

DE LA  
FONTAINE

STEEL DOORS AND FRAMES

# Technical Data Book

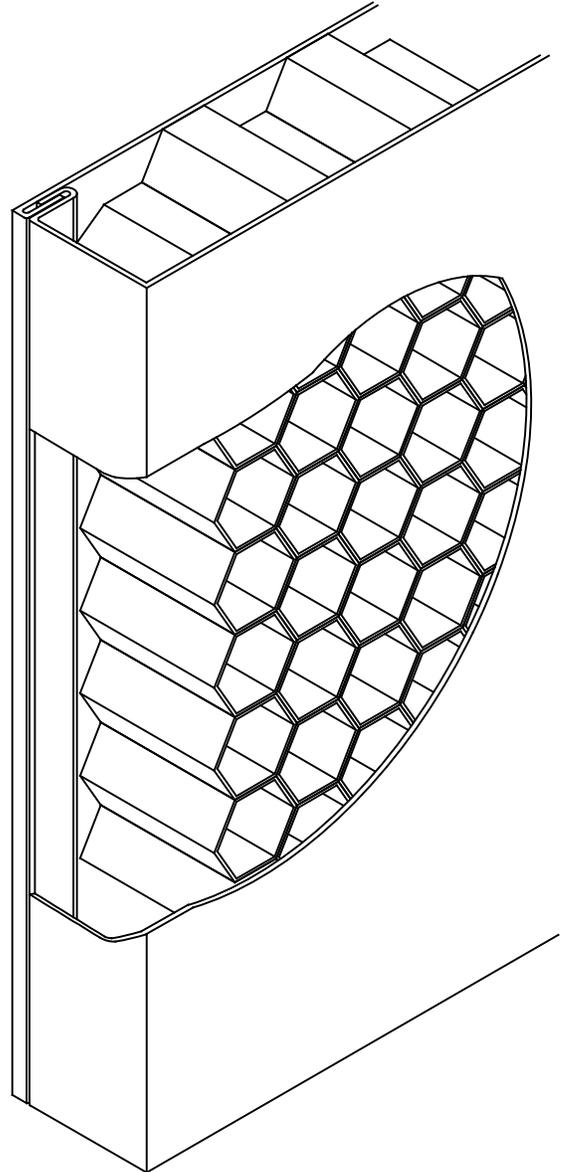
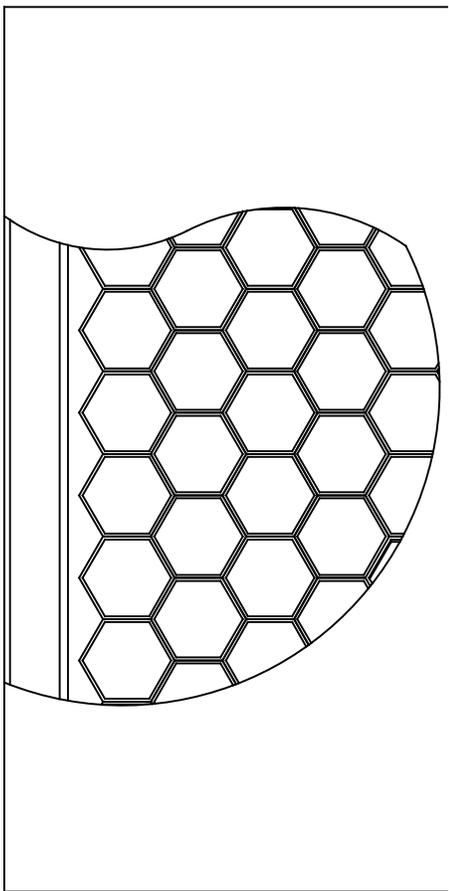
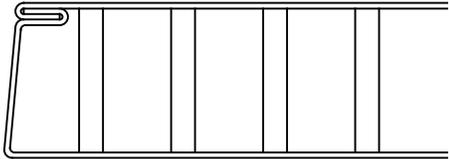
Revised September 2025

# DOOR SERIES

DOOR SERIES	PAGE
Honeycomb (HC Series) .....	D-4
Polystyrene (PS Series) .....	D-6
Polyurethane (PU Series).....	D-8
 Steel-Stiffened (ST Series)	
with Polystyrene (STPS) .....	D-10.1
with Wool (STW) .....	D-10.2
with Polyurethane (STPU).....	D-10.3
with Wool/Thermal Rated (STWT) .....	D-10.4
 Temperature Rise (TR Series)	
Mineral Core 450°F in 30mn (TR45030) .....	D-12.1
Steel Stiffened 450°F in 30mn (ST45030) .....	D-12.2
Mineral Core 250°F in 30mn (TR25030) .....	D-12.3
 Honeycomb Stainless Steel (HCSS Series).....	D-14
Polystyrene Stainless Steel (PSSS Series) .....	D-16
Polyurethane Stainless Steel (PUSS Series).....	D-18
 Steel-Stiffened Stainless Steel (ST Series)	
with Polystyrene (STPSSS).....	D-20.1
with Wool (STWSS).....	D-20.2
with Polyurethane (STPUSS) .....	D-20.3

**Honeycomb core**

Continuous bonding of core to steel faces.

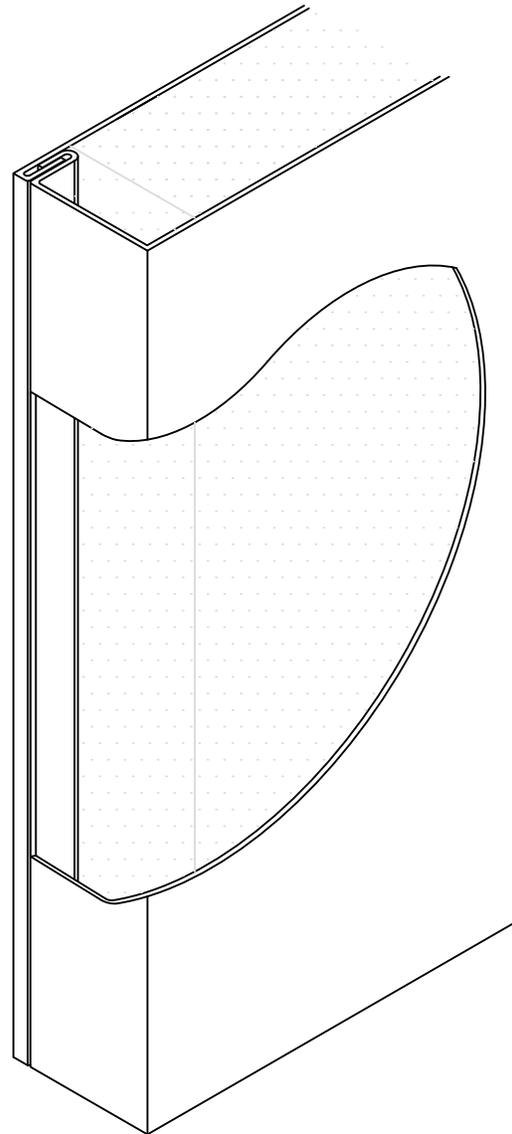
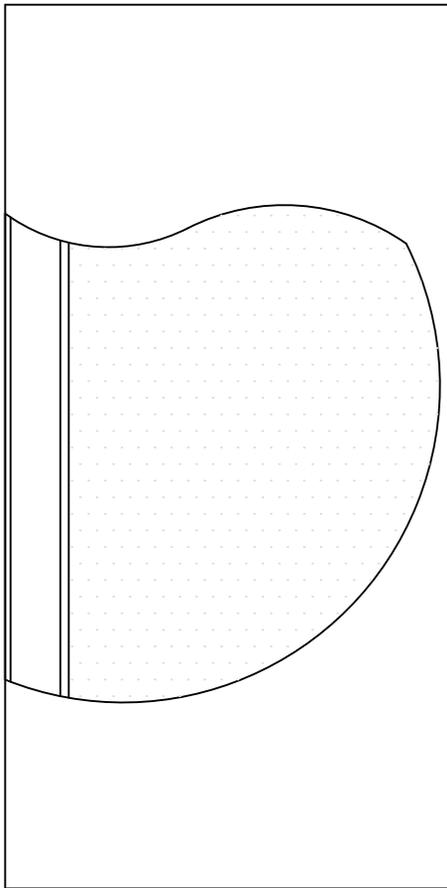


Added stiffener, full height, in middle of door when over 3'0" wide.

**Polystyrene core**

Continuous bonding of core to steel faces.

Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)*	2.50	0.44	0.40	1.84
per SDI-113 (ASTM C518)	7.03	1.24	1.14	0.80

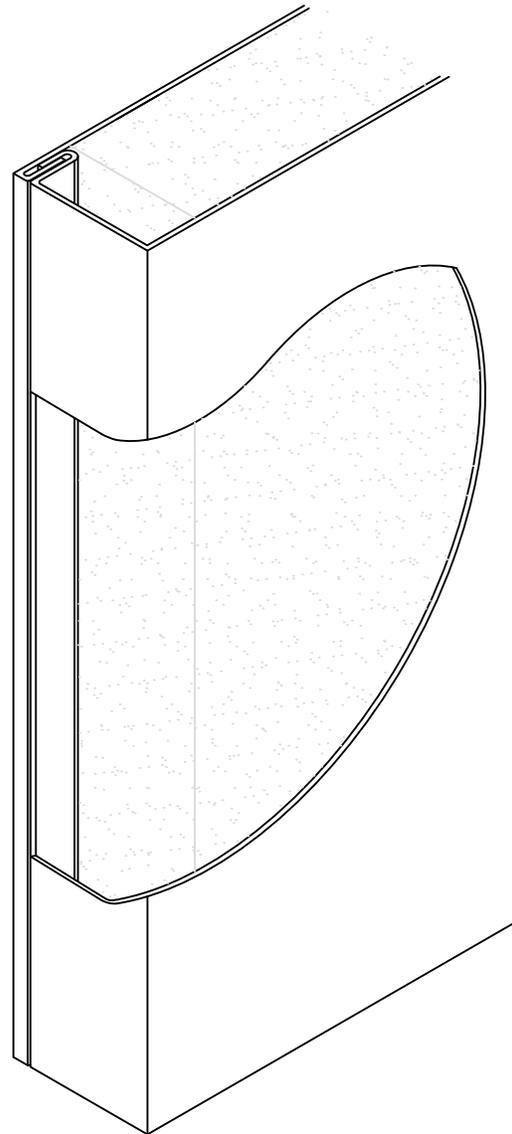
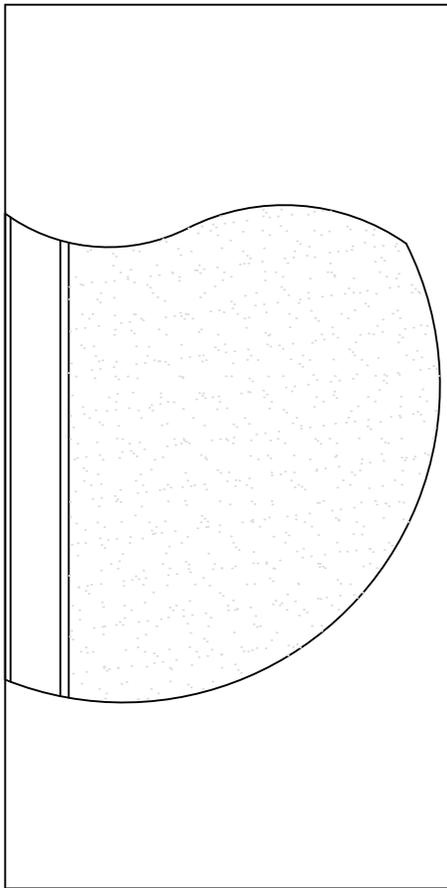
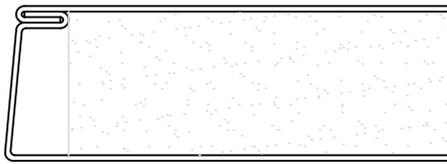


Added stiffener, full height, in middle of door when over 3'0" wide.  
\*When used with thermal break profile frame - see section O-17.30

**Polyurethane core**

Continuous bonding of core to steel faces.

Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)*	3.13	0.54	0.32	1.84
per SDI-113 (ASTM C518)	10.20	1.80	0.098	0.557

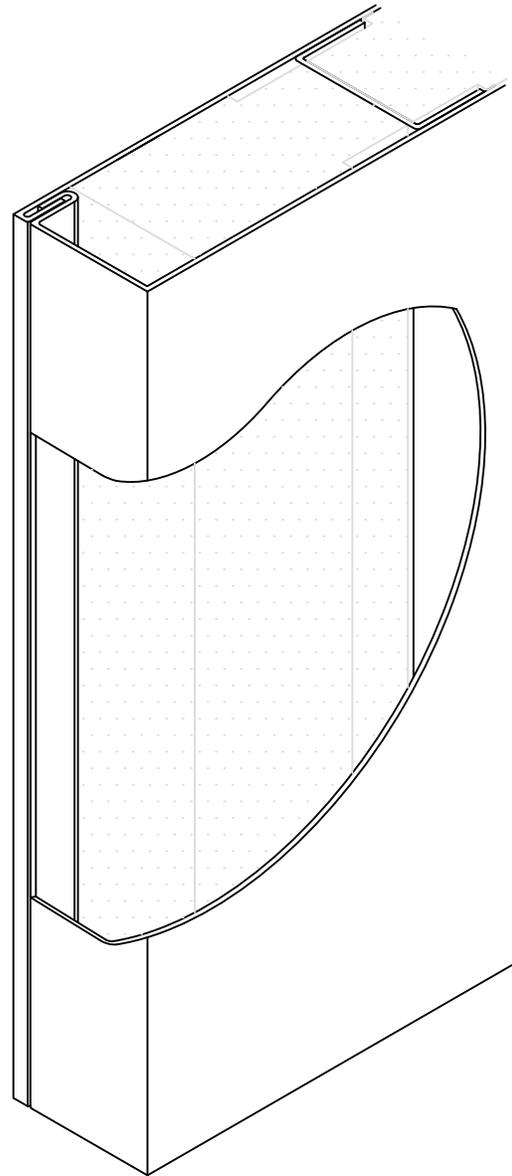
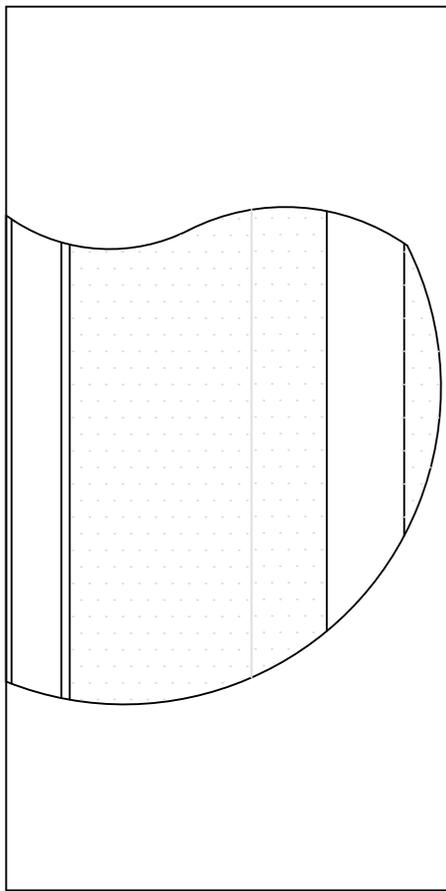
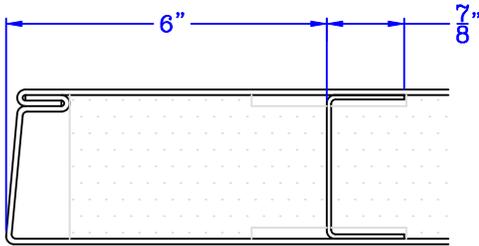


Added stiffener, full height, in middle of door when over 3'0" wide.  
\*When used with thermal break profile frame - see section O-17.30

**Steel stiffened with polystyrene**

With vertical 18 gage steel stiffeners, 6" on center with solid polystyrene blocks.  
Continuous bonding of core to steel faces.

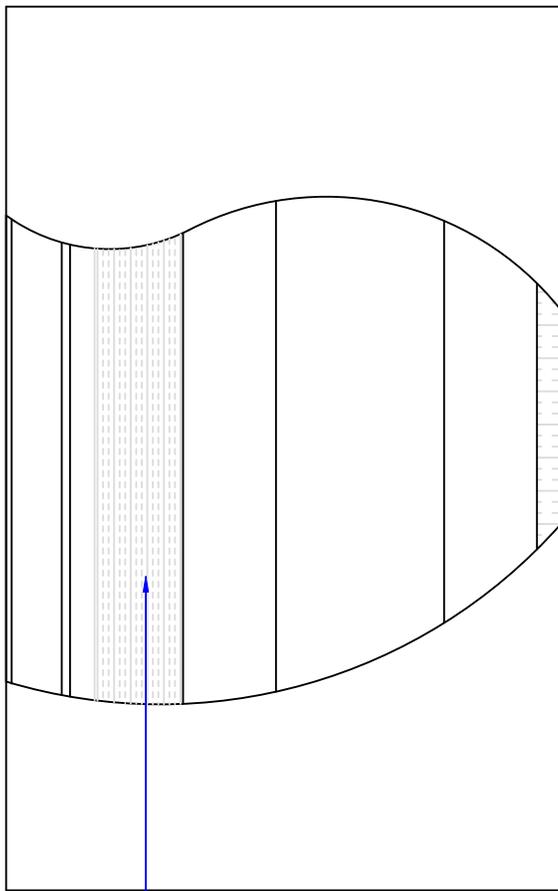
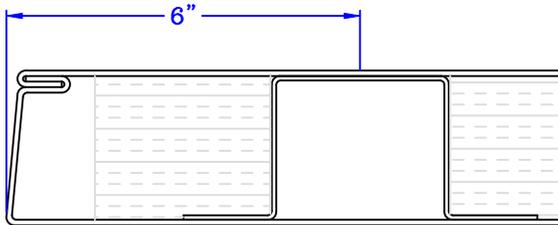
Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.89	0.33	0.53	3.00



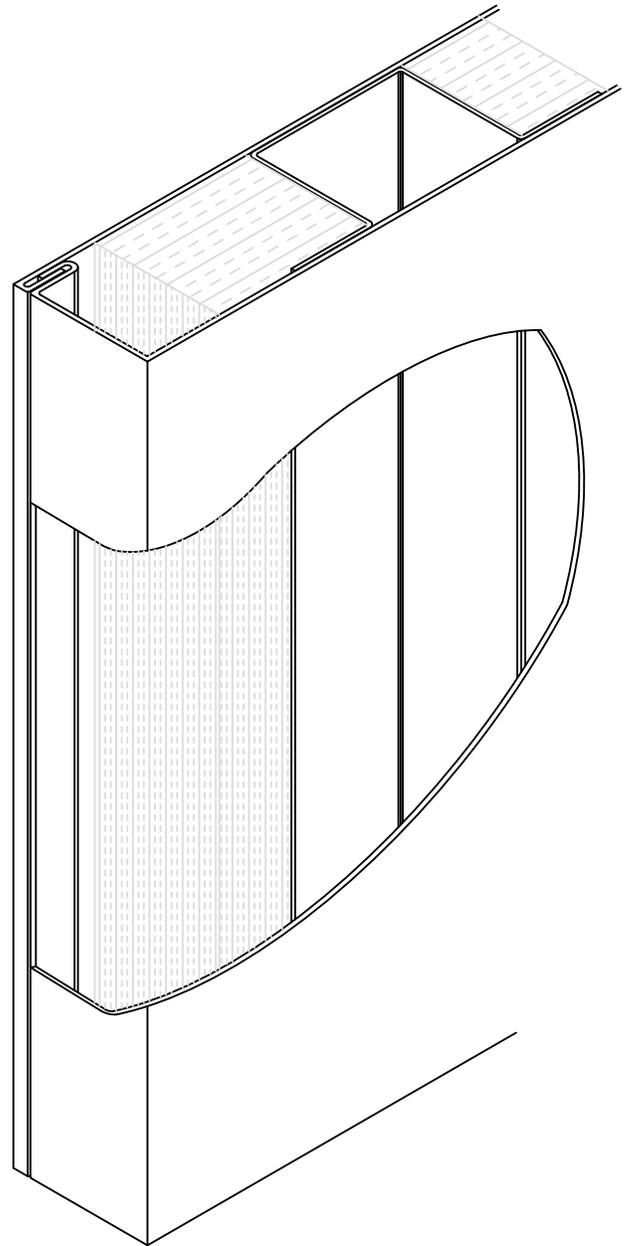
**Steel stiffened with wool**

With vertical 18 gage steel stiffeners, 6" on center.  
Continuous bonding or welded of core to steel faces.

Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.47	0.26	0.68	3.86



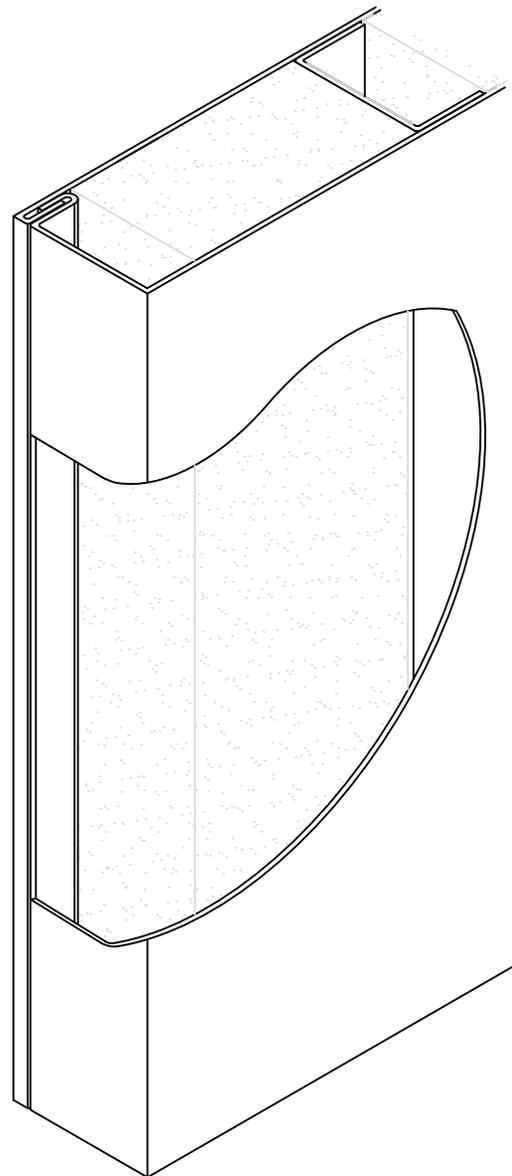
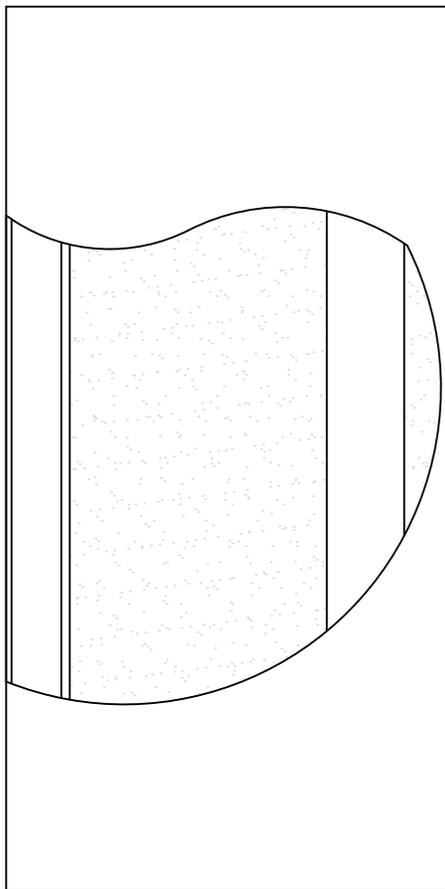
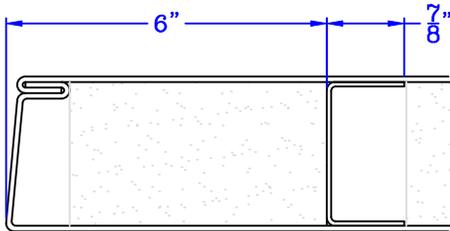
high density  
batt-type  
insulation



**Steel stiffened with polyurethane**

With vertical 18 gage steel stiffeners, 6" on center with solid polyurethane blocks.  
Continuous bonding of core to steel faces.

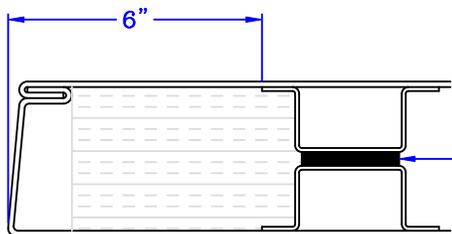
Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.96	0.34	0.51	2.90



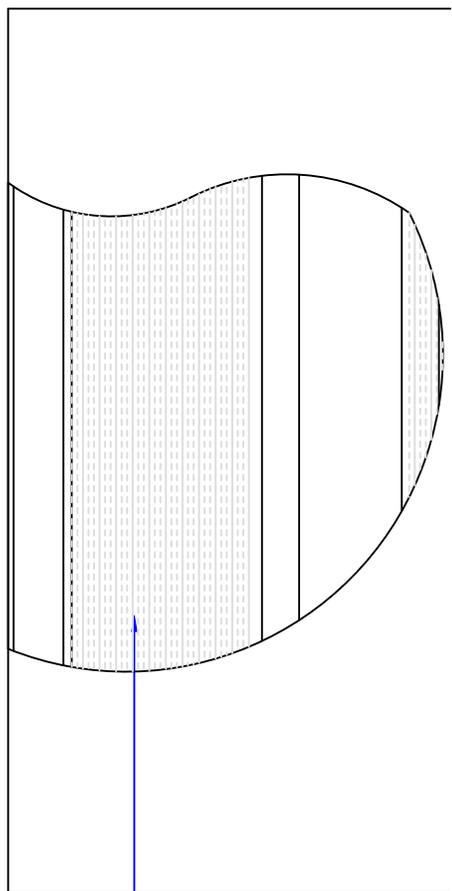
**Steel stiffened with wool, Thermal rated**

With vertical 18 gage steel stiffeners, 6" on center.  
Continuous bonding of core to steel faces.

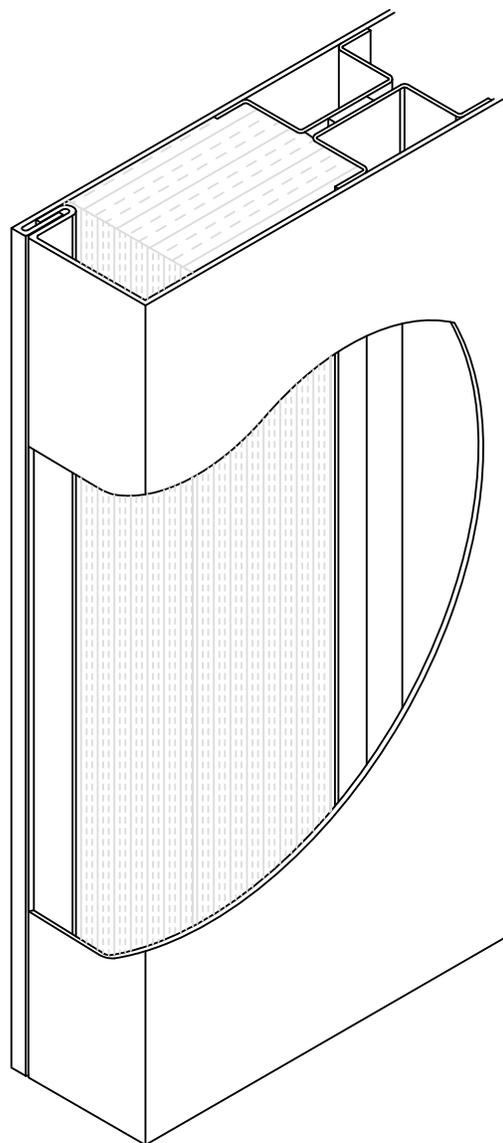
Thermal Performance	R factor		U factor	
	ft <sup>2</sup> ·°F·h/BTU	m <sup>2</sup> ·K/W	BTU/ft <sup>2</sup> ·°F·h	W/m <sup>2</sup> ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.47	0.26	0.68	3.86



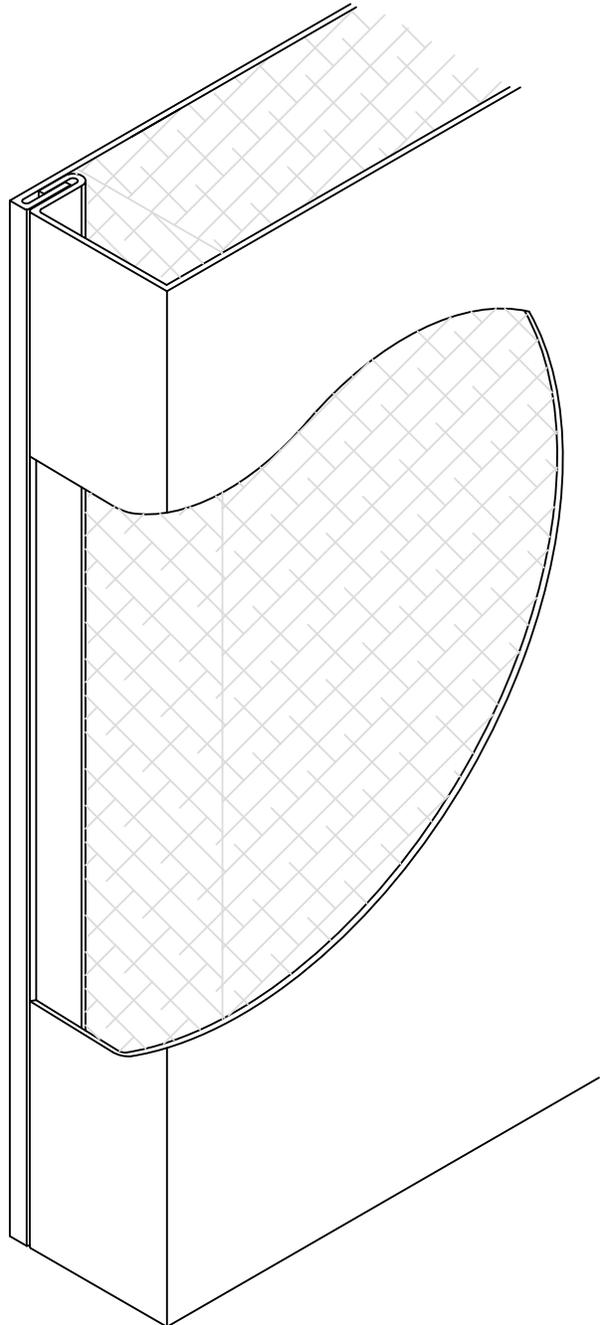
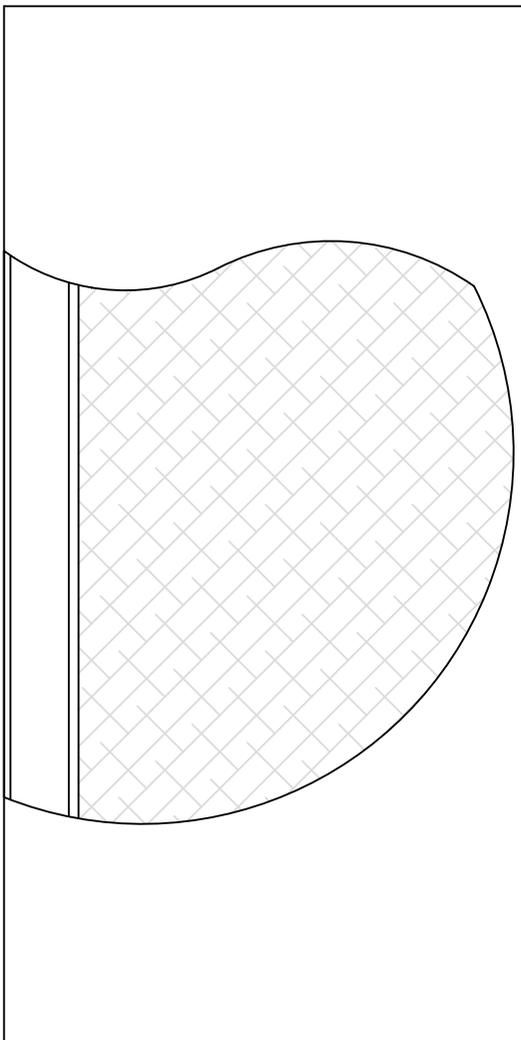
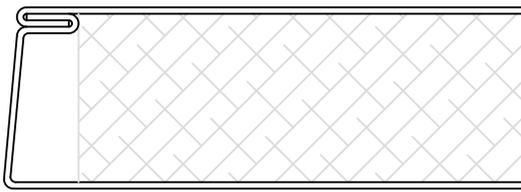
intumescent  
between  
stiffeners



high density  
batt-type  
insulation



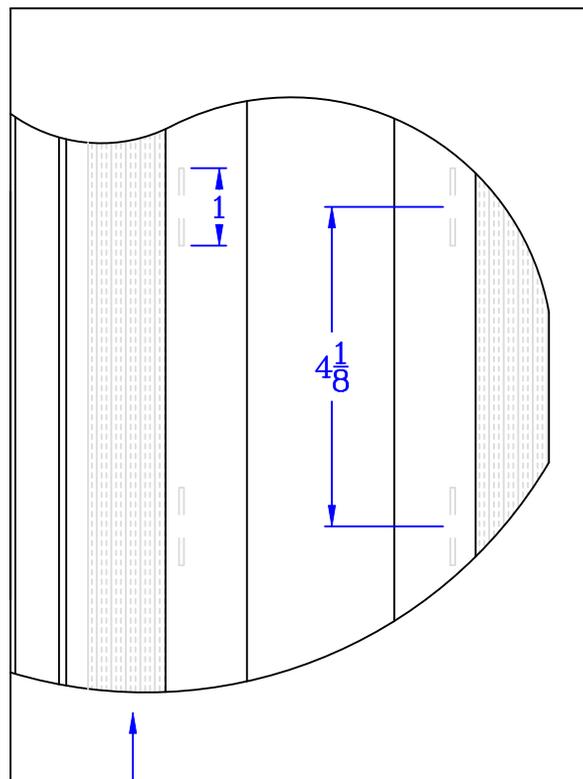
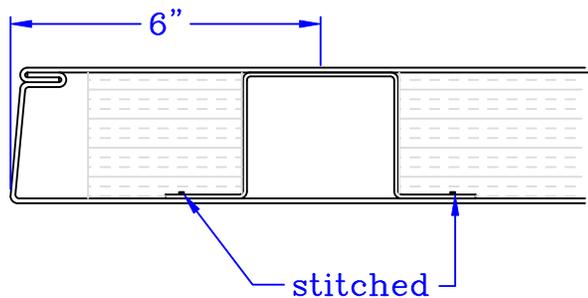
**Temperature rise - Mineral core - 450°F in 30 min**  
Continuous bonding of core to steel faces.



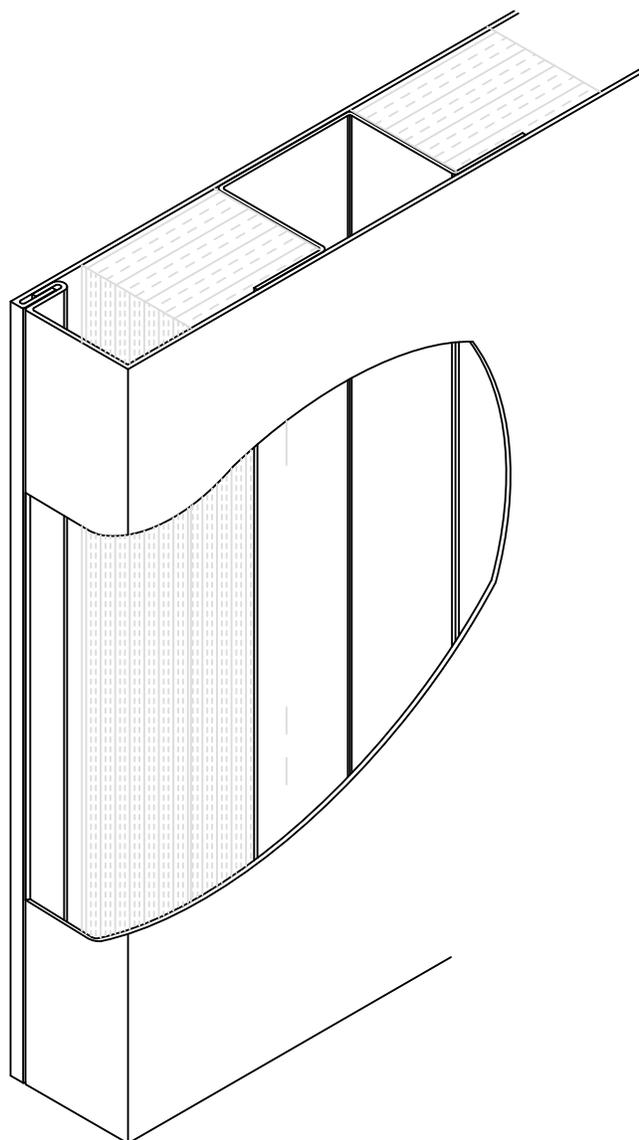
**Temperature rise - Steel stiffened - 450°F in 30 min**

With vertical 18 gage steel stiffeners, 6" on center.

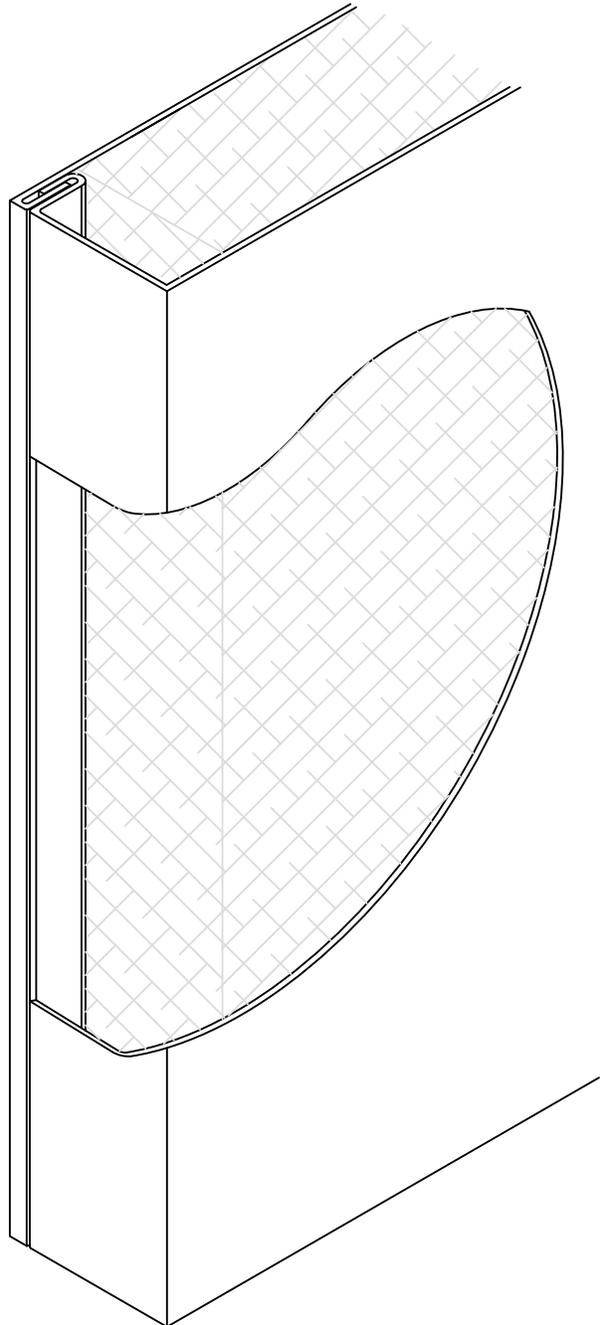
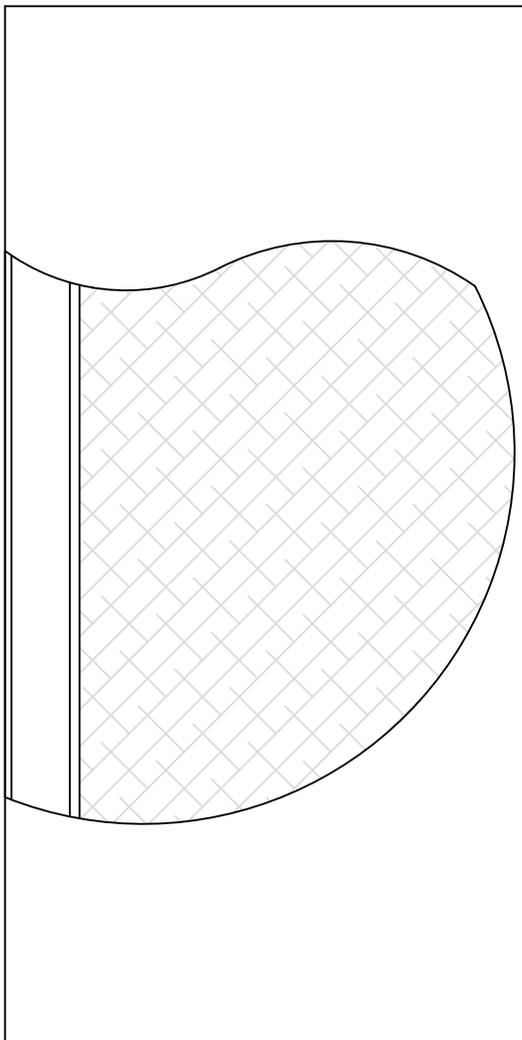
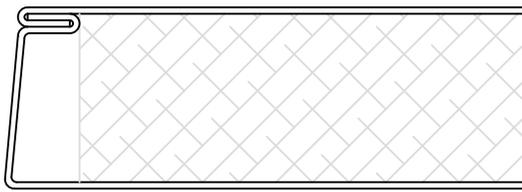
Welded stiffeners, laser welding.



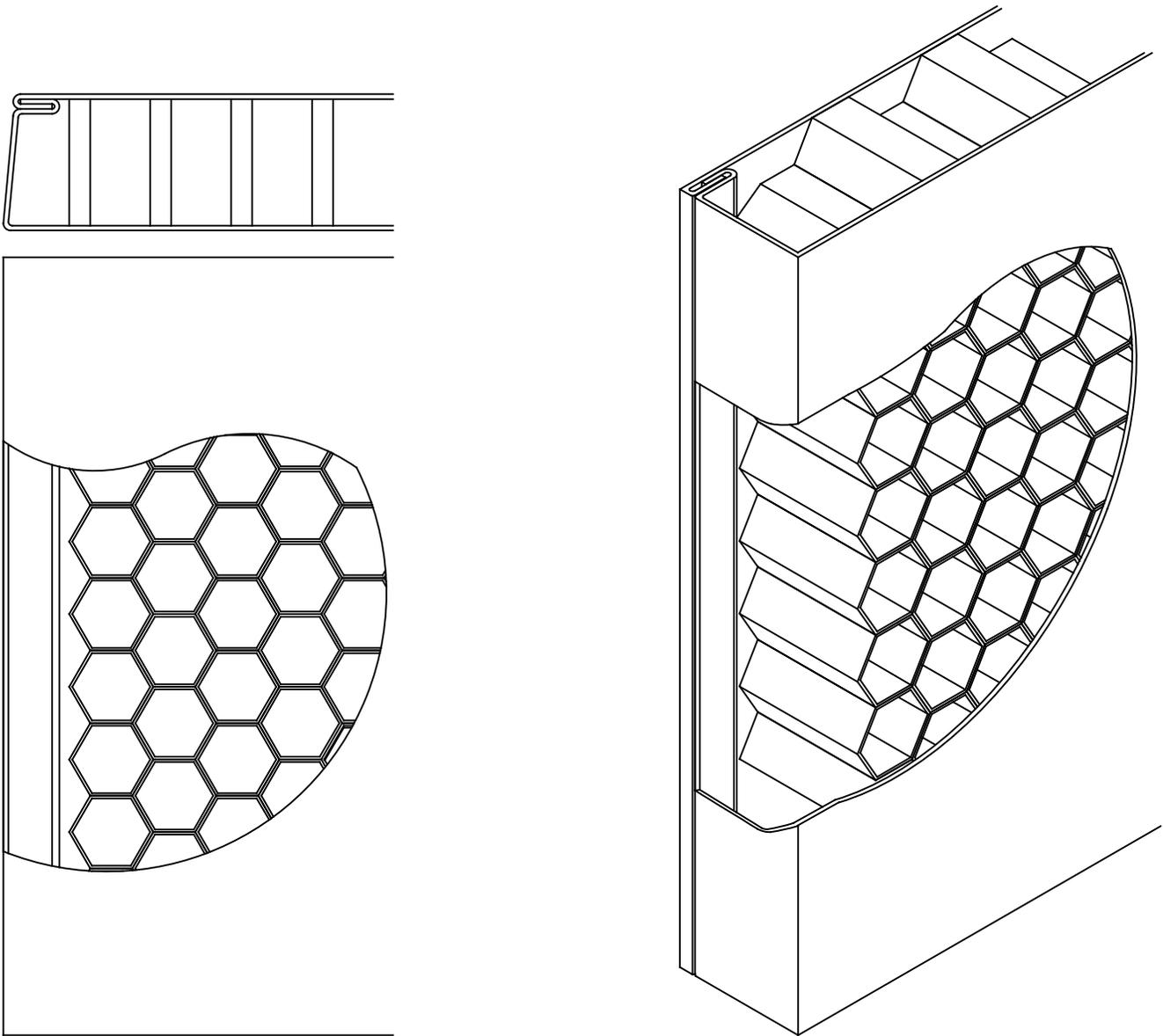
high density  
batt-type  
insulation



**Temperature rise - Mineral core - 250°F in 30 min**  
Continuous bonding of core to steel faces.



**Honeycomb core at stainless steel door**  
Continuous bonding of core to steel faces.

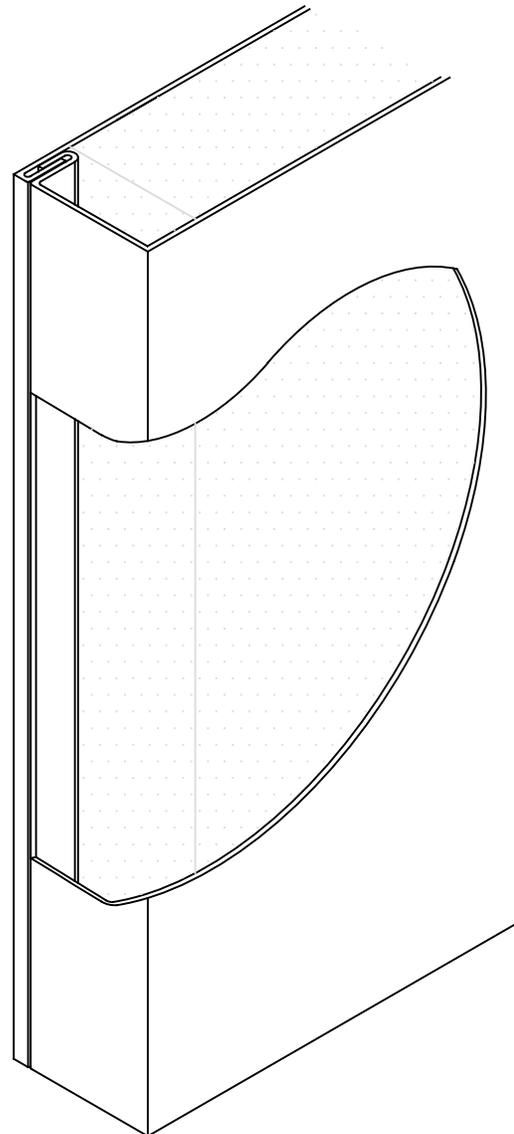
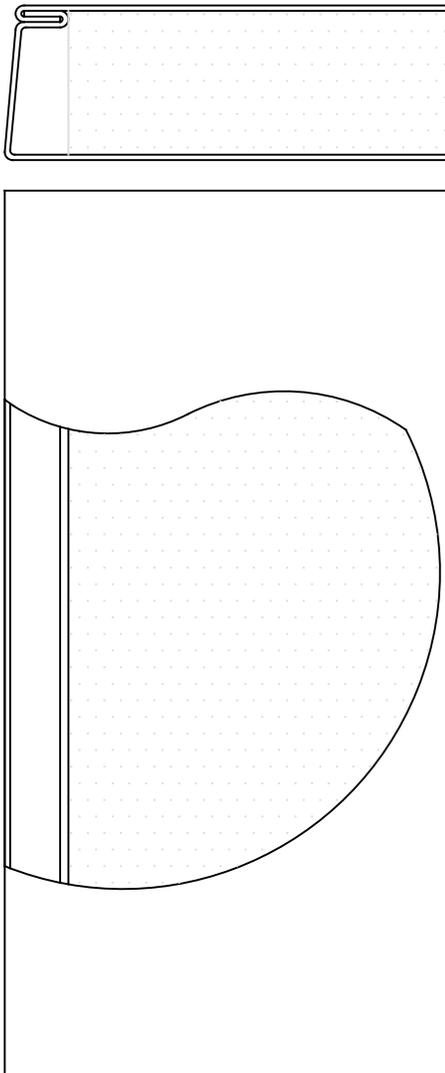


Added stiffener, full height, in middle of door when over 3'0" wide.

**Polystyrene core at stainless steel door**

R and U values not available.

Continuous bonding of core to steel faces.

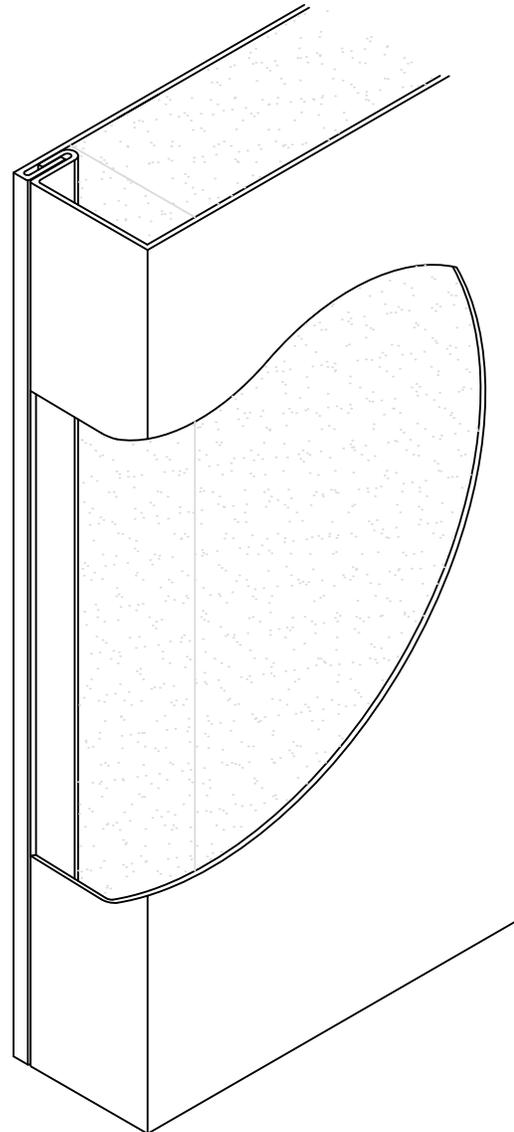
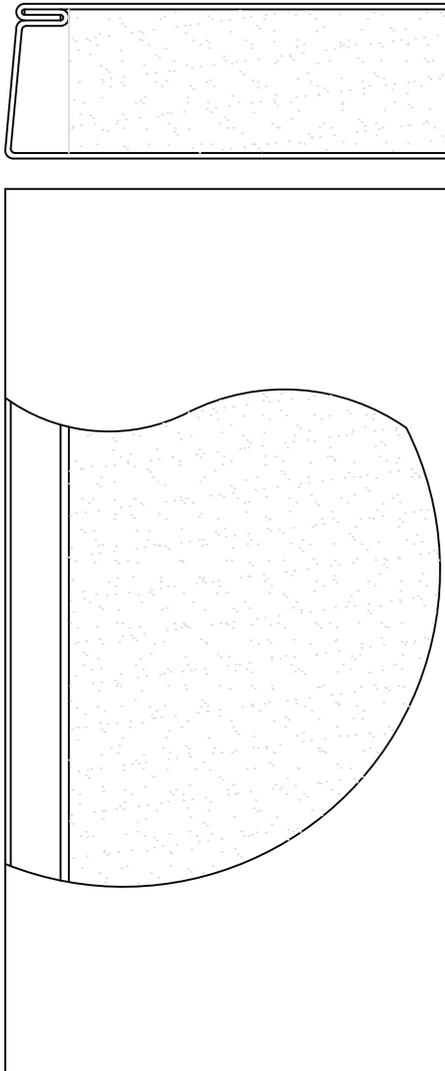


Added stiffener, full height, in middle of door when over 3'0" wide.

**Polyurethane core at stainless steel door**

R and U values not available.

Continuous bonding of core to steel faces.



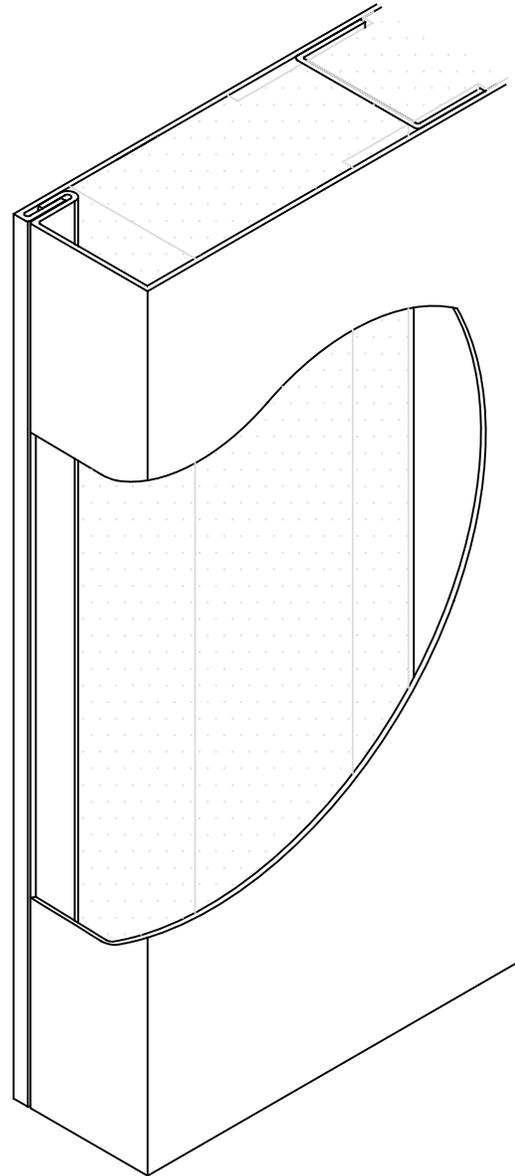
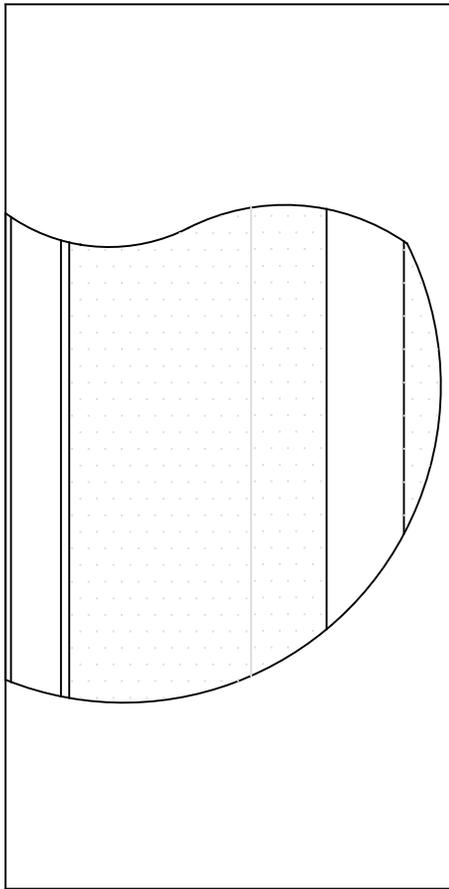
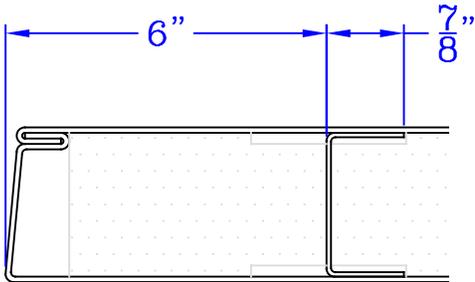
Added stiffener, full height, in middle of door when over 3'0" wide.

**Steel stiffened with polystyrene at stainless steel door**

R and U values not available.

With vertical 18 gage steel stiffeners, 6" on center with solid polystyrene blocks.

Continuous bonding of core to steel faces.

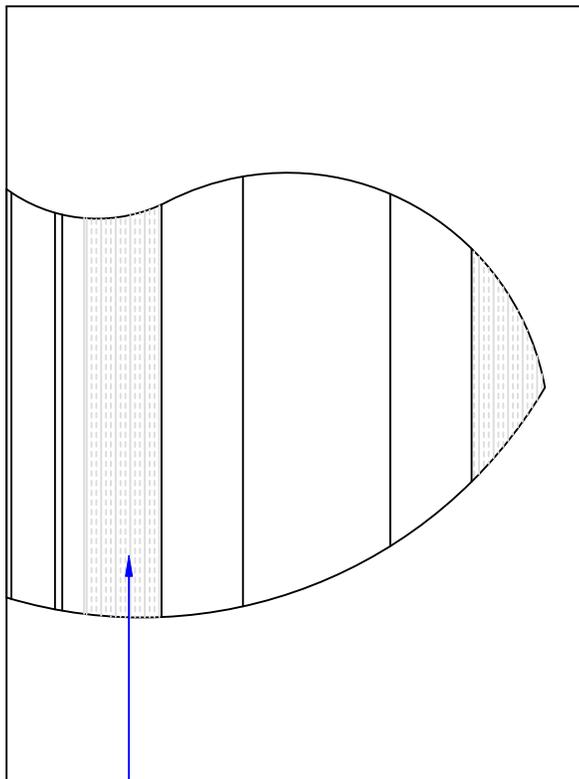
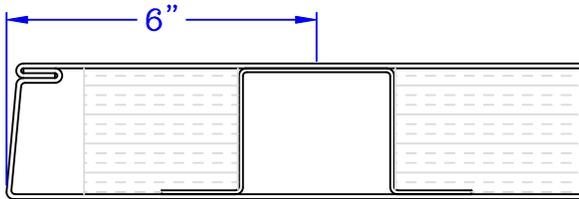


**Steel stiffened with wool at stainless steel door**

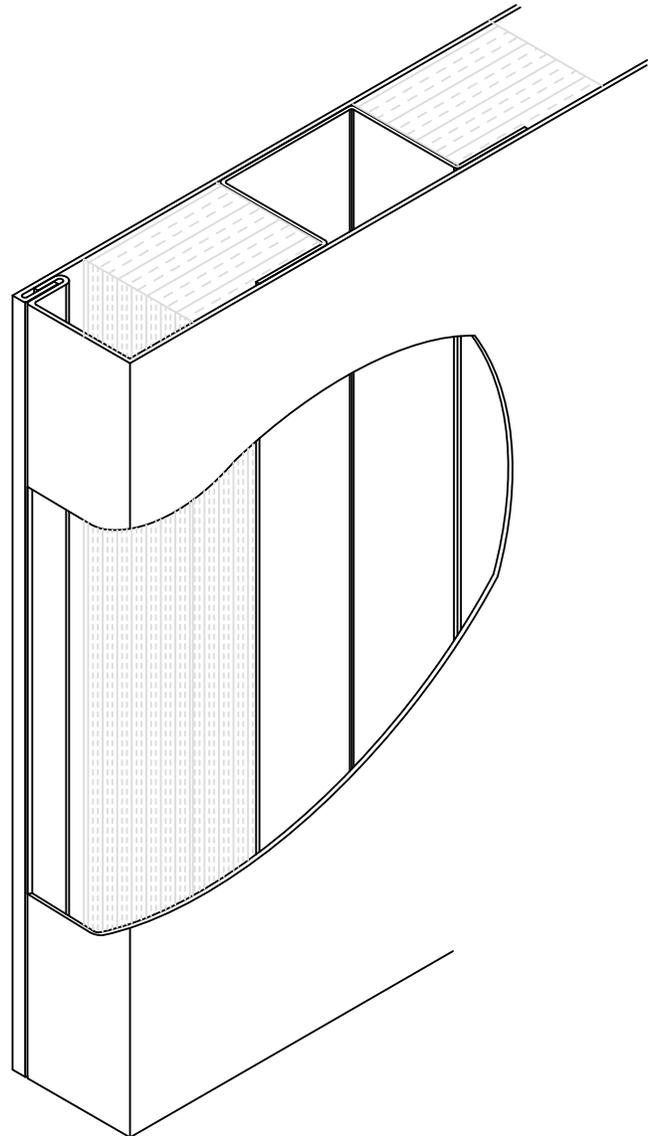
R and U values not available.

With vertical 18 gage steel stiffeners, 6" on center.

Continuous bonding of core to steel faces.



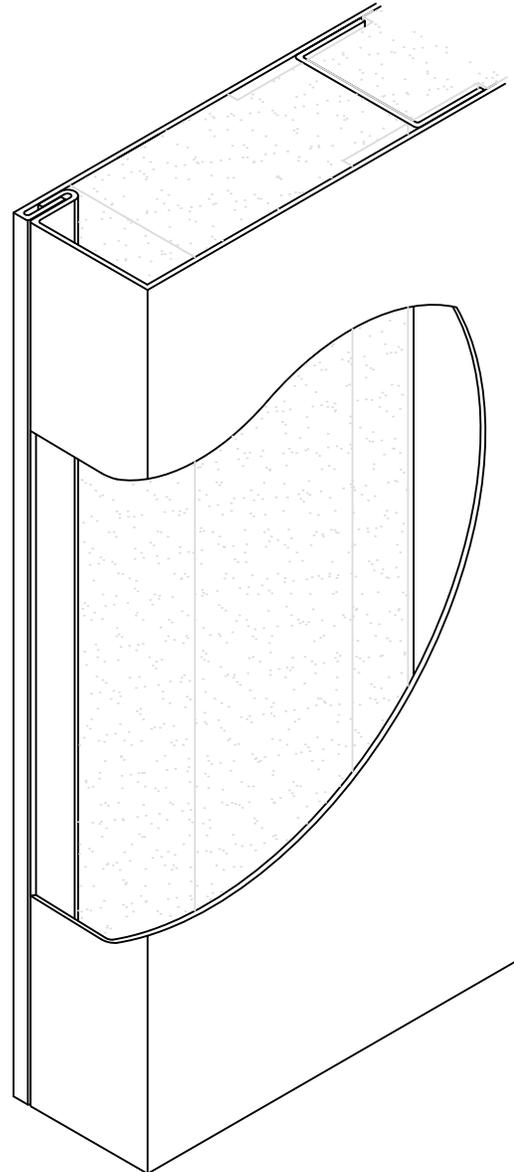
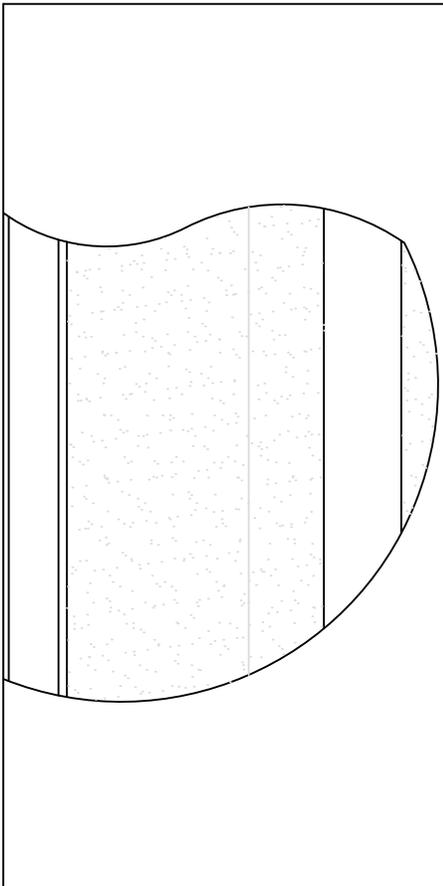
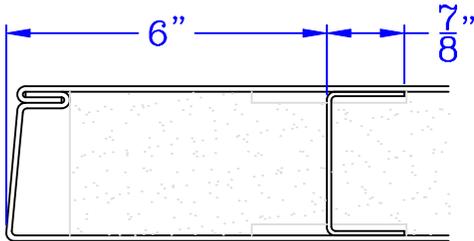
high density  
batt-type  
insulation



**Steel stiffened with polyurethane at stainless steel door**

R and U values not available.

With vertical 18 gage steel stiffeners, 6" on center with solid polyurethane blocks.  
Continuous bonding of core to steel faces.



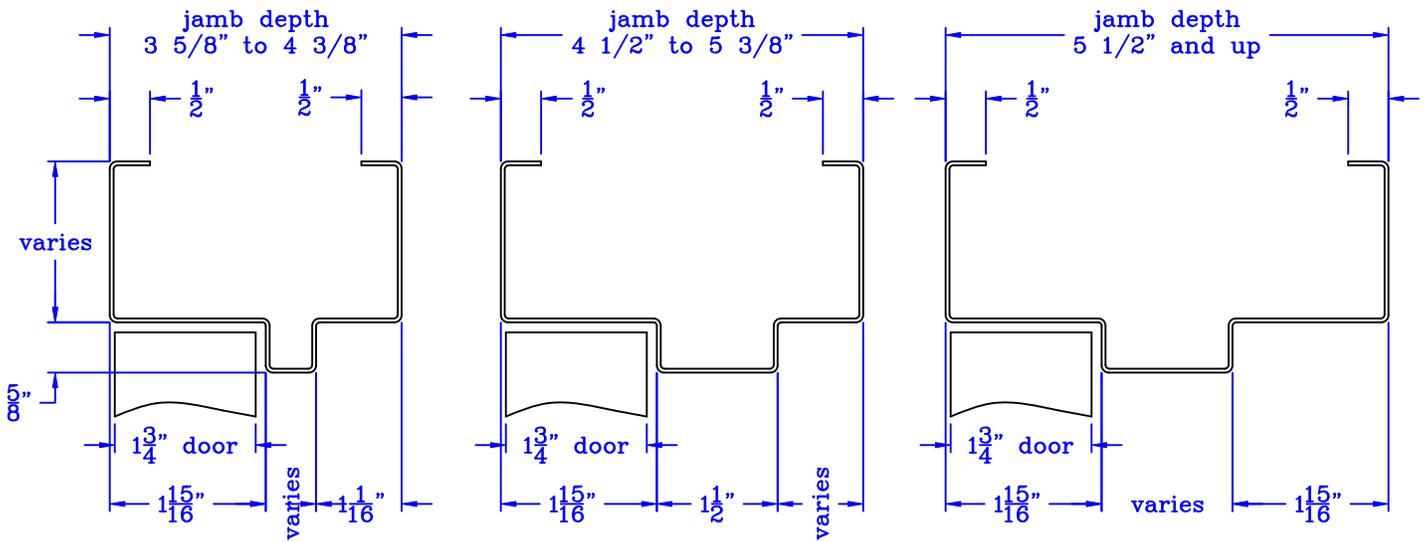
# FRAME SERIES



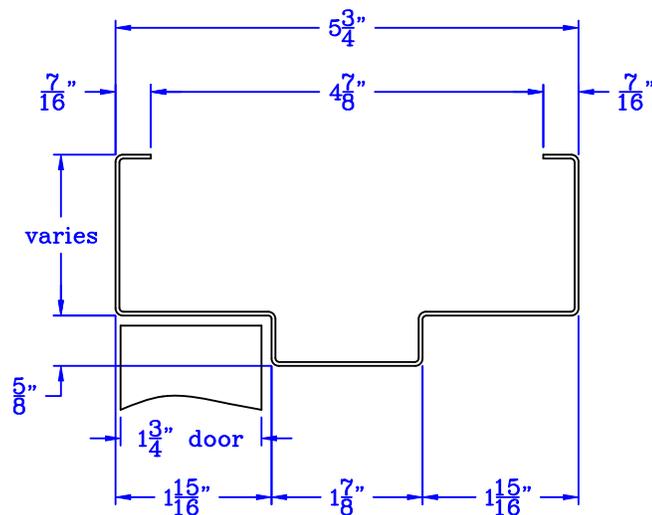
FRAME SERIES	PAGE
Standard Frame (SR Series)	
SR18 - 18 ga Standard Frame .....	F-4
SR16 - 16 ga Standard Frame .....	F-6
SR14 - 14 ga Standard Frame .....	F-8
SR12 - 12 ga Standard Frame .....	F-10
Drywall Frame (DW Series)	
DW18 - 18 ga Drywall Frame .....	F-12
DW16 - 16 ga Drywall Frame .....	F-14
DW14 - 14 ga Drywall Frame .....	F-16
Pre-Drywall Frame (DR Series)	
DR18 - 18 ga Pre-Drywall Frame .....	F-18
DR16 - 16 ga Pre-Drywall Frame .....	F-20
DR14 - 14 ga Pre-Drywall Frame .....	F-22
Less Return Frame (LR Series)	
LR18 - 18 ga Less Return Frame .....	F-24
LR16 - 16 ga Less Return Frame .....	F-26
LR14 - 14 ga Less Return Frame .....	F-28
Split Frame (SF Series)	
SF16 - 16 ga Split Frame .....	F-30
Double Egress Frame (DE Series)	
DE16 - 16 ga Double Egress Frame .....	F-32
DE14 - 14 ga Double Egress Frame .....	F-34
Stainless Steel Frame	
SRSS16, DRSS16, DWSS16 & LRSS16 .....	F-36
SRSS14, DRSS14, DWSS14 & LRSS14 .....	F-38

**Double rabbet profile, SR18**

All jamb depths (excluding 5 3/4")



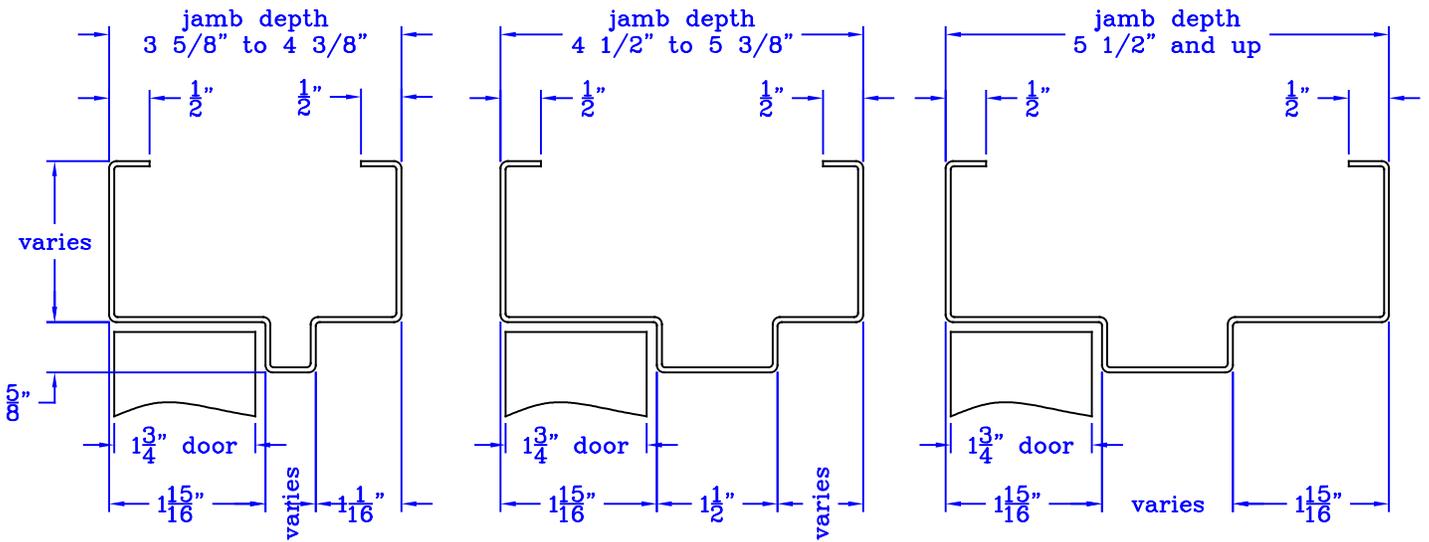
5 3/4" jamb depth



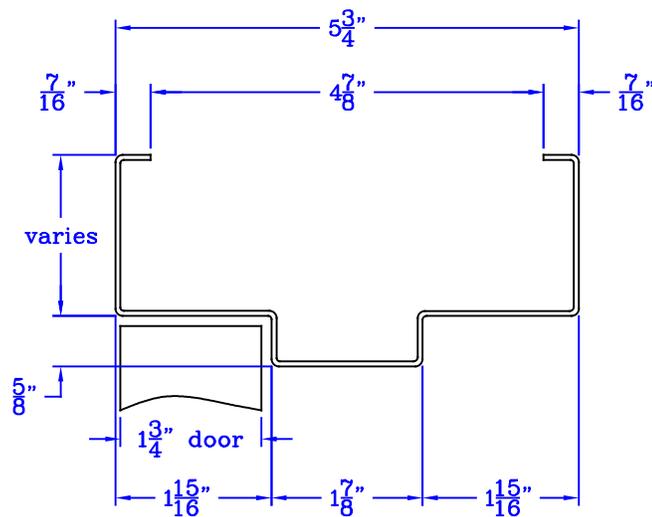
Single rabbet at less than 3 5/8" jamb depth  
Not available for welded elevations

**Double rabbet profile, SR16**

All jamb depths (excluding 5 3/4")



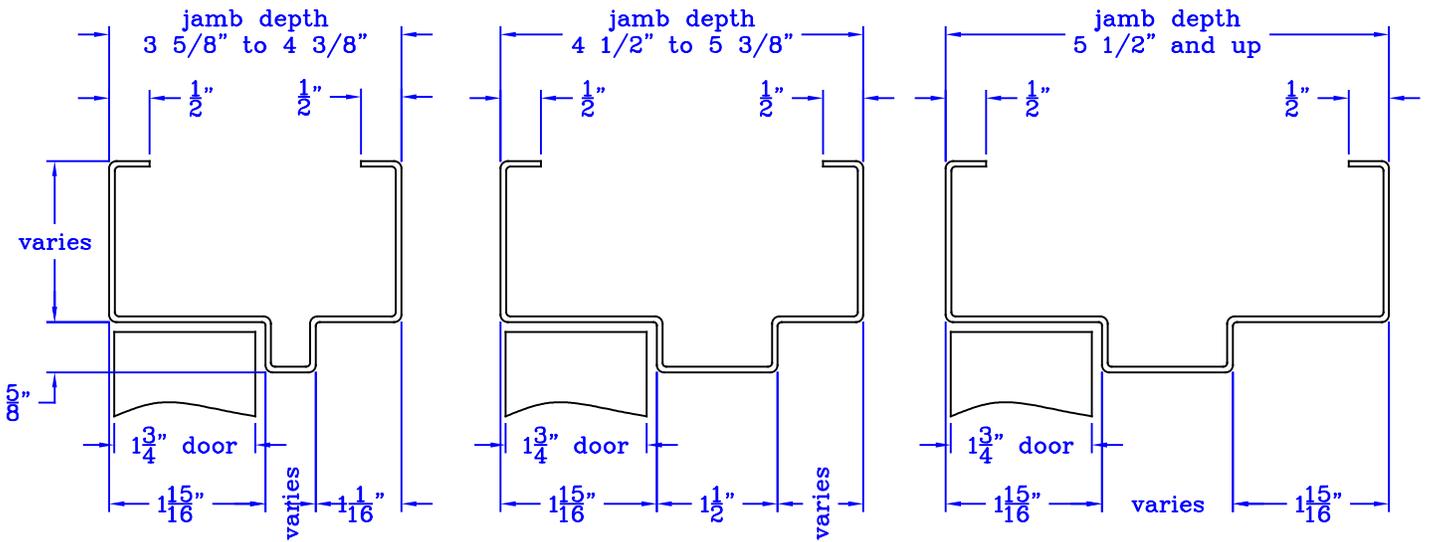
5 3/4" jamb depth



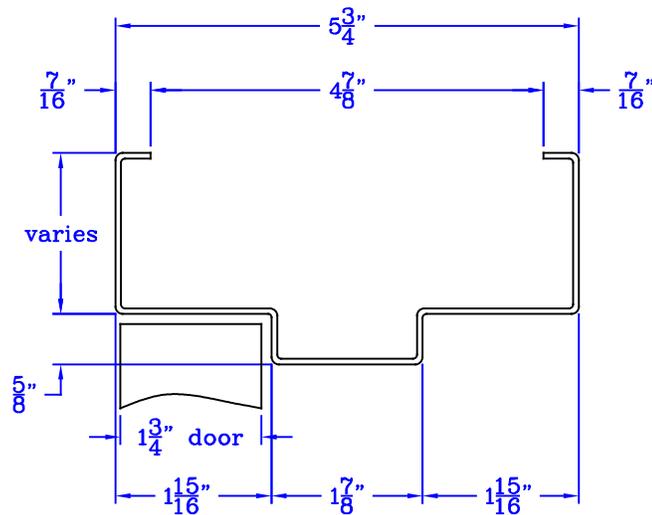
Single rabbet at less than 3 5/8" jamb depth

**Double rabbet profile, SR14**

All jamb depths (excluding 5 3/4")



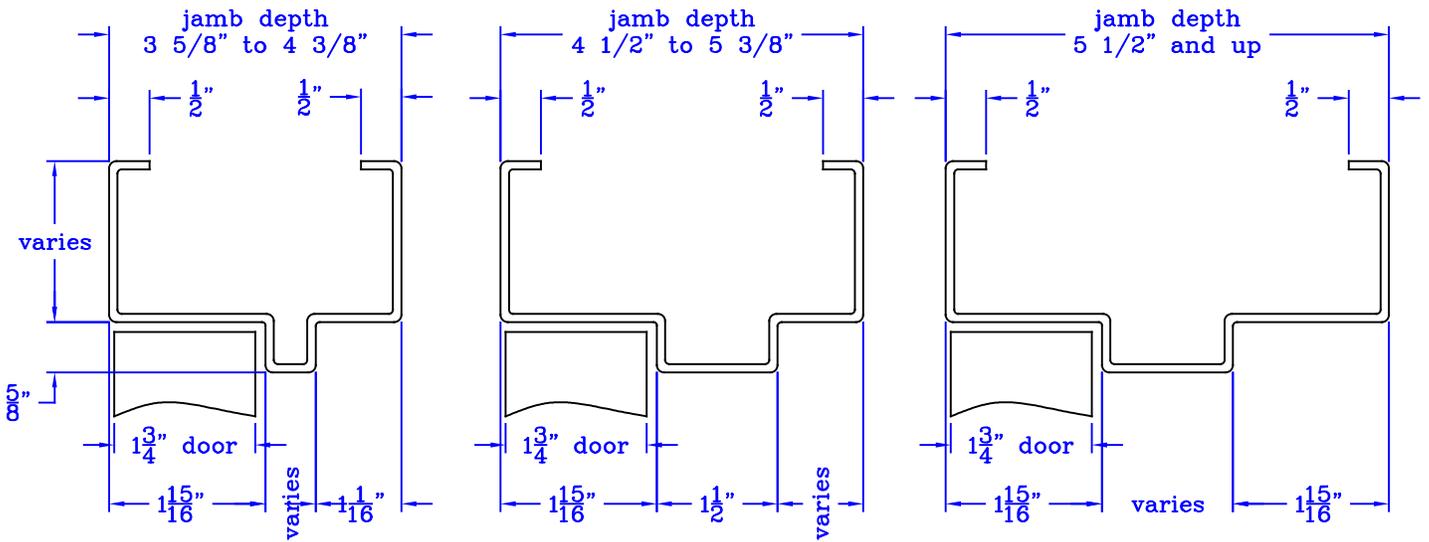
5 3/4" jamb depth



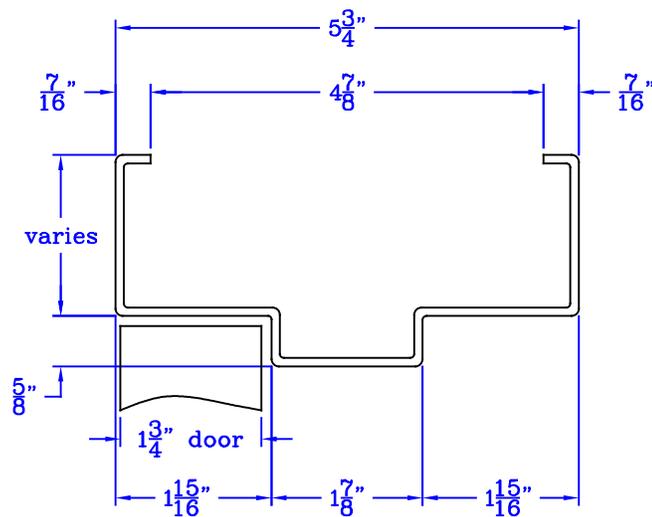
Single rabbet at less than 3 5/8" jamb depth

**Double rabbet profile, SR12**

All jamb depths (excluding 5 3/4")



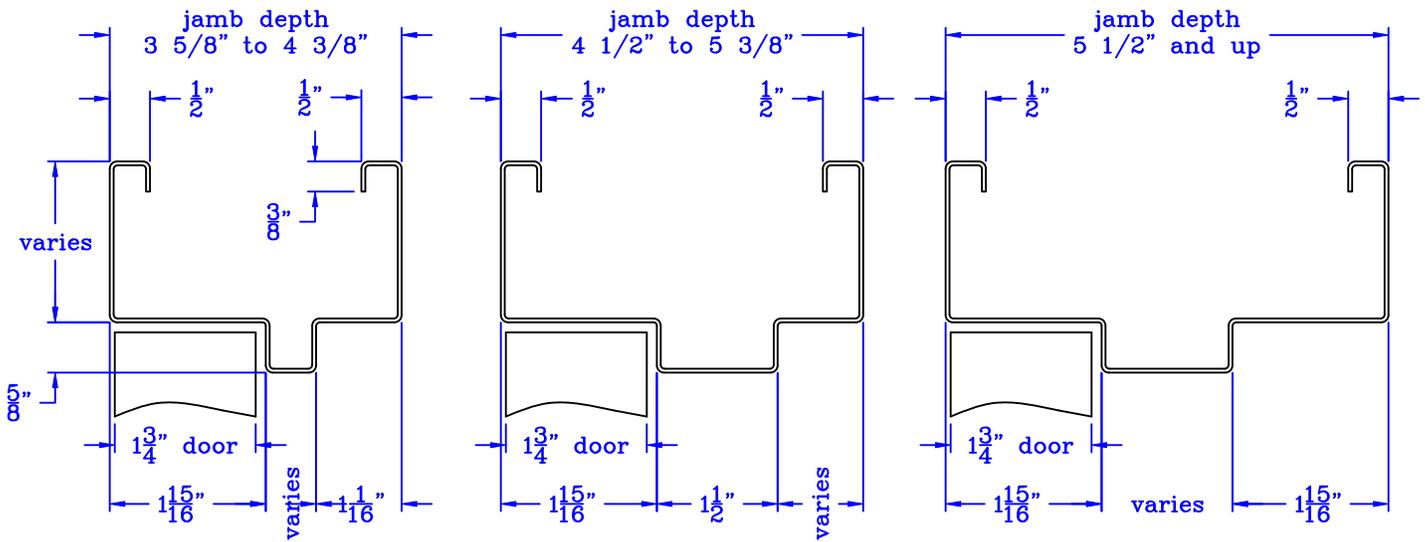
5 3/4" jamb depth



Single rabbet at less than 3 5/8" jamb depth

**Double rabbet profile, DW18**

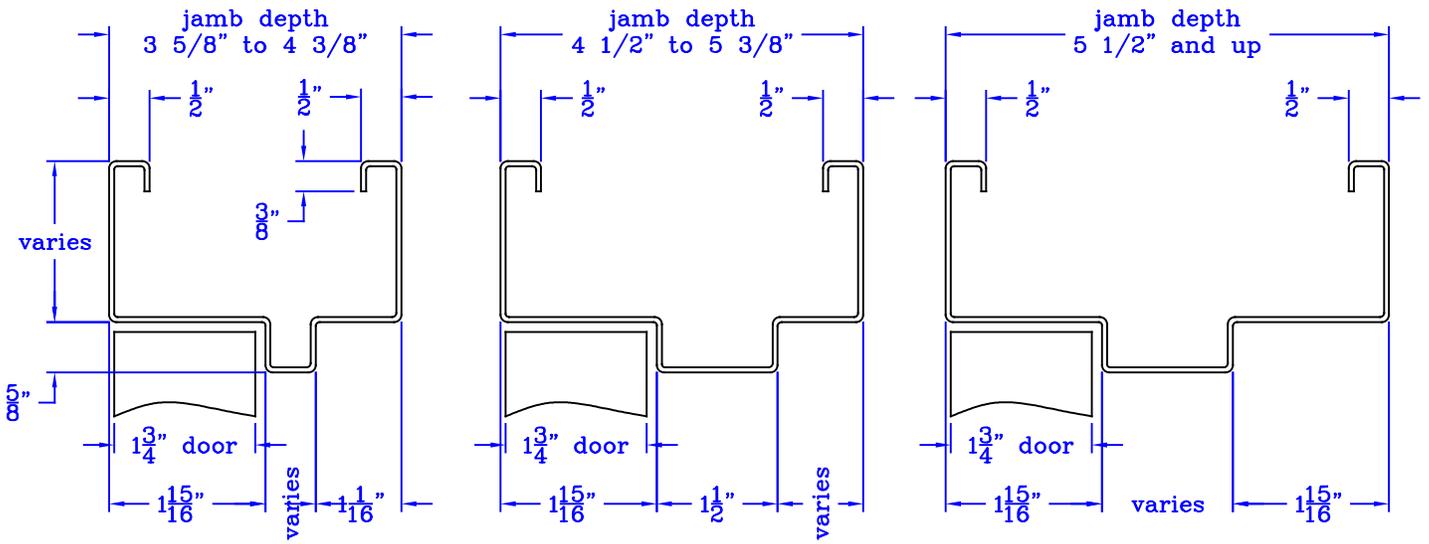
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}$ " jamb depth  
Not available for welded elevations

**Double rabbet profile, DW16**

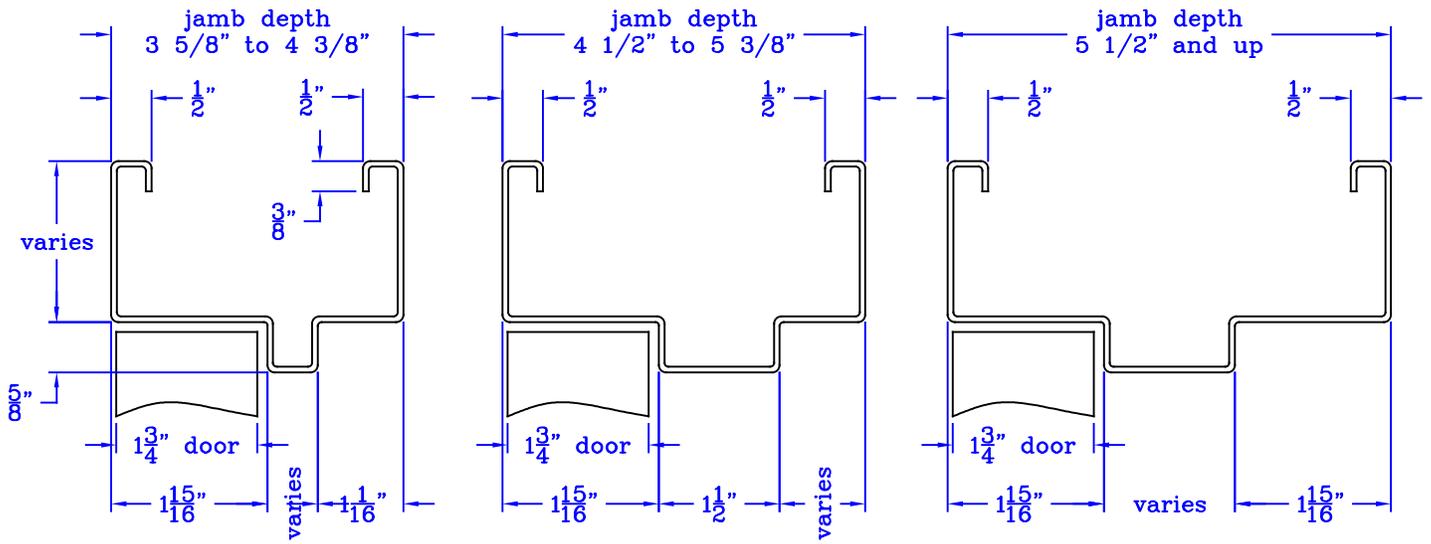
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth

## Double rabbet profile, DW14

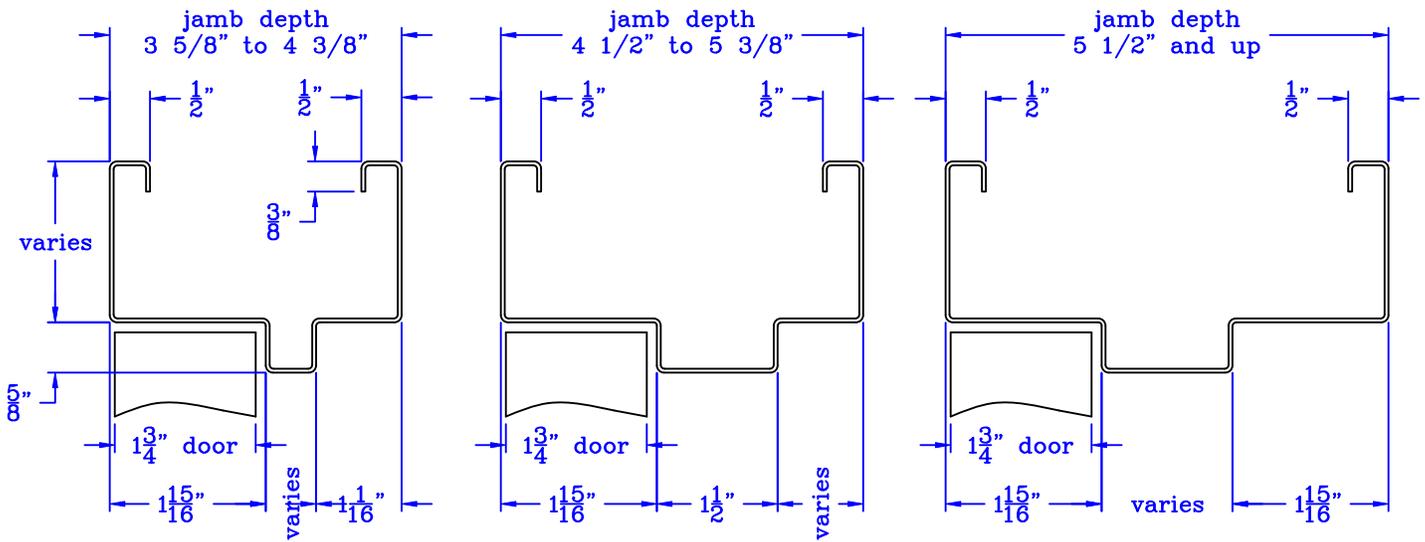
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth

**Double rabbet profile, DR18**

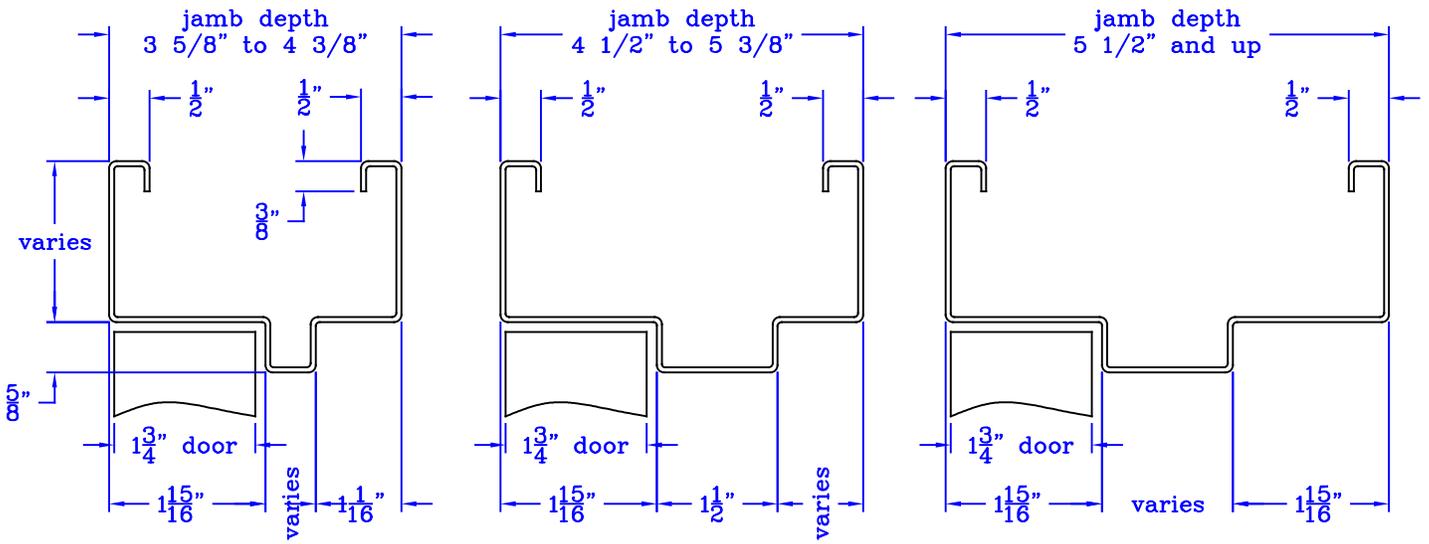
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth  
 Not available for welded elevations

**Double rabbet profile, DR16**

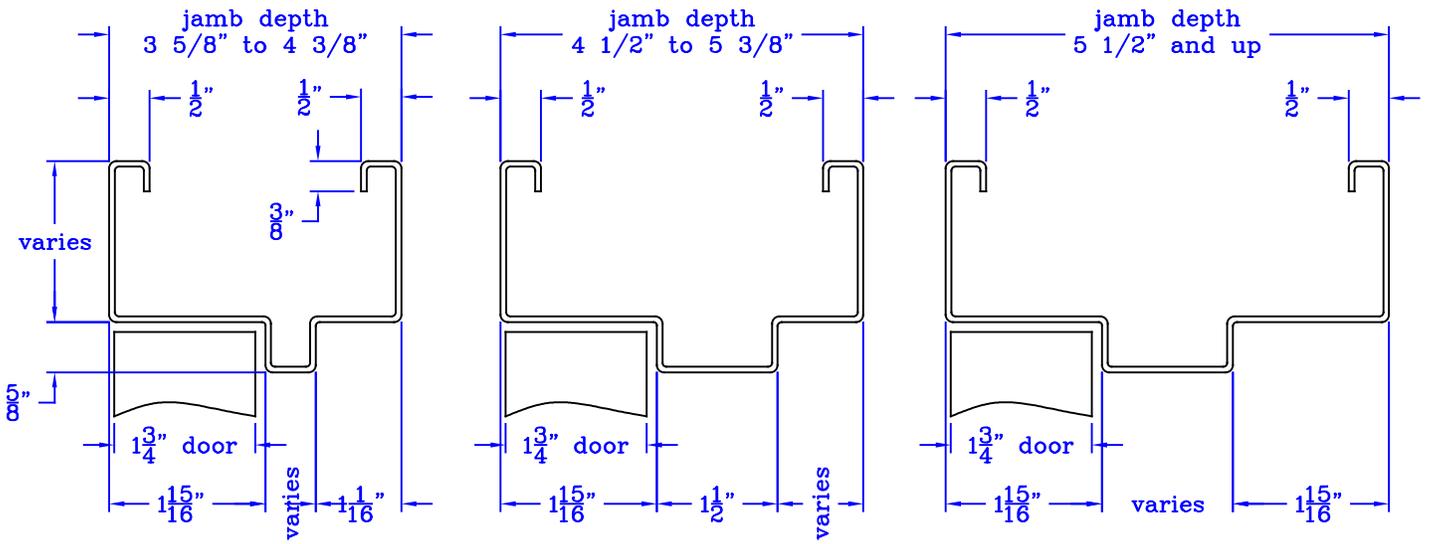
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth

**Double rabbet profile, DR14**

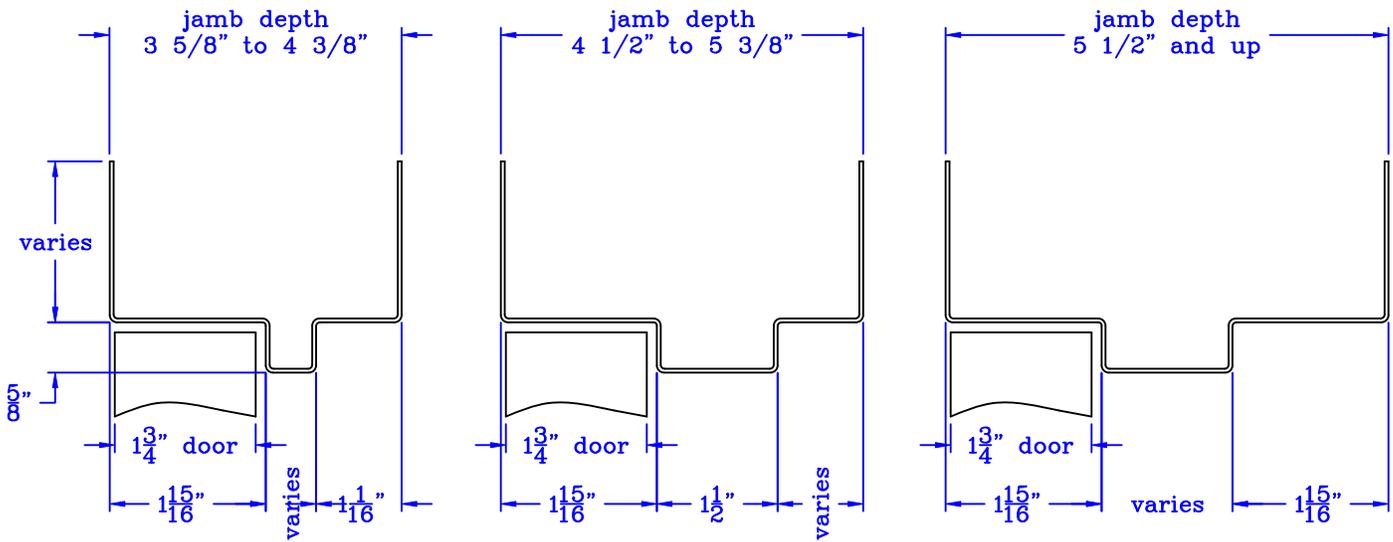
All jamb depths



Single rabbet at less than  $3 \frac{5}{8}$ " jamb depth

**Double rabbet profile, LR18**

All jamb depths

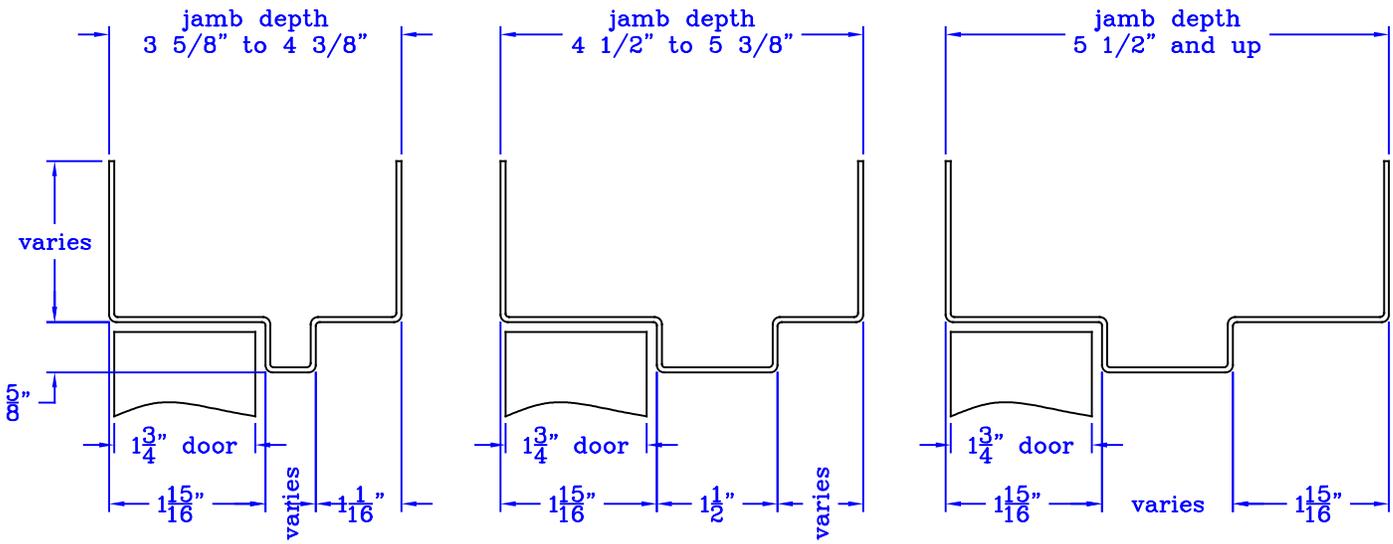


Jamb depth is a  $\frac{1}{8}''$  more than wall thickness

Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth  
Not available for welded elevations

**Double rabbet profile, LR16**

All jamb depths

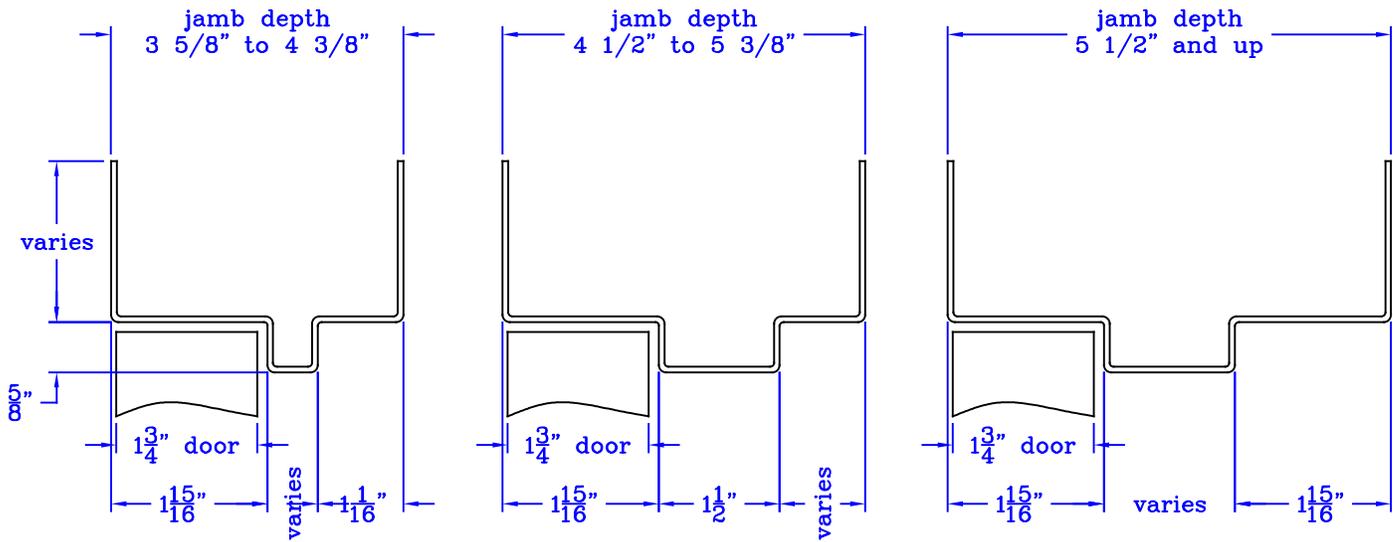


Jamb depth is a  $\frac{1}{8}$ " more then wall thickness

Single rabbet at less than  $3\frac{5}{8}$ " jamb depth

## Double rabbet profile, LR14

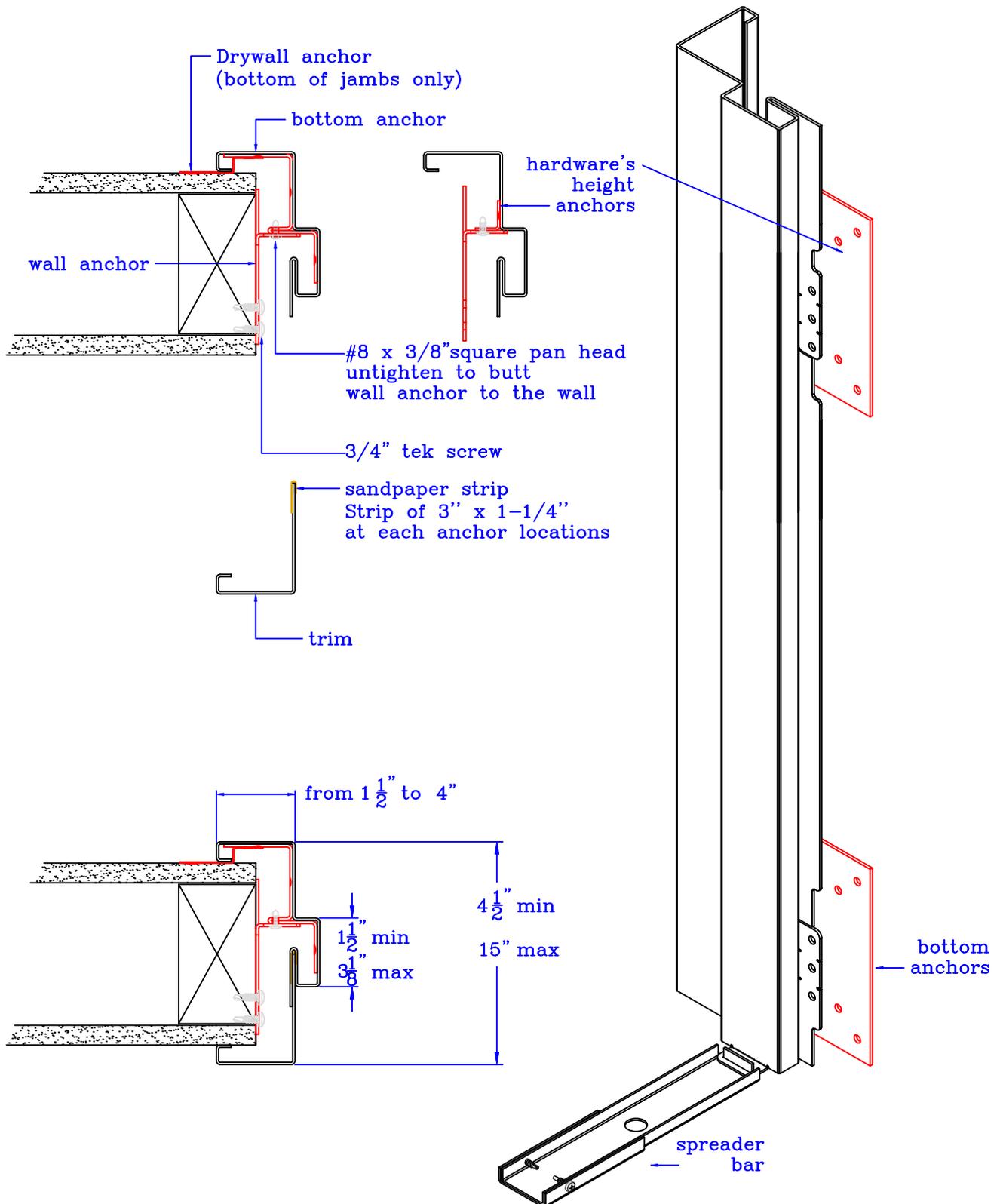
All jamb depths



Jamb depth is a  $\frac{1}{8}''$  more than wall thickness

Single rabbet at less than  $3 \frac{5}{8}''$  jamb depth

**Double rabbet profile, SF16**

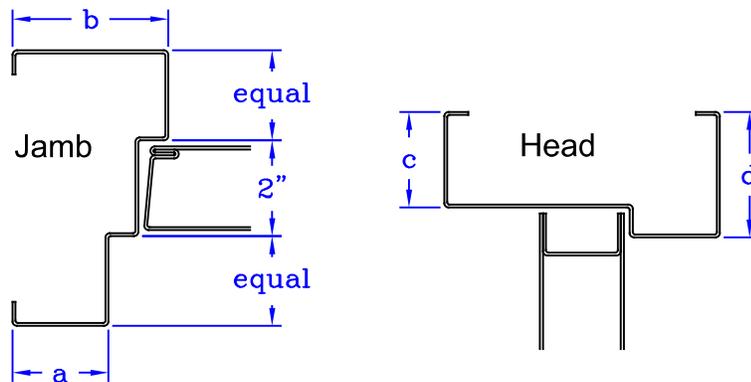
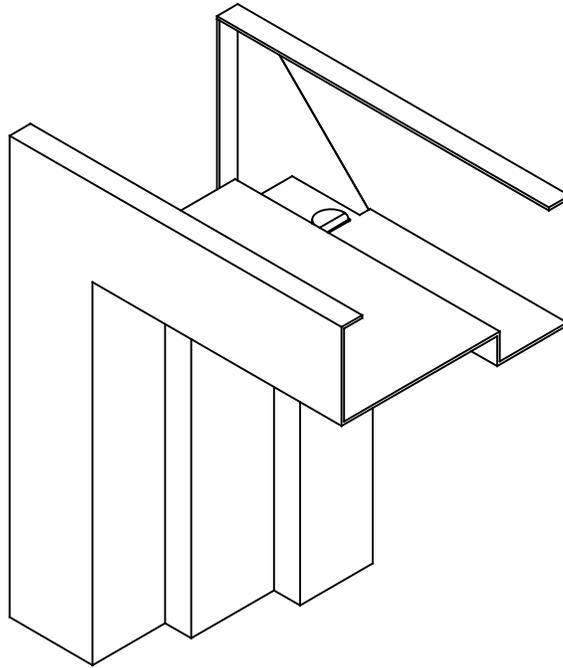


Rough opening : opening width + 2"  
: opening height + 1"

See [www.delafontaine.com/wp-content/uploads/2020/06/split-frame-installation-instructions.pdf](http://www.delafontaine.com/wp-content/uploads/2020/06/split-frame-installation-instructions.pdf)

**Double egress frame, DE16**

Actual opening is 1/8" less than nominal size to accept standard width doors.



-DE1		-DE2 ( by default unless otherwise noted)		-DE3	
Jamb	Head	Jamb	Head	Jamb	Head
a=2"	c=2"	a=1 3/8"	c=1 3/8"	a=1 3/8"	c=2"
b=3 1/4"	d=2 5/8"	b=2 5/8"	d=2"	b=2 5/8"	d=2 5/8"

**Limitations**

From 3160 to 8090

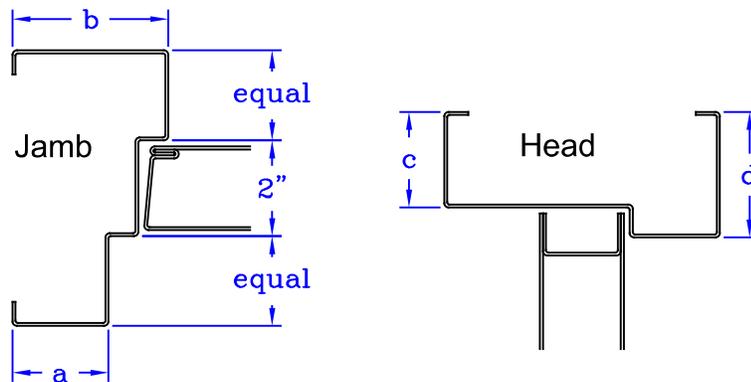
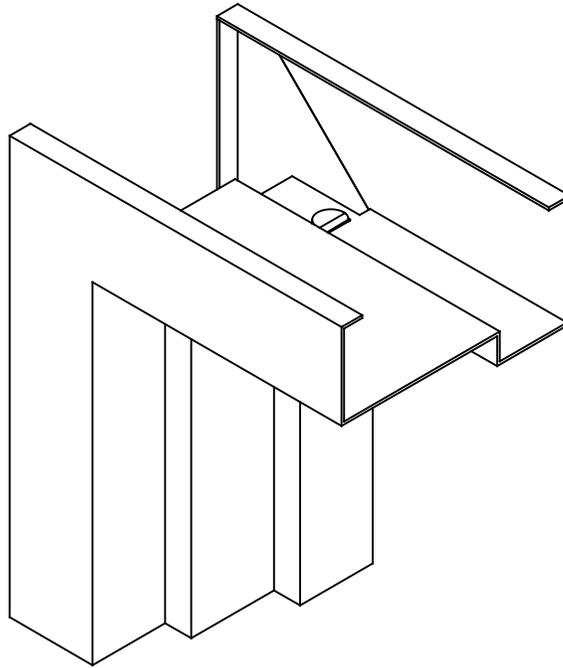
From jamb depth 3-5/8" to 10-7/8"

For frames beyond these limitations, the DE14 series remains a solution.

Single return shown, double return and less return also available

**Double egress frame, DE14**

Actual opening is 1/8" less than nominal size to accept standard width doors.



-DE1

Jamb	Head
a=2"	c=2"
b=3 1/4"	d=2 5/8"

-DE2 ( by default unless otherwise noted)

Jamb	Head
a=1 3/8"	c=1 3/8"
b=2 5/8"	d=2"

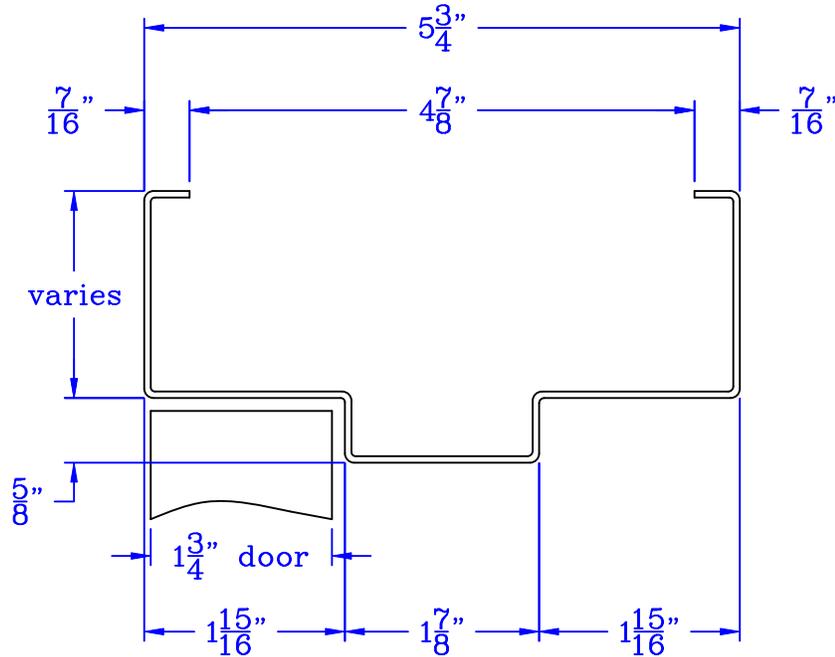
-DE3

Jamb	Head
a=1 3/8"	c=2"
b=2 5/8"	d=2 5/8"

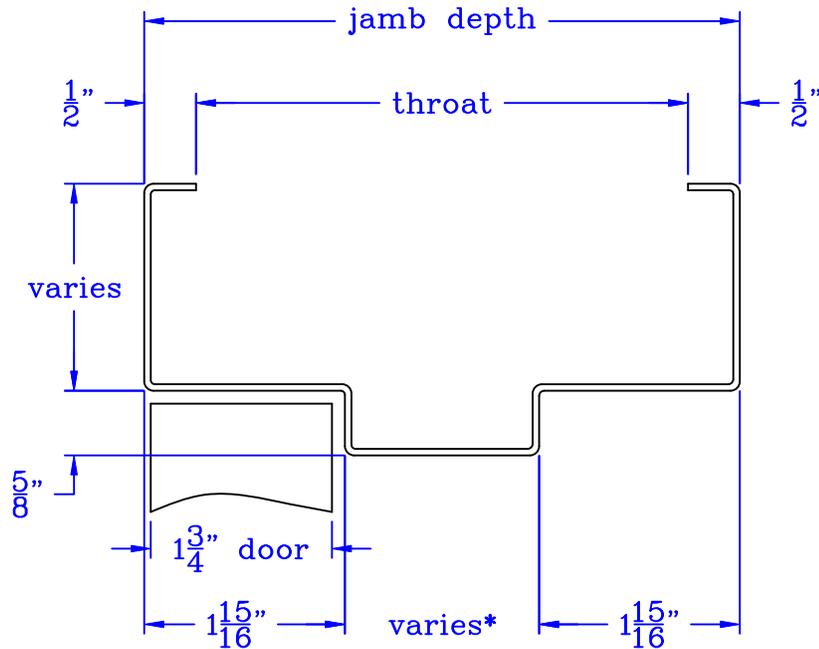
Single return shown, double return and less return also available

**Double rabbet profile at stainless steel frame, SS16**

5 3/4" jamb depth, SR only



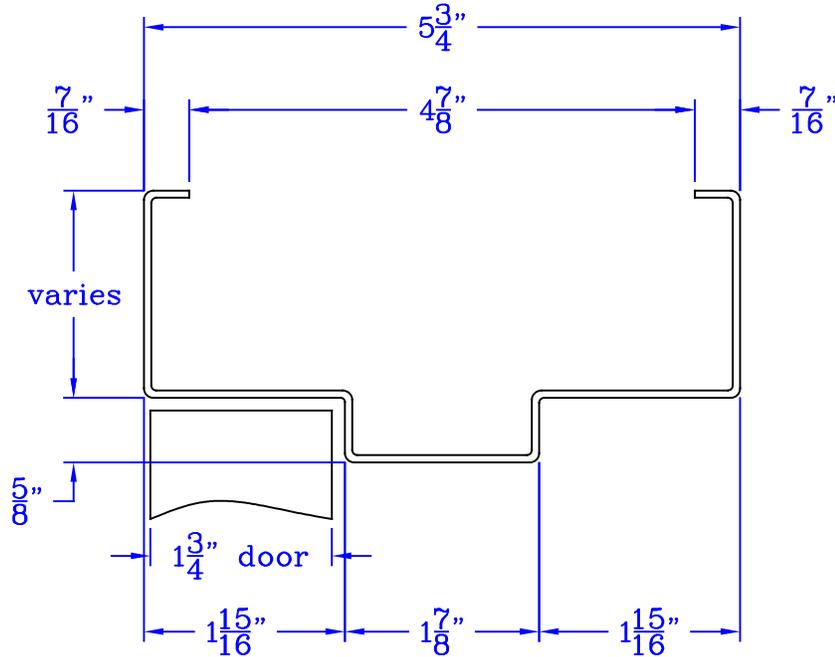
all other jamb depths at SR, DW, DR, LR



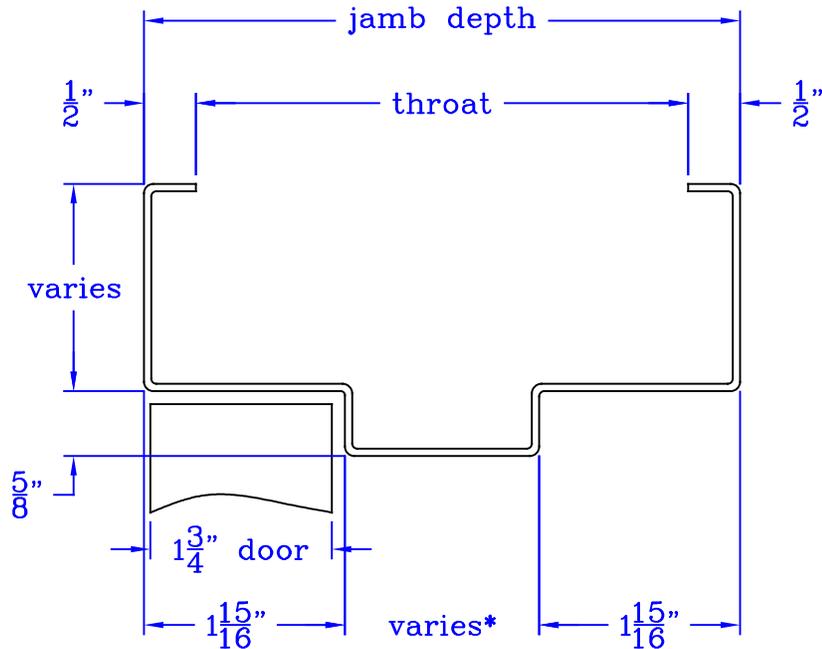
SR series shown, also available DW, DR & LR  
\*down to 1 1/2" then opposite door side to vary

**Double rabbet profile at stainless steel frame, SS14**

5 3/4" jamb depth, SR only



all other jamb depths at SR, DW, DR, LR



SR series shown, also available DW, DR & LR

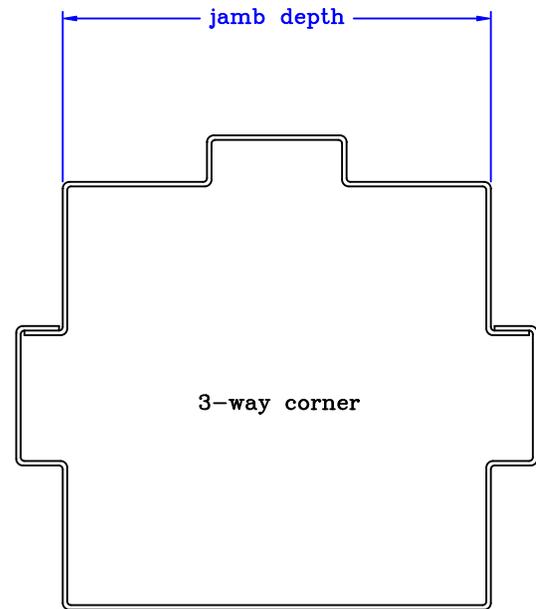
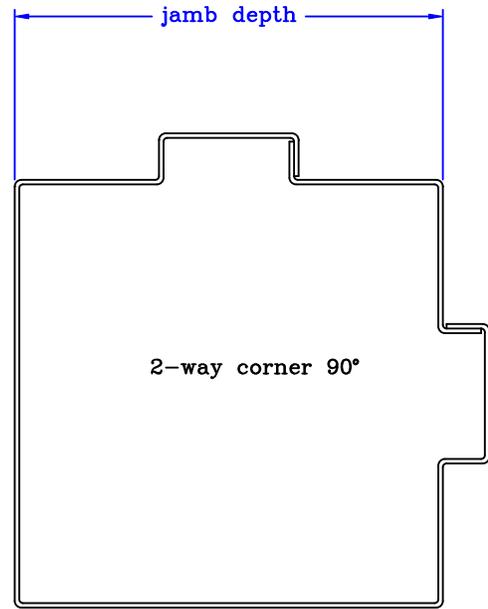
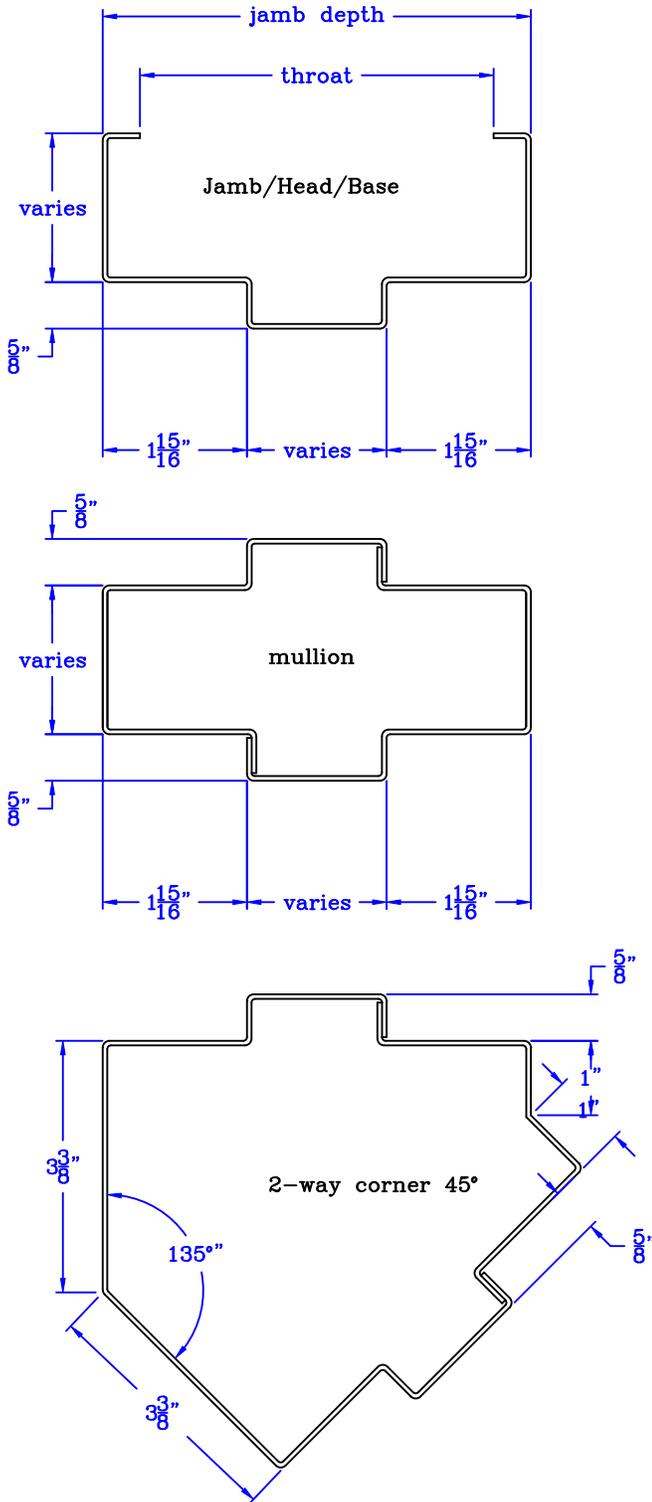
\*down to 1 1/2" then opposite door side to vary

# **CUSTOM FRAME ELEVATION**



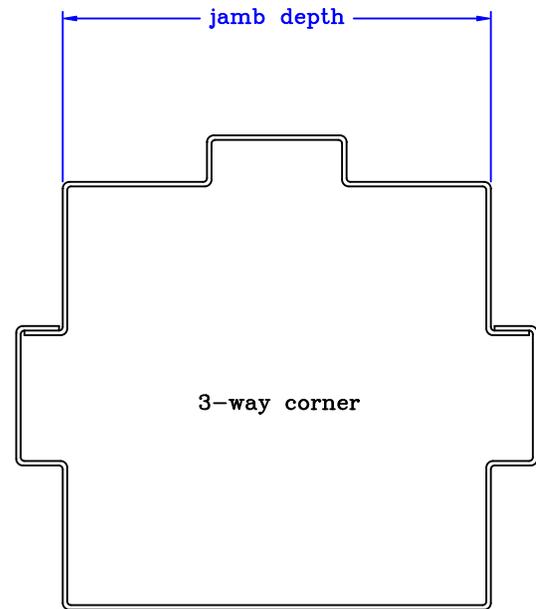
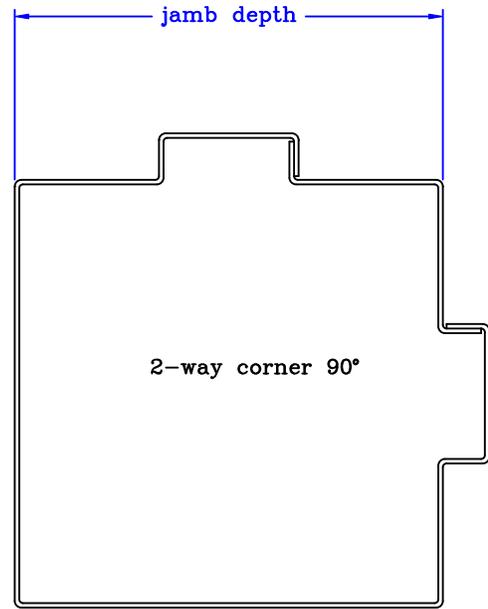
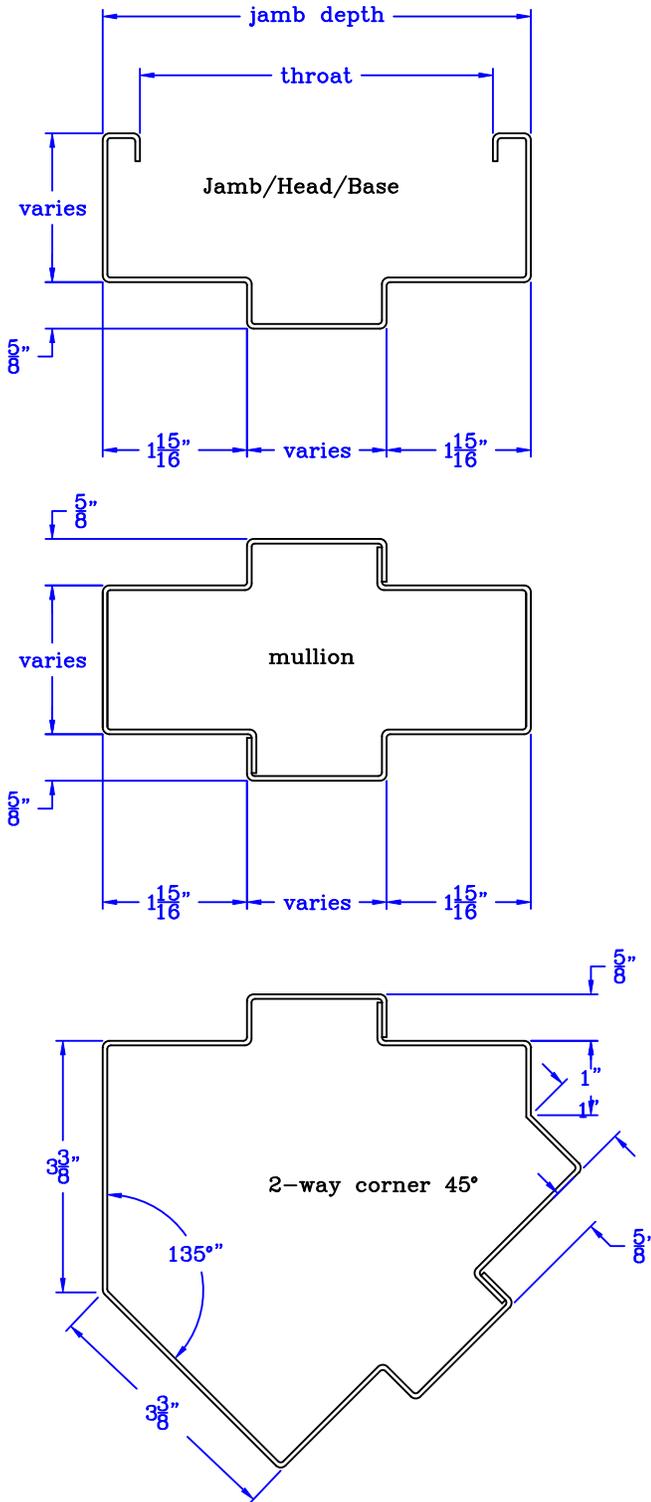
CUSTOM FRAME ELEVATION	PAGE
Double Rabbet Profile (D)	
Standard Series.....	C-9
Drywall/Pre-Drywall Series .....	C-11
Less Return Frame Series .....	C-13
Split Frame Series.....	C-15
Single Rabbet Profile (S)	
Standard Series.....	C-16
Drywall/Pre-Drywall Series.....	C-18
Stainless Steel Frame (Double Rabbet Profile, Standard Series) .....	C-20
Glazing Bead.....	C-21

**Double rabbet profile, D  
Standard Series (SR)**



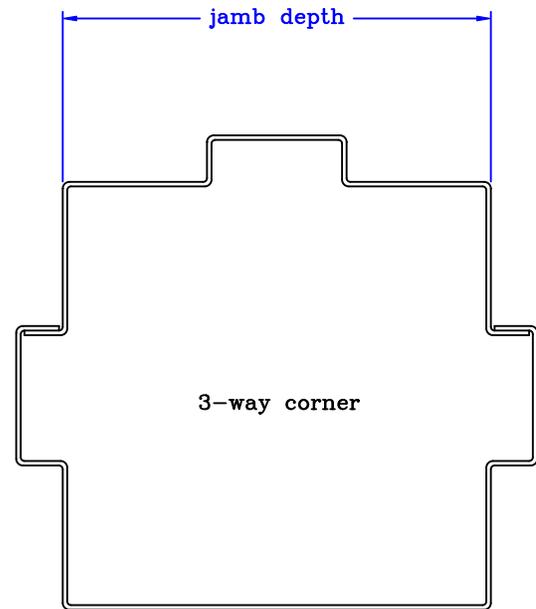
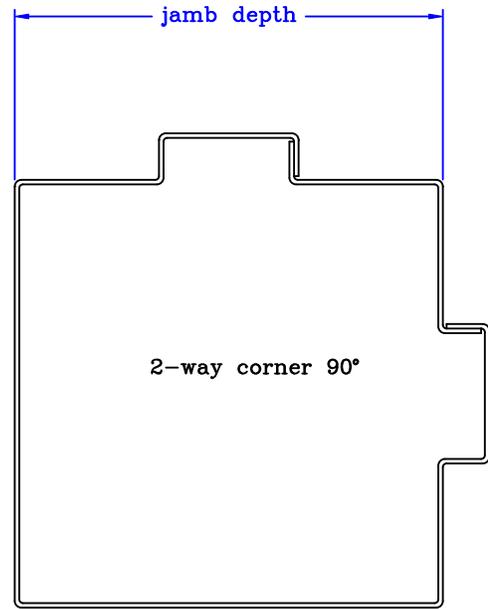
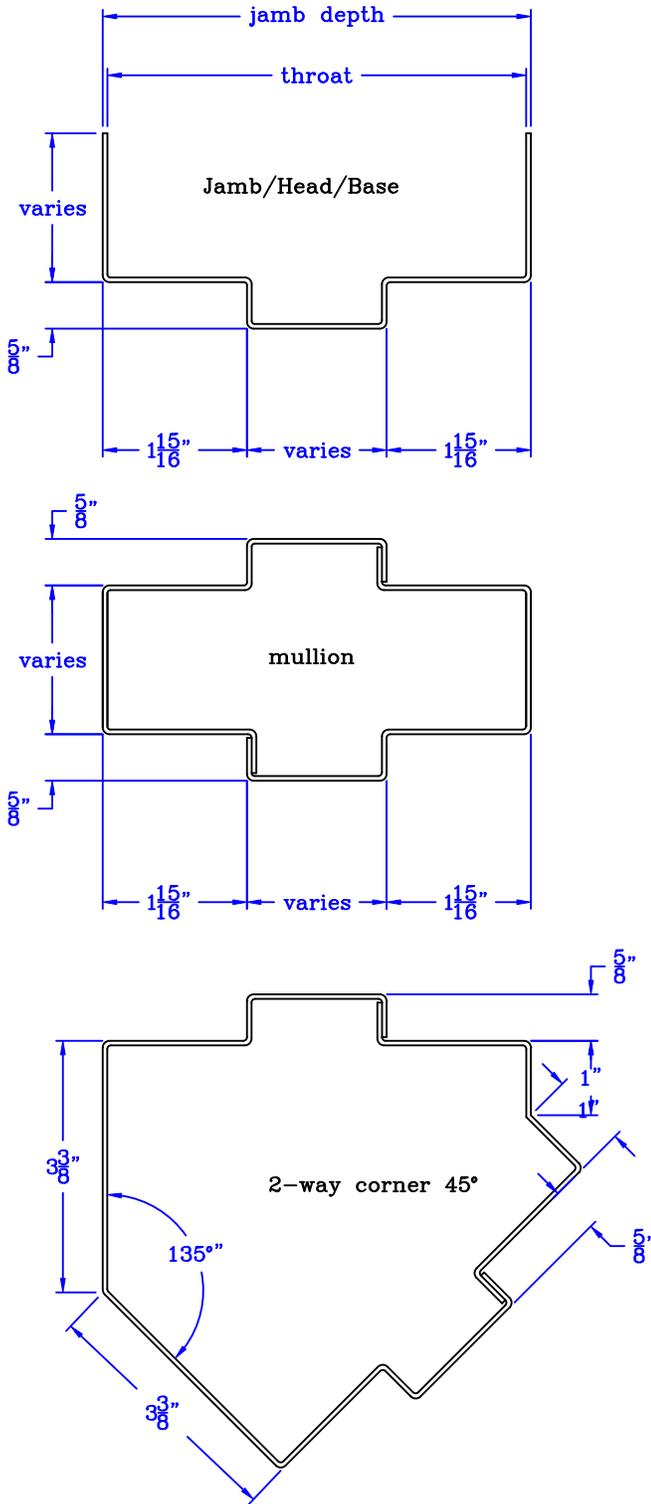
Glazing bead side per handing

**Double rabbet profile, D  
Drywall/Pre-drywall Series (DW/DR)**



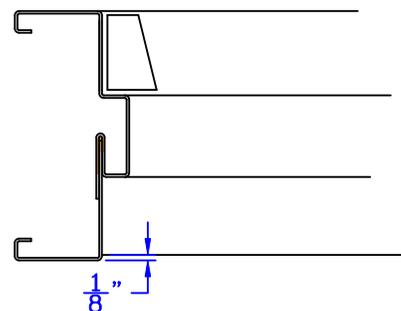
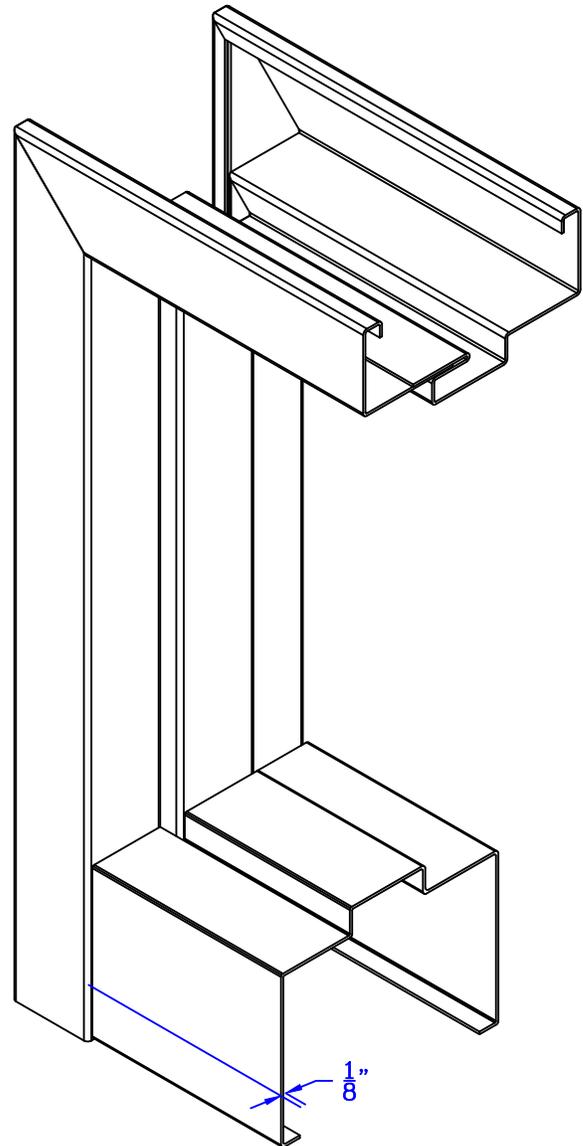
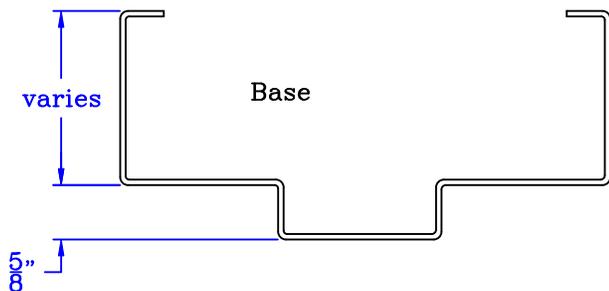
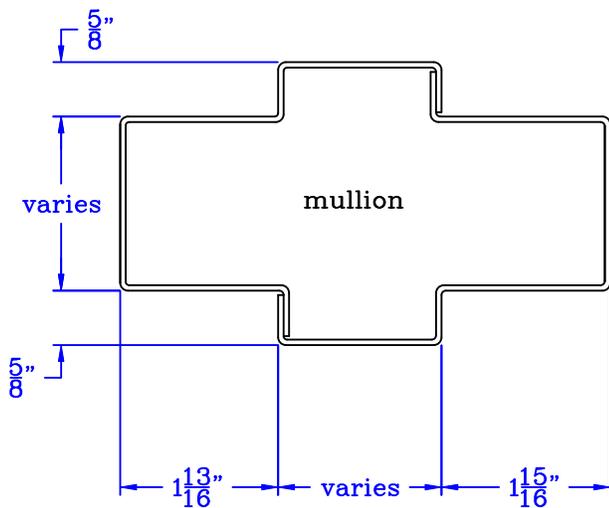
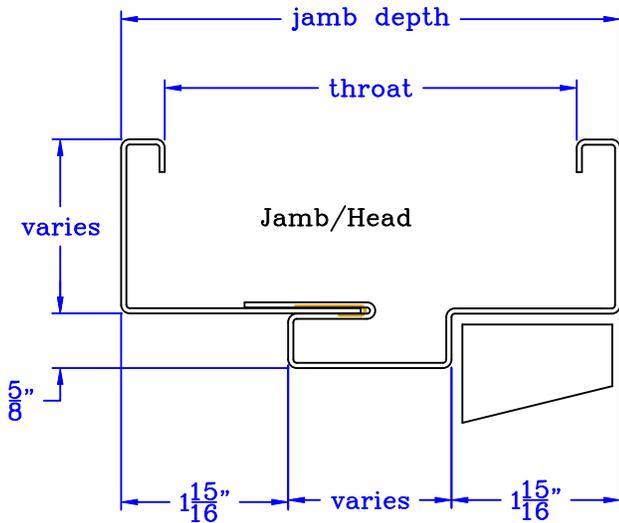
SR series at base  
Glazing bead side per handing

**Double rabbet profile, D  
Less Return Series (LR)**



Glazing bead side per handing

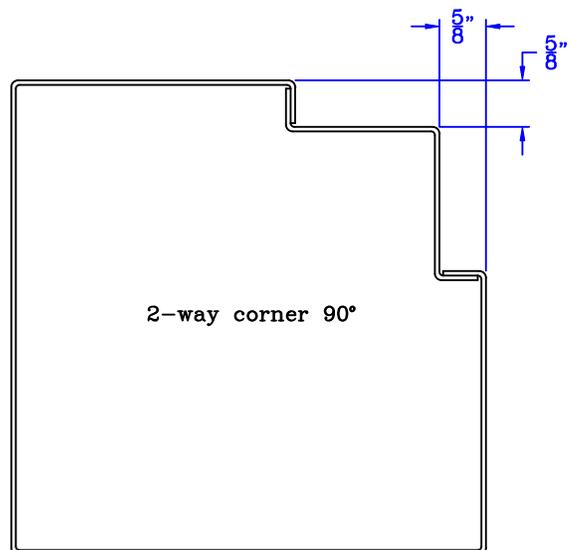
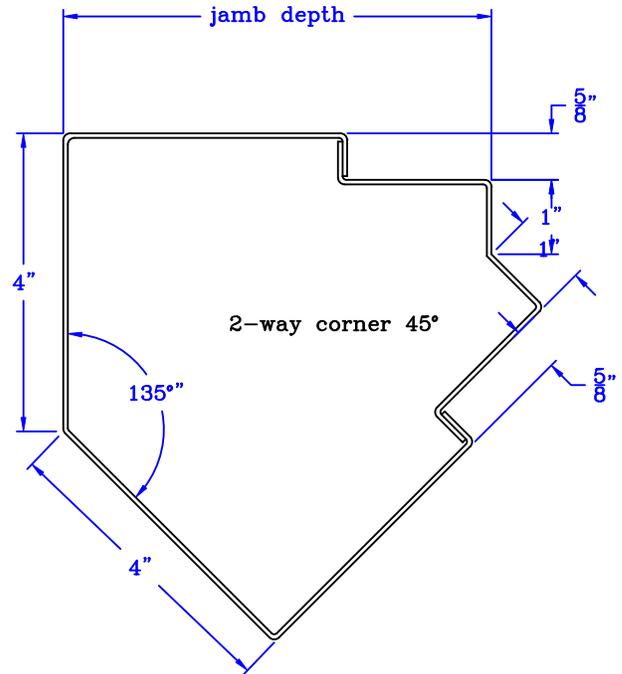
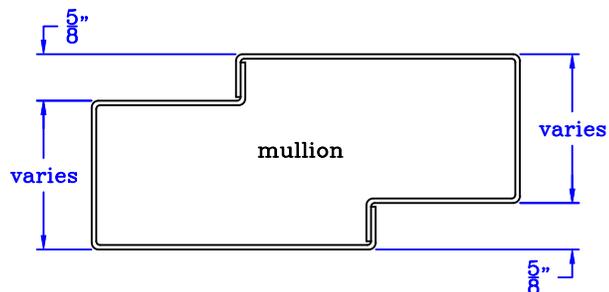
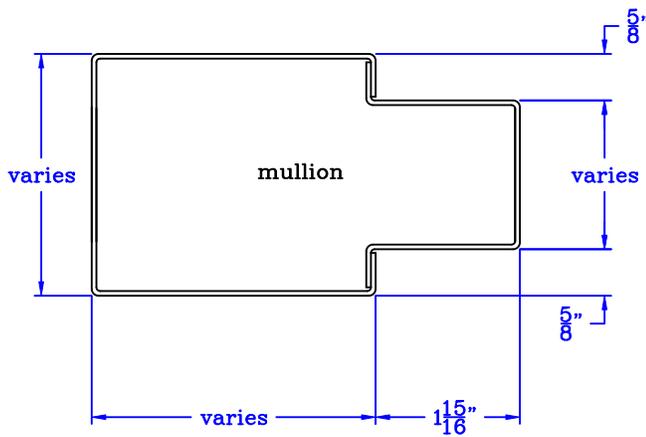
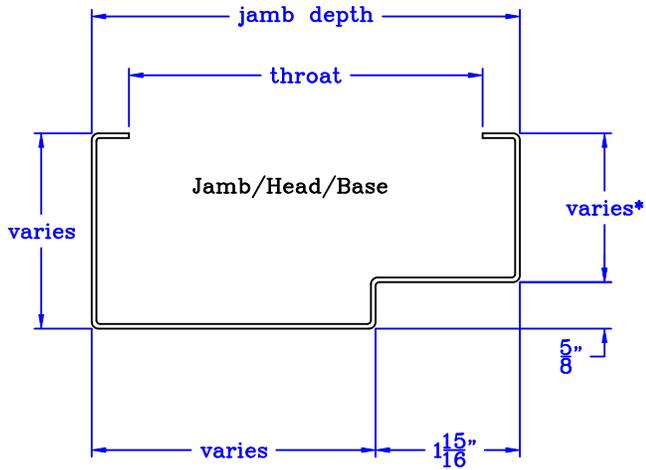
**Split frame profile, SF**  
**Split Frame Series (SF)**



Rough opening for borrowed lite and for sidelite and transom: overall width - 2"  
: overall height - 2"

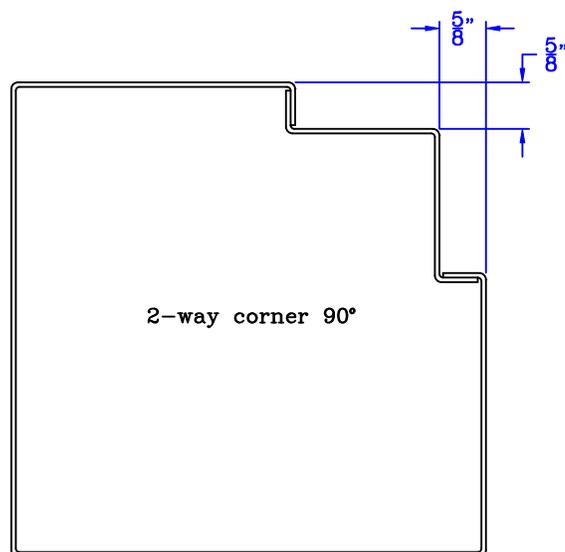
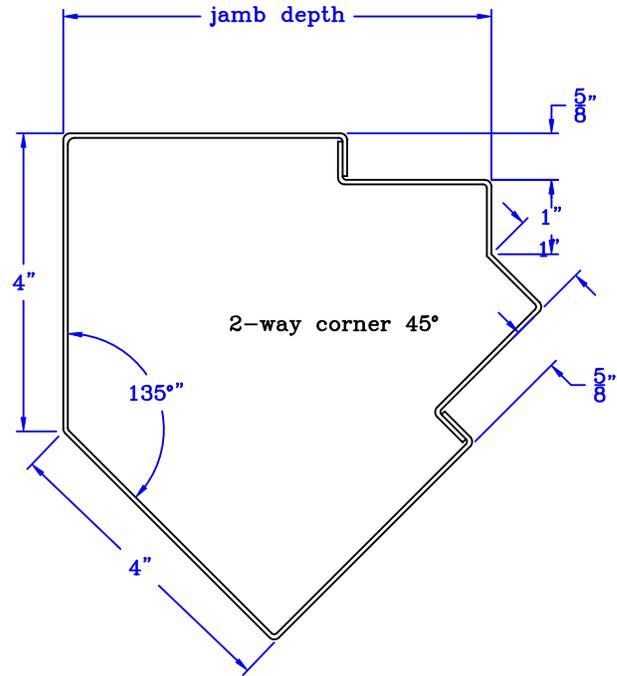
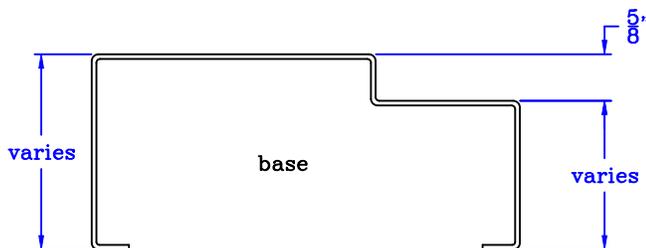
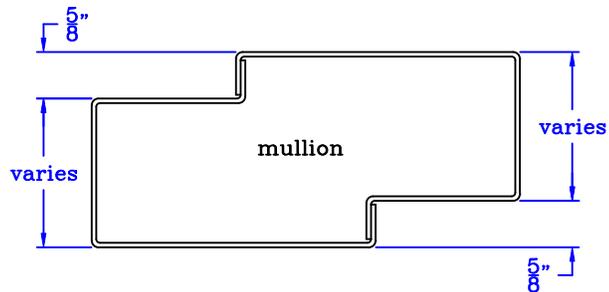
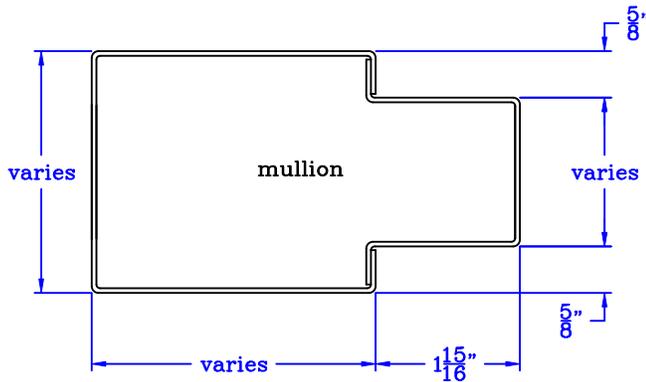
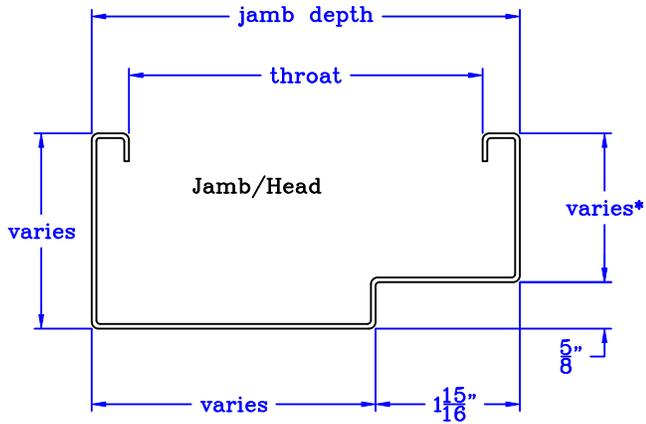
Glazing bead always on door side

**Single rabbet profile, S  
Standard Series (SR)**



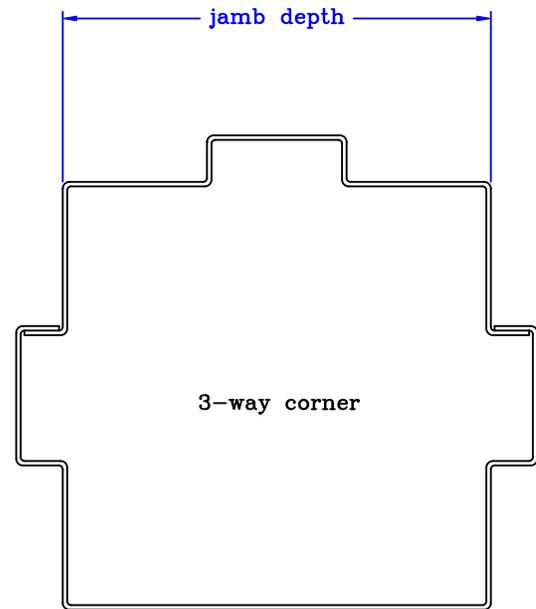
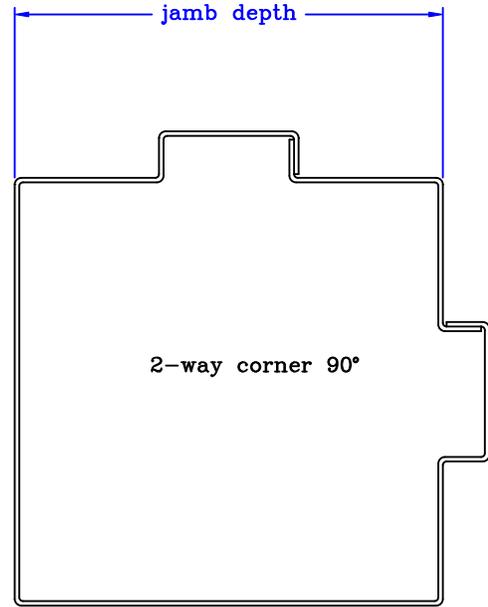
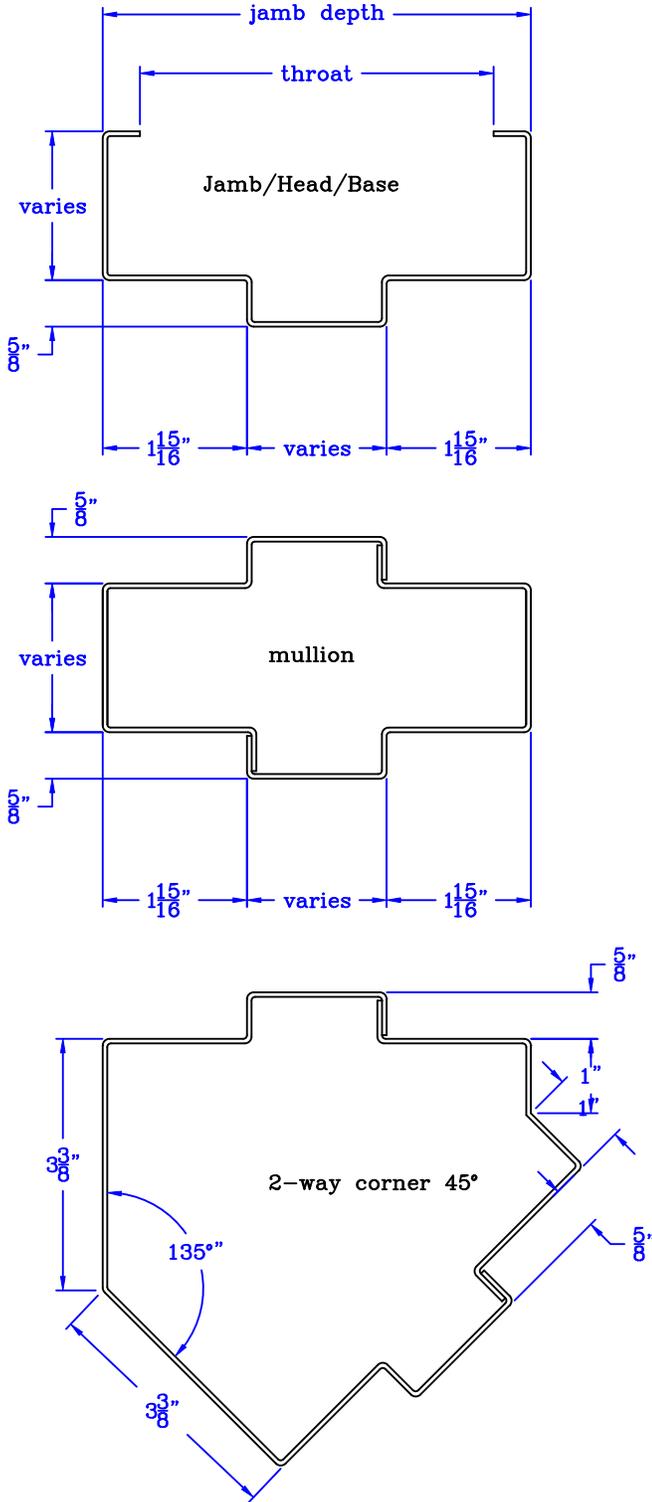
\*S1 model : 2" face door side  
S2 model : 1 3/8" face on door side  
Minimum 2-5/8" JD  
Glazing bead side per handing

**Single rabbet profile, S  
Drywall/Pre-drywall Series (DW/DR)**



\*S1 model : 2" face door side  
 S2 model : 1 3/8" face on door side  
 Minimum 2-5/8" JD  
 Glazing bead side per handing

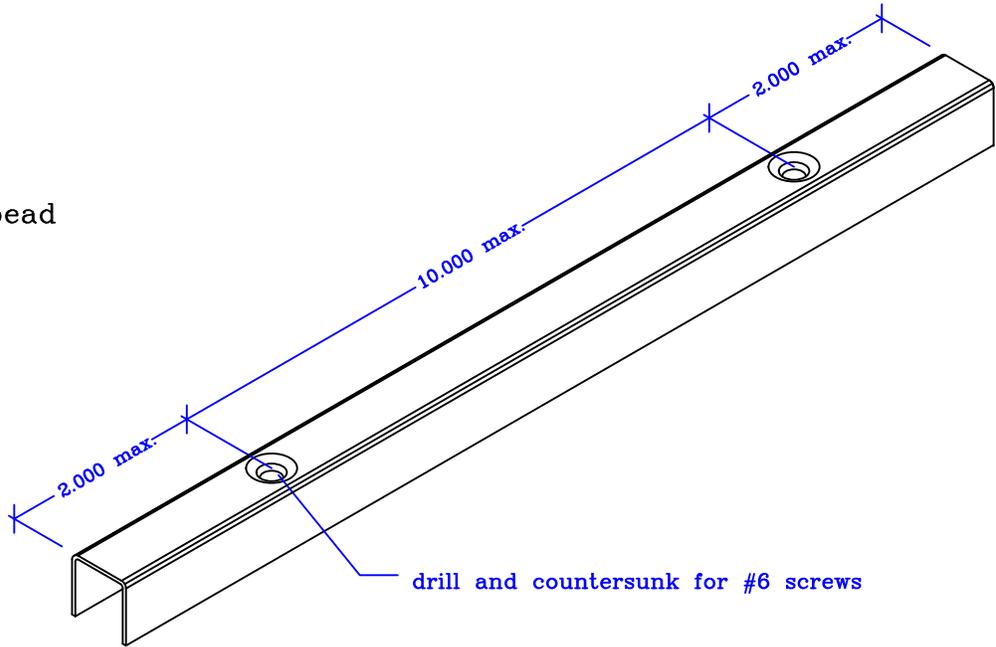
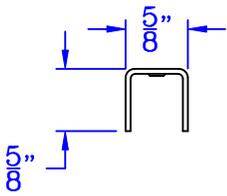
**Double rabbet profile, D  
Standard Series (SR)**



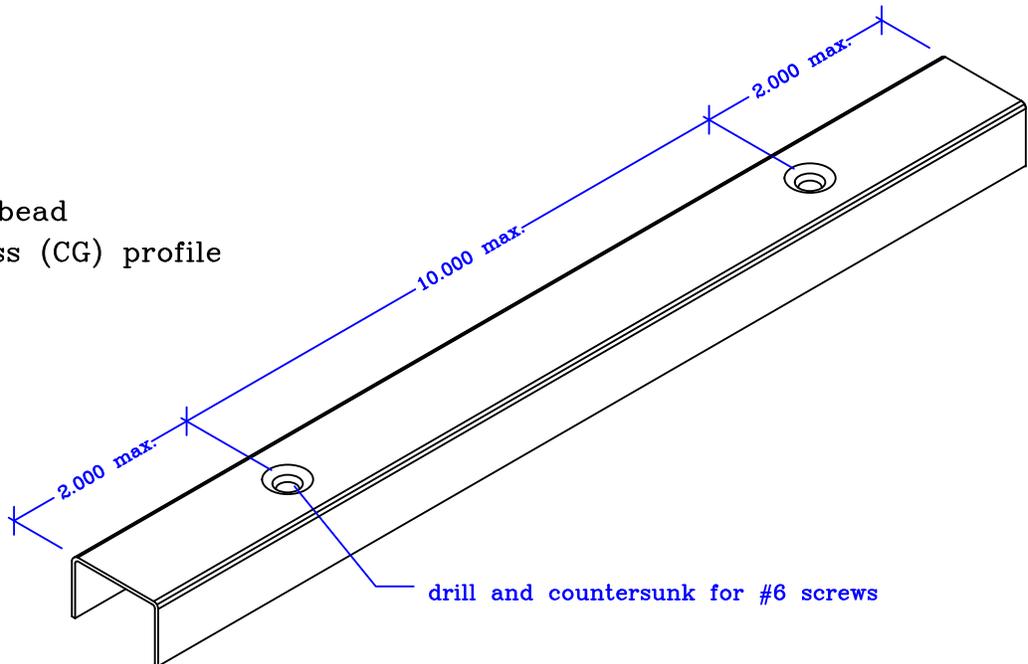
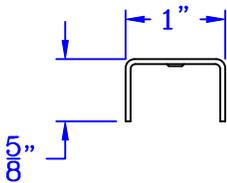
Glazing bead side per handing

### Glazing bead

Default glazing bead



Default glazing bead at centered glass (CG) profile



# OPTIONS

**Mortise Hinge**

45S - 4-1/2" Standard Weight Hinge Reinforcement .....	O-4.1
45H - 4-1/2" Heavy Weight Hinge Reinforcement.....	O-4.2
45R - 4-1/2" Reversible Hinge Reinforcement .....	O-4.3
50S - 5" Standard Weight Hinge Reinforcement.....	O-4.4
50H - 5" Heavy Weight Hinge Reinforcement.....	O-4.5
35S - 3-1/2" Standard Weight Hinge Reinforcement .....	O-4.6
40S - 4" Standard Weight Hinge Reinforcement.....	O-4.7
40T - 4" Thin Hinge Reinforcement.....	O-4.8
45I - 4-1/2" Institutional Hinge Reinforcement.....	O-4.9
60S - 6" Standard Weight Hinge Reinforcement.....	O-4.10
60H - 6" Heavy Weight Hinge Reinforcement.....	O-4.11
AH - Prep. for Anchor Hinge.....	O-4.12
DBLM - Double Mortising of Hinge Reinforcement .....	O-4.13

**Electrified Hardware Prep**

EH - Prep. for Electric Hinge .....	O-4.14
EPT - Prep. for Electric Power Transfer.....	O-4.15
RACE - Raceway for Electrified Hardware.....	O-4.16
BOXED - Box for Electric Device .....	O-4.17

**Continuous Hinge**

CCH - Concealed Leaf Continuous Hinge Reinforcement, 14ga.....	O-4.18
CCH10 - Concealed Leaf Continuous Hinge Reinforcement, 10ga.....	O-4.19
CCEH - Concealed Leaf Continuous Electric Hinge Reinforcement.....	O-4.20
SCH - Surface Continuous Hinge Reinforcement.....	O-4.21

**Invisible Hinge**

INVH - Invisible Hinge Reinforcement.....	O-4.22
---	--------

**Pivot**

TPIV - Prep. for Top Pivot .....	O-4.23
IPIV - Intermediate Pivot Prep.....	O-4.24
BPIV - Prep. for Bottom Pivot.....	O-4.25

**Pocket Pivot**

PPIV - Prep. for Pocket Pivot .....	O-4.26
-------------------------------------	--------

**Lock**

161 - Cylindrical Lock Reinforcement .....	O-4.27
161TB - Cylindrical Lock Reinforcement with Thru Bolts.....	O-4.28
IL4 - Interconnected Lock 4" C/C (161TB+CYLDL) .....	O-4.29

OPTIONS – DOOR HARWARE OPTIONS	PAGE
IL512 - Interconnected Lock 5-1/2" C/C (161TB+CYLDL) .....	O-4.30
86ED - Mortise Lock Reinforcement .....	O-4.31
86FH - Mortise Lock Reinforcement with Function Hole.....	O-4.32
DGL161 - Digital Lock Prep.....	O-4.33
DGL86 - Mortise Lock for Coded Access, Electronic or Digital Lock .....	O-5.1
PAL - Pre-Assembled Lock Reinforcement.....	O-5.2
Deadlock	
CYLDL - Cylindrical Deadlock Reinforcement .....	O-5.3
MODDL - Mortise Deadlock Reinforcement.....	O-5.4
MODDLFH - Mortise Deadlock Reinforcement with Function Hole .....	O-5.5
Exit Device	
RIM - Rim Exit Device Reinforcement.....	O-5.6
RIMFH - Rim Exit Device Reinforcement with Function Holes .....	O-5.7
SVR - Surface Vertical Rod Exit Device Reinforcement .....	O-5.8
SVRFH - Surface Vertical Rod Exit Device Reinforcement with Function Holes.....	O-5.9
MED - Mortise Exit Device Reinforcements .....	O-5.10
MEDFH - Mortise Exit Device Reinforcements with Function Holes.....	O-5.11
CVR - Concealed Vertical Rod Exit Device Reinforcements .....	O-5.12
INCVR - Inpact Concealed Vertical Rod Exit Device Reinforcements.....	O-5.13
INMED - Inpact Mortise Exit Device Reinforcements .....	O-5.14
Exit Device Options	
ED12 - Exit Device Surface Reinforcement in 12ga .....	O-5.15
ED14 - Exit Device Surface Reinforcement in 14ga .....	O-5.16
AUXFL - Auxiliary Fire Latch.....	O-5.17
LBR - Less Bottom Rod.....	O-5.18
Strikes	
ASA - Standard ANSI 4-7/8" Strike Reinforcement.....	O-5.19
ASA12 - Standard ANSI 4-7/8" Strike Reinforcement in 12ga.....	O-5.20
T - Standard 2-3/4" "T" Strike Reinforcement.....	O-5.21
DL234 - Cylindrical Deadlock Strike Reinforcement .....	O-5.22
DL312M - 3-1/2" Mortise Deadlock Strike Reinforcement .....	O-5.23
DL478 - ANSI Standard 4-7/8" Deadlock Strike Reinforcement .....	O-5.24
ES - Prep. for Electric Strike.....	O-5.25
OBS - Prep. for Open Back Strike.....	O-5.26
RIMS - Rim Strike Reinforcement .....	O-5.27
FL - Full Lip Strike 2-1/4" .....	O-5.28

**Bolt (ea)**

FB - ANSI A156.16 Flush Bolts .....	O-5.29
SB - Surface Bolt Reinforcements .....	O-5.30

**Closers (ea)**

CL16 - Standard Closer Reinforcement in 16ga .....	O-5.31
CL14 - Standard Closer Reinforcement in 14ga .....	O-5.32
CL12 - Standard Closer Reinforcement in 12ga .....	O-5.33
CID - Concealed in Door Closer Prep. ....	O-5.34
COHS - Prep. for Concealed Overhead Stop .....	O-5.35
FWCR - Full Width Closer Reinforcement .....	O-5.36

**Non-Mechanical Trim (ea)**

PP - Push and Pull Reinforcements .....	O-5.37
PGB - Pull with Grab Bar Reinforcements .....	O-5.38
FP - Flush Pull with Capping (push, pull or both sides) .....	O-5.39

**Other Hardware Preparation**

SHL - Shearlock Reinforcement.....	O-6.1
RL - Roller / Catch Prep. ....	O-6.2
PEEP - Hole for Door Viewer/Peep Hole .....	O-6.3
MC - Prep. for Magnetic Contact with Reinforcement.....	O-6.4
ADB - Prep. Mortised Automatic Door Bottom .....	O-6.5



OPTIONS – ENGINEERED DOOR OPTIONS PAGE

---

Astragal & Option

FAS - Flat Bar Astragal ..... O-6.6  
 ZAS - “Z” Astragal ..... O-6.7  
 DAS - Deviated Astragal for Single Leaf ..... O-6.8  
 LLAS - 1/16” Lead Lined Flat Bar Astragal ..... O-6.9  
 SAS - Extra for Screwed Astragal to the Door ..... O-6.10  
 WAS - Extra for Welded Astragal to the Door ..... O-6.11

Shelf

FDD - Full Dutch Door Shelf..... O-6.12  
 HDD - Half Dutch Door Shelf..... O-6.13

Model

1PNL - One Panel ..... O-6.14  
 2PNL - Two Panels ..... O-6.15  
 2PNLA - Two Panels Soft Arch ..... O-6.16  
 4PNL - Four Panels ..... O-6.17  
 6PNL - Six Panels ..... O-6.18  
 FL2PNL - Flush with 2 Panels at Bottom ..... O-6.19  
 N6PNL - Narrow Six Panels ..... O-6.20  
 DD - Dutch Door (shelf not included) ..... O-6.21  
 CED - Custom Embossed Door ..... O-6.22  
 RPD - Recessed Panel Door..... O-6.23

Door Edge Seam

PA - Lock Seam ..... O-6.24  
 CW - Continuous Welded Seam ..... O-6.25

Door Edge Seam Option (PA only)

PAF - Lock Seam Edge Filled Seamless ..... O-6.26  
 TWPF - Lock Seam Edge Tack Welded and Filled Seamless ..... O-6.27

Continuous Welded Edge Channel (CW only)

18EC - 18ga Edge Channel ..... O-6.28  
 16EC - 16ga Edge Channel ..... O-6.29  
 14EC - 14ga Edge Channel ..... O-6.30  
 12EC - 12ga Edge Channel ..... O-6.31

Hinge Edge Construction

BEVH - Bevel Edge Door / Hinge Edge ..... O-7.1  
 SQH - Square Edge Door / Hinge Edge..... O-7.2  
 PPHEC - Pocket Pivot Hinge Edge Construction..... O-7.3  
 REH - Segmented Radius Pivot Edge for Double Acting Door (N/A in CW) ..... O-7.4

**Lock Edge Construction**

BEVL - Bevel Edged Door / Lock Edge.....	O-7.5
SQL - Square Edged Door / Lock Edge .....	O-7.6
REL - Segmented Radius Lock Edge for Double Acting Door (N/A in CW) .....	O-7.7

**Stiffener Option**

B - Bonded Stiffeners .....	O-7.8
W - Welded Stiffeners .....	O-7.9

**Door Thickness**

134 - 1-3/4" Door Thickness.....	O-7.10
138 - 1-3/8" Door Thickness.....	O-7.11
200 - 2" Door Thickness .....	O-7.12
214 - 2-1/4" Door Thickness.....	O-7.13

**End Channel/Cap**

ST - Standard Inverted End Channel .....	O-7.14
FWC - Flush Welded Cap .....	O-7.15
FWSC - Flush Welded and Sealed Cap.....	O-7.16
RAB - Rabbeted Cap.....	O-7.17
SNAP - Snap-In Cap (Stainless Steel only) .....	O-7.18

**End Channel/Cap Option**

CH14 - 14ga End Channel/Cap.....	O-7.19
CH12 - 12ga End Channel/Cap.....	O-7.20

**Finish**

P - Baked on Primer for Door .....	O-7.21
PC - Powder Coated Standard RAL Color Prefinished.....	O-7.22

**Label**

180 - Positive Pressure 180 Minutes .....	O-7.23
90 - Positive Pressure 90 Minutes.....	O-7.24
60 - Positive Pressure 60 Minutes.....	O-7.25
45 - Positive Pressure 45 Minutes.....	O-7.26
20 - Positive Pressure Minutes.....	O-7.27
CL - Construction Label - Fire Door/Frame .....	O-7.28
54835 - Fire Exit Hardware - Supplemental Label .....	O-7.29
180R - Riveted Positive Pressure 180 Minutes.....	O-7.30
90R - Riveted Positive Pressure 90 Minutes.....	O-7.31
60R - Riveted Positive Pressure 60 Minutes.....	O-7.32
45R - Riveted Positive Pressure 45 Minutes.....	O-7.33



OPTIONS – ENGINEERED DOOR OPTIONS	PAGE
20R - Riveted Positive Pressure 20 Minutes.....	O-7.34
CLR - Riveted Construction Label - Fire Door/Frame .....	O-7.35
54848 - Construction Label - Fire Door/Frame .....	O-7.36
HUR50 - FBC Hurricane, HVHZ, ±50 PSF .....	O-8.1
HUR70 - FBC Hurricane, HVHZ, ±70 PSF .....	O-8.2
HUR70N - FBC Hurricane, Non-HVHZ, ±70 PSF .....	O-8.3
HURCL - Construction Label - Hurricane-Resistant Door/Frame .....	O-8.4
Other Door Prep	
MONOR - Prep. for Monorail Cut Out, per Leaf .....	O-8.5
Steel	
A40 - Hot Dipped Galvannealed Steel A40 (ZF120) .....	O-8.6
A60 - Hot Dipped Galvannealed Steel A60 (ZF180) .....	O-8.7
G90 - Hot Dipped Galvanized Steel G90 (Z275).....	O-8.8
Undercut	
34UC - 3/4" Undercut .....	O-8.9
58UC - 5/8" Undercut .....	O-8.10
38UC - 3/8" Undercut .....	O-8.11
18UC - 1/8" Undercut (for panels) .....	O-8.12
SPUC - Non-Standard Undercut .....	O-8.13



OPTIONS – VISION KIT AND LOUVERS

PAGE

Sandwich Kit - SK (N Series)

10" x 10" Exposed .....	O-10.1
3" x 33" Exposed .....	O-10.2
4" x 25" Exposed .....	O-10.3
5" x 20" Exposed .....	O-10.4
5" x 54" Exposed .....	O-10.5
6" x 16" Exposed .....	O-10.6
6" x 30" Exposed .....	O-10.7
6" x 32" Exposed .....	O-10.8
6" x 36" Exposed .....	O-10.9
Half Glass .....	O-10.10
Two Half Glass .....	O-10.11
Full Glass.....	O-10.12
CH - With Channel .....	O-10.13
NOCH - Without Channel.....	O-10.14

Flush Kit - FK (P Series)

10" x 10" Exposed .....	O-10.15
5" x 20" Exposed .....	O-10.16
5" x 54" Exposed .....	O-10.17
6" x 16" Exposed .....	O-10.18
6" x 36" Exposed .....	O-10.19
Half Glass .....	O-10.20
Two Half Glass .....	O-10.21
Full Glass.....	O-10.22

Flush Kit Seamless - FKS (O Series)

10" x 10" Exposed .....	O-10.23
5" x 20" Exposed .....	O-10.24
5" x 54" Exposed .....	O-10.25
6" x 16" Exposed .....	O-10.26
6" x 36" Exposed .....	O-10.27
Half Glass .....	O-10.28
Two Half Glass .....	O-10.29
Full Glass.....	O-10.30

Sandwich Kit with Muntins - SKWM

1H, 1H1V, 1H2V, 2H, 2H1V, 2H2V, 3H, 3H1V, 3H2V, 4H2V .....	O-11.1
--	--------

## Louvers

1818LO - 18" x 18" .....	O-11.2
1812LO - 18" x 12" .....	O-11.3
1212LO - 12" x 12" .....	O-11.4
2412-LO - 24" x 12" .....	O-11.5
2418LO - 24" x 18" .....	O-11.6
2424LO - 24" x 24" .....	O-11.7

## Round Cut Out

RCO - Round Cut Out .....	O-11.8
---------------------------	--------

**Mortise Hinge**

45S - 4-1/2" Standard Weight Hinge Reinforcement .....	O-12.1
45H - 4-1/2" Heavy Weight Hinge Reinforcement.....	O-12.2
50S - 5" Standard Weight Hinge Reinforcement.....	O-12.3
50H - 5" Heavy Weight Hinge Reinforcement.....	O-12.4
35S - 3-1/2" Standard Weight Hinge Reinforcement .....	O-12.5
40S - 4" Standard Weight Hinge Reinforcement.....	O-12.6
40T - 4" Thin Hinge Reinforcement.....	O-12.7
45I - 4-1/2" Institutional Hinge Reinforcement.....	O-12.8
60S - 6" Standard Weight Hinge Reinforcement.....	O-12.9
60H - 6" Heavy Weight Hinge Reinforcement.....	O-12.10
AH - Prep. for Anchor Hinge.....	O-12.11
MORG - Mortar Guard.....	O-12.12
SPMH - Special Mortise Hinge.....	O-12.13

**Electrified Hardware Prep**

EH - Prep. for Electric Hinge .....	O-12.14
ELBOX - Box for Electric Prep with Knockouts .....	O-12.15
EPT - Prep. for Electric Power Transfer.....	O-12.16
EPTBOX - Box for Power Transfer with Knockouts .....	O-12.17
ES - Prep. for Electric Strike .....	O-12.18
ESBOX - Box for Electric Strike with Knockouts.....	O-12.19
DPS - Prep. for Magnetic Contact, Hole Only at Head .....	O-12.20
DPSBOX - Box for Magnetic Contact with Knockouts .....	O-12.21
DPSJ - Prep. for Magnetic Contact, Hole Only at Jamb .....	O-12.22
RDPS - Prep. for Magnetic Contact with Reinforcement at Head.....	O-12.23
RDPSJ - Prep. for Magnetic Contact with Reinforcement at Jamb.....	O-12.24
SHL - Shearlock Reinforcement at Head .....	O-12.25
RACE - Raceway for Electric Hardware.....	O-12.26
ELMAG - Prep. for Electromagnetic Lock Reinforcement.....	O-12.27
ELMAGEB - Prep. for Electromagnetic Lock Reinforcement with Box .....	O-12.28

**Continuous Hinge**

CCH - Concealed Leaf Continuous Hinge Reinforcement, 14ga.....	O-12.29
CCH10 - Concealed Leaf Continuous Hinge Reinforcement, 10ga.....	O-12.30
CCEH - Concealed Leaf Continuous Electric Hinge Reinforcement.....	O-12.31
SCH - Surface Continuous Hinge Reinforcement.....	O-12.32

**Double Acting Hinge**

RDA - Reinforcement for Double Acting Hinge .....	O-12.33
ELIAS - Prep. for "Eliaison" Pivot.....	O-12.34

**Invisible Hinge**

IN VH - Invisible Hinge Reinforcement.....	O-12.35
--	---------

**Pivot**

TPIV - Prep. for Top Pivot .....	O-12.36
IPIV - Prep. for Intermediate Pivot .....	O-13.1
BPIVF - Prep. for Bottom Pivot on Floor .....	O-13.2
BPIVJ - Prep. for Bottom Pivot in Jamb .....	O-13.3
CPIV - Reinforcement for Corner Pivot, Full Surface.....	O-13.4

**Pocket Pivot**

PPIV - Prep. for Pocket Pivot .....	O-13.5
-------------------------------------	--------

**Strike**

ASA - Standard ANSI 4-7/8" Strike Reinforcement.....	O-13.6
ASA12 - Standard ANSI 4-7/8" Strike Reinforcement in 12ga.....	O-13.7
ASA10 - Standard ANSI 4-7/8" Strike Reinforcement in 10ga.....	O-13.8
ASA7 - Standard ANSI 4-7/8" Strike Reinforcement in 7ga.....	O-13.9
T - Standard 2-3/4" "T" Strike Reinforcement.....	O-13.10
DL234 - Cylindrical Deadlock Strike Reinforcement .....	O-13.11
DL234-12 - Cylindrical Deadlock Strike Reinforcement in 12ga .....	O-13.12
DL312M - 3-1/2" Mortise Deadlock Strike Reinforcement .....	O-13.13
DL478 - ANSI Standard 4-7/8" Deadlock Strike Reinforcement .....	O-13.14
IL4 - Interconnected Lock Strike 4" C/C (T+DL234).....	O-13.15
IL512 - Interconnected Lock Strike 5-1/2" C/C (T+DL234) .....	O-13.16
DLS - Prep. for Double Lipped Strike Reinforcement .....	O-13.17
ESTOP - Prep. for Emergency Stop Release Reinforcement.....	O-13.18
RLH - Roller Latch Strike Reinforcement, Head .....	O-13.19
RLJ - Roller Latch Strike Reinforcement, Jamb .....	O-13.20
FL - Full Lip Strike 2-1/4".....	O-13.21
SPS - Special Strike .....	O-13.22

**Exit Device Strike**

RED - Rim Exit Device Reinforcement.....	O-13.23
SVRS - Prep. for Surface Vertical Rod Strike .....	O-13.24
CVRS - Prep. for Concealed Vertical Rod Strike .....	O-13.25

**Bolt Strike**

FBS - ANSI A156.16 Flush Bolt Strike Reinforcement .....	O-13.26
RFBS - Reversible Flush Bolt Strike Reinforcement.....	O-13.27
SBS - Surface Bolt Strike Reinforcement.....	O-13.28
SLFBS - Self Latching Flush Bolt Strike Reinforcement .....	O-13.29

**Closers**

RAC - Regular Arm Closer Reinforcement .....	O-13.30
PAC - Parallel Arm Closer Reinforcement .....	O-13.31
RPAC - Regular and Parallel Arm Closer Reinforcement.....	O-13.32
TJC - Top Jamb Closer Reinforcement.....	O-13.33
FWR - Full Width Regular Arm Closer Reinforcement.....	O-13.34
FWP - Full Width Parallel Arm Closer Reinforcement .....	O-13.35
FWRP - Full Width Regular and Parallel Arm Closer Reinforcement .....	O-13.36
FWTJ - Full Width Top Jamb Closer Reinforcement.....	O-13.37
CCR - Concealed Closer Reinforcement .....	O-13.38
COHS - Prep. for Concealed Overhead Stop .....	O-13.39
SOHS - Prep. for Surface Overhead Stop .....	O-13.40
FS - Full Sleeve Closer Reinforcement (12ga) .....	O-13.41
FWFS - Full Width Full Sleeve Closer Reinforcement (12ga).....	O-13.42

**Coordinator**

FCR - Face Mounted Coordinator Reinforcement .....	O-14.1
SCR - Soffit Mounted Coordinator Reinforcement .....	O-14.2



OPTIONS – ENGINEERED FRAME OPTIONS PAGE

---

Anchors - Knocked Down Frames

SBA - Screw Base Anchor ..... O-15.1  
DSA - Drywall Strap Anchor ..... O-15.2  
SDS - Snap-In for Drywall Partition ..... O-15.3  
CPA - Compression Anchor ..... O-15.4  
WTP - Wood Trim Prep ..... O-15.5

Anchors - Welded Frames

ZBA - "Z" Bracket Anchor ..... O-15.6  
ZBA2 - "Z" Bracket Anchor for Double Layer of Drywall ..... O-15.7  
SWS - Snap-In for Wood and Steel Stud ..... O-15.8  
DCA - Combination Wood and Steel Stud Anchor ..... O-15.9  
TMA - "T" Masonry Anchor ..... O-15.10  
WMA - Wire Masonry Anchor ..... O-15.11  
EWA - Existing Wall Anchor ..... O-15.12  
EWA14 - Existing Wall Anchor for 1/4" Screw ..... O-15.13  
EWA14NOR - Existing Wall Anchor for 1/4" Screw without Reinforcing ..... O-15.14  
EWANOR - Existing Wall Anchor without Reinforcing ..... O-15.15  
EWAP - Existing Wall Anchor with Plug ..... O-15.16  
EWAP14 - Existing Wall Anchor with Plug for 1/4" Screw ..... O-15.17  
EWAT - Existing Wall Anchor with Tube ..... O-15.18  
EWAT14 - Existing Wall Anchor with Tube for 1/4" Screw ..... O-15.19  
ATMA - Adjustable "T" Anchor ..... O-15.20  
MBA - Metal Builder Anchor ..... O-15.21  
DYN4 - 4" Long Dynabolt for Existing Wall Anchor ..... O-15.22  
DYN5 - 5" Long Dynabolt for Existing Wall Anchor ..... O-15.23

Floor/Base Anchors

FA - Floor Anchor ..... O-15.24  
INVFA - Inverted Floor Anchor ..... O-15.25  
ADJFA - Adjustable Floor Anchor ..... O-15.26

Split Frame Anchors

ASFA - Additional Split Frame Anchor for Two Layers of Drywall ..... O-15.27

Frame Assemblies

KD - Knocked Down Corner with Tabs ..... O-15.28  
KDI - Knock Down Intersection ..... O-15.29  
KDS - Knock Down Corner with Screws ..... O-15.30  
FW - Face Welded Corner ..... O-16.1  
CFW - Full Depth Continuous Welded Corner ..... O-16.2  
FWI - Face Welded Intersection ..... O-16.3

---

**OPTIONS – ENGINEERED FRAME OPTIONS** **PAGE**


---

NSW - Non-Standard Welded Corner .....	O-16.4
SW - Sanitary Weld Corner .....	O-16.5
WBO - Welded by Others (KD w/o tabs) .....	O-16.6
MFS - Mechanical Field Splice for Oversized Units .....	O-16.7
SOU - Splice for Oversized Units .....	O-16.8
RM - Removable Mullion/Transom Bar .....	O-16.9
RMF - Removable Mullion with Floor Anchor .....	O-16.10
WFS - Splice for Field Welding for Oversized Units .....	O-16.11

**Finish**

TSF-P - Baked on Primer for Three-Sided Frame .....	O-16.12
BL-P - Baked on Primer for Borrowed Lite .....	O-16.12
SL-P - Baked on Primer for Sidelight .....	O-16.12
TF-P - Baked on Primer for Transom Frame .....	O-16.12
FPRO-P - Baked on Primer for Frame Profile .....	O-16.12
DSL-P - Baked on Primer for Double Sidelight .....	O-16.12
CF-P - Baked on Primer for Custom Frame Elevation .....	O-16.12
TSF-PC - Powder Coated Standard Color Prefinished for Three-Sided Frame .....	O-16.13
BL-PC - Powder Coated Standard Color Prefinished for Borrowed Lite .....	O-16.13
SL-PC - Powder Coated Standard Color Prefinished for Sidelight .....	O-16.13
TF-PC - Powder Coated Standard Color Prefinished for Transom Frame .....	O-16.13
FPRO-PC - Powder Coated Standard Color Prefinished for Frame Profile .....	O-16.13
DSL-PC - Powder Coated Standard Color Prefinished for Double Sidelight .....	O-16.13
CF-PC - Powder Coated Standard Color Prefinished for Custom Frame .....	O-16.13

**Hospital Stops**

HS45 - Hospital Stops 45° .....	O-16.14
HS90 - Hospital Stops 90° .....	O-16.15

**Removable Hardware Mullion**

HWEMUA - Removable Hardware Mullion Reinf. without Filler Block .....	O-16.16
HWEMUB - Removable Hardware Mullion Reinf. with Filler Block .....	O-16.17

**Other Frame Prep.**

MW - Sound Deadening Mineral Wool .....	O-16.18
PBH - Reinforcing for by Passing or Bifold Hardware .....	O-16.19
UHD14 - U Reinforcement for Head Only, 14ga .....	O-16.20
UJMB14 - U Reinforcement for Jamb Only, 14ga .....	O-16.21
UHD12 - U Reinforcement for Head Only, 12ga .....	O-16.22
UJMB12 - U Reinforcement for Jamb Only, 12ga .....	O-16.23

**Frame Label**

180 - Positive Pressure 180 Minutes .....	O-17.1
90 - Positive Pressure 90 Minutes.....	O-17.2
60 - Positive Pressure 60 Minutes.....	O-17.3
45 - Positive Pressure 45 Minutes.....	O-17.4
CL - Construction Label – Fire Door/Frame .....	O-17.5
180E - Embossed Positive Pressure 180 Minutes .....	O-17.6
90E - Embossed Positive Pressure 90 Minutes .....	O-17.7
45E - Embossed Positive Pressure 45 Minutes .....	O-17.8
180R - Riveted Positive Pressure 180 Minutes.....	O-17.9
90R - Riveted Positive Pressure 90 Minutes.....	O-17.10
60R - Riveted Positive Pressure 60 Minutes.....	O-17.11
45R - Riveted Positive Pressure 45 Minutes.....	O-17.12
CLR - Riveted Construction Label – Fire Door/Frame .....	O-17.13
HUR50 - FBC Hurricane, HVHZ, ±50 PSF .....	O-17.14
HUR70 - FBC Hurricane, HVHZ, ±70 PSF .....	O-17.15
HUR70N - FBC Hurricane, Non-HVHZ, ±70 PSF .....	O-17.16
HURCL - Construction Label - Hurricane-Resistant Door/Frame .....	O-17.17

**Specialty Frame**

COMM - Communicating Frame .....	O-17.18
DUTCH - Dutch Frame.....	O-17.19

**Sill**

SI45 - 2” Sill with Miter Ends (4-sided frame).....	O-17.20
SI90 - 1/2” Sill with Square Ends .....	O-17.21
WSI - Welded Sill Option.....	O-17.22

**Steel Material**

A40 - Hot Dipped Galvannealed Steel (ZF120) .....	O-17.23
A60 - Hot Dipped Galvannealed Steel (ZF180) .....	O-17.24
G90 - Hot Dipped Galvanized Steel (Z275) .....	O-17.25

**Profile**

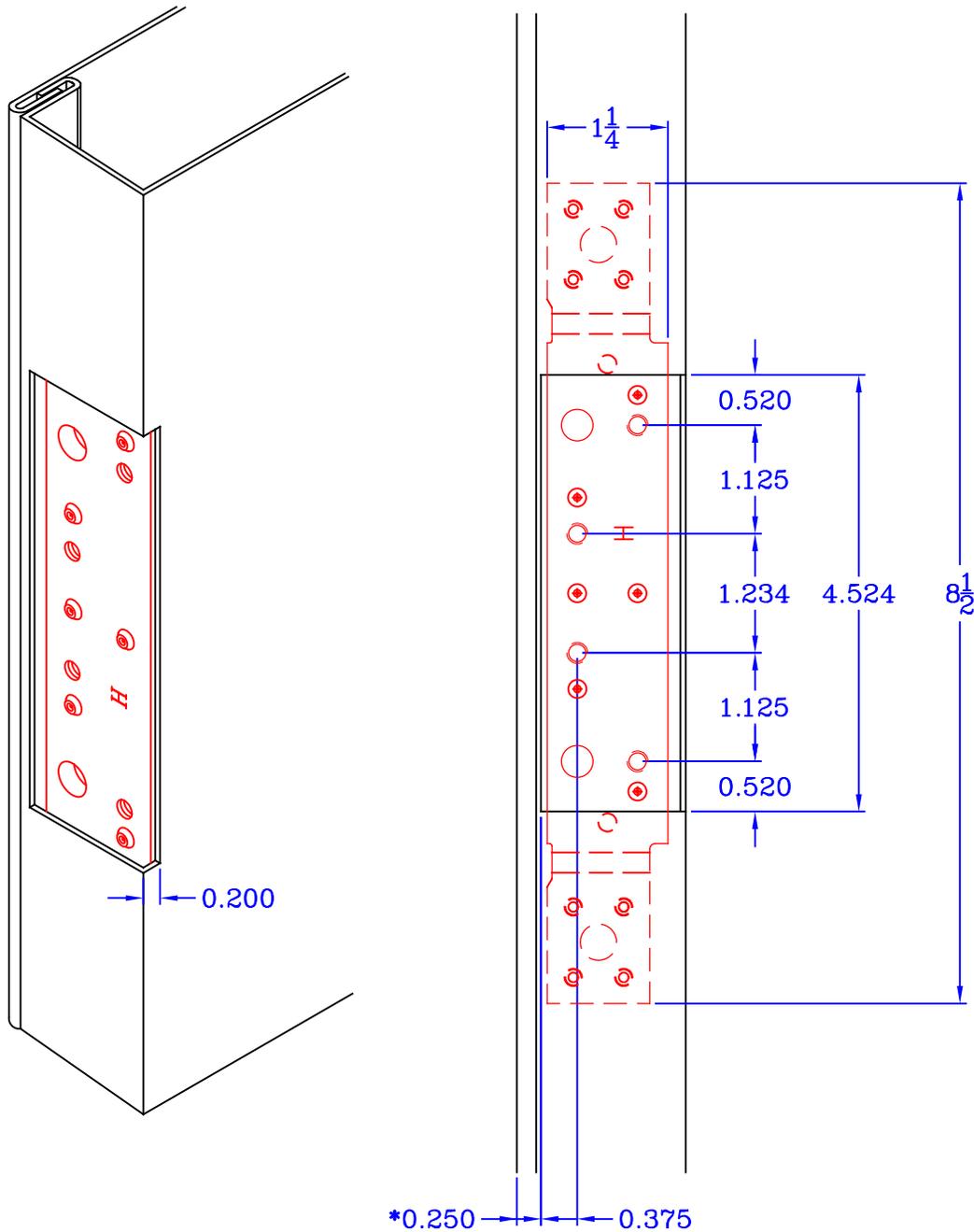
138 - Frame Profile for 1-3/8” Door Thickness.....	O-17.26
200 - Frame Profile for 2” Door Thickness .....	O-17.27
214 - Frame Profile for 2-1/4” Door Thickness.....	O-17.28
SPDT - Frame Profile for Special Door Thickness.....	O-17.29
TB - Thermal Break Frame.....	O-17.30
UEQ - Unequal Rabbet for Three-Sided Frame (1-15/16" x 1-9/16") .....	O-17.31
URB - Unequal Rabbet (for elevations).....	O-17.32
CB - Closed Back .....	O-17.33



OPTIONS – ENGINEERED FRAME OPTIONS	PAGE
CG - Centered Glass Profile.....	O-17.34
CGG - Caulking Groove at Returns .....	O-18.1
HEM - Hemmed Returns .....	O-18.2
KF - Kerf frame Profile.....	O-18.3
SLW - Shipped Loose Weatherstrip for Kerf Frame.....	O-18.4
SL - Shadow Line Profile.....	O-18.5
SPS - Splayed Stop (at single rabbet profile only) .....	O-18.6

**4 1/2" standard weight hinge reinforcement (0.134), 7ga**

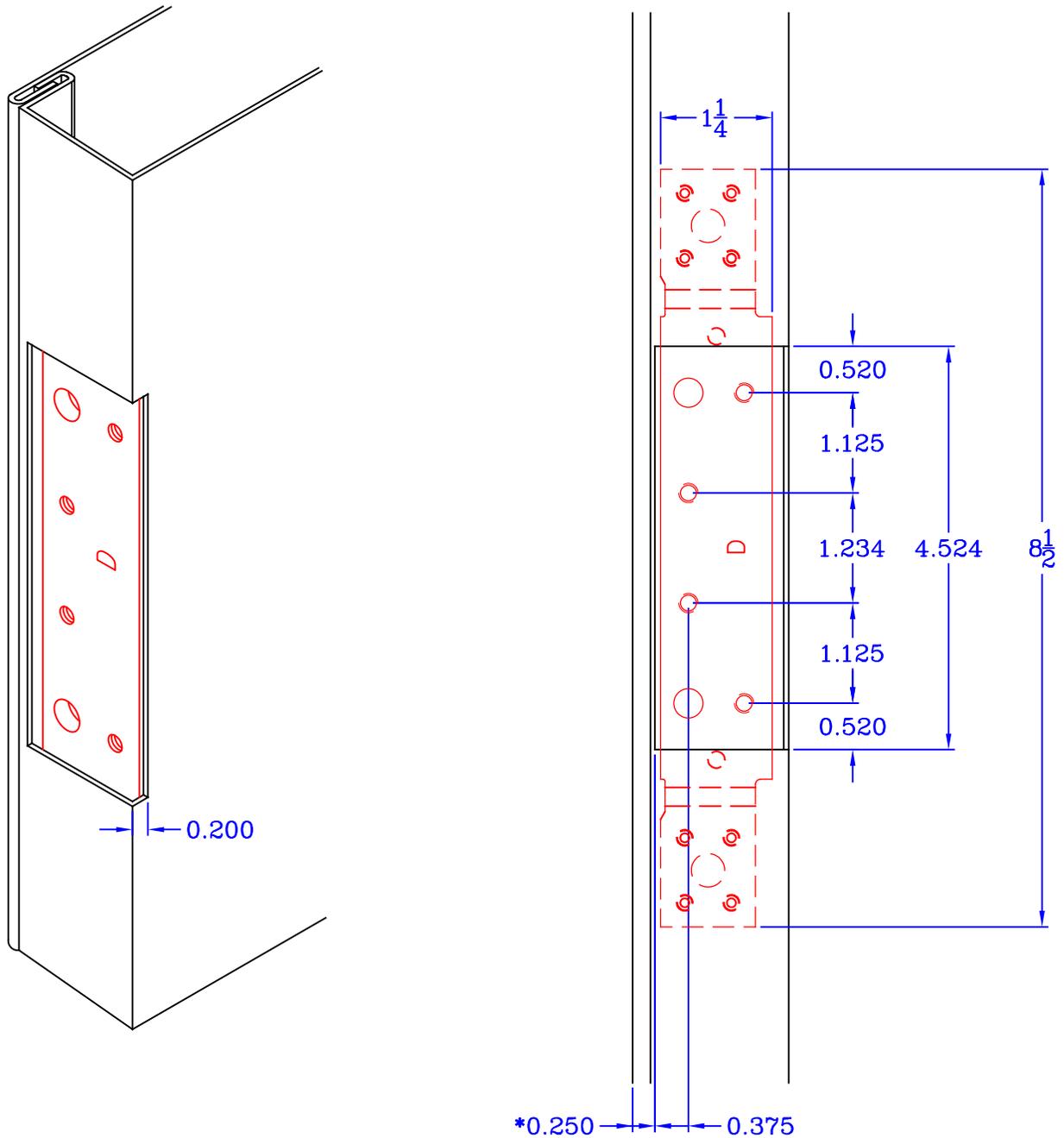
Projection welded



3/8" recommended backset on frame.  
 \* Maybe greater for 16 and thicker gage door.  
 \*\* Tested screw hold for 12-24: 1,200 lbf (per screw)

**4 1/2" heavy weight hinge reinforcement (0.180), 7ga**

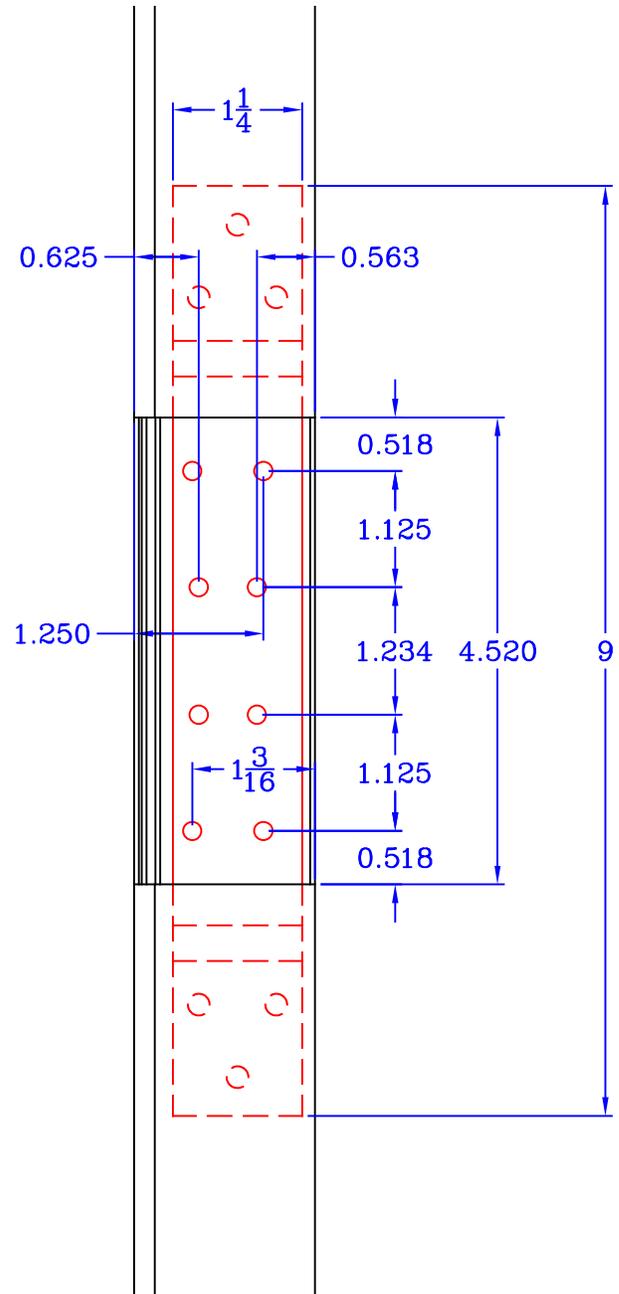
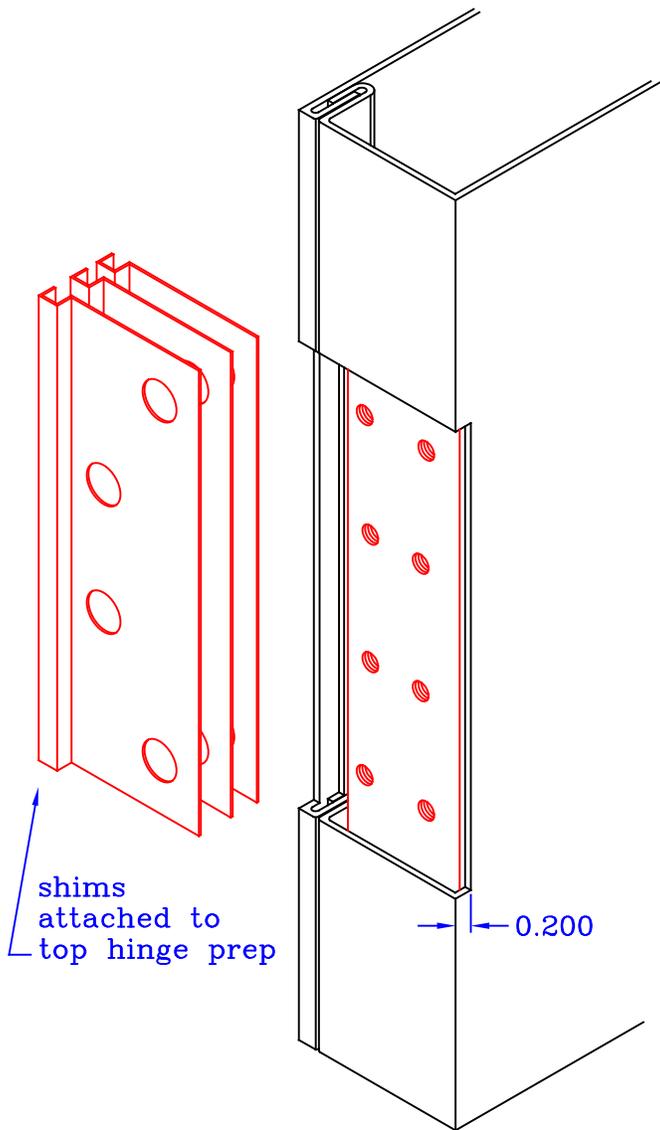
Projection welded



- 3/8" recommended backset on frame.
- \* Maybe greater for 16 and thicker gage door.
- \*\* Tested screw hold for 12-24: 1,200 lbf (per screw)

**4 1/2" reversible hinge reinforcement (0.134), 7ga**

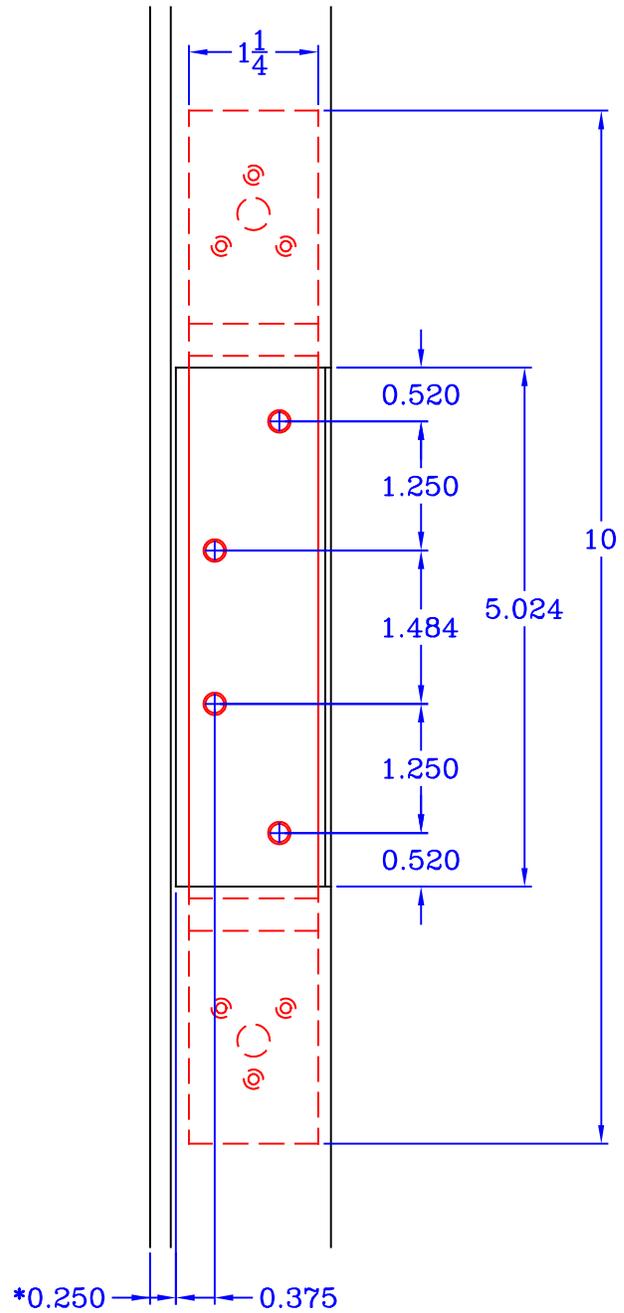
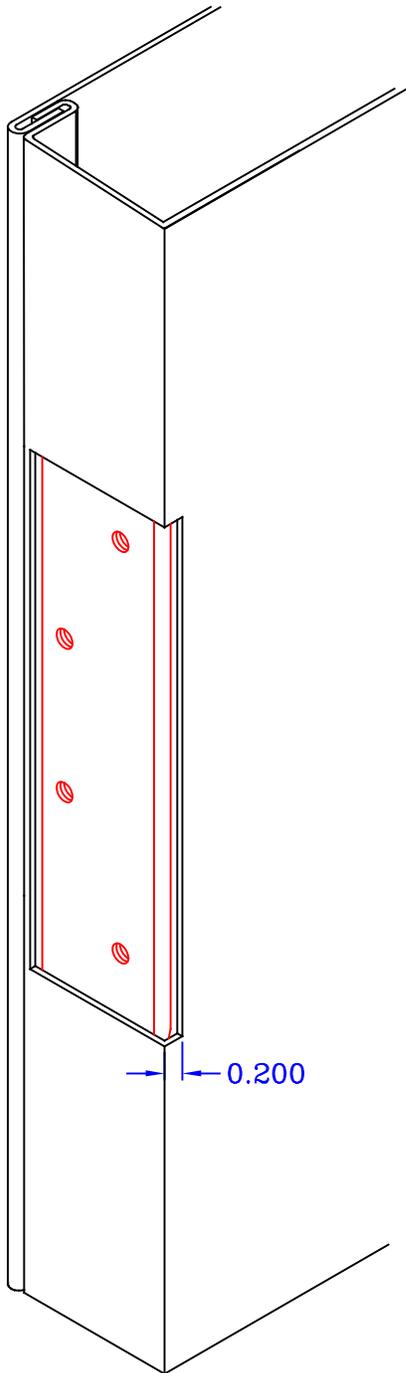
Projection welded



3/8" recommended backset on frame.

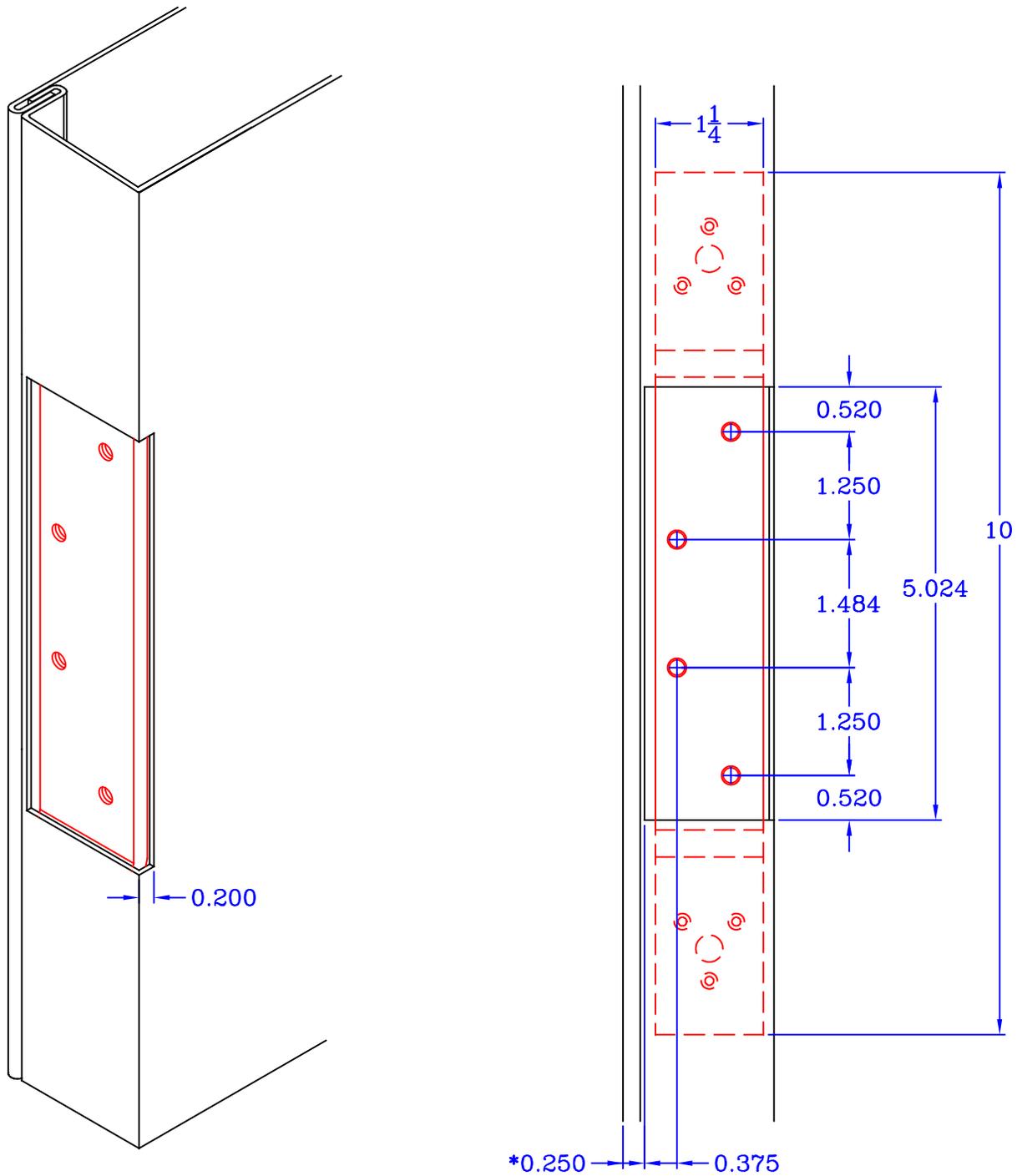
\*\* Tested screw hold for 12-24: 1,200 lbf (per screw)

**5" regular weight hinge reinforcement (0.146), 7ga**  
 Projection welded



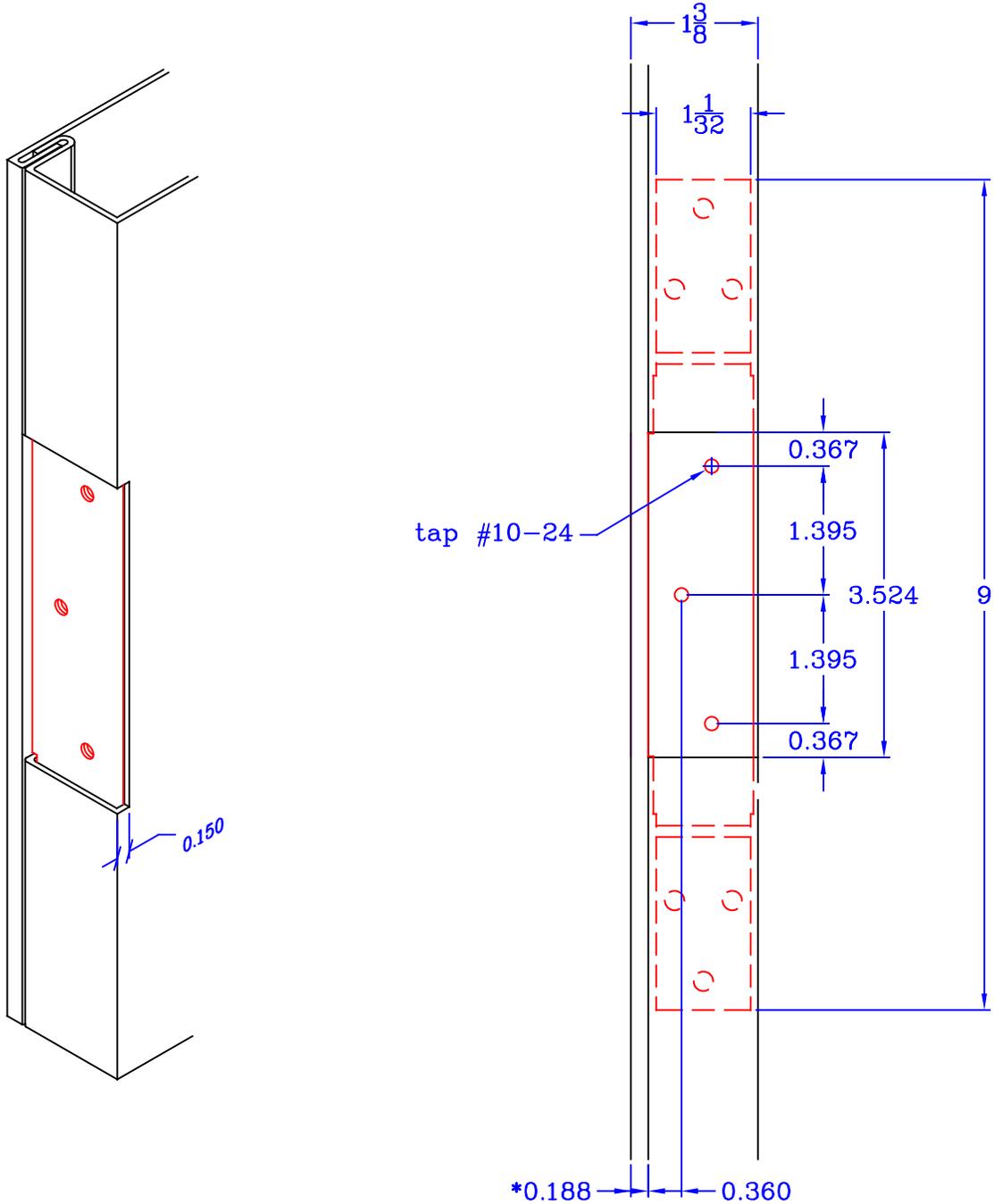
3/8" recommended backset on frame.  
 \* Maybe greater for 16 and thicker gage door.

**5" heavy weight hinge reinforcement (0.190), 7ga**  
Projection welded



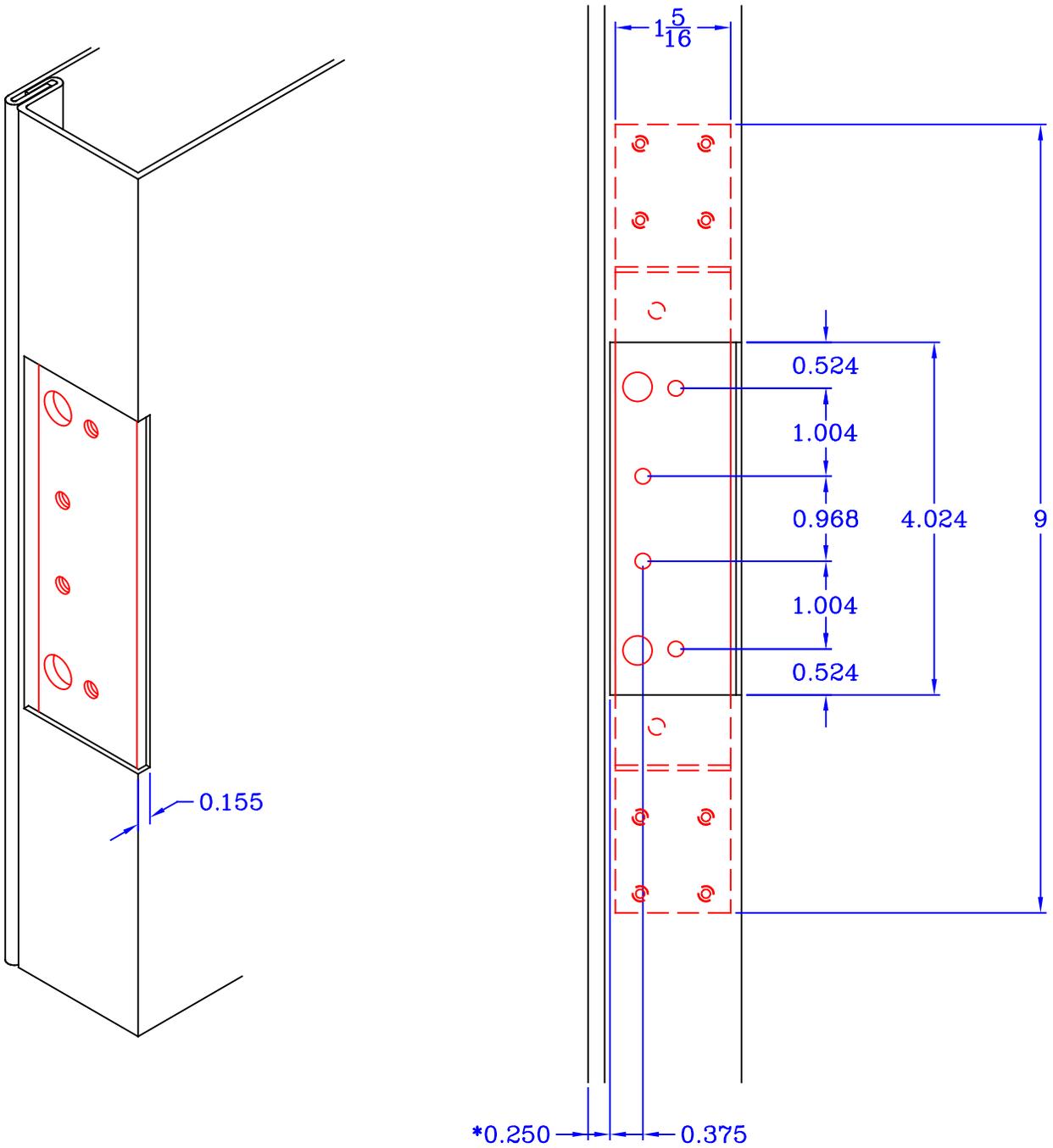
3/8" recommended backset on frame.  
\* Maybe greater for 16 and thicker gage door.

**3 1/2" standard weight hinge reinforcement, 10ga**  
Projection welded



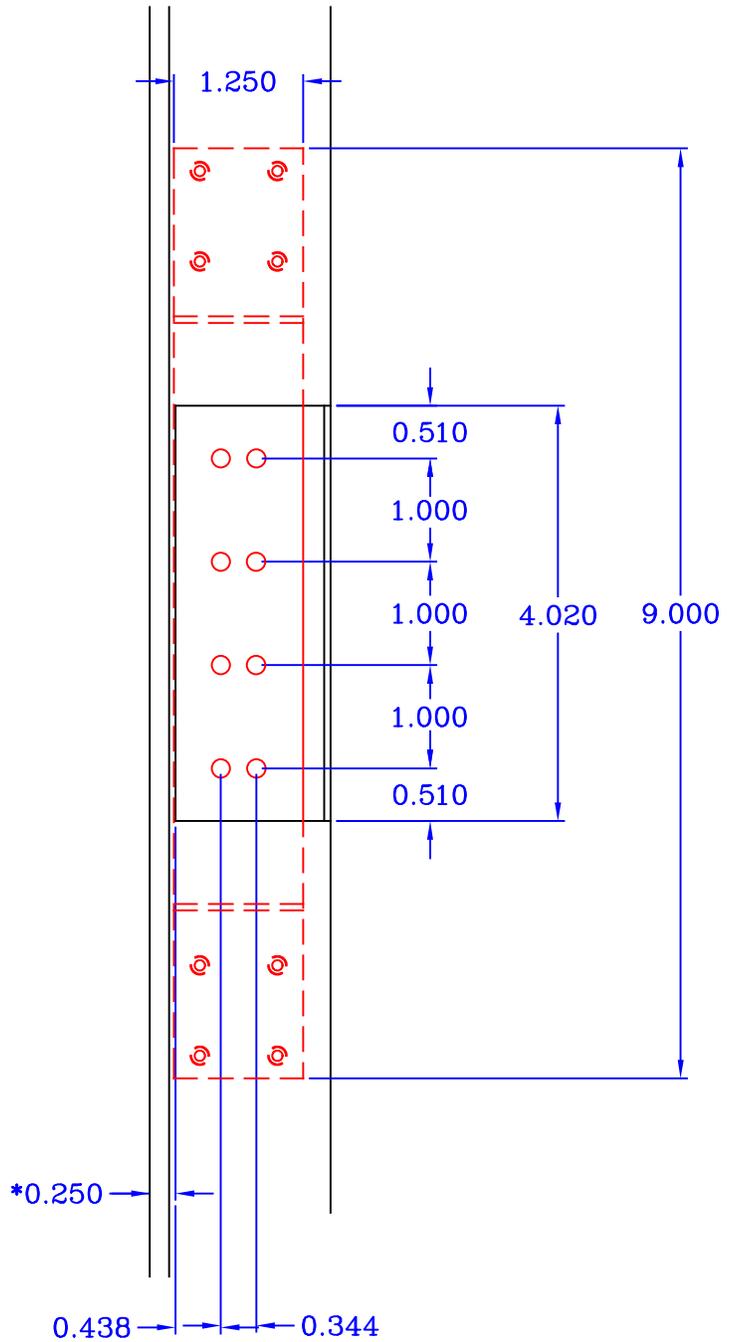
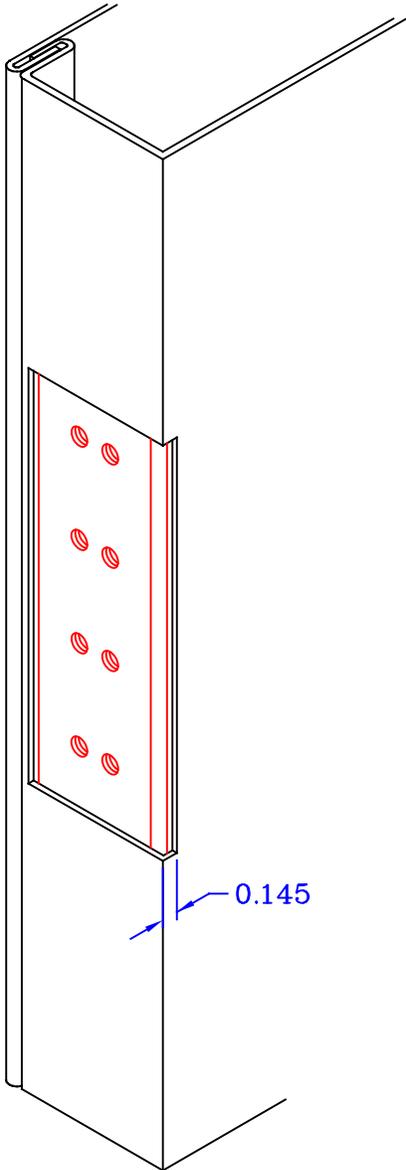
\*5/16" recommended backset on frame.

**4" regular weight hinge reinforcement , 10ga**  
Projection welded



3/8" recommended backset on frame.  
\* Maybe greater for 16 and thicker gage door.

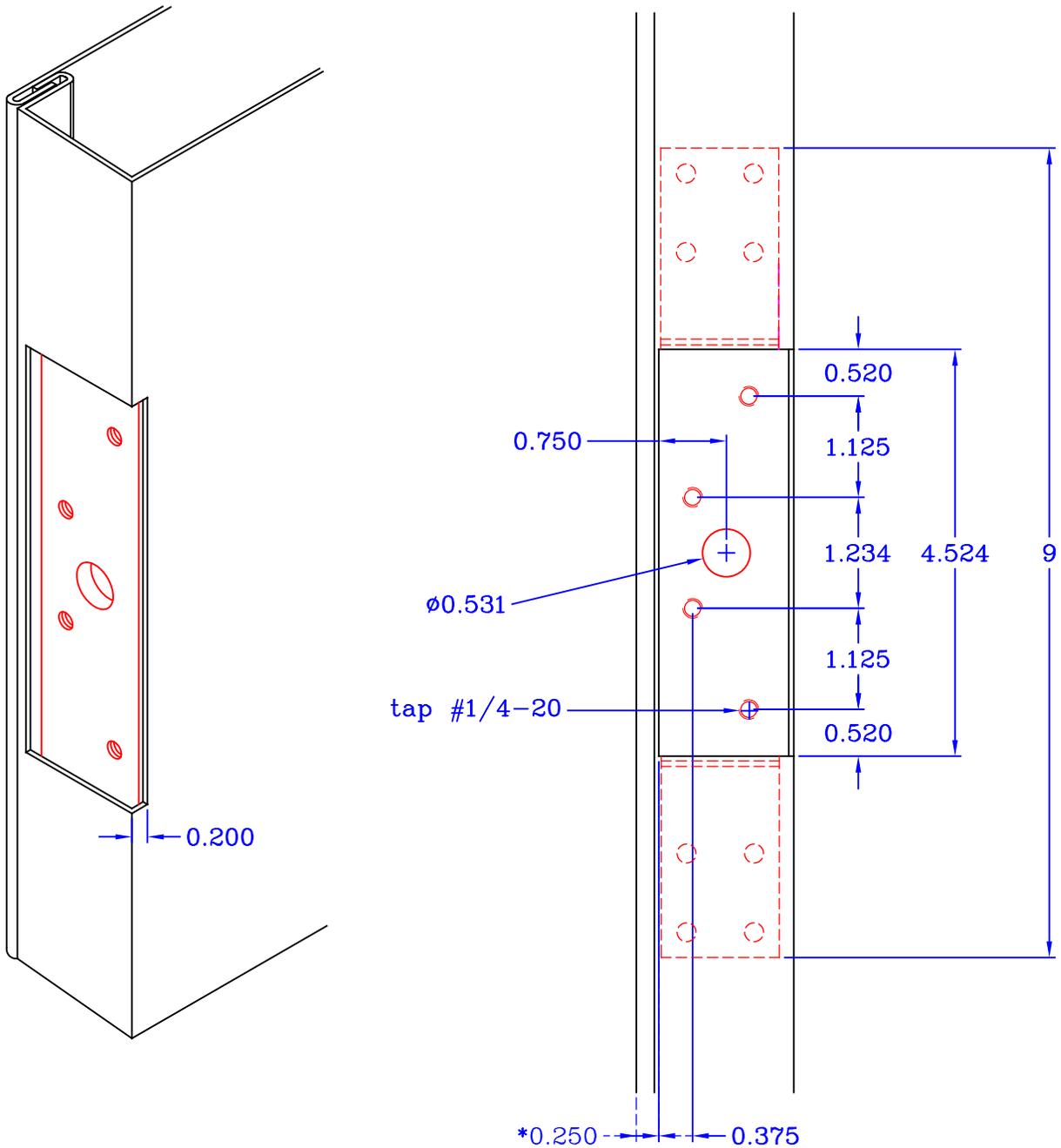
**4" thin hinge reinforcement , 10ga**  
Projection welded



3/8" recommended backset on frame.  
\* Maybe greater for 16 and thicker gage door.

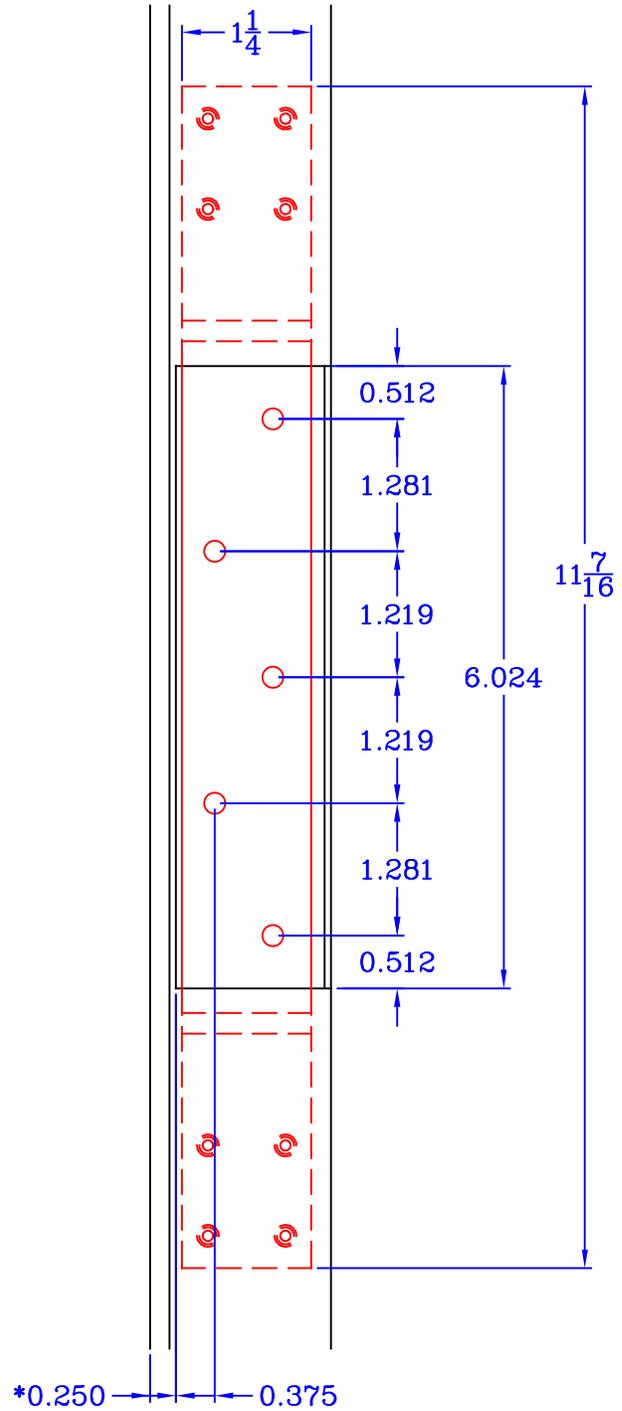
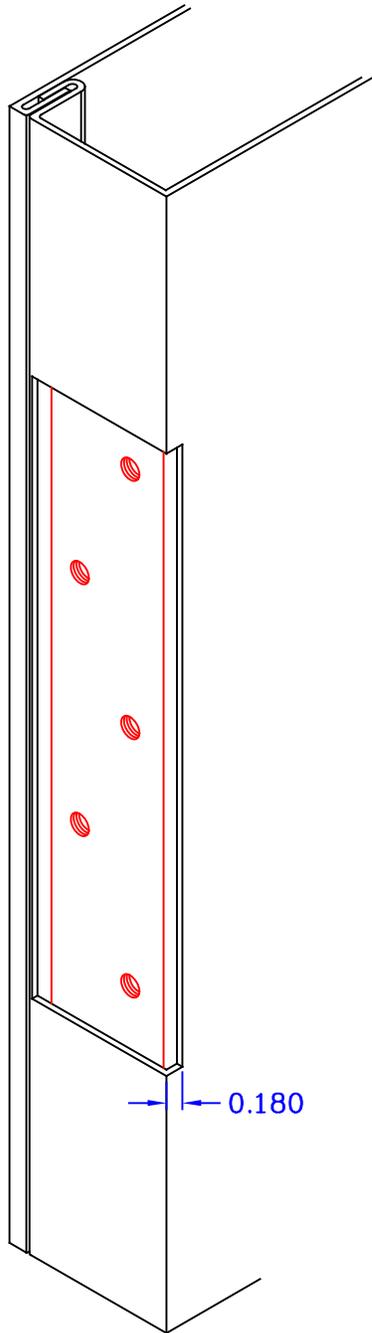
**4 1/2" institutional hinge reinforcement (0.190), 7ga**

Projection welded



3/8" recommended backset on frame.  
\* Maybe greater for 16 and thicker gage door.

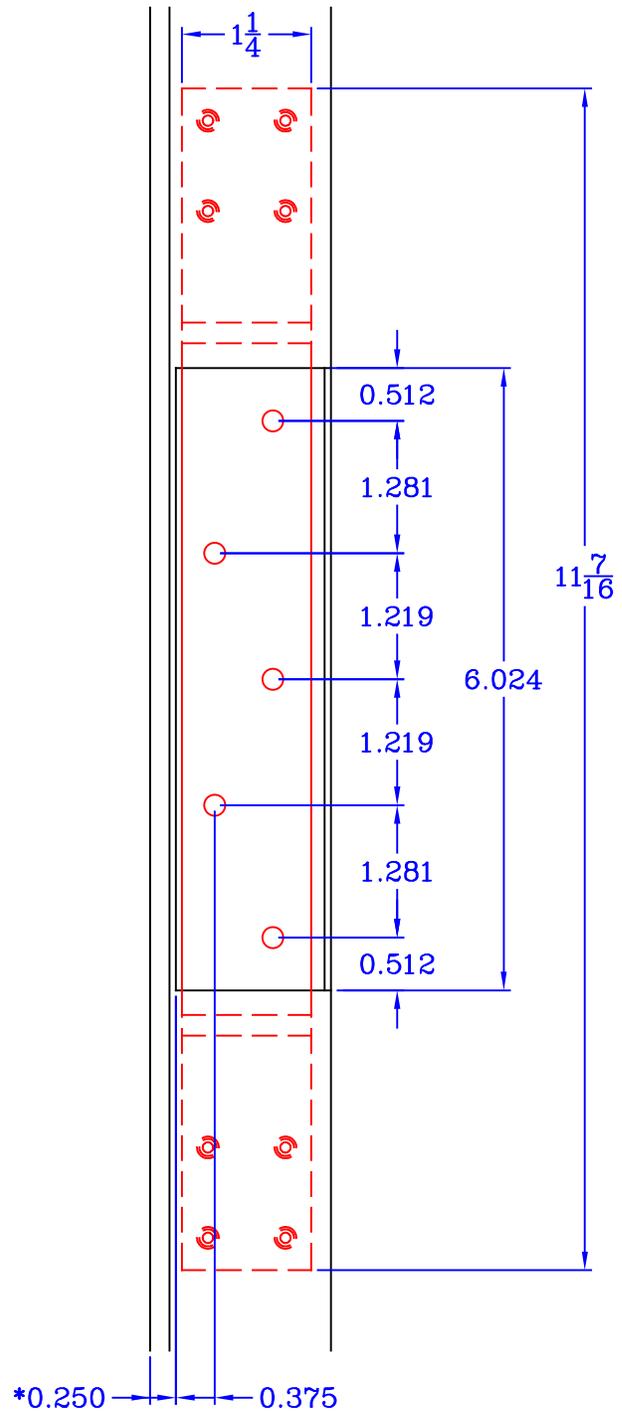
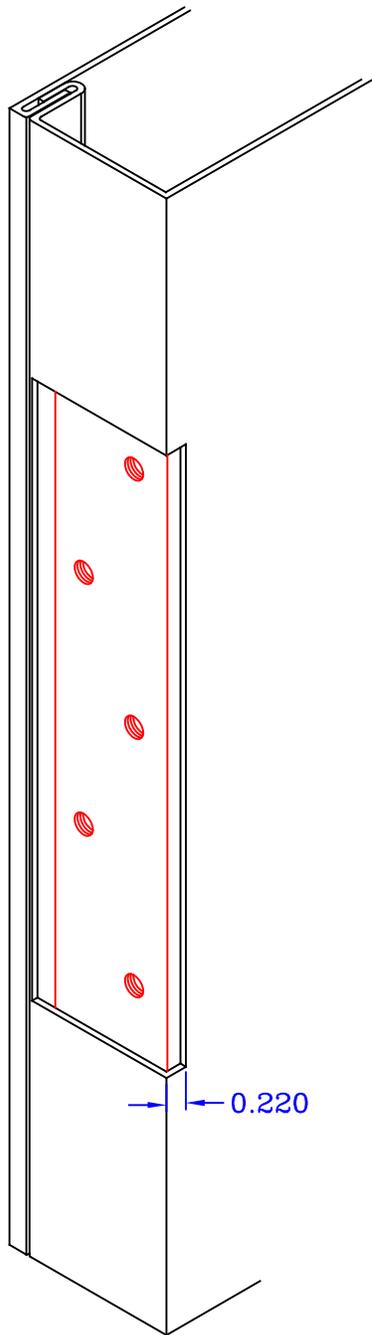
**6" regular weight hinge reinforcement (0.160), 7ga**  
 Projection welded



3/8" recommended backset on frame.  
 \* Maybe greater for 16 and thicker gage door.

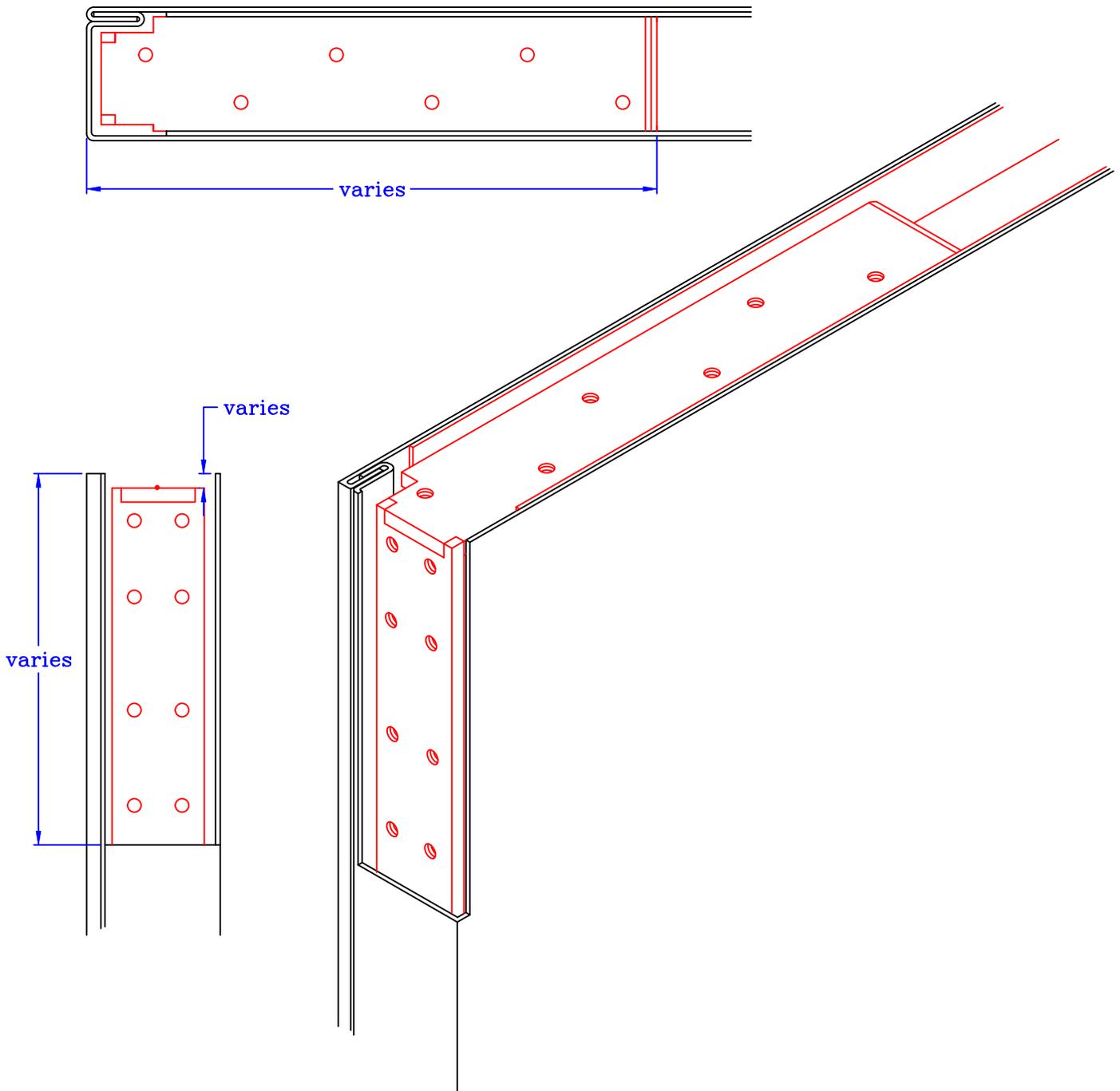
**6" heavy weight hinge reinforcement (0.203), 7ga**

Projection welded



3/8" recommended backset on frame.  
\* Maybe greater for 16 and thicker gage door.

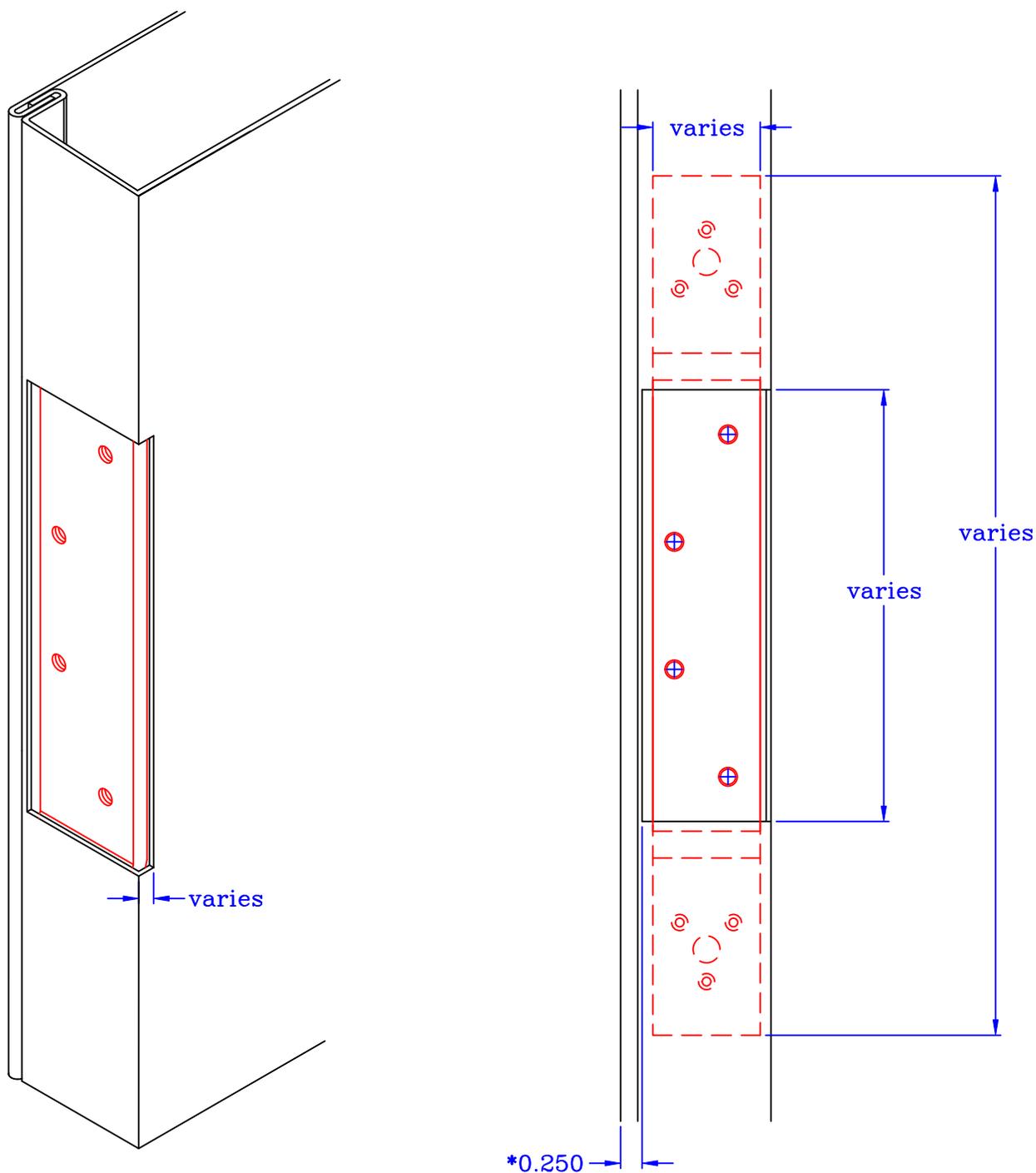
**Prep for anchor hinge, 10ga**  
Projection welded



\* Hinge manufacturer's template to be provided

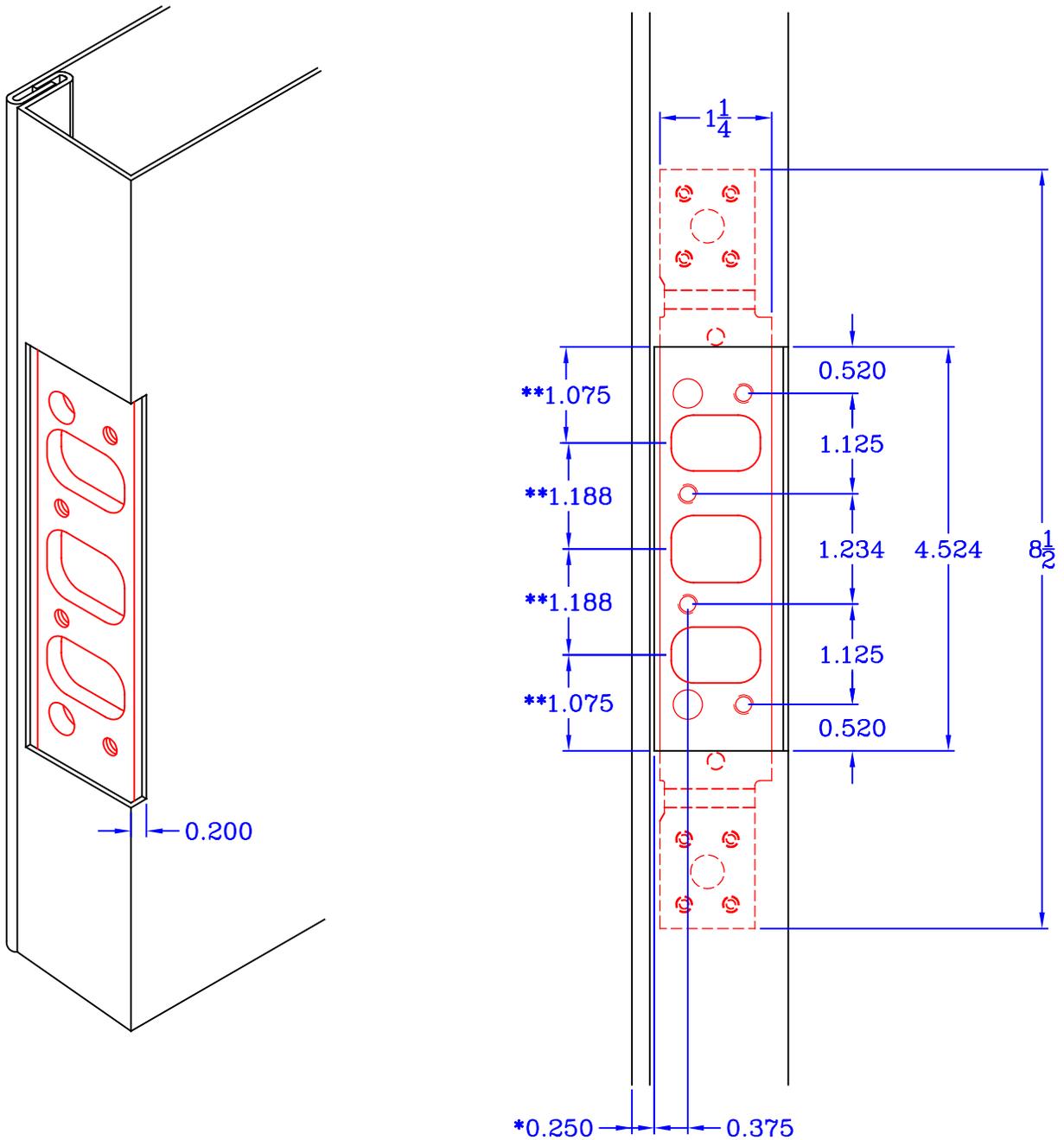
**Double mortising of hinge reinforcement, 7ga**

Projection welded



3/8" recommended backset on frame.  
 \* Maybe greater for 16 and thicker gage door.  
 Per butt hinge height, regular or Heavy-Duty

**Prep. for electrical hinge, 7ga**  
Projection welded

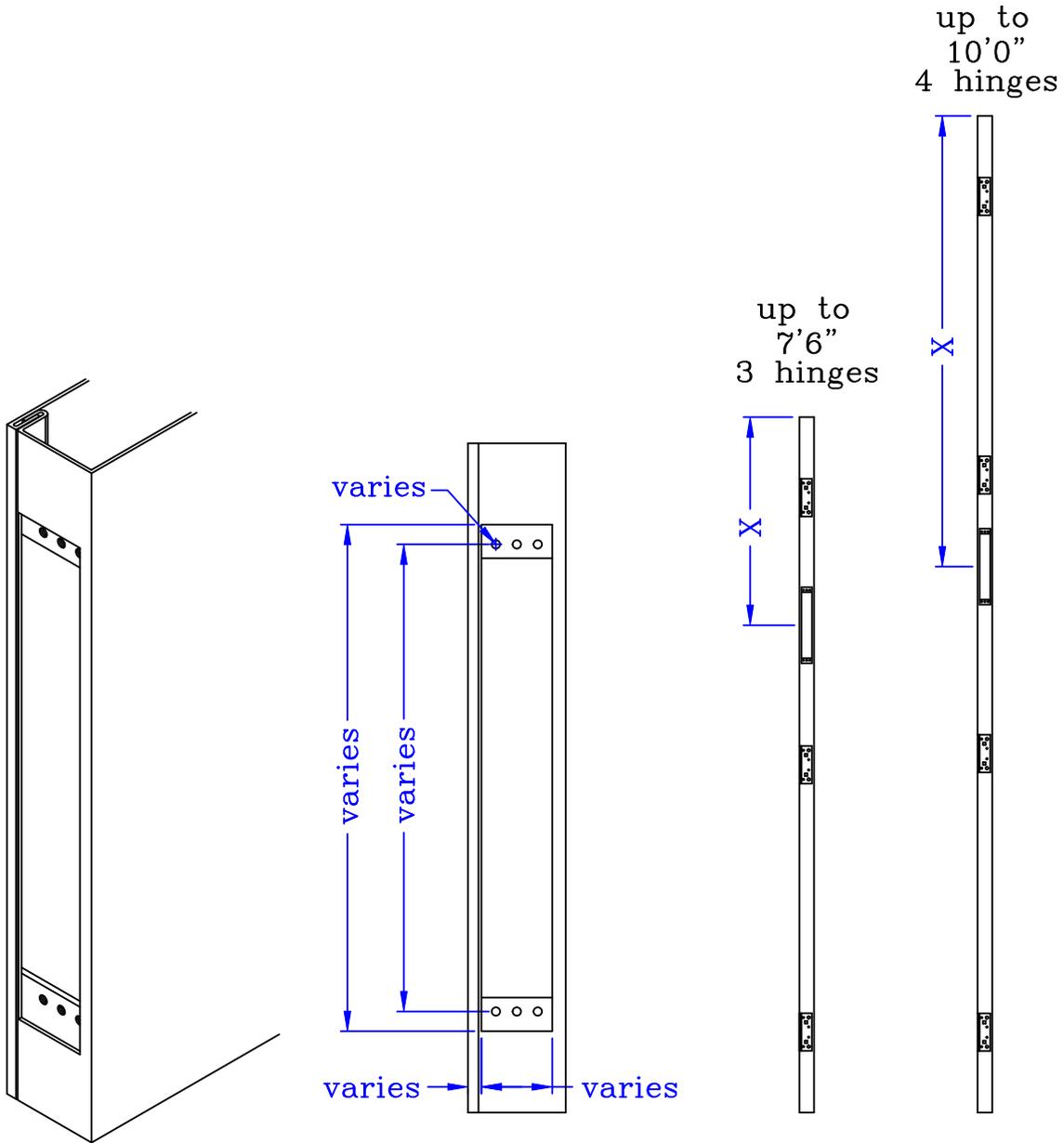


4 1/2" electric hinge prep. shown, also available for other heights.

\* 3/8" recommended backset on frame. Maybe greater for 16 and thicker gage door.

\*\* fits most of electric hinges, please verify toward model intended.

