

DE LA
FONTAINE

STEEL DOORS AND FRAMES

Technical Data Book

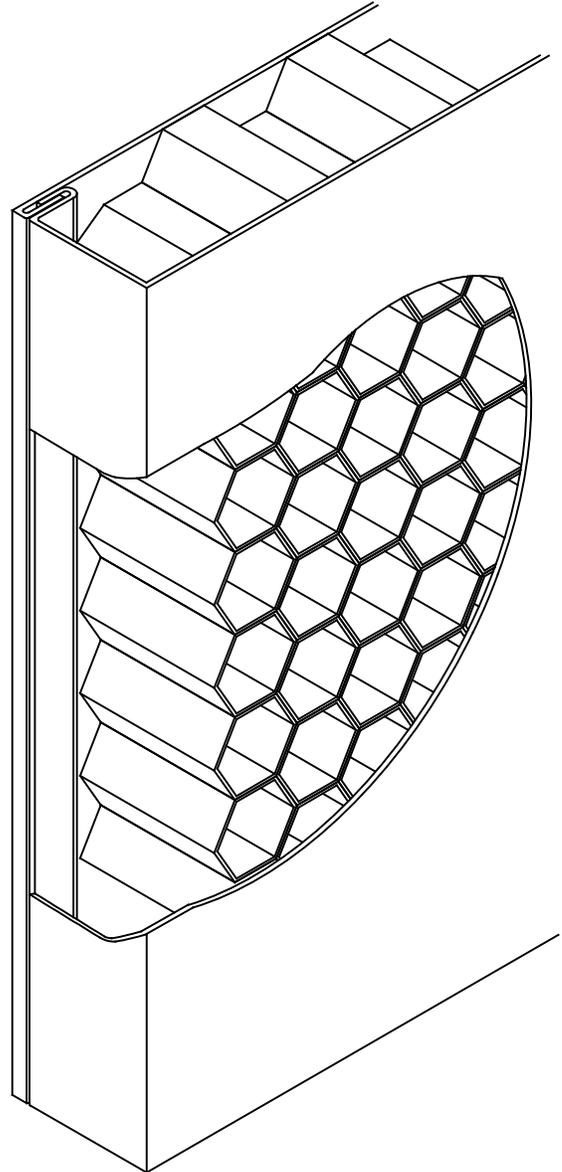
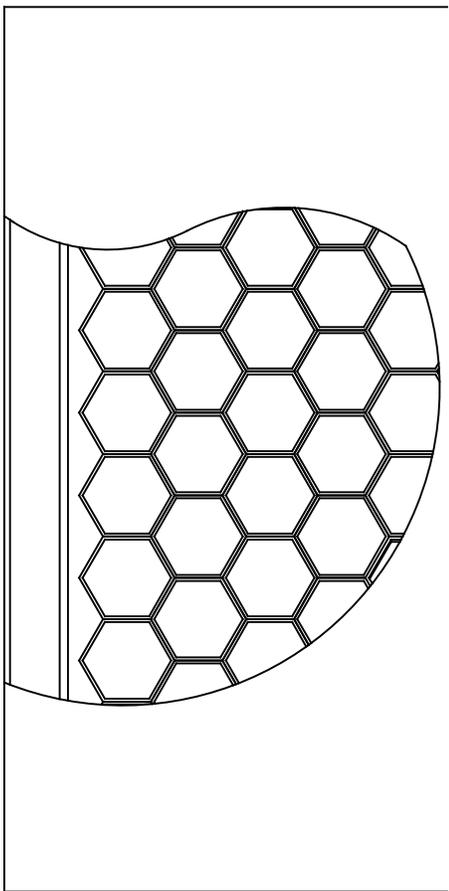
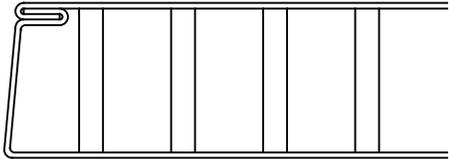
Revised September 2025

DOOR SERIES

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Honeycomb core

Continuous bonding of core to steel faces.

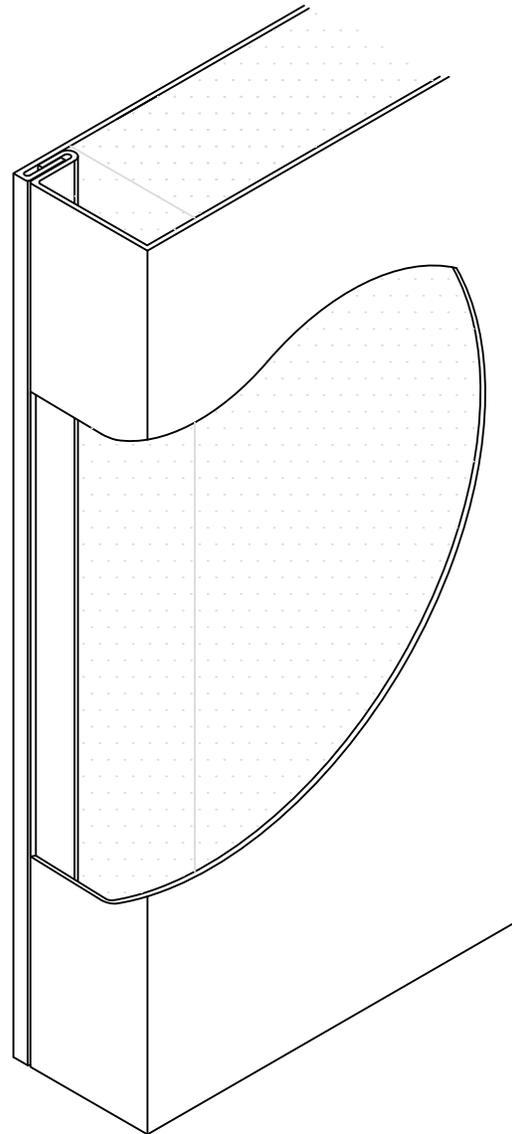
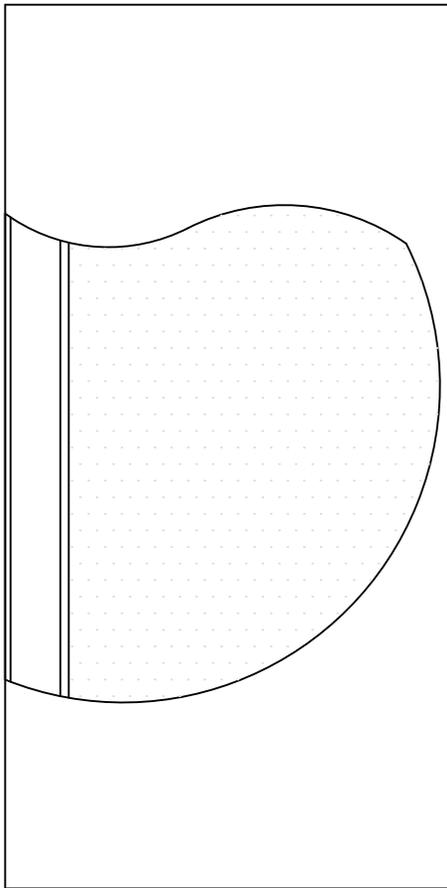


Added stiffener, full height, in middle of door when over 3'0" wide.

Polystyrene core

Continuous bonding of core to steel faces.

Thermal Performance	R factor		U factor	
	ft ² ·°F·h/BTU	m ² ·K/W	BTU/ft ² ·°F·h	W/m ² ·K
per SDI-113 (ASTM C1199, C1363, E1423)	2.50	0.44	0.40	2.27
per SDI-113 (ASTM C518)	7.03	1.24	0.14	0.80

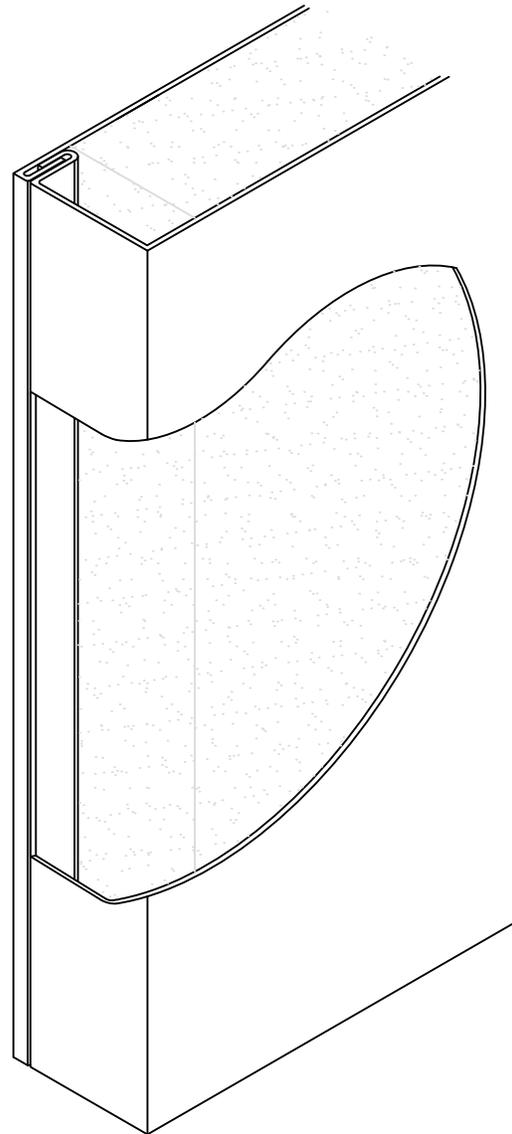
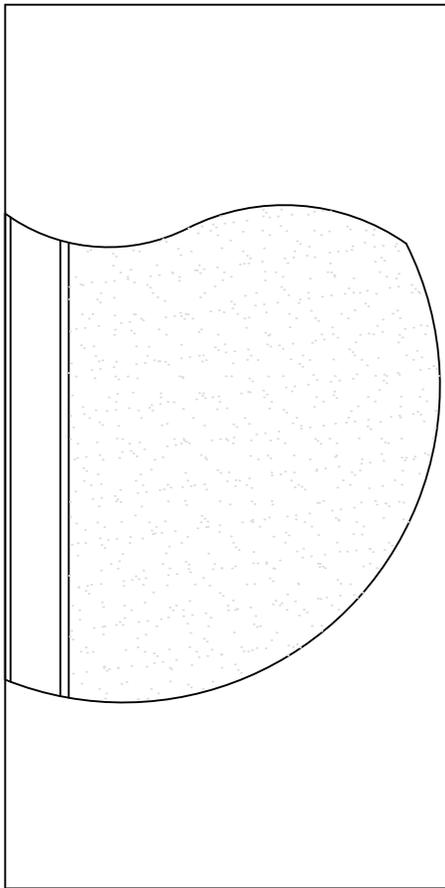
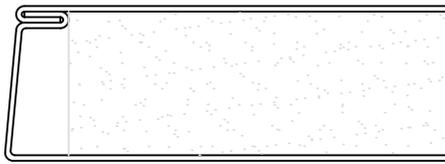


Added stiffener, full height, in middle of door when over 3'0" wide.

Polyurethane core

Continuous bonding of core to steel faces.

Thermal Performance	R factor		U factor	
	ft ² ·°F·h/BTU	m ² ·K/W	BTU/ft ² ·°F·h	W/m ² ·K
per SDI-113 (ASTM C1199, C1363, E1423)*	3.13	0.54	0.32	1.84
per SDI-113 (ASTM C1199, C1363, E1423)	2.86	0.50	0.35	1.99
per SDI-113 (ASTM C518)	10.20	1.80	0.098	0.557

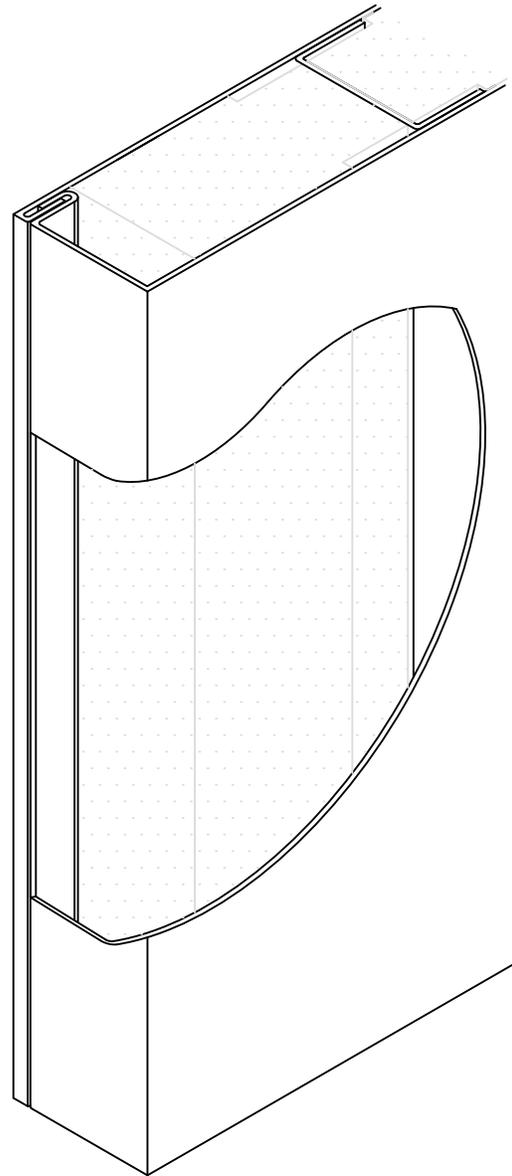
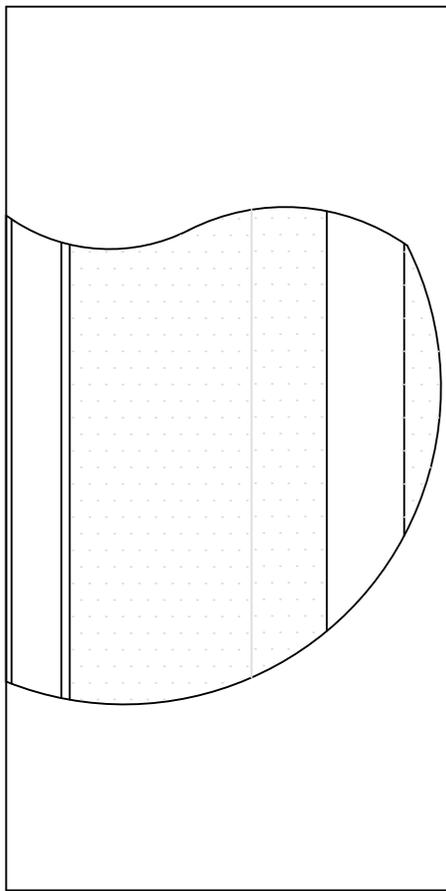
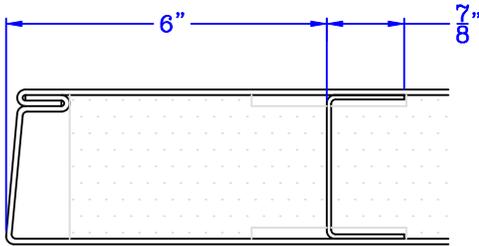


Added stiffener, full height, in middle of door when over 3'0" wide.
*When used with thermal break profile frame - see section O-12.30

Steel stiffened with polystyrene

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

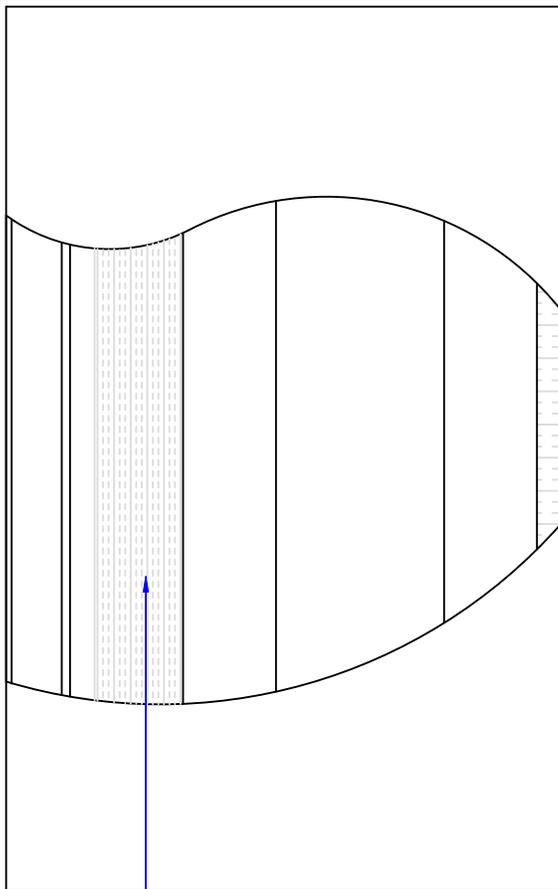
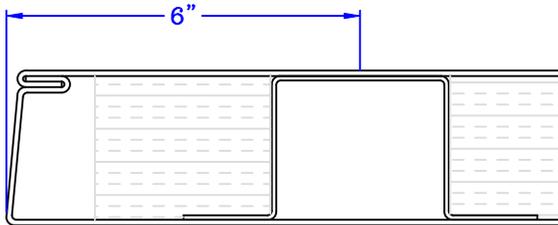
Thermal Performance	R factor		U factor	
	ft ² ·°F·h/BTU	m ² ·K/W	BTU/ft ² ·°F·h	W/m ² ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.89	0.33	0.53	3.00



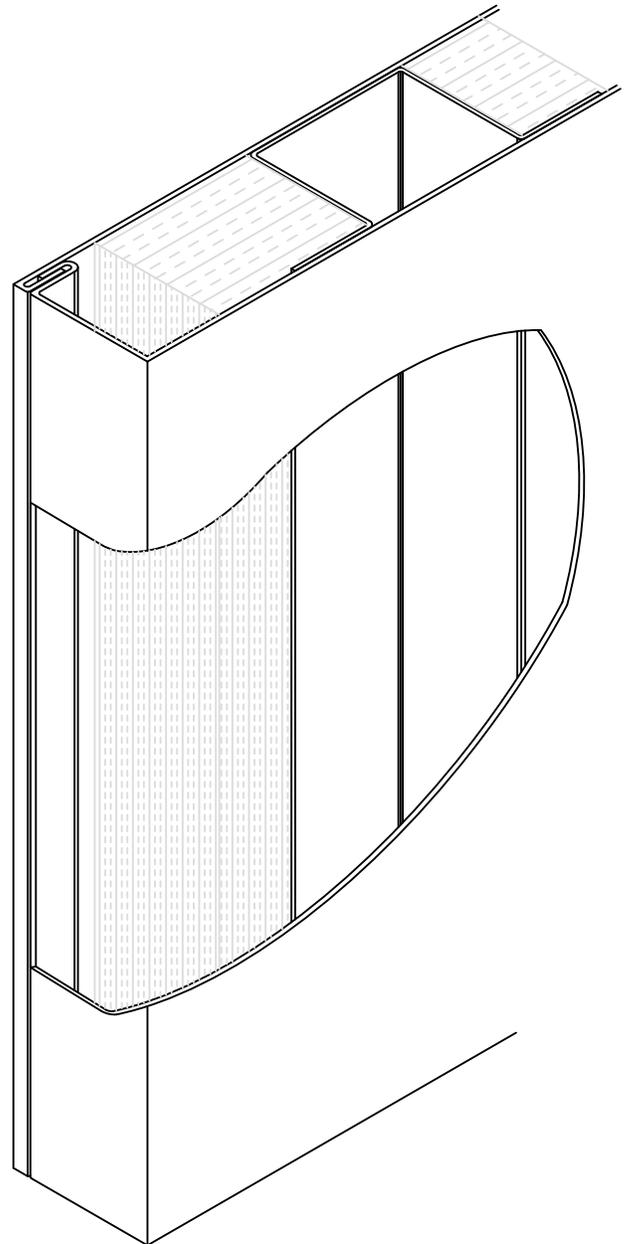
Steel stiffened with wool

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 ² ·°F·h/BTU	m ² ·K/W	BTU/ft ² ·°F·h	W/m ² ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.47	0.26	0.68	3.86



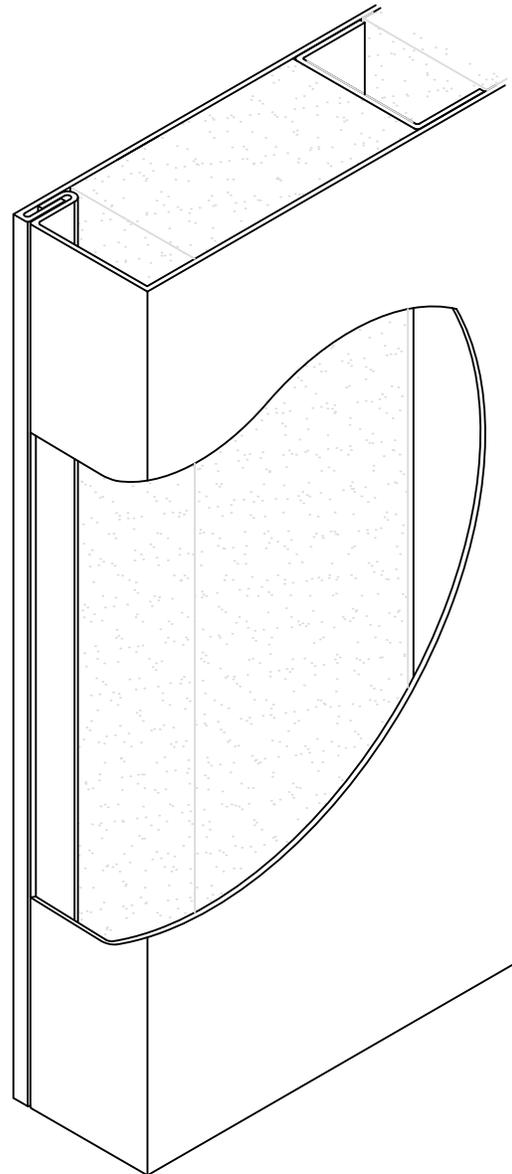
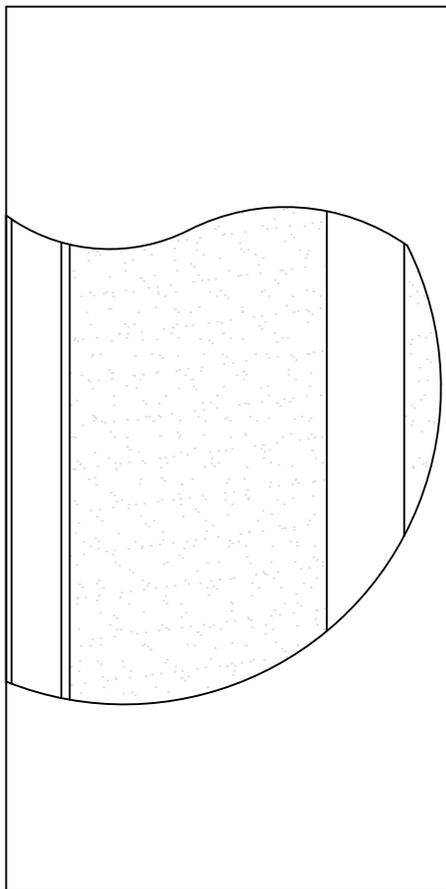
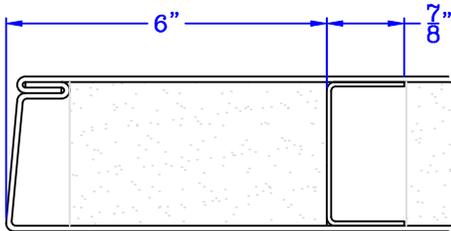
high density
batt-type
insulation



Steel stiffened with polyurethane

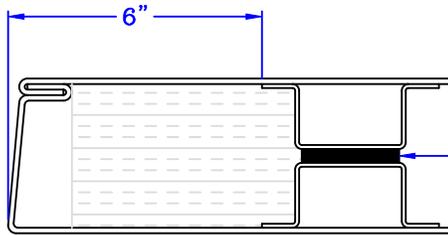
With vertical 18 gage steel stiffeners, 6" on center with solid polyurethane blocks.
Continuous bonding of core to steel faces.

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

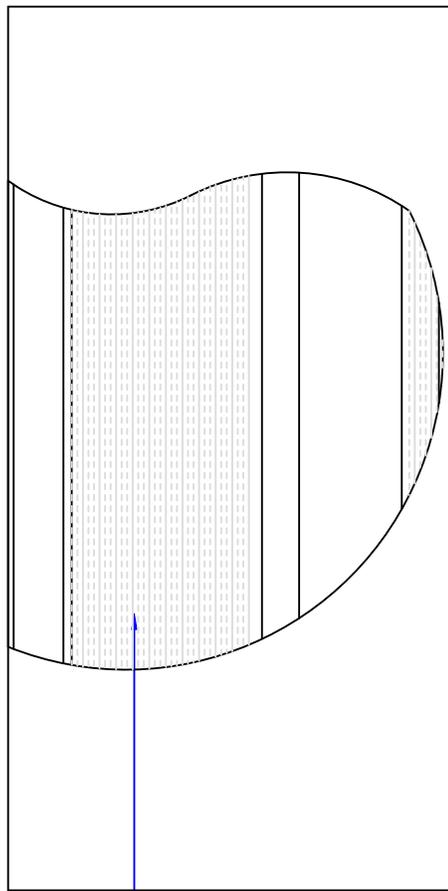


Steel stiffened with wool, Thermal rated
 With vertical 18 gage steel stiffeners, 6" on center.
 Continuous bonding of core to steel faces.

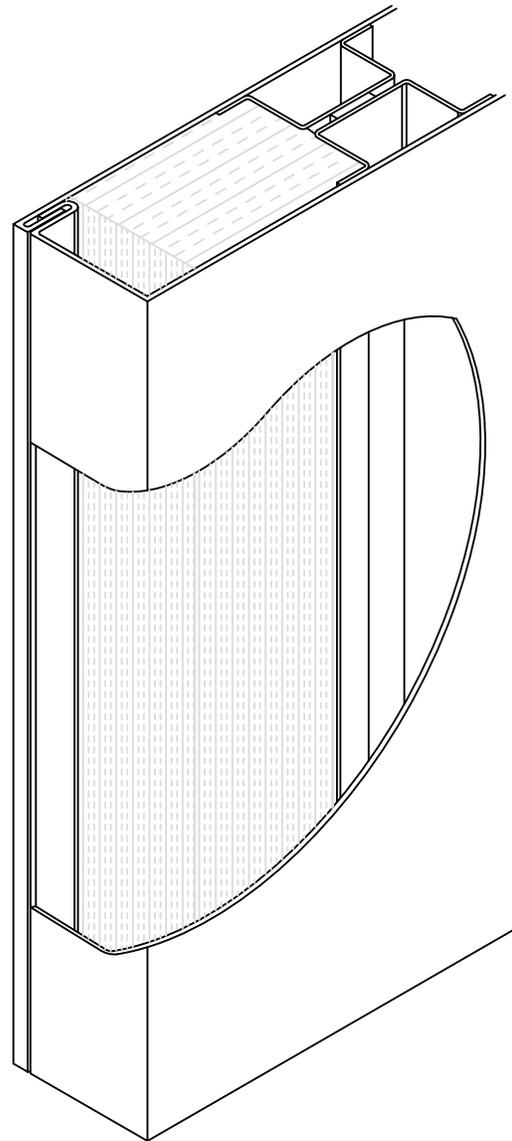
Thermal Performance	R factor		U factor	
	ft ² ·°F·h/BTU	m ² ·K/W	BTU/ft ² ·°F·h	W/m ² ·K
per SDI-113 (ASTM C1199, C1363, E1423)	1.47	0.26	0.68	3.86



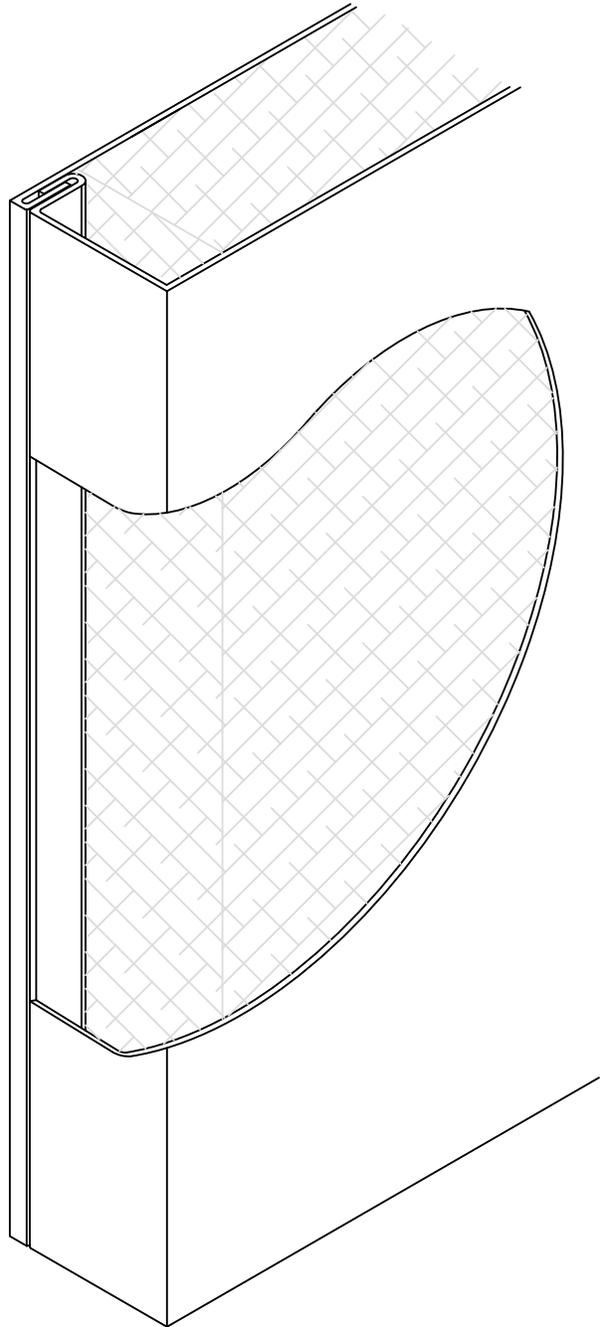
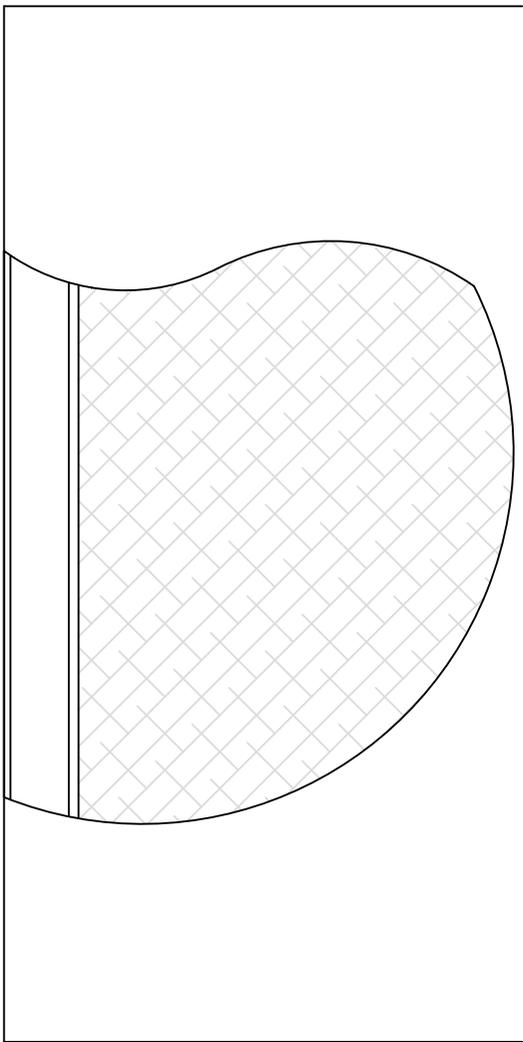
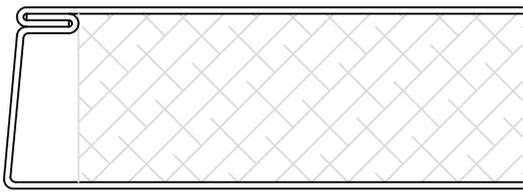
intumescent
between
stiffeners



high density
batt-type
insulation



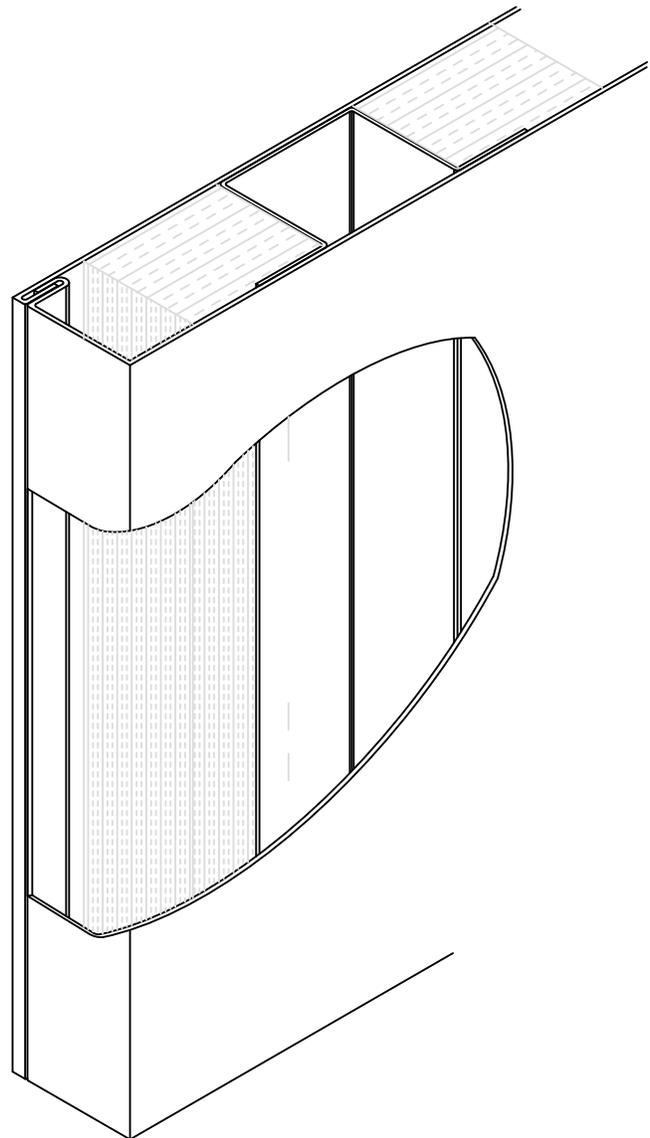
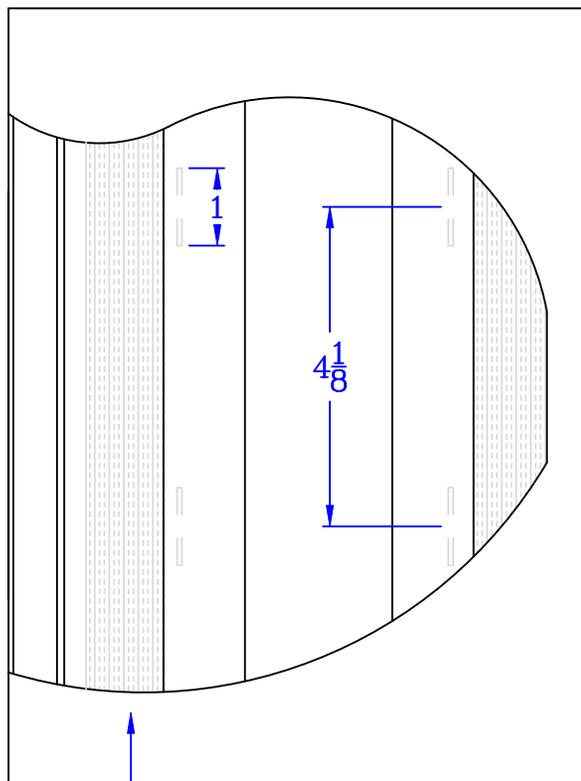
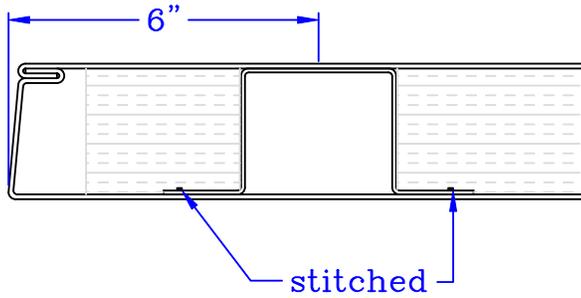
Temperature rise - Mineral core - 450°F in 30 min
Continuous bonding of core to steel faces.



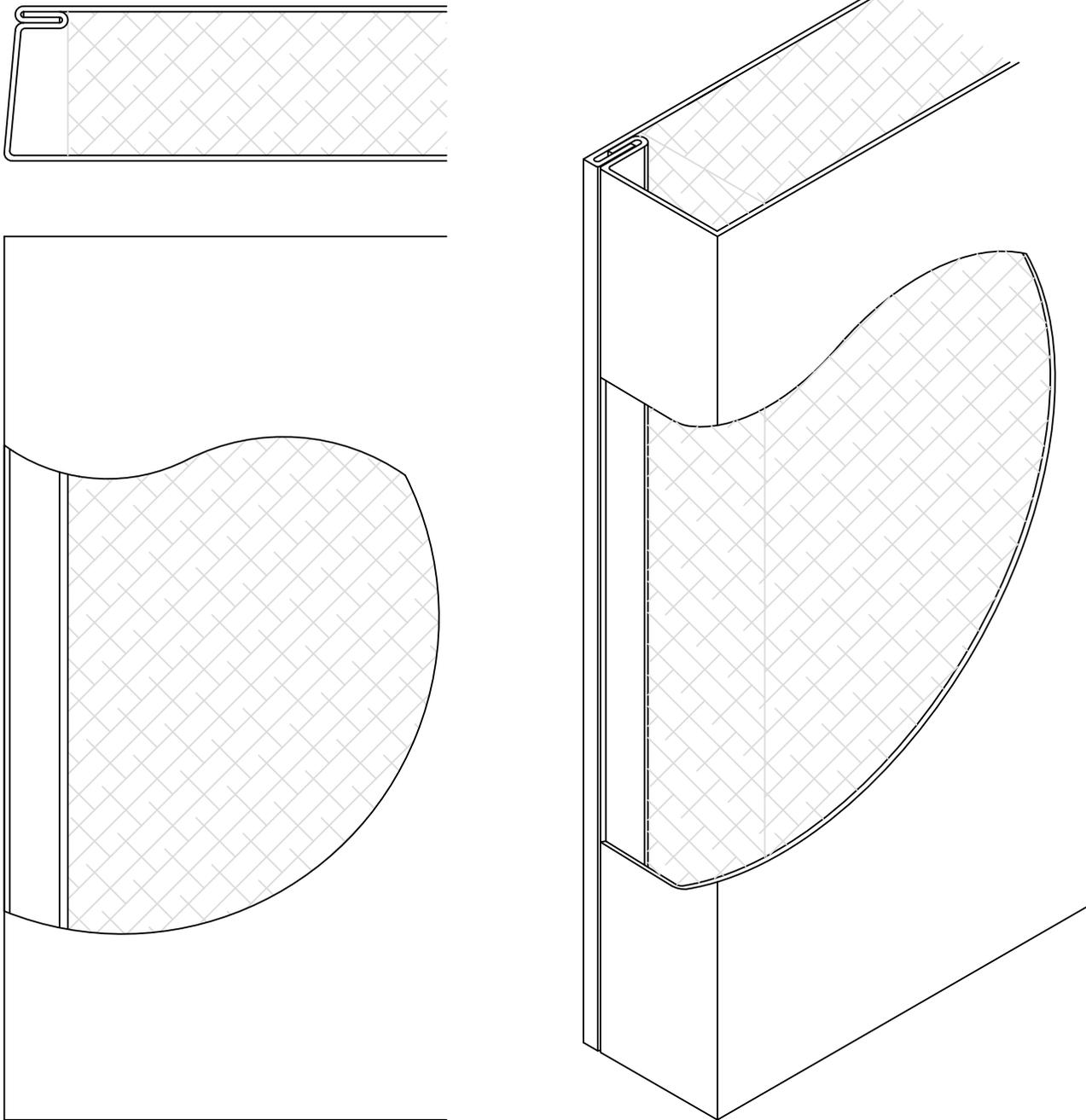
Temperature rise - Steel stiffened - 450°F in 30 min

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

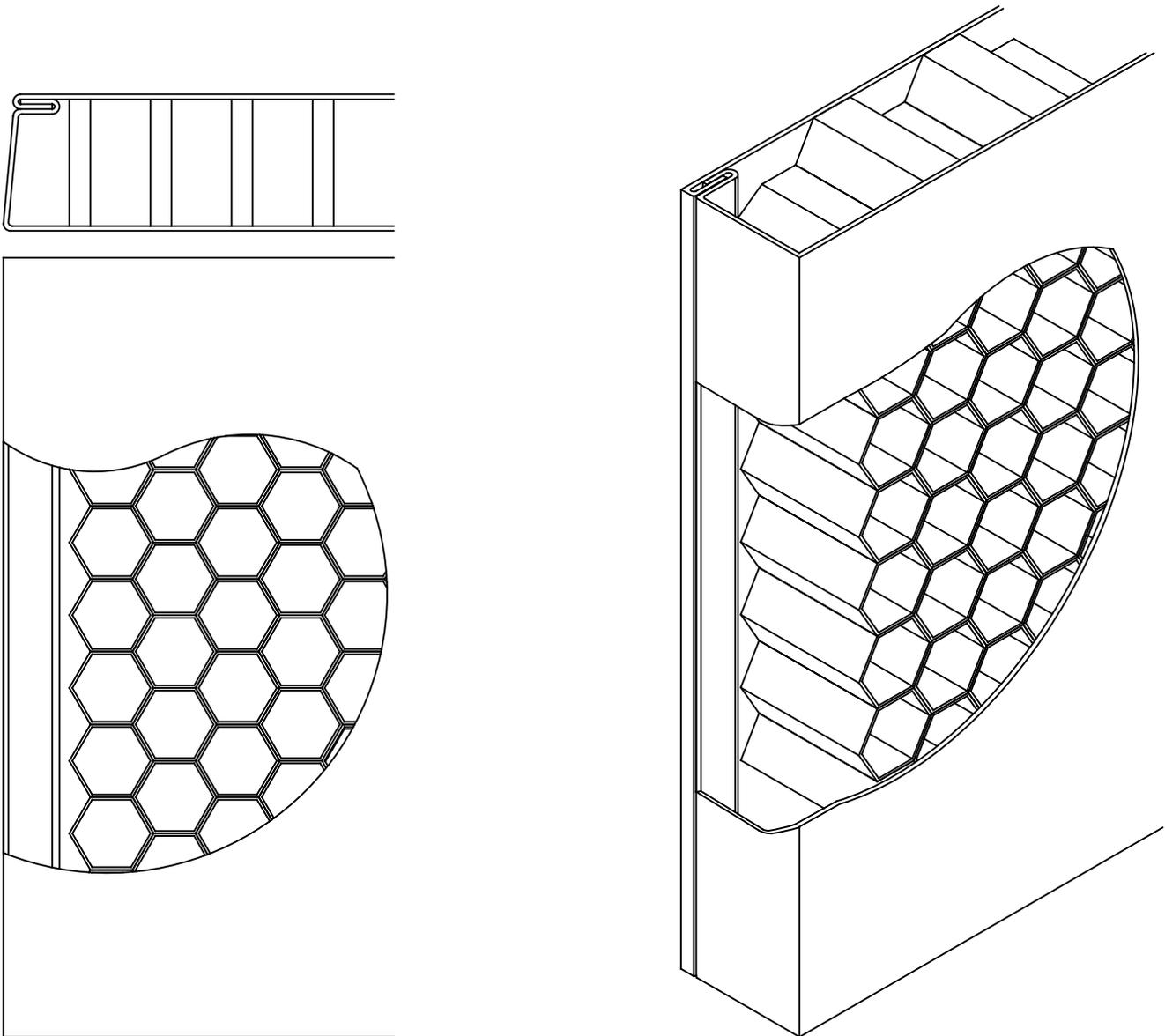
Welded stiffeners, laser welding.



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.

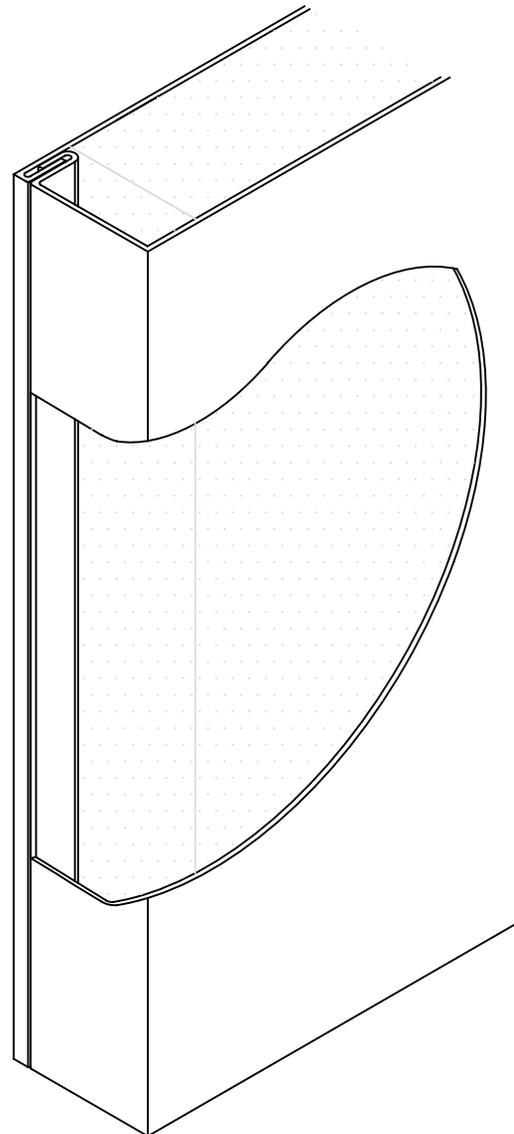
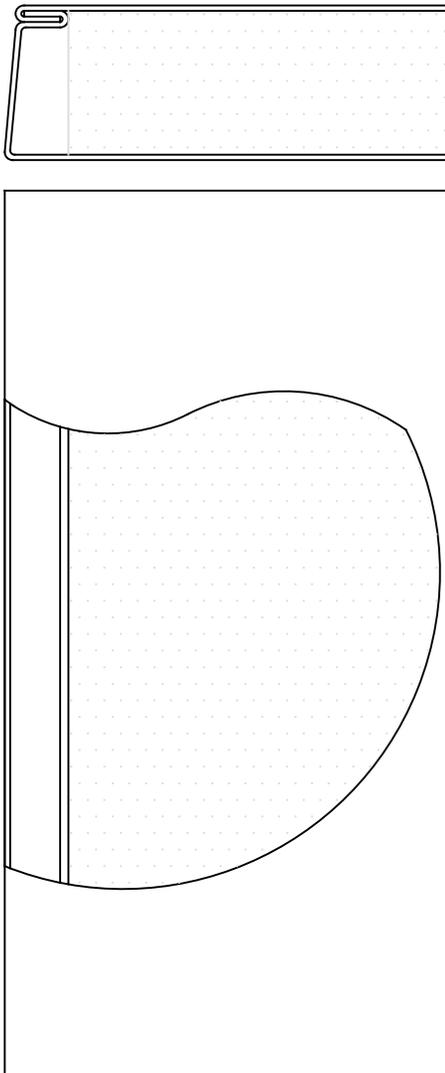


Added stiffener, full height, in middle of door when over 3'0" wide.

Polystyrene core at stainless steel door

R and U values not available.

Continuous bonding of core to steel faces.

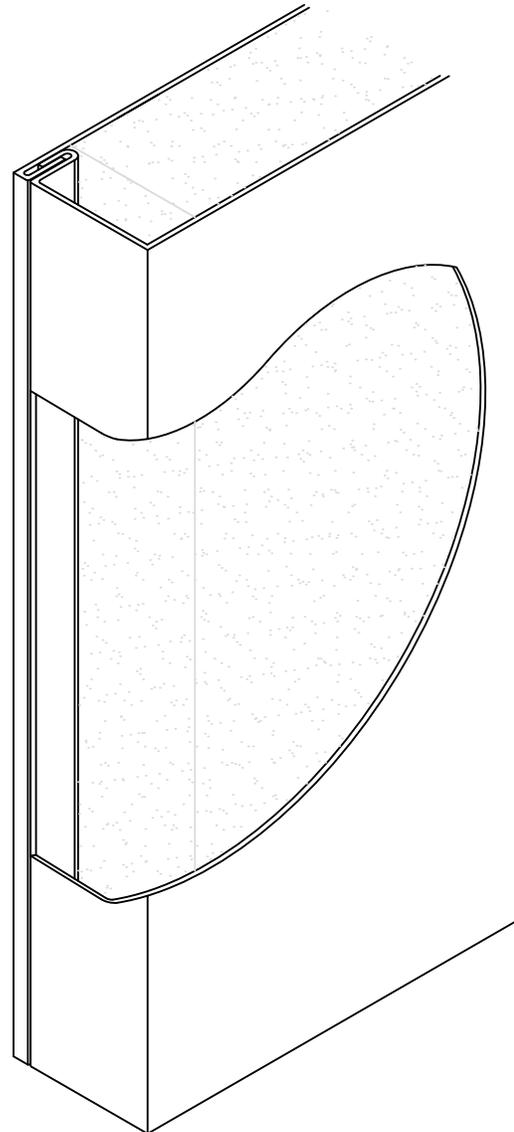
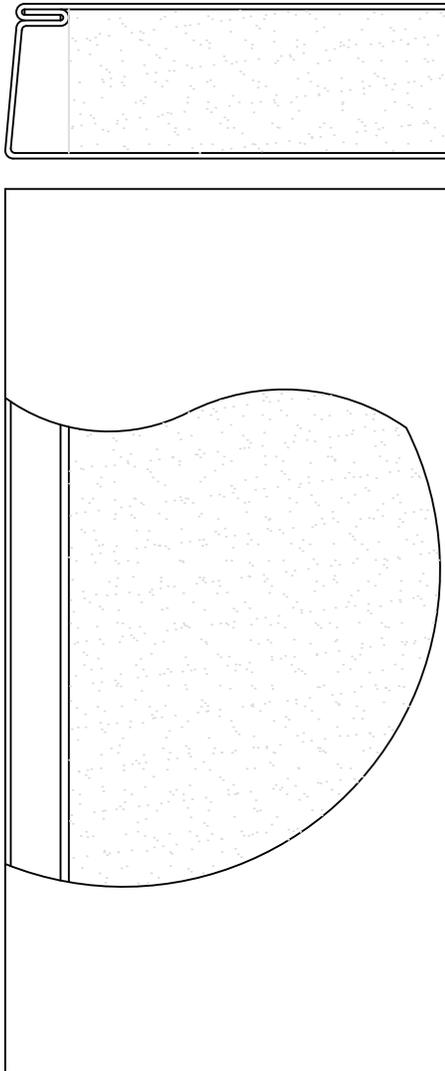


Added stiffener, full height, in middle of door when over 3'0" wide.

Polyurethane core at stainless steel door

R and U values not available.

Continuous bonding of core to steel faces.

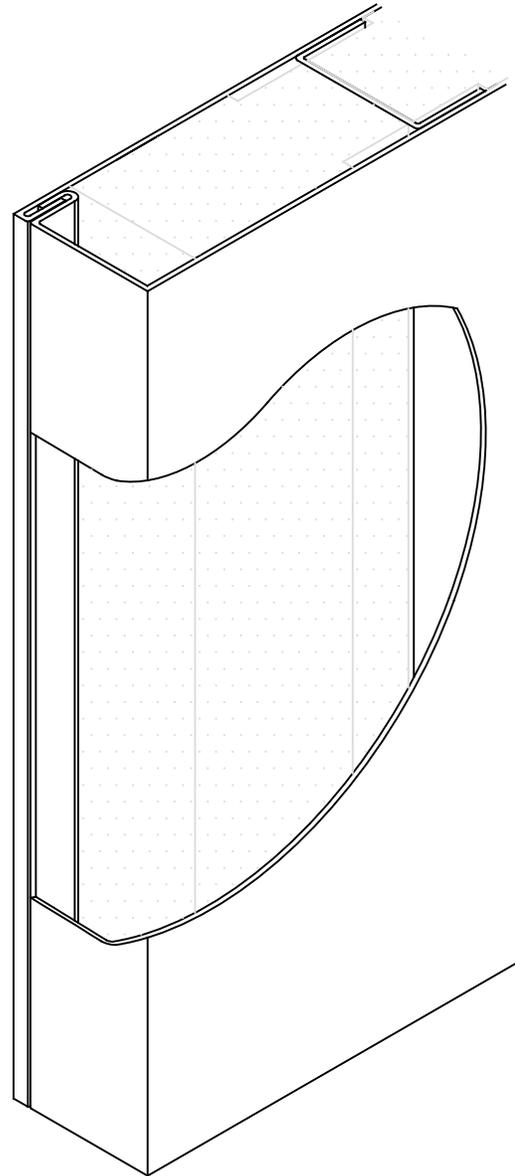
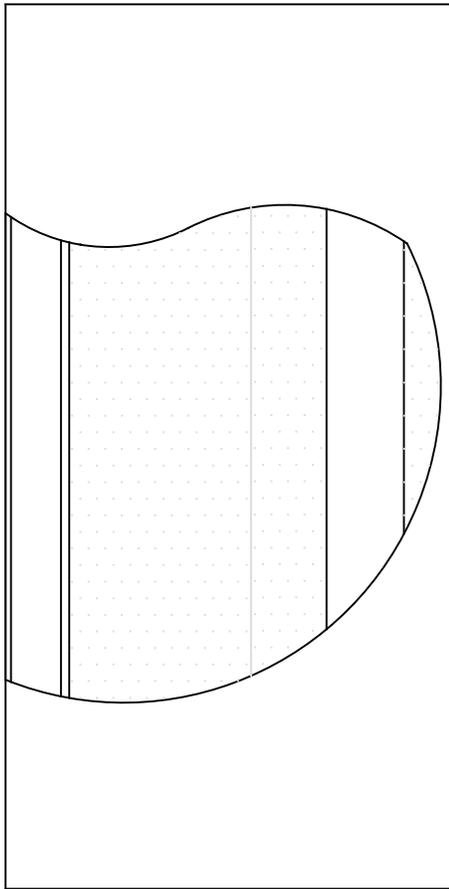
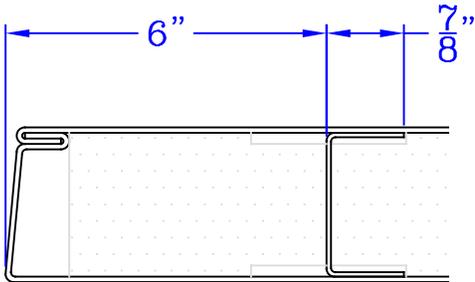


Added stiffener, full height, in middle of door when over 3'0" wide.

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.

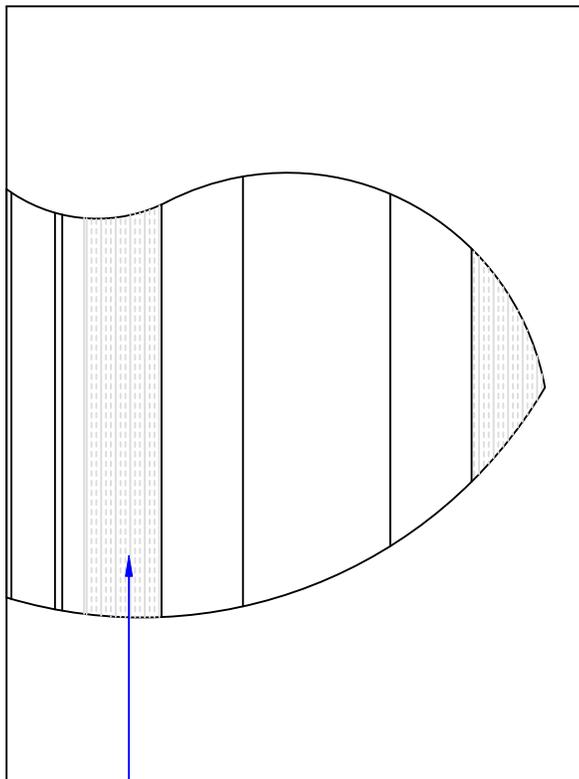
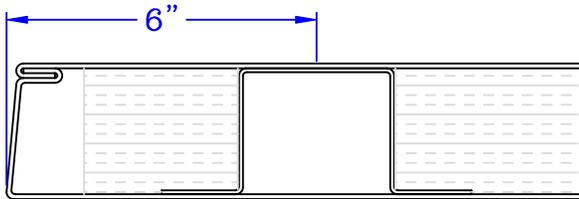


Steel stiffened with wool at stainless steel door

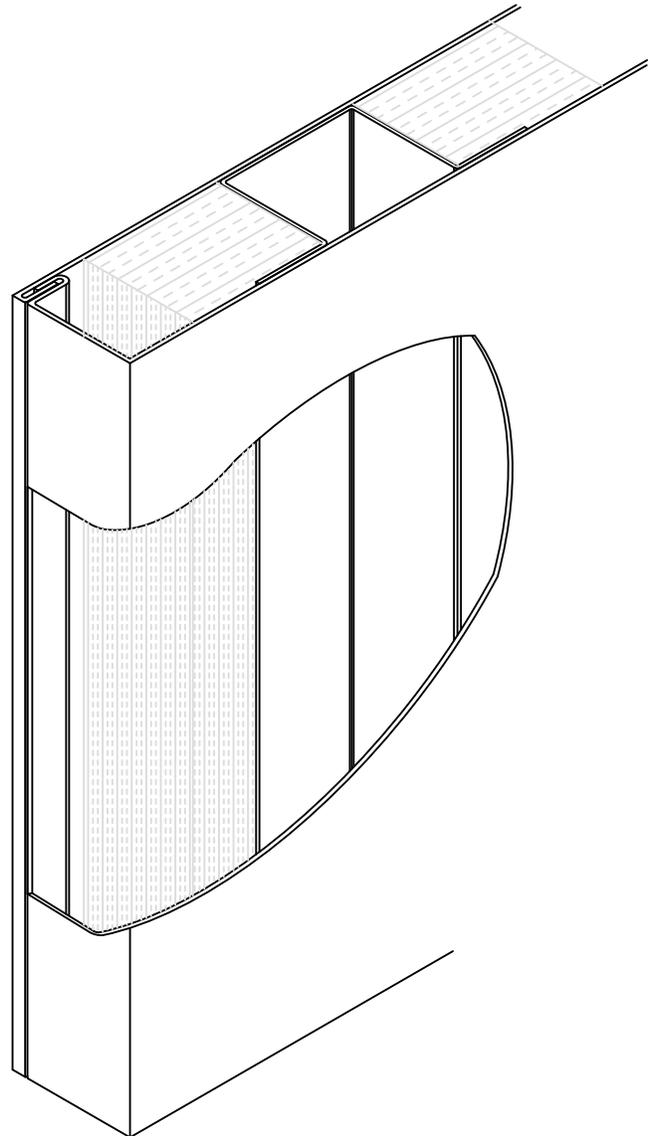
R and U values not available.

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

Continuous bonding of core to steel faces.



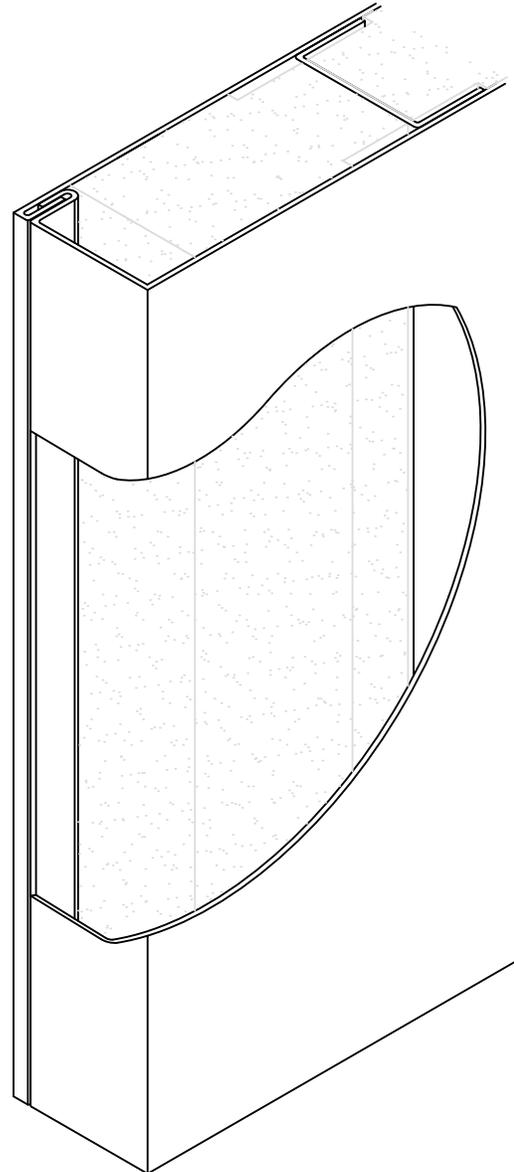
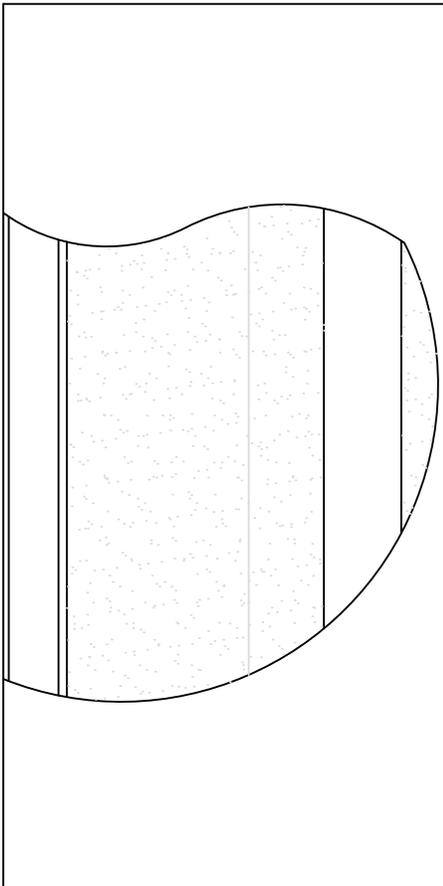
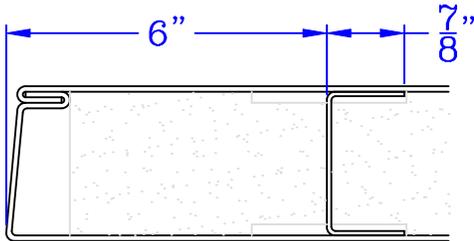
high density
batt-type
insulation



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.

