

Bommer

over 125 years of quality

TM

Corporate Office

P. O. Box 187
Landrum, SC 29356-0187
Call Toll-Free 1-800-334-1654
Fax 1-877-426-0388

Regional Warehouses

Western United States
Phone: 800-334-1654
Fax: 877-426-0388
877-426-1039

Central United States
Phone: 800-334-1654
Fax: 877-426-0388
877-426-1039

Quality Etched In Time

The Bommer brand. Representing four generations of innovation and craftsmanship. Still preferred by those who measure themselves and others by the quality of their work. As advanced and dependable today as ever. Made to last. Made in America. Bommer. The original standard of excellence for more than 125 years.™



www.bommer.com



Architectural Grade Hinges

5000 Series
5 Knuckle,
button tip



8000 Series
3 Knuckle,
flush tip



Bommer Industries offers two basic series of BHMA Certified Architectural Grade Hinges. The 5000 Series hinges are five knuckle with button tips. The 8000 Series hinges are three knuckle with flush tips. Both the 5000 and 8000 series hinges are available in a wide variety of sizes, weights, types and 20 architectural finishes.

Full Mortise Electric Hinges

Available in standard weight or heavy weight, ball bearing or lube bearing, and steel, brass, or stainless steel finish.

Power Transfer Options:

- Concealed electric thru-wires
- Concealed electric monitor
- Concealed electric thru-wires with monitor
- Concealed air transfer
- Exposed electric contacts
- Exposed electric switch



Note: Electric hinges must be non-load bearing. Mount in center position only.

Hinge Types

Full Mortise – One leaf is mortised in the door edge, the other is mortised in the jamb. This is the most common hinge application.

Half Mortise – One leaf is mortised in the door edge, the other is applied to the surface (face) of the jamb. Used when conditions prevent the jamb leaf from being mortised (i.e. channel iron jamb).

Full Surface – One leaf is applied to the surface (face) of the door, the other to the surface (face) of the jamb. Used when conditions prevent both leaves from being mortised (i.e. kalamein or mineral core door with channel iron frame).

Half Surface – One leaf is applied to the surface (face) of the door, the other is mortised in the jamb. Used when conditions prevent the door leaf from being mortised (i.e. kalamein or mineral core door).

Hinge Styles

Wide Throw – Width of hinge is increased, moving barrel away from the door. Used when additional throw is required to clear trim or wall conditions. Available only in Full Mortise type.

Raised Barrel – Both hinge leaves are offset to raise the barrel off the jamb, allowing door to swing without the knuckles rubbing on the jamb. Available only in Full Mortise type.

Slip In – One or both hinge leaves are formed to slip in a slot or slots provided in the door and/or jamb. Normally used with aluminum doors and jambs. Available only in Full Mortise type.

Swing Clear – Position of barrel allows door to swing clear when opened to 95°. Permits hospital beds, wheelchairs, and other equipment to pass through opening without hitting the hinge edge. Available in all hinge types.

Anchor – Hinge leaves are mortised in door and jamb providing increased support at the top corner where stress can occur due to high frequency service and abuse. Available only in Full Mortise type.

These Architectural Hinges are available in three bearing types (Plain Bearing, Ball Bearing, and Lube Bearing), four Security Pin Styles (Non-removable Pin, Security Stud, NRP with Security Stud, and a Maximum Security Stud), four Tip Options (Hospital Tip, Ball Tip, Steeple Tip, and Acorn Tip), and three Pin Types (Standard Steel on Steel, and Stainless Steel Pin on Brass or Stainless Steel).



Spring Hinges



Single Acting Spring Hinges

Single Acting Spring Hinges minimize the cost of installing a door closing device on industrial, commercial, institutional and residential applications. They can be used to convert doors to self-closing in existing buildings. Available in 3 1/2", 4" and 4 1/2" steel and stainless steel (commercial grade), and 3 1/2" or 4" steel (residential grade).

For labeled doors up to and including 3 hour, A Label, maximum door sizes and number of hinges required are based on limits set by NFPA #80 (3'-0" wide x 7'-0" high x 1 3/4" thick and 2 spring hinges per door). **NOTE:** Always verify local fire code requirements.

For non-labeled doors, the maximum door width is 4'-0", and for doors over 7'-6" in height use an additional hinge for each additional 30" of height or fraction thereof.

All hinges available in 20 architectural finishes.



US LISTED GRADE 1 UNITED STATES AND CANADA

BHMA Certified GRADE 1 for 1 Million Cycles

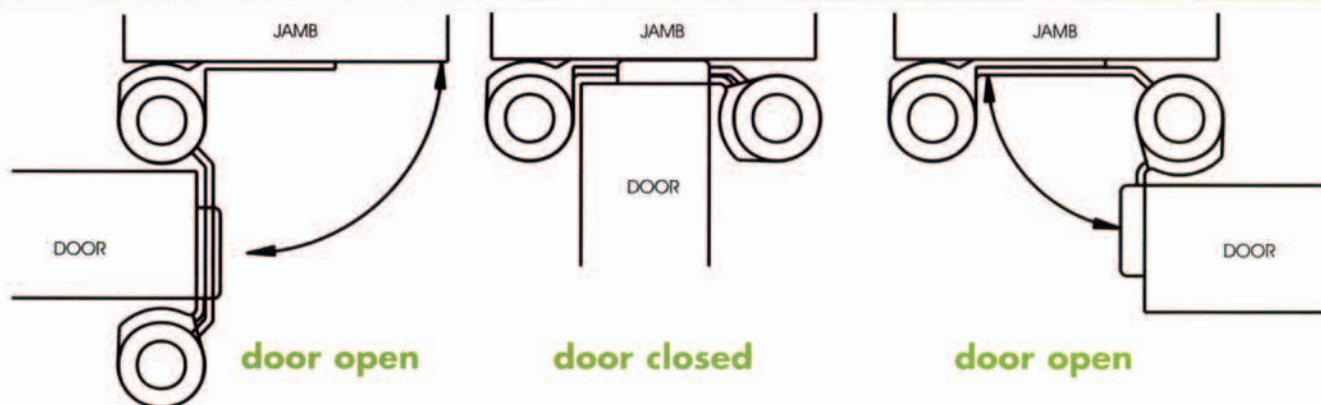
Double Acting Spring Hinges

Double Acting Spring Hinges permit doors to be open in either direction and automatically return to a closed position. They provide maximum protection for doors subject to normal abuse of lift trucks due to the resiliency of spring support and shock absorbing reaction of flexible mounting.

They are available in sizes from 3" to 8" to accommodate a wide range of door sizes and weights. The adjustable spring tension permits power and speed adjustment of each size spring hinge. No hanging strip is required on the door frame.



Top View of Double Acting Spring Hinge Operation





Specialty Hardware

Spring and Gravity Pivots

Horizontal type pivots are used on full height doors (1 3/8" – 1 3/4" and 35 lbs. – 90 lbs) to allow for the door to swing in either direction and automatically return to a closed position or to be held open at a 90 degree position.

Our Spring type pivots would be used for half size doors or gates from 1 7/8" – 2 1/2" thick and up to 75 lbs. The Gravity type pivots will accommodate gates from 7/8" – 1 7/8" thick and up to 50 lbs.

NEW! Anchor Pivot Series



Bommer's new Anchor Pivot is surface applied with no special frame or door preparation so it's easily field applied. This product will help overcome field problems such as bent hinge leaves, loose hinge reinforcements and loose screws.

With our "Lube Bearing" design, we eliminate all metal to metal contact which reduces friction to allow the door to operate smoothly.

Available for standard or heavyweight hinges and in a variety of finishes.

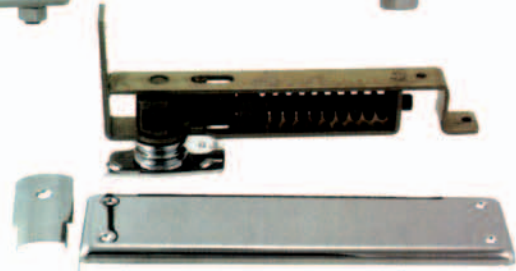
Double Acting Pivots



7000 & 7100 Series
Spring Gate Pivot



7500 Series
Gravity Pivot

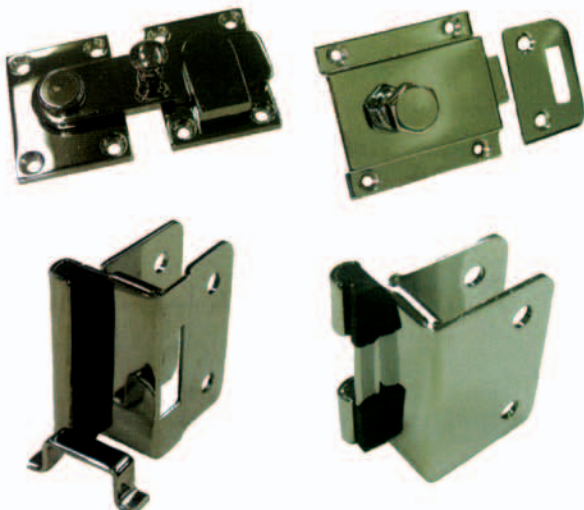


7800 Series
Horizontal Spring Pivot

Lavatory Hardware

All of our hardware items are fabricated from solid brass materials and are heavy duty. The Door Strikes, Keepers, Latches, Bolts, Indicators, and Spring Hinges will accommodate doors from 3/4" to 1 1/4" thick. The Partition Mounting Brackets and Pilaster Covers will accommodate a 3/4" thick partition only.

Latches and Stops



Partition Mounting Brackets



Door Hooks and Handles



BUILDERS HARDWARE
Catalog Number 134 July 2010



Bommer Industries, Inc.
P.O. Box 187
19810 Asheville Highway
Landrum, South Carolina 29356
www.bommer.com

Phone : 864 - 457 - 3301
Phone : 800 - 334 - 1654
Fax : 864 - 457 - 2487
Fax : 877 - 426 - 0388
e-mail : hardware@bommer.com

Regional Warehouse

Western United States
Phone : 800 - 334 - 1654
Fax : 877 - 426 - 0388



“Over 125 Years of Quality”



Catalog Number 134

Quality and innovation have been Bommer trademarks since the day in 1876 when we started in business.

Indeed, it was Lorenz Bommer's patented improvement on the single-acting spring hinge which launched our company.

Four years later, in 1880, Lorenz Bommer, - together with his sons William and Anton, - developed the first double acting spring hinge. This sparked the creative spirit and drive which have been primarily responsible for Bommer's success.



Through the years, we have continued to expand our product offering: Bommer's complete line of



ARCHITECTURAL GRADE HINGES enhances our comprehensive specialty lines of **SPRING HINGES, PIVOTS, and LAVATORY HARDWARE.**

Bommer's long-standing devotion to quality, research, and new product development will keep Bommer's architectural grade products at the forefront of specifications for commercial construction, government projects, and special industrial applications worldwide.

Bommer also enjoys a reputation as one of the oldest existing manufacturers of Postal Service-approved mailboxes. Those carrying the Bommer trademark have become the standard for multiple-dwelling units such as apartment houses, condominiums, and dormitories and other institutional type facilities.

Complementing Bommer's commitment to provide the very best in product design and manufacturing is our sales and service team: a team whose mission is captured in five simple words: "Customer satisfaction is priority one".

When you want the best in architectural hardware and postal specialties, specify Bommer. While other companies are engaged in the search for excellence, at Bommer it continues to be an integral part of our operating philosophy and day-to-day corporate life.

"Over 125 Years of Quality"



General Information

ARCHITECTURAL FINISH CODE.....	GI-4
FREQUENCY OF DOOR USE	GI-5
HANDING OF HINGES.....	GI-8
HINGE SELECTION HEIGHT & WIDTH.....	GI-6,7
HINGE SELECTION WEIGHT	GI-5
NUMERICAL INDEX.....	GI-3
PRODUCT COMPARISON CHART.....	GI-9,10,11,12
SWAGING INFORMATION	GI-8

Architectural Grade Hinges

ANCHOR PIVOTS.....	AH-25
BALL BEARINGS	AH-1
DECORATIVE HINGE TIPS	AH-4
ELECTRIC HINGE CONNECTORS	AH-21

HINGES 5 KNUCKLE PLAIN BEARING

Full Mortise	AH-6
Half Mortise	AH-22
Half Surface	AH-26
Slip In	AH-16
Wide Throw	AH-10

HINGES 5 KNUCKLE BALL BEARING

Anchor	AH-14
Electric	AH-17,19
Full Mortise	AH-7,9
Full Surface	AH-24
Half Mortise	AH-22,23
Half Surface	AH-27,28
Raised Barrel	AH-15
Slip In	AH-16
Swing Clear	AH-13,23,25,28
Wide Throw	AH-11,12

HINGES 5 KNUCKLE LUBE BEARING

Full Mortise	AH-8
--------------------	------

HINGES 3 KNUCKLE PLAIN BEARING

Full Mortise	AH-6
Half Mortise	AH-22
Half Surface	AH-26
Slip In	AH-16
Wide Throw	AH-10

HINGES 3 KNUCKLE LUBE BEARING

Anchor	AH-14
Electric	AH-18,20
Full Mortise	AH-7,9
Full Surface	AH-24
Half Mortise	AH-22,23
Half Surface	AH-27,28
Raised Barrel	AH-15
Slip In	AH-16
Swing Clear	AH-13
Wide Throw	AH-11,12

HINGE SERIES	AH-1
HINGE STYLE	AH-3
HINGE TYPE	AH-2
HOSPITAL TIP	AH-4

GI-2

Table of Contents

MORTAR BOX for electric hinges	AH-21
NUMBERING SYSTEM for ARCHITECTURAL	
GRADE HINGES	AH-5
PIN OPTIONS	AH-4
SECURITY OPTIONS	AH-4

Spring Hinges

DOOR BUMPERS	SH-17
DOUBLE ACTING HINGE LOCATIONS on DOOR	SH-12
HINGE SELECTION MAXIMUM DOOR SIZE	SH-1
INSTALLATION INSTRUCTIONS	SH-2
NFPA LABEL DOOR INFORMATION	SH-1
NUMBERING SYSTEM for SINGLE ACTING	
SPRING HINGES	SH-3

SPRING HINGES DOUBLE ACTING

Clamp-Flange	SH-15
Classic Tips.....	SH-13,14,15
Half Surface Type	SH-14
Industrial Clamp Flange	SH-16
Gate Hinge	SH-18
Light Duty Louver Door Type	SH-18
Mortise Type	SH-13

SPRING HINGES SINGLE ACTING

Lube Bearing Spring Hinge	SH-4,5
Lube Bearing Spring Hinge Special Types	SH-6,7
Lube Bearing Spring Hinge Contract Grade	SH-8,9
Large Barrel Spring Hinge	SH-10,11
Large Barrel Spring Hinge with Classic Tips	SH-10,11

Specialty Products

AUXILIARY SPRINGS.....	SP-8
------------------------	------

LAVATORY HARDWARE

Coat and Hat Hook	SP-11
Door Latches and Bolts.....	SP-10
Door Pull	SP-11
Door Stop and Keepers	SP-12
Door Strikes and Keepers	SP-12
Emergency Key	SP-11
Indicators	SP-11
Partition Mounting Brackets	SP-13
Pilaster Cover and Shoe	SP-13
Spring Hinges	SP-14

DOUBLE ACTING PIVOTS

Gravity Pivots	SP-7
Horizontal Spring Pivots	SP-1,2
Re Tensioning Instructions	SP-5
Spring Pivots.....	SP-3,4,5,6

SCREEN DOOR SPRING HINGES	SP-8,9
---------------------------------	--------

Geared Hinge

CONTINUOUS GEARED HINGE INFORMATION	GH-1
FULL MORTISE GEARED HINGES	GH-2
FULL SURFACE GEARED HINGES	GH-3
HALF SURFACE GEARED HINGES	GH-3
PRODUCT CROSS REFERENCE CHART.....	GH-4,5
NUMBERING SYSTEM for GEARED HINGES	GH-1

“Over 125 Years of Quality”



Numerical Index

01001	SP-14	4010	SH-10	BB5024	AH-13	7004	AH-25	LB8034	AH-14
1001	SP-14	CL4010	SH-10	BB5025	AH-13	7006	AH-25	LB8035	AH-14
LB1002	SP-14	4020	SH-10	BB5026	AH-13			LB8036	AH-14
LB1002H	SP-14	CL4020	SH-10	BB5034	AH-14	7012	SP-3	LB8040	AH-15
LB1006	SP-14	4030	SH-11	BB5035	AH-14	7014	SP-3	LB8041	AH-15
LB1006H	SP-14	CL4030	SH-11	BB5036	AH-14	7022	SP-3	LB8042	AH-15
1011	SP-14	4040	SH-11	BB5040	AH-15	7112	SP-4		
1055	SP-12	CL4040	SH-11	BB5041	AH-15	7114	SP-4	LB8044	AH-15
1055-P	SP-12			BB5042	AH-15	7122	SP-4	LB8045	AH-15
1057	SP-12	LB4310	SH-5	BB5044	AH-15	7211	SP-5	LB8046	AH-15
1057-P	SP-12	LB4311	SH-5	BB5045	AH-15	7212	SP-5	8050	AH-16
1070	SP-12	LB4312	SH-5	BB5046	AH-15	7312	SP-6	8051	AH-16
1072	SP-12	LB4310C	SH-9			7313	SP-6	8052	AH-16
1074	SP-12	LB4311C	SH-9	5050	AH-16	7314	SP-6		
1075	SP-12	LB4312C	SH-9	5051	AH-16	7322	SP-6	LB8050	AH-16
1141	SP-13	LB4313C	SH-9	5052	AH-16	7411	SP-7	LB8051	AH-16
1142	SP-13	LB4321	SH-7	BB5050	AH-16	7412	SP-7	LB8052	AH-16
1514	SH-18	LB4322	SH-7	BB5051	AH-16	7512	SP-7	LB8060	AH-18
1514-H	SH-18	LB4333	SH-7	BB5052	AH-16	7512-H	SP-7	LB8061	AH-18
1515	SH-18	LB4340	SH-7	MB-1	AH-21	7514	SP-7	LB8062	AH-18
1515-H	SH-18	LB4342	SH-7	BB5060	AH-17	7514-H	SP-7	LB8064	AH-20
15000	SP-10	LB4350	SH-7	BB5061	AH-17			LB8065	AH-20
15001	SP-10	LB4360	SH-7	BB5062	AH-17			LB8066	AH-20
15004	SP-10	LB4361	SH-7	BB5064	AH-19	7801	SP-1		
15009	SP-10	LB4362	SH-7	BB5065	AH-19	7802	SP-1	8100	AH-22
15009-H	SP-10	LB4376	SH-7	BB5066	AH-19	7805	SP-2	8101	AH-22
15015	SP-11	LB4381	SH-7			7811	SP-2	8102	AH-22
15016	SP-11	LB4382	SH-7	5100	AH-22	7812	SP-2	LB8100	AH-22
15017	SP-11	LB4383	SH-7	5101	AH-22	7813	SP-2	LB8101	AH-22
15019	SP-10	LB4384	SH-7	5102	AH-22	7814	SP-2	LB8102	AH-22
15019-H	SP-10	LB4390C	SH-9	BB5100	AH-22	7813HD	SP-2	LB8104	AH-23
15020	SP-11	LB4391C	SH-9	BB5101	AH-22	7814HD	SP-2	LB8105	AH-23
15030	SP-11	LB4392C	SH-9	BB5102	AH-22	7821	SP-2	LB8106	AH-23
170	SH-17			BB5104	AH-23	7822	SP-2	LB8200	AH-24
175	SH-17	5000	AH-6	BB5105	AH-23			LB8201	AH-24
		5001	AH-6	BB5106	AH-23	8000	AH-6	LB8202	AH-24
		5002	AH-6	BB5124	AH-23	8001	AH-6	LB8204	AH-24
2100	SP-8	BB5000	AH-7	BB5125	AH-23	8002	AH-6	LB8205	AH-24
2200	SP-8	BB5001	AH-7	BB5126	AH-23	LB8000	AH-7	LB8206	AH-24
2400	SP-8	BB5002	AH-7	BB5200	AH-24	LB8001	AH-7	8300	AH-26
2410	SP-8	BB5004	AH-9	BB5201	AH-24	LB8002	AH-7	8301	AH-26
2430	SP-8	BB5005	AH-9	BB5202	AH-24	LB8004	AH-9	8302	AH-26
2440	SP-8	BB5006	AH-9	BB5204	AH-24	LB8005	AH-9	LB8300	AH-27
2500	SP-8	LB5000	AH-8	BB5205	AH-24	LB8006	AH-9	LB8301	AH-27
2510	SP-8	LB5001	AH-8	BB5206	AH-24			LB8302	AH-27
2520	SP-8	LB5002	AH-8	BB5224	AH-25	8010	AH-10	LB8304	AH-28
2920	SP-9	LB5004	AH-8	BB5225	AH-25	8011	AH-10	LB8305	AH-28
2930	SP-9	LB5005	AH-8	BB5226	AH-25	8012	AH-10	LB8306	AH-28
2960	SP-9	LB5006	AH-8	5300	AH-26	LB8010	AH-11	9700	SH-18
2970	SP-9	5010	AH-10	5301	AH-26	LB8011	AH-11		
2980	SP-9	5011	AH-10	5302	AH-26	LB8012	AH-11	FM79	GH-2
2990	SP-9	5012	AH-10	BB5300	AH-27	LB8014	AH-12	FM83	GH-2
		BB5010	AH-11	BB5301	AH-27	LB8015	AH-12	FM85	GH-2
3023	SH-14	BB5011	AH-11	BB5302	AH-27	LB8016	AH-12	FS83	GH-3
CL3023	SH-14	BB5012	AH-11	BB5304	AH-28	LB8020	AH-13	FS85	GH-3
3024	SH-15	BB5014	AH-12	BB5305	AH-28	LB8021	AH-13	HS83	GH-3
CL3024	SH-15	BB5015	AH-12	BB5306	AH-28	LB8022	AH-13	HS85	GH-3
3029	SH-13	BB5016	AH-12	BB5324	AH-28	LB8024	AH-13	FM95	GH-3
CL3029	SH-13	BB5020	AH-13	BB5325	AH-28	LB8025	AH-13	FS95	GH-3
3044	SH-16	BB5021	AH-13	BB5326	AH-28	LB8026	AH-13	HS95	GH-3
		BB5022	AH-13					FM120	GH-3
								FS120	GH-3
								HS120	GH-3



Classification Of Finishes

BHMA FINISH CODE	NEAREST FORMER U.S. OR BOMMER* EQUIVALENT	FINISH DESCRIPTION	BASE MATERIAL
600	US P	Primed for Painting	Steel
601	US 1B	Bright Black Japanned	Steel
603	US 2G	Zinc Plated	Steel
604	N / A	Zinc Plated and Dichromate Sealed	Steel
605	US 3	Bright Brass, Clear Coated	Brass
606	US 4	Satin Brass, Clear Coated	Brass
609	US 5	Satin Brass, Blackened, Satin Relieved, Clear Coated	Brass
610	US 7	Satin Brass, Blackened, Bright Relieved, Clear Coated	Brass
611	US 9	Bright Bronze, Clear Coated	Brass/Bronze
612	US 10	Satin Bronze, Clear Coated	Brass/Bronze
★ 613	US 10B	Satin Bronze, Dark Oxidized, Oil Rubbed	Brass/Bronze
616	US 10A / US 11	Satin Bronze, Blackened, Satin Relieved, Clear Coated	Brass/Bronze
618	US 14	Bright Nickel Plated, Clear Coated	Brass/Bronze
619	US 15	Satin Nickel Plated, Clear Coated	Brass/Bronze
620	US 15A	Satin Nickel Plated, Blackened, Satin Relieved, Clear Coated	Brass/Bronze
621	US 17A	Nickel Plated, Blackened, Relieved, Clear Coated	Brass/Bronze
625	US 26	Bright Chromium Plated	Brass/Bronze
626	US 26D	Satin Chromium Plated	Brass/Bronze
629	US 32	Bright Stainless Steel	Stainless Steel 300 Series
630	US 32D	Satin Stainless Steel	Stainless Steel 300 Series
632	US 3	Bright Brass Plated, Clear Coated	Steel
633	US 4	Satin Brass Plated, Clear Coated	Steel
636	US 7	Satin Brass Plated, Blackened, Bright Relieved, Clear Coated	Steel
637	US 9	Bright Bronze Plated, Clear Coated	Steel
638	US 5	Satin Brass Plated, Blackened, Satin Relieved, Clear Coated	Steel
639	US 10	Satin Bronze Plated, Clear Coated	Steel
★ 640	US 10B	Satin Bronze Plated, Dark Oxidized, Oil Rubbed	Steel
643	US 10A / US 11	Satin Bronze Plated, Blackened, Satin Relieved, Clear Coated	Steel
645	US 14	Bright Nickel Plated, Clear Coated	Steel
646	US 15	Satin Nickel Plated, Clear Coated	Steel
647	US 15A	Satin Nickel Plated, Blackened, Satin Relieved, Clear Coated	Steel
648	US 17A	Nickel Plated, Blackened, Relieved, Clear Coated	Steel
651	US 26	Bright Chromium Plated	Steel
652	US 26D	Satin Chromium Plated	Steel
332	US 3 / US 4	Bright Brass Plated, Clear Coated - Not Polished	Steel
372	FL 2	Aluminum Lacquer	Steel
383	FE 3	Dark Bronze Enamel	Steel

** Finishes 613 & 640 are unstable and vary when applied to different alloys and forms of base material. These finishes shall be compatible with the BHMA match plate, but these finishes cannot and do not match from one alloy or form of material to the next and from one manufacturer to the next.*



General Information

DETERMINING HINGE WEIGHT

To determine the correct weight of hinge, it is necessary to know the size and material of the door. The following chart lists examples of approximate weights (per square foot) of various material doors. Please use this for rough estimating only and be sure to verify the actual weight with the door manufacturer if there is any question. The weight of the hardware being applied should also be factored into the total door weight.

POUNDS PER SQUARE FOOT						
Door Material	Door Thickness	1 3/8"	1 3/4"	2"	2 1/4"	2 1/2"
Wood, Hollow Core		2.0#	2.5#	8.1#	5.6#	10.2#
Wood, Lumber Core		3.5#	4.5#			
Wood, Particle Core		4.0#	5.0#			
Wood, Oak-Solid Core		6.0#	7.3#			
Wood, Mineral Core			4.0#			
Wood, Plastic Laminate-Particle Core			5.5#			
Hollow Metal, 18 ga.		4.3#	4.6#			
Hollow Metal, 16 ga.		5.4#	5.8#			
Hollow Metal, 14 ga.		7.0#	7.3#			
Hollow Metal, 12 ga.		9.8#	10.4#			
Wood + 1/8" Lead Lining			12.4#			
Wood + 1/4" Lead Lining			19.8#			
Wood + 1/2" Lead Lining			34.6#			
Acoustical Core			8.8#			

FREQUENCY OF DOOR USE

It is also necessary to know the frequency of door use when determining the correct weight of hinge. The following chart lists examples of various types of doors and their estimated frequency of use.

NOTE : Ball bearing hinges should always be provided for doors equipped with door closers.

Type Of Building and Door	Daily	Yearly	Frequency	Hinge Weight
Department Store Entrance	5,000	1,825,000	High	Heavy
Office Building Entrance	4,000	1,460,000	High	Heavy
Hospital Corridor and Surgical Doors	3,000	1,095,000	High	Heavy
School Entrance	1,250	456,250	High	Heavy
School Toilet Room	1,250	456,250	High	Heavy
School Corridor	100	35,500	Average	Standard w/ Ball Bearings
Office Building Corridor	75	27,375	Average	
Store Toilet Room	60	21,900	Average	Standard w/ Ball Bearings
Storage Room	50	18,250	Average	
Residential Entrance	35	12,775	Low	Standard
Residential Toilet	25	9,125	Low	Standard
Residential Interior	10	3,650	Low	Standard



General Information

DETERMINING HINGE HEIGHT

To determine the correct hinge height, it is necessary to know the door's width, height, thickness, weight and frequency of use. The following chart lists some examples of hinge height as it relates to the door thickness and width.

NOTE: Heavy doors and doors expected to receive high frequency service should be specified with heavy weight hinges.

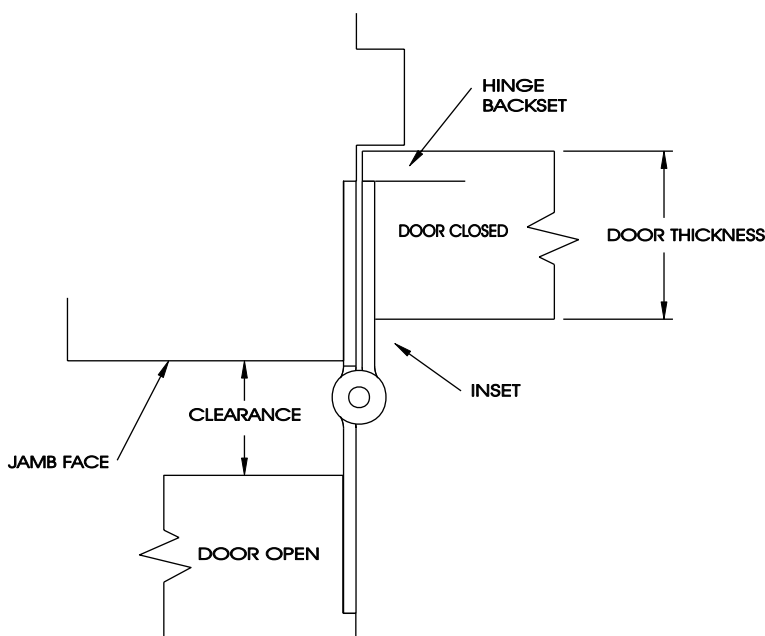
Thickness of Door	Width of Door	Hinge Height
1.375" (1 3/8")	to 32"	3.5" (3 1/2")
1.375" (1 3/8")	32" to 36"	4"
1.750" (1 3/4")	to 36"	4.5" (4 1/2")
1.750" (1 3/4")	36" to 48"	5"
1.750" (1 3/4")	over 48"	6"
1.750" (1 3/4")	to 42"	5" Heavy Weight

NOTE: A good way to determine the number of hinges necessary is to follow this guideline (from NFPA 80, Table 2-8A): "Doors up to 60" in height shall be provided with two hinges, and an additional hinge for each 30 inches of height or fraction thereof."

Doors which are unusually wide (over 37") and heavy and those receiving high frequency use may require additional hinges.

DETERMINING HINGE WIDTH

To determine the correct hinge width, it is necessary to know the door thickness, hinge backset (distance from back end of hinge to edge of inside door surface) and clearance required (necessary distance between the jamb face and door when opened, including trim).



Doors up to 2.25" have .250" backset

Doors over 2.25" have .375" backset

NOTE: When the width of a hinge is greater than the height, it is termed a "Wide Throw" hinge. This hinge is used when additional clearance (throw) is necessary to clear trim or wall conditions.



DETERMINING HINGE WIDTH

The following chart indicates the clearance provided by standard Full Mortise hinges with no interfering trim or wall conditions.

Thickness of Door	Hinge Width	Maximum Clearance Provided
1.375" (1 3/8")	3.5" (3 1/2")	1.250" (1 1/4")
1.375" (1 3/8")	4"	1.750" (1 3/4")
1.750" (1 3/4")	4"	1"
1.750" (1 3/4")	4.5" (4 1/2")	1.500" (1 1/2")
1.750" (1 3/4")	5"	2"
1.750" (1 3/4")	6"	3"
2.000" (2")	4.5" (4 1/2")	1"
2.000" (2")	5"	1.500" (1 1/2")
2.000" (2")	6"	2.500" (2 1/2")
2.250" (2 1/4")	5"	1"
2.250" (2 1/4")	6"	2"

The following formula may be used to determine the MINIMUM hinge width necessary:

Door Thickness
- Backset
x 2
+ Clearance Required
+ Inset (if any)

= Hinge Width (if not a standard width, use the next larger standard width

NOTE: Standard 4.5" wide hinge installed on 1.750" doors will clear 1.5" trim.

The hinge width of Half Mortise, Full Surface and Half Surface hinges is standard, depending on the hinge height. In these hinge types, the amount of clearance available is determined by the amount of offset, not by the hinge width (see catalog pages for offsets).

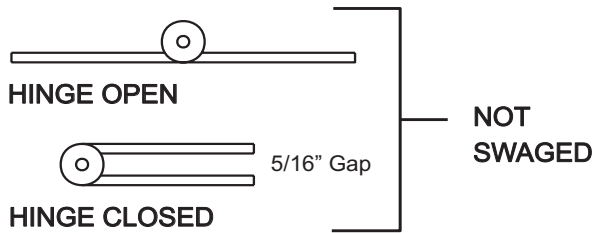
DETERMINING THE NUMBER OF HINGES

A general rule to follow is: one hinge for every 30" of door height.

DOOR HEIGHT	NUMBER OF HINGES
Up to 60"	2 Hinges
Over 60" up to 90"	3 Hinges
Over 90" up to 120"	4 Hinges

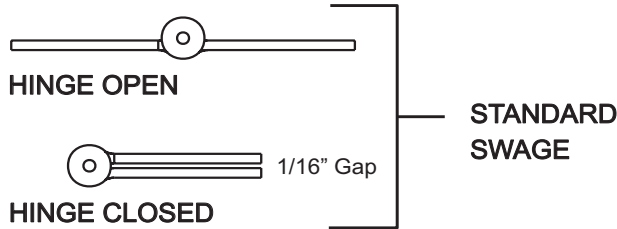
Also adding an extra hinge when using a door wider than 37" is recommended. This will help remove tension from the frame caused by the wider door.

HINGE SWAGING



Swaging is a slight offset of the hinge leaf at the barrel which permits the leaves to close to parallel position as the door closes.

