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INTRODUCTION

This Technical Data Manual is designed as a support and informational tool for Mesker Door™ Products used by Architects, Distributors, Specification Consultants / Writers and Engineers.

Mesker Door™ is the oldest hollow metal door and frame manufacturer in America. In fact, we invented the hollow metal door over 145 years ago. Visit http://www.oldestmetaldoor.com for more information and a detailed timeline on our company history.

If you want superior quality and great value, you've come to the right place. At Mesker Door™, our uncompromising dedication to value is backed by an international network of distributors and exceptional customer service that makes us the choice of contractors and architects throughout the world.

With the best in class fit and finish, our doors and frames are the most rugged and durable in the commercial construction industry. We frequently exceed architectural design specifications as well as the specifications of the Steel Door Institute (SDI), of which we're the oldest member.

Our mantra is simple. We cut metal, not corners. We bend steel, not rules. And we shine as the oldest hollow metal door and frame fabricator in America.

LITERATURE

Standards referenced in this Technical Manual can be obtained directly from the publisher of that literature. Refer to the organization listed below to obtain more information on the standards published.

ANSI American National Standards Institute www.ansi.org
ASTM American Society for Testing and Materials www.astm.org
CSI Construction Specifications Institute www.csinet.org

DHI Door and Hardware Institute www.dhi.org

NFPA National Fire Protection Association www.nfpa.org

SDI Steel Door Institute www.steeldoor.org
UL Underwriters Laboratories, Inc. www.ul.com
WH Warnock Hersey (Intertek) www.intertek.com

FM FM Global www.fmglobal.com

ERRORS AND OMISSIONS

Every effort has been made to ensure the completeness and accuracy of the Mesker Door™ Technical Manual. The data sheets will be updated whenever it is deemed necessary, as new products are introduced, new tests are completed and new technologies are developed. For these reasons and because of the nature and scope of the subject, Mesker Door™ and its employees can assume no responsibility or liability for the absolute accuracy of the material contained herein or its use. The information in this Technical Manual is subject to change without notice.

Please contact the Mesker Door™ Customer Service Department at www.meskerdoor.com if you identify any errors or omissions.



DOOR LEVELS AND MODELS

Standard steel doors are classified in four levels: Level 1—1 3/4" standard duty, Level 2 1 3/4" heavy duty, Level 3—1 3/4" extra heavy duty and Level 4—1 3/4" maximum duty.

Each of the four levels noted above offer a range of construction models and designs to meet architectural requirements for preference and appearance. The standard steel door construction models are full flush or full flush with seamless edge.

Recommended minimum gauge requirements for the various levels and models of standard steel doors are indicated in the table below.

Selection of standard steel doors for general usage is made by analyzing criteria such as frequency of use, including subjection to and degree of possible abuse. Other criteria to be considered in door selection are: conformance to local building codes and fire code regulations; sound attenuation and/or insulation requirements; and architectural design and appearance.

The suggested door levels and model chart below is a reference aid matching standard duty, heavy duty and maximum duty doors with general usage requirements within the classification of buildings. Where optional door levels and models are indicated, further analysis on an individual job basis is recommended.

	vel	Model	Full Fl	ush or Sea	ımless	Construction	Mesker Series
Le	vei	Model	MSG No.	IP in	SI mm	Construction	Mesker Series
1	Standard	1	20	0.032	0.8	Full Flush	N Series
	Duty	2	20	0.032	0.0	Seamless	NVS Series
2	Heavy	1	18	0.042	1	Full Flush	N Series
	Duty	2	10	0.042	•	Seamless	NVS Series
	Extra	1				Full Flush	N Series
3	Heavy	2	16	0.053	1.3	Seamless	NVS Series
	Duty						
4	Maximum	1	14	0.067	1.6	Full Flush	N Series
4	Duty	2	14	0.007	1.0	Seamless	NVS Series

This chart and chart on page G-3 taken from SDI-108, Recommended selection and usage guide for standard steel doors.



SUGGESTED USAGE GUIDE

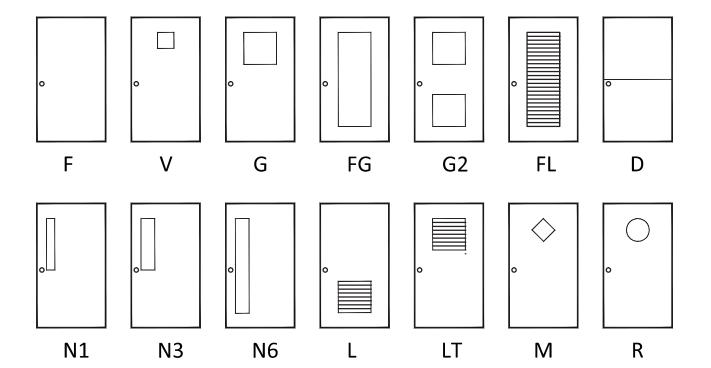
SUGGESTEL	USAGE	GOIDE								
	C+3	ndard Ste	al Door	Lovels		Do	or Docisi	n Noman	claturo	
		iiuai u Sle	בפו טטטו	revel2		D0	or Desig	ii ivoillen	ciature	
	Level 1	Level 2	Level 3	Level 4						
	revert	LEVELZ		Lever						
D:lalia =	Ctandand	ا ا	Extra	Mavimum			\sqcap			
Building	Standard	Heavy	1,	Maximum	。					
Types	Duty	Duty	Duty	Duty						II
	1 2 / 4 !!	1 2 / 4 !!	1 2 / 4 !!	1 2/411						
	1-3/4"	1-3/4"	1-3/4"	1-3/4"						
					F	G	V	FG	N	L
Apartment				I		1	l .	l .	<u>I</u>	
Main Entrance		Х	Х		Х	l X		X	X	
Unit Entrance	X	Х	Х		X					
Bedroom Bathroom	X				X					X
Closet	X				X					X
Stairwell		Х	Х				Х		Х	,,
Dormitory Main Entrance		Х	Х	X		l x	ı	Х	Х	
Unit Entrance	Х	X	- ^ -		Х	 ^				
Bedroom	X	X			X					
Bathroom	X	X			X					X
Closet Stairwell	Х	X			Х					Х
Stairweii			Х				X		Х	
Hotel - Motel										
Main Entrance	Х	Х			X					
Bathroom	X				X					
Closet Stairwell	Х	Х	X		Х		Х		Х	Х
Storage/Utility		X	X		Х		<u> </u>		_^_	Х
				•		•	•	•	•	
Hospital - Nursin Main Entrance	g Home		Х					Х	Х	
Patient Room		Х			Х	X		 ^	 ^ 	
Stairwell		X	Х				Х		Х	
Operating/Exam		X	X		X					
Bathroom Closet	Х	X	Х		X					X
Recreation	^	X			X		Х			
Kitchen		X	Х				X			
							-			
Industrial Entrance/Exit			Х	Х		X	1	Х	Х	
Office	Х	Х	^_	_^_	Х	X		<u> </u>		
Production			Х			Х				
Toilet		Х	X		X					Х
Tool Trucking			X	X	Х	X				
Monorail			X	X	Х	l x				
							·	·	·	
Office			· · ·							
Entrance Individual Office	X		Х		Х	X		Х	Х	
Closet					X	 ^				X
Toilet		Х	Х		X					
Stairwell		X	X				Х		Х	
Equipment Boiler		X	X		X					
polici		^		I		<u> </u>	l	I	<u> </u>	Х
School										
Entrance/Exit			Х	Х		X		Х	X	
Classroom		X				Х			Х	
Toilet Gymnasium		Х	X	X	X	X	X			Х
Cafeteria		Х	X	_^_	^_	X	_^_			
Stairwell		Х	Х				Х		Х	
Closet	Х	Х	Х	Х	Х					Х

Note: This is only a guide.

Compliance with the local and national codes is the responsibility of the specifier.



DOOR STYLES



NOMENCLATURE FOR DOOR STYLES

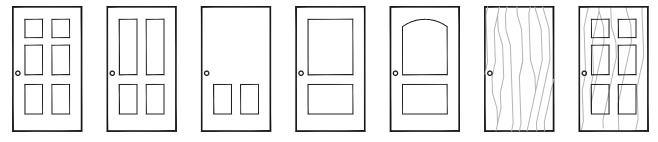
		. •	5 6 6 11 6 1 1 2 2 5
F	FLUSH	N6	5"x60" EXPOSED GLASS
V	VISION LITE	L	LOUVERED
G	HALF GLASS	LT	LOUVERED TOP
FG	FULL GLASS	М	DIAMOND LITE
G2	TWO EQUAL LITES	R	ROUND LITE
FL	FULL LOUVER		
D	DUTCH		
N1	3"x33" EXPOSED GLASS		
N3	5"x20" EXPOSED GLASS		



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GENERAL INFORMATION

DOOR STYLES



SP SERIES P4 SERIES P2B SERIES P2S SERIES P2A SERIES NW SERIES SPW SERIES

NOMENCLATURE FOR DOOR STYLES

SP	6 PANEL
P4	4 PANEL W/LONG TOP
P2B	2 PANEL BOTTOM
P2S	2 PANEL W/ SQUARE TOP
P2A	2 PANEL W/ARCH TOP
NW	FLUSH WOOD GRAIN
SPW	6 PANEL WOOD GRAIN

^{*} Other panel options available for orders of 100 doors or more. Please consult with the factory for details.



HANDING

To determine the hand of a door, view the door from the Secure Side (the side the hinges are on is the hand of the door).

- If the door swings away from the viewer, the hand is regular hand, i.e., right or left hand.
 If the door swings to the viewer, the door is reverse swing, i.e., right hand reverse swing or left hand reverse swing.

Right Hand Door (swing in) Right Hand Frame	Left Hand Door (swing in) Left Hand Frame
RH Lock Secure Side	LH Lock K Secure Side
Right Hand Reverse Door (swing out) Left Hand Frame	Left Hand Reverse Door (swing out) Right Hand Frame
3	
RHR Lock Secure Side	Secure Side LHR Lock
Pair of Doors - LH Active (swing in) Double Door Frame - LH Active	Pair of Doors - RH Active (swing in) Double Door Frame - RH Active
LH Lock K Z Astragal Secure Side	RH Lock Z Astragal Secure Side
Pair of Doors - LHR Active (swing out) Double Door Frame - RH Active	Pair of Doors - RHR Active (swing out) Double Door Frame - LH Active
Secure Side Flat Astragal	RHR Lock Flat Astragal RHR Lock Secure Side



METAL GAUGES

This document is for reference to the common gauges of steel frequently used in the Steel Door Industry.

Manufacturers no longer order sheet and coil to a specific gauge, but rather to a minimum decimal thickness. This thickness is the lowest of the range for a specific gauge. The steel supplier is therefore permitted to exceed, but not be less than the specific decimal thickness. These minimum values meet the stringent requirements of both Underwriters Laboratories Inc. and ITS / Warnock Hersey. Examples of minimum allowable steel thickness are listed below.

For zinc coated (galvannealed) steel sheets, the coating thickness only slightly increases steel thickness. One ounce of zinc per square foot corresponds to an average thickness of 0.0017" (total of both sides). A60 material has an average coating thickness of 1 mil (0.001") or .0005" per side which is 50% greater protection than A40 coating.

Gauge, Minimum - Uncoated Flat Rolled Steel

Lawal	Model	Minimum	Thickness	MOO N = (1)
Level	Model	Inches	mm	MSG No. (1)
,	1	0.032	0.8	20
1	2	0.032 0.8		20
	1	0.042	1.0	18
2	2	0.042	1.0	18
	1	0.053	1.3	16
3	2	0.053	1.3	16
	3			16
4	1	0.067	1.7	14
4	2	0.067	1.7	14

This chart is taken from SDI – A250.8.

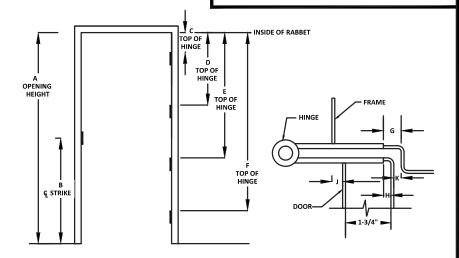


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GENERAL INFORMATION

COMPARISON FOR FRAMES 4-1/2" HINGE



Manufacturer	Α	В	С	D	E	F	G	Н	J	K
	Height	Strike	1st Hinge	2nd Hinge	3rd Hinge	4th Hinge				
	6'-8"		7-1/2"	37-7/16"	67-3/8"	Х		3/16"	1/16"	
	7'-0"	40-5/16"		39-7/16"	71-3/8"	Х				
AMWELD	7'-2"			39-7/16"	71-3/8"	Х	5/16"			1/8"
	7'-10"			32-13/16"	58-1/8"	83-7/16"				·
	8'-0"			32-13/16"	58-1/8"	83-7/16"				

	6'-8"		5"	35-1/4"	65-1/2"	Х				
	7'-0"	40-5/16"		37-1/4"	69-1/2"	Х	11/32"	1/4"	1/8"	3/32"
BENCHMARK	7'-2"			37-1/4"	69-1/2"	Х				
	7'-10"			29-1/8"	53-1/4"	77-3/8"				
	8'-0"			30-1/2"	56"	81-1/2"				

	6'-8"			37-3/4"	68-3/4"	Х				
	7'-0"			39-3/4"	72-3/4"	X				
CECO	7'-2"	41-13/16"	6-3/4"	40-3/4"	74-3/4"	Х	5/16"	1/4"	1/8"	1/16"
	7'-10"]		32-5/64"	57-27/64"	82-3/4"	-			
	8'-0"			32-3/4"	58-3/4"	84-3/4"				

	6'-8"			35-1/4"	65-1/2"	Х				
	7'-0"			37-1/4"	69-1/2"	Х]			
CURRIES	7'-2"	40"	5"	38-1/4"	71-1/2"	Х	5/16"	1/4"	1/8"	1/16"
	7'-10"			29-7/8"	54-3/4"	82-3/4"]	_	_	
	8'-0"			30-1/2"	56"	84-3/4"				

	6'-8"			35-1/4"	65-1/2"	Х				
	7'-0"			37-1/4"	69-1/2"	Х				
MESKER	7'-2"	40-5/16"	5"	38-1/4"	71-1/2"	Х	5/16"	1/4"	1/8"	1/16"
	7'-10"			30-1/2"	56"	81-1/2"]	'		
	8'-0"			30-1/2"	56"	81-1/2"]			

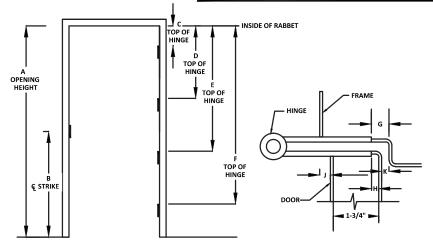


IFDAL INFORMATION

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GENERAL INFORMATION

COMPARISON FOR FRAMES 4-1/2" HINGE



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Manufacturer	Α	В	С	D	E	F	G	Н	J	K
	Height	Strike	1st Hinge	2nd Hinge	3rd Hinge	4th Hinge	3/32"	5/16"	7/32"	
PIONEER	6'-8"	38"	5"	35-1/4"	65-1/2"	Х				
	7'-0"			37-1/4"	69-1/2"	Х				
	7'-2"			38-1/4"	71-1/2"	Х				3/32"
	7'-10"			29-13/16"	54-5/8"	79-7/16"				
	8'-0"			30-1/2"	56"	81-1/2"				

	6'-8"	40-5/16"	7-1/2"	37-7/16"	67-3/8"	Х	1/16"	5/16"	1/4"	1/8"
REPUBLIC	7'-0"		9-1/2"	39-7/16"	69-3/8"	Х				
	7'-2"		9-1/2"	40-7/16"	71-3/8"	Х				
	7'-10"		5"	29-7/8"	54-3/4"	79-5/8"				
	8'-0"		5"	30-1/2"	56"	81-1/2"				

STEELCRAFT	6'-8"	40-5/16"	7-1/2"	37-7/16"	67-3/8"	Х	1/16"	5/16"	1/4"	1/8"
	7'-0"			39-7/16"	71-3/8"	Х				
	7'-2"			40-7/16"	73-3/8"	Х				
	7'-10"			32-1/8"	56-3/4"	81-3/8"				
	8'-0"			32-51/64"	58-5/64"	83-3/8"				



SURFACE PREPARATION AND PAINTING

Mesker Door's ™ recommended guidelines for preparation and painting of doors and frames.

Maintenance of Steel Doors and Frames should be done in accordance with SDI 124-98 "Maintenance of Standard Steel Doors and Frames.

Priming and painting of steel doors and frames should be done in accordance with SDI A250.8, sections 2.1.3, 2.1.4, and 2.1.5. We also recommend following ANSI A250 recommendations, including but not limited to A250.8 4.1 -4.6, and appendix "B" listed below

A250.8-2003 "Recommended Specifications for Standard Steel Doors and Frames"

Appendix B, General Considerations, Aesthetics

"The production of steel doors and frames relies on a variety of manufacturing processes including spot welding, projection welding, arc welding ground smooth, grinding, filling, etc. These processes may result in a show-through after application of finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

The show-through characteristics increase as the paint gloss increases. This standard recommends a maximum paint gloss rating of 20% reflectance, measured using a 60° gloss meter, which should be suitable for most applications. Translucent paints may emphasize show-through characteristics and their use is not recommended."

Mesker Door[™] does not recommend the use of gloss paints. Sprayed on gloss paints are particularly difficult to use. If gloss paints are used, a considerable amount of cleaning, sanding and painting will be required and may still emphasize show through characteristics. Mesker Door [™] does not recommend using black or dark colored paint on exterior doors, without allowing for additional expansion and contraction.

Mesker Door™ does not recommend the use of water based paints as final top coats. If water based paints are used as a finish coat, you should first prime the door or frame with a primer with rust inhibitors recommended by the paint manufacturer for bare steel. If the door is not primed in this way, all scratches and nicks that expose bare steel will develop rust. It is also extremely important to clean any and all metal particles that may be on the prime coat prior to painting. These may include small metal shavings from sanding or other jobsite operations and will cling to the door or frame with static electricity. These particles will show rust through the finish paint but are not rust of the actual frame or door.



ANSI/DHI A115	Hardware Preparation in Steel Doors and Steel Frames
ANSI/DHI A115.IG	Installation Guide for Doors and Hardware
ANSI A250.10	Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames
ANSI A250.11	Recommended Erection Instructions for Steel Frames
ANSI A250.13	Testing and Rating of Severe Windstorm Resistant Components for Swinging Door Assemblies
ANSI A250.3	Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces for Steel Doors and Frames
ANSI A250.4	Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcing
ANSI A250.6	Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames
ANSI A250.7	Nomenclature for Standard Steel Doors and Steel Frames
ANSI A250.8	Recommended Specifications for Standard Steel Doors and Frames (SDI-100)
ANSI/BHMA A156.1	Butts and Hinges
ANSI/BHMA A156.3	Exit Devices
ANSI/BHMA A156.4	Door Controls – Closers
ANSI/BHMA A156.7	Template Hinge Dimensions
ANSI/NFPA 105	Standard for the Installation of Smoke Door Assemblies
ANSI/NFPA 252	Standard Methods of Fire Tests for Door Assemblies
ANSI/NFPA 257	Standard on Fire Test for Window and Glass Block Assemblies
ANSI/NFPA 80	Standard for Fire Doors and Windows
ANSI/UL 10B	Standard for Fire Tests of Door Assemblies (neutral pressure)
ANSI/UL 10C	Standard for Fire Tests of Door Assemblies (positive pressure)
ANSI/UL 1784	Air Leakage Test of Door Assemblies
ANSI/UL 9	Fire Test of Window Assemblies



ASTM A366/A366M	Standard Specification for Commercial Steel (CS) Sheet, Carbon (0.15 Maximum Percent) Cold-Rolled
ASTM A653/A653M	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-coated (Galvannealed) by the Hot-Dip Process
ASTM A1008	Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
ASTM A1011	Standard Specification for Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
ASTM A568	Standard Specification for Steel Sheet, Carbon, High-Strength Low-Alloy, Hot-rolled and Cold-rolled
ASTM A591	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dip Process
ASTM A924	Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM C578	Specification for Rigid, Cellular Polystyrene Thermal Insulation
ASTM D1654	Standard Test Method for Evaluation of Painted or Coated Specimens
ASTM D2794	Standard Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
ASTM D3359	Standard Test Methods for Measuring Adhesion by Tape Test
ASTM D4585	Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation
ASTM D610	Standard Test Method for Evaluation Degree of Rusting on Painted Steel Surfaces
ASTM D714	Standard Test Method for Evaluation Degree of Blistering of Paints
ASTM E-90	Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
HMMA 801	Glossary of Terms for Hollow Metal Doors and Frames
HMMA 802	Manufacturing of Hollow Metal Doors and Frames
HMMA 810	Hollow Metal Doors



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HMMA 810	TN-01-03 Defining Undercuts
HMMA 820	Hollow Metal Frames
HMMA 820	TN 01-03 Grouting Hollow Metal Frames
HMMA 830	Hardware Selection for Hollow Metal Doors and Frames
HMMA 840	Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames
HMMA 850	Fire Rated Hollow Metal Doors and Frames
HMMA 861	Commercial Hollow Metal Doors and Frames
HMMA 865	Guide Specifications for Swinging Sound Control Hollow Metal Doors and Frames
HMMA 867	Guide Specifications for Commercial Laminated Core Hollow Metal Doors and Frames
HMMA 890	Hollow Metal
SDI-106	Recommended Standard Door Type Nomenclature
SDI-108	Recommended Selection and Usage Guide for Standard Steel Doors
SDI-109	Hardware for Standard Steel Doors and Frames
SDI-110	Standard Steel Doors and Frames for Modular Masonry Construction
SDI-111	Recommended Details and Guidelines for Standard Steel Doors, Frames and Accessories (A-H)
SDI-111-A	Recommended Standard Steel Door Details
SDI-111-B	Recommended Standard Details for Dutch Doors
SDI-111-C	Recommended Louver Details for Standard Steel Doors
SDI-111-D	Recommended Door, Frame and Hardware Schedule for Standard Steel Doors and Frames
SDI-111-E	Recommended Weatherstripping for Standard Steel Doors and Frames
SDI-111-F	Recommended Existing Wall Anchors for Standard Steel Doors and Frames
SDI-111-G	Recommended Standard Preparation for Double Type (Interconnected) Locks on Standard Steel Doors and Frames



SDI-111-H	High Frequency Hinge Preparations for Frames
SDI-112	Zinc-Coated (Galvanized/Galvannealed) Standard Steel Doors and Frames
SDI-113	Standard Practice for Determining the Steady State Thermal Transmittance of Steel Door and Frame Assemblies
SDI-117	Manufacturing Tolerances Standard Steel Doors and Frames
SDI-118	Basic Fire Door Requirements
SDI-122	Installation and Troubleshooting Guide for Standard Steel Doors and Frames
SDI-124	Maintenance of Standard Steel Doors and Frames
SDI-127	Series - Industry Alerts (A through J)
SDI-127-A	End Closure
SDI-127-B	Door Edge Cutouts
SDI-127-C	Frame Cutout Limits
SDI-127-D	Electric Strikes in Stud Walls
SDI-127-E	Prime Painted Materials Alert
SDI-127-F	Butted Frames Rough Opening Sizes
SDI-127-G	Environmental Considerations Relating to Factory Painted Steel Doors and Frames
SDI-127-H	Water Penetration
SDI-127-I	Grouting Frames in Drywall
SDI-127-J	Bituminous Back-Coating of Frames
SDI-128	Guidelines for Acoustical Performance of Standard Steel Doors and Frames
SDI-129	Hinge and Strike Spacing
SDI-130	Electrified Hinge Preparations
SDI-131	Accelerated Physical Endurance Test Procedure for Steel Doors, Frames and Frame Anchors
UBC 7-2	Fire Tests of Door Assemblies
UBC 7-4	Fire Tests of Window Assemblies



NOMENCLATURE FOR DOORS AND FRAMES

DOORS:

SERIES

N = Standard Non Handed

NF = Temperature Rise

ST = Steel Stiffened

BR = Bullet Resistant

FE316 = TORNADO DOOR 316

DOOR CORE:

P = Polystyrene

H = Honeycomb (cardboard)

U = Urethane

F = Fiberboard

STEEL TYPE:

- = Cold Rolled Steel

Z = A60 Galvannealed

G90 = G 90 Galvanized

EDGE CONSTRUCTION:

- = Standard Seamed Edge

NVS = Continuously welded seamless vertical edges, with no putty or filler.

S = Seamless (putty or stitch weld and putty)



NOMENCLATURE FOR DOORS AND FRAMES

FACE:

F= Flush

V = Vision Lite

N = Narrow Lite (specify size)

N1= Narrow Lite 3"x 33" Exposed Glass

N3= Narrow Lite 5" x 20" Exposed Glass

N6= Narrow Lite 5" x 60" Exposed Glass

G = ½ Glass Lite

FG = Full Glass Lite

G2 = 2 Lites

R= Round Lite

M= Diamond Lite

L = Louver at Bottom

FL= Full Louver

D= Dutch door

VP = Viewer

CO = Cutout Only

SP = Six Panel

P4 = Four Panel

P2B = Two Panel Bottom

P2S = Two Panel Square Top

P2A = Two Panel Arch Top

NW = Wood Grain

SPW = Six Panel Wood Grain

NOMENCLATURE FOR DOORS AND FRAMES

STILES:

- = 4.5" Standard weight hinges

4H = 4.5" Heavy Weight Hinges

5 = 5" Standard Weight Hinges

5H = 5" Heavy Weight Hinges

C4 = 161 2 3/4" Backset

C4T = 161 2 3/4" Backset with Thru Bolts

C4 Turtle = 161 2 3/4" Backset with Turtle Prep

MB = 86 Edge No Face Preps

MB+Template = Mortise 86 w/ function holes

RP = Rim Panic Reinforcement

RP+Template = Rim Panic Reinforcement with Function Holes

VR = Vertical Rod Panic Reinforcement

MBN = Mortise Box Reinforcement No Edge Prep

BV= Beveled Edge

FRAMES:

SERIES:

F = Masonry / Drywall Standard Frame

FDJ = KD Drywall with Compression Anchor

RF = Remodeling Frame

FF = Flush Face Frame

S = Stick

M = Mullion



NOMENCLATURE FOR DOORS AND FRAMES

COMPONENT:

FH = Header

HJ = Hinge Jamb

SJ = Strike Jamb

BJ = Blank Jamb

WJ = Window Jamb

BS = Blank Stick

BM = Blank Mullion

HS = Hinge Stick

HM = Hinge Mullion

SS = Strike Stick

SM = Strike Mullion

SR = Single Rabbet

ER = Equal Rabbet

DE = Double Egress

CO = Cased Opening

C = Communicating

HARDWARE PREPARATIONS:

U = ASA Strike

C = T strike

DBS = Deadbolt Strike

RL = Roller Latch

RPR = Rim Panic Strike Reinforcement

VRR = Vertical Rod Panic Strike Reinforcement

FB = Flushbolt Strike



NOMENCLATURE FOR DOORS AND FRAMES

HARDWARE PREPARATIONS CONTINUED:

RA = Regular Arm Closer Reinforcement

PA = Parallel Arm Closer Reinforcement

BR = Continuous Hinge Reinforcement

H = Interconnected Lock Strikes

VRM = Concealed Vertical Rod Panic Strike

ELS = Electric Strike Preparation

EH = Electric Hinge Preparation

Miscellaneous:

W4F = 4" Face

NOMENCLATURE FOR DOORS AND FRAMES

FACE:

F= Flush

V = Vision Lite

N = Narrow Lite (specify size)

N1= Narrow Lite 3"x 33" Exposed Glass

N3= Narrow Lite 5" x 20" Exposed Glass

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ER = Equal Rabbet

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RL = Roller Latch

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VRR = Vertical Rod Panic Strike Reinforcement

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NOMENCLATURE FOR DOORS AND FRAMES

HARDWARE PREPARATIONS CONTINUED:

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VRM = Concealed Vertical Rod Panic Strike

ELS = Electric Strike Preparation

EH = Electric Hinge Preparation

Miscellaneous:

W4F = 4" Face

MESKER LEED PROGRAM COMPLIANCE

Based on the U. S. Green Building Council LEED Reference Guide for Green Building Design and Construction 2009 publication for the design, construction and major renovations of commercial and institutional buildings including core & shell and K-12 school projects.

Material and Resources Credits 4.1 and 4.2

Recycled Content: Mesker's doors and frames contribute credits under Material and Resources Credit 4

Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts from extraction and processing of virgin materials.

Requirements: Use materials with recycled content* such that the sum of postconsumer** recycled content plus ½ of the pre-consumer*** content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project.

Credits:

MR 4.1: 1 point - recycled content is at least 10% of the total value of the materials in the entire project.

MR 4.2: 1 additional point added to the MR 4.1 point – recycle content is at least 20% (MR 4.1 percentage plus an additional amount to equal a minimum of 20%) of the total value of the materials in the entire project.

Mesker's postconsumer recycled content is 59%, our pre-consumer recycled content 9% thus qualifying for the maximum credit.

- *Recycled content is defined in accordance with the International Organization of Standards document, ISO 14021 Environmental labels and declarations Self-declared environmental claims (Type II environmental labeling).
- **Postconsumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.
- ***Pre-consumer material is defined as material diverted from the waste stream during the manufacturing process. Reutilization of materials (i.e. rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it) is excluded.

For further information regarding these credits visit the U. S. Green Building Council at www.usgbc.org or call Mesker Door (256) 851-6670



MESKER LEED PROGRAM COMPLIANCE

Based on the U. S. Green Building Council LEED Reference Guide for Green Building Design and Construction 2009 publication for the design, construction and major renovations of commercial and institutional buildings including core & shell and K-12 school projects.

Material and Resources Credits 5.1 and 5.2

Regional Material: Mesker doors and frames are manufactured in Huntsville, AL 35811-9021

Intent: To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Requirements: Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 (five hundred) miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product of material is extracted, harvested or recovered and manufactured locally, then only that percentage (by weight) may contribute to the regional value.

Credits:

MR 5.1: 1 point – At least 10% of the materials are extracted, processed and manufactured regionally.

MR 5.2: 1 additional point added to the MR 5.1 point – At least 20% (MR 5.1 percentage plus an additional amount to equal a minimum of 20%) of materials are extracted, processed and manufactured regionally.

For further information regarding these credits visit the U. S. Green Building Council at www.usgbc.org or call Mesker Door™ (256) 851-6670

BUY AMERICAN

As the oldest manufacturer of Hollow Metal Doors and Frames in the United States of America, Mesker Door™ shines as a founding member of the Steel Door Institute, and the inventors of the Hollow Metal Door.

Mesker Door™ is proud to manufacture innovative products in the United States of America, utilizing American Steel in the construction of our doors and frames.

Mesker Door™ is a company owned by Americans, run by Americans, and employs American families in Huntsville, Alabama, and across the United States of America.

As a result, Mesker Door ™ meets the following qualifications as an American Manufacturer:

THE BUY AMERICAN ACT

MADE IN THE USA

ASSEMBLED AND MANUFACTURED IN THE USA

THE AMERICAN RECOVERY AND REINVESTMENT ACT'S BUY AMERICAN RULE

We're glad that you have chosen our products for your project. Please see below for some common questions that you may have about the above requirements. All information provided in this document is provided for the use of Mesker Door™ and its partners, as an introduction to Mesker Door™, and our compliance with the Buy American statutes. The information below should be used as a guide, and in no way addresses all of the complexity found in the complete versions of these documents. As the information found in the complete versions of these documents is much more detailed, and may change over time, please consult your legal council to find the most current information on the Buy American statutes.

Please specify with your Mesker Door™ distributor that you want American made products on your project!

Thank you for your support.



BUY AMERICAN

THE BUY AMERICAN ACT

Mesker *Door* ™ meets *these qualifications*.

A. Requirements

- 1. The end product must be manufactured in the U.S.
 - a. Test to determine whether a product is a valid "domestic end product" under the Buy American Act: the end product, articles, materials, and supplies must be manufactured in the U.S. That is, the product must have transformed into a new and different article of commerce, with a name, character, or use distinct from the original article.
- 2. The costs of its components which are mined, produced, or manufactured in the U.S. must exceed 50 percent.
 - a. The cost of the components of the end products that are produced or manufactured domestically which are incorporated directly in the end product must exceed the cost of the foreign produced component parts.

B. Benefits

- 1. A qualifying Buy American Act product creates a preference for suppliers of domestic source end products by government contractors.
- 2. The act restricts the government's ability to purchase supplies that are not domestic end products. The act also essentially requires the use of only domestic construction materials in the contracts for construction in the United States.

C. Compliance

- 1. Even a minor violation generally requires imposition of some kind of penalty, although an isolated instance of noncompliance may be insufficient to establish a violation.
 - a. For minor violations, penalties range from substituting domestic items to recovering the cost difference between domestic and foreign items.
 - b. For serious violations, the agency may cancel the contract.
- Decisions applying the Buy American Act are subject to judicial review under a
 highly deferential standard, requiring the court to uphold the decision unless it is
 arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with
 the law.

MESKER DOOR ™ MEETS THE REQUIREMENTS OF THE BUY AMERICAN ACT.



BUY AMERICAN

MADE IN THE USA

Mesker Door™ meets these qualifications.

A. Requirements

- 1. Unqualified claim
 - a. "All or virtually all" of the components making a product must be of U.S. origin; i.e., all significant parts and processing that go into the product must be of U.S. origin.
 - i. A negligible amount of foreign parts in the end product is permitted.
 - ii. The product's final assembly or processing must take place in the U.S.
 - b. When a manufacturer or marketer makes an unqualified claim that a product is "Made in U.S.A", it should have a "reasonable basis" to support the claim at the time it is made.

2. Qualified claim

- a. A qualified claim describes the extent, amount or type of a product's domestic content or processing; it indicates that the product is not entirely of domestic origin.
- b. This label is appropriate for products that include U.S. content or processing but fail to meet the criteria for making an unqualified claim, e.g., "60% U.S. content", "Made in U.S.A. of U.S. and imported parts," or "Couch assembled in U.S.A from Italian Leather and Mexican Frame."

B. Benefits

1. Permits either unqualified or qualified "Made in the U.S.A. Made in America" labeling or advertising claims.

C. Compliance

- 1. Compliance is governed by the FTC, which enforces actions against false or misleading claims that a product is of U.S. origin.
- 2. The FTC does not pre-approve advertising or labeling claims. A manufacturer or marketer may make any claim as long as it is truthful and substantiated.

MESKER DOOR™ MEETS THE REQUIREMENTS OF THE MADE IN THE USA MARK.



BUY AMERICAN

ASSEMBLED AND / OR MANUFACTURED IN THE U.S.A.

Mesker Door™ meets these qualifications.

A. Requirements

- 1. A product that includes foreign components may be called "Assembled in U.S.A." Without qualification when its principal assembly takes place in the U.S. and the assembly is substantial.
- 2. The product's last "substantial transformation" must occur in the U.S. In other words, a "screwdriver" assembly in the US. of foreign components into a final product at the end of the manufacturing process would not qualify for the "Assembled in U.S.A." claim.
 - a. "Substantial transformation" requires that a manufacturing process result in a new and different product with a new name, character, and use that is different from that which existed before the change.

B. Benefits

 Since this label is essentially a modification of the "Made in USA America" claim, the benefits are the same; i.e., the FTC permits an assembled/Manufacture in America" label for advertising and labeling claims for qualifying products.

C. Compliance

1. Compliance is the same as the "Made in U.S.A /America" claim; i.e., compliance is governed by the FTC, which enforces actions against false or misleading claims that a product is of U.S. origin.

MESKER DOOR ™ MEETS THE REQUIREMENTS OF THE ASSEMBLED AND / OR MANUFACTURED IN THE U.S.A. MARK.



BUY AMERICAN

THE AMERICAN RECOVERY AND REINVESTMENT ACT'S BUY AMERICAN RULE

Mesker Door™ meets these qualifications.

The American Recovery and Reinvestment Act's, Buy American Rule requires that all iron, steel and manufactured goods on construction projects of public buildings or public works projects must be produced in the United States.

A. What projects are subject to the Buy American requirement?

The scope of the requirement can be thought of as a three-part test. A project is subject to the requirement if:

- (1) Funds appropriated or otherwise made available by this Act are;
- (2) Used for the construction, alteration, maintenance, or repair of;
- (3) A public building or public work.

Under the first part, most projects that receive funds or a loan guaranteed under the new law are subject to the requirement. The second part of the test- "construction, alteration, maintenance, or repair"- includes an extremely broad range of work, but the third part- "public building or public work"- almost certainly excludes work done with respect to any privately owned facility.

B. What does it mean to be subject to this requirement?

It means that "all of the iron, steel, and manufactured goods" used in the project must have been produced in the U.S. In other words, if any of the iron, steel, or manufactured goods used in the project is produced outside the U.S., the project cannot receive stimulus funding. Depending on how "project" is defined, the use of any foreign iron, steel, or manufactured goods with respect to a small component of a large project could prevent the use of stimulus funds for the entire project.

C. Does the nationality of the company producing the iron, steel, or manufactured goods matter?

No. The only thing that matters is whether production occurs within the U.S.

D. Isn't there already a Buy American requirement in federal law? Yes, the Buy American Act was originally enacted in 1933. But there are two important differences between that law and the provision in the stimulus legislation. The Buy American Act applies only to procurement by the federal government, and only requires that the cost of domestic components exceeds 50 percent of the cost of all the components.



oldest hollow metal door company in America

GENERAL INFORMATION

BUY AMERICAN

E. What circumstances qualify for a waiver under the stimulus law?

A waiver under the stimulus legislation may be granted for "any case or category of cases" where the head of the relevant federal department or agency finds that: (1) applying the prohibition would be "inconsistent with the public interest"; (2) iron, steel, and the relevant manufactured goods are not produced in the U.S. "in sufficient and reasonably available quantities and of a satisfactory quality"; or (3) inclusion of iron, steel and manufactured goods produced in the U.S. will increase the cost of the "overall project" by more than 25 percent if the agency or department head makes such a finding, he or she must publish in the Federal Register a detailed justification as to why the provision is being waived. Perhaps more importantly, the prohibition is also to be applied "in a manner consistent with U.S. obligations under international agreements." This language was added by the Senate in response to strong objections expressed by key trading partners of the U.S., including Canada and the European Union.

F. What does it mean to be consistent with U.S. obligations under international trade agreements?

It's not entirely clear, but the legislative history (discussed in more detail below) suggests that Congress intends that the Obama Administration will use its existing authority under the 1979 Trade Agreements Act to waive the Buy American requirement where it would otherwise violate a free trade agreement or the WTO. There is also an indication that it should be waived for so-called "least developed countries," where they agree to assume the obligations of the WTO and are willing to provide similar opportunities for U.S. products.

G. How soon will all this be resolved?

It depends on how soon the Obama Administration begins issuing waivers, and the breadth of those waivers. At one end of the spectrum, federal departments or agencies could issue one or more very broad waivers on public interest grounds, or based on a finding that iron and steel are not produced in the U.S. in sufficient and reasonably available quantities of satisfactory quality. At the other extreme, departments and agencies could take a narrow, project-by-project approach, issuing a waiver only where there is a showing that the cost of the entire project would otherwise be increased by more than 25 percent.

Based on its obligation to remain consistent with international trade agreements, and concerns about triggering more protectionism, it seems likely that the Obama Administration will move relatively quickly to issue waivers as to countries that are members of either WTO or a free trade agreement Waivers with respect to the least developed countries would presumably be a lower priority, and waivers with respect to developed countries that are not parties to a free trade agreement or WTO would presumably be lower still.

G-28 MAR 2014

GENERAL INFORMATION

BUY AMERICAN

From those seeking stimulus dollars, there will be enormous pressure on the administration to quickly remove the cloud of uncertainty created by this provision, and to minimize its effect on projects that would otherwise qualify. Supporters of the prohibition, on the other hand, are not going to give ground without a fight.

MESKER DOOR ™ MEETS THE REQUIREMENTS OF THE AMERICAN RECOVERY AND REINVESTMENT ACT'S BUY AMERICAN RULE.



G-28 MAR 2014

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G-29 MAR 2014

GENERAL INFORMATION

Standard Warranty

Mesker Door™ Inc. warrants for a period of one (1) year from date of shipment, all material manufactured by us to be free from defects in material and workmanship under normal use and service. All such material is supplied subject to this warranty. The company's obligation there under is limited to repairing or replacing at its option any such material which, upon examination is found to have been defective. This warranty is expressly in lieu of all other warranties expressed or implied, and of all obligations or liabilities on its part for damages, including but not limited to consequential damages. No agent is authorized to assume for it any liability except as set forth above. Nor does Mesker Door™ Company assume any liability for modifications performed on materials after said materials leave Mesker's factory.



Receiving, Storage and Handling

Receiving Material

Upon receipt all material shall be inspected for damage caused in shipping. If damaged material is found it should be noted on the freight bill before signing. Claims will be refused by the carrier if not noted on the freight bill at the time of delivery. The contractor must notify the carrier and request an inspection of the damaged material. The contractor must also notify the distributor immediately of the damage which will help expedite the repair or replacement of the damaged material.

Should the contractor find any errors in the material the distributor must be notified so that the distributor and the factory can participate in solving the problem. Unauthorized modifications to the material could result in voiding the warranty and or any labels attached to the material.

On Site Storage

Proper storage of hollow metal material at the construction site will help prevent damage.

- 1. Store all materials in a dry area. All hollow metal material should be stored so that it does not come in contact with water or moisture.
- 2. Do not use non-vented plastic or canvas. These products retain moisture and will damage hollow metal products.
- 3. Place doors and frames vertically on wood blocking at least 4" off the ground.
- 4. Place not more than 5 doors or frames per vertical stack.
- 5. Provide at least 1/4" air space between each door or frame to permit air circulation.



GENERAL INFORMATION

METRIC CONVERSION GUIDE ALL METRIC DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. ALL NUMBERS USED HAVE BEEN CALCULATED USING A "SOFT" CONVERSION METHOD.

FRAME/DOOR OPENING WIDTH			
NOMINAL WIDTH	NOMINAL WIDTH		
ENGLISH	METRIC (MM)		
1'0"	305		
1'2"	356		
1'4"	406		
1'6"	457		
1'8"	508		
1'10"	559		
2'0"	610		
2'2"	660		
2'4"	711		
2'6"	762		
2'8"	813		
2'10"	864		
3'0"	914		
3'2"	965		
3'4"	1016		
3'6"	1067		
3'8"	1118		
3'10"	1168		
4'0"	1219		
5'0"	1524		
6'0"	1829		
7'0"	2134		

FRAME RETURNS		
NOMINAL WIDTH NOMINAL WIDTH		
ENGLISH	METRIC (MM)	
3/8"	10	
7/16"	11	
1/2"	13	

FRAME FACES		
NOMINAL WIDTH NOMINAL WIDTH		
ENGLISH	METRIC (MM)	
1"	25	
1-1/4"	32	
1-1/2"	38	
1-3/4"	44	
2"	51	
4"	102	

FRAME/DOOR OPENING WIDTH		
NOMINAL WIDTH NOMINAL WIDTH		
ENGLISH	METRIC (MM)	
6'6"	1981	
6'8"	2032	
6'10"	2083	
7'0"	2134	
7'2"	2184	
7'4"	2235	
7'6"	2286	
7'8"	2337	
7'10"	2388	
8'0"	2438	

STOP HEIGHT		
NOMINAL HEIGHT NOMINAL HEIGHT		
ENGLISH	METRIC (MM)	
1/2"	12	
5/8"	16	
3/4"	19	

DOOR THICKNESS		
NOMINAL THICK NOMINAL THICK		
ENGLISH	METRIC	
1-3/4"	44	



GENERAL INFORMATION

METRIC CONVERSION GUIDE ALL METRIC DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. ALL NUMBERS USED HAVE BEEN CALCULATED USING A "SOFT" CONVERSION METHOD.

JAMB DEPTH			
NOMINAL	NOMINAL		
ENGLISH	METRIC		
3"	76		
3-1/8"	79		
3-1/4"	83		
3-3/8"	86		
3-1/2"	89		
3-5/8"	92		
3-3/4"	96		
3-7/8"	98		
4"	102		
4-1/8"	105		
4-1/4"	108		
4-3/8"	111		
4-1/2"	114		
4-5/8"	118		
4-3/4"	121		
4-7/8"	124		
5"	127		
5-1/8"	130		
5-1/4"	133		
5-3/8"	137		
5-1/2"	140		
5-5/8"	143		
5-3/4"	146		
5-7/8"	149		
6"	152		
6-1/8"	156		
6-1/4"	159		
6-3/8"	162		
6-1/2"	165		
6-5/8"	168		
6-3/4"	172		
0-//6	175		
7"	178		
7-1/8"	181		
7-1/4"	184		
7-3/8"	187		
7-1/2"	191		
7-5/8"	194		
7-3/4"	197		
7-7/8"	200		

JAMB DEPTH		
NOMINAL	NOMINAL	
ENGLISH	METRIC	
8"	203	
8-1/8"	206	
8-1/4"	210	
8-3/8"	213	
8-1/2"	216	
8-5/8"	219	
8-3/4"	222	
8-7/8"	225	
9"	229	
9-1/8"	232	
9-1/4"	235	
9-3/8"	238	
9-1/2"	241	
9-5/8"	245	
9-3/4"	248	
9-7/8"	251	
10"	254	
10-1/8"	257	
10-1/4"	260	
10-3/8"	264	
10-3/6	267	
10-1/2	270	
10-3/4"	273	
10-7/8"	276	
11"	279	
11-1/8"	283	
11-1/4"	286	
11-1/4	289	
11-3/8	292	
11-1/2	295	
11-5/6		
11-3/4"	299	
11-7/8"	302	
12"	305	
12-1/8"	308	
12-1/4"	311	
12-3/8"	314	
12-1/2"	318	
12-5/8"	321	
12-3/4"	324	
12-7/8"	327	

JAMB DEPTH		
NOMINAL	NOMINAL	
ENGLISH	METRIC	
13"	330	
13-1/8"	333	
13-1/4"	337	
13-3/8"	340	
13-1/2"	343	
13-5/8"	346	
13-3/4"	349	
13-7/8"	352	
14"	356	
14-1/8"	359	
14-1/4"	362	
14-3/8"	365	
14-1/2"	368	
14-5/8"	371	
14-3/4"	375	
14-7/8"	378	



GENERAL INFORMATION

MESKER ADHESION SYSTEM

Hot Melt PUR (HMPUR) has advantages over conventional adhesives such as contact cements and thermoplastic hot melts.

Technical name: Moisture Cure Polyurethane Hot Melt

HMPUR Adhesives "CURE" completely, meaning once set, it cannot be re-melted and will not soften or freeze and lose its adhesion. It will not absorb moisture once cured. Mesker's HMPUR system has enhanced resistance to flame spread in its cured state and is designed to pass the Underwriters Laboratories Inc. 10C, Positive Pressure Fire Tests of Door Assemblies.

FEATURES & BENEFITS

· Flame Retardant

Designed to pass UL 10C. Patent pending.

· Excellent Heat Resistance

Bonded assemblies withstand prolonged exposure to 200°F temperatures without exhibiting any signs of bond failure.

Excellent Cold Resistance

Adheres to many substrates at temperatures as low as -35°F without exhibiting any signs of bond failure.

· Excellent Creep Resistance

Cured adhesive film is extremely tough yet flexible. This allows for differences in thermal expansion and contraction of various substrates without sacrificing bond performance.

Patented Fully Reactive Technology

In addition to the many other benefits of this technology, bonded assemblies, including darkly colored materials, posses exceptional heat resistance.

Versatility

Adheres to a wide variety of core stocks and skins.