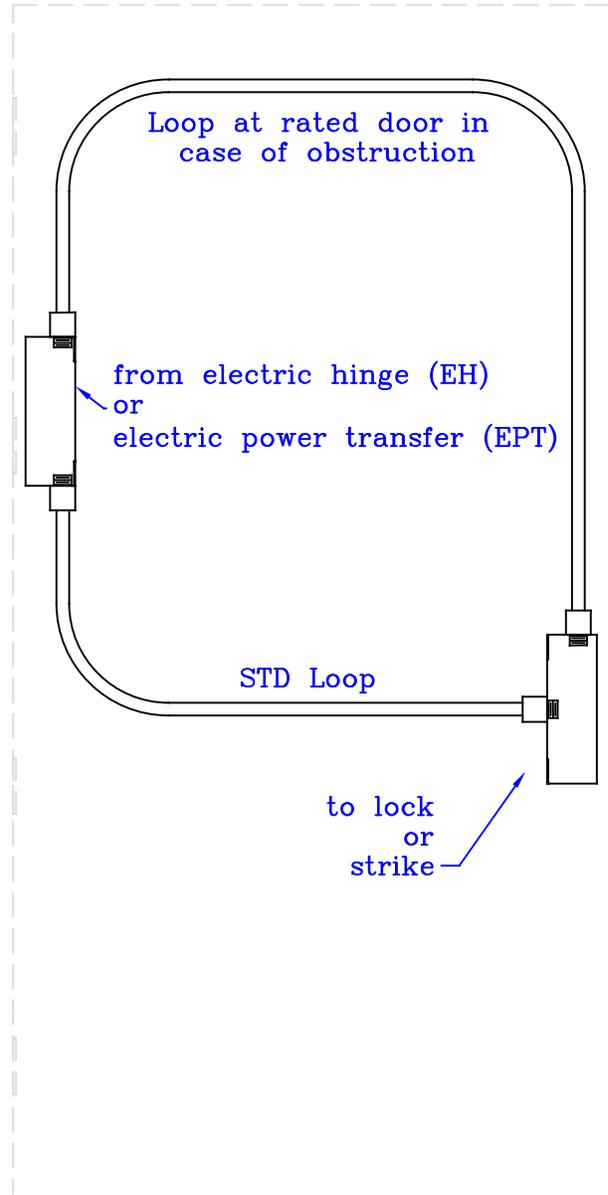
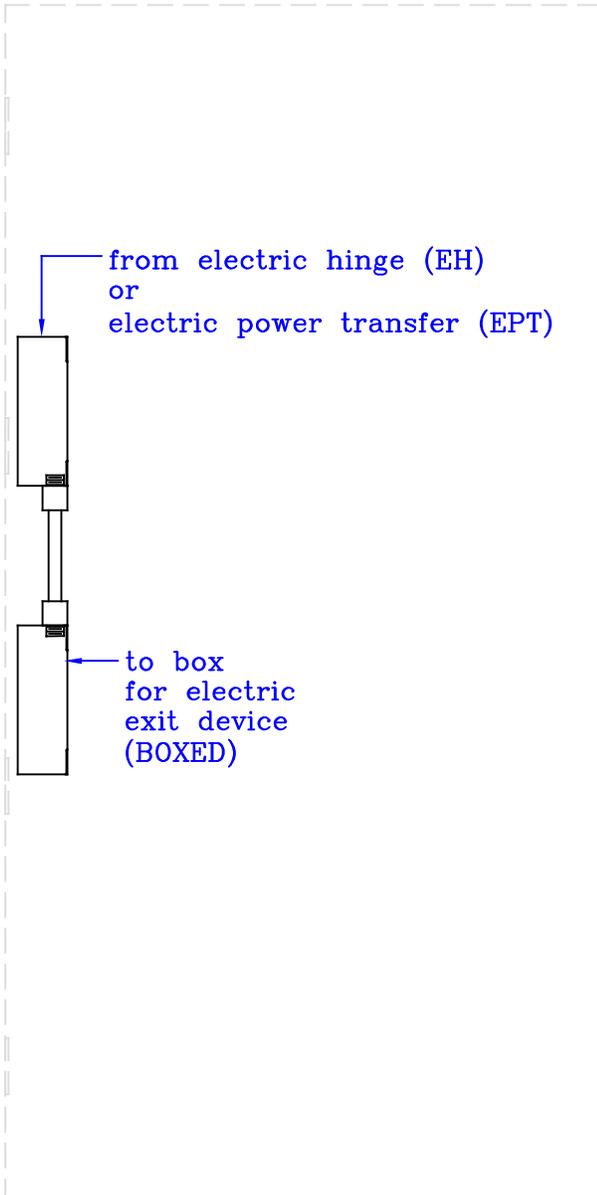
**Prep. for electrical power transfer, 12ga**  
Projection welded



\*manufacturer's template to be provided  
\*\*see page Q-1.2 for EPT location

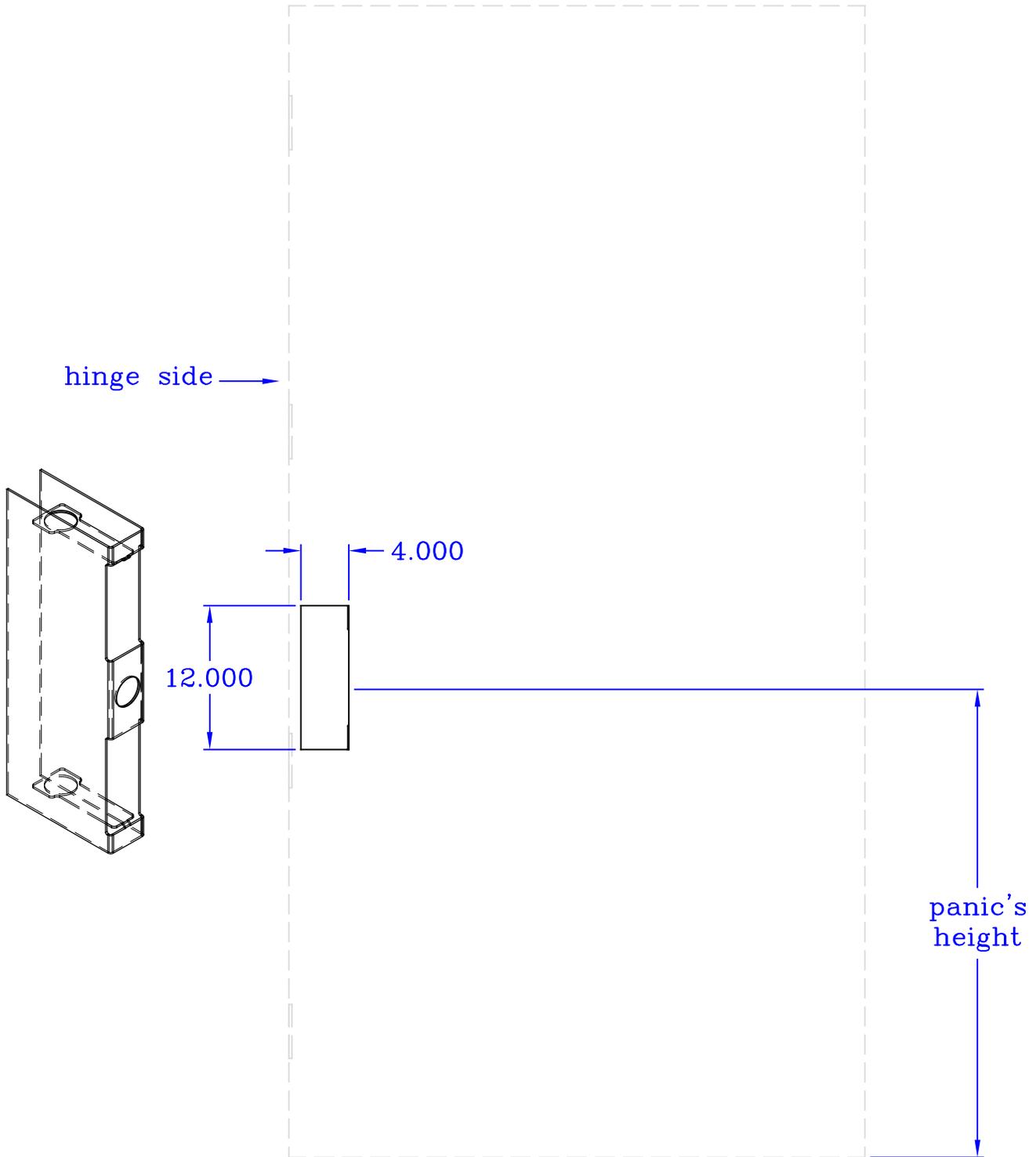
### Raceway for electrified hardware

3/4" interior diameter

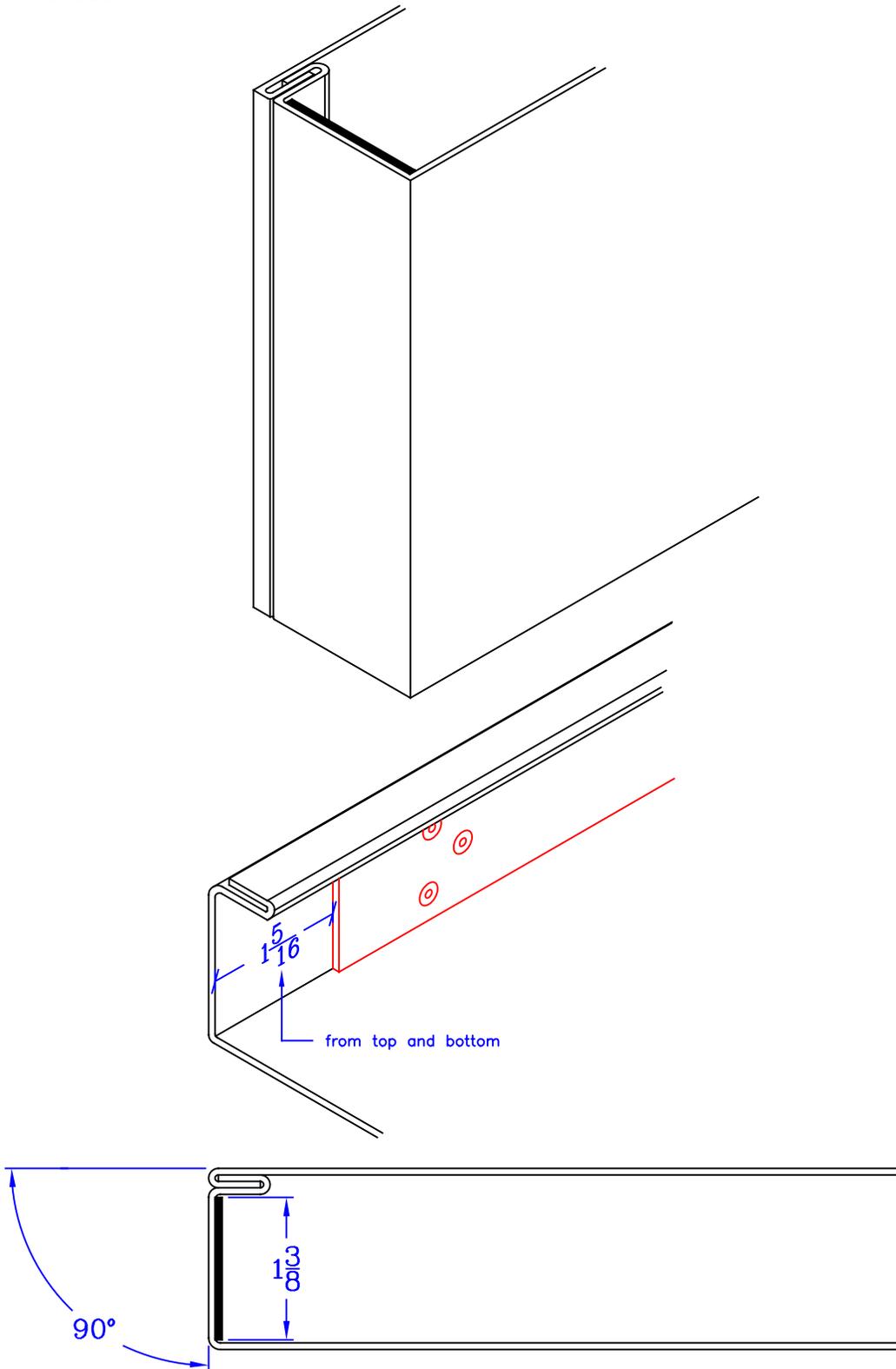


Wire in the raceway to pull electric connector through.

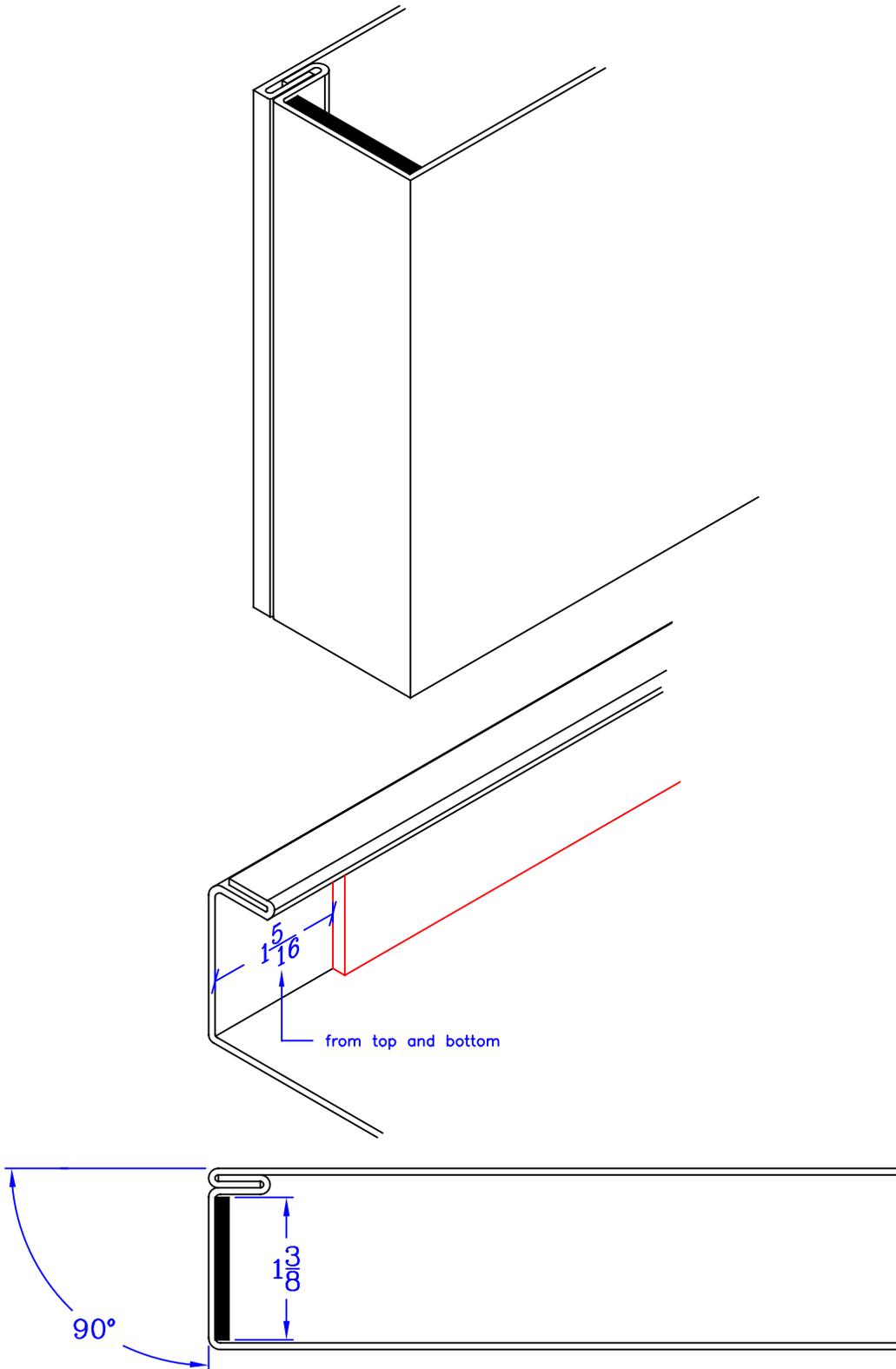
**Box for electric exit device, 16ga**



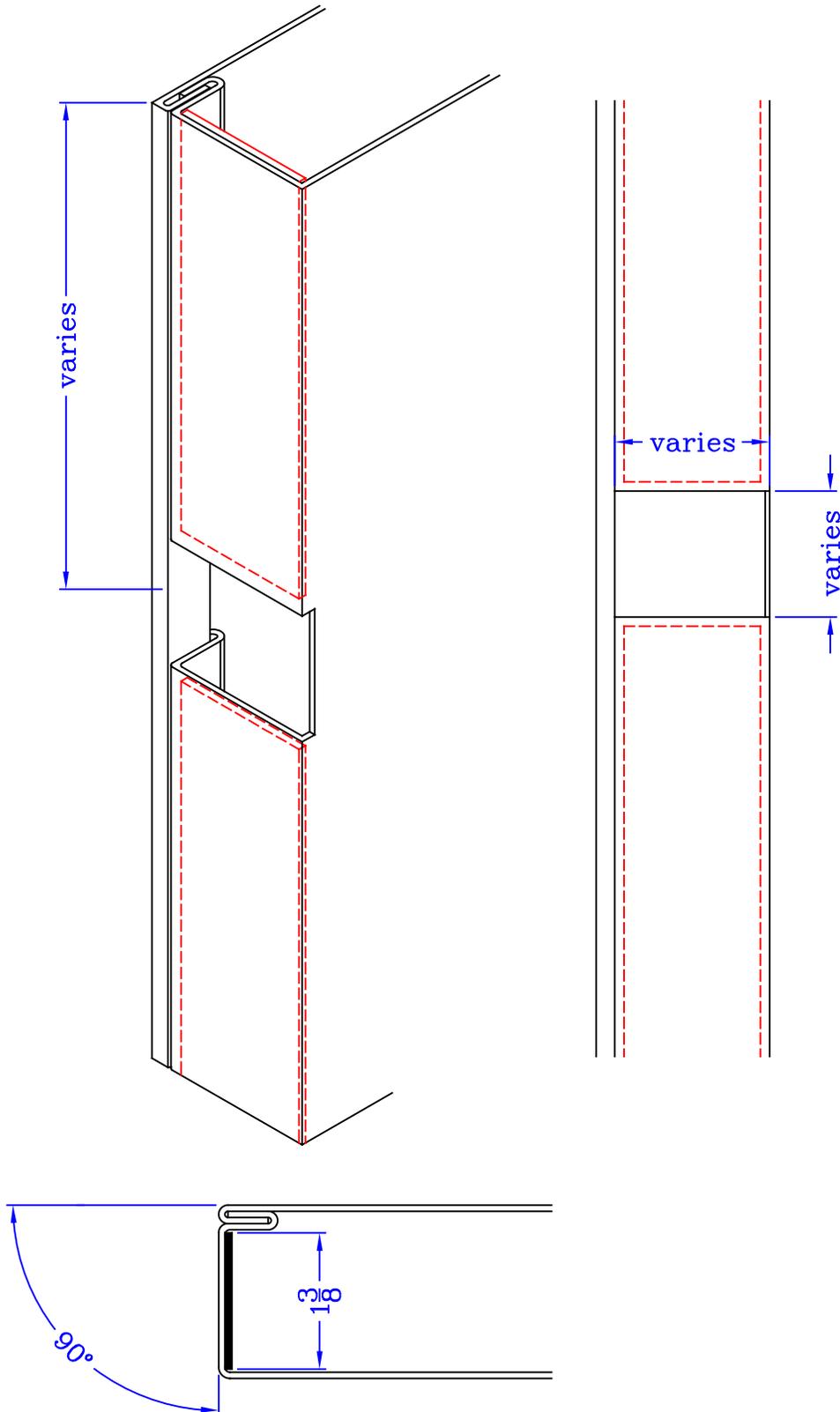
**Concealed leaf continuous hinge reinforcement, 14ga**  
Projection welded



**Concealed leaf continuous hinge reinforcement, 10ga**  
Plug welded



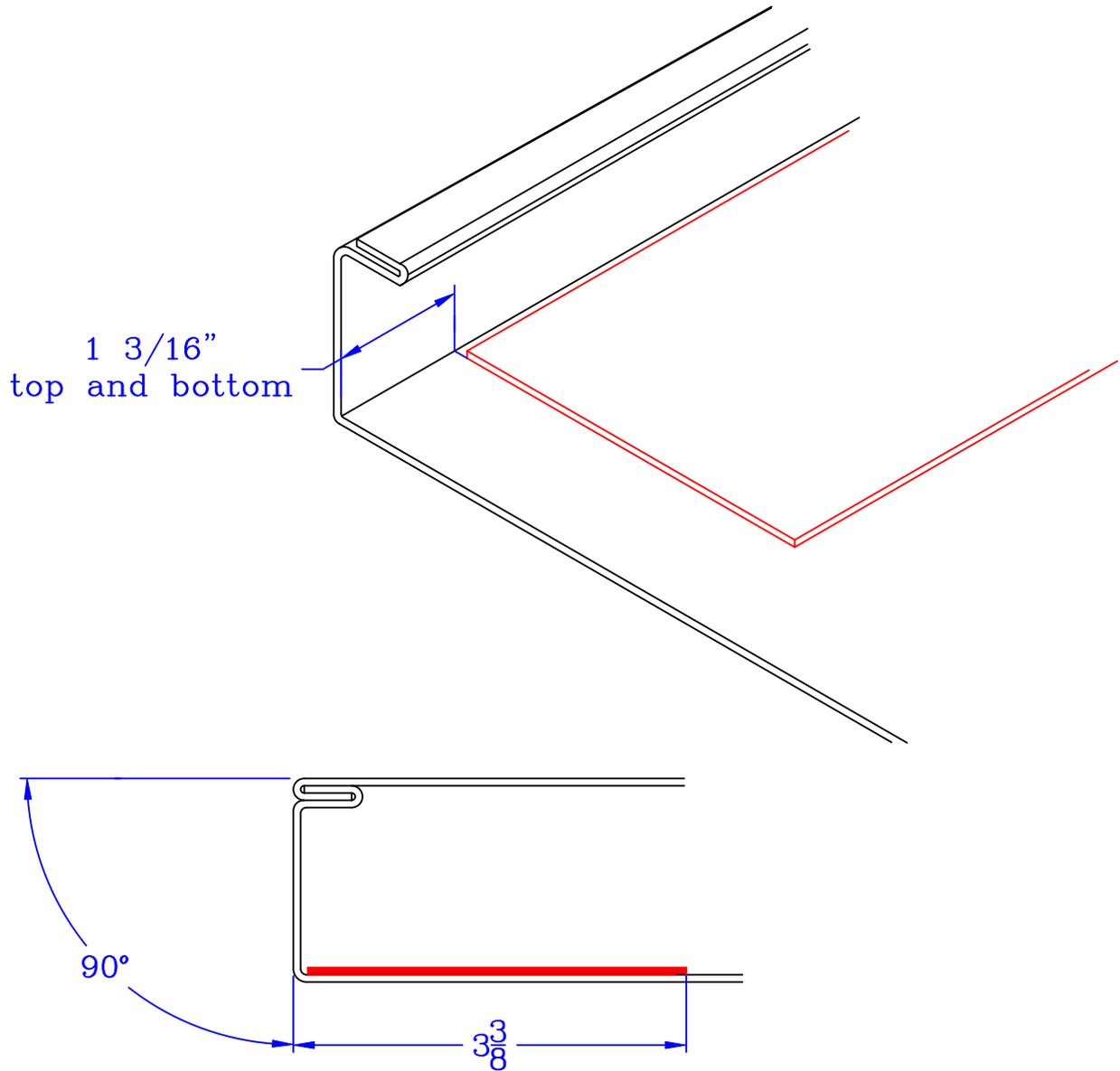
**Concealed leaf continuous electric hinge reinforcement, 14ga**  
Projection welded



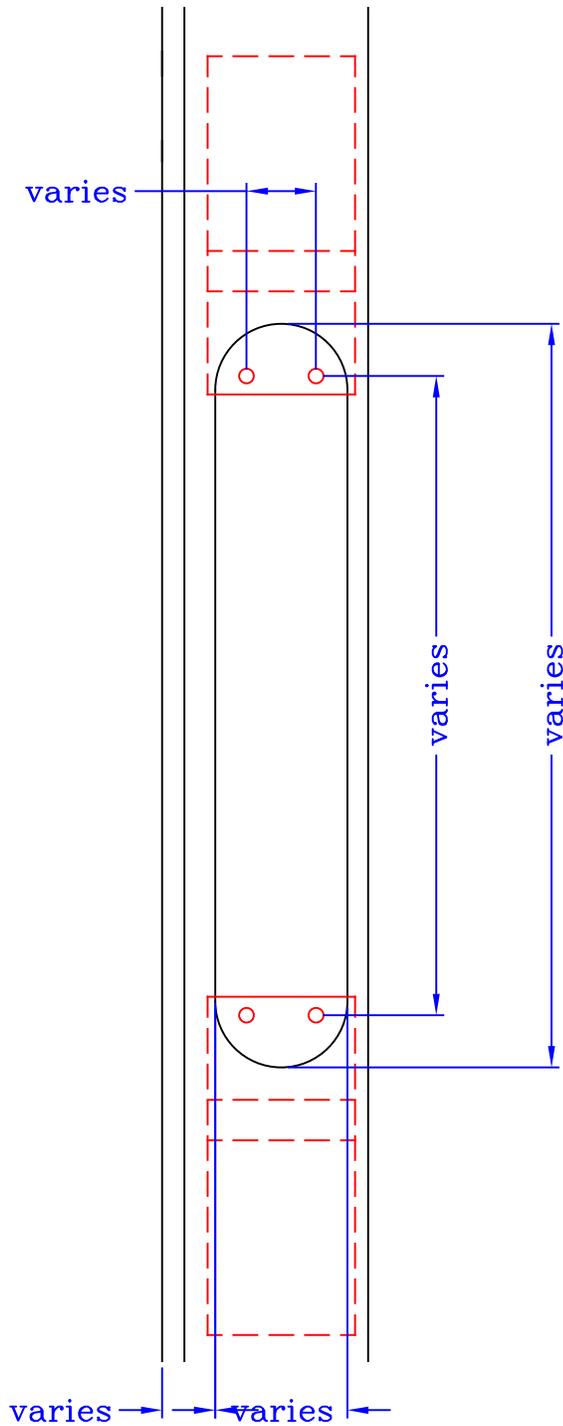
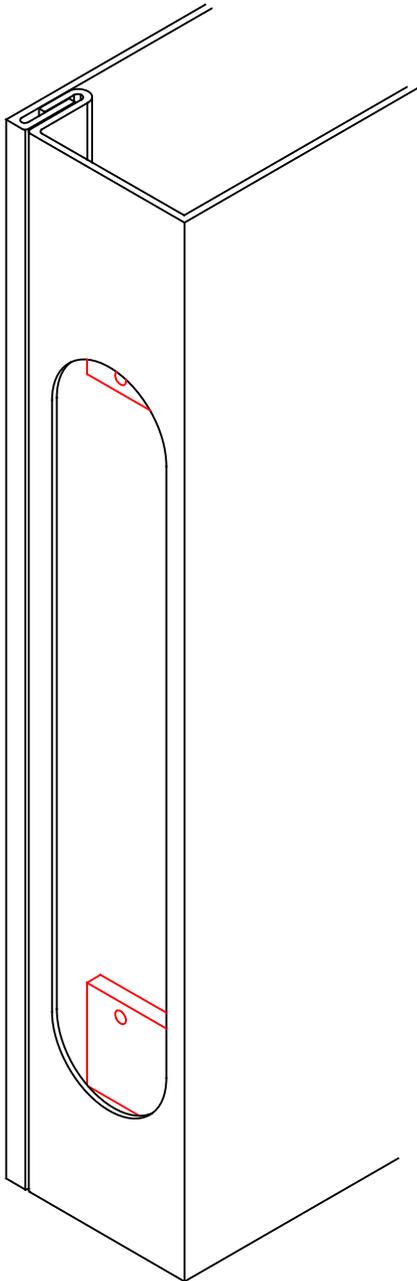
\*manufacturer's template to be provided

### Surface continuous hinge reinforcement, 16ga

Cold fused



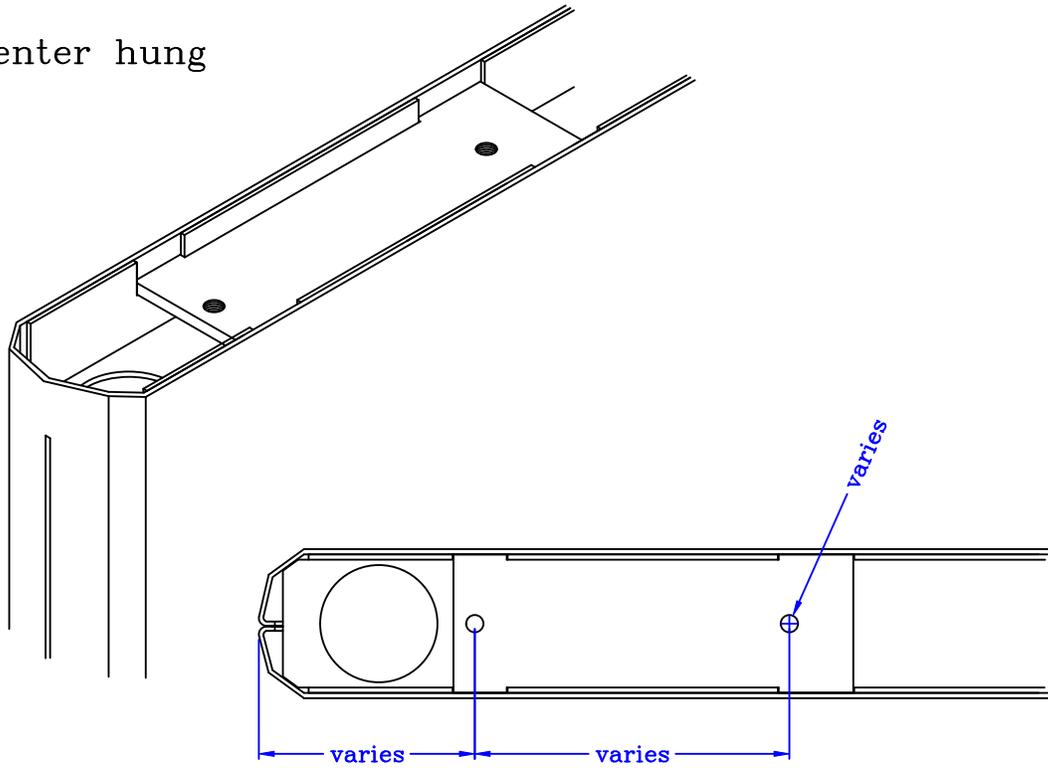
**Invisible hinge reinforcement, 10ga**  
Projection welded



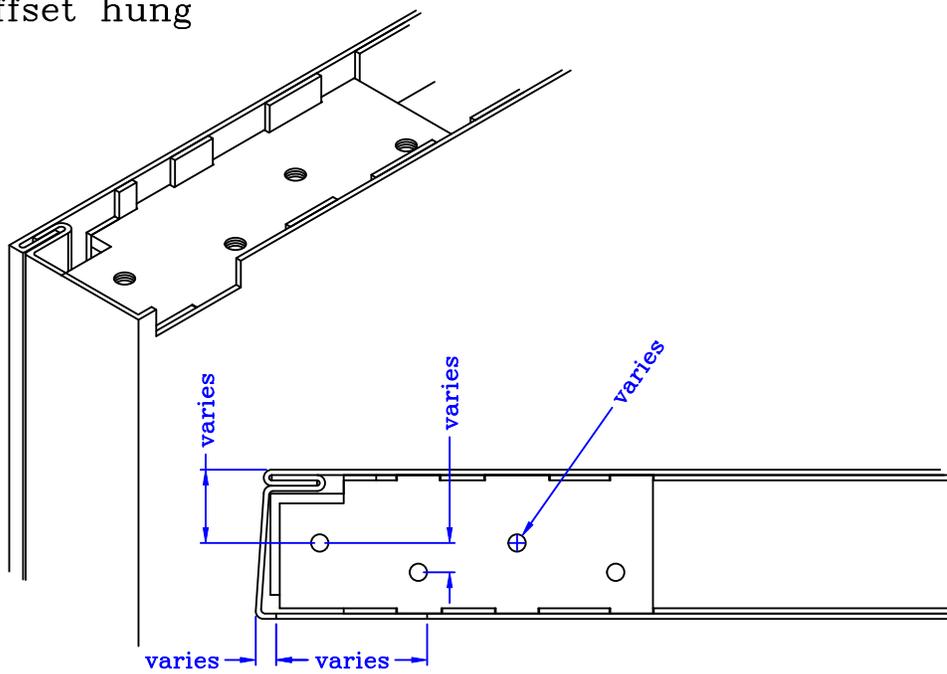
\*manufacturer's template to be provided

**Prep. for top pivot, 10ga**

Center hung



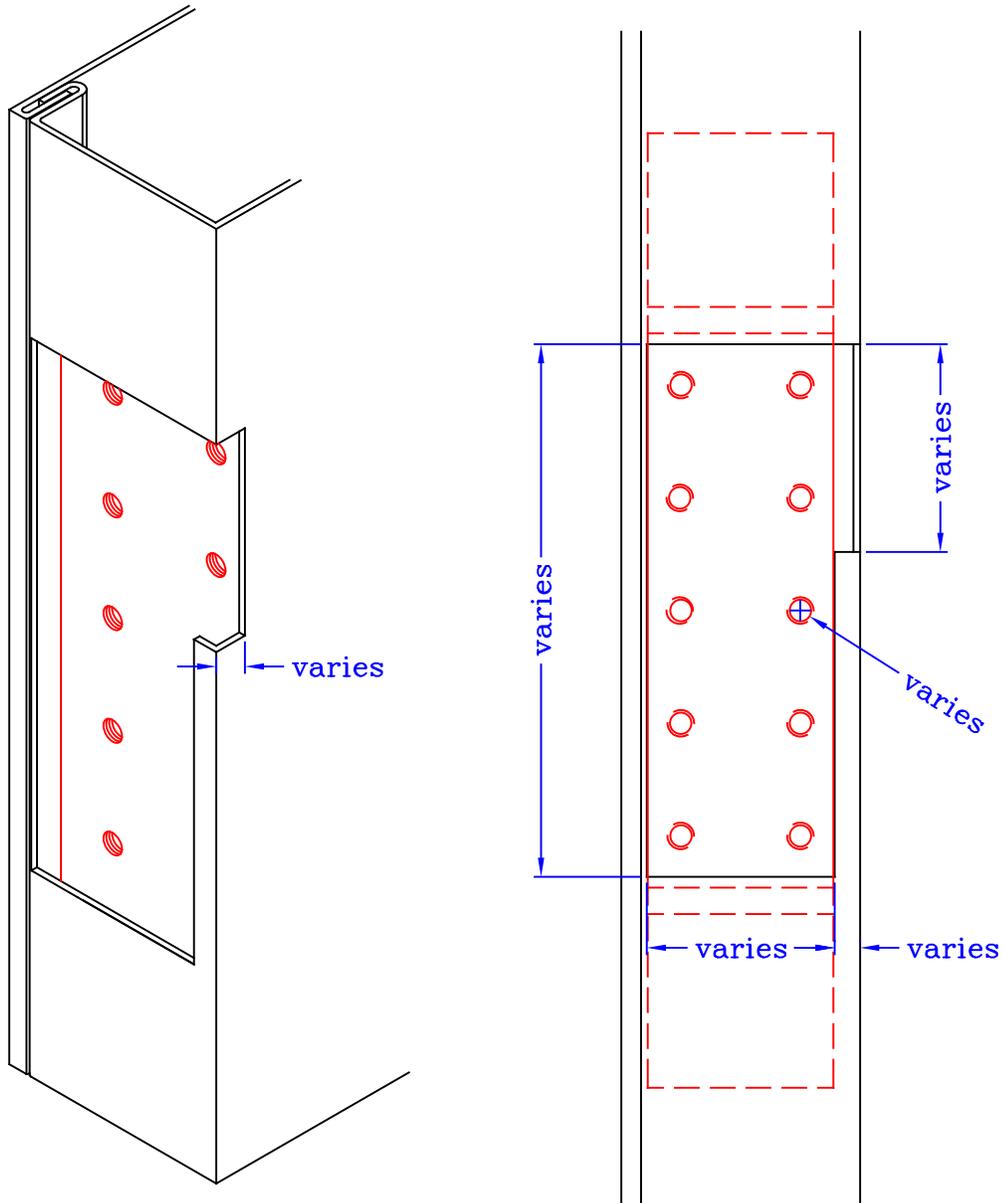
Offset hung



\*manufacturer's template to be provided

### Intermediate pivot prep., 10ga

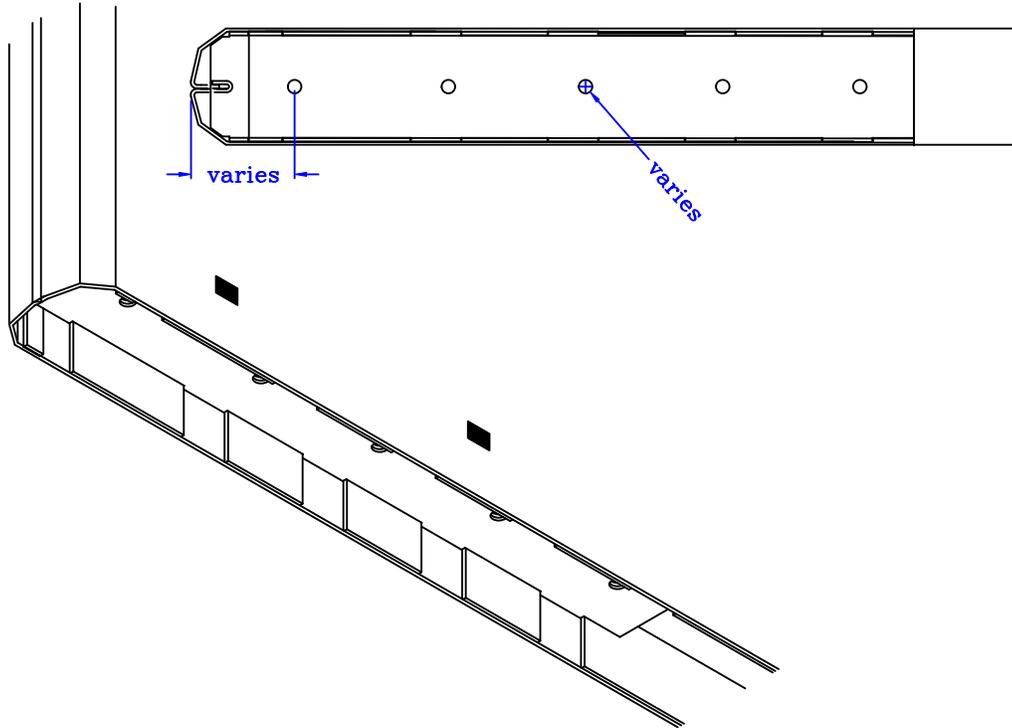
Offset hung



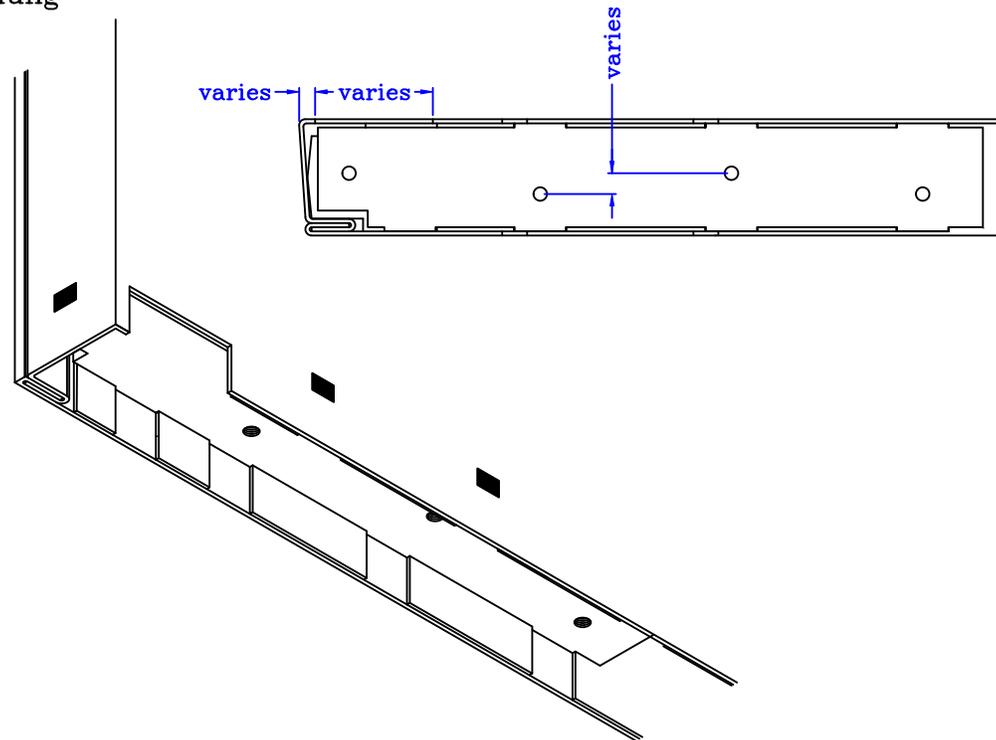
\*manufacturer's template to be provided  
Centered at mid height of opening up to 7'0"

## Prep. for bottom pivot, 10ga

Center hung



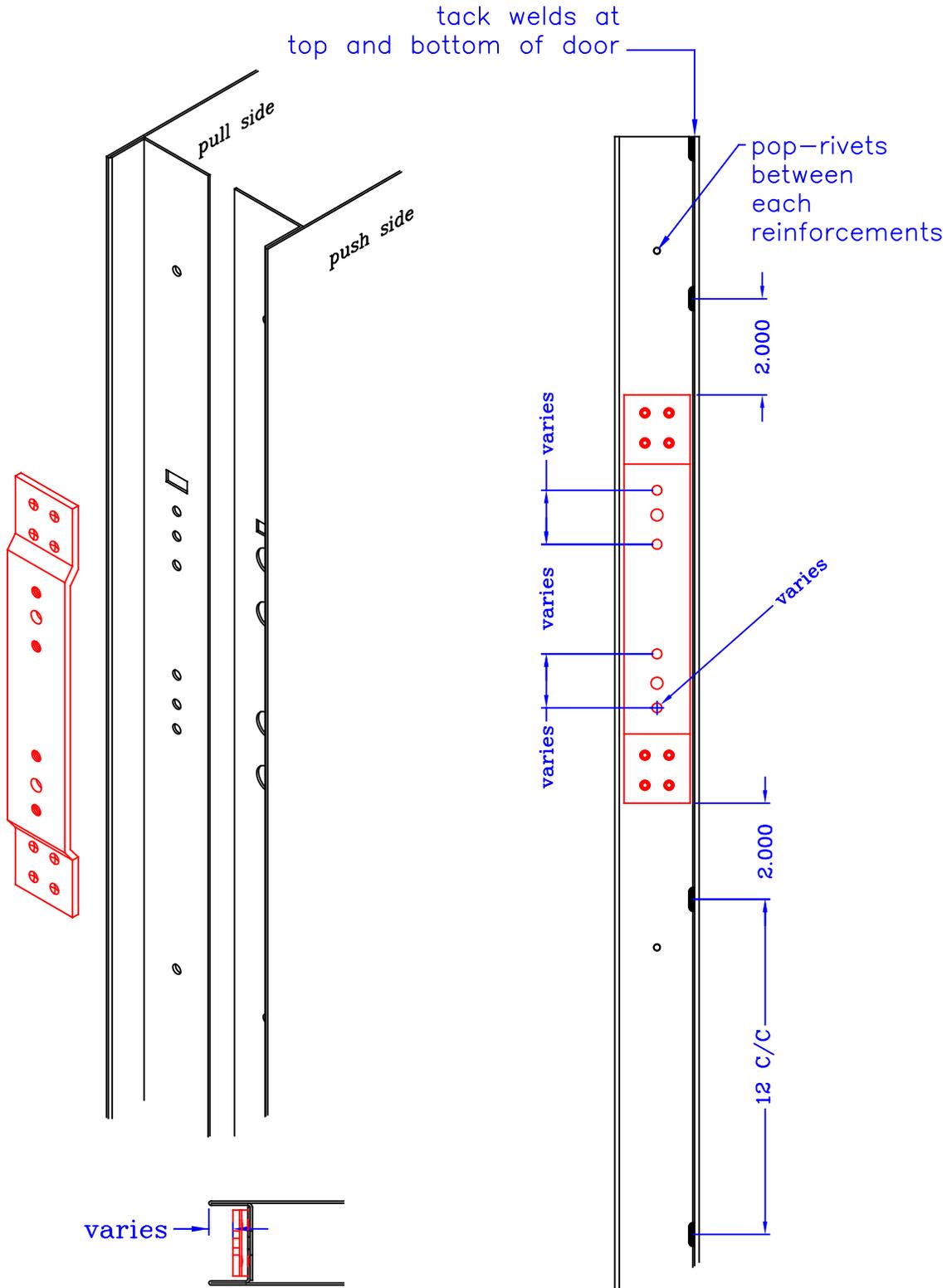
Offset hung



\*manufacturer's template to be provided

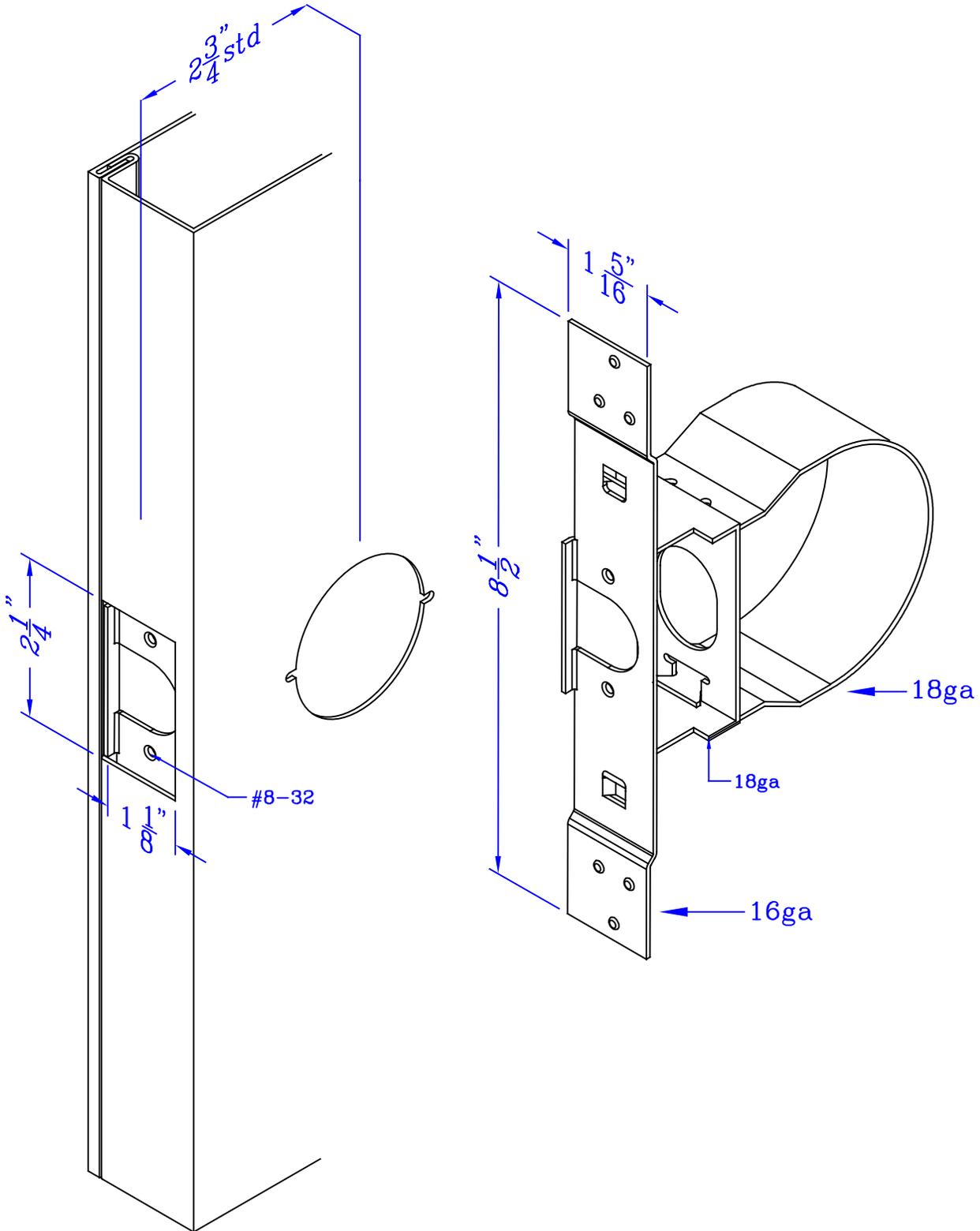
**Prep. for pocket pivot, 10ga**

Projection welded



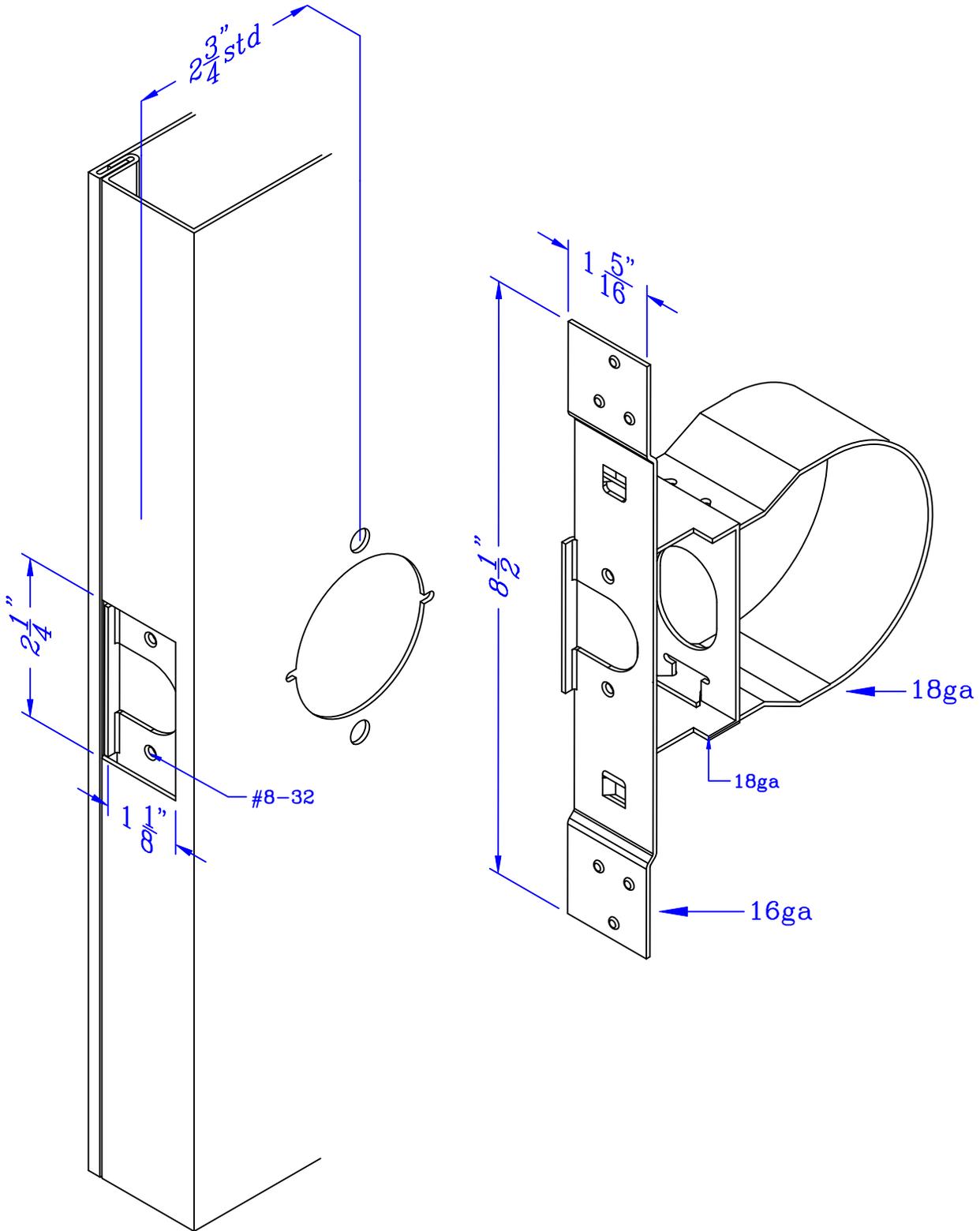
\*manufacturer's template to be provided

**Cylindrical lock reinforcement, 16ga**  
Projection welded



Centered latch. Tapped extruded holes per ANSI/SDI A250.6.

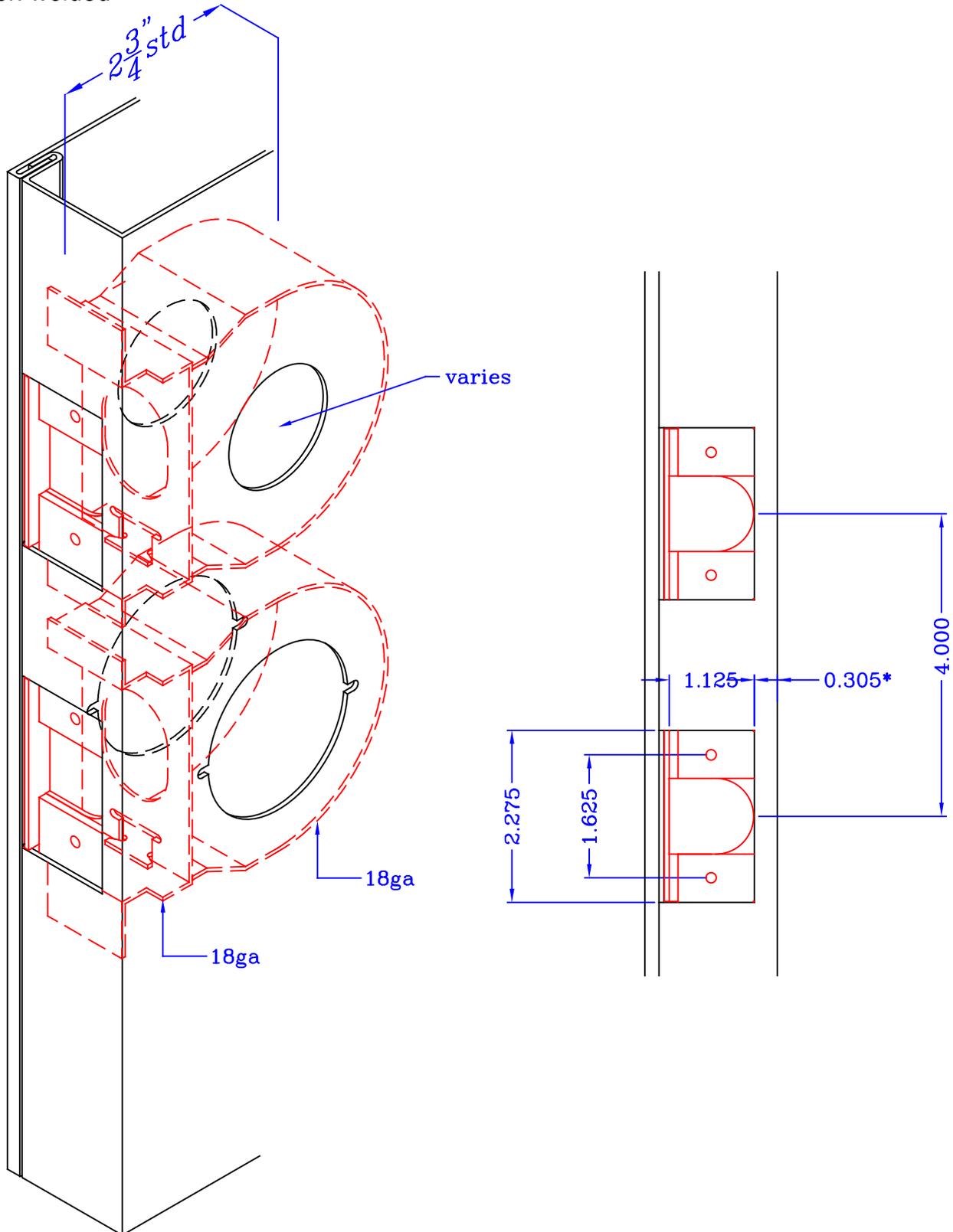
**Cylindrical lock reinforcement, 16ga, with thru bolts\***  
Projection welded



Centered latch. Tapped extruded holes per ANSI/SDI A250.6.  
\*manufacturer's template to be provided

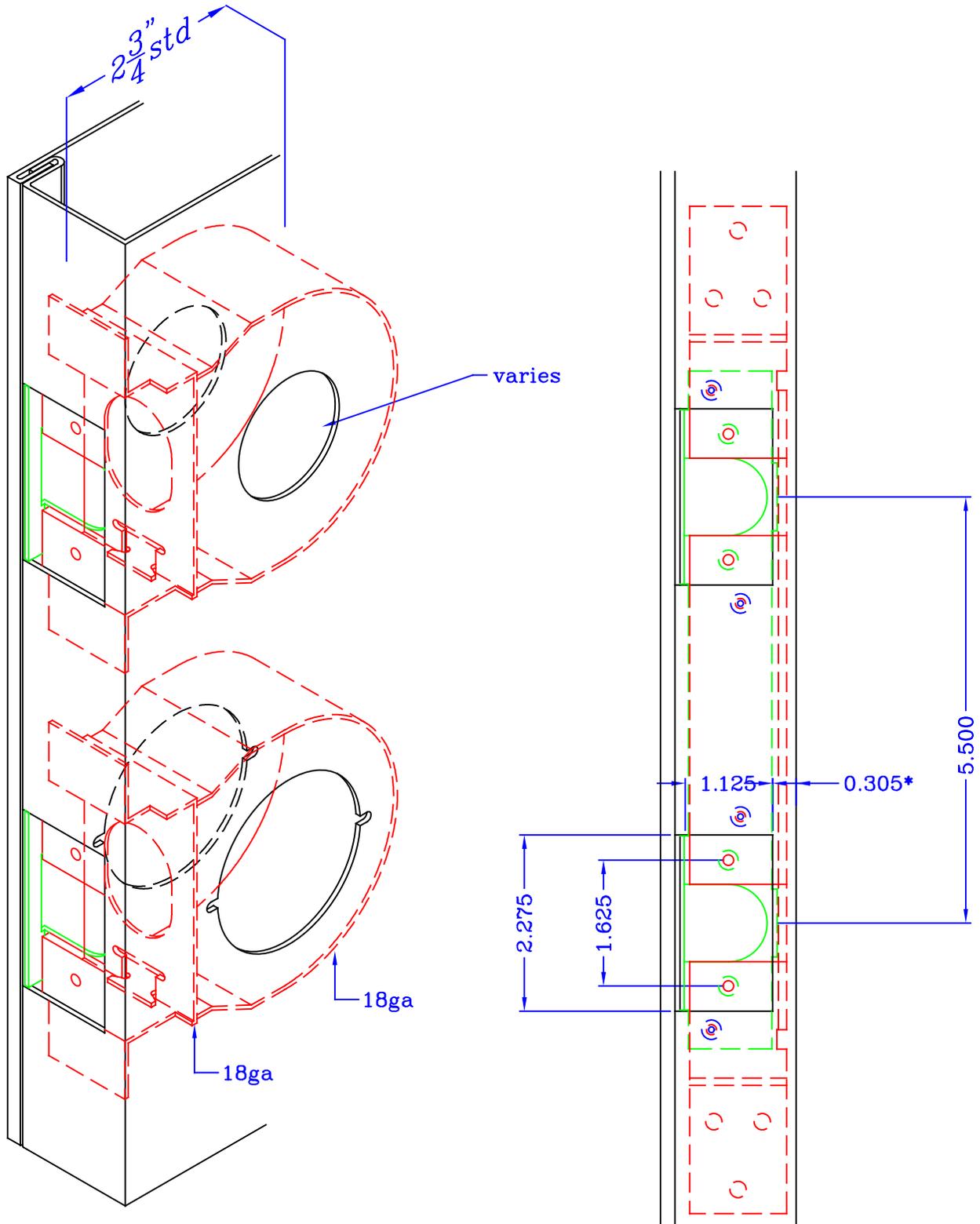
**Interconnected lock 4" C/C reinforcement (161TB+CYLDL), 12ga**

Projection welded



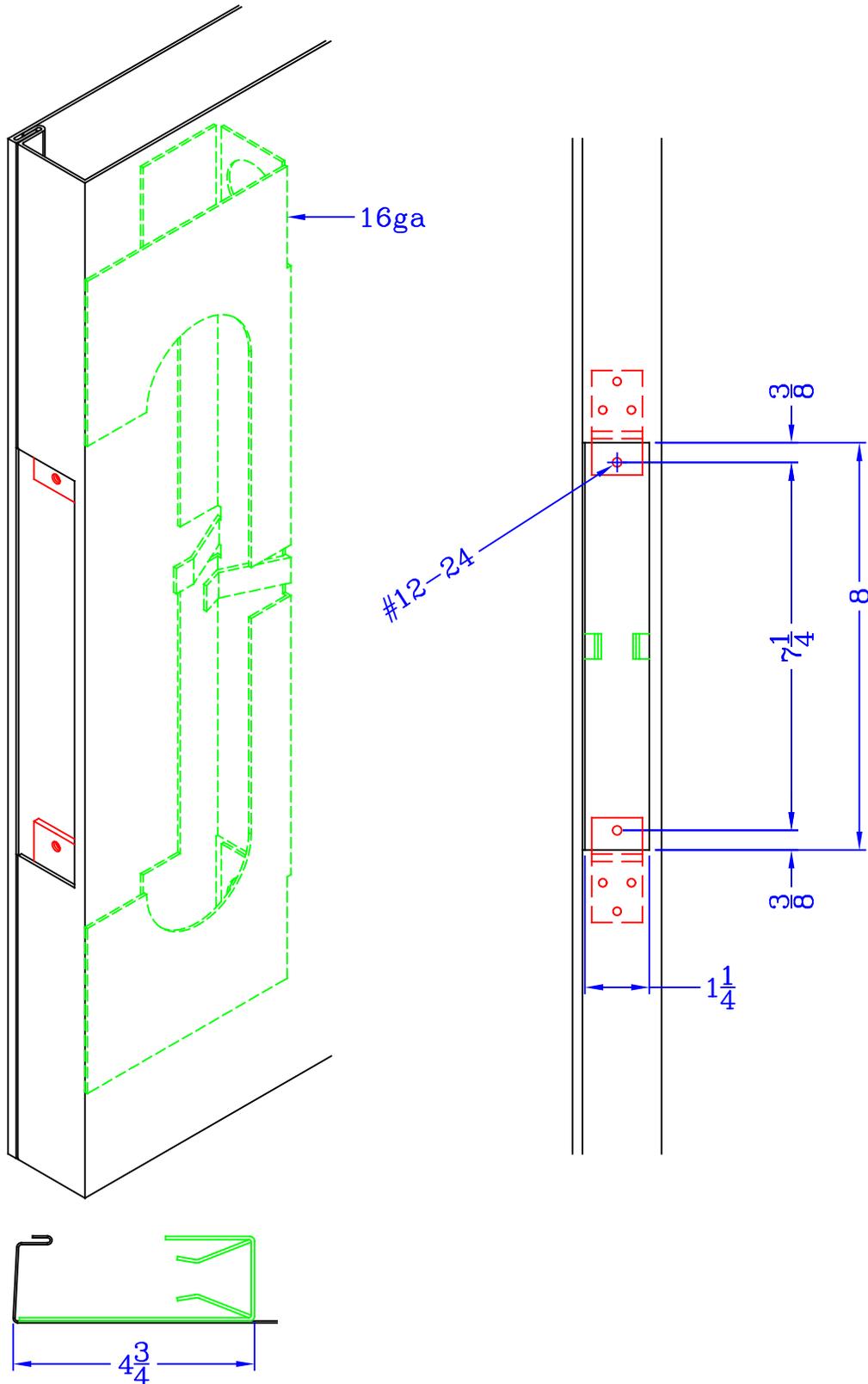
Centered latch. Tapped extruded holes per ANSI/SDI A250.6.  
\*Maybe greater for 16 and thicker gage door.

**Interconnected lock 5 1/2" C/C reinforcement (161TB+CYLDL), 12ga**  
 Projection welded



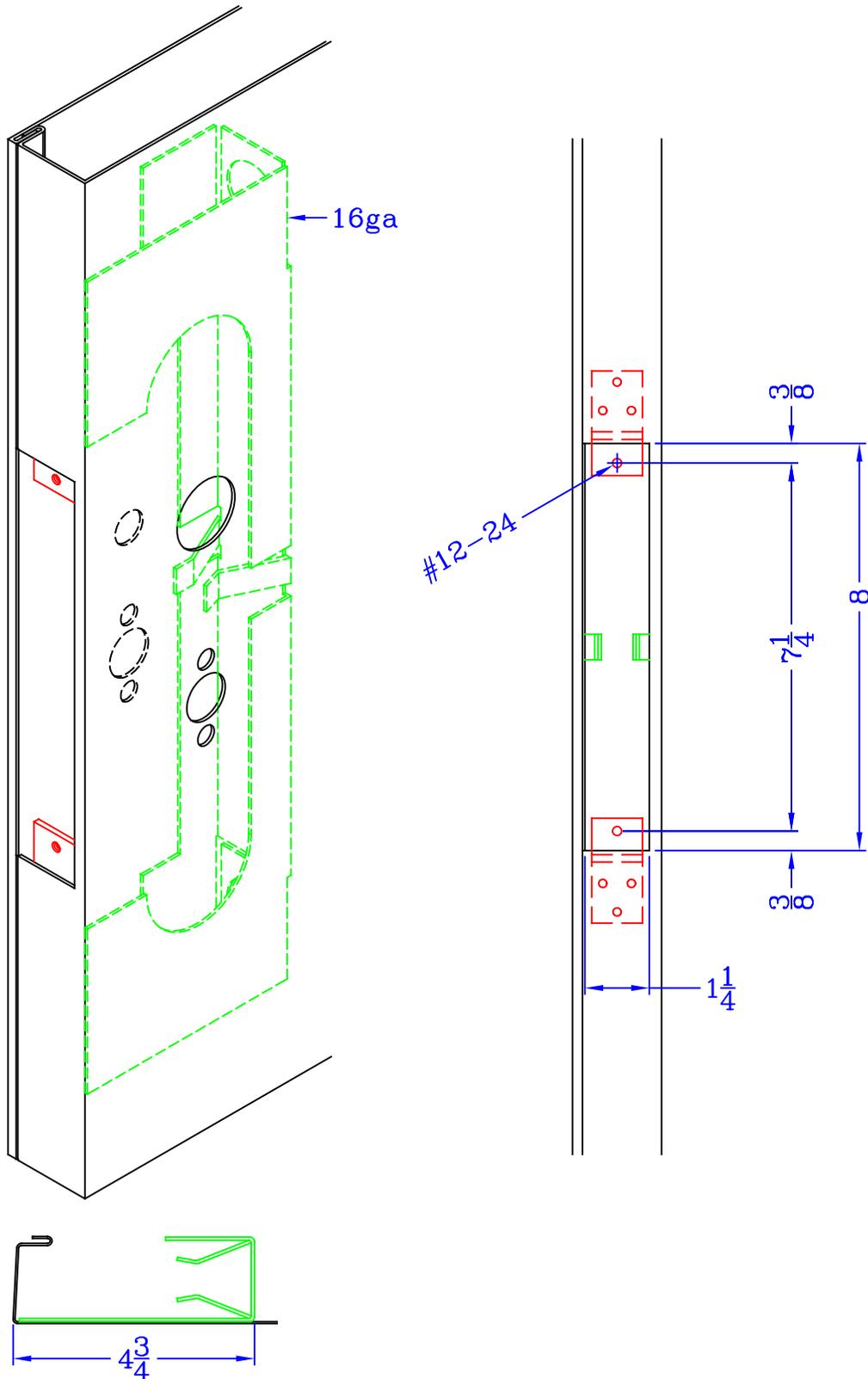
\*Maybe greater for 16 and thicker gage door.

**Mortise lock reinforcement, 12ga**  
Projection welded



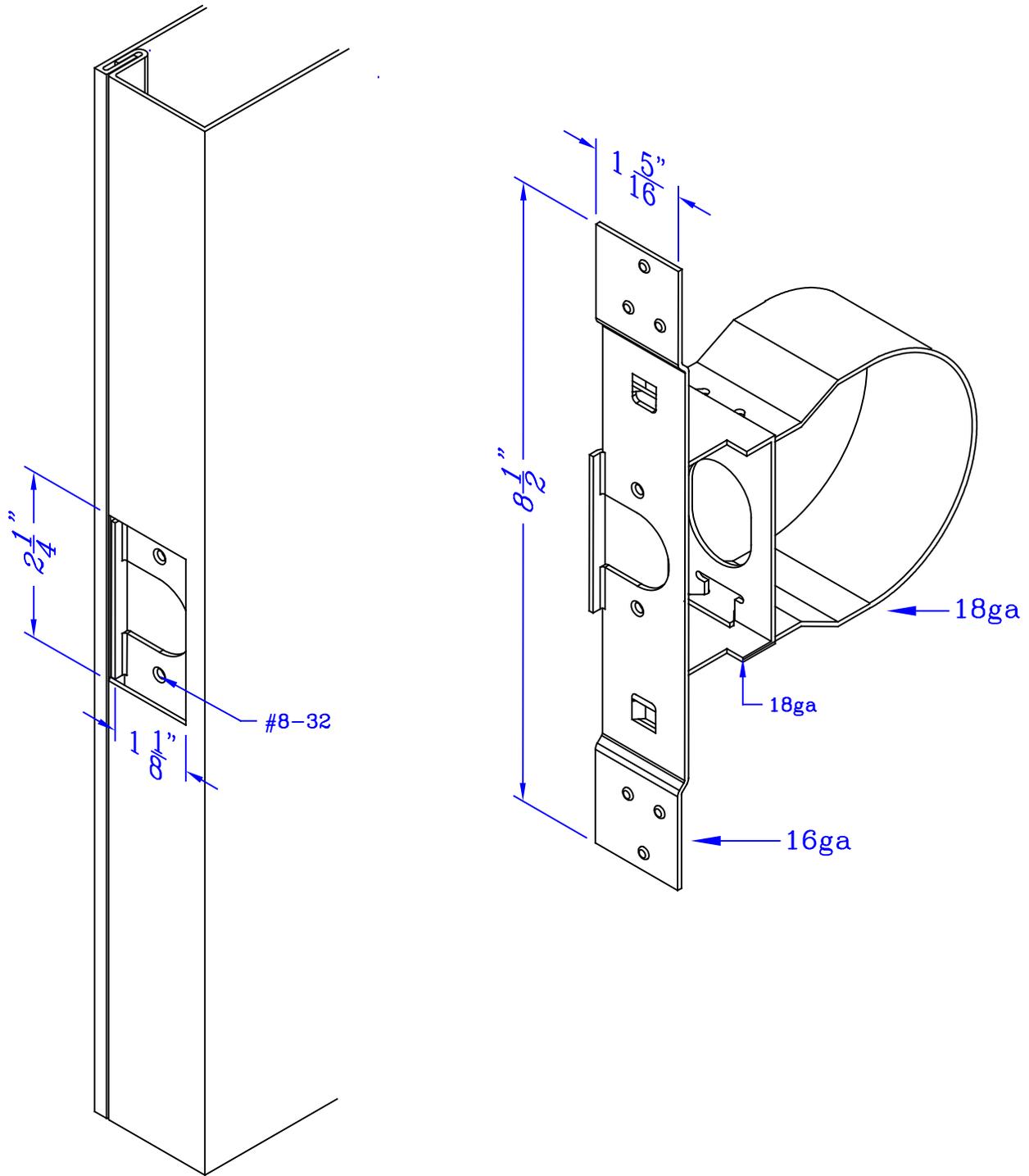
Per ANSI A156.13 specifications

**Mortise lock reinforcement with function holes, 12ga**  
Projection welded



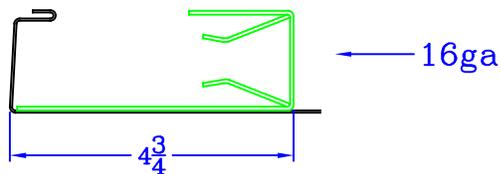
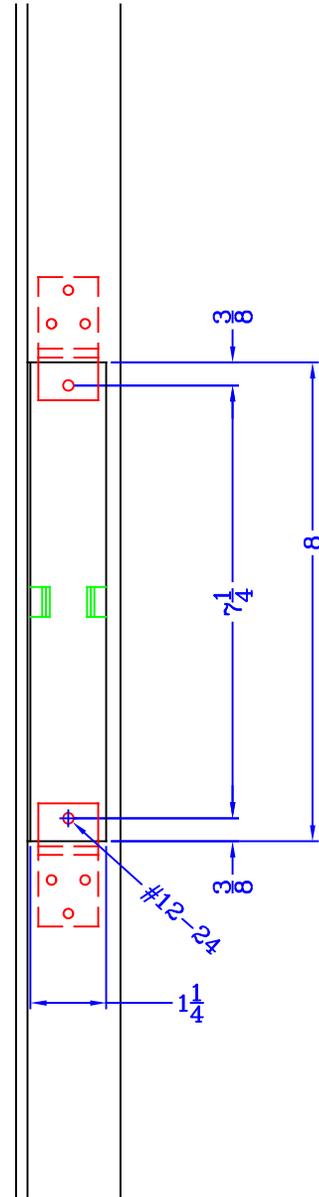
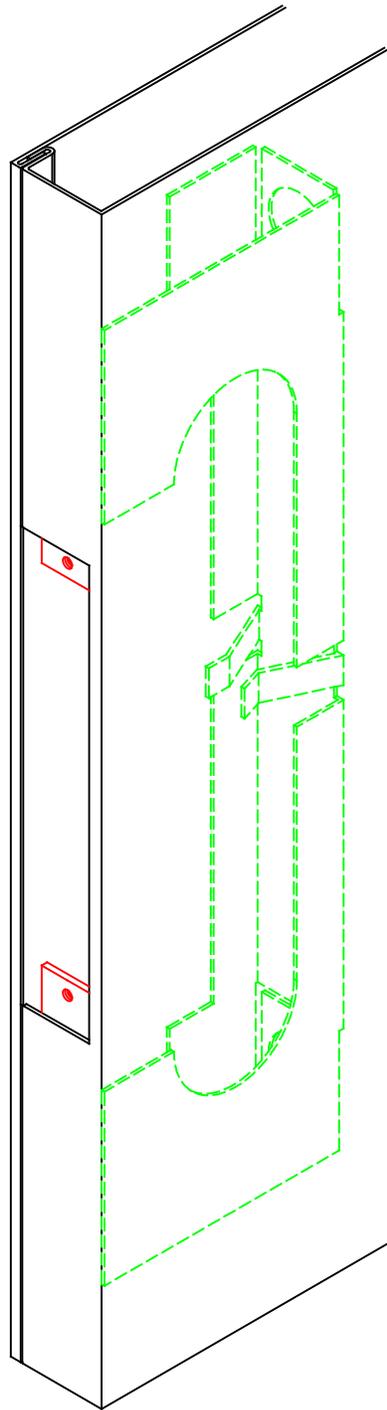
Per ANSI A156.13 specifications  
Function holes: Manufacturer's template to be provided.

**Digital lock prep, 12ga**  
Projection welded



Tapped extruded holes per ANSI/SDI A250.6.  
Function holes: Manufacturer's template to be provided.

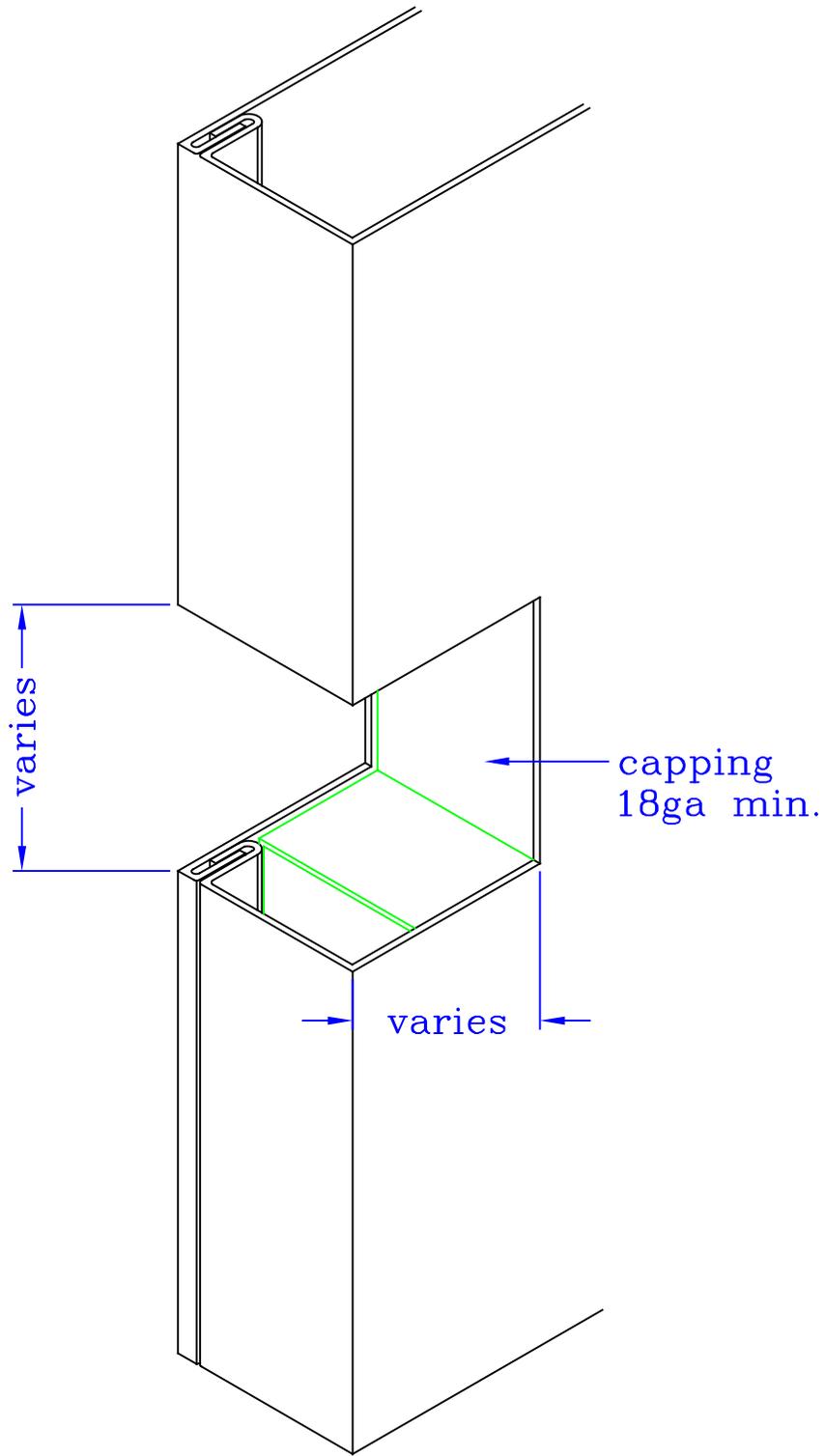
**Digital lock prep, 12ga**  
Projection welded



Function holes: Manufacturer's template to be provided.

### Pre-assembly lock reinforcement

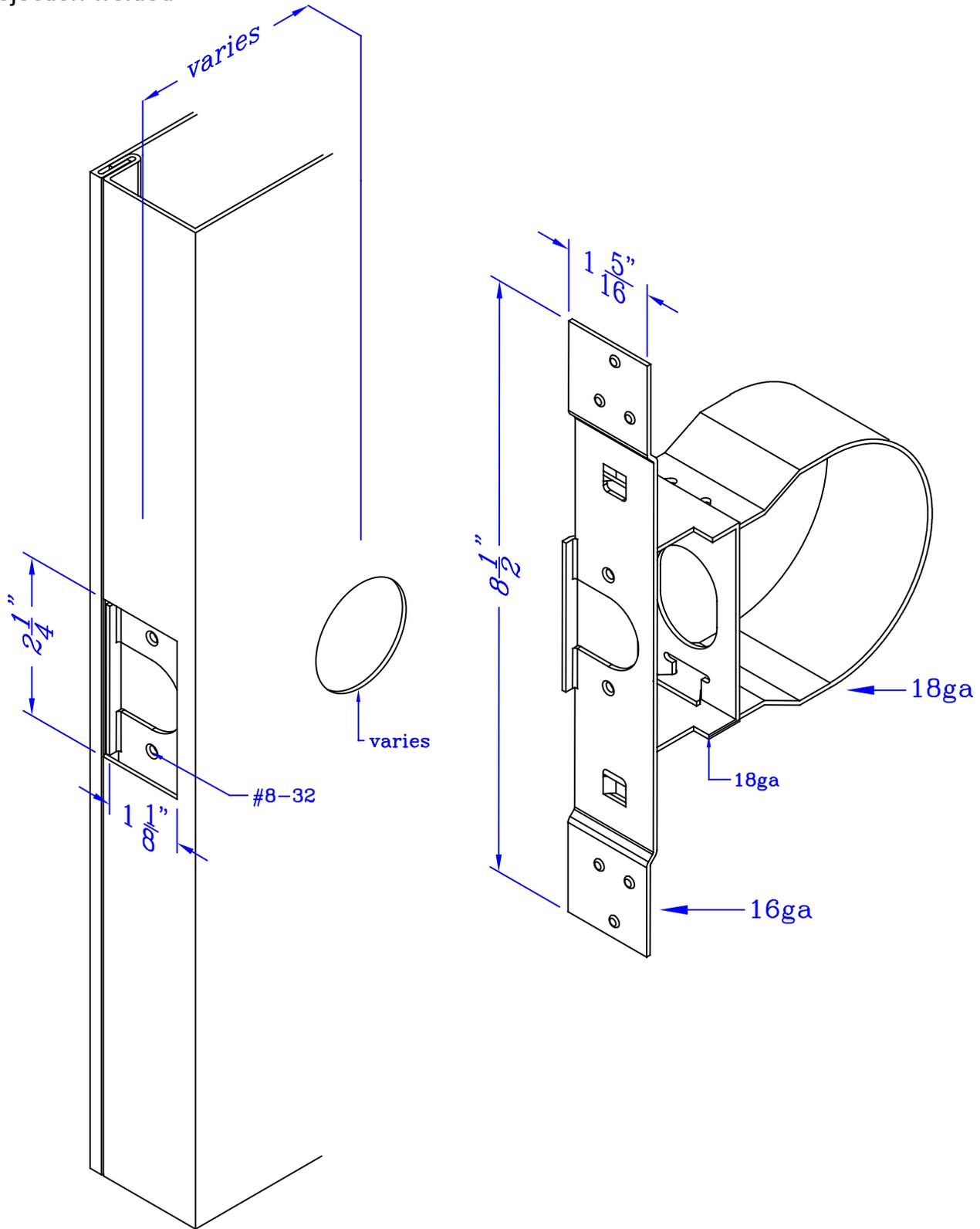
Cold fused



\*manufacturer's template to be provided

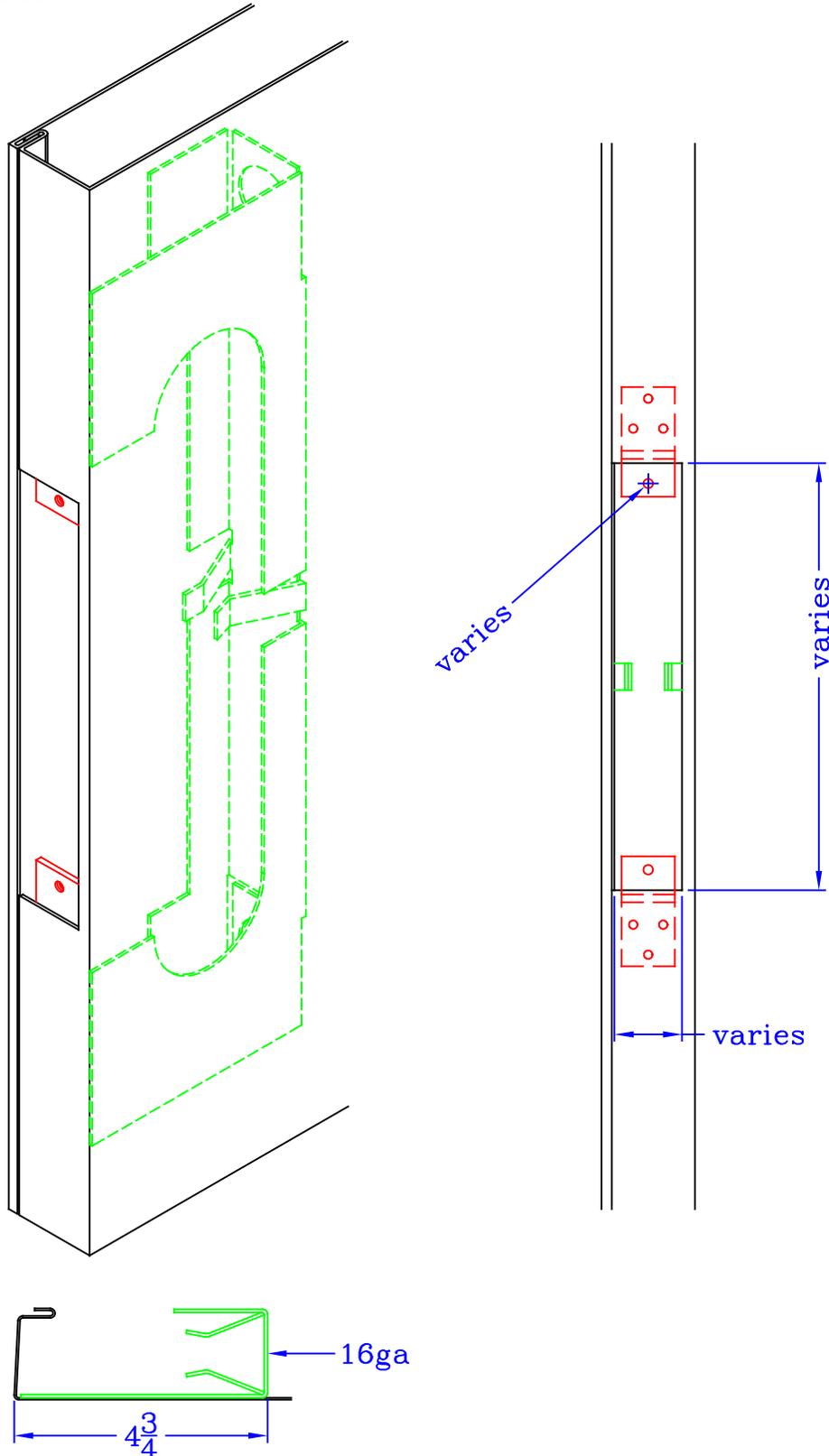
**Cylindrical deadlock reinforcement, 16ga**

Projection welded



Centered latch. Tapped extruded holes per ANSI/SDI A250.6.  
\*manufacturer's template to be provided

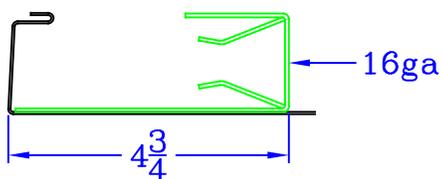
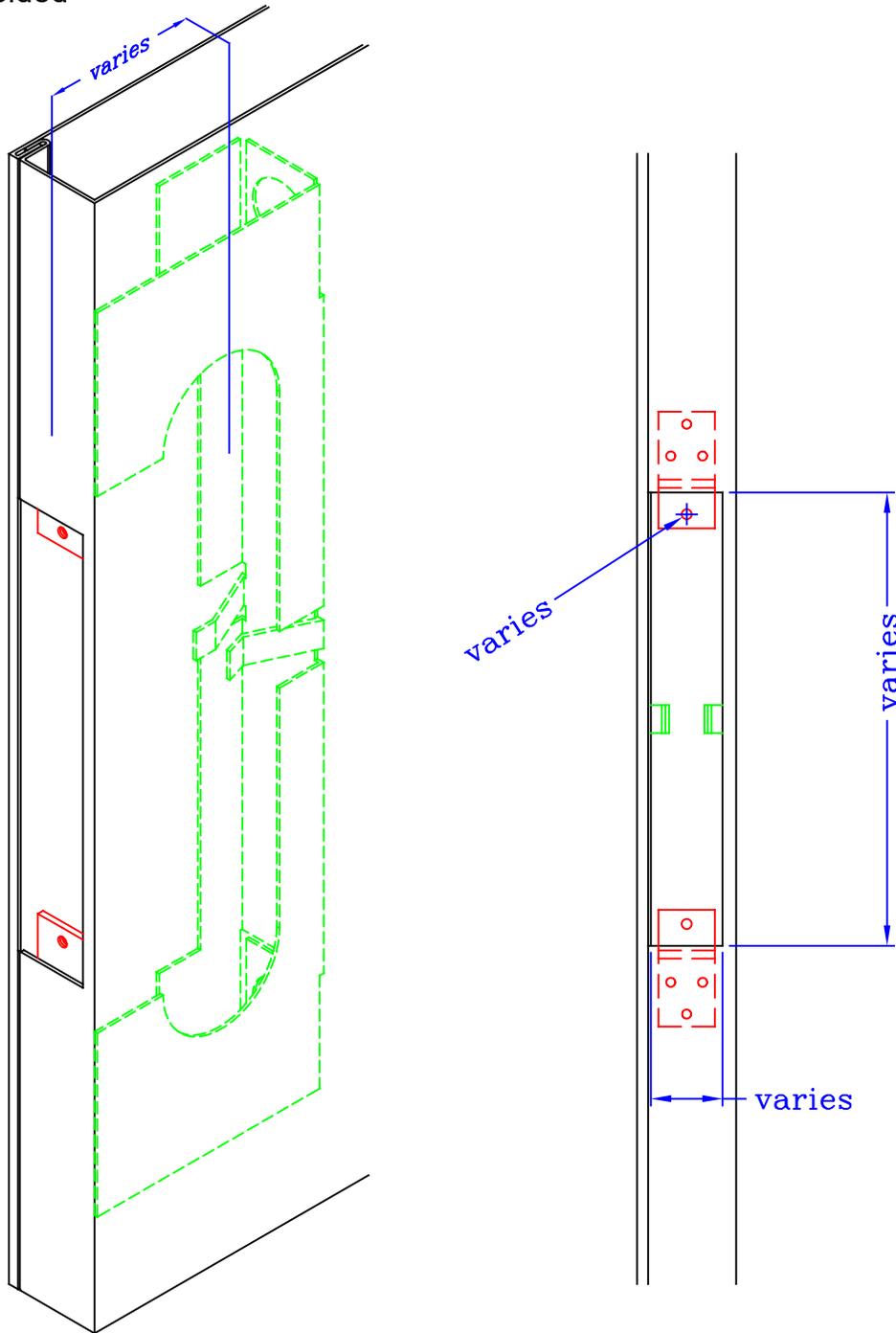
**Mortise deadlock reinforcement, 12ga**  
Projection welded



\*manufacturer's template to be provided

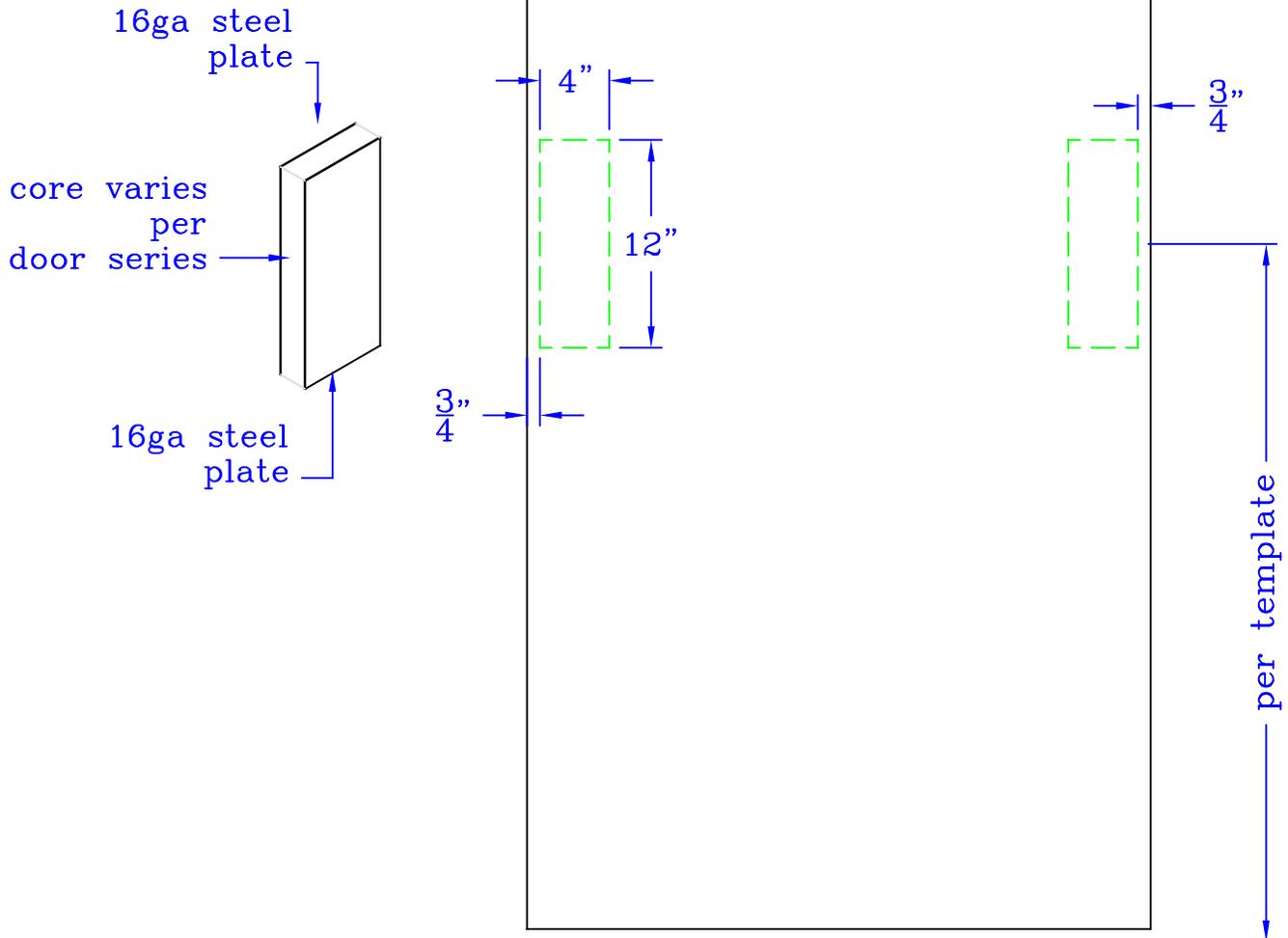
**Mortise deadlock reinforcement with function holes, 12ga**

Projection welded



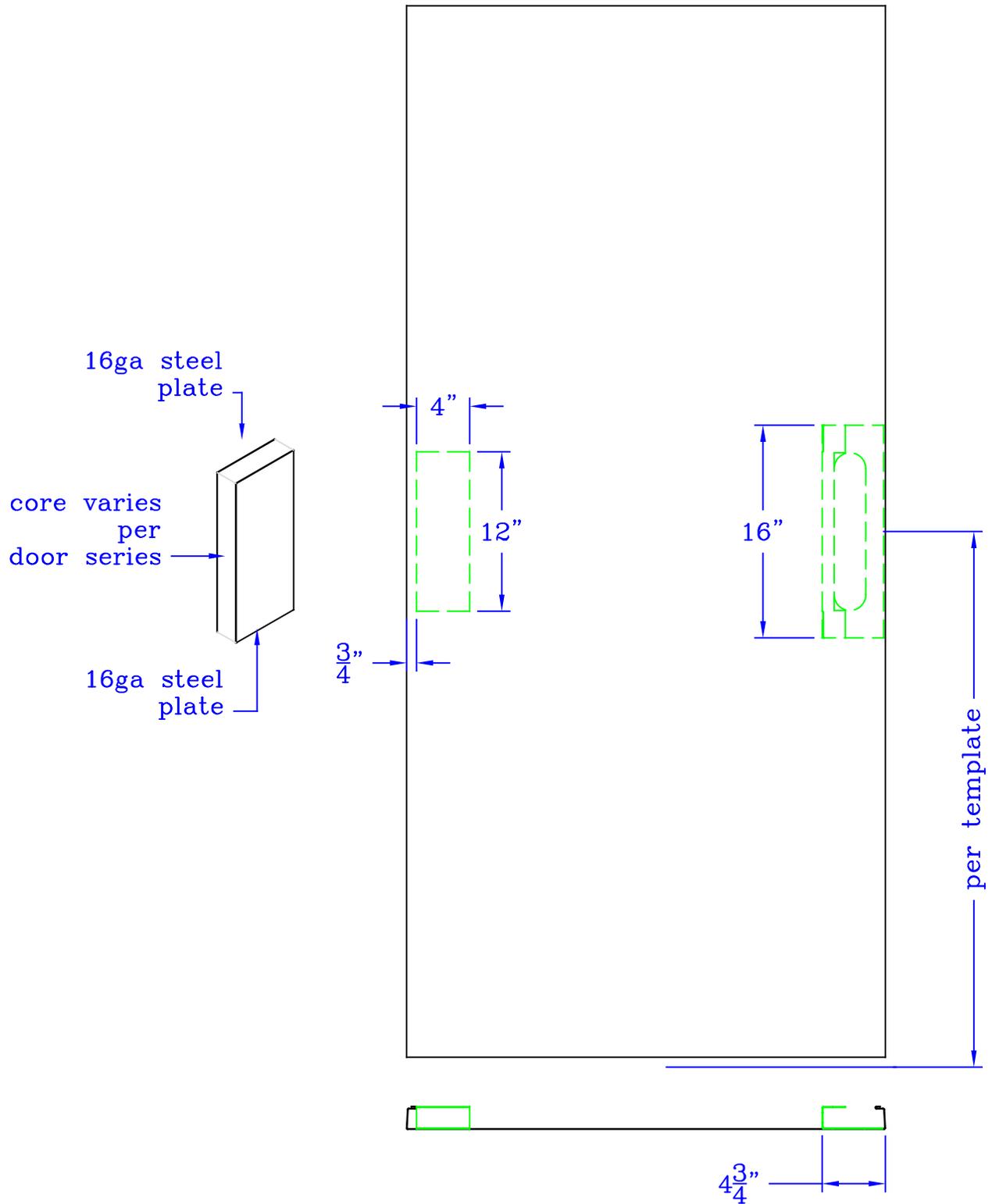
\*manufacturer's template to be provided

**Rim exit device reinforcement**  
Cold fused



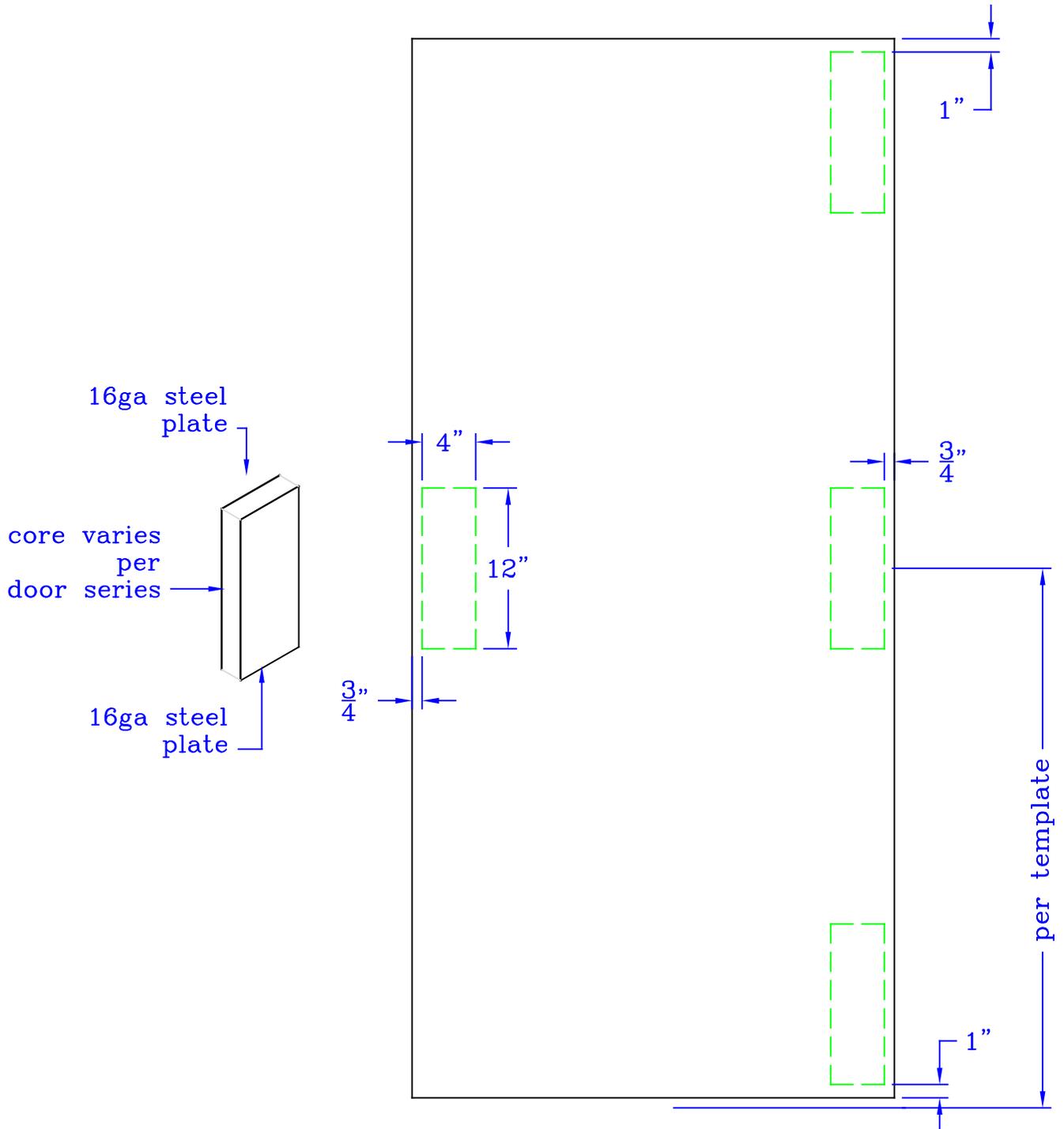
### Rim exit device reinforcement with function holes

Cold fused



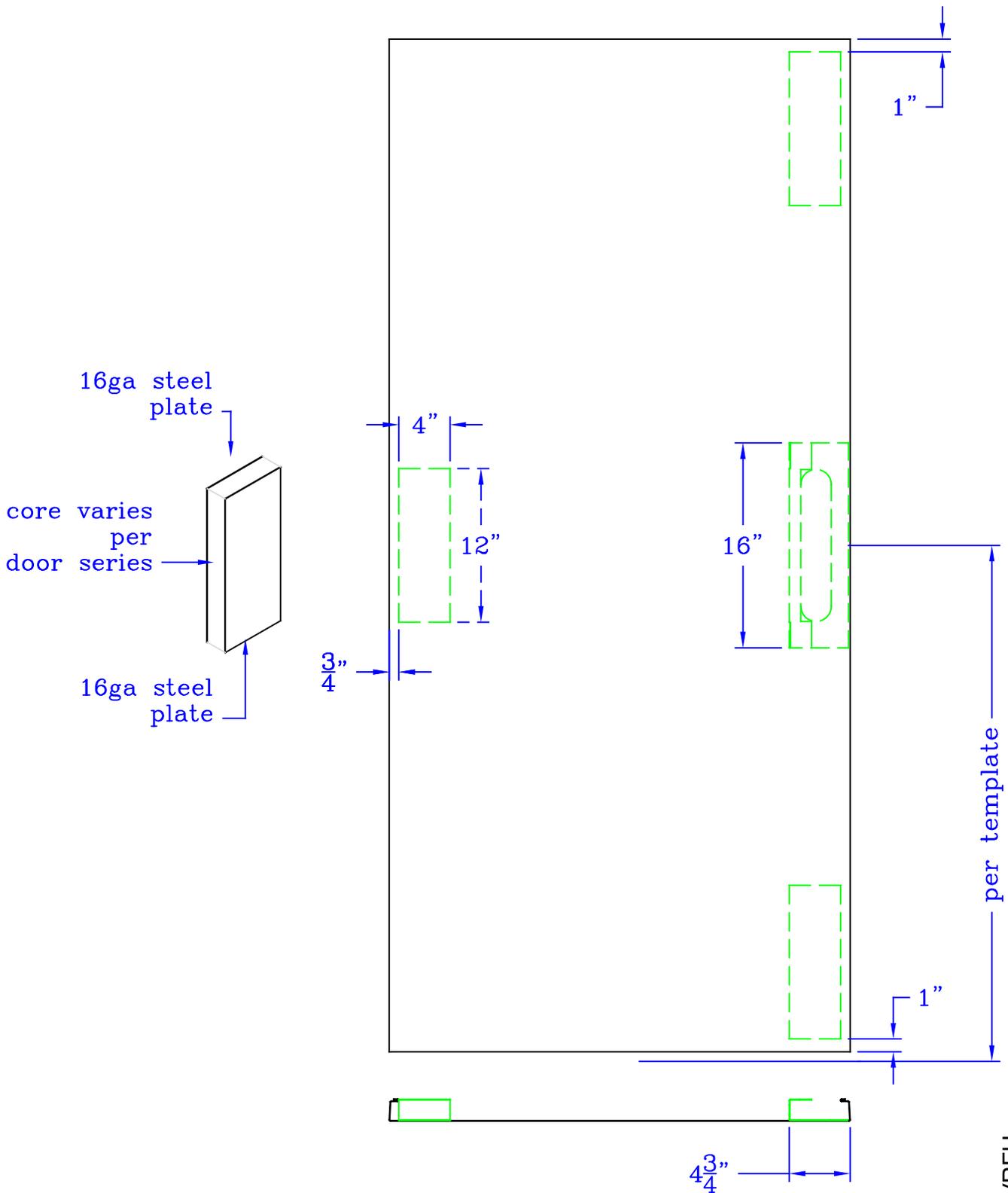
\*manufacturer's template to be provided

### Surface vertical rod exit device reinforcement Cold fused



SVR

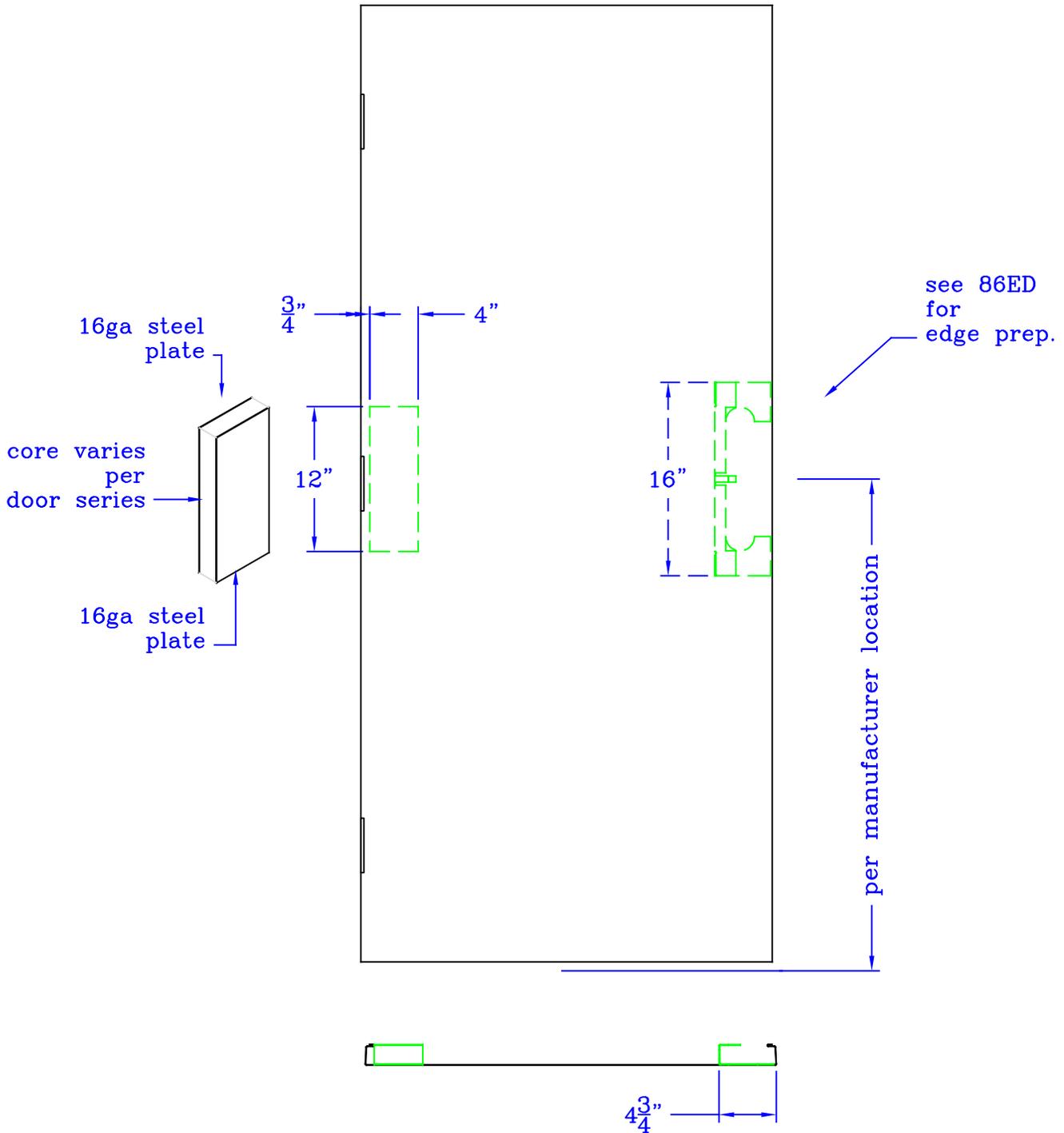
**Surface vertical rod exit device reinforcement with function holes**  
Cold fused



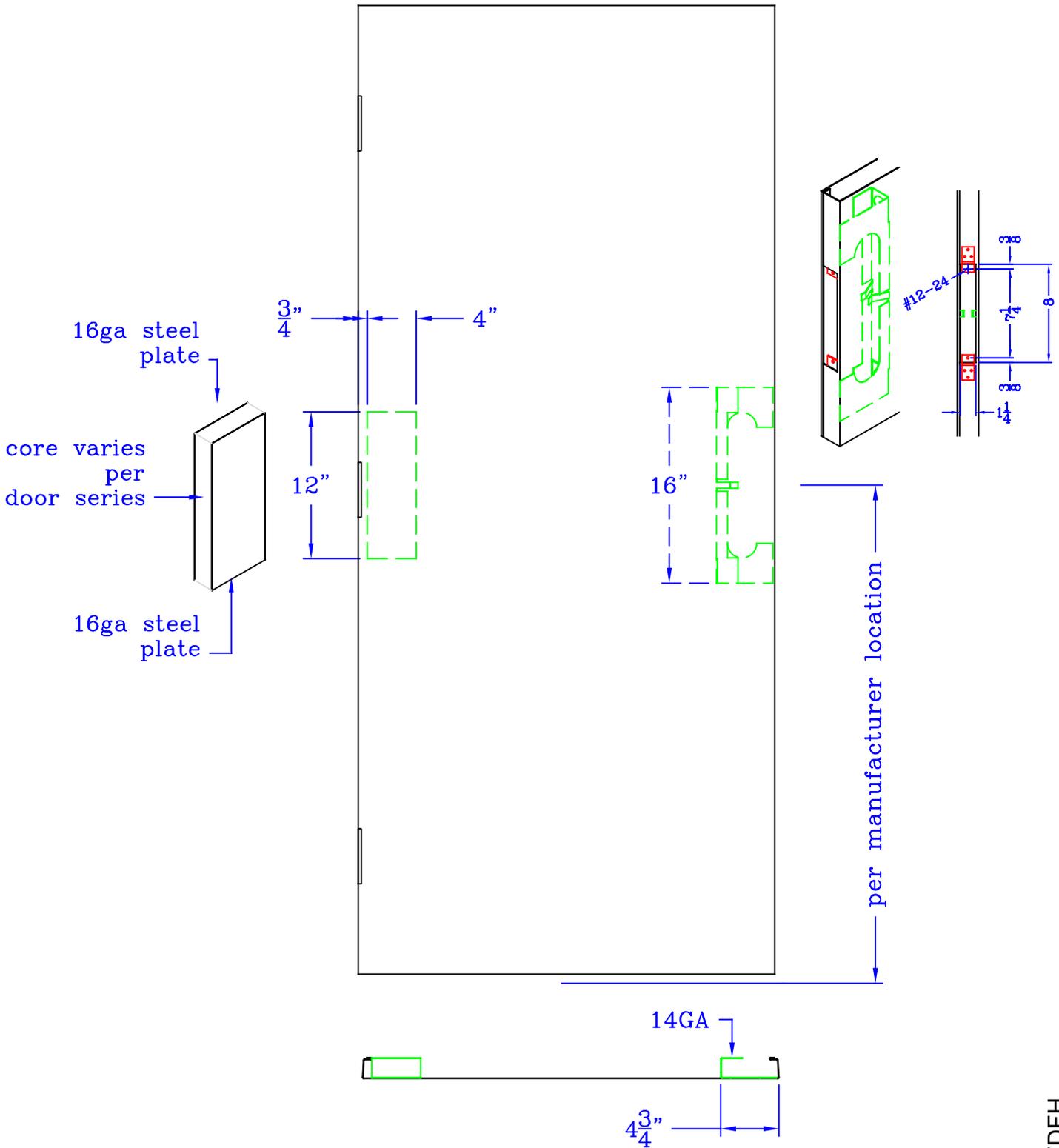
Exit devices

\*manufacturer's template to be provided

**Mortise exit device reinforcements**  
Cold fused

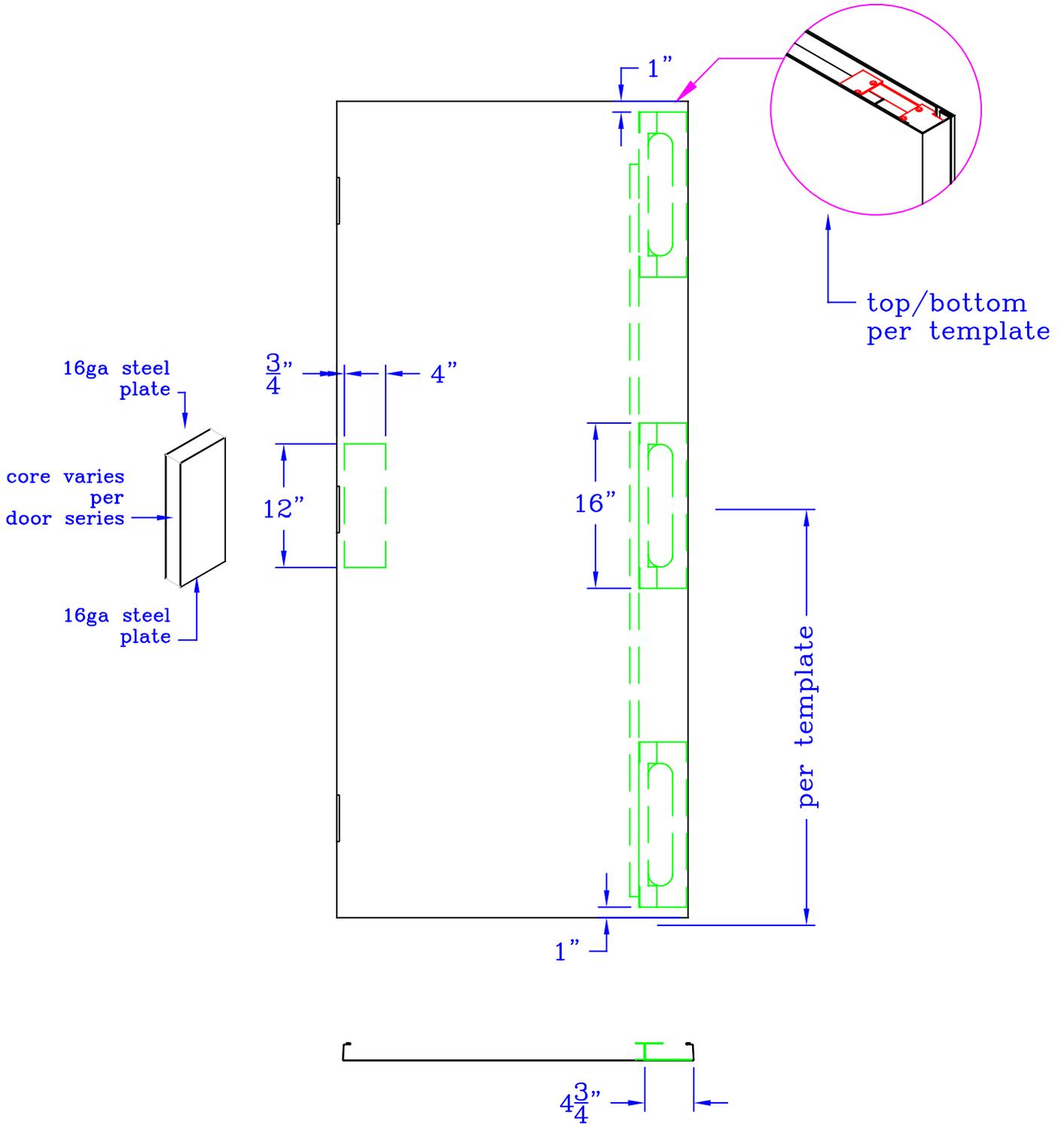


**Mortise exit device reinforcements with function holes**  
Cold fused



\*manufacturer's template to be provided

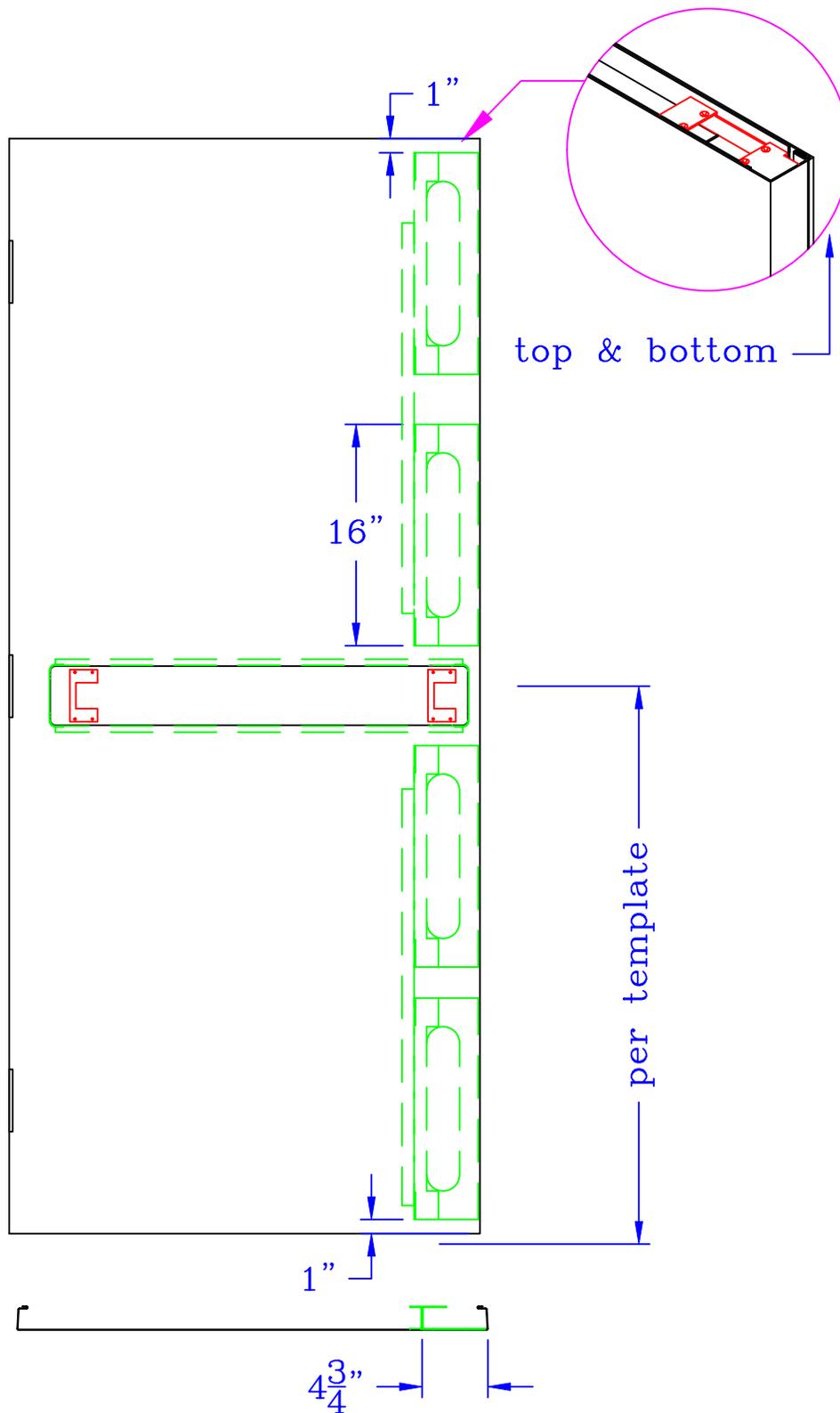
**Concealed vertical rod exit device reinforcements**  
Cold fused



\*manufacturer's template to be provided

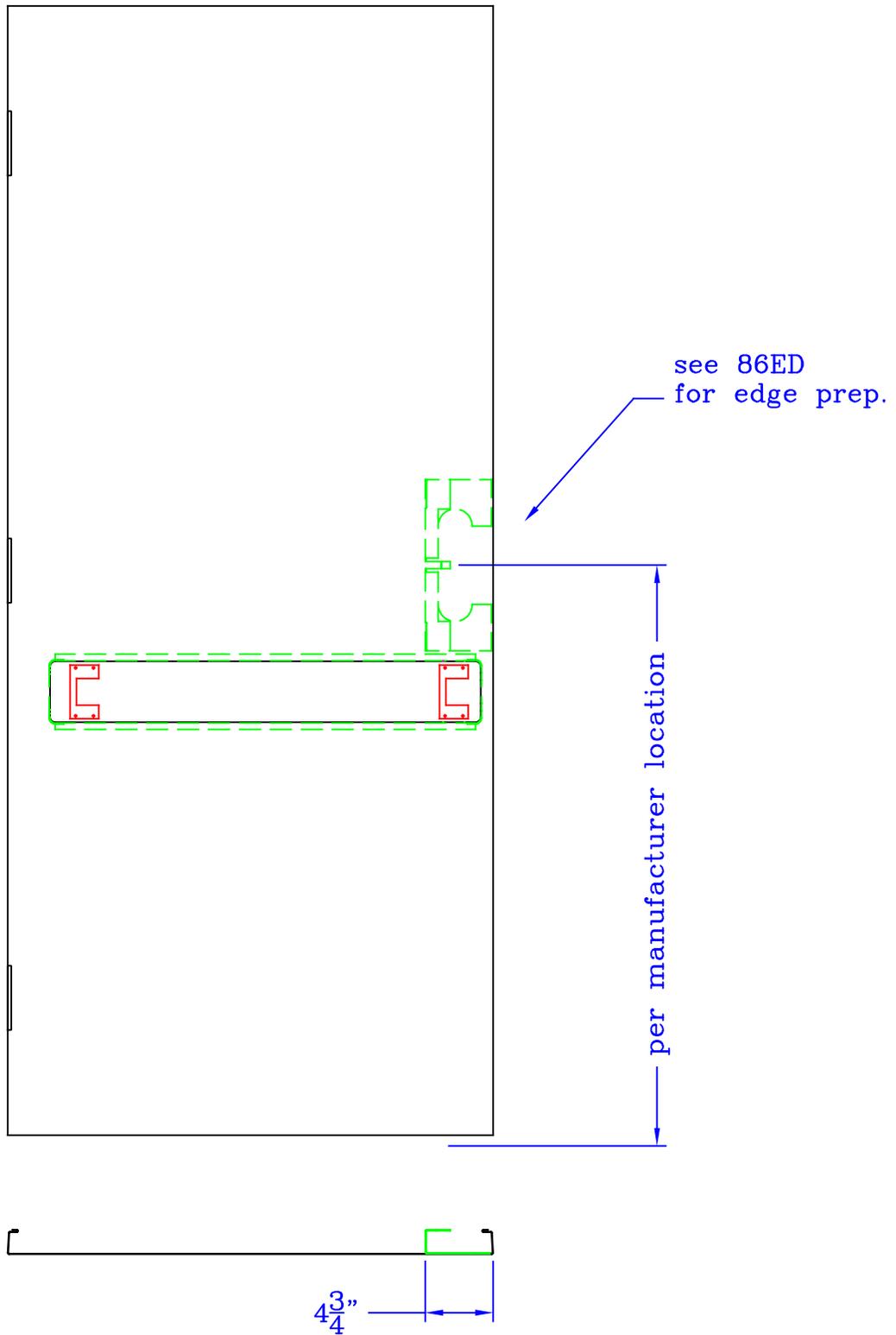
### Impact concealed vertical rod exit device reinforcements

Cold fused



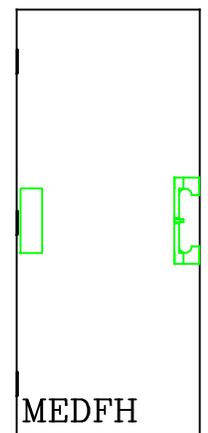
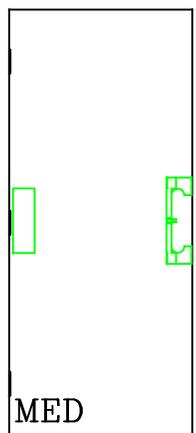
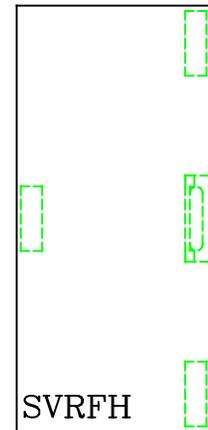
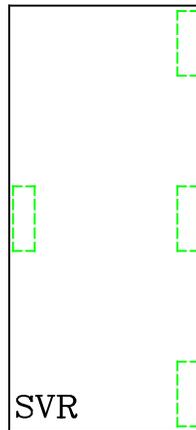
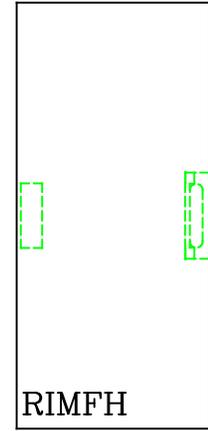
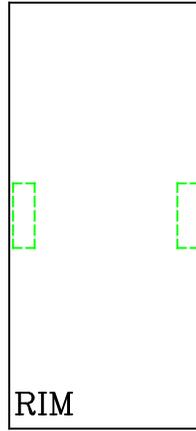
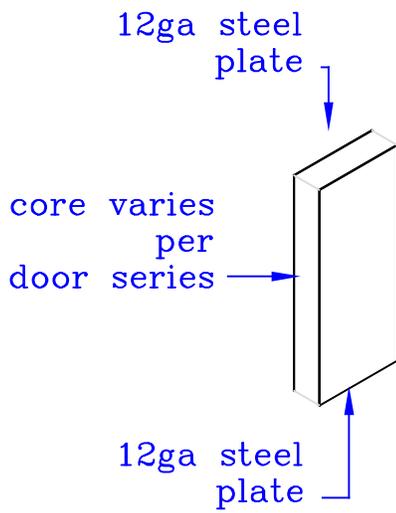
\* manufacturer's template to be provided

**Impact mortise exit device reinforcement**  
Cold fused

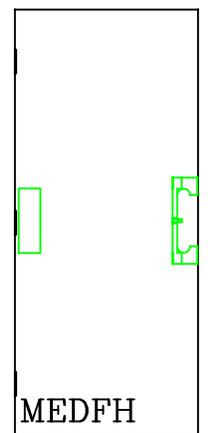
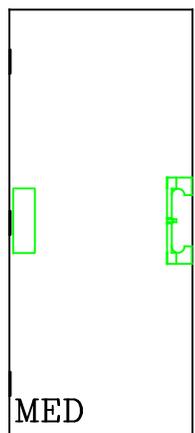
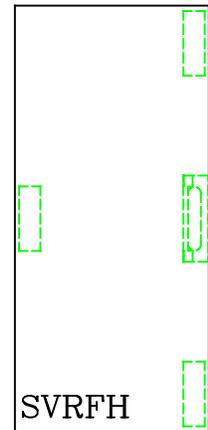
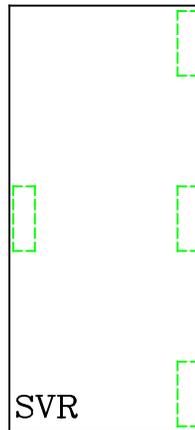
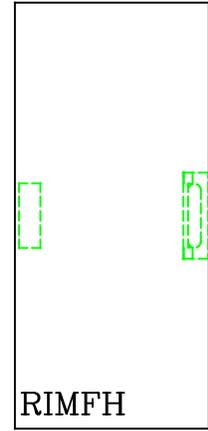
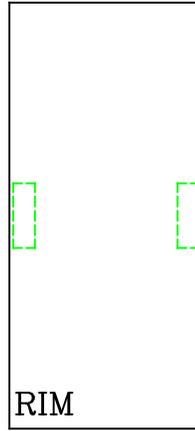
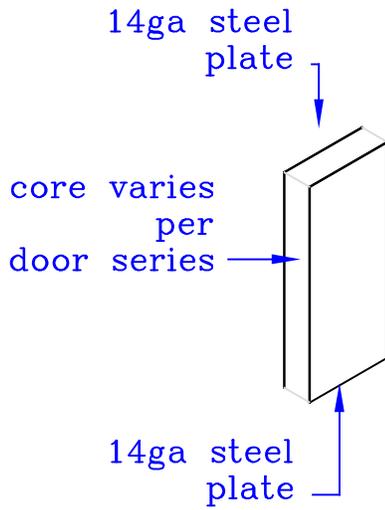


\*manufacturer's template to be provided

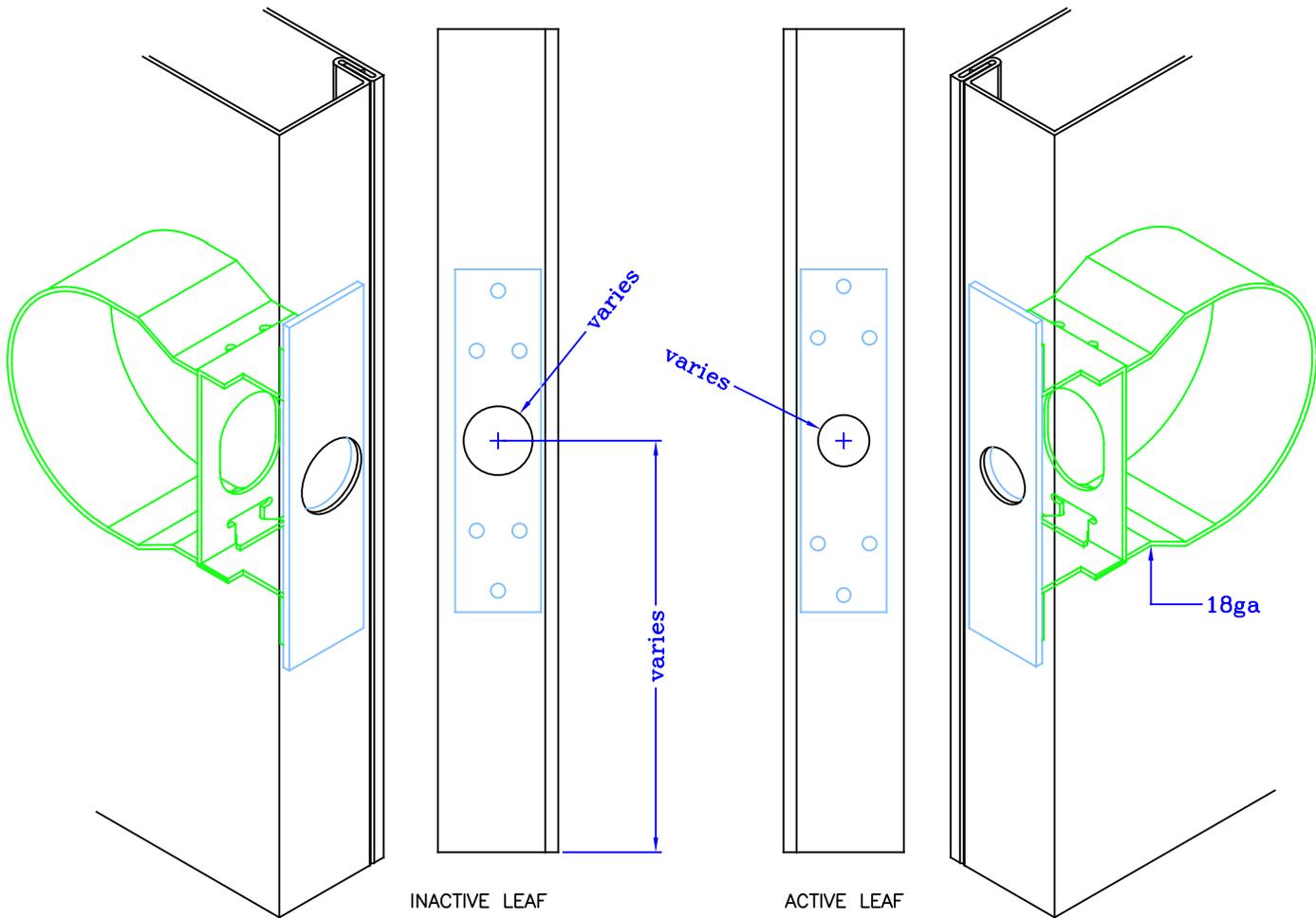
**Exit device surface reinforcements, 12ga**  
Cold fused



**Exit device surface reinforcements, 14ga**  
Cold fused

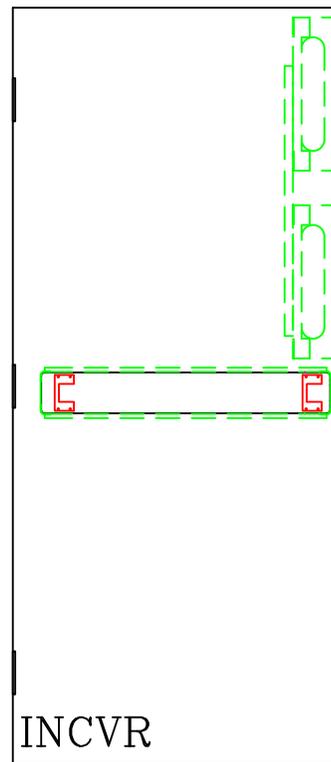
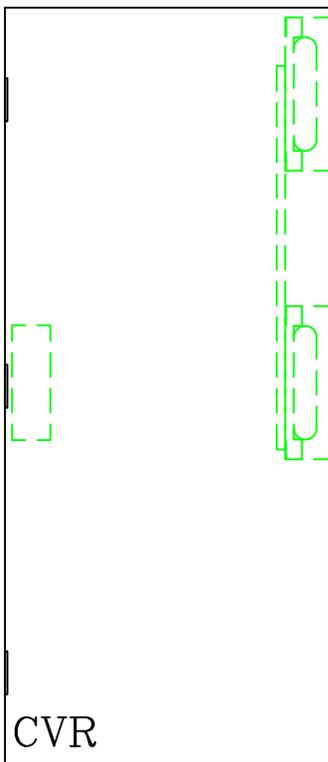
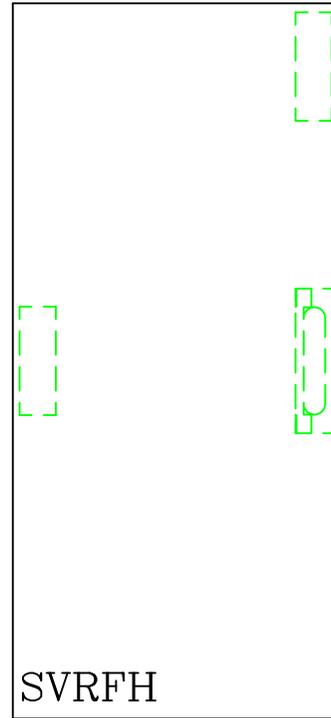
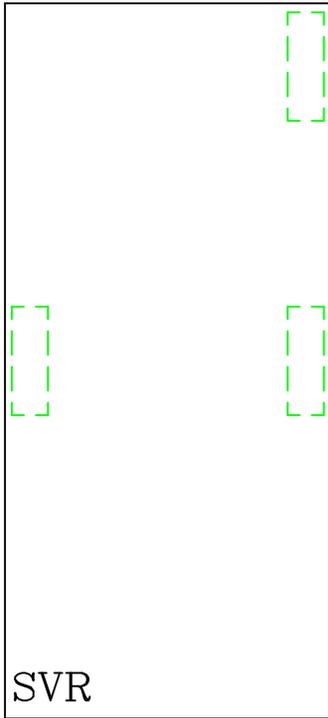


**Auxiliary fire latch, 12ga**  
Projection welded



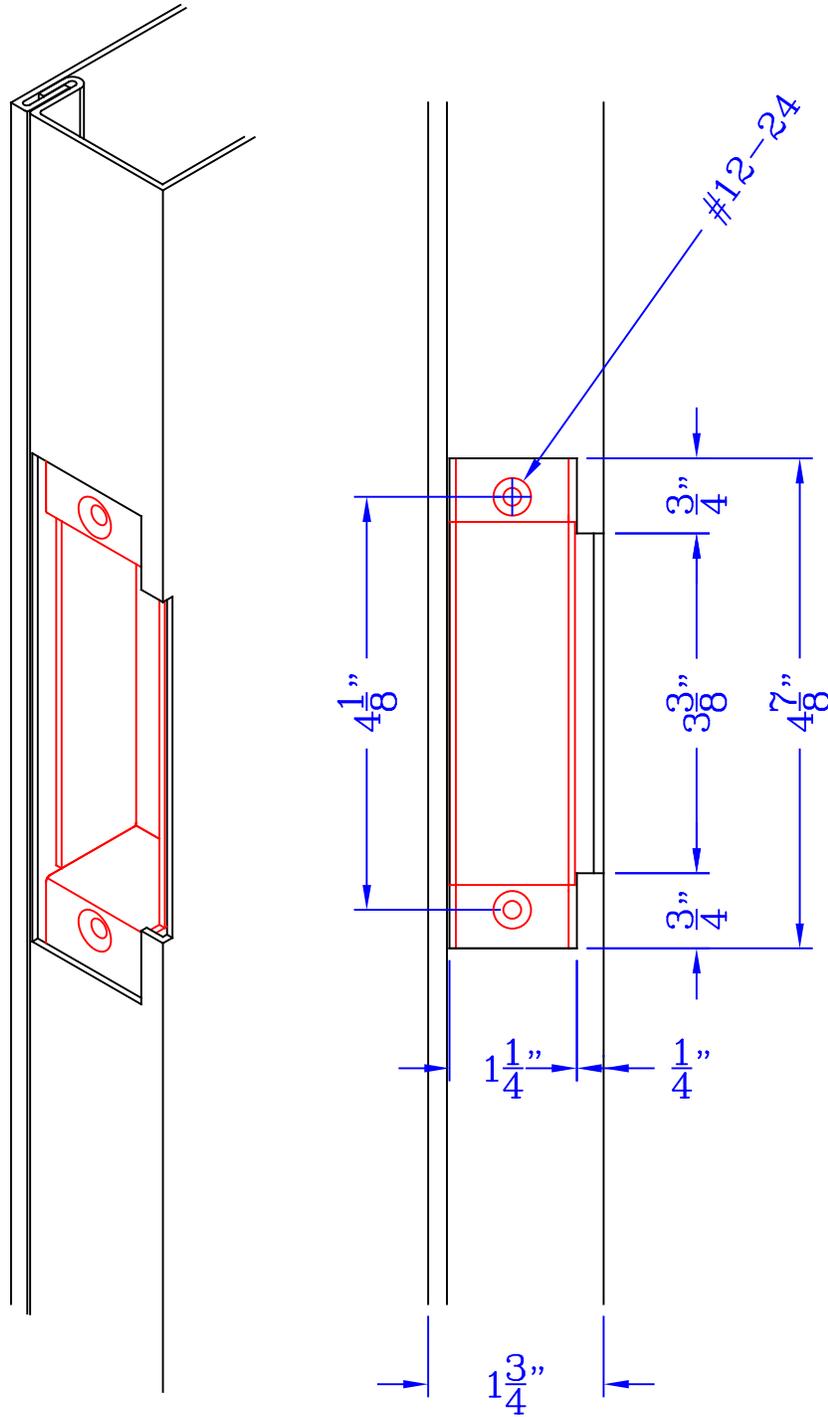
\*manufacturer's template to be provided

**Less bottom rod**



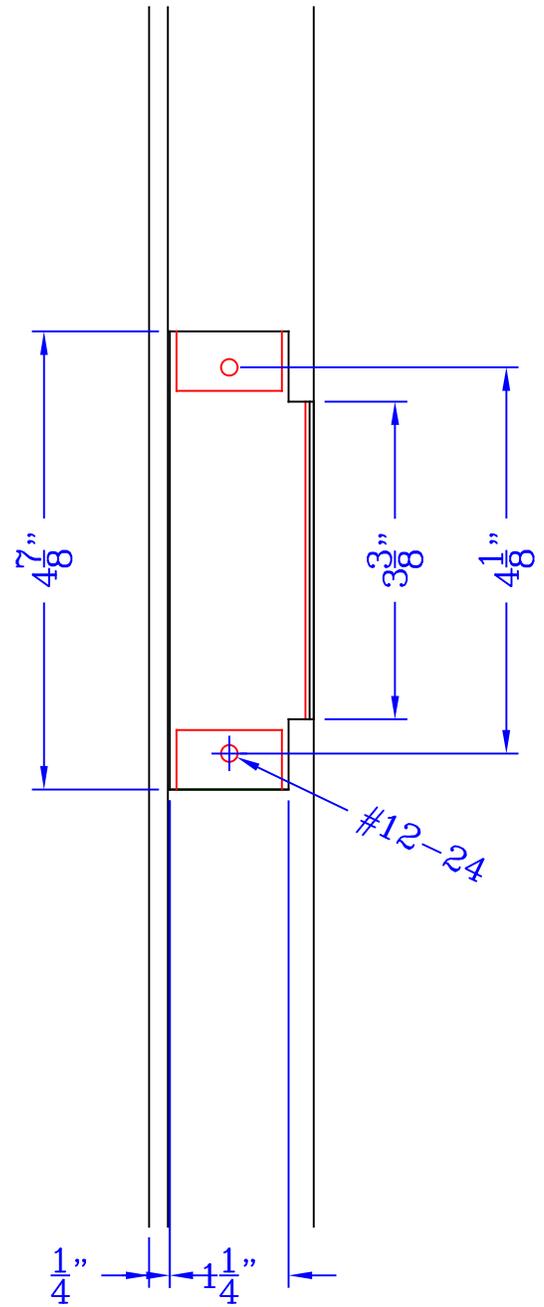
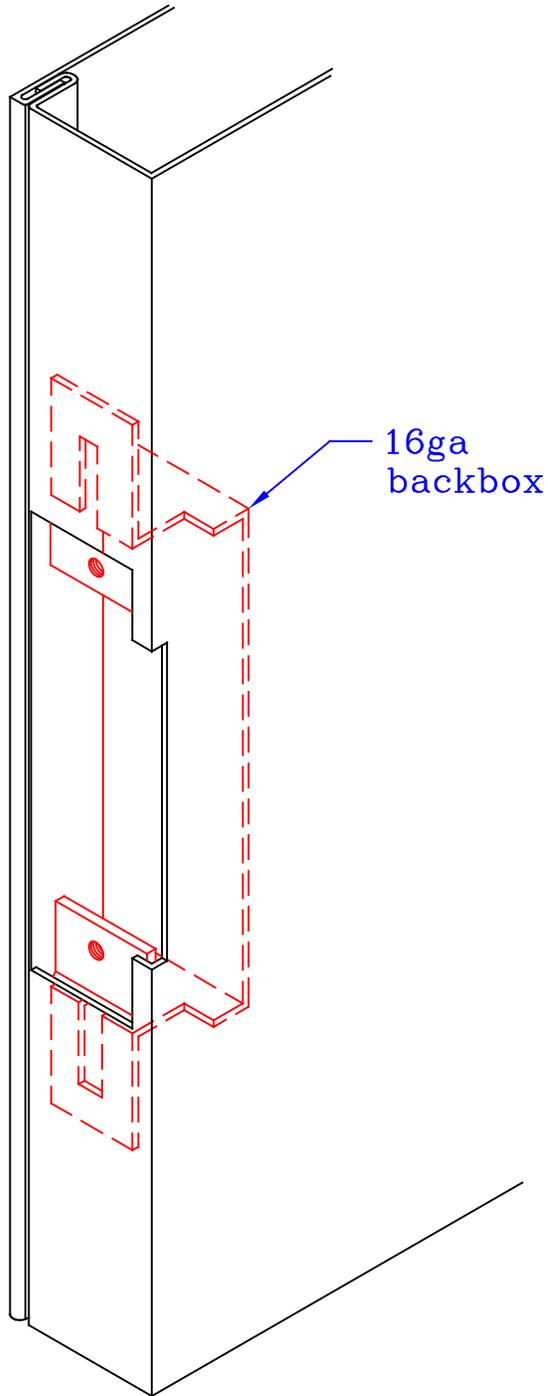
Less bottom rod prep, will require an auxiliary fire latch for rated door.

**Standard ANSI 4 7/8" strike reinforcement, 16ga**  
Projection welded

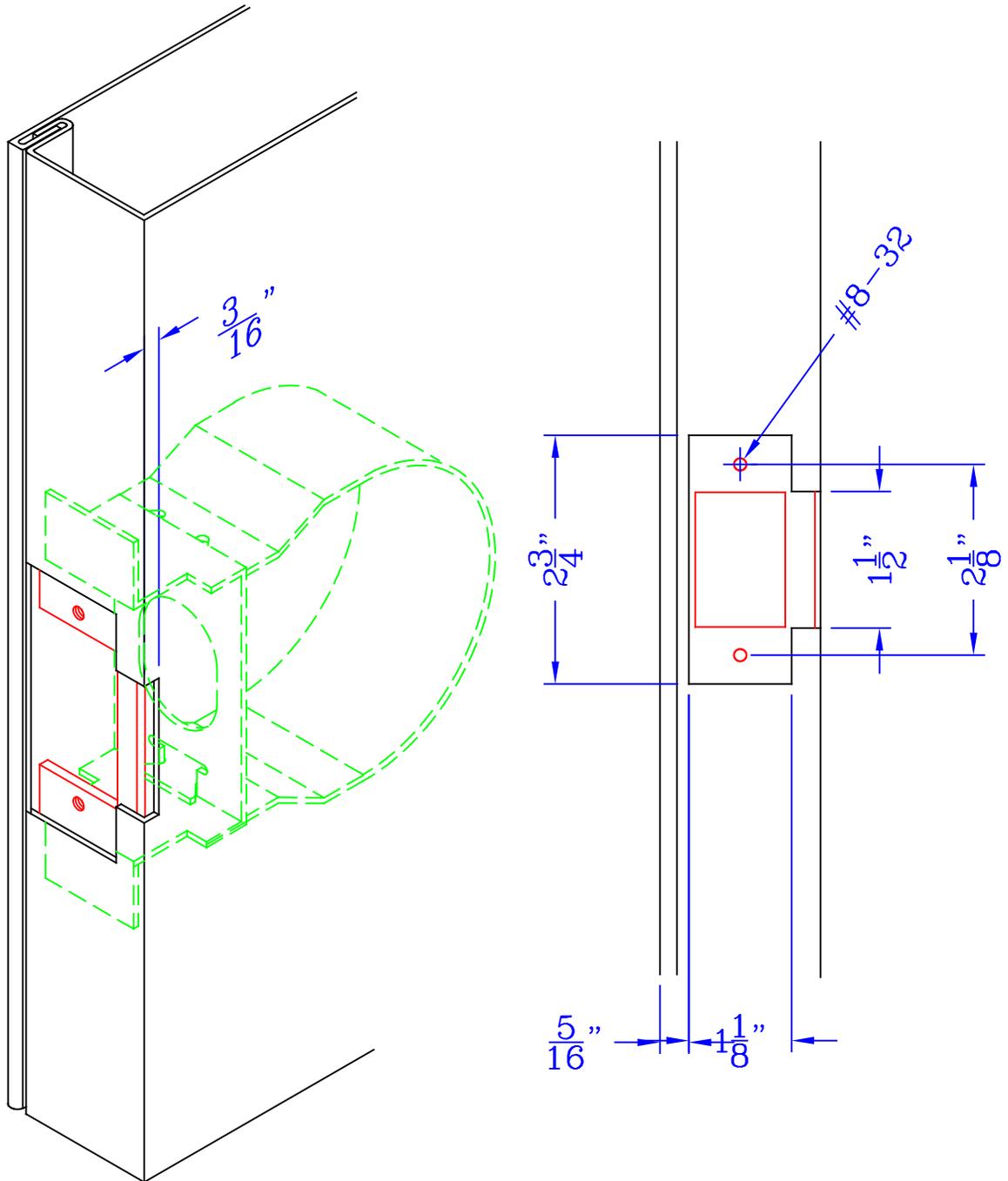


Tapped extruded holes per ANSI/SDI A250.6.

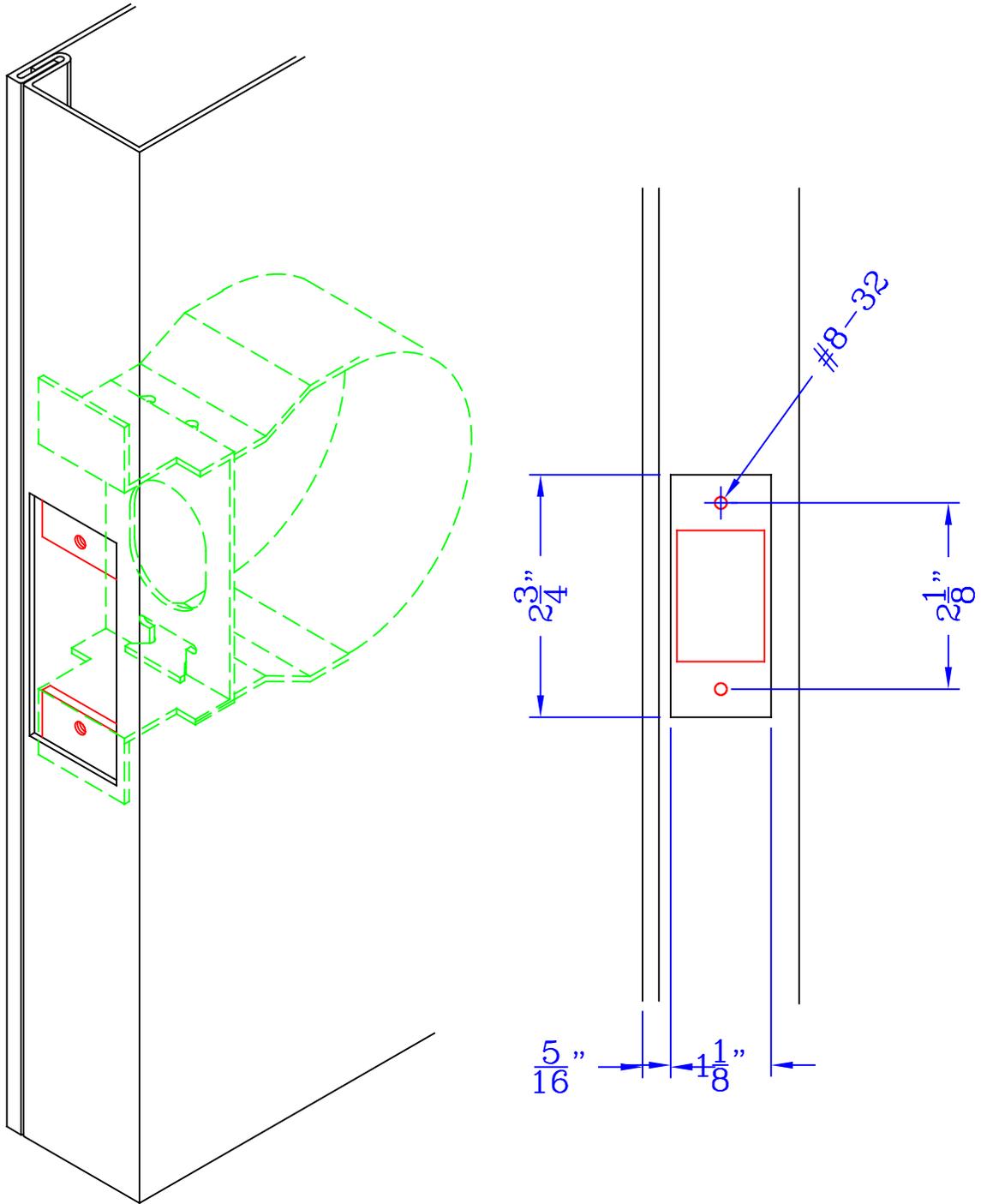
**Standard ANSI 4 7/8" strike reinforcement, 12ga**  
Projection welded



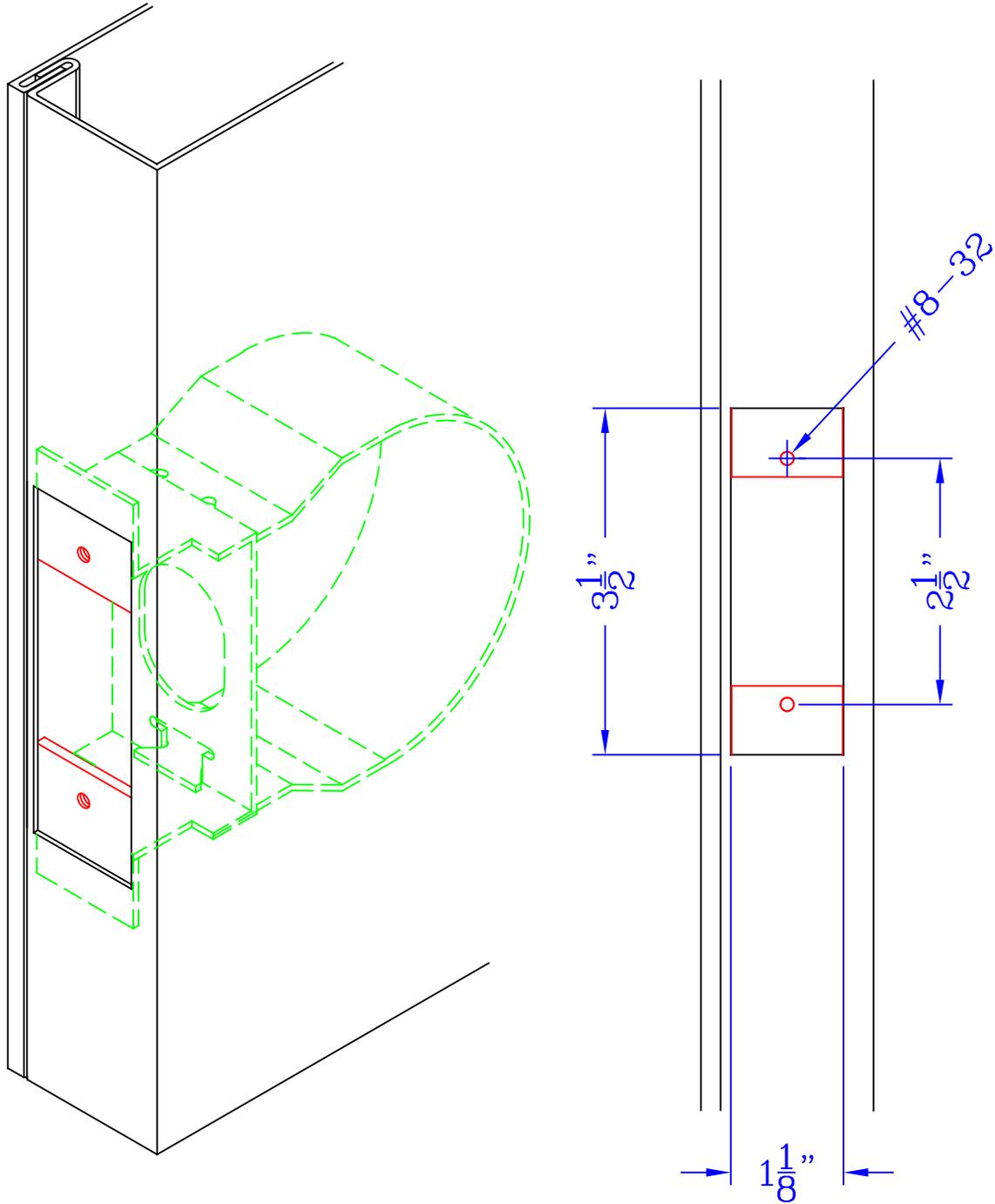
**Standard 2 3/4" "T" strike reinforcement, 12ga**  
Projection welded



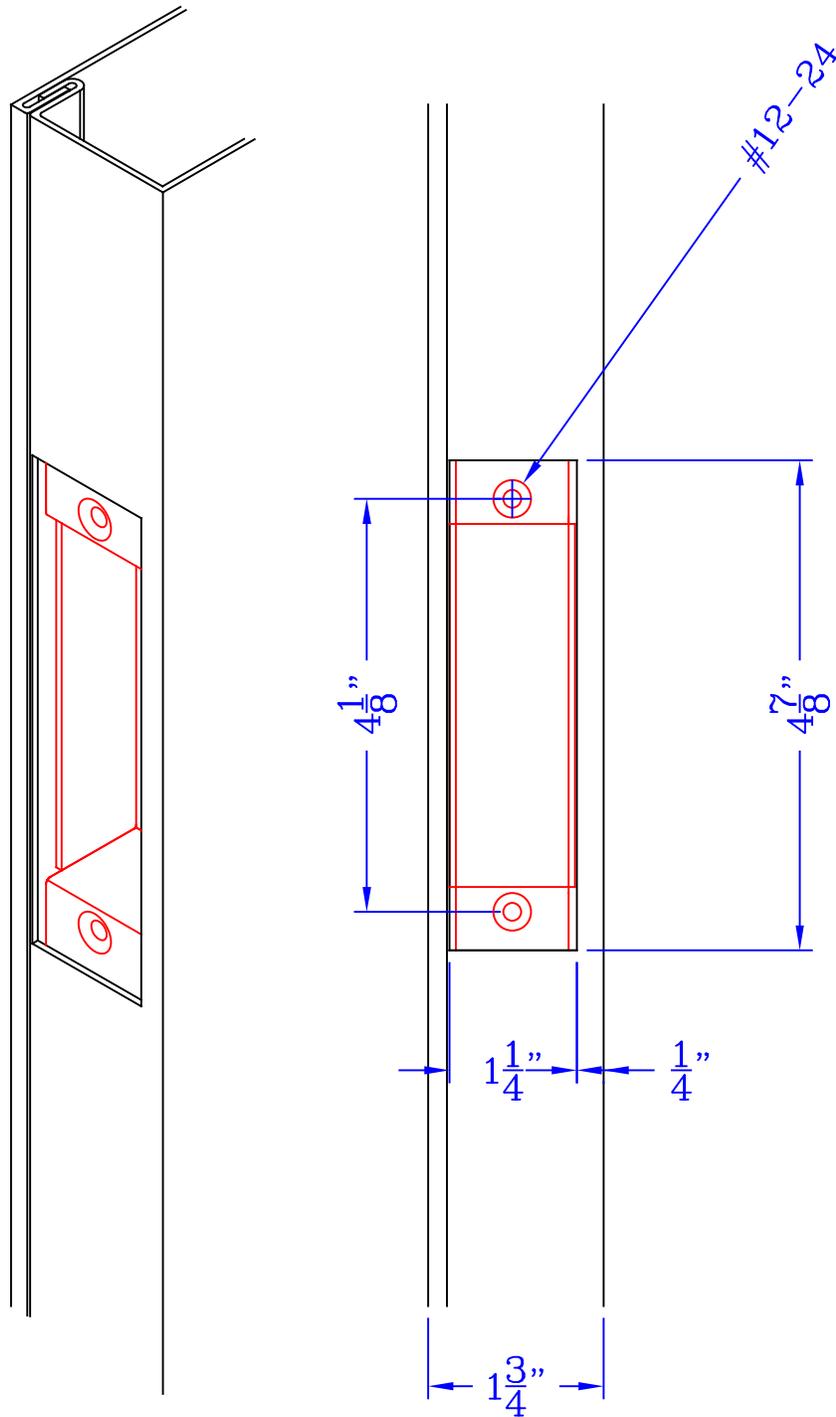
**Cylindrical dead lock strike reinforcement, 12ga**  
Projection welded



**3 1/2" mortise dead lock strike reinforcement, 12ga**  
Projection welded

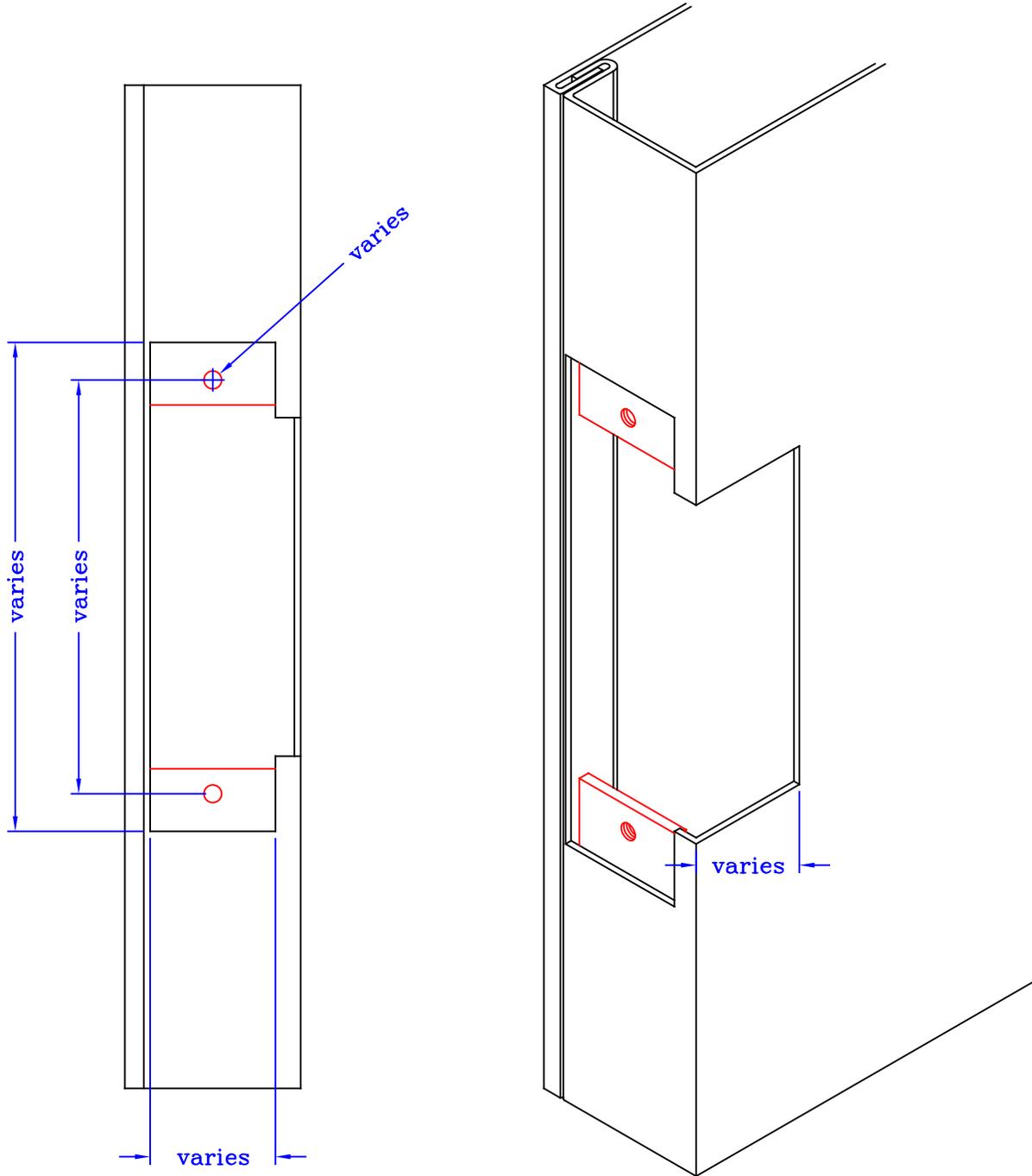


**Standard ANSI 4 7/8" deadlock strike reinforcement, 16ga**  
Projection welded



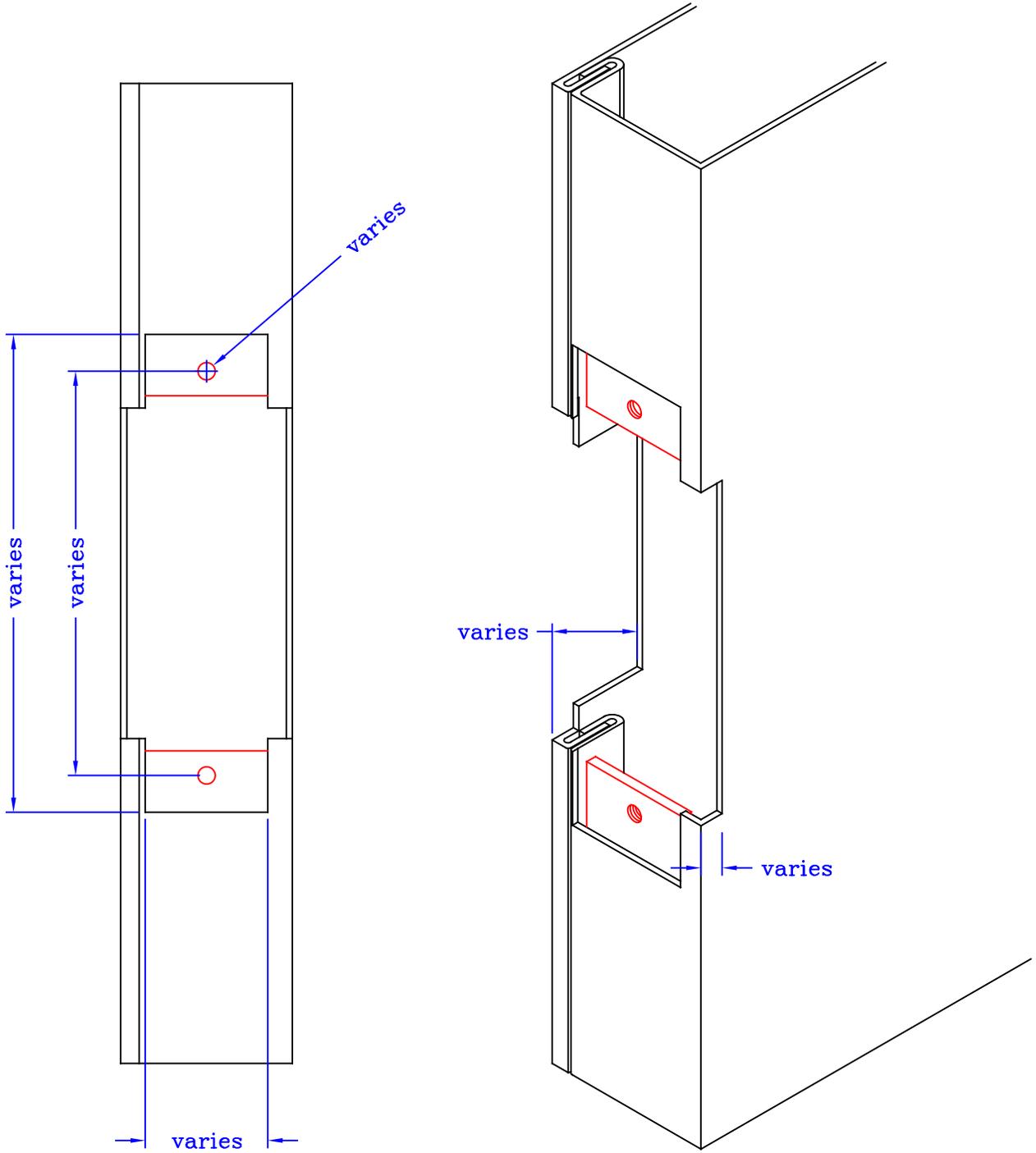
Tapped extruded holes per ANSI/SDI A250.6.

**Prep. for electric strike, 12ga**  
Projection welded



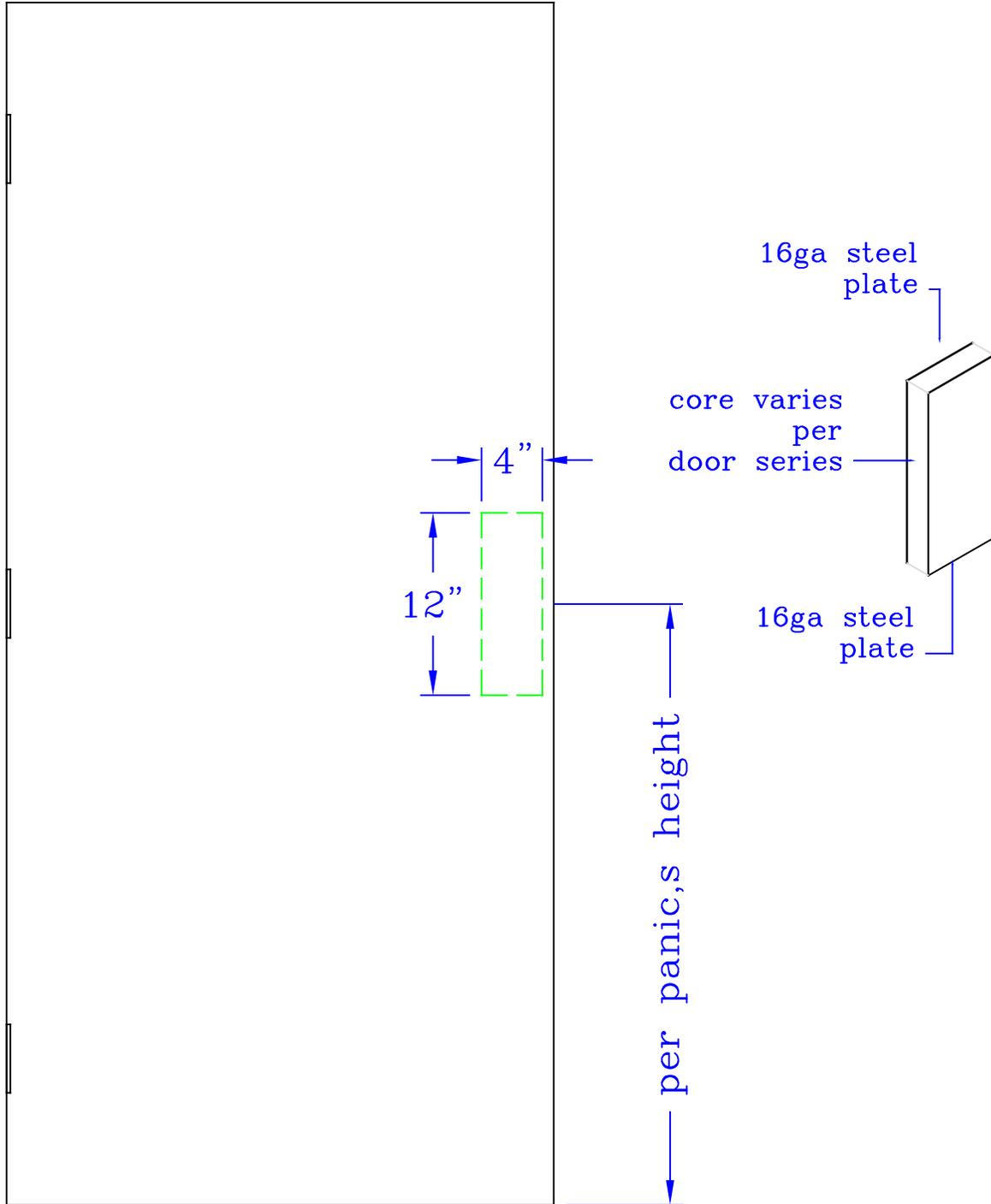
\*manufacturer's template to be provided

**Prep. for open back strike, 12ga**  
Projection welded

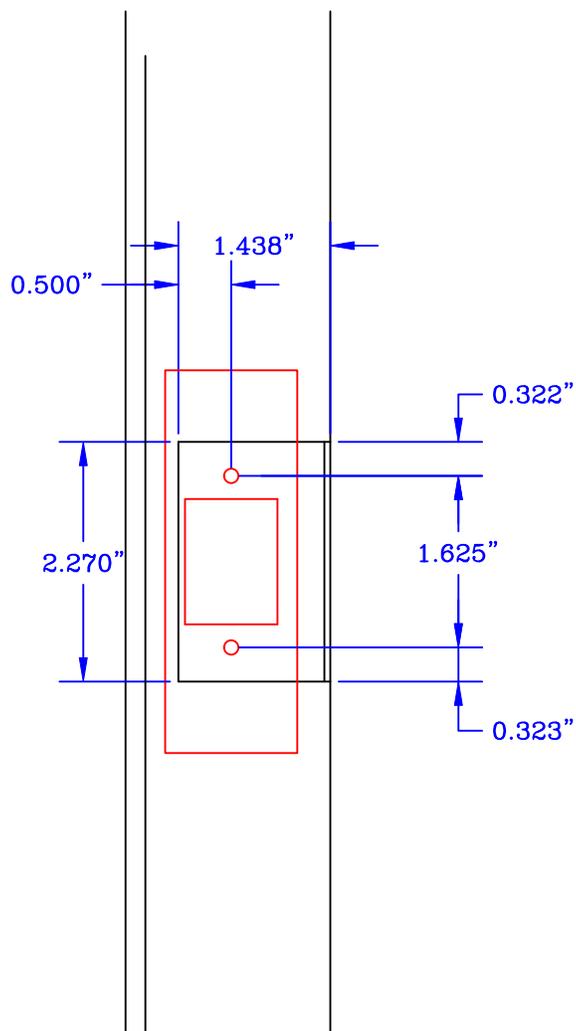
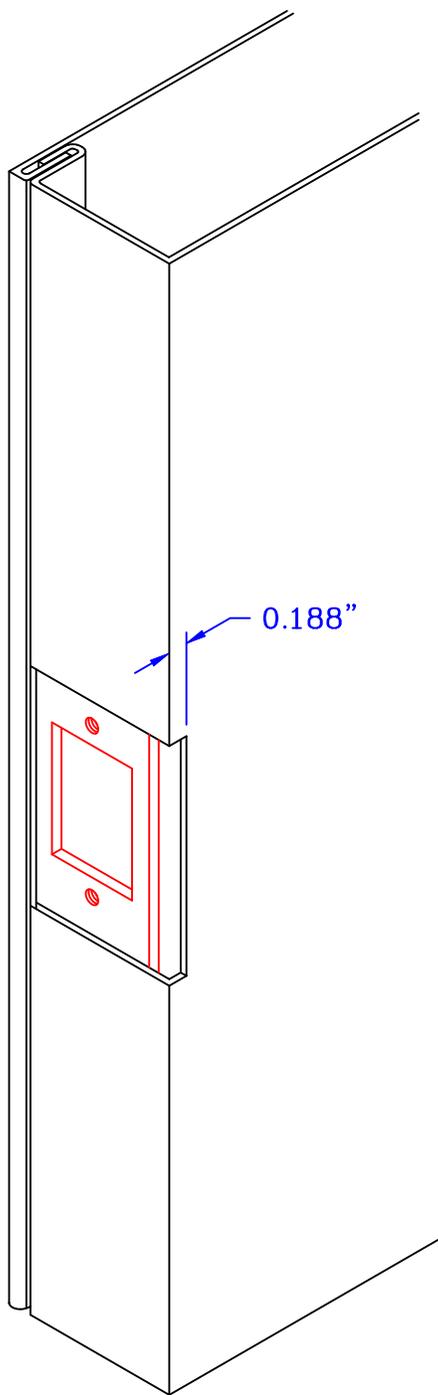


\*manufacturer's template to be provided

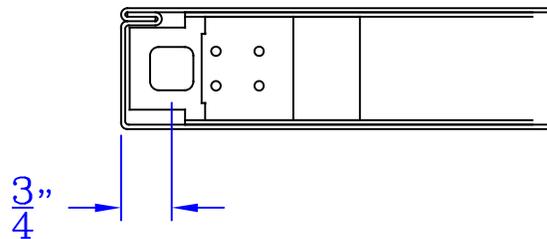
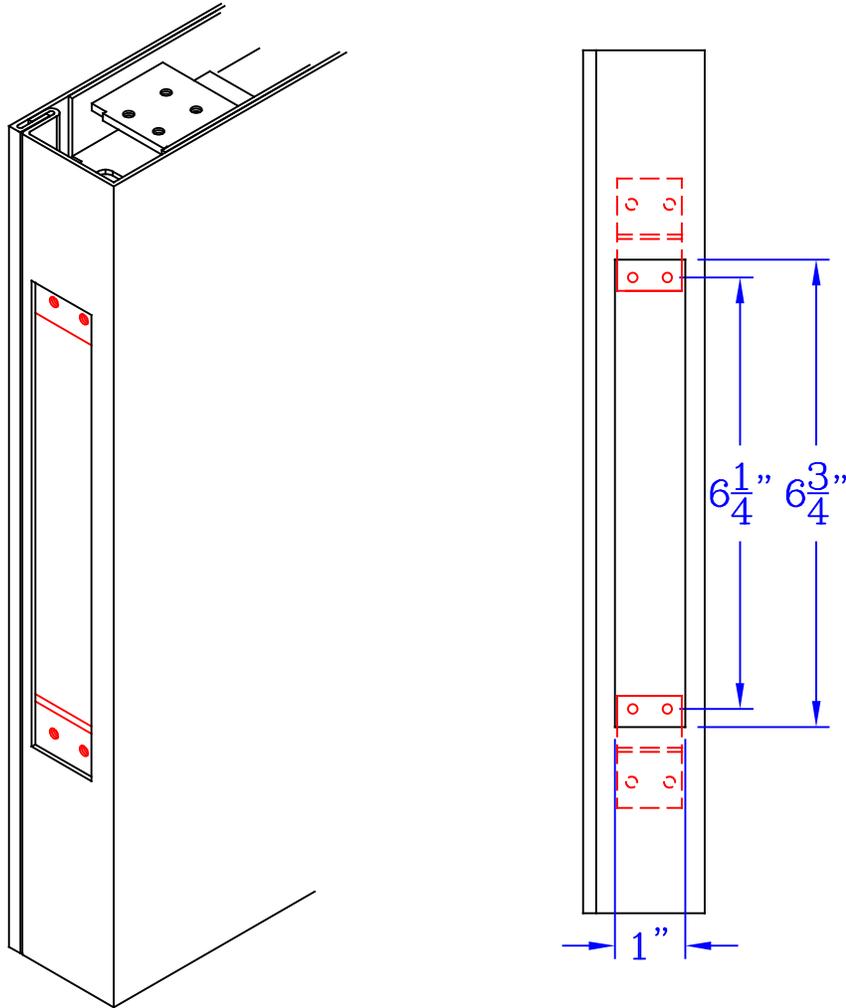
**Rim strike reinforcement, 16ga**  
Cold fused



**Full strike reinforcement, 12ga**  
Projection welded

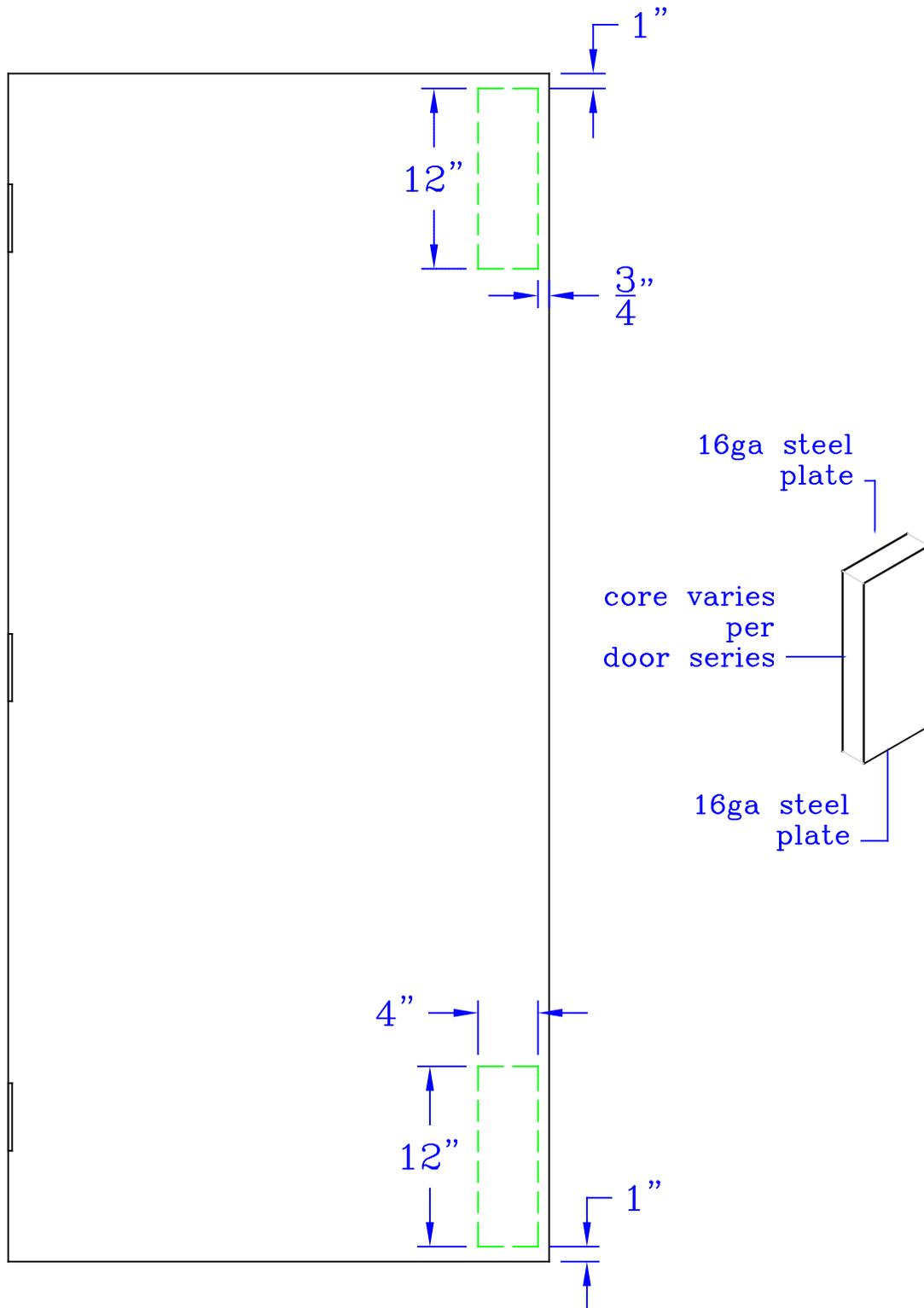


**Ansi 156-16 flush bolt reinforcements, 12ga**  
Projection welded



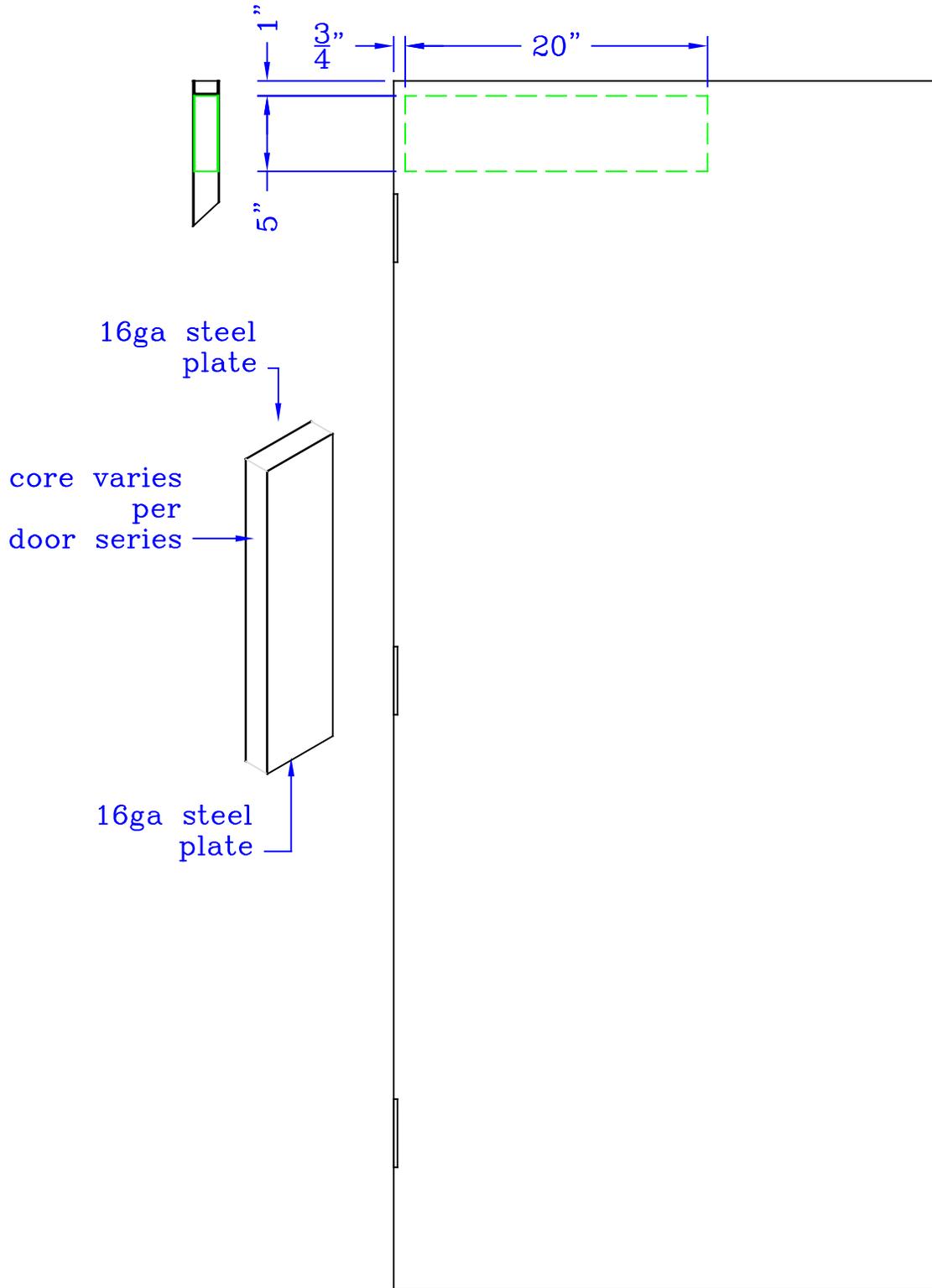
Up to 8'0" top rod at 12", must specify if door over 8'0"

**Surface bolt reinforcement, 16ga**  
Cold fused

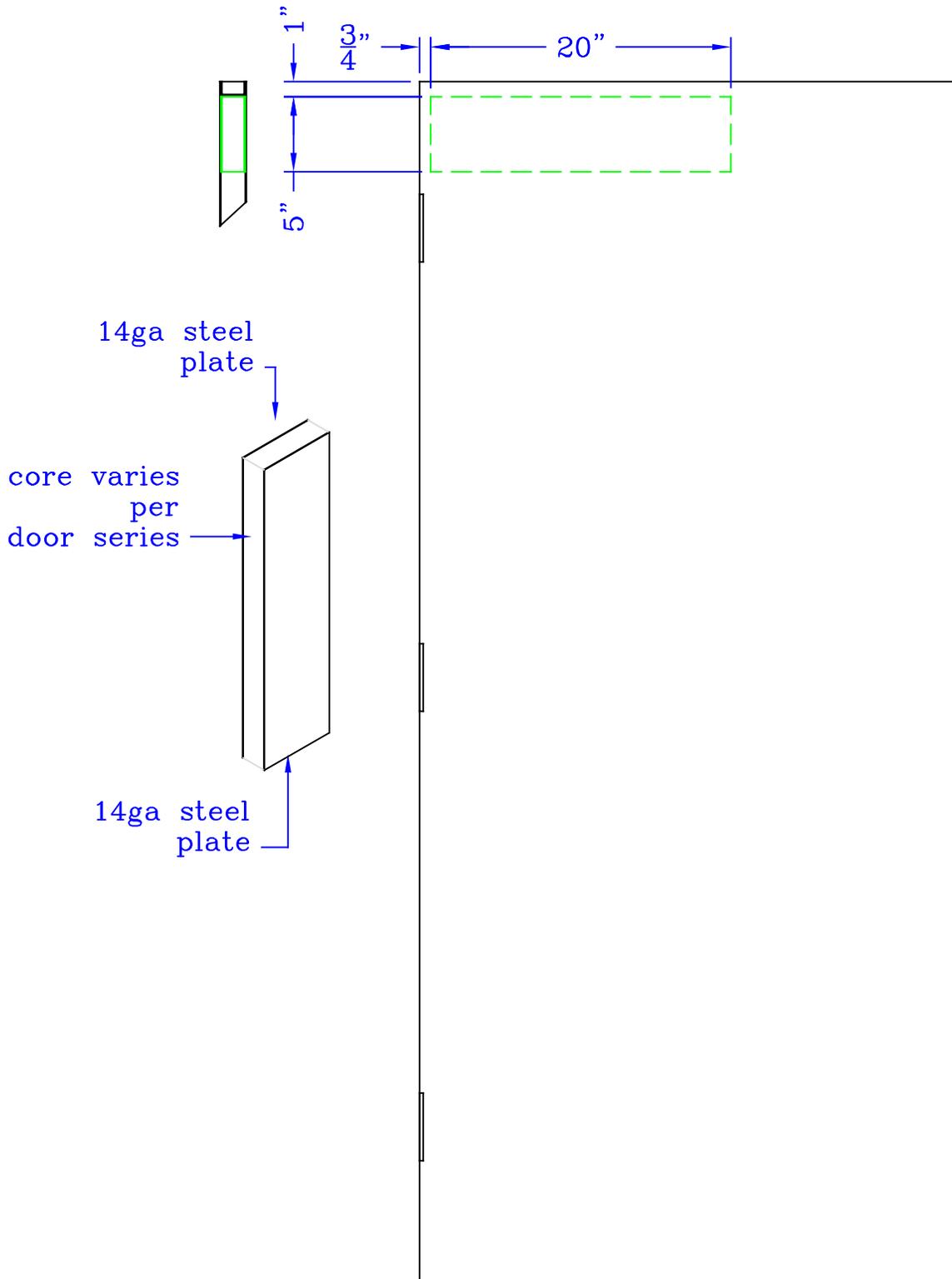


### Standard closer reinforcement, 16ga

Cold fused

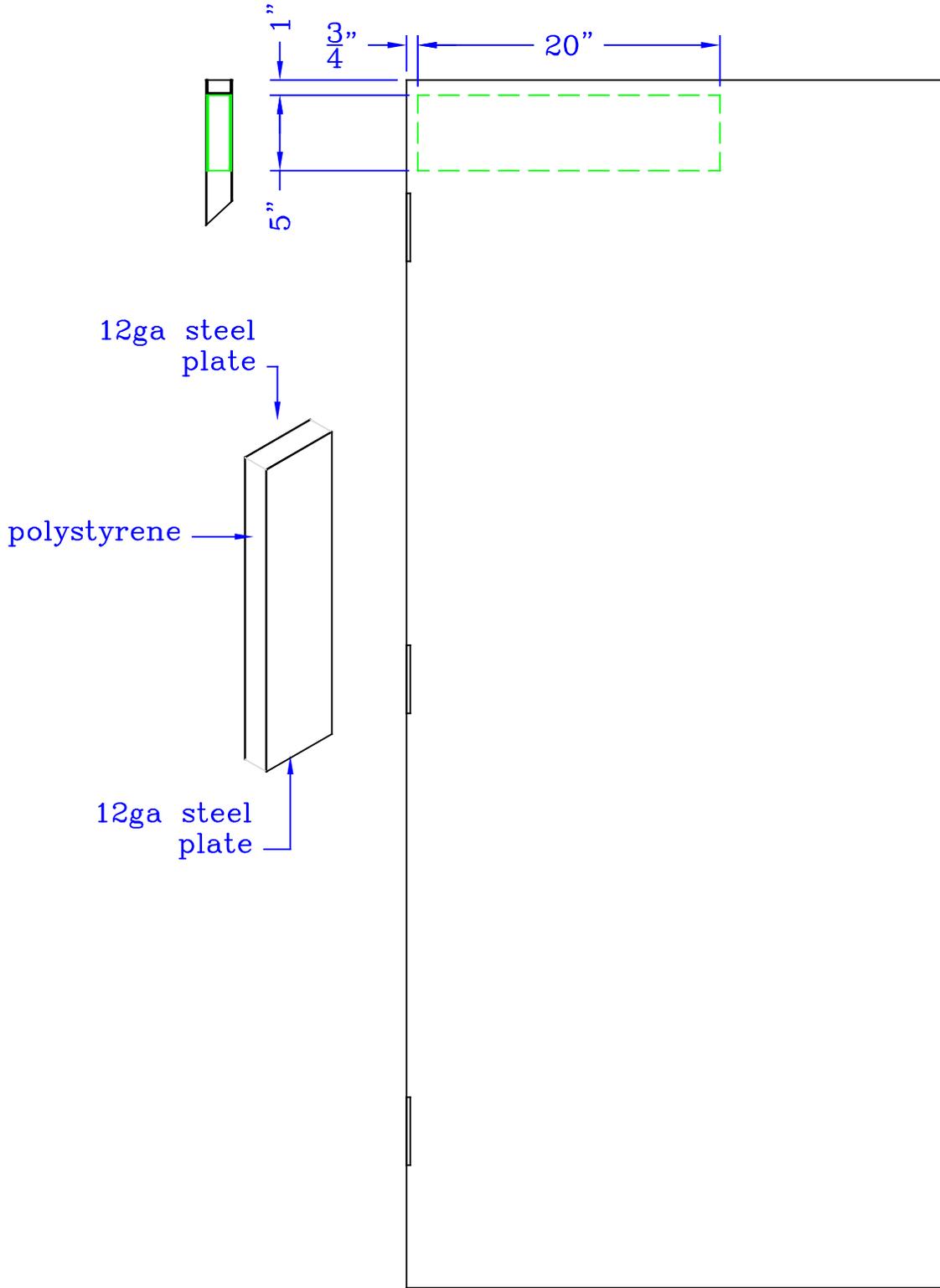


**Standard closer reinforcement, 14ga**  
Cold fused

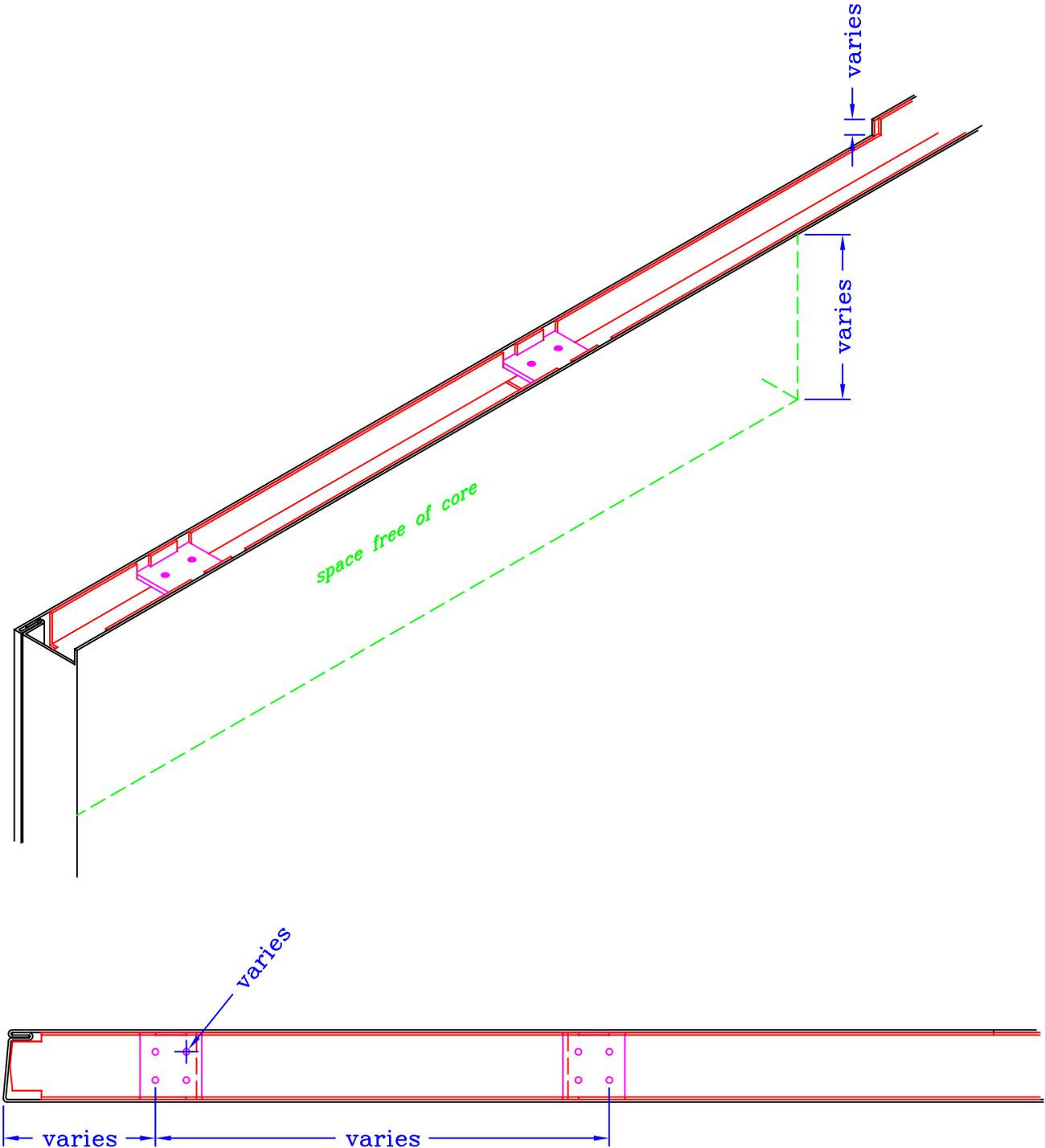


### Standard closer reinforcement, 12ga

Cold fused

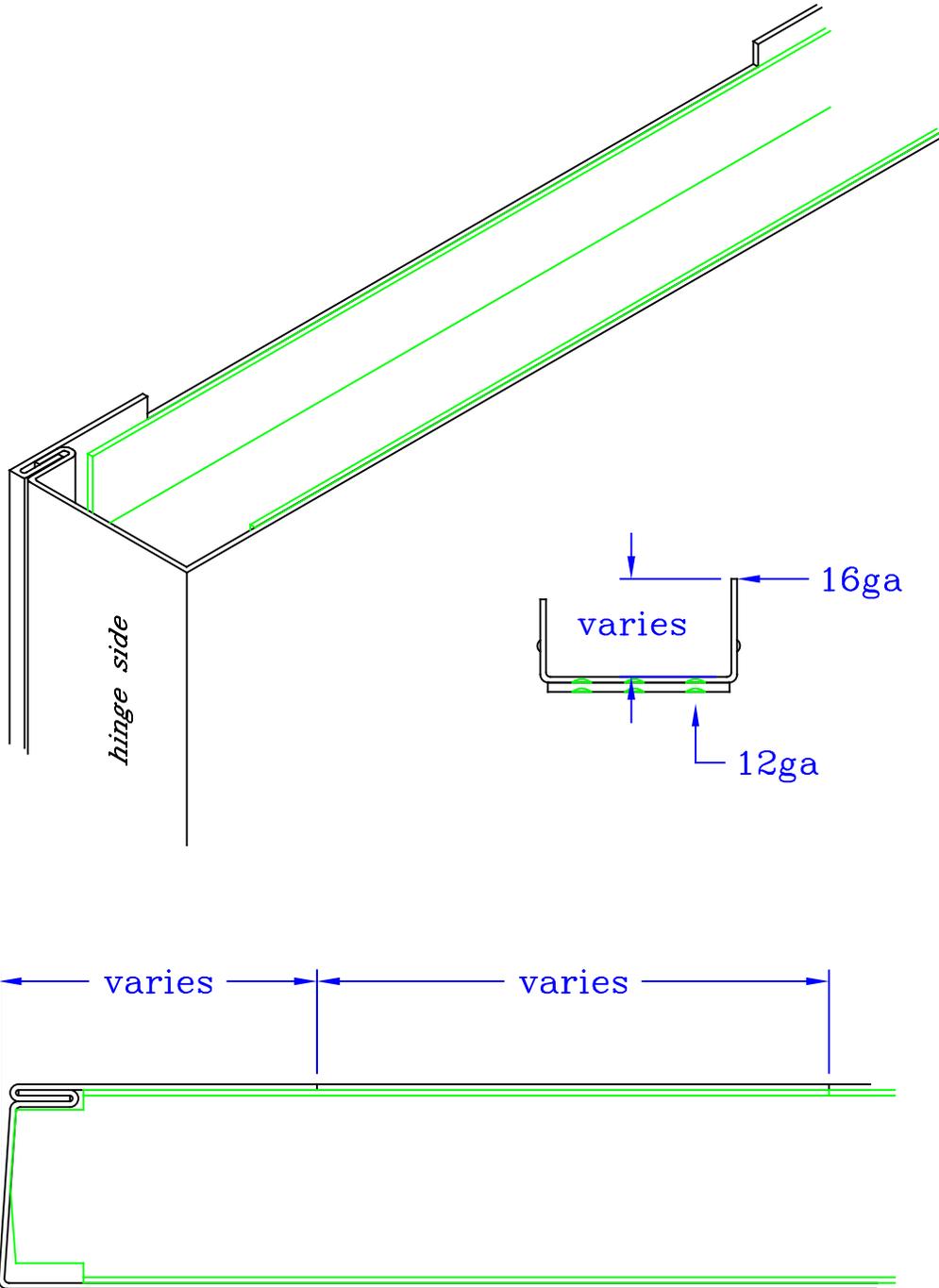


**Concealed in door closer prep.,12ga**



\*manufacturer's template to be provided  
Top cap options not available

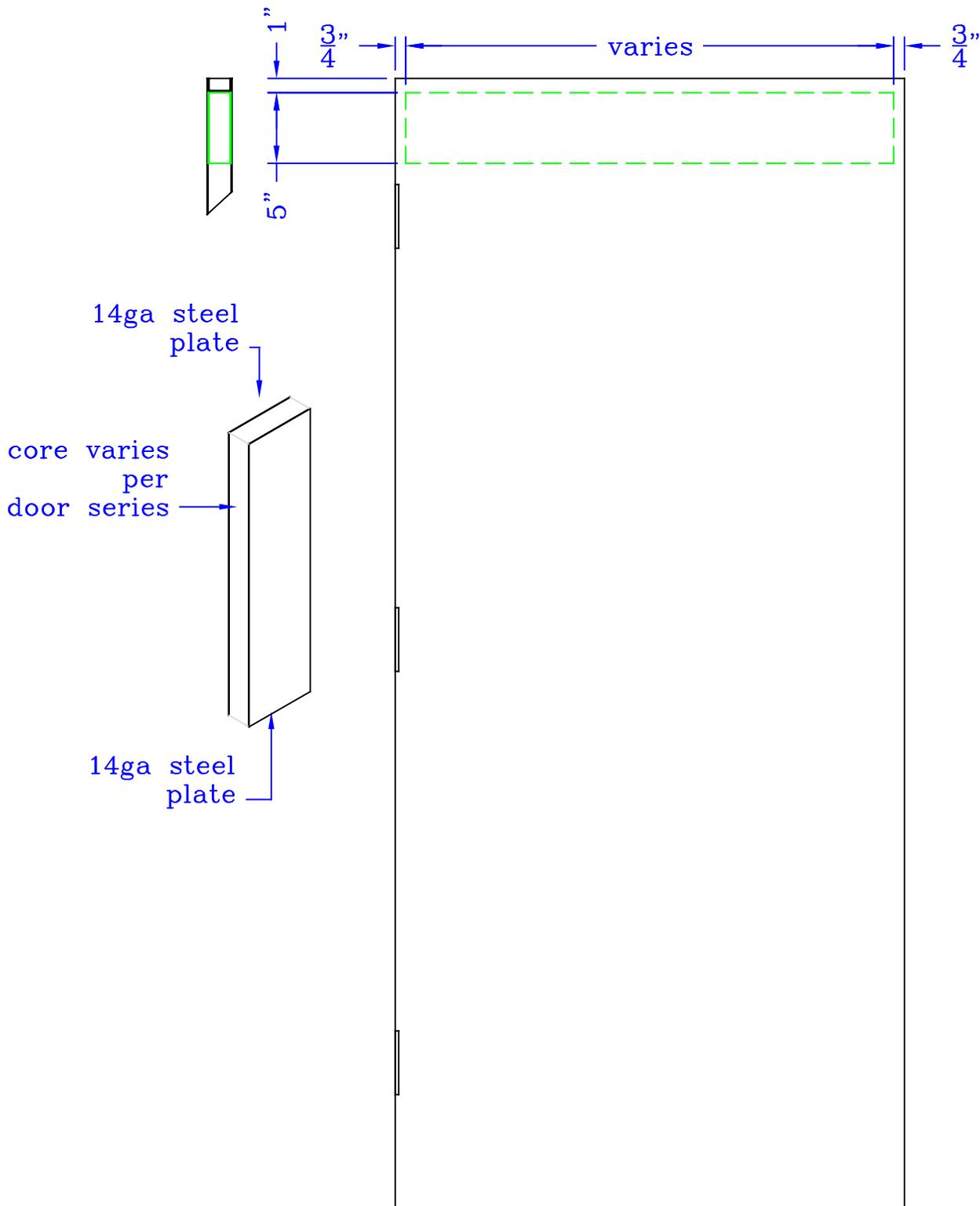
**Prep. for concealed overhead stop**



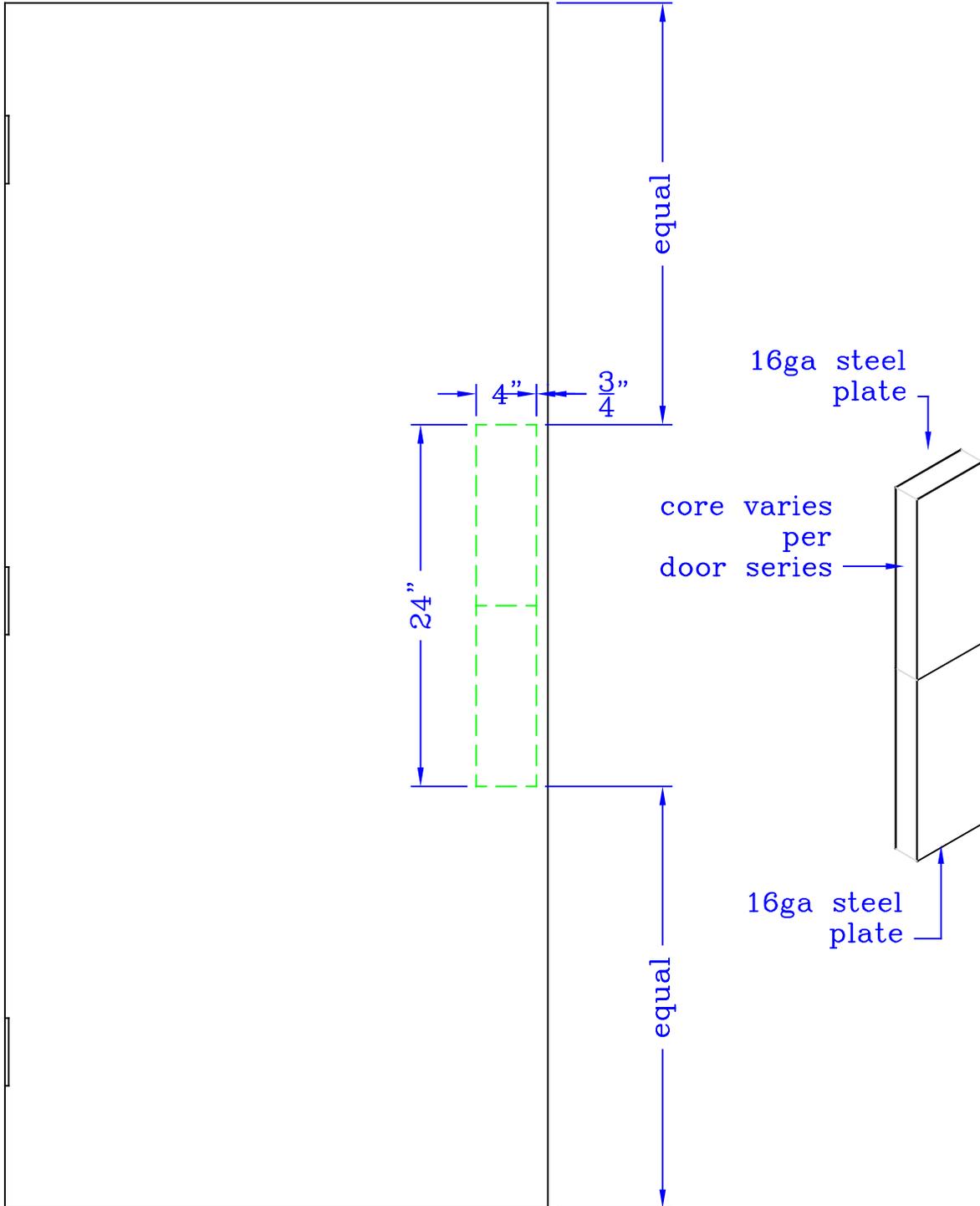
\*manufacturer's template to be provided  
Top cap options not available

## Full width closer reinforcement, 14ga

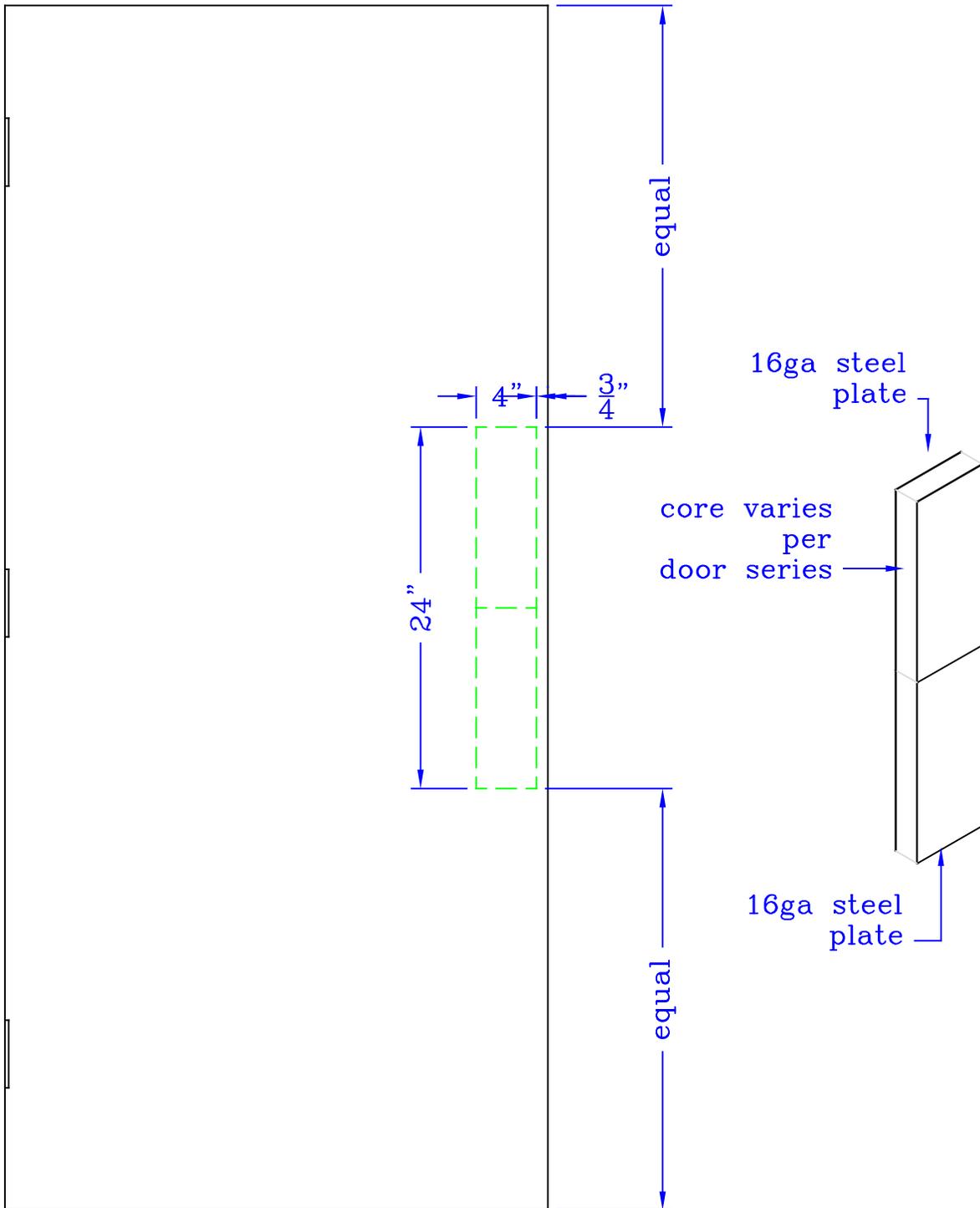
Cold fused



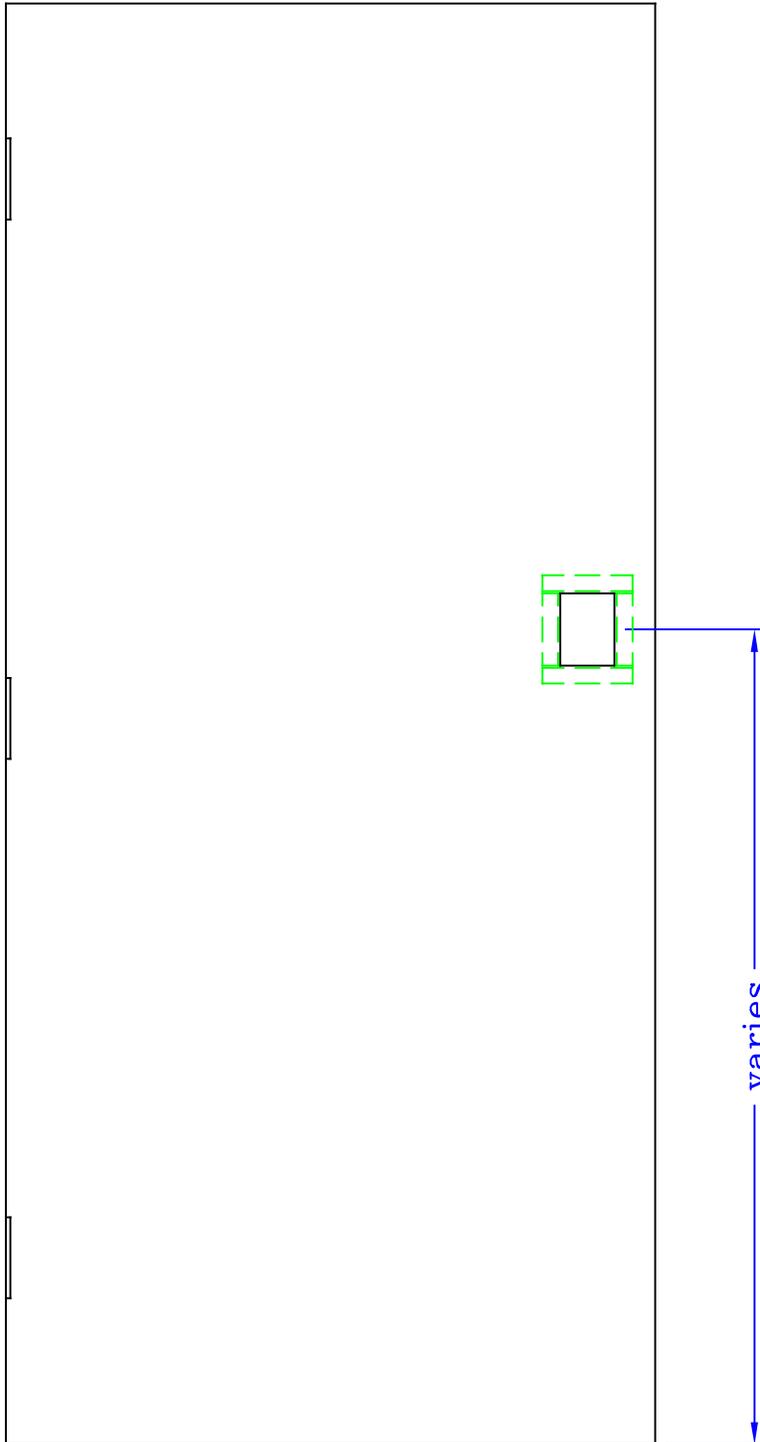
**Push and pull reinforcement, 16ga**  
Cold fused



**Pull with grab bar reinforcement, 16ga**  
Cold fused

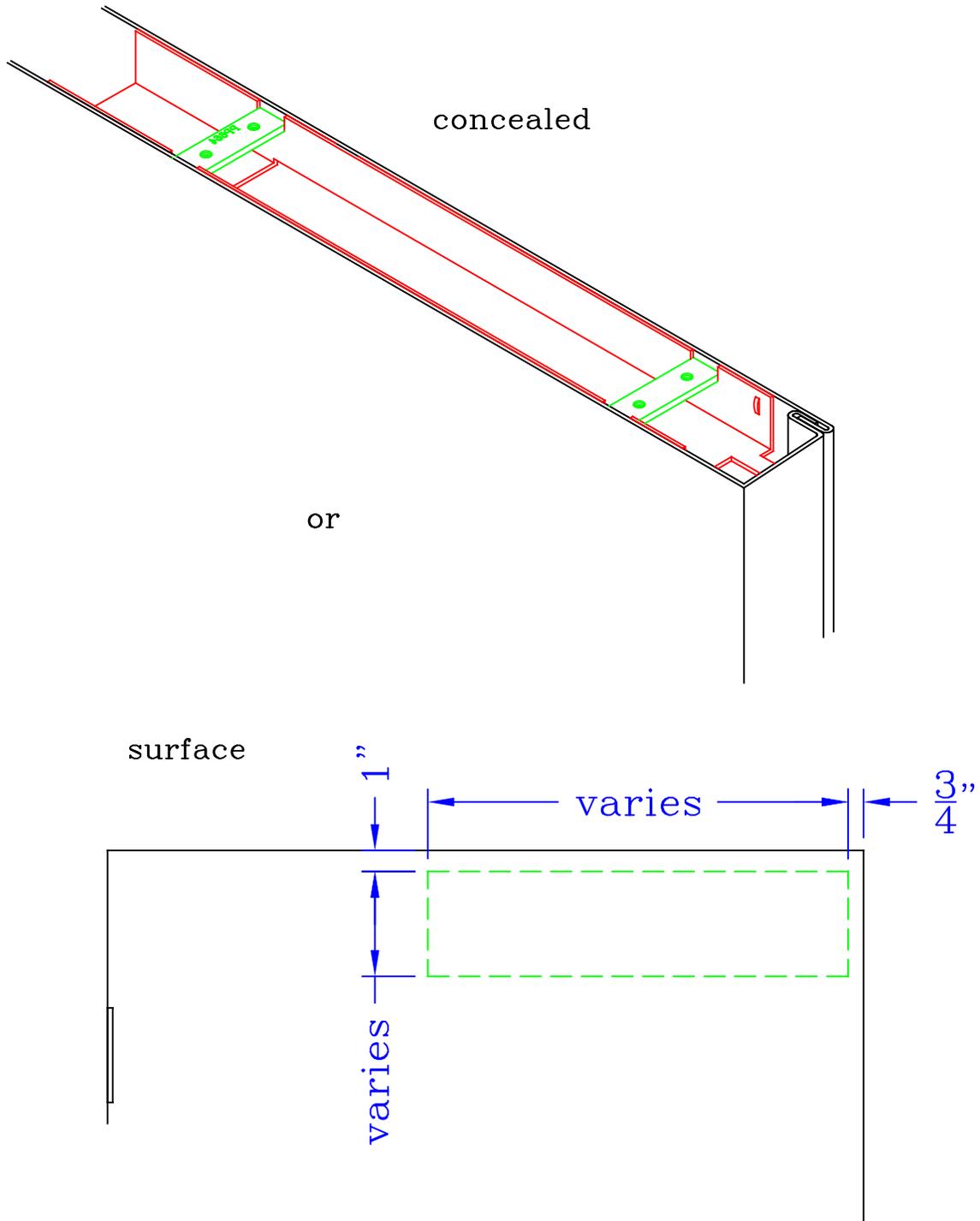


**Flush pull with capping (push, pull or both sides), 18ga**  
Cold fused



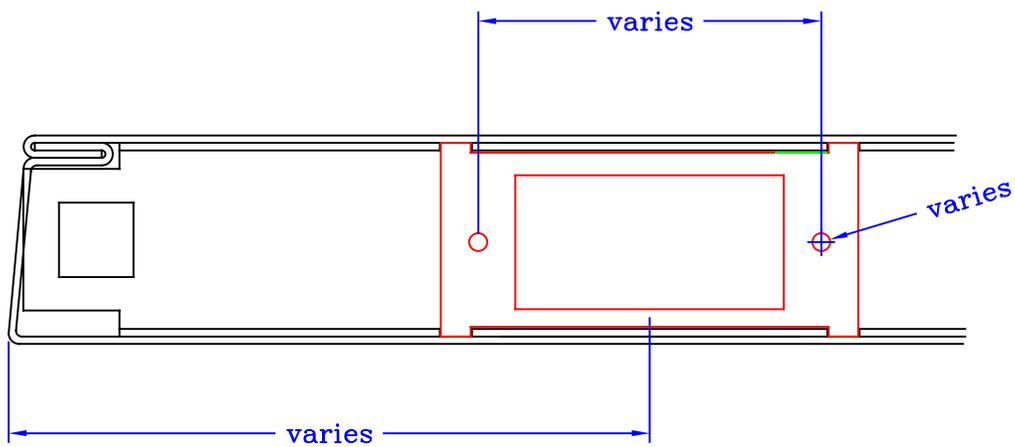
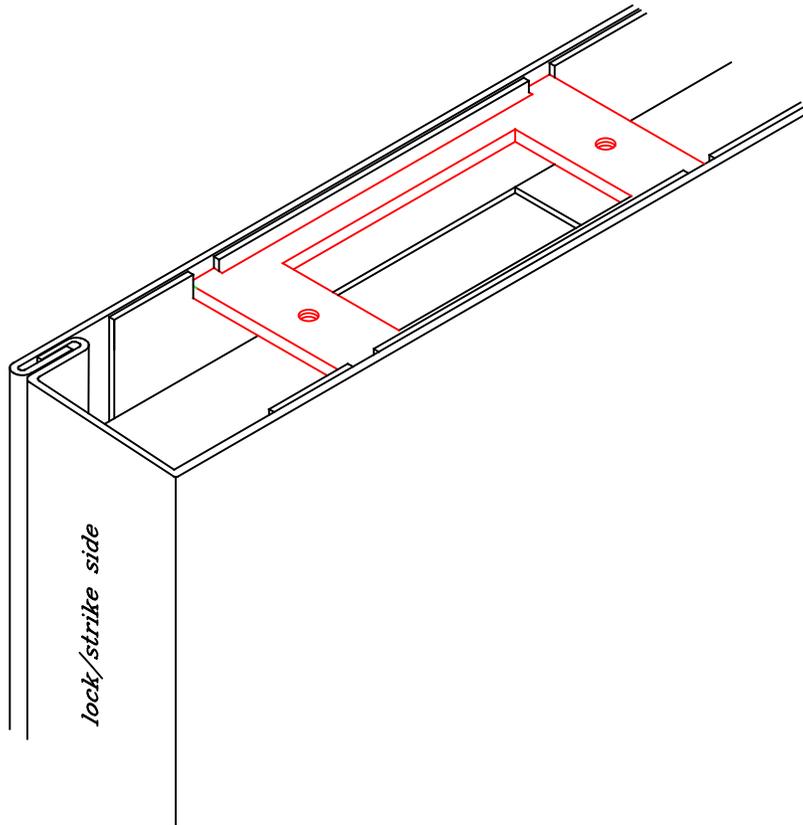
\*manufacturer's template to be provided

### Shearlock reinforcement



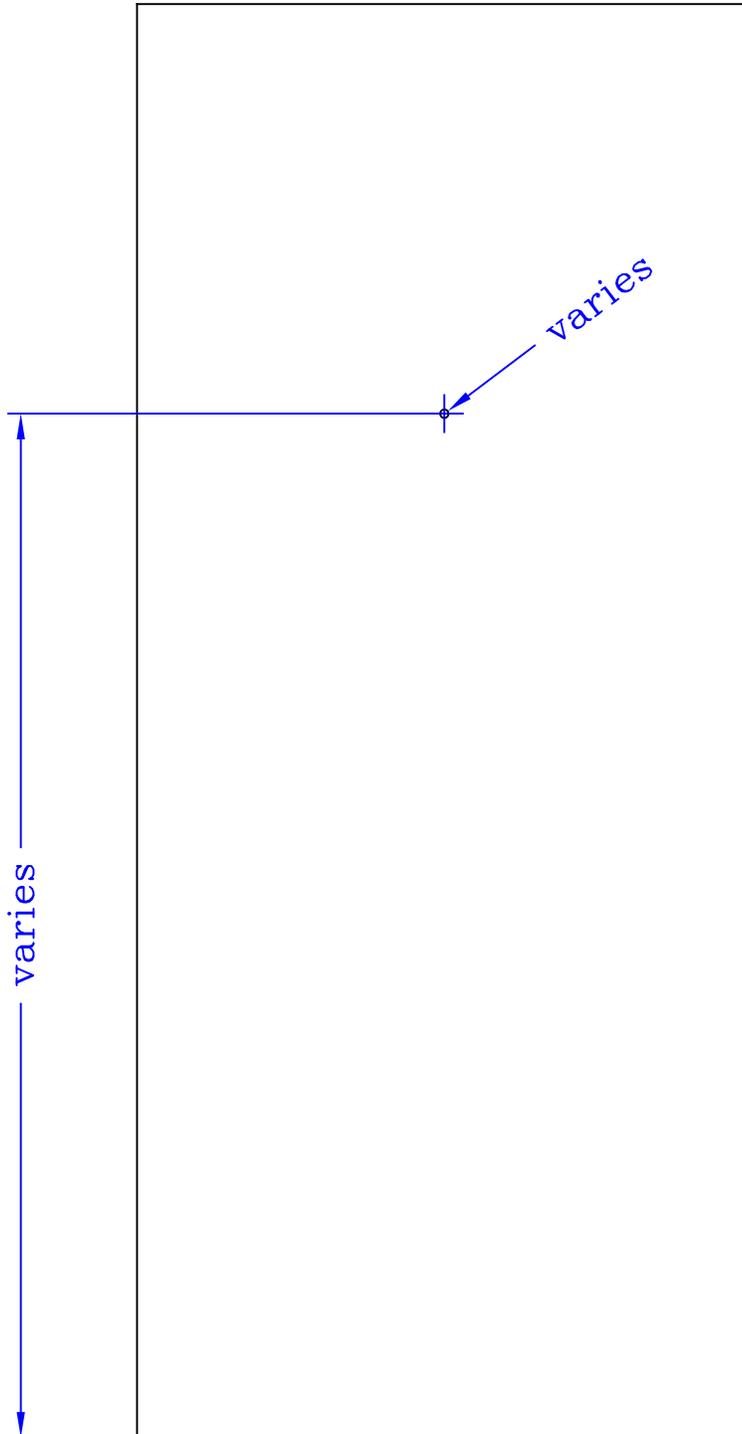
\*manufacturer's template to be provided

**Roller latch/catch prep., 12ga**  
tack welded



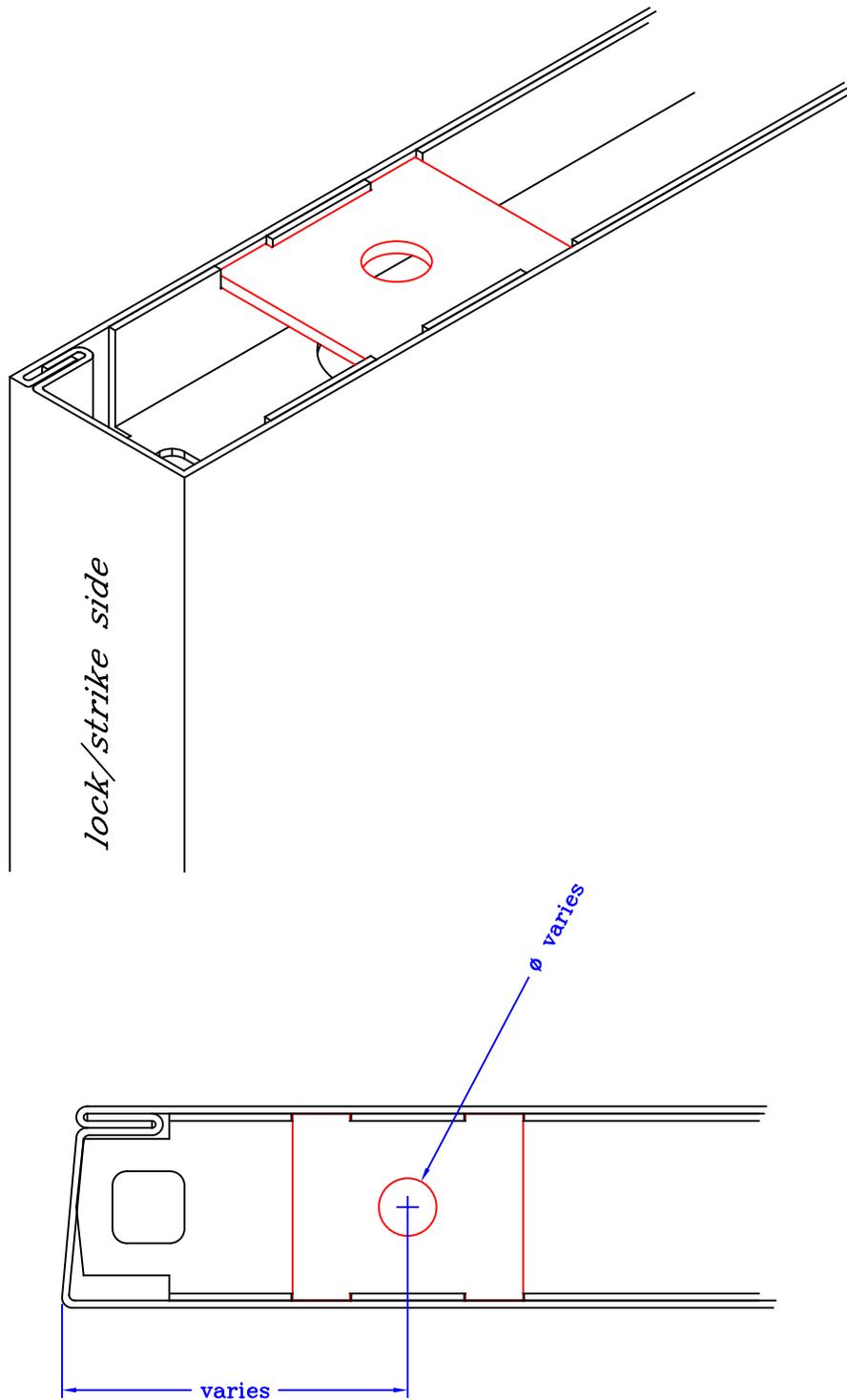
\*manufacturer's template to be provided

### Hole for door viewer/peep hole



\*manufacturer's template to be provided.

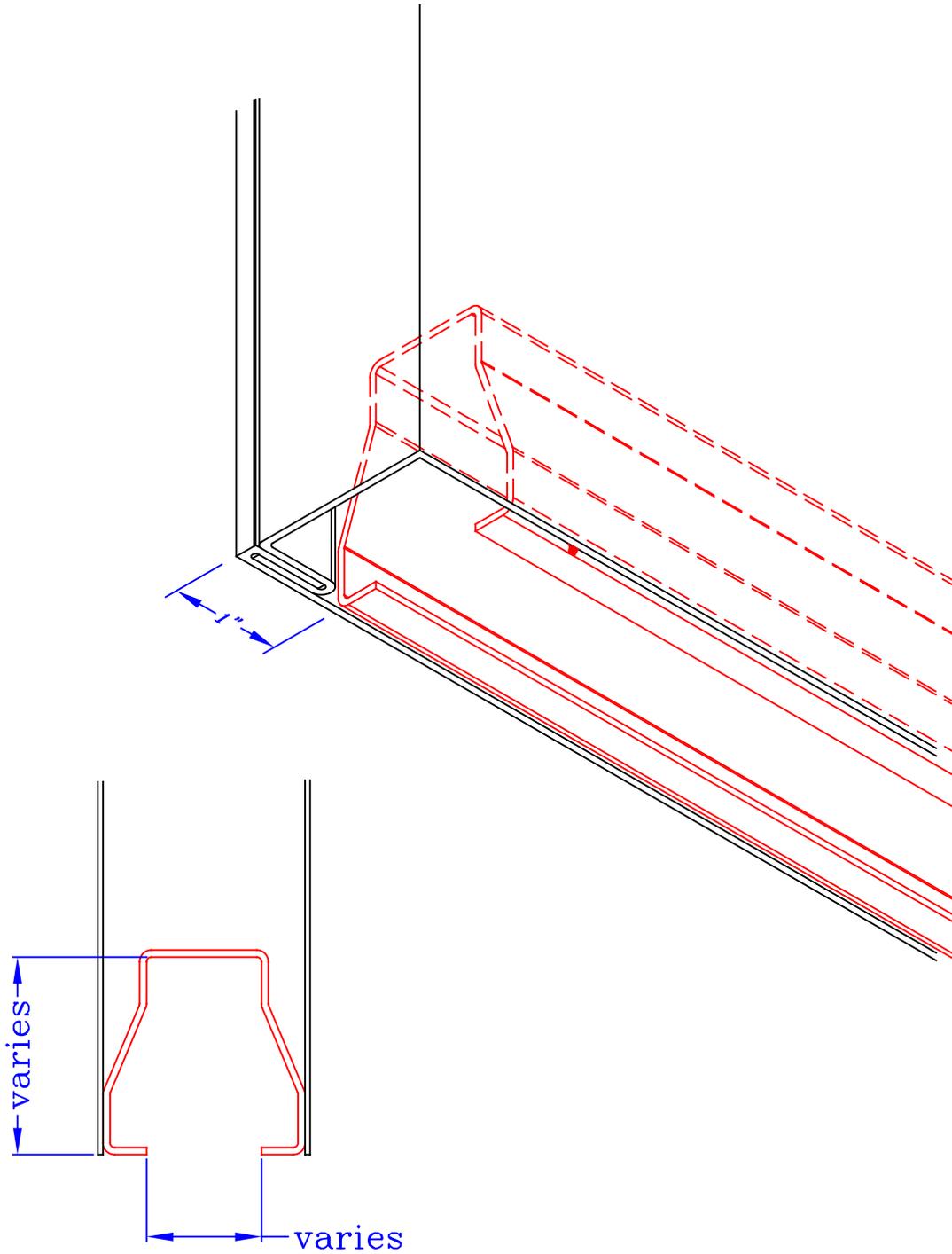
**Prep. for magnetic contact with reinforcement, 12ga**



\*manufacturer's template to be provided

### Prep. for automatic door bottom, 16ga

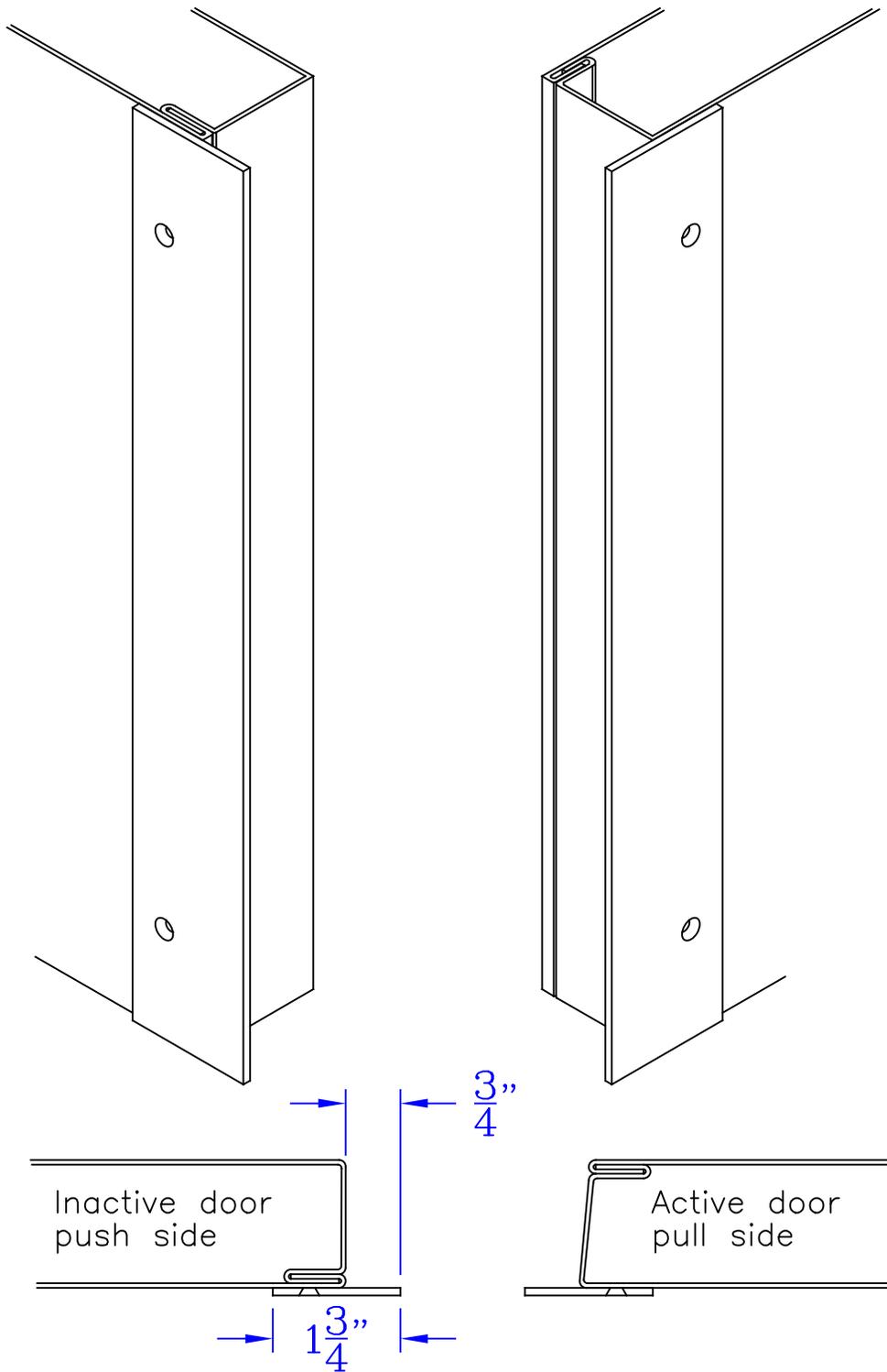
Tack welded



\*manufacturer's template to be provided

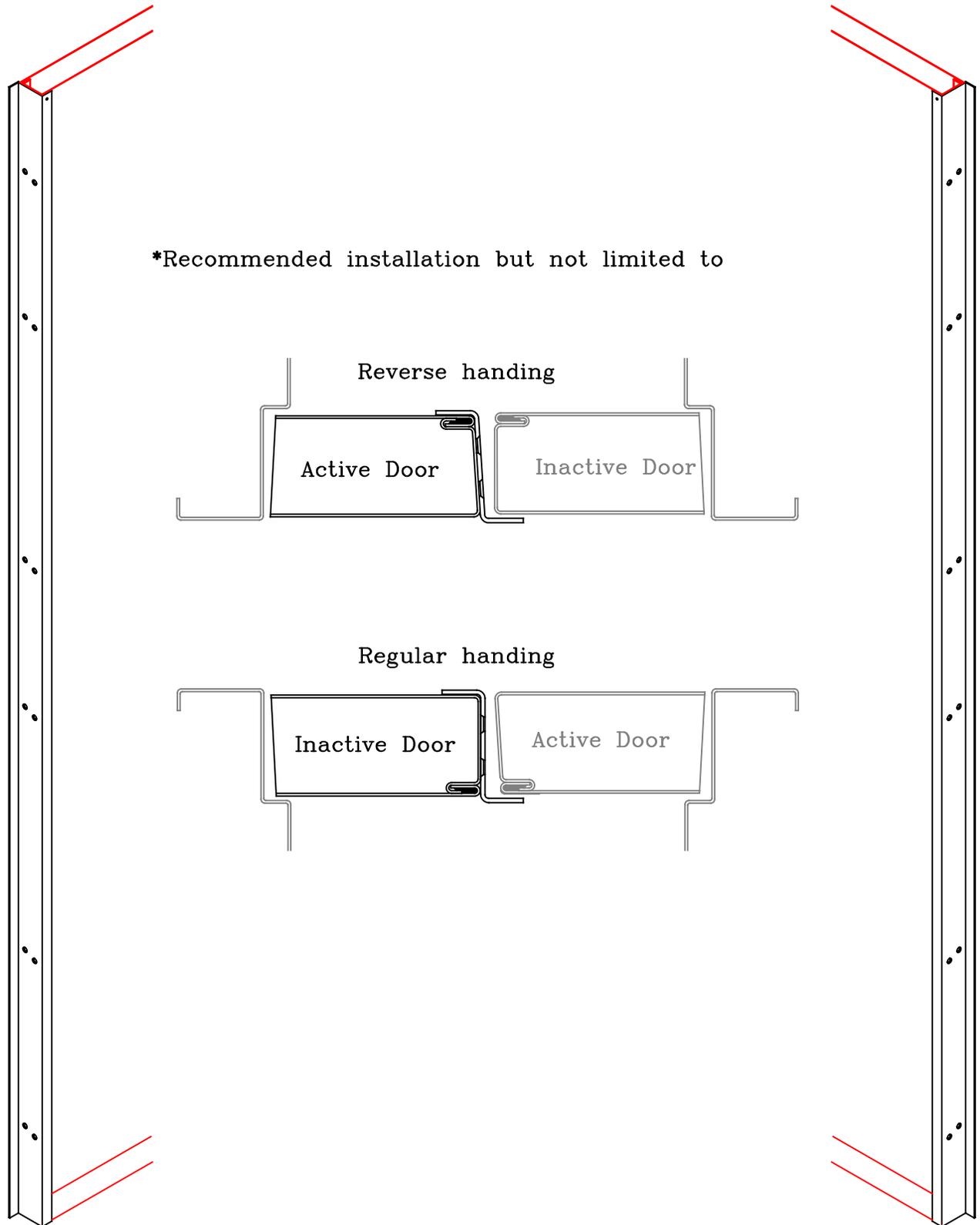
\*\* standard inverted channel for up to 7/8" high automatic door bottom

### Flat bar astragal, 12ga



Available screwed or welded, see options SAS and WAS.

## "Z" Astragal, 14ga



\*Recommended installation but not limited to

Reverse handing

Active Door

Inactive Door

Regular handing

Inactive Door

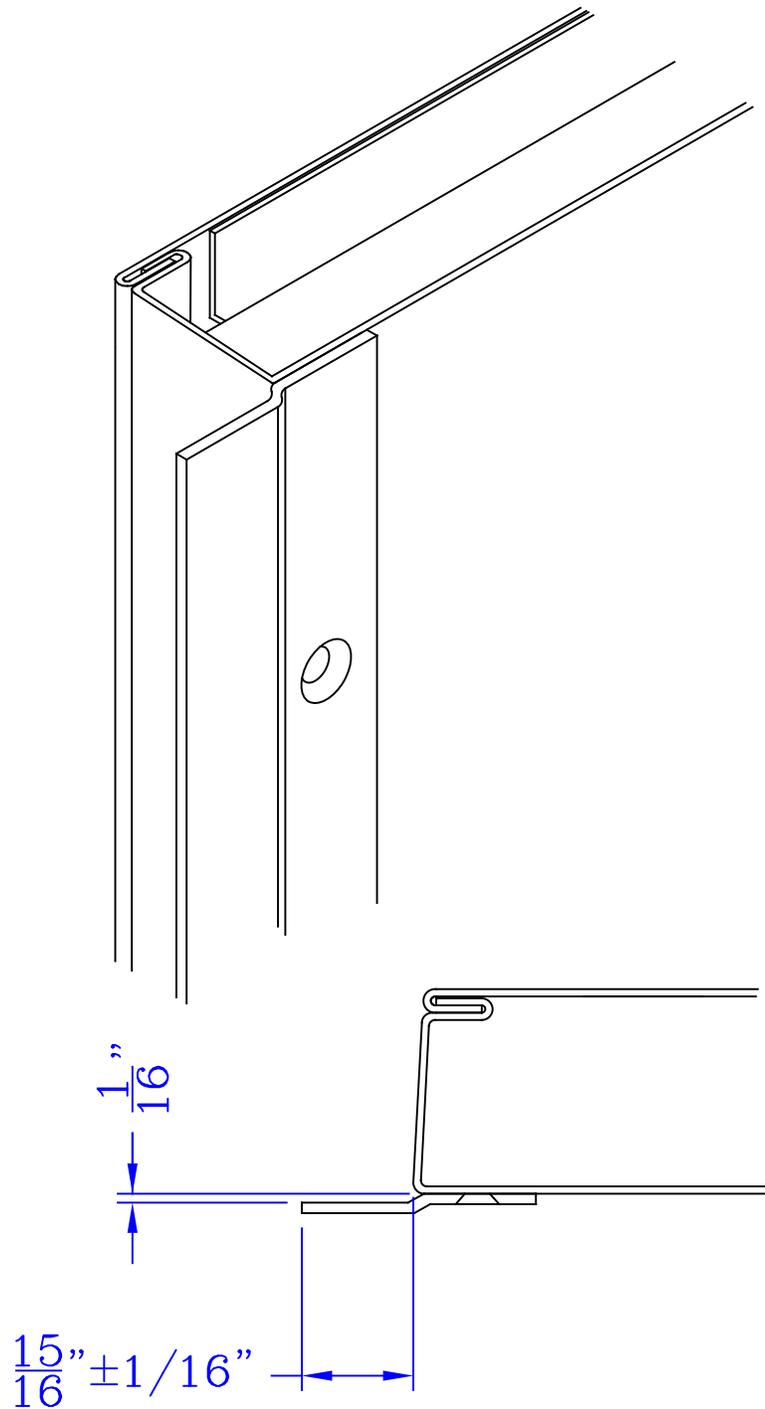
Active Door

Astragal & Option

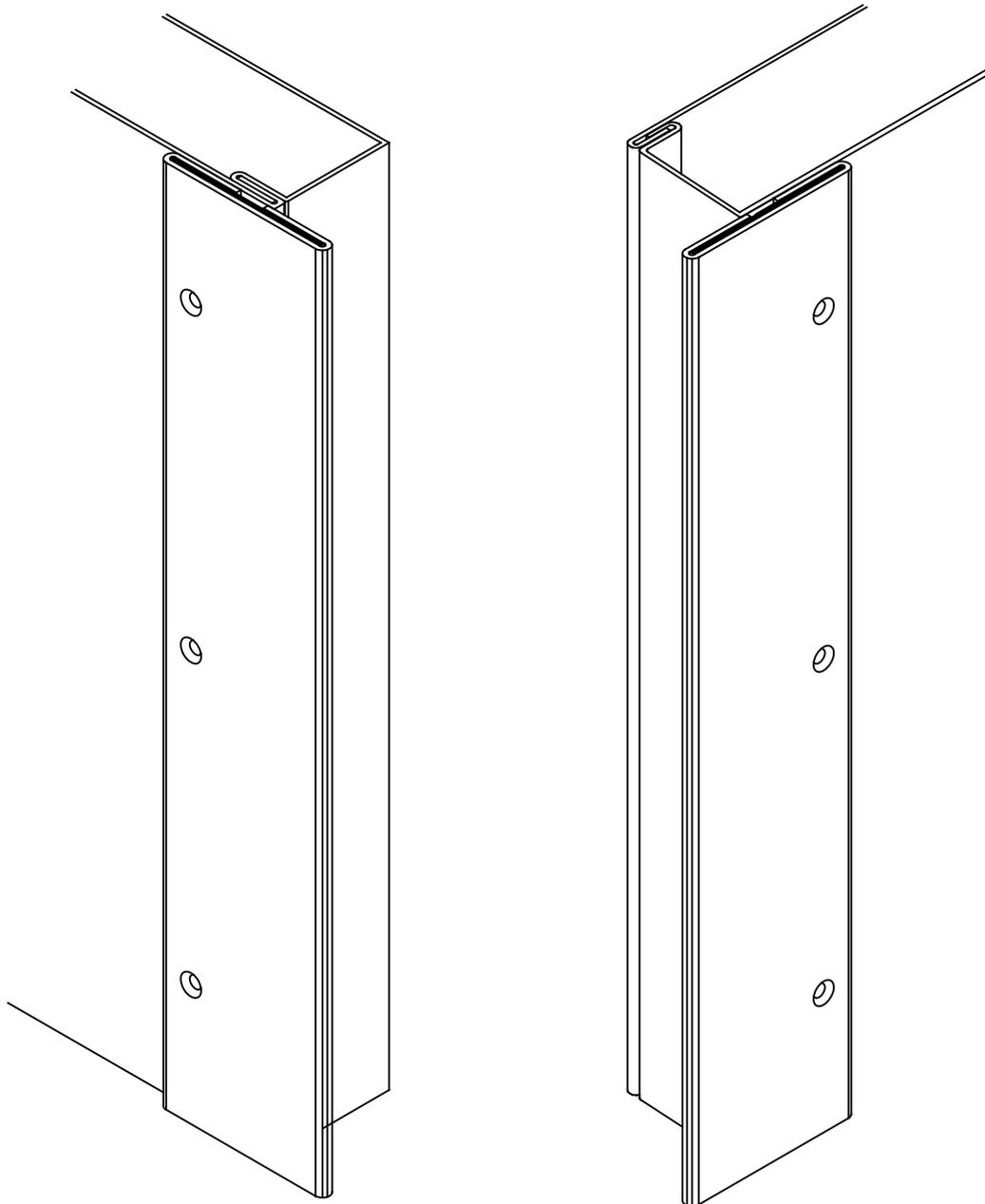
ZAS

Available screwed or welded, see options SAS and WAS.  
Minus 1/16" in door net width.

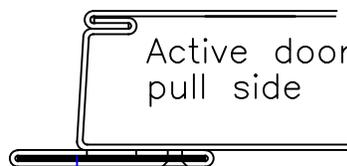
## Deviated astragal for single leaf, 14ga



**1/16" lead flat bar astragal, 16ga**



Inactive door  
push side



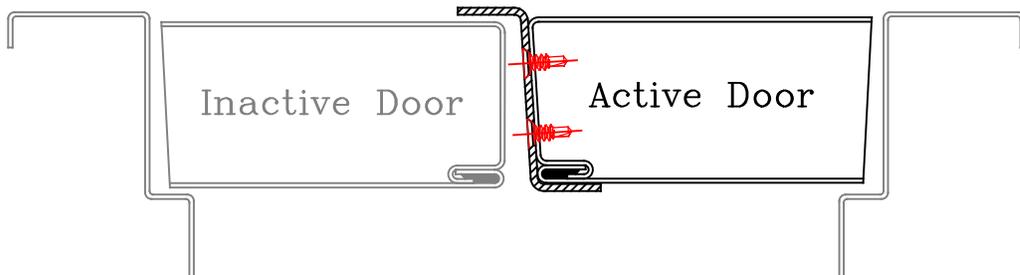
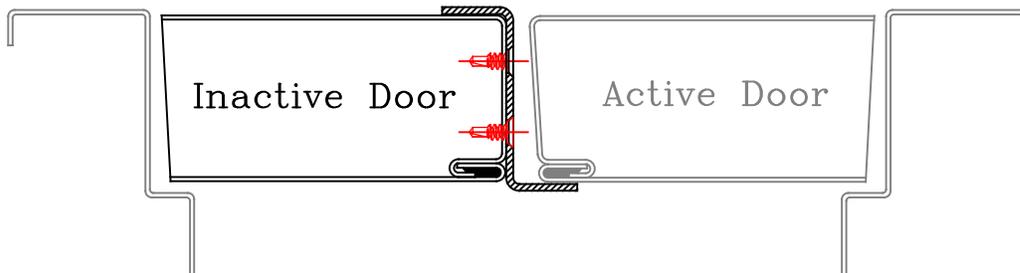
Active door  
pull side

$\frac{7}{8} \pm 1/16$ ''' →

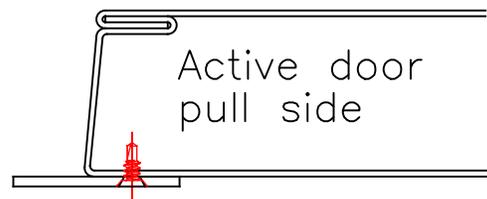
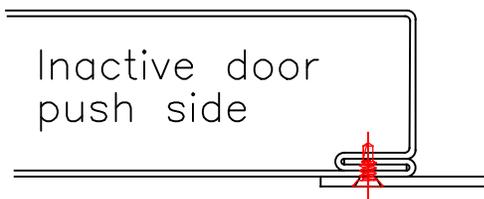
Available screwed or welded, see options SAS and WAS.