Standard swaging of standard weight and heavy weight full mortise hinges when closed to the parallel position provides a 1/16" clearance between leaves.



NOTE A - When both leaves are not swaged, hinges are slightly less in width.

NOTE B - When one leaf only is swaged, the leaf not swaged is approximately 1/16" shorter. EXCEPTION: On hinges for metal doors and metal frames, both leaves must be the same width - specify on order "leaves must be equal".



HINGE HANDING

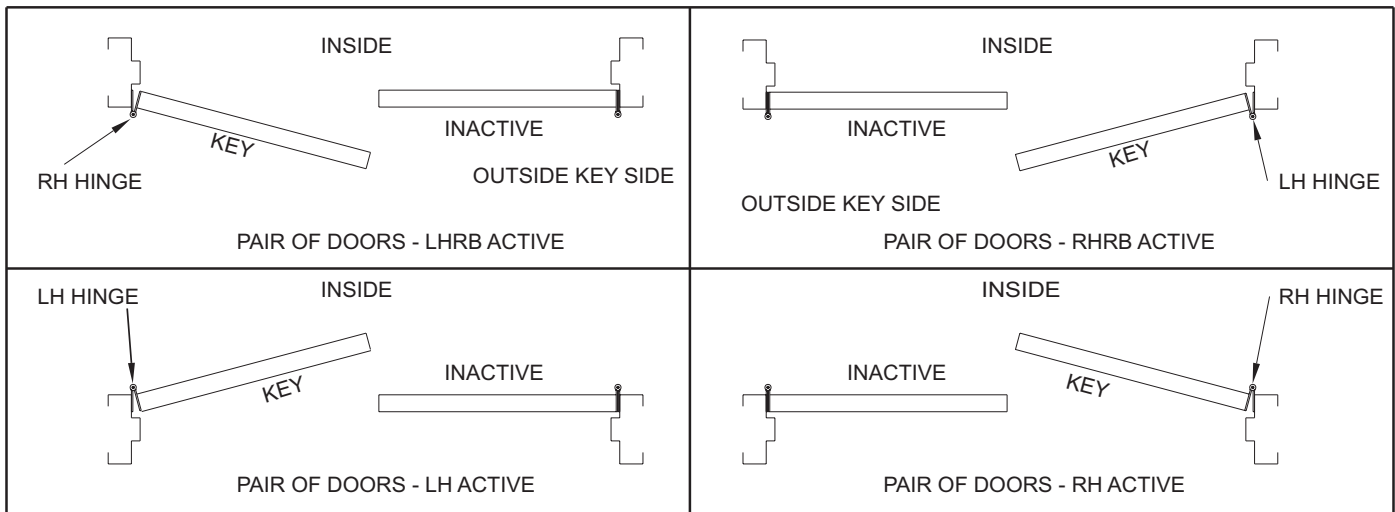
In some instances (ie. Anchor Hinges), it may be necessary to specify "handed" hinges. The following illustration shows how to determine if the hinge should be Right Hand (RH) or Left Hand (LH). Remember, doors are handed four (4) ways, while hinges are handed two (2) ways.

HAND of DOOR

1. Right Hand (RH)
2. Left Hand (LH)
3. Right Hand Reverse (RHR)
4. Left Hand Reverse (LHR)

HAND of HINGE

1. Right Hand (RH)
2. Left Hand (LH)
3. Left Hand (LH)
4. Right Hand (RH)





Product Comparison Chart

NOTES:

1. Product and ANSI numbers listed are for comparison only.
2. Additional information may be required for ELECTRIC hinges before a comparison can be made.
3. An " * " prefixing a competitor's number indicates stainless steel material.
4. Please contact the factory for any product(s) not shown in this chart.

BOMMER	HAGER	STANLEY	McKINNEY	ANSI
5000	1279	F179	T2714	A8133
5001	1191	F191	T2314	A2133
5002	1191-32D	*F191	T2314-32D	A5133
BB5000	BB1279	FBB179	TA2714	A8112
BB5001	BB1191	FBB191	TA2314	A2112
BB5002	BB1191-32D	*FBB191	TA2314-32D	A5112
BB5004	BB1168	FBB168	T4A3786	A8111
BB5005	BB1199	FBB199	T4A3386	A2111
BB5006	BB1199-32D	*FBB199	T4A3386-32D	A5111
5010	WT1279	F179WT		A8133
5011	WT1191	F191WT		A2133
5012	WT1191-32D	*F191WT		A5133
BB5010	WTBB1279	FBB179WT	TA2798	A8112
BB5011	WTBB1191	FBB191WT	TA2398	A2112
BB5012	WTBB1191-32D	*FBB191WT	TA2398-32D	A5112
BB5014	WTBB1168	FBB168WT	T4A3786	A8111
BB5015	WTBB1199	FBB199WT	T4A3386	A2111
BB5016	WTBB1199-32D	*FBB199WT	T4A3386-32D	A5111
BB5020 (SQ.)	BB1260	FBB248	TA2895	A8122
BB5020 (BEV.)	BB1261	FBB258		A8122
BB5021 (SQ.)			TA2395	A2122
BB5021 (BEV.)				A2122
BB5022 (SQ.)	BB1360		TA2395-32D	A5122
BB5022 (BEV.)	BB1361			A5122
BB5024 (SQ.)	BB1262	FBB268	T4A3795	A8121
BB5024 (BEV.)	BB1263	FBB278		A8121
BB5025 (SQ.)				A2121
BB5025 (BEV.)				A2121
BB5026 (SQ.)	BB1362		T4A3395-32D	A5121
BB5026 (BEV.)	BB1363			A5121
BB5034 (SQ.) W/ 7 1/2"	BB1162	FBB211		A8551
BB5034 (SQ.) W/ 4"	BB1165			A8551
BB5034 (SQ.) LESS DOOR ARM	BB1160			A8551
BB5034 (BEV.) W/ 7 1/2"	BB1166	FBB211		A8551
BB5034 (BEV.) W/ 4"	BB1167			A8551
BB5035 (SQ.) W/ 7 1/2"	BB1192	FBB221		A2551
BB5035 (SQ.) W/ 4"	BB1195			A2551
BB5035 (SQ.) LESS DOOR ARM	BB1190			A2551
BB5035 (BEV.) W/ 7 1/2"	BB1196	FBB221		A2551
BB5035 (BEV.) W/ 4"	BB1197			A2551
BB5036 (SQ.) W/ 7 1/2"	BB1195-32D	*FBB221	TA392	A5551
BB5036 (SQ.) W/ 4"	BB1195-32D		TA392	A5551
BB5036 (SQ.) LESS DOOR ARM	BB1190-32D		TA392	A5551
BB5036 (BEV.) W/ 7 1/2"	BB1196-32D	*FBB221		A5551
BB5036 (BEV.) W/ 4"	BB1197-32D			A5551
BB5040	RBS-BB1279	RB-FBB179	RBMTA2714	A8111
BB5041	RBS-BB1191	RB-FBB191	RBMTA2314	A2111
BB5042	RBS-BB1191-32D	*RB-FBB191	RBMTA2314-32D	A5111
BB5044	RBS-BB1168	RB-FBB168	RBT4A3786	A8111
BB5045	RBS-BB1199	RB-FBB199	RBT4A3386	A2111
BB5046	RBS-BB1199-32D	*RB-FBB199	RBT4A3386-32D	A5111

"Over 125 Years of Quality"

GI-9



Product Comparison Chart

BOMMER	HAGER	STANLEY	McKINNEY	ANSI
5050 (1 LEAF TAPPED)	1277			A8133
5050 (BOTH LEAVES TAPPED)	1278			A8133
5051 (1 LEAF TAPPED)	1577			A2133
5051 (BOTH LEAVES TAPPED)	1578			A2133
5052 (1 LEAF TAPPED)				A5133
5052 (BOTH LEAVES TAPPED)				A5133
BB5050 (1 LEAF TAPPED)	BB1277	FBB179 (B)	TA2714 Type 2	A8112
BB5050 (BOTH LEAVES TAPPED)	BB1278	FBB179 (A)	TA2714 Type 1	A8112
BB5051 (1 LEAF TAPPED)	BB1577	FBB191 (B)	TA2314 Type 2	A2112
BB5051 (BOTH LEAVES TAPPED)	BB1578	FBB191 (A)	TA2314 Type 1	A2112
BB5052 (1 LEAF TAPPED)	BB1577-32D		TA2314-32D Type 2	A5112
BB5052 (BOTH LEAVES TAPPED)	BB1578-32D		TA2314-32D Type 1	A5112
5100	1129	F167	T2774	A8233
5101				A2233
5102				A5233
BB5100	BB1129	FBB167	TA2774	A8212
BB5101	BB1109	FBB108	TA3374	A2212
BB5102	BB1109-32D	*FBB108	TA3374-32D	A5212
BB5104	BB1138	FBB138	T4A3784	A8211
BB5105	BB2098	FBB98	T4A3384	A2211
BB5106	BB2098-32D	*FBB98	T4A3384-32D	A5211
BB5124 (SQ.)	BB1264	FBB264	T4A3789	A8221
BB5124 (BEV.)	BB1265	FBB274	T4A4789	A8221
BB5125 (SQ.)				A2221
BB5125 (BEV.)				A2221
BB5126 (SQ.)				A5221
BB5126 (BEV.)				A5221
BB5200	BB2171	FBB171	TA2771	A8312
BB5201	BB2110	FBB110	TA3341	A2312
BB5202	BB2110-32D	*FBB110		A5312
BB5204	BB2169	FBB169	T4A3785	A8311
BB5205	BB2109	FBB109	T4A3385	A2311
BB5206	BB2109-32D	*FBB109		A5311
BB5224	BB1266	FBB266	T4A3797	A8321
BB5225				A2321
BB5226			T4A3397-32D	A5321
5300	1173	F173	T2772	A8433
5301				A2433
5302				A5433
BB5300	BB1173	FBB173	TA2772	A8412
BB5301	BB2112	FBB112	TA2372	A2412
BB5302	BB2112-32D	*FBB112	TA2372-32D	A5412
BB5304	BB1163	FBB163	T4A3782	A8411
BB5305	BB2113	FBB113	T4A3382	A2411
BB5306	BB2113-32D	*FBB113	T4A3382-32D	A5411
BB5324	BB1270	FBB269	T4A3796	A8421
BB5325				A2421
BB5326				A5421
BB5060 (4,6,8,10,12 WIRE)	BB1279 X ETW-4,6,8	CEFBB179-54,56,58	TA2714CC-4,6,8	
BB5060 (4,6,8 WIRE & MONITOR)	BB1279 X ETM-4,6,8	CECSFBB179-54,56,58	TA2714CCXMM-	
BB5060 (MONITOR ONLY)	BB1279 X ETM	CSFBB179	TA2714MM	
BB5064 (4,6,8,10,12 WIRE)	BB1168 X ETW-4,6,8	CEFBB168-54,56,58	T4A3786CC-4,6,8	
BB5064 (4,6,8 WIRE & MONITOR)	BB1168 X ETM-4,6,8	CECSFBB168-54,56,58	T4A3786CCXMM-	
BB5064 (MONITOR ONLY)	BB1168 X ETM	CSFBB168	T4A3786MM	

GI-10

“Over 125 Years of Quality”



Product Comparison Chart

BOMMER	HAGER	STANLEY	McKINNEY	ANSI
8000	700		T714	A8133
8001	800		T314	A2133
8002	800-32D		T314-32D	A5133
LB8000	AB700		TA714	A8112
LB8001	AB800		TA314	A2112
LB8002	AB800-32D		TA314-32D	A5112
LB8004	AB750		T4A786	A8111
LB8005	AB850		T4A386	A2111
LB8006	AB850-32D		T4A386-32D	A5111
8010	WT700			A8133
8011	WT800			A2133
8012	WT800-32D			A5133
LB8010	WTAB700			A8112
LB8011	WTAB800			A2112
LB8012	WTAB800-32D			A5112
LB8014	WTAB750			A8111
LB8015	WTAB850			A2111
LB8016	WTAB850-32D			A5111
LB8020 (SQ.)	AB7001			A8122
LB8020 (BEV.)	AB7002			A8122
LB8021 (SQ.)				A2122
LB8021 (BEV.)				A2122
LB8022 (SQ.)				A5122
LB8022 (BEV.)				A5122
LB8024 (SQ.)	AB7501		TA795	A8121
LB8024 (BEV.)	AB7502		TA795	A8121
LB8025 (SQ.)				A2121
LB8025 (BEV.)				A2121
LB8026 (SQ.)				A5121
LB8026 (BEV.)				A5121
LB8034 (SQ.) W/ 7 1/2" ARM	AB7505		TA792	A8551
LB8034 (SQ.) W/ 4" ARM	AB7506		TA793	A8551
LB8034 (SQ.) LESS ARM	AB7507		TA791	A8551
LB8034 (BEV.) W/ 7 1/2" ARM	AB7508			A8551
LB8034 (BEV.) W/ 4" ARM	AB7509			A8551
LB8035 (SQ.) W/ 7 1/2" ARM	AB8505		TA392	A2551
LB8035 (SQ.) W/ 4" ARM	AB8506		TA393	A2551
LB8035 (SQ.) LESS ARM	AB8507		TA391	A2551
LB8035 (BEV.) W/ 7 1/2" ARM	AB8508			A2551
LB8035 (BEV.) W/ 4" ARM	AB8509			A2551
LB8036 (SQ.) W/ 7 1/2" ARM	AB8505-32D		TA392-32D	A5551
LB8036 (SQ.) W/ 4" ARM	AB8506-32D		TA393-32D	A5551
LB8036 (SQ.) LESS ARM	AB8507-32D		TA391-32D	A5551
LB8036 (BEV.) W/ 7 1/2" ARM	AB8508-32D			A5551
LB8036 (BEV.) W/ 4" ARM	AB8509-32D			A5551
LB8040	RBB / RBS-AB700		RBMTA714	A8111
LB8041	RBB / RBS-AB800			A2111
LB8042	RBB / RBS-AB800-32D			A5111
LB8044	RBB / RBS-AB750		RBMTA786	A8111
LB8045	RBB / RBS-AB850			A2111
LB8046	RBB / RBS-AB850-32D			A5111



Product Comparison Chart

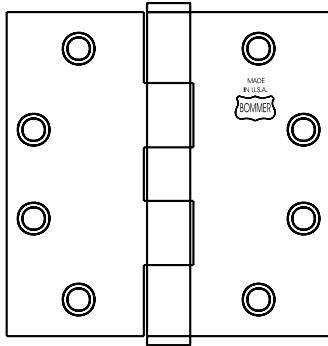
BOMMER	HAGER	STANLEY	McKINNEY	ANSI
8050 (1 LEAF TAPPED)				A8133
8050 (BOTH LEAVES TAPPED)				A8133
8051 (1 LEAF TAPPED)				A2133
8051 (BOTH LEAVES TAPPED)				A2133
8052 (1 LEAF TAPPED)				A5133
8052 (BOTH LEAVES TAPPED)				A5133
LB8050 (1 LEAF TAPPED)				A8112
LB8050 (BOTH LEAVES TAPPED)				A8112
LB8051 (1 LEAF TAPPED)				A2112
LB8051 (BOTH LEAVES TAPPED)				A2112
LB8052 (1 LEAF TAPPED)				A5112
LB8052 (BOTH LEAVES TAPPED)				A5112
8100				A8233
8101				A2233
8102				A5233
LB8100	AB701		TA774	A8212
LB8101	AB801		TA374	A2212
LB8102	AB801-32D		TA374-32D	A5212
LB8104	AB751		TA784	A8211
LB8105	AB851		TA384	A2211
LB8106	AB851-32D		TA384-32D	A5211
LB8200	AB702		TA771	A8312
LB8201	AB802		TA371	A2312
LB8202	AB802-32D		TA371-32D	A5312
LB8204	AB752		TA781	A8311
LB8205	AB852		TA381	A2311
LB8206	AB852-32D		TA381-32D	A5311
8300				A8433
8301				A2433
8302				A5433
LB8300	AB703		TA772	A8412
LB8301	AB803		TA372	A2412
LB8302	AB803-32D		TA372-32D	A5412
LB8304	AB753		TA782	A8411
LB8305	AB853		TA382	A2411
LB8306	AB853-32D		TA382-32D	A5411
LB8060 (4,6,8 WIRE)	AB700 X ETW-4,6,8		TA714CC-4,6,8	
LB8060 (4,6,8 WIRE & MONITOR)	AB700 X ETM-4,6,8		TA714CCXMM-4,6,8	
LB8060 (MONITOR ONLY)	AB700 X ETM		TB714MM	
LB8064 (4,6,8 WIRE)	AB750 X ETW-4,6,8		TA786CC-4,6,8	
LB8064 (4,6,8 WIRE & MONITOR)	AB750 X ETM-4,6,8		TA786CCXMM-4,6,8	
LB8064 (MONITOR ONLY)	AB750 X ETM		TA786MM	



Architectural Grade Hinges

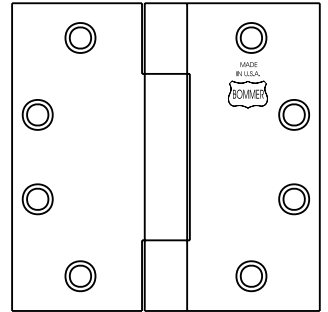
Bommer Industries offers two (2) basic series of BHMA Certified Architectural Grade Hinges

5000 SERIES



5000 Series - Five Knuckle, with Button Tips
8000 Series - Three Knuckle, with Flush Tips

8000 SERIES

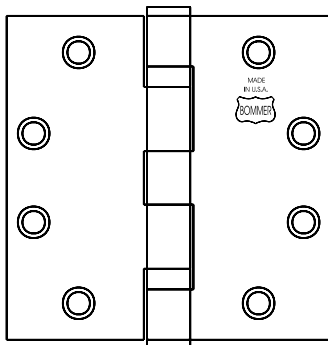


Both the 5000 and 8000 series hinges are available in a wide variety of sizes, weights, types, three base materials (steel, brass and stainless steel) and 20 Architectural finishes. Please contact the factory for any architectural requirement not shown in this catalog.

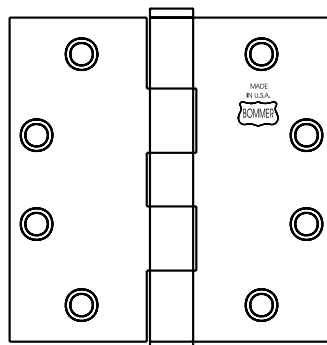
BEARINGS

- BALL BEARING (BB)** Steel Hinge Ball Bearings are made from high grade hardened, chrome alloy steel balls and raceways.
Brass Hinge Ball Bearings are made from high grade stainless steel balls and stainless steel raceways.
Stainless Steel Hinge Ball Bearings are made from high grade stainless steel balls and stainless steel raceways.
Every Bommer bearing is engineered for dependable and permanent service.
- LUBE BEARING (LB)** The Concealed Lube Bearing is made from a special nylon bearing material and is maintenance free and requires little to no oil or grease.

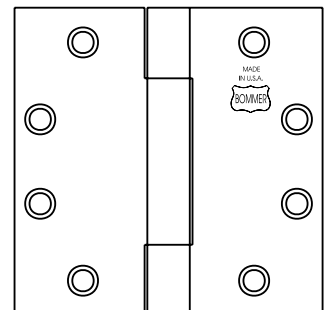
BB5000 SERIES



LB5000 SERIES



LB8000 SERIES



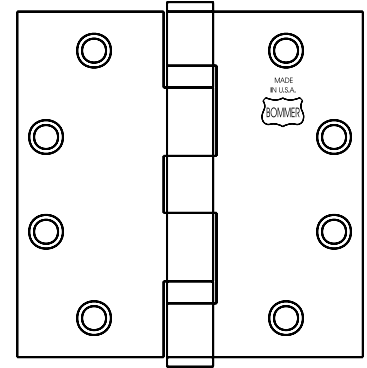


Architectural Grade Hinges

HINGE TYPES

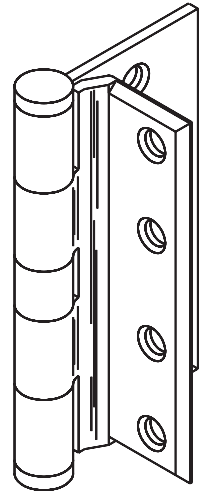
FULL MORTISE 5000 SERIES 8000 SERIES

One leaf is MORTISED in the DOOR edge, the other leaf is MORTISED in the JAMB. This is the most common hinge application.



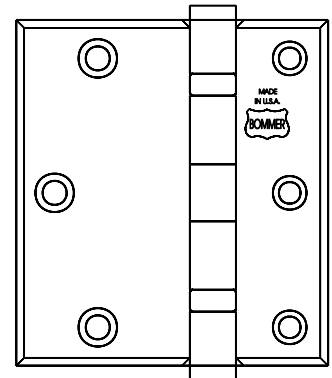
HALF MORTISE 5100 SERIES 8100 SERIES

One leaf is MORTISED in the DOOR edge, the other leaf is applied to the SURFACE (face) of the JAMB. Used when conditions prevent the jamb leaf from being mortised (ie. channel iron jamb).



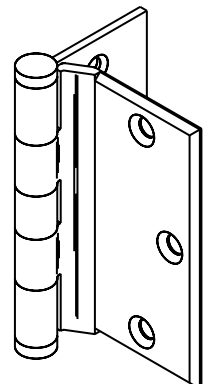
FULL SURFACE 5200 SERIES 8200 SERIES

One leaf is applied to the SURFACE (face) of the DOOR, the other leaf is applied to the SURFACE (face) of the JAMB. Used when conditions prevent both hinge leaves from being mortised (ie. kalamein or mineral core door with channel iron jamb).



HALF SURFACE 5300 SERIES 8300 SERIES

One leaf is applied to the SURFACE (face) of the DOOR, the other leaf is MORTISED in the JAMB. Used when conditions prevent the door leaf from being mortised (ie. kalamein or mineral core door).

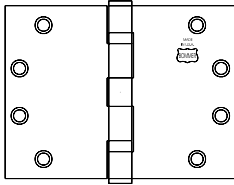




Architectural Grade Hinges

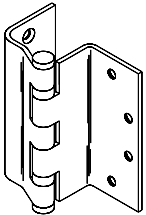
HINGE STYLES

WIDE THROW



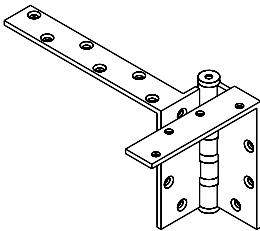
The WIDTH of the hinge is increased (ie. 4.5" x 6"), moving the barrel away from the face of the door. Used when additional THROW is required to clear trim or wall conditions. Only available in Full Mortise type. Designate "1" in the style location of part number (ie. BB5010-456-652)

SWING CLEAR



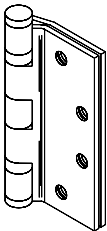
The hinge leaves are formed to locate the barrel in a position that allows the door to SWING CLEAR of the opening when opened to 90 degrees. This permits hospital beds, wheelchairs and other equipment to pass through the opening without hitting the hinge edge of the door. Designate "2" in the style location of part number (ie. BB5020-045-652)

ANCHOR



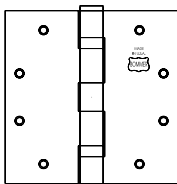
The hinge leaves are mortised in the door and jamb at the top corner, ANCHORING the door in the jamb. Provides increased reinforcement and support at the top corner where stress can occur due to high frequency service and abuse. Only available in Full Mortise type. Designate "3" in the style location of part number (ie. BB5034-545Z01-652)

RAISED BARREL



Both hinge leaves are offset to RAISE the BARREL off the jamb, allowing the door to swing without the knuckles rubbing on the jamb. Used when a door is set deep into a wide frame, prohibiting the use of standard Full Mortise hinges. Only available in Full Mortise type. Designate "4" in the style location of part number (ie. BB5040-450-652)

SLIP IN



One or both hinge leaves are formed to "SLIP IN" a slot(s) provided in the door and/or jamb. Normally used with aluminum doors and jambs. Designate "5" in the style location of part number (ie. BB5050-450G2-652)



Architectural Grade Hinges

SECURITY OPTIONS

NON-REMOVABLE PIN

A threaded set screw located in the barrel is tightened down into a groove in the hinge pin. This prevents the hinge pin from being removed when the door is closed. NRP's are available with Full Mortise, Half Mortise, Full Surface and Half Surface hinges (Designate " N " ie. BB5000-450N-652).

SECURITY STUD

A stud is attached to one leaf of the hinge, and projects into a hole in the other leaf when the door is closed and the leaves are parallel. This helps maintain the door's security even if the hinge pin is removed. Security Studs are available with Full Mortise hinges only (Designate " S " ie. BB5000-450S-652).

NON-REMOVABLE PIN with SECURITY STUD

Both a Non-Removable Pin and a Security Stud are incorporated in a Full Mortise hinge (Designate " A " ie. BB5000-450A-652).

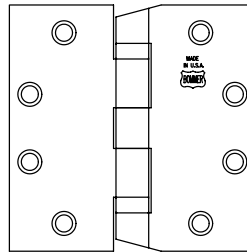
MAXIMUM SECURITY STUD

Studs are attached to the back of both hinge leaves, and project into holes in the hinge reinforcing plates in the door and jamb. These studs secure the leaves to the door and frame and are often used in combination with hospital tip hinges in high security areas and institutions (Designate " M " ie. BB5000-450M-652).

TIP AND PIN OPTIONS

HOSPITAL TIP

The tips of the barrel are " rounded " to help prevent hanging objects on the hinge. The hinge pin cannot be removed. Hospital tips are used in medical areas to facilitate cleaning and to prevent tampering and/or injury in security areas and mental institutions (Designate " H " ie. BB5000-450H-652).



DECORATIVE TIPS

Decorative tips are available. Please contact the factory with your requirements

BALL TIP
Designate "T"



ACORN TIP
Designate "Y"



STEEPLE TIP
Designate "W"



STAINLESS STEEL PIN

Brass and stainless steel hinges are furnished with stainless steel pins. Steel hinges can also be supplied with stainless steel pins upon request and at an additional charge (Designate " J " ie. BB5000-450J-652).

BRASS PIN

Brass pins can be supplied at an additional charge (Designate " K " ie. BB5001-450K-605).

AH-4

"Over 125 Years of Quality"

BOMMER'S numbering system is easy to understand. Product numbers are built from LEFT to RIGHT with each character relating to a specific hinge feature. All hinge numbers begin with the TYPE OF BEARING and follow through, ending with the BHMA or BOMMER FINISH CODE.



“Over 125 Years of Quality”

BEARING	SERIES	TYPE	STYLE	WEIGHT & BASE MATERIAL	SIZE	DOOR OPTIONS	TIP & PIN OPTIONS	SECURITY OPTIONS	ANCHOR & SLIP-IN OPTIONS	ELECTRIC OPTIONS	BHMA/BOMMER FINISH CODE
No Designation = Plain Bearing BB = Ball Bearing LB = Lubricated Bearing	5 = Five Knuckle 8 = Three Knuckle	0 = Full Mortise 1 = Half Mortise 2 = Full Surface 3 = Half Surface	0 = Standard Weight, Steel 1 = Standard Weight, Brass 2 = Standard Weight, Stainless Steel 3 = Standard Weight, Rust Resistant Finish on Steel 4 = Heavy Weight, Steel 5 = Heavy Weight, Brass 6 = Heavy Weight, Stainless Steel 7 = Heavy Weight, Rust Resistant Finish on Steel	0 = Standard 1 = Wide Throw 2 = Swing Clear 3 = Anchor 4 = Raised Barrel 5 = Slip In 6 = Electric 7 = 1/4" Radius Corner 8 = 5/8" Radius Corner 9 = Special	Full Mortise 4" x 4" = 400 Full Mortise 4.5" x 4" = 454 Full Mortise 4.5" x 4.5" = 450 Full Mortise 5" x 5" = 500 Anchor 5" x 4.5" = 545 Full Mortise Hinges are sized height x width. Swing Clear 5" = 050 Half Mortise 5" = 050 Full Surface 6" = 060 Half Surface 4.5" = 045 Swing Clear, Half Mortise, Full Surface & Half Surface Hinges are sized by height only.	R = Square Door V = Beveled Door D = Short Leaf	Tips H = Hospital Tip T = Ball Tip U = Special W = Steeple Tip Y = Acorn Pins: J = Stainless Steel K = Brass	N = Non-removable Pin S = Security Stud A = Non-removable Pin & Security Stud M = Maximum Security Stud	ANCHOR HINGE Z01 = Right Hand Square Door 7 1/2" Door Arm Z02 = Right Hand Square Door 4" Door Arm Z03 = Right Hand Square Door No Door Arm Z04 = Left Hand Square Door 7 1/2" Door Arm Z05 = Left Hand Square Door 4" Door Arm Z06 = Left Hand Square Door No Door Arm Z07 = Right Hand Beveled Door 7 1/2" Door Arm Z08 = Right Hand Beveled Door 4" Door Arm Z09 = Left Hand Beveled Door 7 1/2" Door Arm Z10 = Left Hand Beveled Door 4" Door Arm SLIP-IN HINGES G1 = One Leaf Tapped w/.1875 Swage G2 = Both Leafs Tapped w/.3125 swage	ETW02 = Electric Thru Wire using 2 Wires ETW04 = Electric Thru Wire using 4 Wires ETW06 = Electric Thru Wire using 6 Wires ETW08 = Electric Thru Wire using 8 Wires ETW10 = Electric Thru Wire using 10 Wires ETW12 = Electric Thru Wire using 12 Wires ETM02 = Electric Thru Wire w/ Monitor 4 Wires ETM04 = Electric Thru Wire w/ Monitor 4 Wires ETM06 = Electric Thru Wire w/ Monitor 4 Wires ETM08 = Electric Thru Wire w/ Monitor 4 Wires ETM10 = Electric Thru Wire w/ Monitor 4 Wires EM = Electric Monitor Only (no thru wires)	EXAMPLES 600 = Prime Coat on Steel (USP) 605 = Bright Brass on Brass (US3) 626 = Satin Chromium on Brass (US26D) 630 = Satin Stainless Steel (US32D) 632 = Bright Brass on Steel (US3) 652 = Satin Chromium on Steel (US26D)



Full Mortise Hinges

STANDARD WEIGHT - PLAIN BEARING - 5 KNUCKLE

For medium weight doors / low frequency

5000 STEEL

with steel pin

ANSI A8133

5001 BRASS

with stainless steel pin

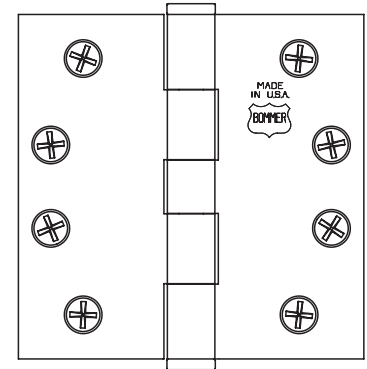
ANSI A2133

5002 STAINLESS STEEL

with stainless steel pin

ANSI A5133

- TEMPLATE
- PLAIN BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
3.5 X 3 (353)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
3.5 X 3.5 (350)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
4 X 4 (400)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4 (454)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4 (504)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

8000 STEEL

with steel pin

ANSI A8133

8001 BRASS

with stainless steel pin

ANSI A2133

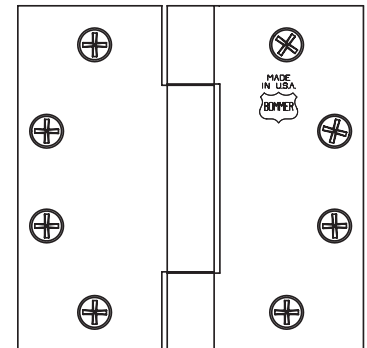
8002 STAINLESS STEEL

with stainless steel pin

ANSI A5133

- TEMPLATE
- PLAIN BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG

For medium weight doors / low frequency



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
*3.5 X 3.5 (350)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
4 X 4 (400)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4 (454)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4 (504)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

*Size
not available in
stainless steel

AH-6

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - BALL BEARING - 5 KNUCKLE

For medium weight doors / average frequency

BB5000 STEEL

bearings are hardened steel raceways and balls
with steel pin **ANSI A8112**

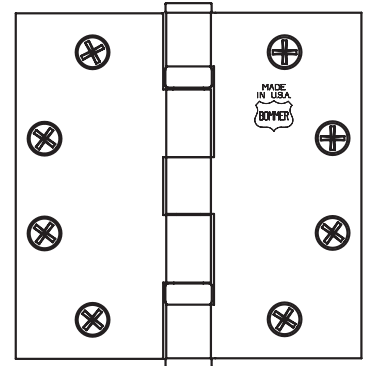
BB5001 BRASS

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A2112**

BB5002 STAINLESS STEEL

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A5112**

- **TEMPLATE**
- **TWO BALL BEARINGS**
- **FIVE KNUCKLE**
- **NON-RISING REMOVABLE PIN**
- **BUTTON TIP PIN & PLUG**



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
3.5 X 3 (353)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
3.5 X 3.5 (350)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
4 X 4 (400)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4 (454)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4 (504)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

LB8000 STEEL

with steel pin
ANSI A8112

LB8001 BRASS

with stainless steel pin
ANSI A2112

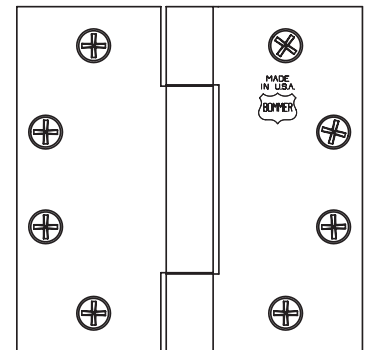
LB8002 STAINLESS STEEL

with stainless steel pin
ANSI A5112

- **TEMPLATE**
- **LUBE BEARING**
- **THREE KNUCKLE**
- **NON-RISING REMOVABLE PIN**
- **FLUSH TIP PIN & PLUG**

STANDARD WEIGHT - LUBE BEARING - 3 KNUCKLE

For medium weight doors / average frequency



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
*3.5 X 3.5 (350)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
4 X 4 (400)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4 (454)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4 (504)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

*Size
not available in
stainless steel

AH-7

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - LUBE BEARING

For medium weight doors / average frequency

LB5000 STEEL

with steel pin

ANSI A8112

LB5001 BRASS

with stainless steel pin

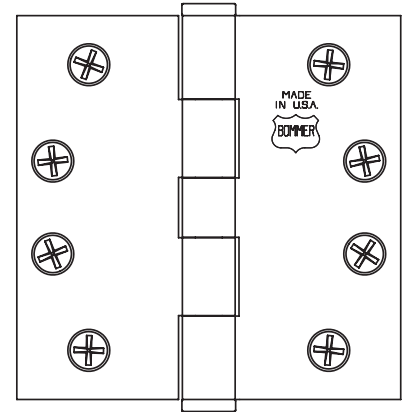
ANSI A2112

LB5002 STAINLESS STEEL

with stainless steel pin

ANSI A5112

- TEMPLATE
- LUBE BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
3.5 X 3.5 (350)	.123	10-24 x 1/2	10 x 1	6	3 ea.	48 ea.
4 X 4 (400)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4 (454)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4 (504)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

HEAVY WEIGHT - LUBE BEARING

For heavy weight doors / high frequency

LB5004 STEEL

with steel pin

ANSI A8111

LB5005 BRASS

with stainless steel pin

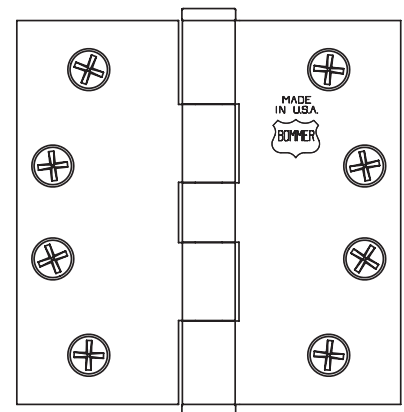
ANSI A2111

LB5006 STAINLESS STEEL

with stainless steel pin

ANSI A5111

- TEMPLATE
- LUBE BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 4 (454)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4.5 X 4.5 (450)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.

