



### SECTION 01 - DOORS, GENERAL

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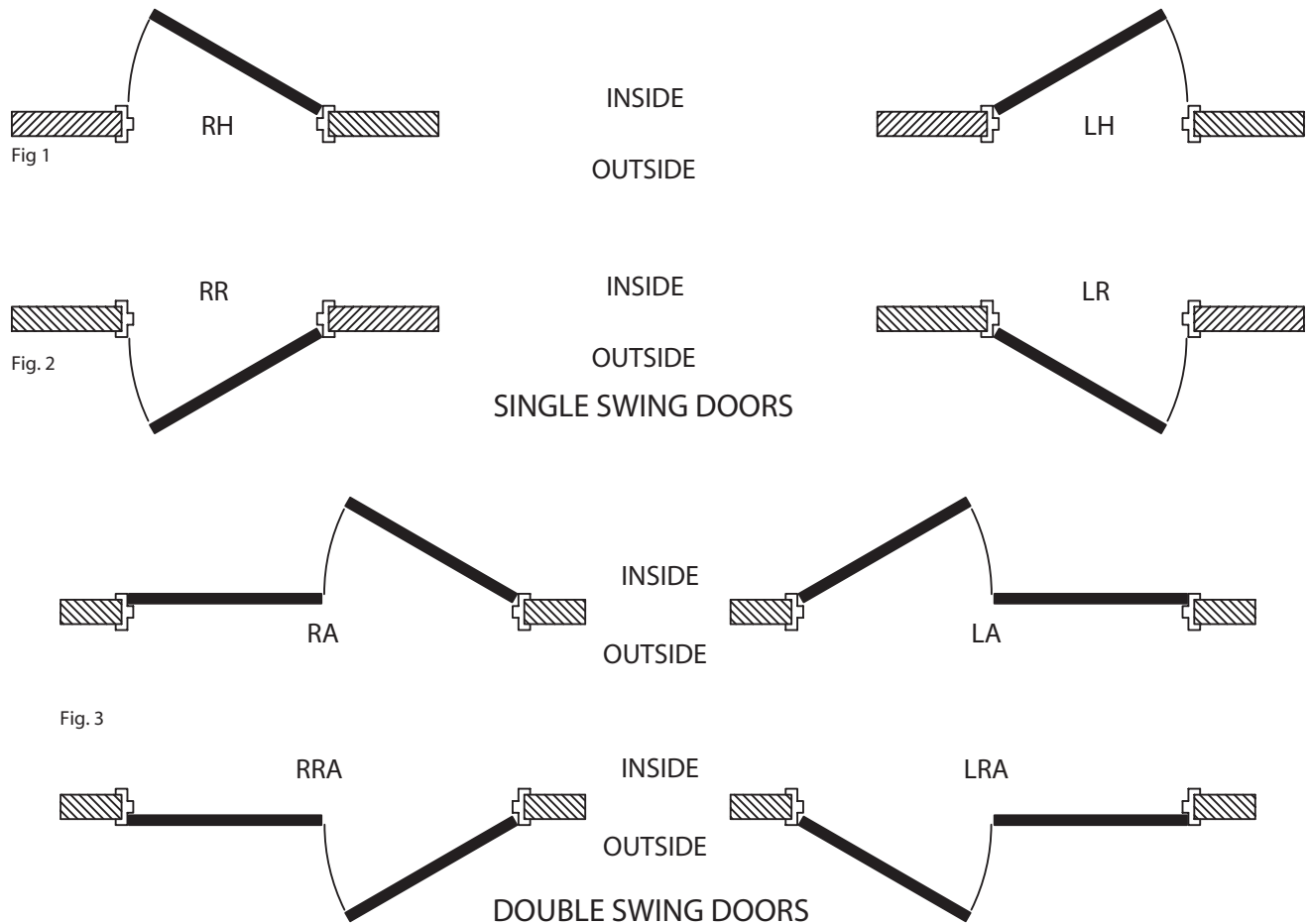
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## Distributor Tech Data

### Hand and Swing Diagrams



"RH" AND "LH" SYMBOLS INDICATE "SWING-IN" OPERATION FOR SINGLE AND DOUBLE DOORS, SEE FIG. 1.  
 "RR" AND "LR" SYMBOLS INDICATE REVERSE BEVEL (SWING-OUT) OPERATION FOR SINGLE AND DOUBLE DOORS, SEE FIG. 2.  
 THE HAND AND SWING SYMBOLS FOR DOUBLE SWING DOORS ARE SUFFIXED WITH "A" TO INDICATE THE ACTIVE LEAF, SEE FIG. 3.  
 THE SYMBOLS BA AND BRA DENOTE THAT BOTH LEAVES ARE ACTIVE.

### HANDING GUIDELINES



Fig. 4

NON-HANDED DOORS, SUCH AS OMEGA, VERSADOOR & ULTRA, ARE PRODUCED WITH A "LH" (LEFT-HAND) HINGE EDGE WHICH IS THEN CONVERTED TO A "CUT-THRU" OR NON-HANDED PREPARATION. THE RESULTING SKIN ORIENTATION IS DEPICTED IN FIG. 4.

### NON-HANDED DOOR FACE SHEET ORIENTATION



# Distributor Tech Data

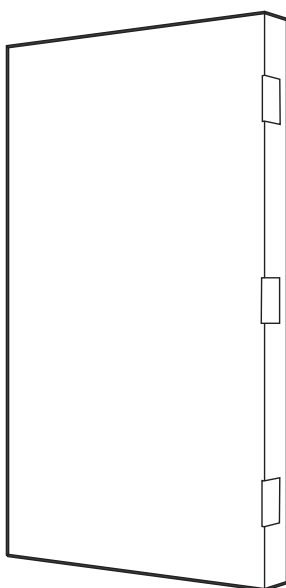
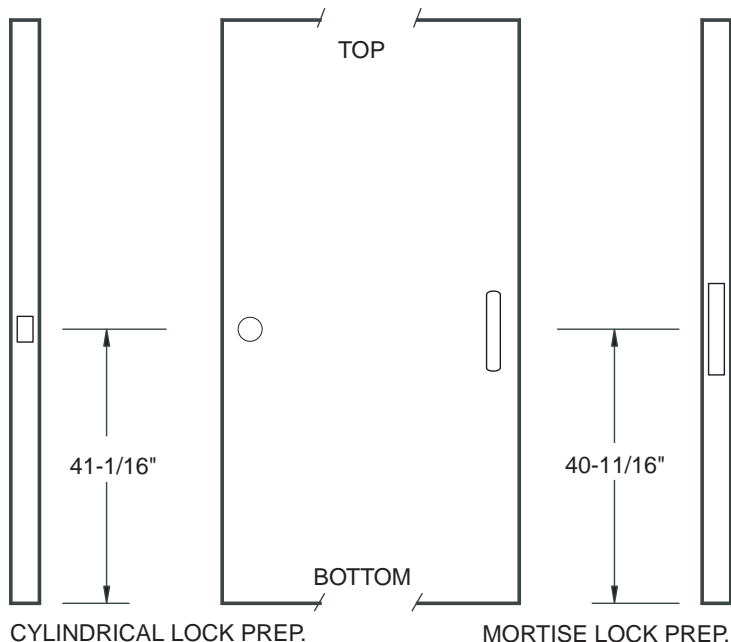
## Determining Hand of Door

To determine the hand of a Regent, Imperial, Legion or Medallion door, use the following procedure:

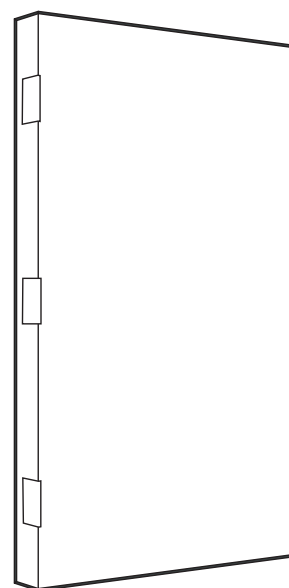
1. First, determine the door bottom by measuring the distance from the center line of the lock edge cutout to the bottom of the door as shown in the illustration at right.

2. Stand the door up with the bottom on the floor and face the hinge edge. If the hinge cutouts project to the left, the door is left handed. If the hinge cutouts project to the right, the door is right handed.

**Note: Omega, Versadoor and Ultra are not handed.**



LEFT HAND  
(LH-RHR)



RIGHT HAND  
(RH-LHR)

## DOOR PERFORMANCE CHARACTERISTICS

CECO DOOR TYPE	SOUND TRANSMISSION CLASS	INSULATION PROPERTIES	PHYSICAL ENDURANCE
	STC RATING	CALCULATED "R" FACTOR (ASTM C518)	OPEN/CLOSE CYCLES
<b>REGENT OMEGA</b>	32	NA	2 MILLION (CLASS A)
<b>LEGION ULTRA</b>	23	6.35	1 MILLION (CLASS A)
<b>IMPERIAL VERSADOOR</b>	26	11.01	2 MILLION (CLASS A)
<b>MEDALLION</b>	38	NA	2 MILLION (CLASS A)
<b>MEDALLION 450° F</b>	40	NA	1 MILLION (CLASS A)
<b>THRU LITE</b>	29	NA	1 MILLION (CLASS A)
<b>FUEGO 250° F</b>	33	NA	1 MILLION (CLASS A)

The higher the number  
the better the sound  
deadening

The higher the number the  
better the resistance to  
heat transmission

Level A – 1 Million  
Level B – 500,000  
Level C – 250,000

### General Notes:

1. Thru Lite ratings reflect 1/4" tempered glass used (Not insulated glazing).
2. Except for 450 degree temperature rise and Thru Lite, STC ratings are based on 18 gage face sheets.
3. Insulation values for Imperial/Versadoor and Legion/Ultra reflect the door core.



# Distributor Tech Data

DISTRIBUTOR TECH DATA

## Steel Door Institute Classifications ANSI/SDI A250.8-2003

Revision and redesignation of ANSI/SDI 100

LEVEL	MODEL	DESIGN	THICKNESS	MM	NOMINAL GAGE(1)	CECO DOOR	
1	1	Full Flush	0.032	0.8	20	Regent Omega Legion UltraDor	Imperial Versadoor Fuego Madera Stainless-Tech
	2	Seamless	0.032	0.8	20	Regent Omega Legion UltraDor	Imperial Versadoor Fuego Stainless-Tech
2	1	Full Flush	0.042	1.0	18	Regent Omega Legion UltraDor	Imperial Versadoor Fuego Madera Stainless-Tech
	2	Seamless	0.042	1.0	18	Regent Omega Legion UltraDor Marine-Tech	Imperial Versadoor Medallion Medallion 450 Fuego Stainless-Tech
3	1	Full Flush	0.053	1.3	16	Regent Omega Legion UltraDor	Imperial Versadoor Fuego Madera Stainless-Tech
	2	Seamless	0.053	1.3	16	Regent Omega Legion UltraDor Imperial Versadoor	Medallion Medallion 450 Fuego Marine-Tech Stainless-Tech Armorshield
	3	Stile & Rail	0.053	1.3	16	ThruLite	
4	1	Full Flush	0.067	1.7	14	Imperial Versadoor Fuego	
	2	Seamless	0.067	1.7	14	Imperial Imperial MAXIM Versadoor Medallion Medallion MAXIM	Fuego StormPro 361 StormPro 320 Armorshield RestrictDor
Commercial Security Product		Seamless	0.093	2.3	12	RestrictDor	

(1) Used for reference only

## Ceco Door Prime Paint Data

### PROCESS DATA

Prior to assembly, the door skins are processed through a washer to clean and pre-treat the steel. This treatment removes mill-contaminants, and provides excellent primer adhesion and under-film corrosion protection.

After the wash, the door skins are dried and then painted with a neutral-color primer. Application is by means of a spray painting system. After application, the primer is oven dried.

The primer coating provides protection against rust and exhibits excellent adhesion characteristics. It is an environmentally friendly water-base paint that contains no heavy metal pigments and meets air quality guidelines. The primer coating is intended as a preparatory base for necessary field painting.

**Standard primer color: Gray**

### PERFORMANCE DATA:

Prime painted steel surfaces have been subjected to the following tests:

**Salt Spray:** Test specimens were subjected to 120 continuous hours of salt spray, in compliance with ASTM B117-94, "Method of Salt Spray (Fog) Testing". The test specimens were scribed with an "X" per ASTM D1654-92, sections 4.1 and 5.1.

**Humidity:** Test specimens were subjected to humidity (condensation) testing for a period of 240 continuous hours, at a minimum temperature of 100° Fahrenheit, as specified in ASTM D4585-92, "Standard Practice for Testing Water Resistance of Coating Using Controlled Condensation.

**Impact:** At a room temperature of 70° to 75° Fahrenheit, test specimens were subjected to a direct impact of 20 inch pounds using the Gardner Impact Tester with a 1/2" diameter ball. Following the test, a strip of 3/4" wide #600 Scotch® cellophane tape was applied to the impact area and pulled off sharply. Test was conducted in compliance with ASTM D2794-93, "Standard Test Method of Organic Coatings to the Effects of Rapid Deformation (Impact).

**Film Adhesion:** The prime paint on test specimens was subjected to a cross cut test utilizing 11 parallel cuts located 1mm apart, made by a sharp instrument. Cuts were made both vertically and horizontally to form a grid. A strip of 1" wide pressure sensitive tape was applied to the scribed surface and removed rapidly. Paint adhesion was tested in compliance with test protocol "B" as defined by ASTM D3359-95a, "Standard Test Method for Measuring Adhesion by Tape Test".

**Ceco's prime paint finish meets the requirements for acceptance in conformance with ANSI Standard A250.10, Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces".**



**FIELD PAINTING:**

A finish coat of paint is to be applied to prime painted units by the painting contractor. The topcoat of paint used over the primer plays a very important role in extending the life of a steel door. Any paint used must be compatible with steel. Solvent base finish paints are recommended for application over the factory applied primer. If solvent base finish paints cannot be used, it is important that a water-base primer formulated for steel be applied over the factory primer. This should be done before applying water-base top coats, to prevent flash rusting.

**GLOSS:**

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

**PROCESS DATA**

Factory-applied Colorstyle finish is a two-part, urethane top-coat that is electrostatically applied over the standard primer. The paint is then oven cured.

The chemically reactive cure provides a top quality, abrasion resistant finish with excellent weathering characteristics. This finish is environmentally friendly in that it does not contain heavy metal pigments. Colorstyle doors are enveloped in protective plastic bags and wrapped in cardboard. Plastic bags should not be removed until final building cleanup.

60° Gardner Gloss: 15 to 20.

Colors: **Over 1,900 colors available.** Color selectors available upon request.

**PERFORMANCE DATA:**

Colorstyle, finish paint process has been subjected to the following tests:

Salt Spray  
Humidity  
Accelerated Weathering  
Impact  
Film Adhesion  
Abrasion

Factory applied Colorstyle finish paint meets the performance requirements and acceptance criteria as stated in ANSI Standard A250.3, **"Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces ..."**.

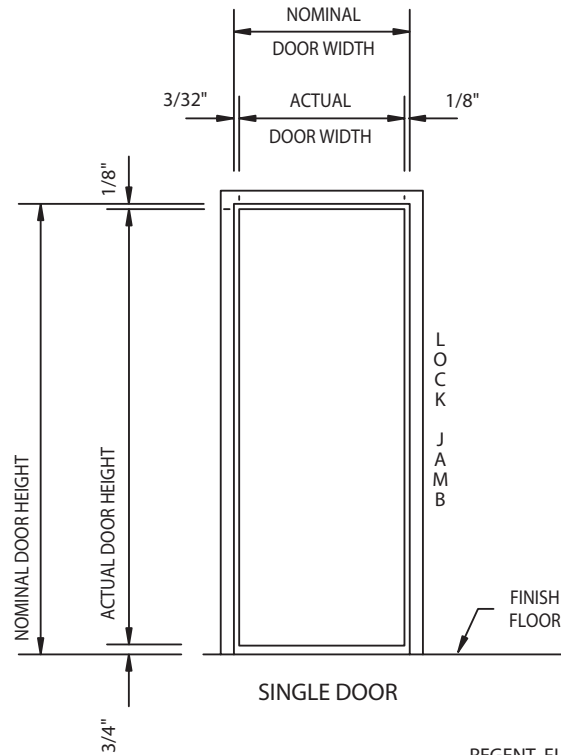
## Fraction/Decimal/Metric Chart

### FRACTION - DECIMAL - METRIC EQUIVALENCY CHART

FRACTION	DECIMAL	mm	FRACTION	DECIMAL	mm
1/64	0.015625	0.3969	33/64	0.515625	13.0969
1/32	0.03125	0.7938	17/32	0.53125	13.4938
3/64	0.046875	1.1906	35/64	0.546875	13.8906
1/16	0.0625	1.5875	9/16	0.5625	14.2875
5/64	0.078125	1.9844	37/64	0.578125	14.6844
3/32	0.09375	2.3813	19/32	0.59375	15.0813
7/64	0.109375	2.7781	39/64	0.609375	15.4781
1/8	0.125	3.1750	5/8	0.625	15.8750
9/64	0.140625	3.5719	41/64	0.640625	16.2719
5/32	0.15625	3.9688	21/32	0.65625	16.6688
11/64	0.171875	4.3656	43/64	0.671875	17.0656
3/16	0.1875	4.7625	11/16	0.6875	17.4625
13/64	0.203125	5.1594	45/64	0.703125	17.8594
7/32	0.21875	5.5563	23/32	0.71875	18.2563
15/64	0.234375	5.9531	47/64	0.734375	18.6531
1/4	0.25	6.3500	3/4	0.75	19.0500
17/64	0.265625	6.7469	49/64	0.765625	19.4469
9/32	0.28125	7.1438	25/32	0.78125	19.8438
19/64	0.296875	7.5406	51/64	0.796875	20.2406
5/16	0.3125	7.9375	13/16	0.8125	20.6375
21/64	0.328125	8.3344	53/64	0.828125	21.0344
11/32	0.34375	8.7313	27/32	0.84375	21.4313
23/64	0.359375	9.1281	55/64	0.859375	21.8281
3/8	0.375	9.5250	7/8	0.875	22.2250
25/64	0.390625	9.9219	57/64	0.890625	22.6219
13/32	0.40625	10.3188	29/32	0.90625	23.0188
27/64	0.421875	10.7156	59/64	0.921875	23.4156
7/16	0.4375	11.1125	15/16	0.9375	23.8125
29/64	0.453125	11.5094	61/64	0.953125	24.2094
15/32	0.46875	11.9063	31/32	0.96875	24.6063
31/64	0.484375	12.3031	63/64	0.984375	25.0031
1/2	0.5	12.7000	1	1	25.4000

## Distributor Tech Data

### Door Sizes, Single Swing, Handed



REGENT, FUEGO, IMPERIAL, LEGION, MEDALLION, THRULITE<sup>2</sup>

STANDARD SIZES, HANDED SINGLE SWING DOORS								
NOMINAL HEIGHT		6-8	7-0	7-2	7-10	8-0	9-0	10-0
ACTUAL HEIGHT		79-1/8"	83-1/8"	85-1/8"	93-1/8"	95-1/8"	107-1/8"	119-1/8"
NOMINAL WIDTH	ACTUAL WIDTH							
2-0	23-25/32"	o	o	o	o	o	o	
2-4	27-25/32"	o	o	o	o	o	o	
2-6	29-25/32"	o	o	o	o	o	o	
2-8	31-25/32"	o	o	o	o	o	o	
2-10	33-25/32"	o	o	o	o	o	o	
3-0	35-25/32"	o	o	o	o	o	o	o
3-4	39-25/32"	o	o	o	o	o	o	o
3-6	41-25/32"	o	o	o	o	o	o	o
3-8	43-25/32"	o	o	o	o	o	o	o
3-10	45-25/32"	o	o	o	o	o	o	o
4-0	47-25/32"	o	o	o	o	o	o	o
5-0	59-25/32"	o	o	o	o	o	o	o

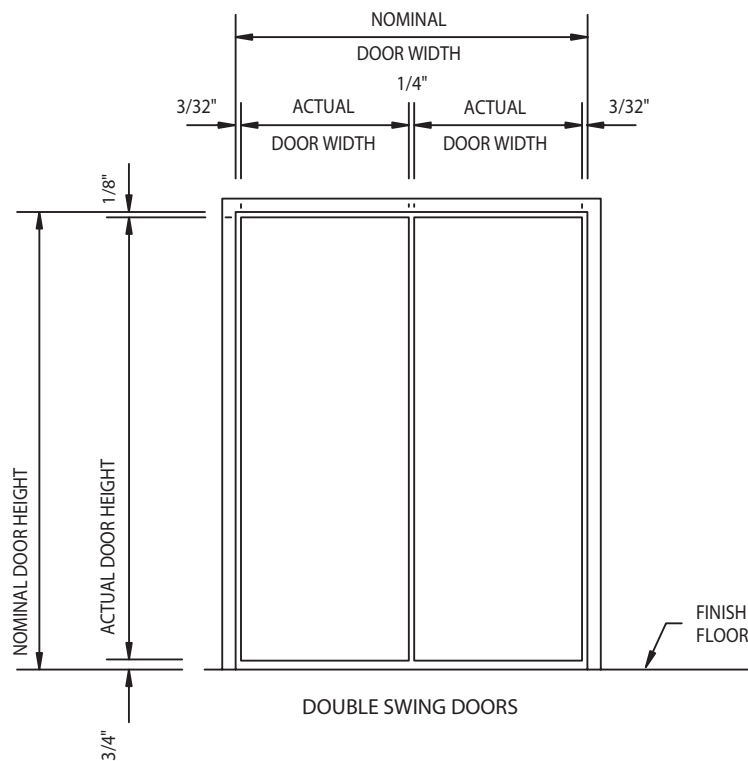
<sup>1</sup> 10-0 heights, 5-0 widths are Medallion doors only

<sup>2</sup> ThruLite: min. width 2-6, max. height 8-0

o Indicates factory standard sizes.

## Distributor Tech Data

### Door Sizes, Double Swing, Handed



REGENT, FUEGO, IMPERIAL, LEGION, MEDALLION<sup>1</sup>, THRU<sup>2</sup>LITE

STANDARD SIZES, HANDED DOUBLE SWING DOORS								
NOMINAL HEIGHT		6-8	7-0	7-2	7-10	8-0	9-0	10-0
ACTUAL HEIGHT		79-1/8"	83-1/8"	85-1/8"	93-1/8"	95-1/8"	107-1/8"	119-1/8"
NOMINAL WIDTH	ACTUAL WIDTH							
4-0	(2) 23-25/32"	o	o	o	o	o	o	
4-8	(2) 27-25/32"	o	o	o	o	o	o	
5-0	(2) 29-25/32"	o	o	o	o	o	o	
5-4	(2) 31-25/32"	o	o	o	o	o	o	
5-8	(2) 33-25/32"	o	o	o	o	o	o	
6-0	(2) 35-25/32"	o	o	o	o	o	o	o
6-8	(2) 39-25/32"	o	o	o	o	o	o	o
7-0	(2) 41-25/32"	o	o	o	o	o	o	o
7-4	(2) 43-25/32"	o	o	o	o	o	o	o
7-8	(2) 45-25/32"	o	o	o	o	o	o	o
8-0	(2) 47-25/32"	o	o	o	o	o	o	o
10-0	(2) 59-25/32"	o	o	o	o	o	o	o

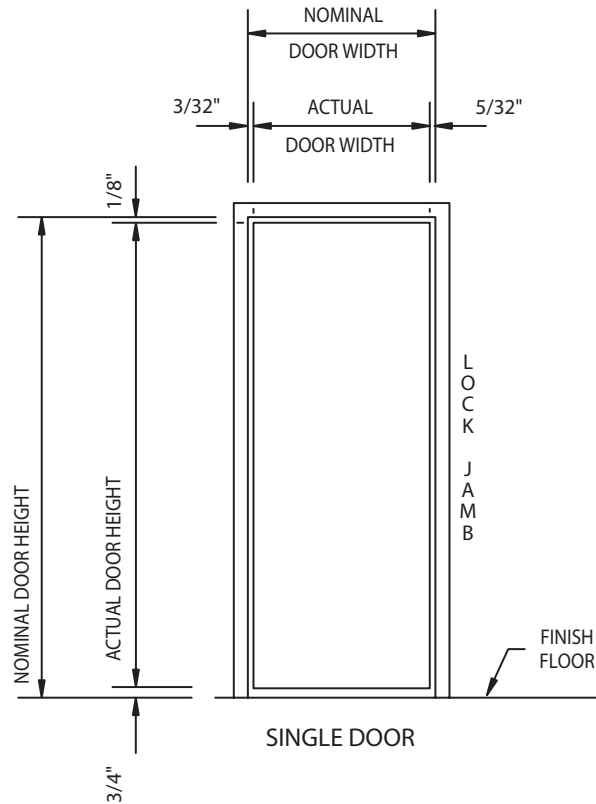
<sup>1</sup> 10-0 heights, 5-0 widths are Medallion doors only

o Indicates factory standard sizes.

<sup>2</sup> ThruLite: min. width pairs (2) 2-6, max. height 8-0

## Distributor Tech Data

### Door Sizes, Single Swing, Non-Handed



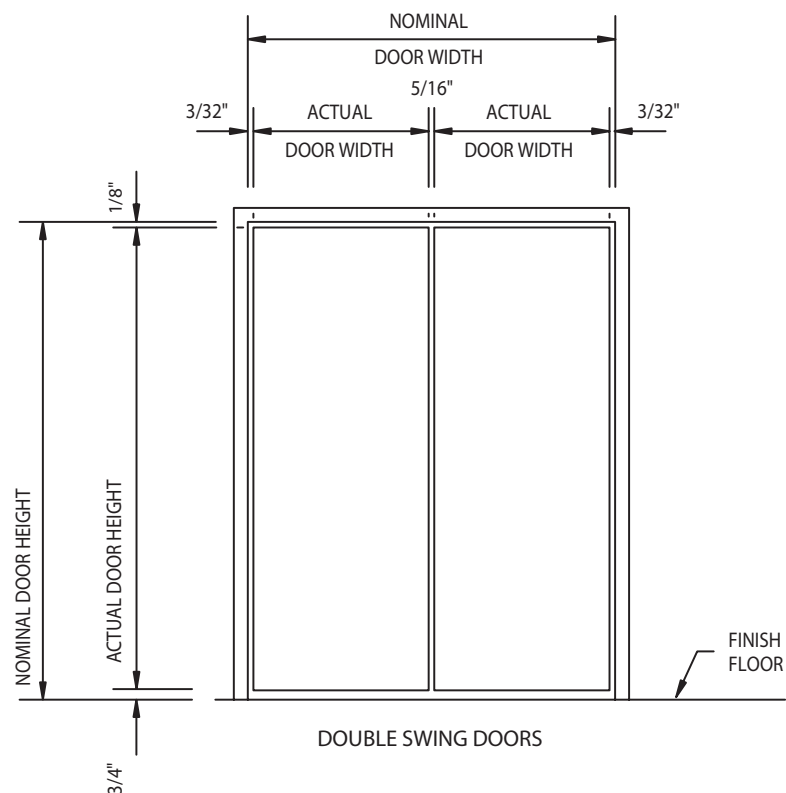
OMEGA, VERSADOOR, ULTRADOR

STANDARD SIZES, NON-HANDED SINGLE SWING DOORS							
NOMINAL HEIGHT		6-8	7-0	7-2	7-10	8-0	9-0
ACTUAL HEIGHT		79-1/8"	83-1/8"	85-1/8"	93-1/8"	95-1/8"	107-1/8"
NOMINAL WIDTH	ACTUAL WIDTH						
2-0	23-3/4"	o	o	o	o	o	o
2-4	27-3/4"	o	o	o	o	o	o
2-6	29-3/4"	o	o	o	o	o	o
2-8	31-3/4"	o	o	o	o	o	o
2-10	33-3/4"	o	o	o	o	o	o
3-0	35-3/4"	o	o	o	o	o	o
3-4	39-3/4"	o	o	o	o	o	o
3-6	41-3/4"	o	o	o	o	o	o
3-8	43-3/4"	o	o	o	o	o	o
3-10	45-3/4"	o	o	o	o	o	o
4-0	47-3/4"	o	o	o	o	o	o

o Indicates factory standard sizes.

