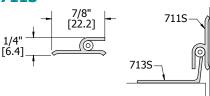
MIL



INTERLOCKING/OVERHEAD DRIP GUARDS

Fasteners: #6 x 5/8" pan head sheet metal screws

711S



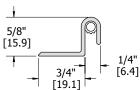
Finishes:

Insert: Certifications: MIL, DBA, GLD





718S

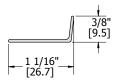


Finishes:

Inserts: Certifications: MIL, DBA, GLD



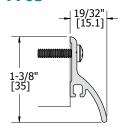
713S



Finishes: Certifications: DBA, GLD, MIB, CLR



770S



Finishes:

Insert:

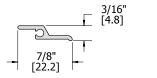
Certifications:

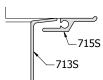
MIL, DBA, GLD

B, V



715S





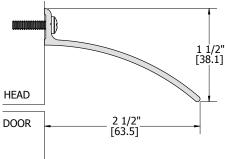
-717S

718S

Finishes: Certifications: DBA, GLD, MIB, CLR



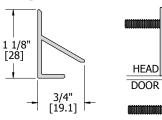
810S



Finishes: Certifications:



717S



Finishes: Certifications:







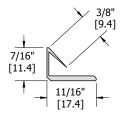


PRESS-ON WEATHERSTRIPPING

Combination Edge-Sealing System with Smoke Control

Field applied edge-sealing system gaskets with integrated smoke fin. Add to the frame of a B, C or 1/3 hour labeled fire door to comply with positive pressure requirements of UBC 7-2 1997 Part I. Also qualifies as smoke control gasketing (UBC 7-2 1997 Part II) necessary to complete installation instructions and validate the "S" label on a smoke control door.

719



Finishes: Category: Charcoal, Brown, Grey, Tan, White

H, G, J

Certifications:

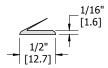




Notes:

- Requires 1/8" clearance
- Not recommended for door frames with 1/2" stop or less
- Recommend 3/16" backset door side hinge
- Intumescent material
- Will not degrade from carbon dioxide and ozone

720



Finishes:

Charcoal, Brown, Grey, Tan, White

Category:

Certifications:





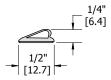


• Thin design for doors and frames with tight tolerances

- · Intumescent material
- Will not degrade from carbon dioxide and ozone

722

Notes:



Finishes:

Charcoal, Brown, Tan, White

Category: Certifications:





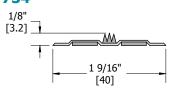




Notes:

- Requires 1/8" clearance. Recommend 3/16" backset - door side hinge
- Intumescent material
- Will not degrade from carbon dioxide and ozone

734



Finishes:

Category:

Charcoal, Brown, Grey, Tan

H, G, J

Certifications:

Notes:







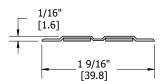
· Intumescent material

· Will not degrade from carbon dioxide and ozone

Edge-Sealing Systems

Field applied edge-sealing system gaskets. Add to the frame of a B, C or 1/3-hour labeled fire doors to comply with the new positive pressure requirements of UBC 7-2 1997 Part I.

724



Finishes: G

Charcoal, Brown, Grey, Tan, White

Category:

Certifications:

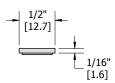


Notes:

Intumescent material

• Will not degrade from carbon dioxide and ozone

729



Finishes: Category:

Charcoal, Brown, Grey, Tan, White

Certifications:



Notes:

- · Intumescent material
- Will not degrade from carbon dioxide and ozone

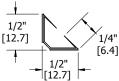


PRESS-ON WEATHERSTRIPPING (CONTINUED)

Smoke Seal Systems

Add to the frame of a smoke rated opening to comply with the requirements of UBC 7-2 1997 Part II, NFPA 105 and UL1784. The addition of a smoke seal is necessary to complete installation instructions and validate the "S" label of a smoke control door.

721



Finishes: Charcoal, Brown, Grey, Tan, White

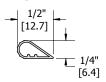
Category: Certifications: H, J c(UL)us





Thermoplastic Elastomer (TPE) material Notes:

726



Finishes: Charcoal, Brown, White

Category: H, J

Certifications:

CULUSTED









Notes: Silicone material

736



Finishes: Charcoal, White

Category: H, J

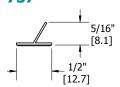
Certifications:





Notes: Silicone material

737



Finishes: Charcoal, White

Category: H, J

Certifications:

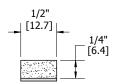




Notes: Silicone material

Draft Control Gaskets

725



Finishes: Charcoal Category: Certifications: շ<u>Մ</u>Ս սո

Sponge neoprene material Notes:

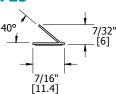
727



Finishes: Charcoal Category: 1 Certifications:

Notes: Thermoplastic Elastomer (TPE) material

728



Finishes: Charcoal, White Category:

Certifications:

Notes: Thermoplastic Elastomer (TPE) material





DOOR BOTTOMS

Provides a seal against weather. For best results, use in conjunction with a threshold.

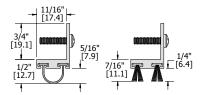
Fasteners:

#6 x 5/8" Pan head sheet metal screws

Notes:

- Lengths up to 48" are supplied 1/2" over their stated size to allow for fitting
- Lengths over 48" are supplied 1" over size
- "Cut to exact length" may be specified
- Constructed of strong extruded 6063-T5 aluminum

751S



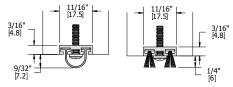
MIL, DBA, GLD Finishes: Inserts: V, N, S, W H, J Category:

Certifications:





772S



Finishes: MIL, DBA, GLD Inserts: V, N, S, W

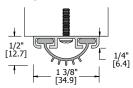
Category:

H, J

Certifications:



774S

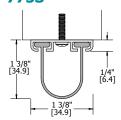


Finishes: MIL, DBA V, N Inserts:

Category: Certifications: H, J



775S



Finishes: MIL, DBA Inserts:

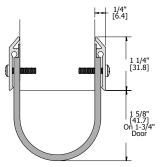
Category: Certifications:







776S



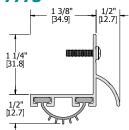
Finishes: CLR, DBA, GLD Inserts:

Category: Certifications:





777S



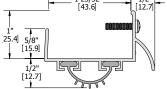
Finishes: MIL, DBA, GLD Inserts: V, N Category: H, J

Certifications:

778S







Finishes: MIL, DBA, GLD V, N Inserts:

Category: Certifications:



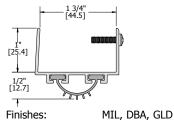






DOOR BOTTOMS (CONTINUED)

779S



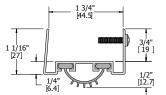
Finishes: Inserts:

Category: Certifications:





780S



Finishes:

MIL, DBA, GLD V, N

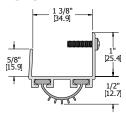
Inserts: Category: Certifications:







781S



Finishes: Inserts:

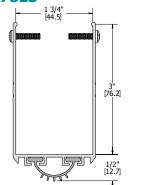
MIL, DBA, GLD V, N

Category: Certifications:





782S



Finishes:

MIL, DBA, GLD

Inserts:

Category: Certifications:



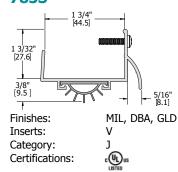
V, N



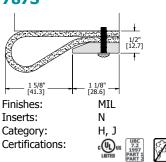




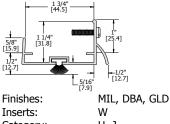
783S



787S



789S



Category: H, J Certifications:

AUTOMATIC DOOR BOTTOMS

Provides an outstanding seal against drafts, light, smoke and sound. For best results, use in conjunction with a threshold. When door fully closes, the gasket extends downward to provide a seal. Gasket retracts when door is opened.

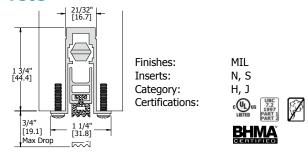
• #8 x 1-1/4" pan head sheet metal screws furnished with surface mount types

• #6 x 5/8" Pan head sheet metal screws furnished with mortise types and surface mount types

Notes:

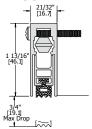
- Furnished exact length as stated. May be trimmed for fitting (2" maximum).
- Furnished with end cover and strike plates.

730S





AUTOMATIC DOOR BOTTOMS (CONTINUED)



Finishes: DBA, GLD, CLR

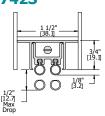
Inserts: N, S H, J

Category: Certifications:





742S



Finishes: MIL

N, V Inserts: Category:

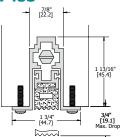
Certifications:



Notes:

For use on hollow metal door

743S



MIL Finishes: Inserts: N

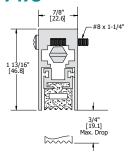
Category: Certifications:







747S



Finishes: CLR, DBA, GLD

Inserts: Category:

Certifications:

28





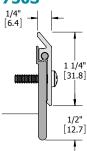
DOOR BOTTOM SWEEPS

Typically door bottom sweeps are used on the exterior of an outswing door Fasteners: #6 x 5/8" pan head sheet metal screws furnished with mortise types

Notes:

- MIL finish weatherstripping is supplied with zinc plated screws
- Brass weatherstripping is supplied with brass screws
- Color anodized weatherstripping is supplied with screws plated to match
- Stainless steel weatherstripping is supplied with stainless steel screws

750S



Finishes: DBA, GLD, MIB, CLR, US32D

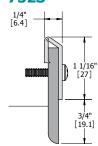
N, S Inserts: H, J

Category: Certifications:





752S



Finishes: MIL, DBA, GLD

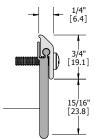
Inserts:

Category: Certifications:





753S



Finishes: MIL, DBA, GLD

Inserts: Ν Category:

Certifications:





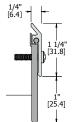


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DOOR BOTTOMS SWEEPS (CONTINUED)

754S



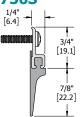
Finishes: DBA, GLD, CLR

Inserts: Ν

Category: H, J

Certifications: c (UL) us

756S

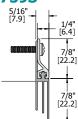


MIL, DBA, GLD Finishes:

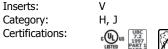
Inserts:

Category: H, J Certifications:

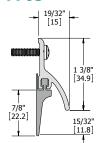
759S



Finishes: MIL, DBA, GLD



770S

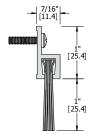


Finishes: MIL, DBA, GLD Inserts: B, V, or without insert

Category: H, J (with insert only) Certifications:



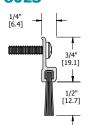
801S



MIL, DBA, GLD Finishes: Inserts:

Category: Certifications:

802S



MIL, DBA, GLD Finishes:

Inserts: Category:

Certifications:



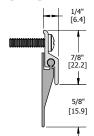


Finishes: MIL, DBA, GLD

Inserts: Category:

Certifications:

872S

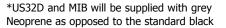


DBA, GLD, MIB*, CLR, US32D* Finishes:

Inserts: Ν

Category: H, J

Certifications: CUL US





JAMB WEATHERSTRIPPING

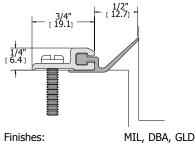
Fasteners: Notes:

#6 x 5/8" Pan head sheet metal screws • MIL finish weatherstripping is supplied

with zinc plated screws

- Brass weatherstripping is supplied with brass
- Color anodized weatherstripping is supplied with screws plated to match
- Stainless steel weatherstripping is supplied with stainless steel screws

785S

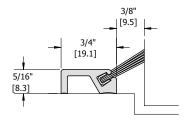


Inserts: Ν

Category: H, J Certifications:



800S



Finishes: MIL, DBA, GLD Inserts: Category:

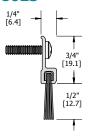
Certifications:







802S



Finishes: MIL, DBA, GLD Inserts: В

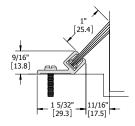
Category: H, J Certifications:







803S



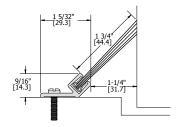
Finishes: MIL, DBA, GLD

В

Inserts: Category: Certifications:



808S



Finishes: MIL, DBA, GLD

Inserts: В Category:

Certifications:



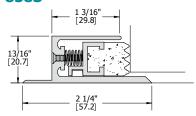






JAMB WEATHERSTRIPPING (CONTINUED)

858S



Finishes: MIL, DBA, GLD Inserts: Ν

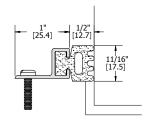
Category: H, J

Certifications: CULUSTED

Notes: • Use with stopless frames only

Spring adjustable

861S

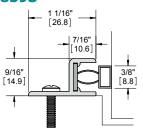


Finishes: MIL, DBA, GLD

Inserts: Ν Category: H, J

Certifications:

859S

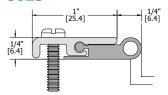


Finishes: MIL, DBA, GLD Category: H, J

Certifications: CULUS

Magnetic Notes:

862S

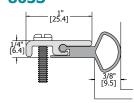


Finishes: DBA, GLD, CLR

Inserts: Ν Category: H, J

Certifications:



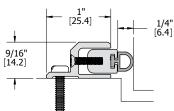


Finishes: DBA, GLD, CLR

Inserts: Ν Category: H, J

Certifications:

860S



Finishes: MIL, DBA, GLD Inserts: V, N, S, W H, J Category:

Certifications:





Notes:

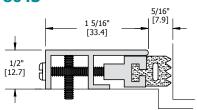






JAMB WEATHERSTRIPPING (CONTINUED)

864S



Finishes: DBA, GLD, CLR Inserts: Ν

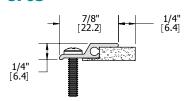
Category: H, J

Certifications:

Notes:



870S



Finishes: DBA, GLD, MIB, CLR, US32D

Inserts: Ν

Category: H, J

Certifications:

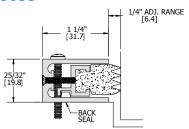
Notes:







865S



MIL, DBA, GLD Finishes: Inserts: Category: H, J

Certifications: CUL US UBC 7.2 1997 PART 1 PART 2

Notes:

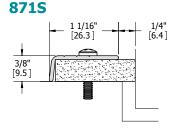
Adjustable



Inserts: Category:

Certifications:

Finishes:

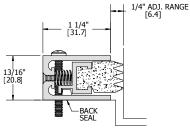


MIL, DBA, GLD

Ν H, J



866S

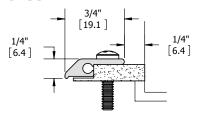


Finishes: MIL, DBA, GLD

Inserts: H, J Category: Certifications:

Notes: Spring adjustable

873S



Finishes: MIL, DBA, GLD

Inserts: Ν Category: H, J

Certifications:







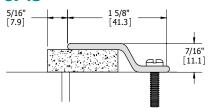
WEATHERSTRIPPING

THRESHOLDS & WEATHERSTRIPPING



JAMB WEATHERSTRIPPING (CONTINUED)

874S



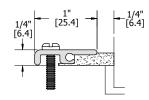
Finishes: MIL, DBA, GLD, US32D

Inserts: Ν

Category:

Certifications:

878S



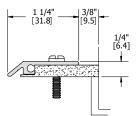
Finishes: DBA, GLD, CLR

Inserts: Ν

Category: H, J Certifications:



875S



DBA, GLD, MIB, CLR Finishes:

Inserts: N, S H, J Category:

Certifications:

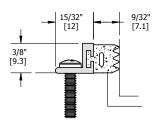








880S



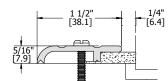
Finishes: MIL, DBA, GLD

Inserts: Category: H, J

Certifications:



877S



Finishes: MIL, DBA, GLD

Inserts: Category:

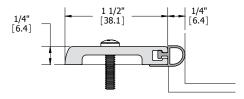
Certifications:







881S



MIL, DBA, GLD Finishes: V, N, S, W Inserts:

Category: H, J

Certifications:







Hardware compatible. Testing showed Notes:

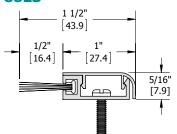
product to withstand 600 lbs per square inch

of force



JAMB WEATHERSTRIPPING (CONTINUED)

882S



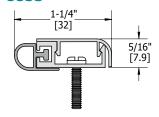
Finishes: Inserts: Category:

Certifications:

DBA, GLD, CLR

В H, J

885S



Finishes: Inserts:

Category:

DBA, GLD, CLR V, N, S, W, F

H, J

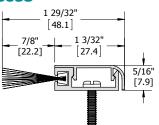
Certifications:







883S



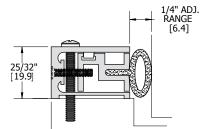
Finishes: Inserts:

Category: Certifications:

DBA, GLD, CLR В

H, J

887S



Finishes: Inserts:

Category:

Certifications:

Notes:

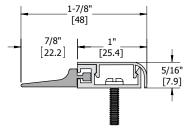


Ν

MIL, DBA, GLD

Adjustable

884S



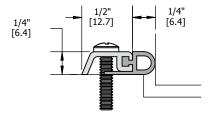
Finishes: Inserts:

Category: Certifications:

DBA, GLD, CLR ٧

H, J

890S



Finishes: Inserts:

Category: Certifications: MIL, DBA, GLD V, N, S

H, J

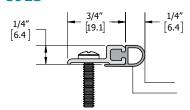






JAMB WEATHERSTRIPPING (CONTINUED)

891S



Finishes: Inserts:

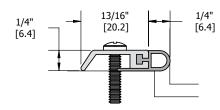
Category: Certifications: V, N, S, F H, J

MIL, DBA, GLD





896S



Finishes: Inserts: Category:

Certifications:

MIL, DBA, GLD V, N, S

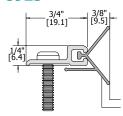
H, J







892S



Finishes:

Inserts: Category:

Certifications:

MIL, DBA, GLD

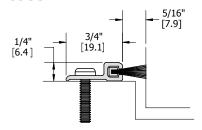
Ν

H, J





893S



Finishes:

Inserts: W

Category: Certifications:

MIL, DBA, GLD





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ASTRAGALS/MEETING STILES

Fire labeled Astragals & Meeting Stiles should only be mounted on pairs of doors with a gap that meets NFPA 80 2-3.1.7 (1/8'' +- 1/16'' for steel doors and not exceeding 1/8'' for wood doors)

Fasteners:

#6 x 5/8" Pan head sheet metal screws

Notes:

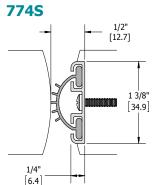
- MIL finish weatherstripping is supplied with zinc plated screws
- Brass weatherstripping is supplied with brass screws
- Color anodized weatherstripping is supplied with screws plated to match
- Stainless steel weatherstripping is supplied with stainless steel screws

772S 11/16" [17.5] 11/16" [17.5] 11/16" [17.5] 11/4" [6.4] 3/16" Mortise Finishes: MIL, DBA, GLD

Finishes:
Inserts:
Category:

Certifications:

V, W, N, S J



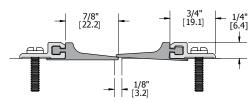
Finishes: MIL, DBA Inserts: V, N

Category: Certifications:





756S



Finishes: MIL, DBA, GLD

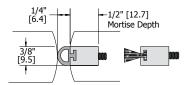
Inserts: V Category: H, J

Category: n, s

Certifications:

Notes: Order two (2) for a set

771S

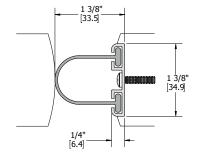


Finishes: MIL, DBA
Inserts: V, W, N, S
Category: J

Certifications:

Notes: Order two (2) for a set

775S



Finishes: MIL, DBA Inserts: V

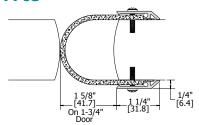
Category: H, J Certifications:





ASTRAGALS/MEETING STILES (CONTINUED)

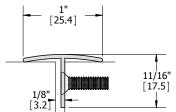
776S



Finishes: Inserts:

Category: Certifications: DBA, GLD, CLR

836S



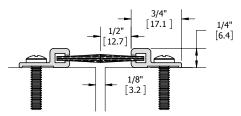
Finishes:

Category: Certifications: MIL, DBA, GLD

H, J

UBC 7.2 1997 PART 1 PART 2

802S



Finishes:

Inserts: Category:

Certifications:

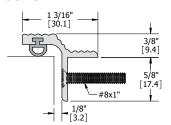
MIL, DBA, GLD

H, J

CUL US

Order two (2) for a set

837S



Finishes: Inserts:

Category: Certifications: MIL, DBA, GLD

W, V, N, S

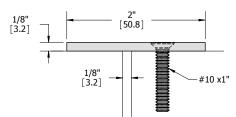
H, J





835S

Notes:



Finishes: Category: Certifications: MIL, DBA, GLD, US32D, USP

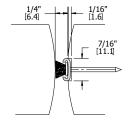




Notes:

- Maximum length = 10 feet
- Available with thrubolts

838S



Finishes: Inserts:

Category:

Certifications:







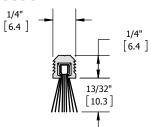
ASTRAGALS/MEETING STILES (CONTINUED)

MIL

В

J

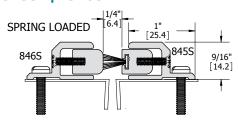
839S



Finishes: Inserts: Category:

Certifications:

845S | 846S



Finishes: Inserts:

Category: Certifications:

Notes:

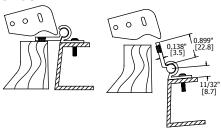
MIL, DBA, GLD W

J

Adjustable

• Order two (2) for a set

840S



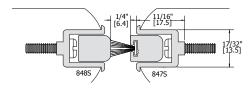
Finishes:

MIL, DBA, GLD

Inserts:

Notes: 96" maximum door height

8475 | 8485



Finishes:

Inserts: Category:

Certifications:

MIL, DBA, GLD

W

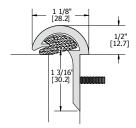
Notes:

• Adjustable

Spring loaded

• Mortise depth = 21/32"

844S

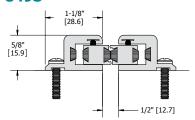


Finishes: Inserts: Category:

Certifications:

MIL, DBA

849S



Finishes: Notes:

MIL, DBA, GLD

• Magnetic

• 96" maximum door height

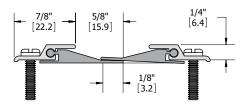
• Designed for use on 80" to 96" doors

• Sets shorter than 80" may not work properly



ASTRAGALS/MEETING STILES (CONTINUED)

872S



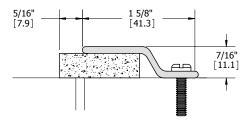
DBA, GLD, MIB, CLR, US32D Finishes:

Inserts: Category:

Certifications:

• Order two (2) for a set Notes:

874S



Finishes: MIL, DBA, GLD, US32D

Inserts: Ν

Category:

Certifications:



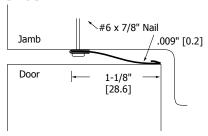
SPRING BRONZE

Constructed of high tempered 0.009" gauge bronze to provide a permanent spring. Hemmed edges.

#6 x 7/8" Nail, #4 wafer head drive nails Fasteners:

available for metal door frames

820S



Finishes: MIB

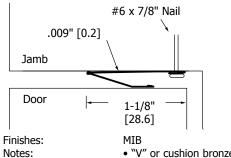
Notes: • Spring bronze weatherstrip, for wood and wood casement windows

• Supplied with nails; nails should be 1-1/2" on center



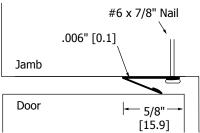
SPRING BRONZE (CONTINUED)

822S



- "V" or cushion bronze weatherstrip, for wood or metal doors
- Supplied with fasteners, specify wood or metal application
- Fasteners should be 3" on center

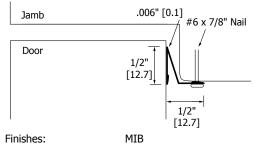
823S



Finishes:

MIB

824S









Hager Companies offers a full line of high quality, durable sliding door hardware that is the perfect choice for any by-pass, bi-fold, or pocket door application your project requires. With Hager sliding door hardware, you can choose from hundreds of fully tested products, including jump proof box tracks, self-aligning wheel systems, and complete sets and accessories to meet any need. Just as beneficial, every Hager sliding door hardware product is designed and manufactured to meet or exceed ANSI standards.



SLIDING DOOR

DOOR SELECTION CHART

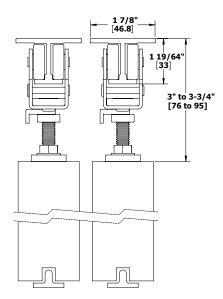
Maximum Door Weight Per Door	Series	Page Number	Packaged Sets	Track	Parts Bag	Description
By-Pass						
60#	9810	18-20	9514	9810	9814	Aluminum track
60#	9820	21-24	9614	9820	9540	Aluminum track, 1-3/4" fascia
60#	9840	25-28	9844	9840	9540	Steel track
100#	9602	10-13	N/A	9602	9575	Aluminum double box track
125#	9602	10-13	9675	9602	9679	Aluminum double box track
125#	9603	14-17	9673	9603	9679	Aluminum double box track with fascia
150#	9602	10-13	9676	9602	9680	Aluminum double box track
150#	9603	14-17	9674	9603	9680	Aluminum double box track with fascia
150#	9600	6-9	9611	9821	9892	Aluminum double box track
175#	9110	3-5	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9875	29-31	9875	9801	9827 hanger	Aluminum box track
250#	9885	32-35	9885	9803	9827 hanger	Aluminum double box track with 3-1/2" fascia
250#	9600	6-9	9612	9821	9893	Aluminum double box track
275#	9130	3-5	9130	9101	9129	Aluminum heavy duty I-beam track
Bi-Fold						
50#	9570	36-38	9570	9601/9599	9569	Aluminum or steel box track
125#	9800	39-41	9860	9821	9894	Aluminum box track
125#	9890	42-45	9890	9801	9827 & 9828	Aluminum box track
Pocket	·	•	•	,		
125#	9601	49-51	9678	9601	9632	Aluminum box track
150#	9601	49-51	N/A	9601	9633	Aluminum box track
175#	9110	3-5	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9801	52-54	9878	9801	9742	Aluminum heavy duty box track
250#	9901	55-57	9901	9821	9895	Aluminum heavy duty box track
275#	9130	46-48	9130	9101	9129	Aluminum heavy duty I-beam track
Universal Pock	et Door Frame	Kits				
125#	9631	58	9631-80	9599	N/A	Pocket door kit for 3'0" wide 6'8" high door
125#	9636	58	9636-80	9599	N/A	Pocket door kit for 3'0" wide 6'8" high door
150#	9630	58	9630-84	9599	N/A	Pocket door kit for 3'0" wide 7'0" high door
150#	9629	58	9629-96	9599	N/A	Pocket door kit for 3'0" wide 8'0" high door
150#	9628	58	9628-108	9599	N/A	Pocket door kit for 3'0" wide 9'0" high door
250#	9850	59-62	9850-96	9801	N/A	Pocket door kit for 4'0" wide 8'0" high door
250#	9850	59-62	9850-102	9801	N/A	Pocket door kit for 4'0" wide 8'6" high door
				-	•	*

Note: Sheet metal screws provided for wood or metal applications.



SLIDING DOOR





Interchanges with Grant 1210/1230 Series

Optional Bottom Track 9121 - 9122 1-3/4" MAX [44] 7/8" MIN [22] 5/8" [15.1]

Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9110 Series and 9130 Series

Heavy Duty Aluminum I-Beam Track and Hardware

Conforms to ANSI A156.14/Type: D8731



- For doors 1" 1-3/4" (25 mm 45 mm) thick
- 9110 Series for doors weighing up to 175 lbs (79.5 kg) per door
- 9130 Series for doors weighing up to 275 lbs (124.7 kg) per door
- Track is extruded aluminum jump-proof style with "I" shaped rails
- Hangers have 1" (25 mm) diameter wheels with steel ball bearings
- Order two sets per opening per by pass

Part Number	Description					
9110 Series Set Includes one (1) 9101 track and one (1) 9109 parts bag For doors up to 175 lbs (79.5 kg) per door						
9110-60	5' (1524 mm) By-Pass Set - For one 2'6" (762 mm) door					
9110-72	6' (1839 mm) By-Pass Set - For one 3'0" (914 mm) door					
9110-84	7' (2134 mm) By-Pass Set - For one 3'6" (1067 mm) door					
9110-96	8' (2438 mm) By-Pass Set - For one 4'0" (1219 mm) door					
9110-120	10' (3048 mm) By-Pass Set - For one 5'0" (1529 mm) door					
9110-144	12' (3658 mm) By-Pass Set - For one 6'0" (1829 mm) door					
9130 Series Set Includes one (1) 9101 track and one (1) 9129 parts bag For doors up to 275 lbs (125 kg)						
9130-60	5' (1524 mm) By-Pass Set - For one 2'6" (762 mm) door					
9130-72	6' (1839 mm) By-Pass Set - For one 3'0" (914 mm) door					
9130-84	7' (2134 mm) By-Pass Set - For one 3'6" (1067 mm) door					
9130-96	8' (2438 mm) By-Pass Set - For one 4'0" (1219 mm) door					
9130-120	10' (3048 mm) By-Pass Set - For one 5'0" (1529 mm) door					
9130-132	11' (3353 mm) By-Pass Set - For one 5'6" (1676 mm) door					
9130-144	12' (3658 mm) By-Pass Set - For one 6'0" (1829 mm) door					

TRACKS - Two sets required for by-pass opening - 0.125" (3 mm) thick aluminum

Part Number	Description				
Tracks for use with 9110 Series and 9130 Series					
9101-72	72" (1829 mm) Aluminum I-Beam Track				
9101-84	84" (2134 mm) Aluminum I-Beam Track				
9101-96	96" (2438 mm) Aluminum I-Beam Track				
9101-120	120" (3048 mm) Aluminum I-Beam Track				
9101-144	144" (3658 mm) Aluminum I-Beam Track				
9101-192	192" (4877 mm) Aluminum I-Beam Track				



SLIDING DOOR

9110 SERIES AND 9130 SERIES TRACK



9101

Aluminum I-Beam Track

Materials: Extruded aluminum 0.125" (3 mm) Gauge: Lengths: 72" (1829 mm) to 192"

(4877 mm)

Mounting holes are pre-Notes:

punched for ease of

installation

9110 SERIES AND 9130 SERIES PARTS BAGS



9109 Parts Bag

Includes two (2) 9102 2-wheel hangers and one (1) 9115 floor guide



9129 Parts Bag

Includes two (2) 9105 4-wheel hangers and one (1) 9115 floor guide

9110 SERIES AND 9130 SERIES COMPONENTS



9102

2-Wheel Hanger

Materials: Zinc plated steel Wheels: Nylon with steel ball

bearings

Hanger: 1-13/16" x 2" x 1-1/8"

(46 mm x 51 mm x 29 mm)

Bolt: 3/8" x 2-5/16"

(10 mm x 59 mm)

(Bolt not same as 9105)

1" x 3-1/2" x 3/16" Top Plate:

(25 mm x 89 mm x 5 mm)

Use with 9101 track, with doors weighing up to 175

lbs (79 kg)



9105

Notes:

4-Wheel Hanger

Materials: Zinc plated steel Wheels: Nylon with steel ball

bearings

4" x 2" x 1-3/4" Hanger:

(102 mm x 51 x 45 mm)

Bolt: 3/8" x 2-5/16"

(10 mm x 59 mm)

Top Plate: 1" x 3-1/2" x 3/16"

(25.4 mm x 89 mm x 5 mm)

• Use with 9101 track, with Notes: doors weighing up to 275

lbs (125 kg)

 Four wheel hanger is selfaligning to allow consistent

contact with track



9111

Fixed Bottom Door Guide

Materials: Zinc plated steel with

bronze roller

Guide: 2" x 3/4" x 3/32"

(51 mm x 19 mm x 2 mm)

17/32" x 1/2" Roller:

(13.5 mm x 13 mm)

• Door mortising is not Notes:

required

• Use with 9122 guide

channel



9110 SERIES AND 9130 SERIES COMPONENTS (CONTINUED)



9112

Stop

Materials: Zinc plated steel and rubber

1-5/8" x 1-1/2" x 5/8" x Stop: 7/8" (41 mm x 38 mm x

16 mm x 22 mm) Notes: Use with 9102 hanger



9122

Bottom Track

Materials: Extruded aluminum Gauge: 0.093 (2 mm) 48" (1219 mm) Lengths:

192" (4877 mm)

Channel: 5/8" x 3/4" (16 mm x 19 mm) Notes: Screws not provided

· Mortised into floor or surface mounted



9113

Stop

Materials: Zinc plated steel and rubber 1-5/8" x 1-1/2" x 5/8" x Stop:

1-3/4" (41 mm x 38 mm x

16 mm x 45 mm) Use with 9105 hanger Notes:



9909

Adjustable Guide

Materials: Steel with bright zinc Molded Celcon/Nylon Posts: Gauge: 0.060" (2 mm)

Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 mm to 44 mm) thick with

steel base, celcon, and nylon

posts



9114

Bottom Guide Rail

Materials: Aluminum

Guide: 7/8" x 1/2" (22 mm x 13 mm)

Lengths: 72" (1829 mm)

> 96" (2438 mm) 144" (3658 mm)

• Door bottom prep requires Notes:

1/4" (6 mm) wide kerf and 9/16" (14 mm) depth • Pre-punched for use with

flat head screws



9115

Bottom Door Guide

Materials: Die cast zinc aluminum

alloy

Guide: 7/8" x 3/4" x 3"

(22 mm x 19 mm x 76 mm) Door bottom prep requires

1/4" (6 mm) wide kerf and

9/16" (14 mm) depth



9121

Notes:

Bottom Door Guide

Materials: Zinc plated steel with

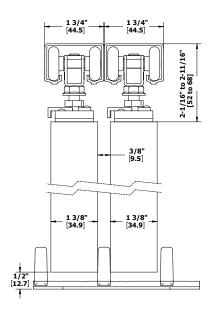
bronze roller

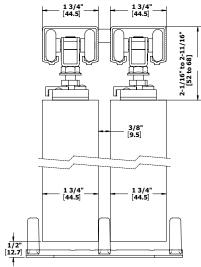
1" x 3-1/2" x 3/16" Guide:

(25 mm x 89 mm x 5 mm)

2-1/2" x 5/16" (64 x 8 mm) Post: Notes: Use with 9122 guide channel

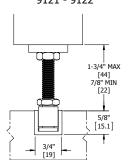






Interchanges with Stanley 125/250 Series and Johnson 100 Series

Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9611 Series and 9612 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 45 mm) thick (top figure)
- For doors 1-3/4" (45 mm) thick with tracks spaced 3/8" (10 mm) apart using 9573 (bottom figure)
- 9611 Series for doors weighing up to 150 lbs (68 kg) per door
- 9612 Series for doors weighing up to 250 lbs (113 kg) per door
- Quick release hangers allow easy door hanging and removal
- Hangers have 1" (25 mm) diameter wheels
- Universal extruded aluminum track interchanges with Stanley and Johnson hangers and track

Part Number	Description	
9611 Series Set Includes two (2) 9821 tracks and one (1) 9892 parts bag For doors up to 150 lbs (68 kg)		
9611-60	By-Pass Set - For two 30" (762 mm) doors	
9611-72	By-Pass Set - For two 36" (914 mm) doors	
9611-96	By-Pass Set - For two 48" (1219 mm) doors	
9612 Series Set Includes two (2) 9821 tracks and one (1) 9893 parts bag For doors up to 250 lbs (113 kg)		
9612-60	By-Pass Set - For two 30" (762 mm) doors	
9612-72	By-Pass Set - For two 36" (914 mm) doors	
9612-96	By-Pass Set - For two 48" (1219 mm) doors	

TRACKS - Two pieces required for by-pass - 0.06" (1.5 mm) thick aluminum

Part Number	Description	
9821-59	59" (1499 mm) Aluminum Box Track	
9821-71	71" (1803 mm) Aluminum Box Track	
9821-96	96" (2438 mm) Aluminum Box Track	
9821-144	144" (3658 mm) Aluminum Box Track	

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description	
9709-72	72" (1829 mm) Aluminum Fascia	
9709-96	96" (2438 mm) Aluminum Fascia	



9611 SERIES AND 9612 SERIES TRACK



9821

Aluminum Box Track

Materials: Extruded aluminum Gauge: 0.06" (2 mm) Track: 1-5/8" x 1-1/16" (41 mm x 27 mm) 59" (1499 mm) to 144" Lengths:

(3658 mm)

• Jump proof twin channel Notes:

design

9611 SERIES AND 9612 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) Depth: 5/16" (8 mm) 1/32" (.8 mm) Projection: Materials: Solid brass Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

• Built-in prong Notes:

design eliminates the need for screws or brads

9611 SERIES AND 9612 SERIES FASCIA



9709

Aluminum Fascia

Materials: Extruded aluminum 0.062" (1.6 mm) Gauge: Lip: 5/8" (16 mm) Fascia: 2-3/4" (70 mm) • 48" (1219 mm) Lengths:

• 60" (1524 mm) • 72" (1829 mm)

• 96" (2438 mm) Notes:

• Grooved fascia for painting

• Pre-punched holes for easy

installation



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm) 11/32" (9 mm) Depth: 3/32" (2 mm) Projection: Materials: Solid brass US3, US4, US5, Finishes:

> US10A, US15, US15A, US26, US26D, ABA

Notes: • Built-in prong design eliminates

the need for screws or brads

9611 SERIES AND 9612 SERIES PARTS BAGS



9892

Parts Bag

Includes four (4) 9824 4-wheel hangers with quick release top mount plate, one (1) 9909 guide, and one (1) 9573 spacer kit



9893

Parts Bag

Includes four (4) 9825 4-wheel ball bearing hangers with quick release top mount plate, one (1) 9909 guide, and one (1) 9573 spacer kit



9121

Bottom Door Guide

Zinc plated steel with Materials:

bronze roller

Guide: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Post: 2-1/2" x 5/16"

(64 mm x 8 mm)

Use with 9122 guide channel Notes:



9611 SERIES AND 9612 SERIES COMPONENTS (CONTINUED)



9122

Bottom Track

Extruded aluminum Materials: Gauge: 0.093 (2.4 mm) Lengths: • 48" (1219 mm)

• 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm) Channel:

 Screws not provided Notes:

· Mortised into floor or surface mounted



9815

Bumper Stop

Materials: Zinc plated steel and rubber Size: Rubber bumper - 1-1/4" (32 mm) x 1/2" (13 mm)

Notes: • Fits all Hager track styles

except 9101 • Screws onto track Included in bi-fold sets 9570 and 9890



9351

Guide

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm)

Notes: One piece fixed guide for

1-3/8" (35 mm) doors



9824

4-Wheel Hanger with Quick Release **Top Mount Plate**

Materials: Zinc plated steel Wheels: Self aligning to allow

consistent contact with

track

1" (25 mm) diameter Wheel: Notes: • Pre-lubricated Celcon

wheels

• For doors up to 150 lbs

(68ka)

• For use with 9821 track

• Quick release feature allows easy door hanging

and removal



9353

Adjustable Door Guide

High density polyethylene Materials: Adjustable guide from 3/4" Notes: (19 mm) to 1-3/8" (35 mm)



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

Rise: 3/4" (19 mm)

Notes: For mounting 9351 and

9353 floor guides over

carpeting



4-Wheel Ball Bearing Hanger with **Quick Release Top Mount Plate**

Materials: Zinc plated steel Wheels: Self aligning to allow

consistent contact with track with steel ball bearings

1" (25 mm) diameter Wheel: Notes:

• Pre-lubricated Celcon wheels

> • For doors up to 250 lbs (113 kg)

• For use with 9821 track

• Quick release feature allows easy door hanging

and removal



9573

Celcon Plastic Spacer Kit

Celcon plastic Materials: Notes: Includes screws

> • Properly spaces two single tracks for 1-3/4" (44 mm)

doors





9611 SERIES AND 9612 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Materials: Zinc plated steel and rubber

Gauge: 0.090" (2.3 mm) Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

(79.4 kg)

Keeps rear door pull

exposed

• Mounts on door

• Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc finish Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

Guide: 4-7/8" x 1-5/8" x 1-3/16"

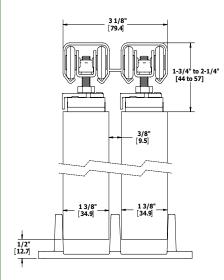
(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 mm to 44 mm) thick and

up to 275 lbs (125 kg)





Interchanges with Stanley 1755, 40-3664, 40-3855/BP150; Johnson 134F/138F; Grant 7000 Series, Cox 15-220 Series; and Lawrence 581 track, HD520hardware.

9675 Series and 9676 Series

Heavy Duty Aluminum Double Box Track and Hardware

Conforms to ANSI A156.14 Type: D8731, D8741, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 100 lbs (45 kg) with 9572 hangers
- 9675 for up to 125 lbs (57 kg) per door
- 9676 for up to 150 lbs (68 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four (4) 7/8" (22 mm) diameter wheels

Part Number Description		
9675 Series Set Includes one (1) 9602 track and one (1) 9679 parts bag For doors up to 125 lbs (57 kg)		
9675-48	By-Pass Set - For two 24" (610 mm) doors	
9675-60	By-Pass Set - For two 30" (762 mm) doors	
9675-72	By-Pass Set - For two 36" (914 mm) doors	
9675-96	By-Pass Set - For two 48" (1219 mm) doors	
9676 Series Set Includes one (1) 9602 track and one (1) 9680 parts bag For doors up to 150 lbs (68 kg)		
9676-48	By-Pass Set - For two 24" (610 mm) door	
9676-60	By-Pass Set - For two 30" (762 mm) door	
9676-72	By-Pass Set - For two 36" (914 mm) door	
9676-96	By-Pass Set - For two 48" (1219 mm) door	

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description	
Tracks for use with	Tracks for use with 9675 Series and 9676 Series	
9602-46	46" (1168 mm) Aluminum Double Box Track	
9602-58	58" (1473 mm) Aluminum Double Box Track	
9602-70	70" (1778 mm) Aluminum Double Box Track	
9602-94	94" (2388 mm) Aluminum Double Box Track	
9602-118	118" (2997 mm) Aluminum Double Box Track	
9602-142	142" (3607 mm) Aluminum Double Box Track	

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description	
9709-48	48" (1219 mm) Aluminum Fascia	
9709-60	60" (1524 mm) Aluminum Fascia	
9709-72	72" (1829 mm) Aluminum Fascia	
9709-96	96" (2438 mm) Aluminum Fascia	



9675 SERIES AND 9676 SERIES TRACK

9602

Heavy Duty Aluminum Double Box

Track

Lengths:

Materials: Extruded aluminum Gauge: 0.050" (1.3 mm)

Track: 1-1/16" x 3-1/8" (27 mm x 79 mm)

46" (1168 mm) to 142"

(3607 mm)

Notes: • Jump proof double twin

channel design

9675 SERIES AND 9676 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (24.5 mm)
Finger Pull Diameter: 3/4" (19 mm)
Depth: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass
Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads

9675 SERIES AND 9676 SERIES FASCIA



9709

Aluminum Fascia

 Materials:
 Extruded aluminum

 Gauge:
 0.062" (1.6 mm)

 Lip:
 5/8" (16 mm)

 Fascia:
 2-3/4" (70 mm)

 Lengths:
 72" (1829 mm) and

96" (2438 mm)

Notes: • Grooved fascia for painting

• Pre-punched holes for easy

installation



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm)
Finger Pull Diameter: 2-1/16" (52 mm)
Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass
Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads





9575

Parts Bag

For 100 lb (45 kg) doors - Includes four (4) 9572 hangers, one (1) 9909 guide



9679

Parts Bag

For 125 lb (57 kg) doors - Includes four (4) 9605 hangers, four (4) 9609 plates, and one (1) 9909 guide



9351

Guide

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm)

Notes: One piece fixed guide for

1-3/8" (35 mm) doors



9680

Parts Bag

For 150 lb (68 kg) doors - Includes four (4) 9606 ball bearing hangers and one (1) 9909 guide



9675 SERIES AND 9676 SERIES COMPONENTS (CONTINUED)



9353

Adjustable Door Guide

High density polyethylene Materials: Notes: Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



9606

4-Wheel Ball Bearing Hanger

Materials:

Steel with brass-tone dichromate finish

Wheel: Notes:

7/8" (22 mm) diameter

- Wheels are self aligning to allow consistent contact with track
- Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
- For doors up to 150 lbs (68 kg)
- Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601, 9602, or 9603 track



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

Rise: 3/4" (19 mm)

For mounting 9351 and Notes:

9353 floor guides over

carpeting



9572

4-Wheel Hanger and Door Bracket

Materials: Wheel: Notes:

Steel with bright zinc finish 7/8" (22 mm) diameter

- Wheels are self aligning to allow consistent contact with track
- Pre-lubricated Celcon wheels
- Includes wrench
- · For use on doors weighing up to 100 lbs (45 kg) each
- For use with 9599, 9601, 9602, and 9603 track



9605

4-Wheel Hanger

Materials:

Steel with brass-tone

dichromate finish

Wheel: Notes:

7/8" (22 mm) diameter

- Wheels are self aligning to allow consistent contact
- with track
- Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
- Can be used on pivot set
- For doors up to 125 lbs (57 kg)
- Use in conjunction with 9601, 9602, or 9603 track



9675 SERIES AND 9676 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop

Materials: Zinc plated steel and

rubber

Notes: • Fits all Hager track styles

except 9101
• Screws onto track
• Included in bi-fold sets 9570 and 9890



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Materials: Zinc plated steel and rubber Gauge: 0.090'' (2.3 mm) Stop: $1-1/4'' \times 1-1/4'' \times 7/8''$

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

(79 kg)

Keeps rear door pull

exposed

• Mounts on door

• Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

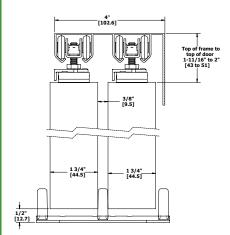
Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 mm to 44 mm) thick and up to 275 lbs (125 kg)





Interchanges with Stanley S1700F Series/BP150F; Johnson 134F/138F; and Lawrence F581 track, HDF520 Series sets.