AH-8

“Over 125 Years of Quality”



Full Mortise Hinges

HEAVY WEIGHT - BALL BEARING

For heavy weight doors / high frequency

BB5004 STEEL

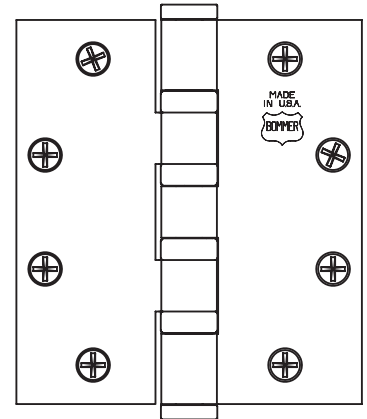
bearings are hardened steel raceways and balls
with steel pin **ANSI A8111**

BB5005 BRASS

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A2111**

BB5006 STAINLESS STEEL

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A5111**



- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING
- REMOVABLE PIN
- BUTTON TIP
- PIN & PLUG

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 4 (454)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4.5 X 4.5 (450)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4 (504)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
6 X 4.5 (645)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.
6 X 5 (605)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.
6 X 6 (600)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.

HEAVY WEIGHT - LUBE BEARING

For heavy weight doors / high frequency

LB8004 STEEL

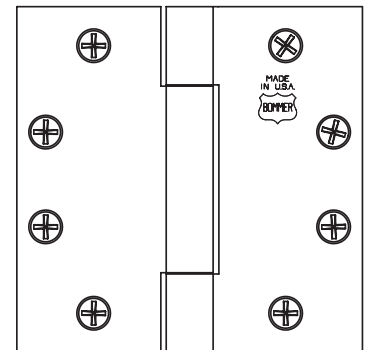
with steel pin
ANSI A8111

LB8005 BRASS

with stainless steel pin
ANSI A2111

LB8006 STAINLESS STEEL

with stainless steel pin
ANSI A5111



- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING
- REMOVABLE PIN
- FLUSH TIP PIN
- & PLUG

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 4 (454)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4.5 X 4.5 (450)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4 (504)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 5 (500)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
6 X 4.5 (645)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.
6 X 5 (605)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.
6 X 6 (600)	.203	1/4-20 x 1/2	14 x 1 1/2	10	3 ea.	18 ea.

AH-9

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - PLAIN BEARING - WIDE THROW

For medium weight doors / low frequency, used when additional throw is needed to clear trim or wall conditions.

5010 STEEL

with steel pin

ANSI A8133

5011 BRASS

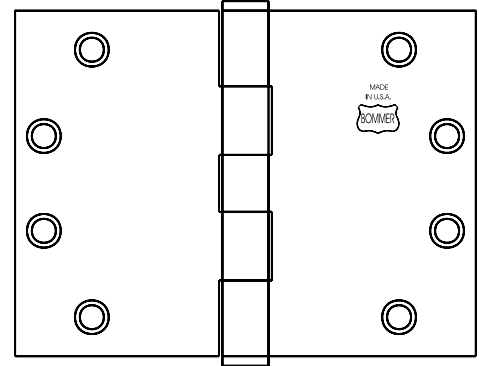
with stainless steel pin

ANSI A2133

5012 STAINLESS STEEL

with stainless steel pin

ANSI A5133



- TEMPLATE
- PLAIN BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
3.5 X 5 (355)	.123	10-24 x 1/2	10 x 1	6	3 ea.	36 ea.
3.5 X 6 (356)	.123	10-24 x 1/2	10 x 1	6	3 ea.	36 ea.
4 X 5 (405)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4 X 6 (406)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4 X 7 (407)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 5 (455)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

STANDARD WEIGHT - PLAIN BEARING - WIDE THROW

8010 STEEL

with steel pin

ANSI A8112

8011 BRASS

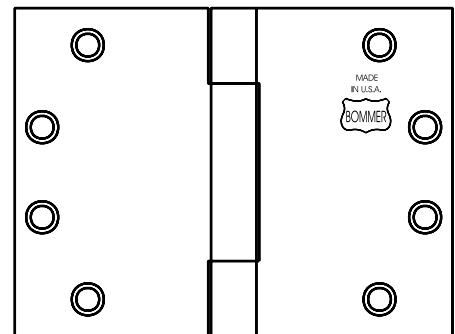
with stainless steel pin

ANSI A2112

8012 STAINLESS STEEL

with stainless steel pin

ANSI A5112



- TEMPLATE
- PLAIN BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 5 (455)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

AH-10

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - BALL BEARING - WIDE THROW

For medium weight doors / average frequency, used when additional throw is needed to clear trim or wall conditions

BB5010 STEEL

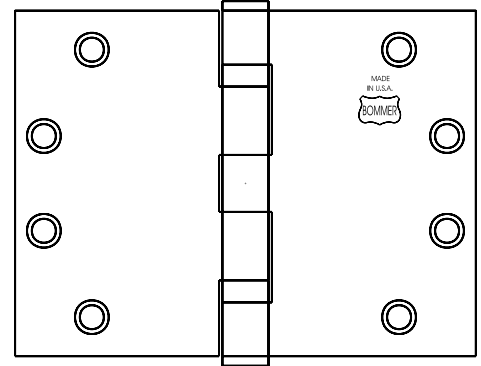
bearings are hardened steel raceways and balls
with steel pin **ANSI A8112**

BB5011 BRASS

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A2112**

BB5012 STAINLESS STEEL

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A5112**



- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING
- REMOVABLE PIN
- BUTTON TIP PIN & PLUG

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
3.5 X 5 (355)	.123	10-24 x 1/2	10 x 1	6	3 ea.	36 ea.
3.5 X 6 (356)	.123	10-24 x 1/2	10 x 1	6	3 ea.	36 ea.
4 X 5 (405)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4 X 6 (406)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
4 X 7 (407)	.130	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 5 (455)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

STANDARD WEIGHT - LUBE BEARING - WIDE THROW

For medium weight doors / average frequency, used when additional throw is needed to clear trim or wall conditions

LB8010 STEEL

with steel pin
ANSI A8112

LB8011 BRASS

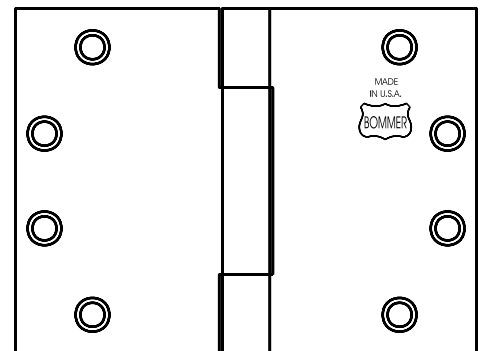
with stainless steel pin
ANSI A2112

LB8012 STAINLESS STEEL

with stainless steel pin

ANSI A5112

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING
- REMOVABLE PIN
- FLUSH TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 5 (455)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

AH-11

“Over 125 Years of Quality”



Full Mortise Hinges

HEAVY WEIGHT - BALL BEARING - WIDE THROW

For heavy weight doors / high frequency, used when additional throw is needed to clear trim or wall conditions

BB5014 STEEL

bearings are hardened steel raceways and balls
with steel pin **ANSI A8111**

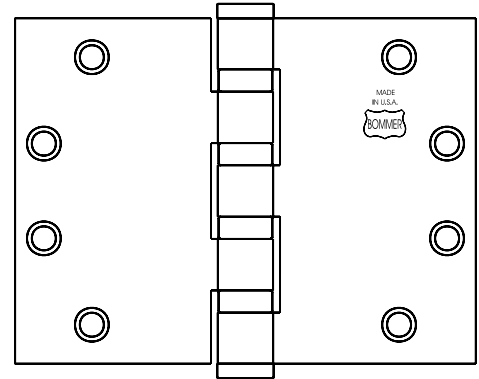
BB5015 BRASS

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A2111**

BB5016 STAINLESS STEEL

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A5111**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING
- REMOVABLE PIN
- BUTTON TIP
- PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 5 (455)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

HEAVY WEIGHT - LUBE BEARING - WIDE THROW

For heavy weight doors / high frequency, used when additional throw is needed to clear trim or wall conditions

LB8014 STEEL

with steel pin
ANSI A8111

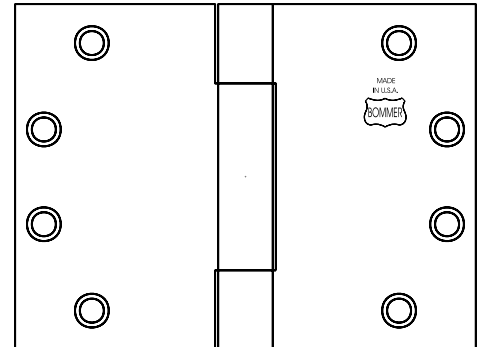
LB8015 BRASS

with stainless steel pin
ANSI A2111

LB8016 STAINLESS STEEL

with stainless steel pin
ANSI A5111

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 5 (455)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
4.5 X 6 (456)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 7 (457)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
4.5 X 8 (458)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 6 (506)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 7 (507)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.
5 X 8 (508)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	18 ea.

AH-12

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - SWING CLEAR

For medium weight doors / average frequency. Used where conditions require the door to completely clear the opening at 90 degrees.

BB5020 STEEL

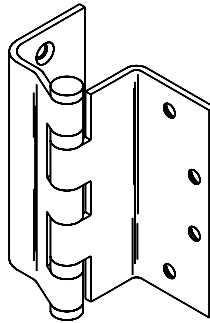
bearings are hardened steel raceways and balls with steel pin **ANSI A8122**

BB5021 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2122**

BB5022 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5122**



LB8020 STEEL

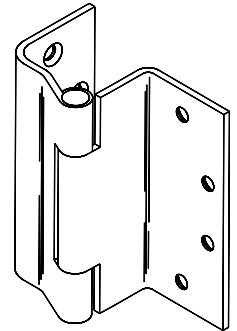
with steel pin **ANSI A8122**

LB8021 BRASS

with stainless steel pin **ANSI A2122**

LB8022 STAINLESS STEEL

with stainless steel pin **ANSI A5122**



- TEMPLATE
- TWO BALL BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- USE ON 1.75" DOOR MAXIMUM
- SPECIFY DOOR EDGE SQUARE (R) OR BEVELED (V)



- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- USE ON 1.75" DOOR MAXIMUM
- SPECIFY DOOR EDGE SQUARE (R) OR BEVELED (V)



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 (045)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
5 (050)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

HEAVY WEIGHT - SWING CLEAR

For heavy weight doors / high frequency. Used where conditions require the door to completely clear the opening at 90 degrees.

BB5024 STEEL

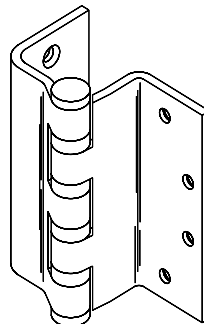
bearings are hardened steel raceways and balls with steel pin **ANSI A8121**

BB5025 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2121**

BB5026 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5121**



LB8024 STEEL

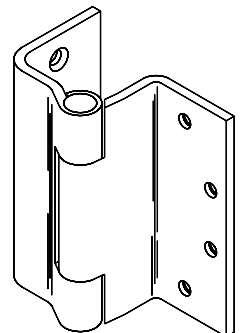
with steel pin **ANSI A8121**

LB8025 BRASS

with stainless steel pin **ANSI A2121**

LB8026 STAINLESS STEEL

with stainless steel pin **ANSI A5121**



- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- SPECIFY DOOR EDGE SQUARE (R) OR BEVELED (V)



- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- SPECIFY DOOR EDGE SQUARE (R) OR BEVELED (V)



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 (045)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.
5 (050)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

AH-13

"Over 125 Years of Quality"



Full Mortise Hinges

HEAVY WEIGHT - BALL BEARING - ANCHOR TYPE

For heavy weight doors subject to high frequency service and abuse, Anchor hinges provide increased reinforcement at the door and jamb where stress can occur.

BB5034 STEEL

bearings are hardened steel raceways and balls
with steel pin **ANSI A8551**

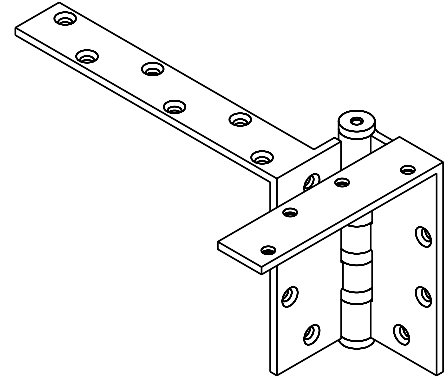
BB5035 BRASS

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A2551**

BB5036 STAINLESS STEEL

bearings are stainless steel raceways and balls
with stainless steel pin **ANSI A5551**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLES
- NON-REMOVABLE PIN STANDARD
- BUTTON TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	18	3 ea.	6 ea.

Anchor hinges are used at the top of the door only and are sold separately.

Additional heavy weight, full mortise hinges - BB5004, LB8004, BB5005, LB8005, BB5006, LB8006 5 x 4.5 (545) - should be used in the other hinge locations.

The hinge pin is inserted into the bottom of the barrel and held in place by a set screw (NRP FEATURE).

When ordering, please specify the following:

1. Hand of door (RH or LH)
2. Door hinge edge (square or beveled).
3. Door reinforcing arm length 7.5" or 4" (door arm can be omitted from door leaf if required).

HEAVY WEIGHT - LUBE BEARING - ANCHOR TYPE

For heavy weight doors subject to high frequency service and abuse, Anchor hinges provide increased reinforcement at the door and jamb where stress can occur.

LB8034 STEEL

with steel pin
ANSI A8551

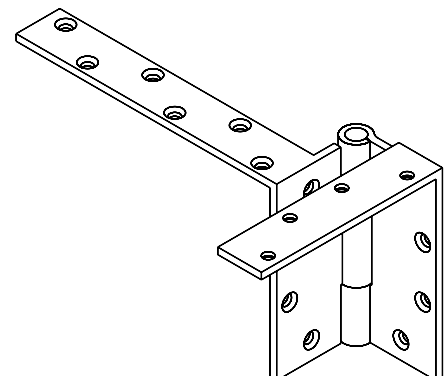
LB8035 BRASS

with stainless steel pin
ANSI A2551

LB8036 STAINLESS STEEL

with stainless steel pin
ANSI A5551

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-REMOVABLE PIN STANDARD
- FLUSH TIP PIN & PLUG



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	18	3 ea.	6 ea.

AH-14

"Over 125 Years of Quality"



Full Mortise Hinges

STANDARD WEIGHT - RAISED BARREL

For medium weight doors / average frequency. Used where doors are set deep onto a wide frame.

BB5040 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8112**

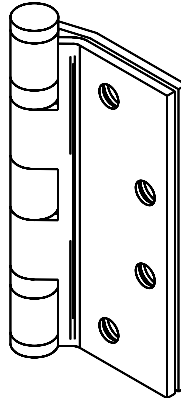
BB5041 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2112**

BB5042 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5112**

- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- USE ON 1.75" DOOR MAXIMUM
- CAN BE MORTISED OR SURFACE MOUNTED TO JAMB



LB8040 STEEL

with steel pin **ANSI A8112**

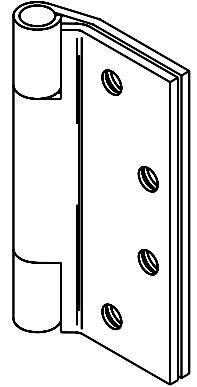
LB8041 BRASS

with stainless steel pin **ANSI A2112**

LB8042 STAINLESS STEEL

with stainless steel pin **ANSI A5112**

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- USE ON 1.75" DOOR MAXIMUM
- CAN BE MORTISED OR SURFACE MOUNTED TO JAMB



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 4.5 (450)	.134	12-24 x 1/2	12 x 1 1/4	8	3 ea.	48 ea.
5 X 4.5 (545)	.146	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.

HEAVY WEIGHT - RAISED BARREL

For heavy weight doors / high frequency. Used where doors are set deep into a wide frame.

BB5044 STEEL

bearings are stainless steel raceways and balls with steel pin **ANSI A8111**

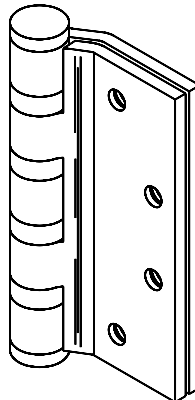
BB5045 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2111**

BB5046 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5111**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- CAN BE MORTISED OR SURFACE MOUNTED TO JAMB



LB8044 STEEL

with steel pin **ANSI A8111**

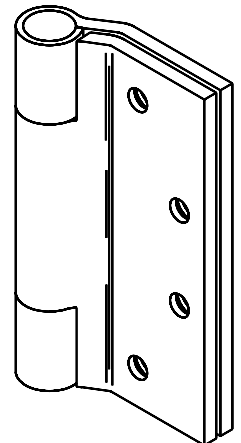
LB8045 BRASS

with stainless steel pin **ANSI A2111**

LB8046 STAINLESS STEEL

with stainless steel pin **ANSI A5111**

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- CAN BE MORTISED OR SURFACE MOUNTED TO JAMB



SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
		MACHINE	WOOD		BOX	CASE
4.5 X 4.5 (450)	.180	12-24 x 1/2	12 x 1 1/4	8	3 ea.	36 ea.
5 X 4.5 (545)	.190	12-24 x 1/2	12 x 1 1/4	8	3 ea.	24 ea.

“Over 125 Years of Quality”



Full Mortise Hinges

STANDARD WEIGHT - SLIP IN

For medium weight doors / low frequency. Used for aluminum doors and frames.
Hinge leaves slip into a slot in the door and/or frame.

5050 STEEL

with steel pin

ANSI A8133

5051 BRASS

with stainless steel pin

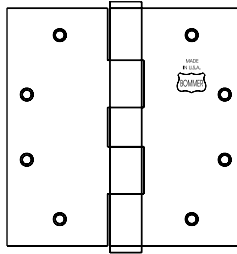
ANSI A2133

5052 STAINLESS STEEL

with stainless steel pin

ANSI A5133

- TEMPLATE
- PLAIN BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



8050 STEEL

with steel pin

ANSI A8112

8051 BRASS

with stainless steel pin

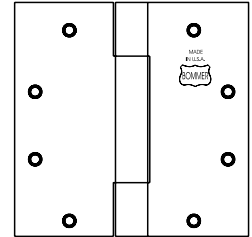
ANSI A2112

8052 STAINLESS STEEL

with stainless steel pin

ANSI A5112

- TEMPLATE
- PLAIN BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



When ordering please specify the following : (G1) One leaf tapped with .1875 swage.
(G2) Both leaves tapped with .3125 swage.

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE	NUMBER OF HOLES	QUANTITY	
		MACHINE		BOX	CASE
4.5 X 4 (454)	.134	12-24 x 1/2	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	8	3 ea.	48 ea.

STANDARD WEIGHT - SLIP IN

For medium weight doors / average frequency. Used for aluminum doors and frames.
Hinge leaves slip into a slot in the door and/or frame.

BB5050 STEEL

bearings are hardened steel raceways and balls

with steel pin **ANSI A8112**

BB5051 BRASS

bearings are stainless steel raceways and balls

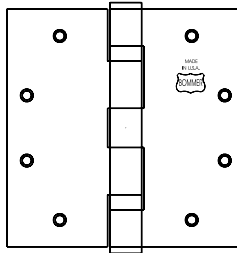
with stainless steel pin **ANSI A2112**

BB5052 STAINLESS STEEL

bearings are stainless steel raceways and balls

with stainless steel pin **ANSI A5112**

- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



LB8050 STEEL

with steel pin

ANSI A8112

LB8051 BRASS

with stainless steel pin

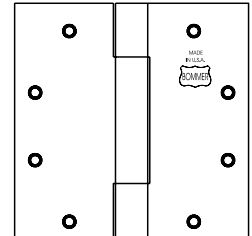
ANSI A2112

LB8052 STAINLESS STEEL

with stainless steel pin

ANSI A5112

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



When ordering please specify the following : (G1) One leaf tapped with .1875 swage.
(G2) Both leaves tapped with .3125 swage.

SIZE OPEN HEIGHT & WIDTH	GAUGE	SCREW SIZE	NUMBER OF HOLES	QUANTITY	
		MACHINE		BOX	CASE
4.5 X 4 (454)	.134	12-24 x 1/2	8	3 ea.	48 ea.
4.5 X 4.5 (450)	.134	12-24 x 1/2	8	3 ea.	48 ea.

AH-16

“Over 125 Years of Quality”



Full Mortise Electric Hinges

STANDARD WEIGHT - BALL BEARING - ELECTRIC HINGE

BB5060 STEEL

for indoor use
bearings are hardened steel raceways and balls
with steel pin
ANSI A8112

BB5061 BRASS

for outdoor and indoor use
bearings are stainless steel raceways and balls
with stainless steel pin
ANSI A2112

BB5062 STAINLESS STEEL

for outdoor and indoor use
bearings are stainless steel raceways and balls
with stainless steel pin
ANSI A5112

- **TEMPLATE**
- **TWO BALL BEARINGS**
- **FIVE KNUCKLES**
- **NON-REMOVABLE BUTTON TIP PIN & PLUG**
- **12" WIRE LEADS STANDARD, 48" WIRE LEADS OPTIONAL**
- **LISTED FOR SECURITY EQUIPMENT AMQV**
- **TESTED TO UL 634 FOR SAFETY CONNECTORS AND SWITCHES**
- **UL TESTED TO ANSI/BHMA A156.1-2006**
- **UL CYCLE TESTED TO 350,000 CYCLES**
- **BOMMER ENDURANCE CYCLE TESTED TO 1,500,000 CYCLES**

POWER TRANSFER OPTIONS

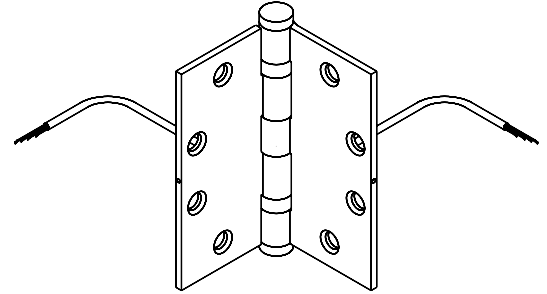
- Concealed electric through wires (2, 4, 6, 8, 10, 12)
 - ♦ The ETW is for doors requiring low voltage electric current transfer capability only
 - ♦ Through wires 22 gauge for 2 wire hinge (18 gauge optional)
 - ♦ Through wires 28 gauge for (4, 6, 8, 10, 12) wire hinges
- Concealed electric magnetic monitor
 - ♦ The EM is for doors requiring monitoring capability only
 - ♦ Uses an enclosed switch and adjustable magnet to provide control for monitoring sensitivity
- Concealed electric through wires (2, 4, 6, 8) with magnetic monitor
 - ♦ The ETM is for doors requiring both low voltage electric current transfer and monitoring capability
- Contact factory for wire options

MAXIMUM WIRE RATING FOR THROUGH WIRE HINGES

- 50 VOLTS AC/DC
- 3.5 AMPS CONTINUOUS
- 16 AMP PULSE

Notes for Electric Hinges:

Consult factory on Swing-Clear Hinges or other electrical information



**ELECTRIC HINGES MUST BE
NON-LOAD BEARING
MOUNT IN CENTER POSITION ONLY.**

SIZE OPEN HEIGHT & WIDTH		GAUGE
4 X 4	(400)	.130
4 X 5	(405)	.130
4 X 6	(406)	.130
4 X 7	(407)	.130
4.5 X 4	(454)	.134
4.5 X 4.5	(450)	.134
4.5 X 5	(455)	.134
4.5 X 6	(456)	.134
4.5 X 7	(457)	.134
4.5 X 8	(458)	.134
5 X 4	(504)	.146
5 X 4.5	(545)	.146
5 X 5	(500)	.146
5 X 6	(506)	.146
5 X 7	(507)	.146
5 X 8	(508)	.146



Full Mortise Electric Hinges

STANDARD WEIGHT - LUBE BEARING - ELECTRIC HINGE

LB8060 STEEL

for indoor use
with steel pin

ANSIA8112

LB8061 BRASS

for outdoor and indoor use
with stainless steel pin

ANSIA2112

LB8062 STAINLESS STEEL

for outdoor and indoor use
with stainless steel pin

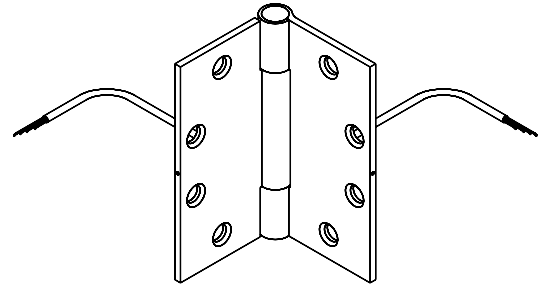
ANSIA5112

- **TEMPLATE**
- **LUBE BEARING**
- **FIVE KNUCKLES**
- **NON-REMOVABLE BUTTON TIP PIN & PLUG**
- **12" WIRE LEADS STANDARD, 48" WIRE LEADS OPTIONAL**
- **LISTED FOR SECURITY EQUIPMENT AMQV**
- **TESTED TO UL 634 FOR SAFETY CONNECTORS AND SWITCHES**
- **UL TESTED TO ANSI/BHMA A156.1-2006**
- **UL CYCLE TESTED TO 350,000 CYCLES**
- **BOMMER ENDURANCE CYCLE TESTED TO 1,500,000 CYCLES**

SECURITY



BP6607
Equipment



**ELECTRIC HINGES MUST BE
NON-LOAD BEARING.
MOUNT IN CENTER POSITION ONLY.**

SIZE OPEN HEIGHT & WIDTH		GAUGE
4 X 4	(400)	.130
4 X 5	(405)	.130
4 X 6	(406)	.130
4 X 7	(407)	.130
4.5 X 4	(454)	.134
4.5 X 4.5	(450)	.134
4.5 X 5	(455)	.134
4.5 X 6	(456)	.134
4.5 X 7	(457)	.134
4.5 X 8	(458)	.134
5 X 4	(504)	.146
5 X 4.5	(545)	.146
5 X 5	(500)	.146
5 X 6	(506)	.146
5 X 7	(507)	.146
5 X 8	(508)	.146

POWER TRANSFER OPTIONS

- Concealed electric through wires (2, 4, 6, 8, 10, 12)
 - ♦ The ETW is for doors requiring low voltage electric current transfer capability only
 - ♦ Through wires 22 gauge for 2 wire hinge (18 gauge optional)
 - ♦ Through wires 28 gauge for (4, 6, 8, 10, 12) wire hinges
- Concealed electric magnetic monitor
 - ♦ The EM is for doors requiring monitoring capability only
 - ♦ Uses an enclosed switch and adjustable magnet to provide control for monitoring sensitivity
- Concealed electric through wires (2, 4, 6, 8) with magnetic monitor
 - ♦ The ETM is for doors requiring both low voltage electric current transfer and monitoring capability
- Contact factory for wire options

MAXIMUM WIRE RATING FOR THROUGH WIRE HINGES

- 50 VOLTS AC/DC
- 3.5 AMPS CONTINUOUS
- 16 AMP PULSE

Notes for Electric Hinges:

Consult factory on Swing-Clear Hinges or other electrical information

AH-18

"Over 125 Years of Quality"



Full Mortise Electric Hinges

HEAVY WEIGHT - BALL BEARING - ELECTRIC HINGE

BB5064 STEEL

for indoor use
bearings are hardened steel raceways and balls
with steel pin
ANSIA8111

BB5065 BRASS

for outdoor and indoor use
bearings are stainless steel raceways and balls
with stainless steel pin
ANSIA2111

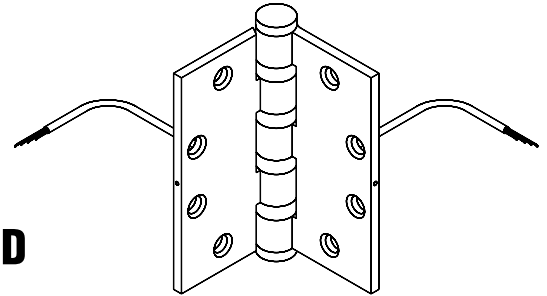
BB5066 STAINLESS STEEL

for outdoor and indoor use
bearings are stainless steel raceways and balls
with stainless steel pin
ANSIA5111

- **TEMPLATE**
- **FOUR BALL BEARINGS**
- **FIVE KNUCKLES**
- **NON-REMOVABLE BUTTON TIP PIN & PLUG**
- **12" WIRE LEADS STANDARD, 48" WIRE LEADS OPTIONAL**
- **LISTED FOR SECURITY EQUIPMENT AMQV**
- **TESTED TO UL 634 FOR SAFETY CONNECTORS AND SWITCHES**
- **UL TESTED TO ANSI/BHMA A156.1-2006**
- **UL CYCLE TESTED TO 350,000 CYCLES**
- **BOMMER ENDURANCE CYCLE TESTED TO 1,500,000 CYCLES**



BP6607
Equipment



**ELECTRIC HINGES MUST BE
NON-LOAD BEARING.
MOUNT IN CENTER POSITION ONLY.**

SIZE OPEN HEIGHT & WIDTH		GAUGE
4.5 X 4	(454)	.180
4.5 X 4.5	(450)	.180
4.5 X 5	(455)	.180
4.5 X 6	(456)	.180
4.5 X 7	(457)	.180
4.5 X 8	(458)	.180
5 X 4	(504)	.190
5 X 4.5	(545)	.190
5 X 5	(500)	.190
5 X 6	(506)	.190
5 X 7	(507)	.190
5 X 8	(508)	.190

POWER TRANSFER OPTIONS

- Concealed electric through wires (2, 4, 6, 8, 10, 12)
 - ♦ The ETW is for doors requiring low voltage electric current transfer capability only
 - ♦ Through wires 22 gauge for 2 wire hinge (18 gauge optional)
 - ♦ Through wires 28 gauge for (4, 6, 8, 10, 12) wire hinges
- Concealed electric magnetic monitor
 - ♦ The EM is for doors requiring monitoring capability only
 - ♦ Uses an enclosed switch and adjustable magnet to provide control for monitoring sensitivity
- Concealed electric through wires (2, 4, 6, 8) with magnetic monitor
 - ♦ The ETM is for doors requiring both low voltage electric current transfer and monitoring capability
- Contact factory for wire options

MAXIMUM WIRE RATING FOR THROUGH WIRE HINGES

- 50 VOLTS AC/DC
- 3.5 AMPS CONTINUOUS
- 16 AMP PULSE

Notes for Electric Hinges:

Consult factory on Swing-Clear Hinges or other electrical information

“Over 125 Years of Quality”



Full Mortise Electric Hinges

HEAVY WEIGHT - LUBE BEARING - ELECTRIC HINGE

LB8064 STEEL

for indoor use
with steel pin
ANSIA8111

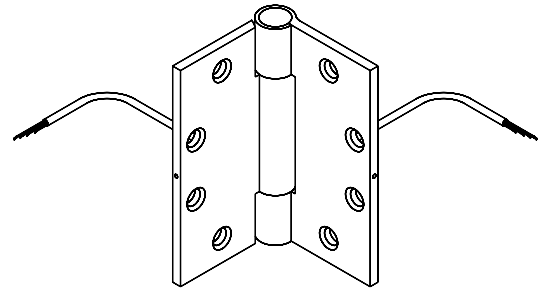
LB8065 BRASS

for outdoor and indoor use
with stainless steel pin
ANSIA2111

LB8066 STAINLESS STEEL

for outdoor and indoor use
with stainless steel pin
ANSIA5111

- TEMPLATE
- LUBE BEARING
- FIVE KNUCKLES
- NON-REMOVABLE BUTTON TIP PIN & PLUG
- 12" WIRE LEADS STANDARD, 48" WIRE LEADS OPTIONAL
- LISTED FOR SECURITY EQUIPMENT AMQV
- TESTED TO UL 634 FOR SAFETY CONNECTORS AND SWITCHES
- UL TESTED TO ANSI/BHMA A156.1-2006
- UL CYCLE TESTED TO 350,000 CYCLES
- BOMMER ENDURANCE CYCLE TESTED TO 1,500,000 CYCLES



**ELECTRIC HINGES MUST BE
NON-LOAD BEARING.
MOUNT IN CENTER POSITION ONLY.**

SIZE OPEN HEIGHT & WIDTH		GAUGE
4.5 X 4	(454)	.180
4.5 X 4.5	(450)	.180
4.5 X 5	(455)	.180
4.5 X 6	(456)	.180
4.5 X 7	(457)	.180
4.5 X 8	(458)	.180
5 X 4	(504)	.190
5 X 4.5	(545)	.190
5 X 5	(500)	.190
5 X 6	(506)	.190
5 X 7	(507)	.190
5 X 8	(508)	.190

POWER TRANSFER OPTIONS

- Concealed electric through wires (2, 4, 6, 8, 10, 12)
 - ♦ The ETW is for doors requiring low voltage electric current transfer capability only
 - ♦ Through wires 22 gauge for 2 wire hinge (18 gauge optional)
 - ♦ Through wires 28 gauge for (4, 6, 8, 10, 12) wire hinges
- Concealed electric magnetic monitor
 - ♦ The EM is for doors requiring monitoring capability only
 - ♦ Uses an enclosed switch and adjustable magnet to provide control for monitoring sensitivity
- Concealed electric through wires (2, 4, 6, 8) with magnetic monitor
 - ♦ The ETM is for doors requiring both low voltage electric current transfer and monitoring capability
- Contact factory for wire options

MAXIMUM WIRE RATING FOR THROUGH WIRE HINGES

- 50 VOLTS AC/DC
- 3.5 AMPS CONTINUOUS
- 16 AMP PULSE

Notes for Electric Hinges:

Consult factory on Swing-Clear Hinges or other electrical information

AH-20

"Over 125 Years of Quality"

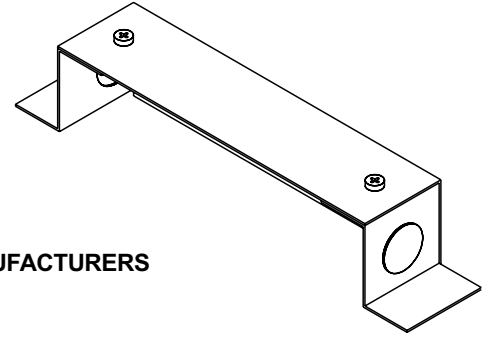


Full Mortise Electric Hinges

Mortar Box for Electric Hinges

BB5060-MB-1 GALVANIZED STEEL

- SHIELDS ELECTRIC FITTINGS FROM MORTAR
- FOR USE WITH BOMMER 5000 & 8000 SERIES ELECTRIC HINGES
- FITS HINGE REINFORCEMENTS FOR 4", 4 1/2" OR 5" HINGES
- SERVICED THROUGH REMOVABLE BACK
- TOP & BOTTOM KNOCKOUTS FOR STANDARD CONDUITS
- INSTALLED ON THE JOB PRIOR TO SETTING JAMB OR AT HOLLOW METAL MANUFACTURERS



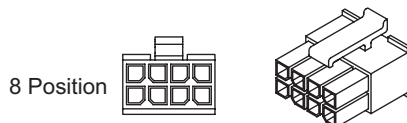
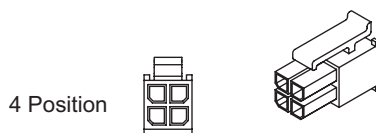
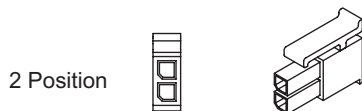
ELECTRIC HINGE CONNECTORS

Bommer's New Electrical Connector Option

The full mortise electrical hinges with Molex Micro Fit 3.0 connectors allow for simpler and quicker installations. The connector eliminates the need for separate or exposed wiring.