## Distributor Tech Data

### Door Sizes, Double Swing, Non-Handed



OMEGA, VERSADOOR, ULTRADOR

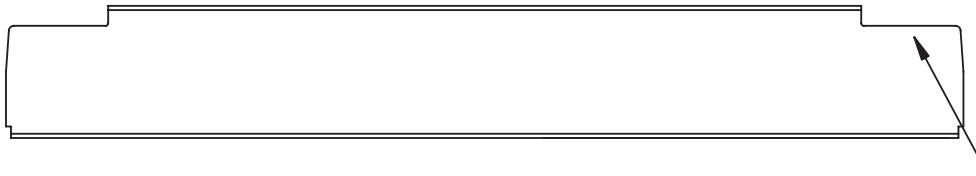
STANDARD SIZES, NON-HANDED DOUBLE SWING DOORS							
NOMINAL HEIGHT		6-8	7-0	7-2	7-10	8-0	9-0
ACTUAL HEIGHT		79-1/8"	83-1/8"	85-1/8"	93-1/8"	95-1/8"	107-1/8"
NOMINAL WIDTH	ACTUAL WIDTH						
4-0	(2) 23-3/4"	○	○	○	○	○	○
4-8	(2) 27-3/4"	○	○	○	○	○	○
5-0	(2) 29-3/4"	○	○	○	○	○	○
5-4	(2) 31-3/4"	○	○	○	○	○	○
5-8	(2) 33-3/4"	○	○	○	○	○	○
6-0	(2) 35-3/4"	○	○	○	○	○	○
6-8	(2) 39-3/4"	○	○	○	○	○	○
7-0	(2) 41-3/4"	○	○	○	○	○	○
7-4	(2) 43-3/4"	○	○	○	○	○	○
7-8	(2) 45-3/4"	○	○	○	○	○	○
8-0	(2) 47-3/4"	○	○	○	○	○	○

○ Indicates factory standard sizes.

# Distributor Tech Data

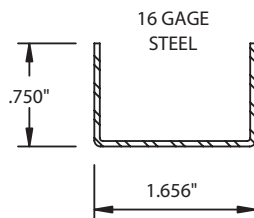
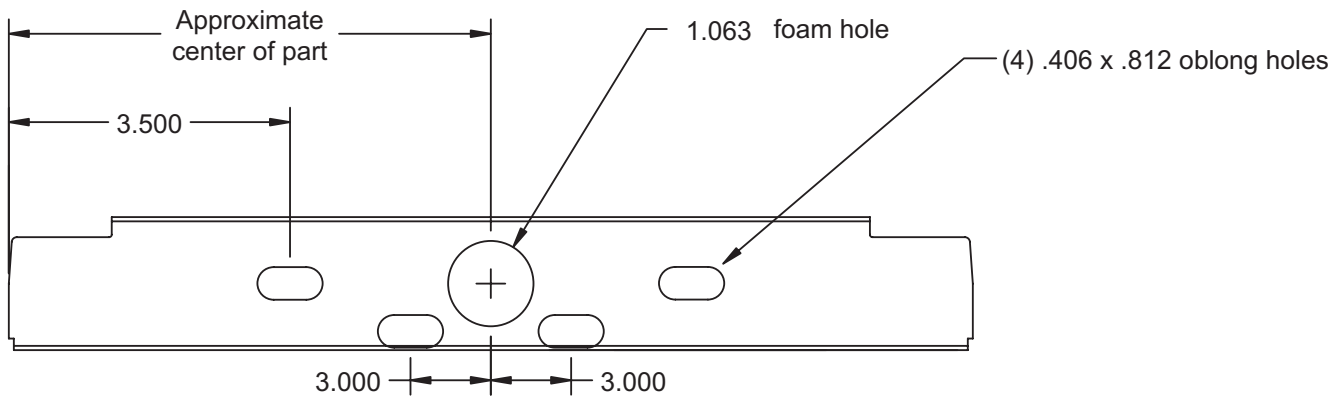
## Construction Features: Top and Bottom Channel

### TOP CHANNEL

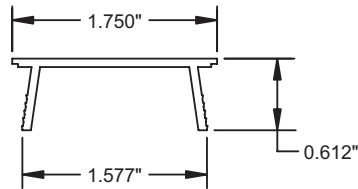


LEGS ARE NOTCHED TO CLEAR  
MECHANICAL INTERLOCK, TOP-  
SKIN SIDE ONLY

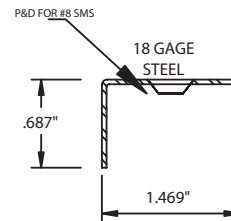
### BOTTOM CHANNEL



SECTION THRU  
END CHANNEL



SECTION THRU  
OPTIONAL CAP (VINYL)

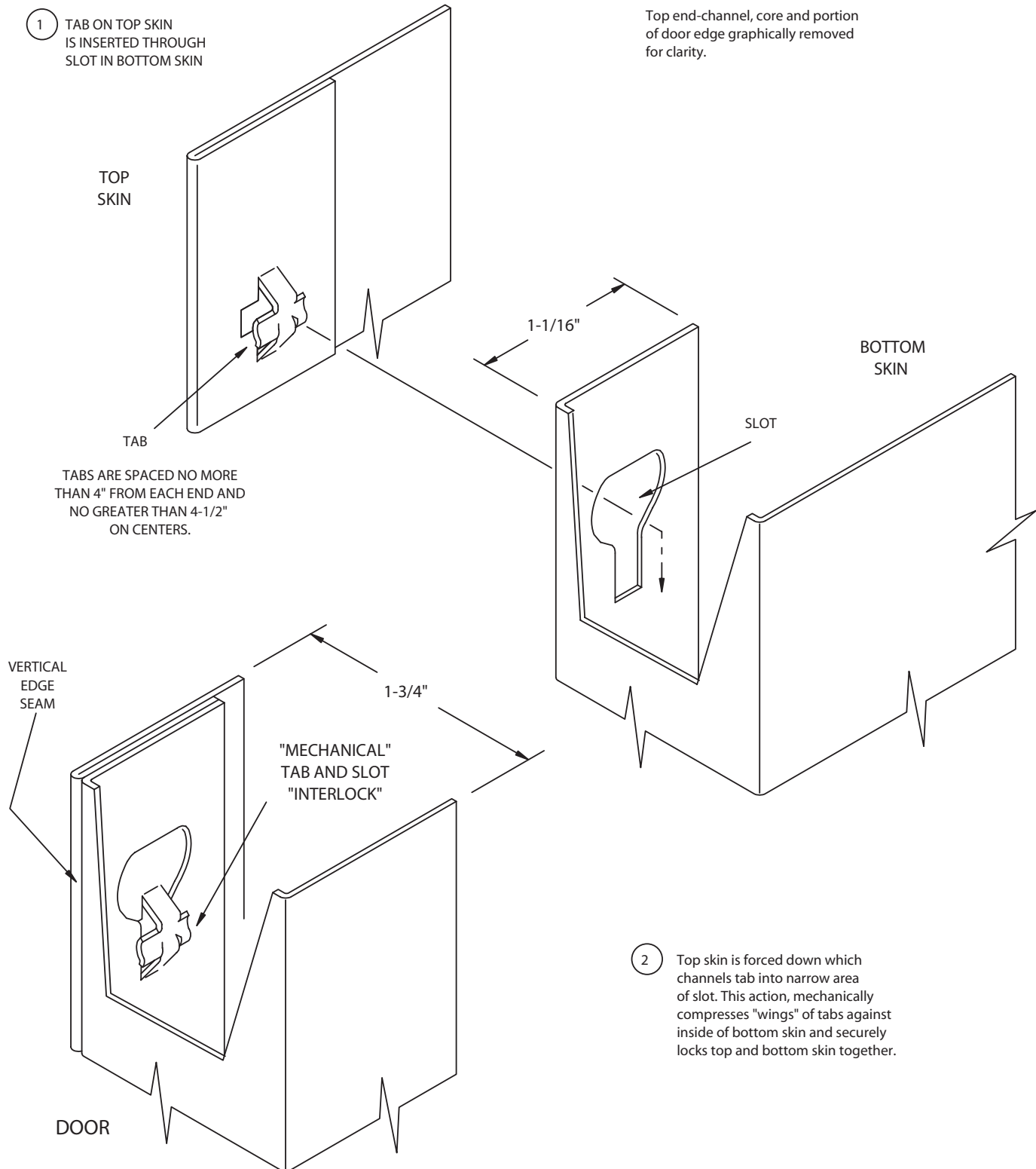


SECTION THRU  
OPTIONAL CAP (STEEL)

Standard end-channels are installed inverted.  
As an option, end caps are also  
available to create flush end channels.

## Distributor Tech Data

### Construction Features: Mechanical Interlock







# Distributor Tech Data

## Construction Features:

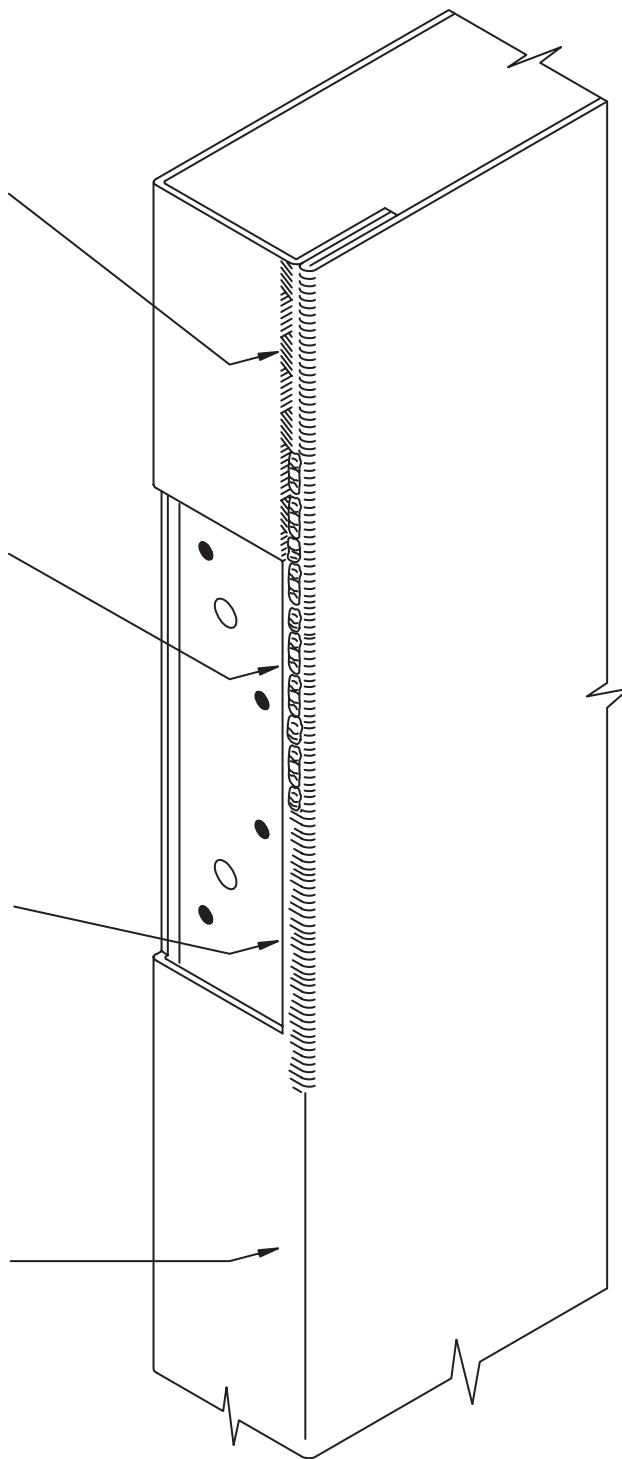
### Seamless Vertical Edges Epoxy-Filled (Optional)

STEP #1  
HINGE AND LOCK EDGE SEAMS  
ARE SANDED TO EXPOSE BARE  
METAL.

STEP #2  
BONDO FILLER IS APPLIED CONTIN-  
UOUSLY TO FILL BARE METAL SEAMS  
AND ALLOWED TO HARDEN.

STEP #3  
SEAM IS SANDED SMOOTH AND FLUSH  
WITH EDGE OF DOOR.

STEP #4  
ALL MARRED SURFACES ARE  
"DRESSED" AND REPAINTED

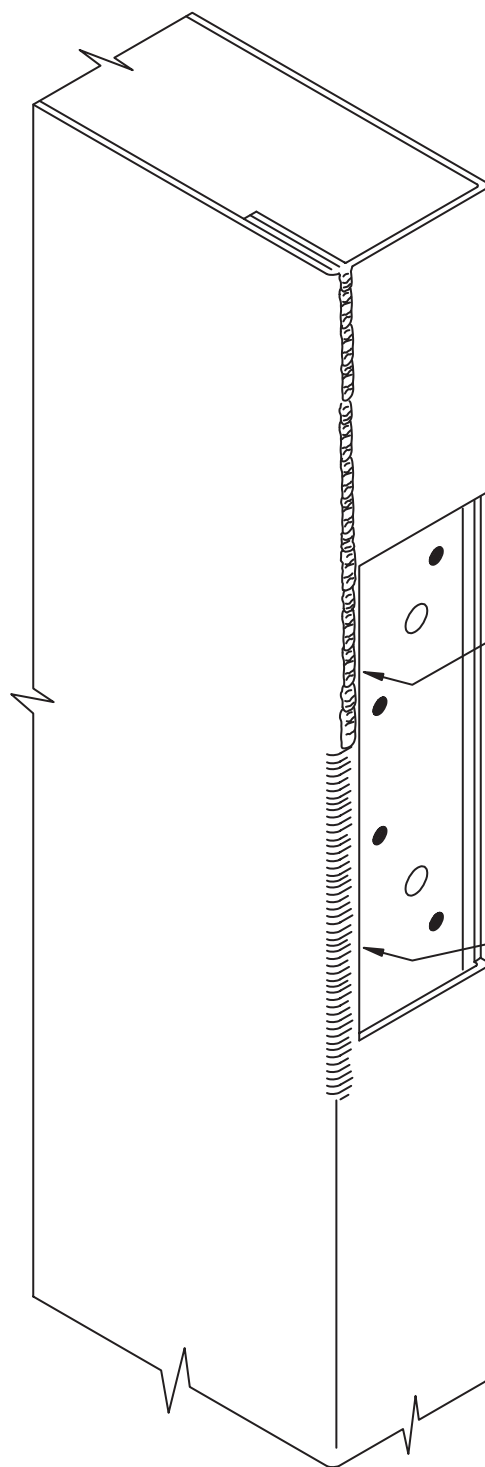


Note: Not available with  
textured steel skins.

**Only available from Service Centers**

# Distributor Tech Data

## Construction Features: Seamless Vertical Edges Welded (Optional)



STEP #1  
THIS WELDING PROCESS  
IS PERFORMED BEST BEFORE  
DOOR IS PAINTED. IF PAINT  
IS PRESENT IT SHOULD BE  
REMOVED FROM AREAS THAT  
WILL BE WELDED.  
DOOR IS THEN WASHED.

STEP #2  
VERTICAL EDGE SEAMS ARE  
ARC WELDED -- WELDING  
EXTENDS THE FULL HEIGHT  
OF DOOR.

STEP #3  
WELDED SEAM IS GROUND,  
FILLED AS NECESSARY AND  
DRESSED SMOOTH TO MAKE  
SEAM INVISIBLE AND TO  
PROVIDE A SMOOTH, FLUSH  
EDGE SURFACE.

STEP #4  
DOOR ASSEMBLY IS GIVEN ONE  
COAT OF STANDARD PRIME PAINT.

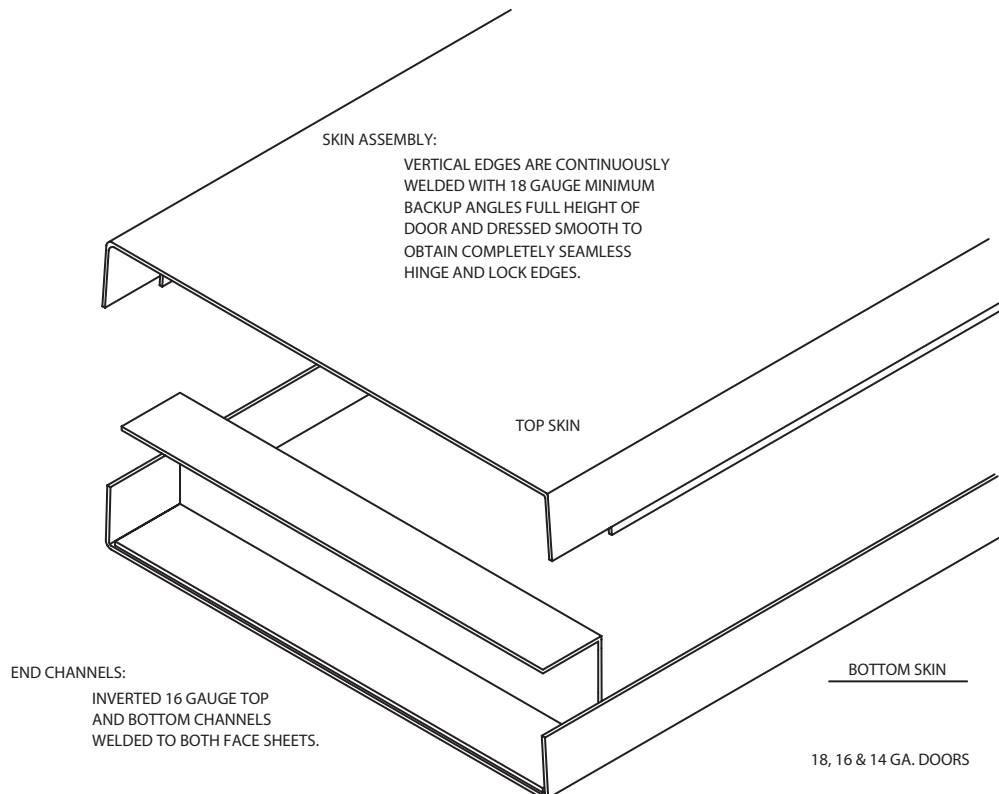
Note: Not available with  
textured steel skins.

## Distributor Tech Data

### Construction Features: Alternate Edge Construction (Center Seam)

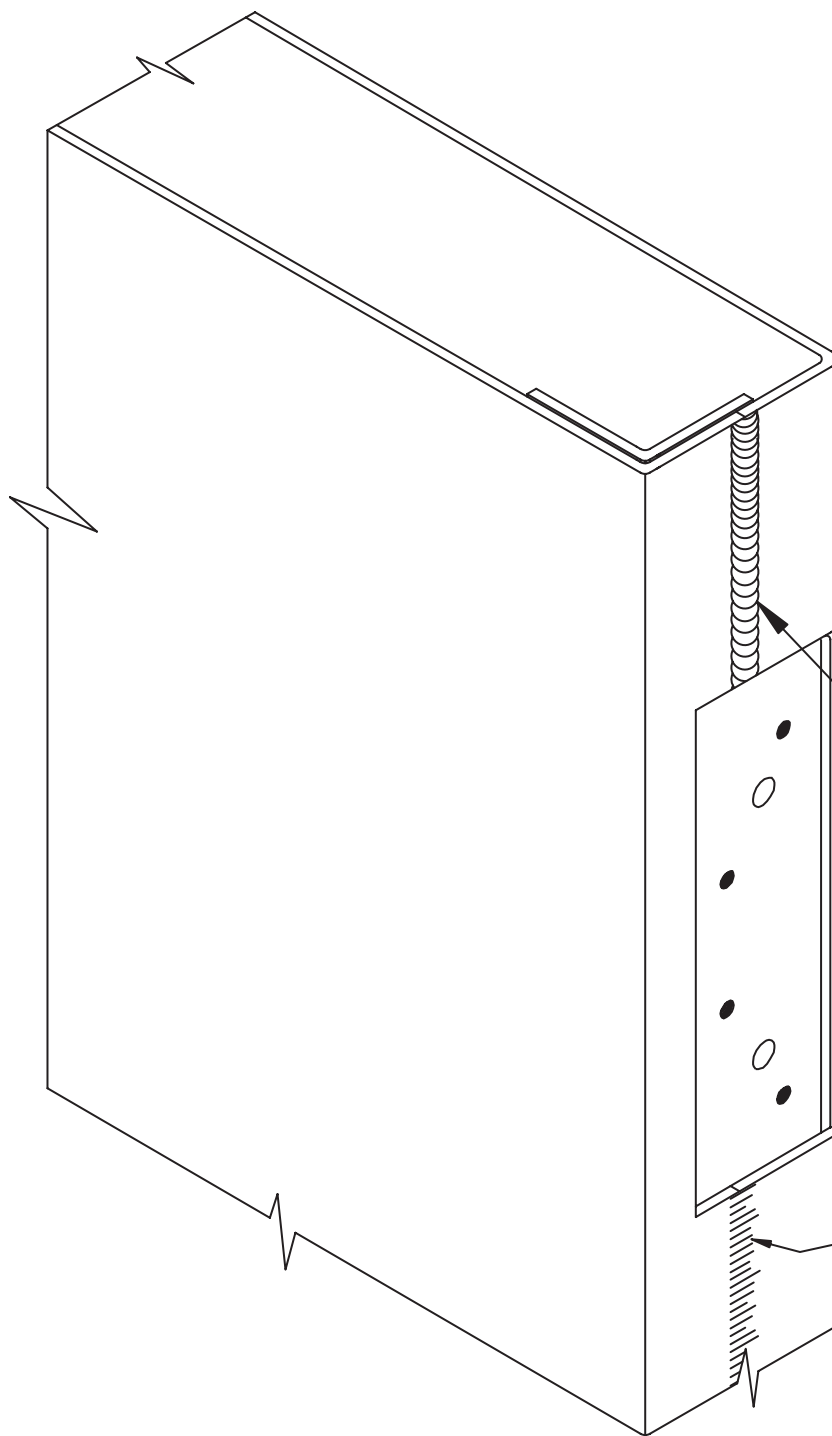


LOCK AND HINGE EDGES ARE BEVELED  $1/8"$  IN  $2"$  (1:16).



# Distributor Tech Data

## Construction Features: Alternate Seamless Vertical Edge



STEP #1  
THIS WELDING PROCESS  
IS PERFORMED BEST BEFORE  
DOOR IS PAINTED. IF PAINT  
IS PRESENT IT SHOULD BE  
REMOVED FROM AREAS THAT  
WILL BE WELDED.  
DOOR IS THEN WASHED.

STEP #2  
VERTICAL EDGE SEAMS ARE  
ARC WELDED -- WELDING  
EXTENDS THE FULL HEIGHT  
OF DOOR.

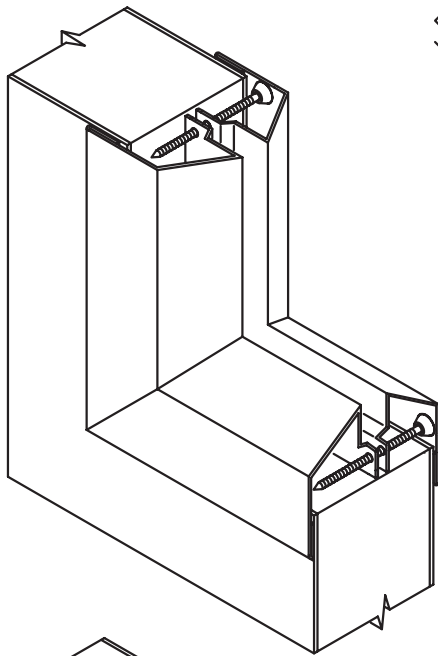
STEP #3  
WELDED SEAM IS GROUND,  
FILLED AS NECESSARY AND  
DRESSED SMOOTH TO MAKE  
SEAM INVISIBLE AND TO  
PROVIDE A SMOOTH, FLUSH  
EDGE SURFACE.

STEP #4  
DOOR ASSEMBLY IS GIVEN ONE  
COAT OF STANDARD PRIME PAINT.

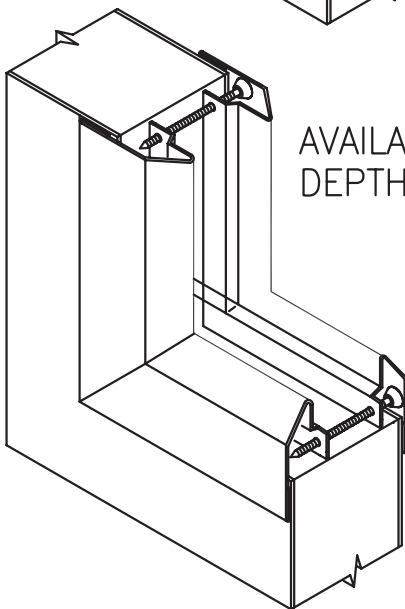
Note: Not available with  
textured steel skins.

## Distributor Tech Data

### Slim Trim Corner Detail

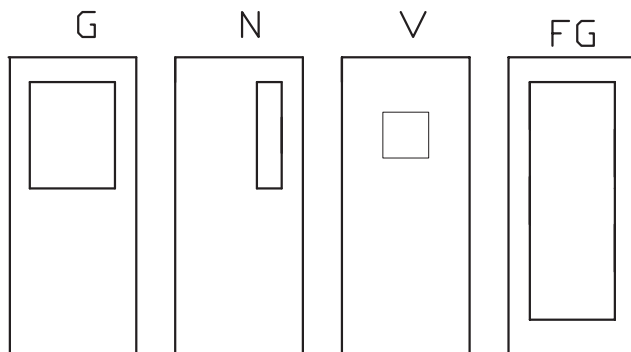
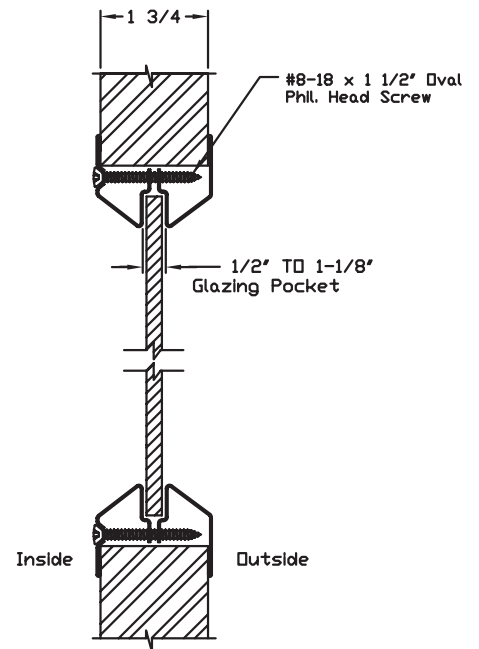
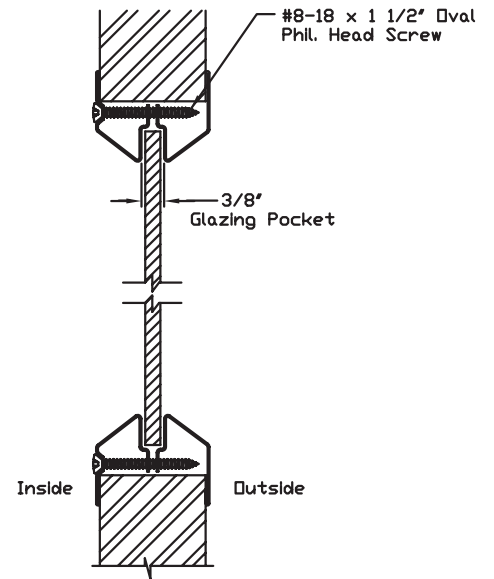


SLIM



SLIS

AVAILABLE IN POCKET  
DEPTH UP TO 1" GLASS



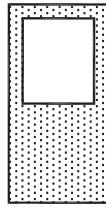
### Standard Product Features

- \* The vision frame is 20 GA
- \* Finish grey primer
- \* Door thickness for 1 3/4" only
- \* Glass not included

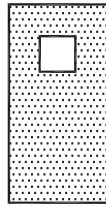


UNDERWRITERS LABORATORIES INC.<sup>®</sup>  
LISTED

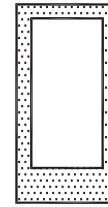
## Glass Size Chart



HALF GLASS



VISION LITES



FULL GLASS\*

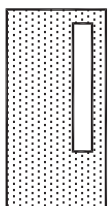
DOOR WIDTH	HALF GLASS		VISION LITES			FULL GLASS*	
	VISIBLE GLASS WIDTH	CUTOUT WIDTH	VISIBLE GLASS WIDTH	CUTOUT WIDTH		VISIBLE GLASS WIDTH	CUTOUT WIDTH
2'-0"	10"	12"	10"	12"		10"	12"
2'-4"	14"	16"				14"	16"
2'-6"	16"	18"				16"	18"
2'-8"	18"	20"				18"	20"
2'-10"	20"	22"				20"	22"
3'-0"	22"	24"				22"	24"
3'-4"	26"	28"				26"	28"
3'-6"	28"	30"				28"	30"
3'-8"	30"	32"				30"	32"
3'-10"	32"	34"				32"	34"
4'-0"	34"	36"				34"	36"

DOOR HEIGHT	VISIBLE GLASS HEIGHT	CUTOUT HEIGHT	VISIBLE GLASS HEIGHT	CUTOUT HEIGHT	DOOR HEIGHT	VISIBLE GLASS HEIGHT	CUTOUT HEIGHT
6'–8"	24"	26"	10"	12"	6'–8"	60"	62"
7'–0"	28"	30"			7'–0"	64"	66"
7'–2", 7'–10", 8'0" 9'–0", 10'–0"	30"	32"			7'–2"	66"	68"
					7'–10"	74"	76"
					8'–0"	76"	78"
					9'–0" 10'–0"	78"	80"

FORMULA: ACTUAL GLASS SIZE = CUTOUT - 1 1/4"

ALL SIZES SHOWN ARE APPROXIMATE.