9673 Series and 9674 Series

Heavy Duty Aluminum Track with 2-5/8" (66 mm) Fascia and Hardware Conforms to ANSI A156.14 Type: D8751, D8752



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 100 lbs (45 kg) with 9572 hangers
- 9673 for up to 125 lbs (57 kg) per door
- 9674 for up to 150 lbs (68 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails and intregal 2-5/8" (66 mm) fascia
- Hangers have four (4) 7/8" (22 mm) diameter wheels

Part Number	Description		
()	9673 Series Set Includes one (1) 9603 track and one (1) 9679 parts bag For doors up to 125 lbs (57 kg)		
9673-48	By-Pass Set - For two 24" (610 mm) doors		
9673-60	By-Pass Set - For two 30" (762 mm) doors		
9673-72	By-Pass Set - For two 36" (914 mm) doors		
9673-96	By-Pass Set - For two 48" (1219 mm) doors		
` '	9674 Series Set Includes one (1) 9603 track and one (1) 9680 parts bag For doors up to 150 lbs (68 kg) and For doors up to 250 lbs (113 kg)		
9674-48	By-Pass Set - For two 24" (610 mm) door		
9674-60	By-Pass Set - For two 30" (762 mm) door		
9674-72	By-Pass Set - For two 36" (914 mm) door		
9674-96	By-Pass Set - For two 48" (1219 mm) door		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use with	Tracks for use with 9673 Series and 9674 Series		
9603-48	48" (1219 mm) Aluminum Double Box Track		
9603-60	60" (1524 mm) Aluminum Box Track		
9603-72	72" (1829 mm) Aluminum Box Track		
9603-96	96" (2438 mm) Aluminum Box Track		
9603-120	120" (3048 mm) Aluminum Double Box Track		
9603-144	144" (3658 mm) Aluminum Double Box Track		



9673 SERIES AND 9674 SERIES TRACK



9603

Notes:

Heavy Duty Aluminum Double Box Track

Materials: Extruded aluminum 0.050" (1.3 mm) Gauge:

Track: 1-1/16" x 4" (27 mm x 102 mm)

Lengths: 48" (1219 mm) to 144"

(3658 mm)

• Grooved fascia for painting

• Jump proof double twin channel design

• One piece track with built-in

grooved fascia

9673 SERIES AND 9674 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) Depth: 5/16" (8 mm) 1/32" (.8 mm) Projection: Materials: Solid brass Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

• Built-in prong Notes:

design eliminates the need for screws or brads

9673 SERIES AND 9674 SERIES PARTS BAGS



9575

Parts Bag

For 100 lb (45 kg) doors - Includes four (4) 9572 hangers, one (1) 9909 guide



9679

Parts Bag

For 125 lb (57 kg) doors - Includes four (4) 9605 hangers, four (4) 9609 plates, and one (1) 9909 guide



9680

Parts Bag

For 150 lb (68 kg) doors - Includes four (4) 9606 ball bearing hangers, four (4) 9609 plates, and one (1) 9909 guide



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm) Depth: 11/32" (9 mm) Projection: 3/32" (2 mm) Solid brass Materials: Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads



9351

Guide

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm)

Notes: One piece fixed guide for

1-3/8" (35 mm) doors



9353

Adjustable Door Guide

Materials: High density polyethylene Notes: Adjustable guide from 3/4" -

1-3/8" (19 mm - 35 mm)



9673 SERIES AND 9674 SERIES COMPONENTS (CONTINUED)



9354

3/4" (19 mm) Riser

Fits 9351 and 9353

Steel with bright zinc finish Materials:

3/4" (19 mm) Rise:

For mounting 9351 and 9353 Notes:

floor guides over carpeting



9606

Notes:

4-Wheel Ball Bearing Hanger

For 150 lb (68 kg) doors

Steel with brass-tone Materials:

dichromate finish

Wheel: 7/8" (22 mm) diameter

> • Wheels are self aligning to allow consistent contact with track

• Pre-lubricated Celcon wheels mounted on steel ball bearing shafts

• For doors up to 150 lbs (68 kg)

 Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601

or 9602 track



9572

4-Wheel Hanger and Door Bracket

For 100 lb (45 kg) doors

Materials: Steel with brass-tone

dichromate finish

Wheel: 7/8" (22 mm) diameter Notes:

• Wheels are self aligning to allow consistent contact

with track

• Pre-lubricated Celcon

wheels

• Includes wrench

 For use on doors weighing up to 100 lbs (45 kg) each

• For use with 9599, 9601, 9602, and 9603 track



9605

4-Wheel Hanger

For 125 lb (57 kg) doors

Materials: Steel with brass-tone

dichromate finish

Wheel: Notes:

7/8" (22 mm) diameter

 Wheels are self aligning to allow consistent contact

with track

• Pre-lubricated Celcon

wheels

• For doors up to 125 lbs

(57 kg)

• Use in conjunction with 9601 or 9602 track





9673 SERIES AND 9674 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop

Materials: Zinc plated steel and

rubber

Notes: • Fits all Hager track styles except 9101

Screws onto track
Included in bi-fold sets 9570 and 9890



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Materials: Zinc plated steel and

rubber

Gauge: 0.090" (2.3 mm) Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

(79.4 kg)

Keeps rear door pull

exposed

• Mounts on door

• Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc finish Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

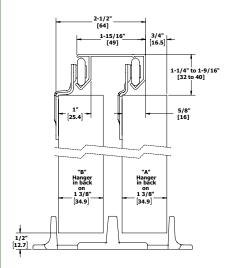
Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 mm to 44 mm) thick and up to 275 lbs (125 kg)





Interchanges with Stanley 40-3230, 40-3240, 40-3260, BP60/BP75-02 and Cox 12-200 Series.

9514 Series and 9583 Series

Aluminum Track and Hardware Conforms to ANSI A156.14 Type: D8742



- For doors 3/4" 1-3/8" (19 mm 35 mm) thick
- Up to 60 lbs (27 kg) per door with single wheel hangers 9400 or 9401
- Up to 75 lbs (34 kg) per door with twin wheel hangers 9202 or 9203
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have 7/8" (22 mm) diameter wheels

Part Number	Description		
•	9514 Series Set (for two doors) Includes one (1) 9810 track and one (1) 9814 parts bag		
9514-48	By-Pass Set - For two 24" (610 mm) doors		
9514-60	By-Pass Set - For two 30" (762 mm) doors		
9514-72	By-Pass Set - For two 36" (914 mm) doors		
9514-96	By-Pass Set - For two 48" (1219 mm) doors		
9583 Series Set (for three doors) Includes one (1) 9810 track, two (2) 9400 hangers, four (4) 9401 hangers, two (2) 9353 guides, and three (3) 2610 pulls			
9583-96	By-Pass Set - For three 32" (813 mm) doors		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use with	Tracks for use with 9514 Series and 9583 Series		
9810-46	46-3/8" (1178 mm) Aluminum Box Track		
9810-58	58-3/8" (1483 mm) Aluminum Box Track		
9810-70	70-3/8" (1788 mm) Aluminum Box Track		
9810-93	93-3/8" (2371 mm) Aluminum Box Track		
9810-120	120" (3048 mm) Aluminum Box Track		
9810-144	144" (3658 mm) Aluminum Box Track		

Hanger Selection Chart			
Door Thickness	3/4" (19 mm)	1" - 1-1/8" (25 - 29 mm)	1-3/8" (35 mm)
Front Hanger	В	В	Α
Rear Hanger	Α	В	В

Use this chart to select the correct hanger offset combination for your application.



9514 SERIES AND 9583 SERIES TRACK



9810 **Aluminum Track**

Materials: Extruded aluminum Gauge 0.050" (1.3 mm)

Track: 1" x 2" (25 mm x 51 mm) Lengths: 48" (1219 mm) to 144"

(3658 mm)

Notes: • For doors up to 75 lbs

(34 kg)

• One piece track



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm) Depth: 11/32" (9 mm) Projection: 3/32" (2 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads





9814 **Parts Bag**

Includes two (2) 9400 hangers, two (2) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9353 guide



9200* | 9201** **Single Wheel Hanger**

Zinc plated steel with Materials:

molded Celcon wheels

0.075" (2 mm) Gauge:

Wheel: 7/8" (22 mm) diameter Notes:

 For use on doors weighing up to 60 lbs. (27 kg)

• For use with 9810, 9820,

and 9840 track

 Side mounted with slot adjust offset

• Hanger is stamped "A" or "B" for easy identification

* 9200 is A offset of 3/8"

(9.5 mm)

** 9201 is B offset of 11/16"

(17.5 mm)





2610

Notes:

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) Depth: 5/16" (8 mm) Projection: 1/32" (.8 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA · Built-in prong

> design eliminates the need for screws or brads



9202* | 9203**

2-Wheel Hanger

Materials: Zinc plated steel with

molded Celcon wheels

0.075" (2 mm) Gauge:

7/8" (22 mm) diameter Wheel: Notes:

• For use on doors weighing up to 60 lbs. (27 kg)

> • For use with 9810, 9820, and 9840 track

 Side mounted with slot adjust offset

 Hanger is stamped "A" or "B" for easy identification

* 9202 is B offset of 11/16"

(17.5 mm)

** 9203 is A offset of 3/8" (9.5 mm)





9514 SERIES AND 9583 SERIES COMPONENTS (CONTINUED)



9351 Guide

Materials: High density polyethylene 4-9/16" x 1" x 11-3/16" Guide:

(116 mm x 25 mm x 46 mm)

One piece fixed guide for Notes:

1-3/8" (35 mm) doors



9865

Flush Cup Pull

1-31/32" (50 mm) Overall Diameter: Finger Pull Diameter: 1-19/32" (41 mm) Depth: 11/32" (9 mm) 5/64" (2 mm) Projection: Materials: Tan color ABS

plastic

Notes: Built-in prong

design eliminates the need for screws or brads



9353

9354

Rise:

Notes:

Materials:

Adjustable Door Guide

Materials: High density polyethylene Adjustable guide from 3/4" Notes:

3/4" (19 mm)

(19 mm) to 1-3/8" (35 mm)

Steel with bright zinc finish

For mounting 9351 and

9353 floor guides over



Door Stop

9880

Materials: Zinc plated steel and

rubber

0.090" (2.3 mm) Gauge: Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)

• For doors up to 175 lbs Notes:

(79.4 kg)

Keeps rear door pull

exposed

• Mounts on door

• Not included in sets



9400* | 9401**

3/4" (19 mm) Riser

Micro Adjust Hanger

Zinc plated steel with Materials:

carpeting

molded Celcon wheels

0.075" (2 mm) Gauge:

Wheel: 7/8" (22 mm) diameter

Notes: Side mounted with precise

cam adjustment

 For use on doors weighting up to 60 lbs. (27 kg)

• For use with 9810, 9820,

and 9840 track

• Hanger is stamped "A" or "B" for easy identification

* 9400 is A offset of 3/8"

(9.5 mm)

** 9401 is B offset of 11/16"

(17.5 mm)



9909

Adjustable Guide

Steel with bright zinc Materials: Molded Celcon/Nylon Posts: 0.060" (1.5 mm) Gauge:

Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" Notes:

(19 mm to 44 mm) thick and up to 275 lbs (124.7 kg)



9815

Bumper Stop

Materials: Zinc plated steel and

rubber

• Fits all Hager track styles Notes:

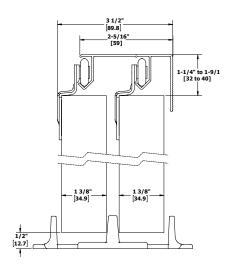
except 9101

Screws onto track

• Included in bi-fold sets 9570 and 9890







Interchanges with Stanley 8139 track, BP75-06, 8400 Series sets, 40-3340 and Cox 12-400 Series.

9614 Series and 9683 Series

Aluminum Track with 1-3/4" (44 mm) Fascia and Hardware Conforms to ANSI A156.14 Type: D8742



- For doors 1-3/8" (35 mm) thick
- Uses all B offset hangers
- Up to 60 lbs (27 kg) per door with single wheel 9201 or 9401 hangers
- Up to 75 lbs (34 kg) per door with twin wheel 9202 hangers
- Track is extruded aluminum jump-proof style with integral 1-3/4" (44 mm) fascia
- Hangers have one or two side mounted 7/8" (22 mm) diameter wheels

Part Number	Description	
9614 Series Set (for two doors) Includes one (1) 9820 track and one (1) 9540 parts bag		
9614-48	By-Pass Set - For two 24" (610 mm) doors	
9614-60	By-Pass Set - For two 30" (762 mm) doors	
9614-72	By-Pass Set - For two 36" (914 mm) doors	
9683 Series Set (for three doors) Includes one (1) 9820 track and one (1) 9540 parts bag		
9683-96	By-Pass Set - For three 32" (813 mm) doors	

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9614 Series and 9683 Series
9820-48	48" (1178 mm) Aluminum Double Box Track
9820-60	60" (1483 mm) Aluminum Box Track
9820-72	72" (1788 mm) Aluminum Box Track
9820-96	96" (2371 mm) Aluminum Box Track
9820-120	120" (3048 mm) Aluminum Double Box Track
9820-144	144" (3658 mm) Aluminum Double Box Track



9614 SERIES AND 9683 SERIES TRACK



9820

Aluminum Track with 1-3/4" (44 mm) Fascia

Materials: Extruded aluminum Gauge: 0.050" (1.3 mm)

Track: 1-3/4" x 3" (44 mm x 76 mm) Lengths: 48" (1219 mm) to 144"

(3658 mm)

Notes: • For doors up to 75 lbs

(34 kg)

For use on 1-3/8" (35 mm) doors onlyFor use with 7/8"

(22 mm) diameter hanger wheels

WIICCIS

• One piece track with built-in

smooth fascia



9843

Parts Bag

Includes four (4) 9202 hangers, two (2) 9865 pulls, and one (1) 9351 guide

9614 SERIES AND 9683 SERIES COMPONENTS



2610

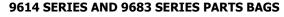
Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm)
Finger Pull Diameter: 3/4" (19 mm)
Depth: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass
Finishes: US3, US4, US5, US10A, US15,

US10A, US15, US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads.





9540

Parts Bag

Includes four (4) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9351 guide



9544

Parts Bag

Includes four (4) 9202 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9841

Parts Bag

Includes four (4) 9401 hangers, two (2) 9865 pulls, and one (1) 9351 guide



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm)
Finger Pull Diameter: 2-1/16" (52 mm)
Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass
Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads.



9842

Parts Bag

Includes four (4) 9401 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9614 SERIES AND 9683 SERIES COMPONENTS (CONTINUED)



9201

Single Wheel Hanger

Materials: Zinc plated steel with

molded Celcon wheels

0.075" (2 mm) Gauge:

Wheel: 7/8" (22 mm) diameter Notes:

• For use on doors weighing up to 60 lbs (27 kg)

• For use with 9810, 9820, and 9840 track

• Side mounted with slot adjust offset

• 9201 is B offset of 11/16"

(17.5 mm)



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

Rise: 3/4" (19 mm)

Notes: For mounting 9351 and

9353 floor guides over

carpeting



9202

Notes:

2-Wheel Hanger

Materials: Zinc plated steel with

molded Celcon wheels

Gauge: 0.075" (2 mm)

Wheel: 7/8" (22 mm) diameter

• For use on doors weighing

up to 60 lbs (27 kg)

• For use with 9810, 9820, and 9840 track

Side mounted with slot

adjust offset

• 9202 is B offset of 11/16"

(17.5 mm)



9401

Micro Adjust Hanger

Materials: Zinc plated steel with

molded Celcon wheels

0.075" (2 mm) Gauge:

7/8" (22 mm) diameter Wheel: Notes:

• Side mounted with precise

cam adjustment

• For use on doors weighting up to 60 lbs (27 kg)

• For use with 9810, 9820,

and 9840 track



9815

Bumper Stop

Materials: Notes:

Zinc plated steel and rubber

• Fits all Hager track styles except 9101

Screws onto track

• Included in bi-fold sets

9570 and 9890



9351

Guide

Notes:

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm)

One piece fixed guide for

1-3/8" (35 mm) doors



9353

Adjustable Door Guide

Materials: High density polyethylene Notes: Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



9614 SERIES AND 9683 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull

 $\begin{array}{ll} \text{Overall Diameter:} & 1\text{-}31/32\text{''} \ (50 \text{ mm}) \\ \text{Finger Pull Diameter:} & 1\text{-}19/32\text{''} \ (41 \text{ mm}) \end{array}$ Depth: 11/32" (9 mm) Projection: 5/64" (2 mm) Materials: Tan color ABS plastic

Notes: · Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Zinc plated steel and Materials:

rubber

0.090" (2.3 mm) Gauge:

1-1/4" x 1-1/4" x 7/8" Stop:

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

(79.4 kg)

Keeps rear door pull

exposed

Mounts on door

• Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc Molded Celcon/Nylon Posts: 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" Gauge:

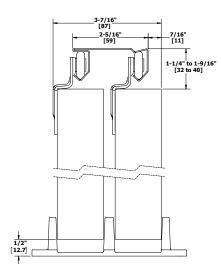
Guide:

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 to 44 mm) thick and up to 275 lbs (125 kg)





Interchanges with Stanley 8603 track and 8800 Series, BP75-01 and Cox 12-300 Series.

9844 Series and 9845 Series

Galvanized Steel Track and Hardware Conforms to ANSI A156.14

Type: D8742



- For doors 1-1/8" (29 mm) and 1-3/8" (35 mm) thick, use 9844 packaged set
- Optional for doors 1-1/8" (29 mm) and 1-3/4" (44 mm) thick, use 9840 track and refer to side mount selection chart for combinations of hangers
- Up to 60 lbs (27 kg) per door with single wheel 9401 hangers
- Up to 75 lbs (34 kg) per door with twin wheel 9202 hangers
- Track is zinc finishes steel jump-proof style
- Hangers have one or two side mounted 7/8" (22 mm) diameter wheels

Part Number	Description		
`	9844 Series Set (for two doors) Includes one (1) 9840 track and one (1) 9540 parts bag		
9844-48	By-Pass Set - For two 24" (610 mm) doors		
9844-60	By-Pass Set - For two 30" (762 mm) doors		
9844-72	By-Pass Set - For two 36" (914 mm) doors		
9844-96	By-Pass Set - For two 48" (1219 mm) doors		
9845 Series Set (for three doors) Includes one (1) 9840 track and one (1) 9540 parts bag			
9845-96	By-Pass Set - For three 32" (813 mm) doors		

TRACKS - 0.03" (0.8 mm) thick 23 gauge galvanized steel

Part Number	Description
Tracks for use with	h 9844 Series and 9845 Series
9840-46	46-1/2" (1181 mm) Galvanized Steel Track
9840-58	58-1/2" (1486 mm) Galvanized Steel Track
9840-70	70-1/2" (1791 mm) Galvanized Steel Track
9840-81	81-1/2" (2070 mm) Galvanized Steel Track
9840-93	93-1/2" (2371 mm) Galvanized Steel Track
9840-120	120" (3048 mm) Galvanized Steel Track
9840-144	144" (3658 mm) Galvanized Steel Track

Side Mount Plate Selection Chart			
Door Thickness	1-1/8" (29 mm)	1-3/8" (35 mm)	1-3/4" (44 mm)
Front Hanger	A or B	В	Α
Rear Hanger	Same as front	В	В
Door Gap	11/16"	9/16"	3/8"

Use this chart to select the correct hanger offset combination for your application.



9844 SERIES AND 9845 SERIES TRACK



9840

Galvanized Steel Track

Materials: Galvanized steel Gauge: 0.030" (.8 mm)

Track: 1" x 2-1/4" (25 mm x 57 mm) Lengths: 48" (1219 mm) to 144"

(3658 mm)

Notes: • For doors up to 75 lbs

(34 kg)

 For use on 1-3/8" (35 mm) doors and 1-3/4" (44 mm)

doors

For use with 7/8"
 (22 mm) diameter hanger wheels



9843

Parts Bag

Includes four (4) 9202 hangers, two (2) 9865 pulls, and one (1) 9351 guide

9844 SERIES AND 9845 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm)
Finger Pull Diameter: 3/4" (19 mm)
Depth: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass
Finishes: US3, US4, US5, US10A, US15, US15A, US26

US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads





9540

Parts Bag

9844 SERIES AND 9845 SERIES PARTS BAGS

Includes four (4) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9351 guide



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm)
Finger Pull Diameter: 2-1/16" (52 mm)
Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass
Finishes: US3, US4, US5,

US10A, US15, US15A, US26, US26D, ABA

Notes:

• Built-in prong design eliminates

the need for screws or brads



9544 Parts Bag

Includes four (4) 9202 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9814

Parts Bag

Includes two (2) 9400 hangers, two (2) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9353 guide



9841

Parts Bag

Includes four (4) 9401 hangers, two (2) 9865 pulls, and one (1) 9351 guide



9842

Parts Bag

Includes four (4) 9401 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9844 SERIES AND 9845 SERIES COMPONENTS (CONTINUED)



9201

Single Wheel Hanger

Zinc plated steel with Materials:

molded Celcon wheels

0.075" (2 mm) Gauge:

Wheel: 7/8" (22 mm) diameter Notes:

• For use on doors weighing up to 60 lbs (27 kg)

• For use with 9810, 9820, and 9840 track

 Side mounted with slot adjust offset

• 9201 is B offset of 11/16"

(18 mm)

• Hanger is stamped "A" or "B" for easy identification



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

3/4" (19 mm) Rise:

For mounting 9351 and Notes:

9353 floor guides over

carpeting



9401

Micro Adjust Hanger

Materials: Zinc plated steel with

molded Celcon wheels

0.075" (2 mm) Gauge:

Wheel: 7/8" (22 mm) diameter Notes: • Side mounted with precise

cam adjustment

• For use on doors weighting up to 60 lbs (27 kg)

• For use with 9810, 9820,

and 9840 track

• 9401 is B offset of 11/16"

(18 mm)

• Hanger is stamped "B" for

easy identification



9202

Two Wheel Hanger

Zinc plated steel with Materials:

molded Celcon wheels

0.075" (2 mm) Gauge:

7/8" (22 mm) diameter Wheel: Notes:

• For use on doors weighing up to 60 lbs (27 kg)

• For use with 9810, 9820,

and 9840 track • Side mounted with slot

adjust offset • 9202 is B offset of 11/16"

(18 mm)

• Hanger is stamped "A" or "B" for easy identification



9815

Bumper Stop

Materials: Zinc plated steel and

rubber

Notes: • Fits all Hager track styles

except 9101 Screws onto track

• Included in bi-fold sets

9570 and 9890



9351

Guide

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm)

One piece fixed guide for Notes:

1-3/8" (35 mm) doors



9353

Adjustable Door Guide

Materials: High density polyethylene Notes: Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



9844 SERIES AND 9845 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Materials: Zinc plated steel and

rubber

Gauge: 0.090" (2.3 mm)

Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

(79 kg)

Keeps rear door pull

exposed

Mounts on door

Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

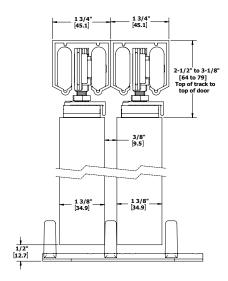
Guide: 4-7/8" x 1-5/8" x 1-3/16"

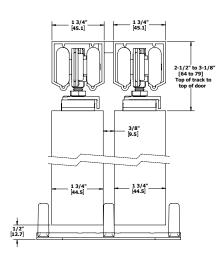
(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 to 44 mm) thick and up to 275 lbs (125 kg)



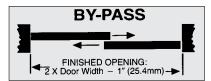




Interchanges with Stanley 57/58.

9875 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick (see top figure)
- For doors 1-3/4" (44 mm) thick, tracks are spaced 3/8" (10 mm) apart using 9574 (see bottom figure)
- Up to 250 lbs (113 kg) per panel
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four (4) 1-1/4" (32 mm) diameter wheels

Part Number	Description
9875 Series Set - Packaged set for doors up to 1-3/4" (44 mm) thick Includes two (2) 9801 tracks, four (4) 9827 hangers, one (1) 9574 spacer, and one (1) 9909 guide	
9875-48	By-Pass Set - 4' (1219 mm) opening for two doors
9875-60	By-Pass Set - 5' (1524 mm) opening for two doors
9875-72	By-Pass Set - 6' (1829) opening for two doors
9875-96	By-Pass Set - 8' (2438 mm) opening for two doors

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9875 Series
9801-72	72" (1829 mm) Aluminum Box Track
9801-96	96" (2438 mm) Aluminum Box Track
9801-120	120" (3048 mm) Aluminum Box Track
9801-144	144" (3658 mm) Aluminum Box Track
9801-192	192" (4877 mm) Aluminum Box Track

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description
9809-72	72" (1829 mm) 3-7/8" (98 mm) Aluminum Fascia
9809-96	96" (2438 mm) 3-7/8" (98 mm) Aluminum Fascia



9875 SERIES TRACK



9801

Heavy Duty Aluminum Box Track

Material Extruded aluminum Gauge: 0.075" (1.9 mm) 1-5/8" x 1-3/4" Track: (41 mm x 44 mm)

72" (1829 mm) to 192" Lengths: (4877 mm)

• For doors up to 250 lbs Notes:

(113 kg)

• Jump proof twin channel

design



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm) Depth: 11/32" (9 mm) Projection: 3/32" (2 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA Built-in prong

Notes:

design eliminates the need for screws or brads

9875 SERIES FASCIA



9809

Aluminum Fascia

Materials: Extruded aluminum Gauge: 0.072" (1.8 mm) 1-3/4" (44 mm) Lip: 3-7/8" (98 mm) Fascia: 72" (1829 mm) and Lengths: 96" (2438 mm) lengths

Notes: Grooved fascia for painting

• Pre-punched holes for easy

installation



9351 Guide

High density polyethylene Materials: 4-9/16" x 1" x 11-3/16" Guide:

(116 mm x 25 mm x 46 mm)

One piece fixed guide for Notes:

1-3/8" (35 mm) doors

9875 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) Depth: 5/16" (8 mm) Projection: 1/32" (.8 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads



9353

Adjustable Door Guide

Materials: High density polyethylene Notes: Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

Rise: 3/4" (19 mm)

For mounting 9351 and Notes:

9353 floor guides over

carpeting



9574

Track Spacer Kit

Materials: Celcon plastic Includes screws Notes:

• Properly spaces two single tracks for 1-3/4" (44 mm)

doors

For use with 9801 track



9875 SERIES COMPONENTS (CONTINUED)



9815 Bumper Stop

Materials: Zinc plated steel and

rubber

Notes: • Fits all Hager track styles

except 9101
• Screws onto track

• Included in bi-fold sets

9570 and 9890



9909

Adjustable Guide

Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4" (19 to 44 mm) thick and

(19 to 44 mm) thick and up to 275 lbs (125 kg)



9827

4-Wheel Ball Bearing Hanger

Materials: Zinc plated steel
Wheels: Self aligning to allow

consistent contact with track 1-1/4" (32 mm) diameter

Wheel: 1-1/4" (32 mm) diameter Notes: • For doors up to 250 lbs

(113 kg)

 Pre-lubricated Celcon wheels on steel shafts with steel ball bearings

Ball bearing axles

• For use with 9801 Track



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Door Stop

Materials: Zinc plated steel and

rubber

Gauge: 0.090" (2.3 mm) Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)

Notes: • For doors up to 175 lbs

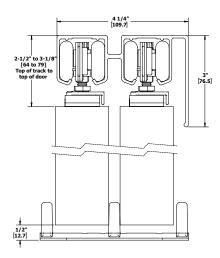
(79.4 kg)

• Keeps rear door pull

exposed

- Mounts on door
- Not included in sets





9885 Series and 9886 Series

Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia and Hardware Conforms to ANSI A156.14

Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 250 lbs (113 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails and integral 3-1/2" (88 mm) fascia
- Hangers have four (4) 1-1/4" (32 mm) diameter wheels
- Smooth finish fascia

Part Number	Description	
9885 Series Set Includes one (1) 9 bumper stop	803 track, four (4) 9827 hangers, one (1) 9909 guide, and one (1) 9815	
9885-48	By-Pass Set - 4' (1219 mm) opening for two doors	
9885-60	By-Pass Set - 5' (1524 mm) opening for two doors	
9885-72	By-Pass Set - 6' (1829 mm) opening for two doors	
9885-96	By-Pass Set - 8' (2438 mm) opening for two doors	
9886 Series Set Includes eight (8) 9827 hangers,and one (1) 9815 bumper stop		
9886-96	By-Pass Set - 8' (2438 mm) opening for four doors	

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9885 Series and 9886 Series
9803-48	4' (1219 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-60	5' (1524 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-72	6' (1829 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-96	8' (2438 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-120	10' (3048 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-144	12' (3658 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia



9885 SERIES AND 9886 SERIES TRACK



9803

Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia

Materials: Extruded aluminum 0.075" (1.9 mm) Gauge: Track: 3-1/2" x 4-1/2"

(89 mm x 114 mm)

Lengths: 48" (1219 mm) to 144"

(3658 mm)

• For doors up to 250 lbs Notes:

(113 kg)

• Jump proof twin channel

design

· One piece track with built-

in smooth fascia



9351

Guide

Materials: High density polyethylene Guide: 4-9/16" x 1" x 11-3/16"

(116 mm x 25 mm x 46 mm) Notes: One piece fixed guide for

1-3/8" (35 mm) doors



9353

Adjustable Door Guide

Materials: High density polyethylene Notes: Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)

9885 SERIES AND 9886 SERIES COMPONENTS



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm)
Depth: 5/16" (8 mm)
Projection: 1/32" (.8 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA

Notes: • Built-in prong

design eliminates the need for screws or brads



9354

3/4" (19 mm) Riser

Materials: Steel with bright zinc finish

3/4" (19 mm) Rise:

Notes: For mounting 9351 and 9353 floor guides over

carpeting



9815

Bumper Stop

Materials: Zinc plated steel and

rubber

Notes: • Fits all Hager track styles

> except 9101 Screws onto track · Included in bi-fold sets 9570 and 9890



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm)
Depth: 11/32" (9 mm) Projection: 3/32" (2 mm) Materials: Solid brass Finishes: US3, US4, US5,

> US10A, US15, US15A, US26, US26D, ABA

· Built-in prong Notes:

design eliminates the need for screws or brads



9827

Notes:

4-Wheel Ball Bearing Hanger

Materials: Zinc plated steel Wheels: Self aligning to allow

consistent contact with track 1-1/4" (32 mm) diameter Wheel:

• For doors up to 250 lbs

(113 kg) • Pre-lubricated Celcon

wheels on steel shafts with steel ball bearings

Ball bearing axles

• For use with 9801 track



9885 SERIES AND 9886 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9880

Notes:

Door Stop

Materials: Zinc plated steel and

rubber

Gauge: 0.090" (2.3 mm)

Stop: 1-1/4" x 1-1/4" x 7/8"

(32 mm x 32 mm x 22 mm)
• For doors up to 175 lbs

(79 kg)

Keeps rear door pull

exposed

Mounts on door

Not included in sets



9909

Adjustable Guide

Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

Guide: 4-7/8" x 1-5/8" x 1-3/16"

(124 mm x 41 mm x 30 mm)

Notes: For doors 3/4" to 1-3/4"

(19 mm to 44 mm) thick and

up to 275 lbs (125 kg)



BY-PASS ADDITIONAL COMPONENTS



9268

By-Pass Door Keyed Lock

Materials: Die cut zamac

• For doors 3/4" (19 mm) Notes: to 1-3/4" (44 mm) thick

• Lock cylinder fits in one 1"

(25 mm) hole

· Available keyed alike



9601

Aluminum Box Track

Materials: Extruded aluminum Gauge: 0.050" (1.3 mm) 1-1/16" x 1-3/8" Track:

(27 mm x 35 mm)

35" (889 mm) to 144" Lengths:

(2657 mm)

• Refer to series pages Notes:

for weight capacities

• Jump proof twin channel

design



9900

Reversible Side Mount Bracket

Steel with bright zinc Materials: Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm) Guide:

4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm)

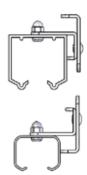
For 3/4" to 1-3/4" Size:

(19 mm to 44 mm) doors

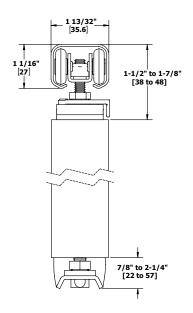
• Mounts at ends of track Notes:

and every foot

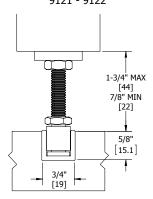
• Can be used with 9606, 9801, and 9821 track







Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9570 Series

Standard Duty Steel or Aluminum Box Track and Hardware Conforms to ANSI A156.14

Type: D8621, D8642, D8652, D8662



- For doors 1" 1-3/4" (25 mm 44 mm) thick
- Up to 50 lbs (57 kg) per panel bi-fold
- Up to 30 lbs (34 kg) per panel multi-fold
- Track is extruded aluminum jump-proof style with "I" beam track
- Hangers have four 7/8" (22 mm) diameter wheels
- Top and bottom pivots are heavy duty with solid brass bottom socket assembly for smooth, long lasting operation
- Note: Loose pin full mortise hinges 1741/1279 are recommended and not included in 9571 parts bag (3 required for 9162, 6 required for 9164)

Part Number	Description		
	9570 Series Set - For two doors Includes one (1) 9601 track and one (1) 9571 parts bag		
9570-36	Bi-Fold Set - 3' (914 mm) opening for two 18" (457 mm) doors		
	9570 Series Set - For four doors Includes one (1) 9601 track and two (2) 9571 parts bag		
9570-48	Bi-Fold Set - 4' (1219 mm) opening for four 12" (305 mm) doors		
9570-60	Bi-Fold Set - 5' (1524 mm) opening for four 15" (381 mm) doors		
9570-72	Bi-Fold Set - 6' (1829 mm) opening for four 18" (457 mm) doors		
9570-96	Bi-Fold Set - 8' (2438 mm) opening for four 24" (610 mm) doors		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description
Tracks for use with	h 9570 Series
9601-35	35" (889 mm) Aluminum Box Track
9601-47	47" (1194 mm) Aluminum Box Track
9601-59	59" (1499 mm) Aluminum Box Track
9601-63	63" (1600 mm) Aluminum Box Track
9601-71	71" (1803 mm) Aluminum Box Track
9601-96	96" (2438 mm) Aluminum Box Track
9601-120	120" (3048 mm) Aluminum Box Track
9601-144	144" (3658 mm) Aluminum Box Track



9570 SERIES TRACK



9601

Aluminum Box Track

Materials: Extruded aluminum
Gauge: 0.050" (1.3 mm)
Track: 1-1/16" x 1-3/8"
(27 mm x 35 mm)
Lengths: 35" (889 mm) to 144"

(2657 mm)

Notes: • Refer to series pages for weight capacities

• Jump proof twin channel

design



9122

9220

Hinge:

Notes:

Materials:

Hole Locations:

Bi-Fold Door Hinge

Bottom Guide Channel

Materials: Extruded aluminum
Gauge: 0.093 (2.4 mm)
Lengths: 48" (1219 mm) to 192"

(4877 mm) Channel: 5/8" x 3/4"

(16 mm x 19 mm)

Notes: • Screws not provided

finish

 Mortised into floor or surface mounted

Steel with bright zinc

1/2" (13 mm) from

to center of barrel
• Non-mortise and easy

to install

3" x 1" (76 mm x 25 mm)

the center lines of holes

9570 SERIES PARTS BAGS



9569

Parts Bag

Includes one (1) 9572 hanger, one (1) 9618 pivot set, one (1) 9559 aligner, one (1) 9558 knob, one (1) 9815 bumper stop, and three (3) 9220 hinges



9571

Parts Bag

Includes one (1) 9572 hanger, one (1) 9618 pivot set, one (1) 9559 aligner, one (1) 9558 knob, and one (1) 9815 bumper stop



9558

Wood Knob

Diameter: 1-1/2" (38 mm)
Materials: Solid wood

Notes: • Will accept paint or

stain





9121

Adjustable Bottom Door Guide

Materials: Zinc plated steel with bronze

roller

Guide: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Post: 2-1/2" x 5/16"

(64 mm x 8 mm)

Notes: Use with 9122 guide channel



9559

Aligner

Materials: Steel with brass-tone dichromate finish

Notes: • Keeps lead doors

aligned when closedUse one on each lead

door



9570 SERIES COMPONENTS (COMPONENTS)



9572

Notes:

Four Wheel Hanger

Materials: Steel with brass-tone dichromate finish

Wheel:

7/8" (22 mm) diameter • Wheels are self aligning to allow consistent contact

with track

• Pre-lubricated Celcon

wheels

• Includes wrench

• For use on doors weighing up to 100 lbs (45 kg) each

• For use with 9601, 9602, and 9603 track



9618

Pivot Set

Materials:

Zinc plated steel Notes:

• For doors up to 50 lbs.

(23 kg)

• Thumb wheel vertical

adjustment

• Top and bottom pivots require 3/8" (10 mm) diameter holes

• For use with 9601



9815

Bumper Stop

Materials: Zinc plated steel and rubber Notes:

• Fits all Hager track styles

except 9101

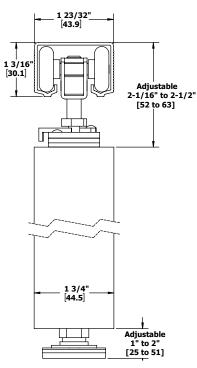
Screws onto track

• Included in bi-fold sets

9570 and 9890

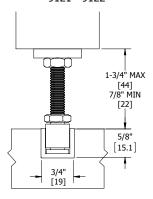
BI-FOLD





Interchanges with Stanley 125/250 Series and Johnson 100 Series.

Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9860 Series and 9861 Series

Heavy Duty Aluminum Box Track and Hardware **Conforms to ANSI A156.14**



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 125 lbs (57 kg) per panel bi-fold
- Up to 75 lbs (34 kg) per panel multi-fold
- Quick release hangers allow easy door hanging and removal
- Universal extruded aluminum track interchanges with Stanley & Johnson track and hangers
- Hangers have 1" (25 mm) diameter wheels

Part Number	Description		
9860 Series Set - For two doors Includes one (1) 9821 track, one (1) 9894 parts bag, and three (3) 1741 3.5" x 3.5" US2D hinges			
9860-30	Bi-Fold Set - 30" (762 mm) opening for two doors		
9860-36	Bi-Fold Set - 36" (914 mm) opening for two doors		
9860-48	Bi-Fold Set - 48" (1219 mm) opening for two doors		
	9861 Series Set - For four doors Includes one (1) 9821 track, two (2) 9894 parts bags, and six (6) 1741 3.5" x 3.5" US2D hinges		
9861-48	Bi-Fold Set - 48" (1219 mm) opening for four doors		
9861-60	Bi-Fold Set - 60" (1524 mm) opening for four doors		
9861-72	Bi-Fold Set - 72" (1829 mm) opening for four doors		
9861-96	Bi-Fold Set - 96" (2438 mm) opening for four doors		

TRACKS - 0.06" (1.5 mm) thick aluminum

Part Number	Description
Tracks for use with 9800 Series	
9821-59	59" (1499 mm) Heavy Duty Aluminum Box Track
9821-71	71" (1803 mm) Heavy Duty Aluminum Box Track
9821-96	96" (2438 mm) Heavy Duty Aluminum Box Track
9821-144	144" (3658 mm) Heavy Duty Aluminum Box Track



9860 SERIES AND 9861 SERIES TRACK



9821

Aluminum Box Track

Materials: Extruded aluminum
Gauge: 0.06" (1.55 mm)
Track: 1-5/8" x 1-1/16"
(41 x 27 mm)

Lengths: 59" (1499 mm) to 144"

(3658 mm)

Notes: • For doors up to 250 lbs

(113 kg)

• Jump proof twin channel

design



9122

Bottom Guide Channel

Materials: Extruded aluminum
Gauge: 0.093 (2.4 mm)
Lengths: 48" (1219 mm) to 192"

(4877 mm) Channel: 5/8" x 3/4"

(16 mm x 19 mm)

Notes:

• Screws not provided
• Mortised into floor or

surface mounted

9860 SERIES AND 9861 SERIES PARTS BAGS



9894

Parts Bag

Includes one (1) 9825 4-wheel ball bearing hanger with quick release top mount plate and one (1) 9828 bi-fold pivot set with one (1) 9815 bumper stop



9220

Bi-Fold Door Hinge

Materials: Steel with bright zinc

finish

Hinge: 3" x 1" (76 mm x 25 mm)

hole

Hole Locations: 1/2" (13 mm) from

the center lines of holes

to center of barrel

Notes: • Non-mortise and easy

to install

9860 SERIES AND 9861 SERIES COMPONENTS



1741

Full Mortise, Five Knuckle, Plain Bearing Hinge

- Steel with steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin
- 3.5" x 3.5"
- US2D



9558

Wood Knob

Diameter: 1-1/2" (38 mm) Materials: Solid wood

Notes: • Will accept paint or

stain



9121

Adjustable Bottom Door Guide

Materials: Zinc plated steel with bronze

roller

Guide: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Post: 2-1/2" x 5/16"

(64 mm x 8 mm)

Notes: Use with 9122 guide channel



9559

Aligner

Materials: Steel with brass-tone

dichromate finish

Notes: • Keeps lead doors

aligned when closed

• Use one on each lead

door



9860 SERIES AND 9861 SERIES COMPONENTS (CONTINUED)



9815 **Bumper Stop**

Materials:

Notes:

Zinc plated steel and rubber • Fits all Hager track styles

- except 9101 • Screws onto track
- Included in bi-fold sets 9570 and 9890



9825

Four Wheel Ball Bearing Quick Release Hanger

Materials: Wheels:

Zinc plated steel Self aligning to allow

consistent contact with track

Wheel: Notes:

1" (25 mm) diameter • For doors up to 125 lbs. (57 kg) for bi-fold

- applications
- Pre-lubricated Celcon wheels
- For use with 9821 track
- Quick release feature allows easy door hanging

and removal



9828

Bi-Fold Pivot Set

Materials:

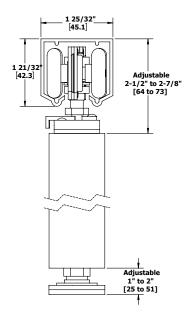
Zinc plated steel

Notes:

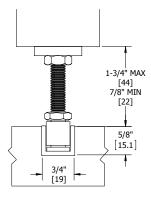
• For doors up to 125 lbs.

- (57 kg)
- Track pivot bearing mounts up inside track - no track cutting required
- Bottom pivot socket has ball bearing raceway
- Top and bottom pivots require 1/2" (13 mm) diameter and 1-3/4" (44 mm) deep holes
- For use with 9801 and 9821 track





Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9890 Series and 9891 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8621, D8641, D8651, D8661



- For doors 1-1/8" 1-3/4" (29 mm 44 mm) thick
- Quick release hanger allows easy door hanging and removal
- Up to 125 lbs (57 kg) per panel bi-fold
- Up to 75 lbs (34 kg) per panel multi-fold
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four 1-1/4" (32 mm) diameter wheels
- Top and bottom pivots are heavy duty with ball bearing bottom socket assembly for smooth, long lasting operation
- Note: 9890 Series requires 1741 loose pin hinges included

Part Number	Description	
9890 Series Set - For two doors Includes one (1) 9801 track, one (1) 9827 hanger, one (1) 9828 pivot, and three (3) 1741 3.5" x 3.5" US2D hinges		
9890-30	Bi-Fold Set - 30" (762 mm) opening for two doors	
9890-36	Bi-Fold Set - 36" (914 mm) opening for two doors	
9890-48	Bi-Fold Set - 48" (1219 mm) opening for two doors	
9891 Series Set - For four doors Includes one (1) 9801 track, one (1) 9827 hanger, one (1) 9828 pivot, and six (6) 1741 3.5" x 3.5" US2D hinges		
9891-48	Bi-Fold Set - 48" (1219 mm) opening for four doors	
9891-60	Bi-Fold Set - 60" (1524 mm) opening for four doors	
9891-72	Bi-Fold Set - 72" (1829 mm) opening for four doors	
9891-96	Bi-Fold Set - 96" (2438 mm) opening for four doors	

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description	
Tracks for use with 9890 Series and 9891 Series		
9801-72	72" (1829 mm) Aluminum Box Track	
9801-96	96" (2438 mm) Aluminum Box Track	
9801-120	120" (3048 mm) Aluminum Box Track	
9801-144	144" (3658 mm) Aluminum Box Track	
9801-192	192" (4877 mm) Aluminum Box Track	



9890 SERIES AND 9891 SERIES TRACK



9801

Heavy Duty Aluminum Box Track

Materials: Extruded aluminum
Gauge: 0.075" (1.9 mm)
Track: 1-5/8" x 1-3/4"
(41 mm x 44 mm)
Lengths: 72" (1829 mm) to 192"

(4877 mm)

Notes: • For doors up to 250 lbs

(113 kg)

• Jump proof twin channel

design



9566

Knob

Diameter: 1-1/4" (32 mm)
Projection: 1" (25 mm)
Materials: Die cast zinc

Finishes: US3, US4, US5, US10A,

US10B, US15, US15A, US26,

US26D

Fasteners: One (1) 8-32 x 1-3/4"

PPHMS and one (1) 8-32 x

2" PPHMS

Notes: For use on doors 3/4"

(19 mm) to 1-3/8" (35 mm)

thick

9890 SERIES AND 9891 SERIES COMPONENTS



1741

Full Mortise, Five Knuckle, Plain Bearing Hinge

- Steel with steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin
- 3-1/2" x 3-1/2" (89 mm x 89 mm)
- US2D



9567

Rose

Rose Diameter: 3/4" (19 mm)
Base Diameter: 1-3/4" (45 mm)
Projection: 15/32" (12 mm)
Materials: Die cast zinc

Finishes: US3, US4, US5, US10A,

US10B, US15, US15A,

US26, US26D

Fasteners: One (1) 8-32 x 1-3/4"

PPHMS and one (1) 8-32 x 2" PPHMS

Notes: For use doors 3/4"

(19 mm) to 1-3/8" (35 mm) thick



9121

Adjustable Bottom Door Guide

Materials: Zinc plated steel with bronze

roller

Guide: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Post: 2-1/2" x 5/16"

(64 mm x 8 mm)
Notes: Use with 9122 guide channel



9558

Wood Knob

Diameter: 1-1/2" (38 mm)
Materials: Solid wood

Notes: • Will accept paint or

ctain



9122

Bottom Guide Channel

Materials: Extruded aluminum
Gauge: 0.093 (2.4 mm)
Lengths: 48" (1219 mm) to 192"

(4877 mm)

Channel: 5/8" x 3/4" (16 mm x 19 mm)

Notes: • Screws not provided

 Mortised into floor or surface mounted



9559

Aligner

Materials: Steel with brass-tone

dichromate finish

Notes: • Keeps lead doors aligned

when closed

• Use one on each lead door



9890 SERIES AND 9891 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop

Materials: Notes:

Zinc plated steel and rubber
• Fits all Hager track styles

except 9101
• Screws onto track

• Included in bi-fold sets 9570 and 9890



9827

Four Wheel Ball Bearing Quick Release Hanger

Materials: Wheels:

Zinc plated steel Self aligning to allow

consistent contact with track

Wheel: Notes:

1-1/4" (32 mm) diameter

• For doors up to 125 lbs

(57 kg)

Pre-lubricated Celcon

wheels

• Ball bearing axles

• Dali Dearing axies

 For doors up to 250 lbs (113 kg) for by-pass and pocket applications

• For use with 9801 track

 Quick release feature allows easy door hanging

and removal



9828

Bi-Fold Pivot Set

Materials:

Zinc plated steel

Notes:

For doors up to 125 lbs

(57 kg)

• Track pivot bearing mounts up inside track - no track

cutting required

 Bottom pivot socket has hall bearing raceway

ball bearing racewayTop and bottom pivots

require 1/2" (13 mm) diameter and 1-3/4" (44 mm) deep holes

• For use with 9801 and

9821 track



BI-FOLD ADDITIONAL COMPONENTS

13

9111

Fixed Bottom Door Guide

Materials: Zinc plated steel with

bronze roller

Guide: 2" x 3/4" x 3/32"

(51 mm x 19 mm x 2 mm)

Roller: 1-7/32" x 1/2"

(14 mm x 13 mm)

Notes: • Door mortising is not

required

• Use with 9122 guide

channel



9169

Top Pivot Assembly

Materials: Zinc plated steel Top Pivot: 1" x 3-1/2" x 1-7/16"

(25 mm x 89 mm x 37 mm)

Notes: Inserts into 9155 top pivot

clamp assembly



9264

Keyed Lock

Materials: Steel

Notes: • Lock cylinder fits 1"

(25 mm) hole

· Available keyed alike



9900

Reversible Side Mount Bracket

Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

Guide: 4-7/8" x 1-5/8" x 1-3/16"

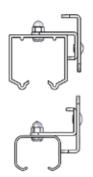
(124 mm x 41 mm x 30 mm)

Size: For 3/4" to 1-3/4"

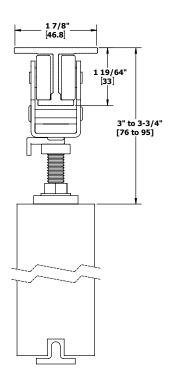
(19 mm to 44 mm) doors

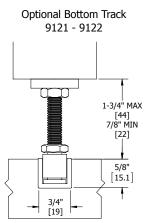
Notes: • Mounts at ends of track

and every foot









Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9110 Series and 9130 Series

Extra Heavy Duty Aluminum I-Beam Track and Hardware Conforms to ANSI A156.14

Type: D8681, D8711



- For doors 1" 1-3/4" (25 mm 44 mm) thick
- 9110 Series for doors weighing up to 175 lbs (80 kg) per door
- 9130 Series for doors weighing up to 275 lbs (125 kg) per door
- Track is extruded aluminum jump-proof style with "I" beam track
- Hangers have 1" (25 mm) diameter wheels

Davit Number	Description			
Part Number	Description			
	9110 Series Set			
Includes one (1) 9	101 track and one (1) 9109 parts bag			
9110-60	Pocket Door Set - 5' (1524 mm) for 2'6" (762 mm) door			
9110-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door			
9110-84	Pocket Door Set - 7' (2134 mm) for 3'6" (1067 mm) door			
9110-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door			
9110-120	Pocket Door Set - 10' (3048 mm) for 5'0" (1524 mm) door			
9110-144	Pocket Door Set - 12' (3658 mm) for 6'0" (1829 mm) door			
9130 Series Set				
Includes one (1) 9101 track and one (1) 9129 parts bag				
9130-60	Pocket Door Set - 5' (1524 mm) for 2'6" (762 mm) door			
9130-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door			
9130-84	Pocket Door Set - 7' (2134 mm) for 3'6" (1067 mm) door			
9130-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door			
9130-120	Pocket Door Set - 10' (3048 mm) for 5'0" (1524 mm) door			
9130-132	Pocket Door Set - 11' (3353 mm) for 5'6" (1676 mm) door			
9130-144	Pocket Door Set - 12' (3658 mm) for 6'0" (1829 mm) door			

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description		
Tracks for use witl	Tracks for use with 9110 and 9130 Series		
9101-72	72" (1829 mm) Aluminum I-Beam Track		
9101-84	84" (2134 mm) Aluminum I-Beam Track		
9101-96	96" (2438 mm) Aluminum I-Beam Track		
9101-120	120" (3048 mm) Aluminum I-Beam Track		
9101-144	144" (3658 mm) Aluminum I-Beam Track		
9101-192	192" (4877 mm) Aluminum I-Beam Track		



9110 SERIES AND 9130 SERIES TRACK



9101

Aluminum I-Beam Track

Materials: Extruded aluminum
Gauge: 0.125" (3 mm)
Lengths: 72" (1829 mm) to 192"

(4877 mm)

Notes: Mounting holes are pre-

punched for ease of

installation



9105

4 Wheel Hanger

Materials: Zinc plated steel Wheels: Nylon with steel ball

bearings

Hanger: $4'' \times 2'' \times 1-3/4''$

(102 mm x 51 mm x 45 mm)

Bolt: 3/8" x 2-5/16"

(10 mm x 59 mm)

Top Plate: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Notes: • Use with 9101 track, with

doors weighing up to 275

lbs (125 kg)

 Four wheel hanger is selfaligning to allow consistent

contact with track





9109 Parts Bag

Includes two (2) 9102 2-wheel hangers and one (1) 9115 floor guide



9129 Parts Bag

Includes two (2) 9105 2-wheel hangers and one (1) 9115 floor guide



9111

Fixed Bottom Door Guide

Materials: Zinc plated steel with

bronze roller

Guide: 2" x 3/4" x 3/32"

(51 mm x 19 mm x 2.4 mm)

Roller: 1-7/32" x 1/2"

(14 mm x 13 mm)

Notes: • Door mortising is not

required

• Use with 9122 guide

channel

9110 SERIES AND 9130 SERIES COMPONENTS



9102

Notes:

2 Wheel Hanger

Materials: Zinc plated steel Wheels: Nylon with Steel Ball

Bearings

Hanger: 1-3/16" x 2" x 1-1/8"

(46 mm x 51 mm x 29 mm)

Bolt: 3/8" x 2-5/16"

(10 mm x 59 mm)

(Bolt not same as 9105)

Top Plate: 1" x 3-1/2" x 3/16"

(25 mm x 89 mm x 5 mm)

Use with 9101 track, with doors weighing up to 175

lbs. (79 kg)



9112

Stop

Materials: Aluminum and rubber Stop: 1-5/8" x 1-1/2" x 5/8" x

7/8" (41 mm x 38 mm x

16 mm x 22 mm)

Notes: Use with 9102 hanger



9113

Stop

Materials: Zinc plated steel and rubber Stop: 1-5/8" x 1-1/2" x 5/8" x

1-3/4" (41 mm x 38 mm x

16 mm x 45 mm)

Notes: Use with 9105 hanger



9110 SERIES AND 9130 SERIES COMPONENTS (CONTINUED)



9114

Bottom Guide Rail

Materials: Aluminum

7/8" x 1/2" (22 mm x 13 mm) Guide:

Lengths: 72" (1829 mm)

96" (2438 mm)

144" (3658 mm)

• Door bottom prep requires Notes:

1/4" (6 mm) wide kerf and 9/16" (14 mm) depth • Pre-punched for use with

#6 x 7/8" FPHMS



9115

Bottom Door Guide

Materials: Die cast zinc aluminum

alloy

Guide: 7/8" x 3/4" x 3"

(22 mm x 19 mm x 76 mm)

Notes: Door bottom prep requires

1/4" (6 mm) wide kerf and 9/16" (14 mm) depth



Pocket Door Edge Pull Finger Pull Extends: 1-1/16" (27mm)

21/32" x 3-1/2" Faceplate:

(17 mm x 89 mm)

Die cast zinc Materials:

Finishes: US3

Fasteners: Two (2) #6 x 5/8"

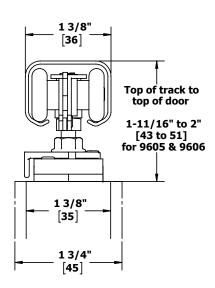
FPHWS

Notes: • Ideal for narrow

> and standard door thicknesses







9678 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8681, D8711

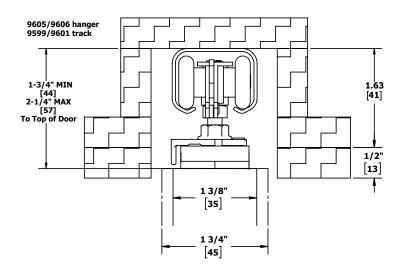


- For doors 1-1/8" 1-3/4" (29 mm 44 mm) thick
- Up to 125 lbs (57 kg) per door with 9605 hangers
- Up to 150 lbs (68 kg) per door with 9606 hangers
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four 7/8" (22 mm) diameter wheels for 9605 and wheels mounted on ball bearing shafts for 9606

Part Number	Description
9678 Series Set Includes one (1) 9	9601 track and one (1) 9632 parts bag
9678-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9678-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.05" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use with	Tracks for use with 9678 Series		
9601-35	35" (889 mm) Aluminum Box Track		
9601-47	47" (1194 mm) Aluminum Box Track		
9601-55	55" (1397 mm) Aluminum Box Track		
9601-59	59" (1499 mm) Aluminum Box Track		
9601-63	63" (1600 mm) Aluminum Box Track		
9601-71	71" (1803 mm) Aluminum Box Track		
9601-96	96" (2438 mm) Aluminum Box Track		
9601-120	120" (3048 mm) Aluminum Box Track		
9601-144	144" (3658 mm) Aluminum Box Track		





9678 SERIES TRACK



9601

Aluminum Box Track

(3657 mm) ´

Notes: • Refer to series pages

for weight capacities

• Jump proof twin channel

design



330L

Pocket Door Privacy Latch

Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) $\#6 \times 5/8"$

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8"

door



9632

9678 SERIES PARTS BAGS

Parts Bag

Includes two (2) 9605 hangers, two (2) 9883 guides, and one (1) 9881 bumper



9678 SERIES COMPONENTS

9633

Parts Bag

Includes two (2) 9606 hangers, two (2) 9883 guides, and one (1) 9881 bumper



330M

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for

D0831

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/4"

door



330D

Pocket Door Latch

Certification: Meets ANSI A156.14 for

D0821.1

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) $\#6 \times 5/8"$

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8" to

1-3/4" (35 mm to 45 mm) door



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm)

diameter

Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A,

US15, US15A, US26,

US26D, ABA

Notes: • Built-in prong design

eliminates the need for

screws or brads

Two Piece Pocket Door Guide

Polyethylene

required

1-3/16" x 3/4" x 1-1/8"

• Two pieces per door

(21 mm x 19 mm x 29 mm)

• Screws to jamb to guide

door and prevent rubbing



9678 SERIES COMPONENTS (CONTINUED)



9605

4-Wheel Hanger

Steel with brass-tone Materials:

dichromate finish

7/8" (22 mm) diameter Wheel: • For doors up to 125 lbs Notes:

(57 kg)

• Wheels are self aligning to allow consistent contact

with track

• Pre-lubricated Celcon wheels mounted on steel ball bearing shafts

• Can be used on pivot set

• Use in conjunction with 9601 or 9602 track



9884

9883

Guide:

Notes:

Materials:

Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27 mm) Faceplate: 21/32" x 3-1/2"

(17 mm x 89 mm)

Die cast zinc Materials:

Finishes: US3

Two (2) #6 x 5/8" Fasteners:

FPHWS

Notes: Ideal for narrow and standard door

thicknesses.