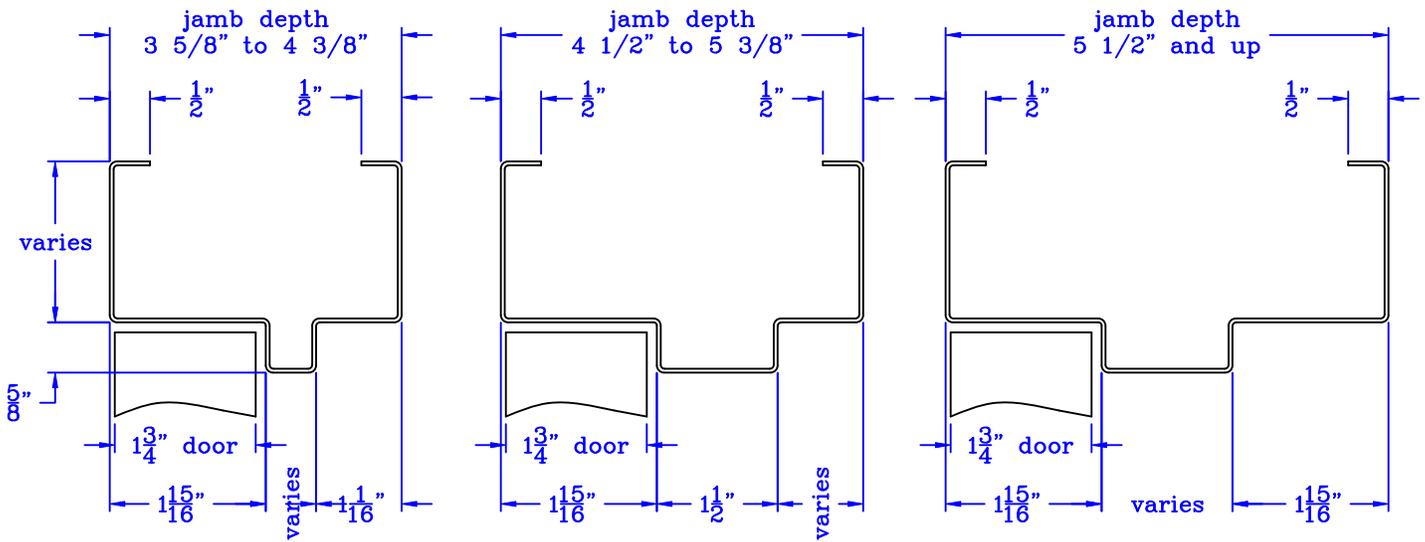


FRAME SERIES

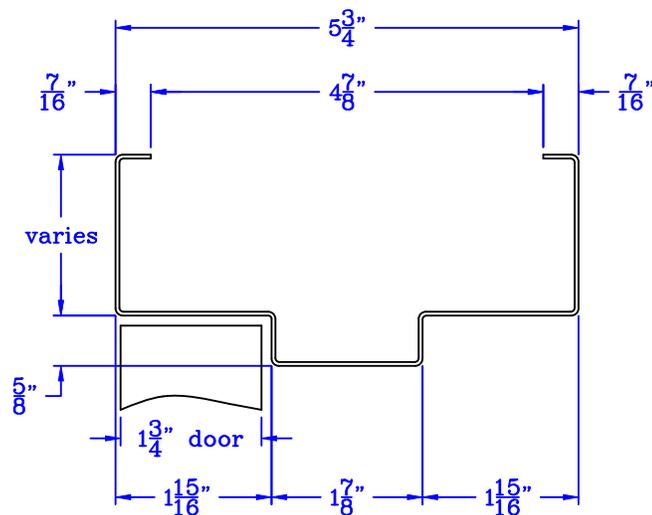
FRAME SERIES	PAGE
Standard Frame (SR Series)	
SR18 - 18 ga Standard Frame	F-4
SR16 - 16 ga Standard Frame	F-6
SR14 - 14 ga Standard Frame	F-8
SR12 - 12 ga Standard Frame	F-10
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DE14 - 14 ga Double Egress Frame	F-34
DE12 - 12 ga Double Egress Frame	F-36
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SRSS14, DRSS14, DWSS14 & LRSS14	F-40

Double rabbet profile, SR18

All jamb depths (excluding 5 3/4")



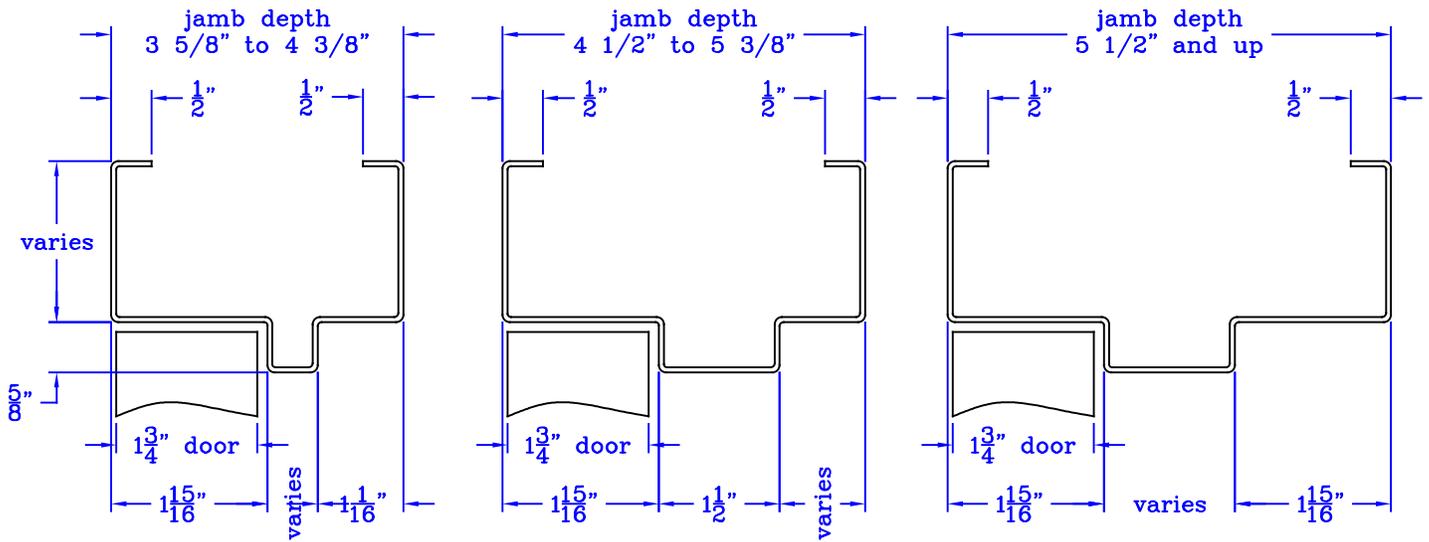
5 3/4" jamb depth



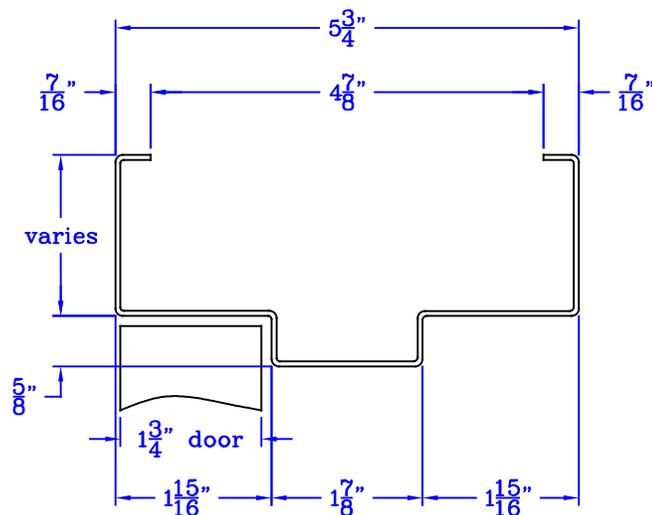
Single rabbet at less than 3 5/8" jamb depth
Not available for welded elevations

Double rabbet profile, SR16

All jamb depths (excluding 5 3/4")



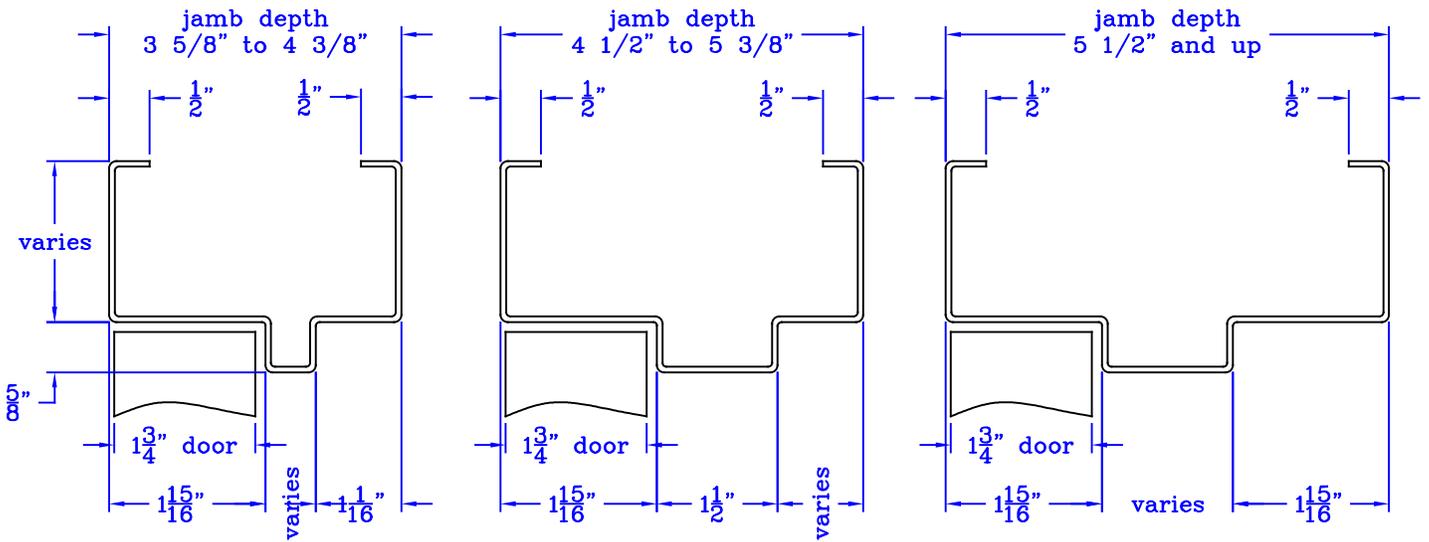
5 3/4" jamb depth



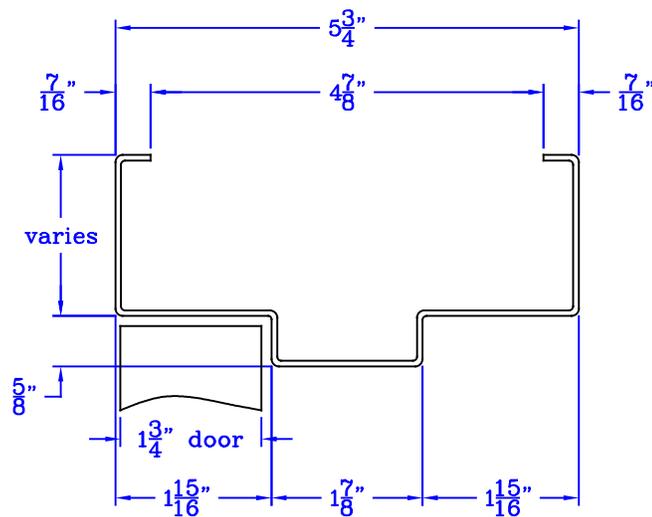
Single rabbet at less than 3 5/8" jamb depth

Double rabbet profile, SR14

All jamb depths (excluding 5 3/4")



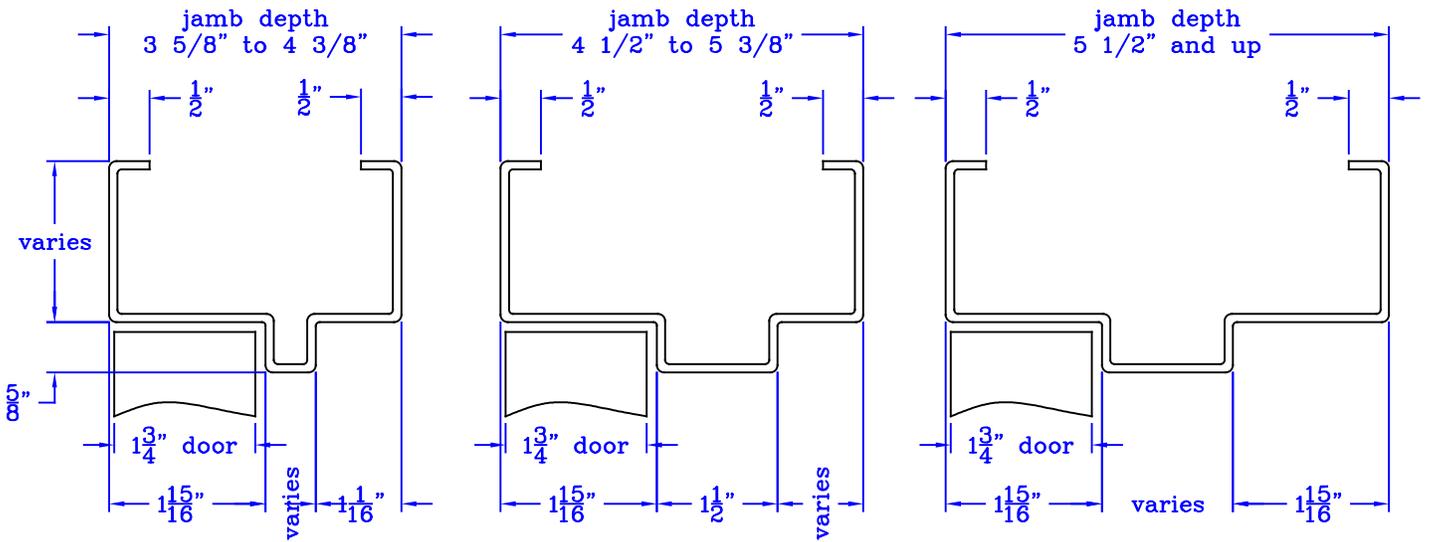
5 3/4" jamb depth



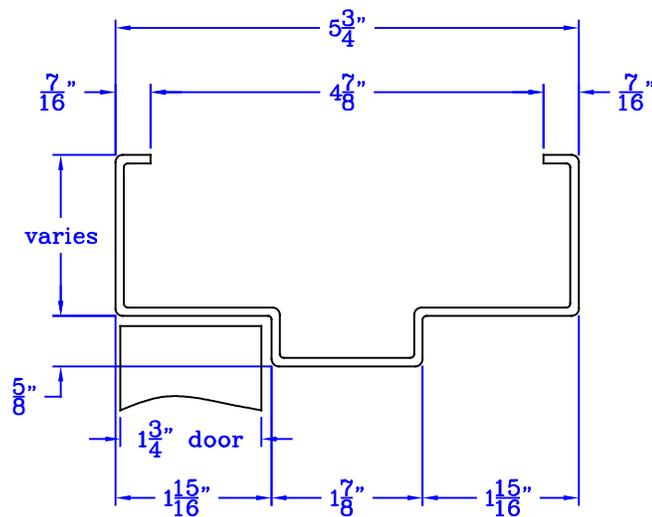
Single rabbet at less than 3 5/8" jamb depth

Double rabbet profile, SR12

All jamb depths (excluding 5 3/4")



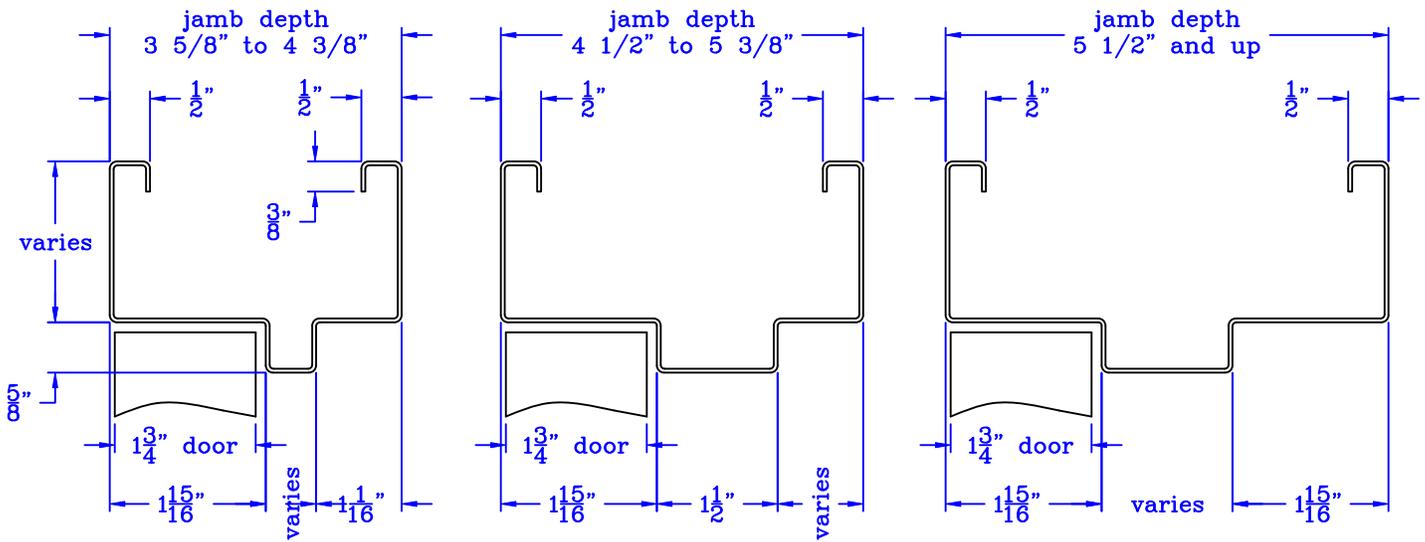
5 3/4" jamb depth



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

Double rabbet profile, DW18

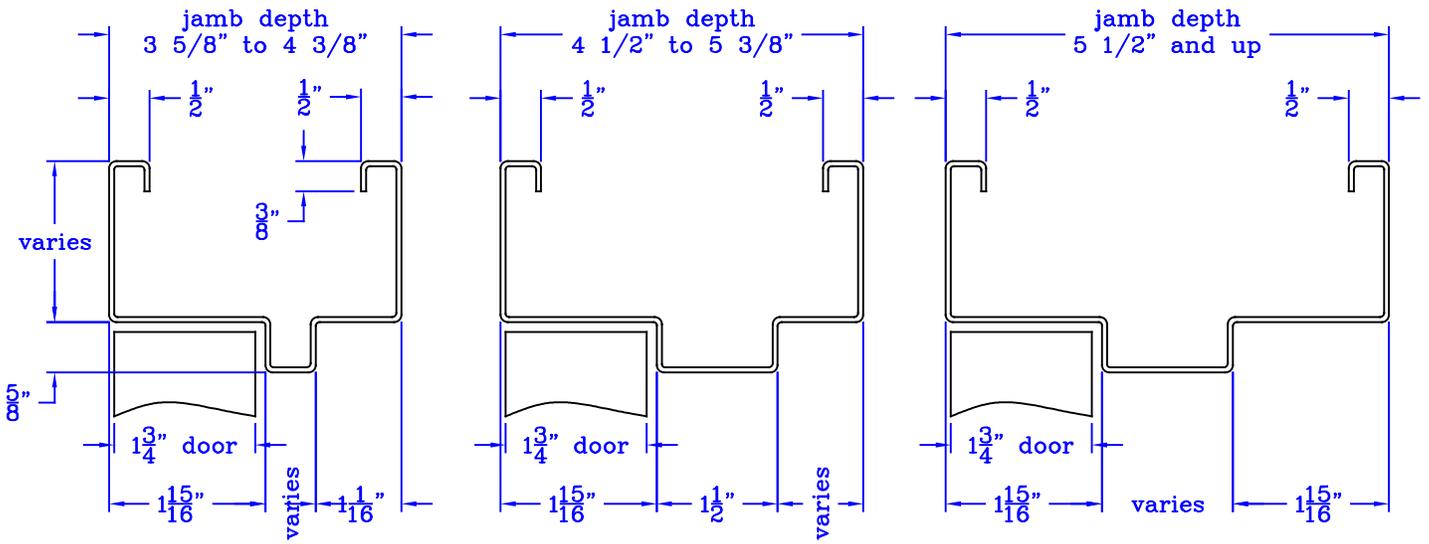
All jamb depths



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

Double rabbet profile, DW16

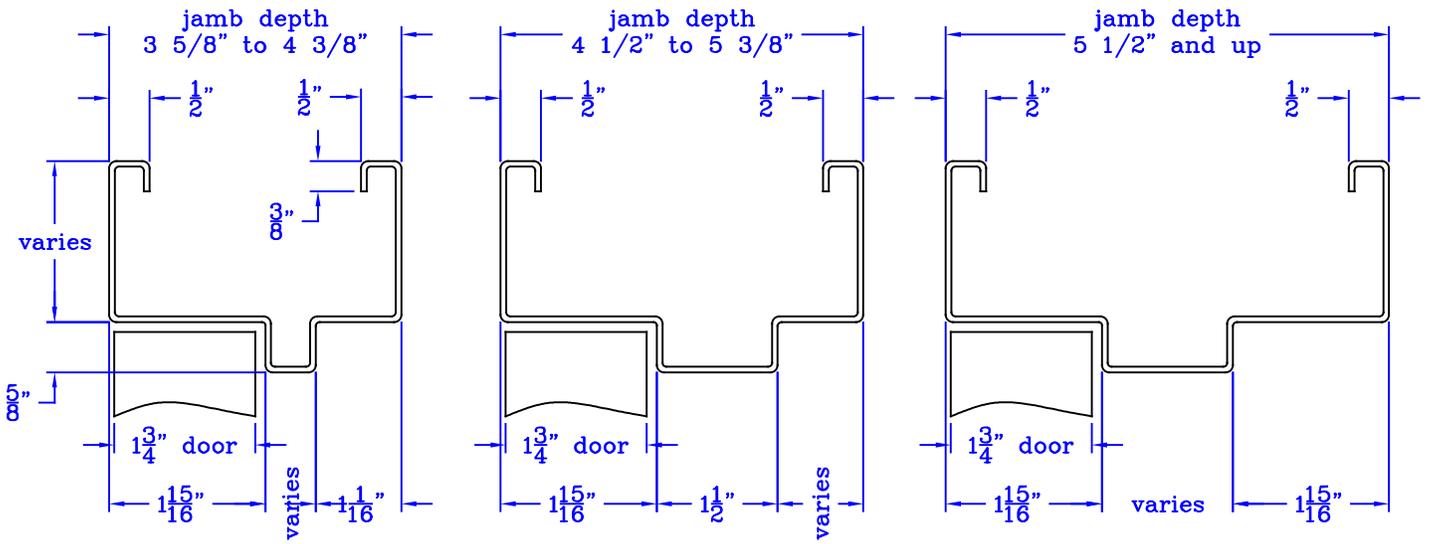
All jamb depths



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

Double rabbet profile, DW14

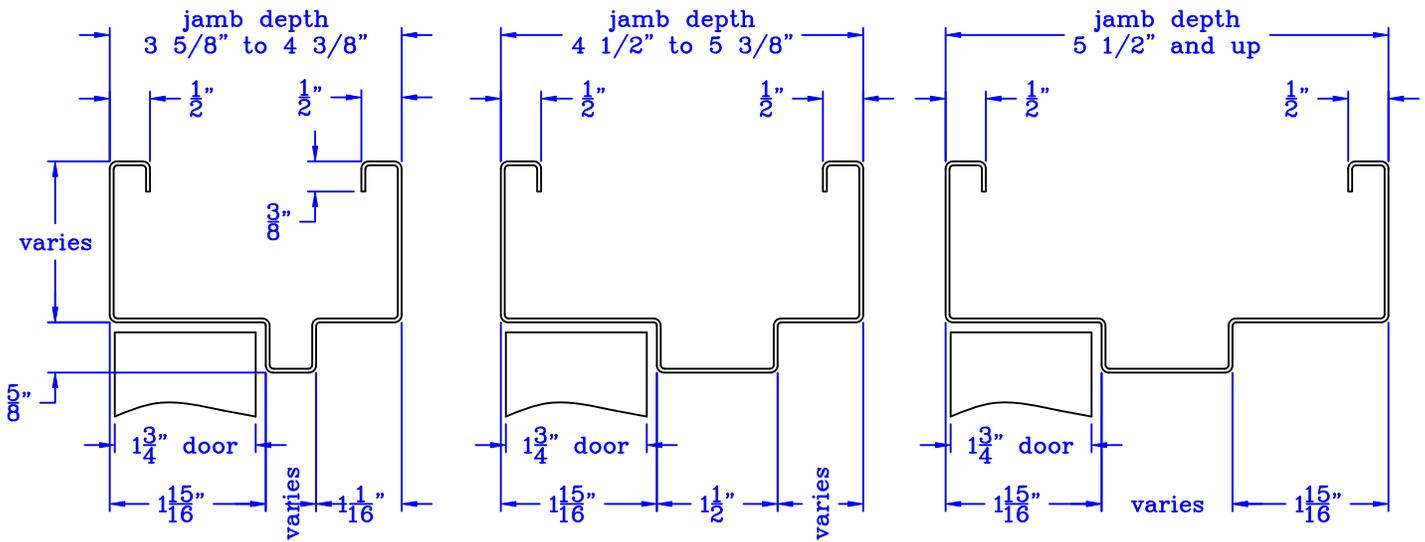
All jamb depths



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

Double rabbet profile, DR18

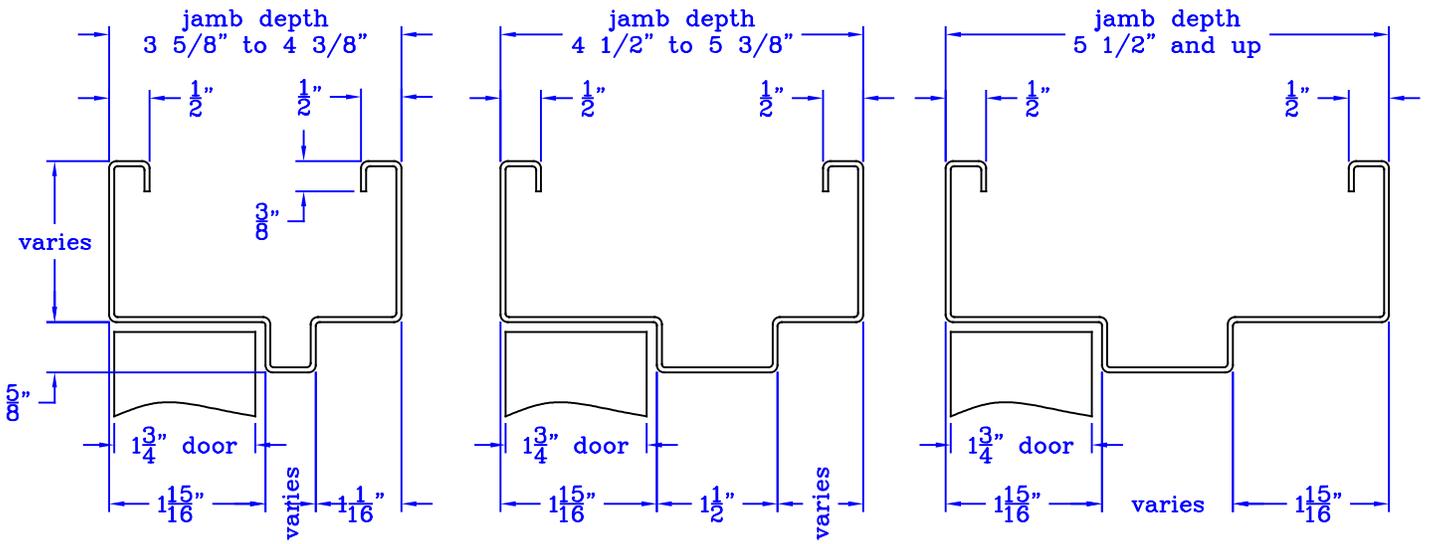
All jamb depths



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

Double rabbet profile, DR16

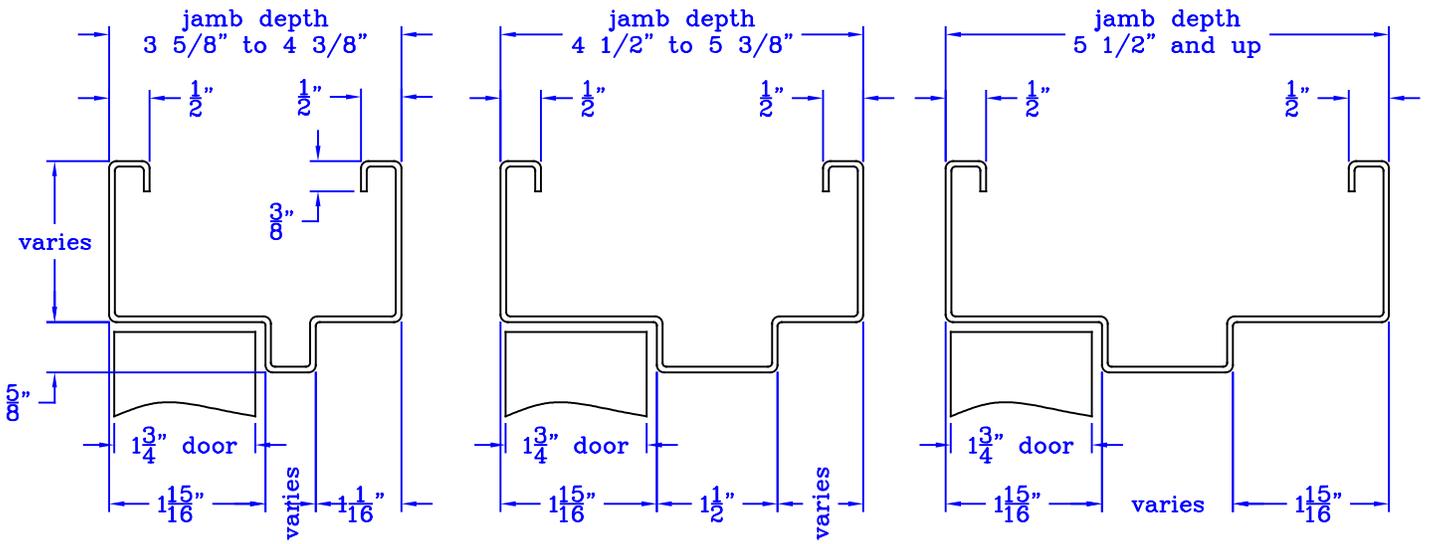
All jamb depths



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

Double rabbet profile, DR14

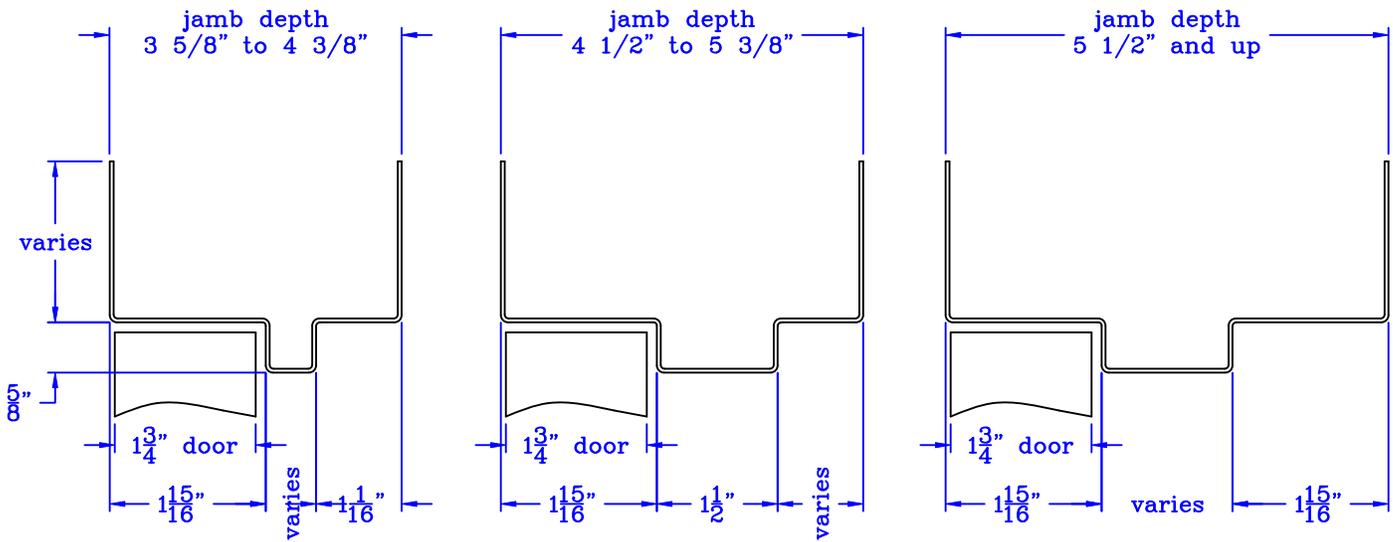
All jamb depths



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

Double rabbet profile, LR18

All jamb depths

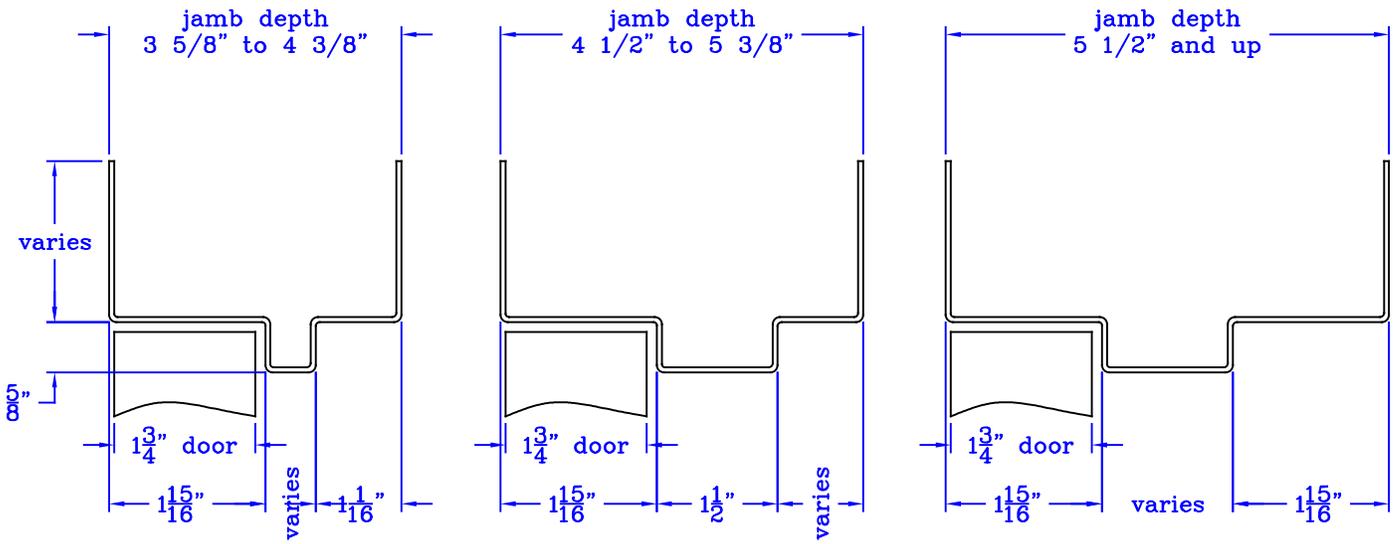


Jamb depth is a $\frac{1}{8}''$ more than wall thickness

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

Double rabbet profile, LR16

All jamb depths

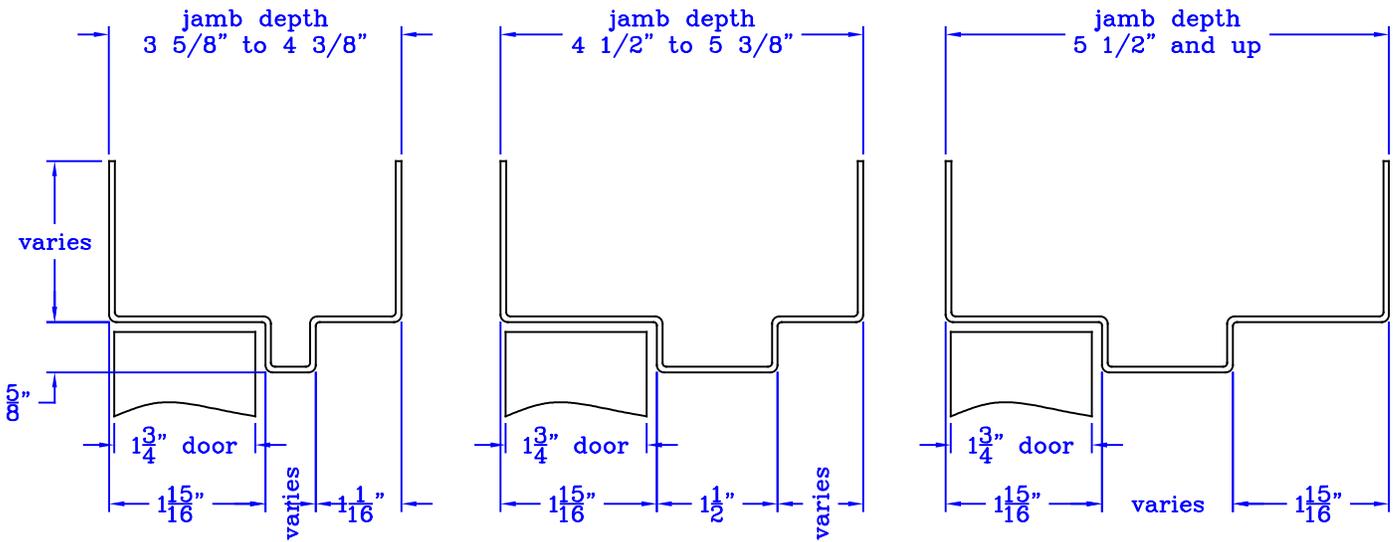


Jamb depth is a $\frac{1}{8}$ " more than wall thickness

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

Double rabbet profile, LR14

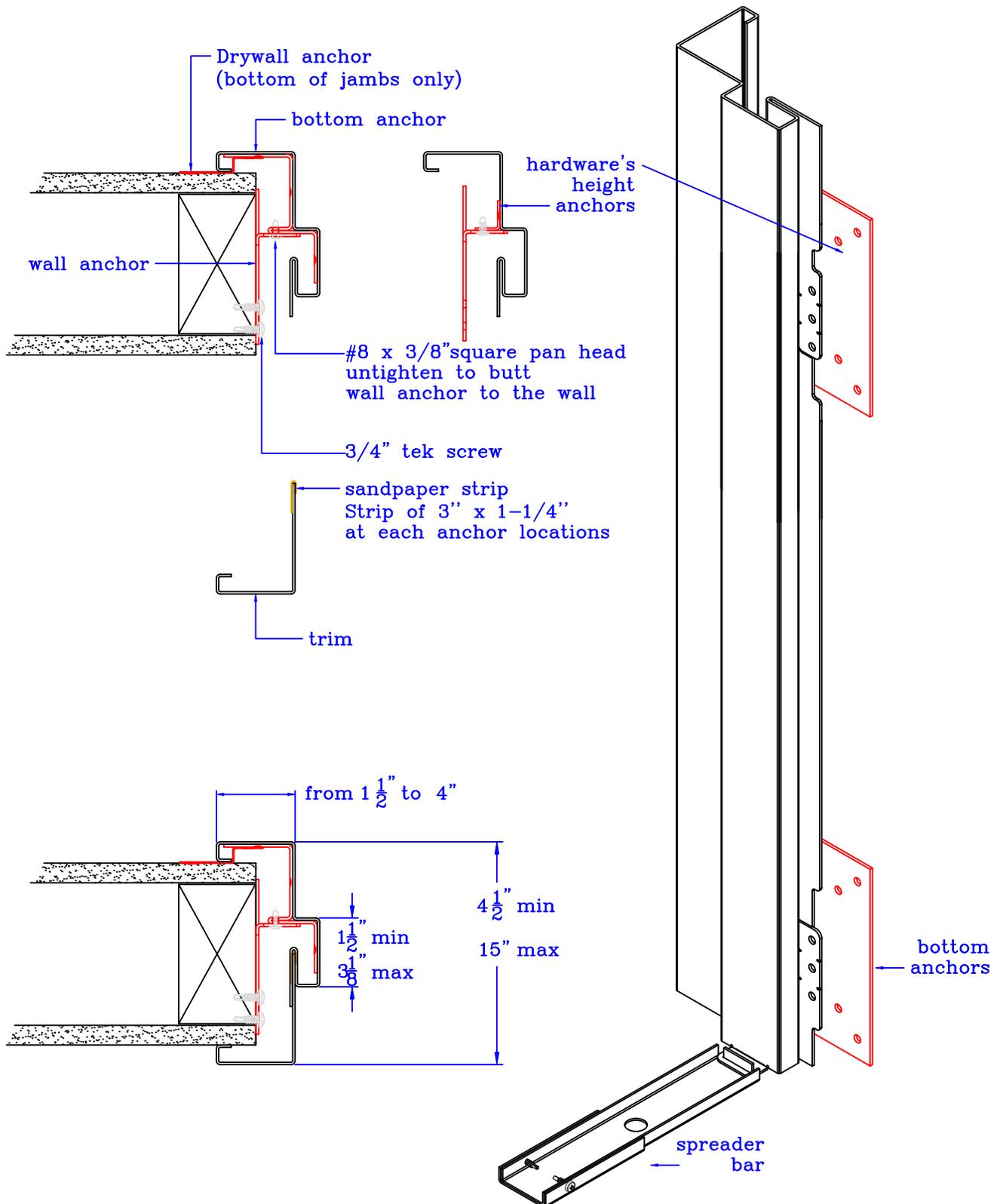
All jamb depths



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

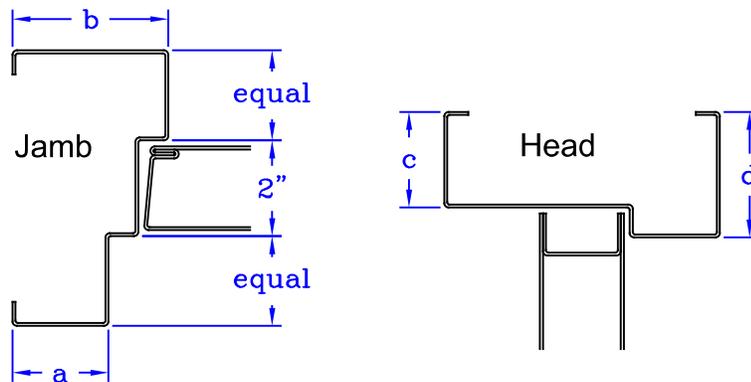
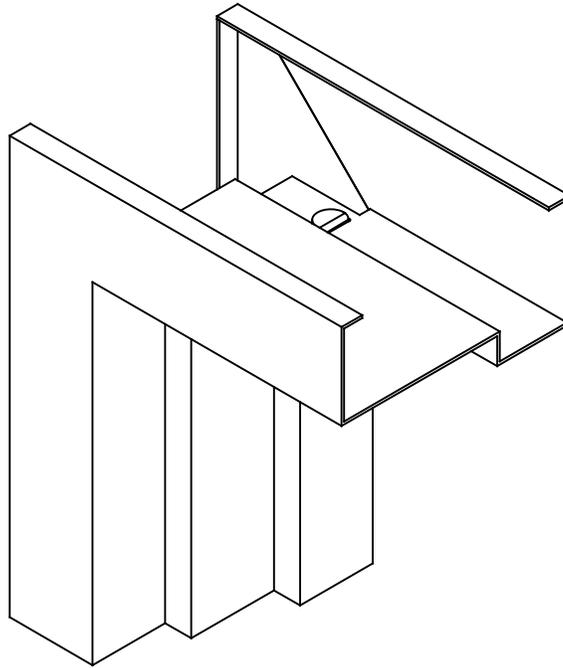


Rough opening : opening width + 2"
: opening height + 1"

See www.delafontaine.com/wp-content/uploads/2020/06/split-frame-installation-instructions.pdf

Double egress frame, DE16

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"

Limitations

From 3160 to 8090

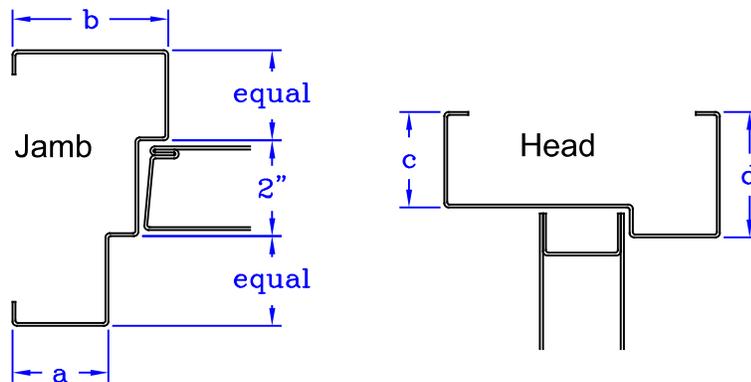
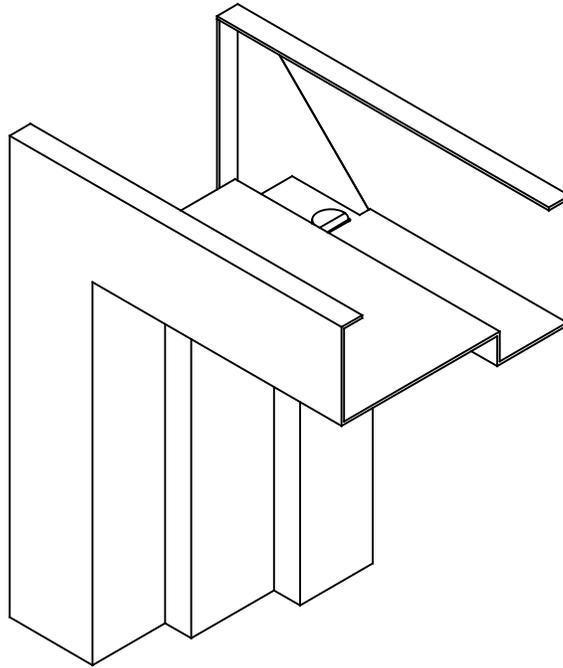
From jamb depth 3-5/8" to 10-7/8"

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"

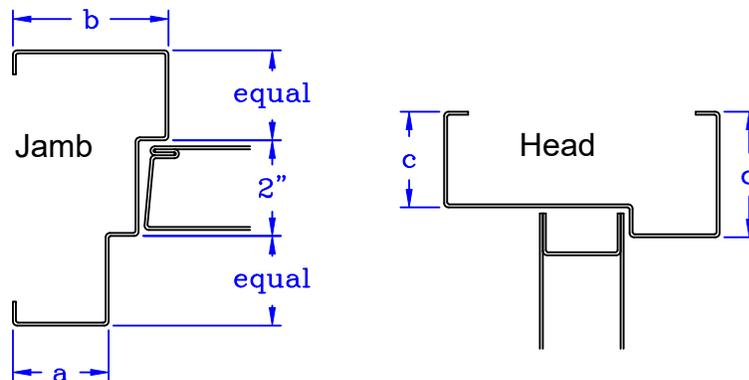
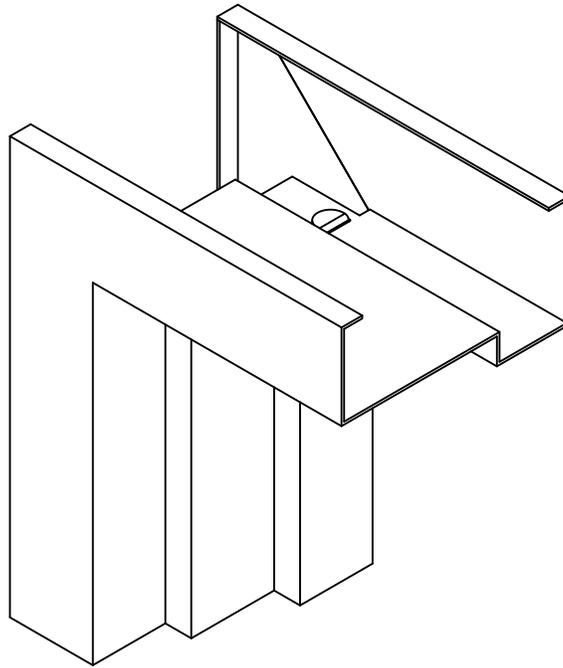
-DE3

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 egress frame, DE12

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



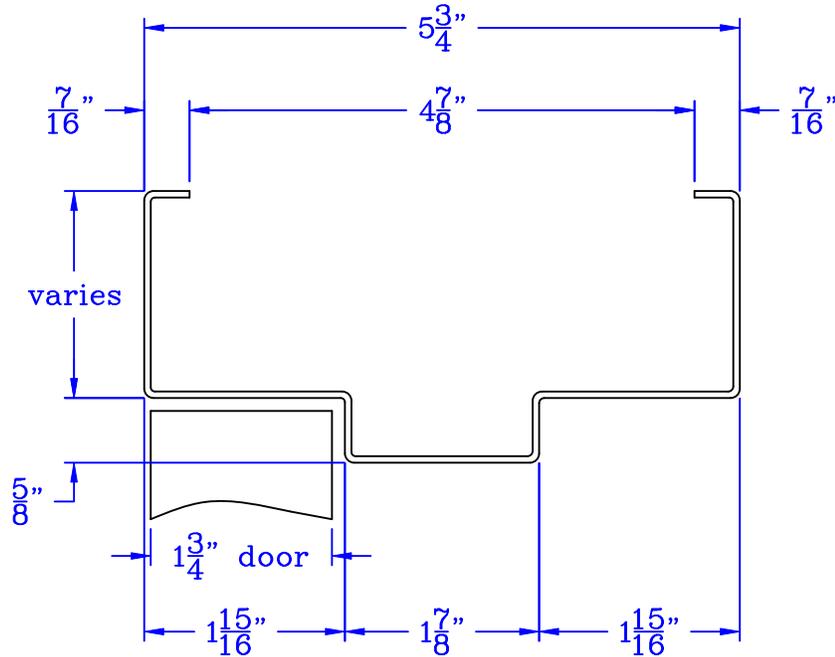
-DE1		-DE2 (by default unless otherwise noted)		-DE3	
Jamb	Head	Jamb	Head	Jamb	Head
a=2"	c=2"	a=1 3/8"	c=1 3/8"	a=1 3/8"	c=2"
b=3 1/4"	d=2 5/8"	b=2 5/8"	d=2"	b=2 5/8"	d=2 5/8"

-DE1, DE2, DE3
 Jamb Depth = 5 3/4" to 13 1/2"
 Returns = 1/2" min.

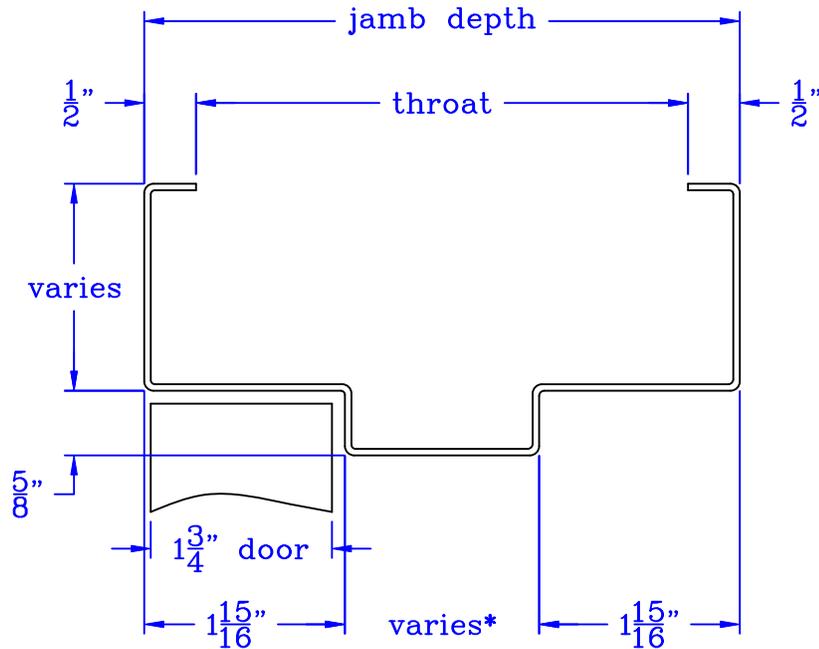
Single return shown, double return and less return also available

Double rabbet profile at stainless steel frame, SS16

5 3/4" jamb depth, SR only



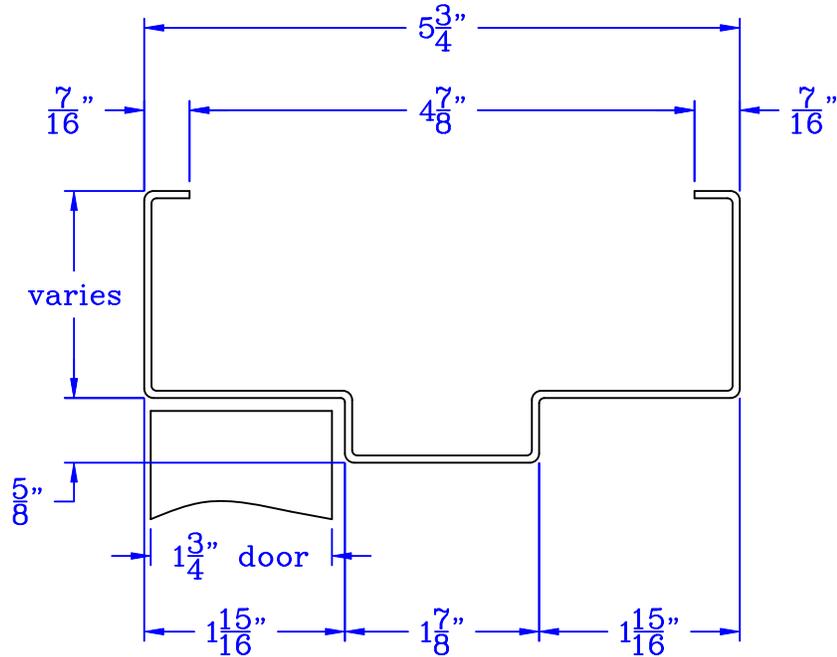
all other jamb depths at SR, DW, DR, LR



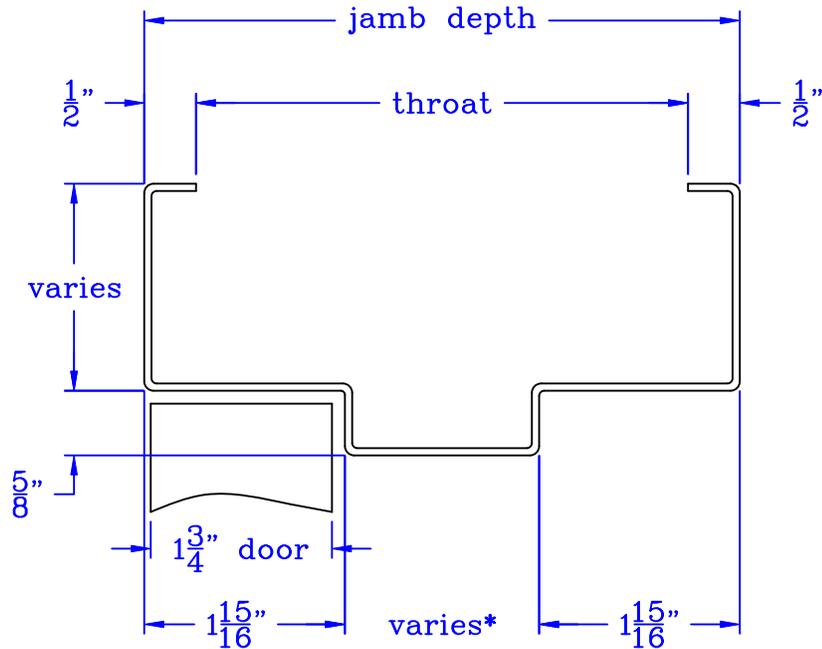
SR series shown, also available DW, DR & LR
*down to 1 1/2" then opposite door side to vary

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

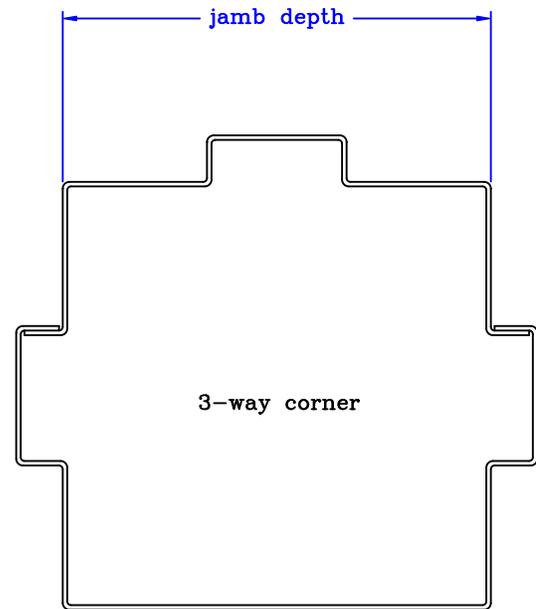
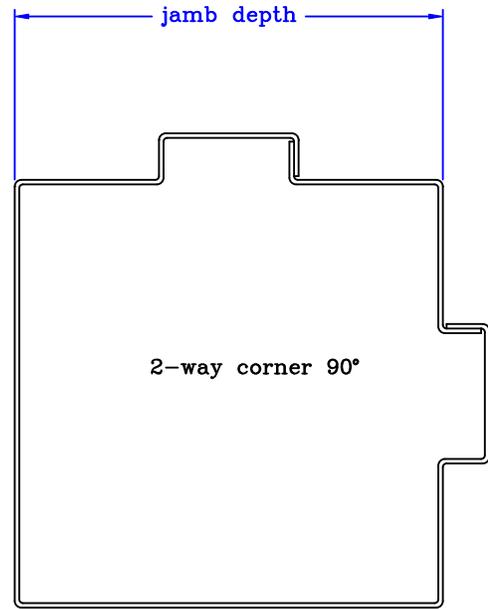
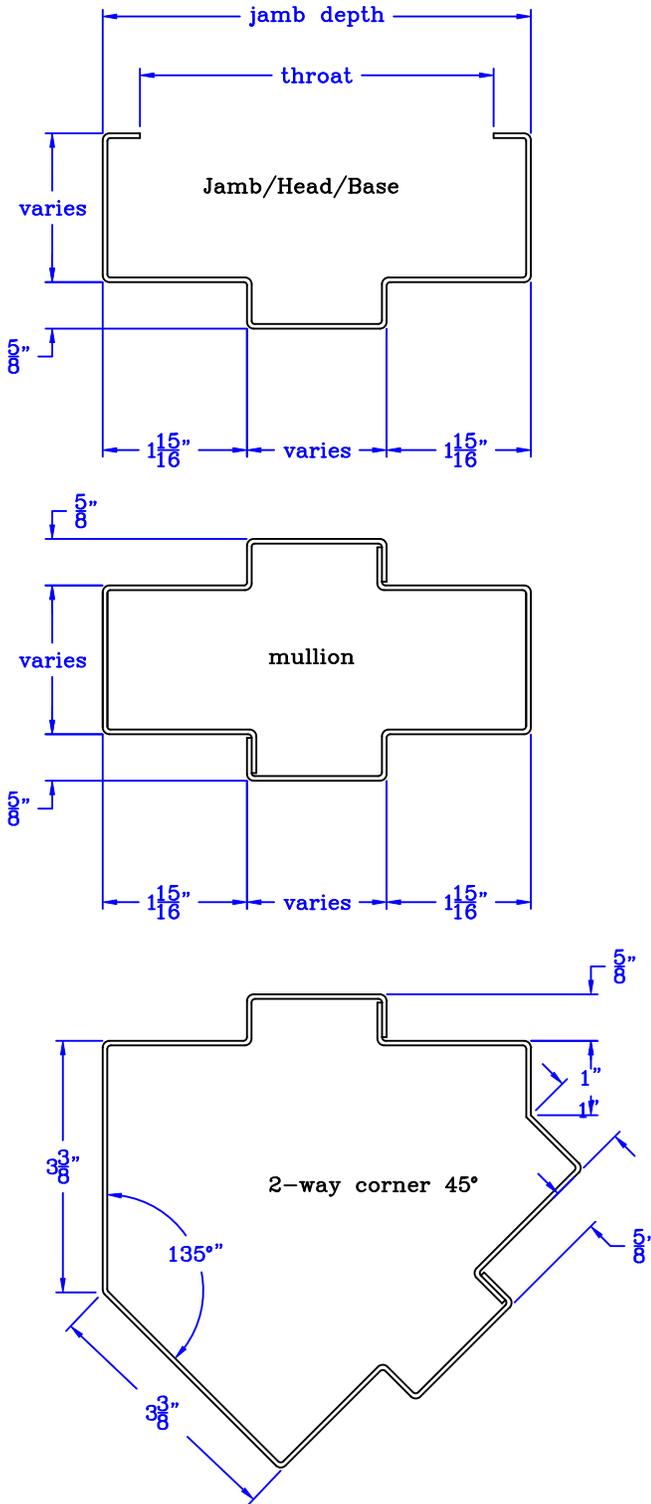
*down to 1 1/2" then opposite door side to vary

CUSTOM FRAME ELEVATION



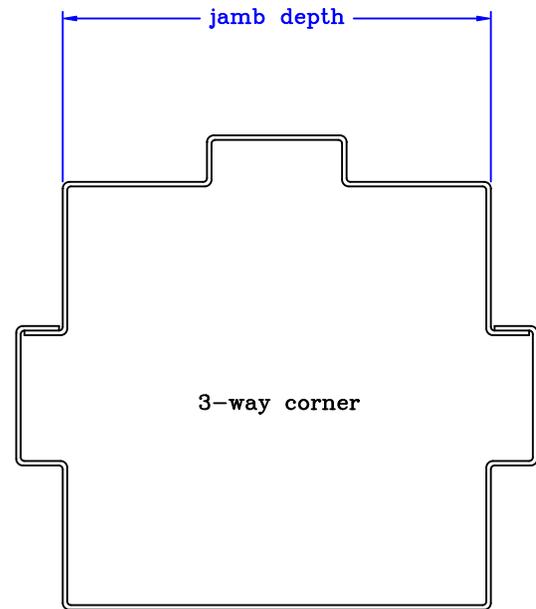
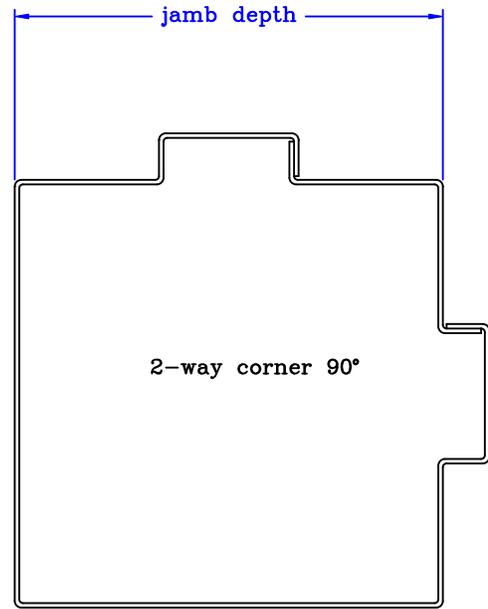
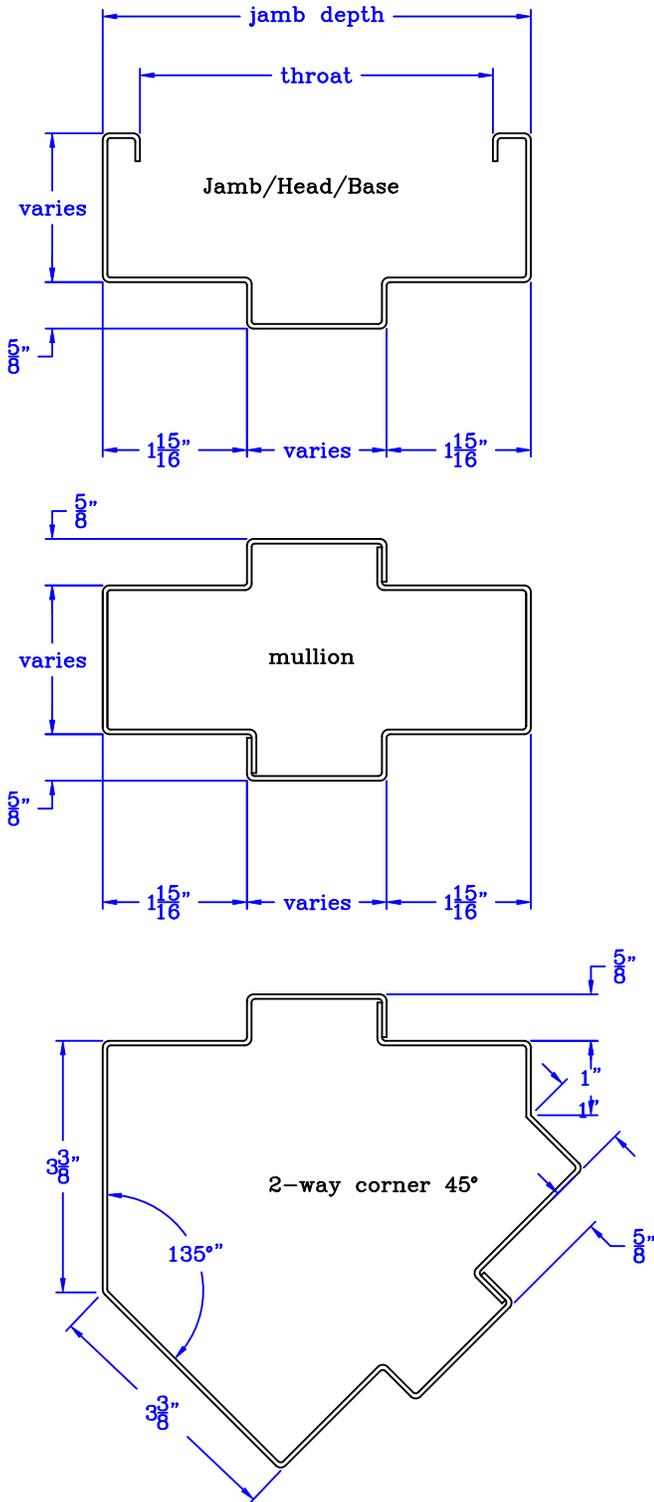
CUSTOM FRAME ELEVATION	PAGE
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Standard Series.....	C-16
Drywall/Pre-Drywall Series.....	C-18
Stainless Steel Frame (Double Rabbet Profile, Standard Series)	C-20
Glazing Bead.....	C-21

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



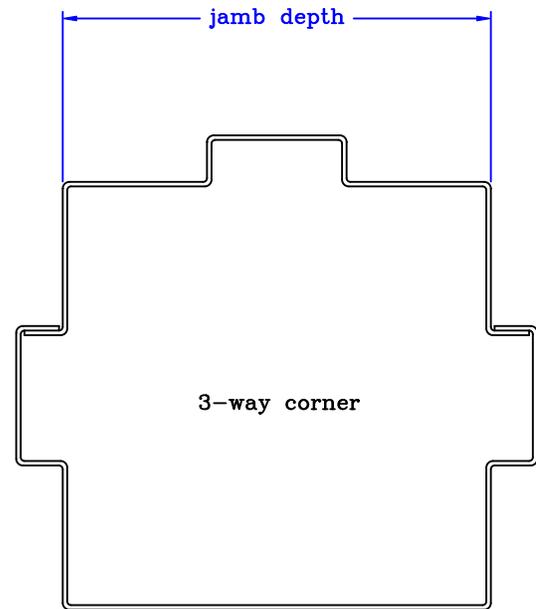
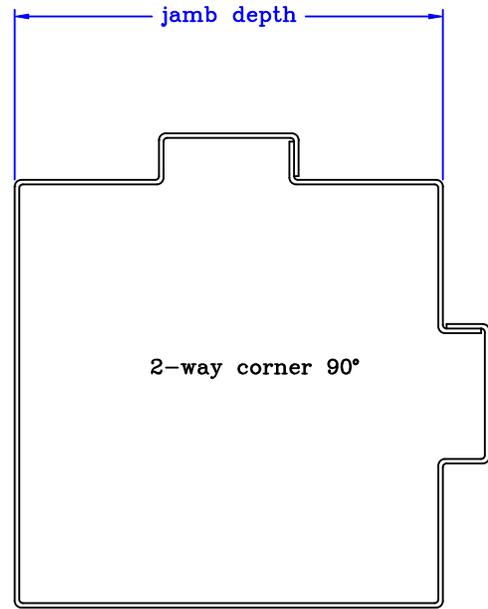
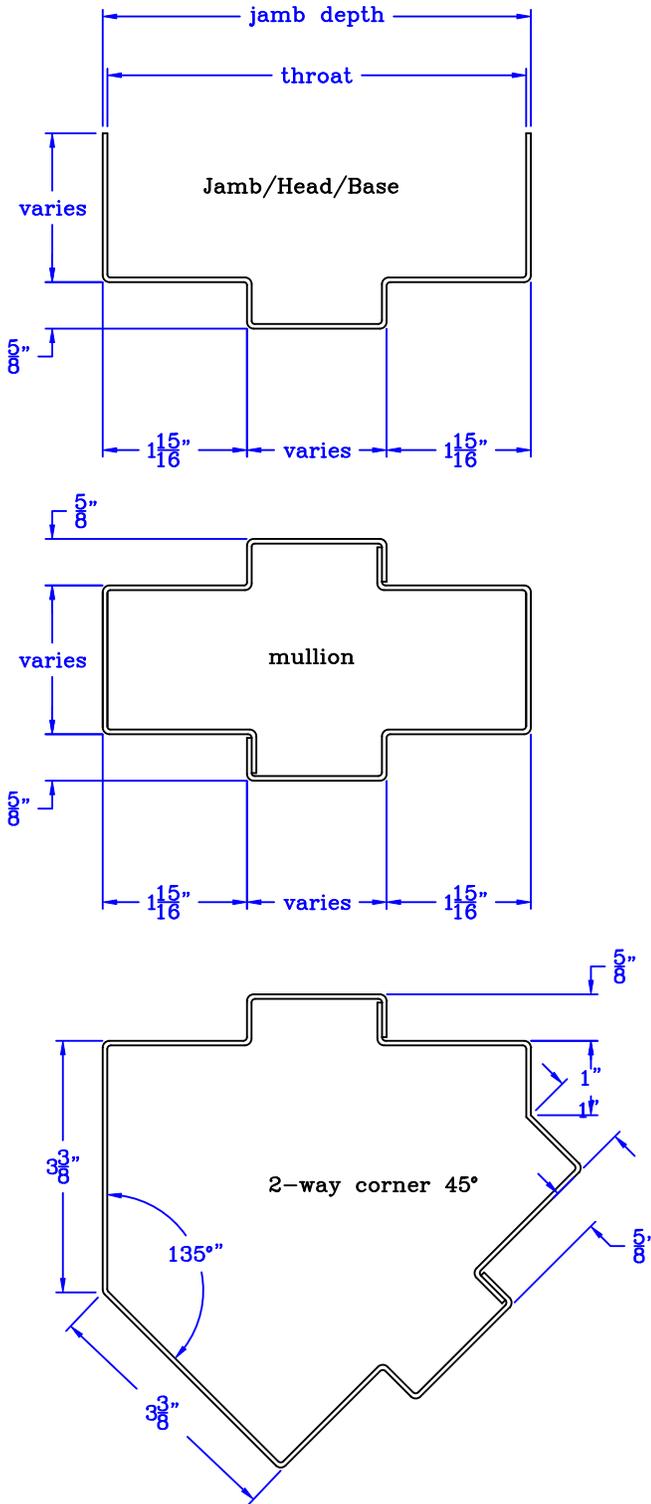
Glazing bead side per handing