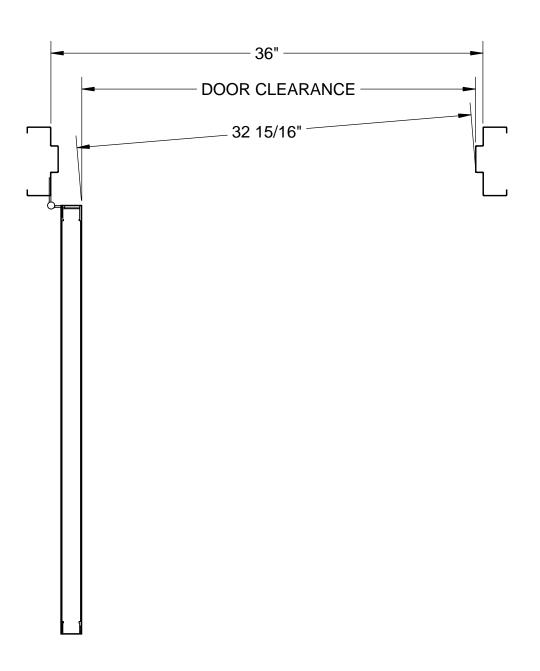


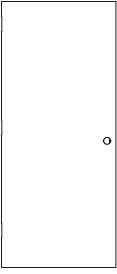


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DOORS HOW TO ORDER



FORMATTING THE PART DESCRIPTION

1 2 3 4 5 6

SERIES
N - STANDARD
NF - TEMP. RISE
ST - STEEL STIFFENED
SP - 6 PANEL
P4 - 4 PANEL
P2B - 2 PANEL BOTTOM
P2S - 2 PANEL SQUARE

P2S - 2 PANEL SQUARE
P2A - 2 PANEL ARCH
NW - WOOD GRAIN
SPW - SIX PANEL WOOD GRAIN
BR - BULLET RESISTANT
FE361 - TORNADO DOOR 361

2 CORE
P - POLYSTYRENE
H - HONEYCOMB
U - URETHANE
F - FIBERBOARD

THICKNESS AND GAUGE 4 - 1 3/4" THEN SPECIFY GAUGE

LOCK STILE
C4-161
C4T-161 W/ THRU BOLTS
C4 TURTLE-TURTLE PREP
MB-86 EDGE
MB+TEMPLATE-SECTIONAL TRIM PREP
RP-RIM PANIC REINFORCEMENT
RP+TEMPLATE-RIM REINF. W/ FNC HOLES
VR-VERTICAL ROD REINFORCEMENT
MBN-MOTISE BOX REINF. NO HOLES

5 WIDTH 28-2'8" 30-3'0" 40-4'0"

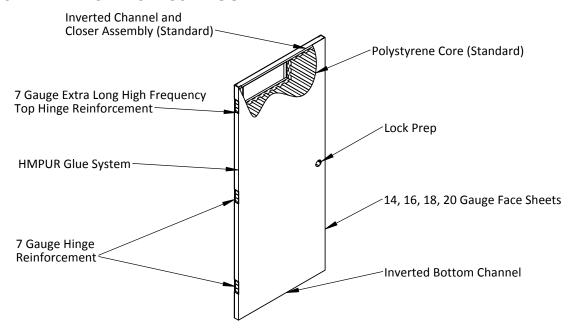
6 HEIGHT 68-6'8" 70-7'0" 80-8'0"

USE THE APPROPRIATE SYMBOL AS DESIGNATED ABOVE FOR POSITIONS 1 THRU 6. EXAMPLE

 $\frac{N}{1} \quad \frac{P}{2} \quad \frac{418}{3} \quad \frac{C4}{4} \quad \frac{30}{5} \quad \frac{70}{6}$



NP - STANDARD SERIES FLUSH DOOR



DOOR CONSTRUCTION

14, 16, 18, 20 gauge, cold-rolled, gavannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

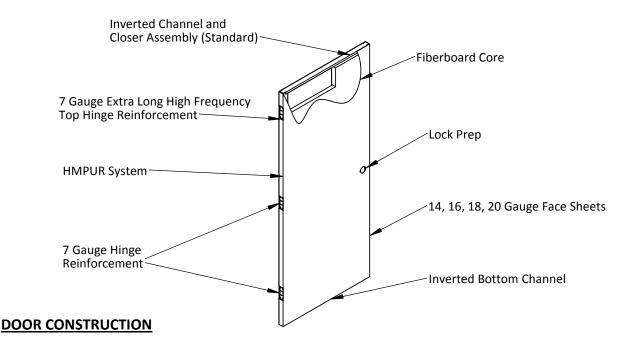
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A 250.8 (R2008). Hardware preparations comply with ANSI A 250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



N - STANDARD SERIES FLUSH DOOR with "F" Fiberboard Core (250 °F Temperature Rise)



14, 16, 18, 20 gauge, cold-rolled, galvannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Doors are rated for 250° F maximum temperature rise for the first 30 minutes of fire test. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be one piece, UL listed, solid mineral fiberboard core.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

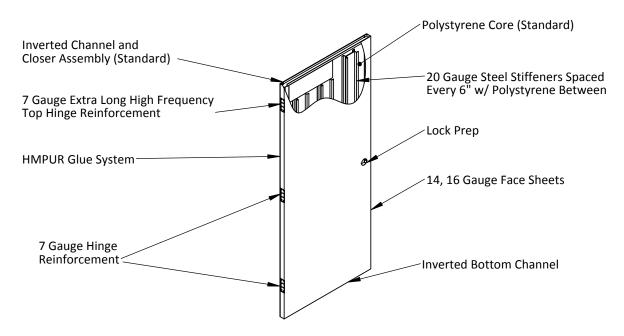
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



ST-STEEL STIFFENED FLUSH DOOR



DOOR CONSTRUCTION

14 or 16 gauge, cold-rolled, gavannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be expanded polystrene core. Optional non-fire rated cores: Urethane and Honeycomb.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

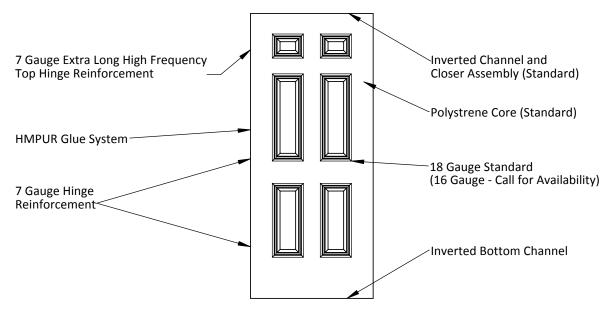
COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult page G-11 through G-14.



D-5 MAR 2014

N - STANDARD SERIES FLUSH DOOR with "EP" Embossed Panel



DOOR CONSTRUCTION

16 or 18 gauge galvannealed panel embossed stamped steel face sheets to be securely bonded to the core. Face sheets shall be embossed for the design indicated. Panel design available in Two Panel Arched (P2A) (Grooves or no grooves), Two Panel Square (P2S), Two Panel Bottom (P2B), Four Panel (P4), and Six Panel (SP). Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28. Standard Sizes: 2'8" to 3'6" width and 6'8" to 8'0". (Special sizes and panel configurations available upon request)

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional core: Polyurethane.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

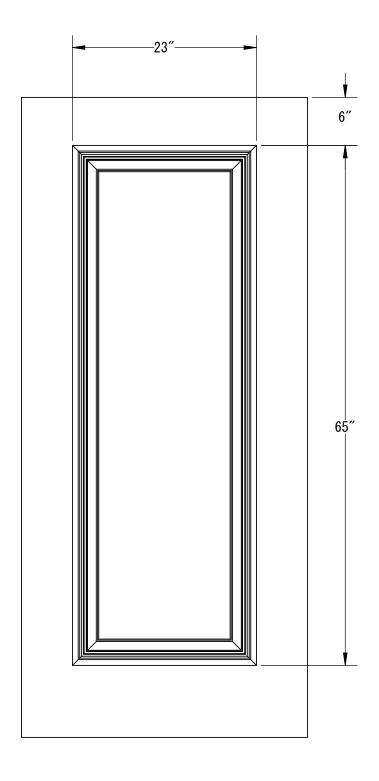
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult page G-11 through G-14.



EMBOSSED PANEL DOORS SINGLE PANEL (P1)

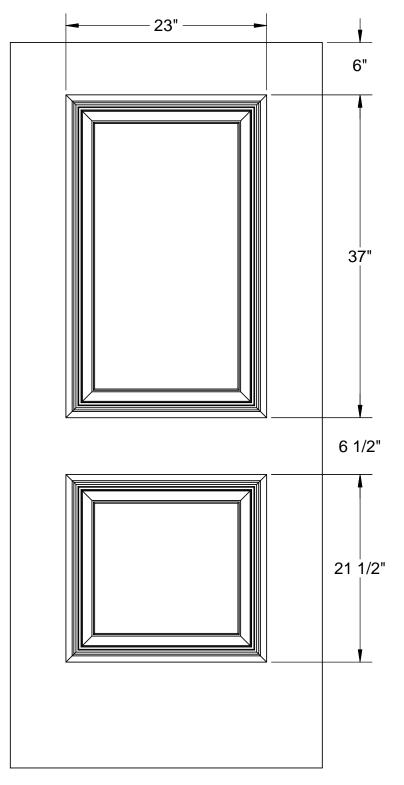


P1 (HIGH DEFINITION)



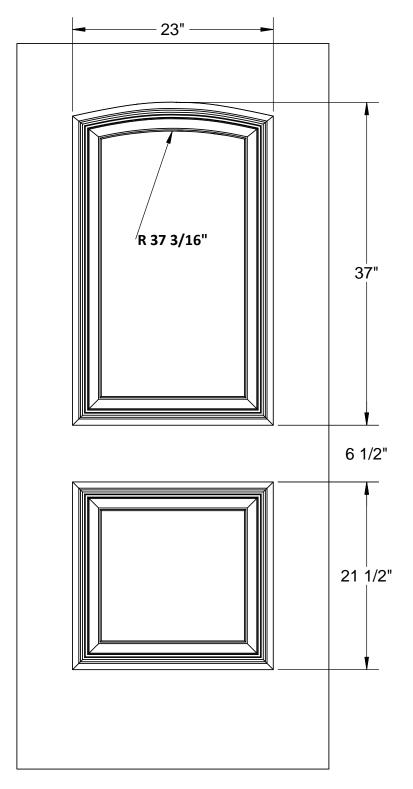






P2S (HIGH DEFINTION)

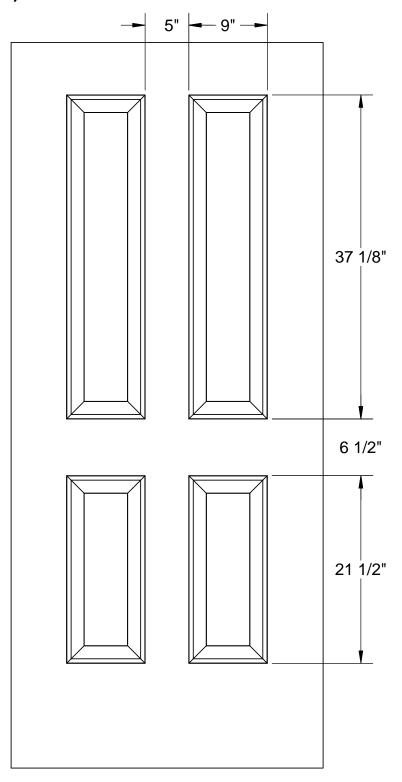




P2A (HIGH DEFINITION)



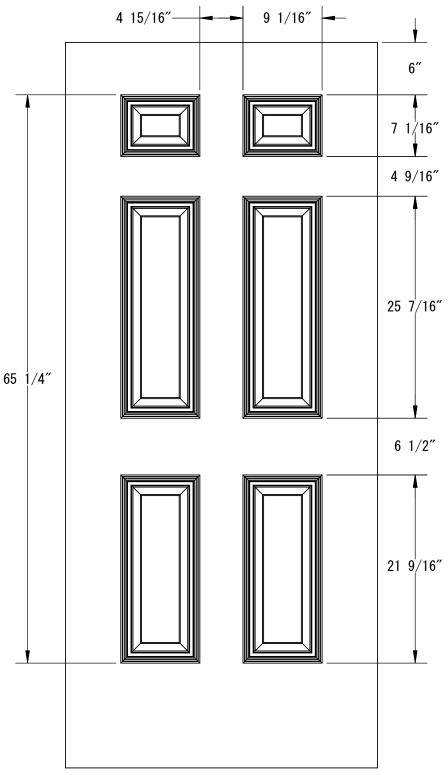
EMBOSSED PANEL DOORS FOUR PANEL (P4)



P4 (STANDARD DEFINTION)



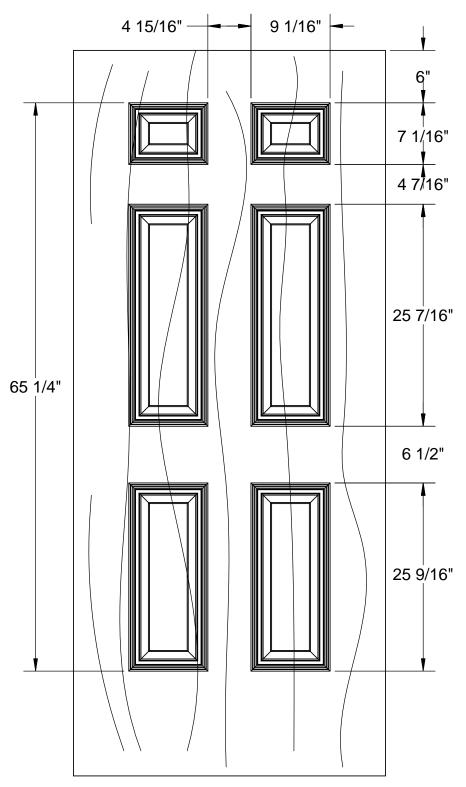
EMBOSSED PANEL DOORS SIX PANEL (SP)



SP (HIGH DEFINITION)

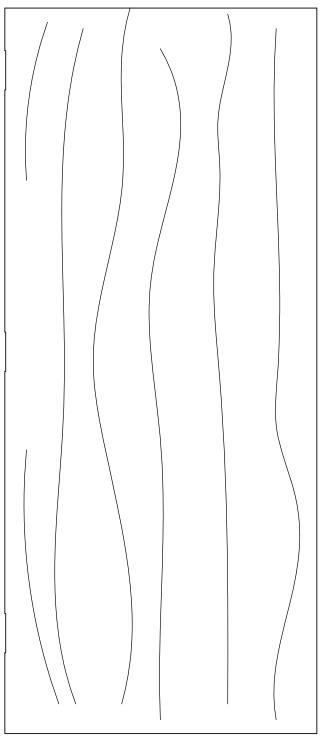


EMBOSSED PANEL DOORS SIX PANEL WOODGRAIN (SPW)



SPW (HIGH DEFINITION)

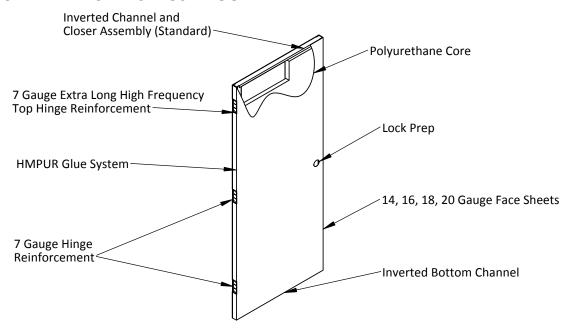








NU - STANDARD SERIES FLUSH DOOR



DOOR CONSTRUCTION

14, 16, 18, 20 gauge, cold-rolled, gavannealed, or Galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be expanded polyurethane core.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

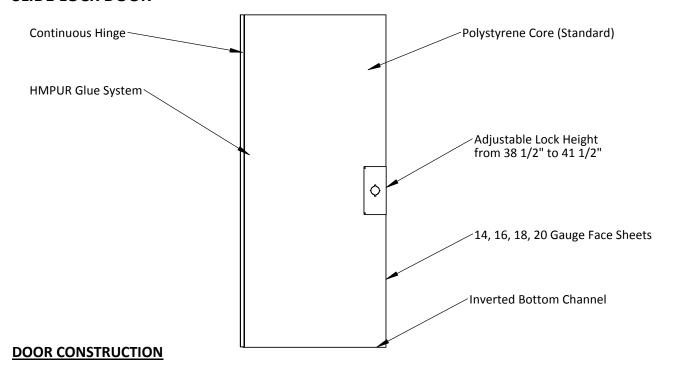
COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



D-15 MAR 2014

SLIDE LOCK DOOR



14, 16, 18, or 20 gauge, cold-rolled, gavannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with a steel continuous hinge reinforcement providing additional strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 cylindrical (bored) locks. Additional hardware preparations available.

FINISH

Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

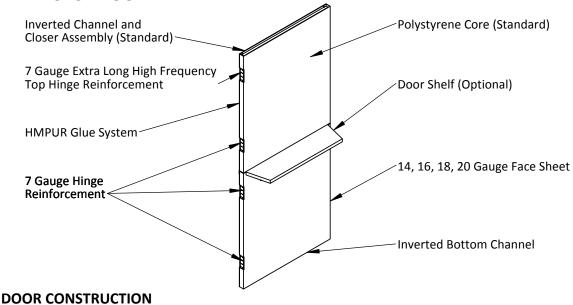
COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult page G-11 through G-14.



D-16 MAR 2014

NDD-DUTCH DOOR



14, 16, 18, 20 gauge, cold-rolled, gavannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) (Patented Technology) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-24 and D-28. Optional dutch door shelves.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

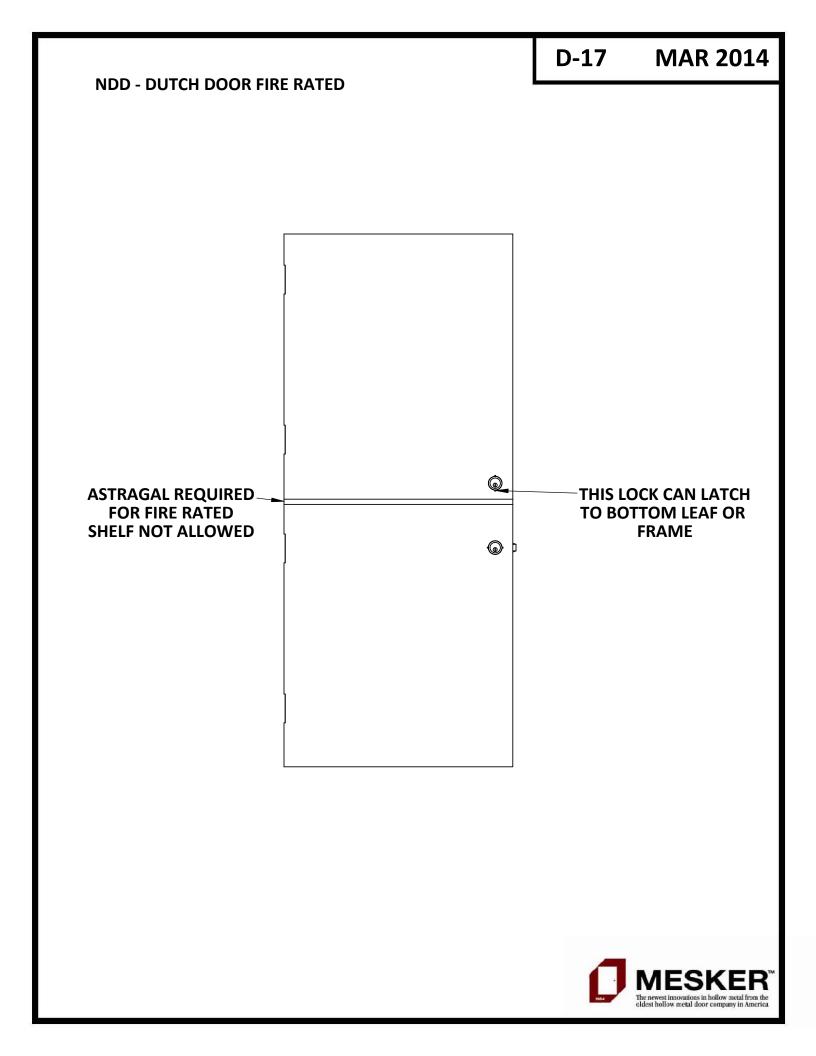
FINISH

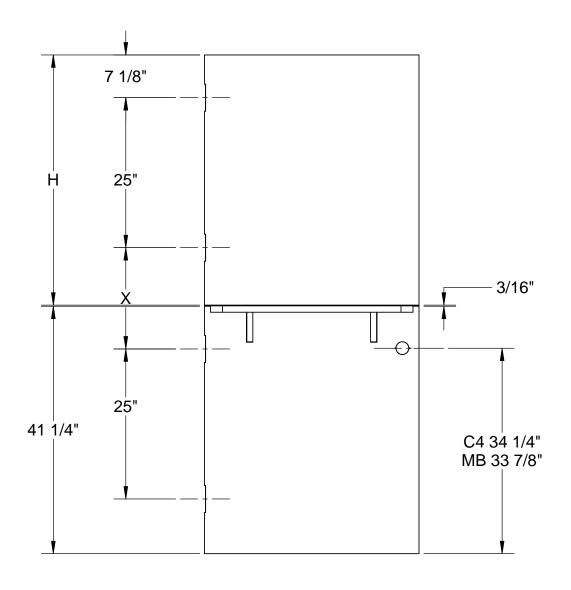
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A250.8 (R2008). Hardware preparations comply with ANSI A250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



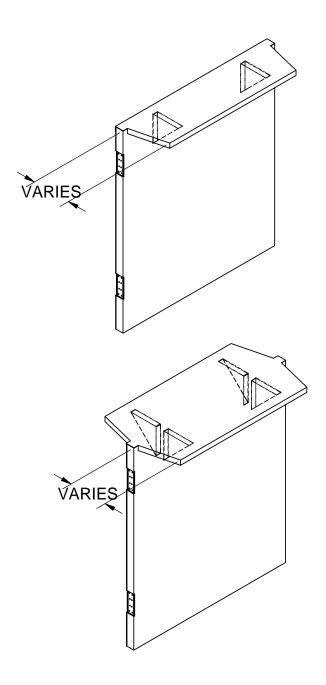




DOOR HEIGHT	н	×
6' 8"	3' 1 11/16"	12 7/8"
7' 0"	3' 5 11/16"	16 7/8"
7' 2"	3' 7 11/16"	18 7/8"

CUSTOM SIZES AVAILABLE UPON REQUEST

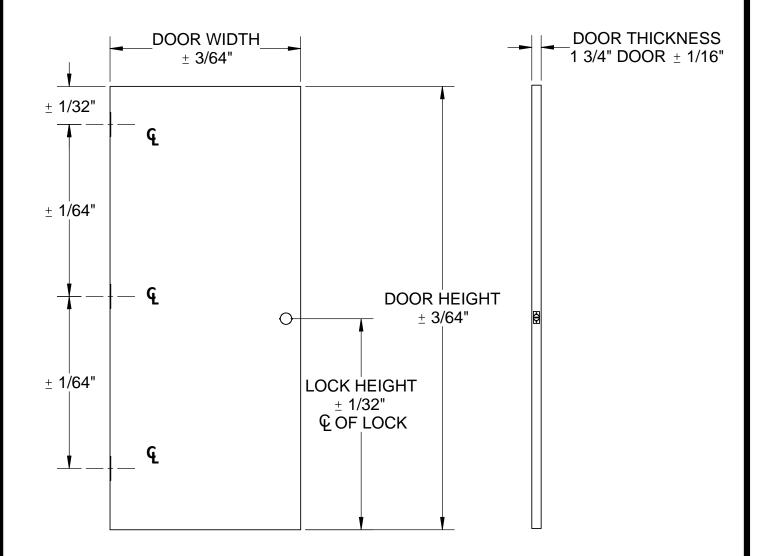




SHELF LENGTHS 6", 8", 10"

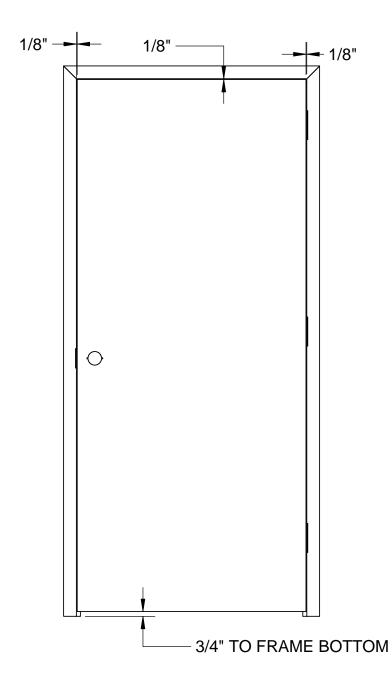


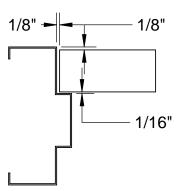
DOOR TOLERANCES





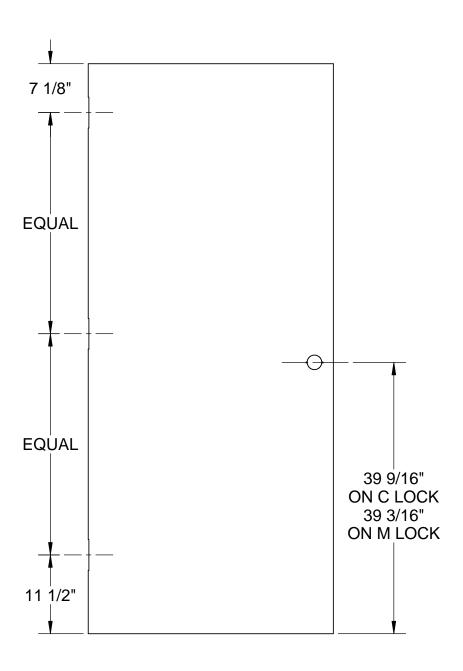
STANDARD CLEARANCES





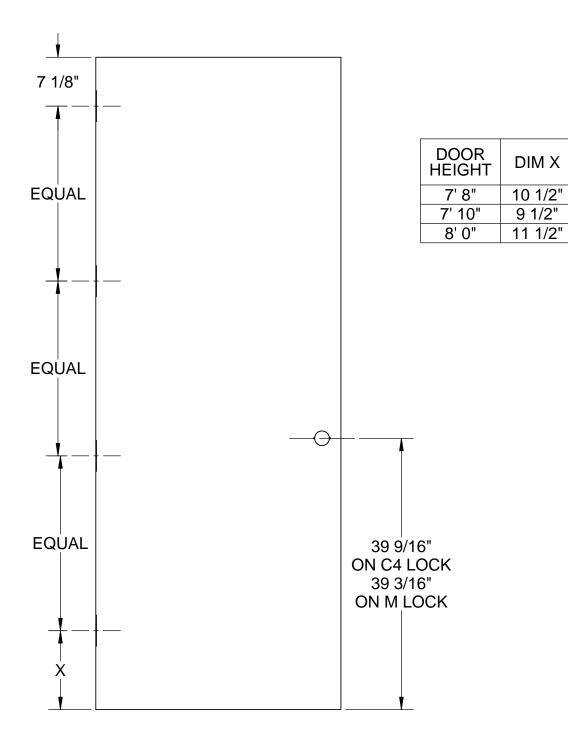


HINGE AND LOCK LOCATIONS

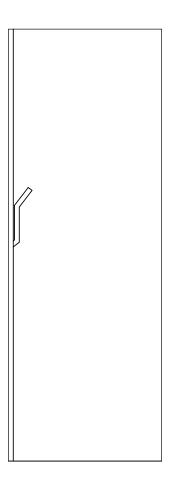




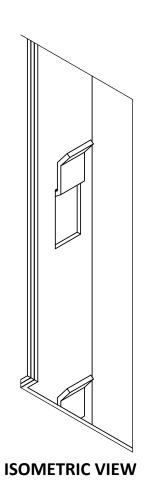
HINGE AND LOCK LOCATIONS ON DOORS TALLER THAN 7' 6"





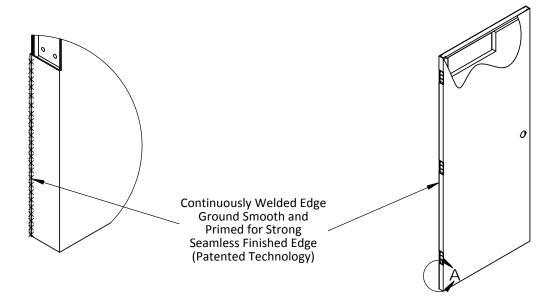








NVS - NO VISIBLE SEAM SEAMLESS



DOOR CONSTRUCTION

14, 16, 18, 20 gauge, cold-rolled or gavannealed steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. In addition to the requirements for full flush doors, no visible seams are permitted along the vertical edges. When a seamless door is specified, the vertical door seams will be continuously welded, and dressed smooth, with no bondo, putty, or filler. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

NVS requires a 6" minimum from all cutouts to door edge for louvers and glazing.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

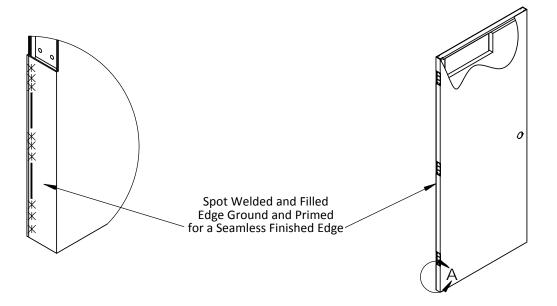
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A 250.8 (R2008). Hardware preparations comply with ANSI A 250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



N - SERIES DOOR SEAM FILLED



DOOR CONSTRUCTION

14, 16, 18, or 20 gauge, cold-rolled or gavannealed steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request. Square edge standard. Optional beveled lock edge (BV-1) or beveled hinge and lock edge (BV-2). See beveled detail pages D-27 and D-28.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extra long high frequency top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

FINISH

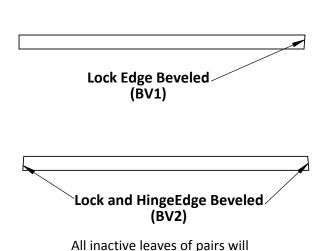
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

COMPLIANCE

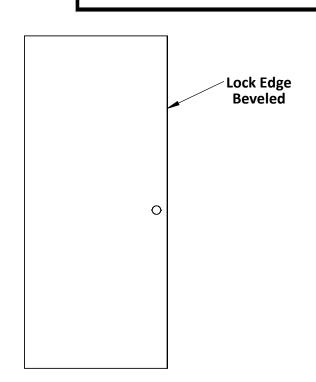
As the oldest member of the Steel Door Institute, all Mesker Door units comply with ANSI A 250.8 (R2008). Hardware preparations comply with ANSI A 250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek), Underwriters Laboratories, and FM Global. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.



BEVELED EDGE



be manufactured as square edge.



DOOR CONSTRUCTION

14, 16, 18, or 20 gauge, cold-rolled, gavannealed, or galvanized G90 steel face sheets to be securely bonded to the core. Doors shall have hemmed vertical edge seams, mechanically interlocked for maximum structural integrity. Optional seamless (NVS) edge available upon request. Top and bottom of doors shall be closed and reinforced with an inverted continuous channel and welded to both faces. Optional flush top available upon request.

CORE CONSTRUCTION

Standard core material to be expanded polystyrene core. Optional cores: Honeycomb, Polyurethane, Fiberboard.

HARDWARE

All doors are furnished with 7 gauge steel hinge reinforcements with three projection welds on each end. Extended top hinge reinforcement provides additional welds for added strength and extra protection against sagging. Doors have a factory installed 14 gauge box type closer reinforcement securely welded to top channel. Doors shall be mortised and adequately reinforced for all hardware. Required mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others. Lockset preparation shall provide for field installation of locksets manufactured in accordance with ANSI A156.115 mortise or cylindrical (bored) locks. Additional hardware preparations available.

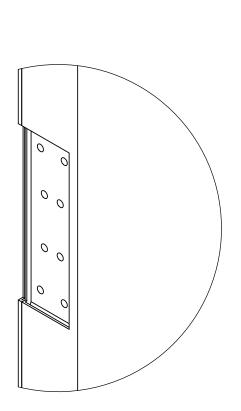
FINISH

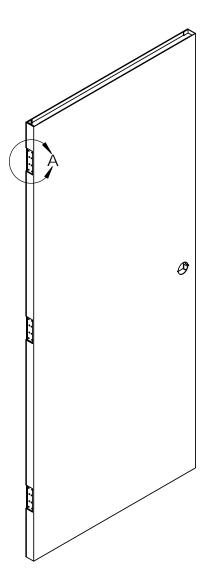
Exposed door surfaces to be cleaned, treated, and coated with rust inhibitive primer. Color painted doors receive a durable, electrostatic, baked on finish. Water- based primer and color paint finishes are free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOC).

COMPLIANCE

All Mesker Door units comply with ANSI A 250.8 (R2008). Hardware Preparations comply with ANSI A 250.6. Primer and color compliant with ANSI A250.10 and ANSI A250.3. Fire labeling in accordance with NFPA-8015 FM (standard), WHI (Intertek) and Underwriters Laboratories. For a complete list of product compliance per ANSI/ASTM test methods, please consult pages G-11 through G-14.







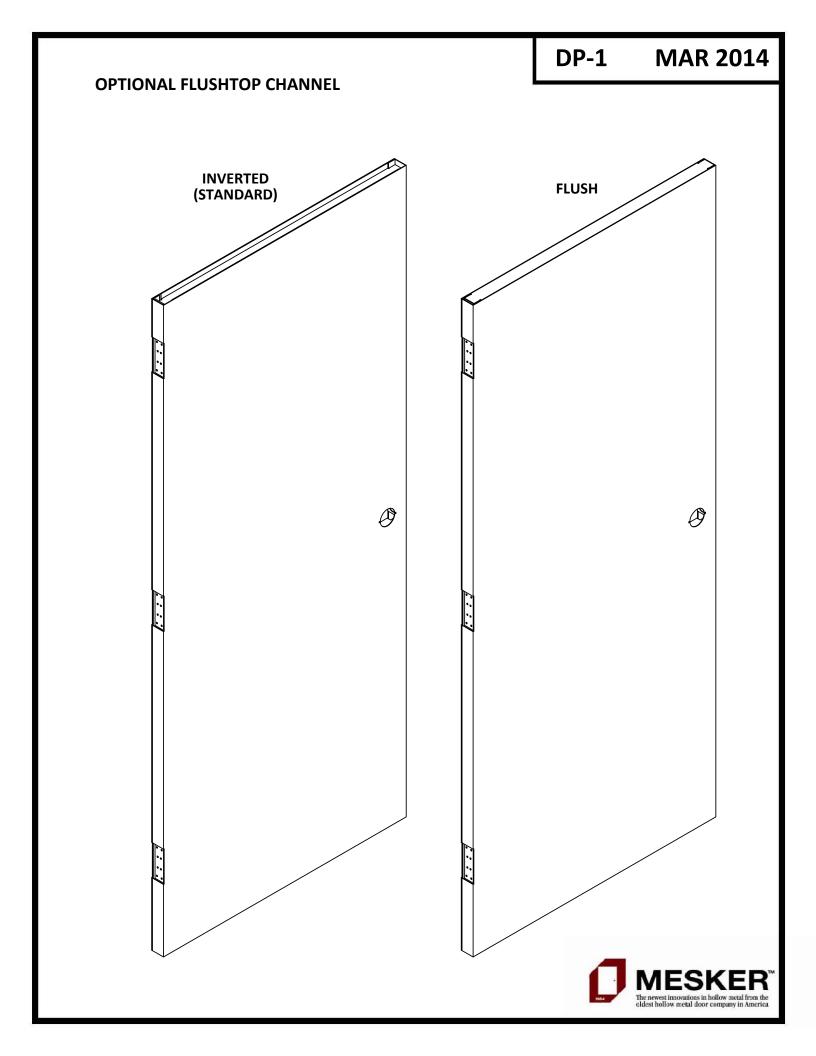
All inactive leaves of pairs will be manufactured as square edge.

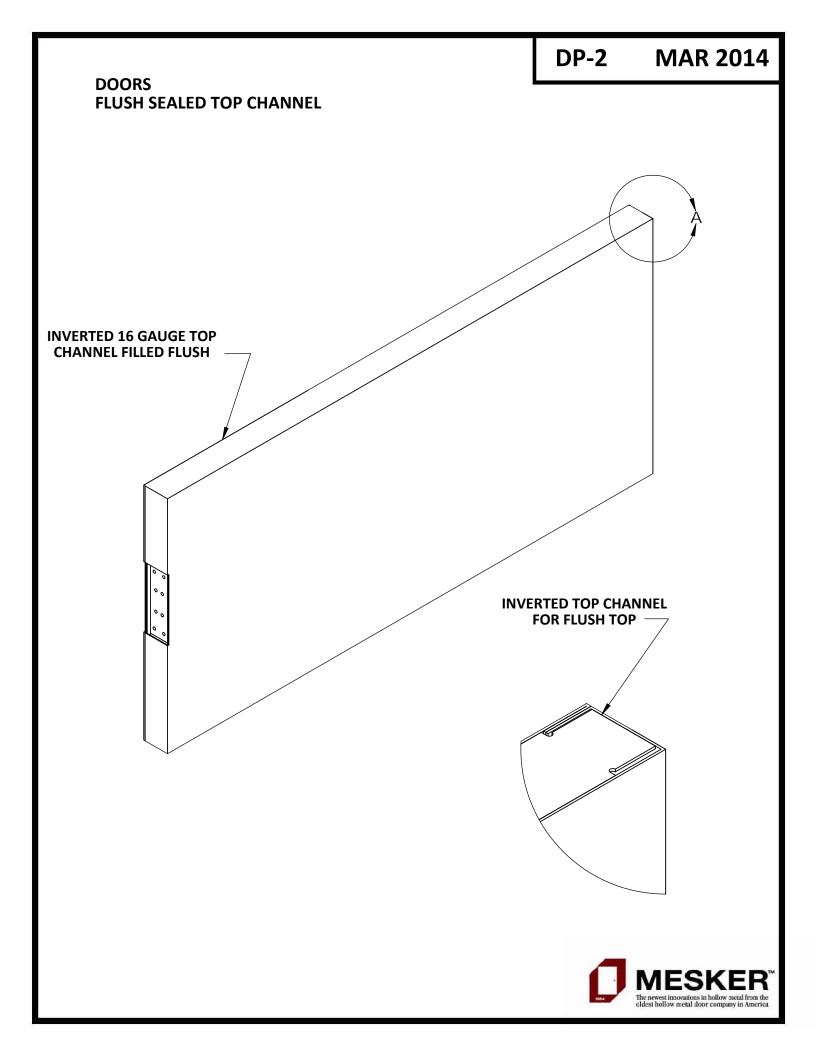


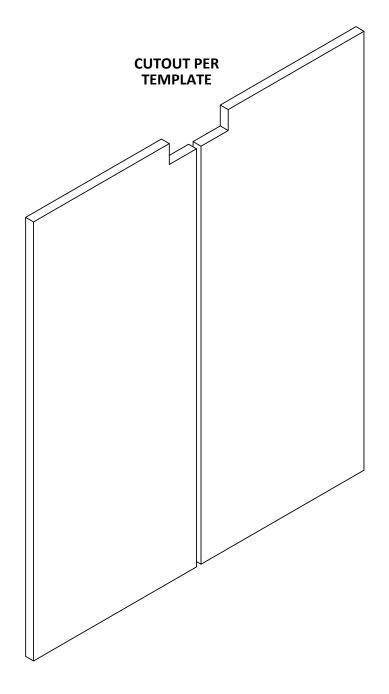
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Pocket Pivot Preparation	DP-20
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C4 Turtle Lock Preparation	DP-23
Interconnected Lock Preparation	DP-24
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MB Lock Preparation	DP-26
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Concealed Closer/Holder	DP-34

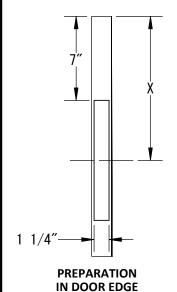




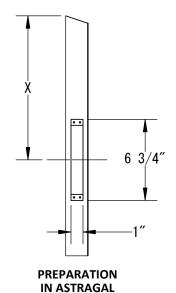


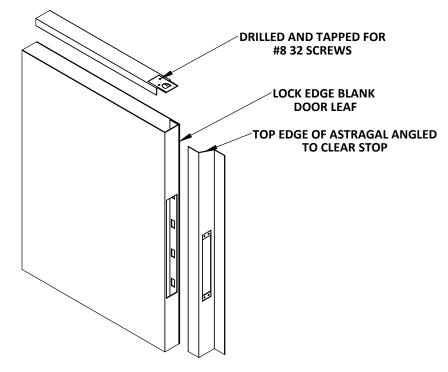


ANSI/BHMA A156.115 FLUSHBOLT PREPARATION WITH ASTRAGAL



DOOR HEIGHT	DIM X
6' 8" & 7' 0"	12"
8' 0″	24"
9' 0″	36″
10' 0"	48"

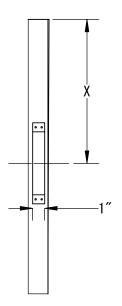




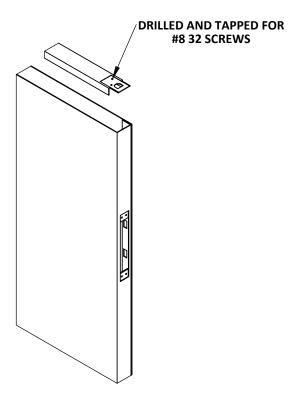




ANSI 115.4 FLUSH BOLT PREPARATION WITHOUT ASTRAGAL



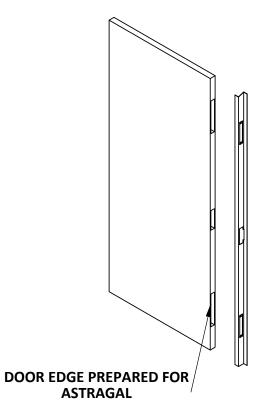
DOOR HEIGHT	DIM X
6' 8" & 7' 0"	12"
8' 0″	24"
9' 0″	36"
10' 0″	48"

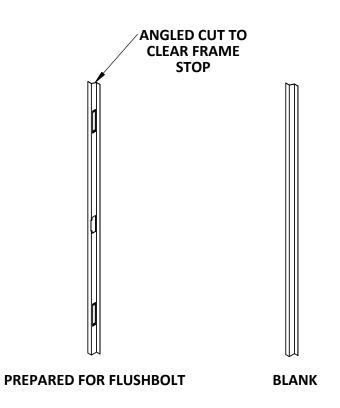


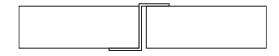
CORE MATERIAL MUST BE CLEARED OUT BEFORE APPLICATION OF FLUSH BOLT







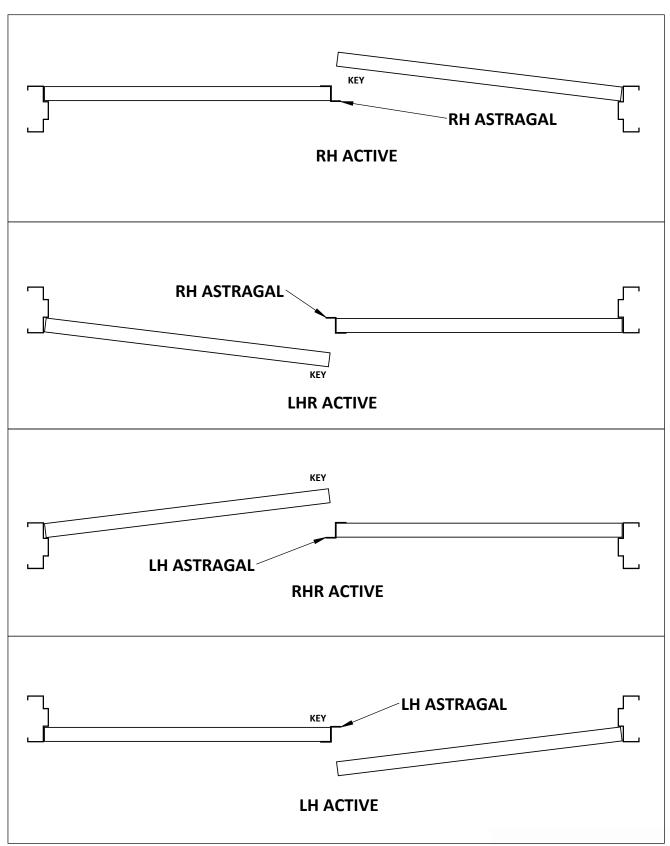




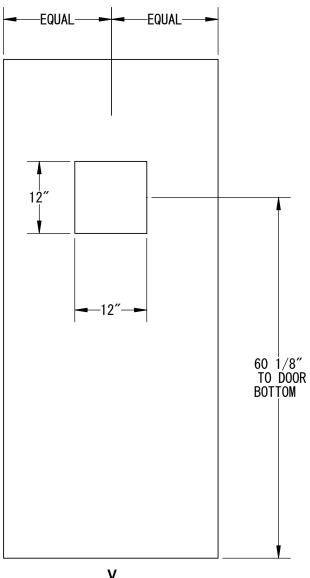
SQUARE ASTRAGAL

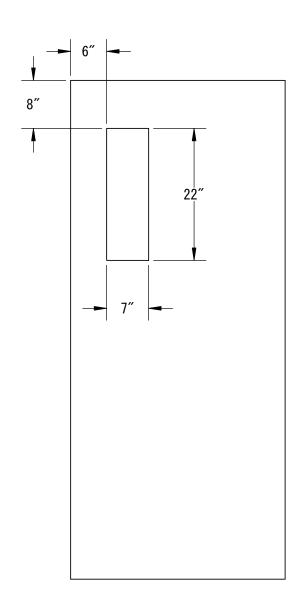


Z - ASTRAGAL HANDING









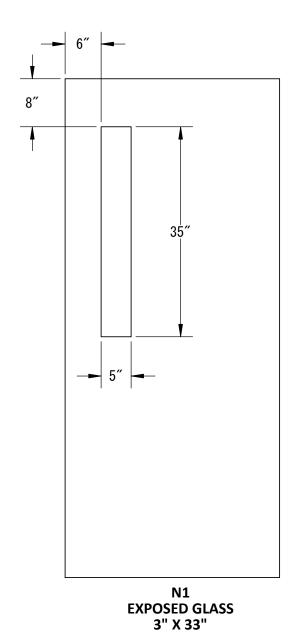
V EXPOSED GLASS 10" X 10"

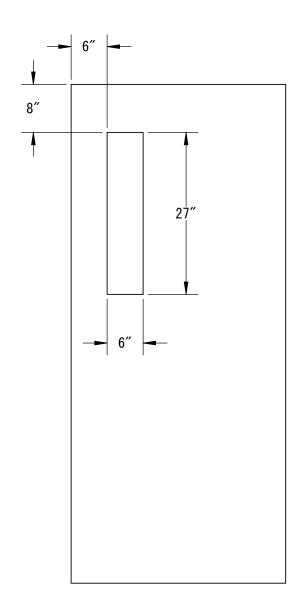
N2 EXPOSED GLASS 5" X 20"

NVS requires a 6" minimum from all cutouts to door edge for louvers and glazing.



GLASS KIT RECOMMENDED LOCATION



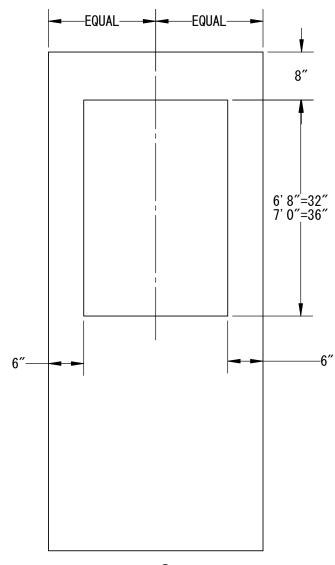


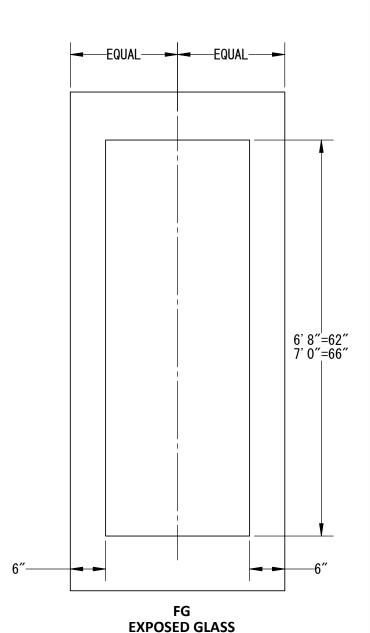
N3 EXPOSED GLASS 4" X 25"

NVS requires a 6" minimum from all cutouts to door edge for louvers and glazing.



GLASS KIT RECOMMENDED LOCATION





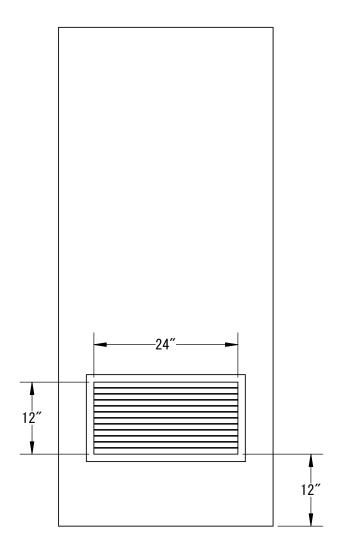
G EXPOSED GLASS FOR 6'8" = 22" X 30" FOR 7'0" = 22" X 34"

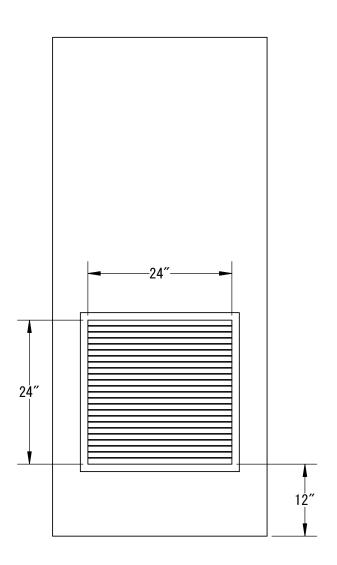
FOR 6'8" = 22" X 60" FOR 7'0" = 22" X 64"

NVS requires a 6" minimum from all cutouts to door edge for louvers and glazing.



LOUVER RECOMMENDED LOCATIONS





Other Sizes Available. Please consult factory.

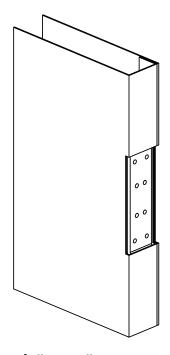
NVS requires a 6" minimum from all cutouts to door edge for louvers and glazing.

Fire rated fusible link louvers availible. Max size 24" x 24".

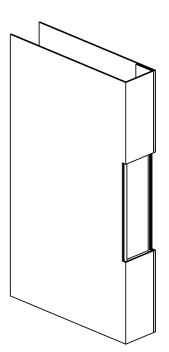
Consult factory for pricing.



HINGE PREPARATION



4 1/2" OR 5" TEMPLATED HINGE PREPARED DRILLED AND TAPPED FOR 12-24 MACHINE SCREWS.

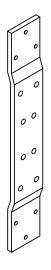


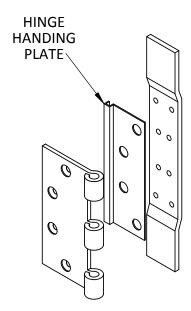
4" OR 6" HINGE PREPARED
"BLANK". MUST BE
DRILLED AND TAPPED BY
OTHERS.