9606

4-Wheel Ball Bearing Hanger

Steel with brass-tone Materials:

dichromate finish

Wheel: 7/8" (22 mm) diameter Notes:

• For doors up to 150 lbs

(68 kg)

· Wheels are self aligning to allow consistent contact

with track

• Pre-lubricated Celcon wheels mounted on steel ball bearing shafts

• Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601

or 9602 track



9889

Non-Adjustable Floor Guide

Materials: Polyethylene

Guide: 2-3/8" x 2-1/2" x 7/8"

(60 mm x 64 mm x 22 mm)

For 1-3/8" (35 mm) doors Notes:



9815

Bumper Stop

Materials: Zinc plated steel and rubber • Fits all Hager track styles Notes:

except 9101

Screws onto track

• Included in bi-fold sets 9570 and 9890



9881

Bumper

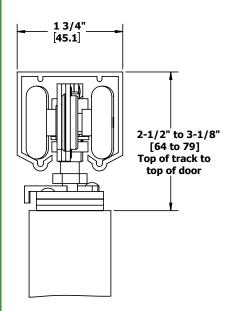
Materials: Rubber

1/2" diameter x 3/8" deep Stop:

(13 mm x 10 mm)

Notes: With screws





9878 Series

Extra Heavy Duty Aluminum Box Track and Hardware **Conforms to ANSI A156.14** Type: D8681, D8711



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
 Up to 250 lbs (113 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four 1-1/4" (32 mm) diameter wheels

Part Number	Description
9878 Series Set Includes one (1) 9	801 track and one (1) 9742 parts bag
9878-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9878-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description	
Tracks for use with 9878 Series		
9801-72	72" (1829 mm) Aluminum Box Track	
9801-96	96" (2438 mm) Aluminum Box Track	
9801-120	120" (3048 mm) Aluminum Box Track	
9801-144	144" (3658 mm) Aluminum Box Track	
9801-192	192" (4877 mm) Aluminum Box Track	

Interchanges with Stanley 57/58.



9878 SERIES TRACK



9801

Extra Heavy Duty Box Track

Materials: Extruded aluminum Gauge: 0.075" (1.9 mm) Track: 1-5/8 "x 1-3/4" (41 mm x 44 mm) Lengths: 72" (1829 mm) to 192"

(4877 mm)

Notes: • For doors up to 250 lbs

(113 kg)

• Jump proof twin channel

design



330L

Pocket Door Privacy Latch

Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

1-3/8" (35 mm)

Finger Piece: extension

1" x 2-1/4" (25 mm x Strike Size:

57 mm)

Materials: **Brass**

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Two (2) #6 x 5/8" Fasteners:

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8"

door





9742

Parts Bag

Includes two (2) 9827 hangers, two (2) 9883 guides, and one (1) 9881 bumper



330M

Pocket Door Privacy Latch

Meets ANSI A156.14 for Certifications:

D0831

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: **Brass**

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/4"

door





330D

Pocket Door Latch

Certification: Meets ANSI A156.14 for

D0821.1

Size: 2-3/4" x 2-1/2"

> (70 mm x 64 mm) 1-3/8" (35 mm)

extension

Materials: Brass

Finger Piece:

US3, US5, US10B, Finishes:

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

For use with 1-3/8" to Notes:

1-3/4" (35 mm to 45 mm) door



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) 2-1/16" (52 mm) Finger Pull:

diameter

Depth: 11/32" (9 mm) 3/32" (2 mm) Projection: Materials: Solid brass

Finishes: US3, US4, US5, US10A,

> US15, US15A, US26, US26D, ABA

• Built-in prong design Notes:

eliminates the need for

screws or brads



9878 SERIES COMPONENTS (CONTINUED)



9815 Bumper Stop

Materials: Notes:

Zinc plated steel and rubber
• Fits all Hager track styles
except 9101

• Screws onto track

• Included in bi-fold sets 9570 and 9890



9884

Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27mm) Faceplate: 21/32" x 3-1/2"

(17 mm x 89 mm)

Materials: Die cast zinc

Finishes: US3

Fasteners: Two (2) #6 x 5/8"

FPHWS

Notes: • Ideal for narrow

and standard door

thicknesses



9827

Four Wheel Ball Bearing Hanger

Materials: Zinc plated steel
Wheels: Self aligning to allow

consistent contact with track

Wheel: 1-1/4" (32 mm) diameter
Notes: • For doors up to 75 lbs

(34 kg)

 Pre-lubricated Celcon wheels on steel shafts with

steel ball bearingsBall bearing axlesFor use with 9801 track



9889

Notes:

Non-Adjustable Floor Guide

Materials: Polyethylene

Guide: 2-3/8" x 2-1/2" x 7/8"

(60 mm x 64 mm x 22 mm)

For 1-3/8" (35 mm) doors



9881

Bumper

Materials: Rubber

Stop: 1/2" diameter x 3/8" deep

(13 mm x 10 mm)

Notes: With screws



9883

Two Piece Pocket Door Guide

Materials: Polyethylene

Guide: 1-3/16" x 3/4" x 1-1/8"

(21 mm x 19 mm x 29 mm)

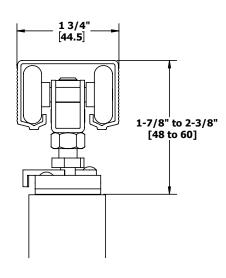
Notes: • Two pieces per door

required

• Screws to jamb to guide door and prevent rubbing







Interchanges with Stanley 125/250 Series and Johnson 100 Series.

9901 Series

Extra Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14

Type: D8681



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 250 lbs (113 kg) per door
- Quick release hangers allow easy door hanging and removal
- Hangers interchange with Stanley & Johnson track and hangers
- Universal extruded aluminum track interchanges with Stanley & Johnson track and hangers
- Hangers have 1" (25 mm) diameter ball bearing wheels

Part Number	Description
9901 Series Set Includes one (1) 9	9821 track and one (1) 9895 parts bag
9901-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9901-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.06" (1.5 mm) thick aluminum

Part Number	Description	
Tracks for use with 9901 Series		
9821-59	59" (1499 mm) Aluminum Box Track	
9821-71	71" (1803 mm) Aluminum Box Track	
9821-96	96" (2438 mm) Aluminum Box Track	
9821-144	144" (3658 mm) Aluminum Box Track	



9901 SERIES TRACK



9821

Aluminum Box Track

Materials: Extruded aluminum
Gauge: 0.06" (1.55 mm)
Track: 1-5/8" x 1-1/16"
(41 mm x 27 mm)

Lengths: 59" (1499 mm) to 144"

(3658 mm)

Notes: • For doors up to 250 lbs

(113 kg)

• Jump proof twin channel

design



330L

Pocket Door Privacy Latch

Size: 2-3/4" x 2-1/2" (70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8"

door





9895

Parts Bag

Includes two (2) 9825 4-wheel ball bearing hangers with quick release top plate, two (2) 9883 guides, and one (1) 9881 bumper



330M

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for

D0831

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/4"

door





330D

Materials:

Pocket Door Latch

Certification: Meets ANSI A156.14 for

D0821.1

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm) 1-3/8" (35 mm)

Finger Piece: 1-3/8" (35 extension

Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) $\#6 \times 5/8"$

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8" to

1-3/4" (35 mm to 45 mm) door



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm)

diameter

Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A,

US15, US15A, US26,

US26D, ABA

Notes: • Built-in prong design

eliminates the need for

screws or brads.



9901 SERIES COMPONENTS (CONTINUED)



9559

Aligner

Materials: Steel with brass-tone

dichromate finish

Notes: • Keeps lead doors aligned

when closed

• Use one on each lead door



9883

Two Piece Pocket Door Guide

Materials: Polyethylene

Guide: 1-3/16" x 3/4" x 1-1/8"

(21 mm x 19 mm x 29 mm)

Notes: • Two pieces per door

required

 Screws to jamb to guide door and prevent rubbing



9825

Notes:

4 Wheel Ball Bearing Hanger with Quick Release Top Mount Plate

Materials: Zinc plated steel
Wheels: Self aligning to a

Self aligning to allow consistent contact with

track

Wheel: 1" (25 mm) diameter

Pre-lubricated Celcon

wheels
• For doors up to 250 lbs

(113 kg)

For use with 9821 track

 Quick release feature allows easy door hanging

and removal



9884

Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27mm) Faceplate: 21/32" x 3-1/2"

(17 mm x 89 mm)

Materials: Die cast zinc

Finishes: US3

Fasteners: Two (2) #6 x 5/8"

FPHWS

Notes: • Ideal for narrow

and standard door

thicknesses.



9815

Bumper Stop

Materials: Zinc plated steel and rubber

Notes: • Fits all Hager track styles

except 9101

Screws onto track

• Included in bi-fold sets

9570 and 9890



9889

Non-Adjustable Floor Guide

Materials: Polyethylene

Guide: 2-3/8" x 2-1/2" x 7/8"

(60 mm x 64 mm x 22 mm)

Notes: For 1-3/8" (35 mm) doors



9881

Bumper

Materials: Rubber

Stop: 1/2" diameter x 3/8" deep

(13 mm x 10 mm)

Notes: With screws



9628 | 9629 | 9630 | 9631

Heavy Duty Pocket Door Kit Conform to ANSI A156.14 Type: D8671, D8701

- , pe. 00071, 00701
- Jump proof track and rollers
- 9601 aluminum box track
- Pre-assembled header assembly goes up quickly
- Easy door installation and removal for painting and repair
- Real wood split studs, size 3/4" x 1-5/8" (19 mm x 26 mm) length relative to height, steel encased for rigidity and to prevent fastener penetration into the pocket
- Track header unit attaches to rough framing at both ends split studs nail or screw to track header no connections to rough header
- 2 pair of split studs with wood inserts
- See chart below for appropriate kit

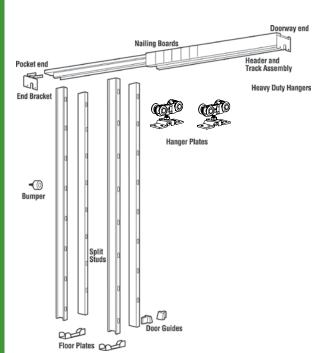
Part #	Max Door Weight	Door Thickness*	Door Width	Door Height	Hanger Bearings
9628	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3'0" (914 mm)	9'0" (2743 mm)	Steel Ball
9629	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3'0" (914 mm)	8'0" (2438 mm)	Steel Ball
9630	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3'0" (914 mm)	7'0" (2134 mm)	Steel Ball
9631	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3'0" (914 mm)	6'8" (2032 mm)	Steel Ball

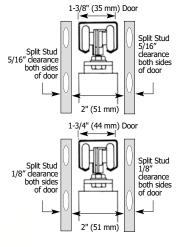
* 9634 adapter kit is recommended for 1-3/4" (45 mm) doors (sold separately).

Installation Note: For bi-parting doors, use Hager double pocket door kit 9639 (sold separately).



Joins two pocket door frames to make one large doorway. Rough opening width changes to door width multiplied by four.





Note: 9634 adapter kit (sold separately) recommended for doors 1-3/4" (45 mm) thick.

Contents

Pocket Door

Quantity	Description
1	Header assembly
2	Pair of split studs
2	Heavy duty 9606 hangers
2	Door hanger plates
1	Bumper
1	Pair of door guides
1	Adjusting wrench
2	Floor plates
1	End bracket



9850

Heavy Duty Pocket Door Kit Conform to ANSI A156.14 Type: D8671, D8701



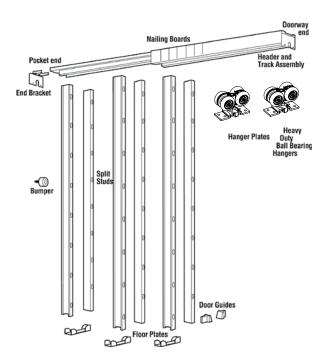
- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick, up to 4'0" (1219 mm) wide and 8'0" (2438 mm) or 8'6" (2591 mm) high, weighing up to 250 lbs (112 kg)
- Jump proof track and rollers
- 9801 heavy duty aluminum box track
- Pre-assembled header assembly goes up quickly
- Easy door installation and removal for painting and repair
- Real wood split studs, size 3/4" x 1-5/8" (19 mm x 26 mm) length relative to height, steel encased for rigidity and to prevent fastener penetration into the pocket
- Track header unit attaches to rough framing at both ends split studs nail or screw to track header no connections to rough header
- 3 pair of split studs with wood inserts

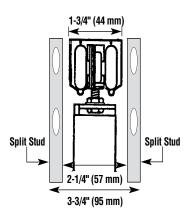
Part #	Max Door Weight	Door Thickness*	Door Width	Door Height	Hanger Bearings
9850	250 lbs (57 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	4'0" (1219 mm)	8'0" (2438 mm)	Steel Ball

Installation Note: For bi-parting doors, use Hager double pocket door kit 9639 (sold separately).



Joins two pocket door frames to make one large doorway. Rough opening width changes to door width multiplied by four.





Contents

Quantity	Description
1	Header assembly
3	Pair of split studs
2	Heavy duty 9827 hangers
2	Door hanger plates
1	Bumper
1	Pair of door guides
1	Adjusting wrench
3	Floor plates
1	End bracket



POCKET DOOR KIT COMPONENTS



330D

Pocket Door Latch

Certification: Meets ANSI A156.14 for

D0821.1

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8" to

1-3/4" (35 mm to 45 mm) door



330M

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for

D0831

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) #6 x 5/8"

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/4"

door



330L

Pocket Door Privacy Latch

Size: 2-3/4" x 2-1/2"

(70 mm x 64 mm)

Finger Piece: 1-3/8" (35 mm)

extension

Strike Size: 1" x 2-1/4" (25 mm x

57 mm)

Materials: Brass

Finishes: US3, US5, US10B,

US15, US15A, US19,

US26, US26D

Fasteners: Two (2) $\#6 \times 5/8"$

OPHWS; (2) #6 x 3/4"

FPHWS

Notes: For use with 1-3/8"

door



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm)

Finger Pull: 3/4" (19 mm) diameter

Depth: 5/16" (8 mm)
Projection: 1/32" (.8 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A,

US15, US15A, US26,

US26D, ABA

Notes: • Built-in prong design

eliminates the need for screws or brads.



2630

Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm)

diameter

Depth: 11/32" (9 mm)
Projection: 3/32" (2 mm)
Materials: Solid brass

Finishes: US3, US4, US5, US10A,

US15, US15A, US26,

US26D, ABA

Notes: • Built-in prong design

eliminates the need for screws or brads.







POCKET DOOR KIT COMPONENTS (CONTINUED)



9605

4-Wheel Hanger

Materials: Steel with brass-tone

dichromate finish

7/8" (22 mm) diameter Wheel: Notes:

• For doors up to 125 lbs (57 kg)

 Wheels are self aligning to allow consistent contact with track

• Pre-lubricated Celcon wheels mounted on steel ball bearing shafts

• Can be used on pivot set

• Use in conjunction with 9601 or 9602 track



9634

Pocket Door Adapter Kit

Materials: Galvanized steel and wood

1/8" (3 mm) on each side Clearance: of a 1-3/4" (44 mm) door

Notes:

• Used with 1-3/4" (44 mm) doors by allowing additional clearance between door and jamb

• Includes wider floor plates and shims for spacing split studs for an additional 3/16" (4.8 mm) on each side of a 1-3/4" (44 mm)



9609

Top Door Plate

Materials: Zinc plated steel 1/8" (3 mm) Gauge: 1-3/8" x 21-3/16" Size:

(35 mm x 72 mm)

Notes: · Used to attach door to

hanger

• Used in conjunction with 9572, 9605, 9606, 9704 and 9816 hanger



9639

Double Pocket Door Adapter Kit

Materials:

Zinc plated steel and rubber bumper stops

Notes:

• Joins two frames in the middle of the doorway

• For joining 9629, 9630, 9631 or 9850 pocket door

• Fits both KD and Built Up frames

• Lag bolt for attaching to rough header

 Bumpers included to stop doors in center of doorway



9632

Parts Bag

Includes:

• Two (2) 9605 hangers

• Two (2) 9883 guides

• One (1) 9881 bumper



9827

Four Wheel Ball Bearing Hanger

Materials: Wheels:

Zinc plated steel Self aligning to allow

Wheel: Notes:

consistent contact with track 1-1/4" (32 mm) diameter

• For doors up to 75 lbs

(34 kg)

• Pre-lubricated Celcon wheels on steel shafts with

steel ball bearings Ball bearing axles

• For use with 9801 track



9633 **Parts Bag**

Includes:

• Two (2) 9606 hangers

• Two (2) 9883 guides

• One (1) 9881 bumper



POCKET DOOR KIT COMPONENTS (CONTINUED)



9865

Flush Cup Pull

Overall Diameter: 1-31/32" (50 mm)
Finger Pull Diameter: 1-19/32" (41 mm)
Depth: 11/32" (9 mm)
Projection: 5/64" (2 mm)
Materials: Tan color ABS

plastic

Notes: • Built-in prong

design eliminates the need for screws or brads



9889

Notes:

Non-Adjustable Floor Guide

Materials: Polyethylene

Guide: 2-3/8" x 2-1/2" x 7/8"

(60 mm x 64 mm x 22 mm) For 1-3/8" (35 mm) doors

9881

Bumper

Materials: Rubber

Stop: 1/2" diameter x 3/8" deep

(13 mm x 10 mm)

Notes: With screws



9883

Two Piece Pocket Door Guide

Materials: Polyethylene

Guide: 1-3/16" x 3/4" x 1-1/8"

(21 mm x 19 mm x 29 mm)

Notes: • Two pieces per door

required

 Screws to jamb to guide door and prevent rubbing



9884

Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27mm) Faceplate: 21/32" x 3-1/2"

(17 mm x 89 mm)

Materials: Die cast zinc

Finishes: US3

Fasteners: Two (2) $\#6 \times 5/8"$

FPHWS

Notes: • Ideal for narrow

and standard door

thicknesses.



POCKET DOOR ADDITIONAL COMPONENTS



9262

Pocket Door Keyed Lock

Materials:

Steel

Notes:

• For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick

• Lock cylinder fits in one 1" (25 mm) hole

• Available keyed alike



9900

Reversible Side Mount Bracket

Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm)

4-7/8" x 1-5/8" x 1-3/16" Guide: (124 mm x 41 mm x 30 mm)

Size: For 3/4" to 1-3/4"

(19 mm to 44 mm) doors

• Mounts at ends of track Notes:

and every foot

• Use with 9601, 9801, and

9821 track



9824

4 Wheel Hanger with Quick Release **Top Mount Plate**

Materials: Zinc plated steel Wheels: Self aligning to allow

consistent contact with

track

Wheel: 1" (25 mm) diameter Notes:

• For doors up to 150 lbs

(68 kg)

• Pre-lubricated Celcon

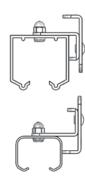
wheels

• For use with 9821 track

· Quick release feature

allows easy door hanging

and removal



9877

Door Guide

Materials: Plastic

Notes:

• For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick

• Two pieces required per

door

Locks

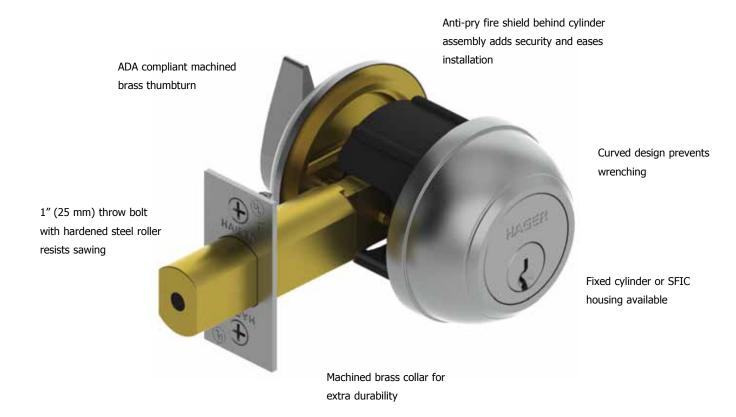


Hager Companies offers a wide range of Grade 1 and Grade 2 products to meet almost any application and specification requirements. Hager locks are manufactured to the highest quality standards and extensively tested to ANSI standards and BHMA certification requirements. In addition, all locks comply with ADA requirements outlined in ANSI A117.1 and are UL Listed up to 3 hours for "A" label doors.

3100 Series

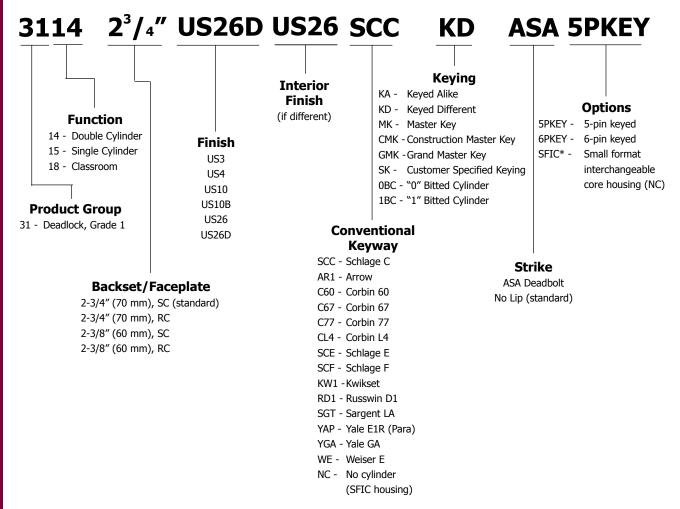


Hager 3100 Series Grade 1 deadlock is designed and engineered to withstand the most abusive environments. It is the perfect complement to Hager 3400 Series lockset for extra protection against break-in and is backed by a lifetime warranty.





HOW TO ORDER



Notes:

- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- 2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

3100 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
•(0)•	Double Cylinder	14	Deadbolt thrown or retracted by key from either side. Bolt automatically deadlocks when fully thrown.	E2141
Cylinder x Thumbturn 15		15	Deadbolt thrown or retracted by key from outside or by inside turn unit. Bolt automatically deadlocks when fully thrown.	E2151
•(0)•	Classroom	18	Deadbolt thrown or retracted by key outside. Inside turn unit will retract bolt only. Bolt automatically deadlocks when fully thrown.	E2171

^{*} Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3114 2-3/4" US26D NC SFIC



3100 Series

Grade 1 Deadlock Auxiliary and primary locking

- Lifetime warranty
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: • Cylinder Hole: 2-1/8" (54 mm) Diameter (Cross Bore)

• Latch Hole: 1" (25 mm) Diameter (Edge Bore)

Certifications: • BHMA Certified ANSI A156.5 Grade 1

• ANSI A250.13 Severe Windstorm Resistant Component

• UL/cUL Listed for all functions up to 3 hours for "A" label single doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

ADA - Thumbturn

Exposed Trim: Wrought brass or bronze

Mechanism: Steel, zinc dichromate plating

Keys: Two operating keys supplied per lock

Cylinders/Cores:

• Brass - Keyed Different - C Keyway

• Drilled 6-pin, Keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

Door Thickness: • 1-3/4" - 2" (45 mm - 51 mm) - Standard

• 2-1/4" (57 mm) available for conventional cylinder - Must specify

Backset: • 2-3/4" (70 mm) - Standard • 2-3/8" (60 mm) - Optional

Latchbolt: • 1" (25 mm) Throw - Brass with concealed hardened steel roller to prevent sawing or cutting

• 1-1/8" x 2-1/4" (29 mm x 57 mm) Square Corner Faceplate

Strikes: • 3930 Square Corner, 1-1/8" x 2-3/4" (29 mm x 70 mm) with dustbox - Standard

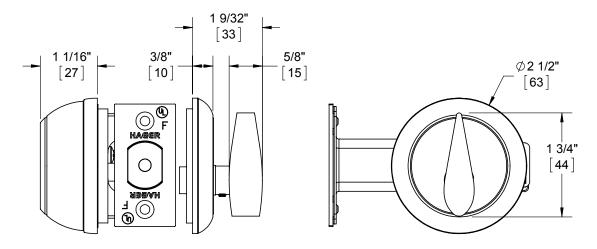
• 3929 ASA Deadbolt Strike - Optional

Functions: 14 Double Cylinder, 15 Cylinder x Thumbturn, 18 Classroom

Finishes: US3, US4, US10, US10B, US26, US26D

Options: • Split finish

• Additional deadbolts and strikes available





LOCKS

3100 SERIES LATCHBOLTS



3940

2-3/4" (70 mm) Backset Latchbolt - Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3941

2-3/8" (60 mm) Backset Latchbolt - Optional

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3100 SERIES STRIKES



3929

ASA Deadbolt Strike - Optional 1-1/4" x 4-7/8" (32 mm x 124 mm)



3930

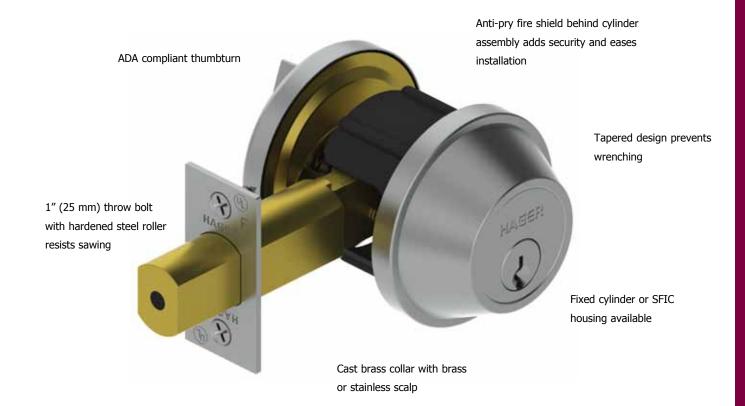
Strike Plate - Standard

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included

3200 Series

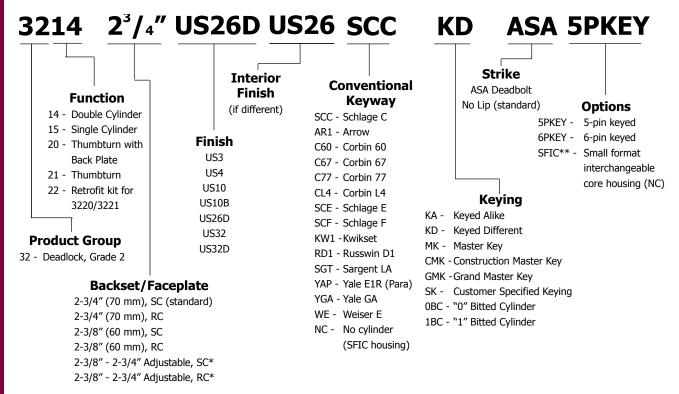


Hager 3200 Series Grade 2 deadlock provides a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. Our 3200 Series is an economical alternative to Grade 1 when Grade 1 is not required. It is a perfect complement to our 3500 Series for extra protection against break-in and is backed by a lifetime warranty.





HOW TO ORDER



Notes:

- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- 2. For additional keying information, please refer to cylinder, core, and keying section of catalog.
- * Adjustable backset deadbolts supplied with 3220, 3221, and 3222.
- ** Small format interchangeable core sold separately. Available in Best Keyways only, A Standard.

Ordering example: 3214 2-3/4" US26D NC SFIC

3200 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
		14	Deadbolt thrown or retracted by key from either side. Bolt automatically deadlocks when fully thrown.	E2142
• (1)•	Cylinder x Thumbturn	15	Deadbolt thrown or retracted by key from outside or by inside turn unit. Bolt automatically deadlocks when fully thrown.	E2152
Thumbturn w/ Blank Plate (no cylinder) 20		20	Deadbolt thrown or retracted by turn unit only. Outside blank plate. Bolt automatically deadlocks when fully thrown.	E21112
40	Thumbturn Only (no cylinder)	21	Deadbolt thrown or retracted by turn unit only. No outside trim. Bolt automatically deadlocks when fully thrown.	E2192

Note: 3222 available for retrofit applications, converting a 3221 into a 3220.





3200 Series Grade 2 Deadlock

Auxiliary and primary locking

- Lifetime warranty
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: • Cylinder Hole: 2-1/8" (54 mm) Diameter (Cross Bore)

• Latch Hole: 1" (25 mm) Diameter (Edge Bore)

Certifications: • BHMA Certified ANSI A156.5 Grade 2

• ANSI A250.13 Severe Windstorm Resistant Component

• UL/cUL Listed for all functions up to 3 hours for "A" label single doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• ADA Thumbturn

Exposed Trim: Wrought Brass, Bronze or Stainless Steel

Mechanism: Steel, zinc dichromate plating
Keys: Two operating keys supplied per lock
Cylinders/Cores: Brass - Keyed Different - C Keyway
Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

Door Thickness: • 1-3/4" (45 mm) only - 3214 SFIC

• 1-3/8" - 1-3/4" (35 mm - 45 mm) - Standard

• 2" - 2-1/4" (51 mm - 57 mm) available for conventional cylinder - Must specify

Backset: • 2-3/4" (70 mm) - Standard • 2-3/8" (60 mm) - Optional

• 2-3/8" - 2-3/4" adjustable backset supplied with 3220 and 3221 (not available on 3214 or 3215)

Latchbolt: • 1" (25 mm) Throw - Brass with concealed hardened steel roller to prevent sawing or cutting

• 1-1/8" x 2-1/4" (29 mm x 57 mm) Square Corner Faceplate

Strikes: • 3930 Square Corner, 1-1/8" x 2-3/4" (29 mm x 70 mm) with dustbox - Standard

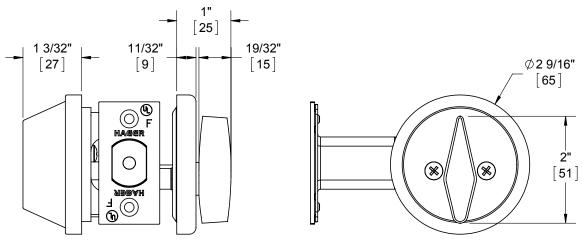
• 3929 ASA Deadbolt Strike - Optional

Functions: 14 Double Cylinder, 15 Cylinder x Thumbturn, 20 Thumbturn w/ Blank Plate, 21 Thumbturn Only

Finishes: US3, US4, US10, US10B, US26D, US32, US32D Notes: 3222 retrofit kit available for use with 3220/3221

Options: • Split finish

· Additional deadbolts and strikes available







LOCKS

3200 SERIES LATCHBOLTS



2-3/4" (70 mm) Backset Latchbolt -Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3941

2-3/8" (60 mm) Backset Latchbolt -**Optional**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Latchbolt -Standard for 3220 and 3221

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm)
- faceplate Standard
 1" x 2-1/4" (25 mm x 57 mm) faceplate - Standard

3200 SERIES STRIKES



3929

ASA Deadbolt Strike - Optional 1-1/4" x 4-7/8" (32 mm x 124 mm)



3930

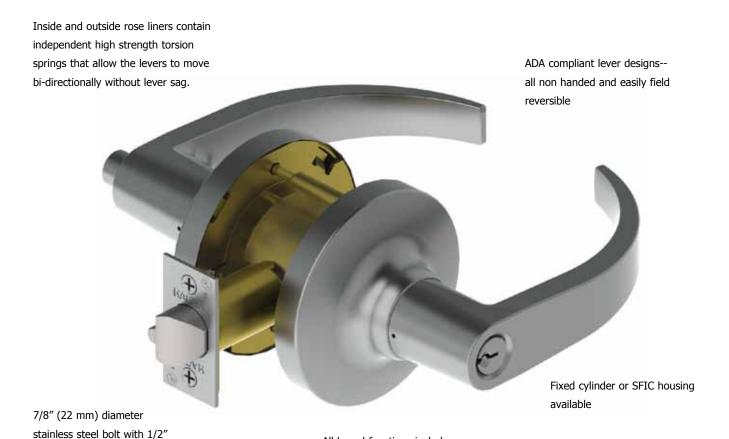
Strike Plate - Standard

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included

3400 Series



Hager 3400 Series Grade 1 lock is designed and engineered to withstand the most abusive environments. We've categorized it 'extra heavy duty' and you can rest assured that it has been tested against heavy use, impact, strength, resistance, and abuse. We're so confident in our 3400 Series lock, it's backed by a lifetime warranty. The exceptional quality of our 3400 Series lock has made it incredibly successful in application after application across the country and around the globe.



All keyed functions include our

while remaining locked

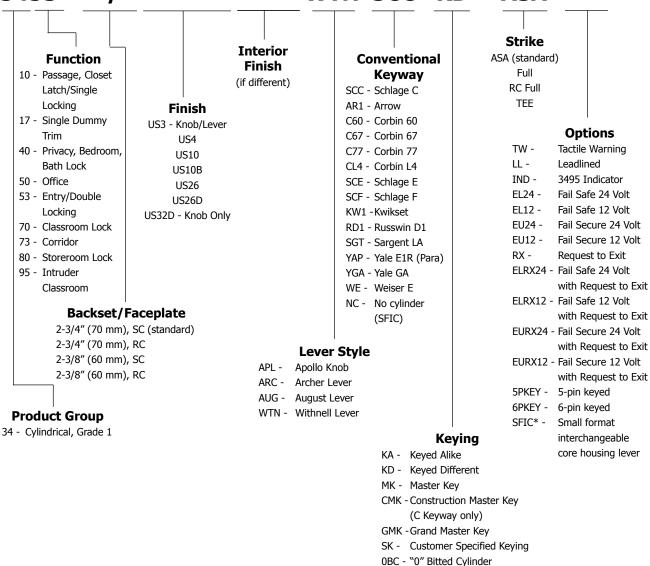
clutching feature that allows the lever to freely rotate up or down

(13 mm) throw



HOW TO ORDER

$3453 \quad 2^3/4$ " US26D US26 WTN SCC KD ASA TW



1BC - "1" Bitted Cylinder

Notes:

- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3453 2-3/4" US26D WTN NC ASA SFIC





3400 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed			•	
(qu)	Passage	10	Latchbolt operated by lever from either side at all times.	F75
4	Dummy	17	Pull one side, no mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed				
المرابع. المرابع	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
. ↓□µ.	Entry	53	Deadlocking latchbolt by lever either side, except when turn button locks outside lever. Pushing turn button in locks outside lever, requiring use of key outside to unlock. (Lever handle is freewheeling in locked position.) Turning inside lever unlocks outside lever. Pushing in and turning button locks outside lever, requiring key at all times. Turning inside lever does not unlock outside lever until button is manually turned to unlocked position. Inside lever always free.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
	Corridor	73	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by key in outside lever or by push button or other locking device on inside. Key in outside lever locks or unlocks outside lever. Operating inside lever releases push button or other locking device placed in a locked position. Closing door releases push button or other inside locking device. Inside lever always operates latchbolt.	F90
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86
.	Intruder Classroom*	95	Deadlocking latchbolt operated by lever from either side. Key either inside or outside locks or unlocks outside lever. Inside lever always operates latchbolt.	F110

 $[\]ensuremath{^{*}}\xspace$ Intruder Classroom is available with an indicator. Specify IND on order.





3400 SERIES LEVER OPTIONS

APOLLO KNOB



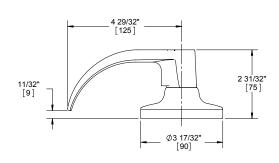


2 1/4" [58] 2 9/16" [65] Ø3" [76]

ARCHER LEVER



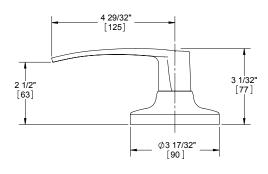




AUGUST LEVER



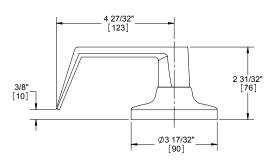




WITHNELL LEVER









Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3400 Series

Grade 1 Cylindrical

Extra heavy duty commercial, industrial, institutional

- Lifetime warranty
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: • 2-1/8" (54 mm) diameter (cross bore)

• Latch hole: 1" (25 mm) diameter (edge bore)

Certifications: • BHMA Certified ANSI A156.2 Series 4000 Grade 1

> ADA Compliant ANSI A117.1 Accessibility Code (levers only) • ANSI A250.13 Severe Windstorm Resistant Component

• UL/cUL Listed for all functions up to 3 hours for "A" label doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• Knobs: Wrought brass or stainless steel Exposed Trim:

• Levers: Cast zinc

Rose: Wrought brass or stainless steel

Rose Diameter: 3-17/32" (90 mm) levers; 3" (76 mm) knobs

• Heavy gauge steel, zinc dichromated for corrosion resistance Lock Chassis:

• Free wheeling (levers only) • Thru-bolt mounting (levers only)

Two operating keys supplied per lock

• Brass 6-pin, keyed different - C Keyway Cylinders/Cores:

• Drilled 6-pin, Keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

• Knobs: 1-3/8" - 1-3/4" (35 mm - 45 mm) Door Thickness:

• Levers: 1-3/8" - 2" (35 mm - 51 mm)

Backset: • 2-3/4" (70 mm) - Standard

• 2-3/8" (60 mm) - Optional • 3-3/4" (94 mm) - Optional

• 5" (128 mm) - Optional

Latchbolt: • 1/2" (13 mm) throw, stainless steel

• 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

• Square corner faceplates standard, round corner available

• Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only

• 3/4" (18 mm) latch available

3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard Strike:

Functions: 10 Passage, 17 Dummy, 40 Privacy, 50 Office, 53 Entry, 70 Classroom, 73 Corridor (levers only),

80 Storeroom, 95 Intruder Classroom (levers only)

• US3, US4, US10, US10B, US26, US26D (levers only) Finishes:

• US3, US32D (knobs only)

Apollo knob; Archer, August, Withnell levers Lever Options:

• Lead lined (levers only) Options:

• Tactile Warning (levers only)

Split finish

• Additional latchbolts and strikes available

• Intruder Classroom indicator available, specify IND (inside rose will have three indicator points for a quide reference for locking the door)



Kevs:





3400 Series - Electrified

Grade 1 Cylindrical Extra heavy duty commercial, industrial, institutional

- Lifetime warranty on mechanical locking components
- One-year warranty on electric components

Function: 80 - Storeroom

Applications: • Provides remote locking and unlocking ideal for door control where added security is necessary

Stairtower doors

• Office doors

Classrooms

• Elevator lobby doors

• Computer rooms

• Hospital equipment rooms

• Pharmaceutical storage rooms

Features: • Deadlocking latch

• Key override allows latchbolt to be momentarily retracted with the key even though electrically locked. Note that locks that are electrically unlocked may not be locked via the key cylinder.

• Inside lever always allows egress

• Interface with life-safety systems

Continuous-duty solenoids

Voltage: • 12V AC/DC; current - .250 AMP

• 24V AC/DC; current - .150 AMP

• Specify 12V or 24V when ordering

Function	Function No.	Function Description
Storeroom - Fail Safe	3480EL	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Fail Secure	3480EU	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Request to Exit	3480RX	Monitors inside lever rotation. Incorporates into alarm systems or in conjunction with an electromagnet.
Storeroom - Fail Safe w/ Request to Exit	3480ELRX	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress. Ability to tie into an alarm system.
Storeroom - Fail Secure w/ Request to Exit	3480EURX	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress. Ability to tie into an alarm system.



3400 Series - Power Supplies

Hager 2903 and 2904 power supplies are designed to power locking devices. Their features include:

- UL Listed
- Filtered/regulated 24 VDC
- 2 AMP load capacity
- Overload protection
- Over voltage protection
- Short circuit protection
- Surge suppression on Fail Safe and Fail Secure outputs
- Automatically accepts 120 VAC or 240 VAC inputs

2903

This power supply includes:

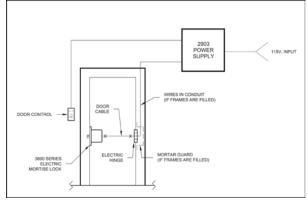
- Interface relay to isolate the locking device current from the control switch
- Auxiliary 24 VDC constant voltage for powering stand alone devices such as keypads, motion detectors, status indicators, etc.

2904

This power supply includes:

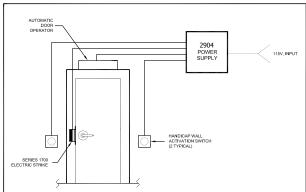
- Separate inputs for activation switch on entry and exit sides of the opening
- Relay contact output to automatic door operator (N.O. or N.C. contacts)
- · Built-in time delay between activation of electrified locking device and automatic door operator
- Input of optional emergency release switch when urgent unlocking of the door is required
- Auxiliary 24VDC constant voltage output
- Separate 24VDC outputs for Fail Safe and Fail Secure electrified locking devices

Hager Locking System



2903

Hager Locking System



2904

Product	Description
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls.
2904	Provides power and control for openings with an electrified locking device and automatic door operator.