- (ETW02) Electric Through Wire 02 uses 22AWG wire and a 2 position connector
- (ETW04) Electric Through Wire 04 uses 28AWG wire and a 4 position connector
- (ETW06) Electric Through Wire 06 uses 28AWG wire and both a 2 & 4 position connector
- (ETW08) Electric Through Wire 08 uses 28AWG wire and a 8 position connector
- (ETW10) Electric Through Wire 10 uses 28AWG wire and both a 2 & 8 position connector
- (ETW12) Electric Through Wire 12 uses 28AWG wire and both a 4 & 8 position connector

Molex Micro Fit 3.0 Connectors



MAXIMUM RATING FOR CONNECTORS

- 24 VOLTS AC/DC
- 1 AMPS CONTINUOUS
- 16 AMP IN RUSH FOR 820 MILLISECONDS



Half Mortise Hinges

STANDARD WEIGHT - PLAIN BEARING

For medium weight doors / low frequency. Normally used when door is hung in a channel iron jamb.

5100 STEEL

with steel pin

ANSI A8233

5101 BRASS

with stainless steel pin

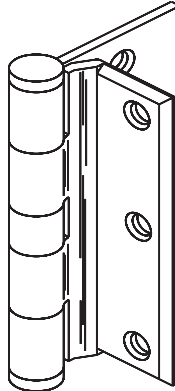
ANSI A2233

5102 STAINLESS STEEL

with stainless steel pin

ANSI A5233

- TEMPLATE
- PLAIN BEARING
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



8100 STEEL

with steel pin

ANSI A8133

8101 BRASS

with stainless steel pin

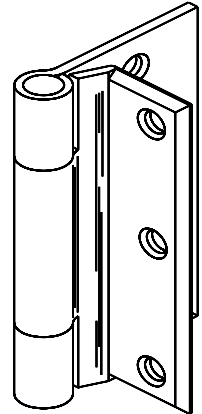
ANSI A2133

8102 STAINLESS STEEL

with stainless steel pin

ANSI A5133

- TEMPLATE
- PLAIN BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	JAMB LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.134	2.062	1.500	.438	12-24FH x 1/2	12-24OH x 1/2	7	3 ea.	24 ea.

STANDARD WEIGHT

For medium weight doors / average frequency. Normally used when door is hung in a channel iron jamb.

BB5100 STEEL

bearings are hardened steel raceways and balls

with steel pin **ANSI A8212**

BB5101 BRASS

bearings are stainless steel raceways and balls

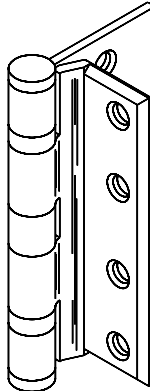
with stainless steel pin **ANSI A2212**

BB5102 STAINLESS STEEL

bearings are stainless steel raceways and balls

with stainless steel pin **ANSI A5212**

- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



LB8100 STEEL

with steel pin

ANSI A8212

LB8101 BRASS

with stainless steel pin

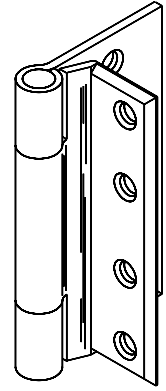
ANSI A2212

LB8102 STAINLESS STEEL

with stainless steel pin

ANSI A5212

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	JAMB LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.134	2.062	1.500	.438	12-24FH x 1/2	12-24OH x 1/2	7	3 ea.	24 ea.
5 (050)	.146	2.062	1.500	.438	12-24FH x 1/2	12-24OH x 1/2	8	3 ea.	24 ea.

AH-22

“Over 125 Years of Quality”



Half Mortise Hinges HEAVY WEIGHT

For heavy weight doors / high frequency. Normally used when door is hung in a channel iron jamb.

BB5104 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8211**

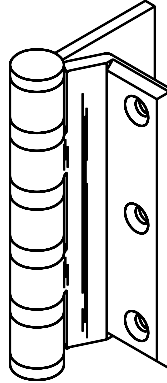
BB5105 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2211**

BB5106 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5211**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



LB8104 STEEL

with steel pin
ANSI A8211

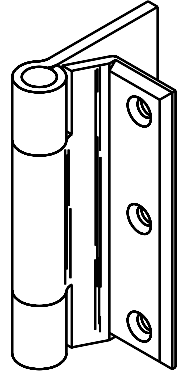
LB8105 BRASS

with stainless steel pin
ANSI A2211

LB8106 STAINLESS STEEL

with stainless steel pin
ANSI A5211

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLES
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	JAMB LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.180	2.125	1.500	.500	12-24FH x 1/2	12-24OH x 1/2	7	3 ea.	24 ea.
5 (050)	.190	2.125	1.500	.500	12-24FH x 1/2	12-24OH x 1/2	8	3 ea.	24 ea.
6 (060)	.203	2.125	1.500	.500	1/4-20FHx 1/2	1/4-20OHx 1/2	9	3 ea.	24 ea.

HEAVY WEIGHT - BALL BEARING - SWING CLEAR

For heavy weight doors / high frequency. Used where conditions require the door to clear the opening at 90 degrees.

BB5124 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8221**

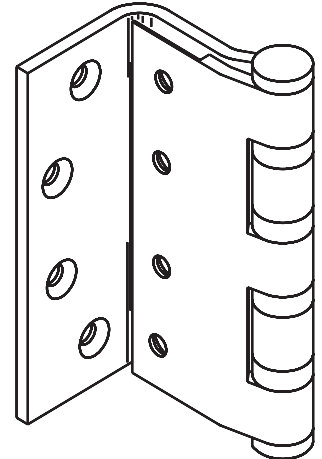
BB5125 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2221**

BB5126 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5221**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- SPECIFY DOOR EDGE SQUARE (R) OR BEVELED (V)



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	JAMB LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
5 (050)	.190	2.125	1.515	.500	12-24FH x 1/2	12-24OH x 1/2	9	3 ea.	24 ea.

AH-23

“Over 125 Years of Quality”



Full Surface Hinges STANDARD WEIGHT

For medium weight doors / average frequency. Normally used on composite core doors with channel iron jambs. Thru-bolts and grommet nuts supplied for door leaf.

BB5200 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8312**

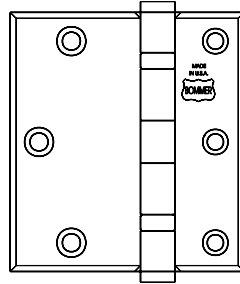
BB5201 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2312**

BB5202 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5312**

- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



LB8200 STEEL

with steel pin **ANSI A8312**

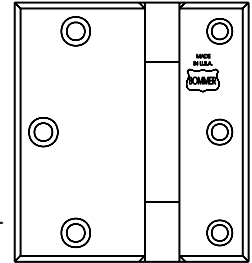
LB8201 BRASS

with stainless steel pin **ANSI A2312**

LB8202 STAINLESS STEEL

with stainless steel pin **ANSI A5312**

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	DOOR LEAF OFFSET	JAMB LEAF WIDTH	JAMB LEAF OFFSET	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
						DOOR THRU BOLTS	JAMB MACHINE SCREWS		BOX	CASE
4.5 (045)	.134	2.562	.562	1.500	.438	1/4-20OH x 2	12-24OH x 1/2	7	3 ea.	48 ea.
5 (050)	.146	2.875	.562	1.500	.438	1/4-20OH x 2	12-24OH x 1/2	8	3 ea.	24 ea.

HEAVY WEIGHT - BALL BEARING

For heavy weight doors / high frequency. Normally used on composite core doors with channel iron jambs. Thru-bolts and grommet nuts supplied for door leaf.

BB5204 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8311**

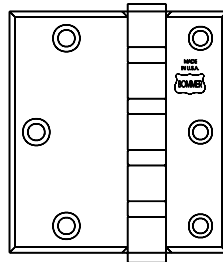
BB5205 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2311**

BB5206 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5311**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



LB8204 STEEL

with steel pin **ANSI A8311**

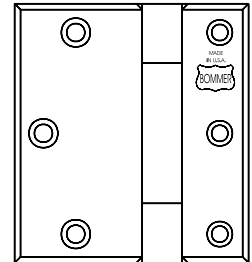
LB8205 BRASS

with stainless steel pin **ANSI A2311**

LB8206 STAINLESS STEEL

with stainless steel pin **ANSI A5311**

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	DOOR LEAF OFFSET	JAMB LEAF WIDTH	JAMB LEAF OFFSET	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
						DOOR THRU BOLTS	JAMB MACHINE SCREWS		BOX	CASE
4.5 (045)	.180	2.562	.625	1.500	.500	1/4-20OH x 2	12-24OH x 1/2	6	3 ea.	36 ea.
5 (050)	.190	2.875	.625	1.500	.500	1/4-20OH x 2	12-24OH x 1/2	8	3 ea.	24 ea.
6 (060)	.203	3.250	.625	1.500	.500	1/4-20OH x 2	1/4-20OH x 1/2	9	3 ea.	18 ea.

AH-24

“Over 125 Years of Quality”



Full Surface Hinges

HEAVY WEIGHT - SWING CLEAR

For heavy weight doors / high frequency. Used where conditions require the door to clear the opening at 90 degrees.

BB5224 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8321**

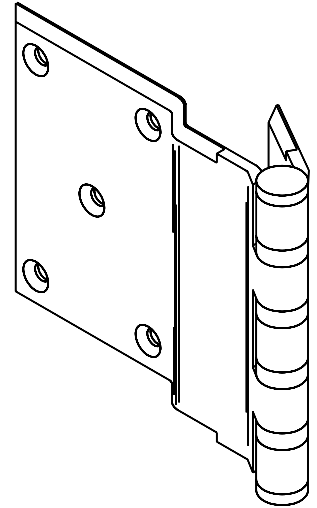
BB5225 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2321**

BB5226 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5321**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLES
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	SCREW SIZE		NUMBER OF HOLES	QUANTITY	
				DOOR THRU BOLTS	JAMB MACHINE SCREWS		BOX	CASE
5	(.050)	.190	5.546	1.515	1/4-20OH x 2	12-24OH x 1/2	9	3 ea. 24 ea.

Full Surface Anchor Pivot

HEAVY WEIGHT - LUBE BEARING - ANCHOR PIVOT

For medium and heavy weight doors subject to high frequency service and abuse, providing increased reinforcement at the top corner on the hinge side of the door and jamb where stress can occur and is surface applied with no special frame or door preparation. This pivot will help overcome field problems such as bent hinge leaves, loose hinge reinforcements and loose screws.

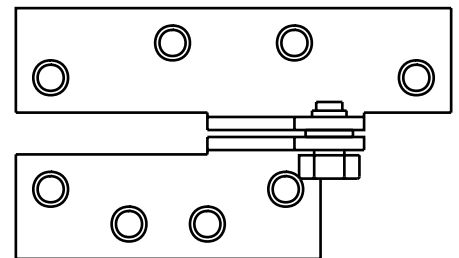
7004 STEEL

with steel pin

7006 STAINLESS STEEL

with stainless steel pin

- NON-TEMPLATE
- LUBE BEARING
- HEX HEAD THREADED PIVOT PIN STANDARD
- STANDARD SCREW PACK OF:
 - 8ea. MACHINE SCREWS (1/4"-20 x 3/4" FHMS)
 - 8ea. WOOD SCREWS (8ea. #14 x 1 1/4" FHMS)
 - 4ea. SLEEVE BOLTS FOR 1/4"-20 THREAD TO FIT 1 3/4" DOORS
- SHIMS MAY BE USED IF NEEDED



ITEM NUMBER	HANDING OF DOOR	GAUGE	BUTT HINGE WIDTH	PROJECTION	QUANTITY PER CASE	AVERAGE WEIGHT PER CASE	DOOR THICKNESS
7004-045L	LH	.187	4 1/2"	3/4"	12	19 lbs.	1 3/4
7004-045R	RH	.187	4 1/2"	3/4"	12	19 lbs.	1 3/4
7004-050L	LH	.187	5 "	1"	12	19 lbs.	1 3/4
7004-050R	RH	.187	5 "	1"	12	19 lbs.	1 3/4
7006-045L	LH	.187	4 1/2"	3/4"	12	22 lbs.	1 3/4
7006-045R	RH	.187	4 1/2"	3/4"	12	22 lbs.	1 3/4
7006-050L	LH	.187	5 "	1"	12	22 lbs.	1 3/4
7006-050R	RH	.187	5 "	1"	12	22 lbs.	1 3/4

AH-25

"Over 125 Years of Quality"



Half Surface Hinges

STANDARD WEIGHT - PLAIN BEARING

For medium weight doors / low frequency. Normally used on composite core doors with hollow metal jambs.

5300 STEEL

with steel pin

ANSI A8433

5301 BRASS

with stainless steel pin

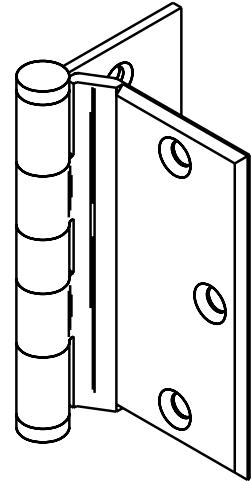
ANSI A2433

5302 STAINLESS STEEL

with stainless steel pin

ANSI A5433

- TEMPLATE
- PLAIN BEARING
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
3.5 (035)	.123	2.062	1.500	.438	10-24OH x 1 3/4	10-24FH x 1/2	6	3 ea.	48 ea.
4 (040)	.130	2.250	1.812	.500	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	48 ea.
4.5 (045)	.134	2.562	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
5 (050)	.146	2.875	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	8	3 ea.	24 ea.

STANDARD WEIGHT - PLAIN BEARING

8300 STEEL

with steel pin

ANSI A8433

8301 BRASS

with stainless steel pin

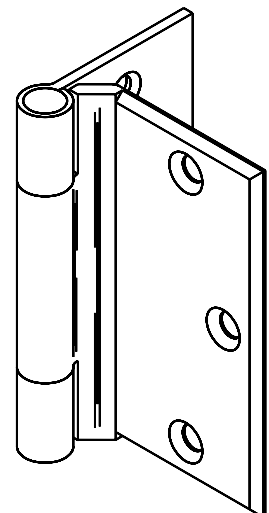
ANSI A2433

8302 STAINLESS STEEL

with stainless steel pin

ANSI A5433

- TEMPLATE
- PLAIN BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.134	2.562	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
5 (050)	.146	2.875	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	8	3 ea.	24 ea.

AH-26

“Over 125 Years of Quality”



Half Surface Hinges

STANDARD WEIGHT - BALL BEARING

For medium weight doors / average frequency. Normally used on composite core doors with hollow metal jambs.

BB5300 STEEL

bearings are hardened steel raceways and balls with stainless steel pin **ANSI A8412**

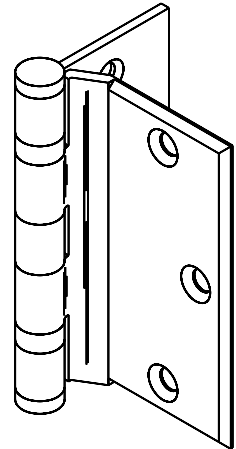
BB5301 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2412**

BB5302 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5412**

- TEMPLATE
- TWO BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
3.5 (035)	.123	2.062	1.500	.438	10-24OH x 1 3/4	10-24FH x 1/2	6	3 ea.	48 ea.
4 (040)	.130	2.250	1.812	.500	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	48 ea.
4.5 (045)	.134	2.562	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
5 (050)	.146	2.875	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	8	3 ea.	24 ea.

STANDARD WEIGHT - LUBE BEARING

For medium weight doors / average frequency. Normally used on composite core doors with hollow metal jambs.

LB8300 STEEL

with steel pin
ANSI A8412

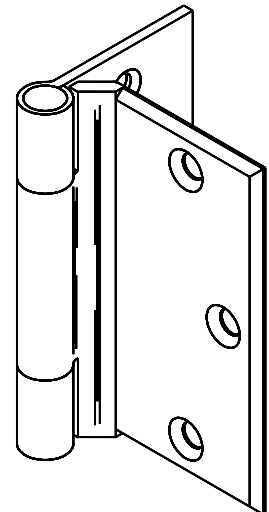
LB8301 BRASS

with stainless steel pin
ANSI A2412

LB8302 STAINLESS STEEL

with stainless steel pin
ANSI A5412

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.134	2.562	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
5 (050)	.146	2.875	2.062	.562	1/4-20OH x 2	12-24FH x 1/2	8	3 ea.	24 ea.

AH-27

“Over 125 Years of Quality”



Half Surface Hinges HEAVY WEIGHT

For heavy weight doors / high frequency. Normally used on composite core doors with hollow metal jambs.

BB5304 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8411**

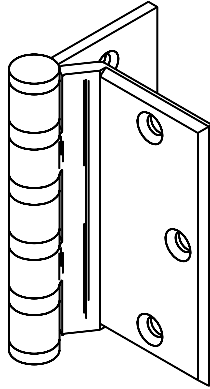
BB5305 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2411**

BB5306 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5411**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



LB8304 STEEL

with steel pin **ANSI A8411**

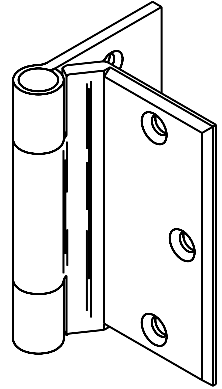
LB8305 BRASS

with stainless steel pin **ANSI A2411**

LB8306 STAINLESS STEEL

with stainless steel pin **ANSI A5411**

- TEMPLATE
- LUBE BEARING
- THREE KNUCKLE
- NON-RISING REMOVABLE PIN
- FLUSH TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
4.5 (045)	.180	2.562	2.125	.625	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
5 (050)	.190	2.875	2.125	.625	1/4-20OH x 2	12-24FH x 1/2	7	3 ea.	24 ea.
6 (060)	.203	3.250	2.125	.625	1/4-20OH x 2	1/4-20FH x 1/2	8	3 ea.	18 ea.

HEAVY WEIGHT - BALL BEARING - SWING CLEAR

For heavy weight doors / high frequency. Used where conditions require the door to clear the opening at 95 degrees.

BB5324 STEEL

bearings are hardened steel raceways and balls with steel pin **ANSI A8421**

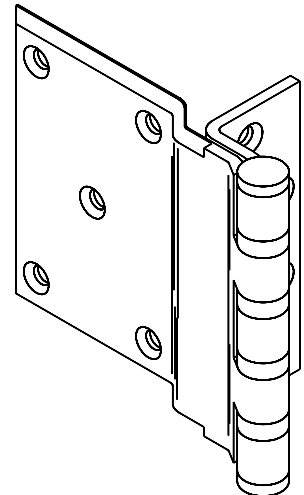
BB5325 BRASS

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A2421**

BB5326 STAINLESS STEEL

bearings are stainless steel raceways and balls with stainless steel pin **ANSI A5421**

- TEMPLATE
- FOUR BALL BEARINGS
- FIVE KNUCKLE
- NON-RISING REMOVABLE PIN
- BUTTON TIP PIN & PLUG
- THRU-BOLTS & GROMMET NUTS SUPPLIED FOR DOOR



HINGE SIZE	GAUGE	DOOR LEAF WIDTH	JAMB LEAF WIDTH	DOOR LEAF OFFSET	MACHINE SCREW SIZE		NUMBER OF HOLES	QUANTITY	
					DOOR	JAMB		BOX	CASE
5 (050)	.190	5.456	2.125	.625	1/4-20OH x 2	12-24FH x 1/2	9	3 ea.	9 ea.

AH-28

“Over 125 Years of Quality”



Single Acting Spring Hinge

LUBE BEARING LB4300 SERIES

PATENT 6,460,220



US LISTED GRADE 1 UNITED STATES AND CANADA

BHMA Certified GRADE 1 For 1 Million Cycles

Bommer Industries Lube Bearing LB4300 Series Single Acting Spring Hinge is Listed by Underwriters Laboratories to meet ANSI A156.17 Grade 1 for self closing hinges (approved for fire door applications). BHMA Certified to conform to all ANSI A156.17 Grade 1 standards for 1 million cycles.

Uses for Single Acting Spring Hinge

Minimizes cost of installing a door closing device on industrial, commercial, institutional and residential applications. Used to convert doors to self-closing in existing buildings. For use in hotels, motels, apartments, dormitories, residences, etc., where doors are required to be self closing. (**always verify local fire code requirements**)

Labeled Doors - Maximum door sizes and number of hinges required is based on limits set forth in NFPA #80. NFPA #80 requires a minimum of two (2) spring hinges on labeled fire door applications. LB4300 Series hinges are listed by UL for fire rated openings up to and including 3 hour, **A label** openings. Wind conditions, excessive air pressure on side of opening, or other adverse job conditions may require the use of all spring hinges. **For maximum versatility use all spring hinges.**

UL listed spring hinges are not available with reverse springs.

Maximum Labeled Door Size - 3'-0" wide x 7'-0" high x 1 3/4" thick as set in NFPA #80.

PLEASE NOTE : Always verify local fire code requirements.

Non-Labeled Doors - Maximum door width - 4'-0". For doors over 7'-6" in height, use an additional hinge for each additional 30" of height or fraction thereof.

HINGE SELECTION FOR MAXIMUM DOOR SIZE

Maximum Labeled Door Size Recommended 3'-0" Wide x 7'-0" High				
4300 SERIES			HINGE SELECTION	
Recommended Maximum Door Weight (LBS.)			SPRING HINGES	BUTT HINGES
350 3 1/2" X 3 1/2"	400 4" X 4"	450 4 1/2" X 4 1/2"		
70	85	115	2 Each	1 Each
90	110	150	3 Each	NONE

***NOTES:**

When Installing a Bommer LB4300 Series Spring Hinge with a butt hinge the following guidelines should be followed:

3 1/2" and 4" .096 Gage Spring Hinge with 3 1/2" and 4" Residential butt hinge gage .085 to .109

3 1/2" and 4" .130 Gage Spring Hinge with 3 1/2" and 4" light Commercial butt hinge gage .123 to .130

4 1/2" .134 Gage Spring Hinge with 4 1/2" Commercial butt hinge gage .134

Installation Instructions

CAUTION: Do not exceed three (3) holes tension for 180 degrees door opening, or four (4) holes tension for 90 degrees door opening.

WORK SAFELY USE PROPER SAFETY PROTECTION.

1. Hinge Installation:

Install Hinge in normal manner with tension adjustment up as shown.

2. Adjusting Spring Torque:

- (A) Place the door in the closed position.
- (B) Insert Tension Lever in right hand hole in the adjustment slot see figure 1.
- (C) Rotate Tension Lever to the left and insert Tension Pin loosely in hole to the right of Tension Lever as shown in figure 2.
- (D) Release Tension Lever until Tension Pin contacts the right hand side of the Adjustment Slot.
- (E) Remove Tension Lever and check the door for closing force, if desired closing force is not achieved, repeat steps A to E until closing force is satisfactory.
- (F) When the hinges have been adjusted to close the door properly, drive the Tension Pin flush with the hinge tube.

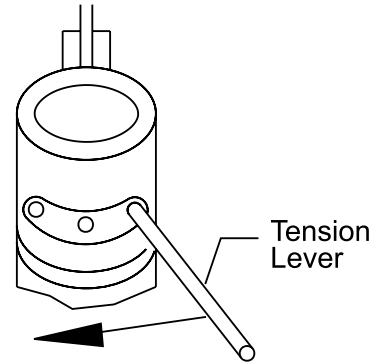


FIGURE 1

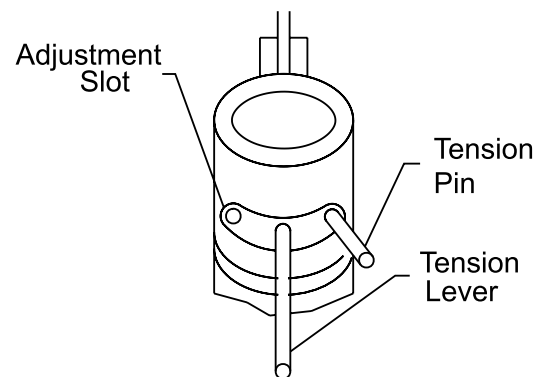


FIGURE 2

CAUTION: Always Install hinges with tension adjustment slot up as shown, always rotate tension lever to the left regardless of right or left hand door applications.

Bommer
over 125 years of quality

A horizontal row of ten boxes representing a 10-bit register. The boxes contain the following labels from left to right: LB, 43, 12, C, a small empty rectangle, 400, BP, Z, another small empty rectangle, and 652.

BHMA/BOMMER
FINISH CODE

-
-
-
-
-

600 = Prime Coat on Steel (USP)
632 = Bright Brass Plated Cleas Coated (US3)
633 = Satin Brass Plated Cleas Coated (US4)
630 = Satin Stainless Steel (US32D)
652 = Satin Chrome on Steel (US26D)

No Designation = Standard Packing
BP = Builders Pack
B = Bulk Pack
CP = Custom Pack
S = Single Pack



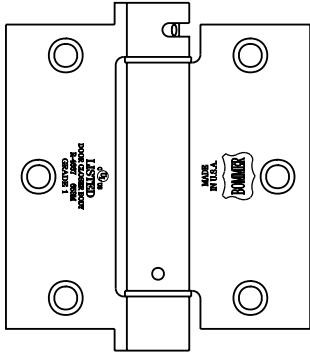
Single Acting Spring Hinges

LUBE BEARING LB4300 SERIES

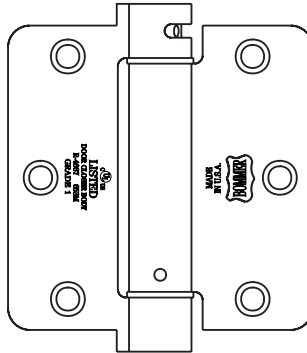
PATENT 6,460,220

cUL^{US} LISTED GRADE 1

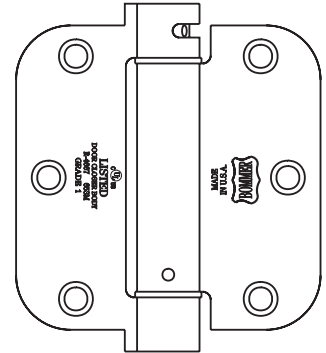
**BHMA Certified Grade 1
For 1 MILLION CYCLES**



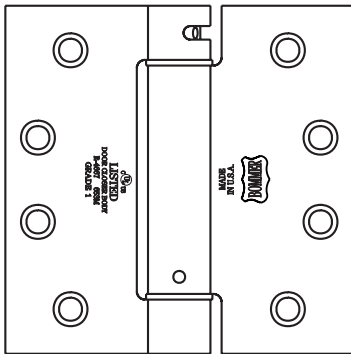
LB4310-350
Square Corner



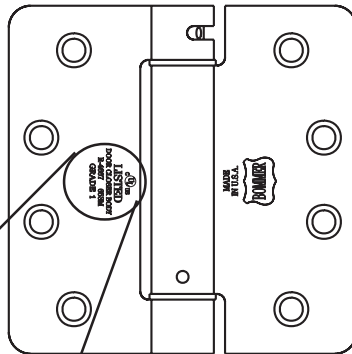
LB4311-350
1/4" Radius



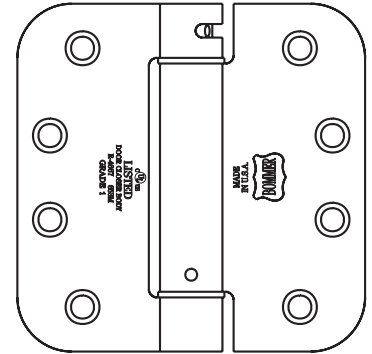
LB4312-350
5/8" Radius



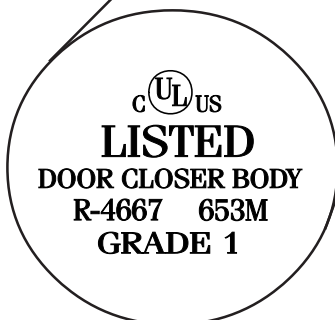
LB4310-400
Square Corner



LB4311-400
1/4" Radius



LB4312-400
5/8" Radius



All Bommer LB4300 Series
Hinges Have the UL Listing
Mark Stamped on each Hinge



Single Acting Spring Hinges

LUBE BEARING LB4300 SERIES
PATENT 6,460,220

LB4310 STEEL

FULL MORTISE

ANSI K81071F

LB4311 STEEL

FULL MORTISE

ANSI K81071F

LB4312 STEEL

FULL MORTISE

ANSI K81071F

cULUS LISTED GRADE 1

BHMA Certified Grade 1
For 1 MILLION CYCLES

- **UL LISTED FOR FIRE DOOR APPLICATIONS**
- **NON-HANDED**
- **STEEL MATERIAL**
- **SELF LUBRICATING BEARINGS**
- **EASILY ADJUSTABLE SPRING TENSION**
- **ANSI TEMPLATED SCREW HOLE PATTERN**
- **PIVOT POINT ALIGNS WITH RESIDENTIAL BUTT HINGES GAGE .085 TO .109**

Item no.	Hinge Size	Corners	Gauge of Metal	Hole Pattern	Number of Holes	Screw Size		Hinge Quantity		Average Case Weight
						Wood	Machine	Box	Case	
LB4310-350	3 1/2" x 3 1/2"	Square	.096	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	27 lbs.
LB4311-350	3 1/2" x 3 1/2"	1/4" Radius	.096	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	27 lbs.
LB4312-350	3 1/2" x 3 1/2"	5/8" Radius	.096	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	27 lbs.
LB4310-400	4" x 4"	Square	.096	Template	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4311-400	4" x 4"	1/4" Radius	.096	Template	8	#10 x 3/4"	#10 Head w/ #12-24x1/2" Thread	2	40ea.	32 lbs.
LB4312-400	4" x 4"	5/8" Radius	.096	Template	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.