\*CECO PROVIDES MIN 10" BOTTOM RAIL TO MEET ADA REQUIREMENTS



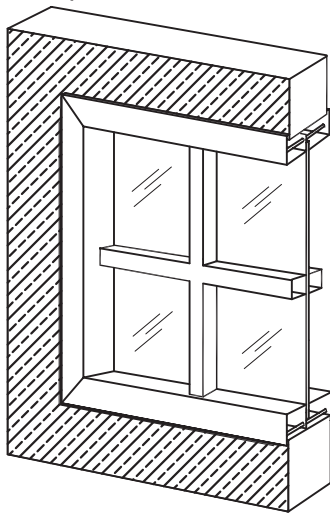
NARROW LITE

			6" WIDE NARROW LITES			8" WIDE NARROW LITES		
NOMINAL OPENING SIZE	VISIBLE GLASS W x H	ACTUAL CUTOUT W x H	NOMINAL OPENING SIZE	VISIBLE GLASS W x H	ACTUAL CUTOUT W x H	NOMINAL OPENING SIZE	VISIBLE GLASS W x H	ACTUAL CUTOUT W x H
3 x 33	3 x 33	5 x 35	6 x 36	6 x 36	8 x 38	8 x 36	8 x 36	10 x 38
4 x 25	4 x 25	6 x 27	6 x 40	6 x 40	8 x 42	8 x 40	8 x 40	10 x 42
5 x 20	5 x 20	7 x 22	6 x 44	6 x 44	8 x 46	8 x 44	8 x 44	10 x 46
			6 x 48	6 x 48	8 x 50	8 x 48	8 x 48	10 x 50
			6 x 52	6 x 52	8 x 54	8 x 52	8 x 52	10 x 54
			6 x 56	6 x 56	8 x 58	8 x 56	8 x 56	10 x 58
			6 x 60	6 x 60	8 x 62	8 x 60	8 x 60	10 x 62

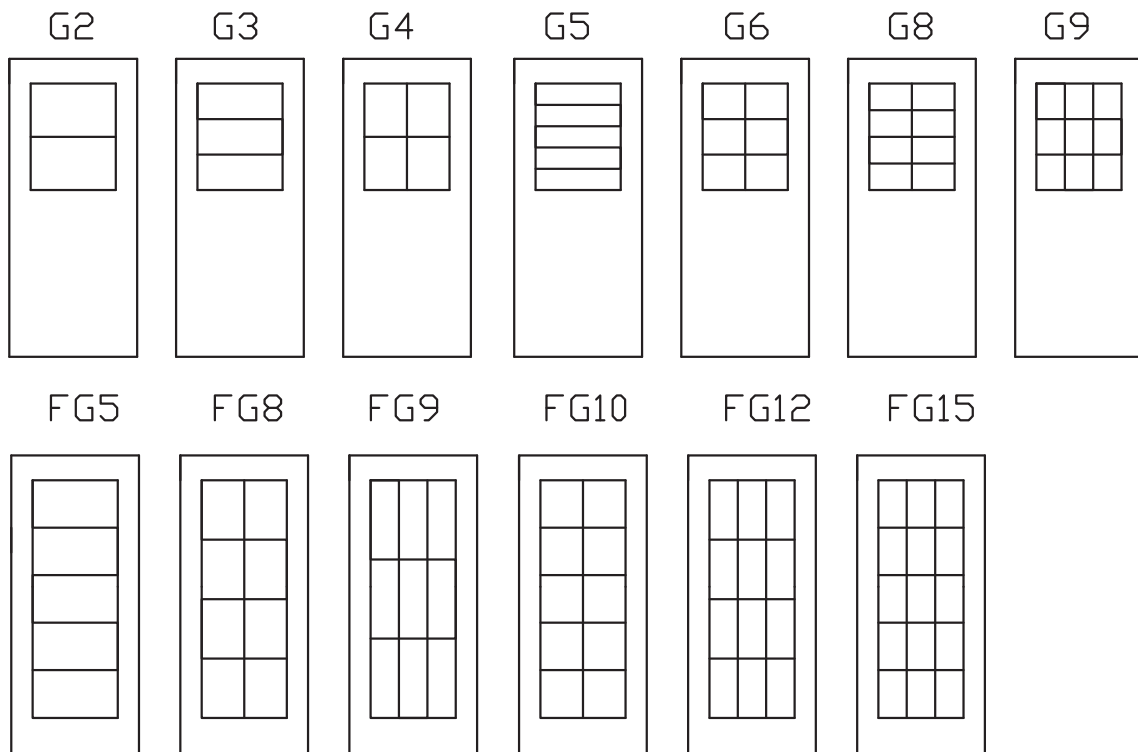
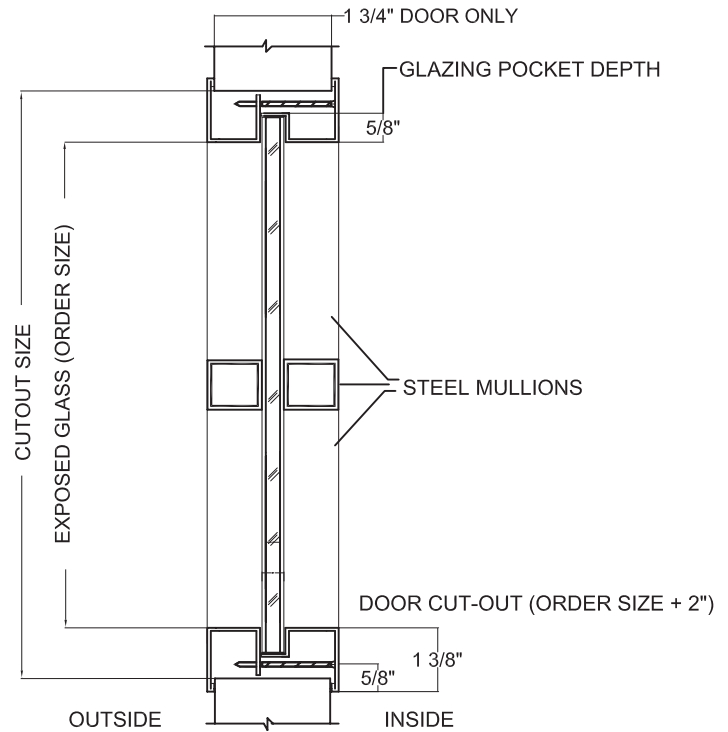
ALL SIZES LISTED ARE BASED ON DOORS WITH 3/4" UNDERCUT

## Distributor Tech Data

### Multi-Lite Detail



3/8" GLAZING POCKET  
GLASS NOT INCLUDED

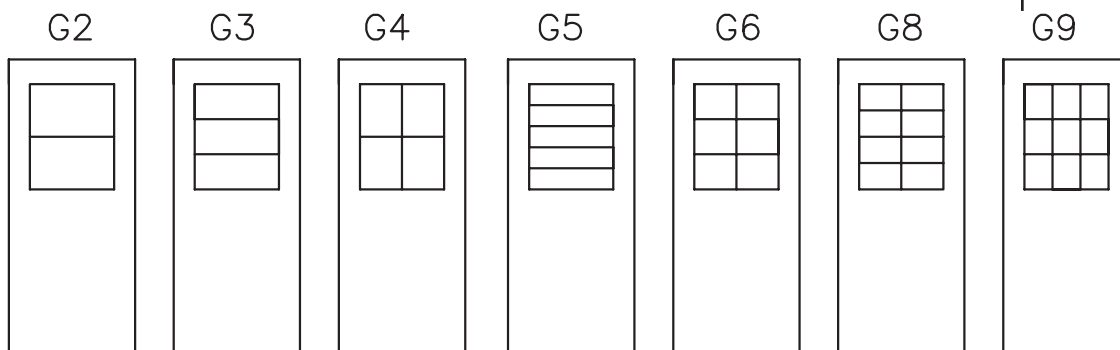


### Standard Product Features

- \* The vision frame is 18 GA
- \* Mullions are 16 GA 1/2" x 1/2" steel tube equally spaced
- \* Finish grey primer
- \* Door thickness for 1 3/4" only

## Distributor Tech Data

### Multi-Lite Glass Size Chart



DOOR WIDTH	HALF GLASS	
	VISIBLE GLASS WIDTH	CUTOUT WIDTH
2'-0"	10"	12"
2'-4"	14"	16"
2'-6"	16"	18"
2'-8"	18"	20"
2'-10"	20"	22"
3'-0"	22"	24"
3'-4"	26"	28"
3'-6"	28"	30"
3'-8"	30"	32"
3'-10"	32"	34"
4'-0"	34"	36"

DOOR HEIGHT	VISIBLE GLASS HEIGHT	CUTOUT HEIGHT
6'-8"	24"	26"
7'-0"	28"	30"
7'-2", 7'-10", 8'-0" 9'-0", 10'-0"	30"	32"

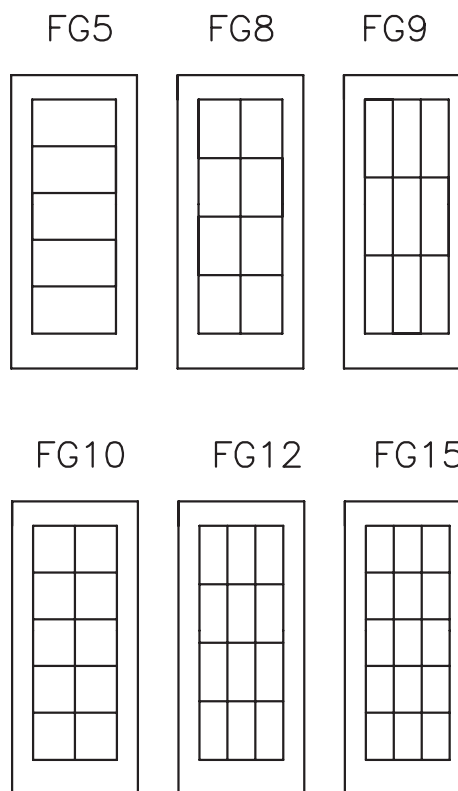
FORMULA: ACTUAL GLASS SIZE  
= CUTOUT - 1 1/4"

ALL SIZES SHOWN ARE APPROXIMATE.  
1/2" X 1/2" MULLIONS ARE EQUALLY SPACED

\*CECO PROVIDES MIN 10" BOTTOM RAIL  
TO MEET ADA REQUIREMENTS

FULL GLASS*		
DOOR WIDTH	VISIBLE GLASS WIDTH	CUTOUT WIDTH
2'-0"	10"	12"
2'-4"	14"	16"
2'-6"	16"	18"
2'-8"	18"	20"
2'-10"	20"	22"
3'-0"	22"	24"
3'-4"	26"	28"
3'-6"	28"	30"
3'-8"	30"	32"
3'-10"	32"	34"
4'-0"	34"	36"

DOOR HEIGHT	VISIBLE GLASS HEIGHT	CUTOUT HEIGHT
6'-8"	60"	62"
7'-0"	64"	66"
7'-2"	66"	68"
7'-10"	74"	76"
8'-0"	76"	78"
9'-0"	78"	80"
10'-0"		



ALL SIZES LISTED ARE BASED ON DOORS WITH 3/4" UNDERCUT





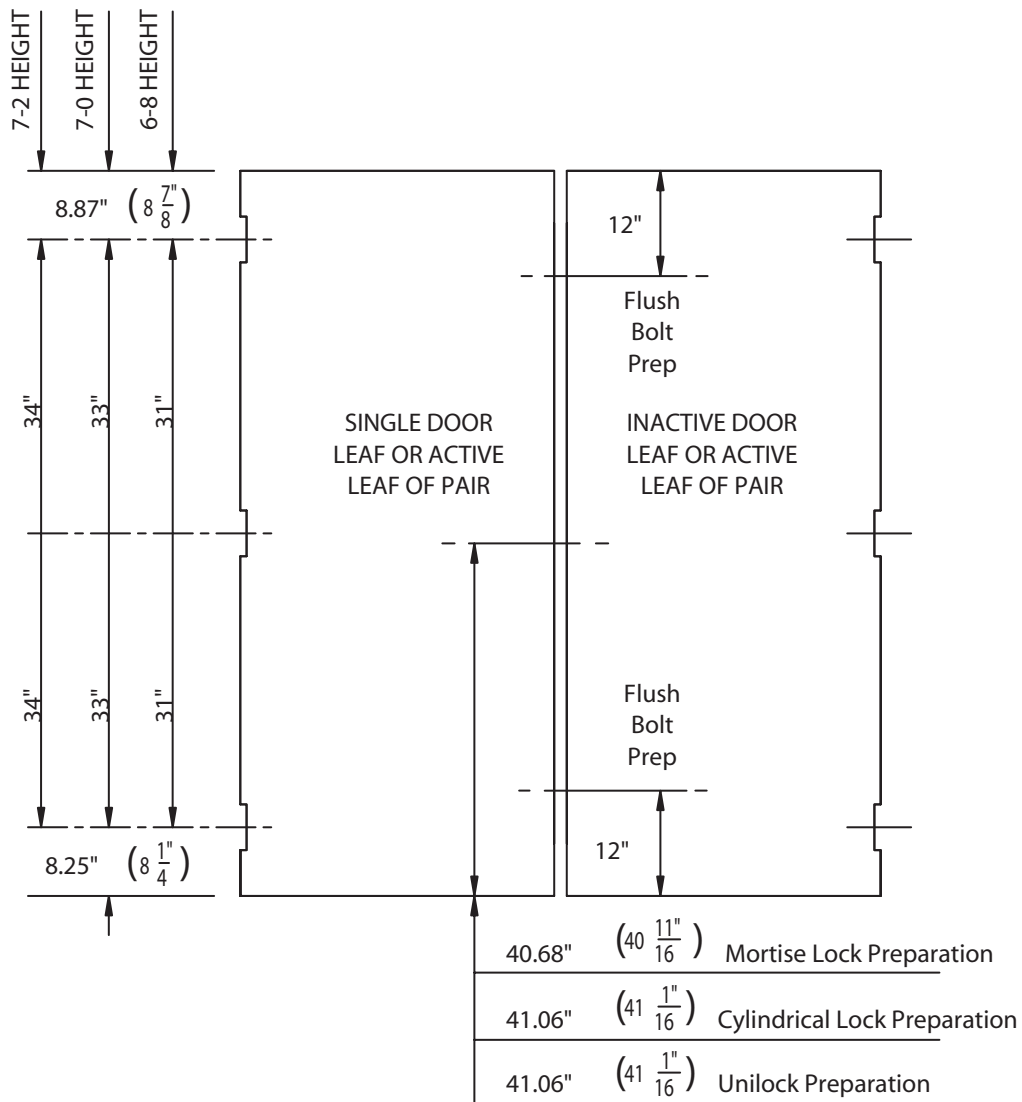
## Distributor Tech Data

### Standard Hardware Locations

Doors: 6-8, 7-0 & 7-2 High

4-1/2" or 5" High Hinges

Hardware preparations below are located to match  
Ceco standard frames.



These hardware locations are Ceco Door Products  
standard and will be furnished unless  
otherwise agreed to.

## Distributor Tech Data

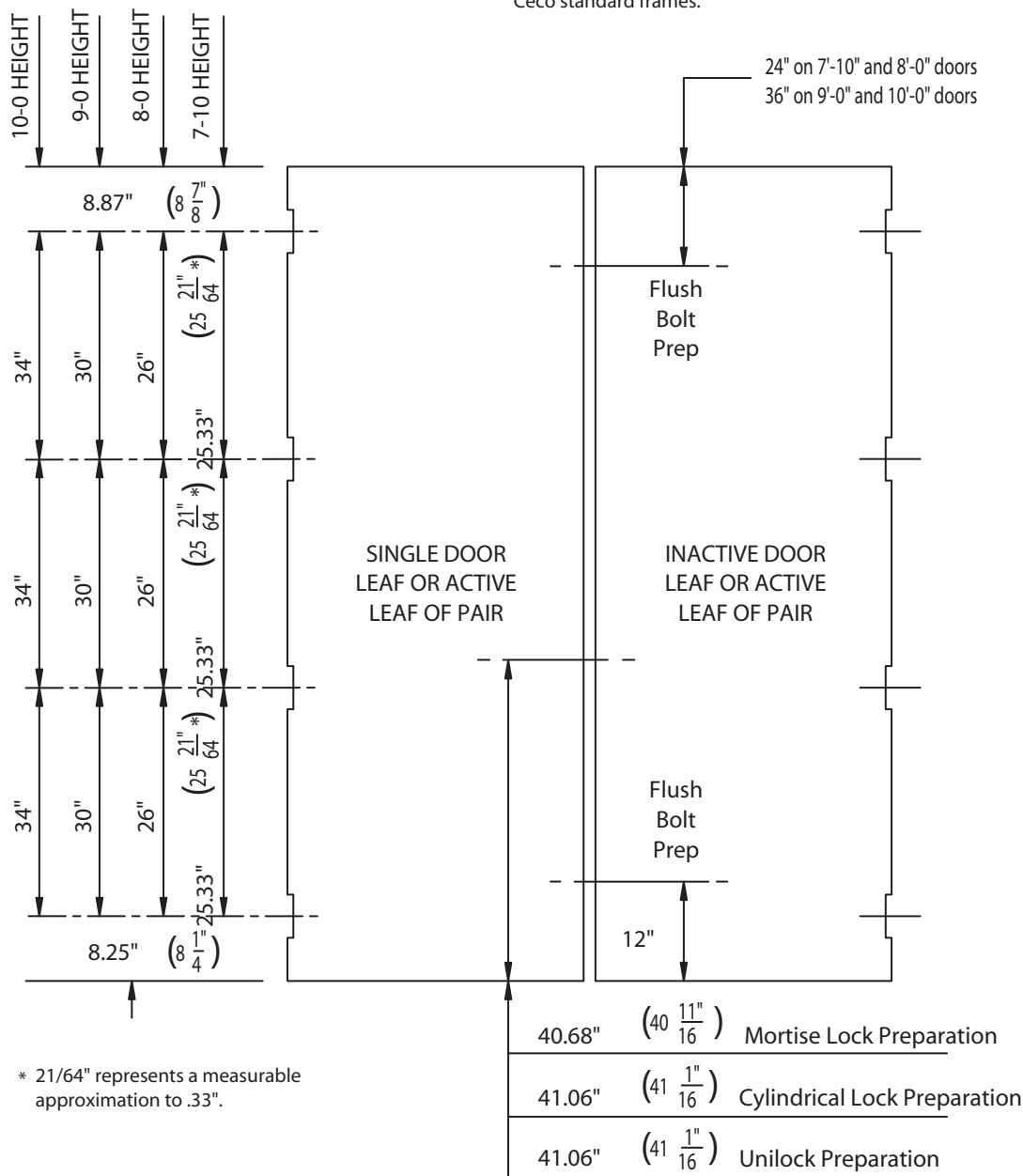
### Standard Door Hardware Locations

7-10, 8-0, 9-0 & 10-0 Heights

4-1/2" or 5" High Hinges

Standard downsets shown below are for manual flush bolts.

Hardware preparations below are located to match Ceco standard frames.



These hardware locations are Ceco Door Products standard and will be furnished unless otherwise agreed to.

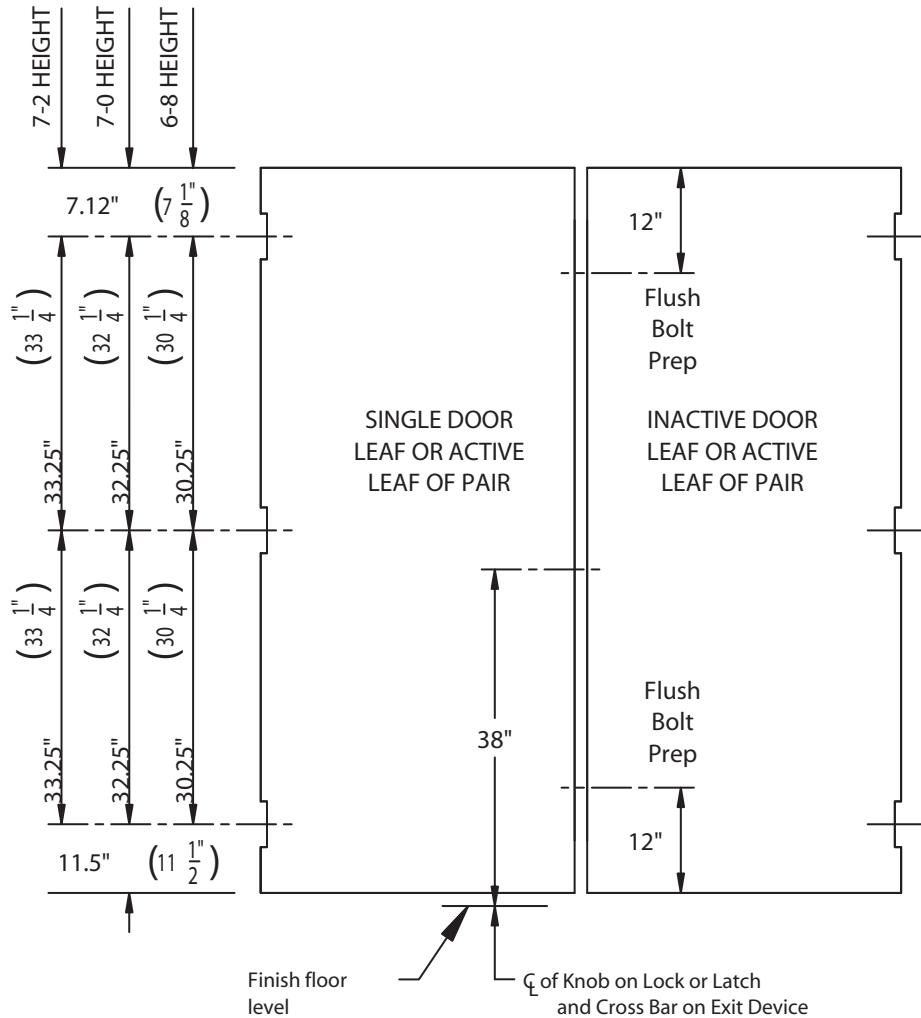


# Distributor Tech Data

## † NAAMM Hardware Locations Doors: 6-8, 7-0 & 7-2 High 4-1/2" High Hinges

HARDWARE LOCATIONS SHOWN BELOW ARE BASED ON THE FOLLOWING:

- 5" From head to top of upper hinge
- 10" From floor to bottom of lower hinge
- Equal spacing between intermediate hinges
- 3/4" Undercut and 1/8" margin at head



The above hardware locations will be furnished only when agreed to.

## Distributor Tech Data

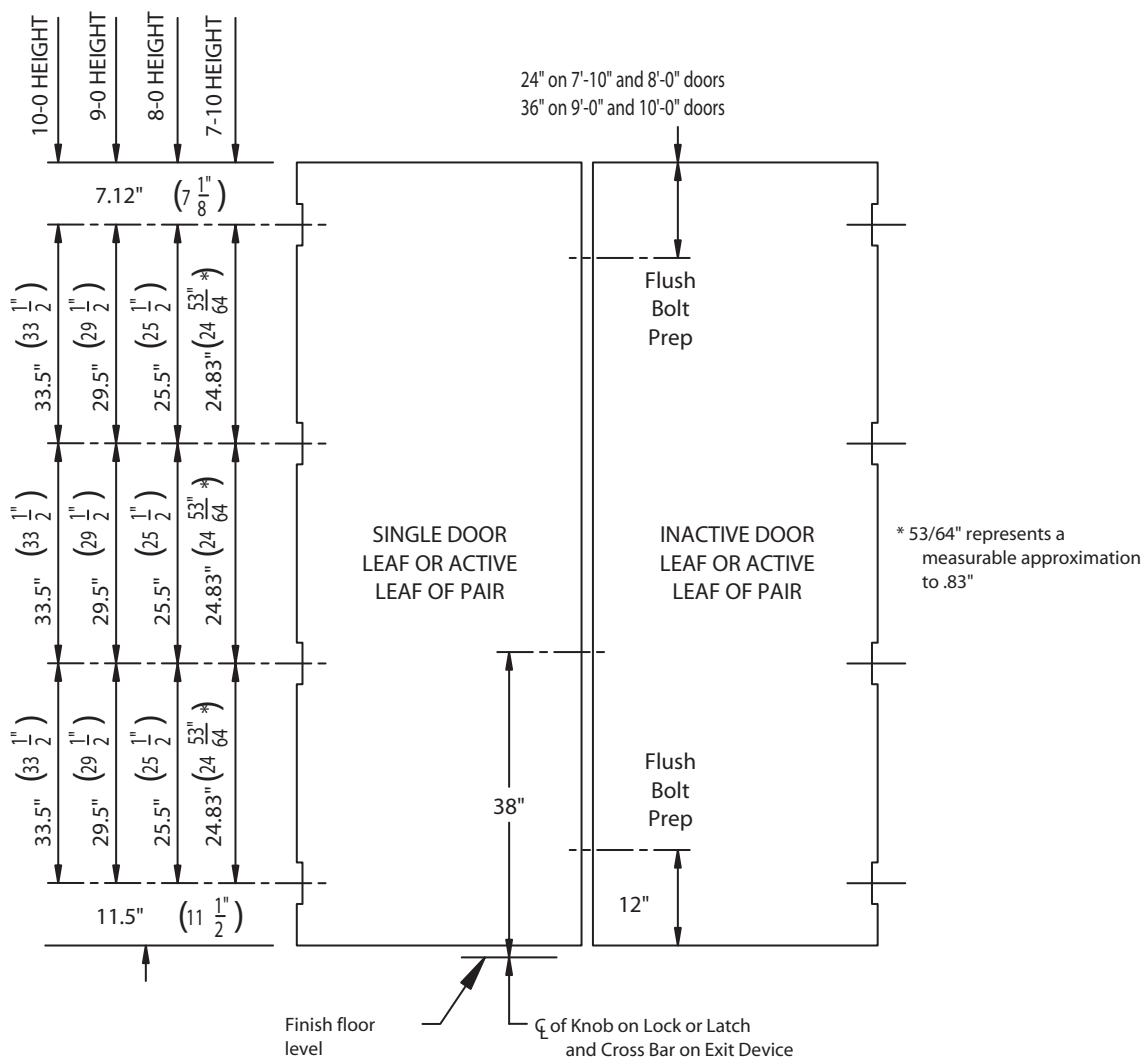
### NAAMM Alternate Hardware Locations

Doors: 7-10, 8-0, 9-0 & 10-0 High

4-1/2" High Hinges

HARDWARE LOCATIONS SHOWN BELOW ARE BASED ON THE FOLLOWING:

- 5" From head to top of upper hinge
- 10" From floor to bottom of lower hinge
- Equal spacing between intermediate hinges
- 3/4" Undercut and 1/8" margin at head
- Standard downsets shown below are for manual flush bolts.