3400 SERIES LATCHBOLTS

Spring Latches



3943

2-3/4" (70 mm) Backset Passage Spring Latch - Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3945

2-3/8" (60 mm) Backset **Passage Spring Latch**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3964

2-3/4" (70 mm) Backset **Privacy Spring Latch - Standard**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3966

2-3/8" (60 mm) Backset **Privacy Spring Latch**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3944

2-3/4" (70 mm) Backset **Dead Latch - Standard**

- Square and round corner available
- For use with all keyed functions other than corridor
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3946

2-3/8" (60 mm) Backset **Dead Latch**

- Square and round corner available
- For use with all keyed functions other than corridor
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3992

2-3/8" (60 mm) Backset **Dead Latch - Corridor Function Only**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3993

2-3/4" (70 mm) Backset **Dead Latch - Corridor Function Only**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

Dead Latches



3932 2-3/4" (70 mm) Backset **Dead Latch**

- 3/4" (18 mm) throw
- Square corner only
- For use on fire rated pairs of doors
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

Backset Extension Links



3-3/4" (95 mm) Backset **Extension Link**

Must use with 2-3/8" (60 mm) backset latch



3936

5" (127 mm) Backset **Extension Link**

Must use with 2-3/4" (70 mm) backset latch

3400 SERIES STRIKES

3933

T-Strike with Plastic Dust Box

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included

3400 SERIES ACCESSORIES



3911 Thru-Bolt JigFor lever set only



3934

Full Lip Strike

1-5/8" x 2-1/4" (41 mm x 57 mm)



3935

Standard ASA Strike Plate

1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

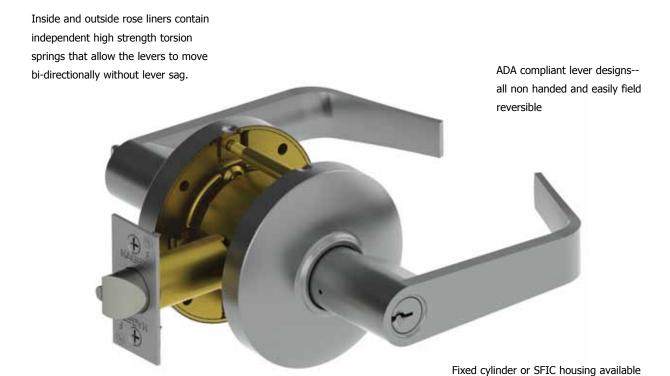
Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius

3500 Series



Hager 3500 Series Grade 2 lock provides a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. It is an economical alternative to Grade 1 when Grade 1 is not required. Our 3500 Series lock offers superior dependability and is backed by a lifetime warranty.

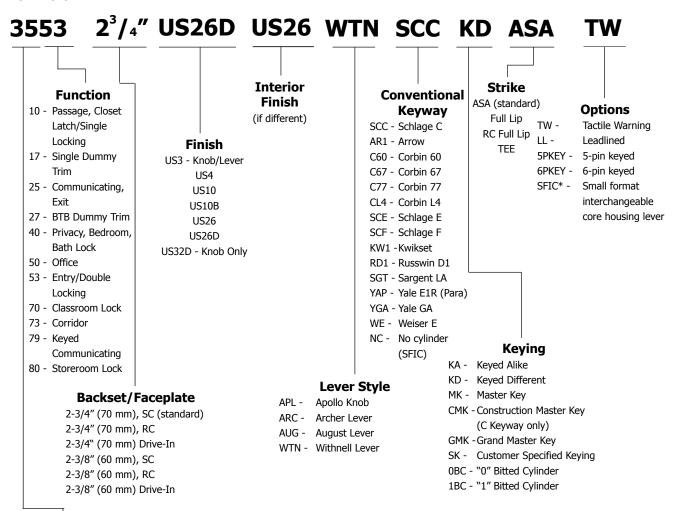


3/4" (18 mm) diameter stainless steel bolt with 1/2" (13 mm) throw

All keyed functions include our clutching feature that allows the lever to freely rotate up or down while remaining locked



HOW TO ORDER



Product Group

35 - Cylindrical, Grade 2

Notes:

- 1. If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3553 2-3/4" US26D WTN NC ASA SFIC

3500 SERIES - CYLINDRICAL

3500 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed				
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
4	Dummy	17	Pull one side, no mechanical operation.	-
	Exit	25	Blank plate outside (13/16" [31 mm] projection). Inside lever always unlocked.	F111
	BTB Dummy	27	Pull both sides. No mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed	1			
المراب المرا	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
↓	Entry	53	Deadlocking latchbolt by lever either side, except when turn button locks outside lever. Pushing turn button in locks outside lever, requiring use of key outside to unlock. (Lever handle is freewheeling in locked position.) Turning inside lever unlocks outside lever. Pushing in and turning button locks outside lever, requiring key at all times. Turning inside lever does not unlock outside lever until button is manually turned to unlocked position. Inside lever always free.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84



3500 SERIES FUNCTION CHART (CONTINUED)

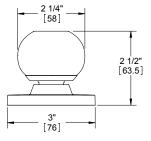
	Function	Function No.	Function Description	ANSI No.	
Keyed (continued)	Keyed (continued)				
	Corridor	73	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by key in outside lever or by push button or other locking device on inside. Key in outside lever locks or unlocks outside lever. Operating inside lever releases push button or other locking device placed in a locked position. Closing door releases push button or other inside locking device. Inside lever always operates latchbolt.	F90	
	Keyed Communicating	79	Deadlocking latchbolt by inside lever except when locked by key. Non-removable blank plate outside (13/16" [31 mm] projection).	F113	
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86	



3500 SERIES LEVER OPTIONS

APOLLO KNOB



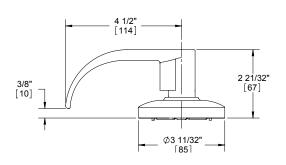


ARCHER LEVER





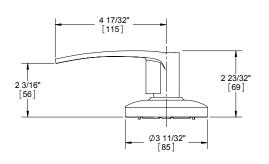




AUGUST LEVER





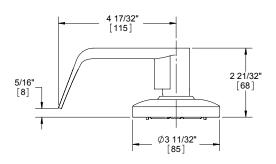


WITHNELL LEVER









Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3500 Series

Grade 2 Cylindrical Standard duty commercial

- Lifetime warranty
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: • 2-1/8" (54 mm) Diameter (Cross Bore)

• Latch Hole: 1" (25 mm) Diameter (Edge Bore)

Certifications: • BHMA Certified ANSI A156.2 Series 4000 Grade 2

> ADA Compliant ANSI A117.1 Accessibility Code (Levers Only) • ANSI A250.13 Severe Windstorm Resistant Component

• UL/cUL Listed for all functions up to 3 hours "A" label single doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• Knobs: Wrought Brass or Stainless Steel Exposed Trim:

• Levers: Cast zinc

• Rose: Wrought brass or stainless steel

Rose Diameter: 3-11/32" (85 mm) levers; 3" (76 mm) knobs

Lock Chassis: • Heavy gauge steel, zinc dichromated for corrosion resistance

• Free wheeling (levers only) • Removable thru-bolts

Notes: Failure to install thru-bolts and removable screw posts voids BHMA certification, UL Rating and Warranty

Keys: Two operating keys supplied per lock • Brass - Keyed Different - C Keyway Cylinders/Cores: • Drilled 6-pin, Keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

• Knobs: 1-3/8" - 1-3/4" (35 mm - 45 mm) Door Thickness:

• Levers: 1-3/8" - 2" (35 mm - 51 mm)

• 2-3/4" (70 mm) - Standard Backset:

• 2-3/8" (60 mm) - Optional • 3-3/4" (94 mm) - Optional • 5" (128 mm) - Optional

• 1/2" (13 mm) Throw - Stainless Steel Latchbolt:

• 1-1/8" x 2-1/4" (29 mm x 57 mm) Faceplate for 2-3/4" (70 mm) backset • 1" x 2-1/4" (25 mm x 57 mm) Faceplate for 2-3/8" (60 mm) backset

• Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only

• Square corner faceplate standard, round corner available 3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard

10 Passage, 17 Dummy, 25 Exit Only, 27 BTB Dummy (Levers only), 40 Privacy, 50 Office, 53 Entry, 70 Functions:

Classroom, 73 Corridor (Levers Only), 79 Keyed Communicating, 80 Storeroom

• US3, US4, US10, US10B, US26, US26D (Levers Only) Finishes:

• US3, US32D (Knobs Only)

Apollo knob; Archer, August, Withnell levers Lever Options:

• Lead Lined (Levers Only) Options:

• Tactile Warning (Levers Only)

• Split Finish

• Additional latchbolts and strikes available

• Blank plate projection is 13/16" (21 mm) for Functions 25 and 79 Notes:



Strike:



3500 SERIES LATCHBOLTS

Spring Latches



3947

2-3/4" (70 mm) Backset Passage Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3949

2-3/8" (60 mm) Backset Passage Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



3965

2-3/4" (70 mm) Backset Privacy Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3967

2-3/8" (60 mm) Backset Privacy Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



3994

2-3/8" (60 mm) Backset Dead Latch - Corridor Function Only

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3995

2-3/4" (70 mm) Backset Dead Latch - Corridor Function Only

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Optional Drive-In Spring Latches



3922

2-3/4" (70 mm) Backset Passage Spring Latch

3925

2-3/8" (60 mm) Backset Passage Spring Latch



3923

2-3/4" (70 mm) Backset Privacy Spring Latch

3926

2-3/8" (60 mm) Backset Privacy Spring Latch

Dead Latches



3948

2-3/4" (70 mm) Backset Dead Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate
- For use with all keyed functions other than corridor

3950

2-3/8" (60 mm) Backset Dead Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions other than corridor

Optional Drive-In Dead Latches



3924

2-3/4" (70 mm) Backset Dead Latch

For use with all keyed functions other than corridor

3927

2-3/8" (60 mm) Backset Dead Latch

For use with all keyed functions other than corridor



3996

2-3/8" (60 mm) Backset
Dead Latch - Corridor Function Only

3997

2-3/4" (70 mm) Backset
Dead Latch - Corridor Function Only



3500 SERIES LATCHBOLTS (CONTINUED)

Backset Extension Links



3917 3-3/4" (95 mm) Backset Extension LinkFor use with 2-3/8" (60 mm) backset latch



3937 5" (127 mm) Backset Extension LinkFor use with 2-3/4" (70 mm) backset latch

3500 SERIES STRIKES



3933

T-Strike with Plastic Dust Box

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3934

Full Lip Strike

1-5/8" x 2-1/4" (41 mm x 57 mm)



3935

Standard ASA Strike Plate

1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius

3500 SERIES ACCESSORIES



3959

Faceplate Adapter

Converts 1" (25 mm) to 1-1/8" (28 mm) width



3912

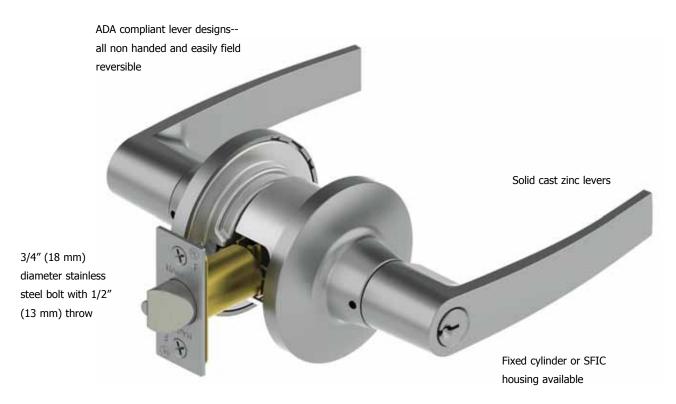
Thru-Bolt Jig

For 3500 Series lever set only

3600 Series



Hager 3600 Series Grade 2 tubular lockset provides the necessary security and dependability of a commercial lock with a more residential look. It is well suited for medium duty commercial or heavy duty residential applications such as multi-family housing. It is a great fit for narrow stile doors because of the smaller profile.

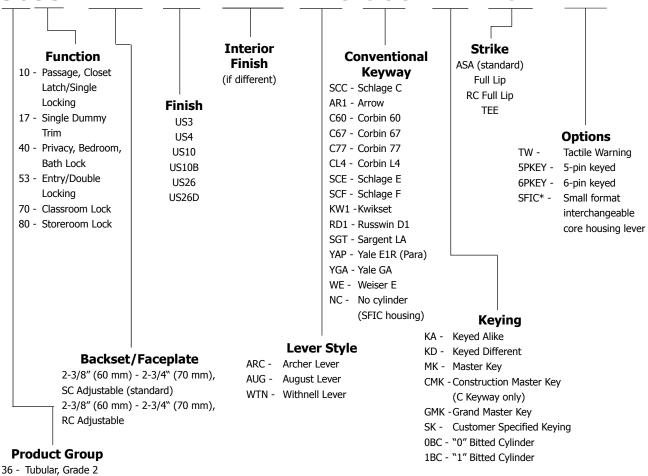


Latchbolt adjustable from 2-3/8" to 2-3/4" (60 mm to 70 mm) backset



HOW TO ORDER

3653 ADJ US3 US26 ARC SCC KD ASA TW



Notes:

- 1. If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- 2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3653 ADJ 2-3/8" to 2-3/4" US26D WTN NC ASA SFIC





3600 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed				
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
4	Dummy	17	Pull one side, no mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside or operating inside lever.	F76B
Keyed				
بلات	Entry	53	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by locking device on inside. When outside lever is locked, operating key in outside lever unlocks locking device. Locking device shall automatically release when inside lever is operated or be in the unlocked position before inside lever is operated.	F82B
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
ناها.	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever always unlocked.	F86

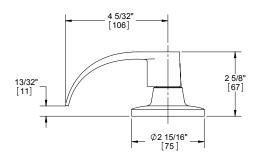


3600 SERIES LEVER OPTIONS

ARCHER LEVER



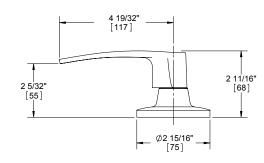




AUGUST LEVER



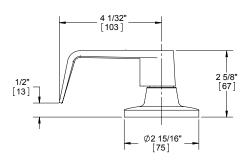




WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3600 Series

Grade 2 Tubular

Heavy Duty Residential - Medium Duty Commercial

- Five-year warranty
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: • 2-1/8" (54 mm) Diameter (Cross Bore)

Latch Hole: 1" (25 mm) Diameter (Edge Bore)
BHMA Certified ANSI A156.2 Series 4000 Grade 2
ADA Compliant ANSI A117.1 Accessibility Code

• UL/cUL Listed for all functions up to 3 hours for "A" label single doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

Exposed Trim: • Levers: Cast Zinc

Certifications:

Latchbolt:

• Rose: Wrought brass

Rose Diameter: 2-15/16" (75 mm)

Lock Chassis: Heavy gauge steel, zinc dichromated Keys: Two operating keys supplied per lock
• Brass - Keyed Different - C Keyway

Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

Door Thickness: 1-3/8" - 1-3/4" (35 mm - 45 mm)

Backset: • Adjustable 2-3/8" - 2-3/4" (60 mm - 70 mm)

Preset at factory for 2-3/8" (60 mm)
1/2" (13 mm) Throw - Stainless Steel

• 1" x 2-1/4" (25 mm x 57 mm) Faceplate

• Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only

• Square corner faceplate standard, round corner available

Strike: 3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard

Functions: 10 Passage, 17 Dummy, 40 Privacy, 53 Entry, 70 Classroom, 80 Storeroom

Finishes: US3, US4, US10, US10B, US26, US26D

Lever Options: Archer, August, Withnell levers

Options: • Tactile Warning

Split finish





3600 SERIES LATCHBOLTS

Adjustable Backset Spring Latches



3951

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch - Standard

- Square corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with Passage/Privacy functions



3953

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch

- Round corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with Passage/Privacy functions

5" Backset Spring Latches



3939

5" (127 mm) Backset Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with Passage/Privacy functions

Adjustable Backset Dead Latches



3952

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Dead Latch - Standard

- Square corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions



3954

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Dead Latch

- Round corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions

5" Backset Dead Latches



3938

5" (127 mm) Backset

- **Dead Latch**
- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions

Optional Drive-In Latchbolts



3914

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch

For use with Passage/Privacy functions



3915

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Dead Latch

For use with all keyed functions

3600 SERIES STRIKES



3933

T-Strike with Plastic Dust Box

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3934

Full Lip Strike

1-5/8" x 2-1/4" (41 mm x 57 mm)



3935

ASA Strike - Standard

1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" radius



3959

Faceplate Adapter

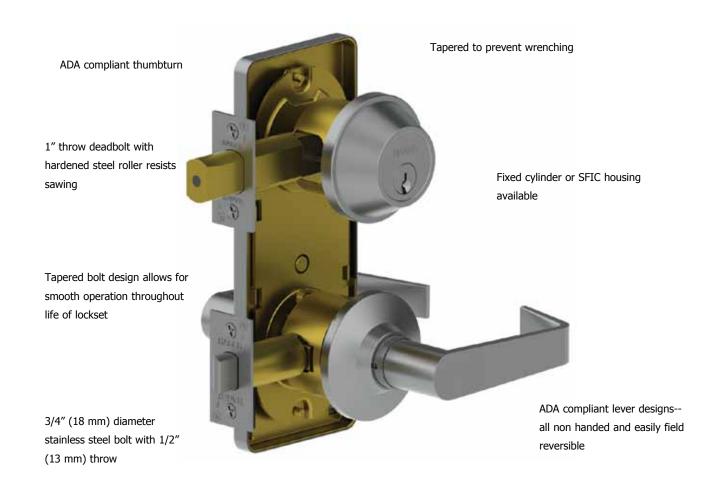
- Converts 1" (25 mm) to 1-1/8" (28 mm) width
- Supplied standard with 3600 Series



3700 Series

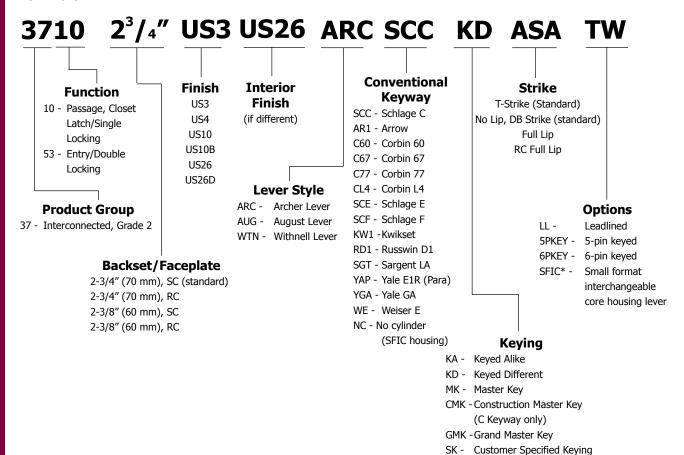


Hager 3700 Series Grade 2 interconnected lock is a perfect match for residential or commercial applications such as apartment buildings and assisted living facilities. These versatile locks provide a single action for retracting the latchbolt and deadbolt simultaneously for panic-free egress. They are supplied with an optional exterior escutcheon plate standard and are backed by a lifetime warranty.





HOW TO ORDER



Notes:

- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- 2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

3700 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Interconnected				
	Interconnected Single Locking Entry	10	Latchbolt operated by lever from either side. Rotating turn from inside or key from outside extends deadbolt to locked position. Both deadbolt and latchbolt are retracted to unlocked position by operating inside lever.	F95
• 40°).	Interconnected Double Locking Entry	53	Deadlocking latchbolt is operated by lever from either side except when outside lever is made inoperable by locking device inside. When outside lever is locked, deadlocking latchbolt is operated by key outside. Inside locking device is manually operated to unlock outside lever. Rotating turn from inside or key from outside extends deadbolt to locked position. Operating inside lever retracts both deadbolt and latchbolt. Closing door shall not release locking device inside.	F97

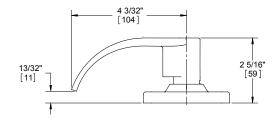
0BC - "0" Bitted Cylinder 1BC - "1" Bitted Cylinder

^{*} Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3753 2-3/4" US26D WTN NC TEE SFIC

3700 SERIES LEVER OPTIONS

ARCHER LEVER



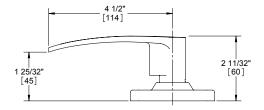






AUGUST LEVER



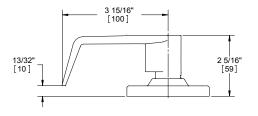






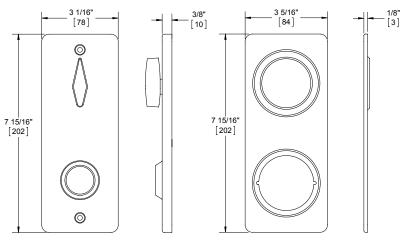
WITHNELL LEVER











INSIDE ESCUTCHEON

OPTIONAL OUTSIDE ESCUTCHEON







3700 Series

Grade 2 Interconnected

Heavy duty residential - medium duty commercial

- Lifetime warranty
- Cylindrical chassis
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housings available

Standard Door Prep: • 4" (102 mm) center of deadbolt to center of lock chassis

• 2-1/8" (54 mm) Diameter (Cross Bore)

• Latch Hole: 1" (25 mm) Diameter (Edge Bore)

Certifications:
• BHMA Certified ANSI A156.12 Grade 2

• ADA Compliant ANSI A117.1 Accessibility Code

• UL/cUL Listed for all functions up to 3 hours for "A" label single doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

Exposed Trim: Wrought Brass or Bronze, cast zinc lever Lock Chassis: • Heavy gauge steel, zinc dichromated

• Thru-bolt mounting

Rose Diameter: 2-1/2" (63 mm)

Outside Escutcheon: 3-5/16" x 7-15/16" x 3/8" (84 mm x 202 mm x 10 mm)
Inside Escutcheon: 3-1/16" x 7-15/16" x 1/8" (78 mm x 202 mm x 3 mm)

Keys: Cylinders/Cores:

Backsets:

Two operating keys supplied per lock

Brass - Keyed Different - C Keyway

Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

Door Thickness: • 1-3/8" - 1-3/4" (35 mm - 45 mm) - Standard

2" (52 mm) Doors - Optional2-3/4" (70 mm) - Standard

• 2-3/8" (60 mm) - Optional

Latchbolt: • 1/2" (13 mm) Throw - Stainless Steel

1-1/8" x 2-1/4" (29 mm x 57 mm) Faceplate for 2-3/4" (70 mm) backset
1" x 2-1/4" (25 mm x 57 mm) Faceplate for 2-3/8" (60 mm) backset

Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only

• Square corner faceplate standard, round corner available

Deadbolt: \bullet 1" (25 mm) Throw - brass with concealed steel roller to prevent sawing or cutting

1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate for 2-3/4" (70 mm) bracket
1" x 2-1/4" (25 mm x 57 mm) faceplate for 2-3/8" (60 mm) faceplate

Strikes: • 3933 Square Corner T-Strike with Plastic Dust Box, 1-1/8" x 2-3/4" (29 mm x 70 mm) Standard

• 3930 Square Corner Strike Plate with Dust Box, 1-1/8" x 2-3/4" (29 mm x 70 mm) - Standard

Functions:

• 10 Single Locking Entry
• 53 Double Locking Entry

Finishes: US3, US4, US10, US10B, US26, US26D

Lever Options: Archer, August, Withnell levers

Options: • Split finish

• Split lever design



3700 SERIES LATCHBOLTS

Spring Latches



3947 2-3/4" (70 mm) Backset Passage Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3949 2-3/8" (60 mm) Backset Passage Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Dead Latches



3948 2-3/4" (70 mm) Backset Dead Latch - Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3950 2-3/8" (60 mm) Backset Dead Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3700 SERIES STRIKES



3930

Strike Plate

1-1/8" x 2-3/4" (29 mm x 70 mm)



3933

T-Strike with Plastic Dust Box 1-1/8" x 2-3/4" (29 mm x 70 mm)



3934

Full Lip Strike

1-5/8" x 2-1/4" (41 mm x 57 mm)



3958

Round Corner Full Lip Strike

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius



3959

Faceplate Adapter

Converts 1" (25 mm) to 1-1/8" (28 mm) width





3920

2-3/4" (70 mm) Backset Tapered Deadbolt - Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3921

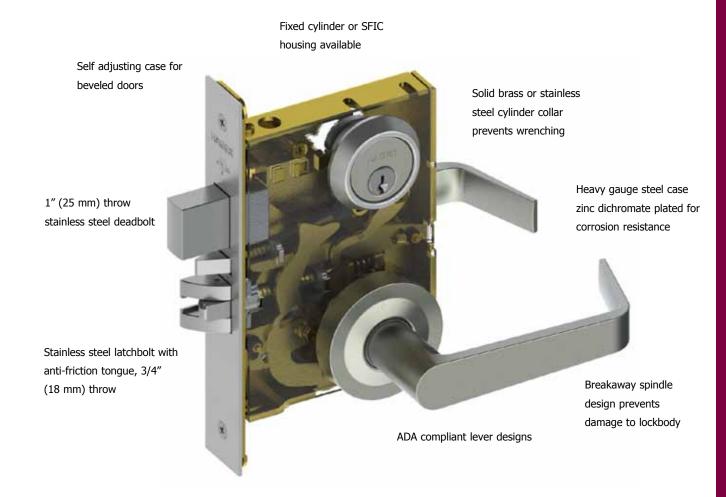
2-3/8" (60 mm) Backset Tapered Deadbolt

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



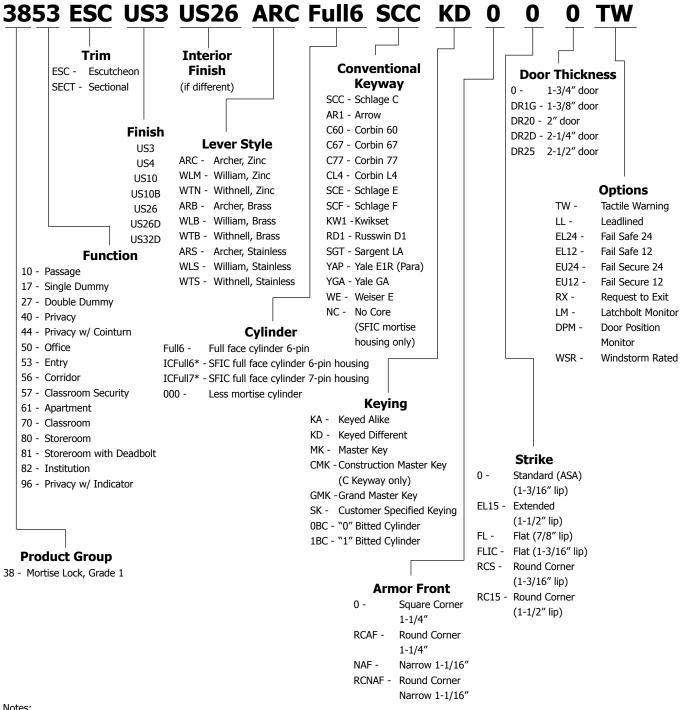


Hager 3800 Series mortise lock provides maximum security and durability for the harshest environments. With field reversible handing, ease of installation, and both escutcheon and sectional models available, our 3800 Series lock provides great flexibility. What's more, it is ANSI certified Grade 1 Operational and Security and is backed by a lifetime warranty.





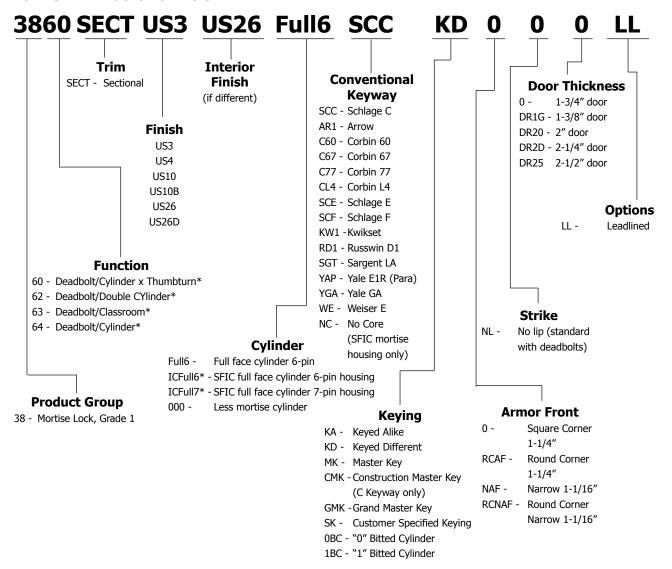
ESCUTCHEON AND SECTIONAL MORTISE LOCKS HOW TO ORDER



- Finishes other than US26D and US32D may require extended lead times.
- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- For additional keying information, refer to cylinder, core, and keying section of catalog.
- * Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example 3850 SECT 26D WTN ICFULL6 NC



MORTISE DEADLOCKS HOW TO ORDER



Notes:

- Finishes other than US26D and US32D may require extended lead times.
- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
- For additional keying information, refer to cylinder, core, and keying section of catalog.
- * Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. **Ordering example 3680 SECT 26D ICFULL6 NC**



3800 SERIES ESCUTCHEON AND SECTIONAL LOCKS FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
eyed Without [Deadbolt			
42	Office	50	Latchbolt retracted by lever from either side unless outside is made inoperative by key outside or by turning inside thumbturn. When outside is locked, latchbolt is retracted by lever inside. Outside lever remains locked until thumbturn is returned to vertical or unlocked by key. Auxiliary latch deadlocks latchbolt when door is closed.	F04
4	Apartment Entrance	61	Latchbolt retracted by lever from either side unless outside is locked by key from inside. When locked, latchbolt retracted by key outside or lever inside. Auxiliary latch deadlocks when door is closed.	F09
4 1	Classroom	70	Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.	F05
4 1	Storeroom	80	Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.	F07
4 5	Institution	82	Latchbolt retracted by key from either side. Lever on both sides always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.	F30
yed With Dea	dbolt			
دلك	Entry	53	Latchbolt retracted by lever from either side unless outside is locked by 20° rotation of thumbturn. Deadbolt thrown or retracted by 90° rotation of thumbturn. When locked, key outside or lever inside retracts deadbolt and latchbolt simultaneously. Outside lever remains locked until thumbturn is restored to vertical position. Throwing deadbolt automatically locks outside lever. Auxiliary latch deadlocks latchbolt when door is closed	F20
4	Corridor	56	Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key outside or thumbturn side. Throwing deadbolt locks outside lever. Turning inside lever simultaneously retracts deadbolt and latchbolt and unlocks the outside lever.	F13
ظه	Classroom Security	57	Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key from either side. Throwing deadbolt locks outside lever. Turning inside lever simultaneously retracts deadbolt and latchbolt and unlocks outside lever.	F33
4	Storeroom w/ Deadbolt	81	Latchbolt retracted by key outside or by lever inside. Outside lever always fixed. Deadbolt thrown or retracted by key outside or thumbturn inside. Turning inside lever simultaneously retracts deadbolt and latchbolt. Auxiliary latch deadlocks latchbolt when door is closed.	-



3800 SERIES ESCUTCHEON AND SECTIONAL LOCKS FUNCTION CHART (CONTINUED)

	Function	Function No.	Function Description	ANSI No.
Non-Keyed Withou	t Deadbolt			
حراب	Passage	10	Latchbolt retracted by lever from either side at all times.	F01
4 3	Privacy	40	Latchbolt retracted by lever from either side unless outside is locked by inside thumbturn. Turning inside lever or closing door unlocks outside lever. To unlock from outside, remove emergency button, insert emergency turn (furnished) in access hole and rotate.	F22
ظ	Privacy with Cointurn	44	Latchbolt retracted by lever from either side unless outside is locked by inside thumbturn or outside cointurn. Operating inside lever, closing door, rotating inside thumbturn, or rotating outside cointurn unlocks outside lever.	-
ظ	Privacy with Indicator	96	Latchbolt retracted by lever from either side. Turning inside thumbturn locks outside lever and displays "Occupied." Operating inside lever, closing door, rotating inside thumbturn. To unlock from outside, remove emergency button, insert emergency turn (furnished) in access hole and rotate.	-
Non-Keyed Dummy	/			•
4	Single Dummy	17	Lever on one side fixed by mounting bar.	-
4 4	Double Dummy	27	Lever on both sides fixed by mounting bar.	-

3800 SERIES DEADLOCKS FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
*	Cylinder x Thumbturn	60	Deadbolt thrown or retracted by key outside or thumbturn inside.	F17
4	Double Cylinder	62	Deadbolt operated by key from either side.	F16
4	Classroom	63	Deadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt but cannot project it.	F29
4	Cylinder	64	Deadbolt thrown or retracted by key from one side. No trim on opposite side.	F18



3800 SERIES ESCUTCHEON LEVER OPTIONS

ARCHER LEVER



AUGUST LEVER

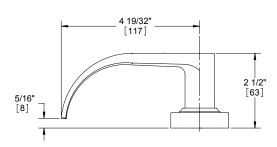


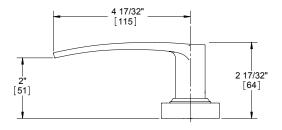
WILLIAM LEVER

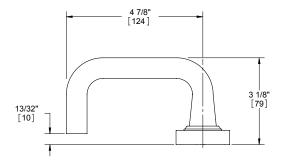


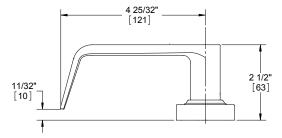
WITHNELL LEVER













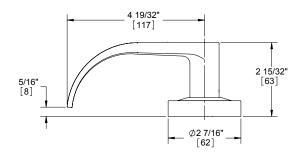
Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).

3800 SERIES SECTIONAL LEVER OPTIONS

ARCHER LEVER



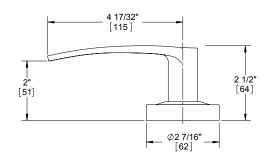




AUGUST LEVER



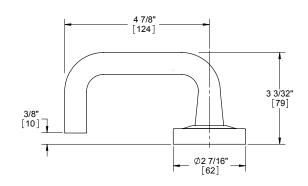




WILLIAM LEVER



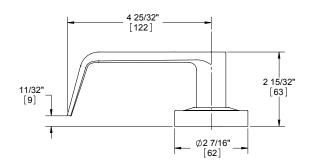




WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3800 Series

Grade 1 Mortise (Escutcheon)
Heavy duty commercial, industrial, institutional

- Lifetime warrantv
- Concealed thru-bolts
- Field reversible
- Standard mortise cylinder or Small Format Interchangeable Core housing available
- BHMA Certified Grade 1 Security with standard mortise cylinder

Standard Door Prep: • 3-5/8" (92 mm) Center of cylinder to spindle

• 2-7/16" (62 mm) Center of thumbturn to spindle

Certifications:
• BHMA Certified ANSI A156.13 Grade 1 Series 1000 Operational and Security

• ADA Compliant ANSI A117.1 Accessibility Code

• UL/cUL Listed for all functions up to 3 hours for "A" label doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• A250.13 Severe Windstorm Resistant (must specify)

Exposed Trim: • Cast Zinc - Standard

• Forged Brass, Cast Stainless Steel - Optional

Lock Case: 4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)

Armor Front: • 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard

• 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional

Escutcheon: 1-15/16" x 8" (50 mm x 203 mm)

Keys: Two operating keys supplied per lock

Cylinders/Cores: • Brass - Keyed Different - C Keyway

• Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

 \bullet Schlage "L" Cam - Standard

Door Thickness: • 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door

• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door

Must specify door thickness if greater than 1-3/4" (45 mm)
Privacy functions have a maximum door thickness of 2" (51 mm)

Backset: 2-3/4" (70 mm) Only

Latchbolt: 3/4" (19 mm) Throw with anti-friction tongue, all Stainless Steel

Deadbolt: 1" (25 mm) Throw - Stainless Steel

Strike: 3985 1-1/4" x 4-7/8" (32 mm x 124 mm), 1-3/16" (30 mm) Lip - Standard

Fasteners: Thru-bolted trim concealed under escutcheon

Functions: 10 Passage, 17 Dummy, 27 Double Dummy, 40 Privacy, 44 Privacy with Cointurn, 50 Office, 53 Entry, 56

Corridor, 57 Classroom Security, 61 Apartment, 70 Classroom, 80 Storeroom, 81 Storeroom with Deadbolt,

82 Institution, 96 Privacy with Indicator

Finishes: • US3, US4, US10, US10B, US26, US26D, US32D (for a true US32D, specify stainless steel levers)

• US3, US4, US10, US10B and US26 subject to extended lead time

Lever Options: Archer, August, William, Withnell levers

Options: • Tactile Warning

Lead lining

Split finish

Notes: • Self-adjusting case for beveled doors

• Stopworks are incorporated in thumbturn

• Breakable spindles prevent the lock from unlocking or being damaged

• Non-handed, stainless steel, deadlocking bar





3800 Series

Grade 1 Mortise (Sectional)

Heavy duty commercial, industrial, institutional

- Lifetime warranty
- Concealed thru-bolts
- Field reversible
- Standard mortise cylinder or Small Format Interchangeable Core housing available
- BHMA Certified Grade 1 Security with standard mortise cylinder

Standard Door Prep: • 3-5/8" (92 mm) Center of cylinder to spindle

• 2-7/16" (62 mm) Center of thumbturn to spindle

Certifications:
• BHMA Certified ANSI A156.13 Series 1000 Grade 1 Operational and Security

• ADA Compliant ANSI A117.1 Accessibility Code

• UL/cUL Listed for all functions up to 3 hours for "A" label doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• A250.13 Severe Windstorm Resistant (must specify)

Exposed Trim: • Cast Zinc - Standard

• Forged Brass, Cast Stainless Steel - Optional

Lock Case: 4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)

Armor Front: • 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard

• 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional

Rose Diameter: 2-7/16" (62 mm)

Keys: Two operating keys supplied per lock
Cylinders/Cores: Brass - Keyed Different - C Keyway
Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

• Schlage "L" Cam - Standard

Door Thickness: • 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door

• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door

Must specify door thickness if greater than 1-3/4" (45 mm)
Privacy functions have a maximum door thickness of 2" (51 mm)

Backset: 2-3/4" (70 mm) Only

Latchbolt: 3/4" (19 mm) Throw with anti-friction tongue, all Stainless Steel

Deadbolt: 1" (25 mm) Throw - Stainless Steel

Strike: 3985 1-1/4" x 4-7/8" (32 mm x 124 mm), 1-3/16" (30 mm) Lip - Standard

Fasteners: Thru-bolted trim concealed under rose

Functions: 10 Passage, 17 Dummy, 27 Double Dummy, 40 Privacy, 44 Privacy with Cointurn, 50 Office, 53 Entry, 56

Corridor, 57 Classroom Security, 70 Classroom, 80 Storeroom, 81 Storeroom with Deadbolt, 82 Institution,

96 Privacy with Indicator

Lever Options: Archer, August, William, Withnell levers

Options:

• Tactile Warning
• Lead lining

Split finish

Finishes:

• US3, US4, US10, US10B, US26, US26D, US32D (for a true US32D, specify stainless steel levers)

• US3, US4, US10, US10B and US26 subject to extended lead time

Notes: • Self-adjusting case for beveled doors

• Stopworks are incorporated in thumbturn

• Breakable spindles prevent the lock from unlocking or being damaged

• Non-handed, Stainless Steel, deadlocking bar







3800 Series - Electrified

Grade 1 Mortise

Extra heavy duty commercial, industrial, institutional

- Lifetime warranty on mechanical locking components
- One-year warranty on electric components

Function: • 80 - Storeroom

• 82 - Institutional

Applications: • Provides remote locking and unlocking ideal for door control where added security is necessary

• Stairtower doors

• Office doors

• Classrooms

• Elevator lobby doors

• Computer rooms

• Hospital equipment rooms

• Pharmaceutical storage rooms

Features: • Deadlocking latch

• Key override allows latchbolt to be momentarily retracted with the key even though electrically locked. Note that locks that are electrically unlocked may not be locked via the key cylinder.

• Interface with life-safety systems

• Continuous-duty solenoids

Voltage: • 12V AC/DC; current - .612 AMP

• 24V AC/DC; current - .330 AMP

• Specify 12V or 24V when ordering

Function	Function No.	Function Description
Storeroom - Fail Safe	3880EL	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Fail Secure	3880EU	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Institution - Fail Safe	3882EL	Both levers continuously locked electrically. Unlocked by key from either side, by breaking electrical current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed.
Institution - Fail Secure	3882EU	Both levers continuously locked until unlocked by key from either side or by supplying electrical current. Auxiliary latch deadlocks latchbolt when door is closed.
Request to Exit	RX	Monitors inside lever rotation. Incorporates into alarm systems or in conjunction with an electromagnet. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.
Latchbolt Monitor	LM	A single switch (SPDT) mounted inside lockset monitors the full extension of the latchbolt. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.
Door Position Monitor	DPM	A single switch (SPDT Reed Magnetic Switch) mounted inside lockset monitors whether the door is fully closed. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.



3800 Series - Power Supplies

Hager 2903 and 2904 power supplies are designed to power locking devices. Their features include:

- UL Listed
- Filtered/regulated 24 VDC
- 2 AMP load capacity
- Overload protection
- · Over voltage protection
- Short circuit protection
- Surge suppression on Fail Safe and Fail Secure outputs
- Automatically accepts 120 VAC or 240 VAC inputs

2903

This power supply includes:

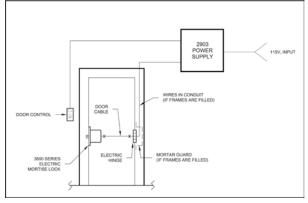
- Interface relay to isolate the locking device current from the control switch
- Auxiliary 24 VDC constant voltage for powering stand alone devices such as keypads, motion detectors, status indicators, etc.

2904

This power supply includes:

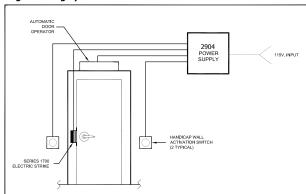
- Separate inputs for activation switch on entry and exit sides of the opening
- Relay contact output to automatic door operator (N.O. or N.C. contacts)
- Built-in time delay between activation of electrified locking device and automatic door operator
- Input of optional emergency release switch when urgent unlocking of the door is required
- Auxiliary 24VDC constant voltage output
- Separate 24VDC outputs for Fail Safe and Fail Secure electrified locking devices

Hager Locking System



2903

Hager Locking System



2904

Product	Description
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls.
2904	Provides power and control for openings with an electrified locking device and automatic door operator.



3800 SERIES STRIKES



3985

Standard Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm)



3986

Extended Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 1-1/2" (32 mm x 124 mm x 38 mm)



3987

Standard Lip Strike

- Round corner
- 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm)



3988

Extended Lip Strike

- Round corner
- 1-1/4" x 4-7/8" x 1-1/2" (32 mm x 124 mm x 38 mm)



3989

Flat Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 7/8" (32 mm x 124 mm x 22 mm)



3990

Extended Flat Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm)

3800 SERIES MORTISE CYLINDERS



3902

Mortise Cylinder

- If cylinder is ordered separately from the mortise lock, please specify Schlage "L" Cam
- Conventional cylinder or Small Format Interchangeable Core housing available
- SFIC core sold separately
- For more cylinder information, please refer to cylinder, core, and keying section.

3800 SERIES CYLINDER COLLARS



3918

Tapered Cylinder Collar

For use with sectional mortise lock, standard 1-1/8" cylinder, 1-3/4" door



3928

Flat Cylinder Collar

For use with special cylinders and door thicknesses







3800 Series

Grade 1 Mortise Deadlock Heavy duty commercial, industrial, institutional

- Lifetime warranty
- Concealed thru-bolts
- Non-handed
- Standard mortise cylinder or Small Format Interchangeable Core housing available
- BHMA Certified Grade 1 Security with standard mortise cylinder

Certifications: • BHMA Certifie

- BHMA Certified ANSI A156.13 Grade 1 Series 1000 Operational and Security
- ADA Compliant ANSI A117.1 Accessibility Code
- UL/cUL Listed for all functions up to 3 hours for "A" label doors
- UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated

Exposed Trim: Forged Brass, Cast Stainless Steel - Optional Lock Case: 4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)

Armor Front: • 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard

• 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional

Keys: Two operating keys supplied per lock Cylinders/Cores: • Brass - Keyed Different - C Keyway

• Drilled 6-pin, keyed 5-pin - Standard

• Other keying options, including keyed 6-pin, available from factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

• Schlage "L" Cam - Standard

Door Thickness: • 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door

• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door

• Must specify door thickness if greater than 1-3/4" (45 mm)

Backset: 2-3/4" (70 mm) Only

Deadbolt: 1" (25 mm) Throw - Stainless Steel

Strike: 3991 1-1/4" x 4-7/8" (32 mm x 124 mm) No Lip - Standard

Functions: 60 Cylinder x Thumbturn, 62 Double Cylinder, 63 Classroom, 64 Cylinder,

Options: Lead lining

Finishes: • US3, US4, US10, US10B, US26, US26D, US32D

• US3, US4, US10, US10B, US26, and US32D subject to extended lead time

Notes: Self-adjusting case for beveled doors

3800 SERIES DEADLOCKS STRIKES



3991

No Lip Strike

- Square corner
- 1-1/4" x 4-7/8" (32 mm x 124 mm)

3800 SERIES MORTISE CYLINDERS



3902 Mortise Cylinder

- If cylinder is ordered separately from the mortise lock, please specify Schlage "L" Cam
- Conventional cylinder or Small Format Interchangeable Core housing available
- SFIC core sold separately
- For more cylinder information, please refer to cylinder, core and keying section.

2500 Series

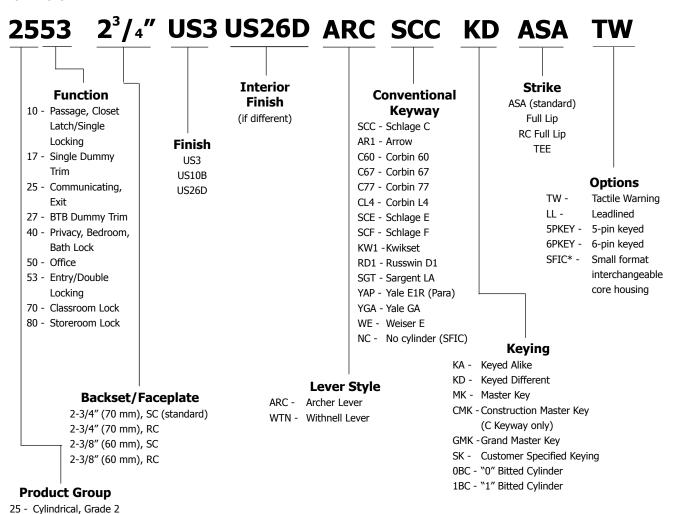


Hager 2500 Series Grade 2 lock is a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. The inherent value of this lock and the product offering make our 2500 Series lock a perfect choice for a stocking program. As an economical alternative to other Grade 2 cylindrical locks, it offers both dependability and affordability.





HOW TO ORDER



Notes:

- If master-keyed, include master key instruction sheet with order (available on page 69 or online).
 For additional keying information, please refer to cylinder, core, and keying section of catalog.
- * Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. **Ordering example: 2553 2-3/4" US26D WTN NC ASA SFIC**



2500 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed				
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
4	Dummy	17	Pull one side, no mechanical operation.	-
	Exit	25	Blank plate outside (13/16" [31 mm] projection). Inside lever always unlocked.	F111
4	BTB Dummy	27	Pull both sides. No mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed				
الروپا	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
40	Entry	53	Deadlocking latchbolt is operated by lever from either side except when outside lever is made inoperable by locking device inside. When outside lever is locked, deadlocking latchbolt is operated by key outside. Inside locking device is manually operated to unlock outside lever. Rotating turn from inside or key from outside extends deadbolt to locked position. Operating inside lever retracts both deadbolt and latchbolt. Closing door shall not release locking device inside.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86

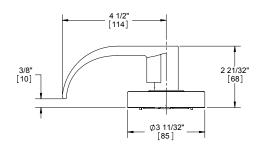


2500 SERIES LEVER OPTIONS

ARCHER LEVER

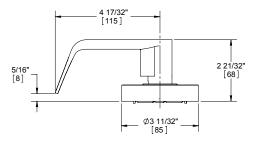






WITHNELL LEVER









Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





2500 Series Grade 2 Cylindrical

Standard duty commercial

- One-year warranty
- No exposed mounting screws
- Non-handed
- Standard cylinder or Small Format Interchangeable Core housing available

Applications: • Standard duty commercial

• Standard door prep - 2-1/8" (54 mm) diameter (cross bore)

Latch hole - 1" (25.4 mm) diameter (edge bore)
BHMA Certified ANSI A156.2, Series 4000, Grade 2

ADA Compliant ANSI A117.1 Accessibility Code

• UL/cUL Listed for all functions up to 3 hours "A" label single doors

• UL 10C/UBC 7-2 (1997) Positive Pressure Related

• UL 10B Neutral Pressure Rated

Warranty: One-year

Certifications:

Latchbolt:

Exposed Trim: • Wrought brass, bronze, and stainless steel

• Lever is zinc based, plated to match BHMA symbols

Rose Diameter: 3-11/32" (85 mm)

Lock Chassis:

• Heavy gauge steel, zinc dichromated for corrosion resistance

• Removable thru-bolts

• Failure to install thru-bolts and removable screw posts voids BHMA certification, UL rating, and warranty

Keys: Two operating keys supplied per lock
Cylinders/Cores: • Brass, keyed different, C keyway

Drilled 6-pin, keyed 5-pin

• Other keying options, including keyed 6-pin, available from the factory

• Small Format Interchangeable Core housing available

• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately

Door Thickness: 1-3/8" - 2" (35 mm - 51 mm)

Backset: 2-3/4" (70 mm) standard

2-3/8" (60 mm) optional

• 1/2" (13 mm) throw, stainless steel

• 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate for 2-3/4" (70 mm) backset

• 1" x 2-1/4" (25 mm x 57 mm) faceplate for 2-3/8" backset

Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only

Strike: • 3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike standard

Optional strikes available

Functions: 10 Passage, 17 Dummy, 25 Exit Only, 27 Back-to-Back Dummy, 40 Privacy, 50 Office, 53 Entry, 70 Classroom,

80 Storeroom

Finishes: US3, US10B, US26D Lever Options: Archer, Withnell levers

Options:

• Lead lined
• Tactile Warning

Notes: Blank plate projection is 13/16" (21 mm) for function 25





2500 SERIES LATCHBOLTS

Spring Latches



3947

2-3/4" (70 mm) Backset **Passage Spring Latch**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3949

2-3/8" (60 mm) Backset **Passage Spring Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3922

Optional Drive-In Spring Latches



2-3/4" (70 mm) Backset **Passage Spring Latch**

3925

2-3/8" (60 mm) Backset **Passage Spring Latch**



3923

2-3/4" (70 mm) Backset **Privacy Spring Latch**

3926

2-3/8" (60 mm) Backset **Privacy Spring Latch**



3965

2-3/4" (70 mm) Backset **Privacy Spring Latch**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3967

2-3/8" (60 mm) Backset **Privacy Spring Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Optional Drive-In Dead Latches



3924

2-3/4" (70 mm) Backset **Dead Latch**

3927

2-3/8" (60 mm) Backset **Dead Latch**

Dead Latches



3948

2-3/4" (70 mm) Backset **Dead Latch**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3950

2-3/8" (60 mm) Backset **Dead Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Backset Extension Links



3917

3-3/4" (95 mm) Backset **Extension Link**

For use with 2-3/8" (60 mm) backset latch



3937

5" (127 mm) Backset **Extension Link**

For use with 2-3/4" (70 mm) backset latch



2500 SERIES STRIKES



3933

T-Strike with Plastic Dust Box 1-1/8" x 2-3/4" (29 mm x 70 mm)





3911 Thrubolt Jig



3934

Full Lip Strike 1-5/8" x 2-1/4" (41 mm x 57 mm)



3935

ASA Strike Plate - Standard 1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius



3959

Faceplate Adapter

Converts 1" (25 mm) to 1-1/8" (28 mm) width





CONVENTIONAL/FIXED CYLINDERS

Keying Options

Keyed function locks are supplied standard with Schlage 'C' keyway cylinder, drilled 6-pin, keyed 5-pin and will be keyed different with two operating keys unless otherwise specified.