NOTES :

Reverse springs available that are not “**UL Listed**”, please contact factory for availability.

SH-5

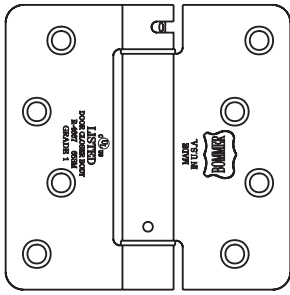
“Over 125 Years of Quality”



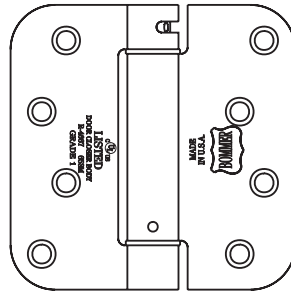
Single Acting Spring Hinges

LUBE BEARING LB4300 SERIES SPECIAL HINGE TYPES

PATENT 6,460,220



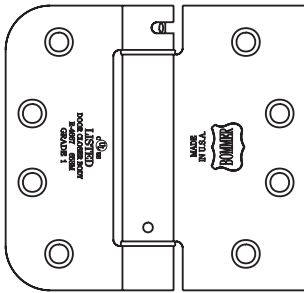
LB4321-400



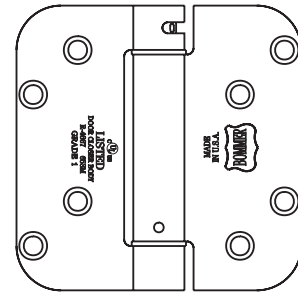
LB4322-400

cUL US LISTED GRADE 1

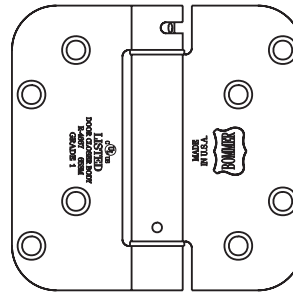
**BHMA Certified Grade 1
For 1 MILLION CYCLES**



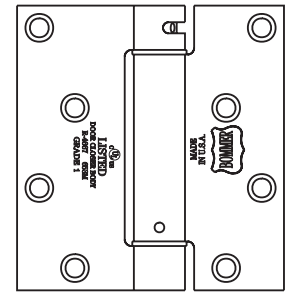
LB4333-400



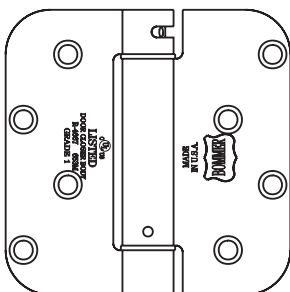
LB4340-400



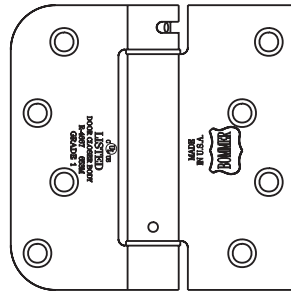
LB4342-400



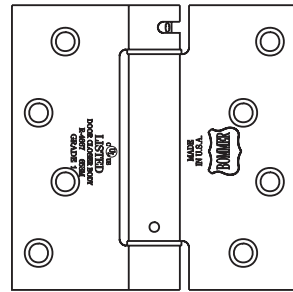
LB4350-400



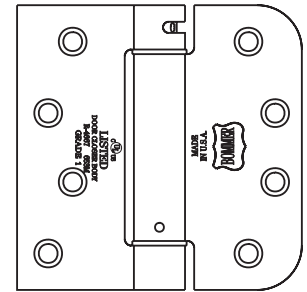
LB4360-400



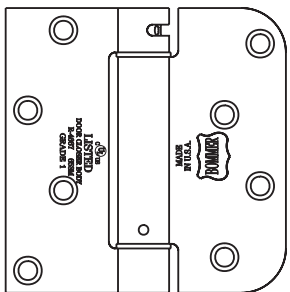
LB4361-400



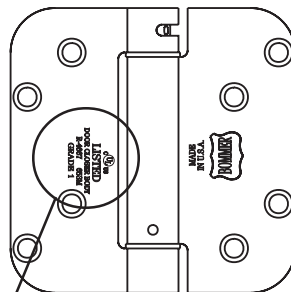
LB4362-400



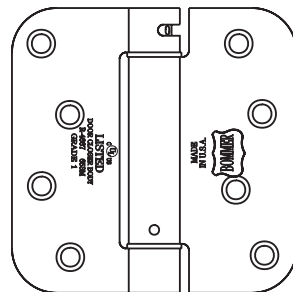
LB4376-400



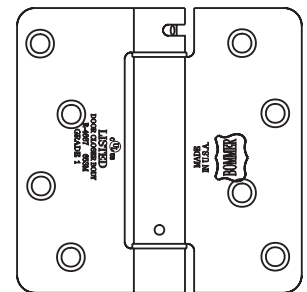
LB4381-400



LB4382-400



LB4383-400



LB4384-400

**cUL US
LISTED
DOOR CLOSER BODY
R-4667 653M
GRADE 1**

SH-6

PLEASE NOTE : Always contact the factory if you do not see the hinge that matches your door or frame, Bommer has over 70 different Lube Bearing LB4300 special hinge types available.

“Over 125 Years of Quality”



Single Acting Spring Hinges

LUBE BEARING LB4300 SERIES SPECIAL HINGE TYPES

PATENT 6,460,220

SPECIAL

LB4300 SERIES STEEL

FULL MORTISE

ANSI K81071F

- UL LISTED FOR FIRE DOOR APPLICATIONS
- NON-HANDED
- SPECIAL TEMPLATE HOLE LOCATION
- DESIGNED TO FIT STANDARD HINGE PREPARATION OF DOOR AND FRAME MANUFACTURERS LISTED
- STEEL MATERIAL
- EASILY ADJUSTABLE SPRING TENSION
- PIVOT POINT ALIGNS WITH RESIDENTIAL BUTT HINGES GAGE .085 TO .109



LISTED GRADE 1

BHMA Certified Grade 1

For 1 MILLION CYCLES

PLEASE NOTE : Always contact the factory for the hinge that matches your door or frame, Bommer has over 70 different special hinge types available.

PLEASE NOTE : Always request a current template from the factory to assure you are ordering the correct hinge.

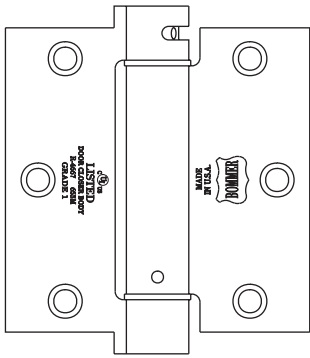
Item no.	Hinge Size	Corners	Gauge of Metal	Door / Frame Manufacturer	Number of holes	Screw Size		Hinge Quantity		Average Case Weight
						Wood	Machine	Box	Case	
LB4321-400	4" x 4"	1/4" Radius	.096	Perma-Door	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4322-400	4" x 4"	5/8" Radius	.096	Perma-Door	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4333-400	4" x 4"	5/8" Radius Leaf Square Leaf	.096	Johnson	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4340-400	4" x 4"	5/8" Radius	.096	Pease	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4342-400	4" x 4 5/64"	5/8" Radius	.096	Pease	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4350-400	4" x 3 3/4"	Square	.096	Peachtree	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4360-400	4" x 4"	5/8" Radius	.096	Acorn	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4361-400	4" x 4"	5/8" Radius Leaf Square Leaf	.096	Castigate	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4362-400	4" x 4"	Square	.096	Castigate	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4376-400	4" x 4"	5/8" Radius Leaf Square Leaf	.096	Johnson Integrity	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4381-400	4" x 4"	5/8" Radius Leaf Square Leaf	.096	Stanley Door System	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4382-400	4" x 4"	5/8" Radius	.096	General Products	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4383-400	4" x 4"	5/8" Radius	.096	Taylor Door	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.
LB4384-400	4" x 4"	1/4" Radius	.096	Taylor Door	8	#10 x 3/4"	#10-24x 1/2"	2	40ea.	32 lbs.



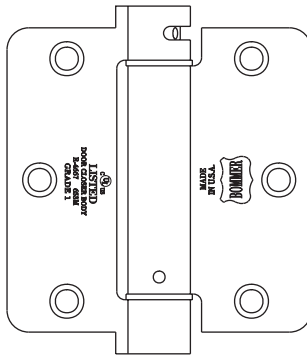
Single Acting Spring Hinges

LUBE BEARING LB4300C SERIES CONTRACT GRADE

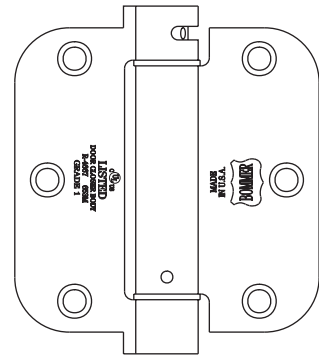
PATENT 6,460,220



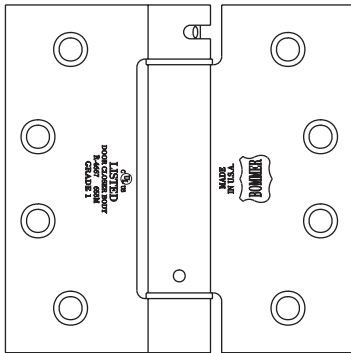
LB4310C-350
Square Corners



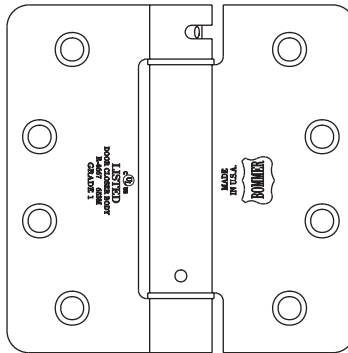
LB4311C-350
1/4" Radius Corners



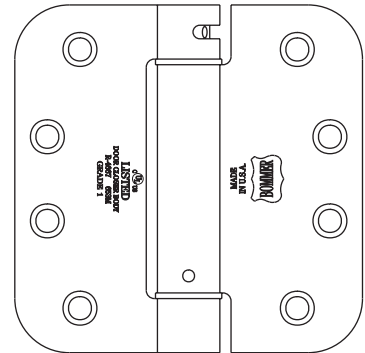
LB4312C-350
5/8" Radius Corners



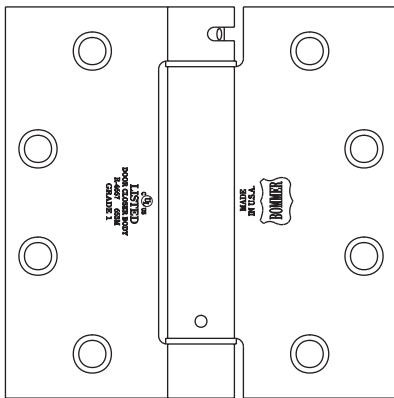
LB4310C-400
Square Corners



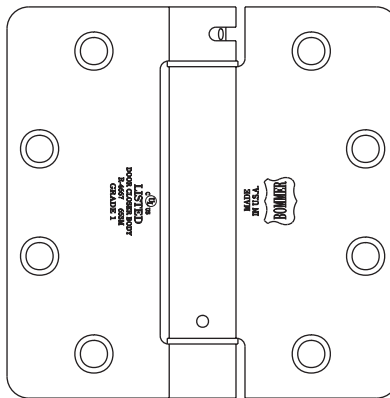
LB4311C-400
1/4" Radius Corners



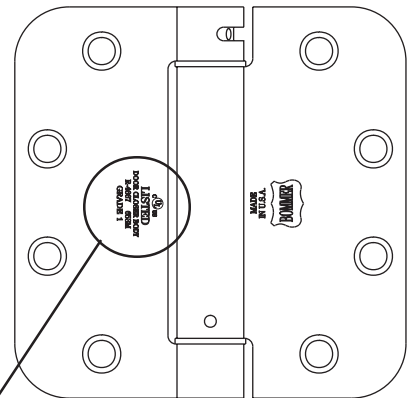
LB4312C-400
5/8" Radius Corners



LB4310C-450 Square Corners



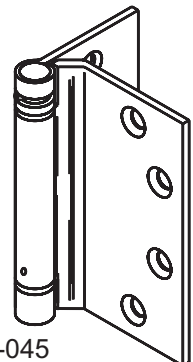
LB4391C-450
1/4" Radius Corners



LB4392C-450
5/8" Radius Corners

cUL US LISTED GRADE 1
BHMA Certified Grade 1
For 1 MILLION CYCLES

cUL US LISTED
DOOR CLOSER BODY
R-4667 653M
GRADE 1



LB4313C-045
Half Surface

SH-8

"Over 125 Years of Quality"



Single Acting Spring Hinges

LUBE BEARING LB4300C SERIES CONTRACT GRADE

PATENT 6,460,220

LB4310C STEEL
FULL MORTISE
ANSI K81071F

LB4311C STEEL
FULL MORTISE
ANSI K81071F

LB4312C STEEL
FULL MORTISE
ANSI K81071F

LB4313C STEEL
HALF SURFACE
ANSI K81081F

LB4390C STAINLESS STEEL
FULL MORTISE
ANSI K51071F

LB4391C STAINLESS STEEL
FULL MORTISE
ANSI K51071F

LB4392C STAINLESS STEEL
FULL MORTISE
ANSI K51071F



LISTED GRADE 1

BHMA Certified Grade 1
For 1 MILLION CYCLES

- UL LISTED FOR FIRE DOOR APPLICATIONS
 - NON-HANDED
 - STEEL & STAINLESS STEEL MATERIAL
 - SELF LUBRICATING BEARINGS
 - EASILY ADJUSTABLE SPRING TENSION
 - ANSI TEMPLATED SCREW HOLE PATTERN
 - PIVOT POINT ALIGNS WITH COMMERCIAL BUTT HINGES
- GAUGE .123 TO .134**

Item no.	Hinge Size	Corners	Gauge of Metal	Hole Pattern	Number of Holes	Screw Size		Hinge Quantity		Average Case Weight
						Wood	Machine	Box	Case	
LB4310C-350	3 1/2" x 3 1/2"	Square	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4311C-350	3 1/2" x 3 1/2"	1/4" Radius	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4312C-350	3 1/2" x 3 1/2"	5/8" Radius	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4390C-350	3 1/2" x 3 1/2"	Square	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4391C-350	3 1/2" x 3 1/2"	1/4" Radius	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4392C-350	3 1/2" x 3 1/2"	5/8" Radius	.130	Template	6	#10 x 3/4"	#10-24x 1/2"	2	40ea.	37lbs.
LB4310C-400	4" x 4"	Square	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4311C-400	4" x 4"	1/4" Radius	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4312C-400	4" x 4"	5/8" Radius	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4390C-400	4" x 4"	Square	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4391C-400	4" x 4"	1/4" Radius	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4392C-400	4" x 4"	5/8" Radius	.130	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4310C-454	4 1/2" x 4"	Square	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4390C-454	4 1/2" x 4"	Square	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	42lbs.
LB4310C-450	4 1/2" x 4 1/2"	Square	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	47lbs.
LB4390C-450	4 1/2" x 4 1/2"	Square	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	47lbs.
LB4391C-450	4 1/2" x 4 1/2"	1/4" Radius	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	47lbs.
LB4392C-450	4 1/2" x 4 1/2"	5/8" Radius	.134	Template	8	#12 x 1 1/4"	#12-24x 1/2"	2	40ea.	47lbs.
LB4313C-045 Half Surface	4 1/2"	Square	.134	Jamb-Template Door-Special	8	#12 x 1 1/4"	1/4-20 x 2" With Grommet nuts	2	24ea.	33lbs.

SH-9

"Over 125 Years of Quality"



Single Acting Spring Hinges

4000 SERIES

4010 STEEL
NON-TEMPLATE
ANSI K81011

4020 STEEL
STANDARD 4 1/2" MORTISE
ANSI K81071

CL4010 STEEL CLASSIC BALL TIP
NON-TEMPLATE
ANSI K81011

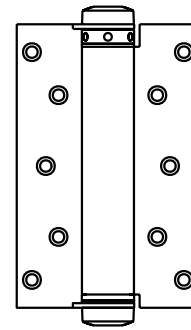
CL4020 STEEL CLASSIC BALL TIP
STANDARD 4 1/2" MORTISE
ANSI K81071

- NON-HANDED
- STEEL MATERIAL
- AVAILABLE WITH REVERSE SPRING
- CLASSIC MODELS AVAILABLE WITH BALL TIPS 6" & 7" ONLY
- EASILY ADJUSTABLE SPRING TENSION
- PIVOT POINTS DO NOT ALIGN WITH STANDARD FULL MORTISE HINGES

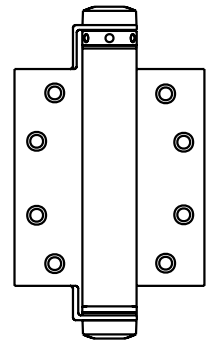
PLEASE NOTE:

Always request a current template from the factory to assure you are ordering the correct hinge

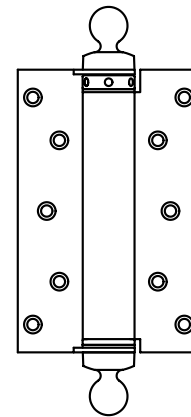
Reverse springs available, please specify "R" after item number when ordering (example: 4010R-6-603)



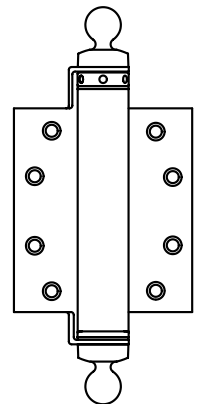
4010
non-template
hole pattern



4020
4 1/2"template
hole pattern



CL4010
ball tip
non-template
hole pattern



CL4020
ball tip
4 1/2"template
hole pattern

HINGE SELECTION FOR MAXIMUM DOOR SIZE

ITEM NUMBER	2 HINGES		3 HINGES		DOOR THICKNESS	HINGE GAUGE	SCREW SIZE		QUANTITY		AVERAGE WEIGHT PER CASE
	DOOR WEIGHT	DOOR WIDTH	DOOR WEIGHT	DOOR WIDTH			WOOD SCREWS	MACHINE SCREWS	BOX	CASE	
4010-3	45	2'-4"	65	2'-8"	3/4" TO 1"	.075	7 X 3/4"		2 ea.	48 Ea.	30 lbs.
4010-6	125	3'-0"	155	4'-0"	1 3/4"	.105	10 X 1"	10-24x1/2"	2 ea.	20 Ea.	53 lbs.
CL4010-6										8 Ea.	20 lbs.
4010-7	130	3'-6"	175	4'-6"	2"	.114	12 X1 1/4"	12-24x1/2"	2 ea.	16 Ea.	50 lbs.
CL4010-7										6 Ea.	23 lbs.
4020-6	125	3'-0"	155	4'-0"	1 3/4"	.134	12 X1 1/4"	12-24x1/2"	2 ea.	12 Ea.	53 lbs.
CL4020-6										8 Ea.	18 lbs.



Single Acting Spring Hinges

4000 SERIES UL LISTED

4030 STEEL
STANDARD 4 1/2" MORTISE
ANSI K81071F

4040 STEEL
NON-TEMPLATE
ANSI K81011F

CL4030 STEEL CLASSIC BALL TIP
STANDARD 4 1/2" MORTISE
ANSI K81011F

CL4040 STEEL CLASSIC BALL TIP
NON-TEMPLATE
ANSI K81071F

- NON-HANDED
- STEEL MATERIAL
- CLASSIC MODELS AVAILABLE WITH BALL TIPS
- UL LISTED FOR FIRE DOOR APPLICATIONS
- FACTORY SET SPRING TENSION
- PIVOT POINTS DO NOT ALIGN WITH STANDARD FULL MORTISE HINGES

PLEASE NOTE:

Always request a current template from the factory to assure you are ordering the correct hinge.

Labeled Doors

Maximum door sizes and number of hinges required is based on limits set by NFPA Standard # 80 (2 spring hinges minimum)

These hinges are listed by UL for fire rated openings up to and including 3 hour, A label openings.

Maximum Labeled door size - 3'-0" x 7'-0" x 1 3/4" as set by NFPA Standard # 80

PLEASE NOTE : Always verify local fire code requirements

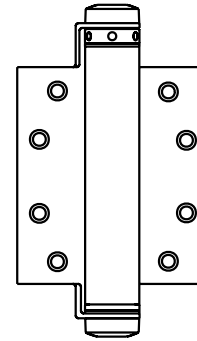
Non-Labeled Doors - Maximum door width - 4'-0". For doors over 7'-6" in height, use an additional hinge for each additional 30" of height or fraction thereof.

HINGE SELECTION FOR MAXIMUM DOOR SIZE

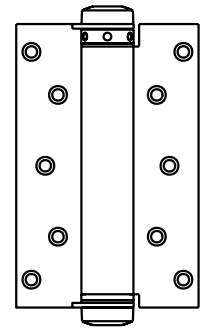
ITEM NUMBER	2 HINGES		3 HINGES		DOOR THICKNESS	HINGE GAUGE	SCREW SIZE		QUANTITY		AVERAGE WEIGHT PER CASE
	DOOR WEIGHT	DOOR WIDTH	DOOR WEIGHT	DOOR WIDTH			WOOD SCREWS	MACHINE SCREWS	BOX	CASE	
4030-6	125	3'-0"	155	4'-0"	1 3/4"	.134	12 x 1 1/4"		2 ea.	12 ea.	53 lbs.
CL4030-6										8 ea.	18 lbs.
4040-6	125	3'-0"	155	4'-0"	1 3/4"	.105	10 x 1"	10-24x1/2"	2 ea.	12 ea.	53 lbs.
CL4040-6										8 ea.	20 lbs.
4040-7	130	3'-6"	175	4'-0"	2"	.114	12 x 1 1/4"	12-24x1/2"	2 ea.	8 ea.	50 lbs.
CL4040-7										6 ea.	23 lbs.

SH-11

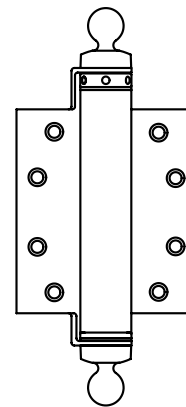
"Over 125 Years of Quality"



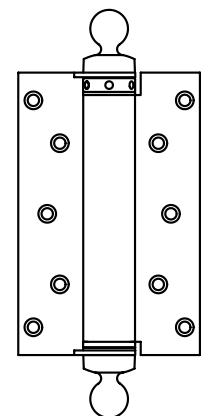
4030
4 1/2" template
hole pattern



4040
non-template
hole pattern



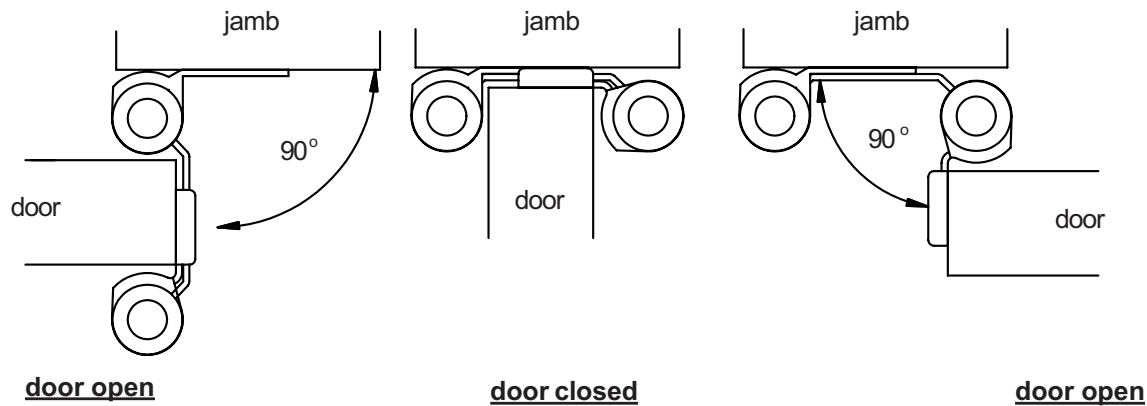
CL4030
ball tip
4 1/2" template
hole pattern



CL4040
ball tip
non-template
hole pattern

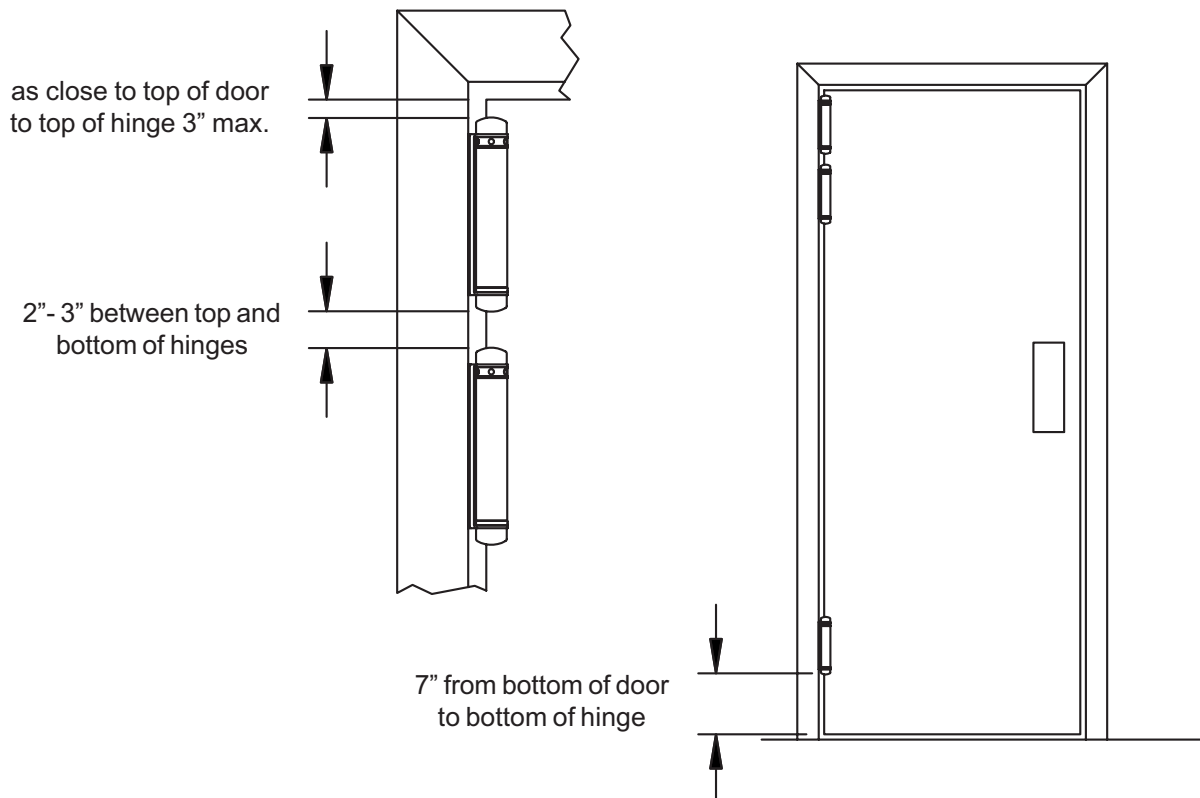
- Permits doors to open in either direction and automatically return to closed position.
- Provides maximum protection for doors subject to normal abuse of lift trucks, due to resiliency of spring support and shock absorbing reaction of flexible mounting.
- Available in size to accommodate a wide range of door sizes and weights.
- Adjustable spring tension permits power and speed adjustment of each size spring hinge.
- No hanging strip is required on frame.

Top View of Double Acting Spring Hinge Operation



Guide Lines for Double Acting Hinge Locations on Doors

It is advisable to use three hinges on a door. The center hinge should be installed as close as possible to the top hinge for maximum support.





Double Acting Spring Hinges

3000 Series

3029- 3" through 8" MORTISE

ANSI K81041

CL3029- 5", 6" & 7" BALL TIPS

ANSI K81041

- DOOR FLANGE IS MORTISED INTO EDGE OF DOOR
- CLASSIC MODELS AVAILABLE WITH BALL TIPS 5", 6" & 7" ONLY
- JAMB FLANGE IS SURFACE APPLIED TO JAMB
- STEEL MATERIAL
- NON- TEMPLATE
- NON-HANDED
- DO NOT USE ON DOORS WITH HINGE EDGE BEVELED
- PACKED WITH ALL WOOD SCREWS

3029- 5 x 3 1/2" MORTISE

3029- 6 x 4 1/2" MORTISE

3029- 8 x 4 1/2" MORTISE

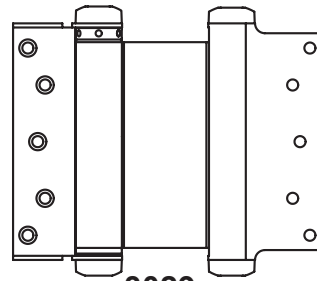
ANSI K81151

CL3029- 5 x 3 1/2" BALL TIPS

CL3029- 6 x 4 1/2" BALL TIPS

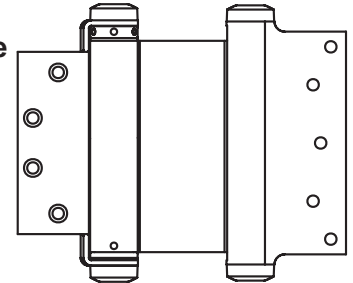
ANSI K81151

- DOOR FLANGE IS MORTISED INTO EDGE OF DOOR
- CLASSIC MODELS AVAILABLE WITH BALL TIPS 5" & 6" ONLY
- JAMB FLANGE IS SURFACE APPLIED TO JAMB
- STEEL MATERIAL
- TEMPLATE DOOR LEAF
- NON-HANDED
- DO NOT USE ON DOORS WITH HINGE EDGE BEVELED
- PACKED WITH MACHINE AND WOOD SCREWS

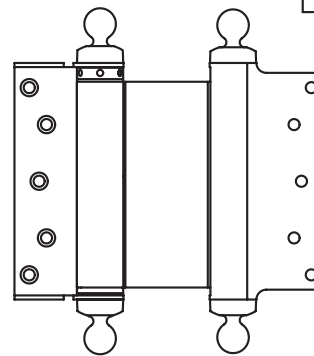


3029

non-template hole pattern



3029-6x4 1/2
template door
leaf



CL3029

ball tips

3029 HINGE SELECTION FOR MAXIMUM DOOR SIZE

ITEM NUMBER	2 HINGES		3 HINGES		DOOR THICKNESS	MINIMUM DOOR HEIGHT	QUANTITY		AVERAGE WEIGHT PER CASE
	DOOR WEIGHT	DOOR WIDTH	DOOR WEIGHT	DOOR WIDTH			BOX	CASE	
3029-3	35	2'-0"	39	2'-8"	3/4" to 1"	5'-0"	2 ea.	40 ea.	50 lbs.
3029-4	60	2'-4"	75	3'-0"	7/8" to 1 1/4"	6'-8"	2 ea.	24 ea.	45 lbs.
3029-5	65	2'-8"	93	3'-0"	1 1/8" to 1 1/2"	6'-8"	2 ea.	16 ea.	48 lbs.
CL3029-5								12 ea.	38 lbs.
3029-6	75	2'-8"	107	3'-0"	1 1/4" to 1 3/4"	7'-0"	2 ea.	12 ea.	51 lbs.
CL3029-6								8 ea.	35 lbs.
3029-7	82	3'-0"	120	3'-6"	1 3/8" to 2"	7'-0"	2 ea.	8 ea.	46 lbs.
CL3029-7								8 ea.	48 lbs.
3029-8	103	3'-6"	143	4'-0"	1 1/2" to 2"	7'-0"	2 ea.	6 ea.	54 lbs.
*3029-5x3.5	65	2'-8"	93	3'-0"	1 3/8"	6'-8"	2 ea.	16 ea.	48 lbs.
CL3029-5x3.5								12 ea.	38 lbs.
*3029-6x4.5	75	2'-8"	107	3'-0"	1 3/4"	7'-0"	2 ea.	12 ea.	50 lbs.
CL3029-6x4.5								8 ea.	40 lbs.
*3029-8x4.5	103	3'-6"	143	4'-0"	1 3/4"	7'-0"	2 ea.	6 ea.	52 lbs.

* Hinges will fit into standard full mortise hinge cutout in hollow metal door ; but if standard hinge locations are furnished on 1 3/4" hollow metal doors, we recommend using 3029-8 x 4 1/2 hinges for maximum support. Request template from factory for door and frame clearance required.