## Screwed astragal

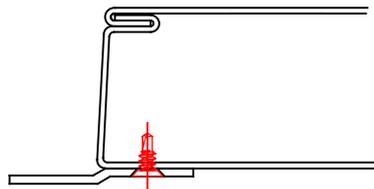
"Z" astragal



flat astragal



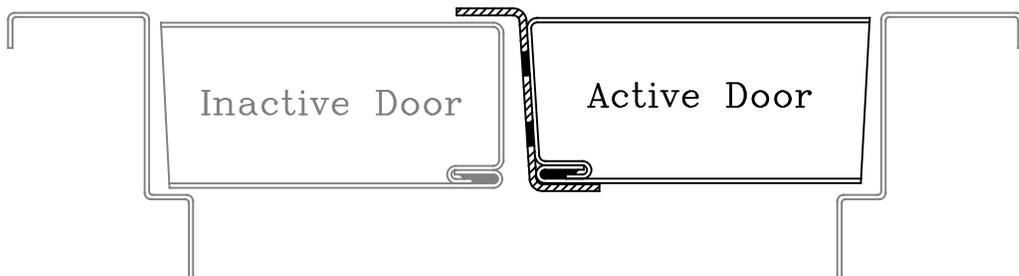
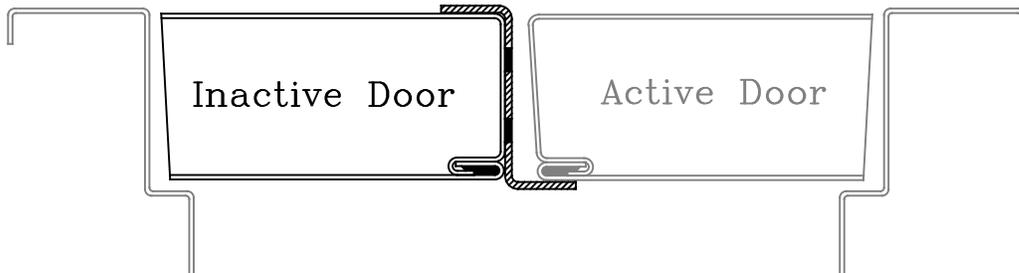
deviated astragal



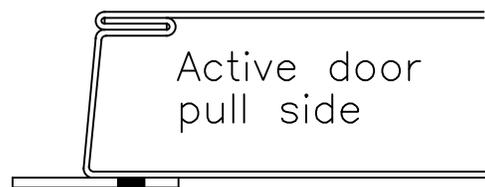
See item #00114 for screw detail

## Extra for welded astragal to the door

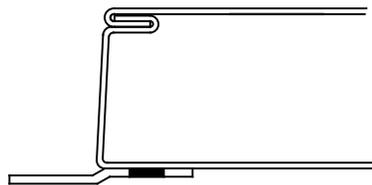
"Z" astragal



flat astragal

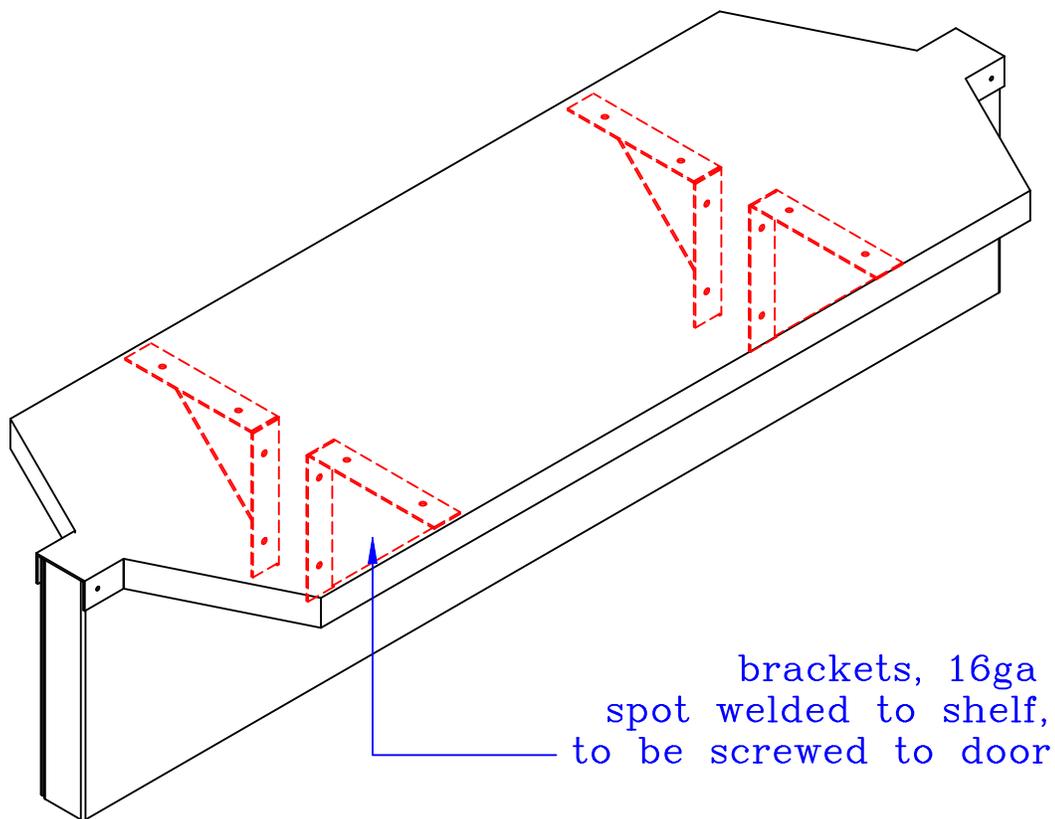
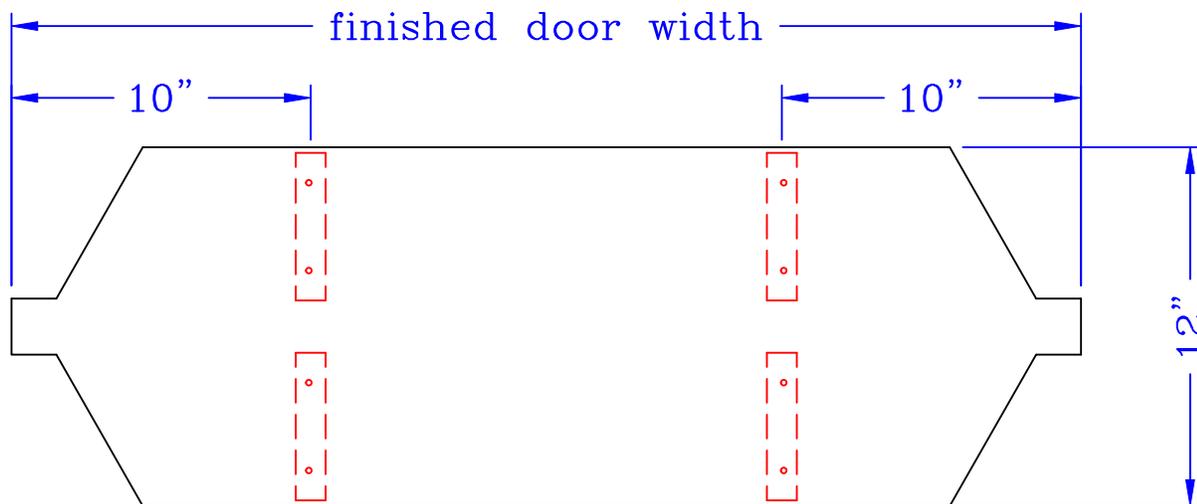


deviated astragal



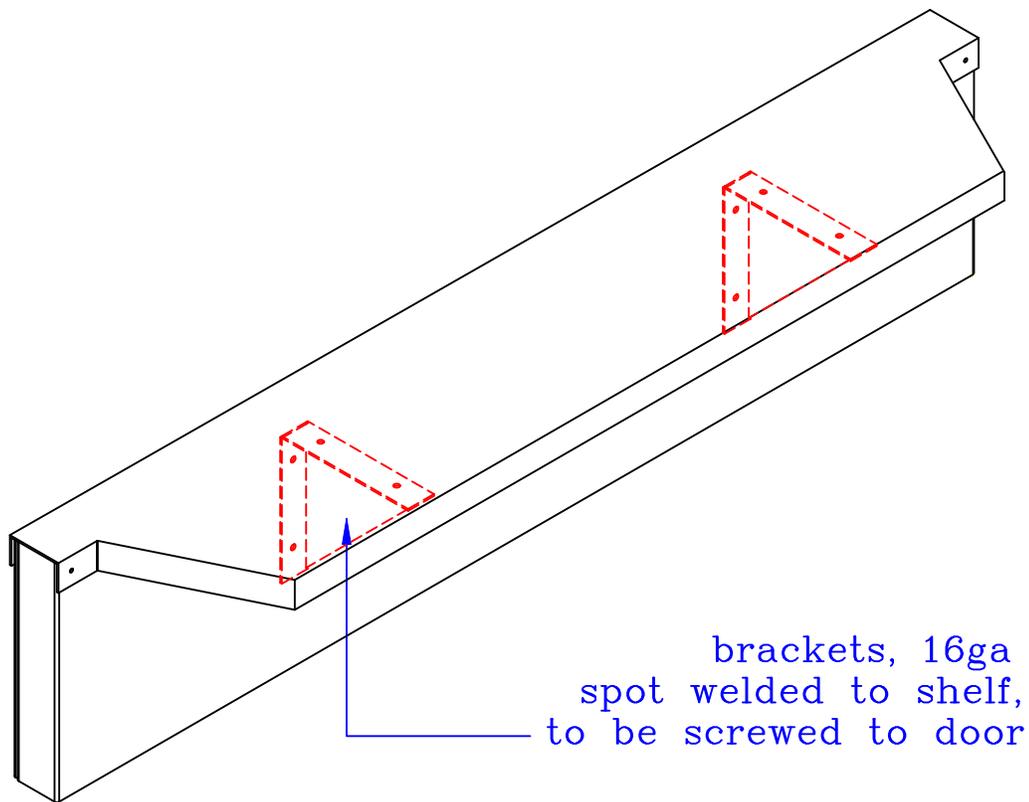
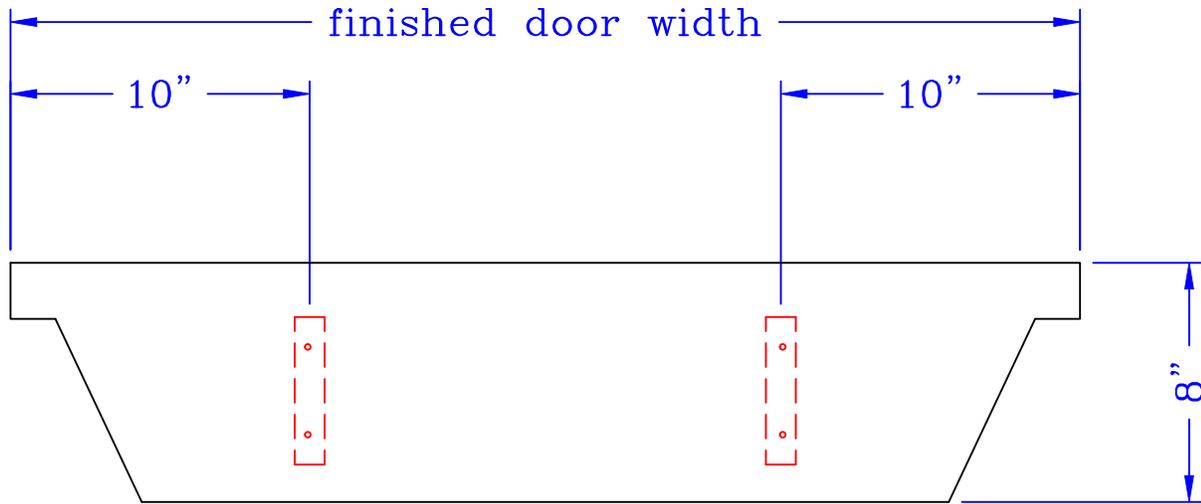
## Full dutch door shelf

Shipped loose



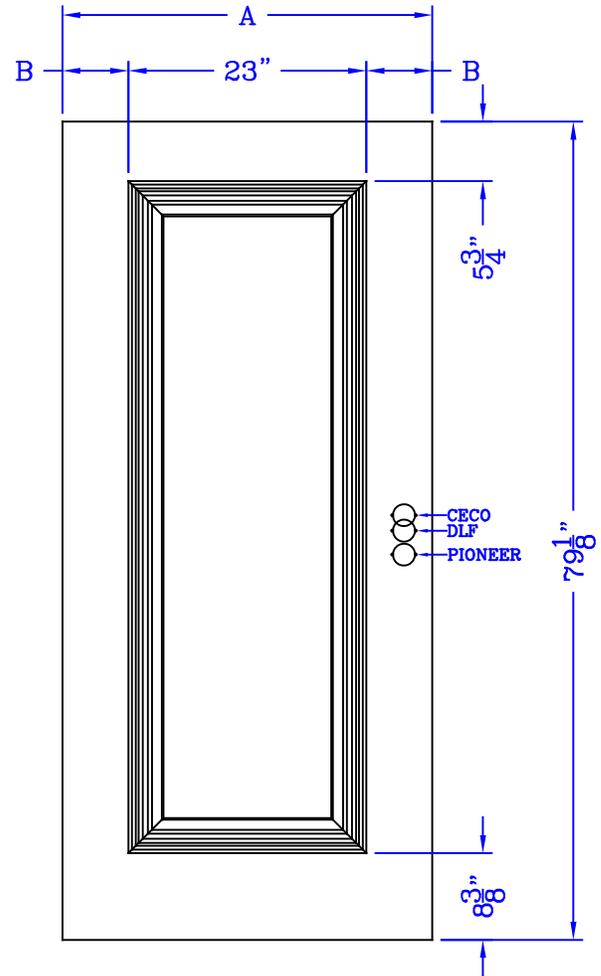
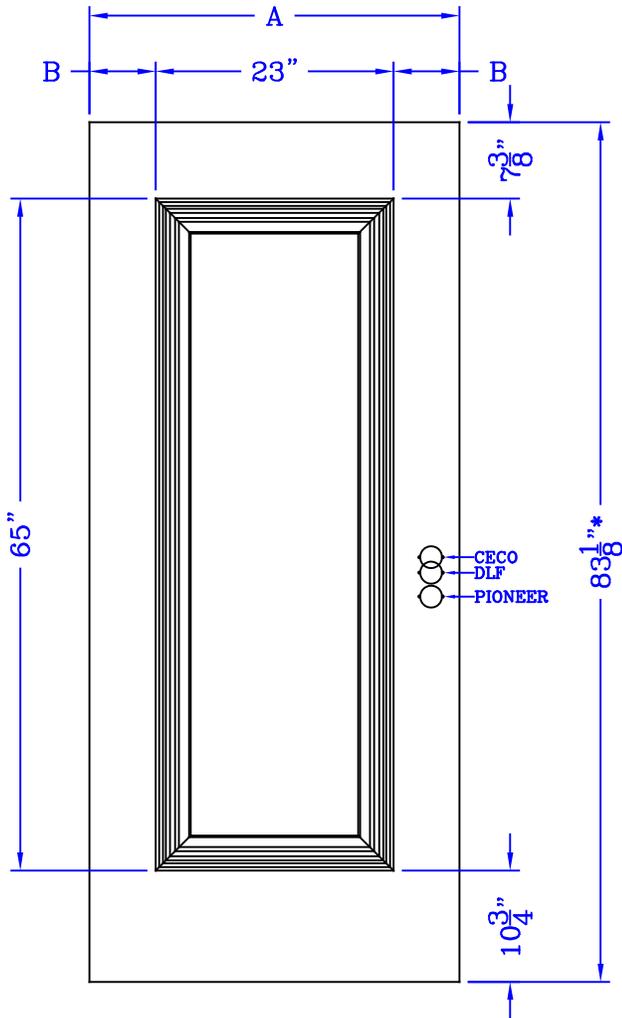
## Half dutch door shelf

Shipped loose



**One panel**

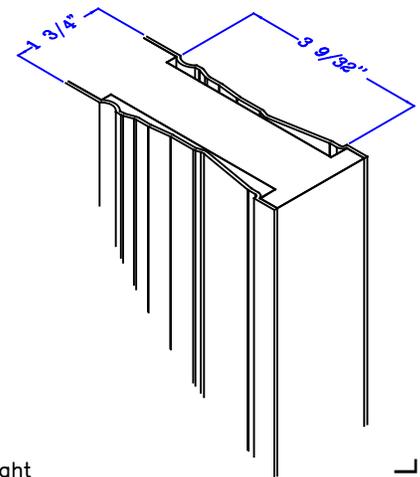
Available 18ga, A40 only.



Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
3'-0"	6 3/8
2'-10"	5 3/8
2'-8"	4 3/8
2'-6"	3 3/8

\*Maximum net height 83 1/8"

□ CW Door only



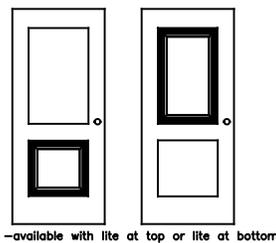
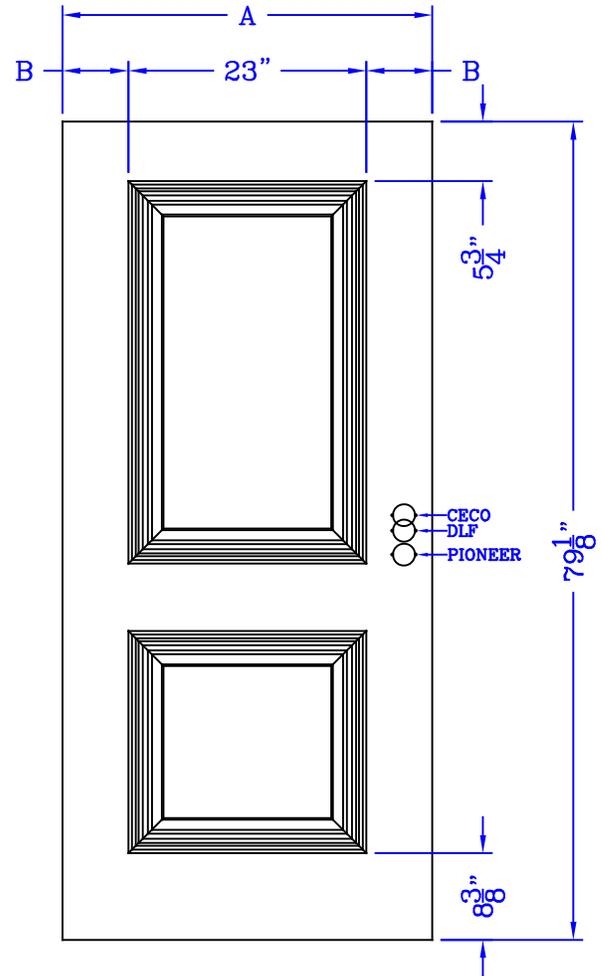
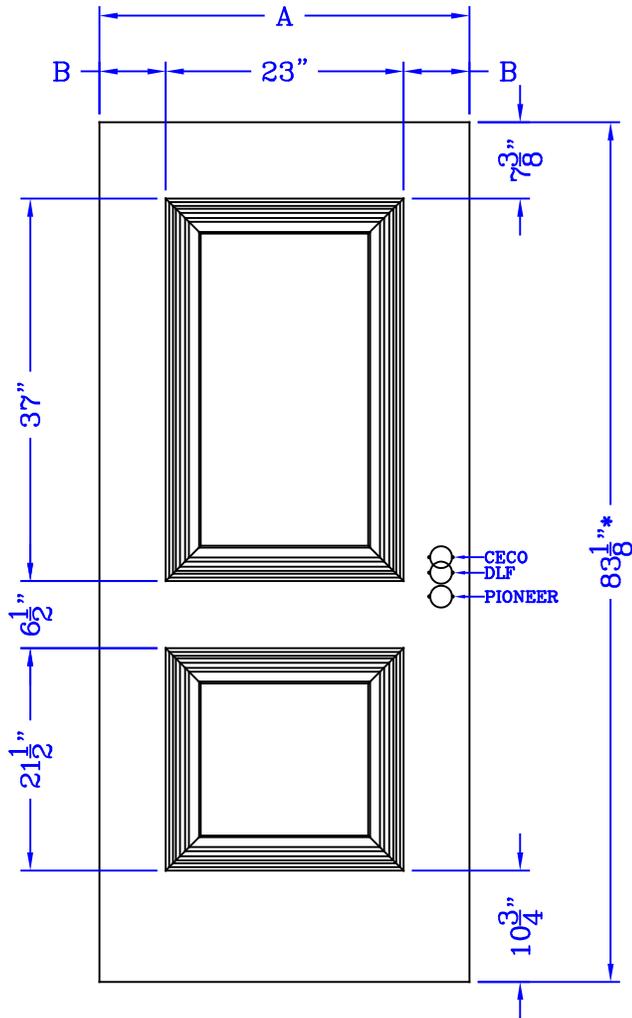
- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : will require an irregular backset at lock for 2'8" and 2'6" doors.

Model

1PNL

**Two panels**

Available 18ga, A40 only.

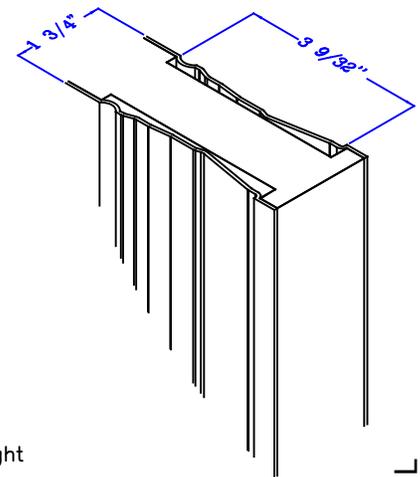


Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
□ 3'-0"	6 3/8
□ 2'-10"	5 3/8
□ 2'-8"	4 3/8
□ 2'-6"	3 3/8

\*Maximum net height 83 1/8"

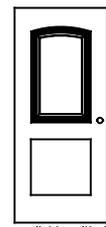
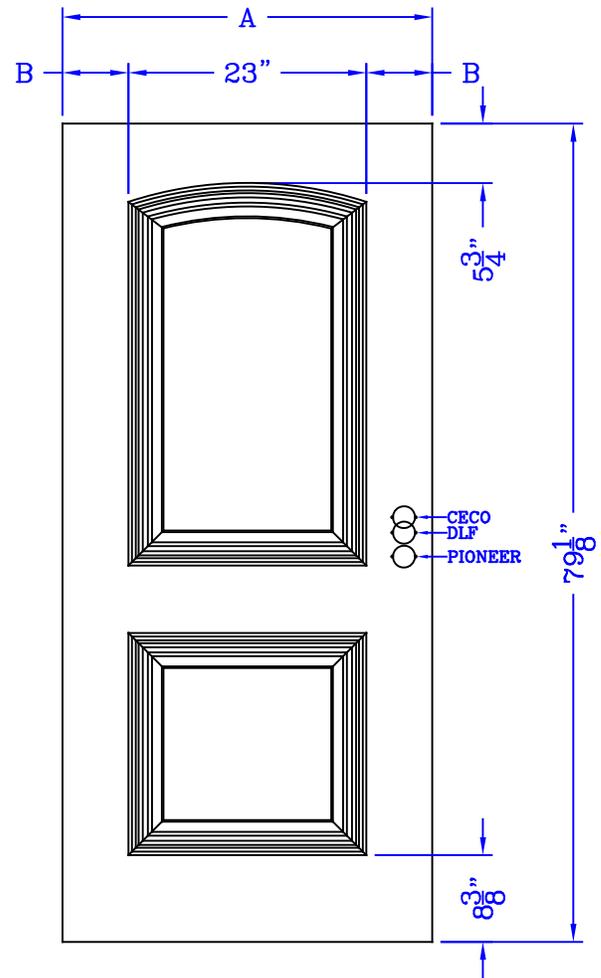
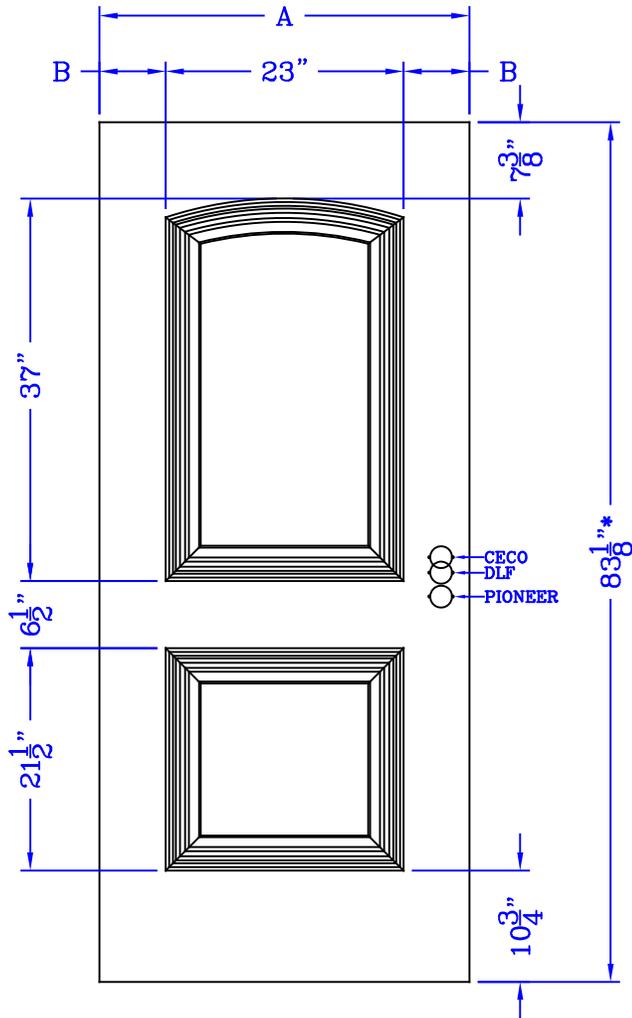
□ CW Door only

- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : will require an irregular backset at lock for 2'8" and 2'6" doors.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel



**Two panels soft arch**

Available 18ga, A40 only.



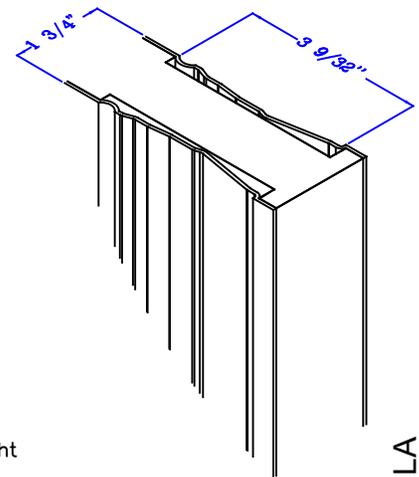
-available with lite at bottom

Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
□ 3'-0"	6 3/8
□ 2'-10"	5 3/8
□ 2'-8"	4 3/8
□ 2'-6"	3 3/8

\*Maximum net height 83 1/8"

□ CW Door only

- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : will require an irregular backset at lock for 2'8" and 2'6" doors.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel

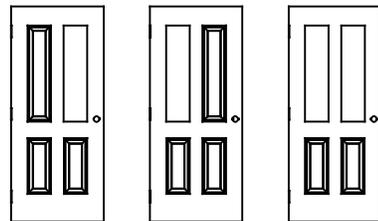
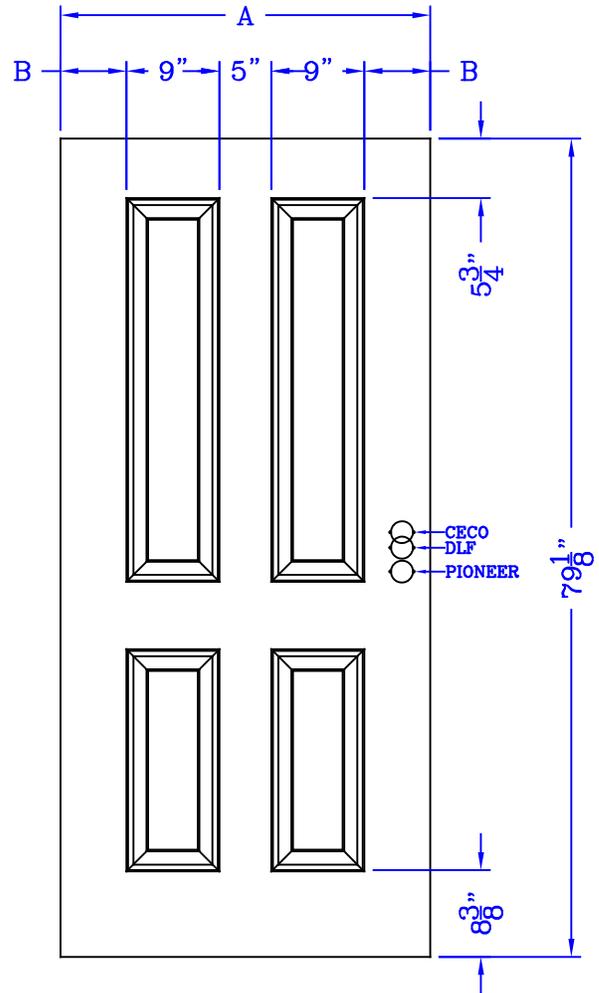
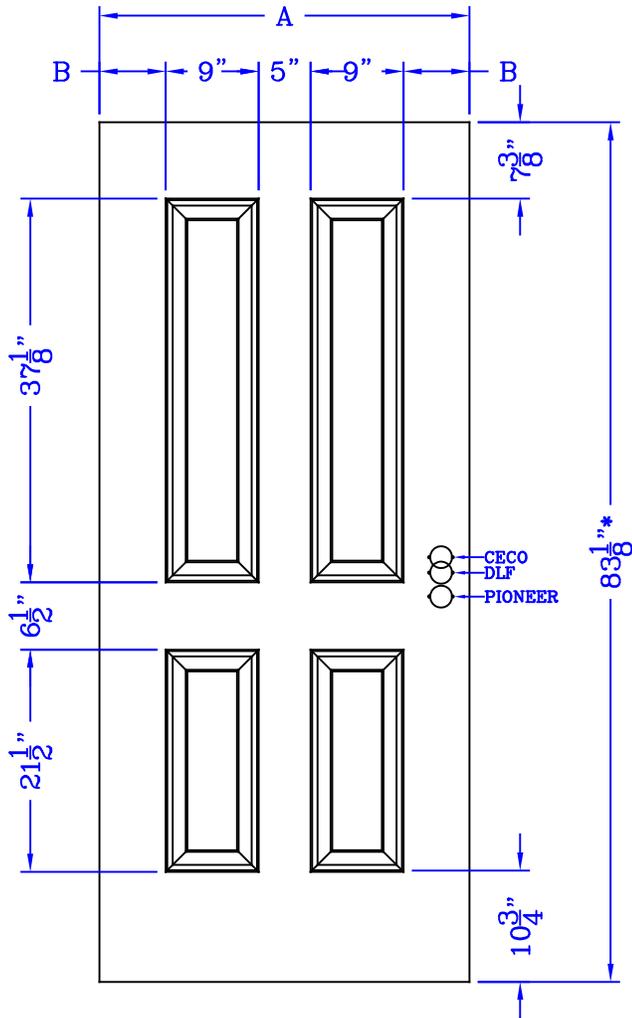


2PNLA

Model

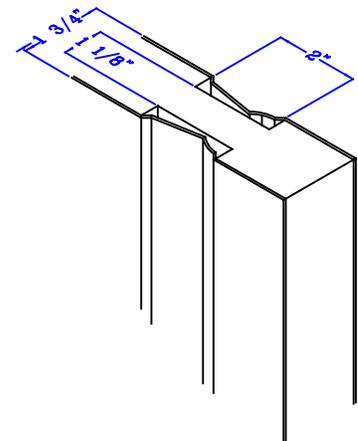
**Four panels**

Available 18ga, A40 only.



-available with lite in different configurations

Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
3'-0"	6 3/8
2'-10"	5 3/8



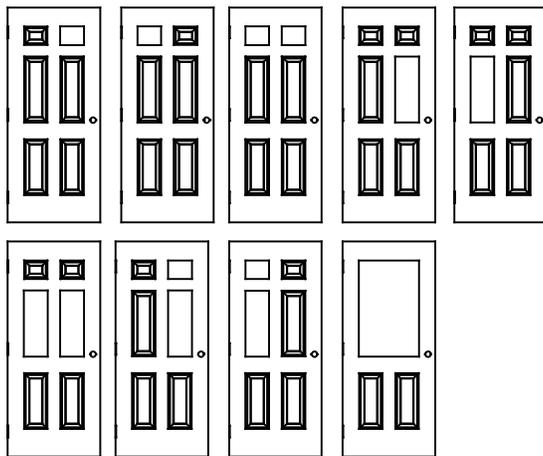
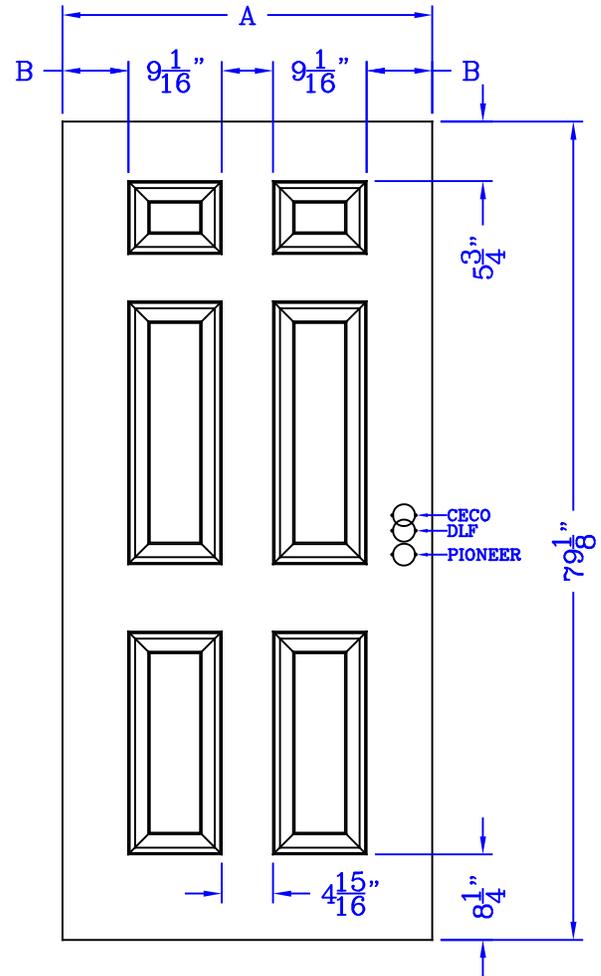
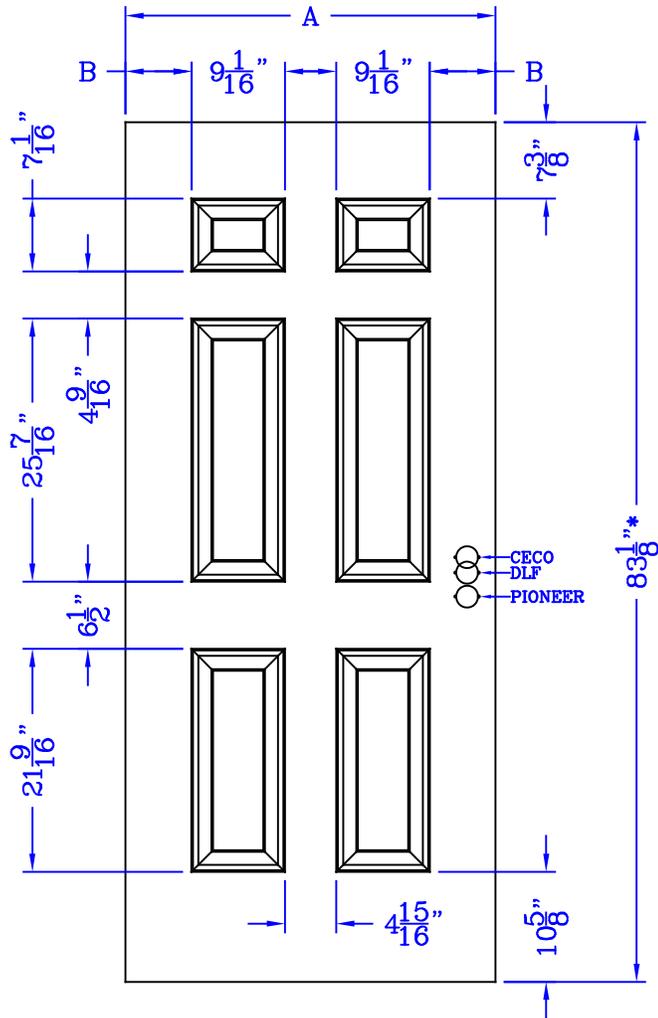
\*Maximum net height 83 1/8"

□ CW Door only

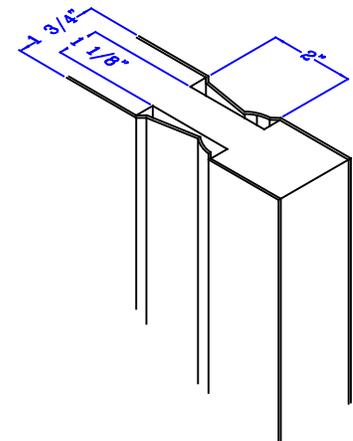
- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel

**Six panels**

Available 18ga, A40 only.



Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 11/32
□ 3'-2"	7 11/32
□ 3'-0"	6 11/32
□ 2'-10"	5 11/32



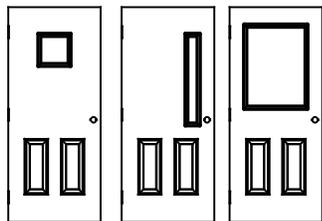
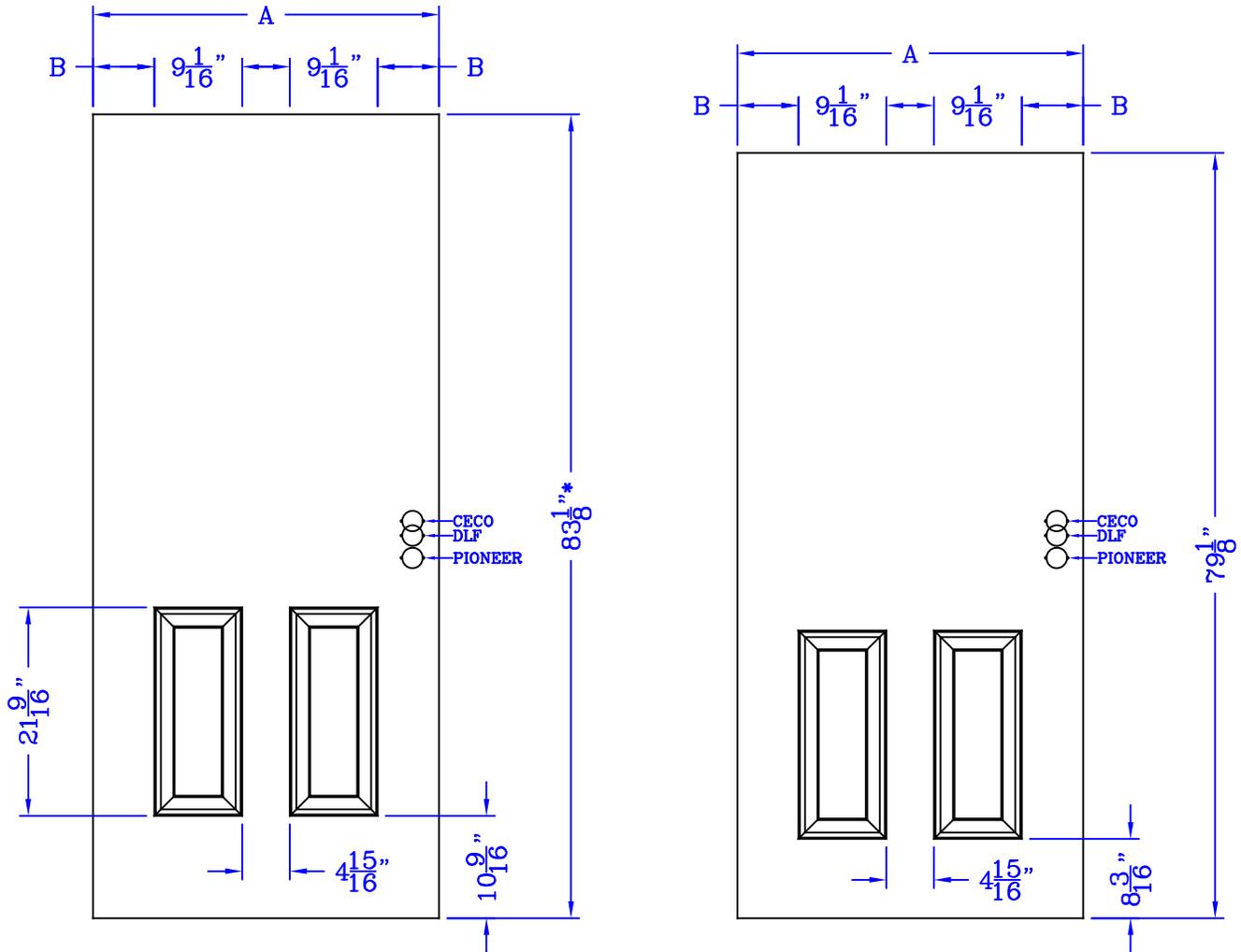
\*Maximum net height 83 1/8"  
□ CW Door only

-available with lite in different configurations.

- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel

**Flush with 2 panels at bottom**

Available 18ga, A40 only.

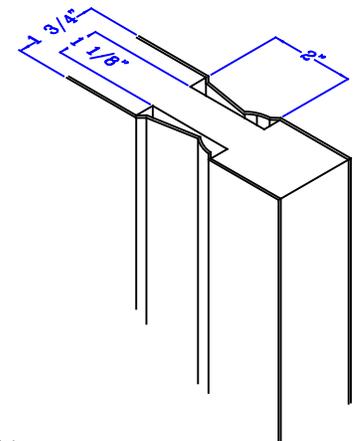


with regular vision, narrow lite of half glass lite kit.

Nominal Dimension -A-	Net size Dimension -B-
□ 3'-4"	8 11/32
□ 3'-2"	7 11/32
3'-0"	6 11/32
2'-10"	5 11/32
2'-8"	4 11/32
2'-6"	3 11/32

\*Maximum net height 83 1/8"

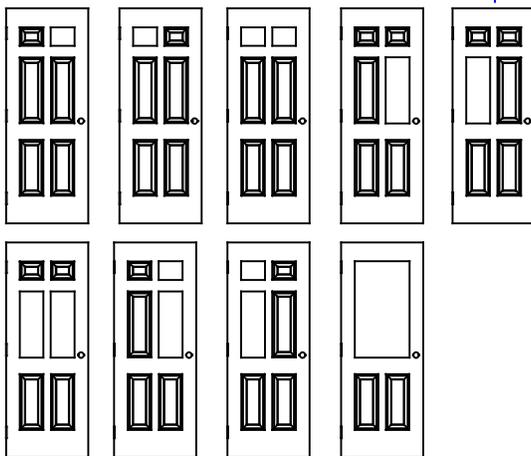
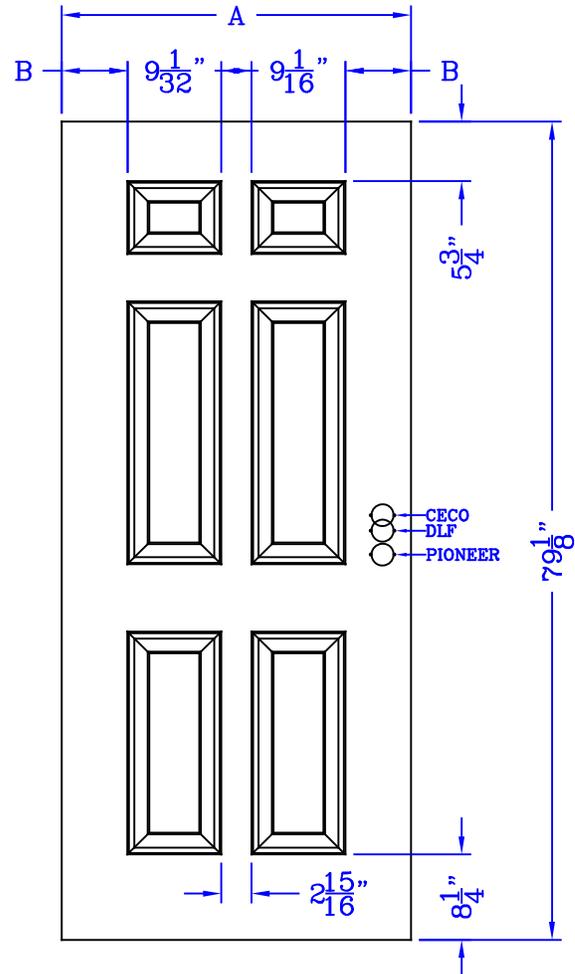
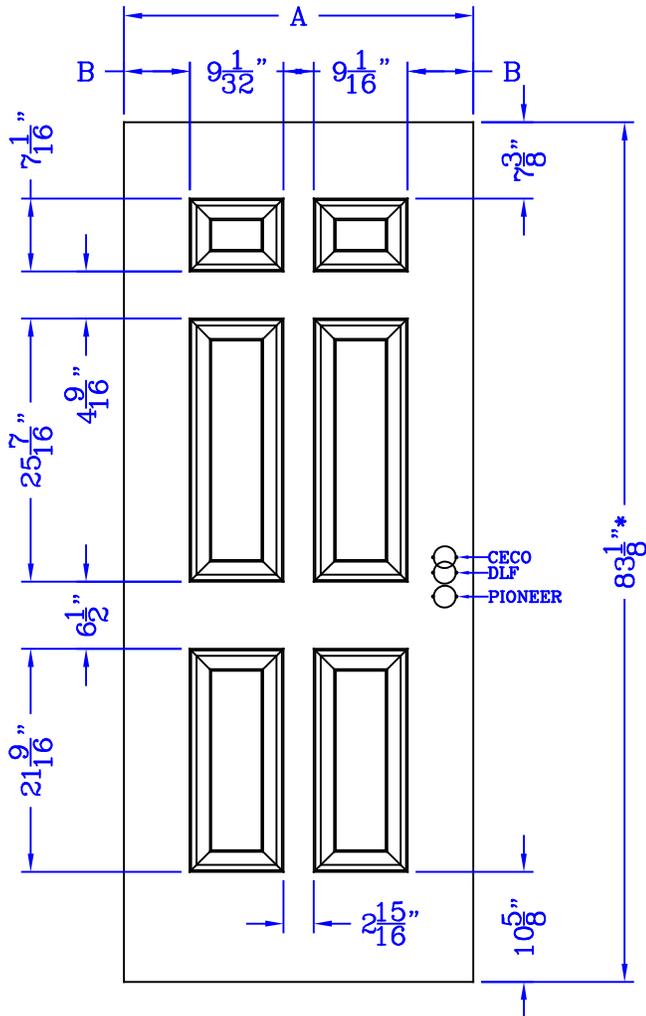
□ CW Door only



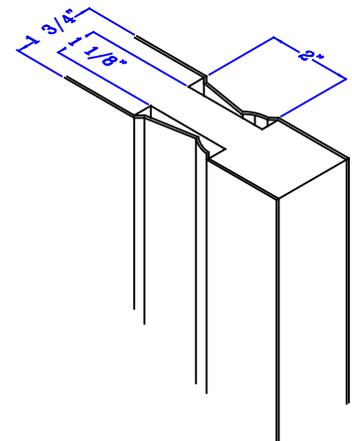
- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : will require an irregular backset at lock for 2'8" and 2'6" doors.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel

**Narrow six panels**

Available 18ga, A40 only.



Nominal Dimension -A-	Net size Dimension -B-
2'-8"	5 11/32
2'-6"	4 11/32

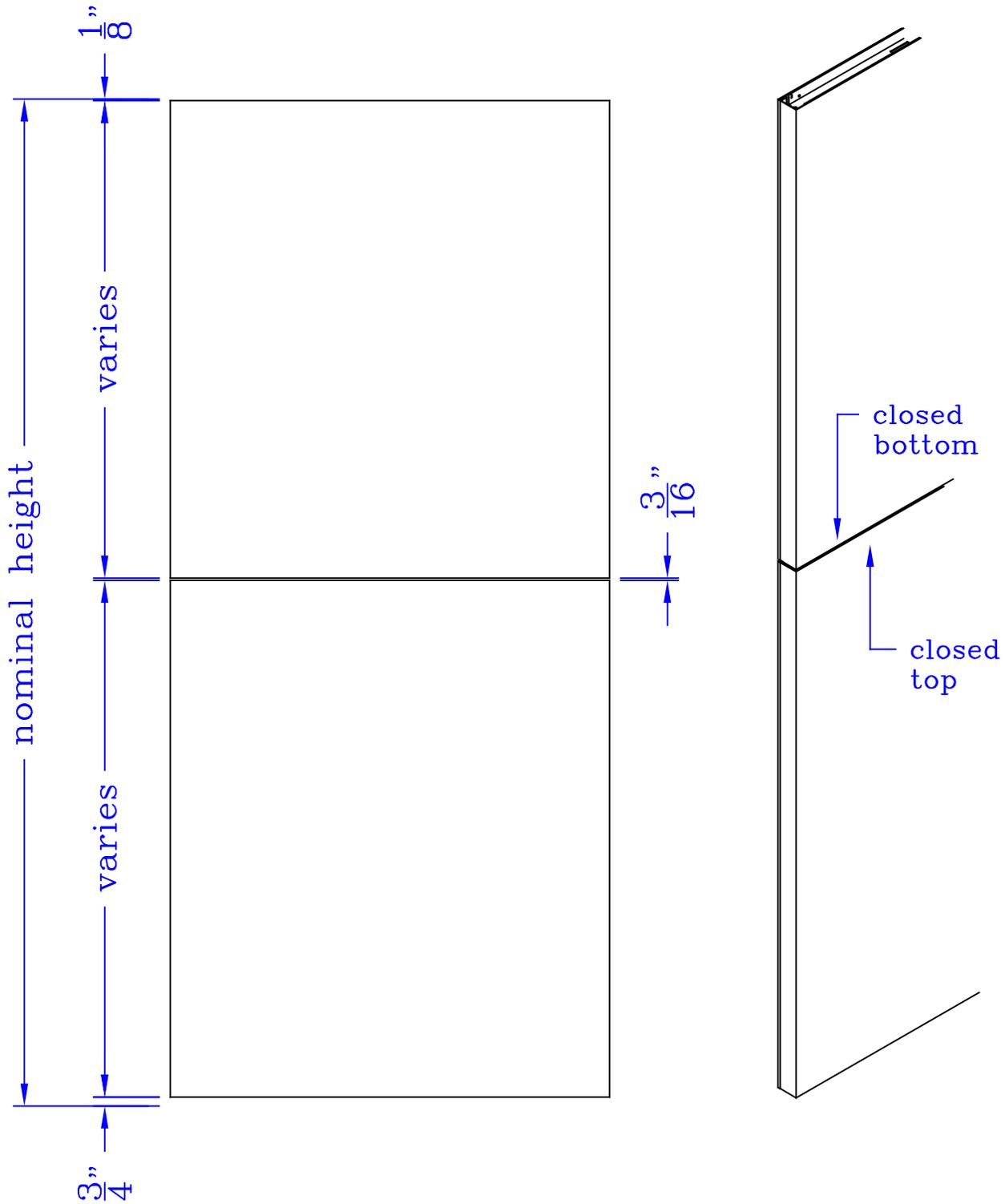


\*Maximum net height 83 1/8"

-available with lite in different configurations.

- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
  - : cut out will be 1/2" higher and larger than dimensions shown of the panel

**Dutch door (shelf not included)**

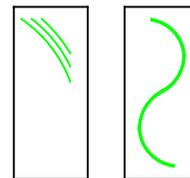
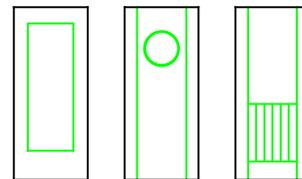
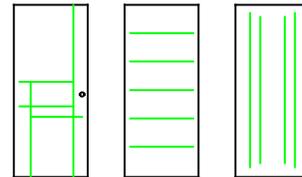
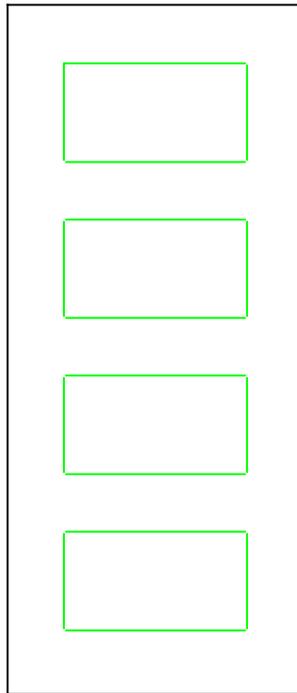
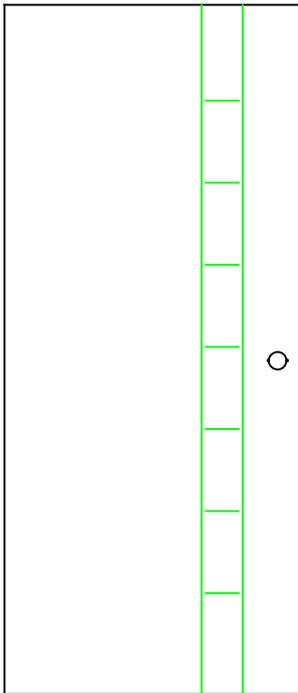
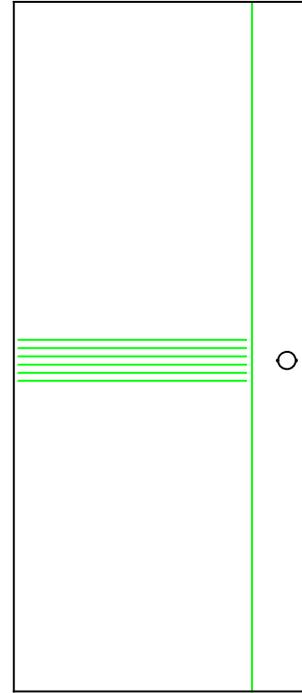
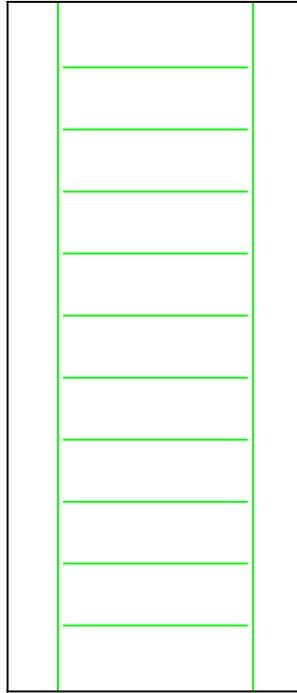
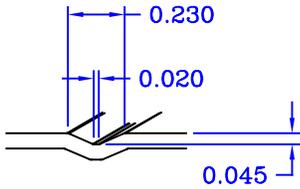


See FDD and HDD for details on our shelves.

**Custom embossed door**

Available in 18 or 16ga, in A40 or A60 or stainless steel

V- type

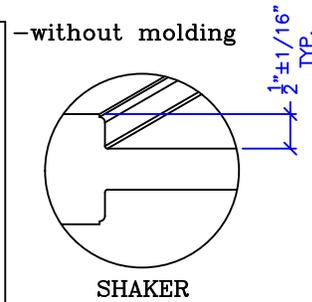
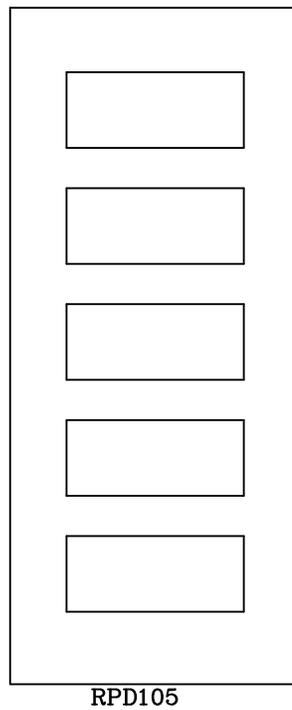
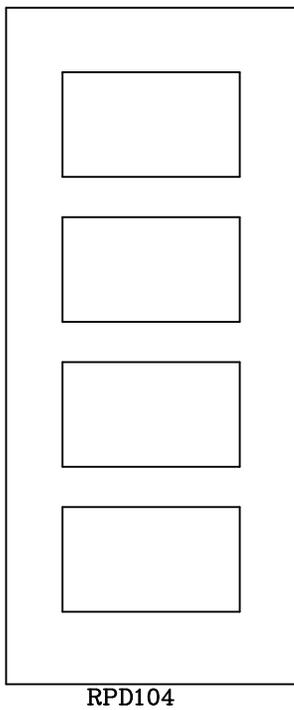
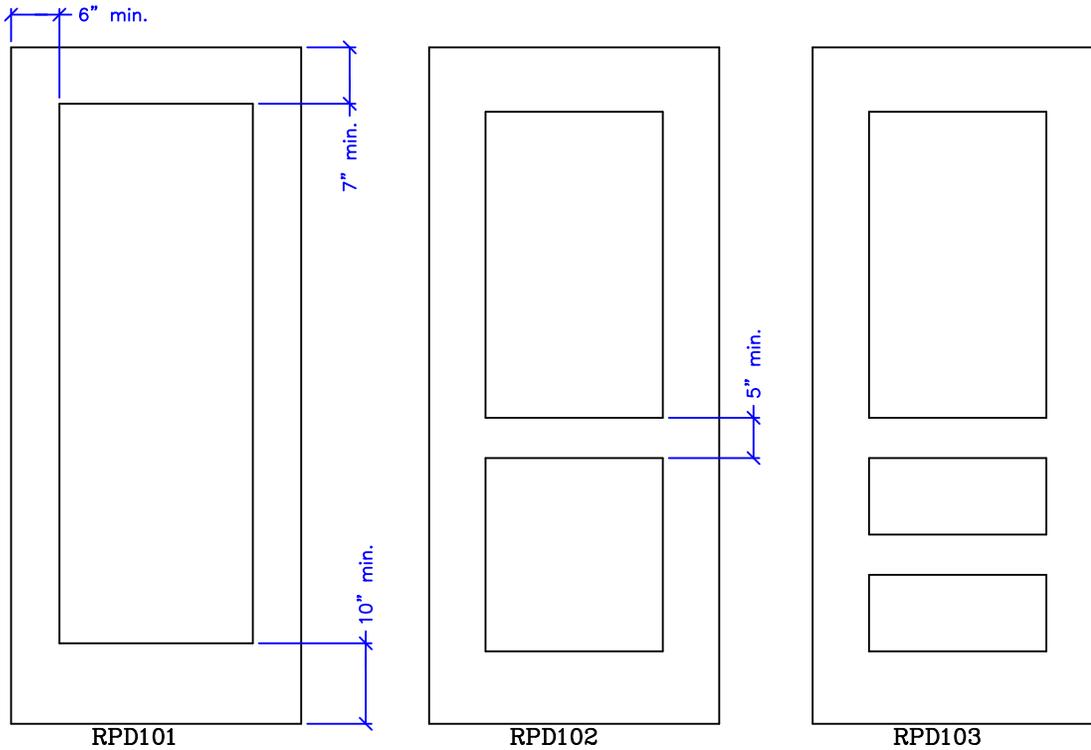


Other custom embossing available

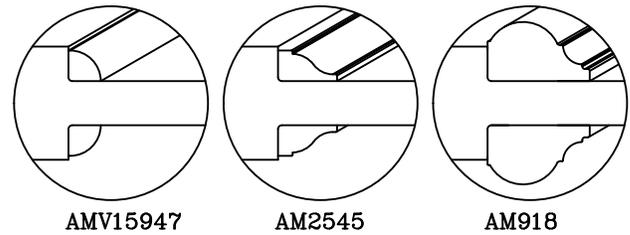
Maximum 4'0" door width

**Recessed panel door**

Available in 18, 16 or 14ga, in A40 or A60. 18ga panels.

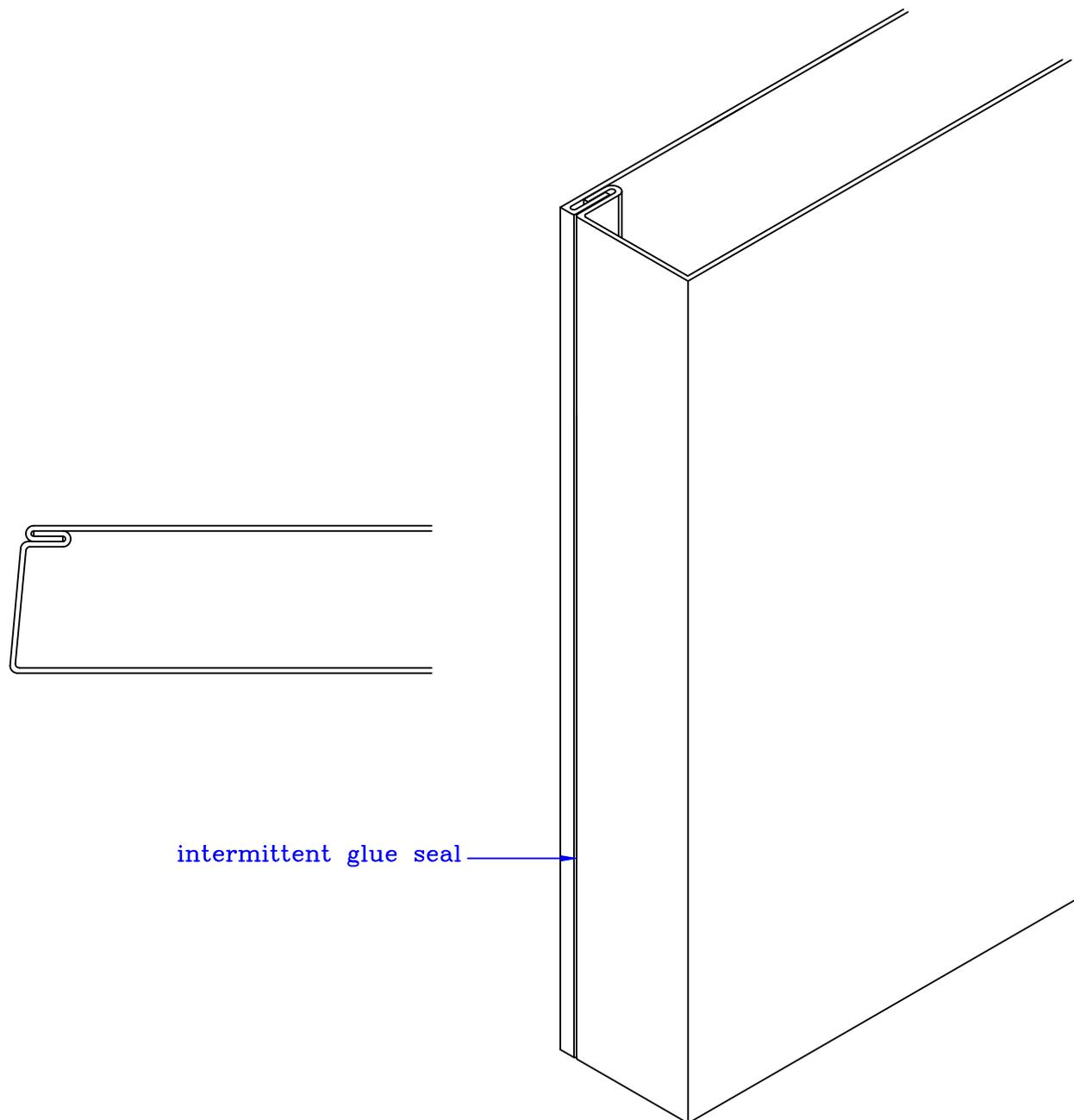


-with aluminum molding



All dimensions from nominal opening  
Available only for 1 3/4" door

## Standard lock seam edge



intermittent glue seal

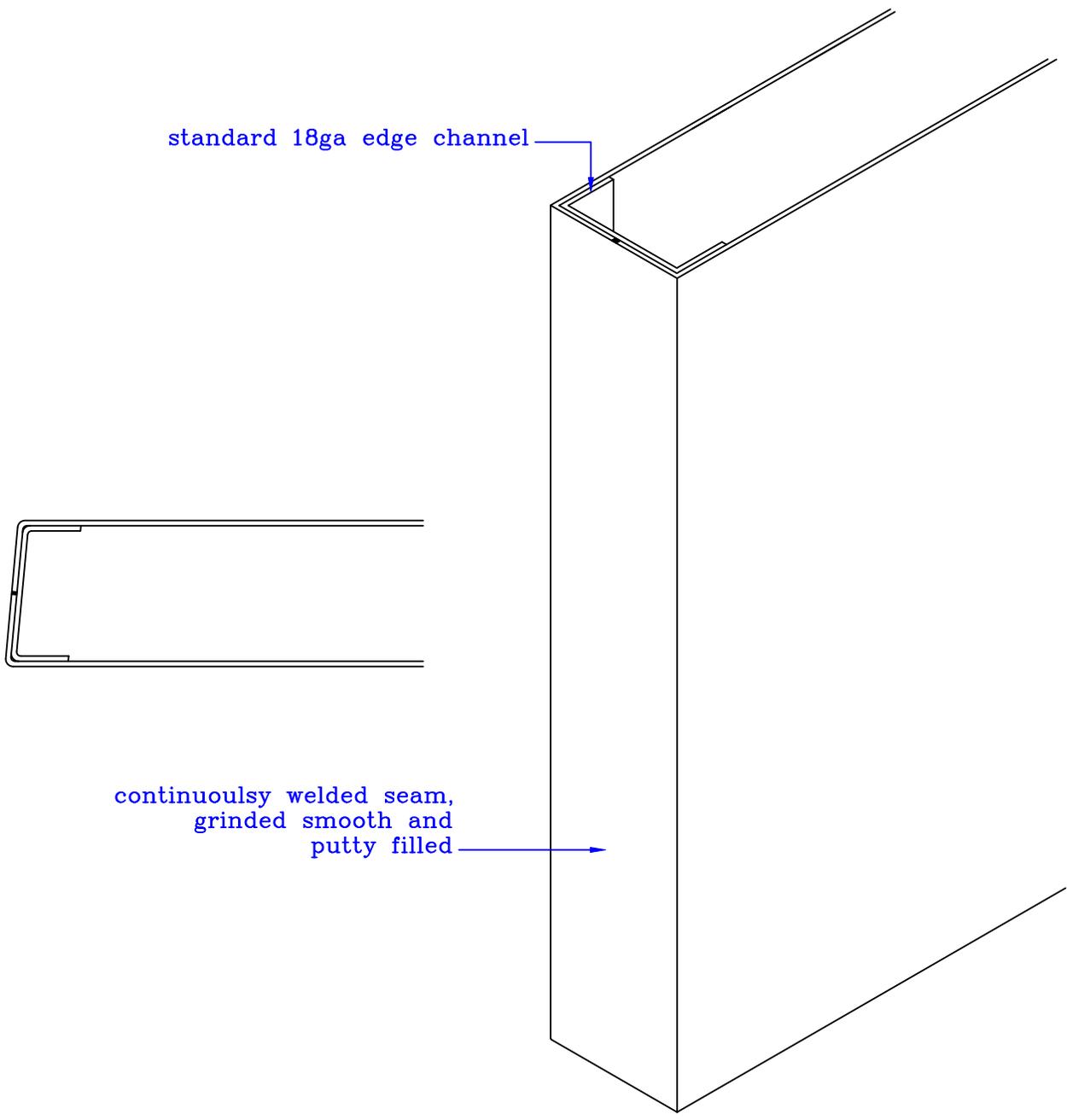
Door edge seam

PA

Available for beveled or square see options BEVH, BEVL, SQH & SQL

## Continuously welded seamless

Door edge seam



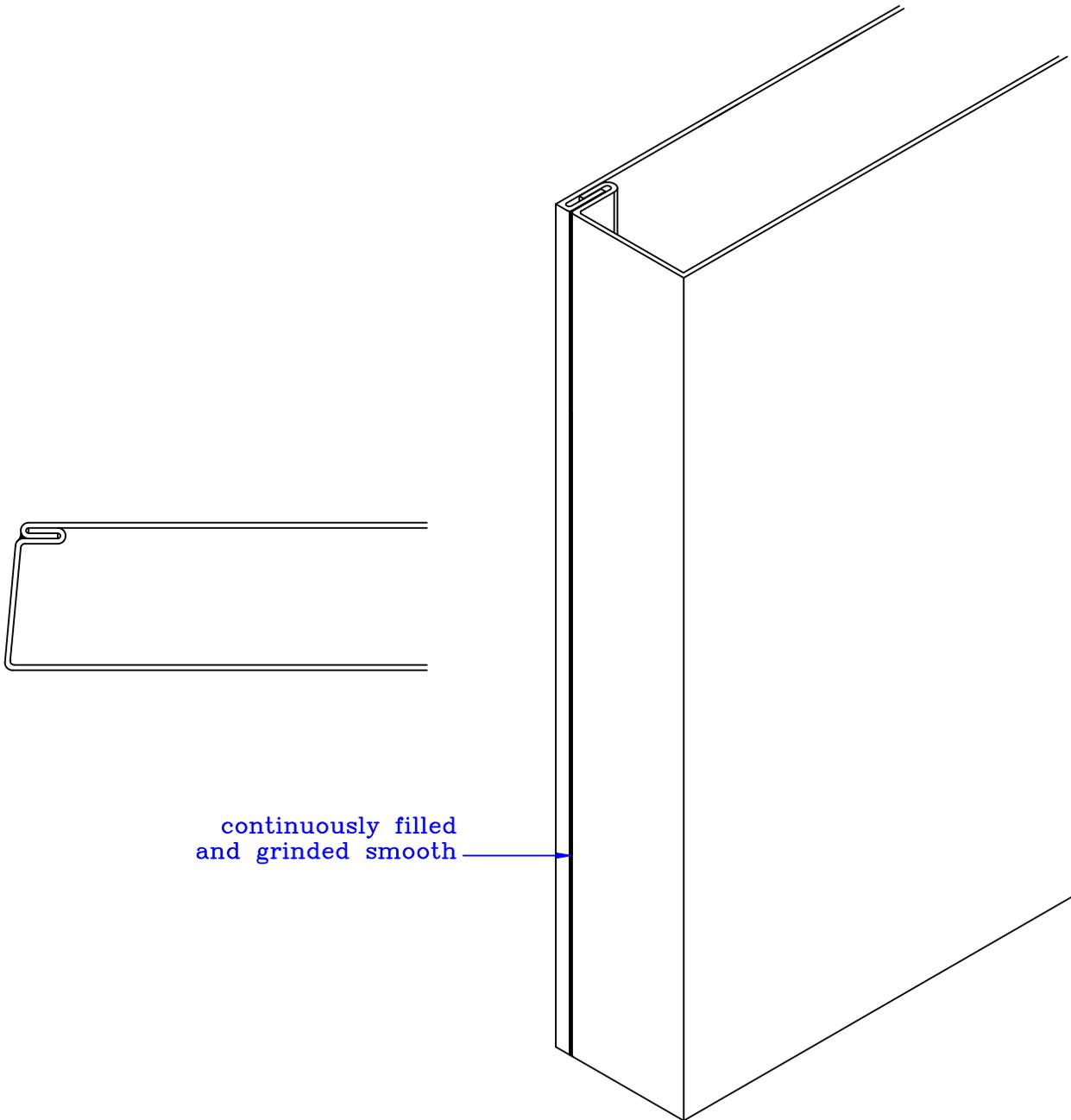
standard 18ga edge channel

continuously welded seam,  
grinded smooth and  
putty filled

CW

Available for beveled or square see options BEVH, BEVL, SQH & SQL

**Lock seam edge filled seamless**

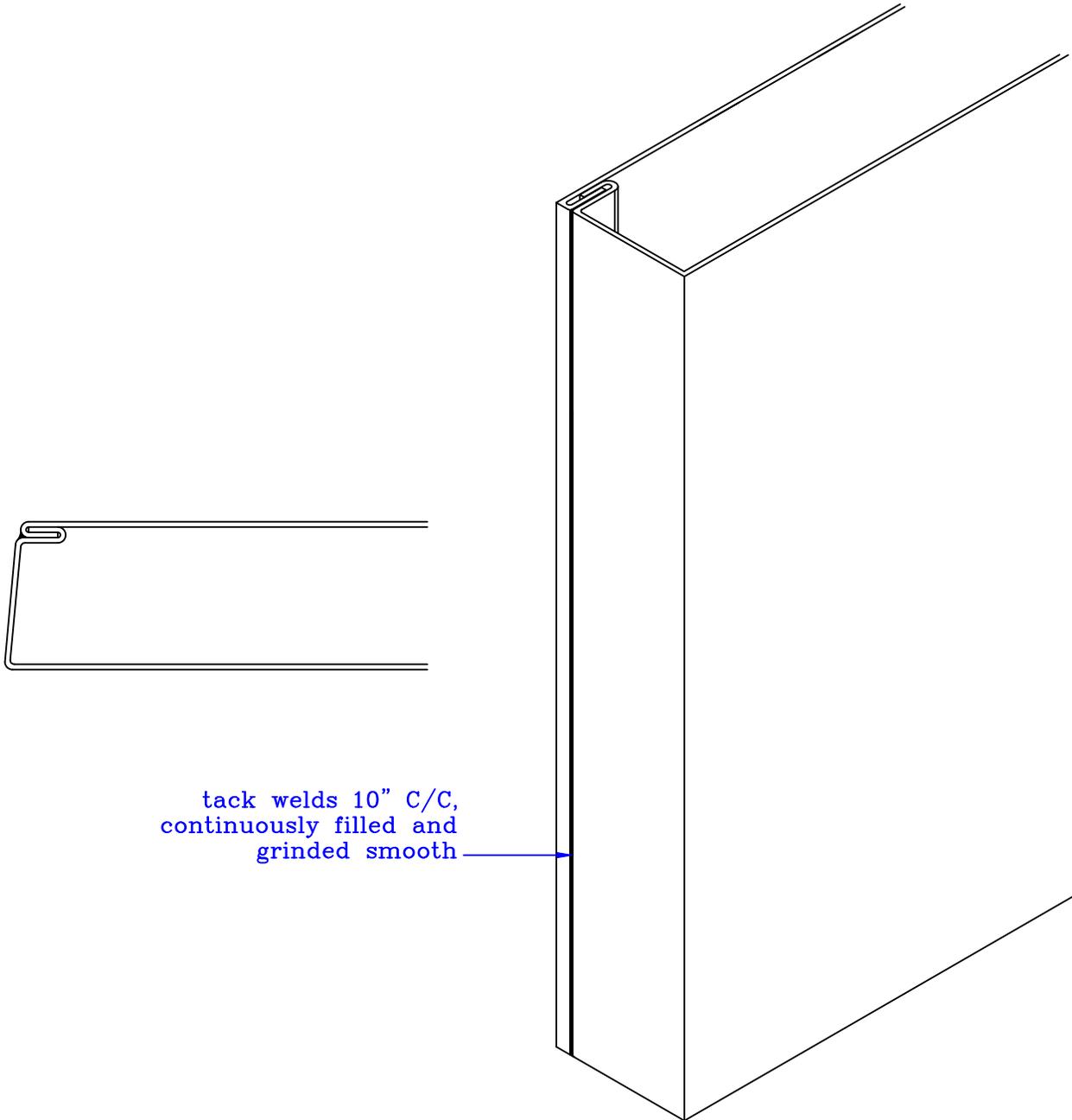


continuously filled  
and grinded smooth

Door edge seam option

Available for beveled or square edge doors

**Lock seam edge tack welded and filled seamless**



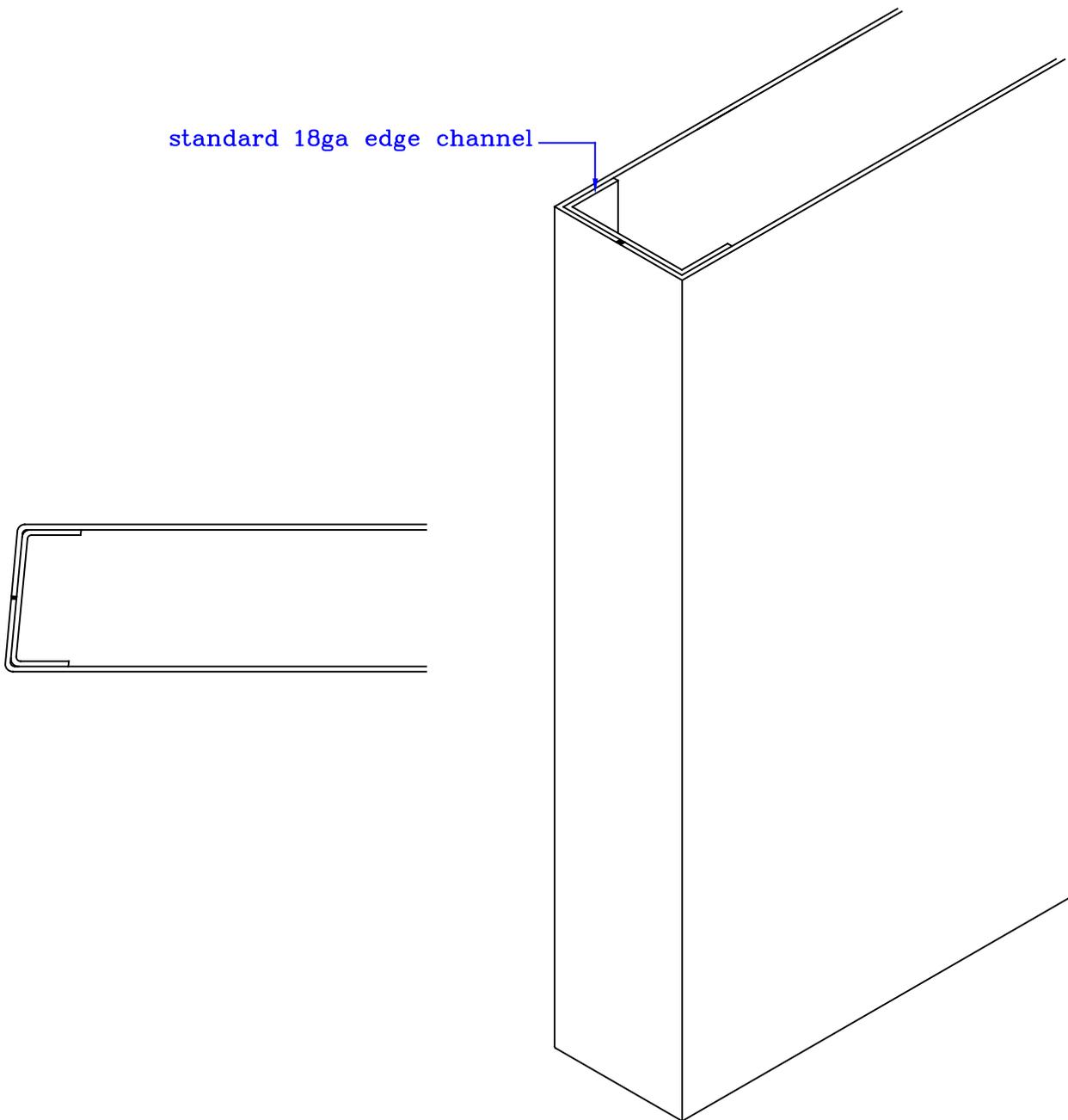
tack welds 10" C/C,  
continuously filled and  
grinded smooth

Door edge seam option

TWPF

Available for beveled or square edge doors

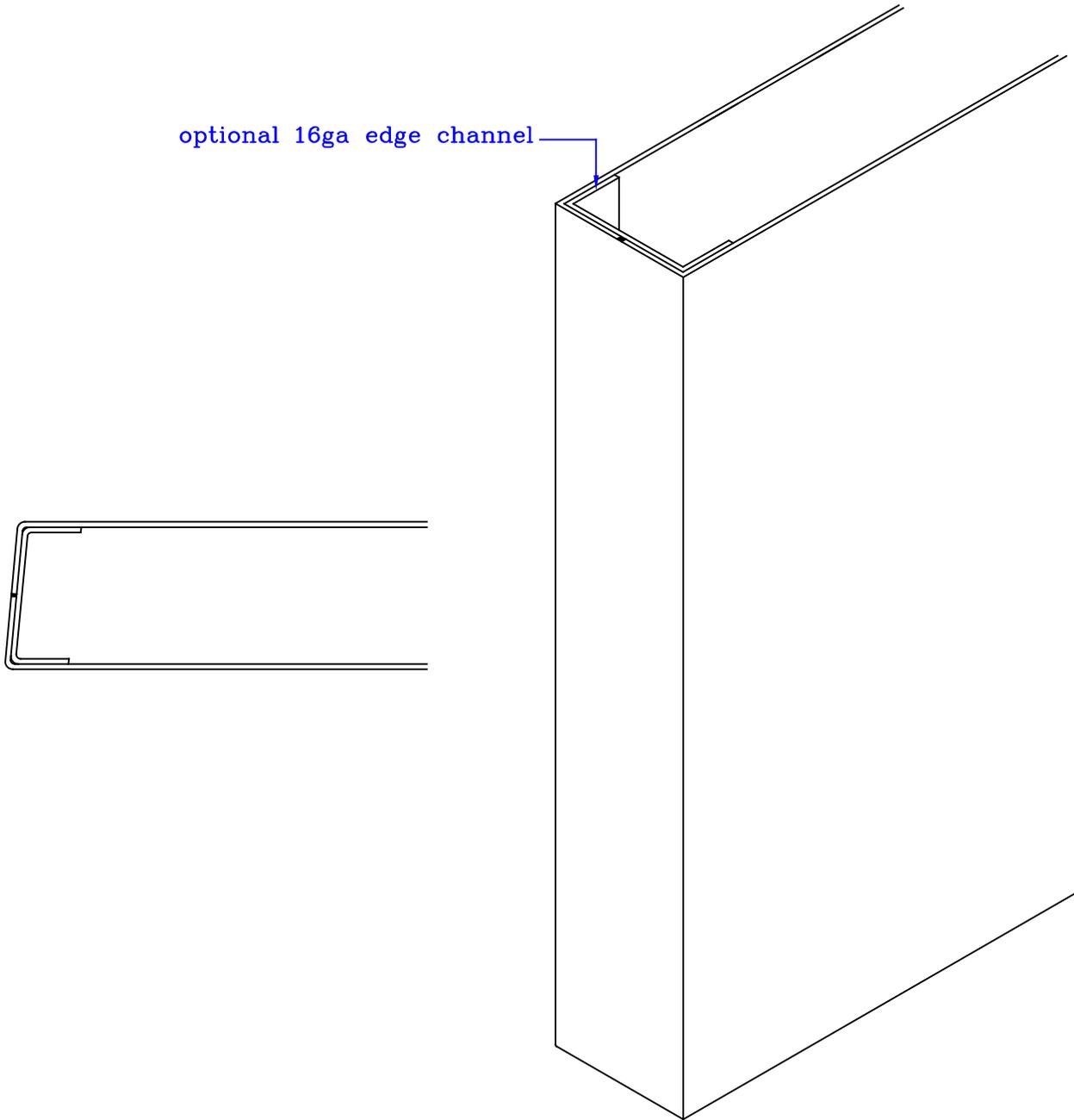
## 18ga edge channel



18EC

Continuously welded edge channel

## 16ga edge channel

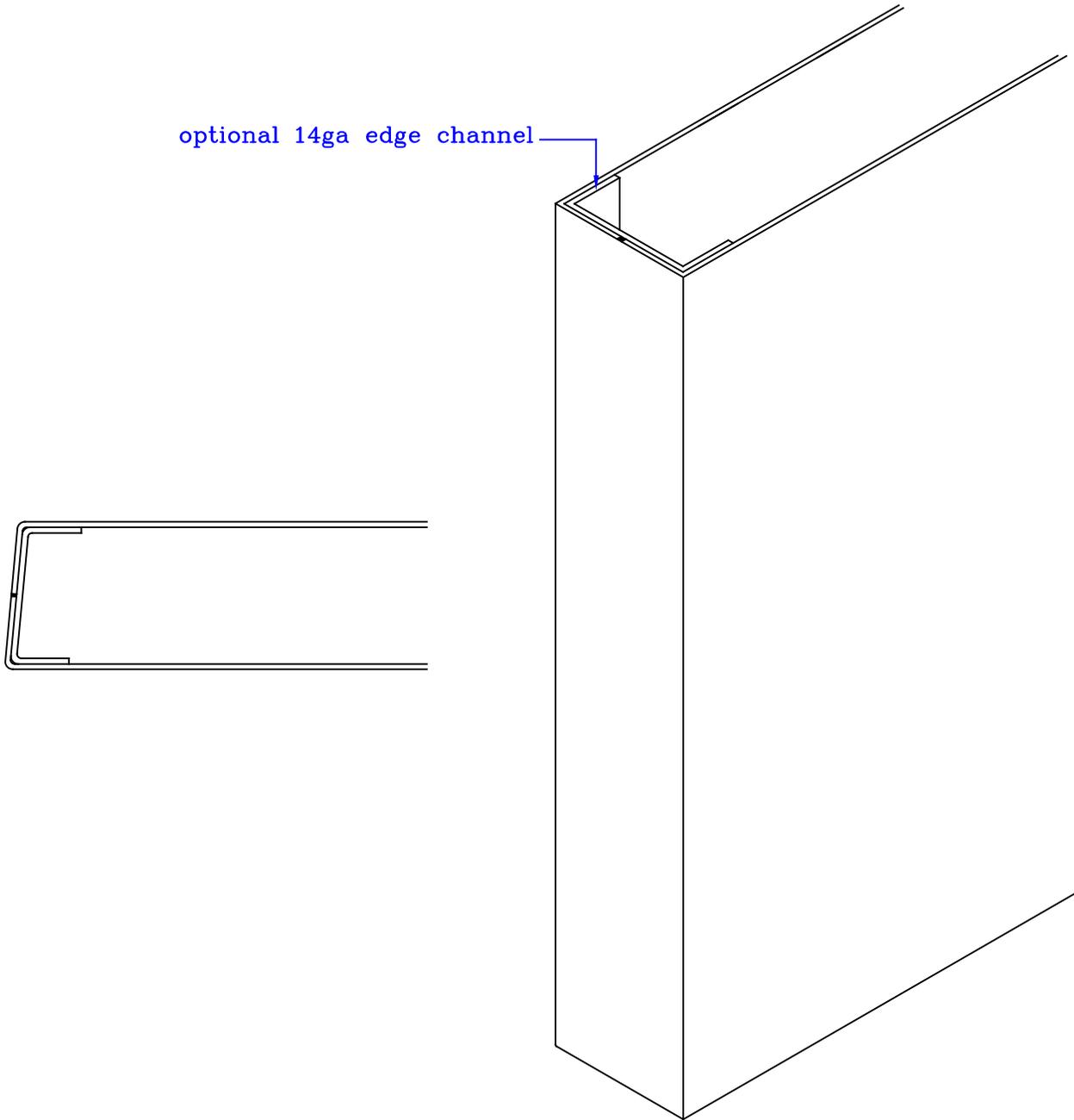


optional 16ga edge channel

16EC

Continuously welded edge channel

## 14ga edge channel

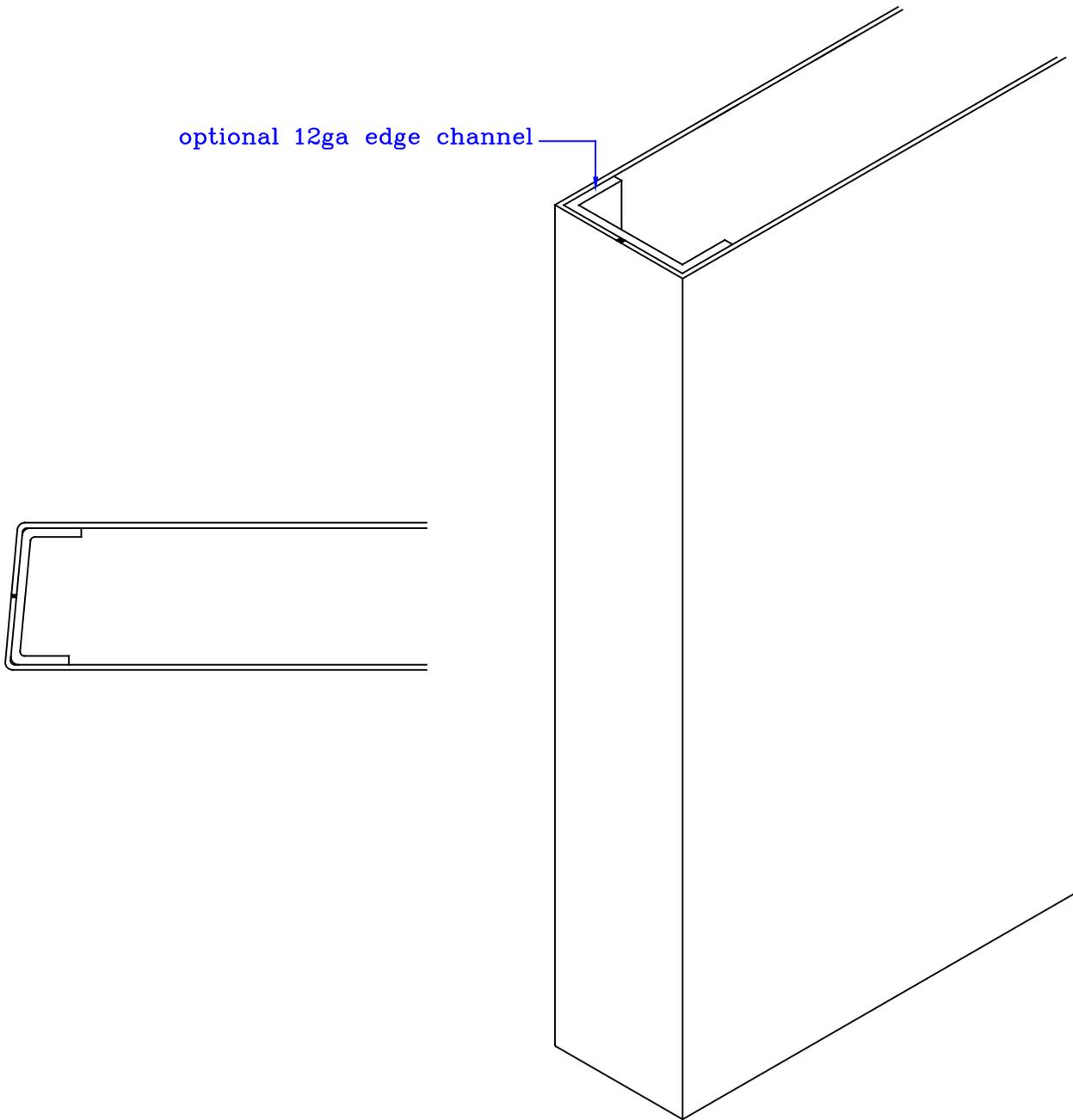


optional 14ga edge channel

14EC

Continuously welded edge channel

## 12ga edge channel

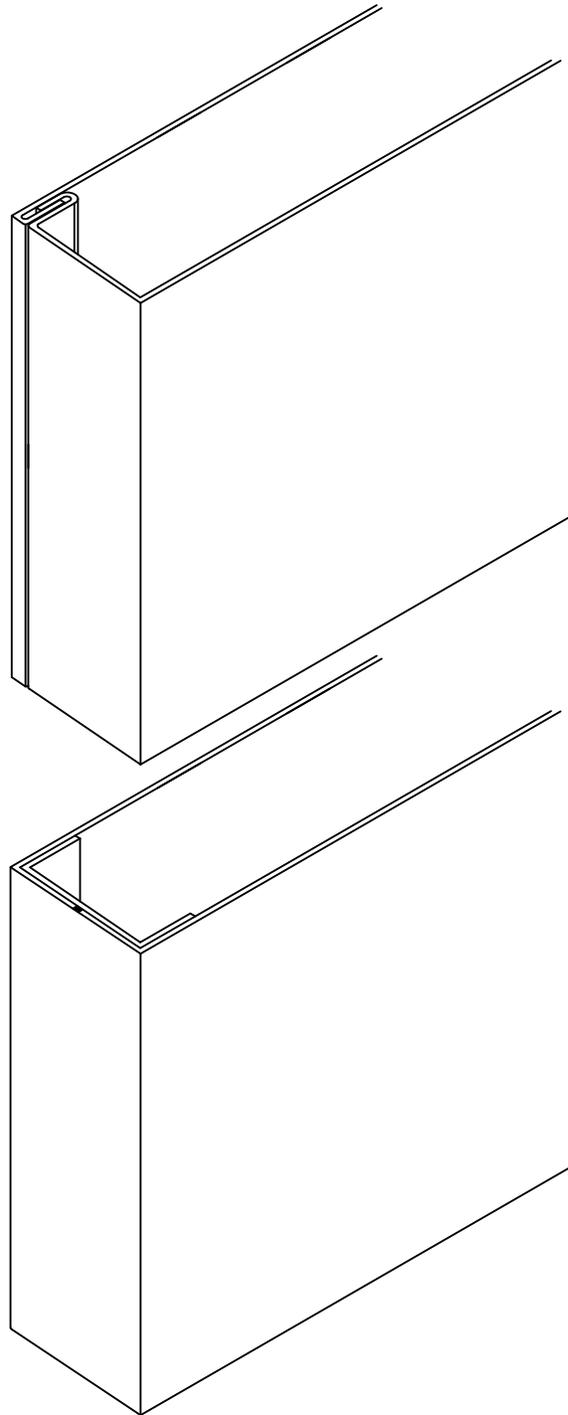
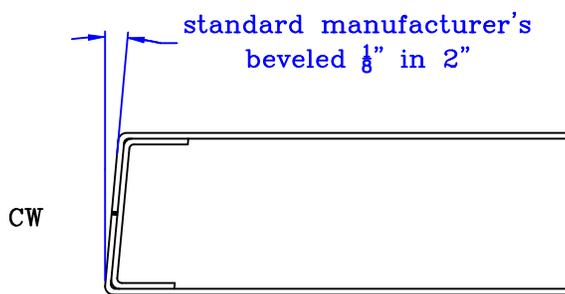
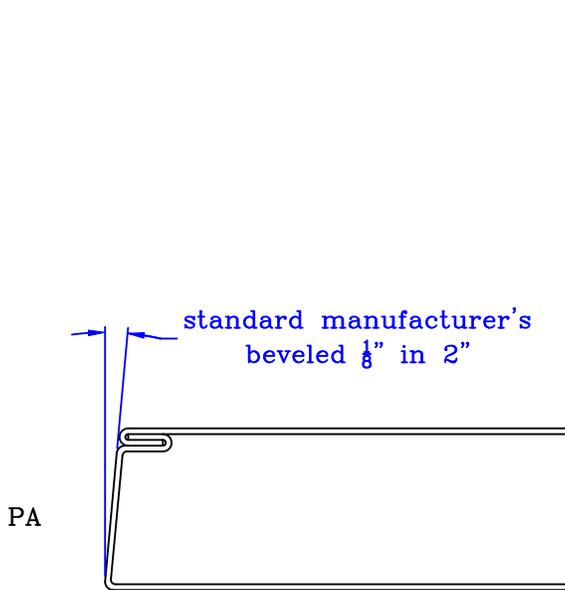


optional 12ga edge channel

12EC

Continuously welded edge channel

## Beveled edge door

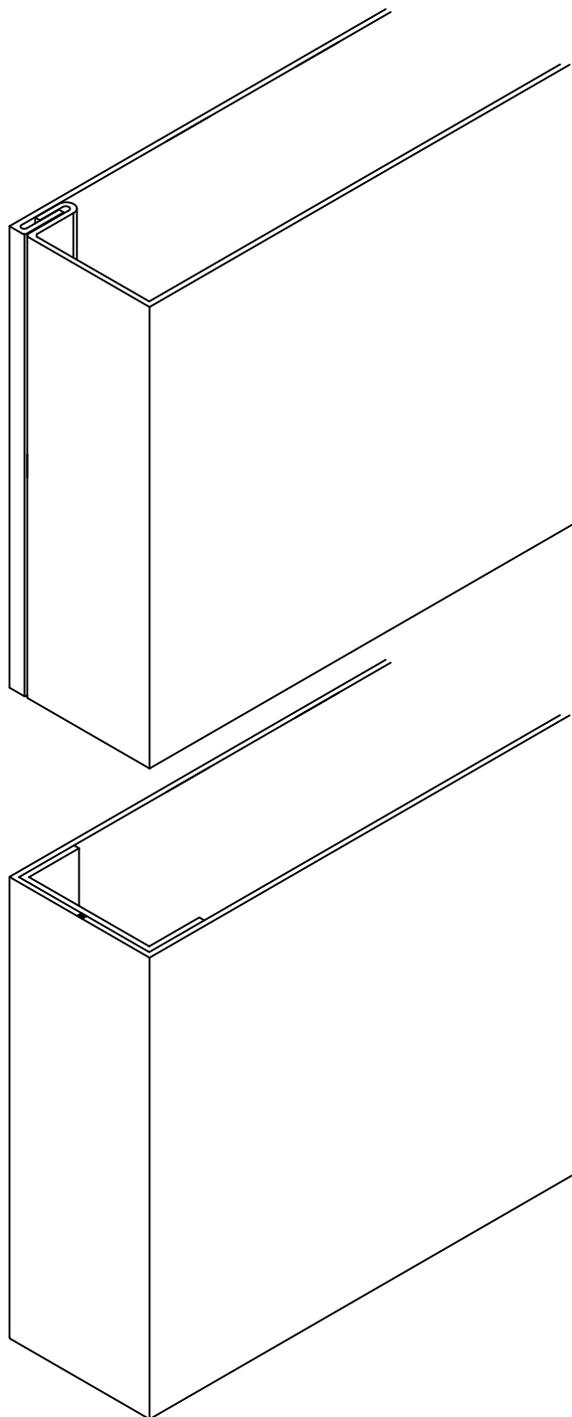
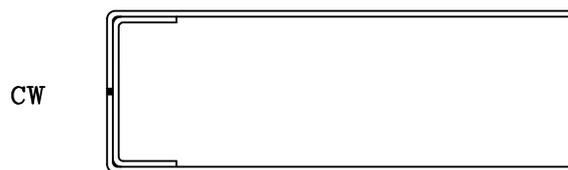
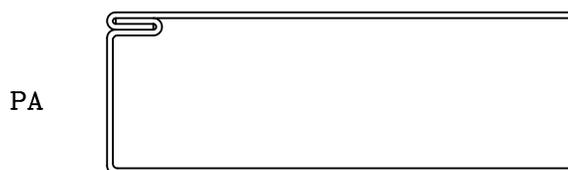


Hinge edge construction

Standard for doors with butt hinges

BEVH

## Square edge door

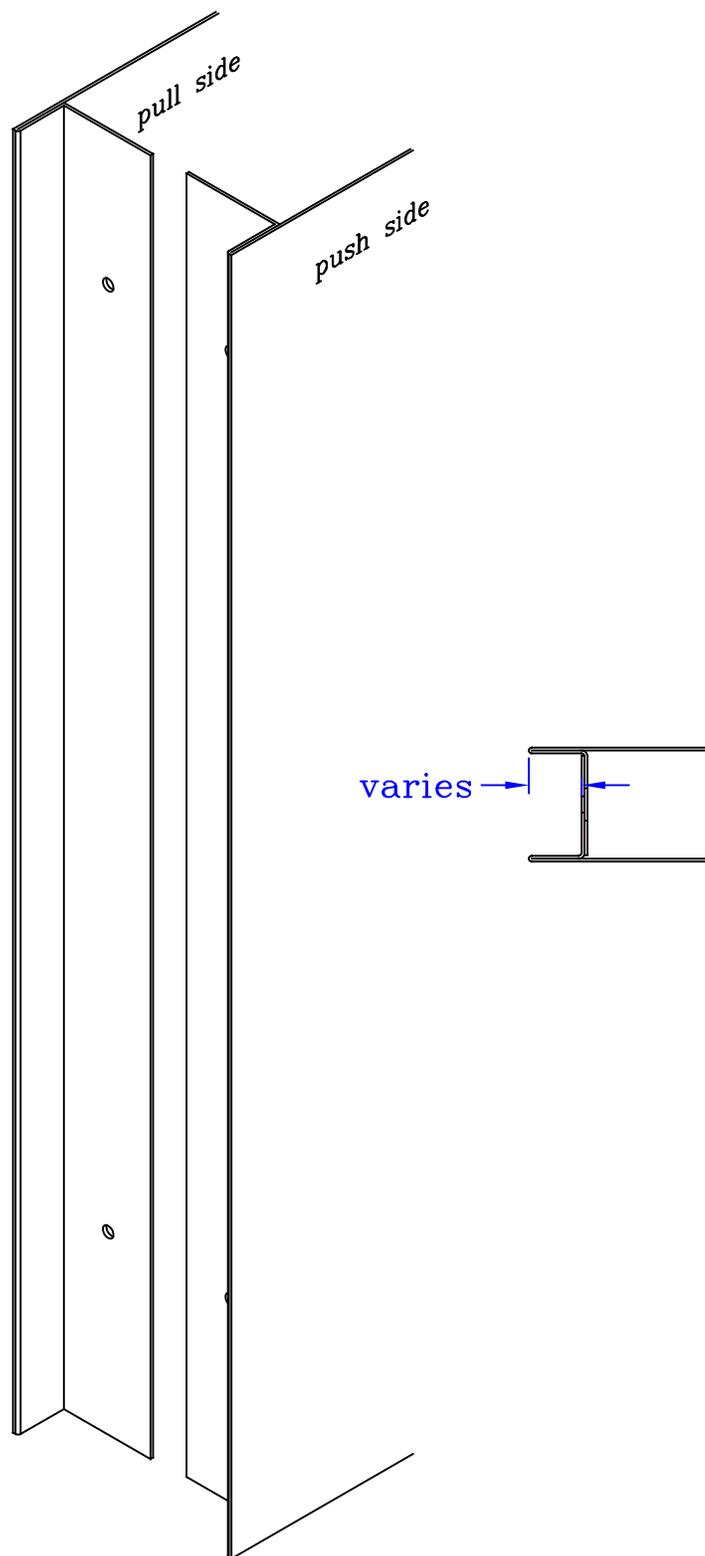


Hinge edge construction

SQH

Standard for doors with continuous hinge

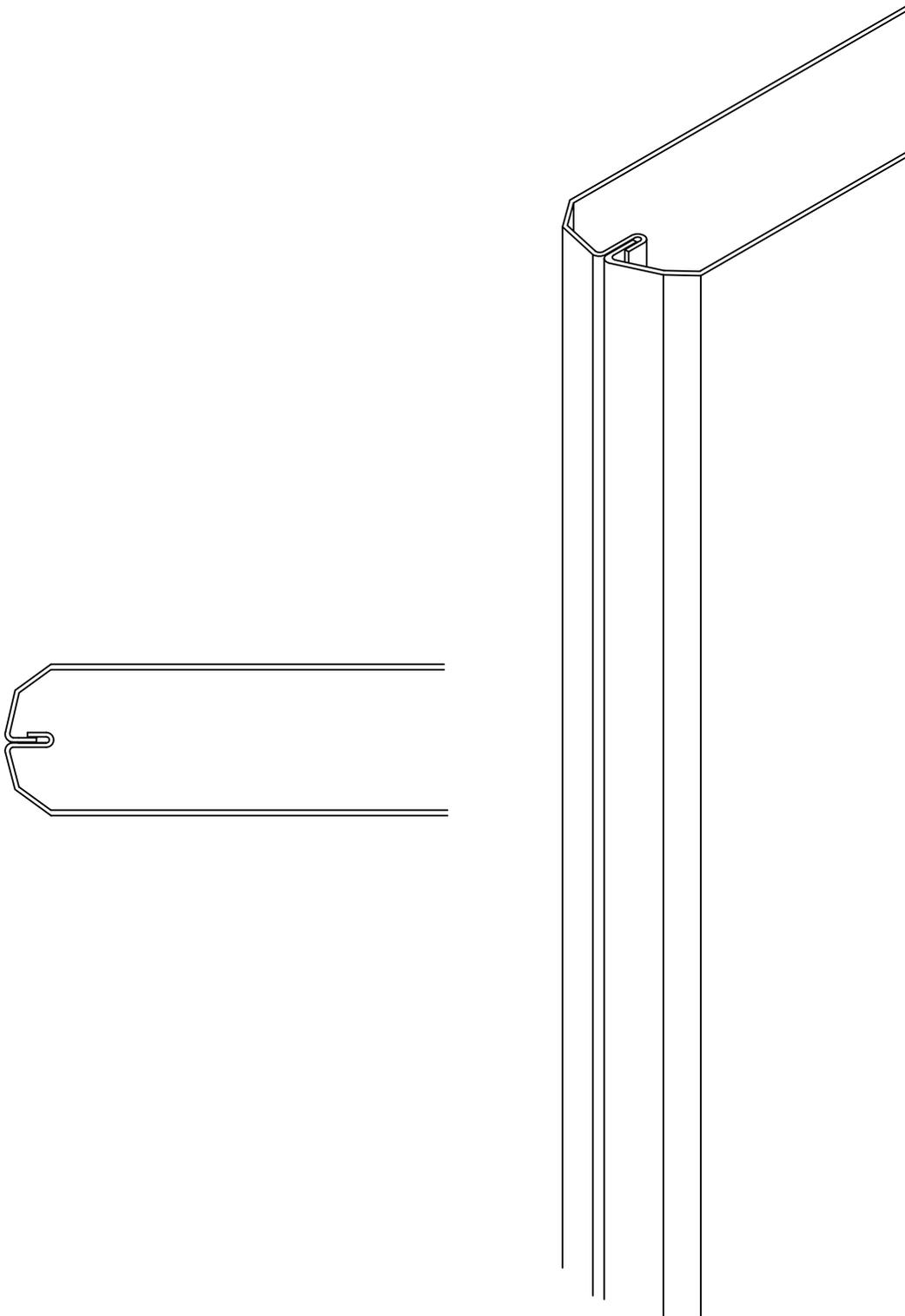
**Pocket pivot edge**



\*manufacturer's template to be provided, see page O-4.26 for additional detail.

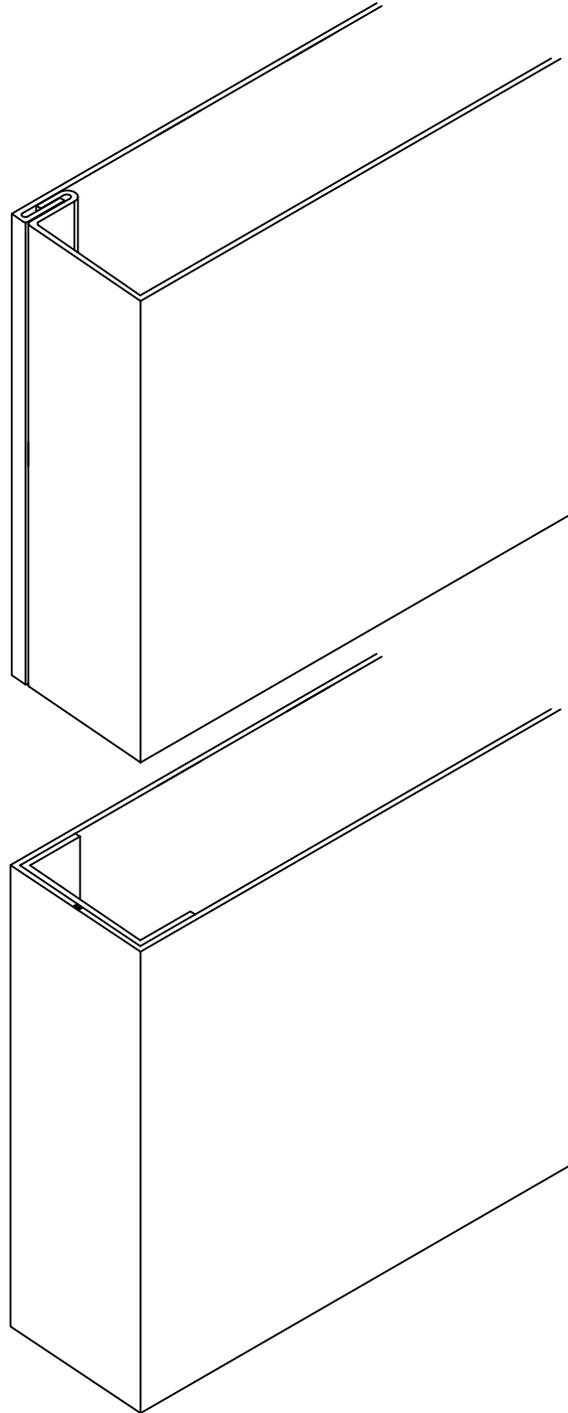
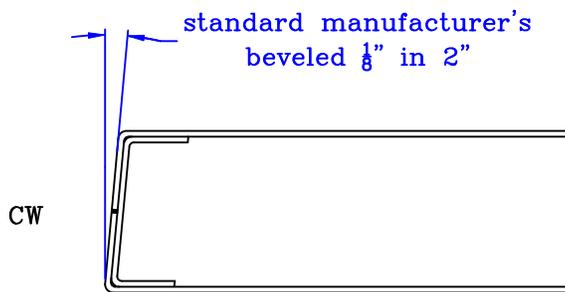
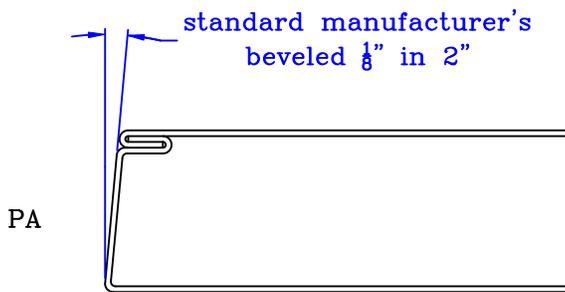
## Segmented radius pivot edge for double acting door

Available for 18 and 16ga.



Edge putty filled if PAF or CW on lock side

## Beveled edge door



Lock edge construction

Standard at lock edge

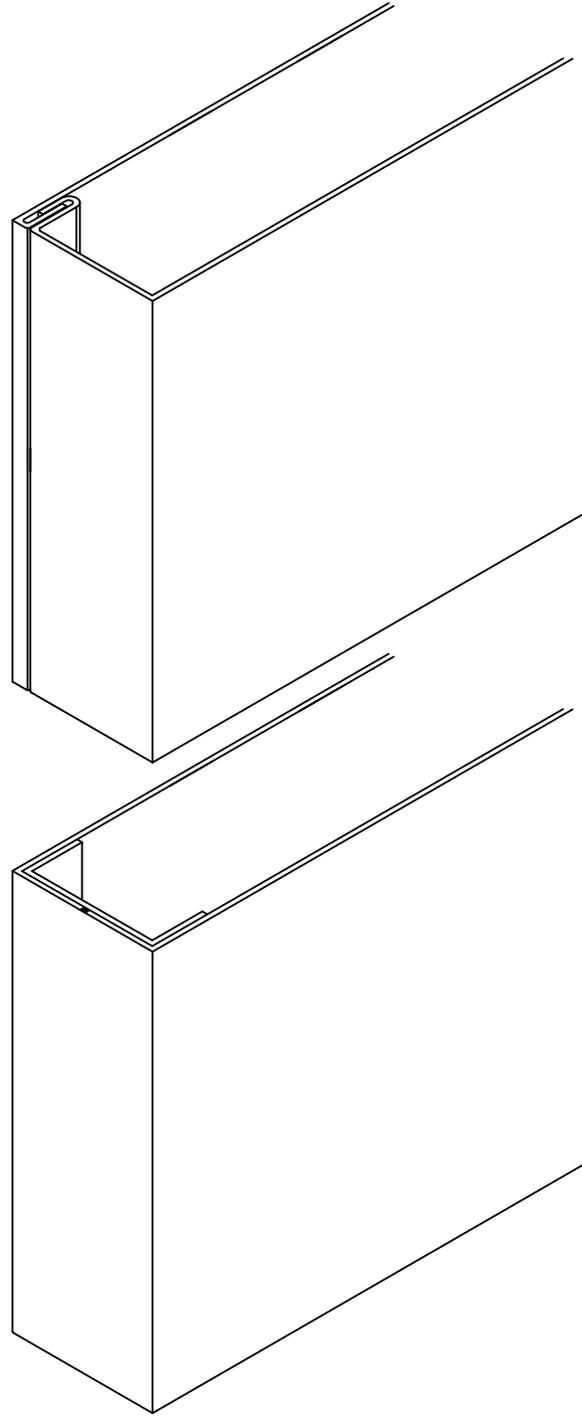
BEVL

## Square edge door

PA



CW

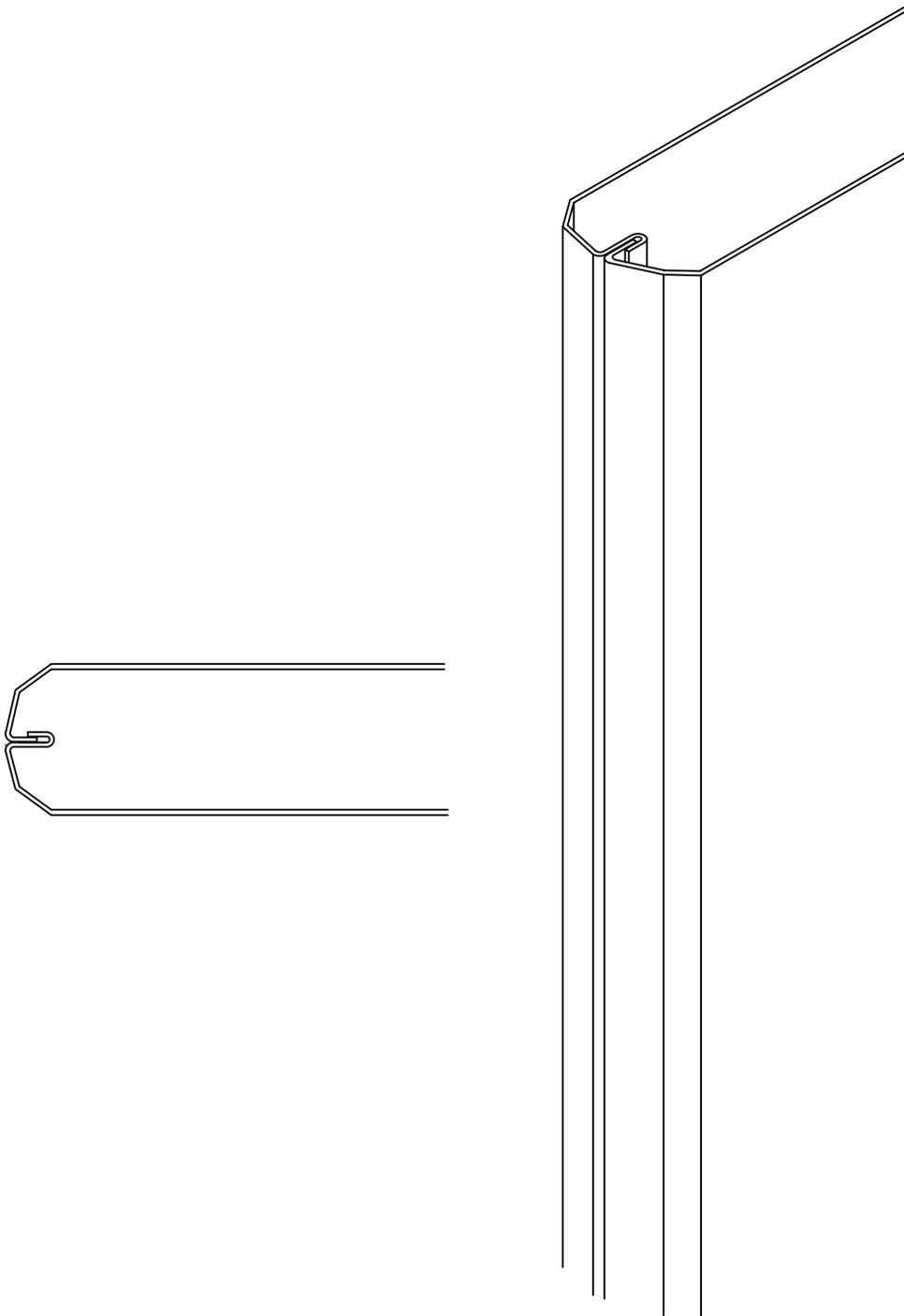


Lock edge construction

Standard at strike edge

## Segmented radius at lock edge

Available for 18 and 16ga.

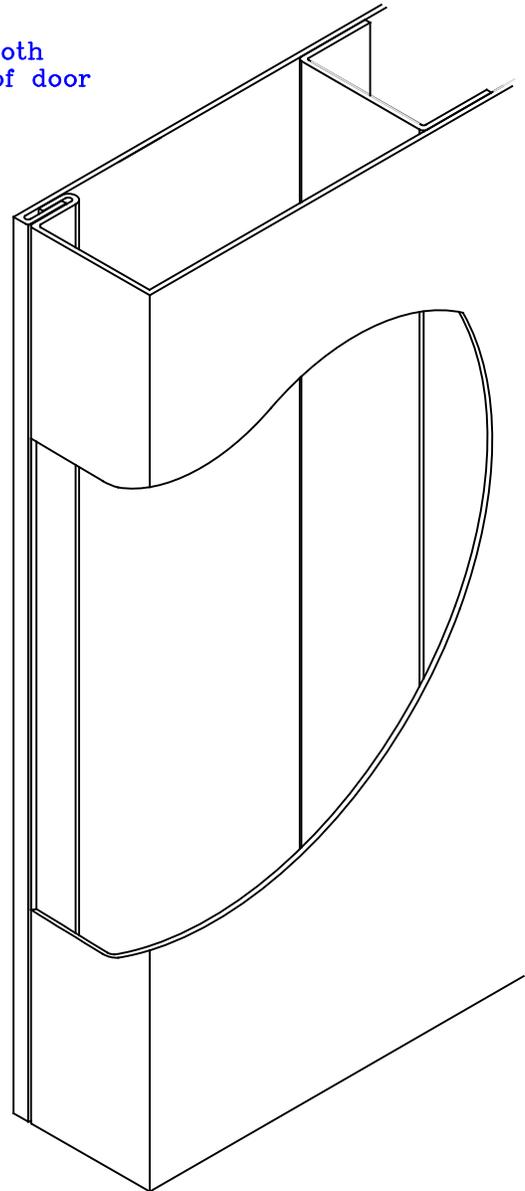
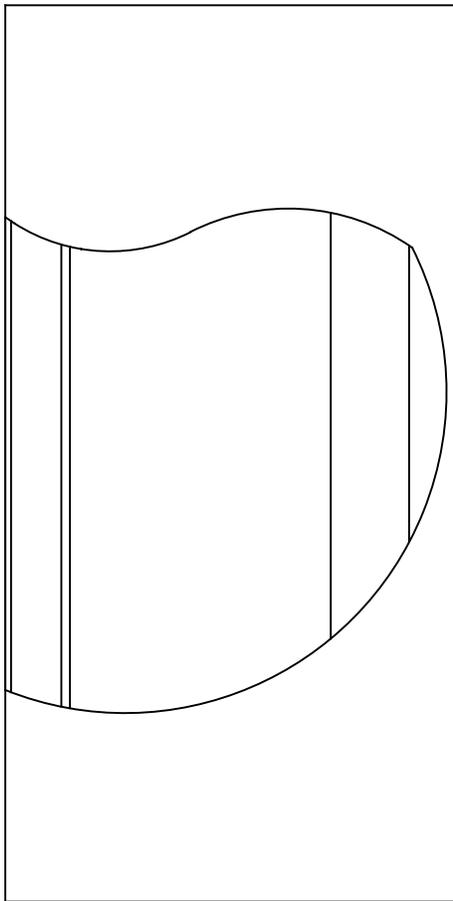


Edge putty filled if PA or CW on hinge edge

## Bonded stiffener

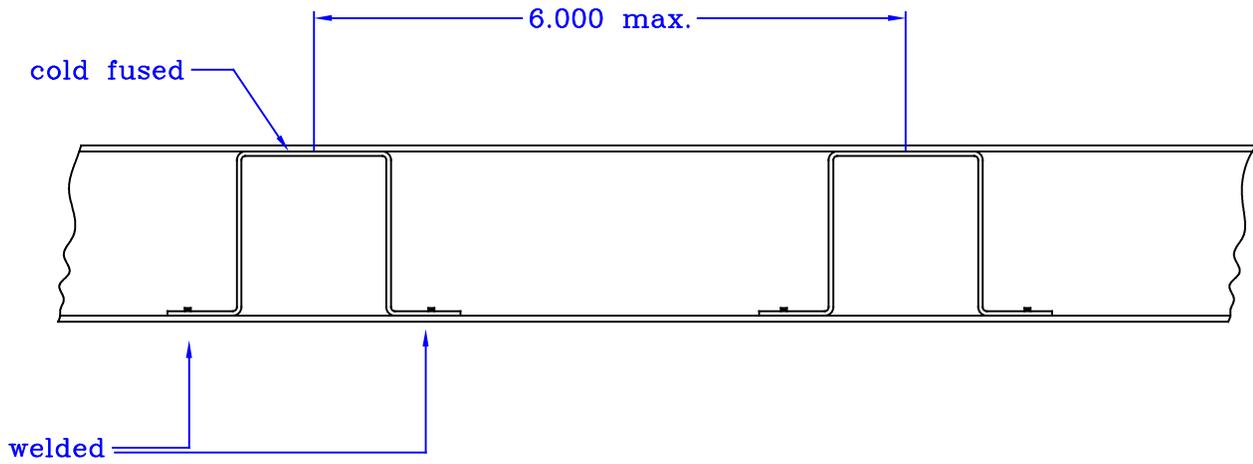


cold fused to both  
internal faces of door



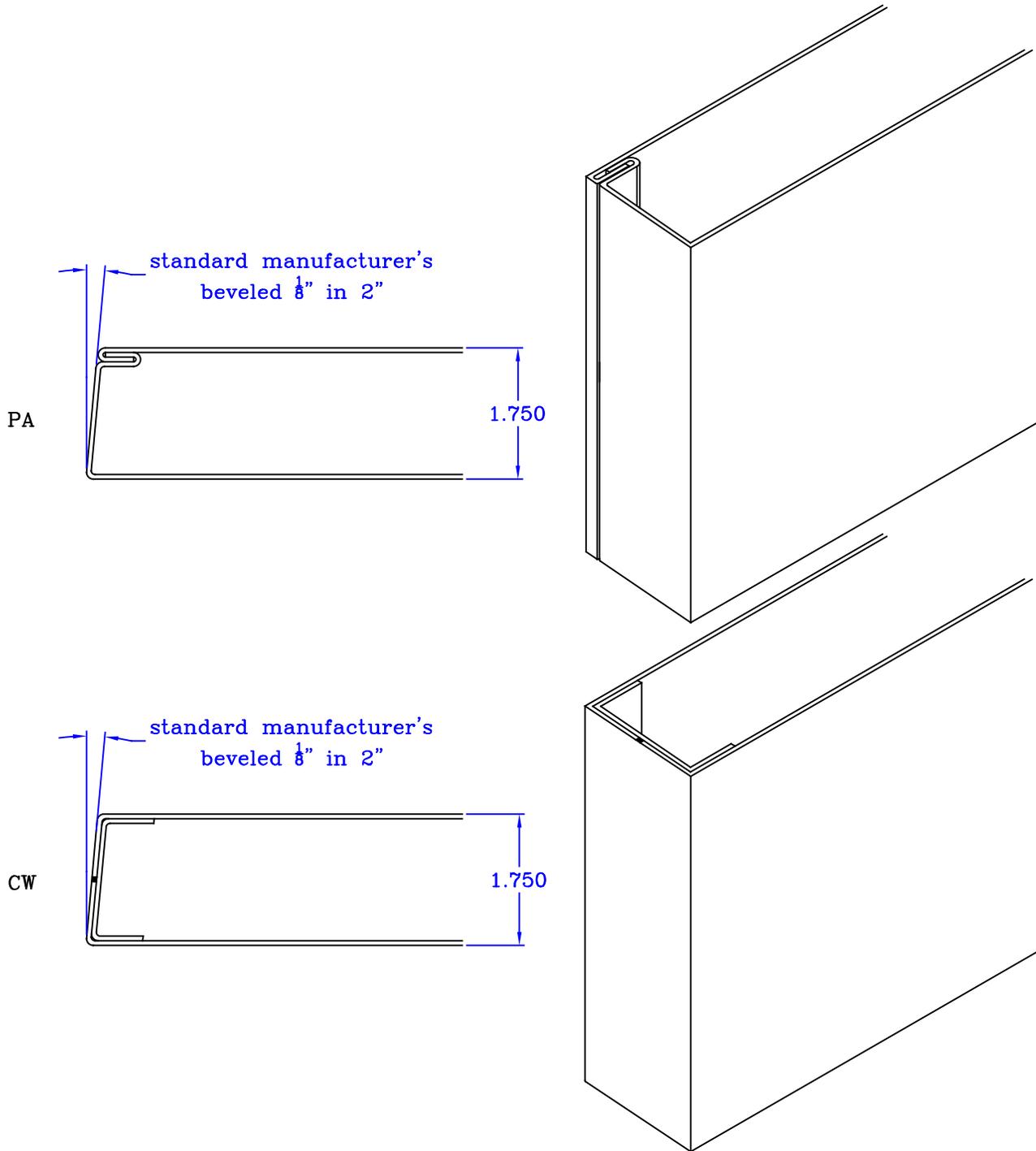
Stiffener option

## Welded stiffener



### 1 3/4" door thickness

Nominal thickness shown, may vary with gage

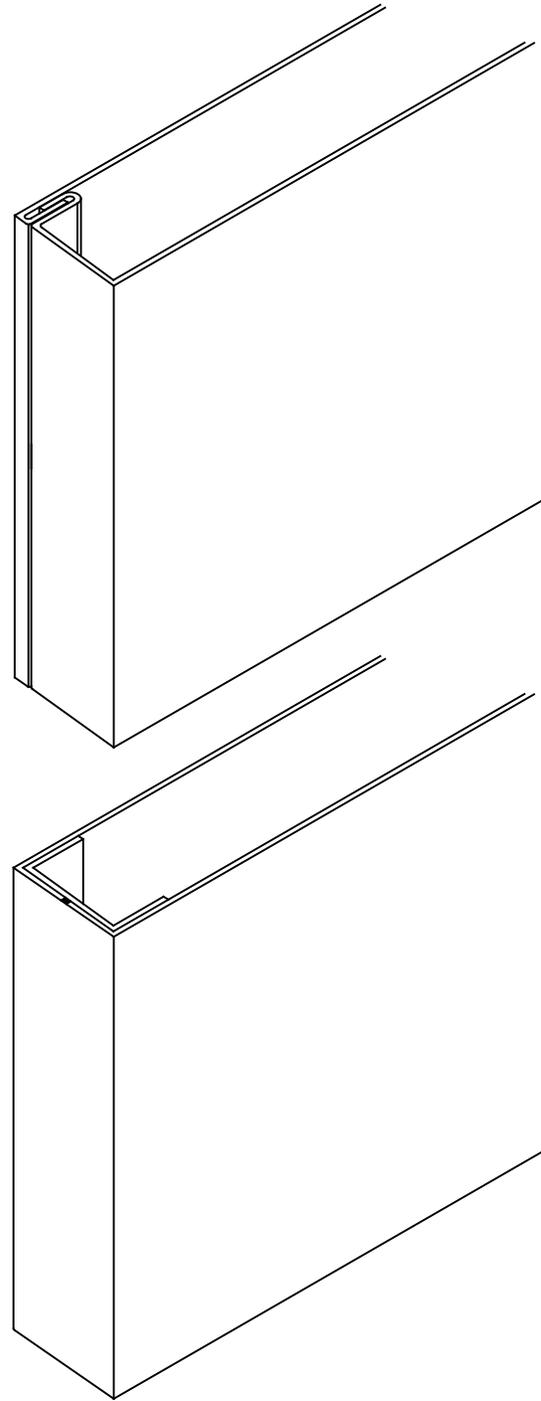
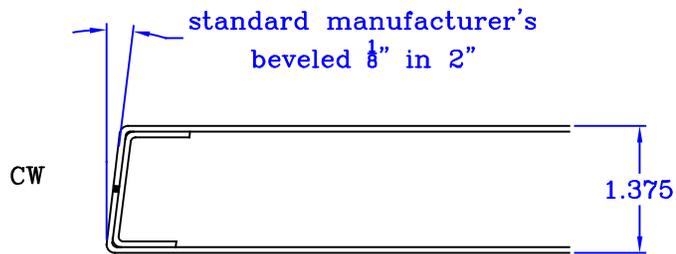
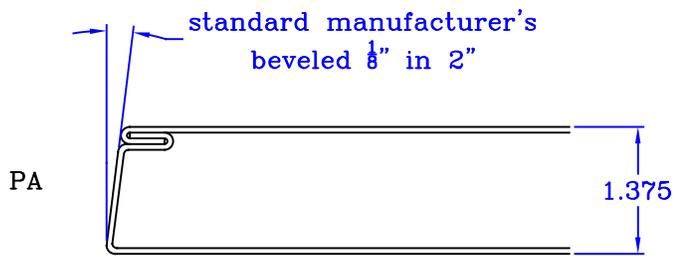


Door thickness

Beveled edge shown, square edge available

### 1 3/8" door thickness

Nominal thickness shown, may vary with gage

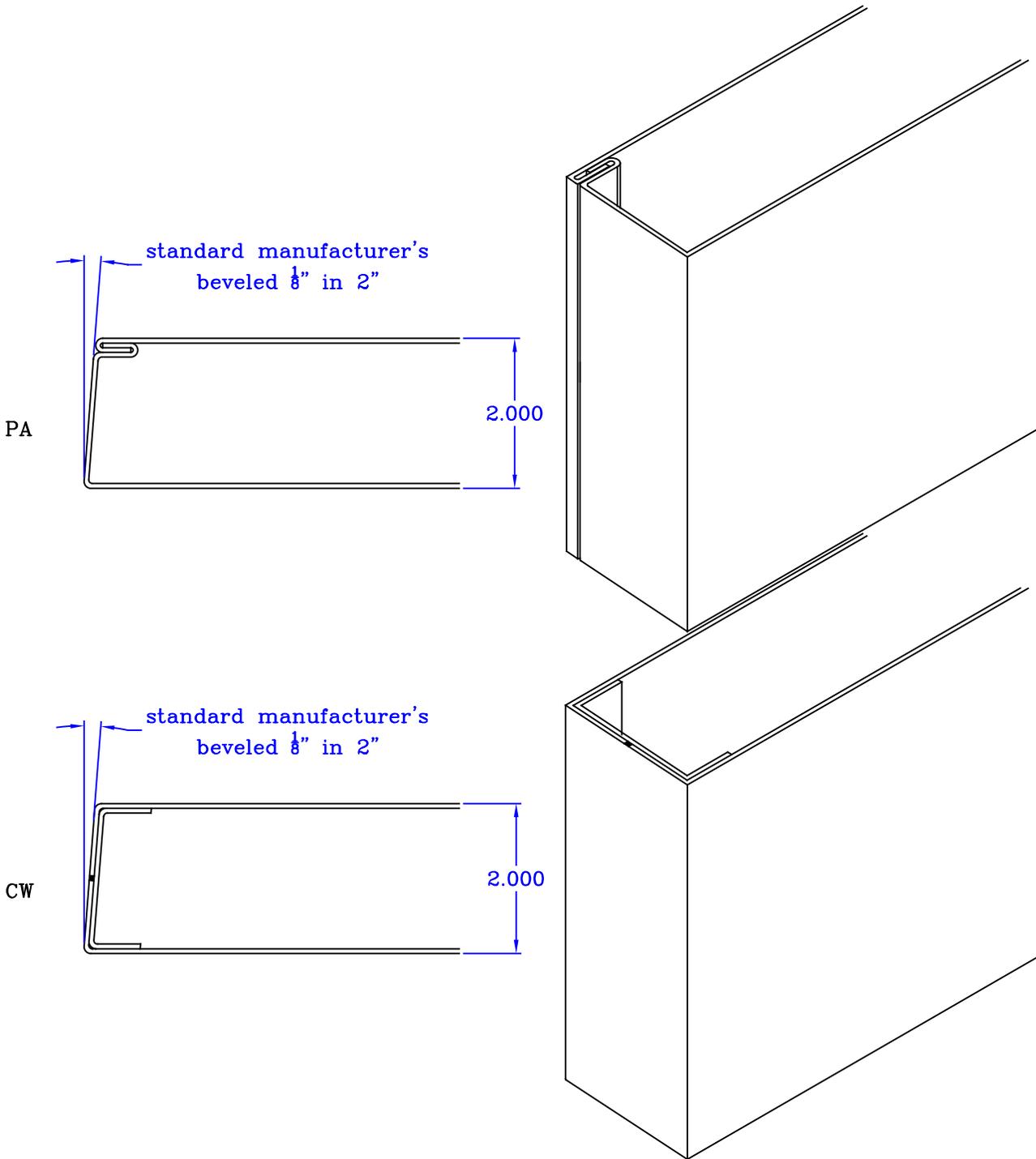


Door thickness

Beveled edge shown, square edge available  
Polystyrene core only

## 2" door thickness

Nominal thickness shown, may vary with gage

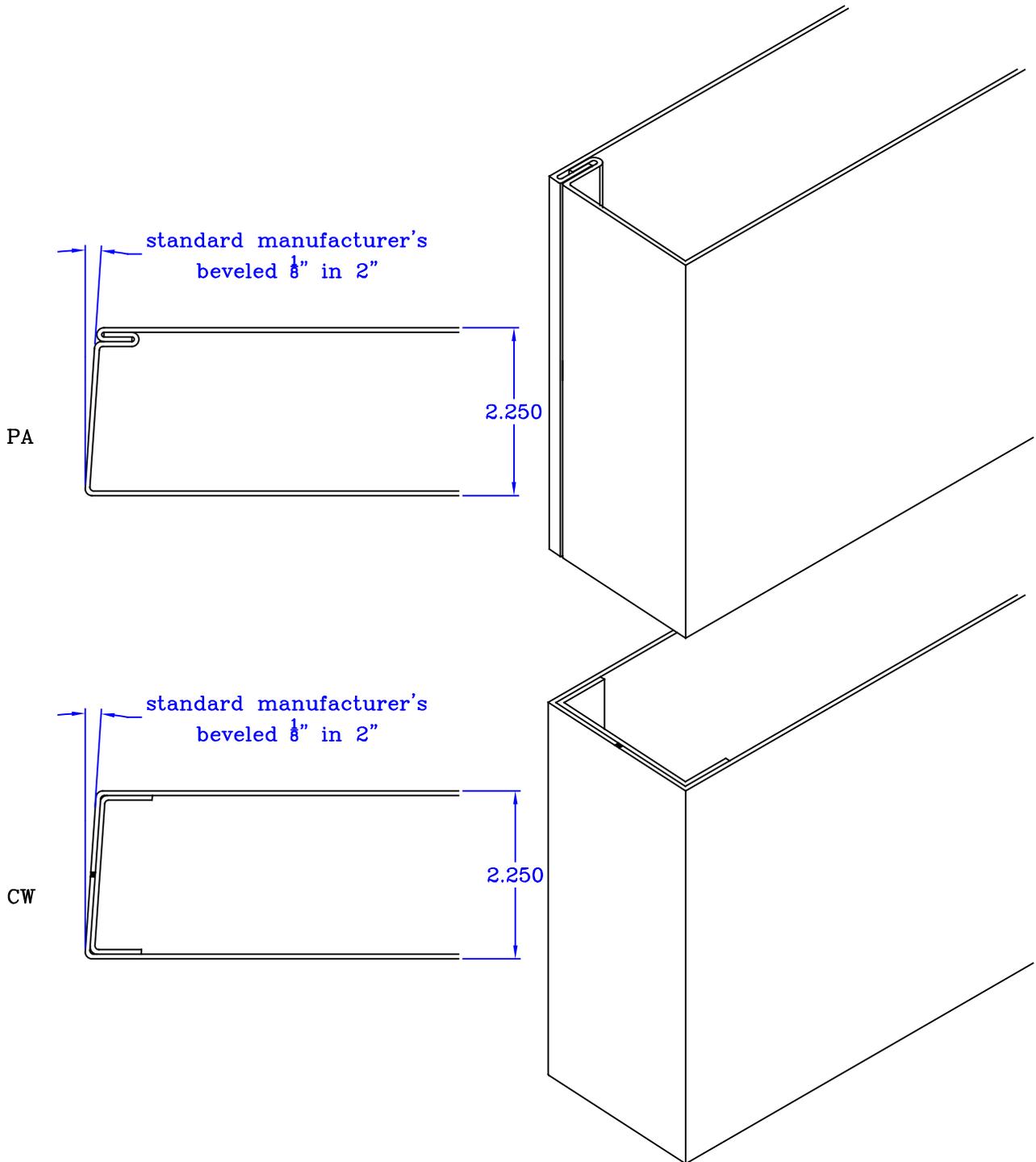


Beveled edge shown, square edge available  
Polystyrene core only  
Standard 1/4" hinge backset unless stated otherwise

## 2 1/4" door thickness

Nominal thickness shown, may vary with gage

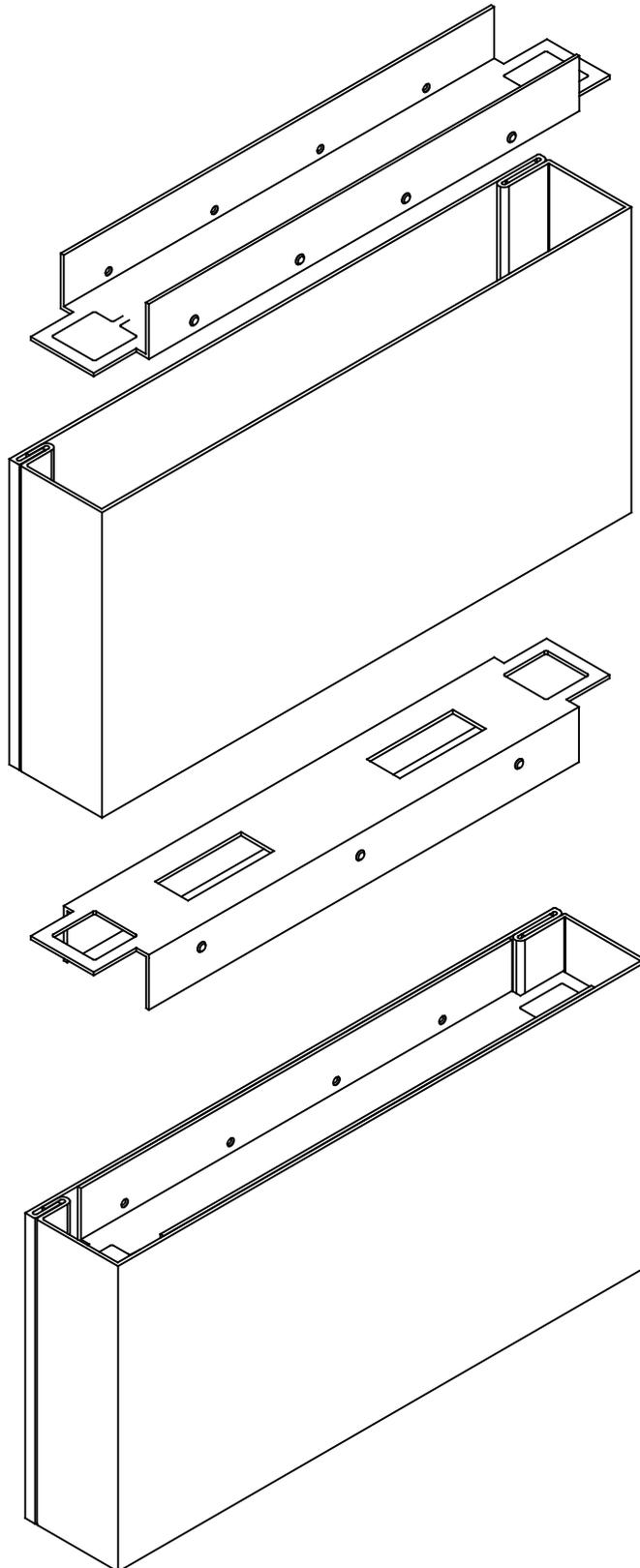
Door thickness



Beveled edge shown, square edge available  
Polystyrene core only  
Standard 1/4" hinge backset unless stated otherwise

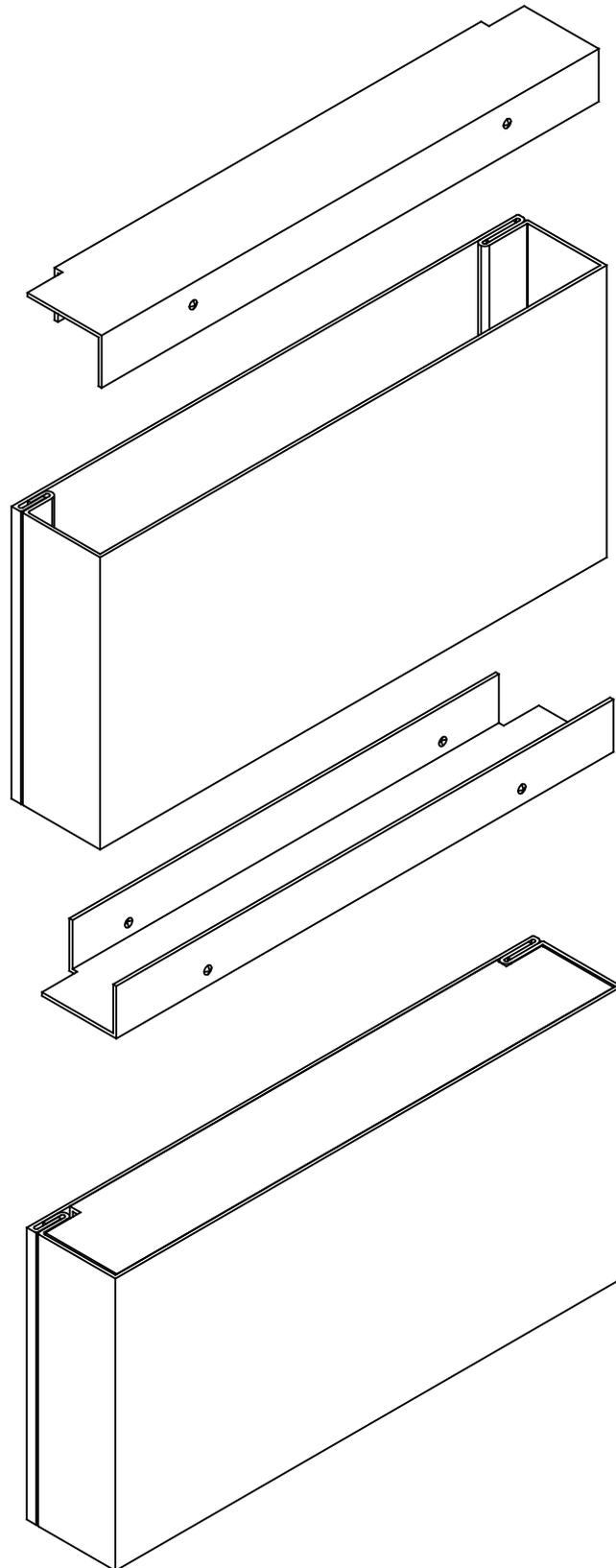
## Standard inverted end channel

Projection welded



Available for top and/or bottom  
\*16ga, 14ga & 12ga optional see CH14 & CH12

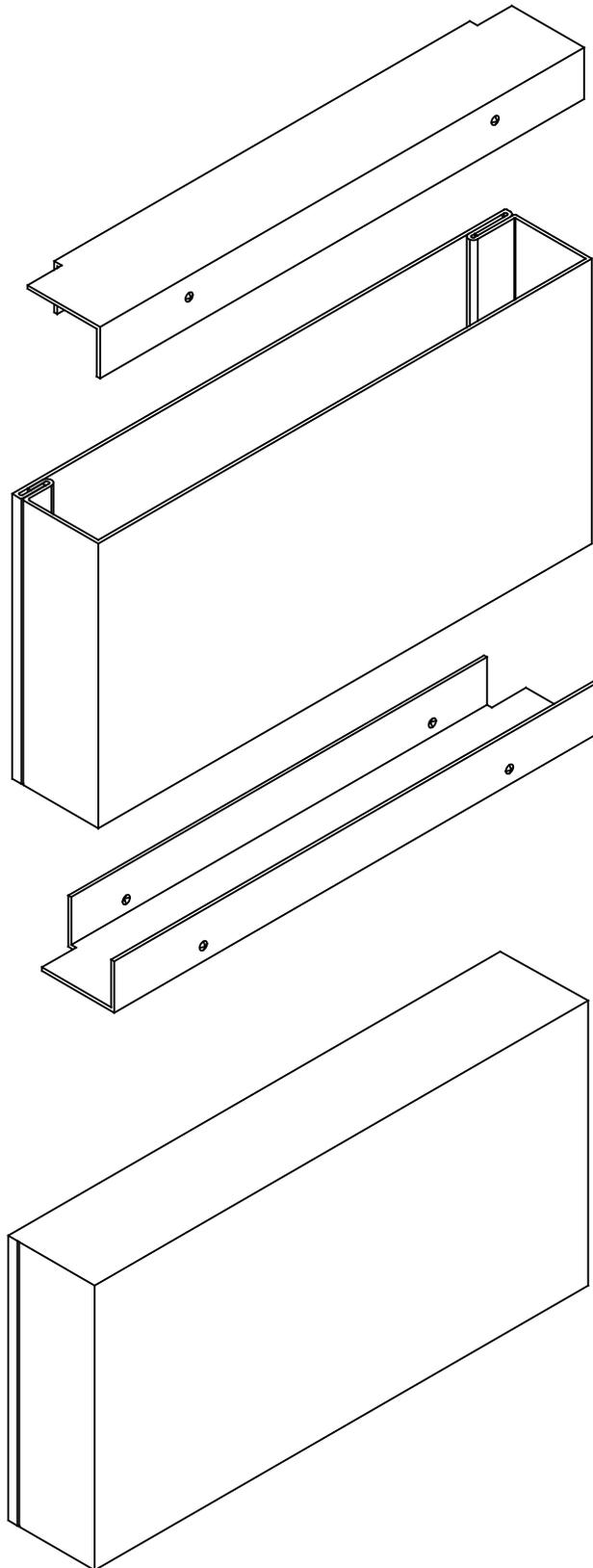
**Flush welded cap**  
Projection welded



Available for top and/or bottom  
\*16ga, 14ga & 12ga optional see CH14 & CH12

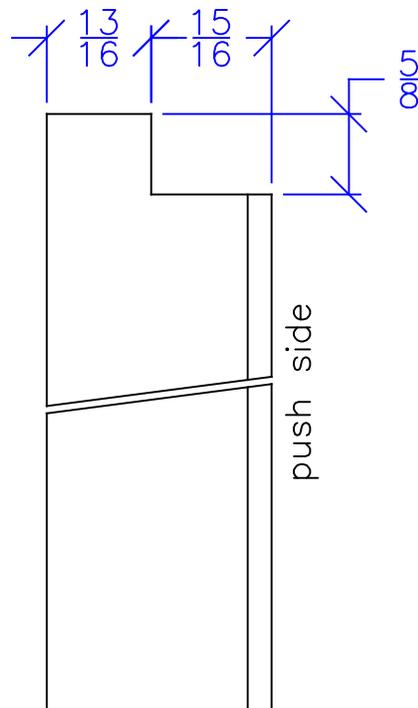
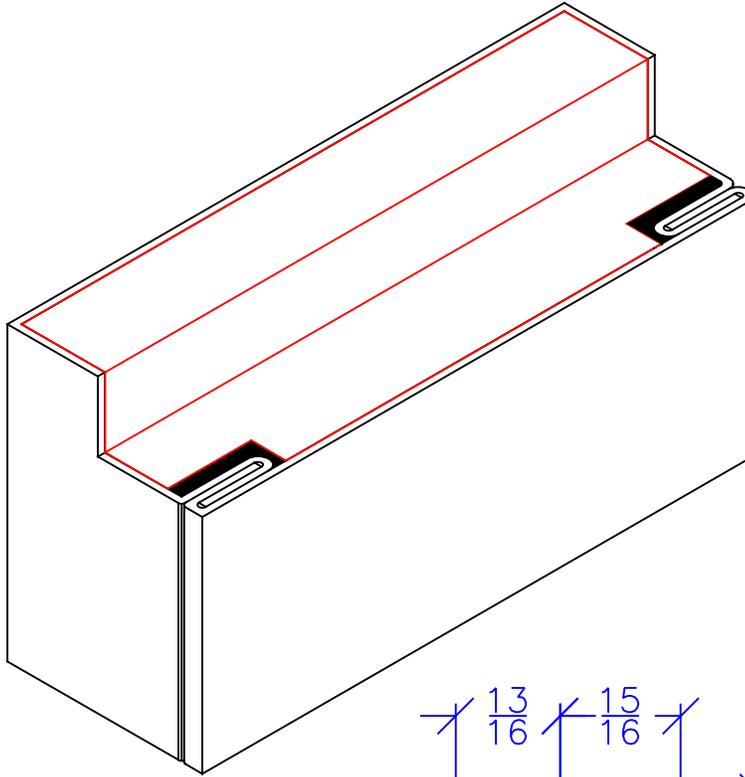
## Flush welded and sealed cap

Projection welded



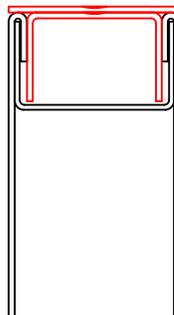
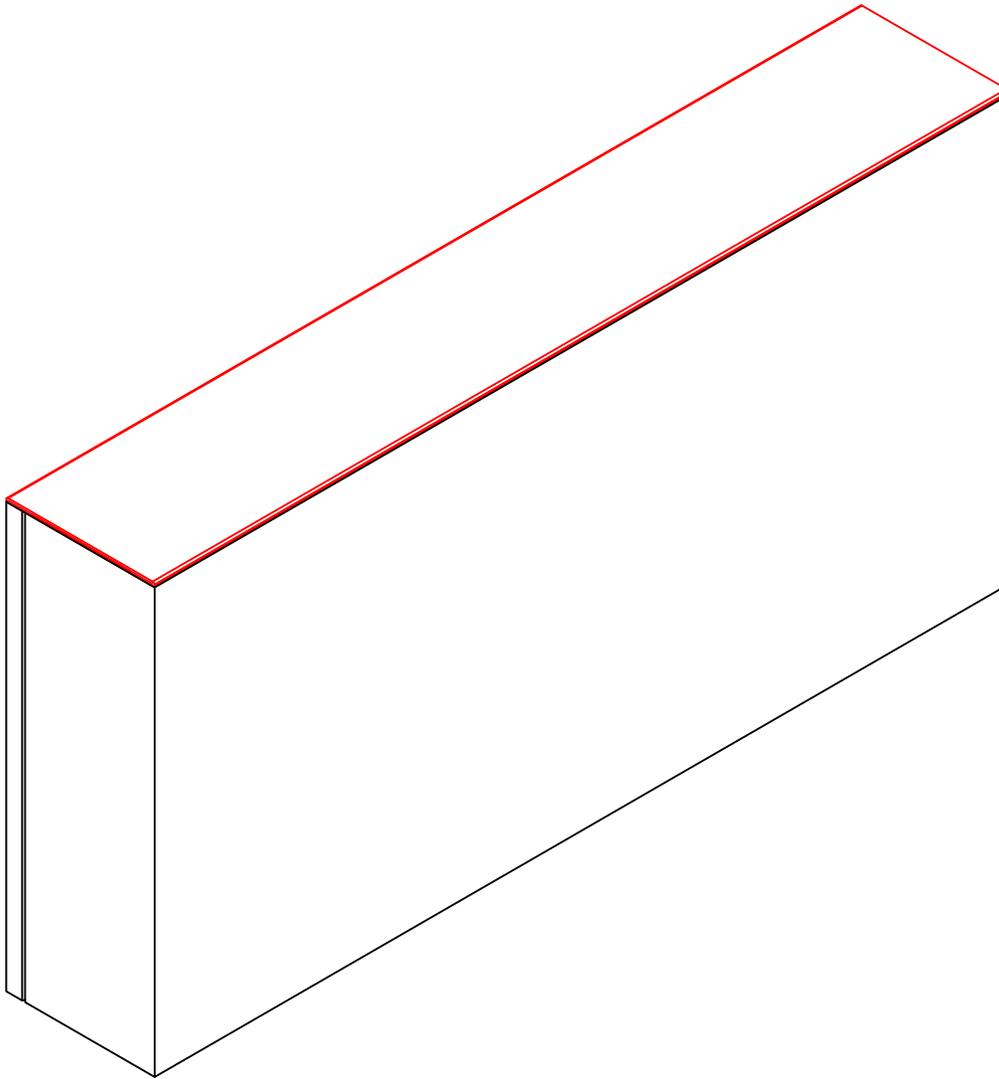
Available for top and/or bottom  
\*16ga, 14ga & 12ga optional see CH14 & CH12

**Rabbeted Cap, 16ga**  
Projection welded



Top only, to be use when rabbeted transom panel.

**Snap-in cap, 18ga**



For stainless steel door only.  
Available for top and bottom.

**14 gauge end channel/cap**

Projection welded

TOP

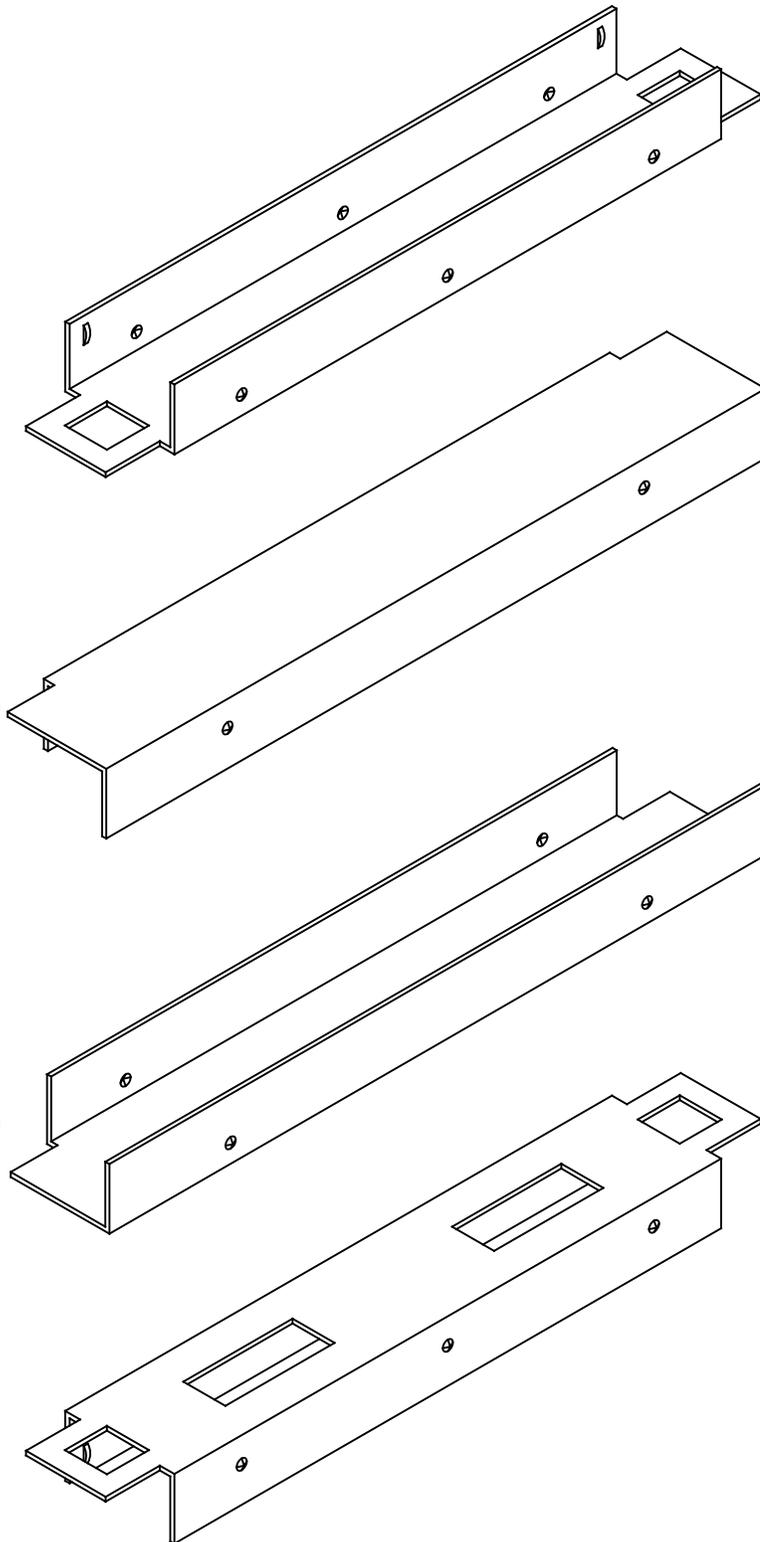
ST

FWC/FWSC

BOTTOM

FWC/FWSC

ST



End channel / Cap option

CH14

**12 gauge end channel/cap**

Tack and/or plug welded

TOP

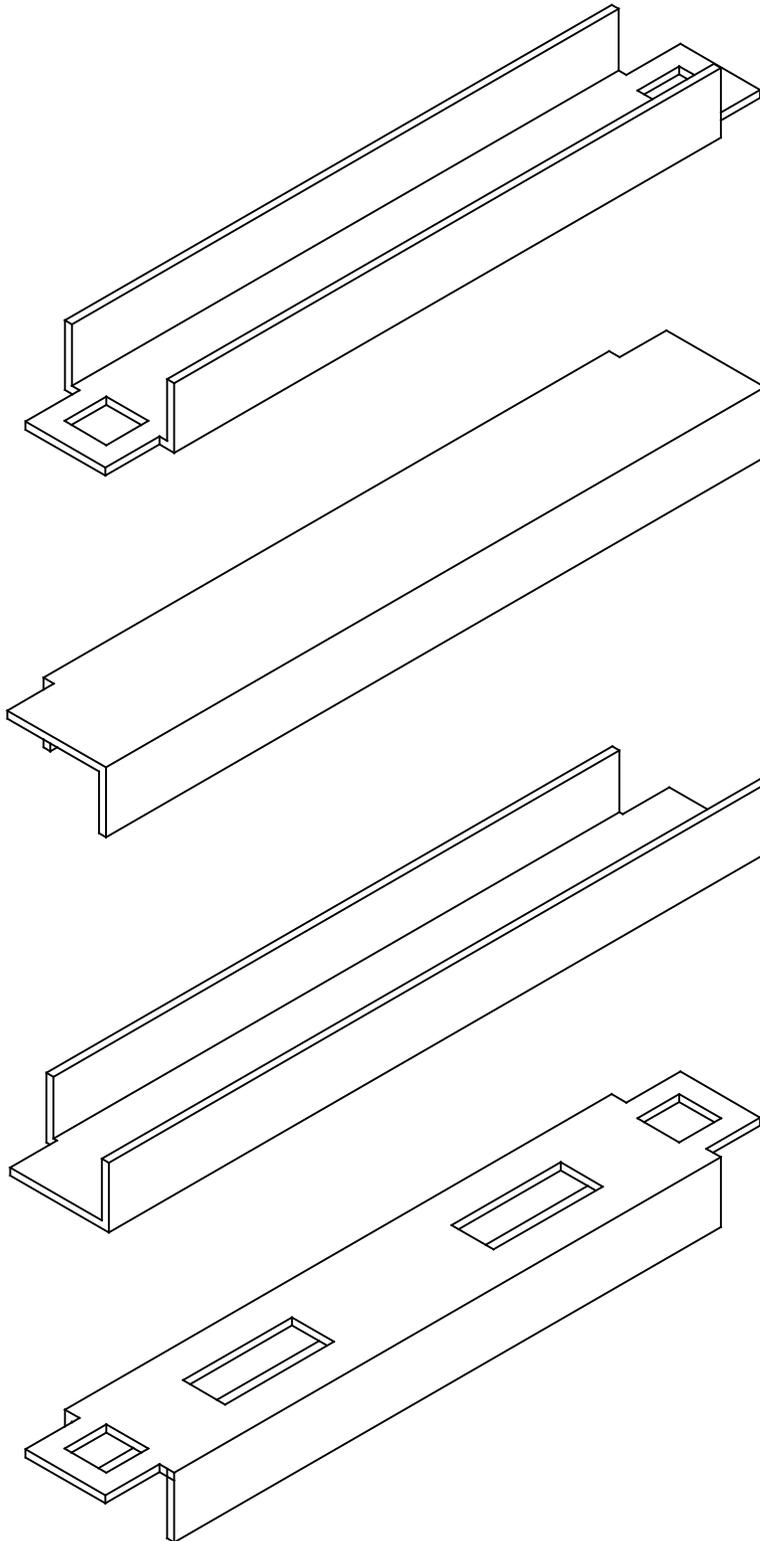
ST

FWC/FWSC

BOTTOM

FWC/FWSC

ST



End channel / Cap option

## Baked on primer

### Grey Waterborne Primer

#### General Properties

A quick drying water-based primer designed for application to galvanized surfaces. This product has excellent adhesion and corrosion resistance properties and is compatible with a wide variety of architectural topcoat paints. This primer can be topcoated immediately, or at any time in the future. Note that per NAAMM/HMMA 840 it is recommended to apply the finish coat of paint within 30 days of delivery. This product contains low VOC's and is engineered to surpass ANSI A250.10 Specifications when applied to galvanized substrates.

#### Product Information

Generic type: Acrylic resins  
Pigment type: Anti-corrosive  
Color: grey  
Finish: low sheen

Mix ratio: Single component  
Viscosity: 68 -72 K.U.  
V.O.C. mixed: 141 g/l (1.17 lbs/gla)  
Temperature resistance (dry):  
75°C (167°F) continuous  
100°C (212°F) intermittent  
Thinner: water

Average volume solids: 34.3%

#### Recommended Topcoats

Topcoat with any water or solvent base architectural paints.

#### Performance Criteria Tested to ANSI A250.10-1998(R2011)

##### Salt spray test:

Standard practice for operating salt spray (fog) apparatus

Method: ASTM B117-03

“X” scribe per ASTM D1654-92 (2000) section 4.1 and 5.1

120 hours continuous exposure

##### Acceptance criteria:

rust grade less than 6 as defined by ASTM D610-01

undercut less than 1/8” on each side

Performance on galvanized: pass

##### Condensation testing (humidity)

Standard practice for testing water resistance of coatings using controlled condensation

Method: ASTM D4585-99

100°F minimum temperature

240 hours continuous exposure

##### Acceptance criteria:

any amount of #8 blisters as defined by ASTM D714-02

less or equal few #6 blisters as defined by ASTM D714-02

Performance on galvanized: pass

##### Impact test:

Standard test method for resistance of organic coatings to the effect of rapid deformation

Method: ASTM D2794-93 (1999)e1

20 inch pounds direct using a Gardner impact tester with 1/2” diameter ball at 70-75°F

tape (3/4” wide) pull off test using #600 Scotch tape

##### Acceptance criteria:

no paint film removal other than an area 1/8” in diameter at the center of the impact test

Performance on galvanized: pass

##### Film adhesion test:

Standard test methods for measuring adhesion by tape test

Method: ASTM D3359-02

method B with 11 parallel cuts made 1mm apart

tape (1” wide) pull off test

##### Acceptance criteria:

less or equal 3B as defined by ASTM D3359-02

less or equal 5 -15 % film removal

Performance on galvanized: pass

## Powder coated standard color prefinished

### General Properties

POWDURA RAL® Series Durable Polyester TGIC-free Powder Coatings are recommended for a broad range of interior/exterior decorative applications. They are designed for superior weatherability compared to standard polyester powder coatings.

### Advantages

Excellent exterior color and gloss retention

Excellent overbake resistance

Good chemical resistance

### Application

Cure schedule 10mn @ 205 C

Film thickness range (mils) 2.0-3.0

### Attributes

Specific gravity (g/ml) 1.68

Coverage at 1.0 Mil (ft<sup>2</sup>/lb) 114.8

60° gloss (ASTM D-523) 28-42

Adhesion (ASTM D-3359) 5B

Flexibility (ASTM D-522) pass 1/8"

Pencil hardness (ASTM D-3363) H-2H

Impact resistance (in lb.) Dir 160 in-lbs  
(ASTM D-2794) Rev 160 in-lbs

Performance measured using 24-gauge Bonderite® 1000 test panels.

See [www.ralcolor.com](http://www.ralcolor.com)

**Positive pressure 180 minutes**  
Mylar label with protective film

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Positive pressure 90 minutes**  
Mylar label with protective film

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Positive pressure 60 minutes**  
Mylar label with protective film

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Positive pressure 45 minutes**

Mylar label with protective film

Label



Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

**Positive pressure 20 minutes**  
Mylar label with protective film

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Construction Label – Fire Door/Frame**

Mylar label with protective film

Label

<p><b>CONSTRUCTION LABEL - FIRE DOOR OR FRAME</b></p> <p>THIS DOOR OR FRAME IS IDENTICAL IN CONSTRUCTION TO A LISTED DOOR OR FRAME. IT DOES NOT BEAR A LISTING MARK FROM A TESTING LABORATORY BECAUSE OF SIZE, HARDWARE PREPARATION OR OTHER LIMITING FACTOR SPECIFIED BY THE USER/OWNER.</p>  <p><b>000000-00161</b></p>	 DE LA FONTAINE <a href="http://WWW.DELAFONTAINE.COM">WWW.DELAFONTAINE.COM</a> <b>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</b>
---	--

Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

CL

**Fire Exit Hardware - Supplemental Label**

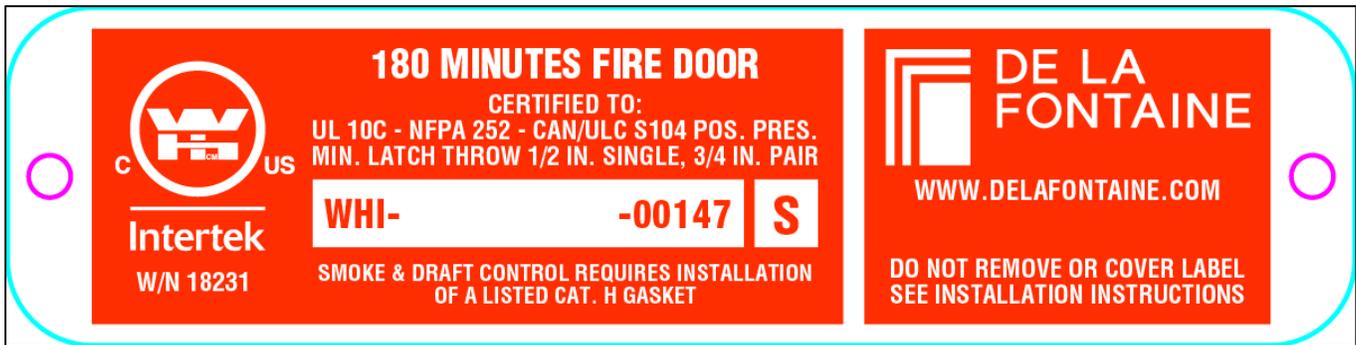
Mylar label with protective film



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Positive pressure 180 minutes**  
Riveted

Label

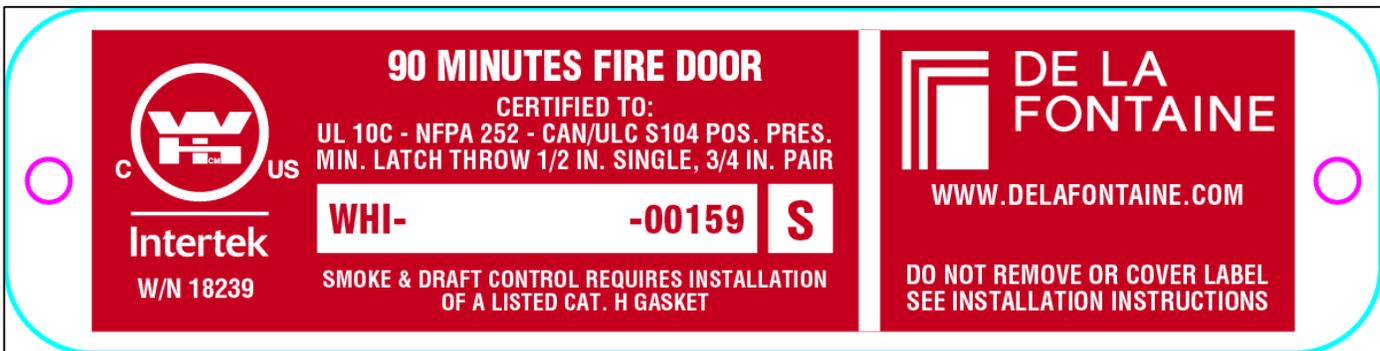


Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

180R

**Positive pressure 90 minutes**  
Riveted

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

90R

**Positive pressure 60 minutes**  
Riveted

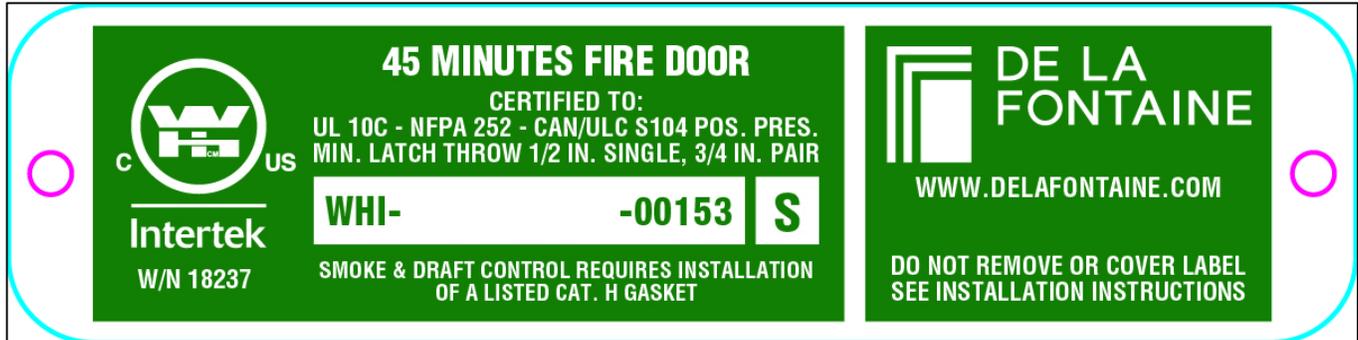
Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**Positive pressure 45 minutes**  
Riveted

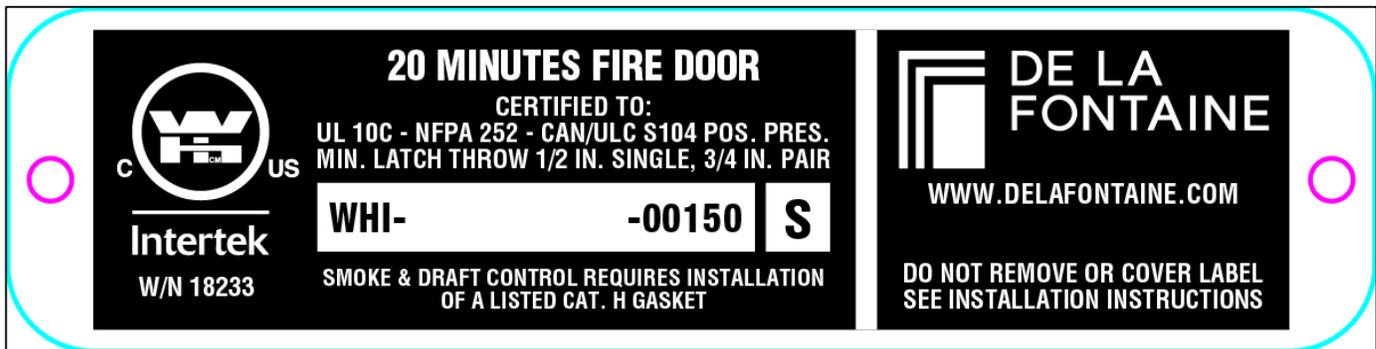
Label



Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

**Positive pressure 20 minutes**  
Riveted

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

## Construction Label – Fire Door/Frame

Riveted

Label



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

CLR

**Fire Exit Hardware - Supplemental Label**  
Riveted



Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

**FBC Hurricane, HVHZ, ±50 PSF, includes door reinforcements**  
Mylar label with protective film

Label

<b>FLORIDA BUILDING CODE APPROVED PRODUCT</b>	 DE LA FONTAINE
FL46851	WWW.DELAFONTAINE.COM
<b>SINGLE &amp; DOUBLE FLUSH OR GLAZED STEEL DOOR OUTSWING, HVHZ, 3'0" / 6'0" X 8'0" MAX. SEE INSTALLATION INSTRUCTIONS FOR DESIGN PRESSURE LIMITATIONS. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</b>	ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC
DO NOT REMOVE OR COVER LABEL	
 <b>000000-21001</b>	

Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

HUR50

**FBC Hurricane, HVHZ, ±70 PSF, includes door reinforcements**  
Mylar label with protective film

Label

<p><b>FLORIDA BUILDING CODE APPROVED PRODUCT</b></p> <p>FL46851</p> <p>SINGLE &amp; DOUBLE FLUSH OR GLAZED STEEL DOOR OUTSWING, HVHZ, 3'0"/6'0" X 8'0" MAX. SEE INSTALLATION INSTRUCTIONS FOR DESIGN PRESSURE LIMITATIONS. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</p> <p>DO NOT REMOVE OR COVER LABEL</p> <p> <b>000000-21001</b></p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
---	--

<p><b>FLORIDA BUILDING CODE APPROVED PRODUCT</b></p> <p>FL46851</p> <p>SINGLE FLUSH OR GLAZED STEEL DOOR INSWING, ±70 PSF, HVHZ, 3'0" X 8'0" MAX. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</p> <p>DO NOT REMOVE OR COVER LABEL</p> <p> <b>000000-21000</b></p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
--	--

Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

HUR70

**FBC Hurricane, Non-HVHZ, ±70 PSF**  
Mylar label with protective film

Label

<b>FLORIDA BUILDING CODE APPROVED PRODUCT</b> FL21194		 <b>DE LA FONTAINE</b>  WWW.DELAFONTAINE.COM  ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC
 Intertek W/N 16686	<b>SINGLE &amp; DOUBLE FLUSH STEEL OUTSWING DOOR</b> +/- 70 PSF, 350 FT-LBS IMPACT, 3'0" / 6'0" x 7'0" MAX. CERTIFIED TO: ASTM E330, E1886, E1996  <b>000000-20751</b> DO NOT REMOVE OR COVER LABEL	

Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

HUR70N

**Construction Label - Hurricane-Resistant Door/Frame**

Mylar label with protective film

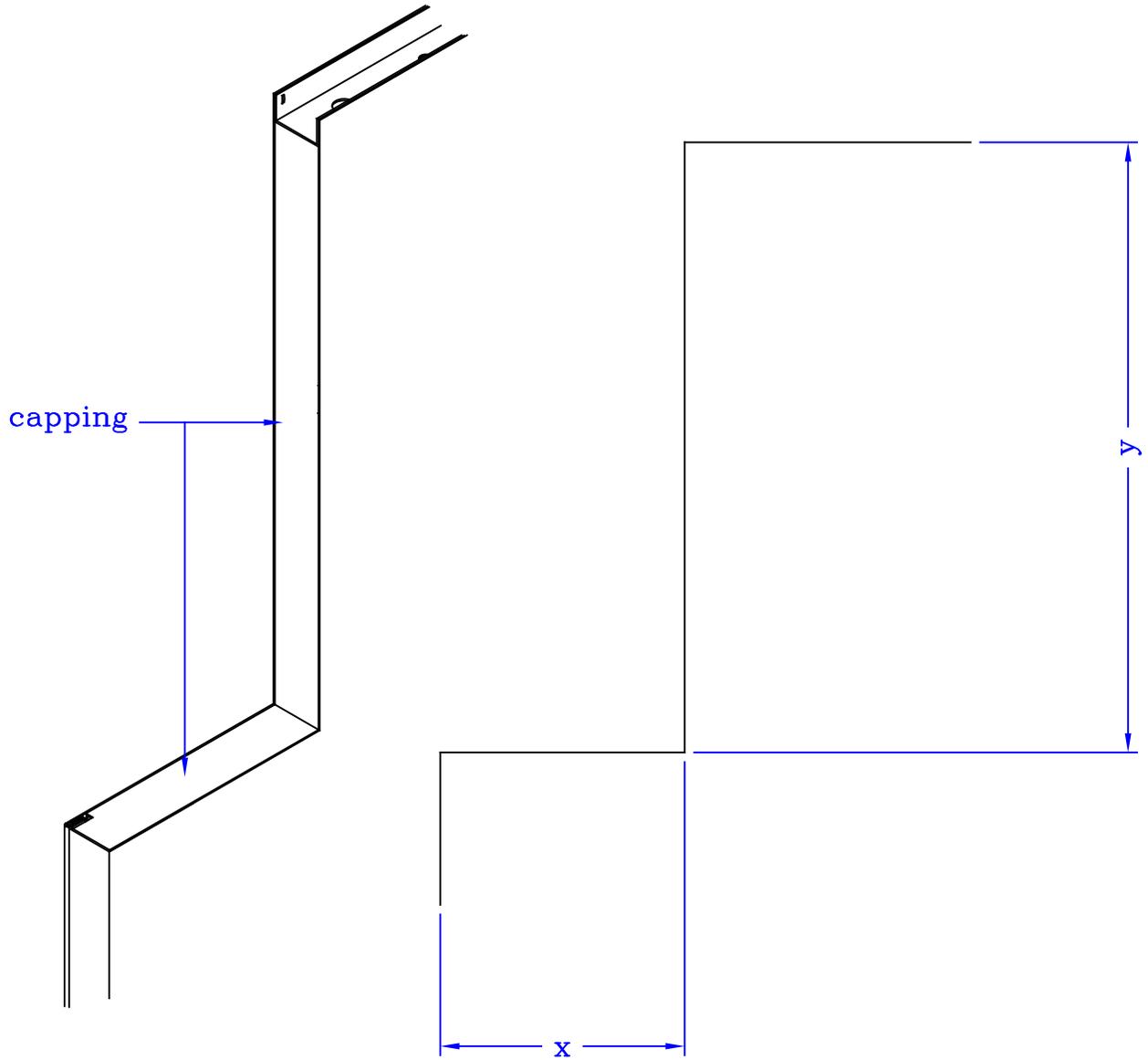
Label

<p><b>HURRICANE-RESISTANT DOOR/FRAME CONSTRUCTION</b></p> <p>THIS DOOR OR FRAME WAS MANUFACTURED USING THE SAME MATERIALS AND CONSTRUCTION METHODS AS A HURRICANE-RESISTANT DOOR OR FRAME. IT DOES NOT BEAR THE LABEL OF A TESTING AGENCY DUE TO SIZE, HARDWARE OR OTHER LIMITING FACTORS SPECIFIED BY THE USER/OWNER.</p> <p>DO NOT REMOVE OR COVER LABEL</p>  <p>000000-21002</p>	 DE LA FONTAINE
	<p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>

Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

HURCL

**Prep for monorail cut out**  
per leaf



Other door prep

MONOR

## Hot dipped galvanized steel A40 (ZF120)

Our A40 material is compliant with the ASTM A653/A653M specifications. Which specification for steel sheet, zinc-coated (galvanized) or zinc-iron (galvanized) by the hot dipped.

Zinc-iron coating of 0.30 oz/ft<sup>2</sup> total both sides per the single spot test.

In SI units it would be 90g/m<sup>2</sup> total both sides per the same test and listed under ZF120.

## Hot dipped galvanized steel A60(ZF180)

Material per ASTM A653/A653M

a zinc-iron alloy by the Hot-Dipped process with a thicker coating than the A40.

0.60 oz/sq.ft total on both surfaces compared to 0.40 oz/sq.ft.

Giving the product a higher rust and corrosion resistance.

Also called as ZF180 in SI units.

## Hot dipped galvanized steel G90(Z275)

Material per ASTM A653/A653M

a zinc coating by the Hot-Dipped process.

0.90 oz/sq.ft total on both surfaces.

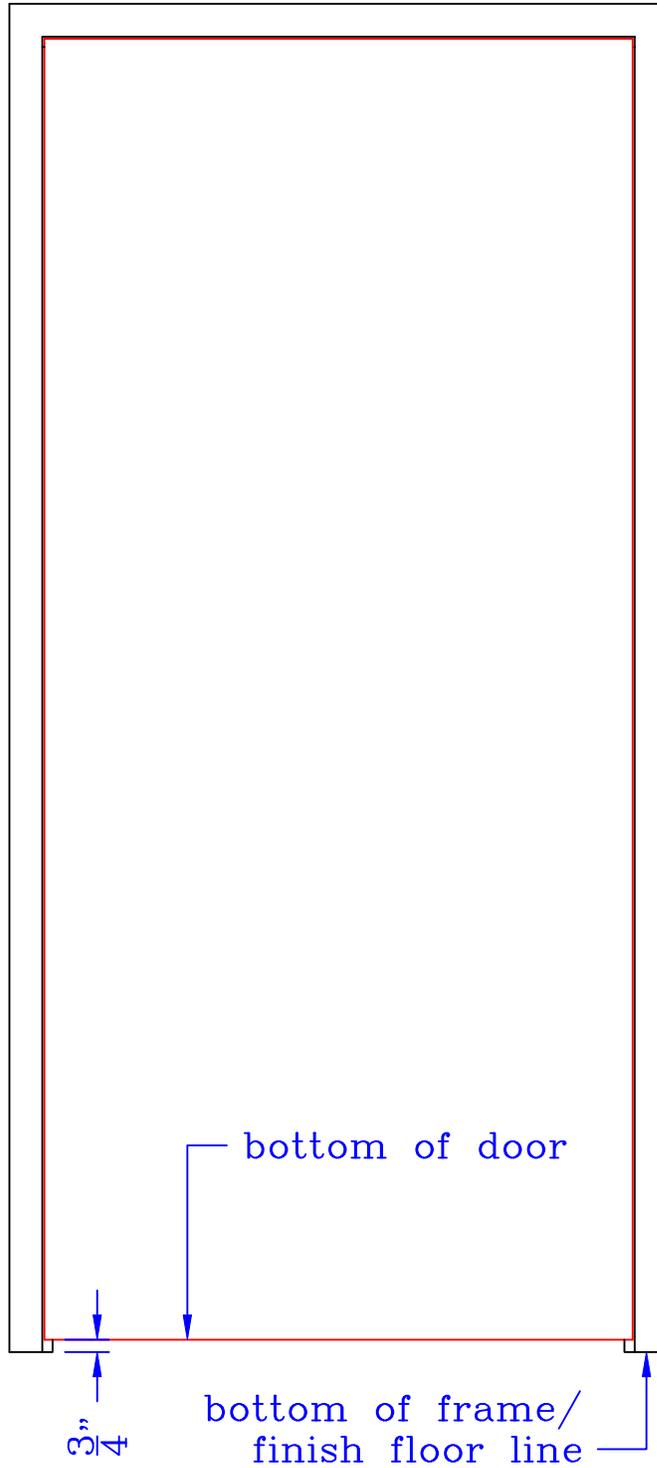
Recommended in damp or salty environment.

Also called as Z275 in SI units.

Doors(PA) and frames(KD) available unprimed only.

Doors(CW) and frames(FW,CFW) with a temporary coating only at grinded areas.

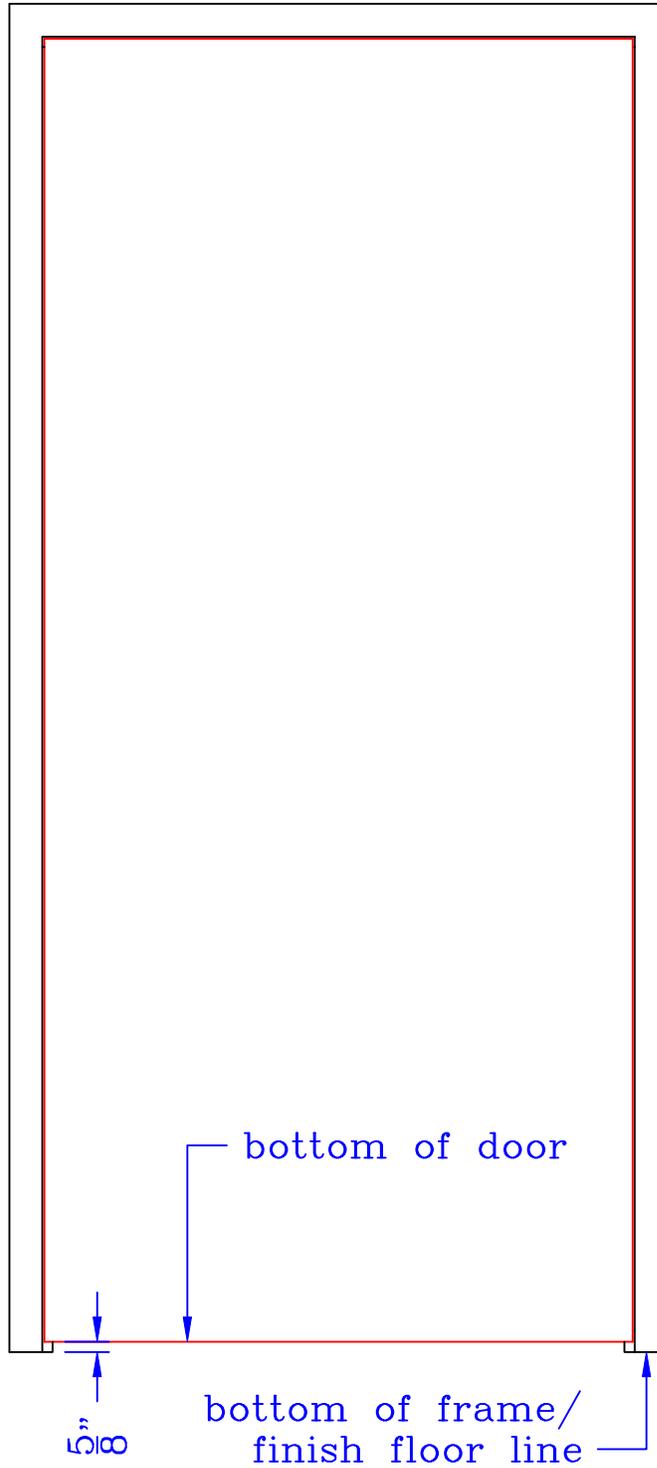
**3/4" undercut**



Undercut

34UC

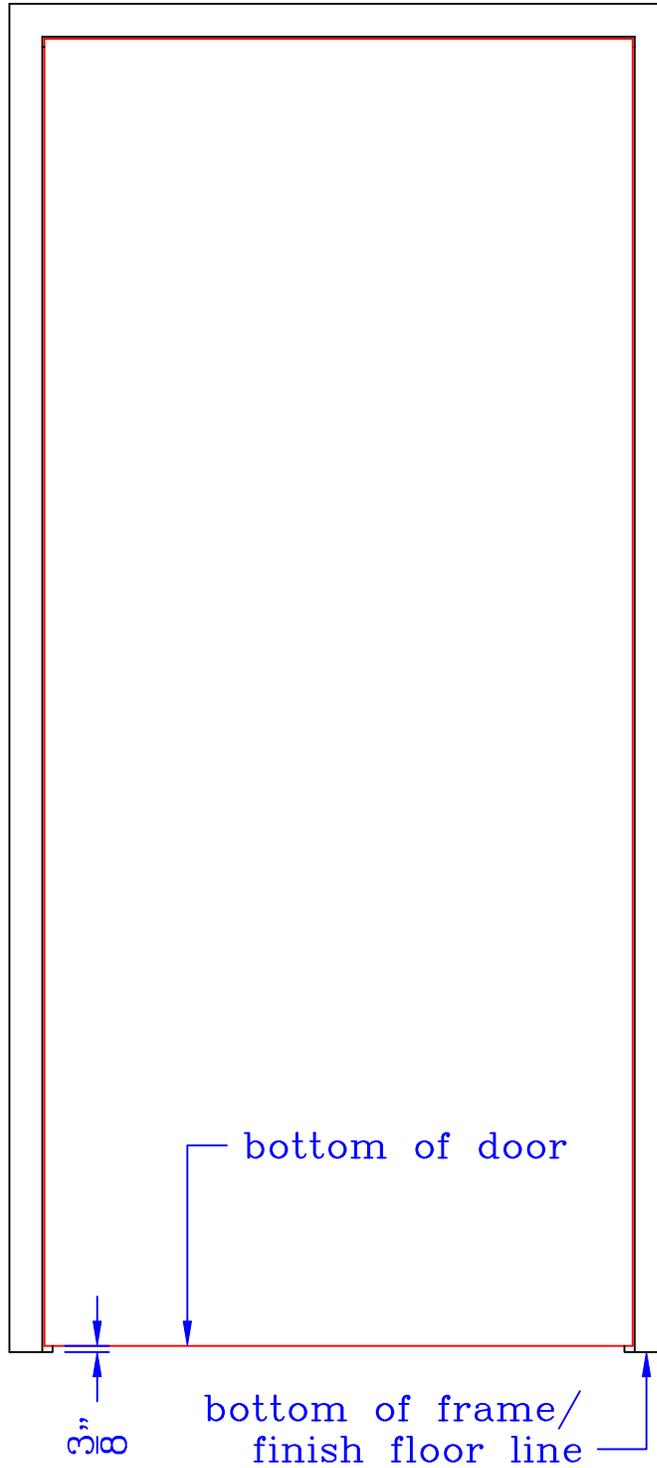
**5/8" undercut**



Undercut

58UC

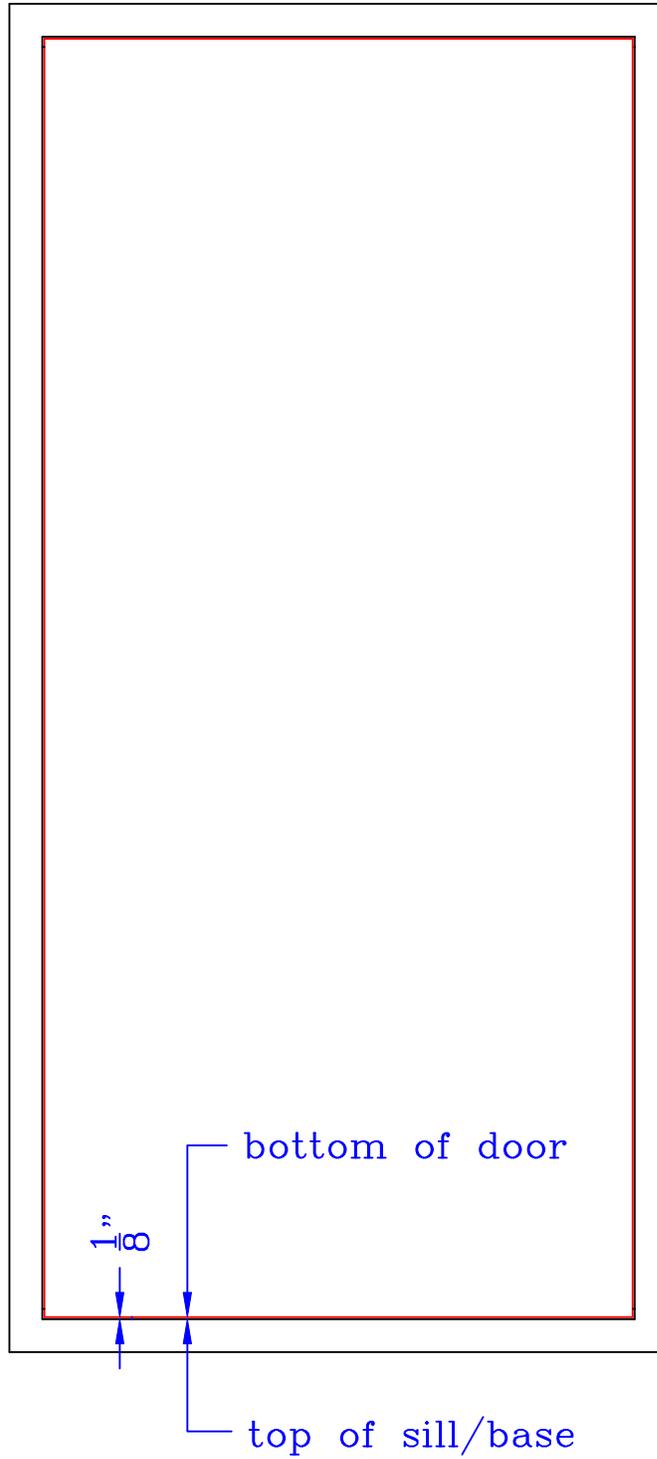
**3/8" undercut**



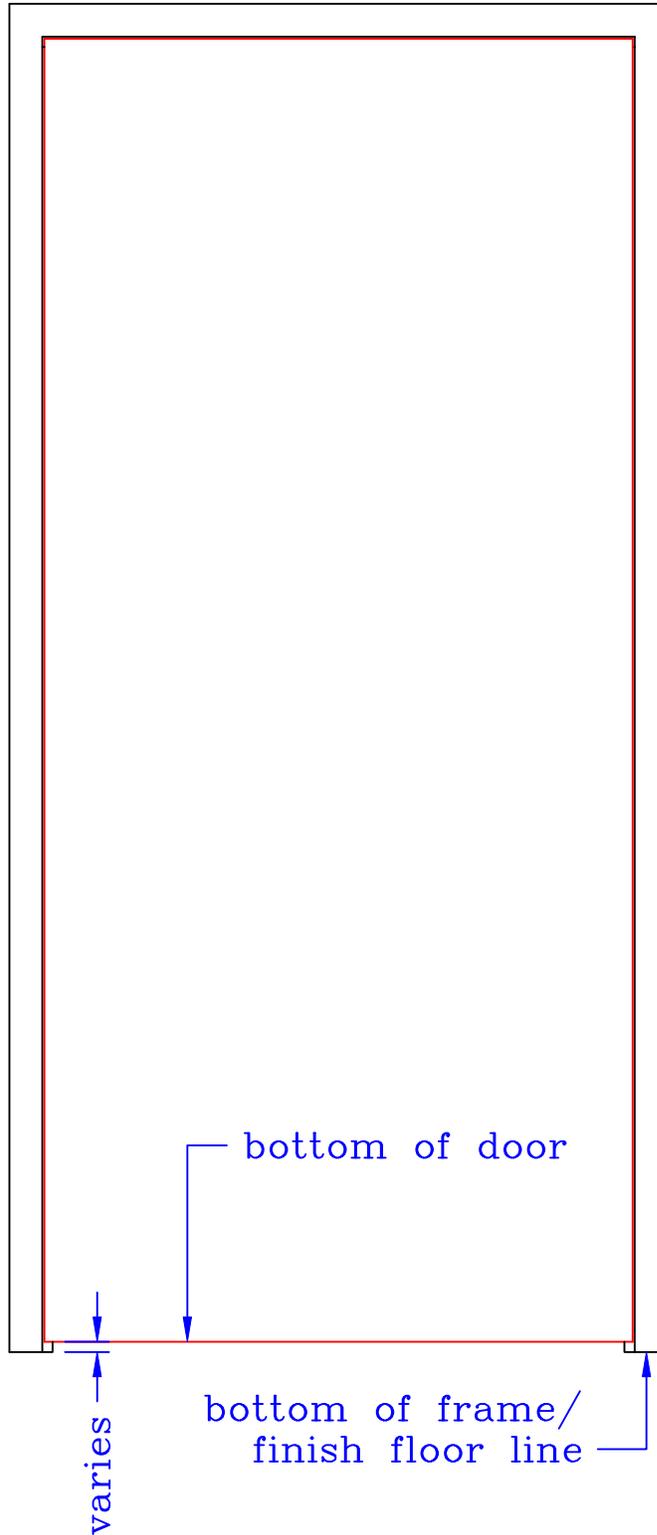
Undercut

38UC

**1/8" undercut**



## Special undercut

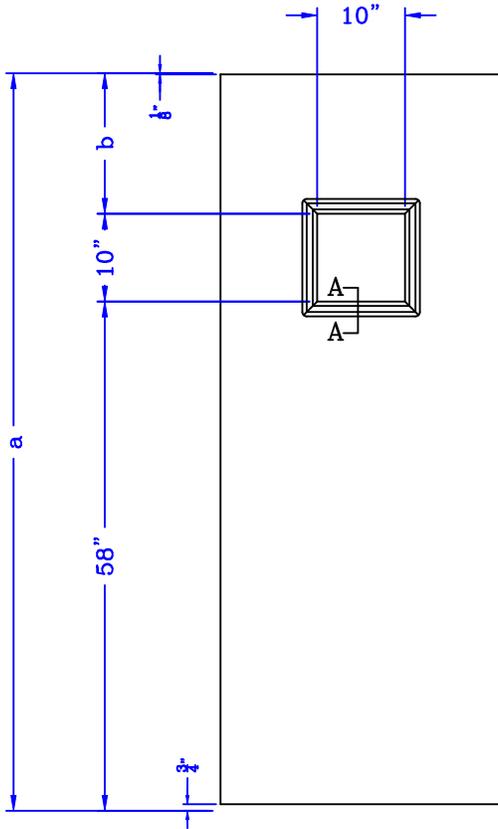


**10" x 10" exposed glass**

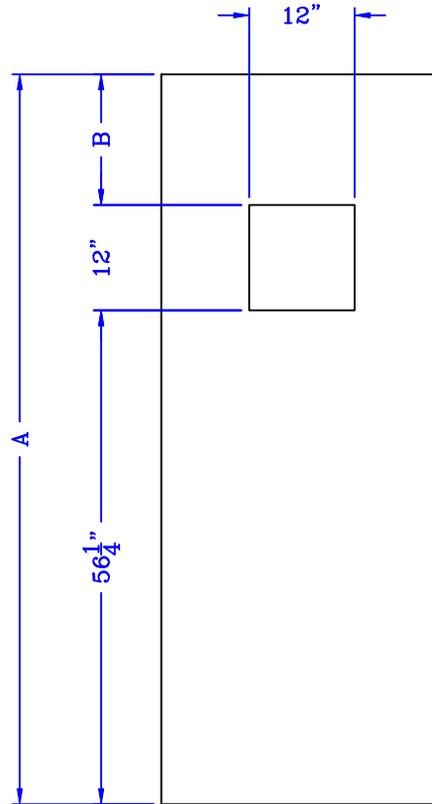
Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

EXPOSED GLASS



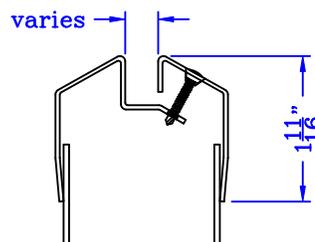
CUT OUT



Nominal Height	
a	b
6' 8" (80")	12"
6' 10" (82")	14"
7' 0" (84")	16"
7' 2" (86")	18"
8' 0" (96")	28"

Net Height	
A	B
79 1/8"	10 7/8"
81 1/8"	12 7/8"
83 1/8"	14 7/8"
85 1/8"	16 7/8"
95 1/8"	26 7/8"

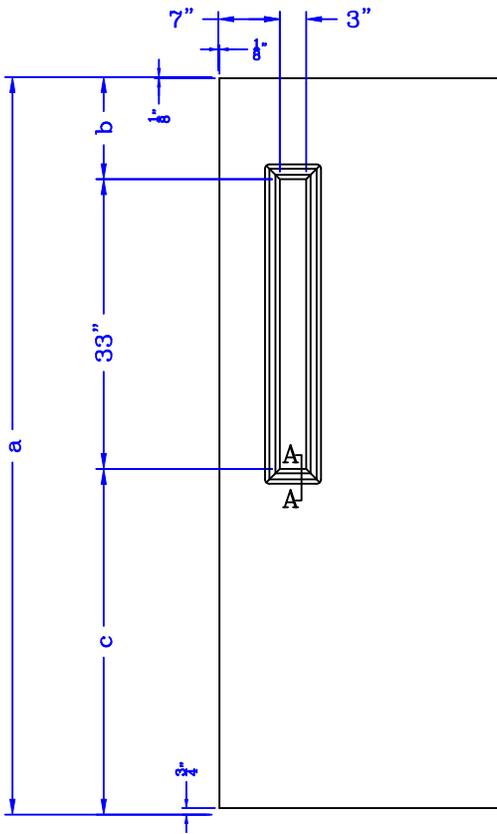
For 3/16" to 1" thick glass



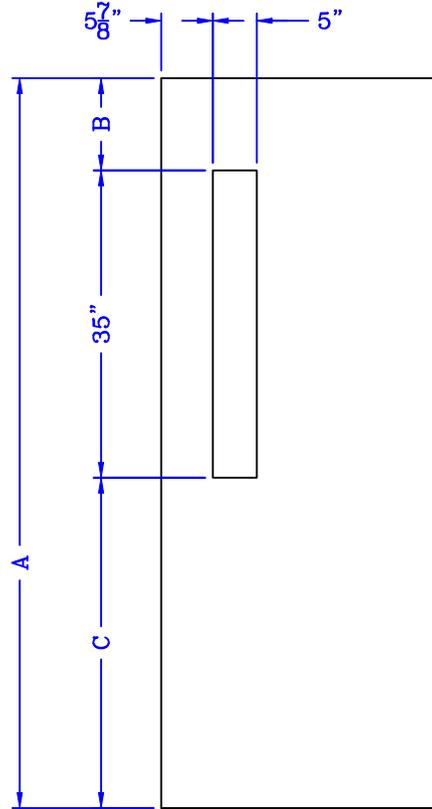
**3" x 33" exposed glass**

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



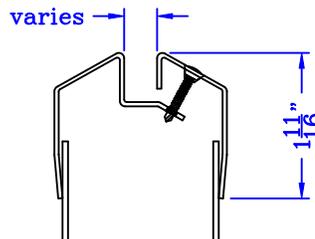
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	39"
6' 10" (82")	9 5/8"	39 3/8"
7' 0" (84")	11 5/8"	39 3/8"
7' 2" (86")	13 5/8"	39 3/8"
8' 0" (96")	23 5/8"	39 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	37 1/4"
81 1/8"	8 1/2"	37 5/8"
83 1/8"	10 1/2"	37 5/8"
85 1/8"	12 1/2"	37 5/8"
95 1/8"	22 1/2"	37 5/8"

For 3/16" to 1" thick glass

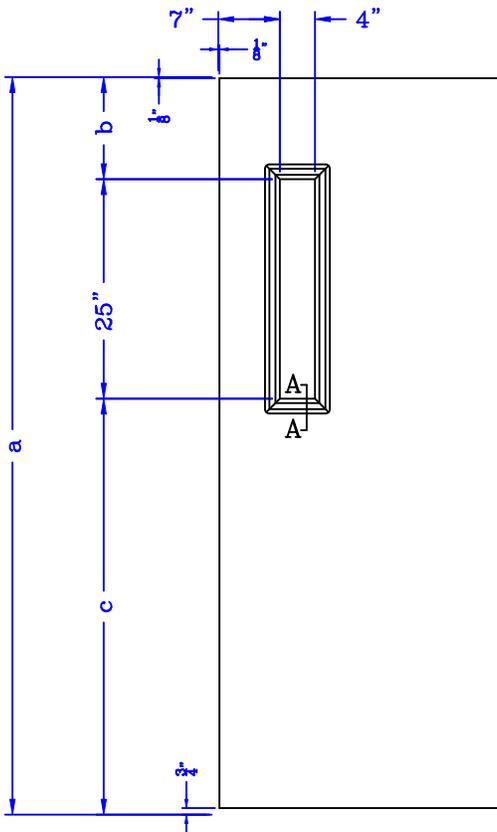


**4" x 25" exposed glass**

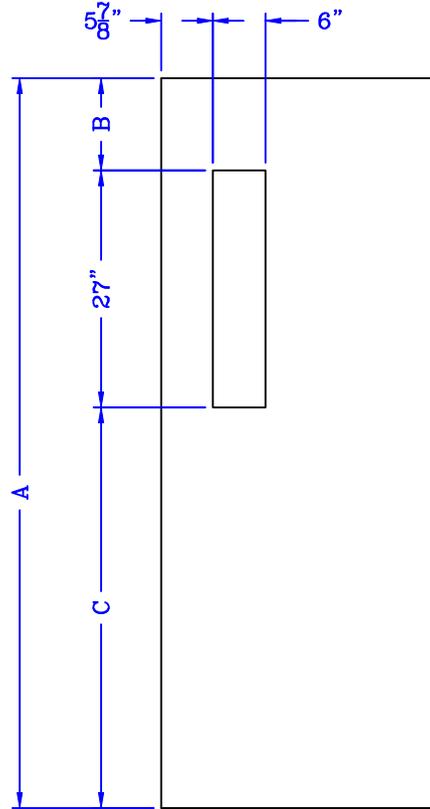
Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

EXPOSED GLASS



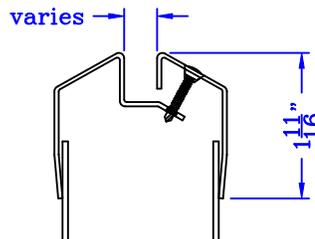
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	47"
6' 10" (82")	9 5/8"	47 3/8"
7' 0" (84")	11 5/8"	47 3/8"
7' 2" (86")	13 5/8"	47 3/8"
8' 0" (96")	23 5/8"	47 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	45 1/4"
81 1/8"	8 1/2"	45 5/8"
83 1/8"	10 1/2"	45 5/8"
85 1/8"	12 1/2"	45 5/8"
95 1/8"	22 1/2"	45 5/8"

For 3/16" to 1" thick glass

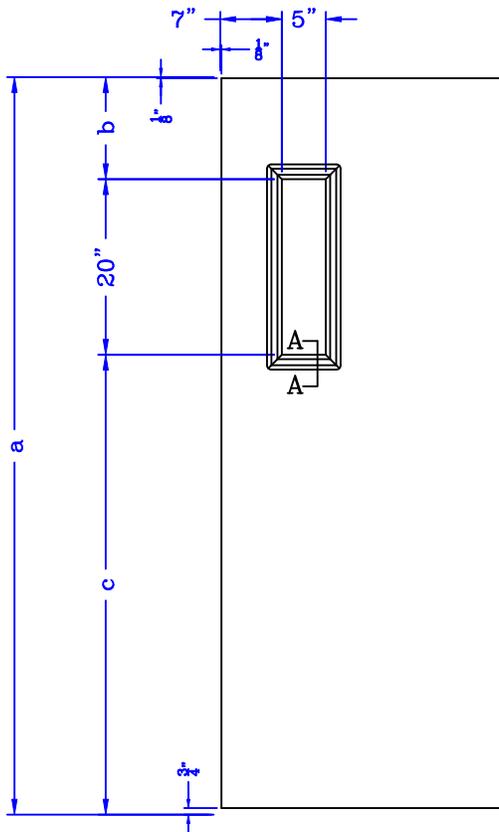


### 5" x 20" exposed glass

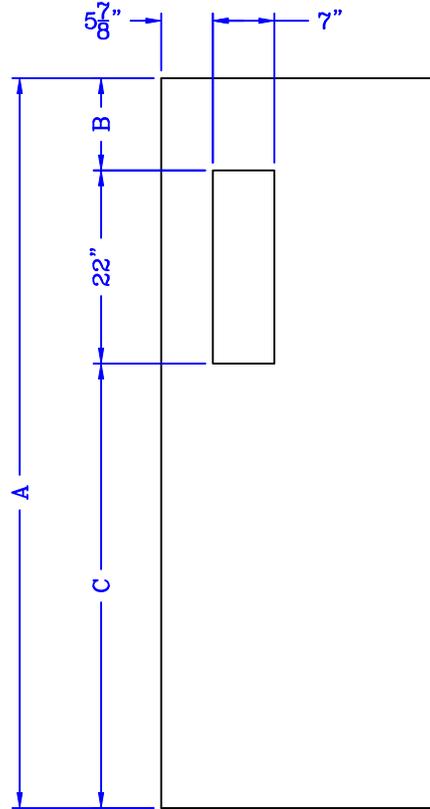
Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

EXPOSED GLASS



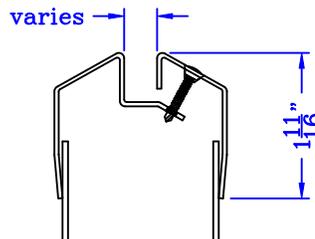
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	52"
6' 10" (82")	9 5/8"	52 3/8"
7' 0" (84")	11 5/8"	52 3/8"
7' 2" (86")	13 5/8"	52 3/8"
8' 0" (96")	23 5/8"	52 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	50 1/4"
81 1/8"	8 1/2"	50 5/8"
83 1/8"	10 1/2"	50 5/8"
85 1/8"	12 1/2"	50 5/8"
95 1/8"	22 1/2"	50 5/8"

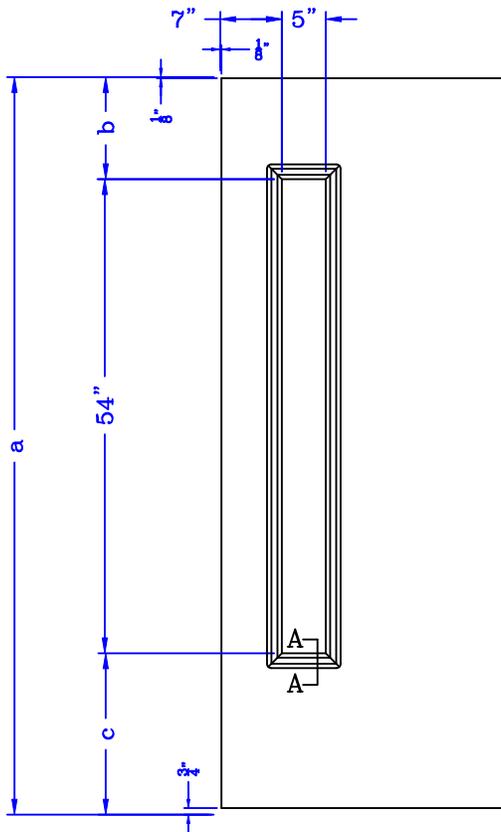
For 3/16" to 1" thick glass



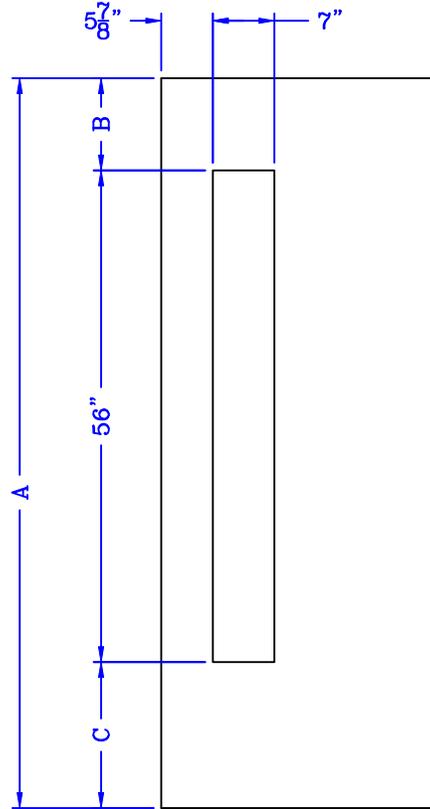
**5" x 54" exposed glass**

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



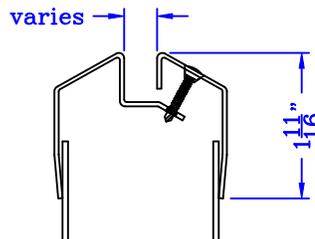
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	18"
6' 10" (82")	9 5/8"	18 3/8"
7' 0" (84")	11 5/8"	18 3/8"
7' 2" (86")	13 5/8"	18 3/8"
8' 0" (96")	23 5/8"	18 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	16 1/4"
81 1/8"	8 1/2"	16 5/8"
83 1/8"	10 1/2"	16 5/8"
85 1/8"	12 1/2"	16 5/8"
95 1/8"	22 1/2"	16 5/8"

For 3/16" to 1" thick glass

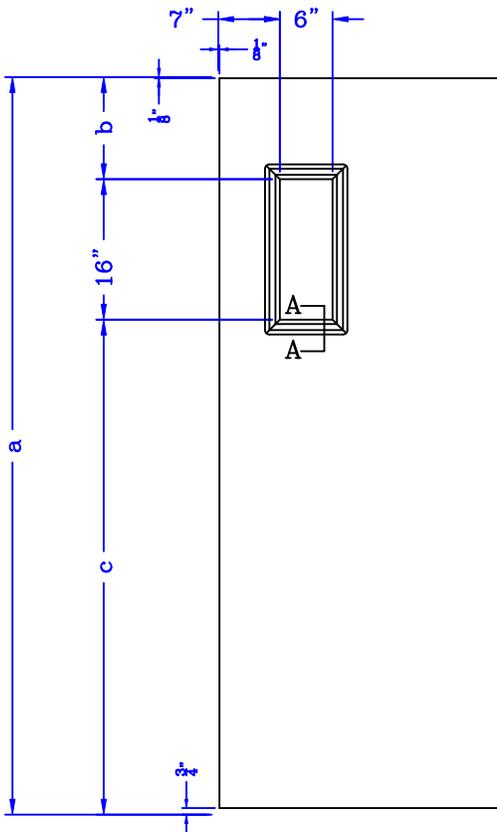


**6" x 16" exposed glass**

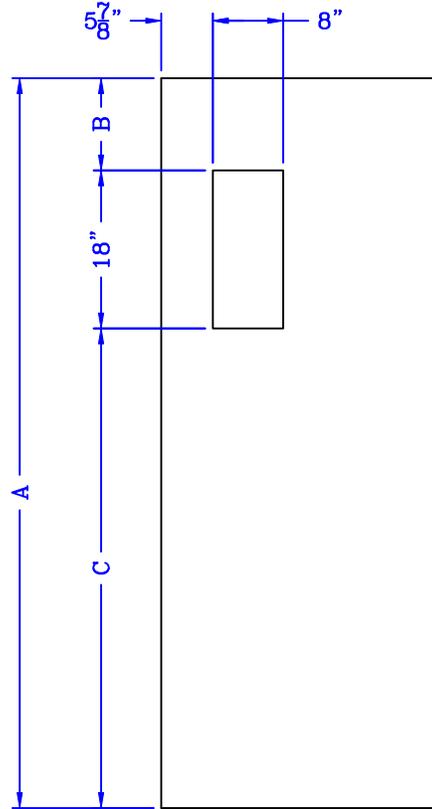
Actual glass size is 1" larger than exposed glass  
 This lie **DOES NOT** meet ADA standards

Sandwich kit

EXPOSED GLASS



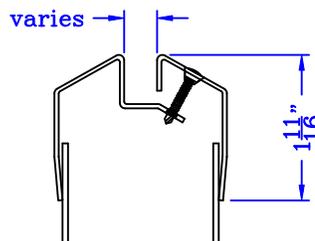
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	56"
6' 10" (82")	9 5/8"	56 3/8"
7' 0" (84")	11 5/8"	56 3/8"
7' 2" (86")	13 5/8"	56 3/8"
8' 0" (96")	23 5/8"	56 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	54 1/4"
81 1/8"	8 1/2"	54 5/8"
83 1/8"	10 1/2"	54 5/8"
85 1/8"	12 1/2"	54 5/8"
95 1/8"	22 1/2"	54 5/8"

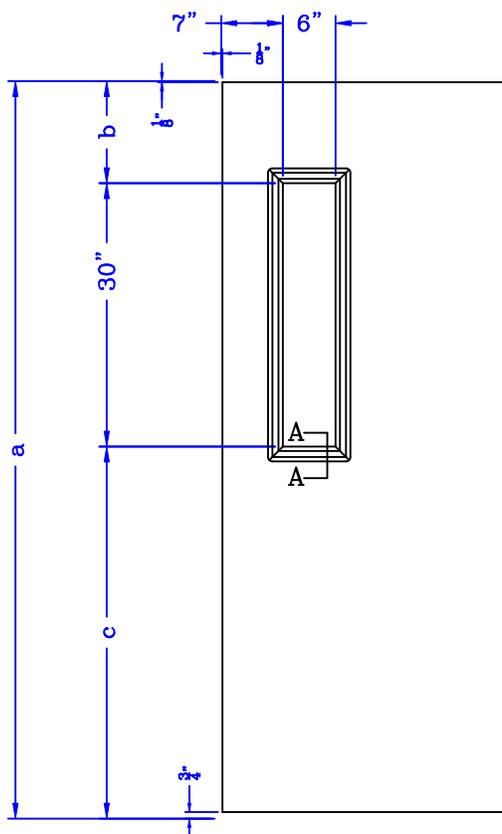
For 3/16" to 1" thick glass



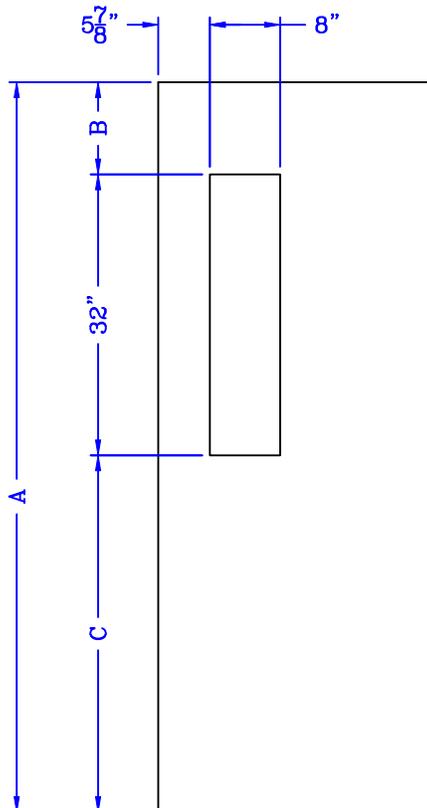
## 6" x 30" exposed glass

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



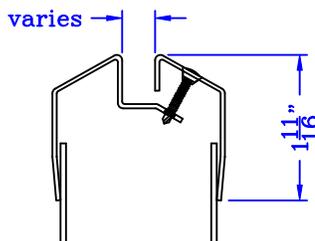
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	42"
6' 10" (82")	9 5/8"	42 3/8"
7' 0" (84")	11 5/8"	42 3/8"
7' 2" (86")	13 5/8"	42 3/8"
8' 0" (96")	23 5/8"	42 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	40 1/4"
81 1/8"	8 1/2"	40 5/8"
83 1/8"	10 1/2"	40 5/8"
85 1/8"	12 1/2"	40 5/8"
95 1/8"	22 1/2"	40 5/8"

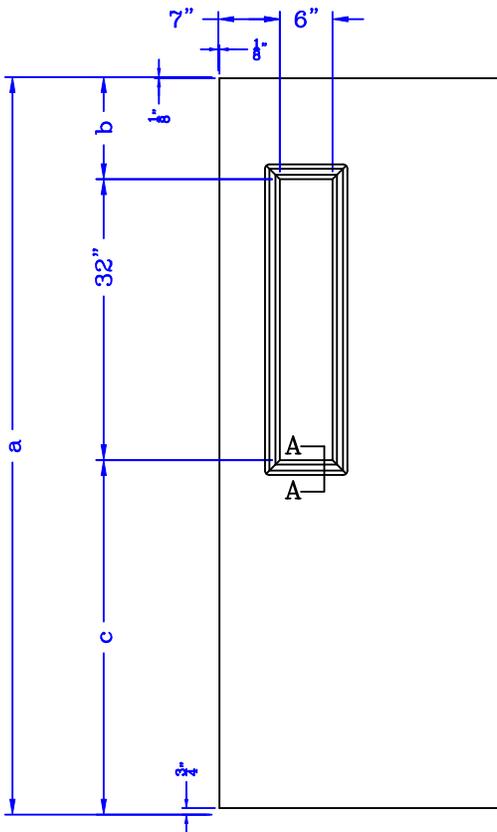
For 3/16" to 1" thick glass



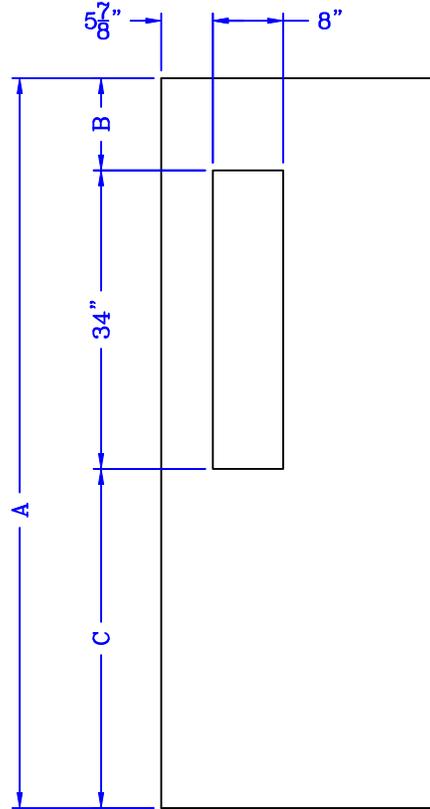
**6" x 32" exposed glass**

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



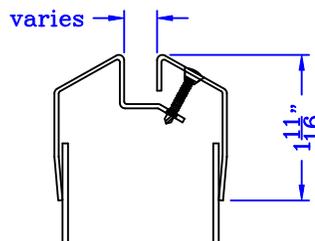
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	40"
6' 10" (82")	9 5/8"	40 3/8"
7' 0" (84")	11 5/8"	40 3/8"
7' 2" (86")	13 5/8"	40 3/8"
8' 0" (96")	23 5/8"	40 3/8"

Net Height		
A	B	C
79 1/8"	6 7/8"	38 1/4"
81 1/8"	8 1/2"	38 5/8"
83 1/8"	10 1/2"	38 5/8"
85 1/8"	12 1/2"	38 5/8"
95 1/8"	22 1/2"	38 5/8"

For 3/16" to 1" thick glass

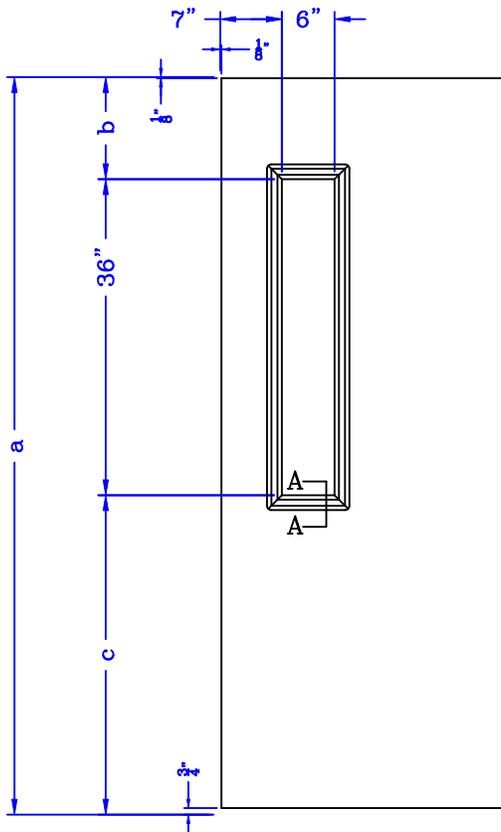


### 6" x 36" exposed glass

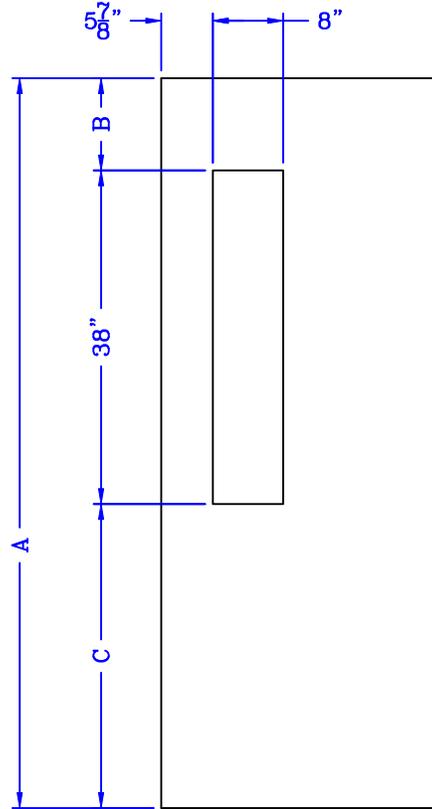
Actual glass size is 1" larger than exposed glass

Sandwich kit

EXPOSED GLASS



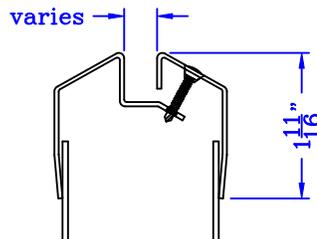
CUT OUT



Nominal Height		
a	b	c
6' 8" (80")	8"	36"
6' 10" (82")	9 5/8"	36 3/8"
7' 0" (84")	11 5/8"	36 3/8"
7' 2" (86")	13 5/8"	36 3/8"
8' 0" (96")	23 5/8"	36 3/8"

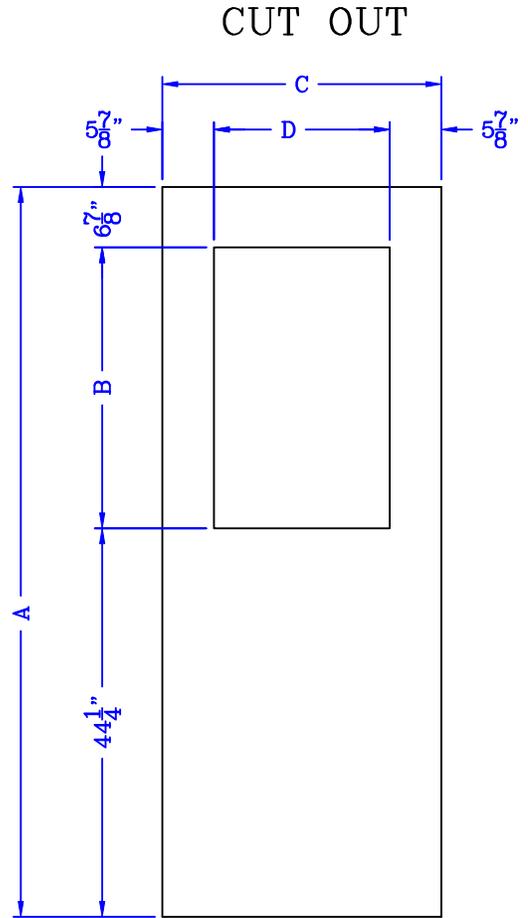
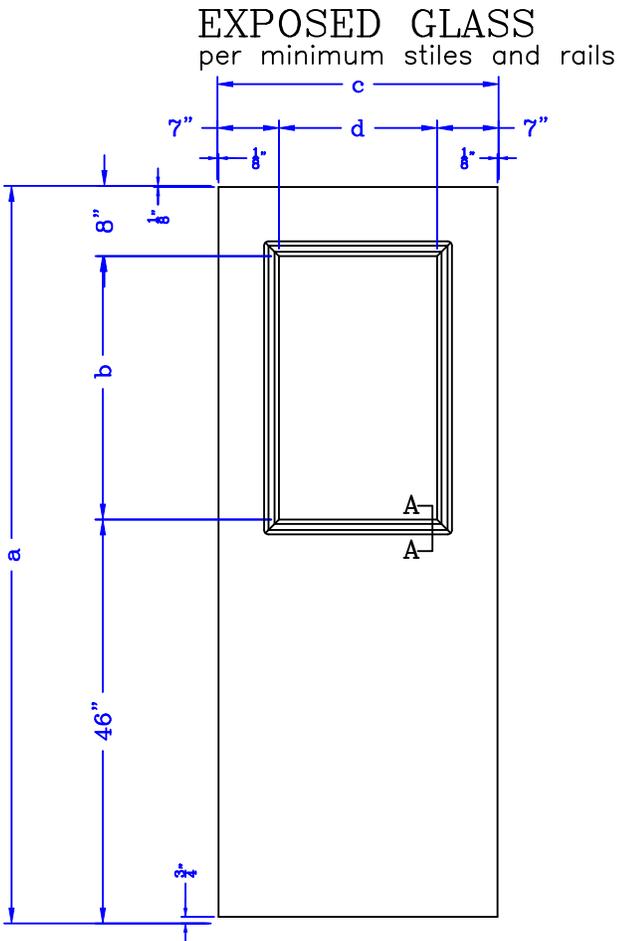
Net Height		
A	B	C
79 1/8"	6 7/8"	34 1/4"
81 1/8"	8 1/2"	34 5/8"
83 1/8"	10 1/2"	34 5/8"
85 1/8"	12 1/2"	34 5/8"
95 1/8"	22 1/2"	34 5/8"

For 3/16" to 1" thick glass



**Half glass**

Actual glass size is 1" larger than exposed glass  
**This lite DOES NOT meet ADA standards**

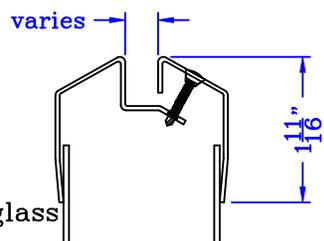


Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

Net Width	
C	D
29 3/4"	18"
33 3/4"	22"
35 3/4"	24"
41 3/4"	30"
47 3/4"	36"

Net Height	
A	B
79 1/8"	28"
81 1/8"	30"
83 1/8"	32"
85 1/8"	34"
95 1/8"	44"



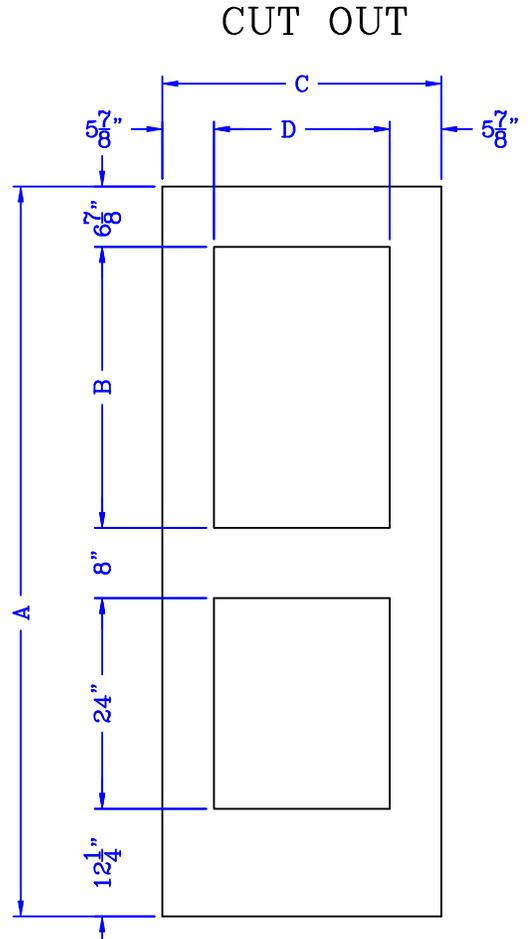
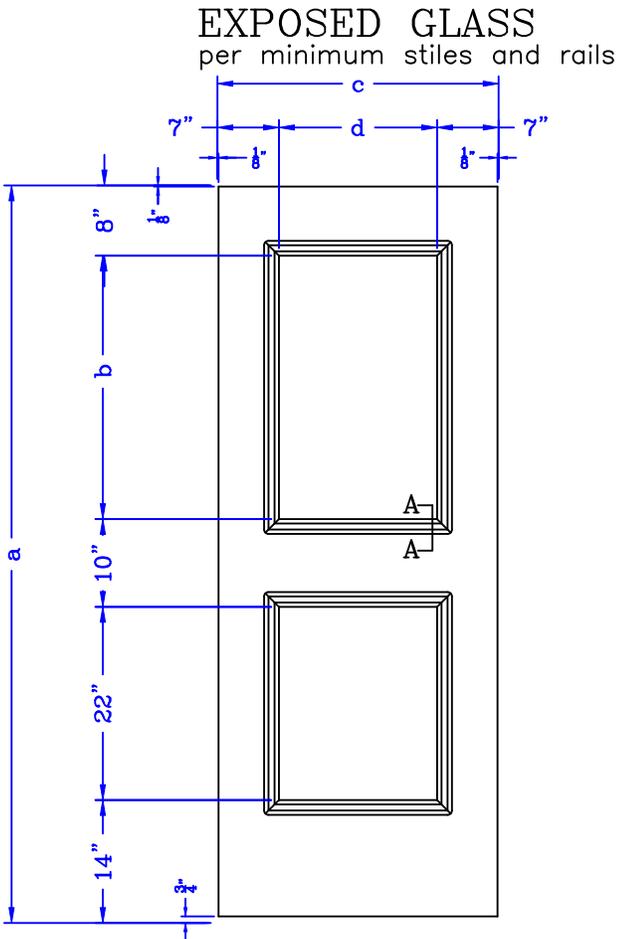
For 3/16" to 1" thick glass

Sandwich kit

SK

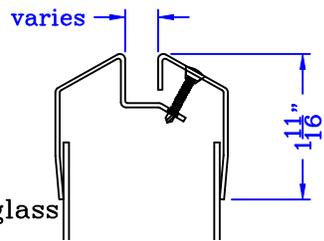
**Two half glass**

Actual glass size is 1" larger than exposed glass



Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"



Net Width	
C	D
29 3/4"	18"
33 3/4"	22"
35 3/4"	24"
41 3/4"	30"
47 3/4"	36"

Net Height	
A	B
79 1/8"	28"
81 1/8"	30"
83 1/8"	32"
85 1/8"	34"
95 1/8"	44"

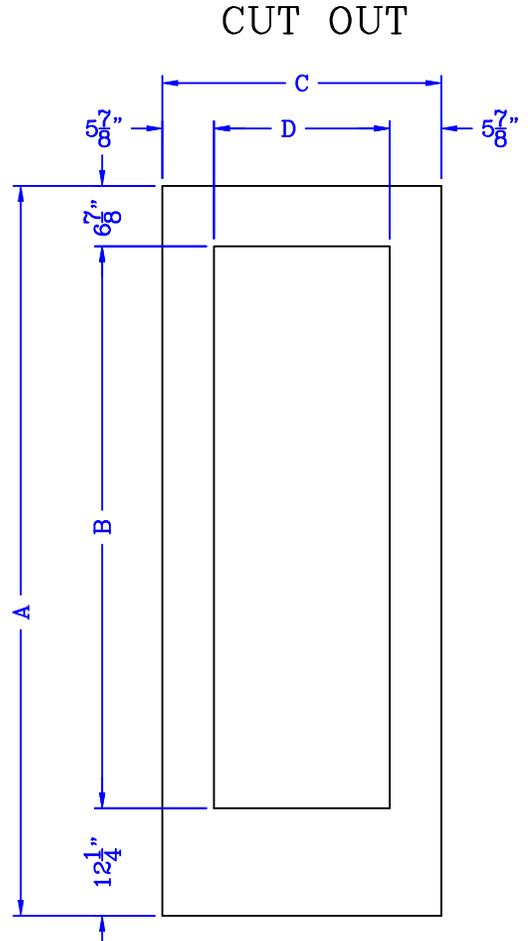
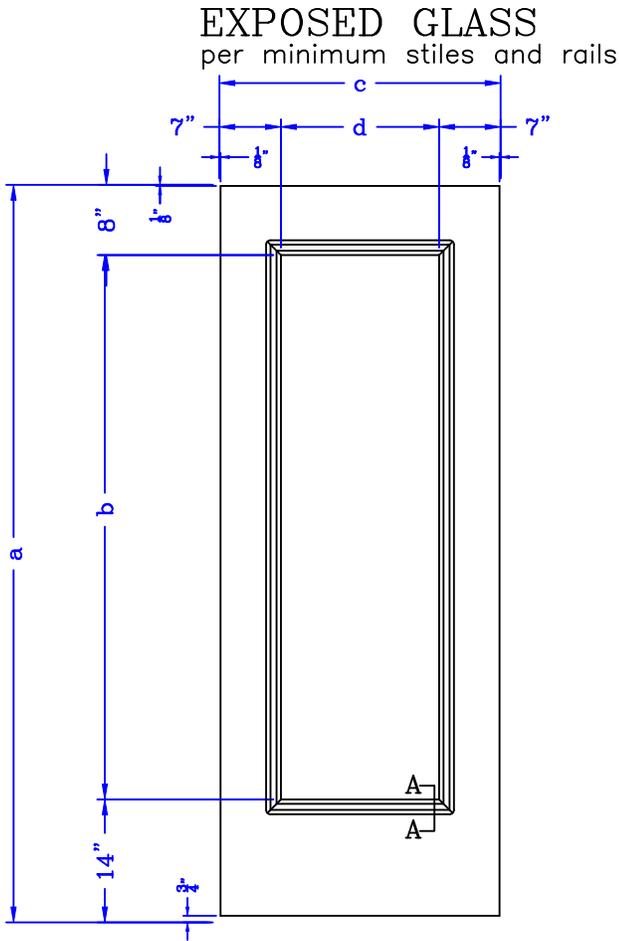
For 3/16" to 1" thick glass

Sandwich kit

SK

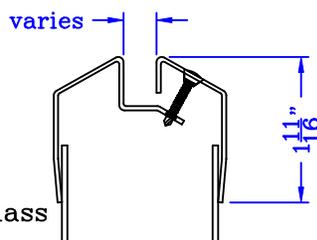
**Full glass**

Actual glass size is 1" larger than exposed glass



Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	58"
6' 10" (82")	60"
7' 0" (84")	62"
7' 2" (86")	64"
8' 0" (96")	74"



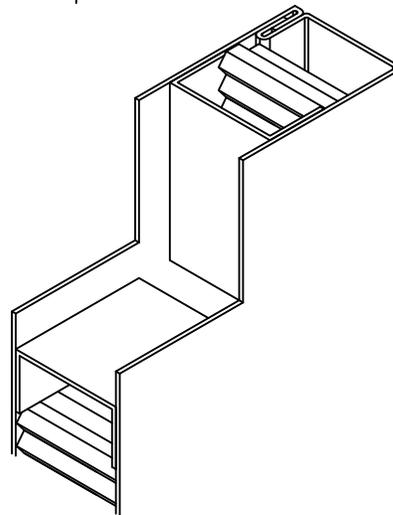
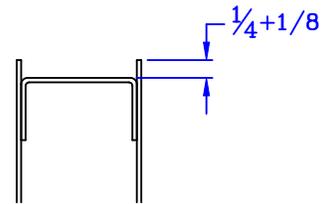
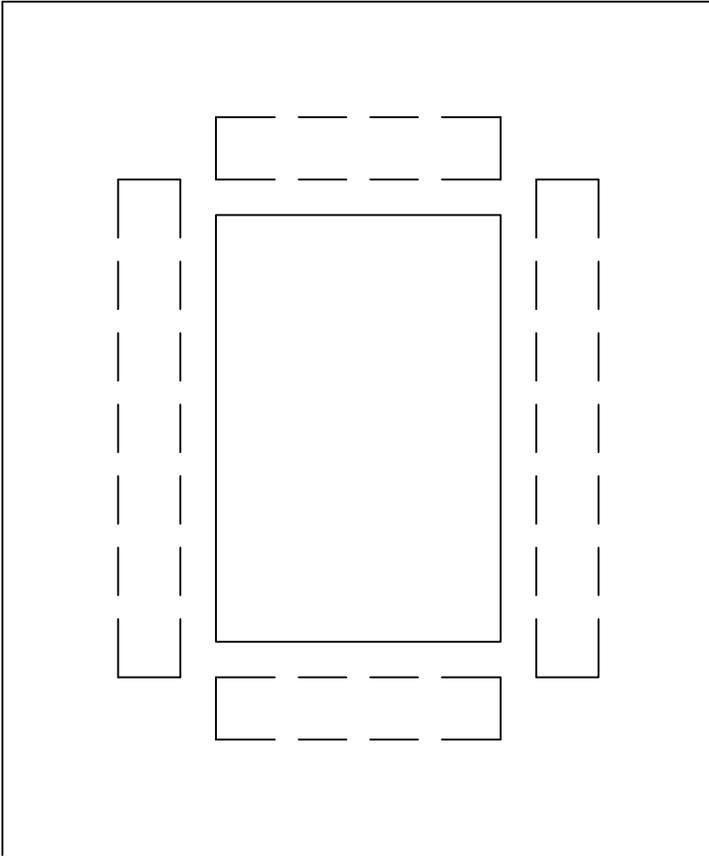
For 3/16" to 1" thick glass

Net Width	
C	D
29 3/4"	18"
33 3/4"	22"
35 3/4"	24"
41 3/4"	30"
47 3/4"	36"

Net Height	
A	B
79 1/8"	60"
81 1/8"	62"
83 1/8"	64"
85 1/8"	66"
95 1/8"	76"

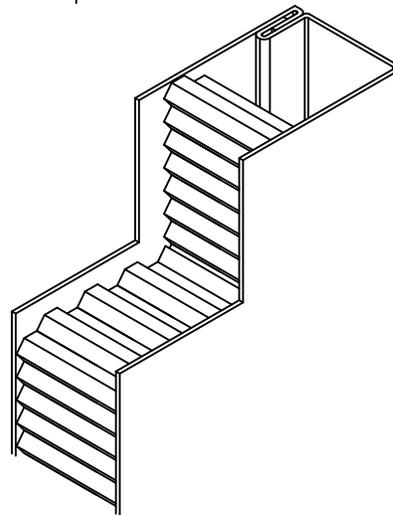
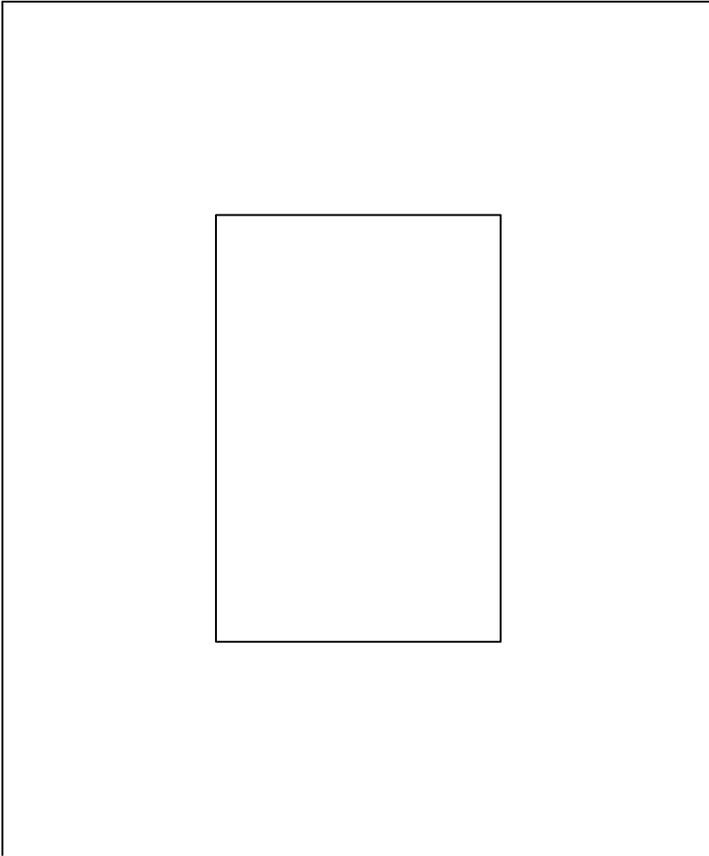
**Including channel**

Mandatory for some lite sizes and/or options



**Without channel**

Not available for some lite sizes and/or options

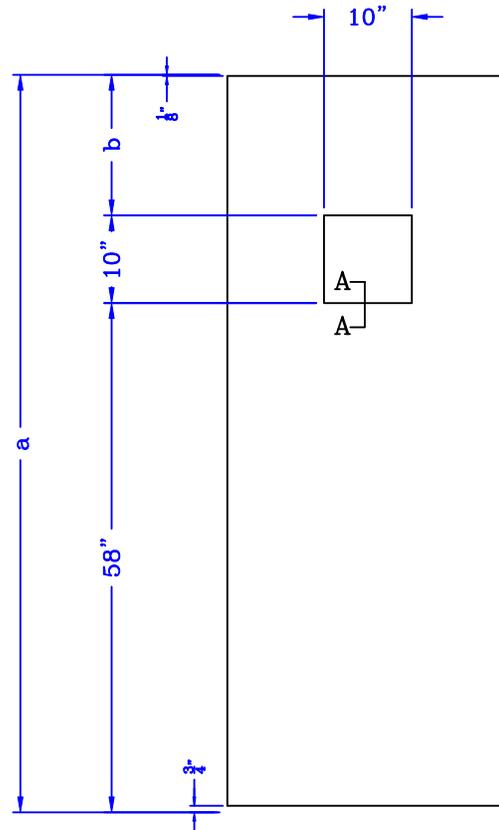


**10" x 10" exposed glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

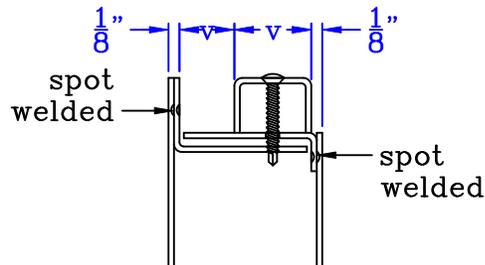
**EXPOSED GLASS**



Outside view

Nominal Height	
a	b
6' 8" (80")	12"
6' 10" (82")	14"
7' 0" (84")	16"
7' 2" (86")	18"
8' 0" (96")	28"

For 3/16" to 1" thick glass

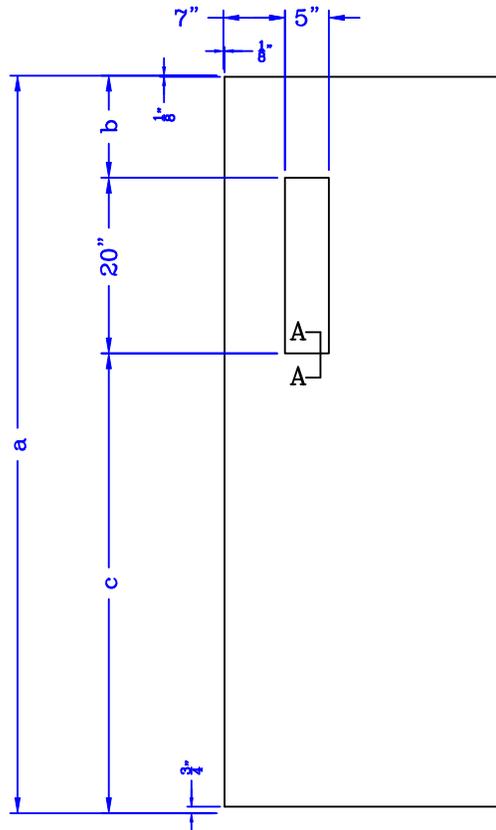


**5" x 20" exposed glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

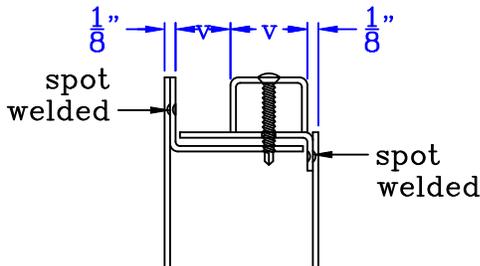
**EXPOSED GLASS**



Outside view

Nominal Height		
a	b	c
6' 8" (80")	8"	52"
6' 10" (82")	9 5/8"	52 3/8"
7' 0" (84")	11 5/8"	52 3/8"
7' 2" (86")	13 5/8"	52 3/8"
8' 0" (96")	23 5/8"	52 3/8"

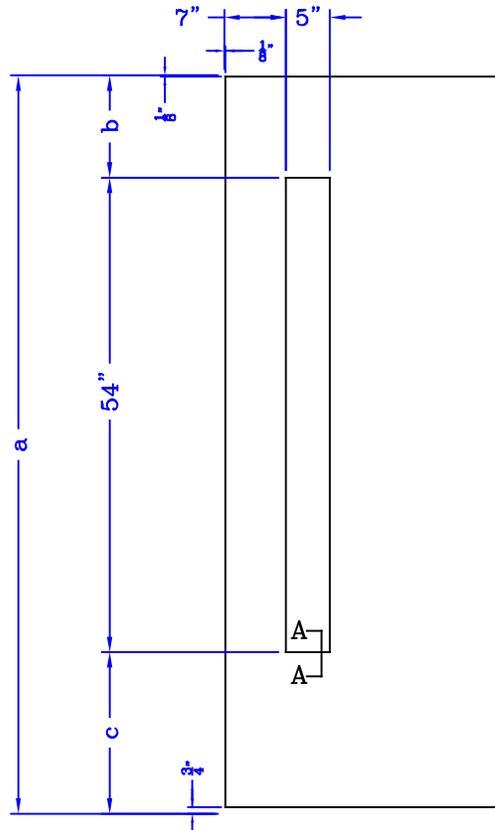
For 3/16" to 1" thick glass



**5" x 54" exposed glass**

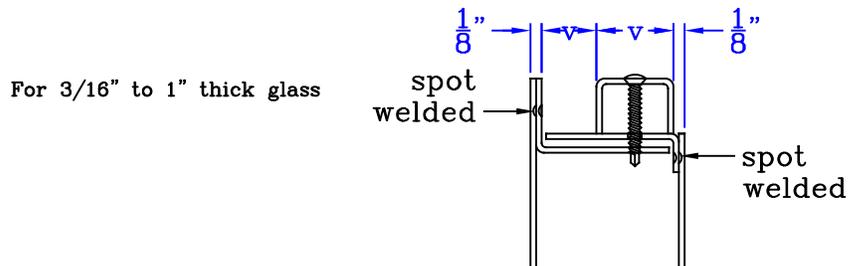
Actual glass size is 1" larger than exposed glass

**EXPOSED GLASS**



Outside view

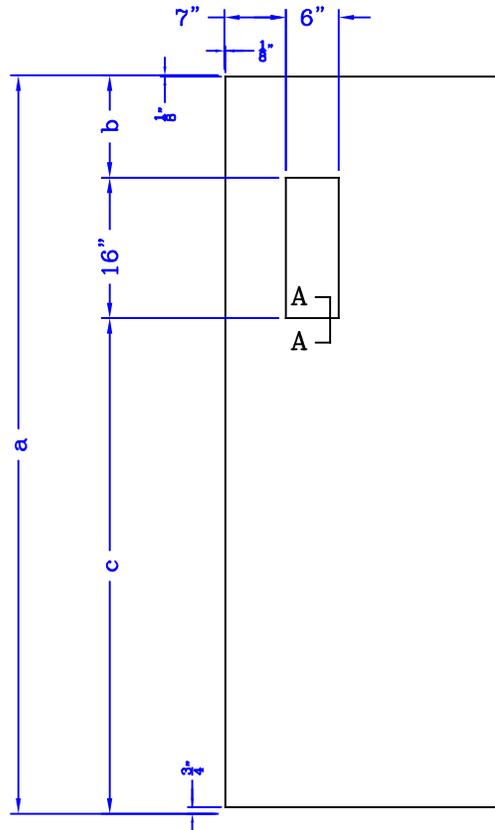
Nominal Height		
a	b	c
6' 8" (80")	8"	18"
6' 10" (82")	9 5/8"	18 3/8"
7' 0" (84")	11 5/8"	18 3/8"
7' 2" (86")	13 5/8"	18 3/8"
8' 0" (96")	23 5/8"	18 3/8"



**6" x 16" exposed glass**

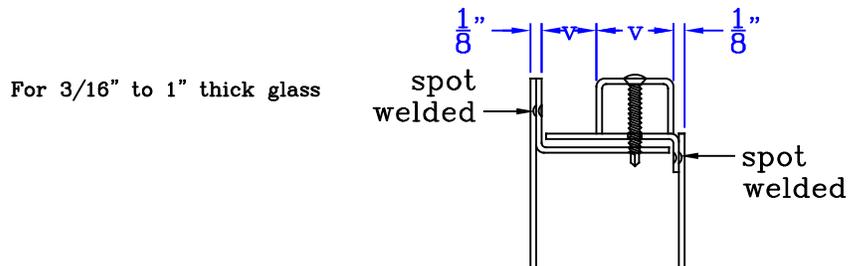
Actual glass size is 1" larger than exposed glass

**EXPOSED GLASS**



Outside view

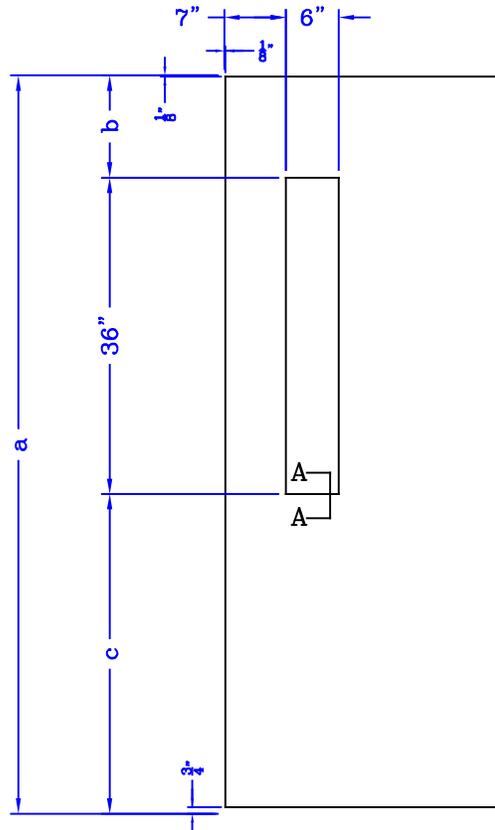
Nominal Height		
a	b	c
6' 8" (80")	8"	56"
6' 10" (82")	9 5/8"	56 3/8"
7' 0" (84")	11 5/8"	56 3/8"
7' 2" (86")	13 5/8"	56 3/8"
8' 0" (96")	23 5/8"	56 3/8"



**6" x 36" exposed glass**

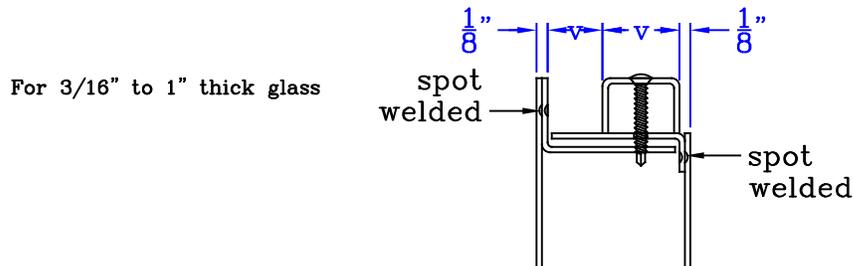
Actual glass size is 1" larger than exposed glass

**EXPOSED GLASS**



Outside view

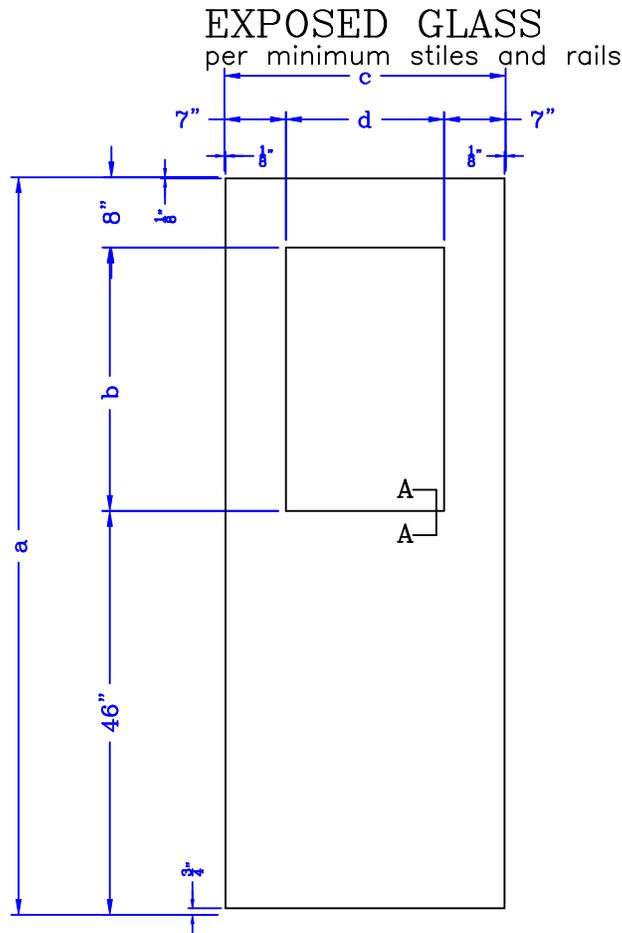
Nominal Height		
a	b	c
6' 8" (80")	8"	36"
6' 10" (82")	9 5/8"	36 3/8"
7' 0" (84")	11 5/8"	36 3/8"
7' 2" (86")	13 5/8"	36 3/8"
8' 0" (96")	23 5/8"	36 3/8"



**Half glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

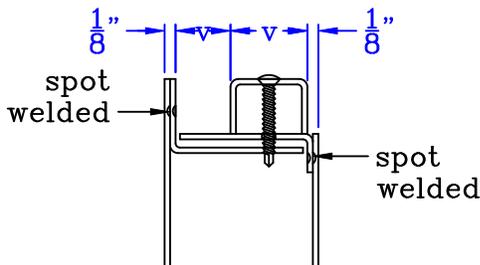


Outside view

Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

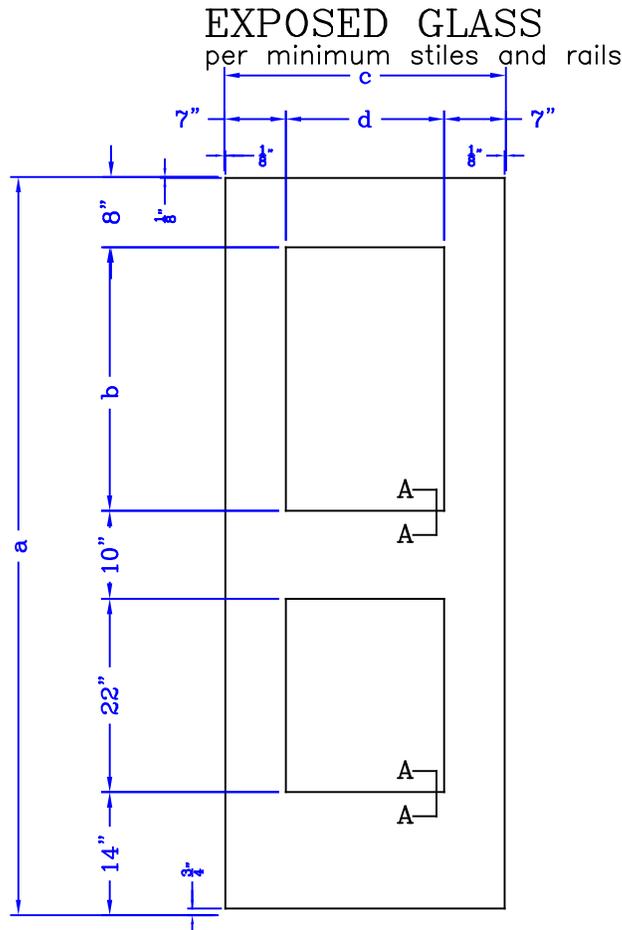
Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

For 3/16" to 1" thick glass



**Two half glass**

Actual glass size is 1" larger than exposed glass

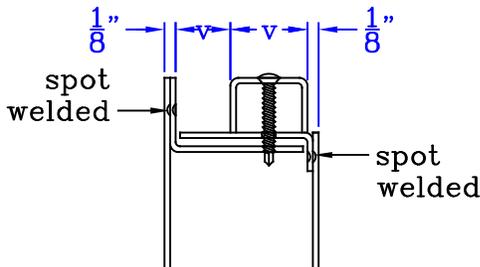


Outside view

Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

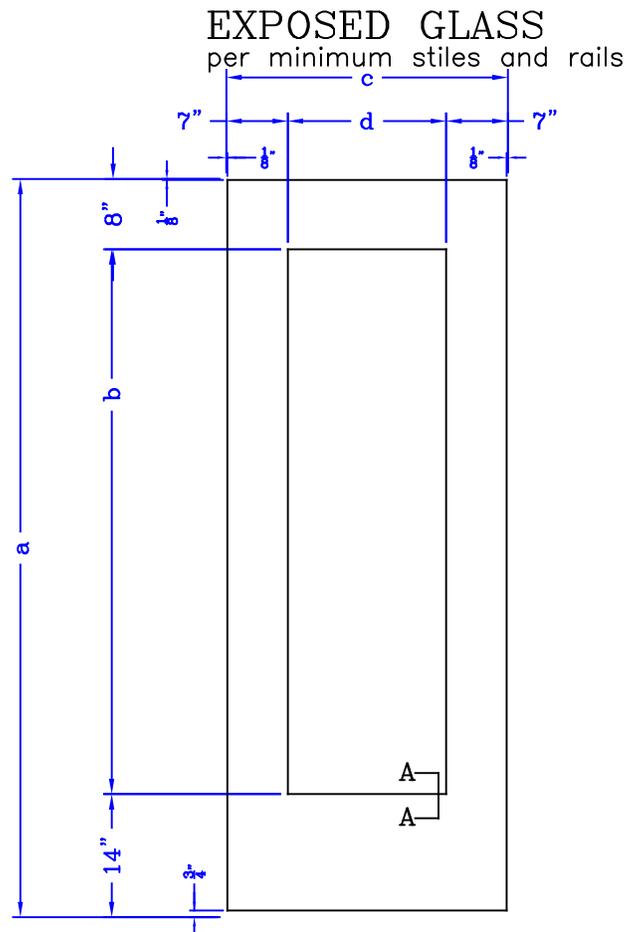
Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

For 3/16" to 1" thick glass



**Full glass**

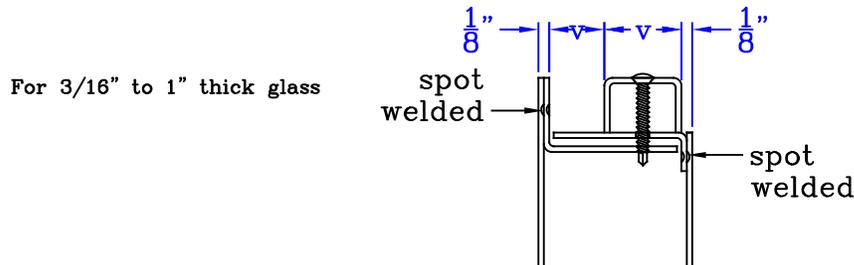
Actual glass size is 1" larger than exposed glass



Outside view

Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	58"
6' 10" (82")	60"
7' 0" (84")	62"
7' 2" (86")	64"
8' 0" (96")	74"

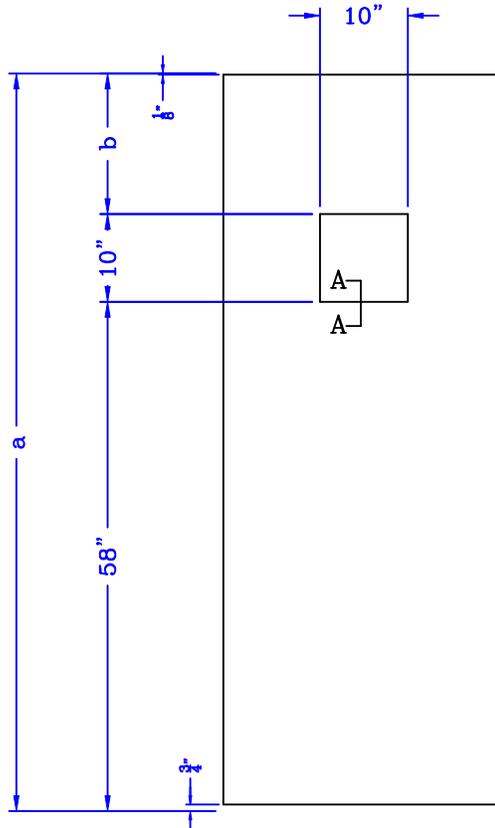


**10" x 10" exposed glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

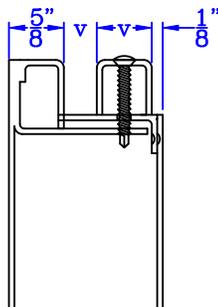
**EXPOSED GLASS**



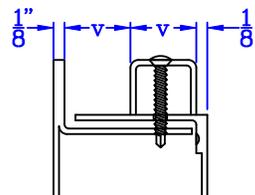
Outside view

Nominal Height	
a	b
6' 8" (80")	12"
6' 10" (82")	14"
7' 0" (84")	16"
7' 2" (86")	18"
8' 0" (96")	28"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

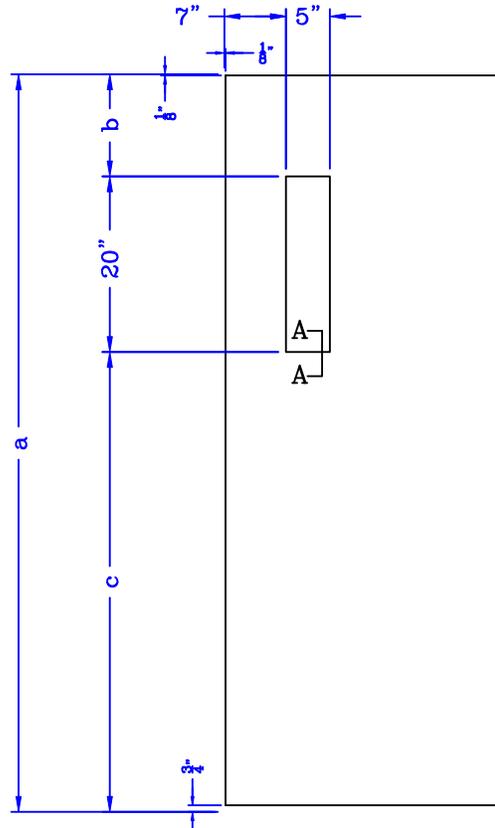
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

**5" x 20" exposed glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

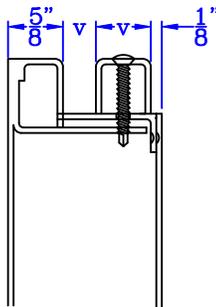
**EXPOSED GLASS**



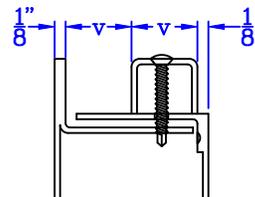
Outside view

Nominal Height		
a	b	c
6' 8" (80")	8"	52"
6' 10" (82")	9 5/8"	52 3/8"
7' 0" (84")	11 5/8"	52 3/8"
7' 2" (86")	13 5/8"	52 3/8"
8' 0" (96")	23 5/8"	52 3/8"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



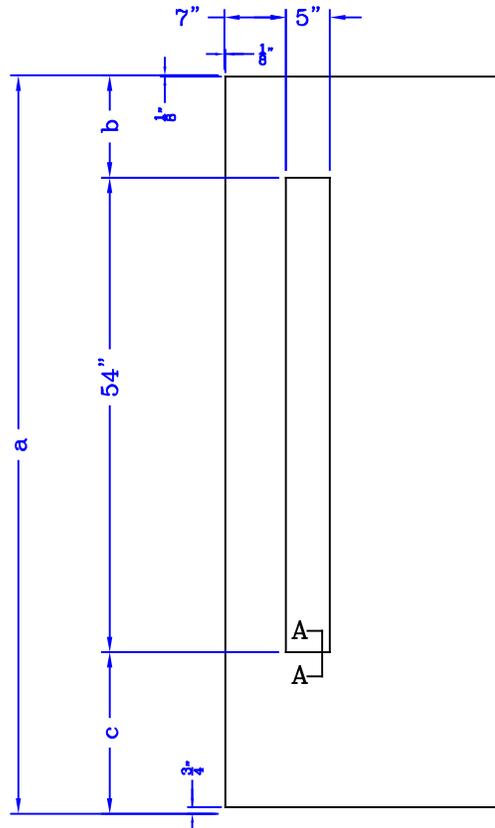
\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

**5" x 54" exposed glass**

Actual glass size is 1" larger than exposed glass

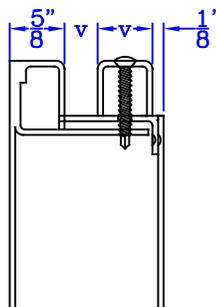
**EXPOSED GLASS**



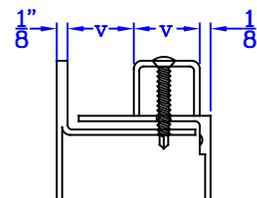
Outside view

Nominal Height		
a	b	c
6' 8" (80")	8"	18"
6' 10" (82")	9 5/8"	18 3/8"
7' 0" (84")	11 5/8"	18 3/8"
7' 2" (86")	13 5/8"	18 3/8"
8' 0" (96")	23 5/8"	18 3/8"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

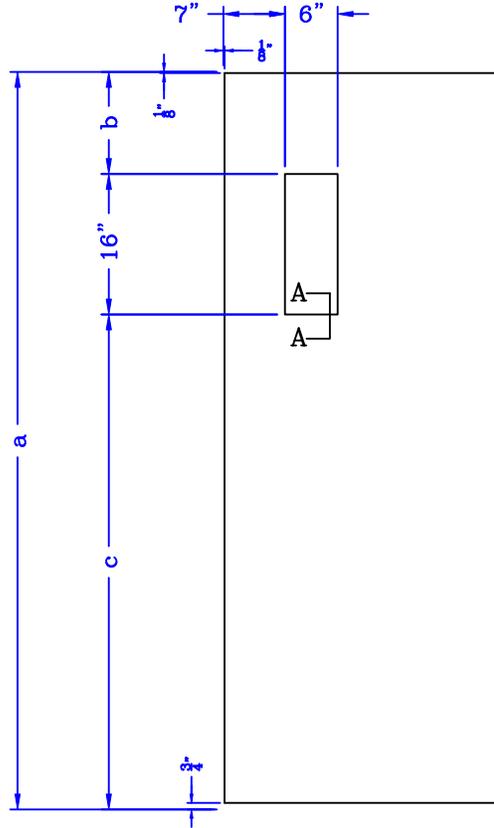
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

**6" x 16" exposed glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

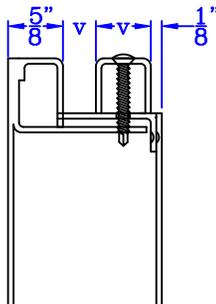
**EXPOSED GLASS**



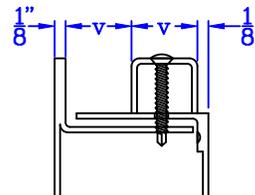
Outside view

Nominal Height		
a	b	c
6' 8" (80")	8"	56"
6' 10" (82")	9 5/8"	56 3/8"
7' 0" (84")	11 5/8"	56 3/8"
7' 2" (86")	13 5/8"	56 3/8"
8' 0" (96")	23 5/8"	56 3/8"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



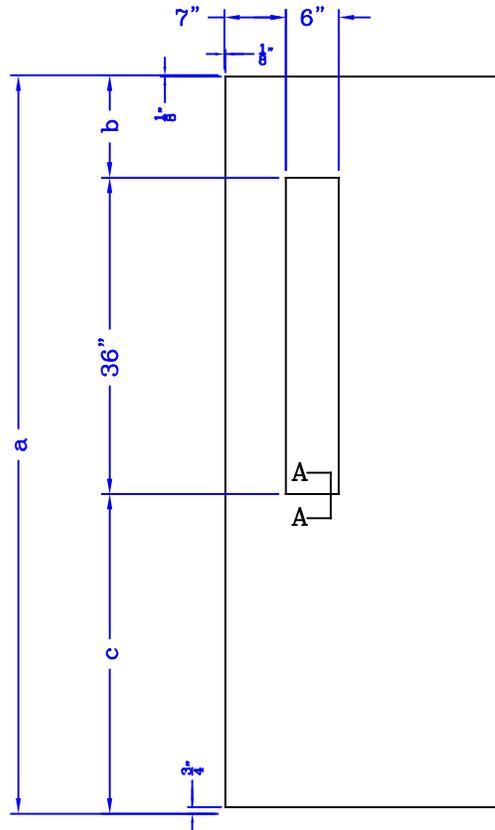
\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

**6" x 36" exposed glass**

Actual glass size is 1" larger than exposed glass

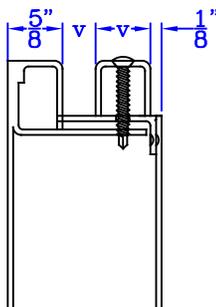
**EXPOSED GLASS**



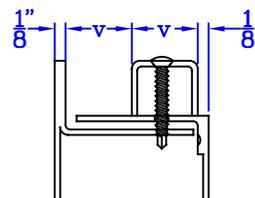
Outside view

Nominal Height		
a	b	c
6' 8" (80")	8"	36"
6' 10" (82")	9 5/8"	36 3/8"
7' 0" (84")	11 5/8"	36 3/8"
7' 2" (86")	13 5/8"	36 3/8"
8' 0" (96")	23 5/8"	36 3/8"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

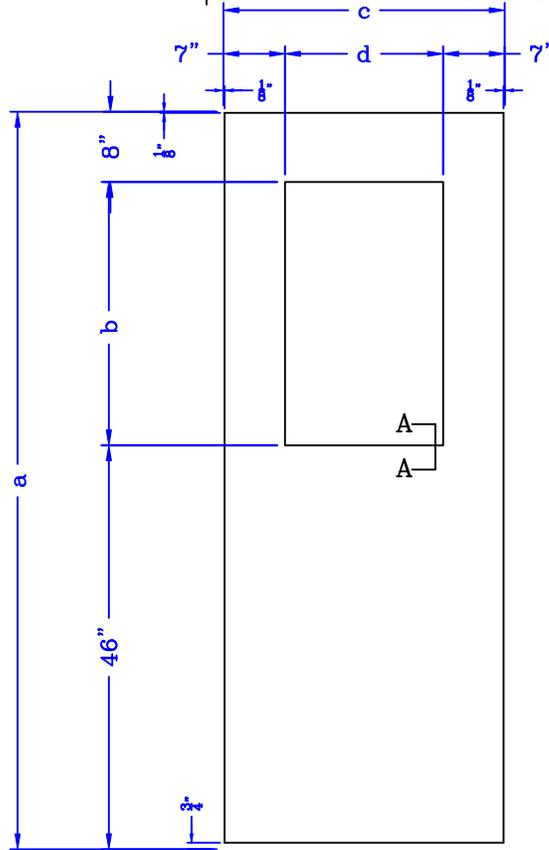
**Half glass**

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

**EXPOSED GLASS**

per minimum stiles and rails

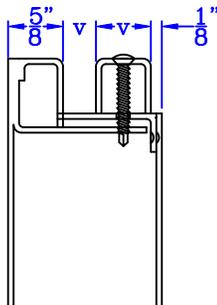


Outside view

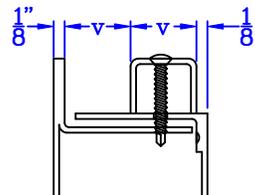
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

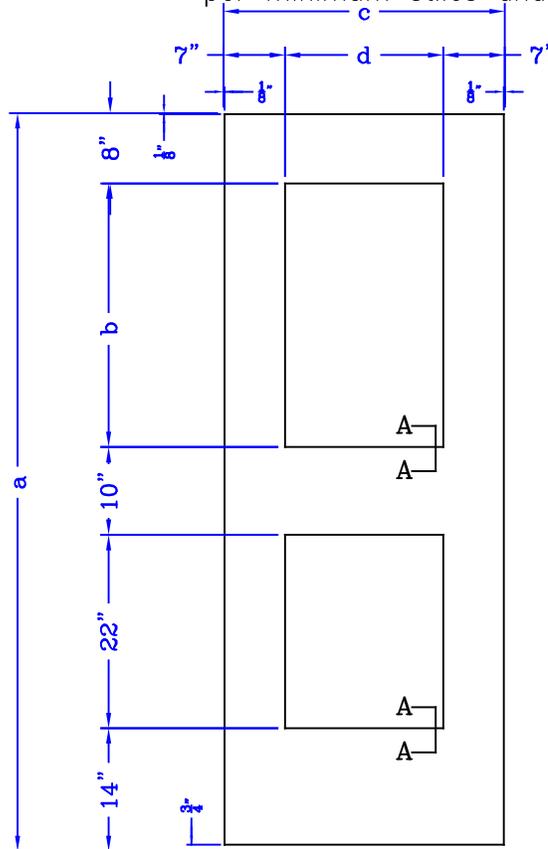
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

Minimum shown to allow proper clearance for hardware.