- Keyed Alike, 0 Bitted, 1 Bitted
- Master Keyed, Grand Master Keyed [must specify quantity of Master keys where applicable, 3961 (5-pin) or 3962 (6-pin)]
- Construction Master Keyed (C keyway only)
- Keyed to Specific or Existing Number
- Submit master keying form; pages 72-73 or online
- Extra Cut Keys (3961 Cut 5-pin, 3962 Cut 6-pin)
- Key Markings: 1AA, 2AA etc. (per key)
- Key Markings other than Key Set (per key)
- Cylinder markings
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998

Optional Keyways (Conventional Cylinders)



Arrow AR1



Corbin 60



Corbin 67



Corbin 77



Corbin/ Russwin L4



Kwikset KW1



Weiser E



Russwin D1



Sargent LA



Schlage E



Schlage F



Yale E1R (PARA)



Yale GA

Keys



3955 Key Blank5-pin, C keyway



3961 Cut Key5-pin, keyed to specific or existing number



3956 Key Blank6-pin, C keyway



3962 Cut Key6-pin, keyed to specific or existing number



CONVENTIONAL/FIXED CYLINDERS (CONTINUED)

Cvlinders



3960 **Fixed Cylinder Kit**

Includes two operating keys Specify keyway, tailpiece, and how keyed Note: Cylinder instructions and ordering guide available online





2-639-7087

Tailpiece Z

Pack of 10 tailpieces for use with 3473L, 3570L, 3573L



2-639-7094

Tailpiece X

Pack of 10 tailpieces for use with 3495L (Interior Lever)



2-639-7192

Tailpiece K

Pack of 10 tailpieces for use with 4700 key-in-lever trim (KE, KN)



2-639-7322

Tailpiece V

Pack of 10 tailpieces for use with 2570L



Tailpieces

2-639-7001

2-639-7000 Tailpiece 1

3450L, 3480L, 2580L

Tailpiece 2

Pack of 10 tailpieces for use with 3470L, 3495L (Exterior Lever)

Pack of 10 tailpieces for use with 3453L,



2-639-7002

Pack of 10 tailpieces for use with 3453K, 3480K, 3550L, 3553L, 3553K, 3579L,



3580L, 3580K, 3753L, 2550L, 2553L





2-639-7003

Tailpiece 4

Pack of 10 tailpieces for use with 3470K,



2-639-7005

Tailpiece 6

Pack of 10 tailpieces for use with 3114DB and 3214DB exterior cylinders



2-639-7006

Tailpiece 7

Pack of 10 tailpieces for use with 3114DB and 3214DB interior cylinders



2-639-7007

Tailpiece 8

Pack of 10 tailpieces for use with 3115DB, 3118DB, 3215DB, 3710DB, 3753DB



2-639-7008

Tailpiece 9

Pack of 10 tailpieces for use with 3653L, 3670L, 3680L





3901

Rim Cylinder

- Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard
- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece included (shipped loose in box)
- Supplied with two operating keys



3903

Rim Dummy Cylinder

Rim Cylinder Accessories



2-639-7045

Standard Breakoff Tailpiece

1-3/4" (45 mm)



2-639-7058

Long Breakoff Tailpiece

2-3/8" (60 mm)



CONVENTIONAL/FIXED CYLINDERS (CONTINUED)

Rim Cylinder Accessories (Continued)

3902

Mortise Cylinder



2-300-0118 Extra Long Breakoff Screws 2-3/8" (60 mm)



Mortise Cylinders

2-649-0137 Retaining CupCan be used with 45PN, 47PN, and 47RN

• Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard

• 3975 standard cam attached and 3972

· Must specify length, cam, keyway,

Thread size is 1.150" x 32 UNS
Cylinder face diameter is 1.360"
Supplied with two operating keys
1-1/8" (29 mm) standard length, 1-1/4"

and keying instructions

Adams Rite cam shipped loose in the box

Mortise Cylinder Cams



3971 Yale CamRadius .722" (18 mm)



3972 Adams Right CamRadius .560 (14 mm)



3973 Standard Cloverleaf Radius .741" (19 mm)



3974 Marks CamRadius .755" (19 mm)



3975 Standard CamRadius .723" (18 mm)
For use with Hager exit devices and trim



3904 Mortise Dummy1-1/8" (29 mm) length

(31 mm) available



3976 Schlage L CamRadius .637" (16 mm)
For use with Hager mortise locks (all functions)



3905Mortise ADA Turn Knob 1-1/8" (29 mm) length



3977 Sargent/Yale CamRadius .733" (18.6 mm)



3978 Corbin/Russwin/Best CloverleafRadius .725" (18.5 mm)



SMALL FORMAT INTERCHANGEABLE CORE

Keying Options

Cores are furnished keyed different unless otherwise specified. Other keying options include:

- Keyed Alike
- Construction Cores
- Master keyed, Grand Master Keyed (Must specify quantity of master keys, control keys, or additional change keys, 3984.)
- Keyed to specific or existing number
- Key Markings: 1AA, 2AA etc. (per key) VKC
- Key markings other than key set
- Core markings
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998
- * Construction master keyed not available.

Keyways (Best) - A, B, C, D, E, F, G, H, J, K, L, M, Q SFIC Cores



3981-C Combinated Core 6-PinIncludes two change keys
Finishes include US4 or US26D

3981-U Uncombinated Core 6-PinIncludes two key blanks
Finishes include US4 or US26D



3982-C Combinated Core 7-PinIncludes two change keys
Finishes include US4 or US26D

3982-U Uncombinated Core 7-PinIncludes two key blanks
Finishes include US4 or US26D

SFIC Construction Cores

Construction Small Format Interchangeable Cores are available in blue or red and are keyed alike. Will receive full credit, less shipping, of original cost upon return of construction cores with keys.



3981-Blue or 3981-Red Construction CoreCombinated, 6-pin
Includes two operating keys



3982-Blue or 3982-Red Construction CoreCombinated, 7-pin
Includes two operating keys



SFIC Keys



3983 SFIC Key BlankBest Keyways, used with 6-pin and 7-pin cores



3984 SFIC Cut KeyBest Keyways, used with 6-pin and 7-pin cores

SFIC Construction Core Keys



2-639-7168 3984 Control Key (BA IC 6 Blue)

2-639-7169 3984 Control Key (BA IC 7 Blue)

2-639-7170 3984 Control Key (BA IC 7 Red)

2-639-7171 3984 Control Key (BA IC 6 Red)

Note: Two (2) each will be shipped unless otherwise specified.



SMALL FORMAT INTERCHANGEABLE CORE (CONTINUED)

SFIC Tailpieces



2-639-7060

Pack of 10 tailpieces for use with 2500/3500 Series SFIC lever (6-pin/7-pin combo)



2-639-7061

Pack of 10 tailpieces for use with 3400/3500 Series SFIC knob (6-pin/7-pin combo)



2-639-7090

Pack of 10 tailpieces for use with 3753 Interconnected Lock SFIC lever (6-pin/7-pin combo)



2-639-7091

Pack of 10 tailpieces for use with 3114/3214 SFIC deadbolt (6-pin/7-pin combo)



2-639-7095

Pack of 10 tailpieces for use with 3115/3118/3215 and 3710/3753 SFIC deadbolt (6-pin/7-pin combo)

SFIC Rim Cylinder Housing



3901

Rim Cylinder

- Furnished with trim ring, mounting plate, and break off screws
- · Long tail piece standard
- Small Format Interchangeable Core housing supplied less core.
- Specify 6- or 7-pin.

SFIC Rim Cylinder Accessories



2-639-7045

Standard Breakoff Tailpiece 1-3/4" (45 mm)



2-639-7058

Long Breakoff Tailpiece

2-3/8" (60 mm)



2-300-0118

Extra Long Breakoff Screws 2-3/8" (60 mm)



2-649-0137

Retaining Cup

Can be used with 45PN, 47PN, and 47RN

Mortise Cylinder Housing



3902

Mortise Cylinder

- 2-639-7082 standard cam; 2-639-7083 shipped loose in the box
- Thread size is 1.150" x 32 UNS. Cylinder face diameter is 1.360"
- Small Format Interchangeable Core housing supplied less core
- Must specify length and cam, 6-pin 1-1/4", 7-pin 1-3/8"

Mortise Cylinder SFIC Cams



2-639-7082 Standard Yale Cam



2-639-7083

Adams Right Cam



2-639-7084

Standard Cloverleaf Cam



2-639-7085

Schlage "L" Cam

For use with Hager mortise locks (all functions)



2-639-7086

Sargent/Yale Cam





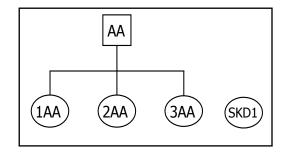
HOW TO ORDER KEY SYSTEMS

2 LEVEL SYSTEMS Simple Master Key System

The master key symbol consists of TWO letters, such as **AA**. The change key numbers are added to the master key letters. The numbers come **FIRST: 1AA, 2AA, 3AA**, etc.

When locks are required which are not operated by the master key or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

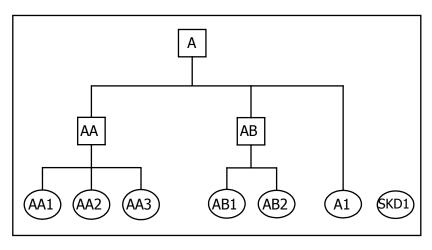
When all higher levels of master keys are to be disallowed, suffix (**NMK**) to the symbol of the key which is to operate. This means "not master keyed." Cylinder **1AA(NMK)** is operated by **1AA** only. The AA master is blocked from operation.



3 LEVEL SYSTEMS Grand Master Key System

The grand master is assigned any ONE letter, such as **A**. The master keys under this grand are assigned *two* letters, the first of which must be the same as the grand: **AA**, **AB**, **AC**, etc. are all masters under grand **A**. Masters **BA**, **BB**, **BC**, etc. are all under grand **B**. Caution: Do not use the letters **I** or **O** because of possible confusion with the numerals **1** and **0**, respectively. Change key numbers come after the letters.

For master keys beyond AZ, insert a numeral between the letters to designate which pass through the alphabet they represent. A2A through A2Z represents the second pass of masters under grand A. A3A through A3Z would be the third. Change keys under these masters have the numbers suffixed in the usual way: A2A1, A2A50, etc.



If the cylinder is to be operated by its change key and nothing lower than the single lettered GMK, the change number is added to the GMK symbol. This is illustrated by the example **A1** in the schematic shown.

When locks are required which are not operated by ANY master keys or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

When all higher levels of master keys are to be disallowed, suffix **(NMK)** to the symbol of the key which is to operate. This means "not master keyed" and can be applied to any level in the system. Cylinder **AA1(NMK)** is operated by **AA1** only. The **AA** master and **A** grand are blocked from operation. Cylinder **AA(NMK)** would be operated by the **AA** master only. Grand **A** does not operate.

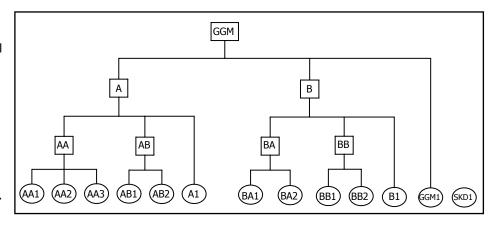


HOW TO ORDER KEY SYSTEMS (CONTINUED)

4 LEVEL SYSTEMS Great Grand Master Key System

The great grand master key is assigned the symbol **GGM**. The rest of the symbols are the same as those in 3-level systems: The GMKs are assigned single letters, e.g., **A, B, C, D,** etc. Caution: Never use **X** for a grand master key due to the confusion which will result with cross keying symbols presented on the next page.

Masters under each GMK are assigned two letters, the first of which is the same as its respective grand master key. Change key numbers come after the letters. Changes under the grand (A1,



B1, etc.) and masters beyond **AZ** are handled exactly as in the 3-level system already described.

Changes directly under a grand are also handled as illustrated in the 3-level system. For changes directly under the **GGM** with no intermediate level masters, the change number is added directly to **GGM** as shown by the example **GGM1** in the schematic.

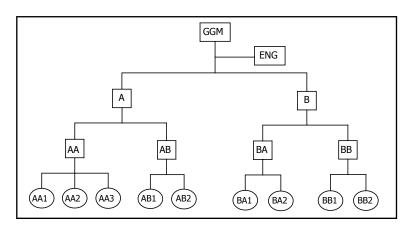
When locks are required which are not operated by ANY master keys or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

When all higher levels of master keys are to be disallowed, suffix **(NMK)** to the symbol of the key which is to operate. This means "not master keyed" and can be applied to any level in the system. Cylinder **AA1(NMK)** is operated by **AA1** only. The **AA** master, **A** grand and **GGM** are all blocked from operation. Cylinder **AA(NMK)** is operated by the **AA** master only. Grand **A** and the **GGM** do not operate. Cylinder **A(NMK)** would be operated by the **A** grand only, without the **GGM**.

SELECTIVE MASTER KEYS

It is often useful in large keying systems to issue a high level master key to maintenance personnel which allows access across all master and grand master key boundaries of a keying system. A selective master key is usually very close to the system's top master key, both physically and through its realm of access. Nevertheless, it must be blocked from operating in many areas.

To designate that a lock be operated by a selective master key, suffix the symbol in parentheses to the standard symbol. Example: **AA1 (ENG)**. This must be added every time the selective key is to operate and left off whenever the selective key is NOT to operate. For instance, you may lay out a system in which key **AA1** is to operate two different offices. Inside one of them



is an electrical cabinet which must be accessible to maintenance personnel carrying the **ENG** key. That lock must be specified as **AA1(ENG)** while the lock for the other office must be specified as **AA1**. Change keys directly under the selective key, such as **ENG1**, are operated by all higher level keys, such as **GGM**.

Like cross keying, a selective master key is a convenience feature which decreases the security of the cylinders it operates and limits the expansion and flexibility of the overall keying system. Each selective master key typically eliminates 20 - 25% of the capacity of the system where it is used, so it should only be specified when absolutely required. It is recommended that no more than one system-wide selective master key be used within the same system.



CROSS KEYING

Convenience May Reduce Cylinder Security and Hinder System Expansion

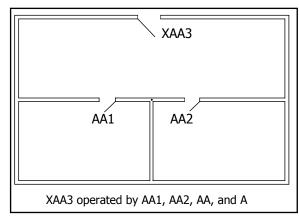
Whenever two or more different keys such as **AA1** and **AA2** are both required to operate the same cylinder, the cylinder's security is reduced. This is called cross keying. When the cross keying occurs under all the same higher level keys, such as **AA1** and **AA2**, it is known as controlled cross keying. When it combines keys under different higher level keys, such as **AA1** and **AB1**, it is known as uncontrolled cross keying.

In addition to reducing the security of the cylinder, cross keying usually imposes limits on the flexibility and expansion of the overall keying system. This is especially true of uncontrolled cross keying. For these reasons, it is strongly recommended to allow personnel to carry more than one key. Cross keying should be discouraged whenever possible. However, when cross keying is required, it is specified as follows, and should be summarized at the beginning of each order. It cannot normally be added later. Each cross keyed set should also be limited to keys which are all under the same higher level master keys.

Case #1

Cylinder requires its own change key. The illustration depicts part of a small medical building where two doctors share a common receptionist. The receptionist gets the **AA3** key. Each doctor carries a key which operates only one office, but is also cross keyed into the entrance from the corridor.

Determine the symbol of the change key (example: **AA3**). Then prefix the letter **X** (example: **XAA3**). Then list all keys which are to operate in an "operated by..." phrase. Example: "**XAA3** operated by **AA1**, **AA2**, **AA** and **A**". Note that **X** is a cylinder specification only. The keys for cylinder **XAA3** are designated **AA3**.

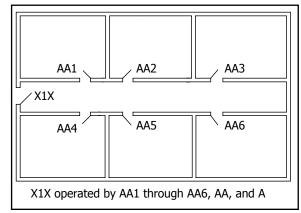


Case #2

Cylinder does NOT require its own change key. This illustration depicts a section of a floor in a dormitory. Each student's bedroom key operates the hall door lock. There is no need to construct a key which operates only the hall door.

In this case, place an **X** at both the beginning and end of the symbol and a number between them. Example: **XIX**, **X2X**, etc. Again, always include the "operated by . . . " phrase with a complete listing of key symbols to operate.

Note: Hager will not do uncontrolled cross-keying due to reduced security and expansion capabilities.



KEYED ALIKE

Use keyed alike groups to conserve key combinations. Study blueprints or building structures to identify areas where more than one door leads into the same space, and where several different areas are used by the same personnel. These areas should be keyed alike (use the same key symbol). This conserves combinations for future use as well as reduces the need to issue master keys.

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Master Keying Form

Hager order number: Account number: Customer: Customer PO number: Job name: Location: 1. System ○ New Existing If existing, please attach bitting sheet and complete following field: Original Hager order number: 2. System type O Conventional keyed 5-pin (standard) Conventional keyed 6-pin O Small Format Interchangeable core keyed 6-pin Small Format Interchangeable core keyed 7-pin 3. System level and key quantity Level Quantity ○ GGGMK ○ GGMK GMK ○ MK O Construction MK (Lost Ball) (for conventional only) Other Change keys Quantity O Per core/cylinder O Per key symbol O Per cylinder/core per KA/KD Special function Quantity Control Maintenance Housekeeping Mechanical Engineering Janitorial SKD

This form is also available in electronic format and submission on our website.

Ship to:
Requested ship date:
4. Key stamping (visual key control)
○ Key set symbol
O Door number
O Bitting number
O Do not duplicate (standard with interchangeable core)
Other
Please note that visual key control is recommended, otherwise, keys will be tagged with temporary identification.
5. Packing
O Pack keys with lock
O Pack keys separate from lock
Marking instructions (labels, packaging, etc.):
Special shipping instructions:
6. 3998 bitting list - no charge if specified with original order
○ Yes ○ No
Ship to:



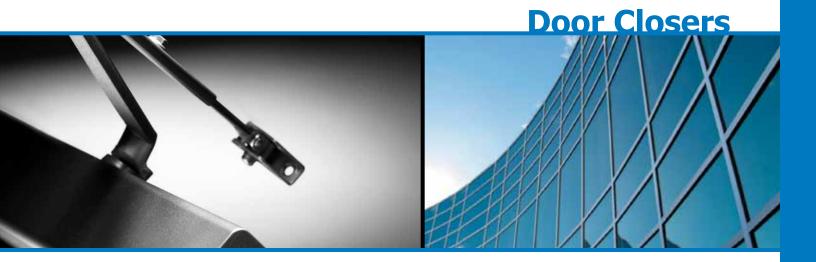
Other

7. Future expansion (list future MK symbols, approximate number of change key symbols)
8. <u>Contact</u>
O. Contact
Name
Title:
Phone:
Fax:
Email:
Signature:
Is a signature required for future keying? O Yes O No
Please note that this document will become part of the permanent keying files for this project. If the requirements for this master keying form change, it is the responsibility of the end user/owner to notify their local factory representative or Hager Companies.
9. Additional information

Note: If forms are not completely filled out, it will delay shipment of order.

Total quant	ity		Product	Stock number	Finish
Quantity	Door#	Keyset	Hardware set	Operated by	Remarks



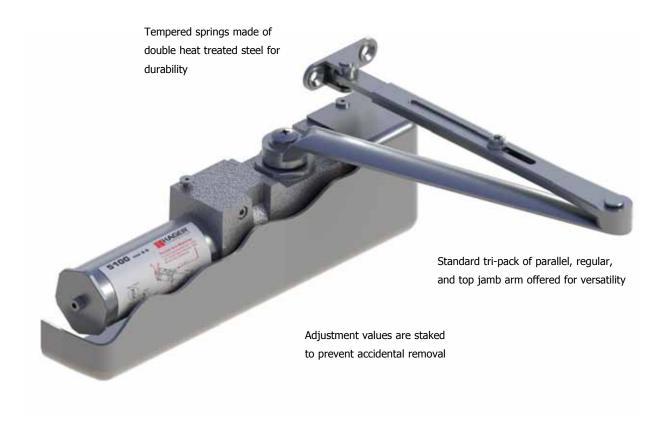


Hager door closers offer architects, contractors, and building owners a superior product with proven reliability. In fact, our 5100, 5200, and 5300 Series Grade 1 models are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty. That makes them a no-risk choice for virtually any building type.

With Hager, you get a door closer that's packaged with everything needed for quick installation, regardless of the application. Hager door closers are tri-packed for mounting three ways: parallel arm, regular arm, and top jamb. They are non-handed, packaged with a parallel arm bracket and thru-bolts at no extra charge, and adjustable for various door sizes.



Hager 5100 Series Grade 1 door closer is constructed of cast iron, which makes it ideal for heavy duty, high use and abusive environments. Hager door closers are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty.





Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high-use environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position on the door

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager door closers are supplied standard with a tri-pack for mounting any of the three types of applications. The package includes regular, parallel, and top jamb arm mounts.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. The power efficiency of the closer may be reduced by the mounting applications.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width Minimum Door Width (24")

2	4" 3	0" 3	6" 4	2" 4	8″
(610	mm) (762	mm) (914	mm) (106	7 mm) (1219	mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width Minimum Door Width (24")

2	4" 3	0" 3	4" 3	8"	48" 5	i4" (50"
(610	mm) (762	mm) (865	mm) (965	mm) (121	.9 mm) (137	2 mm) (152	4 mm)
Regular Arm & Top Jamb	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 1	Size 2	Size 3	Size 4	Size 5	_]



DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested to the same standards. The door closer sizing chart on page 4 shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

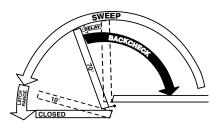
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

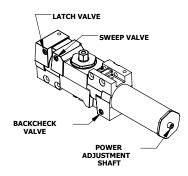
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 2° to 10° of the closed position. The latching speed valve controls the speed of the door from approximately 2° to 10° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5100 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5100 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

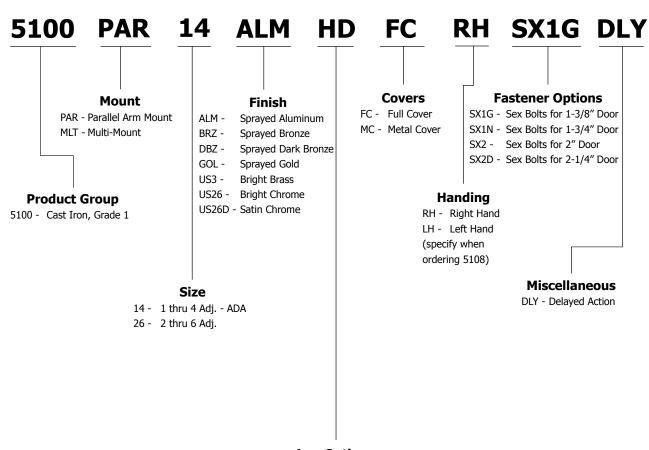
It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

- 1. Size and Weight of Door
 - 5100 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.
- 2. Interior Application
 - Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.
- 3. Exterior Application
 - Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.
- 4. Degree of Opening
 - The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.
- 5. Function
 - Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.
- 6. Abusive Environment
 - Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.



HOW TO ORDER



Arm Options

HD - Extra Heavy Duty Arm HO - Hold Open Arm

HDHO - Extra Heavy Duty Hold Open Arm

LA - Long Arm

HDHOS - Extra Heavy Duty Hold Open Stop Arm

HDHOCS - Extra Heavy Duty Hold Open Cushion Stop Arm

HDS - Extra Heavy Duty Stop Arm
HDCS - Extra Heavy Duty Cushion Stop Arm



5100 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

Templating allows up to 120° Opening:

Hold Open: Hold Open points from 90° up to 120°

with Hold Open arm

Frame Face: 1-1/4" (32 mm) minimum Ceiling Clearance: 1-1/4" (32 mm) minimum

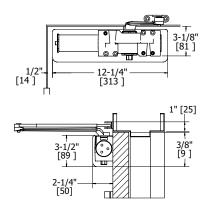
Top Rail: • Less than 3-3/4" (95 mm) requires

drop plate, 5109

• Drop plate requires 2" (51 mm)

minimum

4" (102 mm) from the top of door Top Rail Clearance:



Parallel Arm Mount (Push Side)

Templating allows up to 180° Opening:

Hold Open: Hold Open points from 90° up to 180°

with Hold Open arm

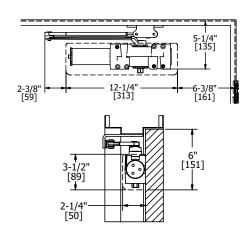
• Standard hollow metal 5/8" frame Top Rail:

stop

• Less than 5-1/2" (140 mm) from the stop requires drop plate, 5110 • Drop plate requires 2" (51 mm)

minimum from the stop

Top Rail Clearance: 6-1/4" (159 mm) from the top of door



Top Jamb Mount (Push Side)

Opening: Templating allows up to 120°

Hold Open: Hold Open points 85° up to 120° with

Hold Open arm

Less than 3-1/2" (89 mm) requires Frame Face:

drop plate, 5115

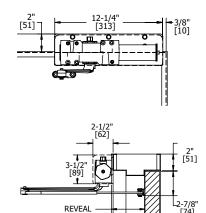
Ceiling Clearance: Drop plate requires 4" (102 mm)

minimum

Top Rail: Requires 1-3/8" (35 mm) minimum

1-1/2" (38 mm) from the top of the Top Rail Clearance:

door







5100 Series

Grade 1

Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments

Lifetime warranty

 Standard package contains 5101 closer body, 5102 closer cover, 5103 main arm assembly, 5104 standard screw pack, 5909 parallel arm bracket, and 5940 SNB screw pack for 1-3/4" (44 mm) doors

Certifications:

- BHMA Certified ANSI A156.4, adjustable sizes 2 to 6 Standard
- ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 Optional
- UL/cUL Listed for up to 3 hours
 UL10C Positive Pressure Rated
 UL10B Neutral Pressure Rated

Materials: Cast iron

Cover: • Full plastic cover - Standard

• Plated metal cover - Optional

Springs: • One piece seamless steel spring tube

• Double heat treated steel, tempered springs

Valves:

• Adjustable latching and sweep speed valves

• Adjustable backcheck valve - Standard

• Delayed action valve - Optional

• Staked valves - Standard

Handing: Non-handed

Arms & Brackets: Tri-Pack: Regular, Parallel Arm, Top Jamb Mount - Standard

Door Thickness: • 1-3/4" (44 mm) - Standard

• 1-3/8" - 2-1/4" (36 mm - 57 mm) thick door - Optional

Fasteners: • Self-reaming, self-tapping wood and machine screws

Sex nuts and bolts

Finishes: • ALM, BRZ, DBZ, GOL, US3, US26, US26D

• Rust inhibiting primer - Standard

Notes: • Full rack and pinion operation

• Precision machined, heat treated steel piston

• Triple heat treated steel spindle





5100 SERIES ARMS



5103

Main Arm

- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount



5125

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5106

Extra Heavy Duty Arm

- Non-handed parallel arm
- Forged steel



5954

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5961 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- · Hold Open function
- Auxiliary stop in soffit shoe



5107

Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5909 bracket for parallel arm mount



5955

Extra Heavy Duty Cushion Stop Arm

- Contains 5125 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5108

Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction hold open
- Not for use on fire rated doors



5961

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5100 SERIES ACCESSORIES



5101

Closer Body Only

- Full rack and pinion operation
- Precision machined heat treated steel piston
- Triple heat treated steel spindle



5113

Blade Stop Spacer

 Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5102

Plastic Cover

- High impact non-corrosive full cover
- Cover projects 2-1/4" (57 mm) from door face
- · Secured by two machine screws



5114

Drop Plate - Low Clearance

- For use when ceiling clearance prevents normal top jamb mounting
- For use when overhead door holder prevents normal top jamb mounting



5109

Drop Plate – Regular Arm Mount

- Required for hinge side mount when top rail is less than 3-3/4" (95 mm)
- Plate requires 2" (51 mm) minimum top rail



5115

Drop Plate - Top Jamb Mount

- Required for top jamb when frame face is less than 3-1/2" (89 mm)
- Plate requires 1-3/4" (44 mm) minimum frame face
- For use with plastic cover



5110

Drop Plate - Parallel Arm Mount

- Required for parallel arm mount when top rail is less than 5-1/2" (140 mm), measured from the stop to the reveal
- Plate requires 2-1/2" (6 mm) minimum top rail



5909

Parallel Arm Bracket

- Supplied standard
- Supplied with standard hold open closer
- Can be used to convert regular or top jamb arm to parallel arm application



5111

Extra Heavy Duty Parallel Arm Support Bracket

- For use with stop arms when reveal is less than 3-1/16" (78 mm)
- Provides anchor for fifth screw



5935

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (51 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with standard soffit plate



5112

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for door reveals greater than 3" (76 mm) and up to 5" (127 mm)



5950

Spring Cushion

- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, and 5907 arms
- For use with extra heavy duty Hold Open and stop arms for abusive applications



5100 SERIES ACCESSORIES (CONTINUED)



5962

Metal Cover

- Cast zinc
- Cover projects 2-1/4" (56 mm) from door face
- Secured by two machine screws

TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint - Bronze (BRZ)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint - Dark Bronze (DBZ)

 Apply to existing closer covers, arm brackets, and fasteners



2-659-0096

Door Closer Touch-Up Paint - Gold (GOL)

• Apply to existing closer covers, arm brackets, and fasteners





5104

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws



5940

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5100 Series closer only



5941

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5100 Series closer only



5942

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5100 Series closer only



5943

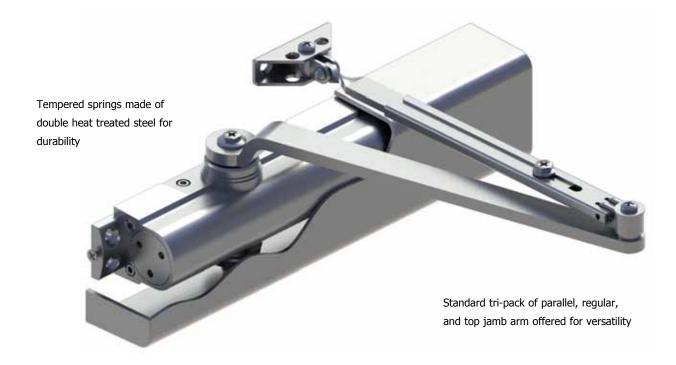
SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5100 Series closer only



Hager 5200 Series Grade 1 door closer is ideal for schools, hospitals, and other high abuse and high traffic environments. It is constructed of an aluminum alloy and provides smooth door control. The 5200 Series door closer is easy to install and maintain-keeping your building safe and secure.

Slim line design provides a smaller footprint





Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high abuse and high traffic environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the power-efficiency of the closer.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width Minimum Door Width (24")

2	4" 3	0" 3	6" 4	ł2" 4	8″
(610	mm) (762	mm) (914	mm) (106	7 mm) (1219	mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width

Minimum Door Width (24")

2	4" 3	0" 3	4" 3	8″ 4	1 8″	54"	60"
(610	mm) (762	mm) (865	mm) (965	mm) (121	9 mm) (13	72 mm) (15	24 mm)
Regular Arm & Top Jamb	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 1	Size 2	Size 3	Size 4	Size 5	-	



DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

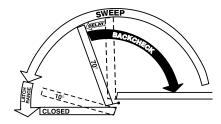
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

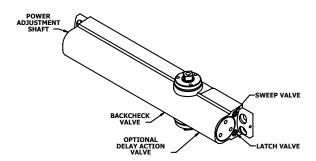
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5200 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5200 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

1. Size and Weight of Door

5200 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.

2. Interior Application

Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.

3. Exterior Application

Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.

4. Degree of Opening

The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.

5. Function

Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.

6. Abusive Environment

Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.



HOW TO ORDER



Arm Options

HD - Extra Heavy Duty Arm HO - Hold Open Arm

HDHO - Extra Heavy Duty Hold Open Arm

LA - Long Arm

HDHOS - Extra Heavy Duty Hold Open Stop Arm

HDHOCS - Extra Heavy Duty Hold Open Cushion Stop Arm

HDS - Extra Heavy Duty Stop Arm
HDCS - Extra Heavy Duty Cushion Stop Arm



5200 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

Opening: Templating allows up to 180°

Hold Open: Hold Open points 90° up to 180° with

Hold Open arm

Frame Face:

Ceiling Clearance:

1-3/8" (35 mm)
• 1-3/4" (45 mm) minimum
• 1-5/8" (41 mm) minimum for Hold

Open arm

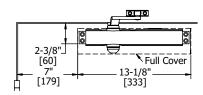
Top Rail: • 2-1/2" (64 mm) minimum without

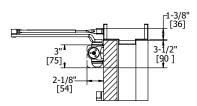
drop plate

• 1-5/8" (38 mm) minimum with drop

plate, 5918

Top Rail Clearance: 3-1/2" (89 mm) minimum





Parallel Arm Mount (Push Side)

Opening: Templating allows up to 180°

Hold Open: Hold Open points 90° up to 180° with

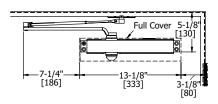
Hold Open

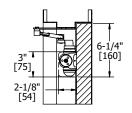
• Standard hollow metal 5/8" frame Top Rail:

stop

• 5-3/8" (137 mm) minimum

Top Rail Clearance: 6-1/4" (159 mm) minimum





Top Jamb Mount (Pull Side)

Opening: Templating allows up to 180°

Hold Open: Hold Open points 90° up to 180° with

Hold Open

Frame Face:

• 1-7/8" (48 mm) minimum • 1-1/8" (29 mm) minimum with drop

plate, 5918

Ceiling Clearance: • 2-3/4" (70 mm) minimum

• 1-5/8" (41 mm) minimum with drop

plate, 5918

2" (51 mm) minimum Top Rail:

• 2-1/4" (57 mm) minimum Top Rail Clearance:

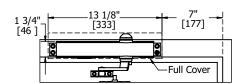
• 2-1/2" (64 mm) minimum for hold-

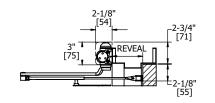
• 3-3/8" (86 mm) minimum with drop

plate, 5918

• 3-5/8" (92 mm) minimum for Hold

Open with drop plate









5200 Series

Grade 1

Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments

Lifetime warranty

 Standard package contains 5201 closer body, 5202 closer cover, 5203 main arm assembly, 5204 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door

Certifications: • BHMA Certified ANSI A156.4, adjustable sizes 2 to 5 - Standard

ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 - Optional

• UL/cUL Listed for up to 3 hours • UL10C Positive Pressure Rated • UL10B Neutral Pressure Rated

Materials: Aluminum alloy

• Full plastic cover - Standard Cover:

• Full size plated metal cover - Optional

• Slim line plastic cover - Optional

Double heat treated steel, tempered springs Springs: Valves: • Adjustable latching and sweep speed valves · Adjustable backcheck valve - Standard

• Delayed action valve - Optional

· Staked valves - Standard

Handing: Non-handed

• Tri-Pack: Regular, Parallel Arm, and Top Jamb Mount - Standard Arms & Brackets:

• 15% power adjustment in standard arm for regular and top jamb mount

Door Thickness:

• 1-3/4" (44 mm) • 1-3/8" - 2-1/4" (36 mm - 57 mm) - Optional

• Self-reaming, self-tapping wood and machine screws Fasteners:

· Sex nuts and bolts

Finishes: • ALM, BRZ, DBZ, GOL, US3, US26, US26D

• Rust inhibiting primer - Standard

• Full rack and pinion operation Notes: • Precision machined, heat treated steel piston

• Triple heat treated steel spindle



5200 SERIES ARMS



5203

Main Arm

- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount



5207

Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5914 bracket for parallel arm mount



5906

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Hold Open function
- Auxiliary stop in soffit shoe
- Plunger Hold Open



5907

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5911

Extra Heavy Duty Arm

- Non-handed parallel arm
- Forged steel



5912

Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction Hold Open



5956

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5906 arm and 5950 spring cushion arm
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5957

Extra Heavy Duty Cushion Stop Arm

- Contains 5907 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5200 SERIES ACCESSORIES



5201

Closer Body Only

- Full rack and pinion operation
- Precision machined, heat treated steel pistons
- Triple heat treated steel spindle



5918

Drop Plate - Top Jamb, Narrow Top Rail

- For use with slim line cover
- For use when a narrow top rail prevents mounting directly to door surface
- For use when low ceiling clearance prevents normal top jamb mounting



5202

Full Plastic Cover

- High impact non-corrosive full cover
- Cover projects 2-3/16" (56 mm) from door face
- Secured by 2 machine screws



5919

Pinion Cap

- High-impact, non-corrosive
- Fits over the pinion and extends 9/16" (14 mm)
- For use with slim line cover



5900

Parallel Arm Bracket

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5920

Slim Line Plastic Cover

- High-impact non-corrosive
- Cover projects 2-3/16" (56 mm) from the door face
- Secured by 2 machine screws
- · Available in plastic only



5908

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)



5921

Drop Plate – Narrow Top Rail

- For use with a full cover
- For use when a narrow top rail prevents mounting directly to door surface



5913

Blade Stop Spacer

 Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5922

Drop Plate - Top Jamb, Parallel Arm

- For use with parallel arm mount and no cover or slim line cover
- For use when low ceiling clearance prevents normal top jamb mounting; with full cover
- For use when an overhead door holder prevents normal top jamb mounting



5914

Hold Open Parallel Arm Bracket

- Supplied with all standard hold open closers
- Can be used to convert regular arm or top jamb arm hold open arms to parallel arm





5200 SERIES ACCESSORIES (CONTINUED)



5923

Drop Plate - Parallel Arm

- For use with a full cover
- For use with a parallel arm when narrow top rail prevents mounting directly to the door surface

5200 SERIES SCREW PACKS



5204

Screw Pack - Standard

- · Self-drilling wood screws
- Self-drilling machine screws



5932

Metal Cover

- Cast zinc
- Cover projects 2-1/4" (57 mm) from door face
- Secured by two machine screws
- Not offered as slim line



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5936

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (51 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate



5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5950

Spring Cushion

- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, 5907
- For use with extra heavy duty hold open and stop arms for abusive applications



5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint - Bronze (BRZ)

 Apply to existing closer covers, arm brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)

 Apply to existing closer covers, arm brackets, and fasteners



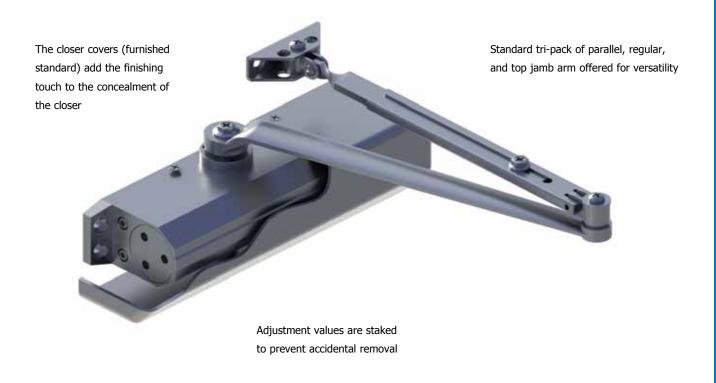
2-659-0096

Door Closer Touch-Up Paint - Gold (GOL)

 Apply to existing closer covers, arm brackets, and fasteners



Hager 5300 Series Grade 1 door closer is ideal for schools, hospitals, and other high abuse and high traffic environments. It is constructed of an aluminum alloy and provides smooth door control. The 5300 Series door closer is easy to install and maintain-keeping your building safe and secure.





Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high-use environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the power-efficiency of the closer.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width Minimum Door Width (24")

24	1" 3	0" 3	6" 4	2" 4	8″
(610	mm) (762	mm) (914	mm) (106	7 mm) (1219	mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width Minimum Door Width (24")

2	4" 3	0" 3	4" 3	8"	48"	54"	60"
(610	mm) (762	mm) (865	mm) (965	mm) (121	19 mm) (13	72 mm) (152	24 mm)
Regular Arm & Top Jamb	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 1	Size 2	Size 3	Size 4	Size 5	-	





DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

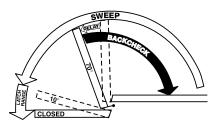
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

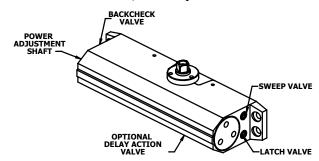
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5300 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5300 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

1. Size and Weight of Door

5300 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.

2. Interior Application

Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.

3. Exterior Application

Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.

4. Degree of Opening

The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.

5. Function

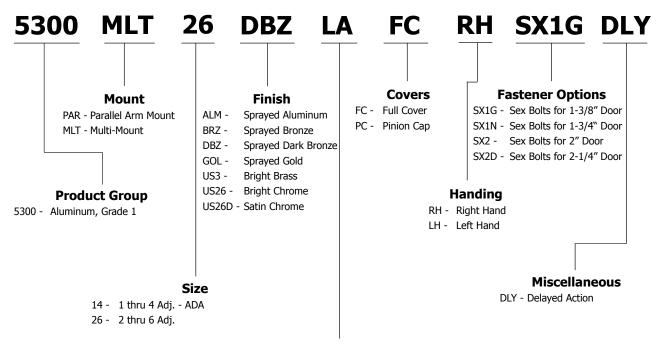
Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.

6. Abusive Environment

Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.



HOW TO ORDER



Arm Options

HD -Extra Heavy Duty Arm HO -Hold Open Arm

Extra Heavy Duty Hold Open Arm HDHO -

LA -Long Arm

Extra Heavy Duty Hold Open Stop Arm HDHOS -Extra Heavy Duty Hold Open Cushion Stop Arm HDHOCS -

HDS -Extra Heavy Duty Stop Arm HDCS -Extra Heavy Duty Cushion Stop Arm



5300 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

Openina: Templating allows up to 180° Hold Open: Hold Open points 90° up to 180°

with Hold Open arm

1-3/8" (35 mm) minimum • 1-5/8" (41 mm) minimum • 1-5/8" (41 mm) minimum for Frame Face: Ceiling Clearance:

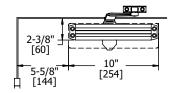
Hold Open arm

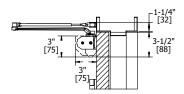
Top Rail: 2-1/2" (64 mm) minimum with drop

plate, 5915

Top Rail Clearance: 4-1/4" (108 mm) minimum from the

top of the door





Parallel Arm Mount (Push Side)

Openina: Templating allows up to 180° Hold Open: Hold Open points 90° up to 180°

with Hold Open

Top Rail: • Standard hollow metal 5/8" frame

stop

• 4-3/4" (121 mm) minimum

• 4" (102 mm) minimum with Hold

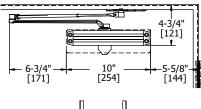
• 3-1/8" (79 mm) minimum with plate

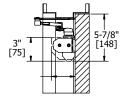
• 2-1/8" (54 mm) minimum with

Hold Open and plate

5-3/4" (146 mm) minimum from the Top Rail Clearance:

top of the door







Top Jamb Mount (Push Side)

Opening: Templating allows up to 180° Hold Open: Hold Open points 90° up to 180°

with Hold Open

1-3/4" (45 mm) minimum • 2-3/4" (70 mm) minimum Frame Face: Ceiling Clearance:

• 1-3/4" (44 mm) minimum with drop

plate, 5918

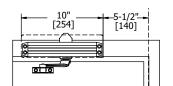
Top Rail: 1-7/8" (48 mm) minimum Top Rail Clearance: • 2-1/8" (54 mm) minimum

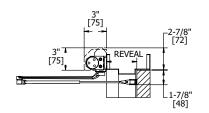
• 2-3/4" (70 mm) minimum with drop

plate, 5917

• 2-1/4" (57 mm) minimum for Hold Open with drop plate, 5917

• 3-5/8" (92 mm) minimum with drop plate, 5915





Notes:



DOOR CLOSERS



5300 Series

Grade 1

Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments

- Lifetime warranty
- Standard package contains 5301 closer body, 5302 closer cover, 5303 main arm assembly, 5304 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door



- BHMA Certified ANSI A156.4, adjustable sizes 2 to 6 Standard
- ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 Optional
- UL/cUL Listed for up to 3 hours
 UL10C Positive Pressure Rated
 UL10B Neutral Pressure Rated

Materials: Aluminum alloy

Cover: Full plastic cover and pinion cap

Springs:

Valves:

Double heat treated steel, tempered springs

Adjustable latching and sweep speed valves

Adjustable backcheck valve - Standard

Delayed action valve - Optional

• Staked valves - Standard

Handing: Non-handed

Arms & Brackets: • Tri-Pack: Regular, Parallel Arm, and Top Jamb Mount - Standard

• 15% power adjustment in standard arm for regular and top jamb mount

Door Thickness: • 1-3/4" (44 mm)

• 1-3/8" - 2-1/4" (36 mm - 57 mm) Optional

Fasteners: • Self-reaming, self-tapping wood and machine screws

Sex nuts and bolts

Finishes: • ALM, BRZ, DBZ, GOL

Rust inhibiting primer - StandardFull rack and pinion operation

Precision machined, heat treated steel piston

• Triple heat treated steel spindle



5300 SERIES ARMS



5303

Main Arm

- Non-handed
- Forged steel
- Mounts regular, top jamb, or parallel arm mount
- For use with 5900 bracket for parallel arm mount



5912

Extra Heavy Duty Hold Open Arm Assembly

- Handed parallel arm (specify handing when ordering)
- · Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction Hold Open



5307

Hold Open Arm Assembly

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5914 bracket for parallel arm mount



5956

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5906 arm and 5950 spring cushion arm
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5906

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Hold Open function
- Auxiliary stop in soffit shoe
- Plunger Hold Open



5957

Extra Heavy Duty Cushion Stop Arm

- Contains 5907 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5907

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- For use in abusive environments
- Auxiliary stop in soffit shoe



5911

Extra Heavy Duty Arm Assembly

- Non-handed parallel arm
- Forged steel
- For use in abusive environments



5300 SERIES ACCESSORIES



5301

Closer Body Only

- Full rack and pinion operation
- Precision machined, heat treated steel pistons
- Triple heat treated steel spindle



5913

Blade Stop Spacer

 Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5302

Full Plastic Cover

- High impact non-corrosive full cover -Standard
- Cover projects 2-3/16" (56 mm) from door face
- Secured by 2 machine screws
- · Available in plastic only



5936

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (13 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate



5900

Parallel Arm Bracket

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5950

Spring Cushion

- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, 5907
- For use with extra heavy duty hold open and stop arms for abusive applications



5901

Pinion Cap

- Supplied standard
- High-impact, non-corrosive
- Fits over the pinion and extends 1" (25 mm)



5908

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)





5300 SERIES ACCESSORIES (CONTINUED)



5914

Hold Open Parallel Arm Bracket

- Supplied with all standard Hold Open closers
- Used to convert 5307 Hold Open arms to parallel arm

5300 SERIES SCREW PACKS



5304

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws



5915

Drop Plate – Narrow Rail Overhead Holder

- For use when an overhead door holder prevents normal top jamb mounting
- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and no cover
- For use when low ceiling clearance prevents normal top jamb mounting
- Includes screw pack



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5916

Drop Plate - Narrow Rail Parallel Arm

- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and full plastic cover
- Includes screw pack



5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5917

Drop Plate – Top Jamb, Low Clearance

- For use when ceiling clearance is between 1-3/4" (44 mm) and 2-5/8" (67 mm)
- For use when an overhead door holder prevents normal top jamb mounting
- For use with no cover



5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint - Bronze (BRZ)

 Apply to existing closer covers, arm brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)

 Apply to existing closer covers, arm brackets, and fasteners



2-659-0096

Door Closer Touch-Up Paint - Gold (GOL)

 Apply to existing closer covers, arm brackets, and fasteners



Hager 5400 Series Grade 2 door closer is ideal for light duty, commercial applications such as store fronts, churches, and hotels. It is constructed of an aluminum alloy and has been tested for strength and abuse. The 5400 Series door closer is ideal for low frequency openings and has a five-year warranty.