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



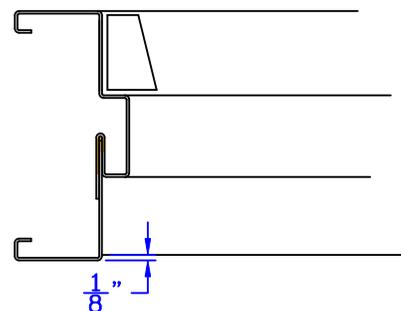
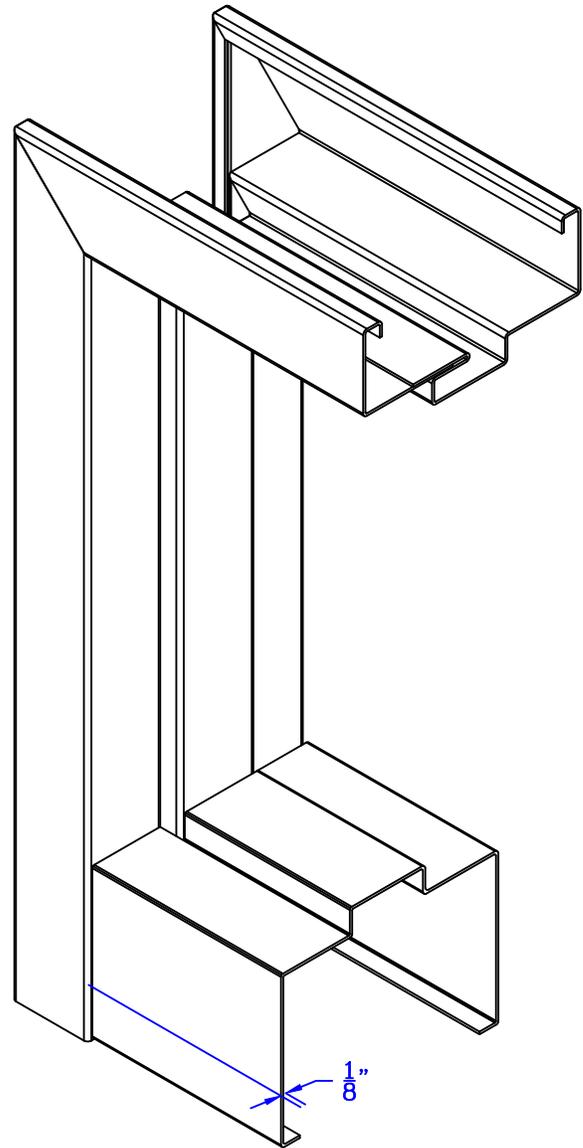
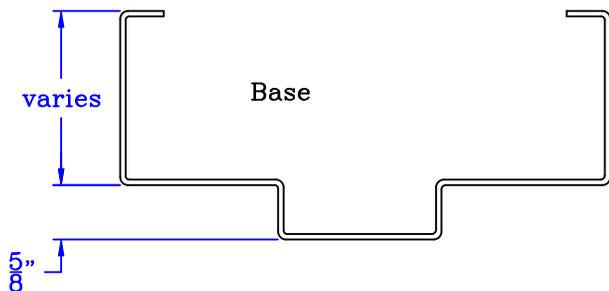
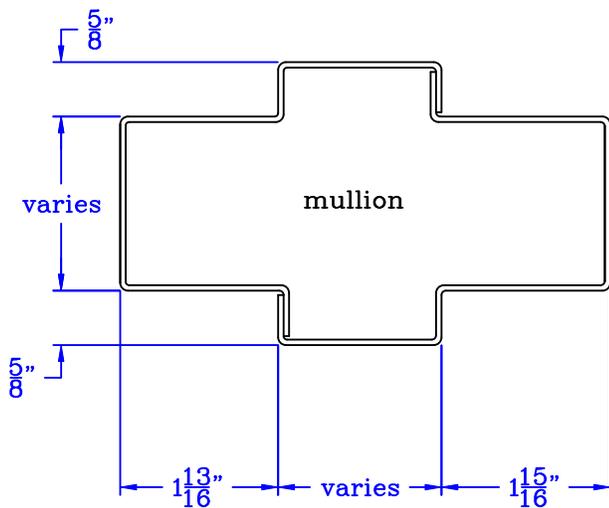
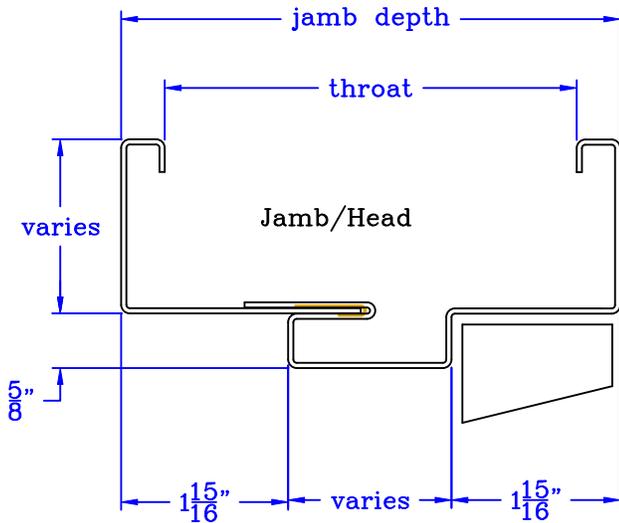
SR series at base
Glazing bead side per handing

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



Glazing bead side per handing

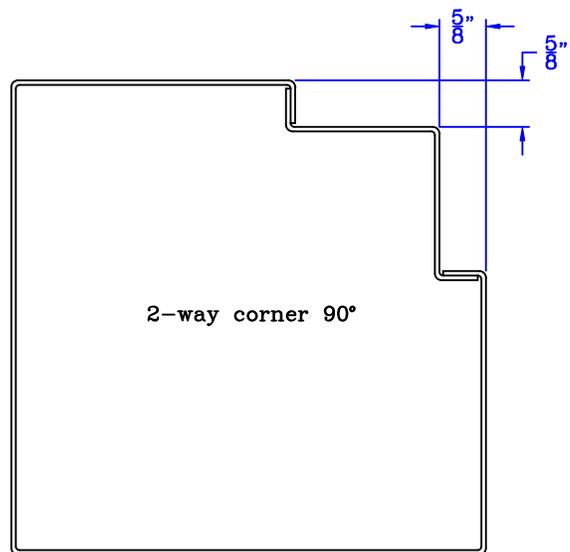
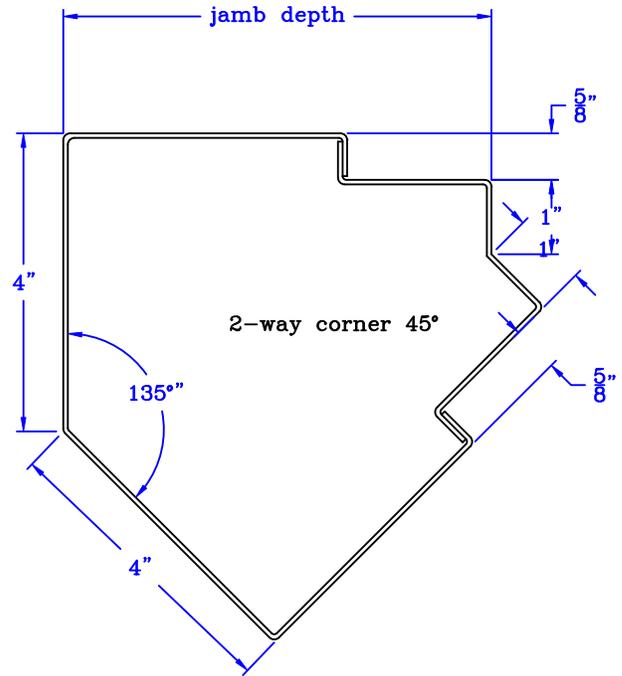
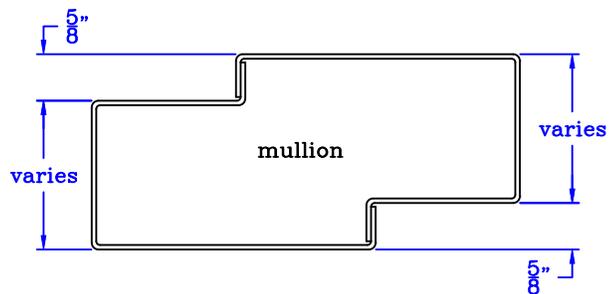
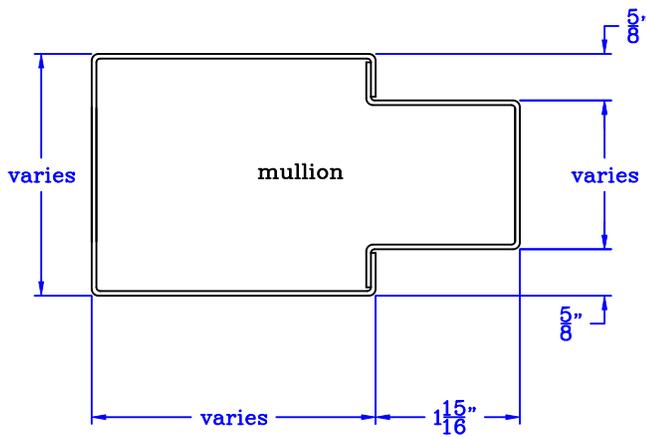
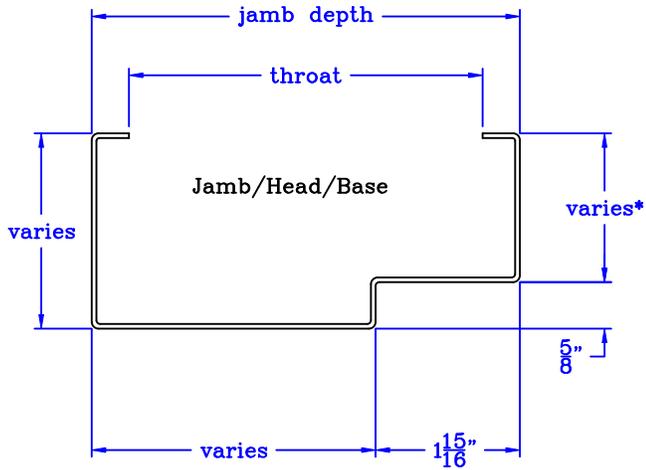
Split frame profile, SF
Split Frame Series (SF)



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

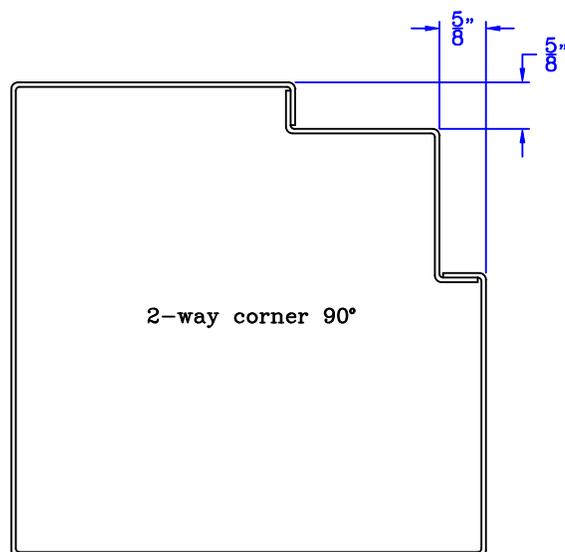
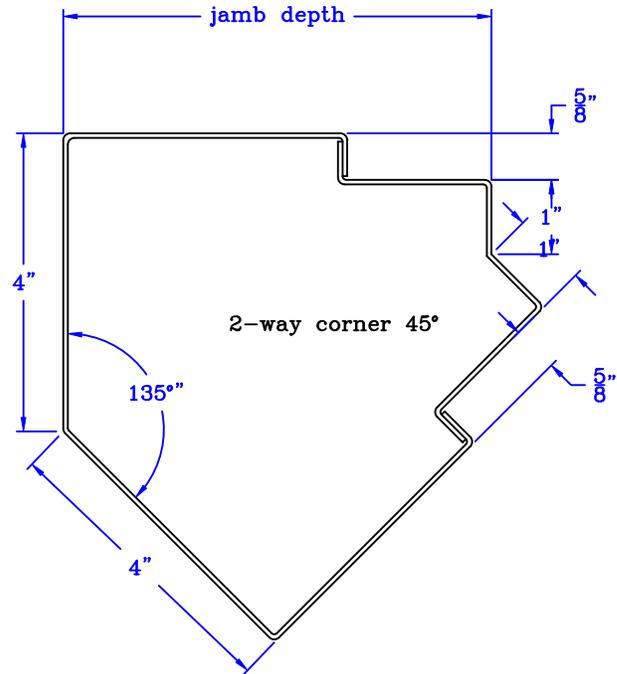
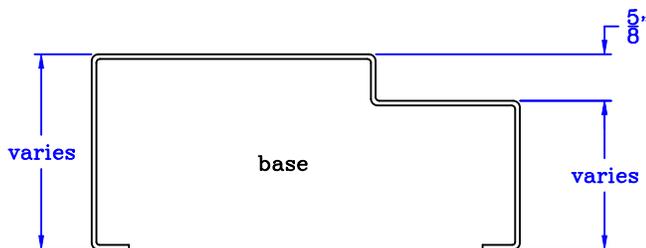
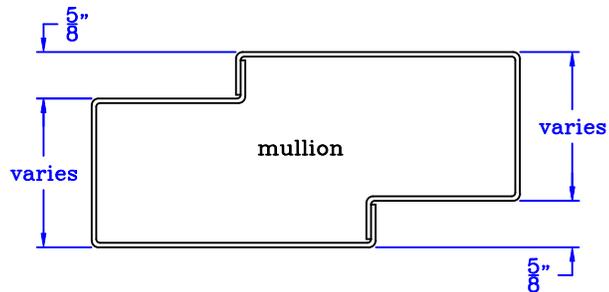
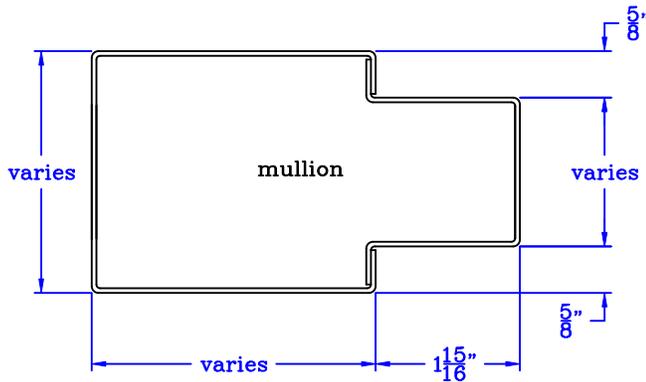
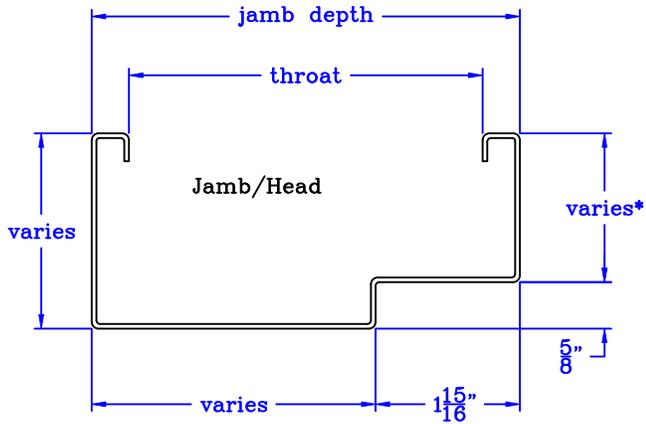
Glazing bead always on door side

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



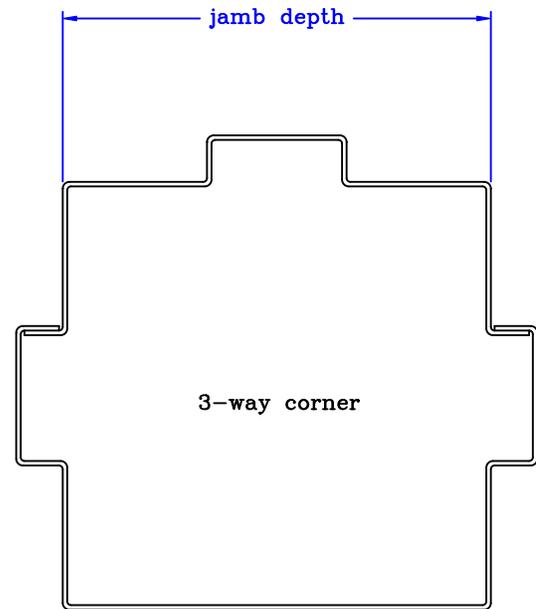
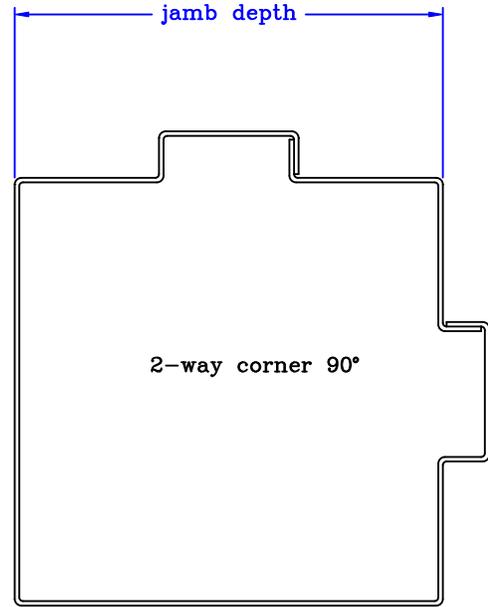
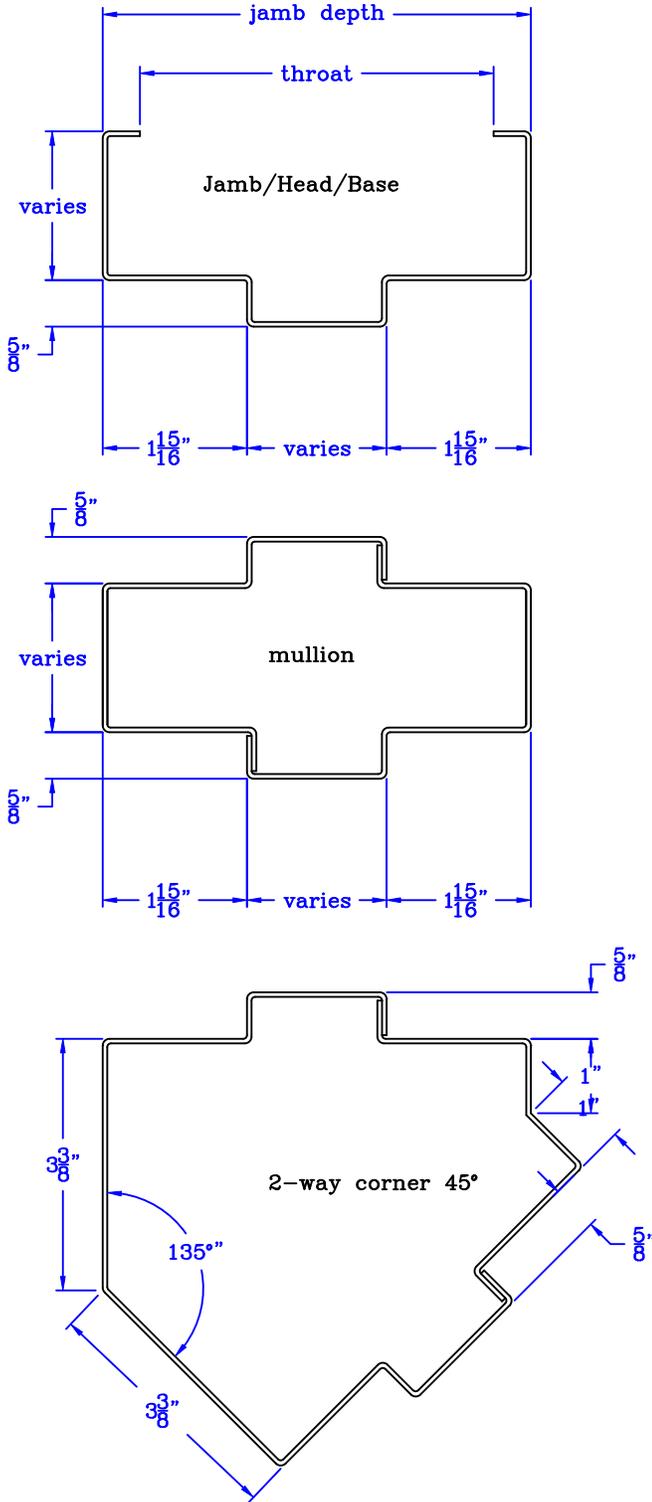
*S1 model : 2" face door side
S2 model : 1 3/8" face on door side
Minimum 2-5/8" JD
Glazing bead side per handing

**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

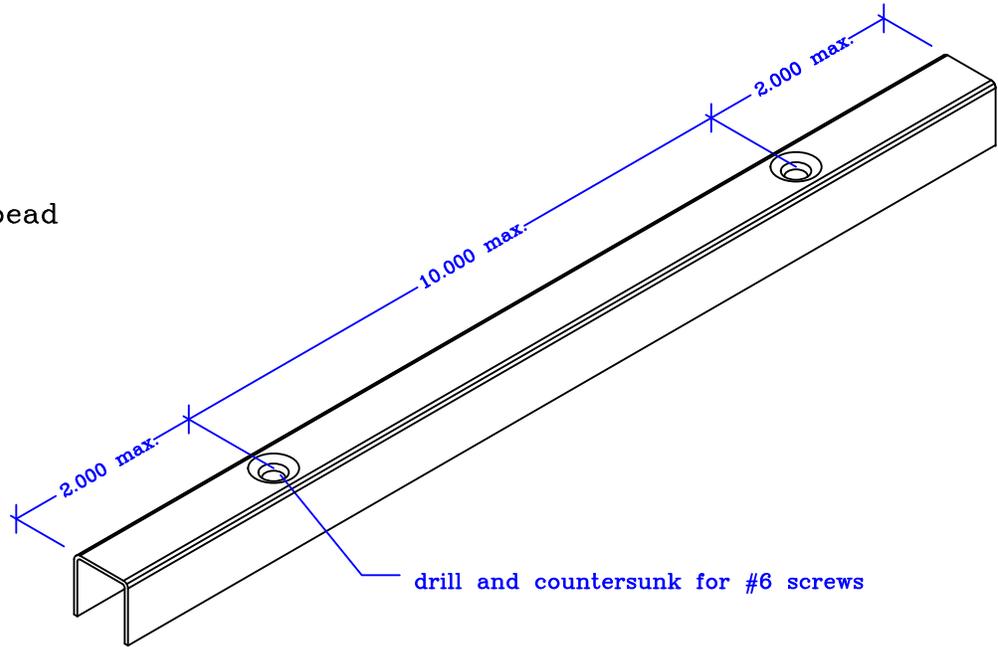
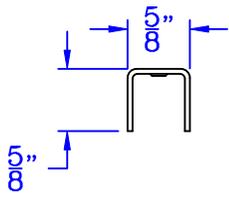
**Double rabbet profile, D
Standard Series (SR)**



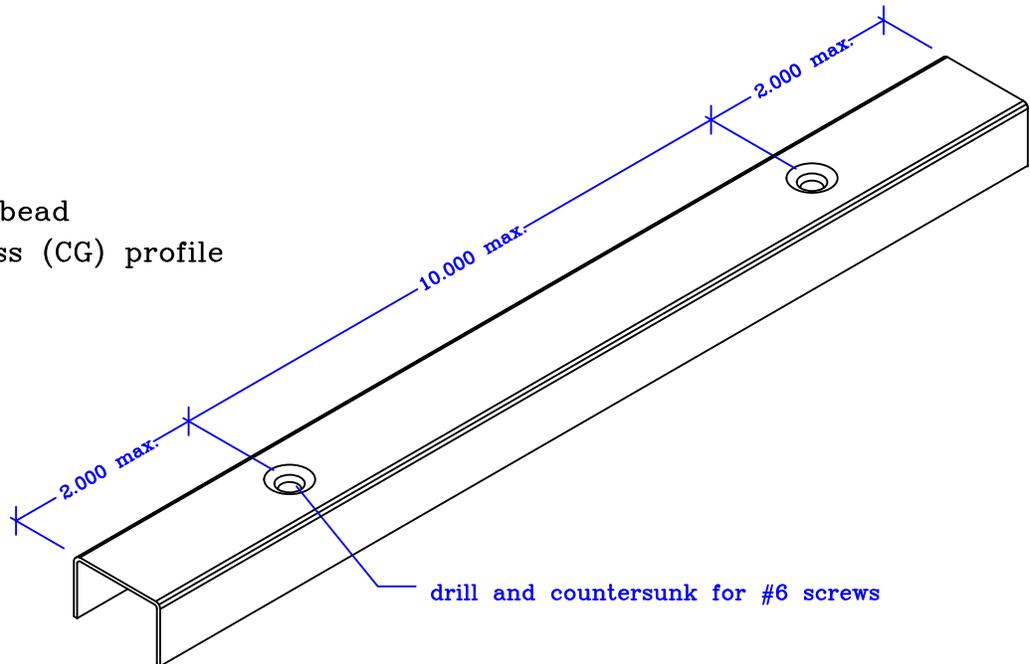
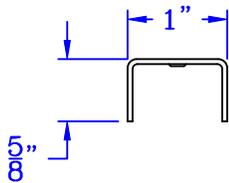
Glazing bead side per handing

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
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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
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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
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CCEH - Concealed Leaf Continuous Electric Hinge Reinforcement.....	O-4.20
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Invisible Hinge

INVH - Invisible Hinge Reinforcement.....	O-4.22
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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
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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
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86FH - Mortise Lock Reinforcement with Function Hole.....	O-4.32
DGL161 - Digital Lock Prep.....	O-4.33
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 Deadlock	
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RIM - Rim Exit Device Reinforcement.....	O-5.6
RIMFH - Rim Exit Device Reinforcement with Function Holes	O-5.7
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SVRFH - Surface Vertical Rod Exit Device Reinforcement with Function Holes.....	O-5.9
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MEDFH - Mortise Exit Device Reinforcements with Function Holes.....	O-5.11
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INCVR - Inpact Concealed Vertical Rod Exit Device Reinforcements.....	O-5.13
INMED - Inpact Mortise Exit Device Reinforcements	O-5.14
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ED14 - Exit Device Surface Reinforcement in 14ga	O-5.16
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LBR - Less Bottom Rod.....	O-5.18
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ASA12 - Standard ANSI 4-7/8" Strike Reinforcement in 12ga.....	O-5.20
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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
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RIMS - Rim Strike Reinforcement	O-5.27
FL - Full Lip Strike 2-1/4"	O-5.28

Bolt (ea)

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Closers (ea)

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CL12 - Standard Closer Reinforcement in 12ga	O-5.33
CID - Concealed in Door Closer Prep.	O-5.34
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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

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REL - Segmented Radius Lock Edge for Double Acting Door (N/A in CW)	O-7.7

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End Channel/Cap Option

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CL - Construction Label - Fire Door/Frame	O-7.28
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60R - Riveted Positive Pressure 60 Minutes.....	O-7.32
45R - Riveted Positive Pressure 45 Minutes.....	O-7.33



OPTIONS – ENGINEERED DOOR OPTIONS	PAGE
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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
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OPTIONS – VISION KIT AND LOUVERS

PAGE

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
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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
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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

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
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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

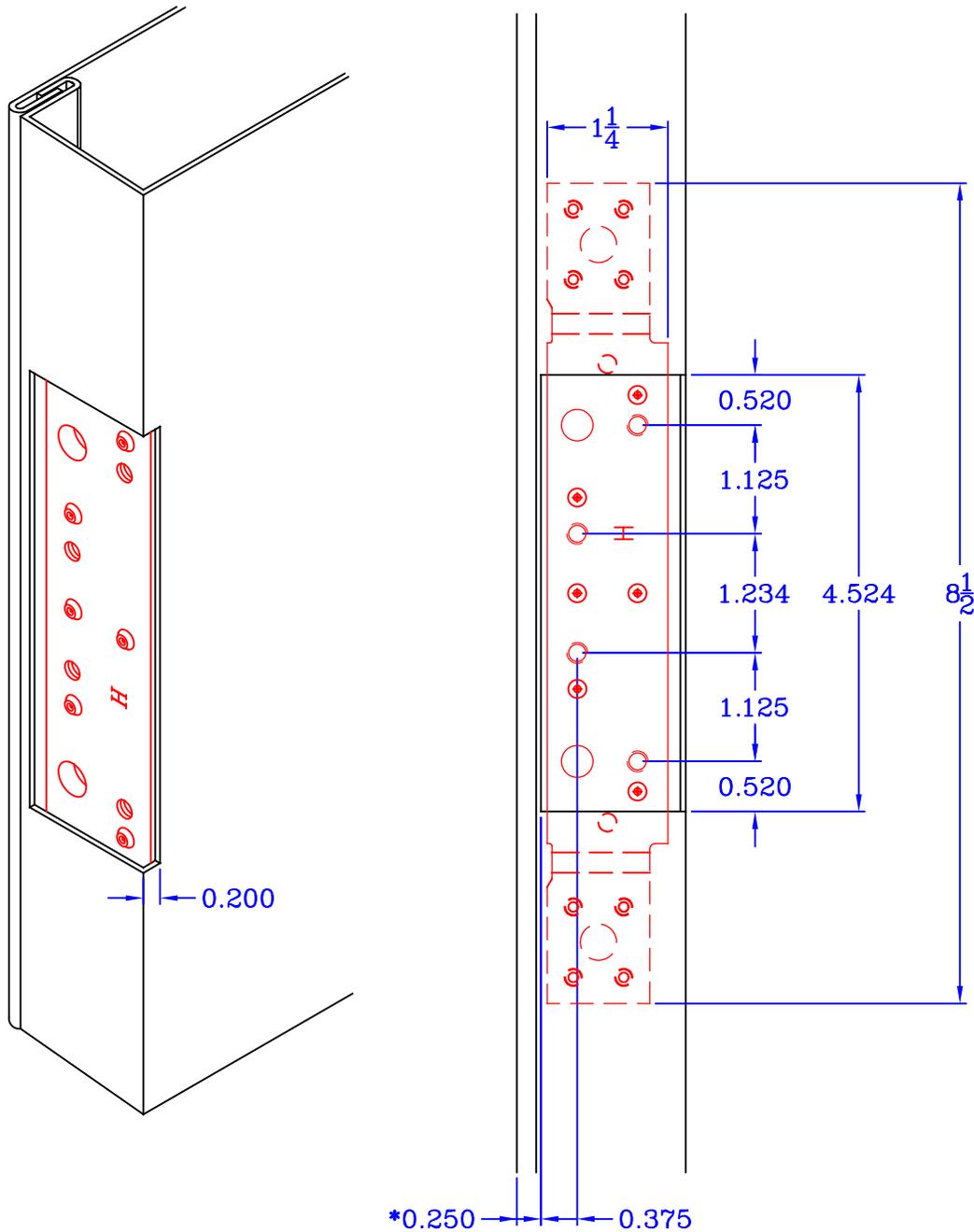
138 - Frame Profile for 1-3/8” Door Thickness.....	O-17.26
200 - Frame Profile for 2” Door Thickness	O-17.27
214 - Frame Profile for 2-1/4” Door Thickness.....	O-17.28
SPDT - Frame Profile for Special Door Thickness.....	O-17.29
TB - Thermal Break Frame.....	O-17.30
UEQ - Unequal Rabbet for Three-Sided 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

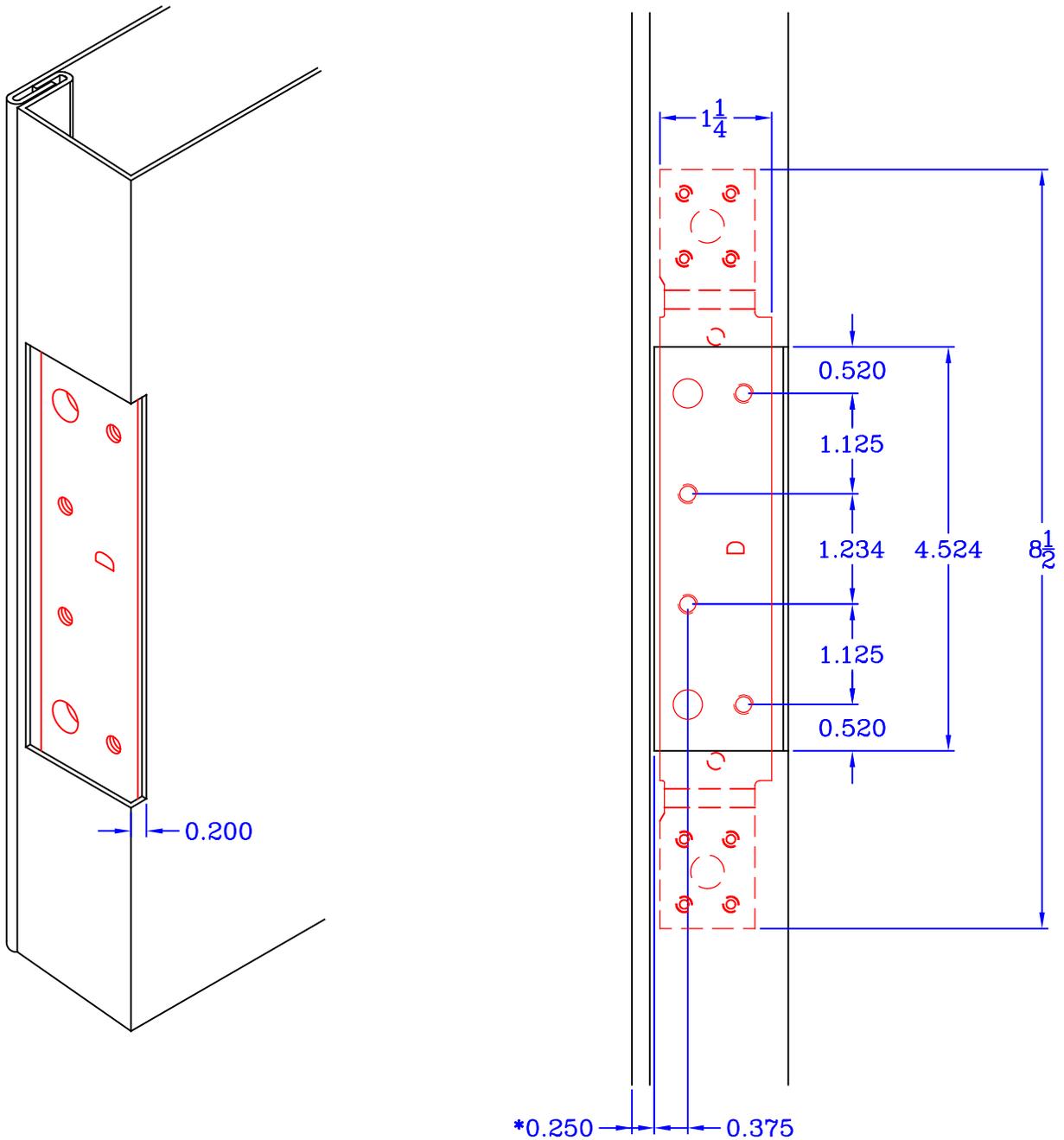
Projection welded



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



45H

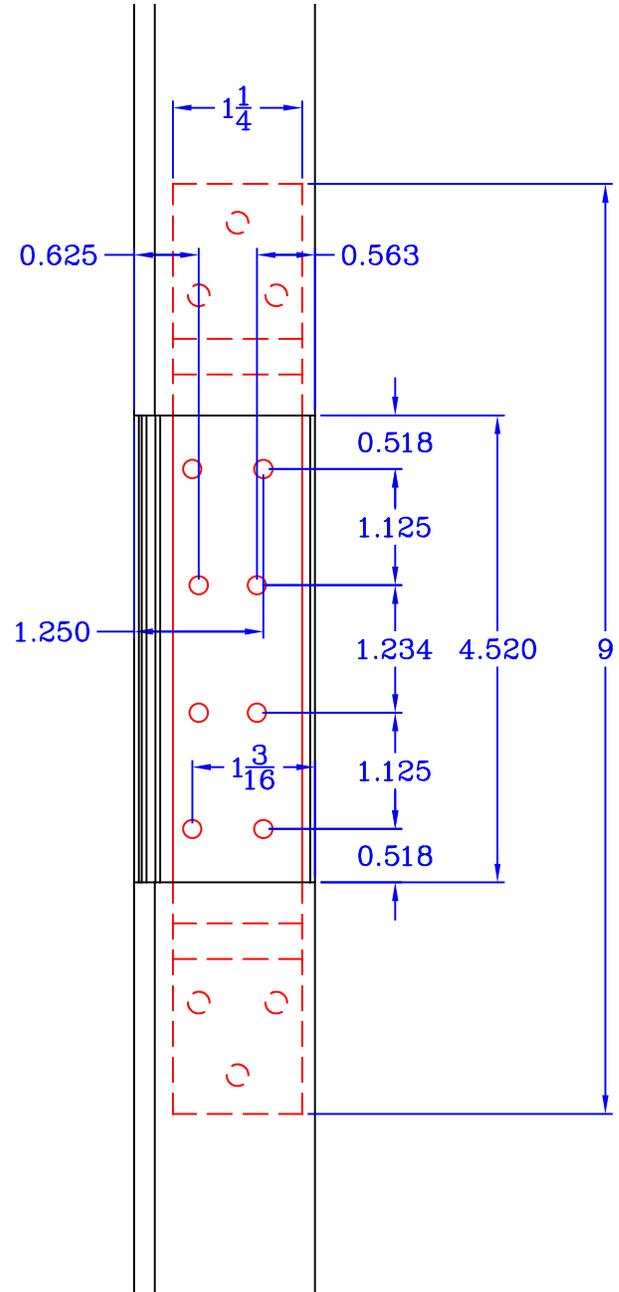
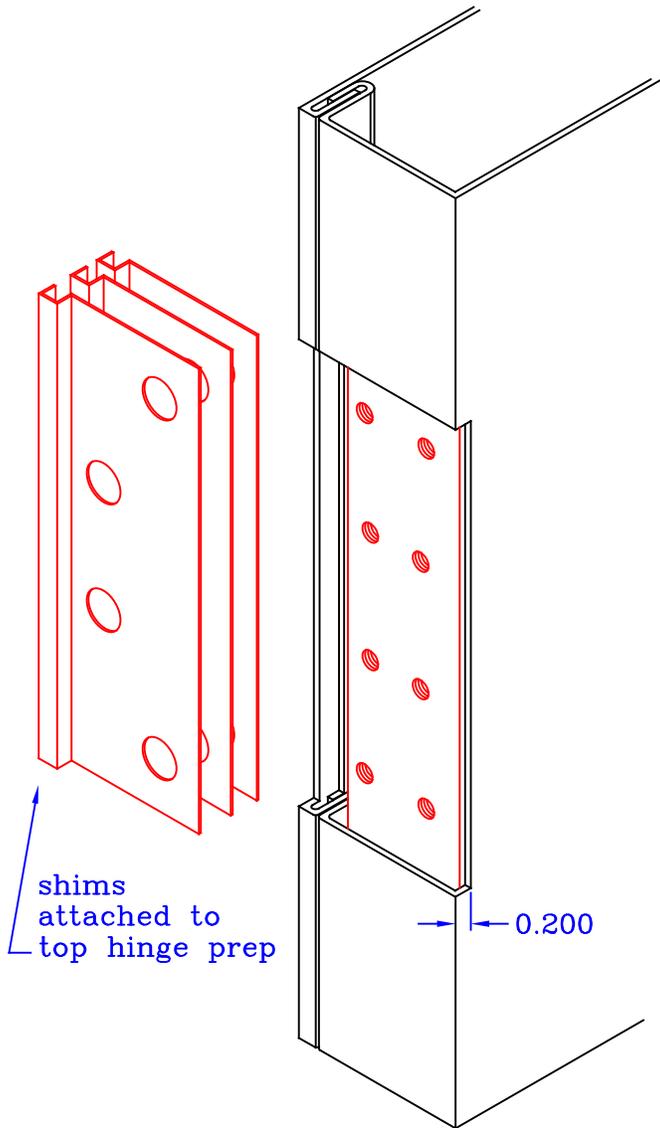
3/8" recommended backset on frame.

* 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

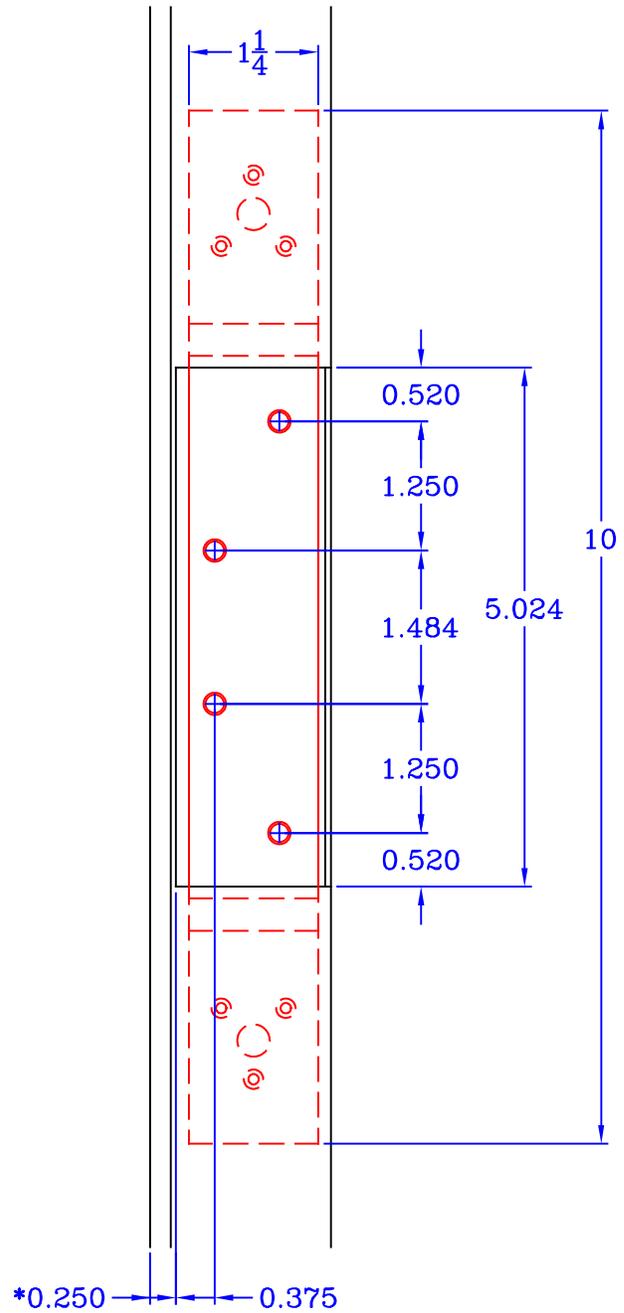
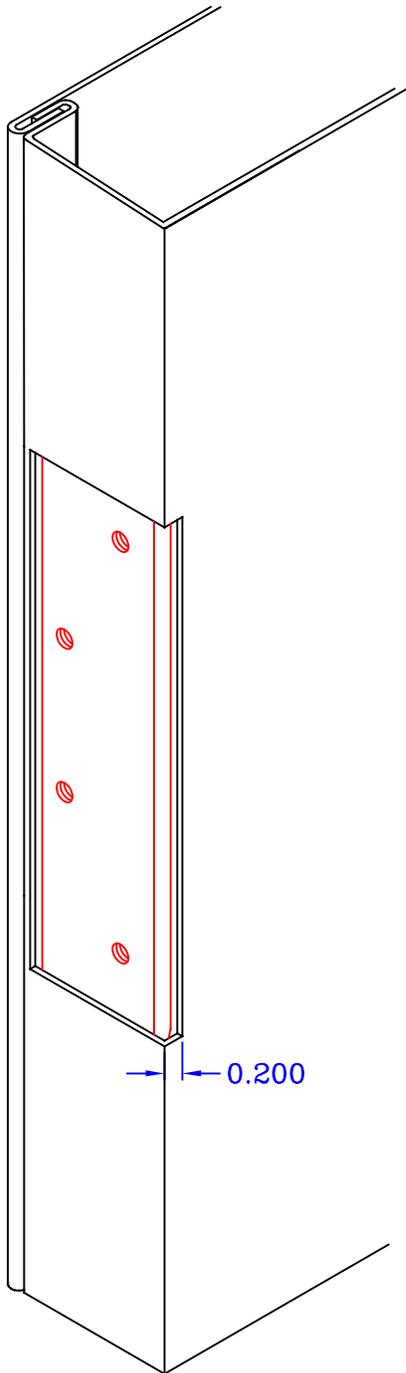
Projection welded



3/8" recommended backset on frame.

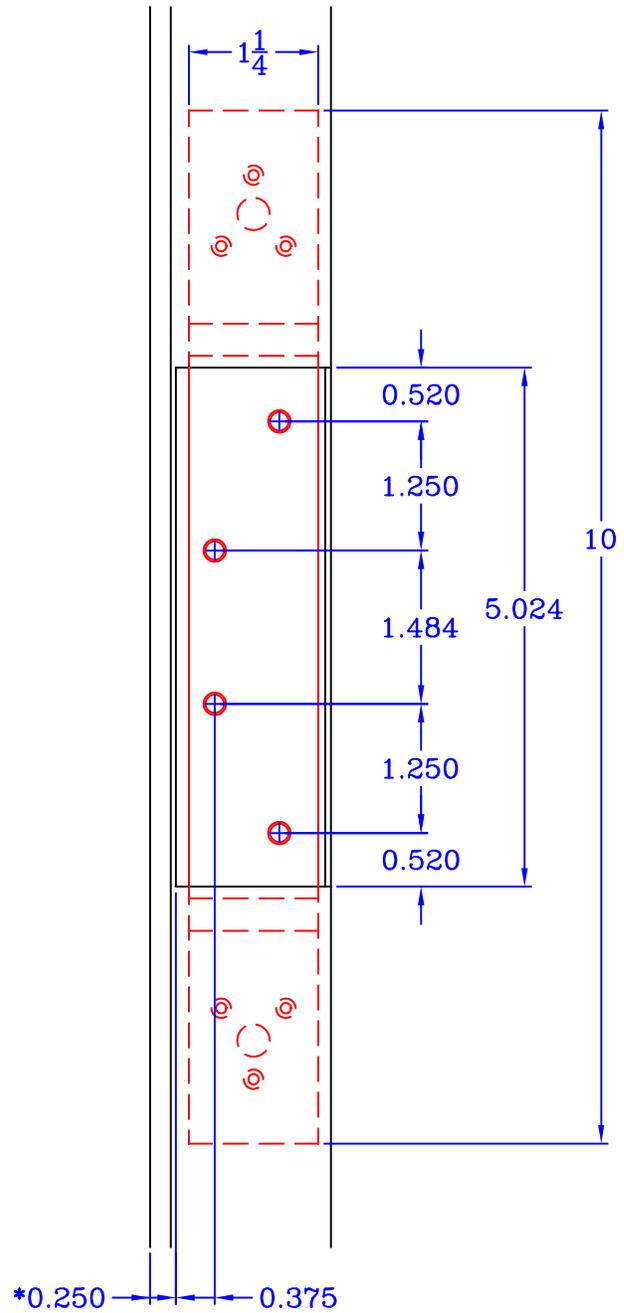
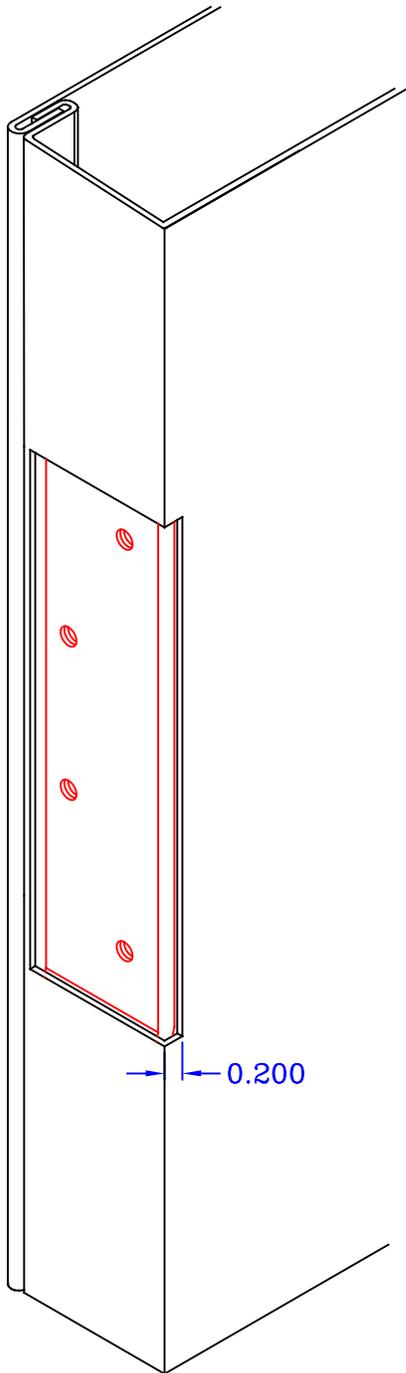
** Tested screw hold for 12-24: 1,200 lbf (per screw)

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



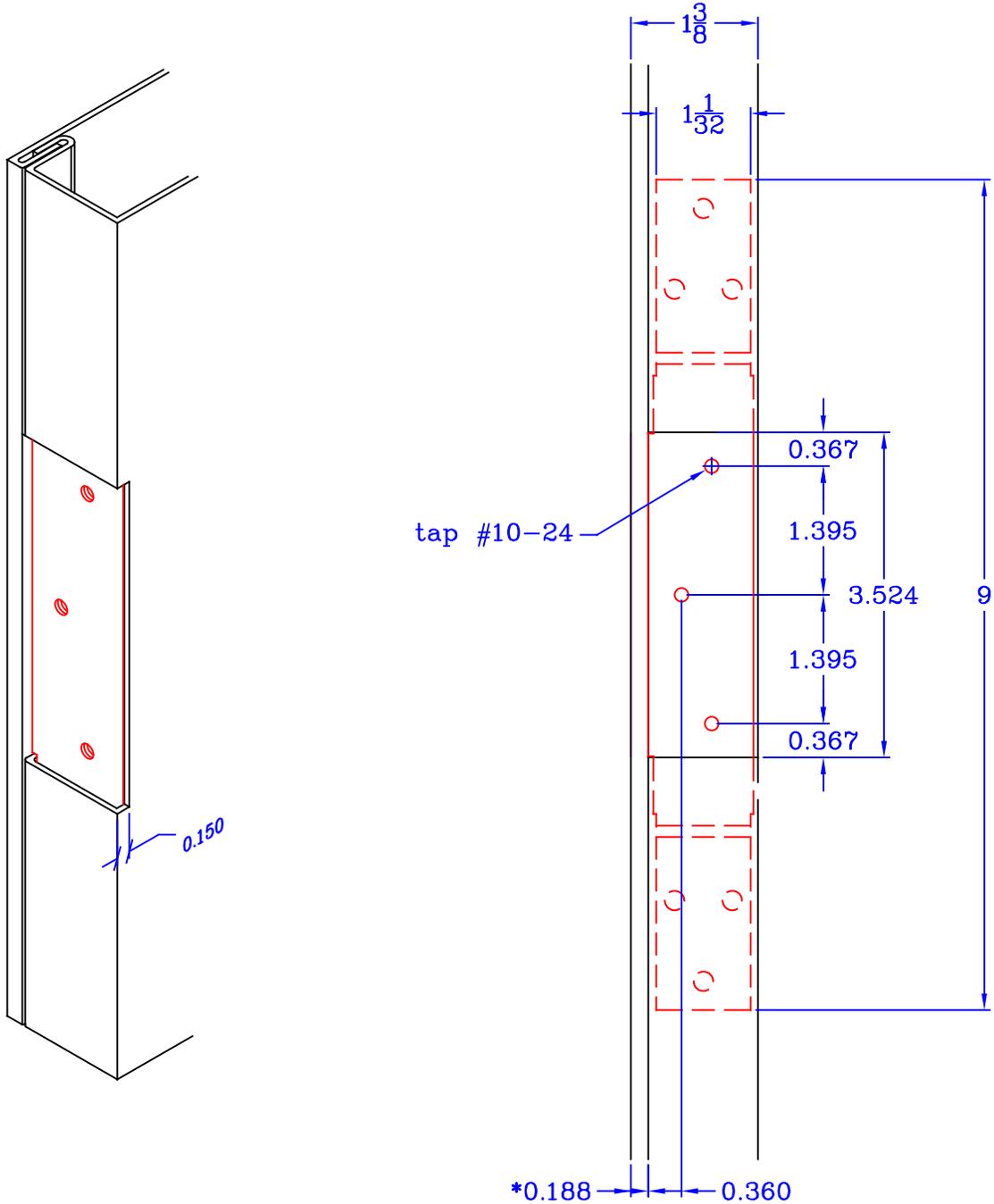
3/8" recommended backset on frame.
* Maybe greater for 16 and thicker gage door.

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



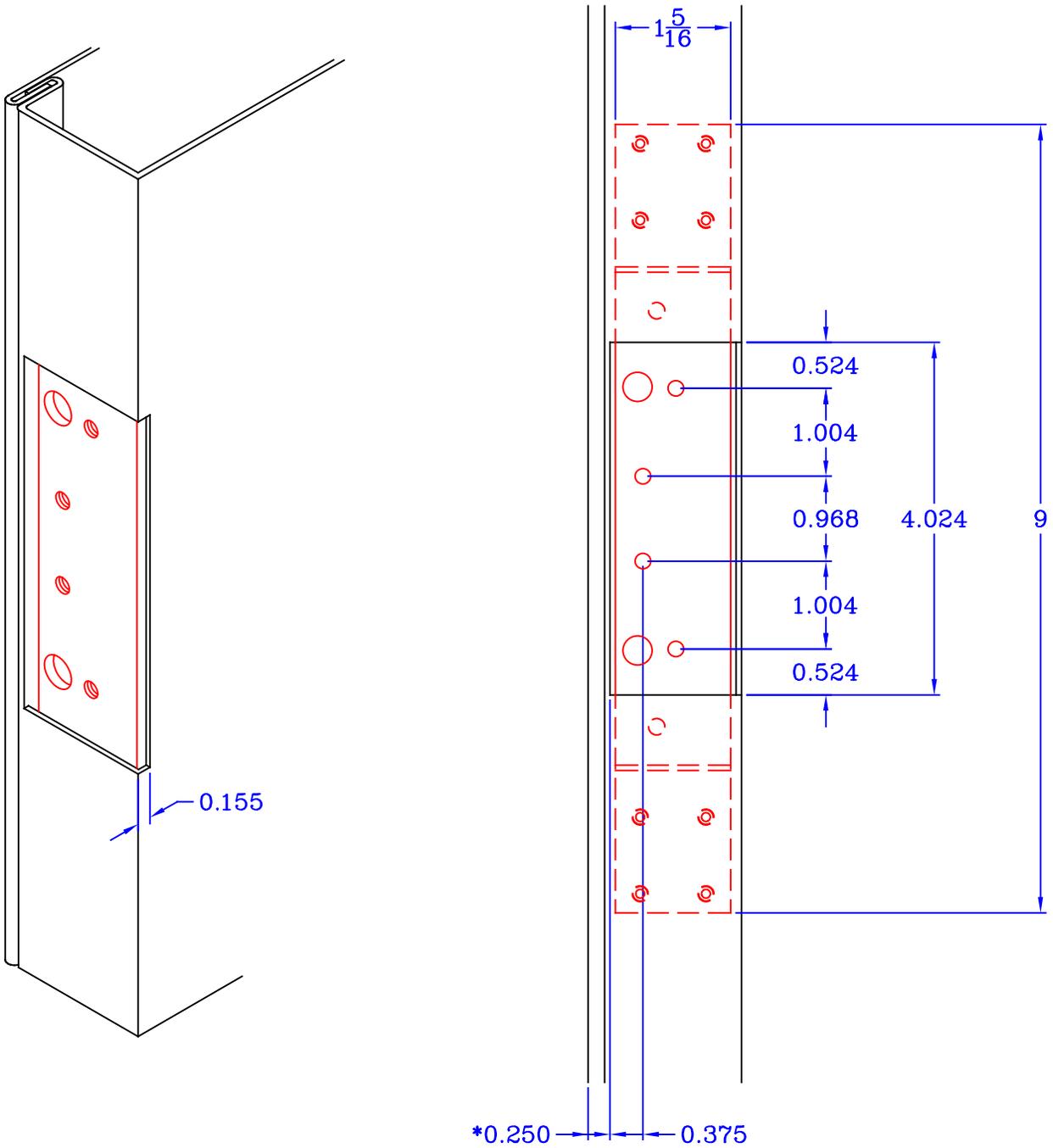
3/8" recommended backset on frame.
* Maybe greater for 16 and thicker gage door.

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



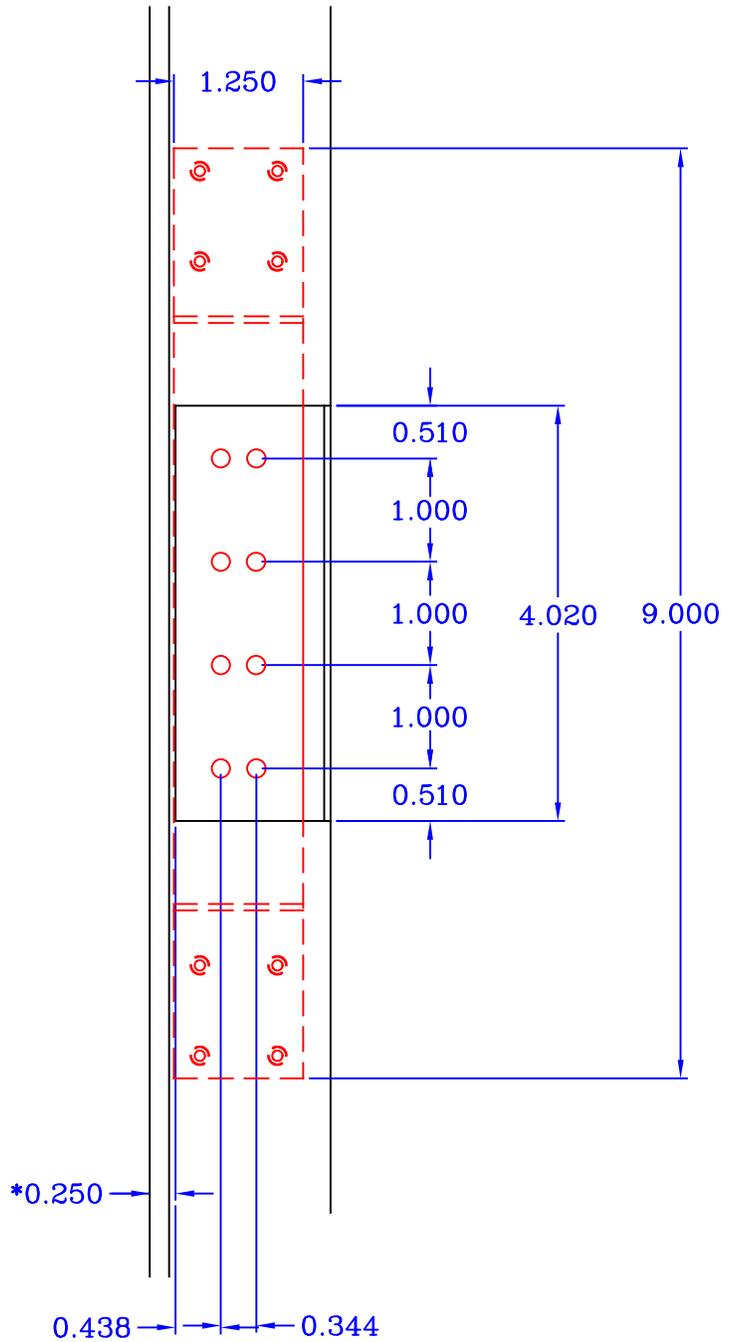
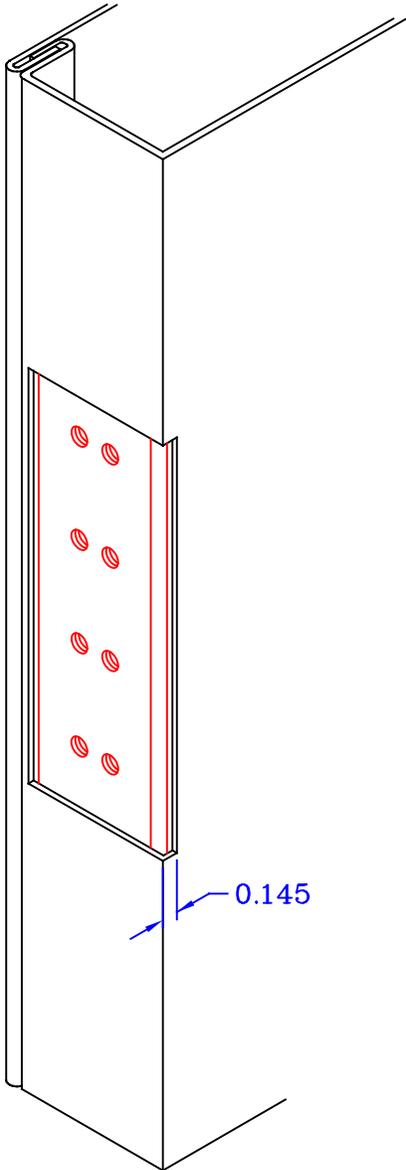
*5/16" recommended backset on frame.