**Two half glass**

Actual glass size is 1" larger than exposed glass

**EXPOSED GLASS**  
per minimum stiles and rails

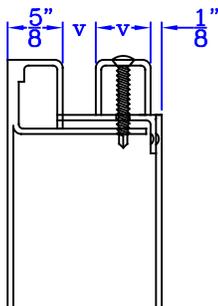


Outside view

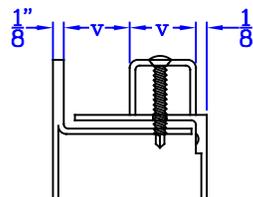
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

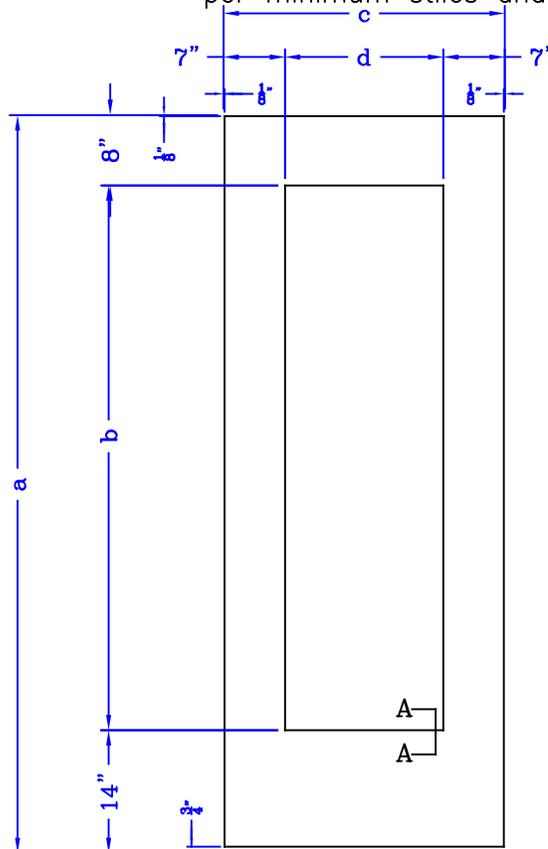
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

Minimum shown to allow proper clearance for hardware.

**Full glass**

Actual glass size is 1" larger than exposed glass

**EXPOSED GLASS**  
per minimum stiles and rails

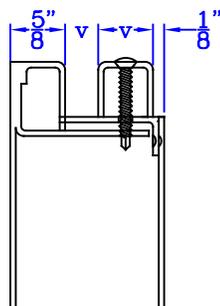


Outside view

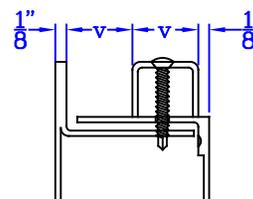
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

Nominal Height	
a	b
6' 8" (80")	58"
6' 10" (82")	60"
7' 0" (84")	62"
7' 2" (86")	64"
8' 0" (96")	74"

\*up to 7/16" thick glass, min. 1 3/4" door



\*For 1/2" to 1" thick glass



\*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

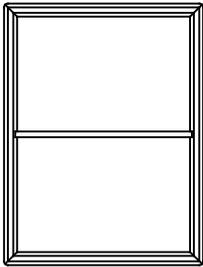
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

Minimum shown to allow proper clearance for hardware.

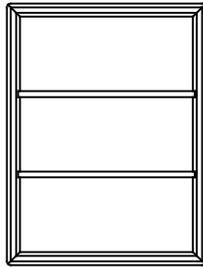
**Sandwich kit (N Series) with muntins**

Add to SK vision kit, for up to 1/2" thick glass

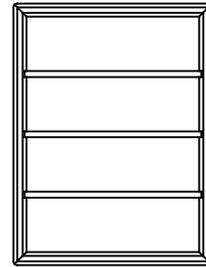
1H



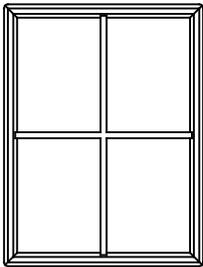
2H



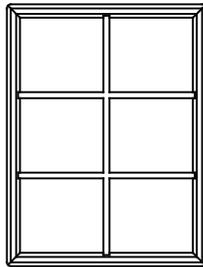
3H



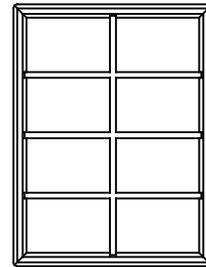
1H1V



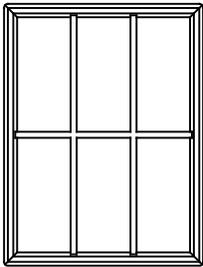
2H1V



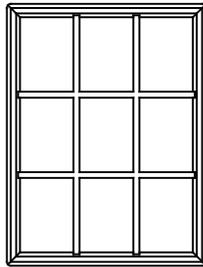
3H1V



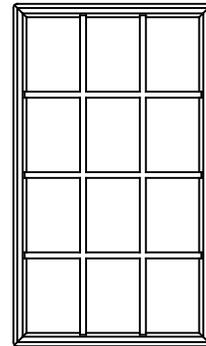
1H2V



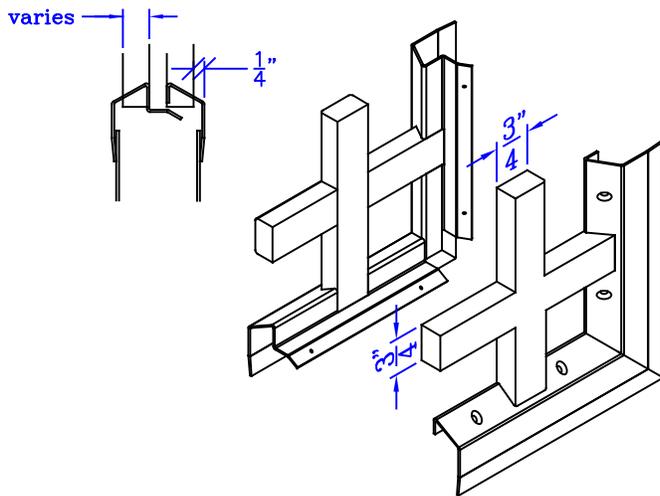
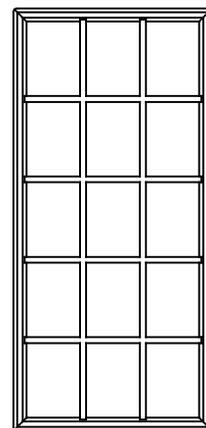
2H2V



3H2V



4H2V

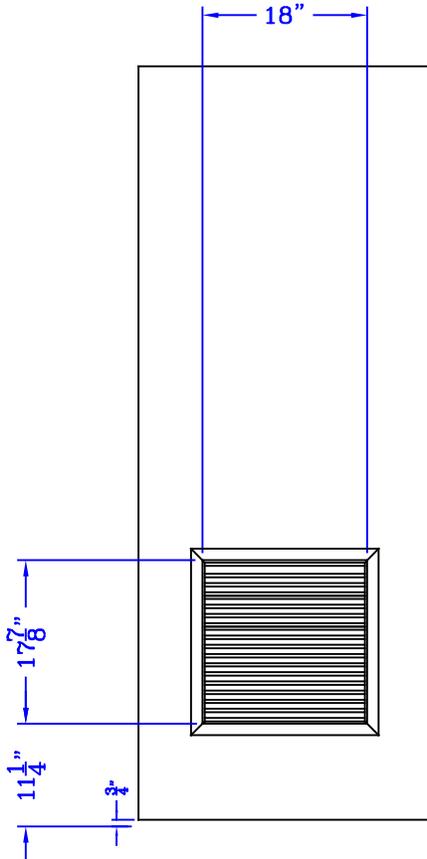


Vision kit with muntins

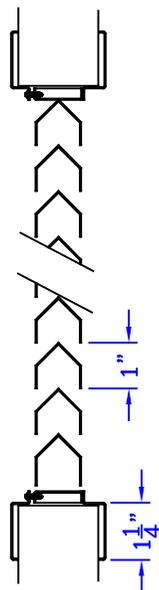
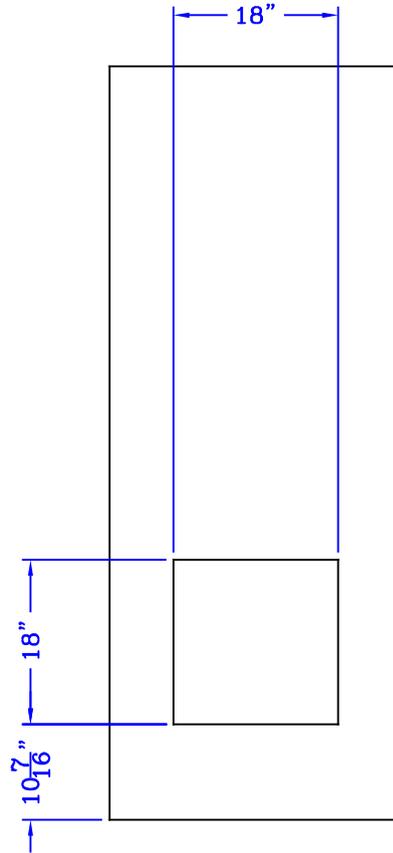
**18" x 18" louver, sandwich type**

Not rated. Available with or without channel

LOUVER SIZES



CUT OUT



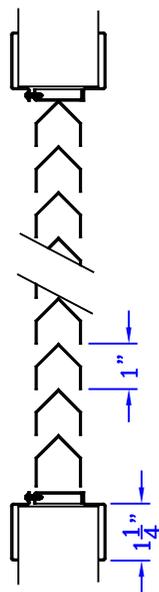
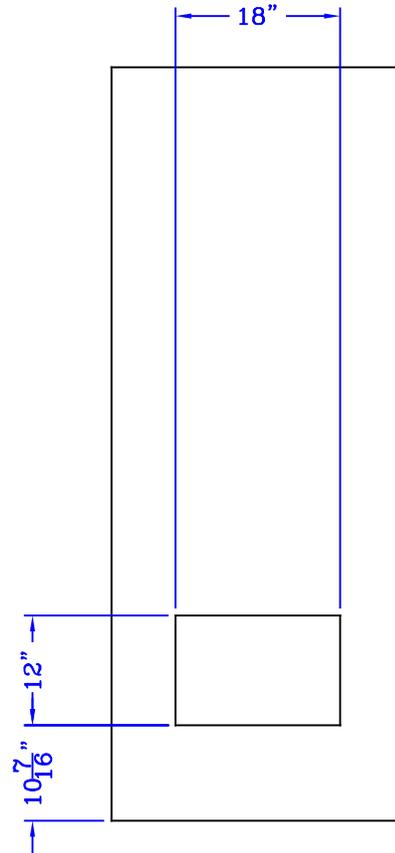
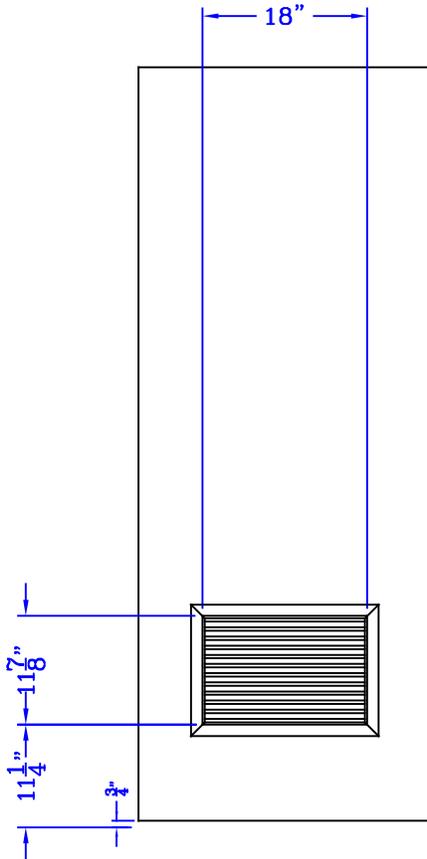
Per ADA standards, 10" from floor to casing.  
Louvers made by others from cold rolled steel, available in galvanized.

**18" x 12" louver, sandwich type**

Not rated. Available with or without channel

**LOUVER SIZES**

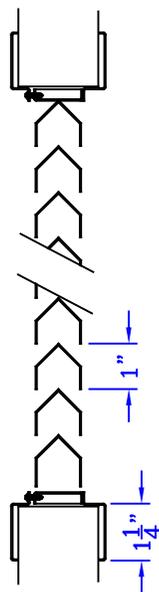
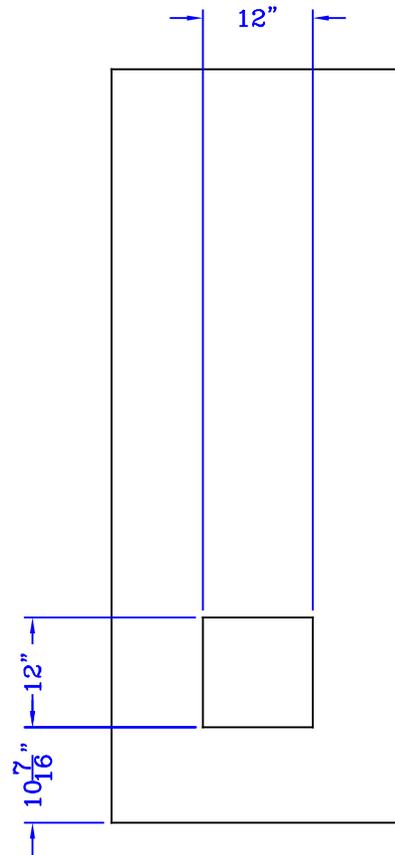
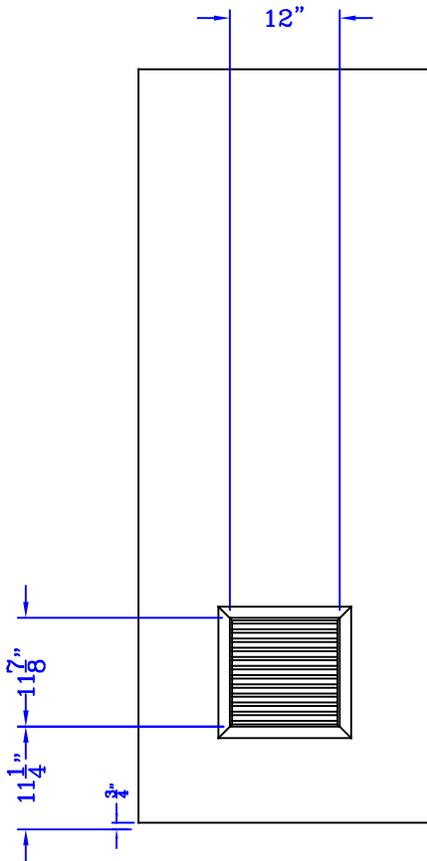
**CUT OUT**



Per ADA standards, 10" from floor to casing.  
Louvers made by others from cold rolled steel, available in galvanized.

**12" x 12" louver, sandwich type**  
 Not rated. Available with or without channel  
**LOUVER SIZES**

**CUT OUT**



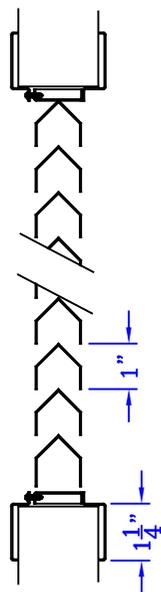
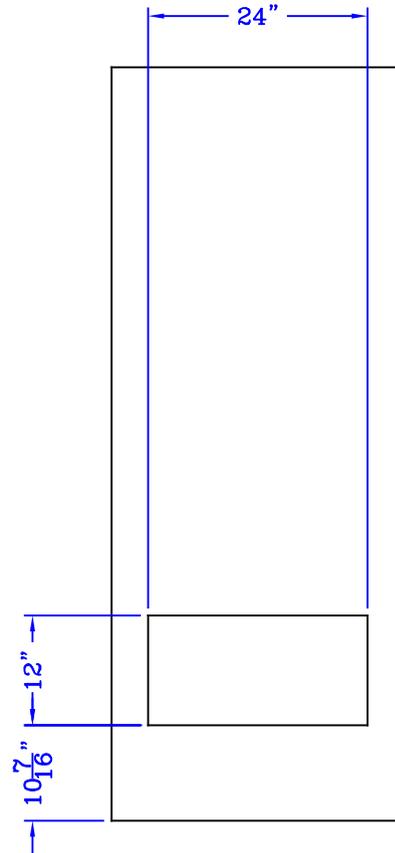
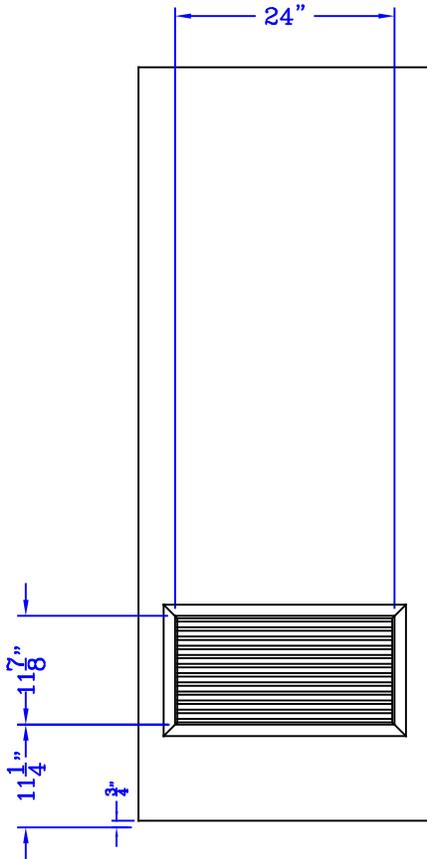
Per ADA standards, 10" from floor to casing.  
 Louvers made by others from cold rolled steel, available in galvanized.

**24" x 12" louver, sandwich type**

Not rated. Available with or without channel

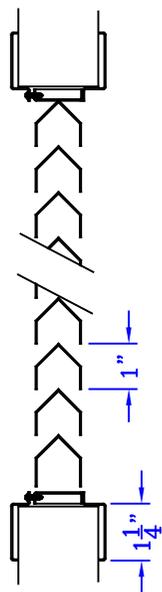
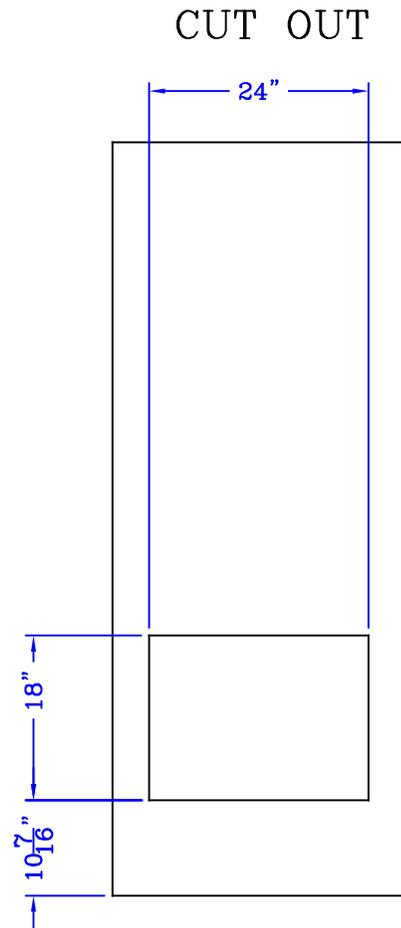
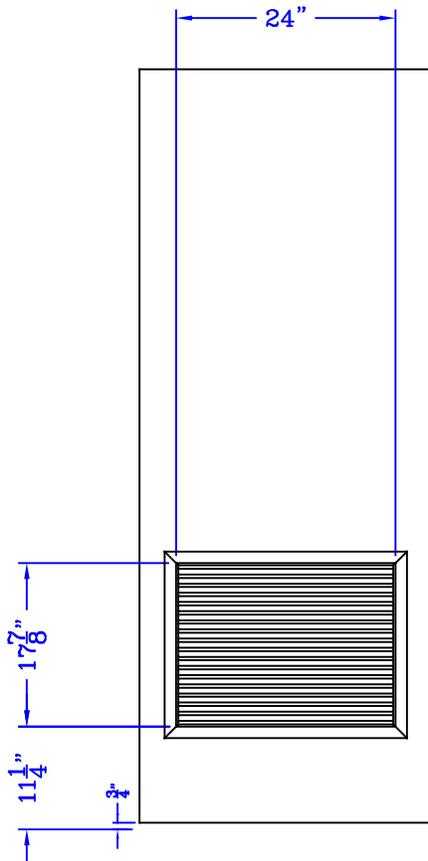
**LOUVER SIZES**

**CUT OUT**



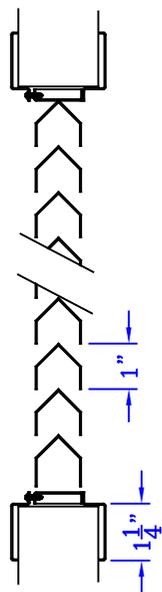
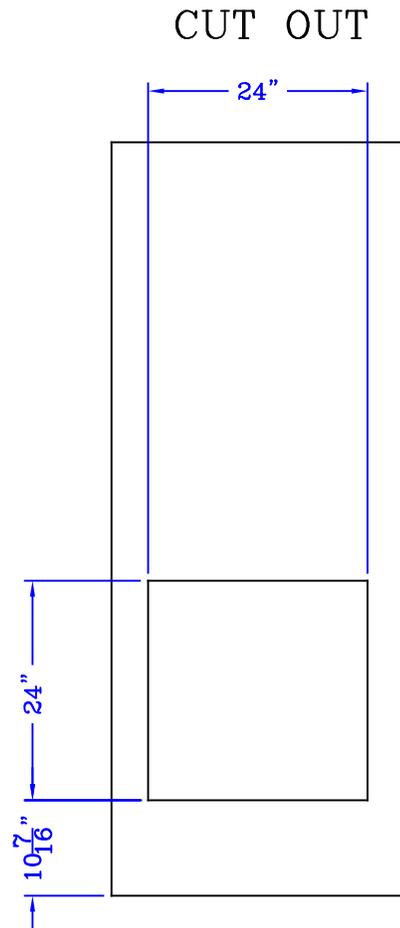
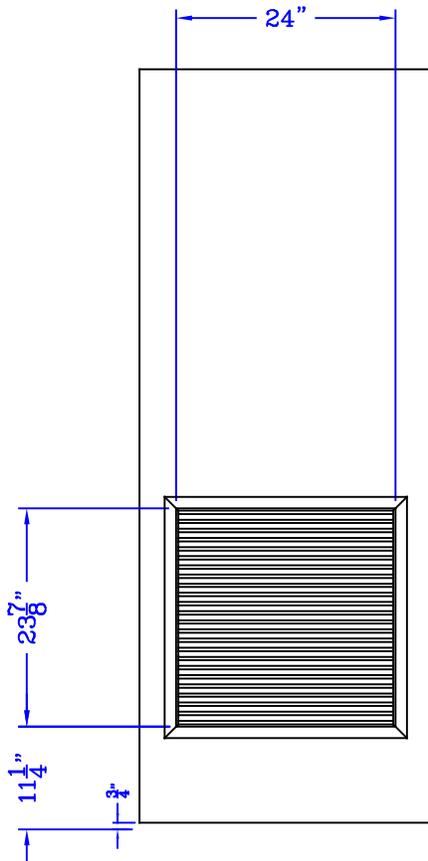
Per ADA standards, 10" from floor to casing.  
Louvers made by others from cold rolled steel, available in galvanized.

**24" x 18" louver, sandwich type**  
 Not rated. Available with or without channel  
**LOUVER SIZES**



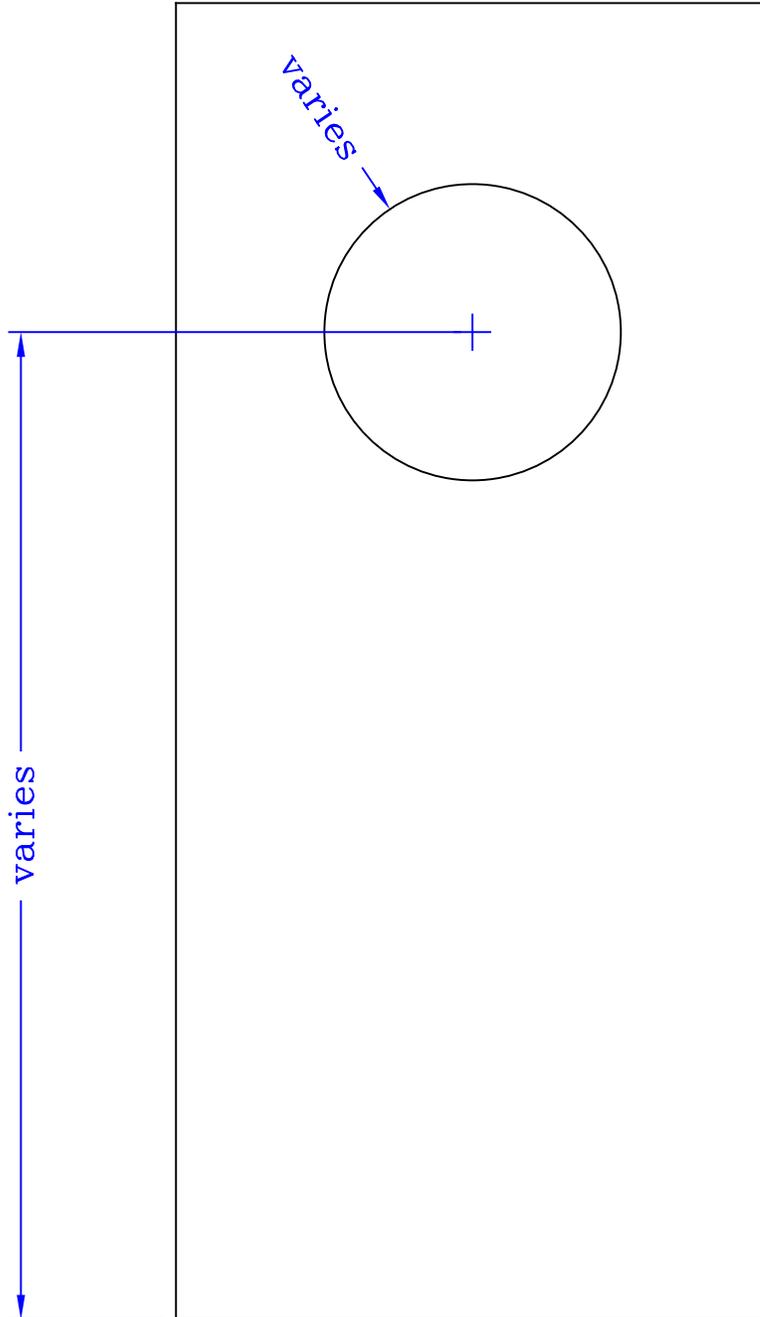
Per ADA standards, 10" from floor to casing.  
 Louvers made by others from cold rolled steel, available in galvanized.

**24" x 24" louver, sandwich type**  
 Not rated. Available with or without channel  
**LOUVER SIZES**

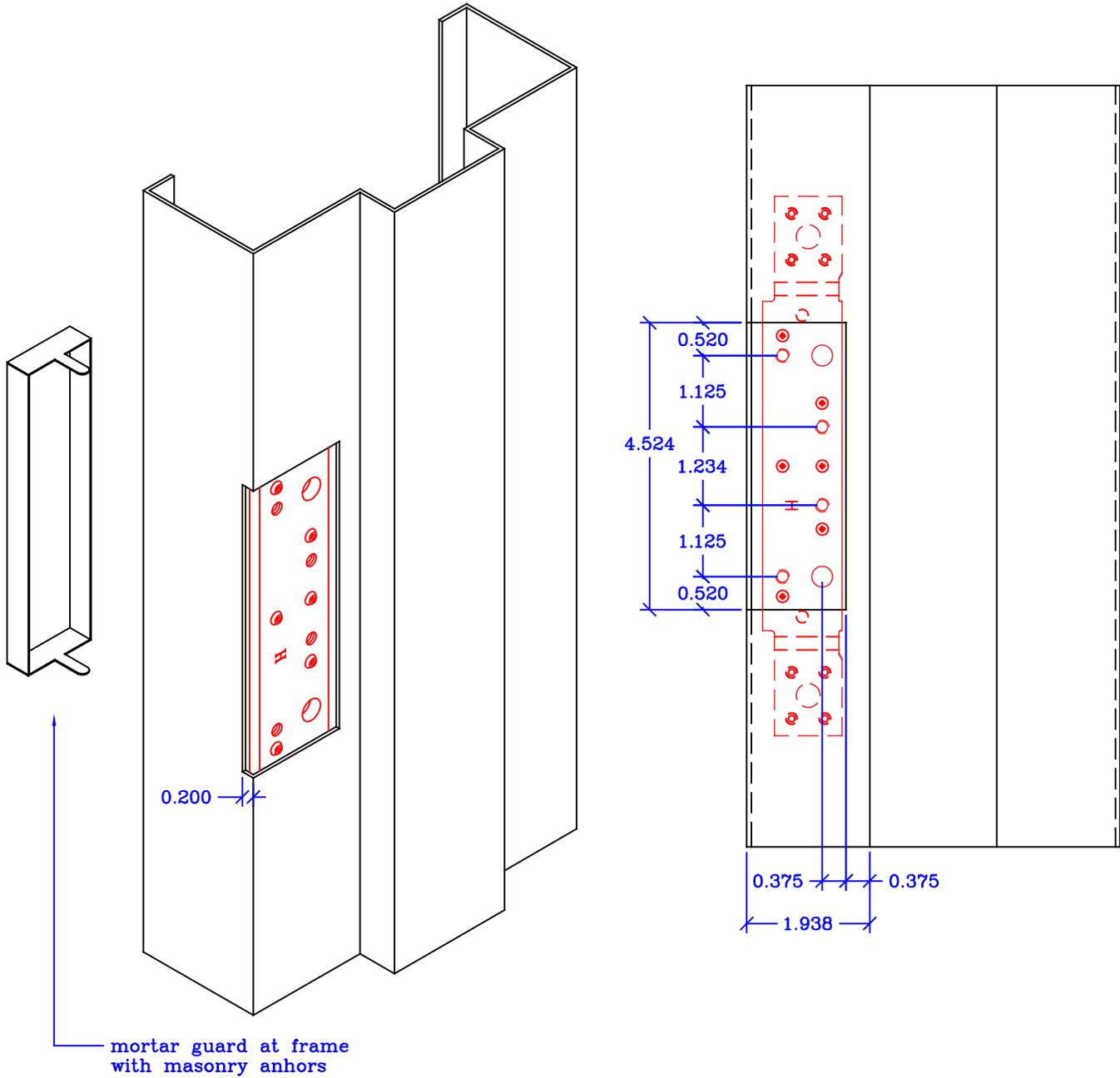


Per ADA standards, 10" from floor to casing.  
 Louvers made by others from cold rolled steel, available in galvanized.

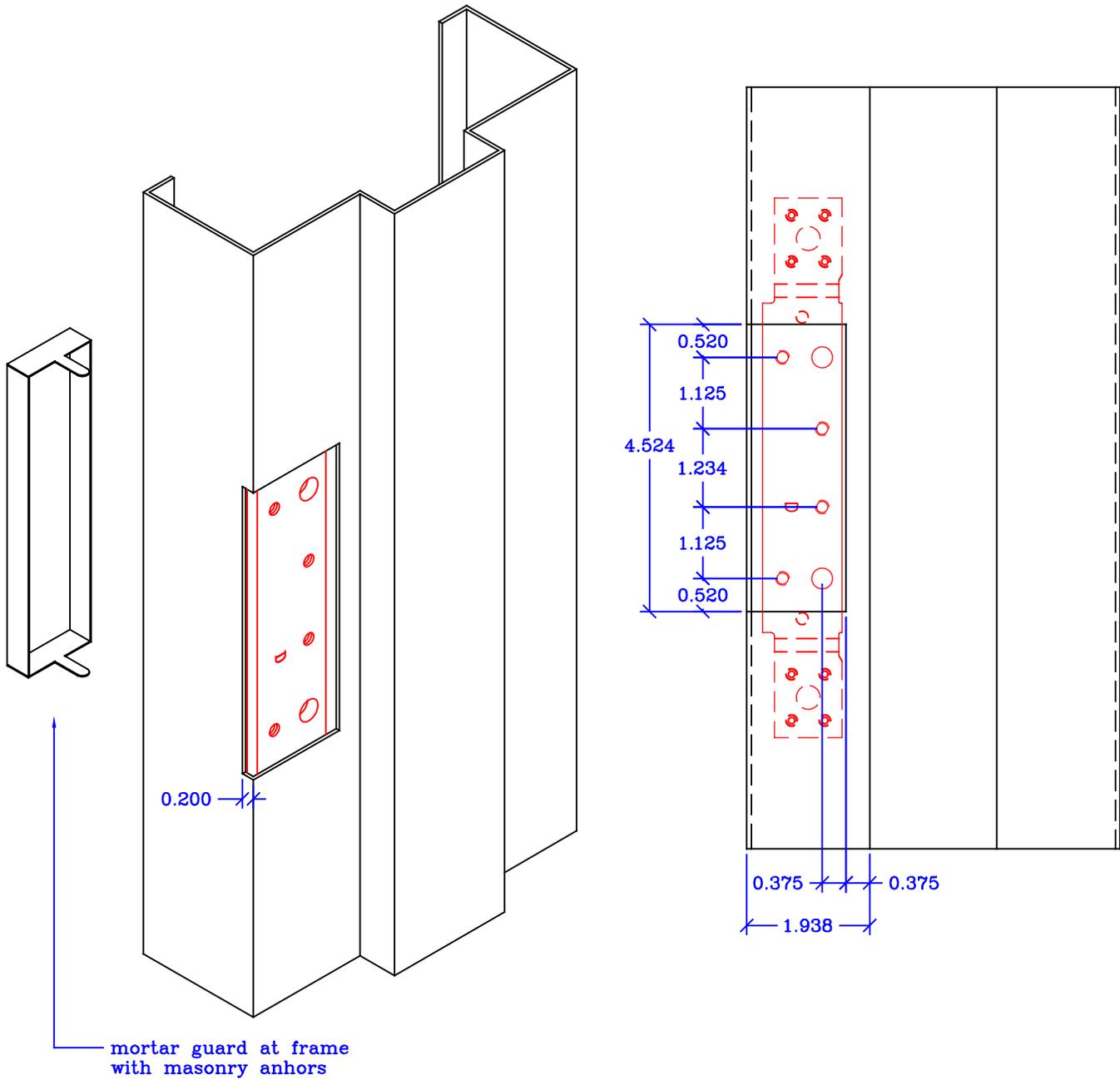
**Round cut out**  
perimeter channel not available



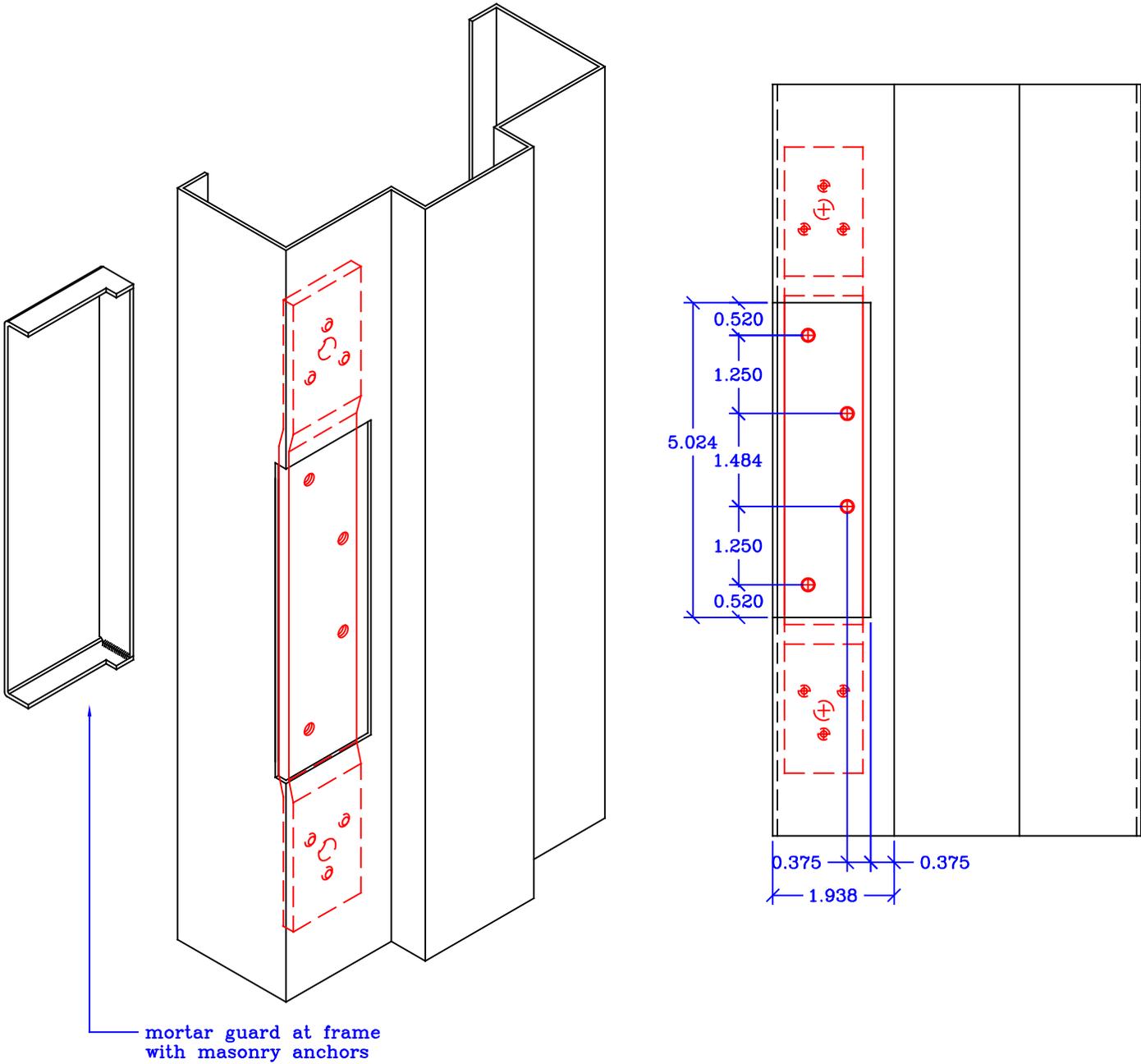
**4 1/2" standard weight hinge reinforcement (0.134), 7ga**  
Projection welded



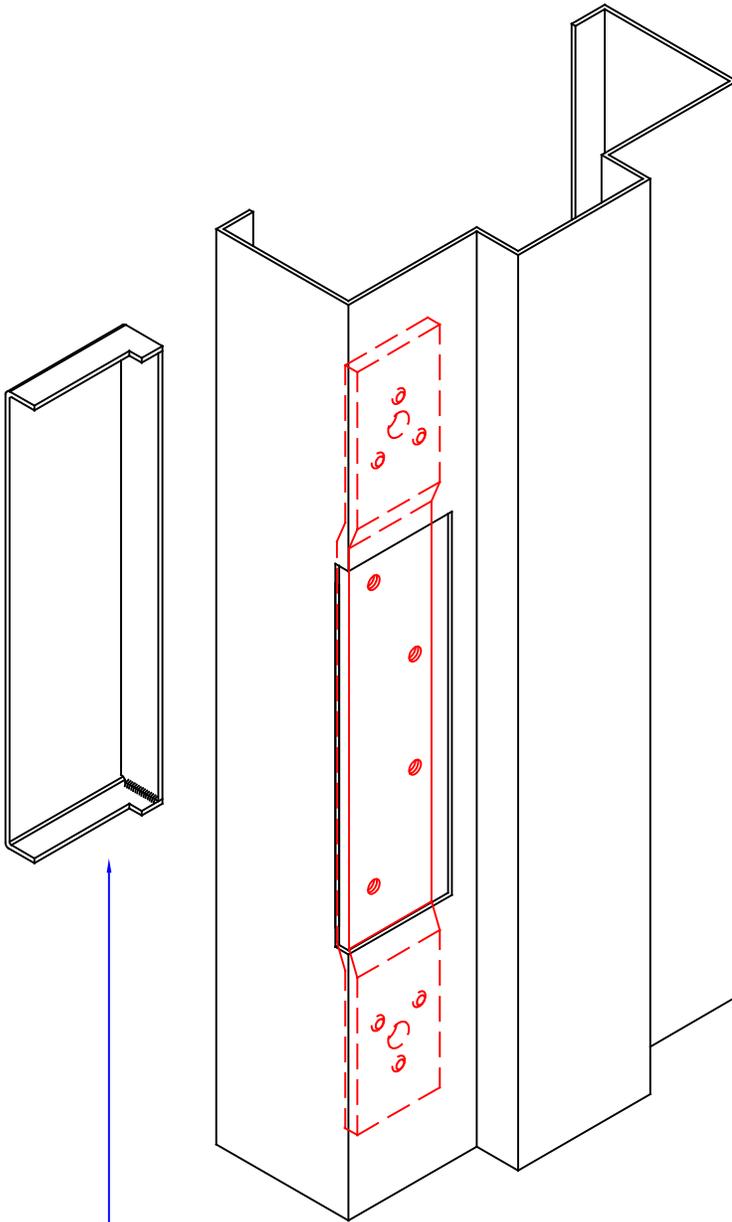
**4 1/2" heavy weight hinge reinforcement (0.180), 7ga**  
Projection welded



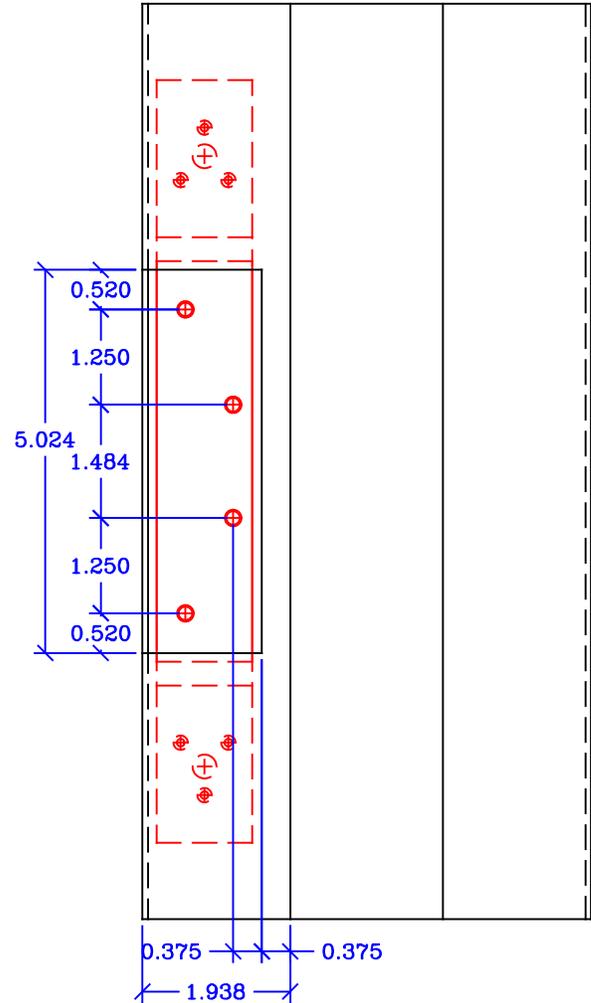
**5" standard weight hinge reinforcement (0.146), 7ga**  
Projection welded



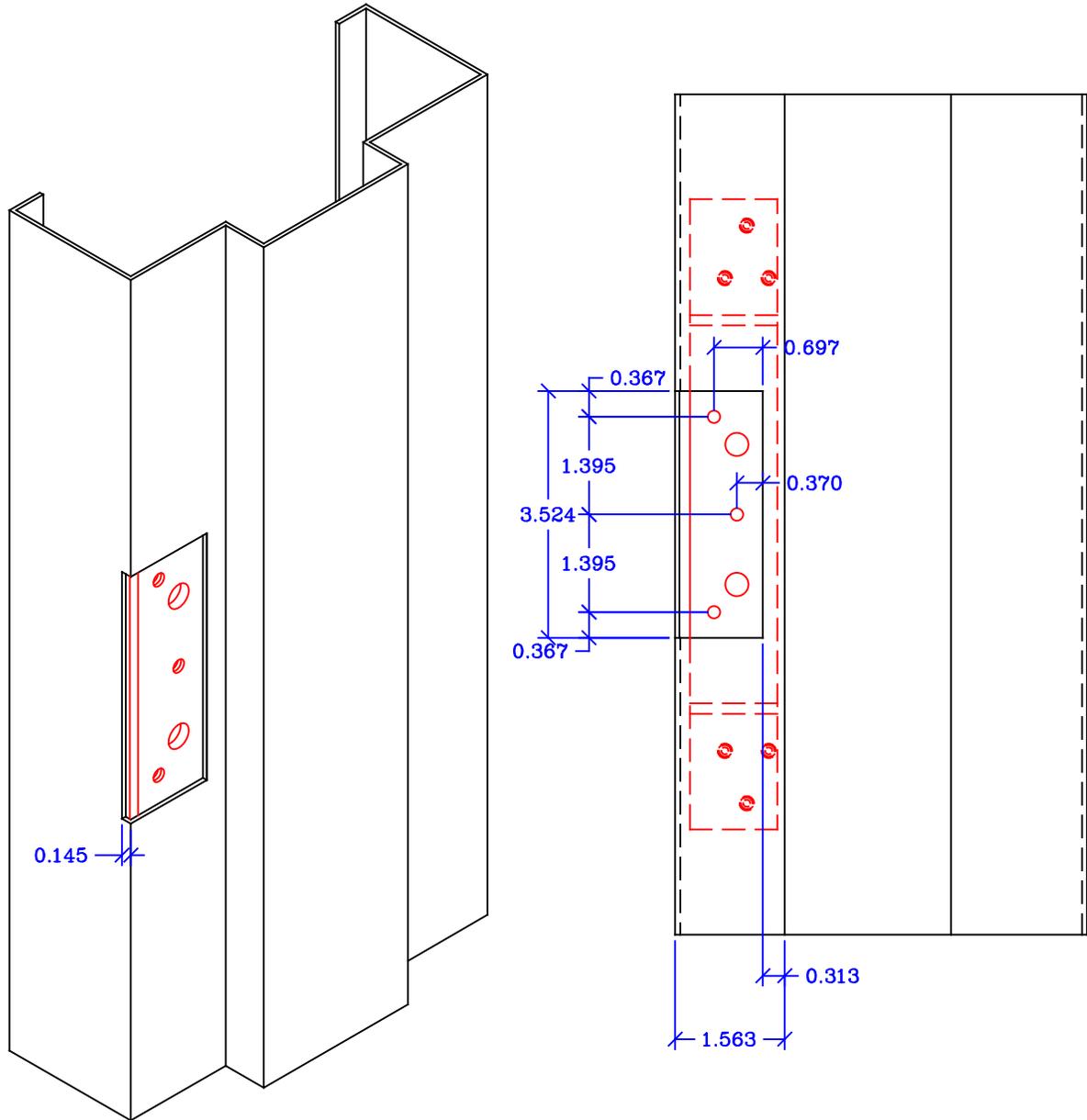
**5" heavy weight hinge reinforcement (0.190), 7ga**  
Projection welded



mortar guard at frame  
with masonry anchors

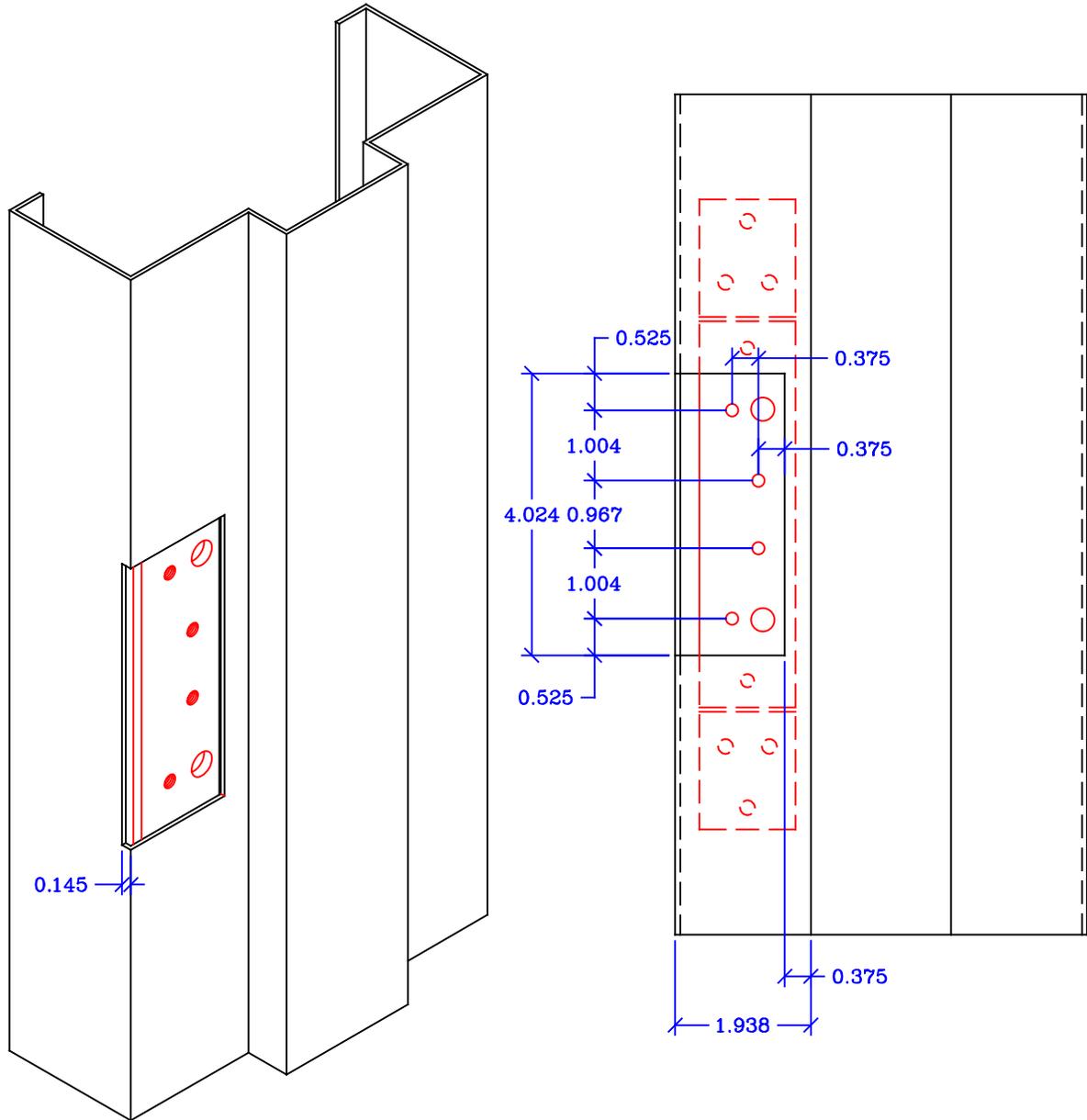


**3 1/2" standard weight hinge reinforcement (0.125), 10ga**  
Projection welded

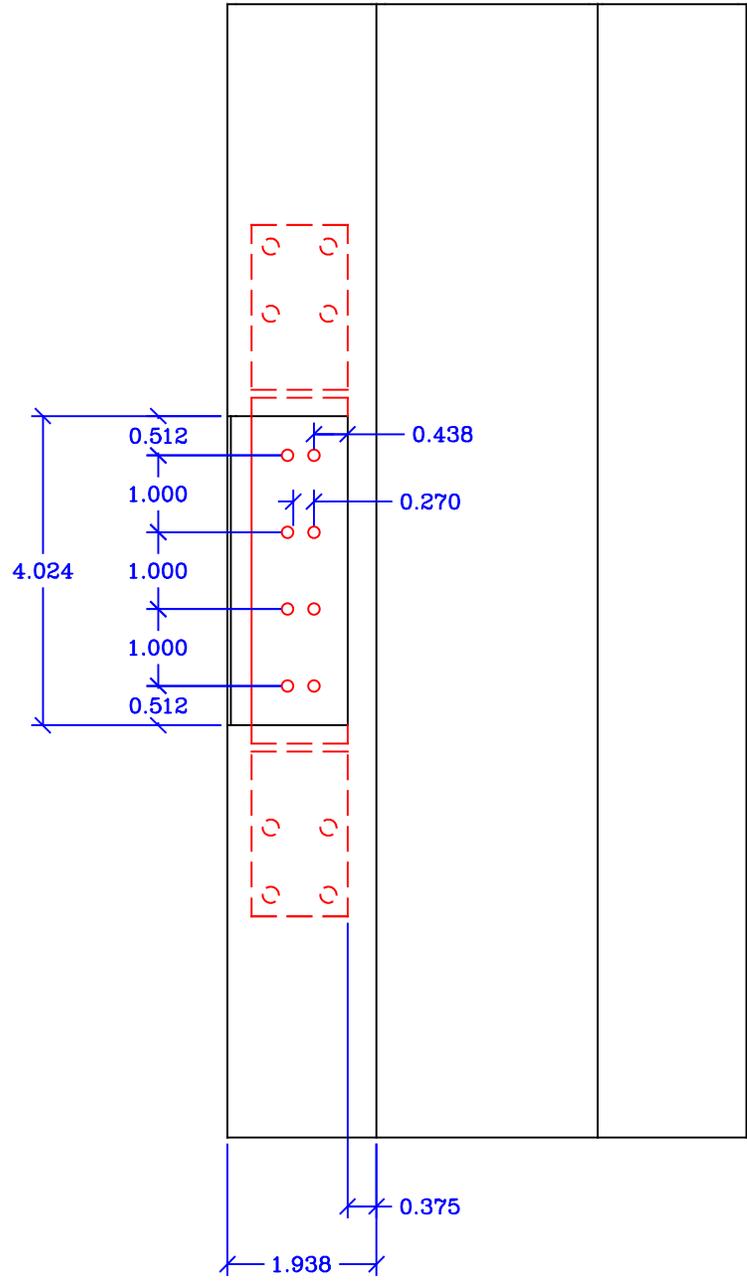
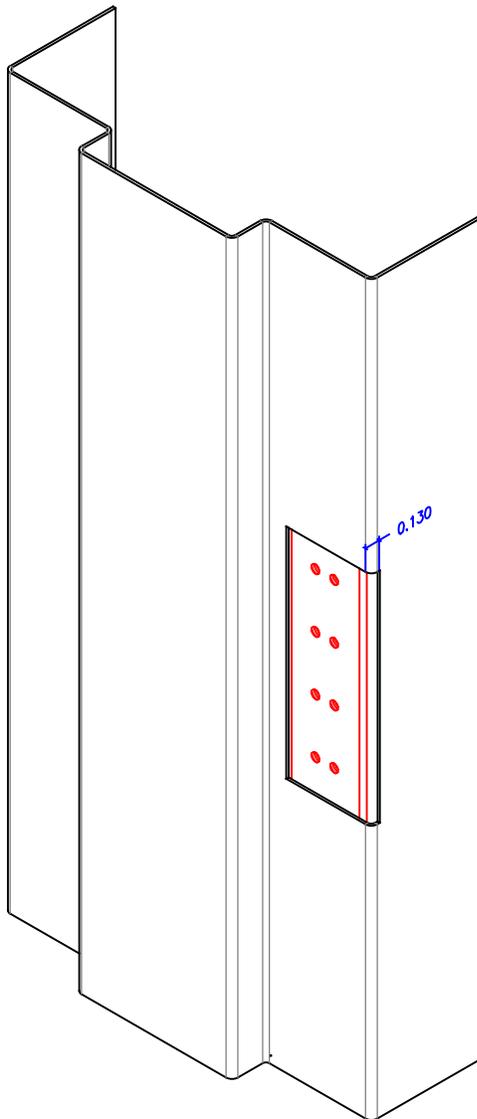


Shown for a 1 3/8" thick door

**4" standard weight hinge reinforcement (0.130), 10ga**  
Projection welded

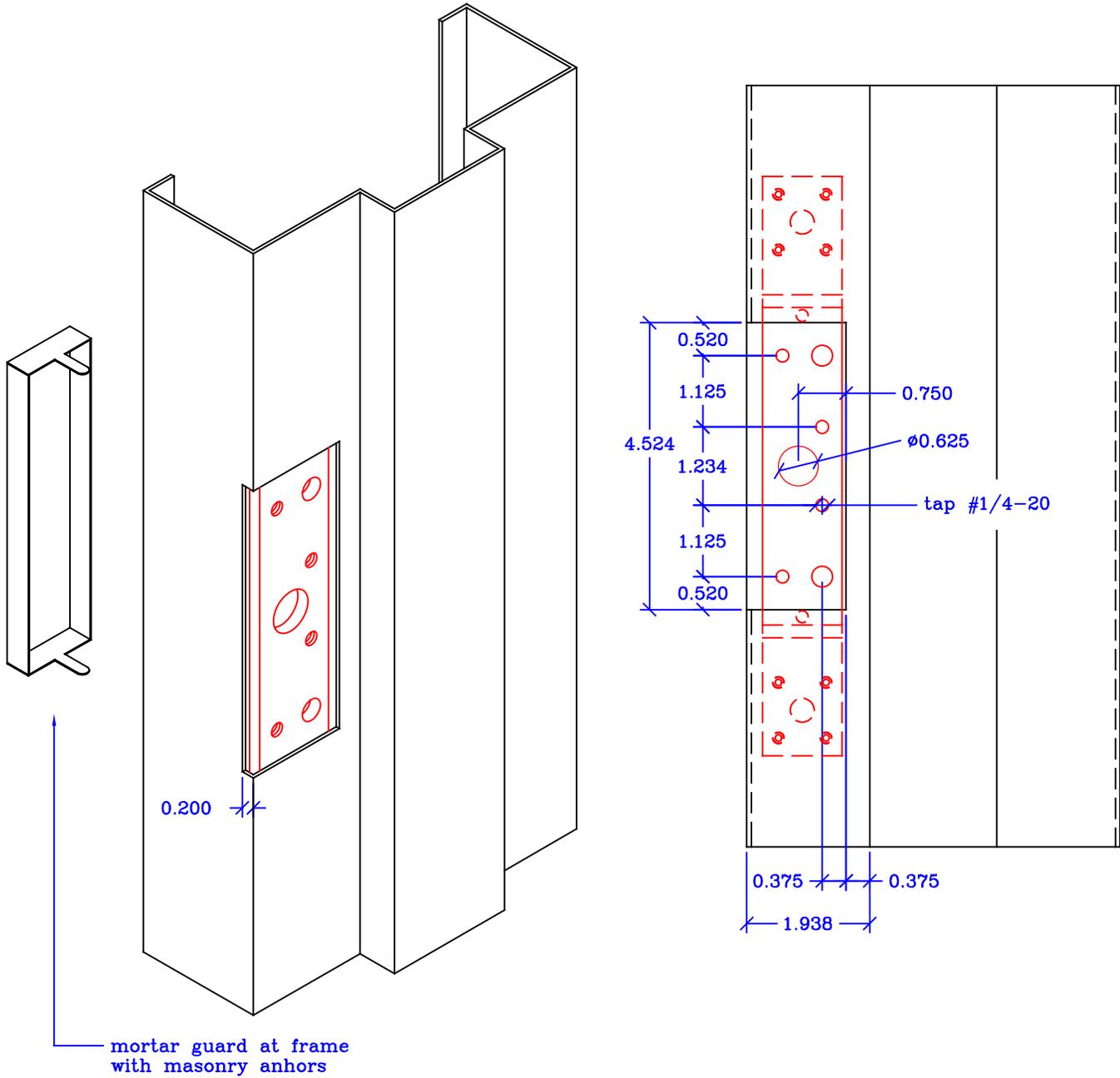


**4" thin reinforcement, 10ga**  
Projection welded

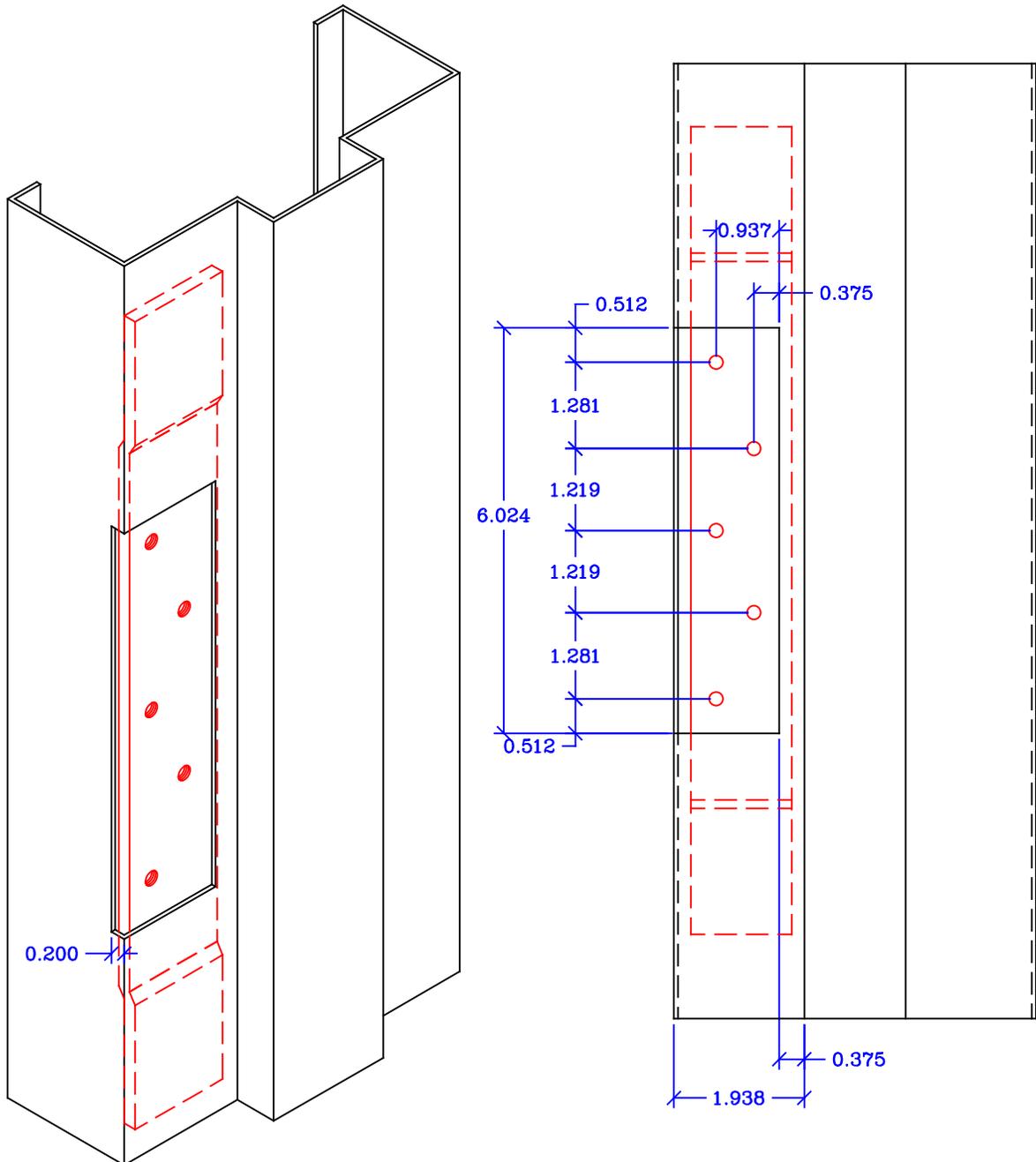


**4 1/2" institutional hinge reinforcement (0.190), 7ga**

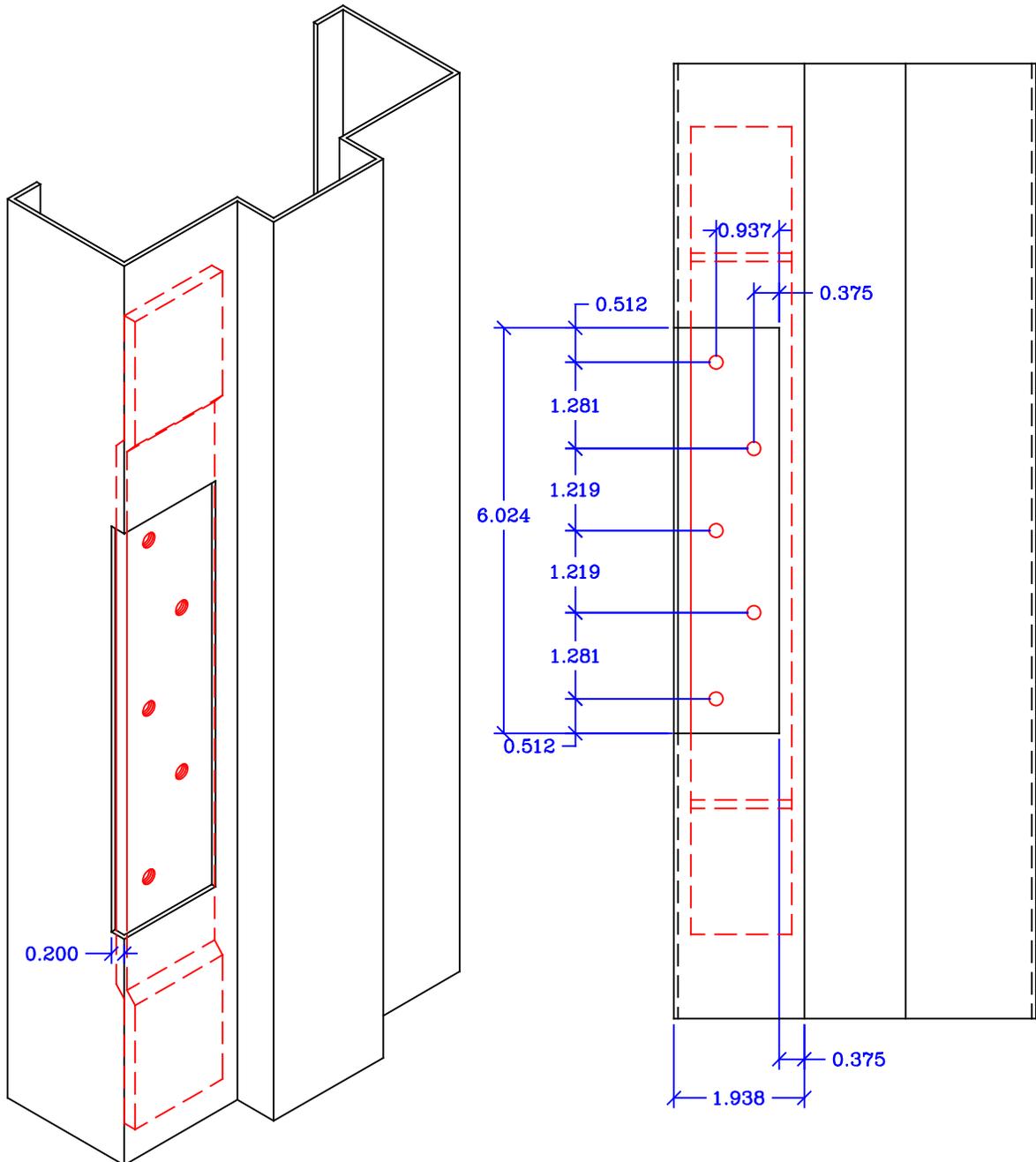
Projection welded



**6" standard weight hinge reinforcement (0.160), 7ga**  
Projection welded

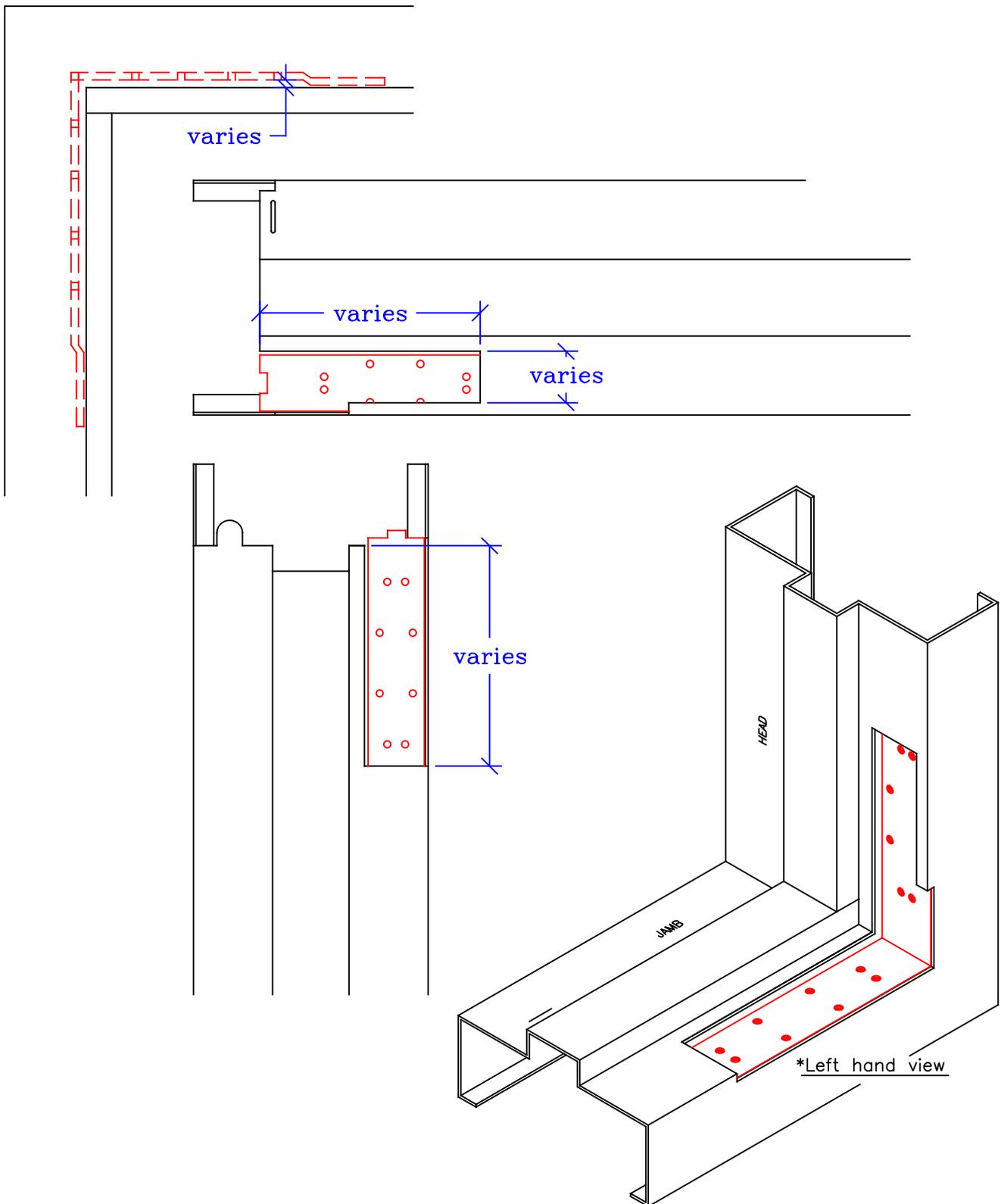


**6" heavy weight hinge reinforcement (0.203), 7ga**  
Projection welded



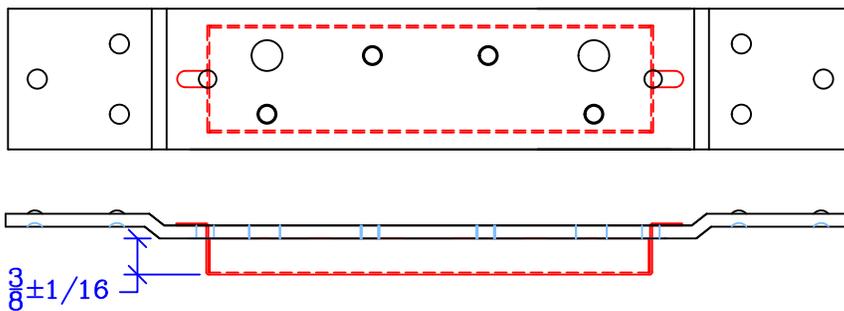
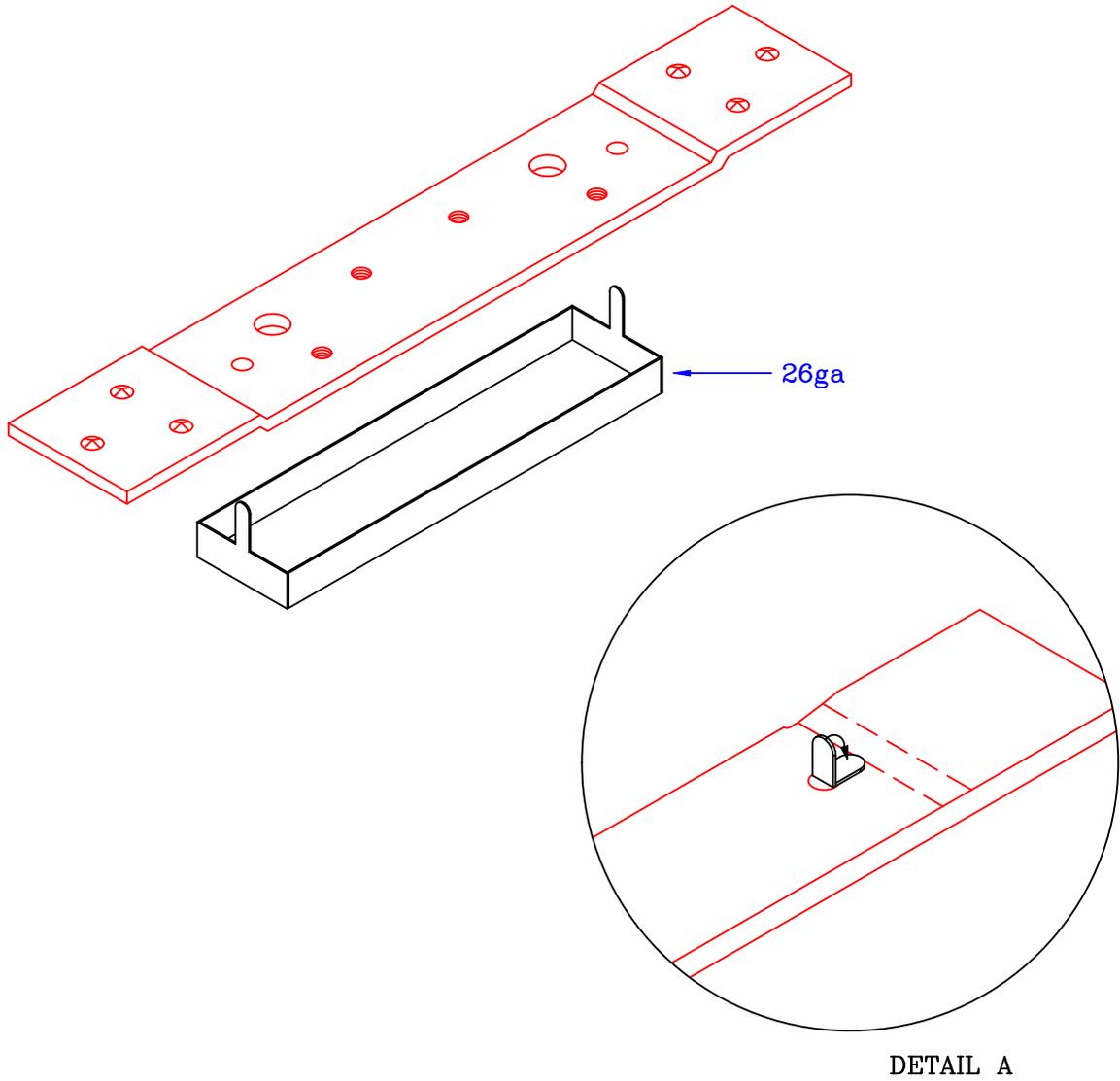
**Anchor hinge, 10ga**

Projection welded



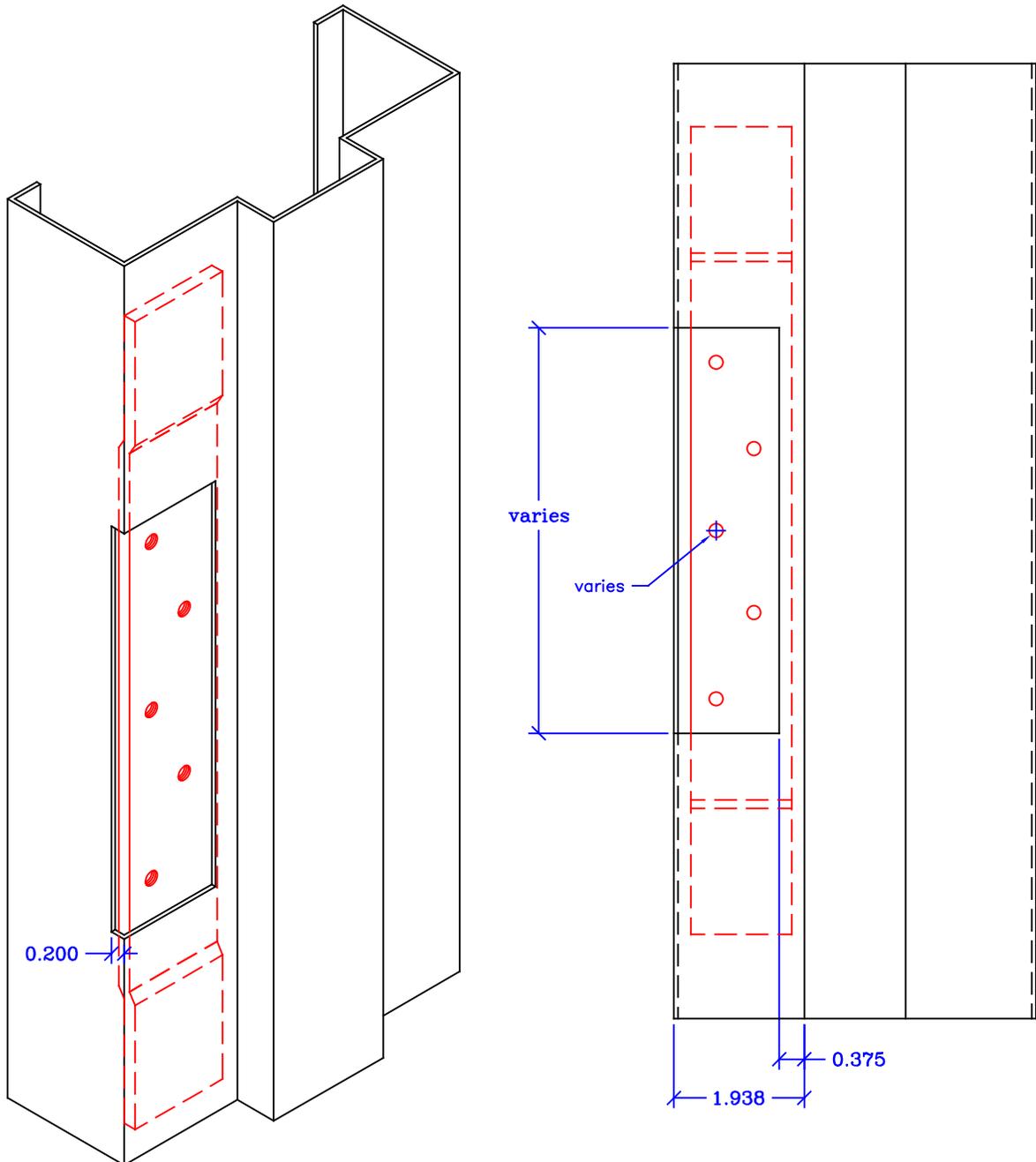
\*manufacturer's template to be provided

**Mortar guard**



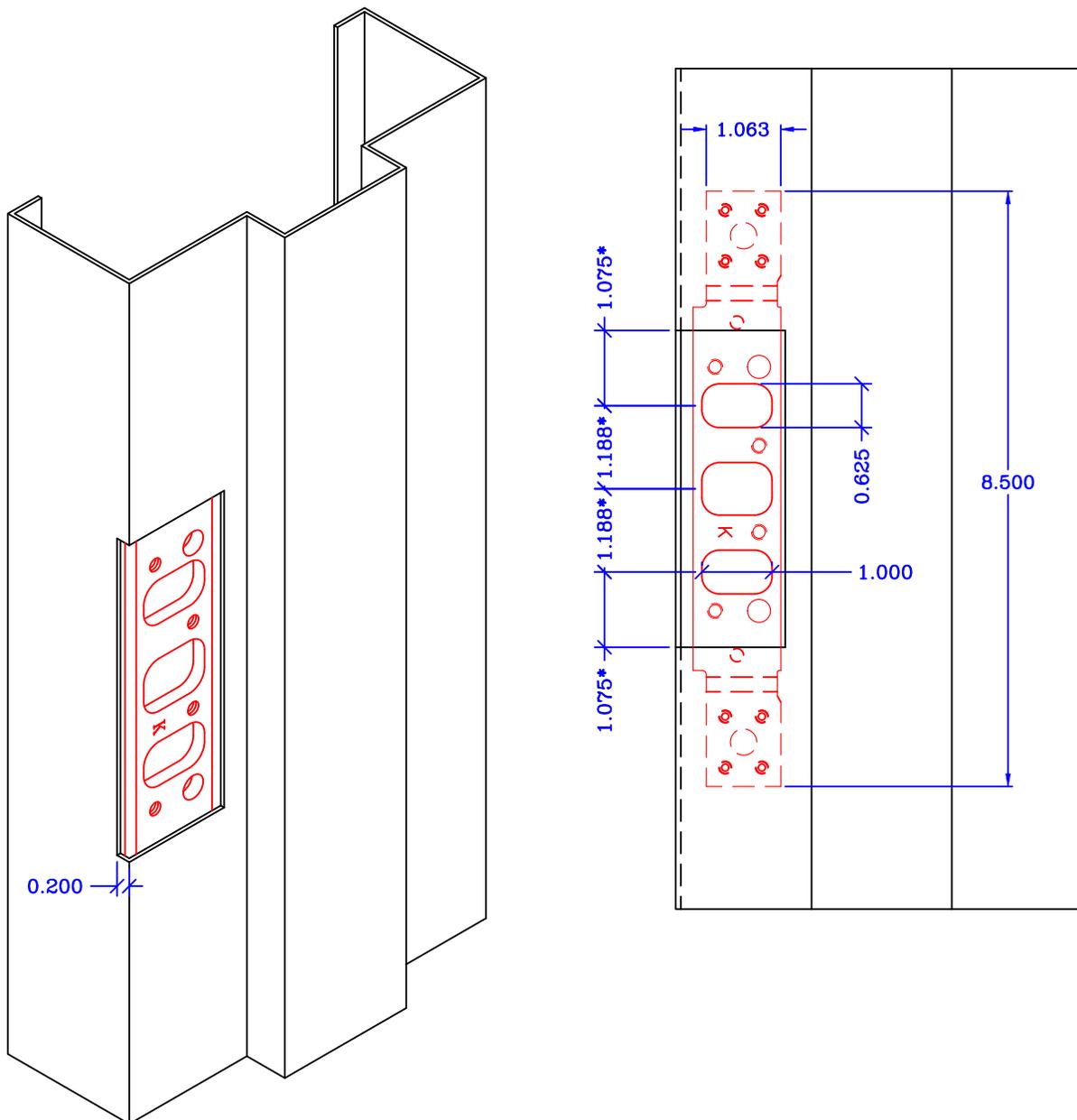
Added at all frames with masonry anchors  
Model for 4 1/2" butt hinge reinforcement shown.

**Special mortise hinge, 7ga**  
Projection welded



\*manufacturer's template to be provided

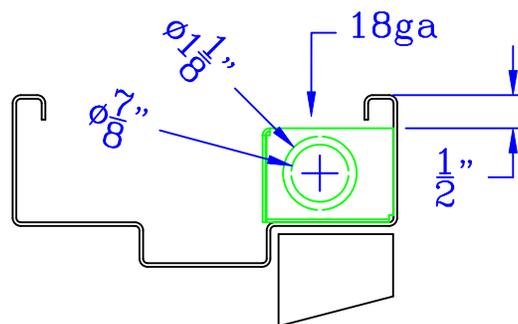
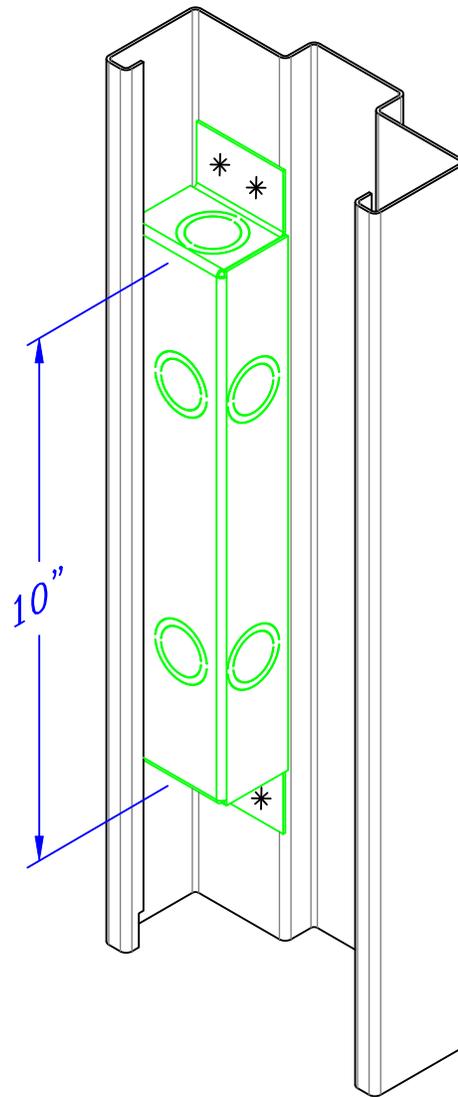
**Electric hinge reinforcement, 7ga**  
Projection welded



4 1/2" electric hinge prep. shown, also available for other heights.  
\* fits most of electric hinges, please verify toward model intended.

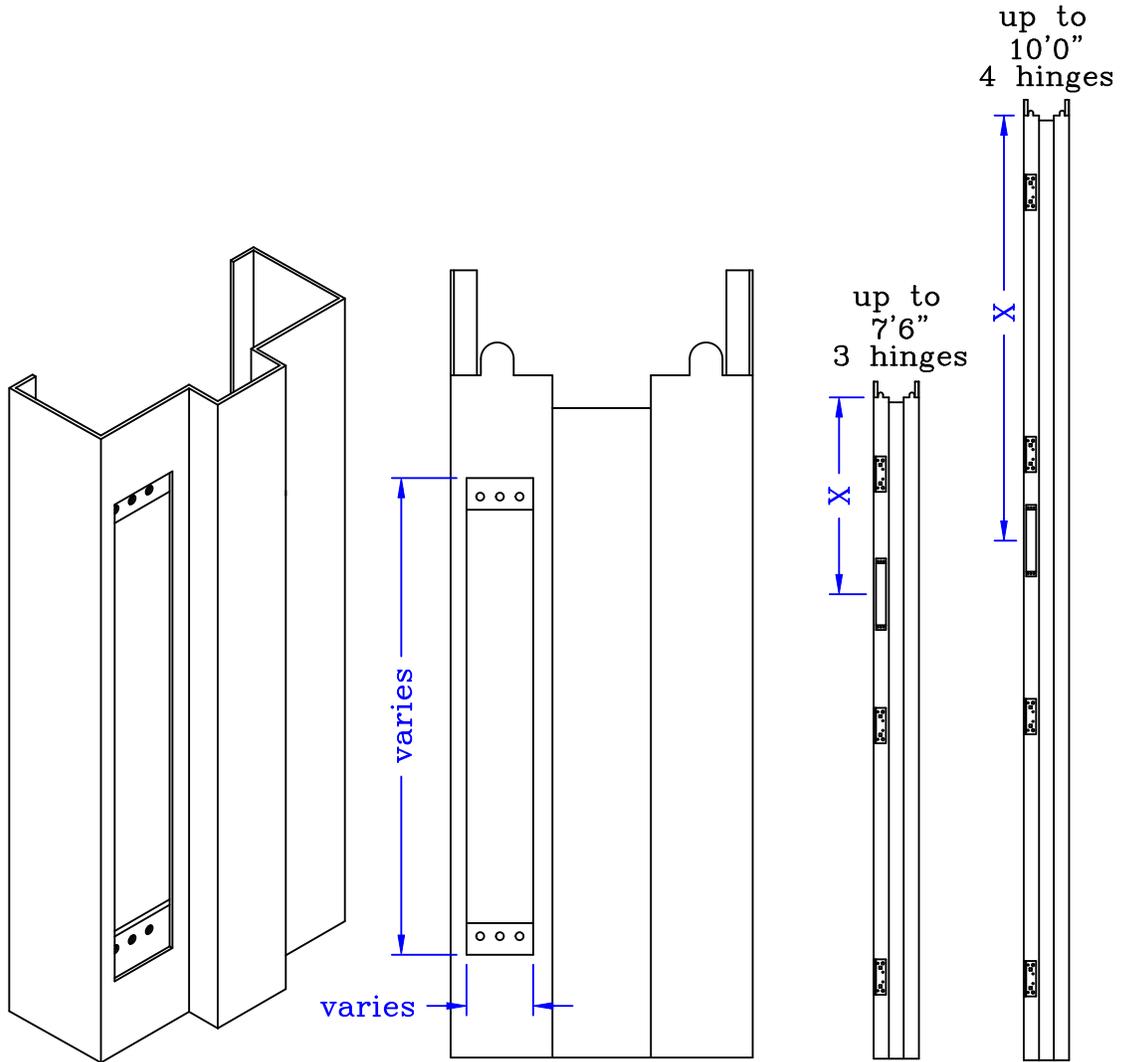
### Box for electric hinge with knockouts

Spot welded



For 2" face frame or more.

**Electric power transfer reinforcements, 12ga**  
Projection welded

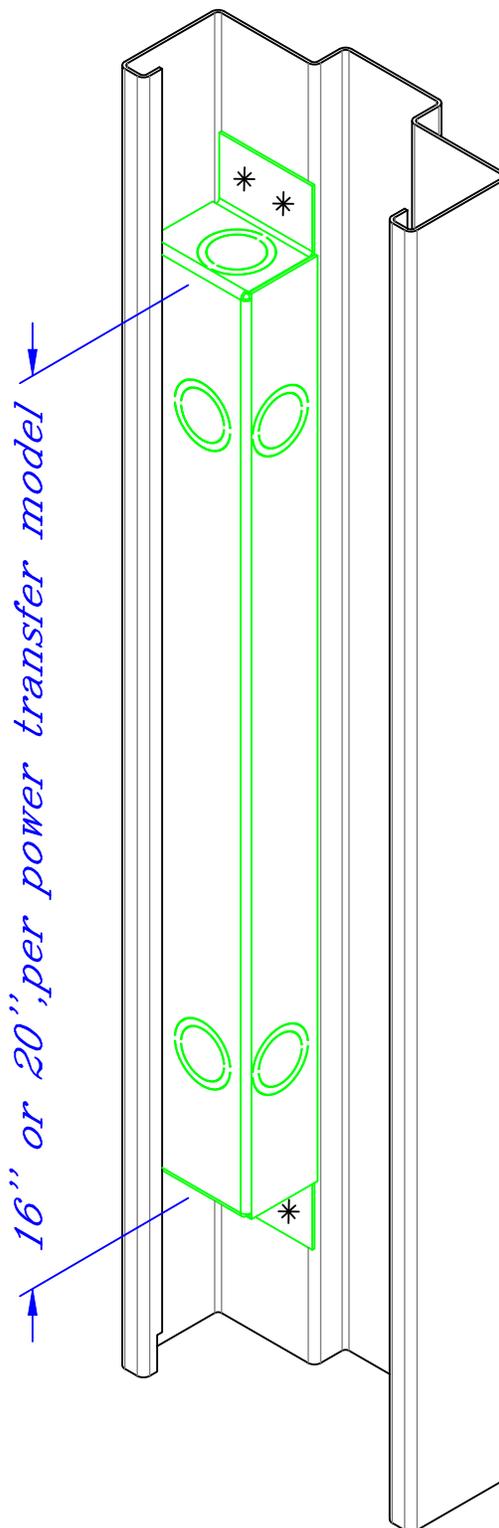
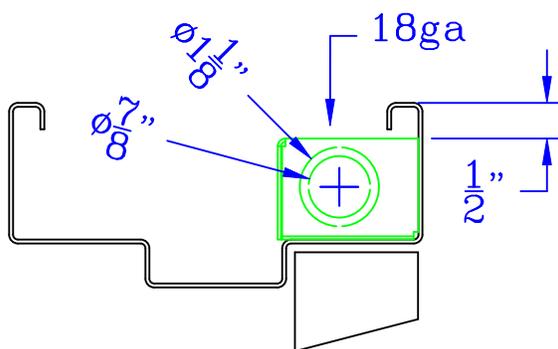


Electrical prep

\*manufacturer's template to be provided  
\*\*see page Q-1.1 for EPT location

### Box for power transfer with knockouts

Spot welded



Electrical prep

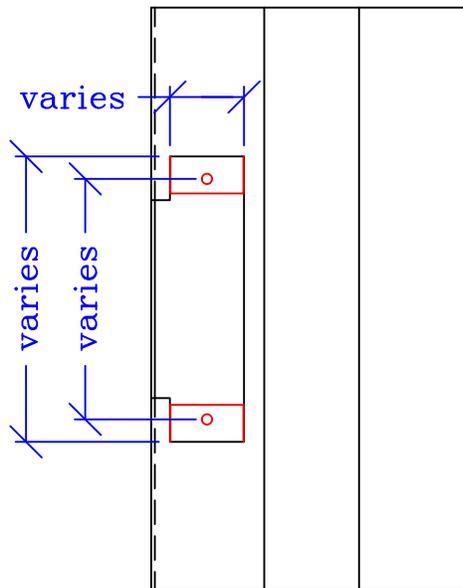
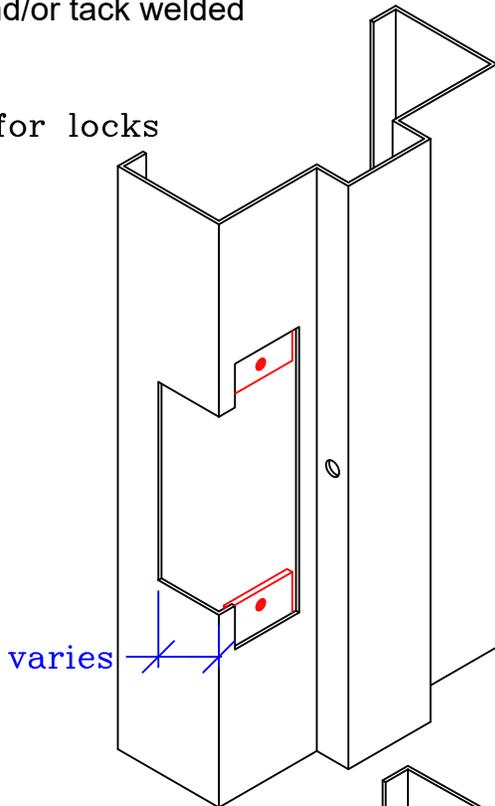
EPTBOX

For 2" face frame or more. Maximum hardware depth of 1-7/16".

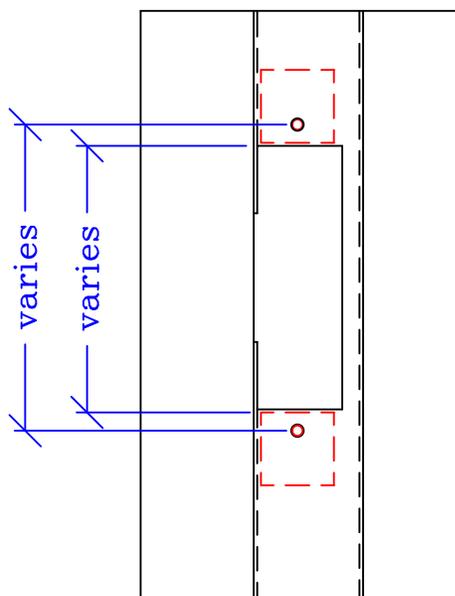
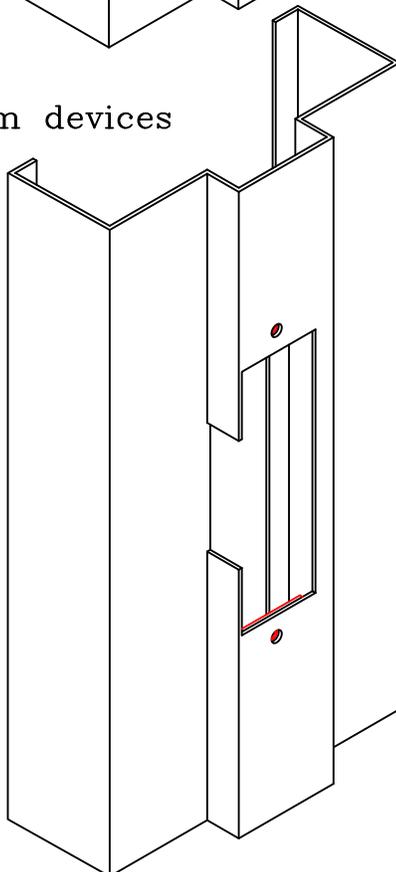
**Prep. for electric strike, 12ga**

Spot and/or tack welded

for locks



for rim devices

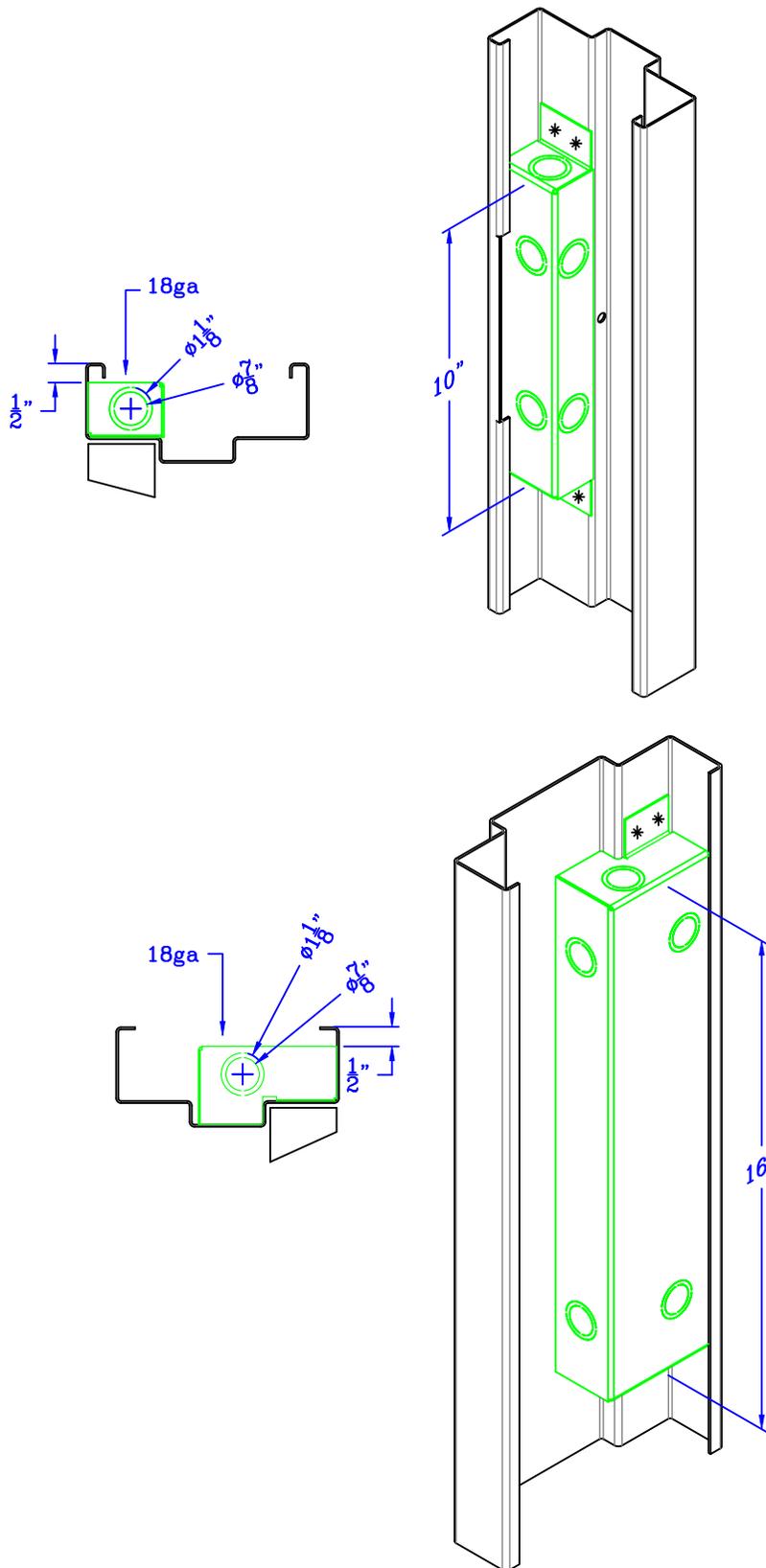


\*availability per soffit's width

\*manufacturer's template to be provided

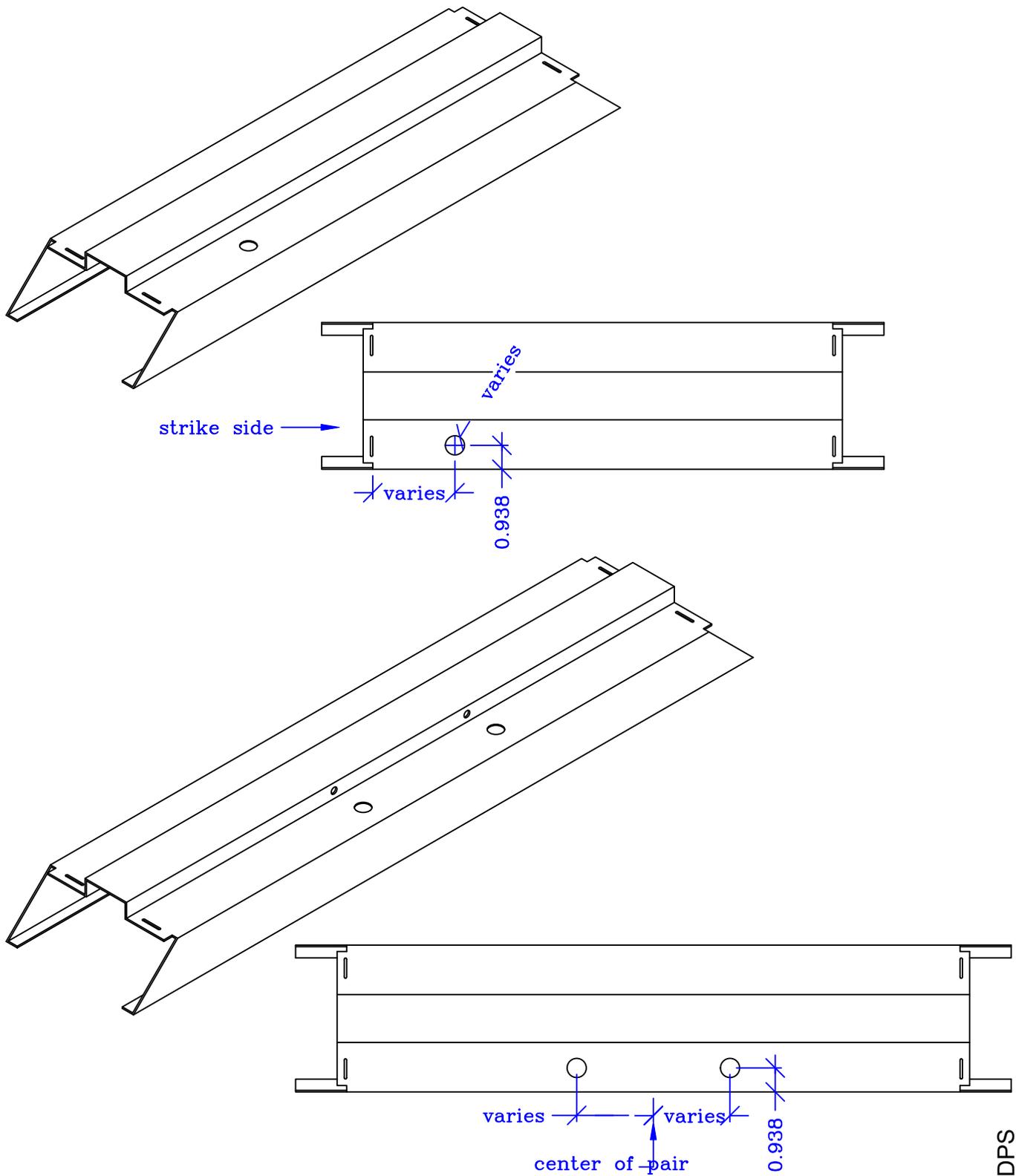
**Box for electric strike with knockouts**

Spot welded



For 2" face frame or more. Maximum hardware depth of 1-7/16".

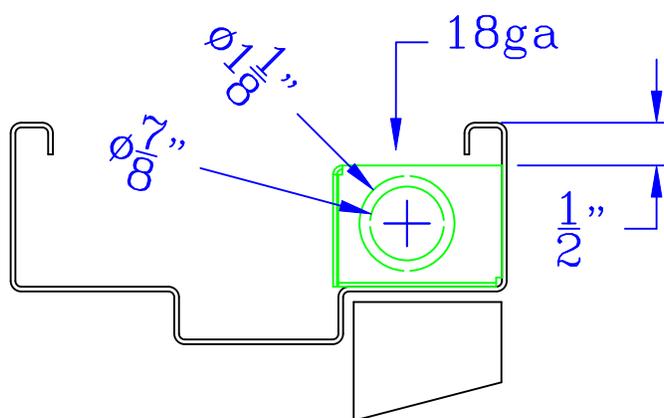
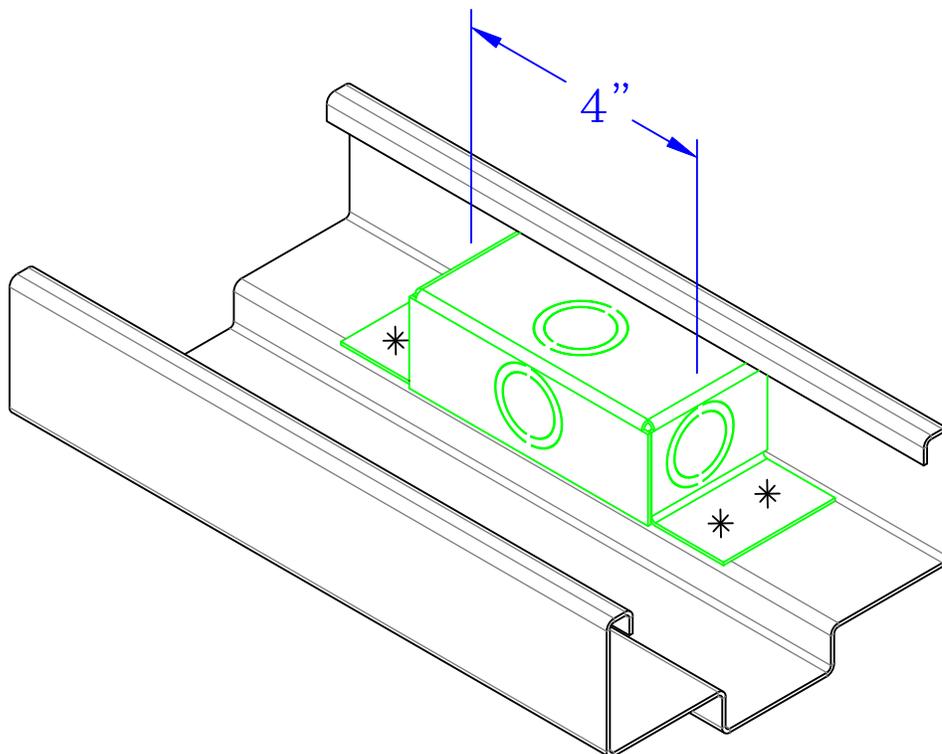
**Prep. for magnetic contact, hole only at head**



\*manufacturer's template to be provided

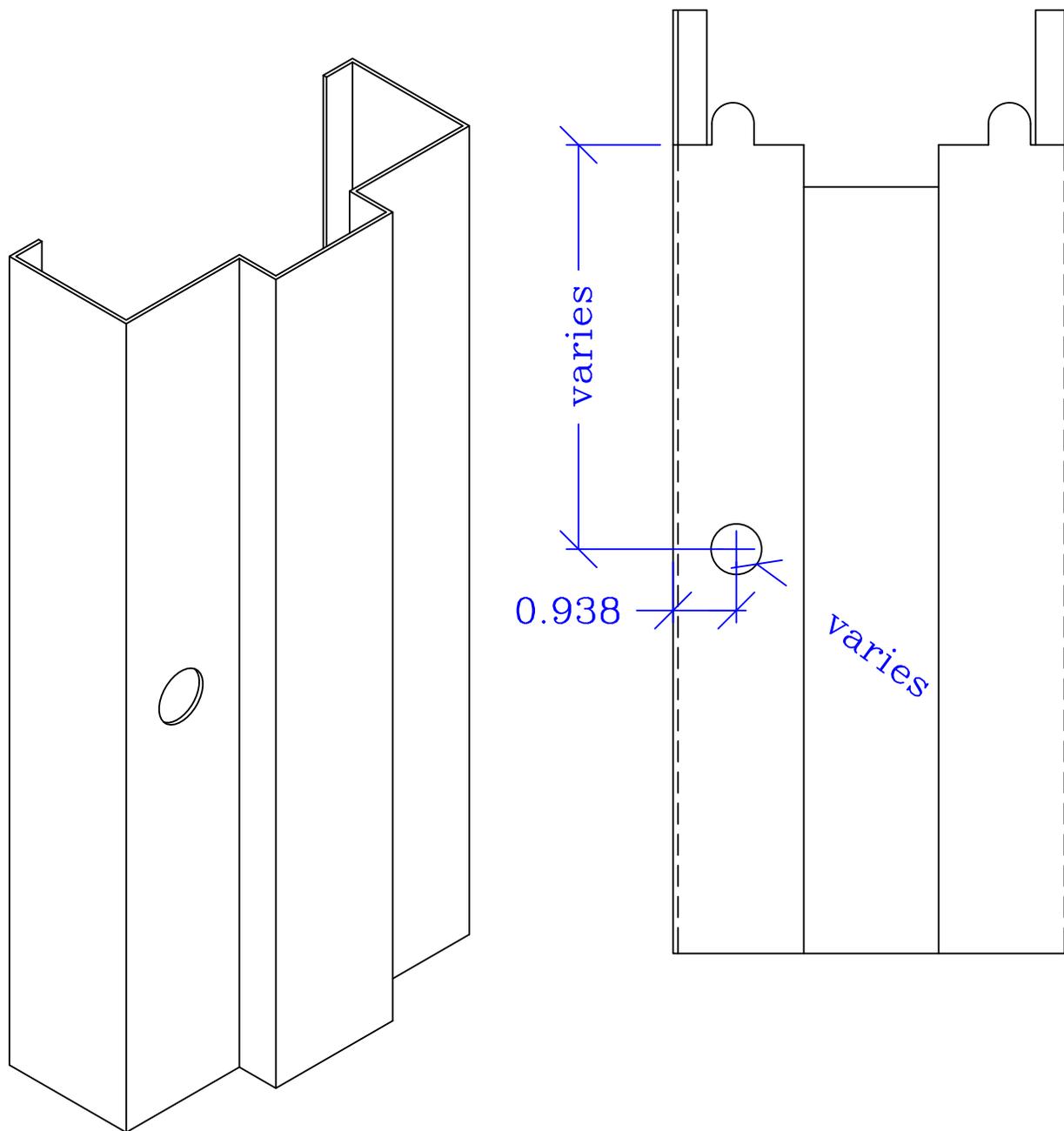
### Box for magnetic contact with knockouts

Spot welded



For 2" face frame or more. Maximum hardware depth of 1-7/16".

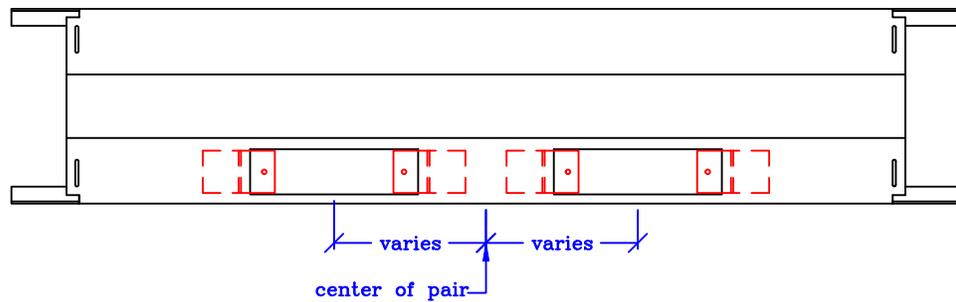
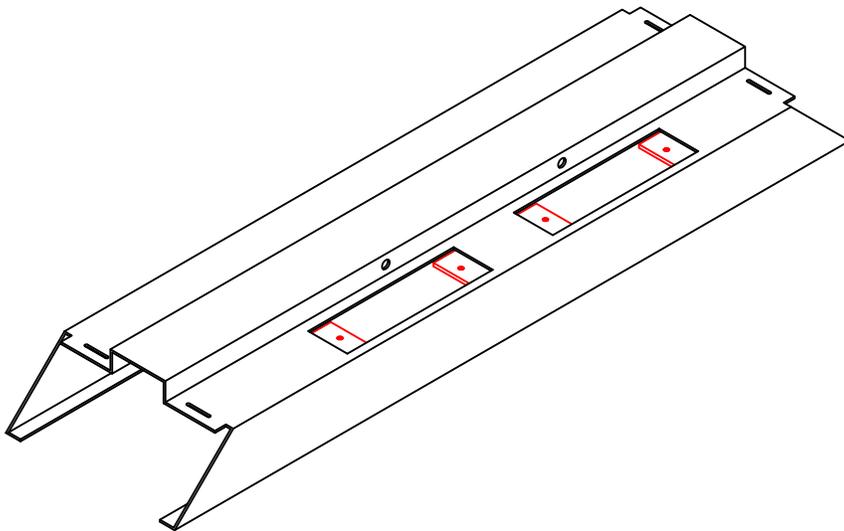
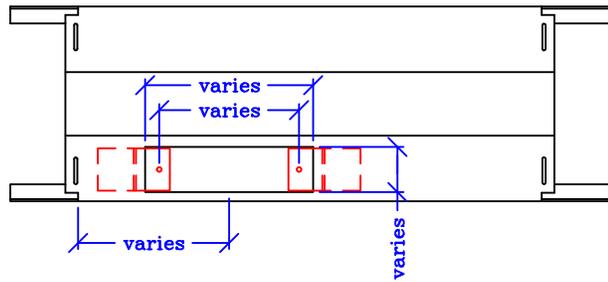
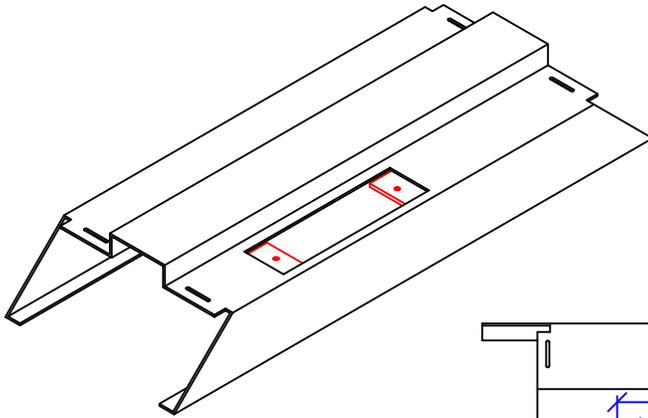
**Prep. for magnetic contact, hole only at jamb**



Electrical prep

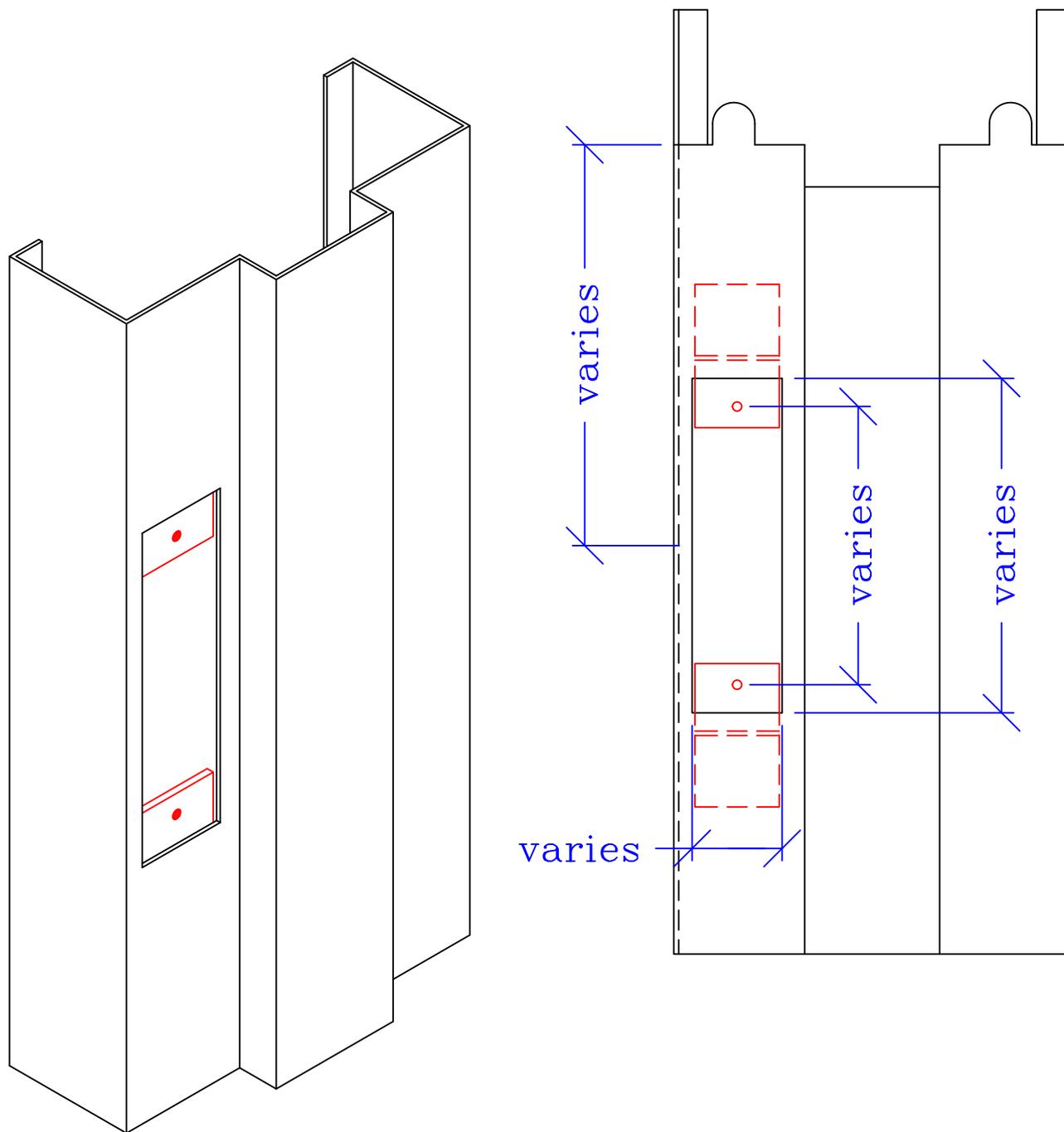
\*manufacturer's template to be provided

**Prep. for magnetic contact with reinforcement, 12ga, at head**



\*manufacturer's template to be provided

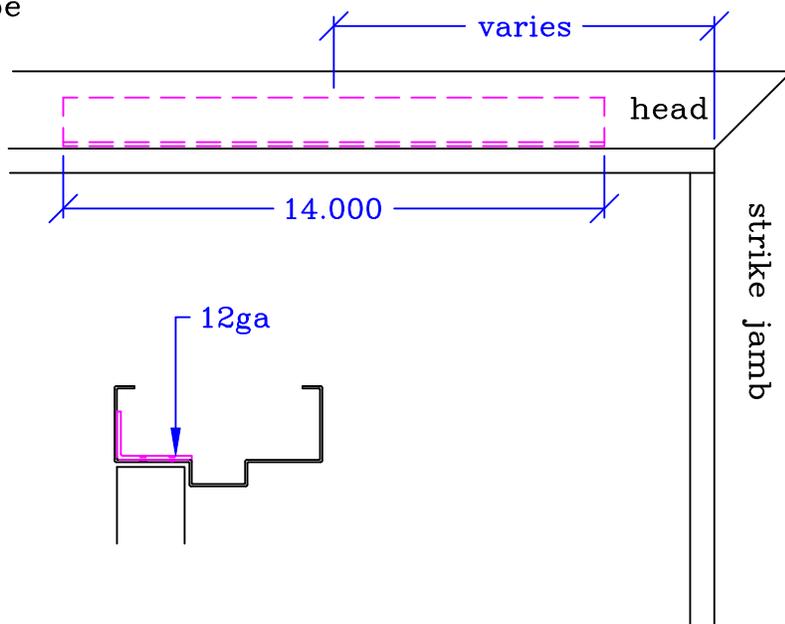
### Prep. for magnetic contact with reinforcement, 12ga, at jamb



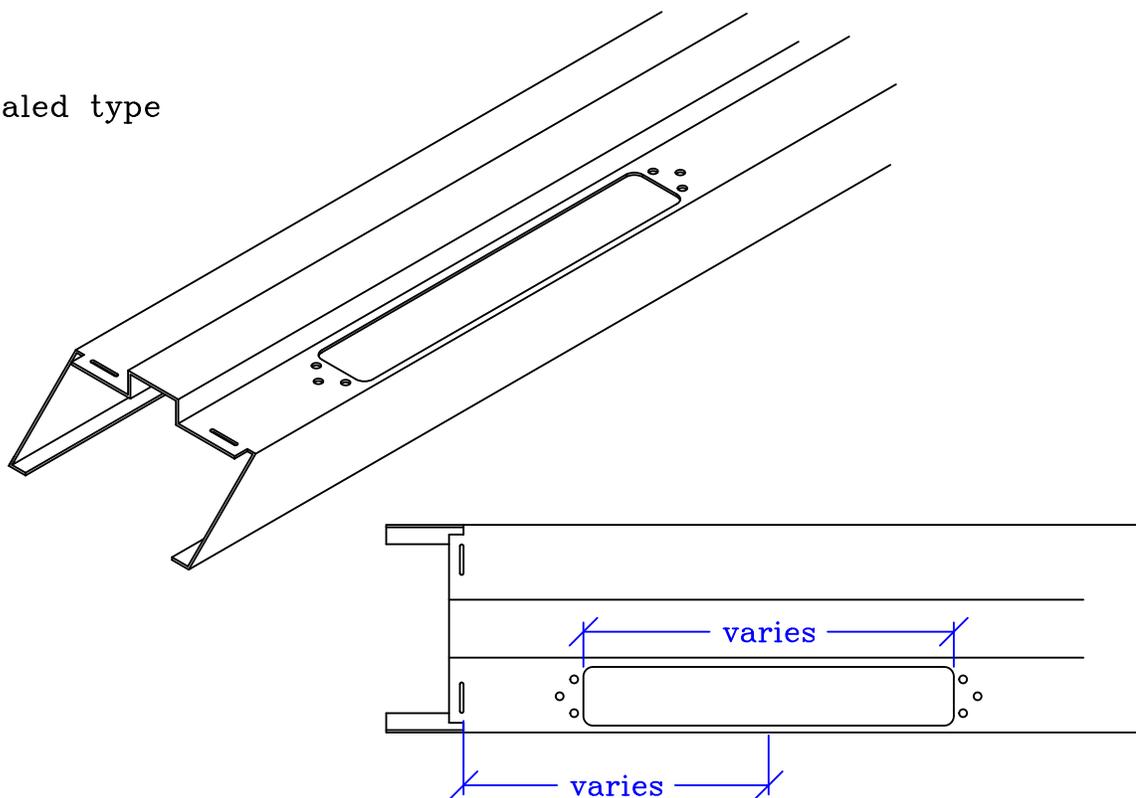
\*manufacturer's template to be provided

### Shearlock head reinforcement

Surface type

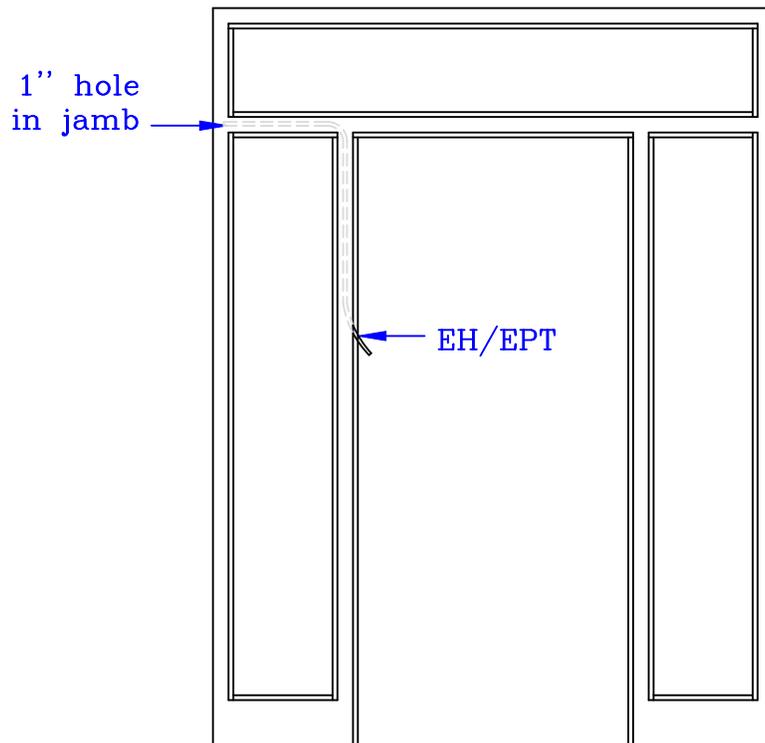
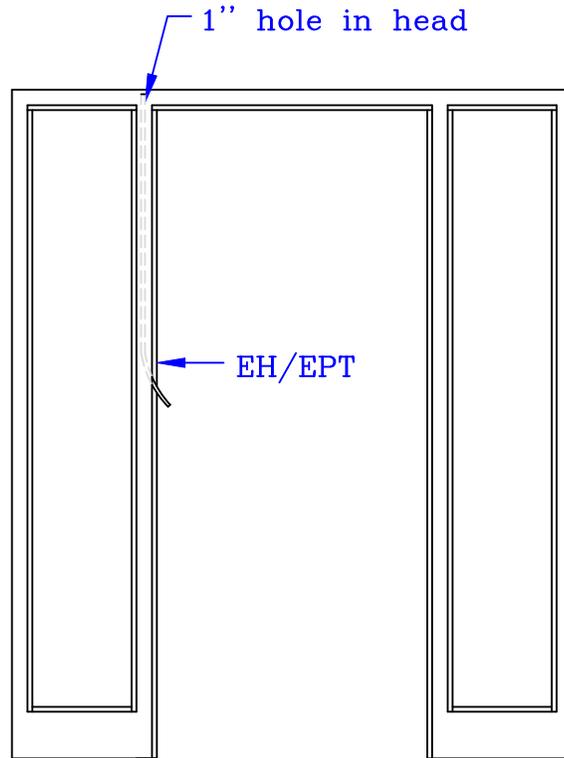


Concealed type

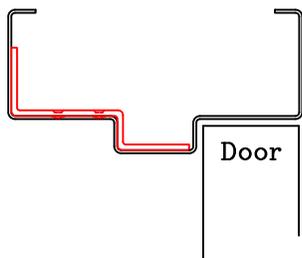
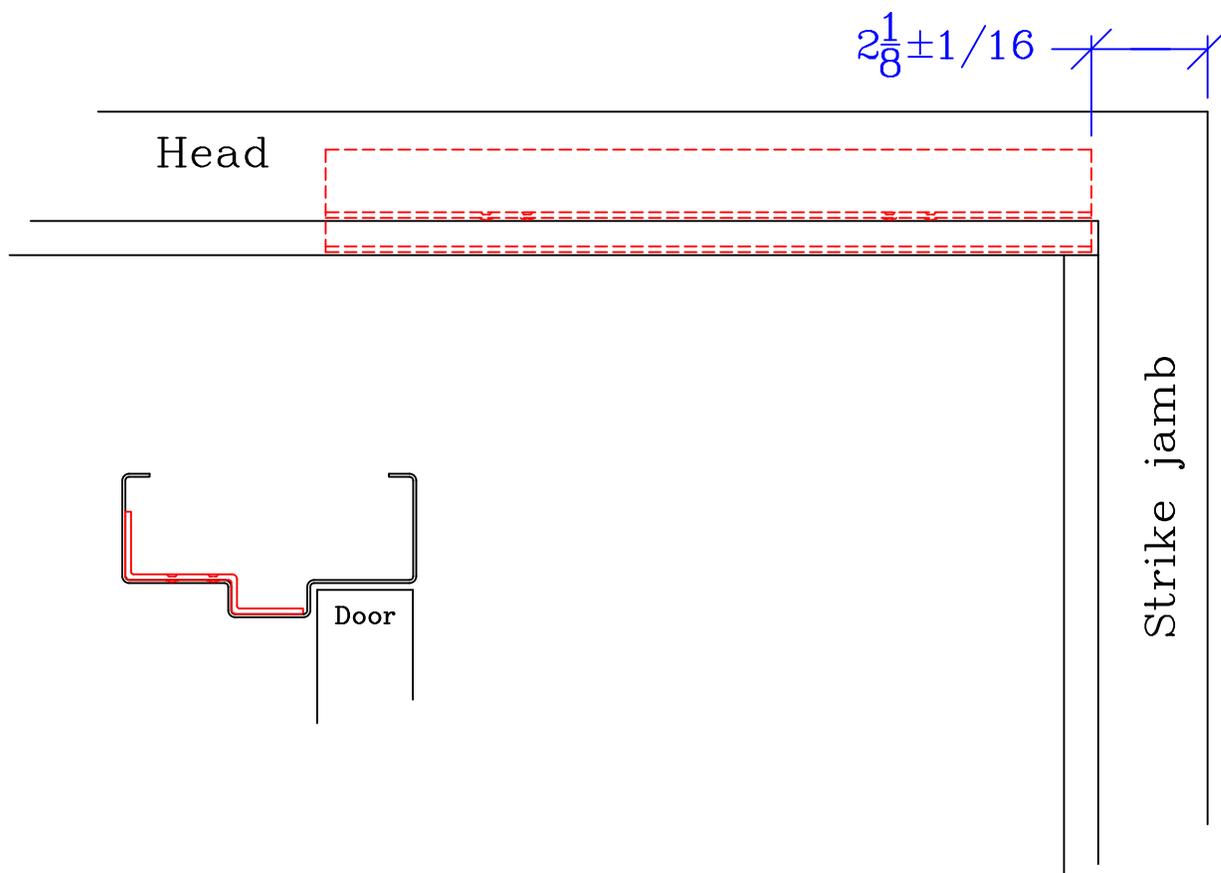
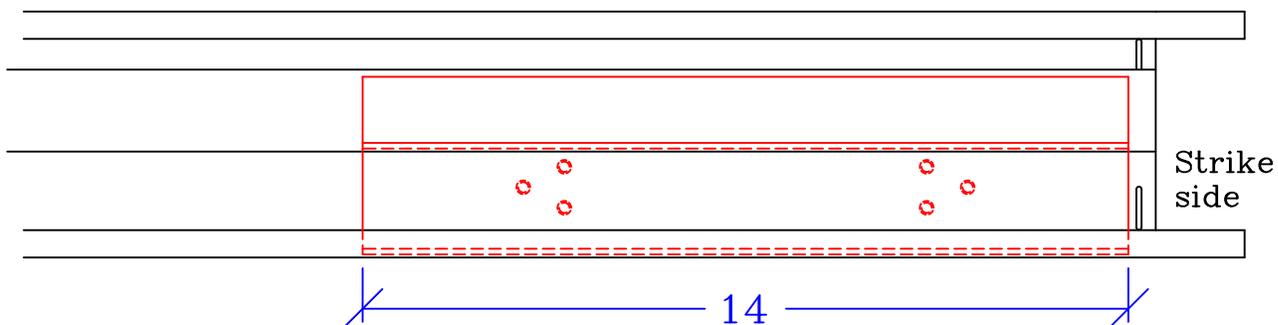


\*manufacturer's template to be provided

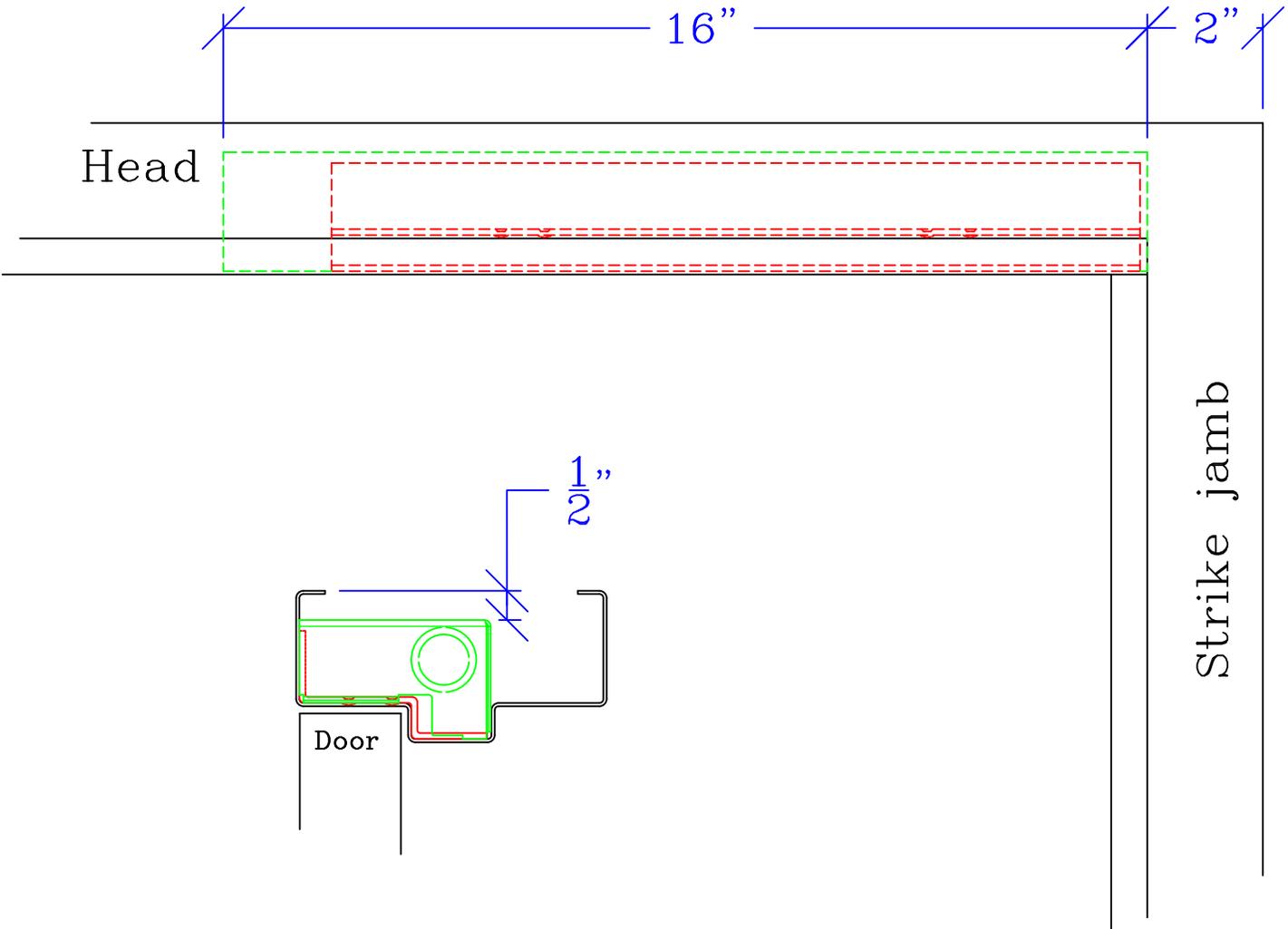
## Raceway for electric hardware



### Prep. for electromagnetic lock reinforcement, 12ga



**Prep. for electromagnetic lock reinforcement, 12ga, with electric box**

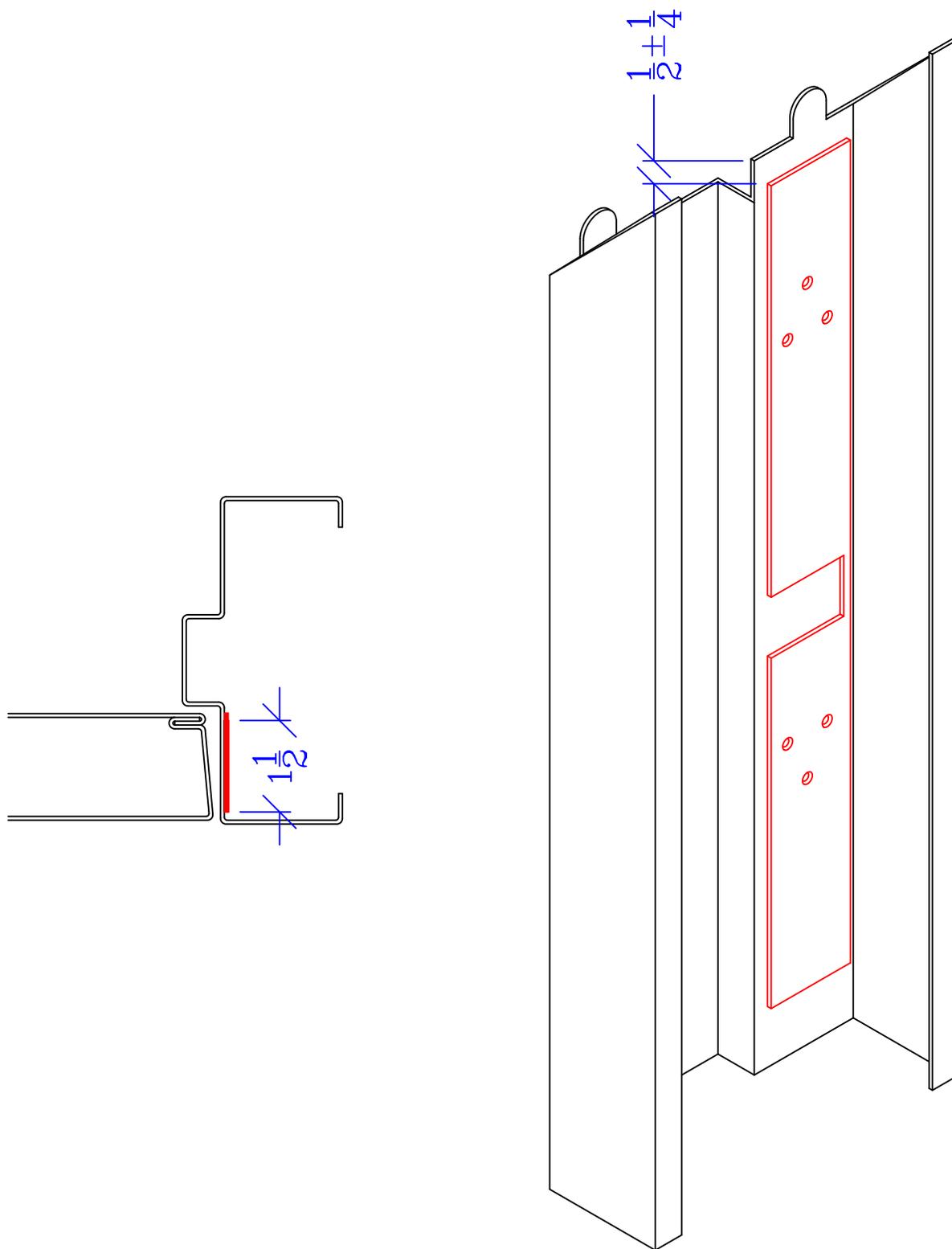


Electrical prep

ELMAGEB

## Concealed leaf continuous hinge reinforcement, 14ga

Projection welded

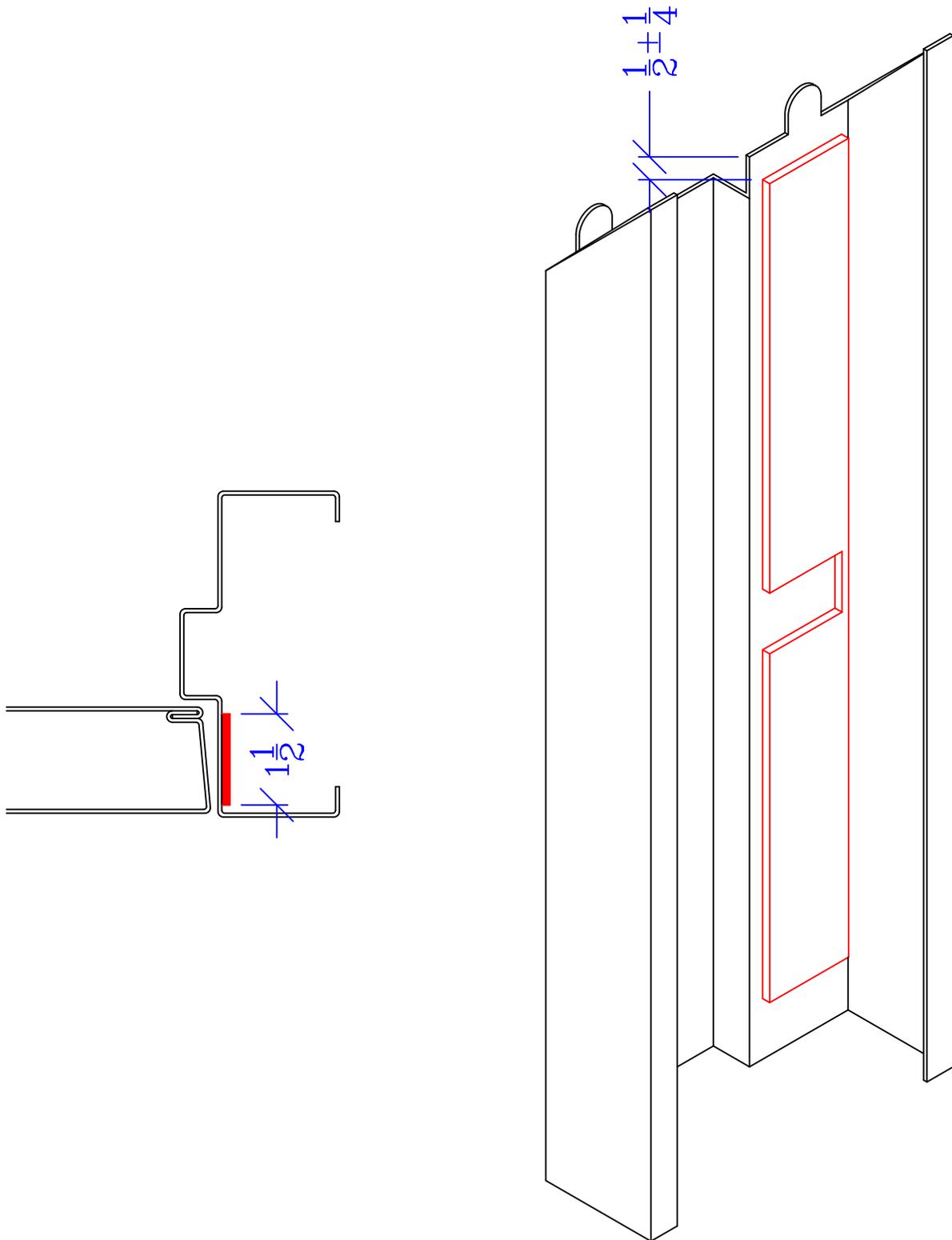


Reinforcement notched for anchors

Continuous hinge

CCH

**Concealed leaf continuous hinge reinforcement, 10ga**  
Plug welded



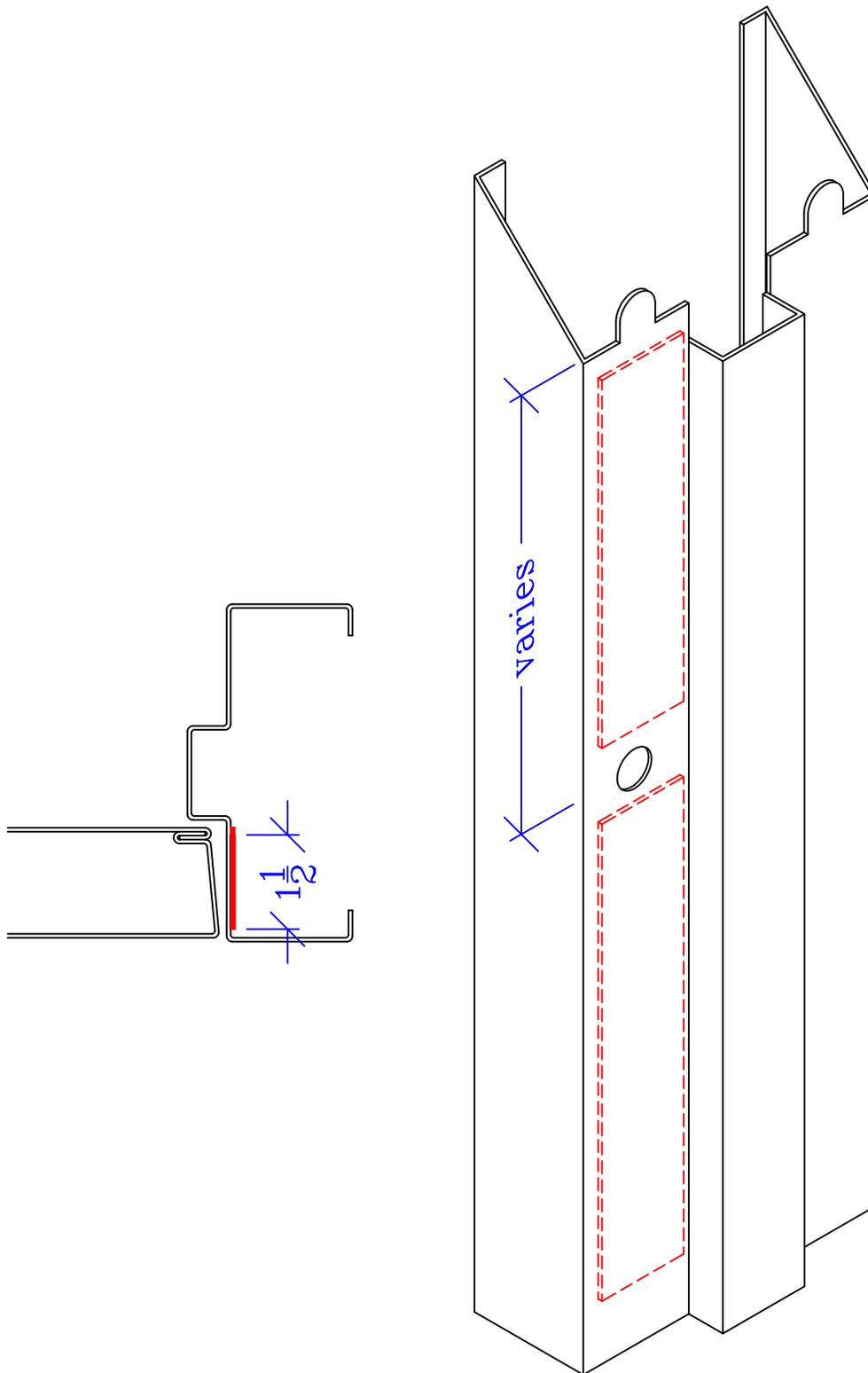
Reinforcement notched for anchors

Continuous hinge

CCH10

### Concealed leaf continuous electric hinge reinforcement, 14ga

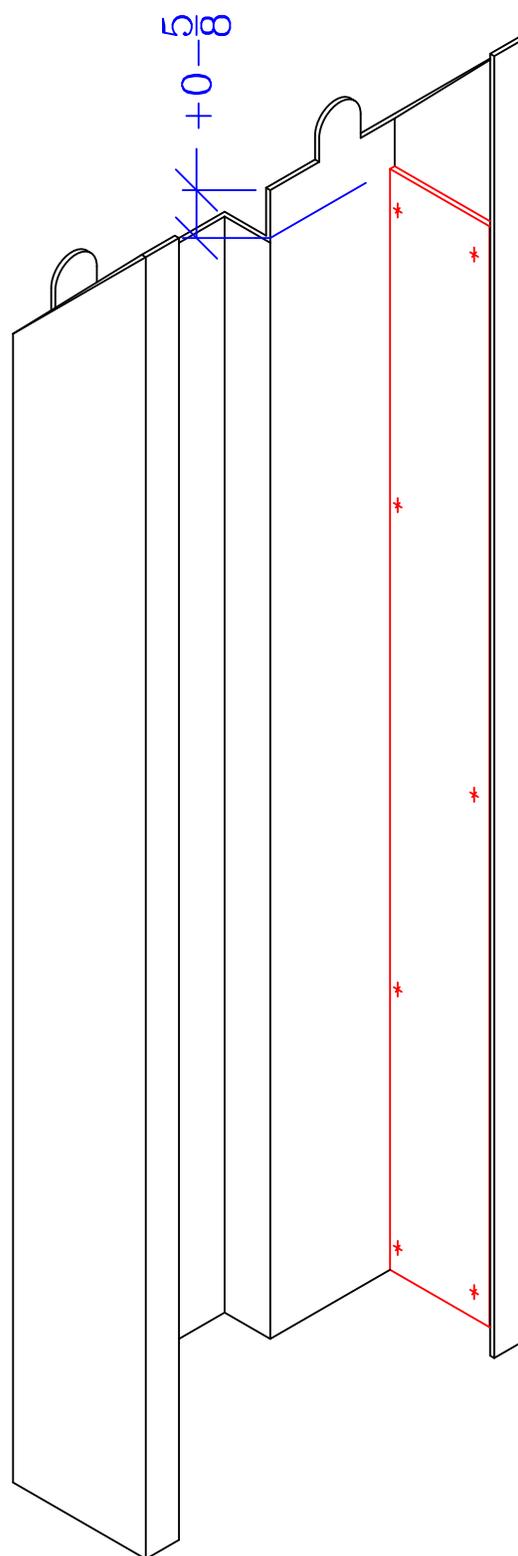
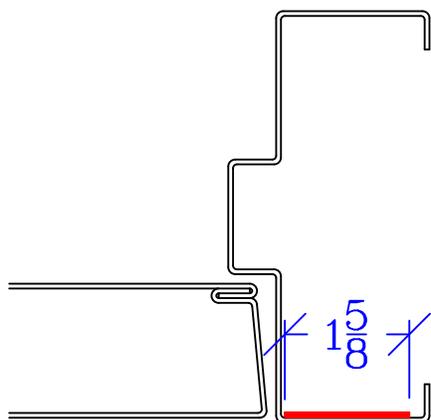
Projection welded



\*manufacturer's template to be provided

**Surface continuous hinge reinforcement, 14ga**

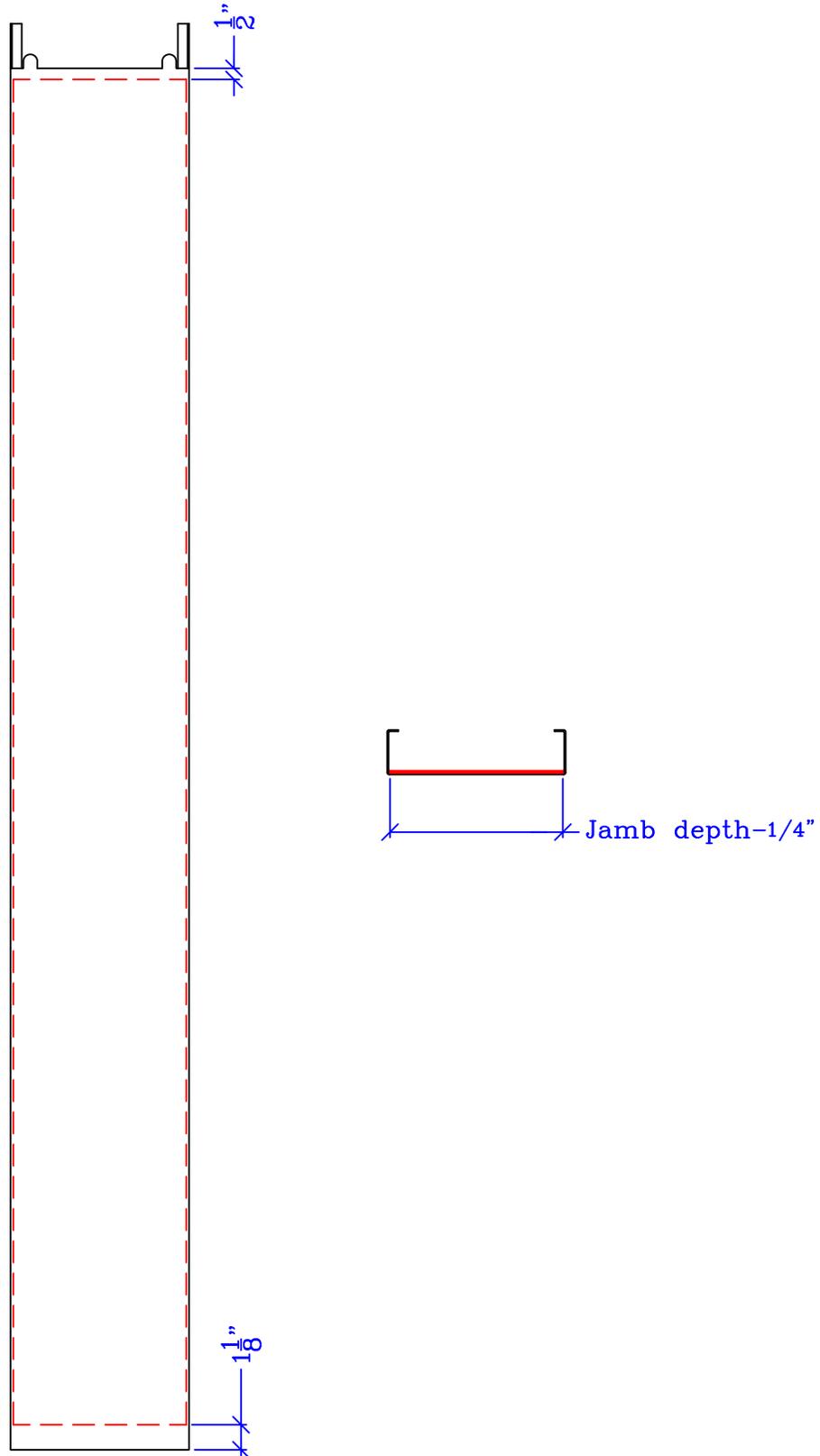
Spot welded, 10" C/C



Continuous hinge

SCH

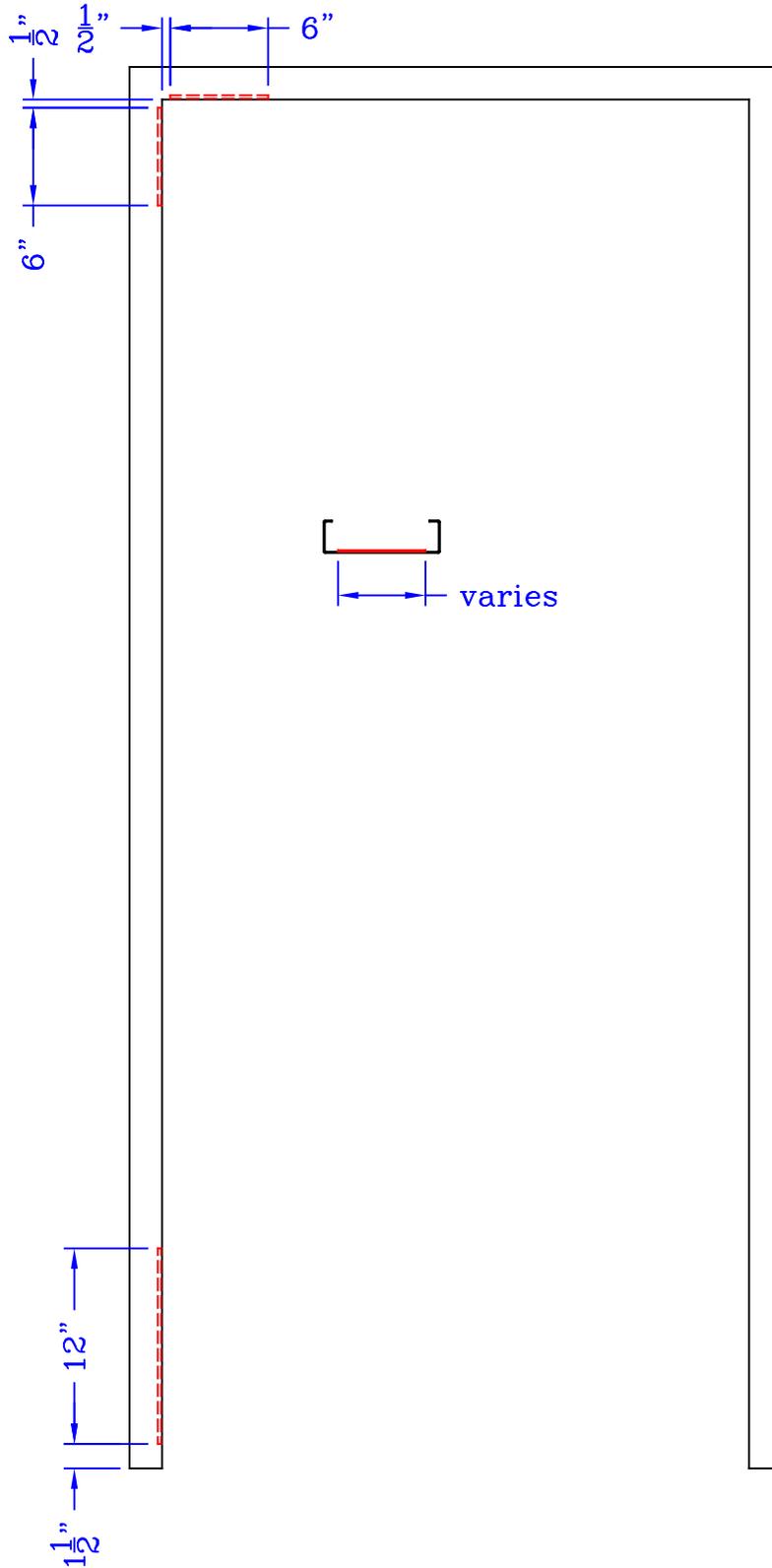
**Reinforcement for double acting hinge, 12ga**  
Spot welded



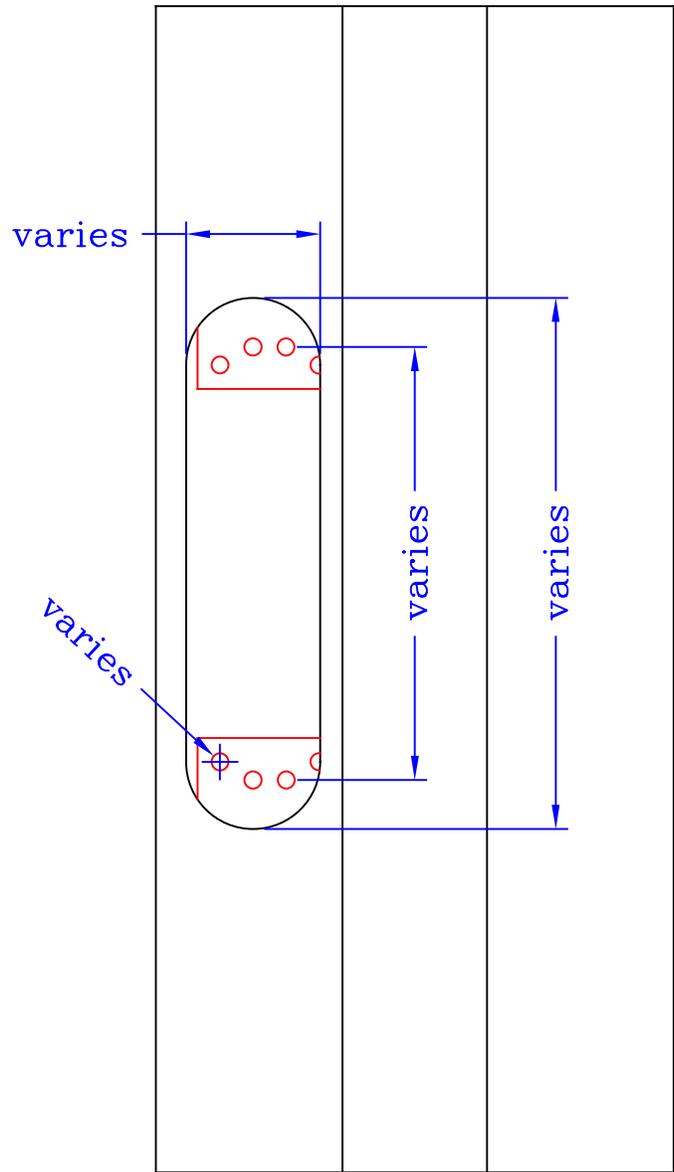
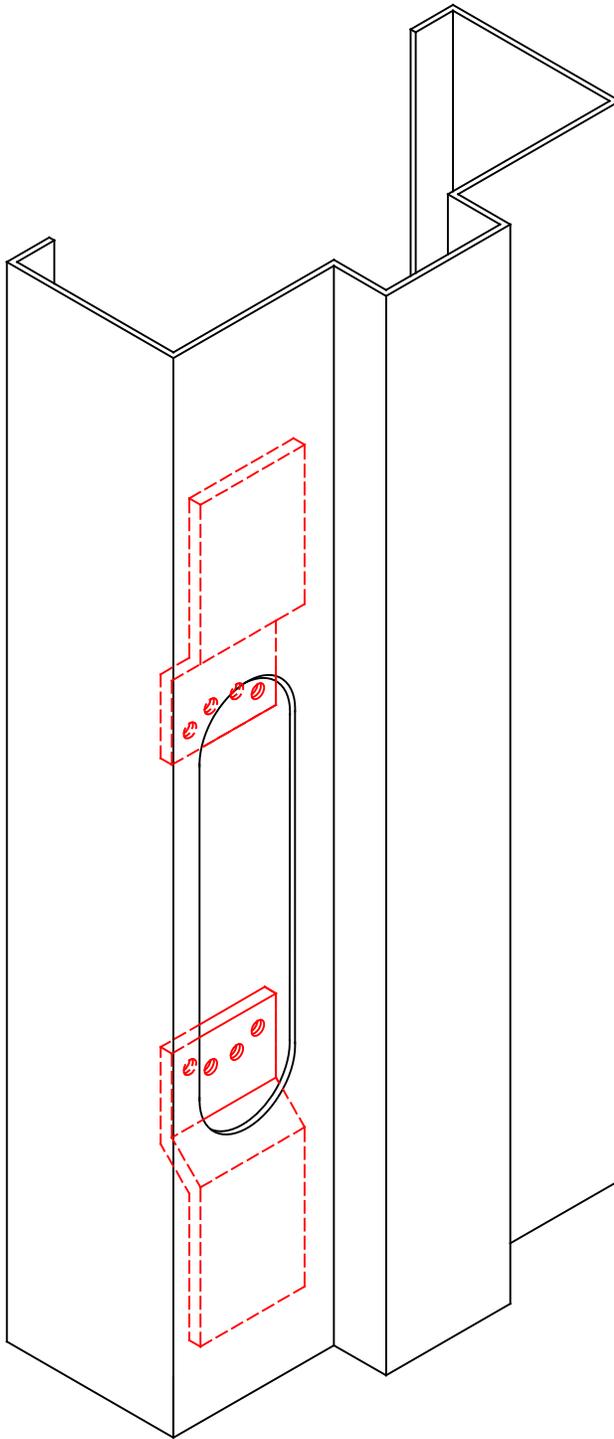
For cased open frame only

**Prep. for "Eliason" pivot, 12ga**

Spot welded



**Invisible hinge reinforcement, 12ga**  
Spot welded



Invisible hinge

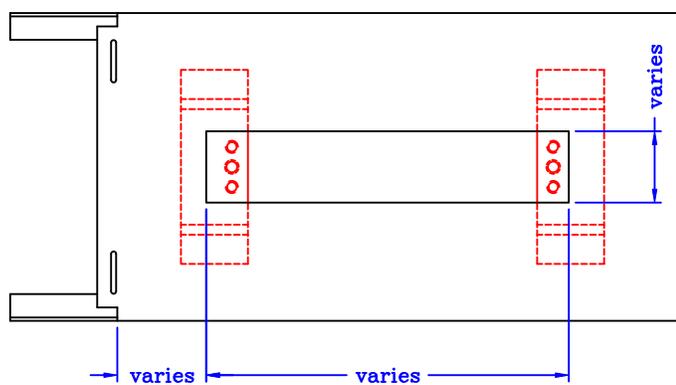
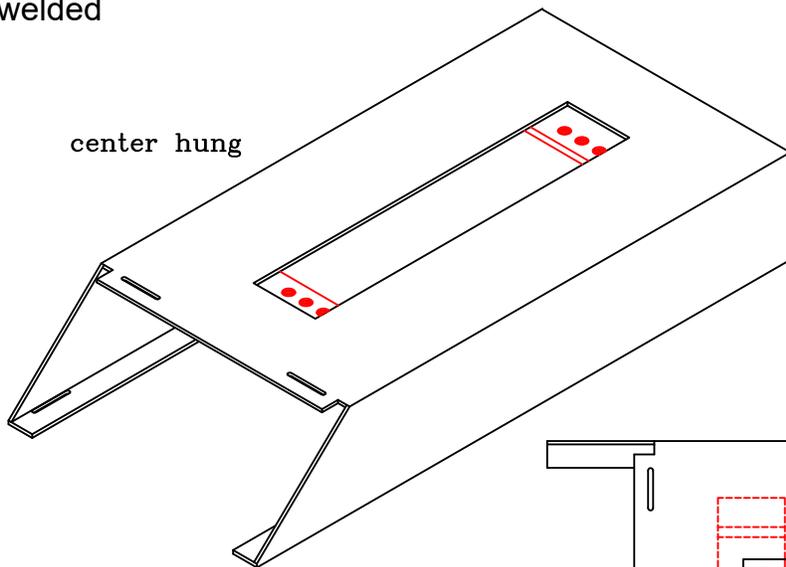
\*manufacturer's template to be provided

INVH

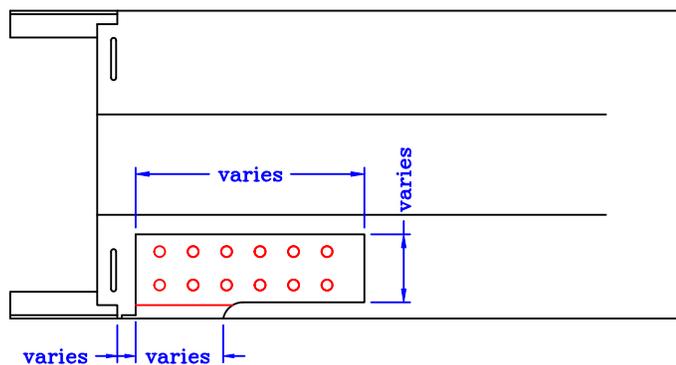
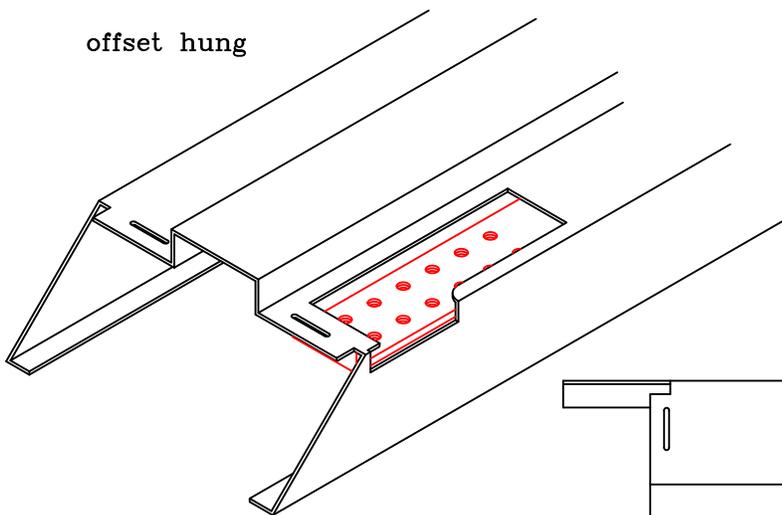
**Prep. for top pivot, 10ga**

Spot welded

center hung

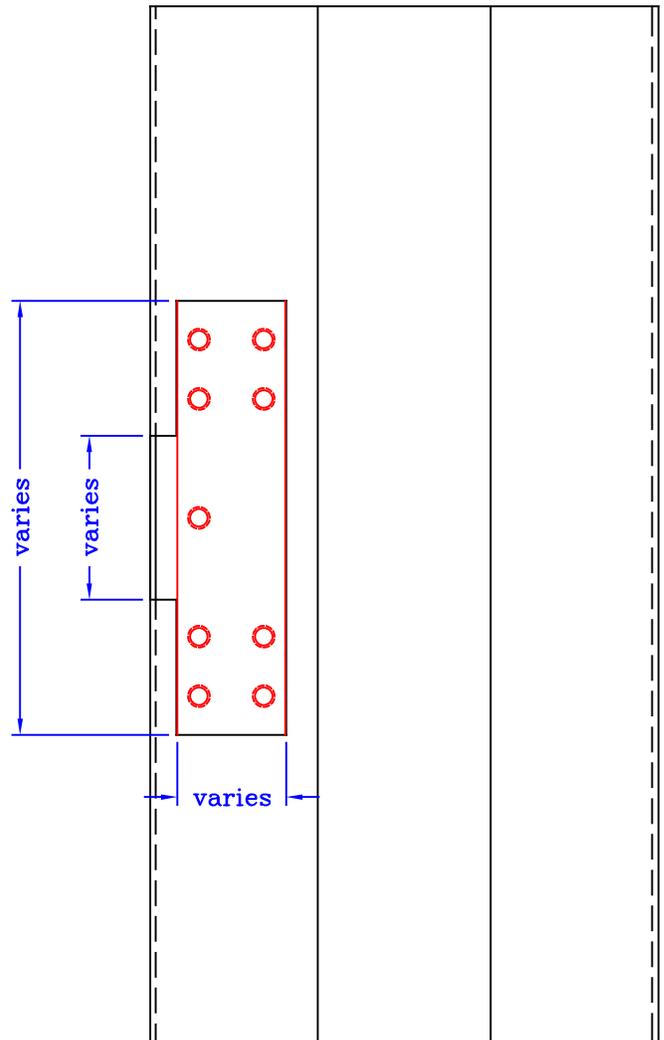
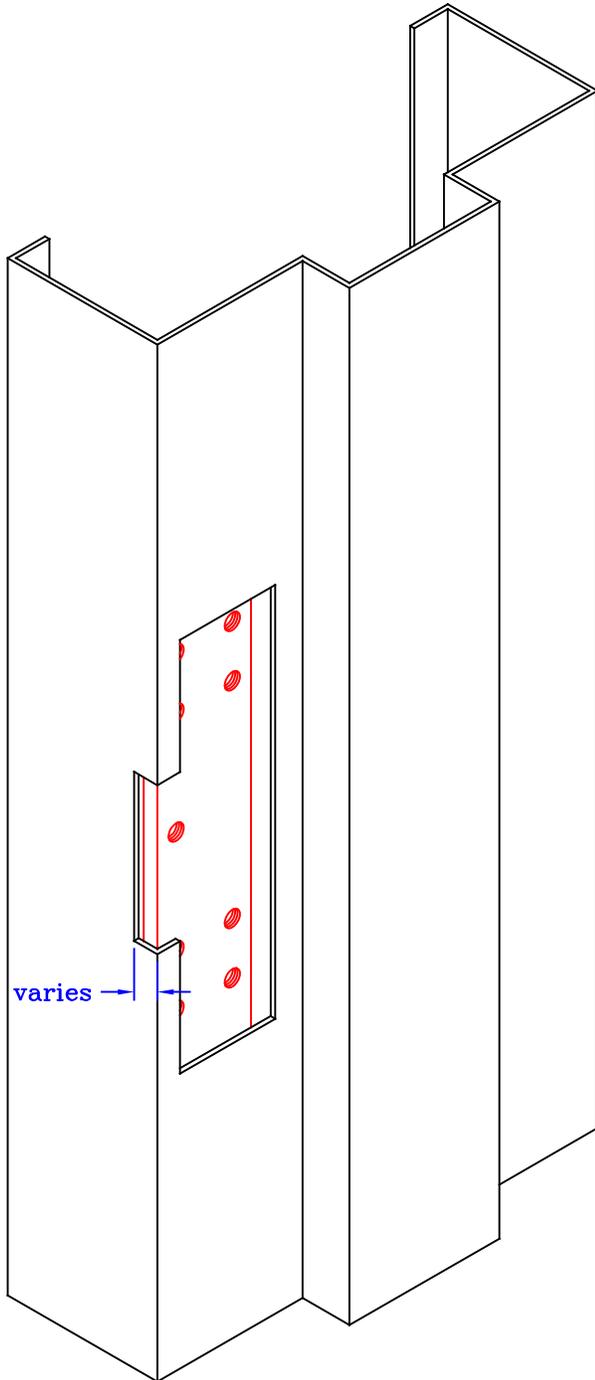


offset hung



\*manufacturer's template to be provided

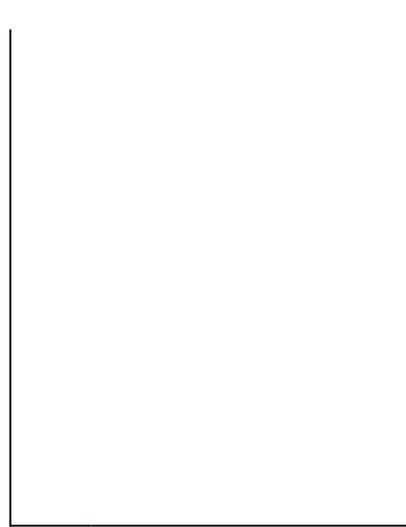
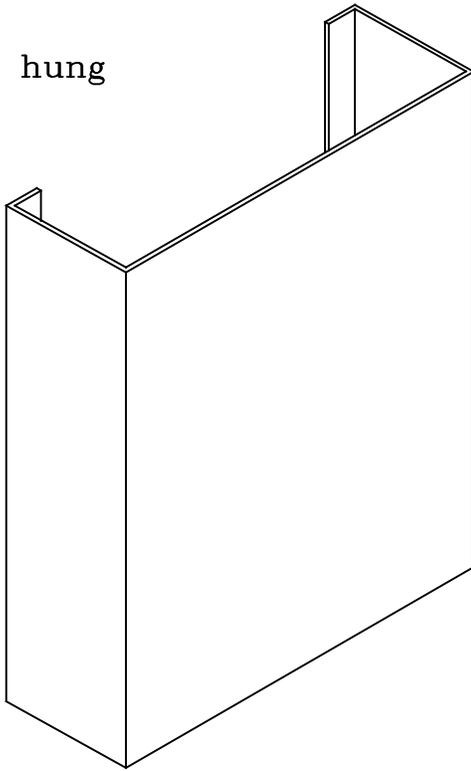
**Prep. for intermediate pivot, 7ga**  
Spot welded



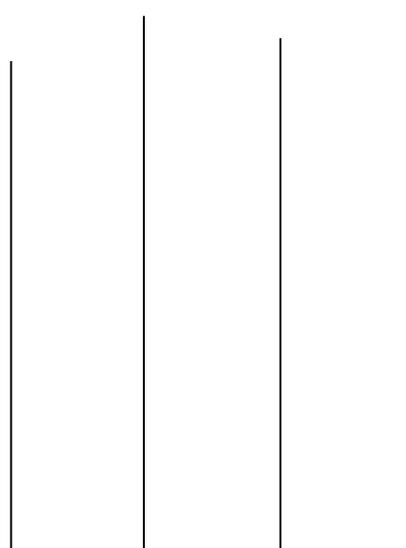
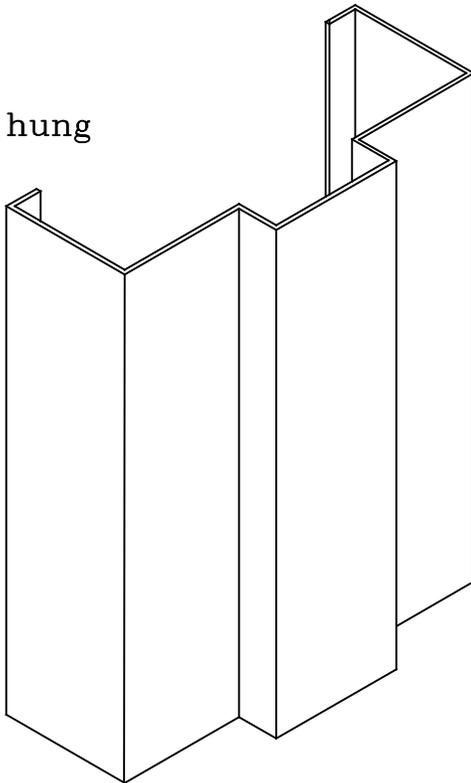
\*manufacturer's template to be provided

### Prep. for bottom pivot on floor

center hung

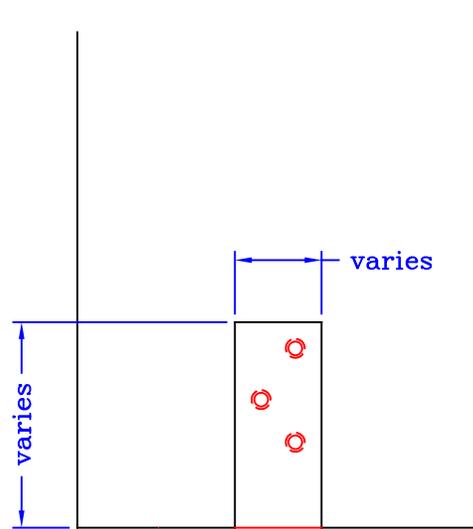
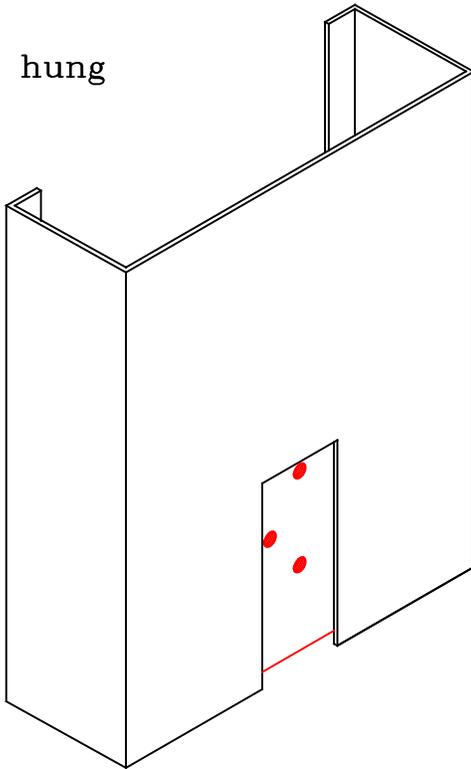


offset hung

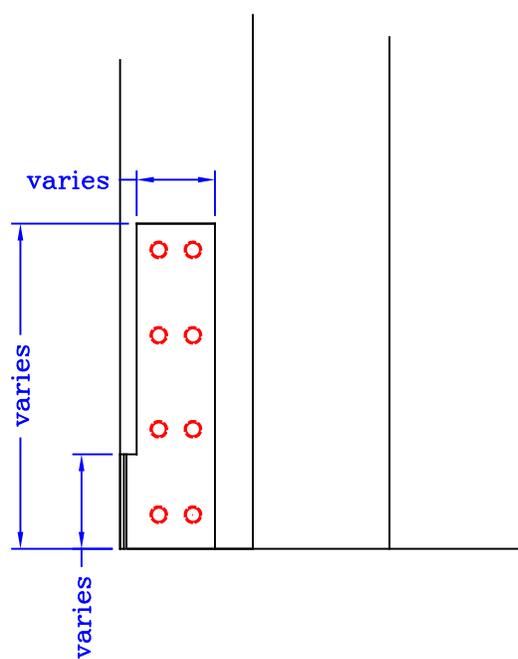
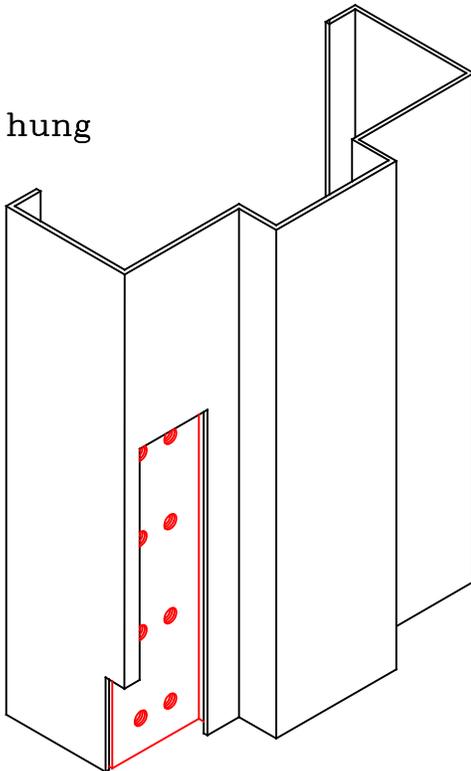


**Prep. for bottom pivot in jamb, 10ga**  
Spot welded

center hung



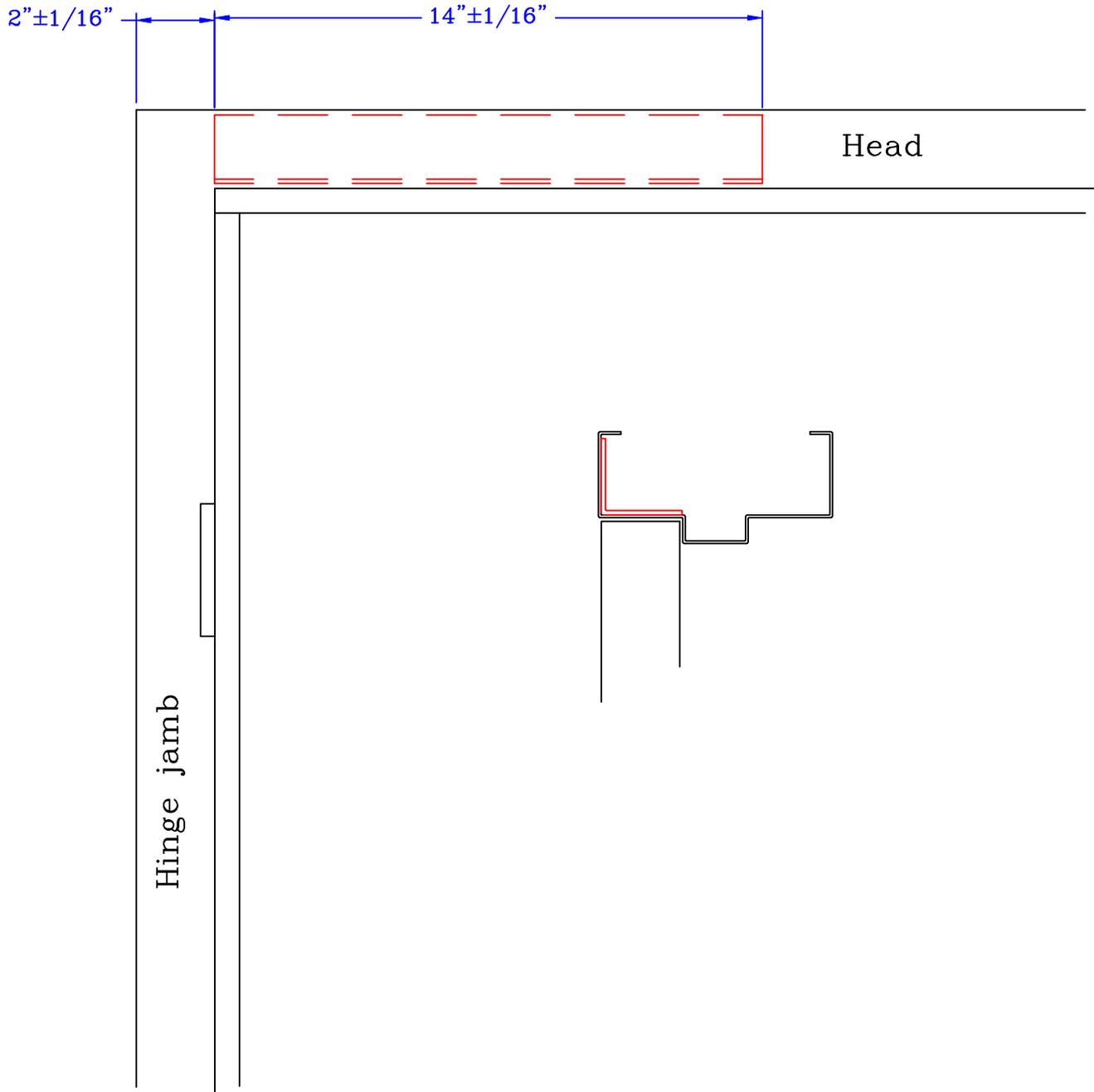
offset hung



\*manufacturer's template to be provided

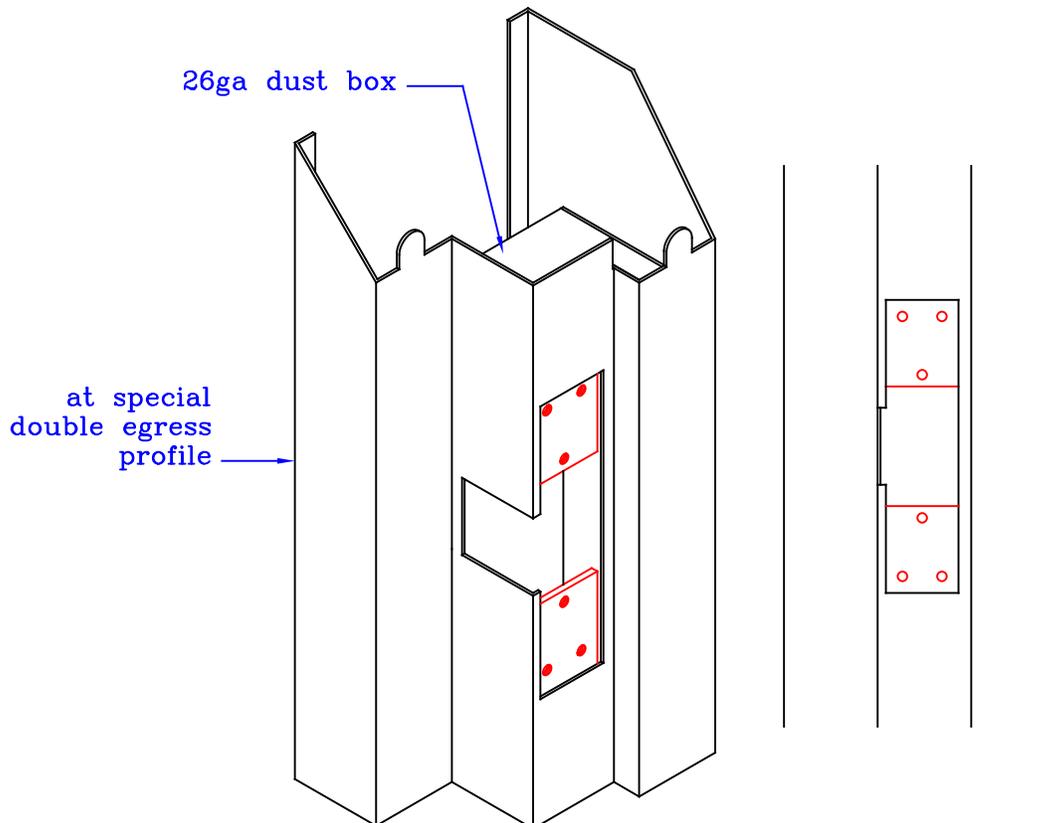
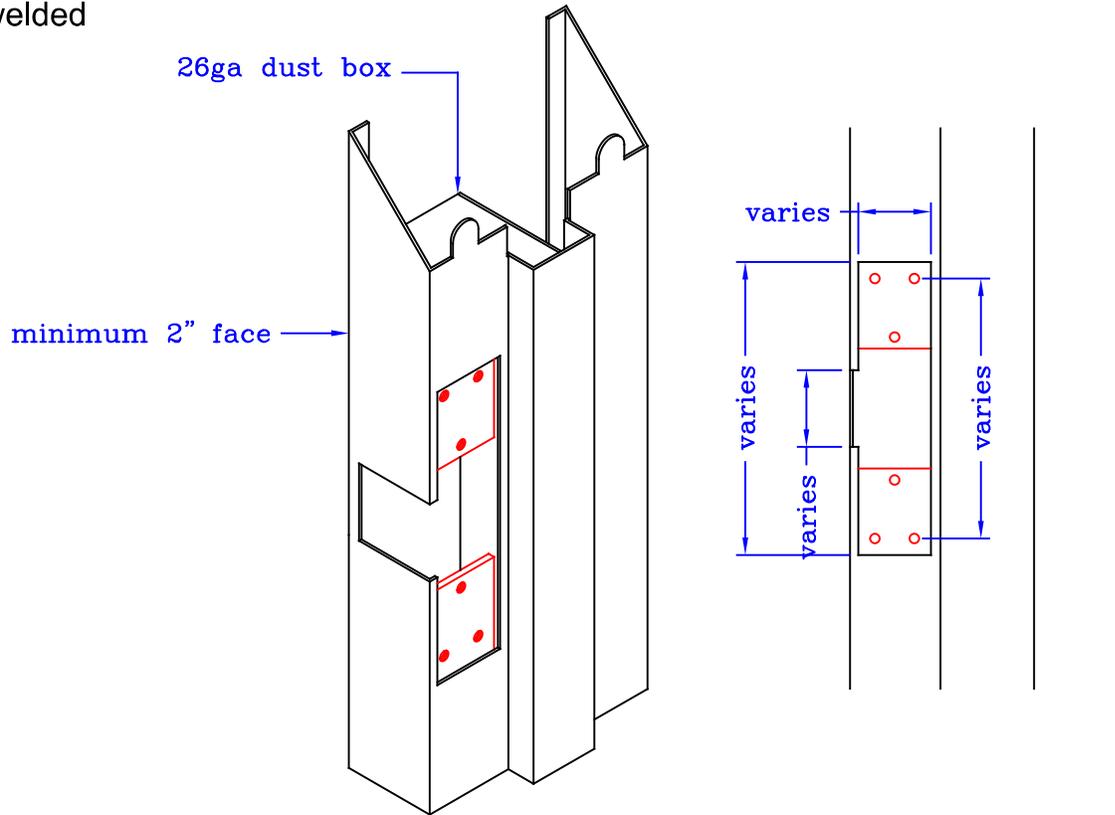
**Reinforcement for surface corner pivot, 12ga**  
Projection welded

Pivot



**Pocket pivot reinforcements, 10ga**

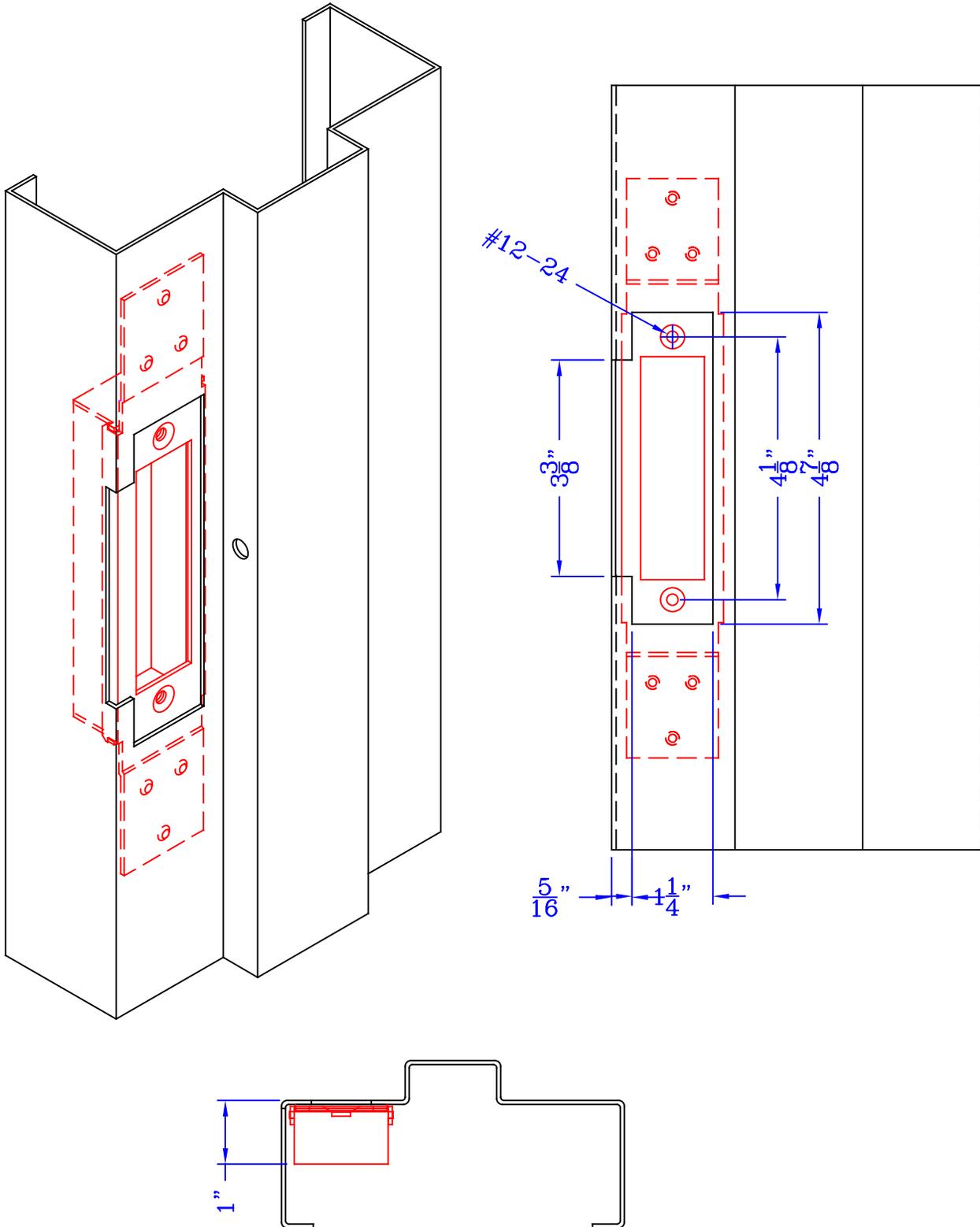
Spot welded



\*manufacturer's template to be provided

**Standard ANSI 4 7/8" strike reinforcement, 16ga**  
Projection welded

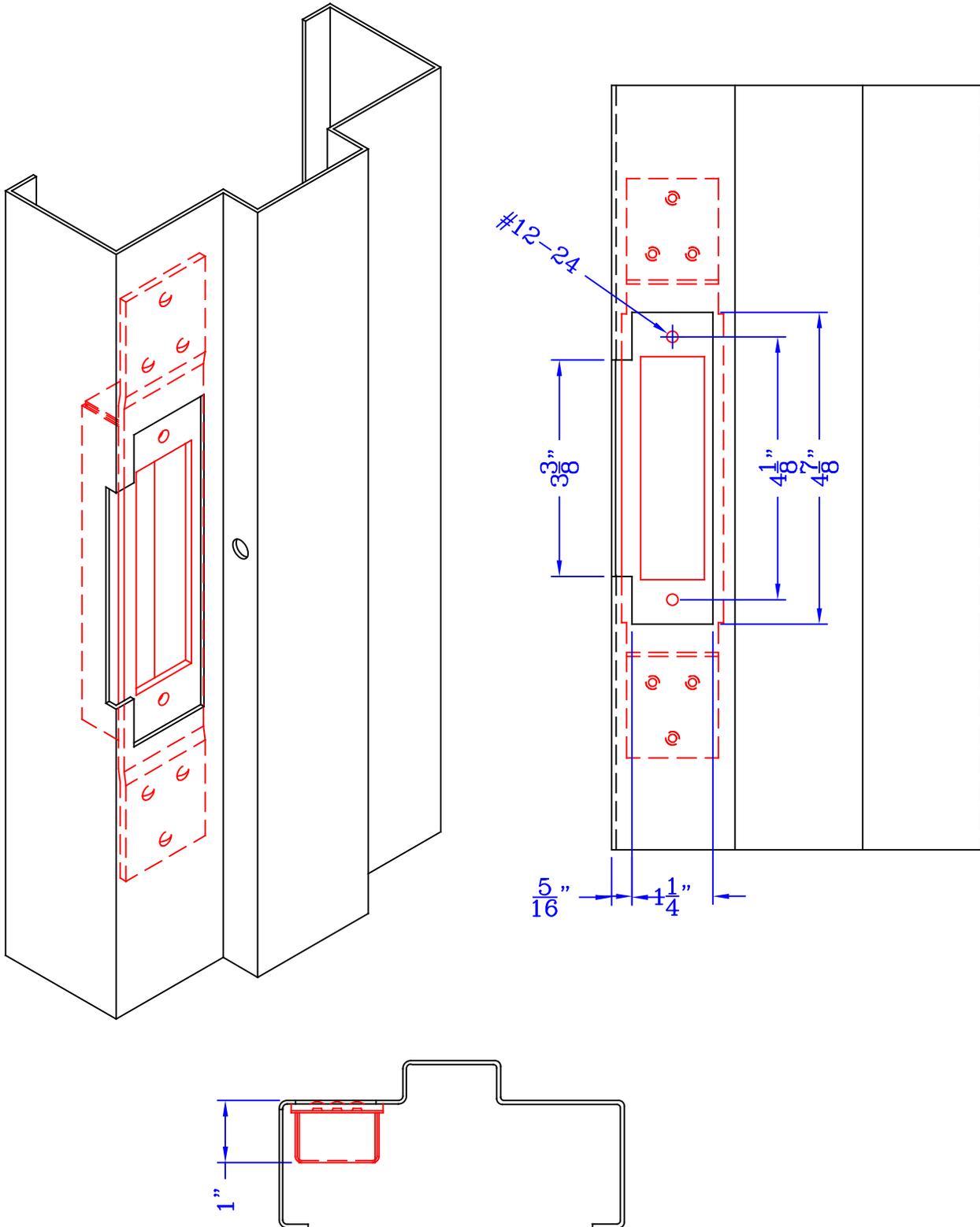
Strike



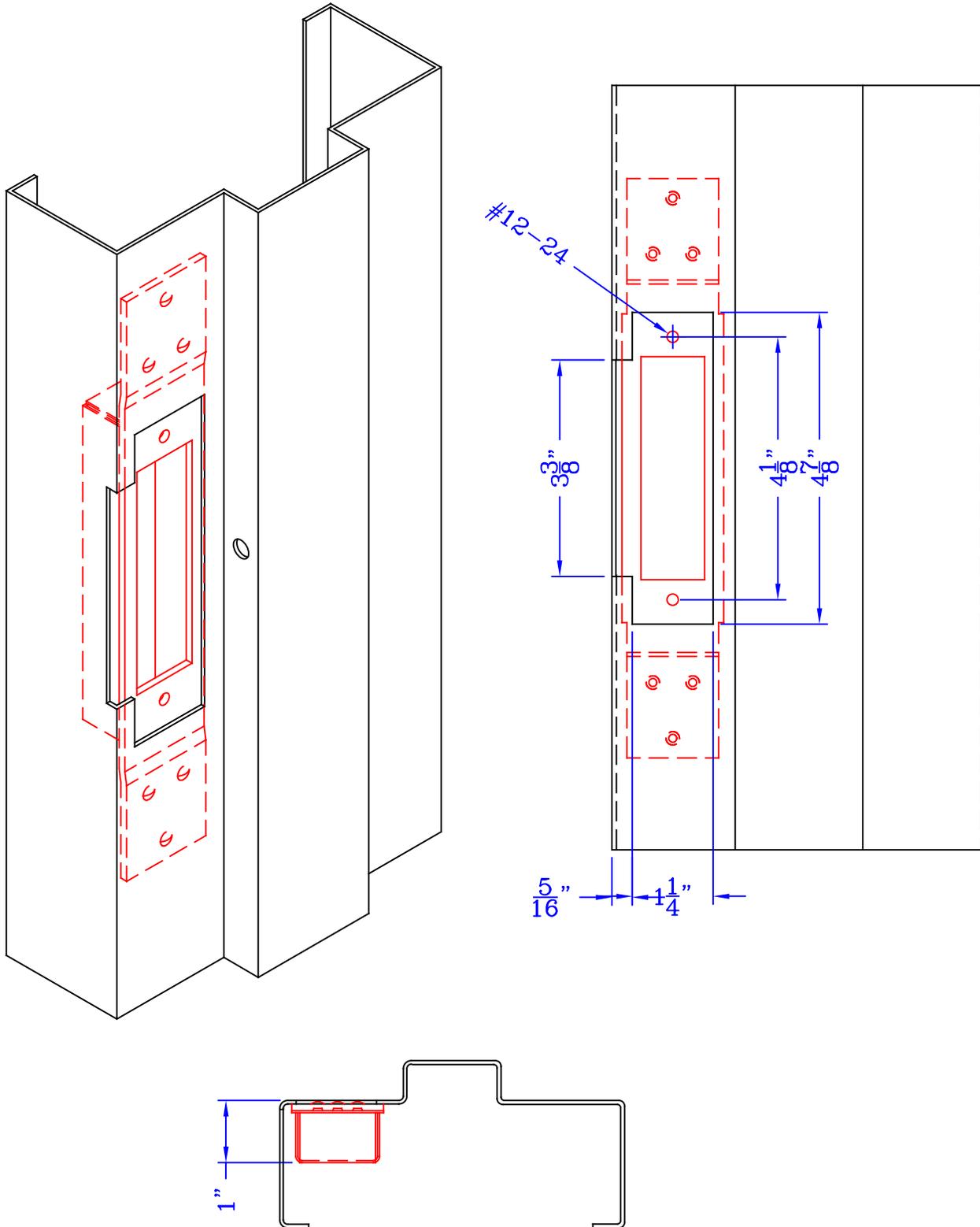
Tapped extruded holes per ANSI/SDI A250.6.

**Standard ANSI 4 7/8" strike reinforcement, 12ga**  
Projection welded

Strike

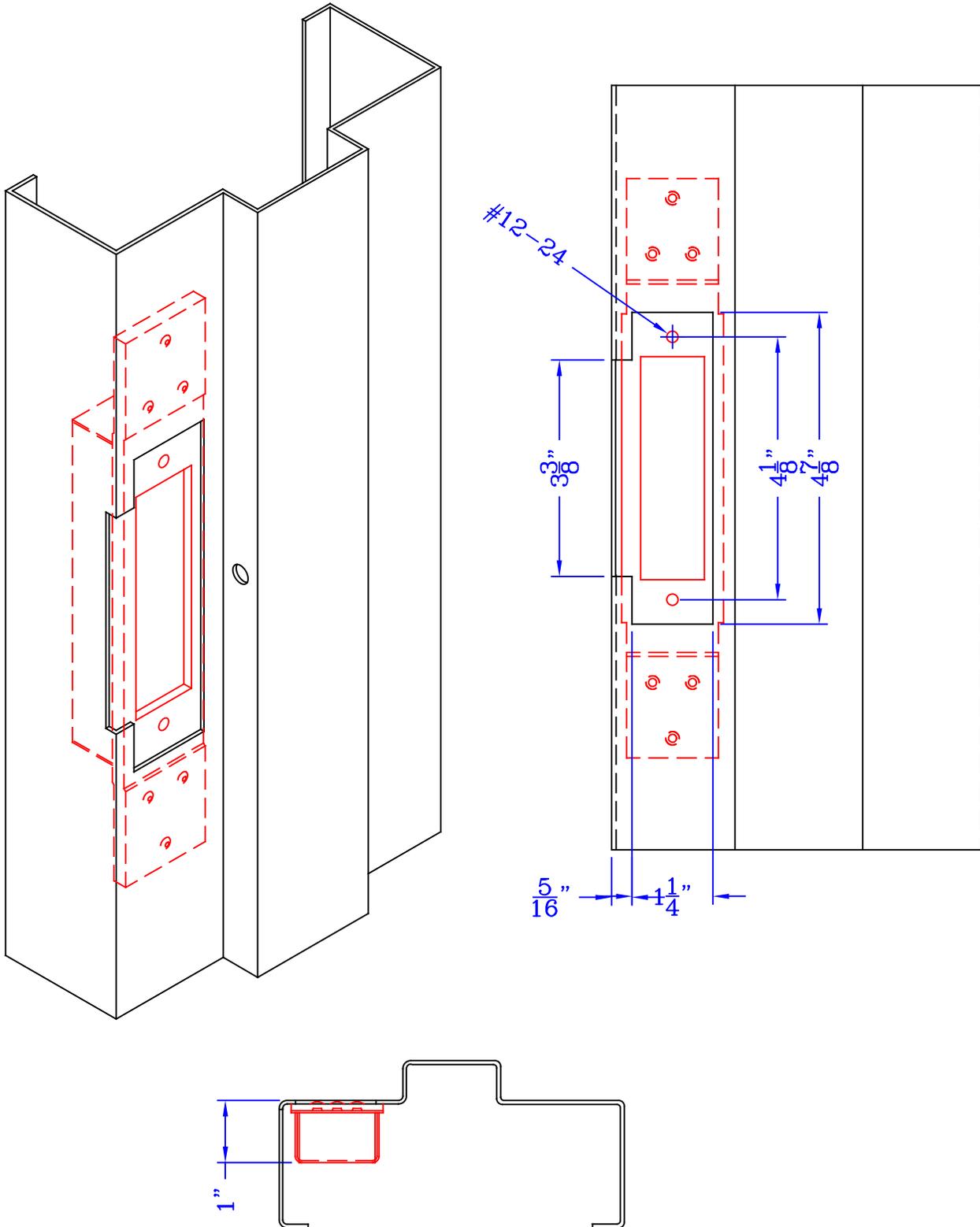


**Standard ANSI 4 7/8" strike reinforcement, 10ga**  
Projection welded



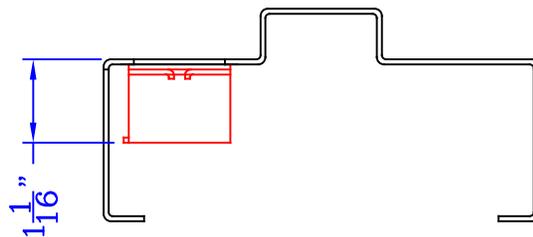
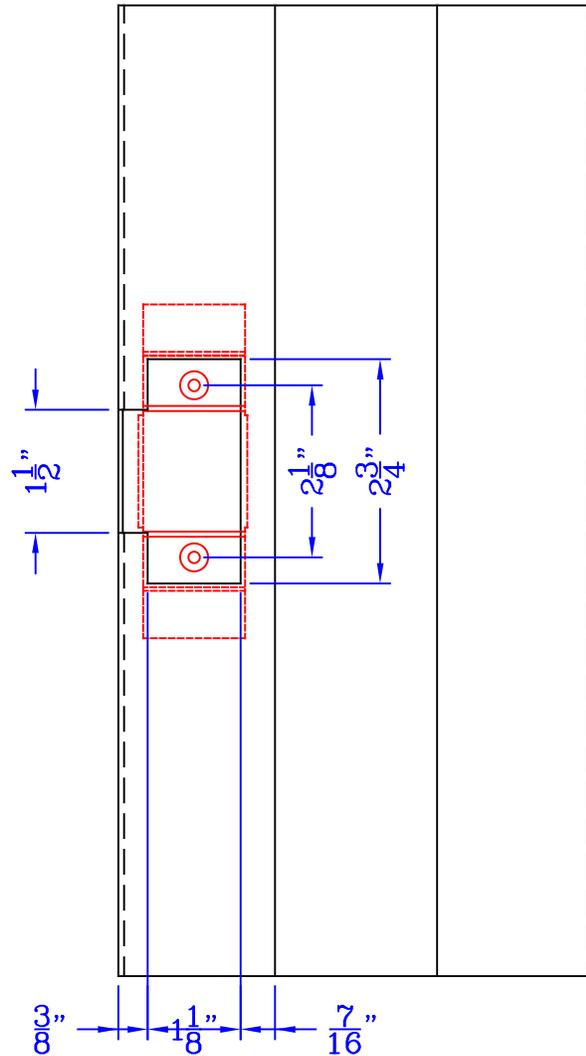
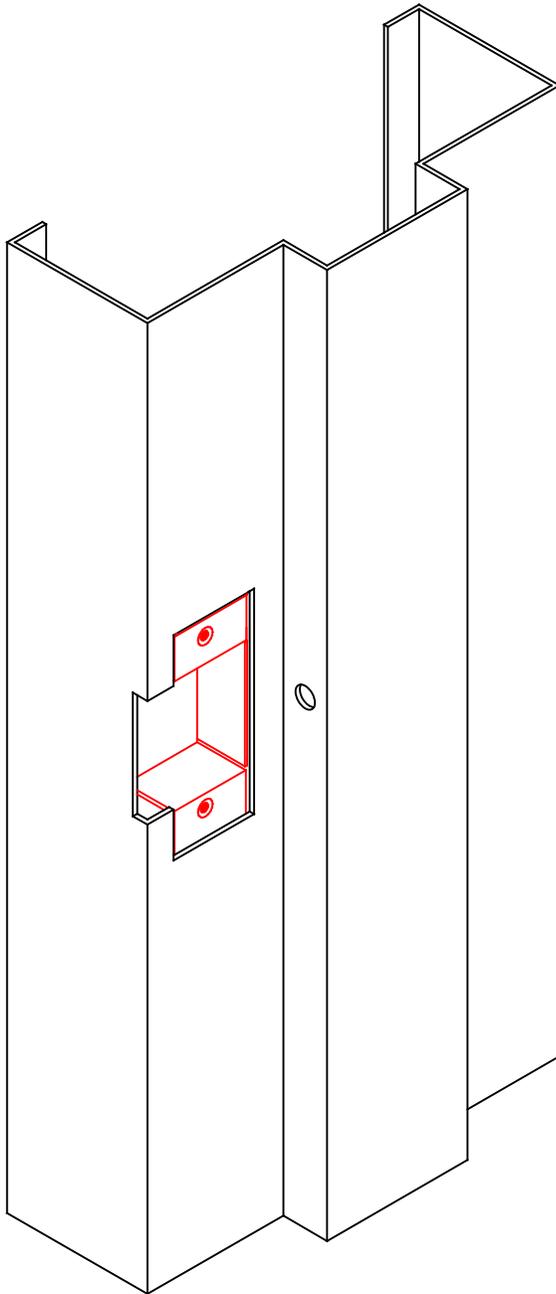
**Standard ANSI 4 7/8" strike reinforcement, 7ga**  
Projection welded

Strike



**Standard 2 3/4" strike reinforcement, 16ga**  
Projection welded

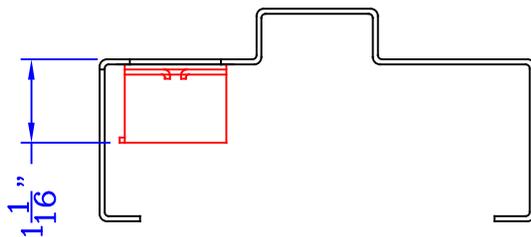
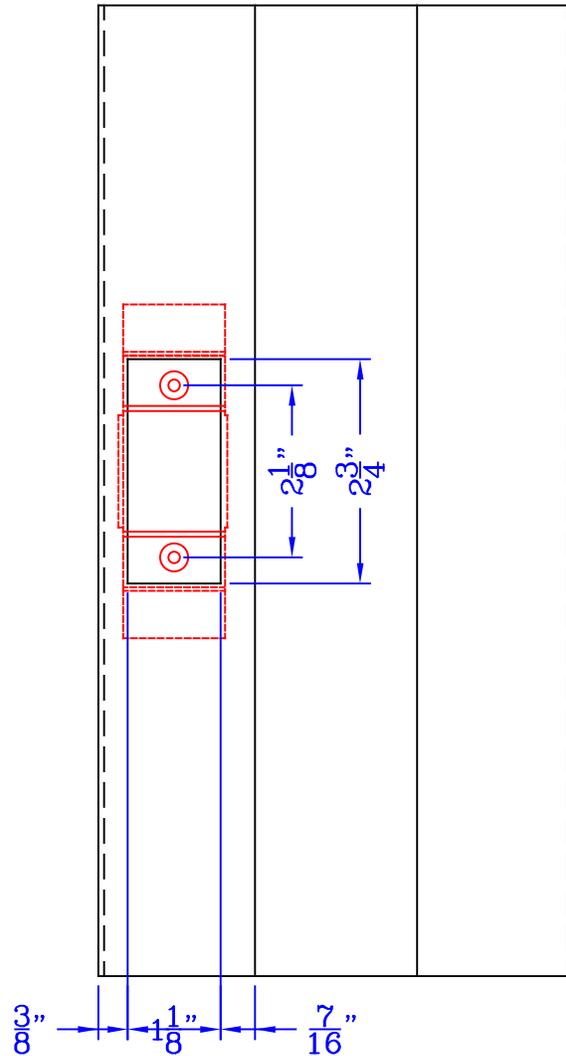
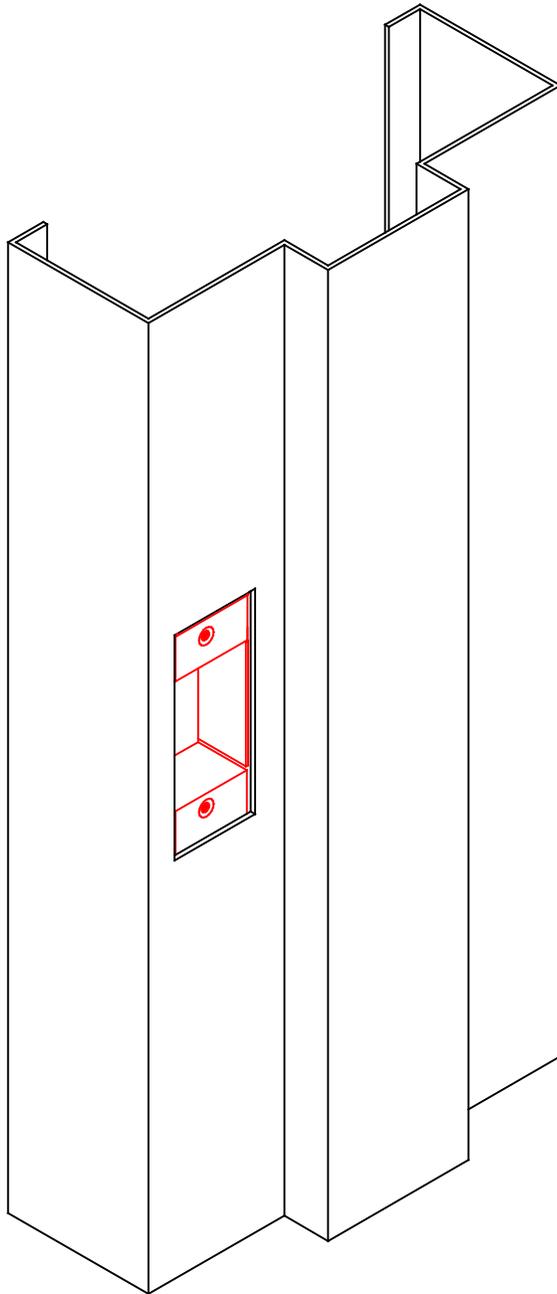
Strike



Tapped extruded holes per ANSI/SDI A250.6.

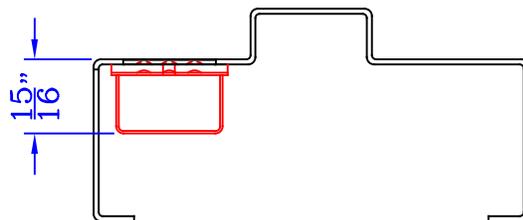
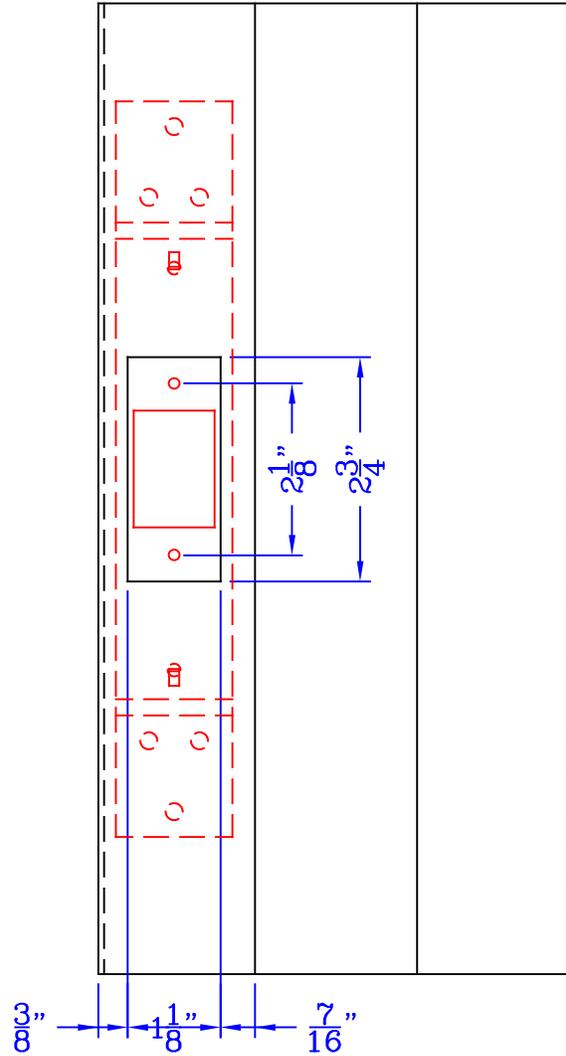
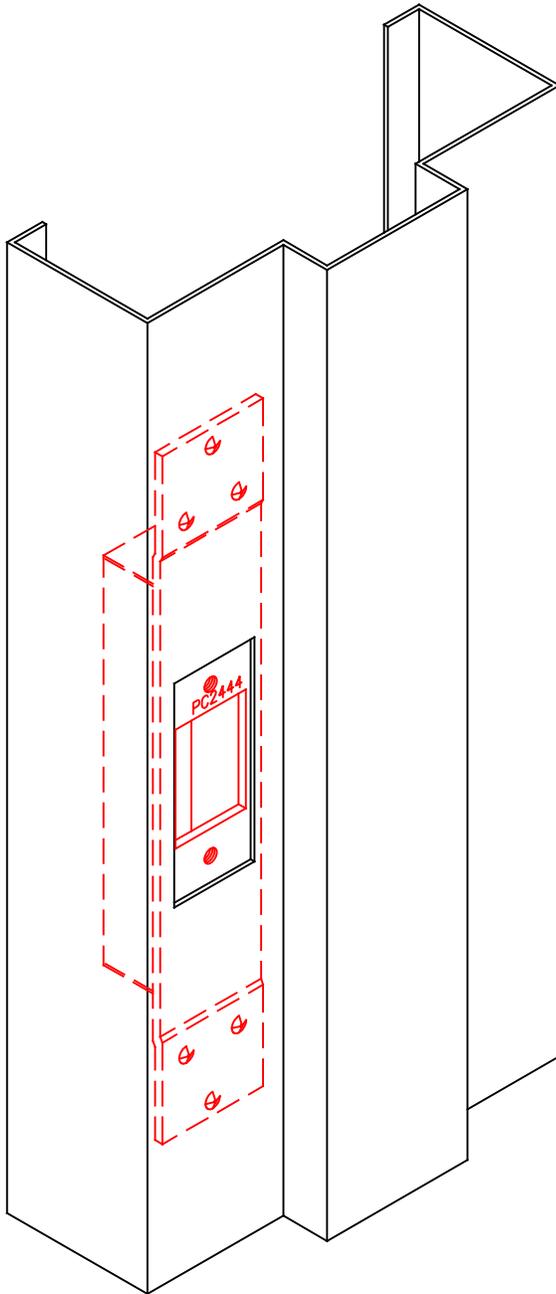
T

**Cylindrical deadlock strike reinforcement, 16ga**  
Projection welded



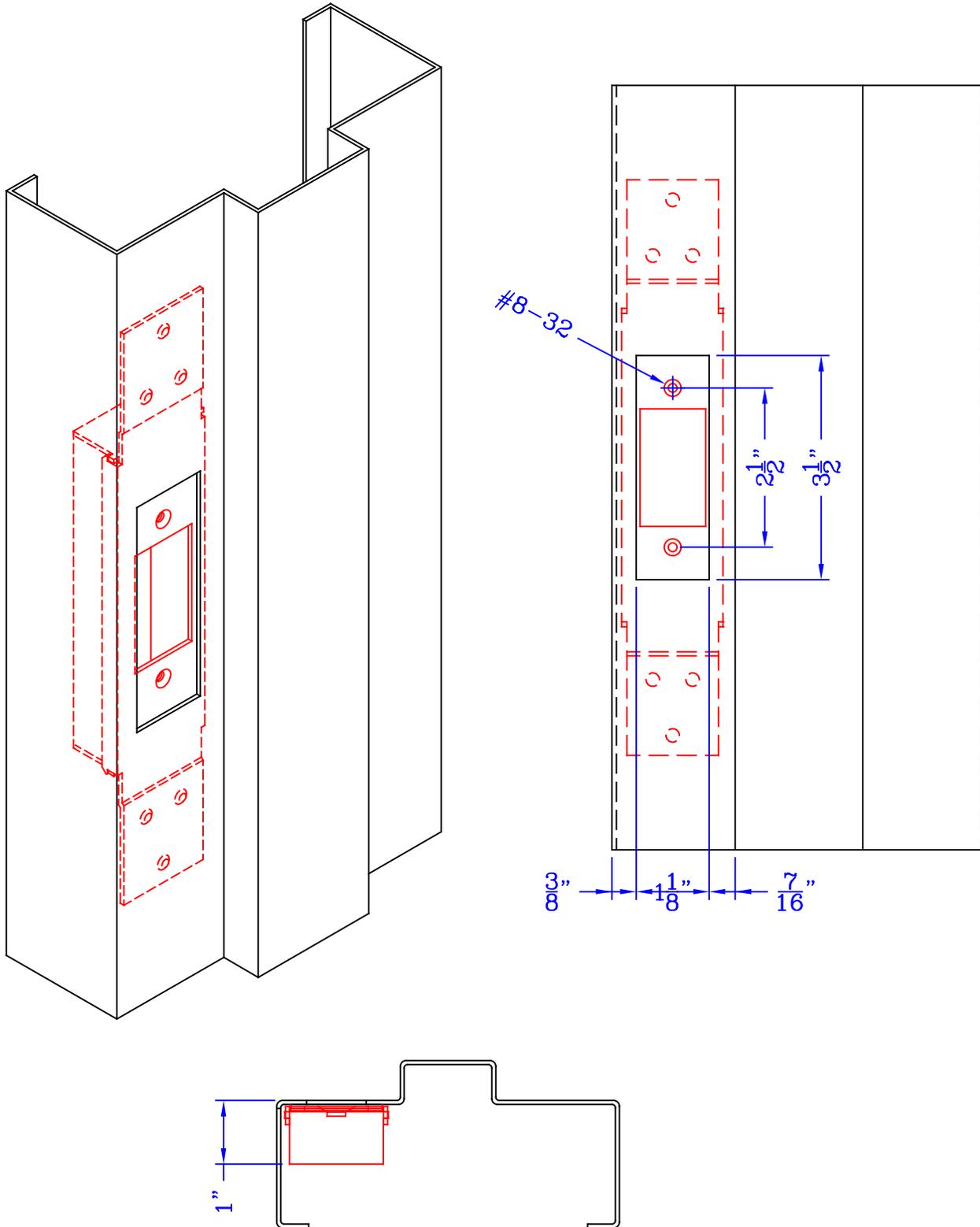
Tapped extruded holes per ANSI/SDI A250.6.

**Cylindrical deadlock strike reinforcement, 12ga**  
Projection welded



**3 1/2" mortise deadlock strike reinforcement, 16ga**

Projection welded



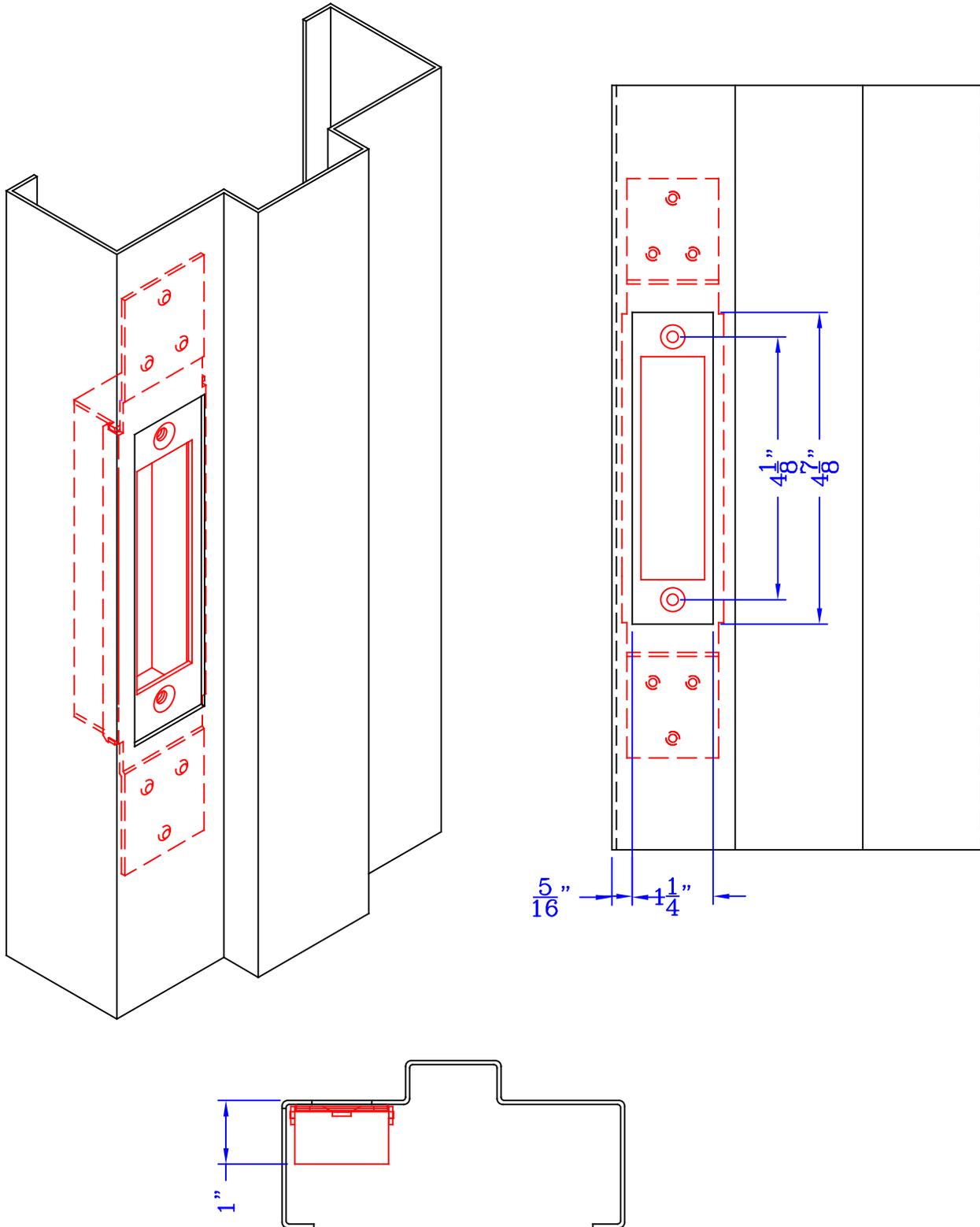
Strike

DL312M

Tapped extruded holes per ANSI/SDI A250.6.

**Standard ANSI 4 7/8" deadlock strike reinforcement, 16ga**

Projection welded



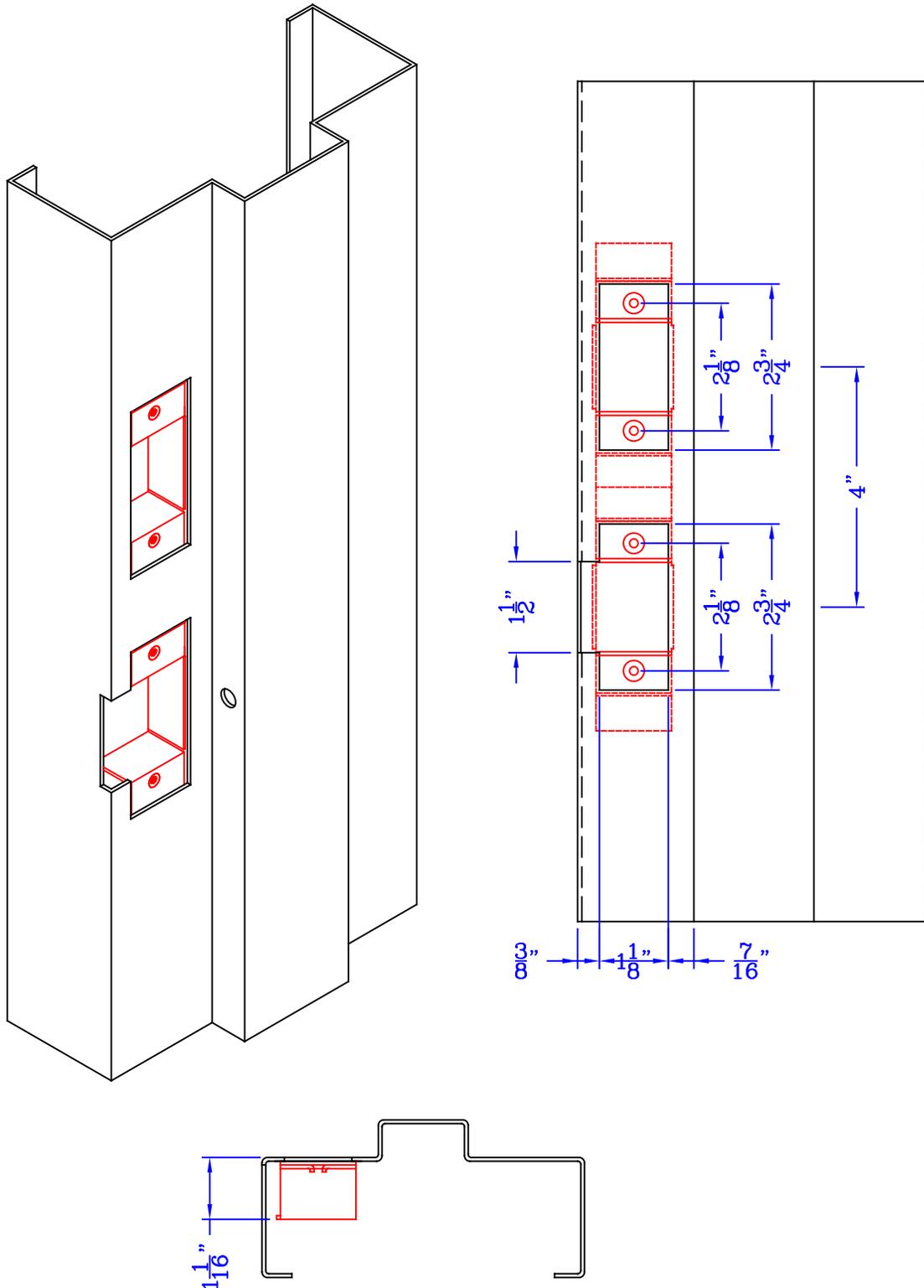
Strike

Tapped extruded holes per ANSI/SDI A250.6.

DL478

**Interconnected lock strike 4" C/C (T + DL234)**

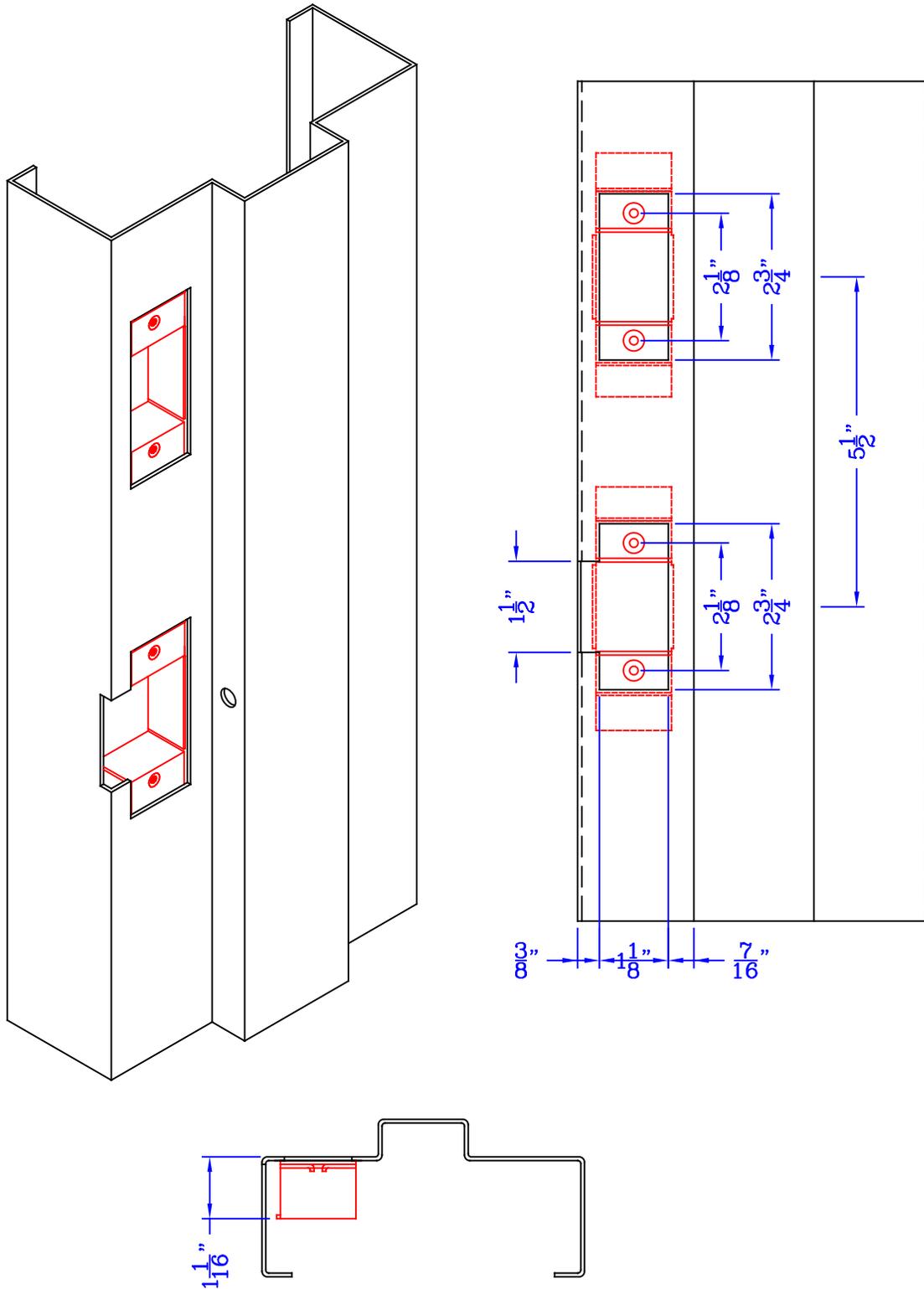
Projection welded



Tapped extruded holes per ANSI/SDI A250.6.

**Interconnected lock strike 5 1/2" C/C (T + DL234)**

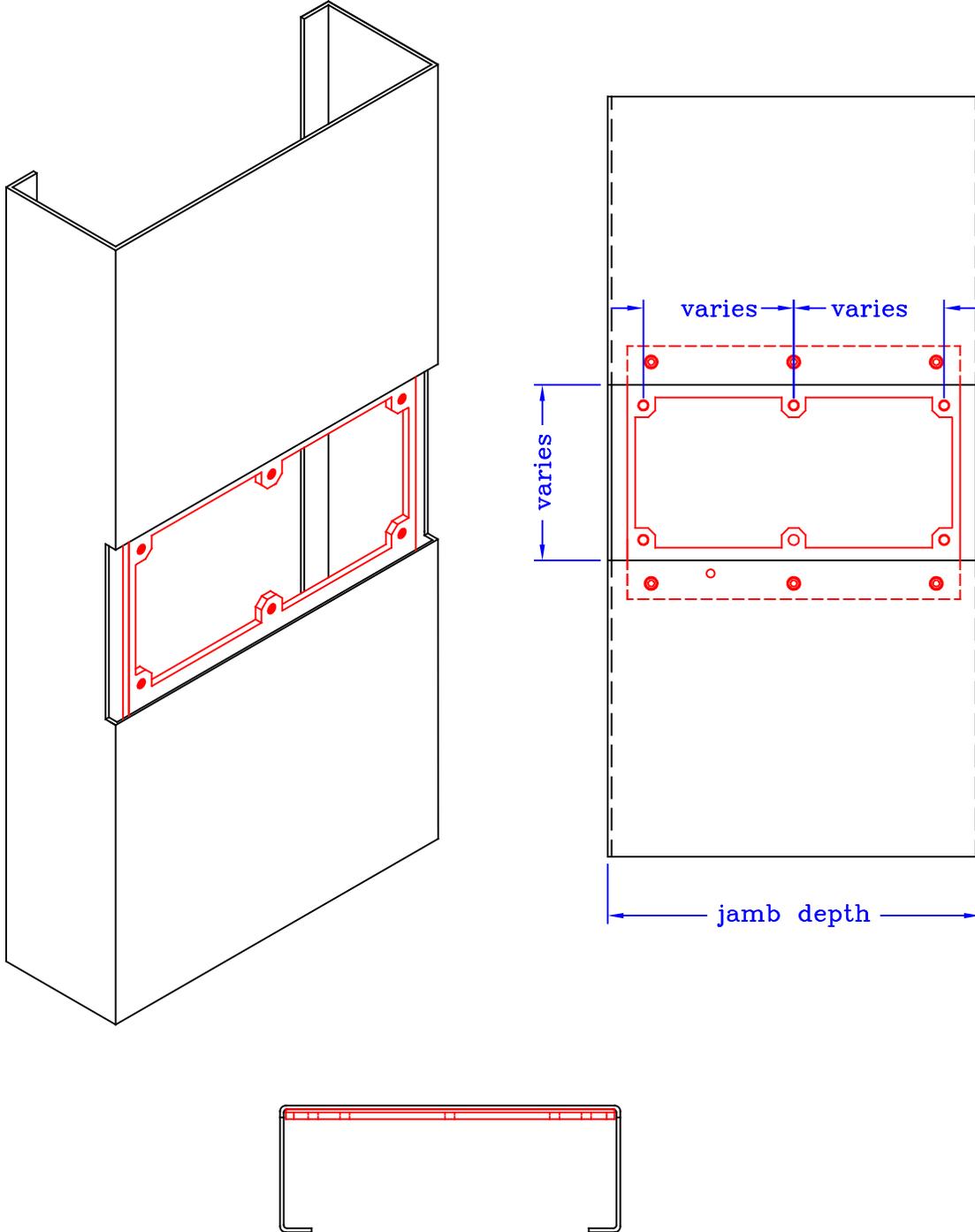
Projection welded



Tapped extruded holes per ANSI/SDI A250.6.