Adjustment values are staked to prevent accidental removal



Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Standard duty Grade 2 door closers are ideal for less abusive commercial applications such as office buildings and store fronts.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

24"

30"

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the power-efficiency of the closer.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width Minimum Door Width (24")

24	ł" 3	30" 36"		42"	48"
(610	mm) (762	mm) (914	1 mm) (1	.067 mm)	(1219 mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	-	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width Minimum Door Width (24")

			` ,	
,	34"	38"	48"	54"
nm)	(865 mm)	(965 mm)	(1219 mm)	(1372 mn

(610	mm) (762	mm) (865	mm) (965	mm) (121	9 mm) (137	2 mm) (152	4 mm)
Regular Arm & Top Jamb	-	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	-	Size 2	Size 3	Size 4	Size 5	-	



60"



DOOR HANDLING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

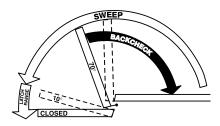
The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK: OPTIONAL FOR 5400 SERIES

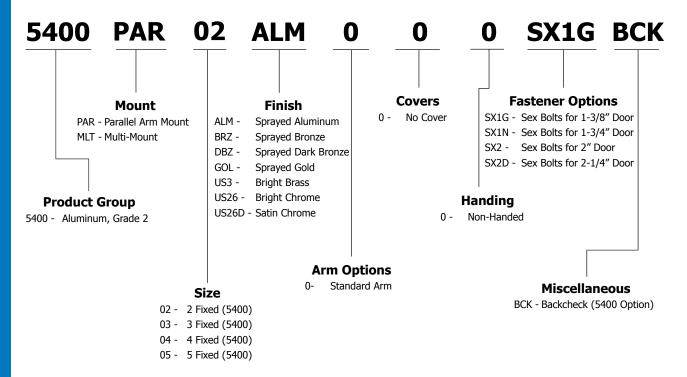
Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.



HOW TO ORDER

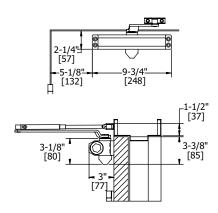




5400 SERIES APPLICATIONS

Regular Arm Mount

Opening: Templating allows up to 180°
Frame Face: 1-1/2" (38 mm) minimum
Ceiling Clearance: 1-3/4" (44 mm) minimum
Top Rail: 2-1/4" (57 mm) minimum
Top Rail Clearance: 3-1/2" (89 mm) minimum

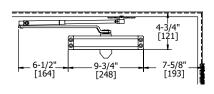


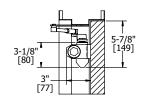
Parallel Arm Mount

Opening: Templating allows up to 180° Top Rail: • 5/8" (16 mm) frame stop

• 4-3/4" (121 mm) minimum

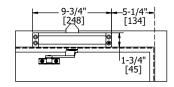
Top Rail Clearance: 5-3/4" (146 mm) minimum

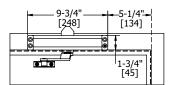




Top Jamb Mount

Opening: Templating allows up to 180°
Frame Face: 1-3/4" (45 mm) minimum
Ceiling Clearance: 2-3/4" (70 mm) minimum
Top Rail: 1-7/8" (48 mm) minimum
Top Rail Clearance: 2-1/8" (54 mm) minimum









5400 Series

Grade 2

Standard Duty Surface Door Closer Ideal for light duty commercial applications

• Five-year warranty

 Standard package contains 5401 closer body, 5901 pinion cap, 5403 main arm assembly, 5404 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door

Certifications: • BHMA Certified ANSI A156.4, Sizes 2, 3, 4, 5 - Must specify

UL/cUL Listed for up to 3 hours
UL10C Positive Pressure Rated
UL10B Neutral Pressure Rated

Materials: Aluminum alloy Cover: Pinion cap

Springs: Double heat treated steel, tempered springs
Valves:

• Adjustable latching and sweep speed valves
• Adjustable backcheck valve - Optional

• Staked valves - Standard

Handing: Non-handed

Arms & Brackets: • Tri-Pack: Regular, Parallel, and Top Jamb Arm Mount - Standard

• 15% power adjustment in standard arm for regular and top jamb mount

Door Thickness: • 1-3/4" (44 mm) - Standard

• 1-3/8" - 2-1/4" (36 mm - 57 mm) - Optional

Fasteners: • Self-reaming, self-tapping wood and machine screws

Sex nuts and bolts

Finishes: • ALM, BRZ, DBZ, GOL

• Rust inhibiting primer - Standard

Notes: • Precision machined, heat treated steel piston

• Triple heat treated steel spindle



5400 SERIES ARMS



5403

Main Arm

- Non-handed
- Punched steel
- Mounts regular, parallel arm, or top jam mount
- For use with 5900 bracket for parallel arm mount

5400 SERIES SCREW PACKS



5404

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws

5400 SERIES ACCESSORIES



5401

Closer Body Only

- Full rack and pinion operation
- Triple heat treated steel spindle



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5900

Parallel Arm Bracket

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5901

Pinion Cap

- Supplied standard
- High-impact, non-corrosive
- Fits over the pinion and extends 1" (25 mm)



5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5913

Blade Stop Spacer

 Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint - Bronze (BRZ)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)

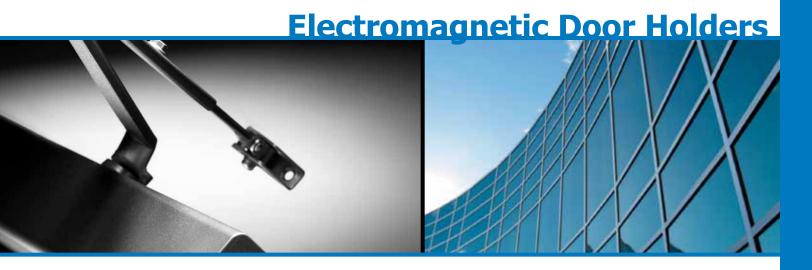
 Apply to existing closer covers, arm brackets, and fasteners



2-659-0096

Door Closer Touch-Up Paint - Gold (GOL)

 Apply to existing closer covers, arm brackets, and fasteners



Hager electromagnetic door holders are designed for virtually any remote door release application and are ideal for holding doors open until released by a remote or switching device. They are primarily used to hold fire and smoke barrier doors open.

Dual voltage inputs for ease of installation



Very low current draw for energy efficiency



ELECTROMAGNETIC DOOR HOLDERS

Performance Data

MODEL	VOLTAGE	DC/mA	AC/mA	TERMINALS	LB.	KG.
1224	12V	40	38	C&L	30	13.6
1224	24V	40	36	C&H	30	13.6
24120	24V	20	19	C&L	40	18.1
24120	120V		20	C&H	35	15.8
24220	24V	20	19	C&L	20	9.0
24220	220V		15	C&H	22	9.8

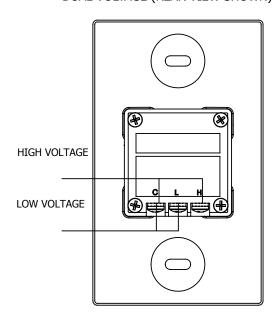
MODEL	VOLTAGE	DC/mA	AC/mA	TERMINALS	LB.	KG.
1224	24V	85	81	C&L	75	34.0
24120	120V		100	C&L	110	49.8

*High Holding Force/Special Applications:

To obtain the performance values in the above table, apply high listed voltage to low voltage terminals (C&L).

NOTE: This configuration can only be applied to models 1224 and 24120.

DUAL VOLTAGE (REAR VIEW SHOWN)



EXTENSION ROD/ADJUSTABLE EXTENSION ROD

To calculate extension rod length needed, use the formula below based on style holder being used.

Flush mount: Measure distance from door to wall when held at desired opening.

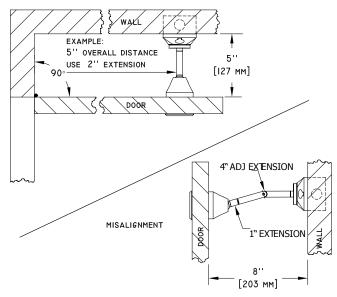
Subtract 3" (76 mm) to obtain extension rod length needed.

Recessed mount: Measure distance from door to wall when held at desired opening. Subtract 2-3/8" (60 mm) to obtain extension rod length needed.

Subtract 2 5/0 (60 mm) to obtain extension for length needed

Surface mount: Measure distance from door to wall when held at desired opening. Subtract 4-5/8" (117 mm) to obtain extension rod length needed.

See example below using flush mount.





ELECTROMAGNETIC DOOR HOLDERS

HOW TO ORDER ELECTROMAGNETIC DOOR HOLDERS



120024 **Voltage**

120024 -12/24V 240120 -24/120V 240220 -24/220V

Finish

300 - Plated Brass LS - Powder Chrome L2 -Powder Dark Bronze

Mount

- F Flush
- G Floor, Single Door
- H Floor, Double Door
- R Recessed
- S Surface

HOW TO ORDER ACCESSORIES





381 - Accessory

Size (Extension Rods)

 $5 = \frac{1}{2}$

1 = 1'' $15 = 1^{-1}/2''$

2 = 2''

3 = 3"

4 = 4"

Finish

300 - Plated Brass

LS - Powder Chrome

L2 - Powder Dark

Bronze

Specifier

- A Adjustable Extension Rod
- B Surface Back Box
- C Catch Disc
- D Drilling Fixture
- E Extension Rod
- H Mounting Hardware
- S Catch Plate Assembly
- W Extension Wrenches





380 Series

Grade 1

Heavy Duty Commercial, Institutional Electromagnetic Door Holder Ideal for hospitals, hotels, schools, and other commercial buildings

- One-year warranty
- Designed for use with self-closing fire and smoke barrier doors
- Low current draw
- Fail safe: when electrical current is interrupted, doors release to close automatically

Certifications:

- UL/ULC listed
- Meets ANSI 156.15 for C00011
- California State Fire Marshall listed (CSFM)
- City of New York MEA approved
- Factory Mutual

Materials:

Zinc alloy

Voltages:

Standard dual voltage AC or DC inputs of 12&24V, 24&120V, 24&220V models

Holding Force:

Typical holding force of 25-40 pounds; performance value can be increased to 110 pounds on special

applications

Mount:

Single or double coil floor, surface, flush, and recessed mount

Total Projection:

• Recessed mount: 2-11/32" (60 mm)

- Flush mount: 3-1/16" (78 mm)
- Surface mount: 4-5/8" (117 mm) • Floor mount (single door): 5" (127 mm)
- Floor mount (double door): 9-5/8" (244 mm)

Hardware package, mounting bracket Fasteners: US3, LS, L2

Finishes:

Notes:

• Optional aluminum extension and misalignment rods available

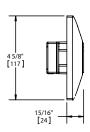
- Drill fixture available
- Replacement catch disc and catch plate assemblies available
- Adhesive template included



380 SERIES HOLDERS



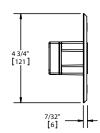
380F Flush Mount





380R

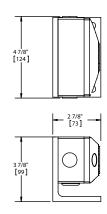
Recessed Mount





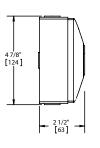


380GFloor Mount (Single Door)



000

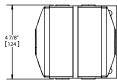
380S Surface Mount

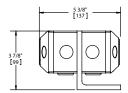






380H Floor Mount (Double Door)







380 SERIES ACCESSORIES



381A

Adjustable Extension RodAvailable extension lengths 1-1/2" (38 mm), 2" (51 mm), 4" (102 mm)



381E

Extension Rod

Available extension lengths 1/2" (13 mm), 1" (25 mm), 1-1/2" (38 mm), 2" (51 mm), 3" (76 mm), 4" (102 mm)



381B

Surface Back Box 2-25/32" x 4-7/8" x 1-1/2" (71 mm x 124 mm x 38 mm) Supplied with 380G, 380H, 380S



381H

Mounting Hardware Package Includes screws, nuts, concrete anchors, and drill bit



381C

Catch Disc

Replacement for the 381S catch plate assembly



381S

Catch Plate Assembly

Swivel design allows catch disc to move in all directions to assist with slight misalignment issues



381D

Drilling Fixture

Attach to the door for quick and accurate hole locations



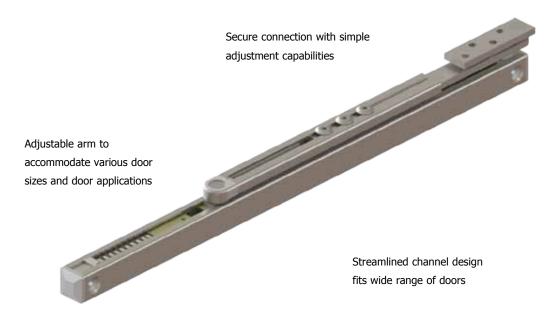
381W

Extension Wrenches

Used to tighten extension rods to catch plate assembly



Hager overhead door holders and stops are utilized to control and protect door assemblies. By providing a high quality product with an adjustable arm to simplify installation, Hager Companies continues to be a door hardware industry leader.



Heavy duty, carbon steel, shock absorbing spring for smooth operation



Hager Companies offers a variety of door hardware products to accommodate virtually all door openings. Overhead door holders and stops are designed to meet the requirements of many door applications. Hager overhead door holders and stops are compatible with a variety of door closers and are ideal for meeting the demands of high traffic areas.

Overhead door holders and stops are mounted at the top of the door, which eliminates tripping hazards and vandalism that are typical of floor or wall mounted stops. These products absorb the abusive shock with a heavy duty spring along with evenly distributing the load and impact along the track of the unit.

It is recommended to utilize overhead door stops and holders on doors furnished with door closers, as closers are not intended to stop the door and should not be expected to perform the functions of a door stop.

ADJUSTABLE ARMS

For inventory and installation simplification of overhead door holders and stops, Hager has developed an adjustable arm to combine door ranges into only two sizes.

METHODS OF INSTALLATION

Concealed Mounted

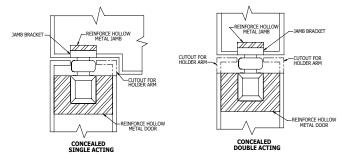
The installation of concealed overhead door holders and stops requires that the jamb bracket be mortised flush with the bottom of the jamb. The arm and channel must be mortised into the door so the arm is flush with the top of the door. Concealing the overhead door holders and stops in the top of the door creates a more attractive architectural look.

Single Acting Door

A cutout made for the arm on the stop side of the single acting door.

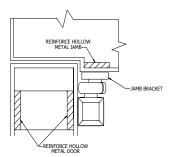
Double Acting Door

Double acting doors require a cutout for the arm on both sides of the door.



Surface Mounted

Surface mounted overhead door holder and stop installation requires the jamb bracket be surface mounted on the stop of the frame. The channel is also surface mounted on the face of the door. Hollow metal doors and jambs must be reinforced to provide necessary strength for the holder specified.



DOOR AND FRAME REINFORCEMENTS

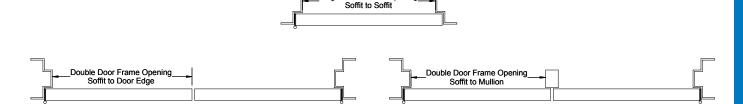
Hollow metal frames must be properly reinforced with 3/16" (5 mm) thick plates/channels that are at least 12" (305 mm) long. Hollow metal doors must be properly reinforced with 3/16" (5 mm) plates that are at least 2-1/2" (64 mm) wide over the length of the device. Templates and installation instructions are available online at www.hagerco.com.

HAGER'S DEFINITION OF "FRAME OPENING"

The "frame opening" is defined as the actual width of the frame, from soffit to soffit, not the width of the door.

Door Sizes - Medium Duty		
Size	Frame Opening	
6000 SZ1	18"-33"	
6000 SZ2	33"-51"	

Door Sizes - Heavy Duty		
Size	Frame Opening	
7000 SZ1	23″-39″	
7000 SZ2	39"-54"	



Single Door Frame Opening

SELECTING DEGREE OF HOLD OPEN OR STOP

Overhead door holders and stops are designed to function effectively from 85° to 110°. The recommended minimum degree of hold open would be set at 95° to put the door lever, pull, and panic hardware beyond the flow of traffic.

When selecting the degree of hold open for doors opening against a wall or back to back, there is approximately 5° to 7° of spring engagement beyond the hold open or initial stop point, this is the dead stop.

For dead stop templating, the degree of opening should be set 5° to 7° less than the point of required dead stop to accommodate the full compression of the shock absorber.

HOW TO ORDER





FUNCTIONS

16 - Stop Only

Heavy Duty Medium Duty
Concealed Mounted: ANSI CO1541 ANSI C01542
Surface Mounted: ANSI CO2541 ANSI C02542

The stop only function provides a reliable method of door control. A shock absorbing spring stops the door. It is UL Listed for fire rated components.

UL Classification

The **stop-only** models are classified by Underwriters Laboratories (UL) as Miscellaneous Fire Door Accessories. This classification applies to the use on either hollow metal fire doors or wood fire doors of any rating. The accessories have been investigated to determine that when properly installed with accordance to the manufacturer's instructions, they do not adversely affect the fire rating of the fire door or fire door frames.

17 - Hold Open

Heavy Duty Medium Duty
Concealed Mounted: ANSI C01511 ANSI C01512
Surface Mounted: ANSI C02511 ANSI C02512

The hold open function provides a selective hold open function with easy to adjust tension. It may be turned on or off and includes the stop only function. It is not for use on fire rated openings.

15 - Friction

Heavy Duty Medium Duty
Concealed Mounted: ANSI CO4531 ANSI C04532
Surface Mounted: ANSI CO5531 ANSI C05532

The multi-point friction hold open function mechanism is adjustable for resistance to door movement. It is not for use on fire rated openings.







6000 Series

Grade 2

Medium Duty Overhead Door Holder and Stop
For use on exterior and interior doors
Ideal for office buildings and other medium duty commercial applications

- Adjustable arm to combine door ranges into two sizes
- Five-vear warranty
- Standard screw pack

Certifications: • BHMA Certified ANSI A156.8 - 2005

UL/cUL Listed for up to 3 hours (stop only)
UL10C Positive Pressure Rated (stop only)
UL10B Neutral Pressure Rated (stop only)

Mounting Style: • Concealed (CON)

• Surface (SRF)

Doors: • Single acting doors for concealed and surface mounted

Double acting doors for concealed mounted only

Door Thickness: • 1-3/4" (44 mm) thick door - Standard

• 1- 3/8"- 2-1/4" (36 mm -57 mm) thick door - Optional

Functions: • Stop Only (16)

• Hold Open (17)

• Friction (15)

Handing: Non-handed

Openings: Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°

Materials: • Steel

Notes:

SteelStainless steel

Finishes: • US26D, US10B, US3 (for steel)

• US32D (for stainless steel)

Fasteners: Standard screw packet included for wood or metal door and frame applications

• Adjustable arms provide easy installation

Slide track design

- Adjustable in the field
- Heavy shock absorber spring provides 5° to 7° compression before deadstop
- Special templating upon request

Door Sizes	
Size	Frame Opening
6000 SZ1	18"-33"
6000 SZ2	33″-51″





6000 SERIES ACCESSORIES



2-659-0101 | 2-659-0102 | 2-659-0103

Surface Mounted End Cap and Spring Replacement Kit

- Includes channel end caps and replacement spring
- 2-659-0101 is US26D, 2-659-0102 is US10B, 2-659-0103 is US3





2-659-0098 | 2-659-0099 | 2-659-0100

Screwpack - Standard

- Includes machine screws, wood screws, sex nuts and bolts for 1-3/4" (44 mm) thick doors, arm set screws, and Allen wrench
- 2-659-0098 is US26D, 2-659-0099 is US10B, 2-659-0100 is US3



2-659-0104

Concealed Mounted End Cap and Spring Replacement Kit

Includes channel end caps and replacement spring



2-659-0107 | 2-659-0108 | 2-659-0109

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 1-3/8" (35 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0107 is US26D, 2-659-0108 is US10B, 2-659-0109 is US3



2-659-0105

Hold Open Replacement Kit

Hold Open assembly



2-659-0110 | 2-659-0111 | 2-659-0112

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2" (51 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0110 is US26D, 2-659-0111 is US10B, 2-659-0112 is US3



2-659-0106

Friction Replacement Kit

Friction assembly



2-659-0113 | 2-659-0114 | 2-659-0115

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2-1/4" (57 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0113 is US26D, 2-659-0114 is US10B, 2-659-0115 is US3





Mounting Style:

Notes:

7000 Series

Grade 1

Heavy Duty Overhead Door Holder and Stop For use on exterior and interior doors Ideal for hospitals, schools, and other high traffic environments

- Adjustable arm to combine door ranges into two sizes
- Five-year warranty
- Standard screw pack

Certifications: BHMA Certified ANSI A156.8 - 2005

> UL/cUL Listed for up to 3 hours (stop only) • UL10C Positive Pressure Rated (stop only) • UL10B Neutral Pressure Rated (stop only)

 Concealed (CON) • Surface (SRF)

Doors: Single acting doors for concealed and surface mounted

Double acting doors for concealed mounted only

Door Thickness: • 1-3/4" (44 mm) thick door - Standard

• 1- 3/8"- 2-1/4" (36 mm -57 mm) thick door - Optional

• Stop Only (16) (II) Functions:

• Hold Open (17)

• Friction (15)

Handing: Non-handed

Openings: Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°

Materials: Steel

• Stainless steel

• US26D, US10B, US3 (for steel) Finishes:

US32D (for stainless steel)

Standard screw packet included for wood or metal door and frame applications Fasteners:

• Adjustable arms provide easy installation

- Slide track design
- Adjustable in the field
- Heavy shock absorber spring provides 5° to 7° compression before deadstop
- Special templating upon request

Door Sizes			
Size	Frame Opening		
7000 SZ1	23″-39″		
7000 SZ2	39″-54″		





7000 SERIES ACCESSORIES



2-659-0119 | 2-659-0120 | 2-659-0121

Surface Mounted End Cap and Spring Replacement Kit

- Includes channel end caps and replacement spring
- 2-659-0119 is US26D, 2-659-0120 is US10B, 2-659-0121 is US3



2-659-0122

Concealed Mounted End Cap and Spring Replacement Kit

• Includes channel end caps and replacement spring



2-659-0123

Hold Open Replacement Kit

Hold Open assembly



2-659-0124

Friction Replacement Kit

Friction assembly





2-659-0116 | 2-659-0117 | 2-659-0118

Screwpack - Standard

- Includes machine screws, wood screws, sex nuts and bolts for 1-3/4" (44 mm) thick doors, arm adjustment screws, and Allen wrench
- 2-659-0116 is US26D, 2-659-0117 is US10B, 2-659-0118 is US3



2-659-0125 | 2-659-0126 | 2-659-0127

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 1-3/8" (35 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0125 is US26D, 2-659-0126 is US10B, 2-659-0127 is US3



2-659-0128 | 2-659-0129 | 2-659-0130

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2" (51 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0128 is US26D, 2-659-0129 is US10B, 2-659-0130 is US3



2-659-0131 | 2-659-0132 | 2-659-0133

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2-1/4" (57 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0131 is US26D, 2-659-0132 is US10B, 2-659-0133 is US3



Every model in Hager's line of exit devices is designed and engineered to assure you and your customers years and years of superior performance. Hager exit devices use fewer moving parts and are constructed with high-quality features--like die cast caps on our lifetime warranty 4500 Series, and die cast head covers on all our models. All Hager exit devices meet UL specifications for panic devices and are fire rated for up to three hours.

You'll also find that Hager exit devices were designed with ease of installation in mind. We package our exit devices for convenience and versatility, with thru-bolts included for every model, slotted strikes, non-handed designs, plus escutcheon trim available in four functions (dummy, blank, entry and night latch).



Hager 4500 Series Grade 1 exit device is designed and engineered for superior performance--using fewer moving parts and constructed with die cast caps and head covers. Our 4500 Series exit device is BHMA certified, UL listed for up to three hours, meets UL specifications for panic hardware, is severe windstorm resistant approved, and is backed by a lifetime warranty.





GENERAL INFORMATION

Hager 4500 Series Grade 1 exit device meets Life Safety codes and Fire Safety requirements providing a perfect fit for use in commercial office buildings, medical and educational facilities, as well as hospitality structures.

The 4500 Series is BHMA-Certified to the requirements of ANSI 156.3 for Grade 1 exit devices and is UL 305 Panic Listed and UL and cUL Listed for up to 3 hour rated fire doors for both rim and surface vertical rod.

These devices have also met the requirements of ANSI A250.13 to be listed as a Severe Windstorm Component. The 4500 Series exit device offers a lifetime warranty to provide peace of mind from the distributors to the building owner.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Non-handed device offers added versatility and means less inventory.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

Shim Kits

Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8" (3.2 mm) shims and the appropriate longer fasteners.

Cylinder Dogging

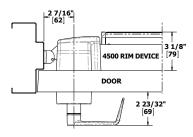
Cylinder dogging is available to replace the standard hex key dogging on panic exit devices. Specify CD on order or purchase 4926 for retrofit applications. Unit requires 1-1/8" mortise cylinder (part number 3902) with standard cam.

Sizing

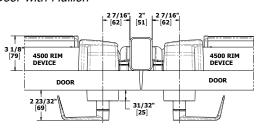
The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches. The surface vertical rod devices are supplied for an 84" (2134 mm) opening standard, but can be ordered for a 96" (2438 mm) opening. Extension rods are available to accommodate openings taller than 96" (2438 mm) and up to 120" (3048 mm).

Applications

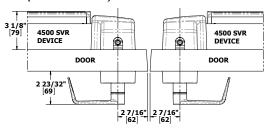
Single Door



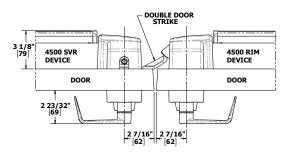
Double Door with Mullion



Double Door (2 SVR Devices)



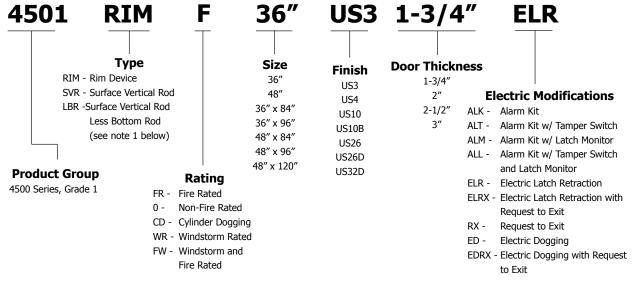
Double Door (SVR x Rim)



Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	45BE	Always operable (Passage)	14
Cylinder Escutcheon	45CE	Key locks or unlocks lever	08
Dummy	45DT 45PD	Pull when device is dogged down	02
Night Latch	45NL 45PN	Key retracts latchbolt	03



HOW TO ORDER



Notes:

1. Fire Rated LBR devices must be ordered in pairs of vertical rod devices and with a spring loaded fire latch to ensure the device's fire rating.

4501 LBR Fire 36" x 84" EO PLUS 4501 LBR Fire 36" x 84" EO with bolt

4501 LBR Fire 36" x 84" EO PLUS an approved automatic or constant latching flush bolt

HOW TO ORDER - TRIM (MUST BE ORDERED SEPARATELY)

45 CE	A	RC	US3	1-3/4"	EL24
T T					
Product Group	Leve	r Style	Finish	Door Thickness	Options
45 - 4500 Series, Grade 1	ARC -	Archer	US3	1-3/4"	EL24 - Fail Safe, 24 Volt
	AUG -	August	US4	2"	EL12 - Fail Safe, 12 Volt
Trim/Function	on WTN -	Withnell	US10	2-1/2"	EU24 - Fail Secure, 24
CE - Cylinder Escutcheon			US10B	3″	Volt
Function 08, key locks/u	ınlocks lever		US26		EU12 - Fail Secure, 12
BE - Blank Escutcheon			US26D		Volt
Function 14, always ope	erable		US32D*		TW - Tactile Warning
NL - Night Latch					
Function 03, key retract	s latchbolt				
DT - Dummy Trim					
Function 02, pull when	dogged down				
PD - Pull Plate Dummy Trim					
Function 02, pull when	dogged down				
PN - Pull Plate Night Latch					
Function 03, key retract	s latchbolt				
ET - Electrified Trim					

Notes:

- 1. Mortise cylinder 3902 is required for use with cylinder escutcheon and is sold separately.
- 2. Rim cylinder with long tailpiece 3901 is required for use with night latch trim and is sold separately.
- 3. For more cylinder information, please refer to general information in the Locks section of the catalog.
- 4. If using shim kit, specify total door thickness including shims.

^{*}US32D only available for pull plate trim (45PD, 45PN), not available in standard escutcheon trims (45BE, 45CE, 45DT, 45NL).





4500 Series

Grade 1 **Rim Device** Ideal for heavy duty commercial applications

- Lifetime warranty
- Thru-bolts supplied standard

Applications: Heavy duty commercial

Certifications: • BHMA Certified ANSI A156.3

- UL/cUL Listed for up to 3 hours for "A" label doors • UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated • UL305 Listed for panic hardware
- ANSI A250.13 Severe Windstorm Resistant Component (requires use of windstorm reinforcing bracket, 2-649-0154, on Rim device)
- Complies with ANSI 117.1 for accessible buildings and facilities • Hex dogging feature standard on non-fire labeled doors

Trim: • Archer, August, or Withnell Lever with escutcheon • Pull plate trim

• Rim cylinder x optional pull

Stainless steel, zinc Covers:

Chassis: Aluminum

End Caps: Zinc

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

1-3/4" (44 mm) - Standard Door Thickness:

• 3" (76 mm) in undogged position Projection:

• 2-5/8" (67 mm) in dogged position

• 5-3/8" (137 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop Stile Width:

• 4-7/8" (124 mm) - Minimum stile width required for double door x surface vertical rod with double door

• 5-3/4" (146 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion

• All stile widths are measured from door edge

Fasteners: • Wood and machine screws

Latchbolt: 3/4" (19 mm) throw, pullman type with automatic dead-latching, stainless steel Strikes: • Stainless steel with plated rollers - Included standard with panic devices

• Solid stainless steel - Included standard with fire rated devices • Surface applied to frame with slotted holes for easy adjustment

• Double door strike for use with surface vertical rod and rim device available

Finishes: US3, US4, US10, US10B, US26, US26D, US32D

Notes: • Cylinder dogging available on non-fire rated devices, specify CD

• 3902 1-1/8" (29 mm) mortise cylinder sold separately • Recommended to be used on appropriately reinforced doors







4500 Series

Grade 1

Surface Vertical Rod Device Ideal for heavy duty commercial applications

- Lifetime warranty
- Thru-bolts supplied standard

Applications: Heavy duty commercial Certifications:

• BHMA Certified ANSI A156.3

UL/cUL Listed for up to 3 hours for "A" label doors up to 10' (3048 mm) in height

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

 UL10B Neutral Pressure Rated UI 305 Listed for Panic Hardware.

• ANSI A250.13 Severe Windstorm Resistant Component • Complies with ANSI 117.1 for accessible buildings and facilities • Hex dogging feature standard on non-fire labeled doors

Archer, August, or Withnell Lever with escutcheon

Pull plate trim

• Rim cylinder x optional pull

Stainless steel, Zinc Covers:

Chassis: Aluminum End Caps: Zinc

Trim:

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

Door Height: • 7' (2134 mm) - Standard

• 8' (2438 mm) - Optional • 10' (3048 mm) - Optional 1-3/4" (44 mm) - Standard

Door Thickness:

Projection: • 3" (76 mm) in undogged position

• 2-5/8" (67 mm) in dogged position

• 5-3/8" (137 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop Stile Width:

• 4-7/8" (124 mm) - Minimum stile width required for double doors

• 4-7/8" (124 mm) - Minimum stile width required for double door x Rim Device with double door strike

• All stile widths are measured from door edge

Fasteners: · Wood and machine screws

Thru-bolts

Latchbolt: Top - 1/2" (13 mm) throw, pullman type with automatic dead-latching, stainless steel

Bottom - 1/2" (13 mm) throw, pullman type, held retracted during door swing, stainless steel

Rod Length: • Rods for 7' (2134 mm) door - Standard

• Rods for 8' (2438 mm) door - Optional • Rods for 10' (3048 mm) door - Optional

• Door height of 6' 8" (2032 mm) requires 29-1/4" (743 mm) top rod length • Door height of 7' (2134 mm) requires 33-1/4" (845 mm) top rod length • Door height of 8' (2438 mm) requires 45-1/4" (1149 mm) top rod length

• Extension rods available, 2' (610 mm) or 3' (914 mm) for doors over 7' (2134 mm)

Strikes: • Stainless steel with plated rollers - Included standard with panic devices

Solid stainless steel - Included standard with fire rated devices

• 10' (3048 mm) fire rated device requires strike and hook kit, 4912, for top strike

• Surface applied to frame with slotted holes for easy adjustment

• Double door strike for use with surface vertical rod and rim device available

Finishes: US3, US4, US10, US10B, US26, US26D, US32D

Notes: Cylinder dogging available on non-fire rated devices, specify CD

• 3902 1-1/8" (29 mm) mortise cylinder sold separately

Recommended to be used on appropriately reinforced doors







4500 Series

Grade 1

Surface Vertical Rod Device Less Bottom Rod Ideal for heavy duty commercial applications

- Lifetime warrantv
- Thru-bolts supplied standard

Applications: Heavy duty commercial

Certifications: • BHMA Certified ANSI A156.3

- UL/cUL Listed for up to 3 hours for "A" label doors • UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated • UL305 Listed for panic hardware
- Complies with ANSI 117.1 for accessible buildings and facilities

• Hex dogging feature standard on non-fire labeled doors

Trim: • Archer, August, or Withnell Lever with escutcheon

Pull plate trim

• Rim cylinder x optional pull

Stainless steel, Zinc Covers:

Chassis: Aluminum

End Caps: Zinc

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

Door Height: • 7' (2134 mm) - Standard

• 8' (2438 mm) - Optional

• 10' (3048 mm) - Optional (panic device only)

1-3/4" (44 mm) - Standard Door Thickness:

Projection: • 3" (76 mm) in undogged position

• 2-5/8" (67 mm) in dogged position

Stile Width: • 5-3/8" (137 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop

• 4-7/8" (124 mm) - Minimum stile width required for double doors

• 4-7/8" (124 mm) - Minimum stile width required for double door x Rim device with double door strike

• All stile widths are measured from door edge

Fasteners: Wood and machine screws

• Thru-holts

Latchbolt: Top - 1/2" (13 mm) throw, pullman type with automatic dead-latching, stainless steel

Rod Length: • Rods for 7' (2134 mm) door - Standard • Rods for 8' (2438 mm) door - Optional

> • Door height of 6' 8" (2032 mm) requires 29-1/4" (743 mm) top rod length • Door height of 7' (2134 mm) requires 33-1/4" (845 mm) top rod length • Door height of 8' (2438 m) requires 45-1/4" (1149 mm) top rod length

• Extension rods available, 2' (610 mm) or 3' (914 mm) for doors over 7' (2134 mm)

• Stainless steel with plated rollers - Included standard for panic devices

• Solid stainless steel - Included standard with fire rated devices • Surface applied to frame with slotted holes for easy adjustment

• Double door strike for use with surface vertical rod and rim device available

Finishes: US3, US4, US10, US10B, US26, US26D, US32D

Notes: • Cylinder Dogging available on non-fire rated devices, specify CD

• 3902 1-1/8" (29 mm) mortise cylinder sold separately

• Recommended to be used on appropriately reinforced doors

• Hole plug for head cover included standard

• Fire rated LBR devices must be ordered in pairs of vertical rod devices and with a spring loaded fire latch, 2-649-0166, to ensure the device's fire rating

Strikes:





4500 Series - Electric Exit Devices

Rim and Surface Vertical Rod Devices and Trim Heavy duty commercial

- Lifetime warranty on exit body only
- One-year warranty on electric components
- Thru-bolts supplied standard

Certifications: • BHMA Certified ANSI A156.3 Grade 1

- UL/cUL Listed for up to three hours for "A" label doors
- UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated
- UL305 Listed for panic hardware
- ANSI A250.13 Severe Windstorm Resistant Component (requires the use of windstorm reinforcement

bracket, 2-649-0154, on Rim device)

Minimum Door Width: 30

36" (914 mm) for electric latch retraction and electric dogging

Door Thickness: 1-3/4" (45 mm) standard

Function	Function Number	Function Description
Electric Latch Retraction	ELR*	Provides a remote means of locking or unlocking exit devices.
Electric Latch Retraction with Request to Exit	ELRX*	Provides a remote means of locking or unlocking exit devices along with a switch for tying into an alarm system, magnetic locks, or a console.
Electric Dogging	ED*	Provides continuous latch retraction and dogging simultaneously.
Electric Dogging with Request to Exit	EDRX*	Provides continuous latch retraction and dogging simultaneously along with a switch for tying into an alarm system, magnetic locks, or a console.
Request to Exit	RX	Used to shunt an alarm, activate an alarm, provide release of magnetic locks, or signal a control console.
Alarm Kit	ALK*	Battery operated alarm to discourage unauthorized use of an opening while maintaining a means of egress.
Electric Trim - Fail Safe	EL	Lever continuously locked electrically. Unlocked by key outside, by switch, or by a power failure. Push bar side always free for immediate egress.
Electric Trim - Fail Secure	EU	Lever continuously locked until unlocked electrically or by key. Push bar side always free for immediate egress.

^{*} Not available with mechanical dogging.

Notes: 1. Fail Safe (EL) and Fail Secure (EU) available in 12 and 24 volt, must specify.

2. Latch monitor and tamper switch available with ALK

Product	Description
2901	For use with 4500 Series electric latch retraction
2902	For use with 4500 Series electric latch retraction in a day/night mode of operation
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls,, card reader, keypads, and other door controls
2904	Provides power and control for openings with an electrified locking device and automatic door operator

Note: Must use Hager 2901 or 2902 to power electric latch retraction.



4500 SERIES ESCUTCHEON TRIM



45BE

Blank Escutcheon

Function: 14 - Always operable (passage) Levers: Archer, August, Withnell

Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell

Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) Finishes: US3, US4, US10, US10B, US26, US26D



45CE

Cylinder Escutcheon

Function: 08 - Key locks or unlocks lever

Levers: Archer, August, Withnell (clutching lever)

Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell

Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm)
Finishes: US3, US4, US10, US10B, US26, US26D
Cylinder: Mortise cylinder, 3902, sold separately



45DT

Dummy Trim

Function: 02 - Pull when device is dogged down

Levers: Archer, August, Withnell

Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell

Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) Finishes: US3, US4, US10, US10B, US26, US26D



45NL

Night Latch

Function: 03 - Key retracts latchbolt

Levers: Archer, August, Withnell (rigid lever)

Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell

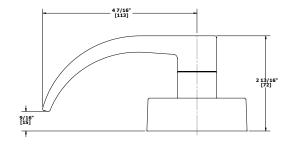
Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) Finishes: US3, US4, US10, US10B, US26, US26D

Cylinder: Rim cylinder, 3901, with long tailpiece sold separately



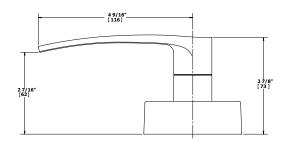
4500 SERIES ESCUTCHEON TRIM - LEVER OPTIONS ARCHER LEVER





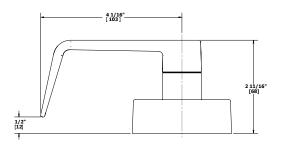
AUGUST LEVER





WITHNELL LEVER





4500 SERIES PULL PLATE TRIM



45PD

Dummy Trim

Function: 02 - Pull when device is dogged down

Projection: 1-3/4" (44 mm)

Escutcheon Plate: 3" x 14" (76 mm x 356 mm)

Pull CTC: 5-1/2" (140 mm)

US3, US4, US10, US10B, US26, US26D, US32D Finishes:



45PN

Night Latch

Function: 03 - Key retracts latchbolt

Projection:

1-3/4" (44 mm) 3" x 14" (76 mm x 356 mm) Escutcheon Plate:

Pull CTC: 5-1/2" (140 mm)

US3, US4, US10, US10B, US26, US26D, US32D Finishes:



4500 SERIES STRIKES



4915

Threshold Strike

Optional strike for use with surface vertical rod exit device and saddle threshold

Finishes: US32D



4923

Top Strike

Included standard with 4500 Series Surface Vertical Rod exit device

Finishes: US32D



4920

Strike

Included standard with 4500 Series Rim exit device

Finishes: US32D



4923F

Fire Rated Top Strike

Included standard with 4500 Series Surface Vertical Rod exit device

Finishes: US32D



4920F

Fire Rated Strike

Included standard with 4500 Series Rim exit device

Finishes: US32D



4924

Bottom Strike

Included standard with 4500 Series Surface Vertical Rod exit device

Finishes: US32D



4921

Double Door Strike

Optional strike to be used with 4500 Series Surface Vertical Rod and Rim exit device

Finishes: US3, US4, US10, US10B,

US26, US32D



4924F

Fire Rated Bottom Strike

Included standard with 4500 Series Surface Vertical Rod exit device

Finishes: US32D



4500 SERIES ACCESSORIES



4926

Cylinder Dogging Conversion Kit

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) each dogging

plate, cylinder collar,

cash box nut

 Mortise cylinder, 3902, sold separately

• Specify 36" (914 mm) or 48" (1219 mm)



Top Rod Replacement Kit

For use with 4500 Series Surface Vertical

Rod exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) each 45-1/4"

(1149 mm) rod, rod guide, rod connector,

and appropriate

fasteners



4927

Notes:

Bottom Latch Assembly

For use with 4500 Series Surface Vertical

Rod exit device

Description: 1/2" (13 mm) throw,

pullman type, held retracted during door swing, stainless steel

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) bottom

latch with cover and appropriate fasteners



4930R

Shim Kits

To be used with 4500 Series Rim exit devices where a glass bead kit would

interfere with exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: Two (2) each 1/8"

(3 mm) shims and appropriate fasteners



4928

Top Latch Assembly

For use with 4500 Series Surface Vertical

Rod exit device

Description: 1/2" (13 mm) throw,

pullman type, held retracted during door swing, stainless steel

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) top latch with

cover and appropriate

fasteners



4930S

Shim Kits

To be used with 4500 Series Surface Vertical Rod exit devices where a glass bead kit would interfere with exit device Finishes: US3, US4, US10,

11131163. 033, 034, 0310,

US10B, US26, US26D,

US32D

Packaging: Two (2) each 1/8"

(3 mm) shims and appropriate fasteners



4500 SERIES ACCESSORIES (CONTINUED)



4932R

Head Cover

For use with 4500 Series Rim exit device Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) head cover and

> four (4) each M4 x 6mm MS



4937

36" Extension Rod Kit

For use with 4500 Series Surface Vertical

Rod exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) each 36"

> (914 mm) extension rod, rod connector, rod guide, plus wood and machine screws

Notes: Threaded on both ends;

if cuts are required, cut the standard rod on non-threaded end



4932S

Head Cover

For use with 4500 Series Surface Vertical

Rod exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) head cover and

> four (4) each M4 x 6mm MS



2-649-0166

Fire Bolt Kit

Bolt Diameter:

For use with fire rated 4500 Series Surface Vertical Rod less bottom rod

device

1-25/32" x 1" Faceplate:

(45 mm x 25 mm) 7/16" (11 mm)

Bolt Length: 1-1/2" (38 mm) Materials: Stainless steel

Packaging: One (1) each fire bolt,

plastic plug, head cover plug, and appropriate

fasteners

Notes: Required with a fire

rated pair of LBR

devices to ensure rating



4936

24" Extension Rod Kit

For use with 4500 Series Surface Vertical

Rod exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

One (1) each 24" Packaging:

> (610 mm) extension rod, rod connector, rod guide, plus wood and machine screws

Threaded on both ends; Notes:

> if cuts are required, cut the standard rod on non-threaded end



2-649-0154

Windstorm Reinforcement Kit

Finishes: N/A

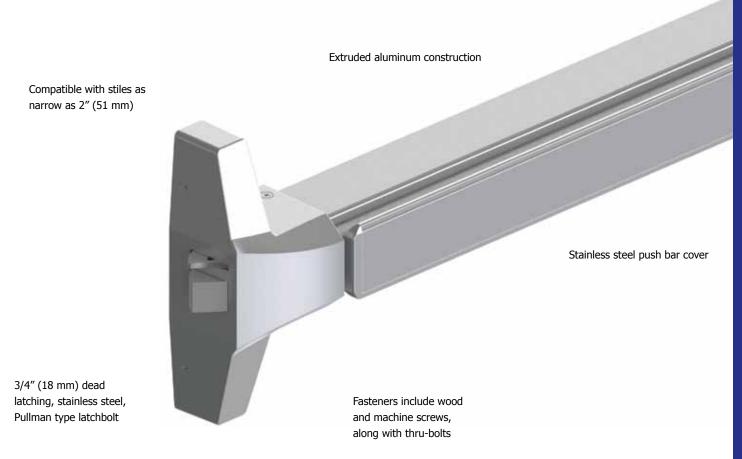
Must use with 4500 Notes:

Series Rim device to ensure ANSI A250.13 Severe Windstorm

rating



Hager 4600 Series Grade 1 Rim device is designed and engineered for superior performance on narrow stile doors in heavy duty commercial applications. The 4600 Series design compliments aluminum and glass construction and provides excellent durability for a range of applications. The 4600 Series is BHMA certified, UL Listed for up to three hour rated fire doors, meets UL specifications for panic hardware, and is backed by a lifetime warranty.





GENERAL INFORMATION

Hager 4600 Series Grade 1 exit device meets Life Safety codes and Fire Safety requirements providing a perfect fit for use in commercial office buildings, medical and educational facilities, as well as hospitality structures.

The 4600 Series Rim device is BHMA-Certified to the requirements of ANSI 156.3 for Grade 1 exit devices and is UL 305 Panic Listed and UL and cUL Listed for up to 3 hour rated fire doors.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Non-handed device offers added versatility and means less inventory.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

Shim Kits

Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8" (3.2 mm) shims and the appropriate longer fasteners.

Cylinder Dogging

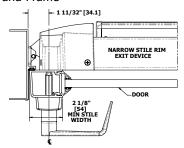
Cylinder dogging is available to replace the standard hex key dogging on panic exit devices. Specify CD on order or purchase 4926 for retrofit applications. Unit requires 1-1/8" (29 mm) mortise cylinder (part number 3902) with standard cam.

Sizing

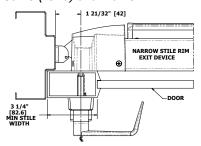
The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches.