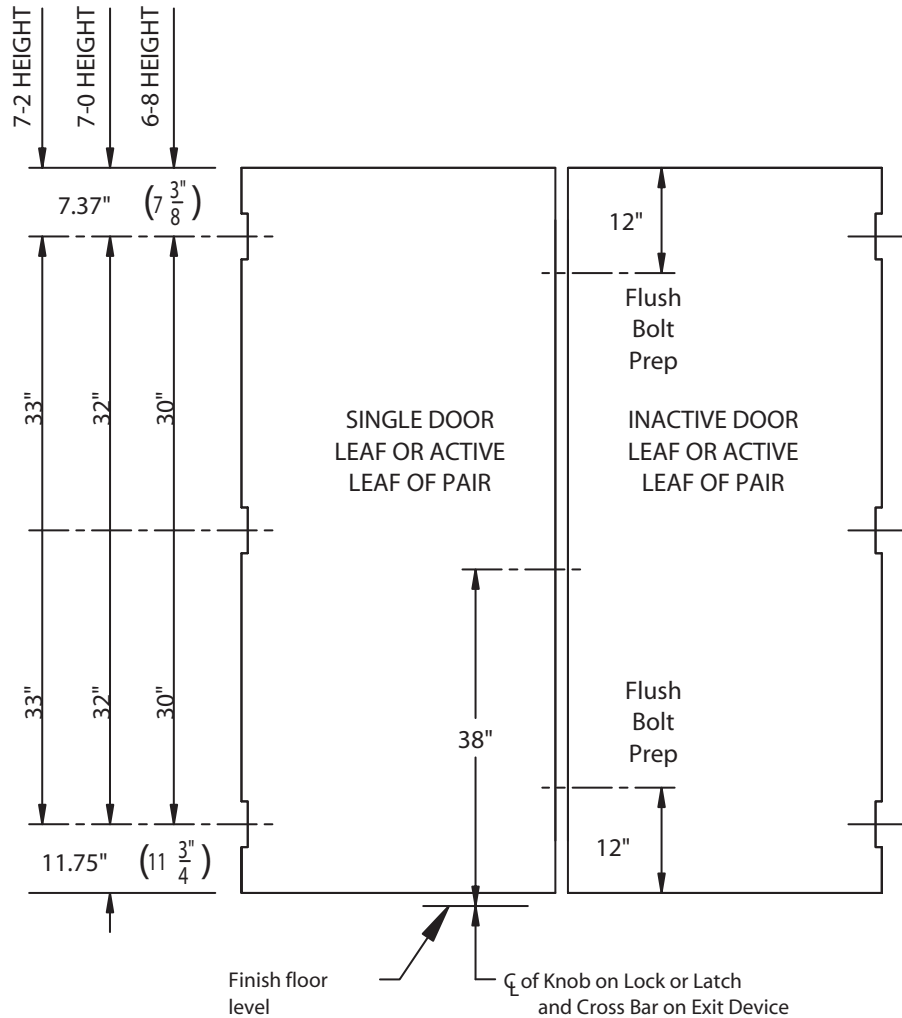
The above hardware locations will be furnished only when agreed to.

## Distributor Tech Data

### † NAAMM Hardware Locations Doors: 6-8, 7-0 & 7-2 High 5" High Hinges

HARDWARE LOCATIONS SHOWN BELOW ARE BASED ON THE FOLLOWING:

- 5" From head to top of upper hinge
- 10" From floor to bottom of lower hinge
- Equal spacing between intermediate hinges
- 3/4" Undercut and 1/8" margin at head



The above hardware locations will be furnished only when agreed to.

# Distributor Tech Data

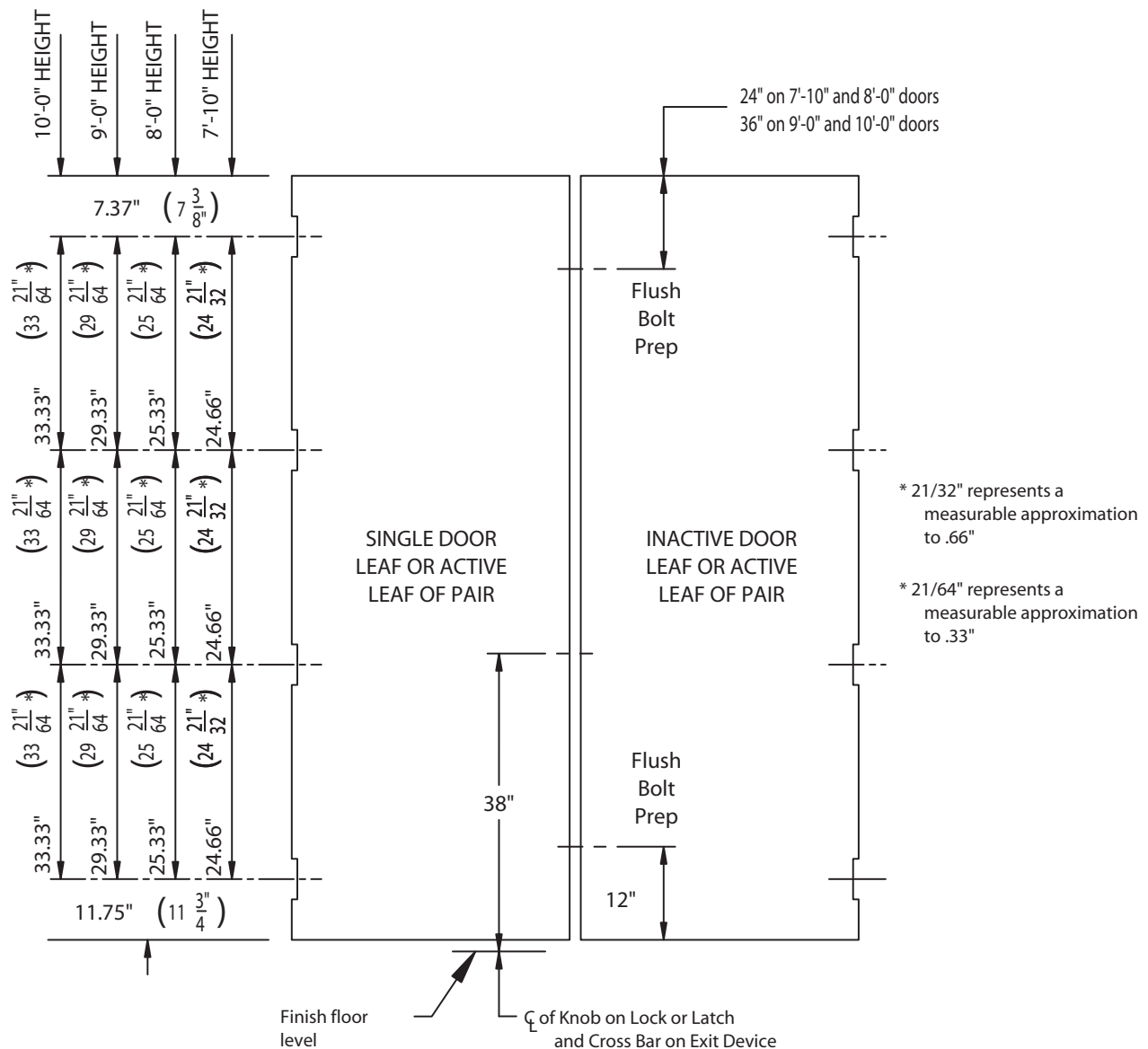
## NAAMM Hardware Locations

Doors: 7'-10", 8'-0", 9'-0" & 10'-0" High

5" Hinges

HARDWARE LOCATIONS SHOWN BELOW ARE BASED ON THE FOLLOWING:

- 5" From head to top of upper hinge
- 10" From floor to bottom of lower hinge
- Equal spacing between intermediate hinges
- 3/4" Undercut and 1/8" margin at head
- Standard downsets shown below are for manual flush bolts.



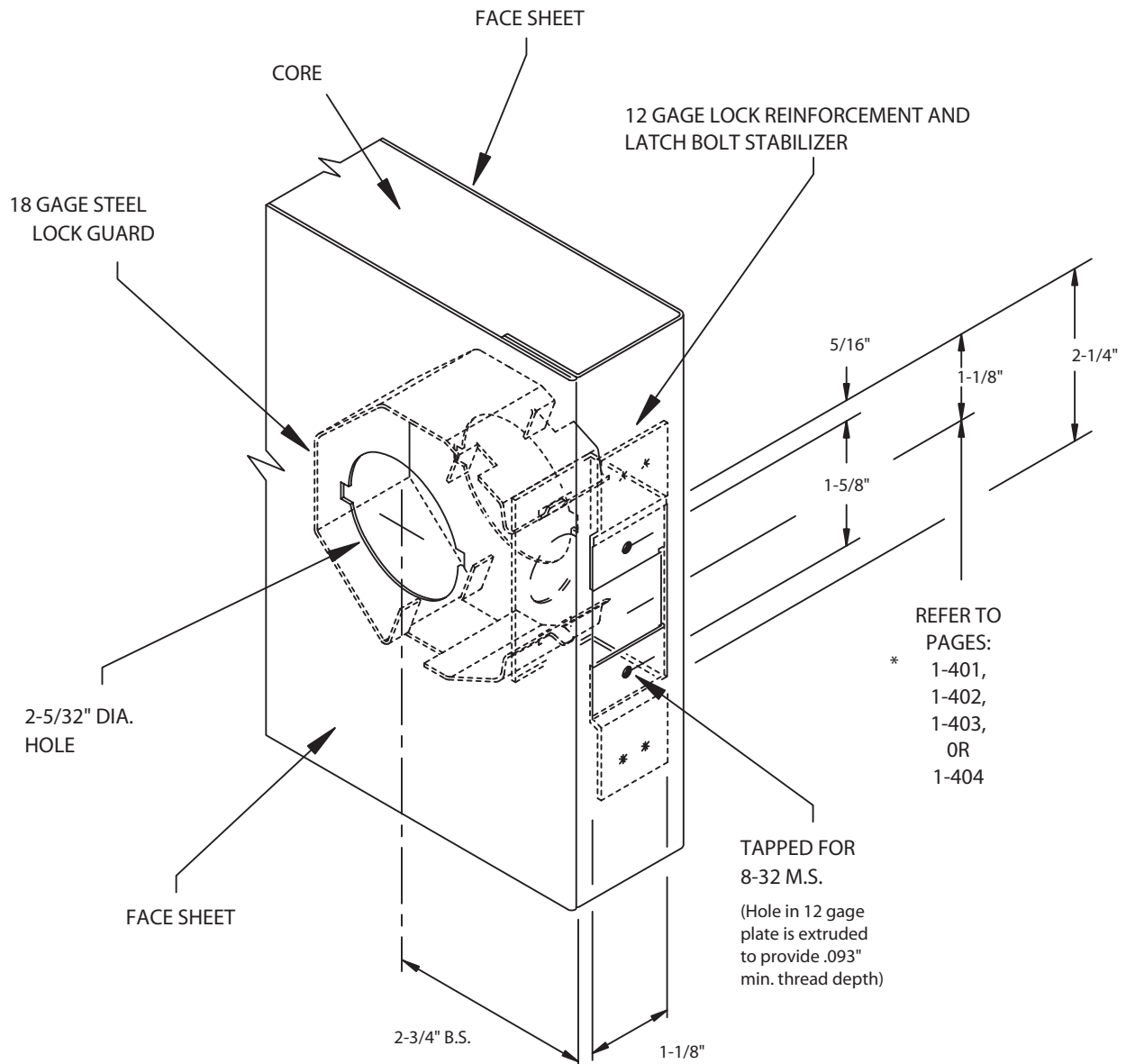
The above hardware locations will be furnished only when agreed to.

# Distributor Tech Data

## Cylindrical Lock Preparation 2-3/4" Backset

Lock edge may be square (shown) or bevel 1/8" in 2" (not shown), and vertical edges may be mechanically interlocked (shown) or have welded vertical edges (not shown).

See Tech-data manual door sections to determine which applies.



This preparation complies with ANSI A115.2 "Specifications for Standard Steel Door ... Preparation for Bored or Cylindrical Locks ...for 1-3/4" Doors", EXCEPT LOCK HEIGHT-see pages listed above\*.

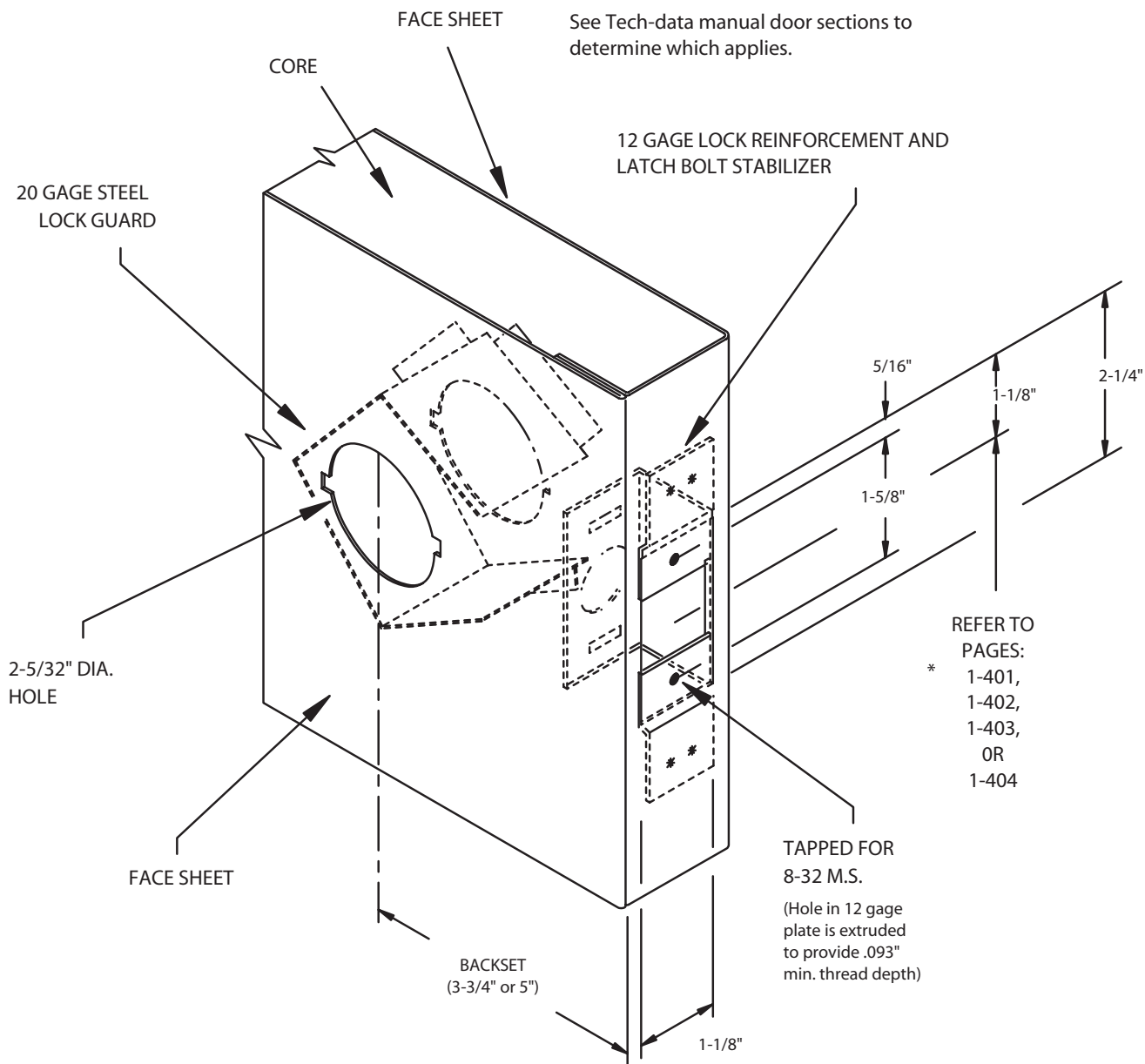
**Lock preparation indicator "C"**

## Distributor Tech Data

### Cylindrical Lock Preparation 3-3/4" or 5" Backset

Lock edge may be square (shown) or bevel 1/8" in 2" (not shown), and vertical edges may be mechanically interlocked (shown) or have welded vertical edges (not shown).

See Tech-data manual door sections to determine which applies.



**Lock preparation indicator**  
3-3/4" Backset - "CB"  
5" Backset - "CC"

This preparation complies with ANSI A115.2  
"Specifications for Standard Steel Door ...  
Preparation for Bored or Cylindrical Locks  
...for 1-3/4" Doors".

EXCEPT: LOCK HEIGHT -see pages listed above.\*  
BACKSET -see page 1-405 for 2-3/4"  
backset.



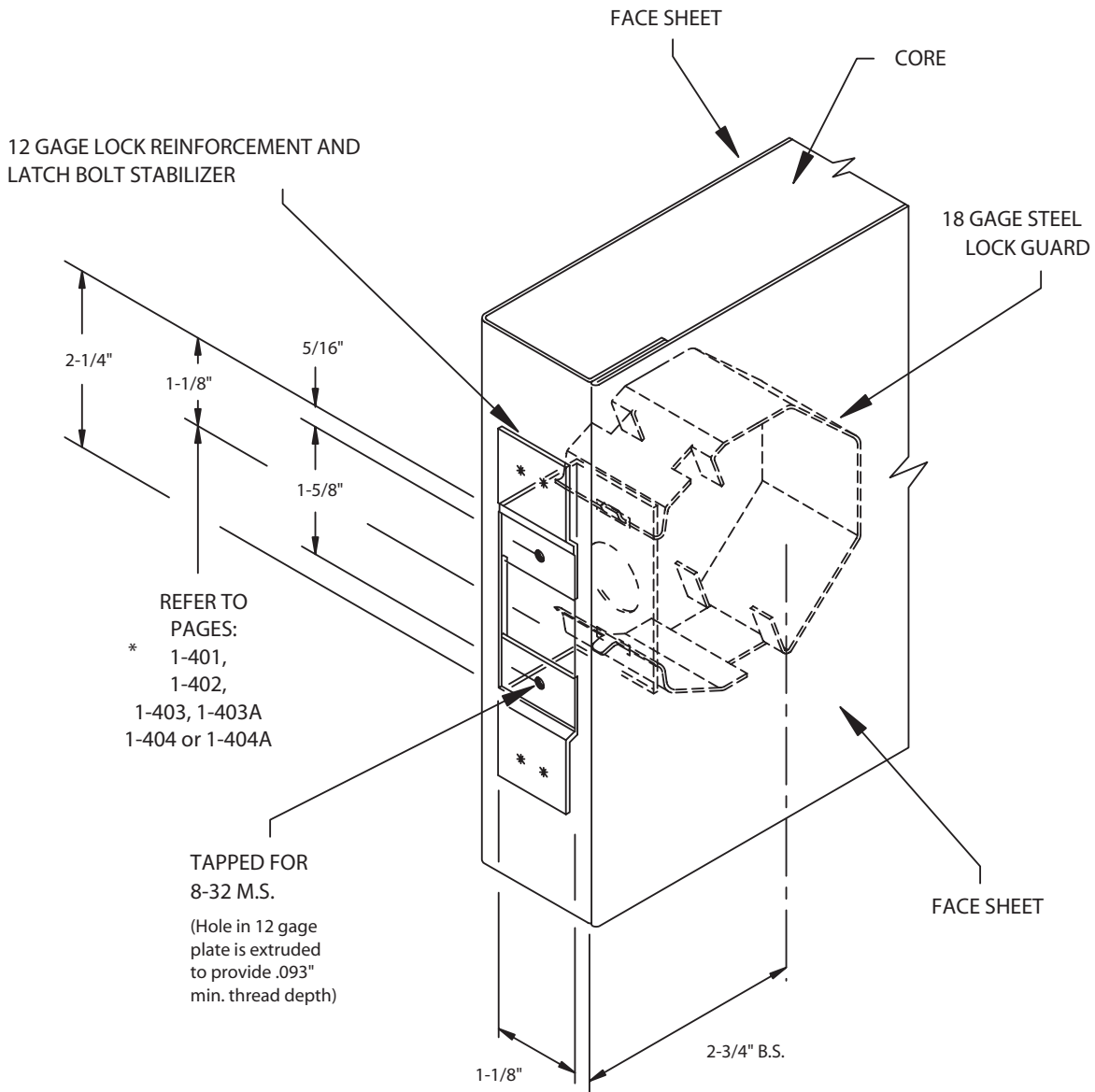


# Distributor Tech Data

## 1-1/8" x 2-1/4" Front Cylindrical Lock Preparation Blank

Lock edge may be square (shown) or bevel  
1/8" in 2" (not shown), and vertical edges  
may be mechanically interlocked (shown)  
or have welded vertical edges (not shown).

See Tech-data manual door sections to  
determine which applies.



This preparation complies with ANSI A115.2 and  
ANSI A115.13: "Specifications for Standard Steel  
Door ...Preparation for Bored or Cylindrical Locks ..."  
and "...for Tubular Deadlocks".  
EXCEPT: LOCK HEIGHT -see pages listed above.\*  
FACE CUTOUPS ARE NOT PROVIDED.

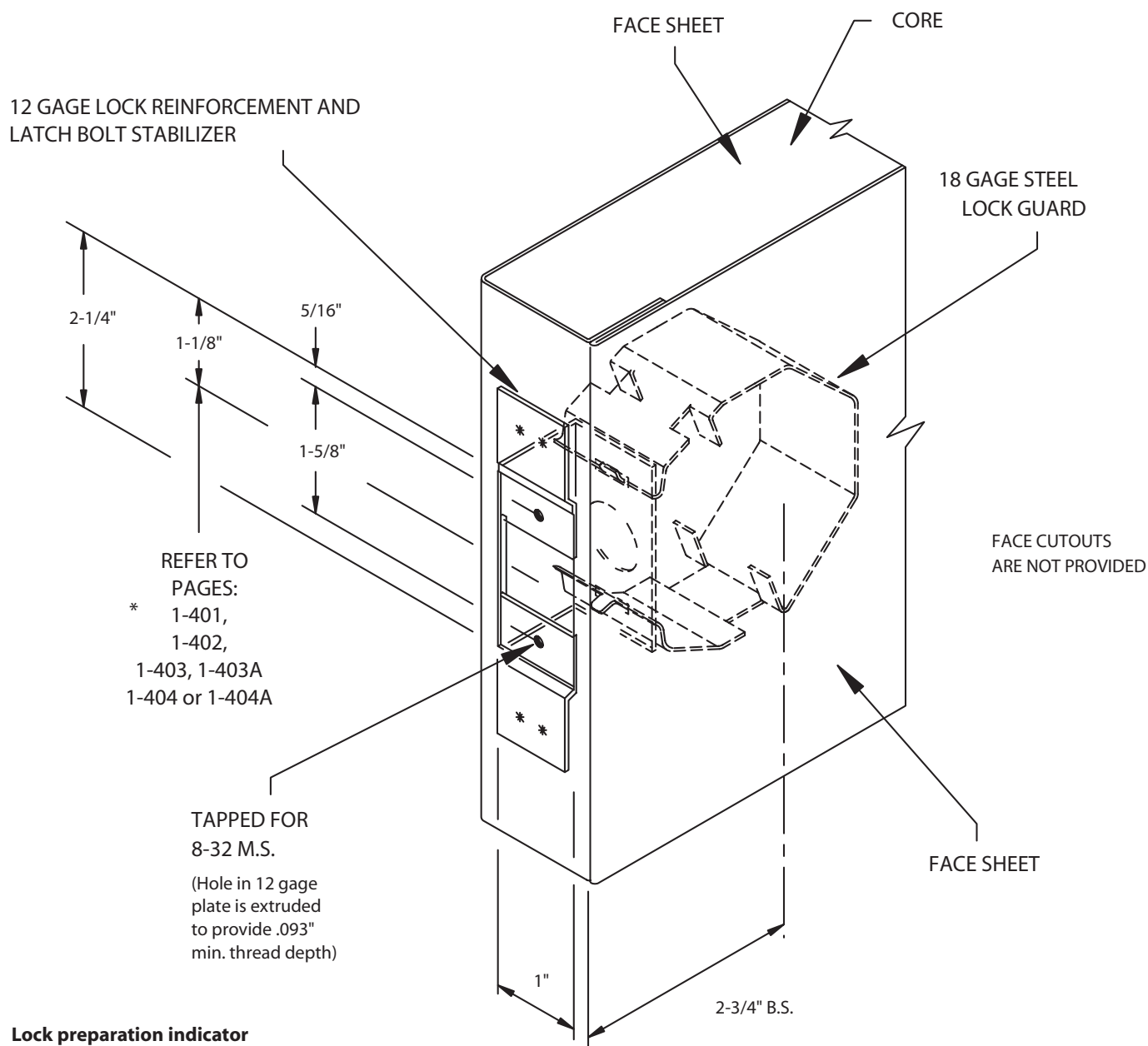
**Lock preparation indicator**  
**1-1/8" x 2-1/4" Front - "BC"**

# Distributor Tech Data

## 1" x 2-1/4" Front Cylindrical Lock Preparation Blank

Lock edge may be square (shown) or bevel 1/8" in 2" (not shown), and vertical edges may be mechanically interlocked (shown) or have welded vertical edges (not shown).

See Tech-data manual door sections to determine which applies.

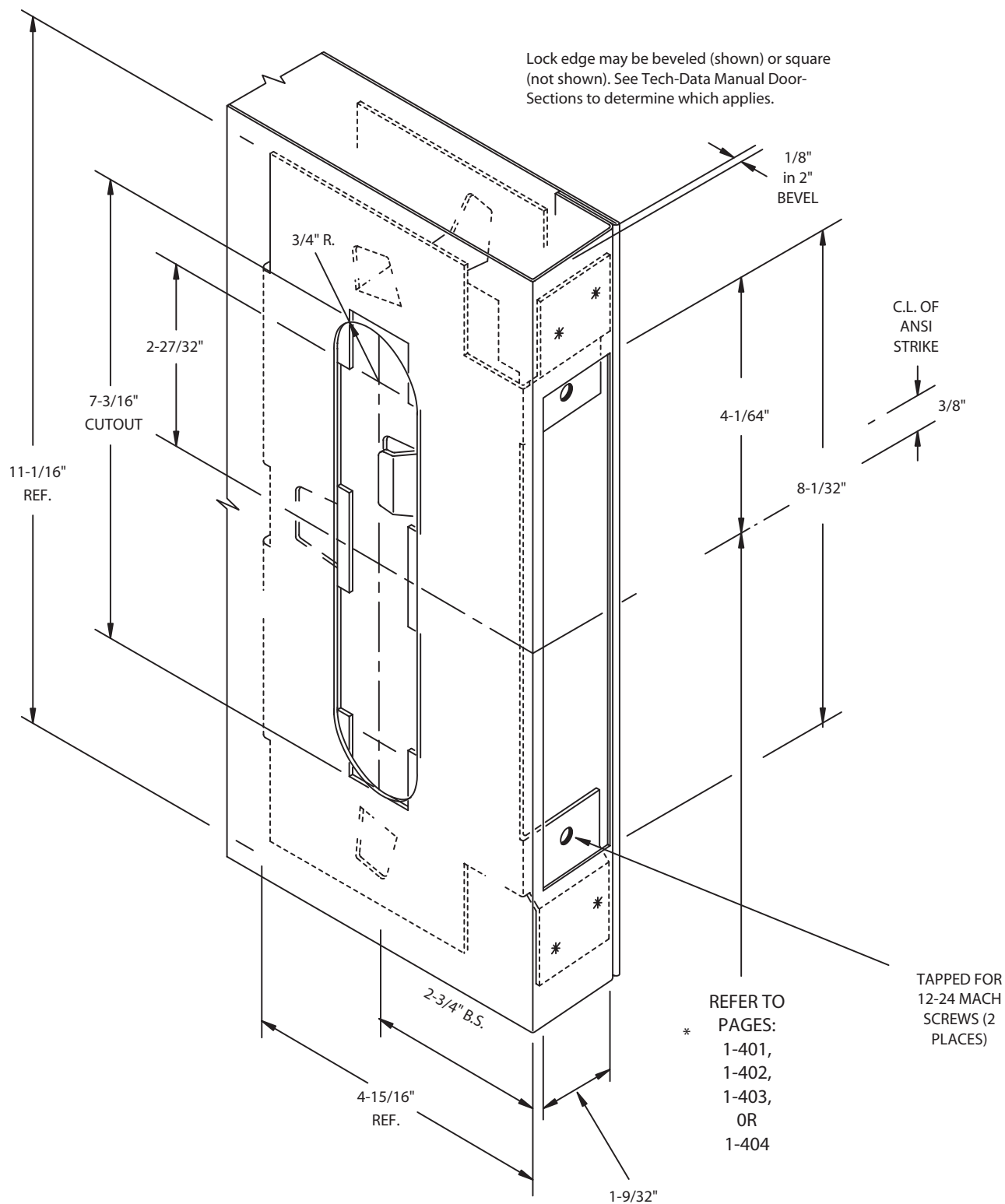


**Lock preparation indicator**  
1" x 2-1/4" Front - "BF"



# Distributor Tech Data

## Mortise Lock Preparation

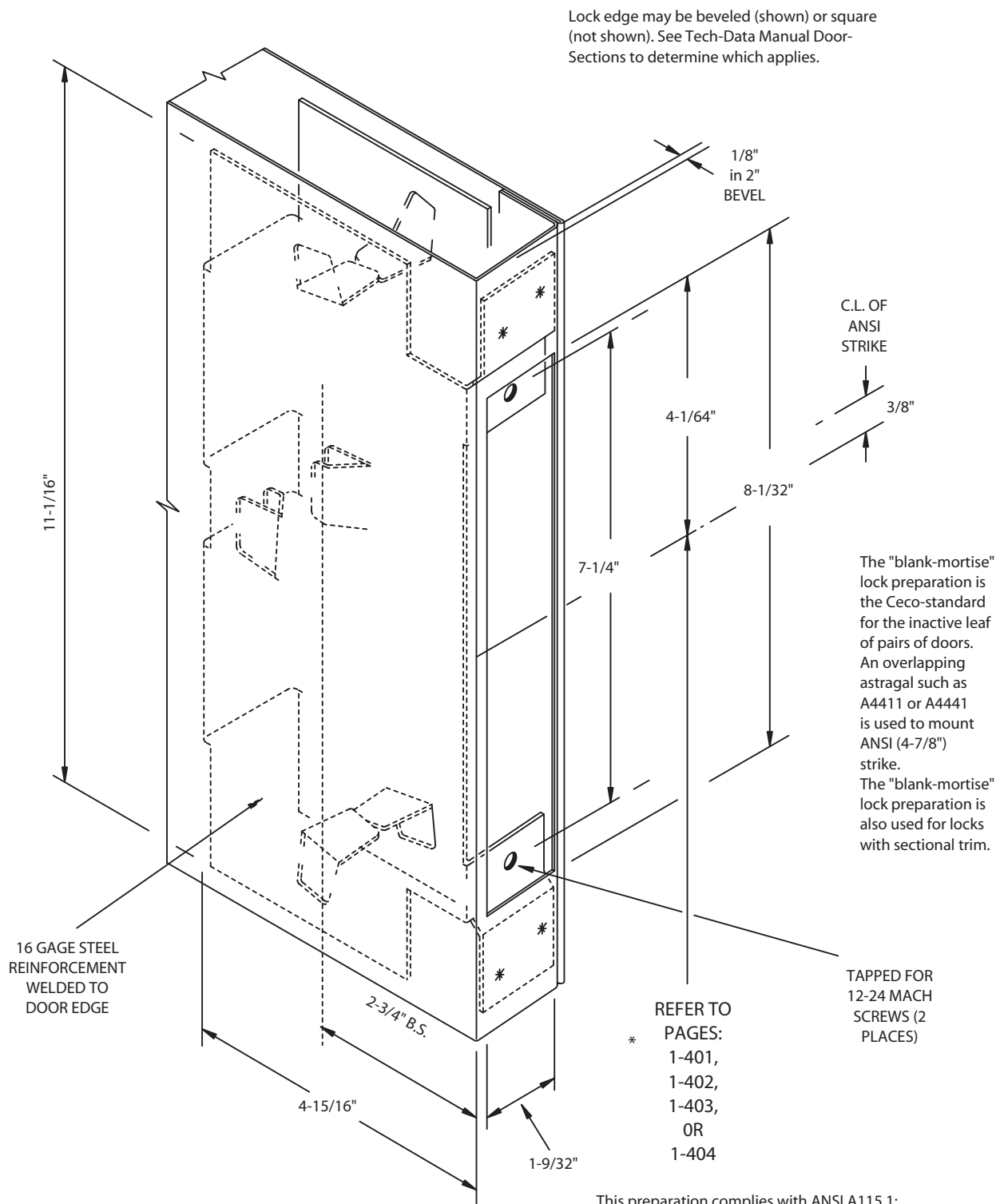


This preparation complies with ANSI A115.1: "Specifications for Standard Steel Door ...Preparation for mortise locks for ...1-3/4" Doors" EXCEPT LOCK HEIGHT, see pages listed above\*.