4" regular weight hinge reinforcement , 10ga
Projection welded



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

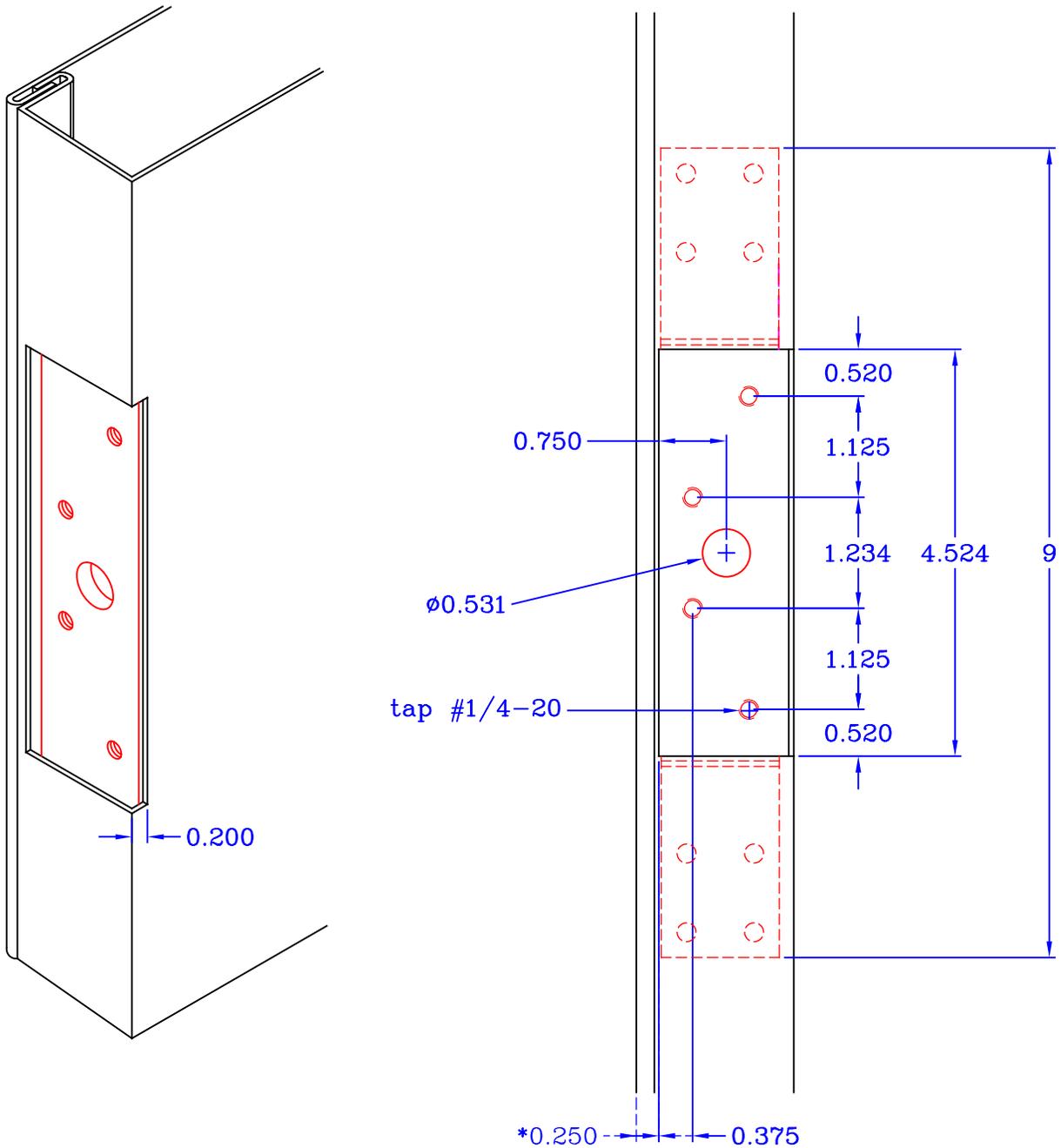
4" thin hinge reinforcement , 10ga
Projection welded



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

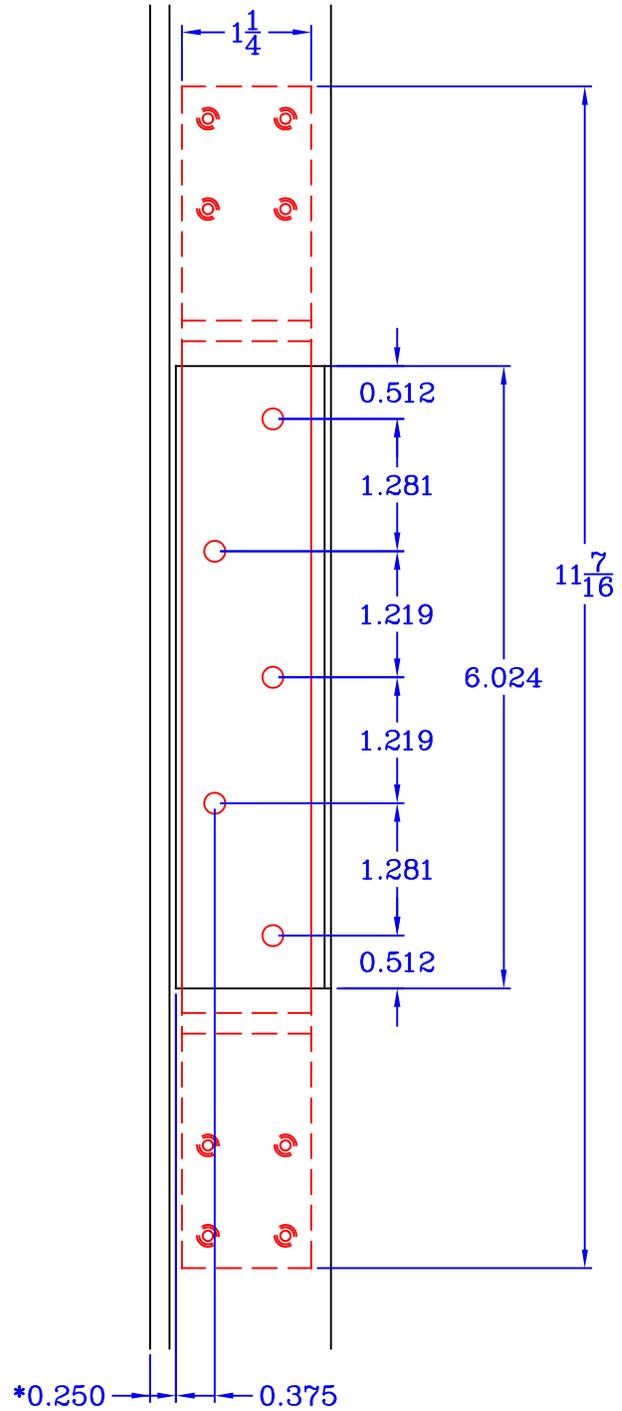
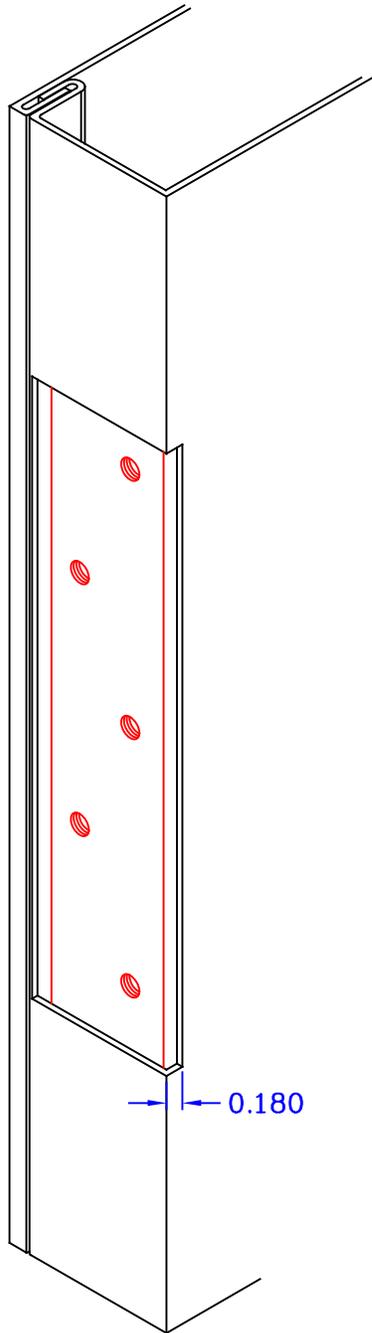
4 1/2" institutional hinge reinforcement (0.190), 7ga

Projection welded



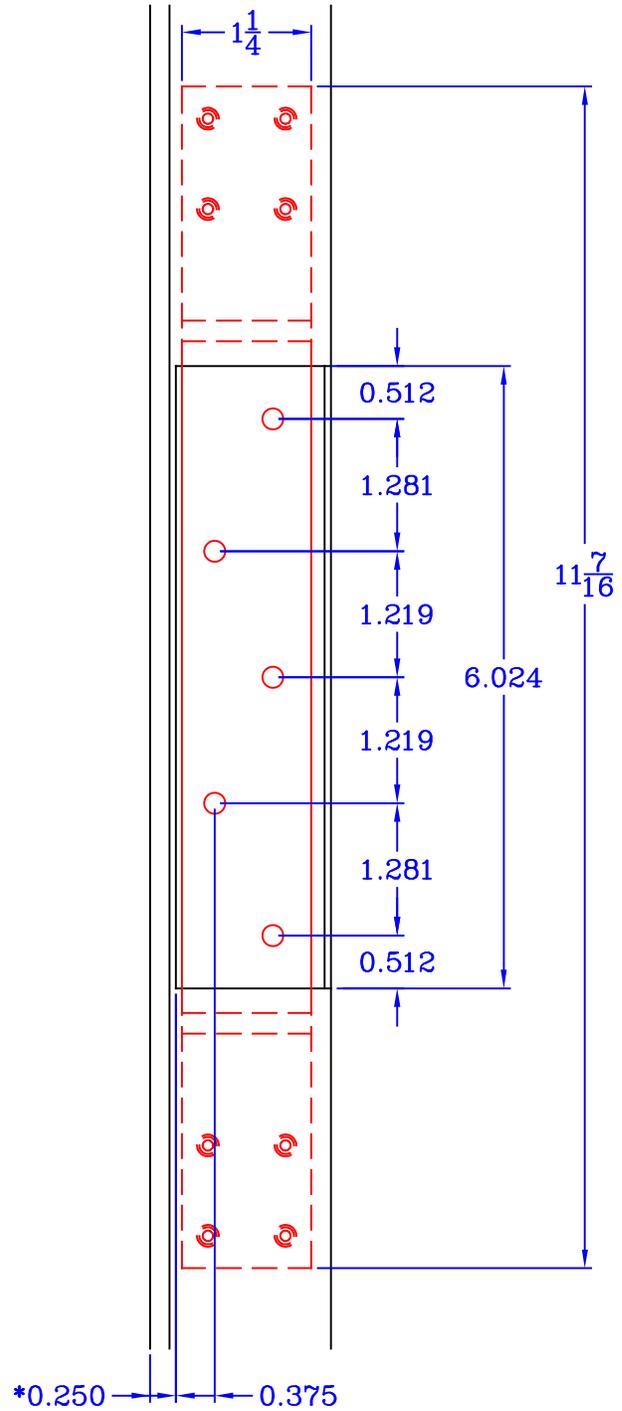
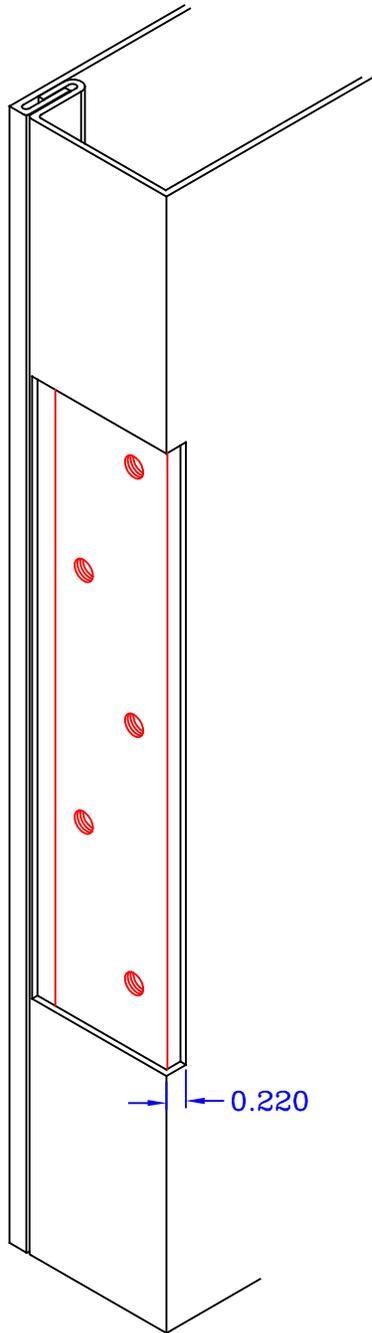
3/8" recommended backset on frame.
* Maybe greater for 16 and thicker gage door.

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



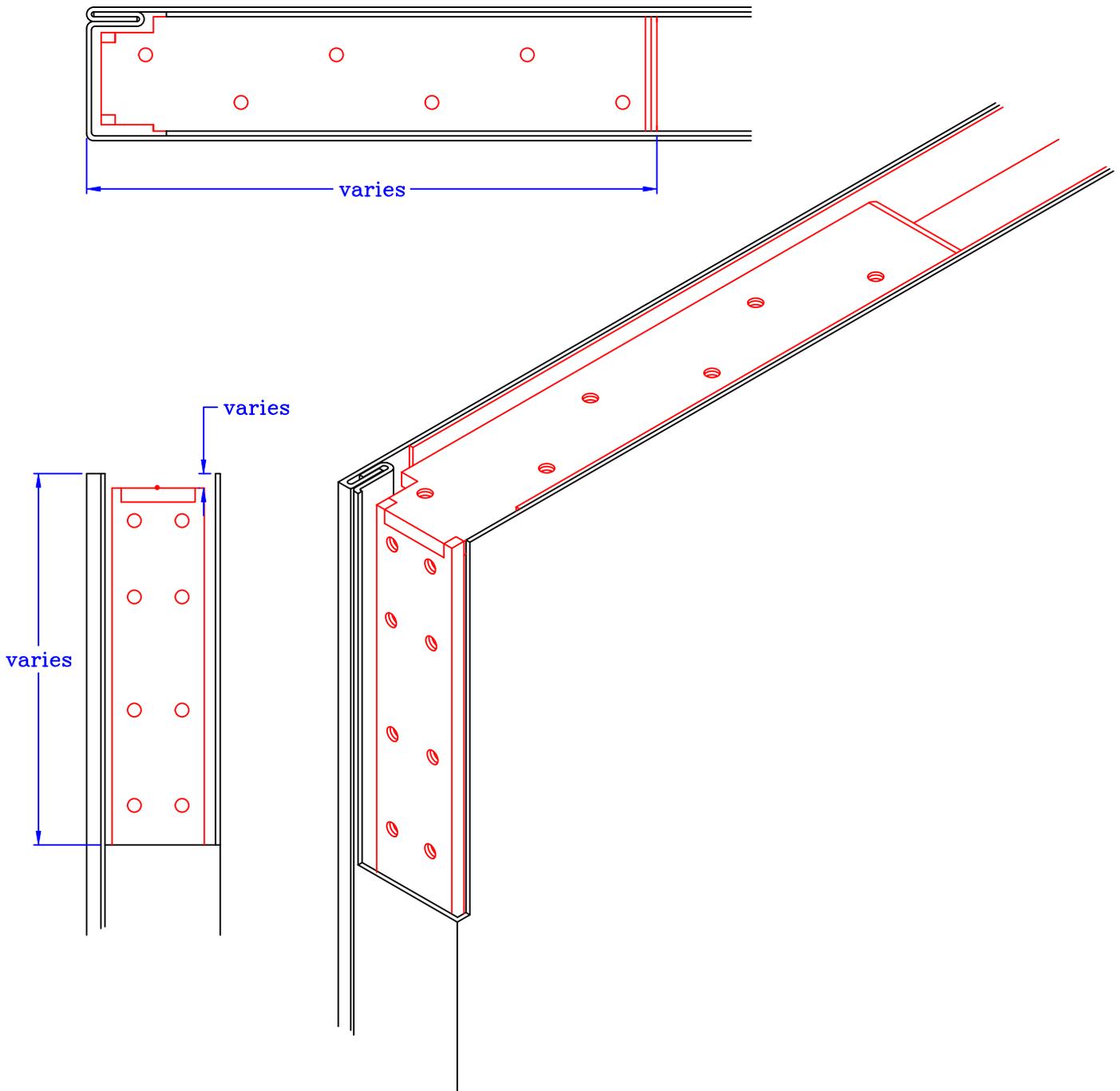
3/8" recommended backset on frame.
* Maybe greater for 16 and thicker gage door.

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



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

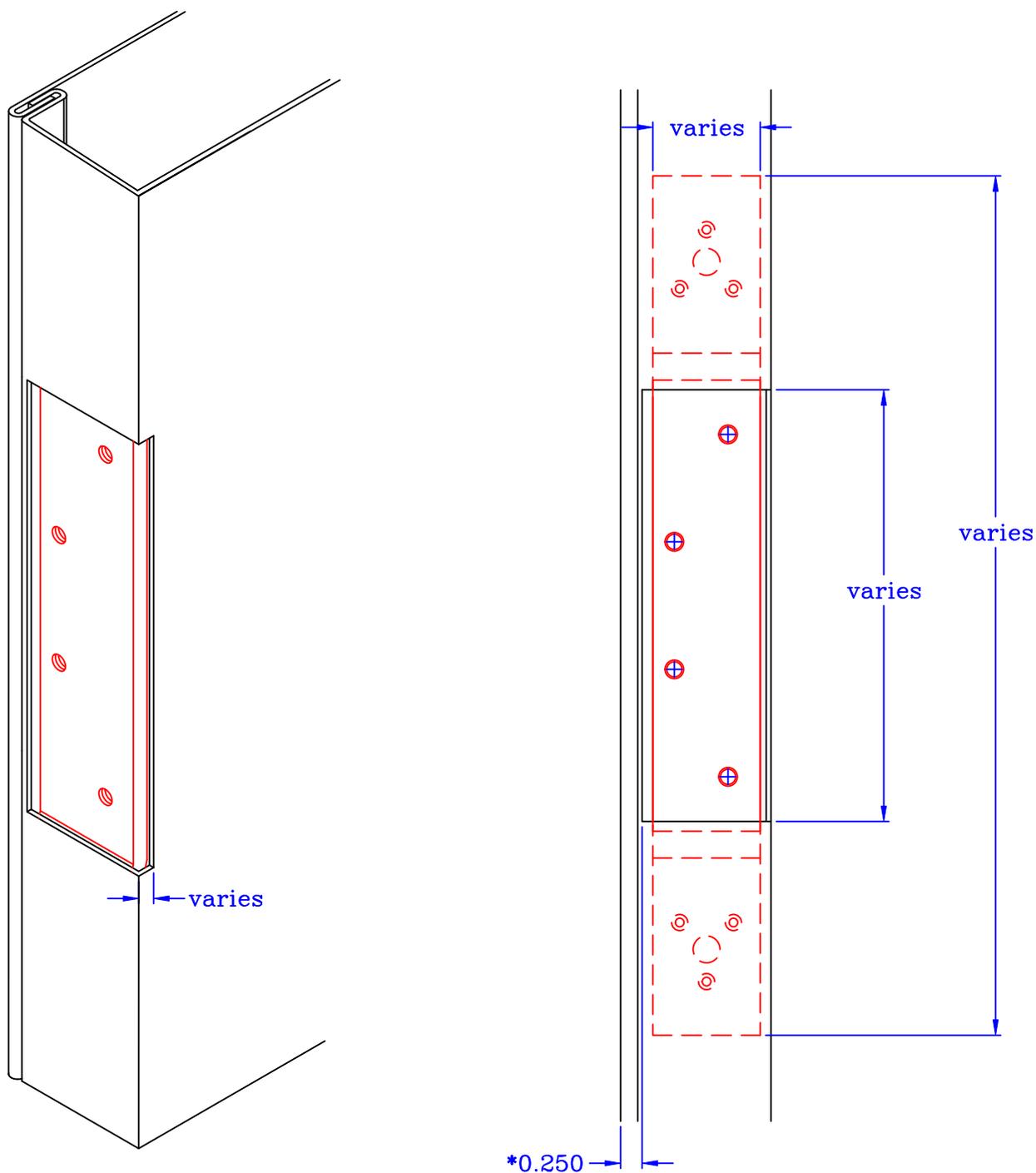
Prep for anchor hinge, 10ga
Projection welded



* Hinge manufacturer's template to be provided

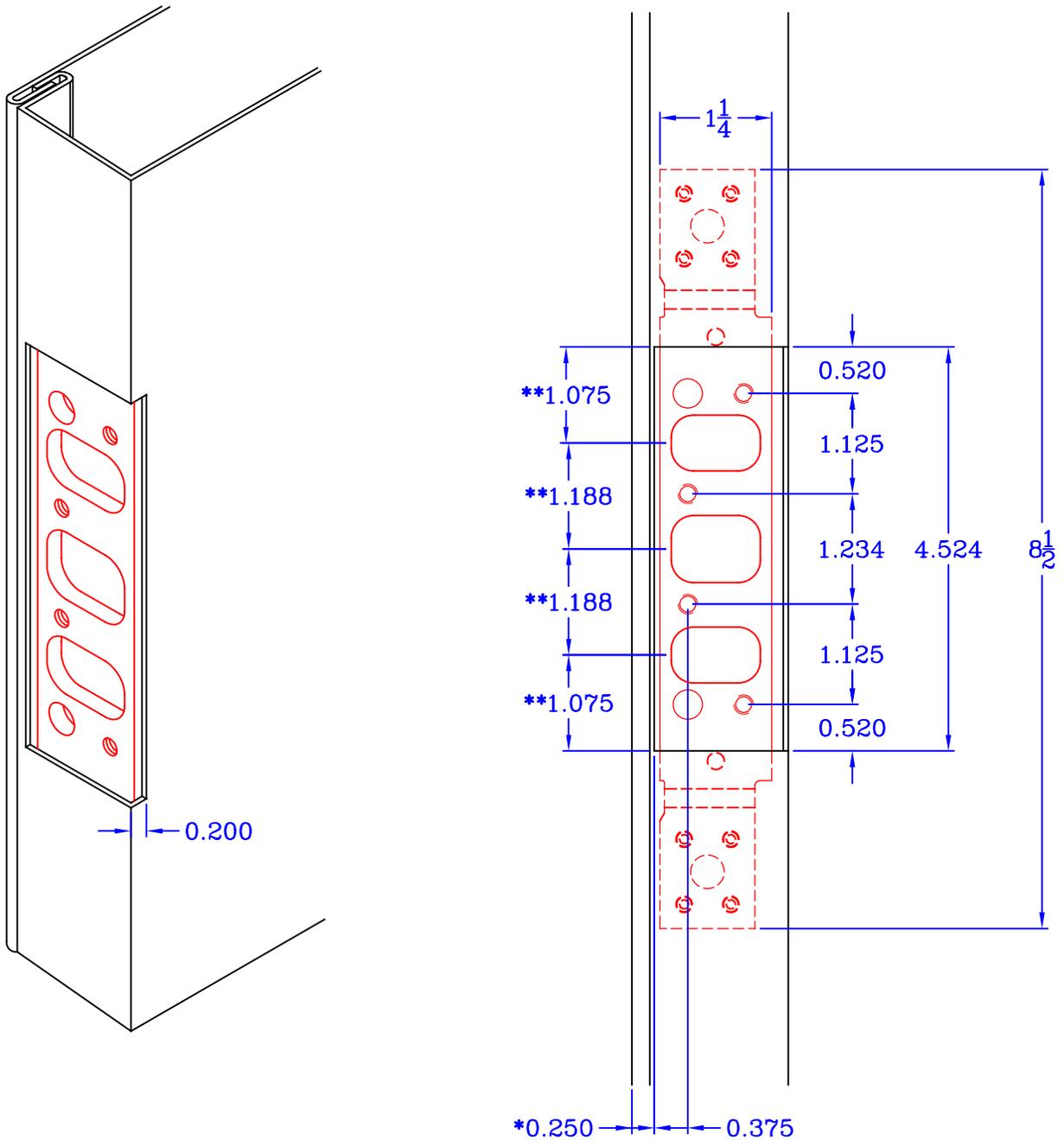
Double mortising of hinge reinforcement, 7ga

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



Electrified hardware

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

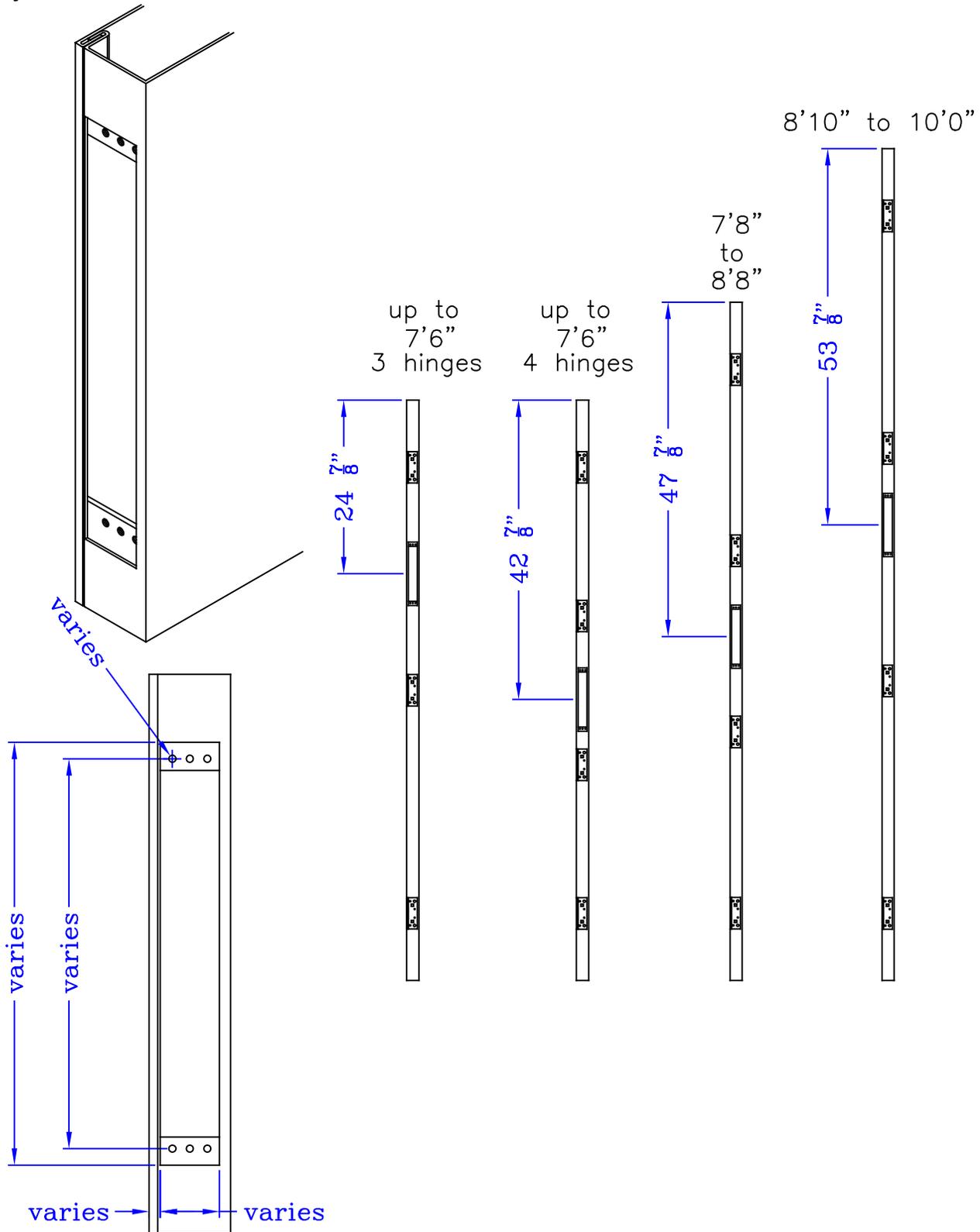
* 3/8" recommended backset on frame. Maybe greater for 16 and thicker gage door.

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

EH

Prep. for electrical power transfer, 12ga

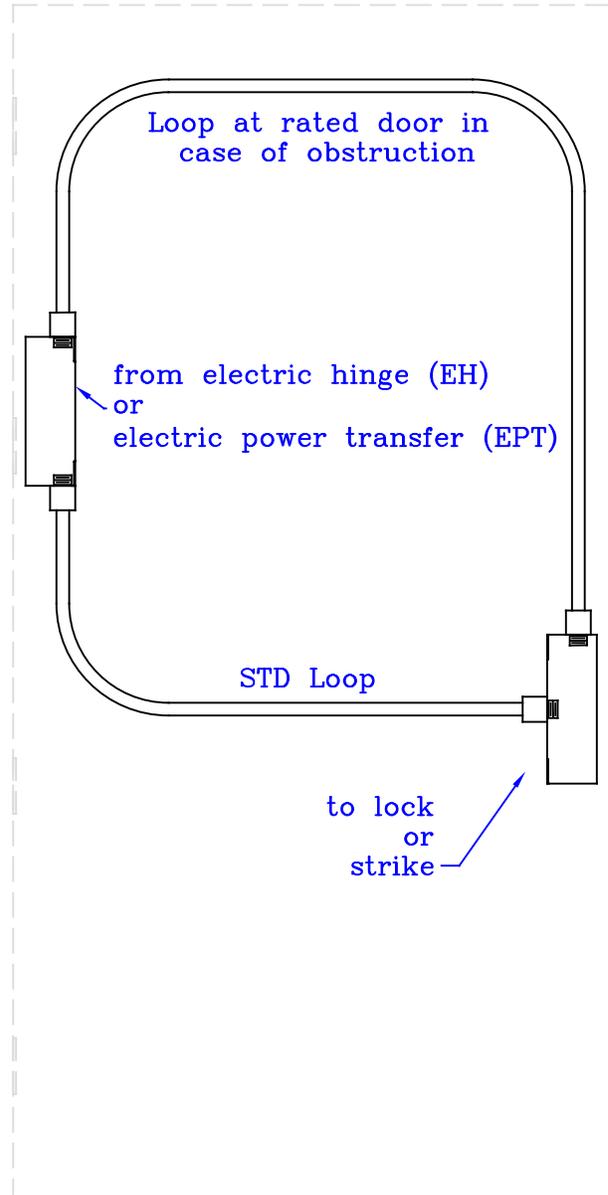
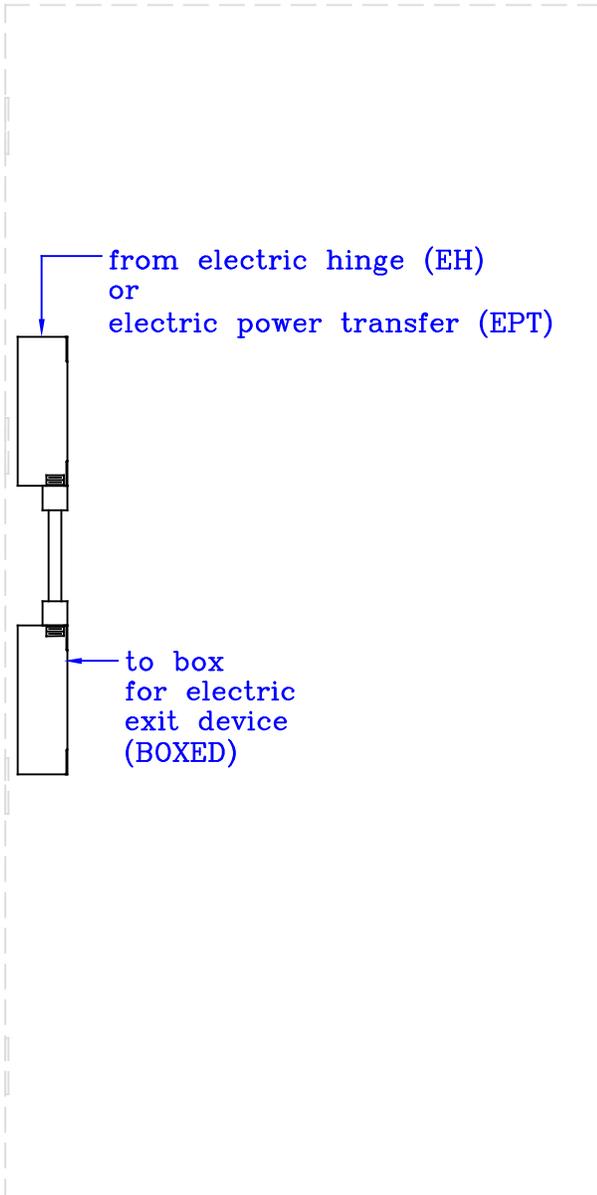
Projection welded



*manufacturer's template to be provided

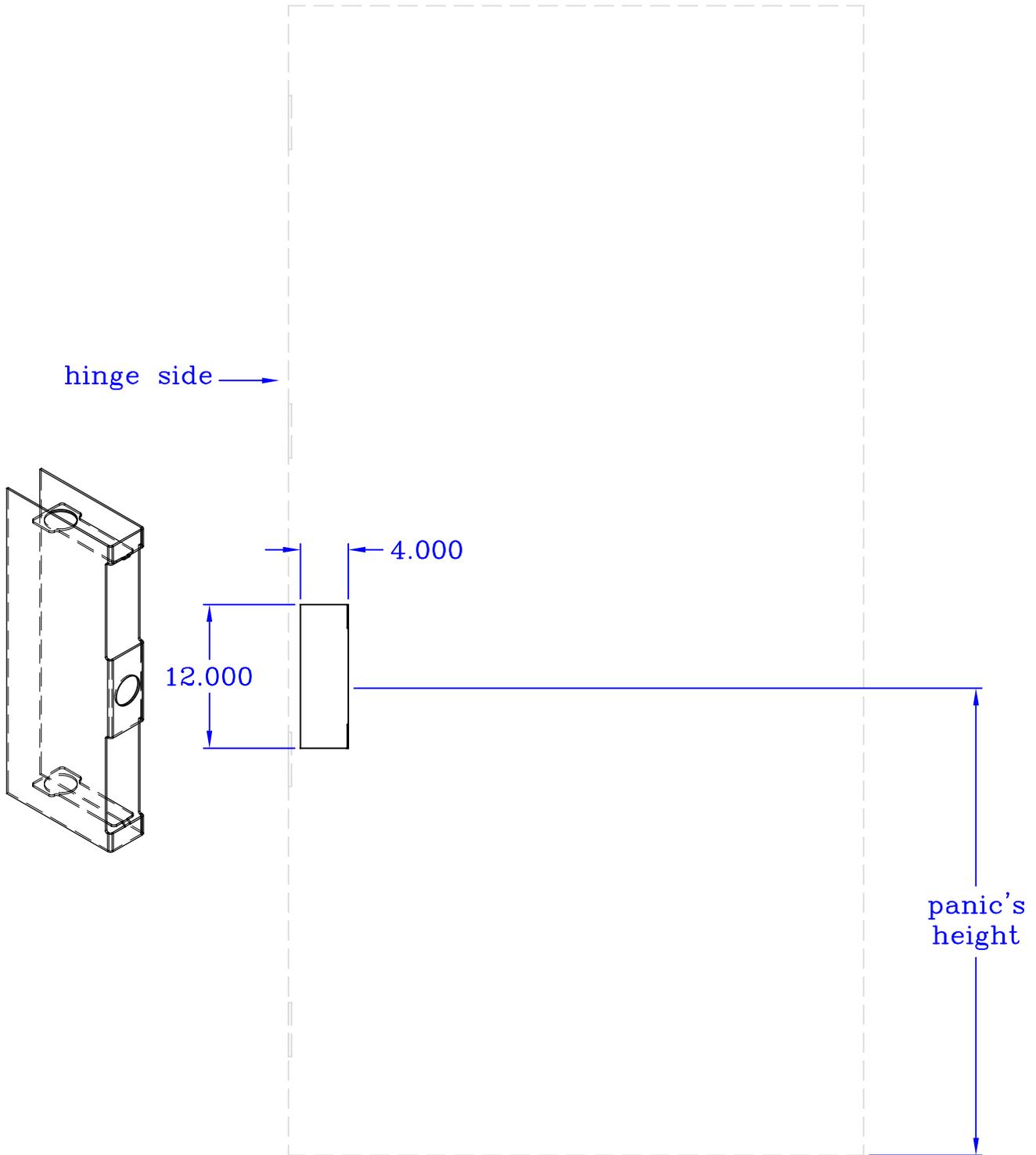
Raceway for electrified hardware

3/4" interior diameter

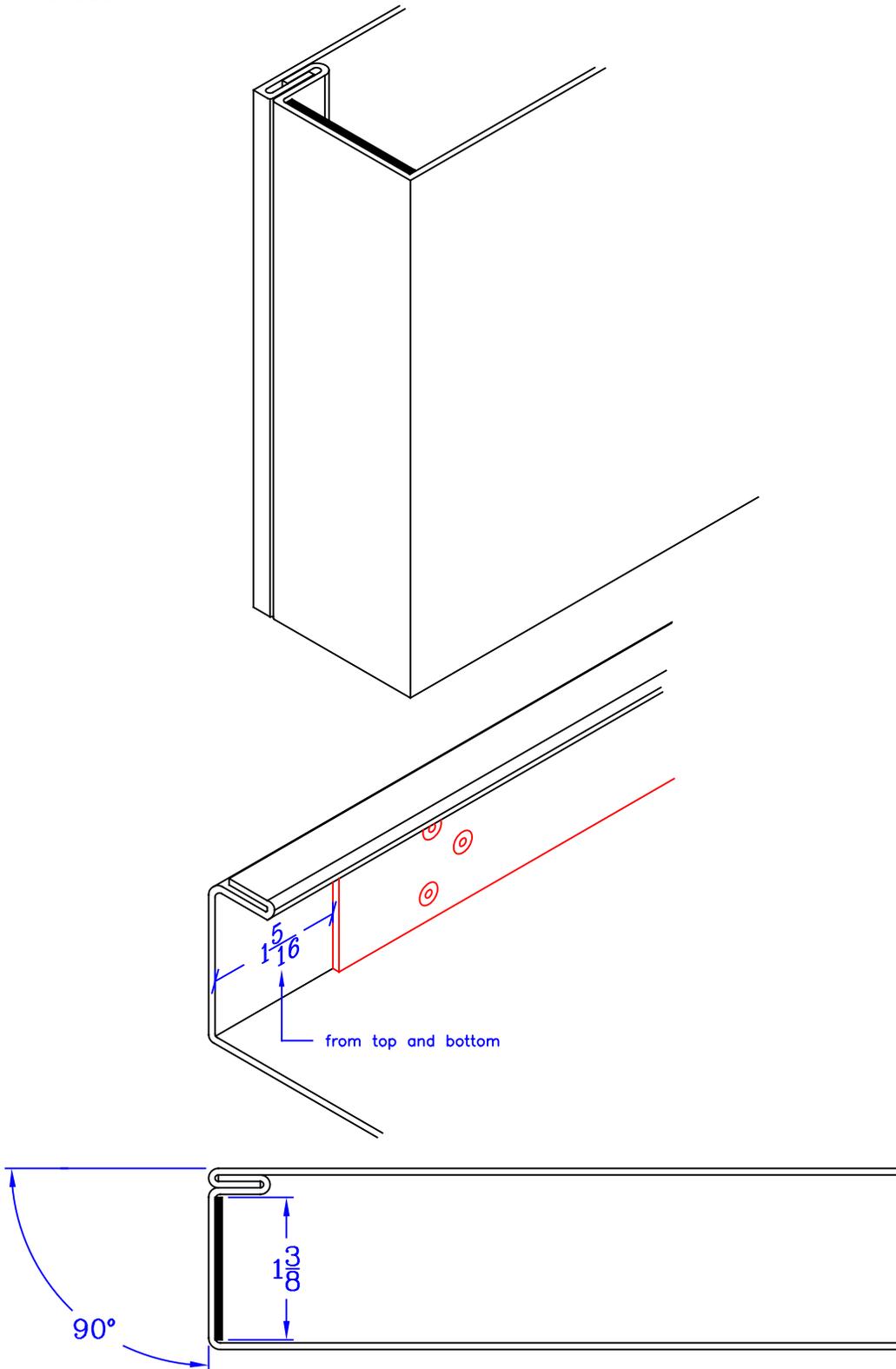


Wire in the raceway to pull electric connector through.

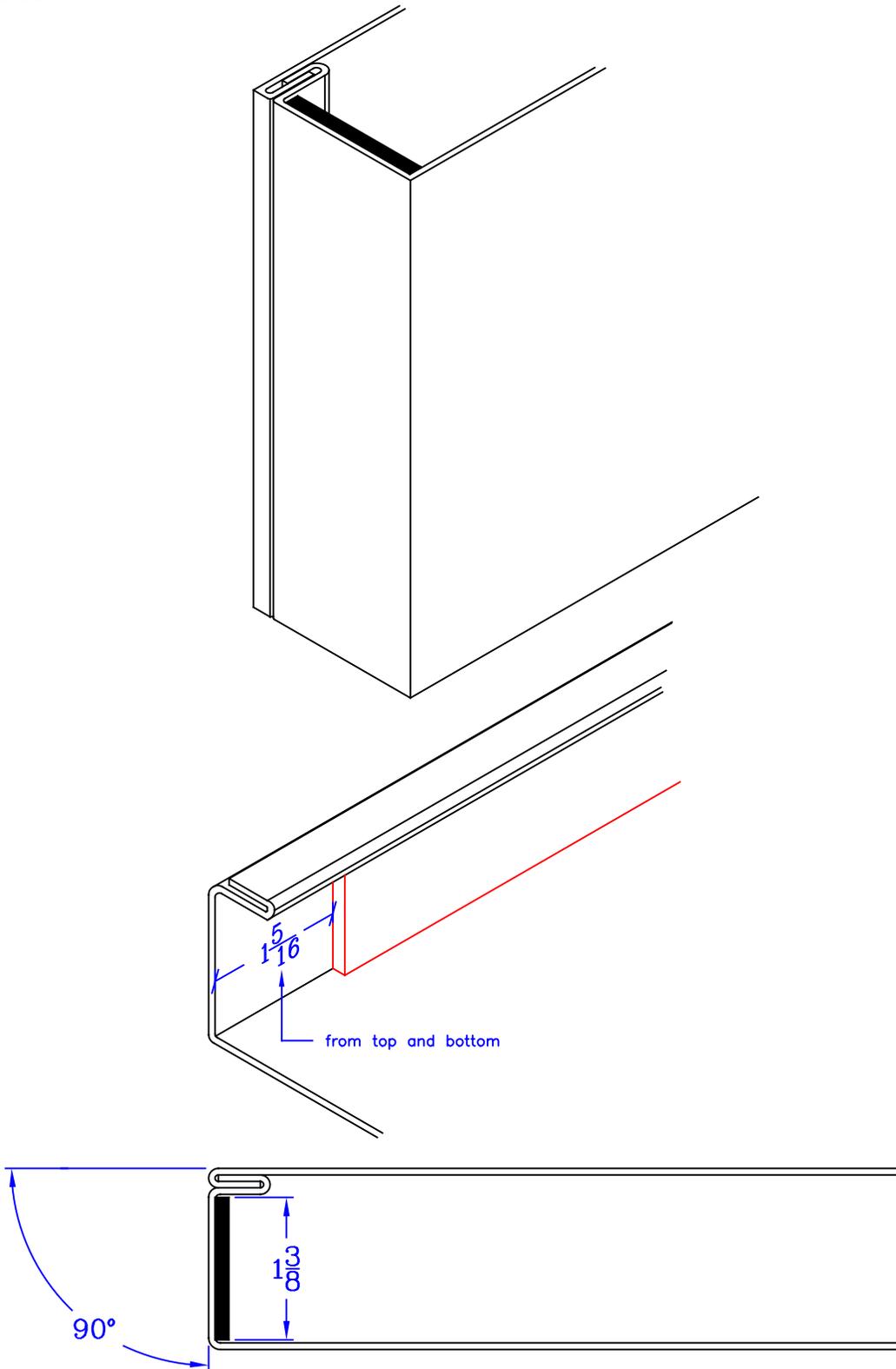
Box for electric exit device, 16ga



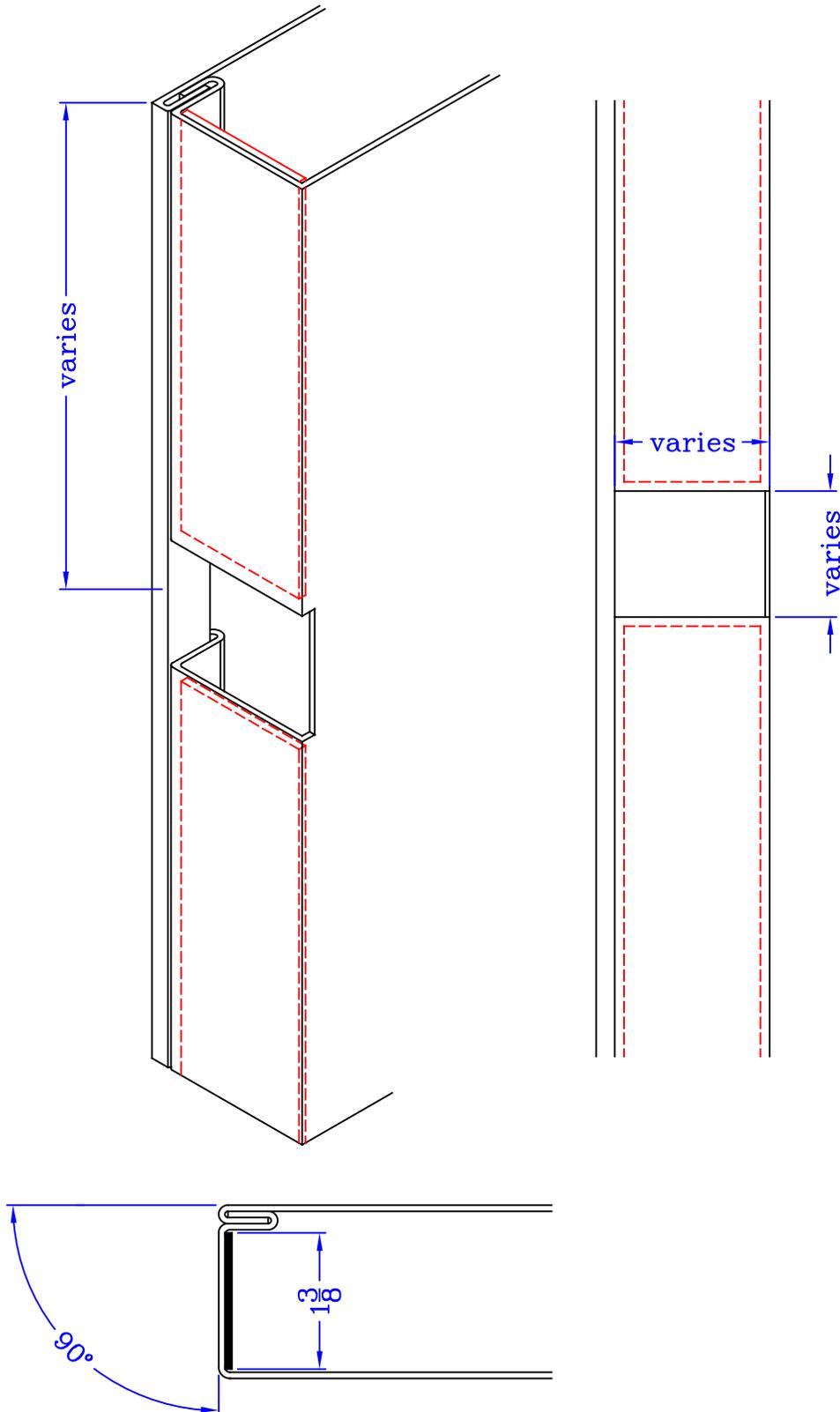
Concealed leaf continuous hinge reinforcement, 14ga
Projection welded



Concealed leaf continuous hinge reinforcement, 10ga
Plug welded



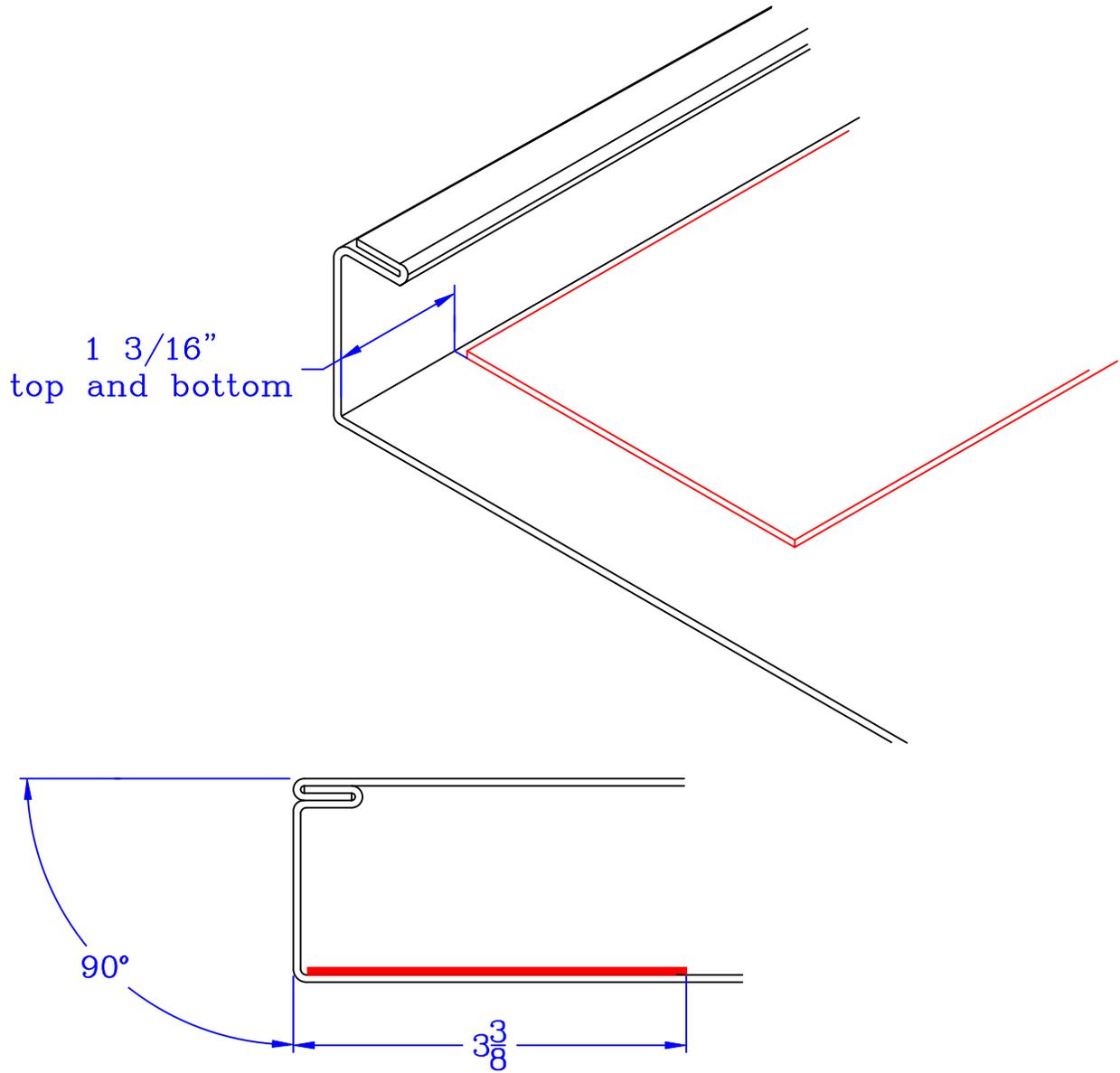
Concealed leaf continuous electric hinge reinforcement, 14ga
Projection welded



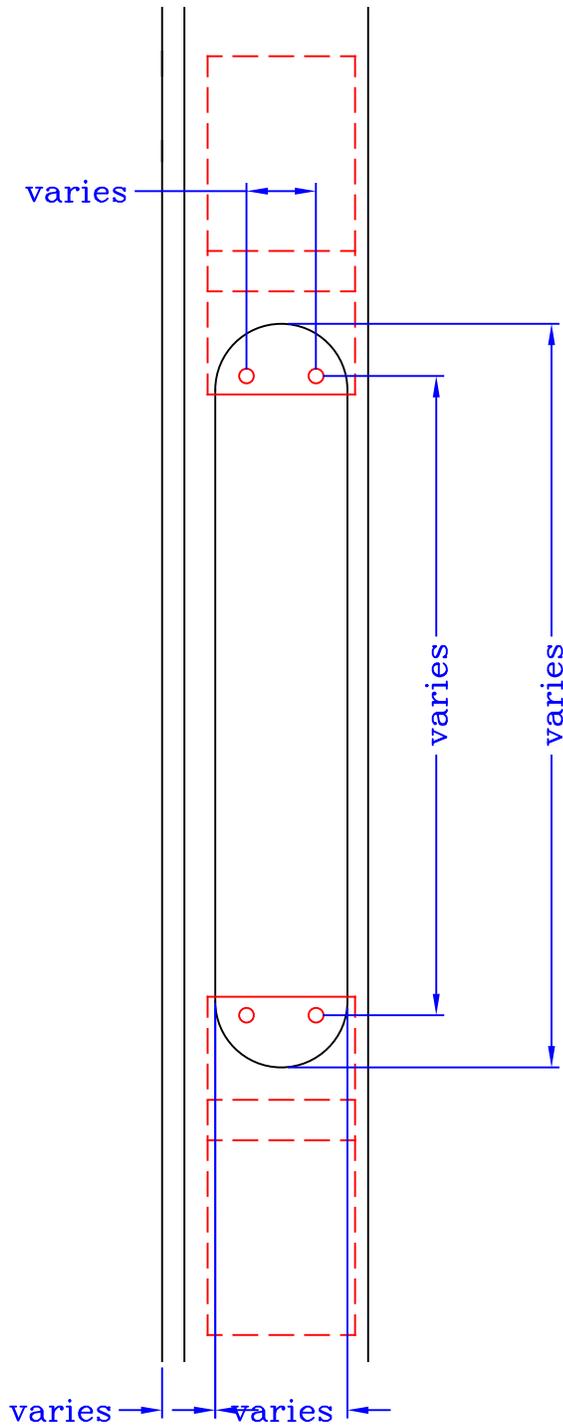
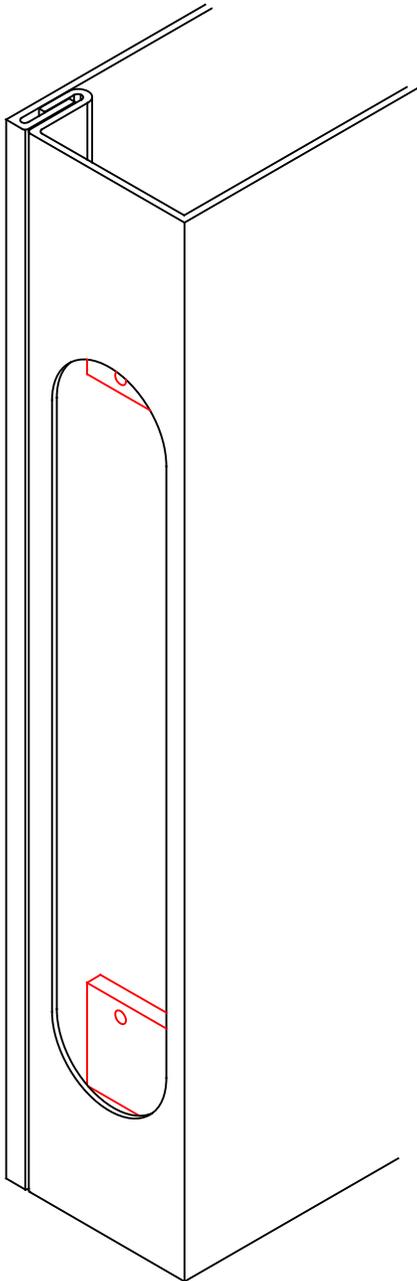
*manufacturer's template to be provided

Surface continuous hinge reinforcement, 16ga

Cold fused



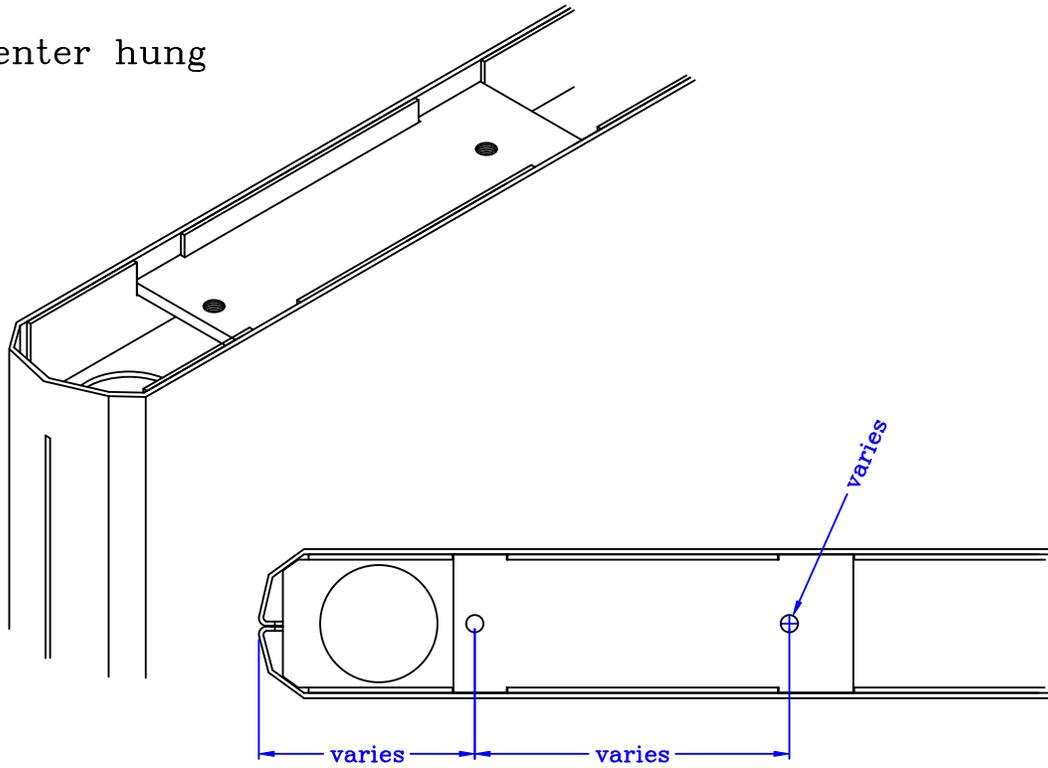
Invisible hinge reinforcement, 10ga
Projection welded



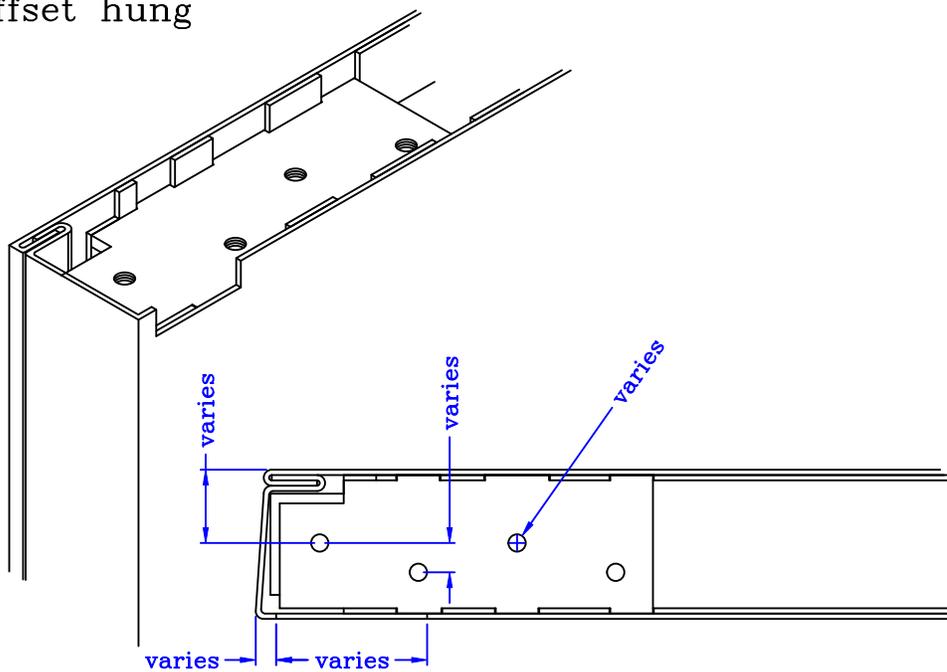
*manufacturer's template to be provided

Prep. for top pivot, 10ga

Center hung



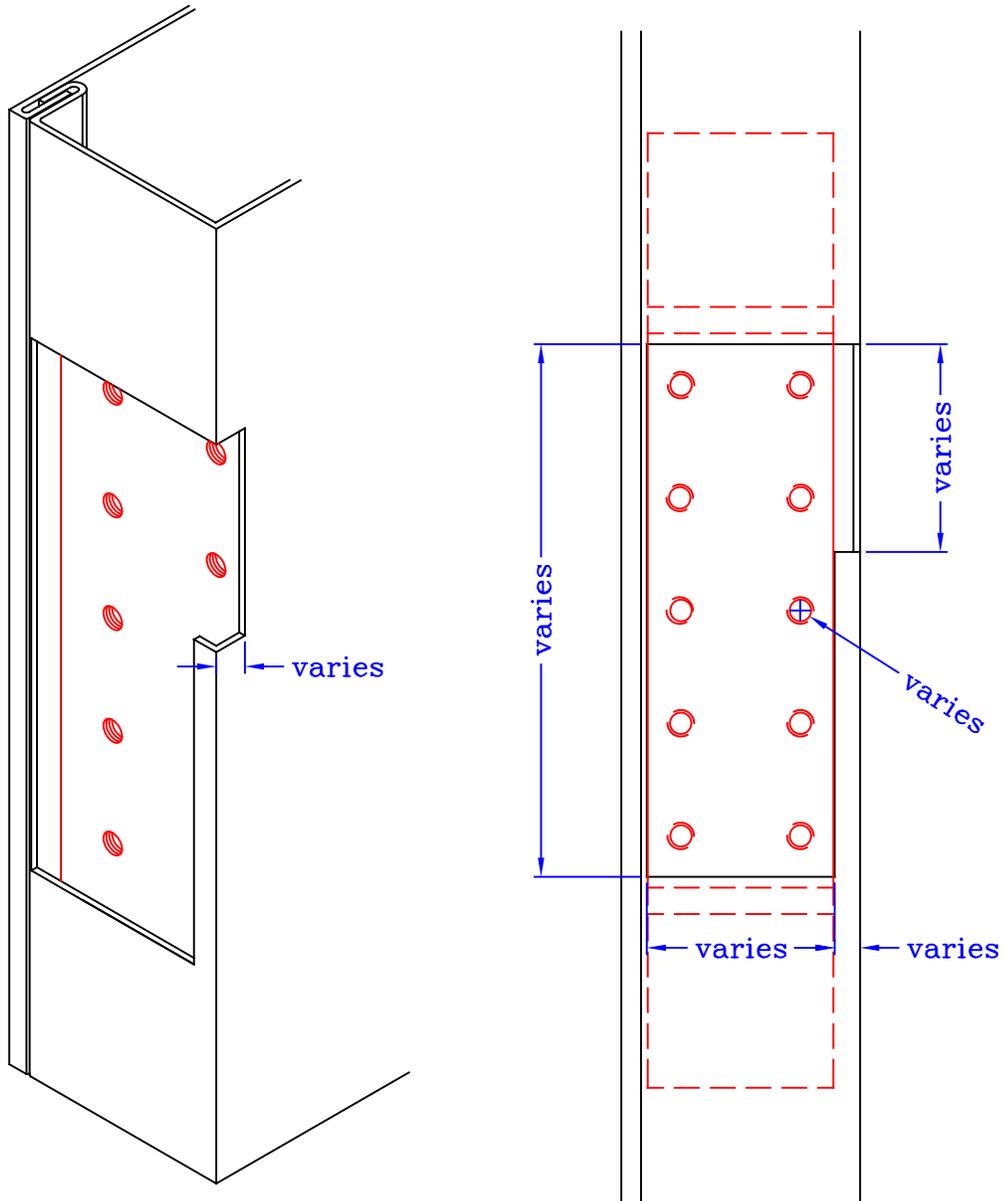
Offset hung



*manufacturer's template to be provided

Intermediate pivot prep., 10ga

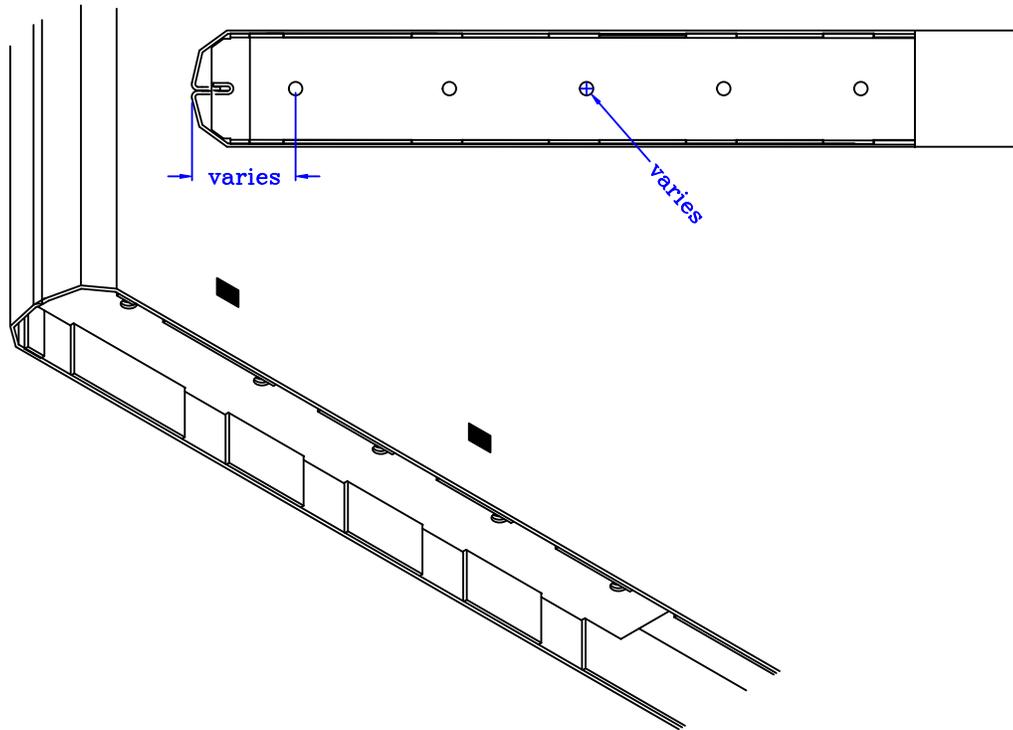
Offset hung



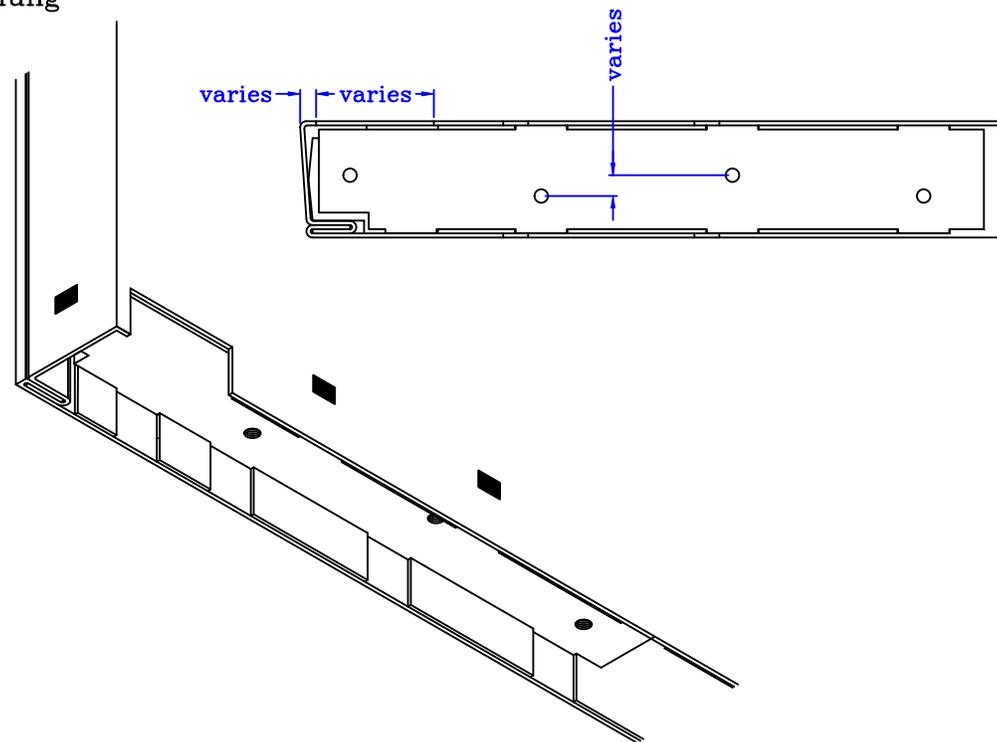
*manufacturer's template to be provided
Centered at mid height of opening up to 7'0"