Applications

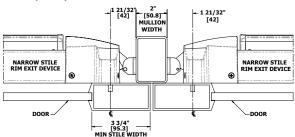
Single Door Panic Exit Hardware - Blade Stop Strike (4950) and Frame



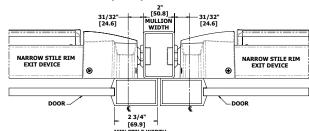
Single or Double Door with Panic Exit Hardware - Standard Strike (4920) and Frame



Single or Double Door with Panic Exit Hardware - Standard Strike (4920) and Mullion



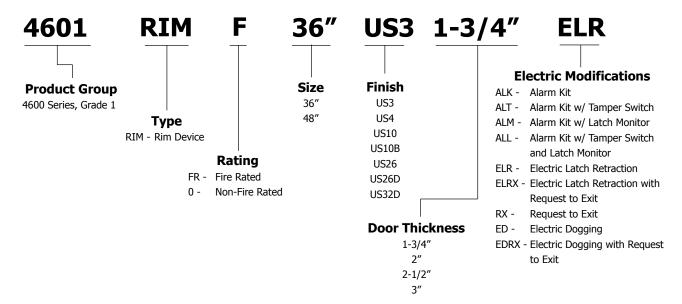
Single or Double Door with Panic Exit Hardware - Semi-Flush Mount Strike (4952) and Mullion



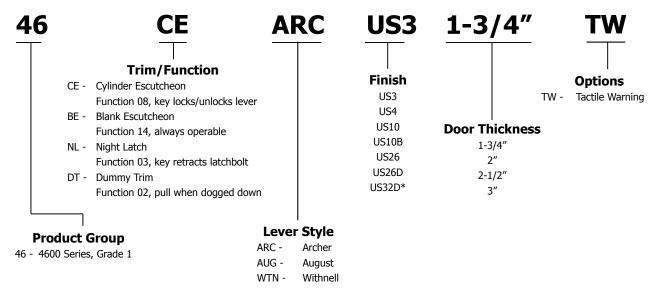
		_	
Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	46BE	Always operable (Passage)	14
Cylinder Escutcheon	46CE	Key locks or unlocks lever	08
Dummy	46DT	Pull when device is dogged down	02
Night Latch	46NL	Key retracts latchbolt	03



HOW TO ORDER



HOW TO ORDER - TRIM (MUST BE ORDERED SEPARATELY)



Notes:

- 1. Mortise cylinder 3902 with 3976 L cam is required for use with cylinder escutcheon and is sold separately.
- 2. Rim cylinder with long tailpiece 3901 is required for use with night latch trim and is sold separately.
- 3. For more cylinder information, please refer to general information in the Locks section of the catalog.
- 4. If using shim kit, specify total door thickness including shims.

^{*}US32D available for device only. Not available in standard escutcheon trims (46BE, 46CE, 46DT, 46NL).





4600 Series

Grade 1

Narrow Stile Rim Device Ideal for heavy duty commercial applications

- Lifetime warranty
- Thru-bolts supplied standard

Applications: Heavy duty commercial

Certifications: • BHMA Certified ANSI A156.3

UL/cUL Listed for up to 3 hours for "A" label doors
UL10C/UBC 7-2 (1997) Positive Pressure Rated

UL10B Neutral Pressure RatedUL305 Listed for panic hardware

• Hex dogging feature standard on non-fire labeled doors

Trim: Archer, August, or Withnell Lever with escutcheon

Covers: Stainless steel, zinc

Chassis: Aluminum

End Caps: Zinc

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

Door Thickness: 1-3/4" (44 mm) - Standard

Projection: • 3" (76 mm) in undogged position

• 2-5/8" (67 mm) in dogged position

Stile Width:

• 2-1/8" (54 mm) - Minimum stile width required for 1/2" (13 mm) blade stop frame and 4950 blade stop

strike

 \bullet 3-1/4" (83 mm) - Minimum stile width required for single door, 5/8" (16 mm) stop and 4920 standard

strike

• 3-3/4" (95 mm) - Minimum stile width required for double door x mullion x 4920 strike

• 2-3/4" (70 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion and 4952

semi-flush mount strike

• All stile widths are measured from door edge

Fasteners: • Wood and machine screws

• Thru-bolts

Latchbolt: 3/4" (18 mm) throw, pullman type with automatic dead-latching, stainless steel

Strikes: • Blade stop (4950) - Standard with panic device

• Fire rated strike (4920F) - Standard with fire rated device

• Standard strike (4920) - Optional

• Single rabbit strike (4951) - Optional

• Semi-flush mount strike (4952) - Optional

US3, US4, US10, US10B, US26, US26D, US32D

Notes: • Cylinder dogging available on non-fire rated devices, specify CD

• 3902 1-1/8" (29 mm) mortise cylinder with 3976 L cam sold separately

Recommended to be used on appropriately reinforced doors



Finishes:





4600 Series - Electric Exit Devices

Rim Devices and Trim Heavy duty commercial

- Lifetime warranty on exit body only
- One-year warranty on electric components
- Thru-bolts supplied standard

Certifications: • BHMA Certified ANSI A156.3 Grade 1

 \bullet UL/cUL Listed for up to three hours for "A" label doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• UL305 Listed for panic hardware

Minimum Door Width:

36" (914 mm) for electric latch retraction and electric dogging

Door Thickness: 1-3/4" (45 mm) standard

Function	Function Number	Function Description
Electric Latch Retraction	ELR*	Provides a remote means of locking or unlocking exit devices.
Electric Latch Retraction with Request to Exit	ELRX*	Provides a remote means of locking or unlocking exit devices along with a switch for tying into an alarm system, magnetic locks, or a console.
Electric Dogging	ED*	Provides continuous latch retraction and dogging simultaneously.
Electric Dogging with Request to Exit	EDRX*	Provides continuous latch retraction and dogging simultaneously along with a switch for tying into an alarm system, magnetic locks, or a console.
Request to Exit	RX*	Used to shunt an alarm, activate an alarm, provide release of magnetic locks, or signal a control console.
Alarm Kit	ALK*	Battery operated alarm to discourage unauthorized use of an opening while maintaining a means of egress.

^{*} Not available with mechanical dogging.

Note: Latch monitor and tamper switch available with ALK.

Product	Description
2901	For use with 4600 Series electric latch retraction
2902	For use with 4600 Series electric latch retraction in a day/night mode of operation
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls
2904	Provides power and control for openings with an electrified locking device and automatic door operator

Note: Must use Hager 2901 or 2902 to power electric latch retraction.



4600 SERIES ESCUTCHEON TRIM



46BE

Blank Escutcheon

Function: 14 - Always operable (passage) Levers: Archer, August, Withnell

Projection: 2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for Withnell

Escutcheon: 1-11/16" x 7-7/8" (43 mm x 200 mm) Finishes: US3, US4, US10, US10B, US26, US26D



46CE

Cylinder Escutcheon

Function: 08 - Key locks or unlocks lever

Levers: Archer, August, Withnell (clutching lever)

Projection: 2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for Withnell

Escutcheon: 1-11/16" x 7-7/8" (43 mm x 200 mm) Finishes: US3, US4, US10, US10B, US26, US26D

Cylinder: Mortise cylinder, 3902 with 3976 L cam, sold separately



46DT

Dummy Trim

Function: 02 - Pull when device is dogged down

Levers: Archer, August, Withnell

Projection: 2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for Withnell

Escutcheon: 1-11/16" x 7-7/8" (43 mm x 200 mm) Finishes: US3, US4, US10, US10B, US26, US26D



46NL

Night Latch

Function: 03 - Key retracts latchbolt

Levers: Archer, August, Withnell (rigid lever)

Projection: 2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for Withnell

Escutcheon: 1-11/16" x 7-7/8" (43 mm x 200 mm) Finishes: US3, US4, US10, US10B, US26, US26D

Cylinder: Rim cylinder, 3901, with long tailpiece sold separately

4600 SERIES ESCUTCHEON TRIM - LEVER OPTIONS

ARCHER LEVER

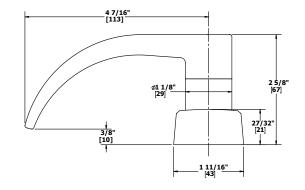


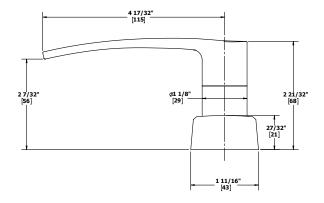
AUGUST LEVER

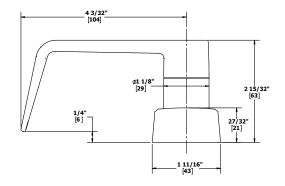


WITHNELL LEVER











4600 SERIES STRIKES



4920

Strike

Optional strike to be used with 4600 Series Rim exit device

Finishes: US32D

Notes: For standard surface mounted applications



4920F

Fire Rated Strike

Included standard with 4600 Series Fire Rated Rim exit device

Finishes: US32D

Notes: For standard surface

mounted applications



4950

Blade Stop Strike

Included standard with 4600 Series

Rim exit device Finishes: US32D



4951

Single Rabbit Strike

Optional strike to be used with 4600 Series Rim exit device

Finishes: US32D



4952

Semi-Flush Mount Strike

Optional strike to be used with 4600 Series Rim exit device

Finishes: US32D

4600 SERIES ACCESSORIES



4925

Cylinder Dogging Conversion Kit

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: One (1) each dogging

plate, cylinder collar,

cash box nut

Notes: • Mortise cylinder,

3902, sold separately
• Specify 36" (914 mm)
or 48" (1219 mm)



4960R

Shim Kit

To be used with 4600 Series Rim exit device where a glass bead kit would

interfere with exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

Packaging: Two (2) each 1/8"

(3 mm) shims and appropriate fasteners



4965

Head Cover

For use with 4600 Series Rim exit device

Finishes: US3, US4, US10,

US10B, US26, US26D,

US32D

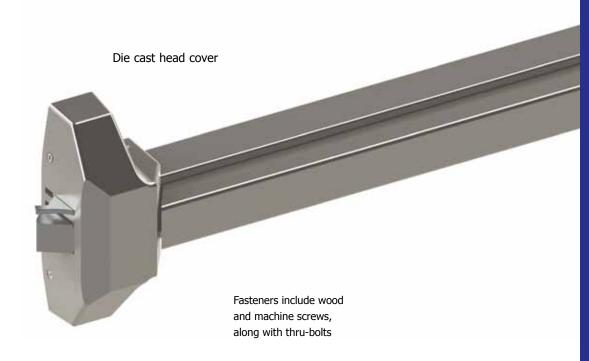
Packaging: One (1) head cover and

four (4) each M4 x

6mm MS



Hager 4700 Series exit device is ideal for standard duty commercial applications. It is UL listed for up to 3 hours (Rim) or 1-1/2 hours (SVR) fire doors, meets UL specifications for panic hardware, and is Severe Windstorm Resistant approved (Rim device only). It is constructed with die cast head covers and is packaged for convenience and versatility with thru-bolts included.



3/4" (18 mm) dead latching, stainless steel, Pullman type latchbolt



GENERAL INFORMATION

Hager's 4700 Series exit devices meet Life Safety codes and Fire Safety requirements providing a perfect fit for use in light commercial and standard duty applications. The 4700 Series is UL305 Panic Listed and UL and cUL listed for up to 3 hour rated fire doors for the Rim device and 1-1/2 hours for the Surface Vertical Rod device. The 4700 Series Rim device also meets the requirements of ANSI A250.13 to be listed as a Severe Windstorm Resistant Component. The 4700 Series has a five-year warranty for devices and trims.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

Shim Kits

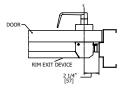
Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8" (3.2 mm) shims and the appropriate longer fasteners.

Sizina

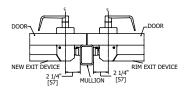
The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches. The surface vertical rod devices are supplied for an 84" (2134 mm) opening standard, but can be ordered for a 96" (2438 mm) opening. Extension rods are available to accommodate openings taller than 96" (2438 mm) up to 120" (3048 mm).

Applications

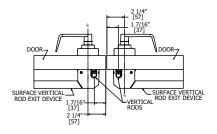
Single Door



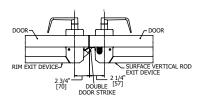
Double Door with Mullion



Double Door (2 SVR Devices)

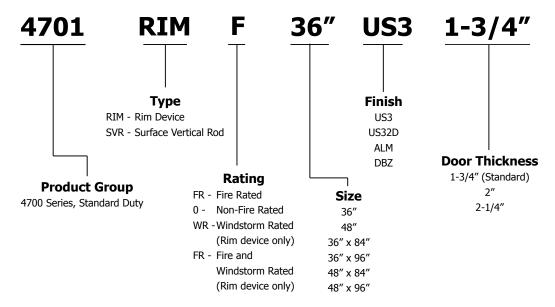


Double Door (SVR x Rim)



Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	47BE 47KP	Always operable (Passage)	14
Cylinder Escutcheon	47CE 47KE	Key locks or unlocks lever	08
Dummy	47DT 47KD 47RD	Pull when device is dogged down (specify handing when ordering)	02
Night Latch	47NL 47KN 47PN 47RN	Key retracts latchbolt (specify handing when ordering)	03

HOW TO ORDER



HOW TO ORDER - TRIM (MUST BE ORDERED SEPARATELY)



Notes:

- Handing is required for the 4700 Series trim. 1.
- 2. Mortise cylinder 3902 is required for use with cylinder escutcheon and is sold separately.
- For more cylinder information, please refer to General Information in the lock section of the catalog. 3.
- 4. If using shim kit, specify total door thickness including shims.



Certifications:

Trim:

EXIT DEVICES



4700 Series

Standard Duty **Rim Device**

Ideal for light commercial and standard duty applications

- Five-year warranty
- Thru-bolts supplied standard

Applications: Light commercial

· Standard duty commercial

UL305 Listed for panic hardware

• UL/cUL Listed for up to 3 hours for "A" label fire doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

• ANSI A250.13 Severe Windstorm Resistant Component (Rim device only)

• Complies with ANSI 117.1 for accessible buildings and facilities • Hex dogging feature standard on non-fire rated panic doors

• Archer, August, or Withnell lever with escutcheon

• Archer, August, Withnell lever with key-in-lever trim

• Raised lip pull • Pull plate trim

• Rim cylinder x optional pull

Covers: Casted brass, bronze, stainless steel, zinc Chassis: Painted steel, plated steel, stainless steel End Caps: Painted steel, plated steel, stainless steel

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

1-3/4" (44 mm) - Standard Door Thickness:

• 2-7/16" (62 mm) in undogged position Projection:

• 1-3/16" (30 mm) in dogged position

Stile Width: • 4-1/2" (114 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop

• 4-1/2" (114 mm) - Minimum stile width required for double door x surface vertical rod device with

double door strike

• 5" (127 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion

• All stile widths are measured from door edge

Fasteners: Wood and machine screws

Thru-bolts

Latchbolt: 3/4" (19 mm) throw, pullman type with automatic dead-latching, stainless steel Strikes:

• Stainless steel with roller - Included standard with panic and fire rated devices

• Surface applied to frame with slotted holes for easy adjustment

• Optional double door strike for use with surface vertical rod and rim devices

Finishes: US3, ALM, DBZ, US32D Notes: Cylinders sold separately

• Recommended to be used on appropriately reinforced doors







4700 Series

Standard Duty Surface Vertical Rod Device Ideal for light commercial and standard duty applications

- Five-year warranty
- Thru-bolts supplied standard

Applications: • Light commercial

· Standard duty commercial

Certifications: • UL305 Listed for panic hardware

• UL/cUL Listed for up to 1/2" hours for "A" label fire doors

• UL10C/UBC 7-2 (1997) Positive Pressure Rated

• UL10B Neutral Pressure Rated

Complies with ANSI 117.1 for accessible buildings and facilities
Hex dogging feature standard on non-fire rated panic doors

Trim:

• Archer, August, or Withnell lever with escutcheon
• Archer, August, Withnell lever in key-in-lever trim

Raised lip pullPull plate trim

• Rim cylinder x optional pull

Covers: Casted brass, bronze, stainless steel, zinc Chassis: Painted steel, plated steel, stainless steel End Caps: Painted steel, plated steel, stainless steel

Door Width: • 36" (914 mm) field sizeable to 30" (762 mm) door

• 48" (1219 mm) field sizeable to 36" (914 mm) door

Door Height: • 7' (2134 mm) - Standard

• 8' (2438 mm) - Optional

• 10' (3048 mm) - Optional (with use of extension rods) - Panic only

Door Thickness: 1-3/4" (44 mm) - Standard

Projection: • 2-7/16" (62 mm) in undogged position

• 1-3/16" (30 mm) in dogged position

Stile Width: • 4-1/2" (114 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop

• 4" (102 mm) - Minimum stile width required for double doors

• 4-1/2" (114 mm) - Minimum stile width required for double door x Rim device with double door strike

• All stile widths are measured from door edge

Fasteners: • Wood and machine screws

Thru-bolts

Latchbolt: • Top - 3/8" (9 mm) throw, with automatic dead-latching, stainless steel

• Bottom - 3/8" (9 mm) throw, held retracted during door swing, stainless steel

Rod Length: • Rods for 7' (2134 mm) door - Standard

• Rods for 8' (2438 mm) door - Optional

Door height of 6' 8" (2032 mm) requires 31-1/4" (794 mm) top rod length
Door height of 7' (2134 mm) requires 35-1/4" (895 mm) top rod length
Door height of 8' (2438 mm) requires 47-1/4" (1200 mm) top rod length

• Extension rods available, 2' (610 mm) or 3' (914 mm) for doors over 7' (2134 mm).

Strikes: • Stainless steel with plated roller - Included Standard

• Surface applied to frame with slotted holes for easy adjustment

• Optional double door strike for use with surface vertical rod and rim devices

Optional threshold strike for use with saddle threshold

Finishes: US3, ALM, DBZ, US32D

Notes: • Recommended to be used on appropriately reinforced doors





4700 SERIES ESCUTCHEON TRIM



47BE

Blank Escutcheon

Function: 14 - Always operable (Passage) Levers: Archer, August, Withnell

Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell

Escutcheon: 2-5/8" x 8" (67 mm x 203 mm)

Finishes: ALM, DBZ, US3, US32D Handing: Specify when ordering



47CE

Cylinder Escutcheon

Function: 08 - Key locks or unlocks lever Levers: Archer, August, Withnell

Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell

Escutcheon: 2-5/8" x 8" (67 mm x 203 mm)

Finishes: ALM, DBZ, US3, US32D

Cylinder: Requires the use of a mortise cylinder, 3902, sold separately

Handing: Specify when ordering



47DT

Dummy Trim

Function: 02 - Pull when device is dogged down

Levers: Archer, August, Withnell

Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell

Escutcheon: 2-5/8" x 8" (67 mm x 203 mm)

Finishes: ALM, DBZ, US3, US32D Handing: Specify when ordering



47NL

Night Latch

Function: 03 - Key retracts latchbolt Levers: Archer, August, Withnell

Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell

Escutcheon: 2-5/8" x 8" (67 mm x 203 mm)

Finishes: ALM, DBZ, US3, US32D

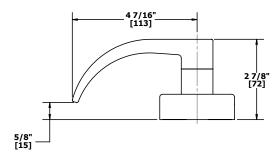
Cylinder: Requires the use of a mortise cylinder, 3902, sold separately

Handing: Specify when ordering

4700 SERIES ESCUTCHEON TRIM - LEVER OPTIONS

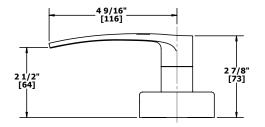
ARCHER LEVER





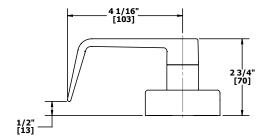
AUGUST LEVER





WITHNELL LEVER





4700 SERIES



4700 SERIES KEY-IN-LEVER TRIM



47KD

Key in Lever Dummy Trim

Function: 02 - Entrance by trim when actuating bar is locked down

Levers: Archer, August, Withnell

Projection: 3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for Withnell

Rose Diameter: 3-3/8" (86 mm) Finishes: ALM, DBZ, US3, US32D



47KE

Key in Lever Entrance

Function: 08 - Entrance by lever; key locks or unlocks lever

Projection: 3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for Withnell

Rose Diameter: 3-3/8" (86 mm)

Finishes: ALM, DBZ, US3, US32D

Cylinder: • Standard core, C keyway - Standard

• Small Format Interchangeable Core housing available, cylinder sold separately, 3981

Keys: Two (2) brass keys per lock



47KN

Key in Lever Night Latch

Function: 03 - Entrance by trim when latch bolt is released by key; key is removable when

locked

Levers: Archer, August, Withnell

Projection: 3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for Withnell

Rose Diameter: 3-3/8" (86 mm) Finishes: ALM, DBZ, US3, US32D

Cylinder: • Standard core, C keyway - Standard

• Small Format Interchangeable Core housing available, cylinder sold separately, 3981

Keys: Two (2) brass keys per lock



47KP

Key in Lever Passage

Function: 14 - Entrance by trim when latch bolt is released by lever; always active, no cylinder

Levers: Archer, August, Withnell

Projection: 3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for Withnell

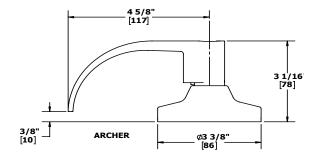
Rose Diameter: 3-3/8" (86 mm)

Finishes: ALM, DBZ, US3, US32D

4700 SERIES KEY-IN-LEVER TRIM - LEVER OPTIONS

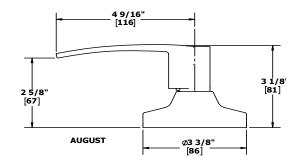
ARCHER LEVER





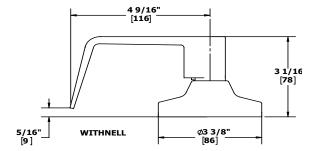
AUGUST LEVER





WITHNELL LEVER





4700 SERIES



4700 SERIES PULL PLATE TRIM



47PD

Dummy Trim

Function: 02 - Pull when device is dogged down

Projection: 1-3/4" (44.5 mm)

3" x 11" (76 mm x 279 mm) Escutcheon:

5-1/2" (140 mm) Pull CTC: ALM, DBZ, US3, US32D Finishes:



47PN

Night Latch

Function: 03 - Key retracts latchbolt

Projection:

1-3/4" (44.5 mm) 3" x 11" (76 mm x 279 mm) Escutcheon:

Pull CTC: 5-1/2" (140 mm) Finishes: ALM, DBZ, US3, US32D

Requires the use of a rim cylinder, 3901, sold separately Cylinder: Supplied with retaining cup for use with 161 door prep Notes:

4700 SERIES RAISED LIP TRIM



Raised Lip Pull Dummy

Function: 02 - Pull when device is dogged down

Size: 3" x 7-3/4" (76 mm x 197 mm)

Projection: 1" (25 mm)

Finishes: ALM, DBZ, US3, US32D



47RN

Raised Lip Pull Night Latch

Function: 03 - Key retracts latchbolt 3" x 7-3/4" (76 mm x 197 mm) Size:

1" (25 mm) Projection:

ALM, DBZ, US3, US32D Finishes:

Requires the use of a Rim cylinder, 3901, sold separately Cylinder:

Must purchase retaining cup, 2-649-0137, separate for 161 door prep Notes:



4700 SERIES STRIKES





4910 Strike

Included standard with 4700 Series Rim exit device

Finishes: US32D



4917

Bottom Latch Assembly

For use with 4700 Surface Vertical Rod

exit device

Finishes: US3, ALM, DBZ, US32D Packaging: One (1) bottom latch with

cover and appropriate

fasteners



4911

Double Door Strike

Optional strike for use with 4700 Series Surface Vertical Rod and Rim exit device Finishes:

US32D



4918

Top Latch Assembly

For use with 4700 Surface Vertical Rod

exit device

Finishes: US3, ALM, DBZ, US32D One (1) top latch with cover Packaging:

and appropriate fasteners



4913

Top Strike

Included standard with 4700 Series Surface Vertical Rod exit device

Finishes: US32D

Note: Can be used for both

> panic and fire rated surface vertical rod

devices



4919

Top Rod Replacement Kit

For use with 4700 Surface Vertical Rod

exit device

Finishes: US3, ALM, DBZ, US32D

Packaging: One (1) each

> 47-1/4" (1200 mm) rod, rod guide, rod connector assembly, and appropriate

fasteners



4914

Bottom Strike

Included standard with 4700 Series Surface Vertical Rod exit device

Finishes: US32D



4931R

Shim Kit

To be used with 4700 Rim exit devices where a glass bead kit or molding would

interfere with exit device

Finishes: US3, ALM, DBZ, US32D Two (2) each 1/8" (3 mm) Packaging:

shims and appropriate

fasteners



4915

Threshold Strike

Optional strike for use with surface vertical rod exit device and saddle

threshold

Finishes: US32D



4700 SERIES ACCESSORIES (CONTINUED)



4931S

Shim Kits

To be used with 4700 Series Surface Vertical Rod exit devices where a glass bead kit or molding would interfere with exit device

Finishes: US3, ALM, DBZ, US32D Two (2) each 1/8" (3 mm) Packaging: shims and appropriate

fasteners



4936

24" Extension Rod Kit

For use with 4700 Series Surface

Vertical Rod exit device

Finishes: US3, ALM, DBZ, US32D

One (1) each Packaging:

24" (610 mm) extension rod, rod connector, rod guide, plus wood and machine screws

Threaded on both ends; if Notes:

> cuts are required, cut the standard top rod on non-

threaded end.



4933R

Head Cover

For use with 4700 Series Rim exit device US3, ALM, DBZ, US32D Finishes: One (1) head cover with Packaging:

four (4) each M4 x 6 mm MS



4937

36" Extension Rod Kit

For use with 4700 Series Surface Vertical Rod exit device

US3, ALM, DBZ, US32D Finishes:

One (1) each 36" (914 mm) Packaging:

extension rod, rod

connector, rod guide, plus wood and machine screws Threaded on both ends; if

Notes: cuts are required, cut the

standard top rod on non-

threaded end.



4933S

Head Cover

For use with 4700 Series Surface Vertical Rod exit device

Finishes: US3, ALM, DBZ, US32D One (1) head cover with Packaging:

> four (4) each M4 x 6 mm MS



4934

Non-Fire Rated Dogging Plate

For use with 4700 Series exit devices Finishes: US3, ALM, DBZ, US32D One (1) each dogging plate Packaging:

and hex key



4934F

Fire Rated Dogging Plate

For use with 4700 Series exit devices Finishes: US3, ALM, DBZ, US32D





Hager 4900 Series offers both a keyed removable mullion and a non-keyed removable mullion. Both are designed for use on double door openings with rim devices--providing increased security and tighter closure, while providing easy adaptation for full width access. Our 4900 Series consists of a mullion, top and bottom brackets, and screw pack. It is UL listed for 3 hours on fire rated pairs of doors up to 8 feet by 8 feet.

1/2" (13 mm) and 5/8" (16 mm) shims supplied standard

2" x 3", 11 gauge steel tube with primecoat



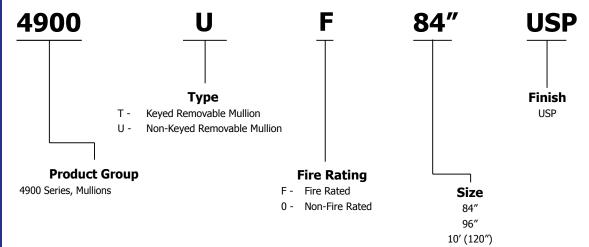
Latching head allows mullion to be removed in seconds; mullion can be locked into place without use of key

Utilizes standard rim cylinder

Keyed Removable Mullion



HOW TO ORDER



Notes:

- Keyed removable mullion requires cylinder, 3901, sold separately. Fire rated strike and hook kits sold separately (4912 for use with 4500 Series fire rated exit device and mullion or 4916 for 1. 2. use with 4700 Series fire rated exit device and mullion). Stabilizer kit, 4953, sold separately.
- 3.





4900KR

Keyed Removable Mullion

- One-year warranty
- Key removable
- Shim kits supplied standard

Applications: Certifications:

For use with 4500 Series and 4700 Series Rim exit devices on non-fire and fire rated pairs of doors UL/cUL/Warnock Hersey listed for fire rated pairs of doors up to 8' (2438 mm) X 8' (2438 mm)

Mullion: Cylinders: 2" x 3" (51 mm x 76 mm) – 11 gauge steel tube • Solid brass 6-pin rim cylinders, 3901, sold separately

• Standard core, C keyway - Standard

• Small Format Interchangeable Core sold separately

Top Fitting:

• Dead latch on fire rated device

Latching head allows the mullion to be removed in seconds
Mullion can be locked in place without the use of a key

Fasteners:

• Four (4) 8 - 32 x 3/4" (19 mm) FPHMS

• Four (4) 5/16" - 18 x 5/8" (16 mm) FPHMS • Two (2) 5/16" - 18 x 1-1/2" (38 mm) FPHMS

• Two (2) 3/8" Wedge anchors

Shims:

• 1/2" (13 mm) and 5/8" (16 mm) shims included (top)

• 1/8" (4 mm) shims included (bottom)

Strikes:

• Non-fire rated mullions use standard Rim strike supplied with exit device

• Fire rated strike and hook kit, 4912 (4500 Series) or 4916 (4700 Series), must be purchased separately

Finishes:

USP – grey primer only



4900T

Non-Fire Rated Mullion Set

Certification: Non-fire rated Dimensions: 84" (2134 mm),

96" (2438 mm), 120" (3048 mm)

Material: 11 gauge steel tube



4900TF

Fire-Rated Mullion Set

Certification: UL fire rated Dimensions: 84" (2134 mm),

96" (2438 mm)

Material: 11 gauge steel tube



4900KR CYLINDERS



3901

Rim Cylinder

Fixed cylinder standard and Small Format Interchangeable Core both sold separately. For more cylinder information, please refer to the lock section in this catalog.



4907

Mullion Tube

Certification: Fire-rated up to 96"

(2438 mm)

Dimensions: 84" (2134 mm),

96" (2438 mm),

120" (3048 mm) USP grey primer

Materials: Steel

4900KR ACCESSORIES



4902

Top/Bottom Bracket Set

Certification: Non-fire rated Function: Keyed Removable

Materials: Steel

Fasteners: Two (2) each MS #5/16

-18 x 1-1/2" FHP stainless; four (4) each MS #8-32 x 3/4" 100 degree FHP; four (4) each MS #5/16-18 x 5/8" FHP stainless zinc

plated

Cylinder: Rim cylinder, 3901, sold

separately



4912

Finishes:

Fire Rated Strike and Hook Kit for 4500 Series

Finishes: US32D

Notes: Must order for use with

fire rated mullion and fire rated Rim devices to ensure fire rating



4916

Fire Rated Strike and Hook Kit for 4700 Series

Finishes: US32D

Notes: • Must order for use

with fire rated mullion and fire rated Rim devices to ensure fire

rating

• For use with 4900NKR

mullion only



4902F

Fire-Rated Top/Bottom Bracket Set

Certification: Fire rated

Function: Keyed removable

Materials: Steel

Fasteners: Two (2) each MS

#5/16 - 18 x 1-1/2" FHP stainless; four (4) each MS #10 x 1" Type

A FHP undercut

stainless; four (4) each MS 10 - 24 x 5/8" FHP undercut stainless; four (4) each MS #5/16 - 18

x 5/8" FHP stainless

zinc plated

Cylinder: Rim cylinder, 3901, sold

separately



4953

Mullion Stabilizer Kit

Finishes: US32D

Notes: For use with mullion

and exit devices for added security







4900NKR

Non-Keyed Removable Mullion

- One-year warranty
- Shim kits supplied standard

Applications: Certifications:

For use with 4500 Series and 4700 Series Rim exit devices on non-fire and fire rated pairs of doors

UL/cUL Listed for fire rated pairs of doors up to 8' (2438 mm) X 8' (2438 mm)

Mullion: Fasteners:

2'' (51 mm) x 3'' (76 mm) – 11 gauge steel tube

- Four (4) each 5/16" 18 x 5/8" FHPMS (top bracket)
- Two (2) each 5/16" 18 x 1-1/2" FHPMS (top bracket)
 Four (4) each 5/16" 18 x 1-1/2" FHMS (bottom bracket)*
- Four (4) each 5/16" 18 masonry anchors (5/8" diameter x 7/8" long) (bottom bracket)**
- Two (2) each 1/4" 20 x 1-1/4" FHPMS (top fitting)
- Two (2) each 1/4" 20 thru bolts (top fitting)
- Two (2) #10 24 x 3/8" FHPMS (top fitting)
- One (1) 1/4 20 x 3/16" set screw (top fitting)
- * Fire rated device 5/16" 18 x 1-1/4" FHMS
- ** Fire rated device 5/16" 18 masonry anchors (1/2" diameter x 1-1/2" long)

Shims:

- Two (2) each 1/2" (13 mm) and 5/8" (16 mm) shims included (top)
- Two (2) 1/16" (1.6 mm) shims included (bottom)

Strikes: • Non-fire rated mullions use standard Rim strike supplied with exit device

• Fire rated strike and hook kit, 4912 (4500 Series), or 4916 (4700 Series), must be purchased separately

Finishes: USP – grey primer only

Notes: Mullion easily removed by loosening top and bottom screws

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4900U

Non-Fire Rated Mullion Set

Certification: Non-fire rated Dimensions: 84" (2134 mm),

96" (2438 mm), 120" (3048 mm)

Material: 11 gauge steel tube



4900UF

Fire-Rated Mullion Set

Certification: UL fire rated*
Dimensions: 84" (2134 mm),

96" (2438 mm),

Material: 11 gauge stainless steel tube





4900NKR ACCESSORIES



4904

Top/Bottom Bracket Set

Certification: Non-fire rated

Function: Non-keyed removable

Materials: Stee



4912

Fire Rated Strike and Hook Kit for 4500 Series

Finishes: US32D

Notes: Must order for use with

fire rated mullion and fire rated Rim devices to ensure fire rating



4904F

Fire-Rated Top/Bottom Bracket Set

Certification: Fire-rated

Function: Non-keyed removable

Materials: Steel



4916

Fire Rated Strike and Hook Kit for 4700 Series

Finishes: US32D

Notes: Must order for use

with fire rated mullion and fire rated Rim devices to ensure fire

rating



4905

Mullion Tube

Certification: Fire-rated

Dimensions: • 84" (2134 mm)

• 96" (2438 mm)

• 120" (3048 mm)

Finishes: USP grey primer

Materials: Steel

Notes: 120" (3048 mm) not

fire rated



4953

Mullion Stabilizer Kit

Finishes: US32D

Notes: For use with mullion

and exit devices for added security









INDUSTRY-LEADING SERVICE

The Hager products on the following pages are known and used the world over because of their legendary quality and practical value. But for 160 years, Hager has also led the industry in service, both before and after the sale, that other manufacturers simply can't match.

Today, Hager has opened the door to providing new levels of customer service by providing complimentary Architectural Hardware Consulting (AHC) services, including complete specification writing services. By using Hager's in-house team of experts to write your specifications, you can save your firm time and money, leaving your staff free for more profitable pursuits.

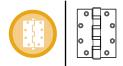
What's more, with Hager, you're guaranteed a truly objective spec every time. We won't just list the products we manufacture, we'll look at hardware that fits both the design and construction requirements of your project. That's the type of truly competitive comparison that

can amount to significant savings in the overall cost of your project's door hardware.

Hager's experience and expertise also make us a complete resource you can trust when you need new ideas, answers to questions, recommendations on meeting your budget, or simply an objective opinion. We want to be the door hardware partner you count on throughout the entire lifecycle of your project--which is why we're proud to offer a complete range of complimentary consulting services that include:

- Door hardware specification writing
- Design development
- Budget preparation
- Code compliance
- Submitted schedules review and approval
- Technical project support





ARCHITECTURAL HINGES



<u>LEGENDARY QUALITY</u>

In the mid 1800s, Charles Hager had a successful business forging metal wheel rims and hinges for wagons headed west. As a smart businessman who valued quality and innovation, Charles soon became a pioneer in product development, designing a revolutionary hinge that became a prototype for more than 5,000 hinges to follow.

Today, the Hager name is synonymous with architectural hinges. In fact, we are the industry's premiere designer and manufacturer of architectural hinges, with a product line that offers one of the widest varieties of sizes, shapes, and finishes--all of which meet or exceed ANSI standards. With legendary quality, time-tested durability, and consistent superior performance, Hager is the one name, and one brand, you can count on to provide it all.







ARCHITECTURAL HINGES

Full Mortise Standard Weight

- Low/medium frequency
- Use with hollow metal or wood doors
- * Also available in wide throw



Three Knuckle





Steel

0

0 0 700

Steel





AB920

Concealed Anti-Friction Bearing Steel



AB923

Concealed Anti-Friction Bearing Brass or Stainless Steel



800

Plain Bearing Brass or Stainless Steel



1279*

Steel

Plain Bearing

AB700*

Concealed Anti-Friction Bearing Steel



Concealed Anti-Friction Bearing Brass or Stainless Steel

Plain Bearing



1191*

Plain Bearing Brass or Stainless Steel



AB800*

BB1279* **Ball Bearing** Steel

Three Knuckle

Five Knuckle



BB1191* **Ball Bearing** Brass or Stainless Steel

CB1191

Concealed Bearing Secure Coat® Lifetime Brass

Full Mortise Heavy Weight

- High frequency
- · Use with hollow metal or wood doors
- * Also available in wide throw



AB930 Concealed Anti-Friction Bearing Steel



AB933

Concealed Anti-Friction Bearing Brass or Stainless Steel



AB850*

Concealed Anti-Friction Bearing Brass or Stainless Steel



AB750*

Steel

BB1168* Four Ball Bearing Steel



BB1199* Four Ball Bearing Brass or Stainless Steel

Concealed Anti-Friction Bearing

Three Knuckle







Contact



E2 Contact



E1S Switch



E1S Switch



E2/E1S Contact/Switch



E2/E1S Contact/Switch

Exposed Electric

- Available on architectural-grade ball bearing and anti-friction bearing
- · Available in steel, brass, or stainless steel



Five Knuckle Three Knuckle



EMN Monitor only



EMN Monitor only



ETW Through-wire only



ETW Through-wire only



Through-wire with monitoring



ETM

Through-wire with monitoring

Concealed Electric

- Available on architectural-grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel







Standard Weight **AB700** Steel

AB800 Brass or Stainless Steel

Heavy Weight AB750 Steel

> AB850 Brass or Stainless Steel





Standard Weight BB1191

Brass or Stainless Steel BB1279 Steel

Heavy Weight **BB1168**

Steel BB1199

Brass or Stainless Steel

Steel

Air Transfer

• Available on architectural grade ball bearing and anti-friction bearing full mortise







Single Acting Full Mortise

Stainless Steel



Single Acting Reverse Action Square Corner

1257 Steel

1258 Steel

Steel



Single Acting Half Surface 1253 Steel



Double Acting Full Surface Adjustable 1303

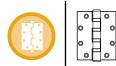
Spring

· Meets codes for hotels, motels, institutions, and commercial buildings



5/8" Radius 1259





ARCHITECTURAL HINGES

Half Mortise Standard Weight

- Low/medium frequency
- Use on hollow metal doors with channel iron frames

Three Knuckle



Concealed Anti-Friction Bearing

AB701 Steel

AB801

Brass or Stainless Steel

Five Knuckle



Plain Bearing 1129 Steel



Ball Bearing **BB1129** Steel **BB1109**

Brass or Stainless Steel

Half Mortise Heavy Weight

- High frequency
- Use on hollow metal doors with channel iron frames

Three Knuckle



Concealed Anti-Friction Bearing

AB751 Steel

AB851

Brass or Stainless Steel





Ball Bearing

BB1138

Steel

BB2098

Brass or Stainless Steel

Full Surface

• Use on hollow metal, wood composite, or tubular steel doors with channel iron frames

Three Knuckle



Concealed Anti-Friction Bearing Standard Weight

AB702 Steel

AB802

Brass or Stainless Steel



Concealed Anti-Friction Bearing

Heavy Weight **AB752**

Steel

AB852

Brass or Stainless Steel

Five Knuckle



Ball Bearing Standard Weight

BB2171

Steel **BB2110**

Brass or Stainless Steel



Ball Bearing

Heavy Weight

For Tublar Steel Doors

BB2108

Brass or Stainless Steel

For Heavy Hollow Metal or Wood Composite Doors

BB2109

Brass or Stainless Steel

Half Surface

· Use on hollow metal or wood composite doors with hollow metal frames





Concealed Anti-Friction Bearing Standard Weight

AB703 Steel

AB803

Brass or Stainless Steel



Concealed Anti-Friction Bearing

Heavy Weight

AB753

Steel **AB853**

Brass or Stainless Steel





Plain Bearing Standard Weight

1173 Steel



Ball Bearing Standard Weight

BB1173* Steel

BB2112*

Brass or Stainless Steel

Heavy Weight

BB1163

Steel

BB2113

Brass or Stainless Steel

*Two ball bearings

Five Knuckle



Plain Bearing Standard Weight

Both Leaves Tapped

1277 Steel 1577

Brass or Stainless Steel

One Leaf Tapped

1278 Steel

1578

Brass or Stainless Steel



Ball Bearing Standard Weight

Both Leaves Tapped

BB1277 Steel **BB1577**

Brass or Stainless Steel

One Leaf Tapped

BB1278 Steel BB1578

Brass or Stainless Steel

• Use on aluminum doors with aluminum frames

Swing Clear

• Use in hospitals or other

institutional type buildings

• Swings doors completely clear of

the opening when door is opened

Three Knuckle



Full Mortise Concealed Anti-Friction Bearing Standard Weight

AB7001/AB7002

Steel



Full Mortise Concealed Anti-Friction Bearing Heavy Weight

AB7501/AB7502

Steel



Half Mortise Concealed Anti-Friction Bearing Heavy Weight

AB7511/AB7512

Steel



Full Surface Concealed Anti-Friction Bearing Heavy Weight

AB7523

Full Mortise

Two Ball Bearing

Standard Weight BB1260/BB1261

BB1360/BB1361 Stainless Steel

Steel



95°

Five Knuckle



Full Mortise Plain Bearing Standard Weight For Square Edge Doors 1260



Steel

Full Mortise Four Ball Bearing

Stainless Steel



Half Mortise Four Ball Bearing Heavy Weight

For Square Edge Doors

BB1264 Steel

For Beveled Edge Doors BB1265

Steel



Full Surface Four Ball Bearings Heavy Weight BB1266 Steel



Heavy Weight BB1262/BB1263 Steel BB1362/BB1363

Half Surface Four Ball Bearings Heavy Weight BB1270 Steel







ARCHITECTURAL HINGES

Accessories

• Variety of miscellaneous architectural hinge accessories available



100 Set Screw Set



305 Hinge Reinforcement Plate



417 Backplate



430 Mortar Box

Decorator Tip Kits



1712/1713 Ball



1716/1717 Acorn



1722/1723 Steeple

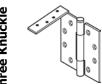


1728/1729 Urn

Anchors

- Heavy weight
- · High frequency
- Mounts at top of door and used in conjunction with full mortise, heavy weight hinges

Three Knuckle



Concealed Anti-Friction Bearing Heavy Weight

AB7505 Steel

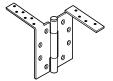
AB8505 Brass or Stainless Steel



Concealed Anti-Friction Bearing Heavy Weight For Square Edge Doors

AB7507 Steel AB8507

Brass or Stainless Steel



Concealed Anti-Friction Bearing Heavy Weight For Square Edge Doors

AB7506 Steel AB8506

Brass or Stainless Steel

For Beveled Edge Doors

AB7508 Steel **AB8508**

Brass or Stainless Steel

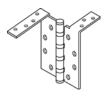
Five Knuckle



Ball Bearing Heavy Weight BB1160

Steel BB1190

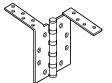
Brass or Stainless Steel



Ball Bearing Heavy Weight For Square Edge Doors **BB1165**

Steel **BB1195**

Brass or Stainless Steel



Ball Bearing Heavy Weight For Square Edge Doors BB1162

Steel BB1192

Brass or Stainless Steel

For Beveled Edge Doors

BB1166 Steel BB1196

Brass or Stainless Steel



Reinforcing Full Surface

251

For 3-1/2" wide hinge

252

For 4" wide hinge

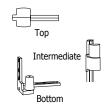
253

For 4-1/2" wide hinge*

254

For 5" wide hinge

*Non-handed



Ball and Thrust Bearing Heavy Weight

Top 495

Forged Bronze

Intermediate

496

Forged Bronze

Bottom

497

Forged Bronze



- For use on exterior and interior heavy weight doors
- High frequency use



Single Acting

Rack and Pinion Opens Door to 105° Maximum Standard Weight

500

80 lb. max weight

Heavy Weight

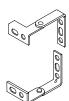
550

150 lb. max weight

Extra Heavy Weight

551

180 lb. max weight



Heavy Weight For Frameless Openings Opens Door to 180° Maximum

615

Doors up to 150 lbs.





510/600*

Mortise application for wood floor



511/611*

Mortise application for masonry floor



512/612*

Surface application for masonry floor



- Use in hospitals and nursing homes
- Double acting pivots
- * Includes 610 door release





Double Lipped Strike 451/452

453/454

1/8" inset hung doors



Door Release and Two Way Strike Plate 455/456

Center hung doors 457/458

1/8" inset hung doors



Plain Bearing Heavy Weight 1850 Steel



- Flat surface
- No holes
- · Fast riveted pin



Concealed Bearing Heavy Weight

IHTAB750 Steel

IHTAB850

Stainless Steel

IHTHB953*

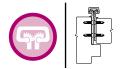
Stainless Steel

*For doors ranging from 250-600 lbs.



- Prison hinge
- Welded hospital tips and plugs
- For doors ranging from 200-300 lbs.





ROTON CONTINUOUS GEARED HINGES



INNOVATIVE ENGINEERING

You design and build structures that need to withstand the realities of daily use. The engineers and product development experts at Hager understand how building entrances and exits are used in the real world. That's why we design our roton continuous geared hinges to provide superior performance you can rely on in high-traffic areas.

Our roton continuous geared hinges use a unique rotating joint — not a pin — to minimize lateral wear on the hinge while evenly distributing door weight along the full length of the frame. Roton continuous hinges are ideal for new construction or retrofit applications.



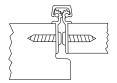


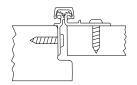


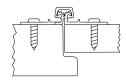
ROTON CONTINUOUS GEARED HINGES

Light Duty

 Light duty hinges are for applications such as wood cabinets, medical equipment, portable displays, electronic cabinets, and switchboxes







500-048

500-220

Concealed Leaf

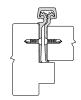
- Standard duty hinges are for medium frequency doors
- HD (heavy duty) hinges are for high frequency doors or heavy medium frequency doors
- LL hinges are for lead-lined doors
- XHD (Extra Heavy Duty) hinges are for heavy high frequency doors or extremely heavy low frequency doors



750-134

Note: For medium frequency 1-3/4" solid core wood interior doors up to 100 lbs

500-200



750-138

Note: For medium frequency 1-3/8" solid core wood interior doors up to 100 lbs



780-041 780-041 HD 780-041 LL

Note: 1-3/4" thick doors only

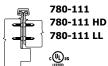






780-110 780-110HD

CUL US





780-112 780-112 HD 780-112 LL





780-113 780-113 HD

780-114 780-114 HD



780-208 780-208 HD



780-224 780-224 HD 780-224 LL

Note: Standard duty for 1-3/4" thick doors only





780-226 780-226 HD 780-226 LL

Note: 2" thick doors or greater





780-235 HD





1200-600 XHD

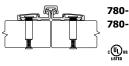
Note: Extra heavy duty for doors between 1-3/4" to 2-3/8" thick



1200-650 XHD

Note: Extra heavy duty for doors more than 2-3/8" thick

INNOVATIVE ENGINEERING



780-057 780-057 HD





780-157 780-157 HD



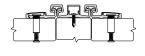
Full Surface

- Standard duty hinges are for medium frequency doors
- HD (heavy duty) hinges are for high frequency doors or heavy medium frequency doors



780-210 780-210 HD





780-257 HD



780-045 780-045 HD





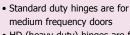
780-046 780-046 HD



780-053







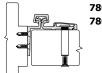
Half Surface

• HD (heavy duty) hinges are for high frequency doors or heavy medium frequency doors



780-054 780-054 HD



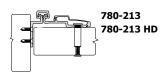


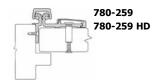
780-155 780-155 HD



780-211 HD









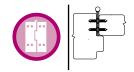
NOTES

- Available lengths for all continuous hinges include 79", 83", 85", 95" and 119"
- · You must specify UL when ordering for extra bearings
- 14 gauge Type 304 stainless steel
- 1/4" diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- For 1-3/4" (44 mm) doors up to 600 lbs.
- Concealed Electric Through Wire (ETW), Electric Power Transfer (EPT) and Exposed Electric Switches (E1S) are available on Concealed Stainless Steel Continuous Hinges
- Exposed Contacts (E), Exposed Electric Switches (E1S), Concealed Electric Through Wire (ETW), Concealed Electric Monitoring (EMN), Concealed Electric Through Wire and Monitoring (ETM), Electric Power Transfer (EPT), and Removable Electric Through Wire (RETW) are available on Roton Continuous Geared Hinges

Available on all Continuous Hinges:

- Dutch Door
- Hospital Tips
- Custom Hole Patterns and Hinge Lengths
- Special Finishes





STAINLESS STEEL CONTINUOUS GEARED HINGES



SECURE STABILITY

Hager's heavy duty stainless steel continuous hinges offer proven reliability that can stand up to the daily rigors of high-traffic, high-impact areas. They're designed and engineered to evenly distribute door weight along the full length of the door, which eliminates localized stresses on the frame. Our stainless steel continuous hinges also help eliminate stress on closers, automatic operators, and panic and locking hardware by helping doors to stay properly aligned.