STANDARD HINGE REINFORCEMENTS

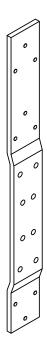
STANDARD HINGE REINFORCEMENT FOR MIDDLE AND BOTTOM HINGES





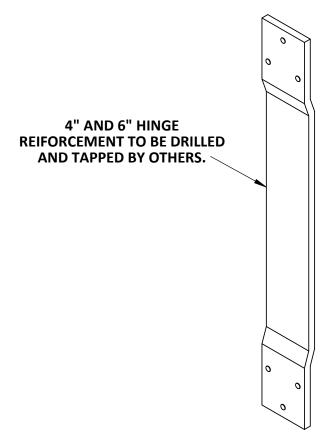
UNIVERSAL HANDING

FOR HEAVY WEIGHT HINGES, A THINNER HANDING PLATE IS AVAILABLE. EXTRA LONG HIGH FREQUENCY TOP HINGE REINFORCEMENT



7 GAUGE HINGE REINFORCEMENT EXTENDED TO TOP OF DOOR FOR EXTRA RIGIDITY WITH 3 EXTRA PROJECTION WELDS TO PREVENT DOOR SAG.

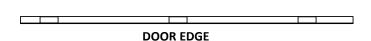




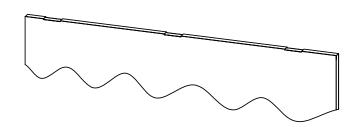


INSTALLING HINGES IN A BLANK DOOR EDGE

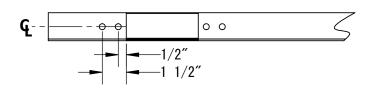
LAY OUT THE DESIRED HINGE LOCATION ON THE DOOR EDGE. USE AN ACTUAL HINGE TO ENSURE PROPER CLEARANCE.



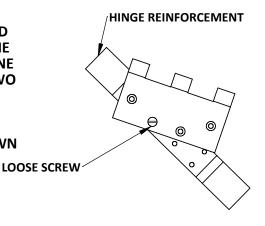
MAKE THE CUT-OUTS WITH A "JIG" SAW. GRIND OR FILE AS REQUIRED. ALL EDGES MUST BE FINISHED: ALSO ALLOW FOR HINGE FILLER PLATE AT PROPER DEPTH (.180" FOR STANDARD WEIGHT HINGE AND FILLER)



DRILL TWO 3/8" DIAMETER HOLES ABOVE AND BELOW EACH CUT-OUT, AS SHOWN.

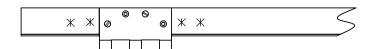


ATTACH A HINGE LEAF AND HINGE FILLER PLATE TO THE REINFORCEMENT WITH ONE SCREW. TIGHTEN ONLY TWO THREADS SO THE REINFORCEMENT CAN BE PLACED INSIDE THE DOOR AND MOVED UP AND DOWN UNTIL POSITIONED.



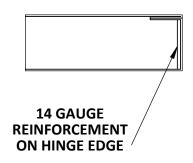
NOTE: IF USING A
MESKER HINGE
REINFORCEMENT, YOU
MUST FIRST REMOVE
THE WELD PROJECTIONS.
(GRIND OR FILE) THE
HINGE REINFORCEMENT
MUST BE CENTERED IN
BETWEEN DOOR FACES.

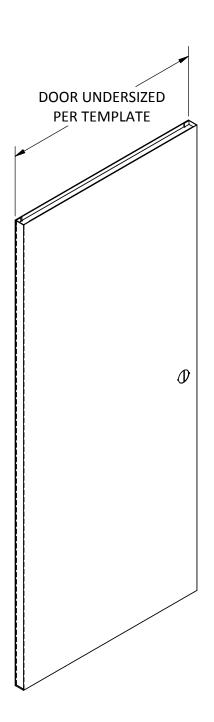
INSTALL A SECOND SCREW AND TIGHTEN BOTH SCREWS. FIRMLY HOLD THE REINFORCEMENT AGAINST THE INSIDE SKIN OF THE DOOR EDGE. FULLY WELD (FILL) THE 3/8" DIAMETER HOLES. REMOVE THE HINGE LEAF. GRIND THE WELDS SMOOTH AND RE-PRIME.





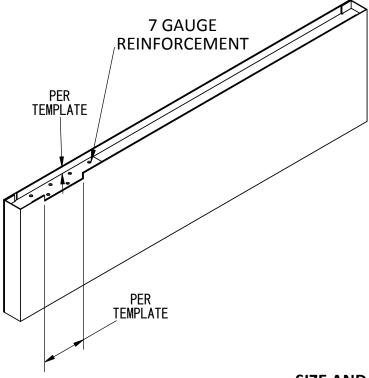
CONTINUOUS HINGE REINFORCEMENT



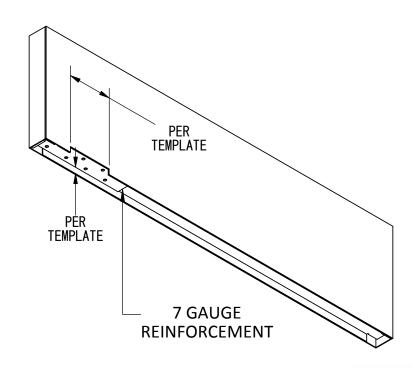




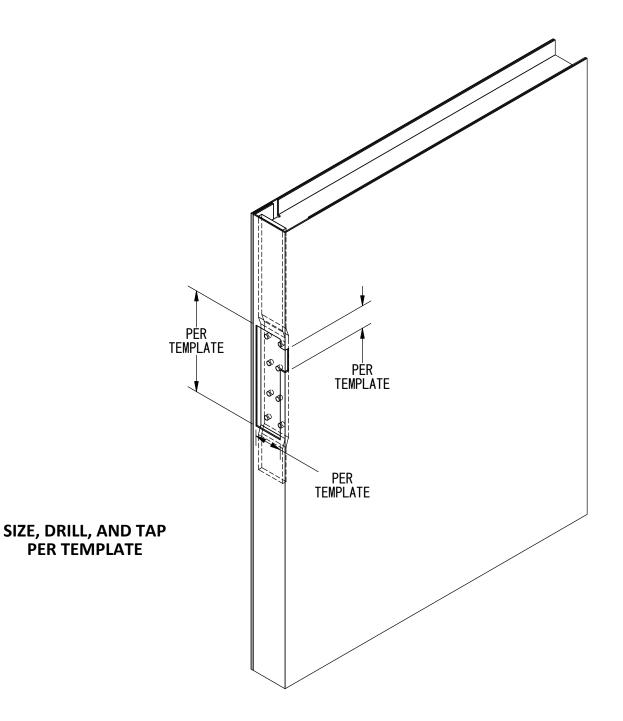
TOP AND BOTTOM PIVOT PREPARATION



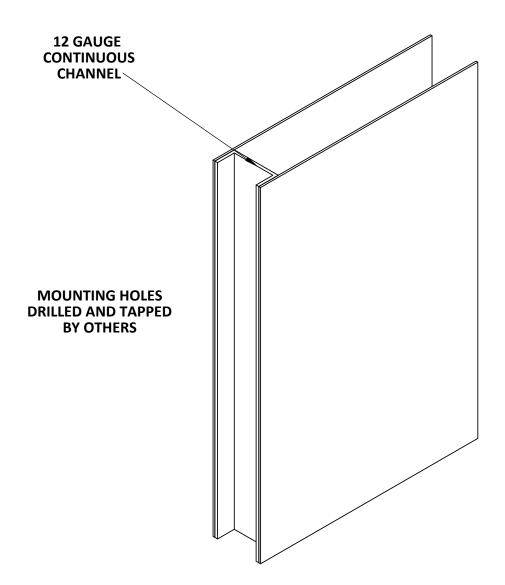
SIZE AND TAP PER TEMPLATE







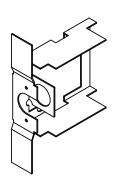




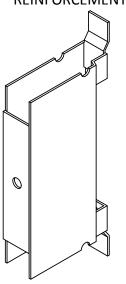


STANDARD LOCK PREPARATIONS STANDARD CLOSER PREPARATIONS

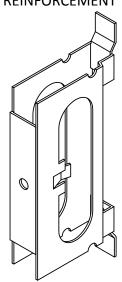
161 CYLINDRICAL LOCK (C4) REINFORCEMENT



GOV'T 86 EDGE MORTISE LOCK (MBN) REINFORCEMENT



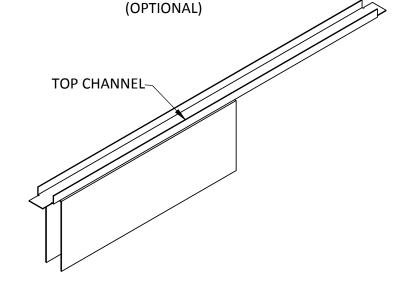
GOV'T 86 EDGE MORTISE LOCK (M) (MB) REINFORCEMENT



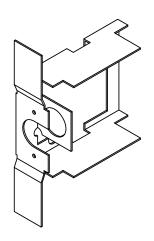
14 GAUGE CLOSER REINFORCEMENTS

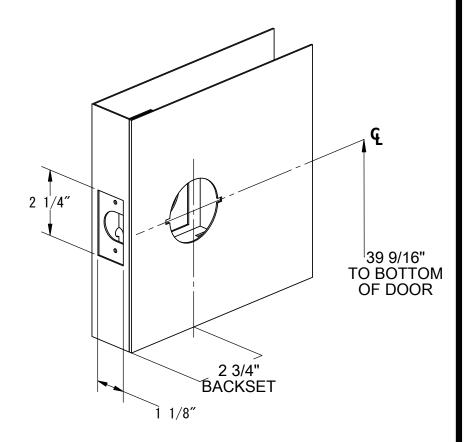
POLYSTYRENE CORE

STANDARD

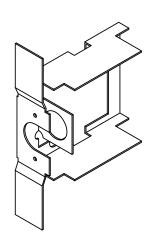


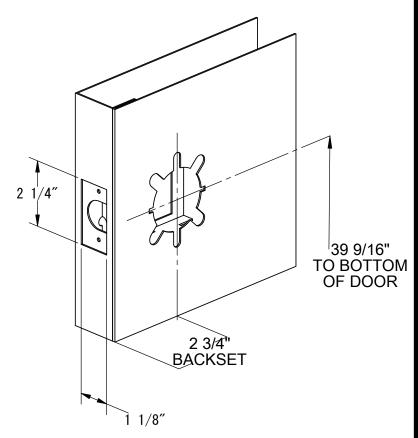


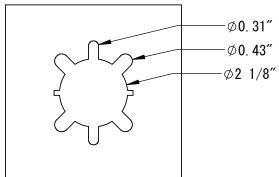






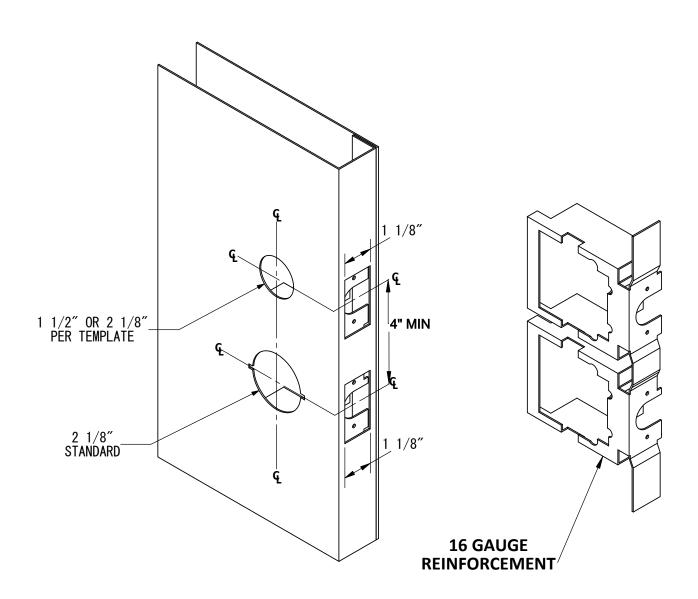




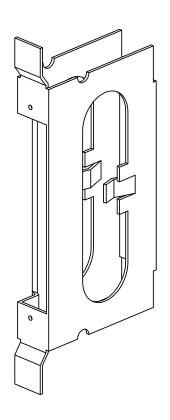


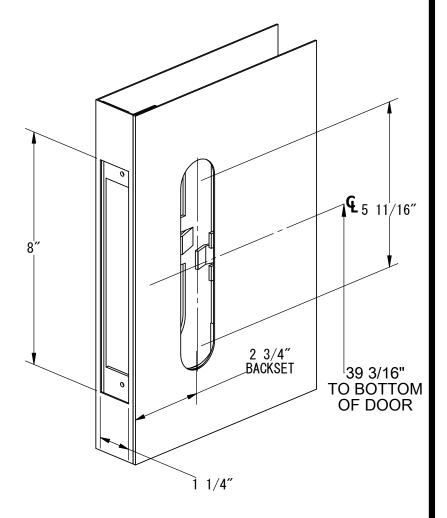


INTERCONNECTED LOCK PREPARATION

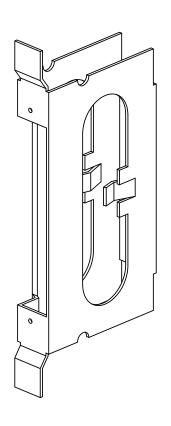


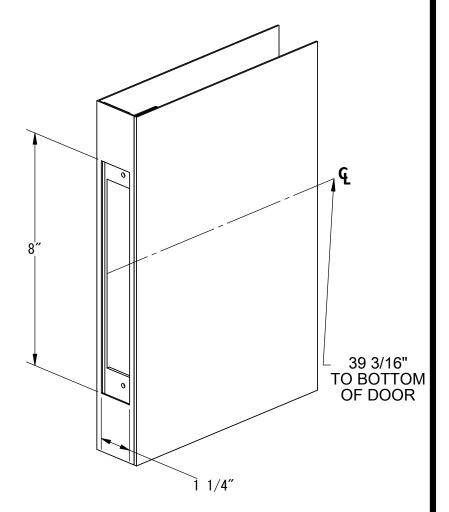




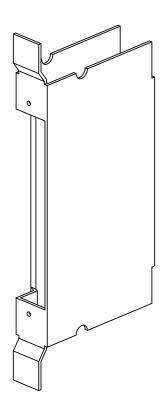


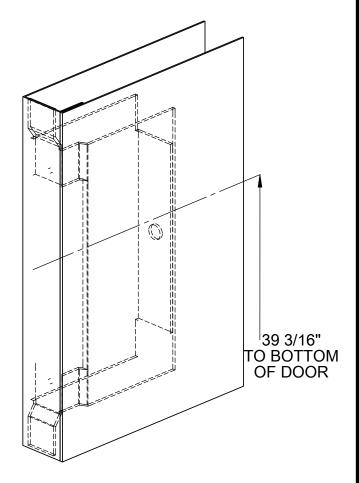






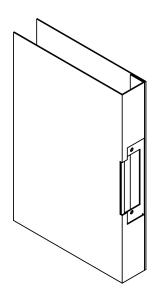




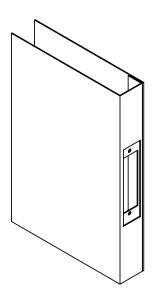




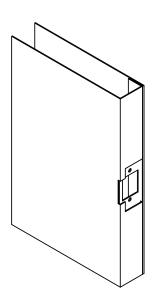
A 14 GAUGE STRIKE REINFORCEMENT. THE STRIKE MORTISE CONFORMS TO ANSI A156.115.



"U" STRIKE MORTISE (ASA STRIKE)



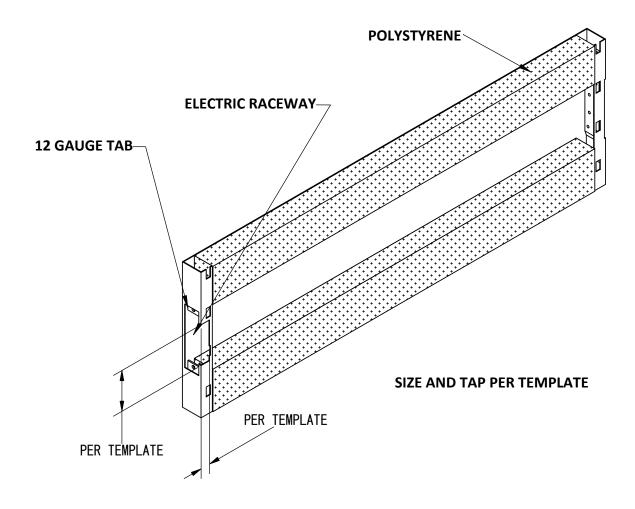
NON HANDED
"U" STRIKE MORTISE
(ASA STRIKE)
LIP NOTCH CUT BY OTHERS



"C" STRIKE MORTISE (T STRIKE)

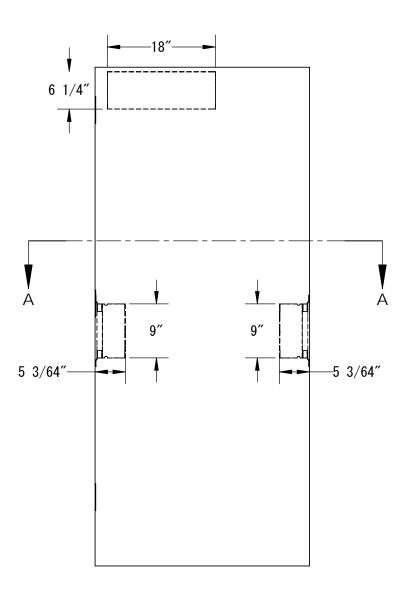


ELECTRIC STRIKE PREPARATION WITH RACEWAY



HEIGHT OF STRIKE PER TEMPLATE

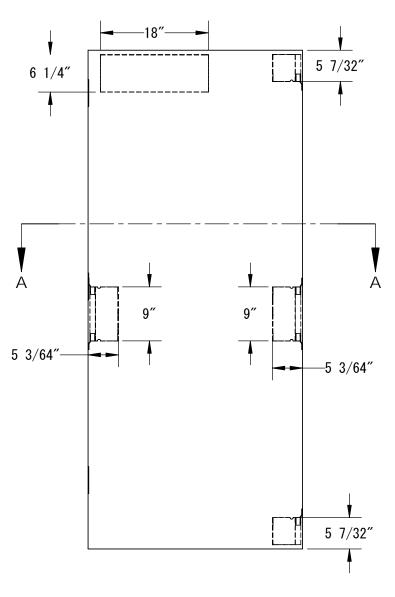








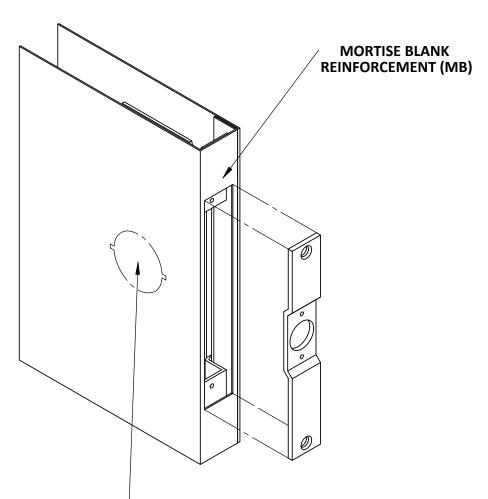
SURFACE VERTICAL ROD DOOR REINFORCEMENTS (SVR)









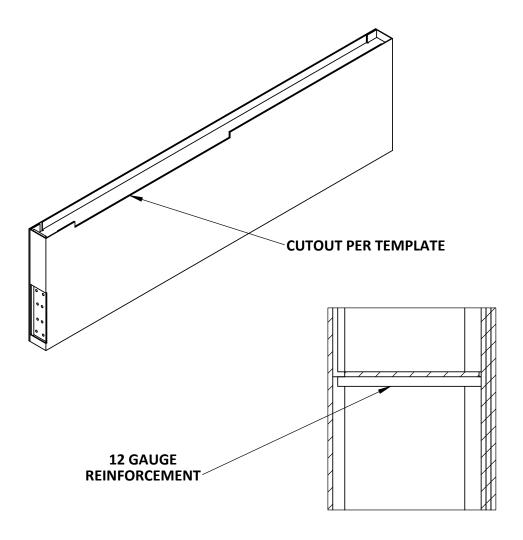


DRILL 2 1/8" DIAMETER HOLE AT 2 3/4" BACKSET 39 9/16" FROM BOTTOM OF DOOR (FACE SHEETS ONLY). REINFORCEMENT HAS CLEARANCE TO CLEAR HOLE SAW.



CONCEALED HOLDER/CLOSER REINFORCEMENT

END CHANNEL IS MODIFIED FOR CORRECT DEPTH (DIMENSIONS VARY AS PER TEMPLATE)



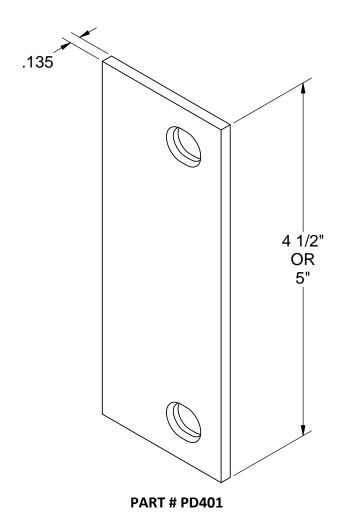
MOUNTING HOLES SHALL BE DRILLED AND TAPPED IN THE FIELD FOR DESIRED HOLD OPEN ANGLE.



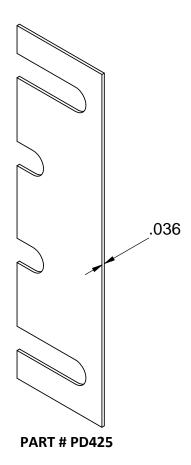
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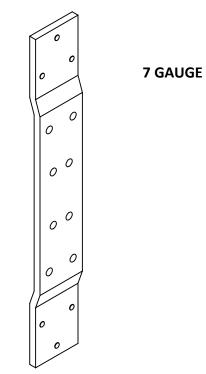








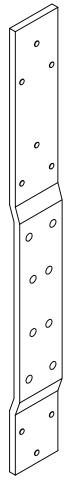
PARTS - DOOR SHORT DOOR HINGE (HR450) AND (HR500)



4 1/2" PART # PDNHR450 5" PART # PDNHR500 DRILLED AND TAPPED FOR TEMPLATE HINGE



PARTS - DOOR EXTRA LONG HIGH FREQUENCY DOOR HINGE (LHR450)



7 GAUGE

PART # PDNLHR450
DRILLED AND TAPPED FOR 4 1/2" TEMPLATE HINGE
HIGH FREQUENCY



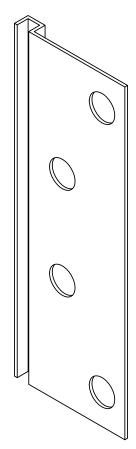


7 GAUGE

4" PART # PDNHR400 6" PART # PDNHR600 MUST BE DRILLED AND TAPPED BY OTHERS

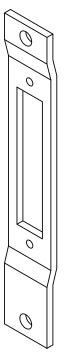


PARTS - DOOR HINGE FILLER (HANDING PLATE)



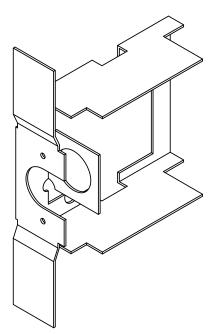
4 1/2" PART # PDHF4 4 1/2" HEAVY WEIGHT PART # PDHF4H 5" PART # PDHF5 **5" HEAVY WEIGHT PART # PDHF5H**





PART # PD86SA MB TO ASA CONVERSION



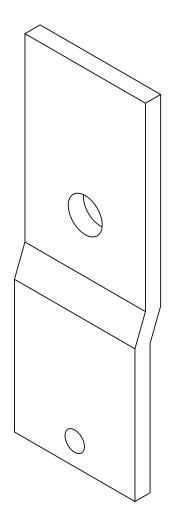


PART # PDCLB 161 LOCK REINFORCEMENT



PD-9 MAR 2014

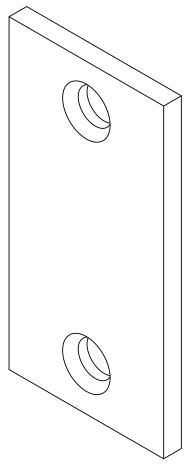
PARTS - DOOR STRIKE TAB REINFORCEMENT 8-32 (RCS001) AND 12-24 (RMS401)



MESKER PART #	DESCRIPTION	USES
PDCR	DRILLED AND TAPPED 8-32	C STRIKE OR DEADLOCK
PDMR	DRILLED AND TAPPED 12-24	ASA STRIKE



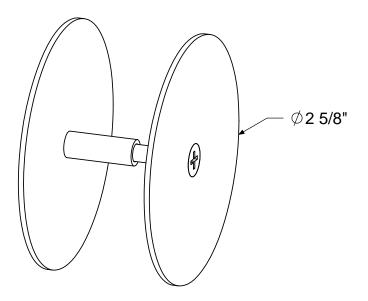
PARTS - DOOR CYLINDRICAL LOCK EDGE FILLER (CLE161)



PART # PDLEC TO FILL C-4 EDGE PREP 1 1/8" X 2 1/4"



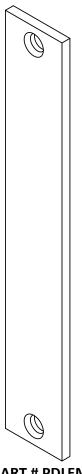
PARTS - DOOR CYLINDRICAL LOCK FACE FILLER (CLF161)



PART # PDLFC



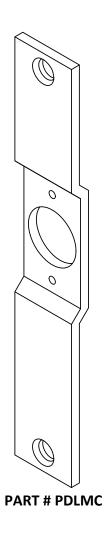
PARTS - DOOR MORTISE LOCK FILLER (MLE086)



PART # PDLEM TO FILL MB (86 EDGE) 1 1/4" X 8"



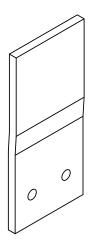
PARTS - DOOR FILLER CHANGE MB TO C4 EDGE





PD-14 MAR 2014

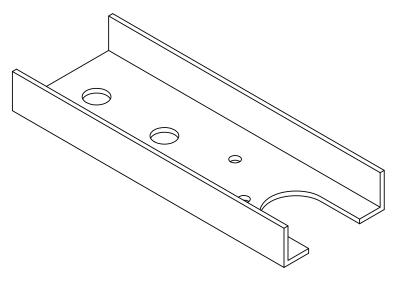
PARTS - DOOR FLUSH BOLT REINFORCEMENT TAB (MBR001)



PART # PDFBA



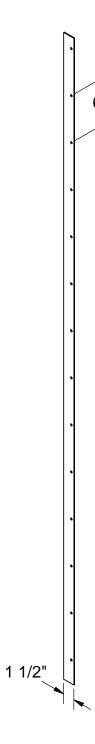
PARTS - DOOR FLUSH BOLT GUIDE (MBR401)



PART # PDFBG



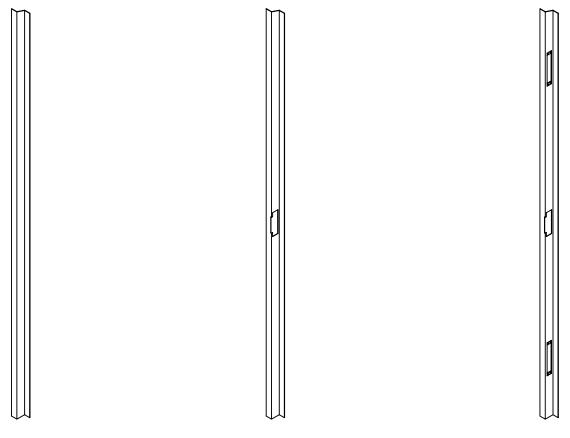
PARTS - DOOR FLAT ASTRAGAL (68, 70, 72, 80, 100)



PART # PDFA (68, 70, 72, 80, 100)



16 Gauge Galvanized



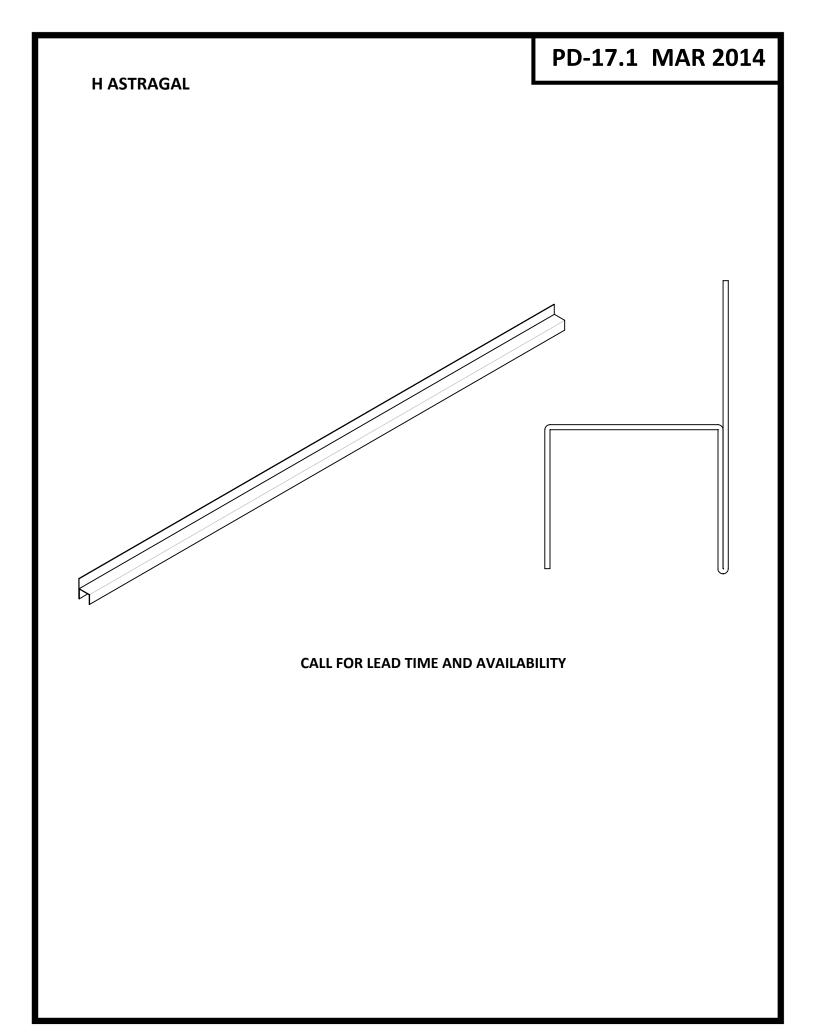
Z ASTRAGAL BLANK

6'8" PART # PDZAB68 7' PART # PDZAB70 8' PART # PDAB 10' PART # PDZABT **Z ASTRAGAL U STRIKE**

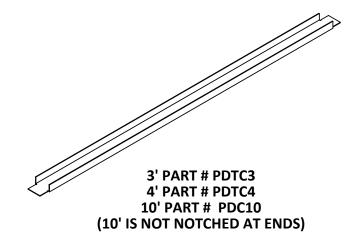
6'8" RH PART # PDZAU68R 6'8" LH PART # PDZAU68L 7' RH PART # PDZAU70R 7' LH PART # PDZAU70L 8' RH PART # PDZAU80R 8' LH PART # PDZAU80L 10' PART # PDZAUT Z ASTRAGAL U STRIKE + FB PREP

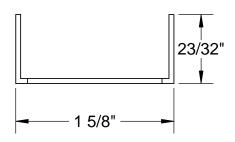
6'8" RH PART # PDZAU68RFB 6'8" LH PART # PDZAU68LFB 7' RH PART # PDZAU70RFB 7' LH PART # PDZAU70LFB 8' RH PART # PDZAU80RFB 8' LH PART # PDZAU80LFB



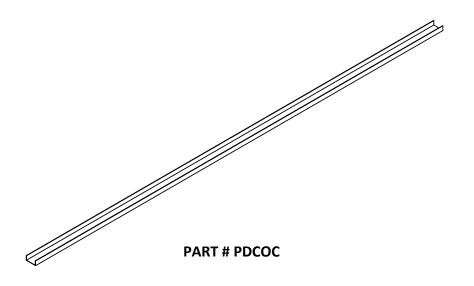


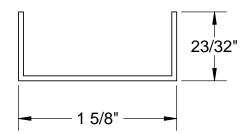
PARTS - DOOR
TOP AND BOTTOM CHANNEL 3' (TC-430), 4' (TC-440) AND 10'



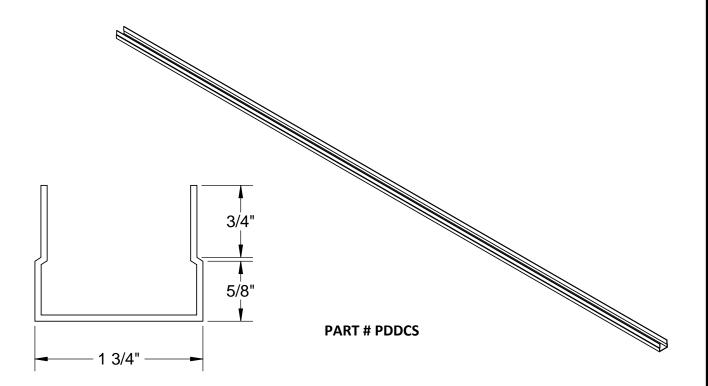




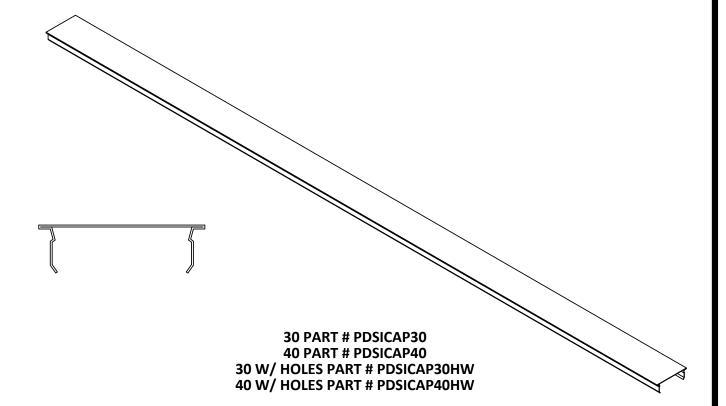








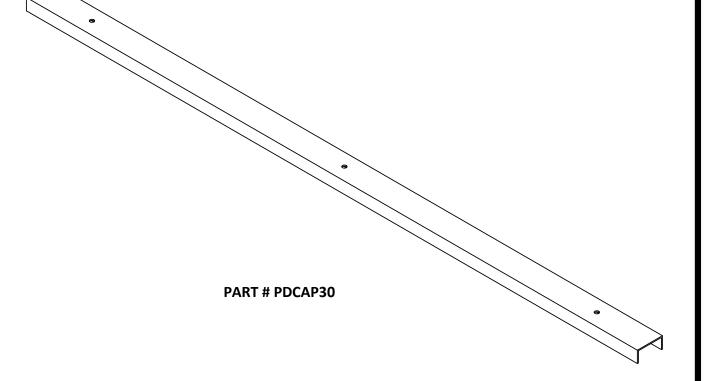








PARTS - DOOR FCS CAP TO FLUSH DOOR TOP (30)





PARTS - DOOR 8" DUTCH SELF (30)

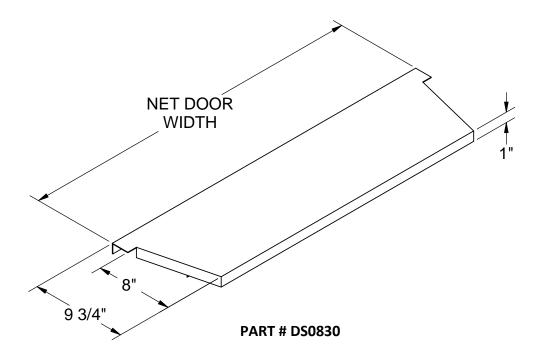




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STC ASSEMBLIES

DOOR CONSTRUCTION

Cold rolled steel standard, A60 galvannealed available. Metal gauge determined by STC rating requirements. Top and bottom of doors shall be constructed as required w/ integral sweep if required for STC rating.

CORE CONSTRUCTION

Core is proprietary as required to meet specific STC rating.

FRAME CONSTRUCTION

Cold rolled steel 14 ga Standard. A60 galvannealed is available. Frames to be welded or split jamb. KD frames are not recommended for STC assemblies.

HARDWARE

All units are furnished with hinge reinforcements as required. If cam lift hinges are required they will be included. Doors shall be mortised and adequately reinforced for all hardware. Mortise hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware to be field drilled by others. Cylindrical locks require a minimum 3 ¾" backset. Electrified hardware is not recommended on STC assemblies.

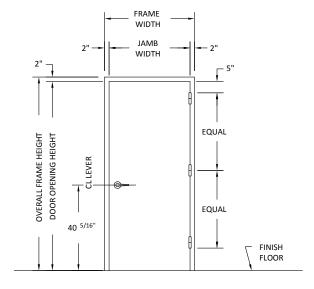
GLASS AND GLAZING

All glass and glazing by others.

COMPLIANCE

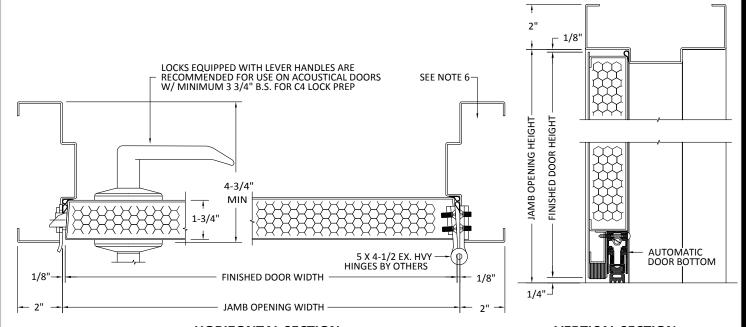
Mesker's acoustical assemblies are in compliance with ASTM E90 & E43 for Laboratory Testing. It is common practice to permit a 3 to 5 db drop from laboratory E413 standards to field test standard of E336 because of imperfections in the wall, floor and ceiling construction which will not be equal to an accredited Acoustical Laboratory.

STC 43
FLUSH SOUND CONTROL DOOR AND FRAME
ASSEMBLY



NOTES:

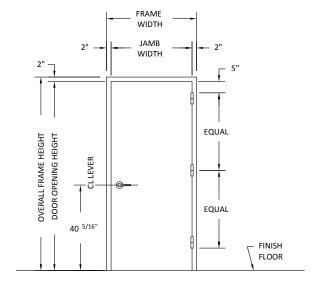
- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with single compression seals at head and jambs. Door is equipped with an automatic door bottom.
- 4. Door weight is 7 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- Frames equipped with masonry anchors must be grouted full in field.
 Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 43 (field results may vary from STC 38 to 43)
- Included: Double bubble perimeter seals and automatic door bottoms shipped loose. All Hardware furnished and applied by others.



HORIZONTAL SECTION

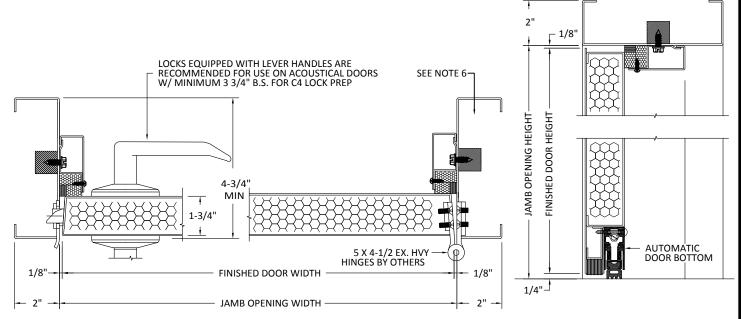


STC 45 FLUSH SOUND CONTROL DOOR AND FRAME ASSEMBLY



NOTES:

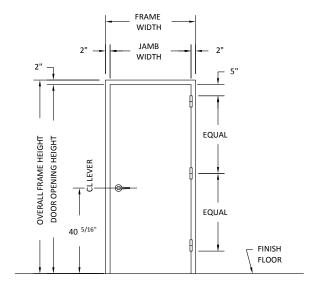
- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with single compression seals at head and jambs. Door is equipped with an automatic door bottom.
- 4. Door weight is 7 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- Frames equipped with masonry anchors must be grouted full in field.
 Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 45 (field results may vary from STC 40 to 45)
- 9. Included: Compression perimeter seals and automatic door bottoms shipped loose. All Hardware furnished and applied by others.



HORIZONTAL SECTION

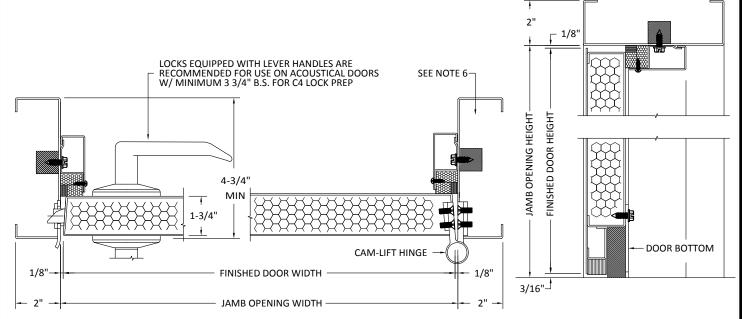


STC 50 FLUSH SOUND CONTROL DOOR AND FRAME ASSEMBLY



NOTES:

- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with single compression seals at head and jambs. Door is equipped with an automatic door bottom.
- 4. Door weight is 9 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- Frames equipped with masonry anchors must be grouted full in field.
 Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 50 (field results may vary from STC 45 to 50).
- Included: Compression door bottom and compression perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.



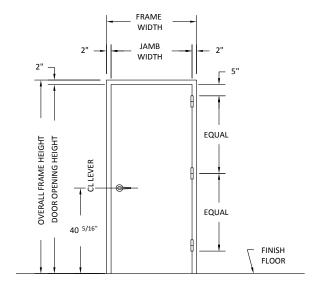
HORIZONTAL SECTION



STC 50M

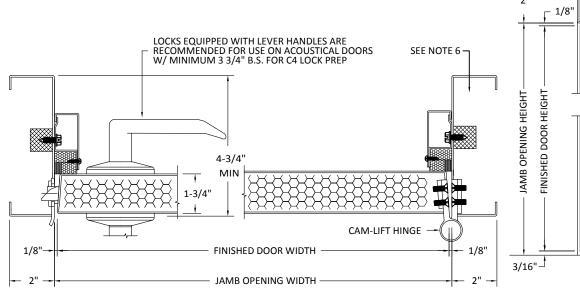
FLUSH SOUND CONTROL DOOR AND FRAME ASSEMBLY/SINGLE MAGNETIC GASKETS

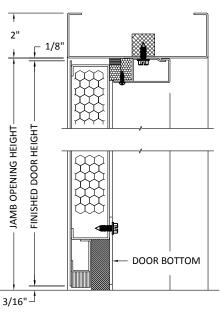
(For use with electrified hardware)



NOTES:

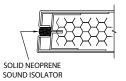
- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with single magnetic seals at head and jambs. Door is equipped with an automatic door bottom.
- 4. Door weight is 11 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- 6. Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 50 (field results may vary from STC 45 to 50).
- Included: Compression door bottom and magnetic perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.





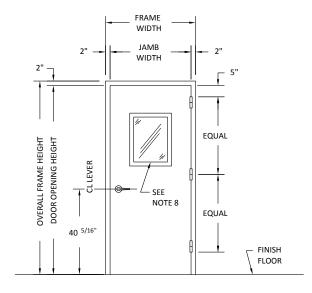
HORIZONTAL SECTION

VERTICAL SECTION



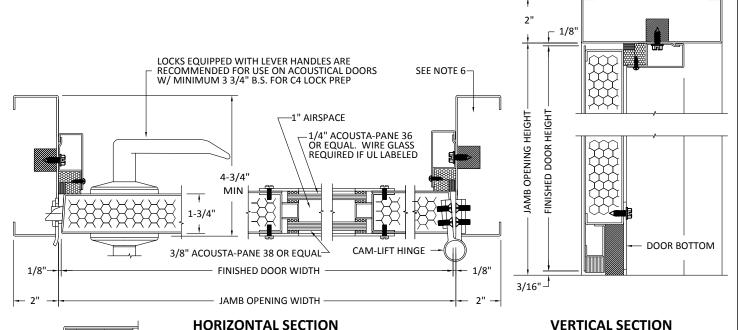


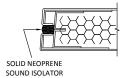
STC 51L DUAL GLAZED SOUND CONTROL DOOR AND FRAME **ASSEMBLY**



NOTES:

- 1. Doors and Frames to be painted with rust inhibitive primer.
- 2. Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with compression seals at head and jambs.
- 4. Door weight is 12 pounds per square foot.
- 5. Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- 6. Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and frame continuously caulked.
- 7. UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Door tested acoustically with 300 square inch vision light. Sized specified by customer.
- 9. Lab Tested STC 51 (field results may vary from STC 46 to 51).
- 10. Included: Compression door bottom and compression perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.

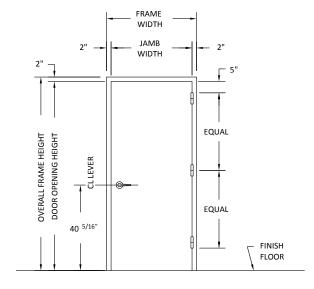




EDGE CONSTRUCTION DOOR JAMB DETAIL

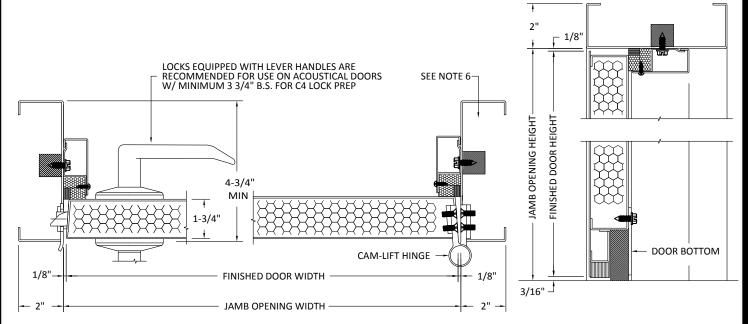


STC 52
FLUSH SOUND CONTROL DOOR AND FRAME
ASSEMBLY



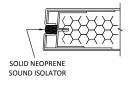
NOTES:

- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with compression seals at head and jambs.
- 4. Door weight is 11 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- Frames equipped with masonry anchors must be grouted full in field.
 Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 52 (field results may vary from STC 47 to 52).
- Included: Compression door bottom and compression perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.



HORIZONTAL SECTION

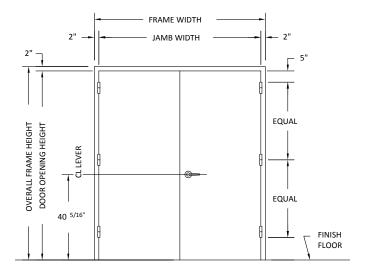
VERTICAL SECTION





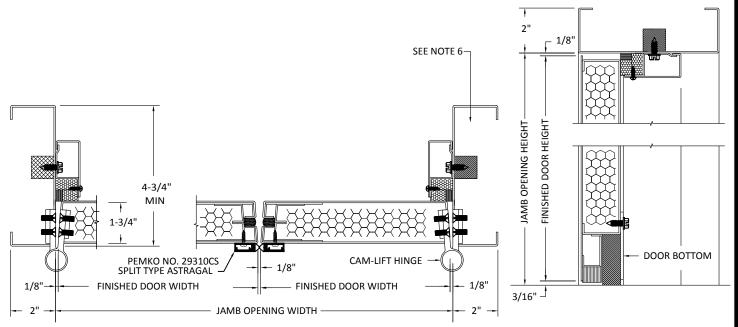
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STC 48PR PAIRED FLUSH SOUND CONTROL DOOR AND FRAME ASSEMBLY (PANIC OPERATION)



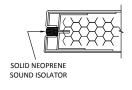
NOTES:

- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with compression seals at head and jambs.
- 4. Door weight is 11 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- 6. Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 48 (field results may vary from STC 43 to 48).
- Included: Compression door bottom and compression perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.



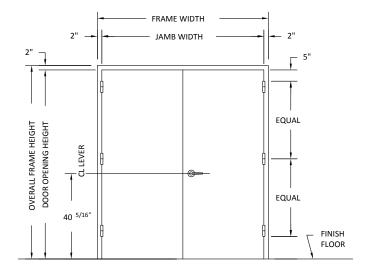
HORIZONTAL SECTION

VERTICAL SECTION



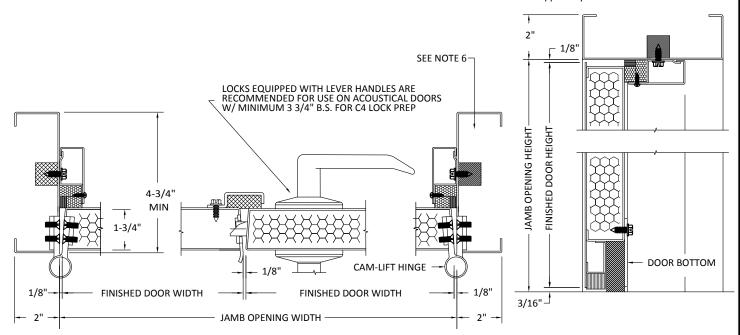


STC 50PR PAIRED FLUSH SOUND CONTROL DOOR AND FRAME ASSEMBLY



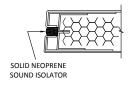
NOTES:

- 1. Doors and Frames to be painted with rust inhibitive primer.
- Door bottom requires flush level sealing surface. Wood, aluminum, or stainless steel threshold recommended. Do not seal against carpet.
- 3. Frame is equipped with compression seals at head and jambs.
- 4. Door weight is 11 pounds per square foot.
- Door can be equipped with standard builders hardware, Customer to specify. Concealed hardware is not recommended for acoustical doors.
- 6. Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool and all voids between wall and frame continuously caulked.
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 8. Lab Tested STC 50 (field results may vary from STC 45 to 50).
- Included: Compression door bottom and compression perimeter seals shipped loose. Supplied Cam-lift hinges must be used with this assembly. All other hardware furnished and applied by others.