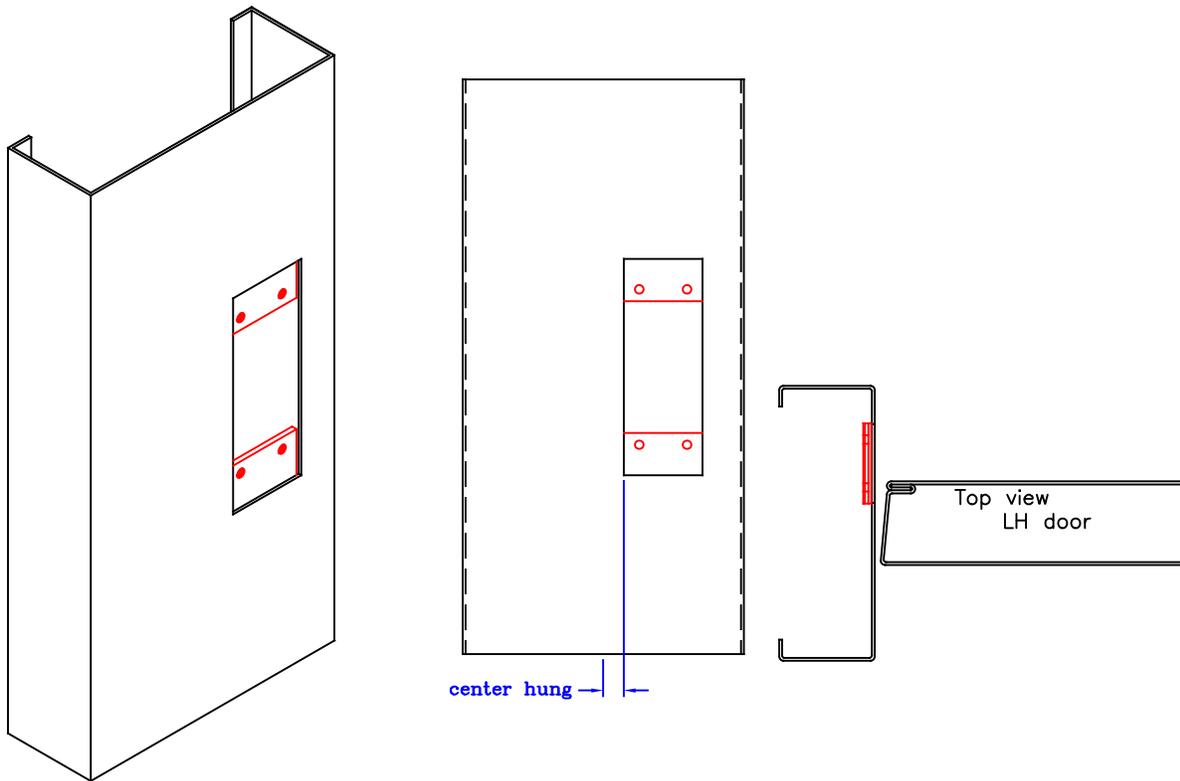
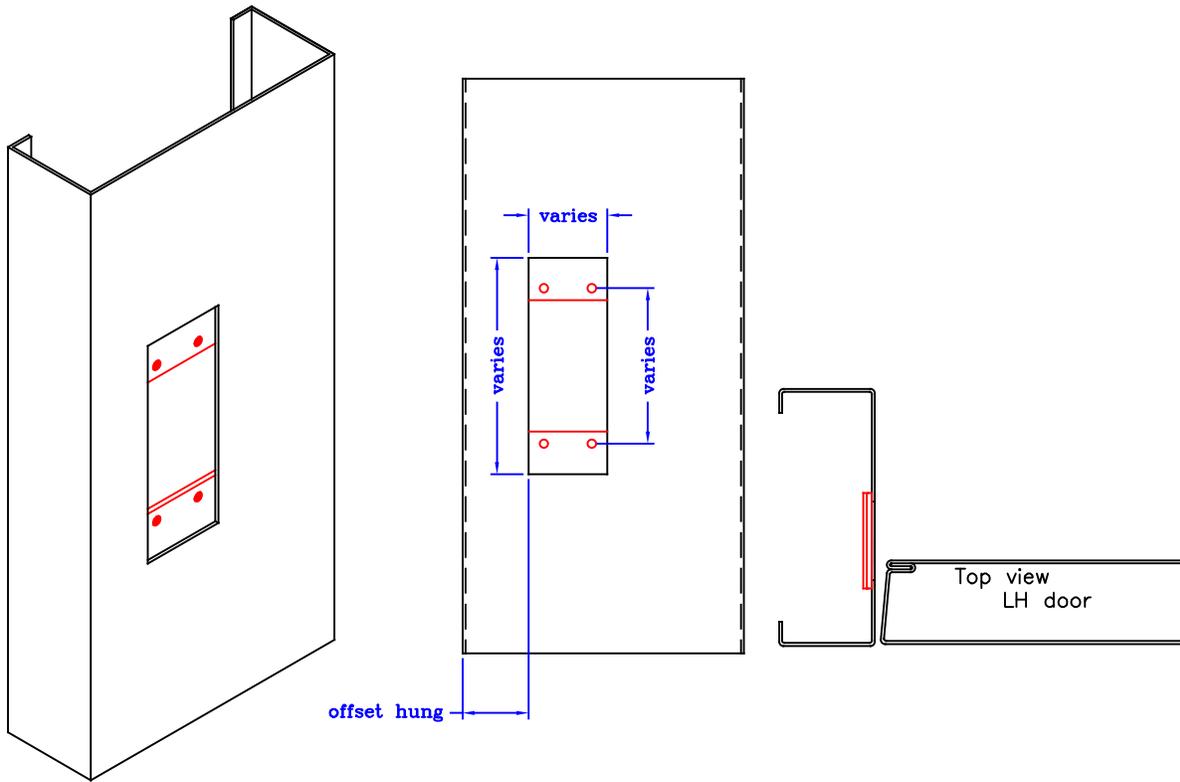
**Prep. for double lipped strike reinforcement, 12ga**  
Projection welded

Strike



\*manufacturer's template to be provided

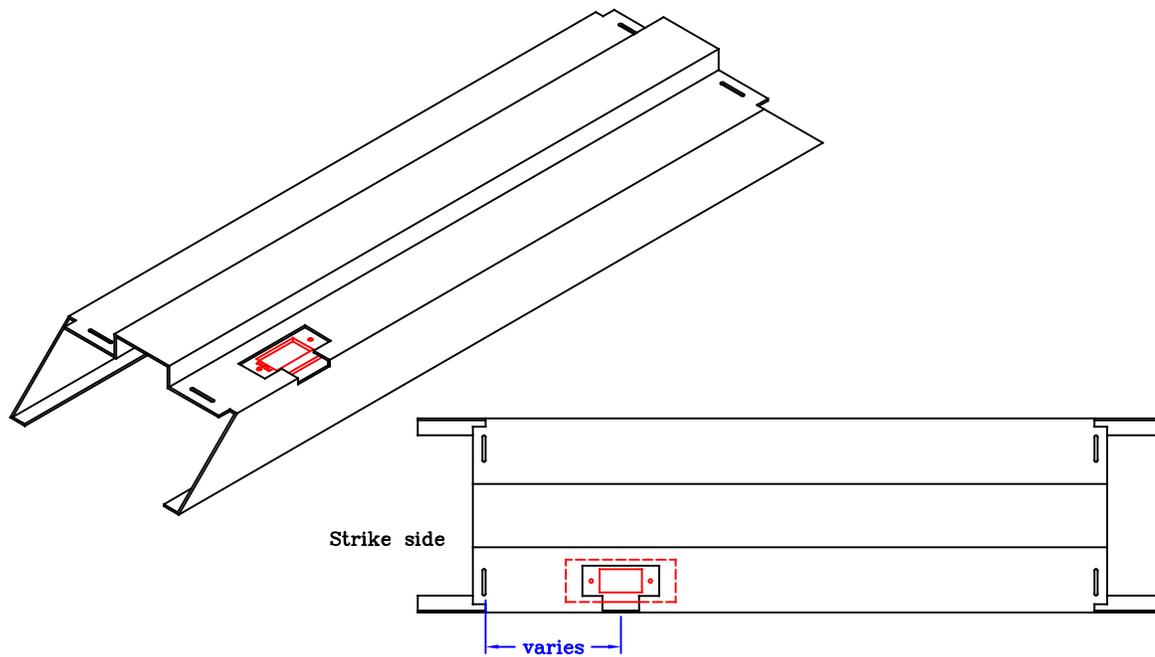
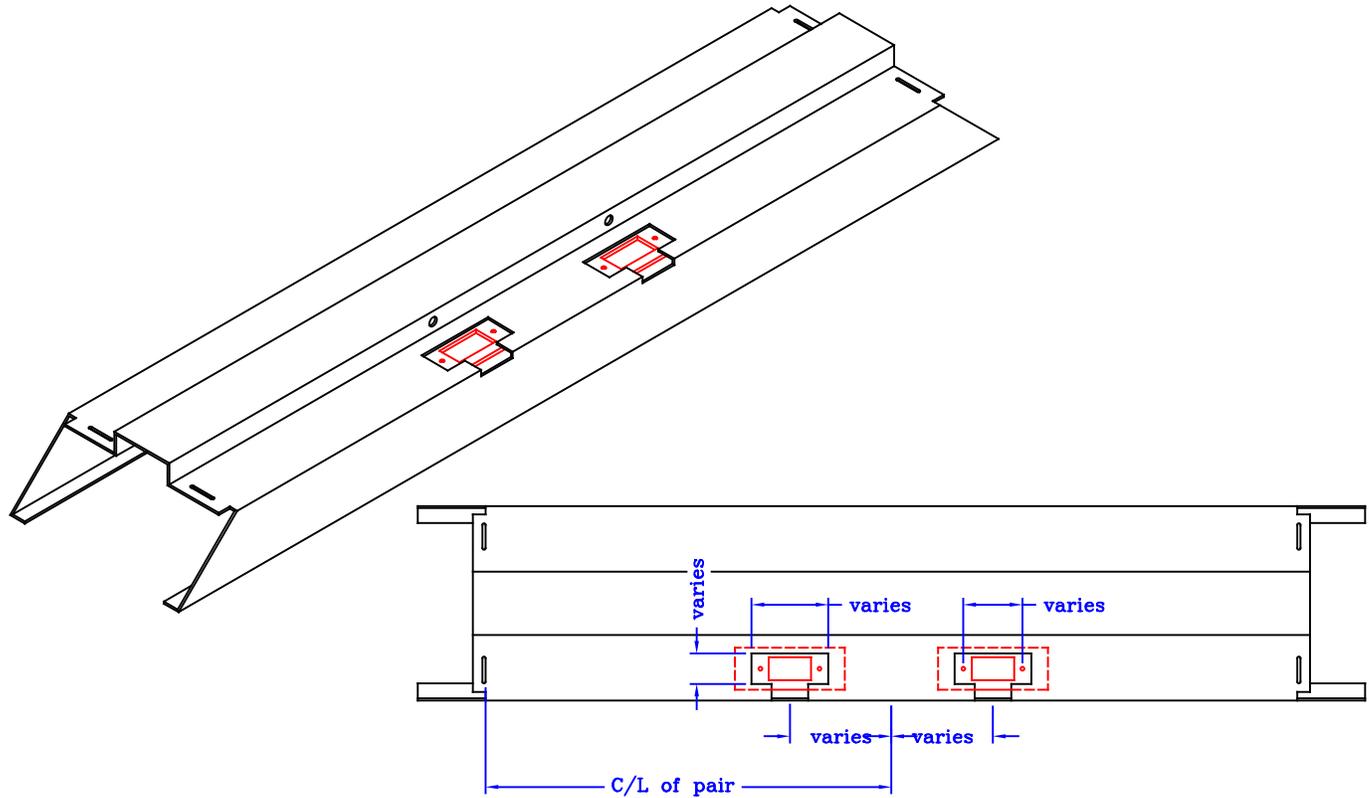
**Prep. for emergency stop release reinforcement, 12ga**  
Spot welded



\*manufacturer's template to be provided

**Roller latch strike reinforcement at head, 12ga**  
Spot welded

Strike

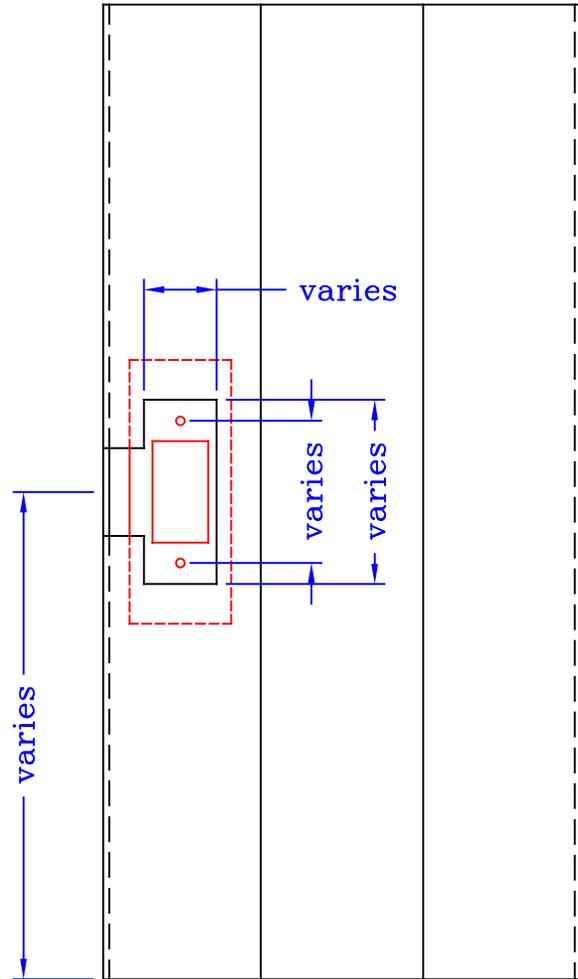
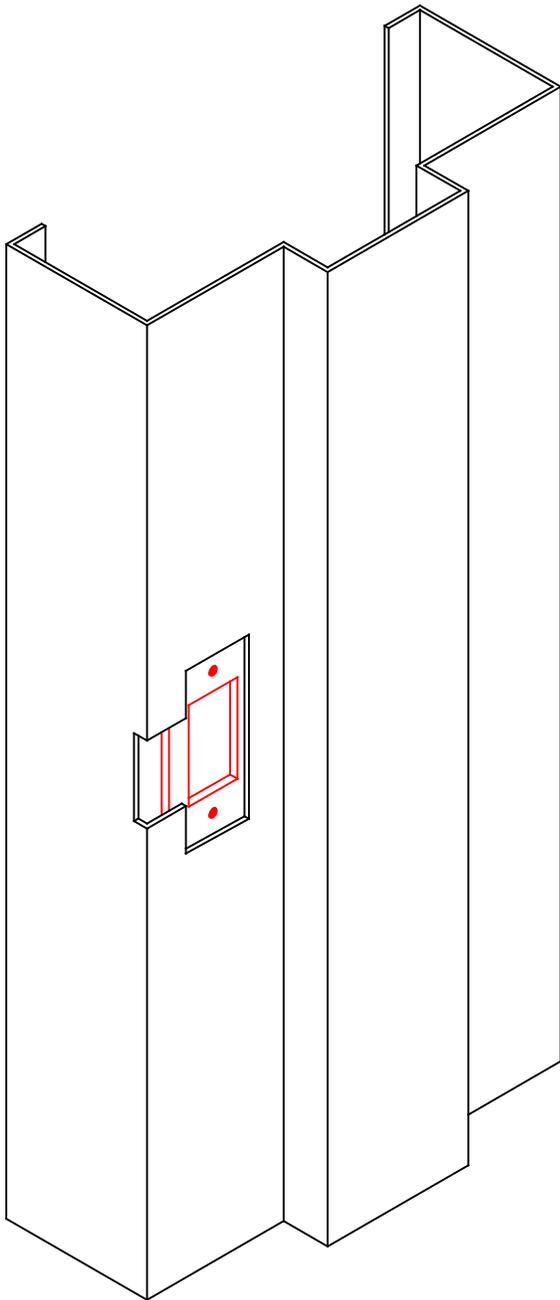


\*manufacturer's template to be provided

RLH

### Roller latch strike reinforcement at jamb, 12ga Spot welded

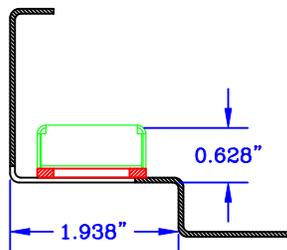
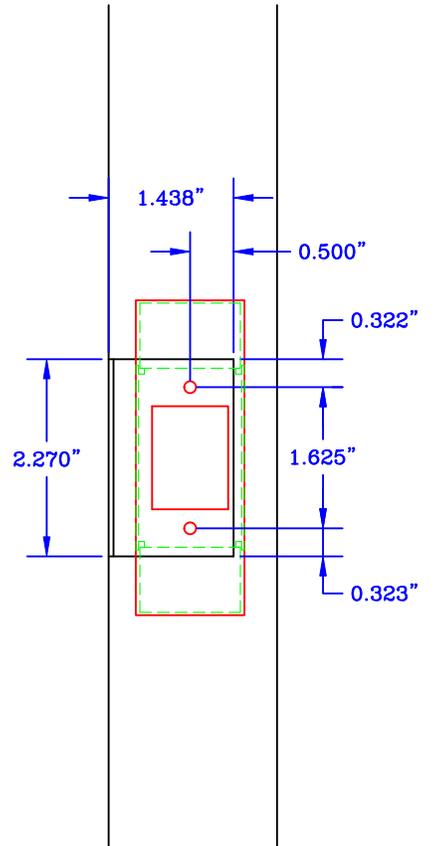
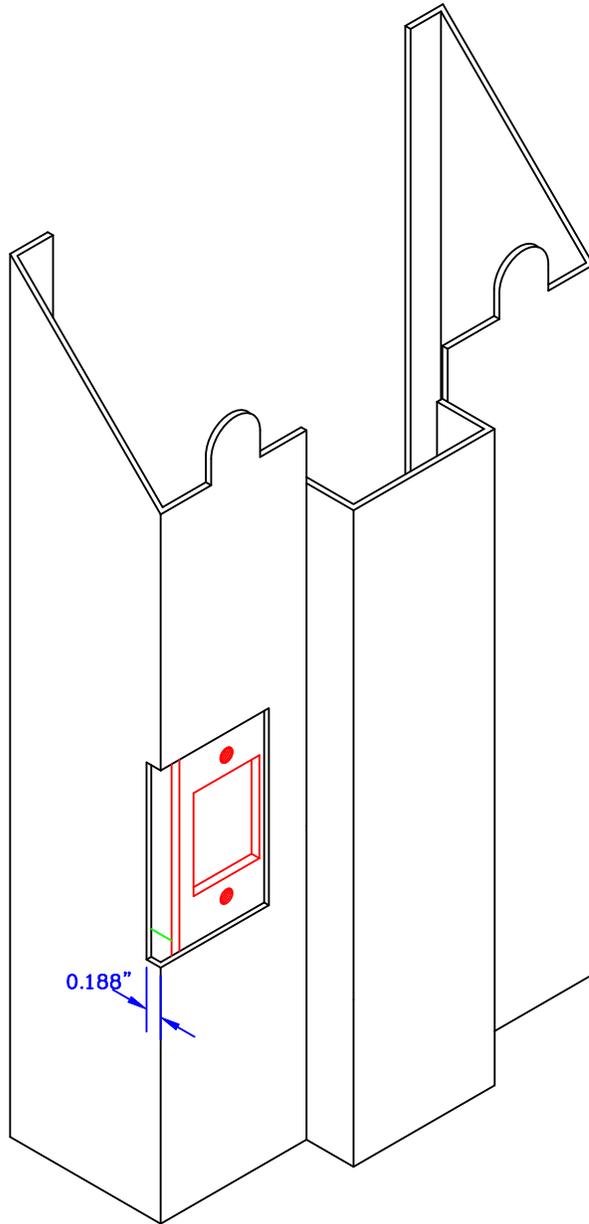
Strike



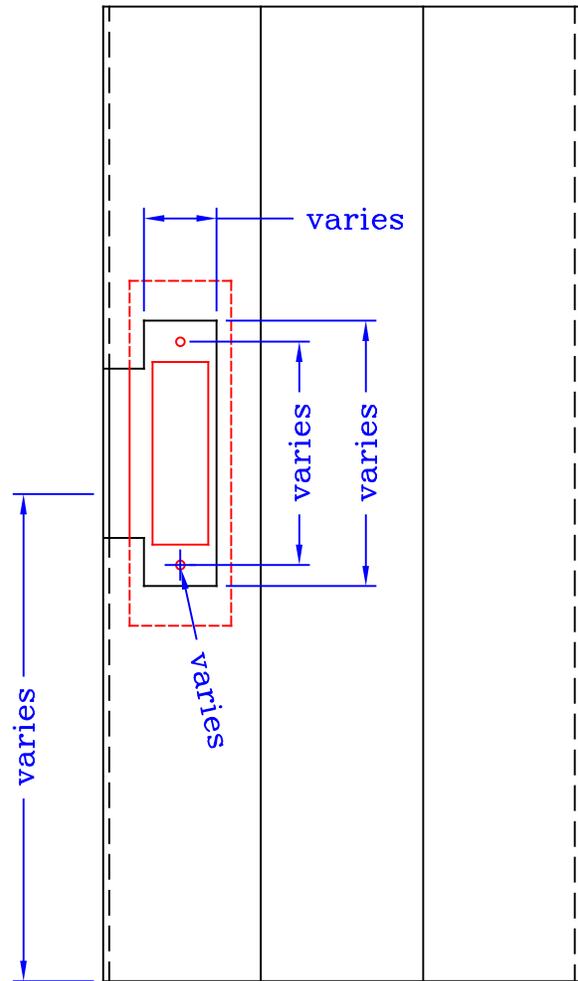
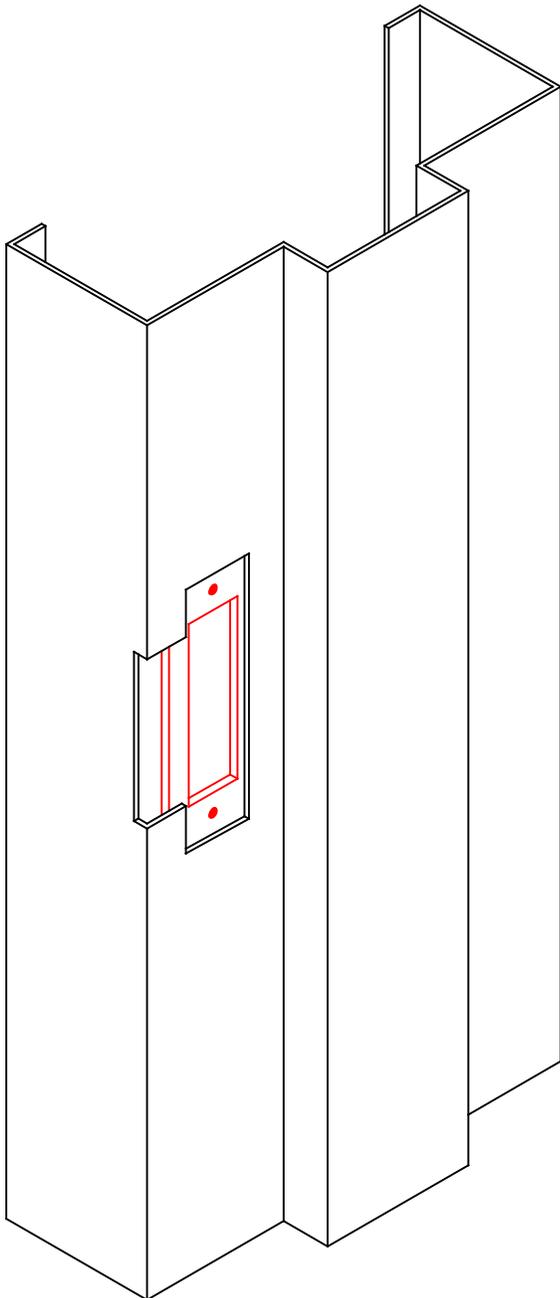
\*manufacturer's template to be provided

**Full lip strike 2-1/4", 12ga**  
Spot welded

Strike

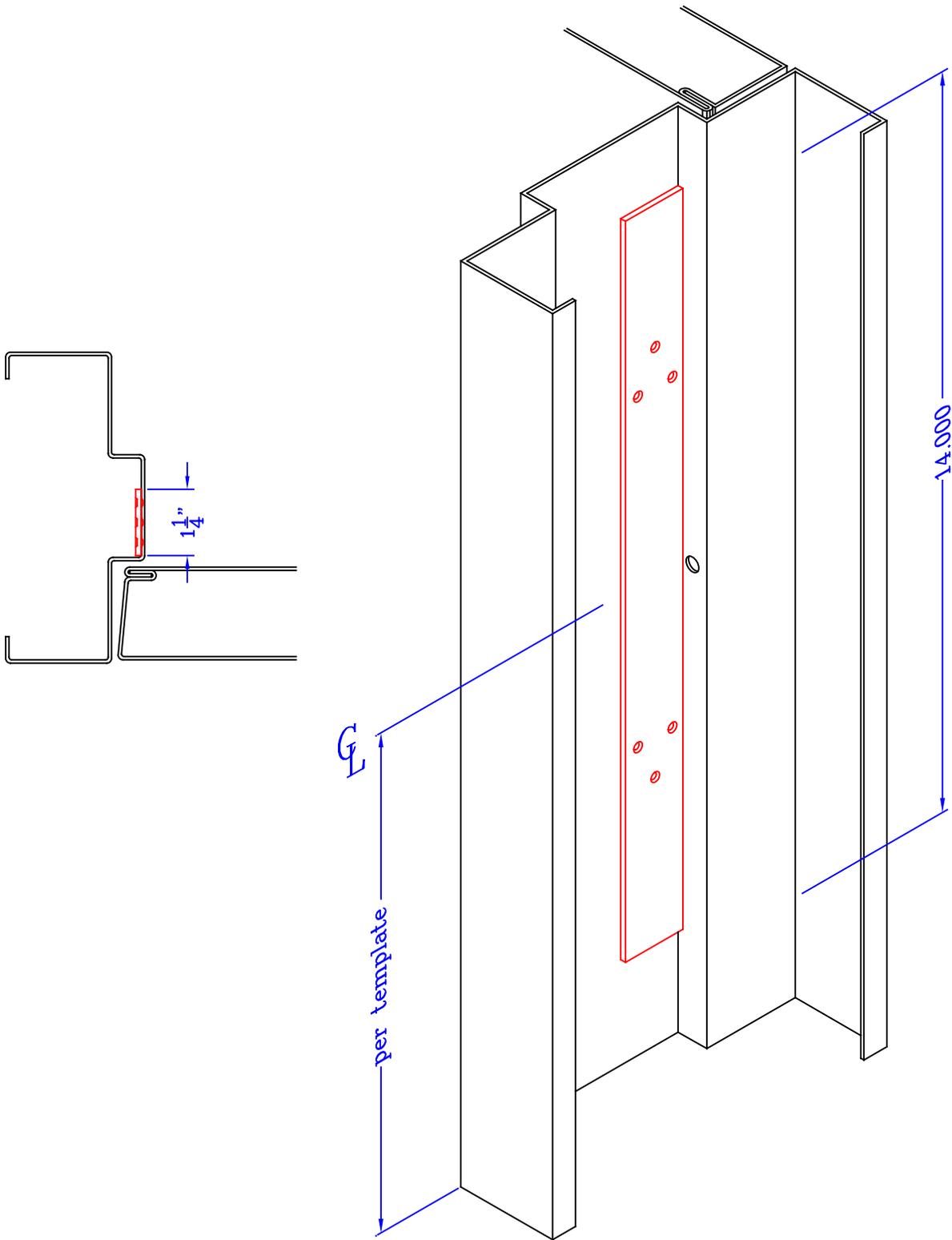


**Special strike reinforcement, 12ga**  
Spot welded



\*manufacturer's template to be provided

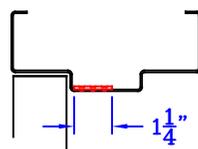
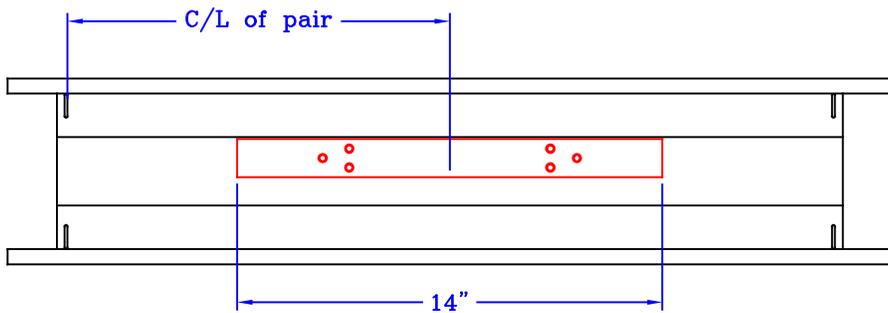
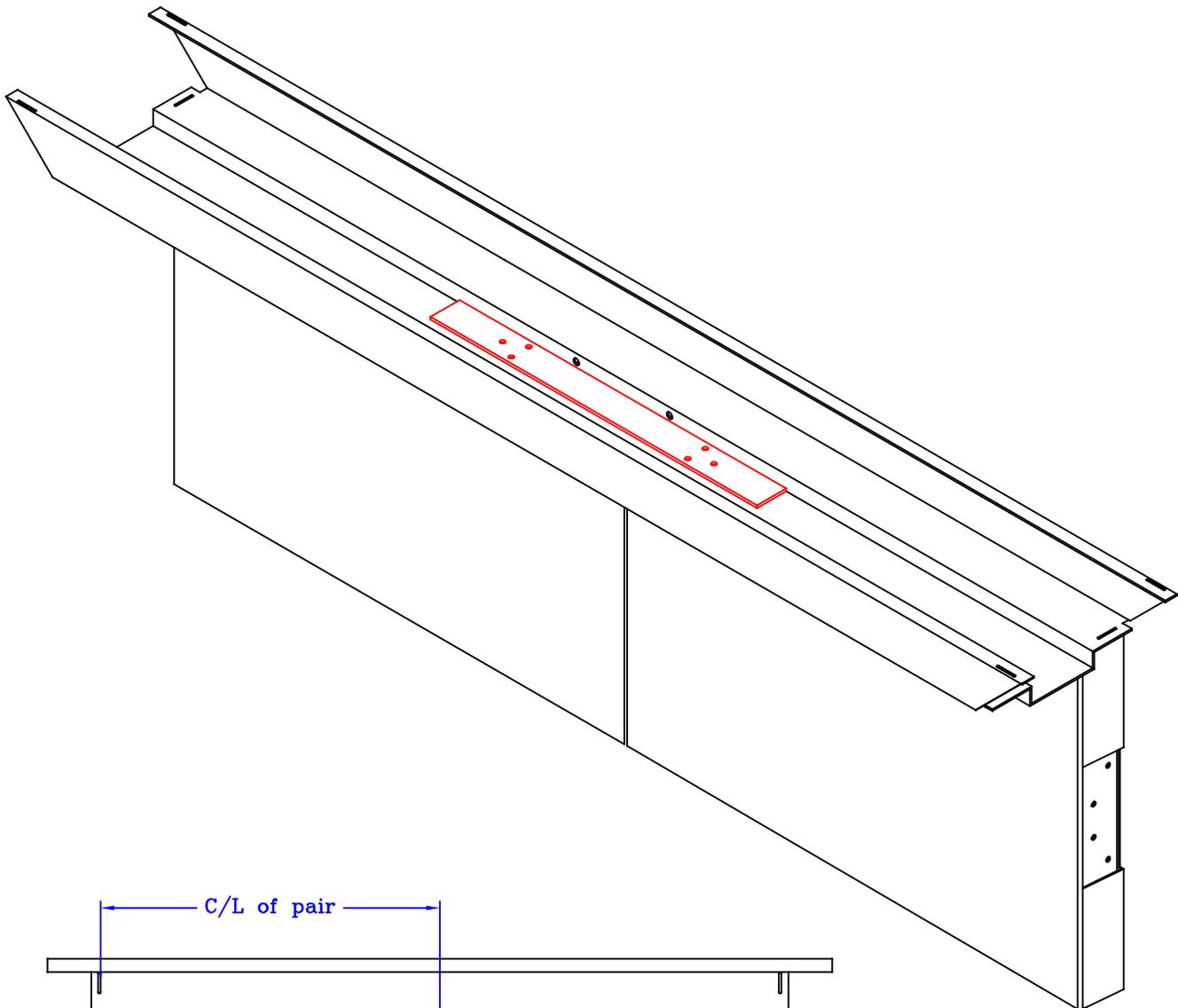
**Rim exit device reinforcement, 12ga**  
Projection welded



Exit device strike

RED

**Prep for surface vertical rod strike, 12ga**  
Projection welded

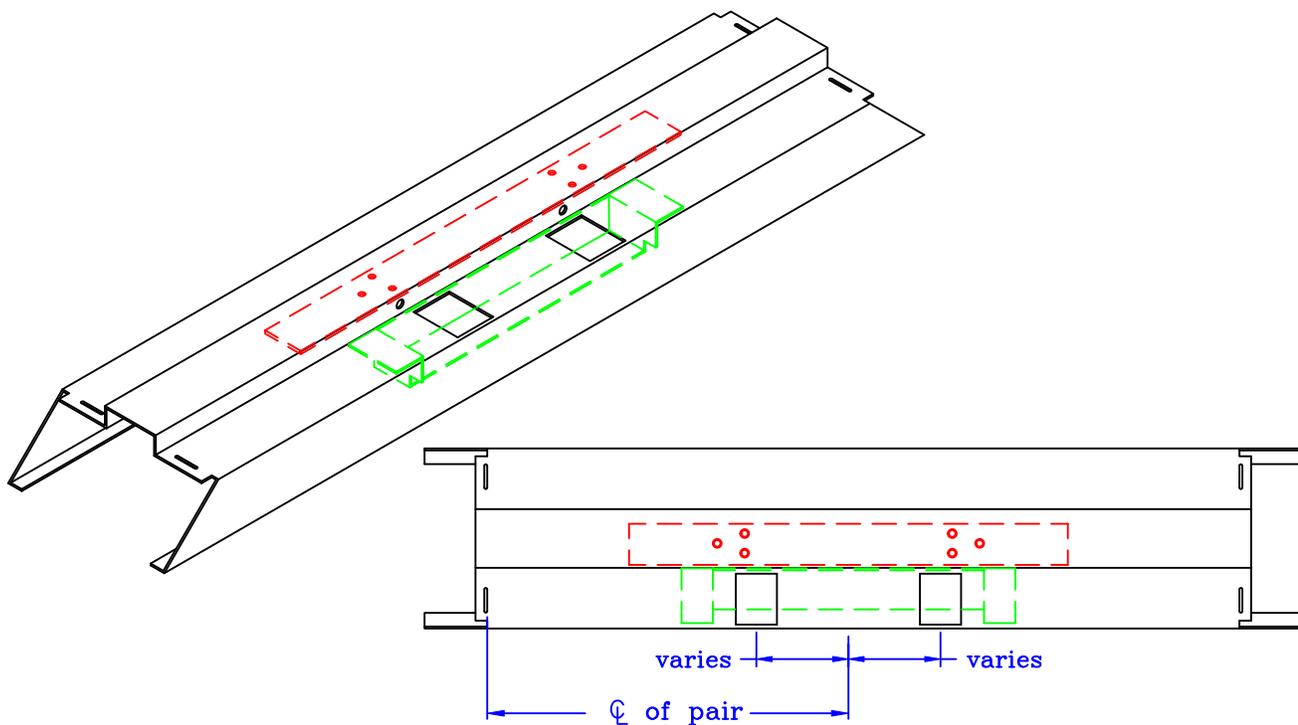


Exit device strike

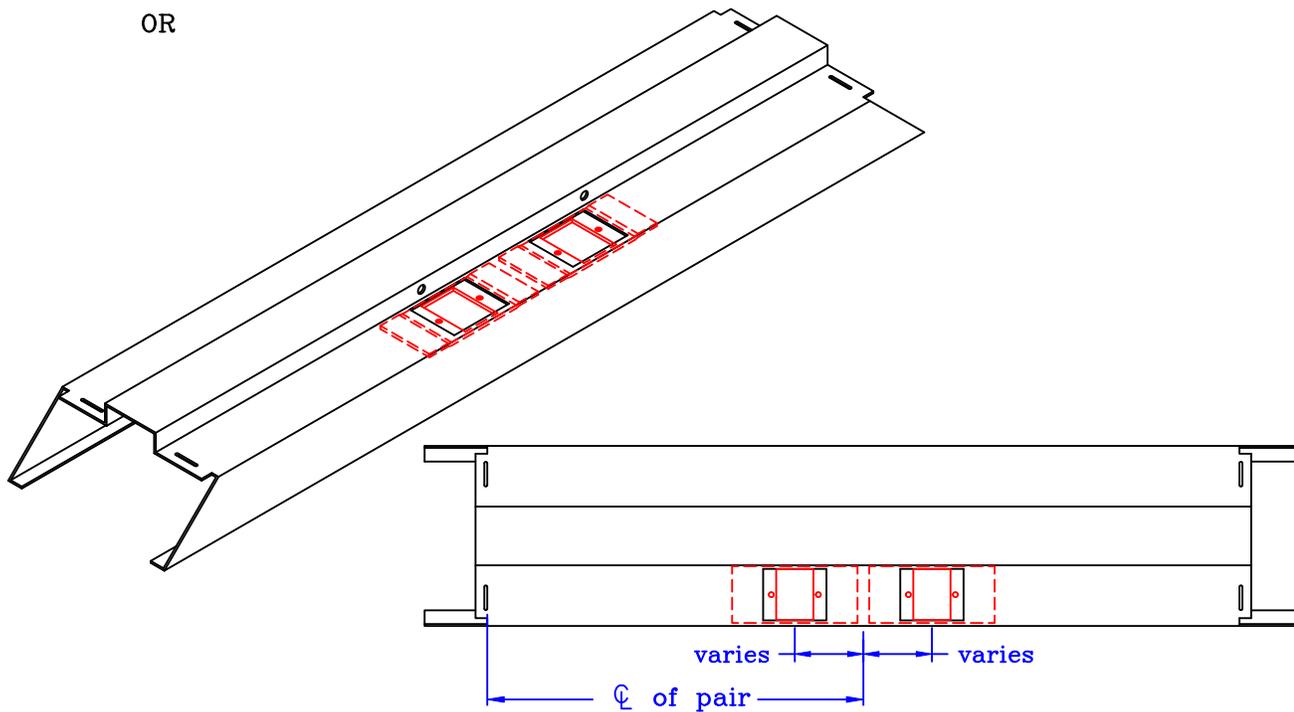
SVRS

**Prep for concealed vertical rod strike, 12ga**

Spot welded

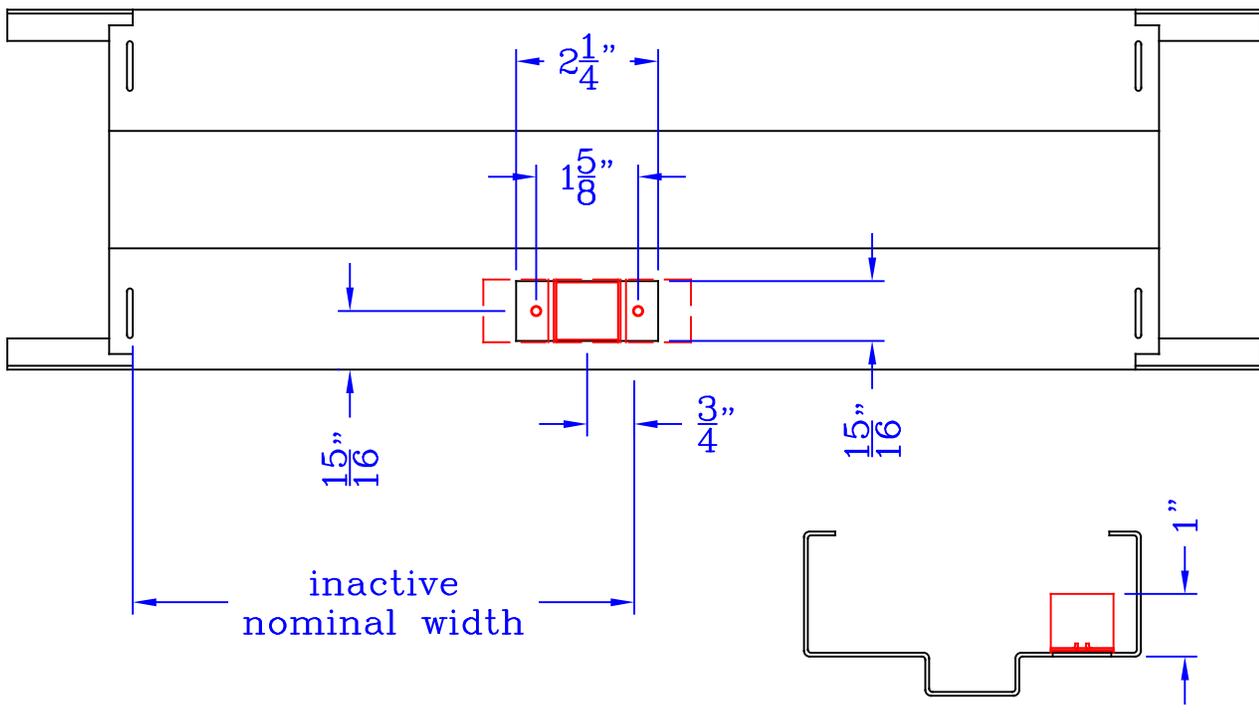
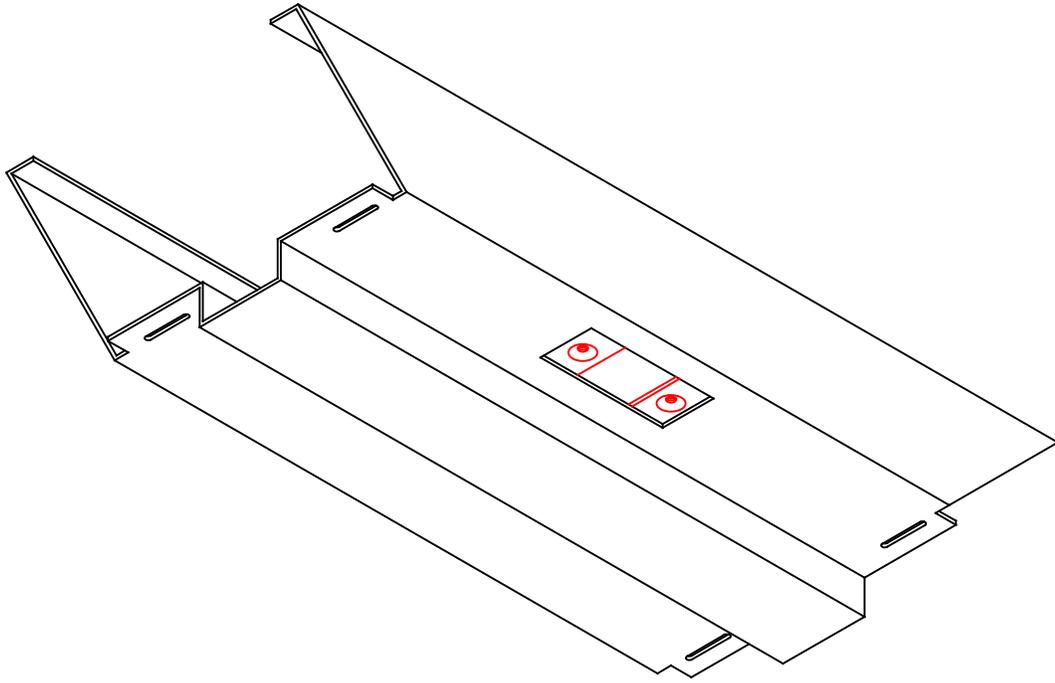


OR



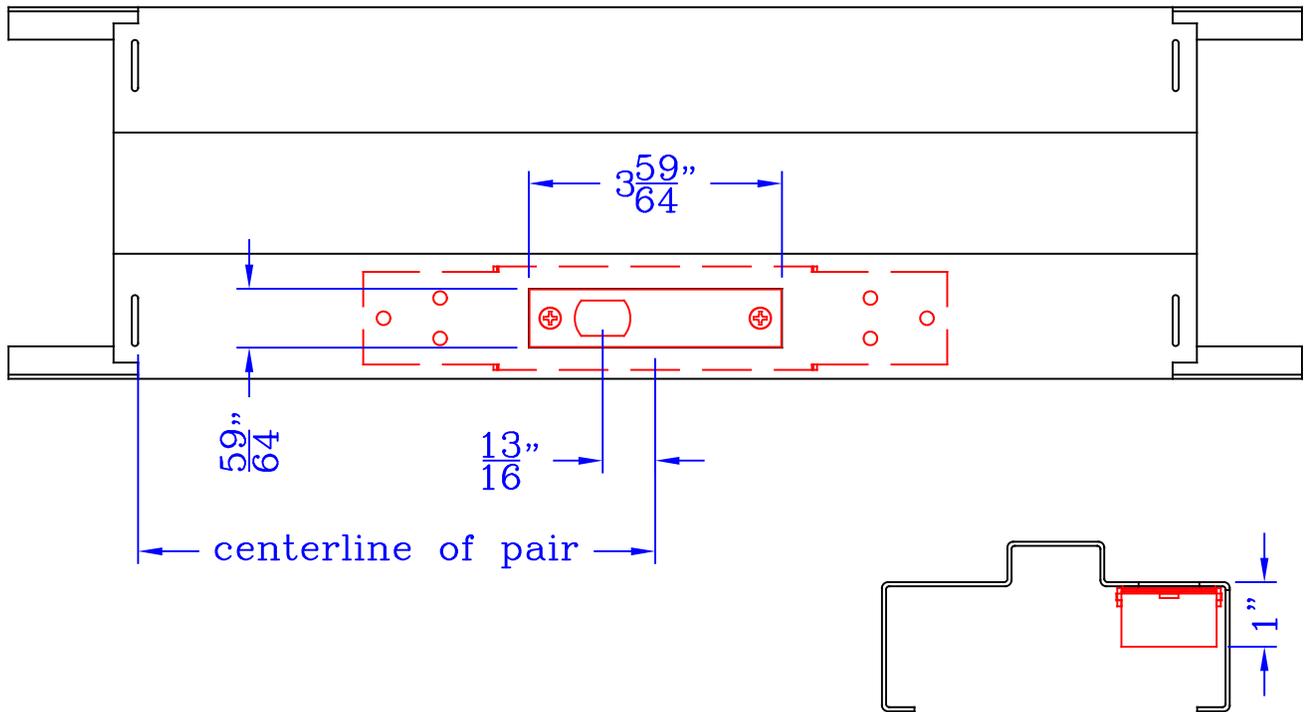
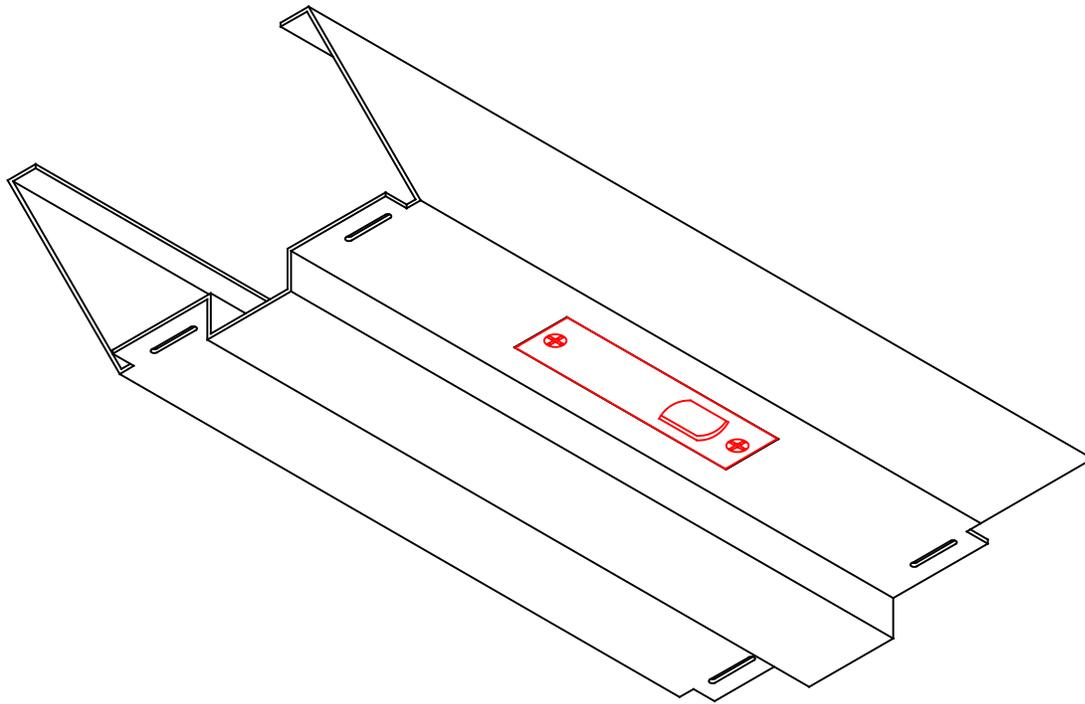
\*manufacturer's template to be provided

**Ansi A156-16 flush bolt strike reinforcement, 18ga**  
Spot welded



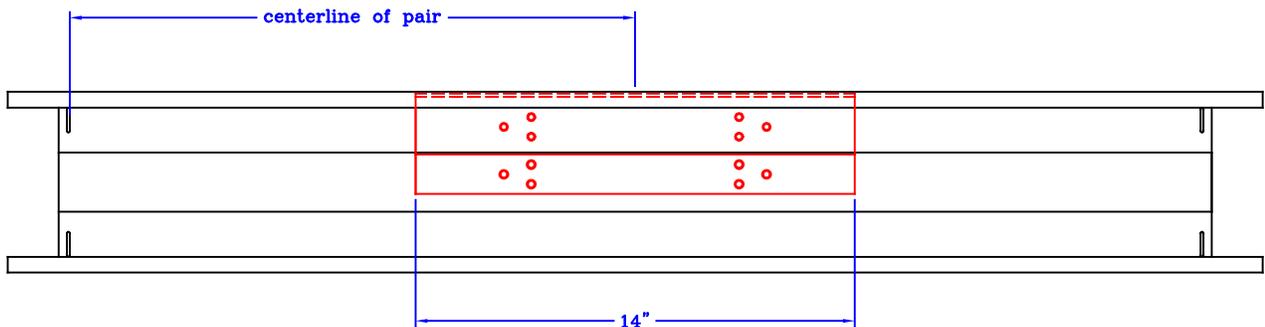
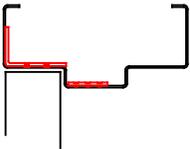
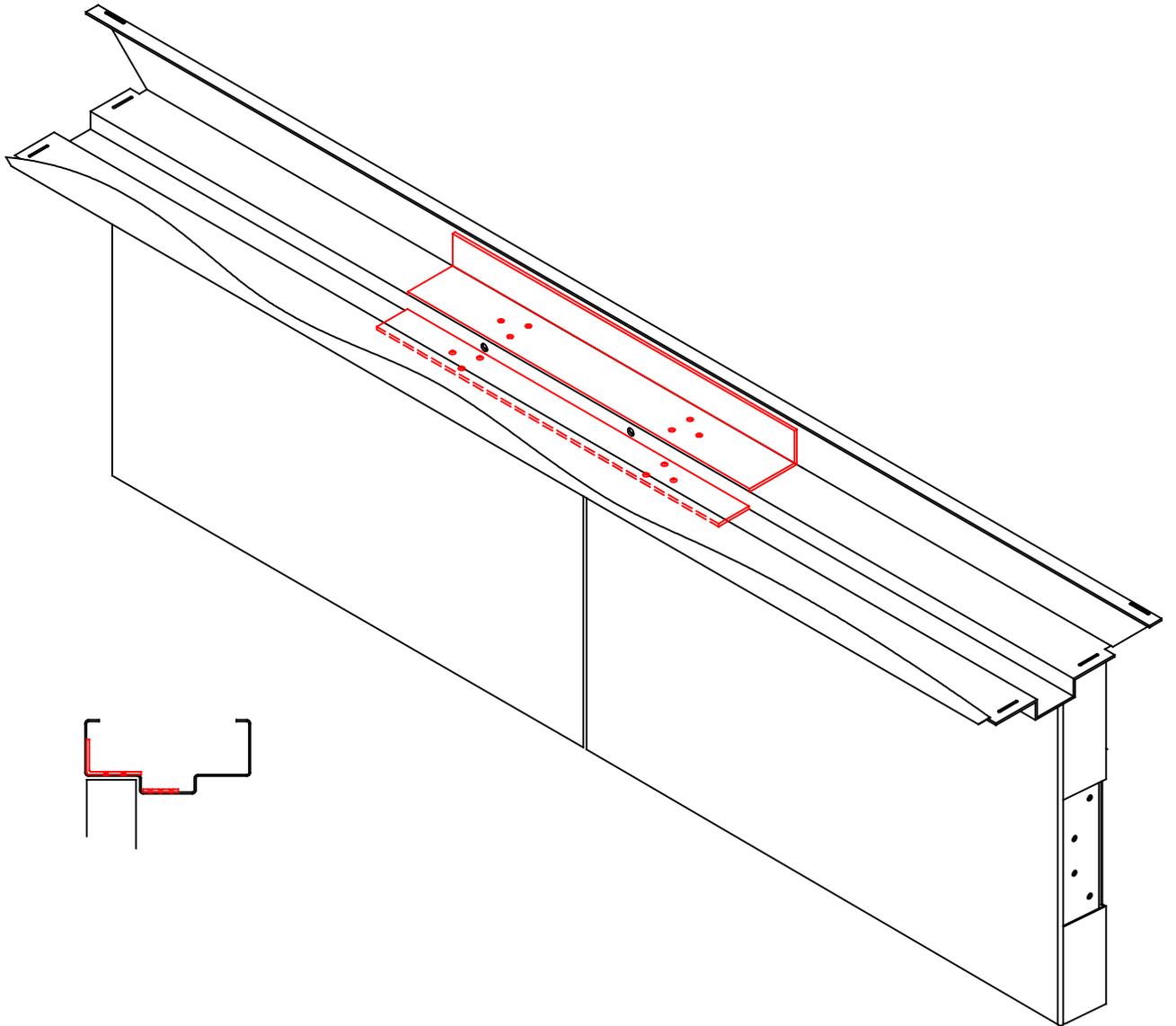
Tapped extruded holes per ANSI/SDI A250.6.

**Reversible flush bolt strike reinforcement, 18ga**  
Projection welded



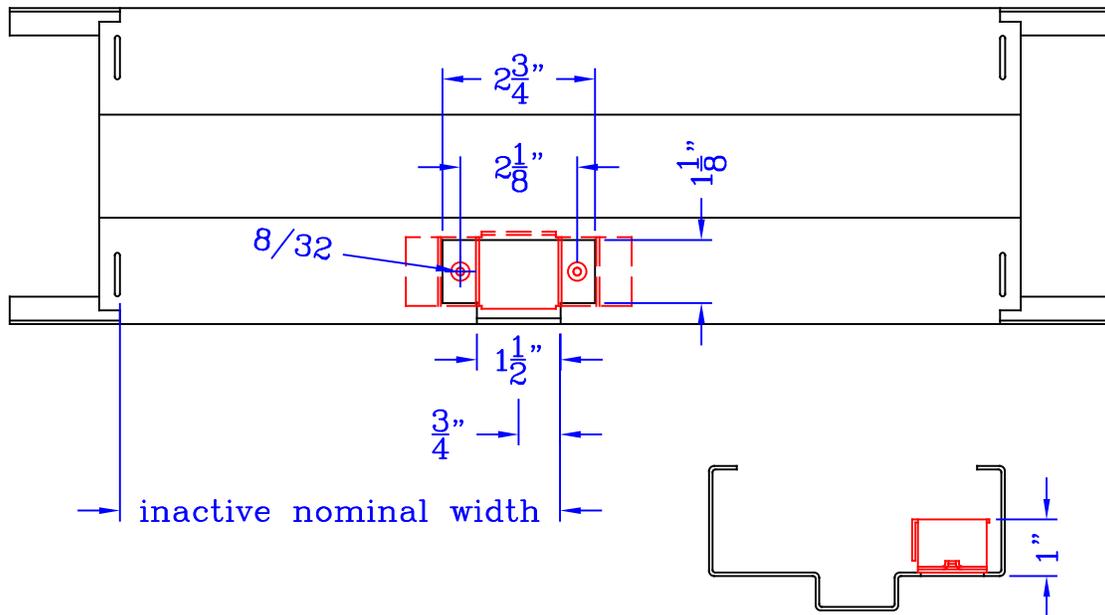
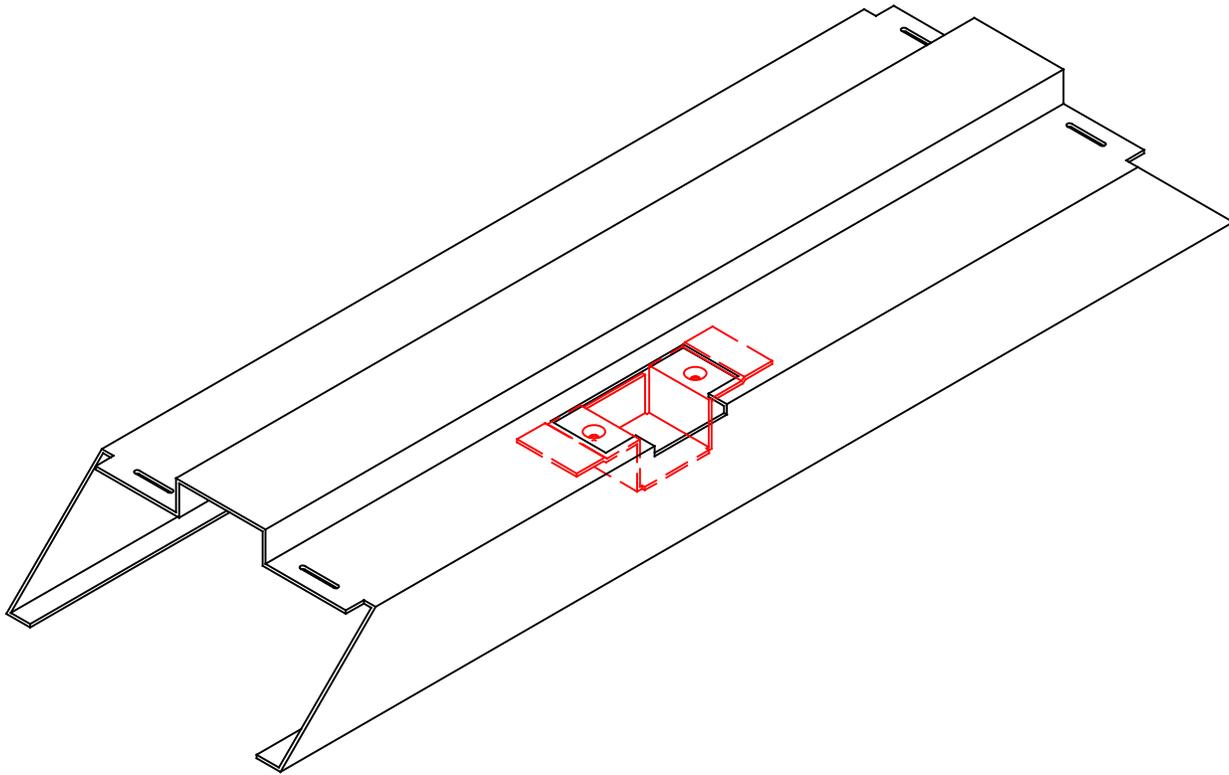
Tapped extruded holes per ANSI/SDI A250.6.

**Surface bolt strike reinforcement, 12ga**  
Projection welded



**Self latching flush bolt strike reinforcement, 18ga**  
Projection welded

Bolt strike

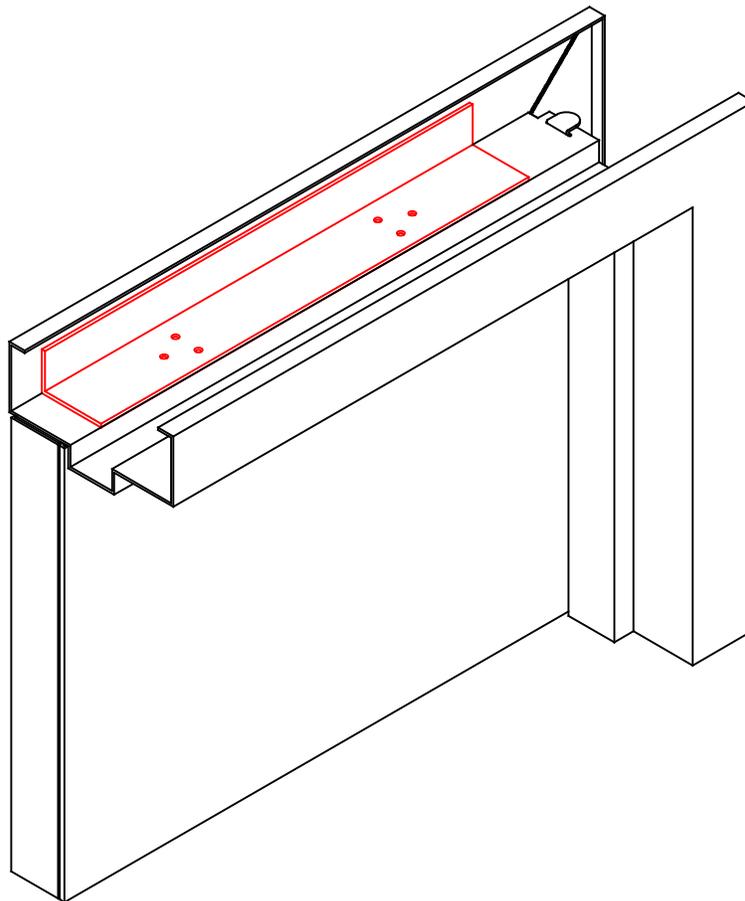
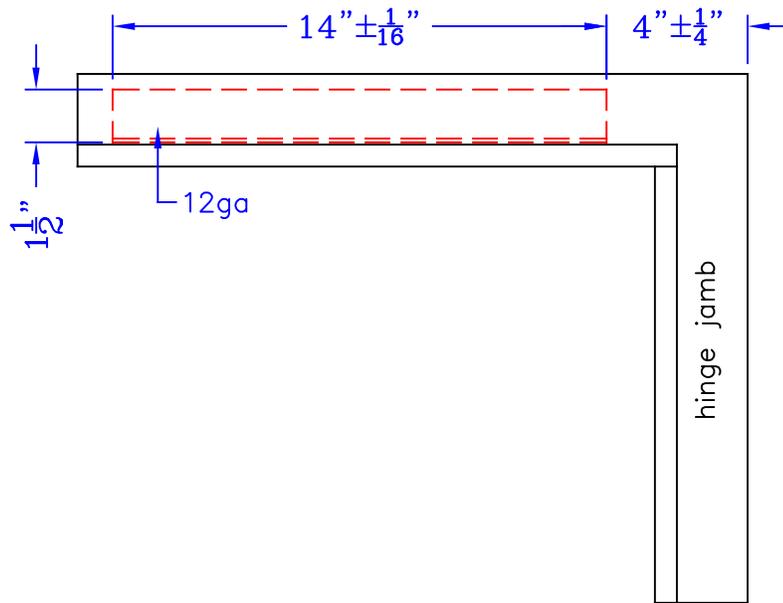


Tapped extruded holes per ANSI/SDI A250.6.

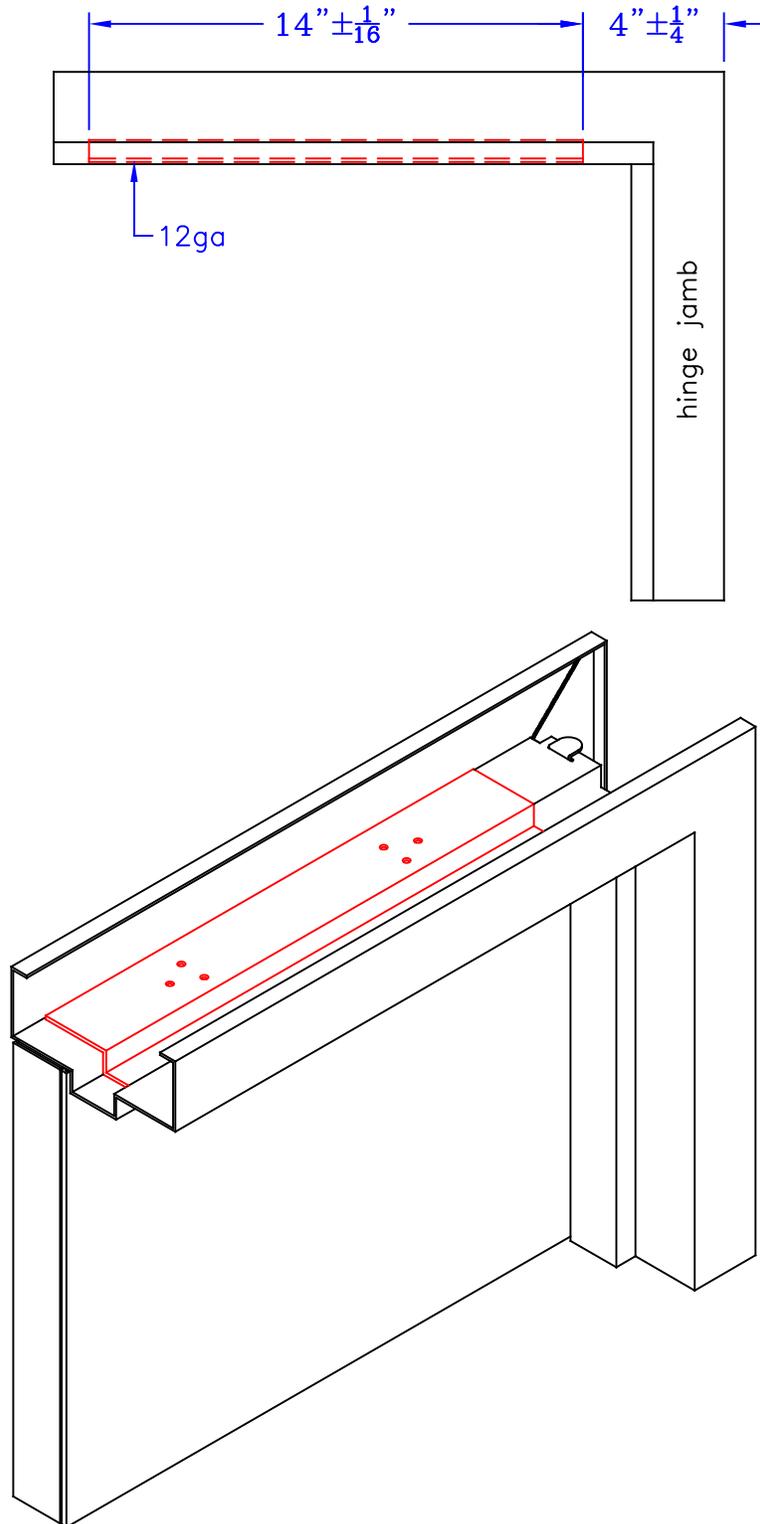
SLFBS

### Regular arm closer reinforcement, 12ga

Projection welded

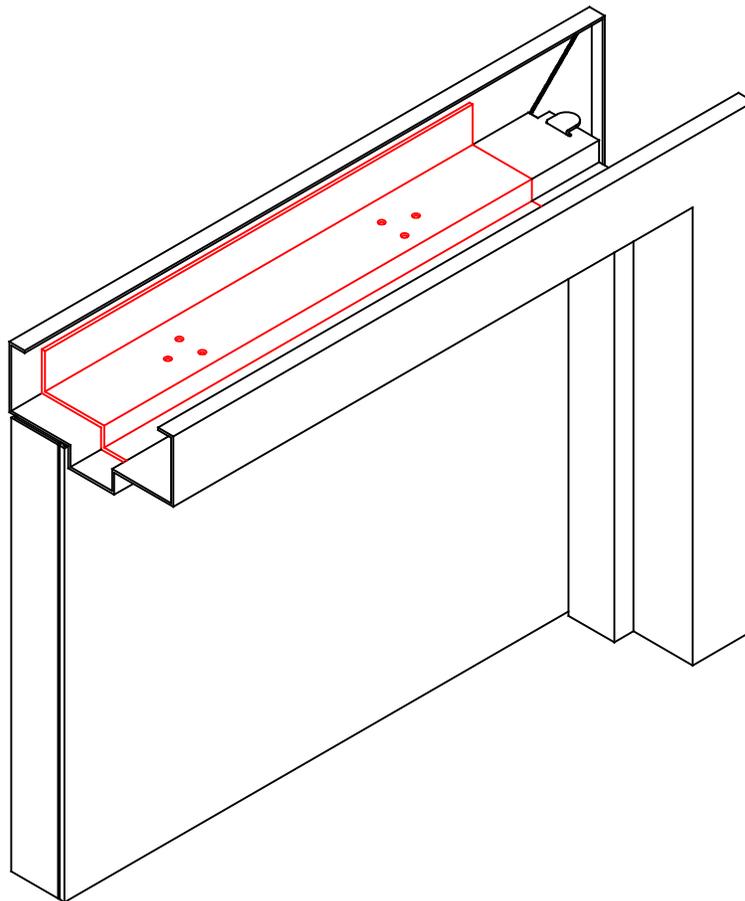
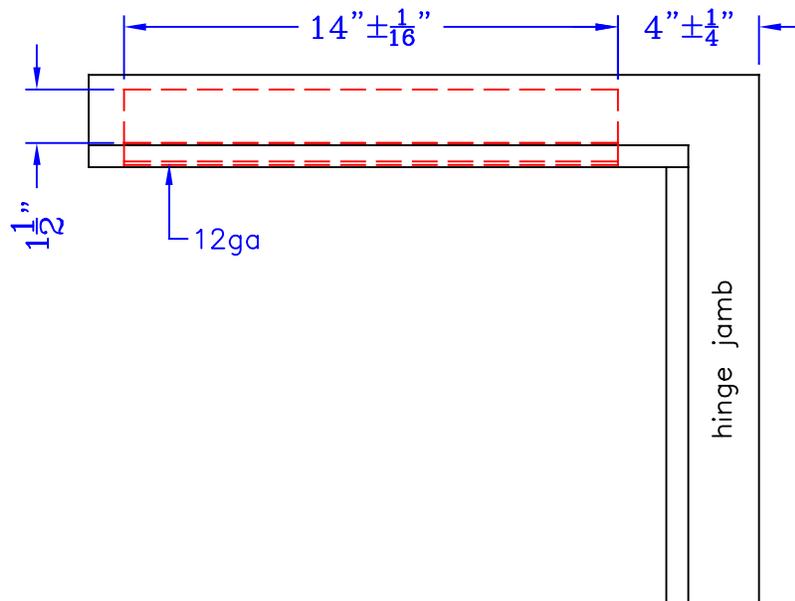


**Parallel arm closer reinforcement, 12ga**  
Projection welded



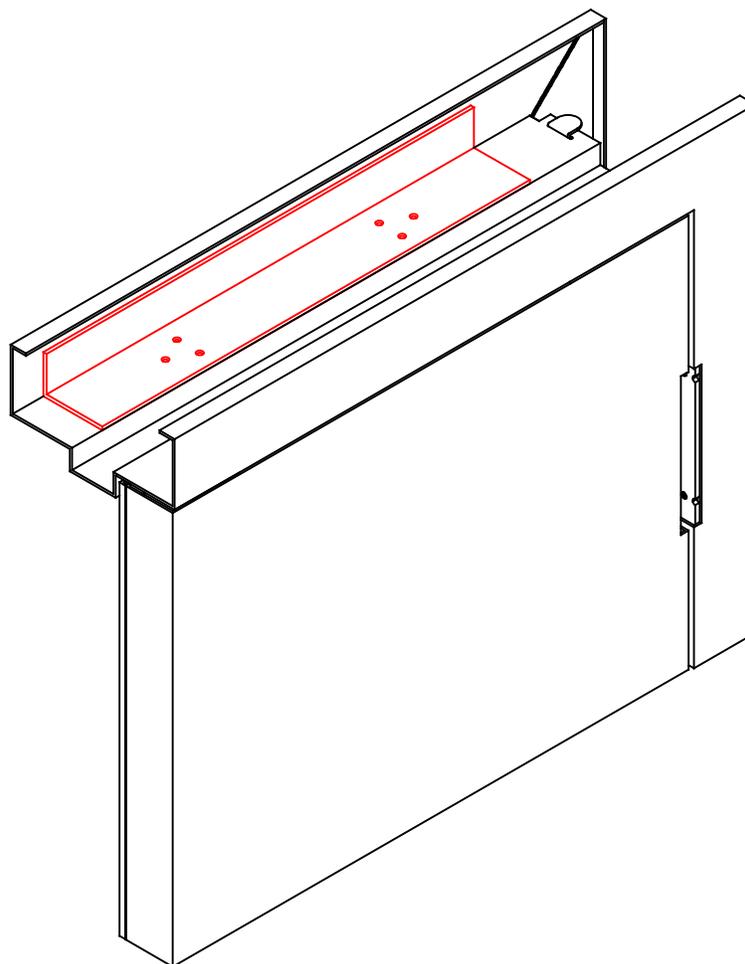
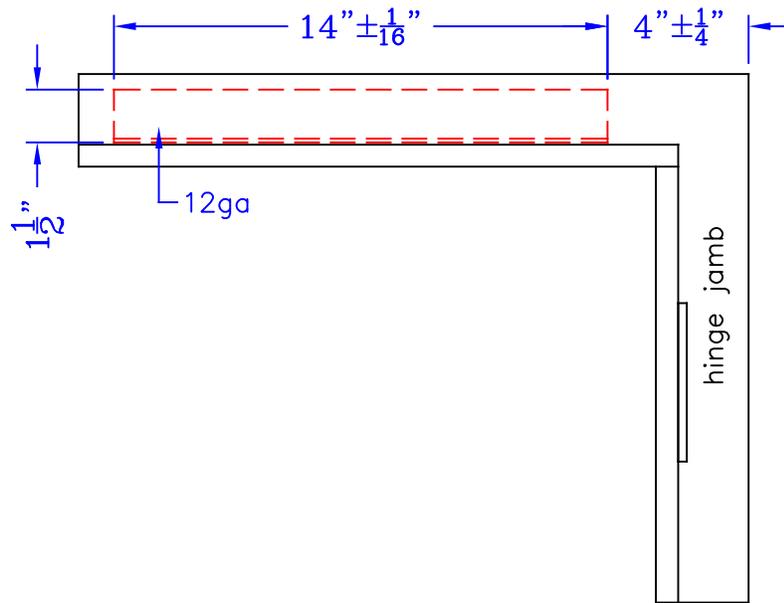
### Regular and parallel arm closer reinforcement, 12ga

Projection welded

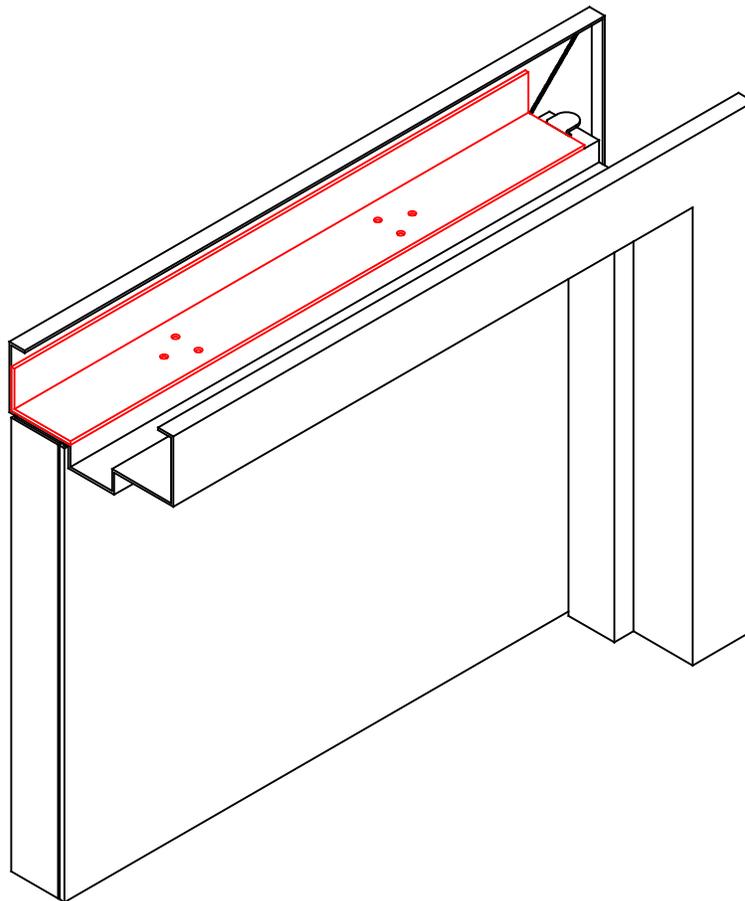
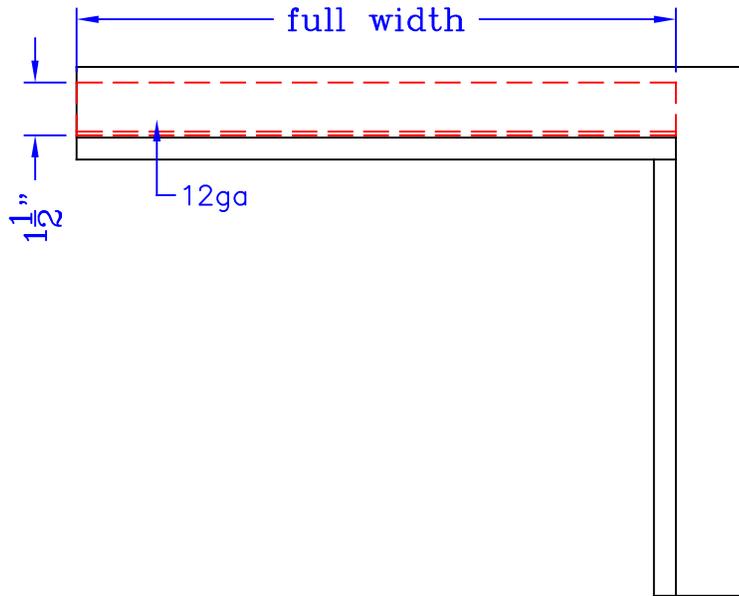


### Top jamb closer reinforcement, 12ga

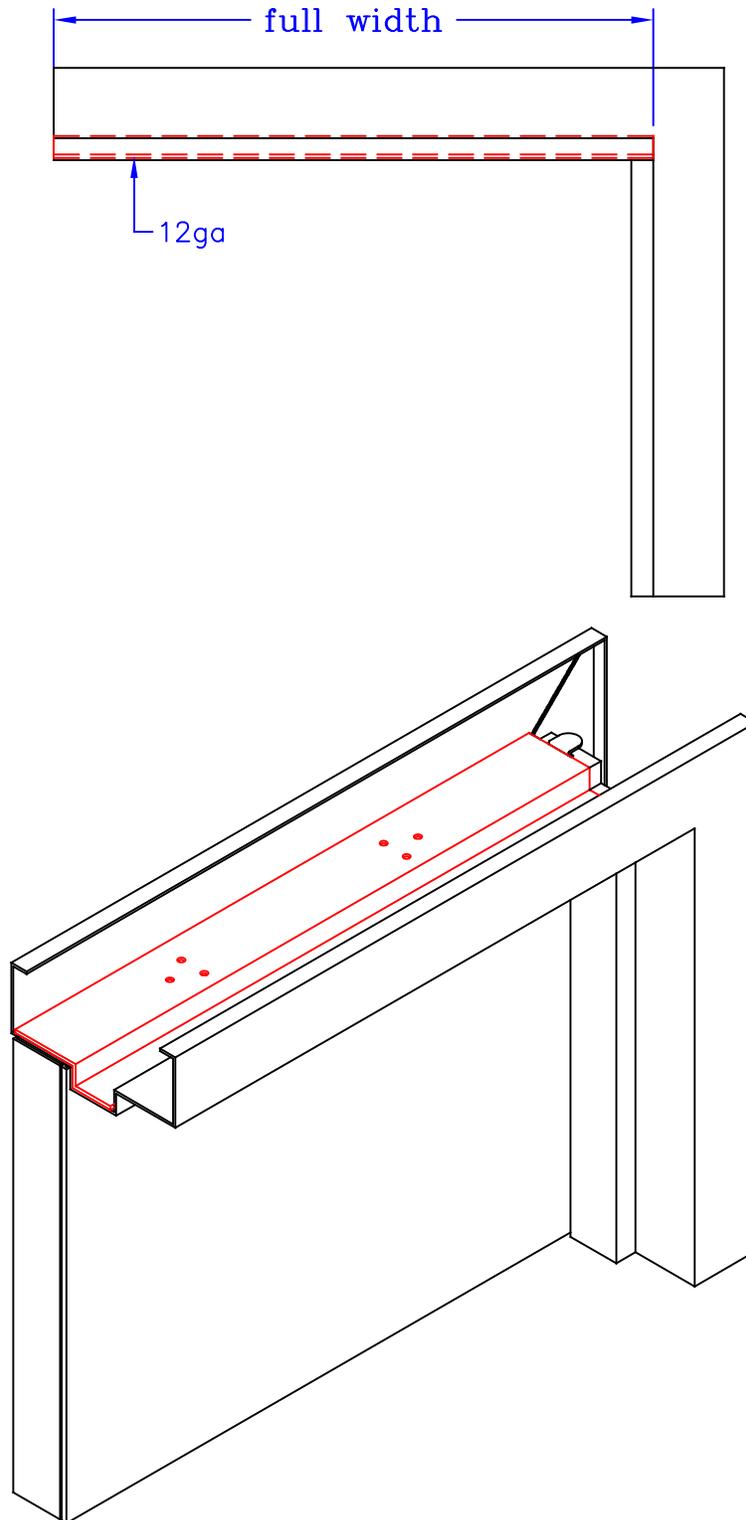
Projection welded



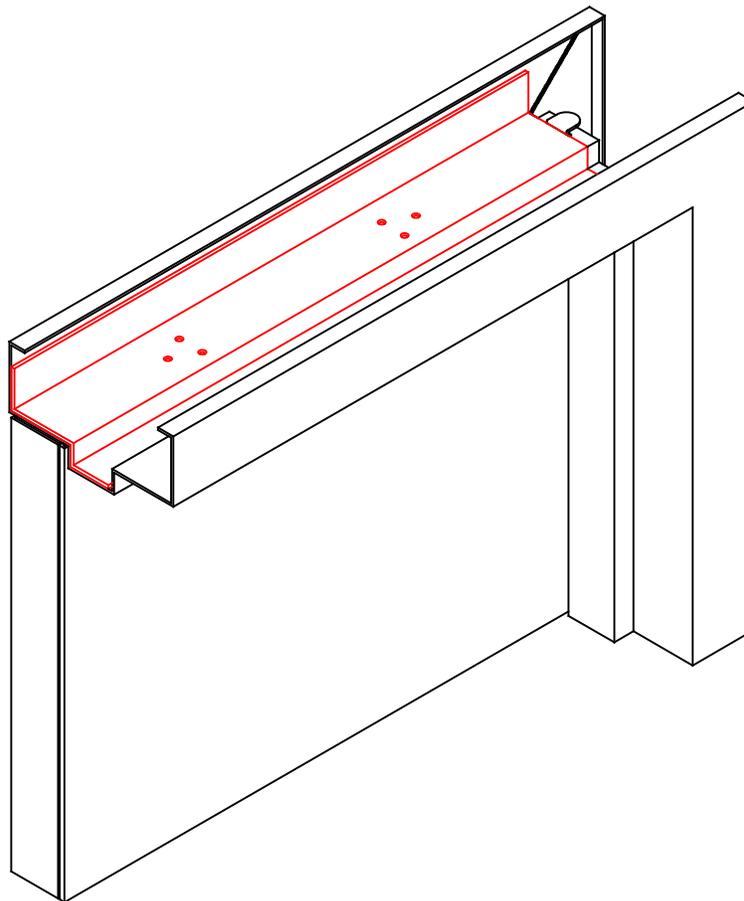
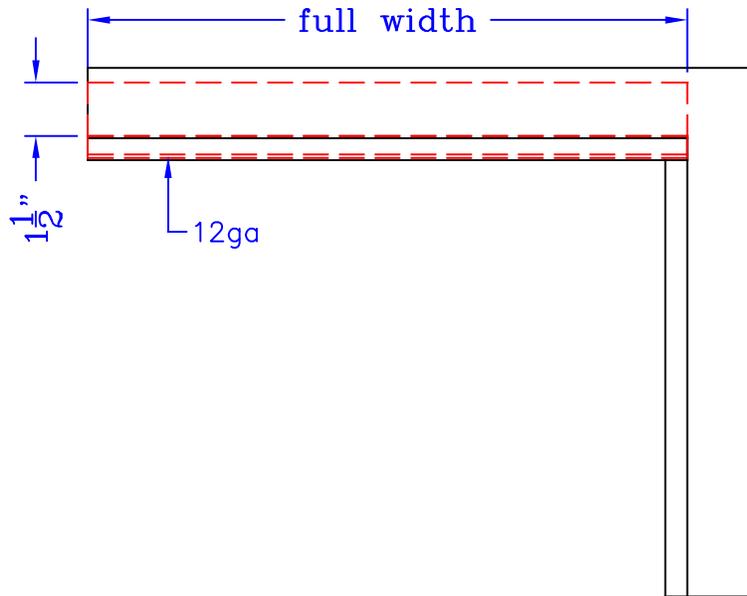
**Full width regular arm closer reinforcement, 12ga**  
Projection welded



**Full width parallel arm closer reinforcement, 12ga**  
Projection welded

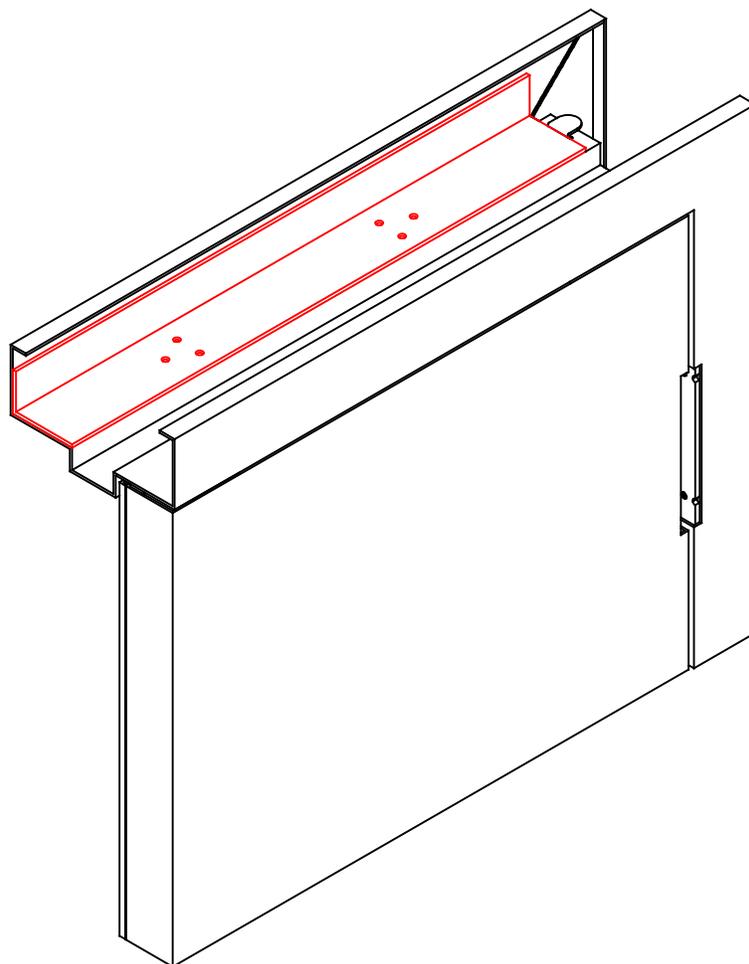
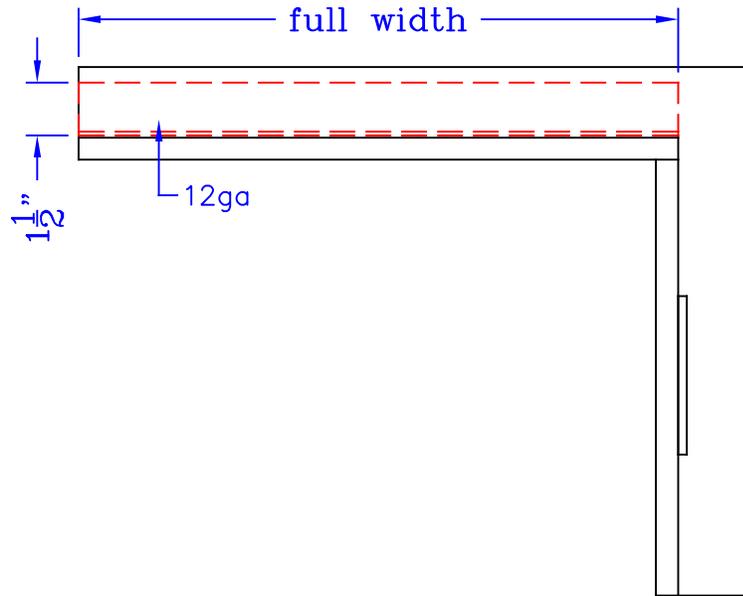


**Full width regular and parallel arm closer reinforcement, 12ga**  
Projection welded

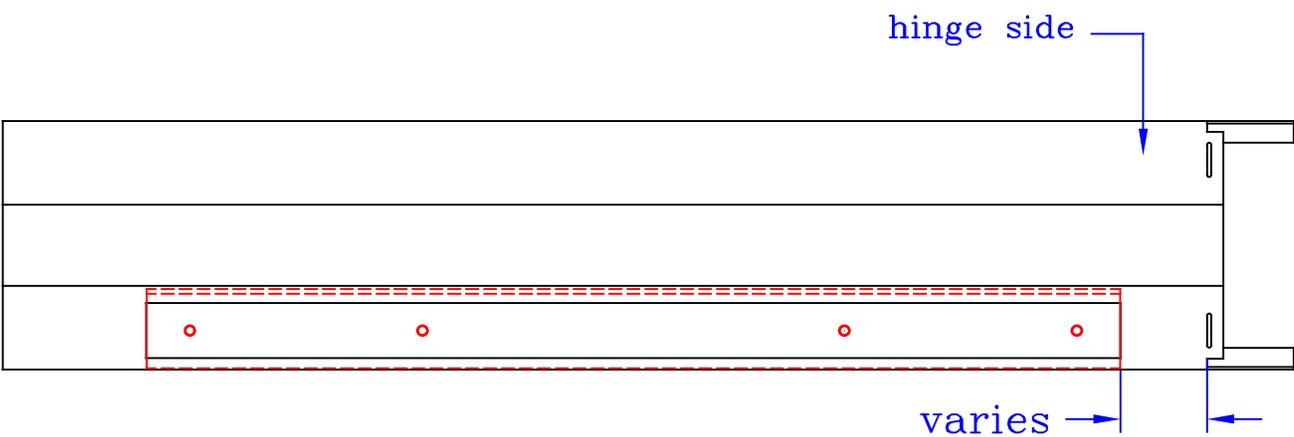
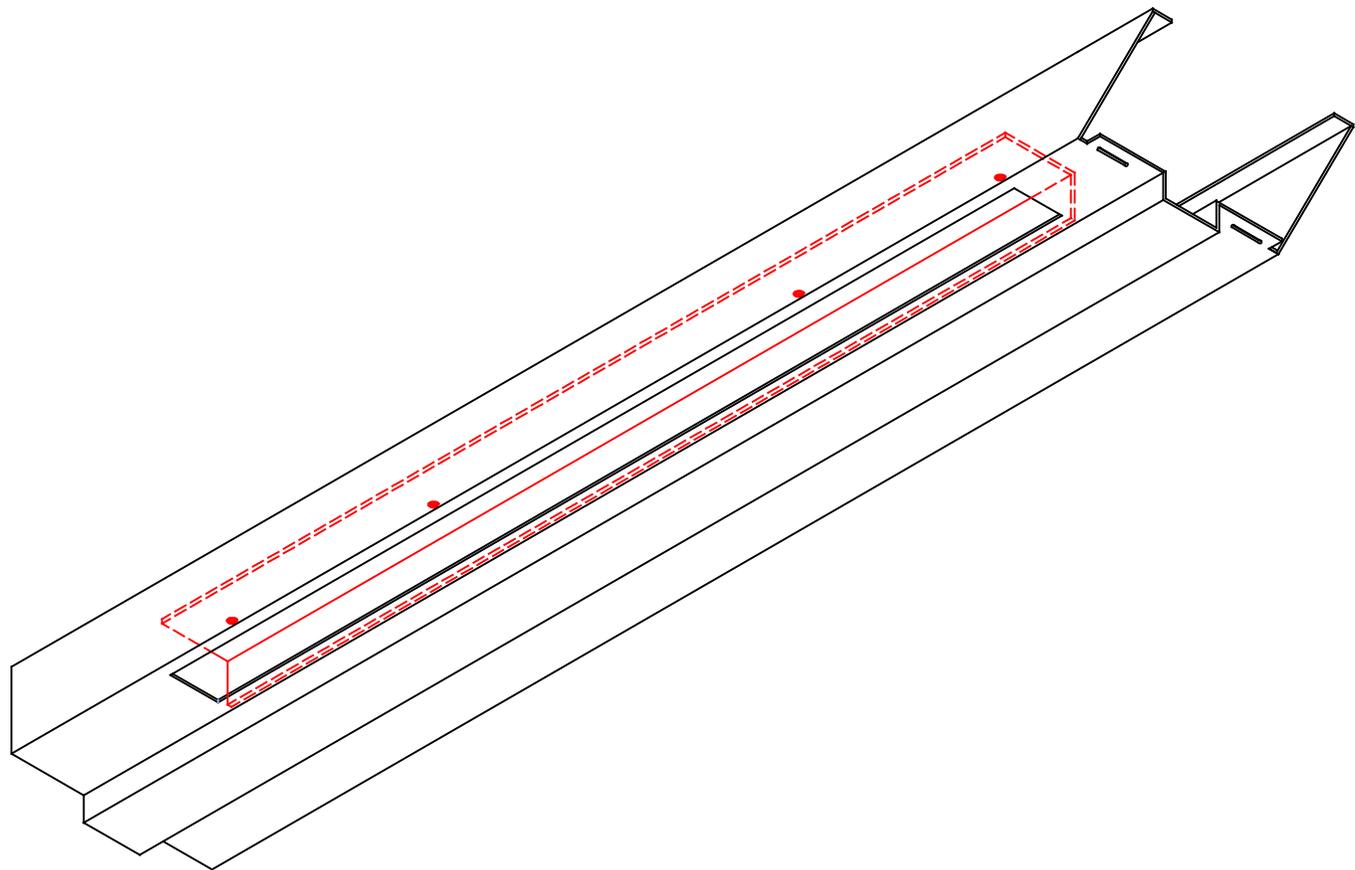


**Full width top jamb closer reinforcement, 12ga**

Projection welded

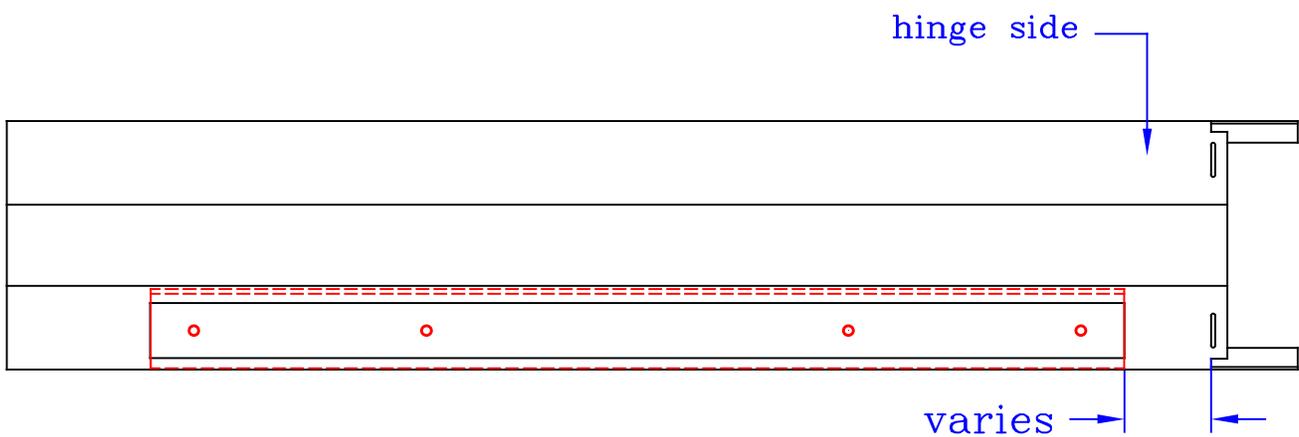
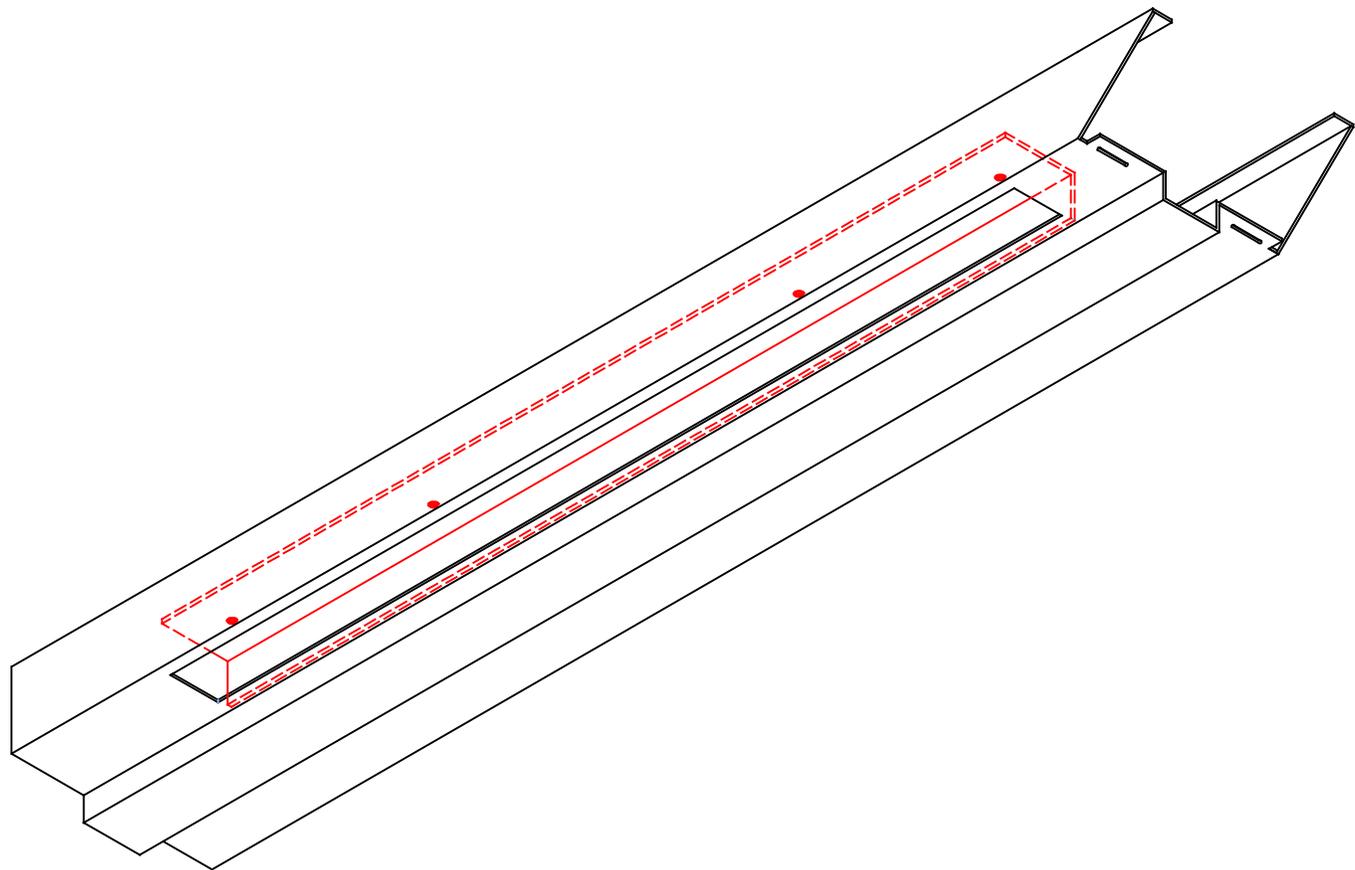


**Concealed closer, 12ga**  
Spot welded



\*manufacturer's template to be provided

**Prep. for concealed overhead stop, 12ga**  
Spot welded

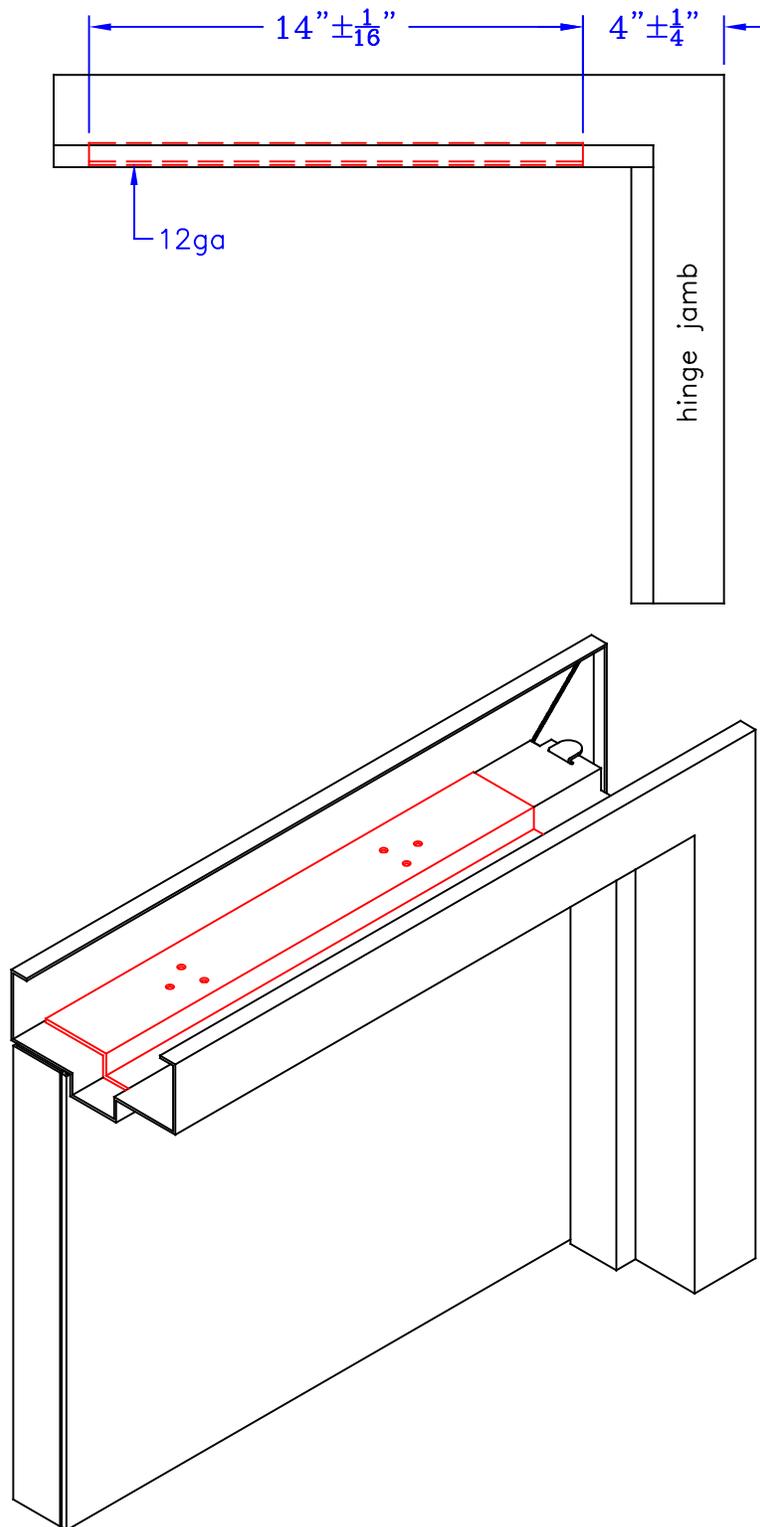


COHS

\*manufacturer's template to be provided

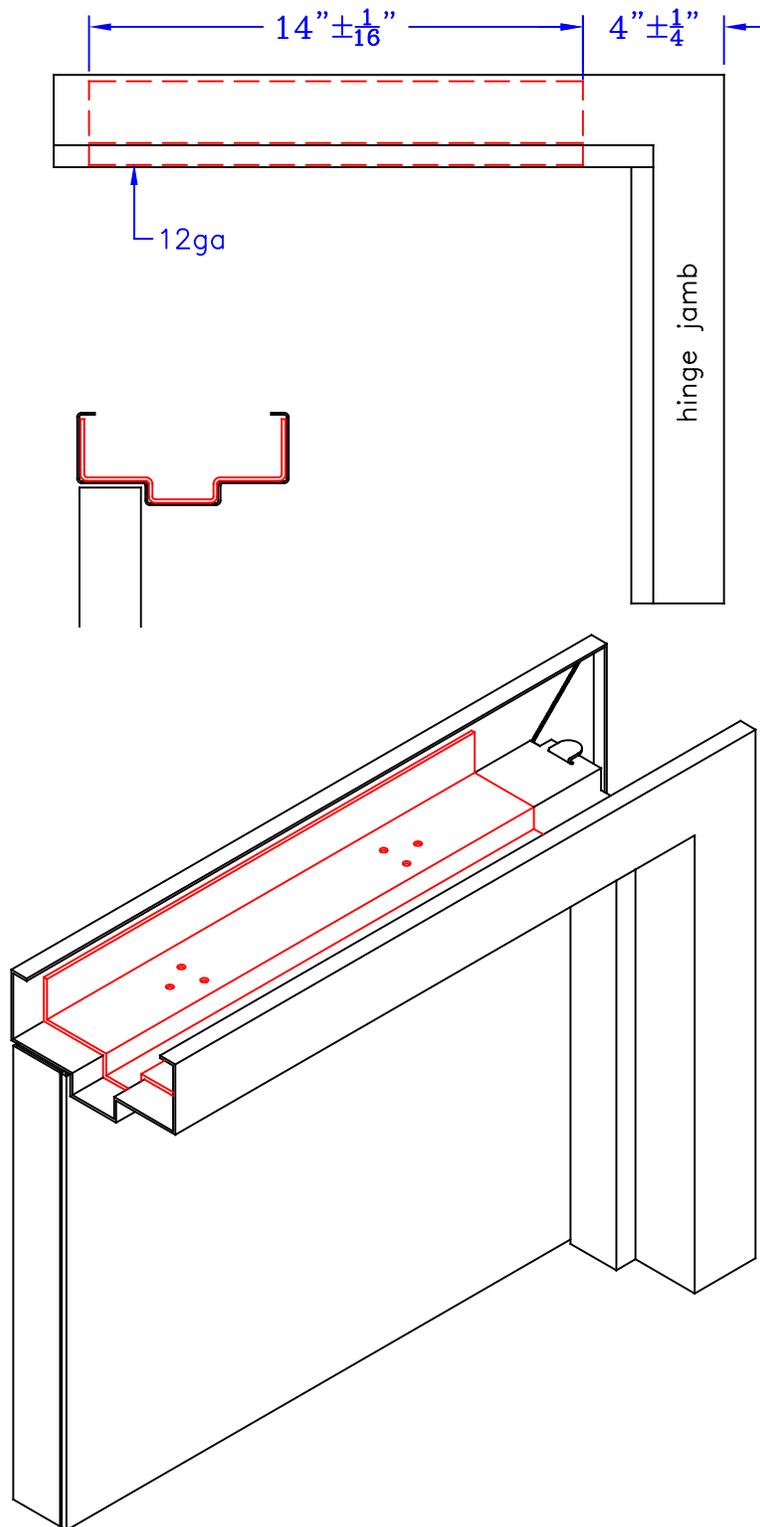
**Prep. for surface overhead stop, 12ga**

Projection welded

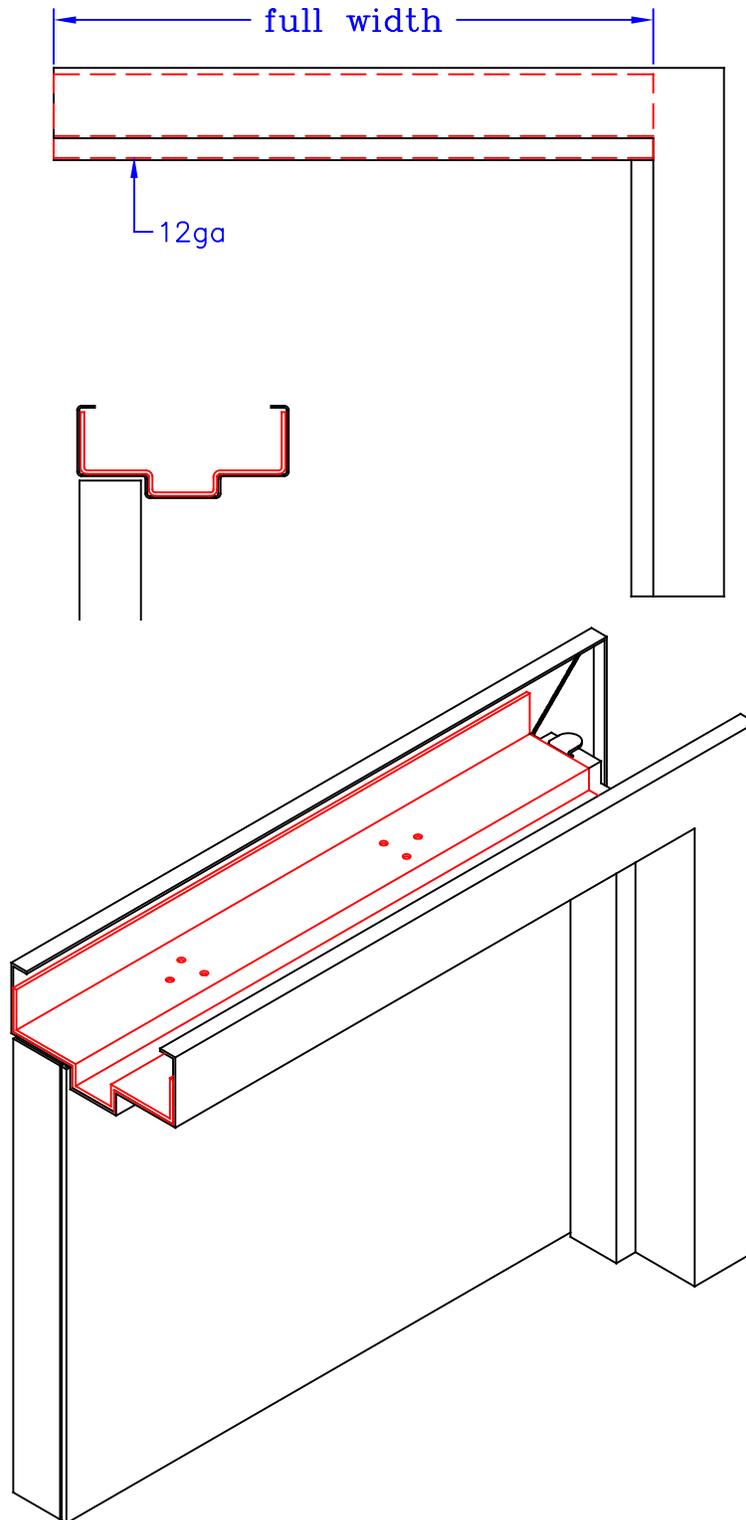


### Full sleeve closer reinforcement, 12ga

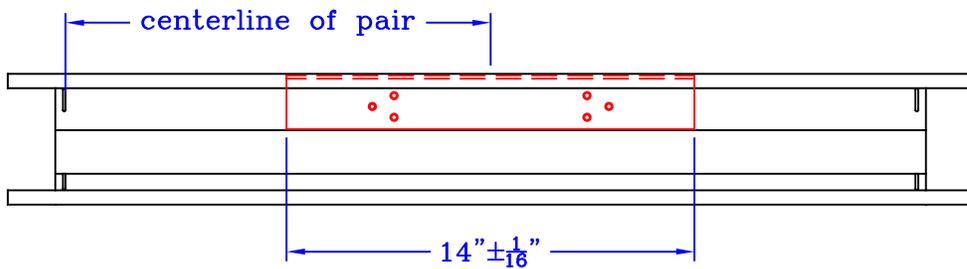
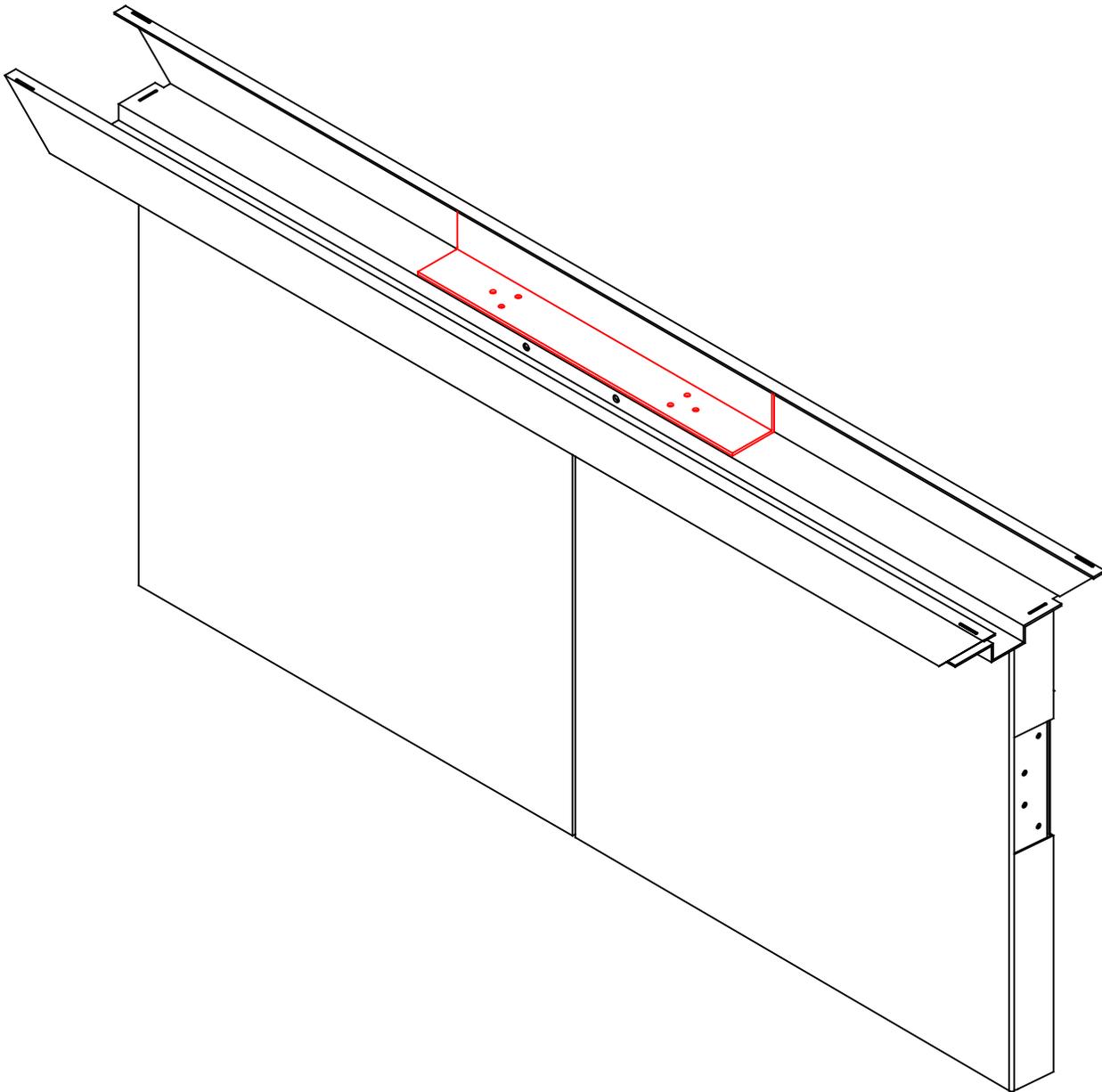
Projection welded



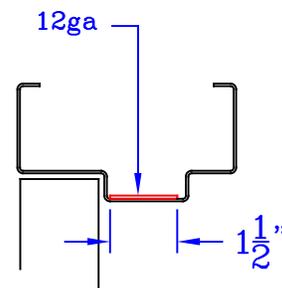
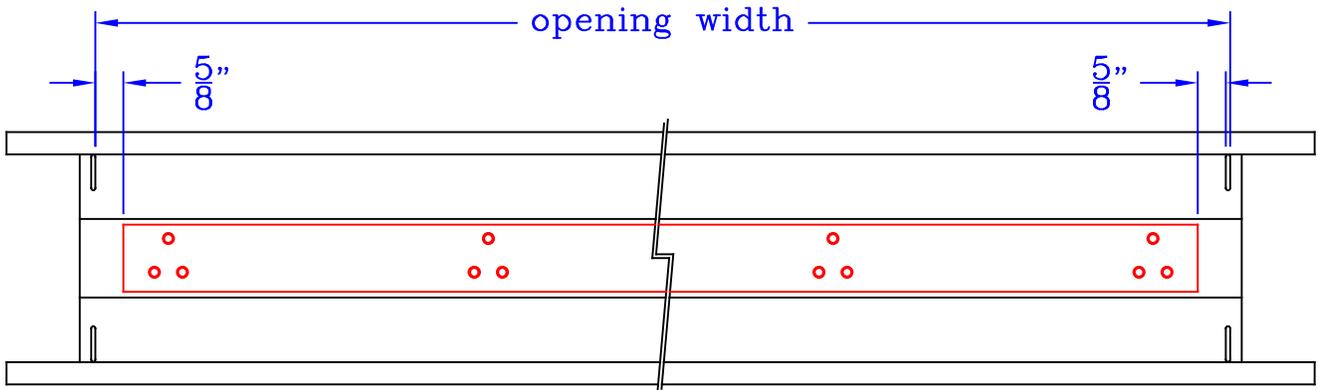
**Full width full sleeve closer reinforcement, 12ga**  
Projection welded



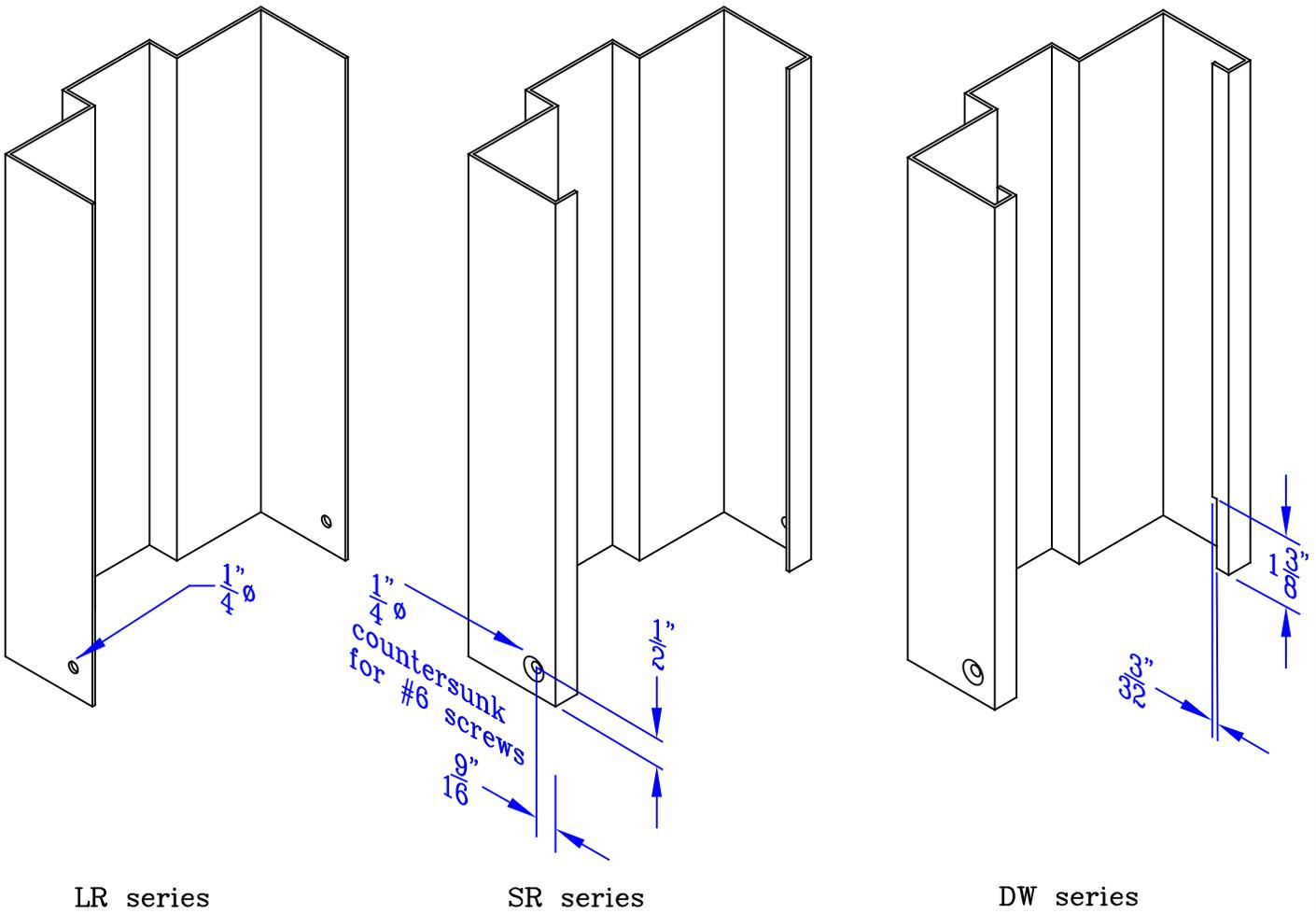
**Face mounted coordinator reinforcement, 12ga**  
Projection welded



**Soffit mounted coordinator reinforcement, 12ga**  
Projection welded



**Screw base anchor**



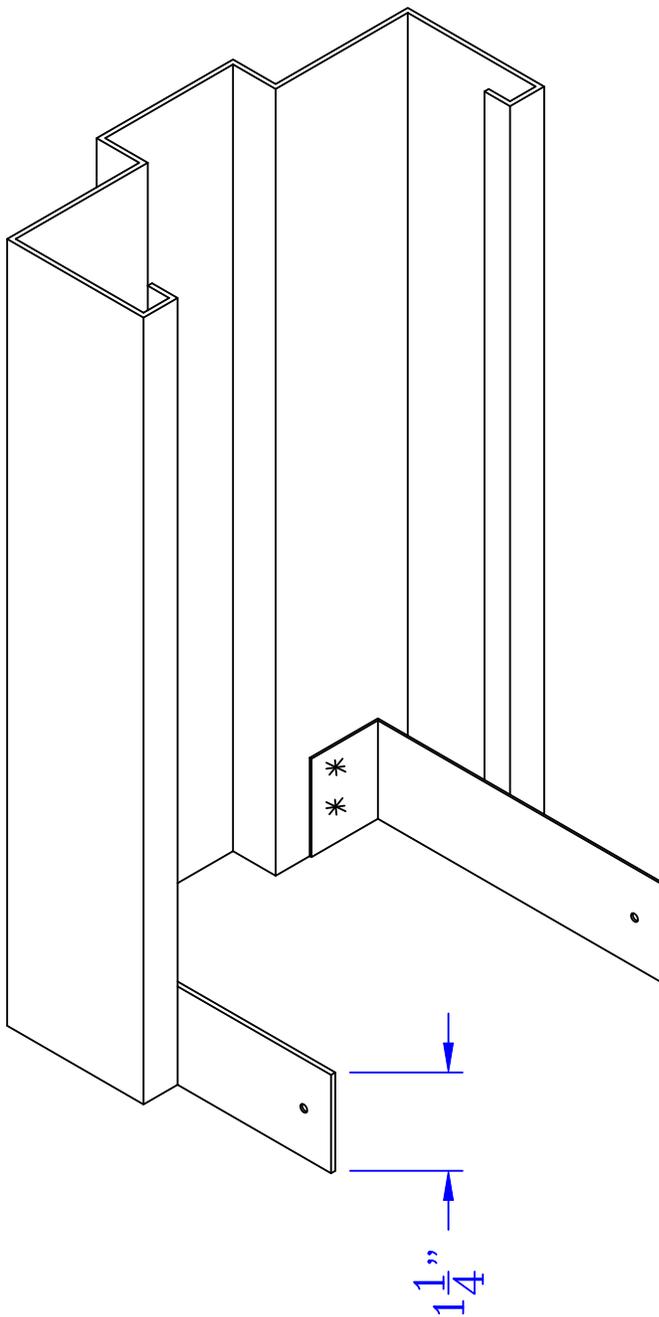
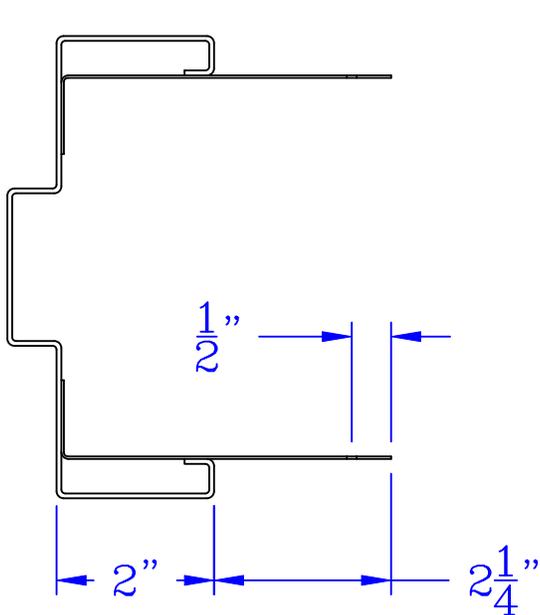
Anchors - KD Frames

Fasteners by others, use #6 drywall screws.

SBA

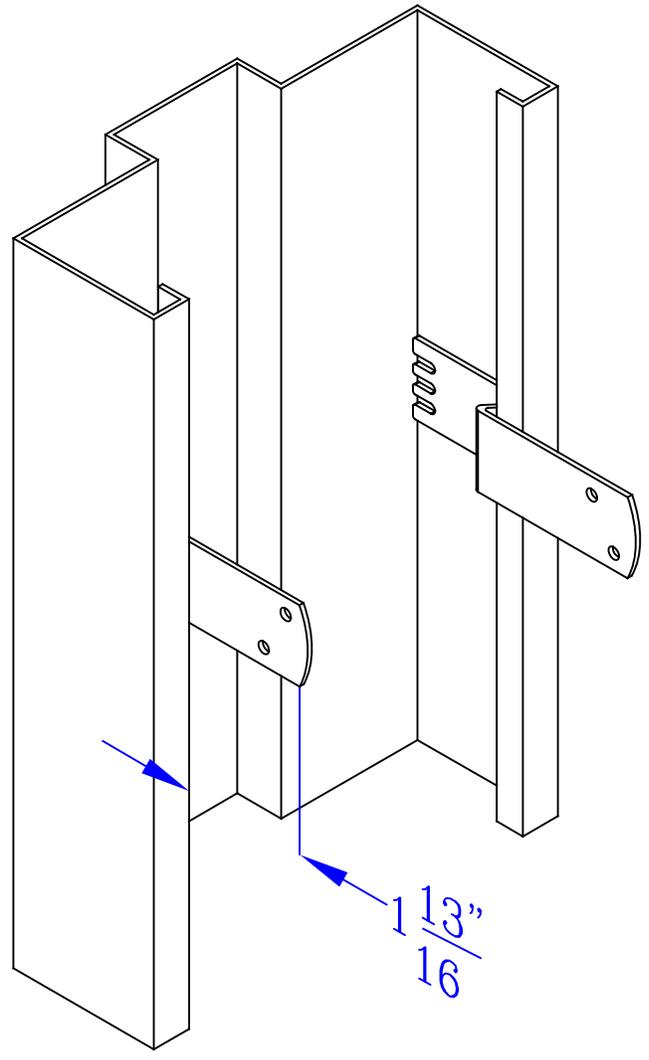
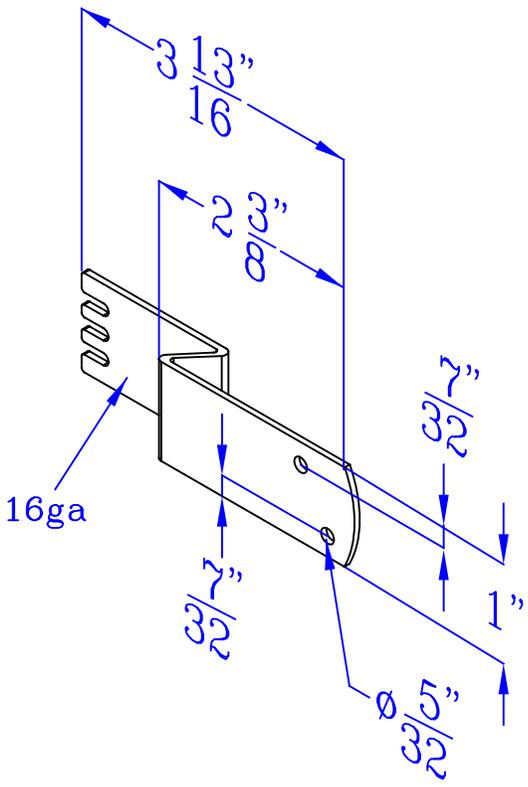
**Drywall strap anchor, 18ga**

Spot welded



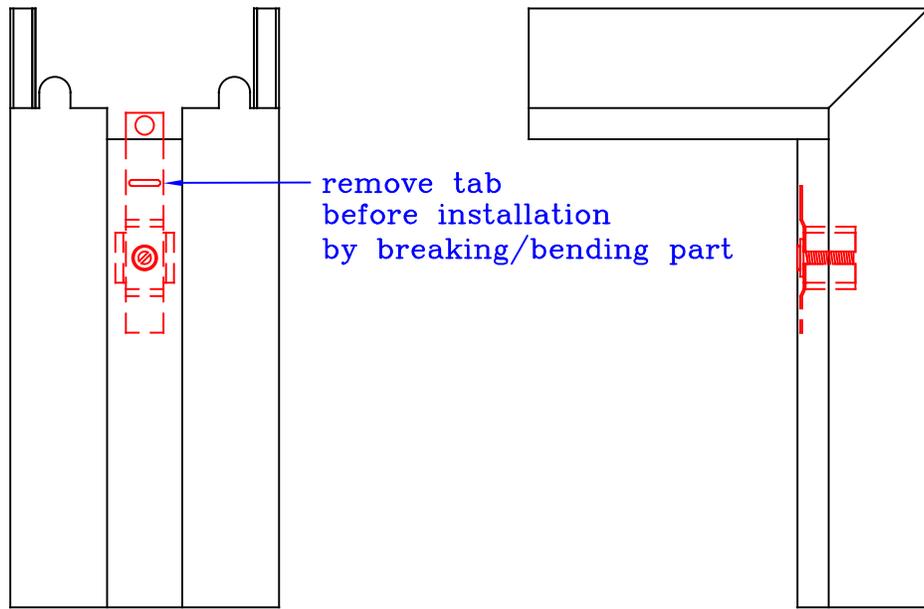
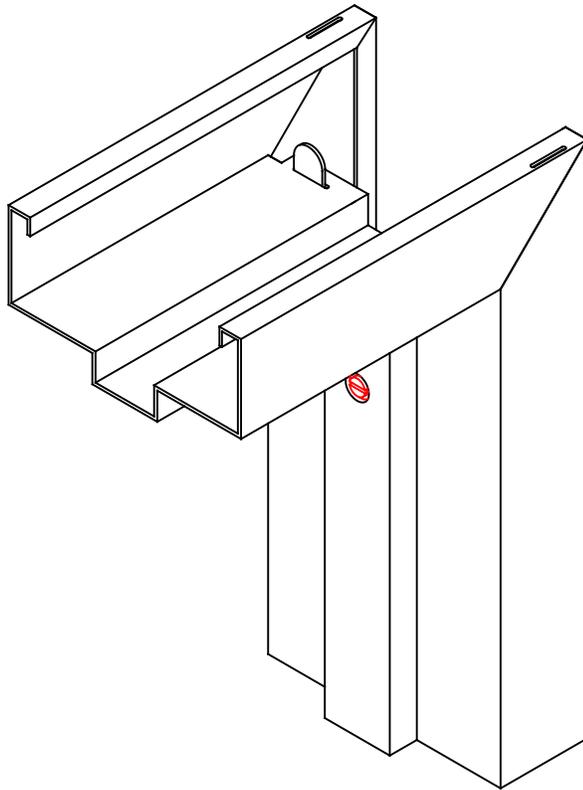
\*at 5/8" from returns if requested on pre-drywall frame

**Snap in anchor for drywall partition, 16ga**  
 Shipped loose



DW/DR series with 2" face and 16ga frame only.  
 Must order 2 pieces for a full anchor

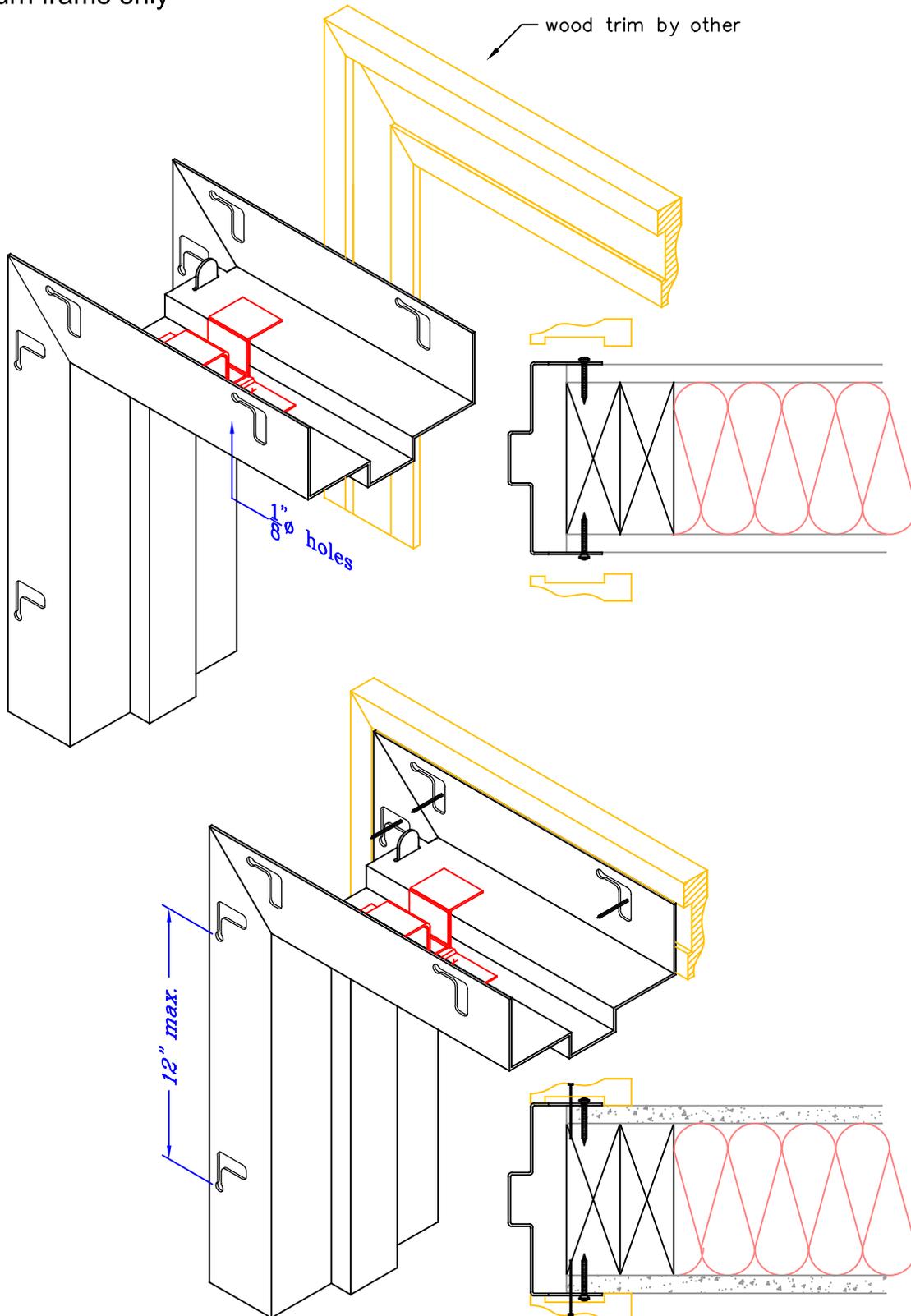
**Compression anchor, 18/20ga**  
Spot welded



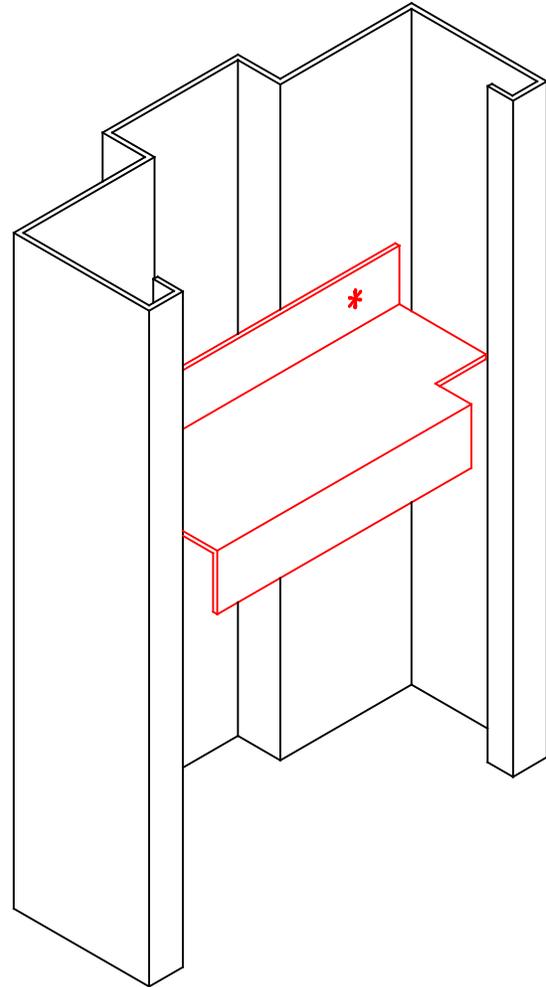
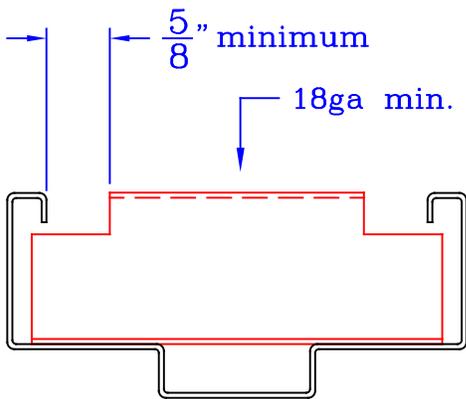
remove tab  
before installation  
by breaking/bending part

By default at knock down frames.  
Additional CPA at head when 4" face and/or LR series.  
2 of in width from 8-3/4"JD and up.

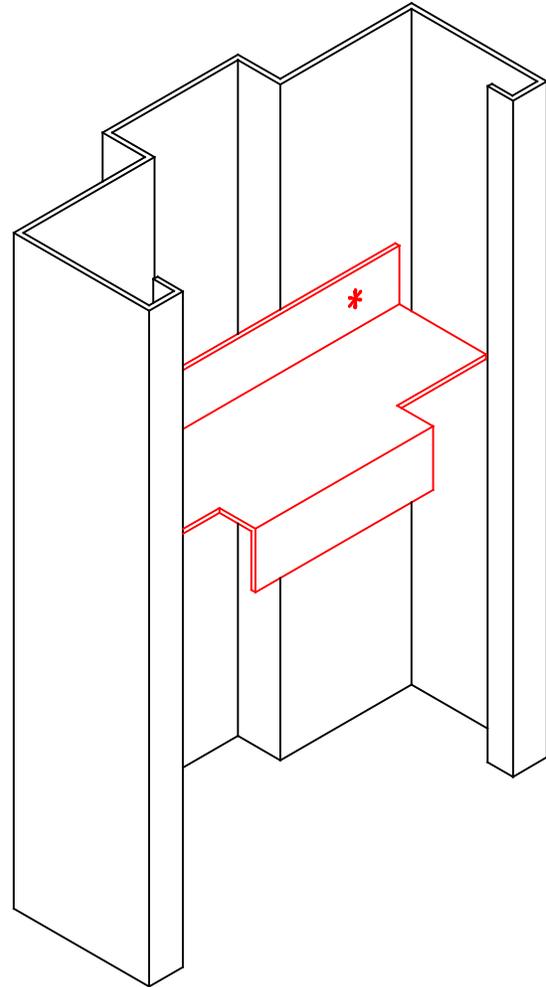
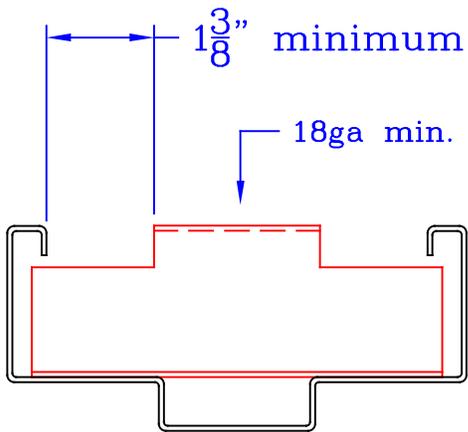
**Wood trim prep**  
Less return frame only



**"Z" bracket anchor**  
Spot welded

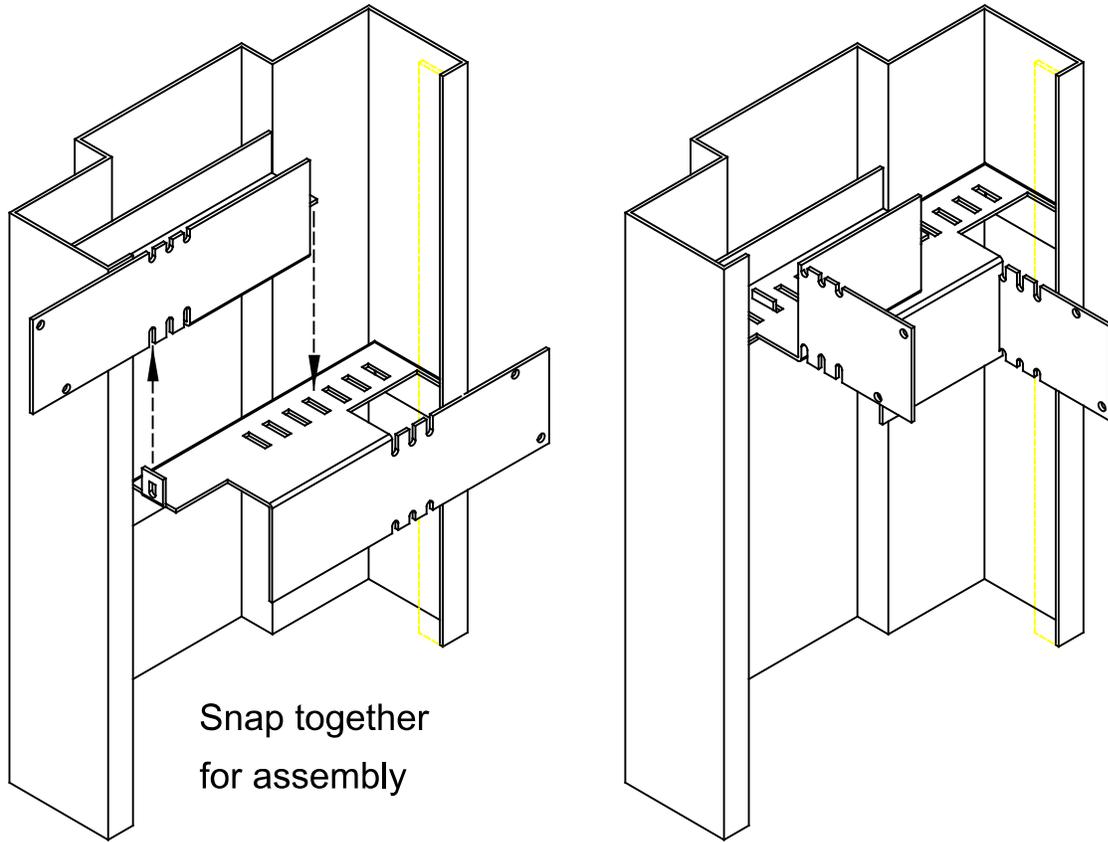


**"Z" bracket anchor for double layer of dryall**  
Spot welded

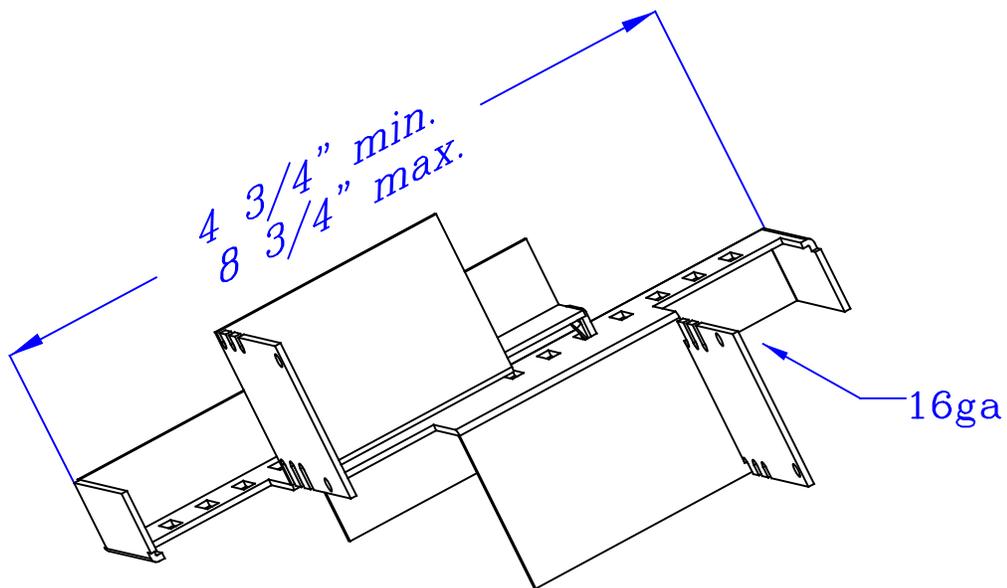


### Snap in for wood and steel stud

Shipped loose

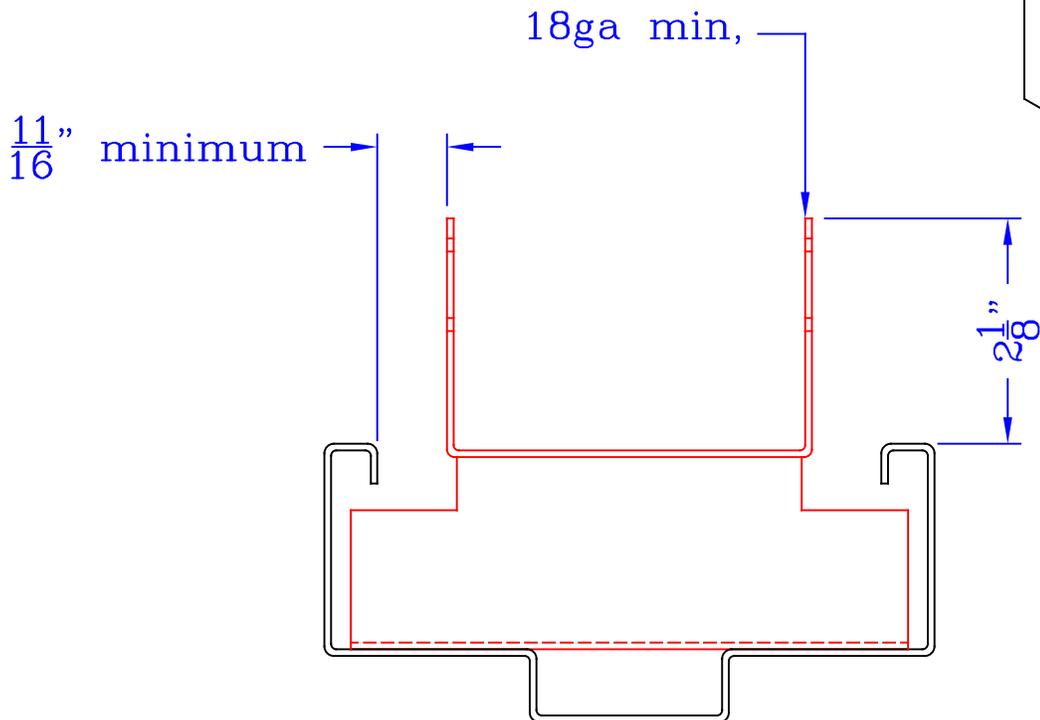
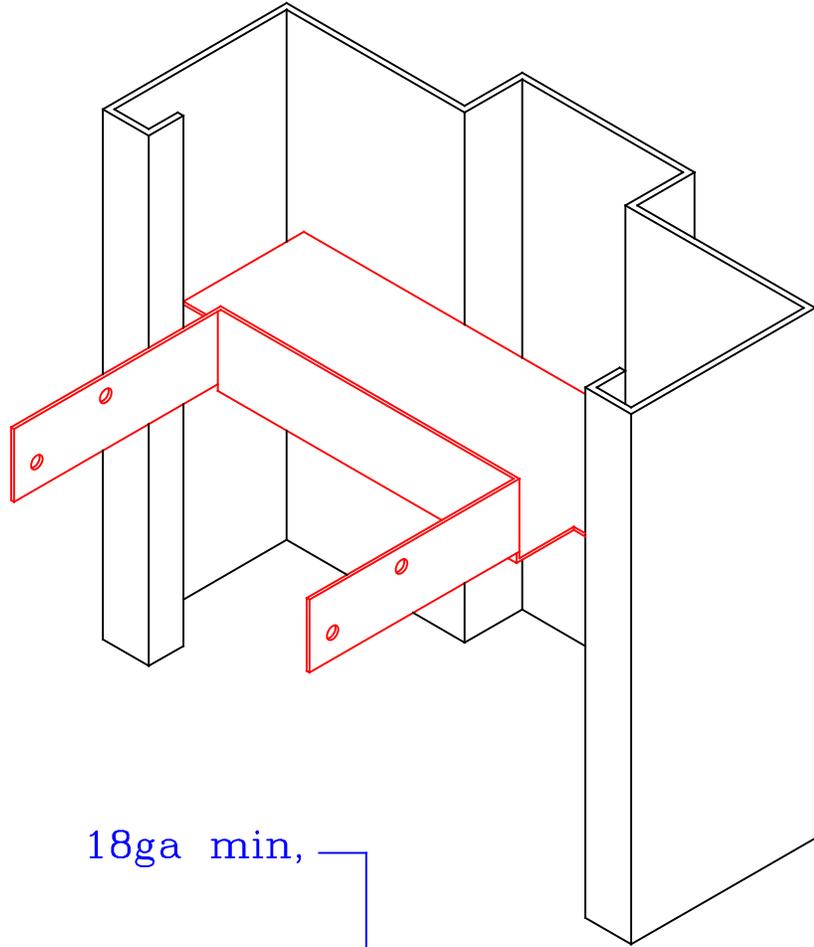


Snap together  
for assembly



Available for 4 3/4", 5 1/4", 5 3/4", 6 1/4", 6 3/4", 7 1/4", 7 3/4", 8 1/4" & 8 3/4" JD.  
Anchor can be adjusted to work with jamb depth  $\pm 1/8"$  of ones listed above.

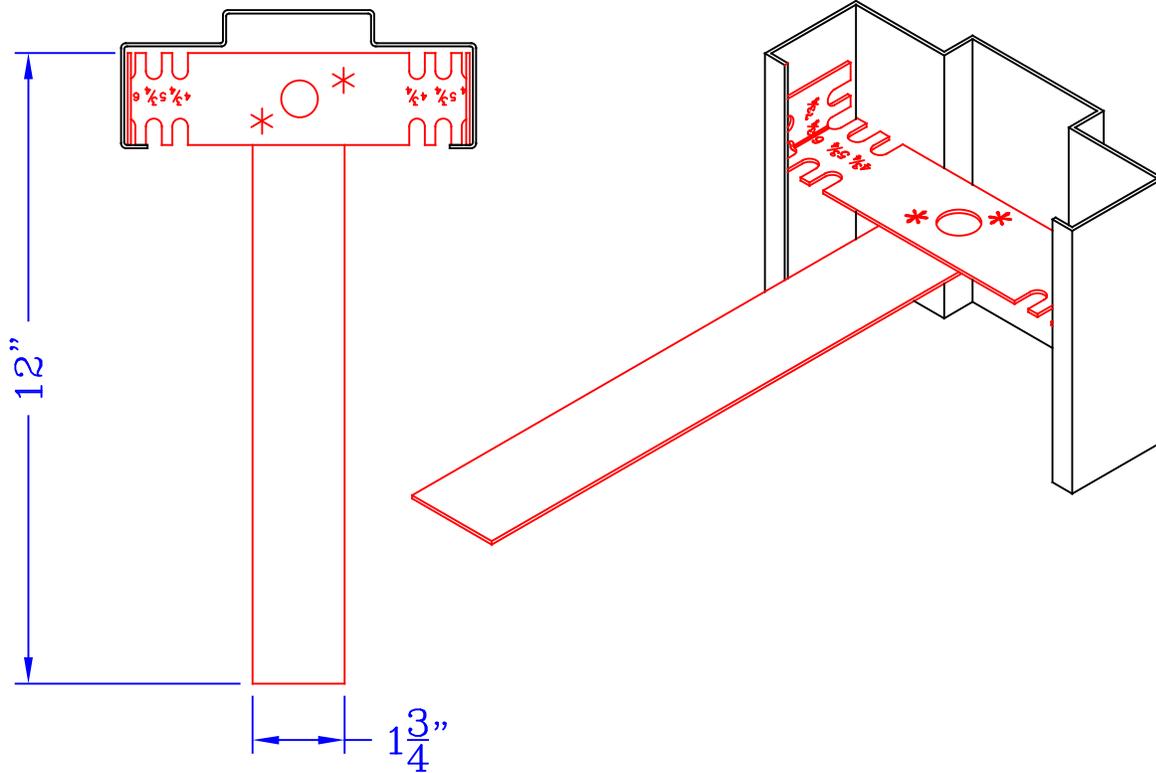
**Combination wood and steel stud anchor**  
Spot welded



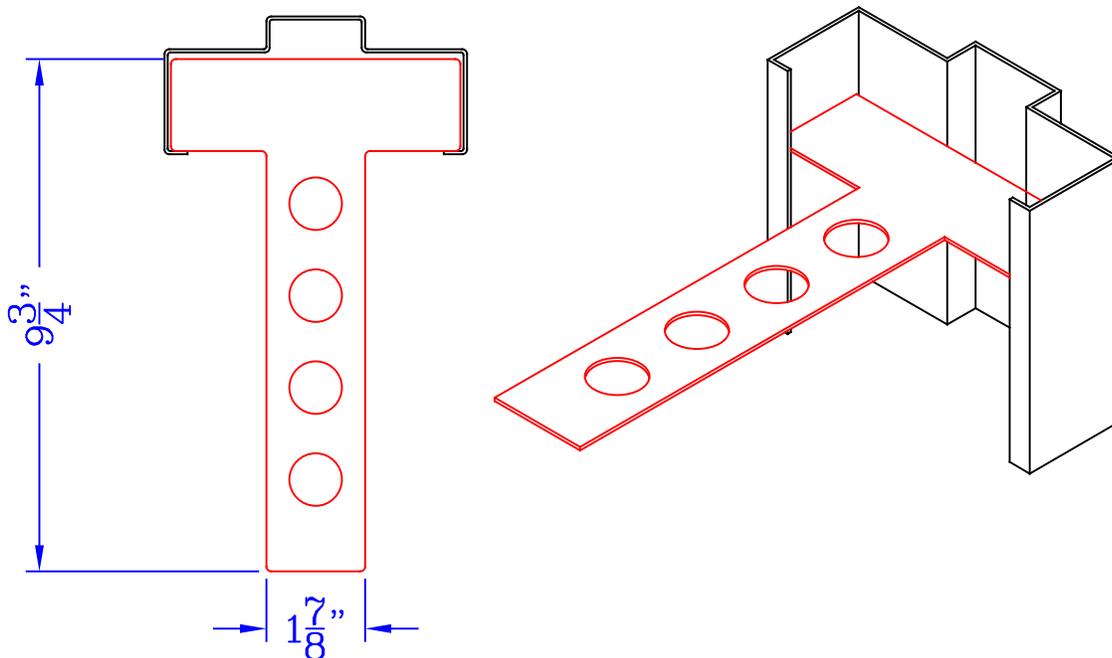
### "T" masonry anchor, 16ga

Shipped loose

From 4 3/4" to 8 3/4" JD



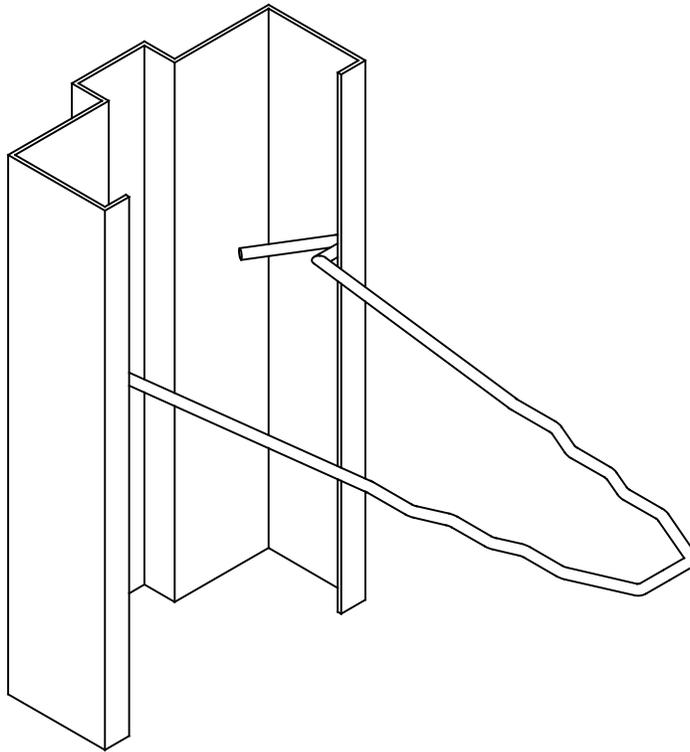
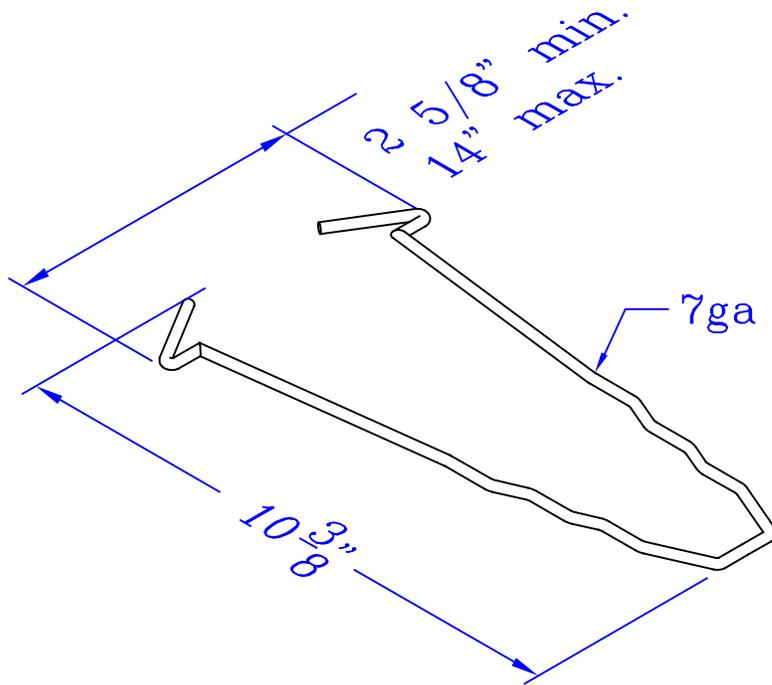
SR16 5 3/4"-4 7/8" frames



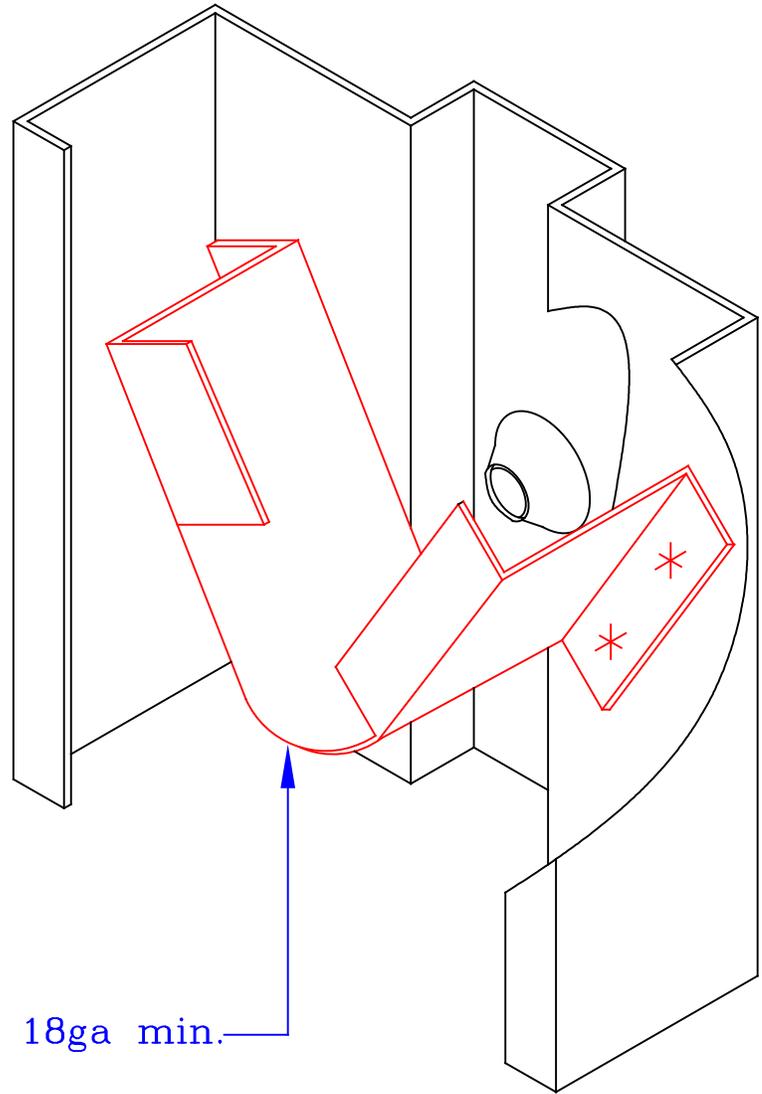
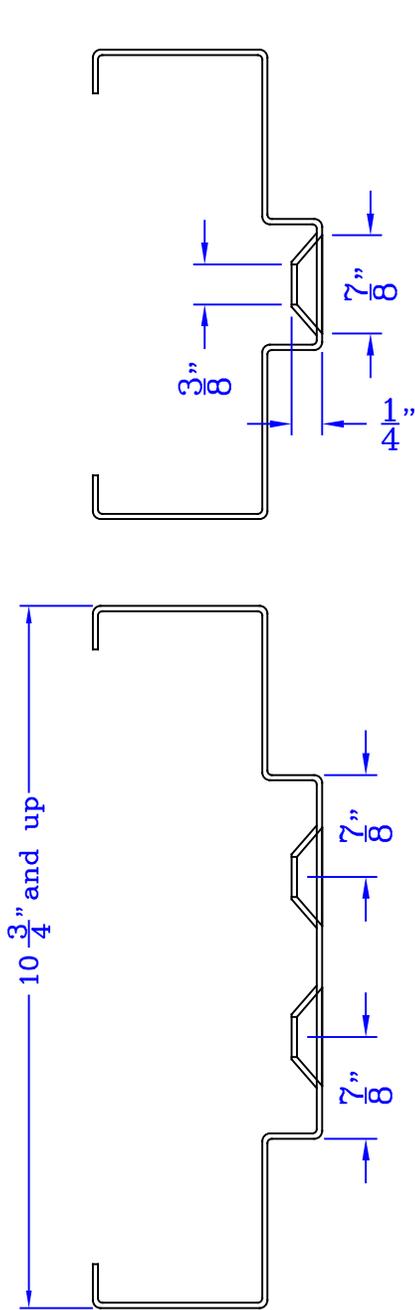
Available for DR series.

### Wire masonry anchor

Shipped loose

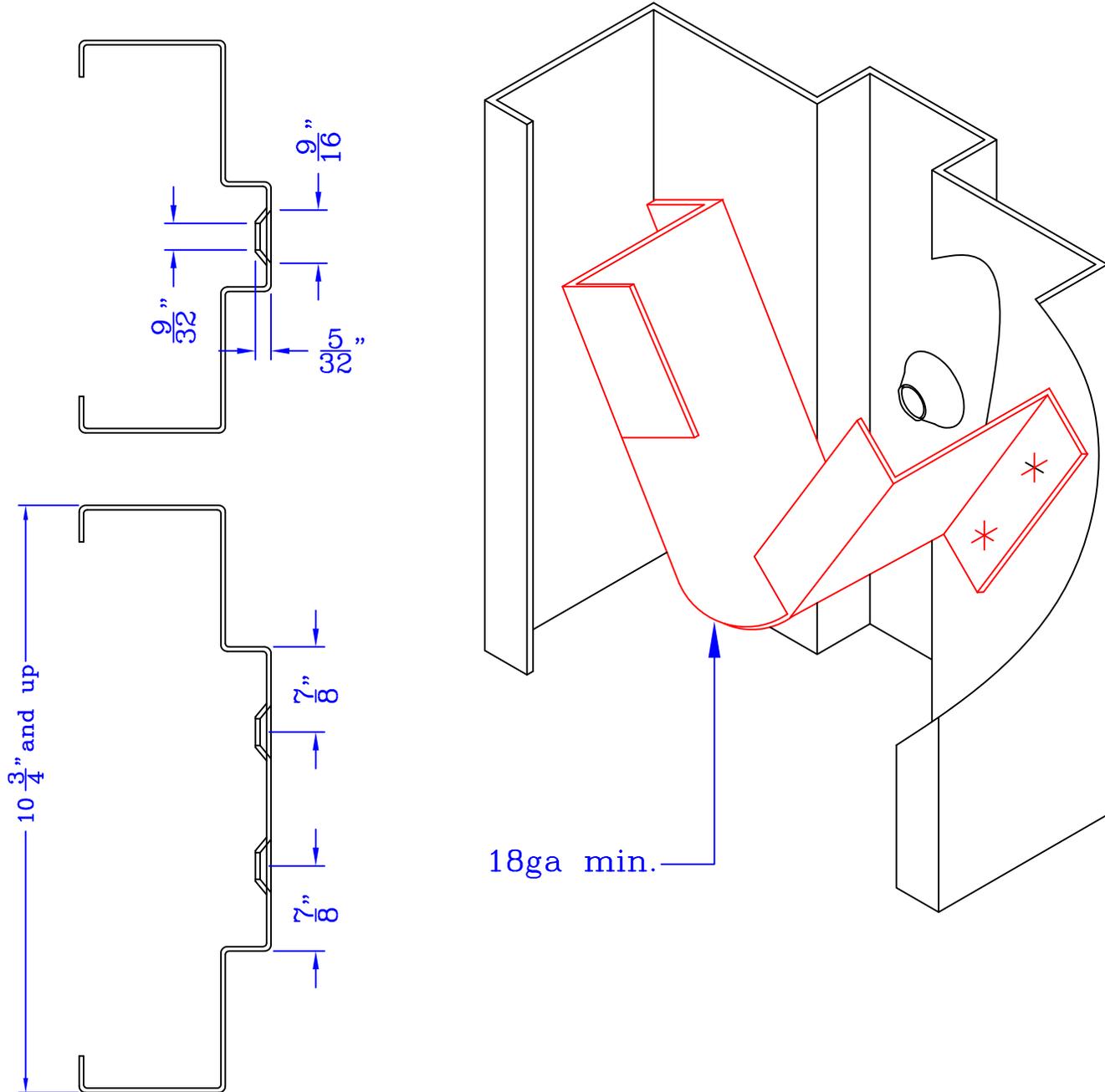


**Existing wall anchor**  
Spot welded



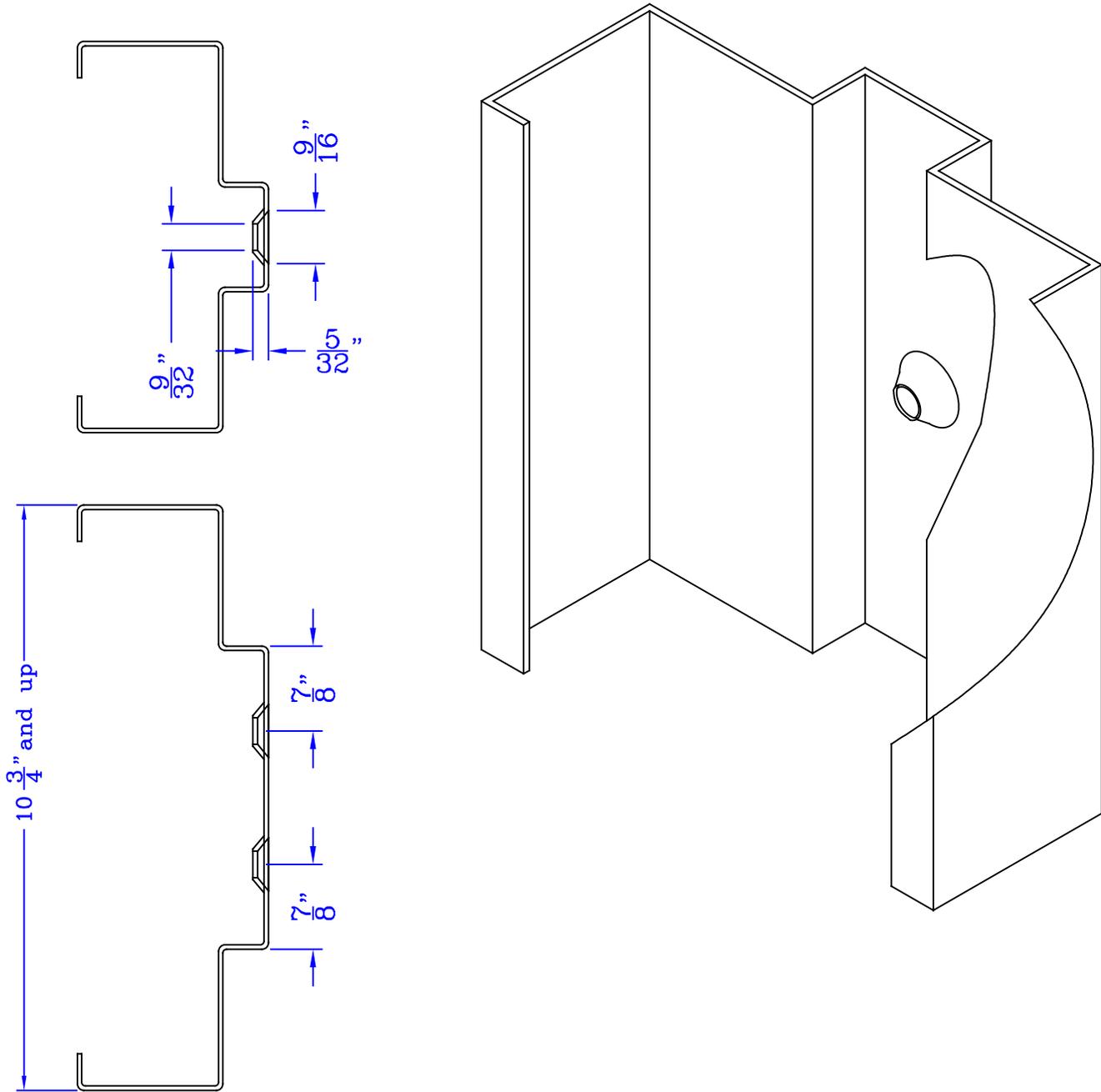
Dynabolts are optional see option DYN4 and DYN5.

**Existing wall anchor for 1/4" screw**  
Spot welded



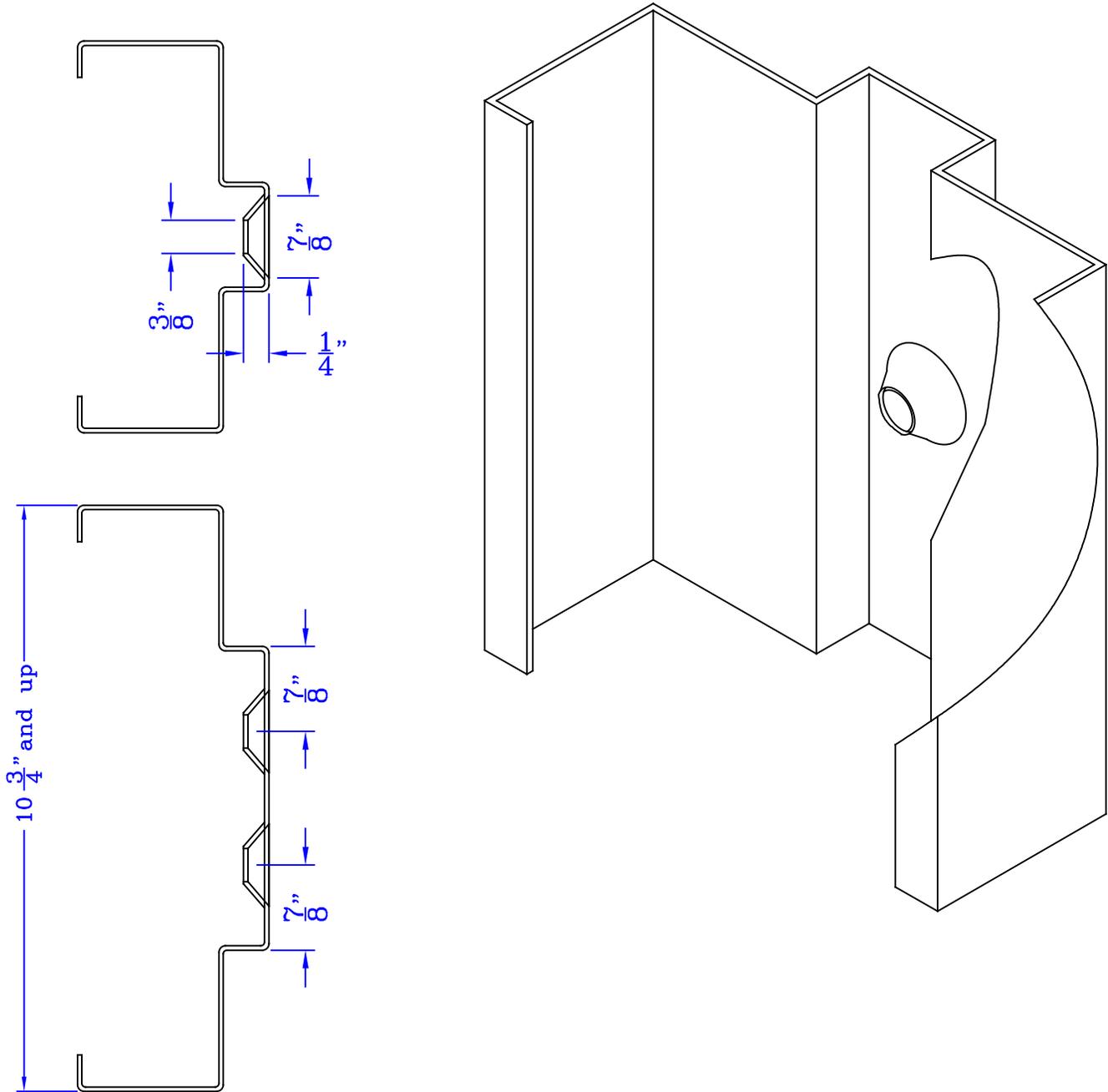
1/4" wood screws by others.

### Existing wall anchor for 1/4" screw without reinforcement



1/4" wood screws by others.

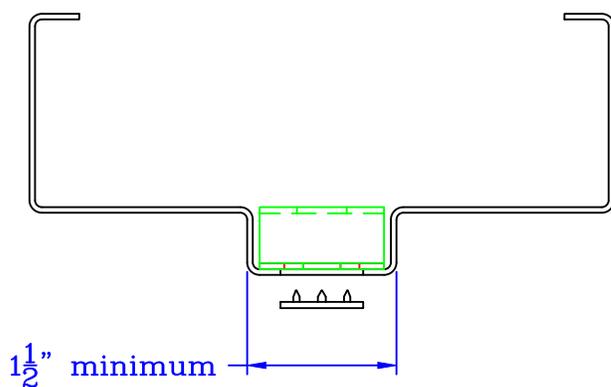
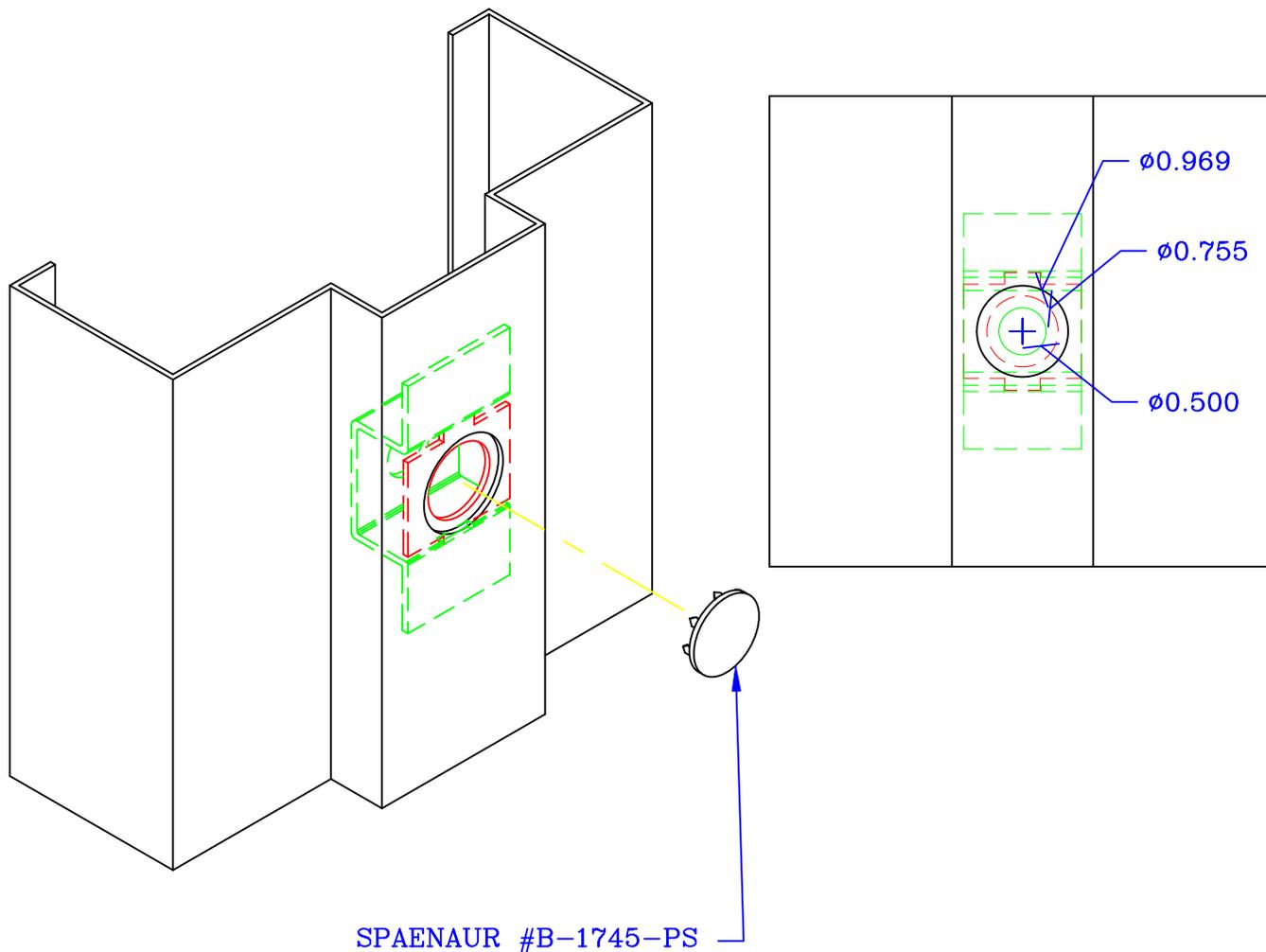
## Existing wall anchor without reinforcement



Dynabolts are optional see option DYN4 and DYN5.

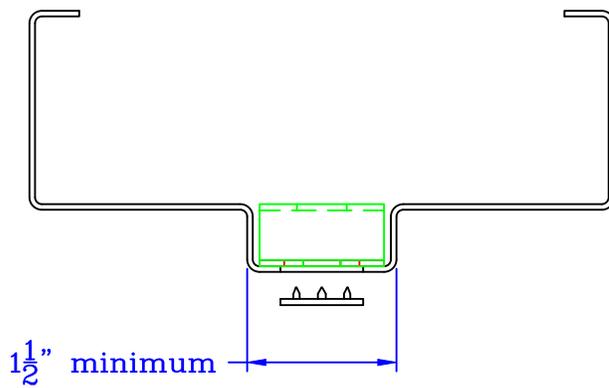
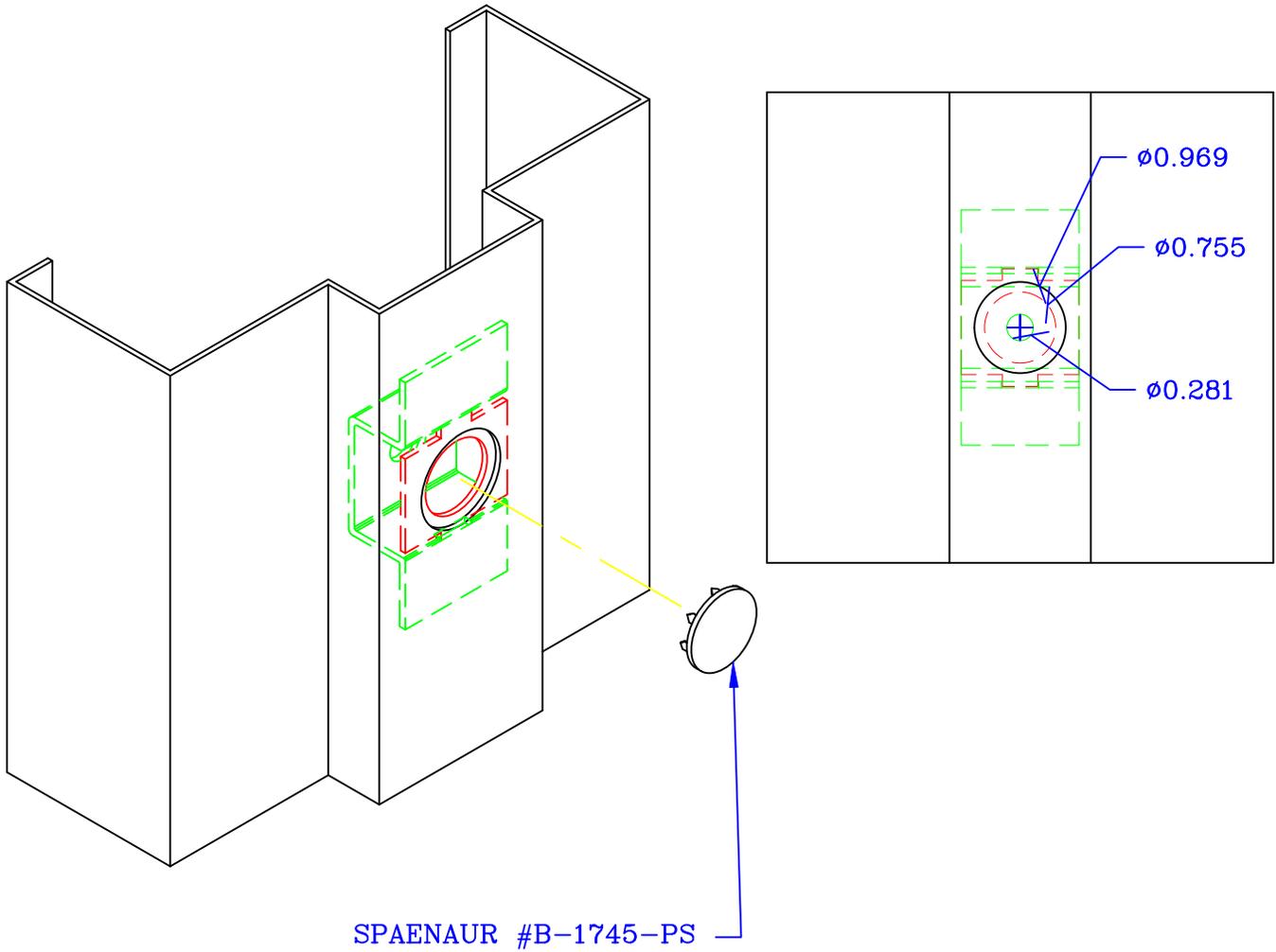
**Existing wall anchor with plug**

Spot welded



2 sets of anchors for 10 3/4" JD and up.  
Dynabolts are optional see option DYN4 and DYN5.

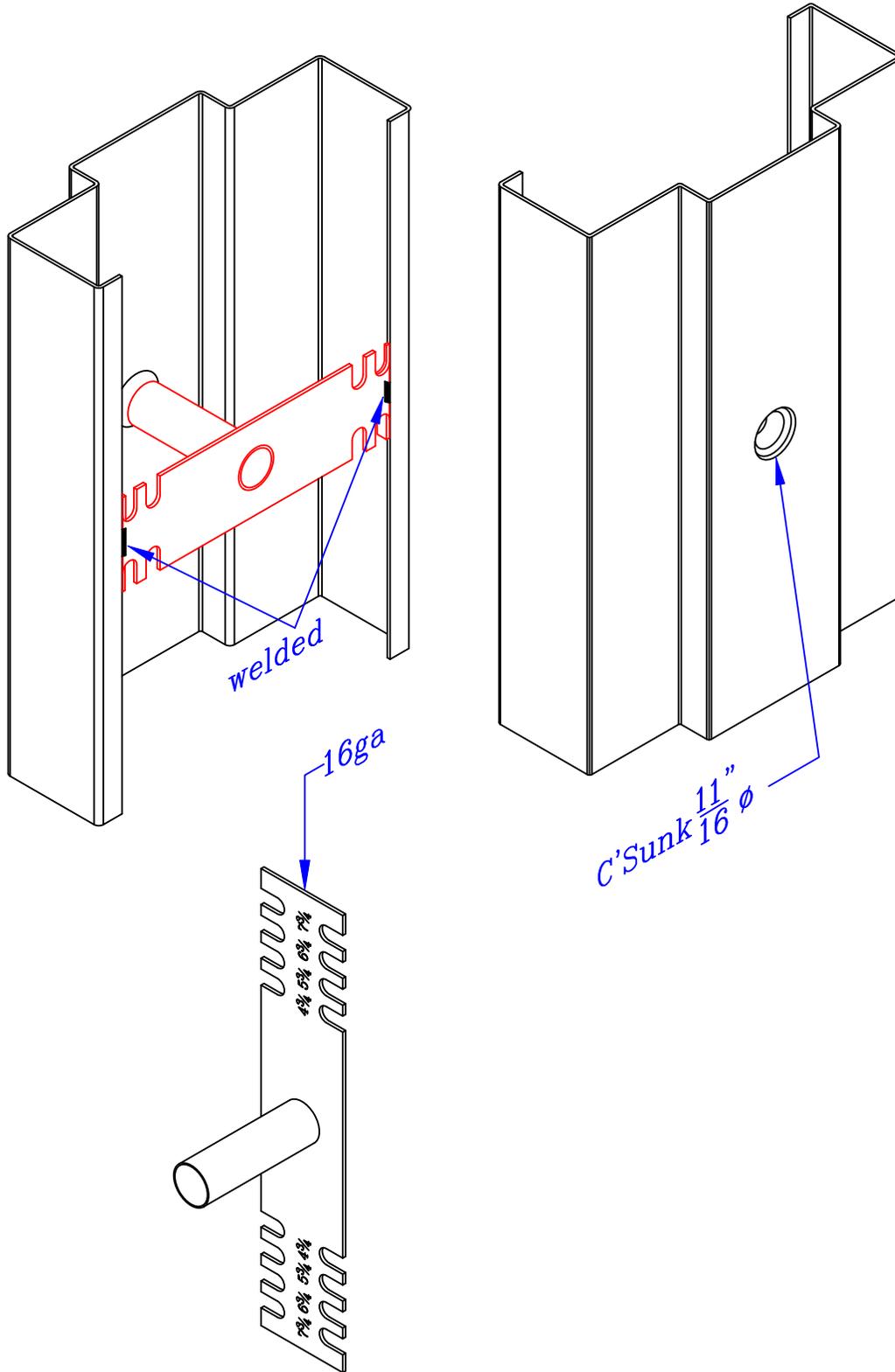
**Existing wall anchor for 1/4" screw with plug**  
Spot welded



2 sets of anchors for 10 3/4" JD and up.  
1/4" wood screws by others.

### Existing wall anchor with tube

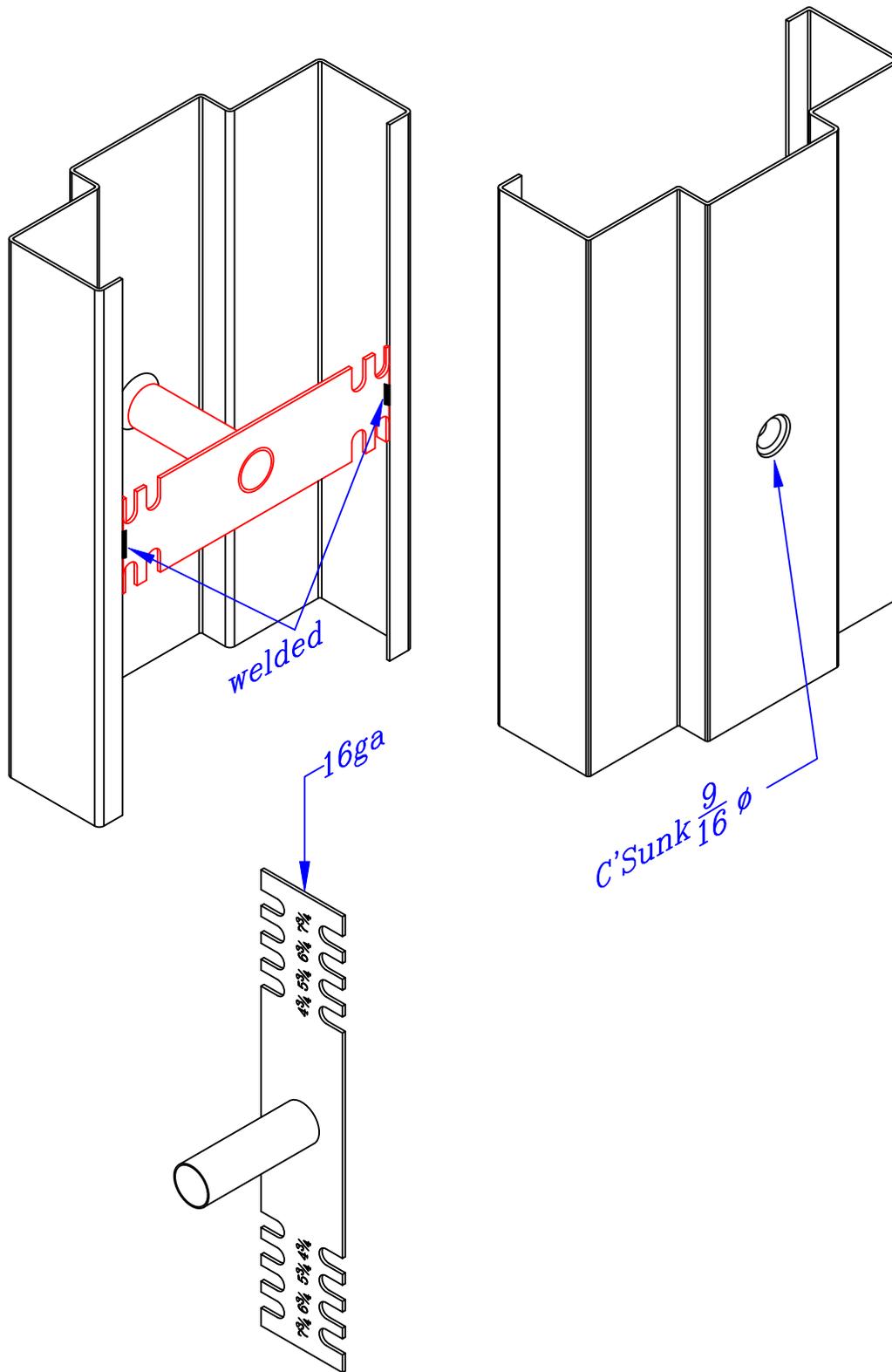
Tack welded



2 sets of anchors for 10 3/4" JD and up.  
Dynabolts are optional see option DYN4 and DYN5.

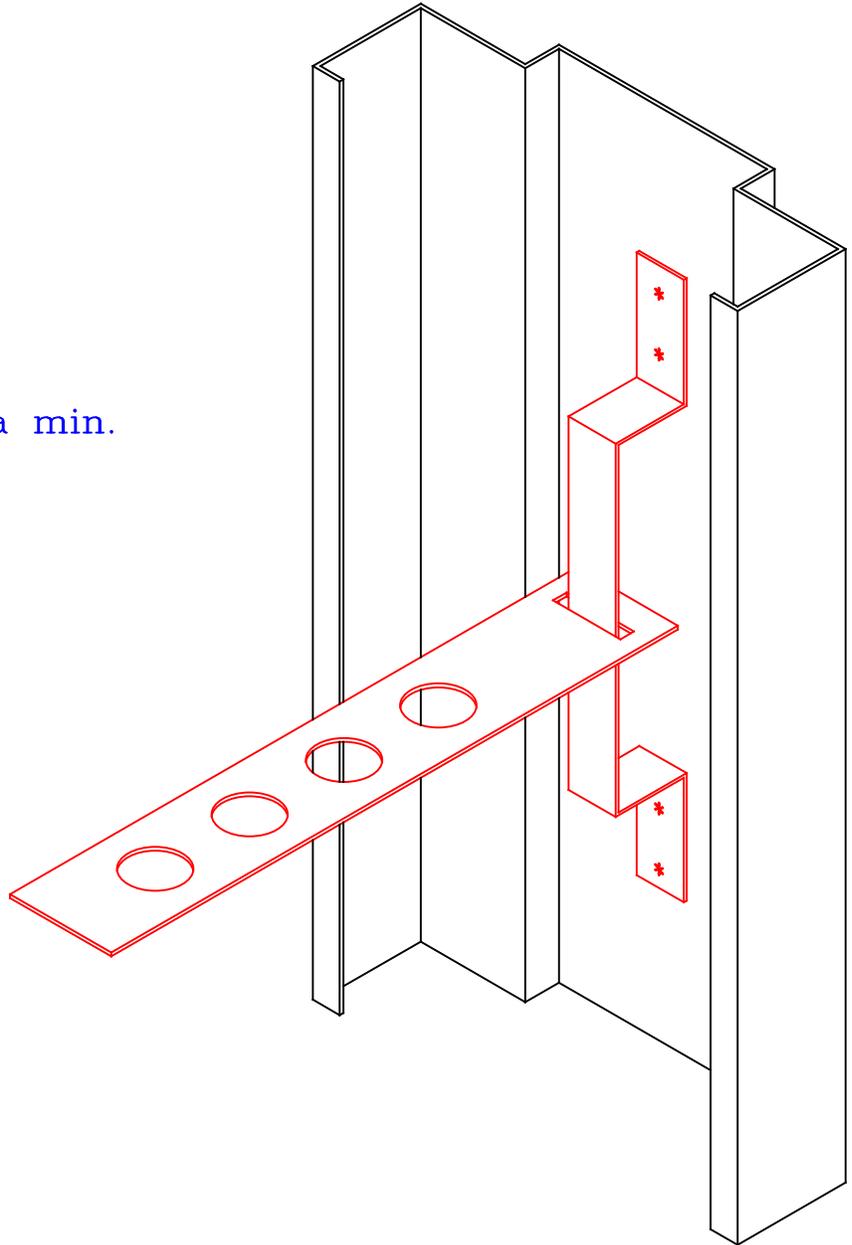
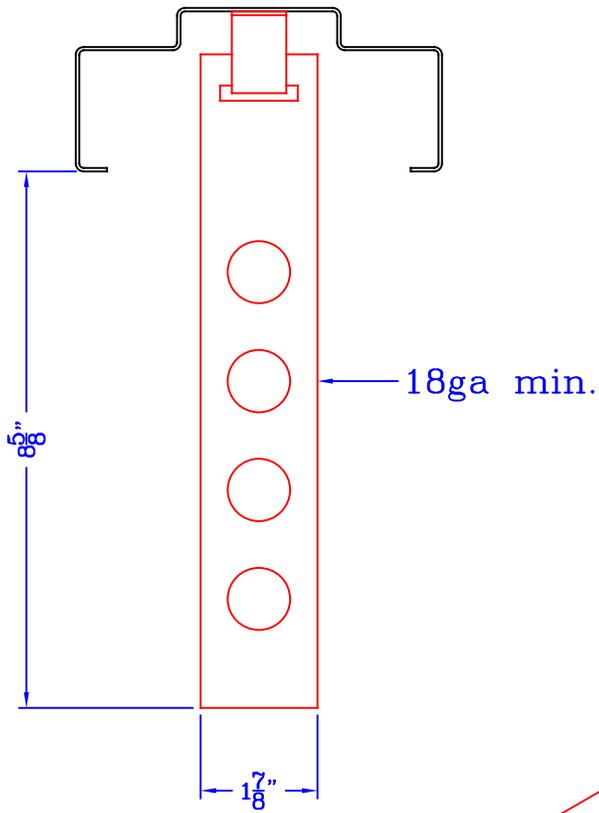
### Existing wall anchor for 1/4" screw with tube

Tack welded

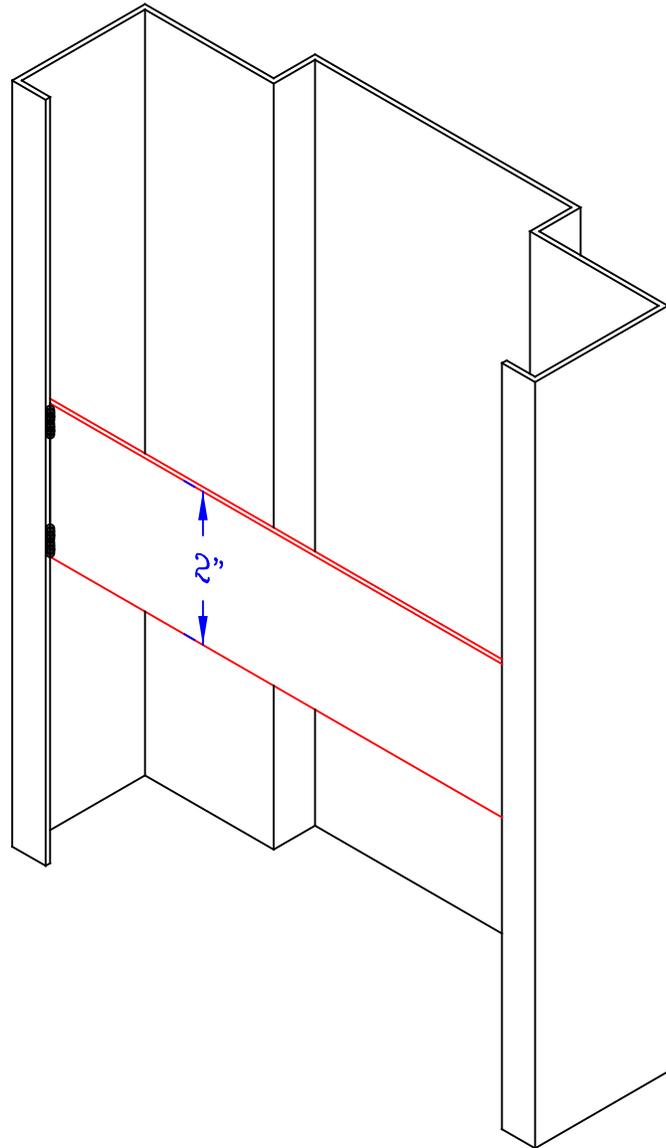
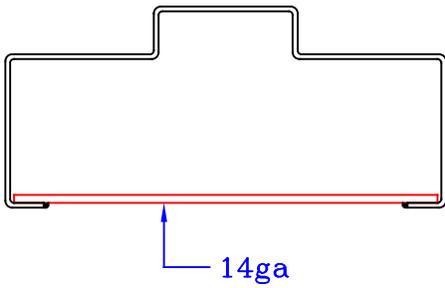


2 sets of anchors for 10 3/4" JD and up.  
1/4" wood screws by others.

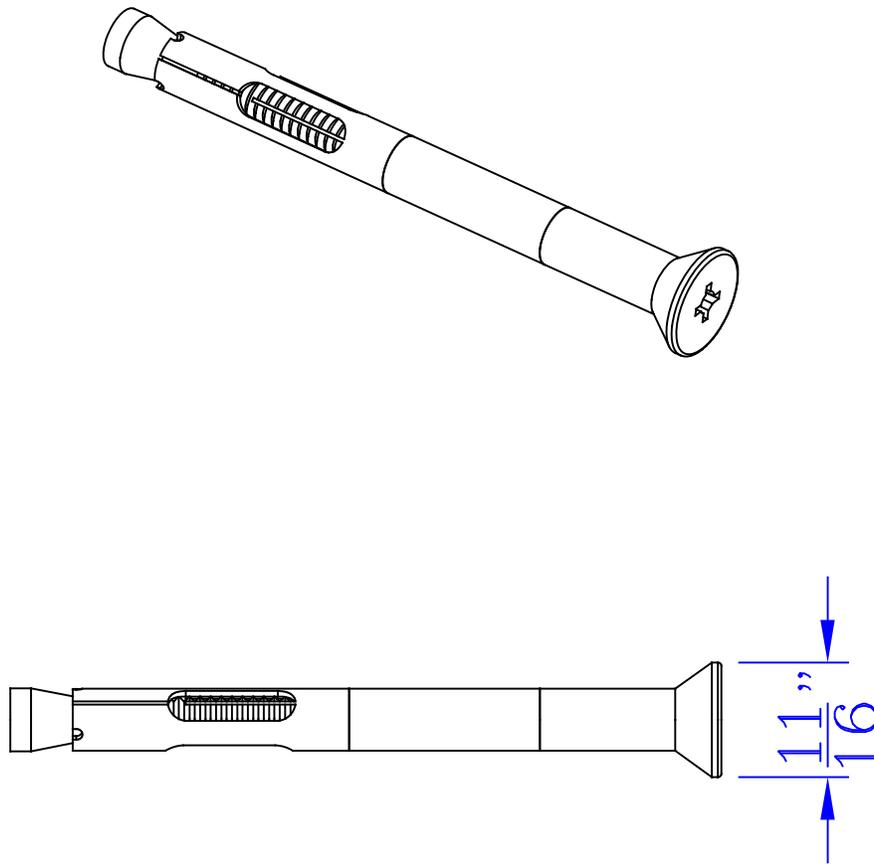
**Adjustable "T" anchor**  
Spot welded



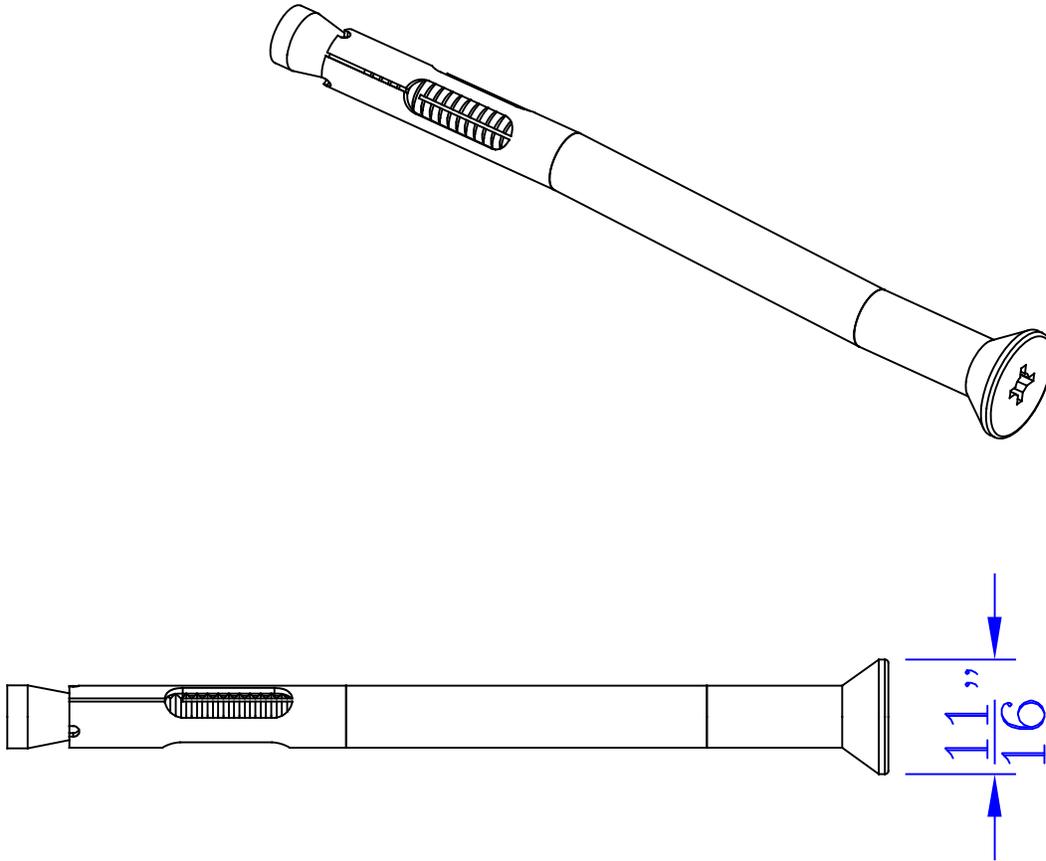
**Metal builder anchor**  
tack welded



**4" long dynabolt for existing wall**  
ship loose

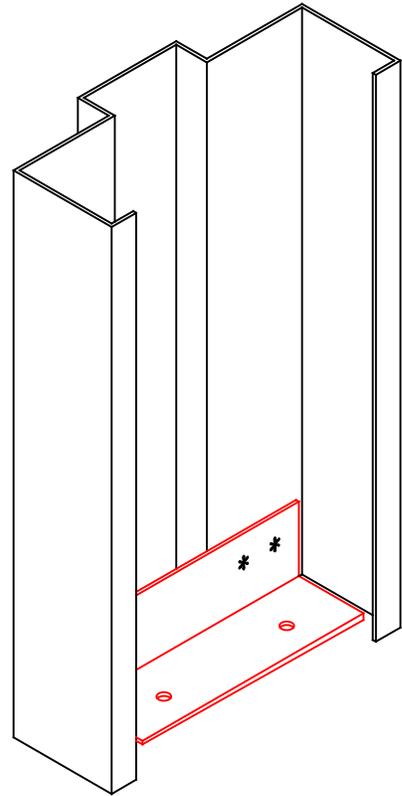
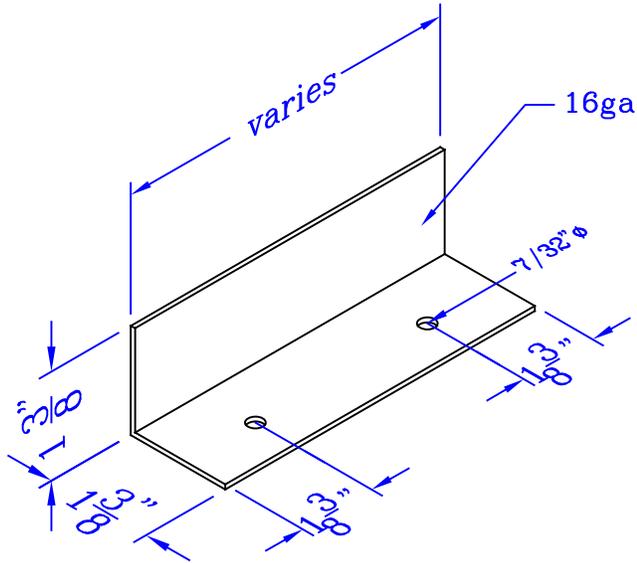


**5" long dynabolt for existing wall**  
ship loose

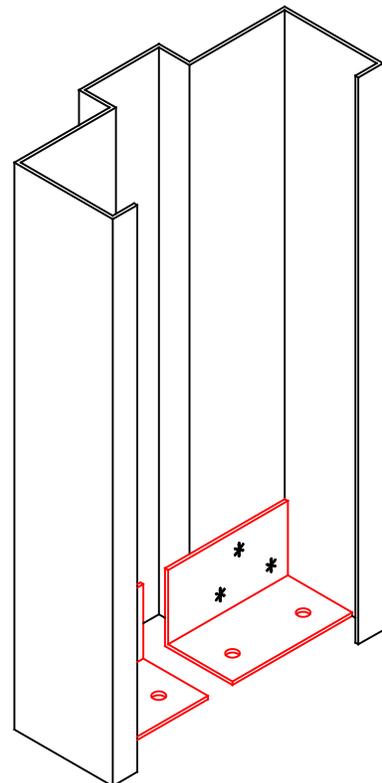
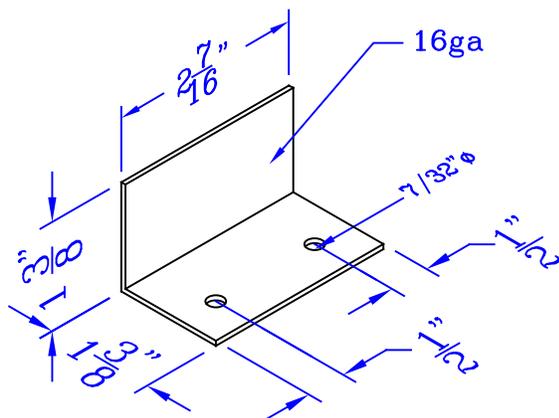


**Floor anchor**  
Spot welded

One part model  
up to 5 7/8" JD

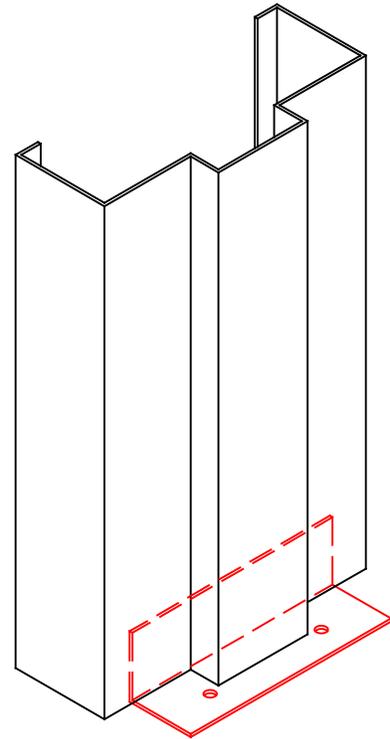
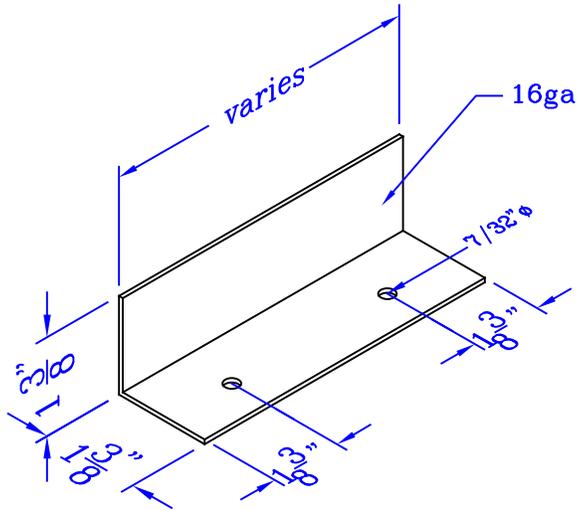


Two parts model  
6"JD and up

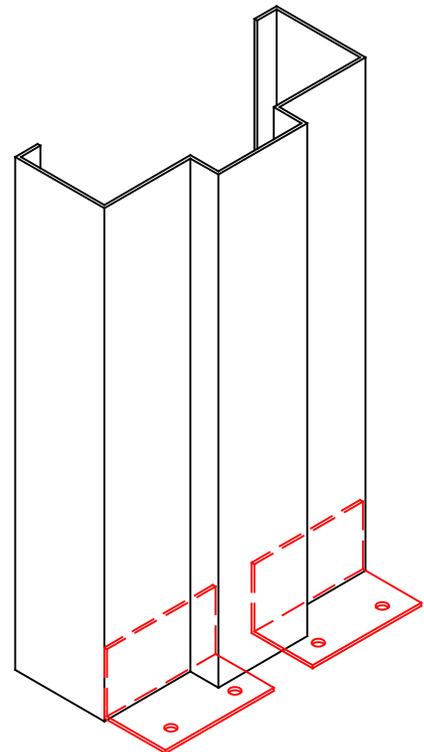
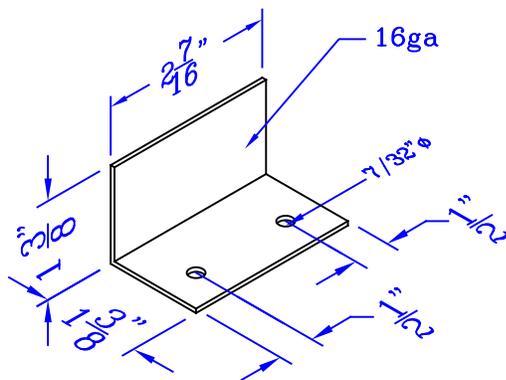


**Inverted floor anchor**  
Spot welded

One part model  
up to 5 3/8" JD

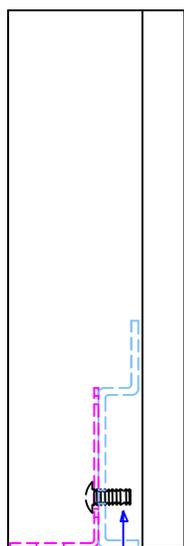


Two parts model  
5 1/2" JD and up

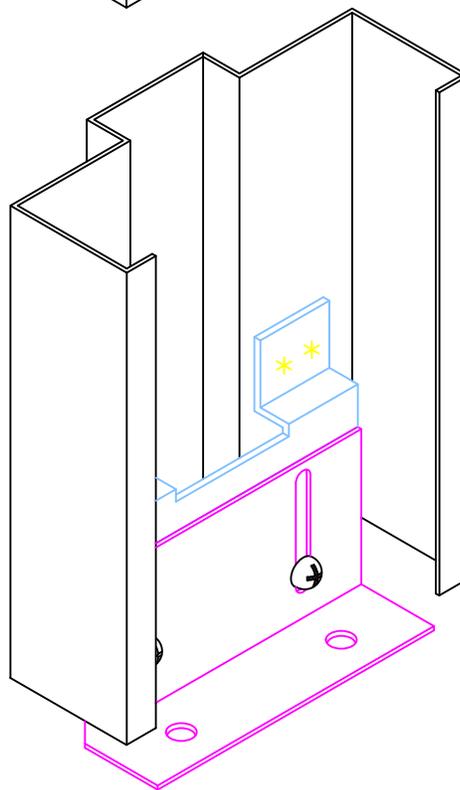
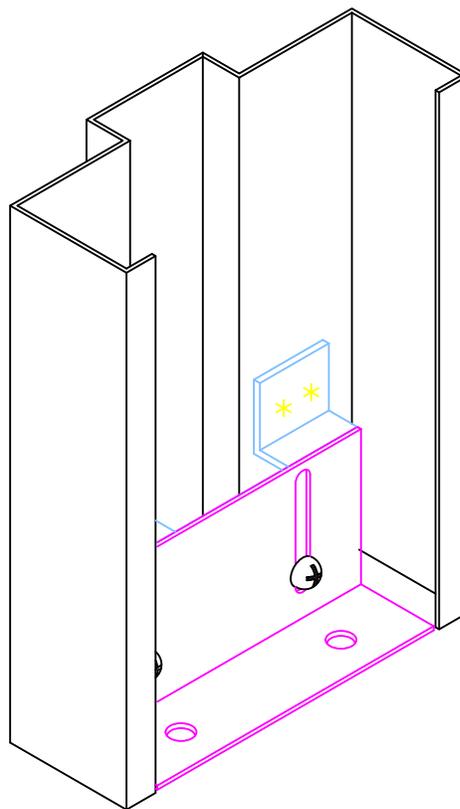
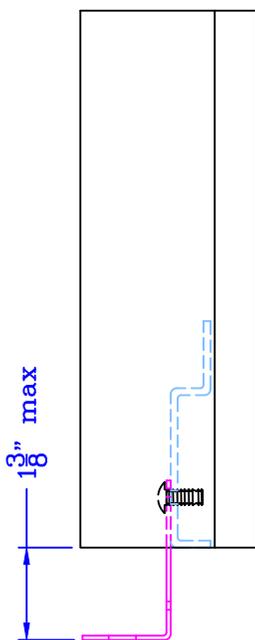


## Adjustable floor anchor, 16/12ga

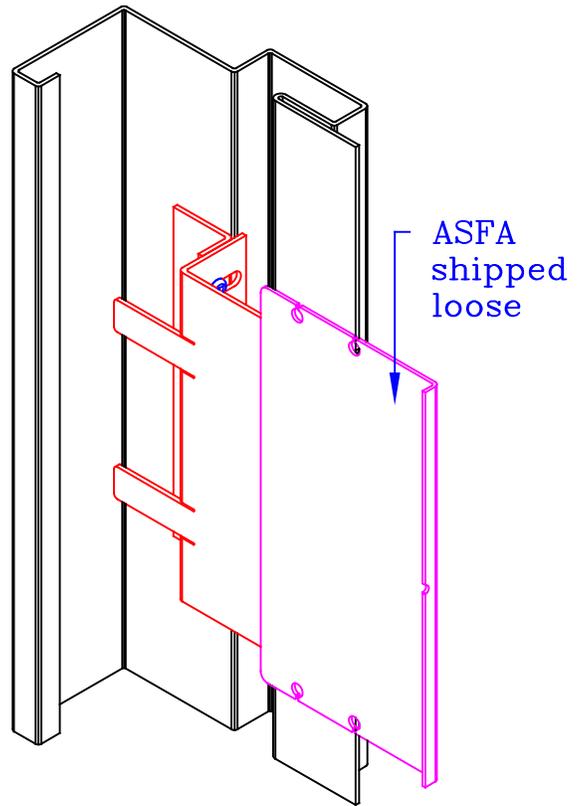
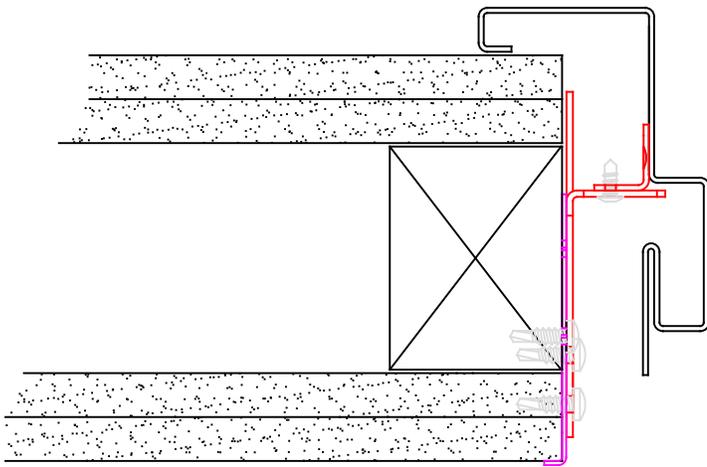
Spot welded



1/4-20 X 1/2"  
PH mech. screws



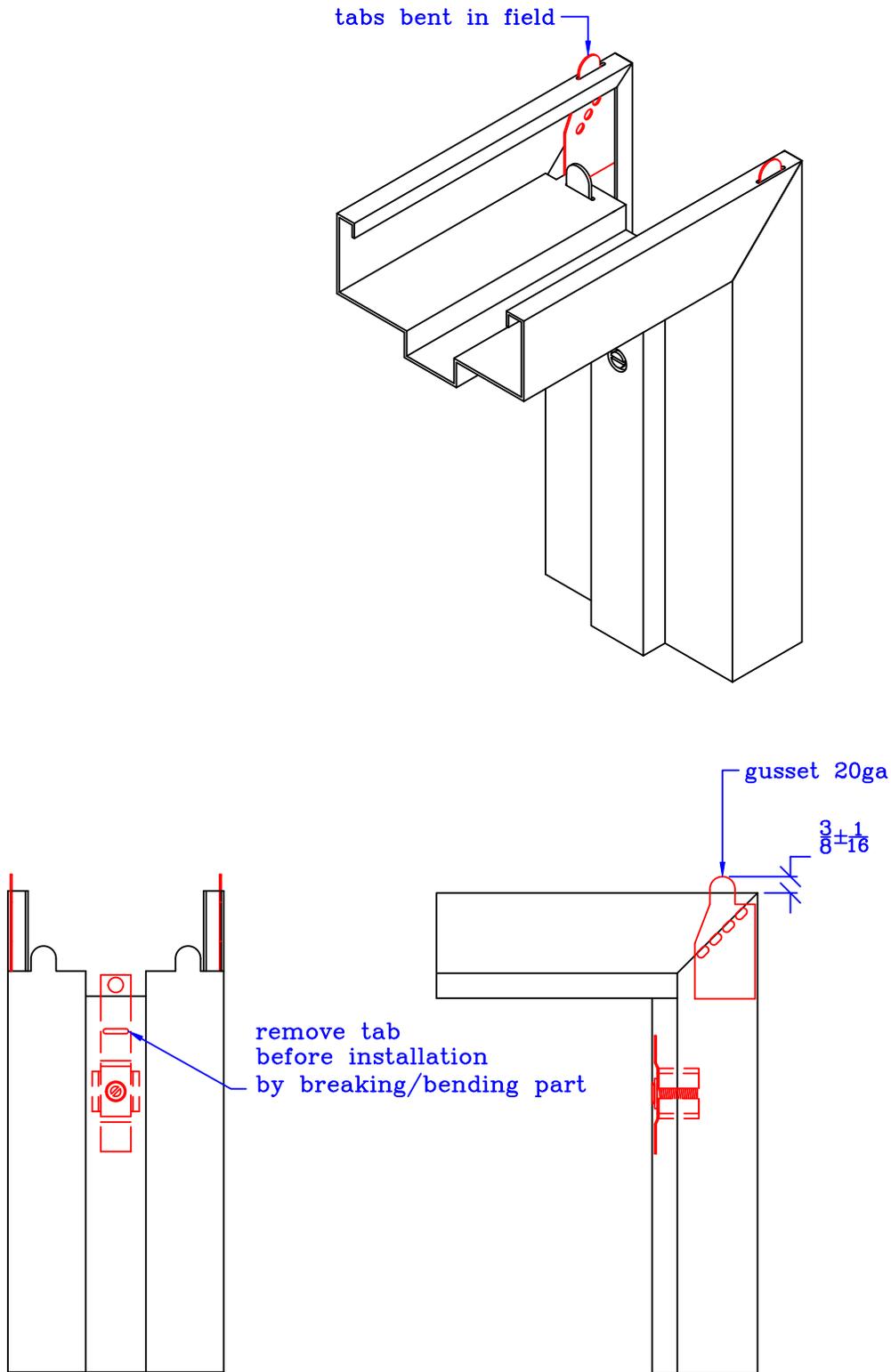
**Additional split frame anchor, 16ga**



Split Frame Anchor

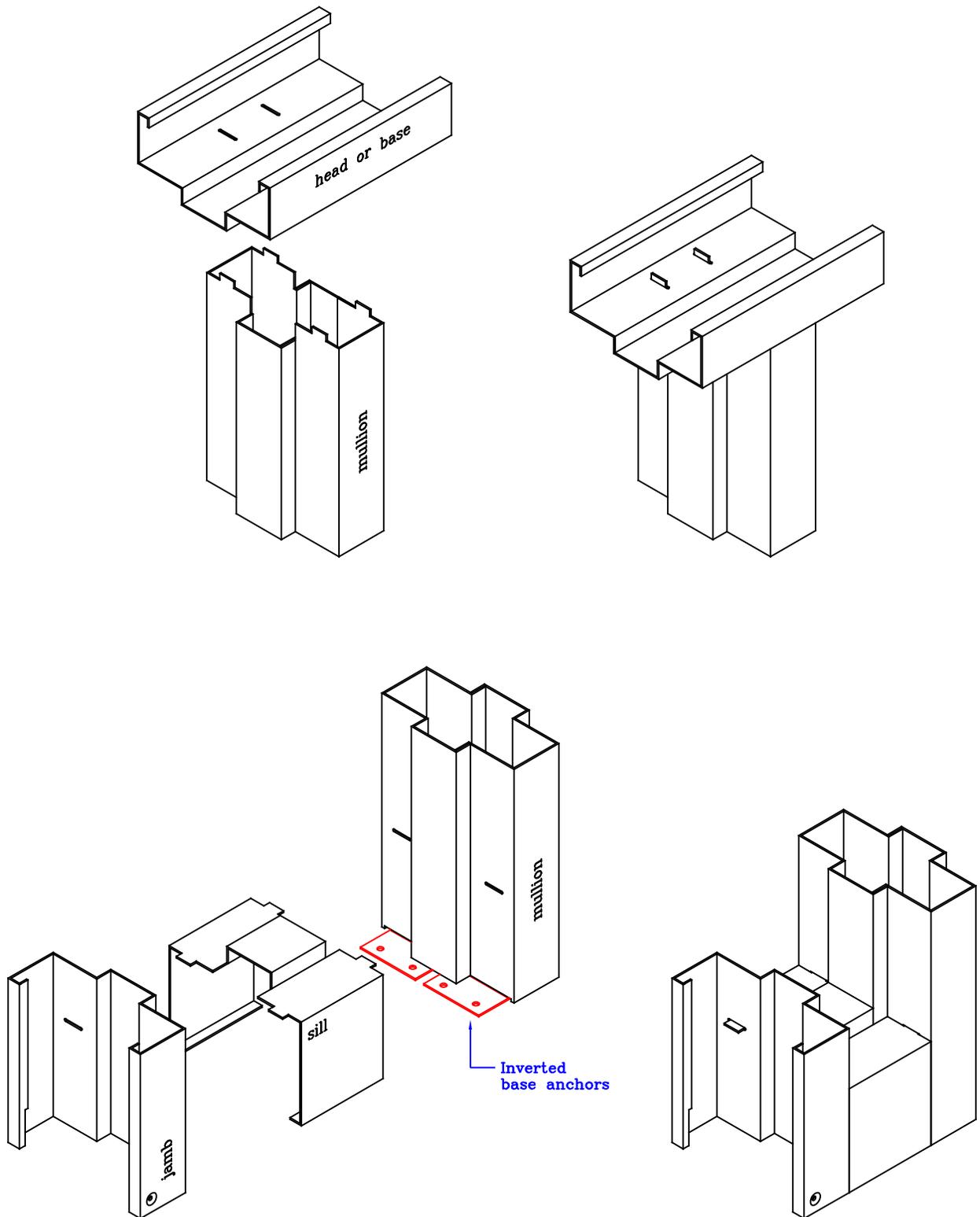
### Knocked down corner with tabs

Corner detail with compression anchor at jamb,



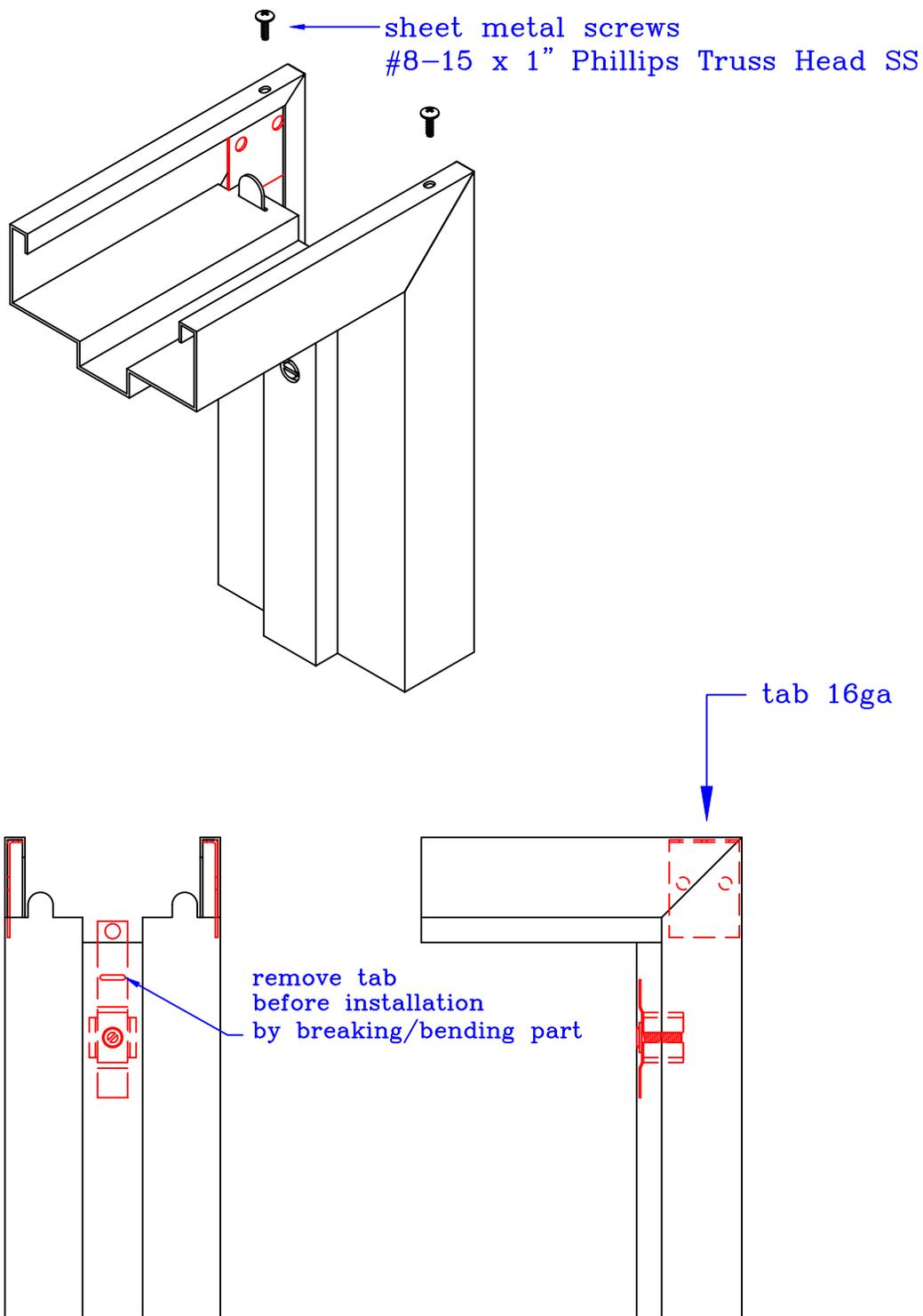
## Knocked down intersection

Corner detail with compression anchor at jambs.



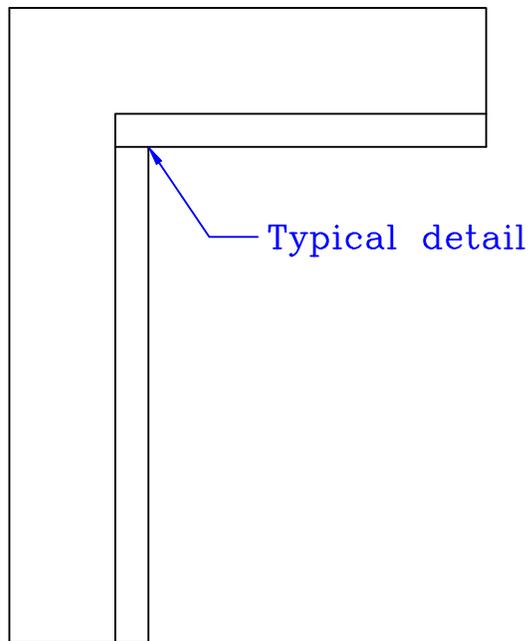
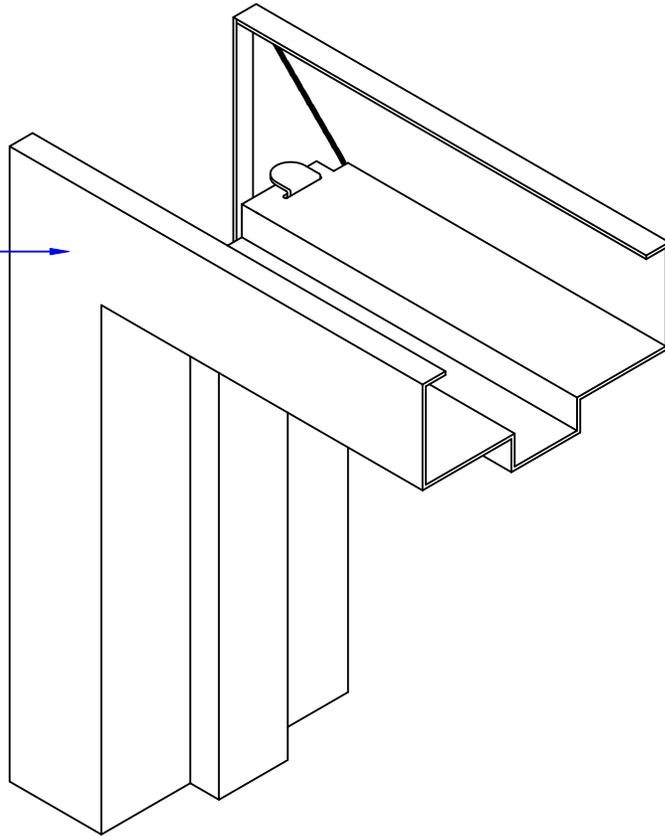
### Knocked down corner with screws

Corner detail with compression anchor at jamb,

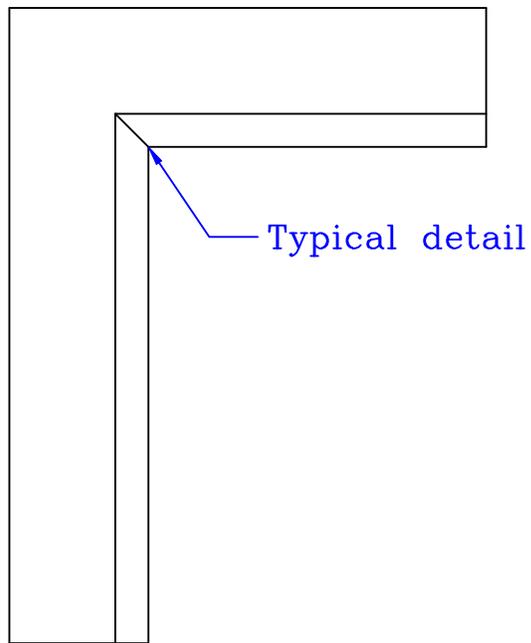
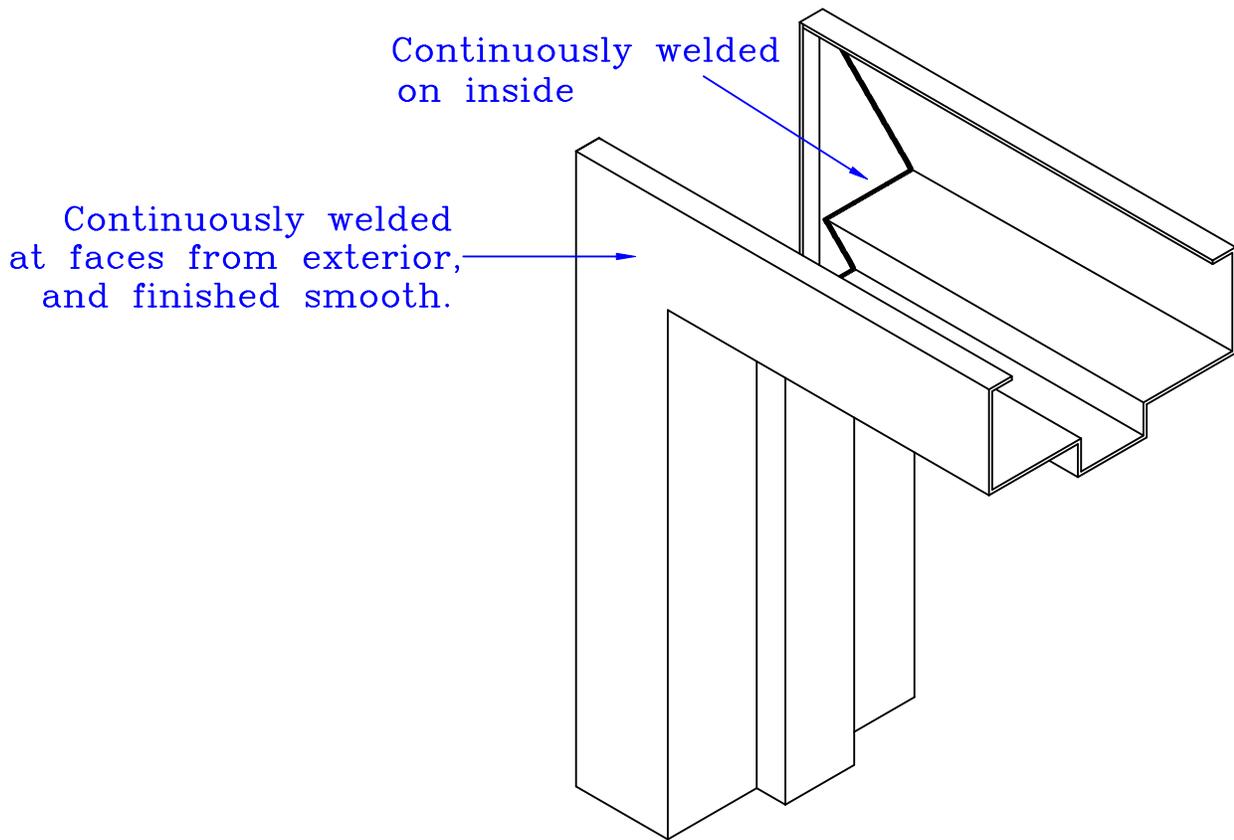


## Face welded corner

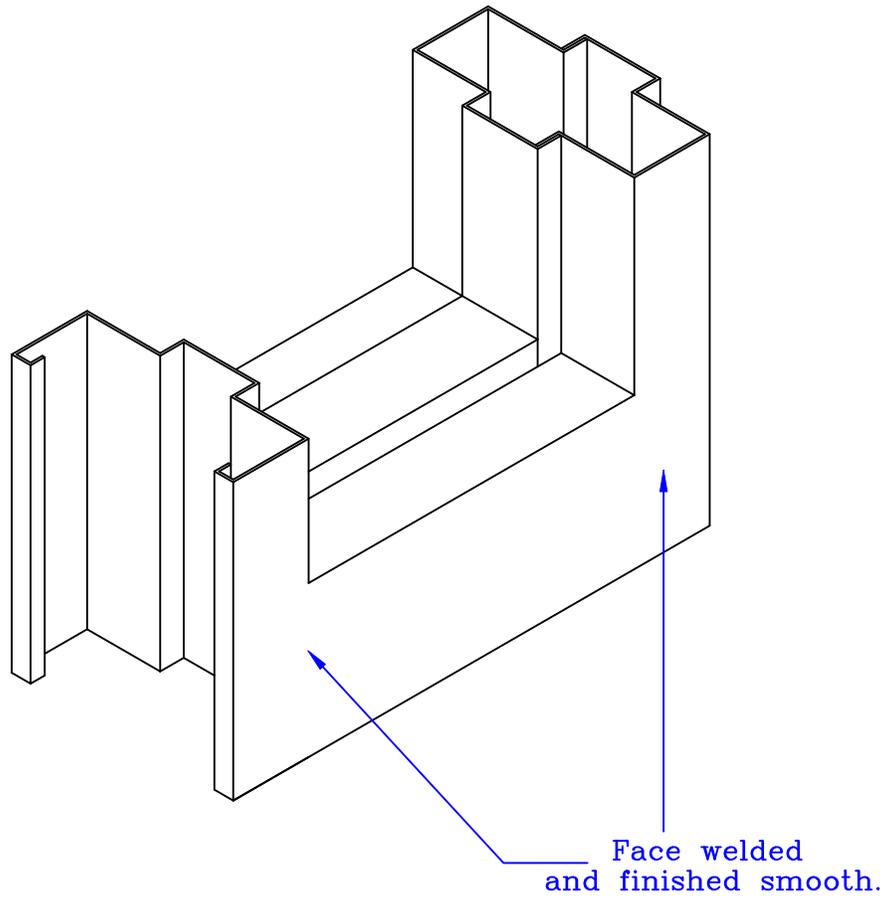
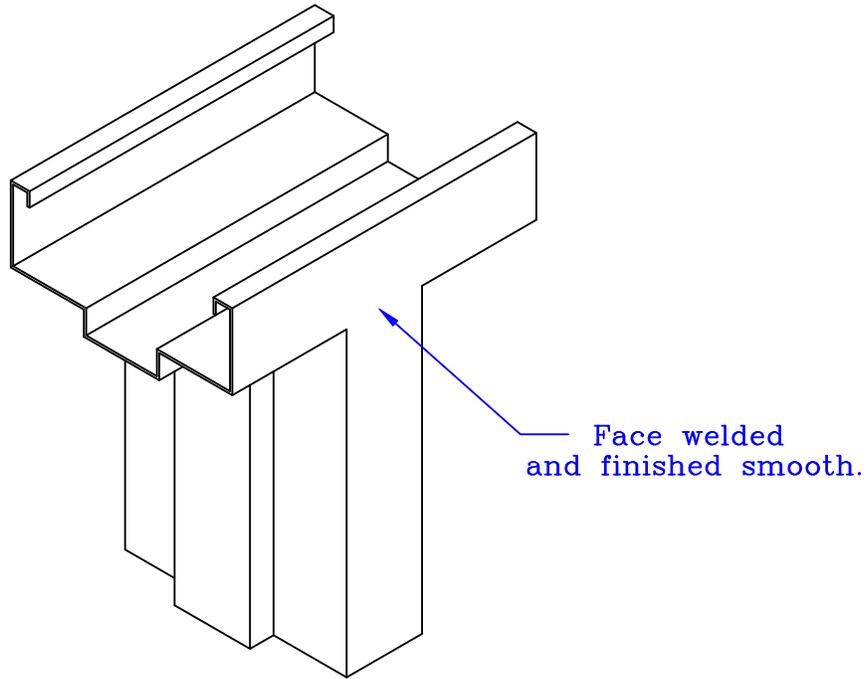
Face welded  
and finished smooth



### Full depth continuous welded corner

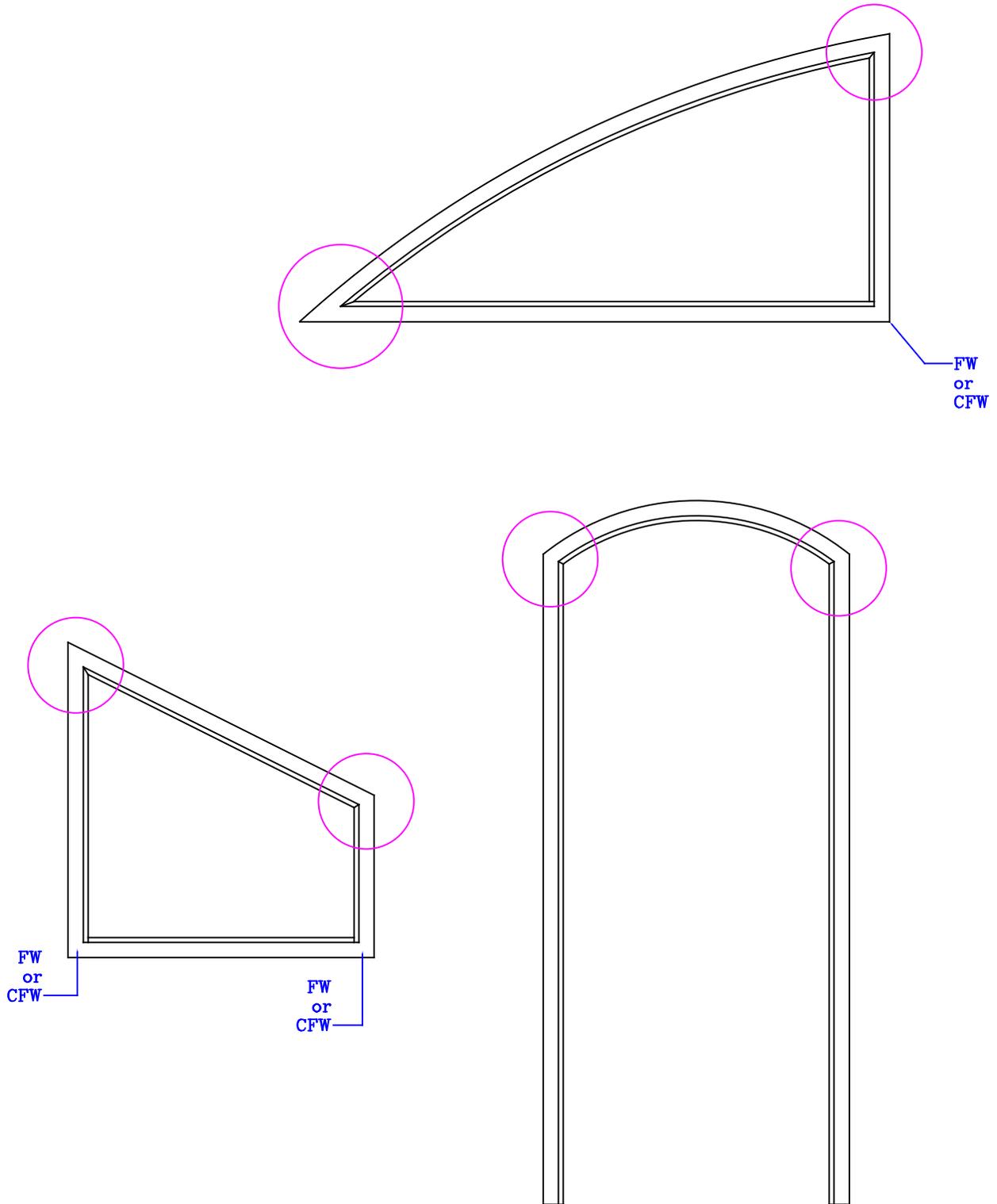


## Face welded intersection

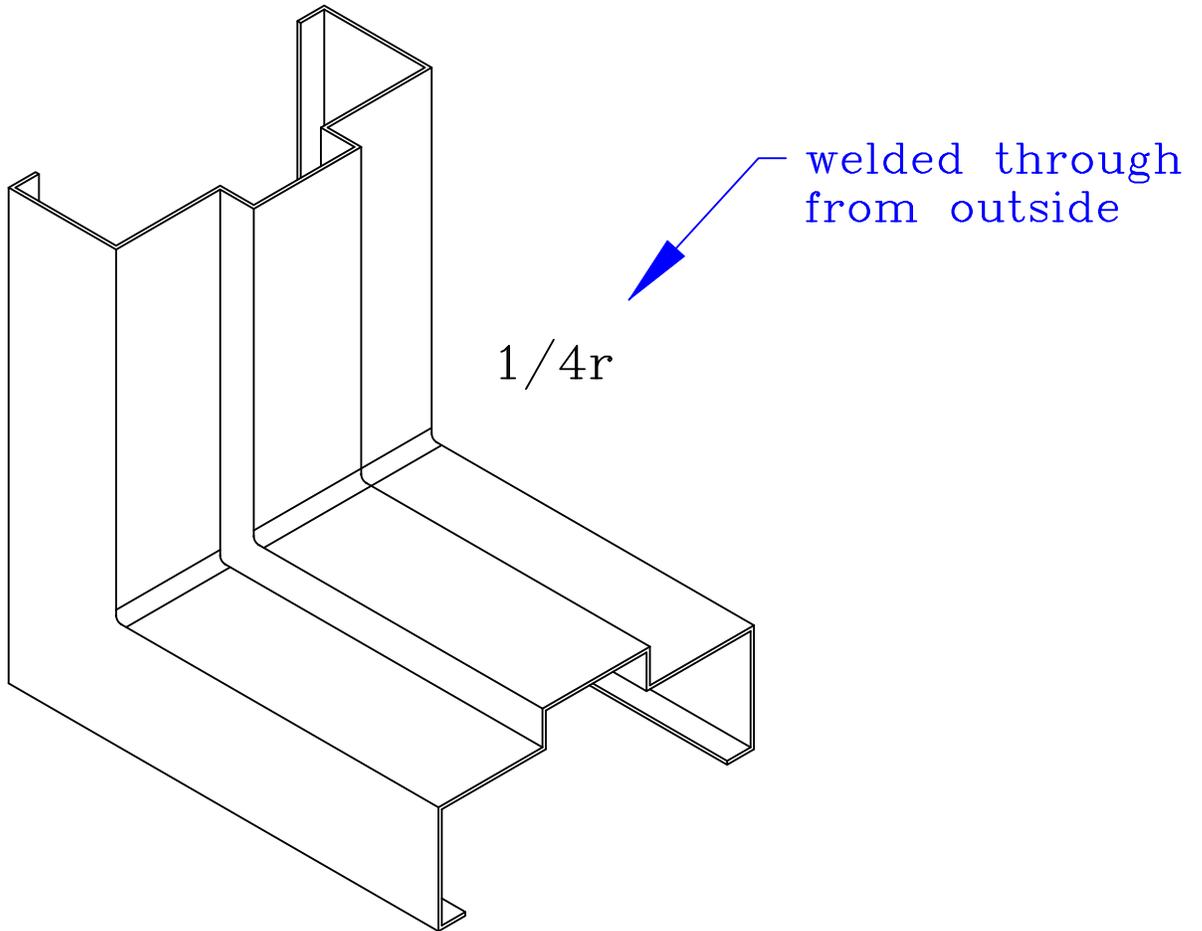


**Non standard welded corner**

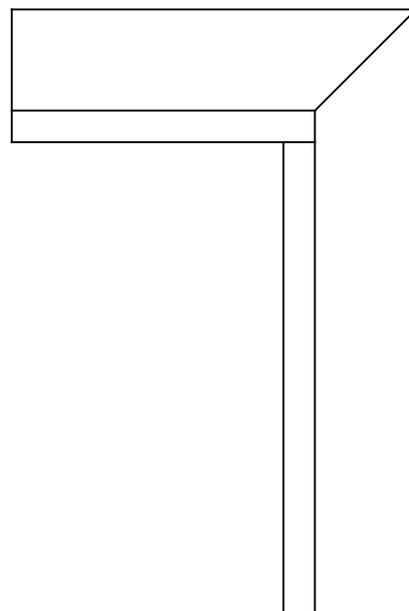
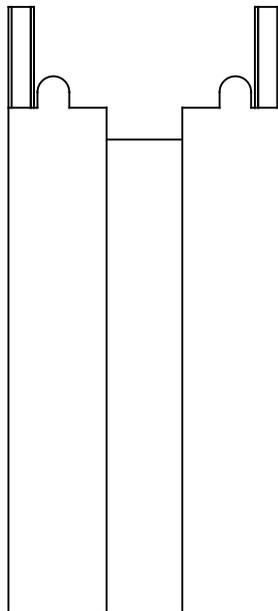
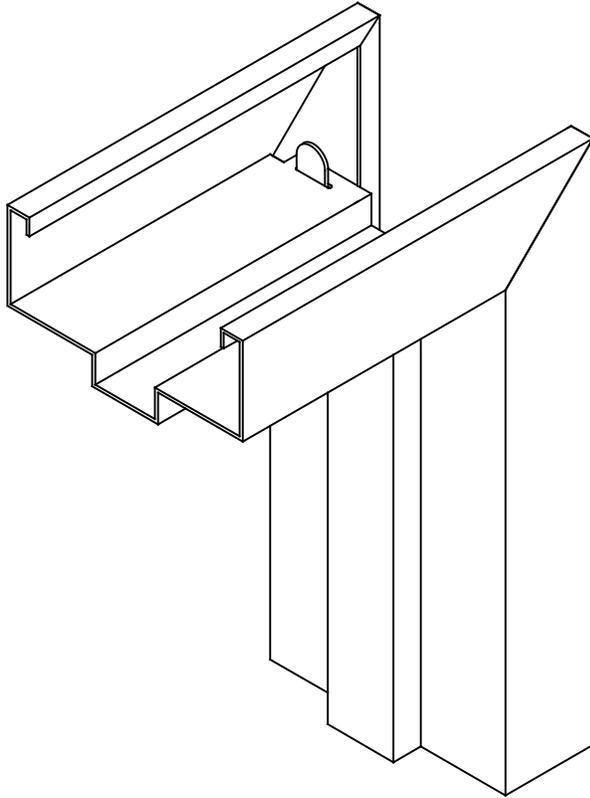
At all corners other than 90°



**Sanitary weld**

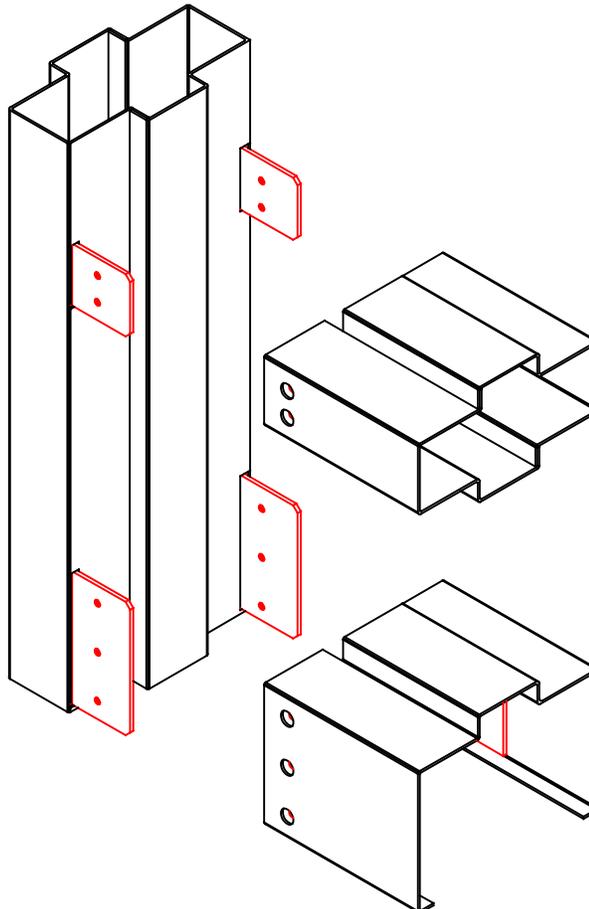
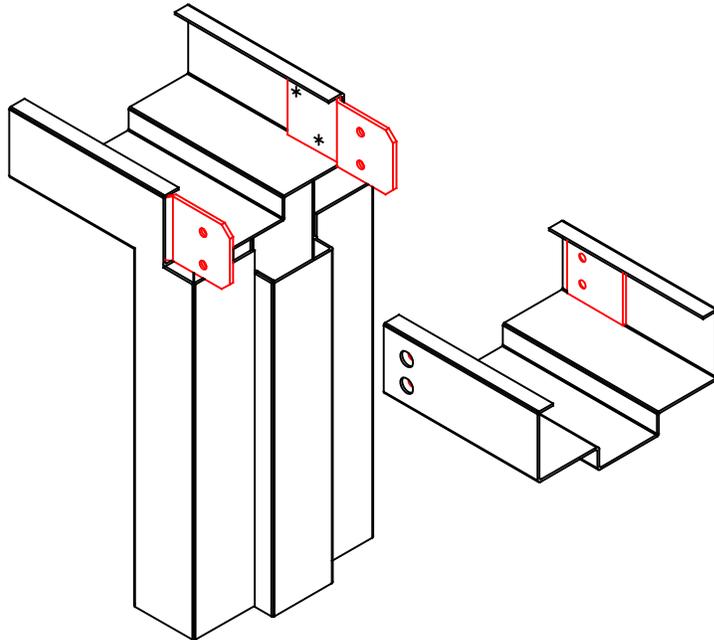


**Welded by others (KD w/o tabs)**

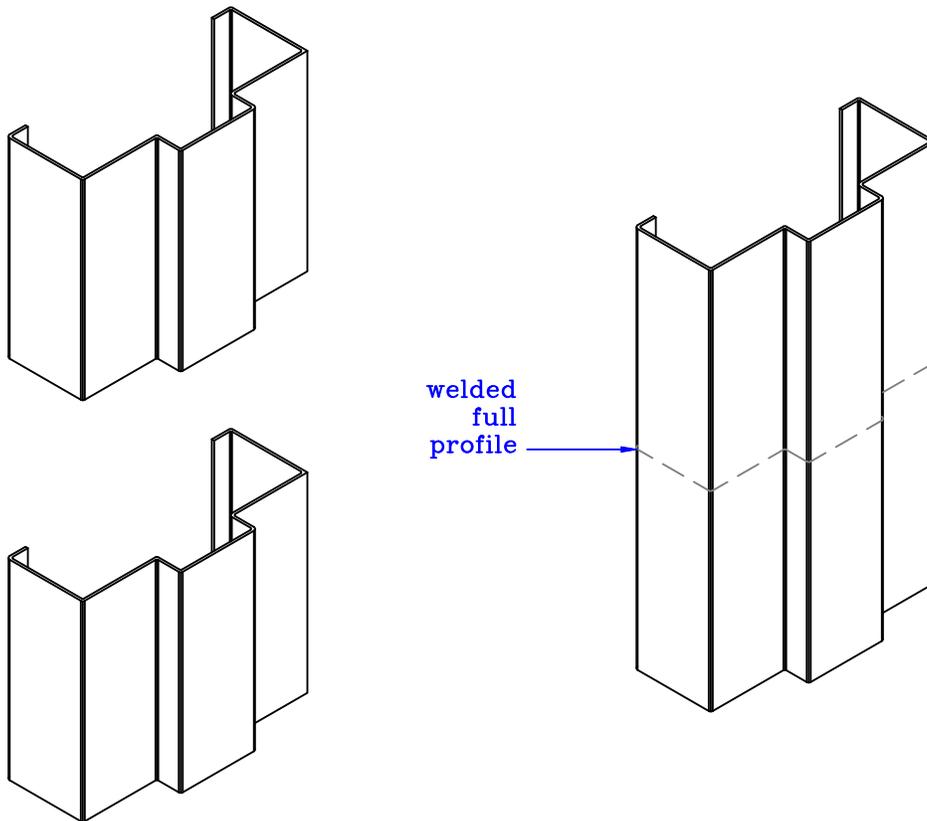
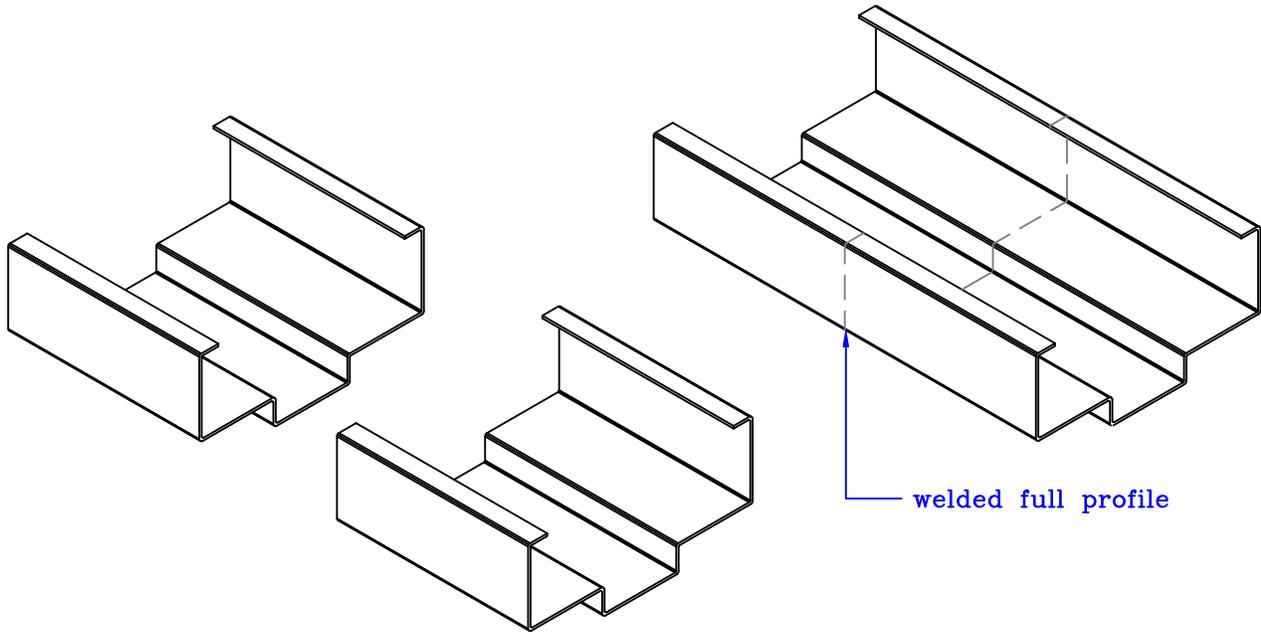


### **Mechanical field splice for oversized units**

Includes #12-24 mechanical screws



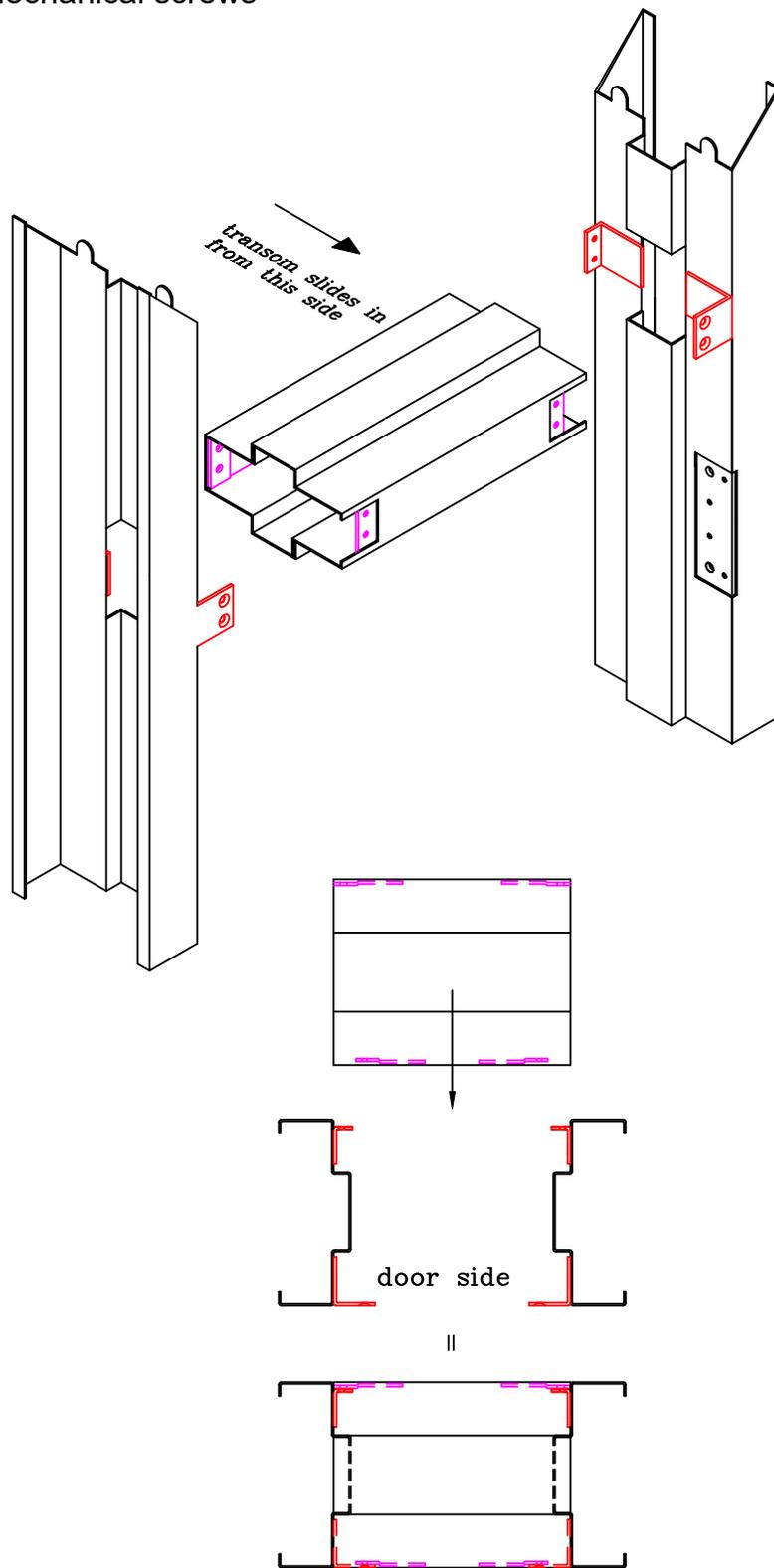
### Splice for oversized units



Over 9'8" in width and 9'10" in height, when no adjacent mullion.