SH-13

"Over 125 Years of Quality"



Double Acting Spring Hinges

3000 Series

3023- 3" through 8" HALF SURFACE

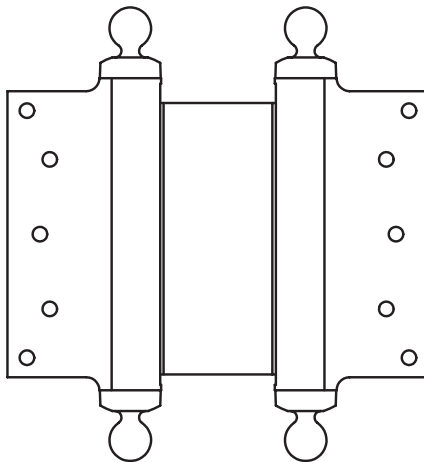
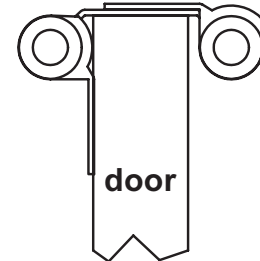
ANSI K81131

CL3023- 5", 6" & 7" BALL TIPS

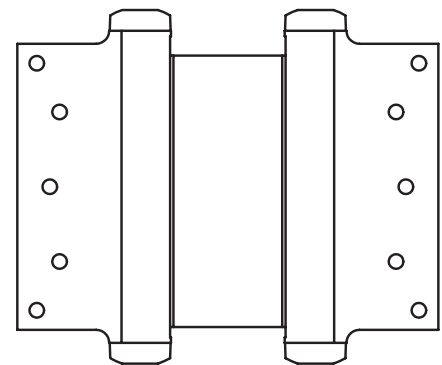
ANSI K81131

- DOOR FLANGE IS SURFACE APPLIED TO FACE OF DOOR
- CLASSIC MODELS AVAILABLE WITH BALL TIPS 5", 6" & 7" ONLY
- JAMB FLANGE IS SURFACE APPLIED TO JAMB
- STEEL MATERIAL
- NON- TEMPLATE
- NON-HANDED
- DO NOT USE ON DOORS WITH HINGE EDGE BEVELED
- PACKED WITH ALL WOOD SCREWS

3023 top view
jamb



CL3023
ball tips



3023
half surface

3023 HINGE SELECTION FOR MAXIMUM DOOR SIZE

ITEM NUMBER	2 HINGES		3 HINGES		DOOR THICKNESS	MINIMUM DOOR HEIGHT	QUANTITY		AVERAGE WEIGHT PER CASE
	DOOR WEIGHT	DOOR WIDTH	DOOR WEIGHT	DOOR WIDTH			BOX	CASE	
3023-3	35	2'-0"	39	2'-8"	3/4" to 1"	5'-0"	2 ea.	40 ea.	50 lbs.
3023-4	60	2'-4"	75	3'-0"	7/8" to 1 1/4"	6'-8"	2 ea.	24 ea.	45 lbs.
3023-5	65	2'-8"	93	3'-0"	1 1/8" to 1 1/2"	6'-8"	2 ea.	16 ea.	48 lbs.
CL3023-5								12 ea.	36 lbs.
3023-6	75	2'-8"	107	3'-0"	1 1/4" to 1 3/4"	7'-0"	2 ea.	12 ea.	51 lbs.
CL3023-6								8 ea.	34 lbs.
3023-7	82	3'-0"	120	3'-6"	1 3/8" to 2"	7'-0"	2 ea.	8 ea.	46 lbs.
CL3023-7								6 ea.	35 lbs.
3023-8	103	3'-6"	143	4'-0"	1 1/2" to 2"	7'-0"	2 ea.	6 ea.	54 lbs.



Double Acting Spring Hinges

3000 Series

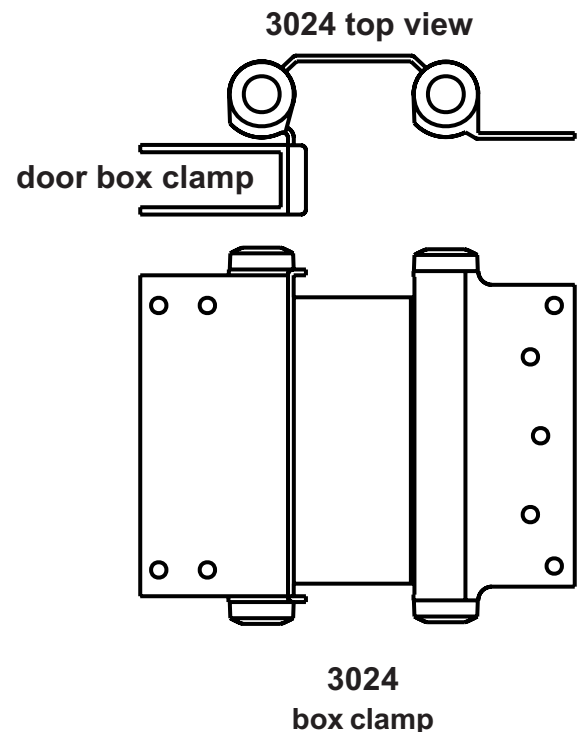
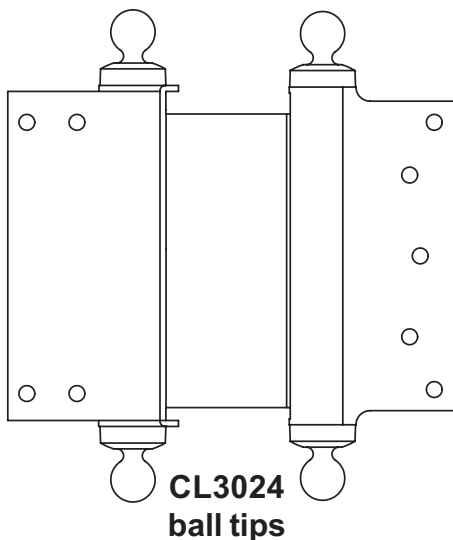
3024- 4" through 8" CLAMP FLANGE

ANSI K81111

CL3024- 5", 6" & 7" BALL TIPS

ANSI K81111

- BOX CLAMP TYPE DOOR FLANGE IS ATTACHED TO DOOR WITH THRU BOLTS AND NUTS
- CLASSIC MODELS AVAILABLE WITH BALL TIPS 5", 6" & 7" ONLY
- JAMB FLANGE IS SURFACE APPLIED TO JAMB
- STEEL MATERIAL
- NON- TEMPLATE
- NON-HANDED
- PACKED WITH THROUGH BOLTS AND MACHINE SCREWS
- CLAMP FLANGES ARE NOT ADJUSTABLE - THICKNESS OF THE DOOR MUST BE INCLUDED ON ORDER



3024 HINGE SELECTION FOR MAXIMUM DOOR SIZE

ITEM NUMBER	2 HINGES		3 HINGES		BOX CLAMP FITS DOOR THICKNESS LISTED	MINIMUM DOOR HEIGHT	QUANTITY		AVERAGE WEIGHT PER CASE
	DOOR WEIGHT	DOOR WIDTH	DOOR WEIGHT	DOOR WIDTH			BOX	CASE	
3024-4	60	2'-4"	75	3'-0"	7/8", 1", 1 1/8"	6'-8"	2 ea.	16 ea.	40 lbs.
3024-5	65	2'-8"	93	3'-0"	1 1/8", 1 1/4"	6'-8"	2 ea.	16 ea.	56 lbs.
CL3024-5								12 ea.	48 lbs.
3024-6	75	2'-8"	107	3'-0"	1 1/4", 1 3/8", 1 1/2"	7'-0"	2 ea.	12 ea.	63 lbs.
CL3024-6								8 ea.	51 lbs.
3024-7	82	3'-0"	120	3'-6"	1 3/8", 1 1/2", 1 5/8"	7'-0"	2 ea.	8 ea.	58 lbs.
CL3024-7								6 ea.	46 lbs.
3024-8	103	3'-6"	143	4'-0"	1 1/2", 1 5/8", 1 3/4", 1 7/8"	7'-0"	2 ea.	4 ea.	46 lbs.

SH-15

"Over 125 Years of Quality"



Double Acting Spring Hinges

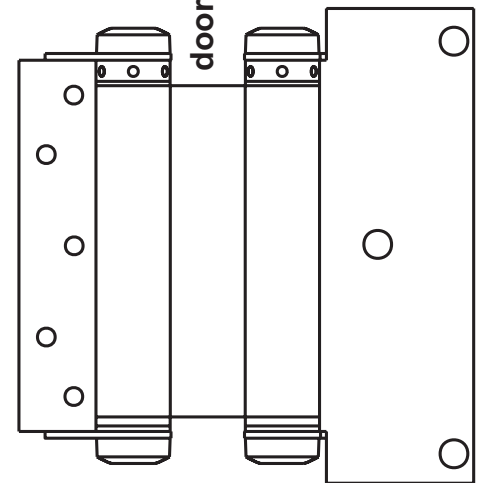
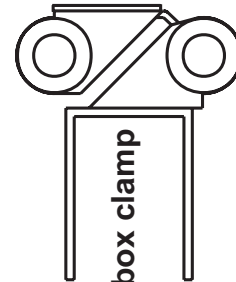
3000 Series

3044- 8" CLAMP FLANGE - INDUSTRIAL

ANSI K81091

- BOX CLAMP TYPE DOOR FLANGE IS ATTACHED TO DOOR WITH THRU BOLTS AND NUTS
- JAMB FLANGE IS SECURED TO FRAME WITH SCREWS
- STEEL MATERIAL
- NON- TEMPLATE
- NON-HANDED
- STANDARD SCREWS PACKED WITH HINGE
 - (4) 5/16"-18 x 2 1/2" HEX. HEAD THRU BOLTS AND NUTS
 - (5) 1/4-20 x 5/8" FLATHEAD CAP SCREWS
 - (5) 1/4" EXTERNAL TOOTH COUNTERSUNK LOCK WASHERS
- HINGE LOCATION
 - 2 HINGES ONE AT TOP, ONE AT BOTTOM
 - 3 HINGES TWO AT TOP, ONE AT BOTTOM
 - 4 HINGES TWO AT TOP, ONE AT BOTTOM, ONE INTERMEDIATE
- CLAMP FLANGES ARE NOT ADJUSTABLE - THICKNESS OF THE DOOR MUST BE INCLUDED ON ORDER

3044 top view



3044
box clamp

3044 HINGE SELECTION FOR MAXIMUM DOOR SIZE & WEIGHTS FOR DOORS 7'-0" MINIMUM HEIGHT

ITEM NUMBER	DOOR WIDTH	2 HINGES	3 HINGES	4 HINGES	DOOR THICKNESS	QUANTITY		AVERAGE WEIGHT PER CASE
		DOOR WEIGHT	DOOR WEIGHT	DOOR WEIGHT		BOX	CASE	
3044-8	3'-0"	265	400	560	1 3/4"	2 ea.	4 ea.	44 lbs.
	3'-6"	245	360	500	1 7/8"			
	4'-0"	225	320	440	2 "			
	4'-6"	185	280	380	2 1/4"			
	5'-0"	165	240	320	2 1/2"			

SH-16

"Over 125 Years of Quality"



Door Bumpers Heavy Duty

170/175 Series

170 - 19 Door Bumper - Industrial Type

Materials

Spring Steel .125 Thick

ANSI K87434

Stainless Steel .109 Thick

ANSI K57434

170 - 32 Door Bumper - Industrial Type

Materials

Spring Steel .125 Thick

ANSI K87434

Stainless Steel .109 Thick

ANSI K57434

175 - 19 Door Bumper - Industrial Type

Materials

Spring Steel .125 Thick

ANSI K87434

Stainless Steel .109 Thick

ANSI K57434

175 - 32 Door Bumper - Industrial Type

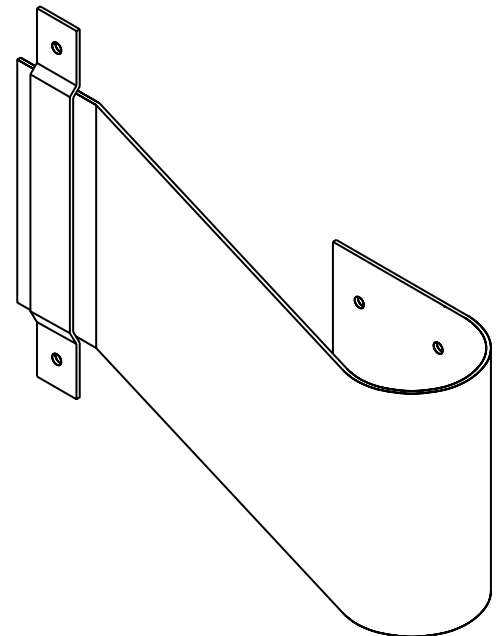
Materials

Spring Steel .125 Thick

ANSI K87434

Stainless Steel .109 Thick

ANSI K57434



SERIES 170 AND 175 DOOR BUMPERS				
ITEM NUMBER	LENGTH (L)	HEIGHT (H)	STANDARD PACKAGING	AVERAGE WEIGHT PER
170-19	19"	8"	(1) Bumper (1) Back Plate (1) Mounting Bracket (6) 5/16-18 x 2 1/2" Thru Bolts and Nuts	12 lbs.
170-32	32"	8"		16 lbs.
175-19	19"	10"		14 lbs.
175-32	32"	10"		20 lbs.

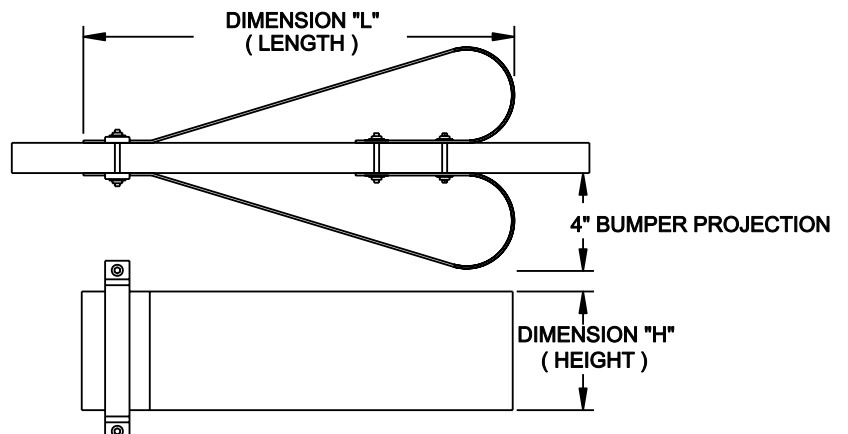
• NON-HANDED

• BACK PLATE PROTECTS FACE OF DOOR FROM WEAR CAUSED BY SLIDING MOTION OF BUMPER

• SPECIFY DOOR THICKNESS FOR PROPER THRU BOLT LENGTH, UP TO 2 1/4" THICK DOOR

• AVAILABLE IN STAINLESS STEEL AND PRIME COAT ON STEEL

Below shows two (2) Bumpers installed back to back on one door.
Check the "L" (length) of the bumper for the correct coverage required for door width.



SH-17

"Over 125 Years of Quality"



Light Duty Double Acting Spring Hinges

Light Duty Series

1514 - LOUVER DOOR HINGE

FITS LOUVER DOORS 7/8" TO 1" THICK

ANSI K81243

1514H - LOUVER DOOR HINGE

WITH HOLD OPEN FEATURE IN ONE DIRECTION

FITS LOUVER DOORS 7/8" TO 1" THICK

ANSI K81243

1515 - LOUVER DOOR HINGE

FITS LOUVER DOORS 1 1/8" TO 1 1/2" THICK

ANSI K81243

1515H - LOUVER DOOR HINGE

WITH HOLD OPEN FEATURE IN ONE DIRECTION

FITS LOUVER DOORS 1 1/8" TO 1 1/2" THICK

ANSI K81243

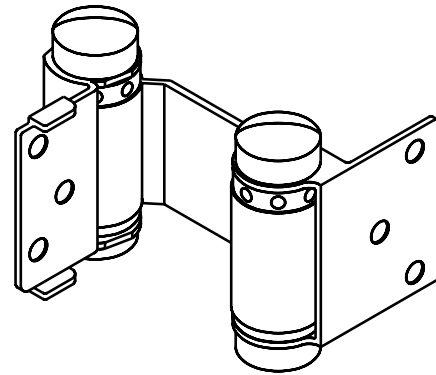
- NON-HANDED
- NON-TEMPLATE
- STEEL MATERIAL
- DOOR FLANGE SURFACE APPLIED OR MORTISED
- JAMB FLANGE SURFACE APPLIED
- EASILY ADJUSTABLE SPRING TENSION

NOTE:

MAXIMUM DOOR WIDTH - 18"

MAXIMUM DOOR WEIGHT - 18 lbs.

MINIMUM DOOR HEIGHT - 42"



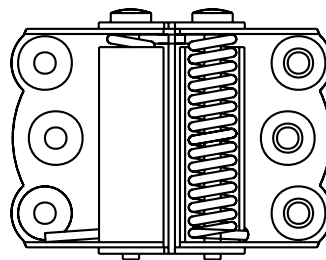
1514

ITEM NUMBER	QUANTITY		WOOD SCREWS	AVERAGE WEIGHT PER CASE
	BOX	CASE		
1514	2 ea.	40 ea.	(6) 7x 3/4	20 lbs.
1514-H	2 ea.	40 ea.	(6) 7x 3/4 (4) 6 x 3/4	20 lbs.
1515	2 ea.	40 ea.	(6) 7x 3/4	20 lbs.
1515-H	2ea.	40 ea.	(6) 7x 3/4 (4) 6 x 3/4	20 lbs.

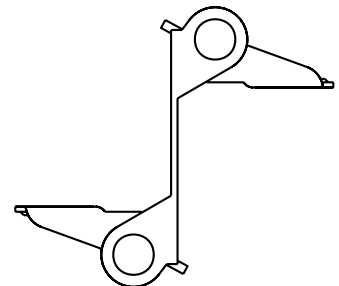
9700 - GATE HINGE

ANSI K84243

- NON-HANDED
- NON-ADJUSTABLE TENSION
- STEEL MATERIAL
- SURFACE APPLIED TO GATE AND JAMB
- FOR DOORS UP TO 1 1/8" THICK
- SIZE 2 3/4"
- (6) No. 7 x 3/4" WS, PER HINGE
- 12 HINGES PER CASE
- 8 lbs. AVERAGE WEIGHT PER CASE



Front View



Top View

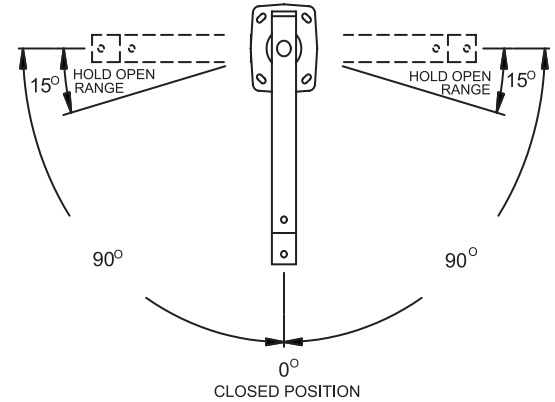
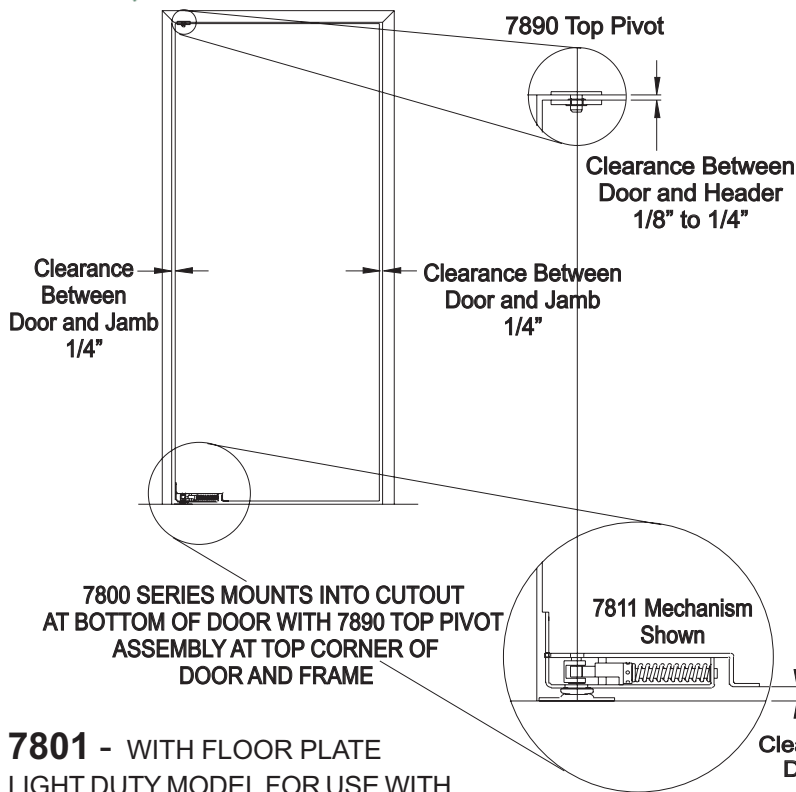
SH-18

"Over 125 Years of Quality"



Spring Pivots Horizontal Type

7800 SERIES



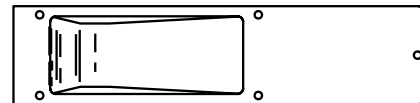
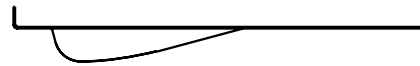
7800 SERIES RANGE OF MOTION

- 7801 & 7802 HOLD OPEN FEATURE
- 7811 & 7812 HOLD OPEN FEATURE
- 7813 & 7814 NO HOLD OPEN FEATURE
- 7813HD & 7814HD NO HOLD OPEN FEATURE
- 7821 & 7822 HOLD OPEN FEATURE

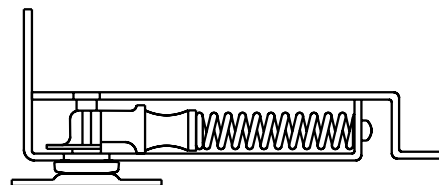
7801 - WITH FLOOR PLATE
LIGHT DUTY MODEL FOR USE WITH
DOORS UP TO 35 LBS.
ANSI K82193

7802 - WITH JAMB BRACKET
LIGHT DUTY MODEL FOR USE WITH
DOORS UP TO 35 LBS.
ANSI K82193

- CAST STEEL MECHANISM
- STEEL FRAME AND TRIM
- ANTI FRICTION BEARING
- DOUBLE ACTING
- HOLD OPEN AT APPROXIMATELY 75 DEGREES
- NON-ADJUSTABLE SPRING TENSION
- PACKED ONE SET PER BOX WITH WOOD SCREWS
- NON-HANDED



7801 Side Plates



7801 Mechanism

ITEM NUMBER	SIDE PLATE MATERIAL	DOOR THICKNESS	MAXIMUM DOOR		QUANTITY PER CASE	AVERAGE WEIGHT PER CASE
			WIDTH	WEIGHT		
7801	STEEL	1 3/8 TO 1 3/4	3'-0"	35 lbs.	8	25 lbs.
7802	STEEL	1 3/8 TO 1 3/4	3'-0"	35 lbs.	8	25 lbs.
7811	STEEL	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.
7812	STEEL	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.
7813	STEEL	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.
7814	STEEL	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.
7813HD	STEEL	1 3/8 TO 1 3/4	3'-0"	150 lbs.	8	36 lbs.
7814HD	STEEL	1 3/8 TO 1 3/4	3'-0"	150 lbs.	8	36 lbs.
7821	BRASS	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.
7822	BRASS	1 3/8 TO 1 3/4	3'-0"	90 lbs.	8	32 lbs.

SP-1

"Over 125 Years of Quality"



Spring Pivots Horizontal Type

7800 SERIES

7811 - WITH FLOOR PLATE

HOLD OPEN IN BOTH DIRECTIONS

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

7812 - WITH JAMB BRACKET

HOLD OPEN IN BOTH DIRECTIONS

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

7813 - WITH FLOOR PLATE

NON-HOLD OPEN MODEL

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

7814 - WITH JAMB BRACKET

NON-HOLD OPEN MODEL

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

7813HD - WITH FLOOR PLATE

HEAVY DUTY MODEL FOR USE WITH DOORS UP TO 150 LBS.

NON-HOLD OPEN MODEL

ANSI K82193

7814HD - WITH JAMB BRACKET

HEAVY DUTY MODEL FOR USE WITH DOORS UP TO 150 LBS.

NON-HOLD OPEN MODEL

ANSI K82193

7821 - WITH FLOOR PLATE AND BRASS TRIM

HOLD OPEN IN BOTH DIRECTIONS

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

7822 - WITH JAMB BRACKET AND BRASS TRIM

HOLD OPEN IN BOTH DIRECTIONS

MEDIUM DUTY MODEL FOR USE WITH DOORS UP TO 90 LBS.

ANSI K82193

• STEEL MECHANISM

• 7811 & 7812 WITH STEEL TRIM

• 7821 & 7822 WITH SOLID BRASS TRIM

• ANTI FRICTION BEARING

• DOUBLE ACTING

• 7811, 7812, 7821 & 7822 HOLD OPEN AT APPROXIMATELY 75 to 90 DEGREES

• 7813, 7814, 7813HD & 7814HD ARE NON-HOLD OPEN

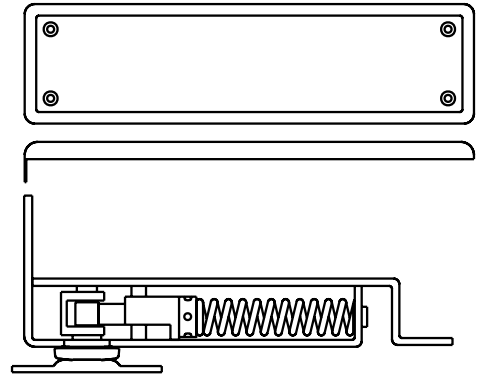
• 7813HD & 7814HD ARE FOR HEAVY DOOR LOW FREQUENCY APPLICATIONS

• ADJUSTABLE SPRING TENSION

• NON-HANDED

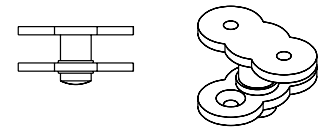
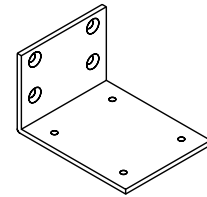
• PACKED ONE SET PER BOX WITH WOOD SCREWS

7811 Side Plates



7811 Mechanism

7805 - JAMB BRACKET



7890 - TOP PIVOT ASSEMBLY

NOTES:

THE 7813HD & 7814HD HEAVY DUTY PIVOT FITS INTO THE SAME CUT OUT AT BOTTOM OF DOOR AND USES THE SAME 7890 TOP PIVOT AS THE 7801, 7802, 7813 AND 7814 FOR EASY RETRO FIT.

THE 7890 TOP PIVOT, SIDE PLATES AND BACK PLATES ARE INCLUDED IN ALL PIVOT SETS.

THE 7805 JAMB BRACKET IS ALSO INCLUDED WITH MODELS 7802, 7812, 7814, 7814HD AND 7822.



Spring Pivots

7000 SERIES

NON-ADJUSTABLE SPRING TENSION

7012 - STEEL SURFACE PIVOT

8 PIVOTS PER CASE
CASE WEIGHT 26 lbs.

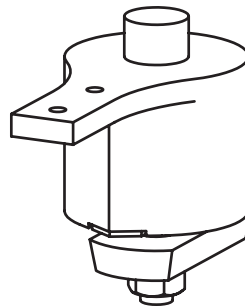
ANSI K63211

7022 - STEEL MORTISE PIVOT

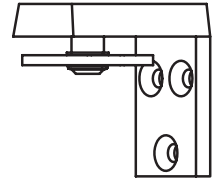
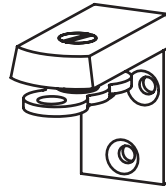
8 PIVOTS PER CASE
CASE WEIGHT 26 lbs.

ANSI K63211

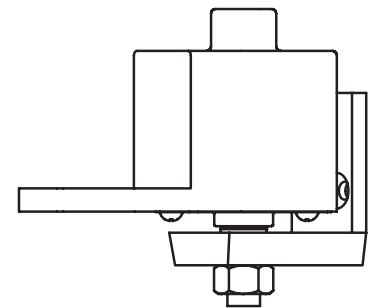
- CAST STEEL BASE MATERIAL
- DOUBLE ACTING
- NON-ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
WIDTH - 36"
THICKNESS - 2 1/2"
WEIGHT - 75 lbs.
- FITS DOORS NOT LESS THAN 1" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- STANDARD PACKAGING ONE SET PER BOX
(1) PIVOT WITH BOTTOM JAMB BRACKET
(1) TOP PIVOT WITH JAMB BRACKET
(8) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
(2) No. 10 x 1" FLAT HEAD WOOD SCREWS



7012



7022



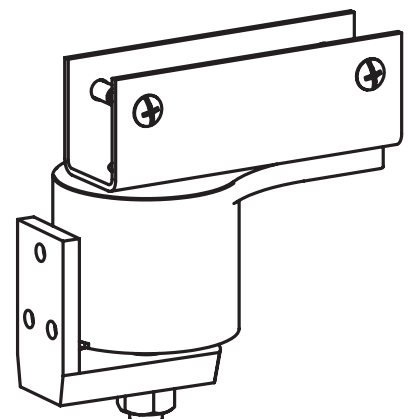
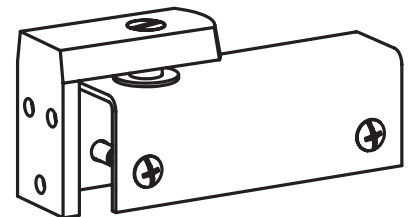
7014 - STEEL SURFACE PIVOT

BOX CLAMP DOOR BRACKET
6 PIVOTS PER CASE

CASE WEIGHT 28 lbs.

ANSI K63211

- CAST STEEL BASE MATERIAL
- DOUBLE ACTING
- NON-ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
WIDTH - 36"
THICKNESS - 1 1/8"
WEIGHT - 75 lbs.
- BOX CLAMP FITS DOORS 1 1/8" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- STANDARD PACKAGING ONE SET PER BOX
(1) PIVOT WITH BOTTOM JAMB BRACKET
(1) TOP PIVOT WITH JAMB BRACKET
(6) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
(4) THRU BOLTS AND NUTS



7014

SP-3

“Over 125 Years of Quality”



Spring Pivots

7100 SERIES

ADJUSTABLE SPRING TENSION

7112 - STEEL SURFACE PIVOT

8 PIVOTS PER CASE

CASE WEIGHT 28 lbs.

ANSI K63201

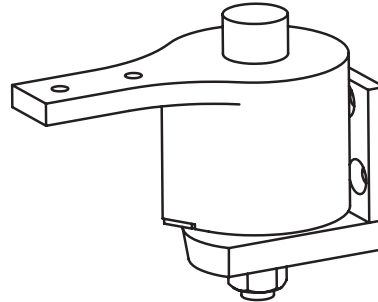
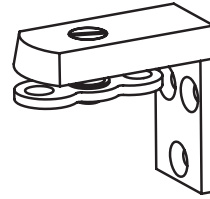
7122 - STEEL MORTISE PIVOT

8 PIVOTS PER CASE

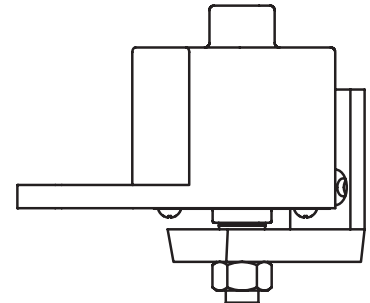
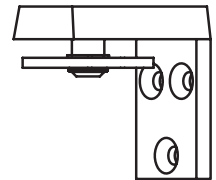
CASE WEIGHT 28 lbs.

ANSI K63311

- CAST STEEL BASE MATERIAL
- DOUBLE ACTING
- ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
 - WIDTH - 36"
 - THICKNESS - 2 1/2"
 - WEIGHT - 75 lbs.
- FITS DOORS NOT LESS THAN 1" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- STANDARD PACKAGING ONE SET PER BOX
 - (1) PIVOT WITH BOTTOM JAMB BRACKET
 - (1) TOP PIVOT WITH JAMB BRACKET
 - (8) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
 - (2) No. 10 x 1" FLAT HEAD WOOD SCREWS



7112



7122

7114 - STEEL SURFACE PIVOT

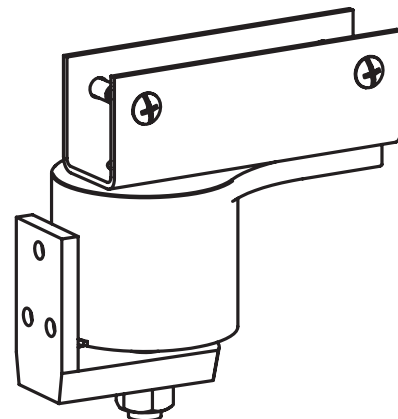
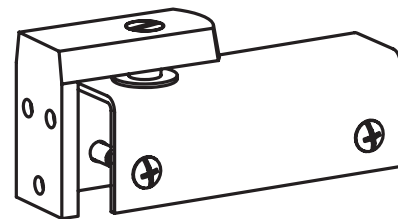
BOX CLAMP DOOR BRACKET

6 PIVOTS PER CASE

CASE WEIGHT 30 lbs.

ANSI K63201

- CAST STEEL BASE MATERIAL
- DOUBLE ACTING
- ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
 - WIDTH - 36"
 - THICKNESS - 1 1/8"
 - WEIGHT - 75 lbs.
- BOX CLAMP FITS DOORS 1 1/8" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- STANDARD PACKAGING ONE SET PER BOX
 - (1) PIVOT WITH BOTTOM JAMB BRACKET
 - (1) TOP PIVOT WITH JAMB BRACKET
 - (6) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
 - (4) THRU BOLTS AND NUTS



7114

SP-4

“Over 125 Years of Quality”

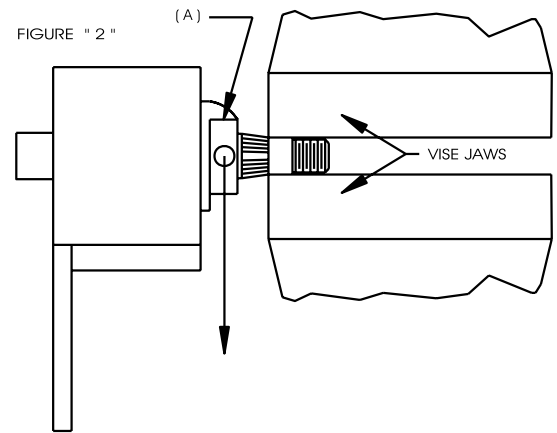
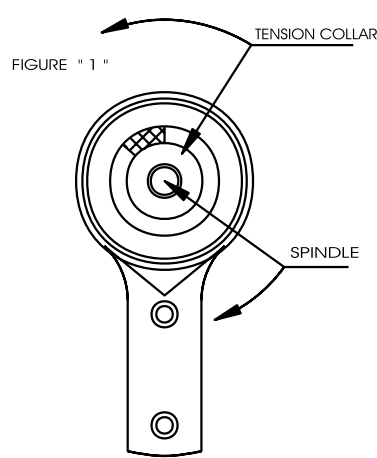


Spring Pivots

INSTRUCTIONS TO REACTIVATE 7100 AND 7300 SERIES PIVOTS

If a pivot fails to close the door in one or both direction, the unit can be reactivated as follows:

- (1) Remove pin from tension collar.
- (2) Remove the pivot from the door and bracket.
- (3) Viewing the pivot from the threaded end, (see figure "1") and with the mounting bracket toward you, turn the tension collar to the left (counterclockwise) until it comes to a stop. Hold the tension collar in this position while turning the threaded spindle to the right (clockwise) until it comes to a stop.