Prep. for bottom pivot, 10ga

Center hung



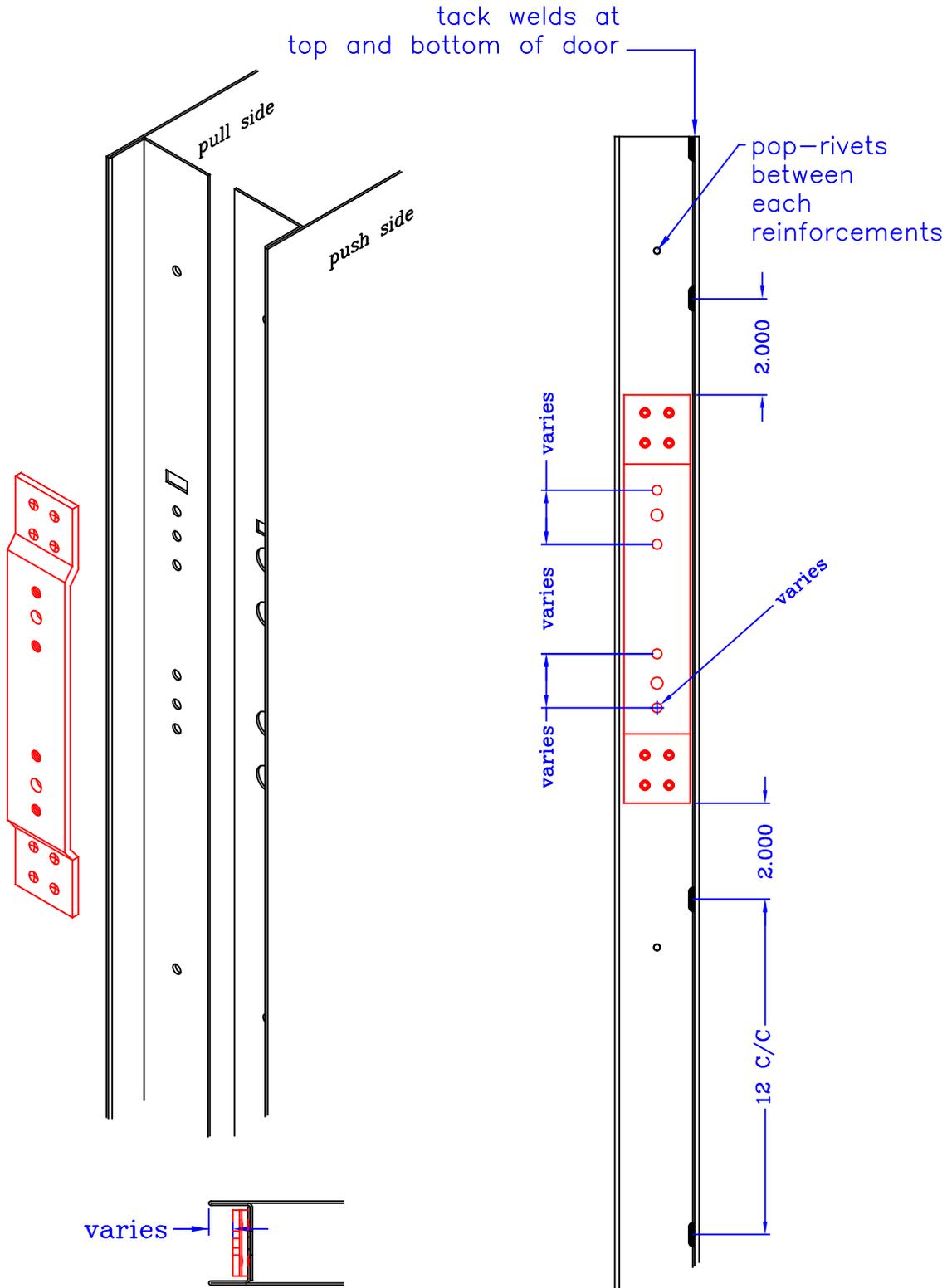
Offset hung



*manufacturer's template to be provided

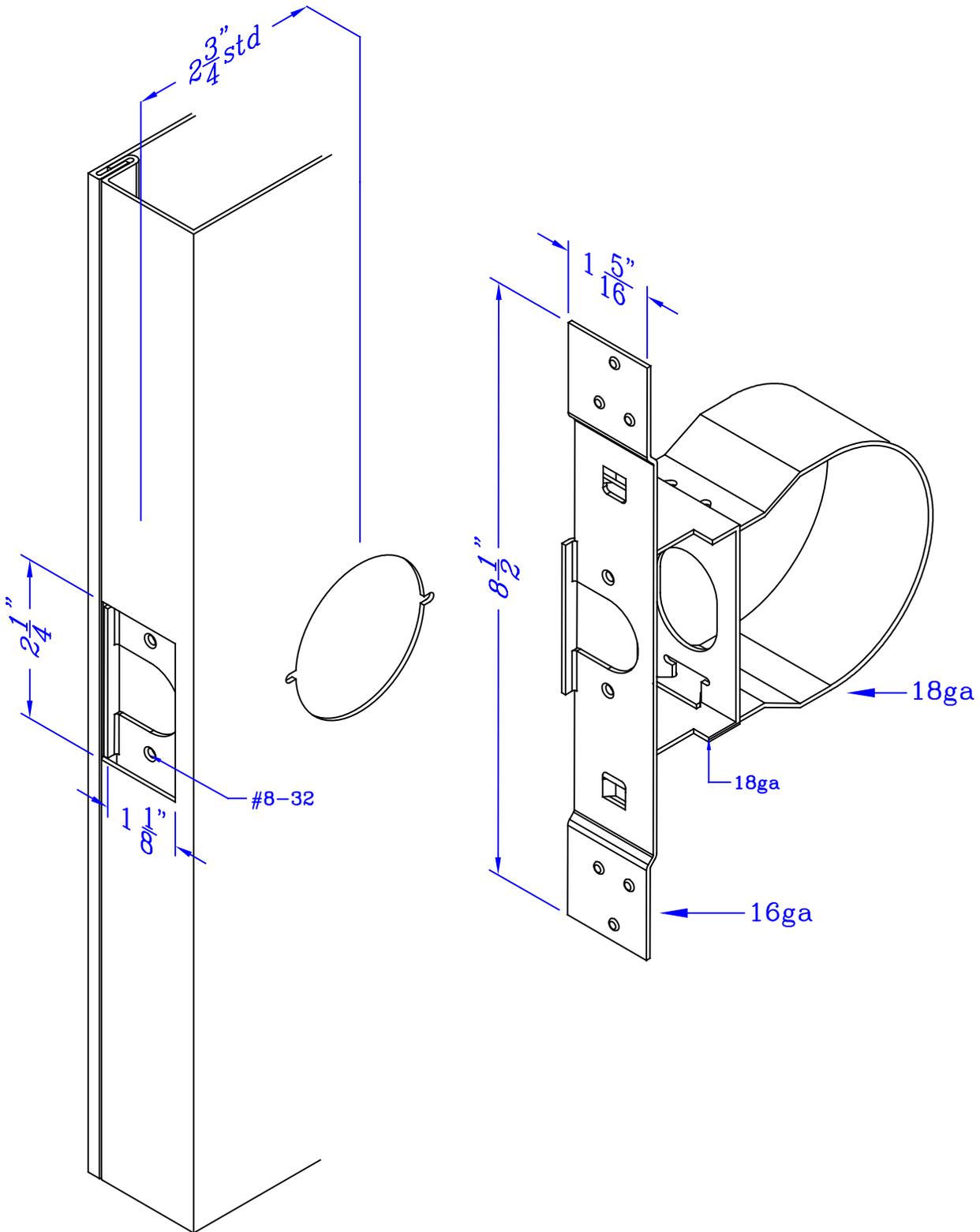
Prep. for pocket pivot, 10ga

Projection welded



*manufacturer's template to be provided

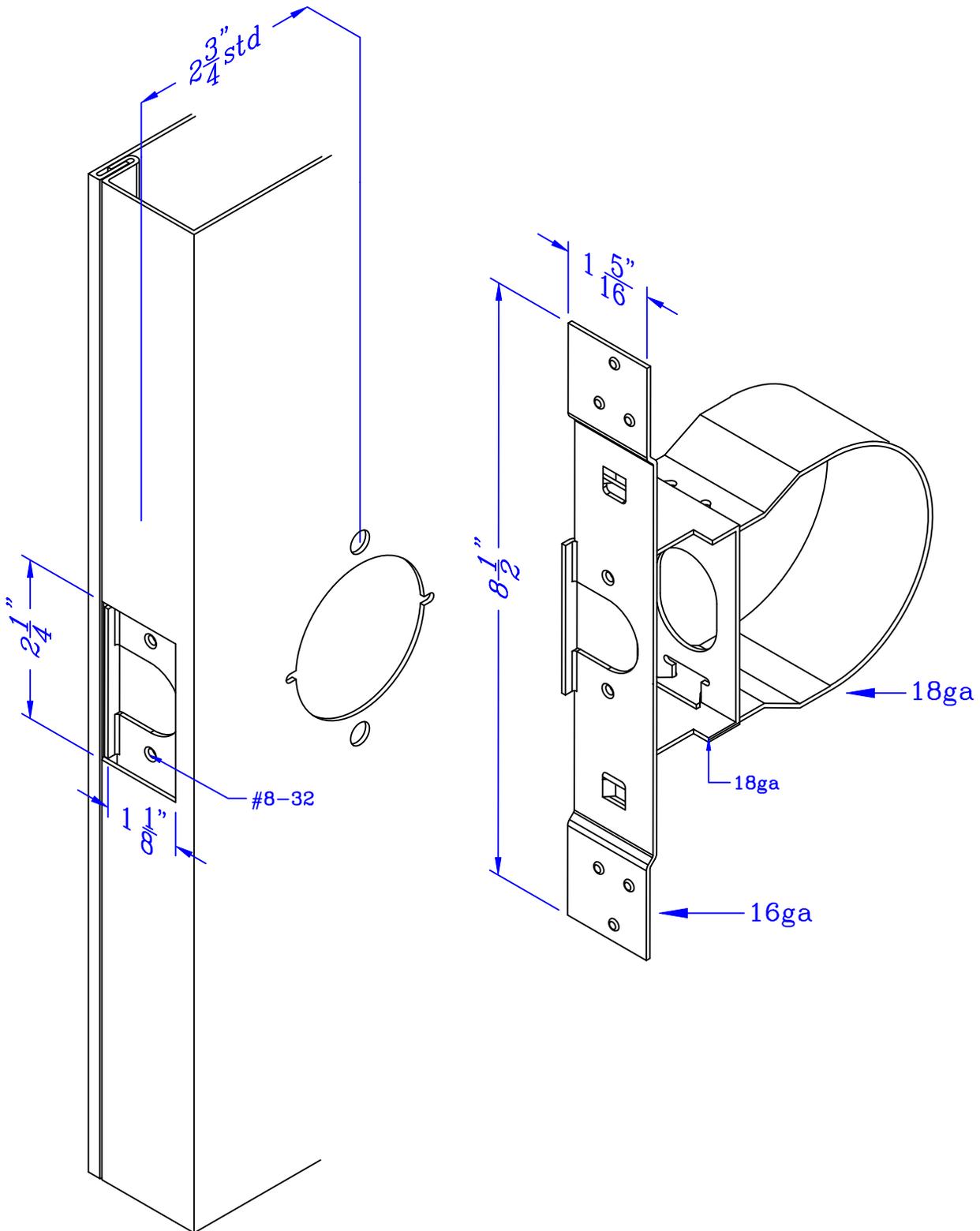
Cylindrical lock reinforcement, 16ga
Projection welded



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

Cylindrical lock reinforcement, 16ga, with thru bolts*

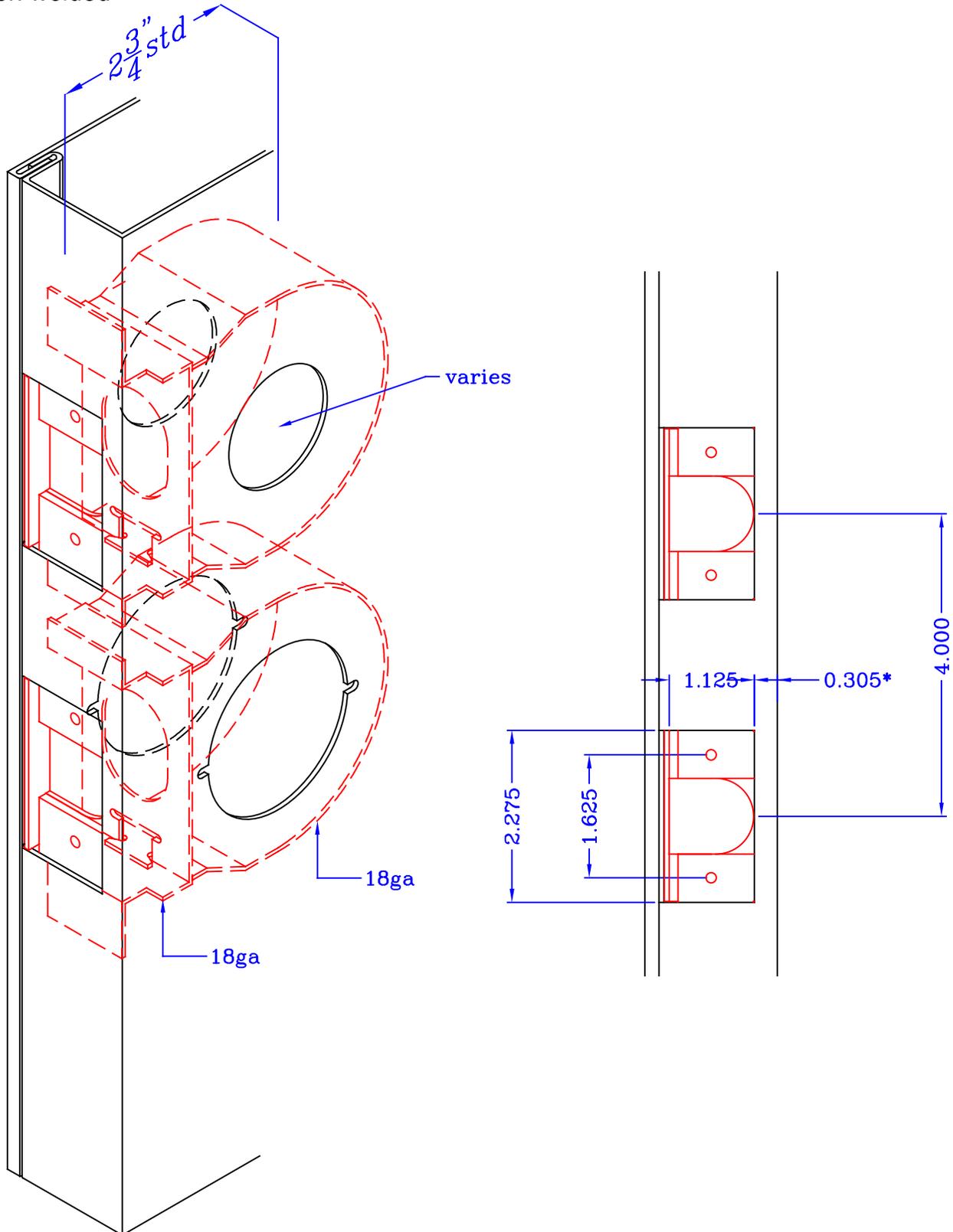
Projection welded



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

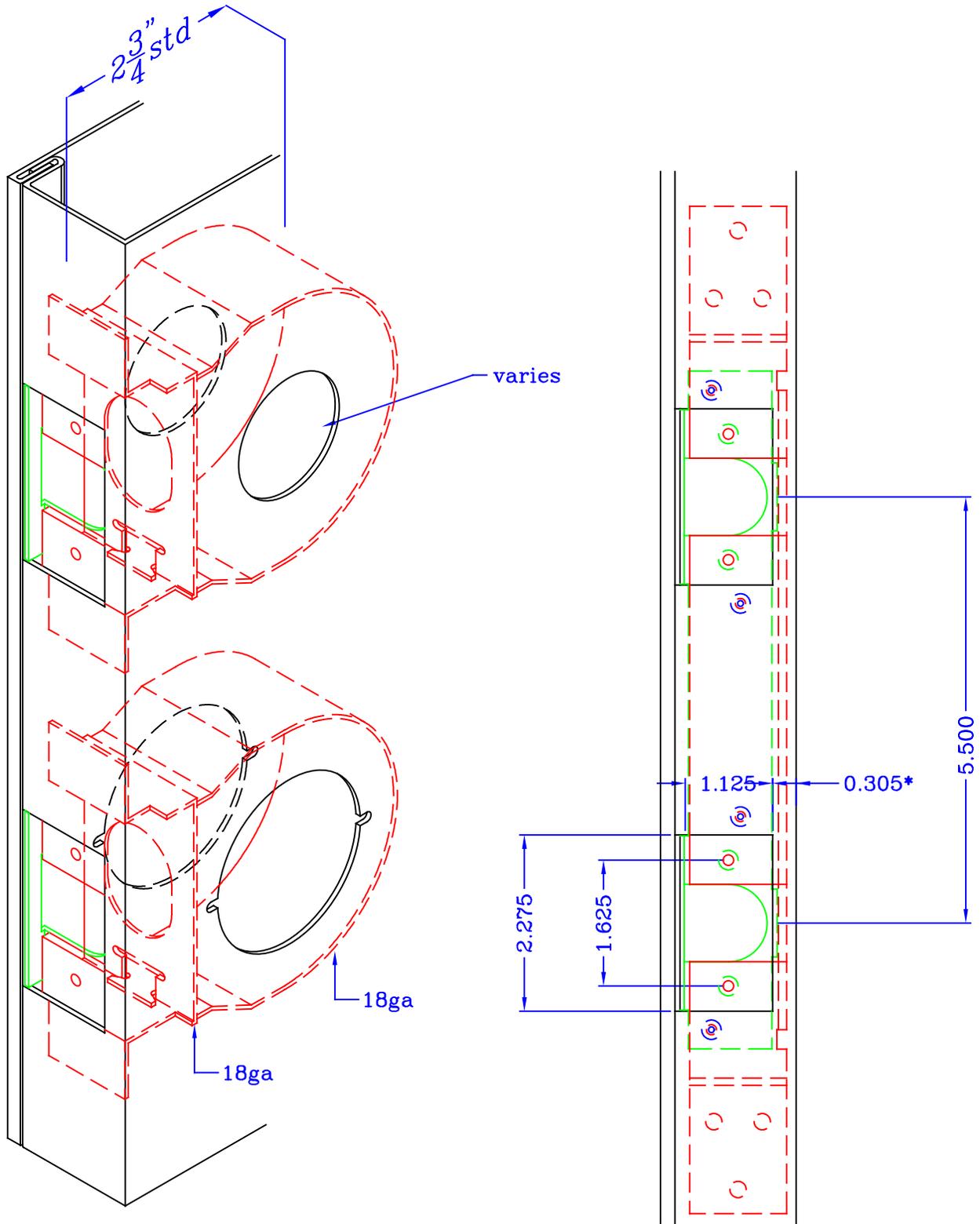
Interconnected lock 4" C/C reinforcement (161TB+CYLDL), 12ga

Projection welded



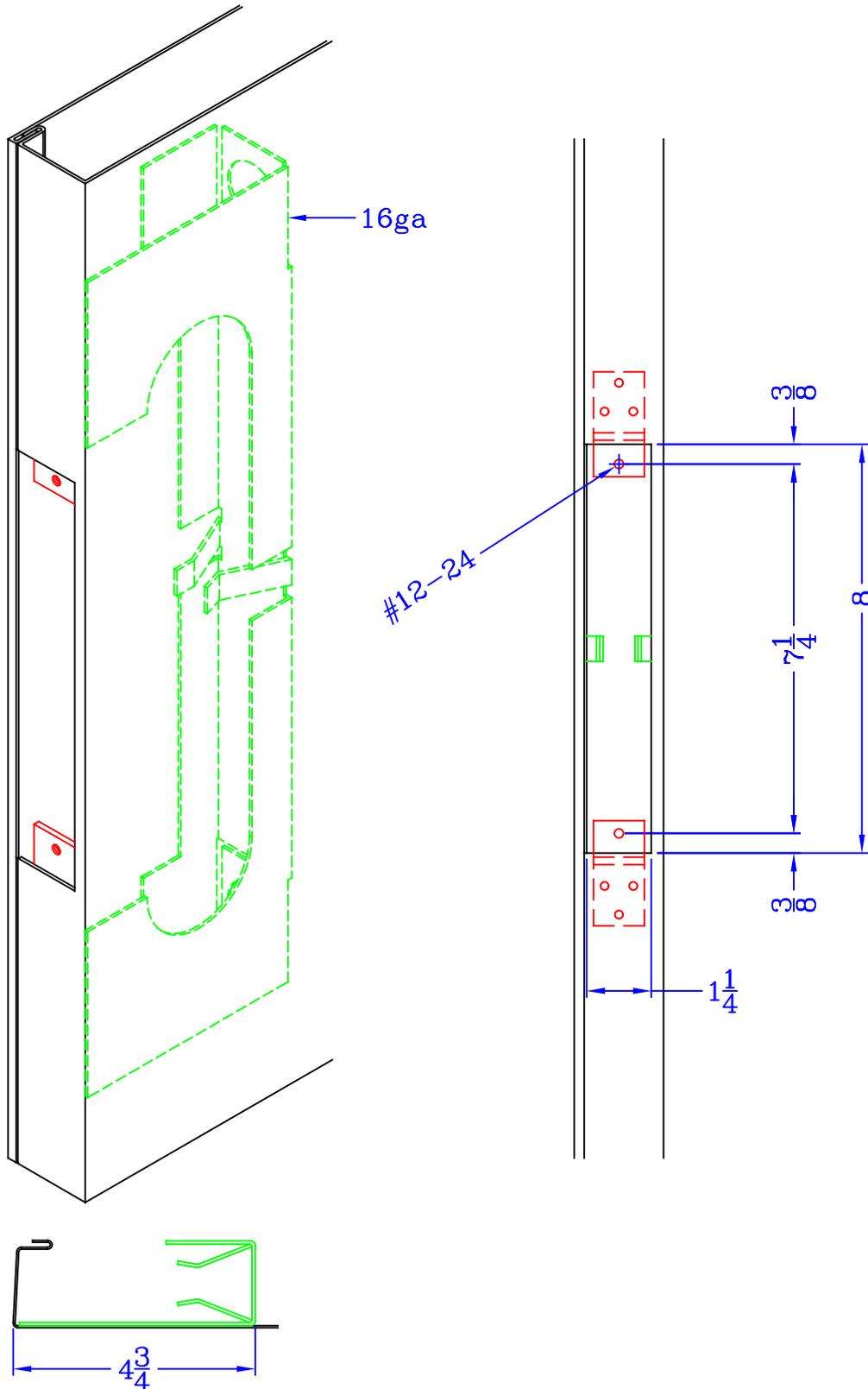
Centered latch. Tapped extruded holes per ANSI/SDI A250.6.
*Maybe greater for 16 and thicker gage door.

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



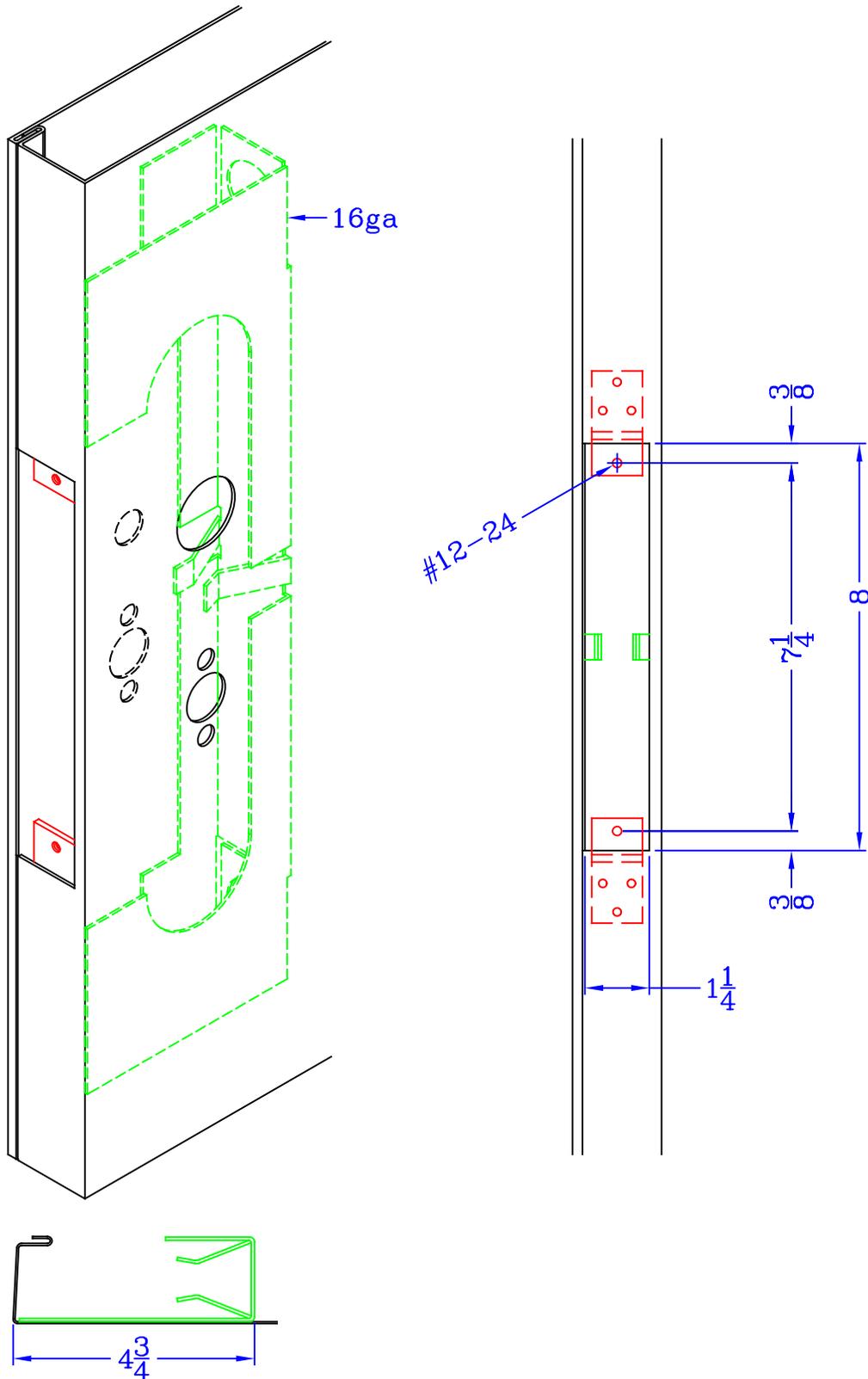
*Maybe greater for 16 and thicker gage door.

Mortise lock reinforcement, 12ga
Projection welded



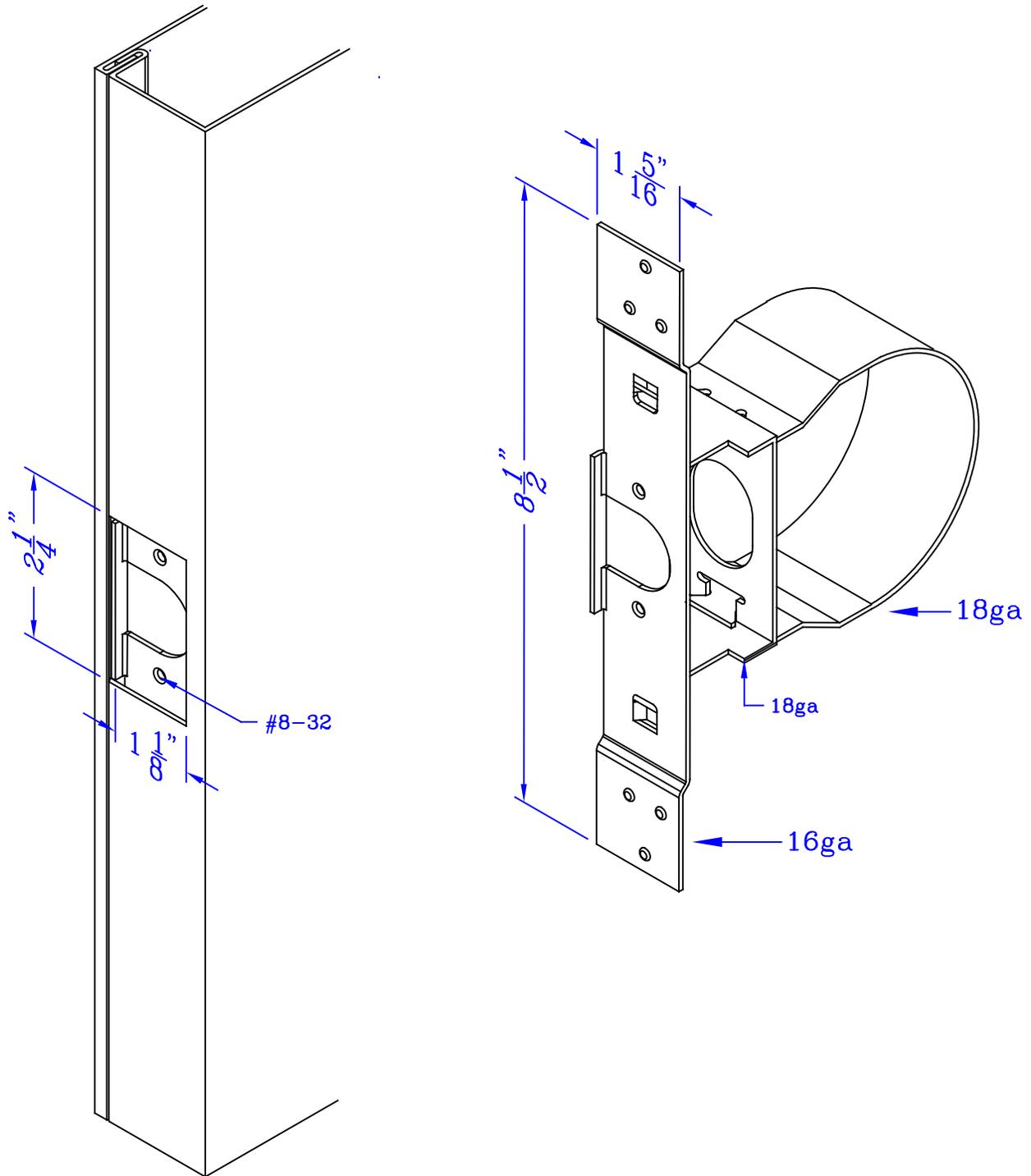
Per ANSI A156.13 specifications

Mortise lock reinforcement with function holes, 12ga
Projection welded



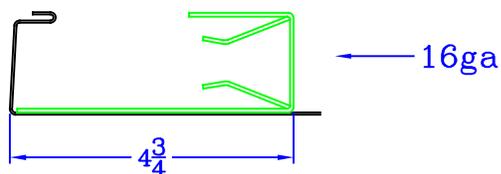
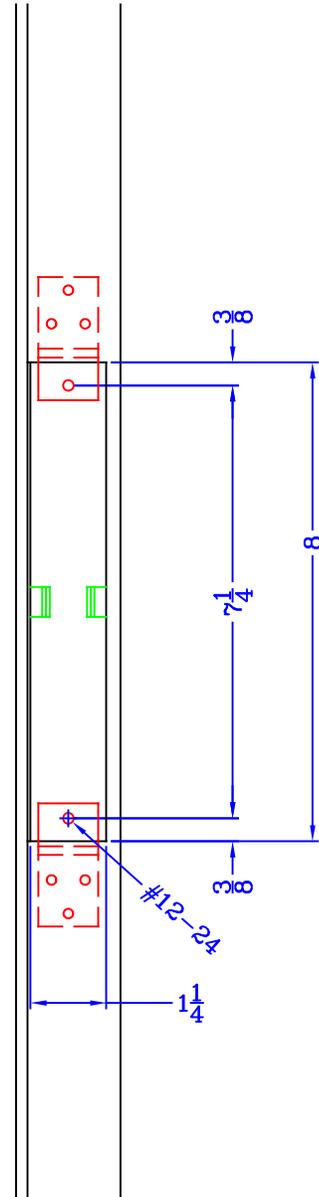
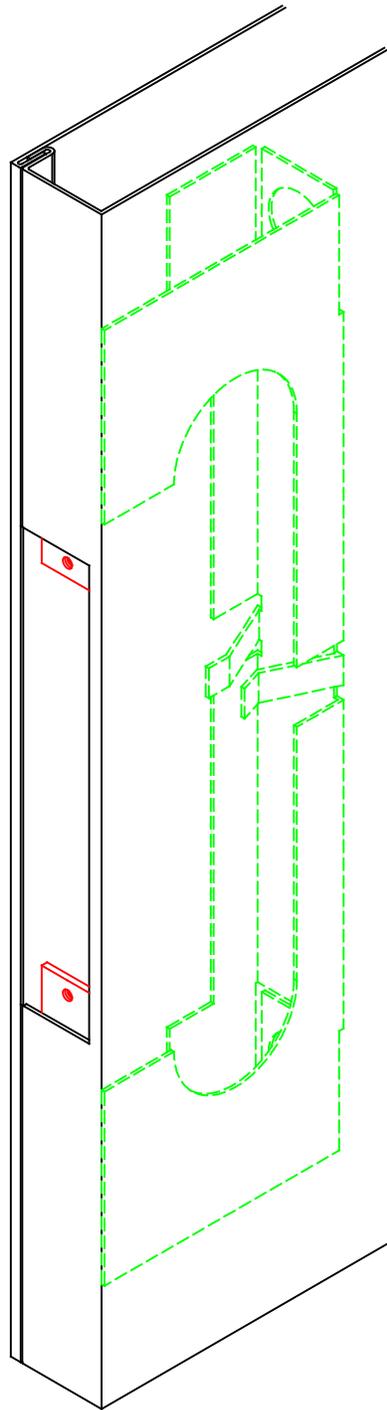
Per ANSI A156.13 specifications
Function holes: Manufacturer's template to be provided.

Digital lock prep, 12ga
Projection welded



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

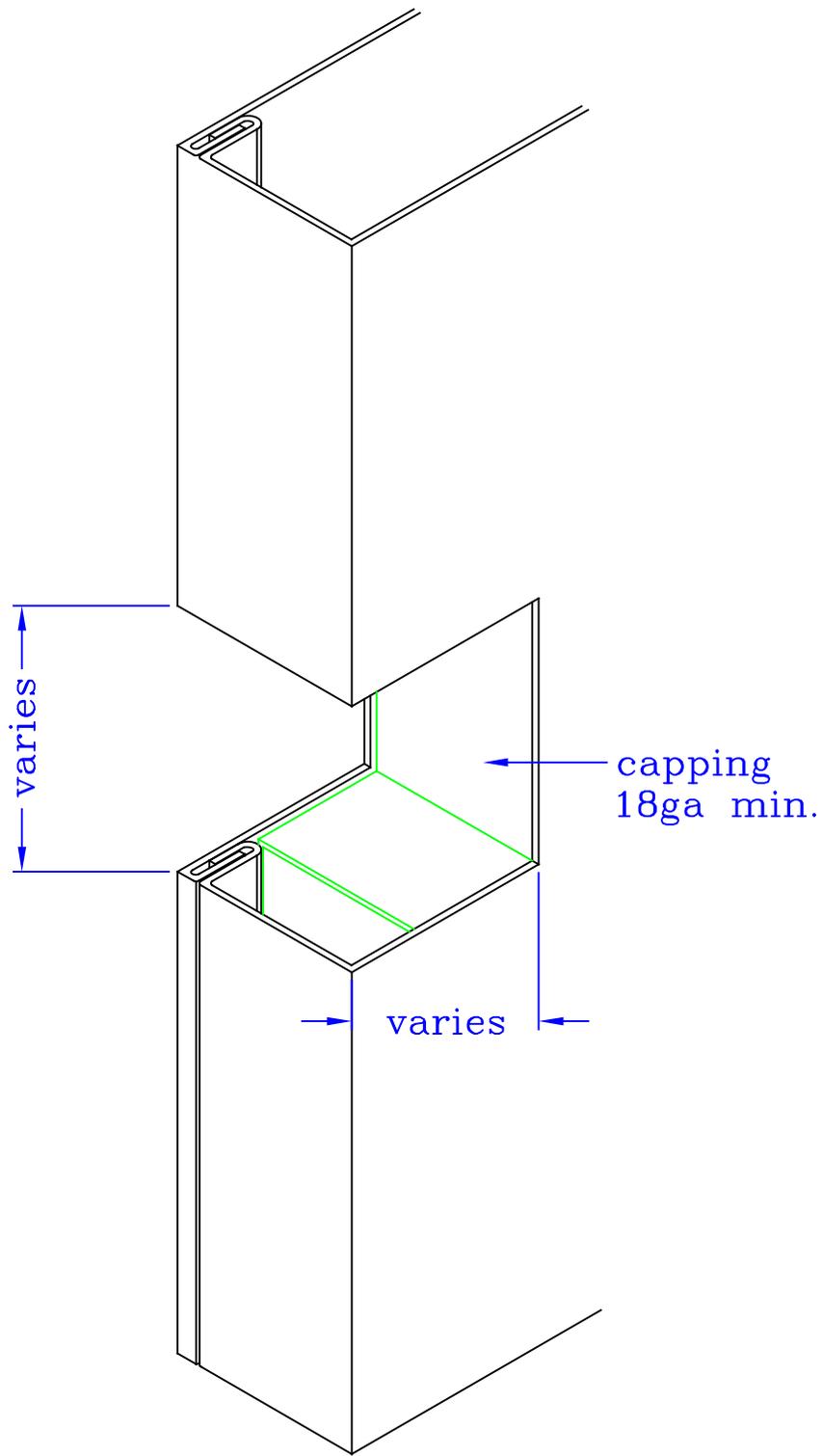
Digital lock prep, 12ga
Projection welded



Function holes: Manufacturer's template to be provided.

Pre-assembly lock reinforcement

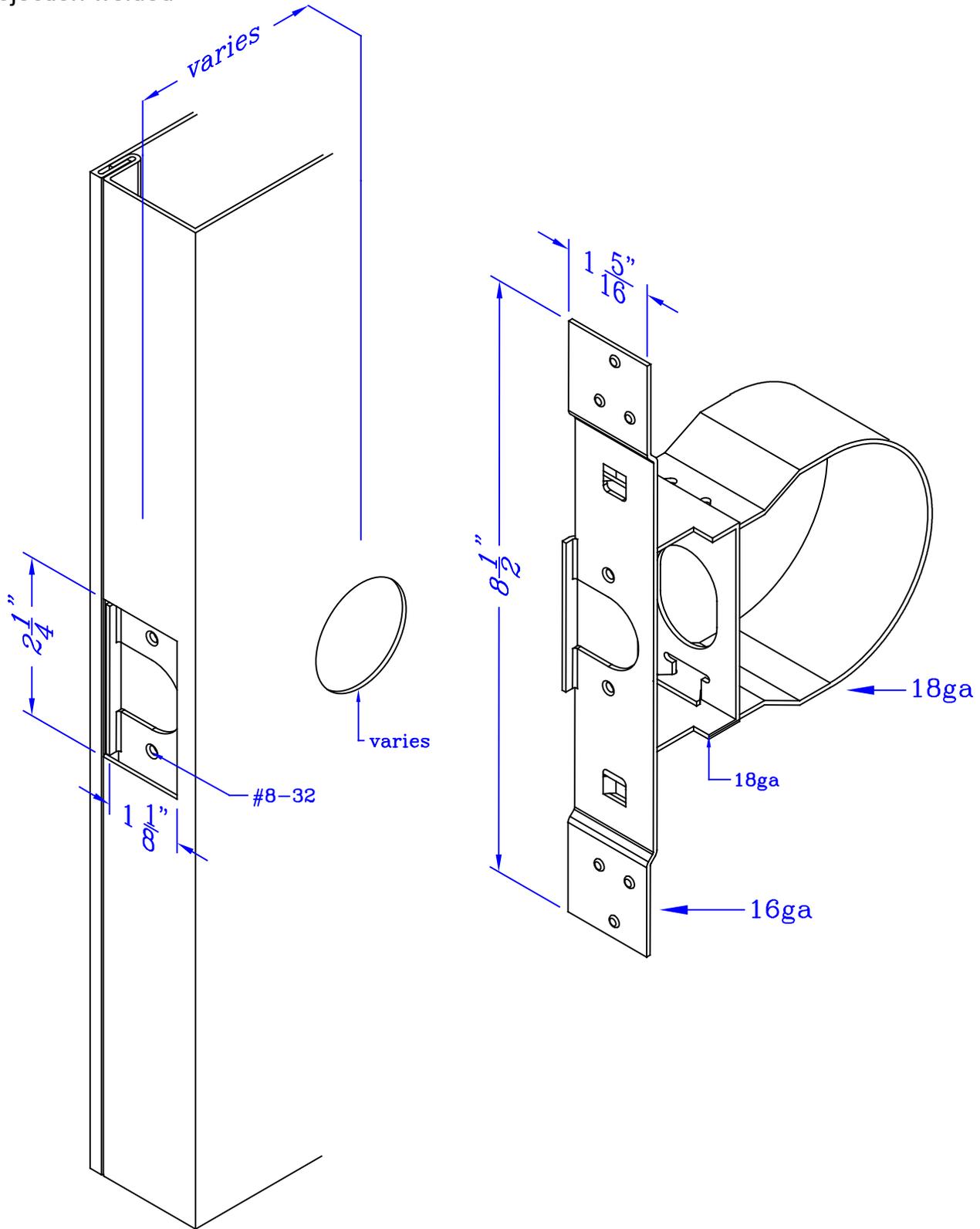
Cold fused



*manufacturer's template to be provided

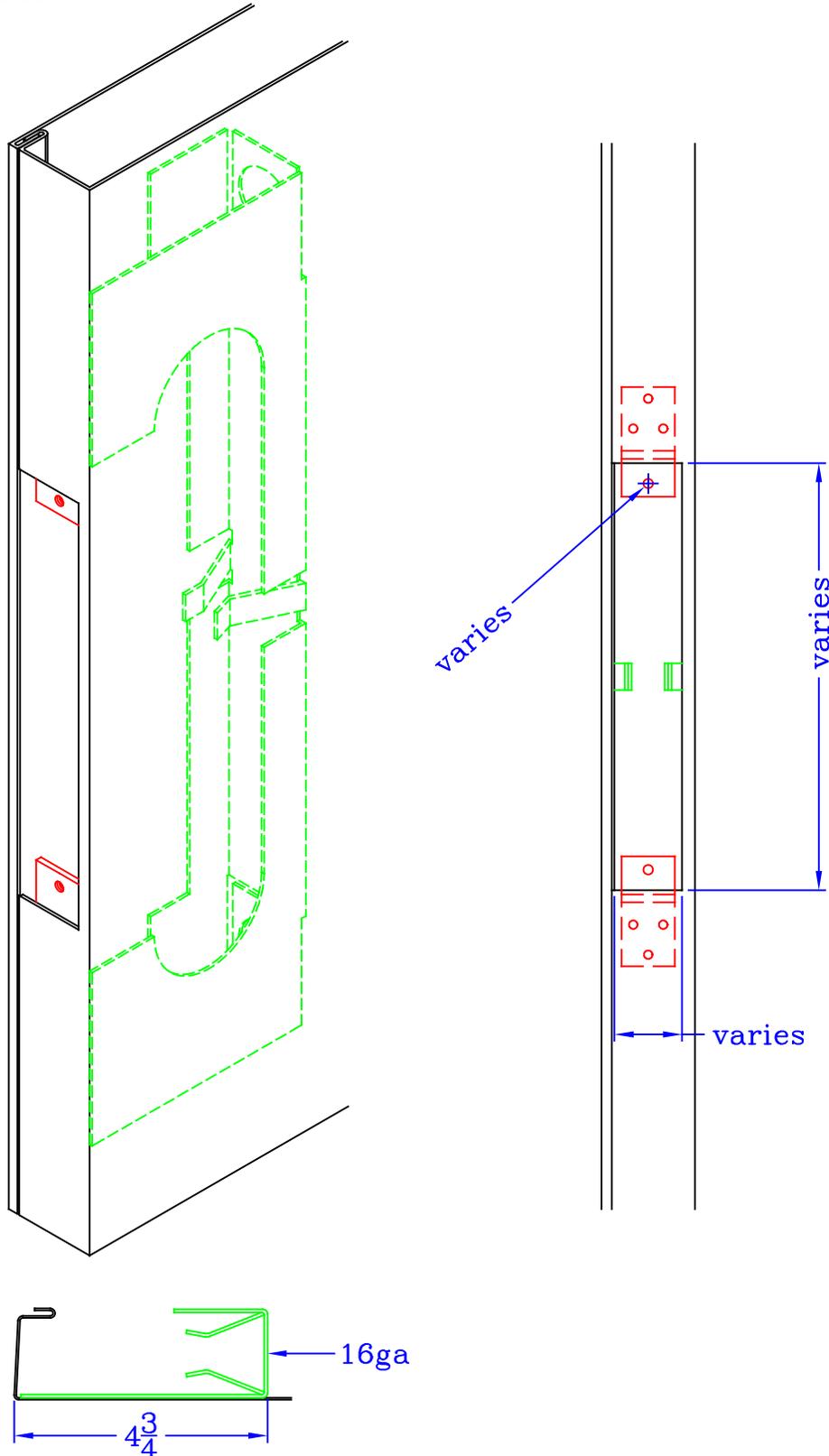
Cylindrical deadlock reinforcement, 16ga

Projection welded



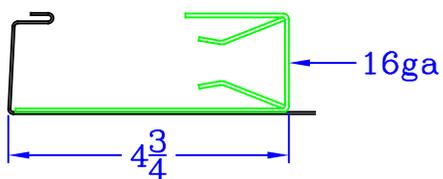
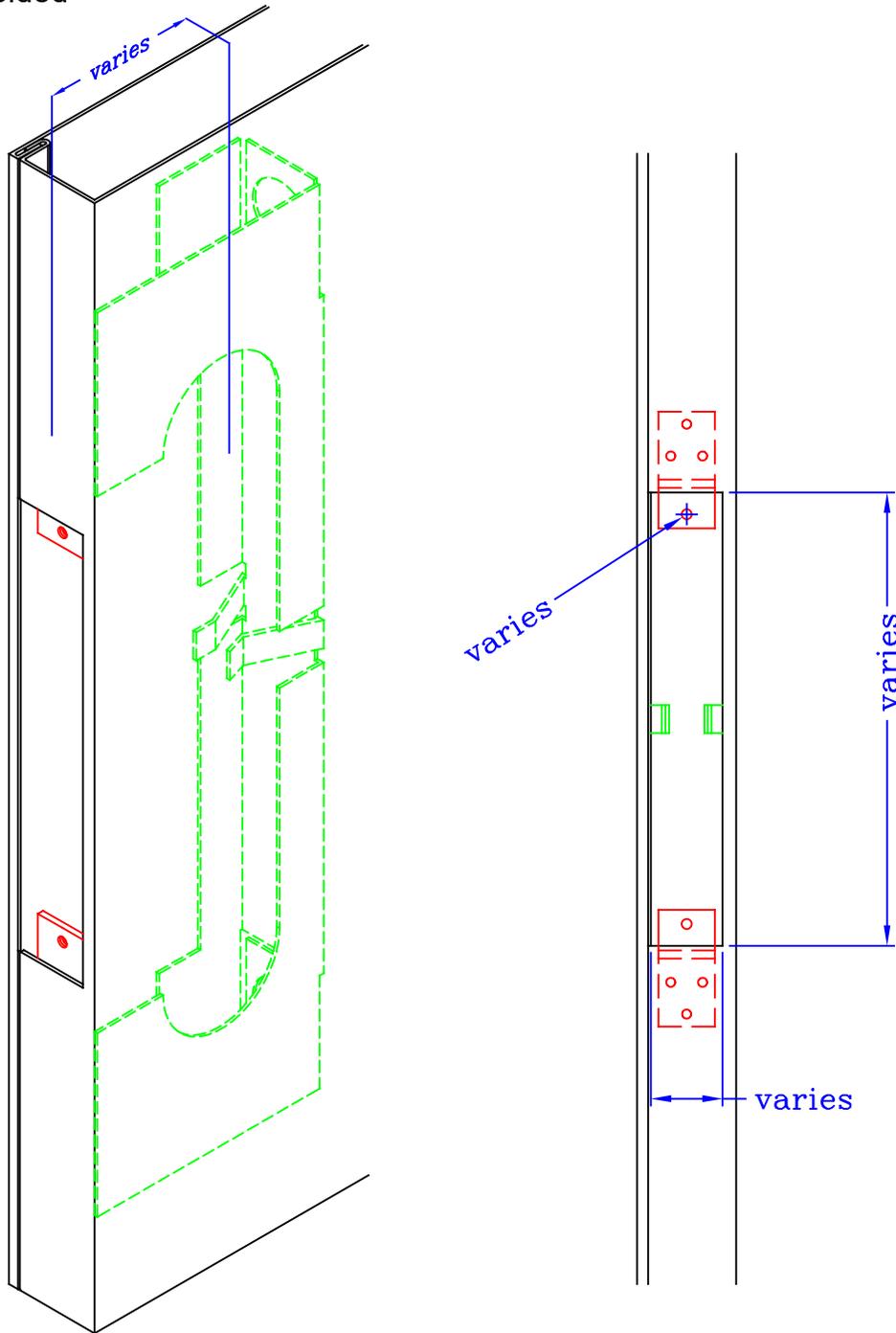
Centered latch. Tapped extruded holes per ANSI/SDI A250.6.
*manufacturer's template to be provided

Mortise deadlock reinforcement, 12ga
Projection welded



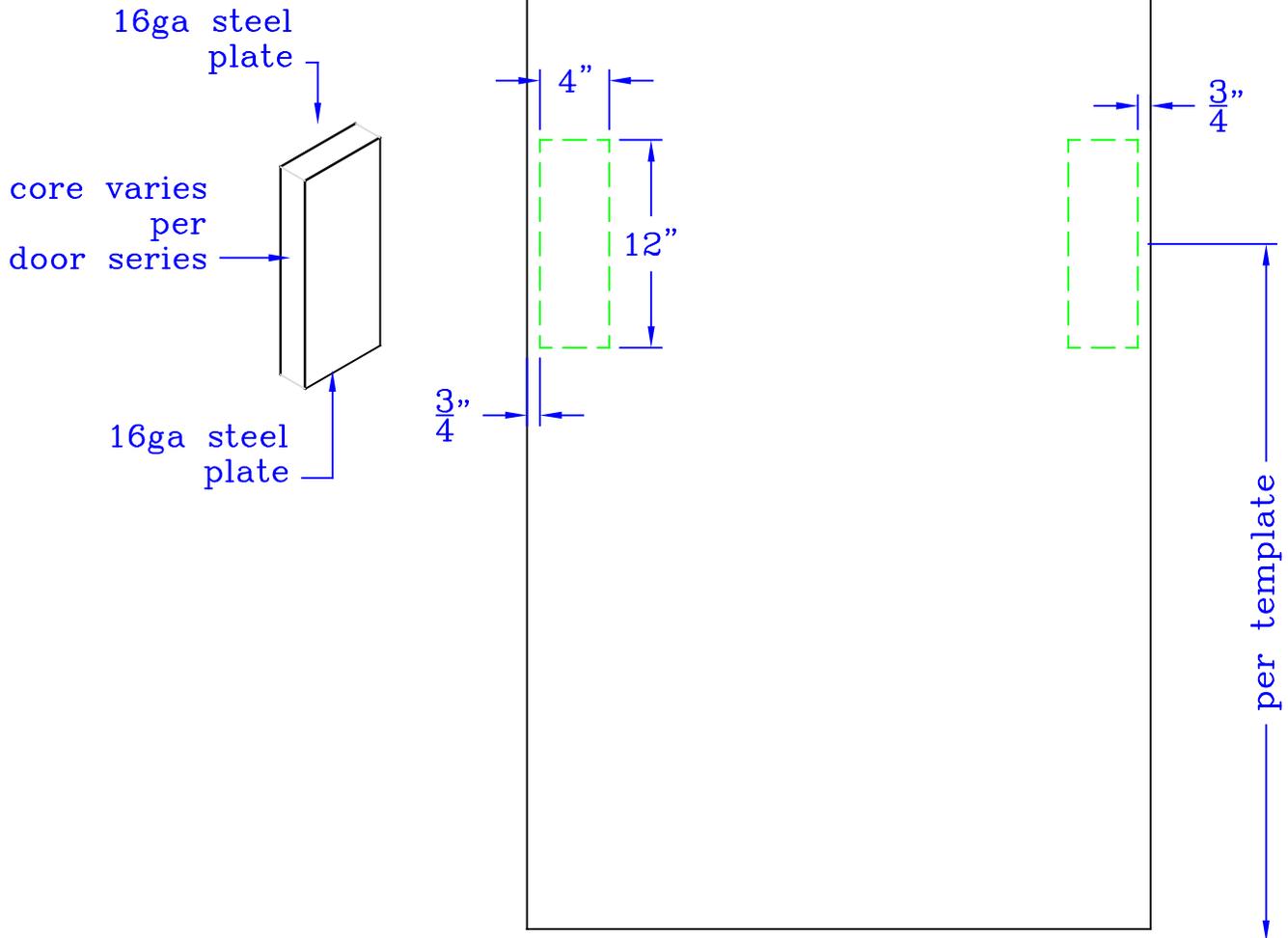
*manufacturer's template to be provided

Mortise deadlock reinforcement with function holes, 12ga
Projection welded

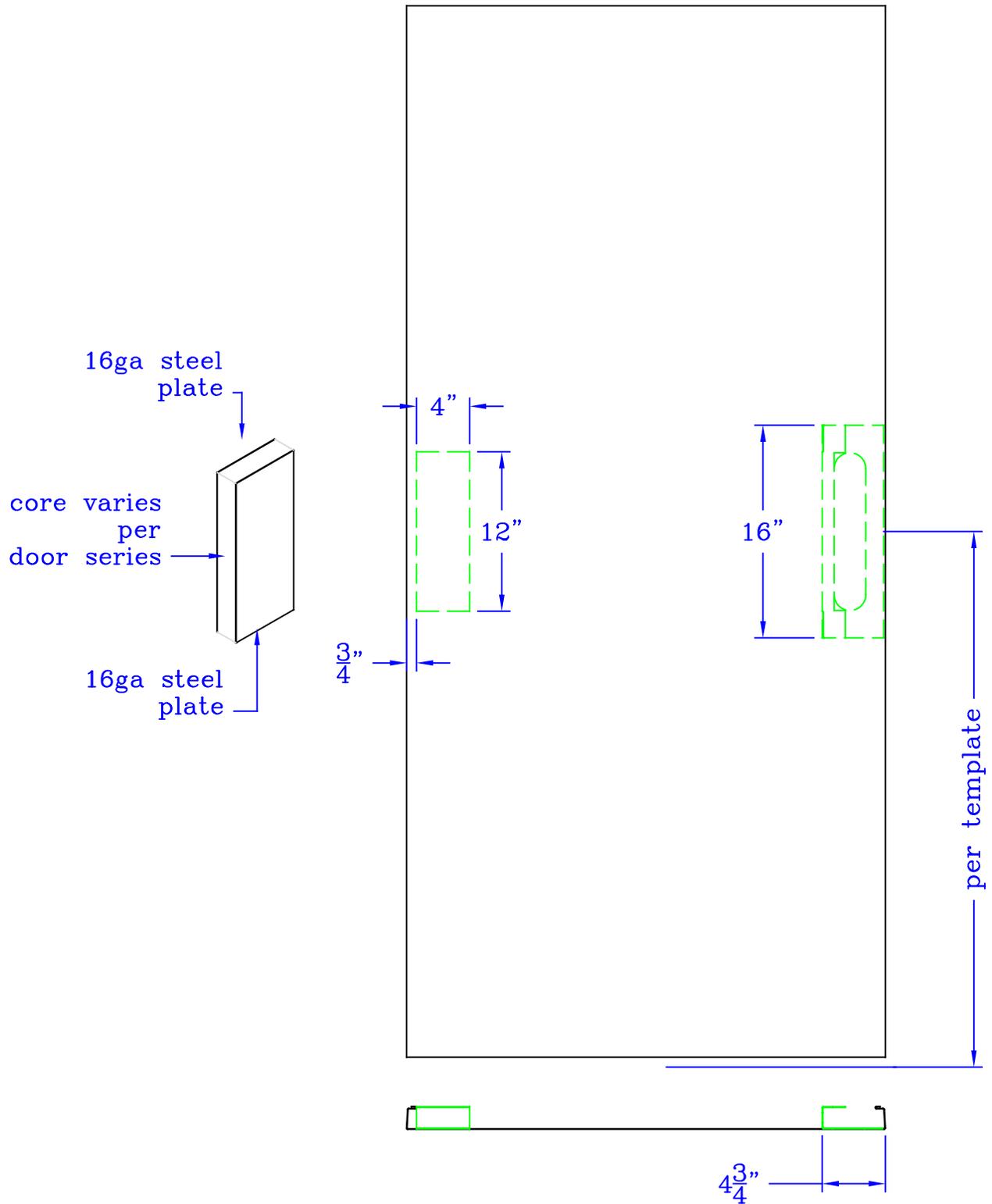


*manufacturer's template to be provided

Rim exit device reinforcement
Cold fused

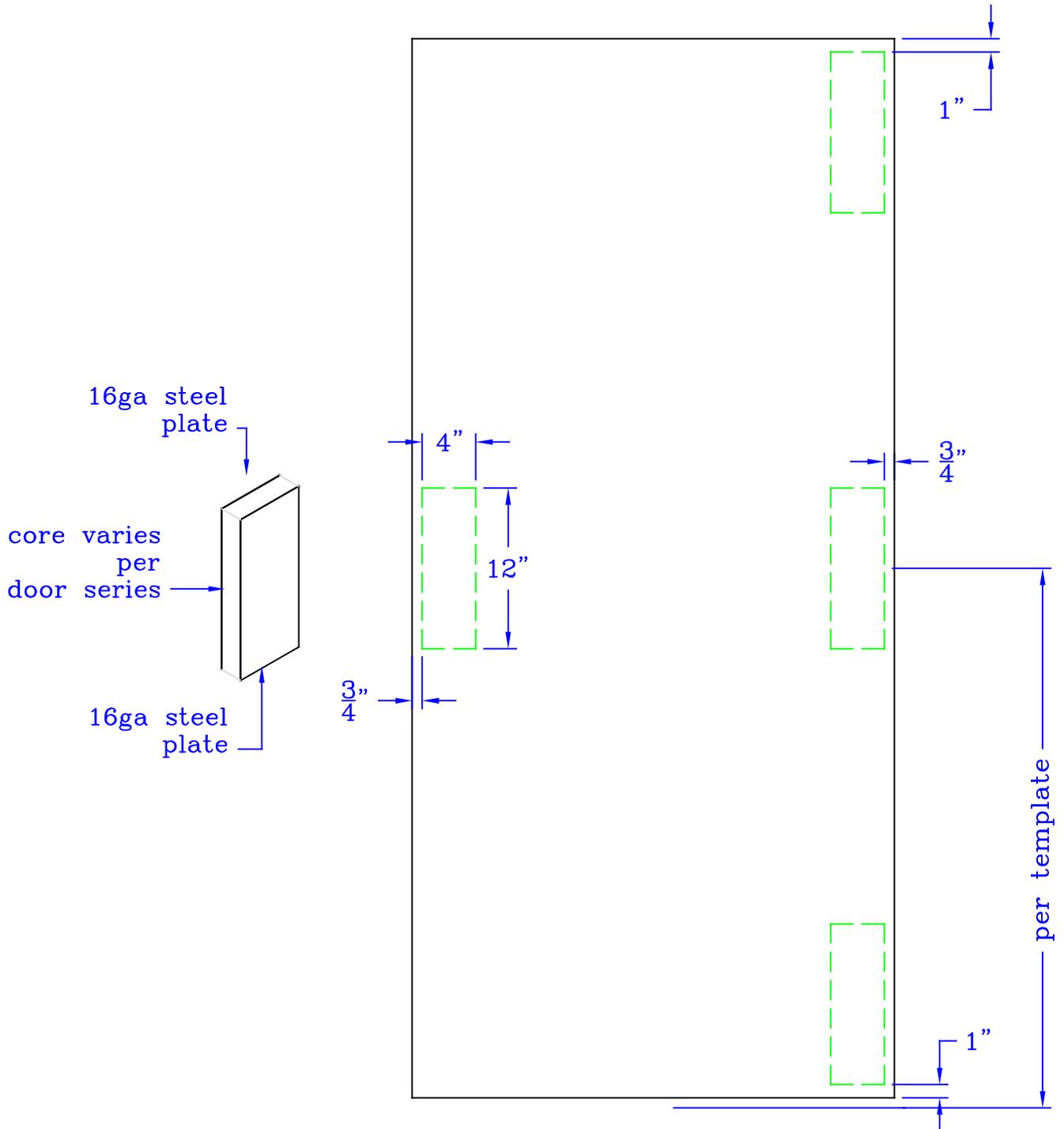


Rim exit device reinforcement with function holes
Cold fused



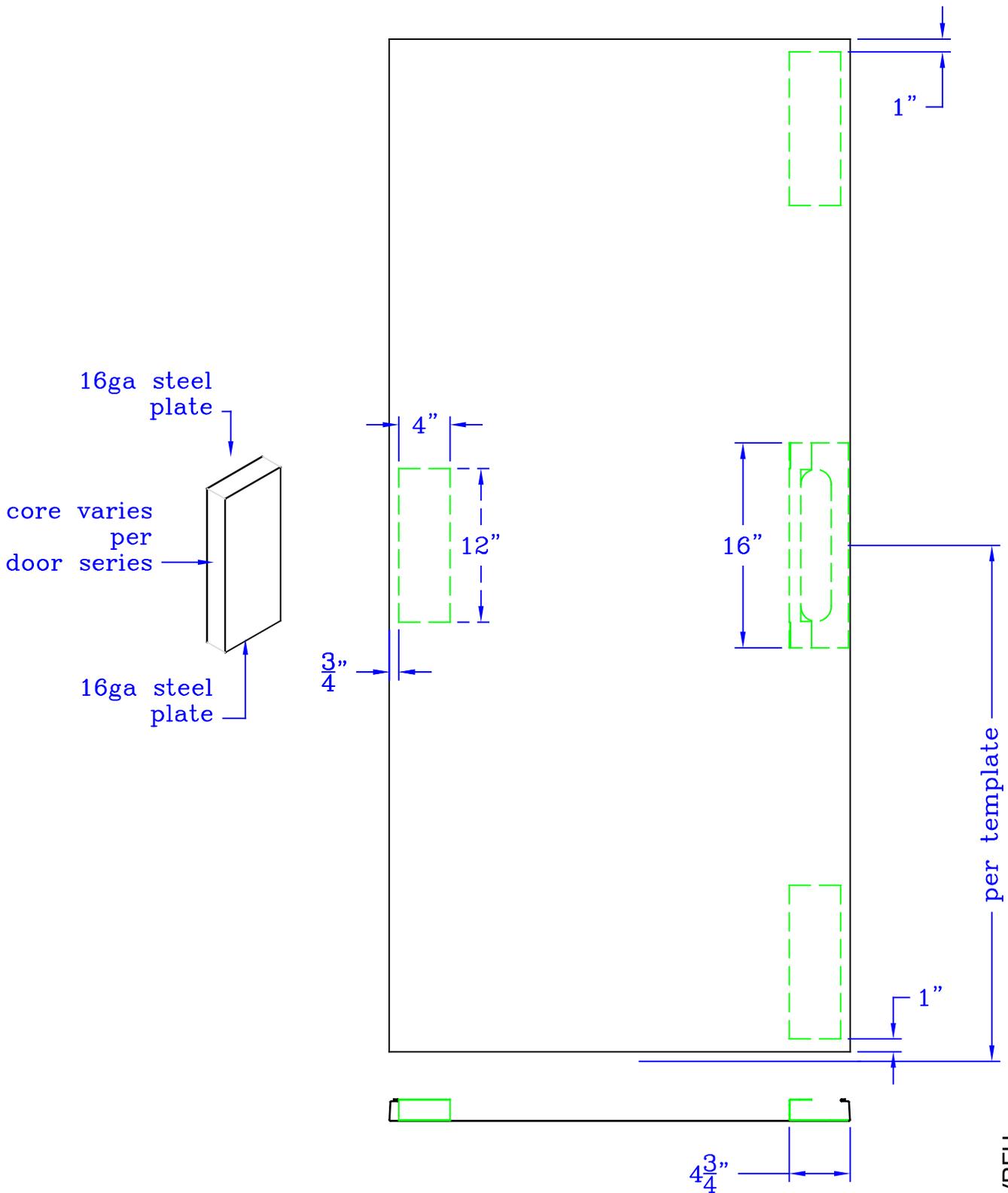
*manufacturer's template to be provided

Surface vertical rod exit device reinforcement
Cold fused



SVR

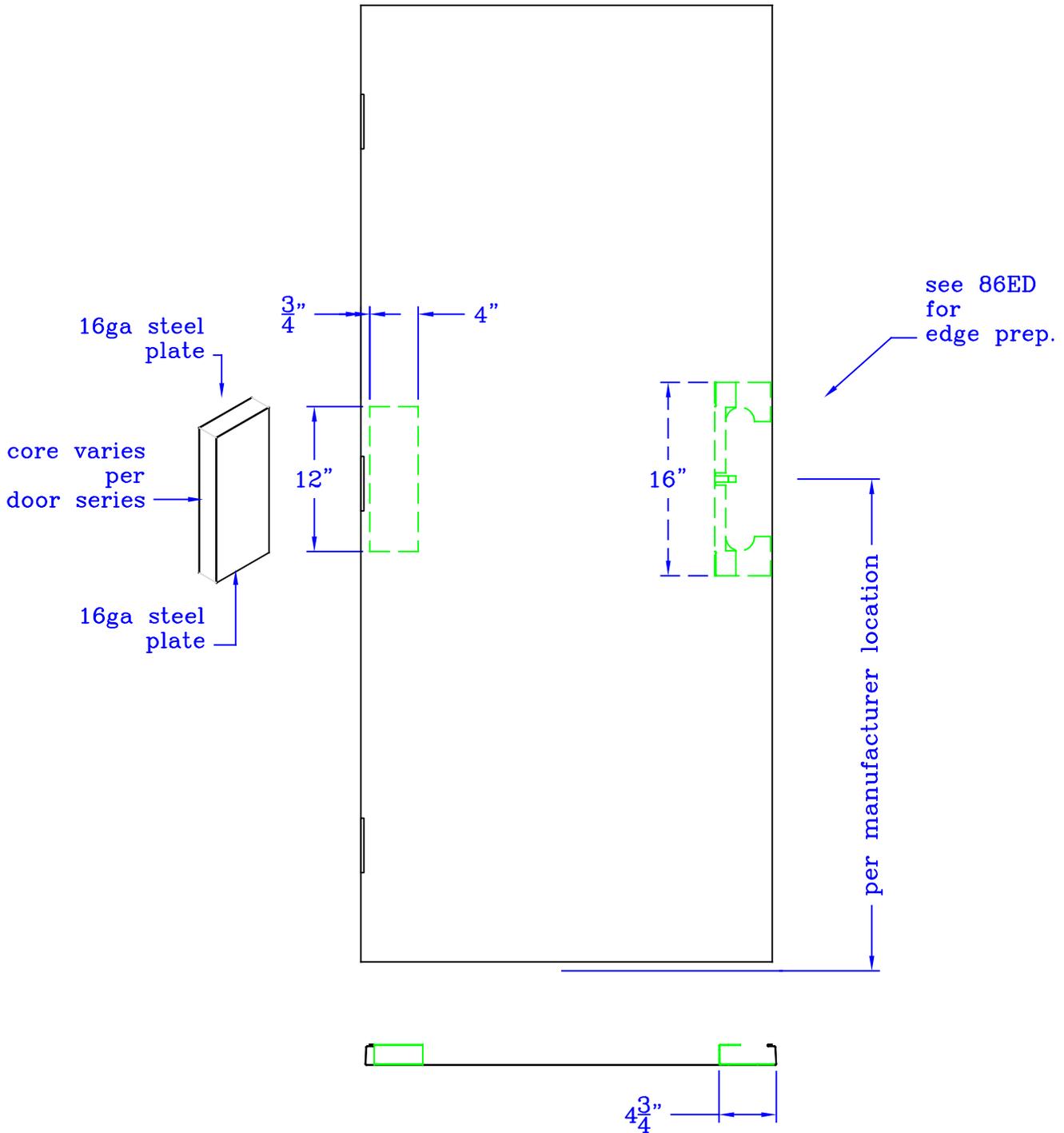
Surface vertical rod exit device reinforcement with function holes
Cold fused