Lock preparation indicator "M"

## Distributor Tech Data

### Mortise Lock Preparation Blank



Lock preparation indicator "B"

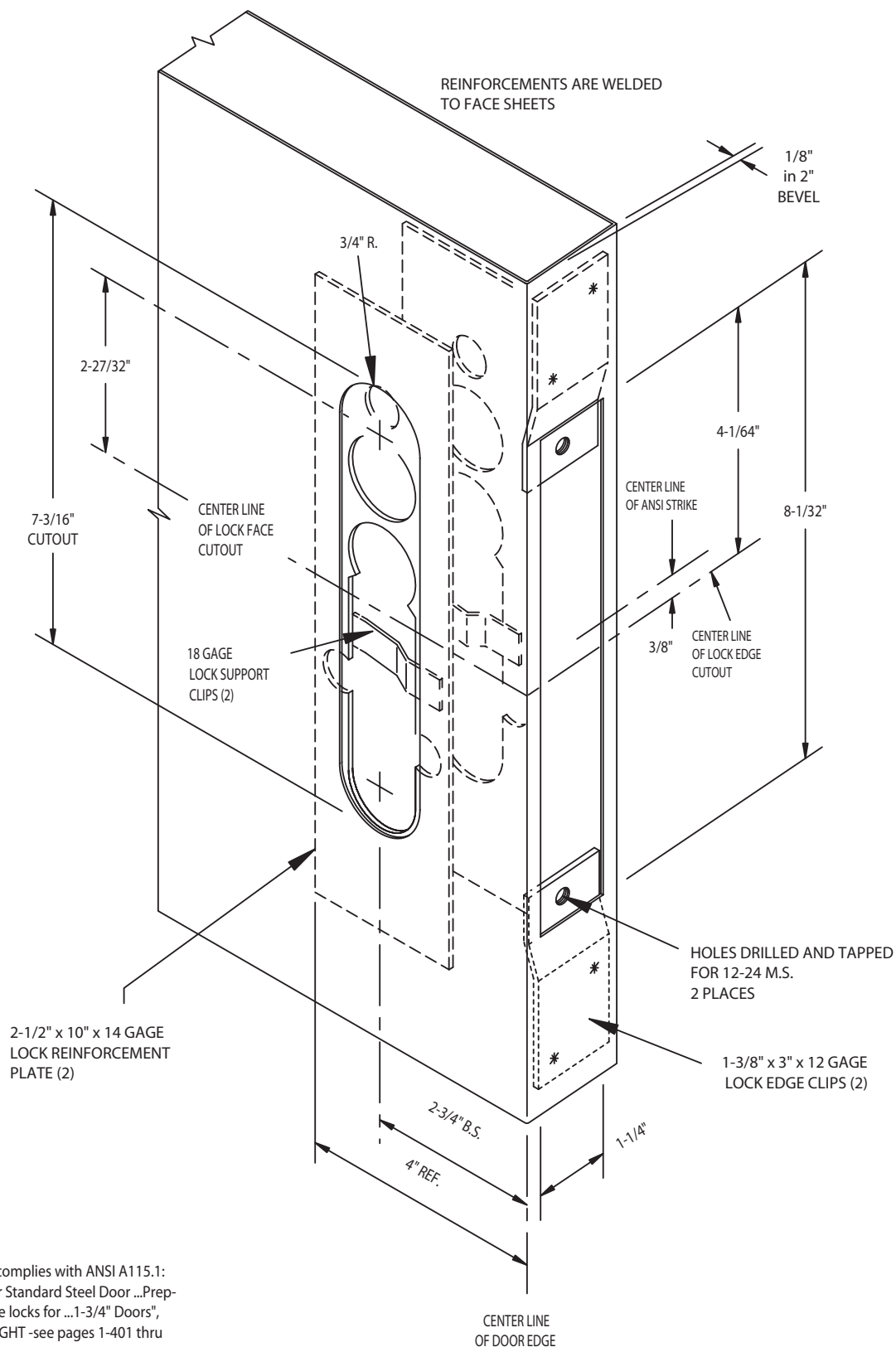
This preparation complies with ANSI A115.1:  
"Specifications for Standard Steel Door ...  
Preparation for mortise locks for ...1-3/4"  
Doors".

EXCEPT: LOCK HEIGHT, see pages listed above.\*  
FACE CUTOUTS ARE NOT PROVIDED.



# Distributor Tech Data

## Mortise Lock Preparation - Alternate

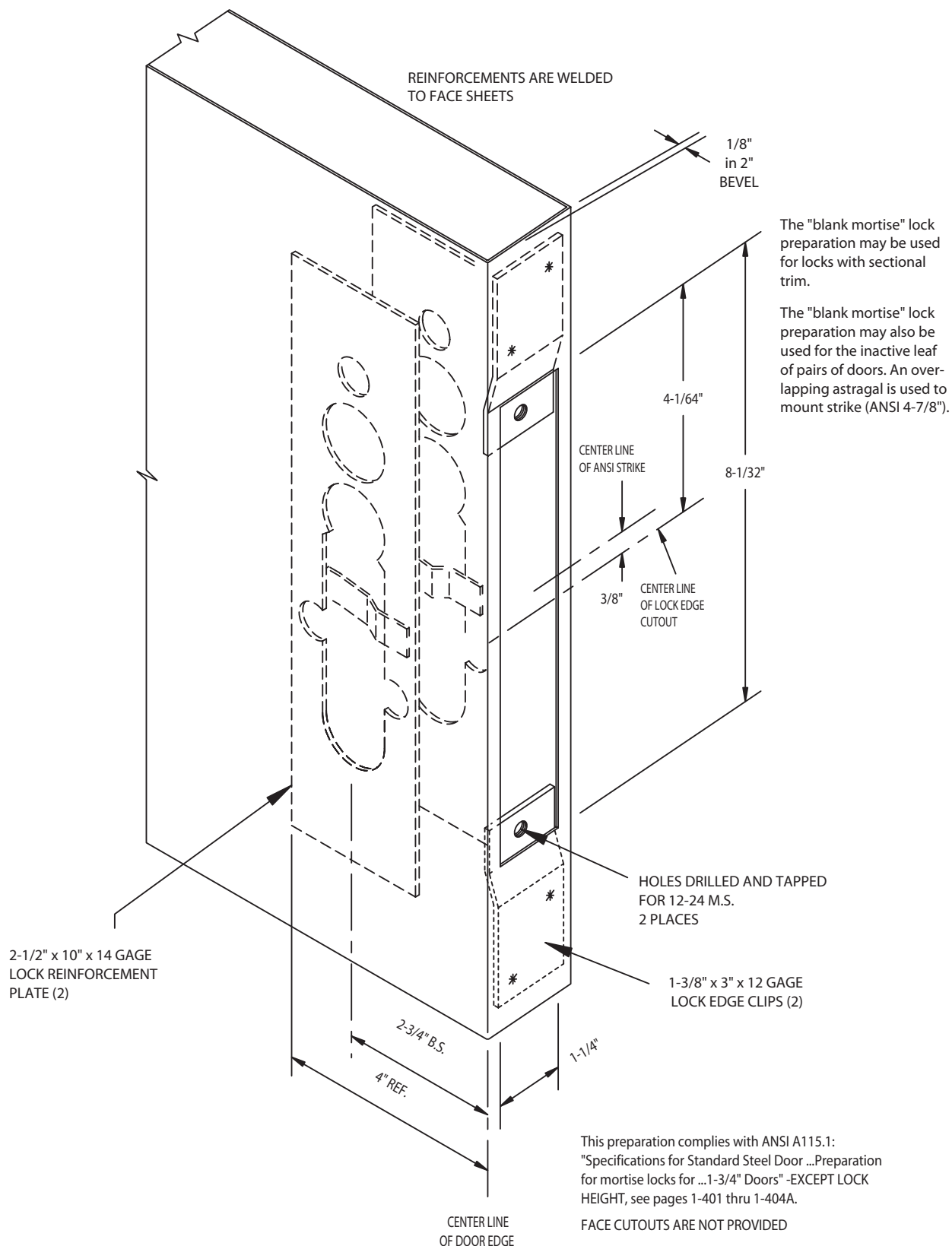


This preparation complies with ANSI A115.1: "Specifications for Standard Steel Door ...Preparation for mortise locks for ...1-3/4" Doors", EXCEPT LOCK HEIGHT -see pages 1-401 thru 1-404A.

Lock preparation indicator "M"

## Distributor Tech Data

### Mortise Lock Preparation - Blank Alternate

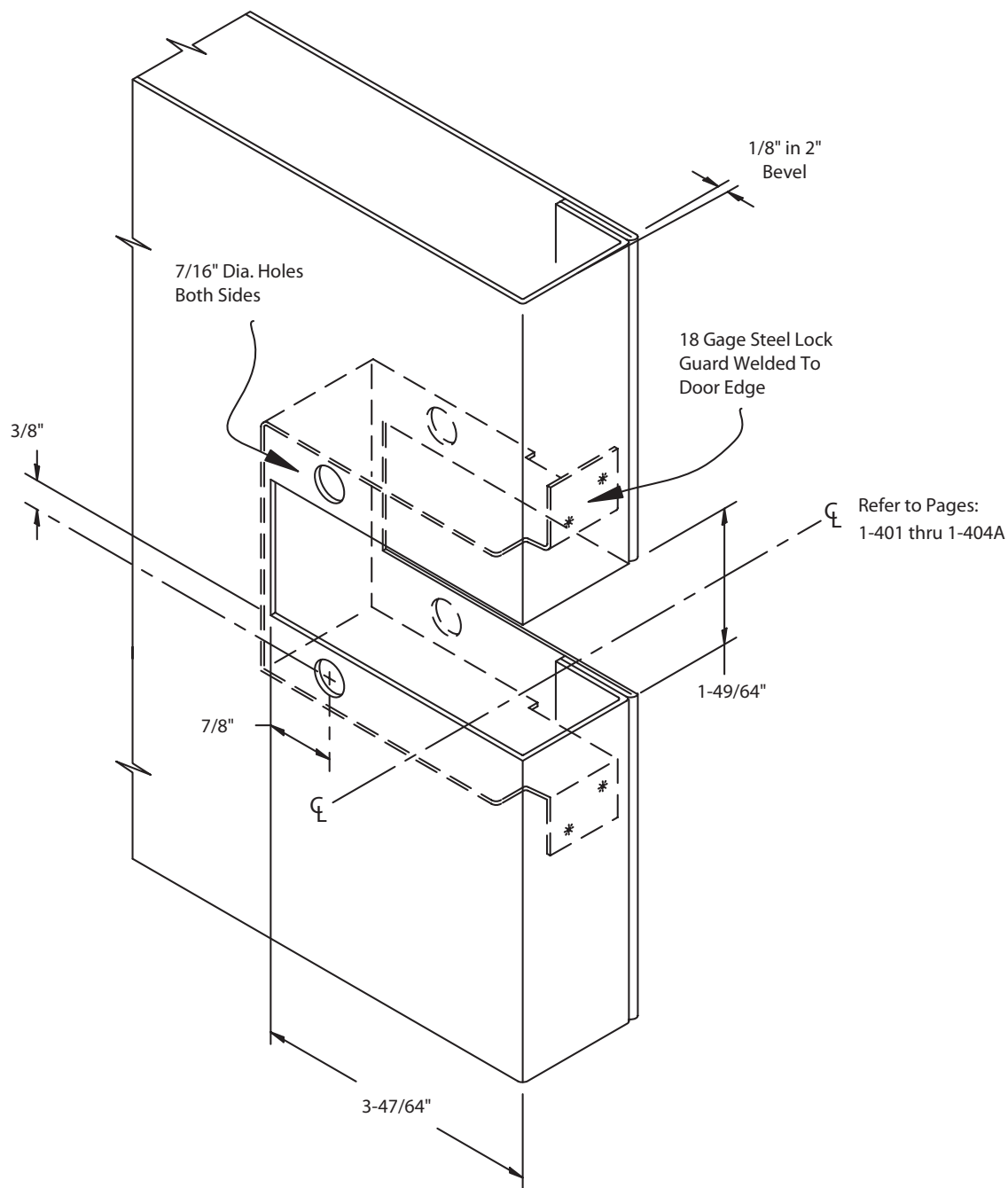


Lock preparation indicator "B"



# Distributor Tech Data

## Unit Lock Preparation



This preparation complies with ANSI A115.6:  
"Specifications for Door ...Preparation for  
Unit Door Locks".  
EXCEPT LOCK HEIGHT, see pages listed above

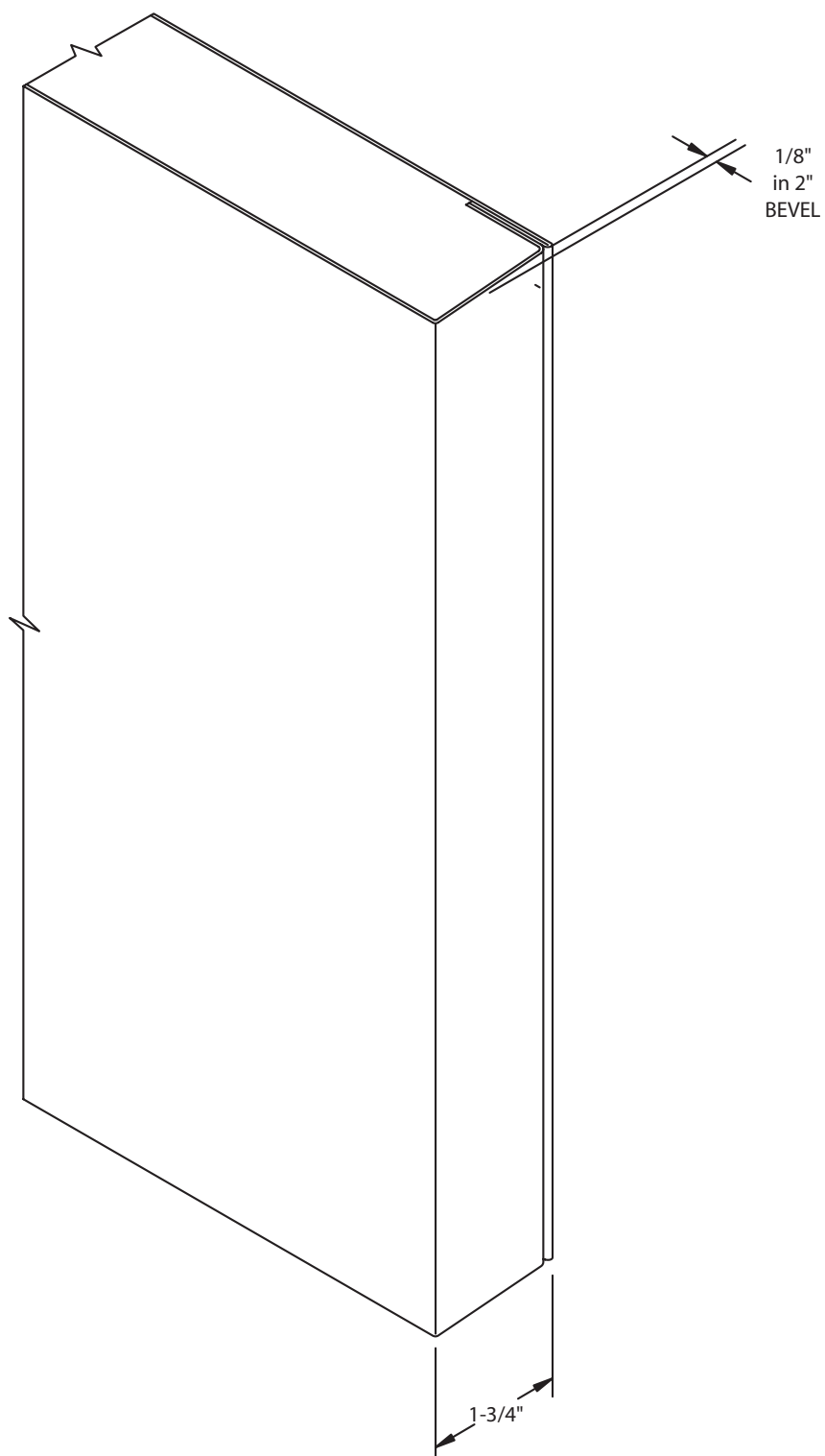
**Lock preparation indicator "U"**



# Distributor Tech Data

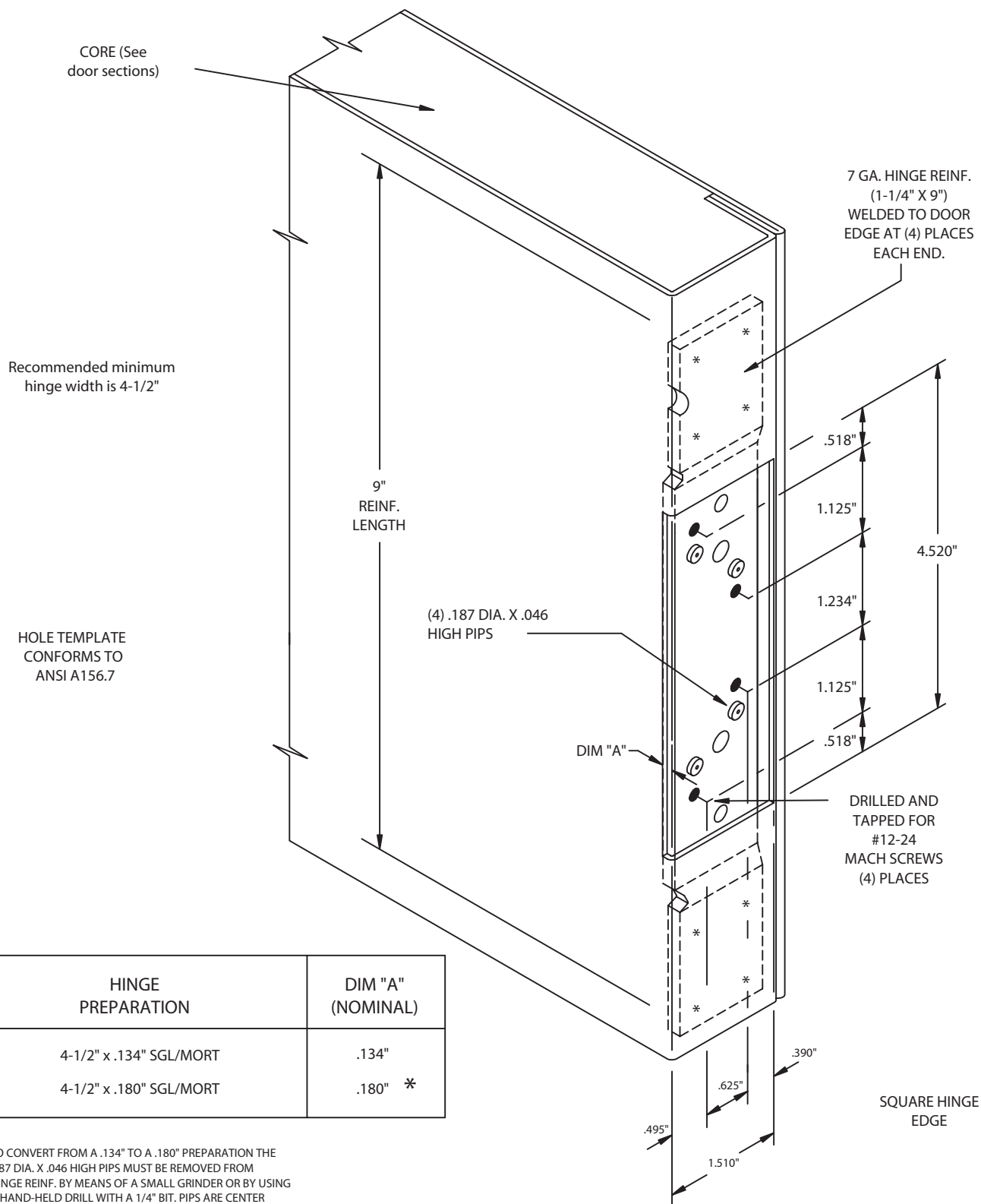
## Plain Lock Preparation

Lock edge may be beveled (shown) or square (not shown). See Tech-Data Manual Door-Sections to determine which applies.





## Standard 4-1/2" Single Mortise Hinge Preparation Handed Door

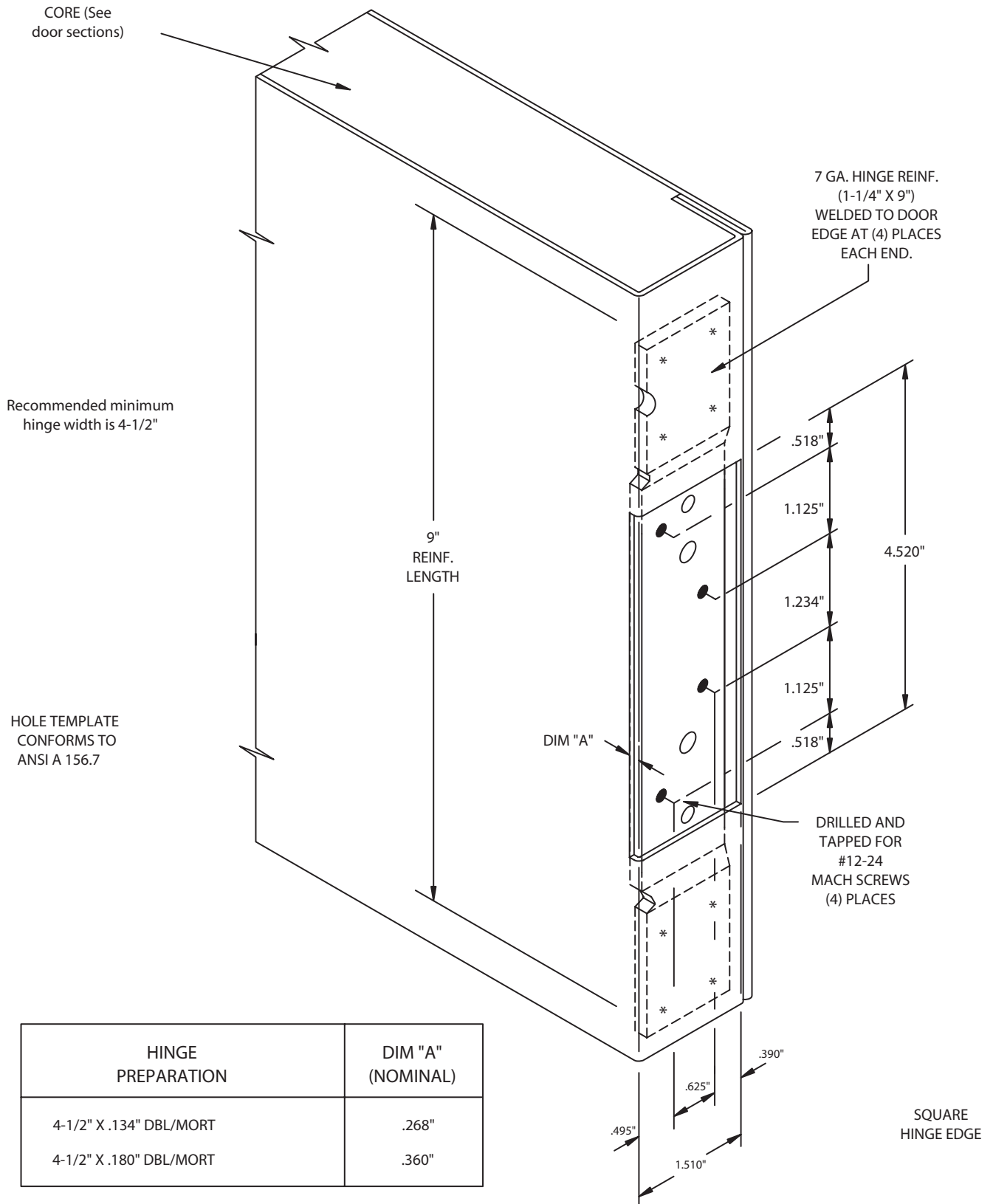


\* TO CONVERT FROM A .134" TO A .180" PREPARATION THE .187 DIA. X .046 HIGH PIPS MUST BE REMOVED FROM HINGE REINF. BY MEANS OF A SMALL GRINDER OR BY USING A HAND-HELD DRILL WITH A 1/4" BIT. PIPS ARE CENTER PUNCHED FOR EASE OF DRILLING. IF NECESSARY, THE CONVERSION IS COMPLETED BY DEEPENING THE FACE NOTCH WITH A FILE OR GRINDER.