- (4) Place the threaded spindle in a vise, gripping it on the 1/2" Dia. (see figure "2") so the spindle is horizontal and mounting bracket is still toward you.
- (5) Place the tension rod in tension collar hole near the cover plate stop (A) and turn the collar toward you (counterclockwise) until spring tension is felt.

Insert the tension pin into the hole in the tension collar close to the stop (A) on the cover plate. Pin must be inserted fully into the hole with the shoulder of the pin against the tension collar allow the spring tension to rotate the collar and tension pin toward the stop (A) until the pin contacts the stop. Reinstall on door.

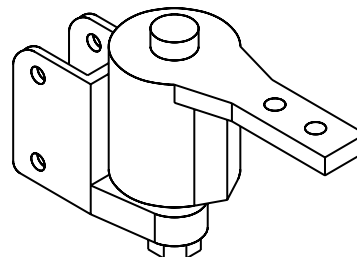
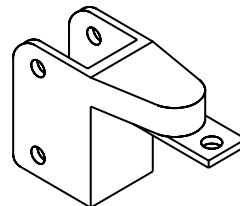
7200 SERIES

NON-ADJUSTABLE SPRING TENSION

7211 - BRASS SURFACE PIVOT
BOX CLAMP JAMB BRACKET
8 PIVOTS PER CASE
CASE WEIGHT 26 lbs.
ANSI K63213

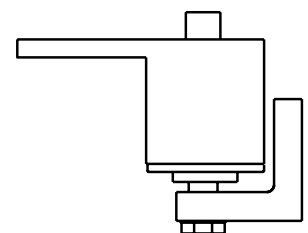
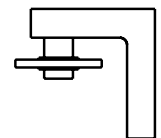
7212 - BRASS SURFACE PIVOT
8 PIVOTS PER CASE
CASE WEIGHT 20 lbs.
ANSI K63213

- BRASS
 - DOUBLE ACTING
 - NON-ADJUSTABLE SPRING TENSION
 - NON-HANDED
 - MAXIMUM DOOR SIZE
WIDTH - 30"
THICKNESS - 1 7/8"
WEIGHT - 50 lbs.
 - FITS DOORS NOT LESS THAN 3/4" THICK
 - FLAT JAMB BRACKET- FITS JAMBS NOT LESS THAN 1 1/4" WIDE
 - BOX CLAMP JAMB BRACKET FITS 1 1/8" AND 1 1/4" THICK JAMB ONLY
- STANDARD PACKAGING ONE SET PER BOX
 - (1) PIVOT WITH BOTTOM JAMB BRACKET
 - (1) TOP PIVOT WITH JAMB BRACKET
 - (8) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
 - (2) No. 10 x 1" FLAT HEAD WOOD SCREWS
 - (4) THRU-BOLTS FOR BOX CLAMP



7211

NOTE:
PLEASE SPECIFY
STYLE OR JAMB THICKNESS
WHEN ORDERING 7211



7212

SP-5

"Over 125 Years of Quality"



Spring Pivots

7300 SERIES

ADJUSTABLE SPRING TENSION

7312 - BRASS SURFACE PIVOT

8 PIVOTS PER CASE
CASE WEIGHT 36 lbs.

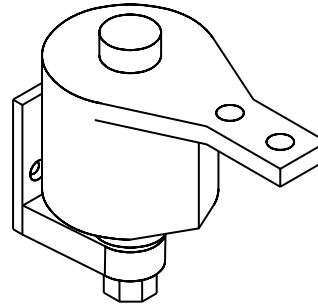
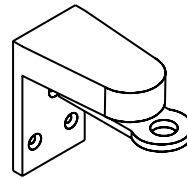
ANSI K13201

7322 - BRASS MORTISE PIVOT

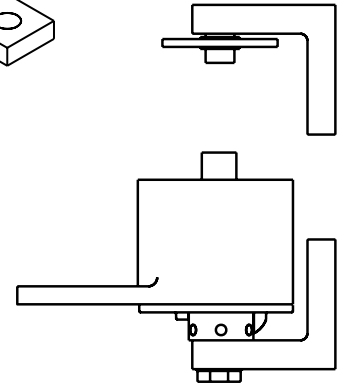
8 PIVOTS PER CASE
CASE WEIGHT 36 lbs.

ANSI K13311

- BRASS
- DOUBLE ACTING
- ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
WIDTH - 36"
THICKNESS - 2 1/2"
WEIGHT - 75 lbs.
- FITS DOORS NOT LESS THAN 1" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- STANDARD PACKAGING ONE SET PER BOX
(1) PIVOT WITH BOTTOM JAMB BRACKET
(1) TOP PIVOT WITH JAMB BRACKET
(8) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
(2) No. 10 x 1" FLAT HEAD WOOD SCREWS



7312



7322

7313 - BRASS SURFACE PIVOT

BOX CLAMP DOOR AND JAMB BRACKETS
6 PIVOTS PER CASE
CASE WEIGHT 46 lbs.

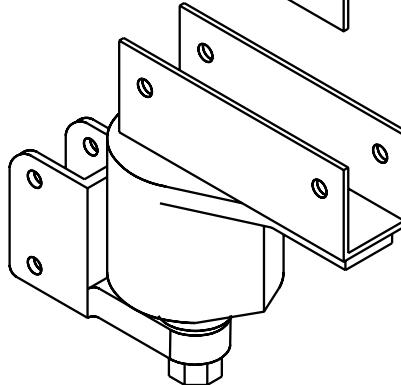
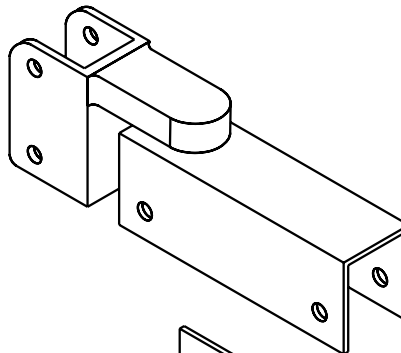
ANSI K13201

7314 - BRASS SURFACE PIVOT

BOX CLAMP DOOR BRACKET
6 PIVOTS PER CASE
CASE WEIGHT 44 lbs.

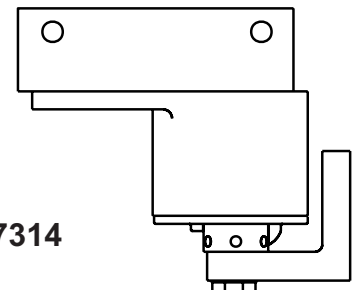
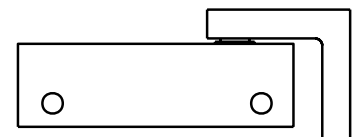
ANSI K13201

- BRASS
- DOUBLE ACTING
- ADJUSTABLE SPRING TENSION
- NON-HANDED
- MAXIMUM DOOR SIZE
WIDTH - 36"
THICKNESS - 1 1/8"
WEIGHT - 75 lbs.
- DOOR BOX CLAMP FITS DOORS 1 1/8" THICK
- FLAT JAMB BRACKET - FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- JAMB BOX CLAMP FITS JAMBS 1 1/8" OR 1 1/4" THICK
- STANDARD PACKAGING ONE SET PER BOX
(1) PIVOT WITH BOTTOM JAMB BRACKET
(1) TOP PIVOT WITH JAMB BRACKET
(6) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
(8) THRU-BOLTS AND NUTS FOR 7313
(4) THRU-BOLTS AND NUTS FOR 7314



7313

NOTE:
PLEASE SPECIFY
STYLE OR JAMB THICKNESS
WHEN ORDERING 7313



7314

SP-6

"Over 125 Years of Quality"

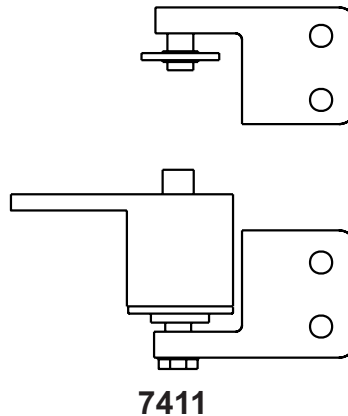


Gravity Pivots 7400 SERIES

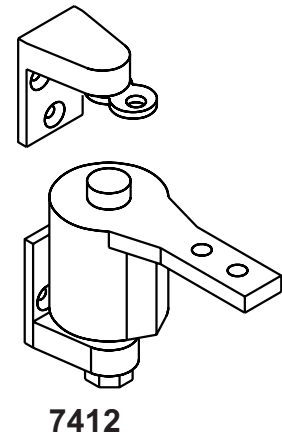
7411 - BRASS SURFACE PIVOT
BOX CLAMP JAMB BRACKET
8 PIVOTS PER CASE
CASE WEIGHT 20 lbs.
ANSI K22011

7412 - BRASS SURFACE PIVOT
8 PIVOTS PER CASE
CASE WEIGHT 18 lbs.
ANSI K22011

- BRASS
- DOUBLE ACTING
- DOOR WEIGHT CLOSSES DOOR - NO SPRING
- NON-HANDED
- MAXIMUM DOOR SIZE
 - WIDTH - 30"
 - THICKNESS - 1 7/8"
 - WEIGHT - 35 lbs.
- FITS DOORS NOT LESS THAN 3/4" THICK
- FLAT JAMB BRACKET- FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- BOX CLAMP JAMB BRACKET FITS 1 1/8" AND 1 1/4" THICK JAMB ONLY
- STANDARD PACKAGING ONE SET PER BOX
 - (1) PIVOT WITH BOTTOM JAMB BRACKET
 - (1) TOP PIVOT WITH JAMB BRACKET
 - (8) No. 12 x 1 1/4" FLAT HEAD WOOD SCREWS
 - (2) No. 10 x 1" FLAT HEAD WOOD SCREWS
 - (4) THRU-BOLTS FOR BOX CLAMP



NOTE:
PLEASE SPECIFY
STYLE OR JAMB THICKNESS
WHEN ORDERING 7411



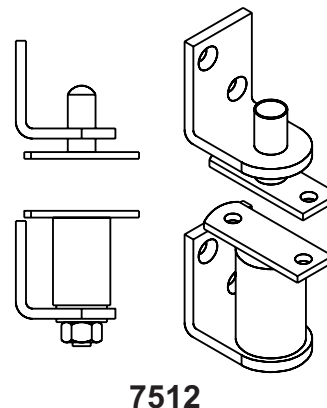
7512 - STANDARD PIVOT
7512-H - HOLDS DOOR OPEN AT 90 DEGREES
20 PIVOTS PER CASE- CASE WEIGHT 17 lbs.

- STEEL
- DOUBLE ACTING
- DOOR WEIGHT CLOSSES DOOR - NO SPRING
- NON-HANDED
- MAXIMUM DOOR SIZE
 - WIDTH - 30"
 - THICKNESS - 1 5/8"
 - WEIGHT - 50 lbs.
- FITS JAMBS NOT LESS THAN 1 1/4" WIDE

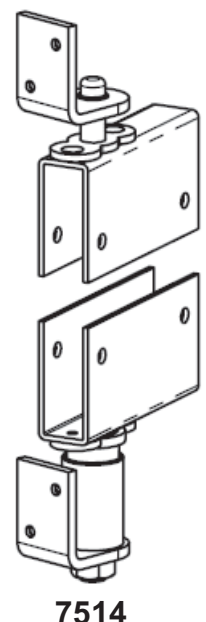
7514 - STANDARD PIVOT
BOX CLAMP DOOR BRACKET
7514-H - HOLDS DOOR OPEN AT 90 DEGREES
BOX CLAMP DOOR BRACKET
10 PIVOTS PER CASE- CASE WEIGHT 20 lbs.

- STEEL
- DOUBLE ACTING
- DOOR WEIGHT CLOSSES DOOR - NO SPRING
- NON-HANDED
- MAXIMUM DOOR SIZE
 - WIDTH - 30"
 - THICKNESS - 3/4"
 - WEIGHT - 50 lbs.
- FITS JAMBS NOT LESS THAN 1 1/4" WIDE
- DOOR BOX CLAMP - FITS DOORS 3/4" THICK

- STANDARD PACKAGING ONE SET PER BOX
 - (1) PIVOT WITH BOTTOM JAMB BRACKET
 - (1) TOP PIVOT WITH JAMB BRACKET
 - (8) No. 10 x 1" FLAT HEAD WOOD SCREWS
 - (4) THRU-BOLTS FOR BOX CLAMP



Gravity Pivots 7500 SERIES FOR LOUVER DOORS



SP-7

"Over 125 Years of Quality"



Auxiliary Springs

2000 SERIES

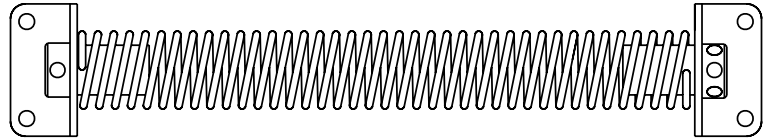


2400 STEEL

2410 STEEL

Wrought Steel Heads
Adjustable Spring Tension
Economical Closing Device
Maximum Door Weight 50 lbs.
ANSI K87444

ITEM NUMBER	OVERALL LENGTH	QUANTITY		WOOD SCREWS	AVERAGE WEIGHT PER CASE
		BOX	CASE		
2400	8 5/16"	12 ea.	72 ea.	(4) 8 x 3/4 ROUND HEAD	35 lbs.
2410	9 5/16"	12 ea.	72 ea.	(4) 8 x 3/4 ROUND HEAD	38 lbs.

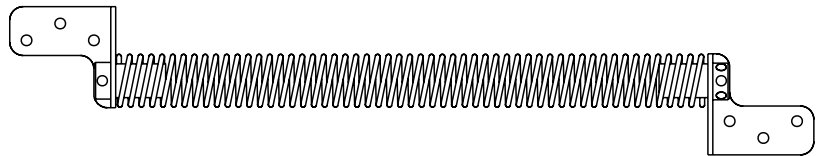


2430 STEEL

2440 STEEL

Wrought Steel Heads
Adjustable Spring Tension
Economical Closing Device
Maximum Door Weight 50 lbs.
ANSI K87444

ITEM NUMBER	OVERALL LENGTH	QUANTITY		WOOD SCREWS	AVERAGE WEIGHT PER CASE
		BOX	CASE		
2430	11 5/8"	6 ea.	24 ea.	(4) 12 x 1 1/4 ROUND HEAD	32 lbs.
2440	12 3/4"	6 ea.	24 ea.	(4) 12 x 1 1/4 ROUND HEAD	42 lbs.



2500 STEEL

2510 STEEL

2520 STEEL

Wrought Steel Heads
Adjustable Spring Tension
Economical Closing Device
Maximum Door Weight 50 lbs.
ANSI K87454

ITEM NUMBER	OVERALL LENGTH	QUANTITY		WOOD SCREWS	AVERAGE WEIGHT PER CASE
		BOX	CASE		
2500	10 7/16"	12 ea.	72 ea.	(6) 8 x 3/4 ROUND HEAD	36 lbs.
2510	13 7/16"	6 ea.	24 ea.	(6) 12 x 1 1/4 ROUND HEAD	25 lbs.
2520	14 5/8"	6 ea.	24 ea.	(6) 12 x 1 1/4 ROUND HEAD	37 lbs.

NOTE FOR ALL AUXILIARY SPRINGS : DO NOT APPLY MORE THAN 3 HOLES TENSION

2100 FULL SURFACE, STEEL

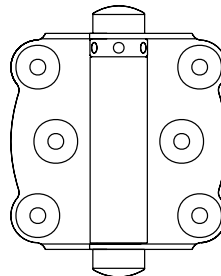
Adjustable Tension with Button Tips
Available with Reverse Spring (R2100)
Size : 3" x 3" (3 Hinges Maximum Door Weight 50 lbs.)
Standard Packaging (2) Per Box
(6) 7 x 3/4" Wood Screws Per Hinge
(40) Hinges Per Case
Average Weight Per Case 25 lbs.
ANSI K84223

2200 HALF SURFACE, STEEL

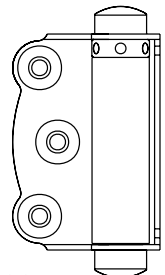
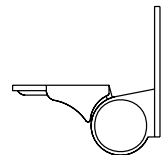
Adjustable Tension with Button Tips
Available with Reverse Spring (R2200)
Size : 3" (3 Hinges Maximum Door Weight 50 lbs.)
Standard Packaging (2) Per Box
(6) 7 x 3/4" Wood Screws Per Hinge
(40) Hinges Per Case
Average Weight Per Case 23 lbs.
ANSI K84233

Screen Door Spring Hinges

2000 SERIES



2100



2200

SP-8

"Over 125 Years of Quality"



Screen Door Spring Hinges

2000 SERIES

2920 FULL SURFACE, STEEL

Adjustable Tension with Loose Pin

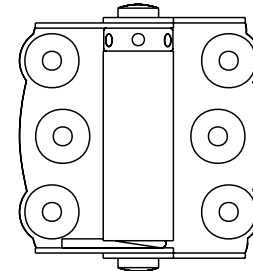
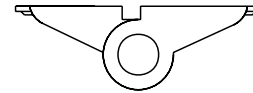
Size : 2 3/4" x 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

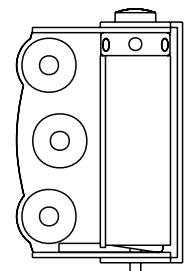
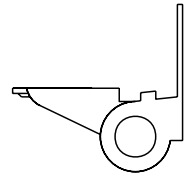
(6) No. 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 15 lbs.



2920



2930

2930 HALF SURFACE, STEEL

Adjustable Tension with Loose Pin

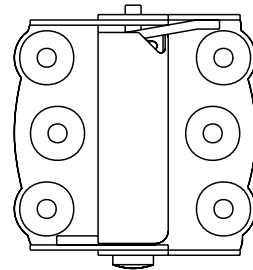
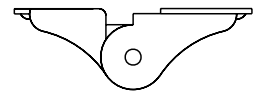
Size : 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

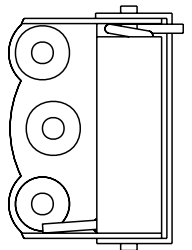
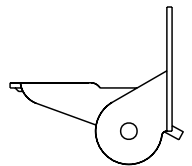
(6) 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 20 lbs.



2960



2970

2960 FULL SURFACE, STEEL

Non-Adjustable Tension with Loose Pin

Size : 2 3/4" x 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

(6) 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 64 lbs.

2970 HALF SURFACE, STEEL

Non-Adjustable Tension with Loose Pin

Size : 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

(6) 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 33 lbs.

2980 FULL SURFACE, STEEL

Adjustable Tension with Button Tip

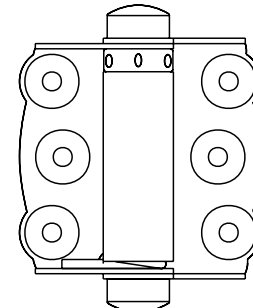
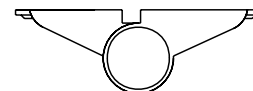
Size : 2 3/4" x 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

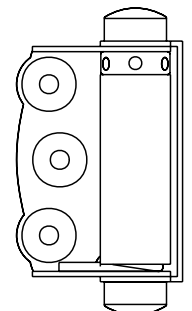
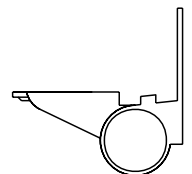
(6) 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 20 lbs.



2980



2990

2990 HALF SURFACE, STEEL

Adjustable Tension with Button Tip

Size : 2 3/4" (3 Hinges Maximum Door Weight 50 lbs.)

Standard Packaging (2) Per Box

(6) 7 x 3/4" Wood Screws Per Hinge

(40) Hinges Per Case

Average Weight Per Case 20 lbs.



Lavatory Hardware - Door Latches and Bolts

15000 SERIES

15000 THROW LATCH and KEEPER

Wrought Brass

Base Plate - 1 1/2" wide x 2" high

Latch Bar - 3 1/4" long x 7/8" wide x 5/32" thick

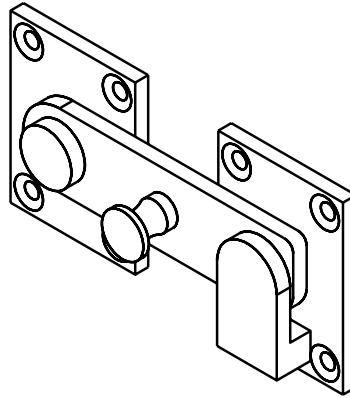
Keeper - 1 1/2" wide x 2" high

Standard Packaging One Set Per Box

(8) No. 8 x 3/4" Wood Screws Per Set

(36) Per Case

Average Weight Per Case 23 lbs.



15000

15001 THROW LATCH and KEEPER

Wrought Brass

Base Plate - 2" wide x 2" high

Latch Bar - 5" long x 1 1/4" wide x 1/4" thick

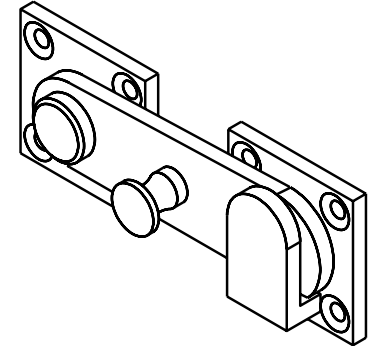
Keeper - 2" wide x 2" high

Standard Packaging One Set Per Box

(8) No. 8 x 3/4" Wood Screws Per Set

(12) Per Case

Average Weight Per Case 12 lbs.



15001

15004 RIM BOLT and KEEPER

Wrought Brass

Base Plate - 2" long x 2" high

Latch Bolt - 9/16" wide x 5/32" thick x 3/4" throw

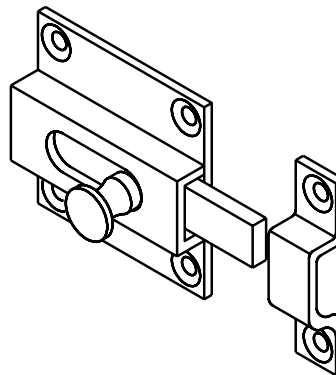
Keeper - 1/2" wide x 2" high

Standard Packaging One Sets Per Box

(6) No. 8 x 3/4" Wood Screws Per Set

(20) Per Case

Average Weight Per Case 24 lbs.



15004

15009 RIM BOLT and KEEPER

Cast Brass

Base Plate - 2 9/16" long x 2 1/2" high

Latch Bolt - 7/8" wide x 1/4" thick x 7/16" throw

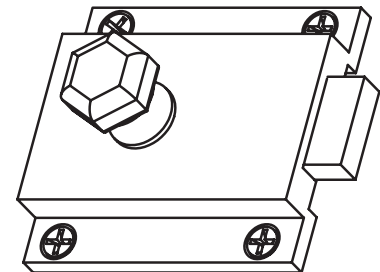
Keeper - 1 1/4" wide x 2" high

Standard Packaging One Set Per Box

(6) No. 8 x 3/4" Wood Screws Per Set

(36) Per Case

Average Weight Per Case 27 lbs.



15009

15009H RIM BOLT and KEEPER

Same as 15009 Except with Handicap Type Handle

15019 RIM BOLT and KEEPER

Same as 15009 Except with Extended Spindle

for use with 15015 or 15016 indicator

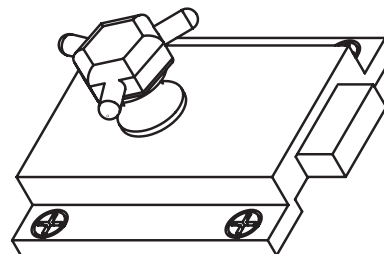
Specify Door Thickness When Ordering

Standard Packaging One Set Per Box

(6) No. 8 x 3/4" Wood Screws Per Set

(20) Per Case

Average Weight Per Case 27 lbs.



15009H

15019H RIM BOLT and KEEPER

Same as 15009 Except with Handicap Type Handle

Specify Door Thickness When Ordering

SP-10

“Over 125 Years of Quality”



Lavatory Hardware - Indicators and Miscellaneous Items 15000 SERIES

15015 INDICATOR

For use with 15019 and 15019H Only

Brass

Diameter - 2 13/16"

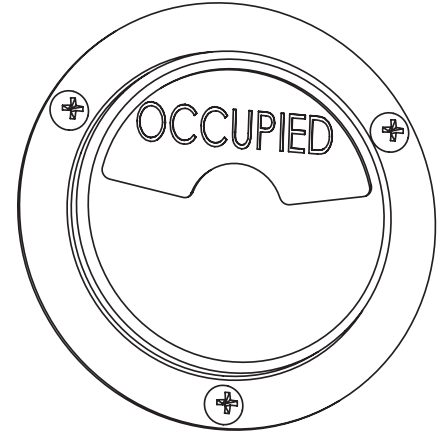
Spanish Part Number is **15016F**

Standard Packaging One Per Box

(3) No. 8 x 3/4" Wood Screws Per Indicator

(20) Per Case

Average Weight Per Case 3 lbs.



15016 INDICATOR

For use with 15019 and 15019H Only

Brass

Diameter - 2 13/16"

Emergency Keyhole on Outside of Door

Spanish Part Number is **15016F**

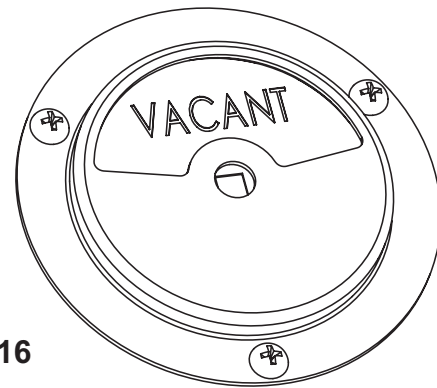
Emergency Key Not Included

Standard Packaging One Per Box

(3) No. 8 x 3/4" Wood Screws Per Indicator

(20) Per Case

Average Weight Per Case 3 lbs.



15015

15016

15017 EMERGENCY KEY

For use with 15016 Indicator

15020 DOOR PULL

Cast Brass

Center to Center - 4"

Overall Length - 4 5/8"

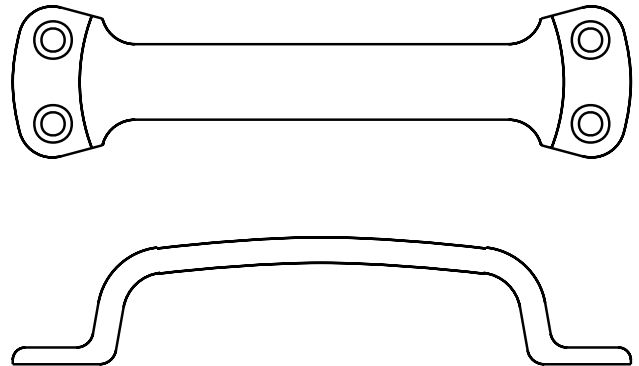
Projection - 1 1/8"

Standard Packaging One Per Box

(4) No. 8 x 3/4" Wood Screws Per Pull

(20) Per Case

Average Weight Per Case 9 lbs.



15020

15030 COAT and HAT HOOK

Cast Brass

Rubber Bumper

Base Diameter - 2"

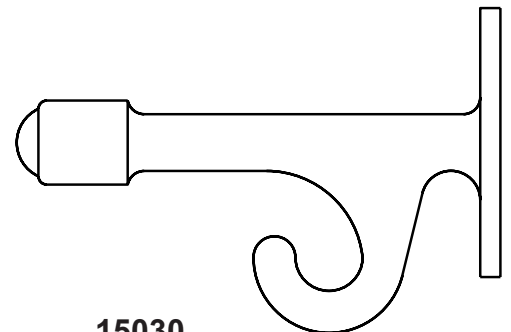
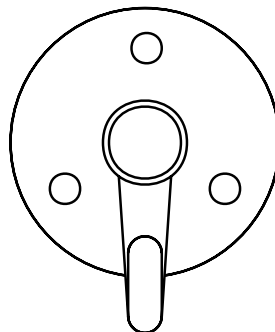
Projection - 3 3/4"

Standard Packaging One Per Box

(3) No. 8 x 3/4" Wood Screws Per Hook

(36) Per Case

Average Weight Per Case 21 lbs.