HORIZONTAL SECTION

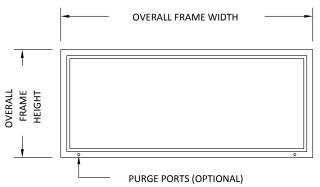
VERTICAL SECTION





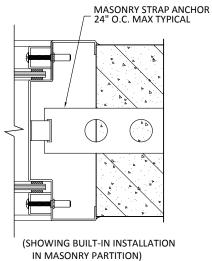
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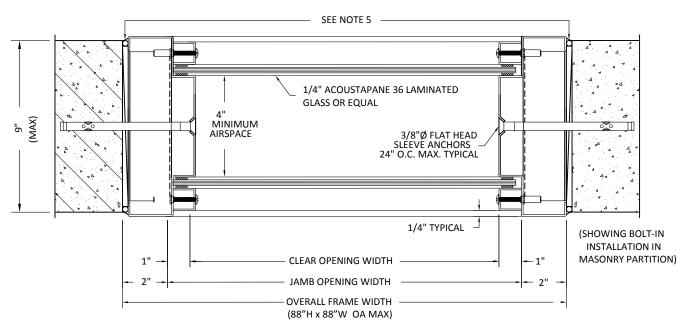
STC 52BL SOUND RATED BORROWED LITE



NOTES:

- 1. Exposed surfaces to be coated with rust inhibitive primer.
- Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool.
- 3. Unit available with two (2) purge ports (optional).
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 5. All voids between wall and frame must be continuously caulked.
- Installed product field results calculated according to ASTM E413 shall be no less than five (5) NIC rating points below the specified laboratory STC rating.
- 7. All glass by others.

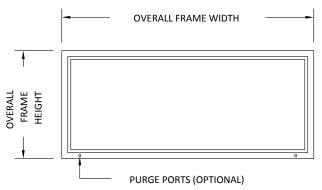




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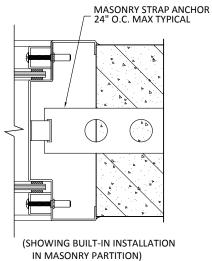


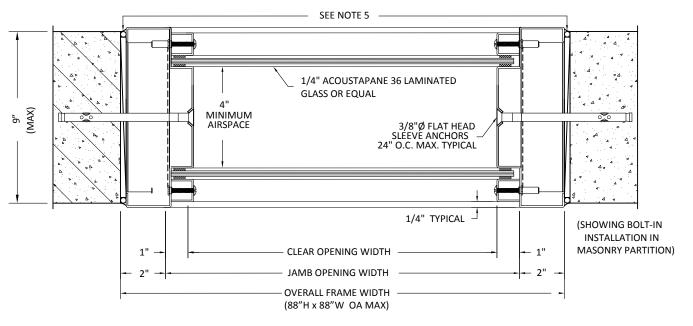
STC 53BL SOUND RATED BORROWED LITE



NOTES:

- 1. Exposed surfaces to be coated with rust inhibitive primer.
- Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool.
- 3. Unit available with two (2) purge ports (optional).
- UL fire labels available in compliance with UL10B and UL10C/UBC7-2. Consult factory for specifics.
- 5. All voids between wall and frame must be continuously caulked.
- Installed product field results calculated according to ASTM E413 shall be no less than five (5) NIC rating points below the specified laboratory STC rating.
- 7. All glass by others.



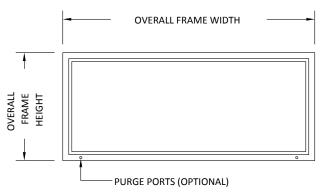


HORIZONTAL SECTION



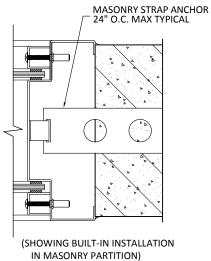
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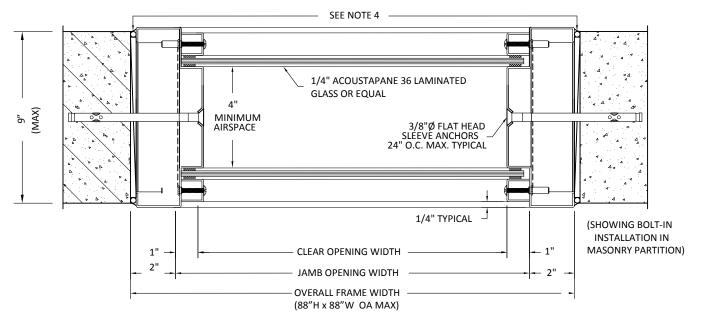
STC 54BL SOUND RATED BORROW LITE



NOTES:

- 1. Frame to be painted with rust inhibitive primer.
- Frames equipped with masonry anchors must be grouted full in field. Bolt-in type frames must have all voids in head and jambs packed with 6 to 12 pound density mineral wool.
- 3. Unit available with two (2) purge ports (optional).
- 4. All voids between wall and frame must be continuously caulked.
- Installed product field results calculated according to ASTM E413 shall be no less than five (5) NIC rating points below the specified laboratory STC rating.
- 6. All glass by others.





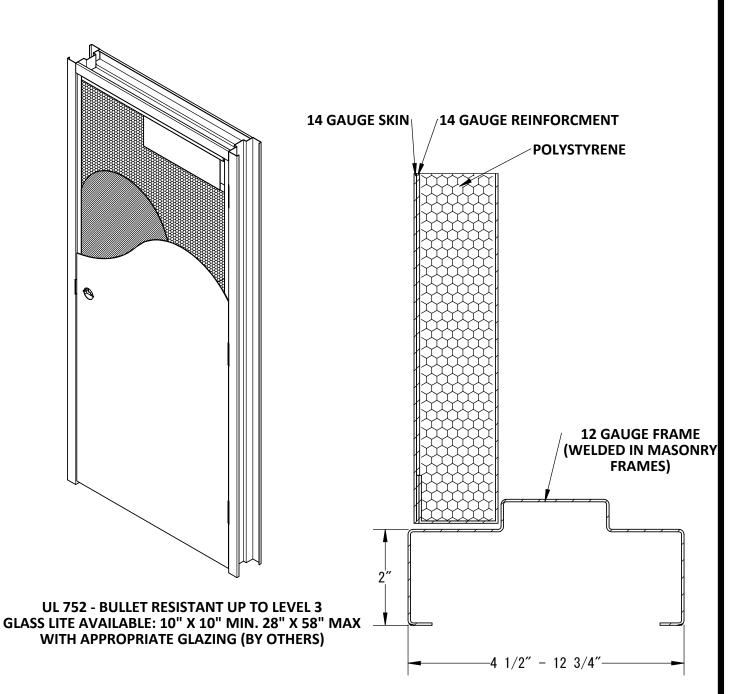
HORIZONTAL SECTION



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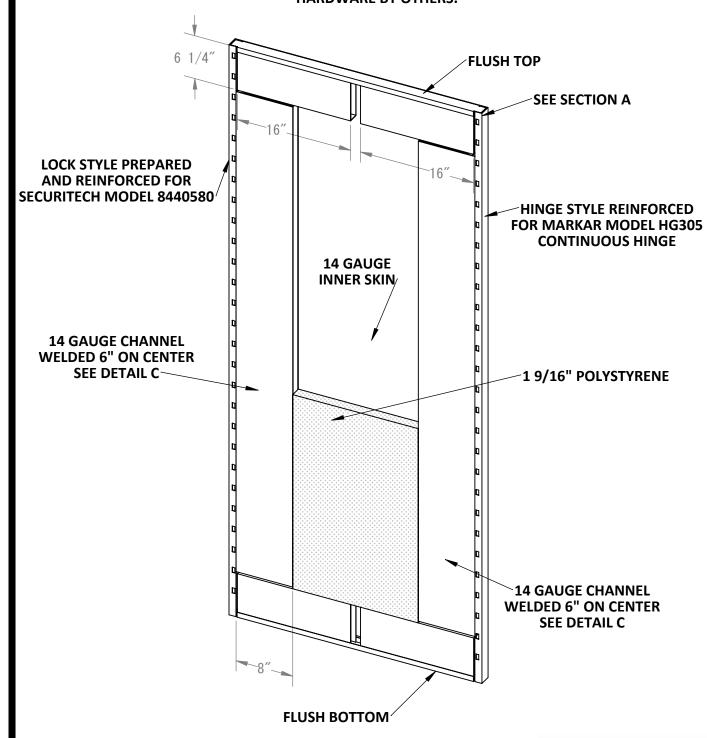
Specialty Assemblies

Bullet Assembly	S-1
TORNADO DOOR 361 1 of 2	S-2
TORNADO DOOR 361 1 of 2	S-3
Safe Room Door	S-4
Hurricane Assemblies	S-8



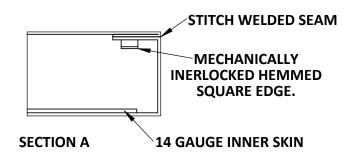


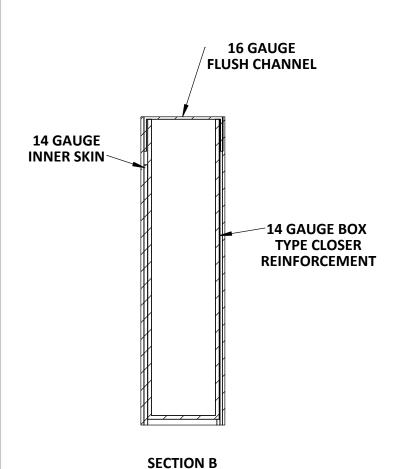
3070NP X 1 3/4" X 16 GAUGE X 14 GAUGE INNER SKIN ON IMPACT FACE X 14 GAUGE REINFORCING DOOR EDGES @2" ON CENTER X MARKAR CONTINUOUS HINGE #HG3057S X SECURITECH 3 POINT LOCKING SYSTEM #8444SBO HARDWARE BY OTHERS.

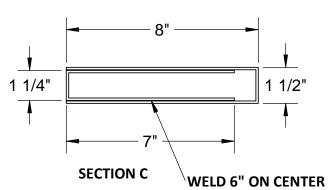




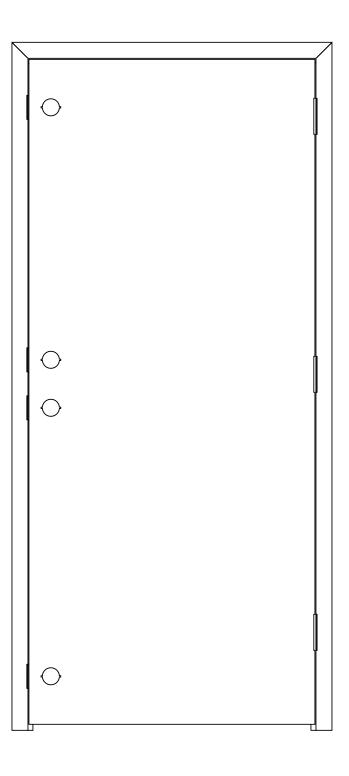
TORNADO DOOR 361













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	NA	MESKER The newest innovations in hollow metal from the oldest hollow metal door company in America

HURRICANE ASSEMBLIES	S-8	MAR 2014	
HORRICAINE ASSEMBLIES			
	COMING SOON		
			MESKER

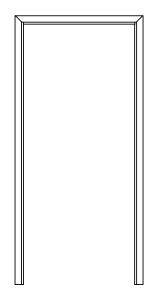
The newest innovations in hollow metal from the oldest hollow metal company in America

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FRAMES HOW TO ORDER



- 1 2 3 4 5 6 7 8 9
- FRAME SERIES
 F MASONRY
 FDJ DRYWALL
 FF FLUSH FACE
 RF REMODELING
- METAL TYPE

 LEAVE BLANK COLD ROLLED
 Z GALVENNEALED
 G90 GALVANIZED (G90)
- PREP SIDE AND GAUGE
 4 PREP ON 400 SIDE
 8 PREP ON 800 SIDE
 THEN DESIGNATE GAUGE
- 4 JAMB DEPTH
- FRAME TYPE
 FH FRAME HEADER
 SJU STRIKE JAMB U STRIKE PREP
 SJC STRIKE JAMB C STRIKE PREP
 HJ HINGE JAMB
 BJ BLANK JAMB
 WJ WINDOW JAMB

- 6 20 2'0" 68 6'8" 26 - 2'6" 70 - 7'0" 30 - 3'0" 80 - 8'0"
- 7 R RIGHT L - LEFT
- 8 FACE W4F - 4" W6F - 6" W1 1/2F - 1 1/2" LEAVE BLANK - 2"
- PROFILE

 DE DOUBLE EGRESS
 ER EQUAL RABBET
 SR SINGLE RABBET
 COS CASED OPEN
 LEAVE BLANK UNEQUAL RABBET

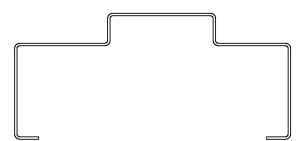
USE THE APPROPRIATE SYMBOL AS DESIGNATED ABOVE FOR POSITIONS 1 THRU 9.

<u>EXAMPLE</u>

 $\frac{F}{1} \frac{Z}{2} \frac{416}{3} \frac{53/4}{4} \frac{HJ}{5} \frac{70}{6} \frac{R}{7} \frac{W4F}{8} \frac{DE}{9}$



F SERIES



Frame Construction

12, 14, or 16 gauge, cold-rolled, galvannealed, or galvanized G90 steel to be break-formed to the design specifications required. (See pages F-3 TO F-9 for sizes and profiles available). Frames shall be furnished knocked-down or welded, ground smooth upon request. Mitered corners shall have a strong, secure, four tab interlocking system to maintain neat mitered joints and corners. Standard frame to have 1/2" returns; standard stop heights to be 5/8" high. Soffit dimensions can vary. Frames can be single or double rabbeted. Frames will be supplied with welded on sill anchors. (Note: Bending tabs in on the jamb rabbets will increase door opening dimension).

Installation & Applications

Frames to be installed in accordance with ANSI A250.11-2001. Standard series frames to be used in a number of applications including masonry, wood stud and steel stud construction.

Hardware Reinforcements

Frames to be furnished with 4-1/2" or 5" standard or heavy weight 7 gauge steel hinge reinforcements and shall be adequately reinforced for all hardware. Standard arm or parallel closer reinforcements available upon request.

Strike and hinge reinforcements shall be protected by mortar guards. Single frames shall be prepared to receive (3) rubber mutes.

Finish

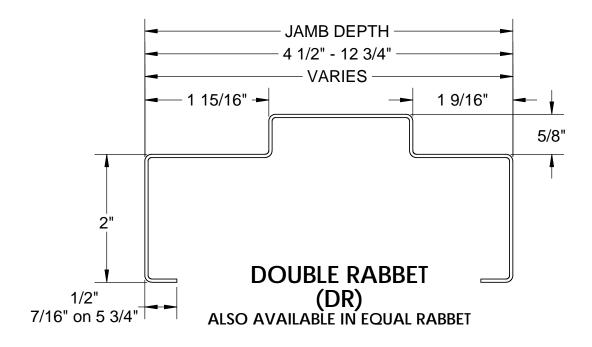
Exposed frame surfaces to be cleaned and treated then coated with rust inhibitive primer. Color painted frames to receive a durable, flow coated, baked on finish. Water-based primer and color paint finishes to be free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

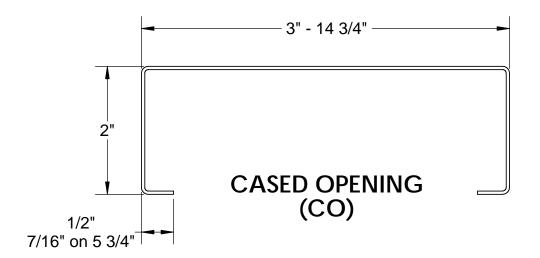
Compliance

All Mesker frame components comply with ANSI A250.8(R2008). Fire labeling in accordance NFPA and available in FM (standard), WHI (Intertek) and Underwriters Laboratories. For a complete list of product compliance per ANSI/ASTM test methods, consult the labeling section.



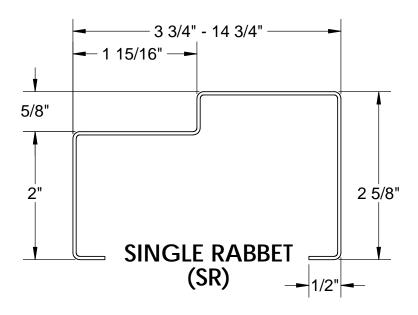
F SERIES PROFILES - DOUBLE RABBET AND CASED OPENING

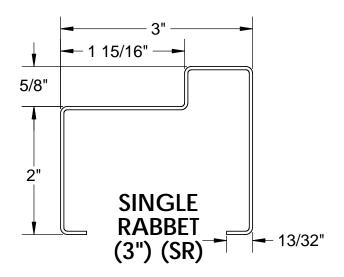






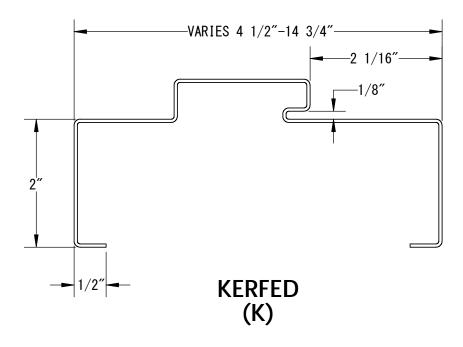
F SERIES FRAME PROFILES - SINGLE RABBET

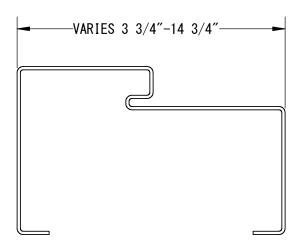






F SERIES FRAME PROFILE - KERFED FOR WEATHERSTRIPPING





AVAILABLE IN 14 OR 16 GAUGE

PHYSICAL ENDURANCE LEVEL: MEETS ANSI A250.4 PERFORMANCE TEST--16 GAUGE STEEL: LEVEL A (1,000,000 CYCLES) FIRE RATED UP TO 90 MINUTES.

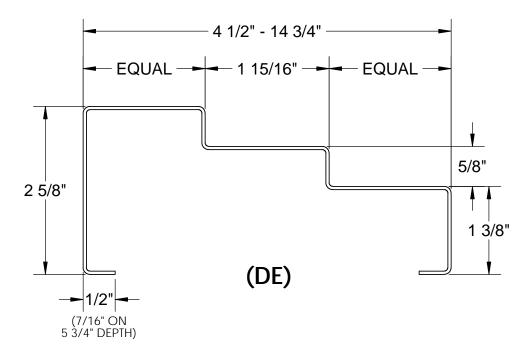


F SERIES THERMAL BREAK

RESERVED

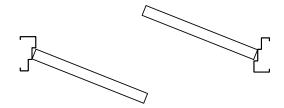


F SERIES PROFILES - DOUBLE EGRESS

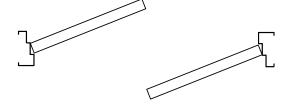




HEADER JUNCTION



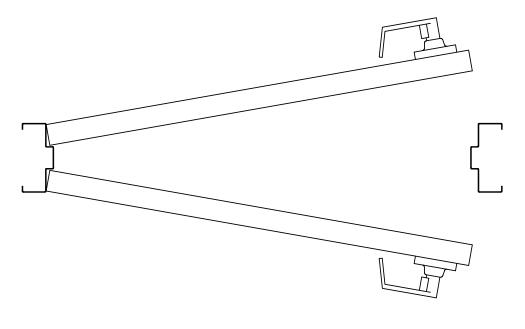
LHR (RH) SWING

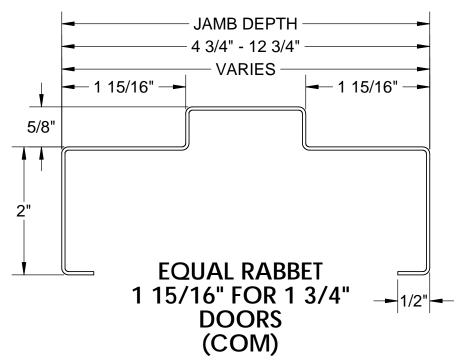


RHR (LH) SWING

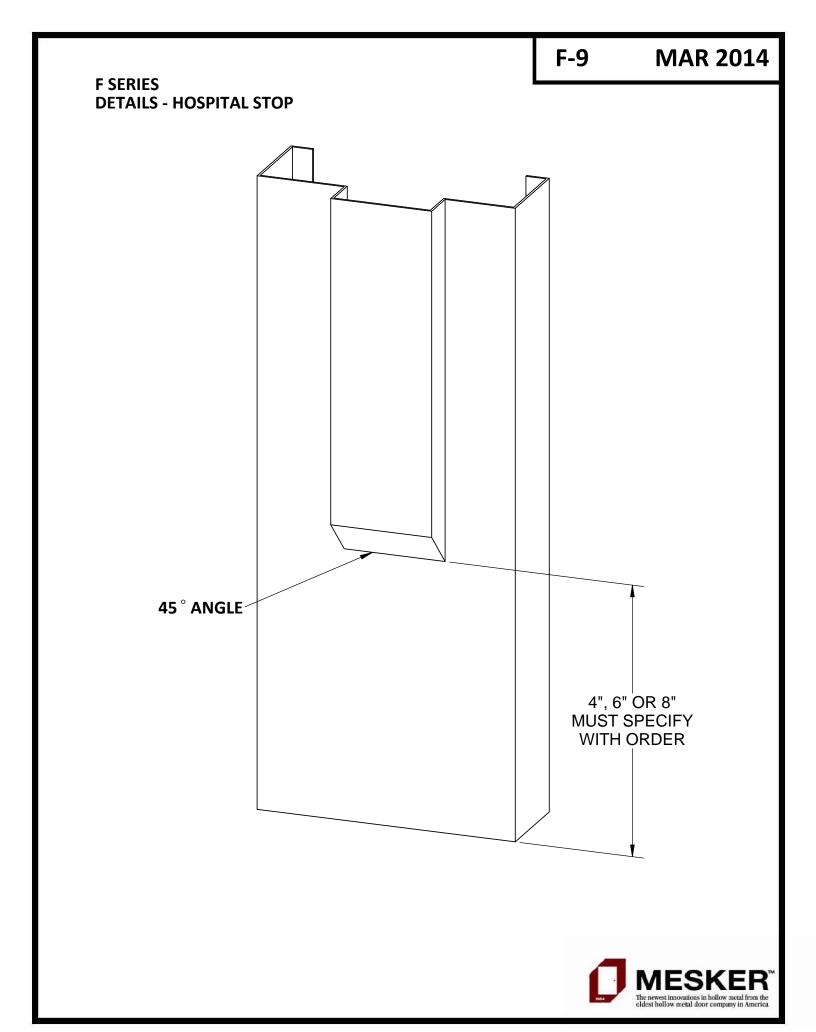


F SERIES PROFILES - COMMUNICATING FRAME

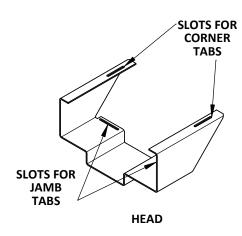


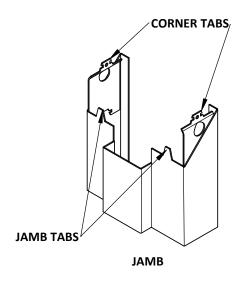


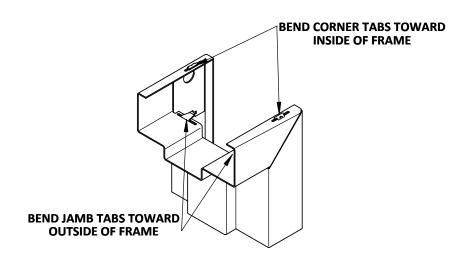




F SERIES CORNER ASSEMBLY - DOUBLE RABBET - KD







CORNER ASSEMBLY

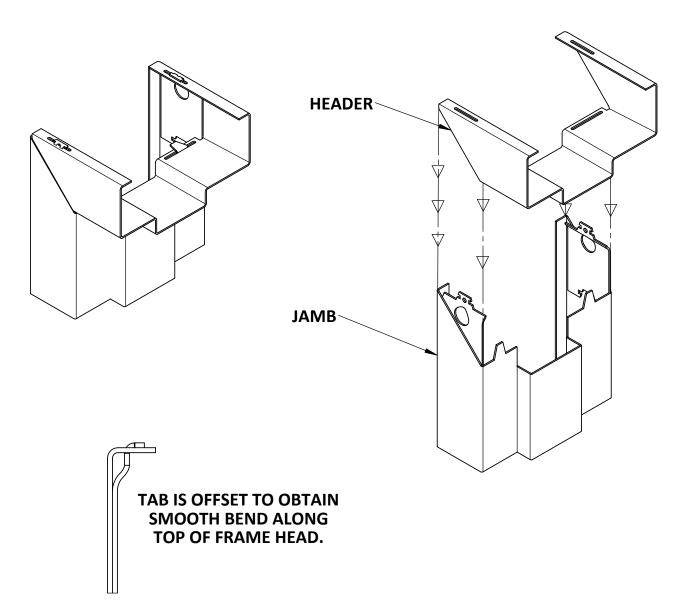
ASSEMBLY OF K.D. CORNER

SLIDE JAMB TABS INTO HEADER AND PUSH HEADER AND JAMB MITERS TOGETHER. ALWAYS BEND INNER TABS OUT WITH HAMMER. BENDING TABS IN WILL INCREASE THE DOOR OPENING DIMENSION.

3 ANCHORS ON EACH JAMB UP TO 7'0" AND 1 ADDITIONAL ANCHOR FOR EVERY 26" OR FRACTION THEREOF ABOVE 7'0".



F SERIES FRAME CORNER DETAIL - DOUBLE RABBET

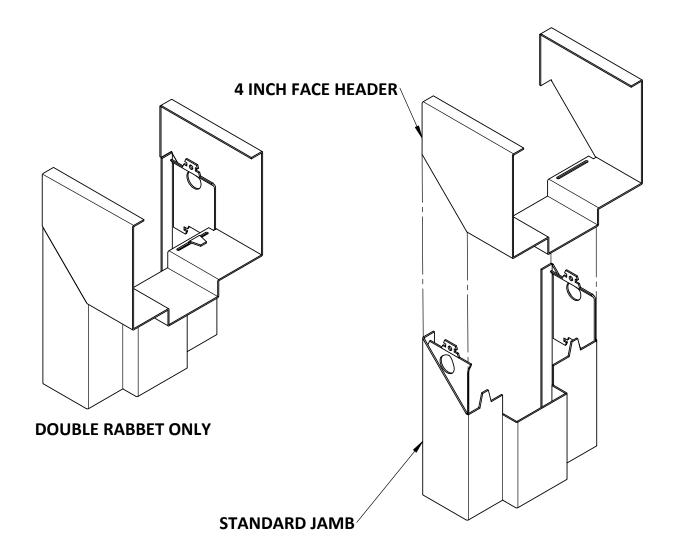


SECTION THRU TAB



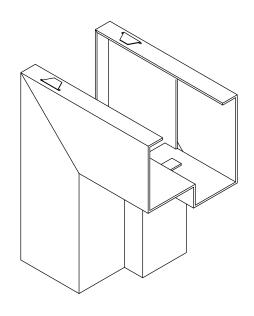
F-12 MAR 2014

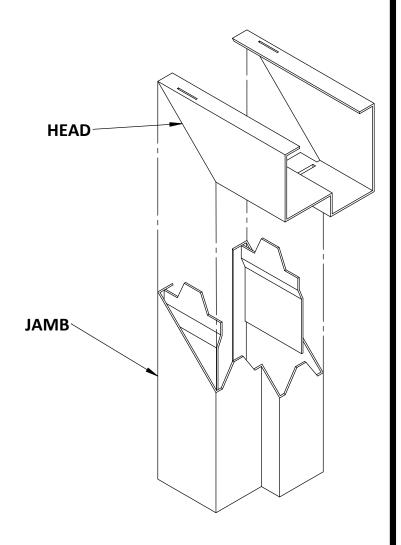
F SERIES CORNER DETAIL - 4 INCH FACE HEADER - DOUBLE RABBET





F SERIES FRAME CORNER DETAIL - SINGLE RABBET - KD



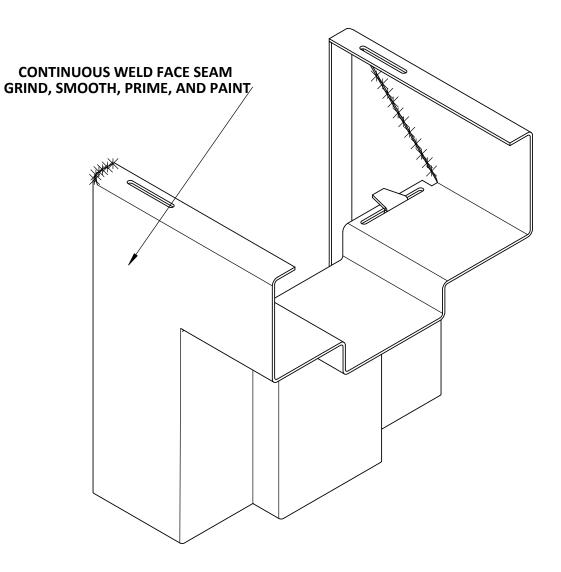




SECTION THRU TAB



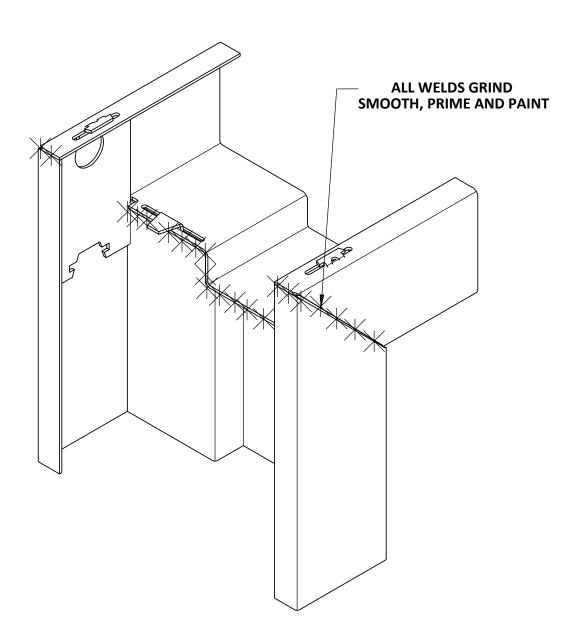
F SERIES CORNER DETAILS - DOUBLE RABBET - FACE WELD





F-15 MAR 2014

F SERIES CORNER DETAILS - DOUBLE RABBET - FULL WELD



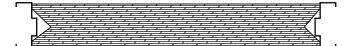


F SERIES FRAME INSTALLATION - BLOCK WALL (NEW CONSTRUTION)

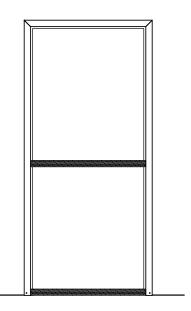
TYPICAL WOOD SPREADER MUST BE SQUARE AND FABRICATED FROM LUMBER NO LESS THAN 1" THICK. CORRECT LENGTH IS THE DOOR OPENING WIDTH BETWEEN JAMBS AND HEADER. CUT CLEARANCE NOTCHES FOR THE FRAME STOPS. AT FRAME STOPS SPREADER MUST BE NEARLY AS WIDE AS FRAME DEPTH FOR PROPER INSTALLATION.

I.E. SINGLE DOOR 3'0" = 36"

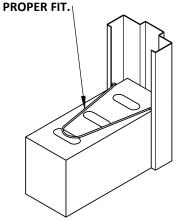
DOUBLE DOOR 6'0" = 72"



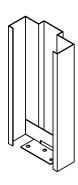
- (1) ASSEMBLE AND WELD FRAME.
- (2) SET AND PLUMB FRAME.
- (3) FASTEN FLOOR ANCHORS WITH APPROPRIATE FASTENERS.
- (4) AN ANCHOR SHALL BE USED FOR EACH 26" OF JAMB HEIGHT OR FRACTION THEREOF. EACH ANCHOR SHALL BE INSTALLED AS WALL IS LAID UP. GROUT FRAME IN THE AREA OF ANCHOR.
- (5) A SECOND SPREADER IS RECOMMENDED AT THE MID-POINT OF THE DOOR OPENING TO MAINTAIN THE DOOR OPENING DIMENSION.
- (6) CONTINUALLY CHECK PLUMB AND SQUARE AS THE WALL PROGRESSES.



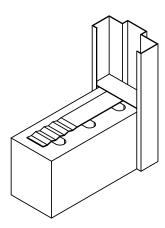
OVER SPREAD ANCHOR BEFORE INTALLATION TO ENSURE



WIRE MASONRY ANCHOR



MASONRY FLOOR ANCHOR



MASONRY T ANCHOR



F SERIES FRAME INSTALLATION - STEEL STUD WALL (NEW CONSTRUCTION)

STEEL STUD WALL CONSTRUCTION

ROUGH STUD OPENING

WIDTH: NOMINAL FRAME WIDTH

+4 3/8" MIN, TO 4 3/4" MAX.

(I.E. 3'0" = 40 3/8" MIN TO 40 3/4" MAX.)

HEIGHT: NOMINAL FRAME HEIGHT

+2 1/8" MIN.

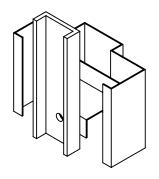
(I.E. 6'8" = 82 1/8" MIN.)

(1) INSTALL MINIMUM OF THREE ANCHORS PER JAMB (BOTH HINGE AND STRIKE). POSITION ANCHORS IN FRAME THROUGH THE THROAT AND TAP ON WITH A HAMMER OR USE WELDED IN Z ANCHOR. FOUR ANCHORS PER JAMB LEG OVER 7'0" HEIGHT.

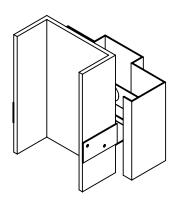
(2) SQUARE, BRACE, AND PLUMB FRAME AS SHOWN.

(3) SET SPREADER. ATTACH JAMBS TO FLOOR THROUGH FLOOR ANCHOR OR FLOOR EXTENSION. INSTALL JAMB STUDS TO FLOOR AND CEILING RUNNERS AND TIGHTLY AGAINST FRAME ANCHORS.

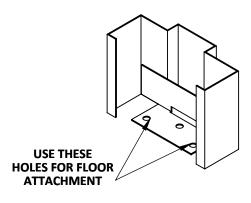
(4) ATTACH STUDS TO FRAME ANCHORS AS SHOWN.



STEEL STUD ANCHOR
Z ANCHOR
CENTER STUDS IN FRAME THROAT
OR AS DESIRED AND ATTACH
TO ANCHORS WITH SCREWS.



STEEL STUD ANCHOR UNA ANCHOR



SILL ANCHOR

WHEN ATTACHING HEADER STUDS TO JAMB STUDS, BE SURE THE STUD IS ABOVE FRAME HEADER. THIS WILL ASSURE AMPLE ROOM FOR ATTACHING PLASTER LATH OR DRYWALL AND WILL NOT INTERFERE WITH INSTALLATION OF HARDWARE ATTACHED TO FRAME HEADER.

SPREADER



F SERIES

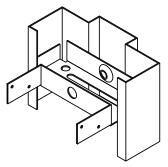
FRAME INSTALLATION - WOOD STUD WALL (NEW CONSTRUCTION)

WOOD STUD CONSTRUCTION

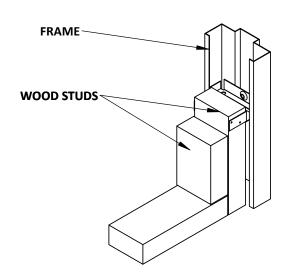
ROUGH STUD OPENING

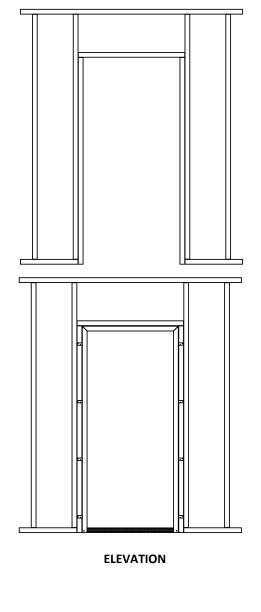
WIDTH: NOMINAL FRAME WIDTH
+4 3/8" MIN, TO 4 3/4" MAX.
(I.E. 3'0" = 40 3/8" MIN TO 40 3/4" MAX.)
HEIGHT: NOMINAL FRAME HEIGHT

+2 1/8" MIN. (I.E. 6'8" = 82 1/8" MIN.)



WOOD STUD ANCHOR



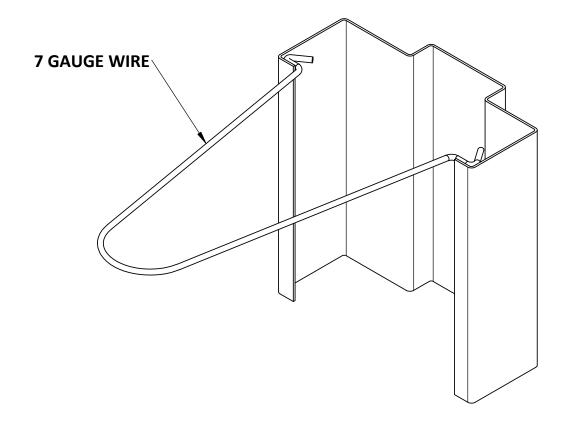


- (1) INSERT THREE ANCHORS PER JAMB UP TO AND INCLUDING 7' 2" HEIGHT (FOUR OVER 7' 2" HIGH). POSITION ANCHORS IN FRAME THROAT AND TAP IN WITH A HAMMER. BASE ANCHORS MAY ALSO BE USED.
- (2) PLACE FRAME IN STUD OPENING.
- (3) BEND ANCHOR TABS AROUND STUD LEAVING DESIRED CLEARANCE BETWEEN FRAME RETURN AND STUD FOR INSERTING FINISHED WALL MATERIAL.
- (4) SET SPREADER AND LEVEL FRAME. SHIM JAMBS IF NECESSARY.
- (5) SQUARE AND NAIL OR SCREW TOP ANCHORS TO STUDS ON <u>ONE JAMB ONLY.</u> CHECK PLUMB AND SQUARE AND CONTINUE TO NAIL OR SCREW BALANCE OF ANCHORS TO STUDS. REPEAT FOR OPPOSITE JAMB.



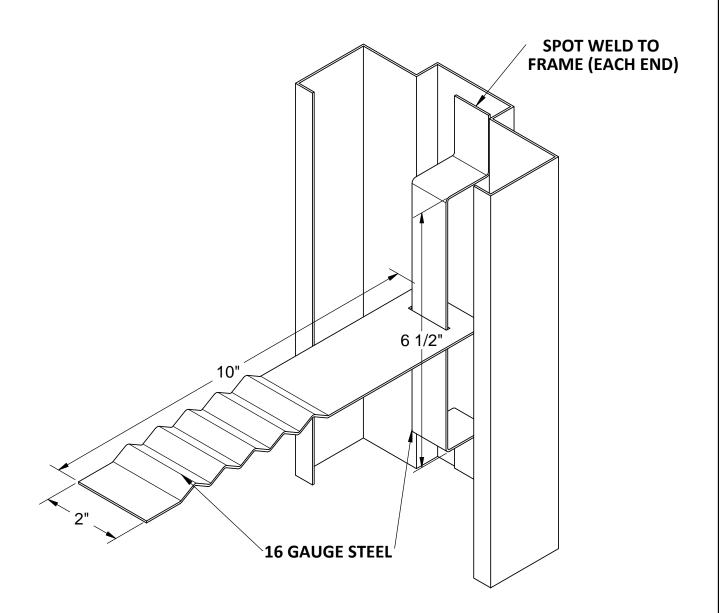
F-19 MAR 2014

F SERIES FRAME ANCHOR - WIRE MASONRY ANCHOR

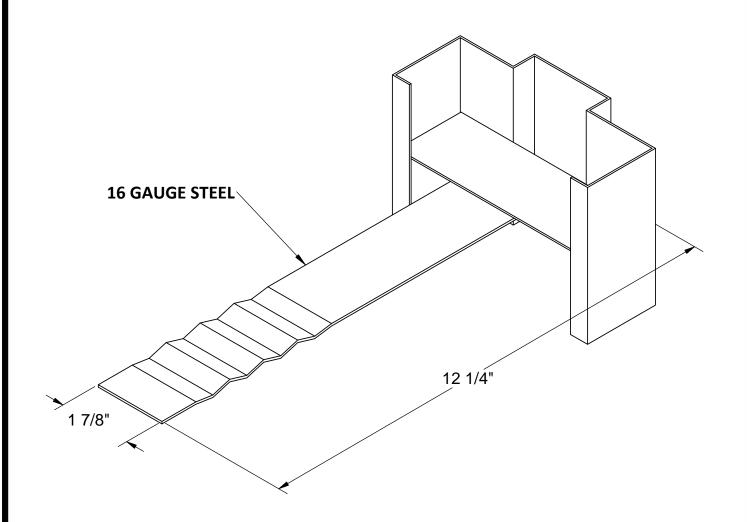




F SERIES
FRAME ANCHOR - MASONRY WELDED IN STRAP ANCHOR

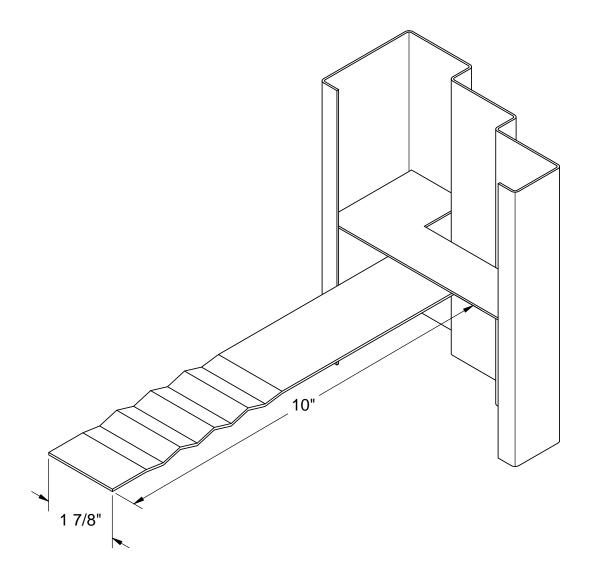




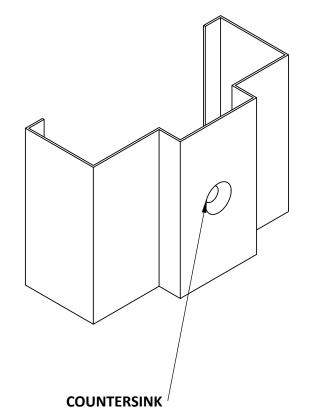




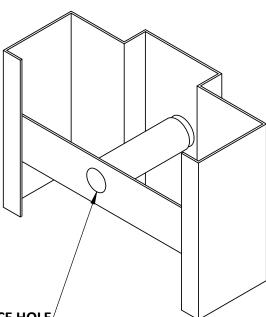
F SERIES
FRAME ANCHOR - DOUBLE EGRESS MASONRY T ANCHOR







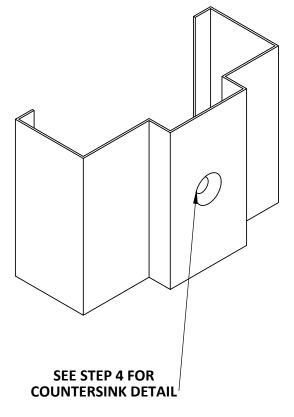
PREPARED FOR 3/8" DIAMETER EXPANSION ANCHOR OR #24 WOOD SCREW



9/16" CLEARANCE HOLE

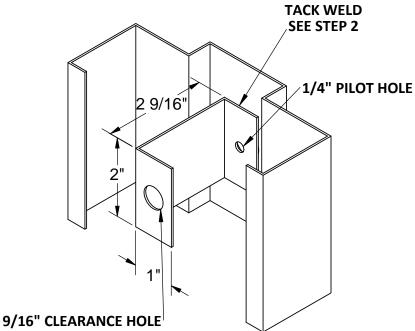


F SERIES FRAME ANCHOR - AEW (ANCHOR EXISTING WALL)



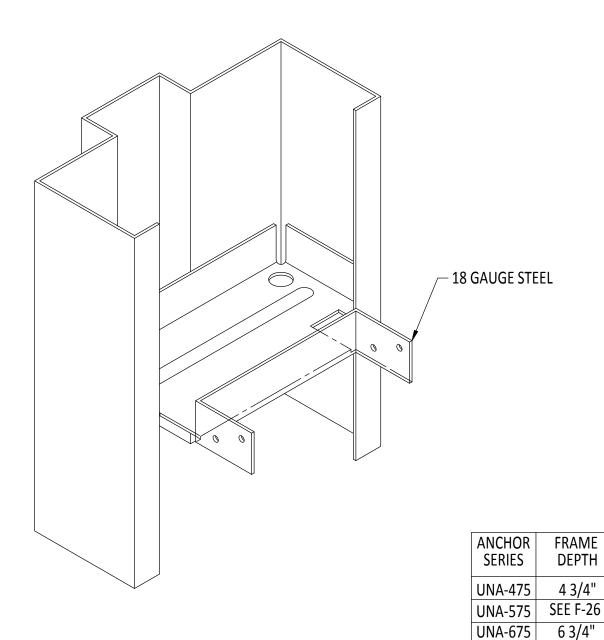
INSTALLATION PROCEDURE

- 1. DRILL 1/4" DIAMETER HOLE IN SOFFIT AS AN AID TO LOCATE ANCHOR.
- 2. ALIGN 1/4" HOLE IN ANCHOR WITH THE HOLE DRILLED IN STEP 1 AND WELD THE ANCHOR TO THE FRAME.
- 3. DRILL 7/16" HOLE THROUGH FRAME AND ANCHOR.
- 4. COUNTERSINK FOR 3/8"DIAMETER FLAT HEAD MACHINE BOLT OR #24 WOOD SCREW.





F SERIES FRAME ANCHOR - UNIVERSAL ANCHOR (UNA)



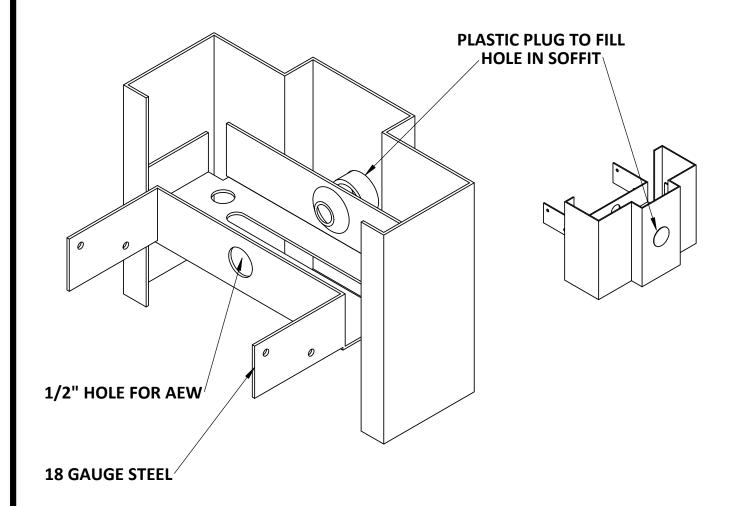


7 3/4"

8 3/4"

UNA-775 UNA-875

F SERIES FRAME ANCHOR - UNIVERSAL ANCHOR (UNA) 5 3/4"

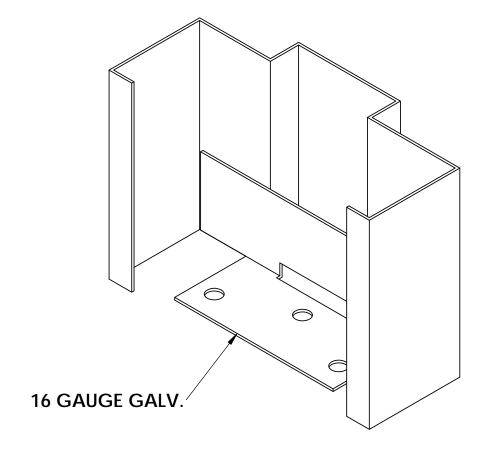


- 1. DRILL 3/4" HOLE IN SOFFIT.
- 2. LOCATE ANCHOR AT HOLE.
- **INSERT ANCHOR INTO WALL 3/8"** DIAMETER MACHINE ANCHOR OR #24 WOOD SCREW.
- 4. INSERT PLUG INTO HOLE IN SOFFIT.