### Lock preparation indicator "P"

## Distributor Tech Data

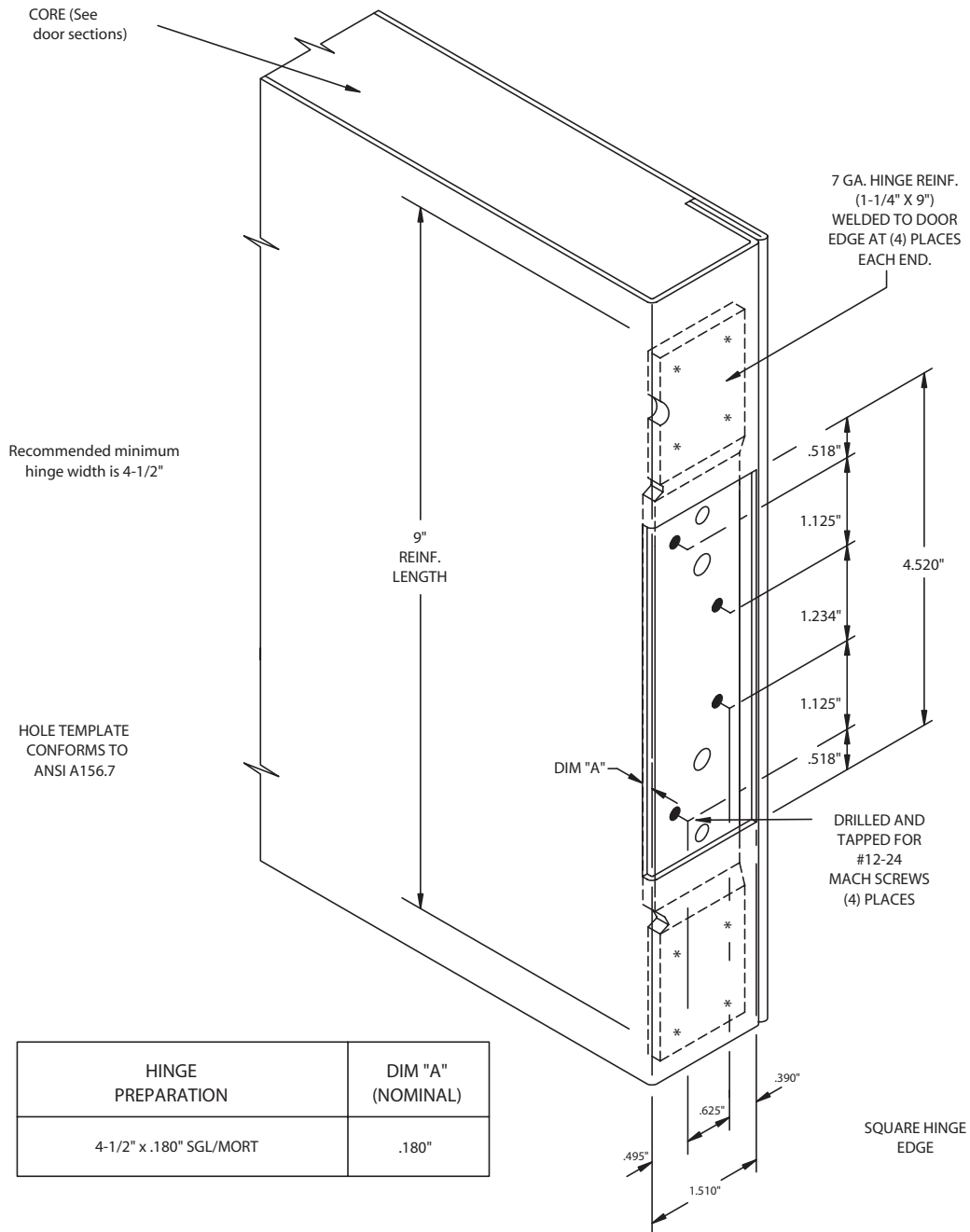
### 4-1/2" Double Mortise Hinge Preparation Handed Door





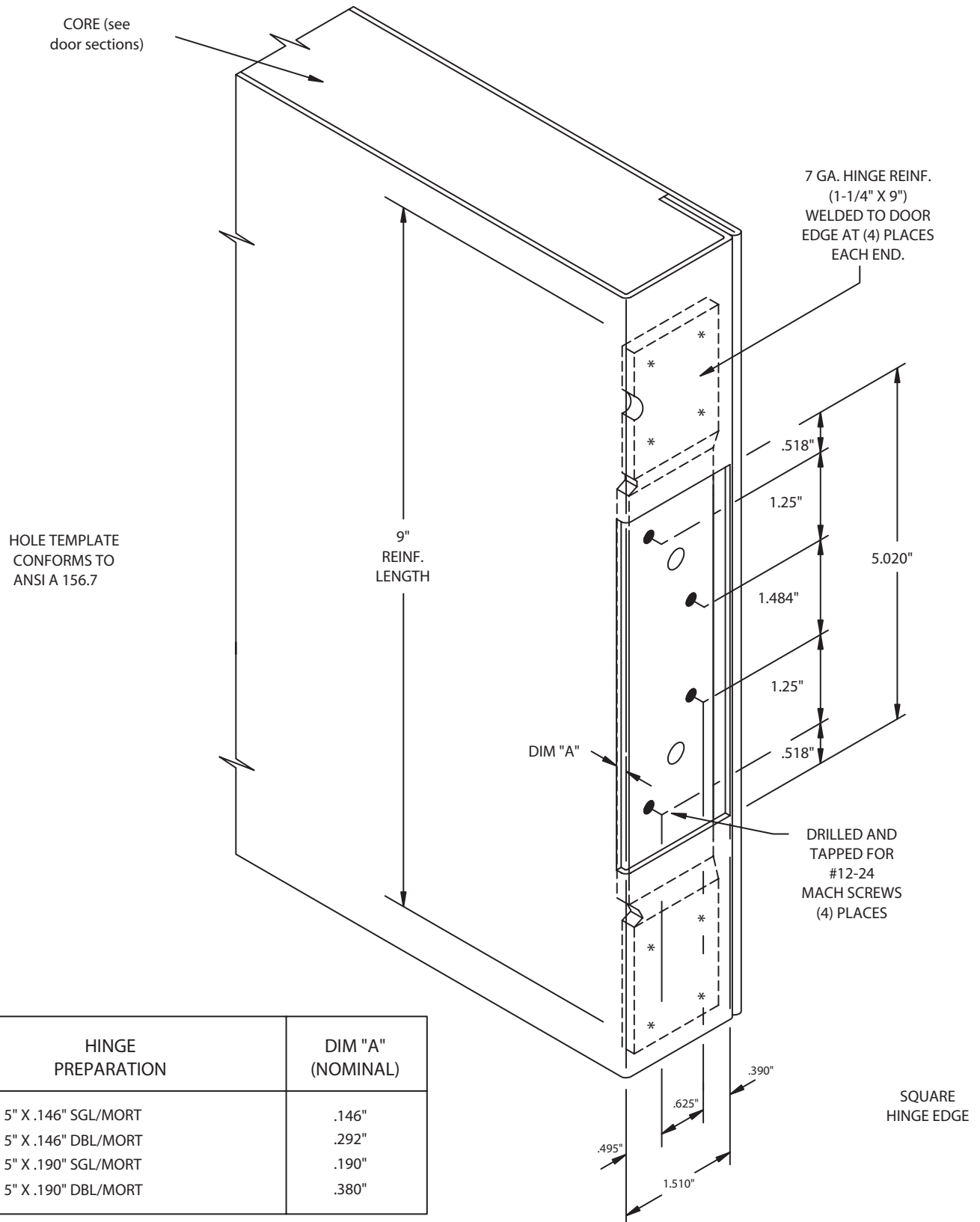
# Distributor Tech Data

## 4-1/2" x .180 Production Hinge Preparation Handed Door



## Distributor Tech Data

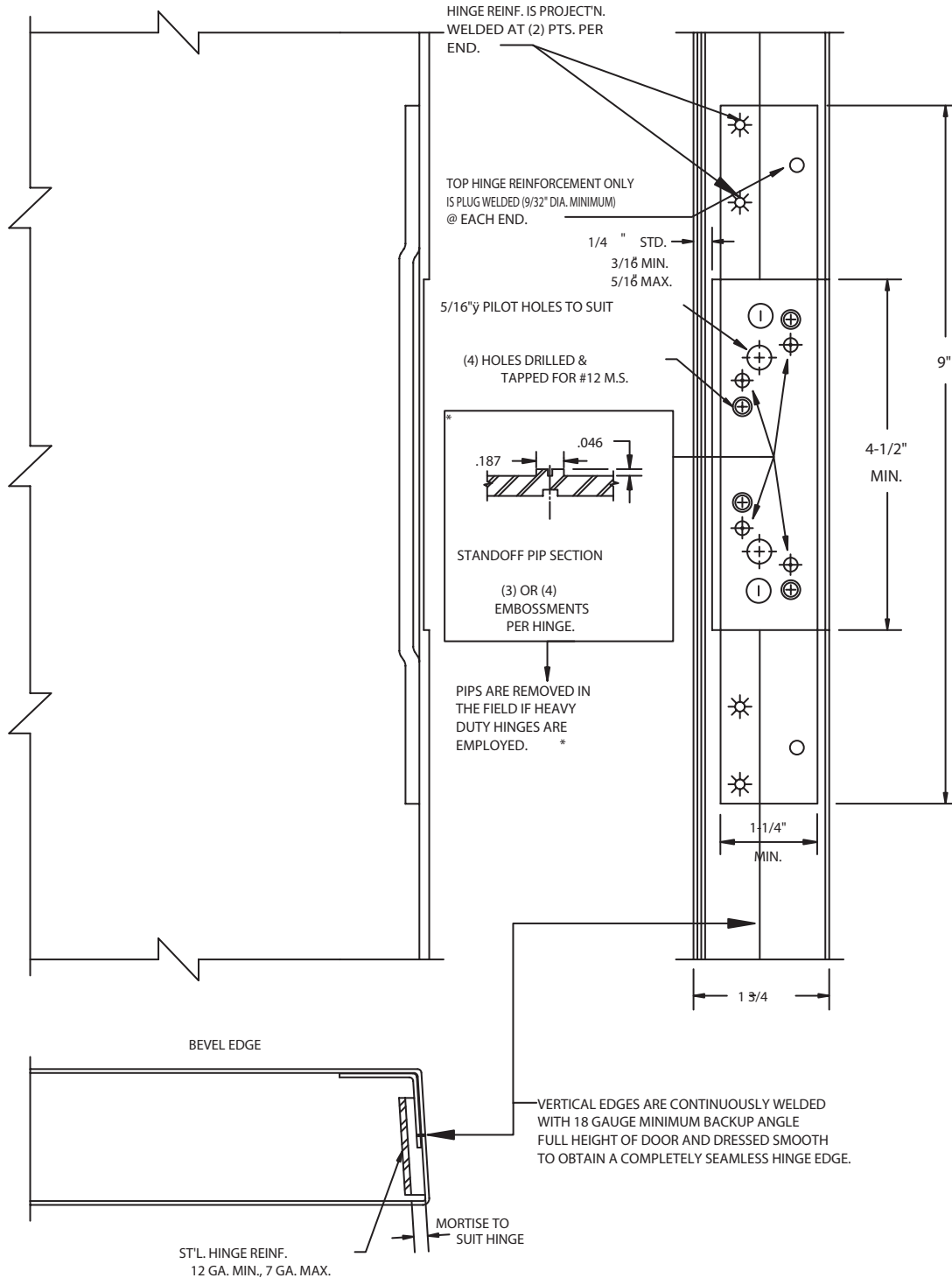
### 5" Single Mortise Handed Door Hinge Preparation





# Distributor Tech Data

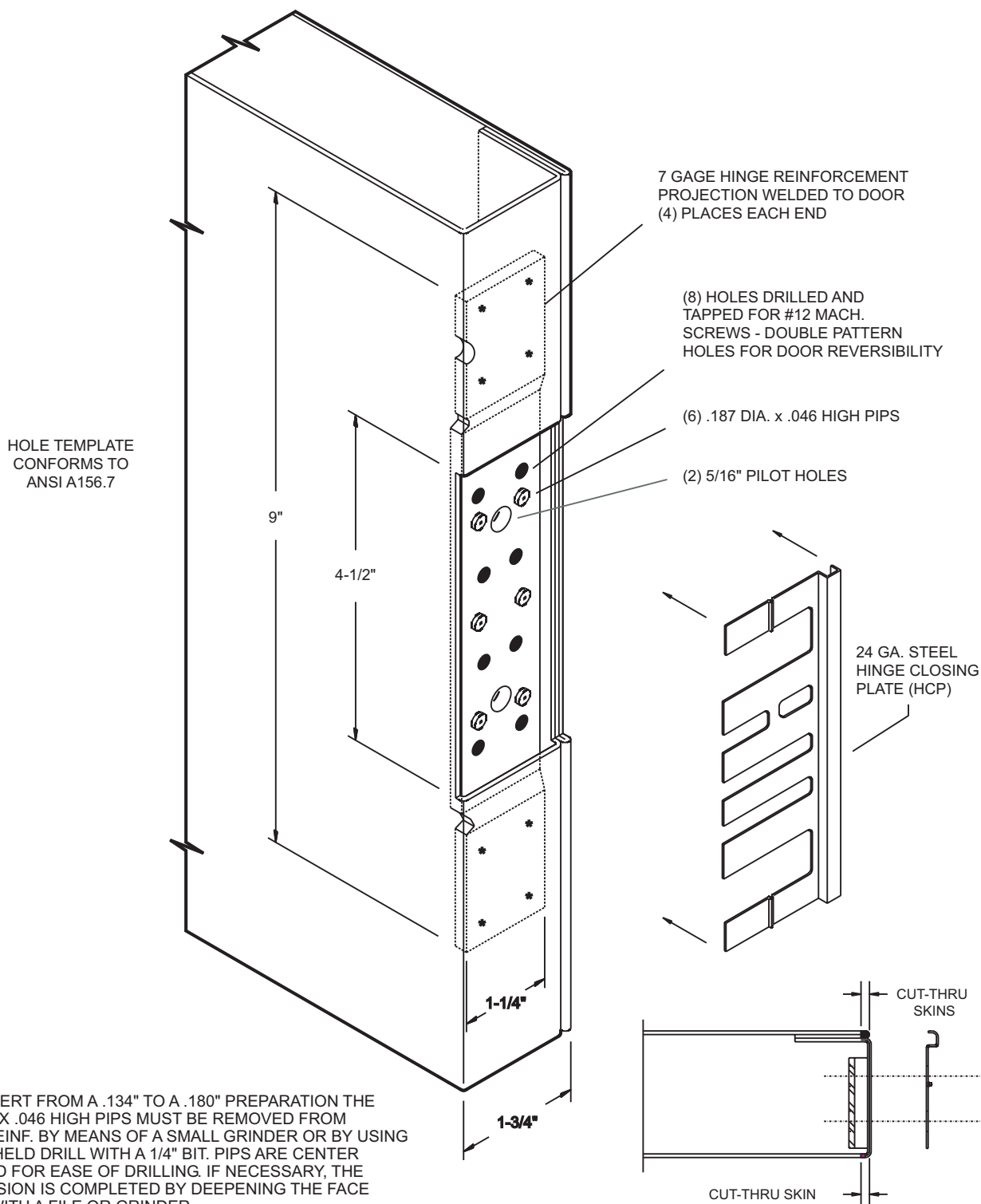
## 4-1/2" Single Mortise Hinge Preparation - Alternate Handed Door



## Distributor Tech Data

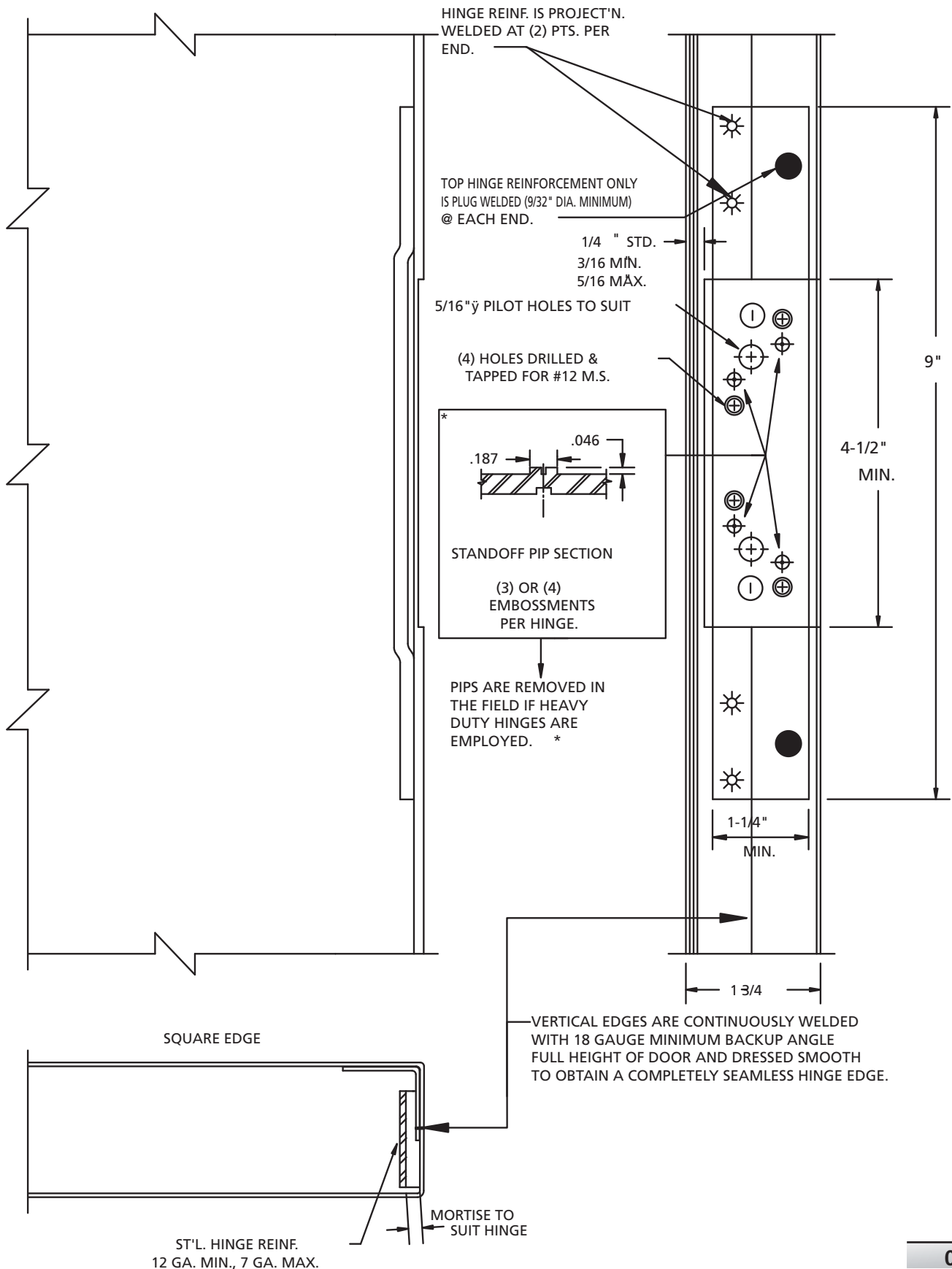
### 4-1/2" x .134 Cut-Thru Hinge Preparation Non-Handed Door

### 4-1/2" x .134 CUT-THRU HINGE PREP NON-HANDED DOOR



## Distributor Tech Data

### Alternate Mortise Hinge Preparation Handed Door

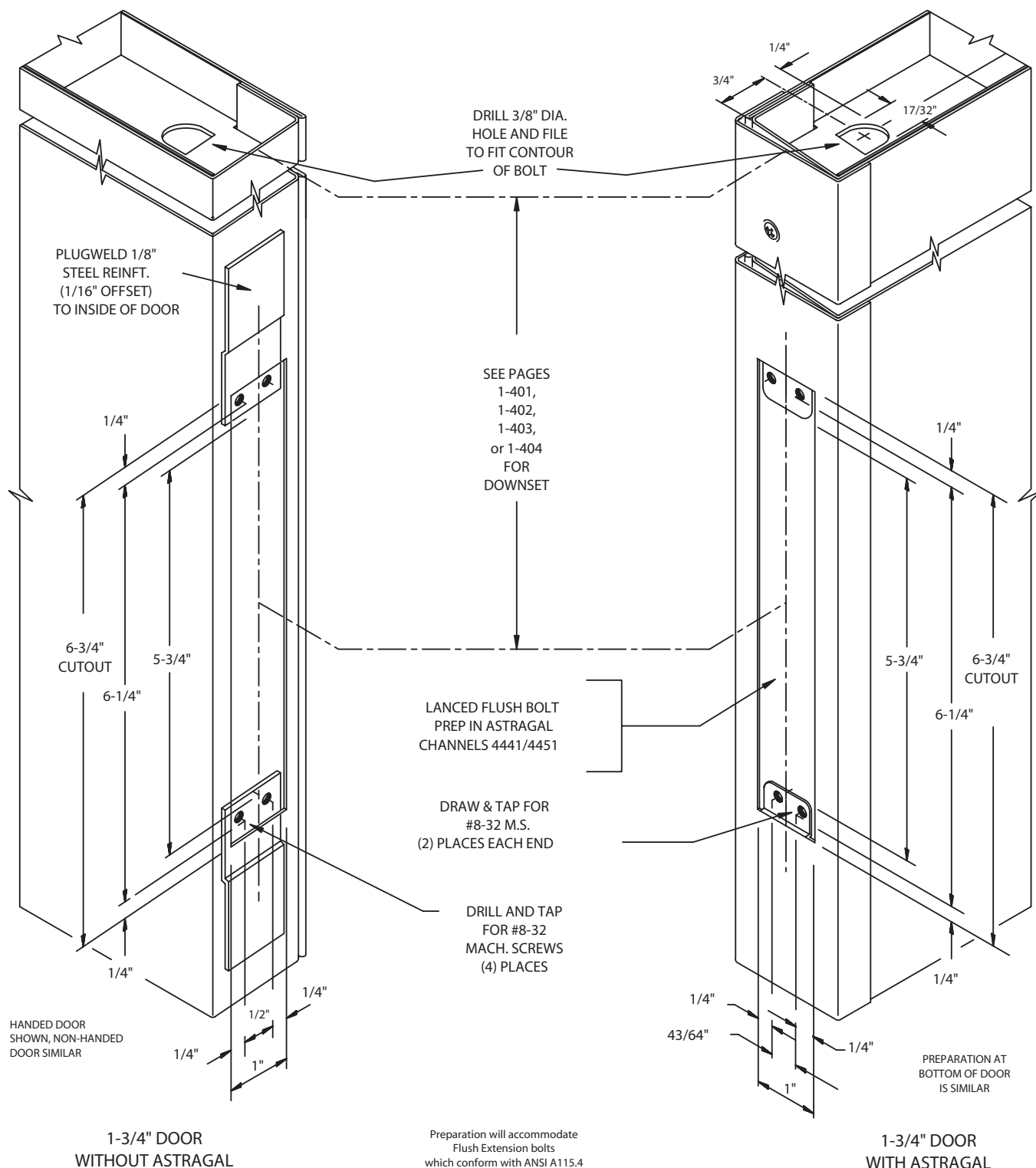




# Distributor Tech Data

## Flush Bolt Preparation Handed Door

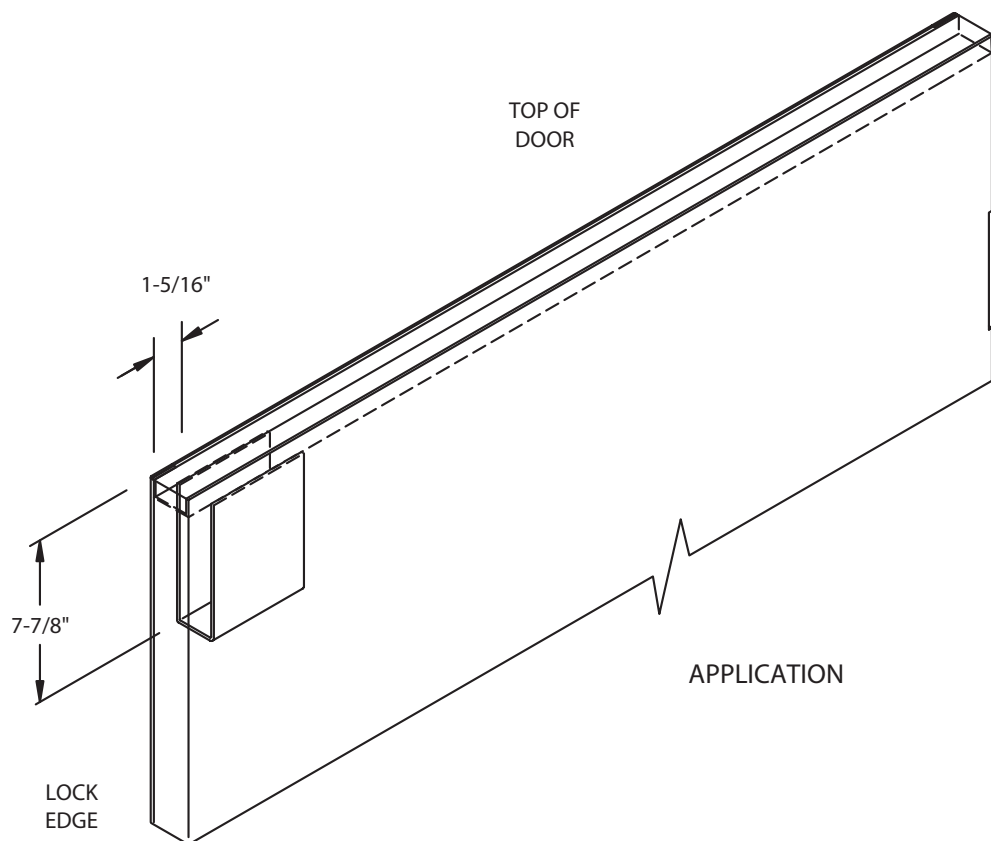
THE CONTOURED HOLE IN THE END CHANNEL FUNCTIONS AS THE BOLT GUIDE. AS AN OPTION, THE END CHANNEL IS ALSO AVAILABLE MORTISED, AND DRILLED AND TAPPED FOR THE BOLT GUIDE PLATE FURNISHED WITH HARDWARE.