15030

SP-11

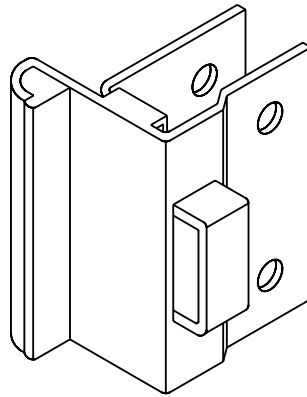
“Over 125 Years of Quality”



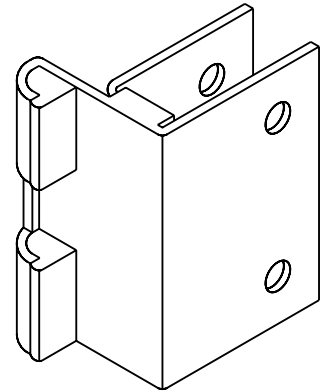
Lavatory Hardware - Door Strikes and Keepers

CLAMP TYPE 1050 SERIES

When Ordering Please Specify
 Door and Jamb Thickness
 Type Door Mounting (Pivot or Hinge)
 Type Door Bolt to be Used With Keeper



1055



1057

1055 BRASS DOOR STOP and KEEPER

1055-P (PIVOT HUNG)

Use with Rim Bolt 15004 or 15009
 For Inswinging Doors Only
 Standard Packaging One Per Box
 (2) Thru Bolts and Nuts
 (6) Per Case
 • **Clamp Flange Jamb Bracket**
 • **Rubber Bumper on Stop**
 • **Non-Handed**

1057 BRASS DOOR STOP and KEEPER

1057-P (PIVOT HUNG)

Use with Rim Bolt 15004 or 15009
 For Outswinging Doors Only
 Standard Packaging One Per Box
 (2) Thru Bolts and Nuts
 (6) Per Case
 • **Clamp Flange Jamb Bracket**
 • **Rubber Bumper on Stop**
 • **Non-Handed**

DOOR THICKNESS	ADJUSTABLE MINIMUM TO MAXIMUM JAMB THICKNESS			
	1055	1055-P	1057	1057-P
3/4"	3/4" - 1 1/4"	3/4" - 7/8"	3/4" - 1 1/4"	3/4" - 7/8"
7/8"	7/8" - 1 1/4"	7/8" - 1"	7/8" - 1 1/4"	7/8" - 1"
1"	1" - 1 1/4"	1" - 1 1/8"	1" - 1 1/4"	1" - 1 1/8"
1 1/8"	1 1/8" - 1 1/4"	1 1/8" - 1 1/4"	1 1/8" - 1 1/4"	1 1/8" - 1 1/4"
1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"

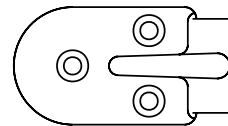
1070 BRASS DOOR STOP

Mounted on Door Face
 Door Stop Only No Keeper
 Standard Packaging One Per Box
 (20) Per Case

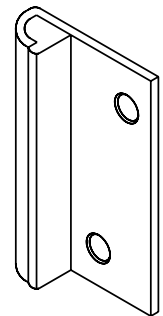
1072 BRASS DOOR STOP

Mounted on Jamb Face
 Door Stop Only No Keeper
 Standard Packaging One Per Box
 (20) Per Case

- **Rubber Bumper on Stop**
- **Non-Handed**



1070



1072

1074 BRASS DOOR STOP and KEEPER

For Inswinging Doors Only
 Standard Packaging One Per Box
 (20) Per Case

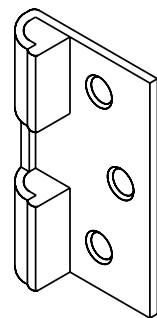
1075 BRASS DOOR STOP and KEEPER

For Outswinging Doors Only
 Standard Packaging One Per Box
 (20) Per Case

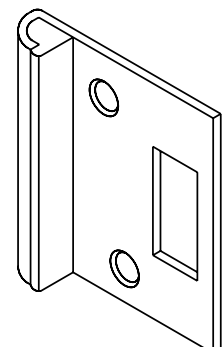
- **Rubber Bumper on Stop**
- **Non-Handed**

- **Door Stops and Keepers are Available for Doors 3/4", 7/8", 1", 1 1/8", 1 1/4" Thick**
- **Use with Rim Bolt 15004 or 15009**

SP-12



1075



1074

FLAT TYPE 1070 SERIES

"Over 125 Years of Quality"



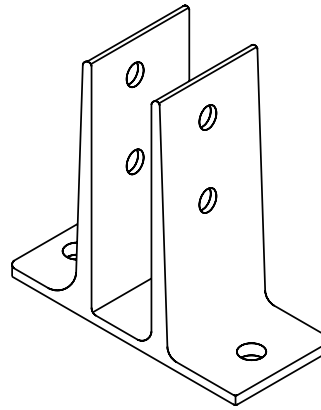
Lavatory Hardware - Partition Mounting Brackets

1140 SERIES

1141-1 DOUBLE FLANGE MOUNTING BRACKET

3/4" Thick Partition Only
Standard Packaging One Per Box
(4) Thru Bolts and AJ"S
(20) Per Case

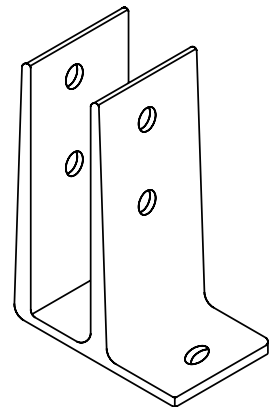
1141-1



1141-2 SINGLE FLANGE MOUNTING BRACKET

3/4" Thick Partition Only
Standard Packaging One Per Box
(4) Thru Bolts and AJ"S
(20) Per Case

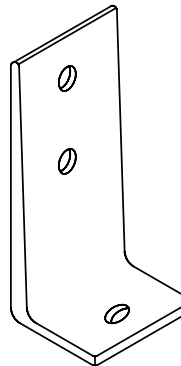
1141-2



1141-3 "L" BRACKET

Standard Packaging One Per Box
(4) Thru Bolts and AJ"S
(20) Per Case

1141-3

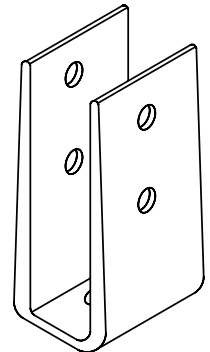


Cast Brass
Height 1 1/2"
Projection 3 5/16"

1141-4 "U" BRACKET

3/4" Thick Partition Only
Standard Packaging One Per Box
(4) Thru Bolts and AJ"S
(20) Per Case

1141-4



1142-3 PILASTER COVER & SHOE

3/4" Thick Partition Only
Standard Packaging One Set Per Box
Thru Bolts, Leveling Nuts and AJ"S
(20) Per Case

1142-6 PILASTER COVER & SHOE

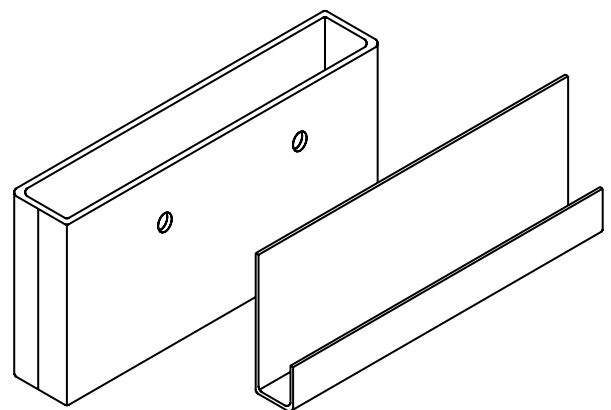
3/4" Thick Partition Only
Standard Packaging One Set Per Box
Thru Bolts, Leveling Nuts and AJ"S
(8) Per Case

1142-8 PILASTER COVER & SHOE

3/4" Thick Partition Only
Standard Packaging One Set Per Box
Thru Bolts, Leveling Nuts and AJ"S
(8) Per Case

1142-12 PILASTER COVER & SHOE

3/4" Thick Partition Only
Standard Packaging One Set Per Box
Thru Bolts, Leveling Nuts and AJ"S
(4) Per Case



- Wrought Brass Pilaster Cover
- Stainless Steel Shoe
- Height 3"
- Available for 3", 6", 8", & 12" Wide Pilasters

SP-13

"Over 125 Years of Quality"



Lavatory Hardware - Spring Hinges Single Acting

1000 SERIES

LB1002-400 - FULL SURFACE

BRASS

LB1002-400H - FULL SURFACE HOLD OPEN

BRASS

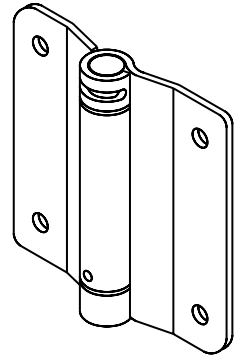
LB1006-400 - FULL SURFACE

STAINLESS STEEL

LB1006-400H - FULL SURFACE HOLD OPEN

STAINLESS STEEL

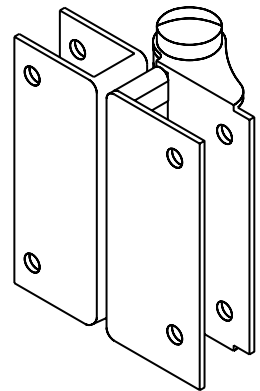
- NON-HANDED
- SIZE (4" X 4")
- 1/4" RADIUS CORNERS
- ADJUSTABLE SPRING TENSION
- 2 BACKPLATES FURNISHED WITH EACH HINGE
- STANDARD PACKAGING ONE PER BOX
- (4) THRU BOLTS AND NUTS PER HINGE
- (20) HINGES PER CASE AVERAGE WEIGHT PER CASE 15 lbs.



1001 - ADJUSTABLE CLAMP FLANGE FOR DOOR AND JAMB

BRASS

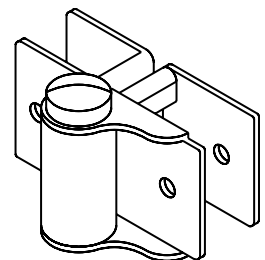
- SIZE (4" HIGH CLAMP FLANGE)
- ADJUSTABLE SPRING TENSION
- AVAILABLE WITH HOLD OPEN (1001-H)
- AVAILABLE FOR DOORS AND JAMBS 7/8" TO 1 3/4" THICK
- STANDARD PACKAGING TWO PER BOX
- (4) THRU BOLTS AND NUTS PER HINGE
- (16) HINGES PER CASE AVERAGE WEIGHT PER CASE 40 lbs.
- SPECIFY DOOR AND JAMB THICKNESS



01001 - ADJUSTABLE CLAMP FLANGE FOR DOOR AND JAMB

BRASS

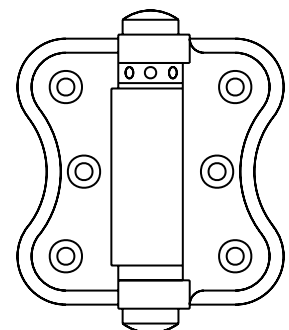
- NON-HANDED
- SIZE (2" HIGH CLAMP FLANGE)
- SPRINGLESS HINGE (NO SPRING)
- USE WITH 1001 SPRING HINGE ON LIGHT WEIGHT DOORS
- AVAILABLE FOR DOORS AND JAMBS 7/8" TO 1 3/4" THICK
- STANDARD PACKAGING TWO PER BOX
- (4) THRU BOLTS AND NUTS PER HINGE
- (16) HINGES PER CASE AVERAGE WEIGHT PER CASE 30 lbs.
- SPECIFY DOOR AND JAMB THICKNESS
- USE WITH TYPE 1001 SPRING HINGE ON LIGHT WEIGHT DOORS



1011 - FULL SURFACE

HEAVY DUTY BRASS CASTING

- LENGTH OF FLANGE 4"
- ADJUSTABLE SPRING TENSION
- AVAILABLE WITH HOLD OPEN (1011-H)
- STANDARD PACKAGING (2) PER BOX
- (6) 1/4 - 20 x 3/4" MACHINE SCREWS PER HINGE
- (24) HINGES PER CASE AVERAGE WEIGHT PER CASE 30 lbs.



SP-14

"Over 125 Years of Quality"



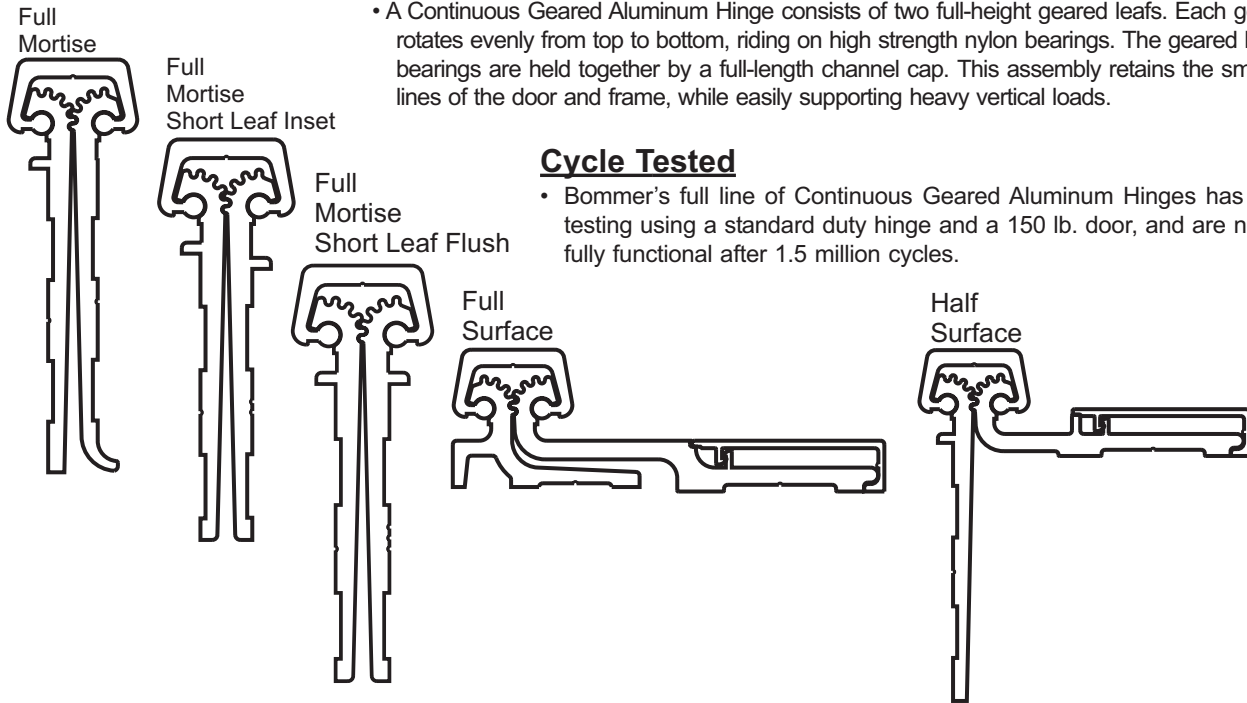
Continuous Geared Aluminum Hinge

What Is a Continuous Geared Aluminum Hinge

- Unlike a conventional hinge, a Continuous Geared Aluminum Hinge has no pin. Also it is not like a piano hinge either, which has 50% of each knuckle cut away, and depends on a thin wire to hold each leaf together.
- A Continuous Geared Aluminum Hinge consists of two full-height geared leafs. Each geared leaf rotates evenly from top to bottom, riding on high strength nylon bearings. The geared leafs and bearings are held together by a full-length channel cap. This assembly retains the smooth, clean lines of the door and frame, while easily supporting heavy vertical loads.

Cycle Tested

- Bommer's full line of Continuous Geared Aluminum Hinges has completed testing using a standard duty hinge and a 150 lb. door, and are now certified fully functional after 1.5 million cycles.



UL-Fire Labeled 3 Hour A-Label

- Bommer's full line of Continuous Geared Aluminum Hinges are certified by Underwriters Laboratories Inc.® (U.S.A. and Canada) for up to a 3 Hour Fire Listing for all 4'-0" x 10'-0" and 8'-0" x 10'-0" door and frame assemblies.
- Special Pins may be required for some rated assemblies. Please refer to page GH-4 and GH-5 for illustrations and information regarding the application of Pins for fire rated assemblies.

Security. Safety. Privacy. Low Wear & Tear

- Unlike conventional hinges, Continuous Geared Aluminum Hinges distribute load stress uniformly along the full length of the door and frame, diffusing wear and tear from closer kickback shock and eliminating door sag and binding.
- The gear design ensures identical operation of each leaf; therefore very little effort is required to open heavy commercial doors.
- The attaching screws for all hinges are located along the full length of each hinge. Preventing warp age of the door along the jamb.
- Continuous Geared Aluminum Hinges creates a high degree of security for any opening or restricted area. The geared construction and the full length channel cap seal the common gap between the door and frame provides security against prying.
- Closing the common gap between the door and frame provides safety against pinched fingers for doors in public areas, particularly those areas where children are present.
- The sight proof design of the Continuous Geared Aluminum Hinge provides privacy in lavatories, executive's offices, exam rooms, and file rooms.
- Bommer Continuous Geared Aluminum Hinge products are GUARANTEED FOR THE LIFE OF THE OPENING against defects in material or workmanship.

Geared Hinge Part Numbering System				
Part Number Break Down Example = FM95SLF-HD-628				
Hinge Types	Hinge Size	Hinge Options	Hinge Capacity	Finishes
<u>FM (Full Mortise)</u>	79"	Blank (Standard)	R (Residential)	393 (Dark Bronzed Anodized)
FS (Full Surface)	83"	<u>SLF (Short Leaf Flush)</u>	Blank (Standard Duty)	<u>628 (Clear Anodized)</u>
HS (Half Surface)	85"	SLI (Short Leaf Inset)	<u>HD (Heavy Duty)</u>	
	<u>95"</u>			
	120"			

"Over 125 Years of Quality"



Continuous Geared Aluminum Hinge

Full-Mortise Hinge

The full-mortise hinge is designed mainly for new door application, and is applied so as to conceal both leaves.

The Full-Mortise Applications

New Construction: New door and frame

Renovations: (all full-mortise hinges will cover existing standard hinge preps)

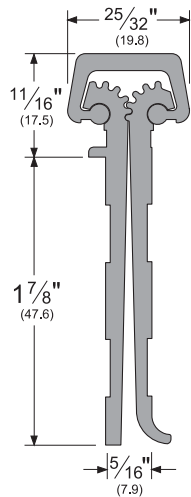
- New door and frame
- New door with existing frame
- Existing door with new frame

The Full Mortise Fasteners

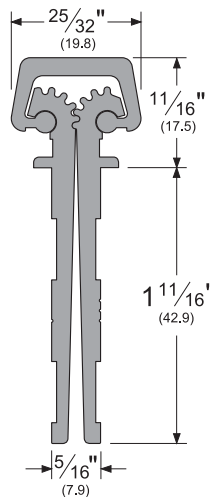
All fasteners are #12-24 x 7/16 Type C, FHUC screws (phillips, flat head, undercut screw, 7/16" long, that forms its own 12-24 thread).

- WOOD SCREWS on request only (specify on order)

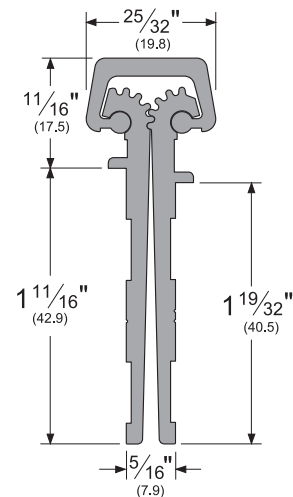
Hinge / Door Weight Bearing Capacity Chart			
	Hinge Size	# of Bearings	Door Weight
Residential	79" & 83"	7	90 lbs.
Standard Duty	83" & 85"	16	280 lbs.
	95"	18	320 lbs.
	120"	24	400 lbs.
Heavy Duty (HD)	83" & 85"	32	600 lbs.
	95"	34	620 lbs.
	120"	42	780 lbs.



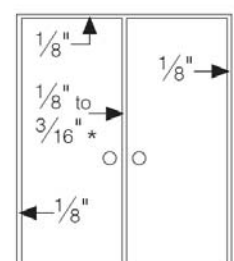
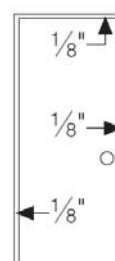
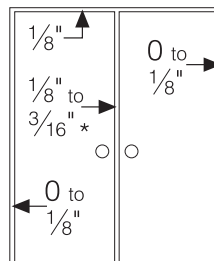
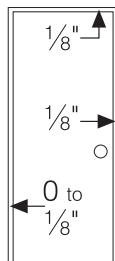
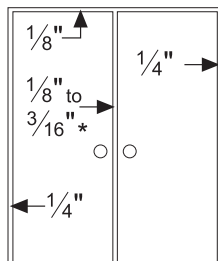
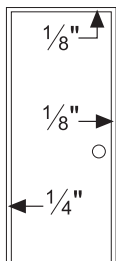
STANDARD
 FM83-(Finish)
 FM83HD-(Finish)
 FM85-(Finish)
 FM85HD-(Finish)
 FM95-(Finish)
 FM95HD-(Finish)
 FM120-(Finish)
 FM120HD-(Finish)



SHORT LEAF FLUSH
 FM83SLF-(Finish)
 FM83SLF-HD-(Finish)
 FM85SLF-(Finish)
 FM85SLF-HD-(Finish)
 FM95SLF-(Finish)
 FM95SLF-HD-(Finish)
 FM120SLF-(Finish)
 FM120SLF-HD-(Finish)



SHORT LEAF INSET
 FM83SLI-(Finish)
 FM83SLI-HD-(Finish)
 FM85SLI-(Finish)
 FM85SLI-HD-(Finish)
 FM95SLI-(Finish)
 FM95SLI-HD-(Finish)
 FM120SLI-(Finish)
 FM120SLI-HD-(Finish)



Full Mortise Door Clearances

Full Surface Door Clearances

Half Surface Door Clearances



Continuous Geared Aluminum Hinge

Full Surface Hinge

The full surface hinge is designed mainly for retrofitting, and is applied to the exposed surface of the door and frame.

The Full Surface Applications

New Construction: New door and frame

Renovations / Retrofit:

- New door and frame
- New door with existing frame
- Existing door with new frame
- Existing door with existing frame

The Full Surface Fasteners

Frame Portion

All fasteners are #12-24 x 7/16 Type C, FHUC screws (phillips, flat head, undercut screw, 7/16" long, that forms its own 12-24 thread).

- WOOD SCREWS on request only (specify on order)

Door Portion

Thru-Bolts are 1/4 - 20 thread x 1 5/8" long, with a low profile head.

Shoulder Bolts, used in conjunction with the Thru-Bolts, are pancake head hex socket, 1/4 - 20 thread, 1" long. The hex socket allows for a certain degree of security.

Pan Head Self Drilling Screws are # 12 x 3/4" long, and tap their own threads into the metal. The installation instructions fully describe their use for initially attaching the hinge to the door for clearance and alignment adjustments.

- heavy duty hinges - 4 required

Half-Surface Hinge

The half surface hinge is designed mainly for retrofitting, the door leaf is applied to the exposed surface of the door, and the frame leaf is applied to the concealed surface of the frame rabbet.

The Half-Surface Applications

New Construction: New door and frame

Renovations / Retrofit: (all half surface hinges will cover existing standard hinge preps.)

- New door and frame
- New door with existing frame
- Existing door with new frame
- Existing door with existing frame

The Half-Surface Fasteners

Frame Portion

All fasteners are #12-24 x 7/16 Type C, FHUC screws (phillips, flat head, undercut screw, 7/16" long, that forms its own 12-24 thread).

- heavy duty hinges 20 required
- WOOD SCREWS on request only (specify on order)

Door Portion

Thru-Bolts are 1/4 - 20 thread x 1 5/8" long, with a very shallow head.

- heavy duty hinges - 8 required

Shoulder Bolts, used in conjunction with the Thru-Bolts, are pancake head hex socket, 1/4 - 20 thread, 1" long. The hex socket allows for a certain degree of security.

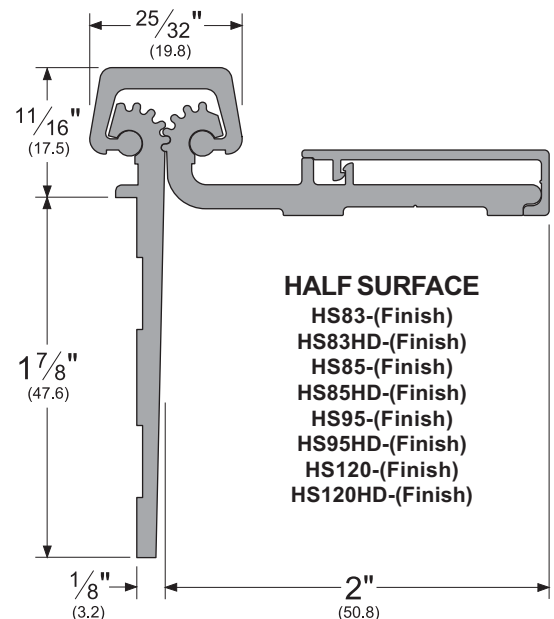
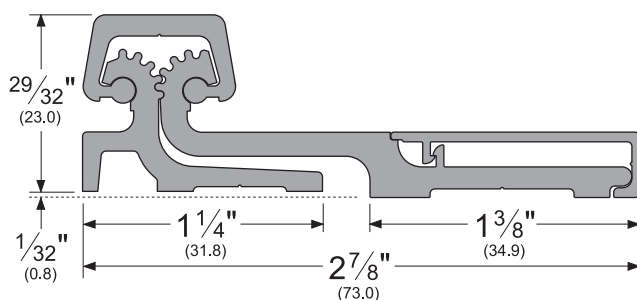
- heavy duty hinges - 8 required

Pan Head Self Drilling Screws are #12 x 3/4" long, and tap their own threads into the metal. The installation instructions fully describe their use for initially attaching the hinge to the door for clearance and alignment adjustments.

- heavy duty hinges - 4 required

FULL SURFACE

FS83-(Finish)
FS83HD-(Finish)
FS85-(Finish)
FS85HD-(Finish)
FS95-(Finish)
FS95HD-(Finish)
FS120-(Finish)
FS120HD-(Finish))



HALF SURFACE

HS83-(Finish)
HS83HD-(Finish)
HS85-(Finish)
HS85HD-(Finish)
HS95-(Finish)
HS95HD-(Finish)
HS120-(Finish)
HS120HD-(Finish)

GH-3

“Over 125 Years of Quality”



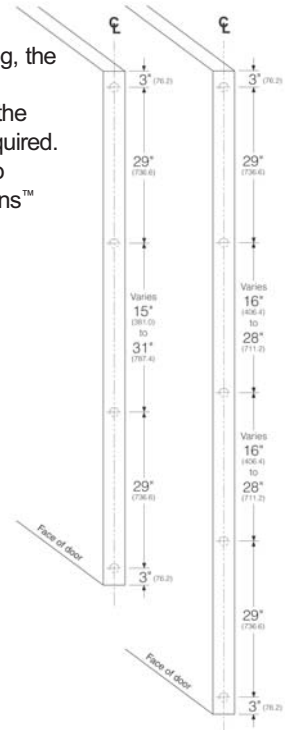
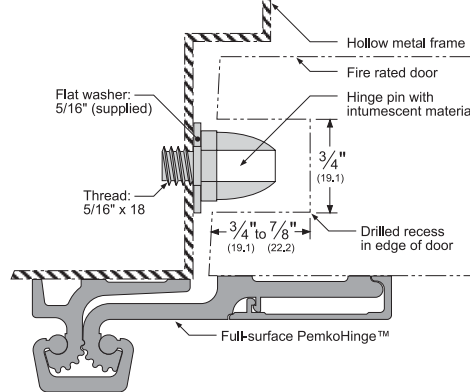
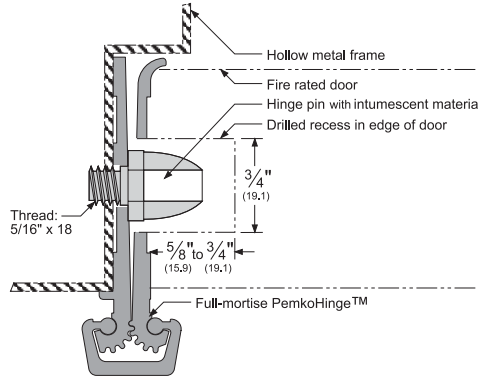
Continuous Geared Aluminum Hinge

FirePins™ for use with Fire Rated Assemblies

- Although Bommer Continuous Geared Aluminum Hinges carry the UL Fire Rating, the highest in the industry, some applications may require the use of FirePins™.
- FirePin™ applications fall with in the UL guidelines for retrofitting assemblies in the field. Expensive shop modifications and door/frame reinforcements are not required.
- Intumescent material is encased in each FirePin™ for wood door applications to insulate against charring the door edge via heat transfer from the frame. FirePins™ also add extra security to a door assembly.

FirePins™ Locations

The locations illustrated below indicate where holes should be drilled on the hinge edge of the door. These locations are appropriate for all hinge models (full-mortise, full-surface, and half-surface).



Full Mortise Hinge

Bommer	Roton	Select	Markar	Stanley	Zero
FM83-628	780-224, 83" CL	SL24A-83	FM-611A, 83"	521	
FM83HD-628	780-224HD, 83" CL	SL24A-HD-83	FM-611A, HD-83"	521	
FM83-393	780-224, 83" BRZ	SL24D-83	FM-611D, 83"	527	
FM83HD-393	780-224HD, 83" BRZ	SL24D-HD-83	FM-611D, HD-83"	527	
FM85-628	780-224, 85" CL	SL24A-85	FM-611A, 85"		
FM85HD-628	780-224HD, 85" CL	SL24A-HD-85	FM-611A, HD-85"		
FM85-393	780-224, 85" BRZ	SL24D-85	FM-611D, 85"		
FM85HD-393	780-224HD, 85" BRZ	SL24D-HD-85	FM-611D, HD-85"		
FM95-628	780-224, 95" CL	SL24A-95	FM-611A, 95"	523	
FM95HD-628	780-224HD, 95" CL	SL24A-HD-95	FM-611A, HD-95"	523	
FM95-393	780-224, 95" BRZ	SL24D-95	FM-611D, 95"	528	
FM95HD-393	780-224HD, 95" BRZ	SL24D-HD-95	FM-611D, HD-95"	528	
FM120-628	780-224, 120" CL	SL24A-120	FM-611A, 120"	525	
FM120HD-628	780-224HD, 120" CL	SL24A-HD-120	FM-611A, HD-120"	525	
FM120-393	780-224, 120" BRZ	SL24D-120	FM-611D, 120"	529	
FM120HD-393	780-224HD, 120" BRZ	SL24D-HD-120	FM-611D, HD-120"	529	

Full Mortise Hinge Short Leaf Flush

Bommer	Roton	Select	Markar	Stanley	Zero
FM83-SLF-628	780-112, 83" CL	SL11A-83	FM-600A, 83"	501	910A-83
FM83HD-SLF-628	780-112HD, 83" CL	SL11A-HD-83	FM-600A, HD-83"	501	910A-DB-83
FM83-SLF-393	780-112, 83" BRZ	SL11D-83	FM-600D, 83"	507	910D-83
FM83HD-SLF-393	780-112HD, 83" BRZ	SL11D-HD-83	FM-600D, HD-83"	507	910D-DB-83
FM85-SLF-628	780-112, 85" CL	SL11A-85	FM-600A, 85"		910A-85
FM85HD-SLF-628	780-112HD, 85" CL	SL11A-HD-85	FM-600A, HD-85"		910A-DB-85
FM85-SLF-393	780-112, 85" BRZ	SL11D-85	FM-600D, 85"		910D-85
FM85HD-SLF-393	780-112HD, 85" BRZ	SL11D-HD-85	FM-600D, HD-85"		910D-DB-85
FM95-SLF-628	780-112, 95" CL	SL11A-95	FM-600A, 95"	503	910A-95
FM95HD-SLF-628	780-112HD, 95" CL	SL11A-HD-95	FM-600A, HD-95"	503	910A-DB-95
FM95-SLF-393	780-112, 95" BRZ	SL11D-95	FM-600D, 95"	508	910D-95
FM95HD-SLF-393	780-112HD, 95" BRZ	SL11D-HD-95	FM-600D, HD-95"	508	910D-DB-95
FM120-SLF-628	780-112, 120" CL	SL11A-120	FM-600A, 120"	505	910A-120
FM120HD-SLF-628	780-112HD, 120" CL	SL11A-HD-120	FM-600A, HD-120"	505	910A-DB-120
FM120-SLF-393	780-112, 120" BRZ	SL11D-120	FM-600D, 120"	509	910D-120
FM120HD-SLF-393	780-112HD, 120" BRZ	SL11D-HD-120	FM-600D, HD-120"	509	910D-DB-120

GH-4

"Over 125 Years of Quality"



Continuous Geared Aluminum Hinge

Product Cross Reference Chart

Full Mortise Hinge Short Leaf Inset

Bommer	Roton	Select	Markar	Stanley	Zero
FM83-SLI-628	780-111, 83" CL	SL18A-83			
FM83HD-SLI-628	780-111HD, 83" CL	SL18A-HD-83			
FM83-SLI-393	780-111, 83" BRZ	SL18D-83			
FM83HD-SLI-393	780-111HD, 83" BRZ	SL18D-HD-83			
FM85-SLI-628	780-111, 85" CL	SL18A-85			
FM85HD-SLI-628	780-111HD, 85" CL	SL18A-HD-85			
FM85-SLI-393	780-111, 85" BRZ	SL18D-85			
FM85HD-SLI-393	780-111HD, 85" BRZ	SL18D-HD-85			
FM95-SLI-628	780-111, 95" CL	SL18A-95			
FM95HD-SLI-628	780-111HD, 95" CL	SL18A-HD-95			
FM95-SLI-393	780-111, 95" BRZ	SL18D-95			
FM95HD-SLI-393	780-111HD, 95" BRZ	SL18D-HD-95			
FM120-SLI-628	780-111, 120" CL	SL18A-120			
FM120HD-SLI-628	780-111HD, 120" CL	SL18A-HD-120			
FM120-SLI-393	780-111, 120" BRZ	SL18D-120			
FM120HD-SLI-393	780-111HD, 120" BRZ	SL18D-HD-120			

Half Surface Hinges

Bommer	Roton	Select	Markar	Stanley	Zero
HS83-628	780-054 83" CL	SL54A-83	HS-609A, 83"	551	920A-83
HS83HD-628	780-054HD 83" CL	SL54A-HD-83	HS-609A, HD-83"	551	920A-DB-83
HS83-393	780-054, 83" BRZ	SL54D-83	HS-609D, 83"	557	920D-83
HS83HD-393	780-054HD, 83" BRZ	SL54D-HD-83	HS-609D, HD-83"	557	920D-DB-83
HS85-628	780-054, 85" CL	SL54A-85	HS-609A, 85"		920A-85
HS85HD-628	780-054HD, 85" CL	SL54A-HD-85	HS-609A, HD-85"		920A-DB-85
HS85-393	780-054, 85" BRZ	SL54D-85	HS-609D, 85"		920D-85
HS85HD-393	780-054HD, 85" BRZ	SL54D-HD-85	HS-609D, HD-85"		920D-DB-85
HS95-628	780-054, 95" CL	SL54A-95	HS-609A, 95"	553	920A-95
HS95HD-628	780-054HD, 95" CL	SL54A-HD-95	HS-609A, HD-95"	553	920A-DB-95
HS95-393	780-054, 95" BRZ	SL54D-95	HS-609D, 95"	558	920D-95
HS95HD-393	780-054HD, 95" BRZ	SL54D-HD-95	HS-609D, HD-95"	558	920D-DB-95
HS120-628	780-054, 120" CL	SL54A-120	HS-609A, 120"	555	920A-120
HS120HD-628	780-054HD, 120" CL	SL54A-HD-120	HS-609A, HD-120"	555	920A-DB-120
HS120-393	780-054, 120" BRZ	SL54D-120	HS-609D, 120"	559	920D-120
HS120HD-393	780-054HD, 120" BRZ	SL54D-HD-120	HS-609D, HD-120"	559	920D-DB-120

Full Surface Hinges

Bommer	Roton	Select	Markar	Stanley	Zero
FS83-628	780-210, 83" CL	SL21A-83	FS/SC-609A, 83"	511	930A-83
FS83HD-628	780-210HD, 83" CL	SL21A-HD-83	FS/SC-609A, HD-83"	511	930A-DB-83
FS83-393	780-210, 83" BRZ	SL21D-83	FS/SC-609D, 83"	517	930D-83
FS83HD-393	780-210HD, 83" BRZ	SL21D-HD-83	FS/SC-609D, HD-83"	517	930D-DB-83
FS85-628	780-210, 85" CL	SL21A-85	FS/SC-609A, 85"		930A-85
FS85HD-628	780-210HD, 85" CL	SL21A-HD-85	FS/SC-609A, HD-85"		930A-DB-85
FS85-393	780-210, 85" BRZ	SL21D-85	FS/SC-609D, 85"		930D-85
FS85HD-393	780-210HD, 85" BRZ	SL21D-HD-85	FS/SC-609D, HD-85"		930D-DB-85
FS95-628	780-210, 95" CL	SL21A-95	FS/SC-609A, 95"	513	930A-95
FS95HD-628	780-210HD, 95" CL	SL21A-HD-95	FS/SC-609A, HD-95"	513	930A-DB-95
FS95-393	780-210, 95" BRZ	SL21D-95	FS/SC-609D, 95"	518	930D-95
FS95HD-393	780-210HD, 95" BRZ	SL21D-HD-95	FS/SC-609D, HD-95"	518	930D-DB-95
FS120-628	780-210, 120" CL	SL21A-120	FS/SC-609A, 120"	515	930A-120
FS120HD-628	780-210HD, 120" CL	SL21A-HD-120	FS/SC-609A, HD-120"	515	930A-DB-120
FS120-393	780-224, 120" BRZ	SL21D-120	FS/SC-609D, 120"	519	930D-120
FS120HD-393	780-224HD, 120" BRZ	SL21D-HD-120	FS/SC-609D, HD-120"	519	930D-DB-120



“Over 125 Years of Quality”