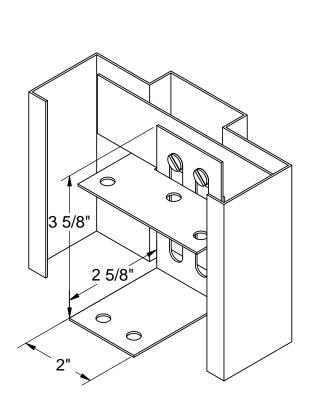
F-27 MAR 2014

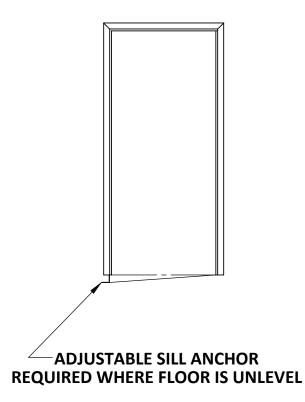
F SERIES
FRAME ANCHOR - SILL ANCHOR DOUBLE RABBET FRAME





F SERIES
FRAME ANCHOR - OPTIONAL ADJUSTABLE SILL ANCHOR



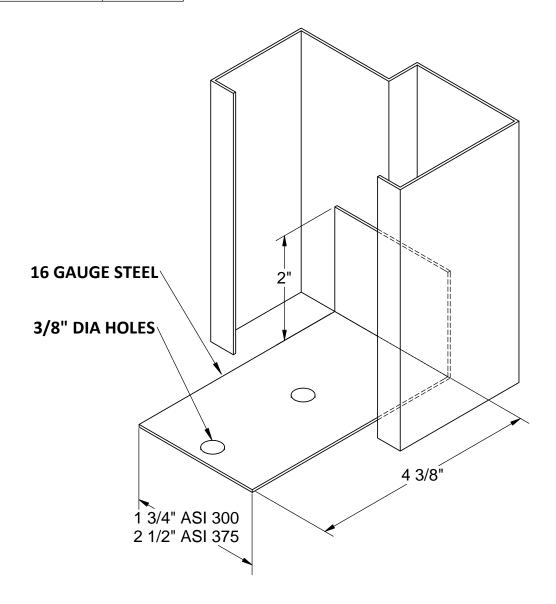


ANCHOR NUMBER	FRAME DEPTH
ASI-475	4 3/4"
ASI-575	5 3/4"
ASI-675	6 3/4"
ASI-875	8 3/4"



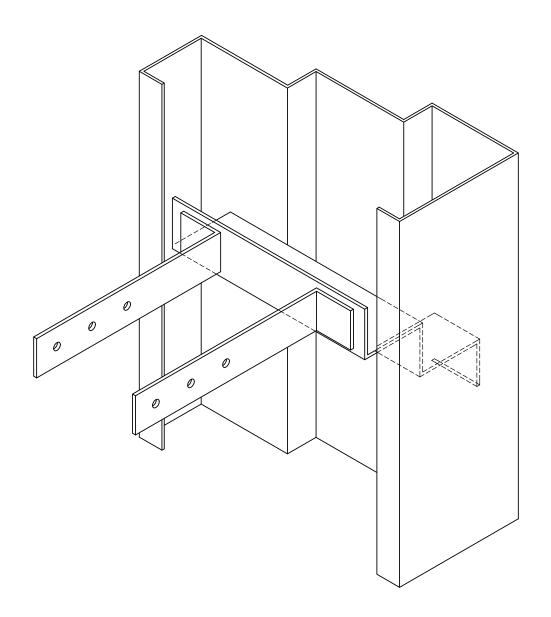
F SERIES FRAME ANCHOR - SILL ANCHOR SINGLE RABBET FRAME

ANCHOR NUMBER	FRAME DEPTH
ASI-300	3"
ASI-375	3 3/4"



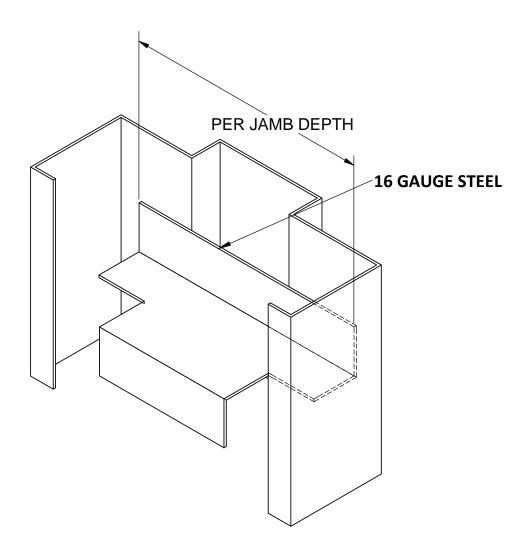


F SERIES
DOUBLE EGRESS ANCHORS- MULTI PURPOSE



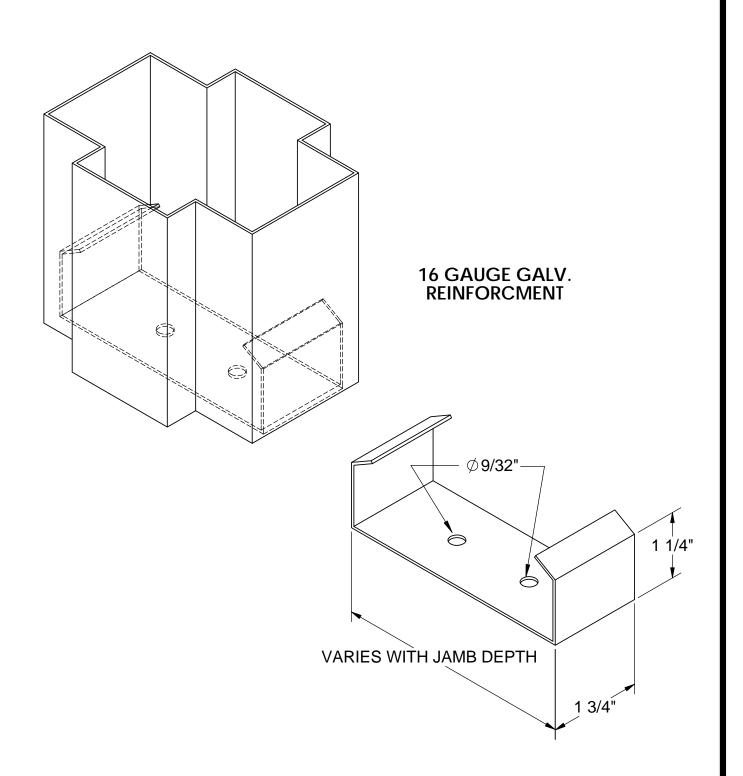


F SERIES
FRAME ANCHOR - METAL STUD "Z" ANCHOR

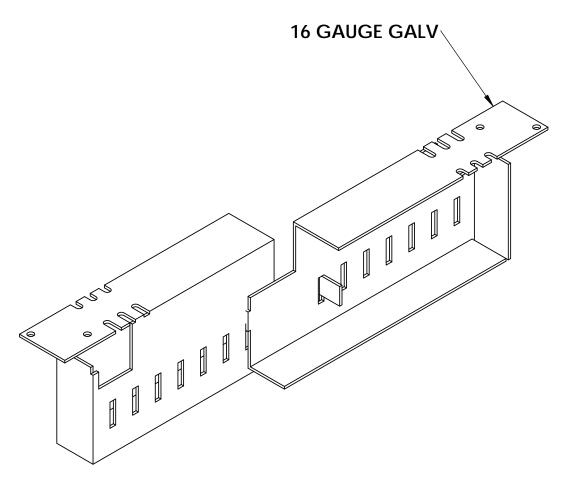




F SERIES FRAME ANCHOR - MULLION FLOOR ANCHOR







ADJUSTS TO FRAME DEPTH

PART#	SIZES COVERED
PFA 110	4 3/4" - 6 3/4"
PFA 380	5 3/4" - 8 3/4"
PFA 380A	7" - 12"

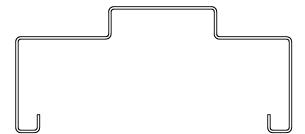


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FDJ Profiles 5 of 6	FDJ- 6
FDJ Profiles 6 of 6	FDJ- 7
Hospital Stop	FDJ- 8
Corner Detail	FDJ- 9
Frame Installation	FDJ- 10
Frame Installation Cased Open	FDJ- 11
FDI Anchors	EDI- 12

FDJ SERIES DRYWALL FRAMES



Frame Construction

Formed from 14 or 16 gauge, cold-rolled, galvannealed steel, galvanized G90. Frames manufactured with die-mitered corner, and furnished with corner tabs for reinforcement and proper alignment.

Furnished with pressure fitted top anchors ensuring durability with less torsion and sagging.

Installation & Applications

FDJ series frames are supplied standard with adjustable jamb lock anchor for secure installation. Sill anchors as indicated on page FDJ-12. The jamb lock anchor is adjusted with a screwdriver or power drill providing a pressure fit. The optional DFA base anchor systemis provided for attachment directly to sill when using wall baseboards. Drywall / FDJ series frames are designed for installation in interior applications after construction of wood or metal stud and drywall applications.

Hardware Reinforcements

Frames to be furnished with 4-1/2" or 5" standard or heavy weight 7 gauge steel hinge reinforcements and shall be adequately reinforced for all hardware. Regular arm or parallel closer reinforcements available upon request. Strike and hinge reinforcements shall be protected by plaster guards.

Finish

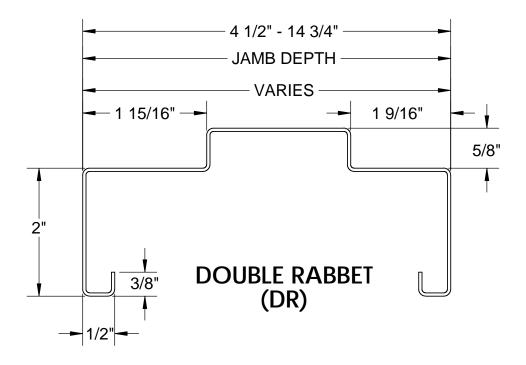
Exposed frame surfaces to be cleaned, treated, and then coated with rust inhibitive primer. Color painted frames to receive a durable, flow coated, baked on finish. Water-based primer and color paint finishes to be free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

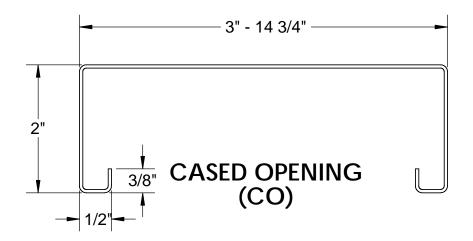
Compliance

These products are in full compliance with ANSI/SDI A250.8-2003 (R2008). This document is commonly referred to as SDI-100 (Steel Door Institute 100).



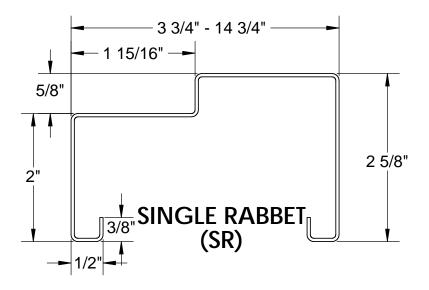
FDJ SERIES PROFILES - DOUBLE RABBET AND CASED OPEN

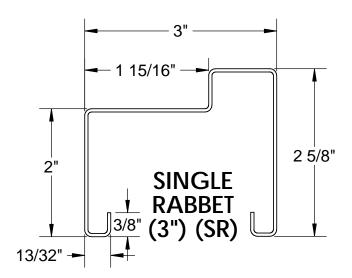






FDJ SERIES PROFILES - SINGLE RABBET





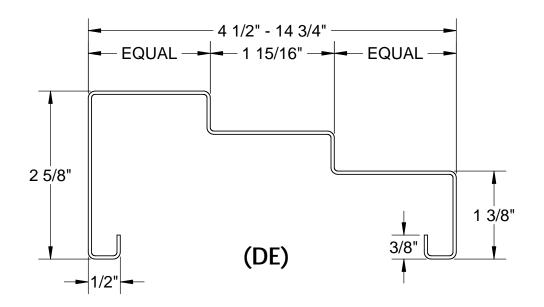


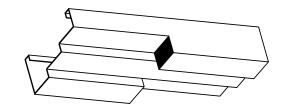
FDJ SERIES THERMAL BREAK

RESERVED

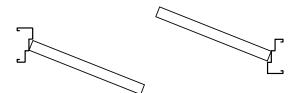


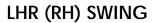
FDJ SERIES - DRYWALL FRAMES PROFILES - DOUBLE EGRESS

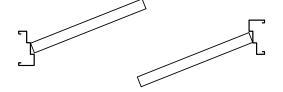




HEADER JUNCTION



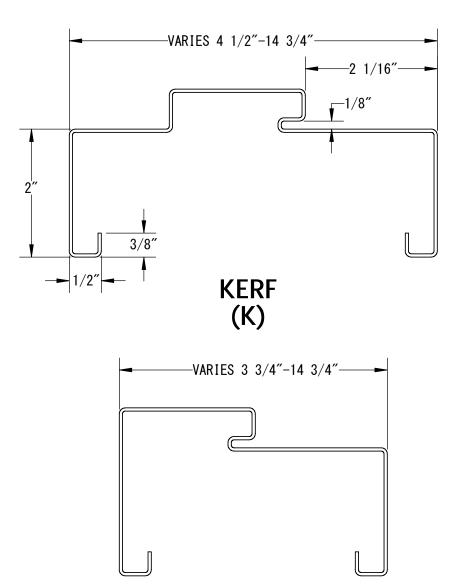




RHR (LH) SWING



FDJ SERIES PROFILE - KERFED FOR WEATHERSTRIPPING



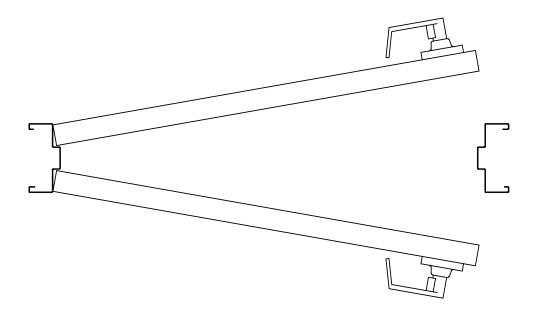
SINGLE RABBET

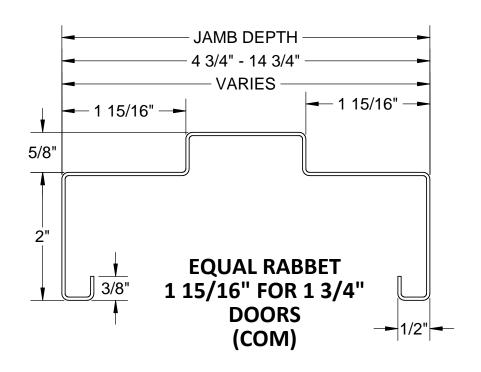
AVAILABLE IN 14 OR 16 GAUGE

PHYSICAL ENDURANCE LEVEL: MEETS ANSI A250.4
PERFORMANCE TEST--16 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)
FIRE RATED UP TO 90 MINUTES.

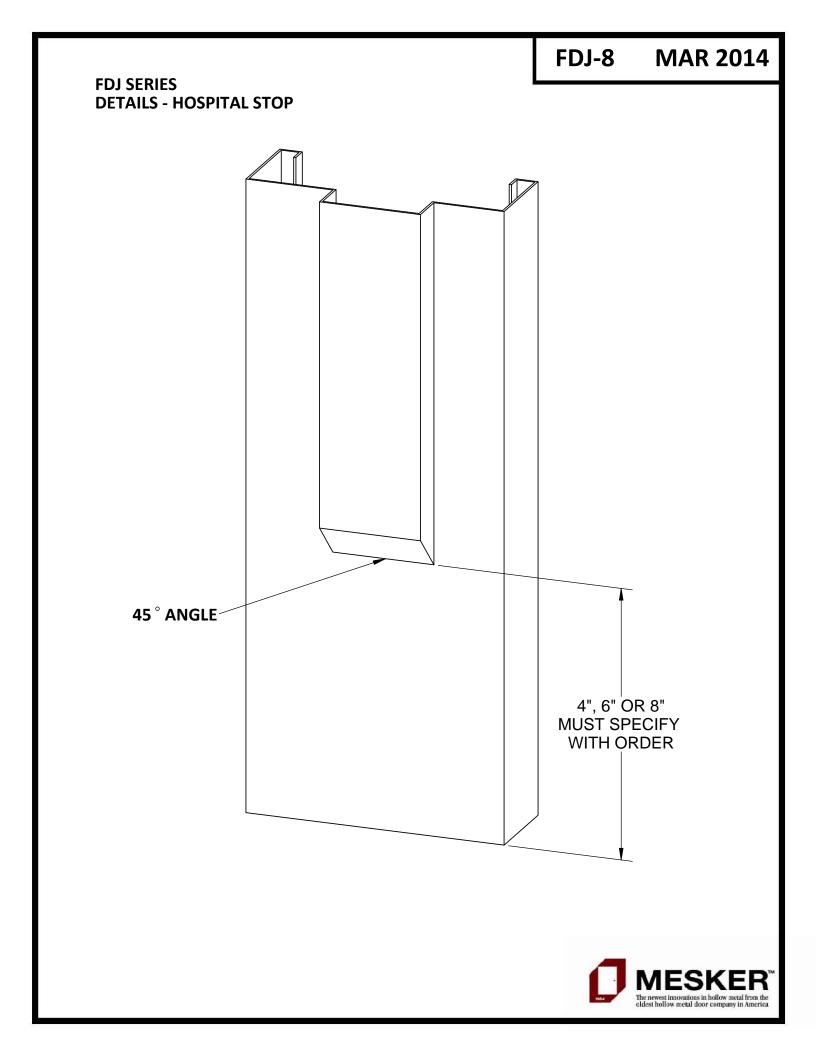


FDJ SERIES PROFILES - COMMUNICATING FRAME

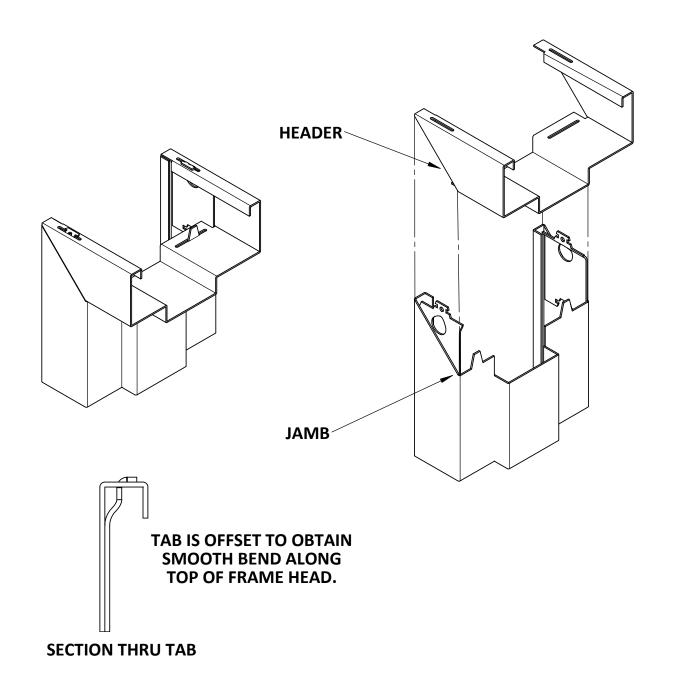








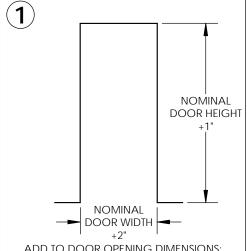
FDJ SERIES FRAME CORNER - DOUBLE RABBET - KD



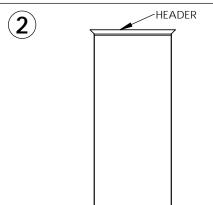


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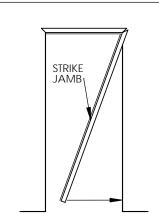
FDJ SERIES FRAME INSTALLATION



ADD TO DOOR OPENING DIMENSIONS: 2" TO WIDTH AND 1" TO HEIGHT. FOR A 3070 DOOR FRAME, THE ROUGH OPENING IS 38" x 85".

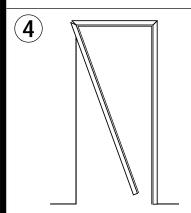


INSTALL HEADER INTO POSITION APPROX. 1" FROM THE TOP AND THE CENTER OF THE ROUGH OPENING.

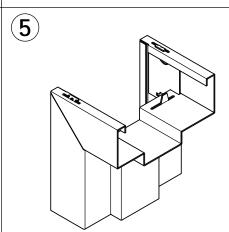


(3)

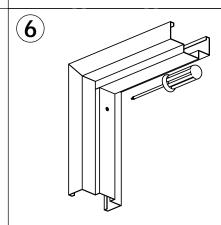
INSTALL STRIKE JAMB BY SLIDING OVER WALL AT TOP AND ENGAGING CORNER TABS INTO HEADER. PIVOT JAMB INTO PLACE.



REPEAT STEP #3 WITH HINGE JAMB. PULL HEADER DOWN TIGHTLY ONTO JAMBS. LOCK HEADER AND JAMBS TOGETHER BY BENDING OVER EXPOSED TABS.

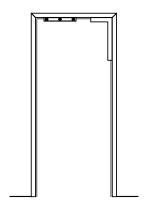


BEND CORNER TABS TOWARD INSIDE OF FRAME.

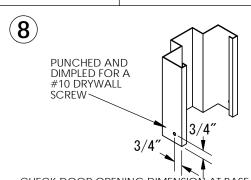


TURN ADJUSTING SCREWS IN BOTH JAMBS COUNTERCLOCKWISE UNTIL ANCHOR IS RESTING AGAINST THE WALL.





IF FEASIBLE, HANG DOOR NOW AND ADJUST FRAME ON WALL TO ALLOW PROPER DOOR / FRAME CLEARANCES OR PLUMB FRAME WITH CARPENTER SQUARE AND/OR LEVEL. (ADJUST HEADER LEVELNESS BY SHIMMING UNDER JAMBS).



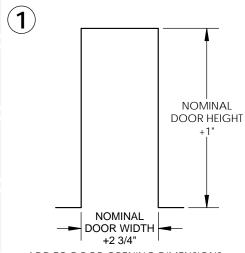
CHECK DOOR OPENING DIMENSION AT BASE OF FRAME (SAME DIMENSION AS BETWEEN JAMBS AT HEADER). SECURE JAMBS WITH DRYWALL SCREW (NOT FURNISHED) THOUGH PUNCHED AND DIMPLED HOLE AT THE BASE OF FRAME. BE SURE TO ATTACH SCREWS TO BOTH SIDES OF BOTH JAMB LEGS (4 PLACES).



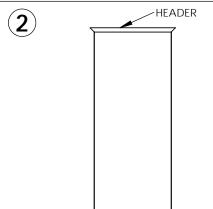
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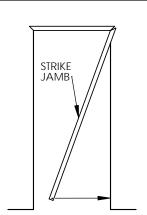
FDJ SERIES FRAME INSTALLATION - CASED OPENING



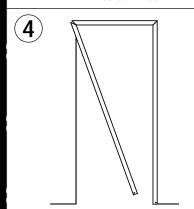
ADD TO DOOR OPENING DIMENSIONS: 2 3/4" TO WIDTH AND 1" TO HEIGHT. FOR A 3070 DOOR FRAME, THE ROUGH OPENING IS 38 3/4" x 85".



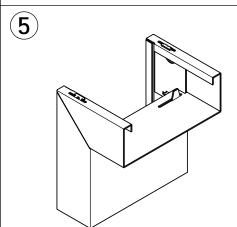
INSTALL HEADER INTO POSITION APPROX. 1" FROM THE TOP AND THE CENTER OF THE ROUGH OPENING.



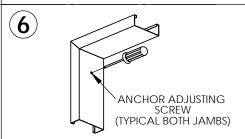
INSTALL STRIKE JAMB BY SLIDING OVER WALL AT TOP AND ENGAGING CORNER TABS INTO HEADER. PIVOT JAMB INTO PLACE.



REPEAT STEP #3 WITH HINGE JAMB. PULL HEADER DOWN TIGHTLY ONTO JAMBS. LOCK HEADER AND JAMBS TOGETHER BY BENDING OVER EXPOSED TABS.

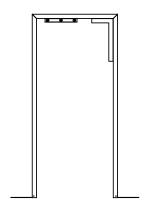


BEND CORNER TABS TOWARD INSIDE OF FRAME.

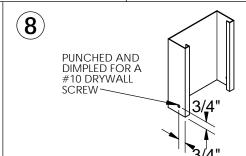


TURN ADJUSTING SCREWS IN BOTH JAMBS COUNTERCLOCKWISE UNTIL ANCHOR IS RESTING AGAINST THE WALL.





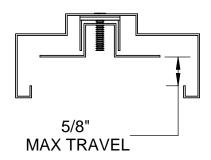
IF FEASIBLE, HANG DOOR NOW AND ADJUST FRAME ON WALL TO ALLOW PROPER DOOR / FRAME CLEARANCES OR PLUMB FRAME WITH CARPENTER SQUARE AND/OR LEVEL. (ADJUST HEADER LEVELNESS BY SHIMMING UNDER JAMBS).

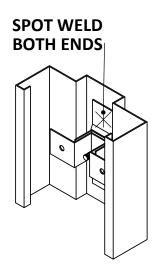


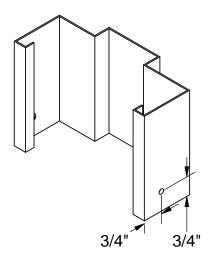
CHECK DOOR OPENING DIMENSION AT BASE OF FRAME (SAME DIMENSION AS BETWEEN JAMBS AT HEADER). SECURE JAMBS WITH DRYWALL SCREW (NOT FURNISHED) THOUGH PUNCHED AND DIMPLED HOLE AT THE BASE OF FRAME. BE SURE TO ATTACH SCREWS TO BOTH SIDES OF BOTH JAMB LEGS (4 PLACES).



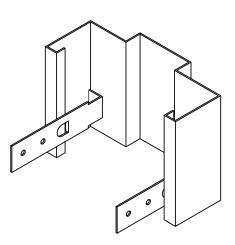
FDJ SERIES FRAME ANCHOR - FDJ COMPRESSION ANCHOR







STANDARD BASE ANCHOR HOLES



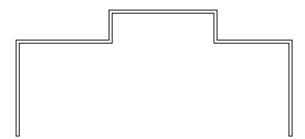
OPTIONAL



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RE Prohung Frame Series	FS-10



Frame Construction

14 or 16 gauge, cold-rolled, galvannealed A60, or galvanized G90 steel to be break-formed to the design specifications required. Frames shall be furnished knocked-down or welded, ground smooth upon request. Frames will have no returns; Standard stop heights to be 5/8" high. Soffit dimensions can vary. Faces will be drilled for multiple fastening options.

Installation & Applications

Frames to be installed in accordance with ANSI A250.11-2001. Standard series frames to be used in a number of applications including masonry, wood stud and steel stud construction.

Hardware Reinforcements

Frames to be furnished with $4\ 1/2$ " or 5" standard or heavy weight 7 gage steel hinge reinforcements and shall be adequately reinforced for all hardware. Standard arm or parallel closer reinforcements available upon request.

Strike and hinge reinforcements shall be protected by plaster guards. Single frames shall be prepared to receive (3) rubber mutes.

Finish

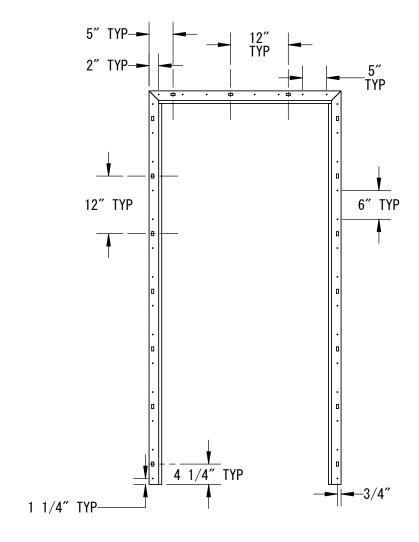
Exposed frame surfaces to be cleaned and treated then coated with rust inhibitive primer. Color painted frames to receive a durable, flow coated, baked on finish. Water-based primer and color paint finishes to be free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

Compliance

All Mesker frame components comply with ANSI A250.8(R2008). Fire labeling in accordance NFPA and available in FM (standard), WHI (Intertek) and Underwriters Laboratories. For a complete list of product compliance per ANSI/ASTM test methods, consult the labeling section.

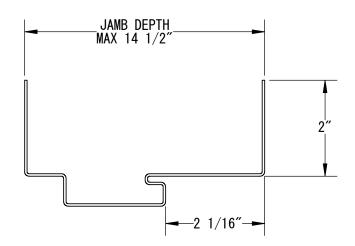


FF SERIES FLUSH FACE W/KERF FRAME



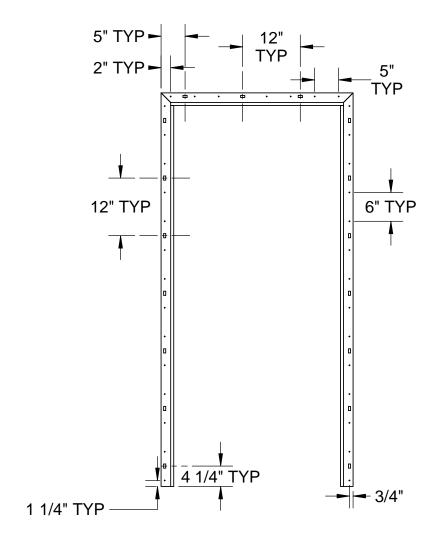
SLOT SIZE MAY VARY FROM 7/16" X 7/8" TO 1/2" X 1 1/2"

NUMBER AND LOCATION OF SLOTS MAY VARY



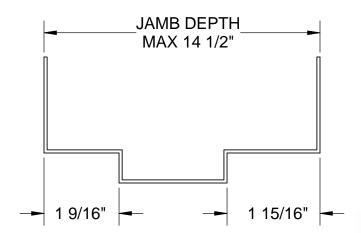


FF SERIES FLUSH FACE FRAME



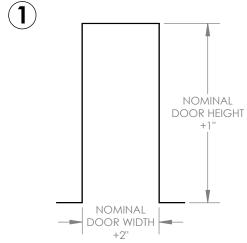
SLOT SIZE MAY VARY FROM 7/16" X 7/8" TO 1/2" X 1 1/2"

NUMBER AND LOCATION OF SLOTS MAY VARY

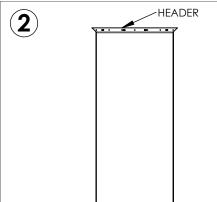




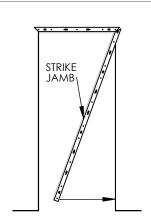
FLUSH FACE FRAME FRAME INSTALLATION



ADD TO DOOR OPENING DIMENSIONS: 2" TO WIDTH AND 1" TO HEIGHT. FOR A 3070 DOOR FRAME, THE ROUGH OPENING IS 38" x 85".

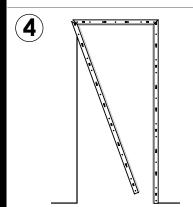


INSTALL HEADER INTO POSITION APPROX. 1" FROM THE TOP AND THE CENTER OF THE ROUGH OPENING.

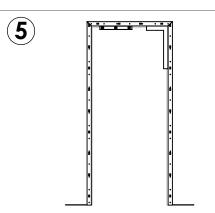


(3)

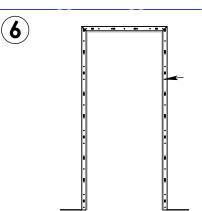
INSTALL STRIKE JAMB BY SLIDING OVER WALL AT TOP AND ENGAGING CORNER TABS INTO HEADER. PIVOT JAMB INTO PLACE.



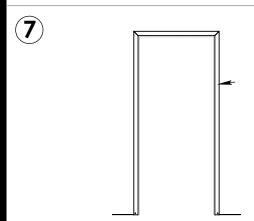
REPEAT STEP #3 WITH HINGE JAMB. PULL HEADER DOWN TIGHTLY ONTO JAMBS.



ADJUST FRAME ON WALL TO ALLOW FRAME CLEARANCES AND PLUMB FRAME WITH CARPENTER SQUARE AND/OR LEVEL. (ADJUST HEADER LEVELNESS BY SHIMMING UNDER JAMBS).

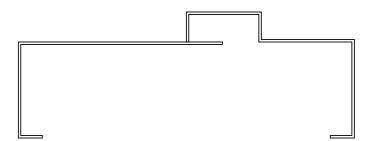


ANCHOR THOUGH FACE WITH ANCHORS APPROPRIATE FOR WALL CONSTRUCTION.



APPLY TRIM OR CASING (PROVIDED BY OTHERS) AS DESIRED.





Frame Construction

14 or 16 gauge, cold-rolled, galvannealed, or galvanized G90 steel to be break-formed to the design specifications required. Frames shall be furnished knocked-down for welding by others or welded, ground smooth upon request. Standard frame to have 1/2" returns; Standard stop heights to be 5/8" high. Soffit dimensions can vary. Frames will be double rabbeted.

Installation & Applications

Frames to be installed in accordance with ANSI A250.11-2001. Standard series frames to be used in a number of applications including masonry, wood stud and steel stud construction.

Hardware Reinforcements

Frames to be furnished with 4 1/2" or 5" standard or heavy weight 7 gauge steel hinge reinforcements and shall be adequately reinforced for all hardware. Standard arm or parallel closer reinforcements available upon request.

Strike and hinge reinforcements shall be protected by plaster guards. Single frames shall be prepared to receive (3) rubber mutes.

Finish

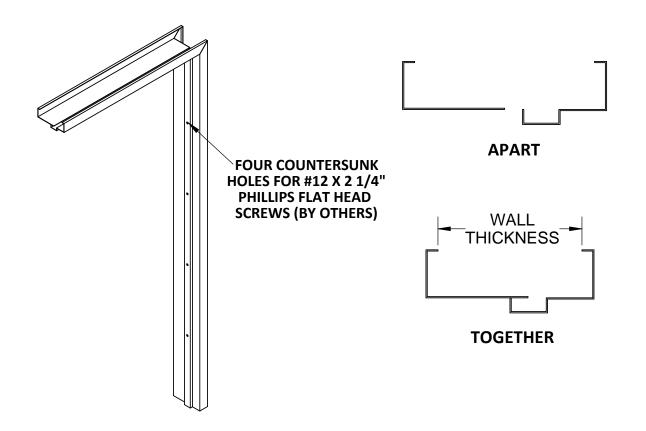
Exposed frame surfaces to be cleaned and treated then coated with rust inhibitive primer. Color painted frames to receive a durable, flow coated, baked on finish. Water-based primer and color paint finishes to be free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOCS).

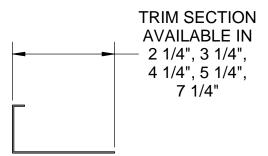
Compliance

All Mesker frame components comply with ANSI A250.8(R2008). Fire labeling in accordance NFPA and available in FM (standard), WHI (Intertek) and Underwriters Laboratories. For a complete list of product compliance per ANSI/ASTM test methods, consult the labeling section.



RF SERIES REMODELING FRAME





	_1 15/16" FOR 1 3/4" DOOR 1 9/16" FOR 1 3/8" DOOR
-	3 1/2" FOR 1 3/4" DOOR 3 1/8" FOR 1 3/8" DOOR

TRIM SIZE	FOR WALL THICKNESS	
2 1/4"	3 1/4" THRU 4 1/16"	
3 1/4"	4 1/8" THRU 5 11/16"	
4 1/4"	5 3/8" THRU 6 13/16"	
5 1/4"	7" THRU 8 3/16"	
7 1/4"	8 1/4" THRU 9 7/16"	



ADJUSTABLE FRAMES



Frame Construction

14 or 16 gage galvannealed steel to be break-formed to the design specifications required. Frames shall be furnished knocked-down. Standard frame to have 1/2" returns; Standard stop heights to be 5/8" high. Soffit dimensions can vary. Frames will be double rabbeted.

Installation & Applications

Frames to be installed in accordance with ANSI A250.11-2001. Standard series frames to be used in a number of applications including masonry, wood stud and steel stud construction.

Hardware Reinforcements

Frames to be furnished with 4 1/2" or 5" standard or heavy weight 7 gage steel hinge reinforcements and shall be adequately reinforced for all hardware. Standard arm or parallel closer reinforcements available upon request.

Single frames shall be prepared to receive (3) rubber mutes.

<u>Finish</u>

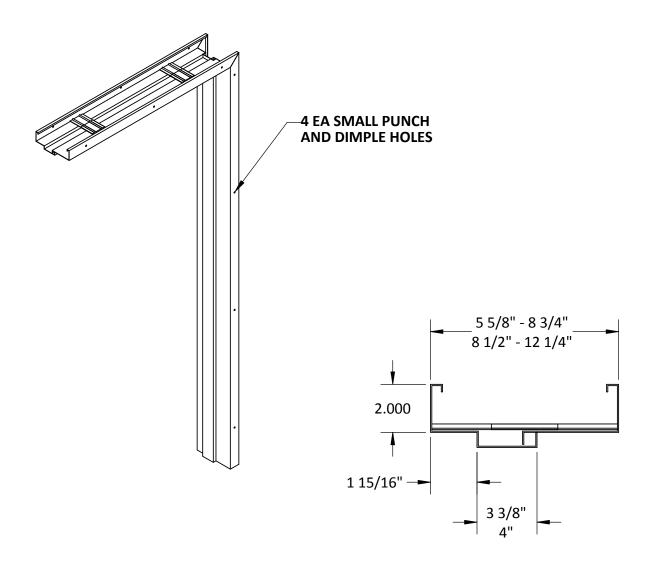
Galvanealed only (NO PRIMER).

Compliance

All Mesker frame components comply with ANSI A250.8(R2008). Fire labeling in accordance NFPA and available in FM (standard), WHI (Intertek) and Underwriters Laboratories. For a complete list of product compliance per ANSI/ASTM test methods, consult the labeling section.



ADJUSTABLE FRAME

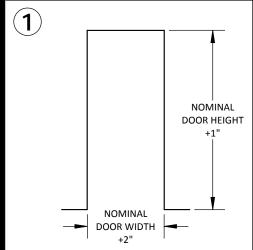


FRAME SIZE	JAMB DEPTH	
SMALL	5 5/8" THRU 8 3/4"	
LARGE	8 1/2" THRU 12 1/4"	

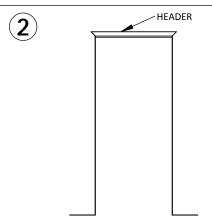


(3)

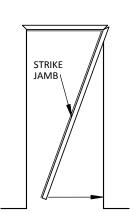
ADJUSTABLE FRAME INSTALLATION



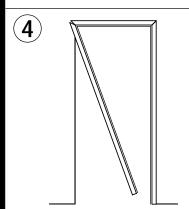
ADD TO DOOR OPENING DIMENSIONS: 2" TO WIDTH AND 1" TO HEIGHT. FOR A 3070 DOOR FRAME, THE ROUGH OPENING IS 38" x 85".



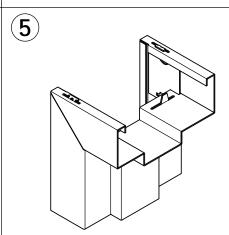
INSTALL HEADER INTO POSITION APPROX. 1"
FROM THE TOP AND THE CENTER OF THE
ROUGH OPENING.



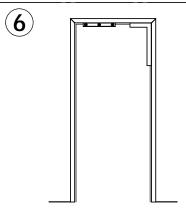
INSTALL STRIKE JAMB BY SLIDING OVER WALL AT TOP AND ENGAGING CORNER TABS INTO HEADER. PIVOT JAMB INTO PLACE.



REPEAT STEP #3 WITH HINGE JAMB. PULL HEADER DOWN TIGHTLY ONTO JAMBS. LOCK HEADER AND JAMBS TOGETHER BY BENDING OVER EXPOSED TABS.

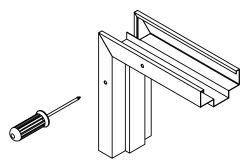


BEND CORNER TABS TOWARD INSIDE OF FRAME.

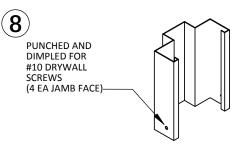


IF FEASIBLE, HANG DOOR NOW AND ADJUST FRAME ON WALL TO ALLOW PROPER DOOR / FRAME CLEARANCES OR PLUMB FRAME WITH CARPENTER SQUARE AND/OR LEVEL. (ADJUST HEADER LEVELNESS BY SHIMMING UNDER JAMBS).





HEADER AND JAMBS PUNCHED AND DIMPLED TO RECEIVE SCREWS TO SECURE FRAME.



CHECK DOOR OPENING DIMENSION AT BASE OF FRAME (SAME DIMENSION AS BETWEEN JAMBS AT HEADER). SECURE JAMBS WITH DRYWALL SCREW (NOT FURNISHED) THOUGH PUNCHED AND DIMPLED HOLES IN FACE OF FRAME. BE SURE TO ATTACH SCREWS TO BOTH SIDES OF BOTH JAMB LEGS (8 PLACES).



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PROHUNG FRAME

COMING SOON

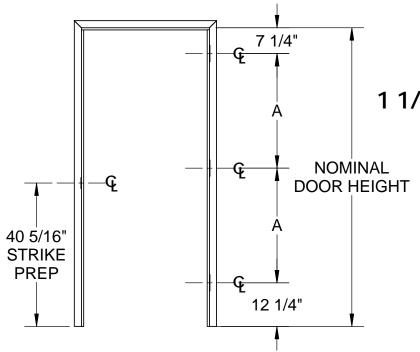


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Frame Preps

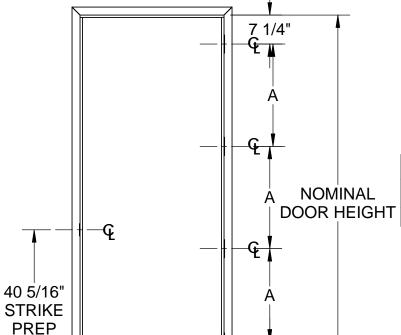
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Double Acting Hinge Prep	FP-12
High Frequency Hinge Prep	FP-13
Full Depth Hinge Reinforcement	FP-14
Invisible Hinge Prep	FP-15
Continuous Hinge Prep	FP-16
Rescue Hardware	FP-17
Interconnected Lock Prep	FP-18
Deadlock Prep	FP-19
Electric Strike	FP-20
Rim Exit	FP-21
SVR Strike Prep	FP-22
CVR Strike Prep	FP- 2 3
Flush Bolt Prep	FP-24
EPT	FP-25
Concealed Door Position Switch	
Concealed Closer Prep	FP-27
Concealed Stop	FP-28
Surface Bolt	FP-29
Pivots	FP-30
Pocket Pivot	FP-31
Offset Pivots	FP-32
Removable Hardware Mullion Pren	FP-33

FRAME DETAILS 1 3/4" FRAMES - HINGE AND LOCK LOCATIONS



6'8",7'0",7'2" 1 1/2 PAIR OF HINGES

FRAME HEIGHT	DIM A
6'8"	30 1/4"
7'0"	32 1/4"
7'2"	33 1/4"



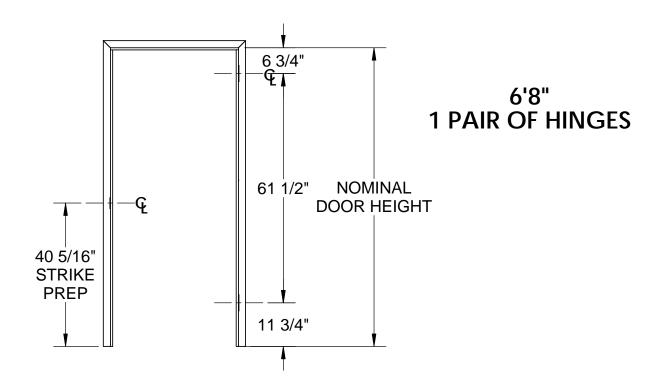
В

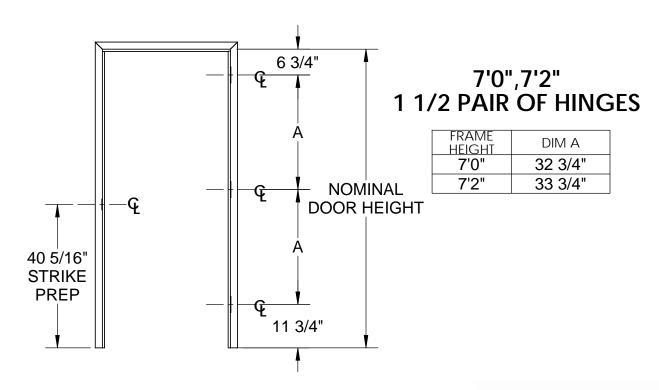
7'10",8'0" 2 PAIR OF HINGES

FRAME HEIGHT	DIM A	DIM B
7'10"	25 1/2"	10 1/4"
8'0"	25 1/2"	12 1/4"



FRAME DETAILS 1 3/8" FRAMES - HINGE AND LOCK LOCATIONS

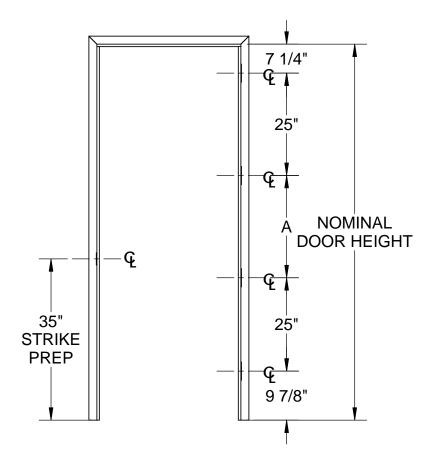






FP-3 MAR 2014

FRAME DETAILS 1 3/4" FRAMES - HINGE AND LOCK LOCATIONS FOR DUTCH DOORS

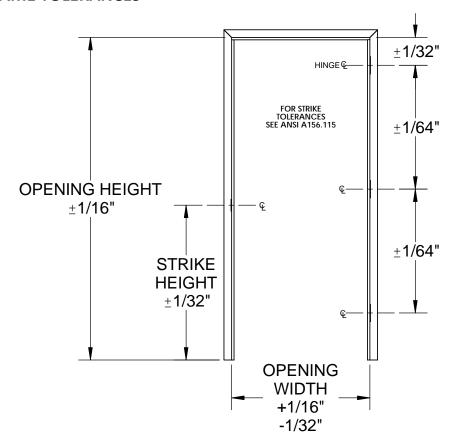


6'8",7'0",7'2" 2 PAIR OF HINGES

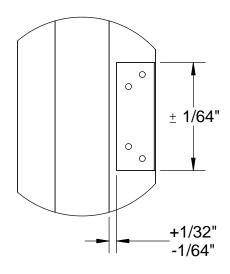
FRAME HEIGHT	DIM A
6'8"	12 7/8"
7'0"	16 7/8"
7'2"	18 7/8"



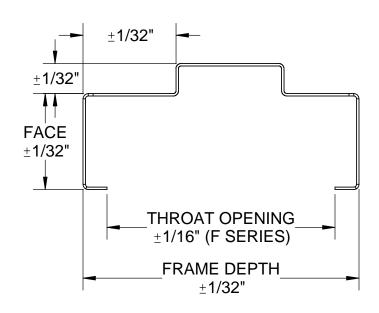
FRAME DETAILS FRAME TOLERANCES



HINGE PREPARATION

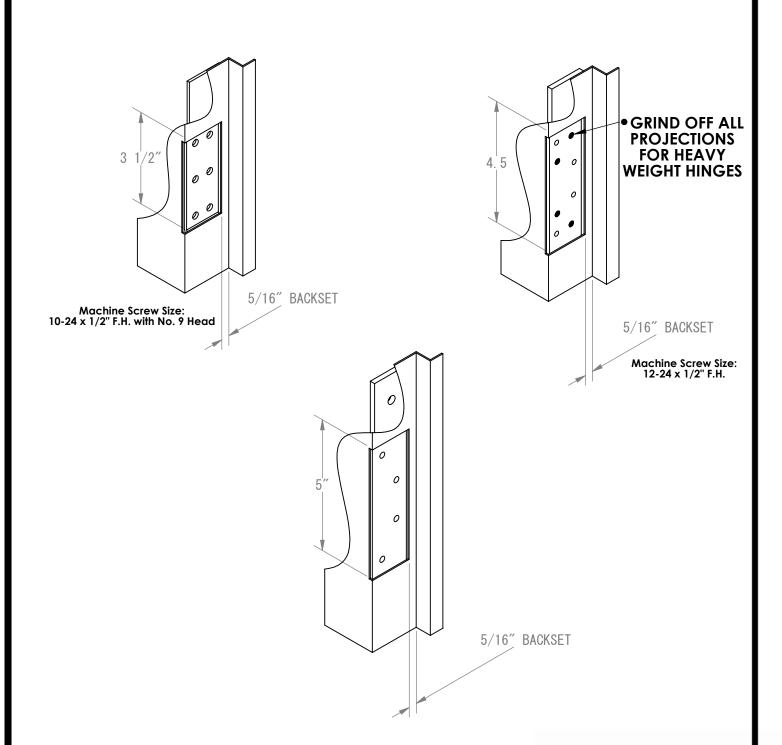


*TOLERANCES BETWEEN HINGE CENTERLINES ARE NON-ACCUMULATIVE **BASED ON NOMINAL HINGE HEIGHT ±1/32"



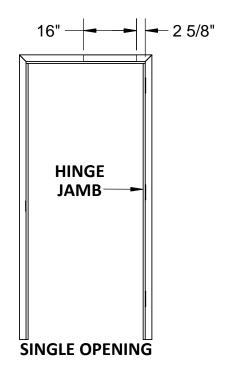
*THROAT OPENING-FDJ DRYWALL ± 1/16"

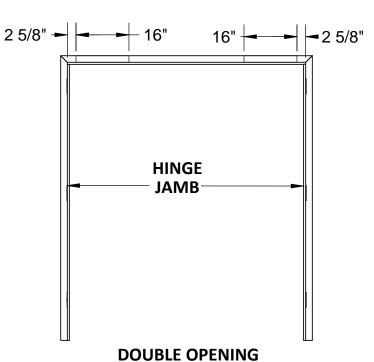


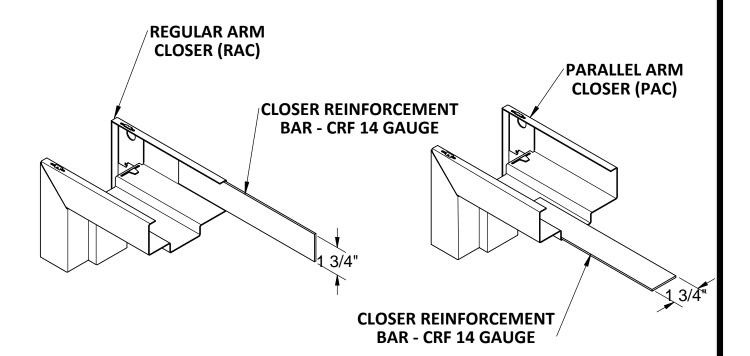




FRAME DETAILS STANDARD CLOSER REINFORCEMENT BAR

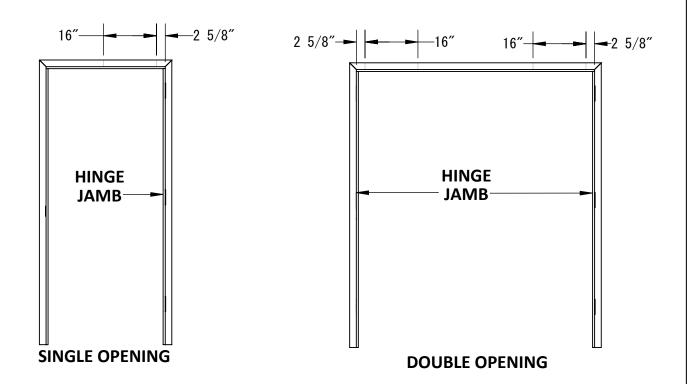




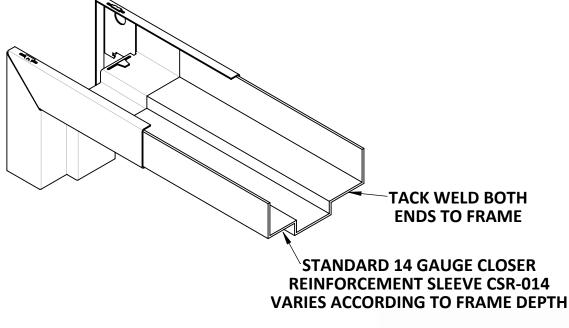




FRAME DETAILS STANDARD CLOSER REINFORCEMENT SLEEVE

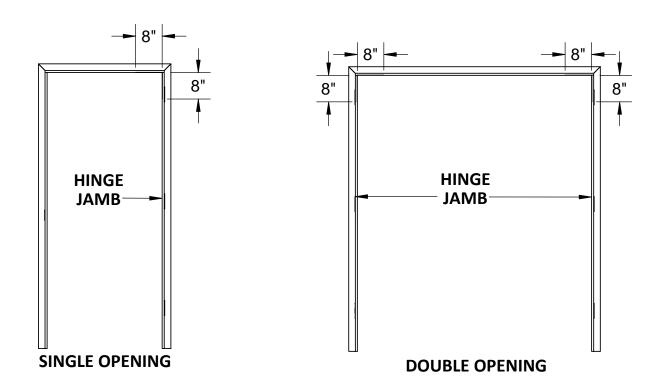


INSERT CLOSER SLEEVE REINFORCEMENT BEFORE ASSEMBLING FRAME.