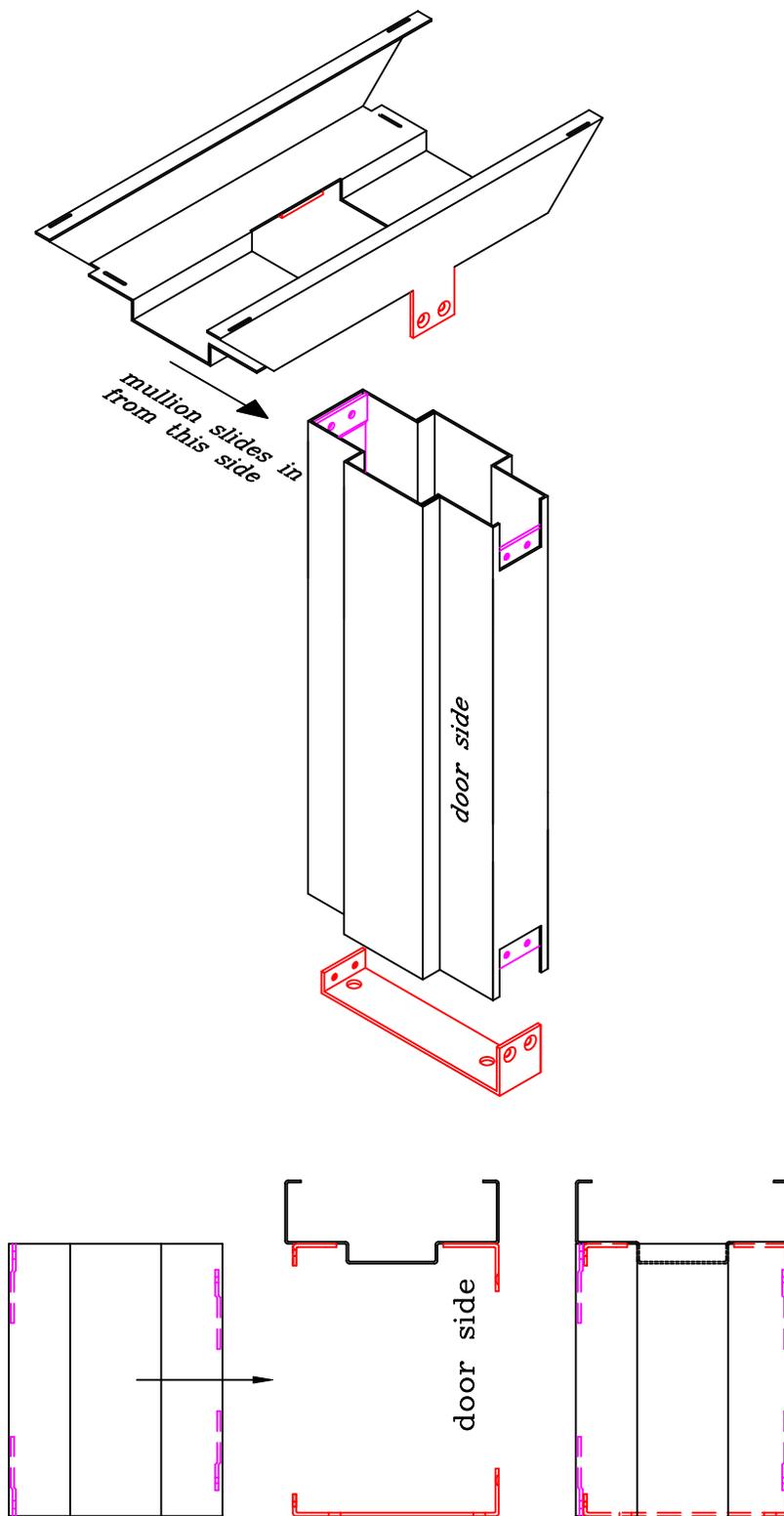
### Removable mullion/transom bar

Includes #12-24 mechanical screws

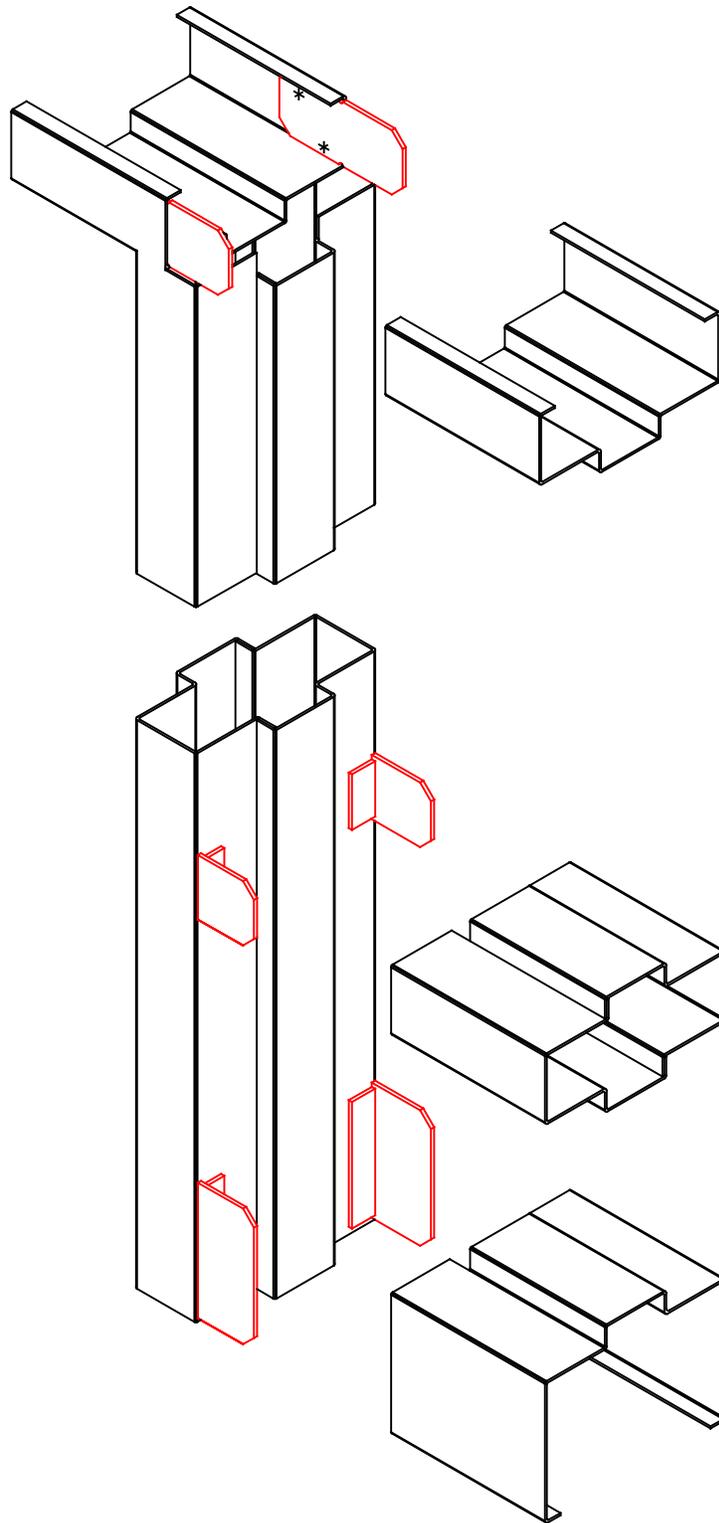


### Removable mullion with floor anchor

Includes #12-24 mechanical screws



## Splice for field welding of oversized units



## Baked on primer

### Grey Waterborne Primer

#### General Properties

A quick drying water-based primer designed for application to galvanized surfaces. This product has excellent adhesion and corrosion resistance properties and is compatible with a wide variety of architectural topcoat paints. This primer can be topcoated immediately, or at any time in the future. Note that per NAAMM/HMMA 840 it is recommended to apply the finish coat of paint within 30 days of delivery. This product contains low VOC's and is engineered to surpass ANSI A250.10 Specifications when applied to galvanized substrates.

#### Product Information

Generic type: Acrylic resins  
Pigment type: Anti-corrosive  
Color: grey  
Finish: low sheen

Mix ratio: Single component  
Viscosity: 68 -72 K.U.  
V.O.C. mixed: 141 g/l (1.17 lbs/gal)  
Temperature resistance (dry):  
75°C (167°F) continuous  
100°C (212°F) intermittent  
Thinner: water

Average volume solids: 34.3%

#### Recommended Topcoats

Topcoat with any water or solvent base architectural paints.

#### Performance Criteria Tested to ANSI A250.10-1998(R2011)

##### Salt spray test:

Standard practice for operating salt spray (fog) apparatus

Method: ASTM B117-03

“X” scribe per ASTM D1654-92 (2000) section 4.1 and 5.1

120 hours continuous exposure

##### Acceptance criteria:

rust grade less than 6 as defined by ASTM D610-01

undercut less than 1/8” on each side

Performance on galvanized: pass

##### Condensation testing (humidity)

Standard practice for testing water resistance of coatings using controlled condensation

Method: ASTM D4585-99

100°F minimum temperature

240 hours continuous exposure

##### Acceptance criteria:

any amount of #8 blisters as defined by ASTM D714-02

less or equal few #6 blisters as defined by ASTM D714-02

Performance on galvanized: pass

##### Impact test:

Standard test method for resistance of organic coatings to the effect of rapid deformation

Method: ASTM D2794-93 (1999)e1

20 inch pounds direct using a Gardner impact tester with 1/2” diameter ball at 70-75°F

tape (3/4” wide) pull off test using #600 Scotch tape

##### Acceptance criteria:

no paint film removal other than an area 1/8” in diameter at the center of the impact test

Performance on galvanized: pass

##### Film adhesion test:

Standard test methods for measuring adhesion by tape test

Method: ASTM D3359-02

method B with 11 parallel cuts made 1mm apart

tape (1” wide) pull off test

##### Acceptance criteria:

less or equal 3B as defined by ASTM D3359-02

less or equal 5 -15 % film removal

Performance on galvanized: pass

## Powder coated standard color prefinished at frames

### General Properties

POWDURA RAL® Series Durable Polyester TGIC-free Powder Coatings are recommended for a broad range of interior/exterior decorative applications. They are designed for superior weatherability compared to standard polyester powder coatings.

### Advantages

Excellent exterior color and gloss retention

Excellent overbake resistance

Good chemical resistance

### Application

Cure schedule 10mn @ 205 C

Film thickness range (mils) 2.0-3.0

### Attributes

Specific gravity (g/ml) 1.68

Coverage at 1.0 Mil (ft<sup>2</sup>/lb) 114.8

60° gloss (ASTM D-523) 28-42

Adhesion (ASTM D-3359) 5B

Flexibility (ASTM D-522) pass 1/8"

Pencil hardness (ASTM D-3363) H-2H

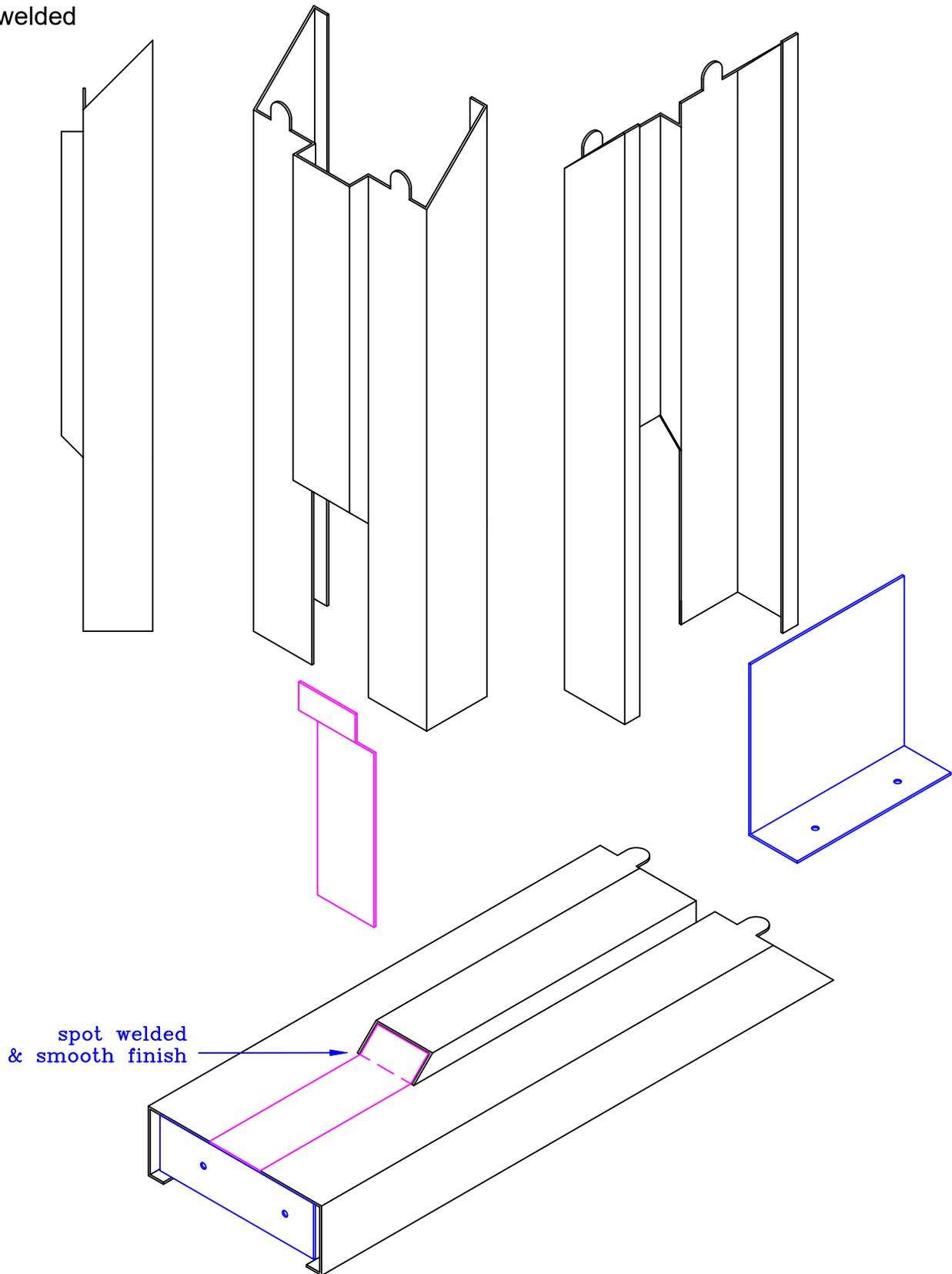
Impact resistance (in lb.) Dir 160 in-lbs  
(ASTM D-2794) Rev 160 in-lbs

Performance measured using 24-gauge Bonderite® 1000 test panels.

See [www.ralcolor.com](http://www.ralcolor.com)  
All units over 90" in width and 100" in height will be spliced.

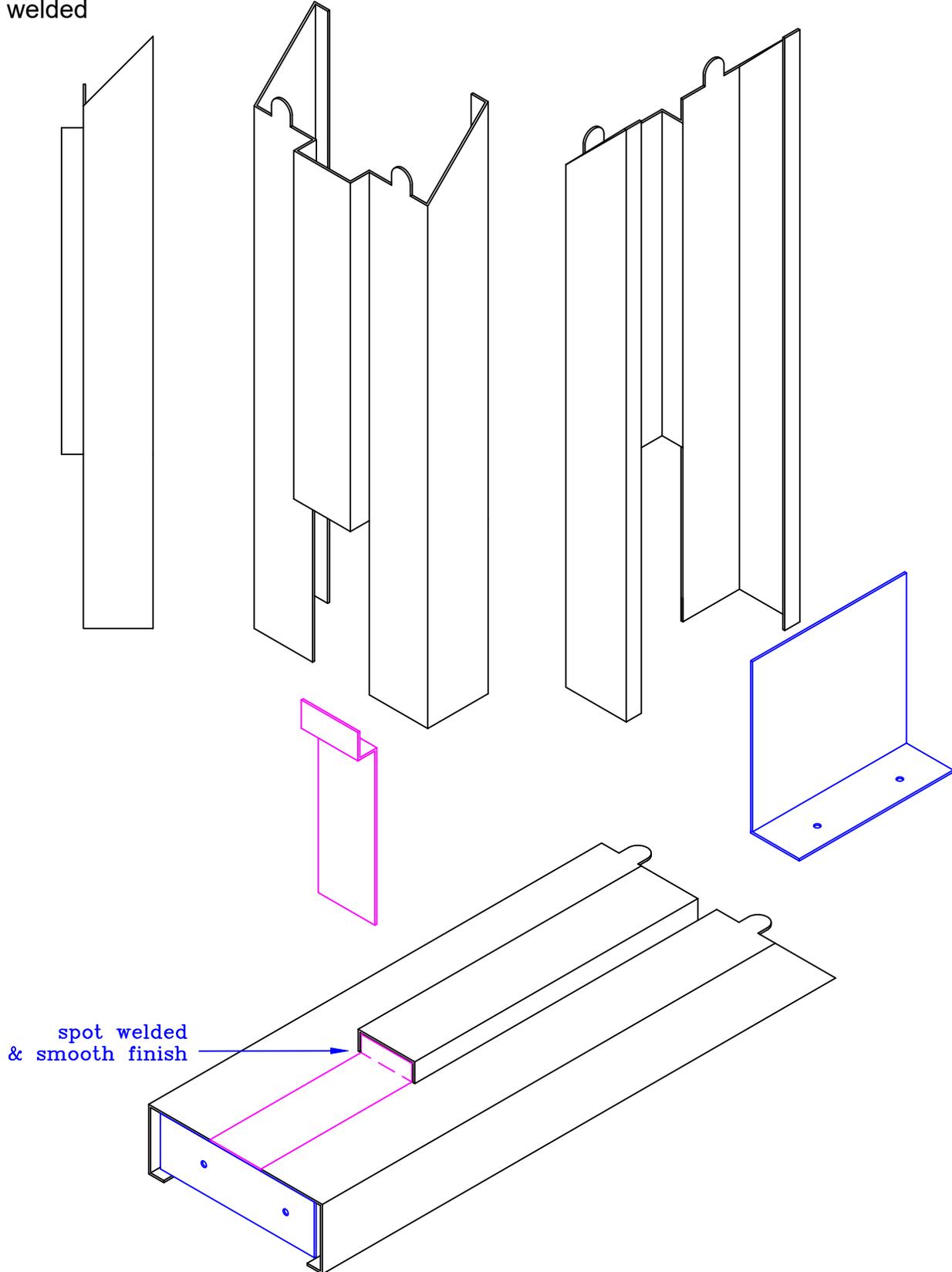
## Hospital stops 45°

Spot welded

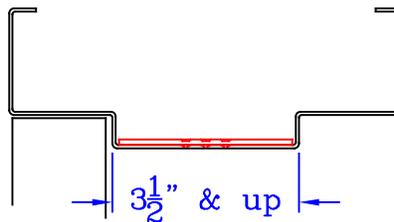
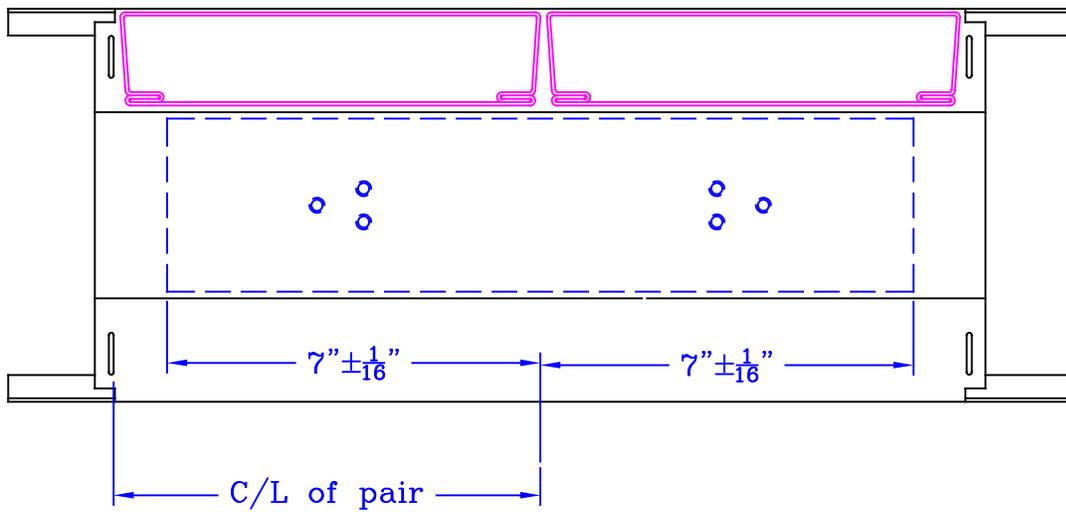
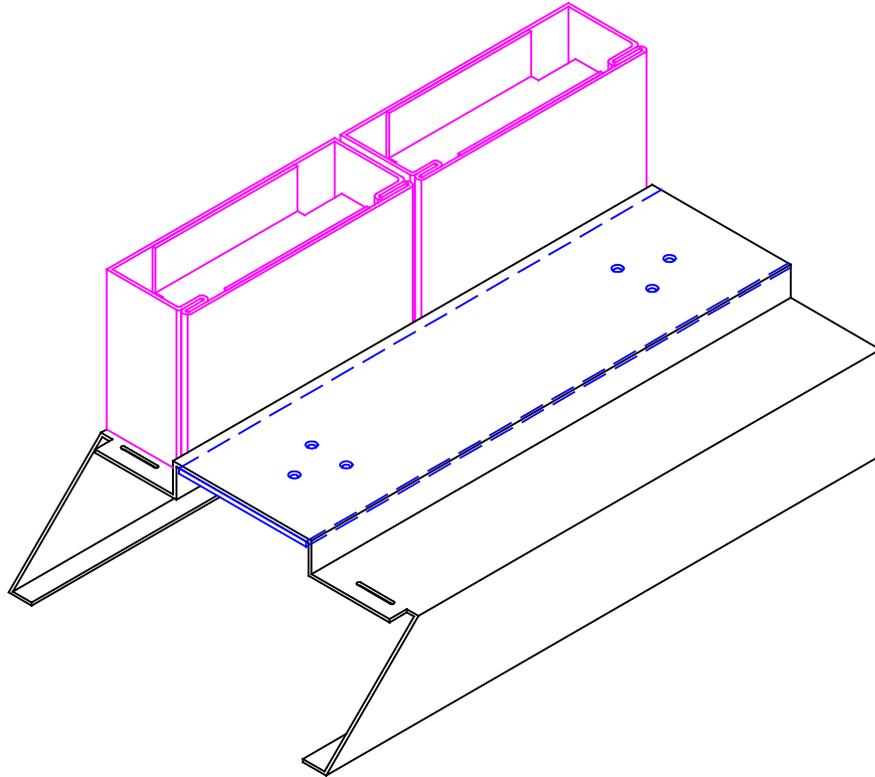


## Hospital stops 90°

Spot welded



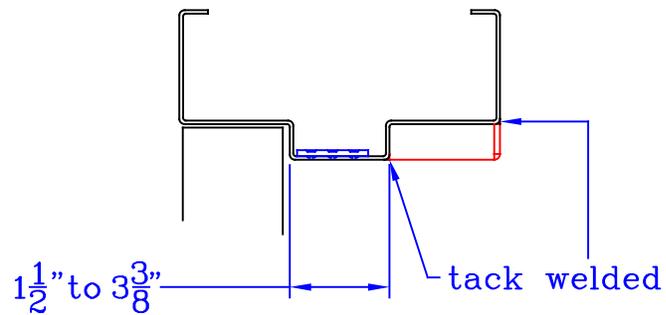
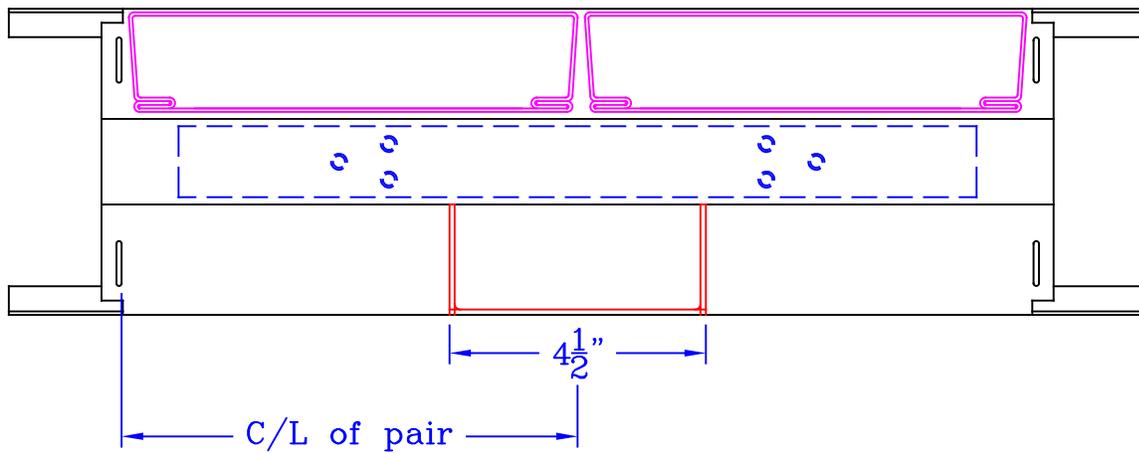
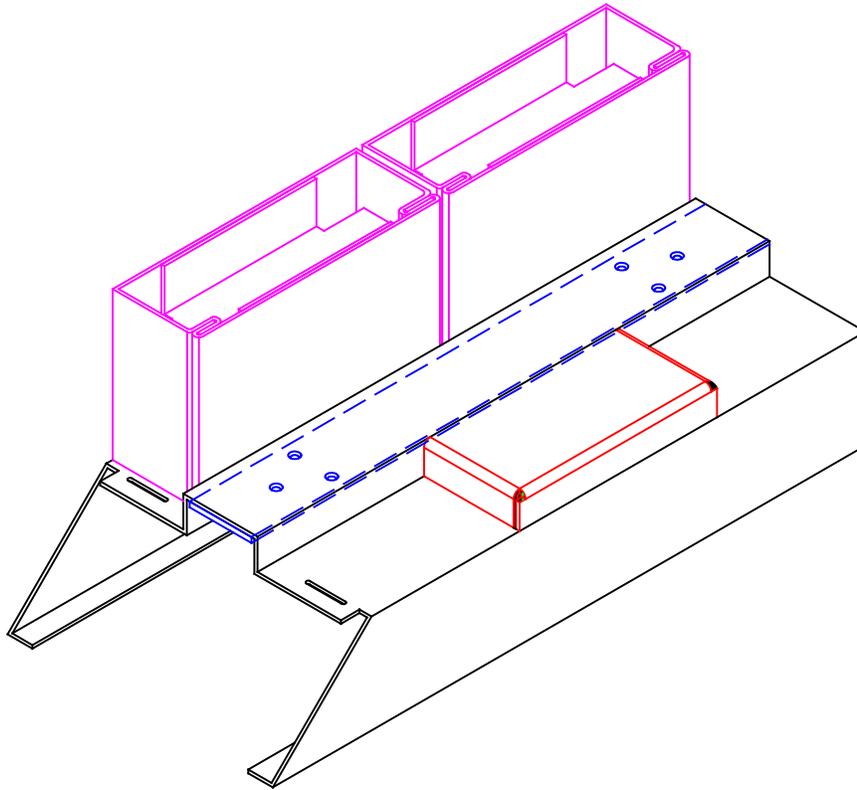
**Removable hardware mullion reinforcement, 12ga, without filler block**



Removable hardware mullion

HWEMUA

### Removable hardware mullion reinforcement, 12ga, with filler block in 12ga



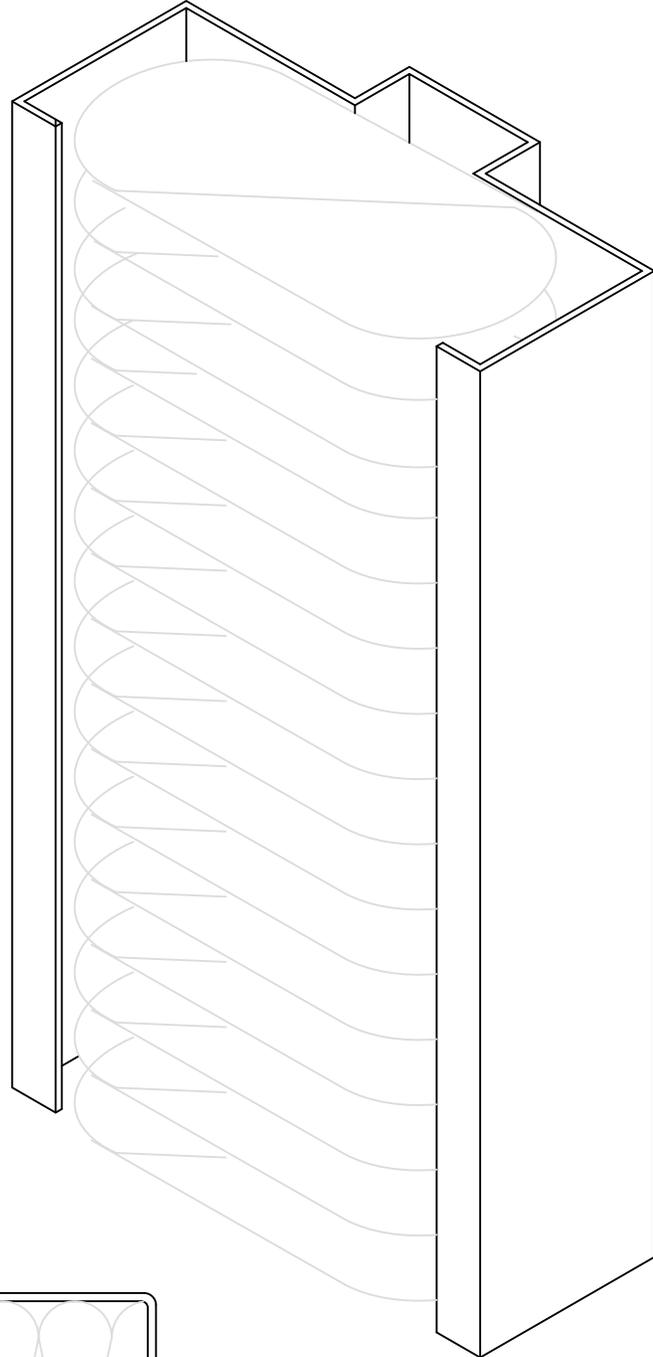
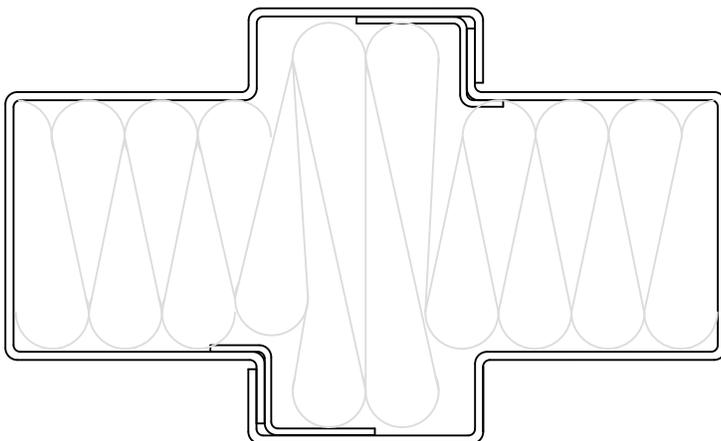
Removable hardware mullion

HWEMUB

## Sound deadening mineral wool

For mullion upon request

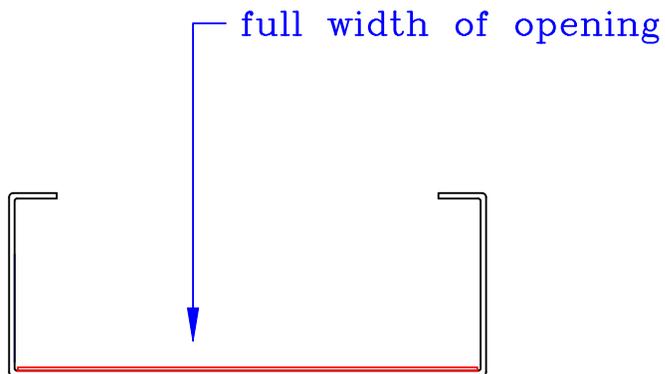
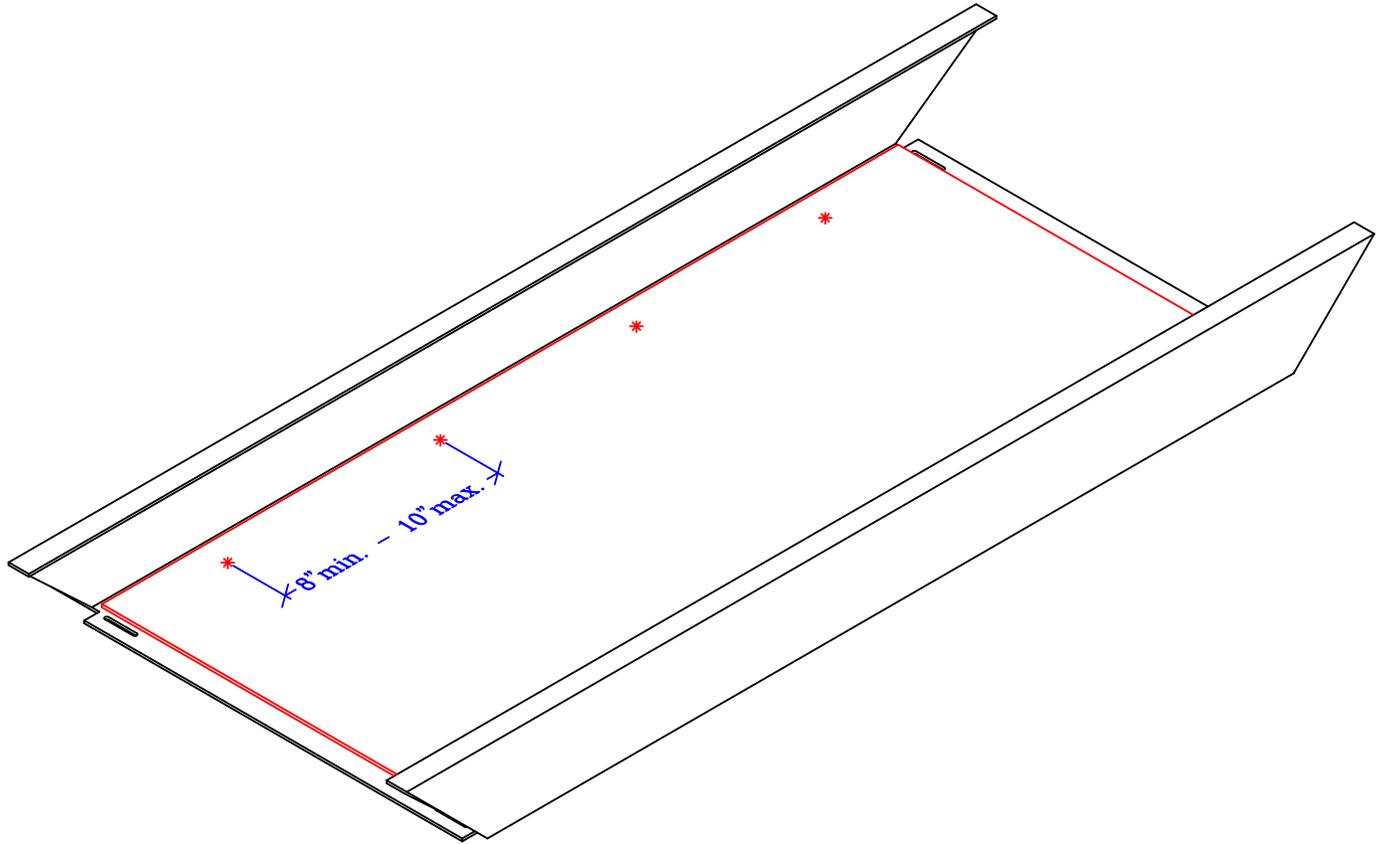
Other frame prep



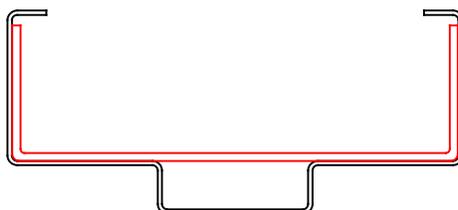
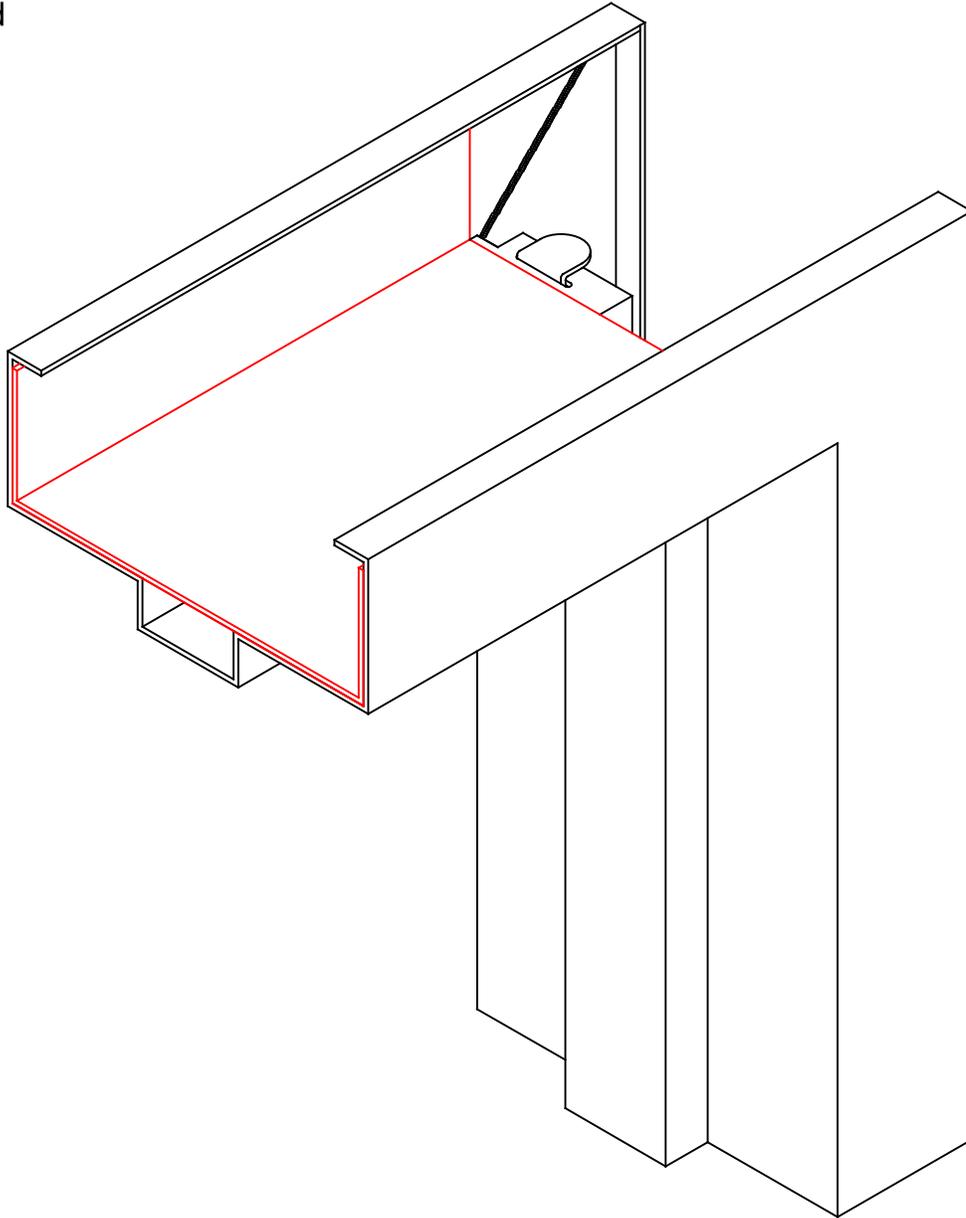
Mandatory for mullion when thermal break frame.

MW

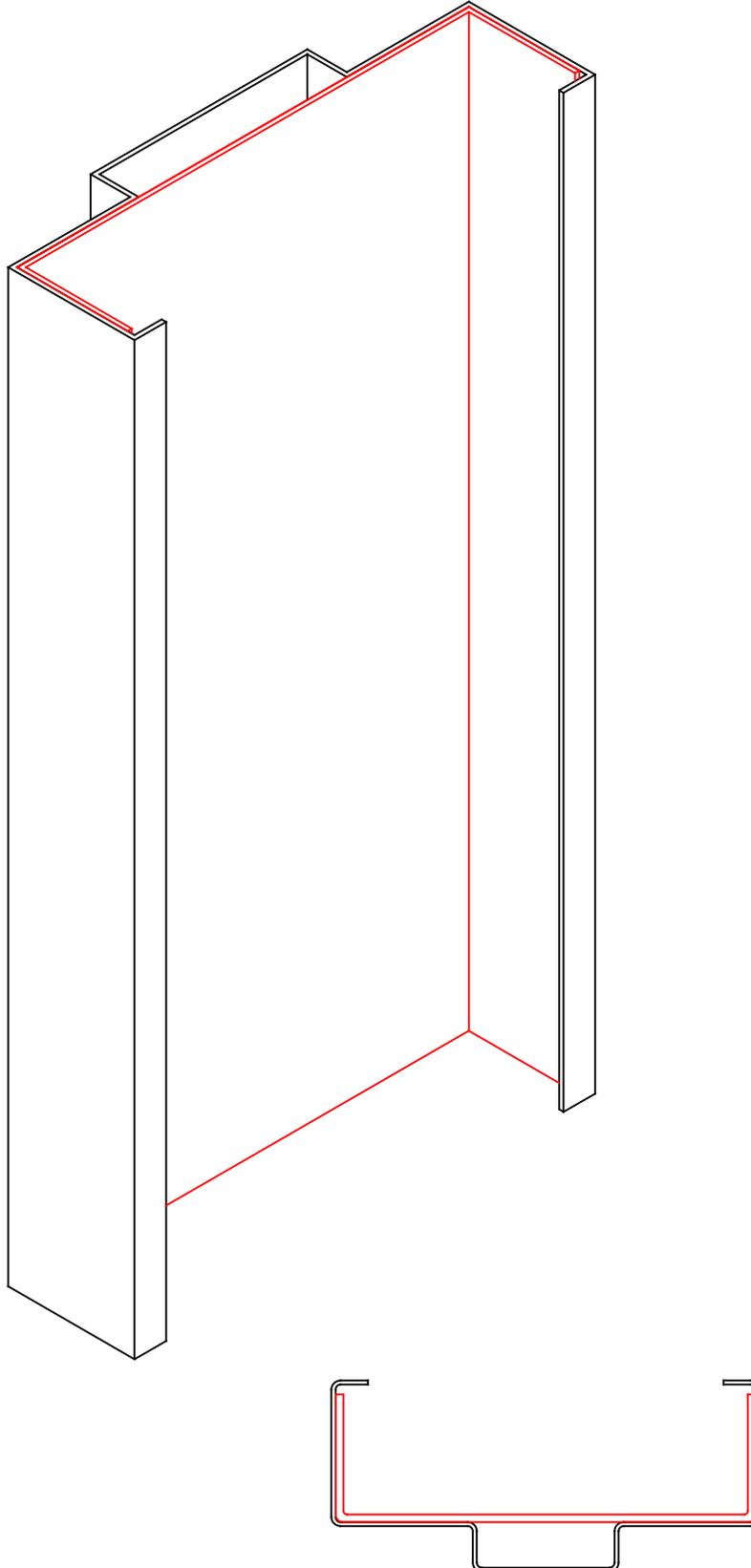
**Reinforcing for by passing or bifold hardware, 12ga**  
Spot welded



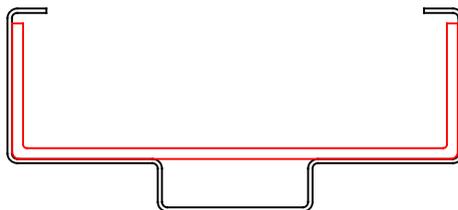
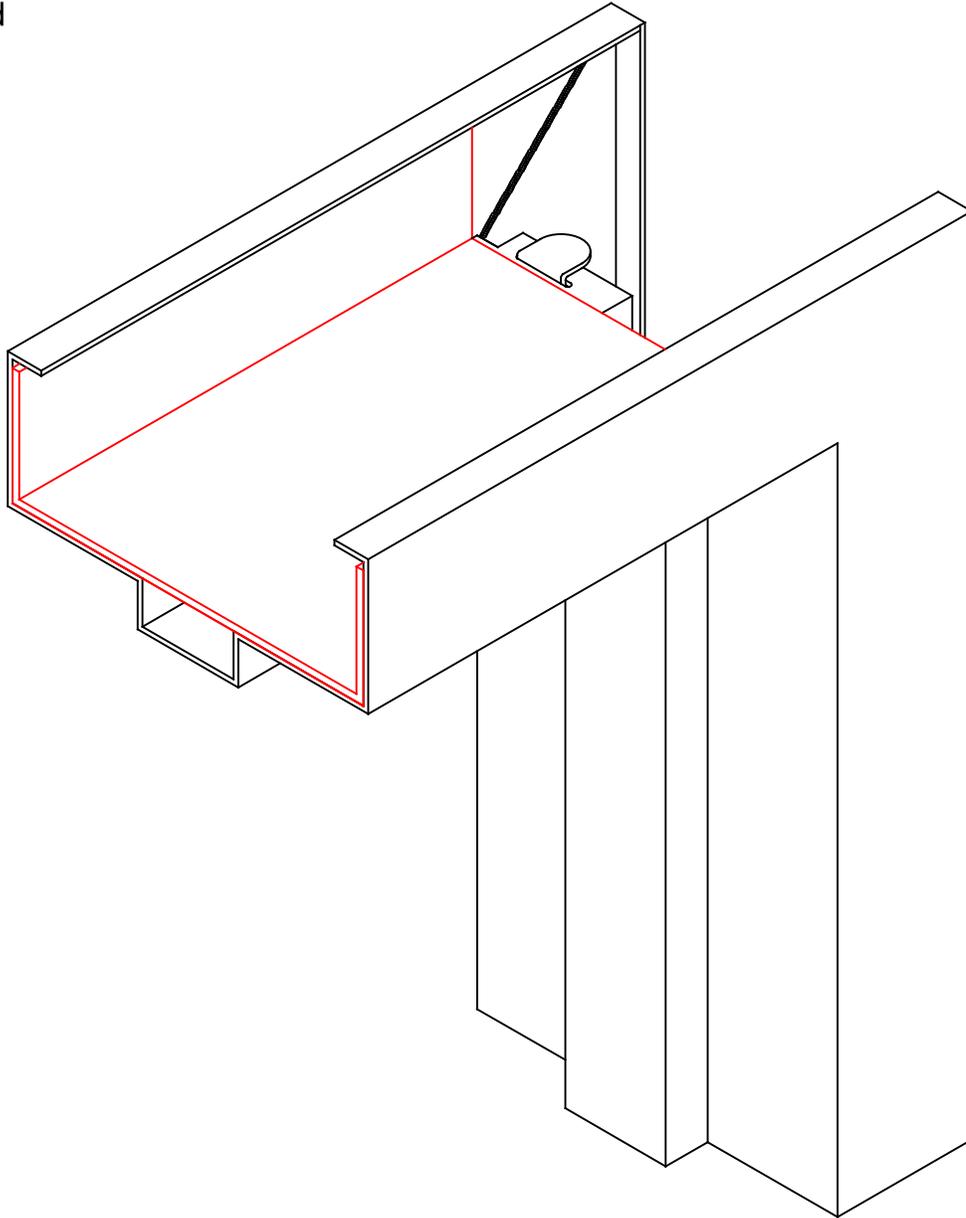
**U reinforcement at head, 14ga**  
Spot welded



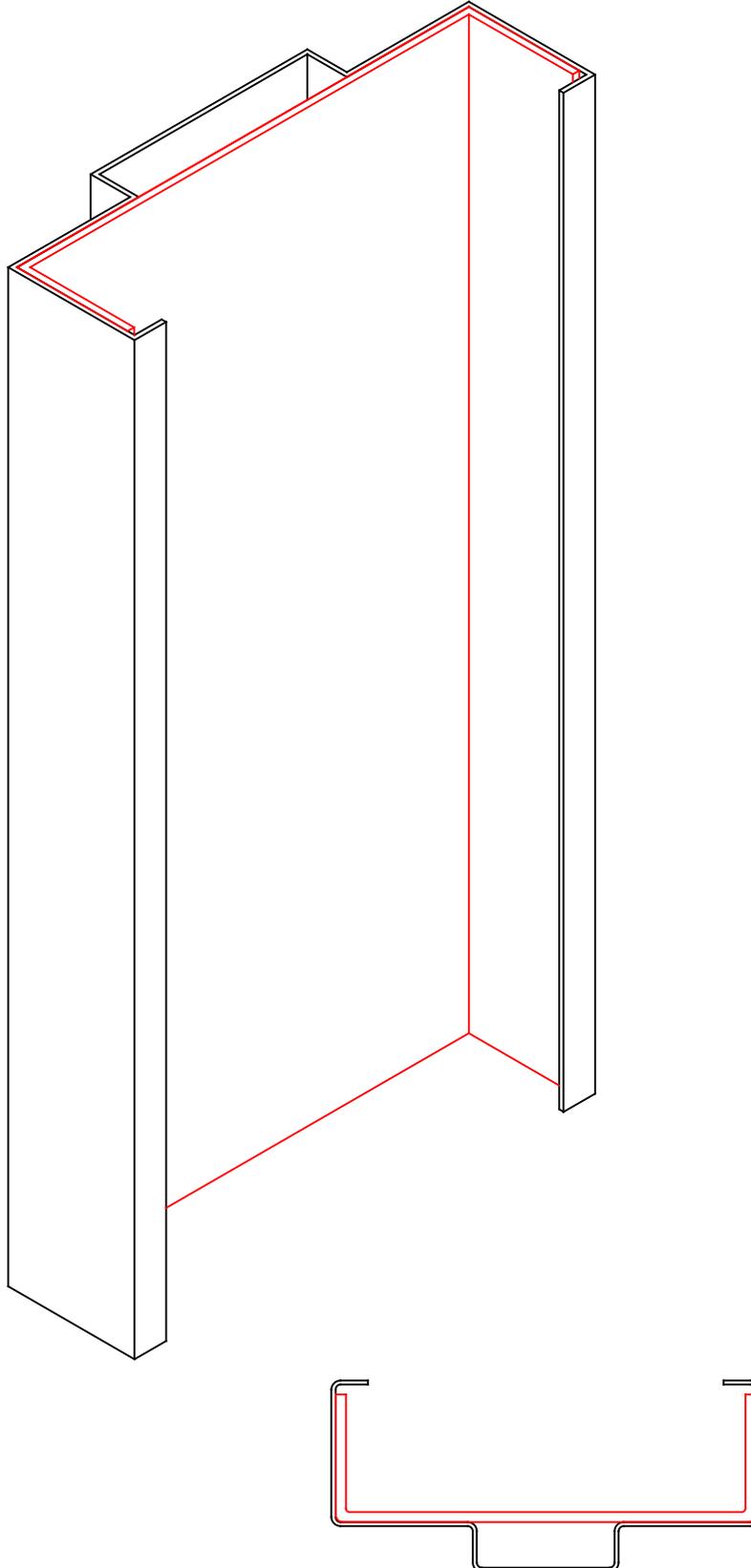
**U reinforcement at jamb, 14ga**  
Spot welded



**U reinforcement at head, 12ga**  
Spot welded



**U reinforcement at jamb, 12ga**  
Spot welded



**Positive pressure up to 180 minutes, for frame**  
Mylar label with protective film

Label

 Intertek W/N 18224	<p><b>180 MINUTES FIRE DOOR FRAME</b></p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <b>WHI- 000000-00144</b> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p><b>DE LA FONTAINE</b></p> <p><a href="http://WWW.DELAFONTAINE.COM">WWW.DELAFONTAINE.COM</a></p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
---	--	---

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Positive pressure up to 90 minutes, for frame**  
Mylar label with protective film

 <p><b>Intertek</b> W/N 18226</p>	<p><b>90 MINUTES FIRE DOOR FRAME</b></p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <p><b>WHI- 000000-00163</b></p> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
--	--	---

 <p><b>Intertek</b> W/N 18242</p>	<p><b>90 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</b></p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <p><b>WHI- 000000-00222</b></p> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
---	--	--

 <p><b>Intertek</b> W/N 18244</p>	<p><b>90 MINUTES FIRE WINDOW FRAME</b></p> <p>CERTIFIED TO: UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p>  <p><b>WHI- 000000-54121</b></p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
--	---	---

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Positive pressure up to 60 minutes, for screen or sidelite**  
Mylar label with protective film

 <b>Intertek</b> W/N 18240	<p><b>60 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</b>                  CERTIFIED TO:                  UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <b>WHI- 000000-00156</b> 	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
---	--	---

 <b>Intertek</b> W/N 18246	<p><b>60 MINUTES FIRE WINDOW FRAME</b>                  CERTIFIED TO:                  UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p>  <b>WHI- 000000-54123</b>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
---	--	---

Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

**Positive pressure 45 minutes**  
Mylar label with protective film

For 20, 45 and 60 ratings, use 90.

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Construction Label – Fire Door/Frame**

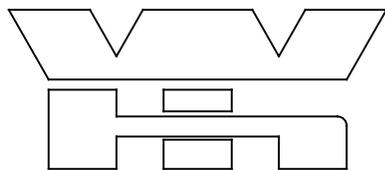
Mylar label with protective film

Label

<p><b>CONSTRUCTION LABEL - FIRE DOOR OR FRAME</b></p> <p>THIS DOOR OR FRAME IS IDENTICAL IN CONSTRUCTION TO A LISTED DOOR OR FRAME. IT DOES NOT BEAR A LISTING MARK FROM A TESTING LABORATORY BECAUSE OF SIZE, HARDWARE PREPARATION OR OTHER LIMITING FACTOR SPECIFIED BY THE USER/OWNER.</p>  <p><b>000000-00161</b></p>	 <p><b>DE LA FONTAINE</b></p> <p><a href="http://WWW.DELAFONTAINE.COM">WWW.DELAFONTAINE.COM</a></p> <p><b>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</b></p>
--	---

Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

**Embossed positive pressure 180 minutes, for frame**  
18GA and 16GA frame only.



LISTED

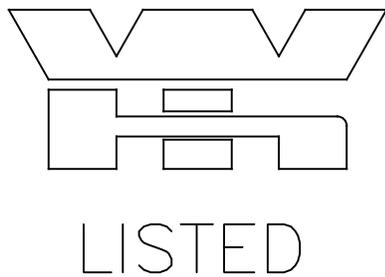
DE LA FONTAINE  
FIRE DOOR FRAME  
RATING 3 HRS

Label

180E

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Embossed positive pressure 90 minutes, for frame**  
18GA and 16GA frame only.



DE LA FONTAINE  
FIRE DOOR FRAME  
RATING 1 1/2 HRS

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Embossed positive pressure 45 minutes, for frame**  
18GA and 16GA frame only.

For 20E, 45E and 60E ratings, use 90E.

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

**Positive pressure up to 180 minutes, for frame**  
Riveted

Label



Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

180R

**Positive pressure up to 90 minutes, for frame, for screen or sidelight**  
Riveted

Label

 <b>Intertek</b> W/N 18227	<p><b>90 MINUTES FIRE DOOR FRAME</b></p> <p>CERTIFIED TO:                  UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p><b>WHI- -00157 S</b></p> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION                  OF A LISTED CAT. H GASKET</p>	 <b>DE LA FONTAINE</b> WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
---	--	--

 <b>Intertek</b> W/N 18243	<p><b>90 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</b></p> <p>CERTIFIED TO:                  UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p><b>WHI- -00160 S</b></p> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION                  OF A LISTED CAT. H GASKET</p>	 <b>DE LA FONTAINE</b> WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
--	--	---

 <b>Intertek</b> W/N 18245	<p><b>90 MINUTES FIRE WINDOW FRAME</b></p> <p>CERTIFIED TO:                  UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p> <p><b>WHI- -54122</b></p>	 <b>DE LA FONTAINE</b> WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
---	--	--

Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

90R

**Positive pressure up to 60 minutes, for screen or sidelight**  
Riveted

Label

 <b>Intertek</b> W/N 18241	<p><b>60 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</b></p> <p>CERTIFIED TO:                  UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p><b>WHI- -00155 S</b></p> <p>SMOKE &amp; DRAFT CONTROL REQUIRES INSTALLATION                  OF A LISTED CAT. H GASKET</p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL                  SEE INSTALLATION INSTRUCTIONS</p>
---	--	--

 <b>Intertek</b> W/N 18247	<p><b>60 MINUTES FIRE WINDOW FRAME</b></p> <p>CERTIFIED TO:                  UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p> <p><b>WHI- -54124</b></p>	 <p><b>DE LA FONTAINE</b></p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL                  SEE INSTALLATION INSTRUCTIONS</p>
---	--	--

Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

60R

**Positive pressure 45 minutes**  
Riveted

For 20R, 45R and 60R ratings, use 90R.

Located between 1st and 2nd hinge prep when butt hinges or  
at head when continuous hinge.

## Construction Label – Fire Door/Frame

Riveted

Label



Located between 1st and 2nd hinge prep when butt hinges or at head when continuous hinge.

CLR

**FBC Hurricane, HVHZ, ±50 PSF, includes door reinforcements**  
Mylar label with protective film

Label

<b>FLORIDA BUILDING CODE APPROVED PRODUCT</b>	 <b>DE LA FONTAINE</b>
<b>FL46851</b>	<b>WWW.DELAFONTAINE.COM</b>
<b>DO NOT REMOVE OR COVER LABEL</b>	<b>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</b>
<b>SINGLE &amp; DOUBLE FLUSH OR GLAZED STEEL DOOR OUTSWING, HVHZ, 3'0"/6'0" X 8'0" MAX. SEE INSTALLATION INSTRUCTIONS FOR DESIGN PRESSURE LIMITATIONS. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</b>	
 <b>000000-21001</b>	

Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

HUR50

**FBC Hurricane, HVHZ, ±70 PSF, includes door reinforcements**  
Mylar label with protective film

Label

<p><b>FLORIDA BUILDING CODE APPROVED PRODUCT</b></p> <p>FL46851</p> <p>DO NOT REMOVE OR COVER LABEL</p>	<p>SINGLE &amp; DOUBLE FLUSH OR GLAZED STEEL DOOR OUTSWING, HVHZ, 3'0"/6'0" X 8'0" MAX. SEE INSTALLATION INSTRUCTIONS FOR DESIGN PRESSURE LIMITATIONS. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</p>  <p>000000-21001</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
---	--	---

<p><b>FLORIDA BUILDING CODE APPROVED PRODUCT</b></p> <p>FL46851</p> <p>DO NOT REMOVE OR COVER LABEL</p>	<p>SINGLE FLUSH OR GLAZED STEEL DOOR INSWING, ±70 PSF, HVHZ, 3'0" X 8'0" MAX. SMALL AND LARGE MISSILE D IMPACT RATED TAS 201, 202, 203, ASTM E283, E330, E1886, E1996</p>  <p>000000-21000</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
---	---	---

Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

HUR70

**FBC Hurricane, Non-HVHZ, ±70 PSF**  
Mylar label with protective film

Label

<b>FLORIDA BUILDING CODE APPROVED PRODUCT</b>	
FL21194	
	SINGLE & DOUBLE FLUSH STEEL OUTSWING DOOR +/- 70 PSF, 350 FT-LBS IMPACT, 3'0" / 6'0" x 7'0" MAX. CERTIFIED TO: ASTM E330, E1886, E1996
	
Intertek W/N 16686	<b>000000-20751</b> DO NOT REMOVE OR COVER LABEL
 DE LA FONTAINE	
WWW.DELAFONTAINE.COM	
ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC	

Located between 1st and 2nd hinge prep when butt hinges or at top channel when continuous hinge.

HUR70N

**Construction Label - Hurricane-Resistant Door/Frame**

Mylar label with protective film

Label

<p><b>HURRICANE-RESISTANT DOOR/FRAME CONSTRUCTION</b></p> <p>THIS DOOR OR FRAME WAS MANUFACTURED USING THE SAME MATERIALS AND CONSTRUCTION METHODS AS A HURRICANE-RESISTANT DOOR OR FRAME. IT DOES NOT BEAR THE LABEL OF A TESTING AGENCY DUE TO SIZE, HARDWARE OR OTHER LIMITING FACTORS SPECIFIED BY THE USER/OWNER.</p> <p>DO NOT REMOVE OR COVER LABEL</p>  <p><b>000000-21002</b></p>	 DE LA FONTAINE
	<p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>

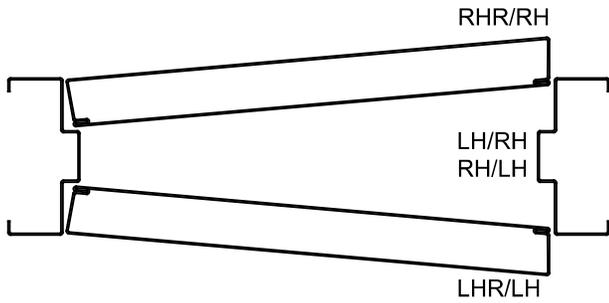
Located between 1st and 2nd hinge prep when butt hinges or  
at top channel when continuous hinge.

HURCL

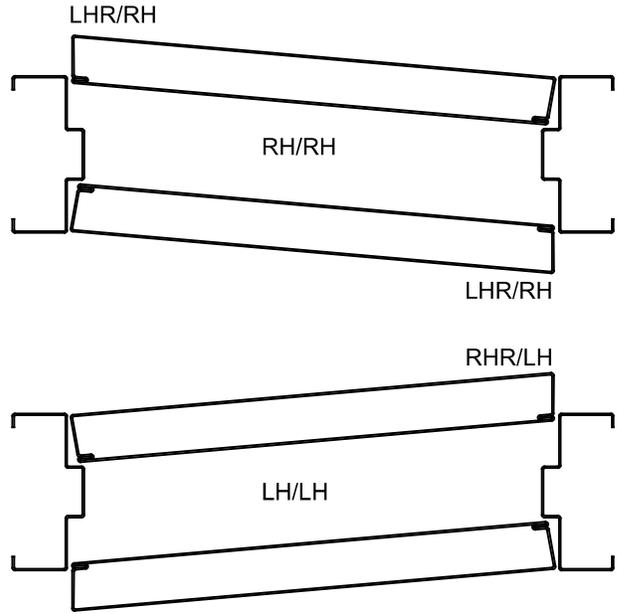
## Communicating frame

Handing shown based on any and all point of views

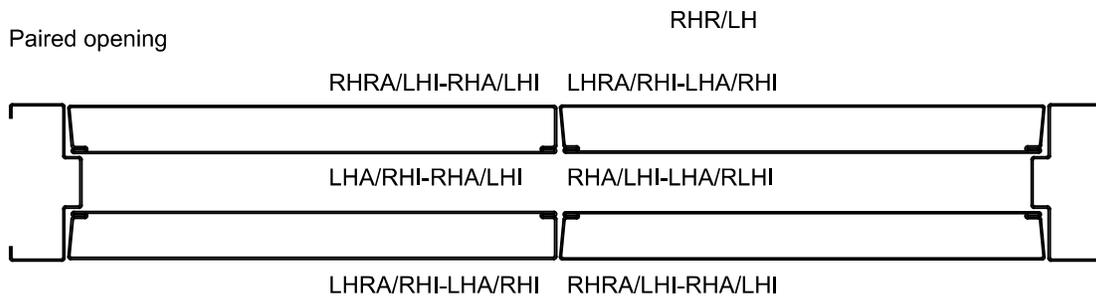
Single opening : hinges on same jamb



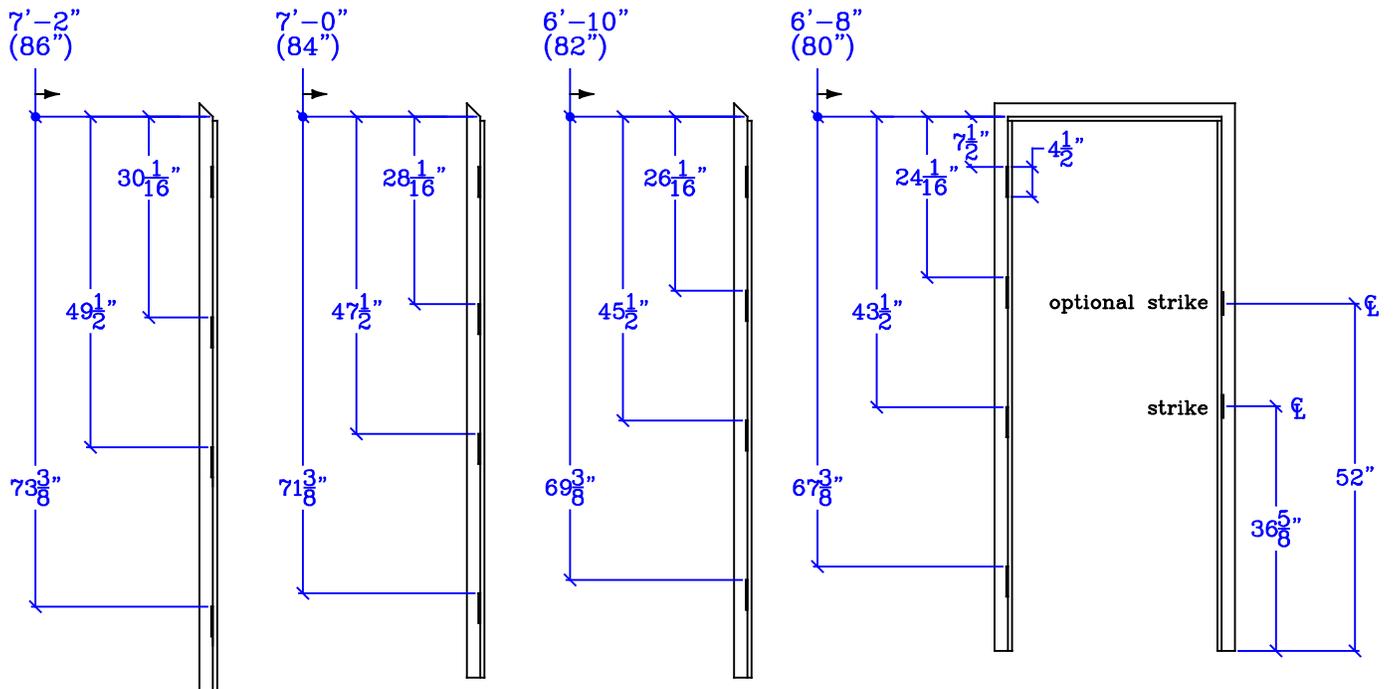
Single opening : hinges on opposite jambs



Paired opening



**Dutch door frame**  
DLF location shown

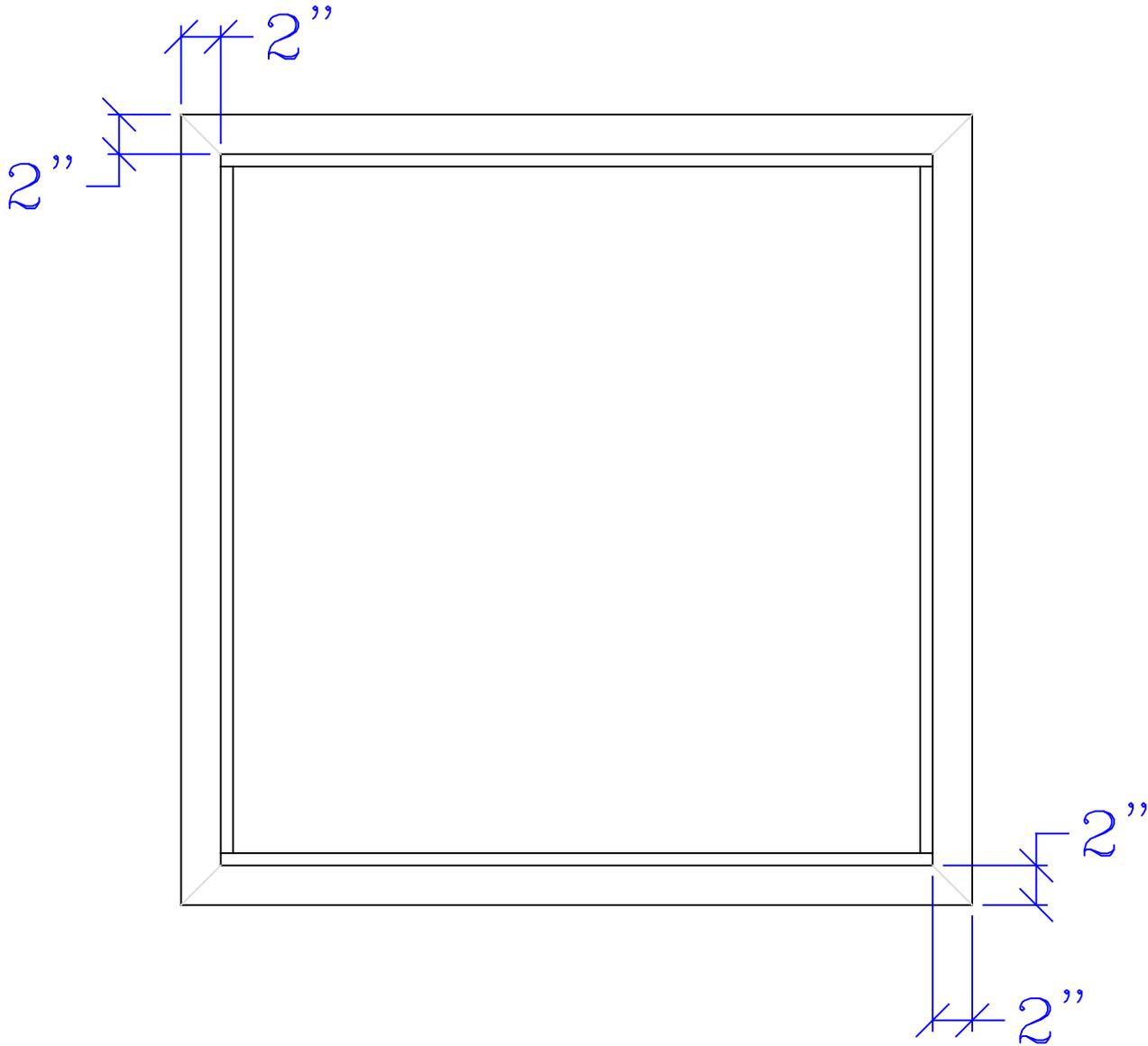


Specialty frame

DUTCH

**2" sill with 45° miters (4 sided frame)**

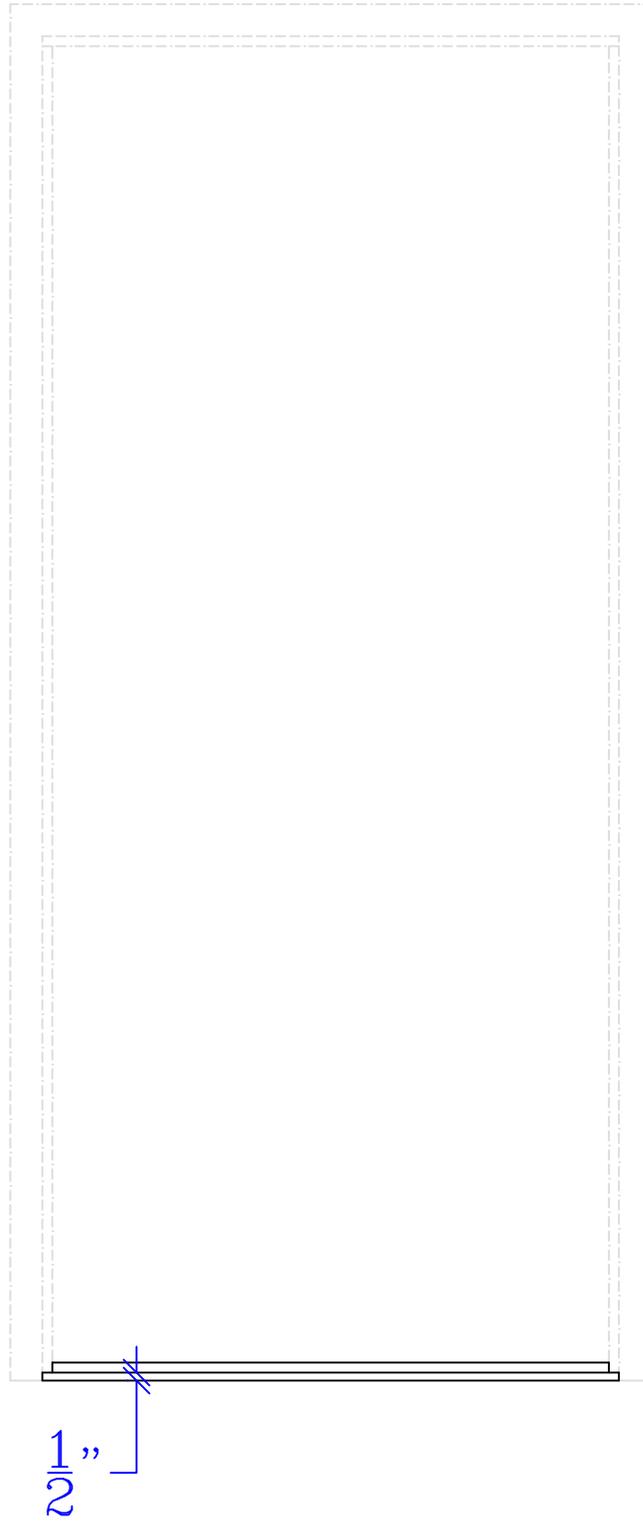
Welded or knock down



Sill

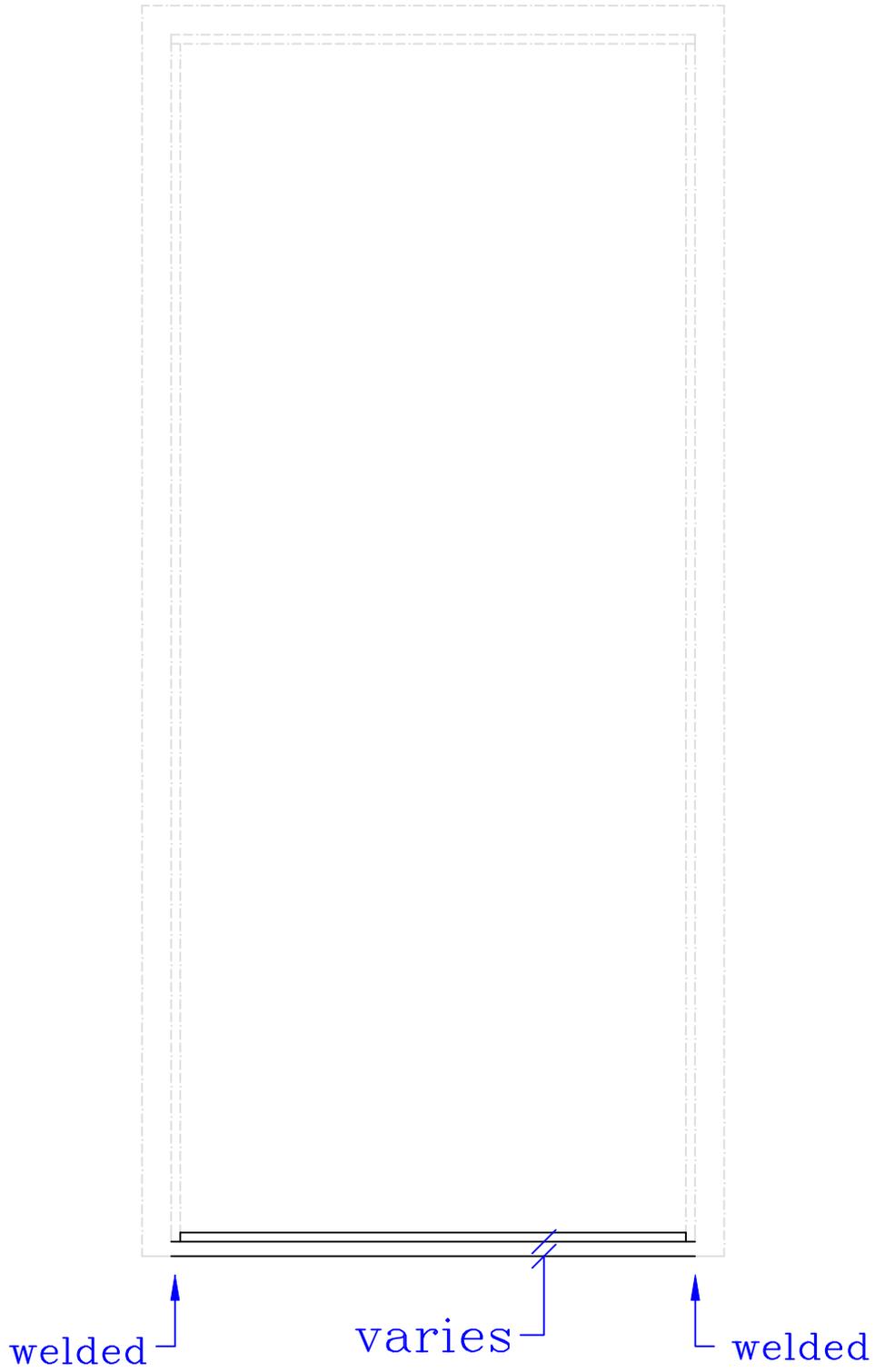
**1/2" sill with square ends for standard 3 sided frame**  
Shipped loose

Sill



061S

## Welded sill option



## **A40 (ZF120) hot dipped galvanized steel**

General information:

Our A40 material is compliant with the ASTM A653/A653M specifications. Which specification for steel sheet, zinc-coated (galvanized) or zinc-iron (galvanized) by the hot dipped process.

Zinc-iron coating of 0.30 oz/ft<sup>2</sup> total both sides per the single spot test. In SI units it would be 90g/m<sup>2</sup> total both sides per the same test and listed under ZF120.

## **A60 (ZF180) hot dipped galvanized steel**

General information:

Our A60 material is compliant with the ASTM A653/A653M specifications. Which specification for steel sheet, zinc-coated (galvanized) or zinc-iron (galvanized) by the hot dipped process.

Zinc-iron coating of 0.50 oz/ft<sup>2</sup> total both sides per the single spot test. In SI units it would be 150g/m<sup>2</sup> total both sides per the same test and listed under ZF180.

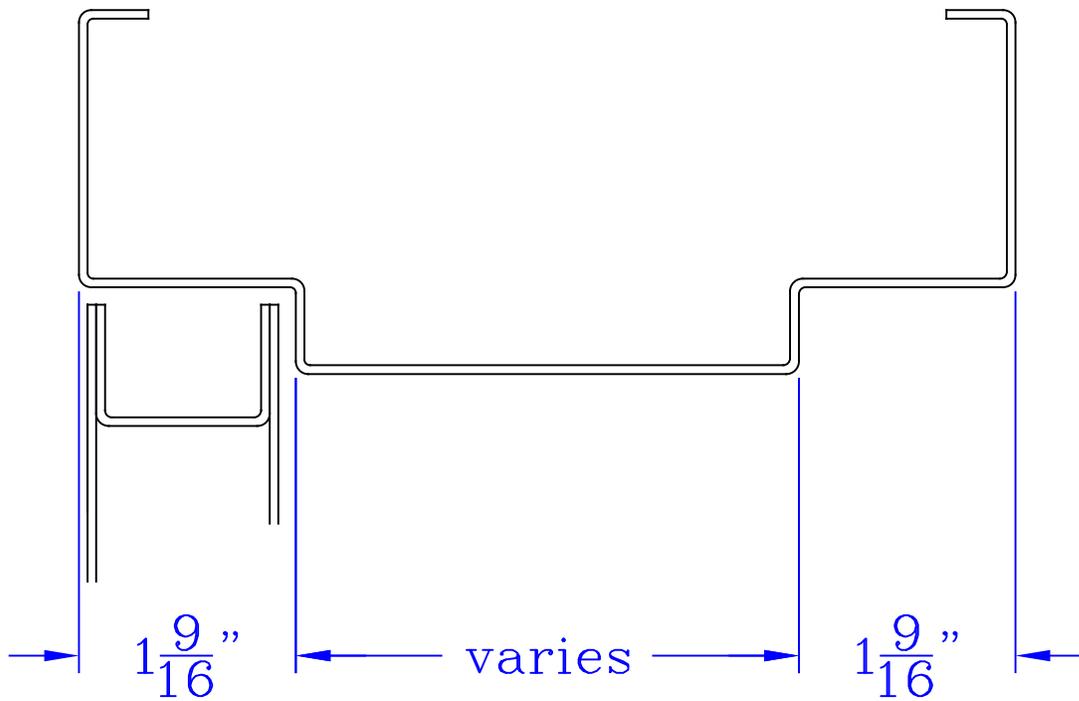
## **G90(Z275) hot dipped galvanized steel**

General information:

Our G90 material is compliant with the ASTM A653/A653M specifications. Which specification for steel sheet, zinc-coated (galvanized) or zinc-iron (galvannealed) by the hot dipped process.

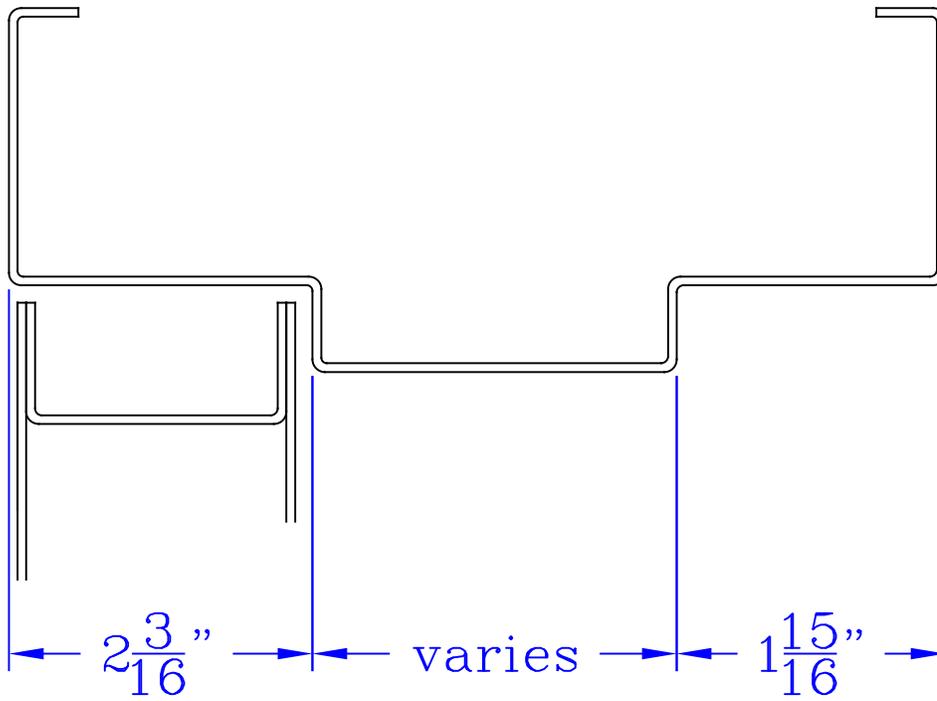
Zinc coating of 0.80 oz/ft<sup>2</sup> total both sides per the single spot test. In SI units it would be 235g/m<sup>2</sup> total both sides per the same test and listed under Z275.

**Frame profile for 1 3/8" door thickness**  
At jambs and head



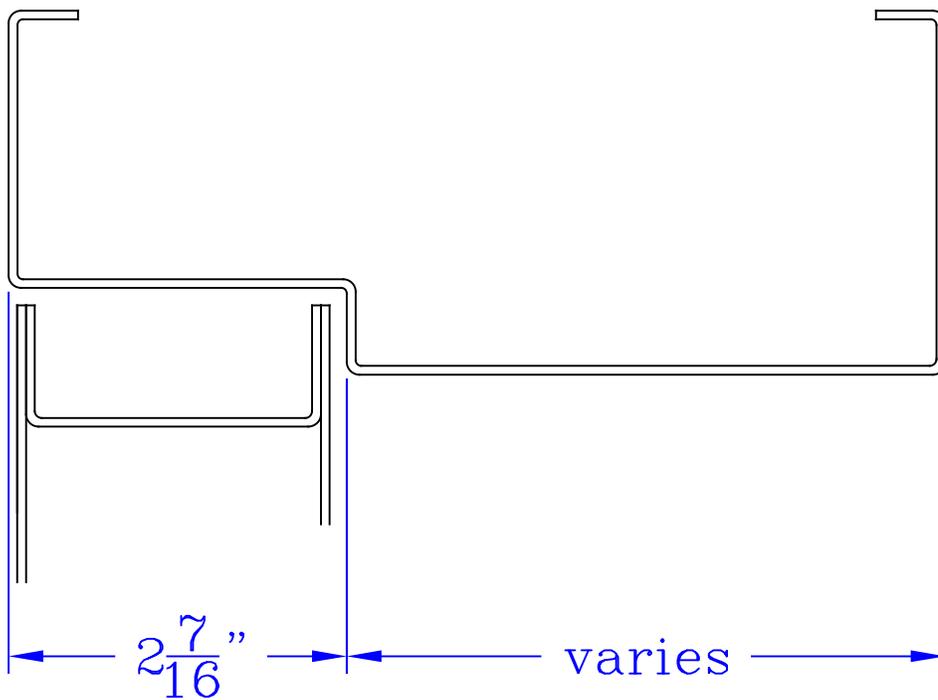
For LR, SR, DR and DW series

**Frame profile for 2" door thickness**  
At jambs and head



For LR, SR, DR and DW series

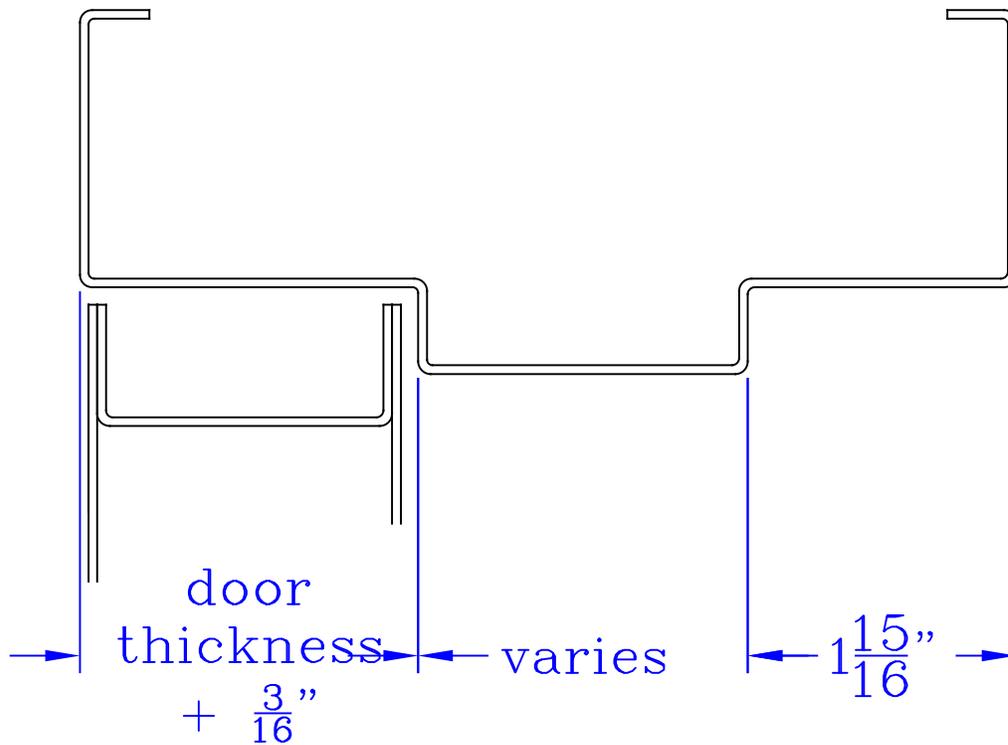
**Frame profile for 2 1/4" door thickness**  
At jambs and head



For LR, SR, DR and DW series

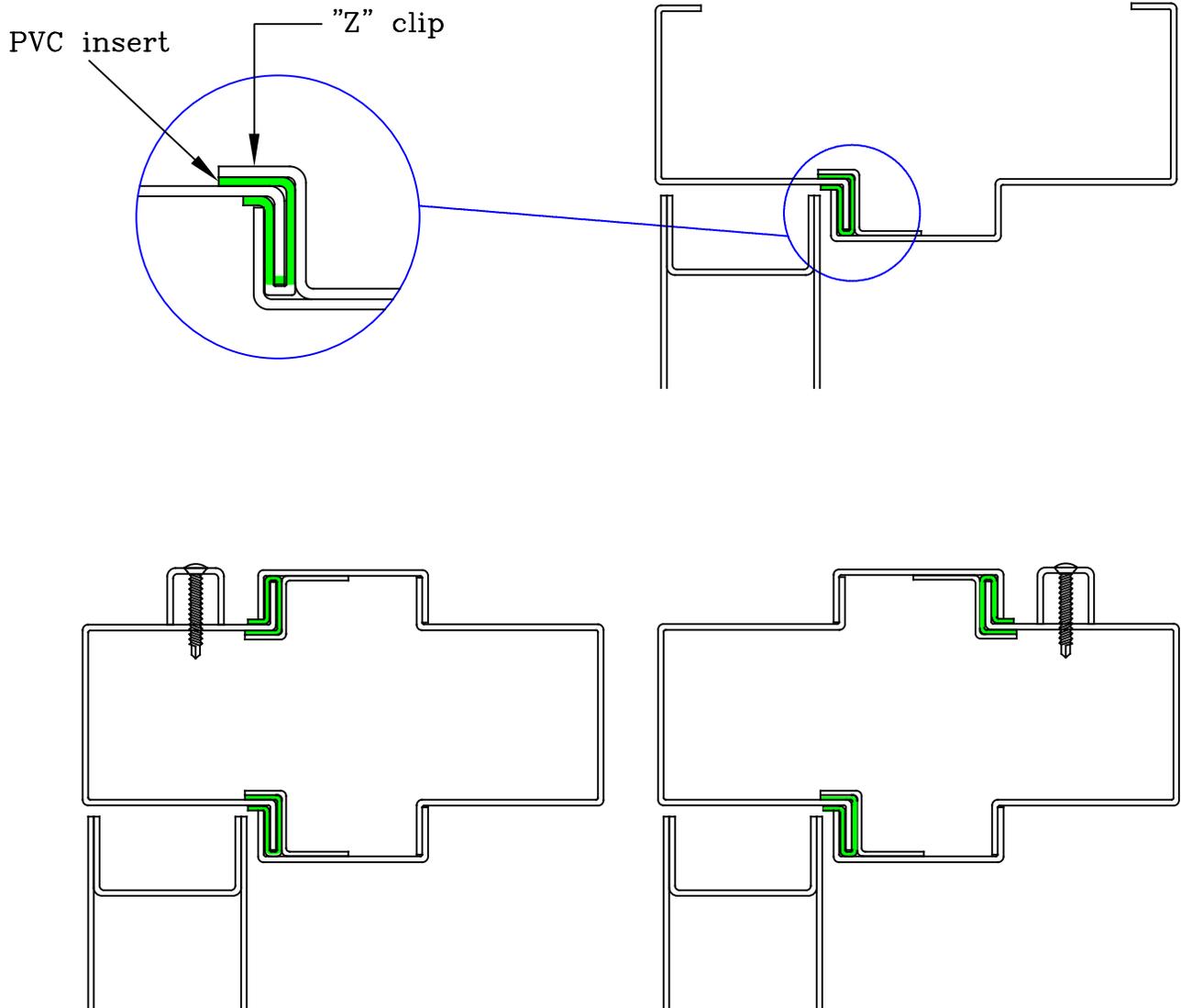
## Frame profile for special door thickness

At jambs and head



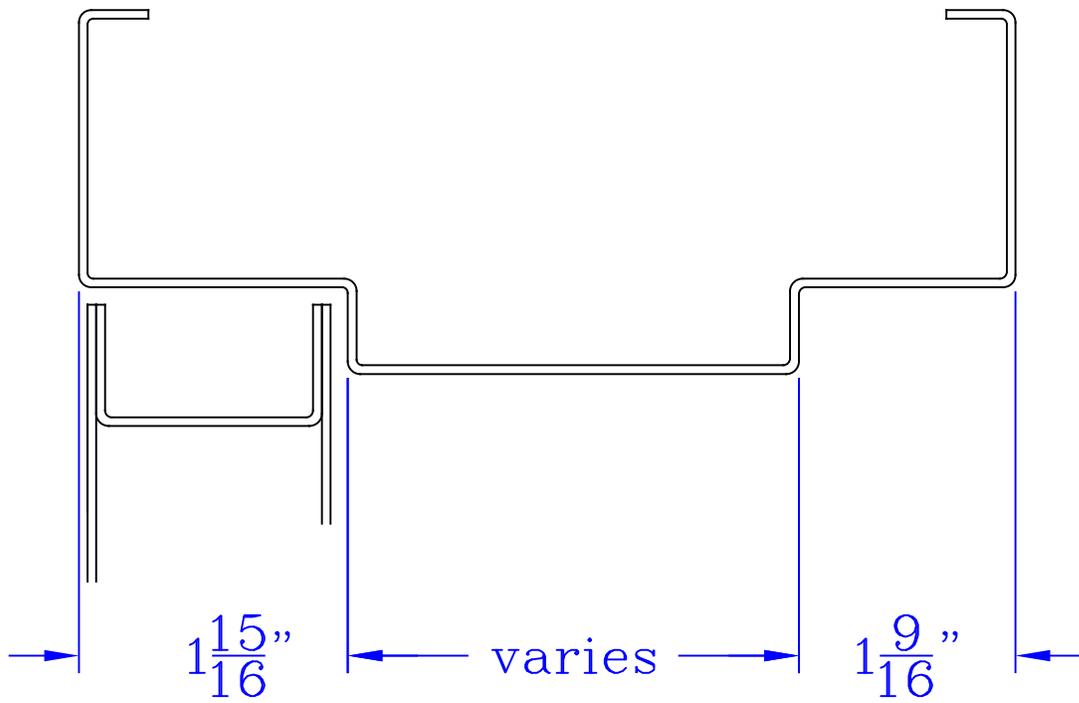
For LR, SR, DR and DW series

**Thermal break frame**  
At jambs, head and mullion



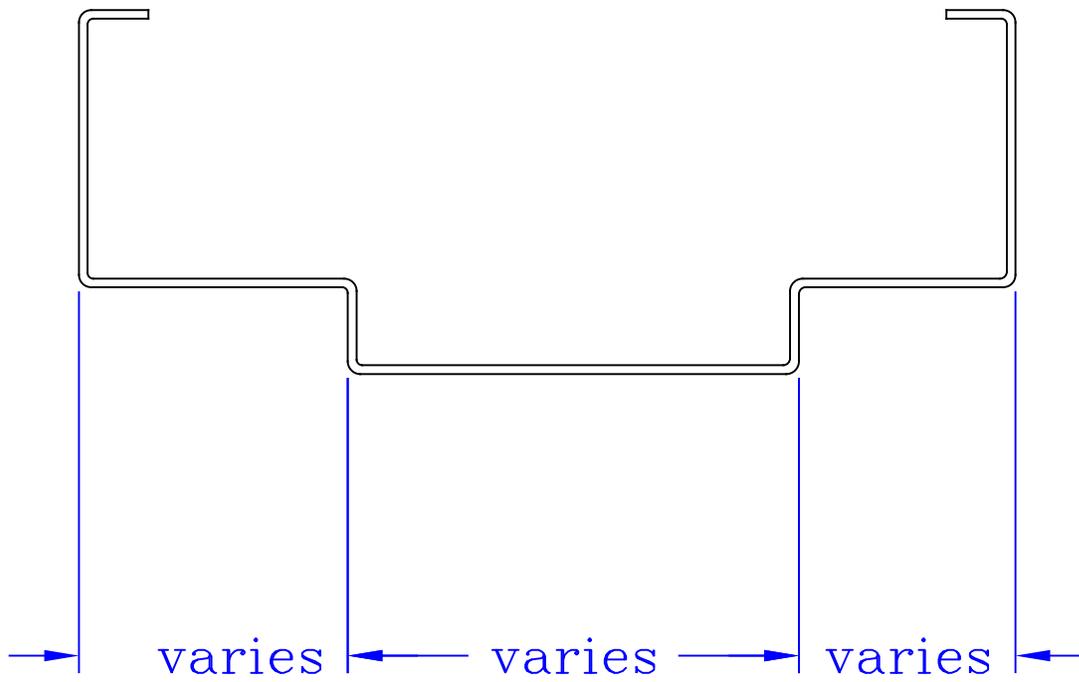
For welded 16ga or 14ga frames only.  
Not available fire rated.

**Unequal rabbet**  
At jambs and head



For LR, SR, DR and DW series

**Unequal rabbet**  
For elevations



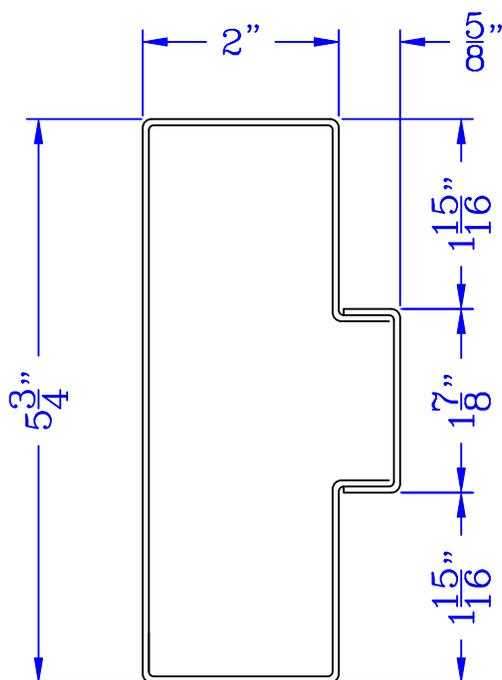
For LR, SR, DR and DW series

**Closed back**

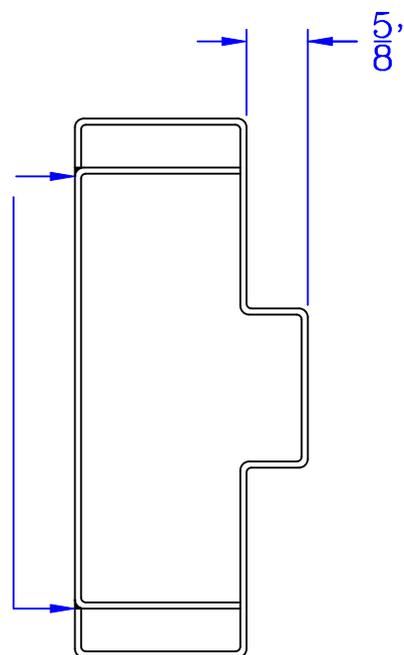
At jambs and head

For 5 3/4"JD and more,  
when 2" face and equal rabbet.

For all else.

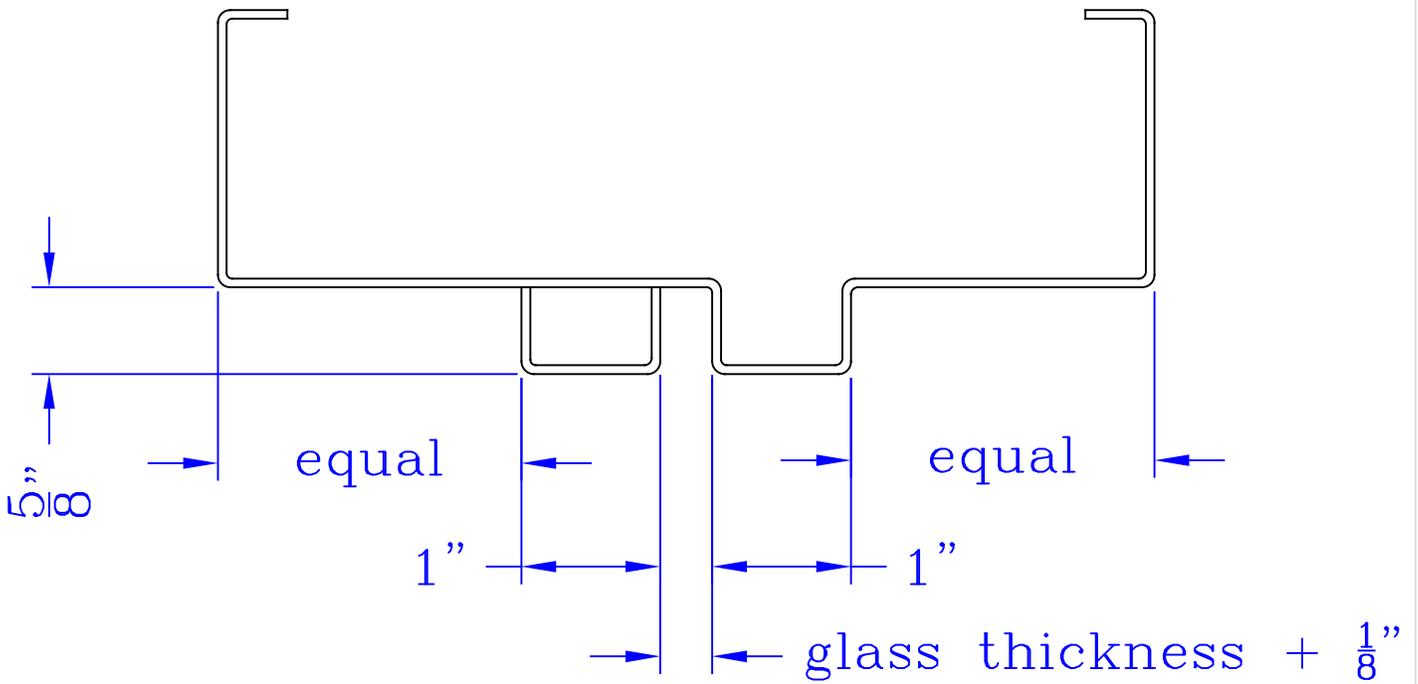


tack welded,  
bondo,  
grinded smooth



**Centered glass**

At lite(s) in borrowed lite, sidelite and transom section

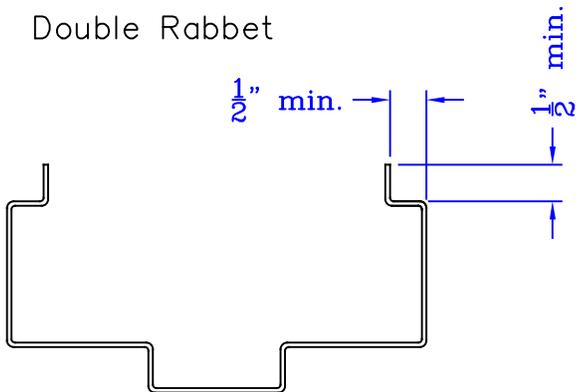


For LR, SR, DR and DW series

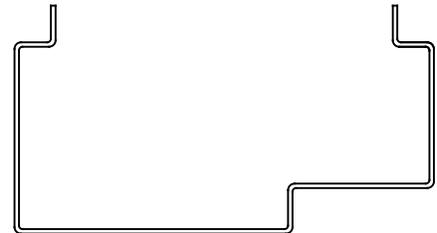
## Caulking groove

At jambs and head

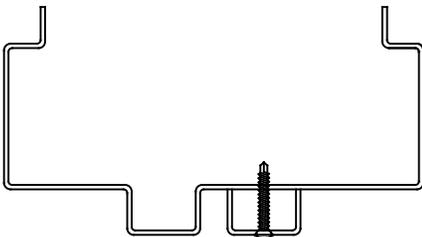
Double Rabbet



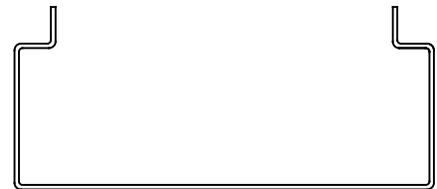
Single Rabbet



Centered glass



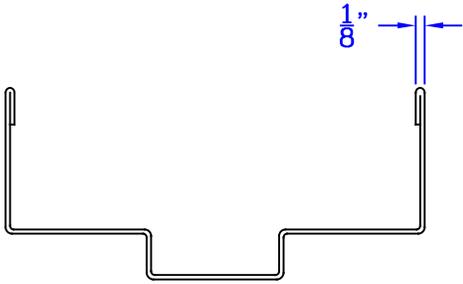
Cased Open



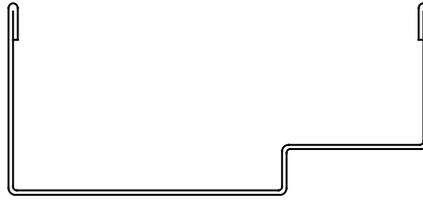
**Hemmed**

At jambs and head

Double Rabbet



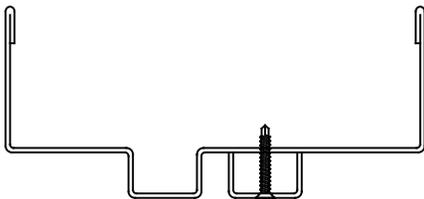
Single Rabbet



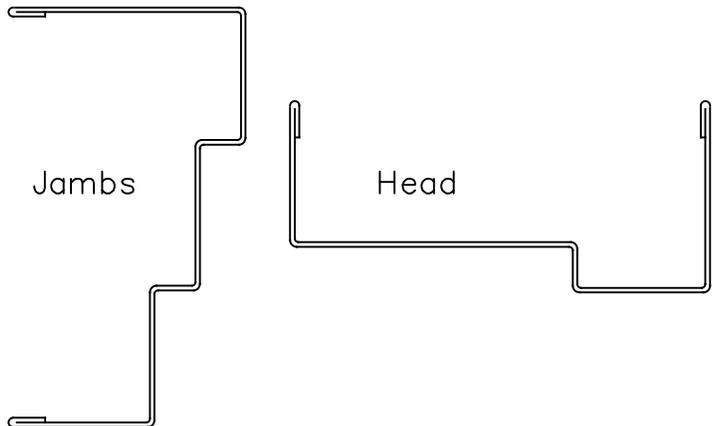
Cased Open



Centered glass

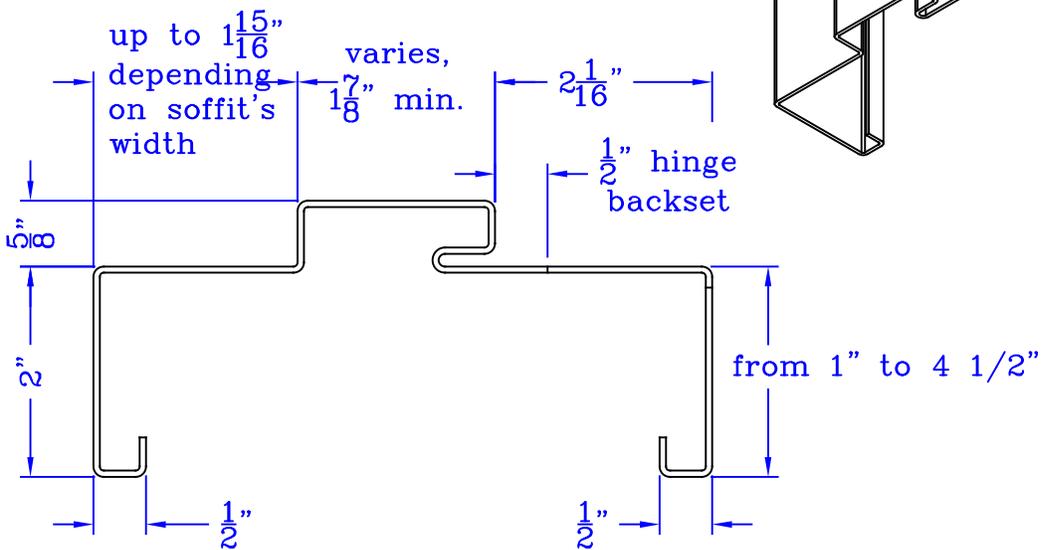
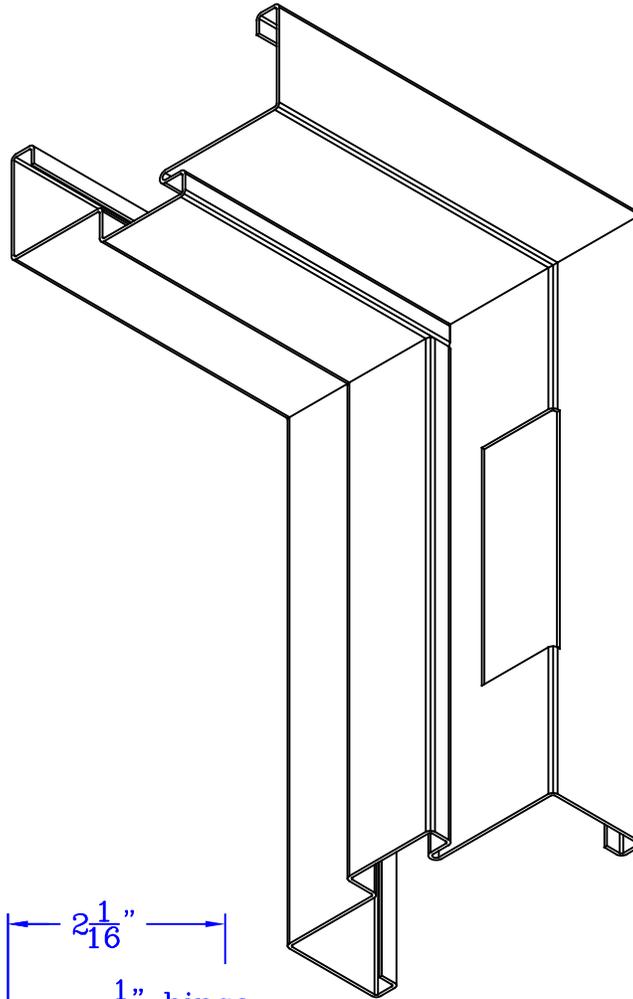


Double Egress



**Kerf frame**

At jambs and head



- DR,DW,SR,LR series, 16ga only
- 90mn maximum
- minimum 5" JD, maximum 15"
- with or without weatherstripping



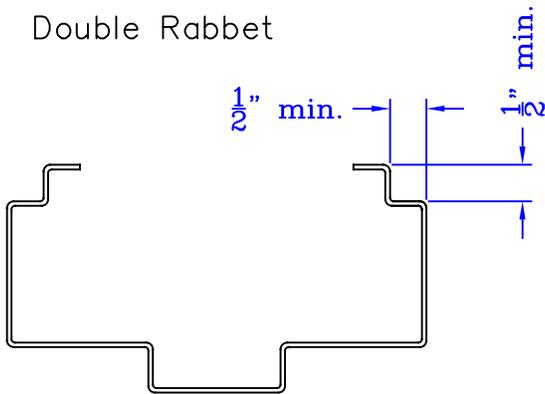
## Weatherstripping for Kerf frame

Shipped loose

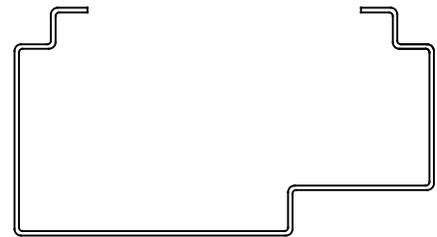


**Shadow line**  
At jambs and head

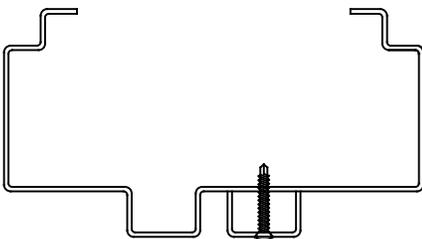
Double Rabbet



Single Rabbet



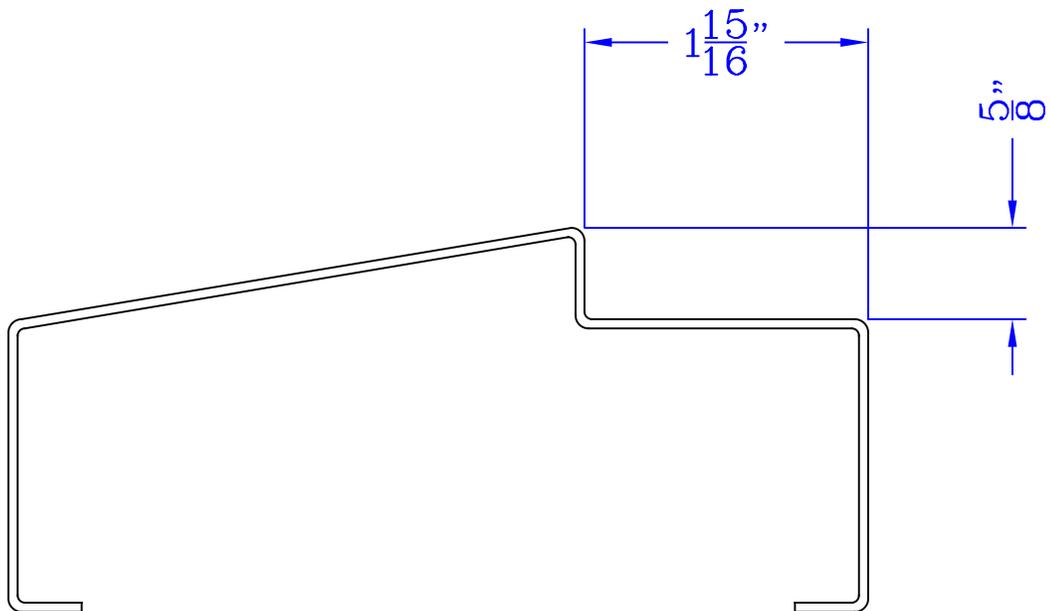
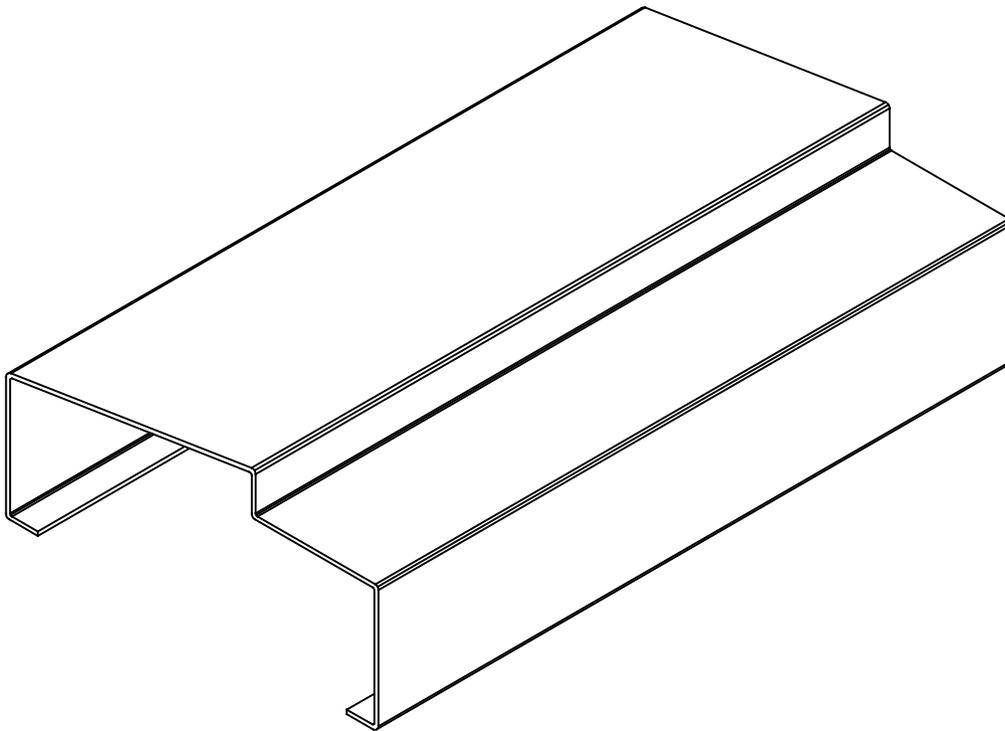
Centered glass



Cased Open



**Splayed stop**  
with single rabbet profile only



For LR, SR, DR and DW series

# **SPECIALTY PRODUCTS**

**Lead-lined**

116LL - Lead Lined Door 1/16" .....	S-4.1
18LL - Lead Lined Door 1/8" .....	S-4.2
LLFW116 - Lead Lined Frame Full Width 1/16" .....	S-4.3
LLFW18 - Lead Lined Frame Full Width 1/8" .....	S-4.4
LLHW116 - Lead Lined Frame Half Width 1/16" .....	S-4.5
LLHW18 - Lead Lined Frame Half Width 1/8" .....	S-4.6

**Acoustical**

STC - General Notes .....	S-5
STC32 - Assembly .....	S-6
STC33 to 37 - Assembly .....	S-7
STC38 to 48 - Assembly .....	S-8

**Rough Buck Frames**

RB16 - 16ga Rough Buck Frame .....	S-10
RB14 - 14ga Rough Buck Frame .....	S-12
RB12 - 12ga Rough Buck Frame .....	S-14

**Pocket Door Frame**

PD - Pocket Door Frame .....	S-15
PD2 - Pocket Door Frame .....	S-16

**Emergency Release Stop**

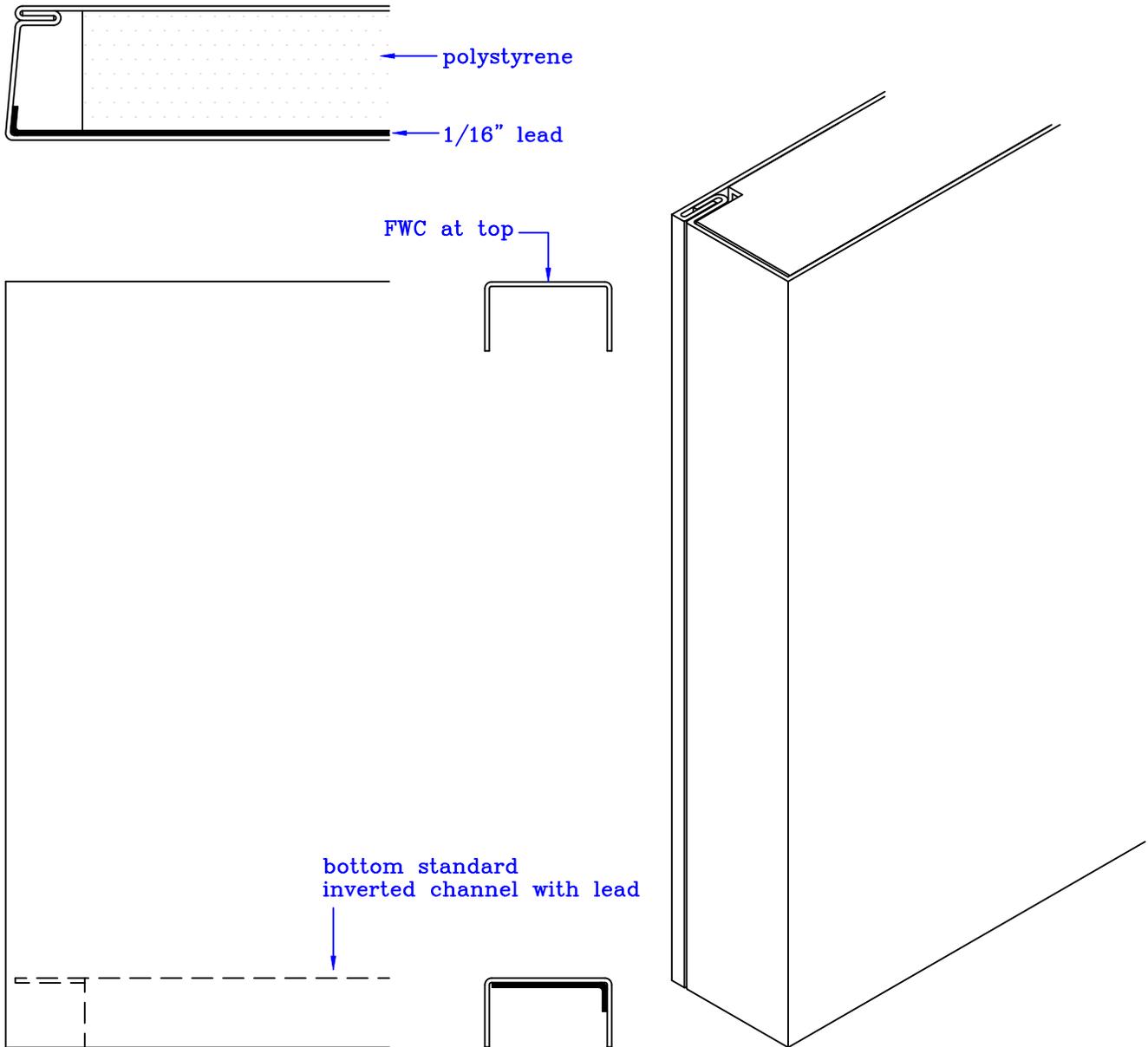
ERS - Emergency Release Stop Frame, Cased Open with Single Rabbet .....	S-18
---	------

**Windstorm**

HUR - General information.....	S-19
--------------------------------	------

### Lead-lined

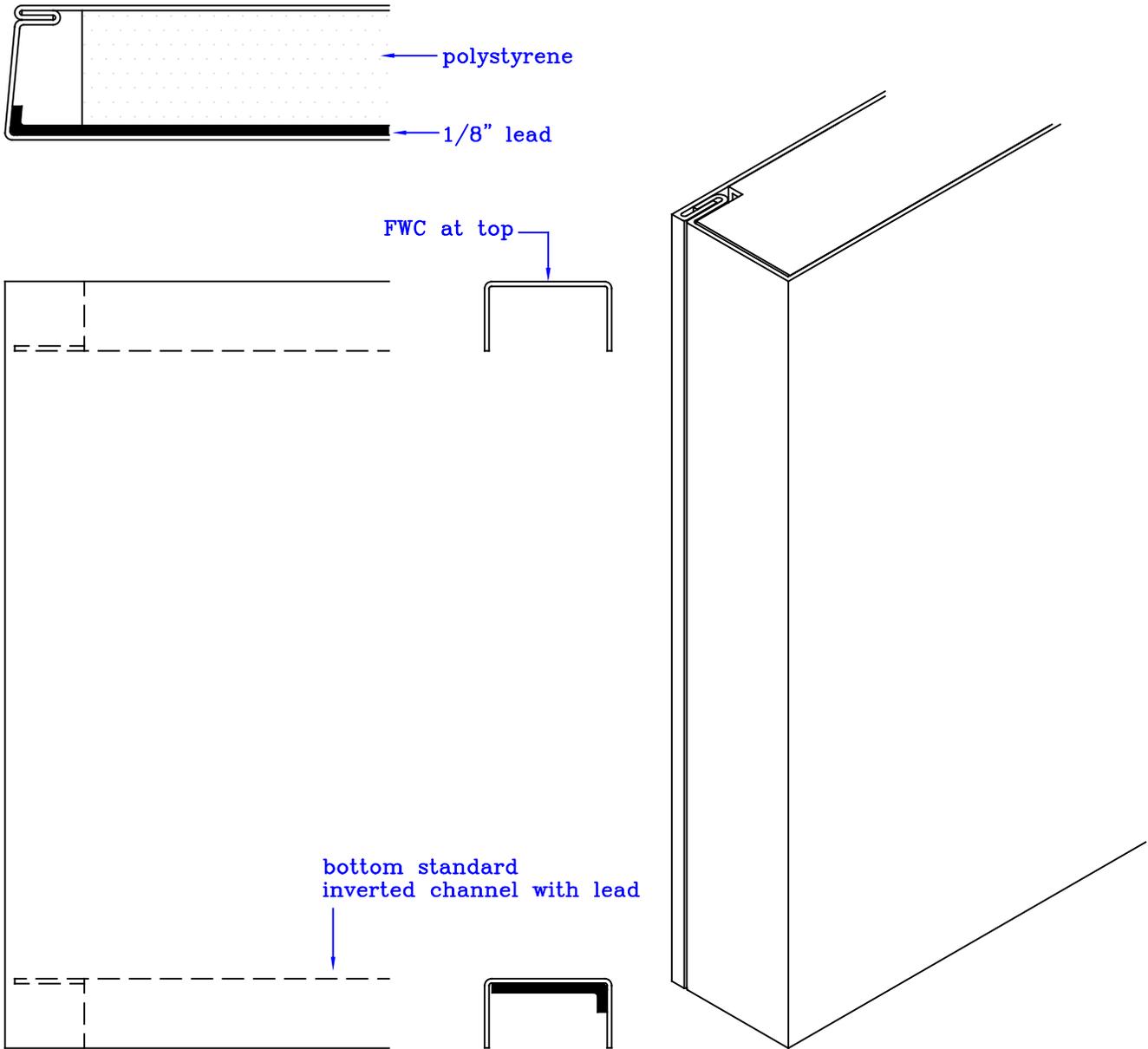
Continuous bonding of core to steel faces.



Complies with ASTM B29, QQ-L-201 "C" Category and CSA HP2 type 2 lead.  
No fire rating available

**Lead-lined**

Continuous bonding of core to steel faces.

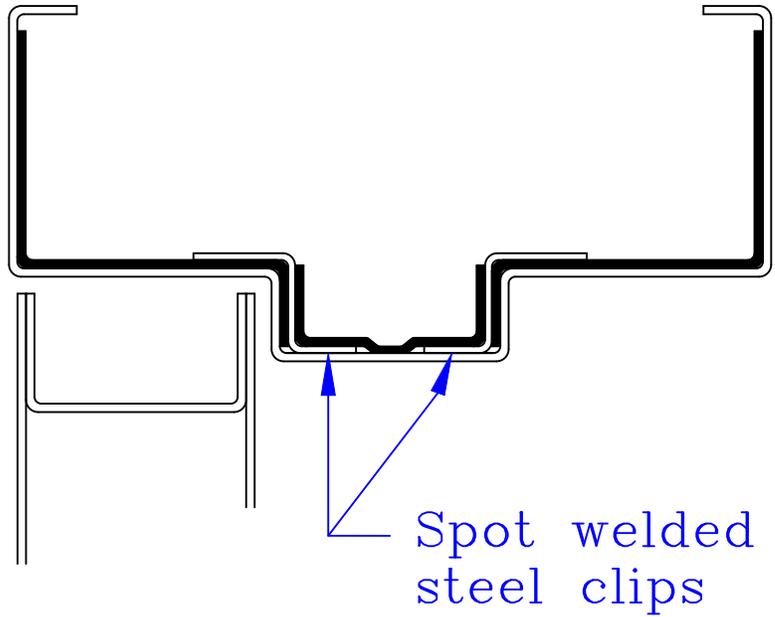


Complies with ASTM B29, QQ-L-201 "C" Category and CSA HP2 type 2 lead.  
No fire rating available

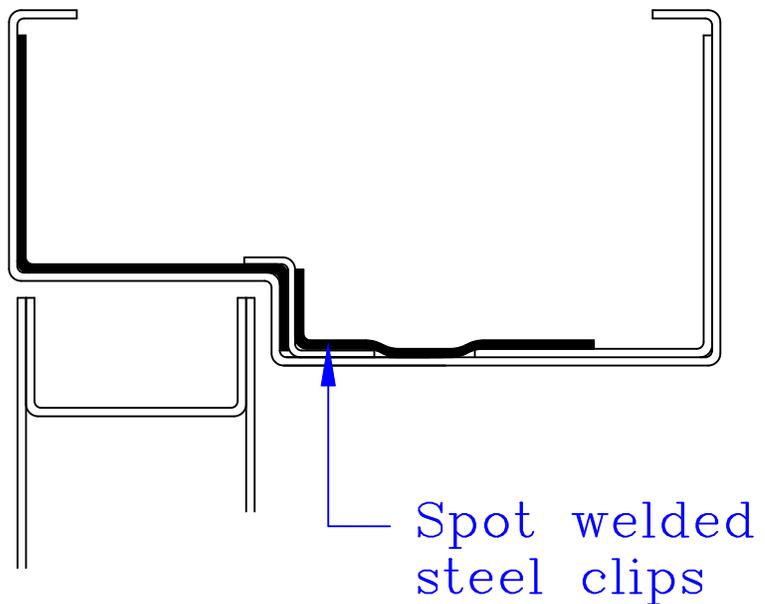
**Lead lined frame, full width 1/16"**

Lead lined

at double rabbet



at single rabbet



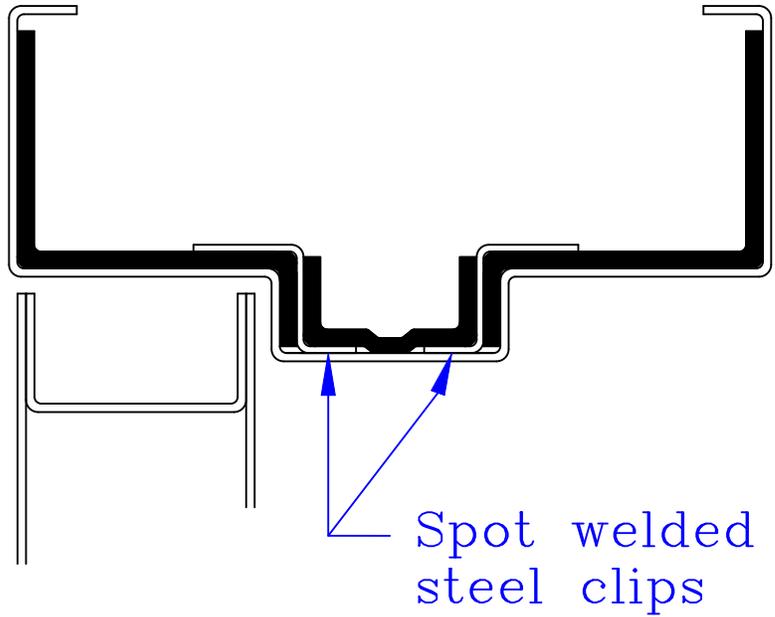
For LR, SR, and DW/DR series  
Lead complies with ASTM B749  
Installation note: Lead linings need to overlap at miters

LLFW116

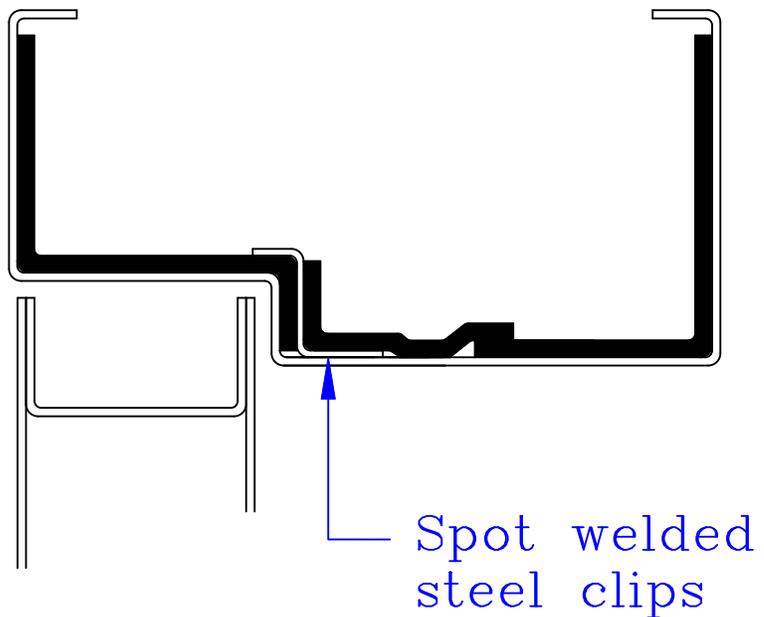
**Lead lined frame, full width 1/8"**  
14ga frame minimum

Lead lined

at double rabbet



at single rabbet



For LR, SR, and DW/DR series  
Lead complies with ASTM B749  
Installation note: Lead linings need to overlap at miters

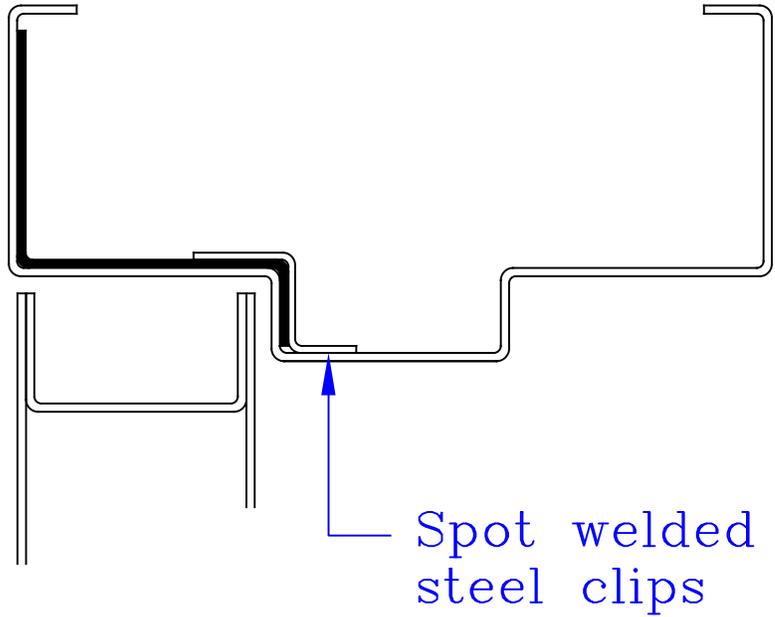
LLFW18

**Lead lined frame, half width 1/16"**

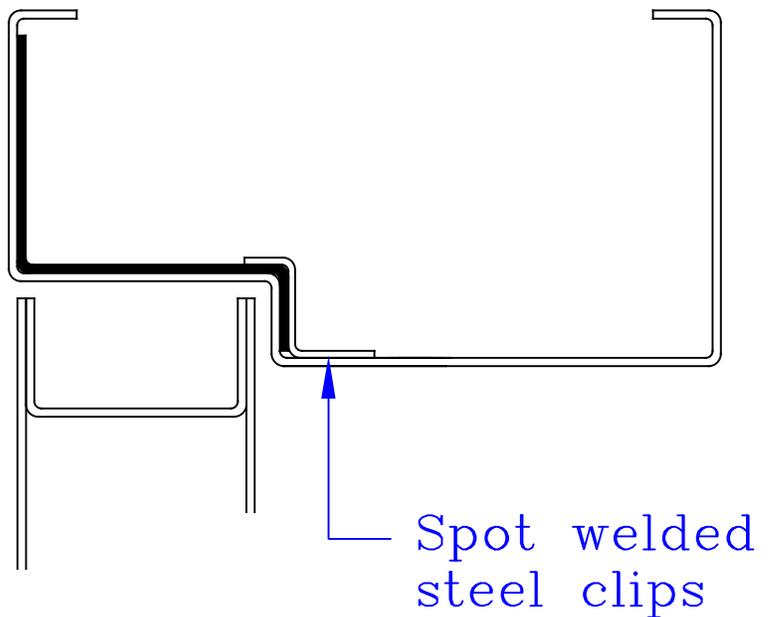
On door/glass side

Lead lined

at double rabbet



at single rabbet



For LR, SR, and DW/DR series  
Lead complies with ASTM B749  
Installation note: Lead linings to overlap at miters

LLHW116

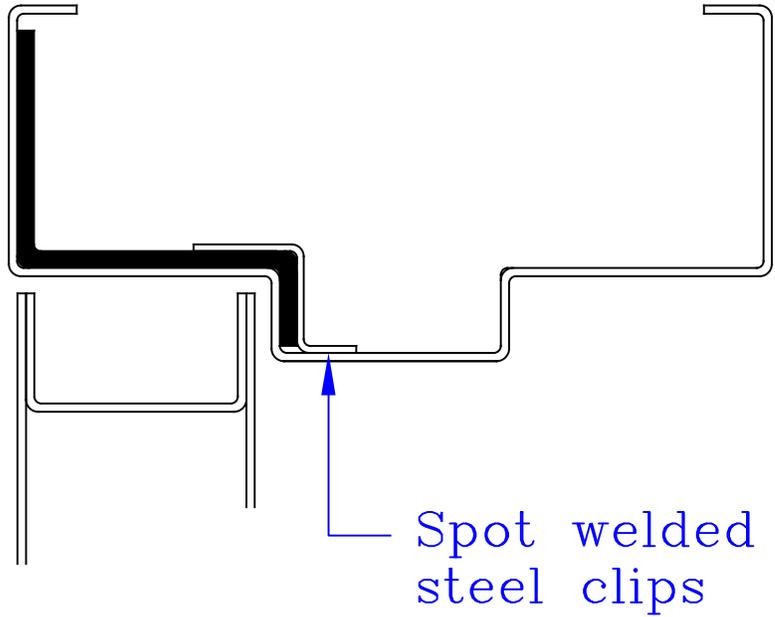
**Lead lined frame, half width 1/8"**

14ga frame minimum

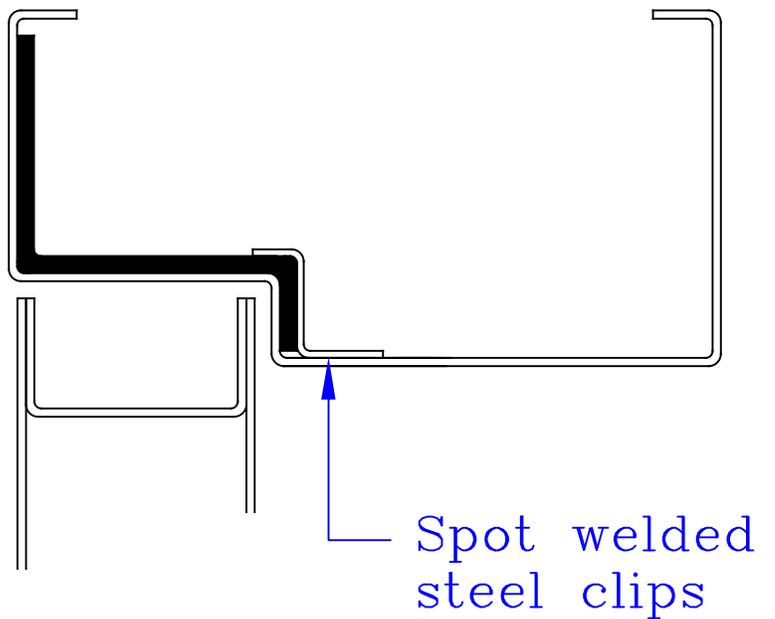
On door/glass side

Lead lined

at double rabbet



at single rabbet



For LR, SR, and DW/DR series  
Lead complies with ASTM B749  
Installation note: Lead linings to overlap at miters

LLHW18

## STC general information

DE LA FONTAINE Industries offers openings with STC ratings up to and including STC48, in compliance with the following standards:

- ASTM E90 (Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements)
- ASTM E413 (Classification Standard for Rating Sound Insulation)
- ASTM E1332 (Standard Classification for Rating Outdoor-Indoor Sound Attenuation)
- ASTM E2235 (Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods)

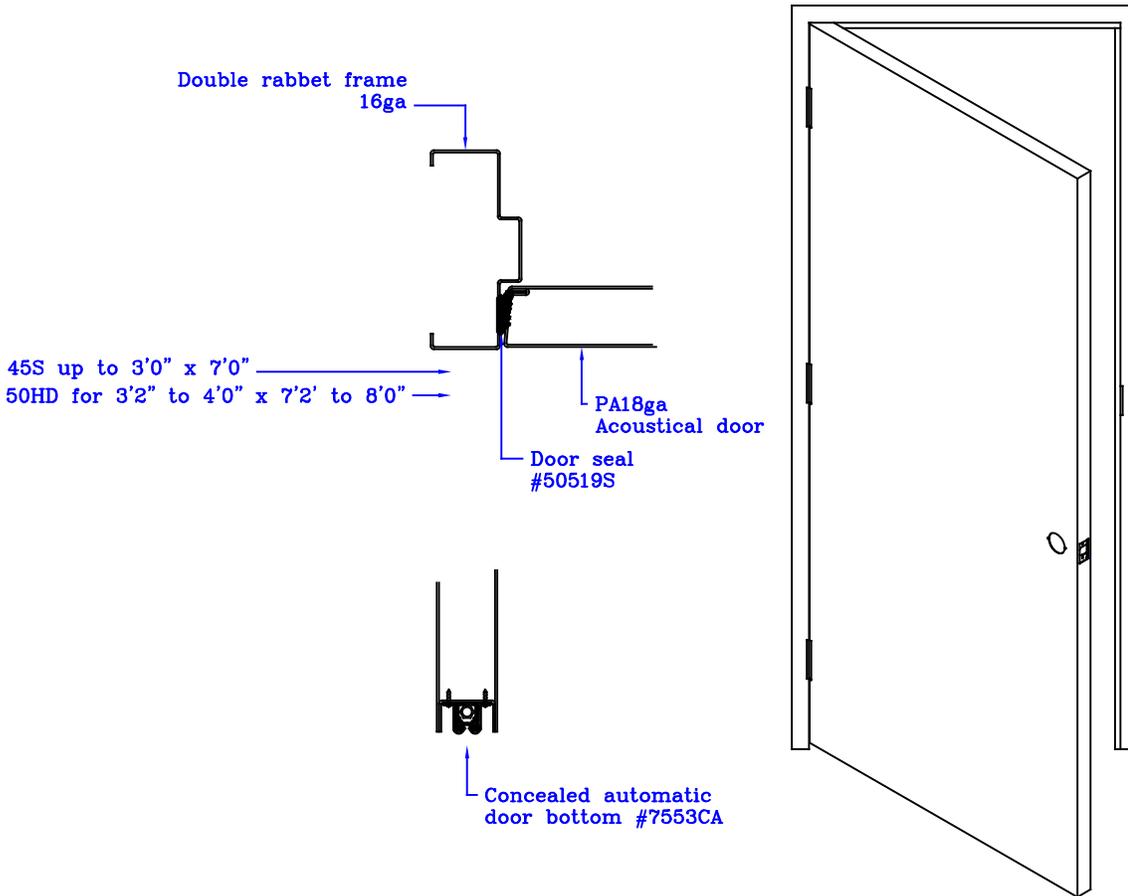
This rating is evaluated according to the operable method. The opening includes the frame, the door, and the acoustical gasketing.

The maximum dimensions for this opening are 4'0" x 8'0" with a door thickness of 1 3/4". Double doors are also available; however, this option has a rating for which we have not yet conducted an official evaluation.

- Cased open regular profile frame based on STC required. The frame must be filled with mortar on the job site.
- Door (PA series), 14-, 16- or 18-gauge.
- Soudproof jamb and head gasketing.
- Automatic door bottom.

The hardware must nonetheless be installed in accordance with the manufacturer's specifications and by a qualified installer. Because DE LA FONTAINE does not assembled the frame and hardware in the factory, we cannot guarantee that the opening will meet the desired rating.

**Up to STC32**

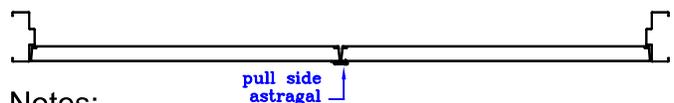


\*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

**Door assembly includes:**

- 1) Double rabbet frame, 16ga, face welded, filled with sound deadening material, by others.
- 2) Flush hollow metal, PA18 acoustical door. Closed (FWC) at top.
- 3) Sound jamb gasketing.
- 4) Sound automatic door bottom, aluminum finish.
- 5) Astragal for pair of doors, aluminum finish.

Double opening assembly



**Notes:**

- Pairs: calculated rating
- This for active by in-active leaf installation, contact customer service for both doors active.
- Gasketing items are shipped loose to be installed after painting.

Single opening assembly

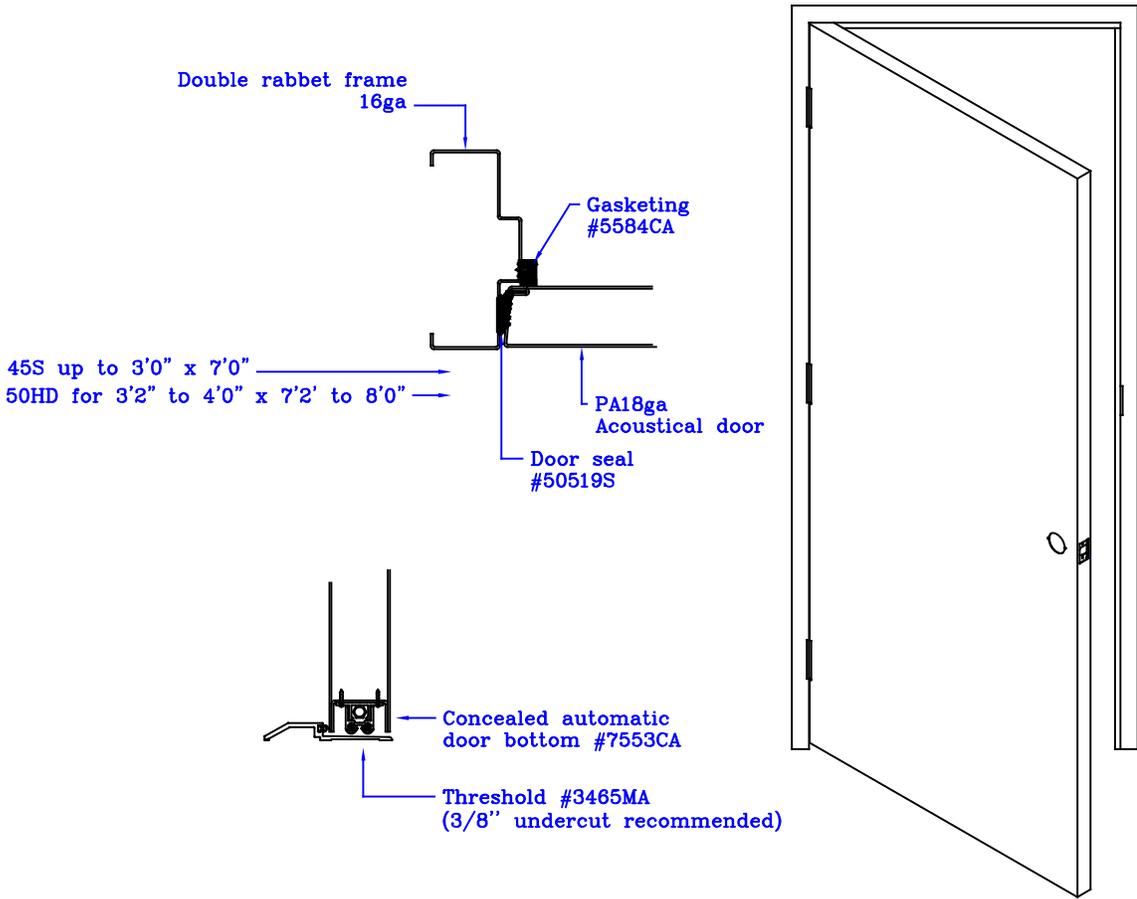


**Notes:**

- Size limitation: up to 4080 : 1 3/4" door only
- Gasketing items are shipped loose to be installed after painting.

All STC Legacy gasketing items are supplied by DeLaFontaine Industries  
 For Single: 50519S at head and jambs, 7553CA door bottom.  
 For Pairs: 50519S at head and jambs, 7553CA door bottom, 7383 SLC astragal.  
 Can be rated up to 180mn if within limits.

**STC33 to 37**

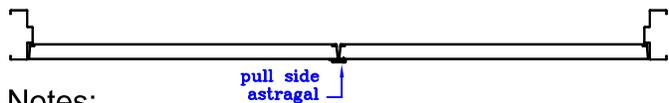


\*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

**Door assembly includes:**

- 1) Double rabbet frame, 16ga, face welded, filled with sound deadening material, by others.
- 2) Flush hollow metal, PA18 acoustical door. Closed (FWC) at top.
- 3) Sound jamb gasketing.
- 4) Sound automatic door bottom, aluminum finish.
- 5) Astragal for pair of doors, aluminum finish.

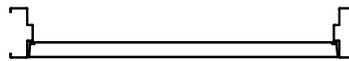
Double opening assembly



Notes:

- Pairs: calculated rating
- This for active by in-active leaf installation, contact customer service for both doors active.
- Gasketing items are shipped loose to be installed after painting.

Single opening assembly

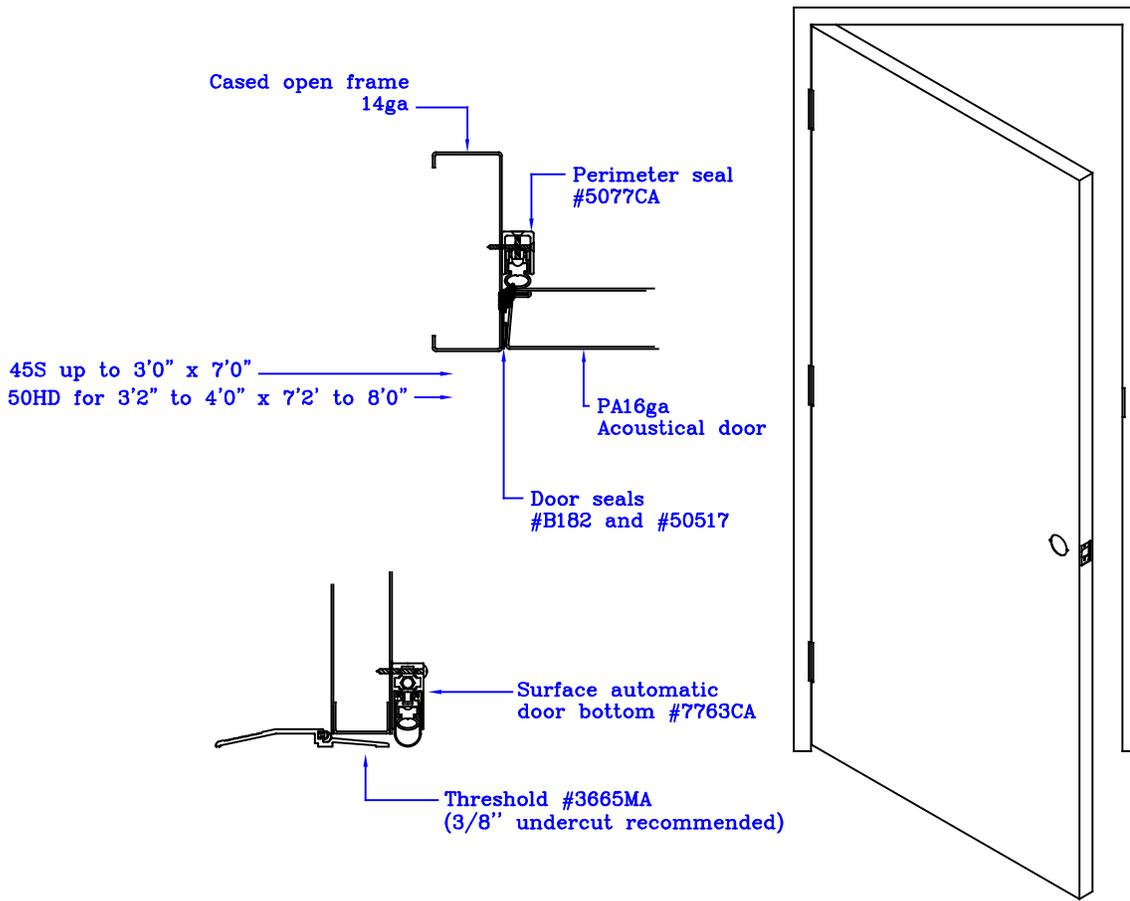


Notes:

- Size limitation: up to 4080 : 1 3/4" door only
- Gasketing items are shipped loose to be installed after painting.

All STC Legacy gasketing items are supplied by DeLaFontaine Industries  
 For Single: 50519S + 5584CA at head and jambs, 7553CA door bottom, 3465MA threshold.  
 For Pairs: 50519S + 5584CA at head and jambs, 7553CA door bottom, 3465MA threshold, 7383 SLC astragal.  
 Can be rated up to 180mn if within limitations.

**STC38 to 48**

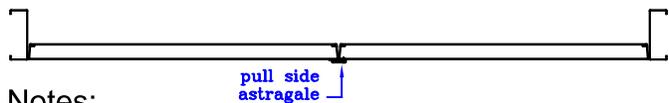


\*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

**Door assembly includes:**

- 1) Cased open frame, 14ga, face welded, filled with sound deadening material, by others.
- 2) Flush hollow metal, PA16 acoustical door. Closed (FWC) top and bottom.
- 3) Sound jamb gasketing.
- 4) Sound automatic door bottom, aluminum finish.
- 5) Astragal for pair of doors, aluminum finish.

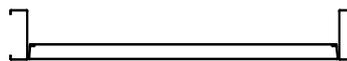
Double opening assembly



**Notes:**

- Pairs: calculated rating
- This for active by in-active leaf installation, contact customer service for both doors active.
- Gasketing items are shipped loose to be installed after painting.

Single opening assembly



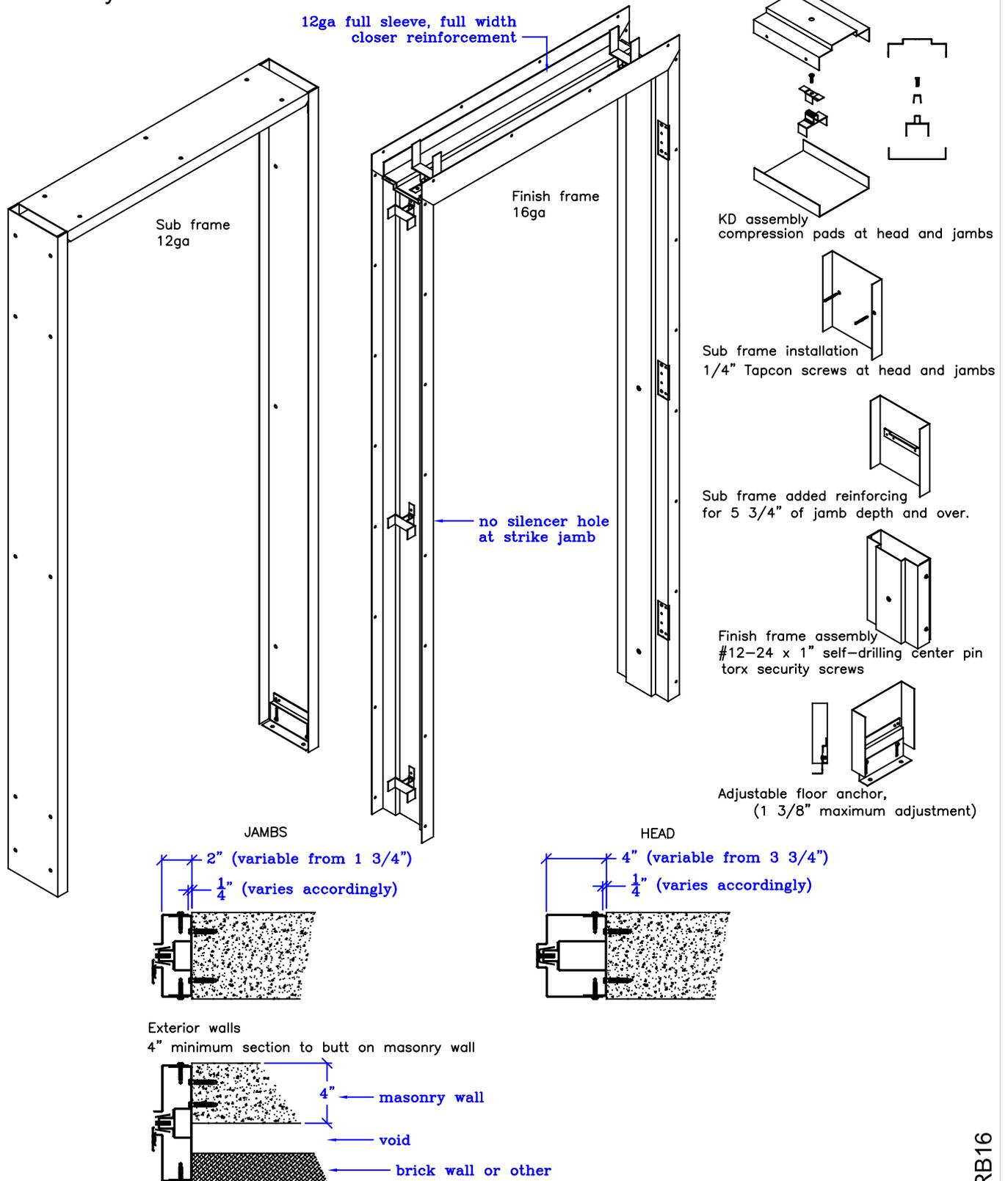
**Notes:**

- Size limitation: up to 4080 : 1 3/4" door only
- Gasketing items are shipped loose to be installed after painting.

All STC Legacy gasketing items are supplied by DeLaFontaine Industries  
 For Single: 5077CA + B182 + 50517 at head and jambs, 7763CA door bottom, 3665MA threshold.  
 For Pairs: : 501CA + 5883S at head and jambs, 7763CA door bottom, 3465MA threshold., 7383SLC astragal.

# 16ga Rough buck frame

KD assembly



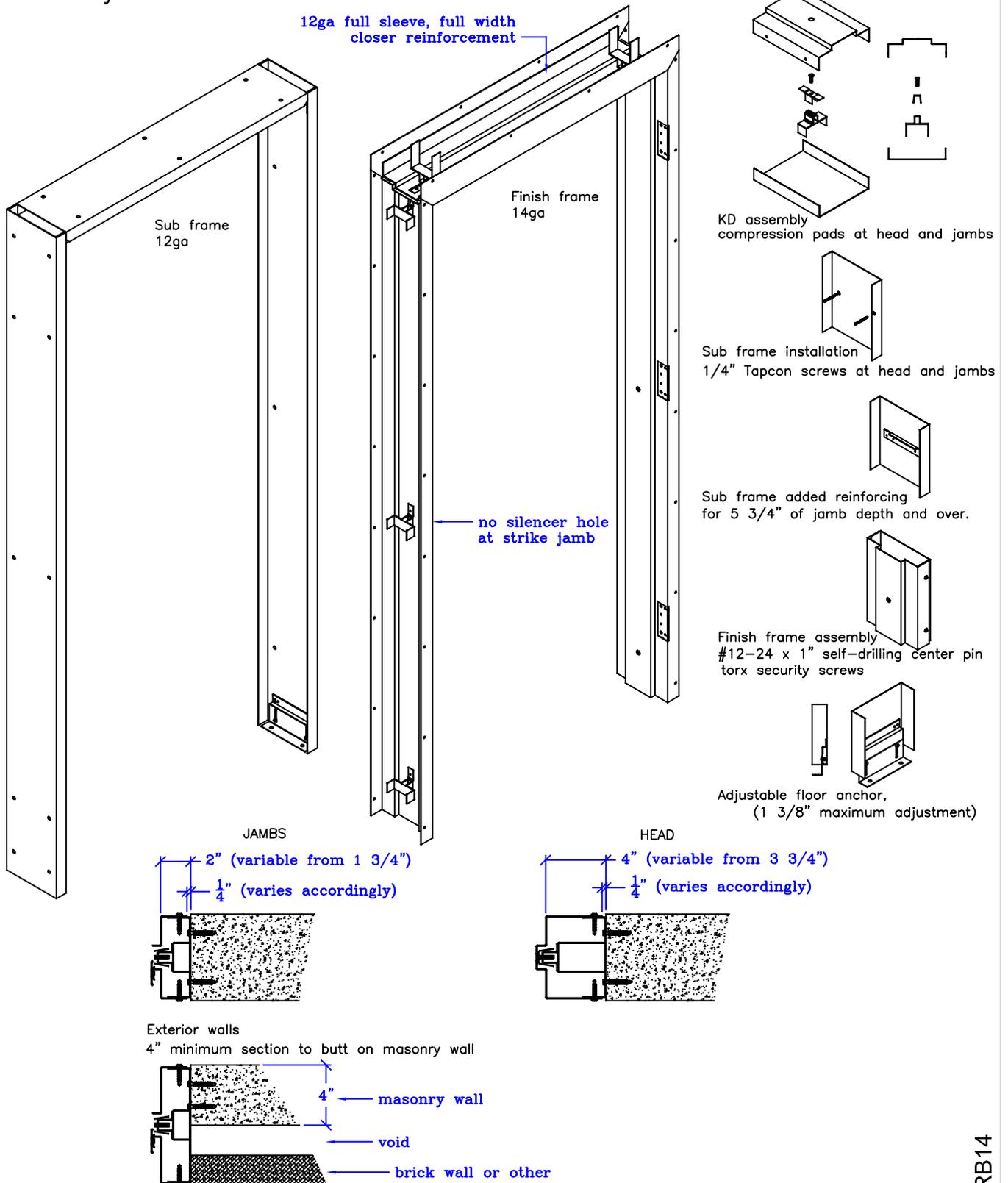
Specialty products

RB16

Sub frame legs 1/4" shorter than R.O. for floor irregularities.  
Nominal opening equals rough opening less 4" in height and width.

# 14ga Rough buck frame

KD assembly



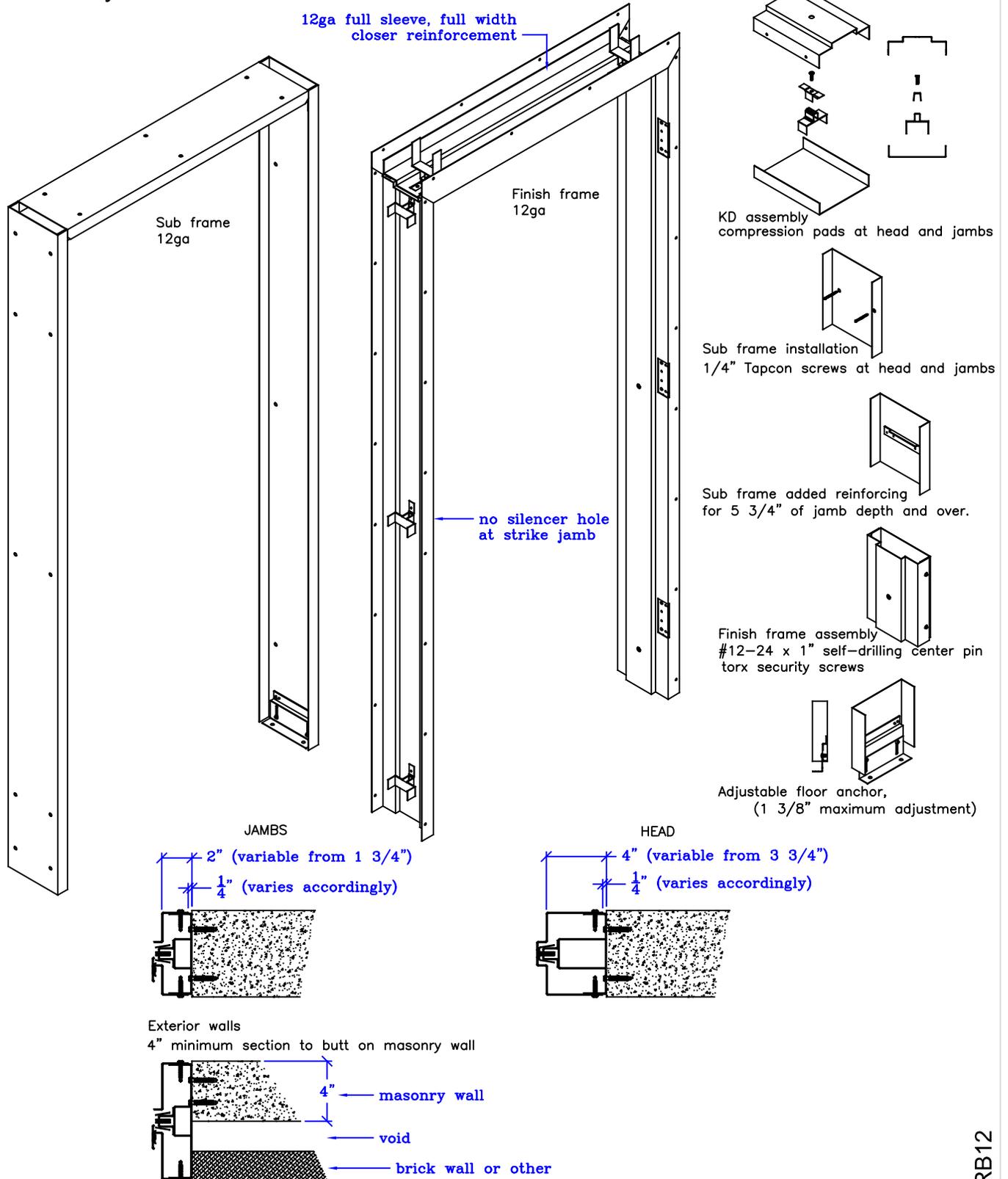
Specialty products

Sub frame legs 1/4" shorter than R.O. for floor irregularities.  
Nominal opening equals rough opening less 4" in height and width.

RB14

# 12ga Rough buck frame

KD assembly



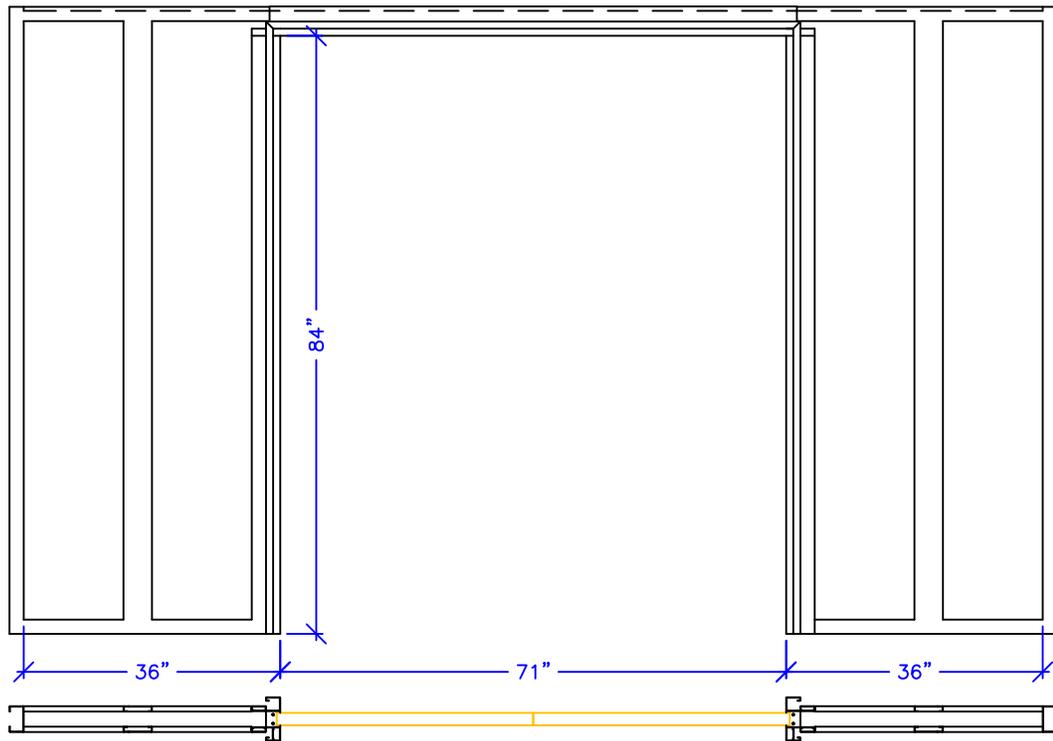
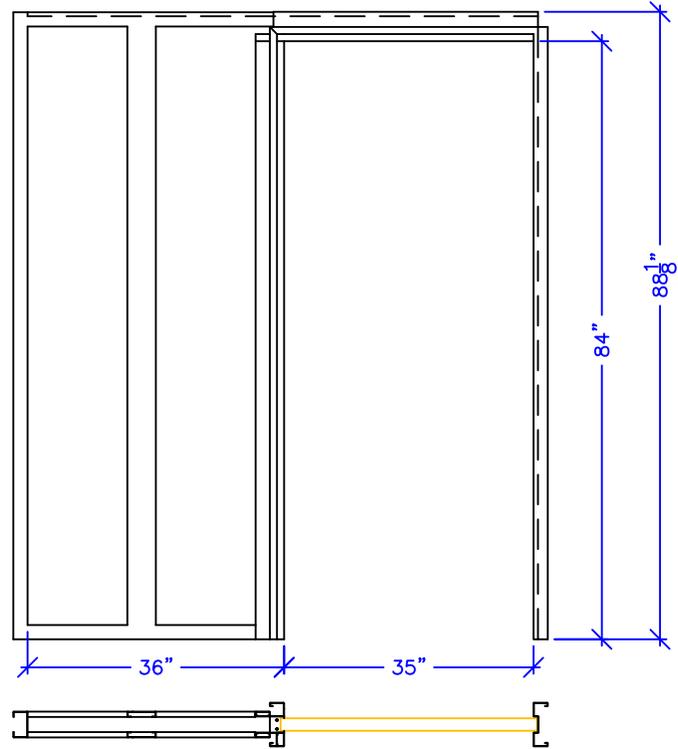
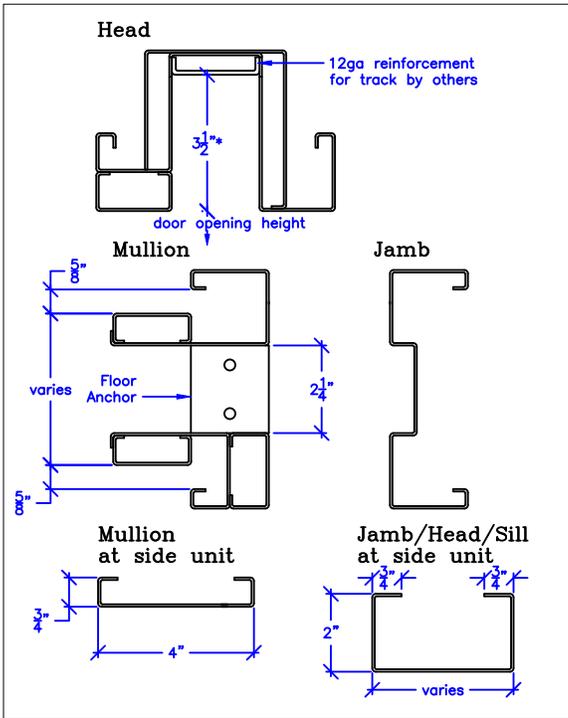
Specialty products

Sub frame legs 1/4" shorter than R.O. for floor irregularities.  
Nominal opening equals rough opening less 4" in height and width.

RB12

**Pocket door frame**

Available single or double, with or without side unit

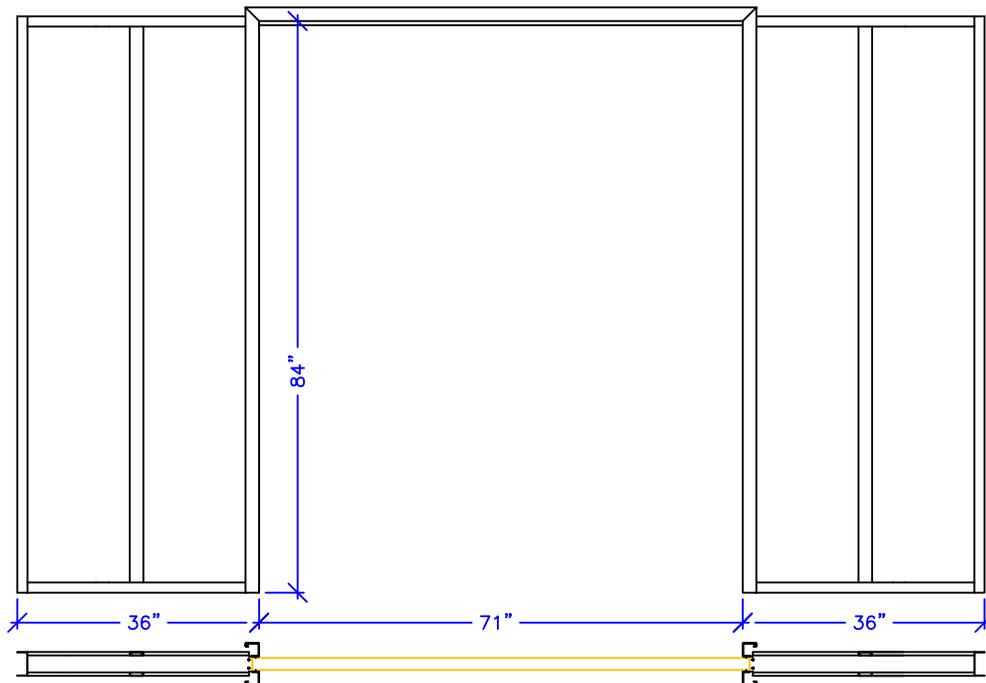
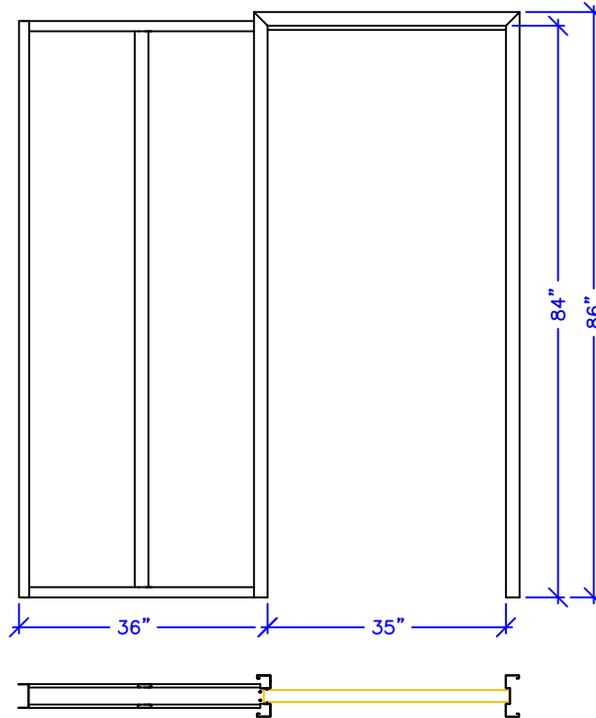
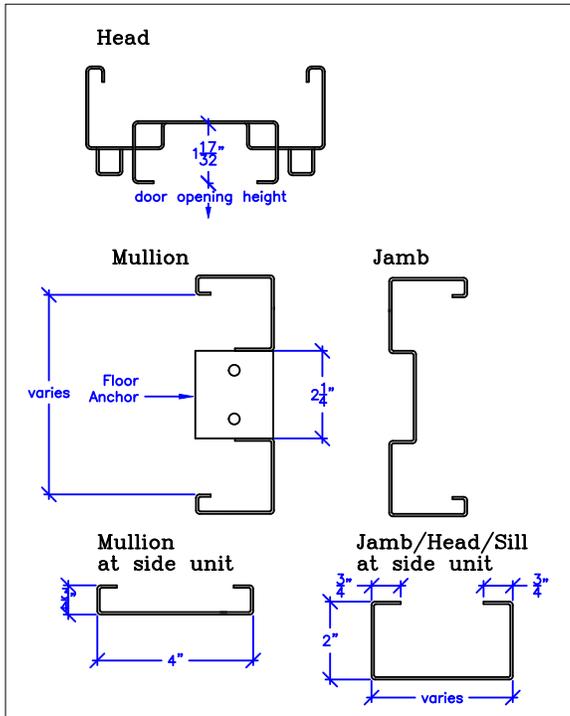


Face welded, 16ga, "Z" anchors, 1 3/4" door, 5 3/4" minimum jamb depth.  
Based on a 3070 slab door.

\* manufacturer's template to be provided

**Pocket door frame**

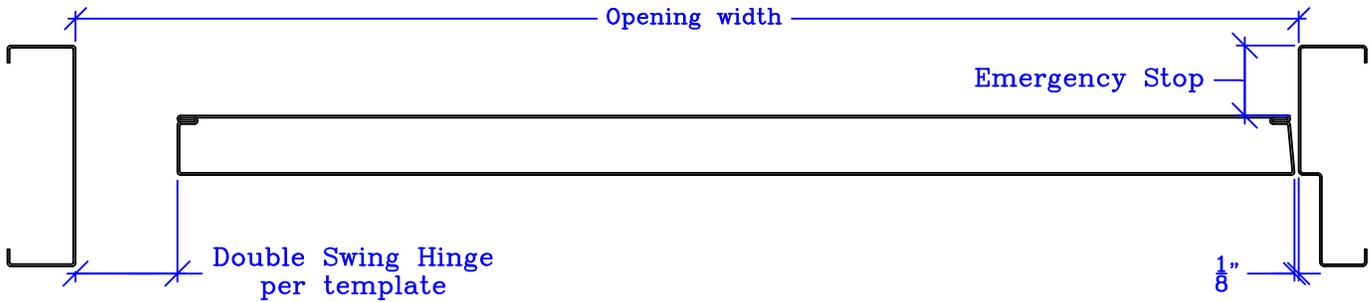
Available single or double, with or without side unit



Face welded, 16ga, "Z" anchors, 1 3/4" door, 5 3/4" minimum jamb depth.

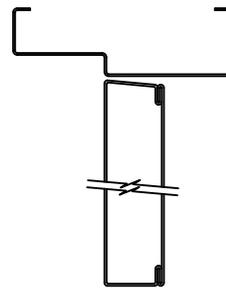
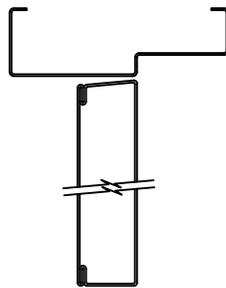
**Emergency Release Stop Frame**

Cased open with single rabbet strike jamb

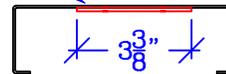
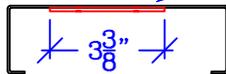


LEFT HAND  
Strike side

RIGHT HAND  
Strike side



RDA - Reinforcement  
For Double Acting  
(12 Ga)



## Windstorm general information

DE LA FONTAINE Industries offers windstorm-resistant assemblies with HUR ratings, that meets the industry's stringent standards.

### Standards Compliance

- ASTM E1886, ASTM E1996, ASTM E330, ASTM E283
- TAS 201, TAS 202, TAS 203
- ANSI A250.1

### Certifications and Listing

- Approved by Florida Building Commission (FBC)
- Approved by Texas Department of Insurance (TDI)
- Quality Assurance by Intertek Testing Services (ITS)

### Features and Options

- Design pressure up to  $\pm 70$  PSF
- Approved for both Non-HVHZ and HVHZ applications
- Minimum 18 gage door with standard edge seam (PA) and standard end channels (ST)
- Pre-embossed (EMB) and custom embossed (CED) door designs available
- 90 minutes fire-rating available

# **DOOR AND FRAME PARTS**

**Hinge Reinforcement**

56514 - 4-1/2" Standard Weight (0.134) .....	P-4.1
56512 - 4-1/2" Heavy Weight (0.134) .....	P-4.2
56508 - 4-1/2" Convertible (0.134/0.180) .....	P-4.3
03134 - 5" Standard Weight (0.146) .....	P-4.4
03135 - 5" Heavy Weight (0.190) .....	P-4.5

**Lock/Strike Reinforcement**

39406 - Ring for Cylindrical and Deadlock Strike (18ga) .....	P-4.6
00789 - Plate for Cylindrical and Deadlock Strike (12ga) .....	P-4.7
00746 - Mortise Lock Tab (12ga) .....	P-4.8
00359 - ANSI A156.16 Flush Bolt Tab (12ga) for Edge of Door .....	P-4.9
00583 - ANSI A156.16 Flush Bolt Guide (12ga) for Top and Bottom .....	P-4.10
39438 - Mortise Lock and Dead Lock Box (16ga) .....	P-4.11
00710 - Standard ANSI 4-7/8" Strike (16ga) .....	P-4.12
00597 - Standard 2-3/4" and Cylindrical Dead Lock Strike (12ga) .....	P-4.13

**End Channels/Cap**

03085 - Standard Inverted End Channel for 3'0" Door .....	P-4.14
03096 - Standard Inverted End Channel for 4'0" Door .....	P-4.15
00092 - Vinyl Cap for 3'0" Door .....	P-4.16
00093 - Vinyl Cap for 4'0" Door .....	P-4.17
00111 - Vinyl Cap 12' Long .....	P-4.18

**Capping Channels for Cut Out**

00634 - 71" Long Capping Channel .....	P-4.19
54493 - 84" Long Capping Channel .....	P-4.20
54494 - 120" Long Capping Channel .....	P-4.21

**Sandwich Type Lite Kit**

40112 - 5" x 20" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.22
40113 - 10" x 10" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.23
40114 - 4" x 25" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.24
40115 - 3" x 33" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.25
40116 - 22" x 30" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.26
54754 - 22" x 62" Exposed Glass, 1/4" Glass, 1-3/4" Door .....	P-4.27

**Dutch Door Shelf**

00851 - Full Dutch Door Shelf .....	P-4.28
00852 - Half Dutch Door Shelf .....	P-4.29

**Fillers**

00540 - 4-1/2" Standard Weight Screwed on Filler .....	P-4.30
00539 - 4-1/2" Heavy Weight Screwed on Filler .....	P-4.31
00538 - ASA Strike Screwed on Filler .....	P-5.1
00546 - Flush Bolt, Edge Prep, Screwed on Filler .....	P-5.2
00544 - Mortise Screwed on Filler .....	P-5.3
00533 - Cylindrical Lock, 161, Screwed on Filler .....	P-5.4

**Astragals**

00458 - Flat Bar Astragal (12ga), 79-1/8" .....	P-5.5
00459 - Flat Bar Astragal (12ga), 83-1/8" .....	P-5.6
00460 - Flat Bar Astragal (12ga), 95-1/8" .....	P-5.7
37816 - "Z" Astragal, (14ga), ASA, 79-1/8", REVH .....	P-5.8
37817 - "Z" Astragal (14ga), Inactive Door, 79-1/8", REVH .....	P-5.9
37818 - "Z" Astragal (14ga), ASA+FB, 79-1/8", REVH .....	P-5.10
37819 - "Z" Astragal (14ga), Inactive Door, 83-1/8", REVH .....	P-5.11
37820 - "Z" Astragal, (14ga), ASA, 83-1/8", LH.....	P-5.12
37821 - "Z" Astragal, (14ga), ASA, 83-1/8", RH.....	P-5.13
37822 - "Z" Astragal (14ga), ASA+FB, 83-1/8", LH.....	P-5.14
37823 - "Z" Astragal (14ga), ASA+FB, 83-1/8", RH .....	P-5.15
53683 - Flat Bar Astragal (12ga), 79-1/8", Primed .....	P-5.16
53684 - Flat Bar Astragal (12ga), 83-1/8", Primed .....	P-5.17
53685 - Flat Bar Astragal (12ga), 95-1/8", Primed .....	P-5.18
53906 - "Z" Astragal, (14ga), ASA, 95-1/8", LH.....	P-5.19
53907 - "Z" Astragal, (14ga), ASA, 95-1/8", RH.....	P-5.20
53908 - "Z" Astragal (14ga), ASA+FB, 95-1/8", LH.....	P-5.21
53909 - "Z" Astragal (14ga), ASA+FB, 95-1/8", RH .....	P-5.22
54811 - "Z" Astragal, (14ga), ASA, 79-1/8", REVH, Primed.....	P-5.23
54812 - "Z" Astragal (14ga), Inactive Door, 79-1/8", REVH, Primed.....	P-5.24
54813 - "Z" Astragal (14ga), ASA+FB, 79-1/8", REVH, Primed .....	P-5.25
54814 - "Z" Astragal (14ga), Inactive Door, 83-1/8", REVH, Primed.....	P-5.26
54815 - "Z" Astragal, (14ga), ASA, 83-1/8", LH, Primed .....	P-5.27
54816 - "Z" Astragal, (14ga), ASA, 83-1/8", RH, Primed .....	P-5.28
54817 - "Z" Astragal (14ga), ASA+FB, 83-1/8", LH, Primed .....	P-5.29
54818 - "Z" Astragal (14ga), ASA+FB, 83-1/8", RH, Primed.....	P-5.30
54819 - "Z" Astragal, (14ga), ASA, 95-1/8", LH, Primed .....	P-5.31
54820 - "Z" Astragal, (14ga), ASA, 95-1/8", RH, Primed .....	P-5.32
54821 - "Z" Astragal (14ga), ASA+FB, 95-1/8", LH, Primed .....	P-5.33
54822 - "Z" Astragal (14ga), ASA+FB, 95-1/8", RH, Primed.....	P-5.34
55100 - Flat Bar Astragal (12ga), 120" .....	P-5.35
55101 - Flat Bar Astragal (12ga), 120", Primed .....	P-5.36

---

55116 - "Z" Astragal (14ga), Inactive Door, 95-1/8", REVH .....	P-5.37
56812 - "Z" Astragal (14ga), Inactive Door, 95-1/8", REVH, Primed.....	P-5.38
56815 - "Z" Astragal (14ga), ASA+FB (24" top), 95-1/8", LH .....	P-5.39
56816 - "Z" Astragal (14ga), ASA+FB (24" top), 95-1/8", LH, Primed.....	P-5.40
56819 - "Z" Astragal (14ga), ASA+FB (24" top), 95-1/8", RH.....	P-5.41
56820 - "Z" Astragal (14ga), ASA+FB (24" top), 95-1/8", RH, Primed .....	P-6.1
10862/Eng001 - "Z" Astragal (14ga), ASA+FB, 73-1/8", LH, with Reinf. ....	P-6.2
10862/Eng002 - "Z" Astragal (14ga), ASA+FB, 73-1/8", RH, with Reinf.....	P-6.3

**Hinge Reinforcement**

56514 - 4-1/2" Standard Weight (0.134) .....	P-7.1
56512 - 4-1/2" Heavy Weight (0.134) .....	P-7.2
56508 - 4-1/2" Convertible (0.134/0.180) .....	P-7.3
03105 - 5" Standard Weight (0.146) .....	P-7.4
03104 - 5" Heavy Weight (0.190) .....	P-7.5
36927 - Mortar Guard for 4-1/2" Hinge.....	P-7.6
00499 - Mortar Guard for 5" Hinge .....	P-7.7
66464 - Electric Box for Electric Hinge.....	P-7.8
58246 - Electric Box for EPT .....	P-7.9

**Strike Reinforcement**

00606 - Standard ANSI 4-7/8" Strike Reinforcement.....	P-7.10
00832 - Standard 2-3/4" Strike Reinforcement .....	P-7.11
00832 - Deadlock Strike Reinforcement .....	P-7.12
00509 - ANSI A156.16 Flush Bolt Reinforcement.....	P-7.13
00854 - Reversible Flush Bolt Reinforcement.....	P-7.14
00711 - 3-1/2" Mortise Deadlock Strike Reinforcement .....	P-7.15

**Closer Reinforcement**

00690 - Closer Reinforcement, 1-3/4" x 14" .....	P-7.16
00691 - Closer Reinforcement, 1-1/2" x 14" .....	P-7.17
00692 - Closer Reinforcement, 1-1/4" x 14" .....	P-7.18

**Assembly Parts**

00869 - Jamb and Head Mechanical Connecting Tab, Reversible.....	P-7.19
00560 - Gusset for Knocked Down Series .....	P-7.20

**Anchor Parts**

00416 - DSA, Drywall Strap Anchor, 2" Face.....	P-7.21
00357 - "T" Masonry Anchor, 2" Face, 5-3/4" Jamb Depth .....	P-7.22
00356 - "T" Masonry Anchor, 2" Face, 4-3/4" to 8-3/4" Jamb Depth .....	P-7.23
00353 - WMA, Wire Masonry Anchor.....	P-7.24
03041 - ZBA, Steel Stud Anchor 4-1/4", 2" Face, 3-1/2" to 3-7/8" Wall .....	P-7.25
03042 - ZBA, Steel Stud Anchor 4-3/4", 2" Face, 4" to 4-3/8" Wall .....	P-7.26
03043 - ZBA, Steel Stud Anchor 5-1/4", 2" Face, 4-1/2" to 4-7/8" Wall .....	P-7.27
03044 - ZBA, Steel Stud Anchor 5-3/4", 2" Face, 5" to 5-3/8" Wall .....	P-7.28
03046 - ZBA, Steel Stud Anchor 6-3/4", 2" Face, 6" to 6-3/8" Wall .....	P-7.29
03051 - ZBA, Steel Stud Anchor 9-1/4", 2" Face, 8-1/2" to 8-7/8" Wall .....	P-7.30
00426 - EWA, Existing Wall Anchor Spacer 4-1/2" to 7-3/8" JD .....	P-7.31
00427 - EWA, Existing Wall Anchor Spacer 7-1/2" to 9-3/8" JD .....	P-7.32

**FRAME PARTS**
**PAGE**

00397 - Floor Anchor not Sized (need 2 per jamb) .....	P-8.1
00398 - Floor Anchor 3-1/2" (need 1 per jamb).....	P-8.2
00399 - Floor Anchor 4-1/2" (need 1 per jamb).....	P-8.3
54602 - Mullion Floor Anchor for 5-3/4" JD .....	P-8.4
00415 - Mullion Floor Anchor for 5-7/8" JD .....	P-8.5
00858 - Compression Anchor form 16ga KD Frame (leveling screw).....	P-8.6
00355 - Adj. Stud Anchor 4 3/4",5 1/4",5 3/4",6 1/4",6 3/4" JD (2 parts per anchor).....	P-8.7
00354 - Adj. Stud Anchor 5 3/4",6 1/4",6 3/4",7 1/4",7 3/4",8 1/4",8 3/4" JD (2/anch.).....	P-8.8
00435 - SDS, Snap-In Drywall Strap (2 parts per anchor) .....	P-8.9
00358 - Existing Wall Anchor with Tube, 16ga .....	P-8.10

**Glazing Bead**

00075 - Glazing Bead 5/8" x 5/8" x 10'0" without Dimples.....	P-8.11
00095 - Glazing Bead 5/8" x 5/8" x 10'0" Punched and Dimpled.....	P-8.12

**Spreader Bars**

03059 - 3'0" Long .....	P-8.13
03063 - 4'0" Long .....	P-8.14
03064 - 5'0" Long .....	P-8.15
03065 - 6'0" Long .....	P-8.16
03066 - 10'0" Long .....	P-8.17

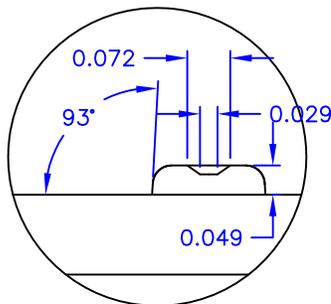
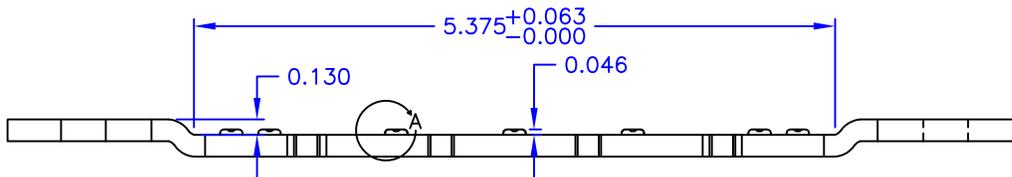
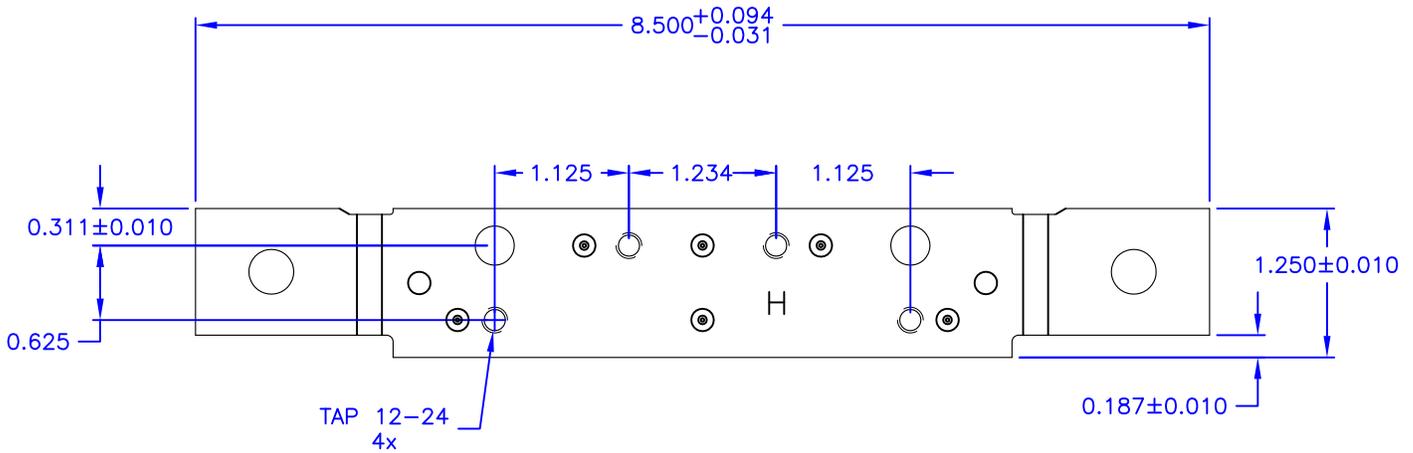
**Fillers**

00541 - 4-1/2" Standard Weight Hinge Filler (screwed).....	P-8.18
00542 - 4-1/2" Heavy Weight Hinge Filler (screwed) .....	P-8.19
00543 - ASA Strike Filler (screwed) .....	P-8.20

---

00114 - Self Drill Screw #8-18 x 1/2" Phillips Flat Undercut Head ZP #2 Point.....	P-9.1
00089 - Self Drill Screw #6x1" Phillips Oval Head ZP .....	P-9.2
00216 - Self Drill Screw #6-20 x 1-7/8" Phillips Bugle Head ZP #2 Point.....	P-9.3
00046 - Rubber Bumper-Silencers.....	P-9.4
00050 - Knocked Down Screw .....	P-9.5
00087 - Masonry Sleeve Anchor 3/8" x 4".....	P-9.6
00088 - Masonry Sleeve Anchor 3/8" x 5".....	P-9.7
00190 - Masonry Sleeve Anchor 3/8" x 4" in Stainless Steel.....	P-9.8
00088 - Masonry Sleeve Anchor 3/8" x 5" in Stainless Steel.....	P-9.9

**4 1/2" standard weight hinge reinforcement (0.134), 7ga**  
at PA door



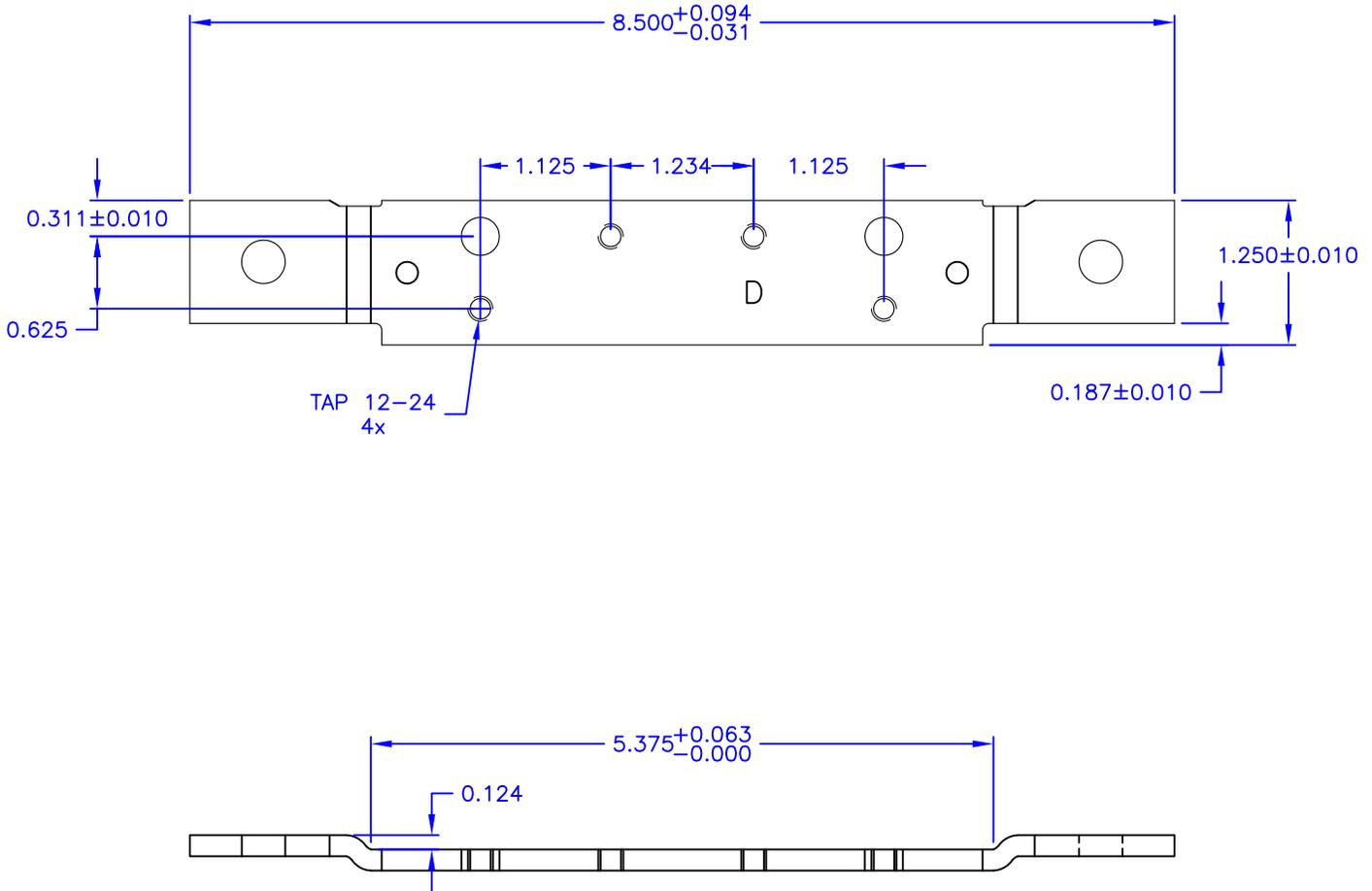
DETAIL A

Hinge reinforcement

56514

See option 45S on page O-4.1 for reference on location in door

**4 1/2" heavy weight hinge reinforcement (0.180), 7ga**  
at PA door

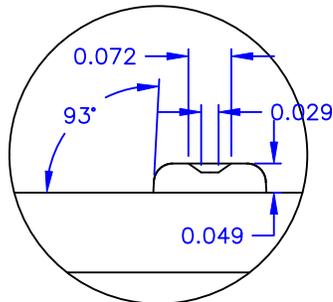
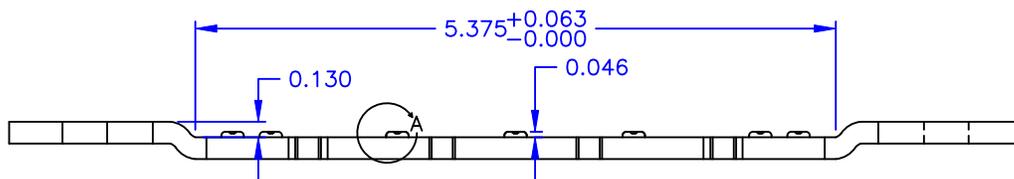
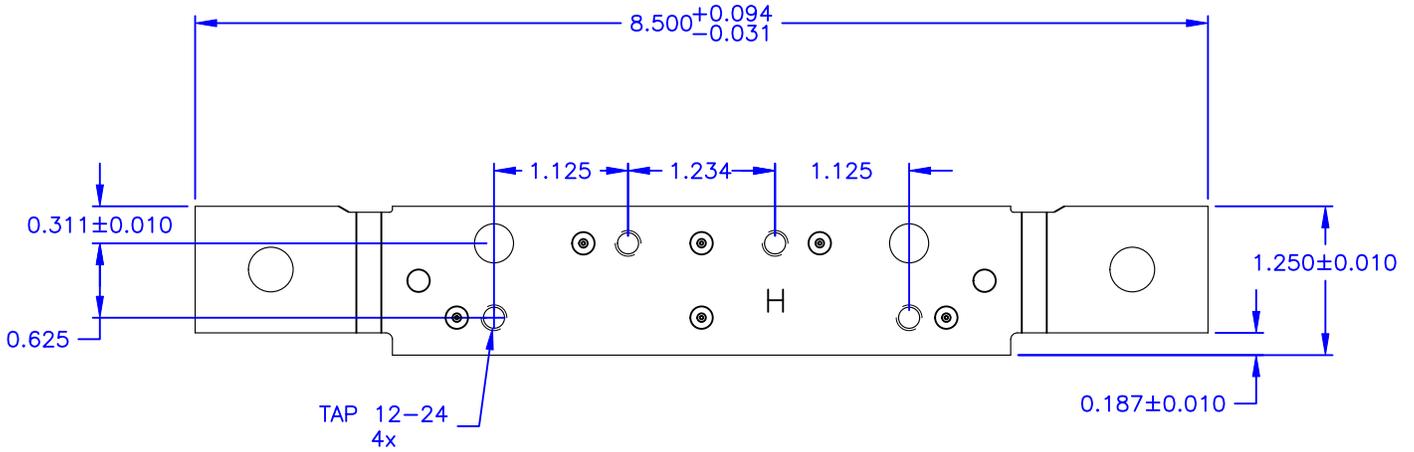


Hinge reinforcement

56511

See option 45H on page O-4.2 for reference on location in door

**4 1/2" convertible hinge reinforcement (0.134/0.180), 7ga**  
at PA door



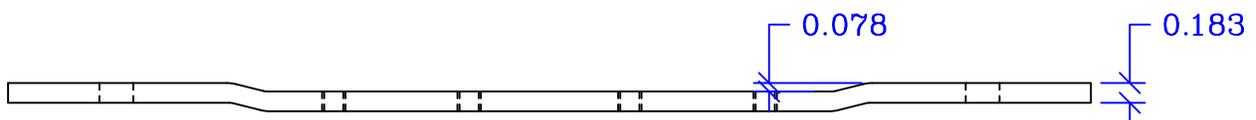
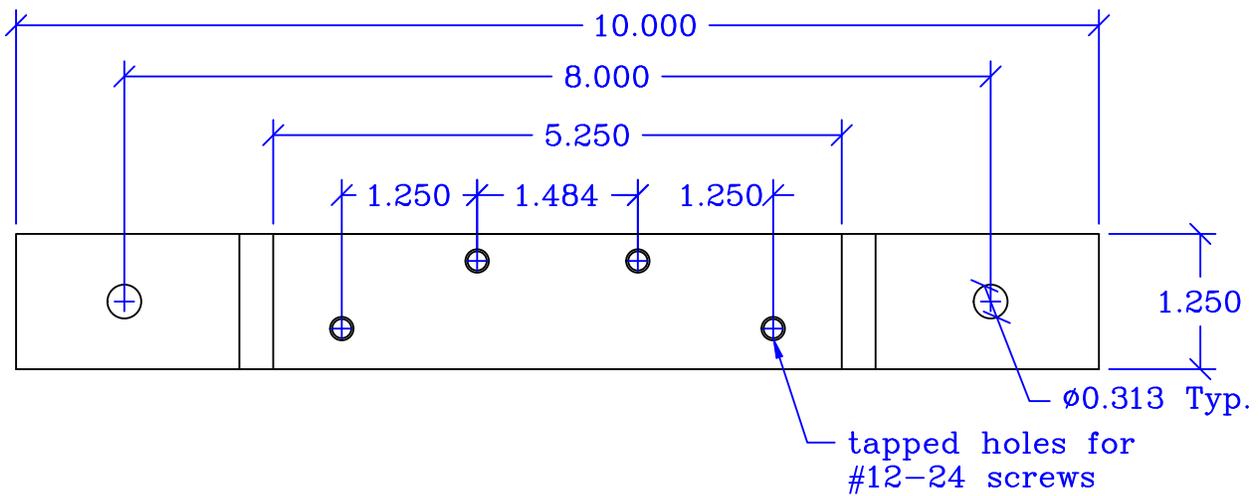
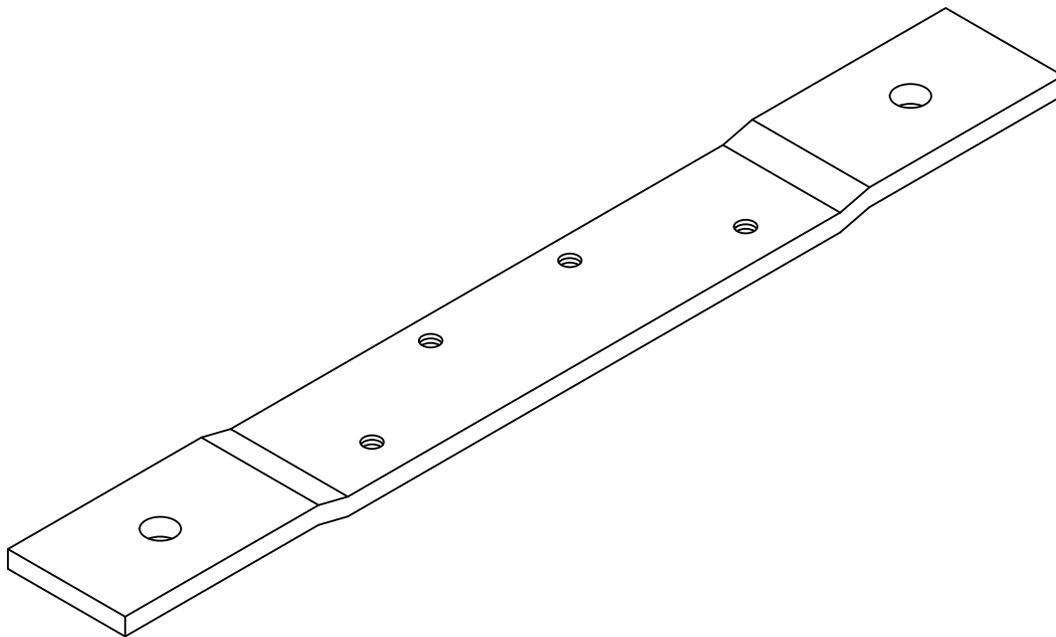
DETAIL A

Hinge reinforcement

See option 45H on page O-4.3 for reference on location in door

56507

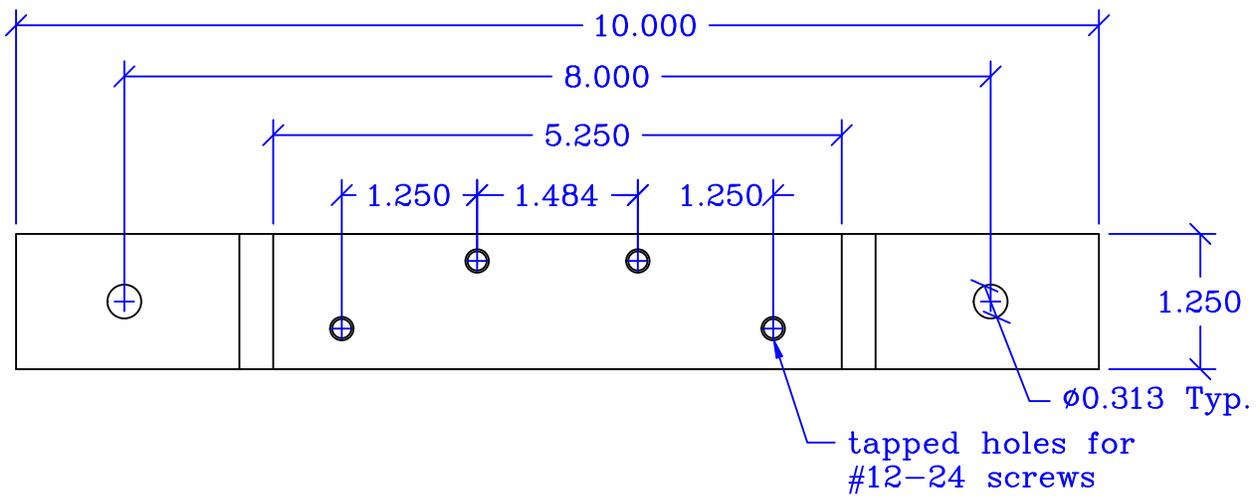
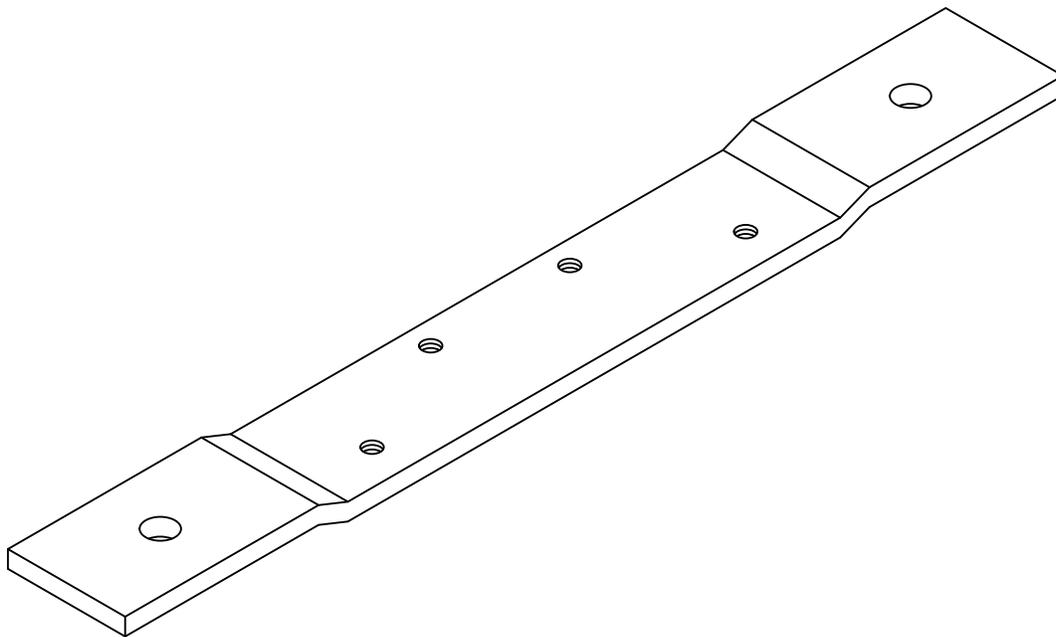
**5" standard weight hinge reinforcement (0.146), 7ga**  
at PA door



Hinge reinforcement

See option 50S on page O-4.4 for reference on location in door

**5" heavy weight hinge reinforcement (0.190), 7ga**  
at PA door

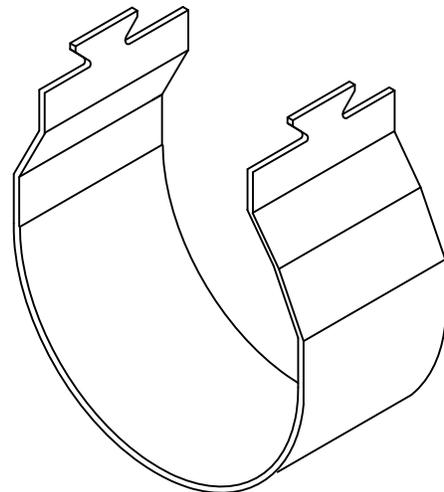
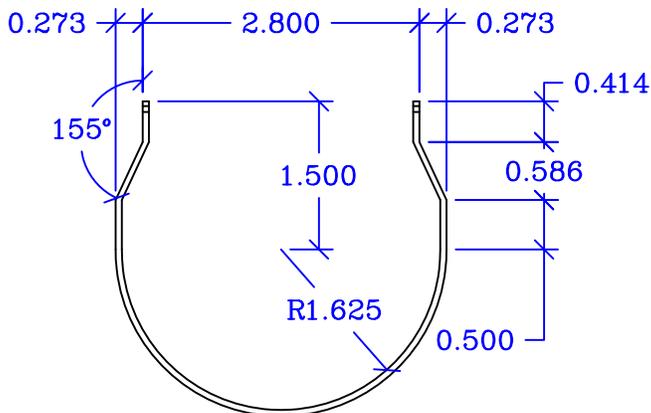
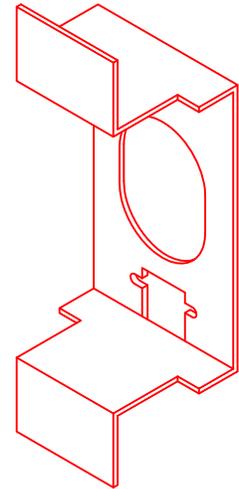
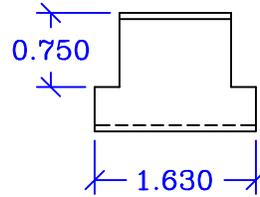
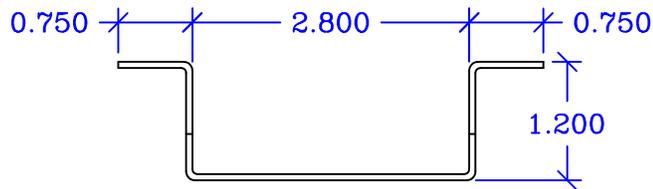
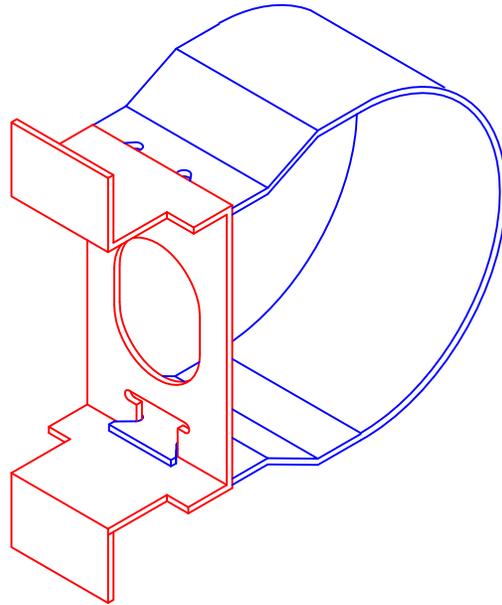


Hinge reinforcement

See option 50H on page O-4.5 for reference on location in door

03104

**Ring for cylindrical and dead lock, 18ga**  
at PA door, for 2 3/4" backset

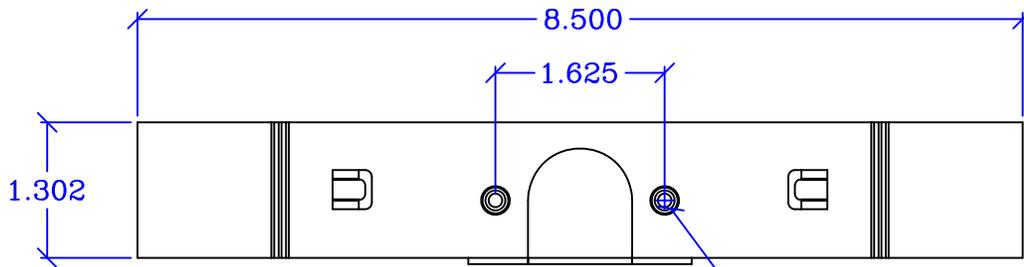
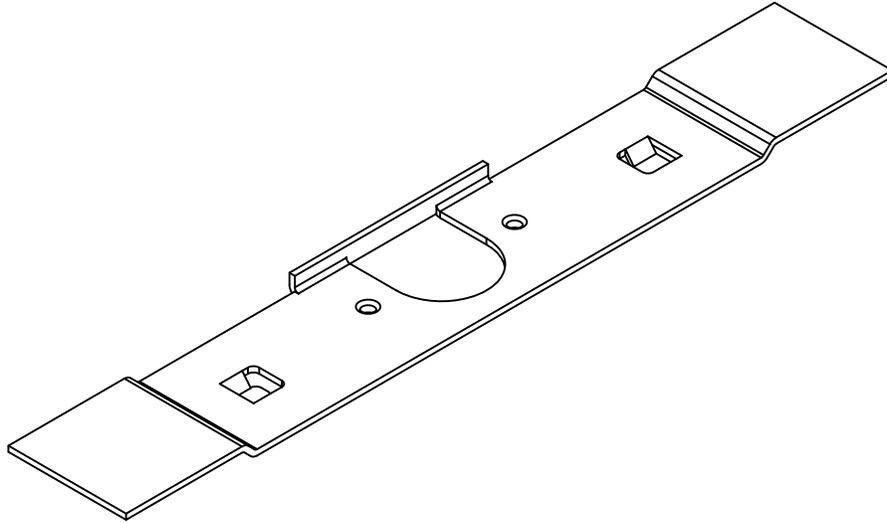


Lock/strike reinforcement

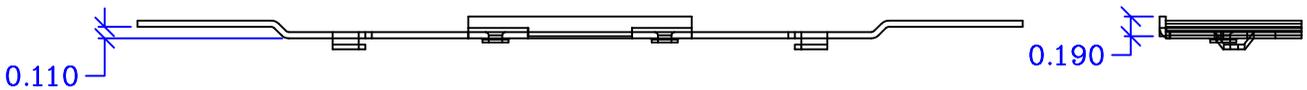
39406

See option 161 on page O-4.27 for additional information.

**Plate for cylindrical and dead lock, 16ga**  
at PA door



tapped and extruded holes  
for #8-32 screws  
per ANSI/SDI A250.6.

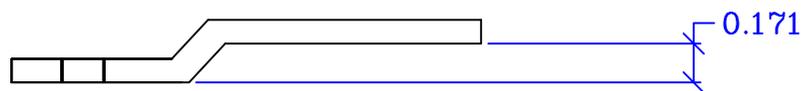
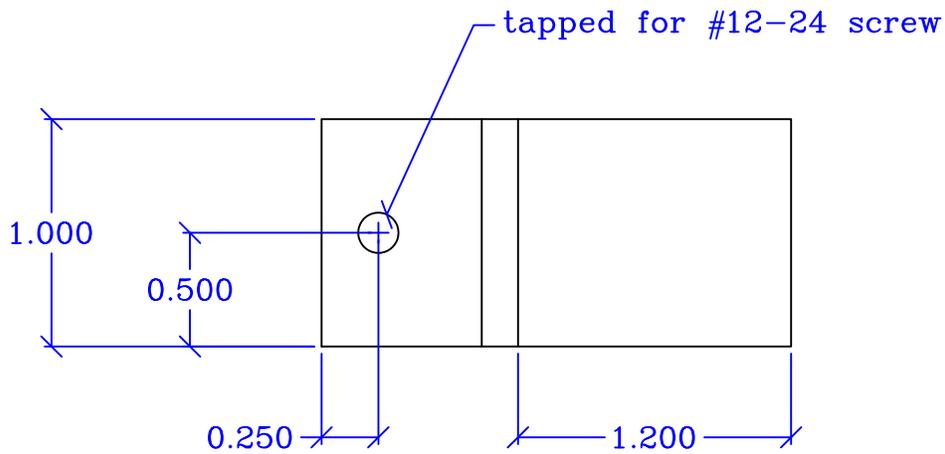
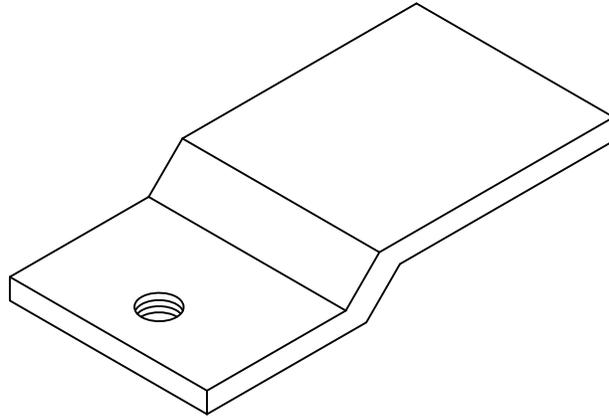


Lock/strike reinforcement

00789

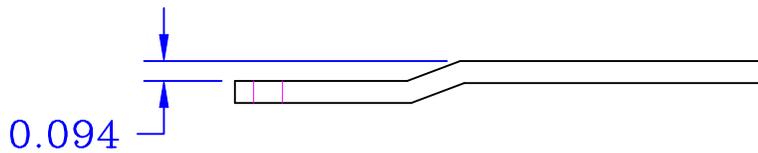
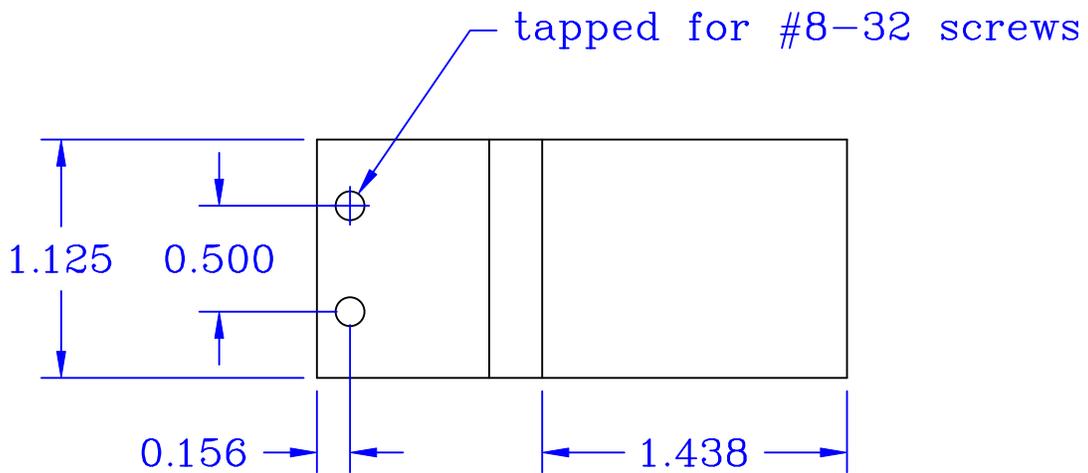
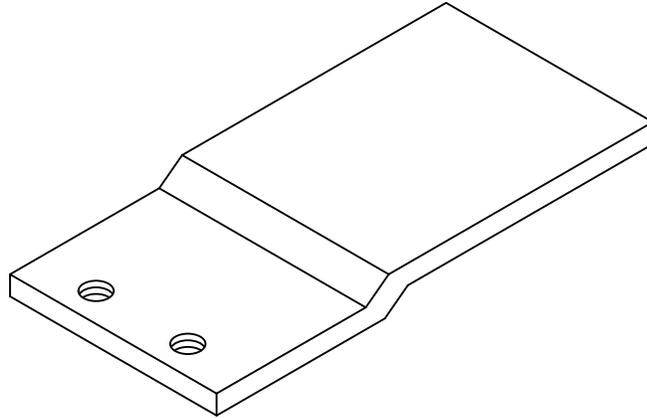
See option 161 on page O-4.27 for additional information

**Mortise lock tab, 12ga**  
at PA door



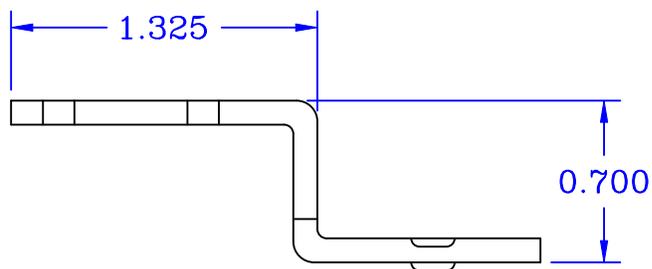
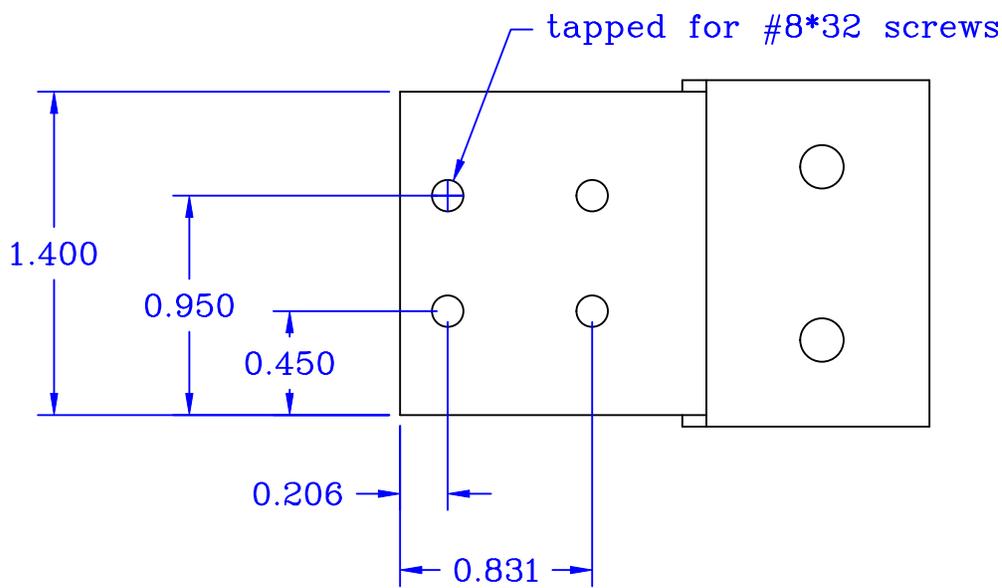
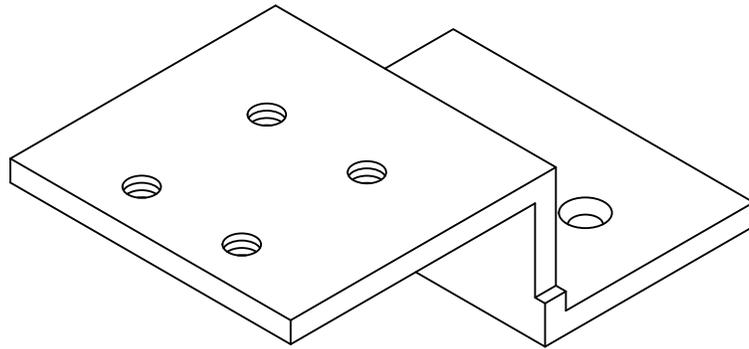
See option 86ED on page O-4.31 for additional information

**ANSI A156-16 flush bolt tab at edge of door, 12ga**  
at PA door



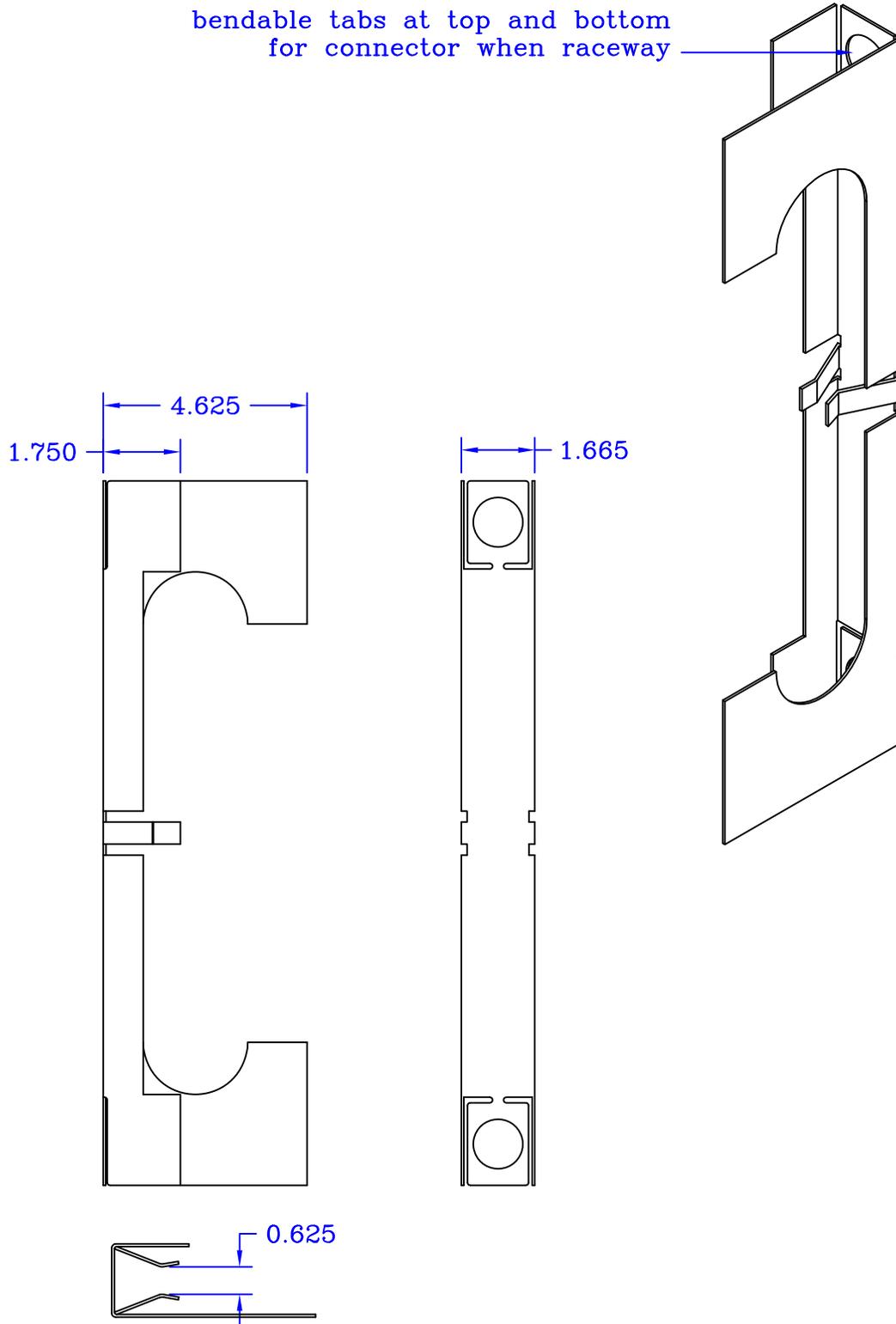
See option FB on page O-5.29 for additional information

**ANSI A156-16 flush bolt guide for top and bottom, 12ga**



See option FB on page O-5.29 for additional information

### Mortise lock and deadlock box, 16ga

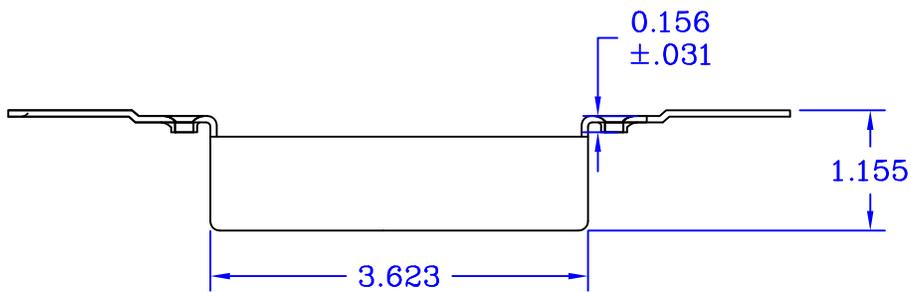
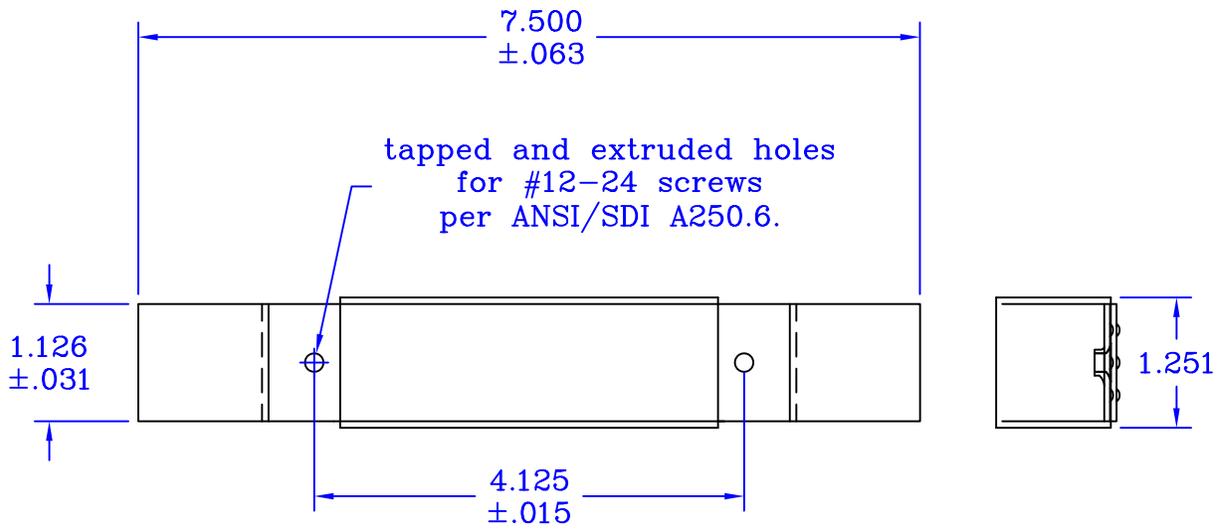
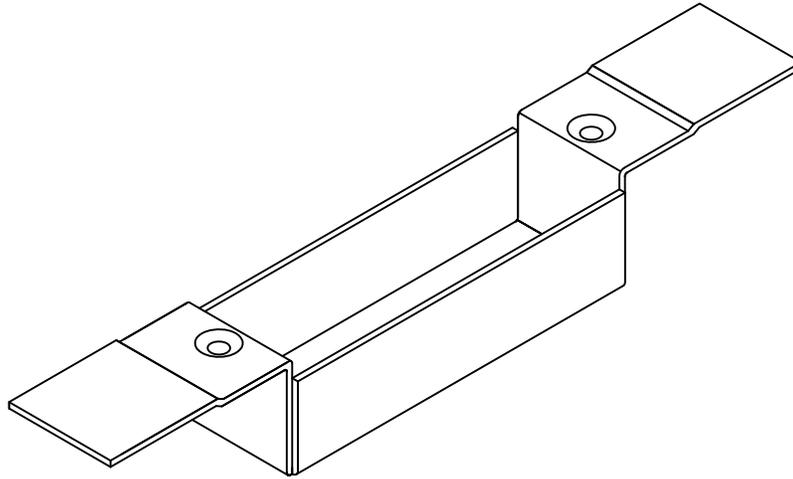


Lock/strike reinforcement

39438

See option 86ED on page O-4.31 for additional information

**Standard ANSI 4 7/8" strike, 16ga**  
at PA door

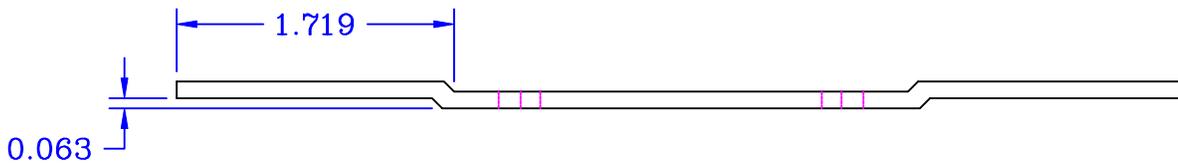
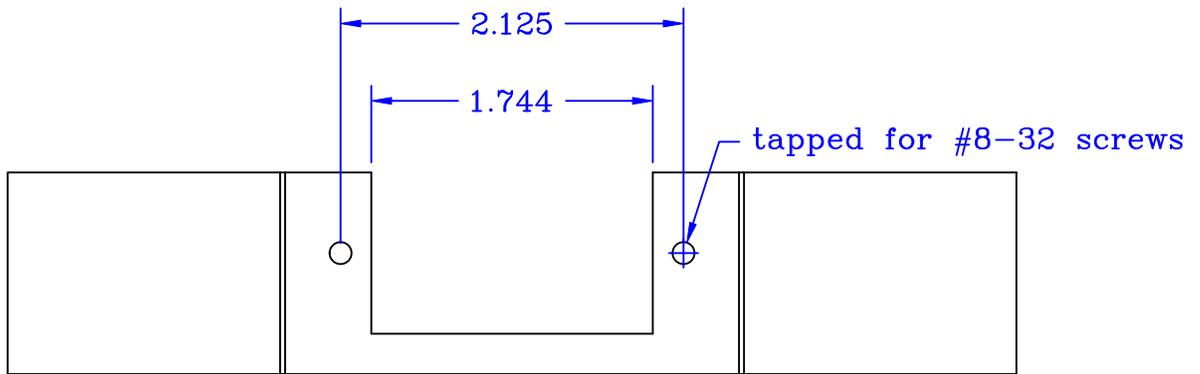
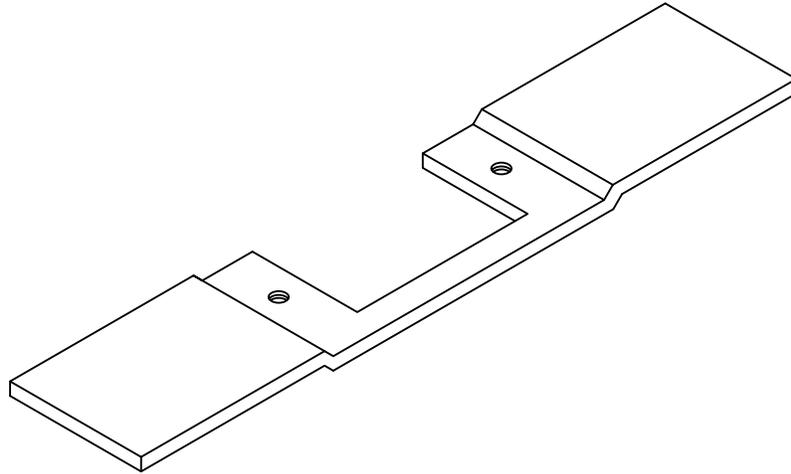


Lock/strike reinforcement

00710

See option ASA on page O-5.19 for additional information

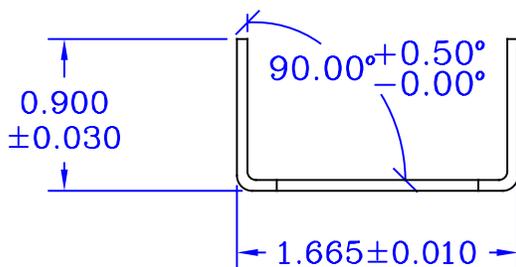
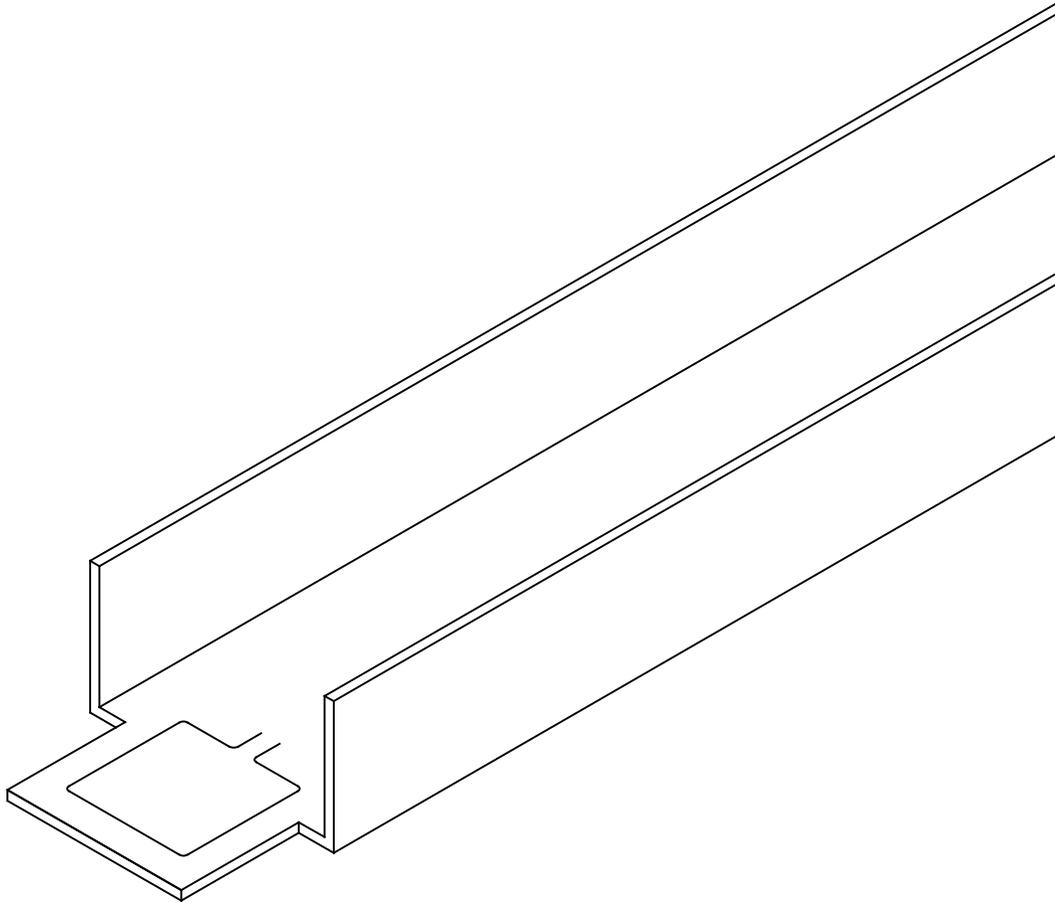
**Standard 2 3/4" and cylindrical deadlock strike, 12ga**  
at PA door



Lock/strike reinforcement

See option DL234 on page O-5.22 for reference on location in door

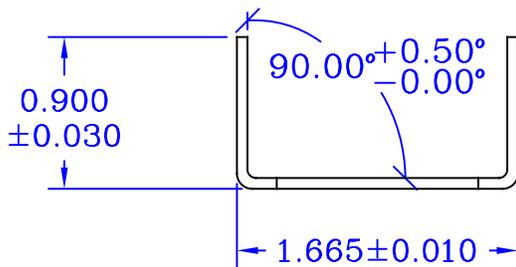
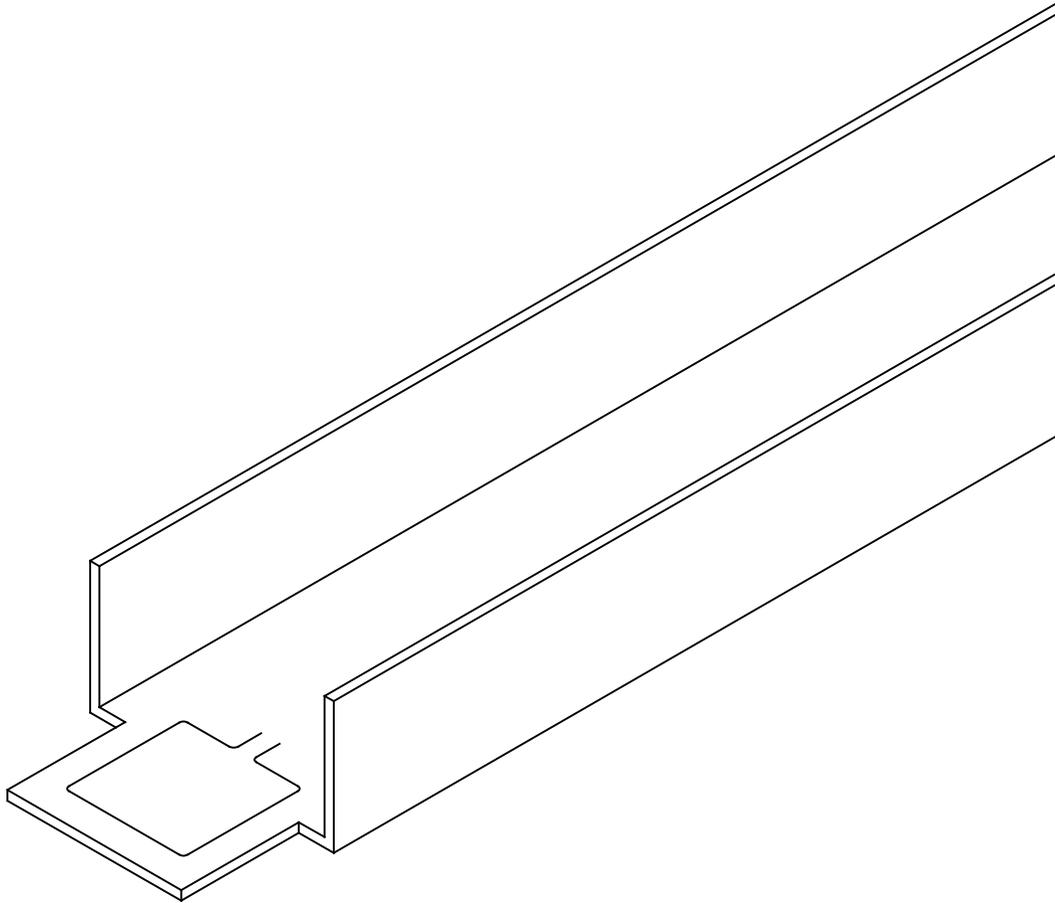
**Standard inverted end channel for 3'0" door, 16ga**  
35 5/16" finished width



End channels/cap

03085

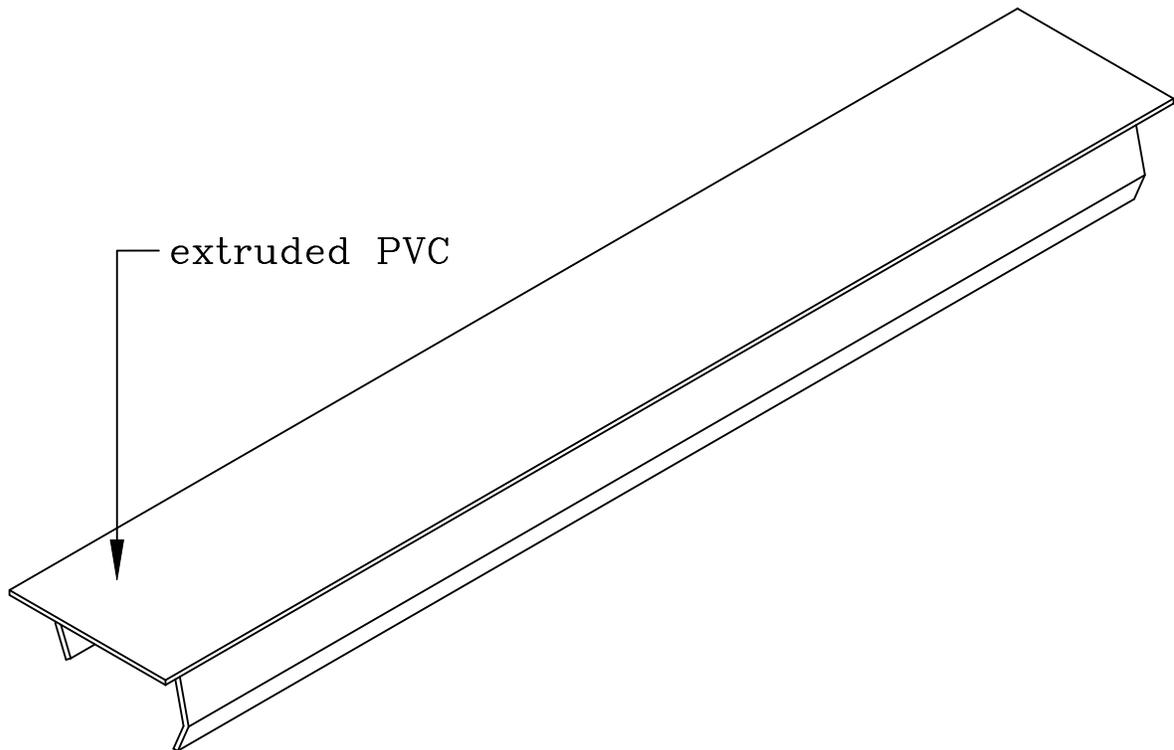
**Standard inverted end channel for 4'0" door, 16ga**  
47 5/16" finished width



End channels/cap

03096

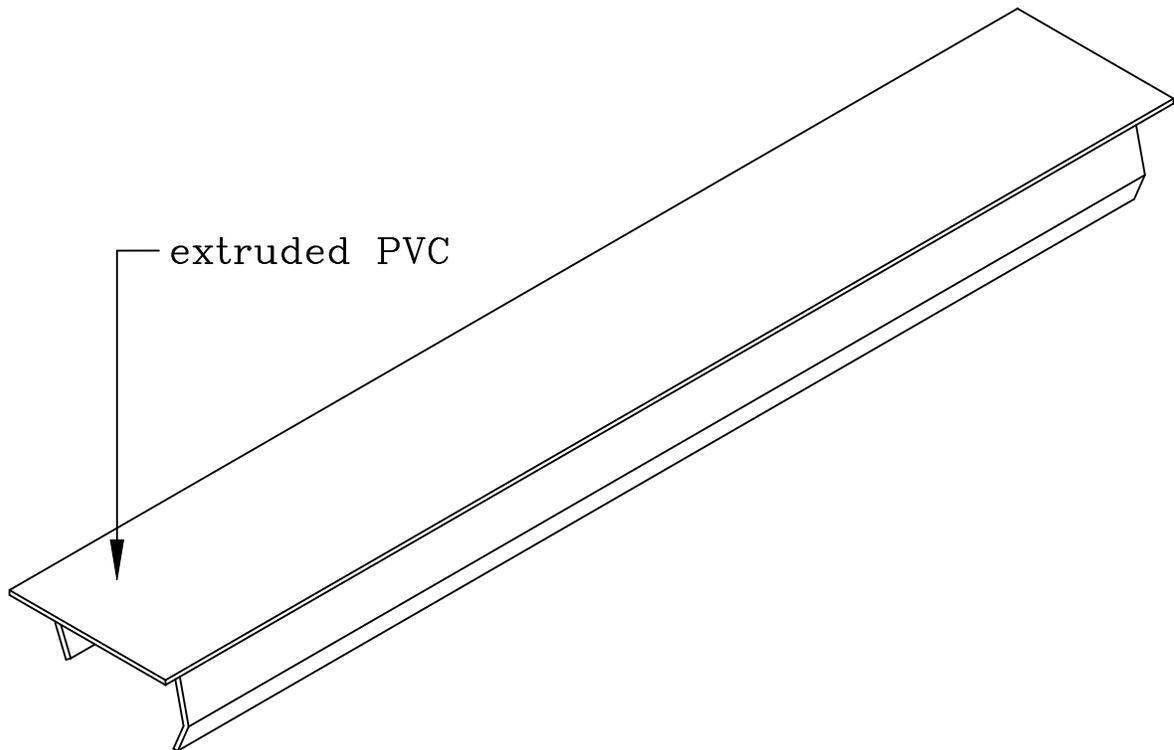
**Vinyl cap for 3'0" door**  
36 1/4" finished width



End channels/cap

00092

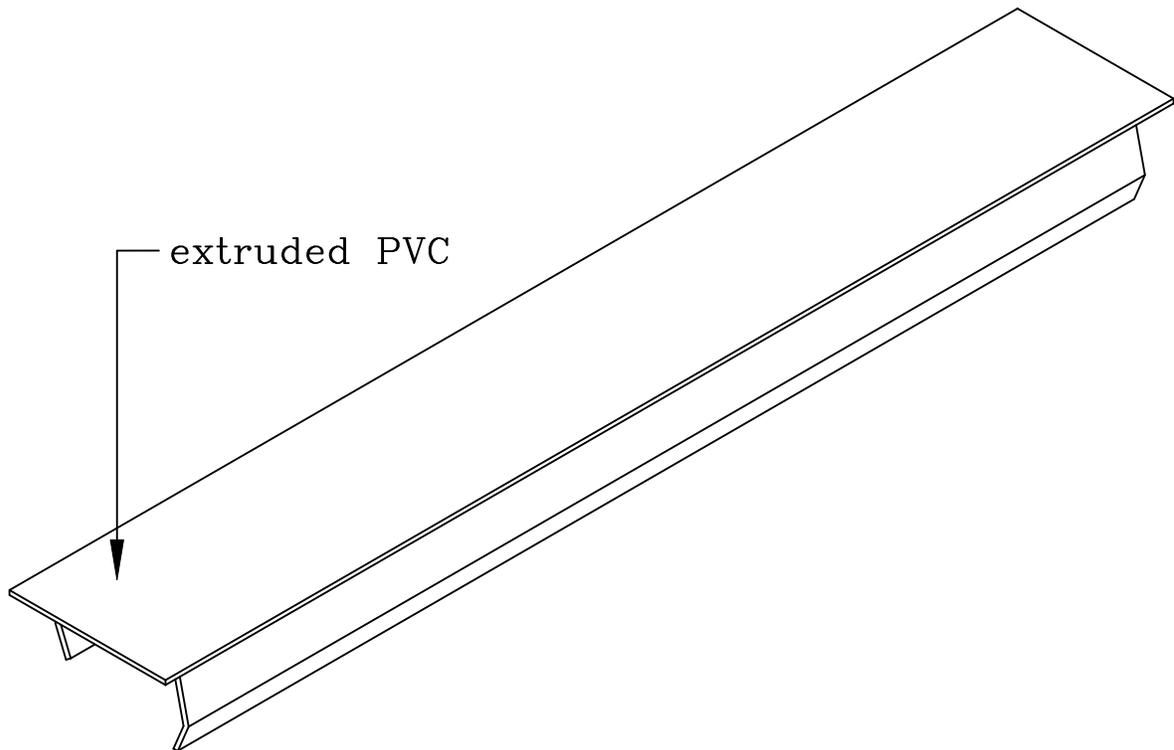
**Vinyl cap for 4'0" door**  
48 1/4" finished width



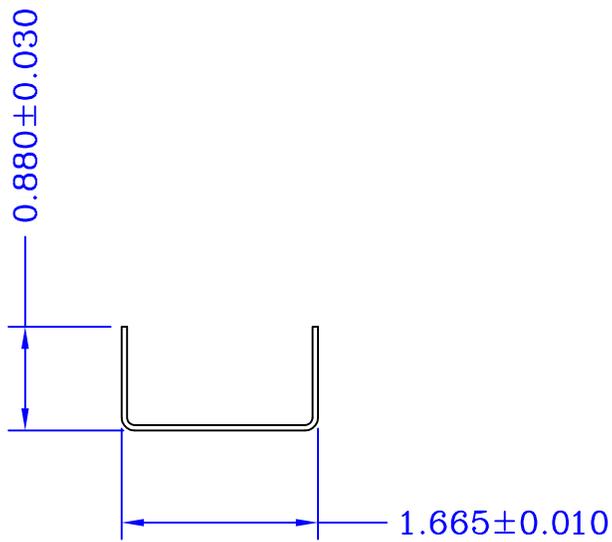
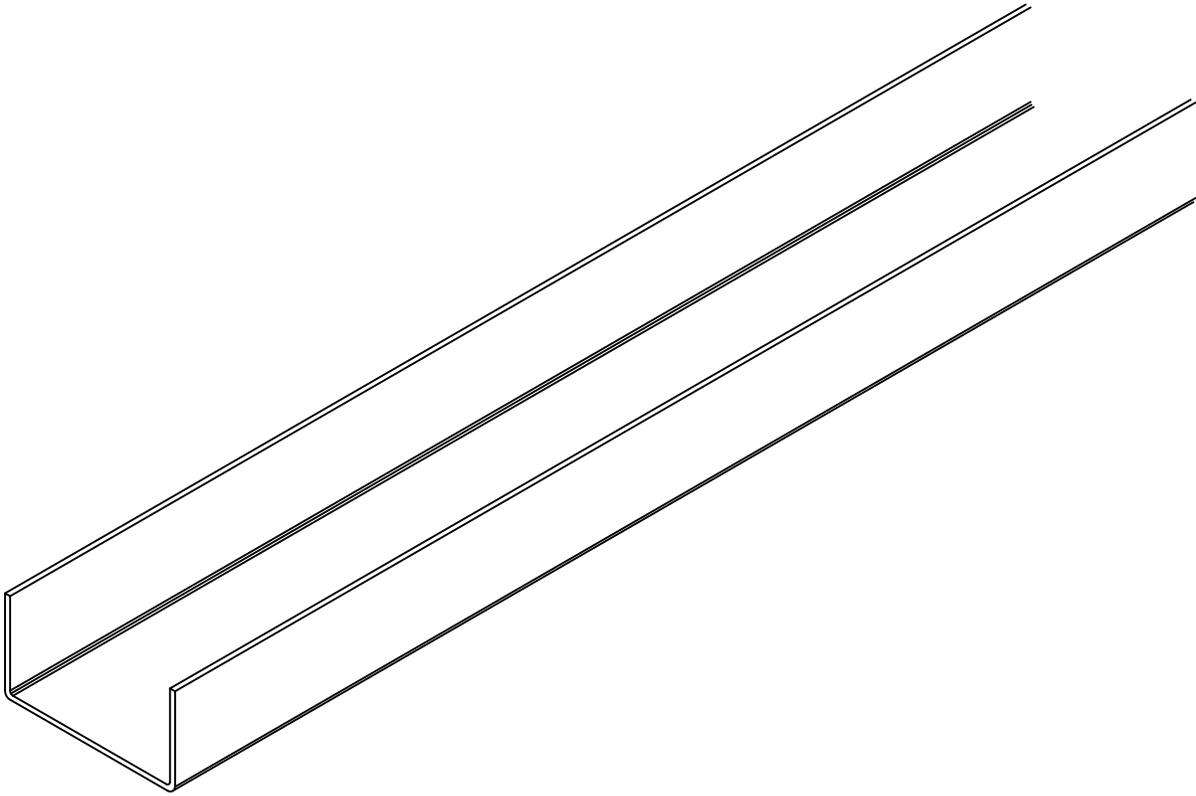
End channels/cap