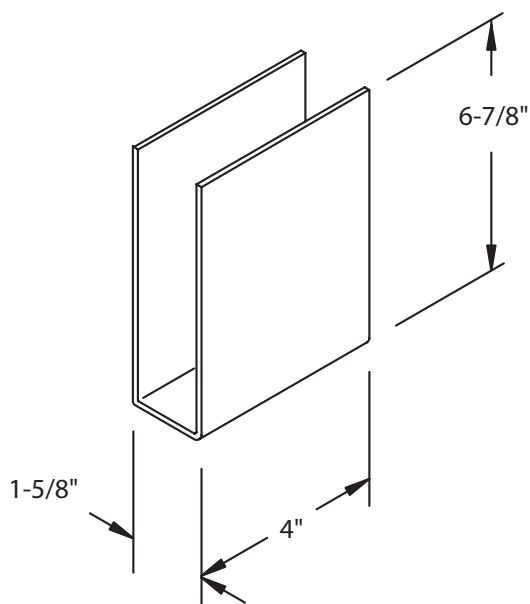
## Distributor Tech Data

### Surface Bolt Reinforcement (Optional)



REINFORCEMENT  
(SURBOLT 30)

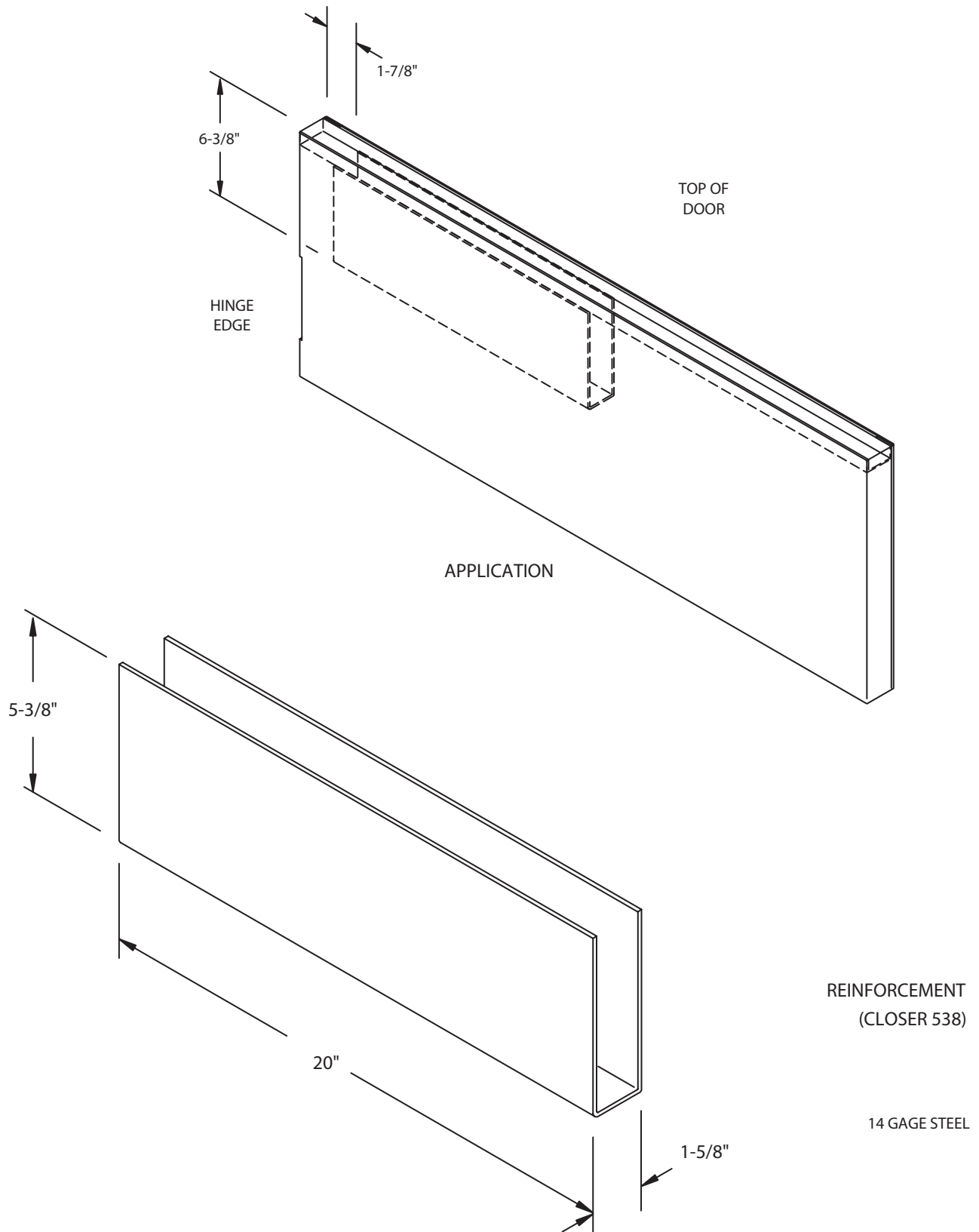
14 GAGE STEEL





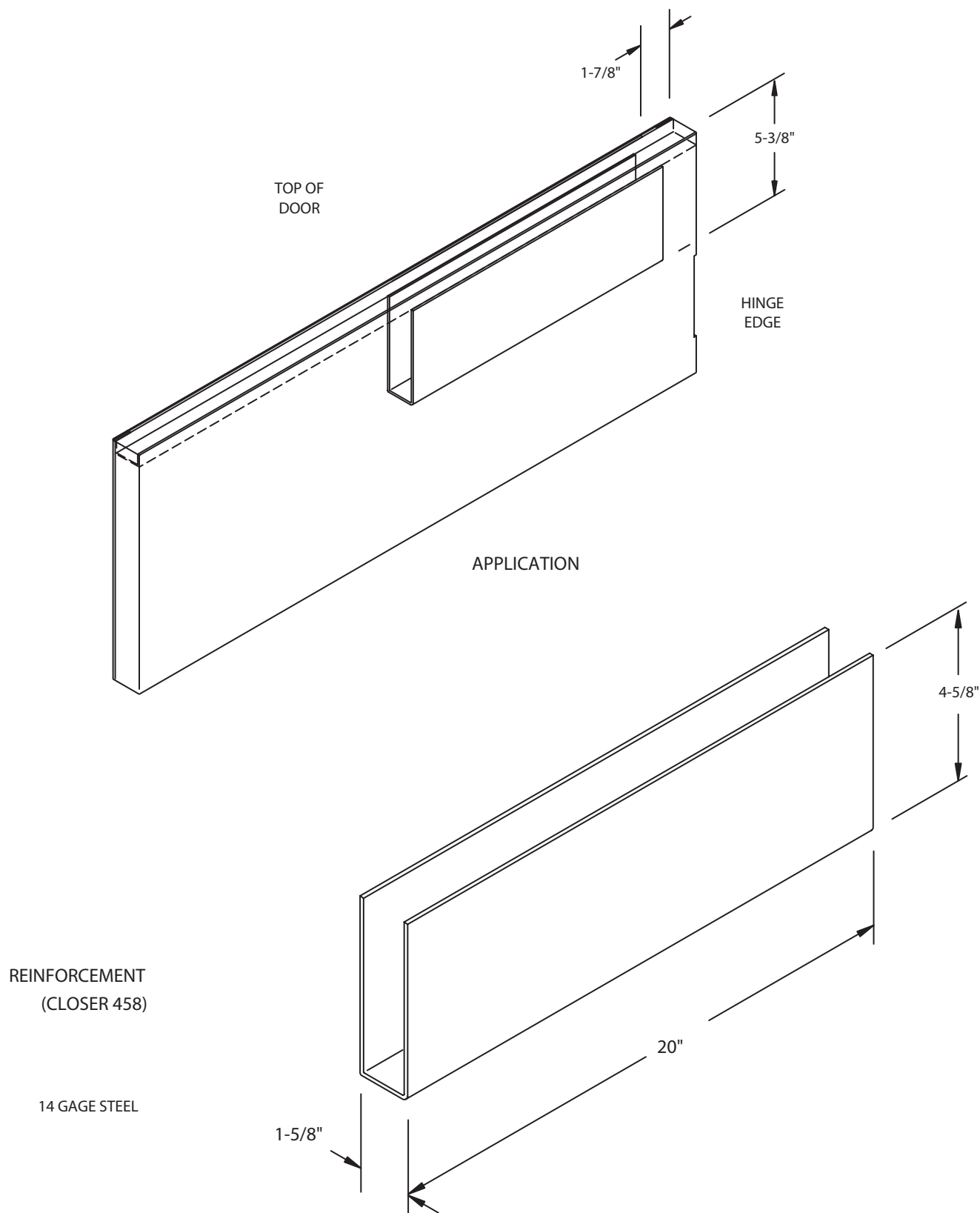
## Distributor Tech Data

### Door Closer/OH Holder Reinforcement Flush Doors (Optional)



## Distributor Tech Data

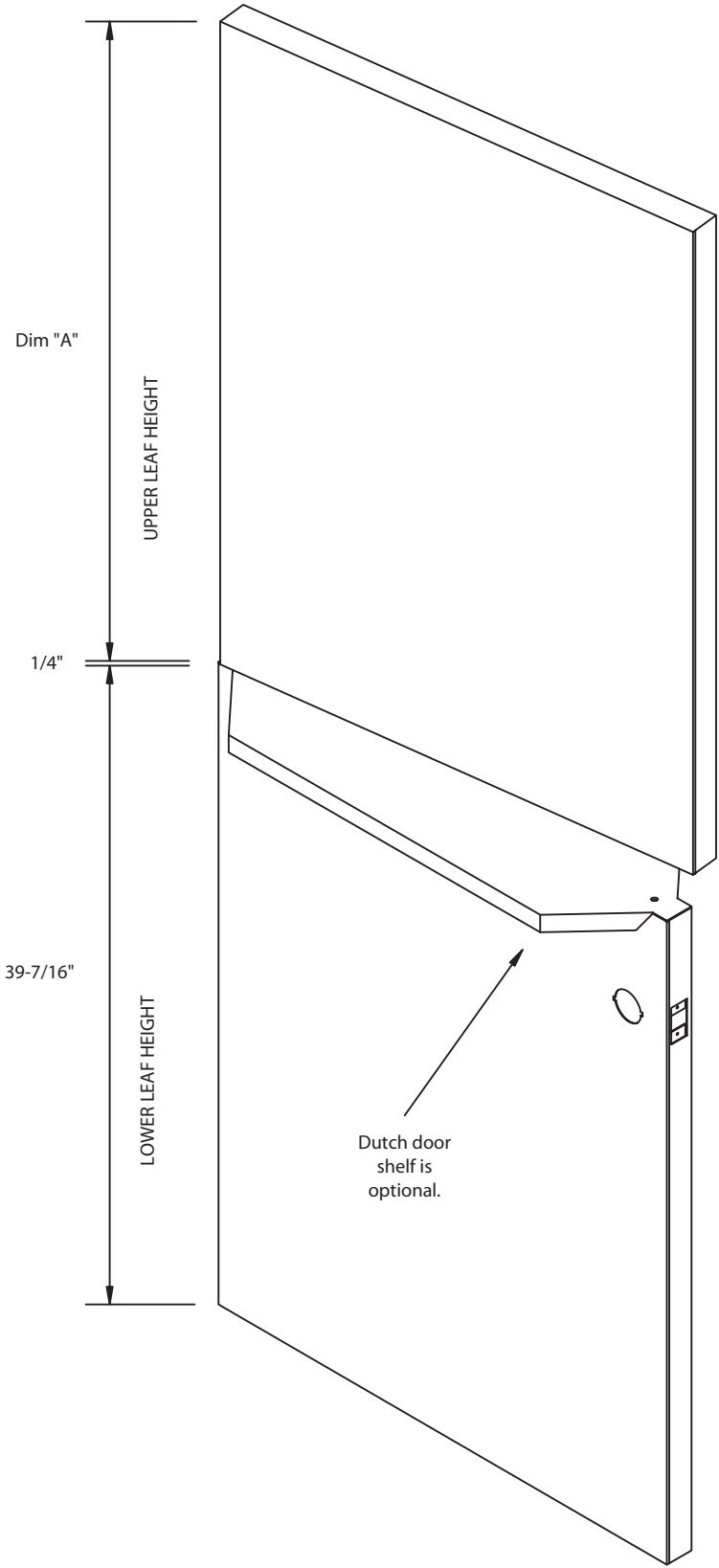
### Door Closer/OH Holder Reinforcement For Embossed Panel Doors (Optional)





# Distributor Tech Data

## Dutch Door Leaf Heights



Note:  
Construction of  
both door leaves  
is the same as  
for standard doors  
(see door sections).

DOOR HEIGHT	Dim "A"
6-8	39-7/16"
7-0	43-7/16"
7-2	45-7/16"
8-0	55-7/16"

For hardware locations  
see page 1-502.

## Distributor Tech Data

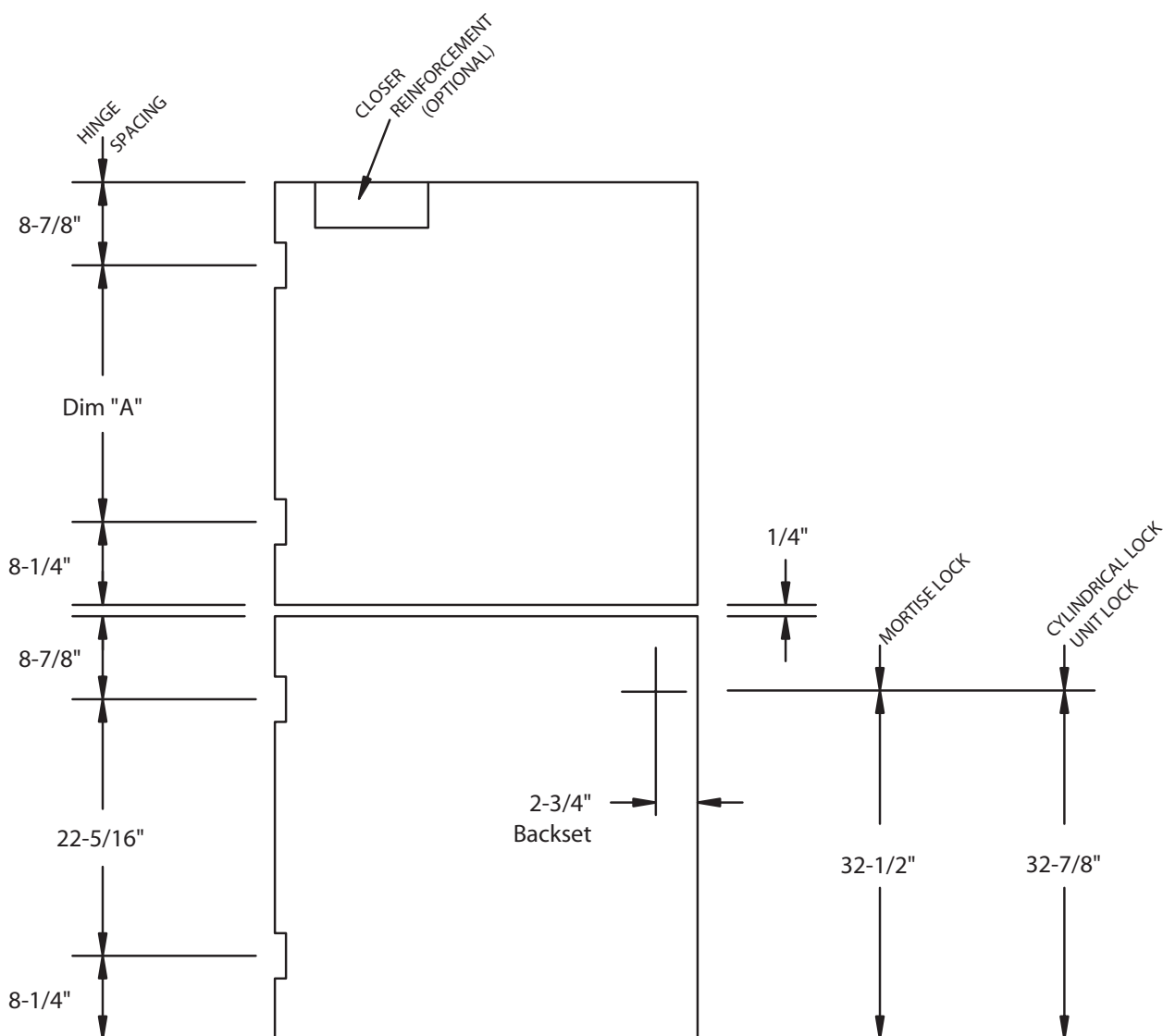
### Dutch Door Hardware Locations

DOOR HEIGHT	Dim "A"
6-8	22-5/16"
7-0	26-5/16"
7-2	28-5/16"
8-0	38-5/16"

TOP LEAF MAY BE PREPARED FOR:

SURFACE OR FLUSH BOLTS INTO BOTTOM LEAF.  
CYLINDRICAL LOCK INTO BOTTOM LEAF OR JAMB.  
MORTISE LOCK INTO JAMB.

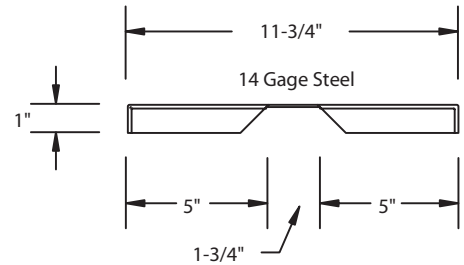
(Location depends on hardware and orientation.)



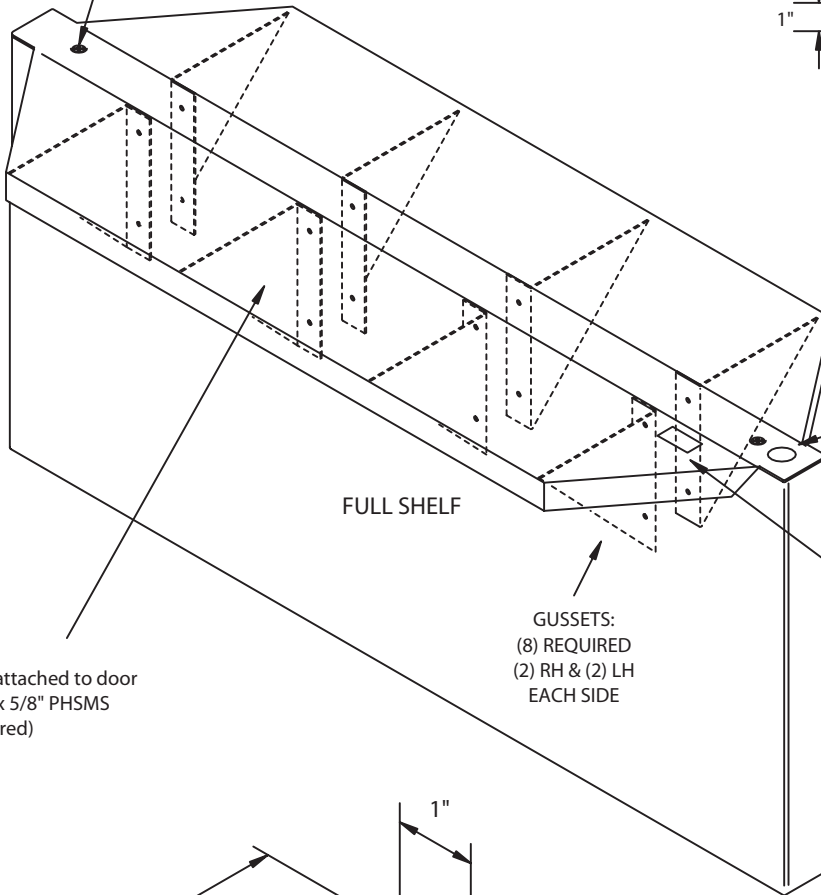
# Distributor Tech Data

## Dutch Door Full Shelf and Accessory Package

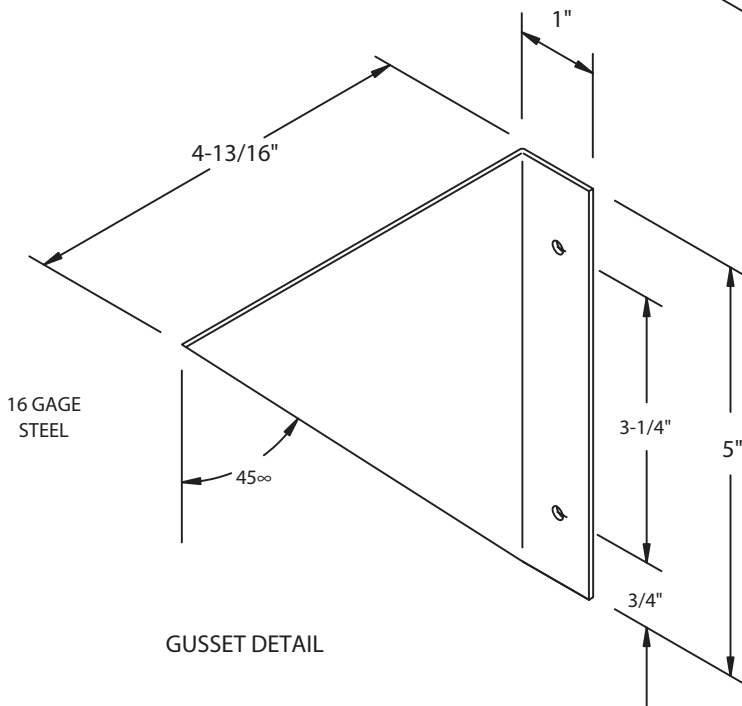
Punched and CTSK for  
#12 x 1/2" UCFHMS  
(Phil) ea. end



SHELF PROFILE



Gussets attached to door  
with # 8 x 5/8" PHSMS  
(16 required)

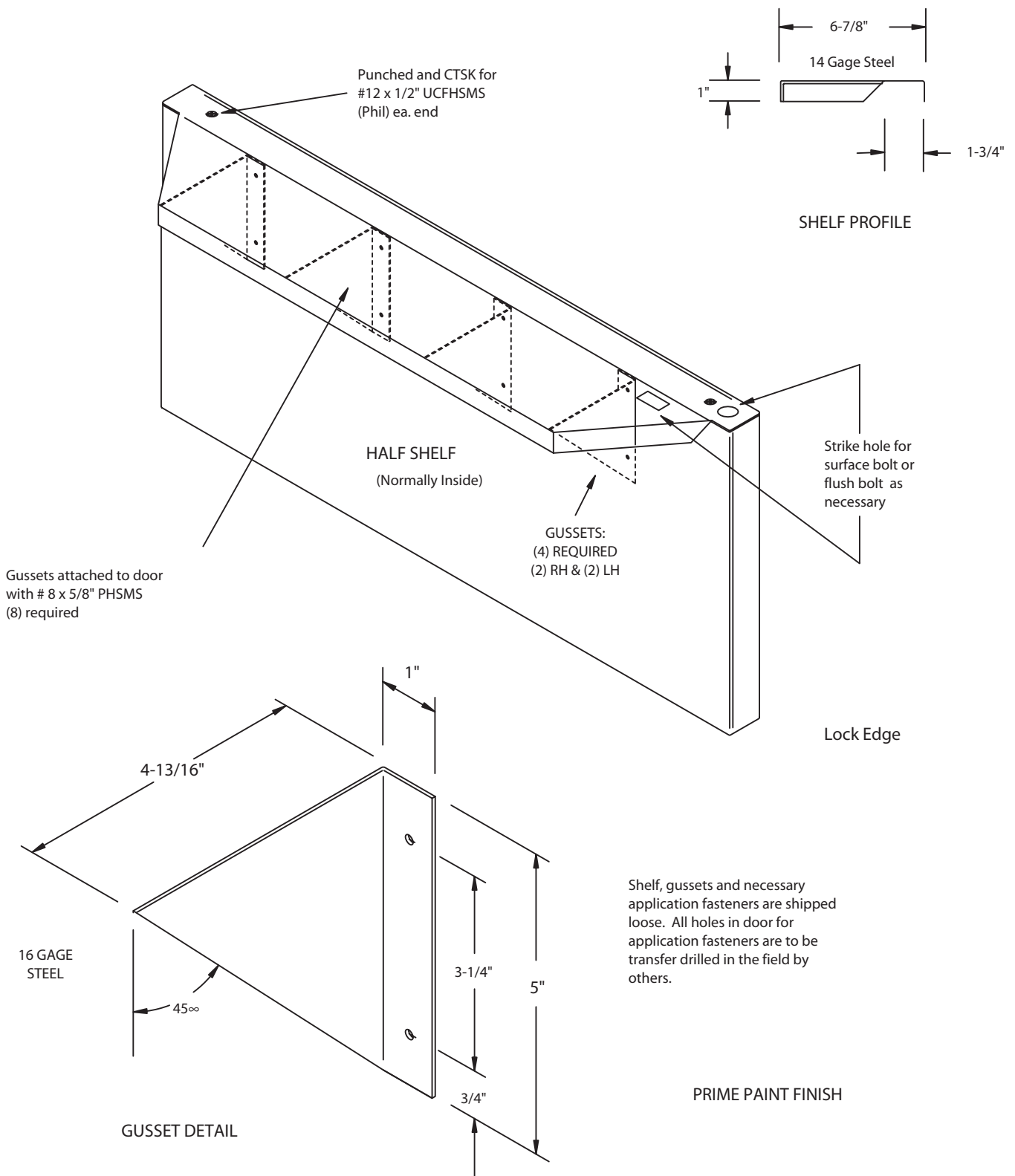


Shelf, gussets and necessary  
application fasteners are shipped  
loose. All holes in door for  
application fasteners are to be  
transfer drilled in the field by  
others.

PRIME PAINT FINISH

## Distributor Tech Data

### Dutch Door Half Shelf and Accessory Package



# Distributor Tech Data

## 4471 Astragal for Pairs of Doors Steel, Chair Type, Overlapping

HARDWARE PREPARATIONS
ANSI 4-7/8" Universal Strike
ANSI 2-3/4" Cylindrical Strike
PLAIN (No Strike Prep)
ANSI FLUSH BOLTS (Top & Bottom)

HANDED:  
USE (LH) ASTRAGAL FOR R OR LR ACTIVE OPENING.  
USE (RH) ASTRAGAL FOR L OR RR ACTIVE OPENING.

Finish: PRIME PAINT

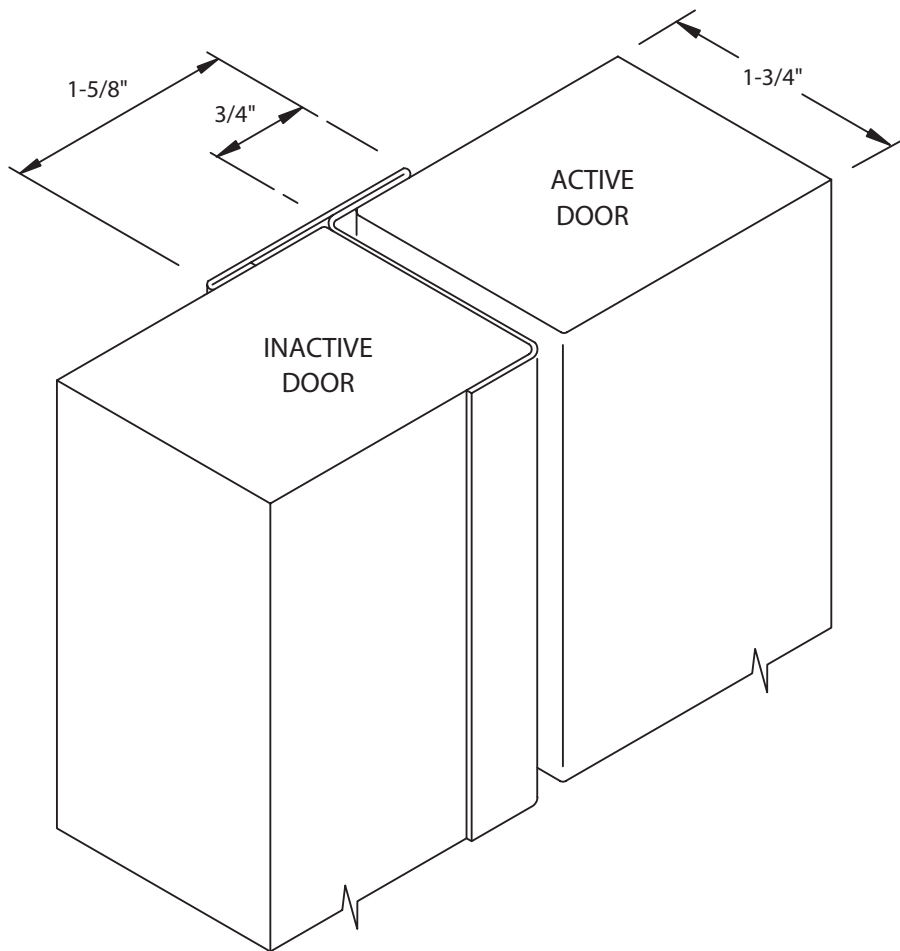
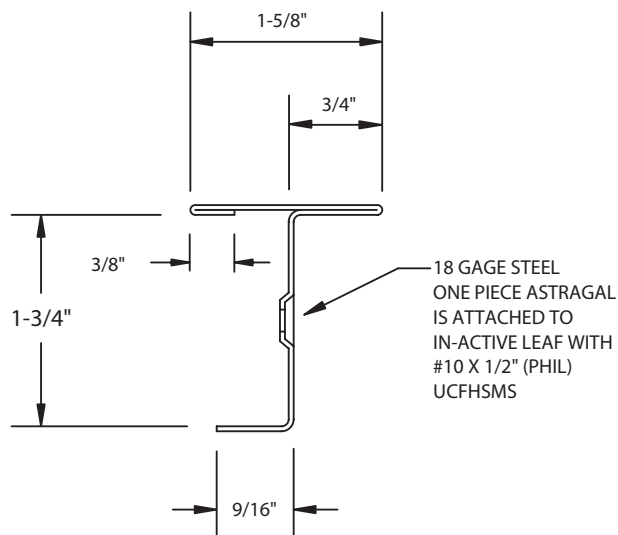
LANCED FLUSHBOLT  
PREPARATION

LANCED (ANSI)  
STRIKE  
MOUNTING PREP

6-8,  
7-0,  
7-2,  
7-10,  
8-0,  
9-0,

NOMINAL  
HEIGHTS

41-1/16"



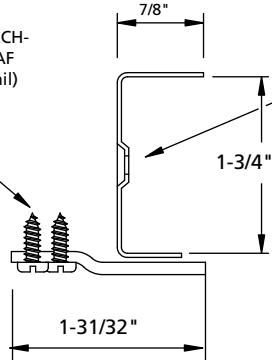
Astragal is shop attached.