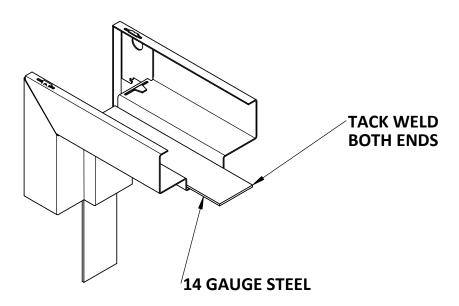




FRAME DETAILS CORNER BRACKET MOUNTED CLOSER REINFORCEMENT



VARIES IN WIDTH ACCORDING TO FRAME DEPTH

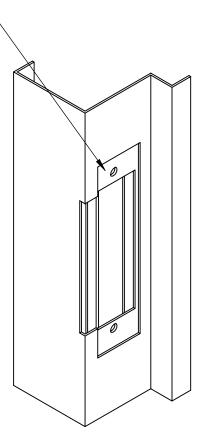




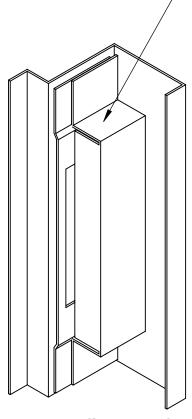
FRAME DETAILS STANDARD STRIKE PREPARATIONS

A 14 GAUGE STRIKE REINFORCEMENT PROJECTION WELDED TO FRAME. STRIKE MORTISE CONFORMS TO ANSI A156.115.





PART # PFSRU



PART # PFUPG

"U" STRIKE MORTISE (ASA STRIKE)

BACK VIEW

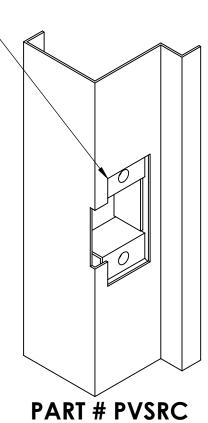


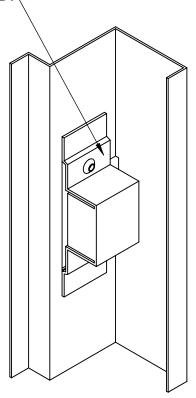
FRAME DETAILS STANDARD STRIKE PREPARATIONS

A 14 GAUGE STRIKE REINFORCEMENT PROJECTION WELDED TO FRAME.

STRIKE MORTISE CONFORMS TO ANSI A156.115.





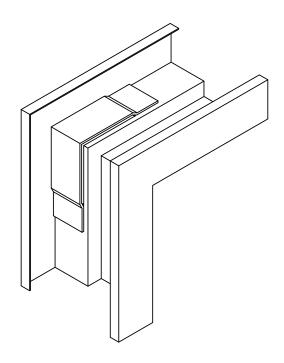


"C" STRIKE MORTISE (T STRIKE)

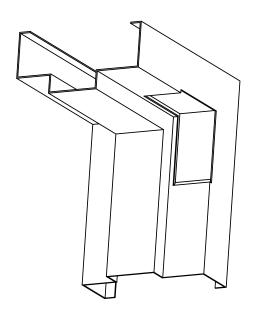
BACK VIEW



FRAME DETAILS ANCHOR HINGE PREPARATION



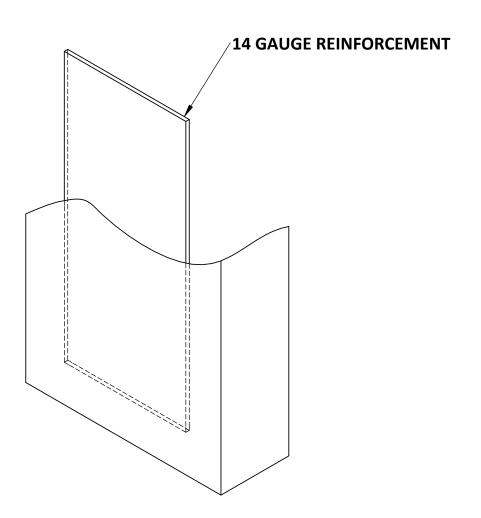
7 GAUGE REINFORCED PER TEMPLATE FOR DRILL AND TAP BY OTHERS





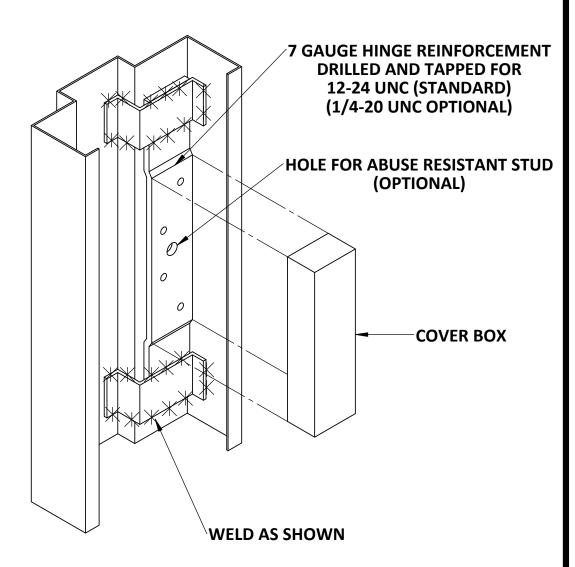
FRAME DETAILS DOUBLE ACTING HINGE REINFORCEMENT

REINFORCEMENT SIZED AND PLACED PER MANUFACTURING LOCATION





FRAME DETAILS HIGH FREQUENCY HINGE REINFORCEMENT



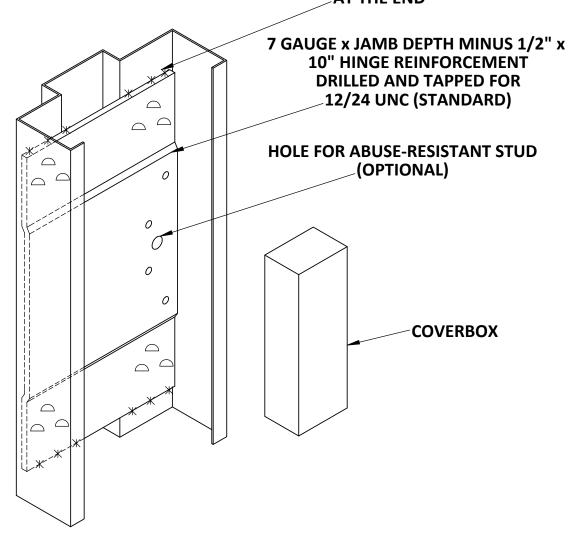


FRAME DETAILS FULL DEPTH REINFORCEMENT

ARC WELD FULL WIDTH ALONG EACH END IN RABBETS (ONLY WHERE SPECIFIED).

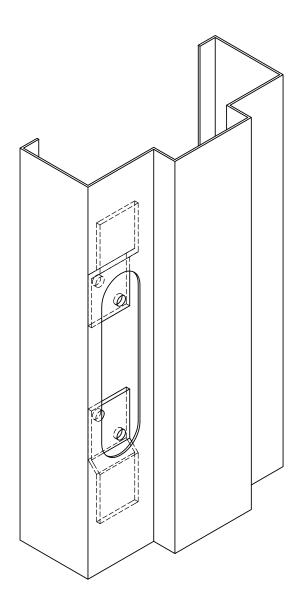
STANDARD WELD INDICATED WITH A

AT THE END

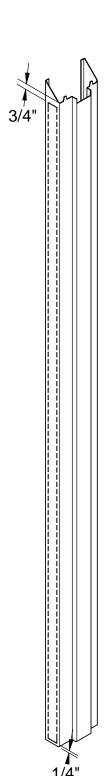




FRAME DETAILS INVISIBLE HINGE PREPARATION

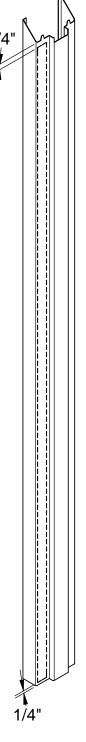






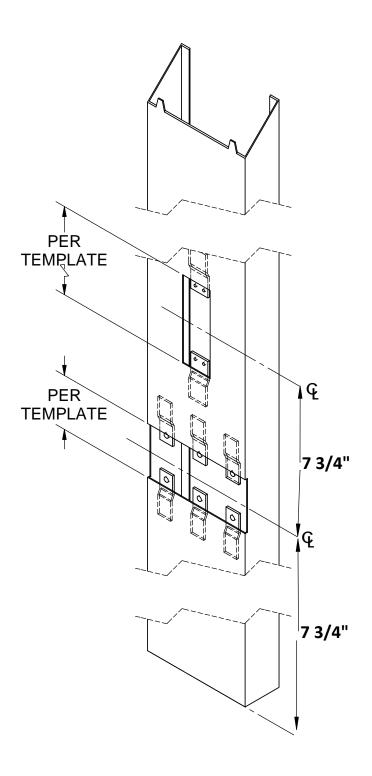
HINGE REINFORCEMENTS ARE WELDED IN PLACE.

REINFORCEMENTS ARE MADE FROM 14 GAUGE STEEL.



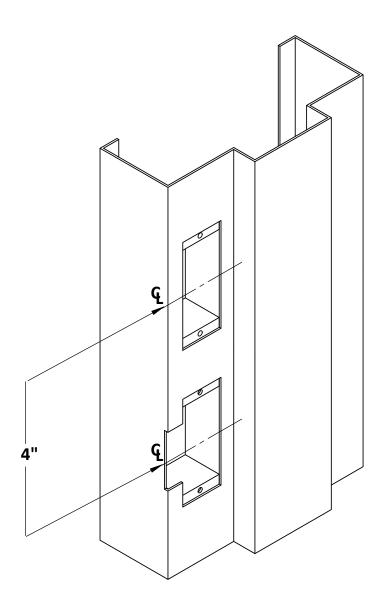


FRAME DETAILS RESCUE HARDWARE - EMERGENCY STOP AND DOUBLE LIP STRIKE



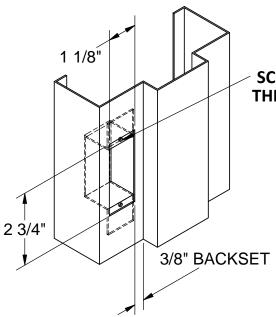


FRAME DETAILS INTERCONNECTED LOCK STRIKE PREPARATION



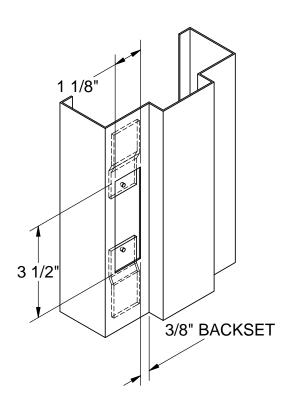


FRAME DETAILS DEADLOCK STRIKES



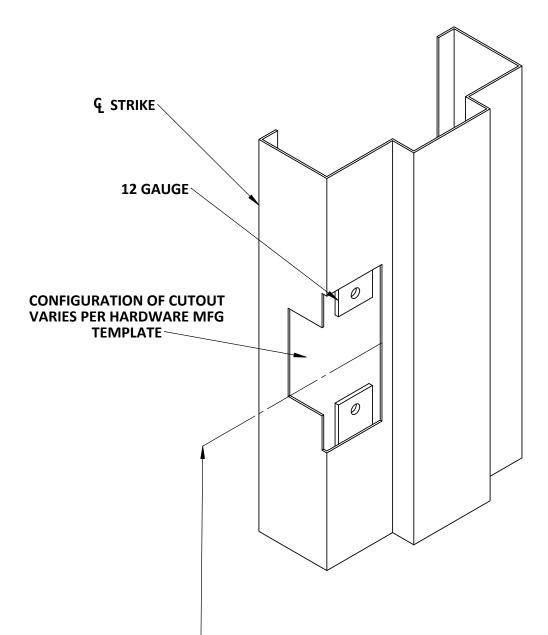
SCREW HOLES ARE EXTRUDED TO PROVIDE THREAD DEPTH EQUAL TO 12 GAUGE PLATE

SIZE AND TAP PER ANSI 115.4



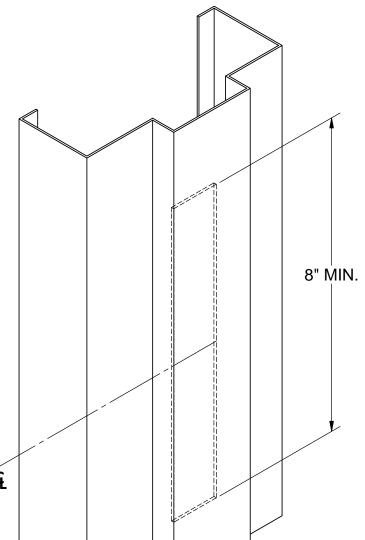


FRAME DETAILS ELECTRIC STRIKE



VERTICAL LOCATION OF ELECTRIC STRIKE WILL VARY WITH THE HARDWARE MANUFACTURER, WHEN ORDERING FRAMES PREPARED FOR AN ELECTRIC STRIKE, SPECIFY THE TYPE OF LOCK BEING USED ALONG WITH CENTERLINE DIMENSION REQUIRED OF THE LOCK.

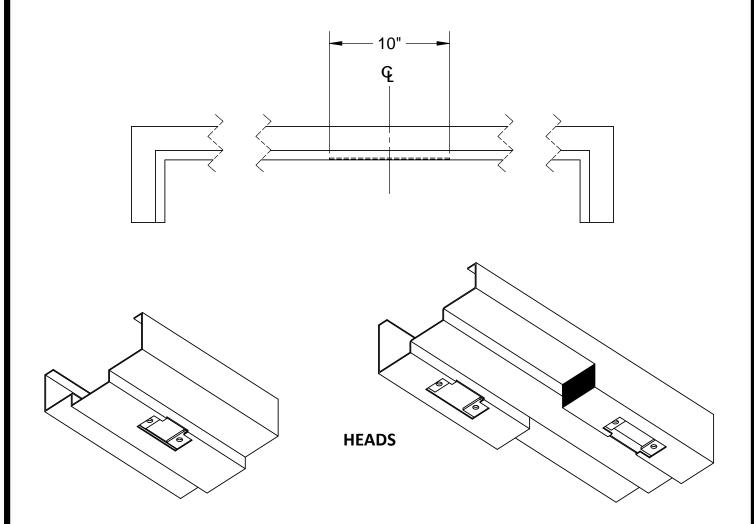




41" FROM FRAME BOTTOM TO **Q** (STANDARD)



FRAME DETAILS SVR EXIT DEVICE STRIKE REINFORCEMENT / PREPARATION



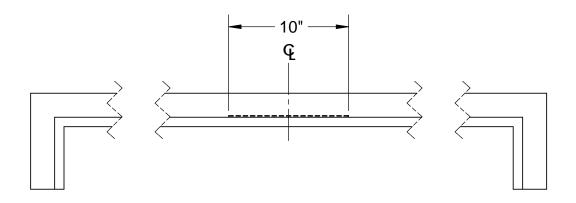
PREPARED FOR MORTISE STRIKES PER TEMPLATE OF HARDWARE MANUFACTURER

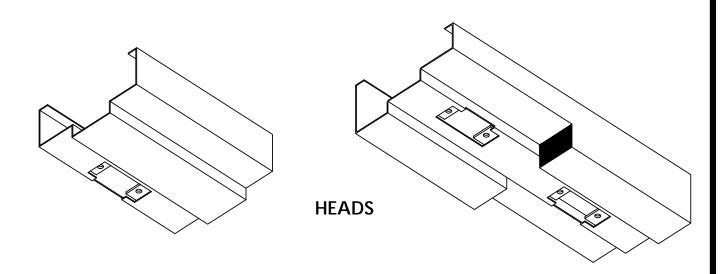
SPECIFY EXIT DEVICE AND STRIKE BEING USED WHEN ORDERING



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FRAME DETAILS CVR EXIT DEVICE STRIKE REINFORCEMENT / PREPARATION



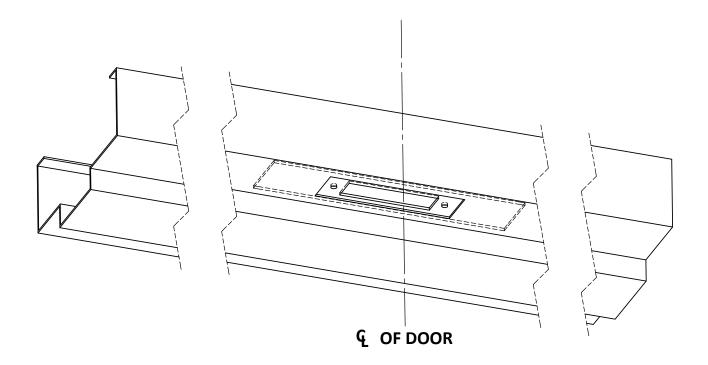


PREPARED FOR MORTISE STRIKES PER TEMPLATE OF HARDWARE MANUFACTURER

SPECIFY EXIT DEVICE AND STRIKE BEING USED WHEN ORDERING

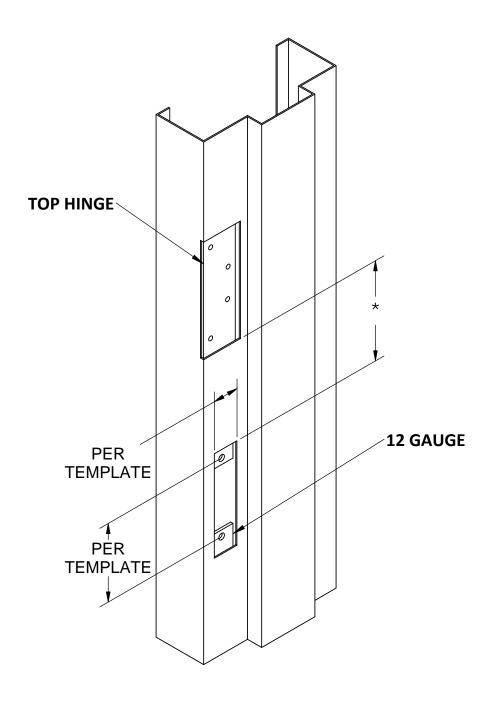


FRAME DETAILS FLUSHBOLT STRIKE PREPARATION



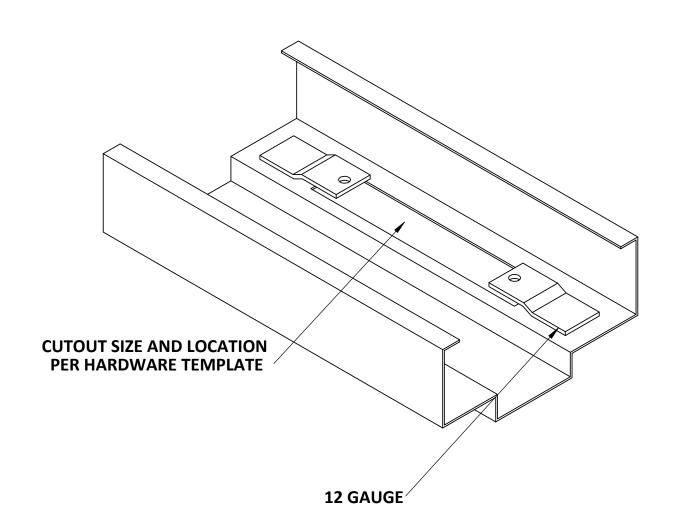


FRAME DETAILS ELECTRIC POWER TRANSFER (EPT)



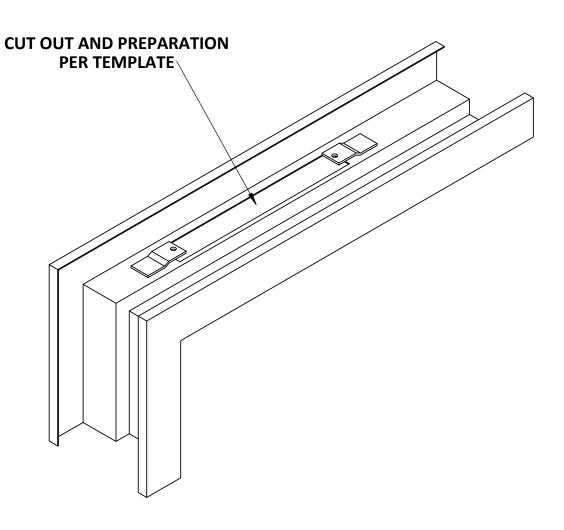
^{*} LOCATION PER TEMPLATE. IF NO LOCATION ON TEMPLATE, THEN LOCATION MUST BE SPECIFIED WITH ORDER. THE QUANTITY OF HINGES MAY REQUIRE COORDINATION OF LOCATION WITH DOOR, (EX. 4 HINGES ON A 7'0") WOOD DOORS MAY REQUIRE OTHER LOCATIONS.



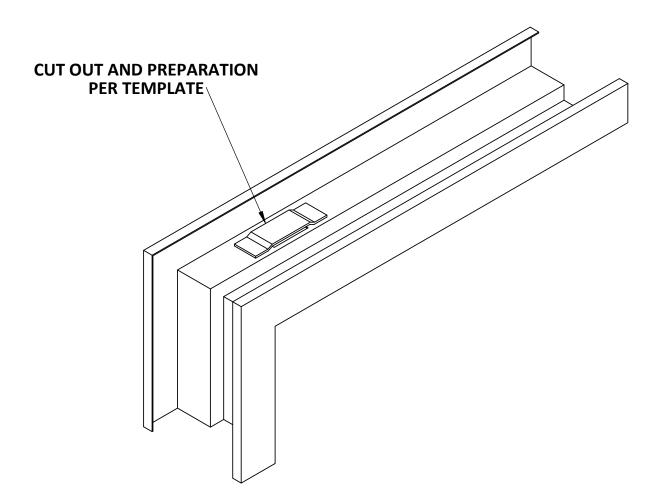




FRAME DETAILS CONCEALED CLOSER PREPARATION

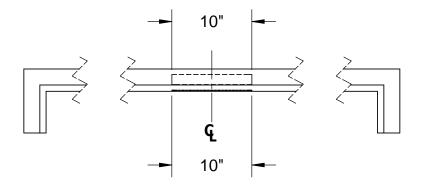


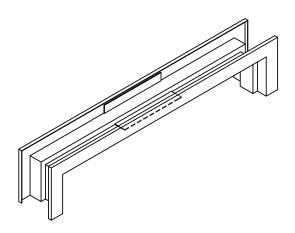




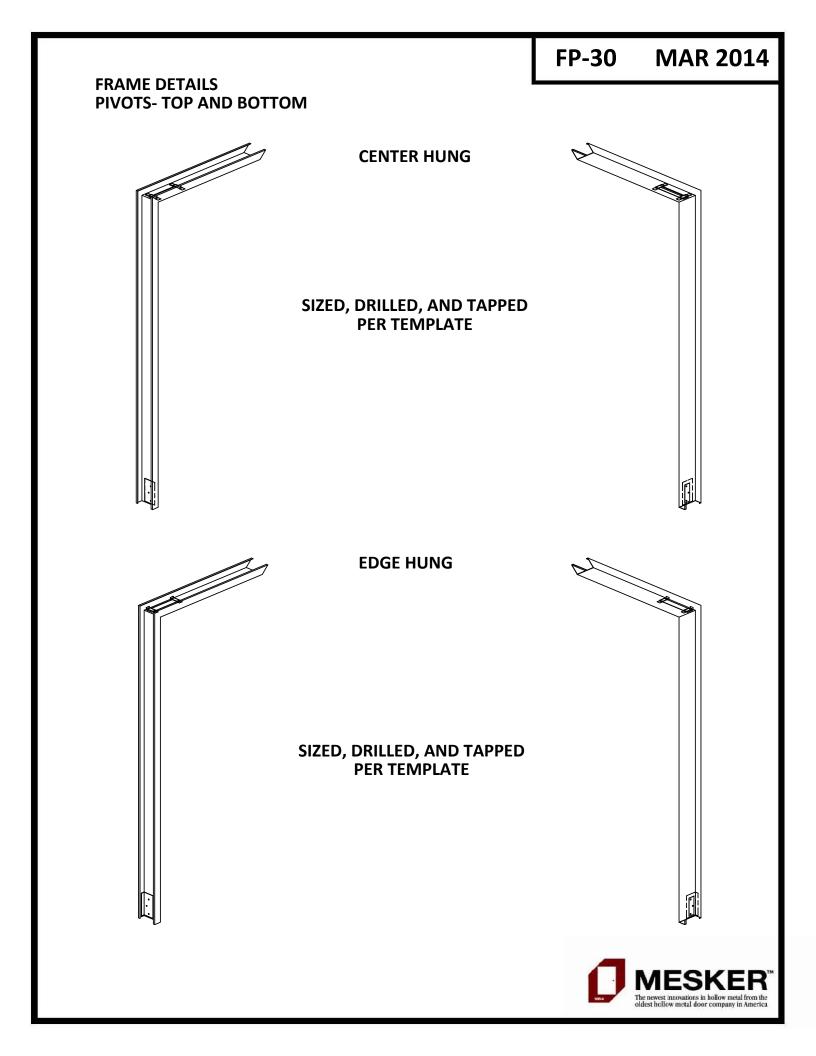


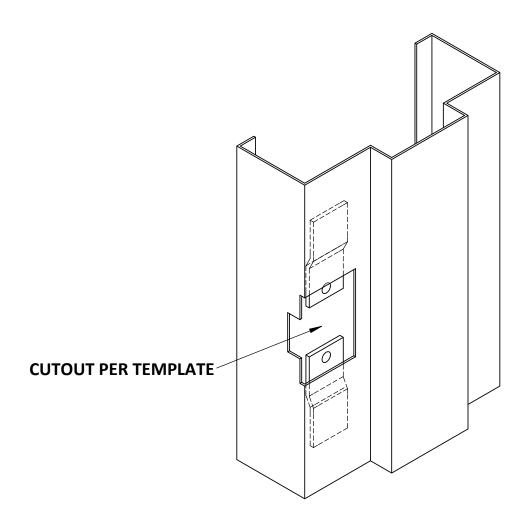
FRAME DETAILS SURFACE BOLT STRIKE REINFORCEMENT







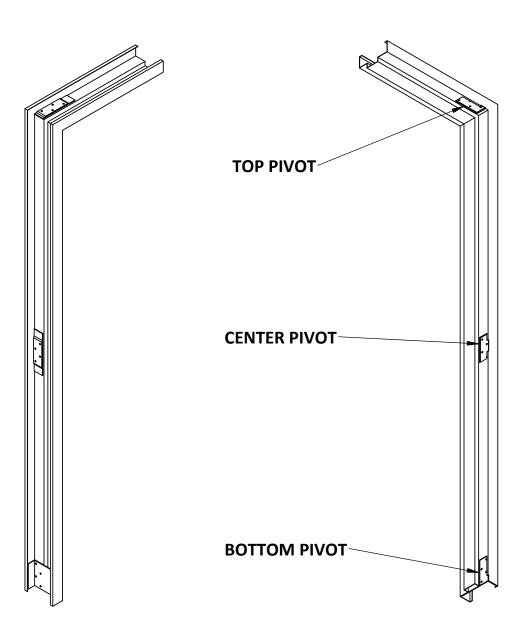




SIZE, DRILL, AND TAP PER TEMPLATE



FRAME DETAILS OFFSET PIVOTS, TOP, CENTER, AND BOTTOM





FRAME DETAILS REMOVABLE HARDWARE MULLION REINFORCEMENT

FILLER BLOCK NOT INCLUDED

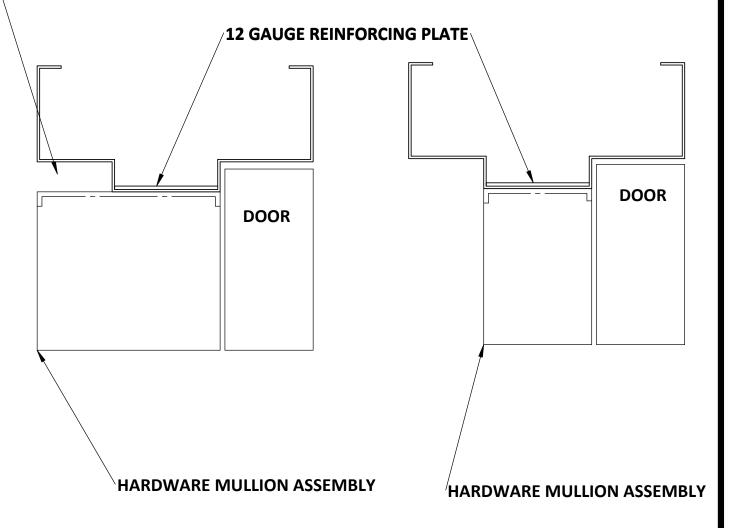
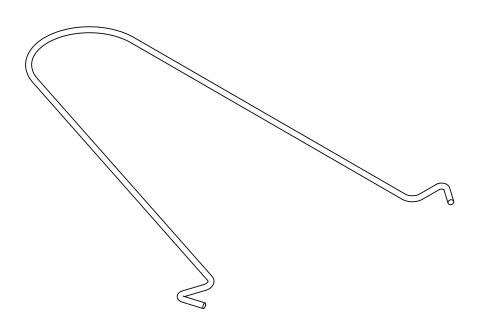




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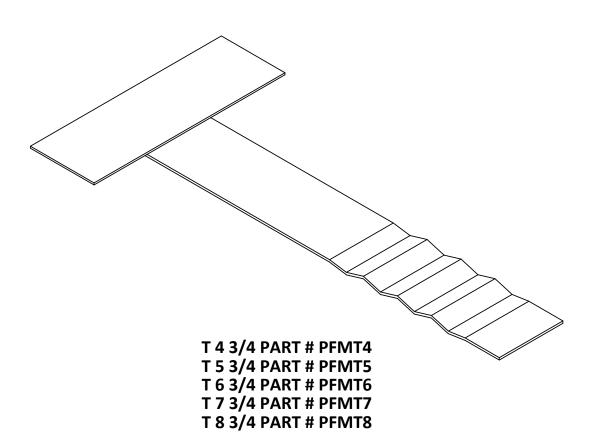
Frame Parts

Wire Anchor	PF-1
T Anchor	PF-2
Double Egress T Anchor	PF-3
Double Egress Multi-Purpose Anchor	PF-4
UNA Anchor	PF-5
5 ¾" UNA Anchor	PF-6
Wood Strap Anchor	PF-7
Steel Stud Anchor	PF-8
Z Anchor	PF-9
Tube Anchor	PF-10
AEW Anchor	PF-11
Floor Anchor	PF-12
Adjustable Floor Anchor	PF-13
Drywall Snap in Anchor	PF-14
Drywall Compression Anchor	PF-15
Adjustable Anchor	PF-16
Mullion Anchor	PF-17
Closer Reinforcement Frame Face (CRF)	PF-18
Closer Reinforcement 4 ½" Frame	PF-19
Closer Reinforcement Sleeve	PF-20
Frame Filler Plate	PF-21
Hinge Reinforcement	PF-22
Hinge Plaster Guard	PF-23
Reversible Flush Bolt Strike and Reinforcement	PF-24
Strike Filler	PF-25
U Strike Reinforcement and Plaster Guard	PF-26
C Strike Reinforcement with Plaster Guard	PF-27
Spreader Bar	PF-28
Plastic Plug	PF-29
Mutes	PF-30
Corner Frame Tab	PF-31
Mullion Clip	PF-32

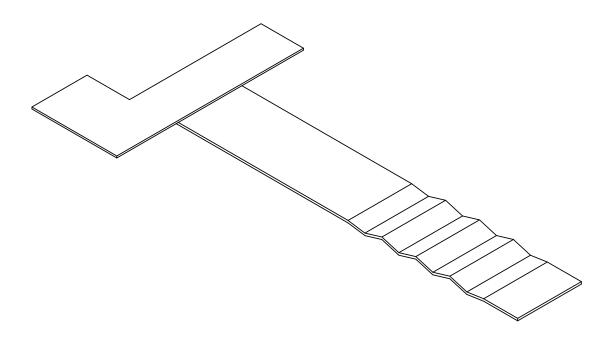


PART # PFWA
MASONRY WIRE ANCHOR



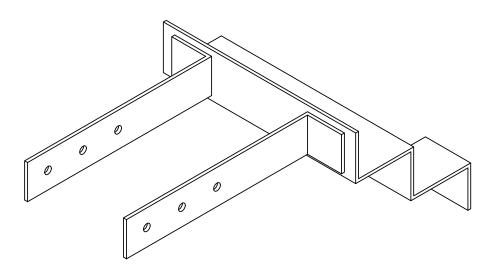






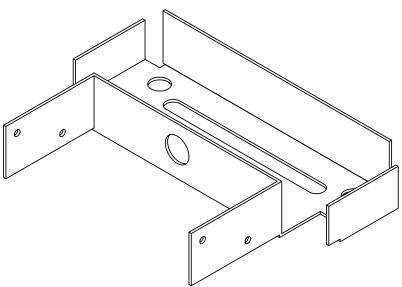
T 5 3/4 DOUBLE EGRESS PART # PFDE684





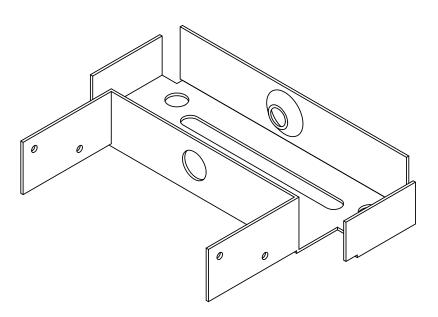
PART # PFDE680





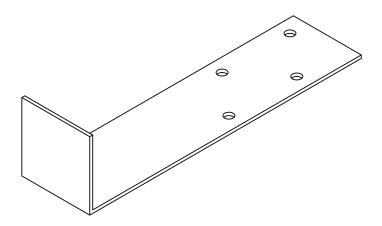
4 3/4 PART # PFUA4 6 3/4 PART # PFUA6 7 1/4 PART # PFUA725 7 3/4 PART # PFUA7 8 1/4 PART # PFUA825 8 3/4 PART # PFUA8





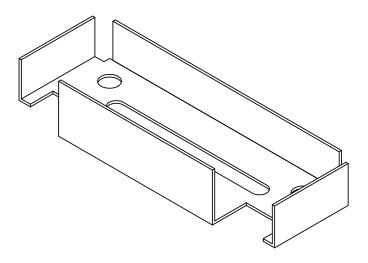
5 3/4" PART # PFUA5





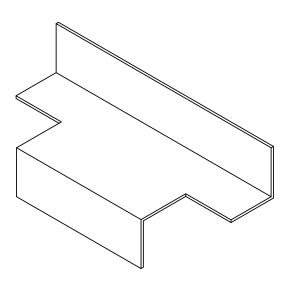
PART # PFWSSA





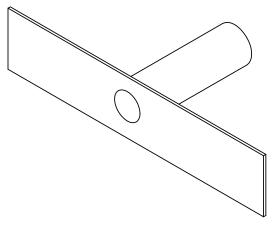
PART # PFSSA5





4 3/4" PART # PFZA475 5 3/4" PART # PFZA575 6 3/4" PART # PFZA675 7 3/4" PART # PFZA775 8 3/4" PART # PFZA875

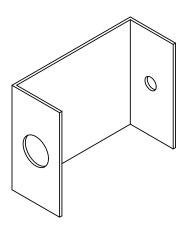




PART # PFMTA

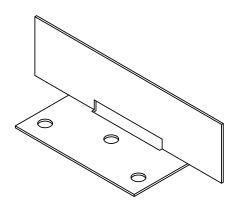
CUT TO MATCH JAMB DEPTH BY OTHERS





PART # PFAEW

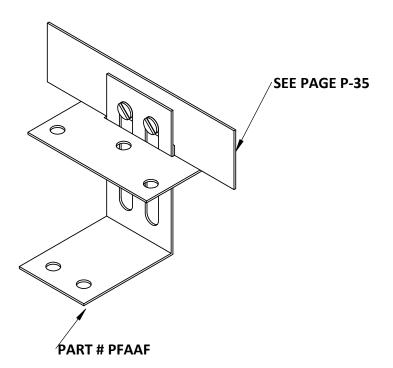




4 3/4" PART # PFSA4 5 3/4" PART # PFSA5 6 3/4" PART # PFSA6 7 3/4" PART # PFSA7 8 3/4" PART # PFSA8



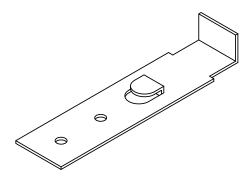
PARTS - FRAME ADJUSTABLE FLOOR ANCHOR (4 3/4 THRU 8 3/4)





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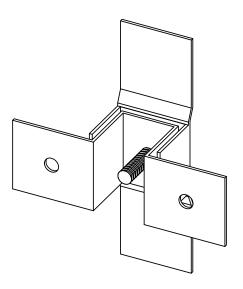
PARTS - FRAME DRYWALL SNAP IN ANCHOR (2 NEEDED PER JAMB)



PART # PFDSNA



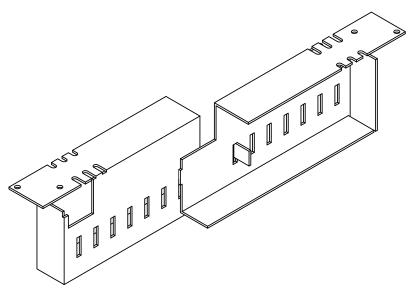
PARTS - FRAME DRYWALL COMPRESSION ANCHOR



PART # PFDCA

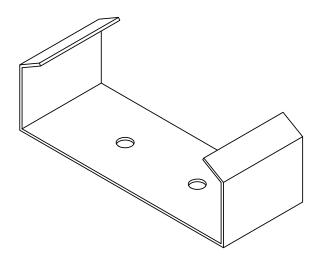


PARTS - FRAME ADJUSTABLE ANCHOR (110) (380) & (380A)



4 3/4" - 6 3/4" PART # PFA110 5 3/4" - 8 3/4" PART # PFA380 7" - 12" PART # PFA380A

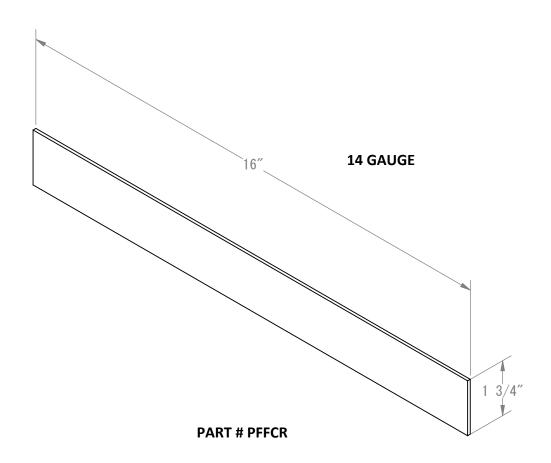




4 3/4" PART # PFMUA4 5 3/4" PART # PFMUA5 6 3/4" PART # PFMUA6 7 3/4" PART # PFMUA7 8 3/4" PART # PFMUA8

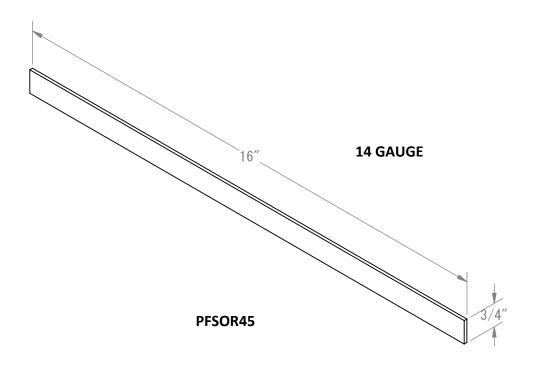


PARTS - FRAME CLOSER REINFORCEMENT FRAME FACE (CRF)



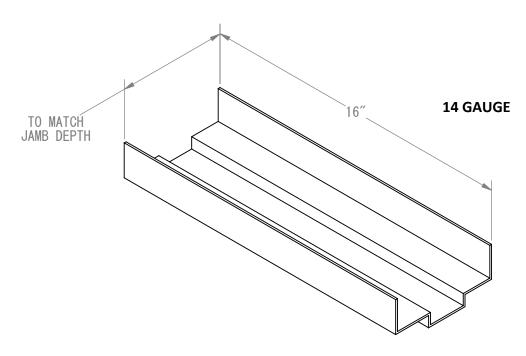


PARTS - FRAME CLOSER REINFORCEMENT 4 1/2" FRAME (CRB)



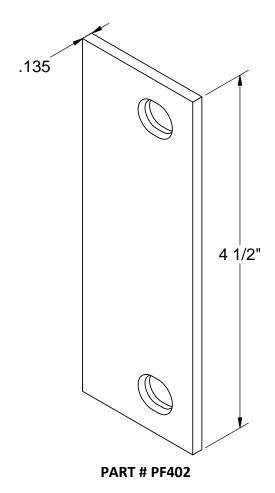


PARTS - FRAME CLOSER SLEEVE (SPECIFY PROFILE)

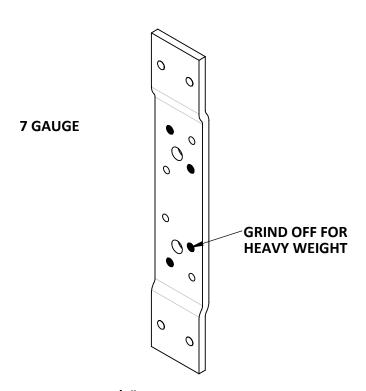


4 3/4" PART # PFSCR47 5 3/4" PART # PFSCR57 5 5/8" PART # PFSCR56 5 7/8" PART # PFSCR58 6 3/4" PART # PFSCR67 8 1/4" PART # PFSCR82 8 3/4" PART # PFSCR87



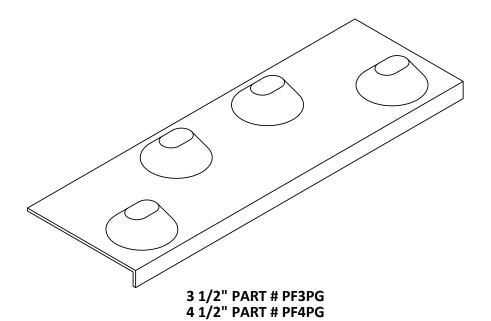






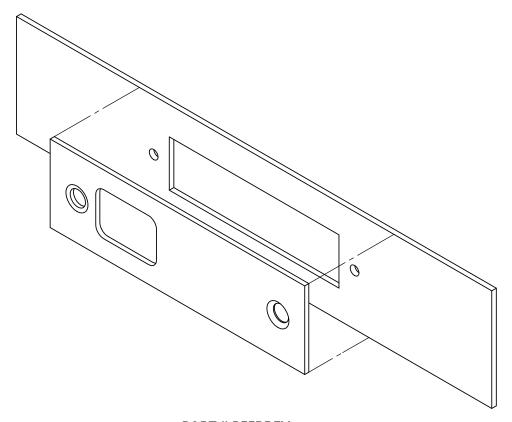
3 1/2" PART # PF3HR
4 1/2" PART # PF4HR
5" PART # PF5HR
4 1/2" HEAVY WEIGHT PART # PF4HHR
5" HEAVY WEIGHT PART # PF5HHR





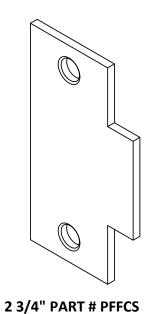


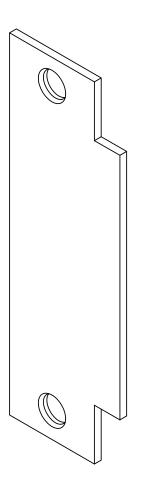
PARTS - FRAME REVERSIBLE FLUSH BOLT STRIKE AND REINFORCEMENT



PART # PFFBREV



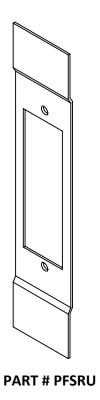


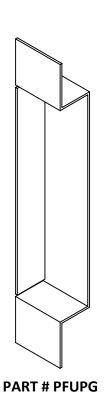


4 7/8" PART # PFFUS



PARTS - FRAME U STRIKE (ASA) REINFORCEMENT AND PLASTER GUARD

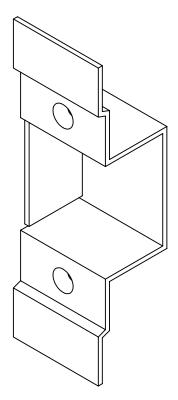




14 GAUGE



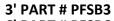
PARTS - FRAME C STRIKE (T) REINFORCEMENT WITH PLASTER GUARD



PART # PFSRC 14 GAUGE



PARTS - FRAME SPREADER BAR

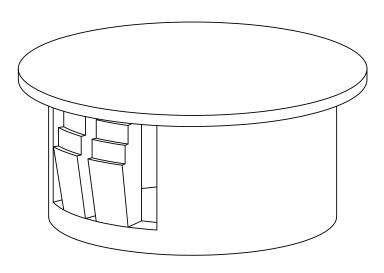


6' PART # PFSB6

8' PART # PFSB8

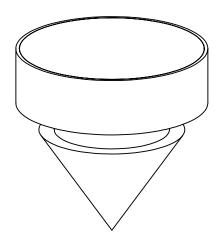


PARTS - FRAME PLASTIC PLUG FOR UNA 5 3/4"



PART # PFPP







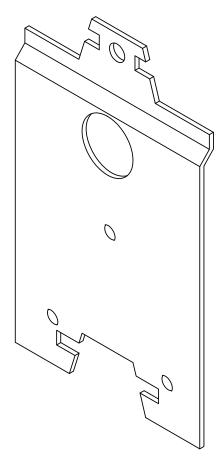
PUSH THROUGH PART # PFPTM

STICK ON PART # PFSOM

DOUBLE HEADERS AND MULLIONS ARE NOT DRILLED THEREFORE STICK-ON MUTES ARE RECOMMENDED.

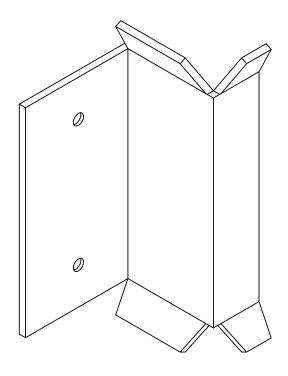


PARTS - FRAME CORNER FRAME TAB



PART # PFTAB





PART # PFMC

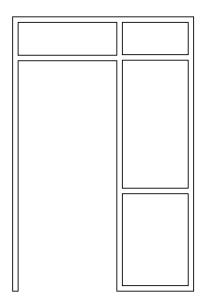


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STICK AND MULLION HOW TO ORDER



1 2 3 4 5 6 7 8 9 10

LENGTH

HAND

R - RIGHT

L - LEFT

FACE

W4F - 4"

W6F - 6"

PROFILE

W1 1/2F - 1 1/2" LEAVE BLANK - 2"

DE - DOUBLE EGRESS

ER - EQUAL RABBET

SR - SINGLE RABBET

COS - CASED OPEN

8

9

10

107 - 10' 7"

- T STICK DESIGNATION S STICK M MULLION
- METAL TYPE
 LEAVE BLANK COLD ROLLED
 Z GALVANNEALED
 G90 GALVANIZED (G90)
- PREP SIDE AND GAUGE
 4 PREP ON 400 SIDE
 8 PREP ON 800 SIDE
 THEN DESIGNATE GAUGE
- JAMB DEPTH
- STICK TYPE

 BS BLANK STICK
 HS HINGE STICK
 SS STRIKE STICK
 CS CASED OPEN
 HA HAT

 STICK TYPE
 BM BLANK MULLION
 HM HINGE MULLION
 SM STRIKE MULLION
 CM CASED OPEN
 HAC CASED OPEN HAT
 - HINGE PREP LAYOUT 68 6'8"

70 - 7'0" 80 - 8'0"

6

USE THE APPROPRIATE SYMBOL AS DESIGNATED ABOVE FOR POSITIONS 1 THRU 10.