00093

**Vinyl cap 12'0" long**



**71" long capping channel, 18ga**  
for sandwich type kit and louver cutout only

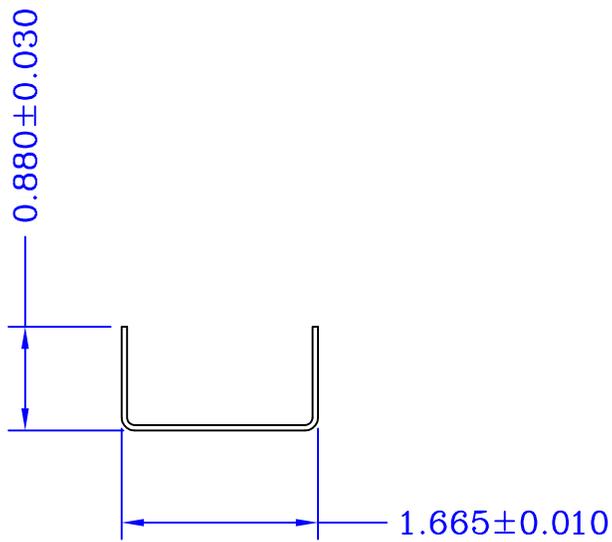
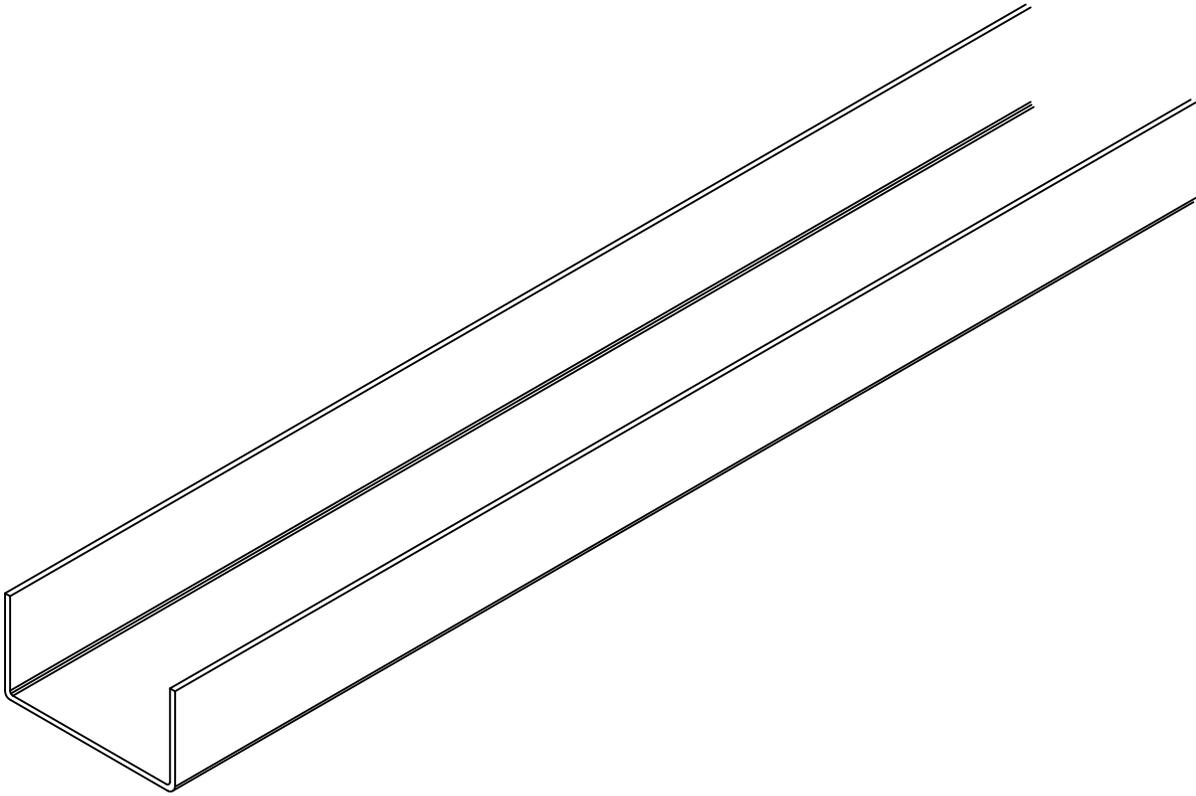


Capping channel for cutout

00634

See option CH on page O-10.13 for additional information

**84" long capping channel, 18ga**  
for sandwich type kit and louver cutout only

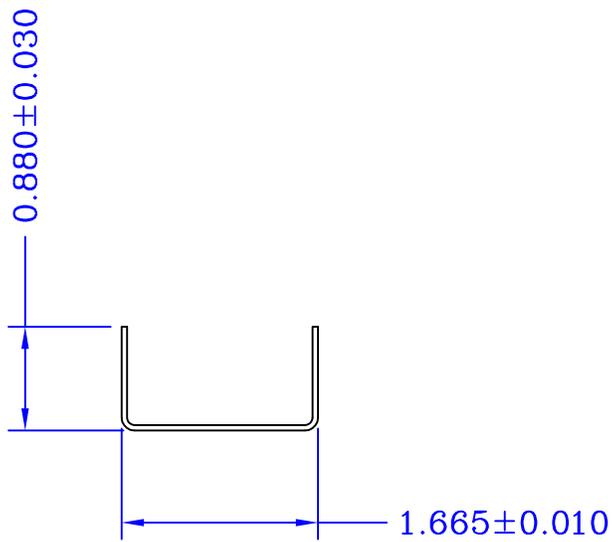
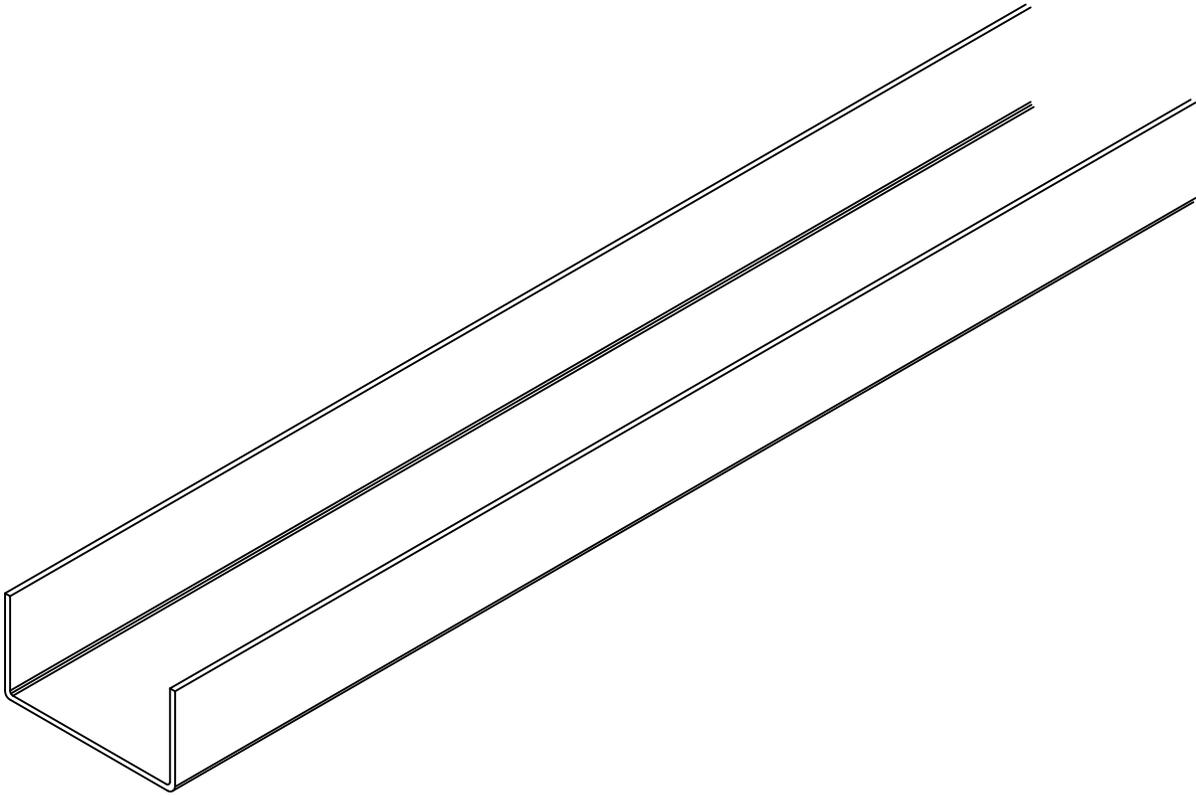


Capping channel for cutout

54493

See option CH on page O-10.13 for additional information

**120" long capping channel, 18ga**  
for sandwich type kit and louver cutout only

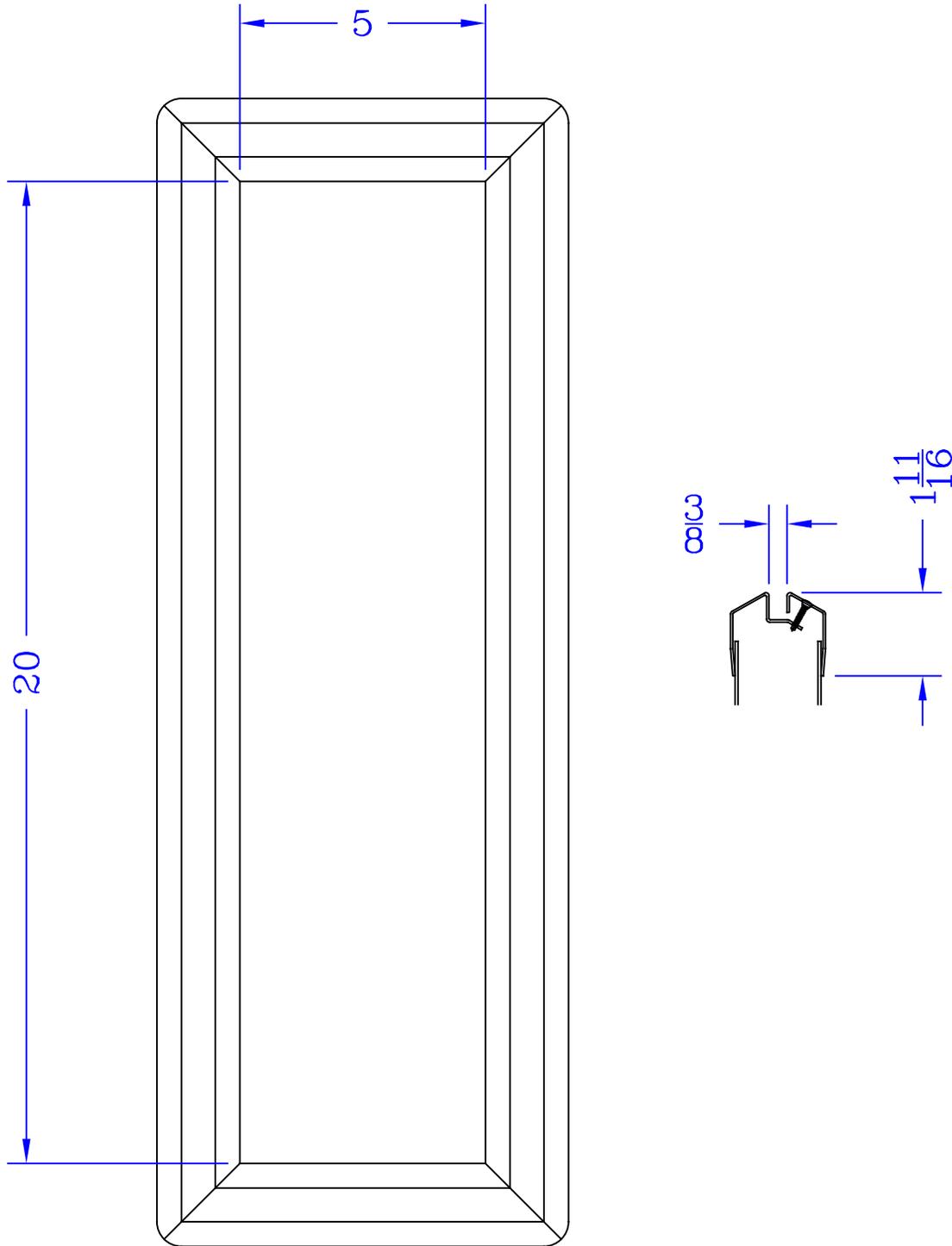


Capping channel for cutout

54494

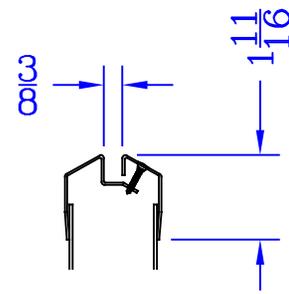
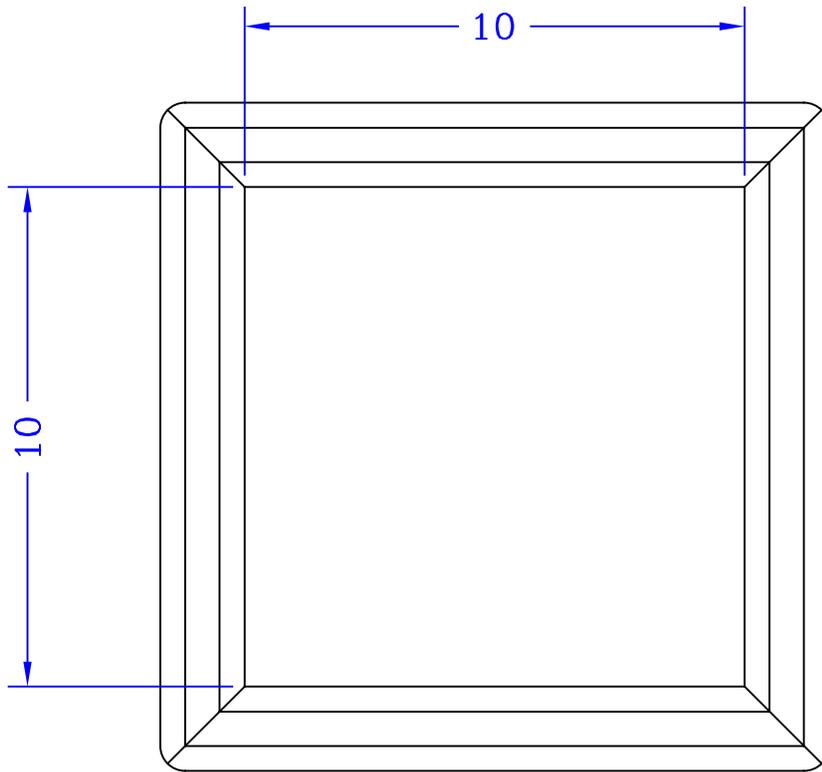
See option CH on page O-10.13 for additional information

5" x 20" exposed glass, for 1/4" thick glass  
for 1 3/4" thick door



See option SK on page O-10.4 for additional information

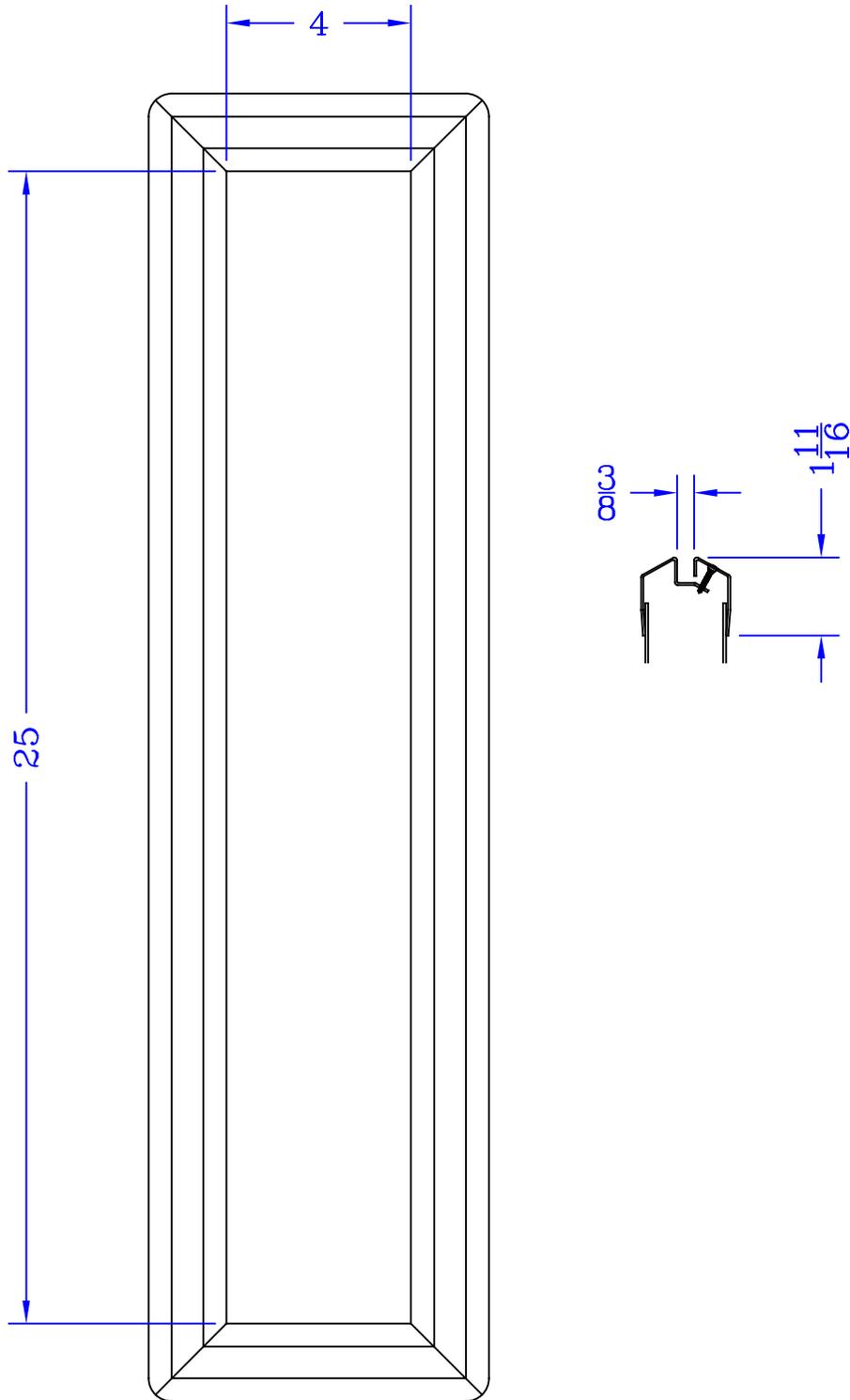
**10" x 10" exposed glass, for 1/4" thick glass**  
for 1 3/4" thick door



**Sandwich type lite kit**

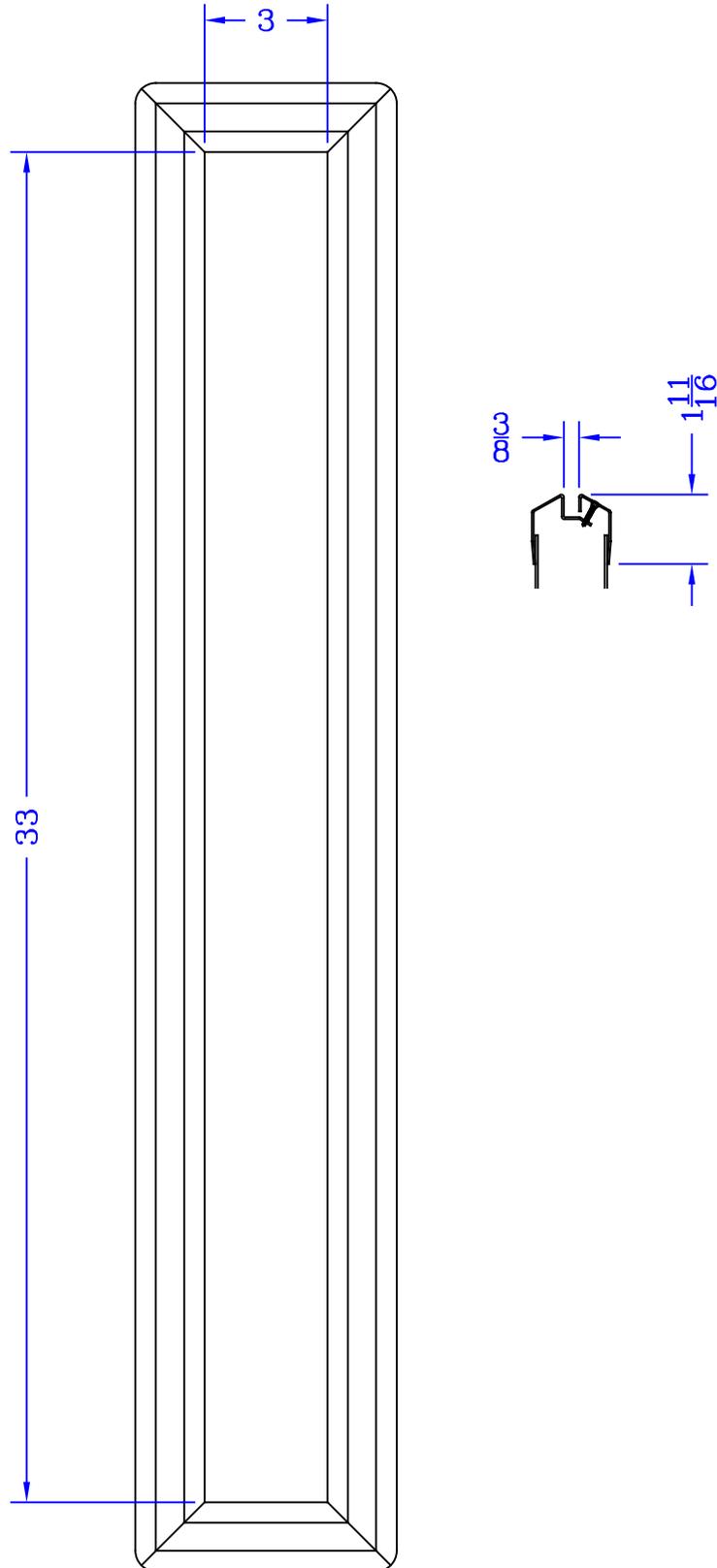
See option SK on page O-10.1 for additional information

**4" x 25" exposed glass, for 1/4" thick glass**  
for 1 3/4" thick door



See option SK on page O-10.3 for additional information

**3" x 33" exposed glass, for 1/4" thick glass**  
for 1 3/4" thick door

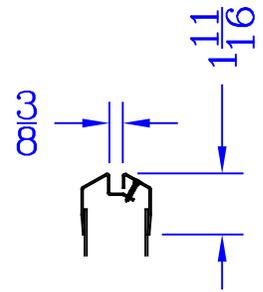
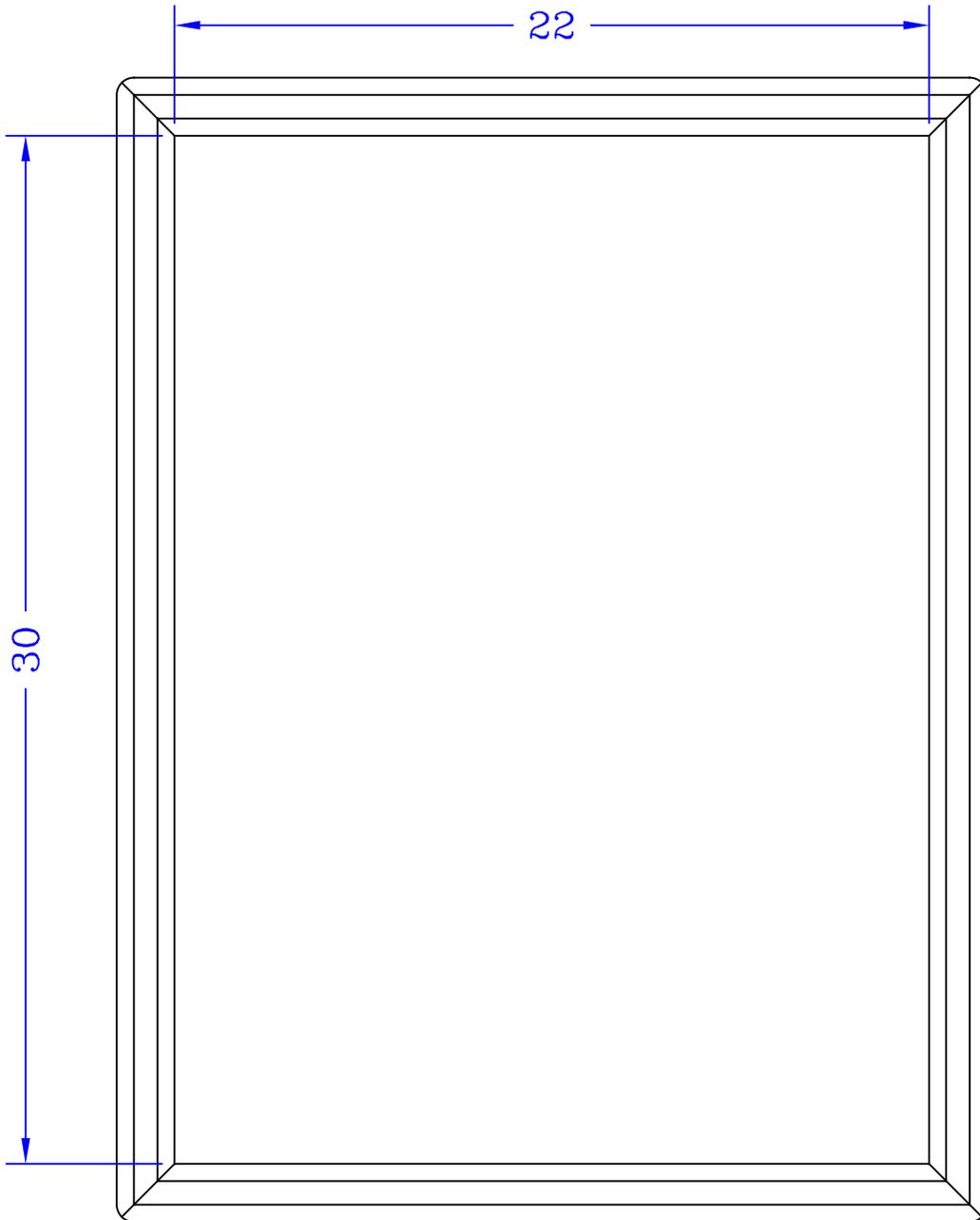


See option SK on page O-10.2 for additional information

**Sandwich type lite kit**

40115

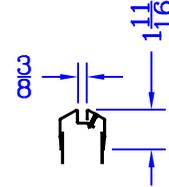
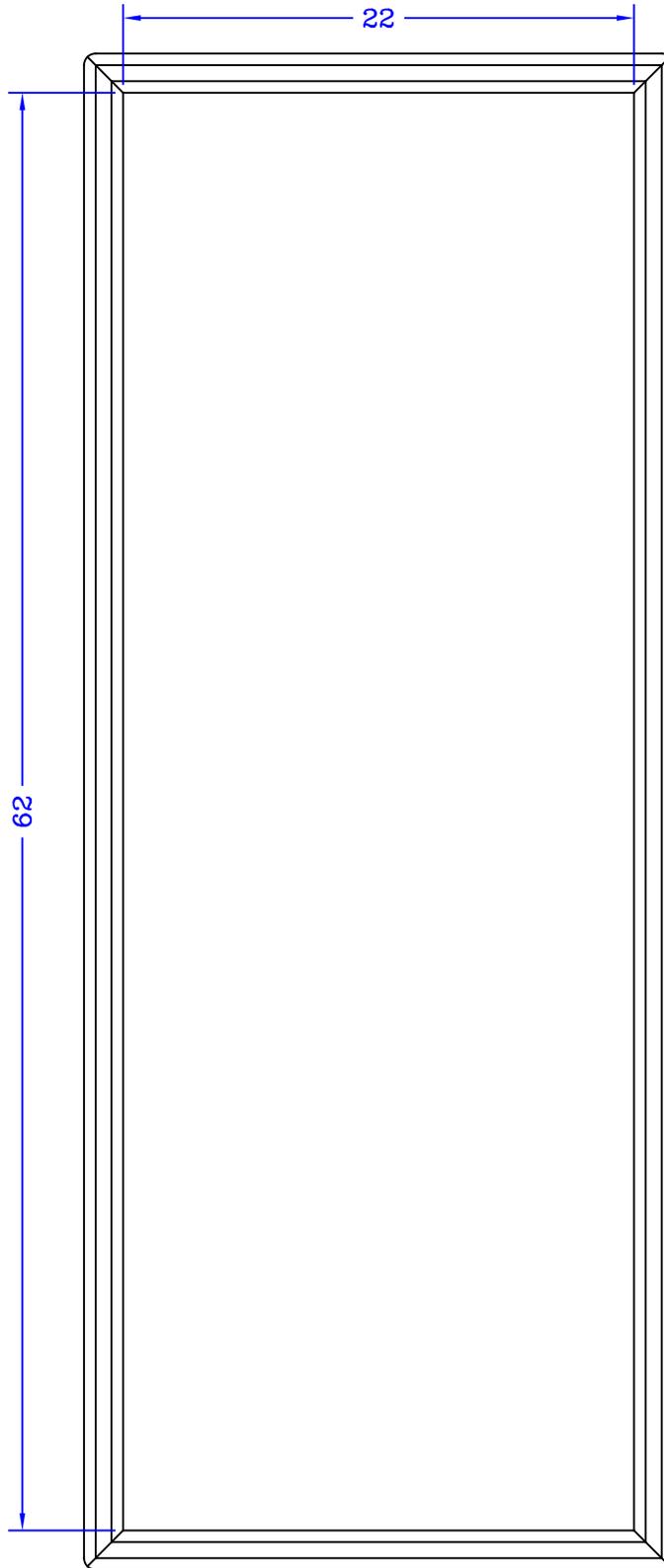
**22" x 30" exposed glass, for 1/4" thick glass**  
for 1 3/4" thick door



**Sandwich type lite kit**

See option SK on page O-10.10 for additional information

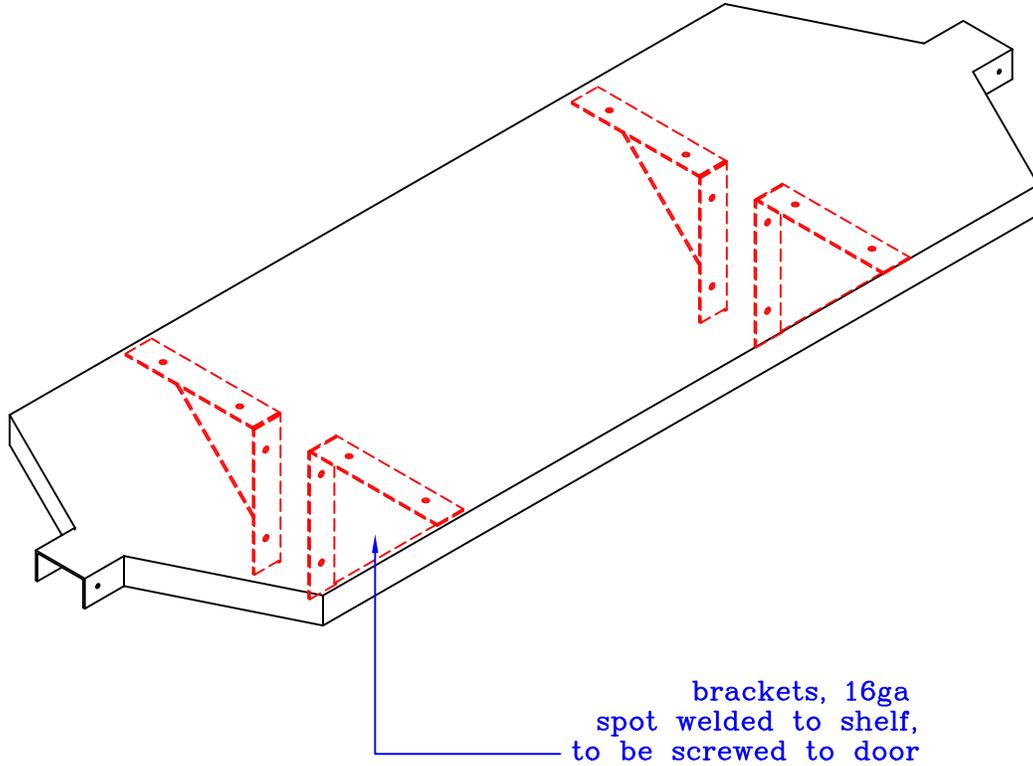
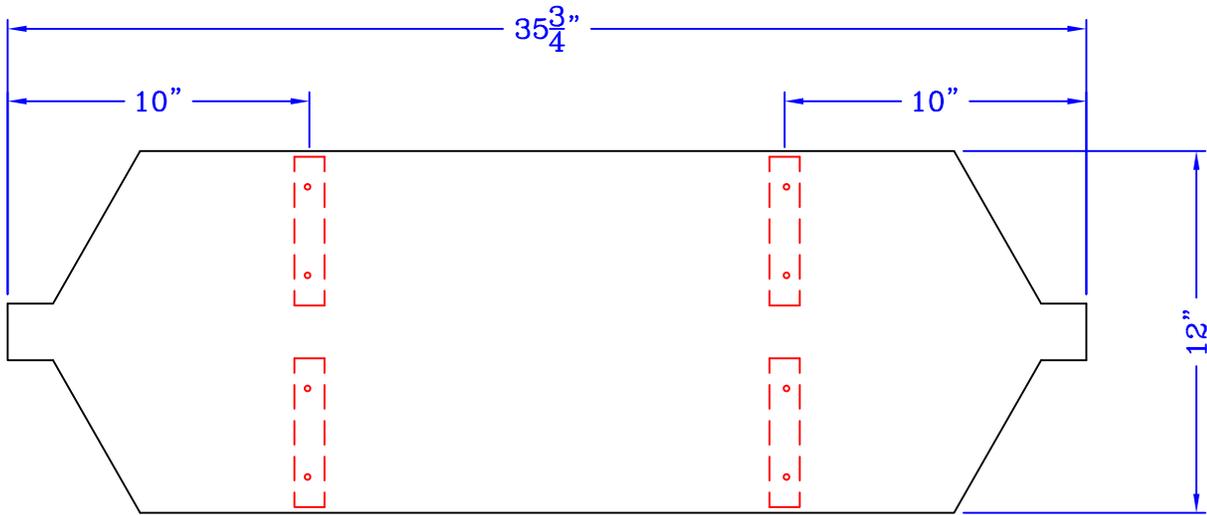
**22" x 62" exposed glass, for 1/4" thick glass**  
for 1 3/4" thick door



**Sandwich type lite kit**

See option SK on page O-10.12 for additional information

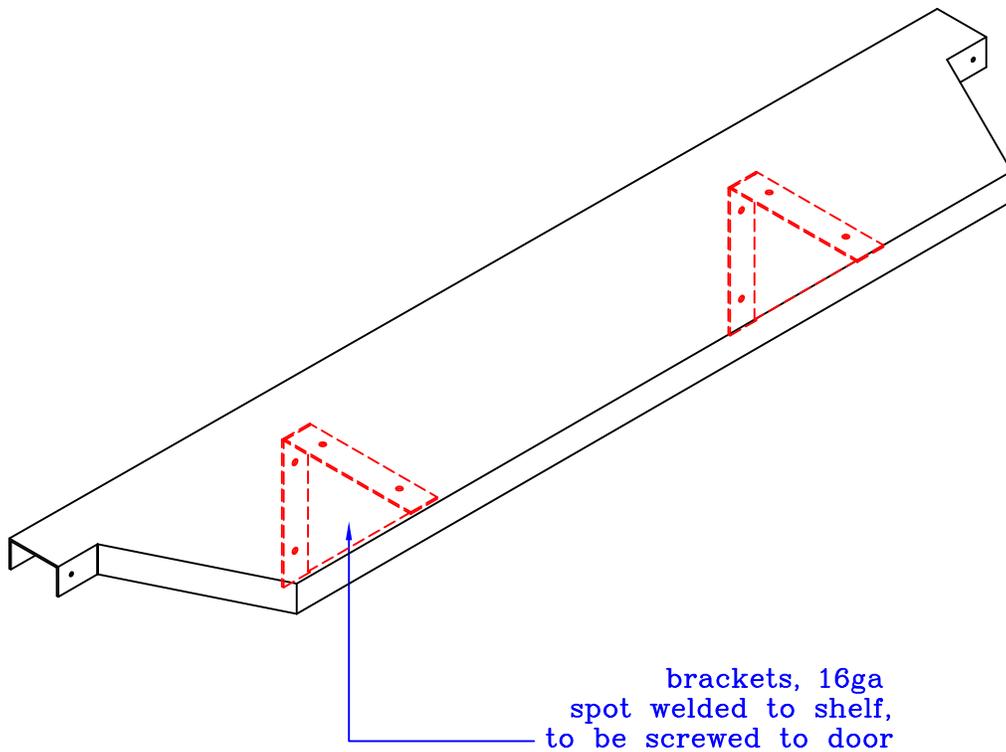
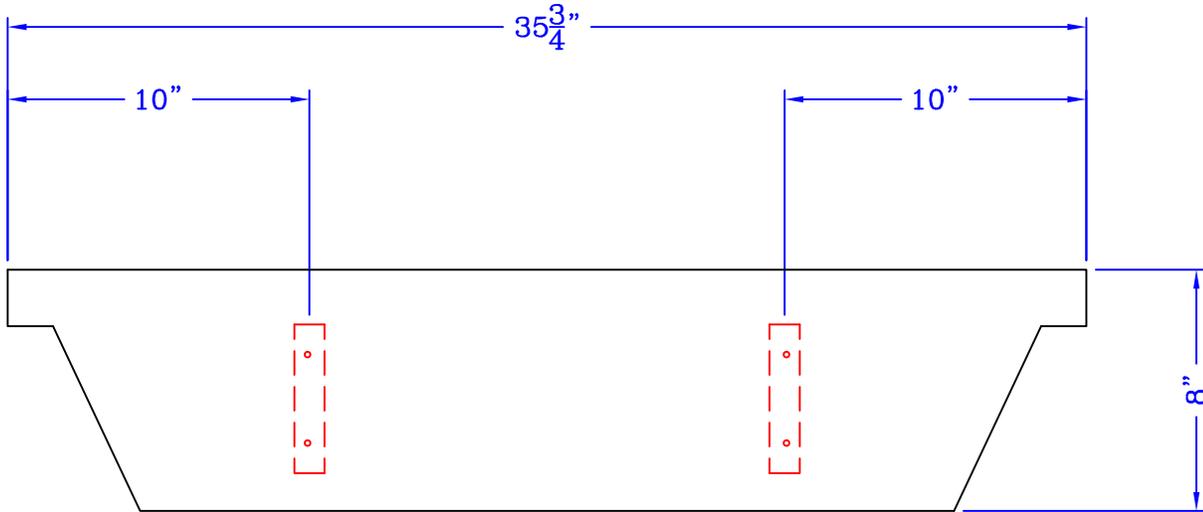
**Full dutch door shelf, 16ga, for 3'0" nominal door**  
for 1 3/4" thick door



Dutch door shelf

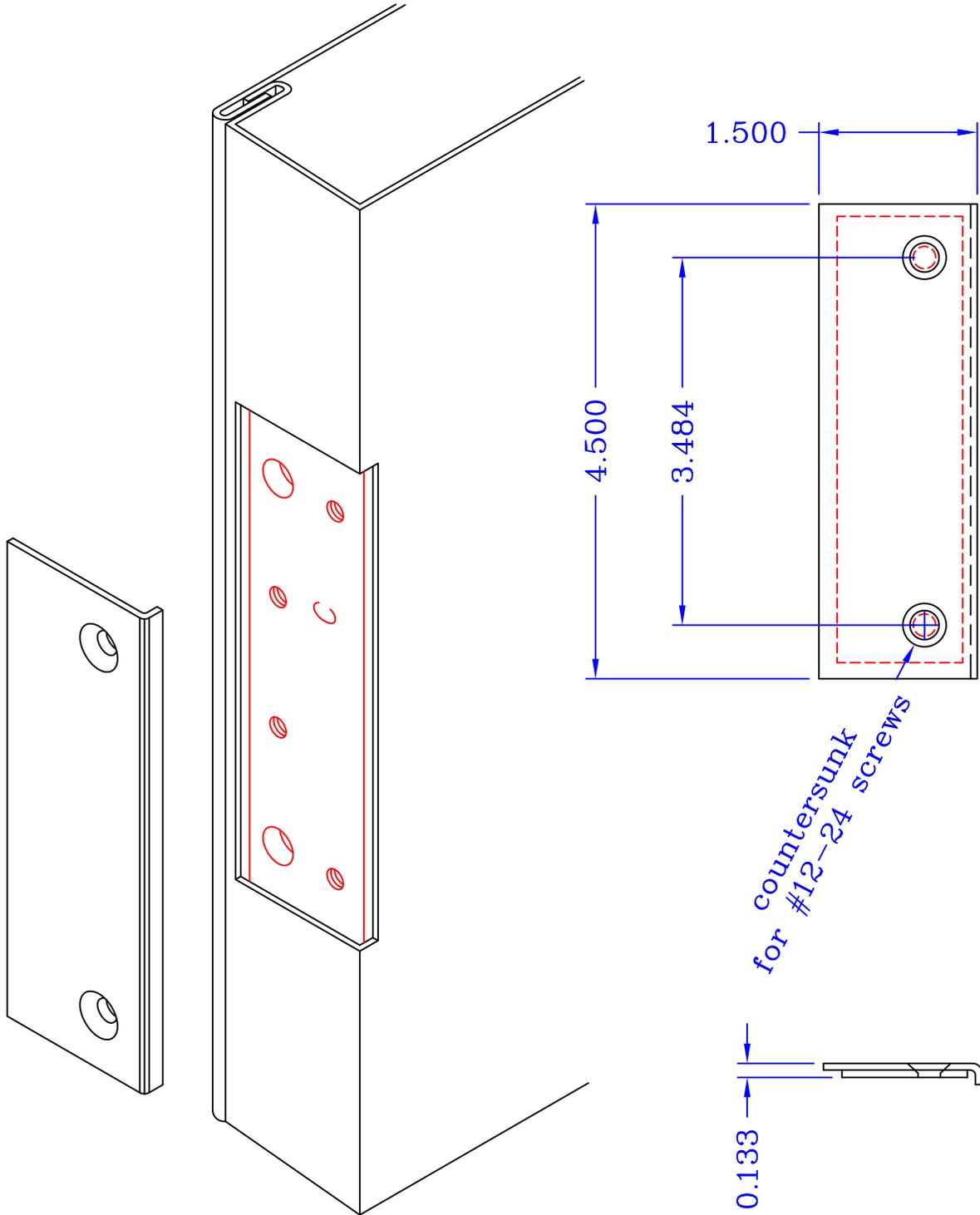
00851

**Half dutch door shelf, 16ga, for 3'0" nominal door**  
for 1 3/4" thick door

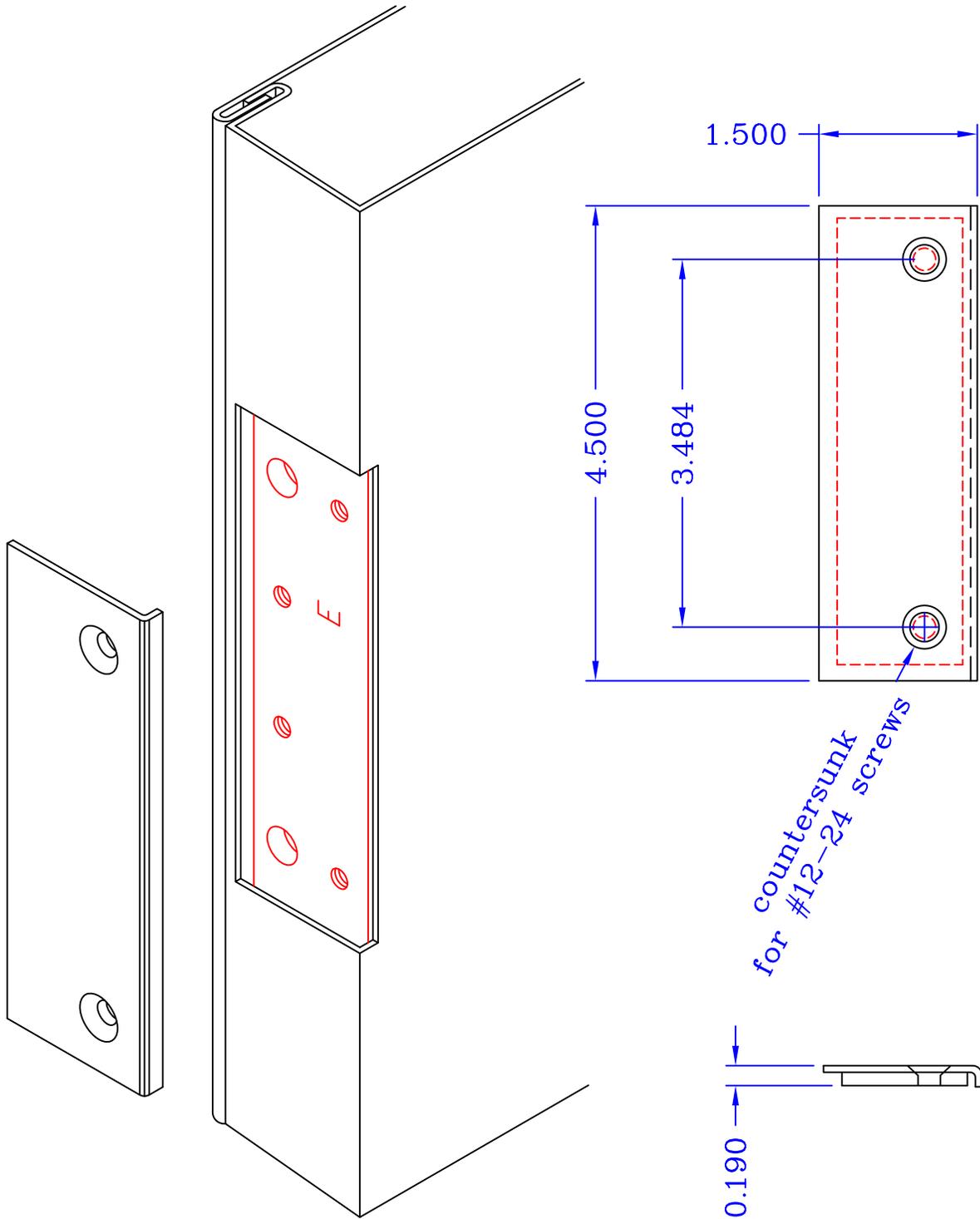


Dutch door shelf

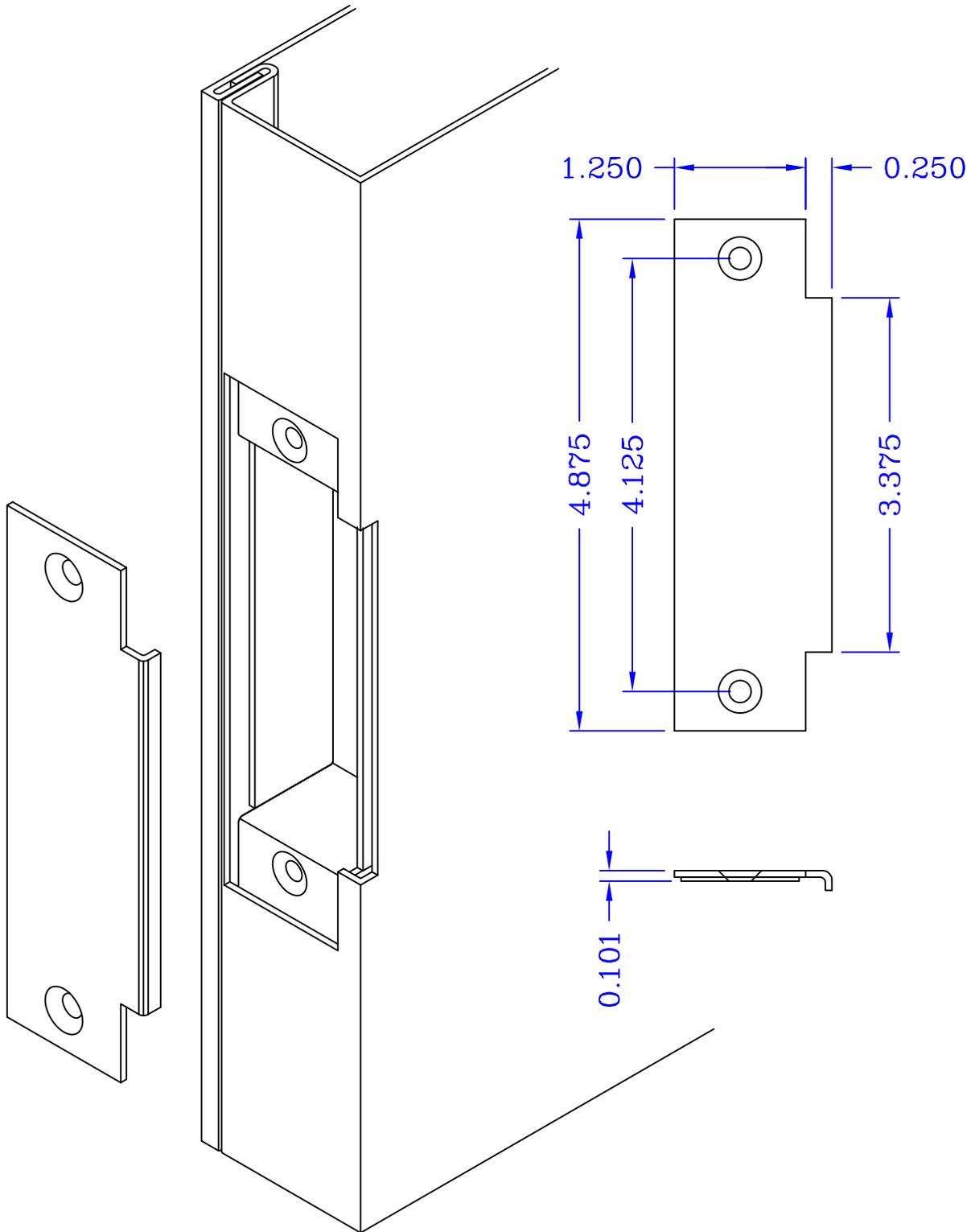
**4 1/2" standard weight hinge filler, screwed**  
for 1 3/4" thick door



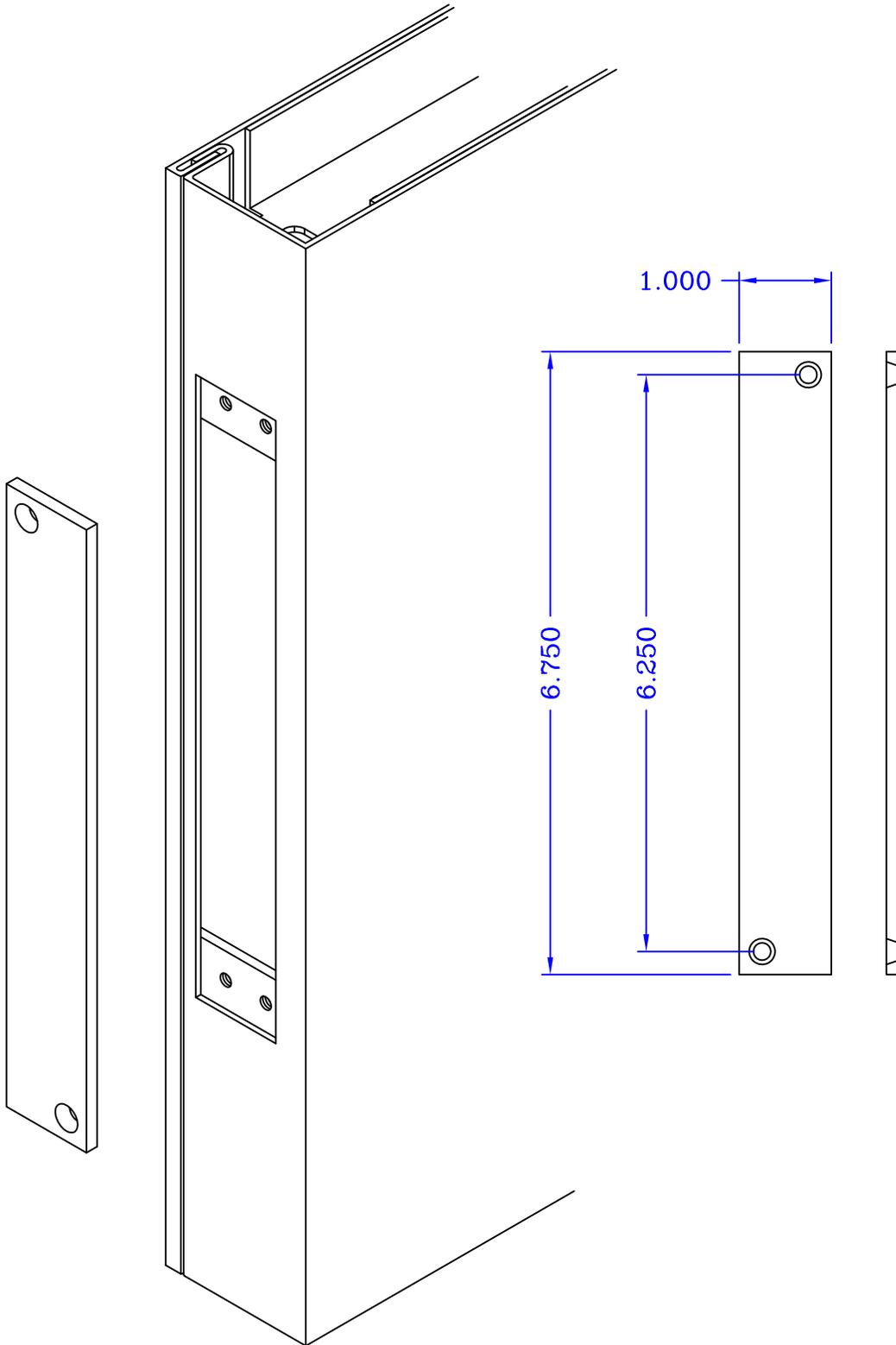
**4 1/2" heavy weight hinge filler, screwed**  
for 1 3/4" thick door



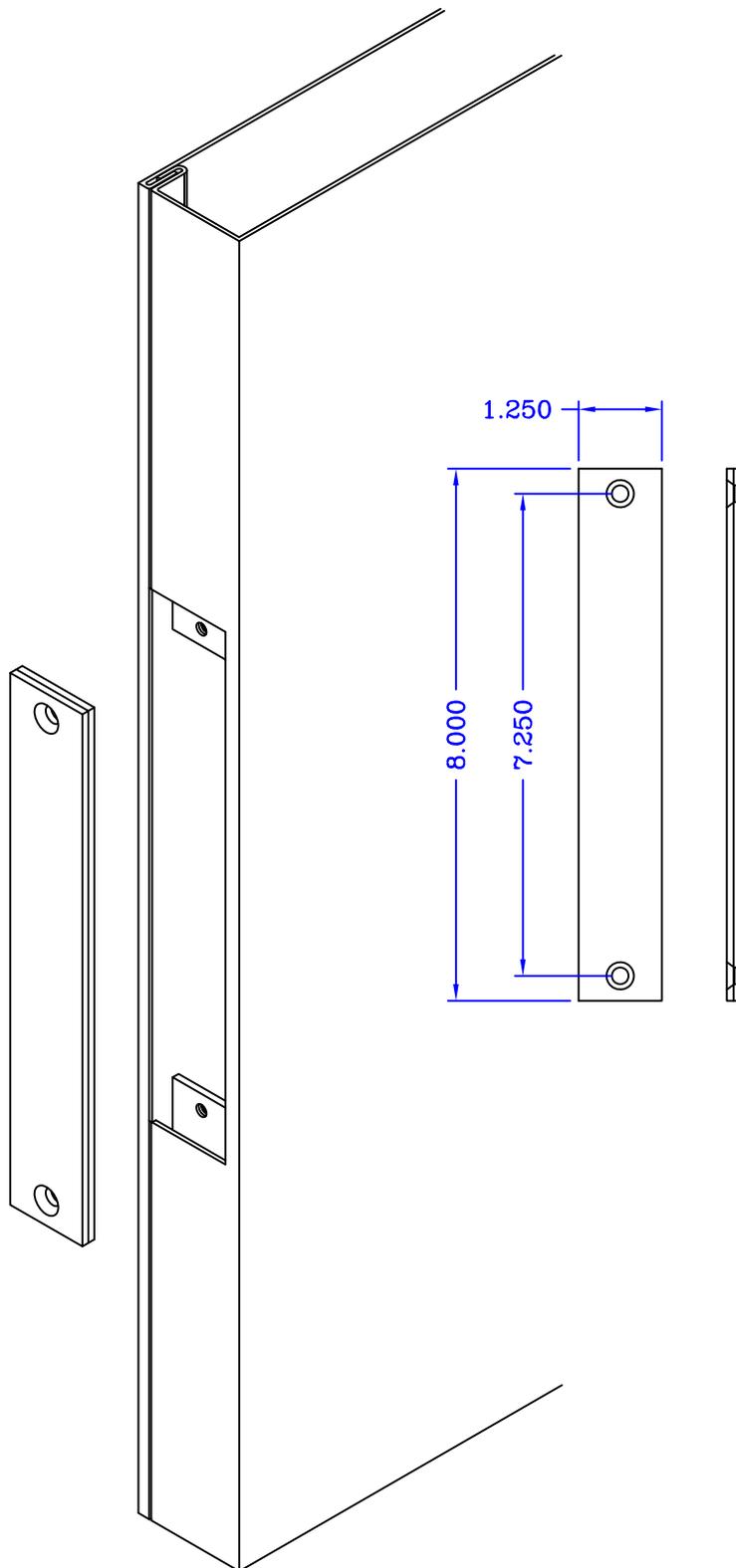
**ASA strike filler, screwed**  
for 1 3/4" thick door



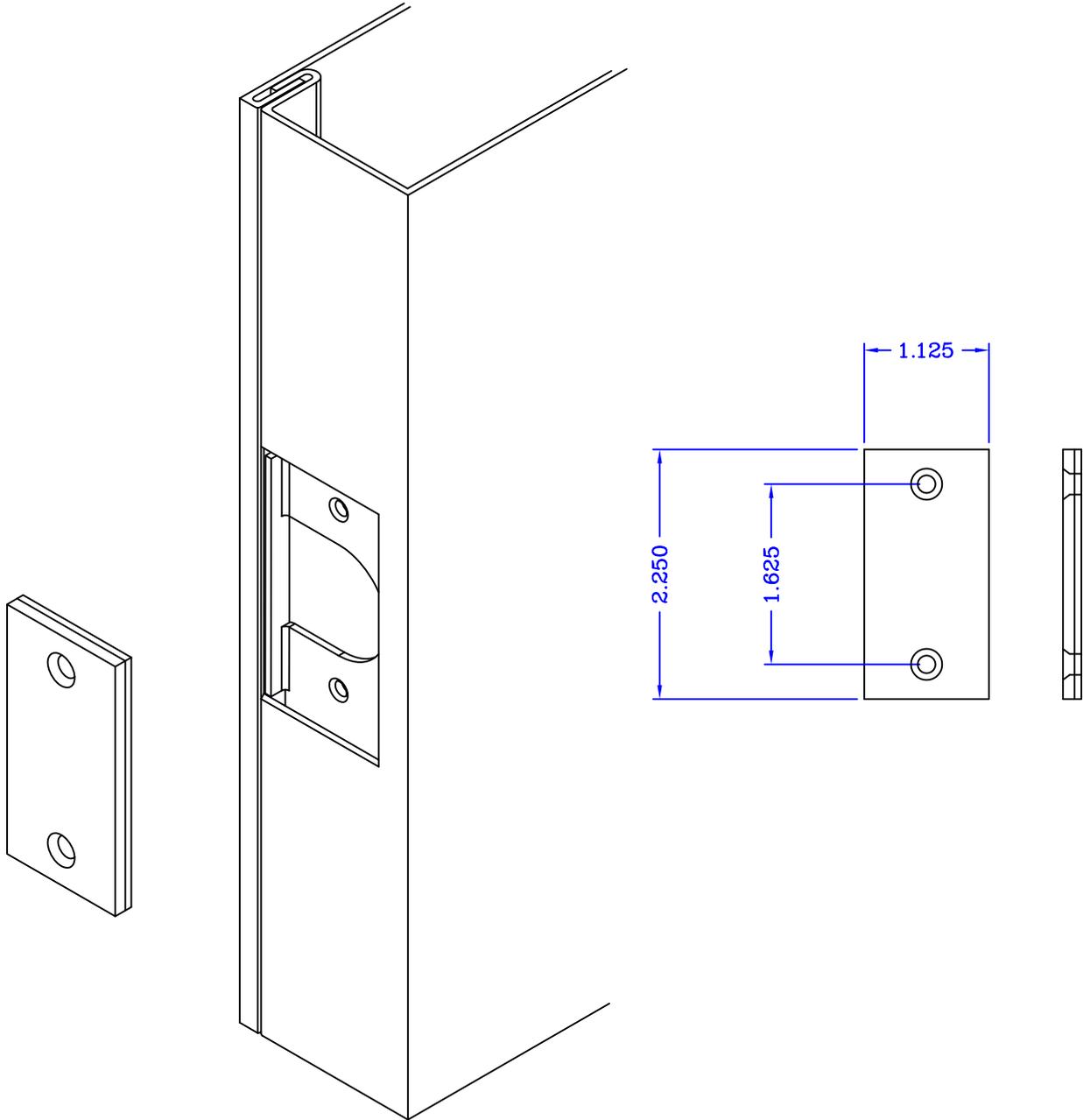
**Flush bolt, edge prep filler, screwed**  
for 1 3/4" thick door



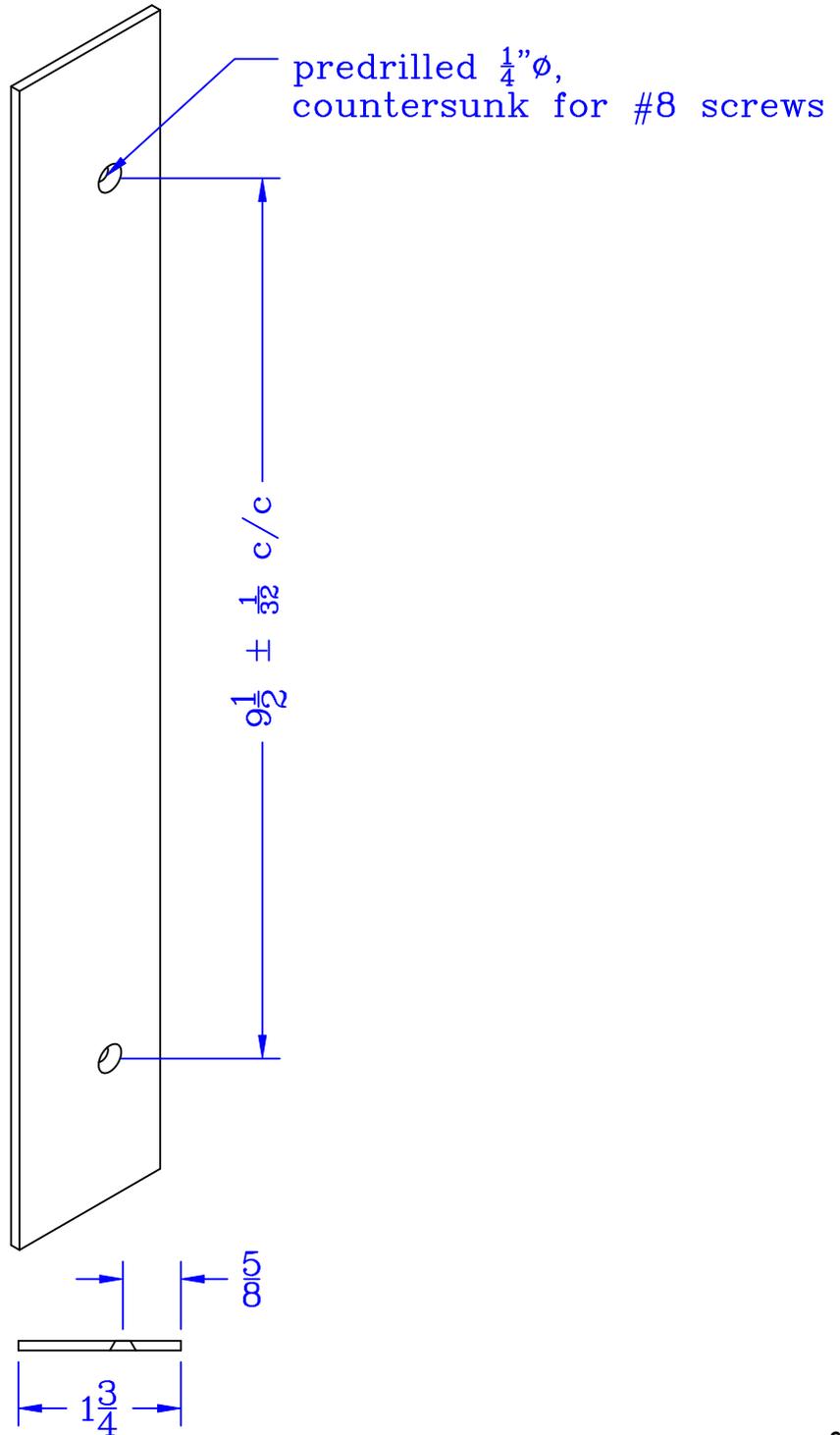
**Mortise filler, screwed**  
for 1 3/4" thick door



**Cylindrical lock filler, screwed**  
for 1 3/4" thick door

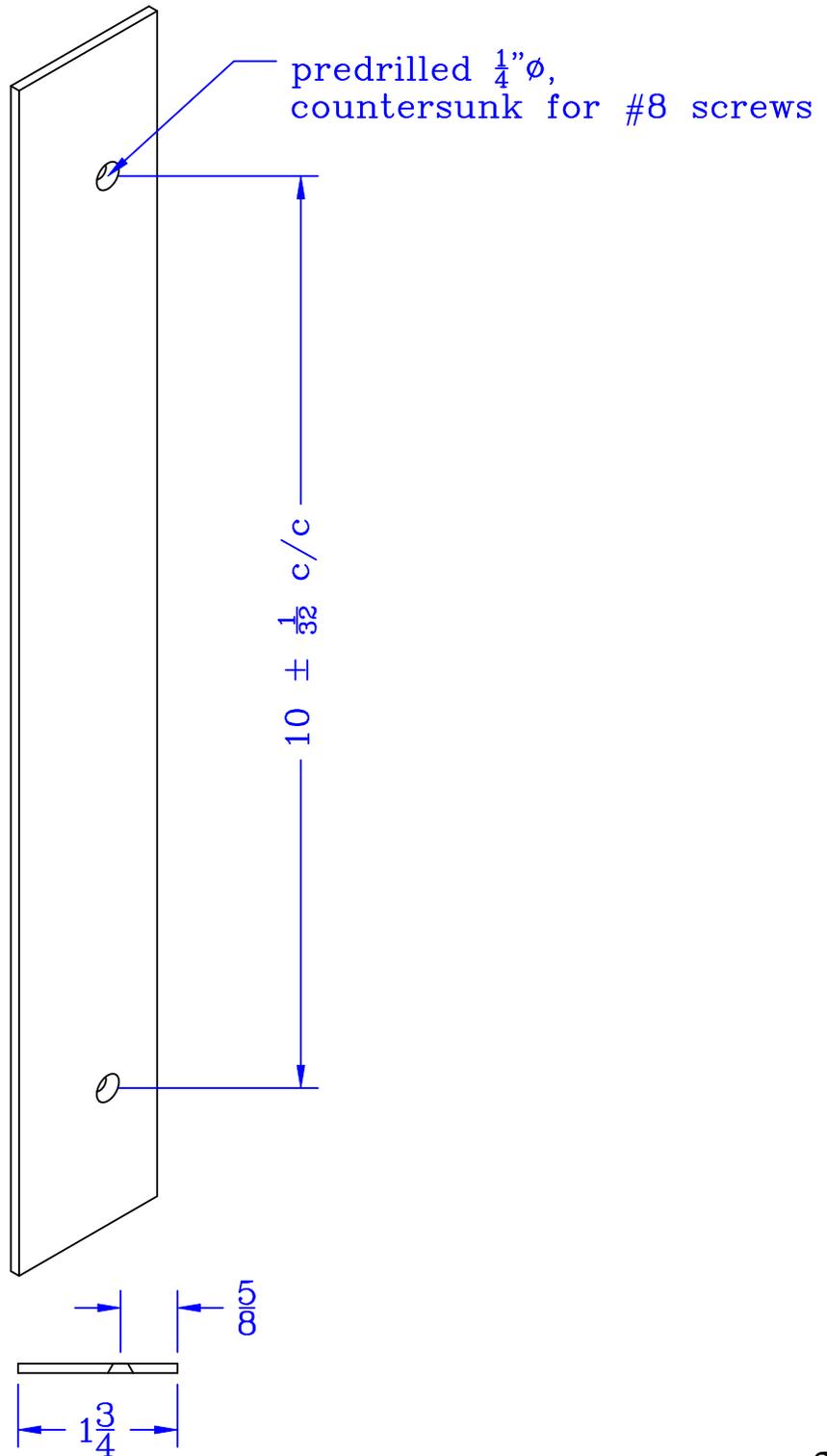


**Flat bar astragal 79 1/8", 12ga**



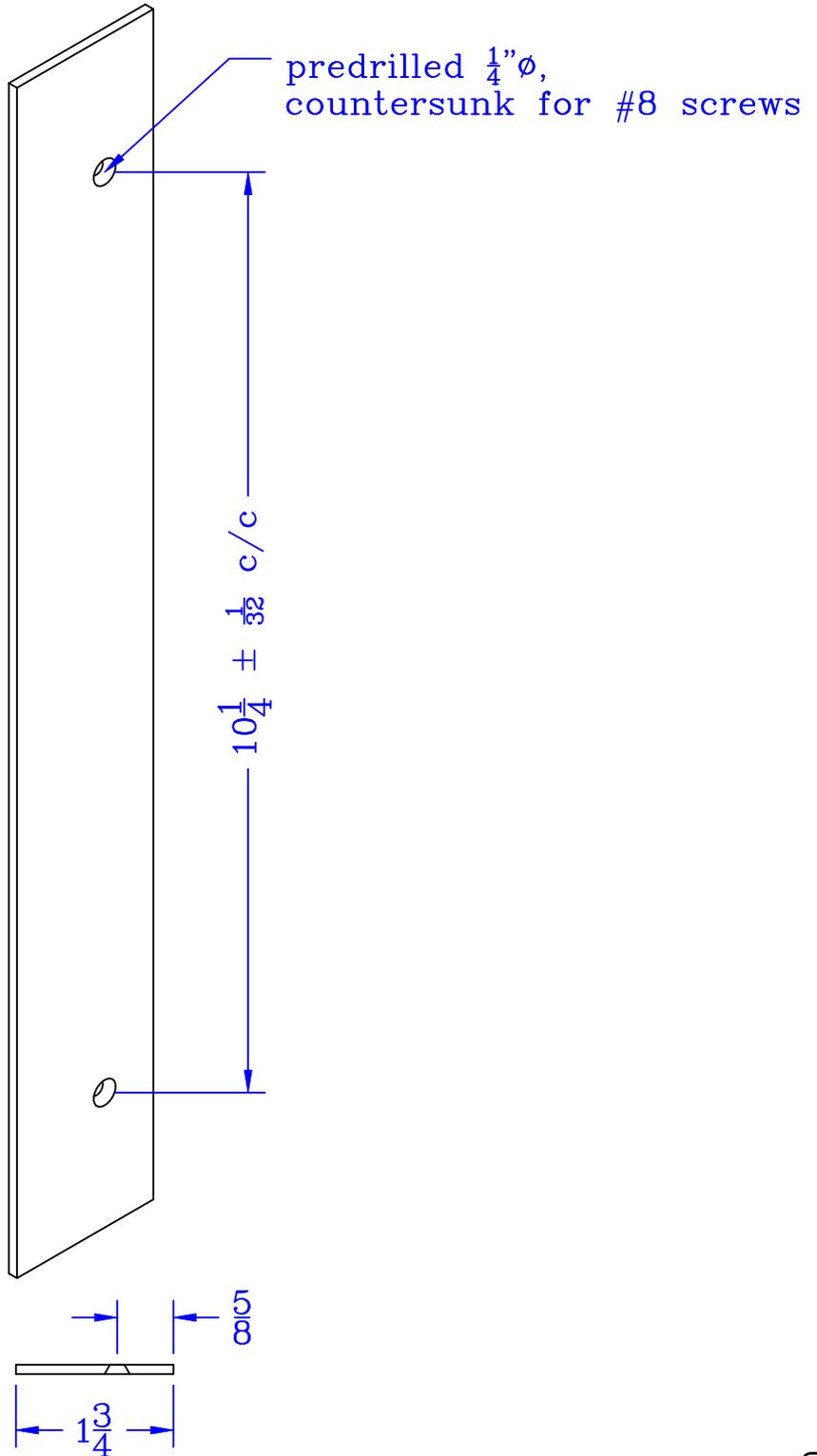
See option FAS on page O-6.6 for additional information

**Flat bar astragal 83 1/8", 12ga**



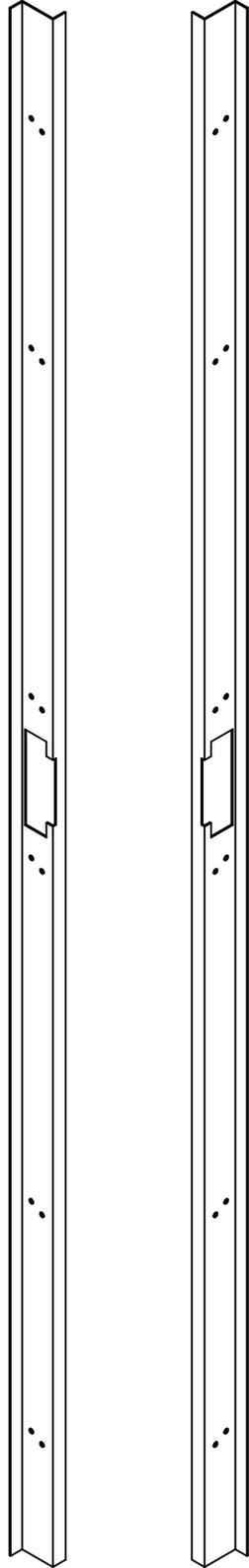
See option FAS on page O-6.6 for additional information

**Flat bar astragal 95 1/8", 12ga**



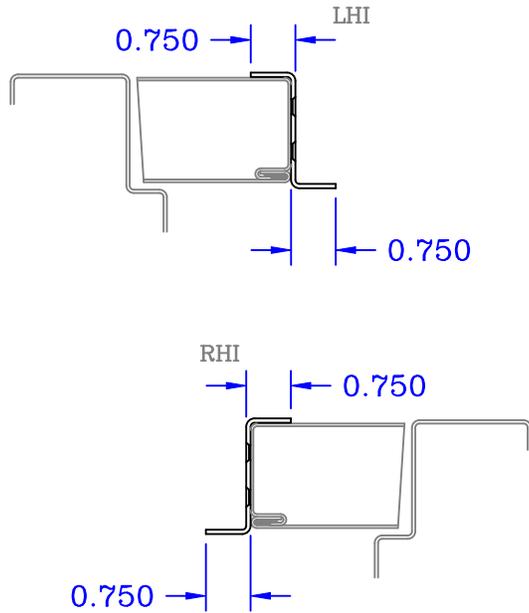
See option FAS on page O-6.6 for additional information

**"Z" astragal, 14ga, ASA, 79 1/8", REVH**



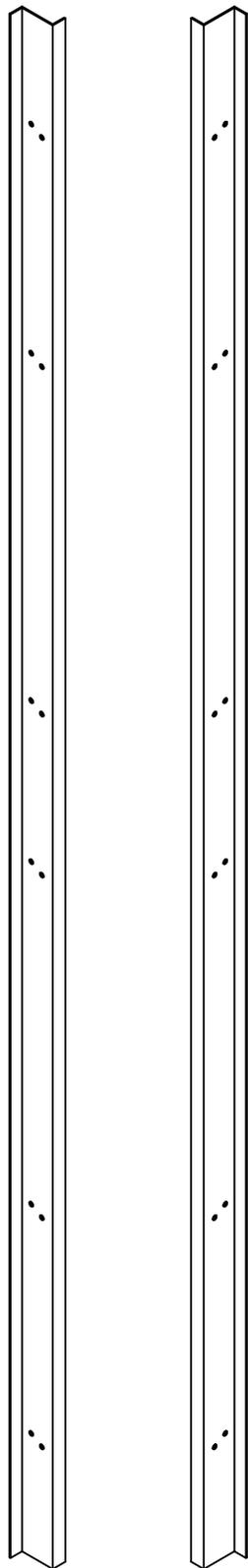
LHI

RHI



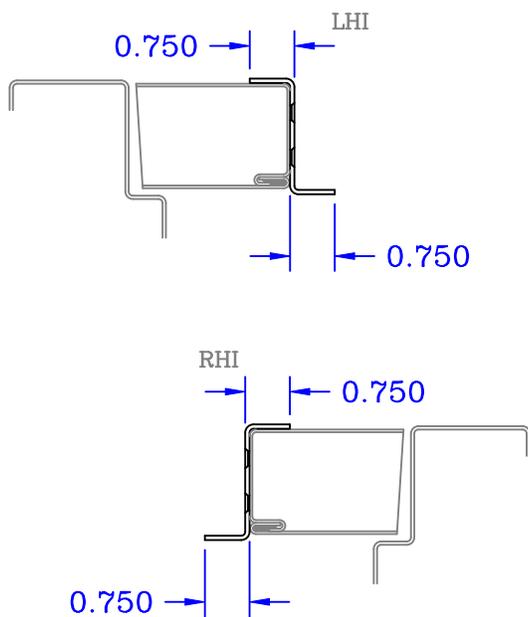
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, Inactive door, 79 1/8", REVH**



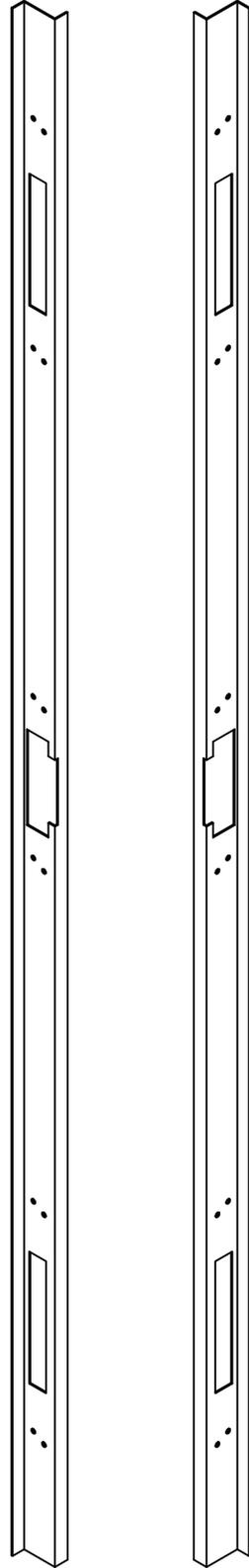
LHI

RHI



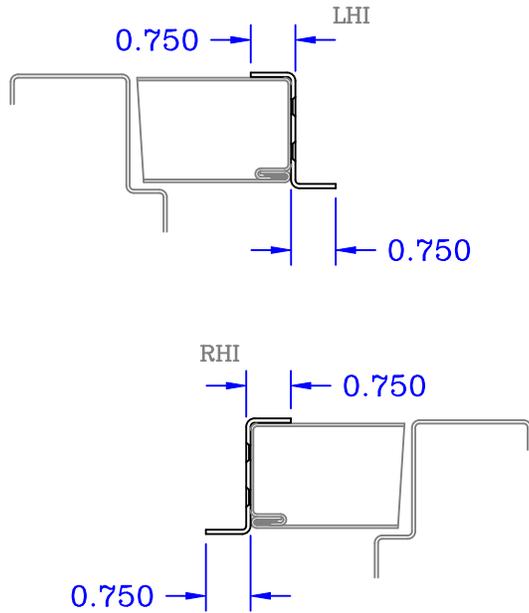
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 79 1/8", REVH**



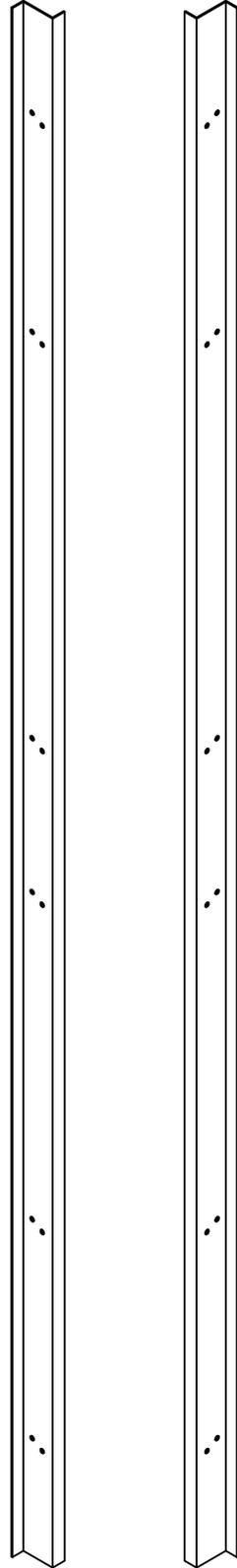
LHI

RHI



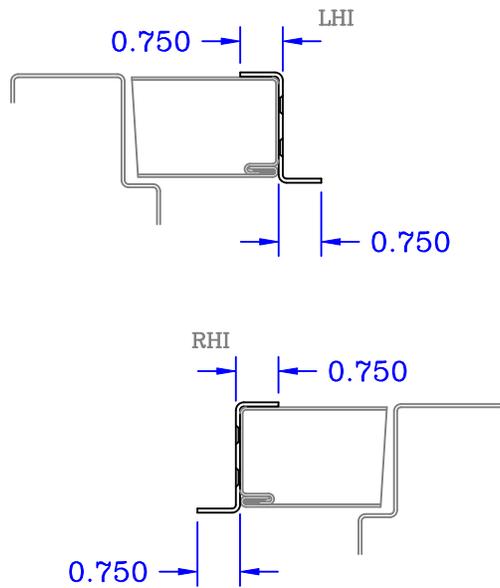
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, Inactive door, 83 1/8", REVH**



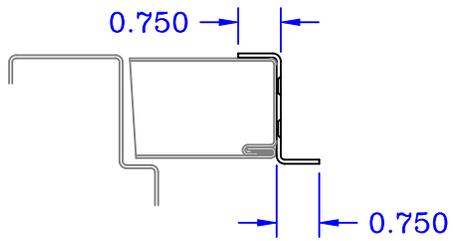
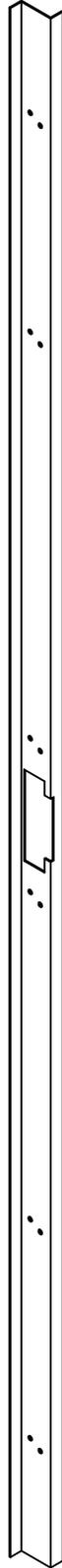
LHI

RHI



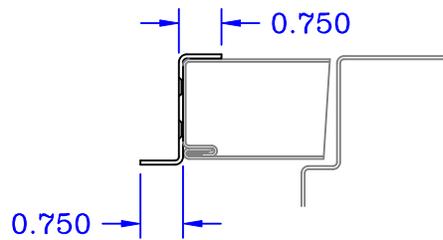
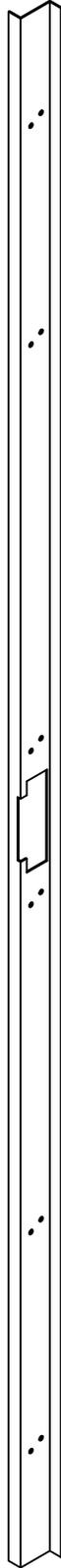
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 83 1/8", LH**



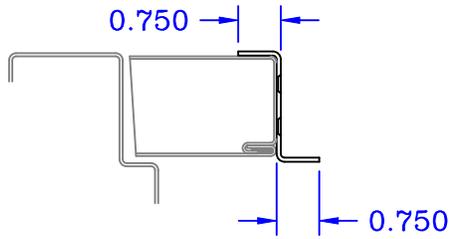
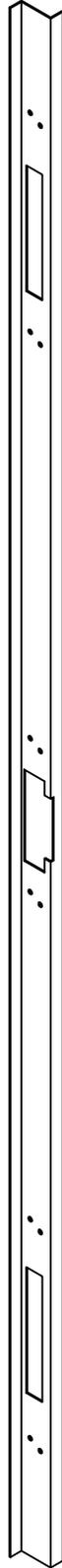
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 83 1/8", RH**



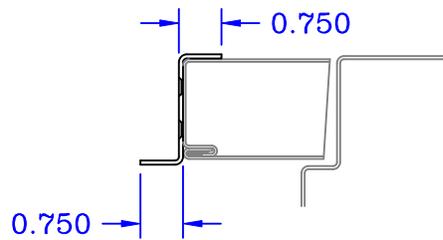
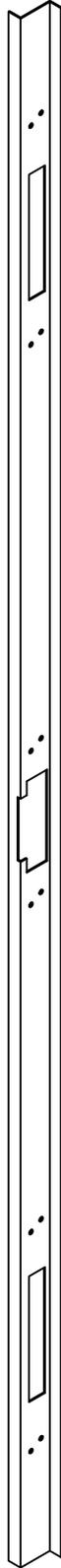
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", LH**



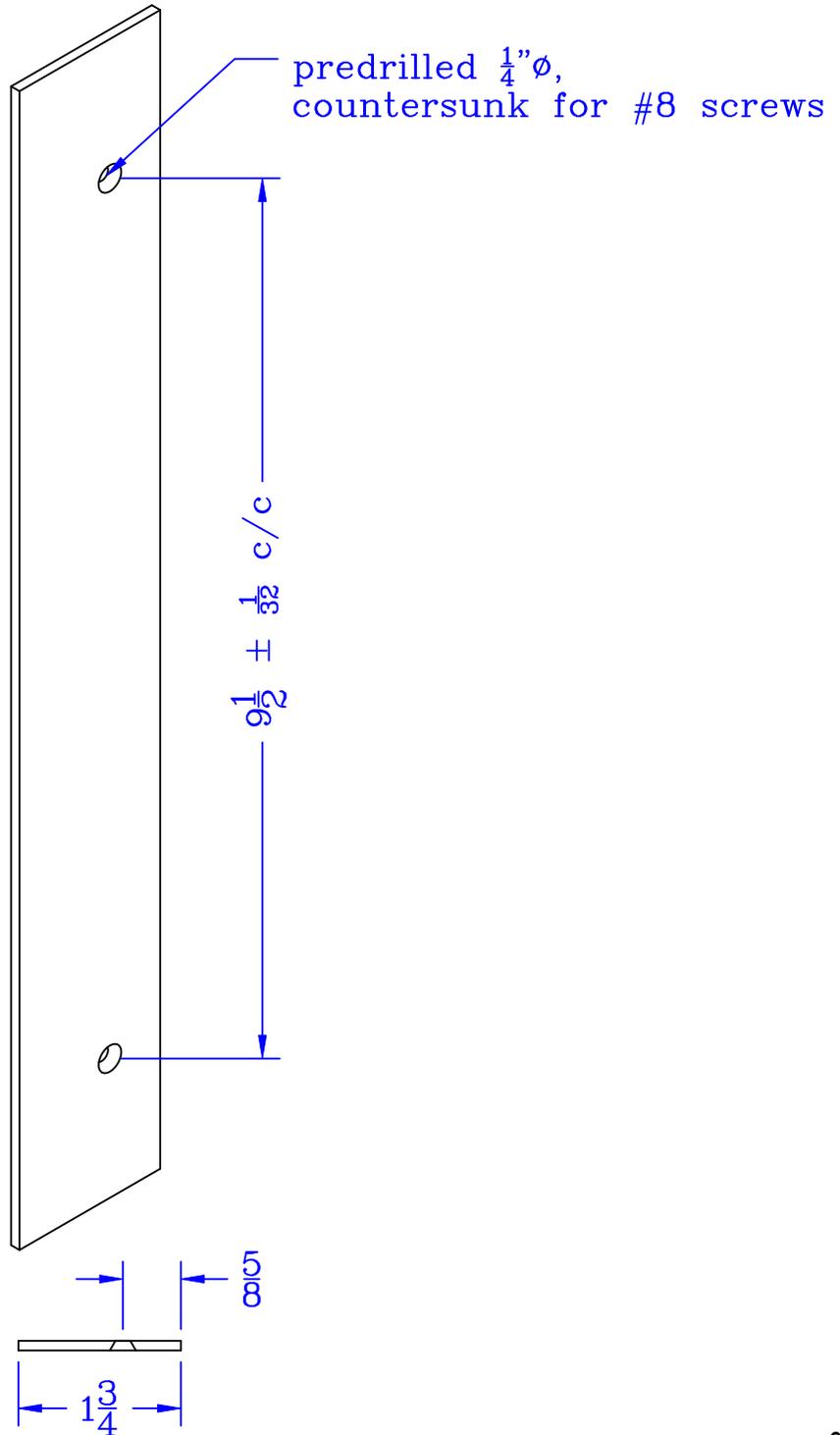
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", RH**



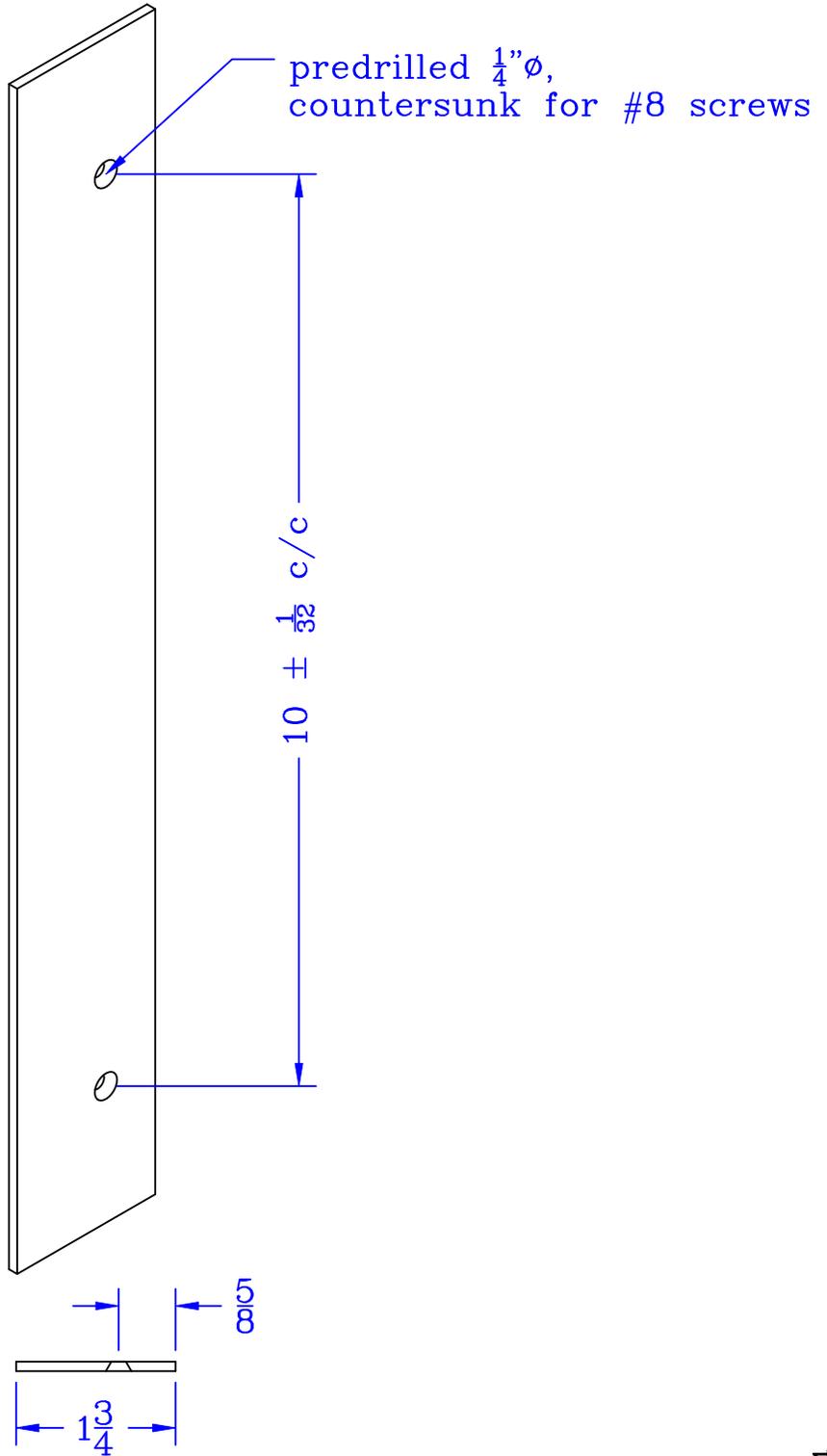
See option ZAS on page O-6.7 for additional information

**Flat bar astragal 79 1/8", 12ga, Primed**



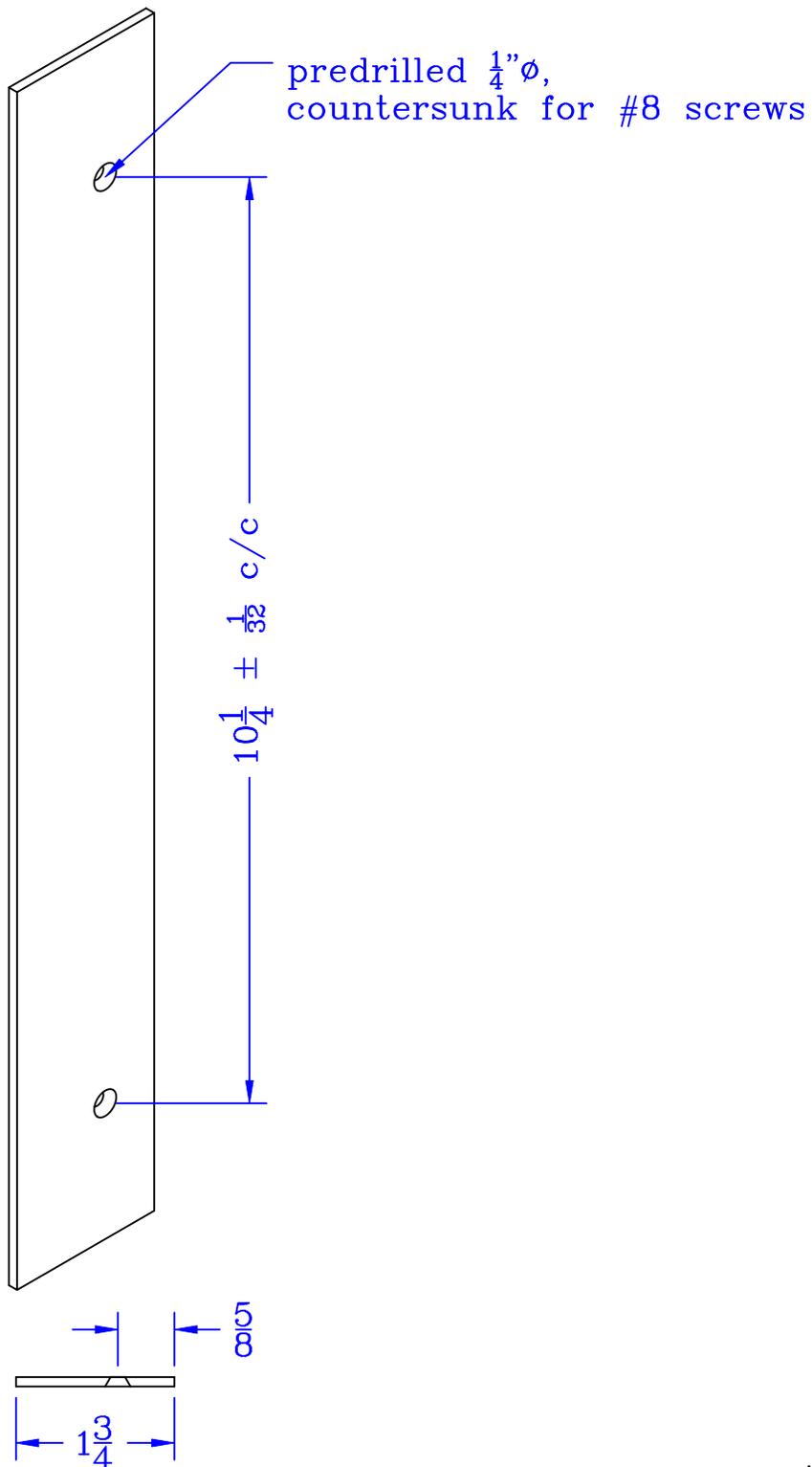
See option FAS on page O-6.6 for additional information

**Flat bar astragal 83 1/8", 12ga, Primed**



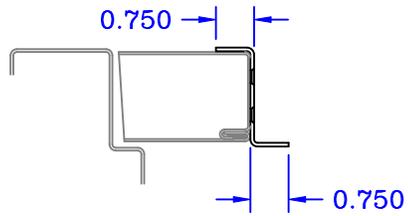
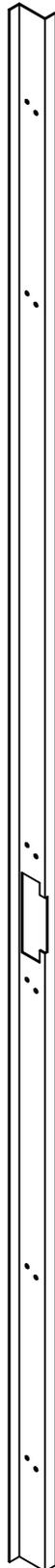
See option FAS on page O-6.6 for additional information

**Flat bar astragal 95 1/8", 12ga, Primed**



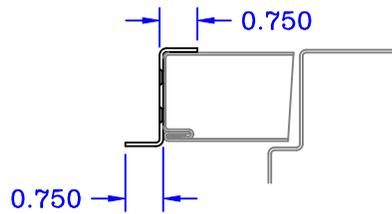
See option FAS on page O-6.6 for additional information

**"Z" astragal, 14ga, ASA, 95 1/8", LH**



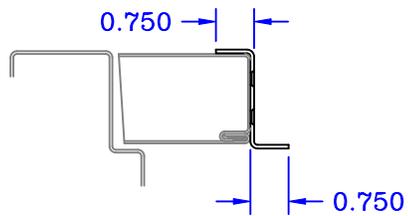
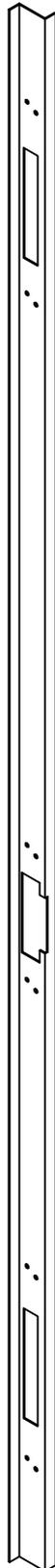
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 95 1/8", RH**



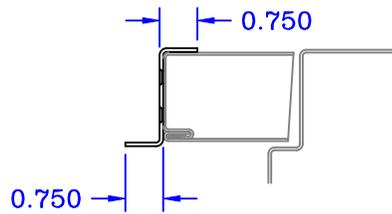
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 95 1/8", LH**



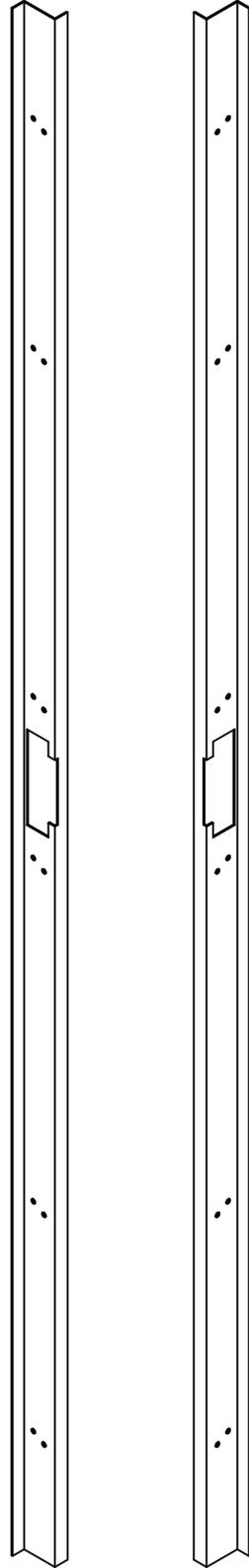
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 95 1/8", RH**



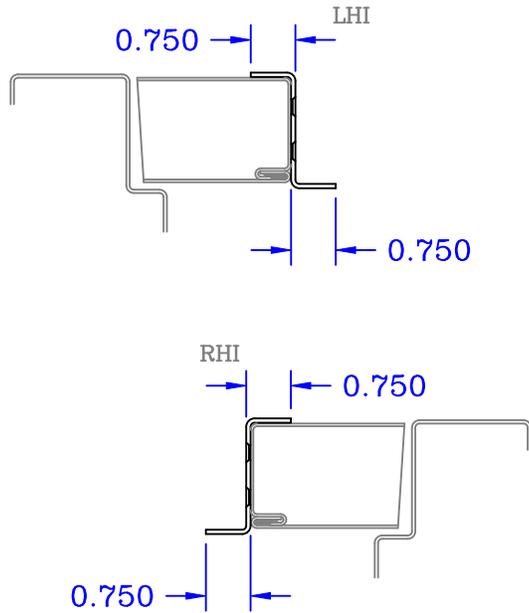
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 79 1/8", REVH, Primed**



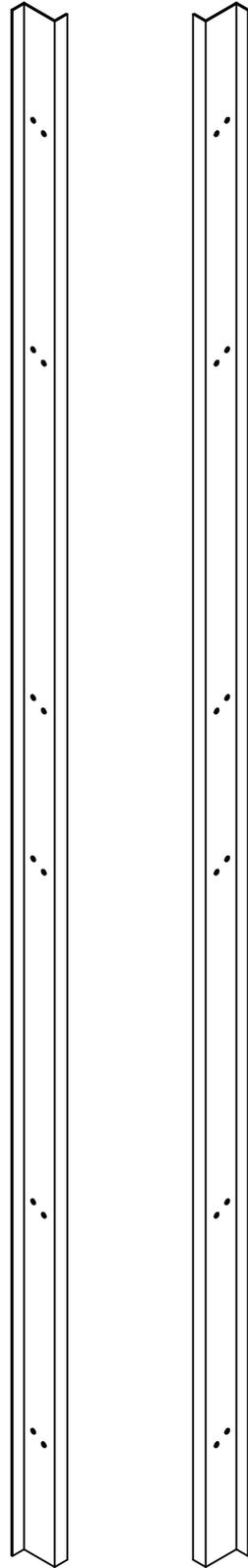
LHI

RHI



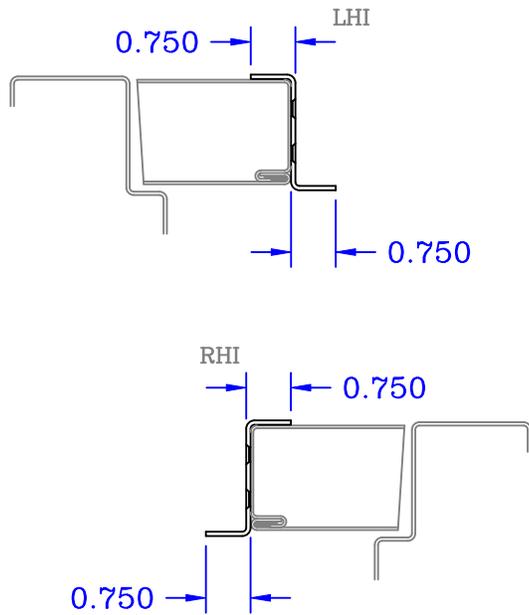
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, Inactive door, 79 1/8", REVH, Primed**



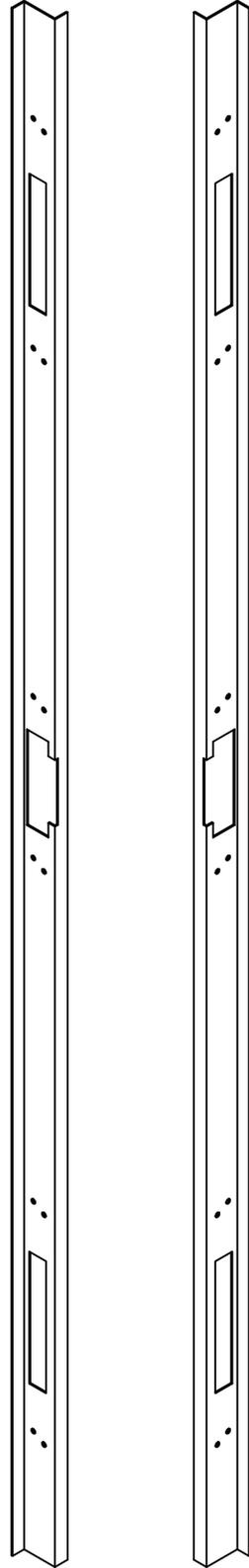
LHI

RHI



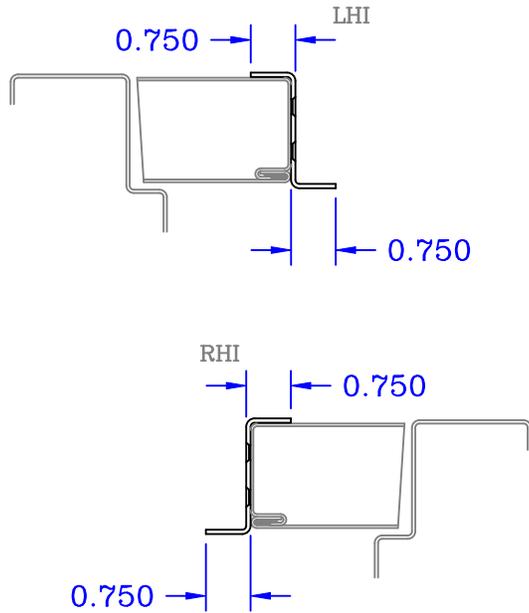
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 79 1/8", REVH, Primed**



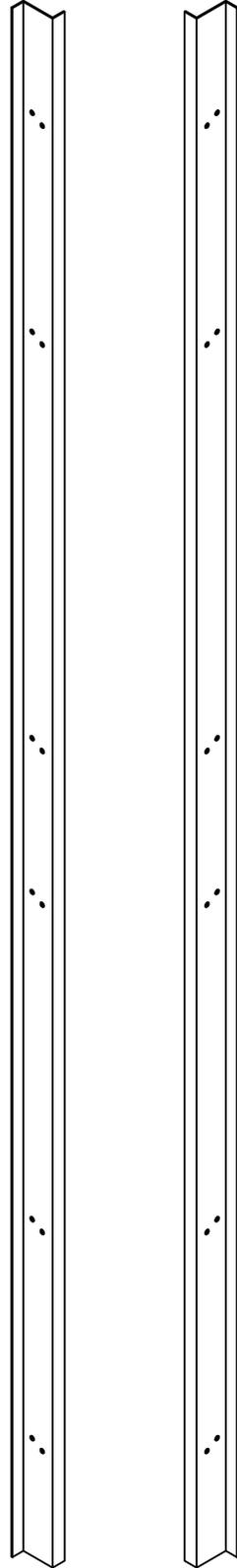
LHI

RHI



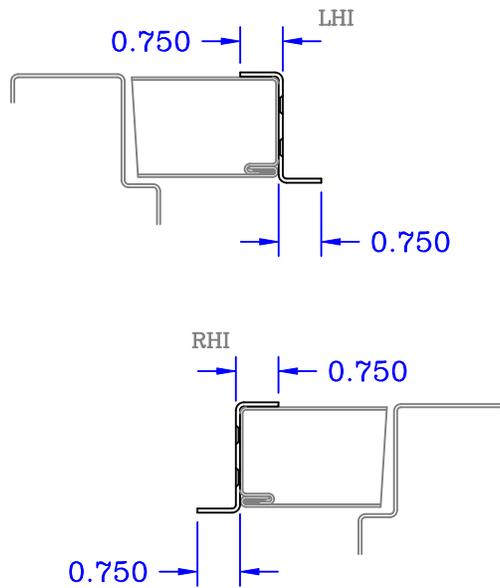
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, Inactive door, 83 1/8", REVH, Primed**



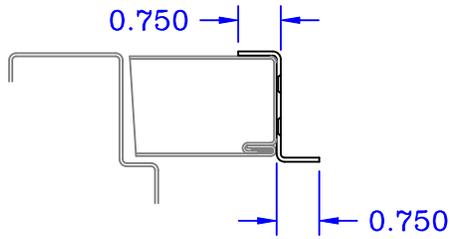
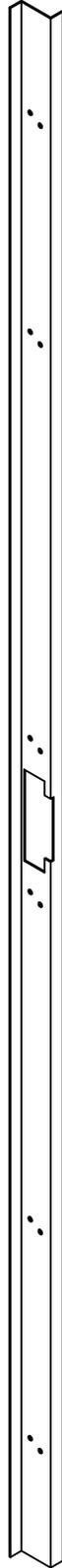
LHI

RHI



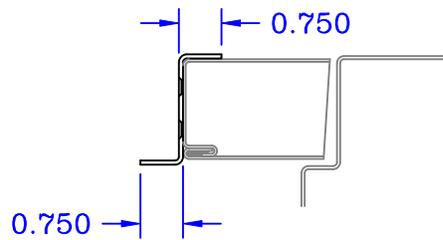
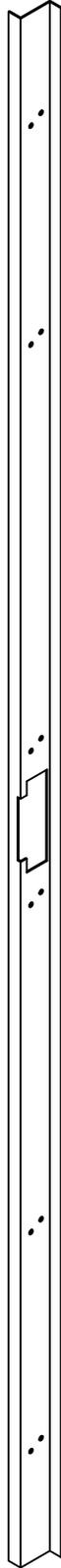
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 83 1/8", LH, Primed**



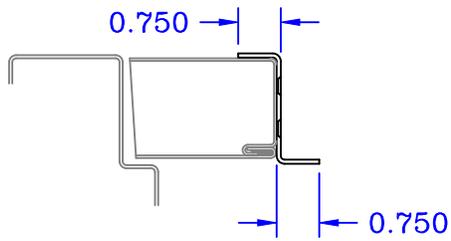
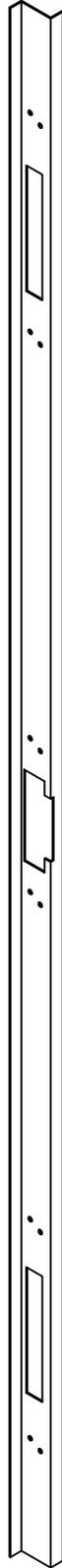
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 83 1/8", RH, Primed**



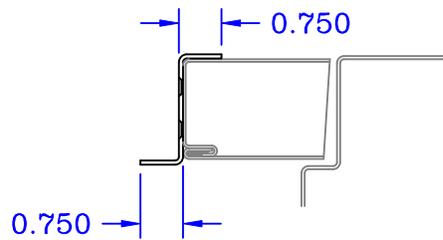
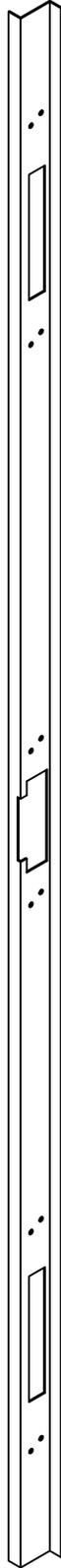
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", LH, Primed**



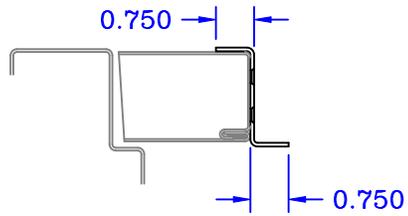
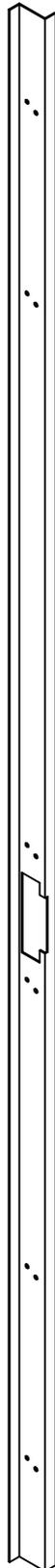
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", RH, Primed**



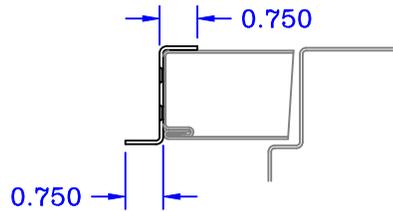
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 95 1/8", LH, Primed**



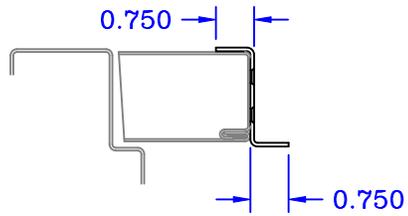
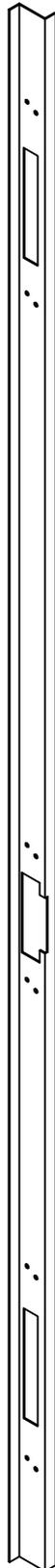
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA, 95 1/8", RH, Primed**



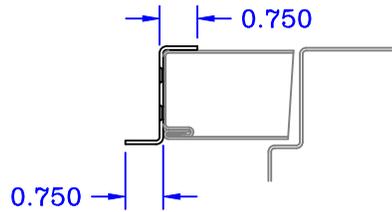
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 95 1/8", LH, Primed**



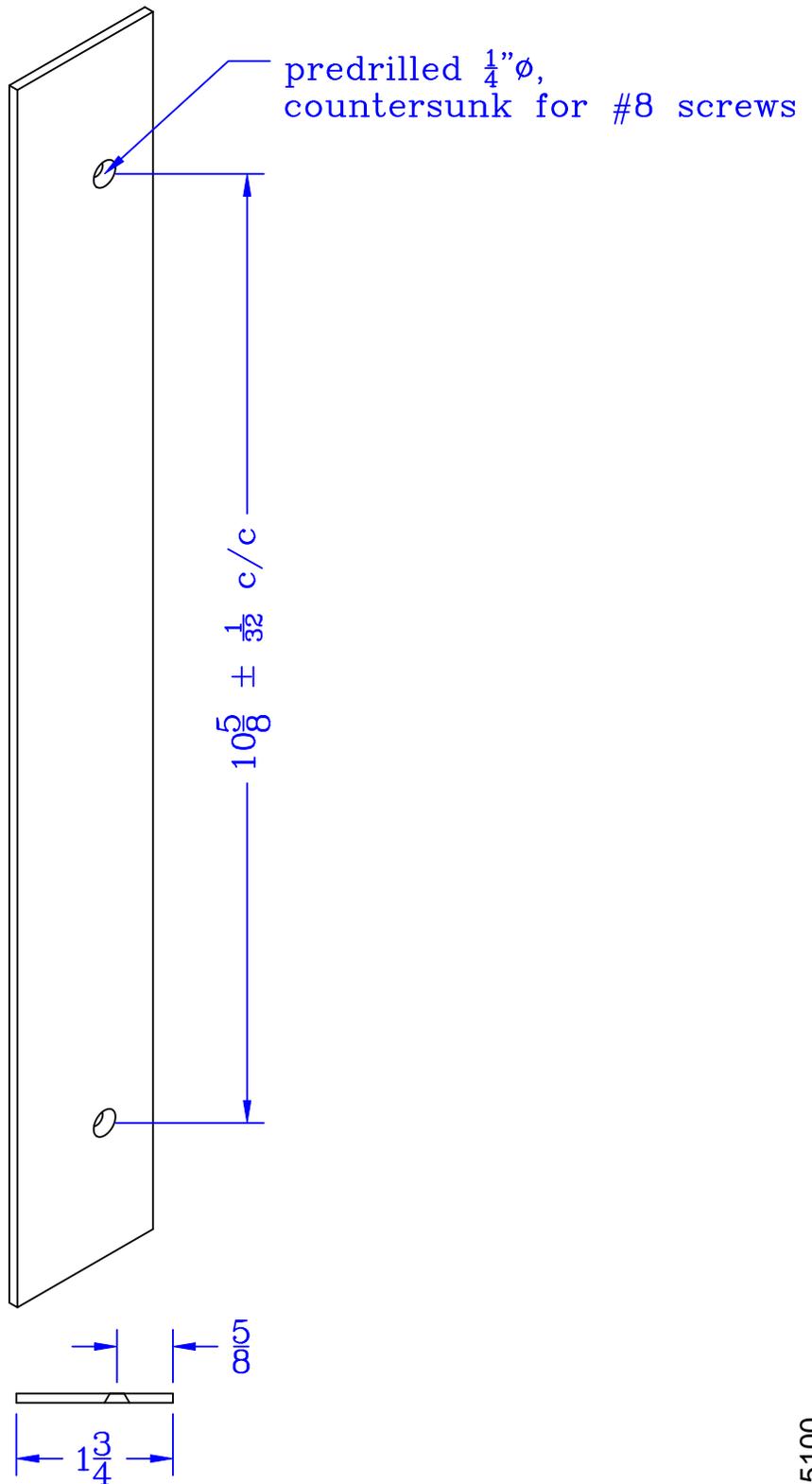
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 95 1/8", RH, Primed**



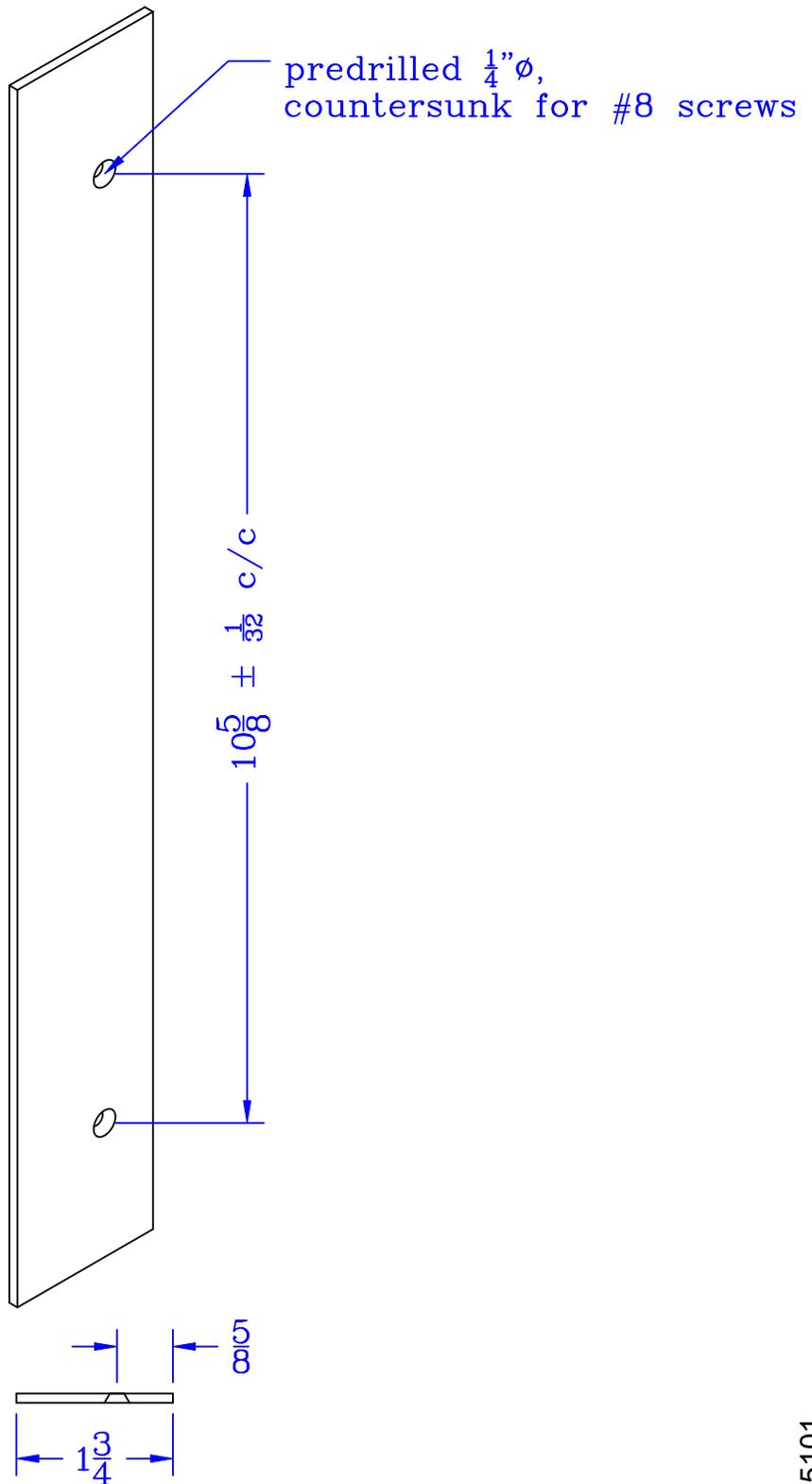
See option ZAS on page O-6.7 for additional information

**Flat bar astragal 120", 12ga**



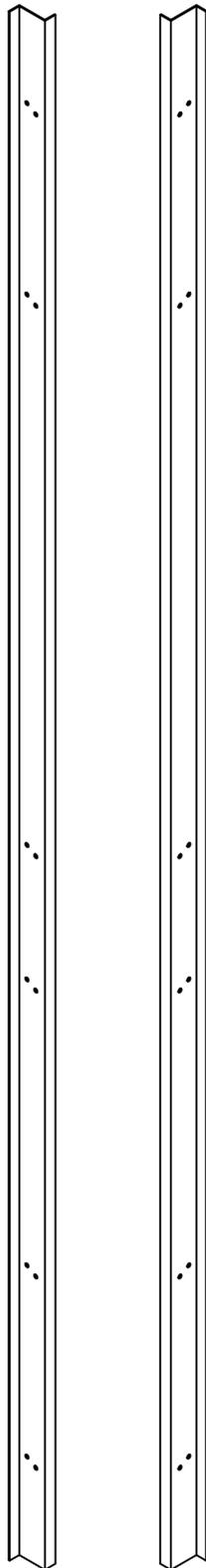
See option FAS on page O-6.6 for additional information

**Flat bar astragal 120", 12ga, Primed**



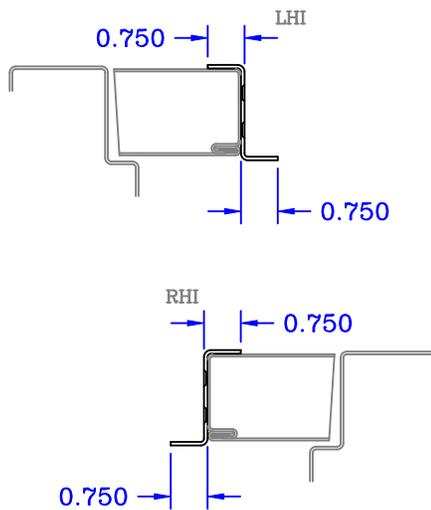
See option FAS on page O-6.6 for additional information

**"Z" astragal, 14ga, Inactive door, 95 1/8", REVH**



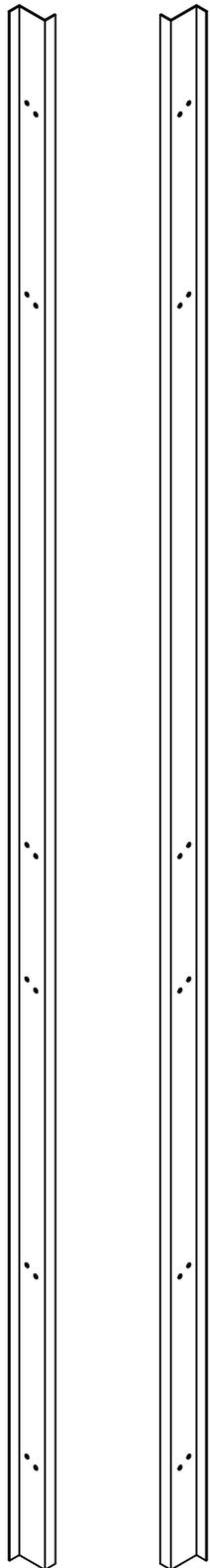
LHI

RHI



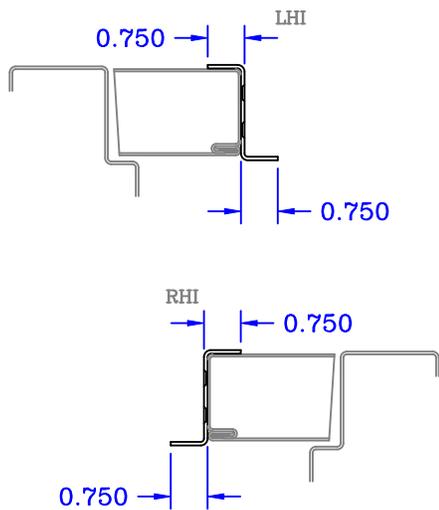
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, Inactive door, 95 1/8", REVH, Primed**



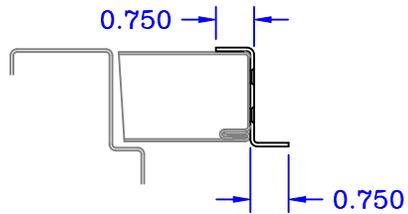
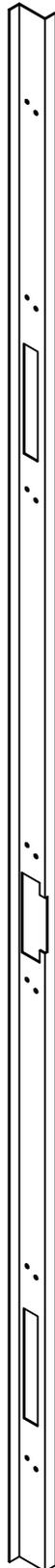
LHI

RHI



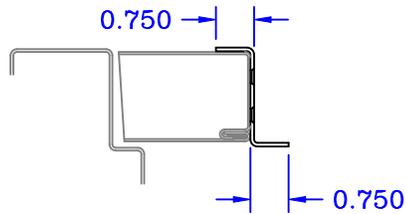
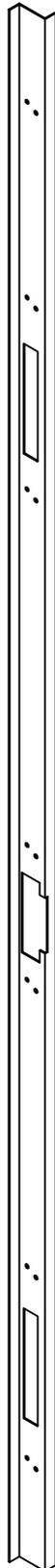
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB(24"top), 95 1/8", LH**



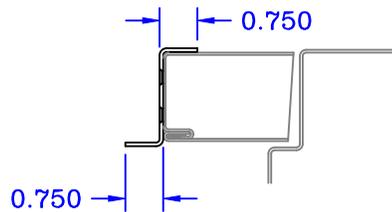
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB(24"top), 95 1/8", LH, Primed**



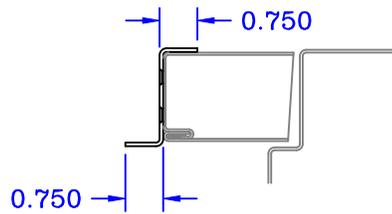
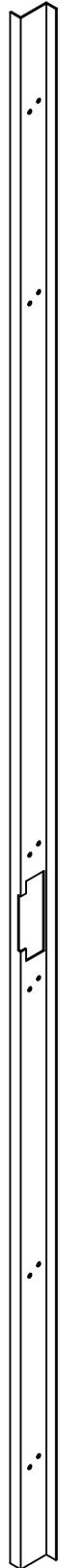
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB(24" top), 95 1/8", RH**



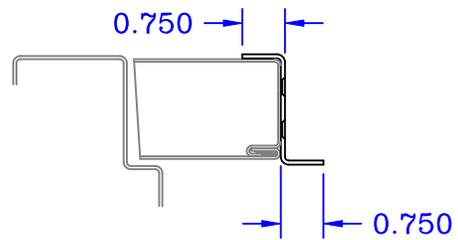
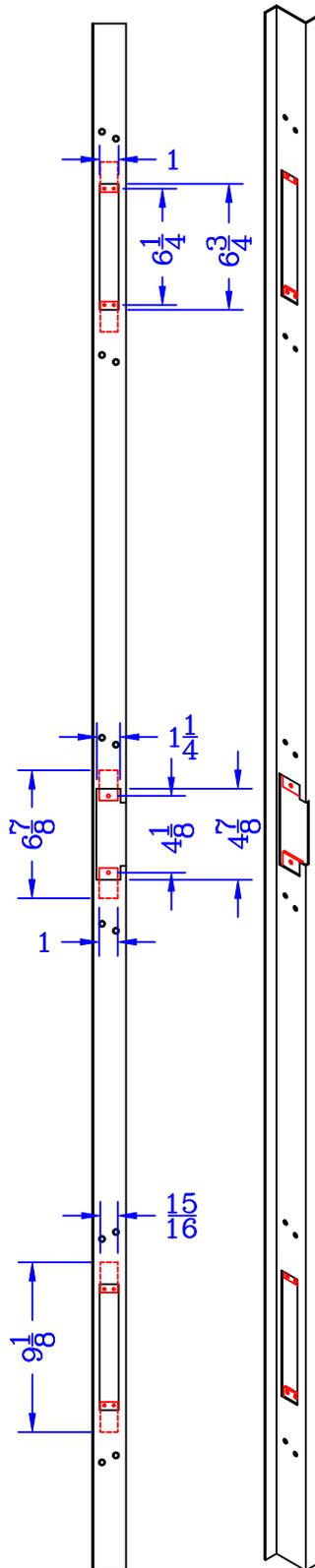
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB(24" top), 95 1/8", RH, Primed**



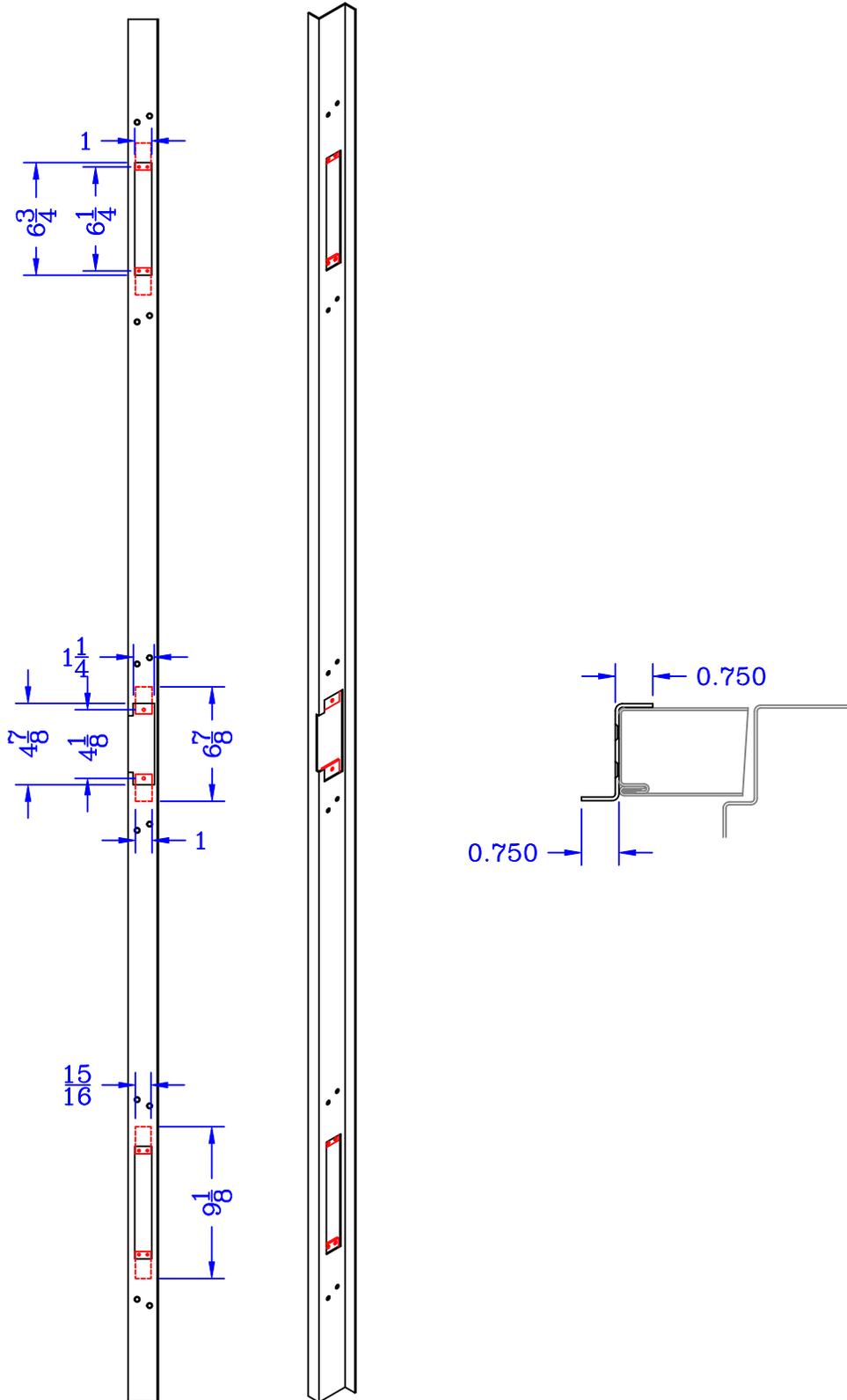
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", LH, with reinforcements**



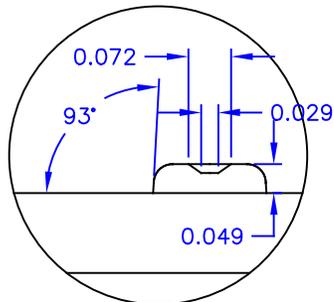
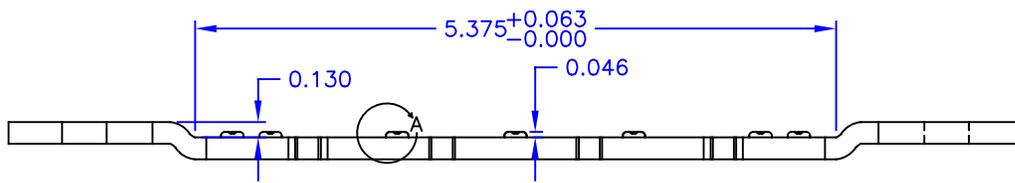
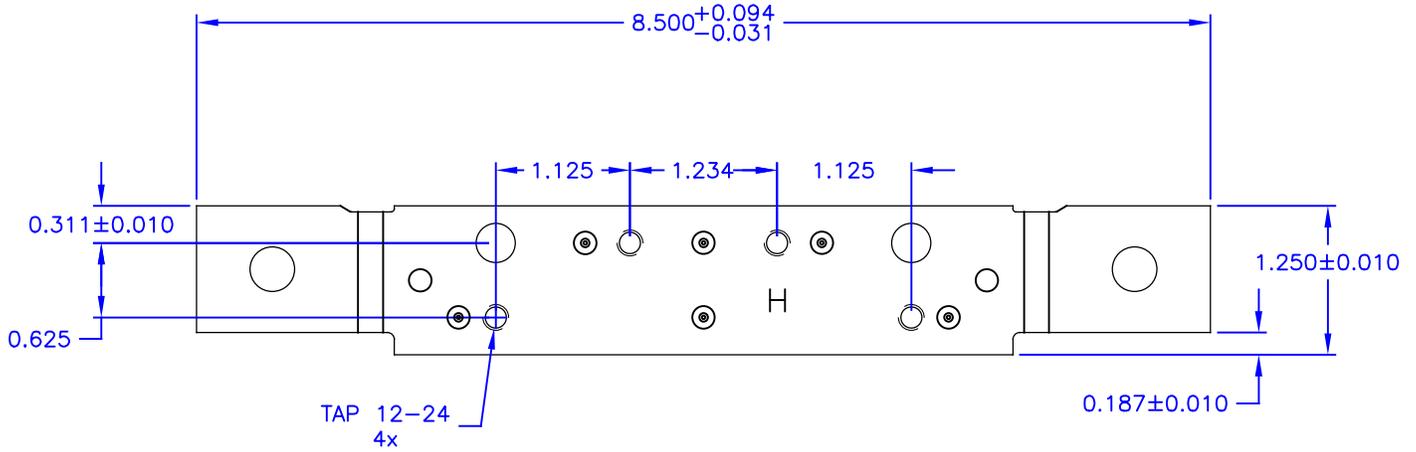
See option ZAS on page O-6.7 for additional information

**"Z" astragal, 14ga, ASA+FB, 83 1/8", RH, with reinforcements**



See option ZAS on page O-6.7 for additional information

**4 1/2" standard weight hinge reinforcement (0.134), 7ga**



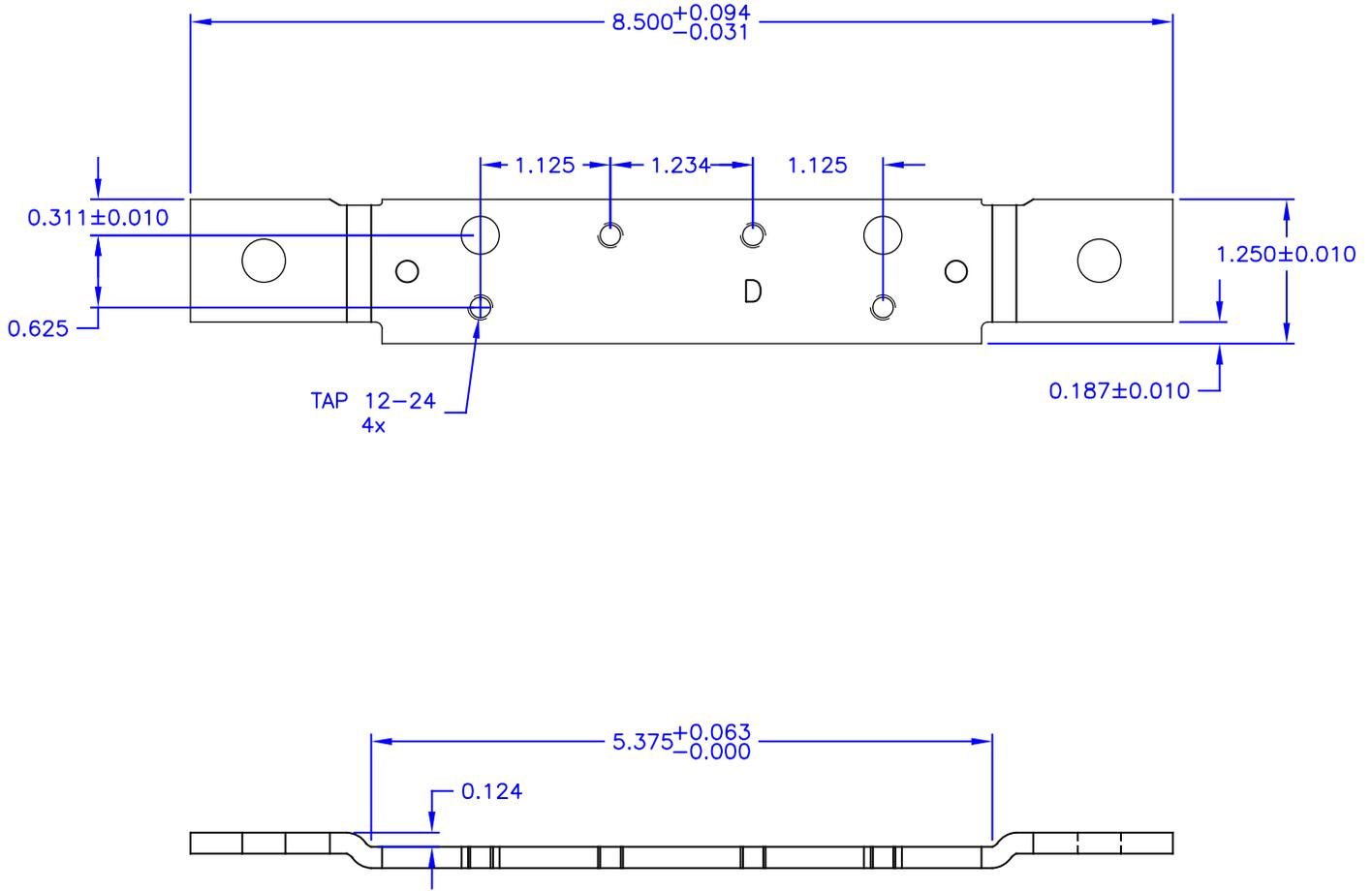
DETAIL A

Hinge reinforcement

56514

See option 45S on page O-12.1 for additional information

### 4 1/2" heavy weight hinge reinforcement (0.180), 7ga

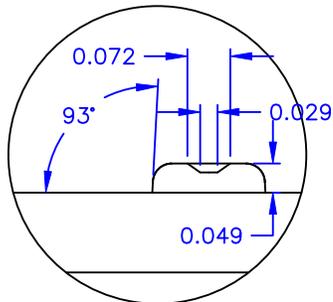
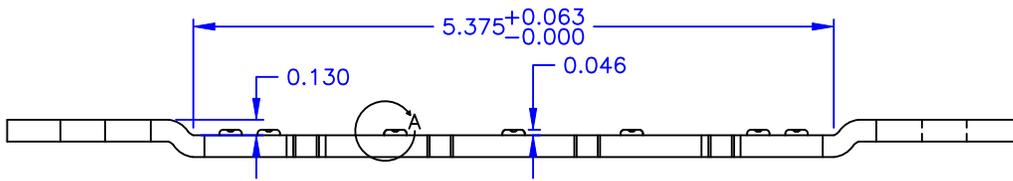
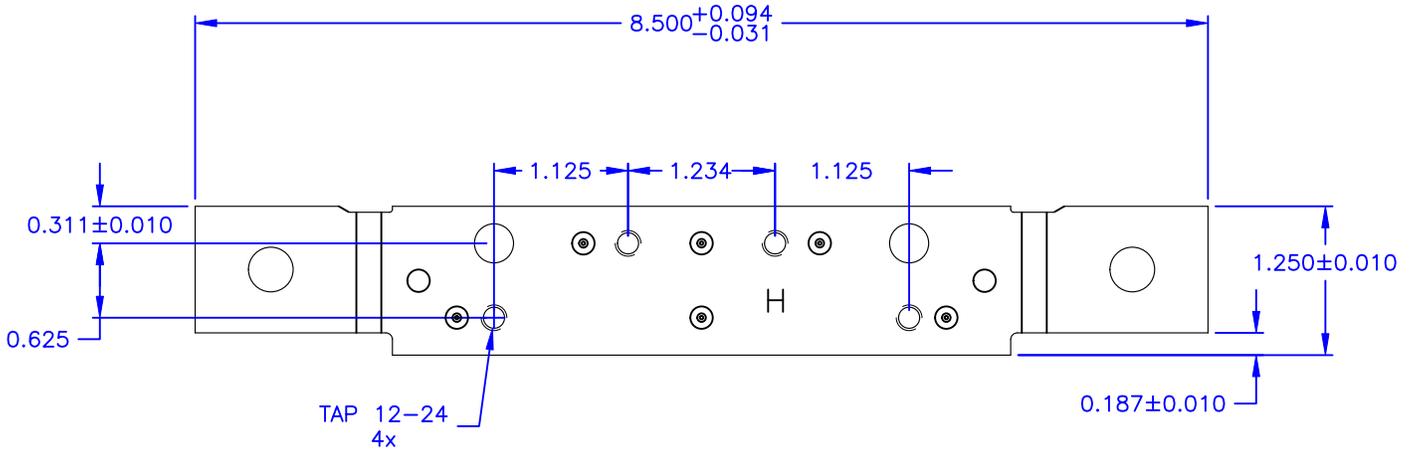


Hinge reinforcement

See option 45H on page O-12.2 for additional information

56512

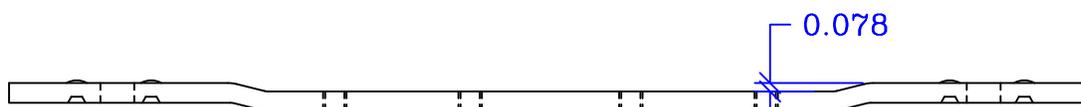
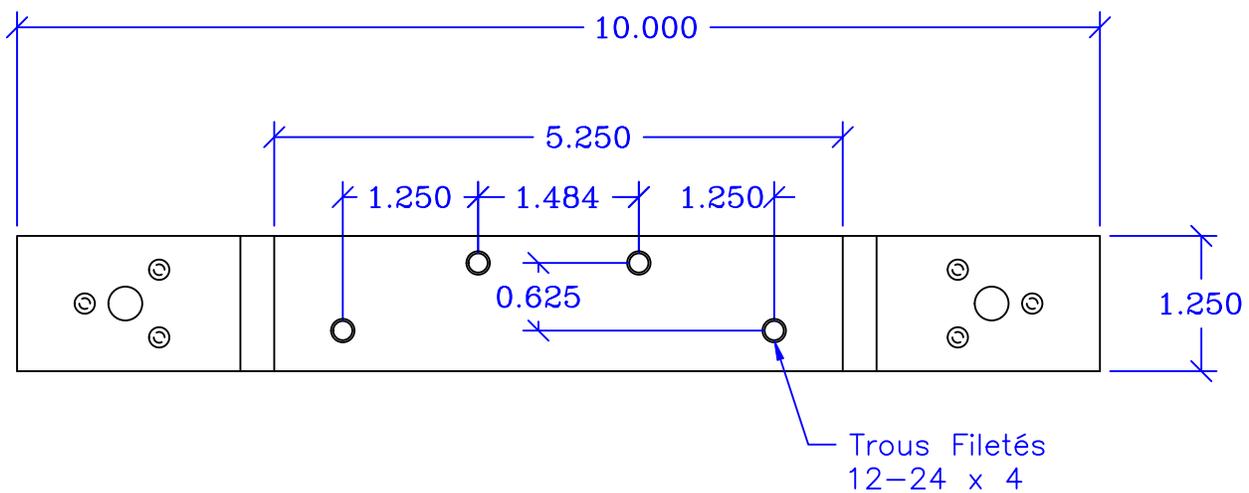
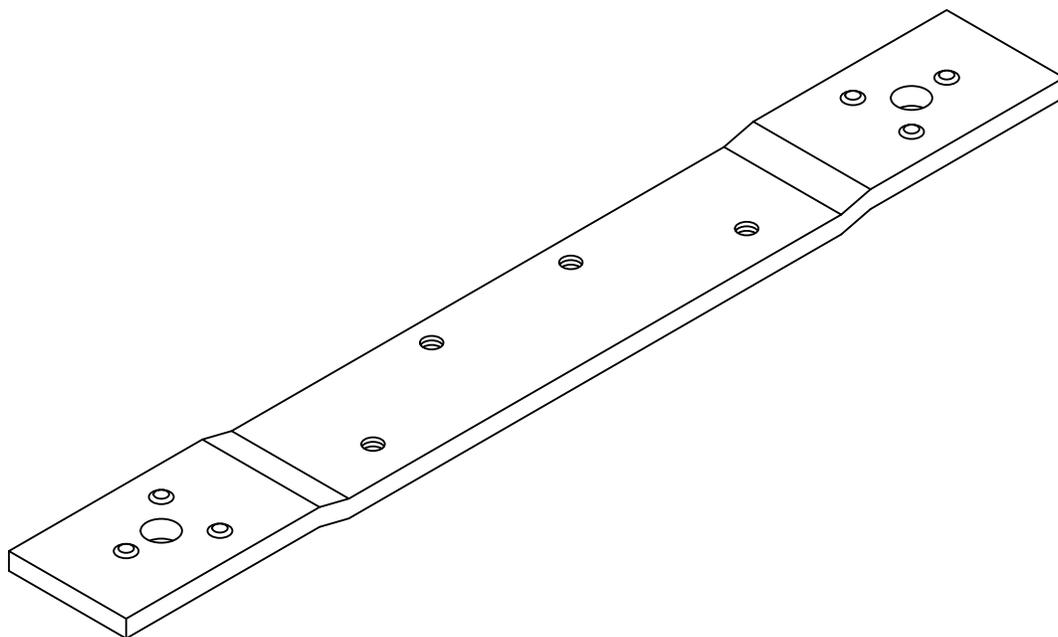
**4 1/2" convertible hinge reinforcement (0.134/0.180), 7ga**



DETAIL A

Hinge reinforcement

**5" standard weight hinge reinforcement (0.146), 7ga**

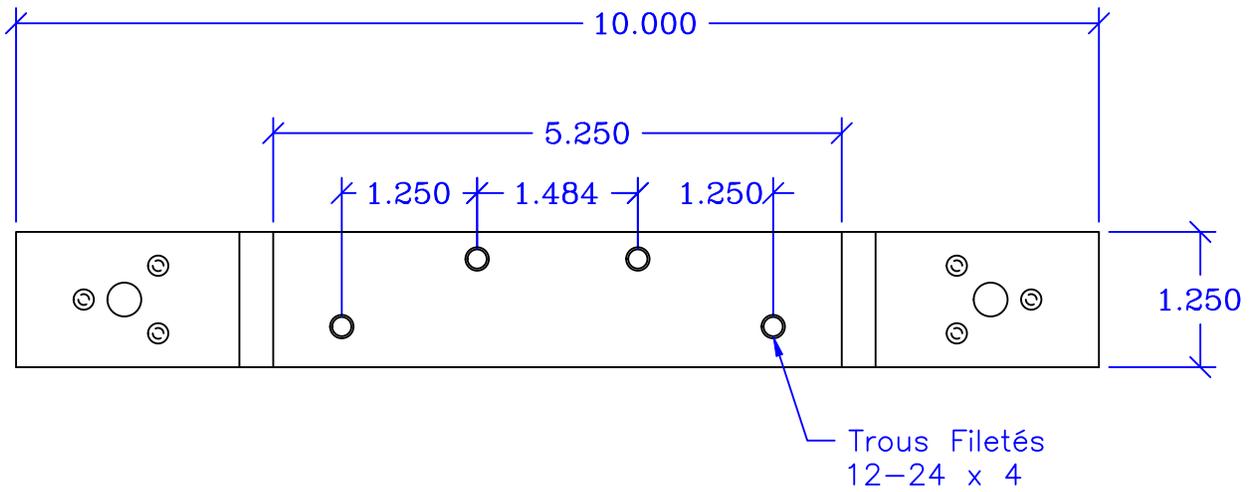
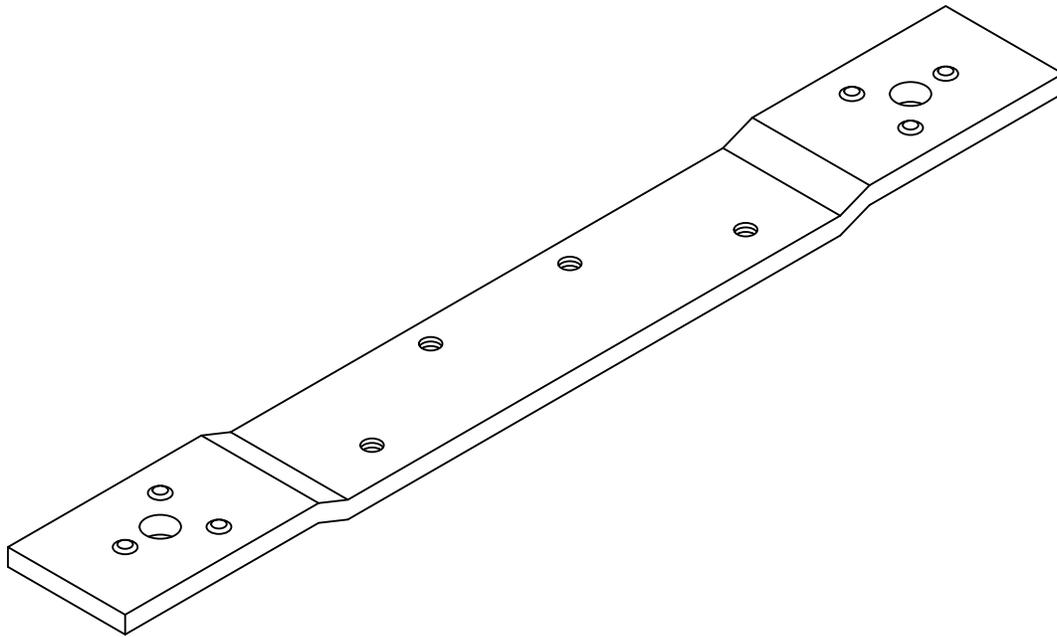


Hinge reinforcement

03105

See option 50S on page O-12.3 for additional information

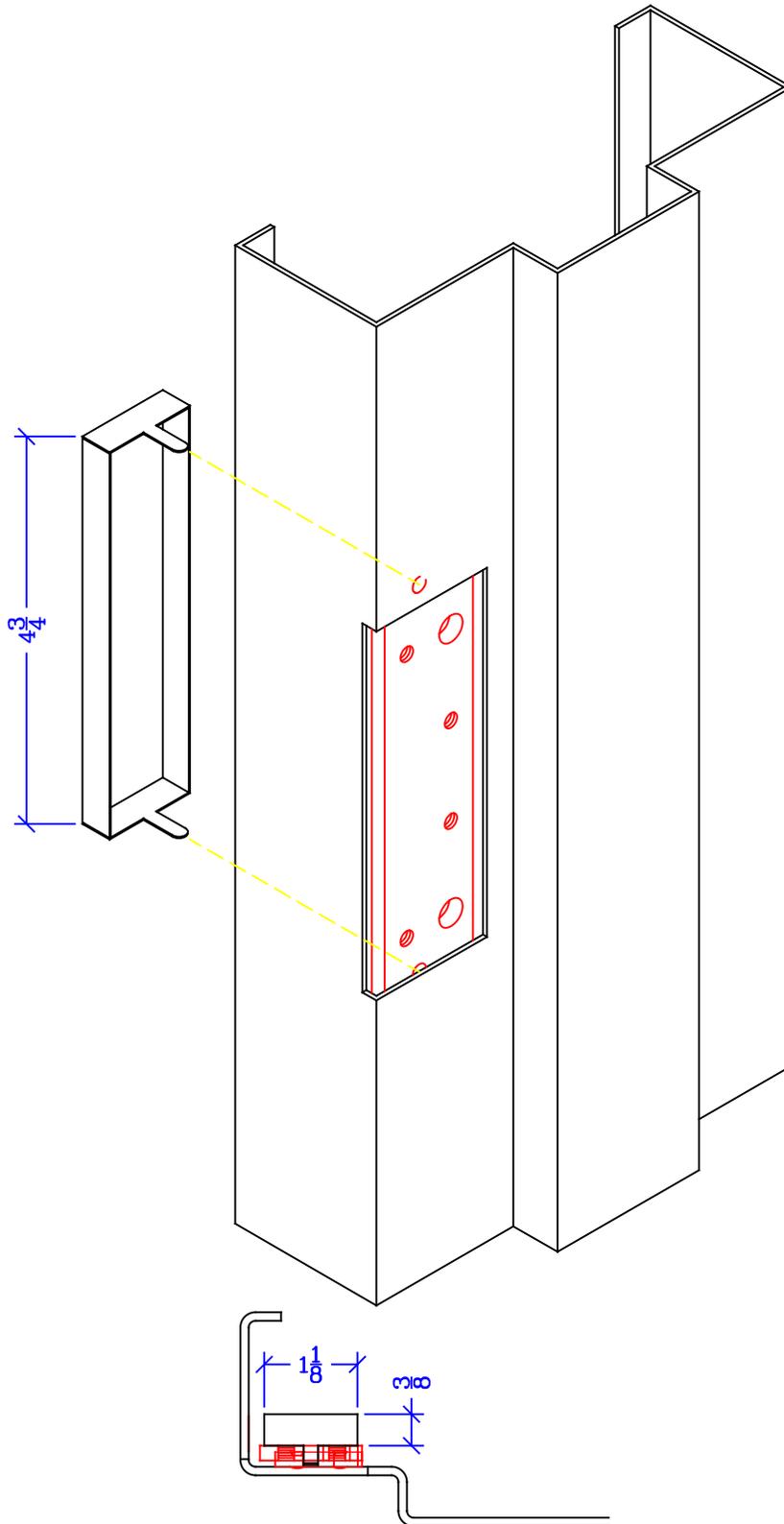
### 5" heavy weight hinge reinforcement (0.190), 7ga



Hinge reinforcement

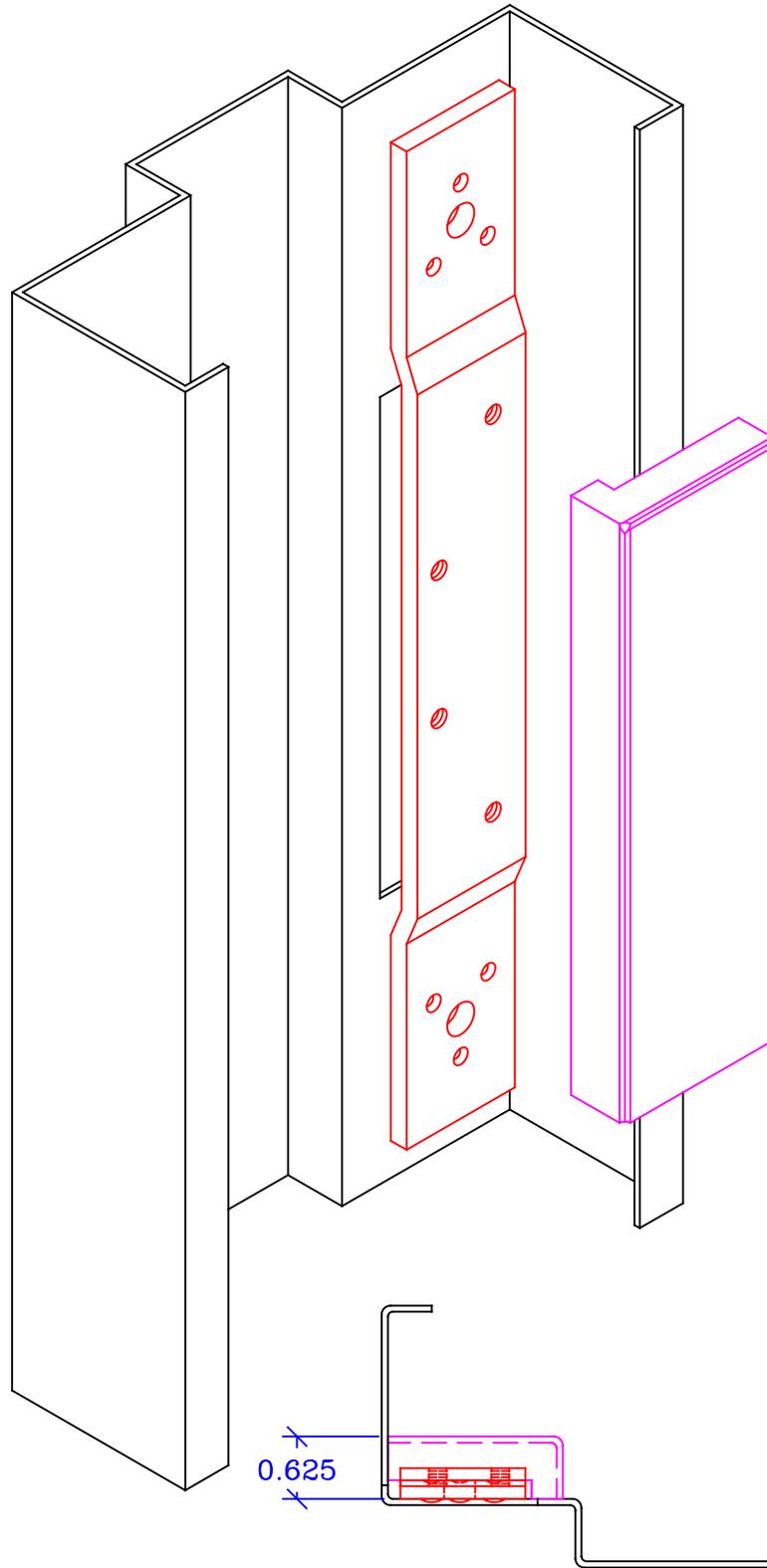
See option 50H on page O-12.4 for additional information

**Mortar guard for 4 1/2" hinge, 26ga**



by default at masonry frame with TMA, WMA or ATMA

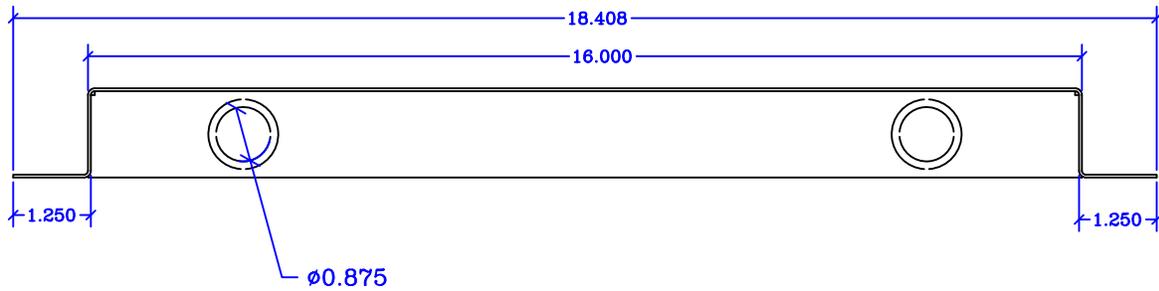
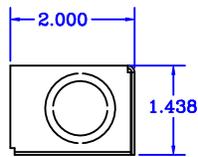
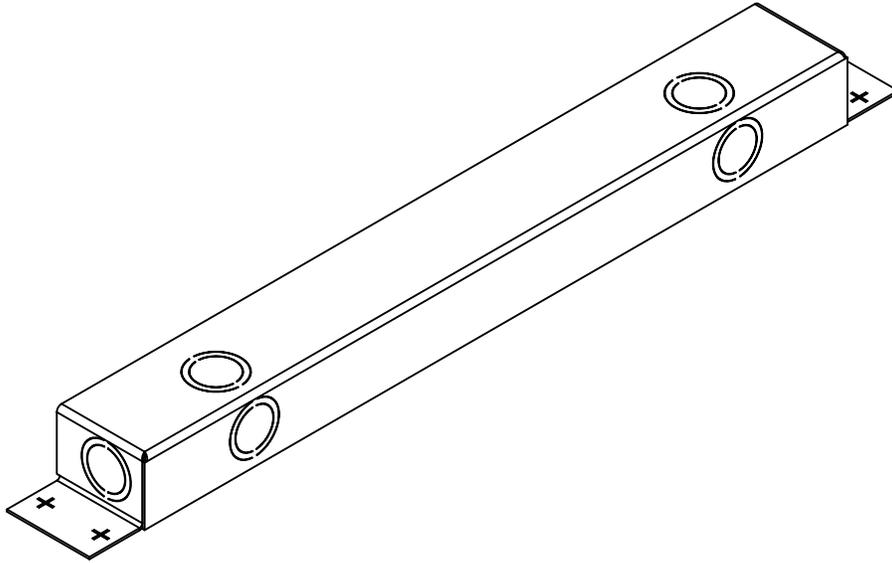
**Mortar guard for 5" hinge, 18ga**



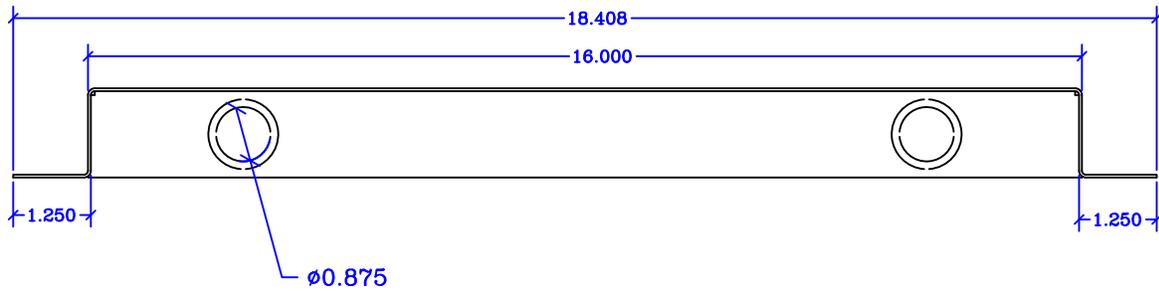
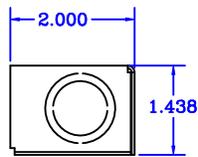
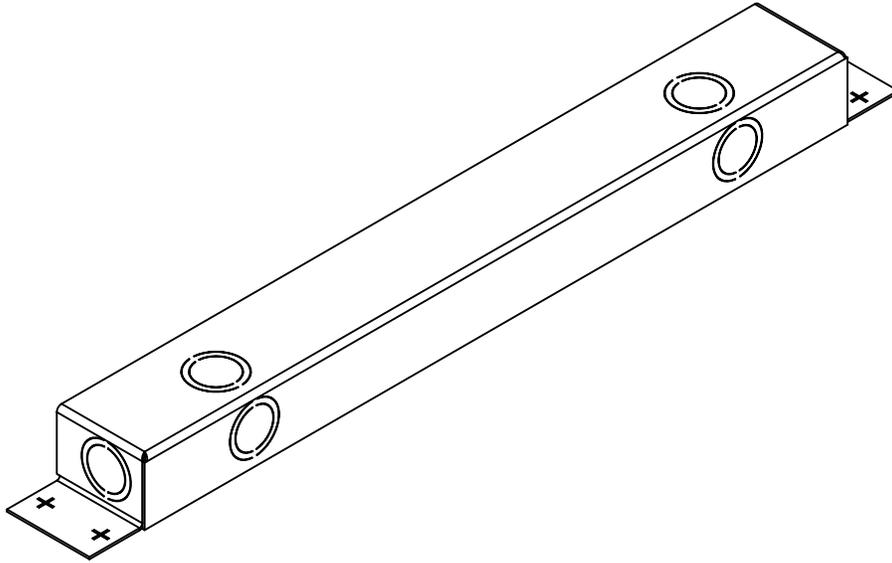
Hinge reinforcement

by default at masonry frame with TMA, WMA or ATMA

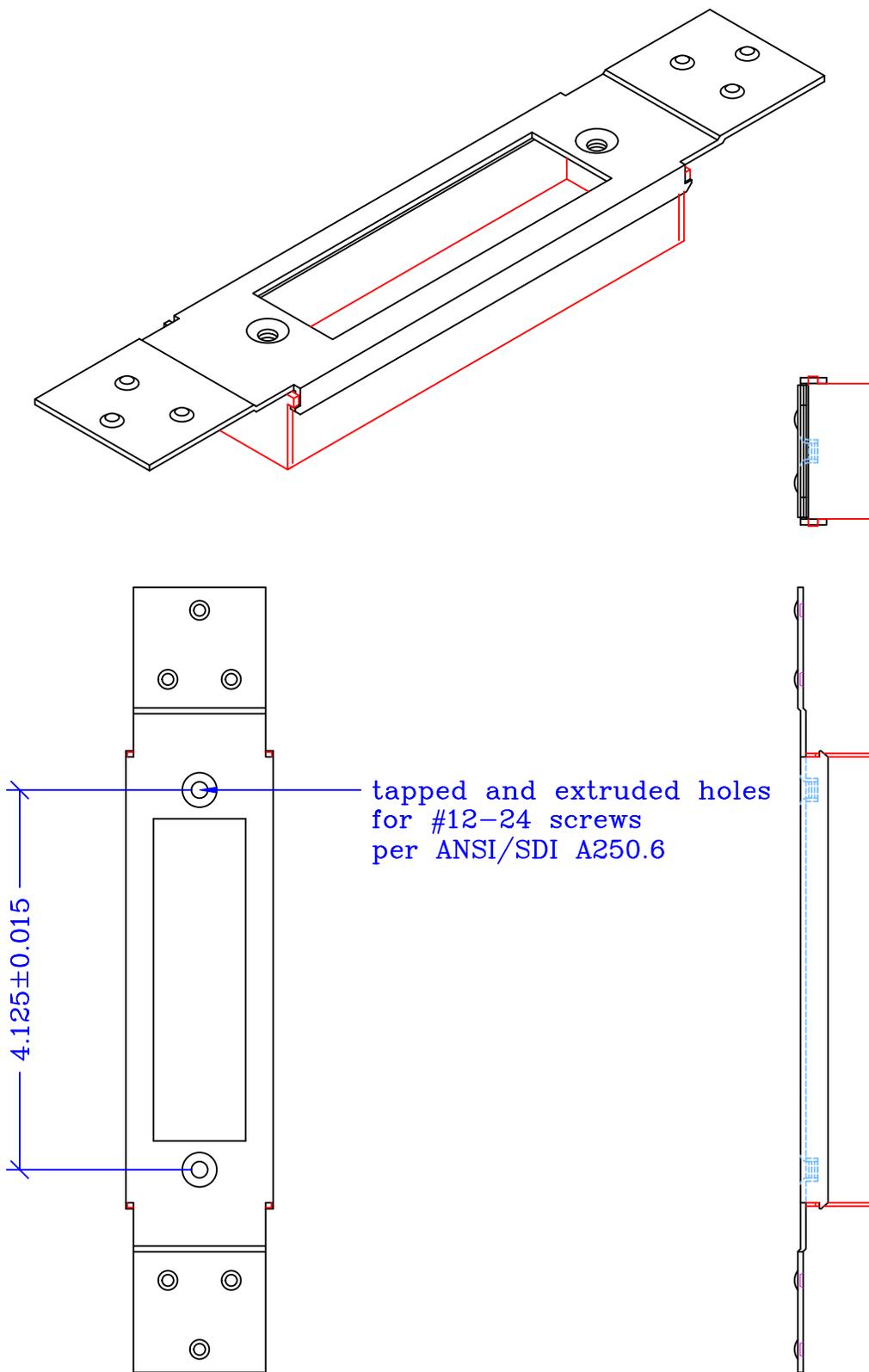
### Electric box for Electric Hinge, 16ga



**Electric box for EPT, 16ga**



### Standard ANSI 4 7/8" strike reinforcement, 16ga

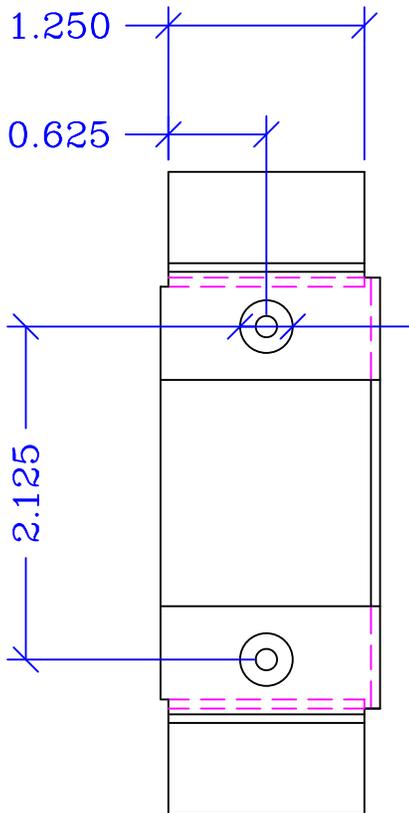
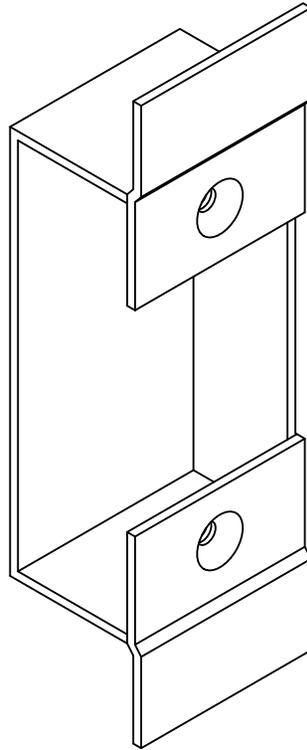


Strike reinforcement

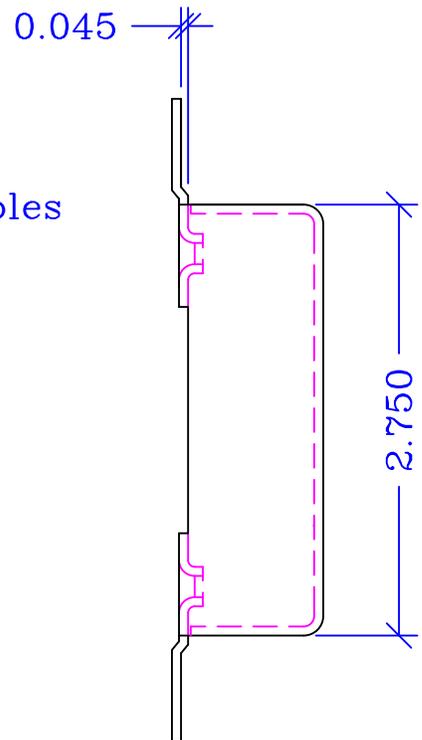
00606

See option ASA on page O-13.6 for additional information

**Standard 2 3/4" strike reinforcement, 16ga**



tapped and extruded holes  
for #8-32 screws  
per ANSI/SDI A250.6

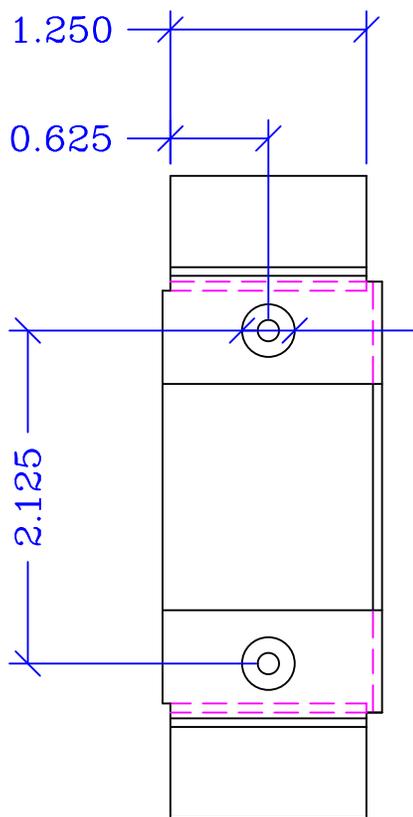
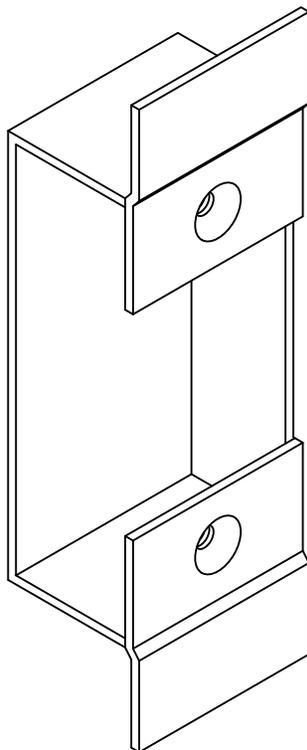


Strike reinforcement

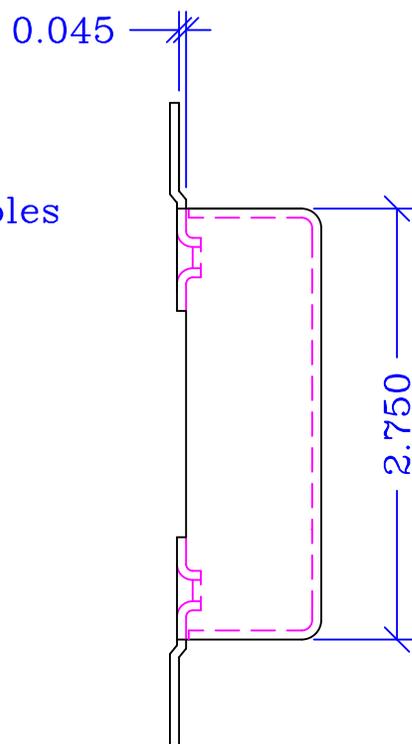
00832

See option T on page O-13.10 for additional information

### Deadlock strike reinforcement, 16ga



tapped and extruded holes  
for #8-32 screws  
per ANSI/SDI A250.6

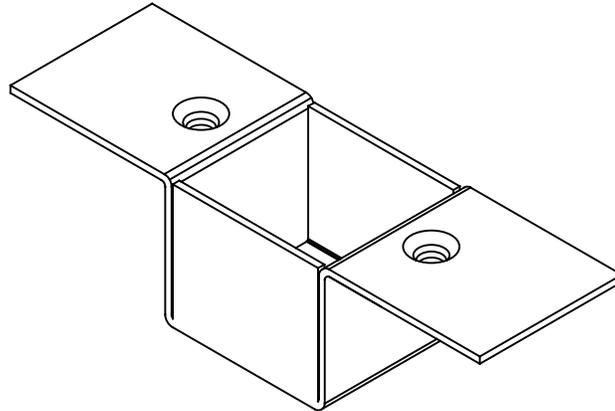


Strike reinforcement

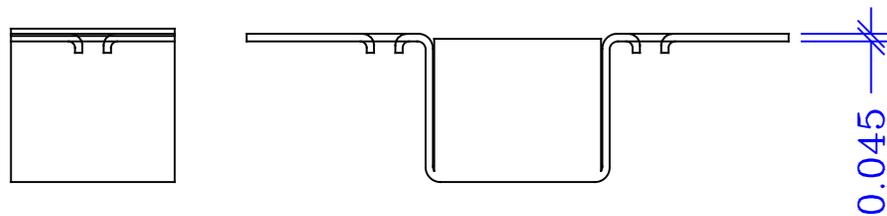
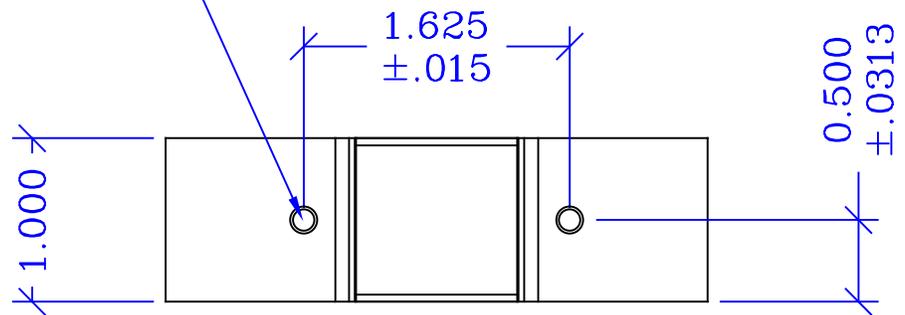
00832

See option DL234 on page O-13.11 for additional information

**ANSI A156-16 flush bolt reinforcement, 16ga**



tapped and extruded holes  
for #8-32 screws  
per ANSI/SDI A250.6

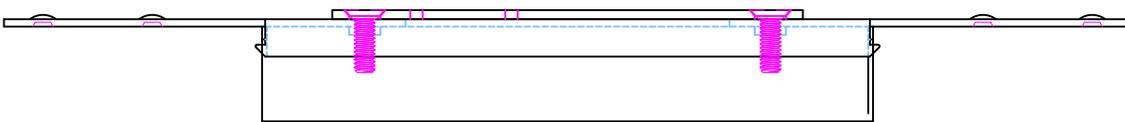
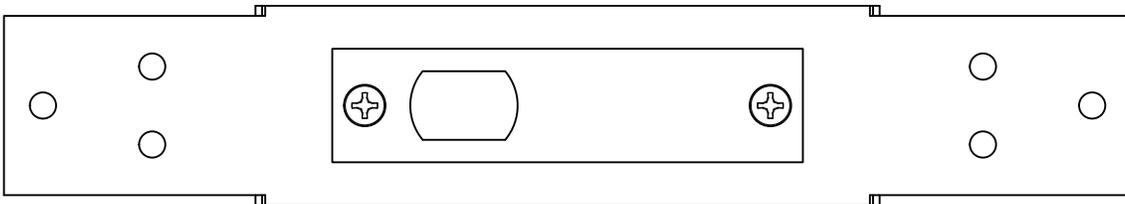
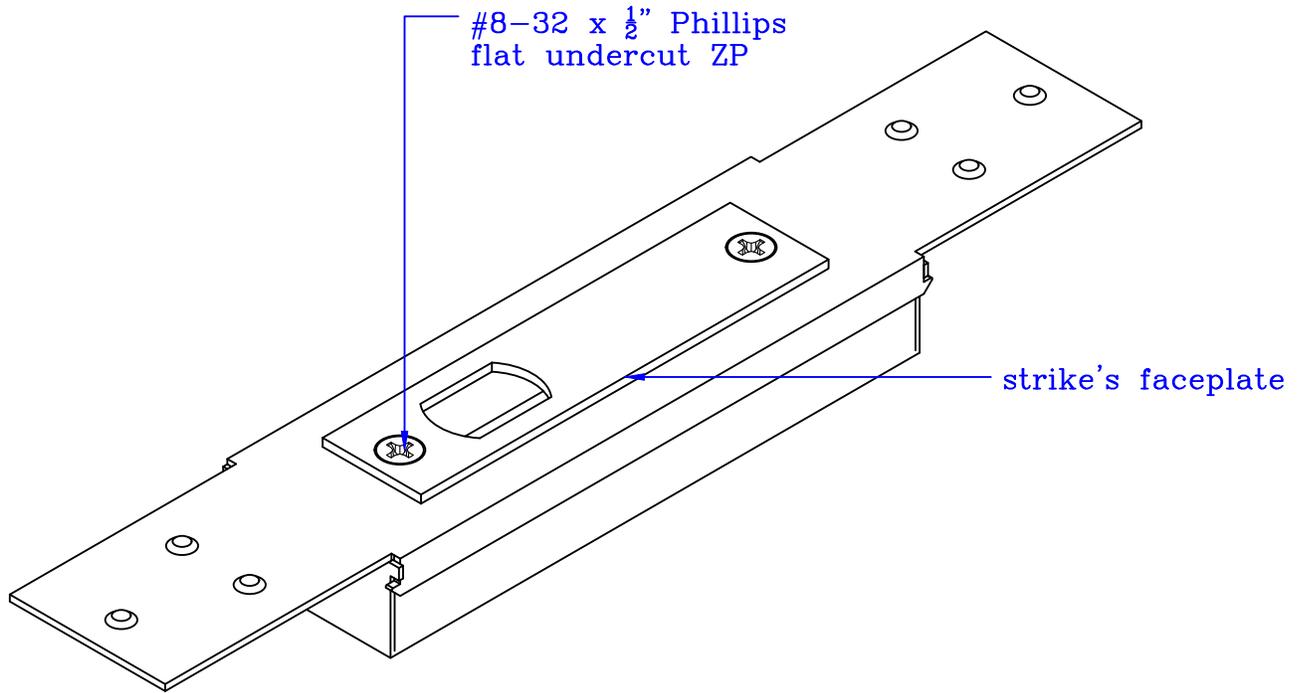


Strike reinforcement

See option FBS on page O-13.26 for additional information

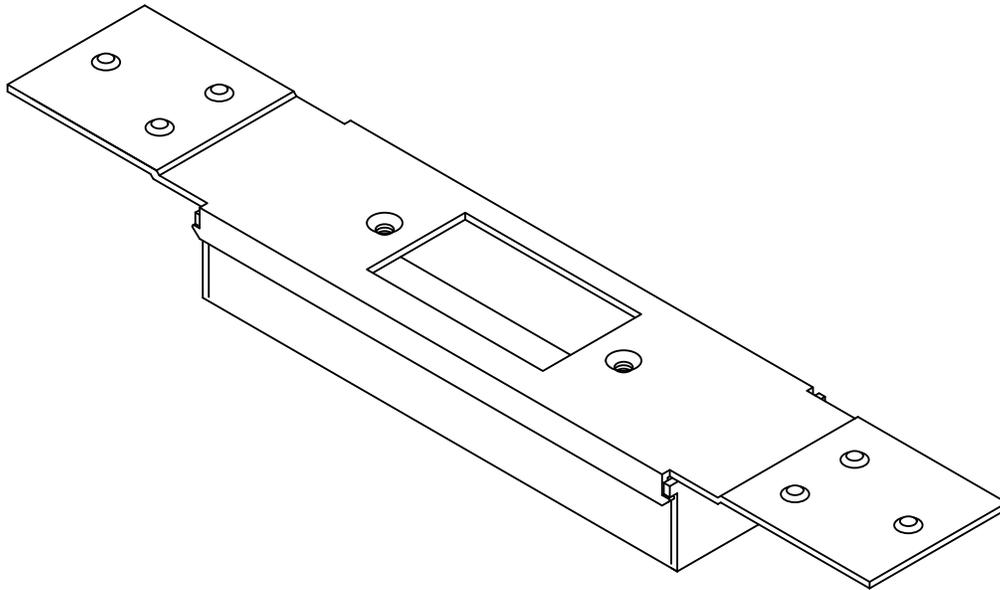
00509

## Reversible flush bolt reinforcement, 16ga

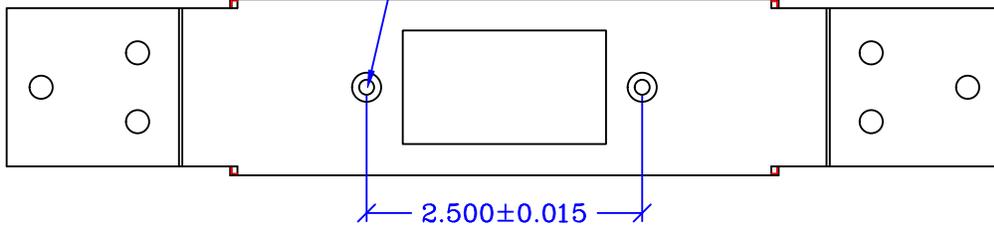


See option RFBS on page O-13.27 for additional information

### 3 1/2" mortise deadlock strike reinforcement, 16ga



tapped and extruded holes  
for #8-32 screws  
per ANSI/SDI A250.6

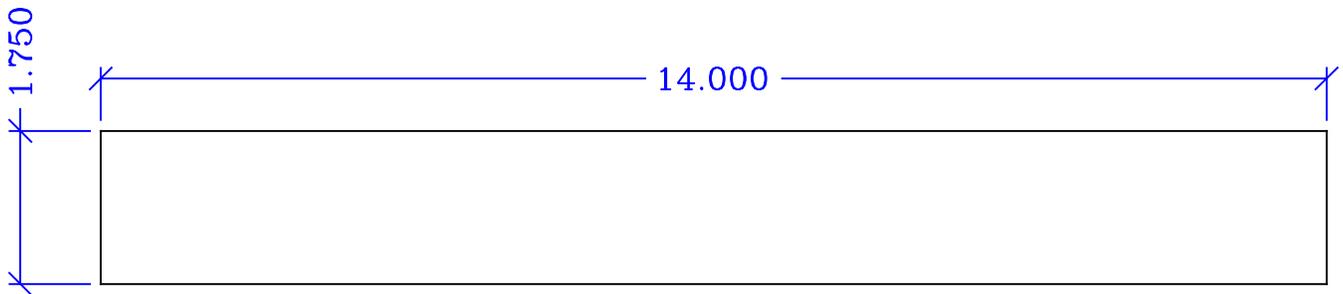
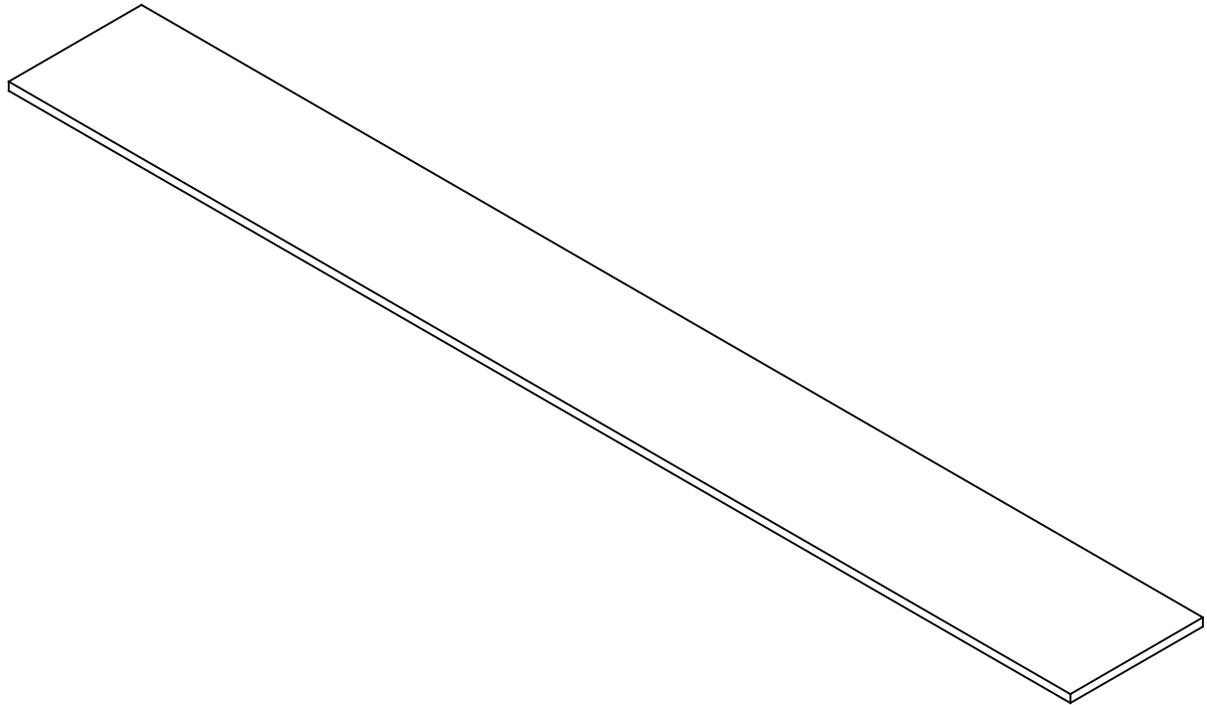


Strike reinforcement

00711

See option DL312 on page O-13.13 for additional information

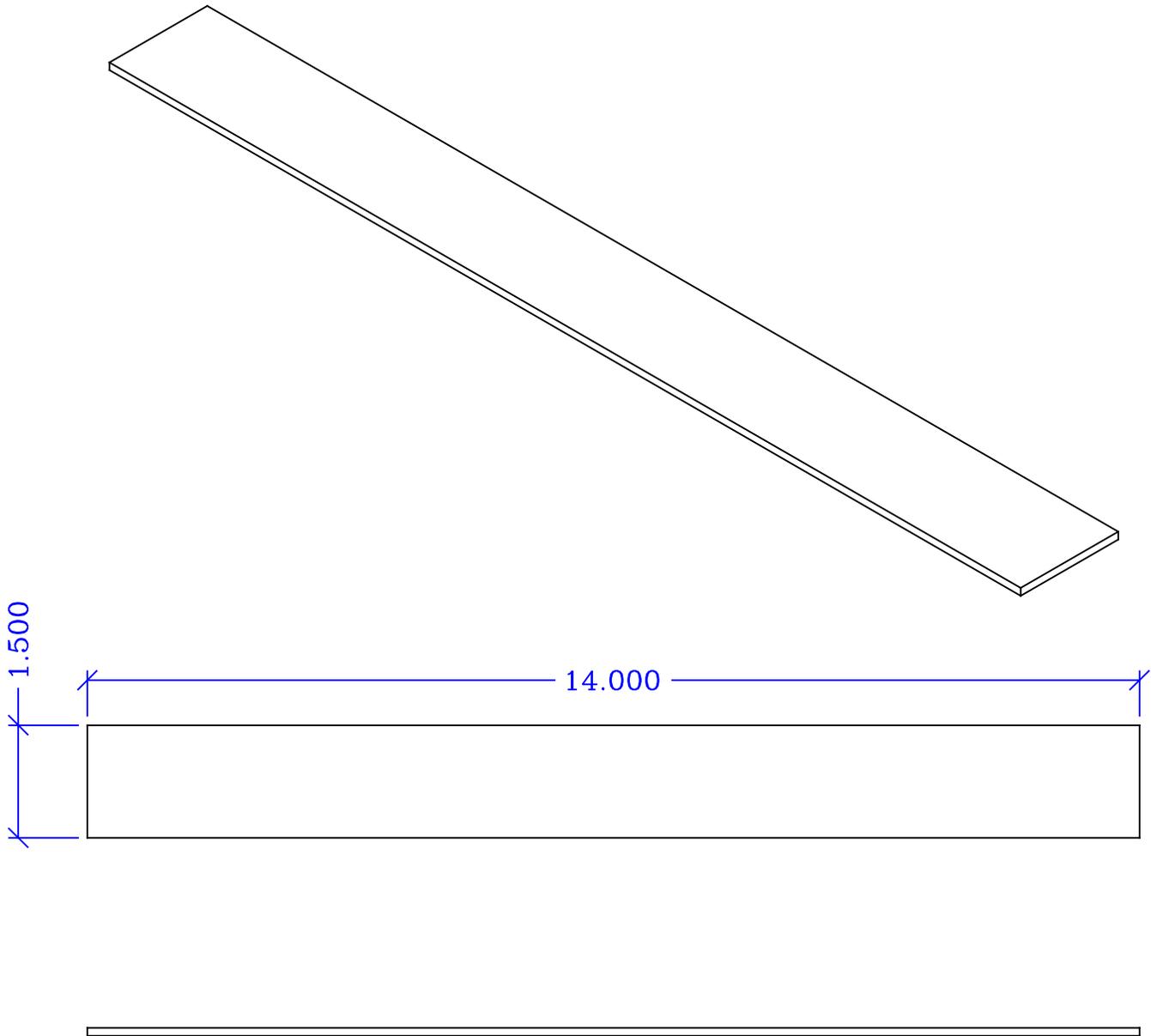
**Closer reinforcement, 12ga**



Closer reinforcement

00690

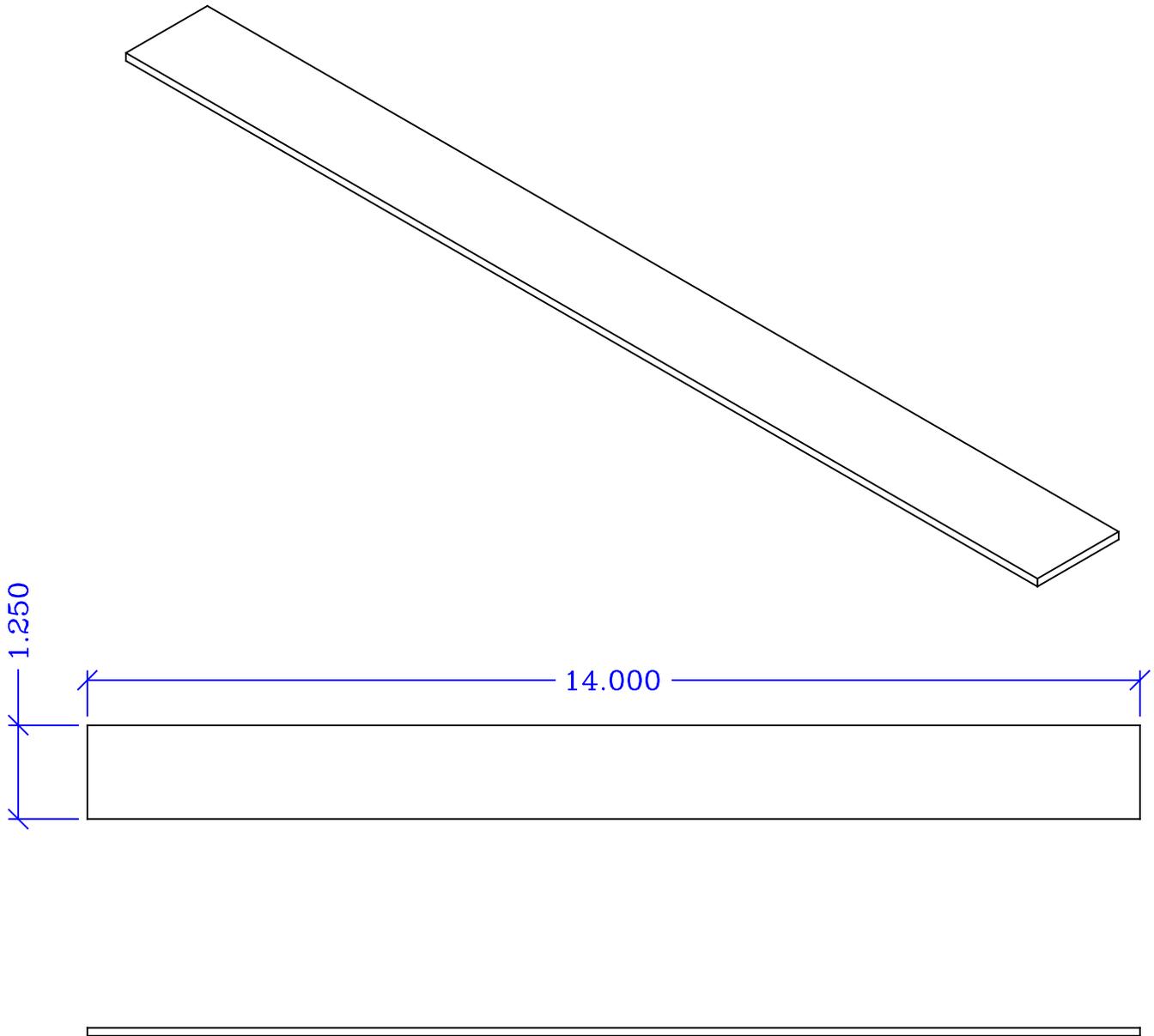
**Closer reinforcement, 12ga**



Closer reinforcement

00691

**Closer reinforcement, 12ga**

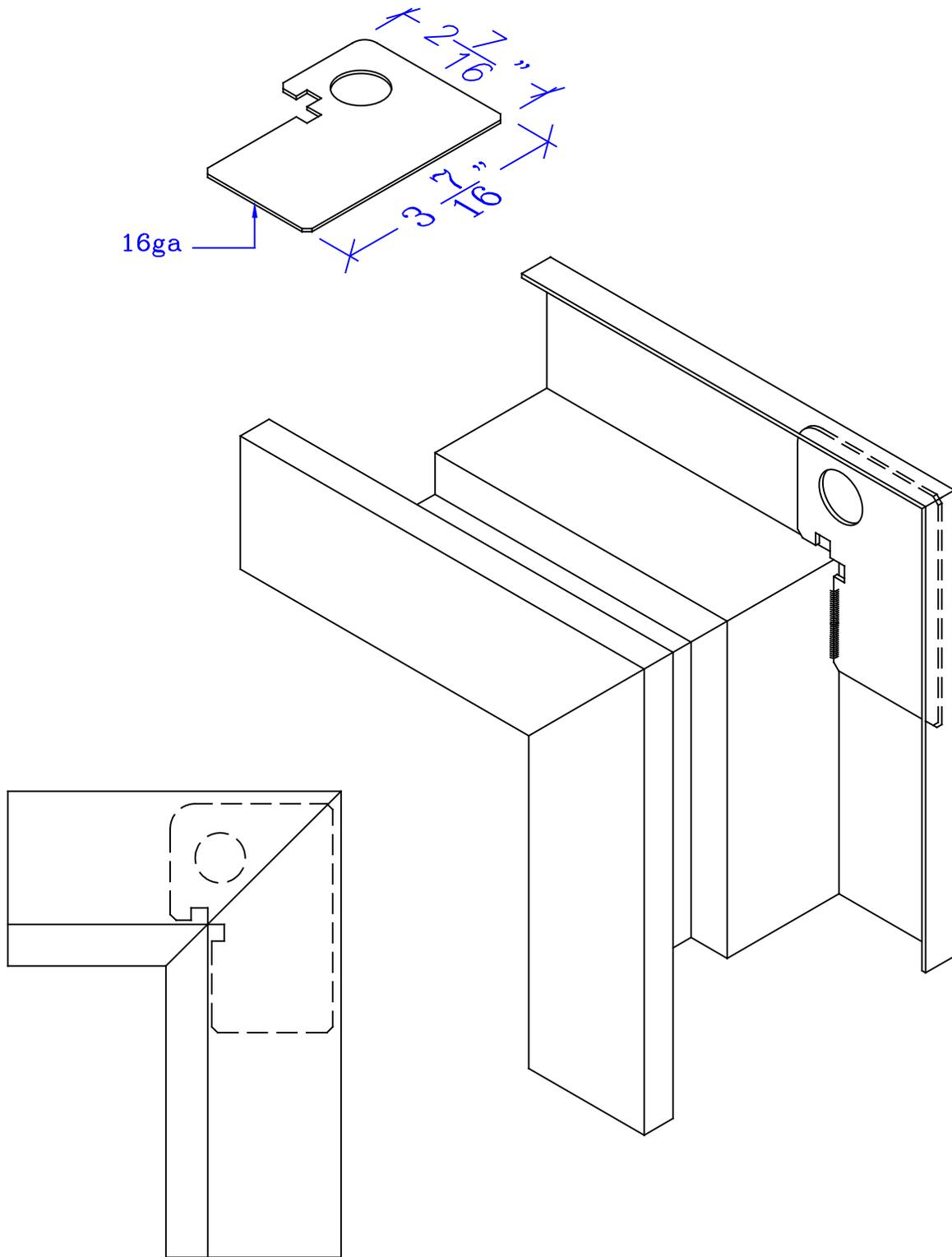


Closer reinforcement

00692

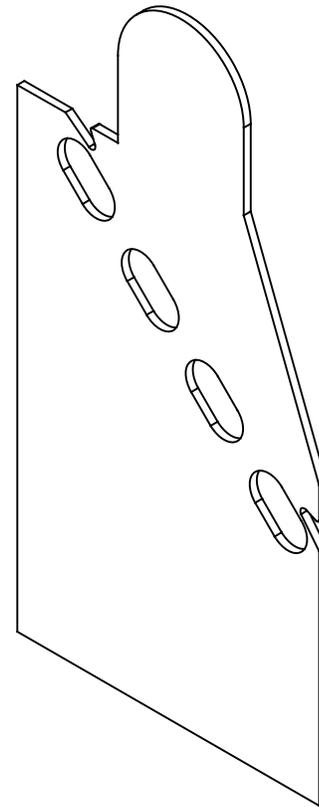
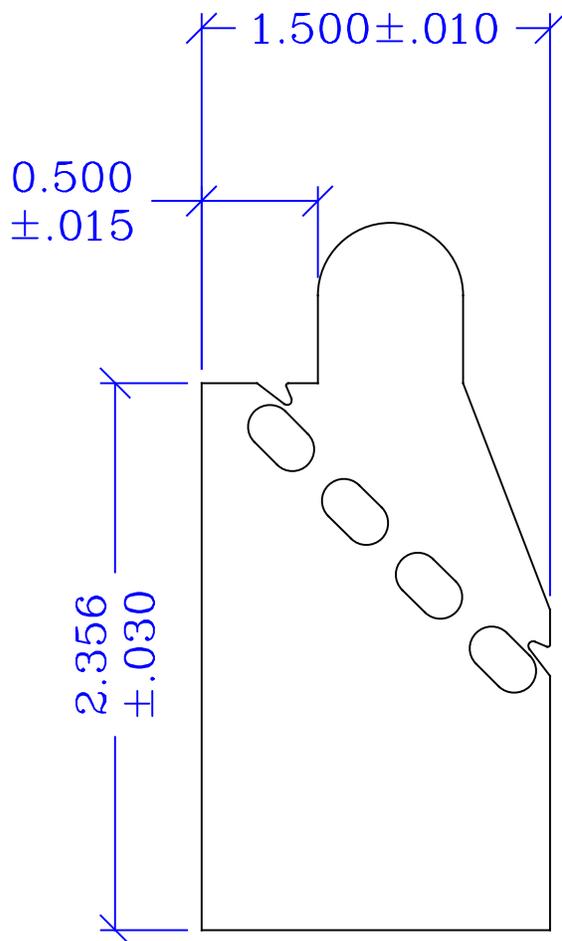
**Jamb and head mechanical connecting tab, reversible**

For 45° saw mitered knocked down assembly



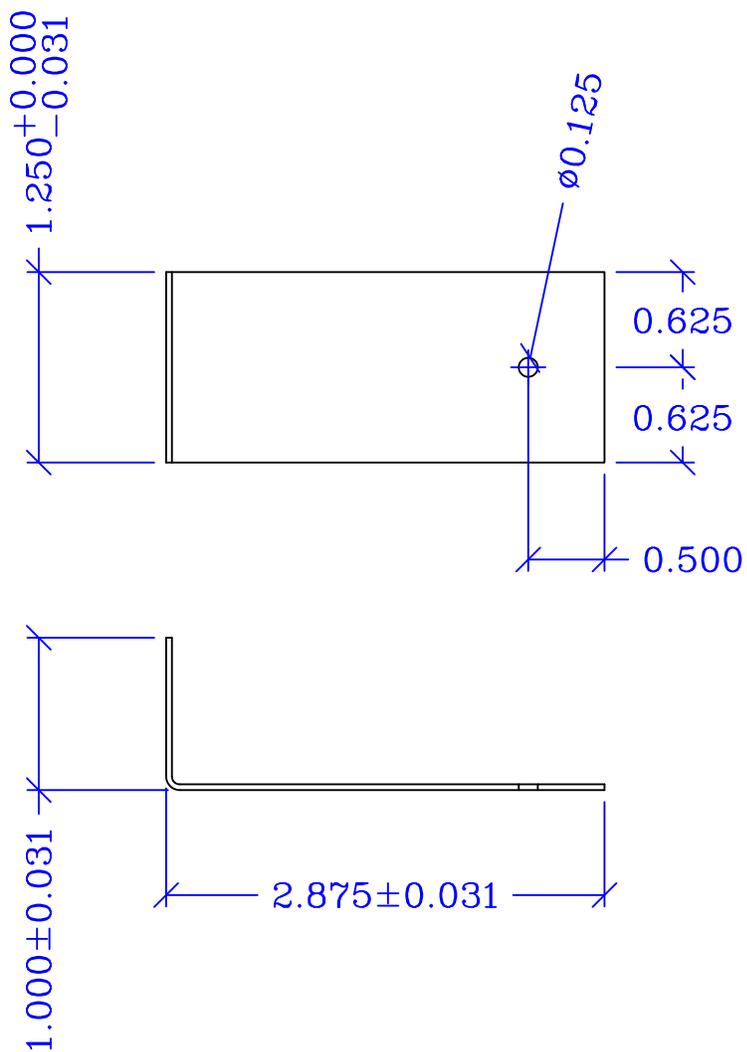
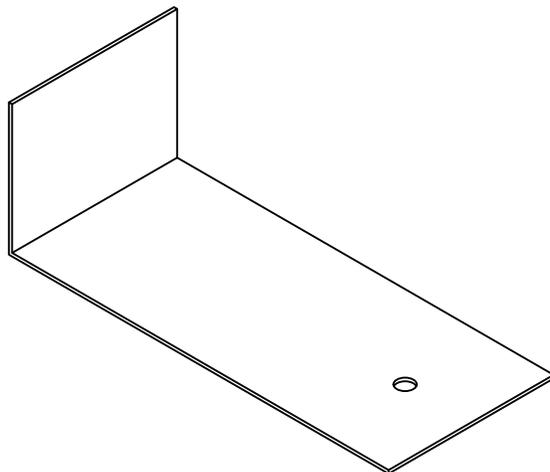
Clean interior burrs prior to reversible tab installation

**Gusset for knocked down series, 20ga**  
Need 2 per jamb



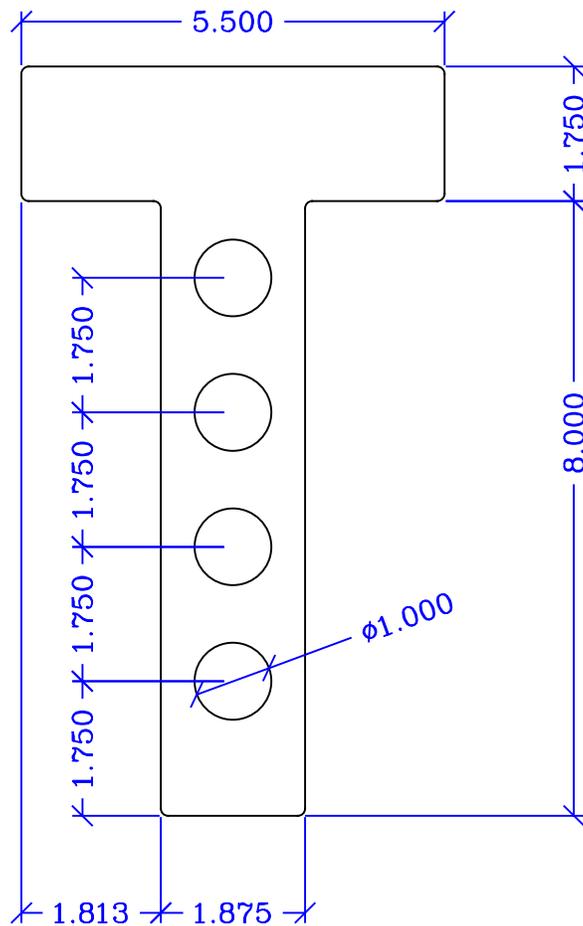
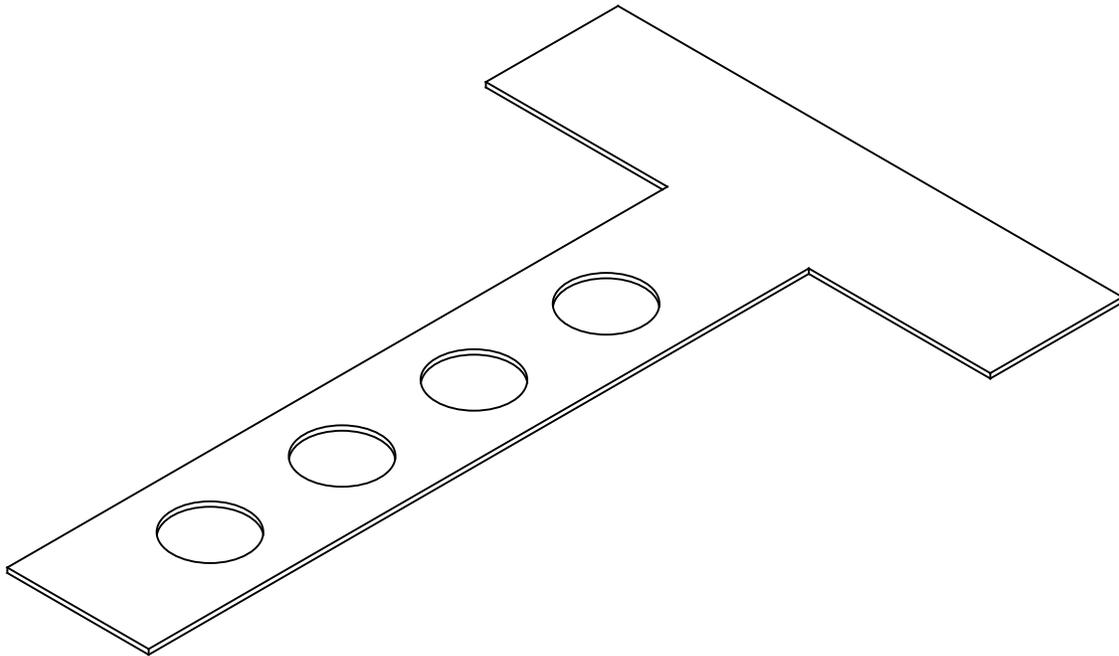
See option KD on page O-15.28 for additional information

**DSA, drywall strap anchor for 2" face jambs, 18ga**



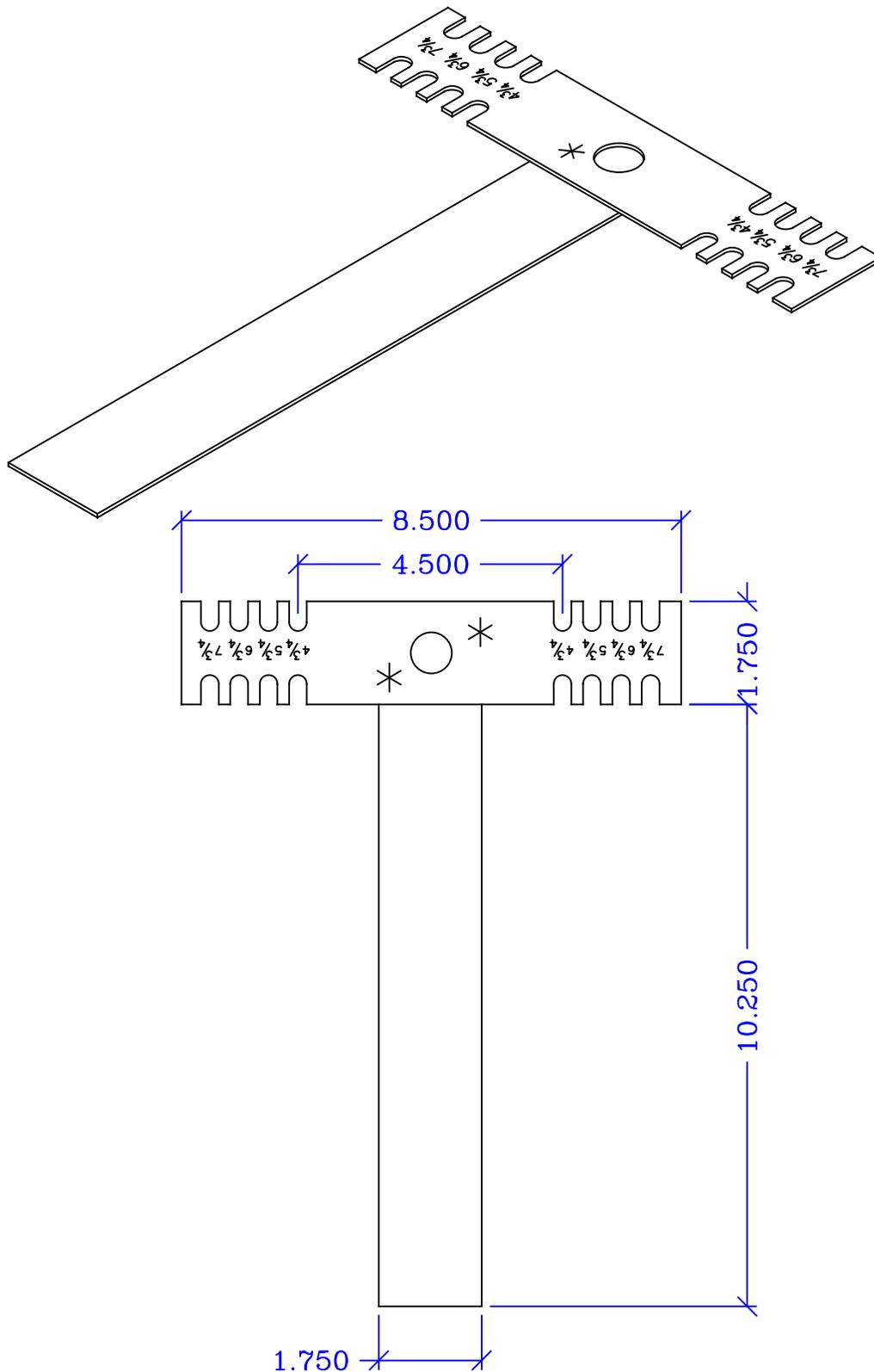
See option DSA on page O-15.2 for additional information

**T masonry anchor, 16ga, 2" face, SR series, 5 3/4" jamb depth**



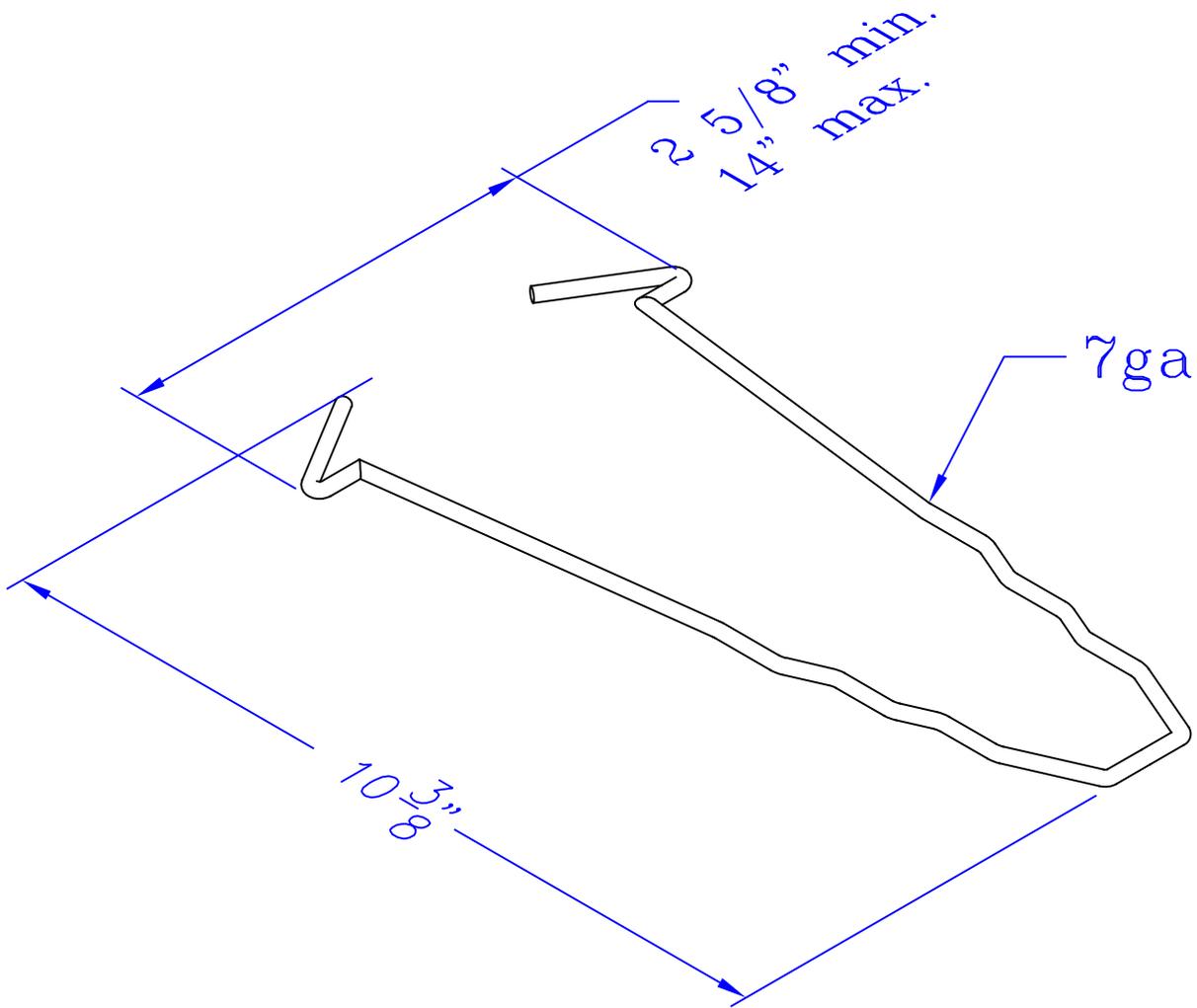
See option TMA on page O-15.10 for additional information

**T masonry anchor, 16ga, 2" face, SR series, 4 3/4" to 8 3/4" jamb depth**



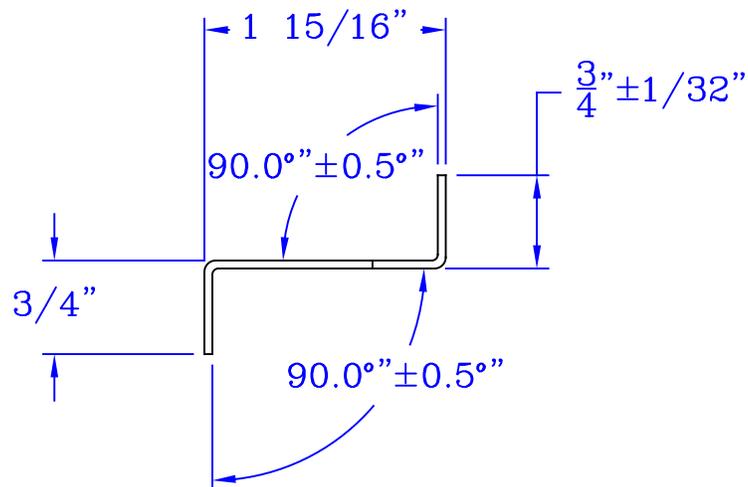
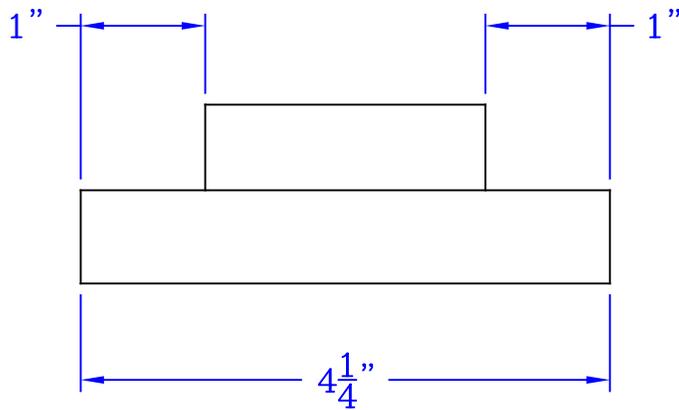
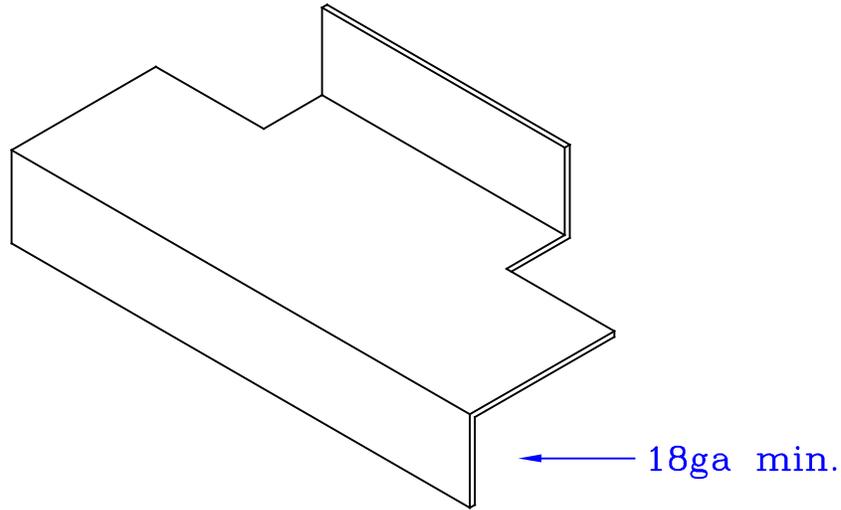
See option TMA on page O-15.10 for additional information

**WMA, wire masonry anchor**



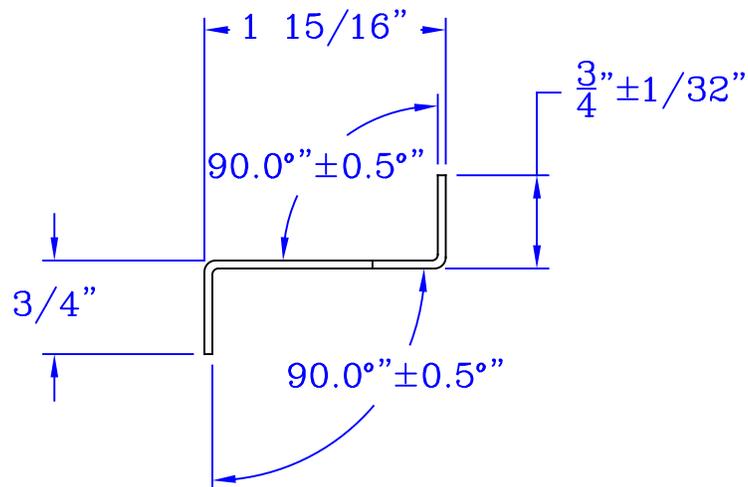
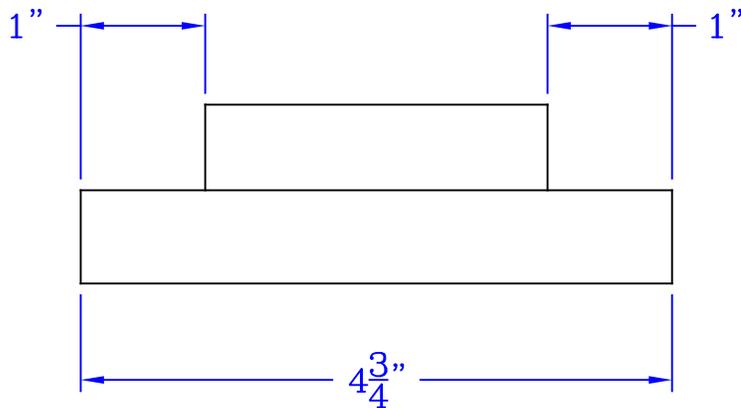
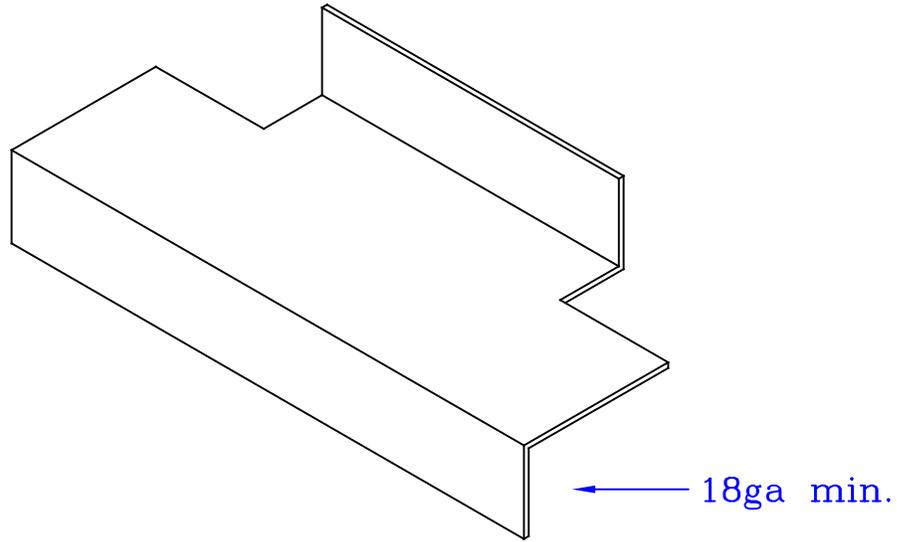
See option WMA on page O-15.11 for additional information

**ZBA, steel stud anchor 4 1/4", 2" face, 3 1/2" to 3 7/8" wall**



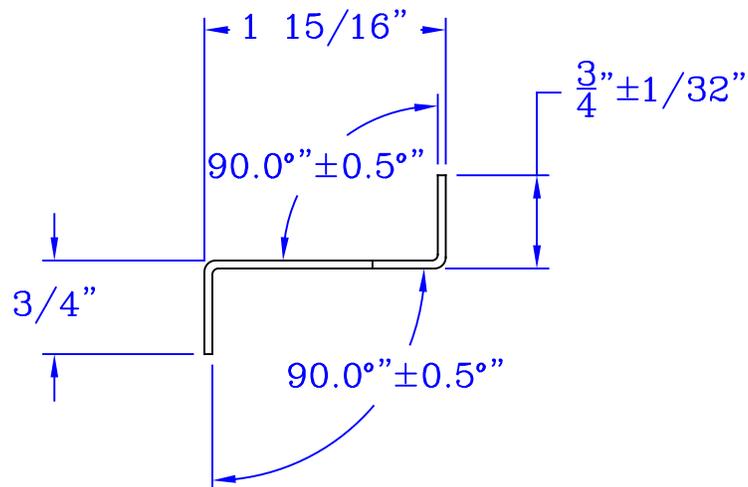
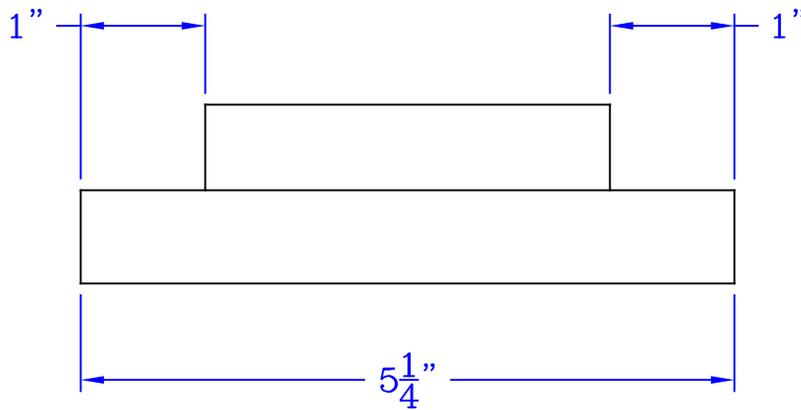
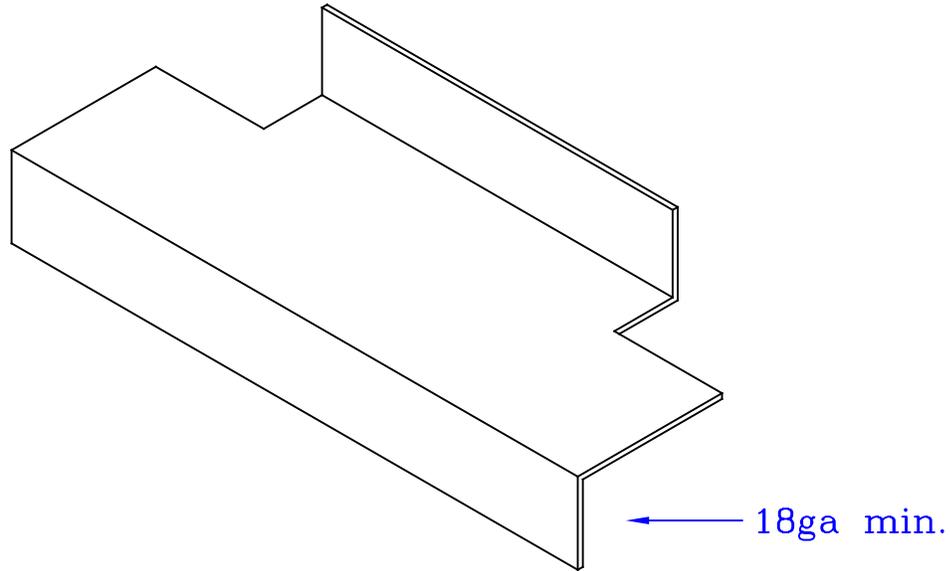
See option ZBA on page O-15.6 for additional information

**ZBA, steel stud anchor 4 3/4", 2" face, 4" to 4 3/8" wall**



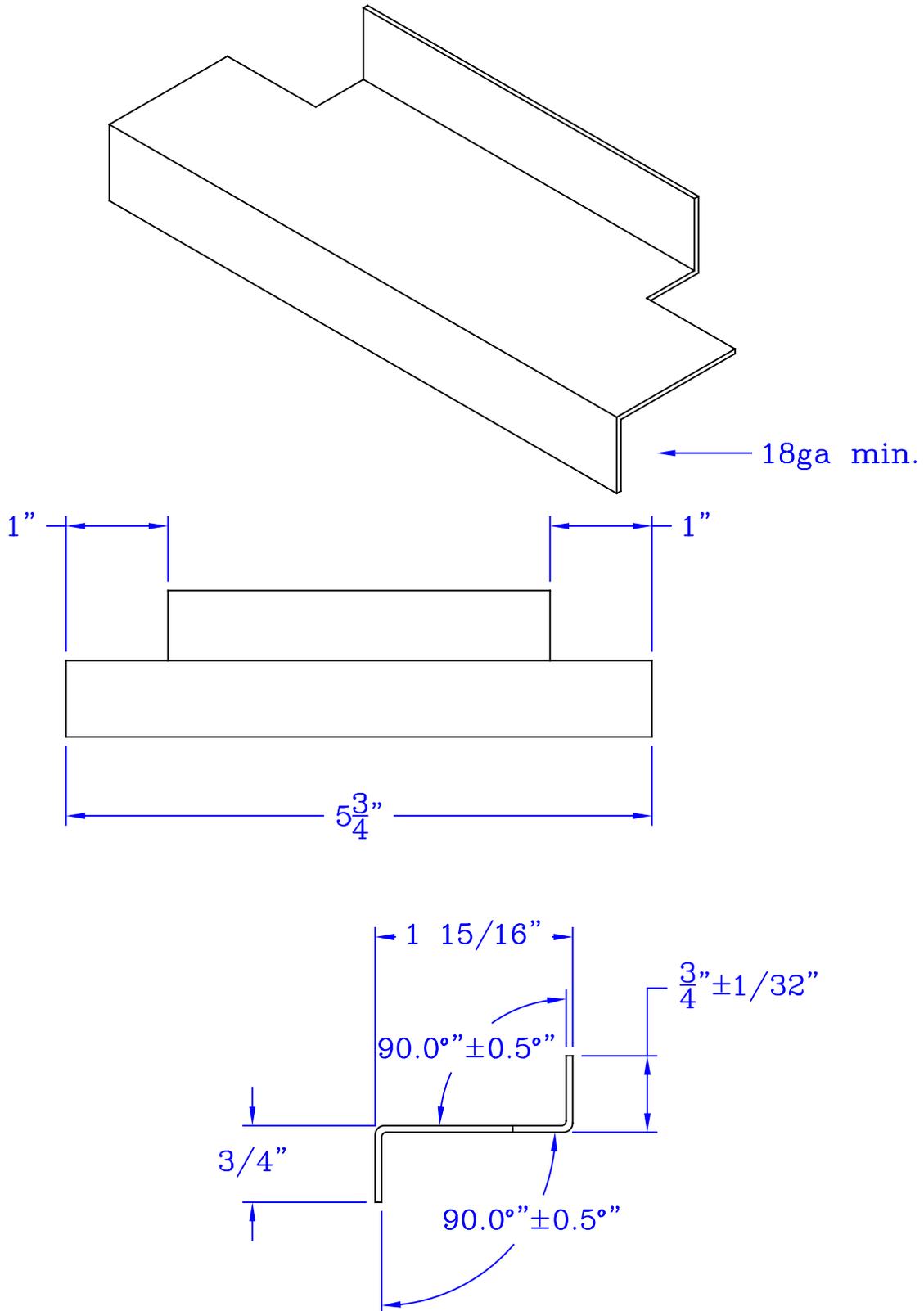
See option ZBA on page O-15.6 for additional information

**ZBA, steel stud anchor 5 1/4", 2" face, 4 1/2" to 4 7/8" wall**



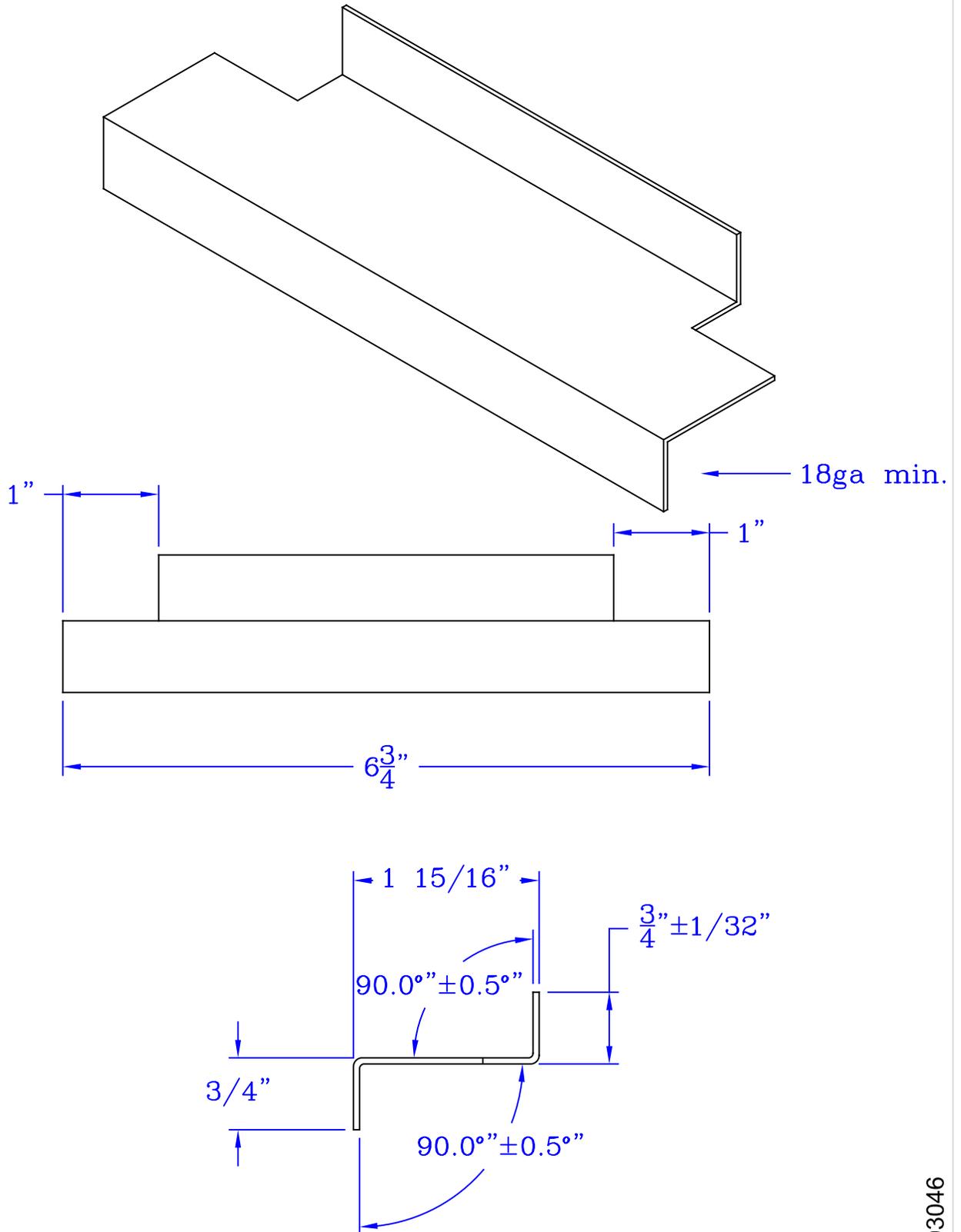
See option ZBA on page O-15.6 for additional information

**ZBA, steel stud anchor 5 3/4", 2" face, 5" to 5 3/8" wall**



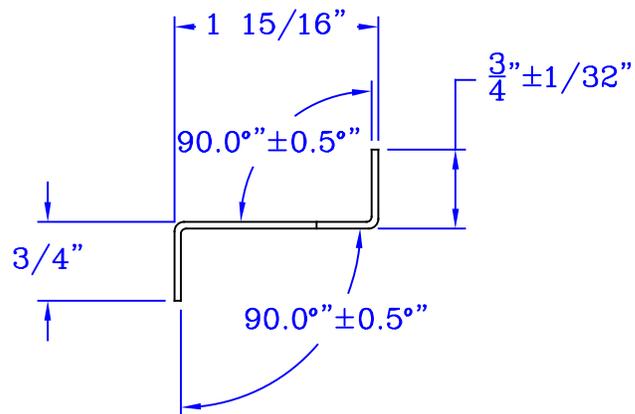
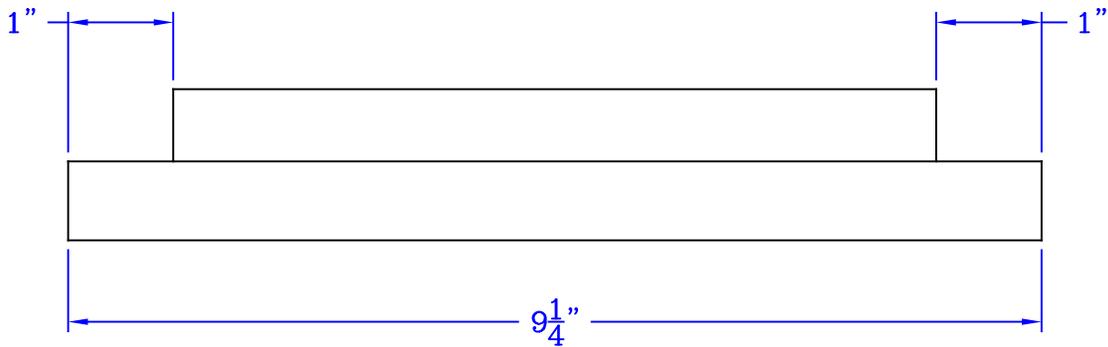
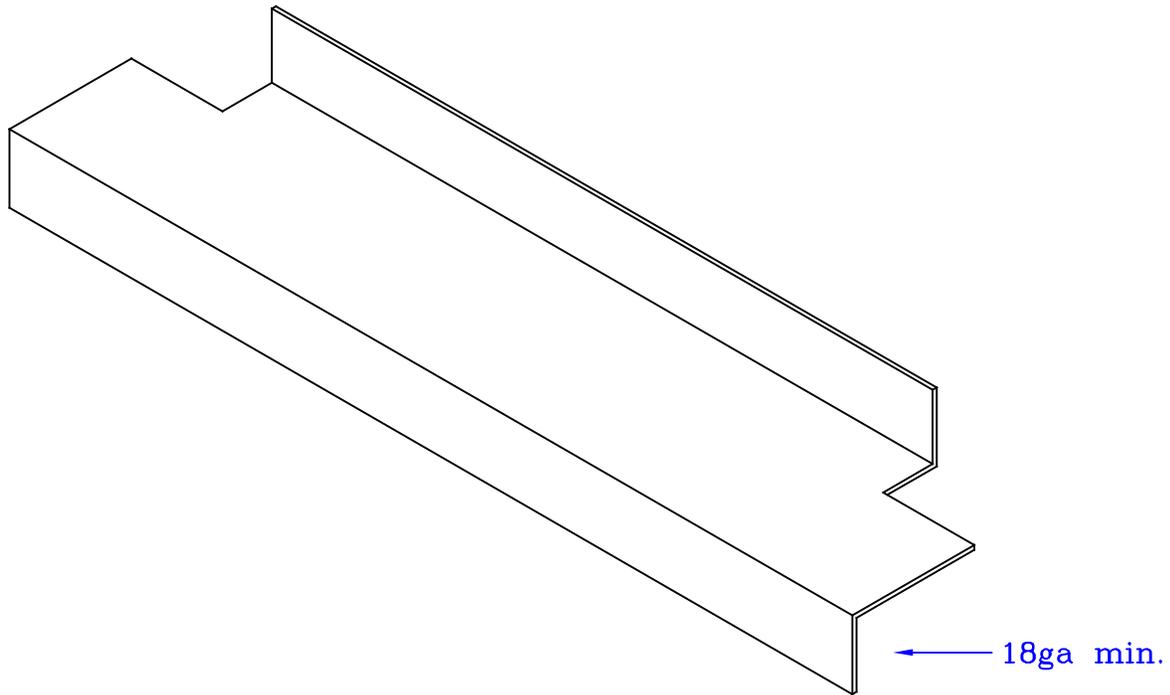
See option ZBA on page O-15.6 for additional information

**ZBA, steel stud anchor 6 3/4", 2" face, 6" to 6 3/8" wall**



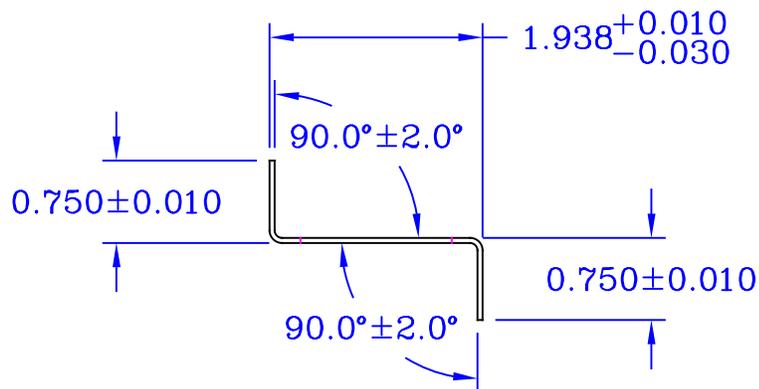
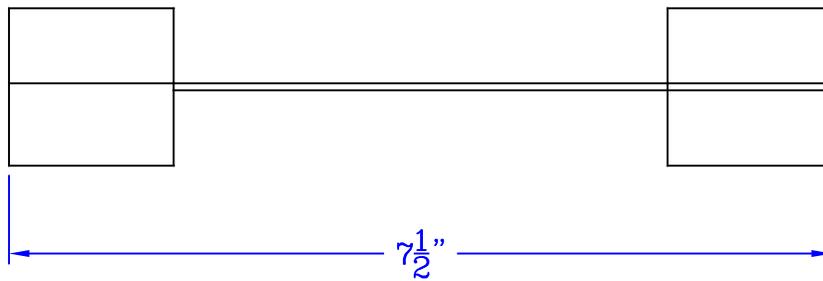
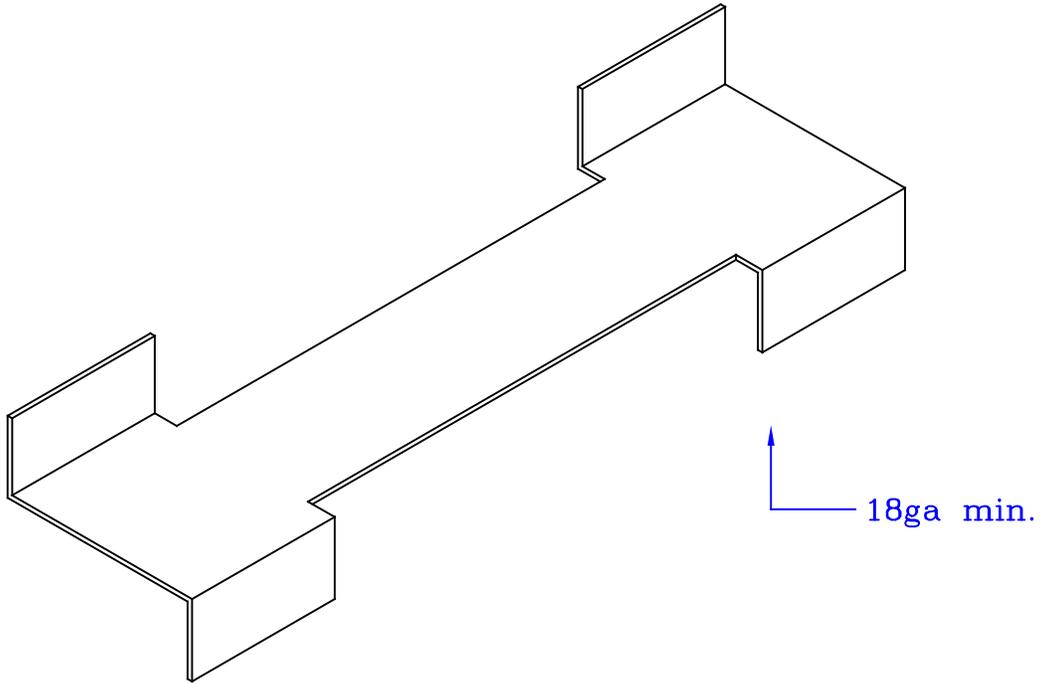
See option ZBA on page O-15.6 for additional information

**ZBA, steel stud anchor 9 1/4", 2" face, 8 1/2" to 8 7/8" wall**



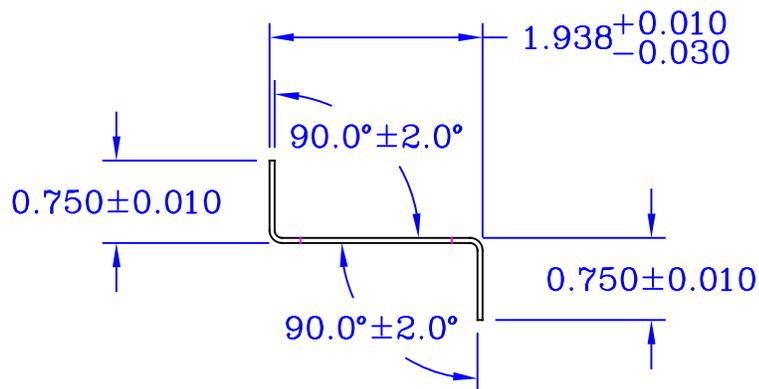
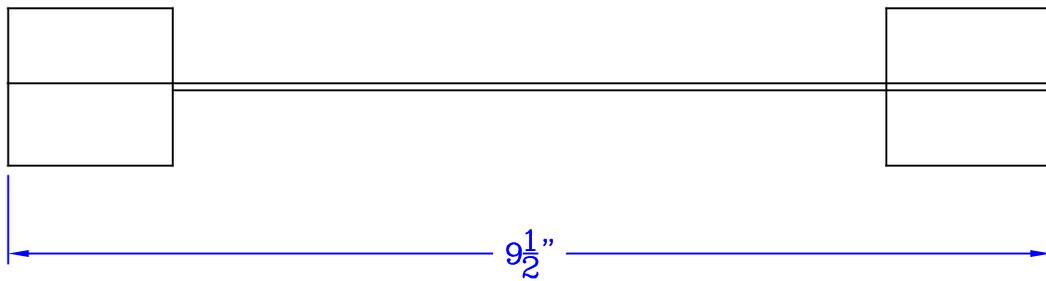
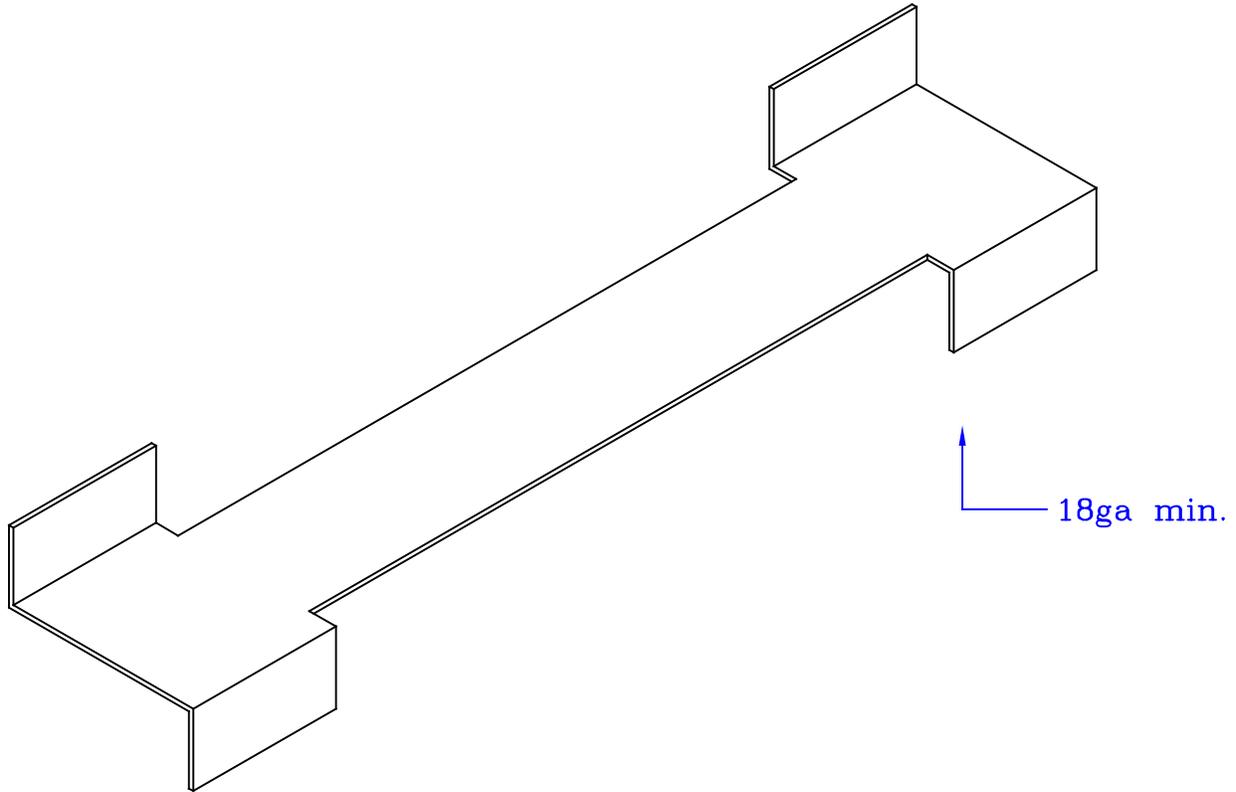
See option ZBA on page O-15.6 for additional information

**EWA, existing wall anchor 4 1/2" to 7 3/8" jamb depth**



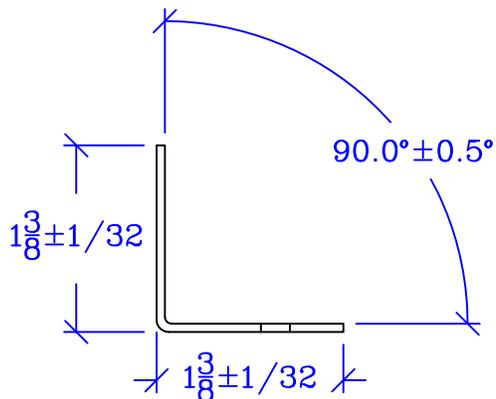
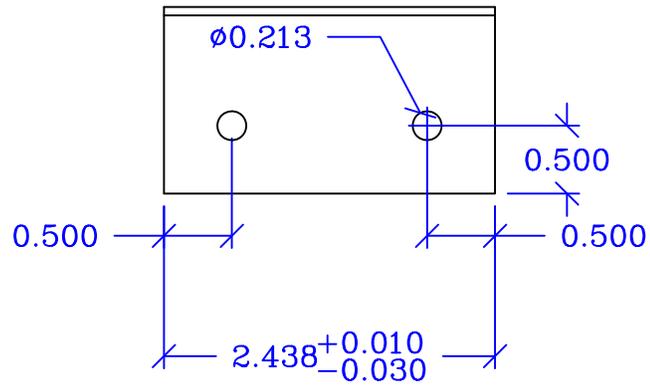
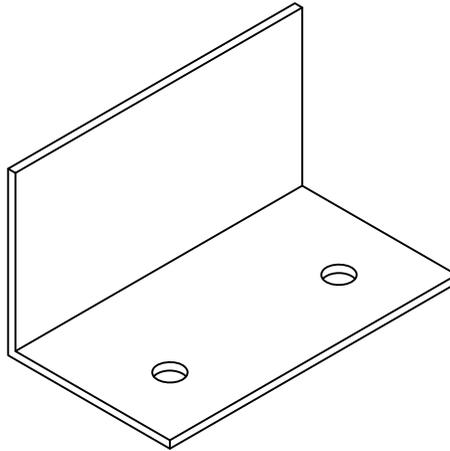
See option EWA on page O-15.12 for additional information

**EWA, existing wall anchor 7 1/2" to 9 3/8" jamb depth**



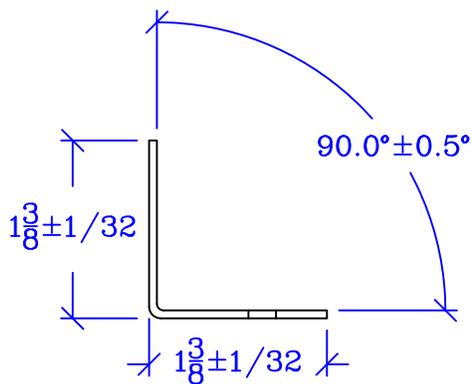
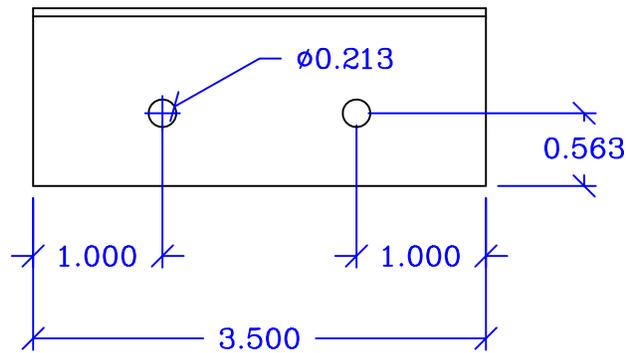
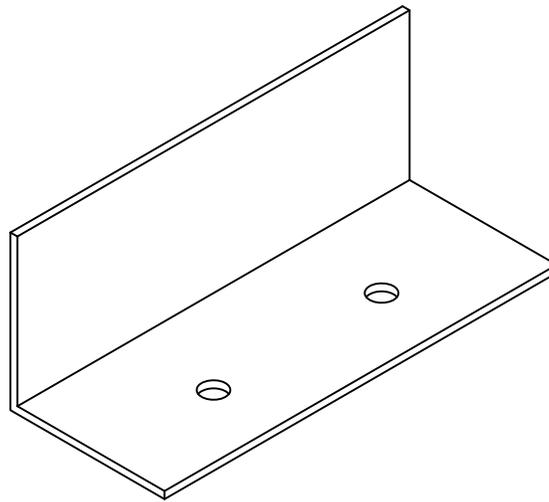
See option EWA on page O-15.12 for additional information

**Floor anchor not sized, 16ga**



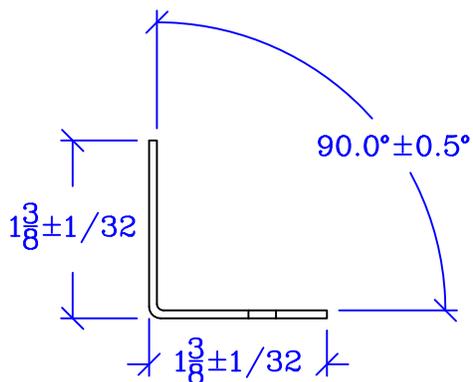
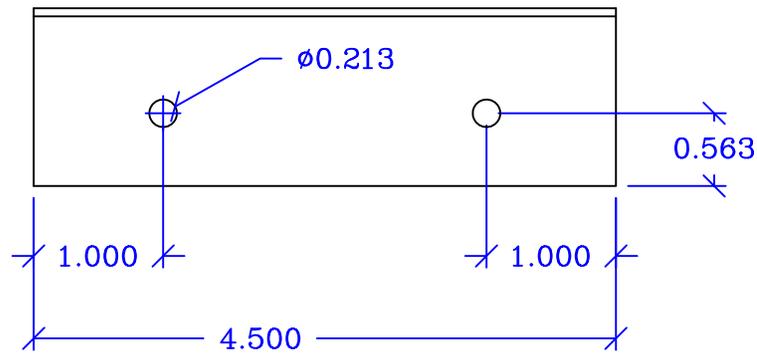
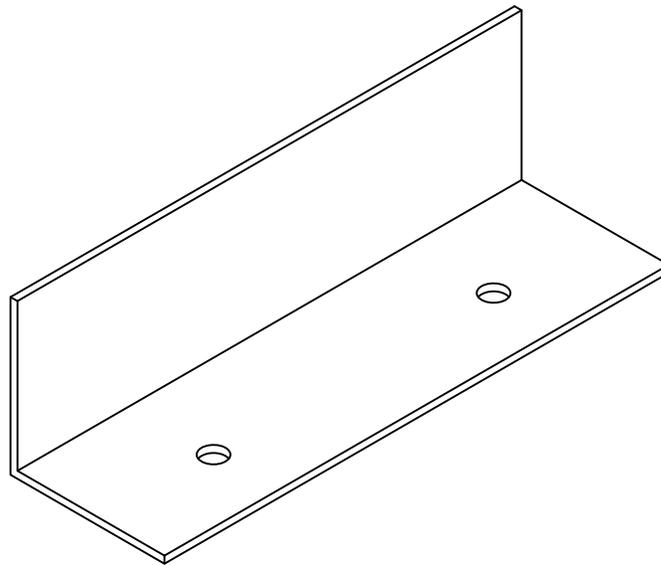
See option FA on page O-15.24 for additional information