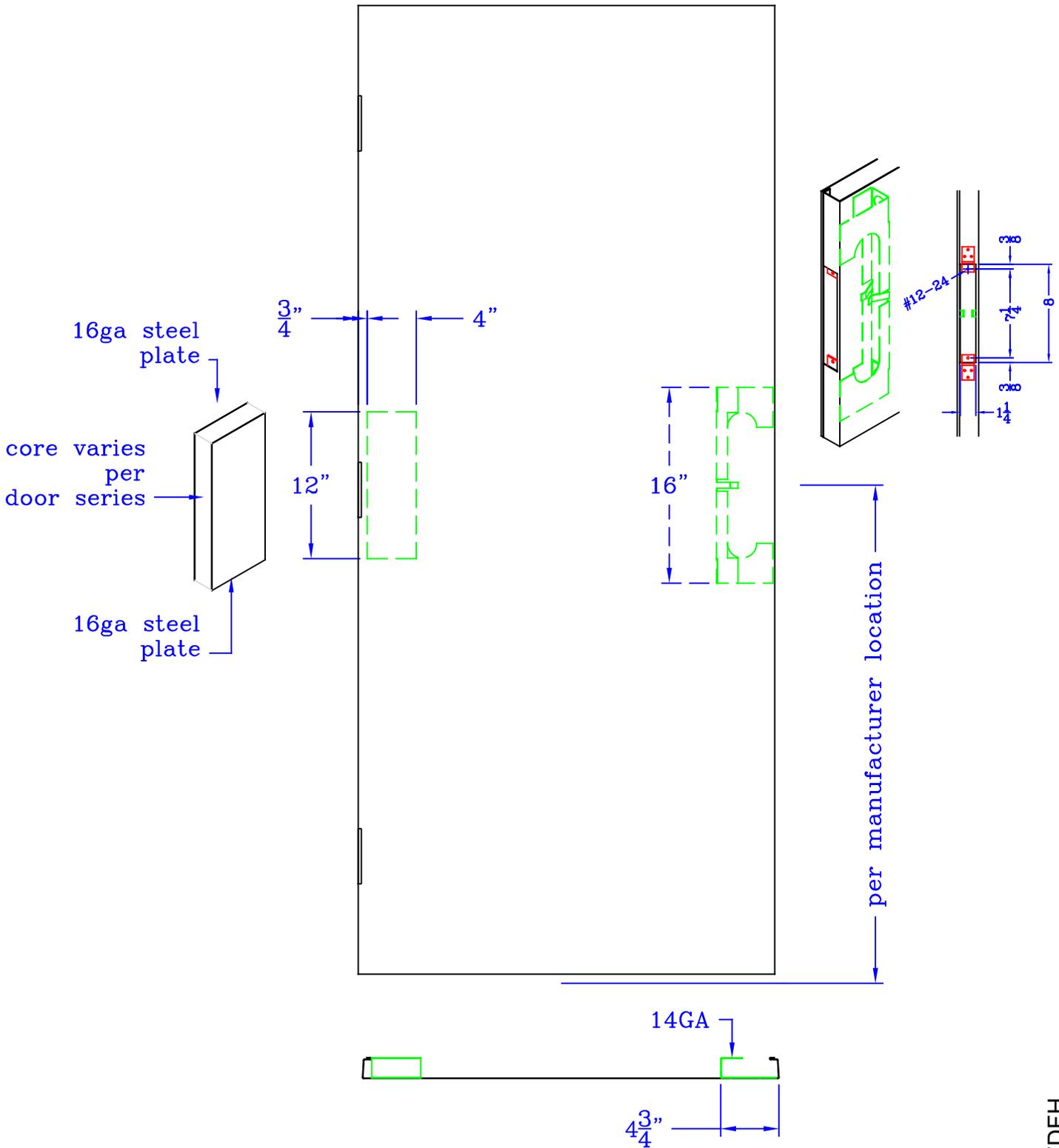
Exit devices

*manufacturer's template to be provided

Mortise exit device reinforcements
Cold fused

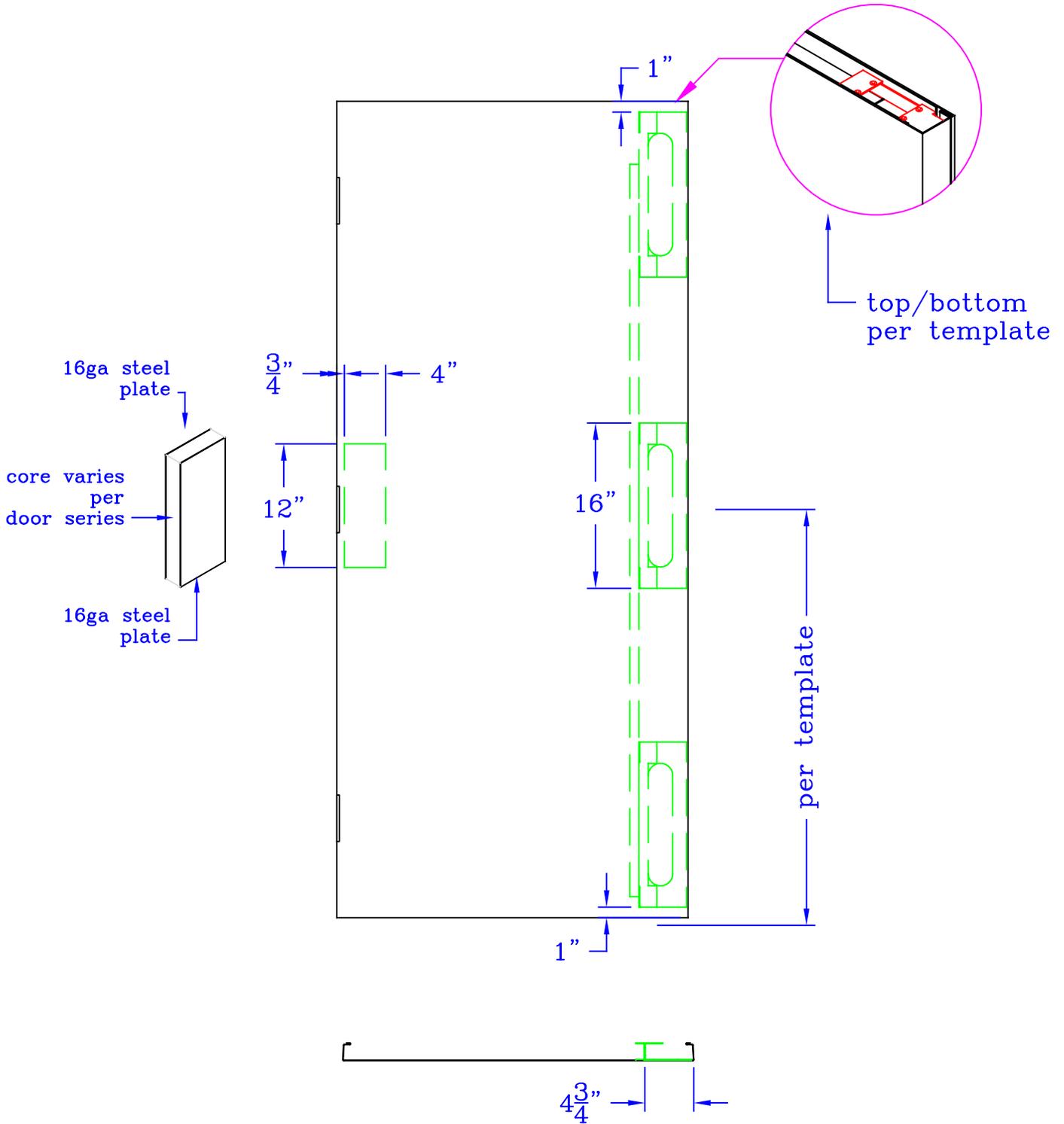


Mortise exit device reinforcements with function holes
Cold fused



*manufacturer's template to be provided

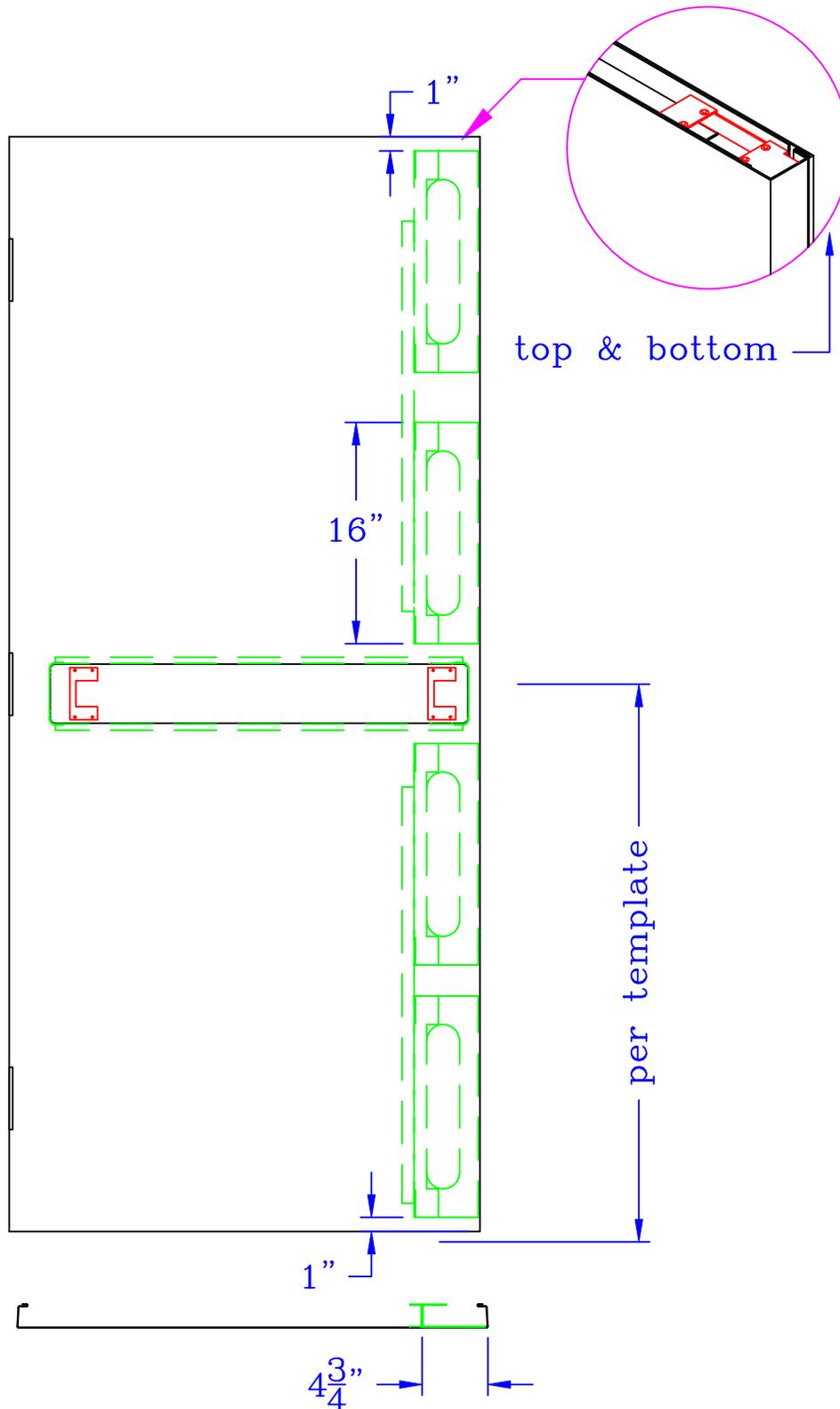
Concealed vertical rod exit device reinforcements
Cold fused



*manufacturer's template to be provided

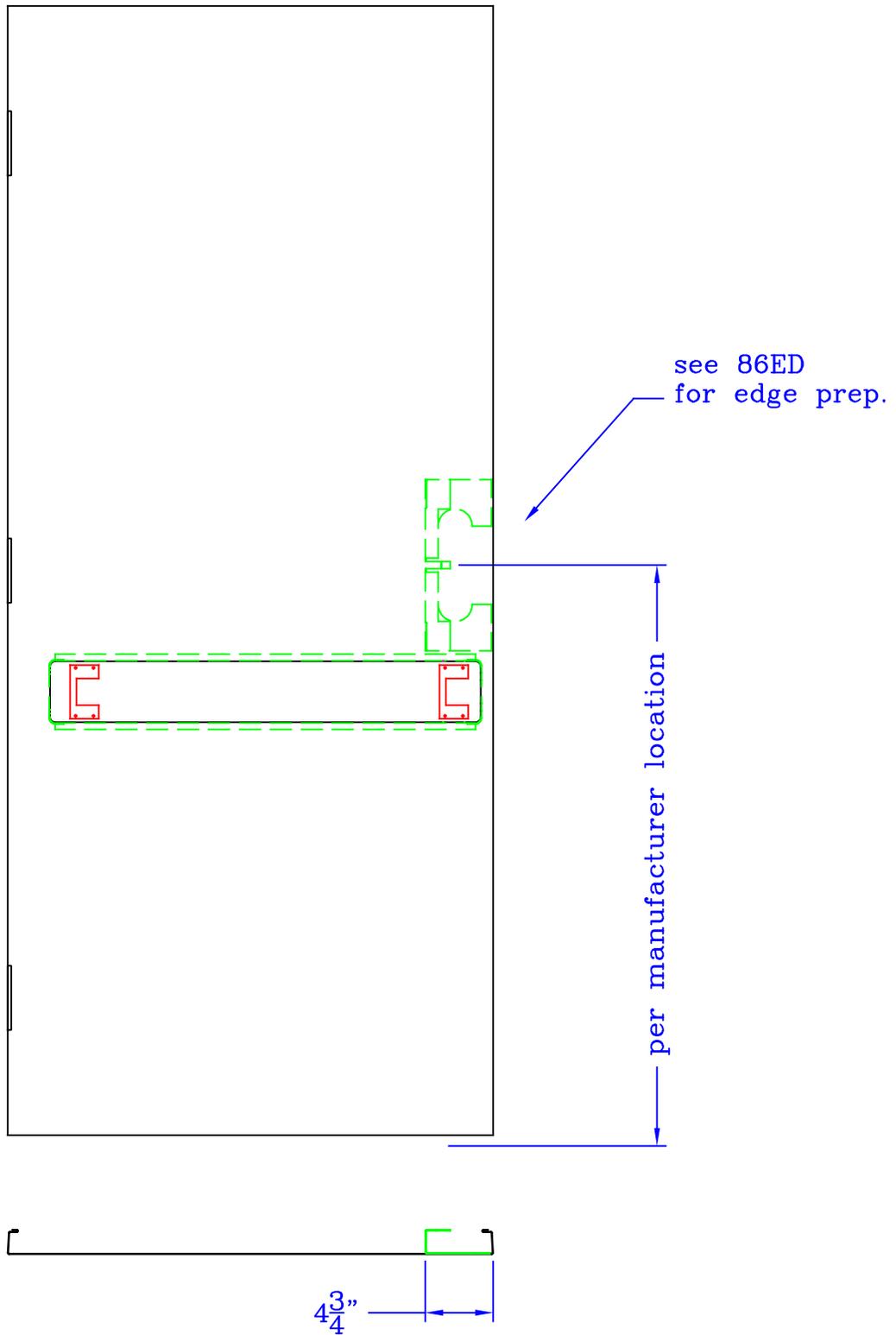
Impact concealed vertical rod exit device reinforcements

Cold fused



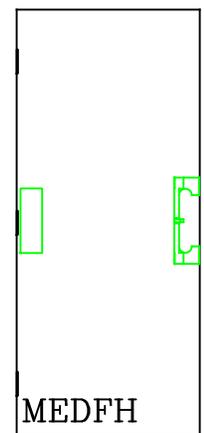
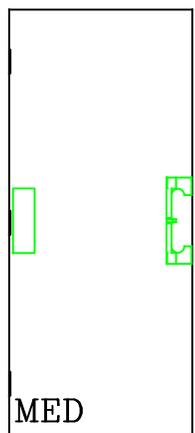
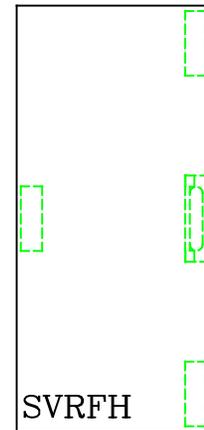
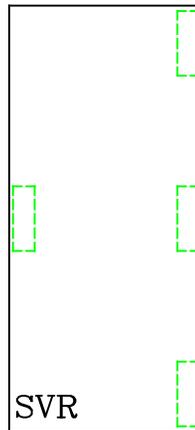
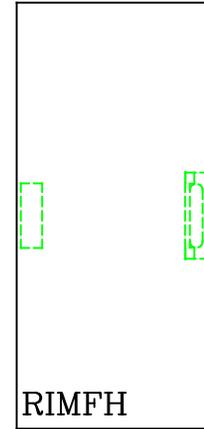
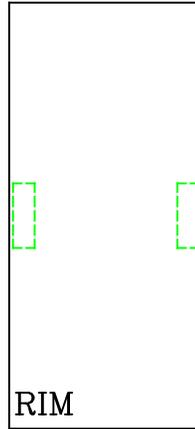
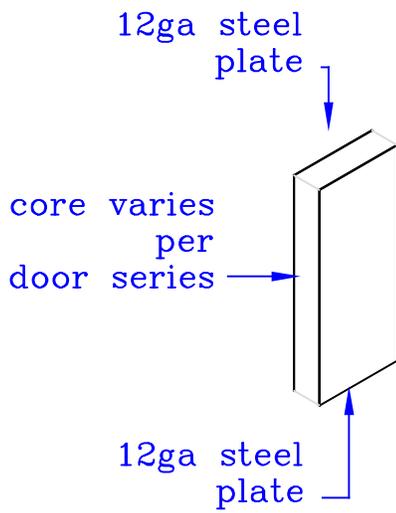
* manufacturer's template to be provided

Impact mortise exit device reinforcement
Cold fused

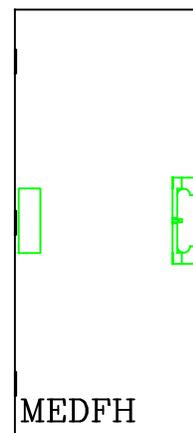
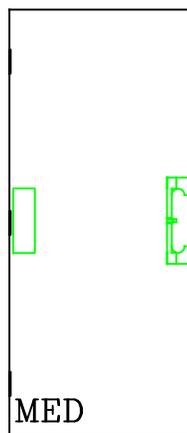
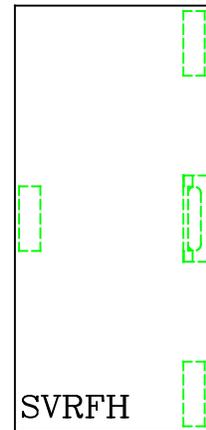
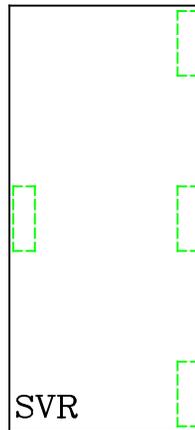
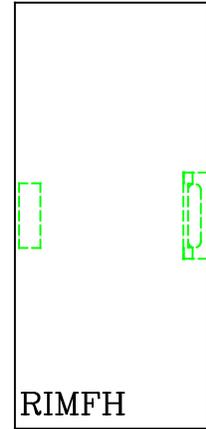
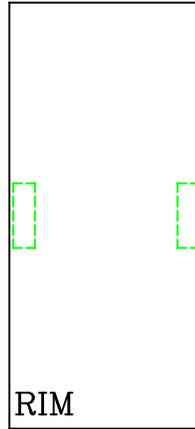
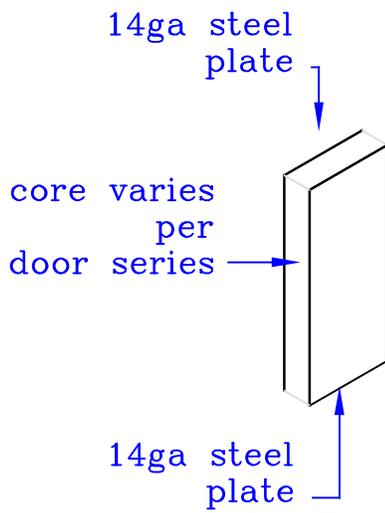


*manufacturer's template to be provided

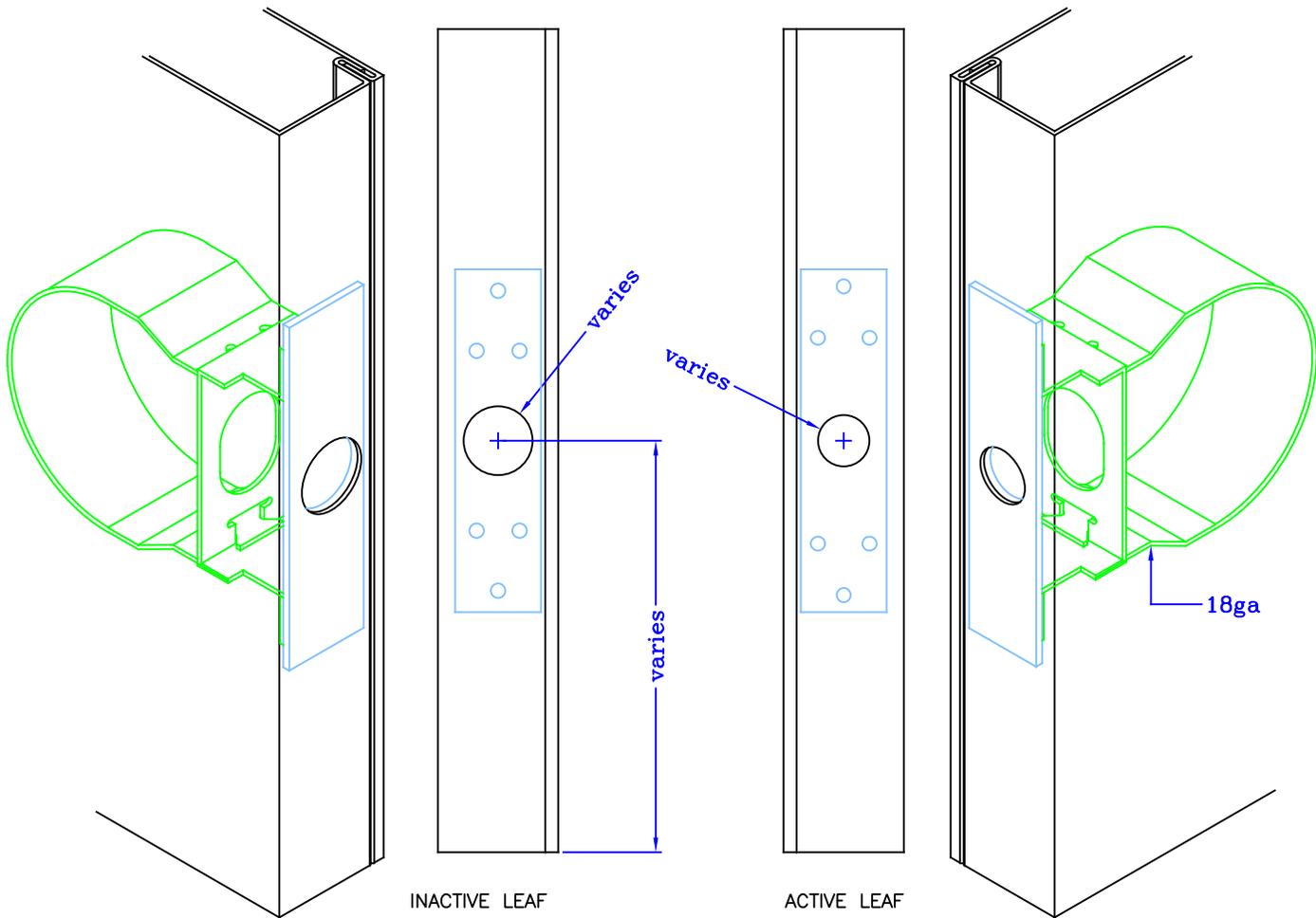
Exit device surface reinforcements, 12ga
Cold fused



Exit device surface reinforcements, 14ga
Cold fused

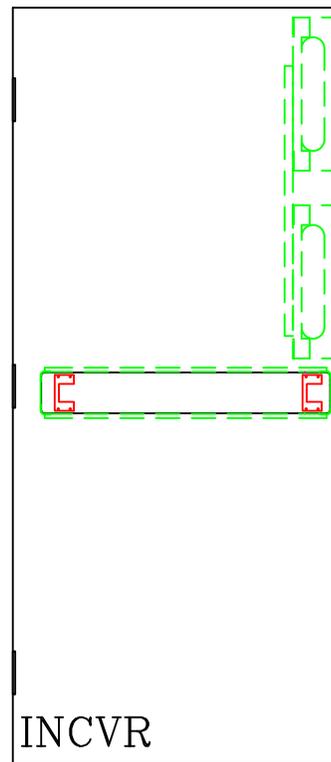
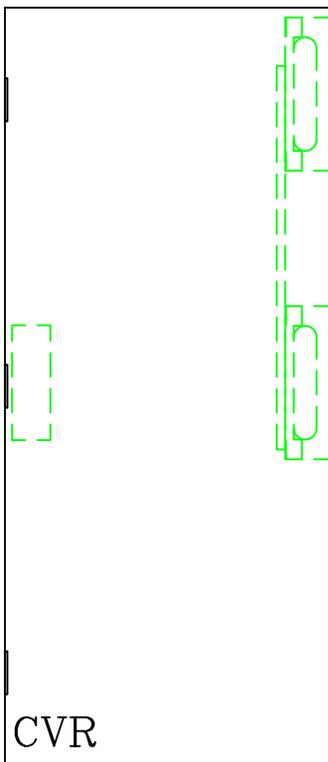
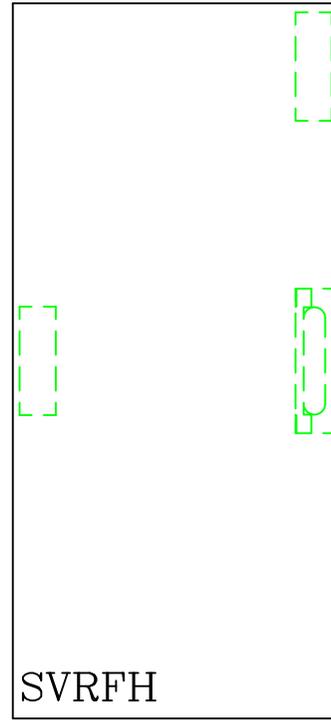
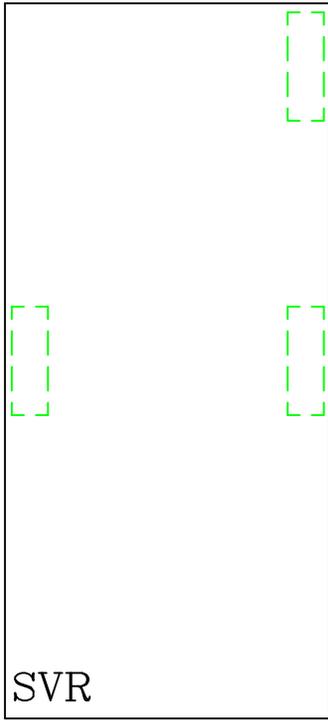


Auxiliary fire latch, 12ga
Projection welded



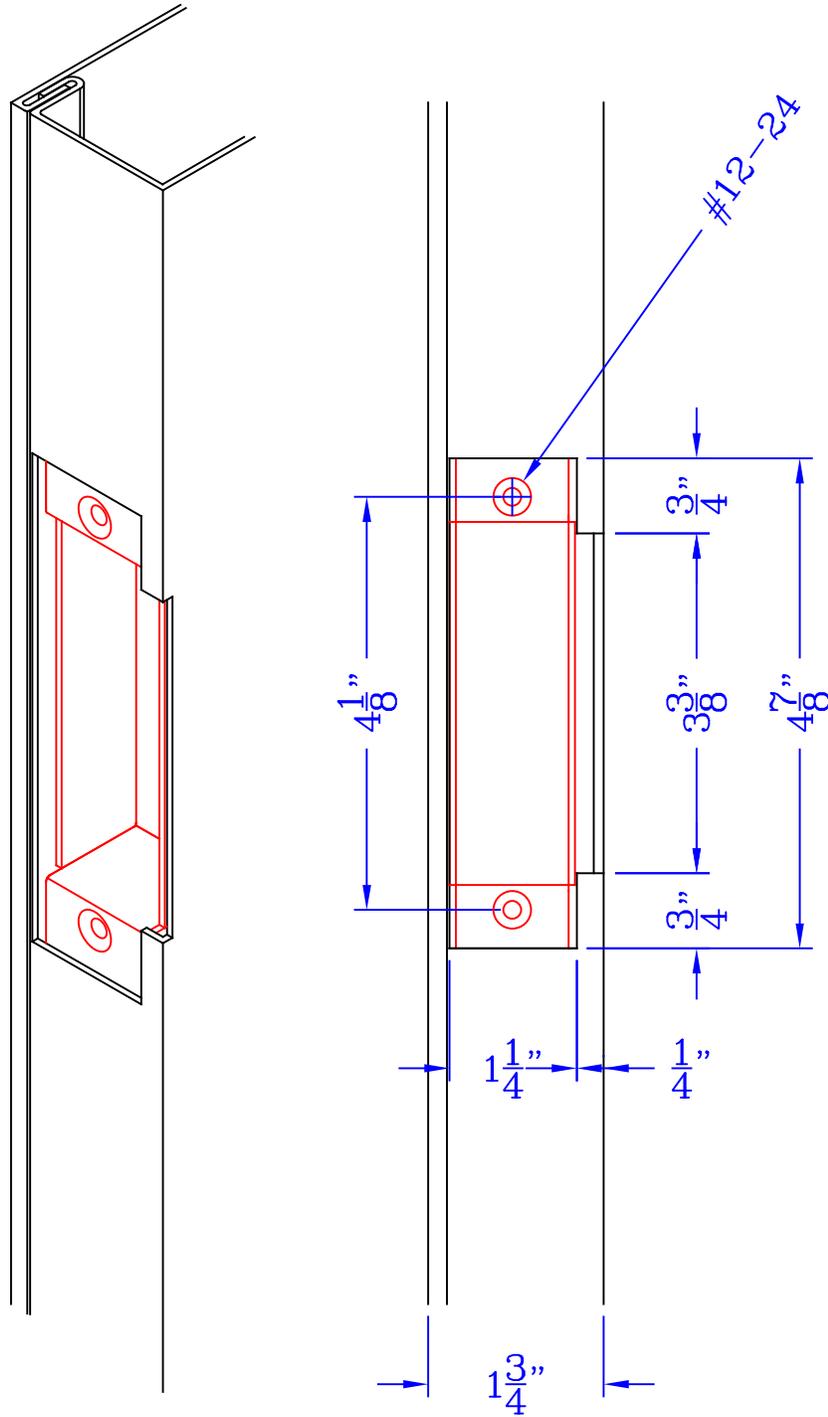
*manufacturer's template to be provided

Less bottom rod



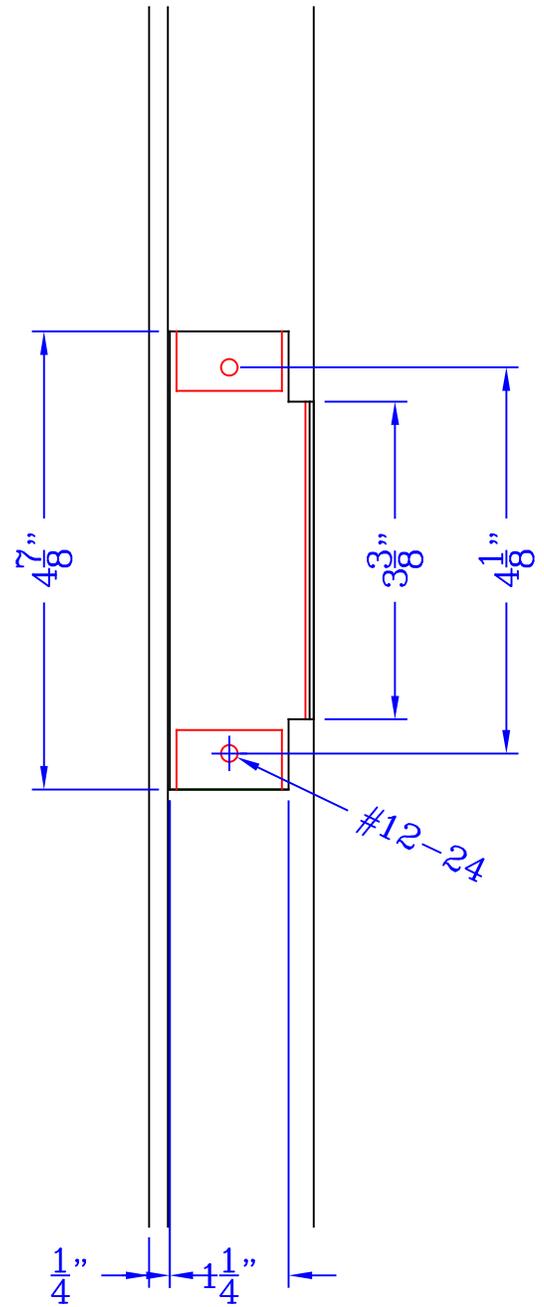
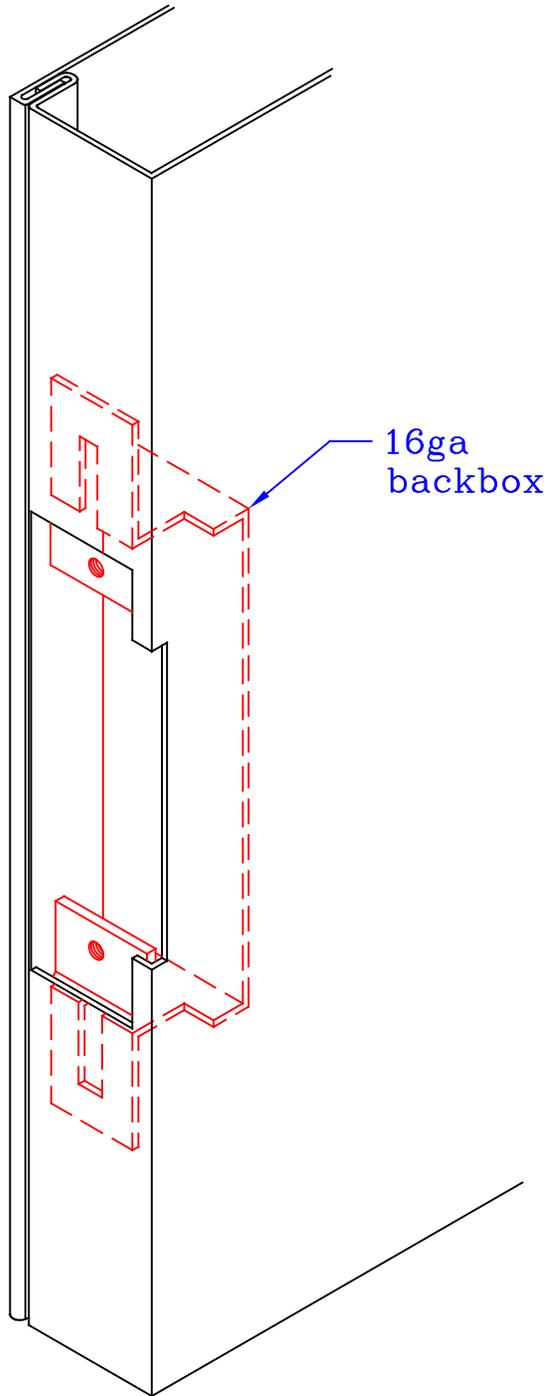
Less bottom rod prep, will require an auxiliary fire latch for rated door.

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

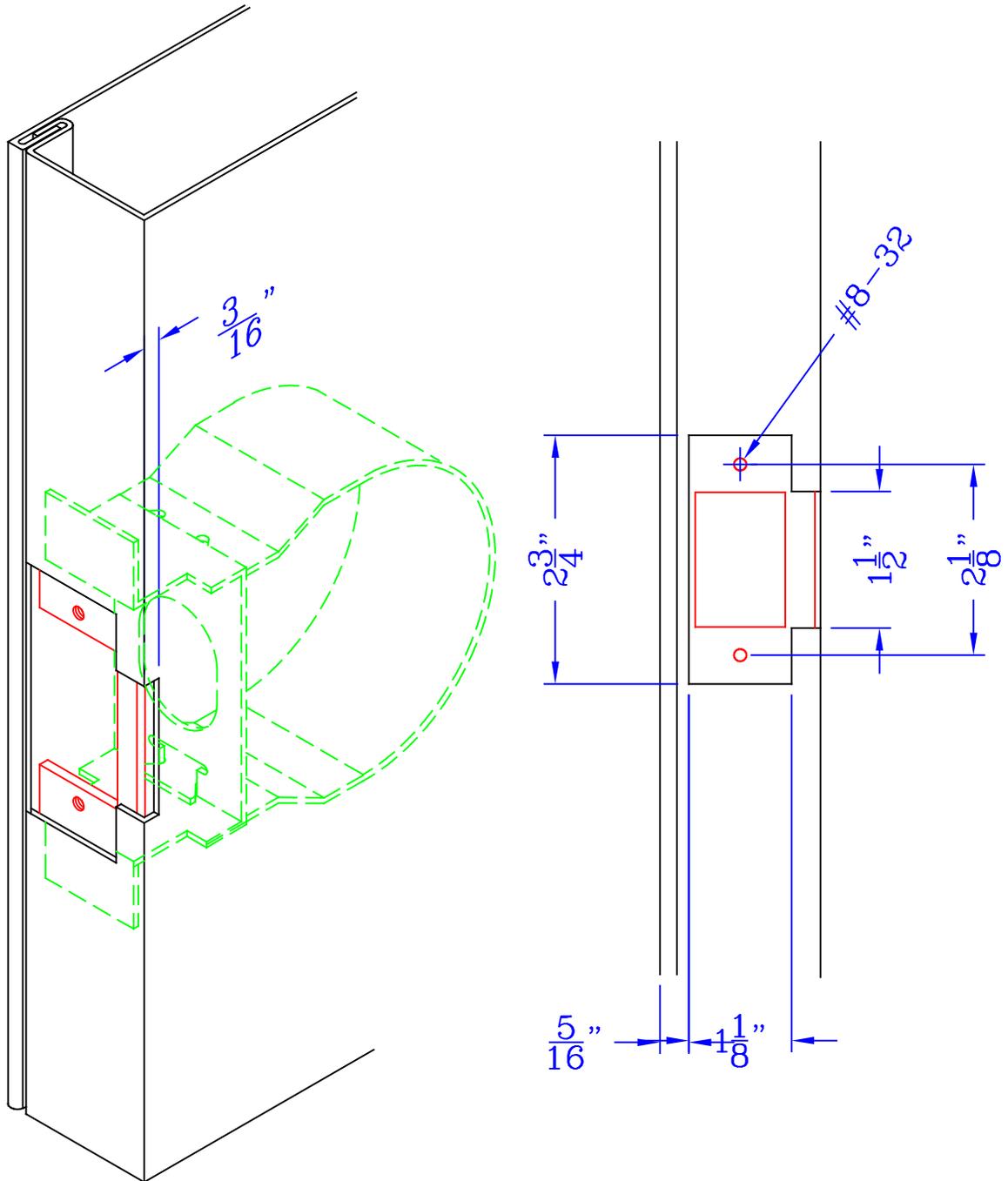


Tapped extruded holes per ANSI/SDI A250.6.

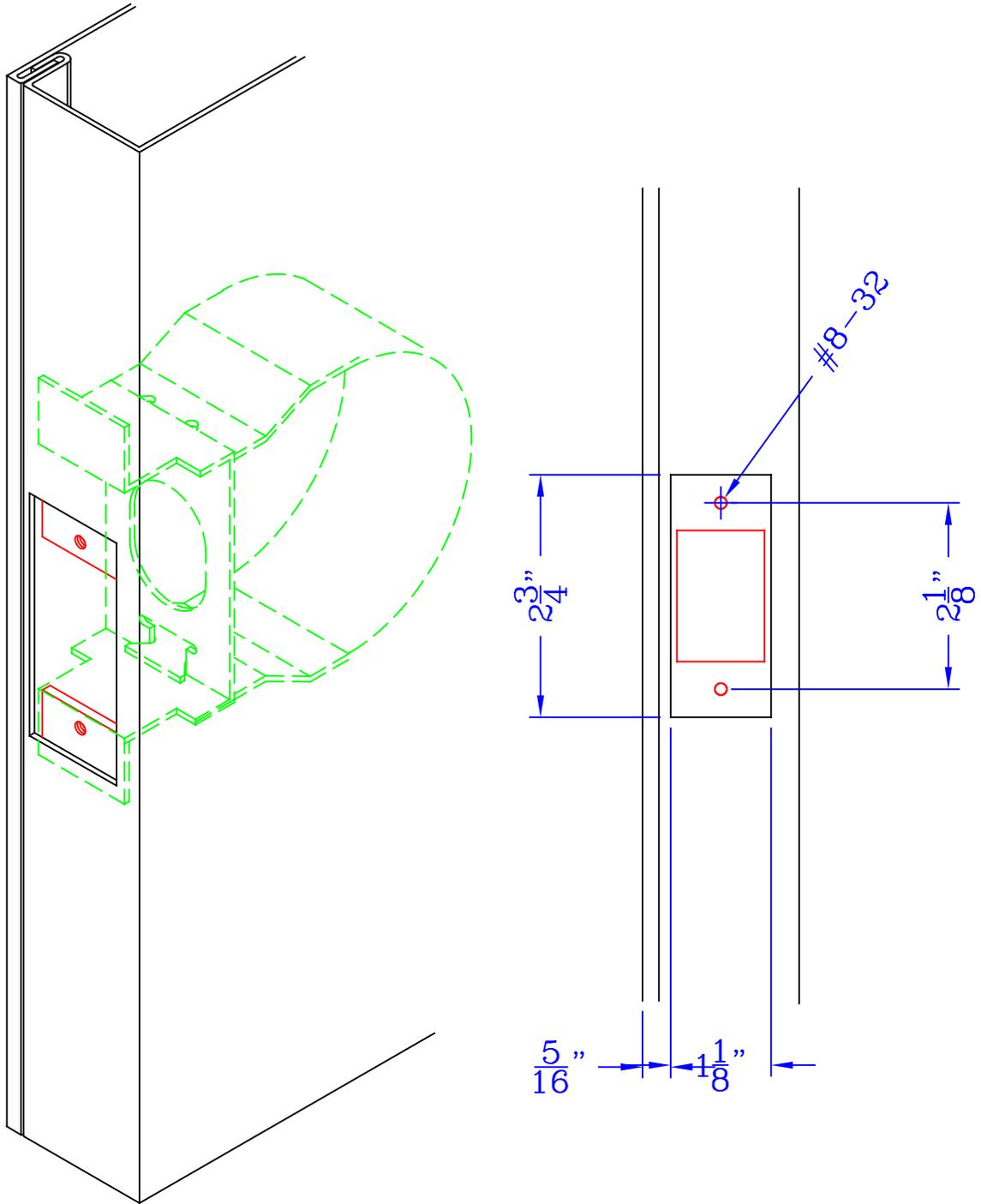
Standard ANSI 4 7/8" strike reinforcement, 12ga
Projection welded



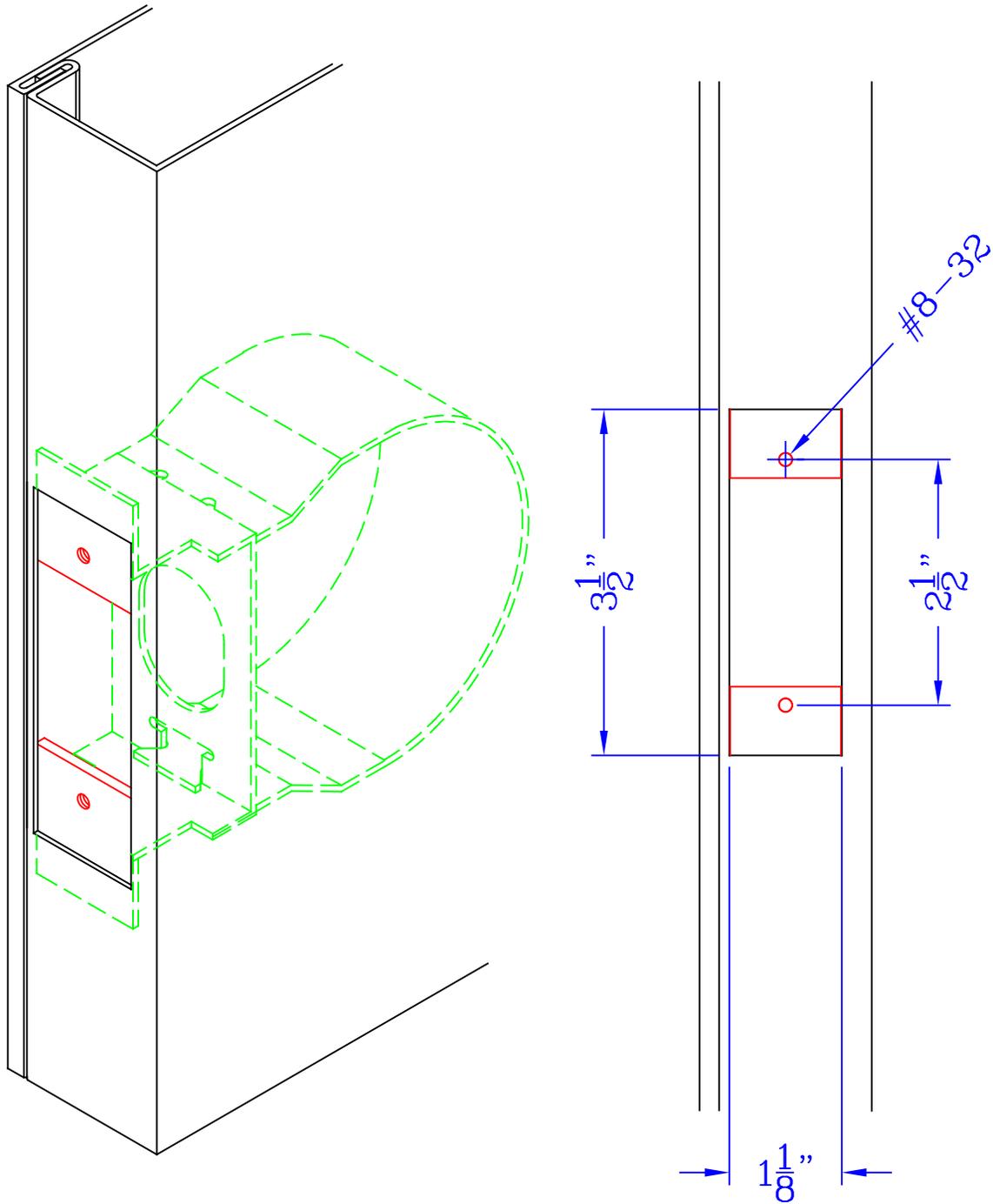
Standard 2 3/4" "T" strike reinforcement, 12ga
Projection welded



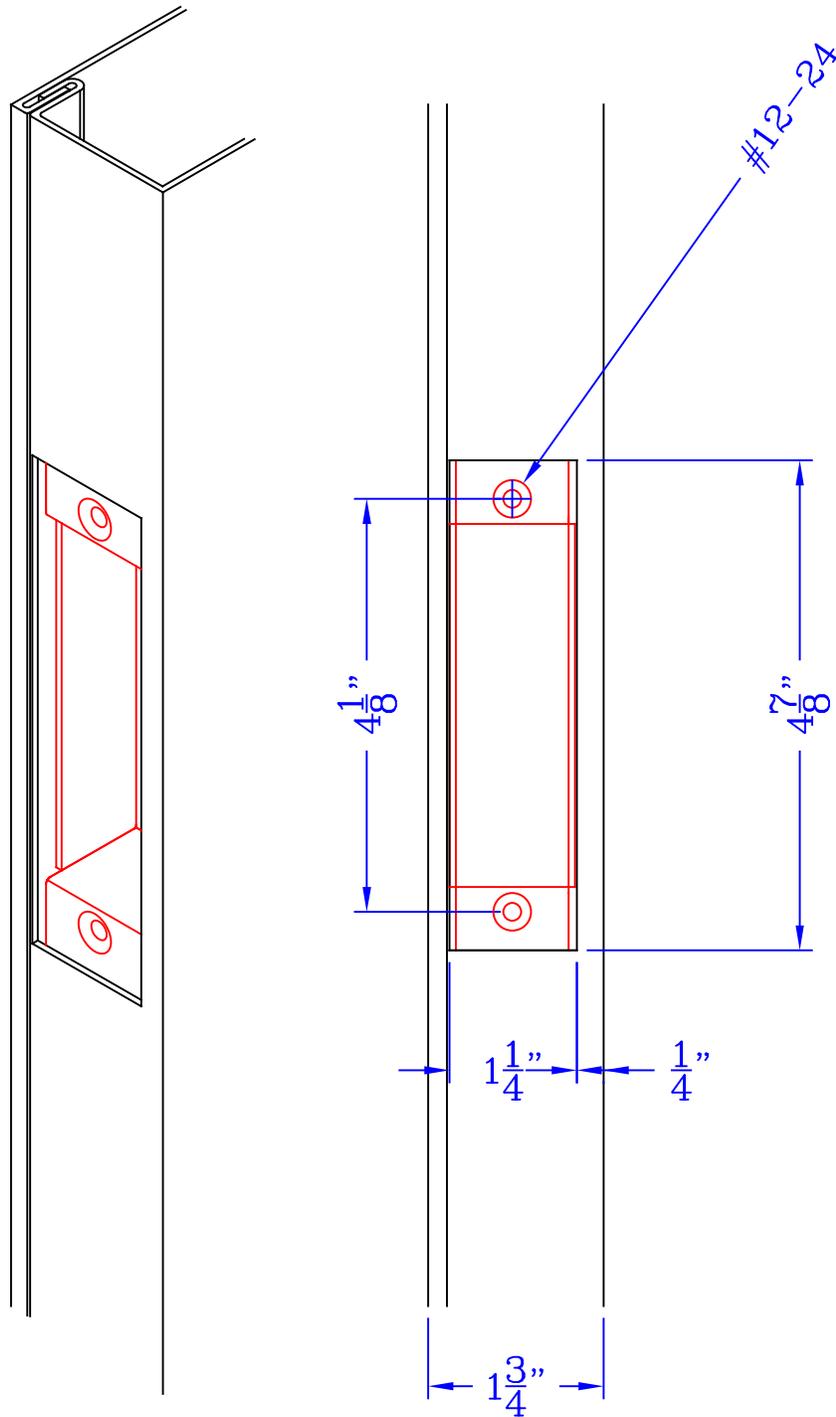
Cylindrical dead lock strike reinforcement, 12ga
Projection welded



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

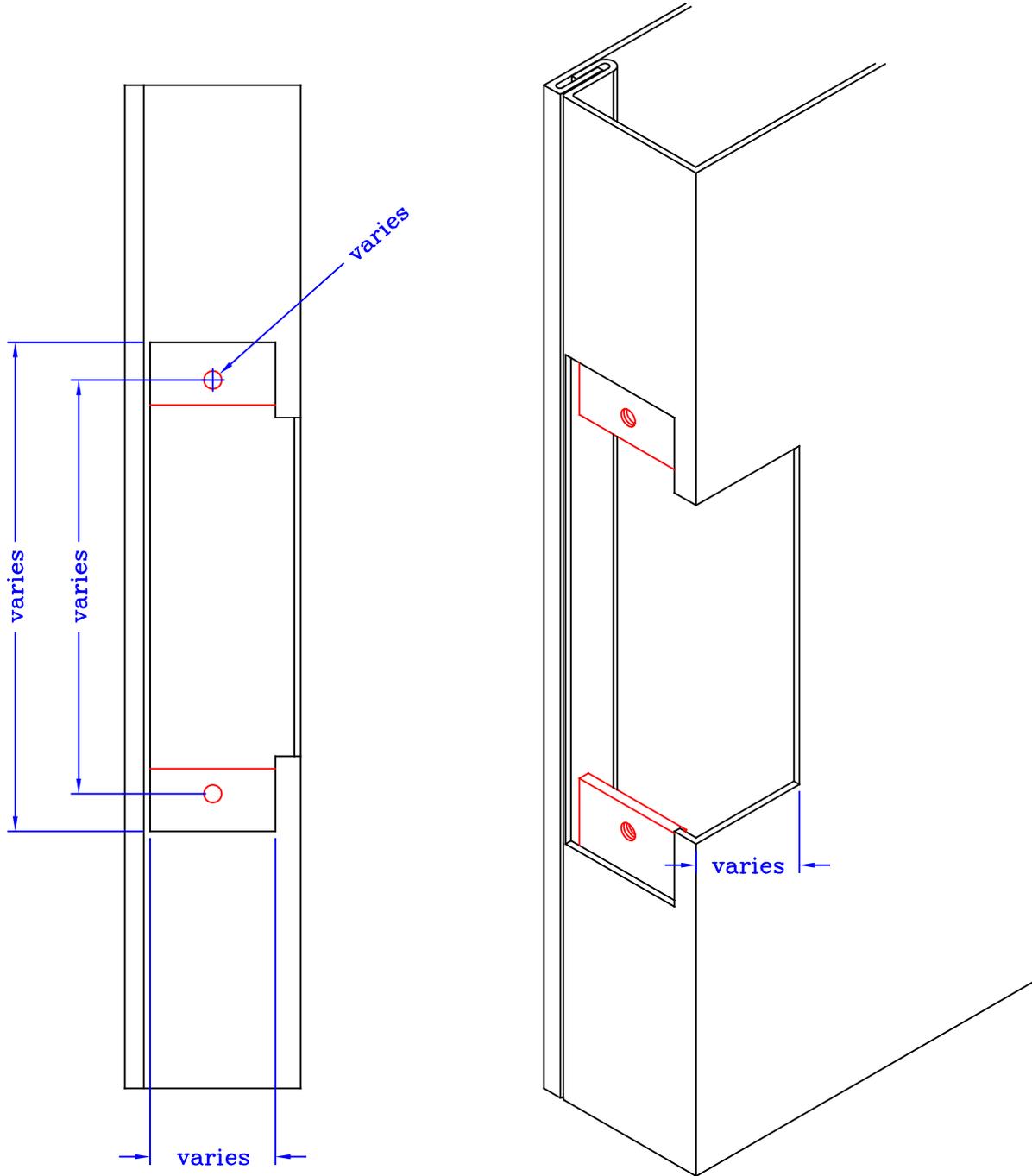


Standard ANSI 4 7/8" deadlock strike reinforcement, 16ga
Projection welded



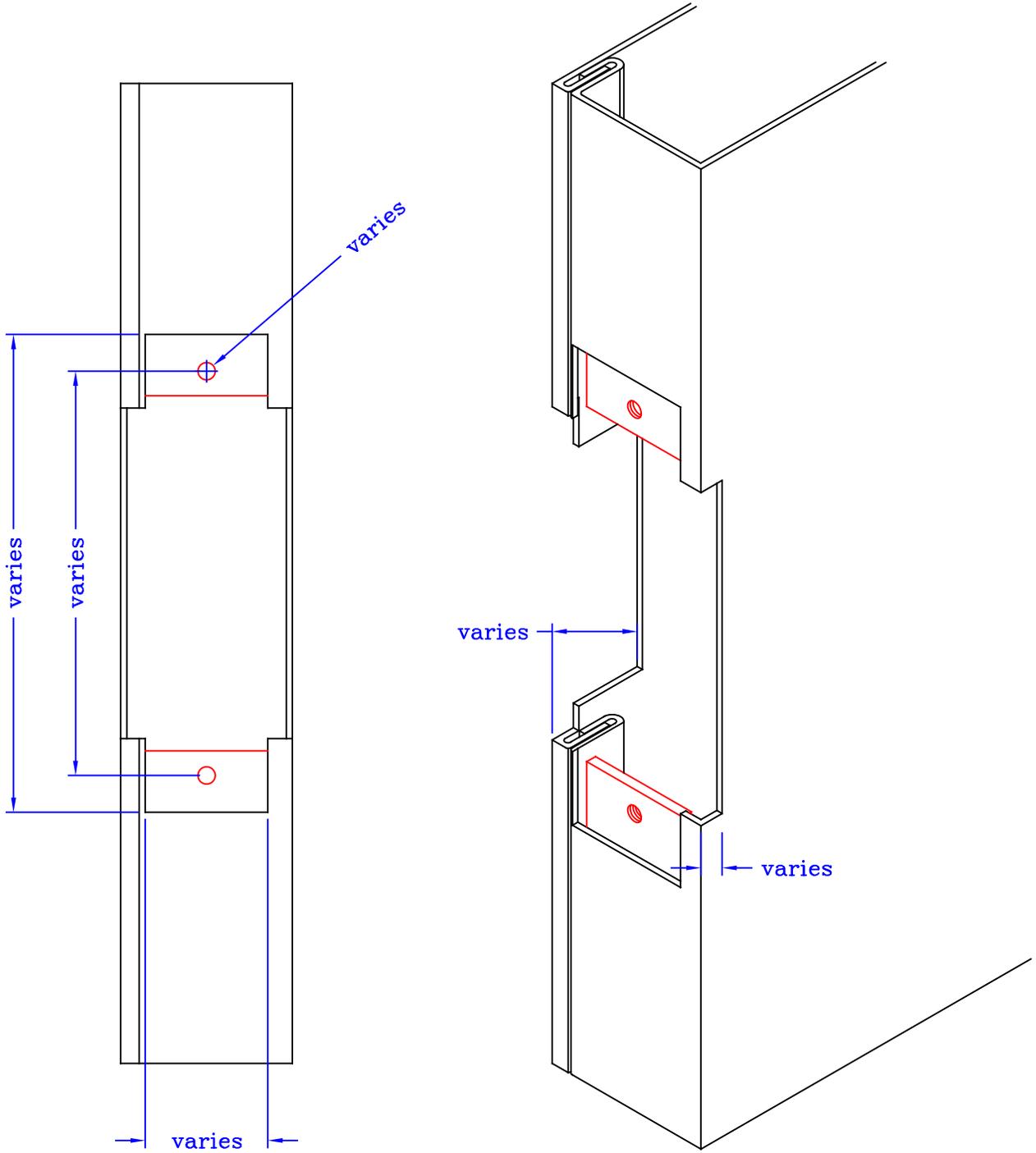
Tapped extruded holes per ANSI/SDI A250.6.