## Distributor Tech Data

### 4441 ASTRAGAL SET FOR PAIRS OF DOORS

1/8" STEEL OVER-  
LAP STRIP IS ATTACH-  
ED TO ACTIVE LEAF  
WITH #8 x 1/2" (Phil)  
PHSMS APPROX.  
6" ON CENTERS

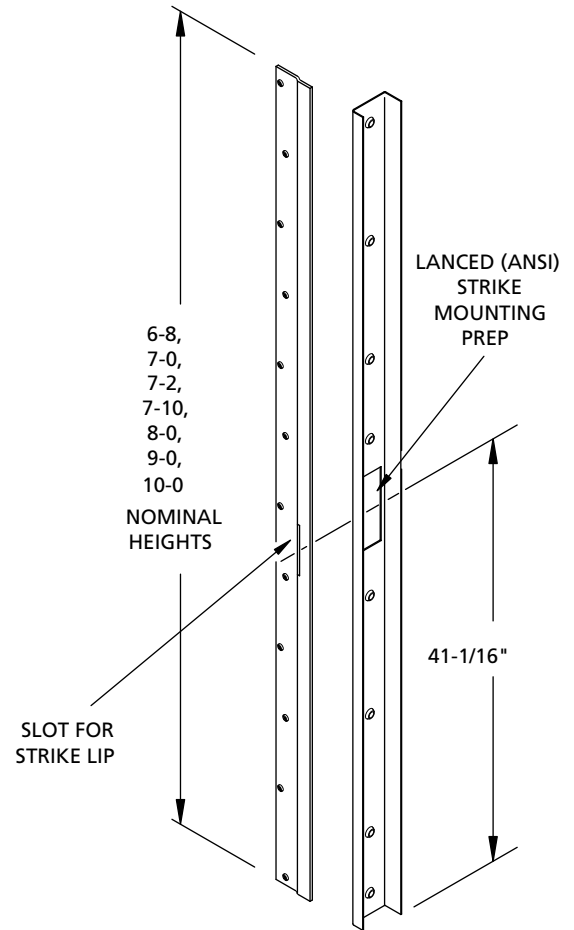
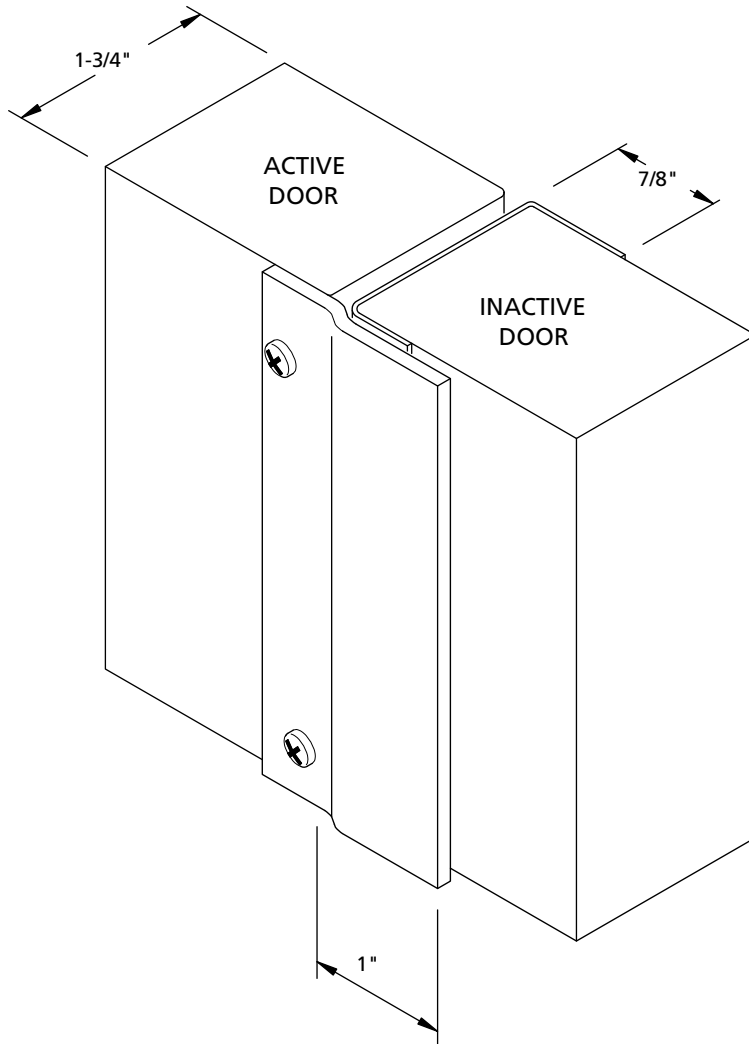


18 GAGE STEEL  
EDGE CHANNEL IS  
ATTACHED TO IN-  
ACTIVE LEAF WITH  
#10 x 1/2" (Phil)  
UCFH5MS

HARDWARE PREPARATIONS	
ANSI 4-7/8" Universal Strike	
ANSI 2-3/4" Cylindrical	Strike
PLAIN (No Strike Prep)	
ANSI FLUSH BOLTS	(Top & Bottom)

HANDED:  
USE (LH) ASTRAGAL FOR R OR LR ACTIVE LEAF.  
USE (RH) ASTRAGAL FOR L OR RR ACTIVE LEAF.

Finish: PRIME PAINT



Astragal is shop attached.

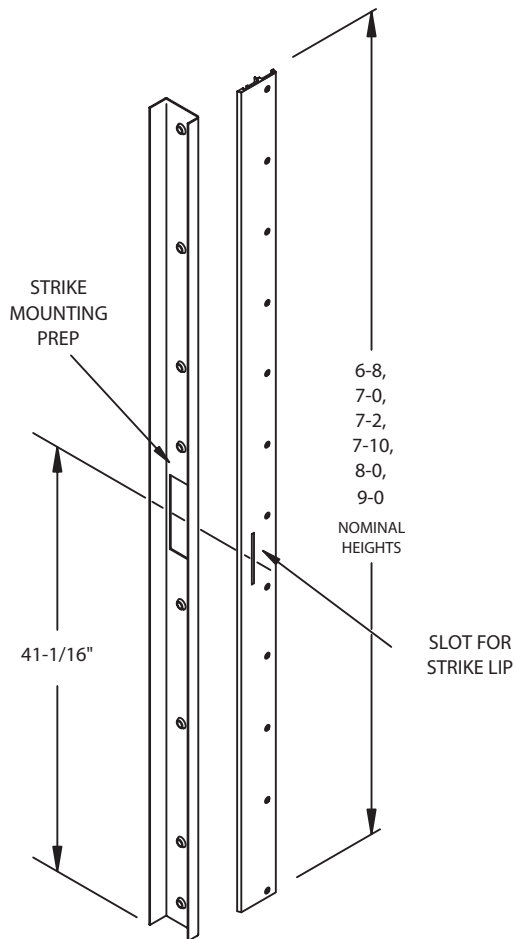
# Distributor Tech Data

## 4451 Astragal for Non-Label Pairs of Doors Aluminum/Steel, Two-Piec, Overlapping

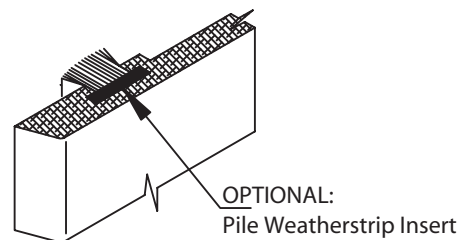
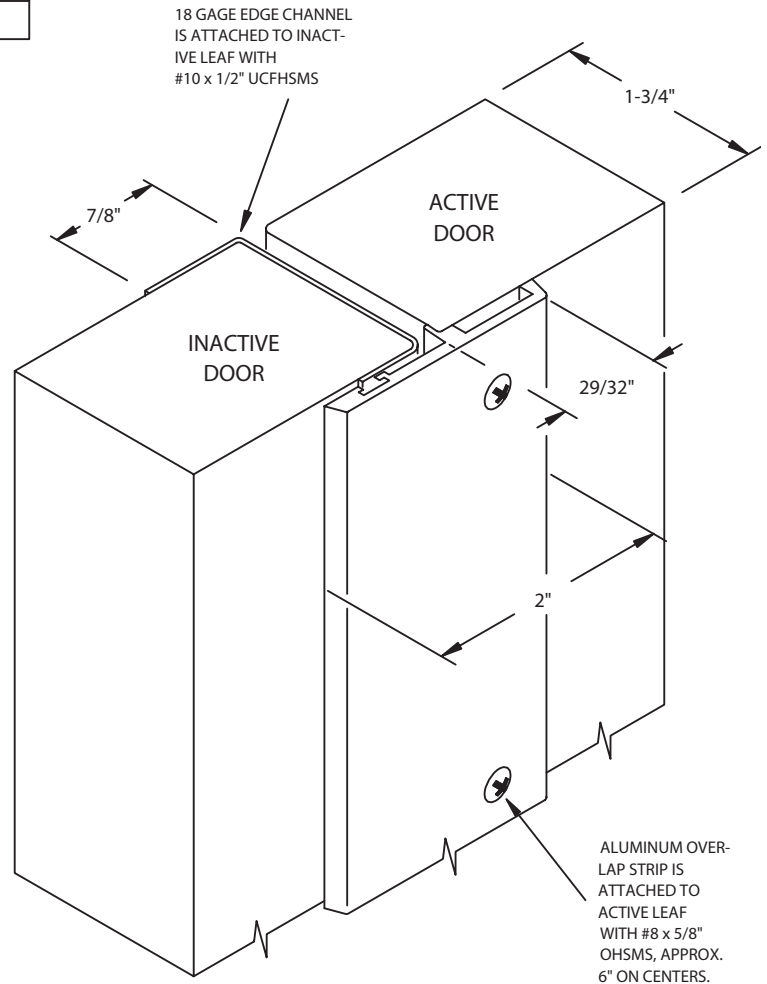
HARDWARE PREPARATIONS
ANSI 4-7/8" Universal Strike
ANSI 2-3/4" Cylindrical Strike
PLAIN (No Strike Prep)
ANSI FLUSH BOLTS (Top & Bottom)

HANDED:  
USE (LH) ASTRAGAL FOR R OR LR ACTIVE LEAF.  
USE (RH) ASTRAGAL FOR L OR RR ACTIVE LEAF.

Finish: PRIME PAINT



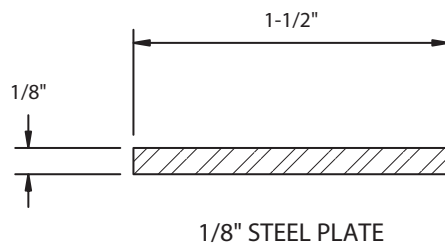
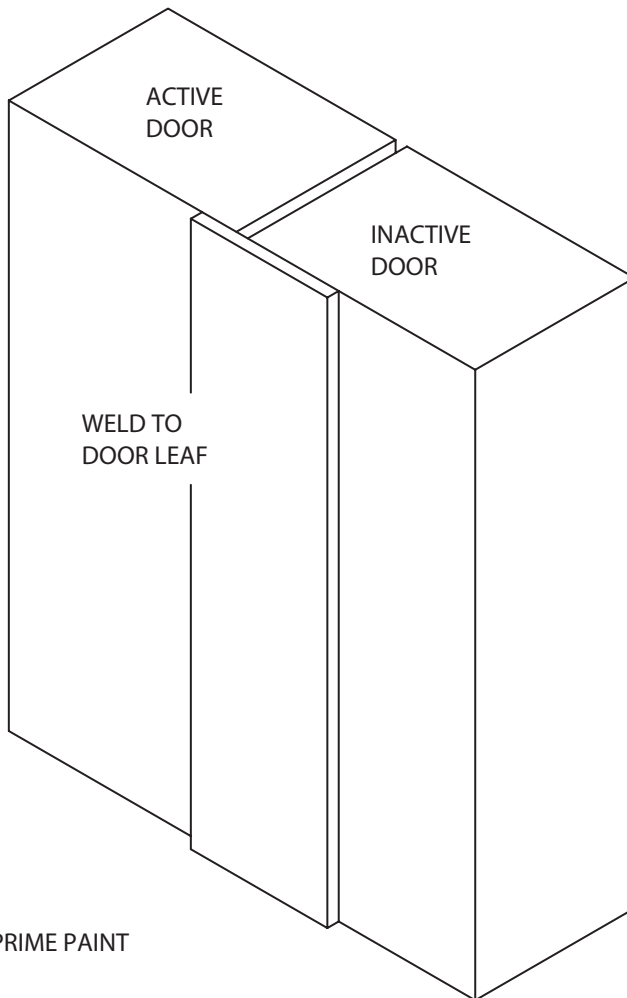
Edge channel is shop attached. To avoid damage during transit, aluminum overlap is temporarily applied with flat side toward door by means of end screws only. Door is transfer drilled and balance of screws are bagged separately. Final installation (as shown above) is by others.





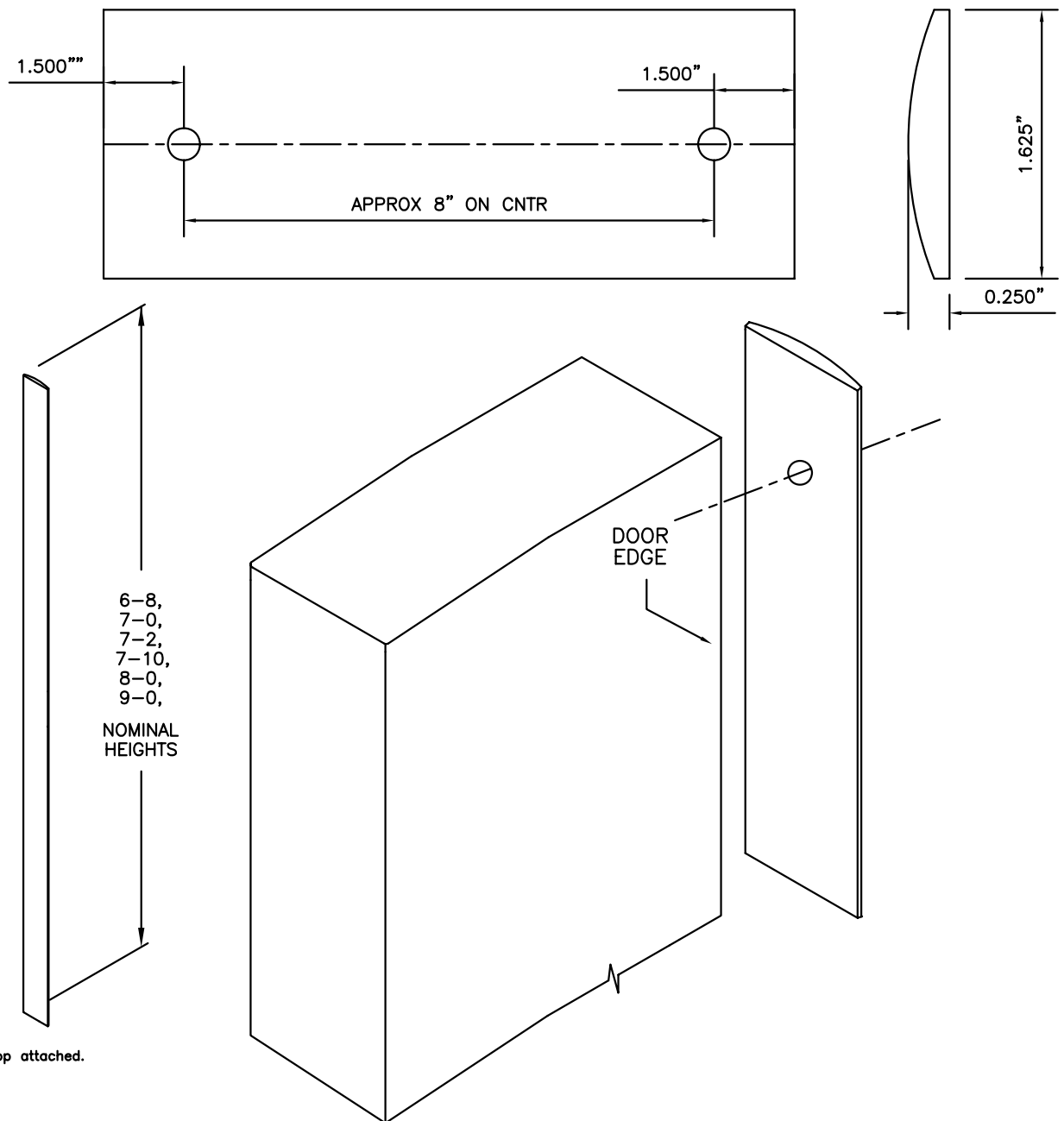
## Distributor Tech Data

### 4491 Plate Astragal (Optional)



AVAILABLE FOR  
MEDALLION AND  
THRULITE DOORS

4783 BULLNOSE  
ALUMINUM SECTION  
FOR DOUBLE ACTING DOORS

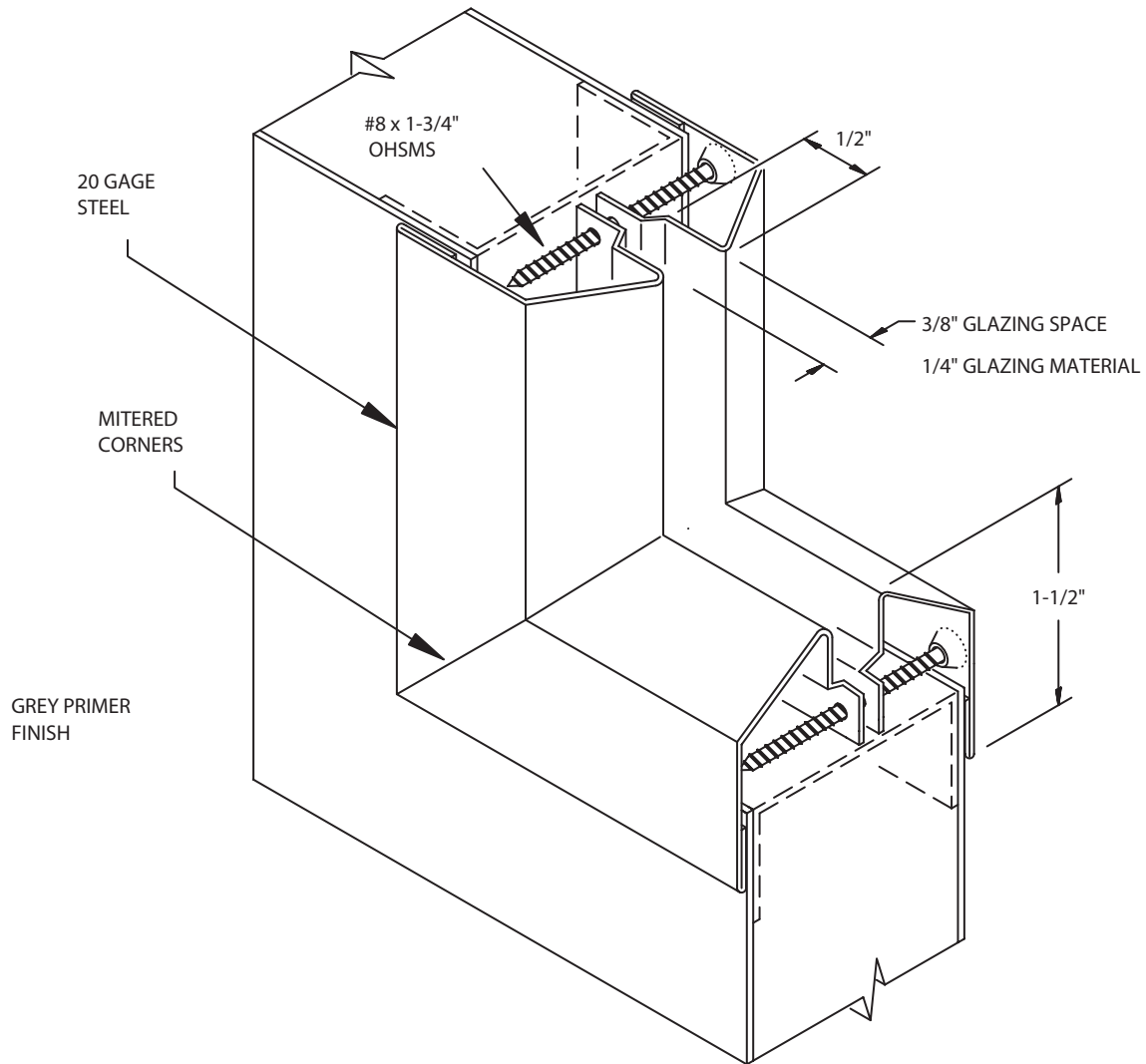


4783 BULLNOSE STRIP CAN BE APPLIED TO ONE OR BOTH EDGES OF THE DOOR. BULLNOSE IS ATTACHED TO THE DOOR WITH #8 X 5/8" PHIL O.H. TEK.



# Distributor Tech Data

## Slim Trim Glazing Kit for 1/4" Glazing Steel

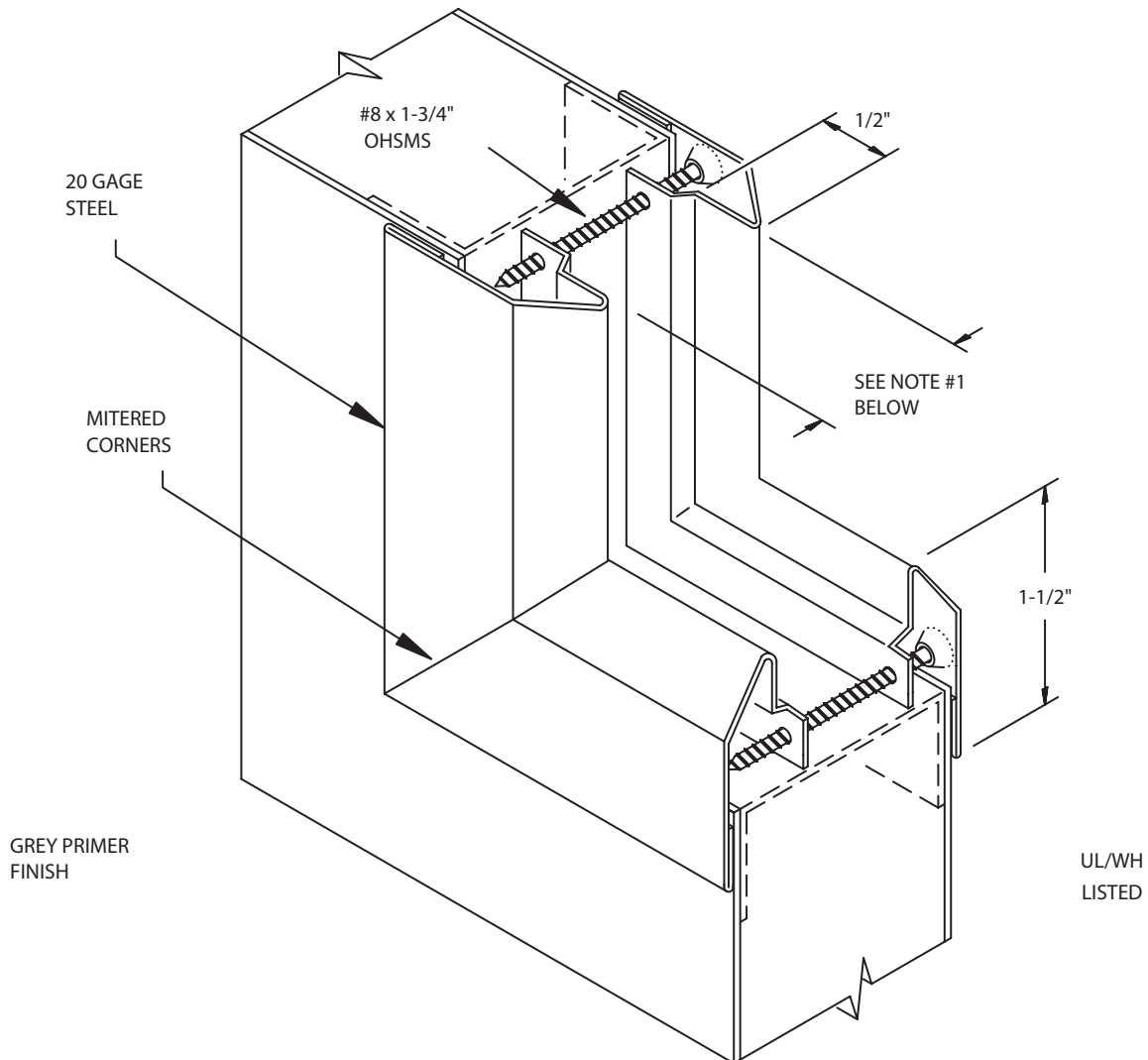


VISIBLE GLASS SIZES (W x H)
3 x 33
4 x 25
5 x 20
10 x 10
22 x 22
22 x 28
Special Sizes available

UL/WH  
LISTED

## Distributor Tech Data

### Slim Trim Glazing Kit for 3/8" to 1" Glazing Steel



#### NOTE #1

VISIBLE GLASS SIZES (W x H)
3 x 33
4 x 25
5 x 20
10 x 10
22 x 22
22 x 28
Special Sizes available

9/16" MIN. GLAZING SPACE  
3/8" TO 1/2" GLAZING MATERIAL

13/16" GLAZING SPACE  
5/8" TO 3/4" GLAZING MATERIAL

1-1/16" GLAZING SPACE  
7/8" TO 1" GLAZING MATERIAL

GLAZING SPACE DETERMINED BY  
COMPOUND OR GLAZING TAPE  
USED AS WELL AS GLASS THICKNESS.

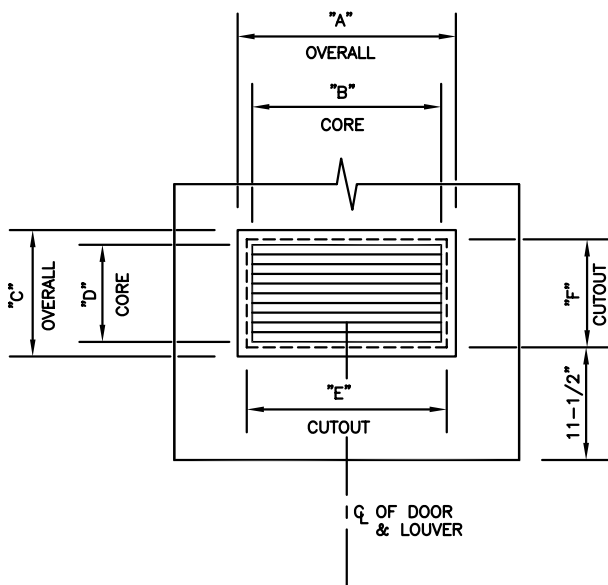
## 4634 FIXED SLAT LOUVER

NOMINAL SIZE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	FREE AIR PASSAGE
12 x 8	12-13/16	11	8-13/16	7	12	8	41 sq. ins.
12 x 12	12-13/16	11	12-13/16	11	12	12	62 sq. ins.
16 x 8	16-13/16	15	8-13/16	7	16	8	55 sq. ins.
16 x 12	16-13/16	15	12-13/16	11	16	12	83 sq. ins.
20 x 8	20-13/16	19	8-13/16	7	20	8	69 sq. ins.
20 x 12	20-13/16	19	12-13/16	11	20	12	103 sq. ins.
20 x 16	20-13/16	19	16-13/16	15	20	16	138 sq. ins.

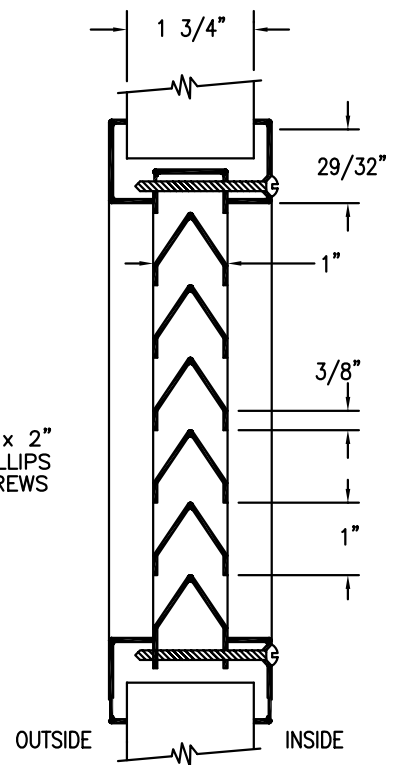
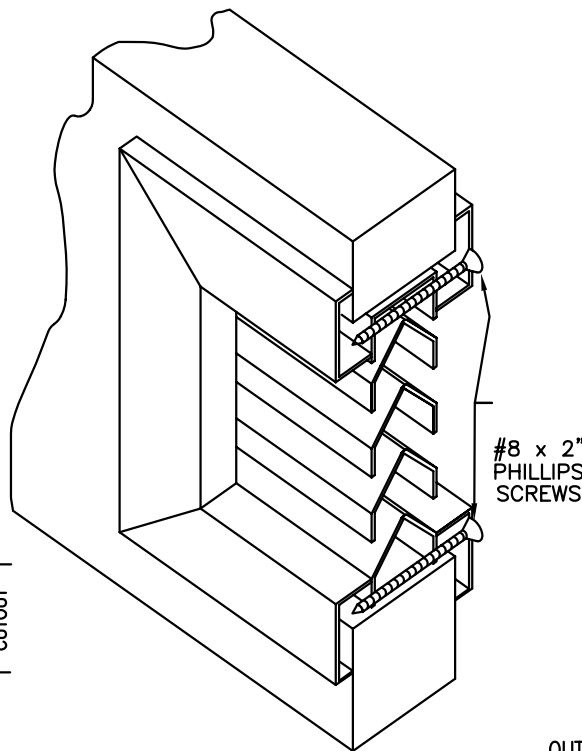
FREE AIR AREA  
APPROXIMATELY  
50%

Ceco Model 4634 (factory set for 1-3/4" doors)

Minimum core size: 6" x 6"  
Maximum core size: 36" x 78"  
Size of cutout in door equals  
core size.



FRAMES ARE 20 GAUGE STEEL (MINIMUM)  
CORE IS 22 GAUGE STEEL (MINIMUM)



When preparation and installation are included: cutout and installation are performed in the manner indicated above. Louver frame halves attach to core, clamping louver assembly to door; frames are not screwed directly to door.  
 Insect screens (optional) are #18 x 16 mesh aluminum. The screen material is trapped between core and louver back frame.  
 Standard finish is prime paint.