**Floor anchor 3 1/2, 16ga**



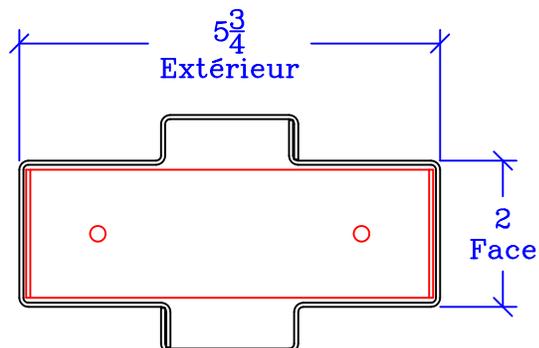
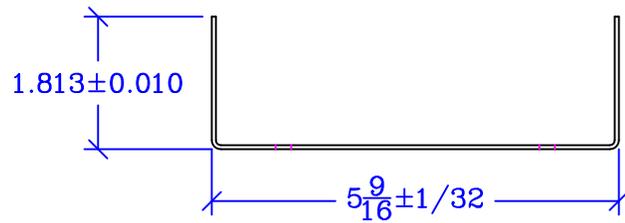
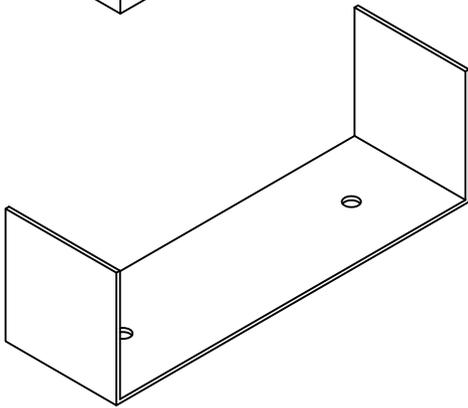
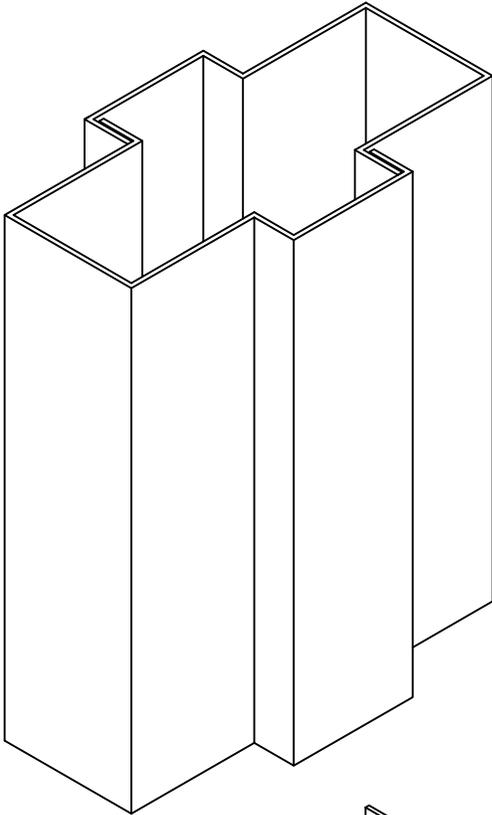
See option FA on page O-15.24 for additional information

**Floor anchor 4 1/2, 16ga**

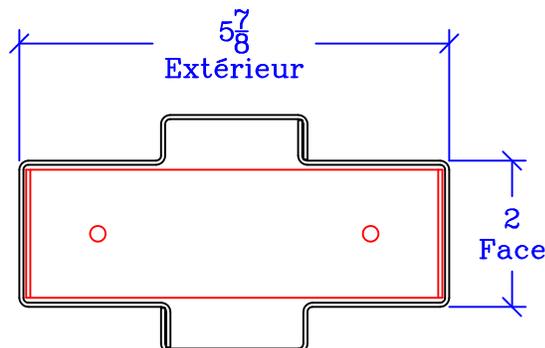
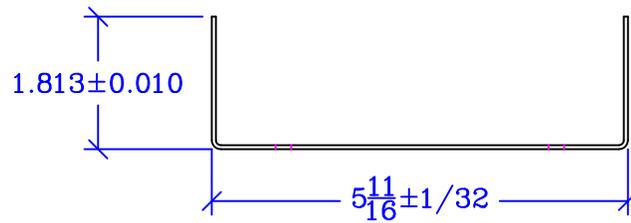
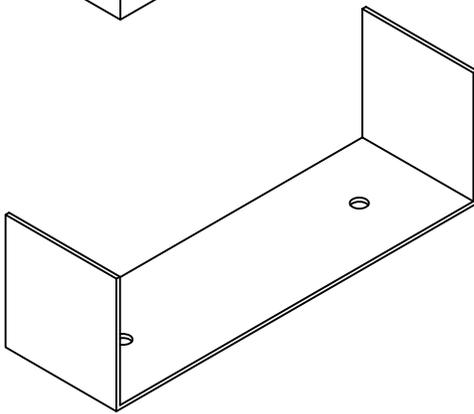
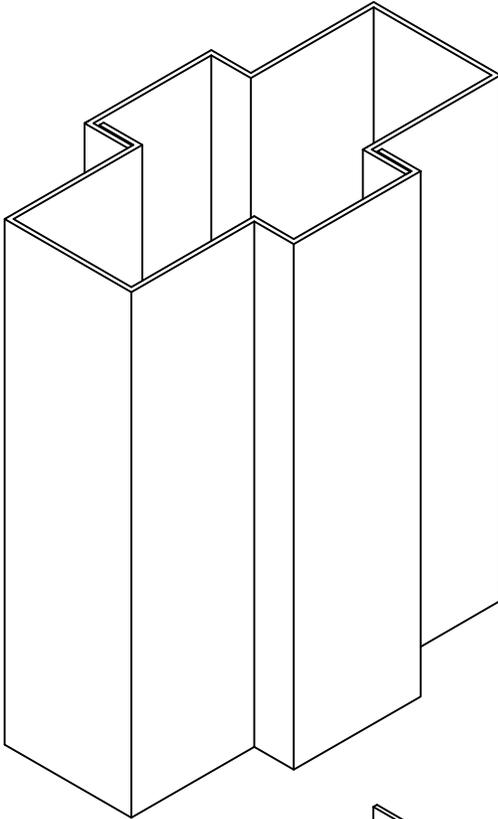


See option FA on page O-15.24 for additional information

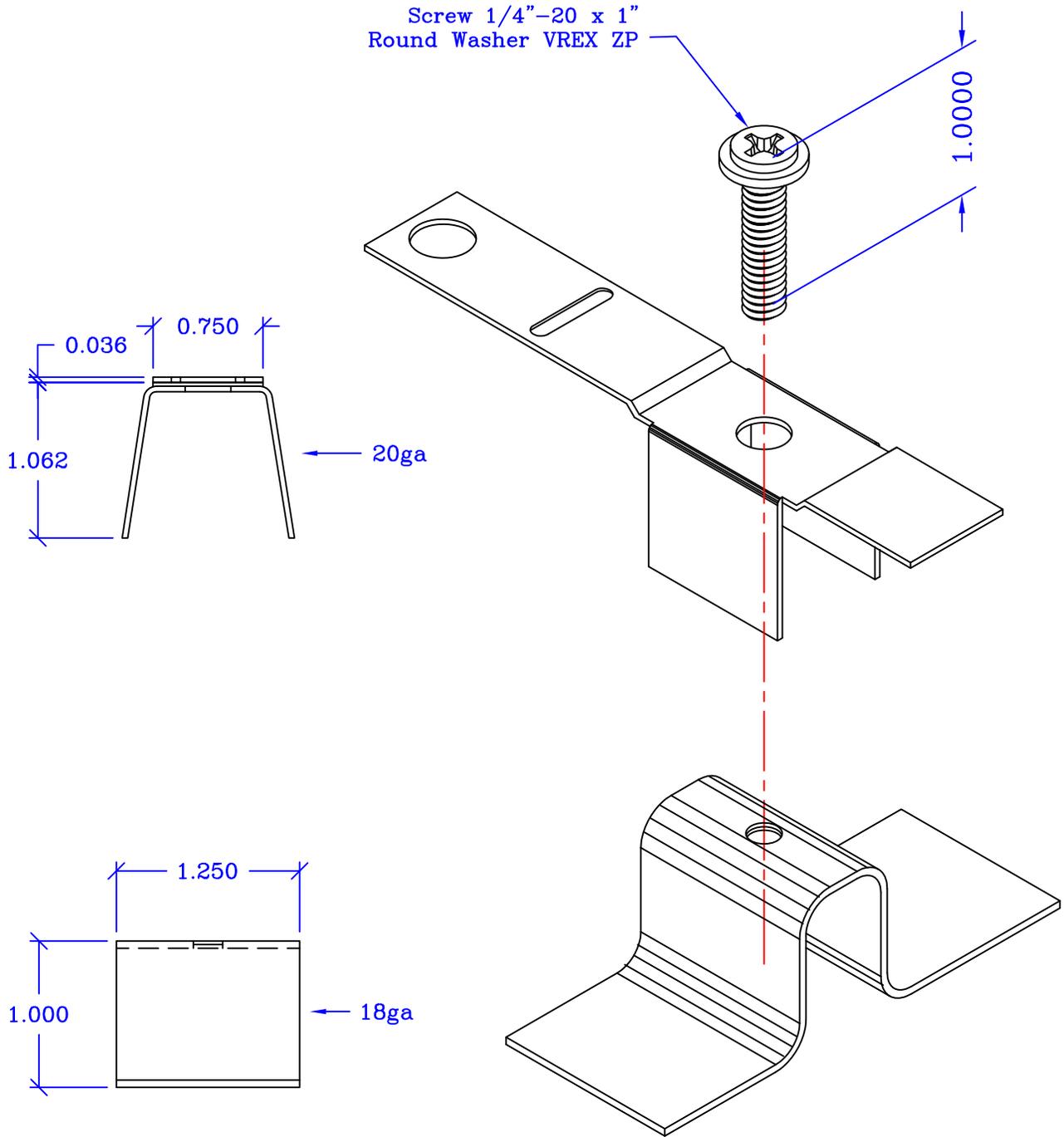
**Mullion floor anchor for 5 3/4" jamb depth, 16ga**



**Mullion floor anchor for 5 7/8" jamb depth, 16ga**



**Compression anchor for 16ga knocked down frame**

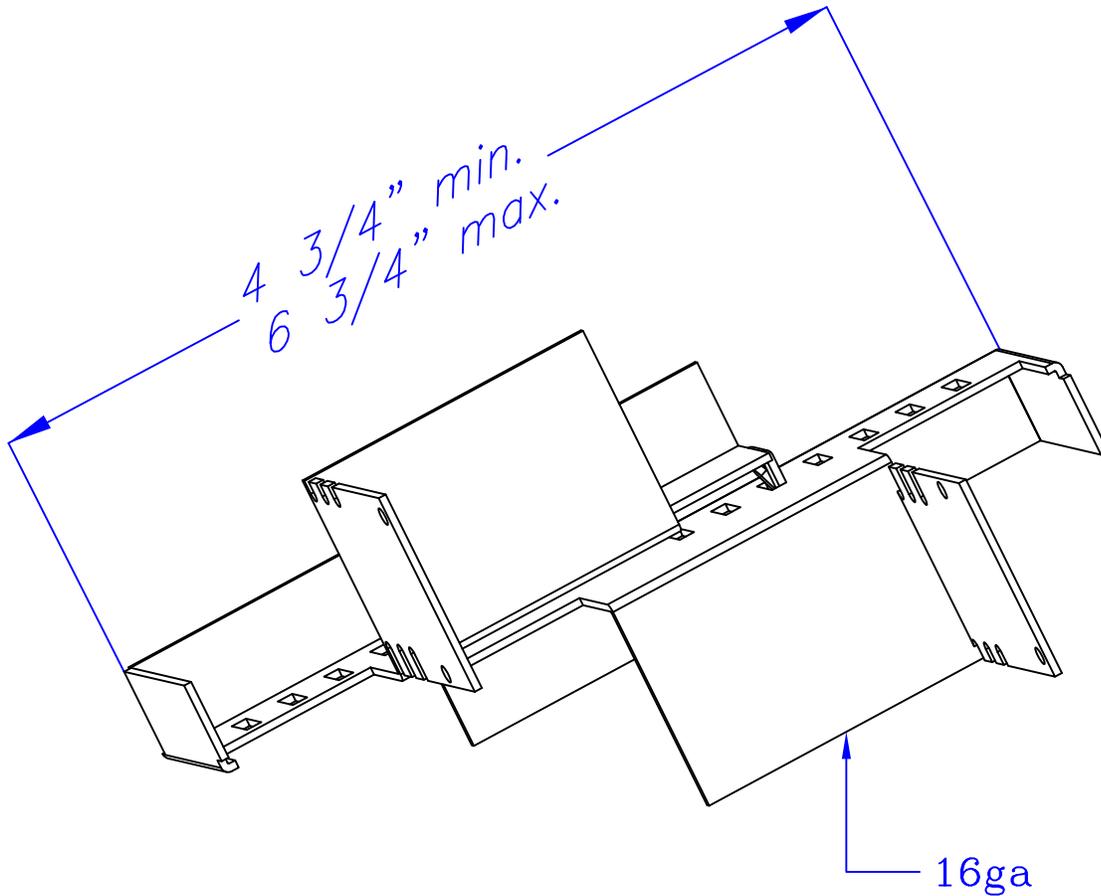


Anchor parts

00858

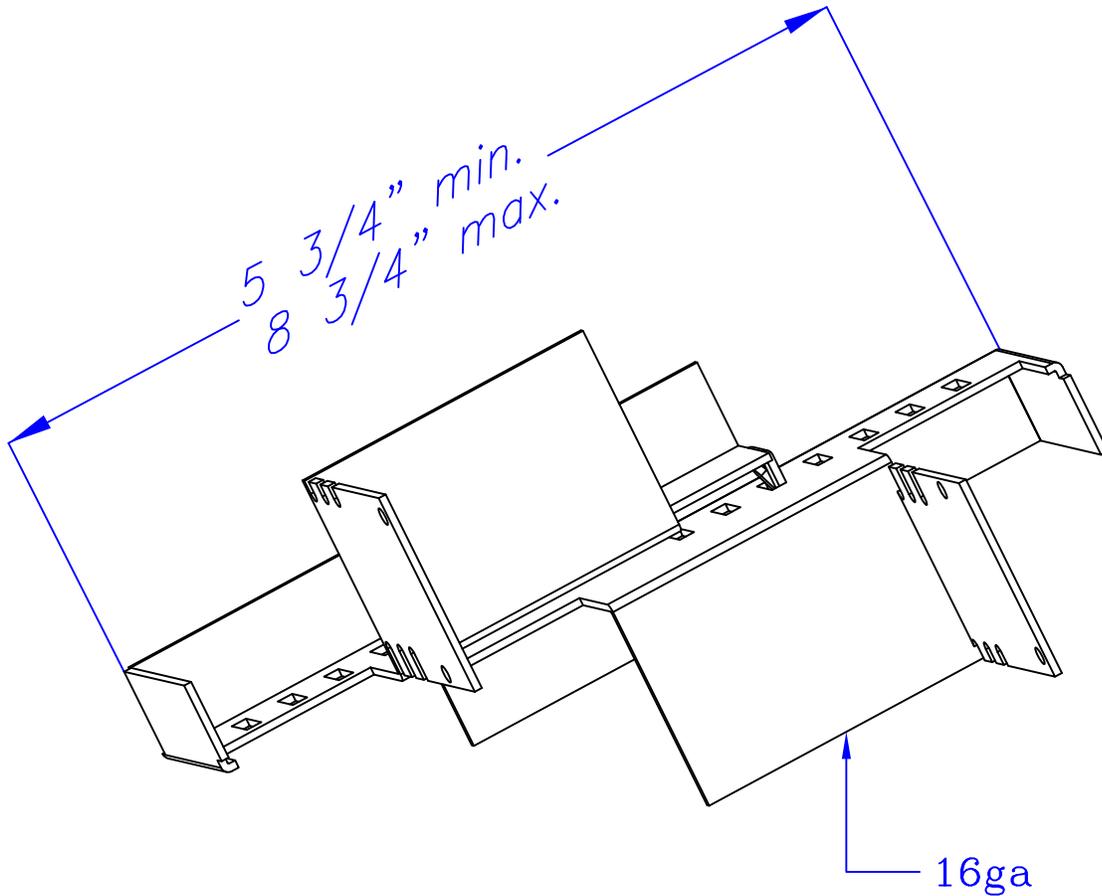
See option KD/KDS on pages O-15.28 and O-15-.30 for additional information

**SWS, adjustable wood/steel stud anchor for 4 3/4" to 6 3/4" jamb depth**  
Need 2 of to make a full anchor



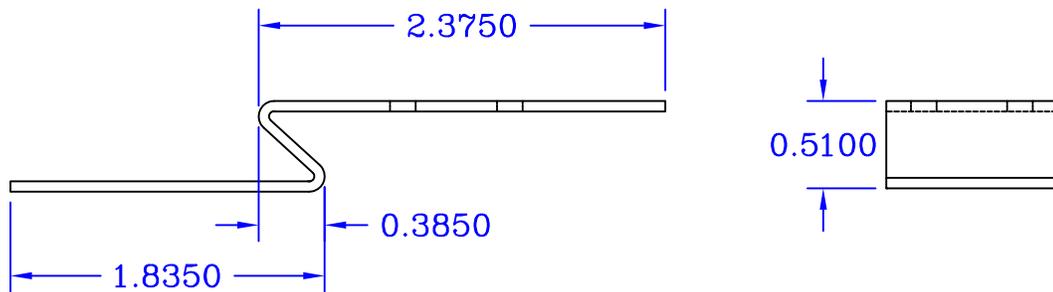
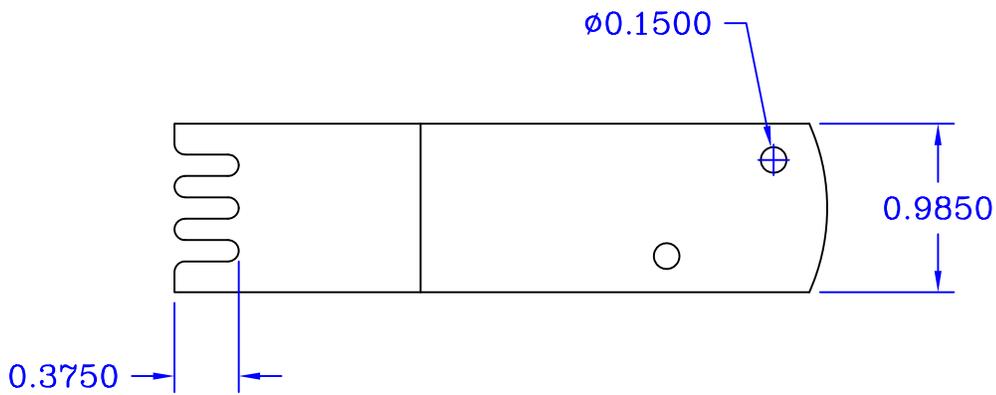
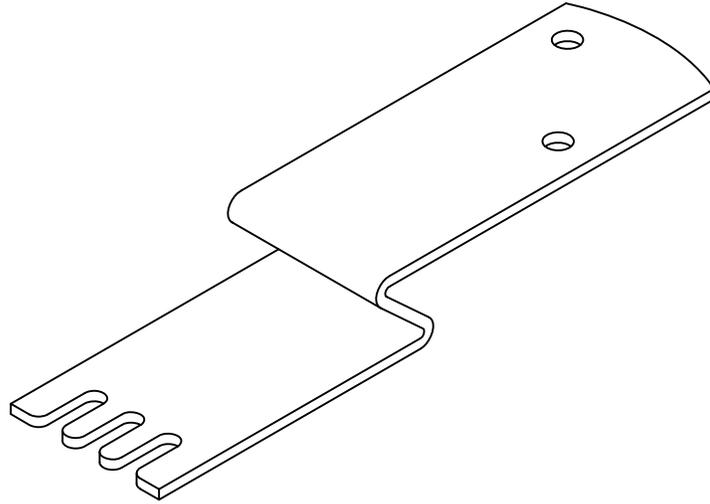
See option SWS on page O-15.8 for additional information

**SWS, adjustable wood/steel stud anchor for 5 3/4" to 8 3/4" jamb depth**  
Need 2 of to make a full anchor



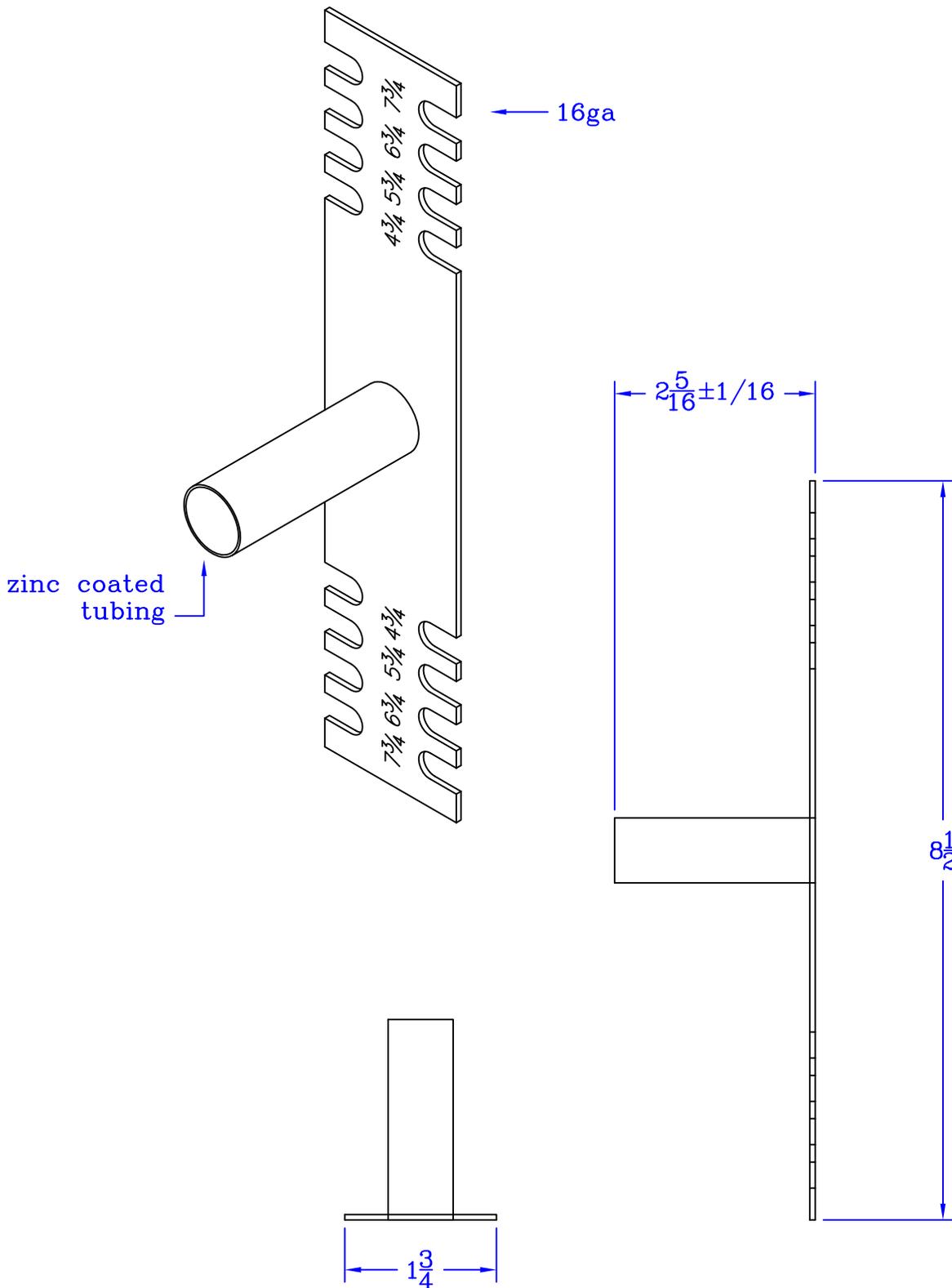
See option SWS on page O-15.8 for additional information

**SDS, snap-in drywall strap, 16ga**  
for DW and DR series



See option SDS on page O-15.3 for additional information

**EWAT, existing wall anchor with tube, 4 3/4" to 8 3/4" jamb depth**

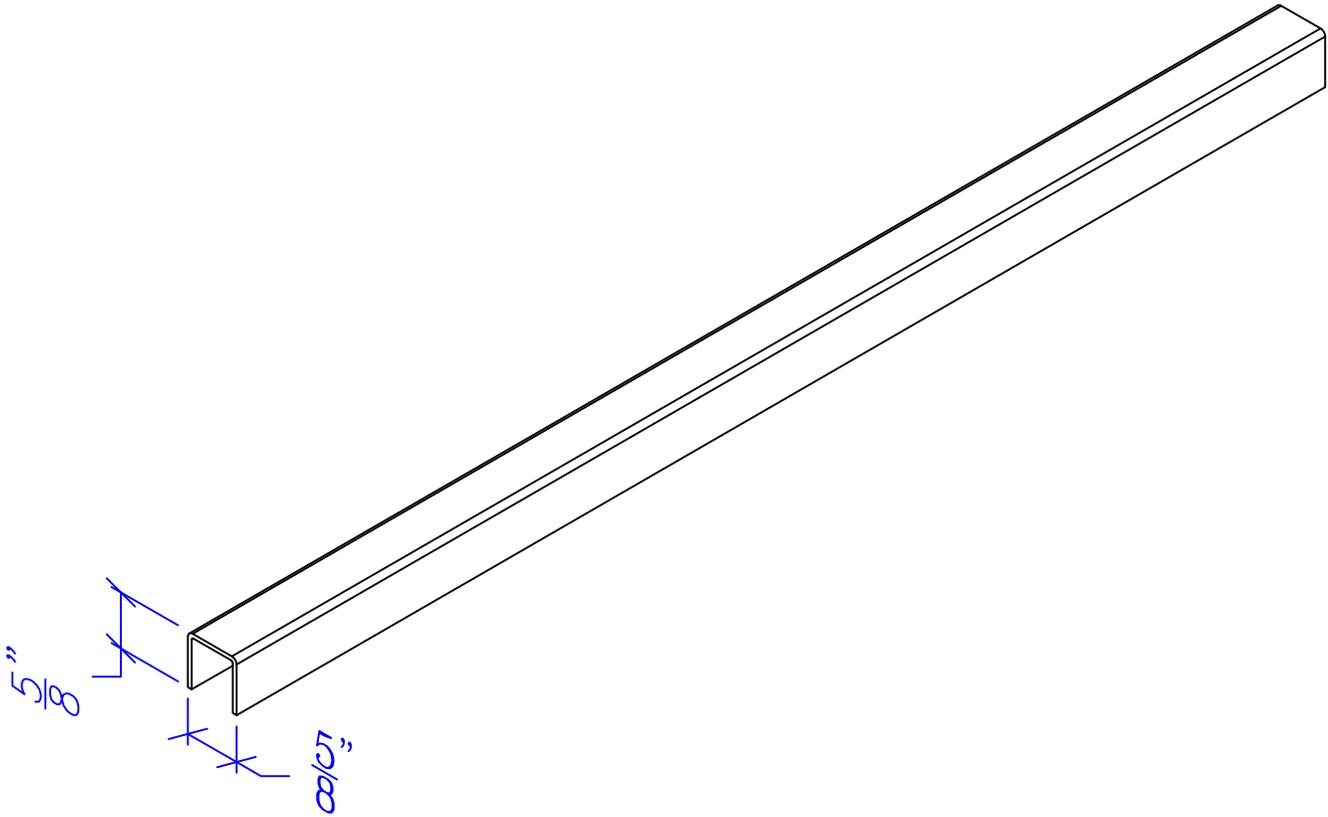


Anchor parts

00358

See option EWAT on page O-15.18 for additional information

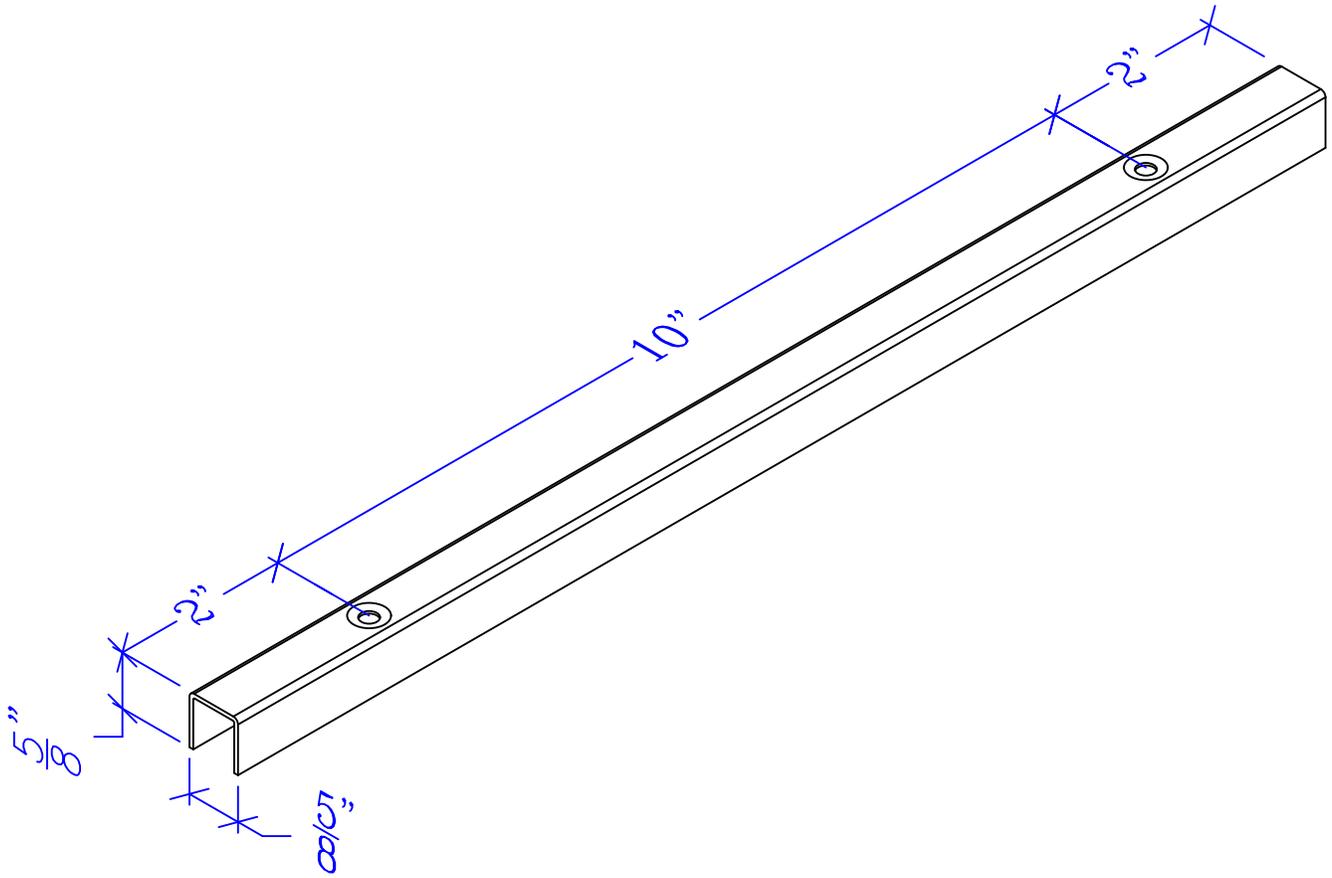
**Glazing bead 5/8" x 5/8" x 10'0" without dimples**



Glazing bead

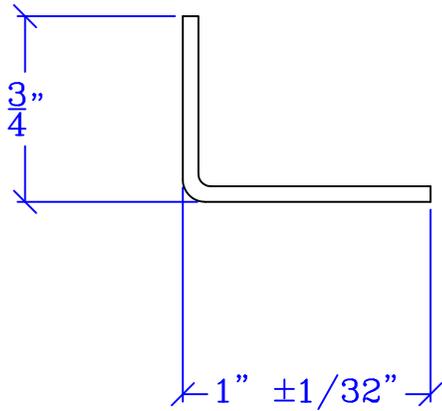
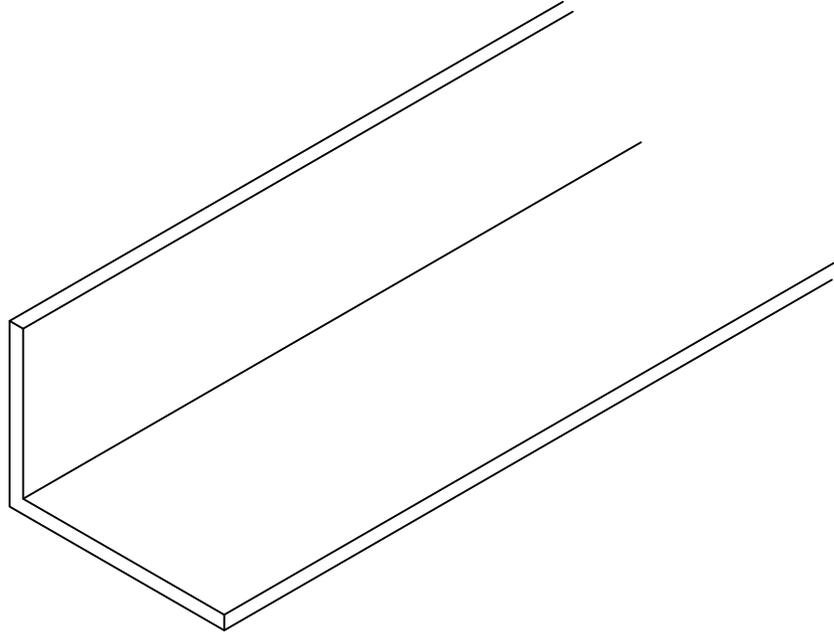
00075

**Glazing bead 5/8" x 5/8" x 10'0" punched and dimpled**



Glazing bead

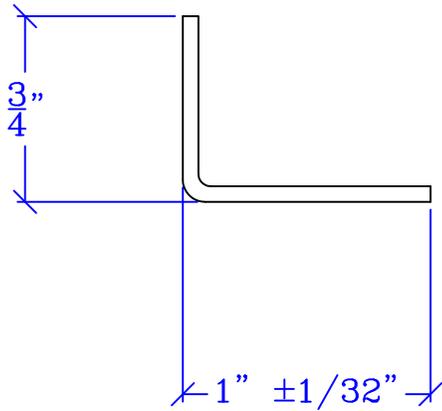
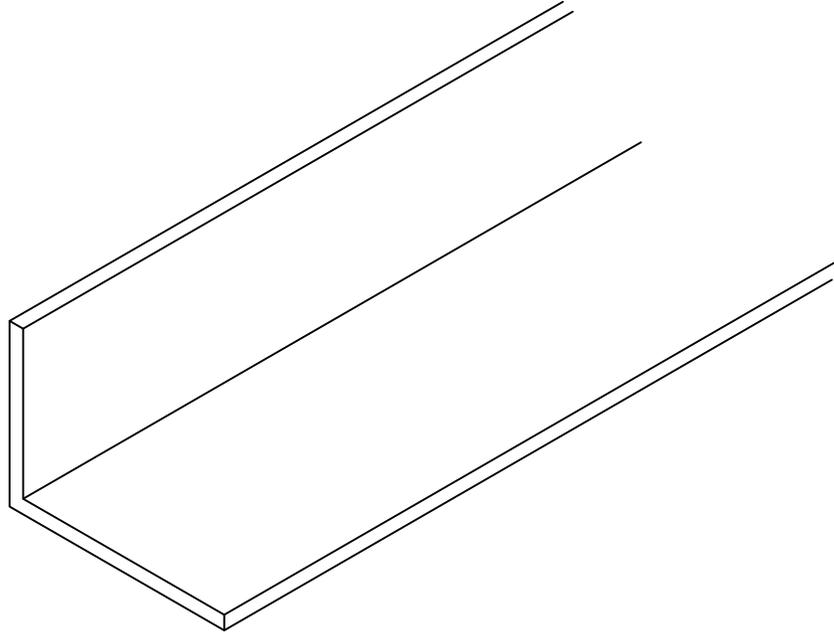
**3'0" long, 16ga**



Spreader bar

03059

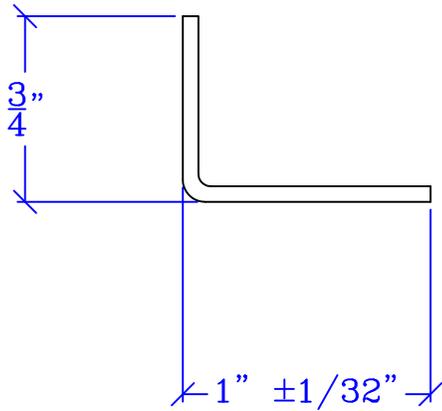
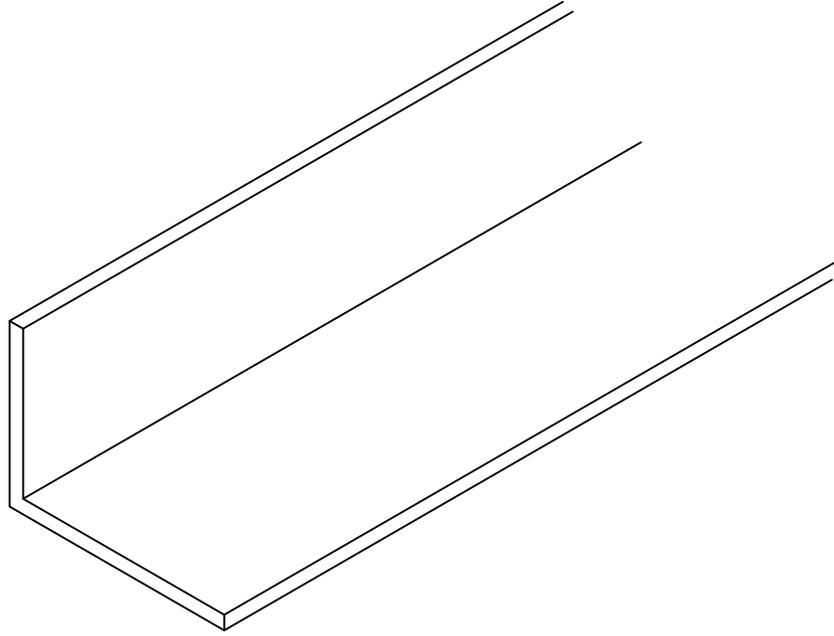
**4'0" long, 16ga**



Spreader bar

03063

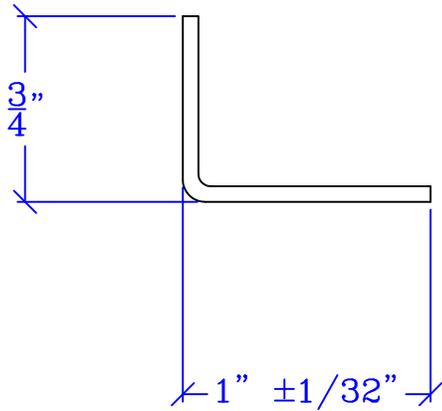
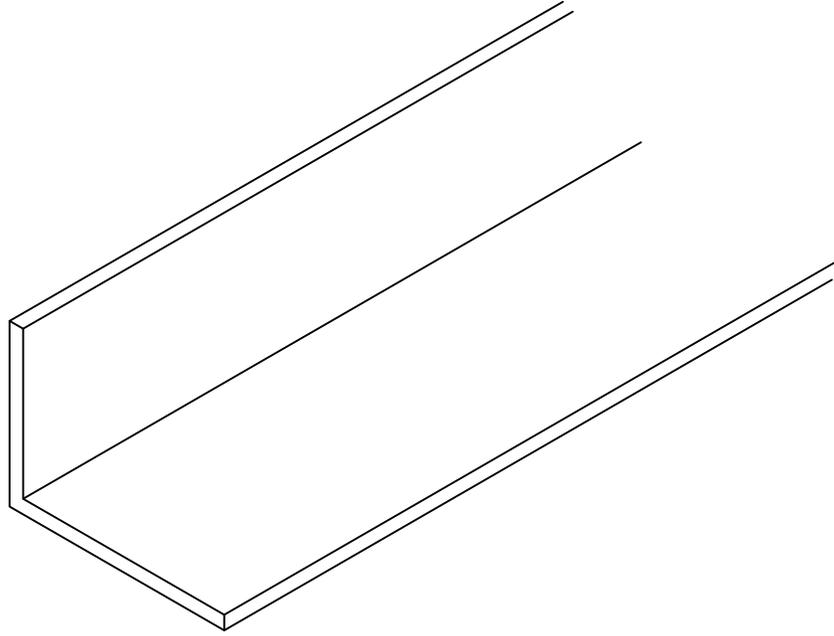
**5'0" long, 16ga**



Spreader bar

03064

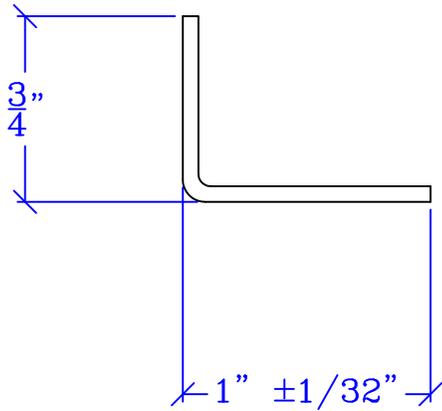
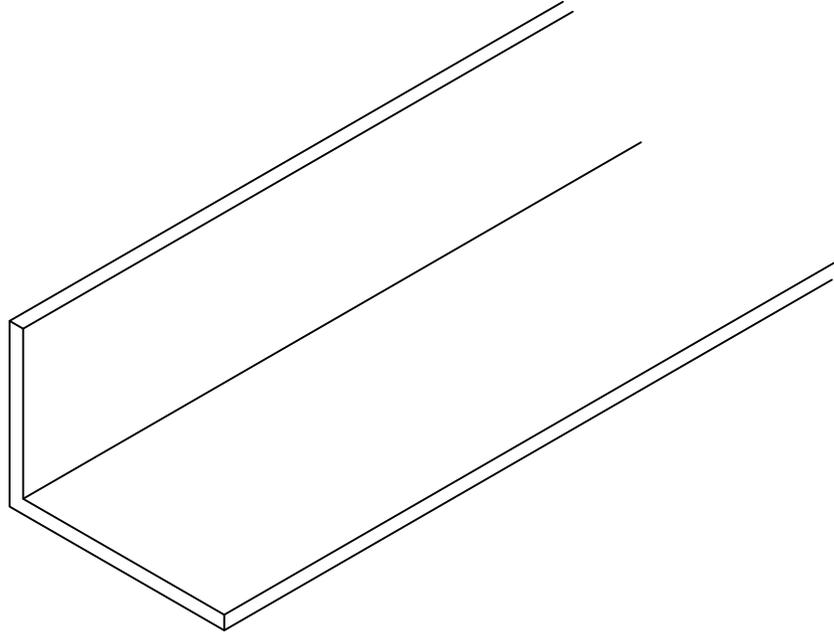
**6'0" long, 16ga**



Spreader bar

03065

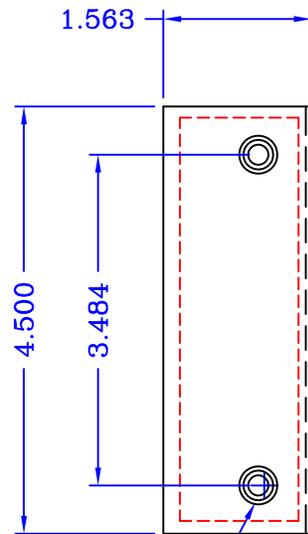
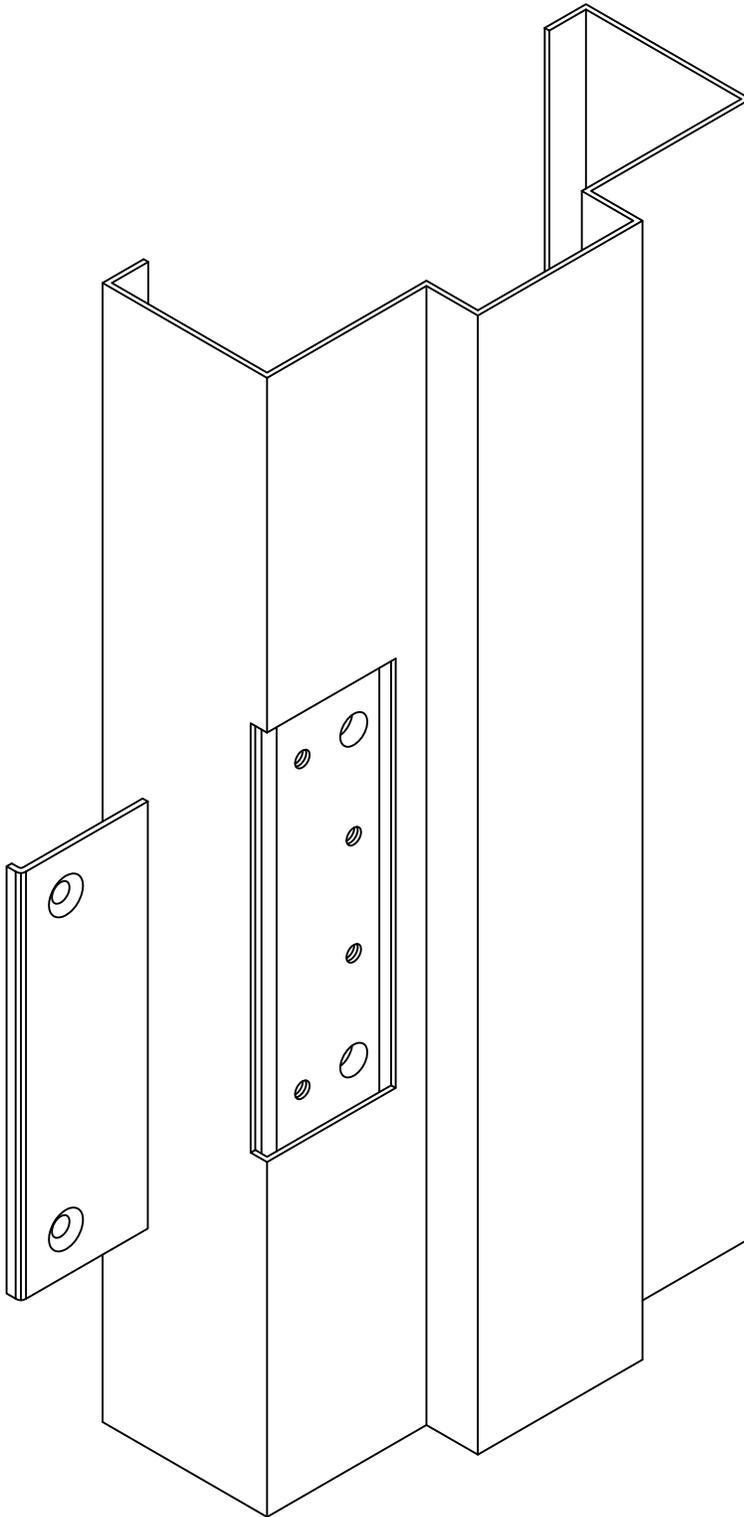
**10'0" long, 16ga**



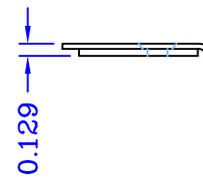
Spreader bar

03066

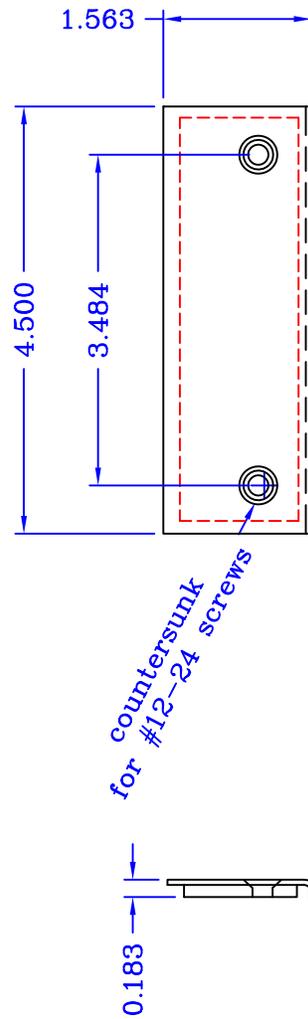
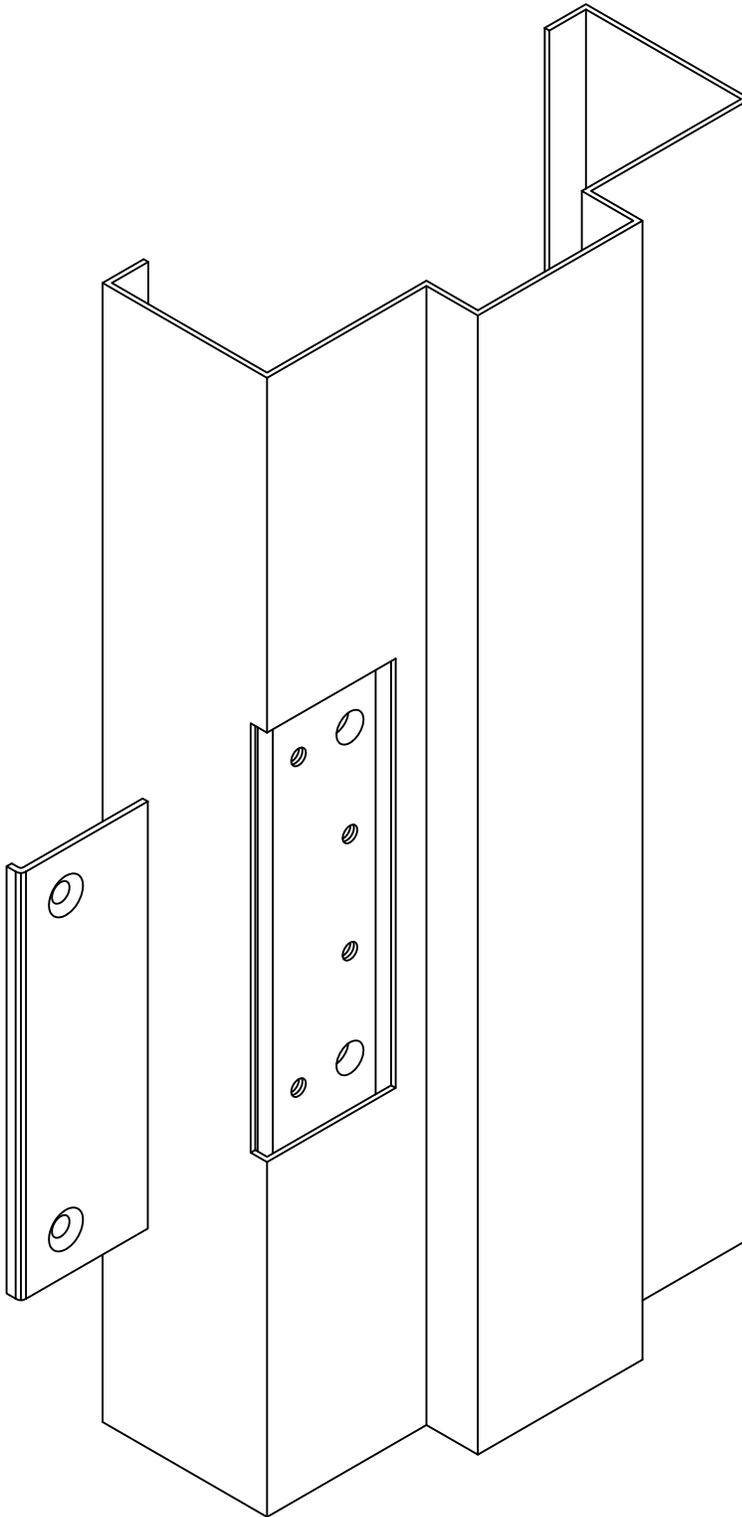
**4 1/2" standard weight hinge filler, screwed**  
for 1 3/4" thick door



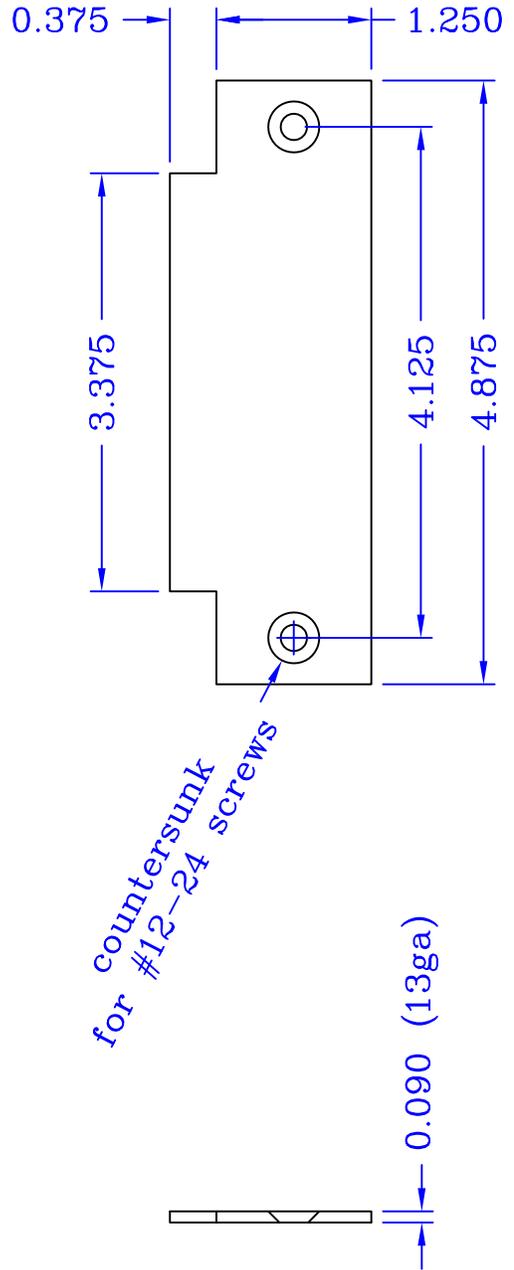
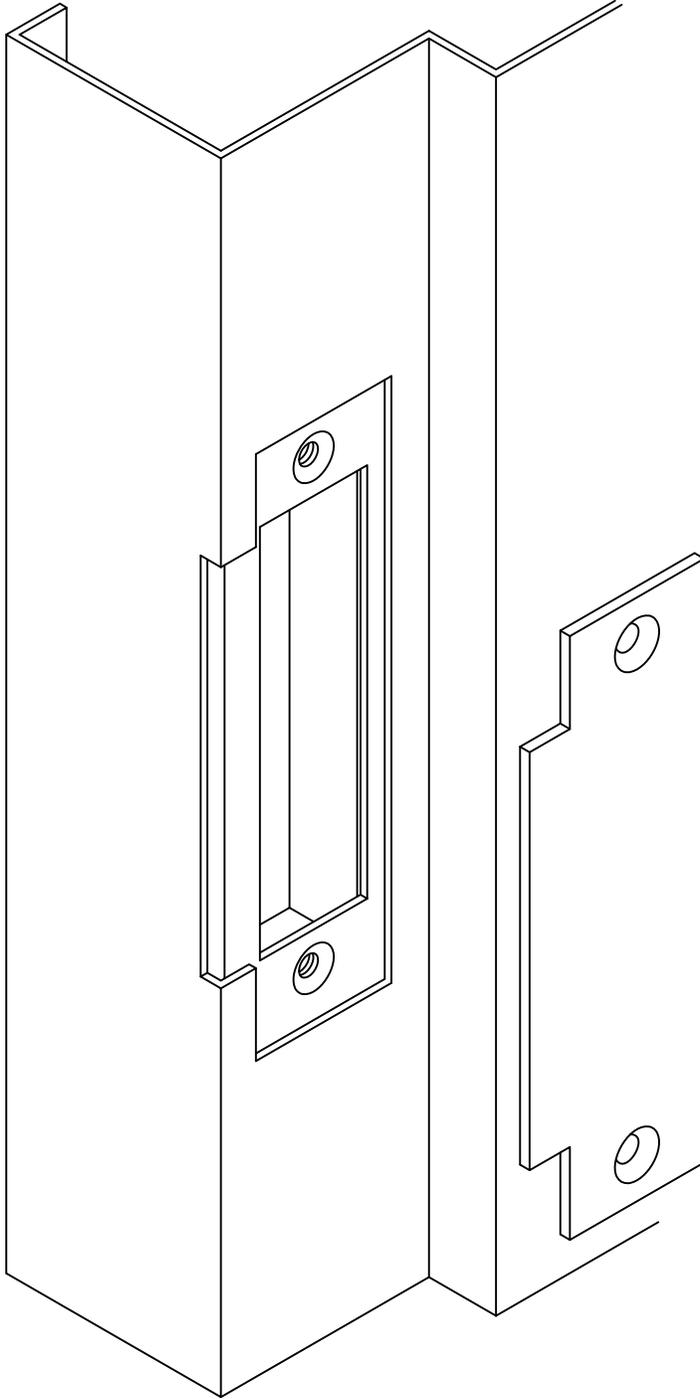
countersunk  
for #12-24 screws



**4 1/2" heavy weight hinge filler, screwed**  
for 1 3/4" thick door

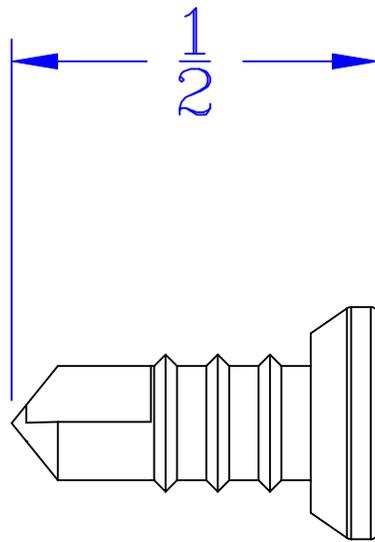
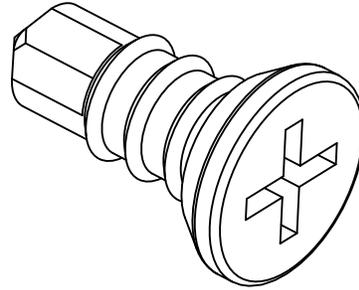


**ASA strike filler, screwed**  
for 1 3/4" thick door

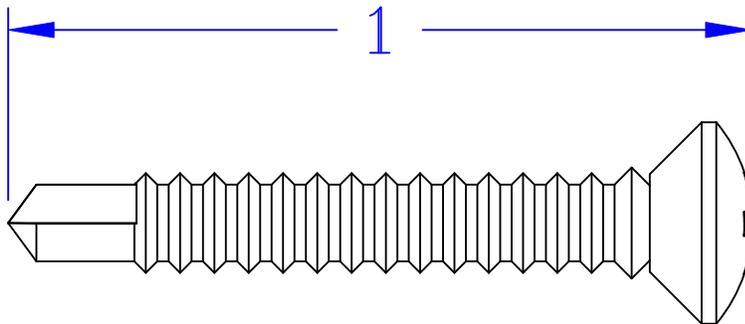
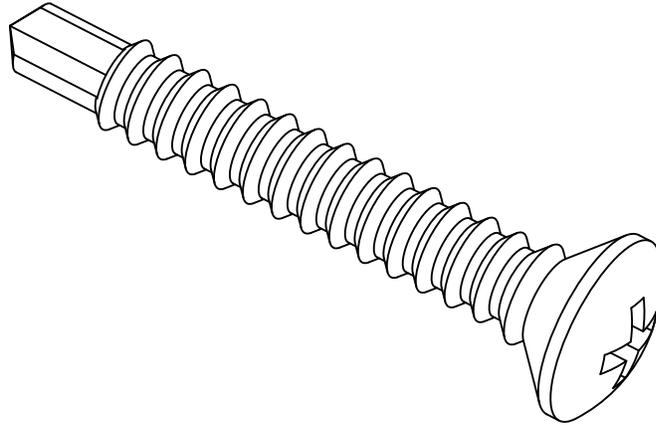


**Self drill screw for astragal**

#8-18 x 1/2" Phillips flat undercut head ZP #2 point



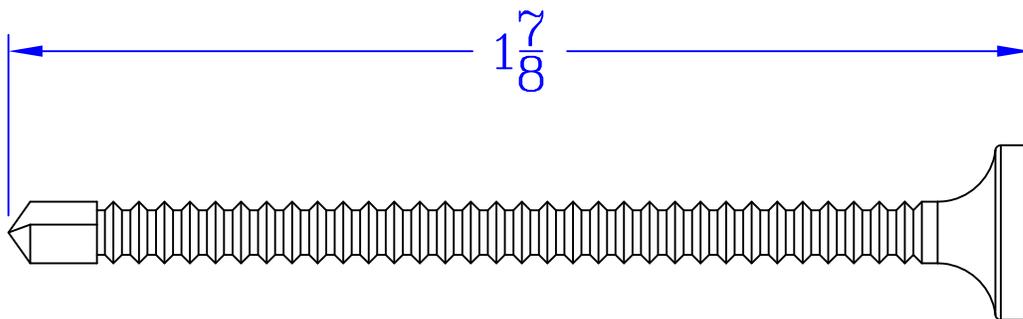
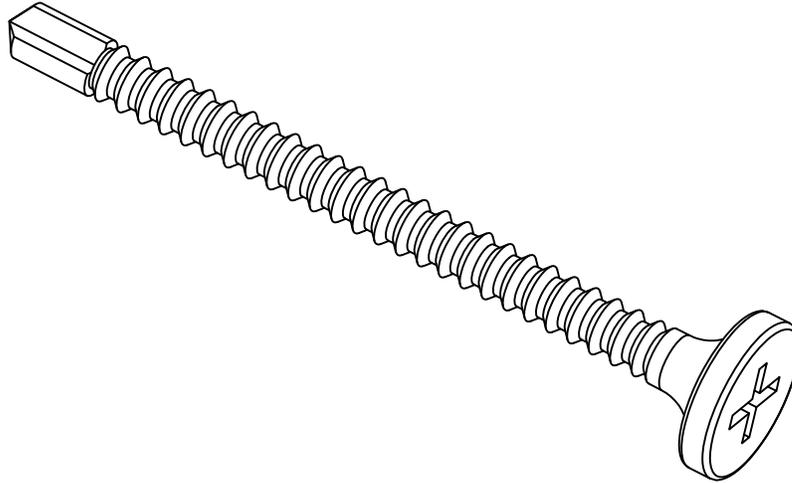
**Self drill screw for glazing bead**  
#6 x 1" Phillips oval head ZP



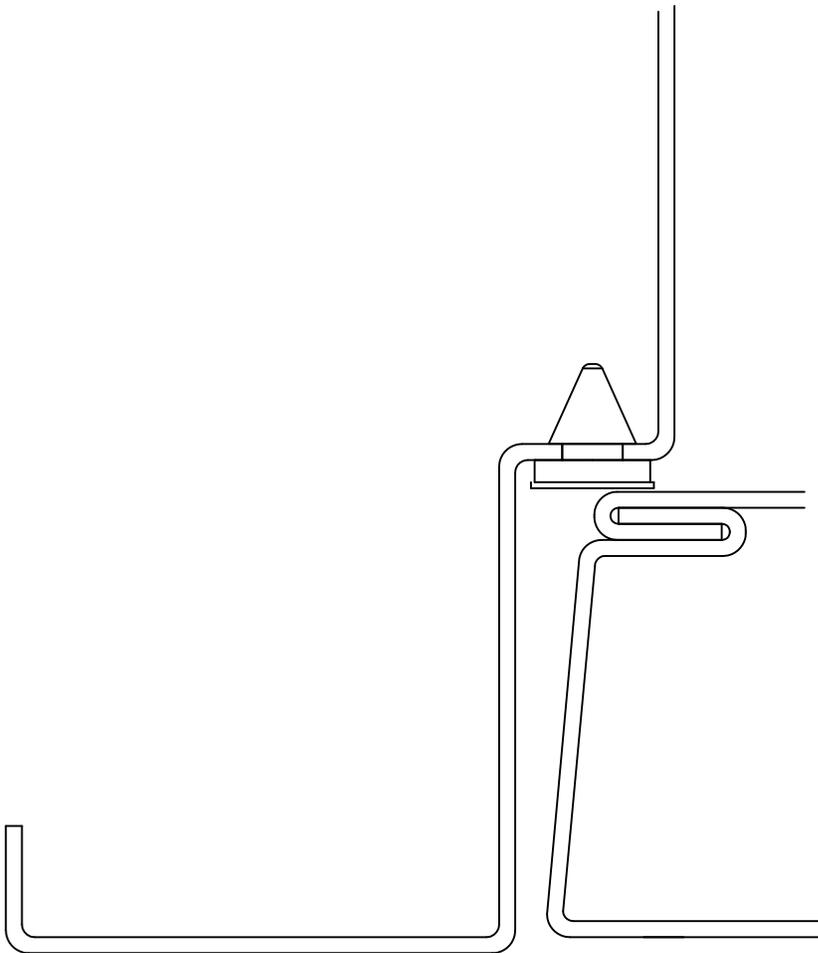
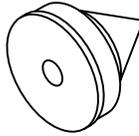
See on page C-21 for additional information

**Self drill screw for vinyl cap**

#6-20 x 1 7/8" Phillips bugle head ZP #2 point

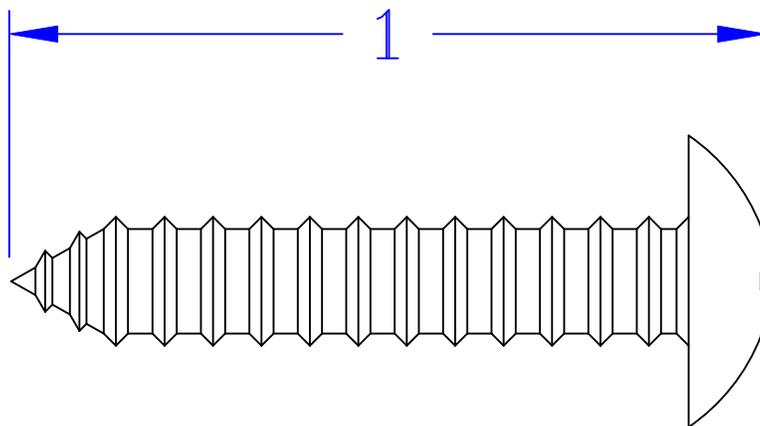
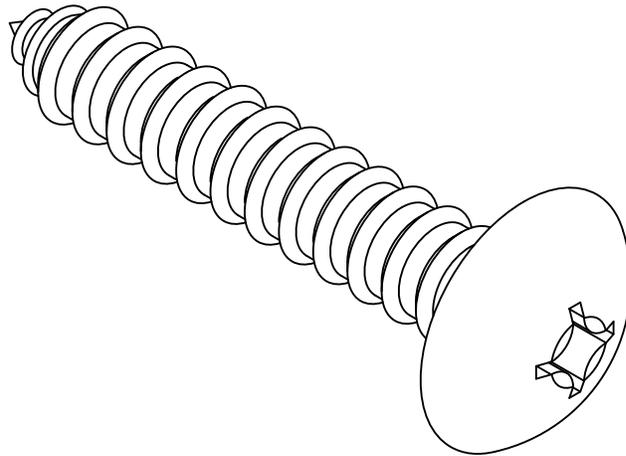


## Rubber bumper/silencer



Three at strike jamb or two at head when paired opening

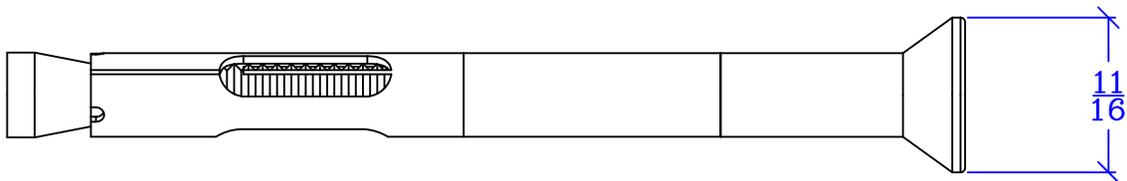
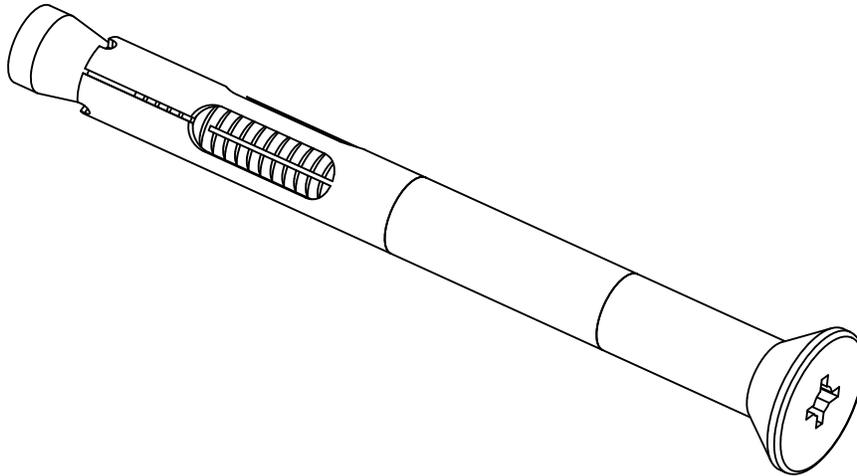
**Knock down screw**  
#8 -15 x 1" Phillips Truss Head SS



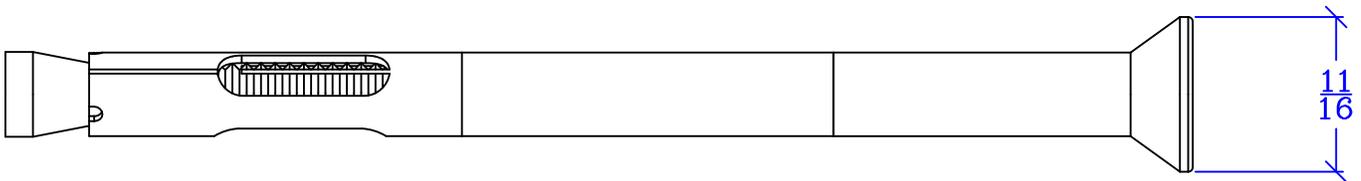
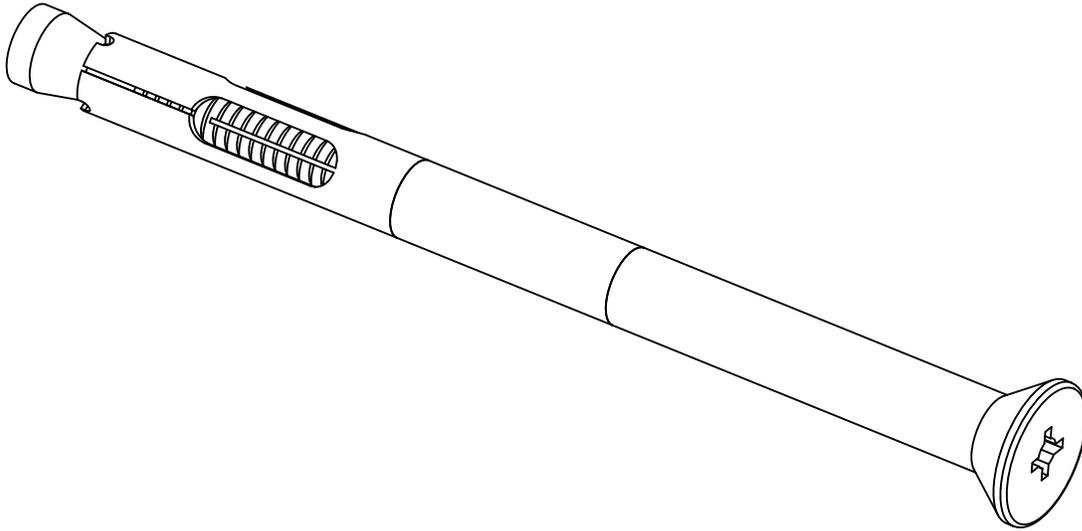
See option KDS on page O-15.30 for additional information

**Masonry sleeve anchor**

3/8" x 4"

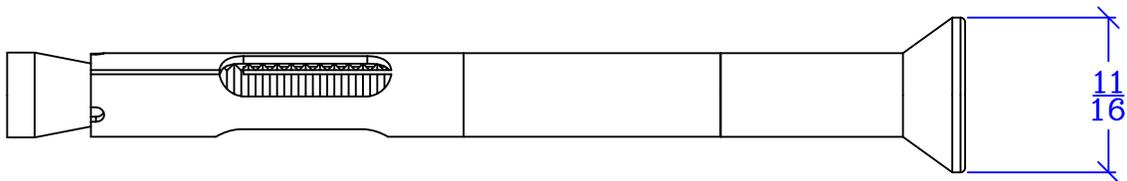
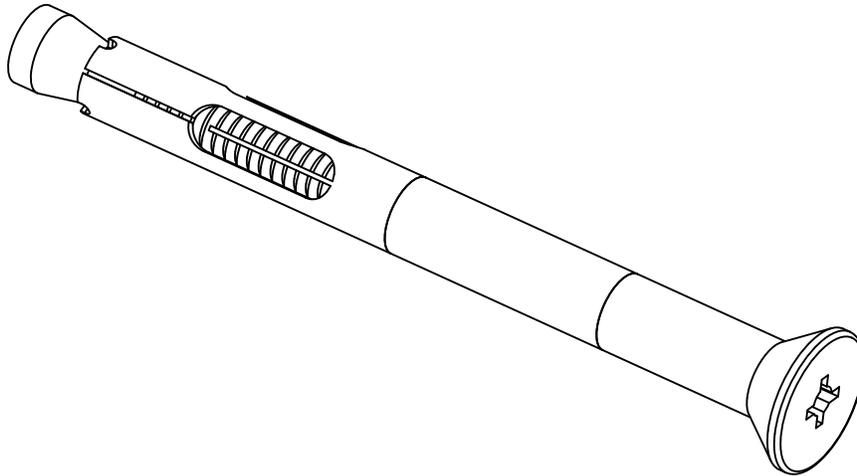


**Masonry sleeve anchor**  
3/8" x 5"

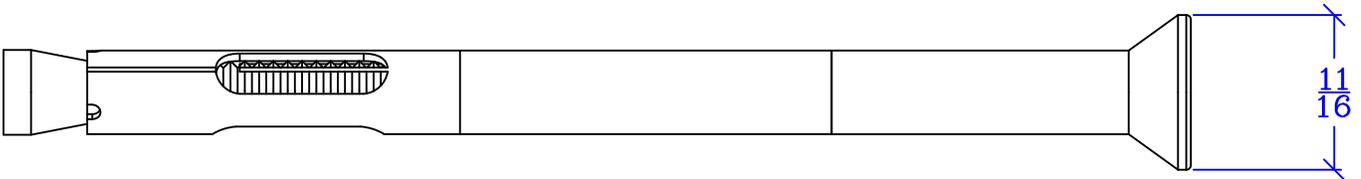
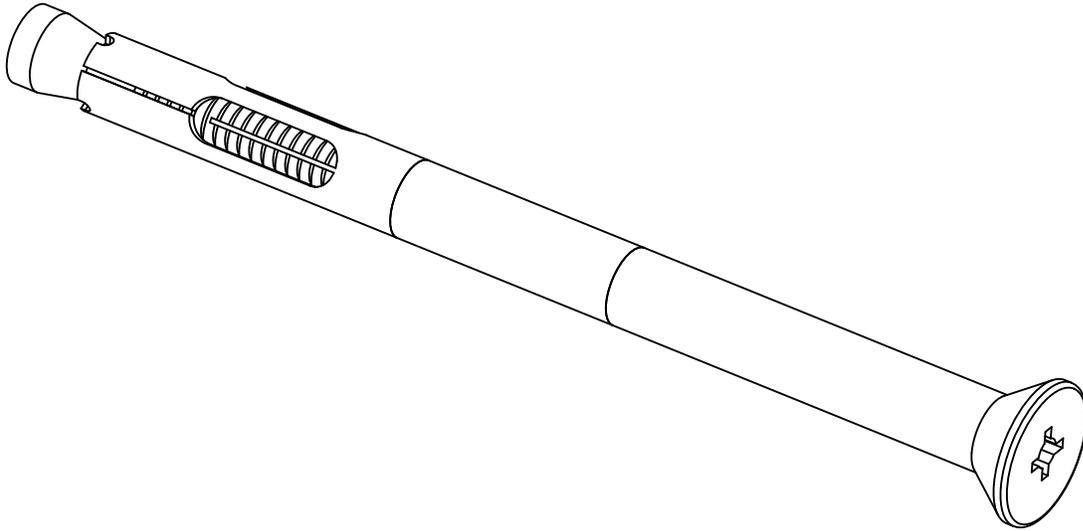


**Masonry sleeve anchor**

3/8" x 4" stainless steel



**Masonry sleeve anchor**  
3/8" x 5" stainless steel

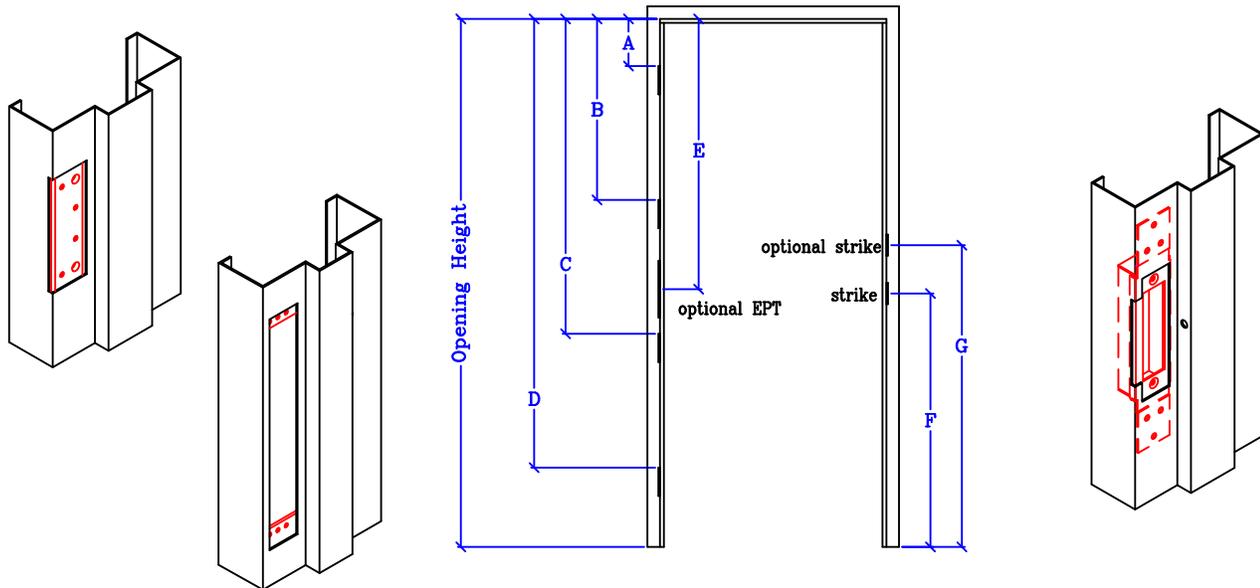


# **HARDWARE LOCATIONS**

---

Frame Location Resume .....	Q-1.1
Door Location Resume.....	Q-1.2
4-1/2" for 1'0" to 3'4" .....	Q-1.3
4-1/2" for 3'6" to 5'0" .....	Q-1.4
4-1/2" for 5'2" to 6'4" .....	Q-1.5
4-1/2" for 6'6" to 7'6" .....	Q-1.6
4-1/2" for 6'8" to 7'6" .....	Q-1.7
4-1/2" for 7'8" to 8'2" .....	Q-1.8
4-1/2" for 8'4" to 8'10" .....	Q-1.9
4-1/2" for 9'0" to 10'0" .....	Q-1.10
4-1/2" for Dutch 6'8" x 7'2" .....	Q-1.11
5" for 1'0" to 3'4" .....	Q-1.12
5" for 3'6" to 5'0" .....	Q-1.13
5" for 5'2" to 6'4" .....	Q-1.14
5" for 6'6" to 7'6" .....	Q-1.15
5" for 6'8" to 7'6" .....	Q-1.16
5" for 7'8" to 8'2" .....	Q-1.17
5" for 8'4" to 8'10" .....	Q-1.18
5" for 9'0" to 10'0" .....	Q-1.19
5" for Dutch 6'8" x 7'2" .....	Q-1.20

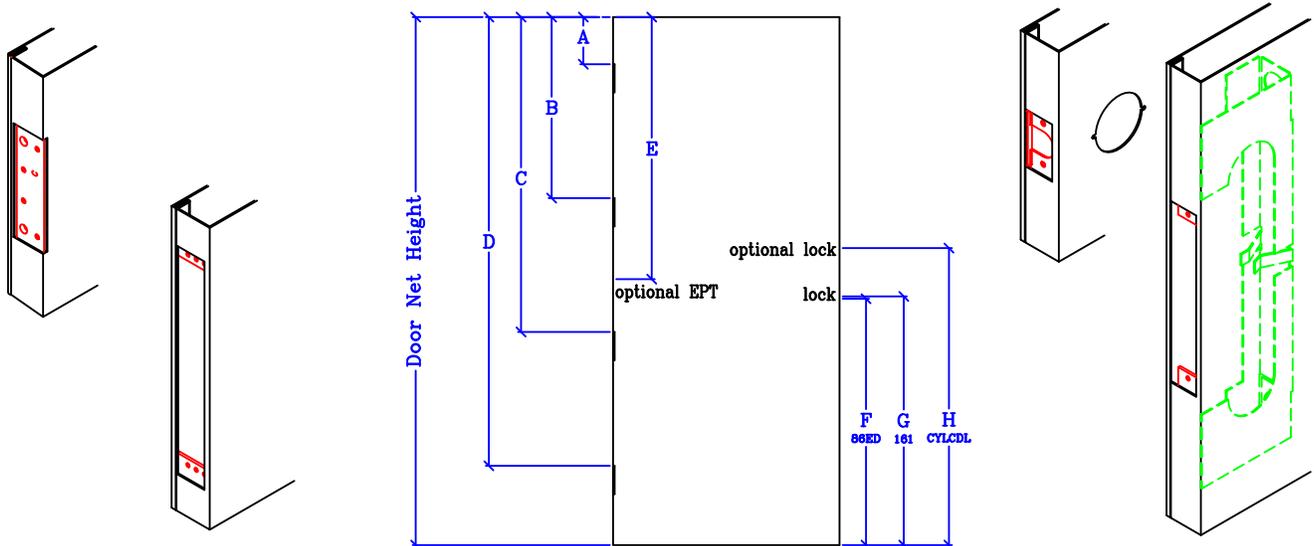
## 4 1/2" hinge, strike and EPT location



Opening Height	Hinge size	Qt.	Machining Dimensions						
			A	B	C	D	E	F	G
6'6"(78")	4 1/2"	3	7 1/2"	36 7/16"	65 3/8"		24 7/32"	40 5/16"	48"
6'8"(80")	4 1/2"	3	7 1/2"	37 7/16"	67 3/8"		24 23/32"	40 5/16"	48"
6'8"(80")	4 1/2"	4	7 1/2"	27 29/64"	47 13/32"	67 15/64"	39 11/16"	40 5/16"	48"
6'10"(82")	4 1/2"	3	7 1/2"	38 7/16"	69 3/8"		25 7/32"	40 5/16"	48"
6'10"(82")	4 1/2"	4	7 1/2"	28 1/8"	48 3/4"	69 1/4"	40 11/16"	40 5/16"	48"
7'0"(84")	4 1/2"	3	7 1/2"	39 7/16"	71 3/8"		25 23/32"	40 5/16"	48"
7'0"(84")	4 1/2"	4	7 1/2"	28 51/64"	50 3/32"	71 17/64"	41 11/16"	40 5/16"	48"
7'2"(86")	4 1/2"	3	7 1/2"	40 7/16"	73 3/8"		26 7/32"	40 5/16"	48"
7'2"(86")	4 1/2"	4	7 1/2"	29 29/64"	51 13/32"	73 15/64"	42 11/16"	40 5/16"	48"
7'4"(88")	4 1/2"	3	7 1/2"	41 7/16"	75 3/8"		26 23/32"	40 5/16"	48"
7'4"(88")	4 1/2"	4	7 1/2"	40 1/8"	52 3/4"	75 1/4"	43 11/16"	40 5/16"	48"
7'6"(90")	4 1/2"	3	7 1/2"	42 7/16"	77 3/8"		27 7/32"	40 5/16"	48"
7'6"(90")	4 1/2"	4	7 1/2"	30 51/64"	54 3/32"	77 17/64"	44 11/16"	40 5/16"	48"
7'8"(92")	4 1/2"	4	7 1/2"	31 29/64"	55 13/32"	79 15/64"	45 11/16"	40 5/16"	48"
7'10"(94")	4 1/2"	4	7 1/2"	32 1/8"	56 3/4"	81 1/4"	46 11/16"	40 5/16"	48"
8'0"(96")	4 1/2"	4	7 1/2"	32 51/64"	58 3/32"	83 17/64"	47 11/16"	40 5/16"	48"
10'0"(120")	4 1/2"	4	7 1/2"	40 51/64"	74 3/32"	107 17/64"	59 11/16"	40 5/16"	48"

Top to top hinge location  
 Top to center EPT location  
 Bottom to center strike location

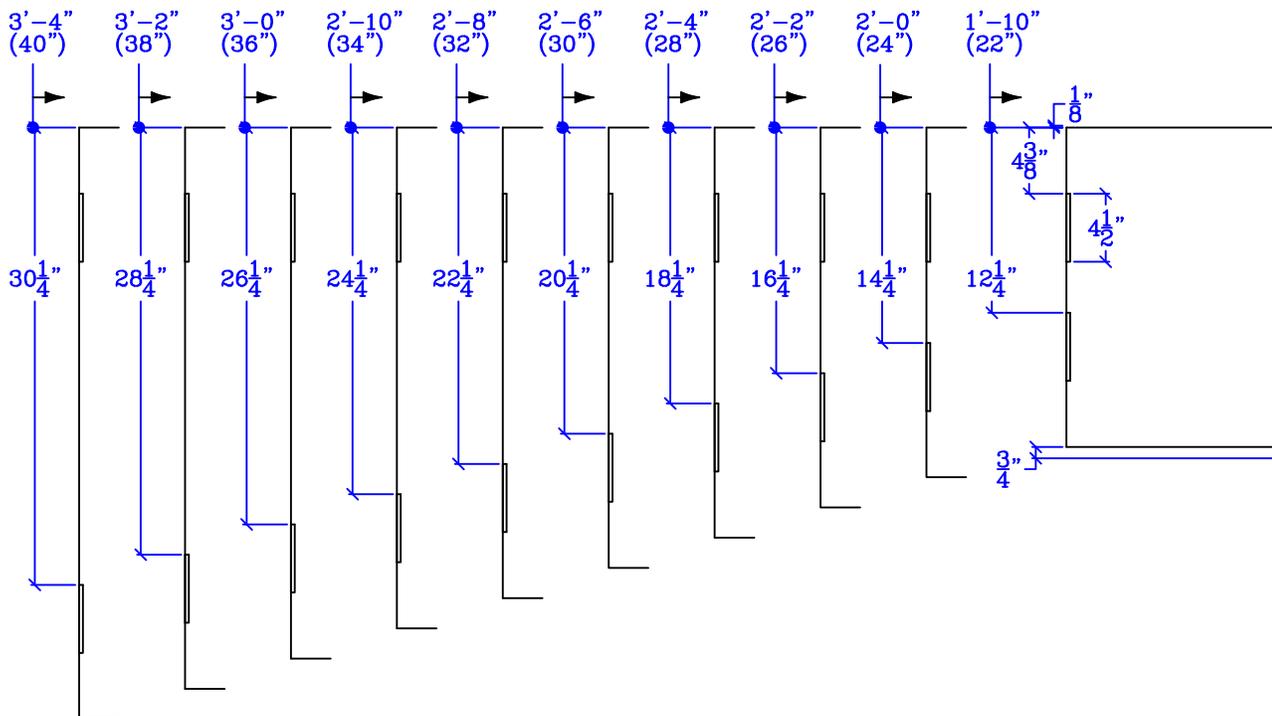
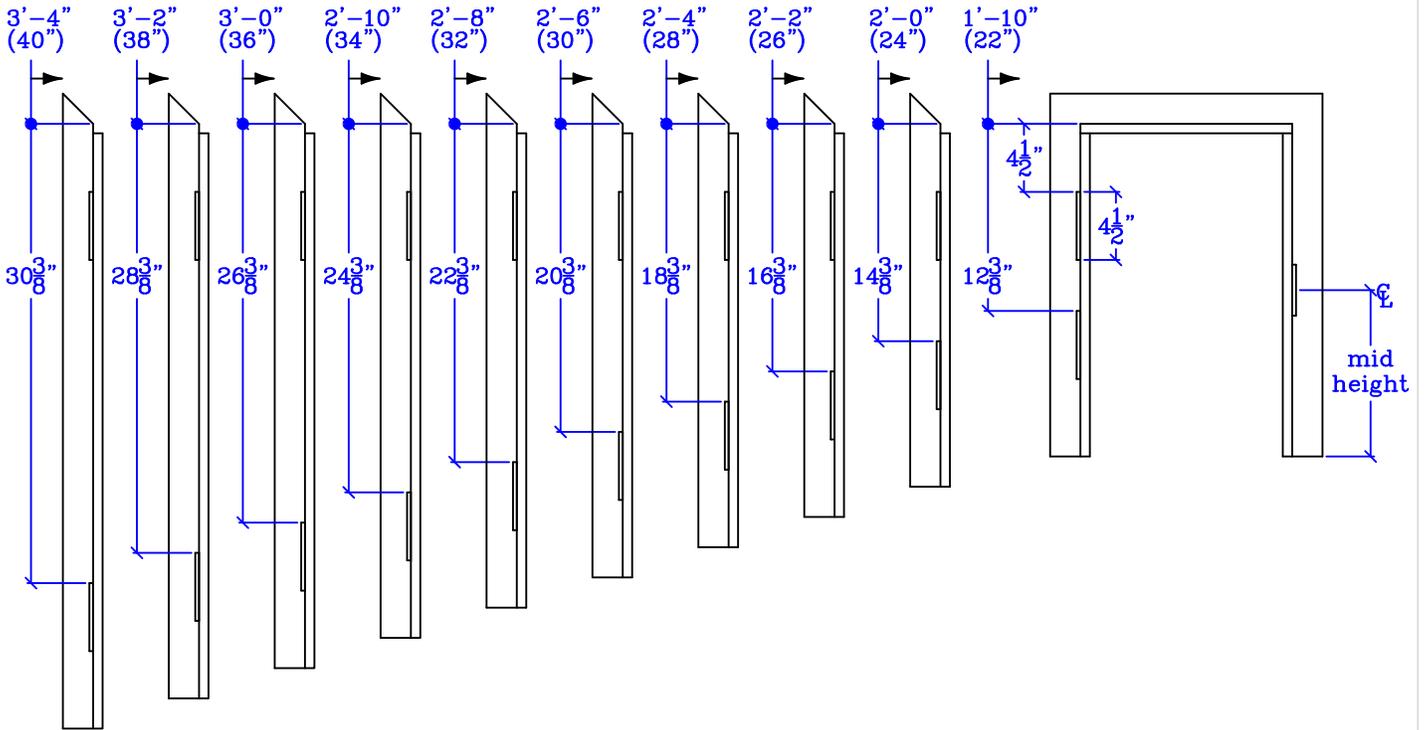
### 4 1/2" hinge, EPT and lock location



Door Nominal Height	Hinge size	Qt.	Machining Dimensions							
			A	B	C	D	E	F	G	H
6'6"(78")	4 1/2"	3	7 3/8"	36 5/16"	65 1/4"		24 3/32"	39 3/16"	39 9/16"	47 1/4"
6'8"(80")	4 1/2"	3	7 3/8"	37 5/16"	67 1/4"		24 19/32"	39 3/16"	39 9/16"	47 1/4"
6'8"(80")	4 1/2"	4	7 3/8"	27 21/64"	47 9/32"	67 15/64"	39 9/16"	39 3/16"	39 9/16"	47 1/4"
6'10"(82")	4 1/2"	3	7 3/8"	38 5/16"	69 1/4"		25 3/32"	39 3/16"	39 9/16"	47 1/4"
6'10"(82")	4 1/2"	4	7 3/8"	28"	48 5/8"	69 1/4"	40 9/16"	39 3/16"	39 9/16"	47 1/4"
7'0"(84")	4 1/2"	3	7 3/8"	39 5/16"	71 1/4"		25 19/32"	39 3/16"	39 9/16"	47 1/4"
7'0"(84")	4 1/2"	4	7 3/8"	28 43/64"	49 31/32"	71 17/64"	41 9/16"	39 3/16"	39 9/16"	47 1/4"
7'2"(86")	4 1/2"	3	7 3/8"	40 5/16"	73 1/4"		26 3/32"	39 3/16"	39 9/16"	47 1/4"
7'2"(86")	4 1/2"	4	7 3/8"	29 21/64"	51 9/32"	73 15/64"	42 9/16"	39 3/16"	39 9/16"	47 1/4"
7'4"(88")	4 1/2"	3	7 3/8"	41 5/16"	75 1/4"		26 19/32"	39 3/16"	39 9/16"	47 1/4"
7'4"(88")	4 1/2"	4	7 3/8"	30"	52 5/8"	75 1/4"	43 9/16"	39 3/16"	39 9/16"	47 1/4"
7'6"(90")	4 1/2"	3	7 3/8"	42 5/16"	77 1/4"		27 3/32"	39 3/16"	39 9/16"	47 1/4"
7'6"(90")	4 1/2"	4	7 3/8"	30 43/64"	53 31/32"	77 17/64"	44 9/16"	39 3/16"	39 9/16"	47 1/4"
7'8"(92")	4 1/2"	4	7 3/8"	31 21/64"	55 9/32"	79 15/64"	45 9/16"	39 3/16"	39 9/16"	47 1/4"
7'10"(94")	4 1/2"	4	7 3/8"	32"	56 5/8"	81 1/4"	46 9/16"	39 3/16"	39 9/16"	47 1/4"
8'0"(96")	4 1/2"	4	7 3/8"	32 43/64"	57 31/32"	83 17/64"	47 9/16"	39 3/16"	39 9/16"	47 1/4"
10'0"(120")	4 1/2"	4	7 3/8"	40 43/64"	73 31/32"	107 17/64"	59 9/16"	39 3/16"	39 9/16"	47 1/4"

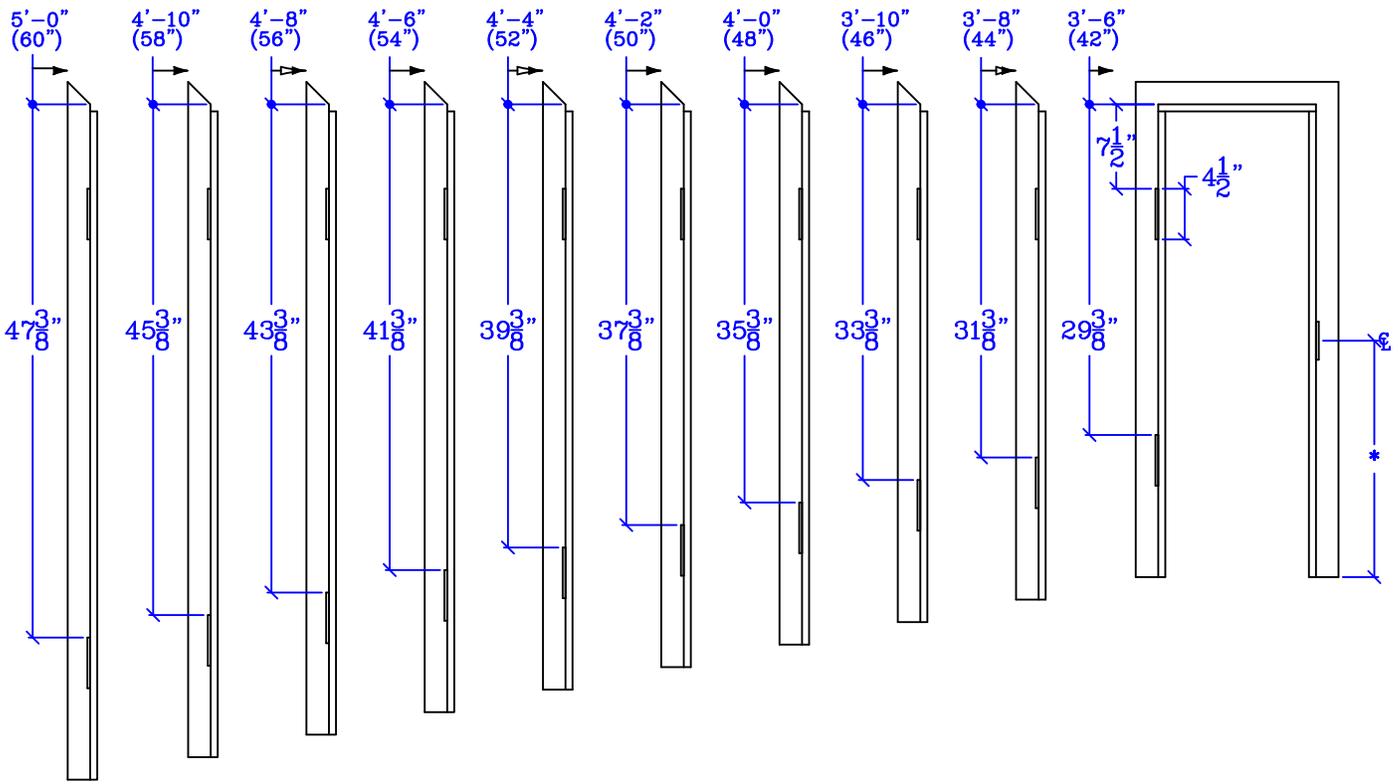
Top to top hinge location  
 Top to center EPT location  
 Bottom to center lock location, based on 3/4" undercut

**4 1/2" hinge location for 1'10" to 3'4"**

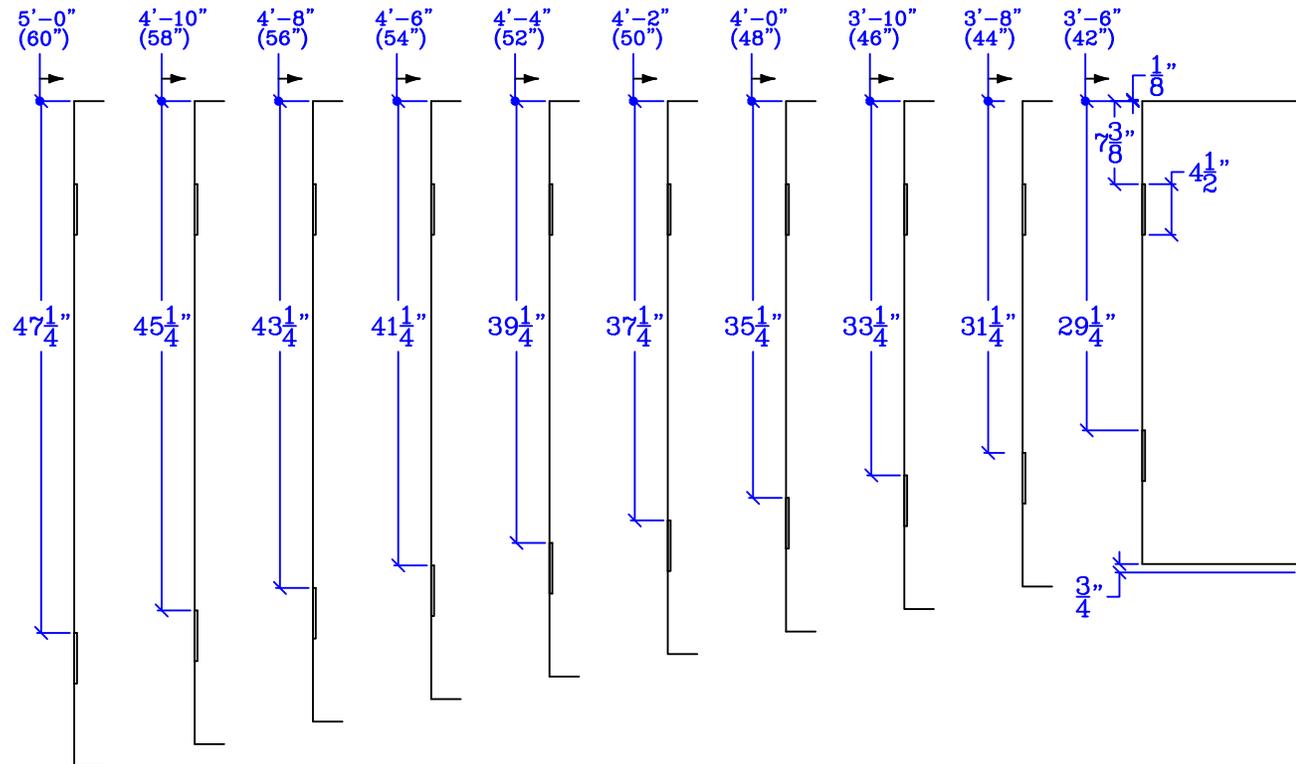


Top to top hinge locations  
Bottom to center strike location

**4 1/2" hinge location for 3'6" to 5'0"**

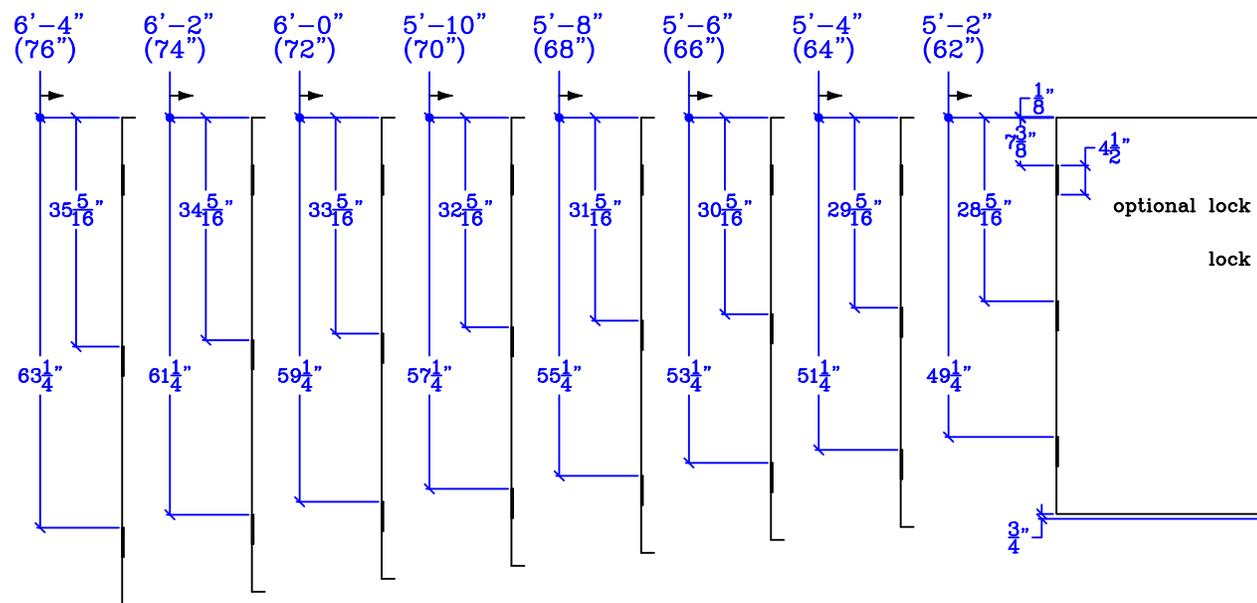
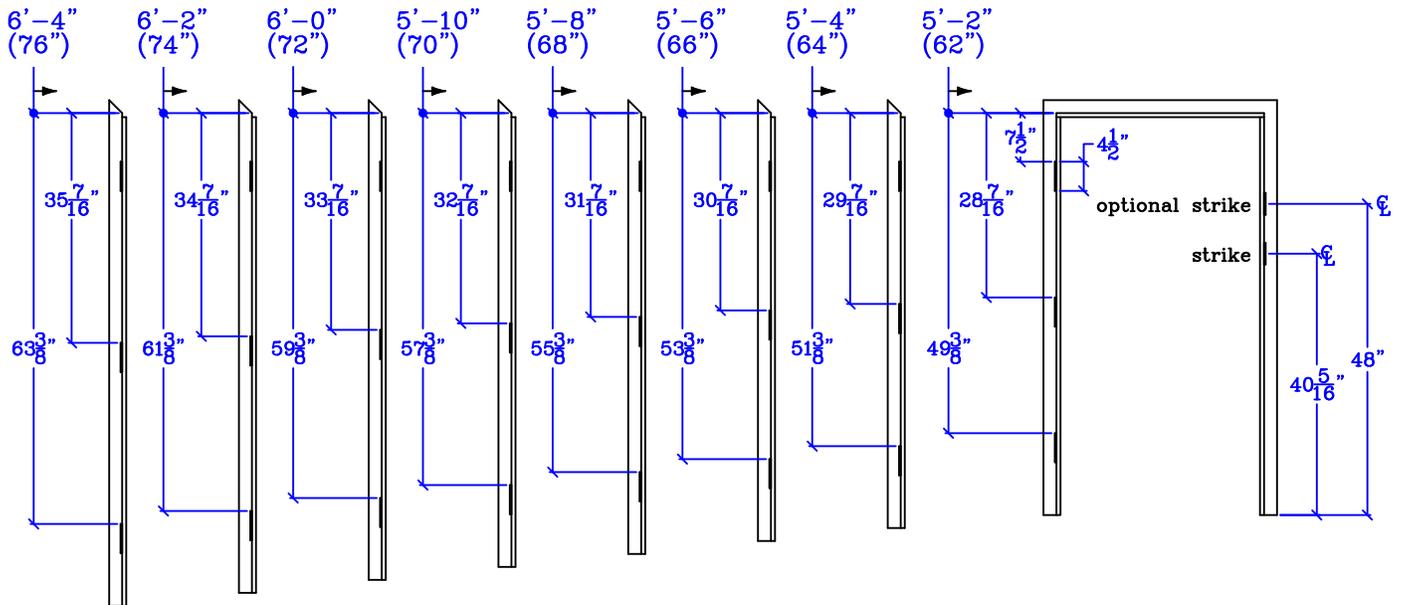


\* = Mid height up to 59 15/16", 40 5/16" for greater than 60"



Top to top hinge locations  
Bottom to center strike location

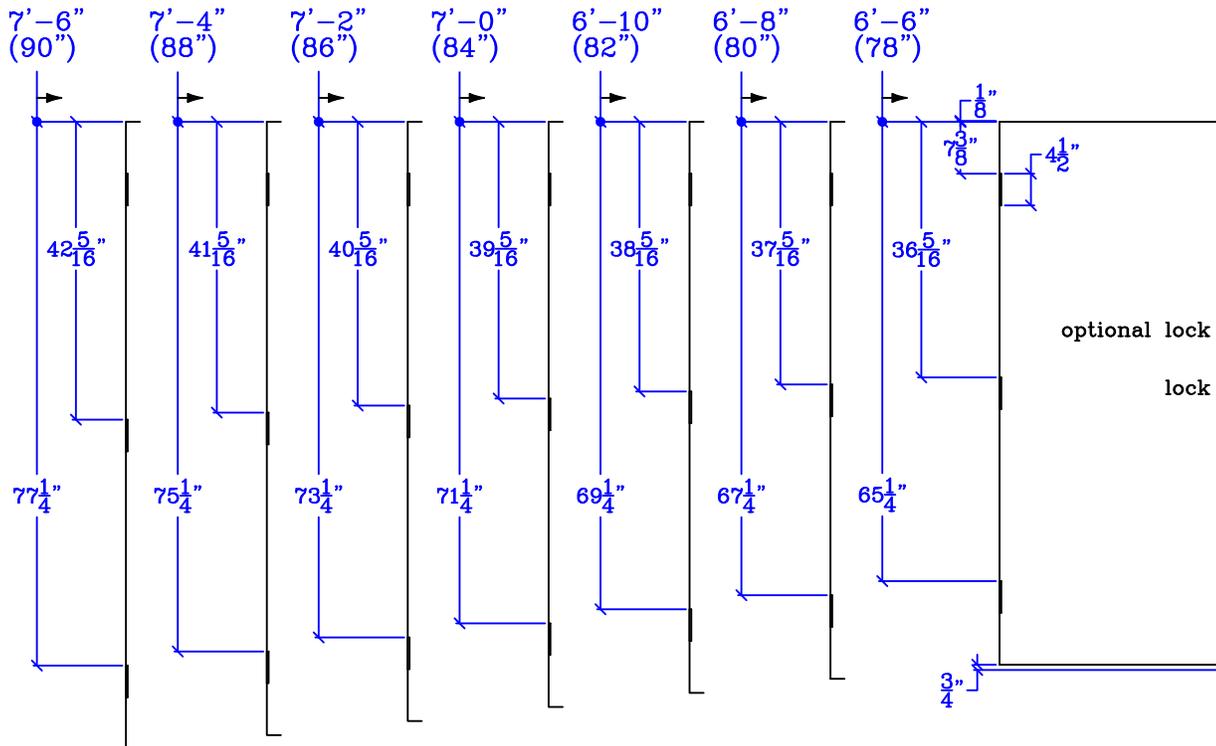
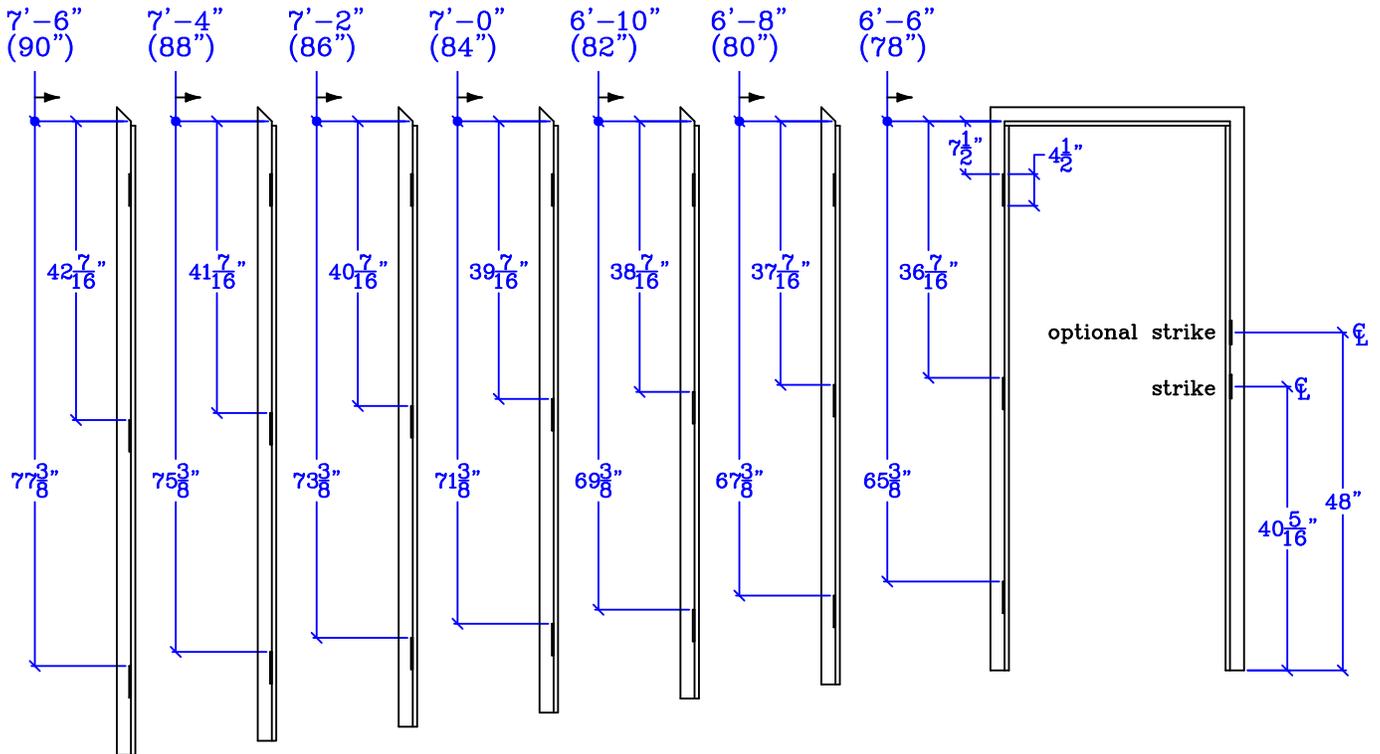
**4 1/2" hinge location for 5'2" to 6'4"**



Top to top hinge locations  
Bottom to center strike location

Hardware location

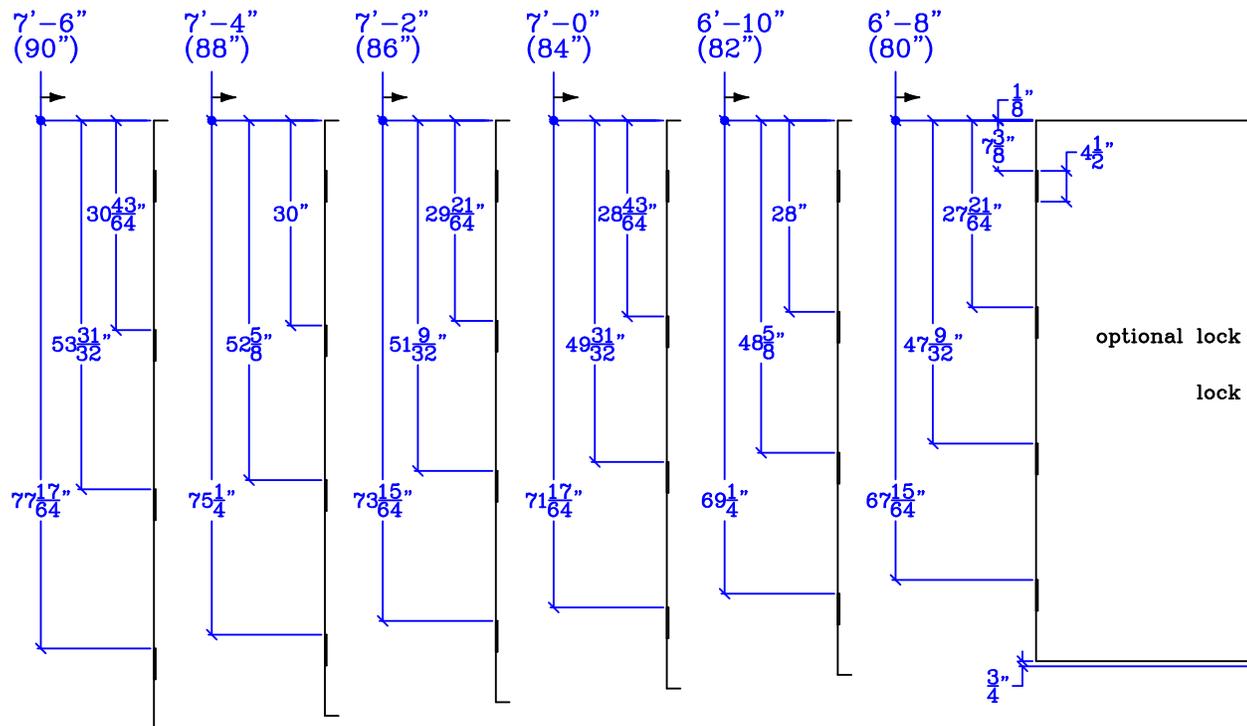
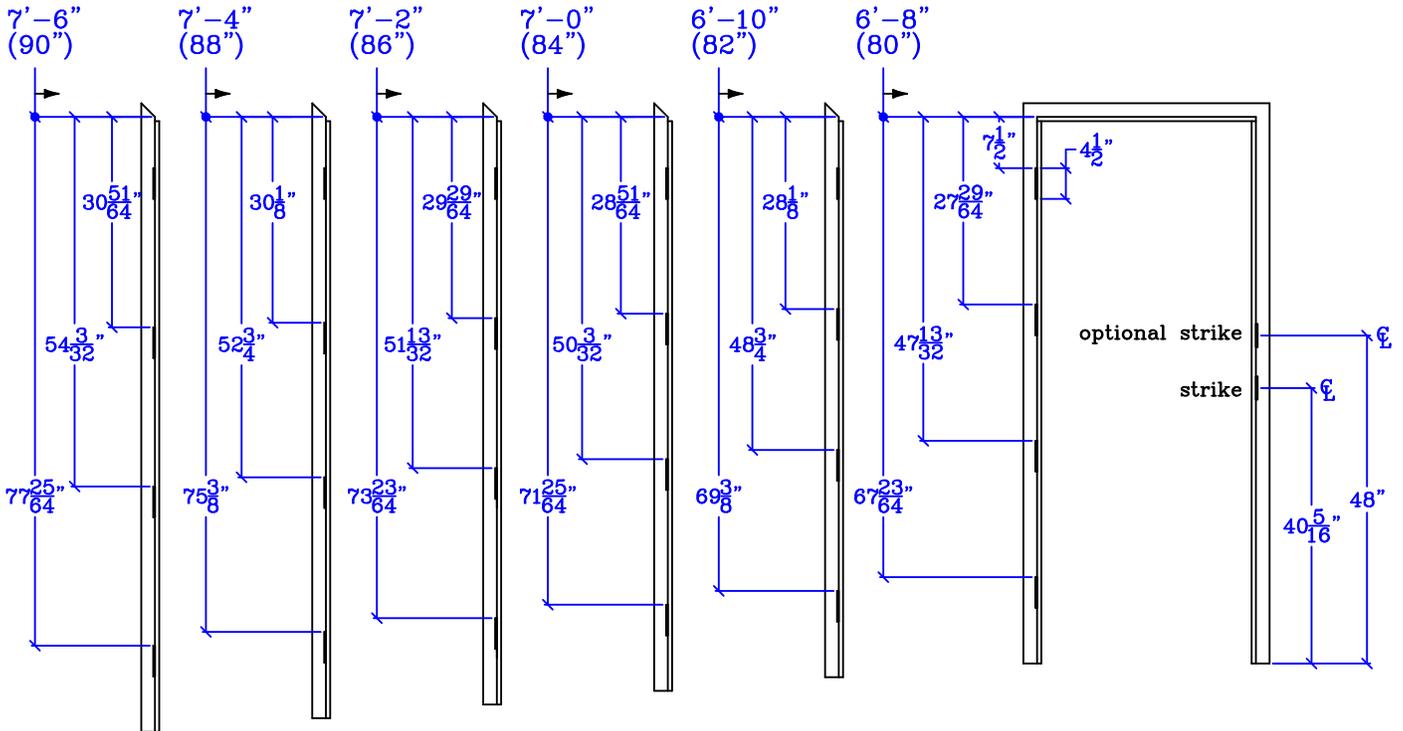
**4 1/2" hinge location for 6'6" to 7'6"**



Top to top hinge locations  
Bottom to center strike location

Hardware location

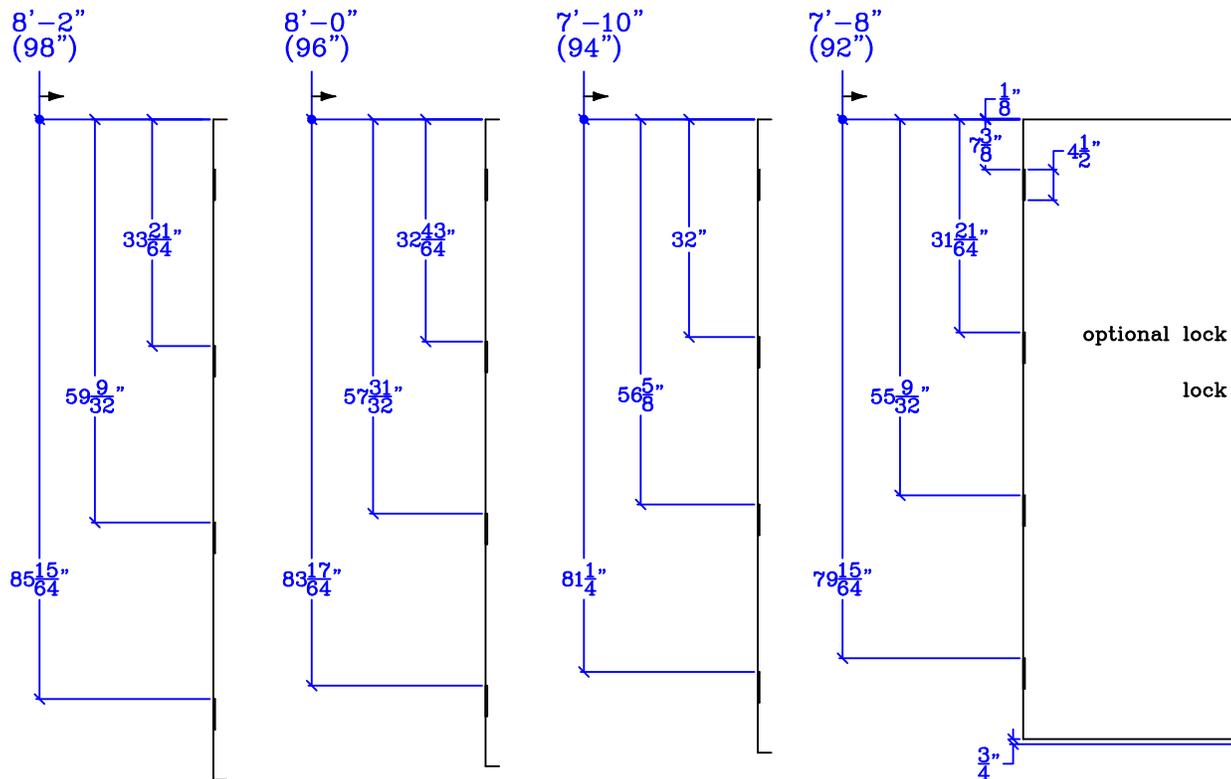
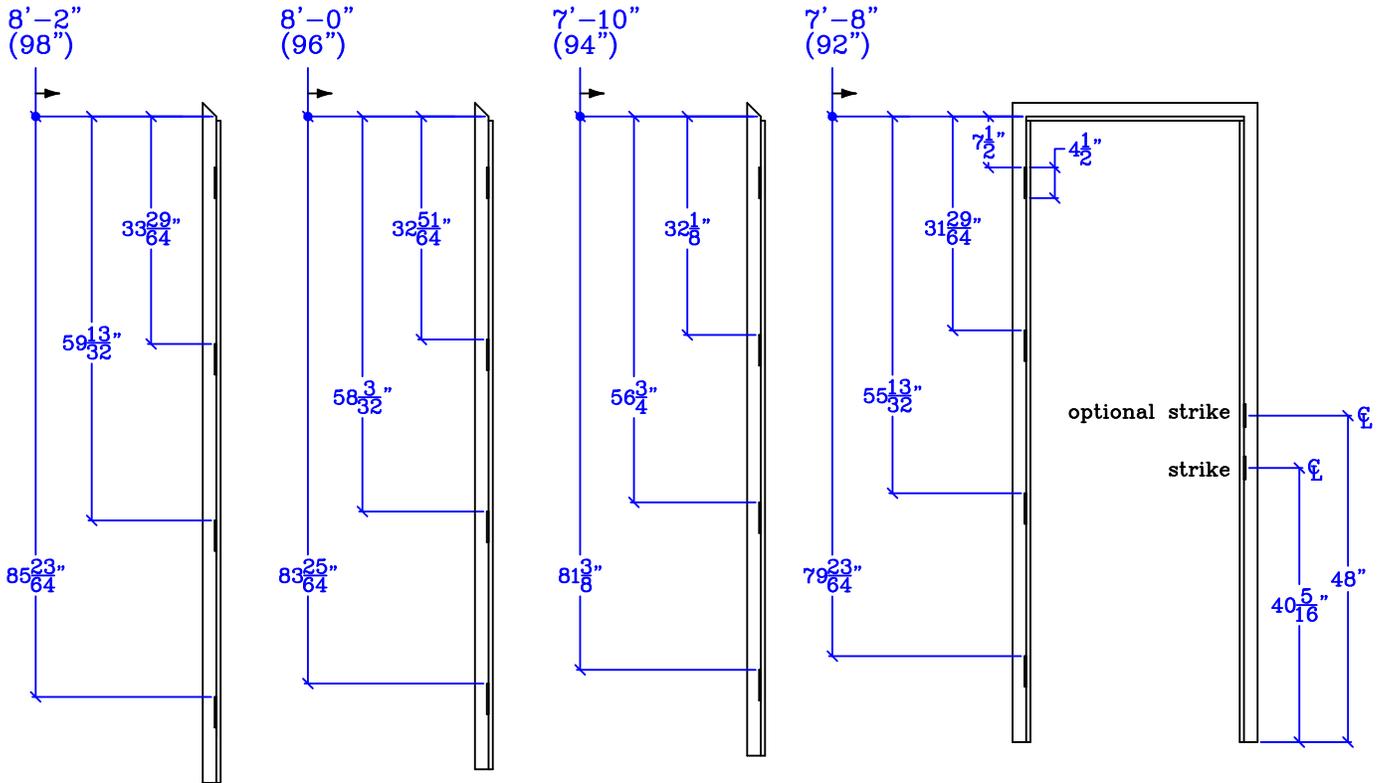
**4 1/2" hinge location for 6'8" to 7'6"**



Top to top hinge locations  
Bottom to center strike location

Hardware location

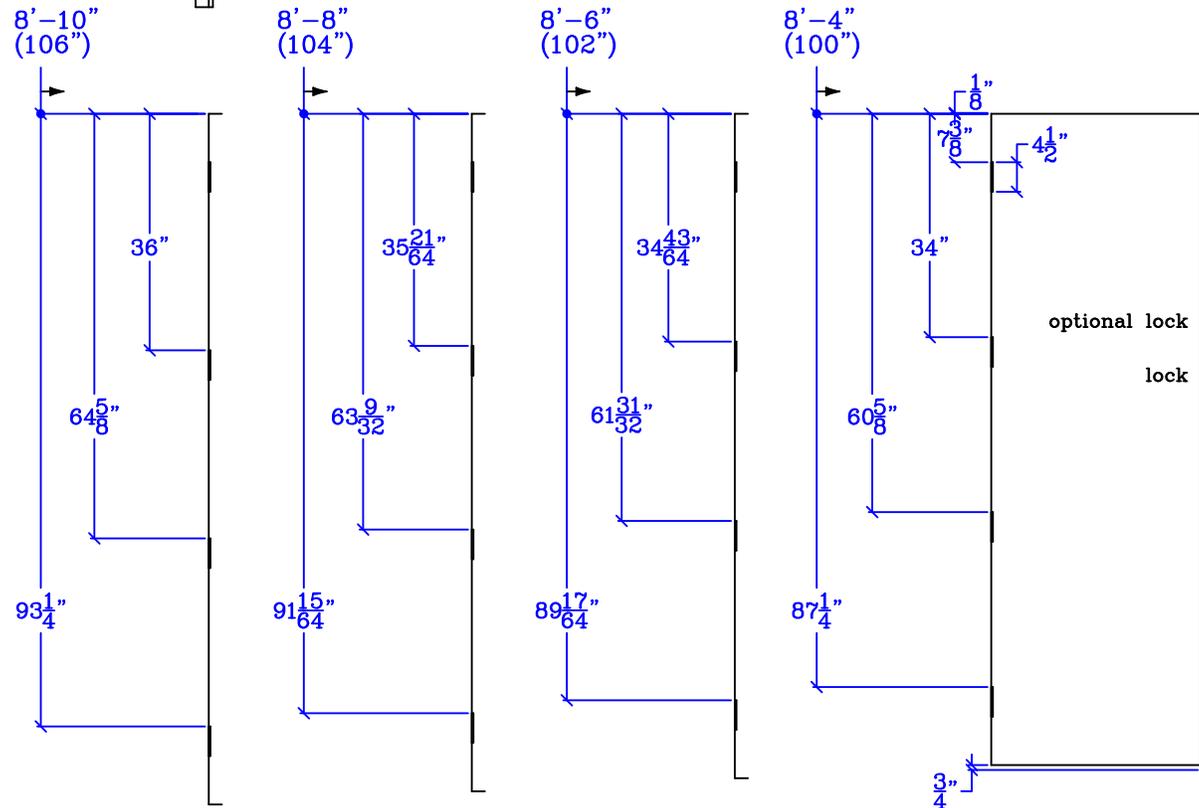
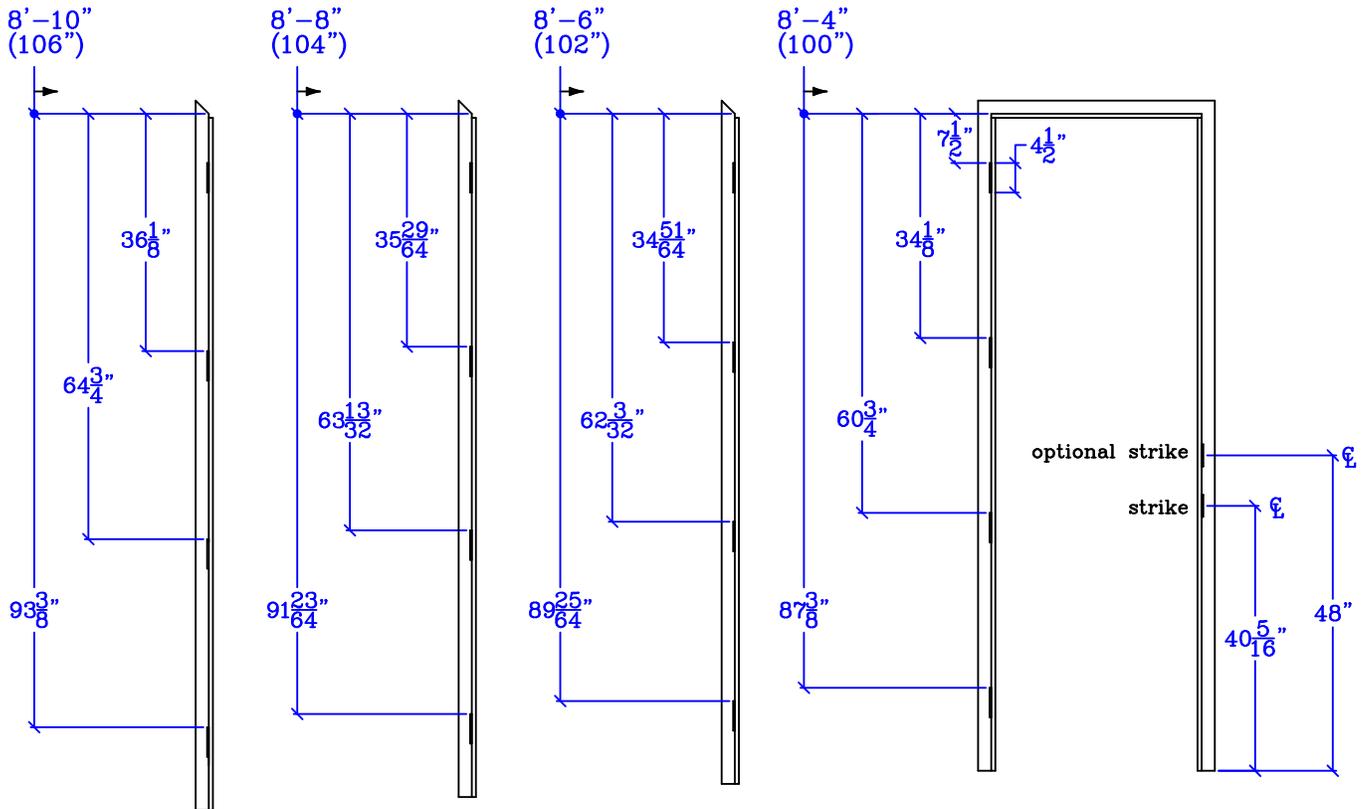
**4 1/2" hinge location for 7'8" to 8'2"**



Top to top hinge locations  
Bottom to center strike location

Hardware location

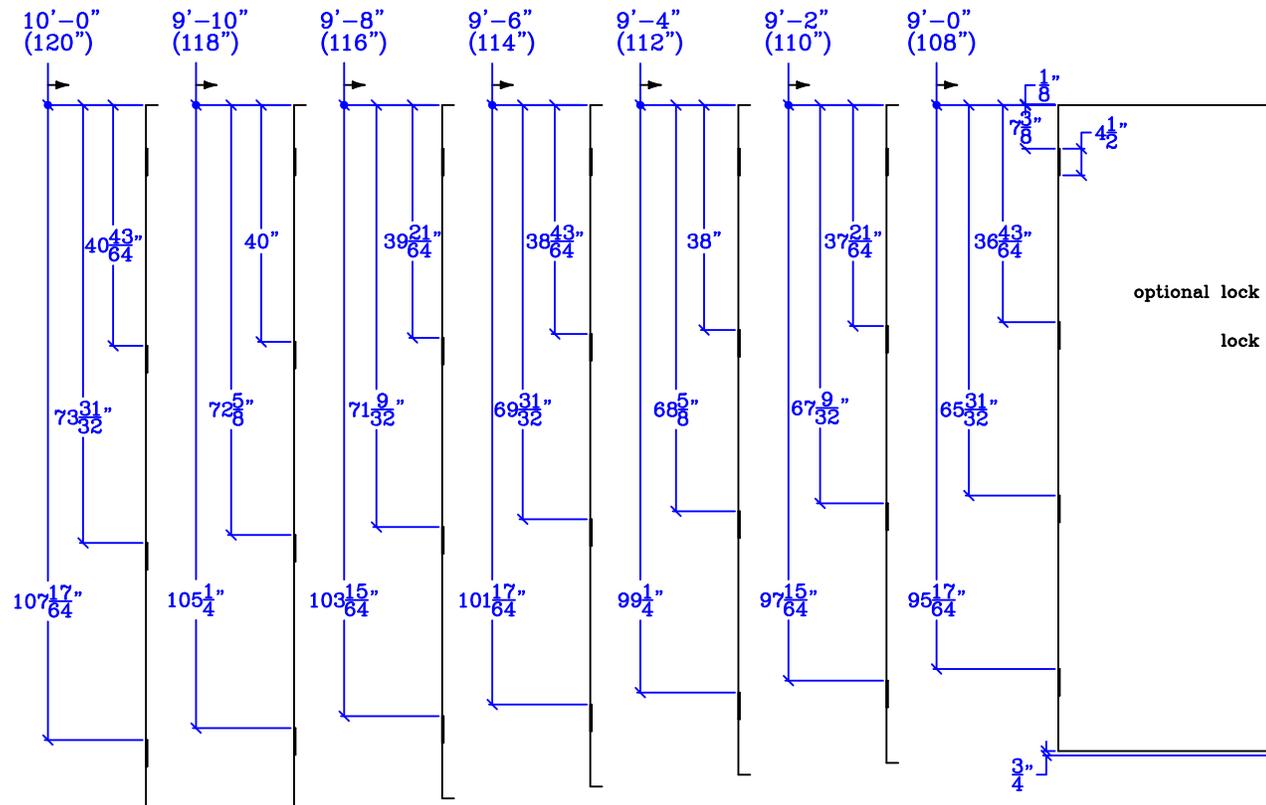
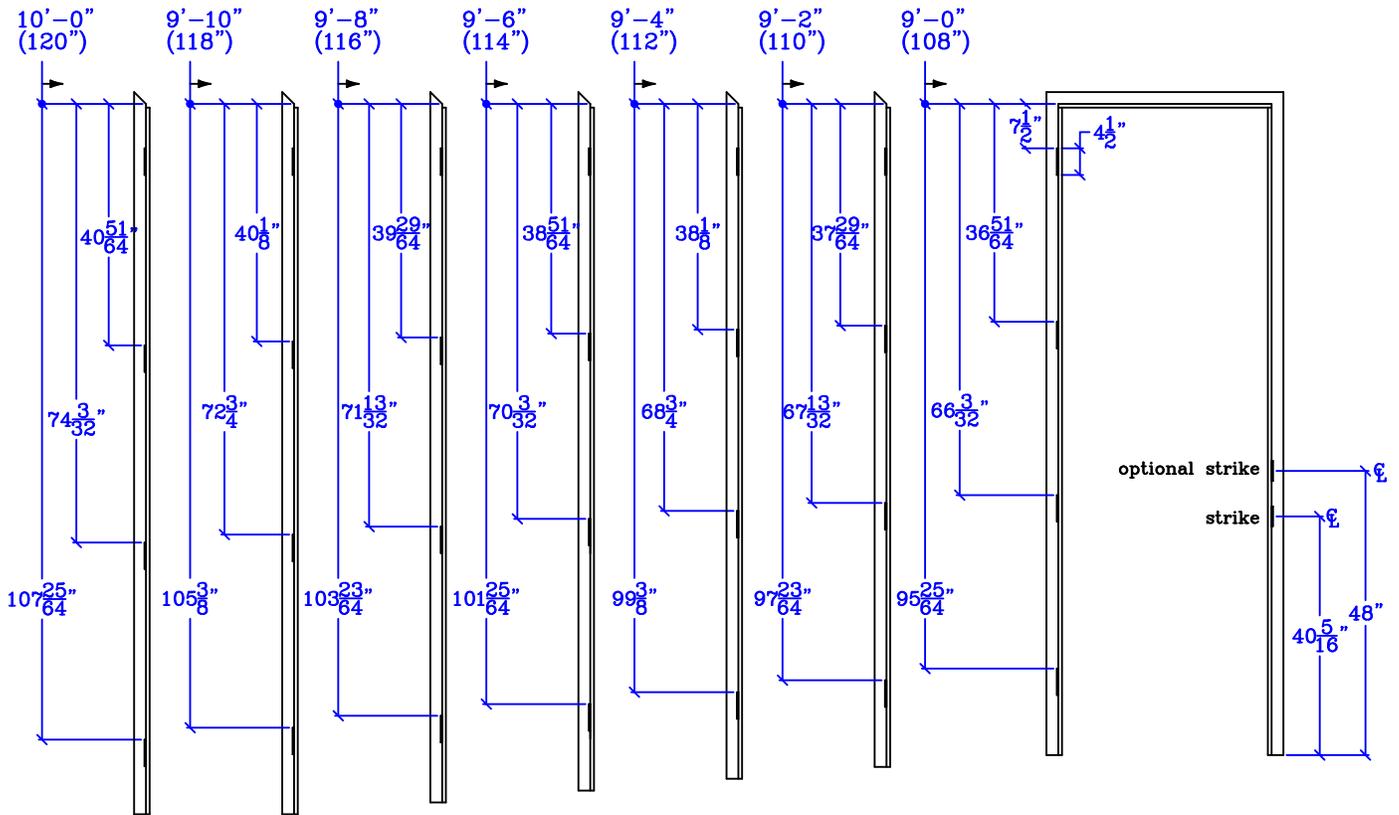
**4 1/2" hinge location for 8'4" to 8'10"**



Top to top hinge locations  
Bottom to center strike location

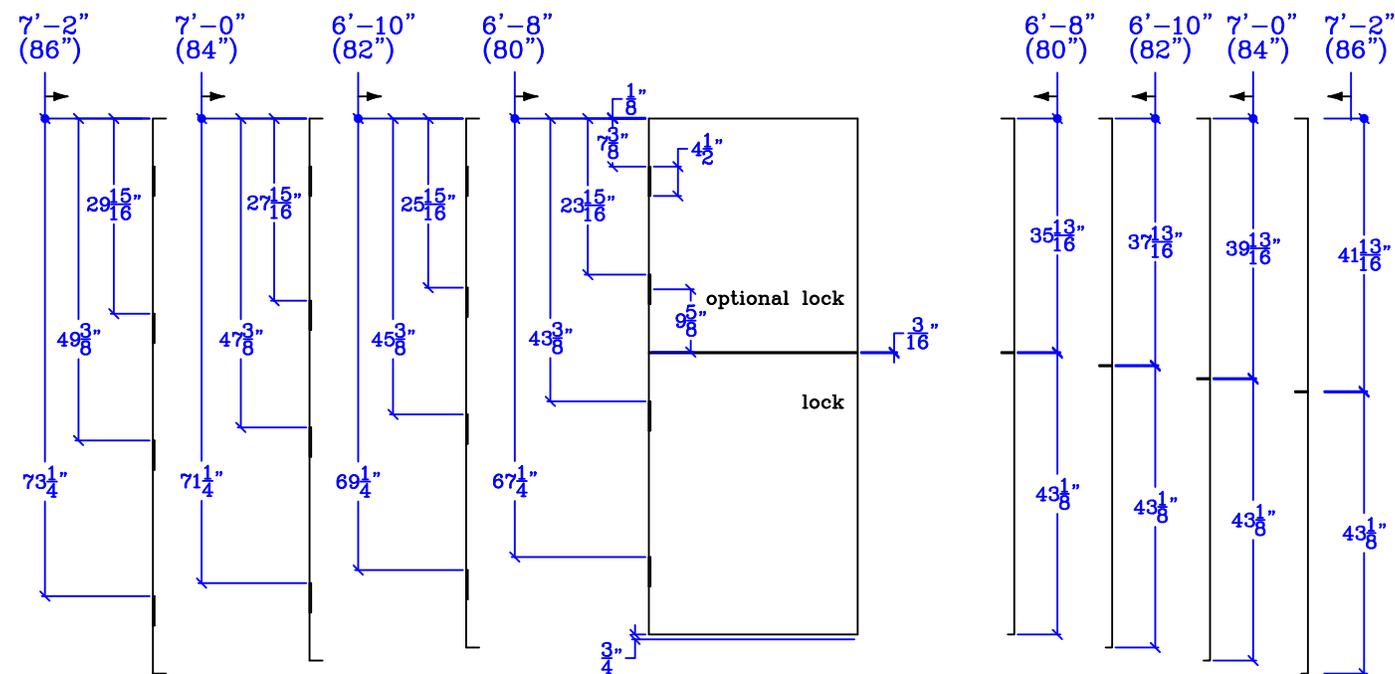
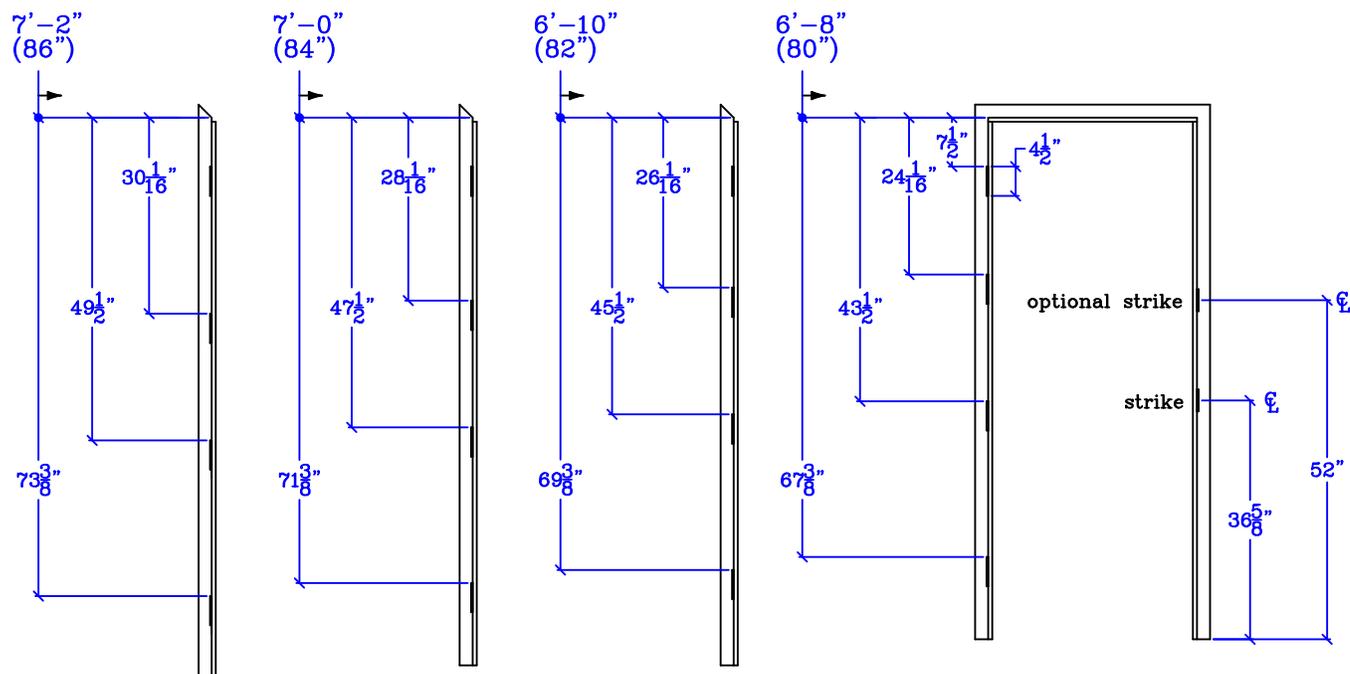
Hardware location

**4 1/2" hinge location for 9'0" to 10'0"**



Top to top hinge locations  
 Bottom to center strike location

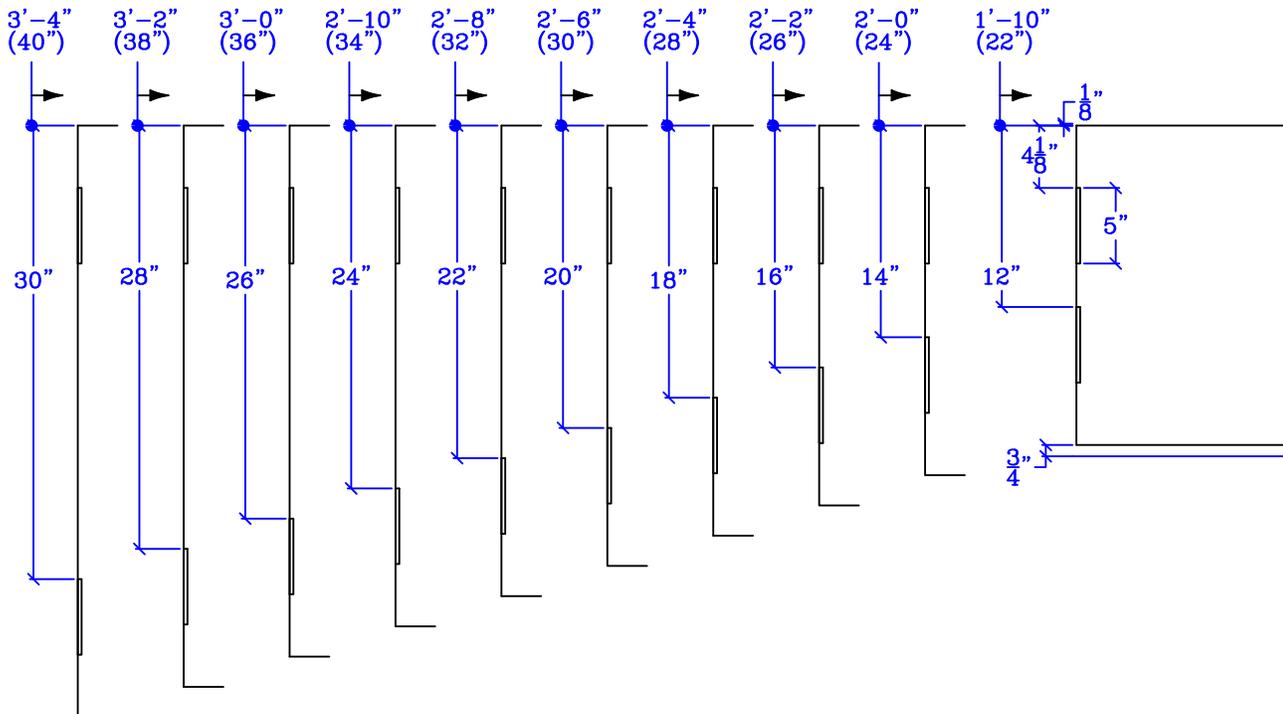
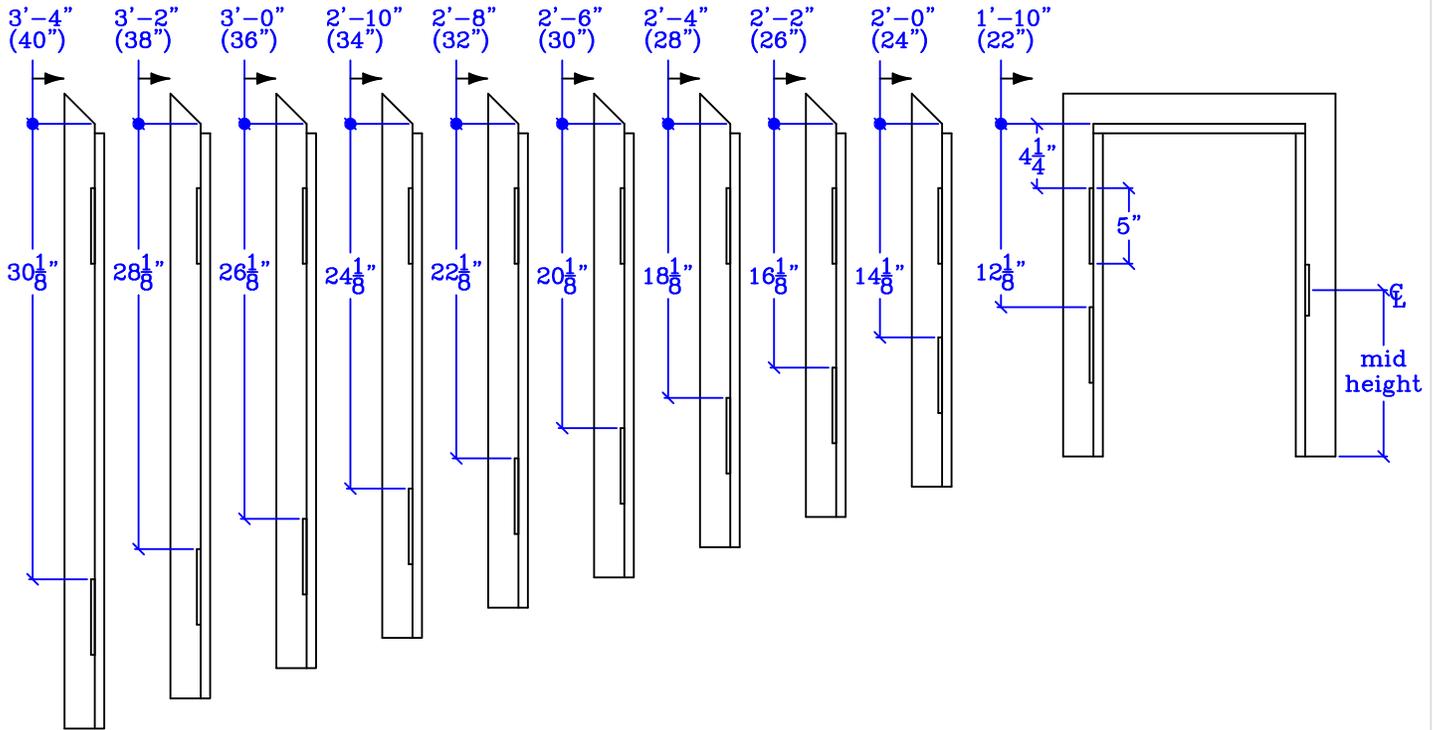
**4 1/2" hinge dutch location for 6'8" to 7'2"**



Top to top hinge locations  
Bottom to center strike location

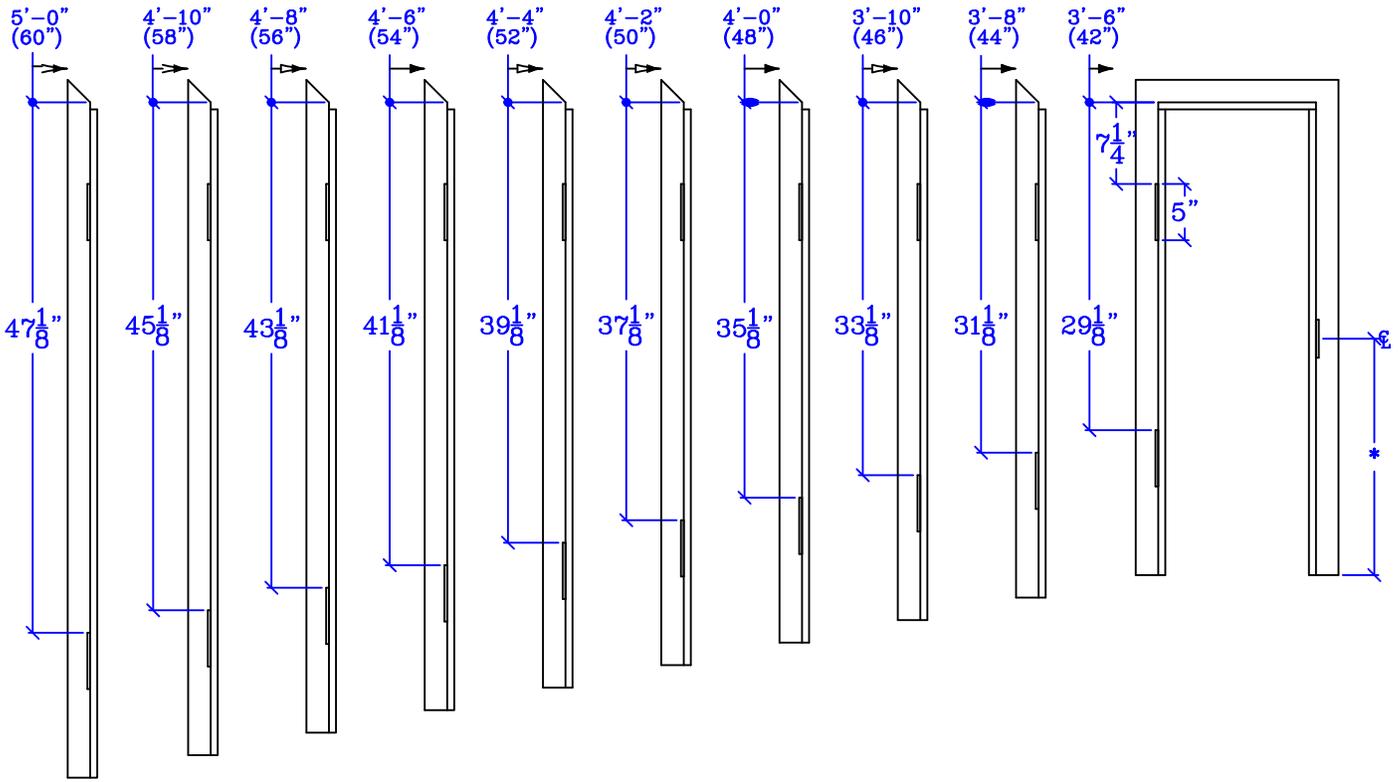
Hardware location

**5" hinge location for 1'10" to 3'4"**

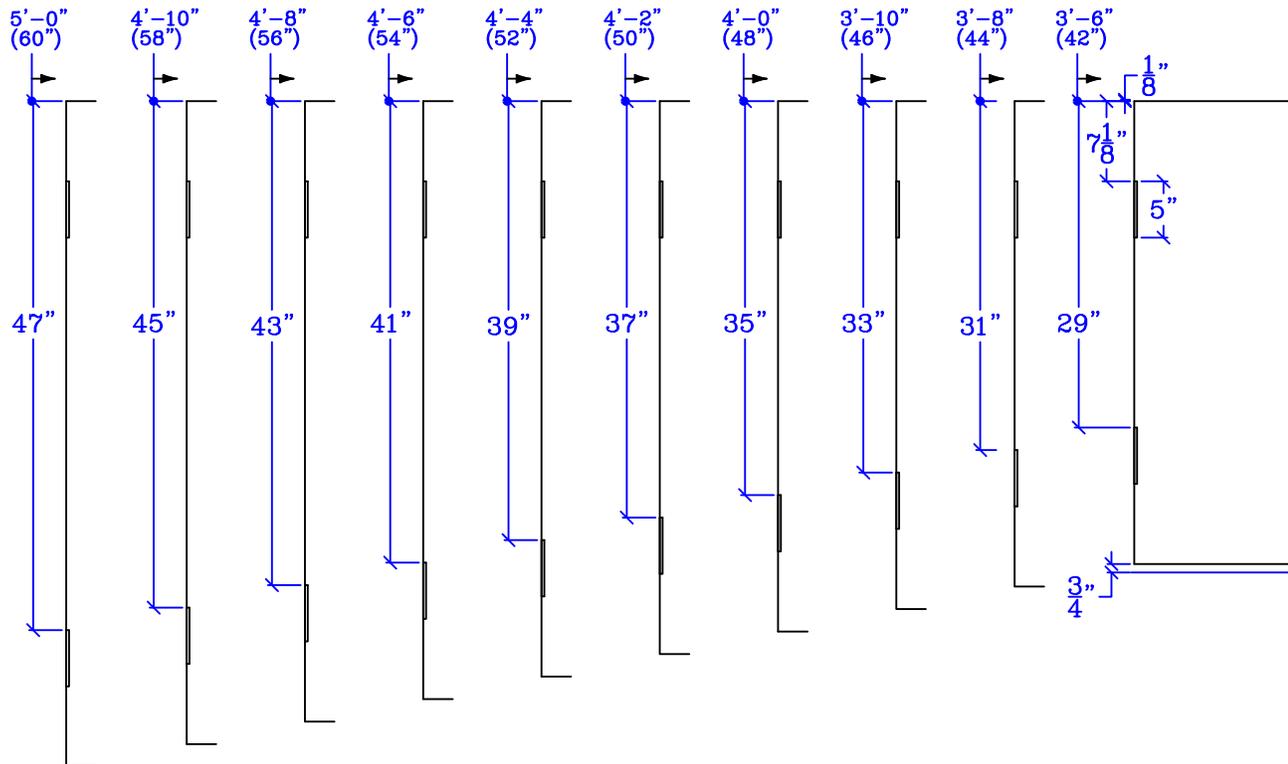


Top to top hinge locations  
Bottom to center strike location

**5" hinge location for 3'6" to 5'0"**

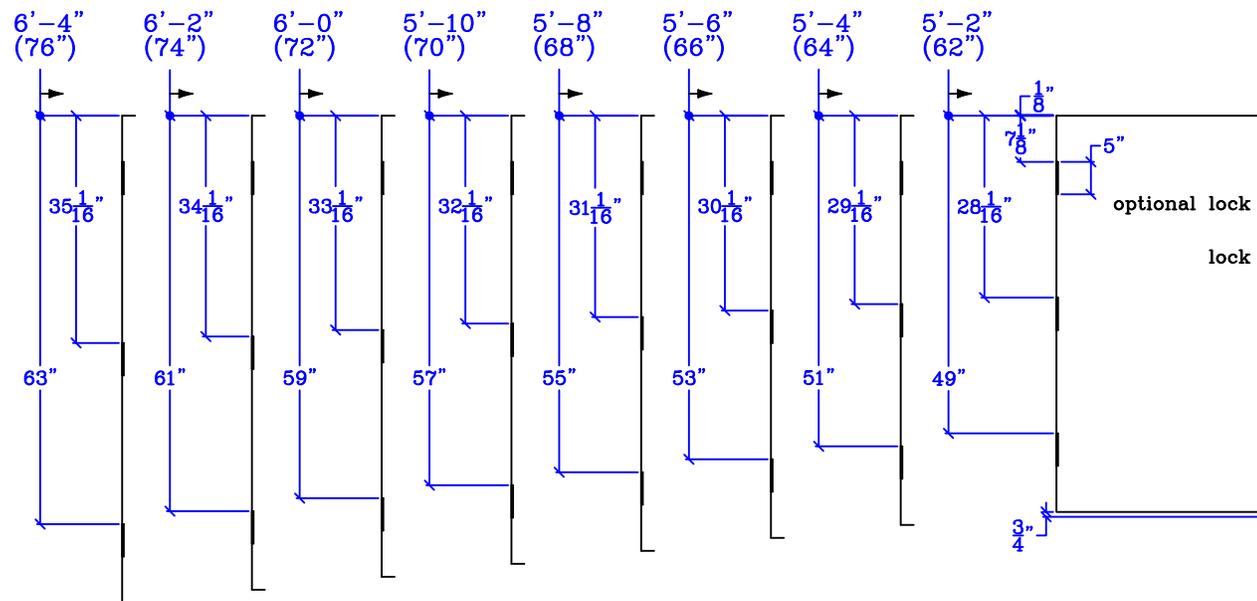
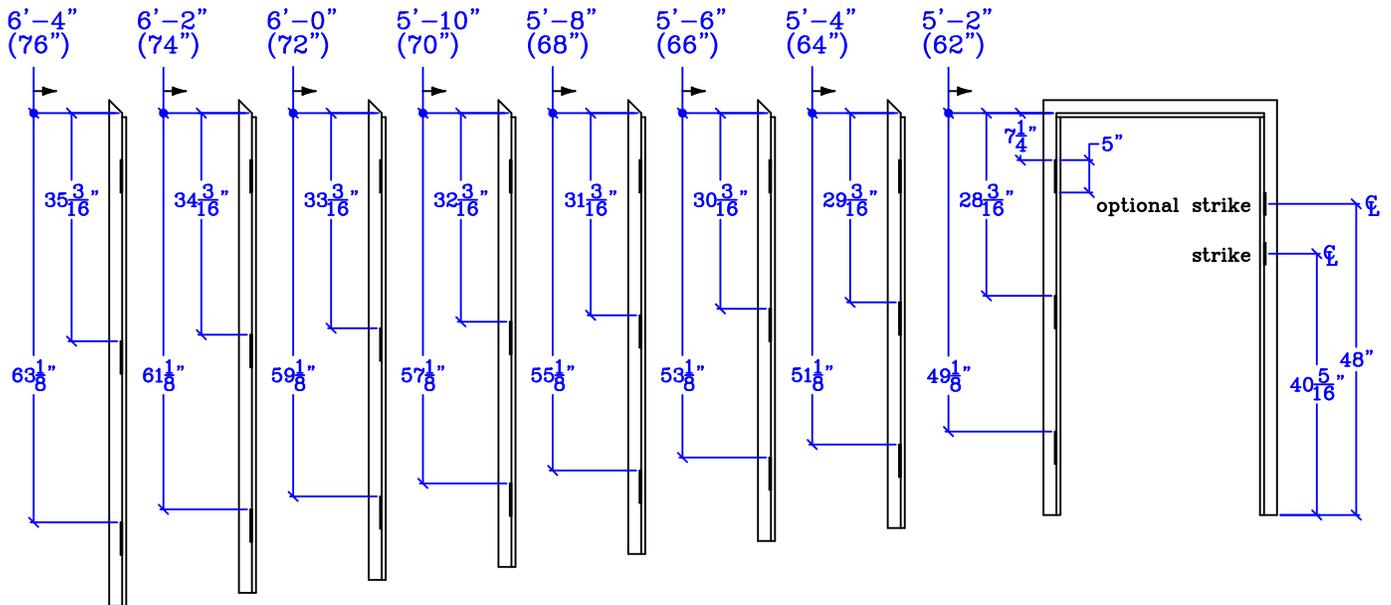


\* = Mid height up to 59 15/16", 40 5/16" for greater than 60"



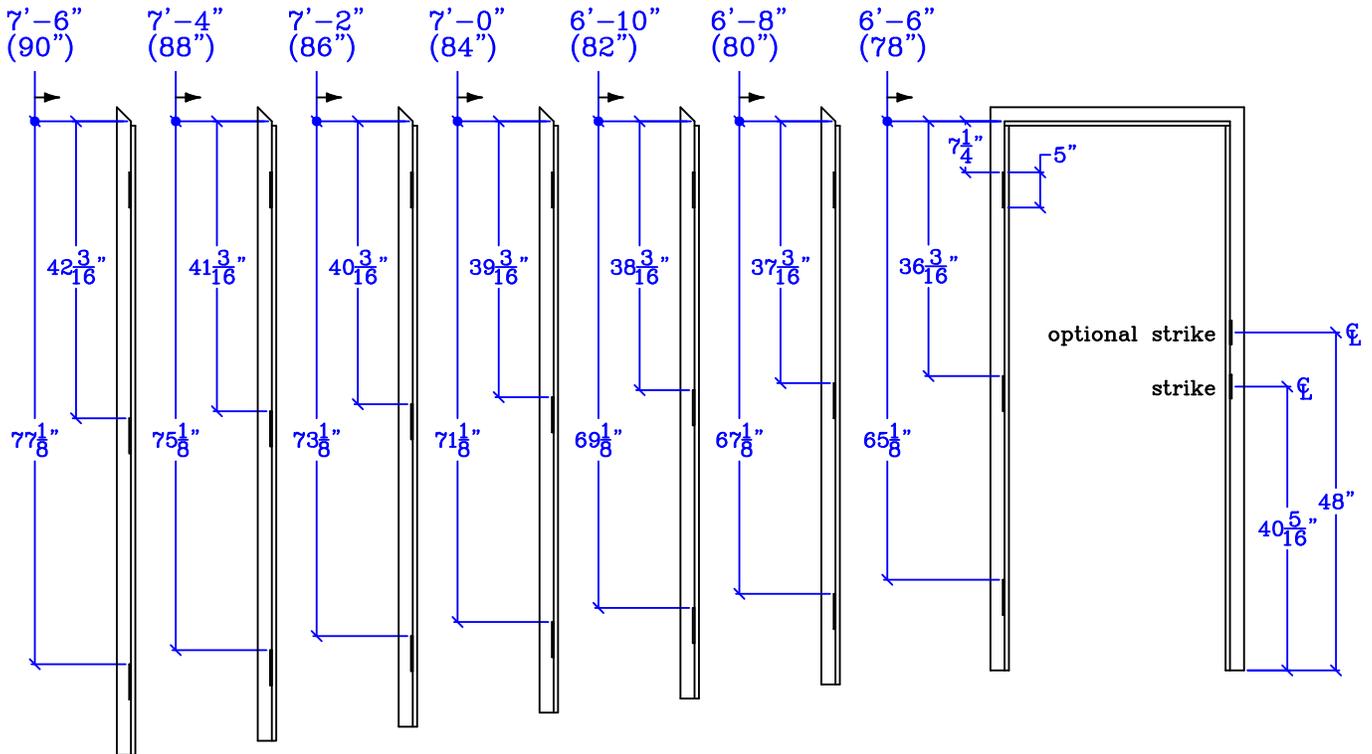
Top to top hinge locations  
Bottom to center strike location

**5" hinge location for 5'2" to 6'4"**

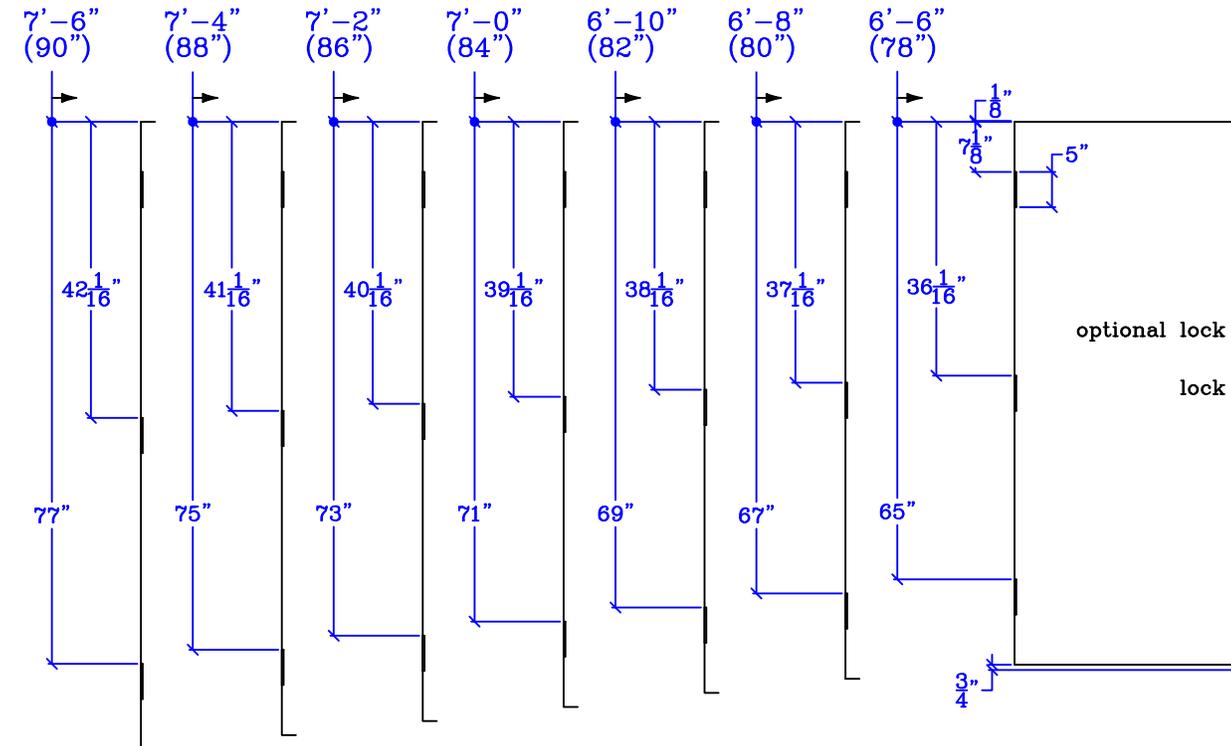


Top to top hinge locations  
Bottom to center strike location

**5" hinge location for 6'6" to 7'6"**

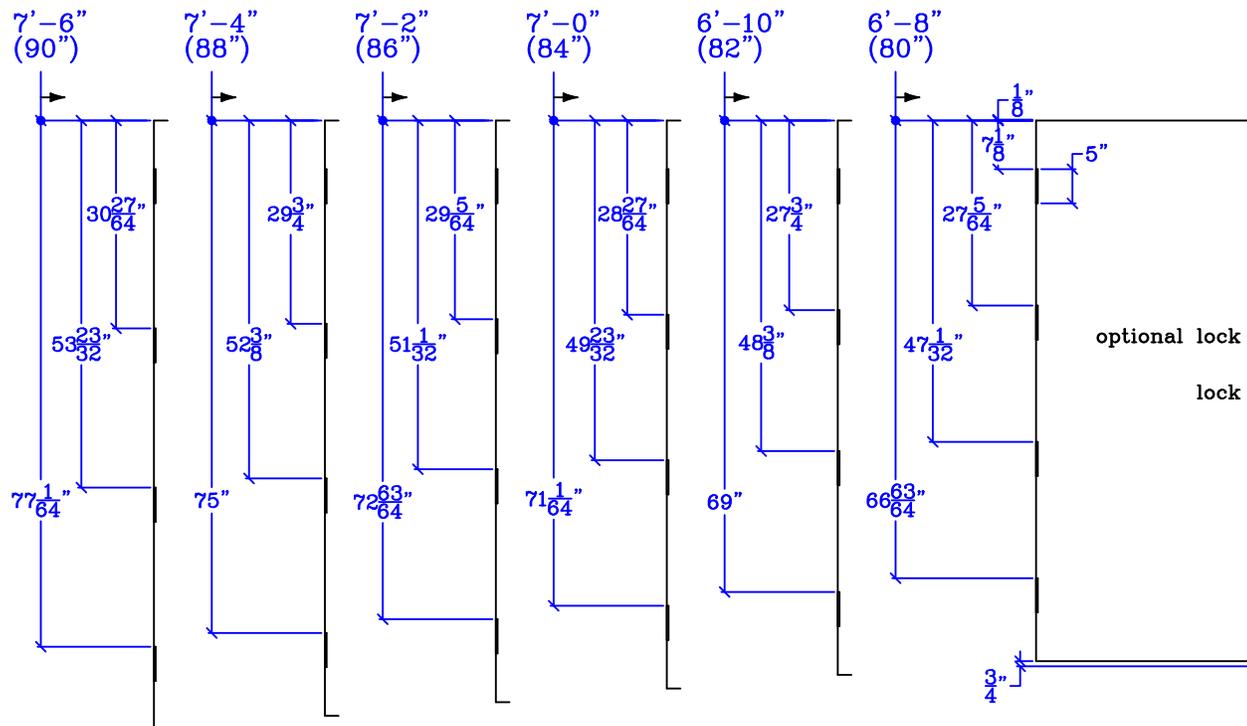
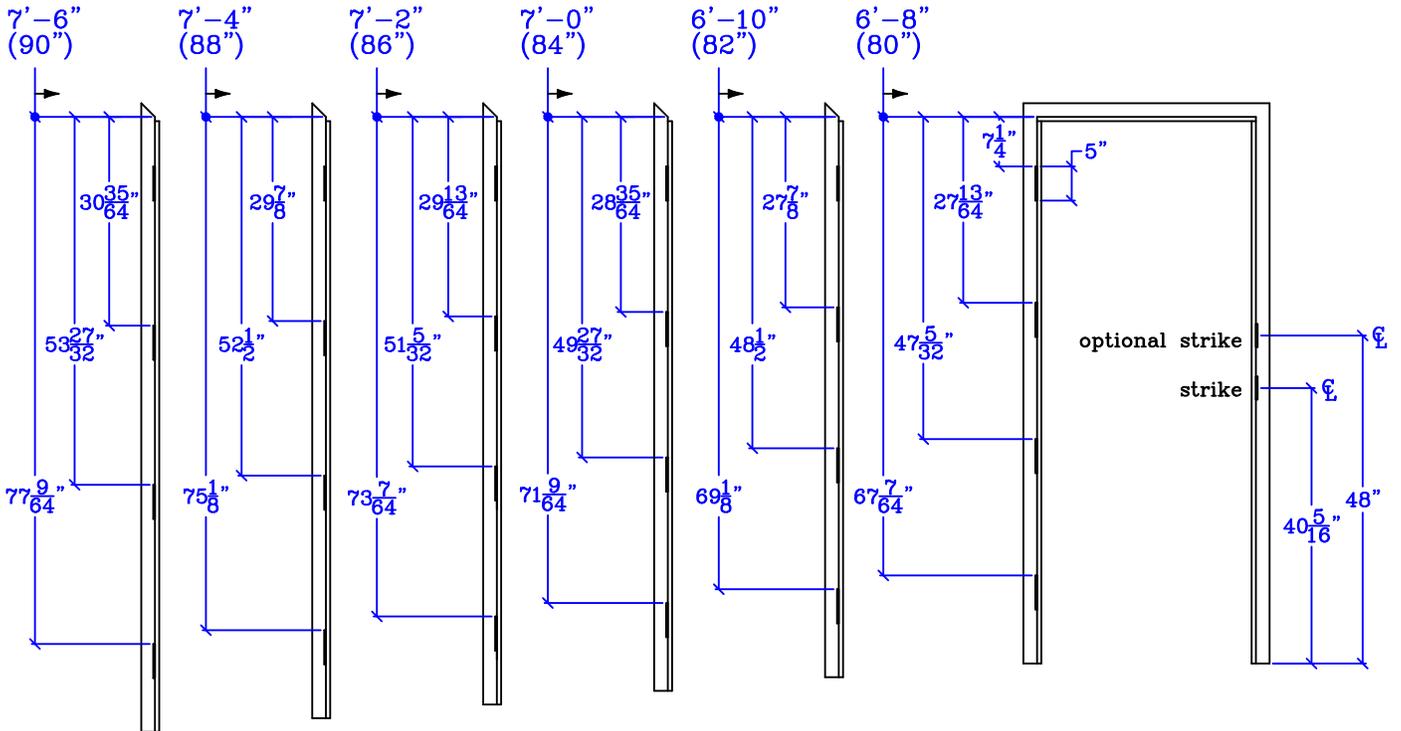


Hardware location



Top to top hinge locations  
 Bottom to center strike location

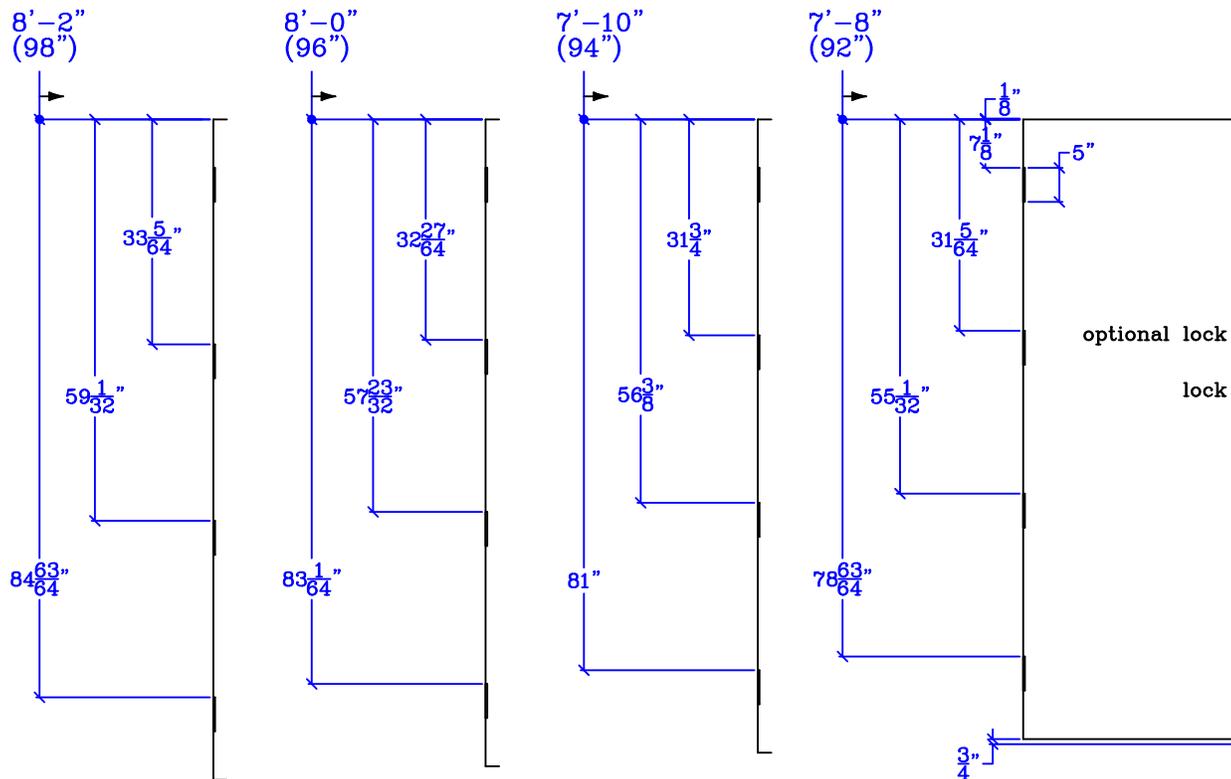
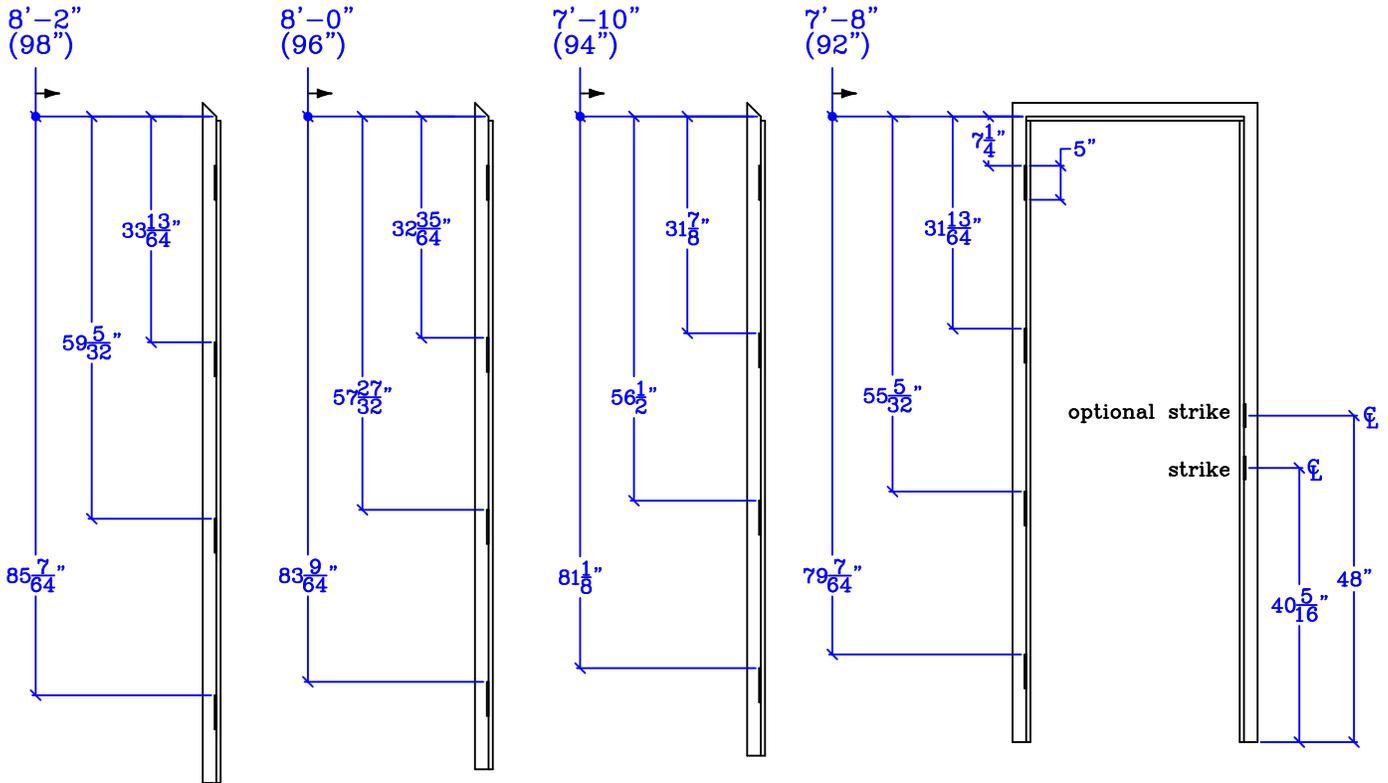
**5" hinge location for 6'8" to 7'6"**



Top to top hinge locations  
Bottom to center strike location

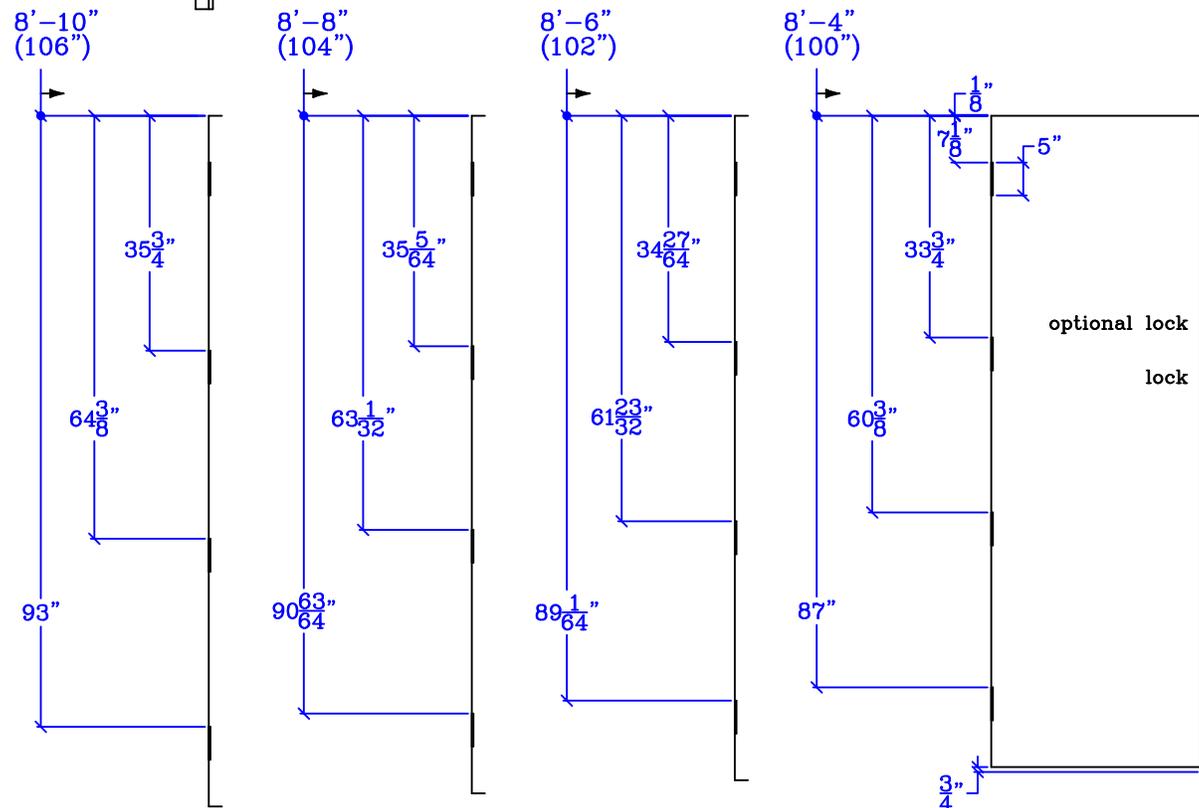
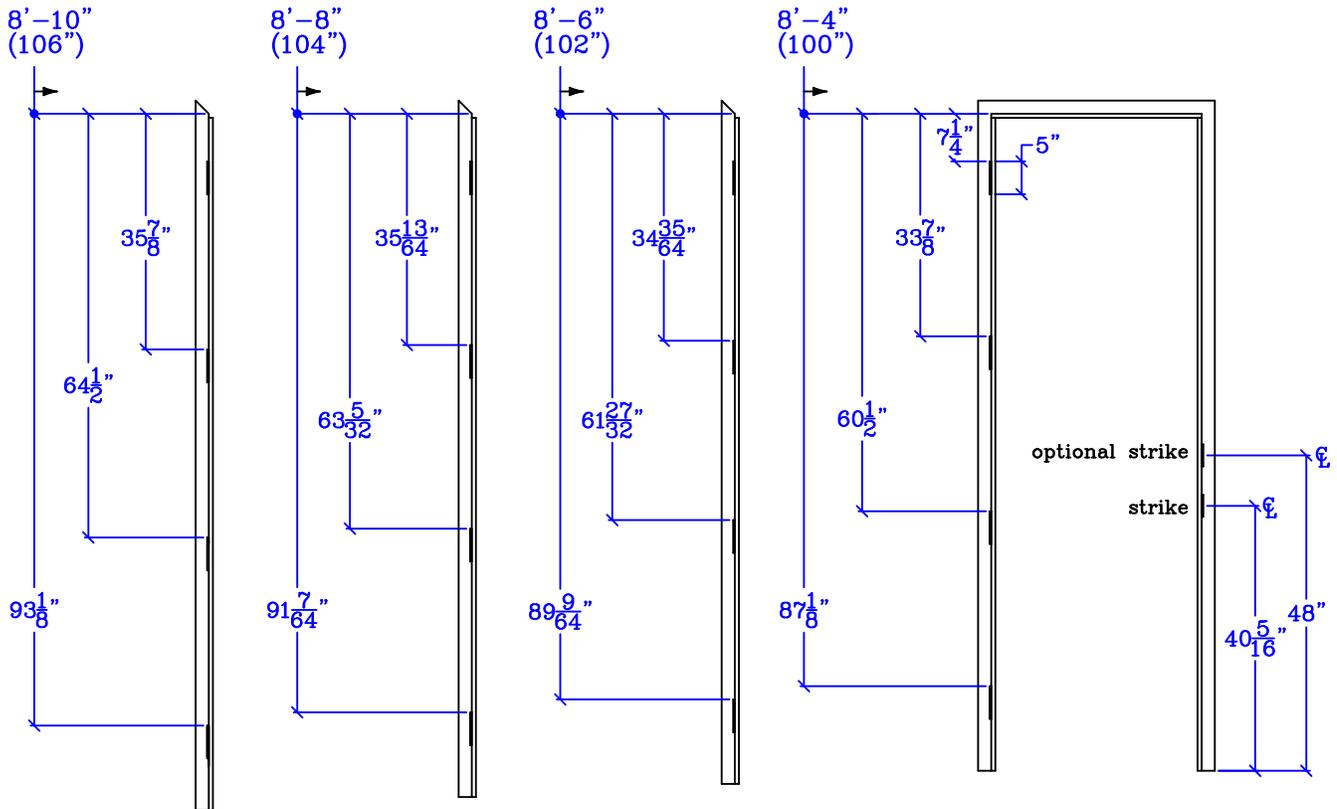
Hardware location

**5" hinge location for 7'8" to 8'2"**



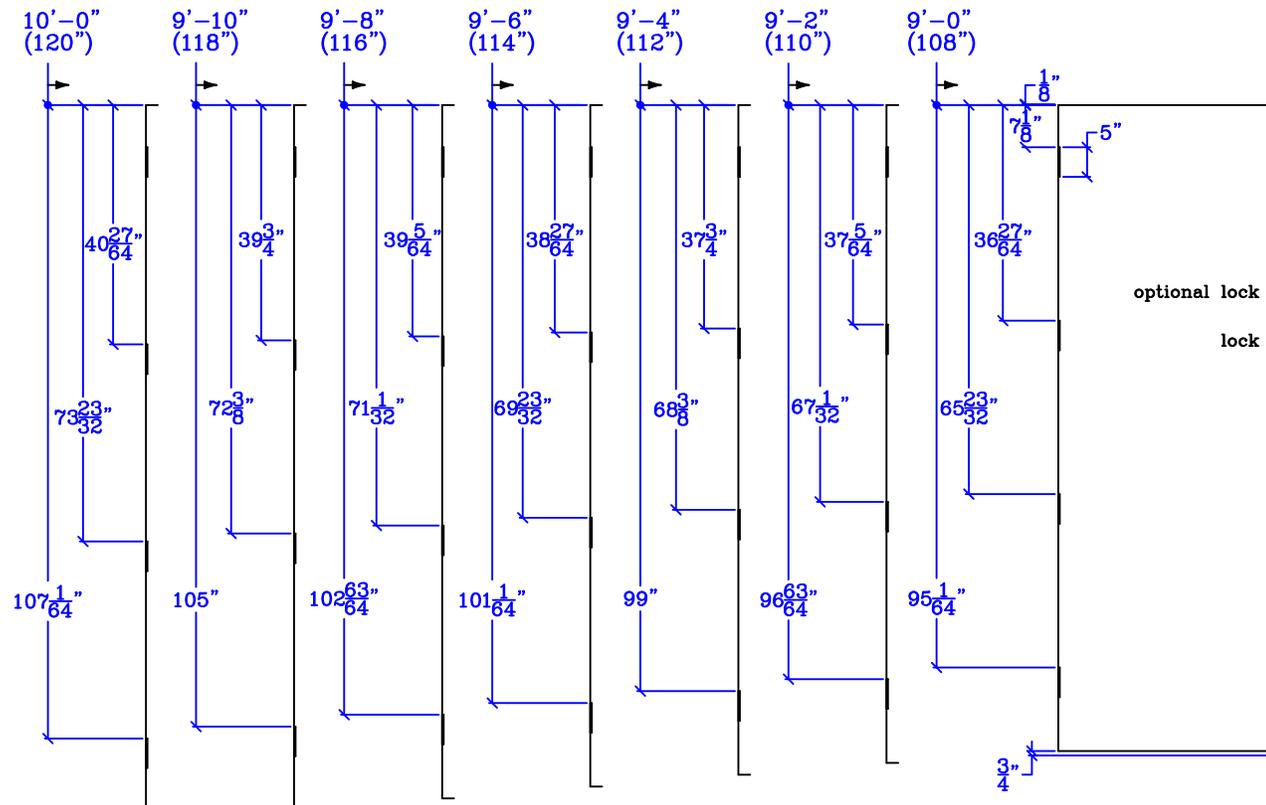
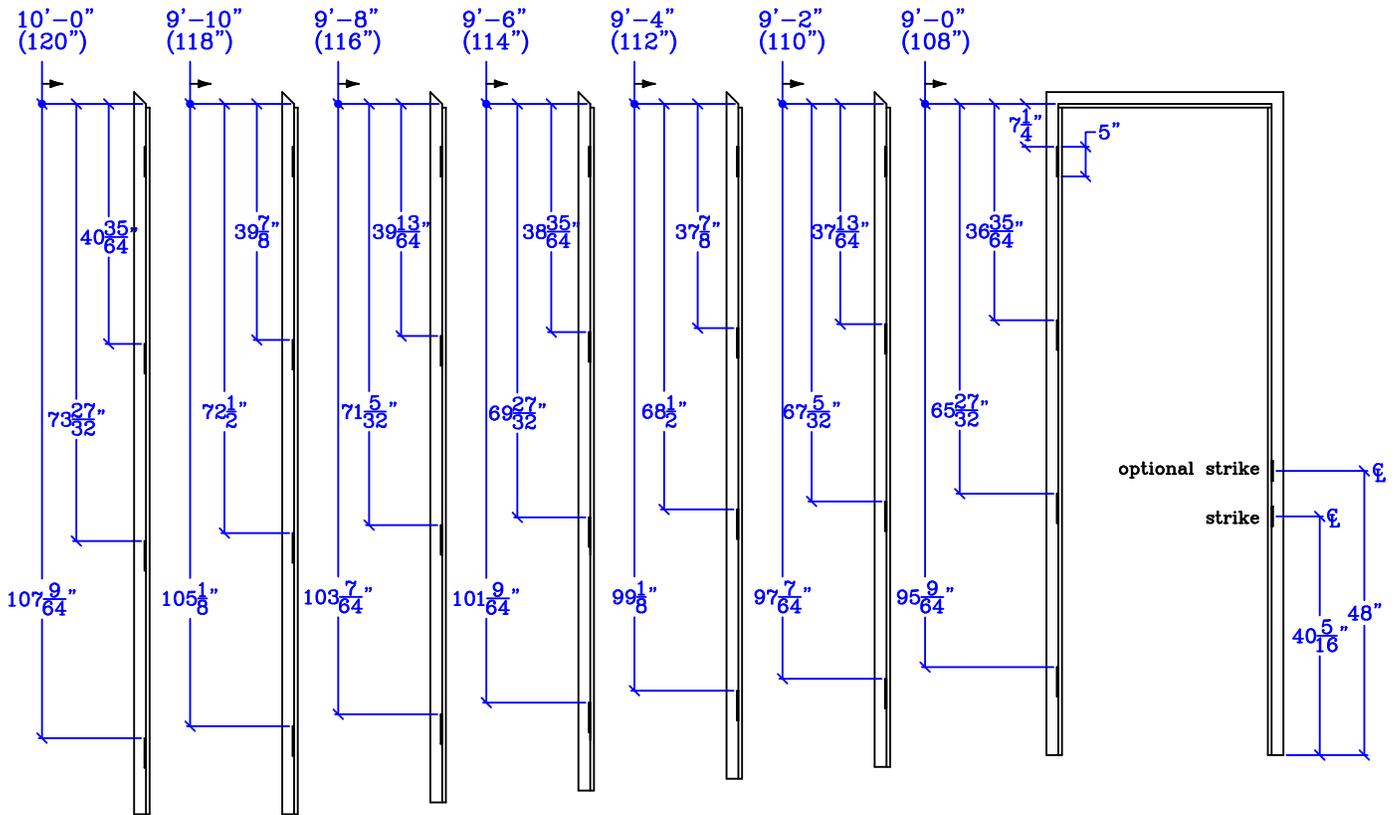
Top to top hinge locations  
Bottom to center strike location

**5" hinge location for 8'4" to 8'10"**



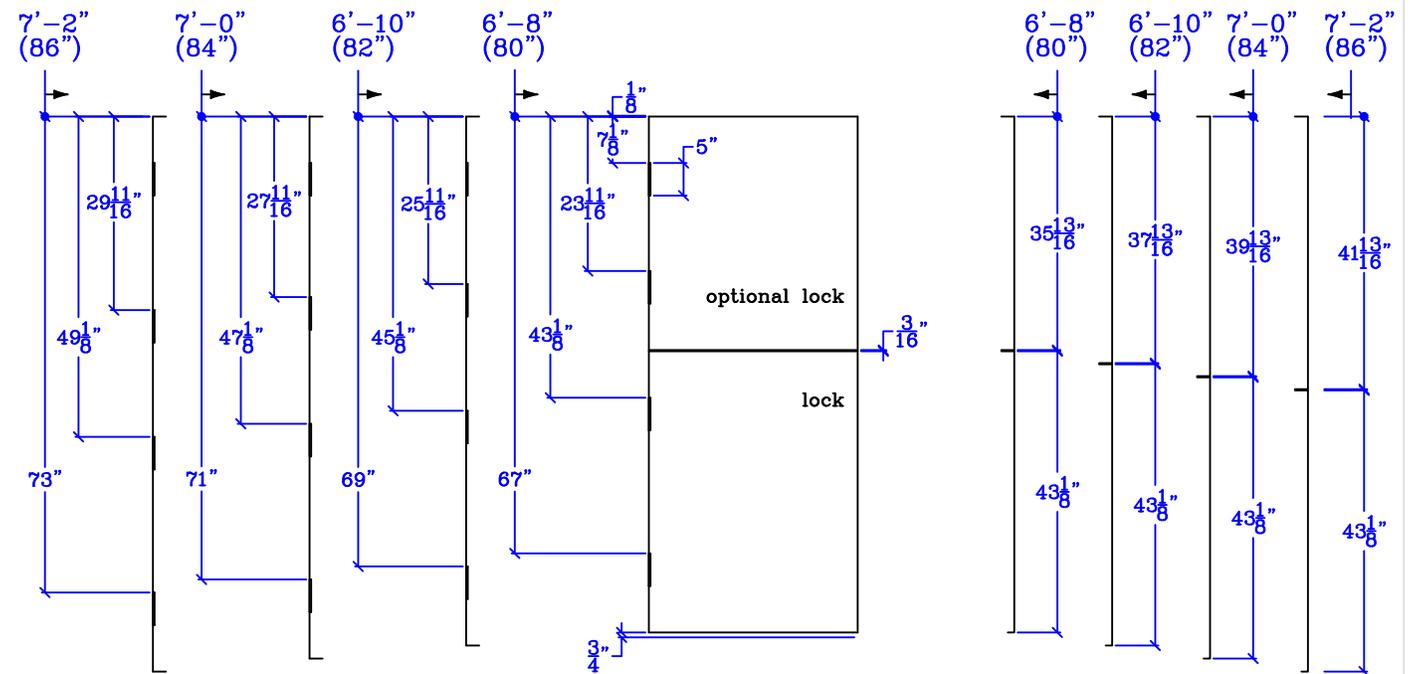
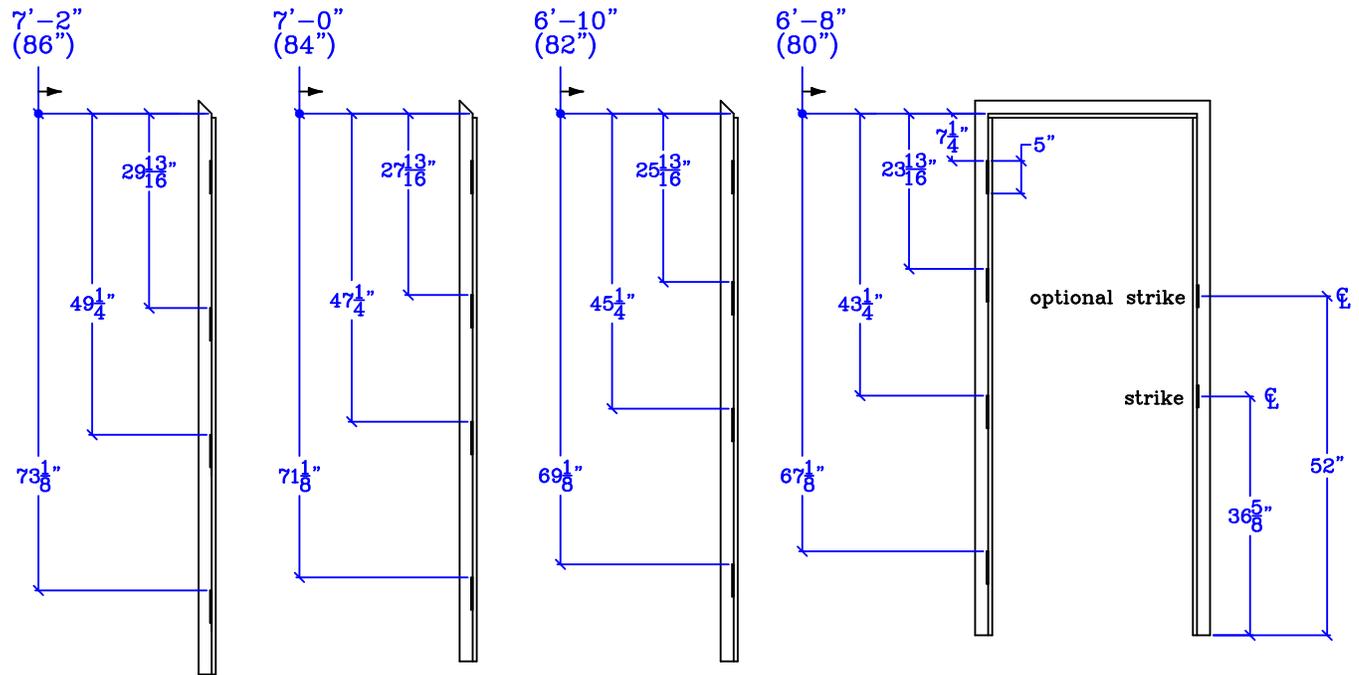
Top to top hinge locations  
Bottom to center strike location

**5" hinge location for 9'0" to 10'0"**



Top to top hinge locations  
Bottom to center strike location

**5" hinge dutch location for 6'8" to 7'2"**



Top to top hinge locations  
Bottom to center strike location

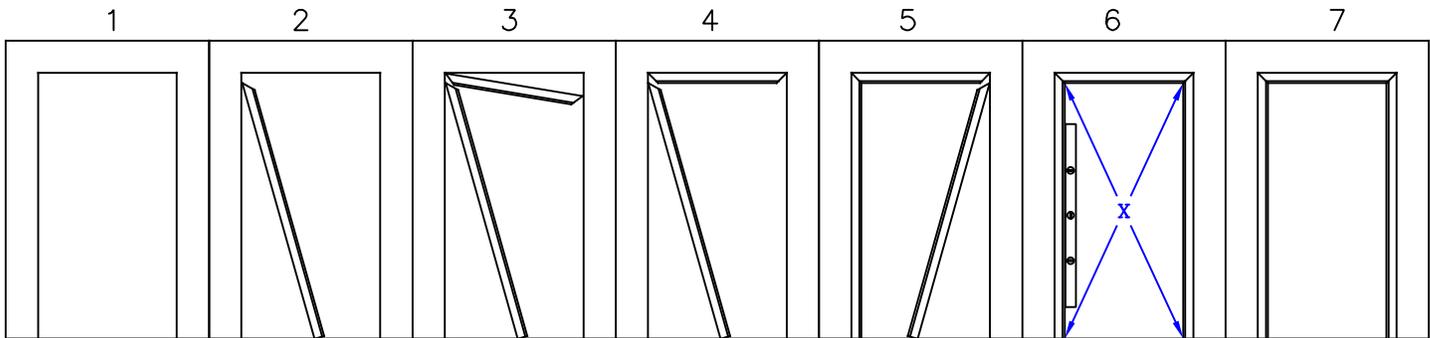
Hardware location

# INSTALLATION

---

Knocked Down Drywall Frame .....	R-1.1
Knocked Down Drywall Sidelight .....	R-1.2
Welded Frames/Elevations .....	R-1.3
Masonry Frame Page 1 .....	R-1.4
Masonry Frame Page 2 .....	R-1.5
Steel Framing .....	R-1.6
4 Sided Knocked Down Borrowed Lite.....	R-1.7
Knock Down Double Egress Frame .....	R-1.8
Glass Sizes in Elevation .....	R-1.9
Glass Sizes in Door .....	R-1.10
Handing Chart .....	R-1.11
Panel .....	R-1.12

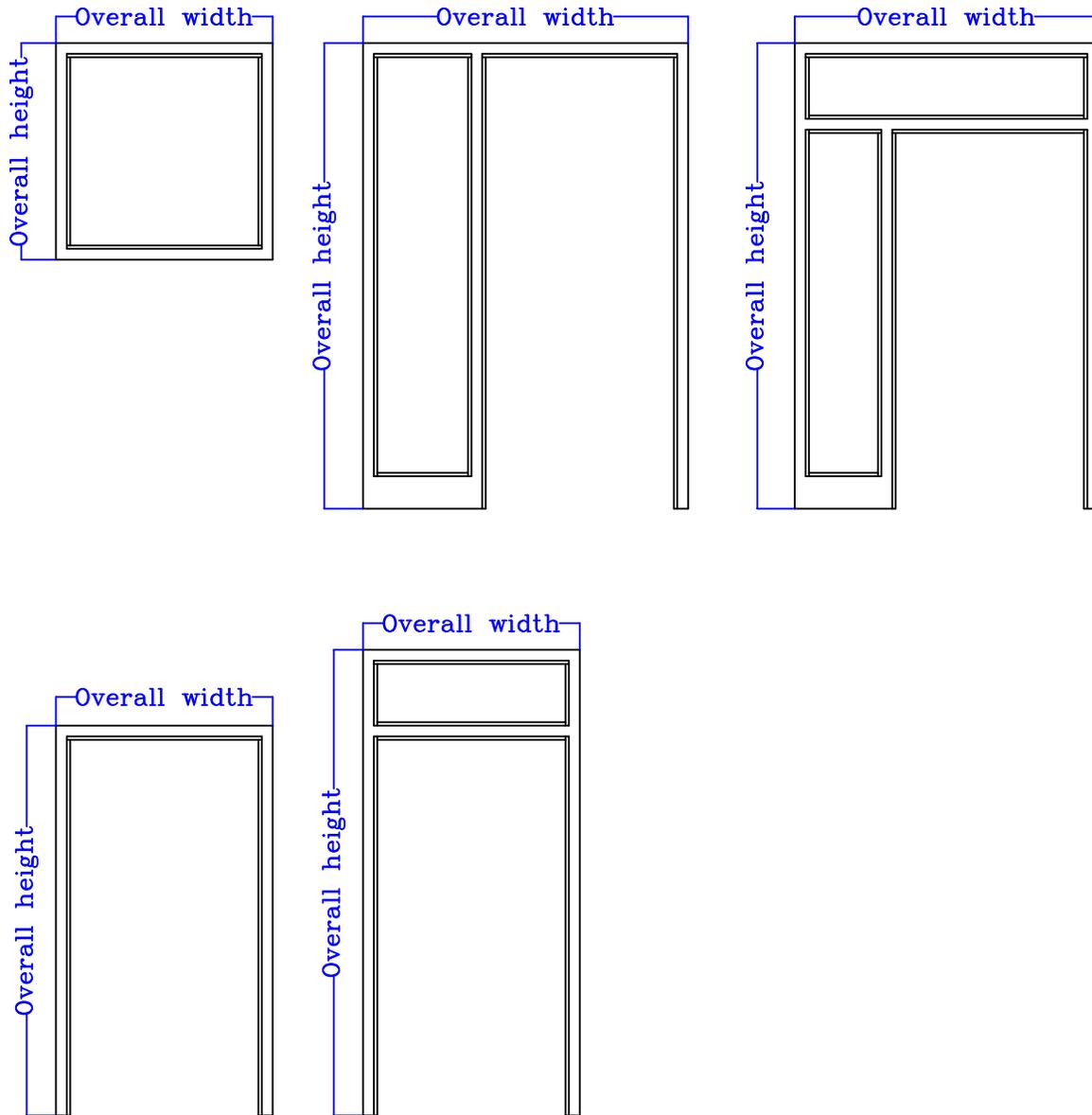
## Knocked down drywall frame



1. Build wall with rough opening height equal to nominal door opening : -height plus 1 ¼”  
-width plus 2”
2. Install jamb at angle, and let the top of the jamb rest against the opening close to the top.
3. Insert frame head under the corner clips of the jamb and raise into position.
4. Retract leveling anchor in the jamb and finish installing it in position on wall.
5. Insert the corner clips of the opposite jamb into the opposite end of the head and position jamb on wall.
6. After the two vertical jambs are installed with the frame head, measure diagonally from upper left to lower right corner, and from upper right to lower left corner and make sure that “X” dimensions are identical. Install base anchor screws through countersunk holes in frame face or DSA straps and floor plate.
7. Square top of frame and tighten leveling bracket. (Do not overtighten)
8. For cased open KD frames, the rough opening size is equal to finished opening: -height plus 1 ¼”  
- width plus 2 ¾”.



## Welded frame



The rough opening to be as high and wide as the overall height and width of the frame.

## Masonry frame

### 1. Bracing the frame :

Brace the frame as shown in Figure #1.  
Do not brace in the direction of intended wall.

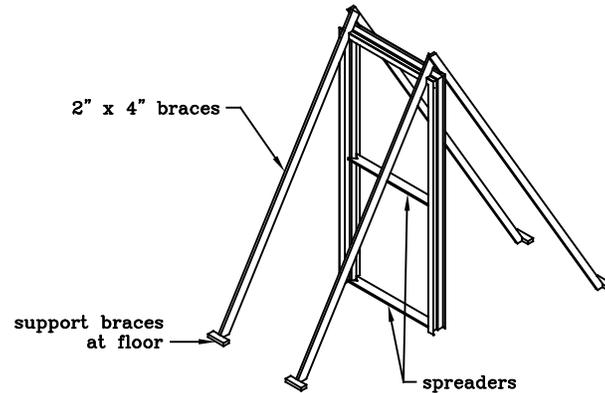


Figure #1 : Frame bracing

### 2. Plumbing the frame :

The contractor should have a carpenter level, square and spreader, Figure #2.  
Set the frame in the desired location and level the header.  
If necessary shim under jamb floor anchor, Figure #2a, or equalize them through an adjustable floor anchor.  
With frame on line, set the spreader and fasten jamba to the floor through floor anchors.

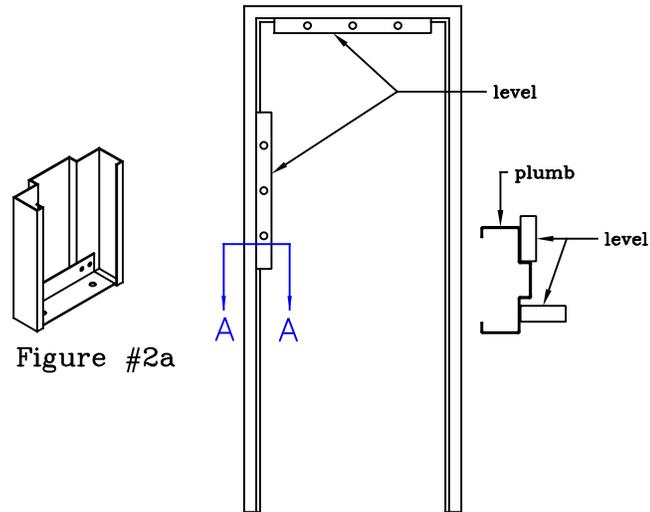


Figure #2a

Figure #2 : Plumbing the frame

### 3. Spreader :

The typical wood spreader, Figure #3, must be square and fabricated from lumber not less 1" (25.4mm) thick.  
The correct length is the door opening width between the jambs at the header.  
Cut clearance notches for frame stops.  
Spreader must be nearly as wide as frame depth for proper installation.  
Do not remove spreaders until the frame is set permanently in the wall.

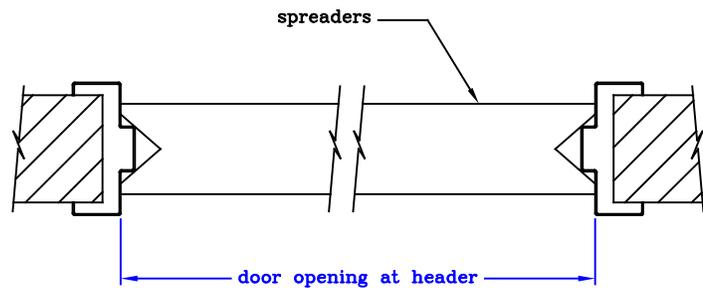


Figure #3 : wood spreaders

## Masonry frame

4. The temporary spreaders often welded to the base of the jambs of frame with welded corners, ARE NOT intended to be used during the installation of the frame into the wall. These temporary spreaders are used to prevent shipping damages only.

A second wood spreader at the mid or strike point the frame, Figure #4, must be used in addition to the one at the base of the frame to maintain a proper door opening and to prevent bowing the jambs.

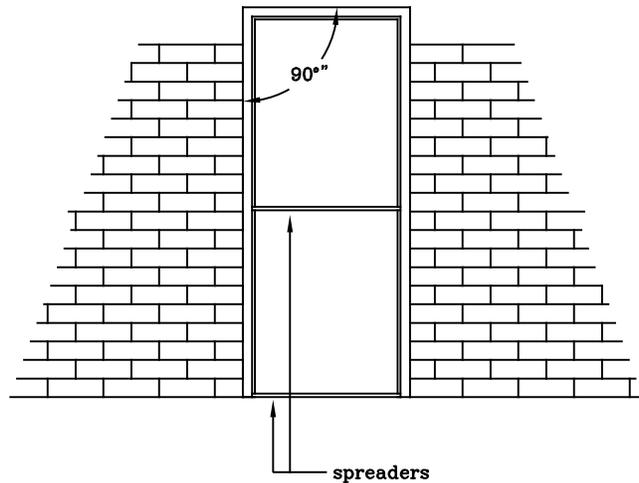
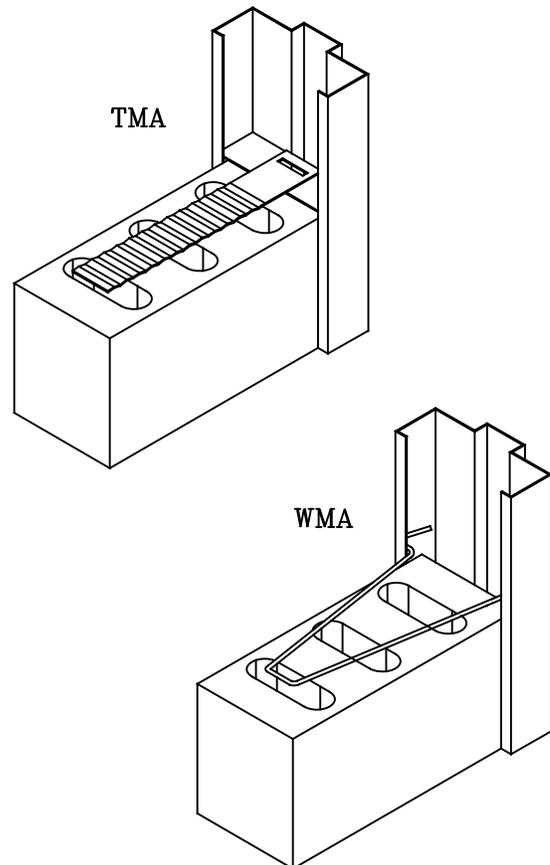


Figure #4 : Spreader locations

5. WMA, Wire masonry Anchor is normally used on custom frames. The metallic wire must be adjusted at the job site in function of the throat.

The TMA, "T" Masonry Anchor provides total adjustability and is normally made to fit a particular type of frame profile.



## Steel framing

Door and borrowed light openings should be rough-framed with steel studs and runners.

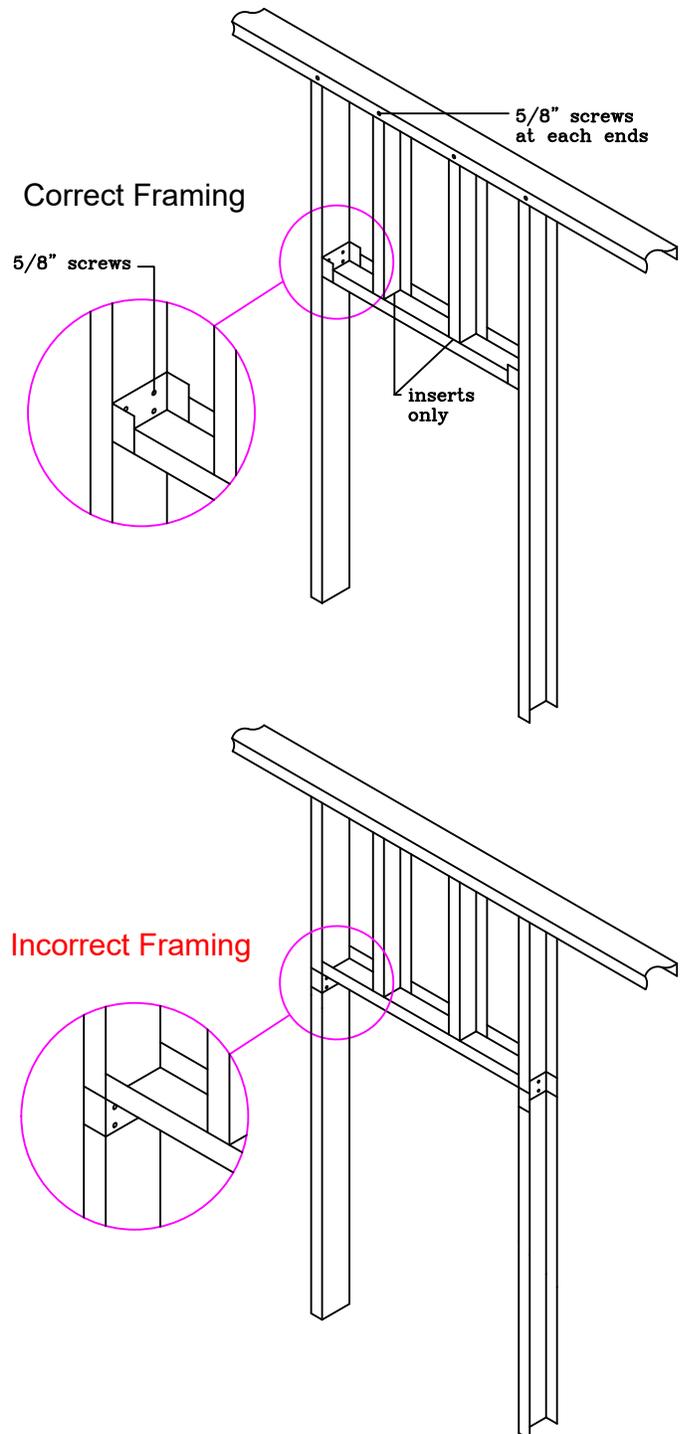
Position floor to ceiling height strut-studs vertically.

Adjacent to frames, and anchor securely to top and bottom runners with 5/8" type S-12 Low profile head screws.

Where heavy or oversize doors are used, install an additional strut-stud at jambs.

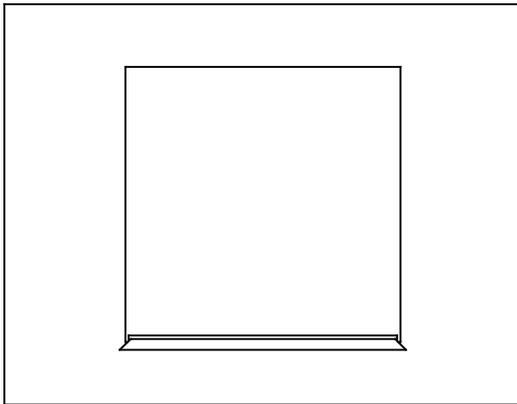
Fabricate sill and header sections from steel runners and install over, less than ceiling height door frame, and above and below borrowed light frames, fabricate from a section of runner cut to length approx. 6" longer than rough opening. Slit flanges and bend web to allow attachment to adjacent vertical strut-studs.

Securely attach through web to strut-stud with 5/8" type S-12 Low profile head screws.

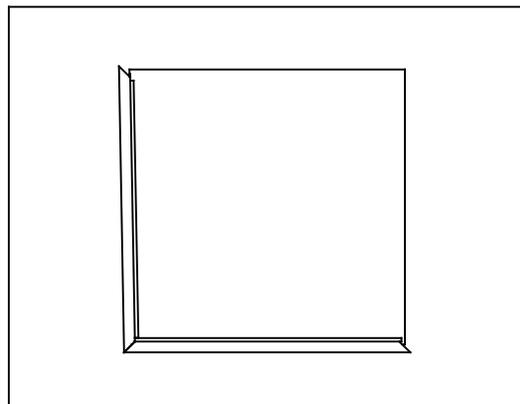


## 4 sided knocked down frame

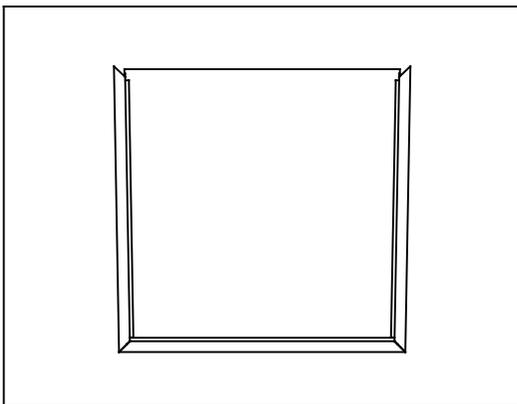
Step # 1



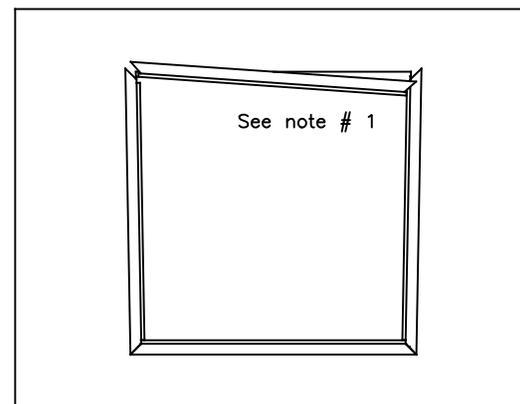
Step # 2



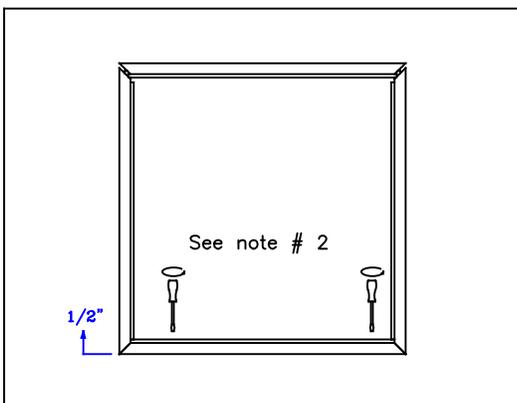
Step # 3



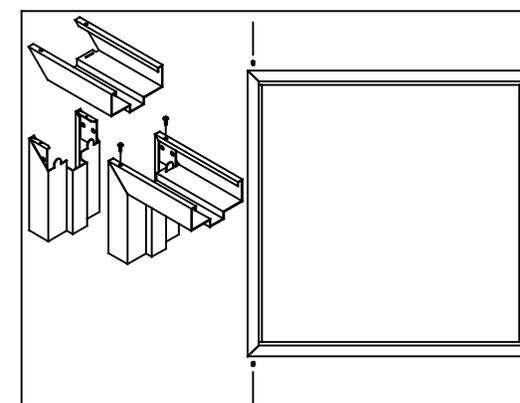
Step # 4



Step # 5

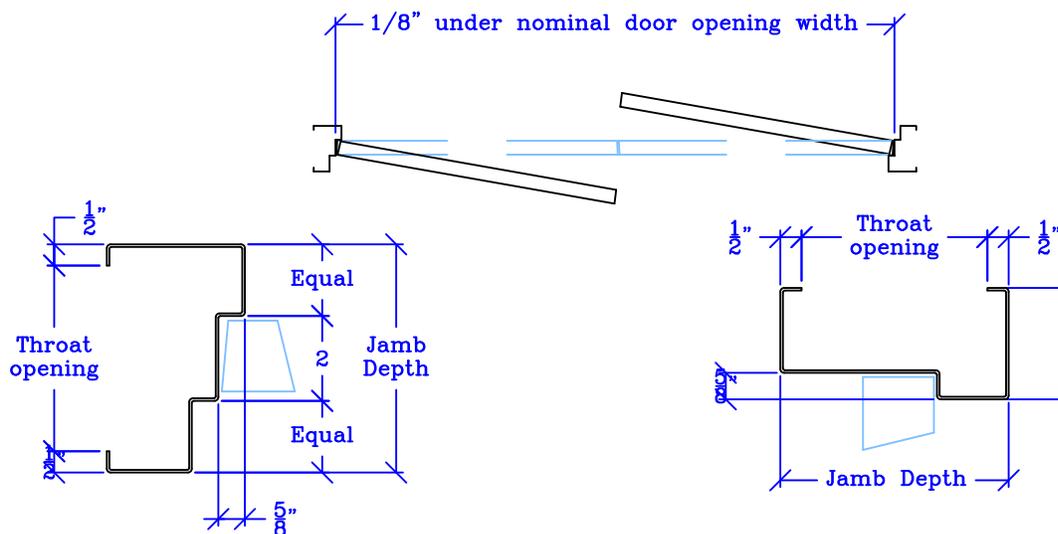
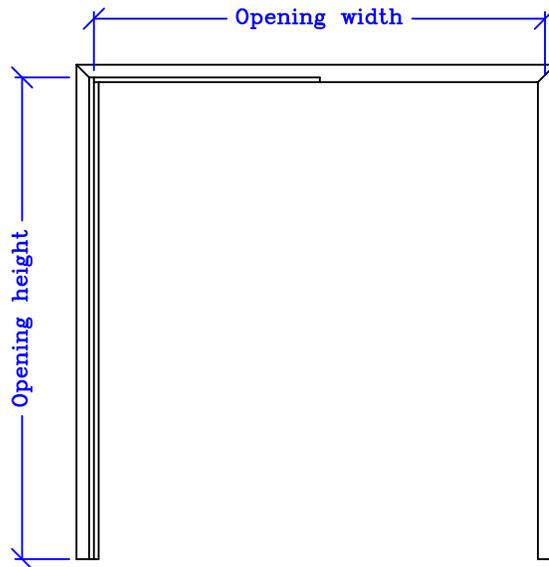


Step # 6



1. You have to open jamb throat by hand, to pass over the jamb depth.
2. The base of frame must be raised  $\frac{1}{2}$ " to be able to properly adjust the header and this should be done with your leveling screw.
3. Construct wall with rough opening equal to finished opening height and width plus 2".  
If cased open, rough opening equal to finished opening height and width plus 2-3/4".
4. Standard construction, knocked down with screws, compression pads at each ends of each components.

## Double egress knocked down frame



Rough Opening for 1 3/8"-2 5/8" face jambs:

Opening width + 2 1/4"= Rough Opening dimension

Opening height + 3/4"= Rough Opening dimension

Rough Opening for 2"-3 1/4" face jambs:

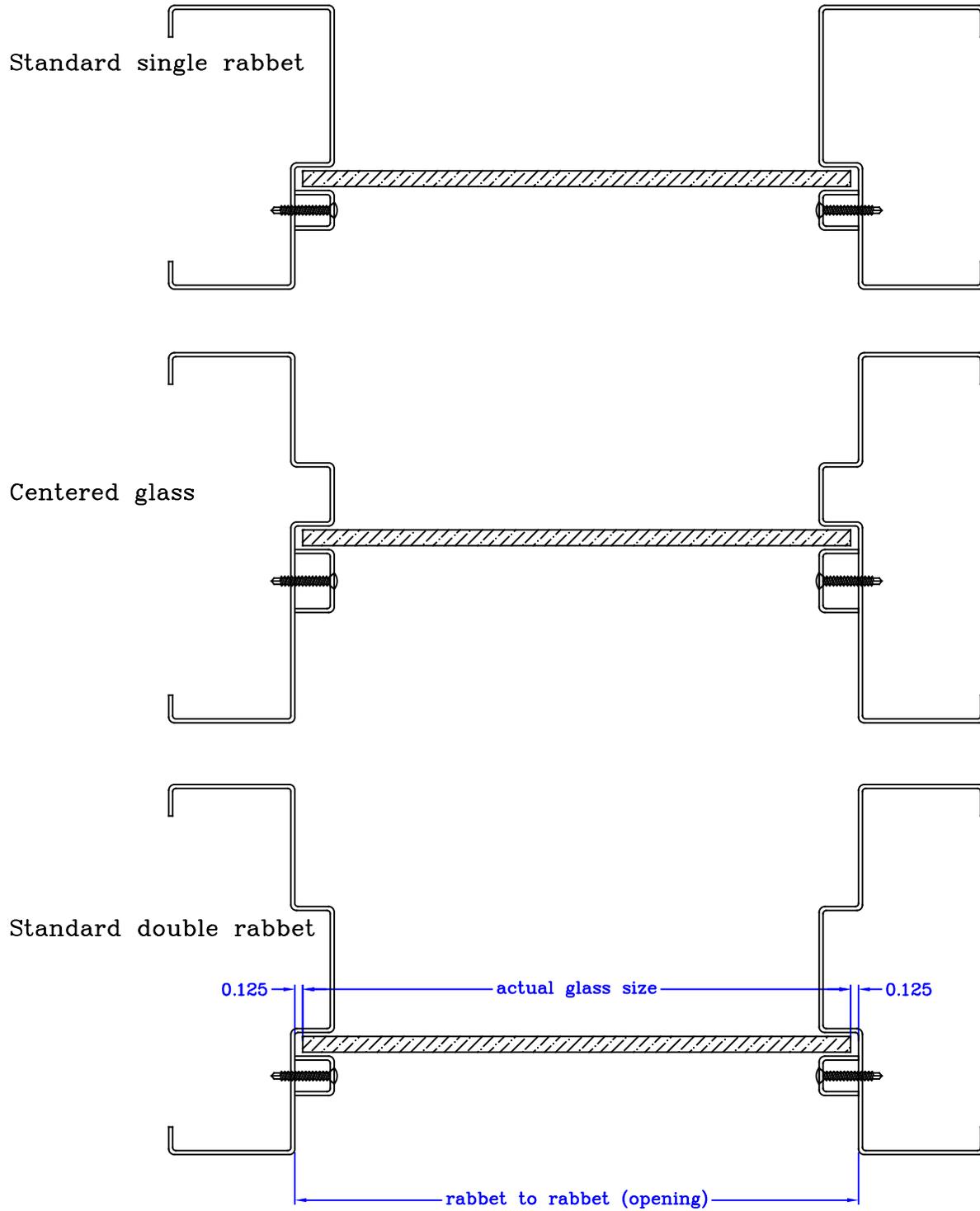
Opening width + 3 1/4"= Rough Opening dimension

Opening height + 1 1/4"= Rough Opening dimension

For more installation information see

Technical Data Manual page R-1.1 Knocked down drywall frame installation notes: 2 thru 7.

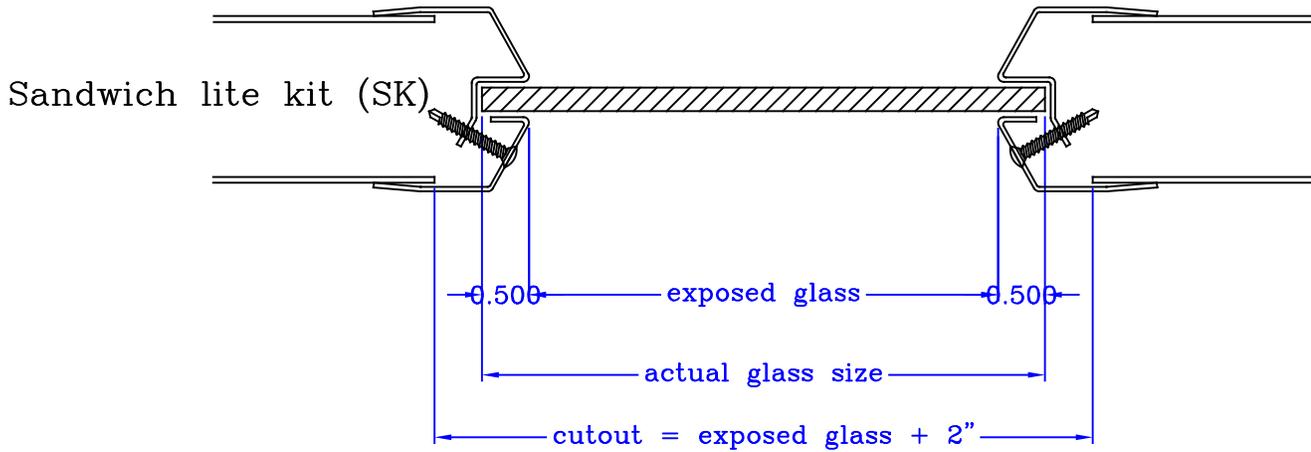
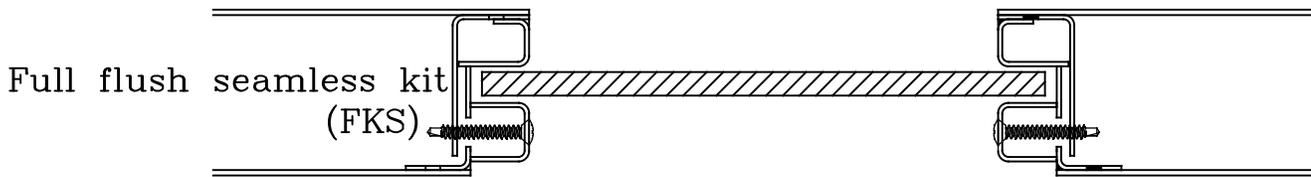
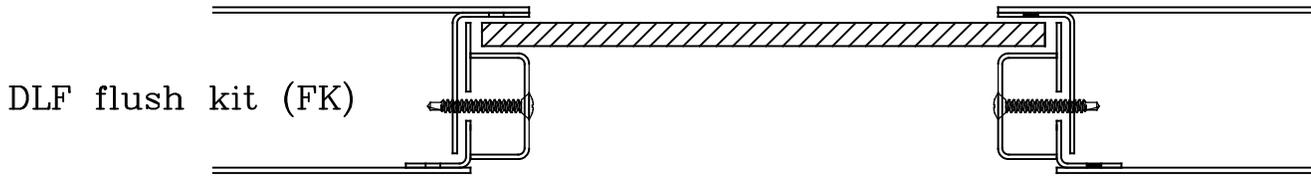
## Glass size in elevations



Actual glass sizes :

opening dimension - 1/4" in height and width

**Glass size at kits**

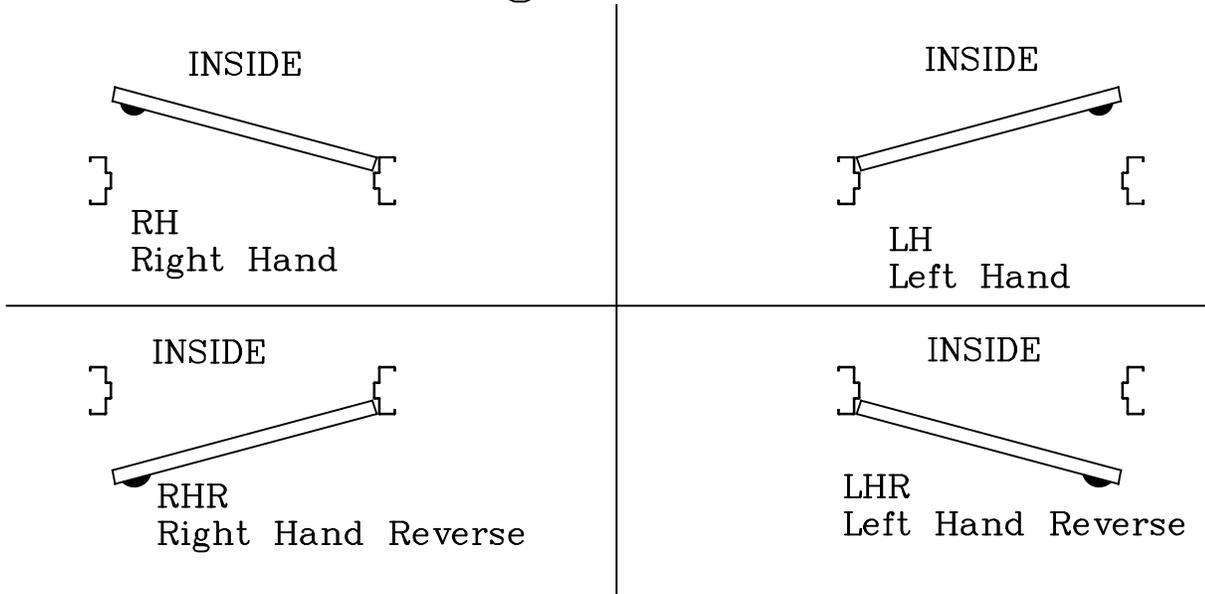


Actual glass sizes :

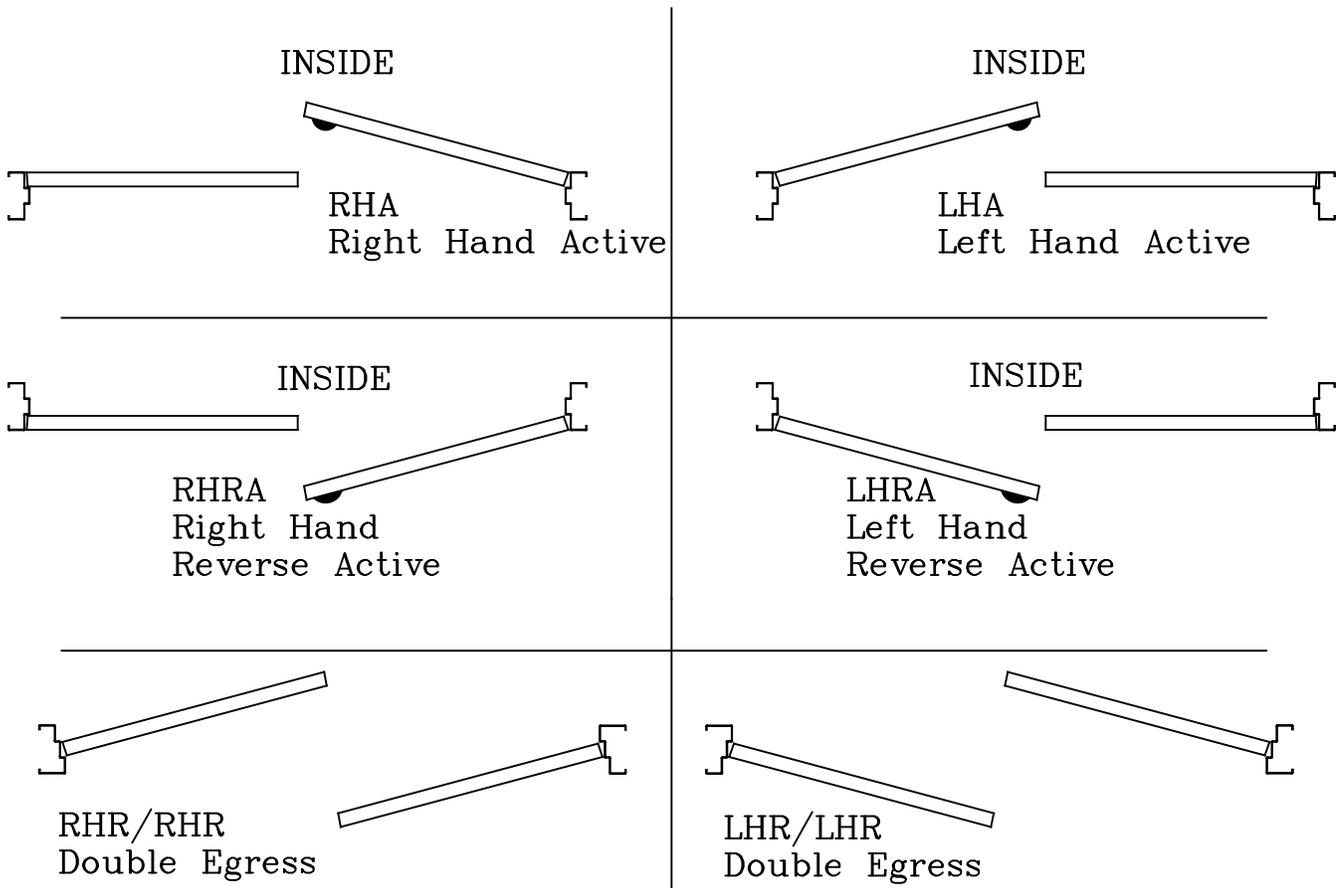
exposed glass + 1" in height and width

**Handing chart**

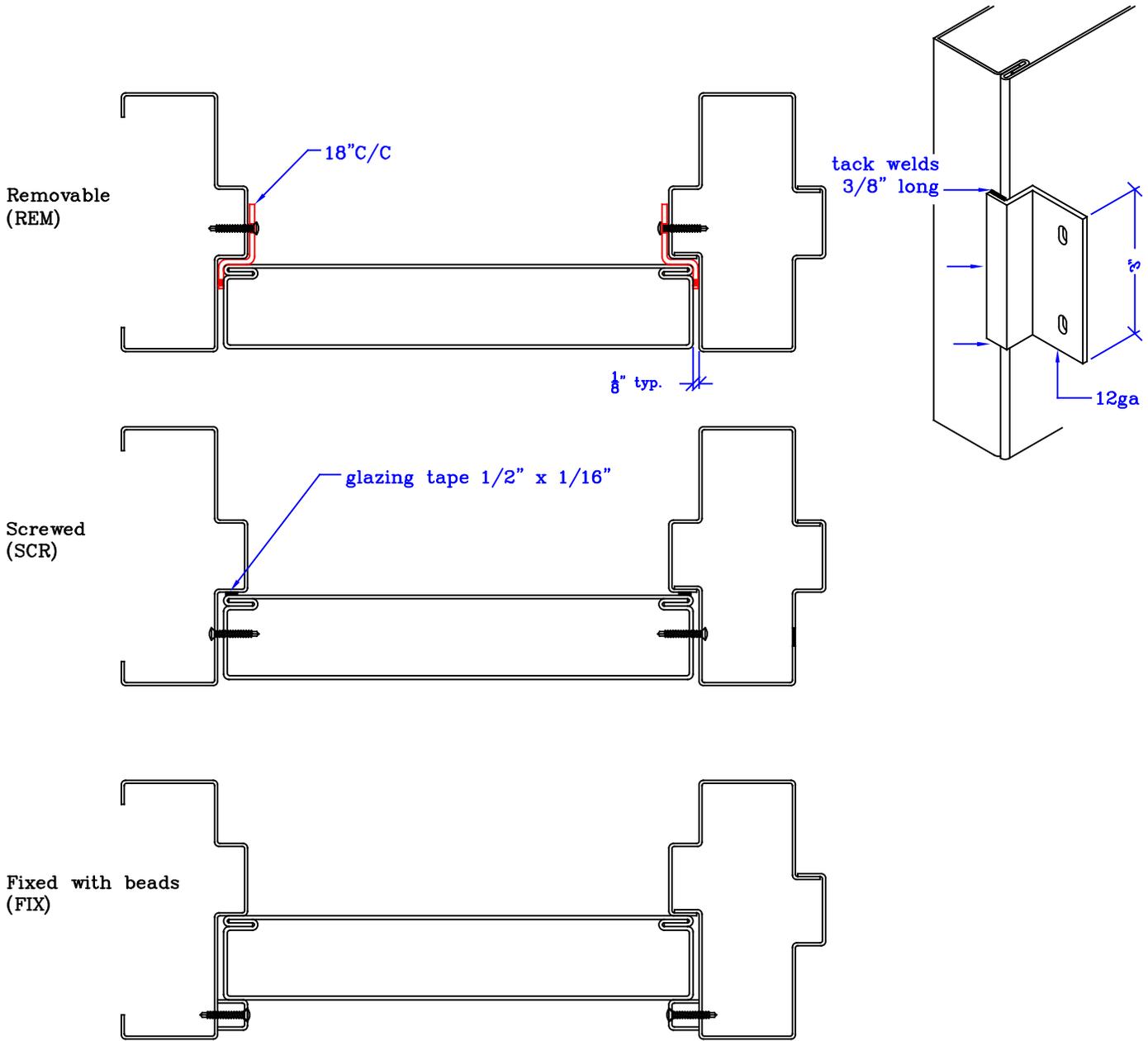
Single Doors



Pair of Doors

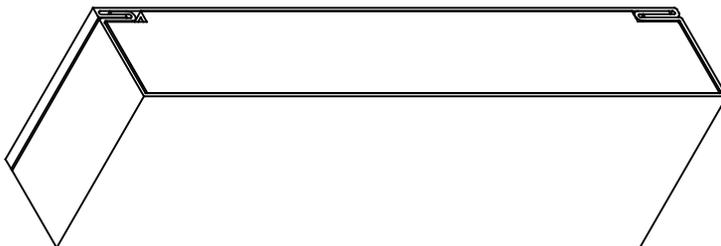


**Panel**



note: may require special profile depending on panel thickness.

Notice: panels will received top and bottom channels not sealed independently of method of installation



# GLOSSARY

---

GLOSSARY

---

116LL..... 1/16" Lead-Lined Door	45S..... 4-1/2" Standard Hinge Reinf.
12EC.....Edge Channel in 12ga	4PNL ..... Four Panels
134.....1-3/4" Door Thickness	50H.....5" Heavy Hinge Reinf.
138.....1-3/8" Door Thickness	50S..... 5" Standard Hinge Reinf.
14EC.....Edge Channel in 14ga	58UC ..... 5/8" Undercut
161.....Cylindrical Lock Reinf.	60 ..... Positive Pressure Label 60mn
161TB ..... Cylindrical Lock Reinf. w/ Thru Bolts	60H.....6" Heavy Hinge Reinf.
16EC.....Edge Channel in 16ga	60R..... Riveted Positive Pressure Label 60mn
180.....Positive Pressure Label 180mn	60S..... 6" Standard Hinge Reinf.
180E ..... Embossed Positive Pressure 180mn	6PNL ..... Six Panels
180R ..... Riveted Positive Pressure Label 180mn	86ED ..... Mortise Lock Reinf.
18EC.....Edge Channel in 18ga	86FH .....Mortise Lock Reinf. w/ Function Holes
18LL..... 1/8" Lead-Lined Door	90 ..... Positive Pressure Label 90mn
18UC..... 1/8" Undercut	90E..... Embossed Positive Pressure 90mn
1PNL..... One Panel	90R..... Riveted Positive Pressure Label 90mn
20.....Positive Pressure Label 20mn	ADB..... Automatic Door Bottom
200..... 2" Door Thickness	ADJFA.....Adjustable Floor Anchor
20R ..... Riveted Positive Pressure Label 20mn	AH ..... Anchor Hinge
214.....2-1/4" Door Thickness	ASA ..... Standard ANSI Strike Reinf.
2G ..... Double Half Glass	ASFA..... Additional Split Frame Anchor
2PNL..... Two Panels	ATMA ..... Adjustable "T" Anchor
2PNLA ..... Two Panels Soft Arch	AUXFL..... Auxiliary Fire Latch
34UC..... 3/4" Undercut	B..... Bonded Stiffeners
35S .....3-1/2" Standard Hinge Reinf.	BEVH ..... Beveled Edge Door/Hinge Edge
38UC..... 3/8" Undercut	BEVL ..... Beveled Edge Door/Lock Edge
40S .....4" Standard Hinge Reinf.	BOXED.....Box for Electric Device
40T..... 4" Thin Hinge Reinf.	BPIV ..... Bottom Pivot
45.....Positive Pressure Label 45mn	BPIVF..... Bottom Pivot on Floor
45E ..... Embossed Positive Pressure 45mn	BPIVJ .....Bottom Pivot on Jamb
45H .....4-1/2" Heavy Hinge Reinf.	CB .....Closed Back
45I..... 4" Institutional Hinge Reinf.	CCEH..... Concealed Leaf Continuous EH Reinf.
45R ..... 4-1/2" Reversible Hinge Reinf.	CCH ..... Concealed Leaf Continuous Hinge Reinf.
45R ..... Riveted Positive Pressure Label 45mn	CCR ..... Concealed Closer Reinf.

---

GLOSSARY

---

CED .....	Custom Embossed Door	DPSJ .....	Magnetic Contact for Jamb
CFW.....	Full Depth Continuous Welded Corner	DR .....	Pre-Drywall Frame
CG .....	Centered Glass	DSA.....	Drywall Strap Anchor
CGG.....	Caulking Groove	DUTCH.....	Dutch Frame
CH.....	End Channel/Cap	DW .....	Drywall Frame
CID.....	Concealed in Door Closer	DYN4.....	4" Long Dynabolt for Existing Wall
CL .....	Construction Label - Fire Door/Frame	DYN5.....	5" Long Dynabolt for Existing Wall
CL12 .....	Surface Closer Reinf. in 12ga	ED .....	Exit Device Surface Reinf.
CL14 .....	Surface Closer Reinf. in 14ga	EH .....	Electric Hinge
CL16 .....	Surface Closer Reinf. in 16ga	ELBOX .....	Electric Prep with Knockouts
CLR.....	Riveted CL	ELIAS .....	"Eliason" Pivot
COHS .....	Concealed Overhead Stop	ELMAG.....	Electromagnetic Lock Reinf.
COMM .....	Communicating Frame	ELMAGEB.....	ELMAG with Electric Box
CPA .....	Compression Anchor	EPT .....	Electric Power Transfer
CPIV .....	Corner Pivot - Full Surface Reinf.	EPTBOX.....	Box for EPT
CVR ...	Concealed Vertical Rod Exit Device Reinf.	ERS1.....	Emergency Release Stop Frame
CVRS.....	Concealed Vertical Rod Strike	ES .....	Electric Strike
CW.....	Continuously Welded & Seamless Edge	ESBOX.....	Box for Electric Strike
CYLDL .....	Cylindrical Deadlock Reinf.	ESTOP .....	Emergency Stop Release Reinf.
D .....	Double Rabbet Profile	EWA .....	Existing Wall Anchor
DAS .....	Deviated Astragal for Single Leaf	EWA14 .....	EWA for 1/4" Screw
DBLM.....	Double Mortising of Hing Reinf.	EWA14NOR .....	EWA for 1/4" Screw w/o Reinf.
DCA .....	Combination Wood & Steel Stud Anchor	EWANOR .....	EWA w/o Reinf.
DD.....	Dutch Door	EWAP.....	EWA with Plug
DE.....	Double Egress Frame	EWAP14.....	EWA with Plug for 1/4" Screw
DGL161 .....	Digital Lock	EWAT.....	EWA with Tube
DGL86 .....	Mortise Lock for Electronic Lock	EWAT14.....	EWA with Tube for 1/4" Screw
DL234 .....	Cylindrical Deadlock Strike Reinf.	FA.....	Floor Anchor
DL312M .....	Mortise Deadlock Strike Reinf.	FAS .....	Flat Bar Astragal
DL478 .....	ANSI Standard Deadlock Strike Reinf.	FB.....	Flush Bolts
DLS.....	Double Lipped Strike Reinf.	FBS .....	Flush Bolt Strike Reinf.
DPS .....	Magnetic Contact - Hole Only for Head	FCR.....	Face Mounted Coordinator Reinf.
DPSBOX .....	Box for DPS	FDD.....	Full Dutch Door Shelf

---

**GLOSSARY**


---

FG..... Full Glass	KDI..... Knock Down Intersection
FK..... Flush Kit - P Series	KDS..... Knock Down Corner with Screws
FKS..... Flush Kit Seamless - O Series	KF..... Kerf Frame
FL..... Full Lip Strike	LBR..... Less Bottom Rod
FL2PNL..... Flush with 2 Panels at Bottom	LLAS..... 1/16" Lead Lined Flat Bar Astragal
FP..... Flush Pull with Capping	LLFW116..... Lead-Lined Frame Full Width 1/16"
FS..... Full Sleeve Closer Reinf.	LLFW18..... Lead-Lined Frame Full Width 1/8"
FW..... Face Welded Corner	LLHW116..... Lead-Lined Frame Half Width 1/16"
FWC..... Flush Welded Cap	LLHW18..... Lead-Lined Frame Half Width 1/8"
FWCR..... Full Width Closer Reinf.	LR..... Less Return Frame
FWFS..... Full Width Full Sleeve Closer Reinf.	MBA..... Metal Builder Anchor
FWI..... Face Welded Intersection	MC..... Magnetic Contact with Reinf.
FWP..... Full Width Parallel Arm Closer Reinf.	MED..... Mortise Exit Device Reinf.
FWRP..... FWR & FWP Reinf.	MEDFH..... MED with Function Holes
FWR..... Full Width Regular Arm Closer Reinf.	MFS..... Mechanical Field Splice
FWSC..... Flush Welded & Sealed Cap	MODDL..... Mortise Deadlock Reinf.
FWTJ..... Full Width Top Jamb Closer Reinf.	MODDLFH..... MODDL with Function Holes
HC..... Honeycomb	MONOR..... Monorail cut out, per leaf
HCSS..... Honeycomb - Stainless Steel	MORG..... Mortar Guard
HDD..... Half Dutch Door Shelf	MW..... Mineral Wool
HEM..... Hemmed	N6PNL..... Narrow Six Panels
HG..... Half Glass	NL..... Narrow Lite
HS45..... Hospital Stops 45°	NSW..... Non-Standard Welded Corner
HS90..... Hospital Stops 90°	OBS..... Open Back Strike
HWEMUA..... Removable Hardware Mullion	P..... Baked on Primer for Door
HWEMUB..... HWEMUA with Filler Block	PA..... Lock Seam
IL..... Interconnected Lock Strike	PAC..... Parallel Arm Closer Reinf.
INCVR..... Inpact CVR	PAF..... Lock Seam Edge Filled Seamless
INMED..... Inpact MED	PAL..... Pre-Assembly Lock Reinf.
INVFA..... Inverted Floor Anchor	PBH..... By Passing or Bifold Hardware Reinf.
INVH..... Invisible Hinge Reinf.	PC..... Powder Coated Color Prefinished
IPIV..... Intermediate Pivot	PD..... Pocket Door Frame
KD..... Knock Down Corner with Tabs	PEEP..... Hole for Door Viewer/Peep Hole

---

**GLOSSARY**


---

PGB .....	Pull with Grab Bar Reinf.	SAS .....	Extra for Screwed Astragal to the Door
PP .....	Push & Pull Reinf.	SB .....	Surface Bolts Reinf.
PPHEC .....	PPIV Hinge Edge Construction	SBA .....	Screw Base Anchor
PPIV.....	Pocket Pivot	SBS .....	Surface Bolt Strike Reinf.
PS .....	Polystyrene	SCH.....	Surface Continuous Hinge Reinf.
PSSS .....	Polystyrene - Stainless Steel	SCR.....	Soffit Mounted Coordinator Reinf.
PU.....	Polyurethane	SDS.....	Snap-In for Drywall Partition
PUSS .....	Polyurethane - Stainless Steel	SF.....	Split Frame
RAB .....	Rabbeted Cap	SHL .....	Shearlock Head Reinf.
RAC .....	Regular Arm Closer Reinf.	SI45.....	2" Sill with Miter Ends
RACE.....	Raceway for Electrified Hardware	SI90.....	1/2" Sill with Square Ends
RDA .....	Full Reinf. Double Acting Hinge	SK .....	Sandwich Kit - N Series
RB12.....	Rough Buck Frame in 12ga	SKWM .....	Sandwich Kit with Muntins
RB14.....	Rough Buck Frame in 14ga	SL.....	Shadow Line
RB16.....	Rough Buck Frame in 16ga	SLFBS.....	Self-Latching Flush Bolt Strike Reinf.
RCO.....	Round Cut Out	SLW .....	Weatherstrip for Kerf Frame
RDPS.....	Magnetic Contact w/Reinf. for Head	SNAP .....	Snap-In Cap
RDPSJ .....	Magnetic Contact w/ Reinf. for Jamb	SOHS .....	Surface Overhead Stop
RED .....	Rim Exit Device Reinf.	SOU .....	Splice for Oversized Units
REH .....	Radius Pivot Edge	SPDT.....	Frame Profile - Special Door Thickness
REL.....	Radius Lock Edge	SPMH.....	Special Mortise Hinge
RFBS .....	Reversible Flush Bolt Strike Reinf.	SPS .....	Splayed Stop
RIM .....	Rim Exit Device Reinf.	SPS .....	Special Strike
RIMFH .....	RIM with Function Holes	SPUC .....	Non-Standard Undercut
RIMS.....	Rim Strike Reinf.	SQL .....	Square Edge Door/Lock Edge
RL .....	Roller Latch/Catch	SQH .....	Square Edge Door/Hinge Edge
RLH.....	Roller Latch Strike Reinf. - Head	SR .....	Standard Frame
RLJ .....	Roller Latch Strike Reinf. - Jamb	SS .....	Stainless Steel
RM .....	Removable Mullion/Transom Bar	ST.....	Standard Inverted End Channel
RMF .....	Removable Mullion w/ Floor Anchor	ST45030.....	TR - Steel Stiffened - 450°F in 30mn
RPAC.....	Regular & Parallel Arm Closer Reinf.	STC .....	Sound Transmission Class
RPD .....	Recessed Panel Door	STC32 .....	Sound Transmission Class Up to 32
S .....	Single Rabbet Profile	STC37 .....	Sound Transmission Class 33 to 37

---

GLOSSARY

---

STC48.....	Sound Transmission Class 38 to 48	WSI .....	Welded Sill Option
STPS .....	Steel-Stiffened - Polystyrene	WTP .....	Wood Trim Prep.
STPSSS.....	STPS - Stainless Steel	ZAS .....	"Z" Astragal
STPU .....	Steel-Stiffened - Polyurethane	ZBA .....	"Z" Bracket Anchor
STPUSS .....	STPU - Stainless Steel	ZBA2 .....	ZBA for 2 Layers of Drywall
STW.....	Steel-Stiffened - Wool		
STWSS.....	STW - Stainless Steel		
STWT.....	Steel-Stiffened - Wool/Thermal Rated		
SVR .....	Surface Vertical Rod Exit Device Reinf.		
SVRFH.....	SVR with Function Holes		
SVRS .....	Surface Vertical Rod Strike		
SW .....	Sanitary Weld Corner		
SWS.....	Snap-In for Wood & Steel Stud		
T.....	Standard T Strike Reinf.		
TB .....	Thermal Break Frame		
TJC .....	Top Jamb Closer Reinf.		
TMA .....	"T" Masonry Anchor		
TPIV.....	Top Pivot		
TR .....	Temperature Rise		
TR25030.....	TR - Mineral - 250°F in 30mn		
TR45030.....	TR - Mineral - 450°F in 30mn		
TWPF.....	PAF Tack Welded		
UEQ.....	Unequal Rabbet for Three-Sided Frame		
UHD12 .....	U Reinf. for Head in 12ga		
UHD14 .....	U Reinf. for Head in 14ga		
UJMB12.....	U Reinf. for Jamb in 12ga		
UJMB14.....	U Reinf. for Jamb in 14ga		
URB .....	Unequal Rabbet for Elevations		
W .....	Welded Stiffeners		
WAS.....	Extra for Welded Astragal to the Door		
WBO .....	Welded by Others		
WFS.....	Splice for Field Welding		
WMA.....	Wire Masonry Anchor		

# APPENDIX

## Steel table

MSG*	Minimum Thickness	
	Inch	mm
4	0.214	5.43
5	0.199	5.05
6	0.184	4.67
7	0.167	4.24
8	0.152	3.86
10	0.123	3.12
12	0.093	2.36
14	0.067	1.70
16	0.053	1.34
18	0.042	1.06
20	0.032	0.81
22	0.026	0.66
24	0.020	0.05

Conversion		
Fraction	Inch	mm
	1.0000	25.40
$\frac{15}{16}$	0.9375	23.81
$\frac{7}{8}$	0.8750	22.22
$\frac{13}{16}$	0.8125	20.63
$\frac{3}{4}$	0.7500	19.05
$\frac{11}{16}$	0.6875	17.46
$\frac{5}{8}$	0.6250	15.87
$\frac{9}{16}$	0.5625	14.28
$\frac{1}{2}$	0.5000	12.70
$\frac{7}{16}$	0.4375	11.11
$\frac{3}{8}$	0.3750	9.52
$\frac{5}{16}$	0.3125	7.93
$\frac{1}{4}$	0.2500	6.35
$\frac{3}{16}$	0.1875	4.76
$\frac{1}{8}$	0.1250	3.17
$\frac{1}{16}$	0.0625	1.58

\*Manufacturers Standard Gage (MSG) for reference purposes only