Prep. for electric strike, 12ga
Projection welded



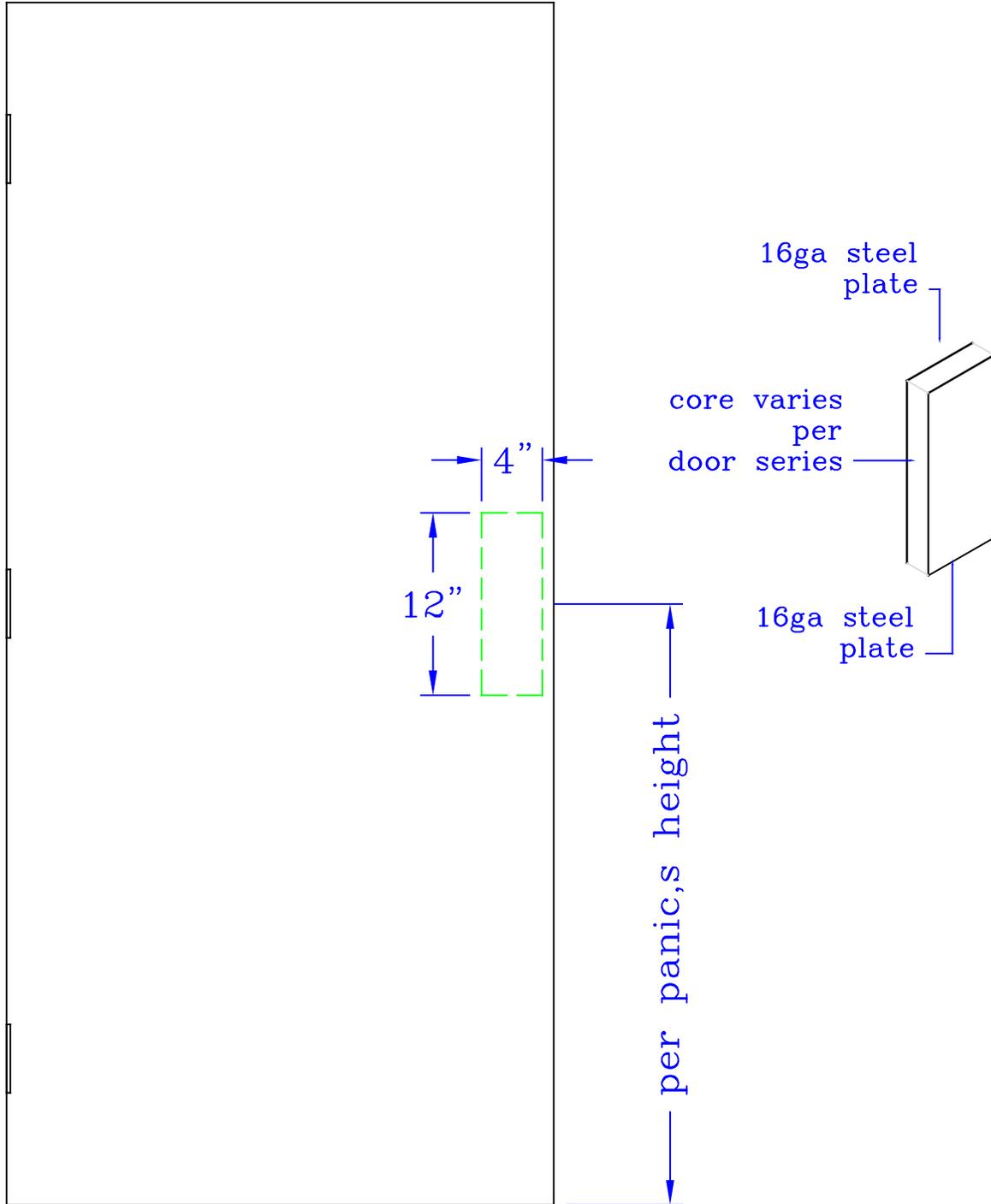
*manufacturer's template to be provided

Prep. for open back strike, 12ga
Projection welded

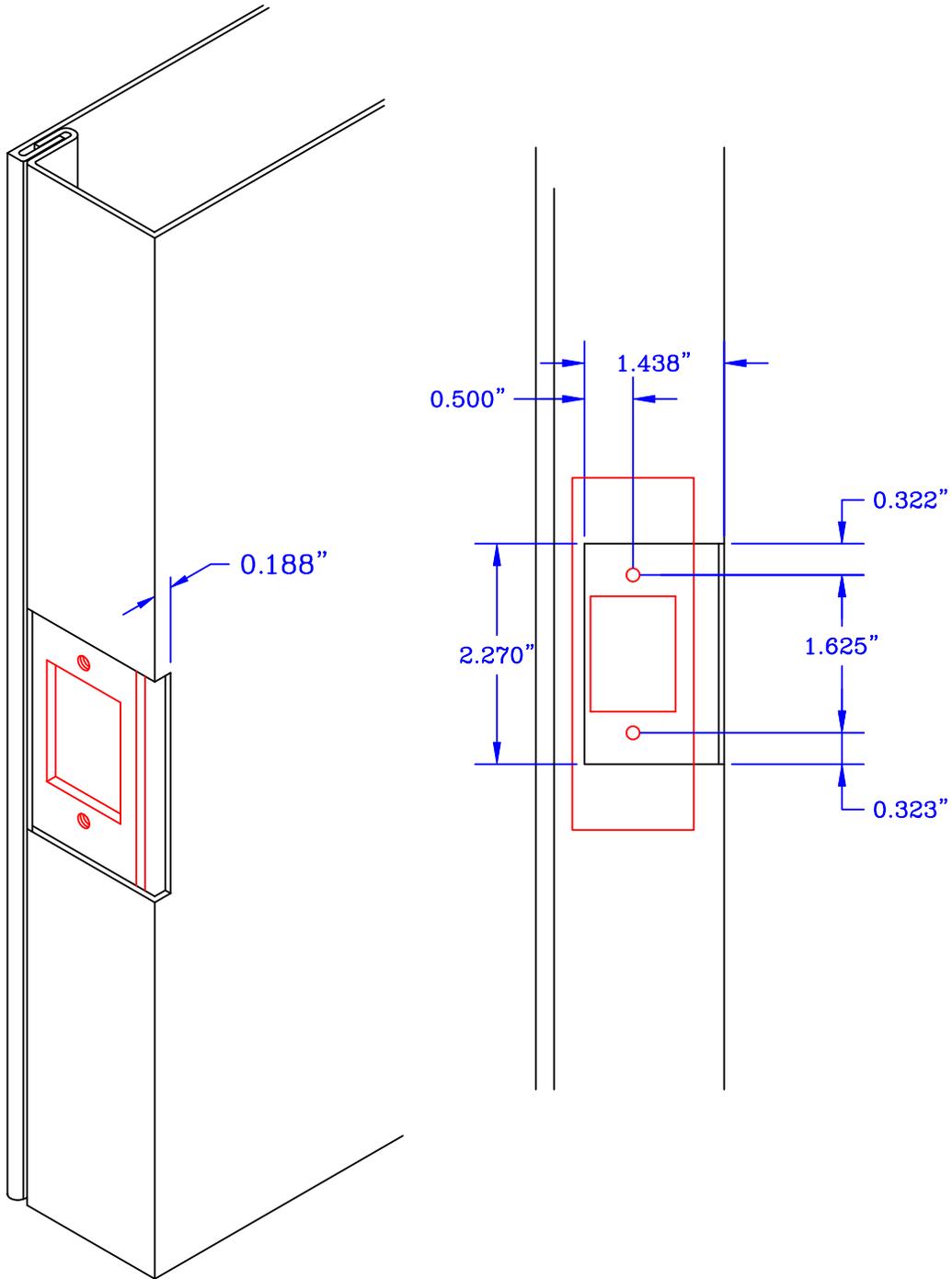


*manufacturer's template to be provided

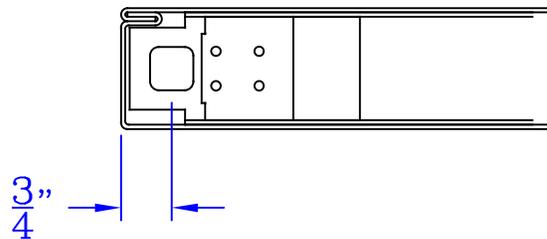
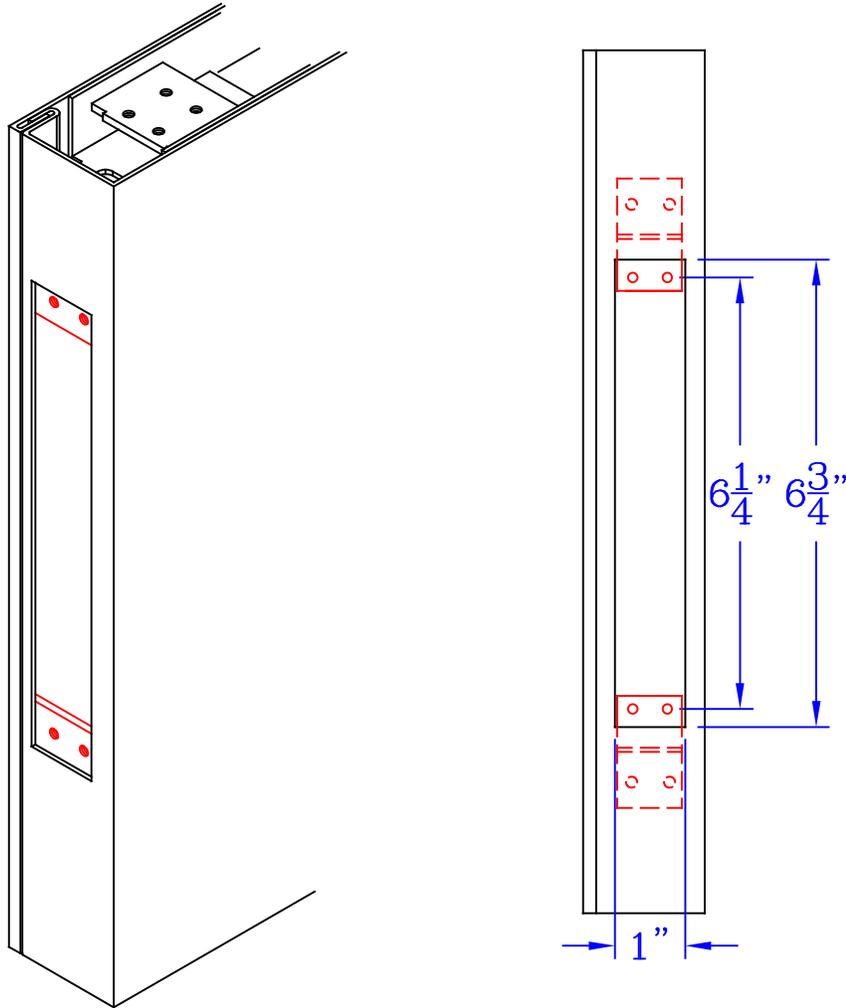
Rim strike reinforcement, 16ga
Cold fused



Full strike reinforcement, 12ga
Projection welded

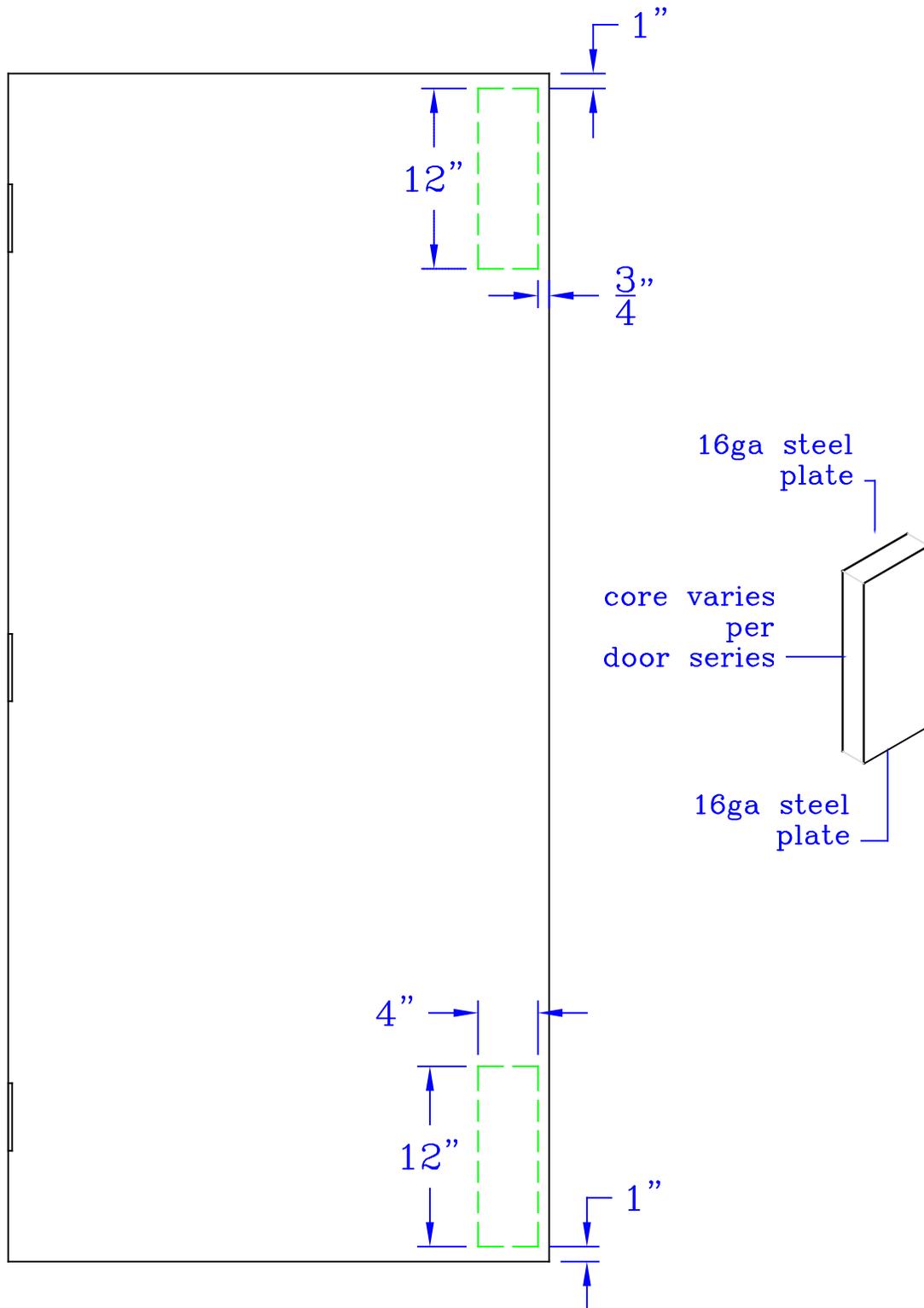


Ansi 156-16 flush bolt reinforcements, 12ga
Projection welded



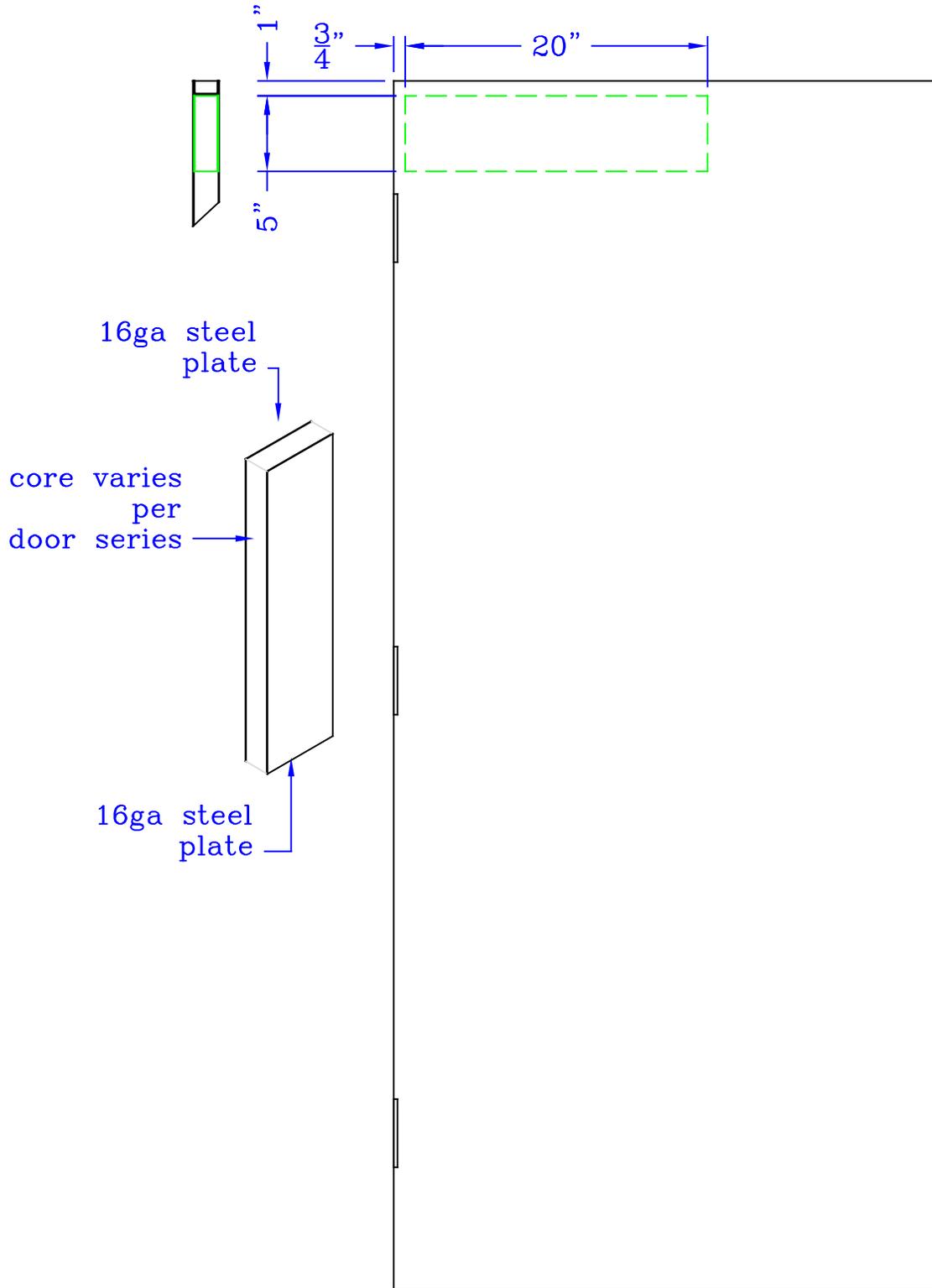
Up to 8'0" top rod at 12", must specify if door over 8'0"

Surface bolt reinforcement, 16ga
Cold fused



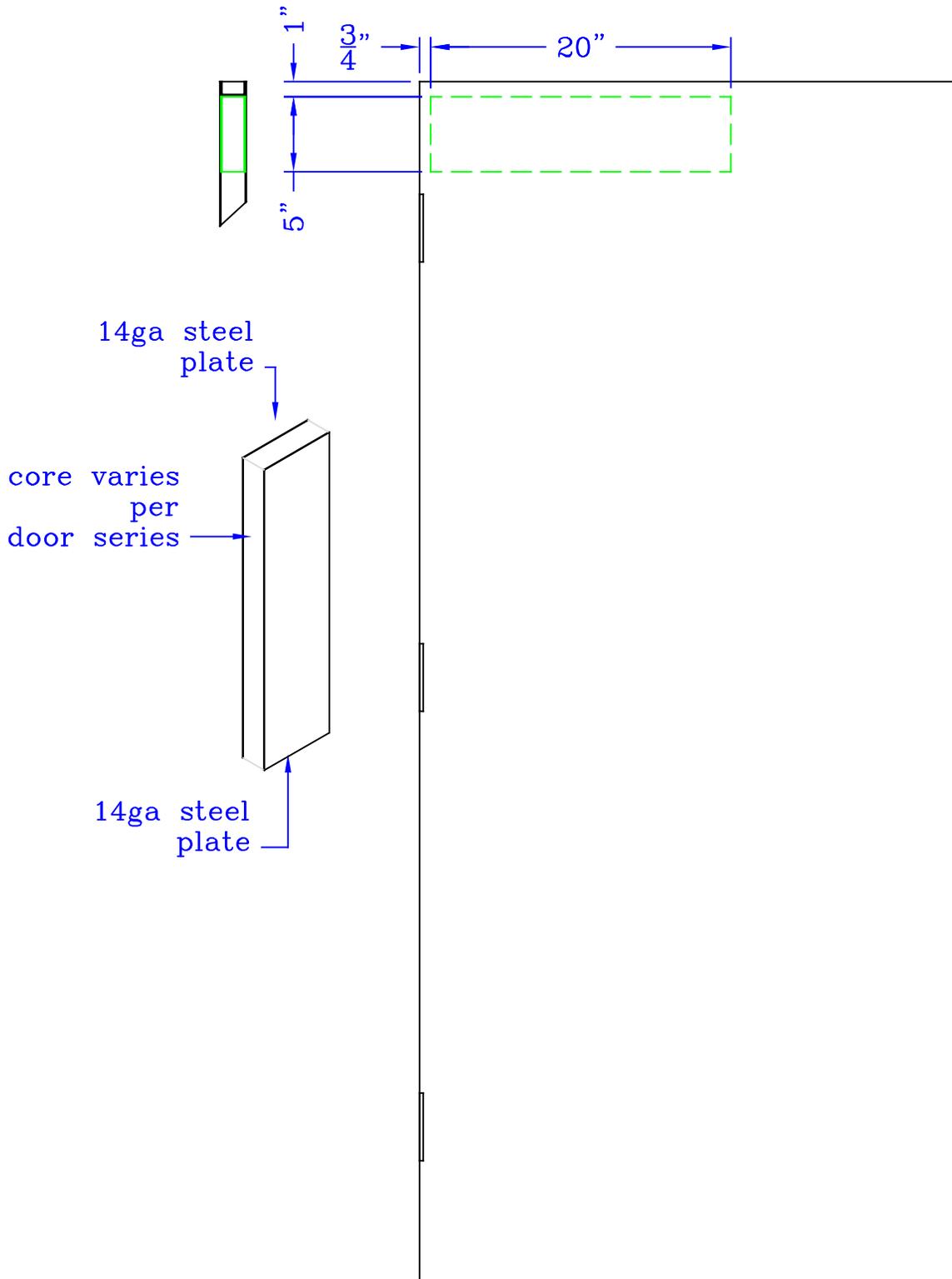
Standard closer reinforcement, 16ga

Cold fused



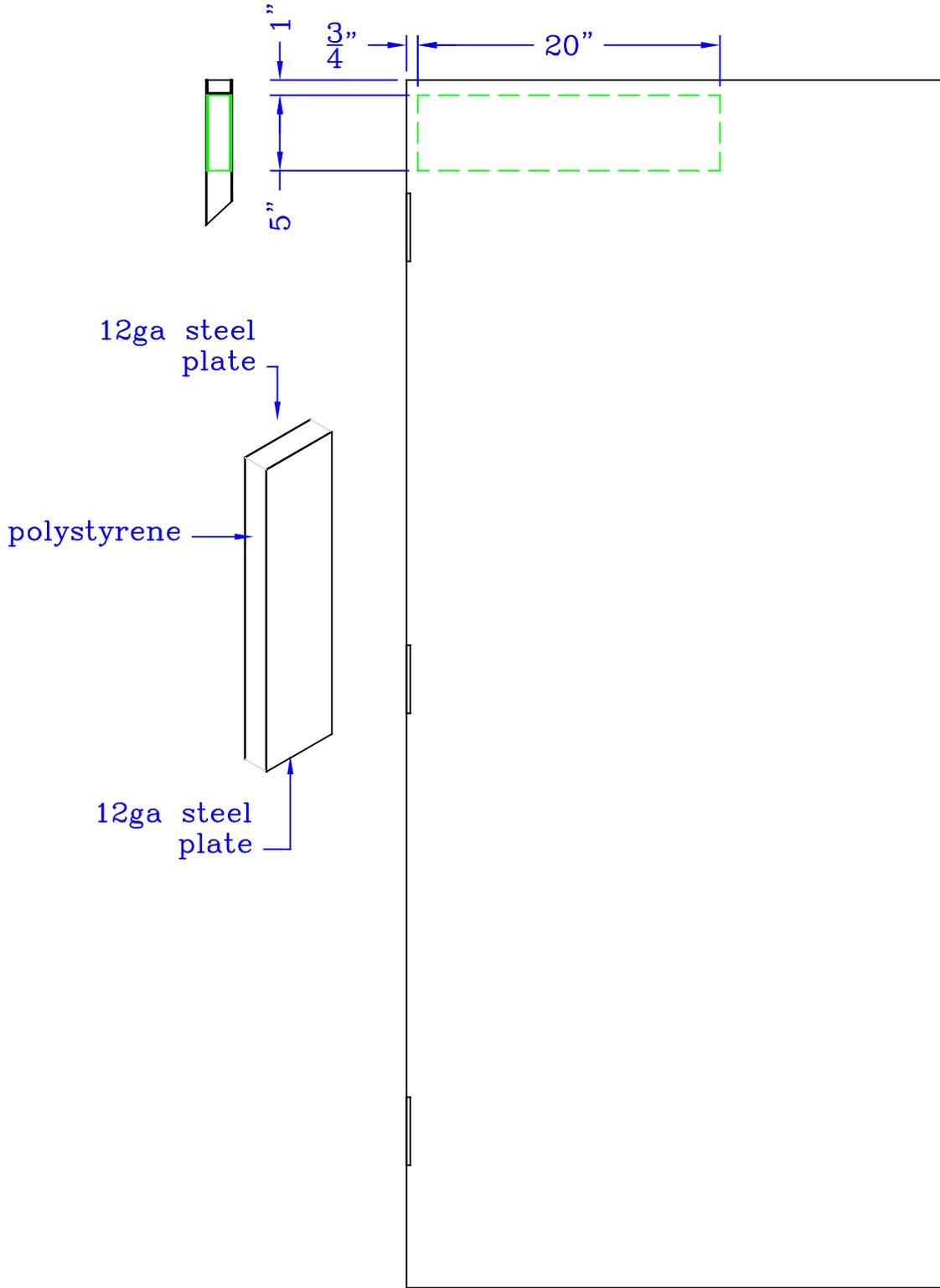
Standard closer reinforcement, 14ga

Cold fused

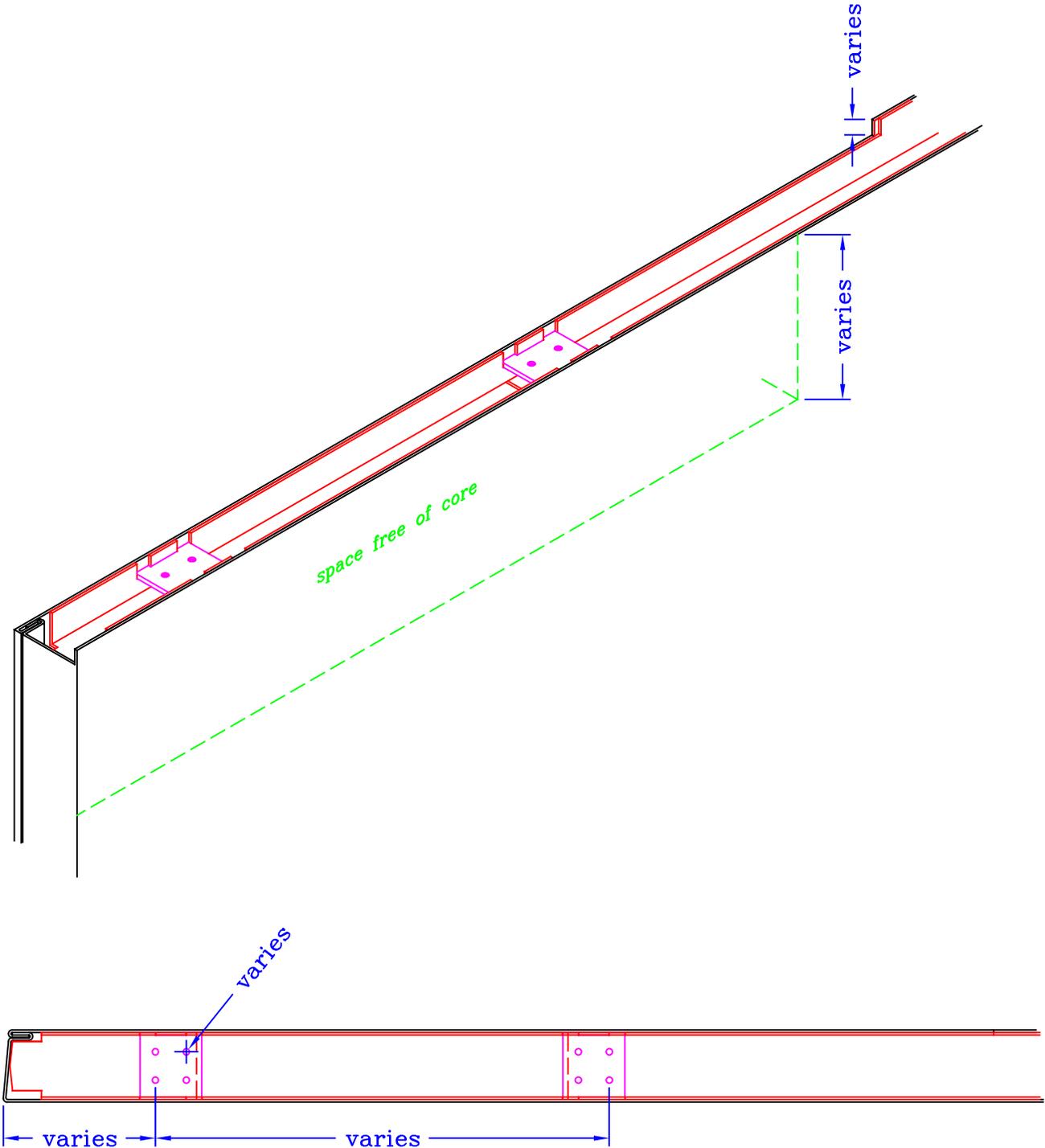


Standard closer reinforcement, 12ga

Cold fused

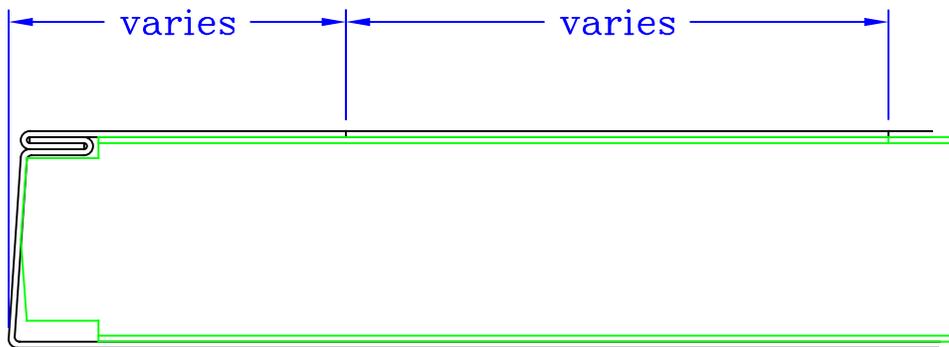
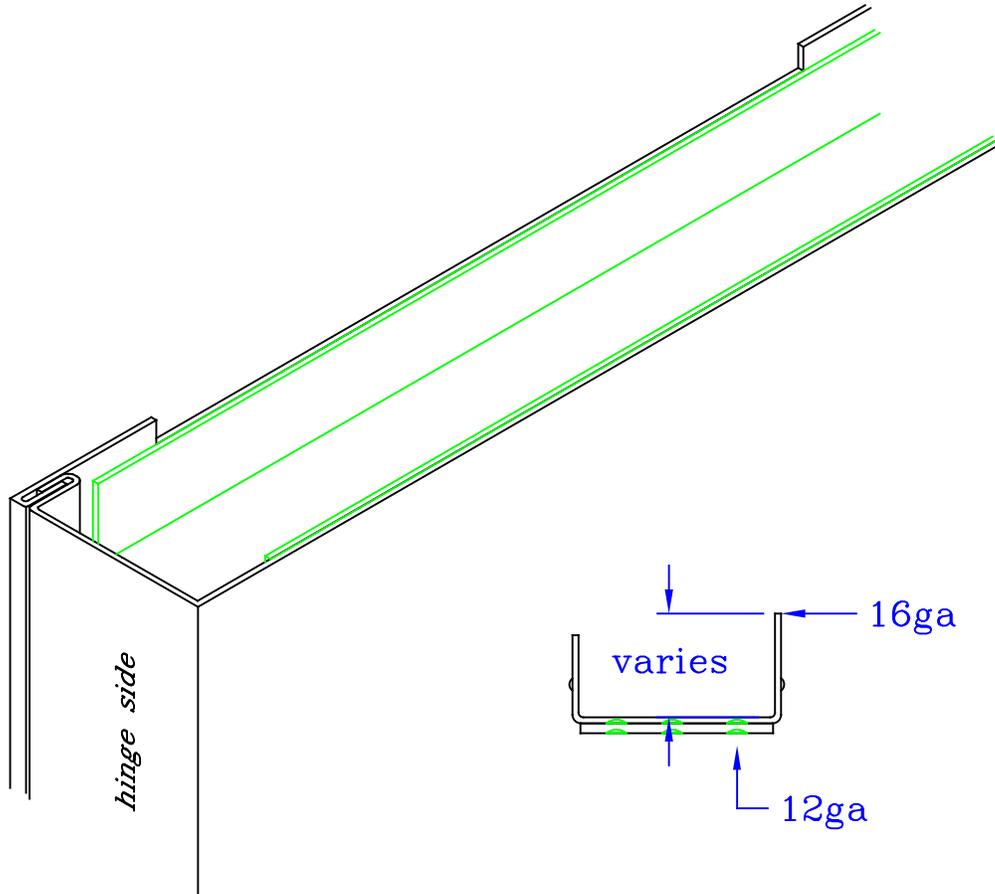


Concealed in door closer prep., 12ga



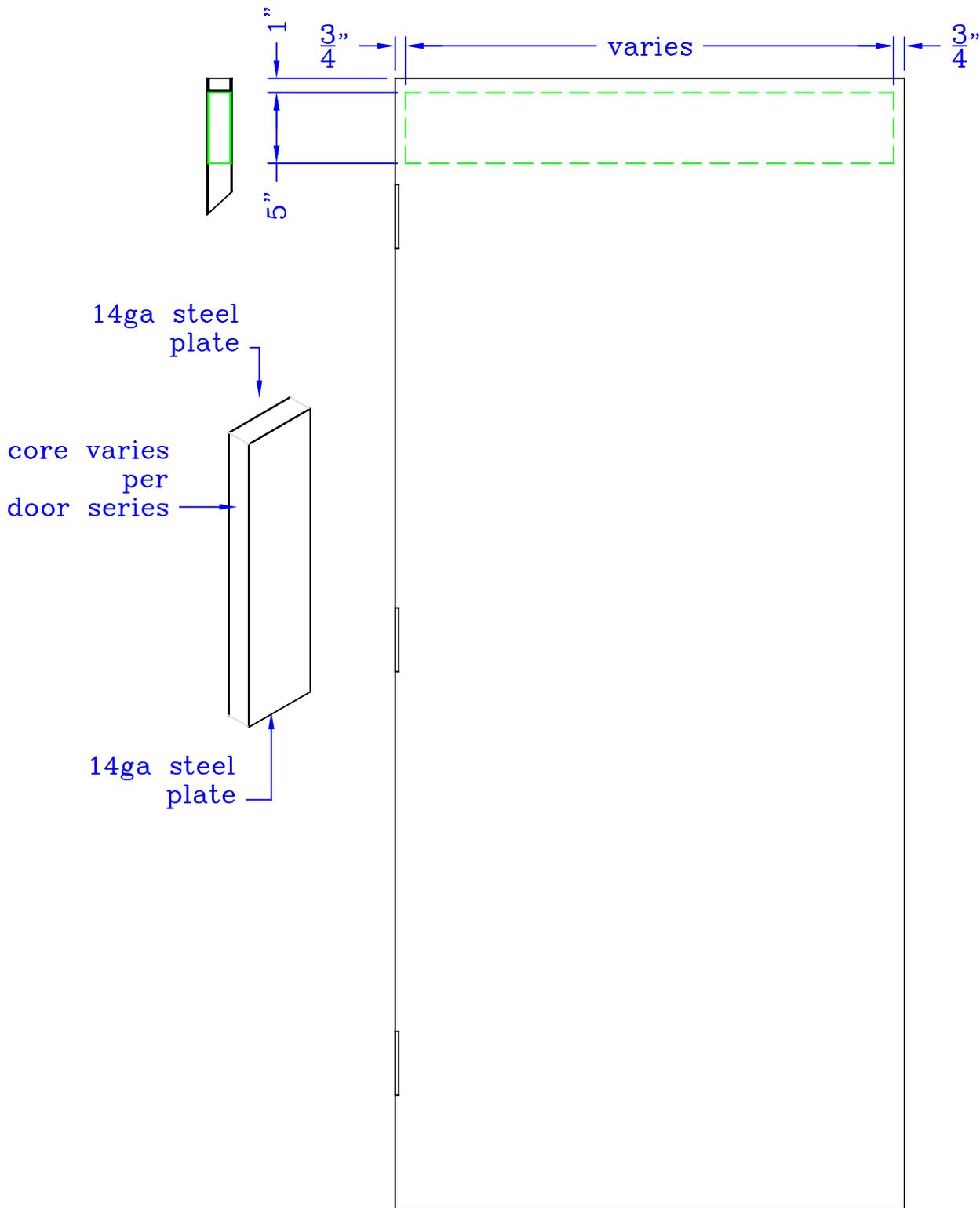
*manufacturer's template to be provided
Top cap options not available

Prep. for concealed overhead stop

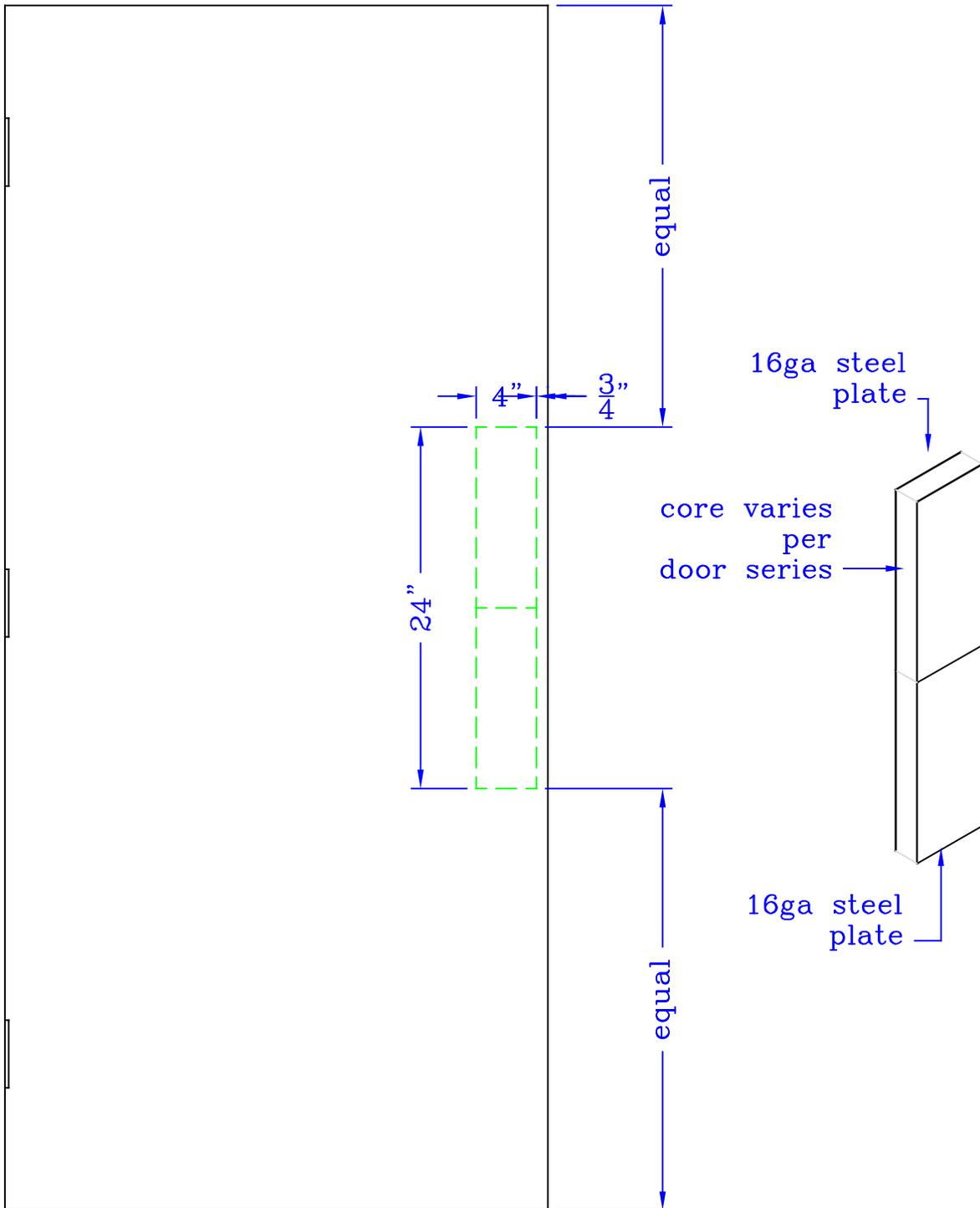


*manufacturer's template to be provided
Top cap options not available

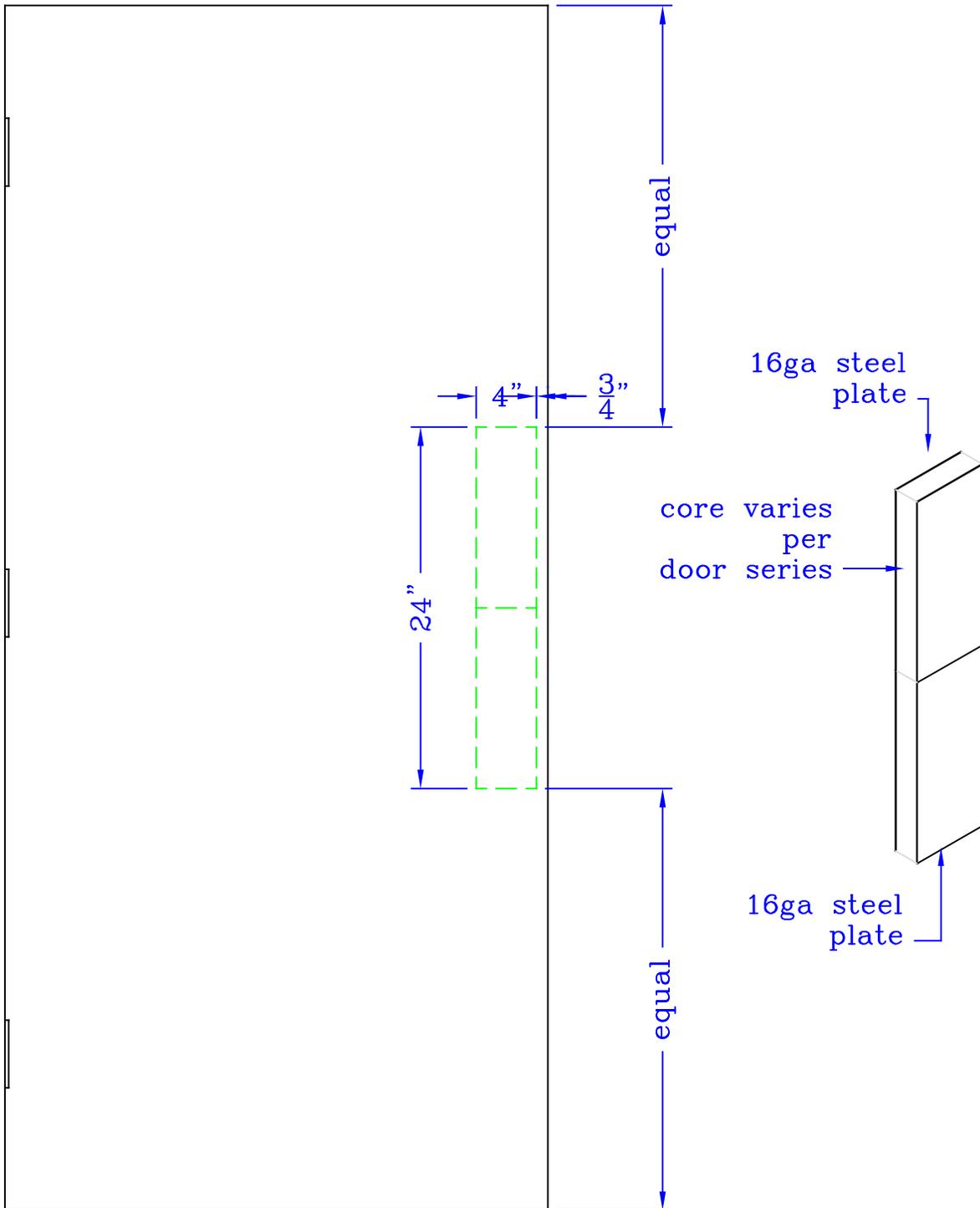
Full width closer reinforcement, 14ga
Cold fused



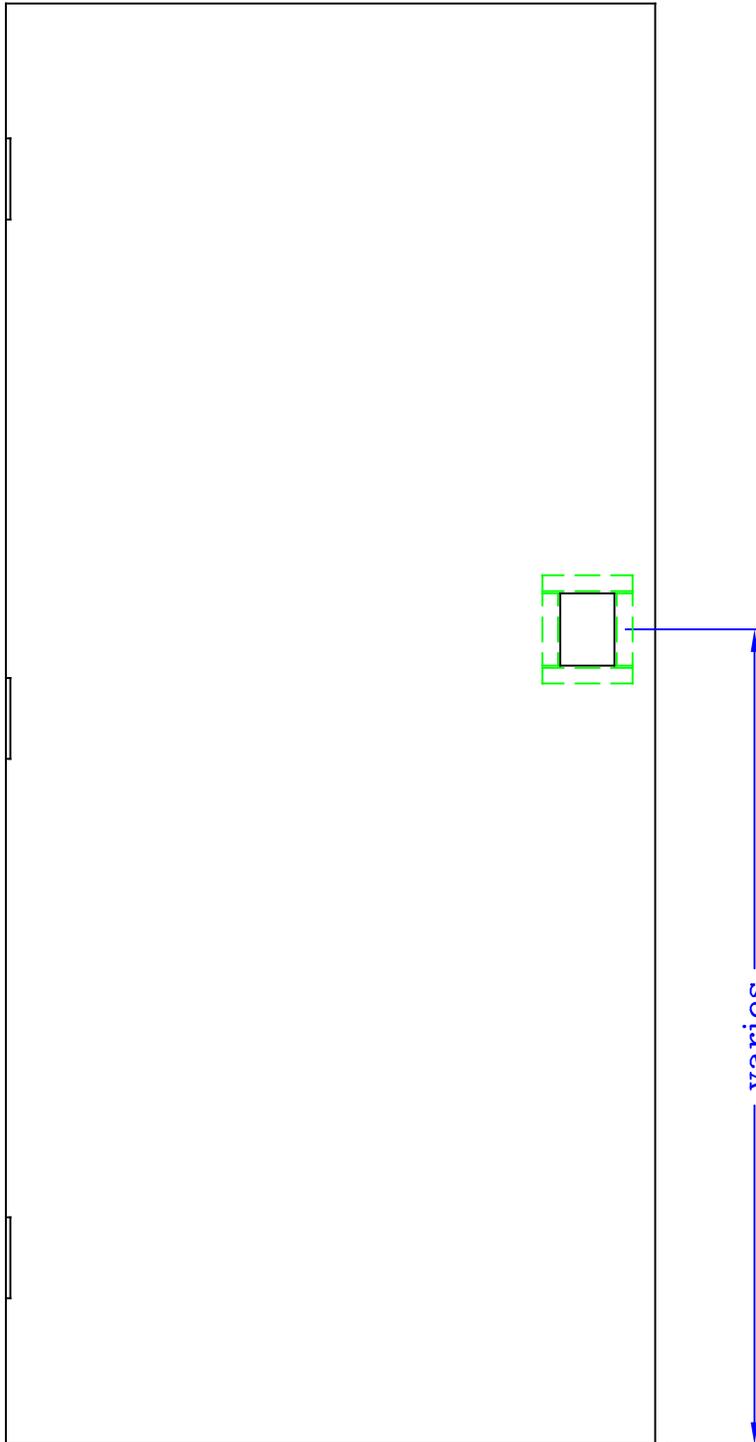
Push and pull reinforcement, 16ga
Cold fused



Pull with grab bar reinforcement, 16ga
Cold fused

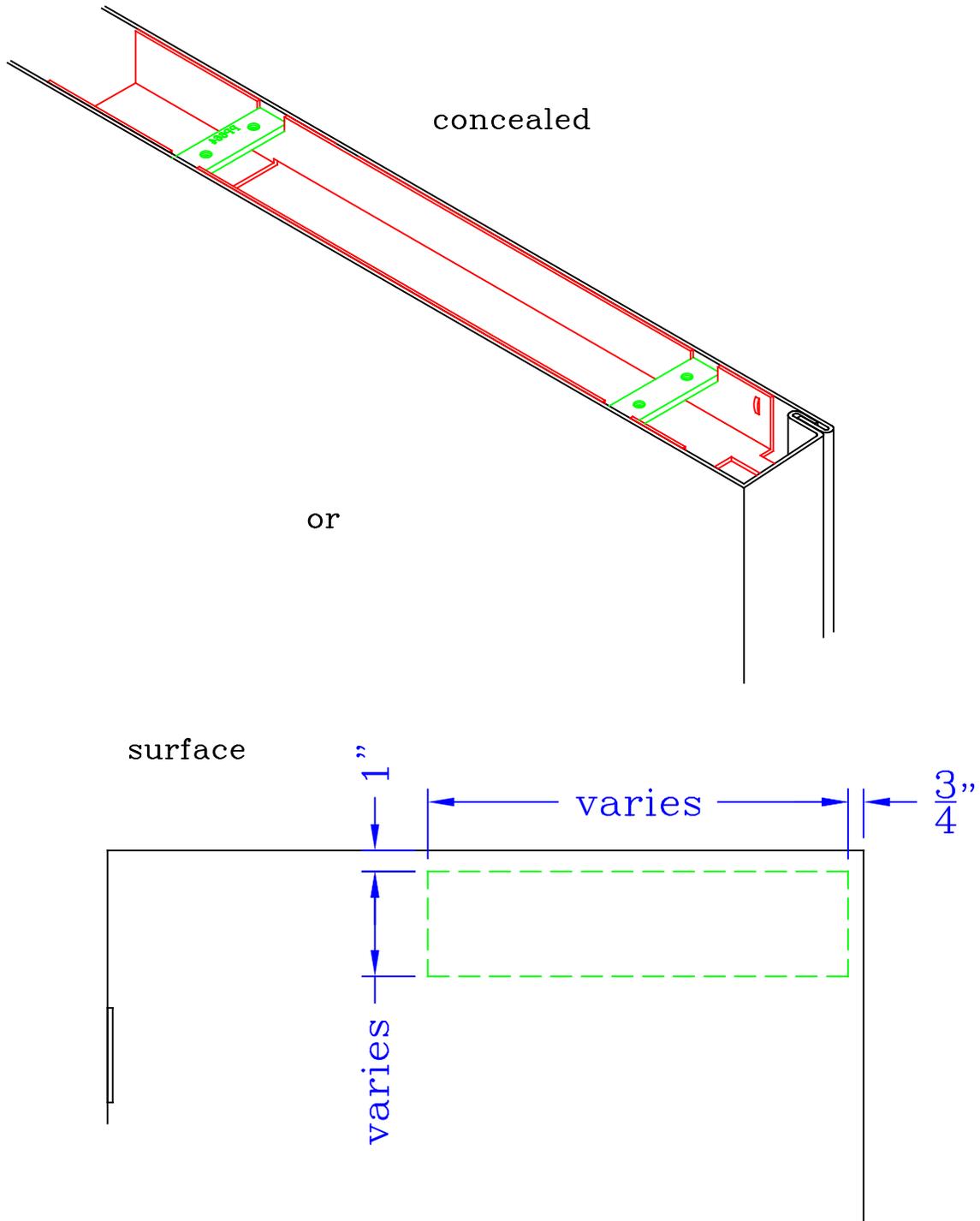


Flush pull with capping (push, pull or both sides), 18ga
Cold fused



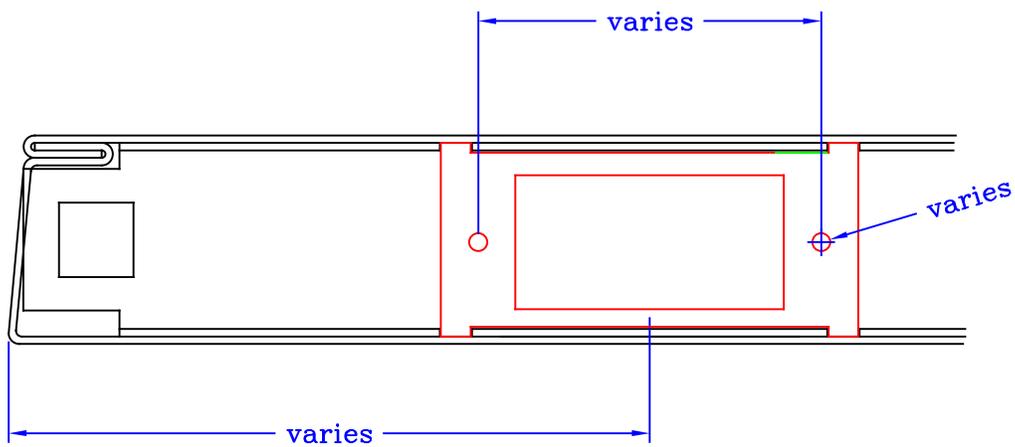
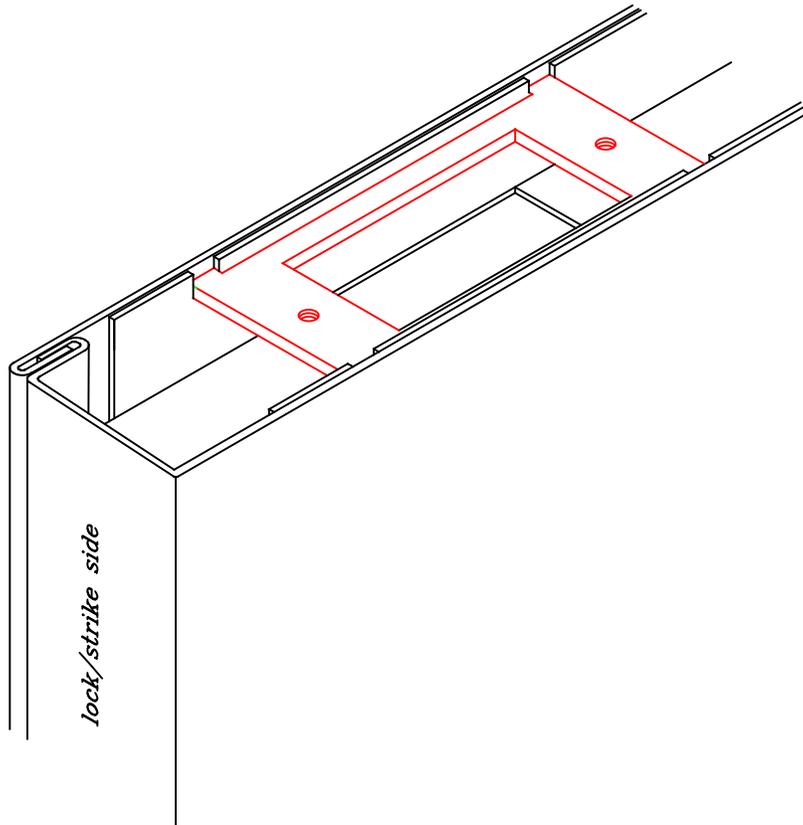
*manufacturer's template to be provided

Shearlock reinforcement



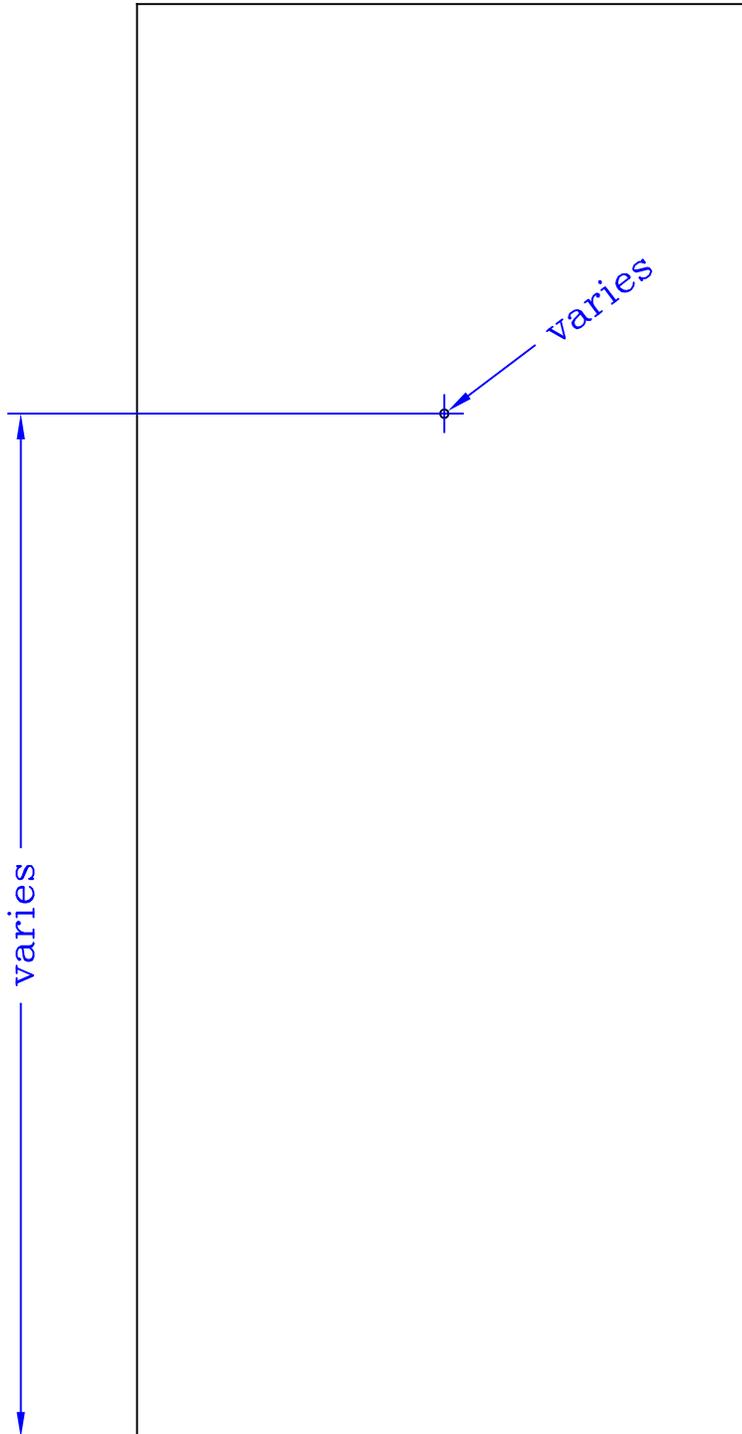
*manufacturer's template to be provided

Roller latch/catch prep., 12ga
tack welded



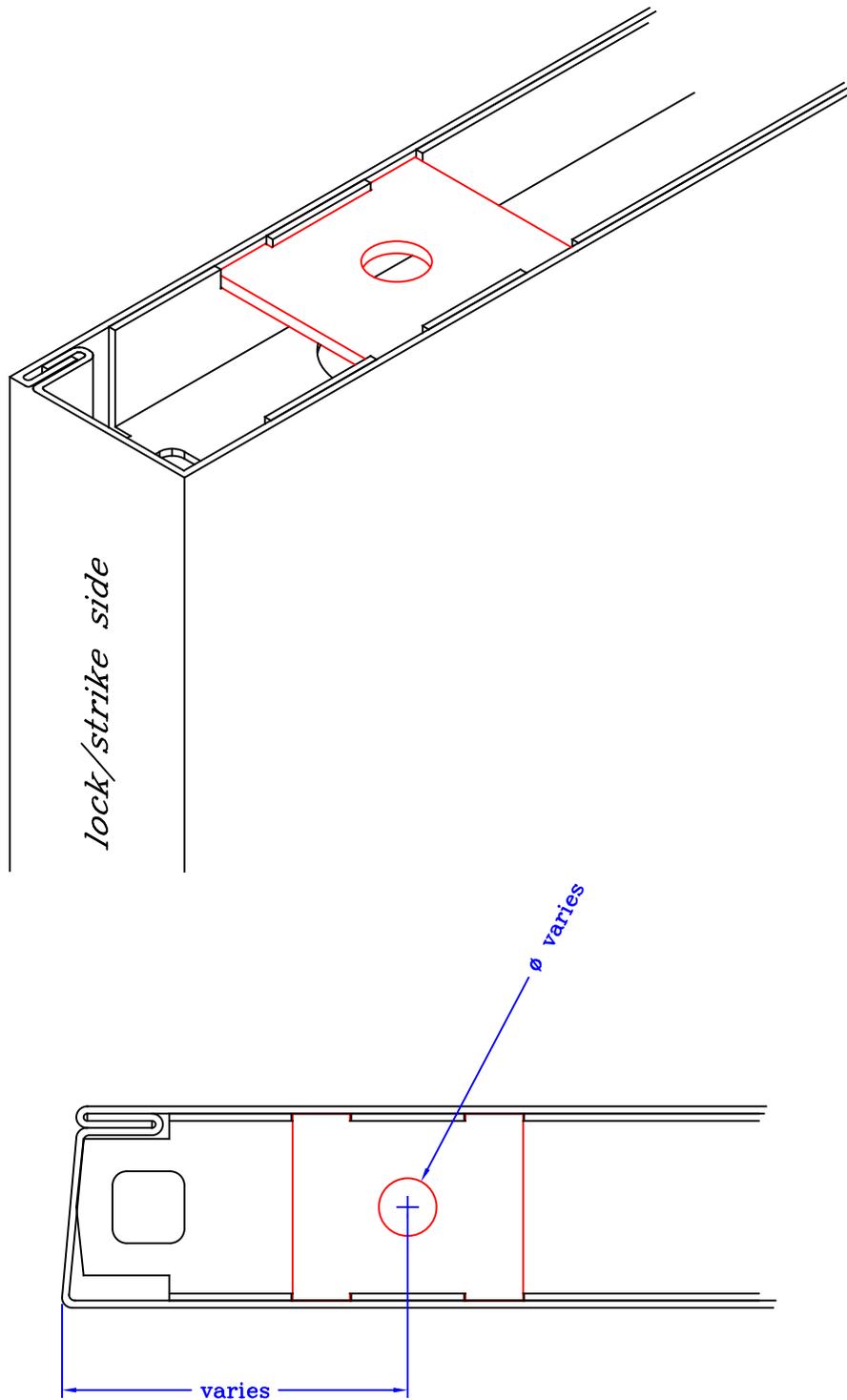
*manufacturer's template to be provided

Hole for door viewer/peep hole



*manufacturer's template to be provided.

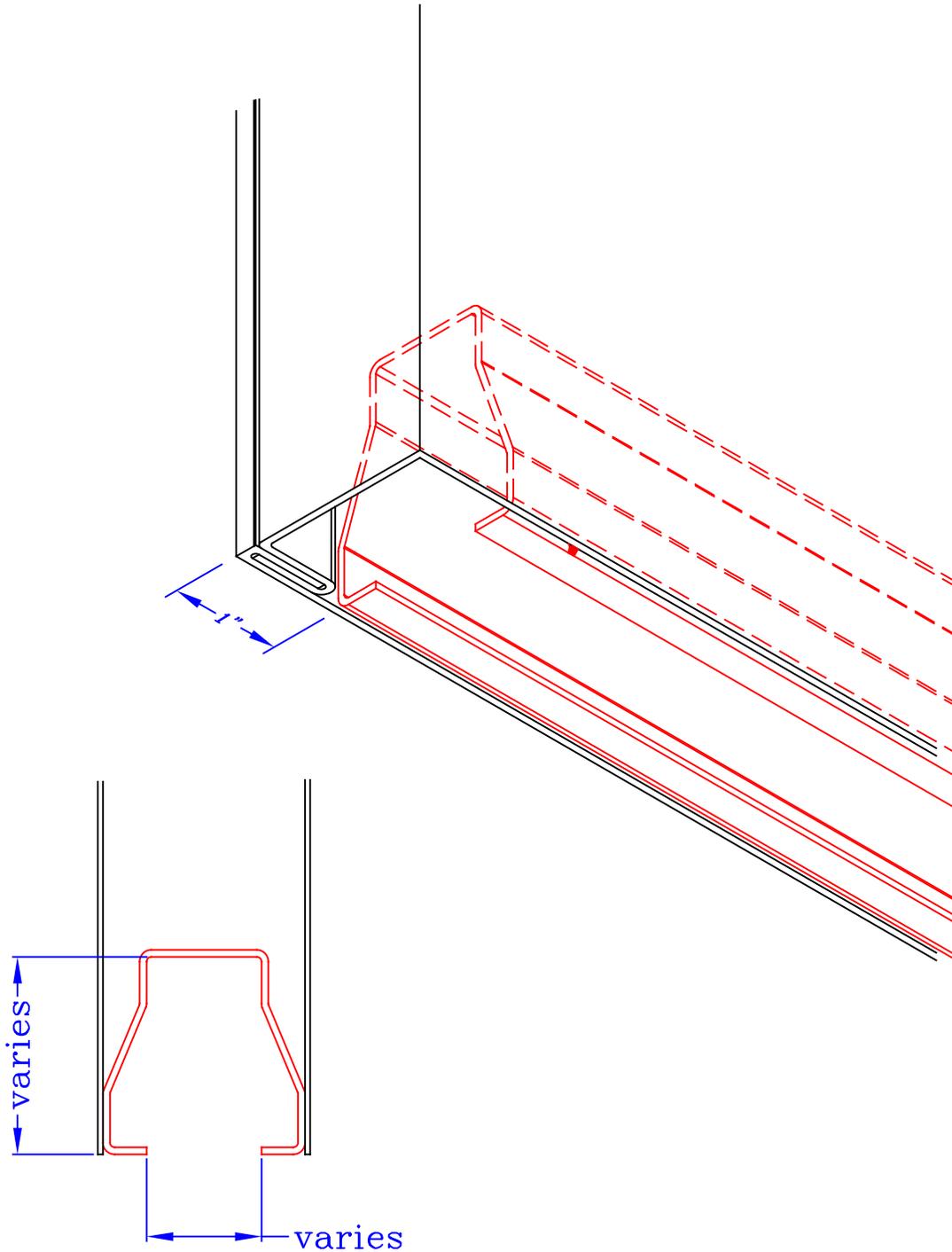
Prep. for magnetic contact with reinforcement, 12ga



*manufacturer's template to be provided

Prep. for automatic door bottom, 16ga

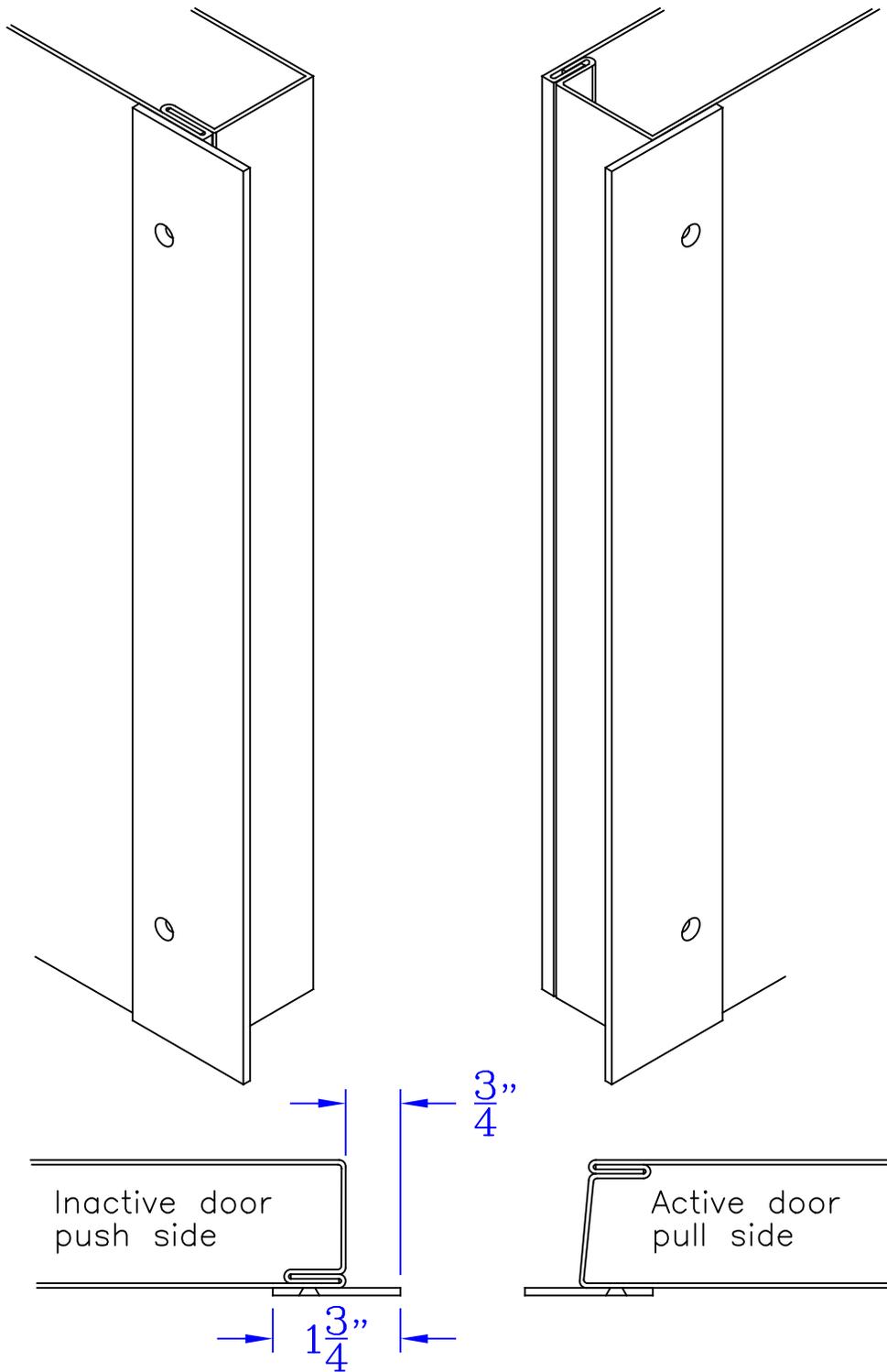
Tack welded



*manufacturer's template to be provided

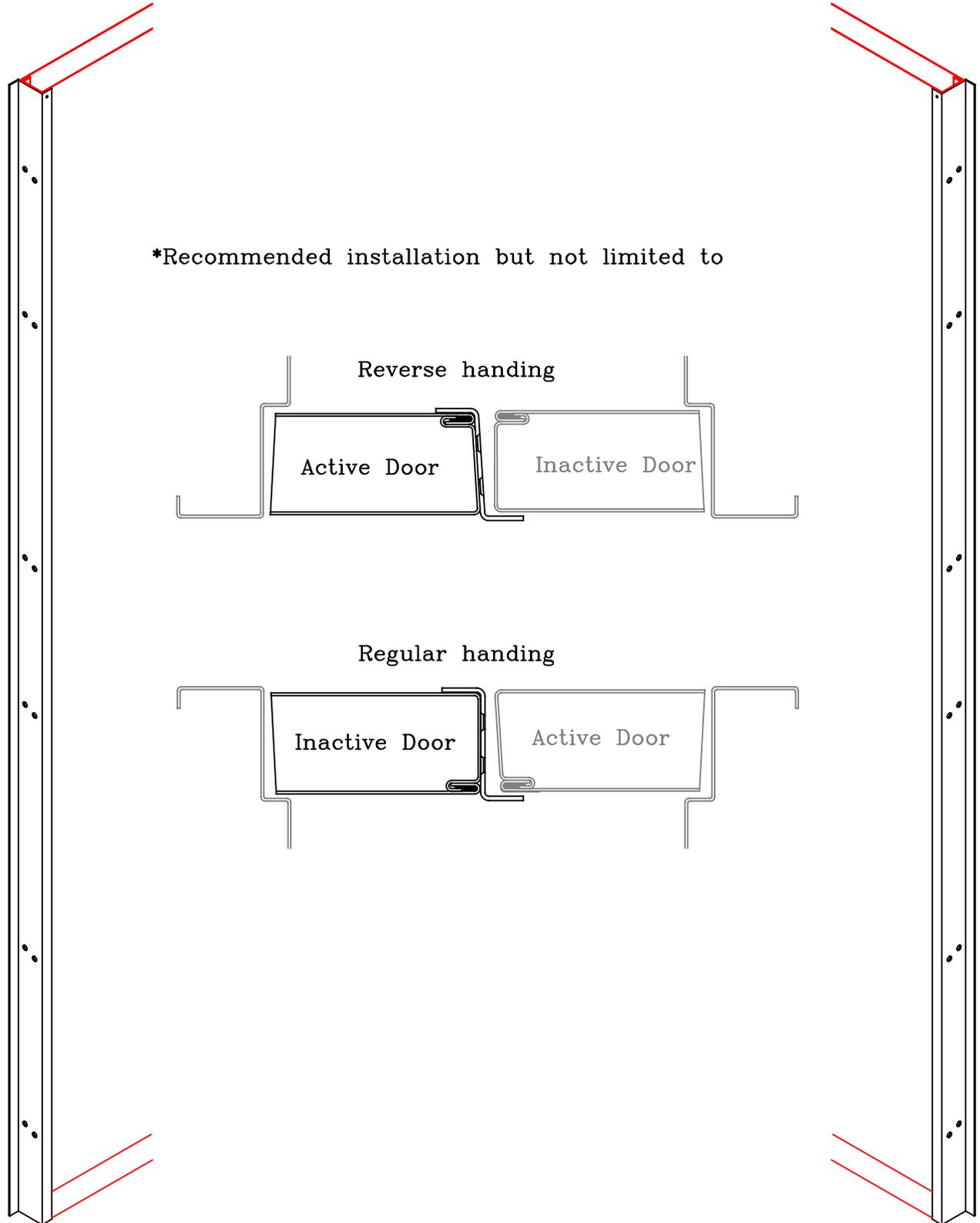
** standard inverted channel for up to 7/8" high automatic door bottom

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

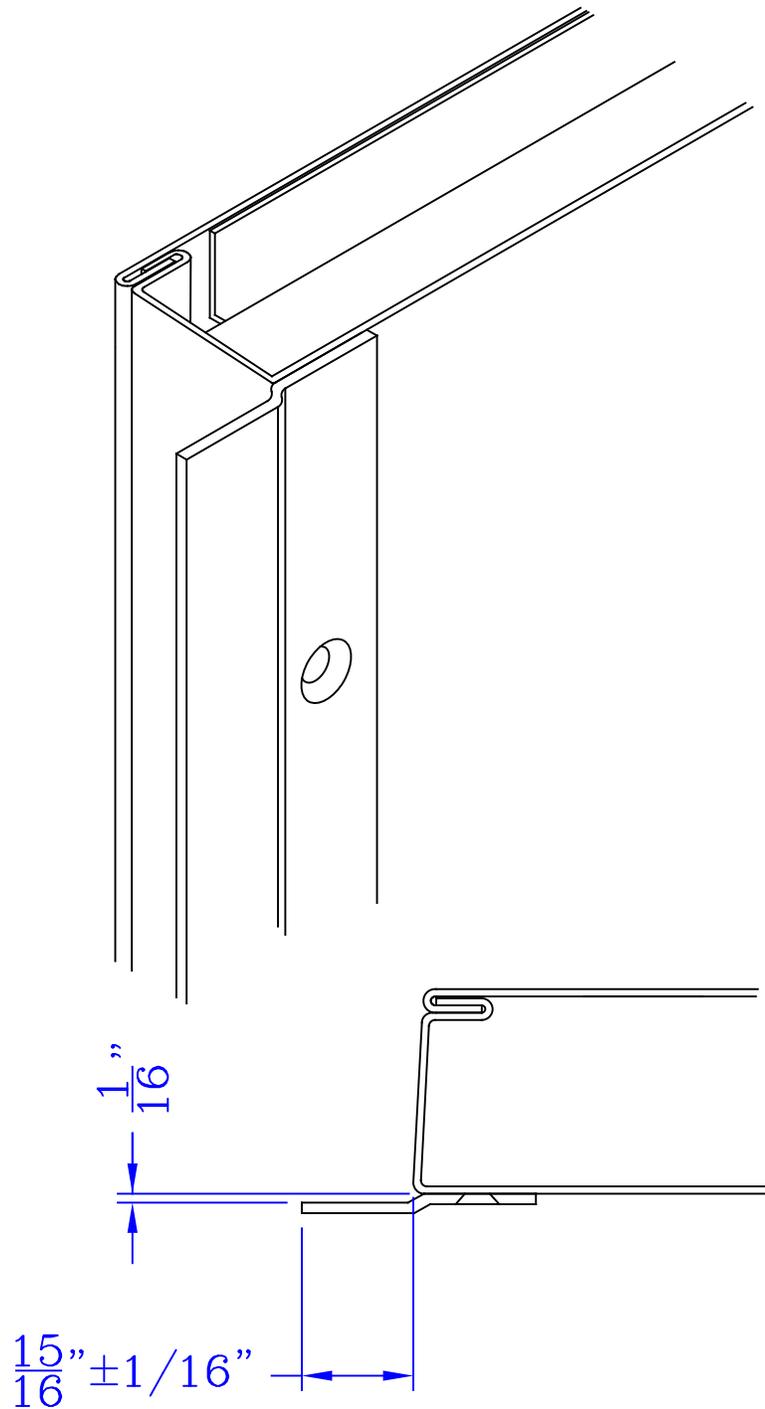
Active Door

ZAS

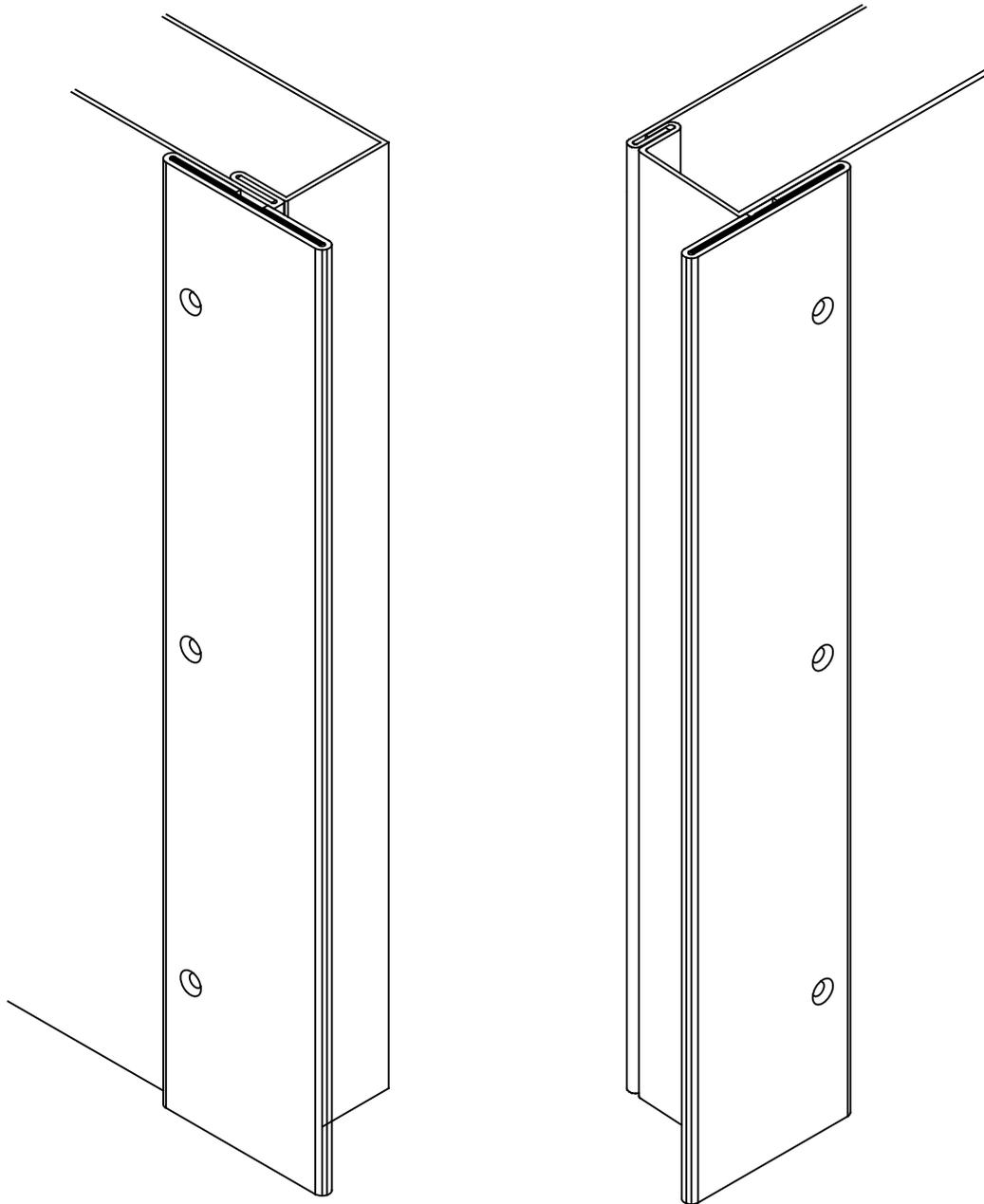
Available screwed or welded, see options SAS and WAS.
Minus 1/16" in door net width.