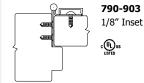


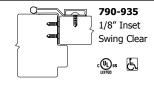
STAINLESS STEEL CONTINUOUS GEARED HINGES

790-907 790-900 790-905 **Concealed Leaf** 1/8" Inset 1/8" Inset Flush Mount • Door edge protection lip Note: Does not have door edge protection c (U) is c (U) us c (UL) us 790-911 790-915 790-926 0101010101 Swing Clear 1/16" Inset Swing Clear 00000000 COURS E c UD us Ł **Full Surface** 790-909 1/8" Inset • Useful for ADA upgrade work Swing Clear

Half Surface

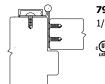
· Security molding





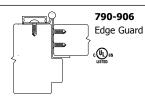
Half Mortise

- · Ideal for retrofit
- For square edge doors only



790-904 1/8" Inset

.U. E



NOTES

- Available lengths for all continuous hinges include 79", 83", 85", 95" and 119"
- You must specify UL when ordering
- 14 gauge Type 304 stainless steel
- 1/4" diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- For 1-3/4" (44 mm) doors up to 600 lbs.
- Concealed Electric Through Wire (ETW), Electric Power Transfer (EPT) and Exposed Electric Switches (E1S) are available on Concealed Stainless Steel Continuous Hinges
- Exposed Contacts (E), Exposed Electric Switches (E1S), Concealed Electric Through Wire (ETW), Concealed Electric
 Monitoring (EMN), Concealed Electric Through Wire and Monitoring (ETM), Electric Power Transfer (EPT), and Removable
 Electric Through Wire (RETW) are available on Roton Continuous Geared Hinges

Available on all Continuous Hinges:

- Dutch Door
- Hospital Tips
- Custom Hole Patterns and Hinge Lengths
- Special Finishes

SECURE STABILITY

Electric Modifications

Exposed Electric Switches:

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door.
- Includes three 12" wire leads.
- To order, use symbol "E1S" as a suffix (Example: 790-900 85" US32D E1S).
- Each monitoring hinge only needs one E1S switch.
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Templates regarding location of contact switch available upon request.

Concealed Electric Through-Wire:

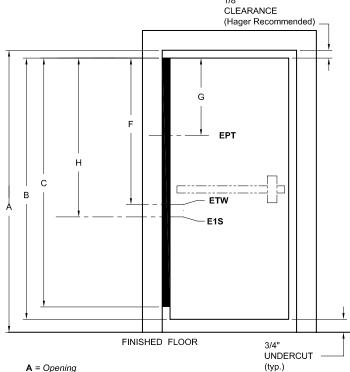
- Transfers power discreetly from building to door hardware.
- Includes four or eight 24 gauge 12" wire leads.
- Includes ten 26 gauge 12" wire leads.
- To order, use symbol "ETW" plus the number of wires required, as a suffix (Example: 790-900 HD 85" US32D ETW - 4).
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6mm to 3.2 mm).
- Available on the following models: 790-900 & 790-915

Von Duprin EPT2 or EPT10 Electric Power Transfer Preparation

- Hinge leaf cutout to accommodate power transfer
- Specify handing and dimension from top of hinge to centerline of power transfer cutout location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on models 790-900, 790-903, 790-904, and 790-915.

Mortar Box - 430

- Serves as a mortar shield.
- Overall dimensions are 9" (229 mm) length with tabs, 7" (178 mm) (inside), 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Galvanized steel 0.040" (1 mm)
- Top and bottom knockouts for standard conduit fittings.



A = Opening

B = Door height

C = Actual hinge length

F = C.L. of ETW (electric through-wires) G = C.L. of \overline{EPT} (electric power transfer)

H = C.L. of $\overline{E1S}$ (exposed switch)

	79″	83"	85"	95″	119"
A	80"	84"	86"	96"	120"
В	79-1/8"	83-1/8"	85-1/8"	95-1/8"	119-1/8"
С	79-3/16"	83-1/8"	85-1/8"	95″	118-3/4"
F	41-1/2"	43-1/2"	45-1/2"	55-3/8"	79-1/8"
G	24-1/2"	28-7/16"	30-7/16"	40-1/2"	64-7/16"
Н	41-1/2"	43-1/2"	45-1/2"	55-3/8"	79-1/8"



TRIM & AUXILIARY





EXTRAORDINARY VARIETY

At Hager, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application.

Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager's trim and auxiliary products give you great looks and proven durability. That makes Hager trim and auxiliary products the perfect choice for any commercial or institutional building project.





TRIM & AUXILIARY

Pulls

- Handicap accessibility clearance available on a variety of pulls
- Back-to-back mounting available



P4E Security Pull



3, 4, 5 Round Wrought Pull



11, 12 Round Offset Pull



20N Cast Pull



Edge Pull for



Security Finger Pull



926P Curved Pull



961P Steeple Tip Pull

Bar Push/Pull Sets

- Multi-bar option available on a variety of push/pull sets
- All push/pull sets are made to order



125S Bent Push Bar

Sliding Doors



153 D/V/B-10" CTC 154 D/V/B-12" CTC 155 D/V/B-18" CTC Push/Pull Set



159 D/V/B-10" CTC 160 D/V/B-12" CTC 161 D/V/B-18" CTC Push/Pull Set



170D Push/Pull Set

Push/Pull Plates

• Engraving and special cutouts are available on push/pull plates



Sauare

Corner

30 Series .050" A30 Series .062" Pull Plate



Radius Corner

40 Series .050" A40 Series .062" Pull Plate



50 Series .050"



Half Circle

A50 Series .062"

Pull Plate







100T Push Plate





121L Cylinder Pull Beveled



122L

Security Push/Pull Plate Set Beveled

Door Edgings & Corner Guards

• Door edging standard lengths 36"- 42"

Options: Other lengths made to order, hinge and latch cutouts available, UL rated edging available



Security Finger

Pull/Push Plate

25P

180H/K/M/P/Q Mortise Leg on the Door Edge:

1-3/4" minus 1/32" (44.5 minus 0.8 mm)



Square Corner

181H/K/M/P/Q Overlap

Leg on the Door Edge: 1-3/4" plus 1/32" (44.5 plus 0.8 mm)



182H/K/M/P/Q Non-Mortise

Leg on the Door Edge: 1-3/4" plus 1/32" (44.5 plus 0.8 mm)



185G

Size: 3" x 3" x 40" Thickness: .050"

EXTRAORDINARY VAR





Kick Plate Mop Plate

190S, 193, 194S Gauge .050" 198S Gauge .038" 220S, 223S, 224S Gauge .062"





Stretcher Plate Armor Plate

204S Plastic Gauge .125" 214S Laminate Gauge .125" 225S Kydex Gauge .060"

Protection Plates

- Door protection plates available with beveling or counter sunk holes
- * 190S Series protection plates available UL rated

Stops and Holders • Wall and floor stops available in both manual and automatic







236W Concave Wall Stop



254W Manual Wall Stop & Holder



326W Automatic Wall Stop & Holder



Floor



242F Universal Dome Stop



244F Cast Floor Stop



252F Cast Floor Stop



Heavy Duty Floor Stop

Accessories

· Variety of miscellaneous auxiliary door hardware available



957P Coat Hook



951P Coat Hook



1755 160° Door Viewer



300D Chain Door Check



301D Heavy Duty Hinge Pin Stop



303W Handrail Bracket



Door Silencer for Metal Frames





TRIM & AUXILIARY

Surface Bolts and Coordinators

• All coordinators are UL certified

Surface Bolts



275D - 8" length 276D - 12" length



278D - 6" length



279D For Dutch Doors

Coordinators



297D Coordinating Device Gravity Coordinator



Flush Bolts

• All flush bolts are UL certified



280X **Dust Proof** Strike



281D Slide



282D Manual



Automatic for Wood Covered Composite Doors



293D

Self Latching for Inactive Metal Doors



294D

Constant Latching for Wood Doors



295M

Automatic Set with Fire Bolt for Metal Doors



296W

Automatic for Wood Doors





274D

Door Guard



Push/Pull Latch

Full Lip Strike



1442

Roller Latch with



Latch Protection Plate with Lock Cut Out



318D Roller Latch

with Tee Strike



345D

Latch Protection Plate



321R

Adjustable Ball Catch with Strike



Pocket Door Privacy Latch

EXTRAORDINARY VARIETY

ADA Tactile Sign







368M

368W

Includes Grade 2 braille translation conforming to section 4.30 requirements Size: 6" x 8" (152 mm x 203 mm) Thickness: .125" (3.2 mm)

Material: Plastic

Engraved Plastic Sign

PUSH



350H

350L

Size: 2" x 4" (51 mm x 102 mm) Thickness: .125" (3.2 mm)

Material: Plastic



WOMEN

350M

350W

Size: 2" x 5" (51 mm x 127 mm) Thickness: .125" (3.2 mm)

Material: Plastic

Signage

• Meets ANSI A156.16 for L03201



336Q

ASA Strike Filler Plate - Frame Size: 1-1/4" x 4-7/8" (32 mm x 124 mm)



336L

Hinge Filler Plate - Frame Size: 1-5/8" x 4-1/2" (41 mm x 114 mm)



336B

Door Edge Filler Plate - 86 Prep Size: 1-1/4" x 8" (32 mm x 203 mm)



336A

Door Edge Filler Plate - 161 Prep Size: 1-1/8" x 2-1/4" (29 mm x 57 mm)



336D

Door Face Filler Plate - 161 Prep Size: 2-5/8" (67 mm)



337A

Template Hinge Shim Size: 1-7/16" x 4-1/2" (37 mm x 114 mm)

Filler Plates and Shims

• Several size configurations available to meet most applications





DESIGN AND DURABILITY

A building has doorways, of course, to let people come in and go out. For those things you'd rather not let in or out of your doors--such as insects, water, smoke, heat, or cold, count on Hager thresholds and weatherstripping to do the job, day-in and day-out.

Hager offers a complete line of thresholds and weatherstripping products for virtually any type of door application. What's more, each meets or exceeds ANSI-grade quality, durability, and performance levels. For enhanced levels of safety and security, we also offer intumescent products for positive pressure solutions, including edge sealing and smoke control systems. All of which make Hager threshold, weatherstripping, and door bottom products an excellent choice for standard or custom applications in schools, hospitals, office buildings, and more.





Saddle

• Several saddle threshold configurations available, many ADA compliant



4045

417S

MIL, DBA, GLD, MIB

MIL, DBA, GLD, MIB, 32D



E BHMA





MIL, DBA, GLD, MIB, 32D

.125 TYP. WALL



BHMA

4185

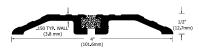
MIL, DBA, GLD, MIB



Thermal Barrier

- All thermal barrier thresholds are ADA compliant
- Barrier strips recommended with thermal barrier thresholds





.125 TYP. WALI

420S

MIL, DBA, GLD



- 4225 MIL, DBA, GLD 6" (152.4 mm)
- **423S** MIL, DBA, GLD 7" (177.8 mm)
- 4245 MIL, DBA, GLD 8" (203.2 mm)
- **451S** MIL, DBA, GLD 9" (228.6 mm)
- 4525 MIL, DBA, GLD 10" (254 mm)

Thermal Barrier Panic

- Effectively blocks transfer of heat or cold temperatures
- Inserts V, N, S, W available



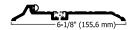
515S

MIL, DBA, GLD



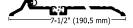
516S

MIL, DBA, GLD



517S

MIL, DBA, GLD



518S

MIL, DBA, GLD

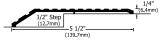
Half Saddle

• Available with Sure Step non-slip abrasive coating



406S

MIL, DBA, GLD



407S

MIL, DBA, GLD



429S

MIL, DBA, GLD



431S

MIL, DBA, GLD, MIB

F

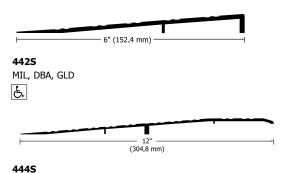
All thresholds have been independently tested and meet the requirements set forth by





MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte Stainless Steel

DESIGN AND DURABILITY





ADA Ramps

• Ramp threshold that provides a 1:12 slope to meet the requirements of the Americans with Disabilities Act



455S MIL, DBA, GLD, MIB BHMA

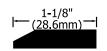
MIL, DBA, GLD

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470S MIL, DBA, GLD, MIB 4405 MIL, DBA, GLD, MIB • 2" (50.8 mm)* 4455 MIL, DBA, GLD, MIB • 3" (76.2 mm)* 450S MIL, DBA, GLD, MIB • 4" (101.6 mm)*

460S MIL, DBA, GLD, MIB • 6-1/8" (155.6 mm)* 4655 MIL, DBA, GLD • 8" (203.2 mm)*

BHMA *BHMA certified



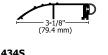
484S MIL, DBA, GLD, MIB



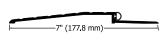
Floor Plate Assembly

- Used primarily for extra wide door frames or to cover floor joints and expansion joists
- All floor plate assembly parts are ADA compliant





MIL, DBA, GLD



478S MIL, DBA, GLD



435S MIL, DBA, GLD



MIL, DBA, GLD



477S MIL, DBA, GLD



483S MIL, DBA, GLD

Bumper Thresholds/ Strips

- Bumper thresholds available in many widths and elevations
- Inserts V, N, S, W available

MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte Stainless Steel





Carpet

Carpet thresholds available in a variety of heights

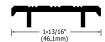


503S MIL, DBA, GLD



504S MIL, DBA, GLD







MIL, DBA, GLD





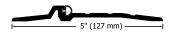
Ė



4" (101.6 mm)

Panic

- Over 12 configurations of panic thresholds
- Inserts V, N, S, W available



520S

MIL, DBA, GLD, MIB





541S

MIL, DBA, GLD, MIB

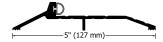
BHMA



E336

MIL, DBA, GLD, MIB

BHMA



575S

MIL, DBA, GLD, MIB

BHMA

Cover Plates

- Cover plates for extra wide expansion joints or strength
- ADA compliant





676S

BHMA

(76 - 610mm)

MIL



677S MIL

BHMA

Interlocking

- Interlocking water return type, catches water and returns to the outside through weepholes
- Optional pan keeps water from coming in contact with the floor



601S

MIL, DBA, GLD



604S

MIL, DBA, MIB





608S

MIL, DBA, MIB

Finish Codes

DESIGN AND DURABILITY





400S

MIL, DBA, GLD

MIL, DBA, GLD

408S MIL, DBA, GLD

MIL, DBA, GLD

• Available with Sure Step non-slip abrasive coating



409S

4" (101.6 mm) **419S**







4" (101.6 mm), _____ 5" (127 mm), 6" (152.4 mm)

621S CAL

623S

CAL E

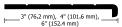
627S

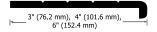
CAL

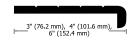


Abrasive Cast Aluminum

• Cast aluminum thresholds and nosings have silicon carbide granules cast into the surface



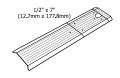




641S CAL

642S CAL

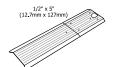
640S CAL



651S

MIL, DBA, MIB





652S

MIL, DBA, MIB



BHMA



655S

MIL, DBA, MIB



BHMA

Cover Plate Assembly

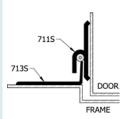
• Used with floor closers, either center or offset hung, single/ double door applications





Interlocking/ **Drip Guard**

• Category "J"



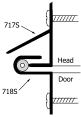
711S/713S - Interlock Weatherstrip MIL, DBA, GLD





713S/715S - Interlock Weatherstrip MIL, DBA, GLD



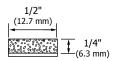


717S/718S - Overhead Drip Guard MIL, DBA, GLD



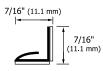
Press-On Draft Control

- Pressure sensitive adhesive for quick and easy installation
- Category "J"



725 - Draft Control Gasket





727 - Draft Control Gasket



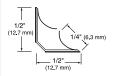


728 - Draft Control Gasket



Press-On Smoke Seal

- The addition of a smoke seal is necessary to validate the "s" label of a smoke control door
- Category "H"



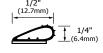
721 - Smoke Seal System











726 - Smoke Seal System









736 - Smoke Seal System











737 - Smoke Seal System









Insert Codes:

V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone

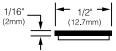
DESIGN AND DURABILITY



724 - Edge Seal System





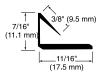


729 - Edge Seal System



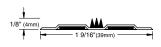
Press-On Edge Sealing

- Intumescent material expands at elevated temperature
- Category "G"













Press-On Edge Sealing with Smoke Control

• Intumescent material expands at elevated temperature

• Constructed of strong, high-quality

extruded aluminum or brass

• Category "G" & "H"

Door Bottoms

· Category "H"









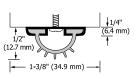






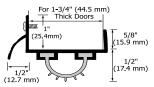












722

778S MIL, DBA, GLD V, N

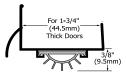






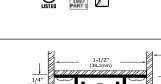
783S MIL, DBA, GLD

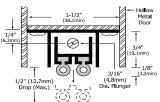




Automatic Door Bottoms

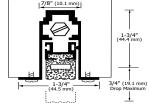
- Surface applied and mortised models available
- · Outstanding seal against drafts, light, smoke and sound
- · Category "H"











743S MIL





740S

MIL

N, S





1-13/16"

Insert Codes:

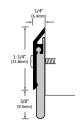
V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone





Door Bottoms Sweeps

- Typical door bottom sweeps are used on the exterior of an outswing door
- Category "H"



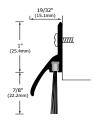
750S

DBA, GLD, MIB, CLR, 32D N, S







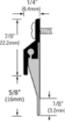


770S

MIL, DBA, GLD B, V







872S

DBA, GLD, MIB, CLR, 32D



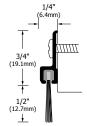






Jamb Weatherstripping

• Category "H"

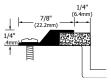


802S

MIL, DBA, GLD







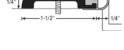
870S

CLR, DBA, GLD, MIB, 32D









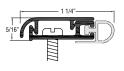
881S

MIL, DBA, GLD V, N, S, W







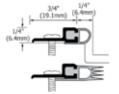


885S

DBA, GLD, CLR V, N, S, W, F







891S

MIL, DBA, GLD V, N, S, F









896S

MIL, DBA, GLD V, NS



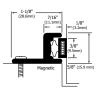




Insert Codes:

V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone • W-Pile • F-Vinyl with Fins • B-Nylon Brush

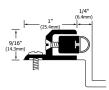
DESIGN AND DURABILITY



859S MIL, DBA, GLD



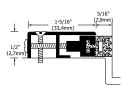




860S MIL, DBA, GLD V, N, S, F







864S

DBA, GLD, CLR

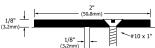




Adjustable/ **Magnetic Jamb** Weatherstripping

• Category "H"





837S

1/8" _ (3.2mm)

MIL, DBA, GLD W, V, N, S





MIL, DBA, GLD



756S



MIL, DBA, GLD, 32D

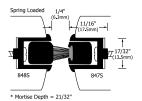








• Fire labeled astragals/meeting stiles should only be mounted on pairs of doors with a gap that meets NFPA80 2-3.1.7



Adjustable/ **Magnetic Astragals**

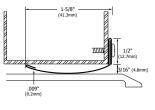
847S/848S

MIL, DBA

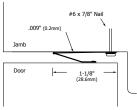




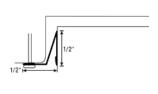
MIL, DBA, GLD



821S MIB



822S MIB



824S MIB

Spring Bronze • Constructed of high tempered

- 0.0009" gauge bronze to provide a permanent spring
- Hemmed edges



V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone • W-Pile • F-Vinyl with Fins • B-Nylon Brush





SLIDING DOOR HARDWARE



PROVEN FUNCTIONALITY

Hager's full line of high quality, durable sliding door hardware is the perfect choice for any by-pass, bi-fold, or pocket door application your project requires.

With Hager sliding door hardware, you can choose from hundreds of fully tested products, including jump-proof box tracks, self-aligning wheel systems, and complete sets and accessories to meet any need. Just as beneficial, every Hager sliding door hardware product is designed and manufactured to meet or exceed ANSI standards.







SLIDING DOOR HARDWARE

By-Pass

- Fascia available on select series
- Aluminum and steel track available on select series
- Quick release hangers
- Jump proof style track



9110 / 9130 Series Heavy Duty Aluminum I-Beam Track & Hardware

For doors 1"(25 mm) to 1-3/4" (44 mm) thick Note: Use two tracks per by-pass door



9600 Series

Heavy Duty Aluminum Box Track & Hardware

For doors 1-3/8" (35 mm) thick and up Note: Use two tracks per by-pass door



9602 Series Heavy Duty Aluminum Double Box Track & Hardware

Double Box Track & Hardware For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick



9603 Series Heavy Duty Aluminum Double Box Track with 2-5/8" (66 mm) Fascia & Hardware

For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick



9702 Series Heavy Duty Aluminum Double I-Beam Track & Hardware

For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick



9810 Series Aluminum Track & Hardware

For doors 3/4" (19 mm) to 1-3/8" (35 mm) thick



9820 Series Aluminum Track with 1-3/4" (44 mm) Fascia & Hardware For doors 1-3/8" (35 mm) thick



9830 Series Aluminum Track with 3" (76 mm) Fascia

For doors 1-3/8" (35 mm) thick



9840 Series Galvanized Steel Track & Hardware

For doors 1-1/8" (29 mm) to 1-3/8" (35 mm) thick



9875 Series Heavy Duty Aluminum Box Track & Hardware

For doors 1-3/8" (35 mm) thick and up



9885 Series Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia & Hardware For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick



PROVEN FUNCTIONAL



9100 Series **Heavy Duty Aluminum** I-Beam Track & Hardware For doors 1" (25 mm) to 1-3/4" (44 mm) thick



9570 Series **Medium Duty Steel or Aluminum Box Track & Hardware** For doors 1" (25 mm) to 1-3/4" (44 mm) thick

- For bi-fold or multi-fold applications
- Quick release hangers
- Jump proof style track



9800 Series **Heavy Duty Aluminum Box Track & Hardware** For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick



9890 Series **Heavy Duty Aluminum Box Track & Hardware** For doors 1-1/8" (29 mm) to 1-3/4"

(44 mm) thick



9110 Series **Extra Heavy Duty Aluminum** I-Beam Track & Hardware For doors 1" (25 mm) to 1-3/4" (44 mm) thick



9601 Series **Heavy Duty Aluminum Box Track & Hardware**

For doors 1-1/8" (29 mm) to 1-3/4" (44 mm) thick



9701 Series **Heavy Duty Aluminum** I-Beam Track & Hardware For doors 1-1/8" (2 mm) thick and up



9801 Series **Extra Heavy Duty Aluminum Box Track & Hardware** For doors 1-3/8" (35 mm) thick and up



9901 Series **Extra Heavy Duty Aluminum Box Track & Hardware** For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick



- Sold as sets
- Replacement parts available
- Jump proof style track







SLIDING DOOR HARDWARE

Pocket Door Kits

- Jump proof track and rollers
- Pre-assembled header
- Real wood split studs



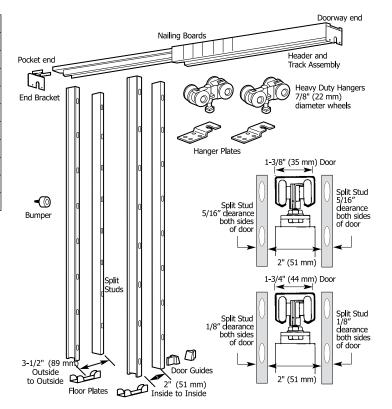
9628, 9629, 9630, 9631, 9850 Heavy Duty Pocket Door Kit

For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick

Model	Max. Weigh	t Door	Door	Door	Hanger
	Per Door	Thickness*	Width	Height	Bearings
9631	125 lbs	1-3/8" - 1-3/4"	3'0"	6′8″	Molded
	(57 kg)	(35-45 mm)	(914 mm)	(2032 mm)	Celcon
9630	150 lbs	1-3/8" – 1-3/4"	3′0″	7′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2134 mm)	Ball
9629	150 lbs	1-3/8" – 1-3/4"	3′0″	8′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2438 mm)	Ball
9628	150 lbs	1-3/8" – 1-3/4"	3′0″	9′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2743 mm)	Ball
9850	250 lbs (57 kg)	1-3/8" – 1-3/4" (35-45 mm)		8'0"/8'6" 438 mm)/(2591 r	Steel nm) Ball

^{* 9634} Adapter Kit recommended for 1-3/4" doors.

Kit Contains					
Quantity	Description				
1	Header Assembly				
2	Pair of Split Studs				
2	Heavy Duty Hangers				
2	Door Hanger Plates				
1	Bumper				
1	Pair of Door Guides				
1	Adjusting Wrench				
2	Floor Plates				
1	End Bracket				



PROVEN FUNCTIONALITY

Sliding Door Selection Chart All Hager sliding door series conform to ANSI A156.14

Max. Weight Per Door	Series	Packaged Sets	Track	Parts Bag	Description		
BY-PASS							
60#	9810	9514	9810	9814	Aluminum track		
60#	9820	9614	9820	9540	Aluminum track, 1-3/4" fascia		
60#	9830	N/A	9830	9540	Aluminum track, 3" fascia		
60#	9840	9844	9840	9540	Steel track		
100#	9602	N/A	9602	9575	Aluminum double box track		
125#	9602	9675	9602	9679	Aluminum double box track		
125#	9603	9673	9603	9680	Aluminum double box track with fascia		
125#	9702	9775	9702	9777	Aluminum double box I-beam track		
150#	9602	9676	9602	9680	Aluminum double box track		
150#	9603	9674	9603	9680	Aluminum double box track with fascia		
150#	9600	9611	9821	9692	Aluminum box track		
175#	9110/9130	9110	9101	9109	Aluminum heavy duty I-beam track		
250#	9875	9875	9801	9816 hanger	Aluminum box track		
250#	9885	9885	9803	9816 hanger	Aluminum double box track with 3-1/2" fascia		
250#	9600	9612	9821	9893	Aluminum double box track		
275#	9110/9130	9130	9101	9129	Aluminum heavy duty I-beam track		
BI-FOLD							
50#	9570	9570	9601/9599	9569	Aluminum or steel box track		
125#	9100	9162/9164	9101	9160	Aluminum I-beam track		
125#	9890	9890	9801	9827 & 9828	Aluminum box track		
125#	9800	9860	9821	9894	Aluminum box track		
POCKET							
125#	9601	9678	9601	9632	Aluminum box track		
125#	9701	9778	9701	9779	Aluminum I-beam track		
150#	9601	N/A	9601	9633	Aluminum box track		
175#	9110/9130	9110	9101	9109	Aluminum heavy duty I-beam track		
250#	9801	9878	9801	9742	Aluminum heavy duty box track		
250#	9903	9901	9821	9895	Aluminum heavy duty box track		
275#	9110/9130	9130	9101	9129	Aluminum heavy duty I-beam track		
UNIVERSAL	POCKET DOOR F	RAME KITS					
125#	9631	9631-80	9599/9601	N/A	Pocket door kit for 3'0" wide 6'8" high door		
150#	9630	9630-84	9599/9601	N/A	Pocket door kit for 3'0" wide 7'0" high door		
150#	9629	9629-96	9599/9601	N/A	Pocket door kit for 3'0" wide 8'0" high door		
150#	9628	9628-108	9599/9601	N/A	Pocket door kit for 3'0" wide 9'0" high door		
250#	9850	9850-96	9801	N/A	Pocket door kit for 4'0" wide 8'0" high door		
250#	9850	9850-102	9801	N/A	Pocket door kit for 4'0" wide 8'6" high door		

Note: Sheet metal screws provided for wood or metal applications.







EXCEPTIONAL QUALITY

Hager locks provide exceptional quality--which is why they have proven to be so popular with our customers and so successful in application after application across the country and around the world.

Available in Commercial Grades 1 and 2, Hager deadbolts, knobs, and levers are perfectly suited for all types of new construction and replacement use. What's more, they're BHMA certified and backed by exclusive lifetime warranties. With Hager locks, you can use your preferred keying system, choose from a variety of finishes, and choose from a wide variety of available parts and accessories (like latchbolts, cylinders, strikes, keys, faceplate adapters, thru-bolt jigs, and more). We've even been told by installers in the field that Hager locksets are the easiest locks they've ever installed!





Deadbolts

- · Lifetime warranty
- Non-handed
- Fixed core and small format interchangeable cores available
- Small format iinterchangeable cores sold separately
- 2-3/4" backset
- 2-1/4" x 1-1/8" SC faceplate
- 3930 square corner strike with dustbox
- Optional keying/keyways available

3100 Series - Grade 1



3114 - Double Cylinder 3118 - Classroom

3115 - Single Cylinder

3200 Series - Grade 2



3214 - Double Cylinder 3215 - Single Cylinder

3220 - Thumbturn with Blank Plate

3221 - Thumbturn Only

3222 - Retrofit for use with 3220 or 3221

Latchbolts



3940 - 2-3/4", Deadbolt 3941 - 2-3/8", Deadbolt

3942 (3200 Series only) - Adjustable Deadbolt

Note: 2-3/8" backset supplied with a 2-1/4" x 1" faceplate

Optional Strikes



3929 - ASA Deadbolt Strike



3930 - Strike Plate (Standard)



3959 - Faceplate Adapter

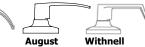
Cylindrical Levers and Knobs Grade 1

- · Lifetime warranty
- · Non-handed
- No exposed mounting screws
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/4" backset
- 2-1/4" x 1-1/8" SC faceplate
- Optional 3-3/4" and 5" backset extensions available
- 3935, ASA strike
- Optional keying/keyways available

3400 Series - Grade 1









3417 - Dummy 3440 - Privacy

3450 - Office*

3410 - Passage

3453 - Entry

3470 - Classroom

3473 - Corridor* 3480 - Storeroom

3495 - Intruder Classroom*

*Levers Only

3400 Series Electrified Options

3480EL - Storeroom - Fail Safe

3480EU - Storeroom - Fail Secure

3480RX - Storeroom - Request to Exit

3480ELRX - Storeroom - Fail Safe with Request to Exit **3480EURX** - Storeroom - Fail Secure with Request to Exit

Power Supplies

2903 - Provides power for Fail Safe or Fail Secure locking devices

Latchbolts



3943 - 2-3/4", Spring Latch, Passage Only

3945 - 2-3/8", Spring Latch, Passage Only

3964 - 2-3/4", Spring Latch, Privacy Only

3966 - 2-3/8", Spring Latch, Privacy Only

3944 - 2-3/4", Dead Latch, All Keyed Functions*

3946 - 2-3/8", Dead Latch, All Keyed Functions*

3992 - 2-3/8", Dead Latch, Corridor

3993 - 2-3/4", Dead Latch, Corridor

3932 - 3/4" Latchbolt, Dead Latch, All Keyed Functions*

*Except Corridor Function **Optional Strikes**

3933 T-Strike



3934 Full Lip Strike



3958 Full Lip Strike, Round Corner



3935 ASA Strike (Standard)

EXCEPTIONAL QUALITY

Cylindrical

Lifetime warranty

sold separately

• 2-3/4" backset

• 3935, ASA strike

Grade 2

Non-handed

Levers and Knobs

• No exposed mounting screws

• Fixed core and small format

• 2-1/4" x 1-1/8" SC faceplate

• Optional 3-3/4" and 5" backset extensions available

• Optional keying/keyways available

interchangeable cores available

• Small format interchangeable cores

3500 Series - Grade 2



3510 - Passage

3525 - Exit Only*

3550 - Office*

3553 - Entry

3570 - Classroom

3573 - Corridor*

3579 - Keyed Communicating*

3580 - Storeroom

*Levers Only

Latchbolts



3947 - 2-3/4", Spring Latch, Passage Only

3949 - 2-3/8", Spring Latch, Passage Only

3967 - 2-3/8", Spring Latch, Privacy Only

3517 - Dummy

3527 - BTB Dummy*

3540 - Privacy



3965 - 2-3/4", Spring Latch, Privacy Only



3948 - 2-3/4", Dead Latch, All Keyed Functions*

3950 - 2-3/8", Dead Latch, All Keyed Functions*

3994 - 2-3/8", Dead Latch, Corridor

3995 - 2-3/4", Dead latch, Corridor

*Except Corridor

Drive-In Latchbolts



3922 - 2-3/4", Spring Latch, Passage Only

3923 - 2-3/4", Spring Latch, Privacy Only

3925 - 2-3/8", Spring Latch, Passage Only

3926 - 2-3/8", Spring Latch, Privacy Only



3924 - 2-3/4", Dead Latch, All Keyed Functions*

3927 - 2-3/8", Dead Latch, All Keyed Functions*

3996 - 2-3/8", Dead Latch, Corridor

3997 - 2-3/4", Dead Latch, Corridor

*Except Corridor

Note: 2-3/8" backsets supplied with a 2-1/4" x 1" faceplate

Optional Strikes



3933 T-Strike



3934 Full Lip Strike



3958

Full Lip Strike, Round Corner



3935 ASA Strike (Standard)





Tubular Levers

- Non-handed
- No exposed mounting screws
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/8" 2-3/4" adjustable backset
- 2-1/4" x 1" SC faceplate
- 3935, ASA strike
- Optional keying/keyways available

3600 Series - Grade 2







3610 - Passage **3617** - Dummy **3640** - Privacy **3653** - Entry **3670** - Classroom

3680 - Storeroom

Latchbolts



3951 - Adjustable Spring Latch, Square Corner **3953** - Adjustable Spring Latch, Round Corner



3952 - Adjustable Dead Latch, Square Corner **3954** - Adjustable Dead Latch, Round Corner



3938 - 5" Dead Latch, All Keyed Functions **3939** - 5" Spring Latch, Non-Keyed Functions



3914 - Adjustable Spring Latch, Privacy/Passage **3915** - Adjustable Dead Latch, All Keyed Functions

Optional Strikes



3933 T-Strike



3934 Full Lip Strike



3958Full Lip Strike,
Round Corner



3935 ASA Strike (Standard)



3959Faceplate
Adapter

EXCEPTIONAL QUALITY

3700 Series Grade 2 - Sectional 3700 Series Grade 2 - Escutcheon (Optional)







3700 Series Grade 2 - Lever Designs



3710 - Single Locking Entry

3753 - Double Locking Entry

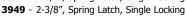
Latchbolts



3920 - 2-3/4", Deadbolt **3921** - 2-3/8", Deadbolt



3947 - 2-3/4", Spring Latch, Single Locking





3948 - 2-3/4", Dead Latch, Double Locking **3950** - 2-3/8", Dead Latch, Double Locking

Note: 2-3/8" backset supplied with a 2-1/4" x 1" faceplate

Optional Strikes



3934 Full Lip Strike



3935 ASA Strike



3958Full Lip Strike,
Round Corner



3930 Strike Plate (Standard)



3933 T-Strike (Standard)

Interconnected Lock

- Lifetime warranty
- Non-handed
- Optional escutcheon included
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/4" backset
- 2-1/4" x 1-1/8" SC faceplate
- 3933, T-strike and 3930, square corner strike
- Optional keying/keyways available



Mortise Lock Deadbolt

- · Lifetime warranty
- Field reversible
- BHMA Certified Grade 1 Operational and Security with standard cylinder
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- Requires mortise cylinder with Schlage "L" cam
- 2-3/4" backset
- 3991, ASA no lip strike
- Optional keying/keyways available

3800 Series Grade 1 - Deadbolt



3860 - Cylinder x Thumbturn 3862 - Double Cylinder

3863 - Classroom 3864 - Cylinder

Mortise Lock

- Lifetime warranty
- Field reversible
- · Concealed thru-bolts
- BHMA Certified Grade 1 Operational and Security with standard cylinder
- Additional faceplates and strikes available
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- Requires mortise cylinder with Schlage 'L' cam
- 2-3/4" backset
- 3985, ASA strike
- Optional keying/keyways available

3800 Series

Grade 1 - Sectional





3800 Series

Grade 1 - Escutcheon



3800 Series Grade 1 - Lever Designs







3810 - Passage

- 3817 Dummy
- 3827 Double Dummy
- 3840 Privacy
- 3850 Office
- 3853 Entry
- 3857 Classroom Security
- 3870 Classroom
- **3880** Storeroom
- 3881 Storeroom with Deadbolt

3800 Series Electrified Options

3880EL - Storeroom - Fail Safe 3880EU - Storeroom - Fail Secure 3880RX - Storeroom - Request to Exit

3880ELRX - Storeroom - Fail Safe with Request to Exit 3880EURX - Storeroom - Fail Secure with Request to Exit

Power Supplies

2903 - Provides power for Fail Safe or Fail Secure locking devices

Optional Strikes



3986









Flat Lip









Extended Flat Lip

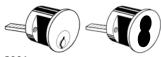


3991 No Lip





EXCEPTIONAL QUALITY



3901 Rim Cylinder



3902 Mortise Cylinder



3904 Mortise Dummy



Mortise ADA Turn Knob



Fixed Core

3960 Standard core cylinder kit

Note: Please refer to our website for information on tailpieces and their corresponding function.

Fixed Core Keys



3955 Key Blank 5-Pin



3956 Key Blank 6-Pin



3961 Cut Key 5-Pin



3962 Cut Key 6-Pin



Small Format Interchangeable Core

3981-U Uncombinated 6-pin

3982-U Uncombinated 7-pin

3981-C Combinated 6-pin

3982-C Combinated 7-pin

Small Format Interchangeable Core Keys



3983 Key Blank 6- or 7-pin



3984 Cut Key 6- or 7-pin

Cylinders and Keys

Fixed Core

- Fixed core cylinder
 - Drilled 6-pin, keyed 5-pin
- 5-pin and 6-pin keys available
- C Keyway standard
- Optional keying/keyways available
- Multiple cam styles available

Small Format Interchangeable Core

- Small format interchangeable cores sold separately
- Small format interchangeable core keys available
- 6- or 7-pin keys available
- Best "A" Keyway standard
- Optional keying/keyways available
- Multiple cam styles available





EXTREME RELIABILITY

Hager door closers offer architects, contractors, and building owners a superior product with proven reliability. In fact, our 5100, 5200, and 5300 Series Grade 1 models are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty. That makes them a no-risk choice for virtually any building type.

With Hager, you get a door closer that's packaged with everything needed for quick installation, regardless of the application. Hager door closers are tri-packed for mounting three ways: regular arm, top jamb, and parallel arm. They are non-handed, packaged with a parallel arm bracket and thru-bolts at no extra charge, and adjustable for various door sizes.





5100 Series

- Grade 1 Surface Door Closer
- Heavy duty cast iron
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- · Lifetime warranty
- BHMA Certified ANSI A156.4
- Non-handed





5100 SeriesSurface Door Closer

5100 Series

Arms

- Standard hold open arm
- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms
- Non-handed arms unless specified



5103 Main Arm Assembly



5106 Extra Heavy Duty Arm



5107 Standard Hold Open Arm



5108Extra Heavy Duty
Hold Open Arm
(Handed)



5125Extra Heavy Duty
Stop Arm



5954 Extra Heavy Duty Hold Open Cushion Stop Arm



5955Extra Heavy Duty
Cushion Stop Arm



5961Extra Heavy Duty Hold Open Stop Arm

5100 Series Accessories

- Spring cushion kit
- Plastic and metal covers available
- Drop plates include mounting screws
- Parallel arm bracket
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts



5101 Closer Body Only



5102 Full Plastic Cover



5111 Extra Heavy Duty Parallel Arm Bracket



5112 Long Rod and Shoe



5909 Parallel Arm Bracket

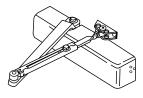


5950Spring Cushion Kit
Fits 5125, 5961, 5906, and 5907



5962 Metal Cover

EXTREME RELIABILITY



5200 Series Surface Door Closer

5200 Series

- Grade 1 Surface Door Closer
- Heavy duty aluminum alloy
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- Lifetime warranty
- BHMA Certified ANSI A156.4
- Non-handed





5203 Main Arm Assembly



5207 Standard Hold Open Arm



5906 Extra Heavy Duty Hold Open Stop Arm



5907 Extra Heavy Duty Stop Arm

5200 Series

Arms

- Standard hold open arm
- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms
- Non-handed arms unless specified



5911 Extra Heavy Duty Arm



5912 Extra Heavy Duty Hold Open Arm (Handed)



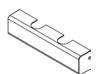
5956Extra Heavy Duty
Hold Open Cushion
Stop Arm



5957Extra Heavy Duty
Cushion Stop Arm



5201 Closer Body Only



5202 Full Plastic Cover



5900 Parallel Arm Bracket



5908Long Rod and Shoe



5914 Hold Open Parallel Arm Bracket



5919 Pinion Cap



5920 Slim Line Plastic Cover



5932 Metal Cover

5200 Series Accessories

- Spring cushion kit
- Metal covers and full and slim line plastic covers available
- Drop plates include mounting screws
- Parallel arm bracket
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts



5950 Spring Cushion Kit Fits 5125, 5961, 5906, and 5907





5300 Series

- Grade 1 Surface Door Closer
- Heavy duty aluminum alloy
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- Lifetime warranty
- BHMA Certified ANSI A156.4
- Non-handed





5300 SeriesSurface Door Closer

5300 Series Arms

- Standard hold open arm
- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms
- Non-handed arms unless specified



5303Main Arm Assembly



5307 Standard Hold Open Arm Assembly



5906 Extra Heavy Duty Hold Open Stop Arm



5907Extra Heavy Duty
Stop Arm



5911 Extra Heavy Duty Arm



5912 Extra Heavy Duty Hold Open Arm (Handed)



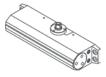
5956 Extra Heavy Duty Hold Open Cushion Stop Arm



5957Extra Heavy Duty
Cushion Stop Arm

5300 Series Accessories

- Spring cushion kit
- Plastic and metal covers available
- Drop plates include mounting screws
- Parallel arm bracket
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts



5301 Closer Body Only



5302 Full Plastic Cover



5900 Parallel Arm Bracket



5901 Pinion Cap



5908Long Rod and Shoe

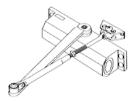


5914 Hold Open Parallel Arm Bracket



5950Spring Cushion Kit
Fits 5125, 5961, 5906, and 5907

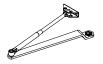
EXTREME RELIABILITY



5400 Series Surface Door Closer

5400 Series

- Grade 2 Surface Door Closer
- Standard duty
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- One-year warranty
- BHMA Certified ANSI A156.4
- Non-handed



5403 Main Arm Assembly

5400 Series

Arms

- Main arm assembly mounts regular, top jamb or parallel arm applications
- Non-handed







5901 Pinion Cap

5400 Series Accessories

- Parallel arm bracket
- Pinion cap
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

24" (610 m	_	-	•	-	48" (1219 mm)	
Regular Arm & Top Jamb	Size 3 (0)	Size 4 (4cw)	Size 5 (8cw)	Size 6 (12cw)		
Parallel Arm	Size 3 (4cw)	Size 4 (8cw)	Size 5 (12cw)	-		

Interior Door Width

Minimum Door Width (24")

24	" 3	30" 34"		38"		48" 5		54" (60"	
(610	mm) (762	mm) (86	5 mm)	(965 mm)	(1219	mm)	(1372	mm)	(1524	4 mm)	
Regular Arm & Top Jamb	Size 1 (8ccw)	Size 2 (4ccw)	Size (0)	-	ize 4 4cw)	Size (8cv	-	Size (12c			
Parallel Arm	Size 1	Size 2	Size	-	ize 4 8cw)	Size	-	-			

CW = Clockwise CCW = Counterclockwise

Closer Sizing

ANSI Standard Closing Charts







SUPERIOR PERFORMANCE

Every model in Hager's line of exit devices is designed and engineered to assure you and your customers of years and years of superior performance. Hager exit devices use fewer moving parts and are constructed with high-quality features--like die cast caps on our lifetime warranty 4500 Series, and die cast head covers on all our models. All Hager exit devices meet UL specifications for panic devices and are fire rated for up to three hours.

You'll also find that Hager exit devices were designed with ease of installation in mind. We package our exit devices for convenience and versatility, with thru-bolts included for every model, slotted strikes, non-handed designs, plus escutcheon trim available in four functions (dummy, blank, entry and night latch).







4500 Series **Grade 1**

- · Heavy duty commercial
- BHMA Certified ANSI A156.3
- UL-cUL listed for up to 3 hours for "A" label doors
- UL 305 listed for panic hardware
- ANSI A250.13 severe windstorm resistant component (Rim and SVR)
- · Lifetime warranty

4500 Series Grade 1 - Rim



4500 Series Grade 1 - SVR



4500 Series **Grade 1 - SVR Less Bottom Rod**



Electric Modifications

ELR - Electric Latch Retraction ED -Electric Dogging

Request to Exit

ELRX - Electric Latch Retraction with Request to

EDRX - Electric Dogging with Request to Exit

Power Supplies

2901 - For use with 4500 Series electric latch retraction

2902 - For use with 4500 Series electric latch retraction in a day/night mode of operation 2903 - Provides power for Fail Safe or Fail Secure

locking devices

4500 Series Trim

- · Archer, August and Withnell available on any trim function
- · Non-handed
- Blank Escutcheon, Cylinder Escutcheon, Dummy Trim, Night
- Cylinder sold separately, refer to lock section of catalog



45BE Archer



45CE August



45DT Withnell



Archer



45PD Pull Plate Dummy



45PN Pull Plate Night Latch

Electric Modifications

ET - Electric Trim (Fail Safe or Fail Secure)

Power Supplies

2903 - Provides power for Fail Safe or Fail Secure locking devices

4500 Series Strikes

• Panic and fire rated strikes available



4920 Rim Strike



4920F Rim Strike (Fire)



Double Door Strike - Rim and SVR



4915

Threshold Strike



4923

Top Strike - SVR



4923F

Top Strike (Fire) - SVR



4924

Bottom Strike - SVR



4924F

Bottom Strike (Fire) - SVR

4500 Series **Accessories**

- Cylinder dogging available
- Cylinder sold separately, refer to lock section of catalog



Plate Conversion Kit

Cylinder Dogging



4927 Bottom Latch Assembly



Top Latch Assembly



4929 Top Rod Replacement Kit



4932R Head Cover - Rim



4932S

Head Cover - SVR

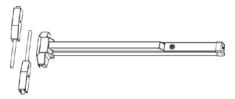


SUPERIOR PERFORMANCE

4700 Series Standard Duty - Rim



4700 Series Standard Duty - SVR



4700 Series **Standard Duty**

- Standard duty commercial
- UL-cUL listed for up to 1-1/2 hours for "A" label doors
- UL 305 listed for panic hardware
- ANSI A250.13 severe windstorm resistant component (RIM Device)
- One year warranty



47BE Archer



47CE August



47DT Withnell



47NL August



47PD Pull Plate Dummy



47PN Pull Plate Night Latch



47RN

4700 Series Trim

- Archer, August, and Withnell available in any trim function
- Blank Escutcheon, Cylinder Escutcheon, Dummy Trim, Night
- Cylinder sold separately, refer to lock section of catalog



47KE Entrance



47KP Passage



47KN Night Latch



47KD Dummy



47RD Raised Lip Pull Dummy



Raised Lip Pull Night Latch



4910 Rim Strike



Double Door Strike Rim and SVR



4913 Top Strike SVR



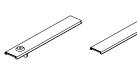
4914 Bottom Strike SVR



4915 Threshold Strike



Panic rated strikes



4934 Dogging Plate



4934F Dogging Plate (Fire)



4917 Bottom Latch Assembly



4918 Top Latch Assembly



Top Rod Replacement Kit

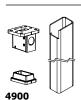


4933R Head Cover



4933S Head Cover SVR

4700 Series **Accessories**



84", 96", 120" Mullion Set

84", 96" Fire Rated Mullion Set



Bracket Set

Top/Bottom Bracket Set 4902F Fire Rated Top/Bottom



Mullion Tube 84", 96", 120"



4912 Fire Rated Mullion Strike 4500 Series



4916 Fire Rated Mullion Strike 4700 Series

4900 Series Mullions

- Key removable mullions
- Fire rated mullions available on 84" and 96" openings
- Fire rated strikes sold separately from fire-rated mullion set
- Cylinder sold separately, refer to lock section of catalog







More for your door than any other brand. $^{\text{\tiny TM}}$

Hager: Opening a new door to environmental responsibility

To help minimize Hager's environmental impact, this brochure was printed on paper containing FSC 10% post-consumer waste fiber made with certified renewable energy, which resulted in a savings of:

- 15 trees
- 5,455 gallons of wastewater
- 10,000,000 BTUs of energy
- 1,664 pounds net greenhouse gases
- 903 pounds of solid waste



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Printed in the U.S.A. | Part # 5-500-0152 | February 2010