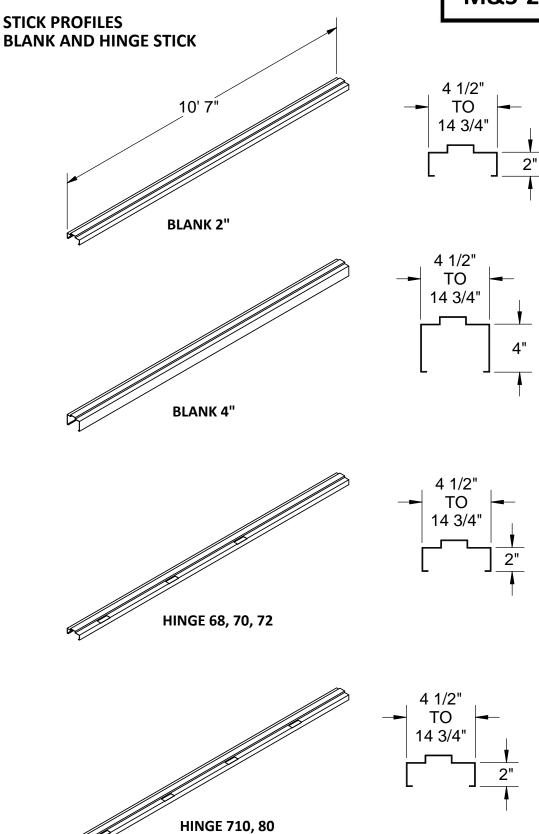
EXAMPLE

LEAVE BLANK - UNEQUAL RABBET

 $\frac{S}{1} \quad \frac{Z}{2} \quad \frac{416}{3} \quad \frac{53/4}{4} \quad \frac{HS}{5} \quad \frac{70}{6} \quad \frac{107}{7} \quad \frac{R}{8} \quad \frac{W4F}{9} \quad \frac{SR}{10}$

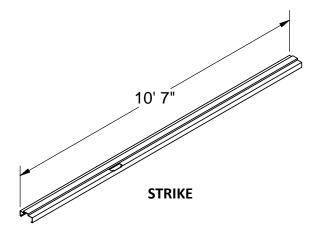


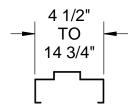
M&S-2 MAR 2014

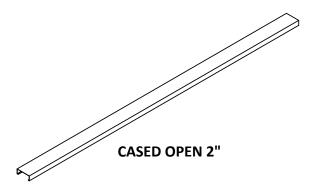


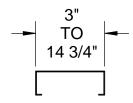


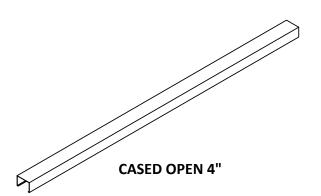
STICK PROFILES STRIKE AND CASED OPEN STICK





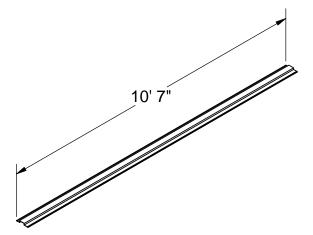


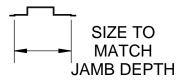


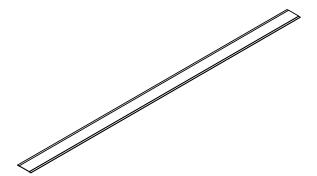


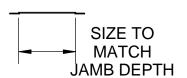


STICK PROFILES HAT STICK



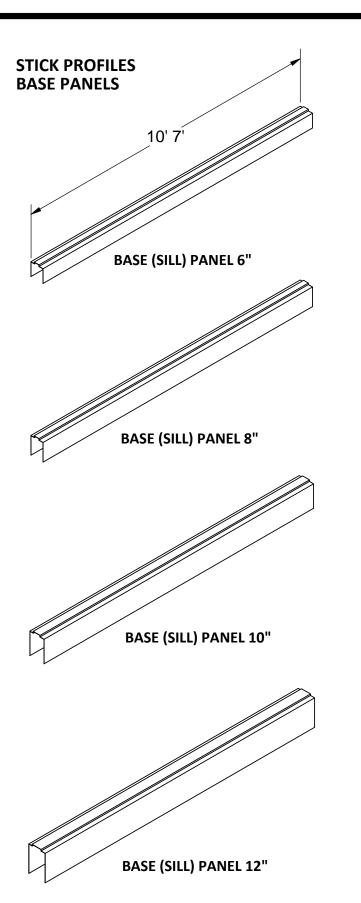


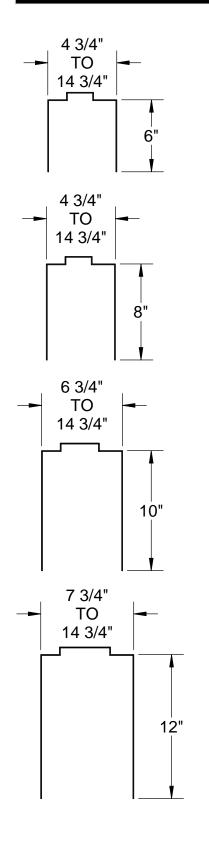






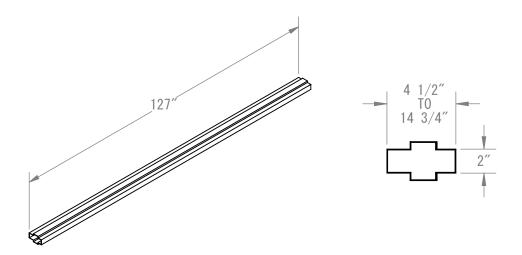
M&S-5 MAR 2014





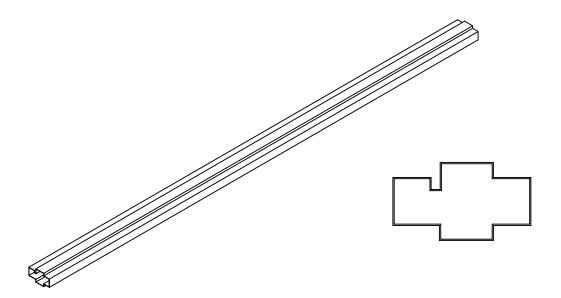


MULLION PROFILES



STANDARD HARDWARE PREPS.
AVAILABLE
OTHER FACES AVAILABLE 1" TO 12"
NO MUTE HOLES IN MULLIONS

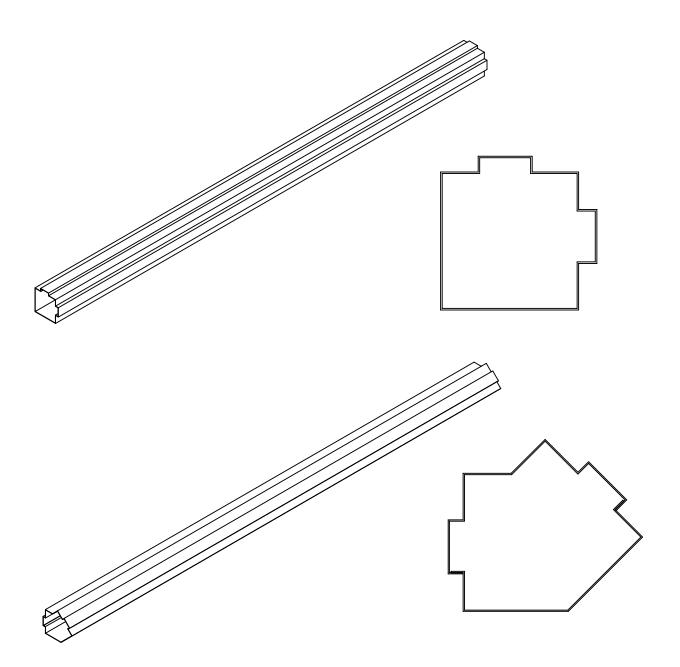




CONTACT FACTORY FOR AVAILABLE SIZES.



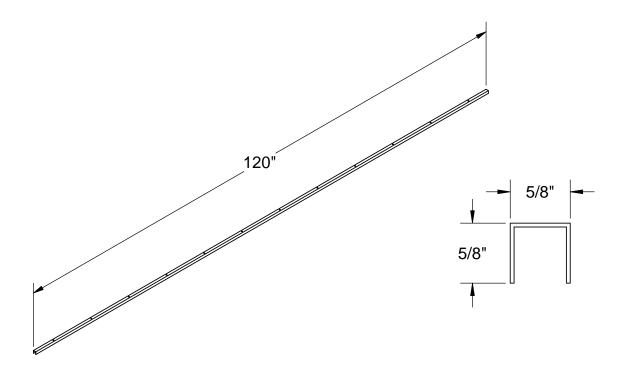
CORNER POST



RABBETS AND DIMENSIONS CAN VARY.
PLEASE CONTACT FACTORY



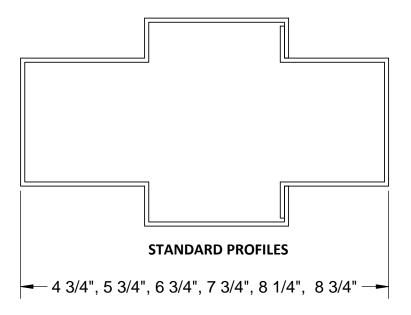
GLAZING BEAD

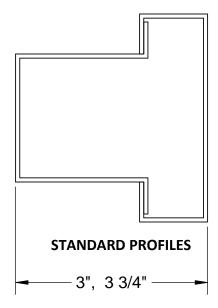


PREPARED FOR #10 X 1 1/4" SCREW



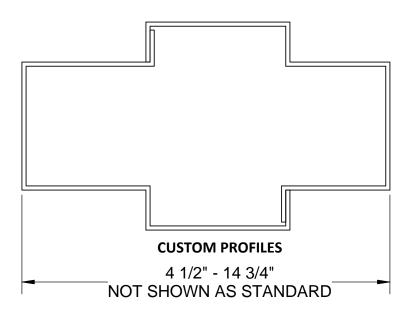
STICK AND MULLION MULLION STANDARD PROFILES

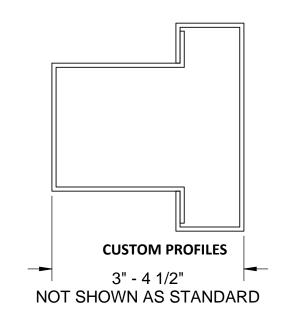






STICK AND MULLION MULLION CUSTOM PROFILES

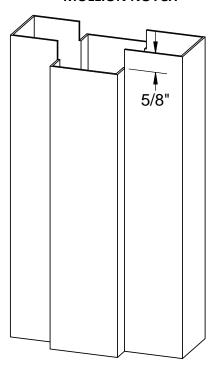


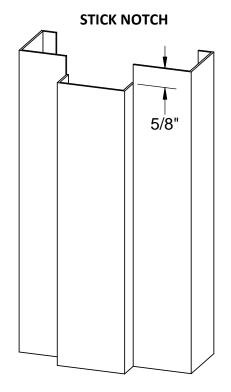




STICK AND MULLION NOTCHES

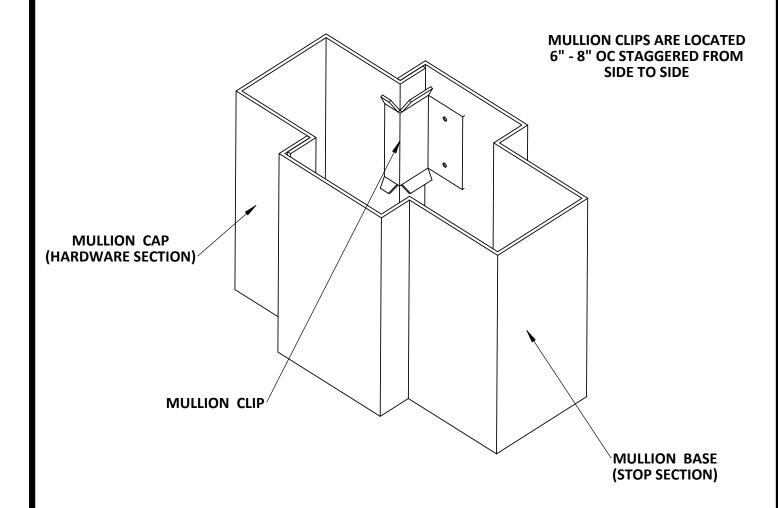






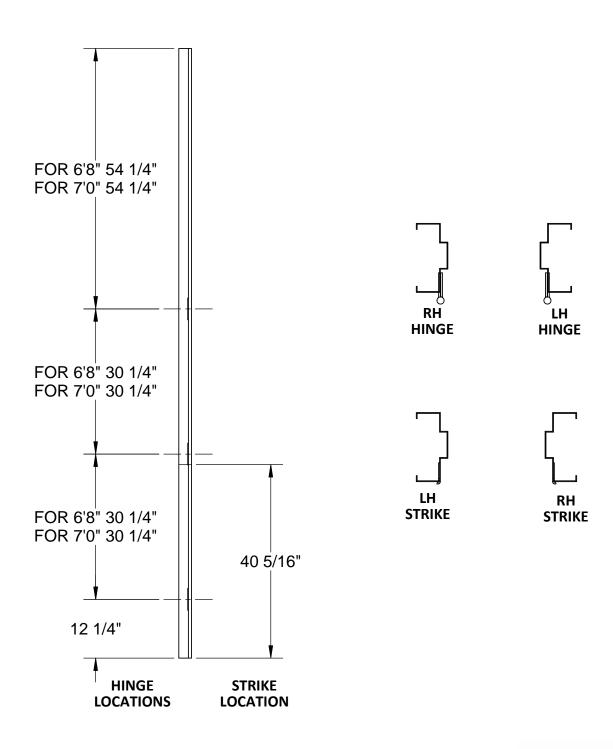


MULLION DETAIL



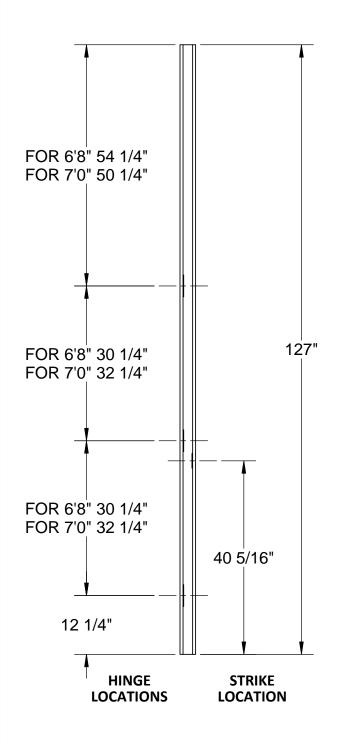


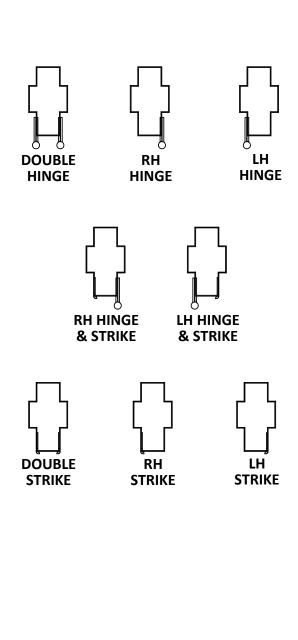
S416 STANDARD FRAME COMPONENTS TRANSOM HINGE JAMBS 6'8" & 7'0" HIGH DOORS





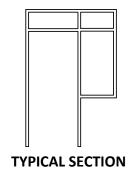
M416 STANDARD FRAME COMPONENTS MULLION 6'8" & 7'0"

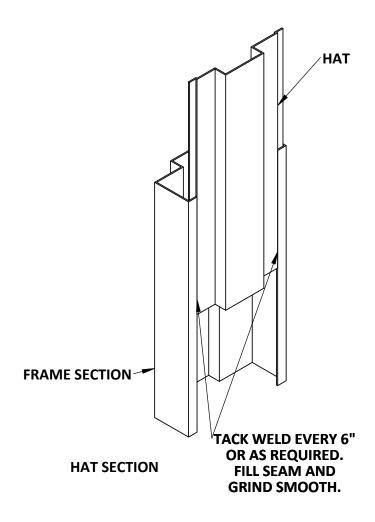






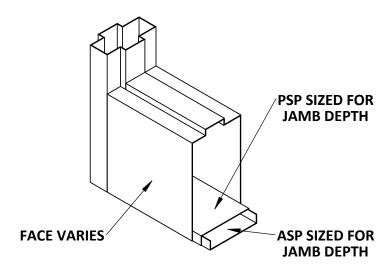
STICK MODIFICATION DETAILS



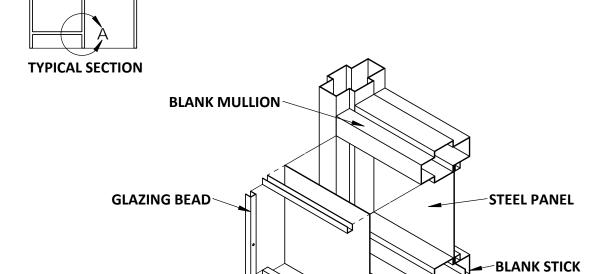




STICK MODIFICATION DETAILS







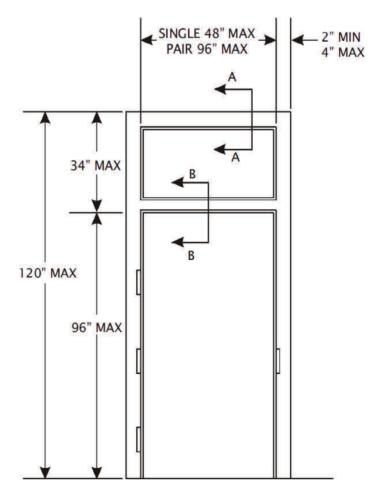
ALTERNATE BASE PANEL ASSEMBLY

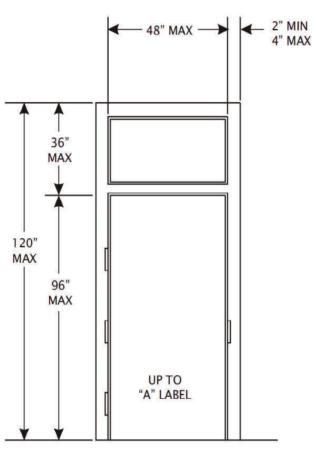


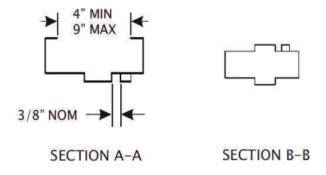
AFL SIZED FOR JAMB DEPTH

M&S-17 MAR 2014

UNDERWRITERS LABORATORIES APPROVED TRANSOM FRAMES







MATERIAL: 16 GA C.R. STEEL

JAMB DEPTH: 4 MIN – 12 3/4" MAX

PANEL: 20 GA x 1 3/4"

MATERIAL: 16 GA C.R. STEEL

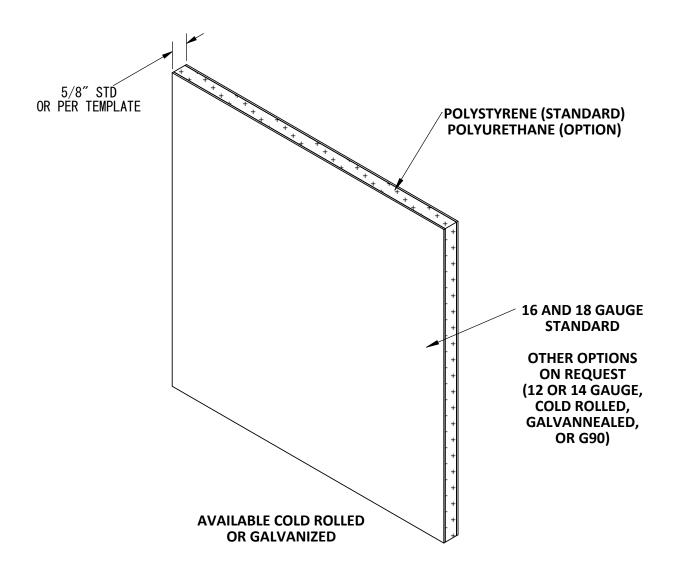
JAMB DEPTH: 4" MIN TO 9" MAX

PANEL: 20 GA MIN TO 16 GA

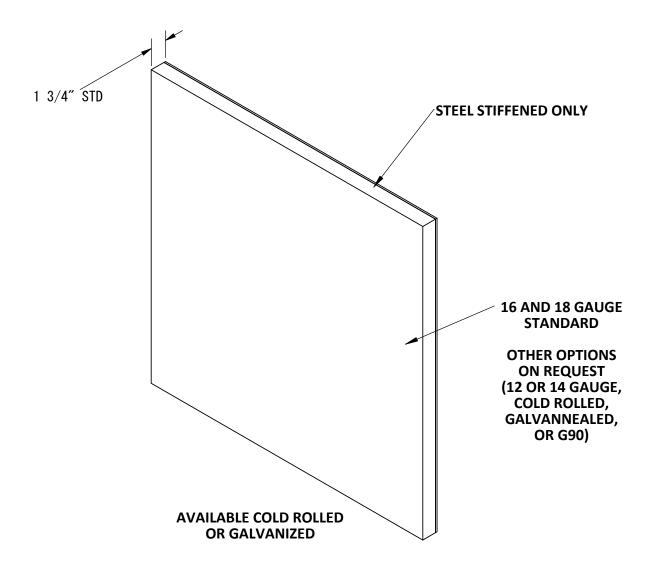
MAX STEEL OR 1296 SQ



TRANSOM / SIDE LITE PANEL







FOR SIZES AVAILABLE SEE PAGE L-14, L-16, L23



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Doors 1 of 4	L-26
Doors 2 of 4	L-27
Doors 3 of 4	L-28
Doors 4 of 4	L-29

GENERAL NOTES:

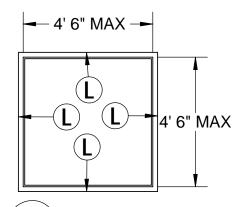
- 1. Chart is intended for reference only. Changes to frames or glazing options are frequently occurring. Please check website [| Á8[] * | Ó4 aco 4 accurrent information.
- 2. Profiles are shown as double rabbet for illustration purposes only. Single rabbet frames are available with door side face sizes same as double rabbet.
- 3. Profiles are shown for basic information only. They are not intended for use as submittal drawings.
- 4. All frames are for use in positive pressure or neutral pressure conditions.
- 5. All frames are series F.
- 6. All stop height• are 5/8" based on using listed glass, glazing and glazing installation combinations.
- 7. All bars and mullions are welded (non-removable).
- 8. In the anchor column ** indicates that this anchor type is allowed up to 10'0" overall height.



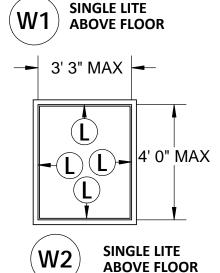
L-& MAR 2014

							G	GAUGE	띪	 ≠	THROAT			116		ANCHOR TYPE	PE		2	10,000	
MAX	DETAIL/	FRAME	BAR OR		2.7		0	7	4	7		AUM	AMT	AMT MAS	WIRE .	AER EXIST MAS	WSA	AND	AER EXIST MAS ASW UNA UNA EXIST MAS	WELD	LOOSE
RATING	GLAZING	FACE	MULL FACES	PROFILE	7	AAELD	77 14 17	Ö	4	Z IVIIIV.	. WAA.	MASONRY	MASONRY	TEE	Ÿ	CONCRETE	STUD STUD	0	CONCRETE	ANCHOR	ANCHOR
	W1 FIRE																				
Н	LITE	TO 4"	N/A	5		•		•	•	4.	13"	•				•		*	*	٠	
	W2 1/4"	1 1/4"							2	š	.,										
3/4	GL	TO 4"	N/A	L		•	500	•		4"	13"	•				F	•	*	*	•	
	W3 1/4"								8	ò		5000				200		8	1990	1000	2
20 min	GL	2" TO 4"	N/A	М		•	1.31	•	•	4"	13"	3	•	•	•	•				•	•
	W4 FIRE	1 1/4"					-	_													
1	LITE	TO 4"	2" TO 4"	L-K		•		•	_•	4"	9"	•				18/2		*	*	•	
	W5 1/4"	1 1/4"						_													
3/4	GL	TO 4"	2" TO 4"	L-K		•		•	•	4"	9"	•				•		*	*	•	
	W6 1/4"																				
20 min	GL	2" TO 4"	2" TO 4"	M-K		•	16	•	_	4"	13"	***	•	•	•	•	•	•	٠	•	•
	W7 FIRE	1 1/4"				20,000		ì	ř	90		SANA.				3,000					
1	LITE	TO 4"	2" TO 4"	L-K		٠	1000	•	•	4"	9"	77.2						*	**		
	W8 1/4"	1 1/4"						_	Ž.	8											
3/4	GL	TO 4"	2" TO 4"	L-K		•	- 00	•	•	4"	9"					•		*	*		
	W9 1/4"							-		8				8	80		8	0			0
20 min	GL	2" TO 4"	2" TO 4"	M-K-N		٠	1.00	•	•	4"	13"	1		•	•	•		•			•





Fire Lite used with listed glazing material combinations. 4"-6" maximum width or height not toexceed 2,721 square inches of exposed.

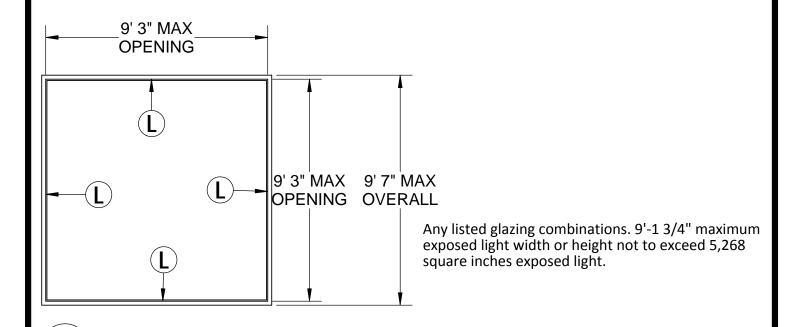


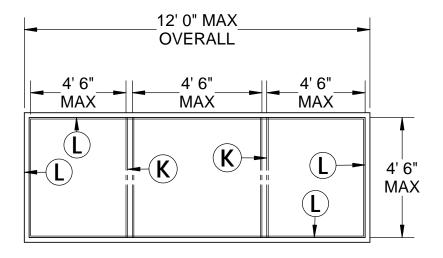
SINGLE LITE

ABOVE FLOOR

W3

1/4" wire glass used with listed glazing material combinations. 3'-3" maximum opening width or 4'-0" maximum opening height not to exceed 1,296 square inches exposed light.

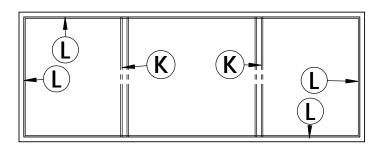




Fire Lite used with listed glazing material combinations. 4'-6" maximum width or height not to exceed 2,721square inches of exposed light.



MULTIPLE LITE ABOVE FLOOR

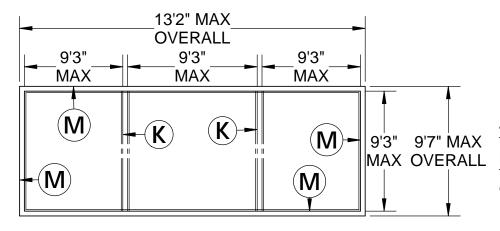


114" wire glass used with listed glazing material combinations. 3'-3" maximum opening width or 4'-0" maximum opening height not to exceed 1,296 square inches exposed light.



MULTIPLE LITE ABOVE FLOOR

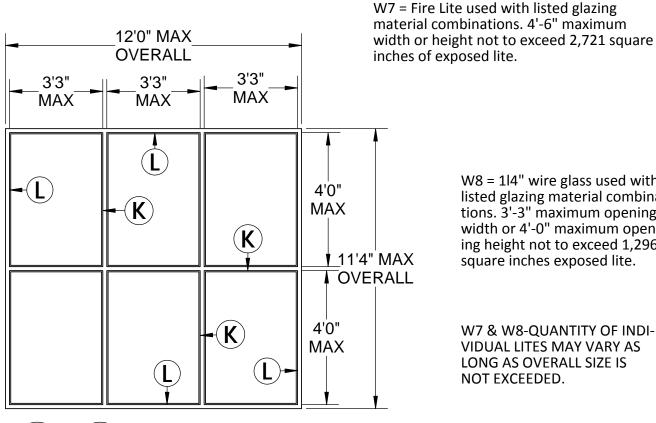




Any listed glazing combinations. 9'-1 3/4" maximum exposed light width or height not to exceed 5,268 square inches exposed lite.

MULTIPLE LITE W6 ABOVE FLOOR





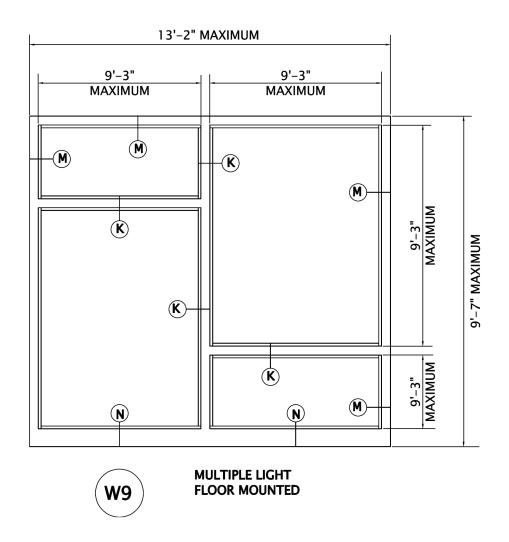
W8 = 1l4" wire glass used with listed glazing material combinations. 3'-3" maximum opening width or 4'-0" maximum opening height not to exceed 1,296 square inches exposed lite.

W7 & W8-QUANTITY OF INDI-**VIDUAL LITES MAY VARY AS** LONG AS OVERALL SIZE IS NOT EXCEEDED.

W7

MULTIPLE LITE FLOOR MOUNTED

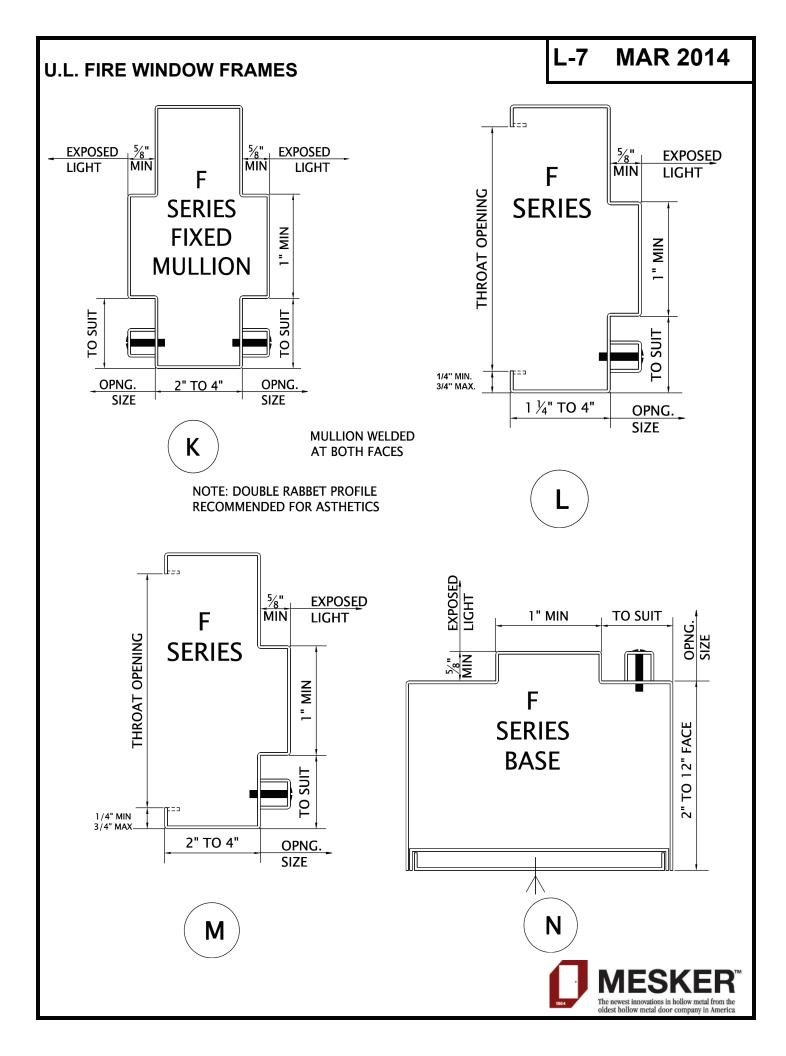




Any listed glazing combinations. 9'-1 3/4" maximum exposed light width or height not to exceed 5,268 square inches exposed light.

Quantity of individual lights may vary as long a overall size is not exceeded.





MAX OPENING

GAUGE

ANCHOR TYPE

0.0											
NOTE:	c/1 t	3	3	1 1/2	3	3	1 1/2	1 1/2	3	3	MAX RATING
HIS CHA	п	F	F	F	п	T)	F	F	F	F	SERIES SINGLE
RT ARO			*			•		٠		100	
/F REPRE		•			•		•		•		DOUBLE WIDTH HEIGHT PROFILE KD WELD 18 16 14 MIN. MAX.
FNTS 3 6) 7	8'-0"	4'-0"	4'-0"	8'-0"	4¹-0"	8'-0"	4'-0"	8¹-0 ¹¹	4'-0"	WIDTH
IDFD FIR	0.0	8'-0"	8'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0''	10'-0"	10'-0"	HEIGHT
FDOOR	P.A	A B1	A B1	В2	B2	B2	A B1	A B1	A B1	A B1	PROFILE
# 	•	•	•	٠	•		٠			٠	ð
AES IN N	•	٠	•	٠	٠	•	٠	٠	*	٠	WELD
<u> </u>											18
. .	•	•	•	٠	•	•	•	•	•	•	16 1
= -						-					.4 M
ŘOCF L						,					N. M.
	3	3"	3"	78	78	78	3	3"	3"	3=	
S AS OF IAN		2 2		•	٠	٠	٠	•	*	٠	AUM MASONRY
2011 FRAI		•	•								AMT MAS TEE
MFS ARF FIIGI		*	٠								WIRE MASONRY
N F TO BFAR II I					٠	¥	3	٠	•		AER EXIST MAS ASW UNA CONCRETE STUD STUD
				٠			٠	•			ASW STUD
ล์ MA	•			•			•	٠			ASW UNA STUD STUD
RKS (I ARFI S) LIND		**	•	3 .	•	•	3 .	•	٠	2.	UNA EXIST MAS CONCRETE
ER UI 10C (F				b • .		•	8.	.•	•	5 * .	WELD LOOSE ANCHOR ANCHOR
OSITIVE	:•:	•	*								LOOSE ANCHOR
	THIS CHART ABOVE REPRESENTS 3 SIDED FIRE DOOR FRAMES IN MESKER TO U.L. PRO	11/2 F 4'-0" 8'-0" B1 A 4" 13" A 13" A 14" A 15"	3 F 8'-0" 8'-0" B1 . 4" 13" 4" 13"	3 F . 4'-0" 8'-0" B1 . 4" 13"	11/2 F	3 F 8-0" 10-0" B2 2 2" 4" 2 2" 4" 2 2" 4" 2 2" 4" 3 11/2 F 3 10-0" B1 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 F . 4!-0" 10'-0" B2 . 2" 4" . 10'-0" B2 . 2" 4" . 11/2 F . 8'-0" 8'-0" B1 . 4" 13" . 13" . 13" . 14" SCHART ABOVE REPRESENTS 3 SIDED FIRE DOOR FRAMES IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE IN MESKER "ULL PROCEDURES AS OF IAN 2011 FRAMES ARE ELIGIBLE TO BEAR ULL LISTING MARKS (LABELS) UNDER UI 10C (POSTIVE TO STATE TO STA	11/2 F 8:0" 10'-0" B1 9:0 4 1 13" 9:0 8:0 9:0 10'-0" B2 9:0 9:0 9:0 9:0 9:0 9:0 9:0 9:0 9:0 9:0	11/2 F	A	A 4.0" 10'-0" B1 2 2 4 13" 2 4



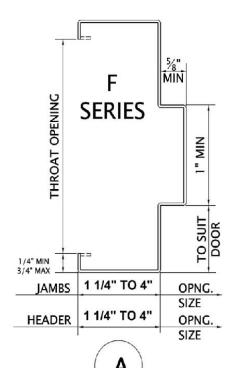
3-SIDED U.L. FDJ, DOUBLE EGRESS, FR SERIES FRAMES

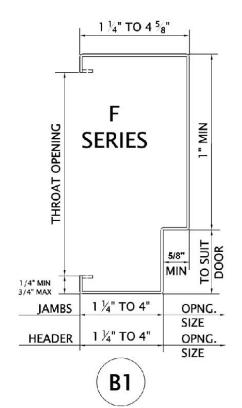
L-9 **MAR 2014**

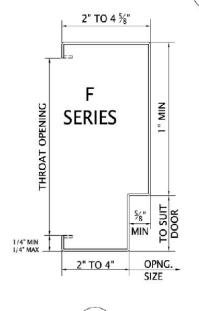
MAX SERIES SINGLE DOUBLE WIDTH HEIGHT PROFILE KD WELD 18 16 14 12 MIN. MAX MASONRY TEE MASONRY TEE MASONRY TEE MASONRY TEE MASONRY TEE MASONRY CONCRETE STUD BYWALL 11/2 FDJ			ì				e a					-	1
			NOTE	1 1/2	ω	1 1/2	1 1/2	1 1/2	3	1 1/2	1 1/2	MAX RATING	
			: THIS CH	E	F	FR	FR	F D/E	F D/E	FDJ	FDJ	SERIES	
			HART ABI			•						SINGLE	
			OVE REPF		5 - 3					•		DOUBLE	
			RESENTS	2@ 4'-0"	2@ 4'-0"	4'-0"	4'-0"	8'-0"	8'-0"	8'-0"	4'-0"	WIDTH	MAX
			3 SIDED F	8'-0"	8'-0"	7'-0"	7'-0"	8'-0"	8'-0"	8'-0"	8'-0"	неібнт	PENING
			IRE DOO	A-B1 G-H	A-B1 G-H	-	E	D	D	С	С	PROFILI	
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MODIFY TO FIT MODIFY TO FIT MULLION BETWEEN DOORS MULLION BETWEEN DOORS			SITIVE									LOOSE ANCHOR	
			•	MULLION BETWEEN DOORS	MULLION BETWEEN DOORS			MODIFY TO FIT	MODIFY TO FIT				

The newest innovations in hollow metal from the oldest hollow metal door company in America

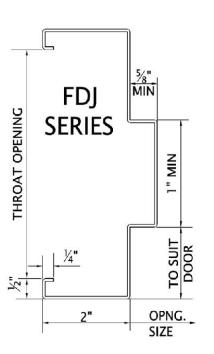
3 - SIDED U.L. FIRE DOOR FRAME

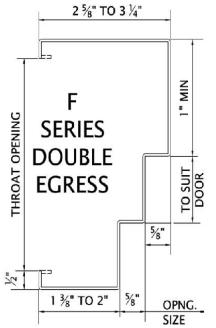






B2





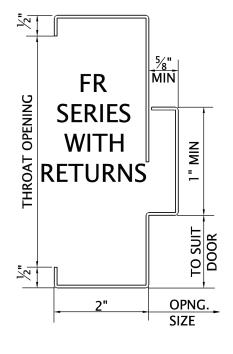


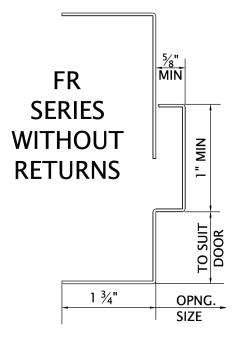




3-SIDED U.L. FIRE DOOR FRAME

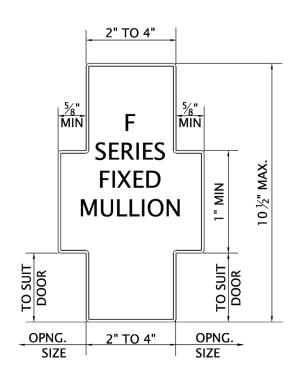
L-11 MAR 2014

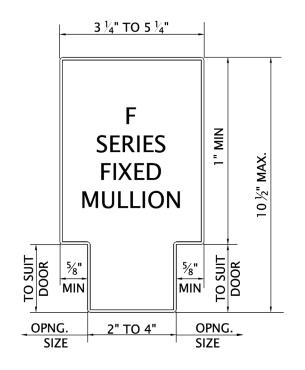




E







MULLION WELDED AT BOTH FACES



MULLION WELDED AT BOTH FACES

NOTE: TYPE G & H —DOORS SHALL NOT BE HINGED FROM MULLION.



L-12 MAR 2014

GENERAL NOTES:

- 1. Chart is intended for reference only. Changes to frames or glazing options are frequently occurring.
- 2. Profiles are shown as double rabbet for illustration purposes only. Single rabbet frames are available with door side face sizes same as double rabbet.
- 3. Profiles are shown for basic information only. They are not intended for use as submittal drawings.
- 4. All frames are for use in positive pressure (UL-10C) or neutral pressure (UL-10B) conditions.
- 5. All frames are series F.
- 6. All stop height are 5/8" based on using listed glass, glazing, and glazing installation combinations.
- 7. Panels and glazing shown on door side for illustration purposes only. Panels and glazing may also be located opposite the door side to suit architectural details.
- 8. All transom bars and mullions are welded (non-removable).
- 9. ** \mathbf{Q} anchor column indicates that this anchor type is allowed up to 10'-0" overall height. Anchor must be welded to frame.

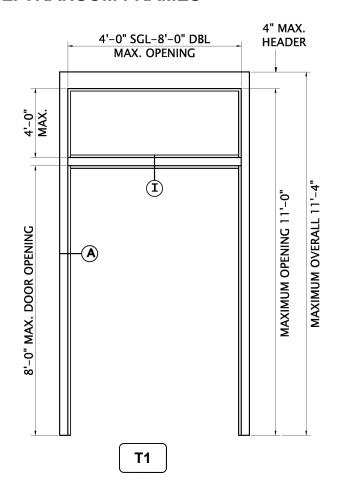


L-13 MAR 2014

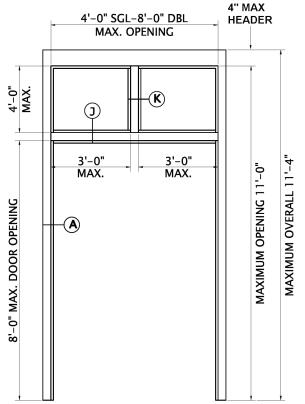
3/4	w		1 1/2	1 1/2	1 1/2	3	3/4	ц	1 1/2	3	MAX RATING	
	Т10	19	Т8	17	16	T5	T4	Т3	Т2	11	MAX RATING SERIES	
C1 4 7 E	WIRE GL	3/8" COMP	1 3/4" WD	1 3/4" WD	13/4" HC	13/4" COMP	WIRE GL	FIRE LITE	3/8" COMP	13/4" HM	S PANEL	
	•		*	9	•	•	•					
200		•					**	3° - 10	(*)	•	SINGLE DOUBLE	
2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	2" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	FRAME FACES	
2" TO 12"	2" TO 4"	2" TO 4"	2" TO 4"	N/A	N/A	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	TRAN BAR OR MULL FACES	
A1-J	A1-J-K	A1-J	A1-I	A	A	A1-I	A-J-K	A-J-K	A-J-K	A-I	PROFILE KD WELD	
11-11	1.07						1.0	1.0			KD WE	
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13"	9"	9"	9"	13"	13"	13"	13"	13"	13"	13"	MAX.	JAT
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)(a)	(4)	•					WIRE	AN
383					•	•	*	*	*	*	AER EXIST MAS CONCRETE	ANCHOR TYPE
•	•	•	٠		×	•	*	*	*	*	ASW STUD	
18.5					*	•	*	*	**	*	ASW UNA STUD STUD	
×			×		**	•	*	*	*	**	UNA UNA EXIST MAS STUD CONCRETE	
3.	:■::								(*)		S WELD ANCHOR	
3 .											WELD LOOSE ANCHOR ANCHOR	



L-14 MAR 2014



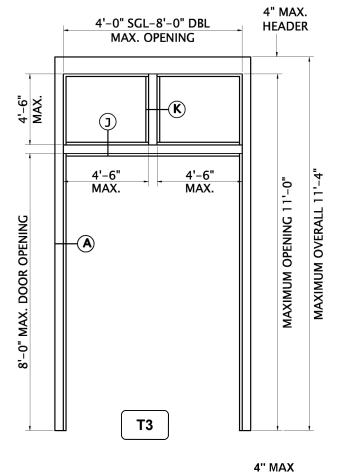
1 3/4" Steel Stiffened Hollow Metal Panel



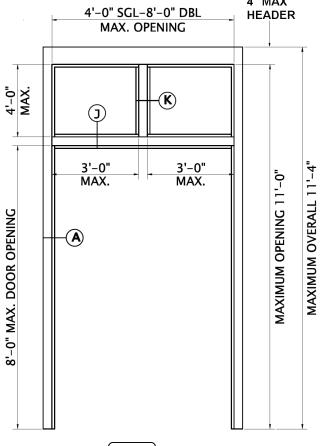
3/8" Thick Laminate Panel. 3'-0" x 4'-0" Maximum Opening



L-15 MAR 2014



Fire Lite used with listed glazing material combinations. 4'-6" maximum width or height not to exceed 2,721 square inches exposed light.

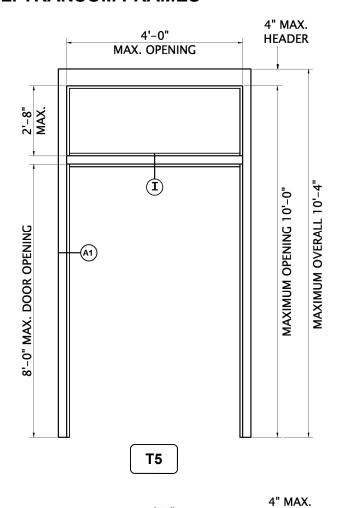


T4

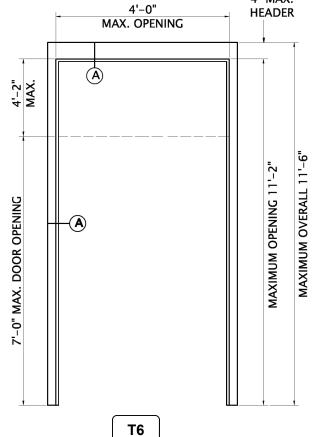
1/4" Wire glass used with listed glazing material combinations. 3'-0" maximum opening width or 4'-0" maximum opening height not to exceed 1,296 square inches exposed light.



L-16 MAR 2014



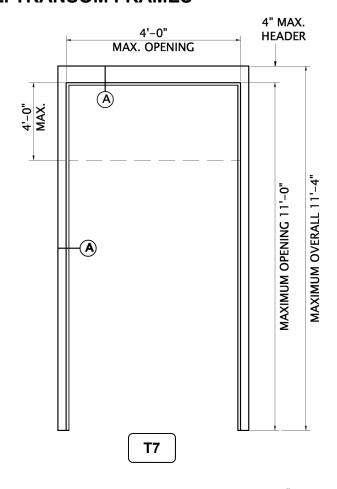
1 3/4" Thick Composite Panel with steel faces, non-removable.



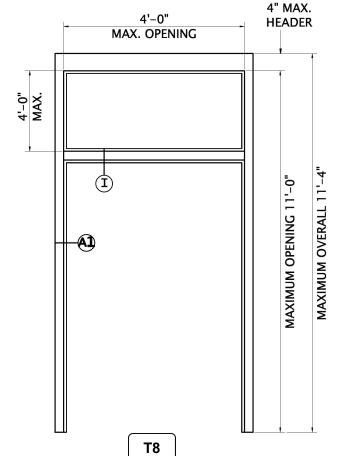
1 3/4" Thick Honeycomb Core Panel non-removable.



L-17 MAR 2014



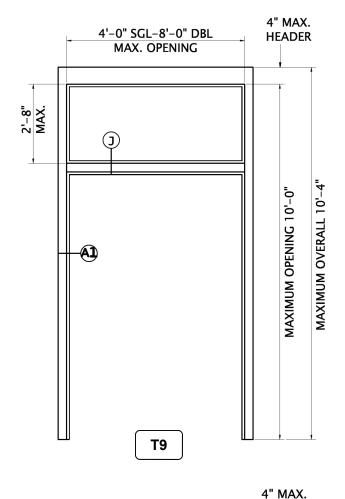
1 3/4" Wood Panel with spring bolts non-removable.



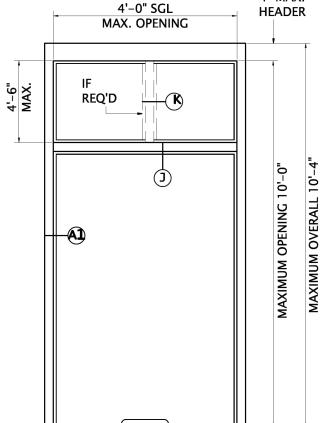
1 3/4" Wood Panel with spring bolts non-removable.



L-18 MAR 2014



3/8" Cement Board Panel non-removable.



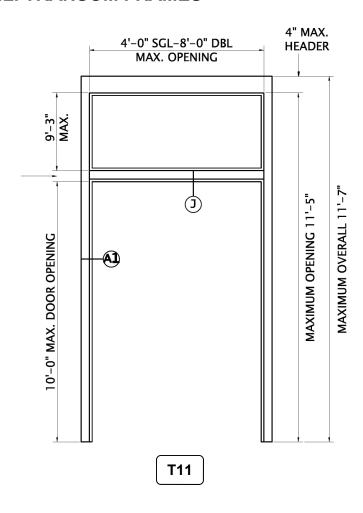
T10

1/4" Wire glass. 4'-6" maximum opening not to exceed 1,296 square inches exposed light with conventional glazing systems and 3/4" high stops at transom.

See Elevation T4 for optional information in lieu of this design.

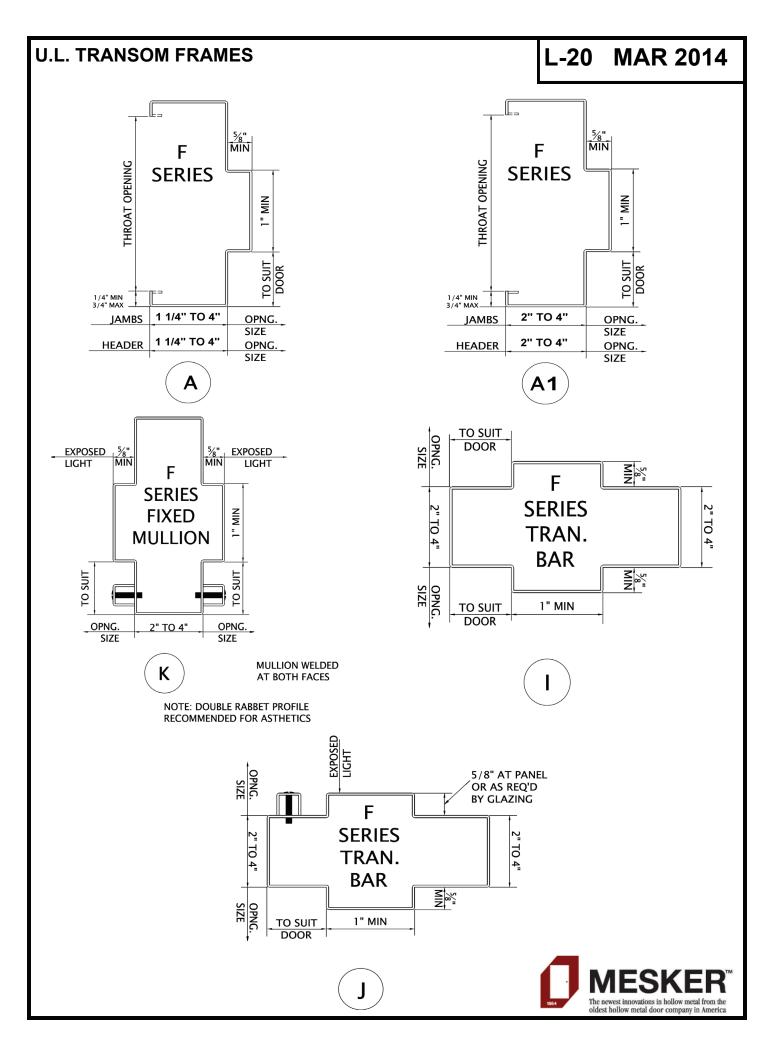


L-19 MAR 2014



1/4" Listed glazing material combinations up to 9'-3" opening width or height not to exceed 5,268 square inches exposed light.





U.L. TRANSOM AND SIDE LIH9G OR PANELS ABOVE FLOOR

L-21 MAR 2014

GENERAL NOTES:

- 1. Chart is intended for reference only. Changes to frames or glazing options are frequently occurring.
- 2. Profiles are shown as double rabbet for illustration purposes only. Single rabbet frames are available with door side face sizes same as double rabbet.
- 3. Profiles are shown for basic information only. They are not intended for use as submittal drawings.
- 4. All frames are for use in positive pressure (UL-10C) or neutral pressure (UL-10B) conditions.
- 5. All frames are series F.
- 6. All stop height are 5/8" based on using listed glass, glazing, and glazing installation combinations.
- 7. Panels and glazing shown on door side for illustration purposes only. Panels and glazing may also be located opposite the door side to suit architectural details.
- 8. All transom bars and mullions are welded (non-removable).
- 9. ** \mathbf{Q} anchor column indicates that this anchor type is allowed up to 10'-0" overall height. Anchor must be welded to frame.



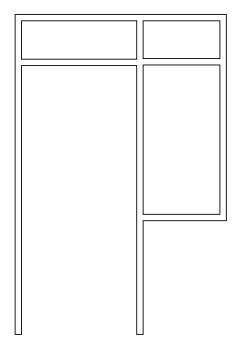
U.L. TRANSOM AND SIDE LIGHTS OR PANELS ABOVE FLOOR

L-22 MAR 2014

N1:	ı	ı			1					Ī
20 M IN	3/4	3/4	_	ь	11/2	1 1/2	ω	ω	MAX RATING	
TS7	TS6	TS5	TS4	TS1	TS2	TS1	TS2	TS1	DETAIL	
2"TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	FRAME FACES	
2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	FRAME BAR OR MULL FACES FACES	
ANY LISTED GLAZING	LISTED 1/4" GLAZING COMBO A-J-K-L	LISTED 1/4" GLAZING COMBO	LISTED FIRELITE	LISTED FIRELITE	3/8" LAM CEMENT BOARD	3/8" LAM CEMENT BOARD	STIFFENED PANEL	1 3/4" STEEL STIFFENED PANEL A-I-K-L	LIGHT OR PANEL MATERIAL	
A1-J-K- M	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A-I-K-L	A-I-K-L	PROFILE KD WELD 18 16 14 12	
									KD WE	
									LD 18	H
٠	₽ 0	•	•	٠	•	٠	•	•	16	GAUGE
•			•	•	•	•	•	•	14 13	GE
4"	4"	4"	47/8"	4 7/8"	4"	4"	4 "	4"	MIN.	THROAT
13"	မှု	9"	9"	9"	9"	9"	မှု	မှု	MAX.	AT
₹•2				•					AUM MASONRY	
N•1									AMT MAS TEE	
;•:									WIRE	A
•	(*)		•		•				AER EXIST MAS CONCRETE	ANCHOR TYPE
	•								ASW STUD	
٠	*		*		*		*		ASW UNA STUD STUD	
,•.	* *		*		*		*		UNA EXIST MAS CONCRETE	
8.0	(• 0)							3.0		
3 0 3				*					WELD LOOSE ANCHOR ANCHOR	



U.L. TRANSOM AND SIDE LITE OR PANELS ABOVE FLOOR



		OVE	RALL	TRAI	NSOM	SI	DE	
DETAIL	DOOR OPENING	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	MAX EXPOSED LIGHT
TS1	4080 SNG 8080 DBL	12'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	N/A
TS2	4080 SNG 8080 DBL	8'-0"	10'-0"	3'-0"	4'-0"	2'-9"	4'-6"	N/A
TS3	4080 SNG 8080 DBL	12'-0"	11'-4"	4'-6"	6'-5 3/4"	4'-6"	6'-5 3/4"	2,721 SQ. IN.
TS4	4080 SNG 8080 DBL	8'-0"	10'-0"	4'-6"	6'-5 3/4"	4'-6"	6'-5 3/4"	2,721 SQ. IN.
TS5	4080 SNG 8080 DBL	12'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	1,296 SQ. IN.
TS6	4080 SNG 8080 DBL	8'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	1,296 SQ. IN.
TS7	4'-0" x 10'-0" SNG 8'-0" x 10'-0" DBL	13'-2"	11'-7"	9'-3"	9'-3"	9'-3"	9'-3"	5,268 SQ. IN.



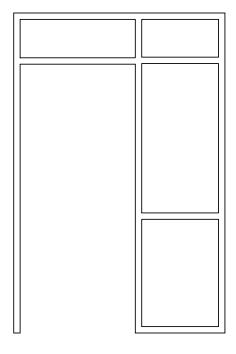
U.L. TRANSOM AND SIDE LIGHTS OR PANELS MOUNTED ON FLOOR

L-24 MAR 2014

N)				Г					T)	ı
20 MIN	3/4	3/4	⊢	H	1 1/2	1 1/2	ω	ω	MAX RATING	
TS14	TS13	TS12	TS11	TS10	TS9	TS8	TS9	TS8	DETAIL	
2" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	1 1/4" TO 4"	FRAME FACES	
2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" TO 4"	2" ТО 4"	2" TO 4"	BAR OR MULL FACES	
ANY LISTED GLAZING	LISTED 1/4" GLAZING COMBO	LISTED 1/4" GLAZING COMBO	LISTED FIRELITE	LISTED FIRELITE	3/8" LAM CEMENT BOARD	3/8" LAM CEMENT BOARD	STIFFENED PANEL	13/4" STEEL STIFFENED PANEL	LIGHT OR PANEL MATERIAL	
A1-J-K-M	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A-J-K-L	A -I-K-L	A-1-K-L	PROFILE	
11071		5.000		5,000	100	det	100	266	KD WELD	
2.53						100		1.0		Н
	•	183	•	•	•	•			18 16 14 12	GAUGE
4"	4"	4	47/8"	47/8"	4"	4"	4"	4"	MIN.	로
13"	وِ	يو	ايو	ايو	يو	بو	9"	9	MAX.	THROAT
		3-3		3.					AUM MASONRY	
91 2 18									AMT MAS TEE	
S • S									WIRE MASONRY	AN
									AER EXIST MAS ASW UNA CONCRETE STUD STUD	ANCHOR TYPE
			•				•		ASW STUD	
3100	*		*		*		*		ASW UNA STUD STUD	
(8)	* *		* *		* *		**		UNA EXIST MAS CONCRETE	
200		9 = X		\$ = X					WELD LOOSE ANCHOR ANCHOR	
ixi									LOOSE ANCHOR	



U.L. TRANSOM AND SIDE LITES OR PANELS MOUNTED ON FLOOR



		OVE	RALL	TRAI	NSOM	SI	DE	
DETAIL	DOOR OPENING	WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT	MAX EXPOSED LIGHT
TS8	4080 SNG 8080 DBL	12'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	N/A
TS9	4080 SNG 8080 DBL	8'-0"	10'-0"	3'-0"	4'-0"	2'-9"	4'-6"	N/A
TS10	4080 SNG 8080 DBL	12'-0"	11'-4"	4'-6"	6'-5 3/4"	4'-6"	6'-5 3/4"	2,721 SQ. IN.
TS11	4080 SNG 8080 DBL	8'-0"	10'-0"	4'-6"	6'-5 3/4"	4'-6"	6'-5 3/4"	2,721 SQ. IN.
TS12	4080 SNG 8080 DBL	12'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	1,296 SQ. IN.
TS13	4080 SNG 8080 DBL	8'-0"	11'-4"	3'-0"	4'-0"	2'-9"	4'-6"	1,296 SQ. IN.
TS14	4'-0" x 10'-0" SNG 8'-0" x 10'-0" DBL	13'-2"	11'-7"	9'-3"	9'-3"	9'-3"	9'-3"	5,268 SQ. IN.



GENERAL NOTES:

1. All doors shall be prepared for swinging, closing and latching hardware. Generally types include:

Swinging:

Butt hinges per NFPA 80

UL Listed continuous hinges

UL Listed pivots or pivot sets (single acting)

Closing:

Surface closers

Concealed closers

Track type closers

Mortise (indoor) closers

UL Listed spring hinges (single acting)

UL Listed floor closers (single acting)

Latching:

UL Listed single point latches (mortise, cylindrical, unit, hospital)

UL Listed mortise or rim fire exit devices (single doors)

UL Listed rim fire exit devices with mullion (double doors)

UL Listed mortise x vertical rod fire exit devices (double doors)

UL Listed vertical rod fire exit devices (2) (double doors)

UL Listed auxiliary-supplemental lock with primary latching

UL Listed flush or surface bolts (inactive doors)

- 2. All doors have been tested or evaluated for compliance with UL-10C (positive pressure) or UL-10B (neutral pressure) or NFPA-252.
- 3. All doors may bear smoke control marking (S-Labels) validated by installation (at jobsite) of listed gaskets.
- 4. All doors 1 3/4" thick unless noted.
- 5. Louvers cannot be used in doors rated over 1 1/2 hours or in doors having glazing, temperature rise rating or fire exit hardware. Where permitted, louvers cannot exceed 24" in width or height.
- 6. See page XX for glazing dimensions, rating, material, etc.
- 7. Chart is intended for reference only. Changes will frequently occur increasing capability or data noted.



U.L. FIRE RATED COMPOSITE DOORS

L-27 MAR 2014

1 1/2	w	1 1/2	1 1/2	1 1/2	ω.	s.	1 1/2	1 1/2	ω	3	MAX RATING	
	•	2-2				1-1	1•%			F-0	SINGLE	
			•				•				DOUBLE	
4'-0" x 8'-0"	4'-0" x 8'-0"	4'-0" x 7'-2"	4'-0" x 8'-0"	4'-0" x 10'-0"	4'-0" × 8'-0"	4'-0" x 10'-0"	4'-0" x 7'-2"	4'-0" x 8'-0"	4'-0" x 7'-2"	4'-0" x 8'-0"	MAX SIZE EACH DOOR LEAF	
•			•	•		-		•	•			Ь
•	•			•				•	•		0 18	GA.
•	•	•		•	•			•	•	٠	16	GAUGE
											14	Ц
			٠	•	٠	٠					20 18 16 14 POLYSTYRENE HONEYCOMB	
•		(•)										CORE
											STEEL STIFFENED	m
							•			(*	STIFFENED CORE BOARD FLUSH	
•	•	•	•	•	•	•	•	•	•	•	FULL FLUSH	Γ
•		٠	٠			٠	•	•		٠	SEAMLESS	
										(•)	SEAMLESS REQUIRED	AST
•		•	•				•	•			OPTION N/A	ASTRAGAL
											N/A	1
•	•	•	•	•	•		•		•			
•		•	1.0								FEH R	
•	•	•	•	•		•		•		•	MORT FEH	LATHCHING
•	•										V-ROD MORT x FEH (2) VR-FEH	NG NG
		•								1841	MORT × VR-FEH	
			34 1								LOUVER	
			•				•				LOUVER GLAZING	
							•	š	1	120	250° TEMP RISE	



U.L. FIRE RATED STEEL STIFFENED DOORS

L-28 MAR 2014

	N. 1				
1 1/2	20 MIN	1 1/2	ω	MAX RATING	
				SINGLE	
		•	•	DOUBLE	
3'-8" x 7'-2"	4'-0" x 9'-0"	4'-0" x 8'-0"	4'-0" x 8'-0"	MAX SIZE EACH DOOR LEAF	
				20	ח
2			120	18 1	GAUGE
я			1973	6 14	ř
				MAX SINGLE DOUBLE MAX SIZE EACH 20 18 16 14 POLYSTYRENE HONEYCOMB STIFFENED CORE BOARD FLUSH SEAMLESS REQUIRED OPTION N/A SINGLE RIM MORT V-ROD MORT X LOUVER GLAZING 250° TEMP RISE FULL SEAMLESS REQUIRED OPTION N/A POINT FEH FEH FEH FEH (2) VR-FEH LOUVER GLAZING RISE	
				HONEYCOMB	CORE
•	•	•	3 . V	STEEL STIFFENED	
				TEMP RISE CORE BOARD	
	•	•		FULL FLUSH	
	•	•	•	SEAMLESS	
			(■)	REQUIRED	ASTE
	•	•		OPTION	ASTRAGAL
	٠			N/A	
•	•			SINGLE RIN POINT FEH	
				MORT FEH	LATHCHING
			(=)	V-ROD FEH (2)	iNG
				MORT x VR-FEH	
				LOUVER	
ě	•			GLAZING	
				250° TEMP RISE	



L-29 MAR 2014

GLAZING IN UL FIRE DOORS

KATING	GLAZING	DOOK STILES (EXAMPLES ONLY)
ALL WITH 250° TEMP RISE	100 SQ. IN PER DOOR	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
3 HOUR	100 SQ. IN FIRE LITE	
1 1/2 HOUR	100 SQ. IN	V N2 N1 M R U U U U U U U U U U U U U U U U U U
1 HOUR	100 SQ. IN	V N2 N1 M R
1 - 1 1/2 HOUR	PILKINGTON WIRE WITH FG 3000. 522 SQ. IN. EACH UP TO 4 LITE. 12" X 46" MAX.	V N2 N1 M R G2 G3 N3 N4 N5 G
3/4 HOUR	1,296 SQ. IN. PER LITE. 54" MAX WIDTH OR HEIGHT.	V N2 N1 M R G2 G3 N3 N4 N5 G
3/4 - 1/3 HOUR (20 MIN)	PILKINGTON WIRE WITH FG 3000. 2856 SQ. IN. PER LITE. 34" WIDE OR 84" HIGH	V N2 N1 M R G2 G3 N3 N4 N5 G FG
20 MIN	ANY GLAZING. 3,289 SQ.IN. PER LITE. MAX 35 3/4" WIDE OR 92" HIGH.	V N2 N1 M R G2 G3 N3 N4 N5 G FG

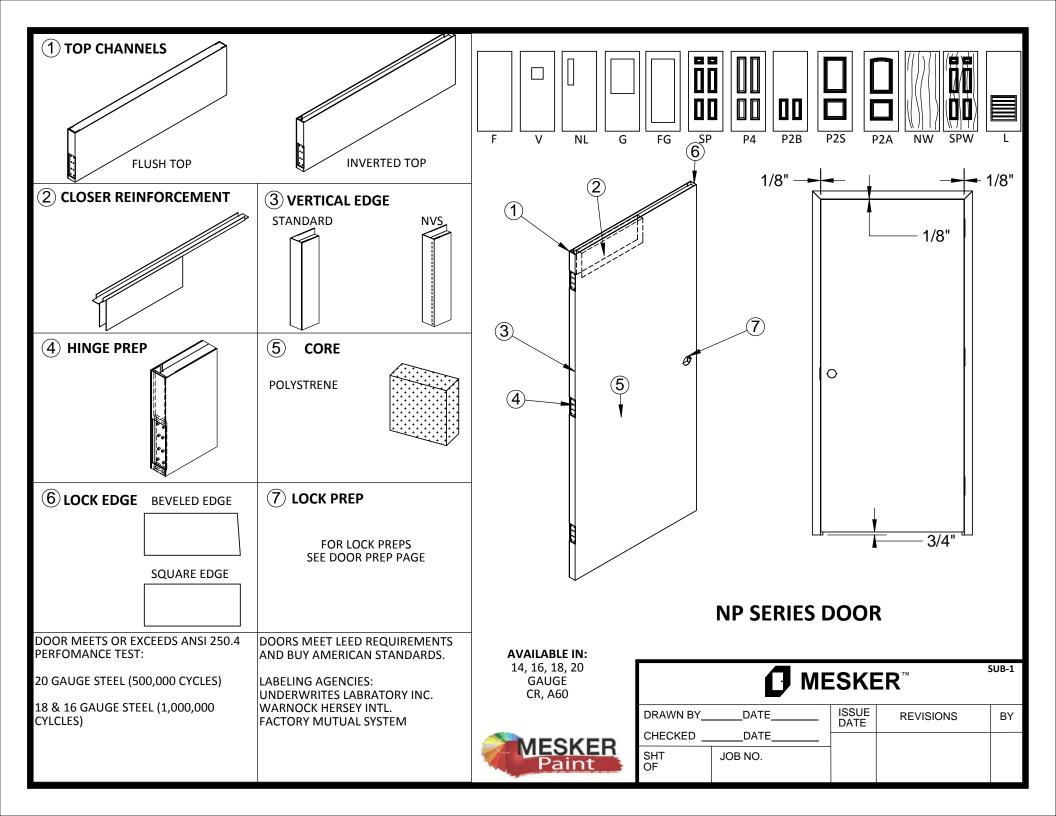
- 1. DOOR STYLE F IS PERMITTED FOR ALL HOURLY RATINGS.
- 2. STOP HEIGHT 5/8" UP TO 100 SQ. IN. EXPOSED OR WHERE LISTED GLASS IS USED IN COMBINATION WITH LISTED COMBINATIONS.

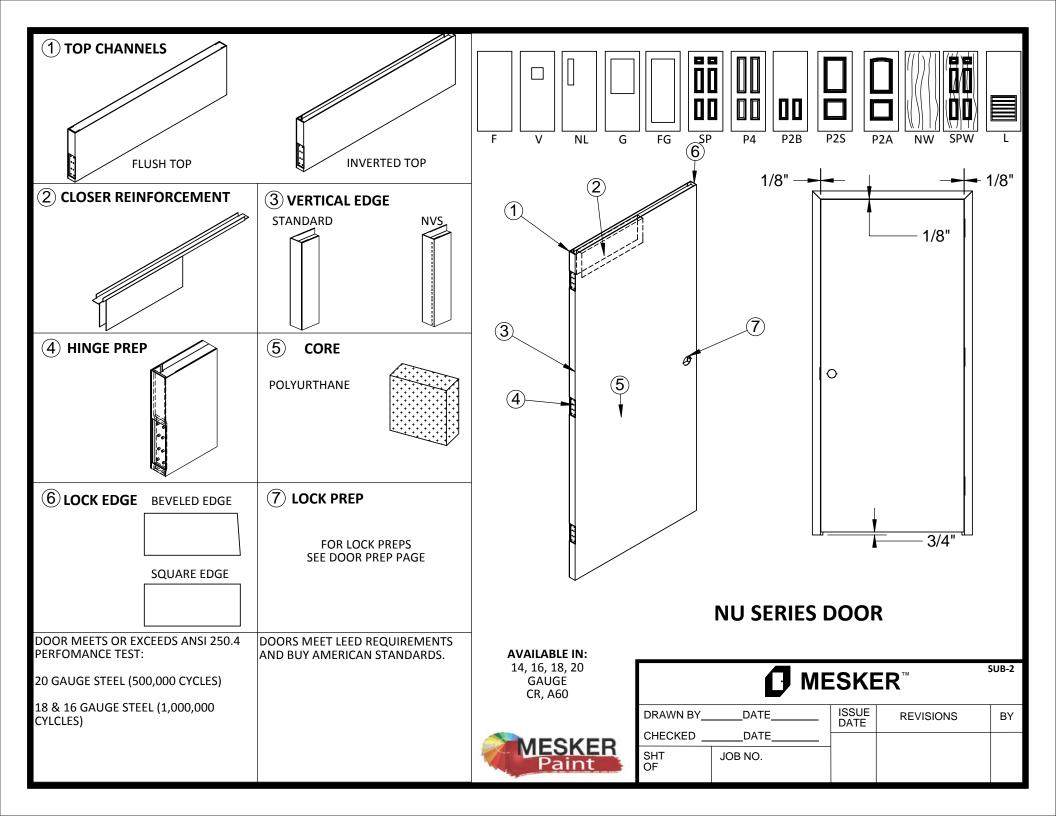


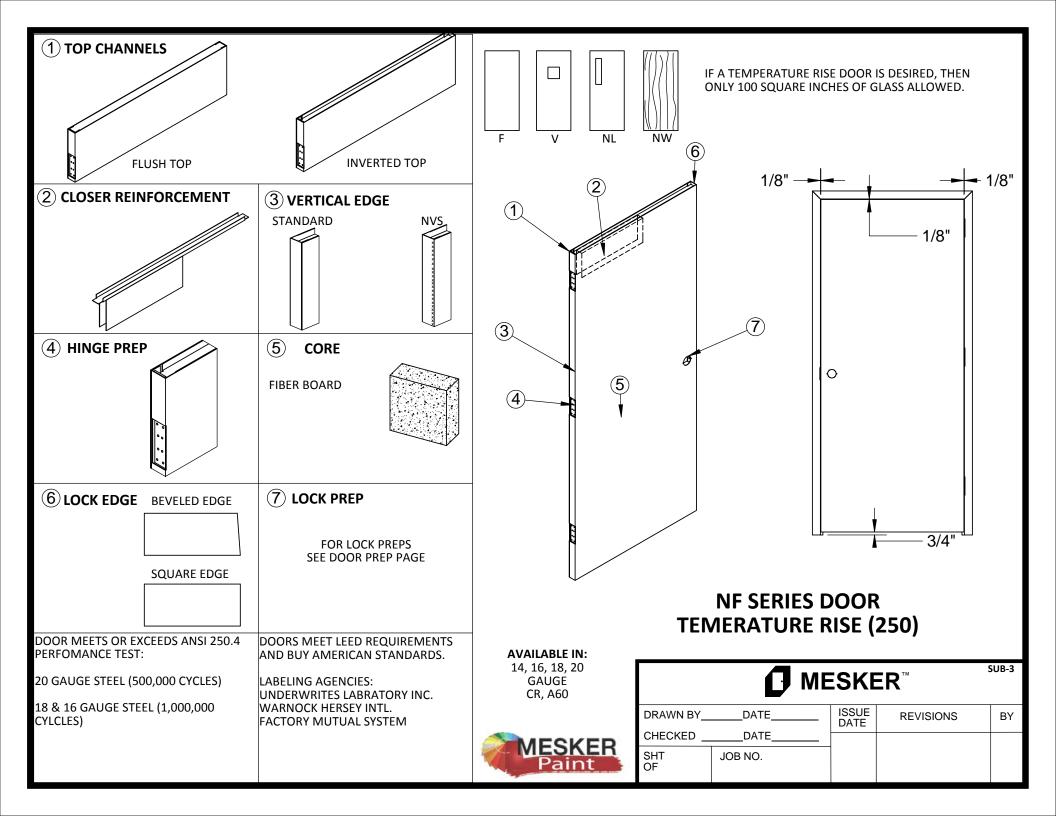
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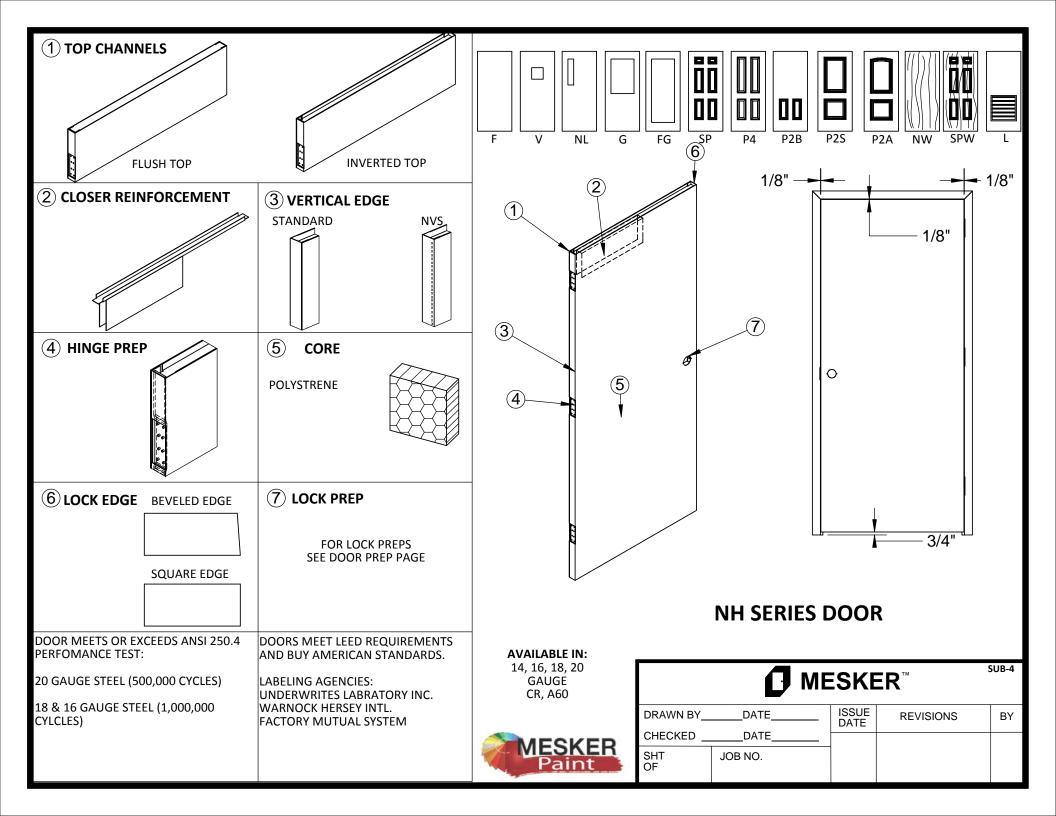
Submittals

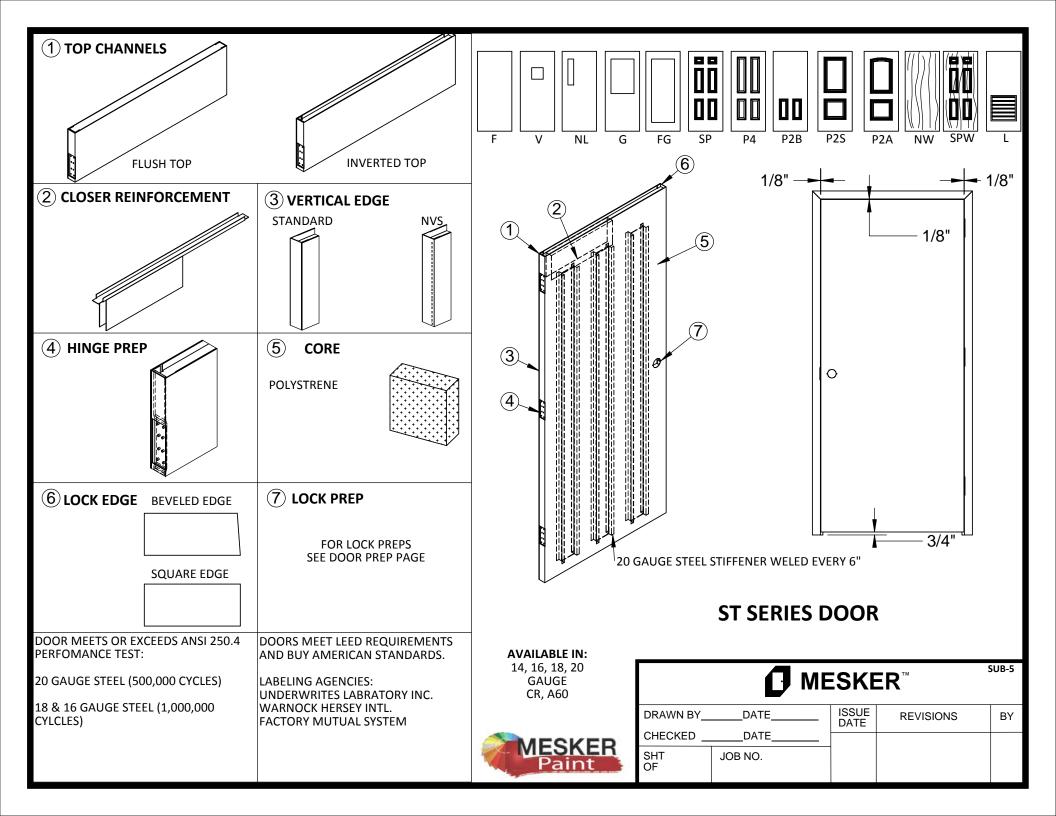
NP Doors	SUB-1
NU Doors	SUB-2
NF Doors	SUB-3
NH Doors	SUB-4
ST Doors	SUB-5
NDD Doors	SUB-6
Bullet Assembly	SUB-7
Door Preps	SUB-8
F Series	SUB-9
FDJ Series	SUB-10
FF Series	SUB-11
RF Series	SUB-12
Anchors	CLID 12

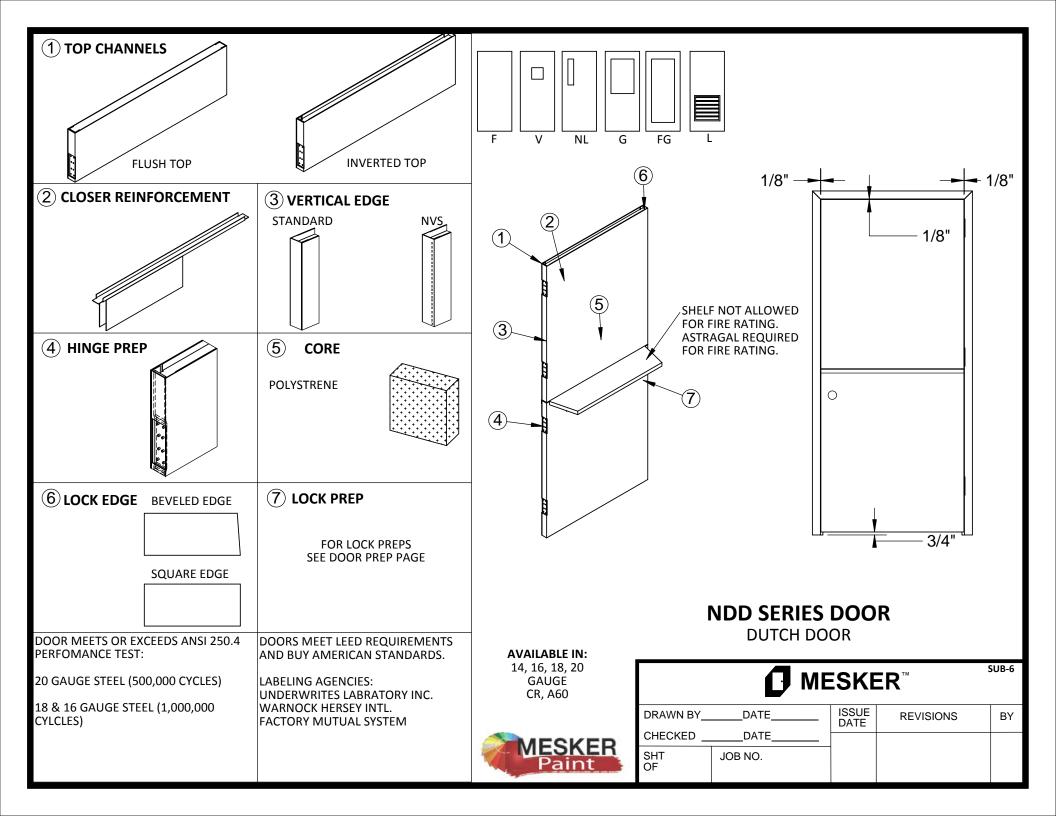


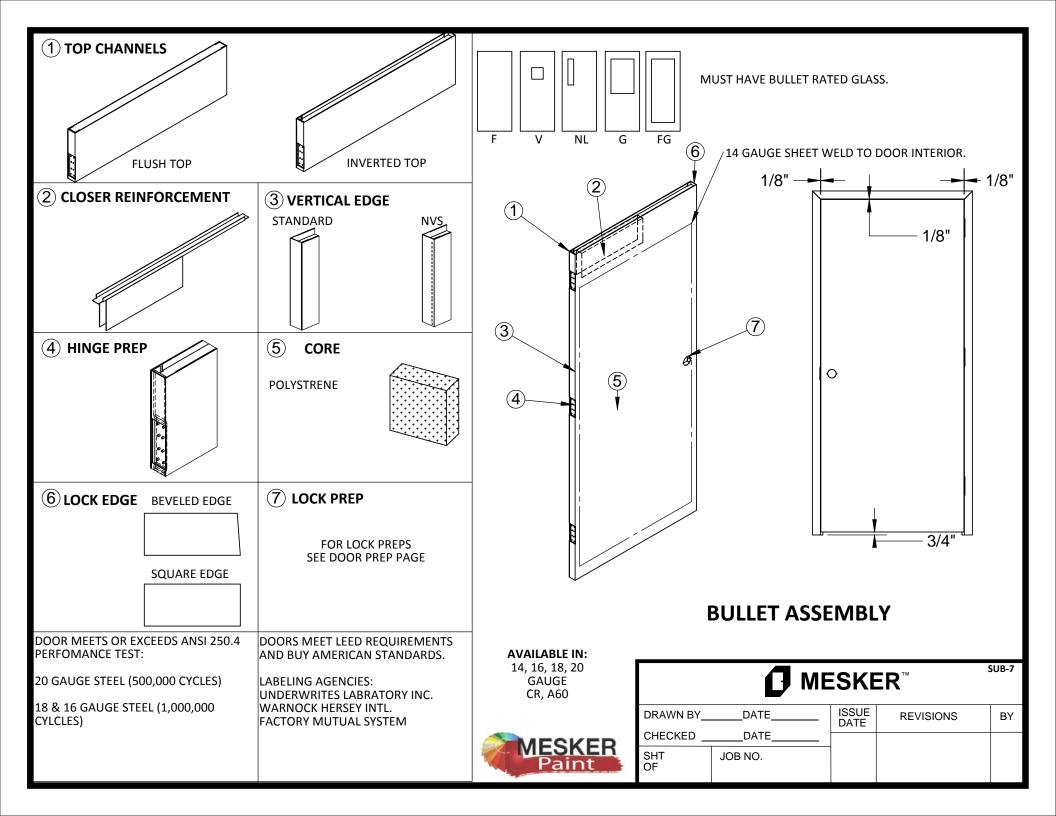


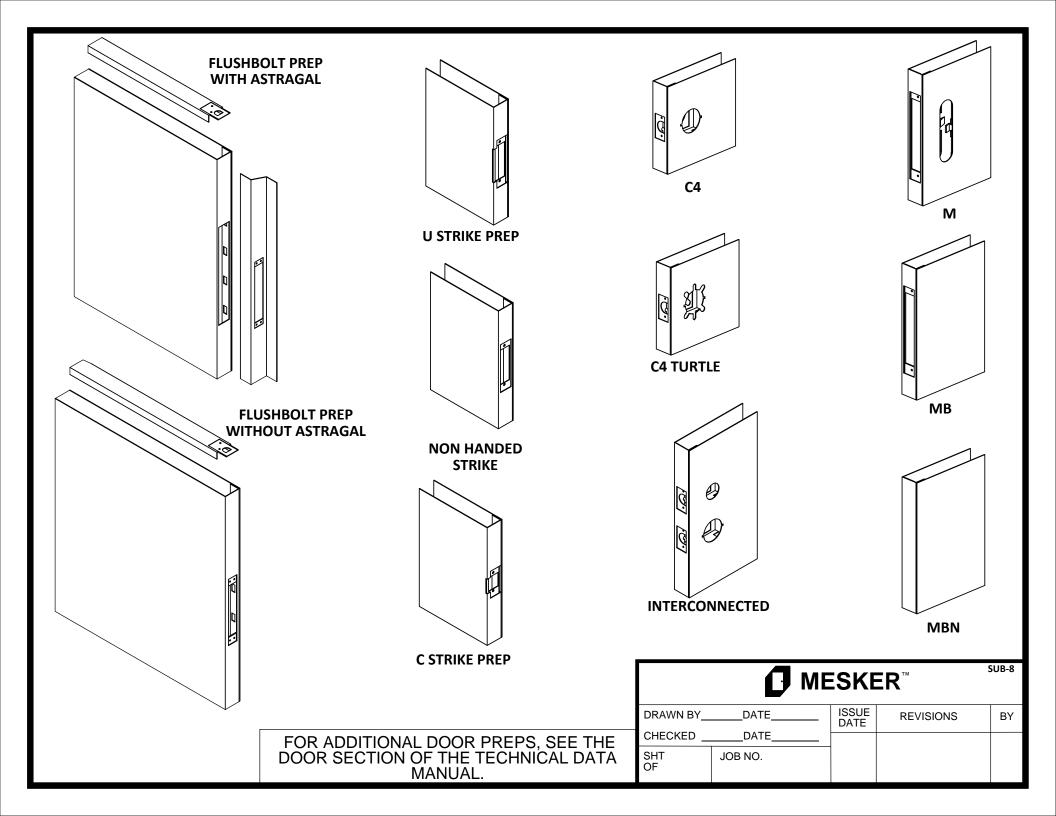


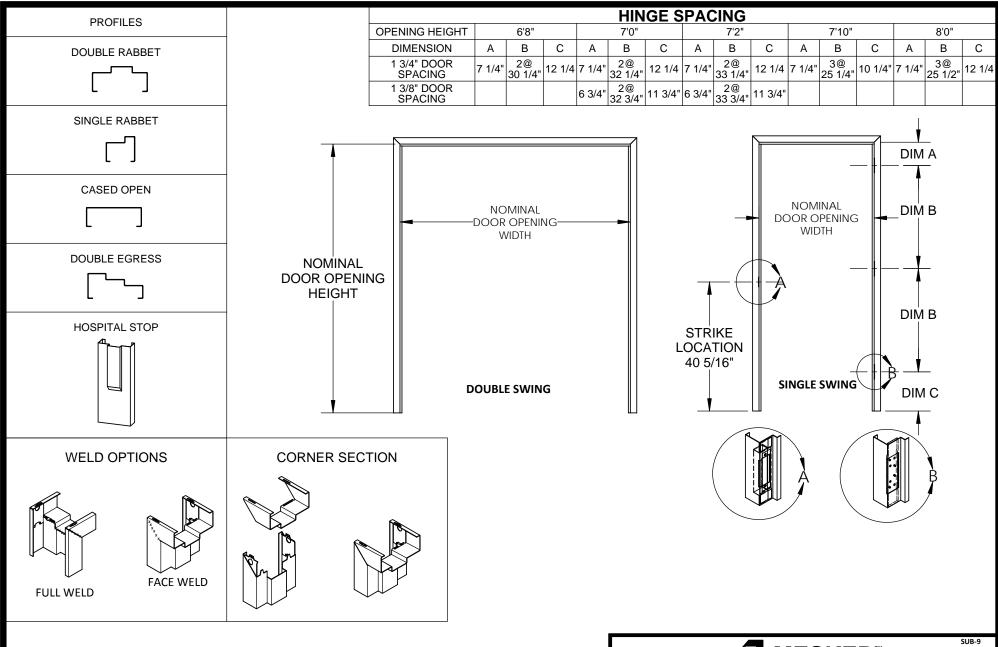








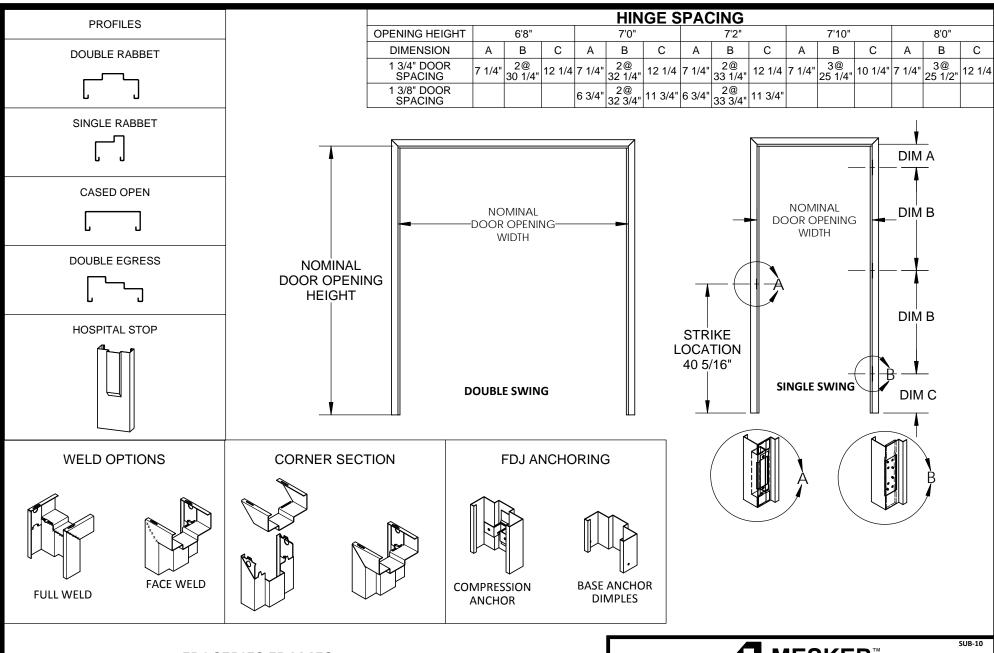




F SERIES FRAMES

F SERIES FRAMES ARE AVAILABLE AS SHOWN FOR THREE SIDED FRAMES OR AS STICK SECTIONS FOR TRANSOMS, SIDELIGHTS AND BORROWED LITE FRAMES.

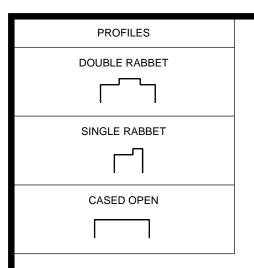
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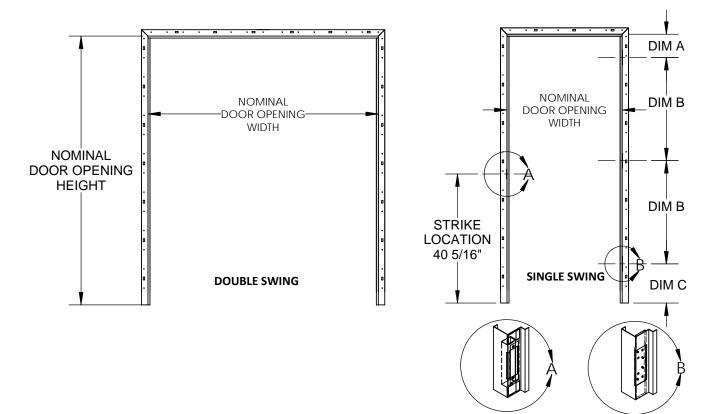
FDJ SERIES FRAMES

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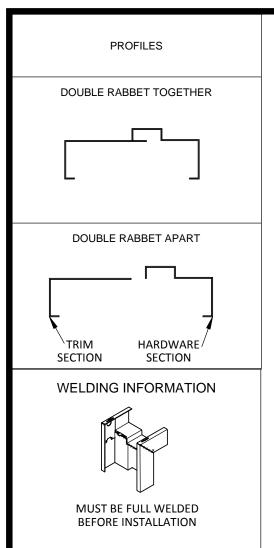
HINGE SPACING															
OPENING HEIGHT 6'8"				7'0"		7'2"		7'10"			8'0"				
DIMENSION	Α	В	С	Α	В	С	Α	В	С	Α	В	С	Α	В	С
1 3/4" DOOR SPACING	7 1/4"	2@ 30 1/4"	12 1/4	7 1/4"	2@ 32 1/4"	12 1/4	7 1/4"	2@ 33 1/4"	12 1/4	7 1/4"	3@ 25 1/4"	10 1/4"	7 1/4"	3@ 25 1/2"	12 1/4
1 3/8" DOOR SPACING				6 3/4"	2@ 32 3/4"	11 3/4"	6 3/4"	2@ 33 3/4"	11 3/4"						



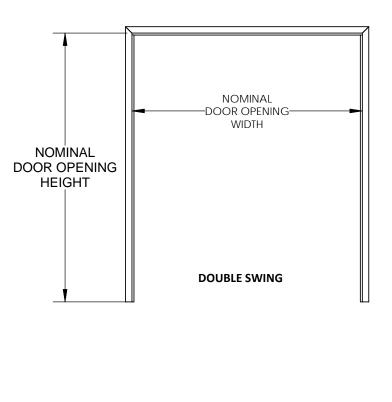
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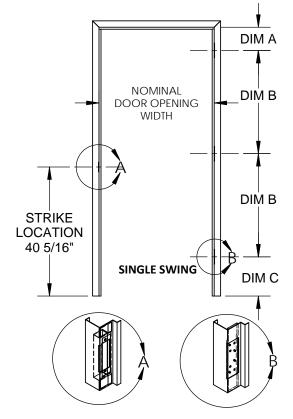
FF SERIES FRAMES ARE AVAILABLE AS SHOWN FOR THREE SIDED FRAMES OR AS STICK SECTIONS FOR TRANSOMS, SIDELIGHTS AND BORROWED LITE FRAMES.

	ER™	SUB-11		
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HINGE SPACING															
OPENING HEIGHT 6'8"				7'0"			7'2"			7'10"			8'0"		
DIMENSION	Α	В	С	Α	В	С	Α	В	С	Α	В	С	Α	В	С
1 3/4" DOOR SPACING	7 1/4"	2@ 30 1/4"	12 1/4	7 1/4"	2@ 32 1/4"	12 1/4	7 1/4"	2@ 33 1/4"	12 1/4	7 1/4"	3@ 25 1/4"	10 1/4"	7 1/4"	3@ 25 1/2"	12 1/4
1 3/8" DOOR SPACING				6 3/4"	2@ 32 3/4"	11 3/4"	6 3/4"	2@ 33 3/4"	11 3/4"						

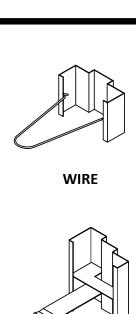




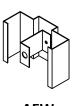
RF SERIES FRAMES

RF SERIES FRAMES ARE AVAILABLE AS SHOWN FOR THREE SIDED FRAMES OR AS STICK SECTIONS FOR TRANSOMS, SIDELIGHTS AND BORROWED LITE FRAMES.

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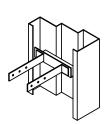
TUBE



ADJUSTABLE FLOOR



ZEE



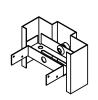
DOUBLE EGRESS **MULTI PURPOSE**



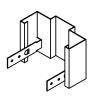
FLOOR



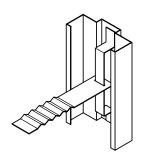
SINGLE FLOOR



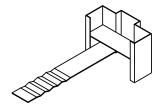
UNA

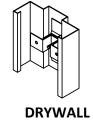


DRYWALL OPTION



STRAP







MULLION

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