Astragal & Option

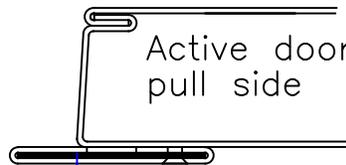
Deviated astragal for single leaf, 14ga



1/16" lead flat bar astragal, 16ga



Inactive door
push side



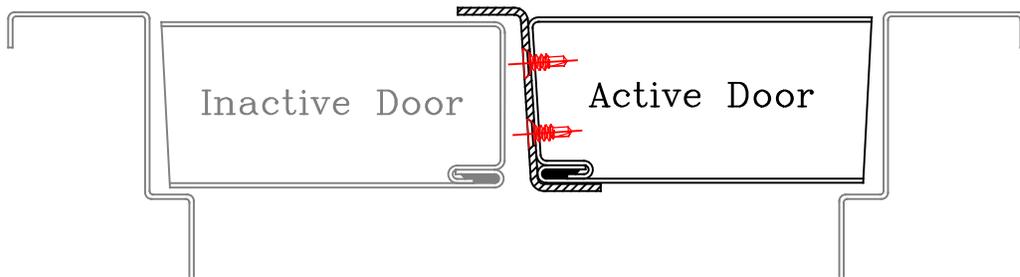
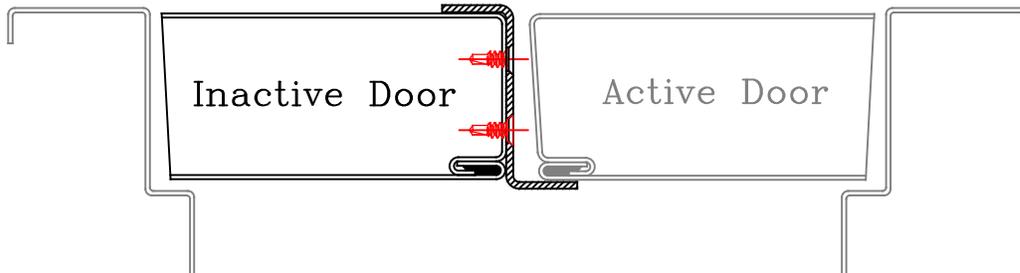
Active door
pull side

$\frac{7}{8} \pm 1/16$ ''' →

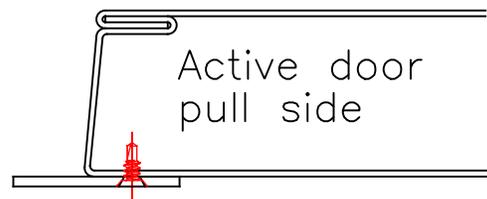
Available screwed or welded, see options SAS and WAS.

Screwed astragal

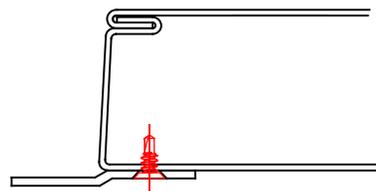
"Z" astragal



flat astragal



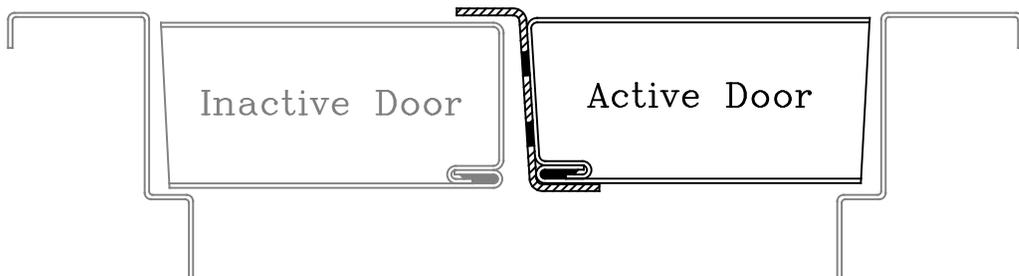
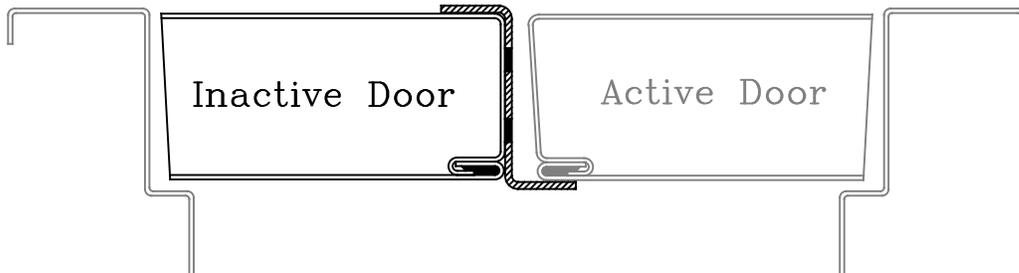
deviated astragal



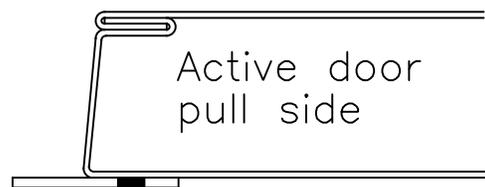
See item #00114 for screw detail

Extra for welded astragal to the door

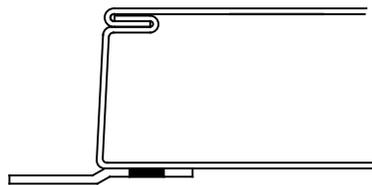
"Z" astragal



flat astragal

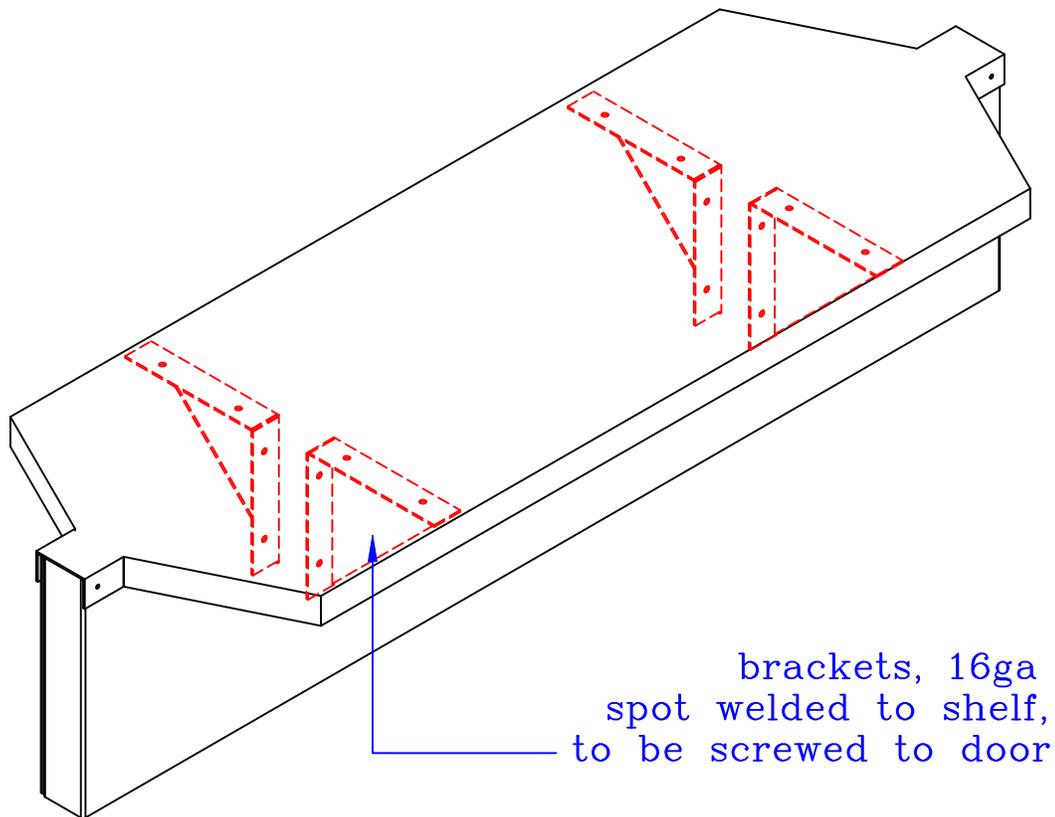
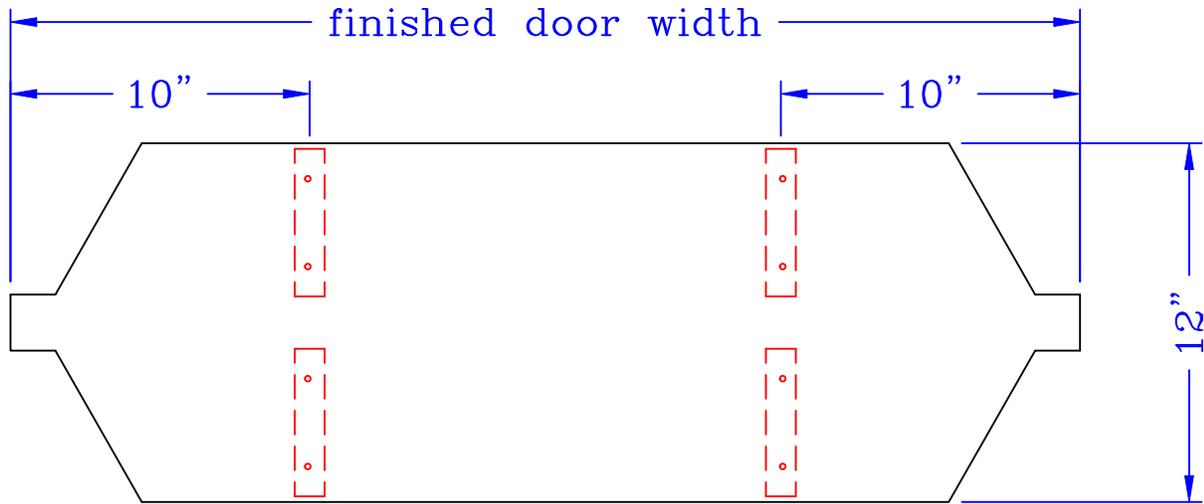


deviated astragal



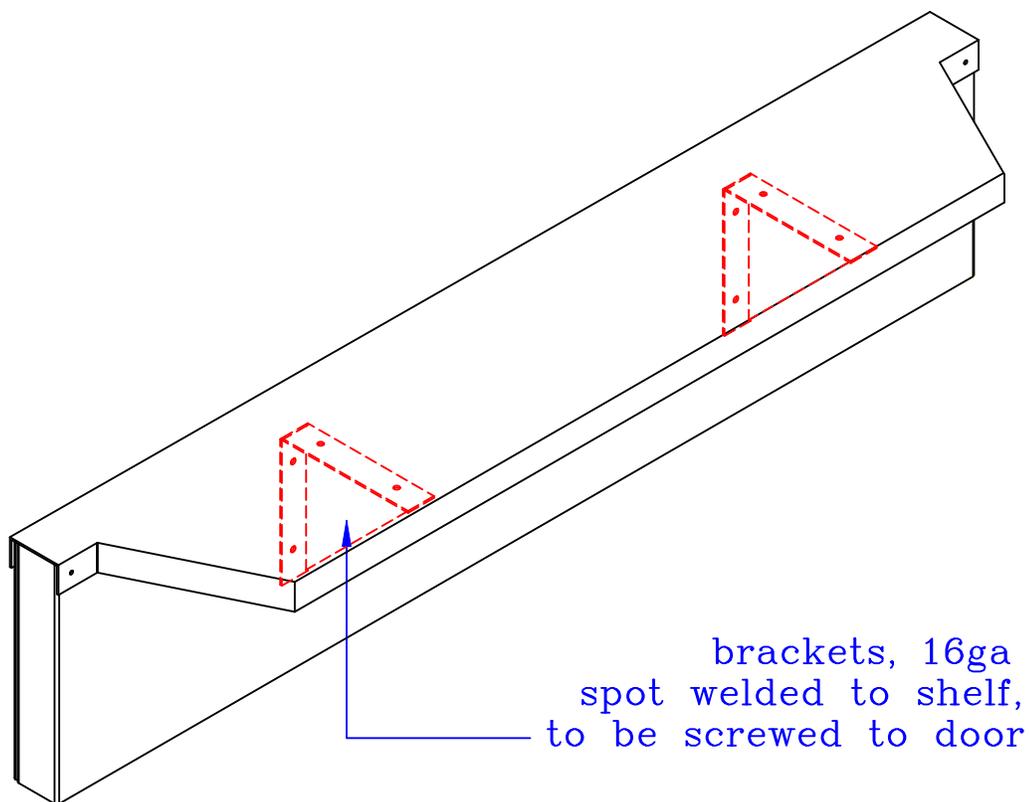
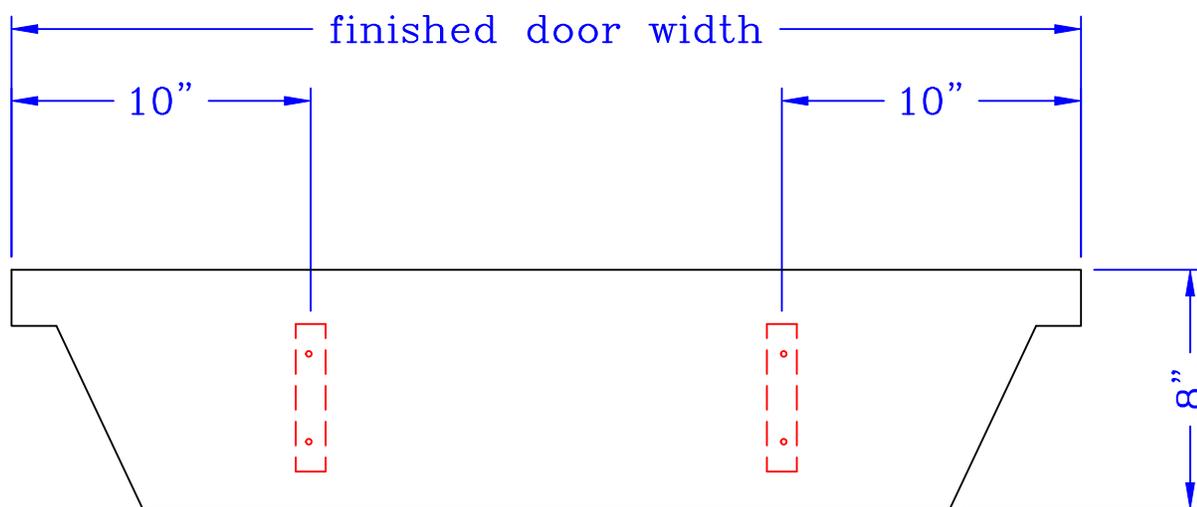
Full dutch door shelf

Shipped loose



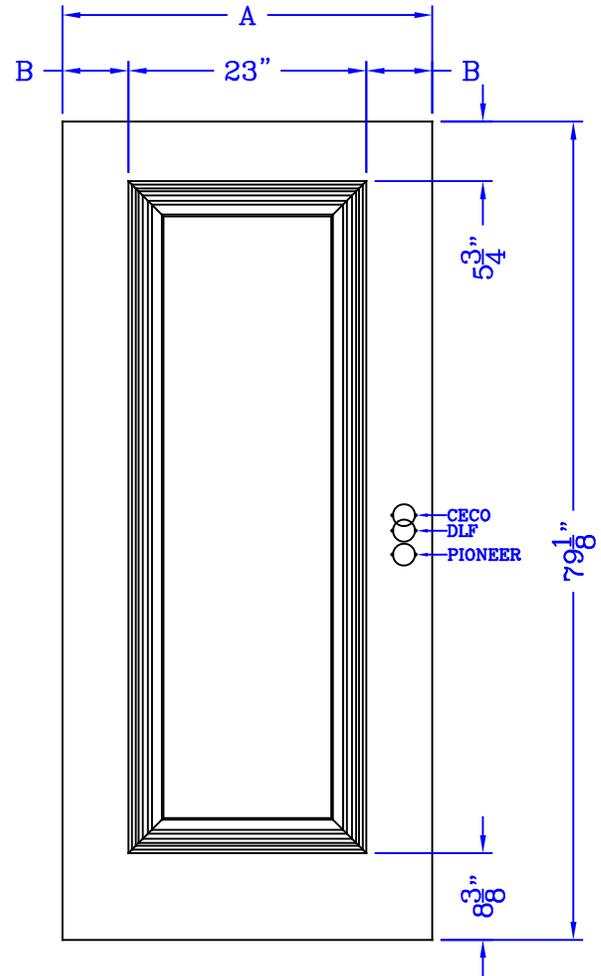
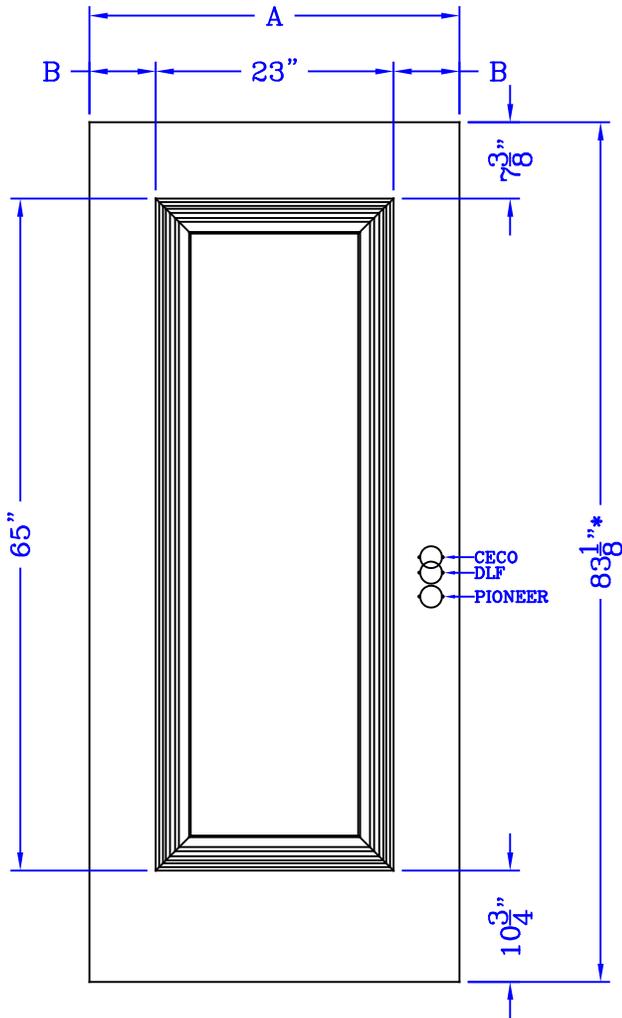
Half dutch door shelf

Shipped loose



One panel

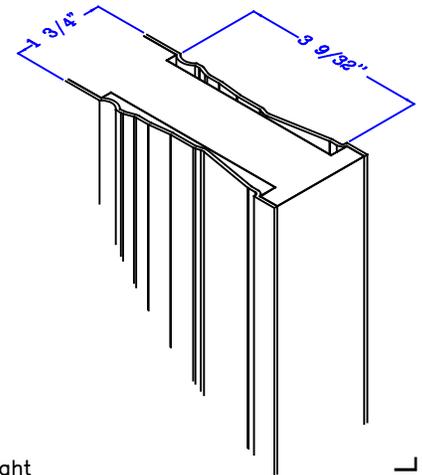
Available 18ga, A40 only.



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.

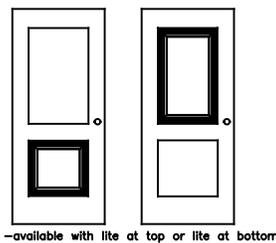
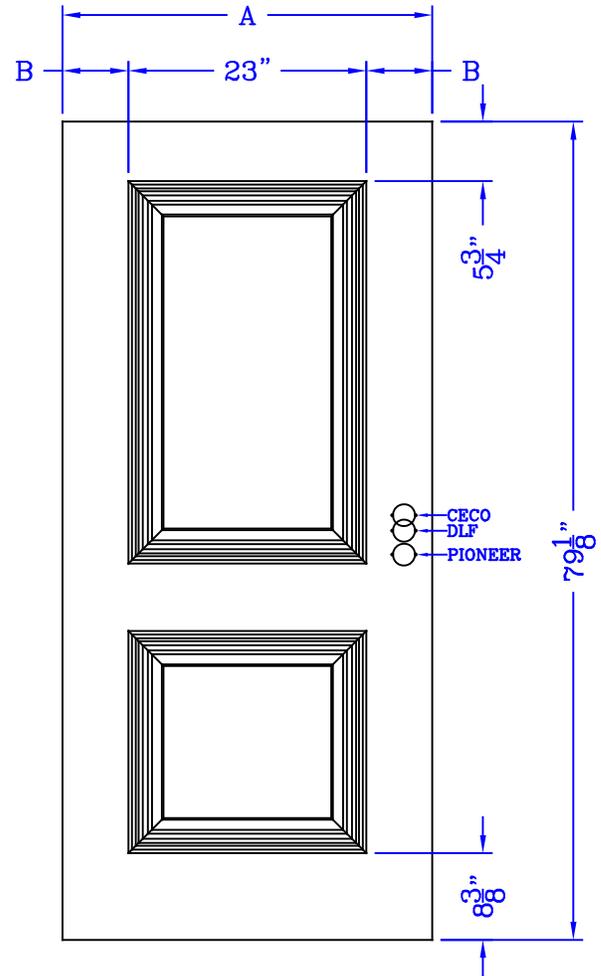
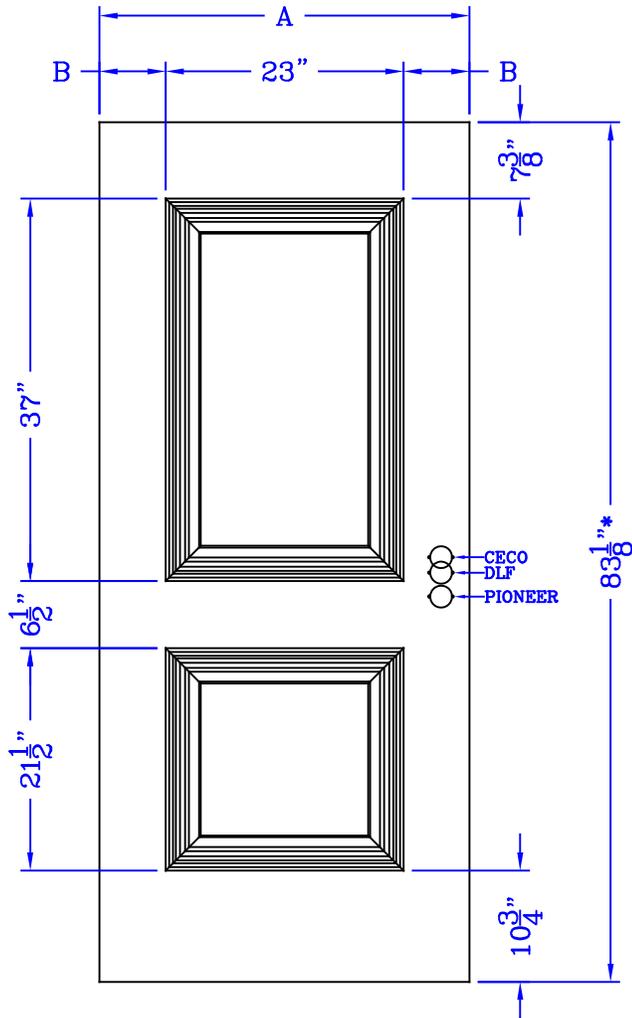
: All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.

: will require an irregular backset at lock for 2'8" and 2'6" doors.

1PNL

Two panels

Available 18ga, A40 only.

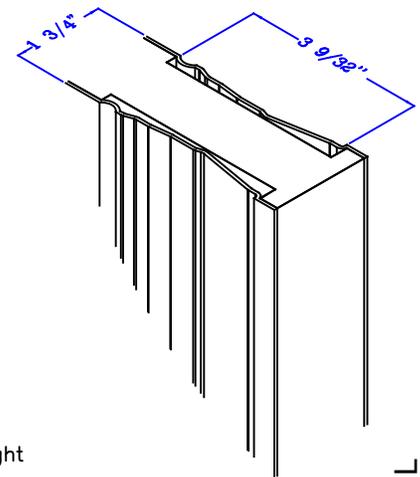


Nominal Dimension —A—	Net size Dimension —B—
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
□ 3'-0"	6 3/8
□ 2'-10"	5 3/8
□ 2'-8"	4 3/8
□ 2'-6"	3 3/8

*Maximum net height 83 1/8"

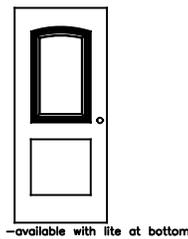
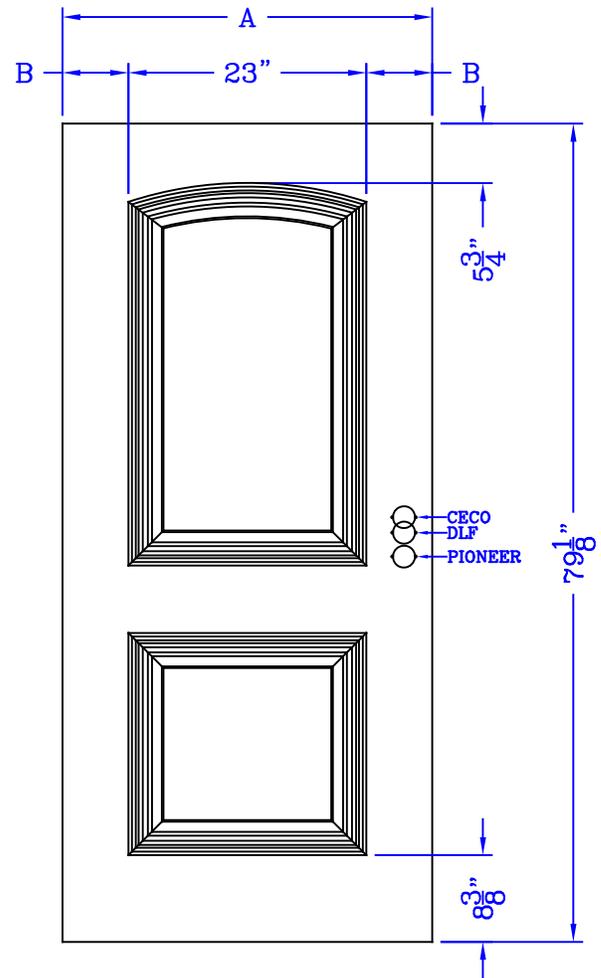
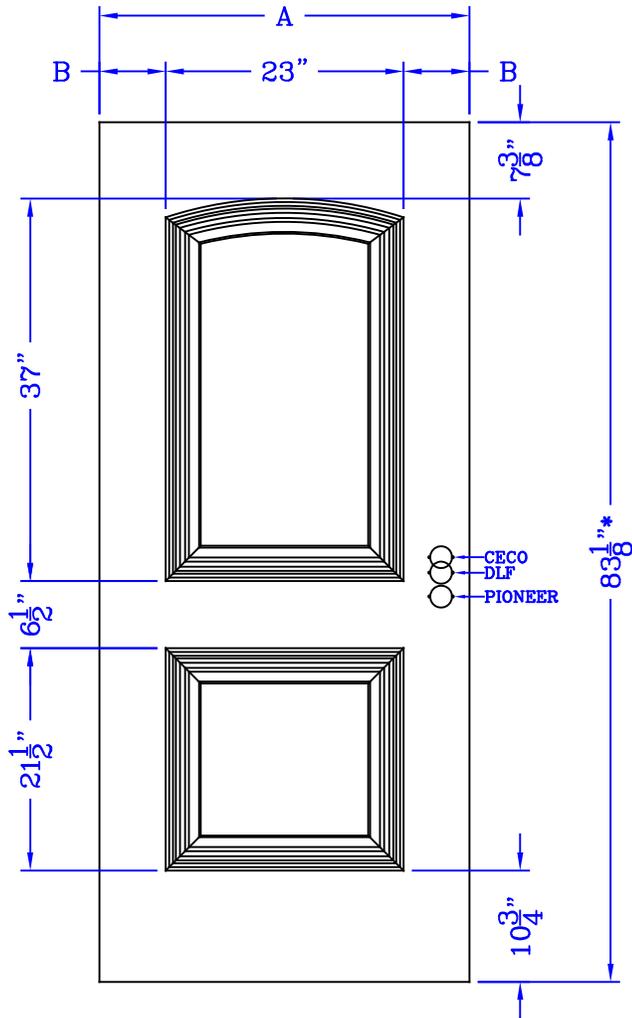
□ CW Door only

- 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.

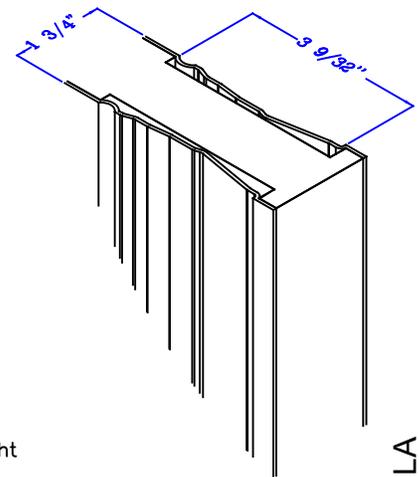


Nominal Dimension —A—	Net size Dimension —B—
□ 3'-4"	8 3/8
□ 3'-2"	7 3/8
□ 3'-0"	6 3/8
□ 2'-10"	5 3/8
□ 2'-8"	4 3/8
□ 2'-6"	3 3/8

*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

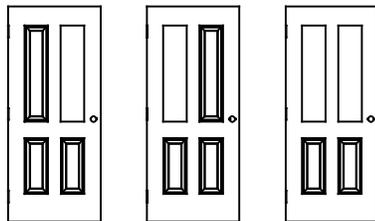
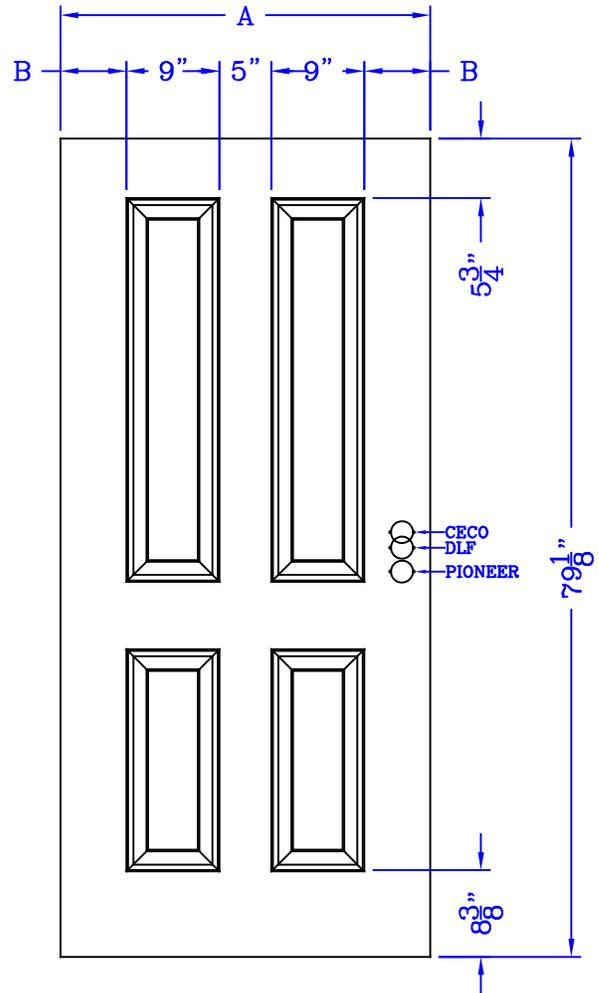
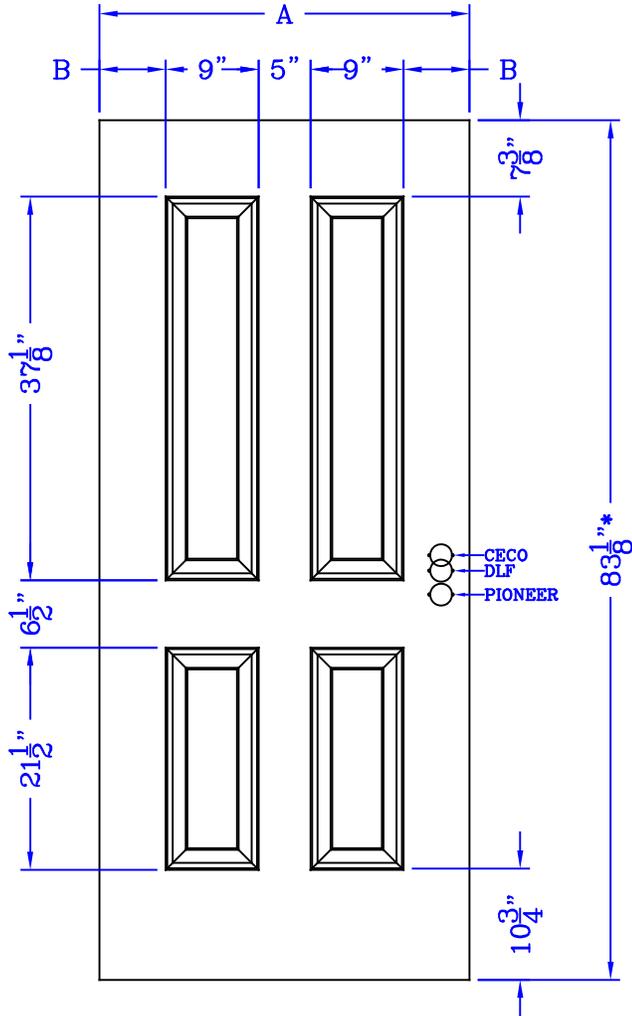


Model

2PNLA

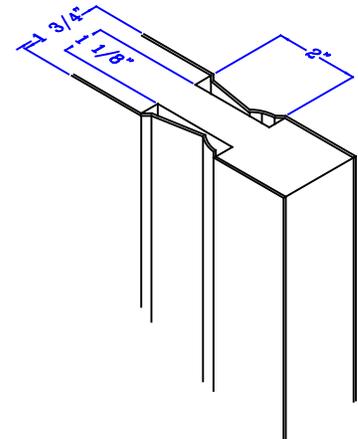
Four panels

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



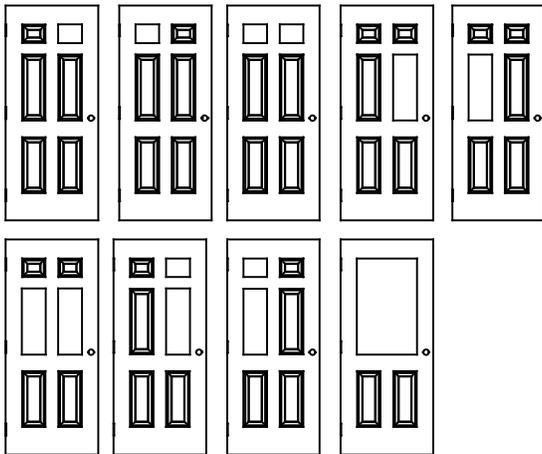
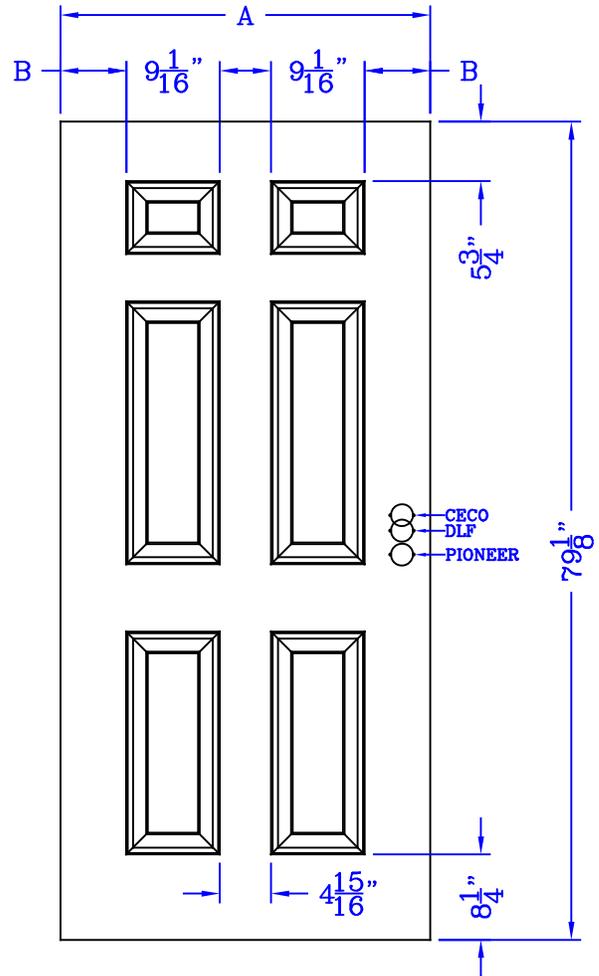
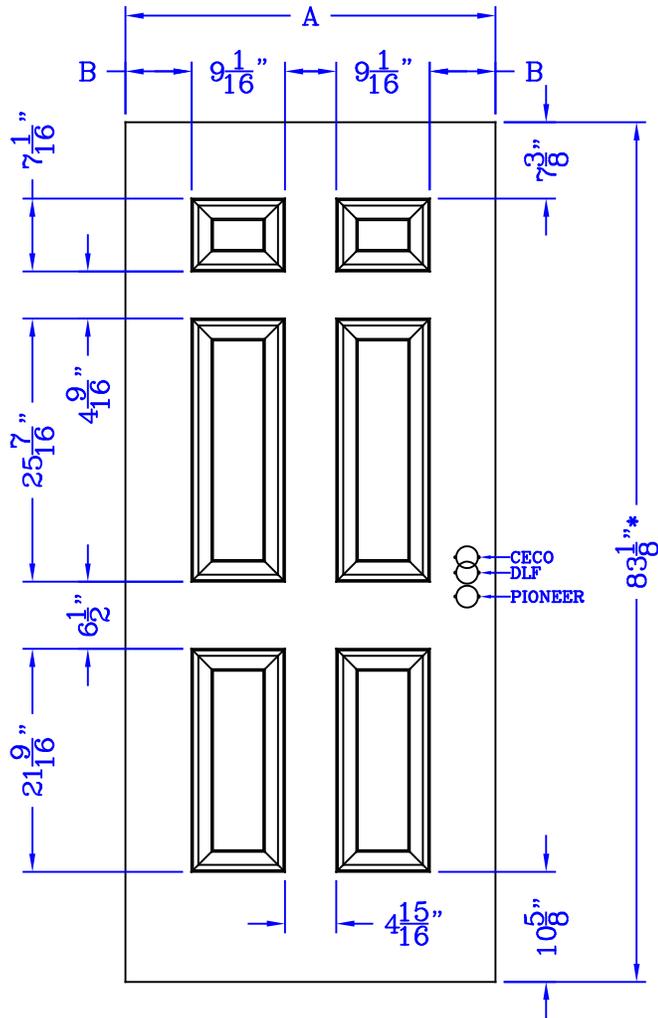
*Maximum net height 83 1/8"

□ CW Door only

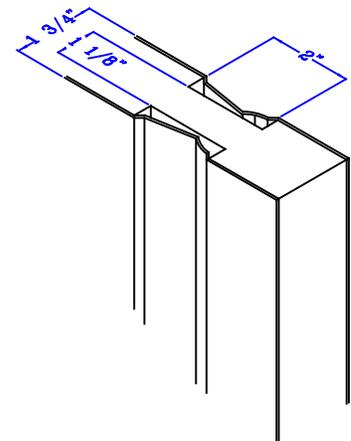
- NOTES: Doors are available rated up to 3hrs, available with polystyrene core only.
- : All hardware preps, including panic devices, will be located per commercial height and/or per manufacturer's template, without consideration of aesthetic.
 - : cut out will be 1/2" higher and larger than dimensions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



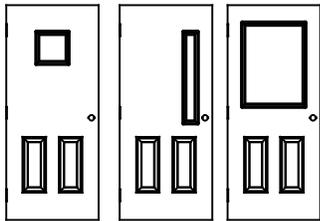
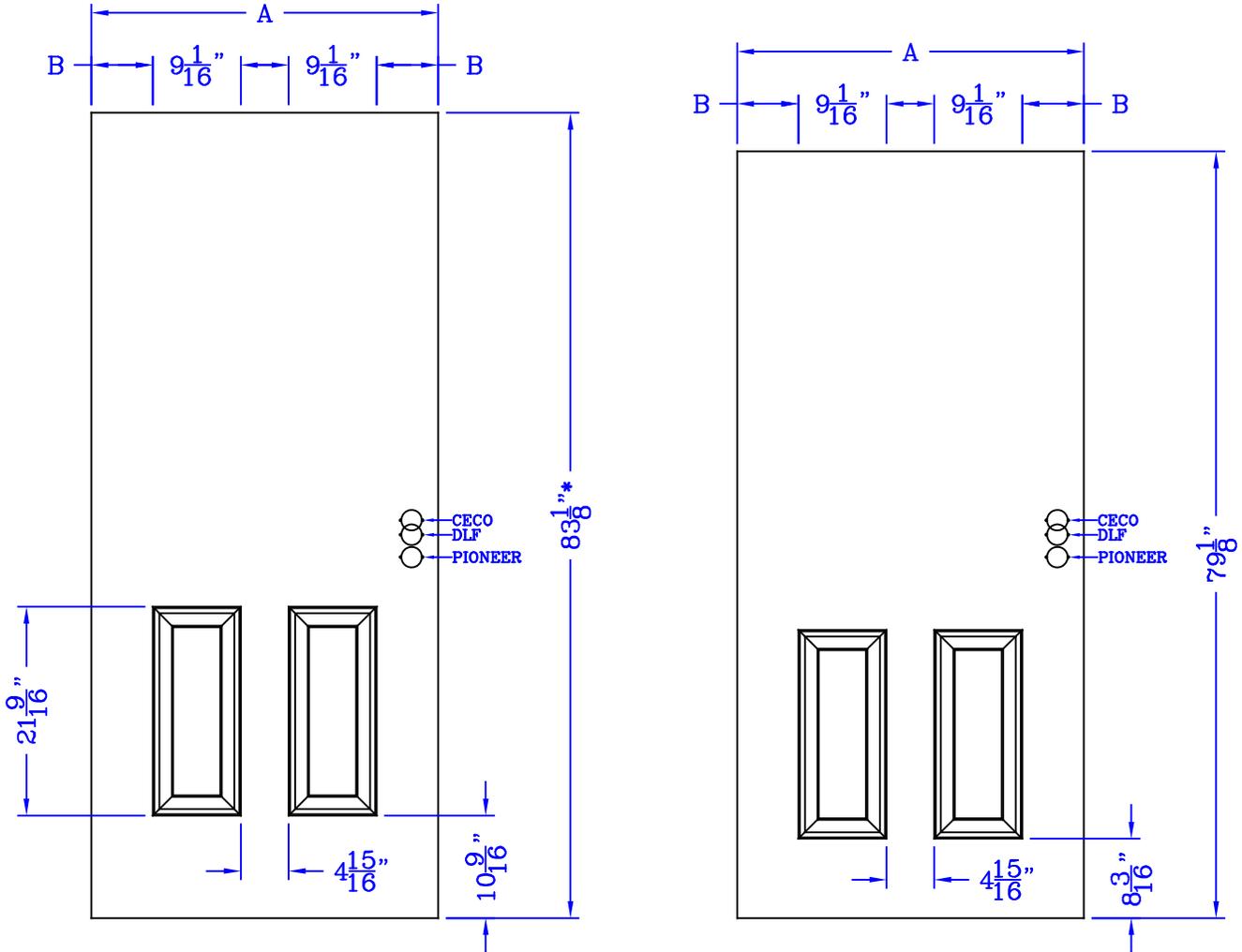
*Maximum net height 83 1/8"
□ CW Door only

-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.



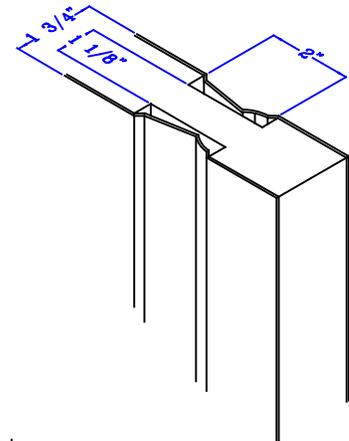
with regular vision, narrow lite of half glass lite kit.

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"

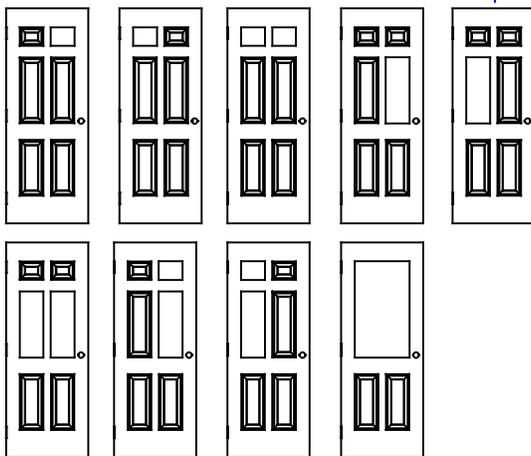
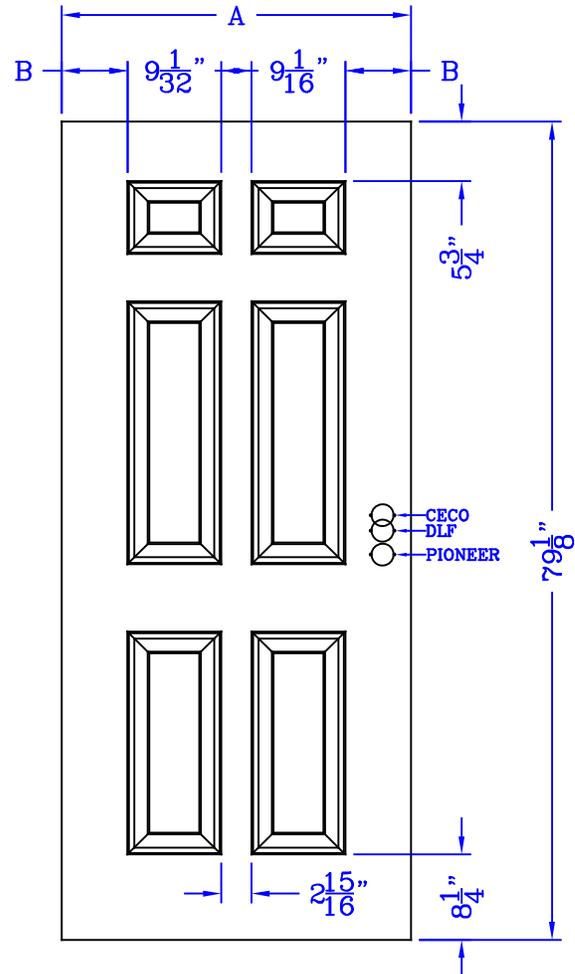
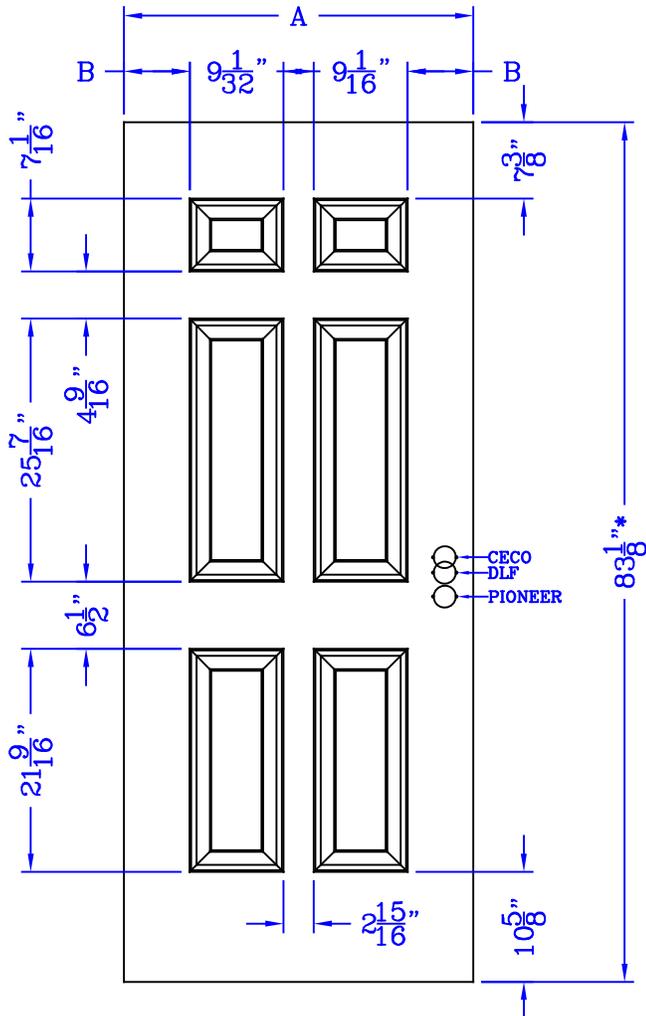
□ CW Door only

- 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

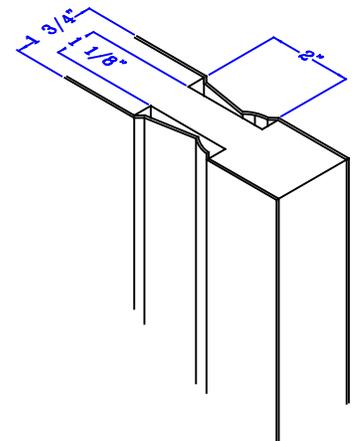


Narrow six panels

Available 18ga, A40 only.



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

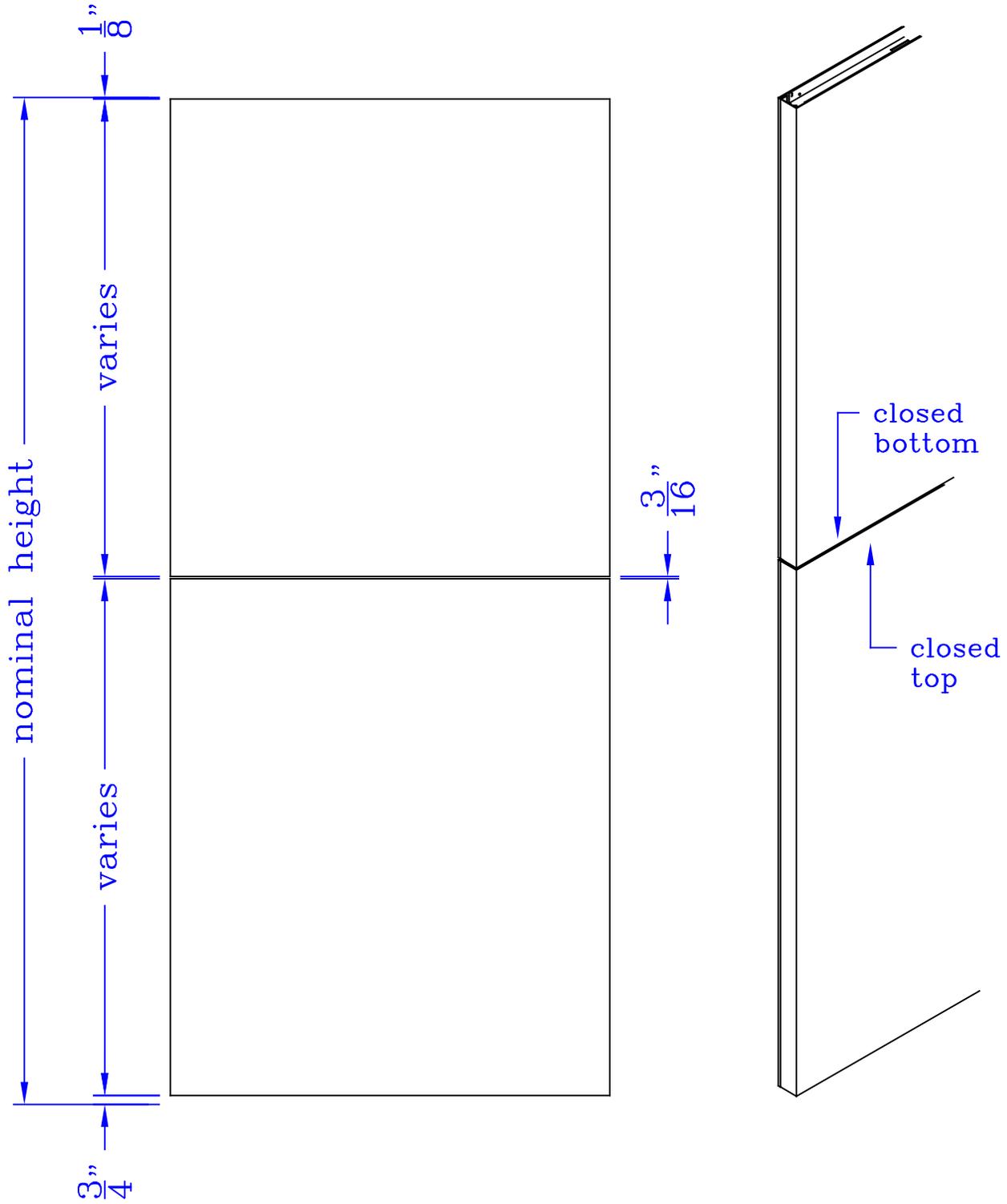


*Maximum net height 83 1/8"

-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)

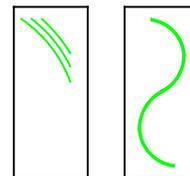
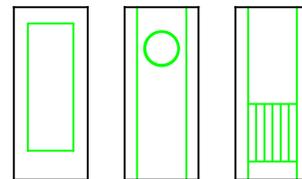
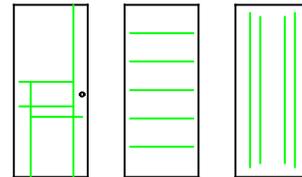
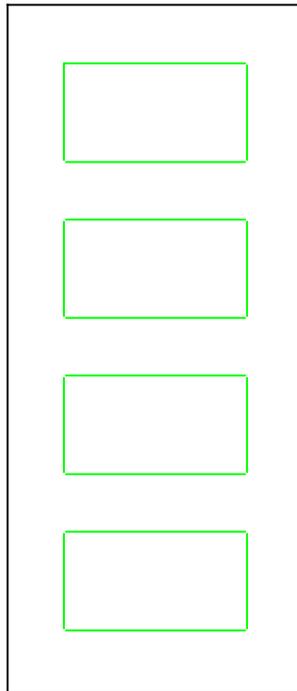
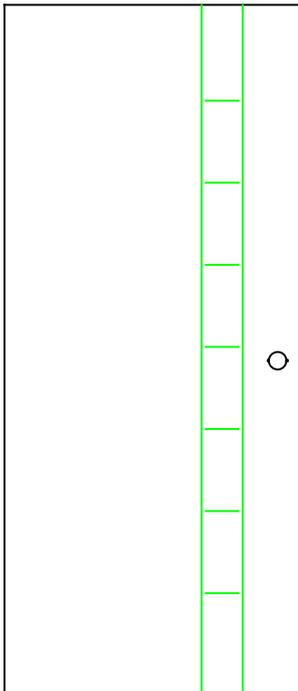
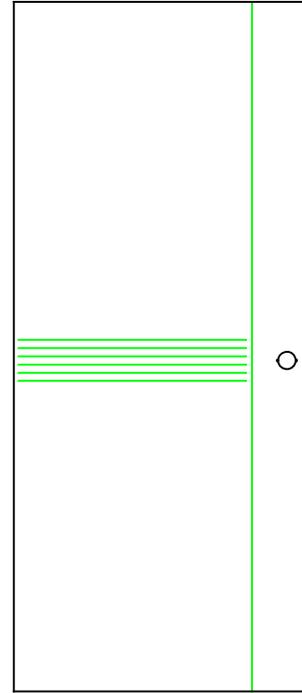
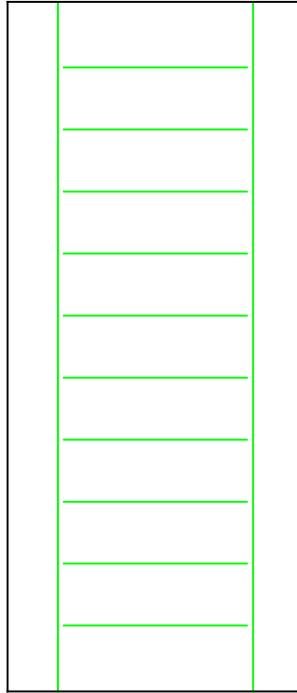
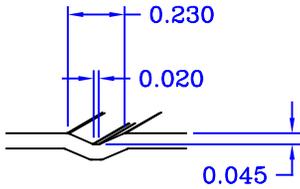


See FDD and HDD for details on our shelves.

Custom embossed door

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

V- type

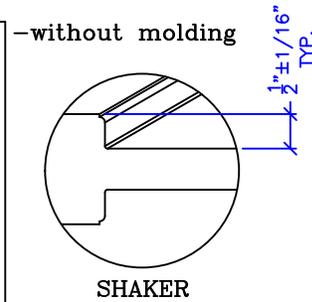
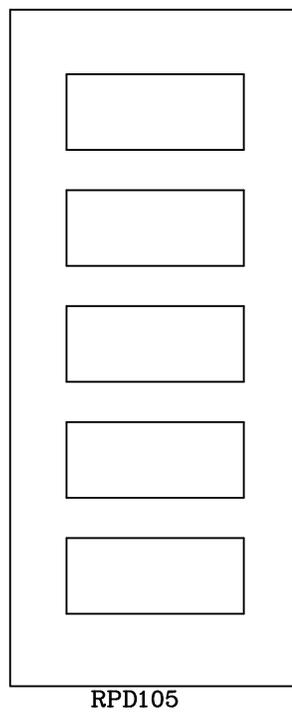
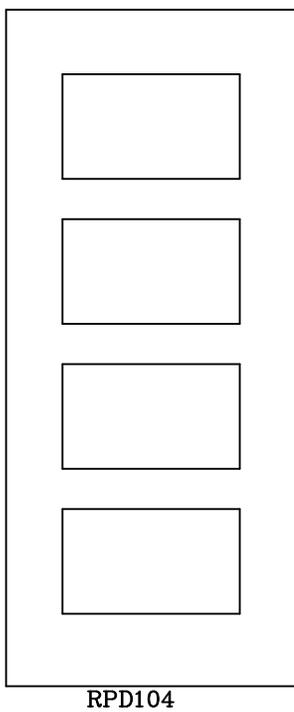
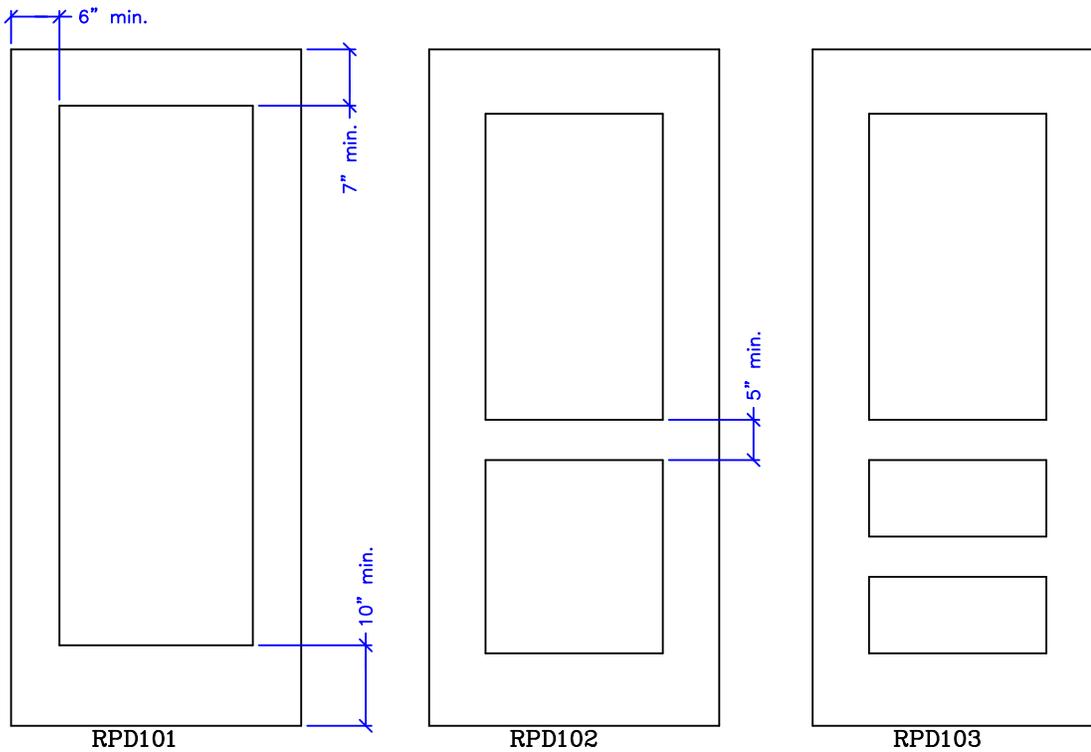


Other custom embossing available

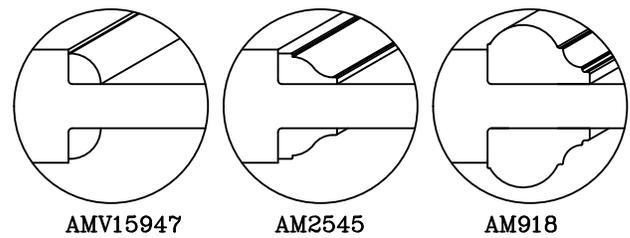
Maximum 4'0" door width

Recessed panel door

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



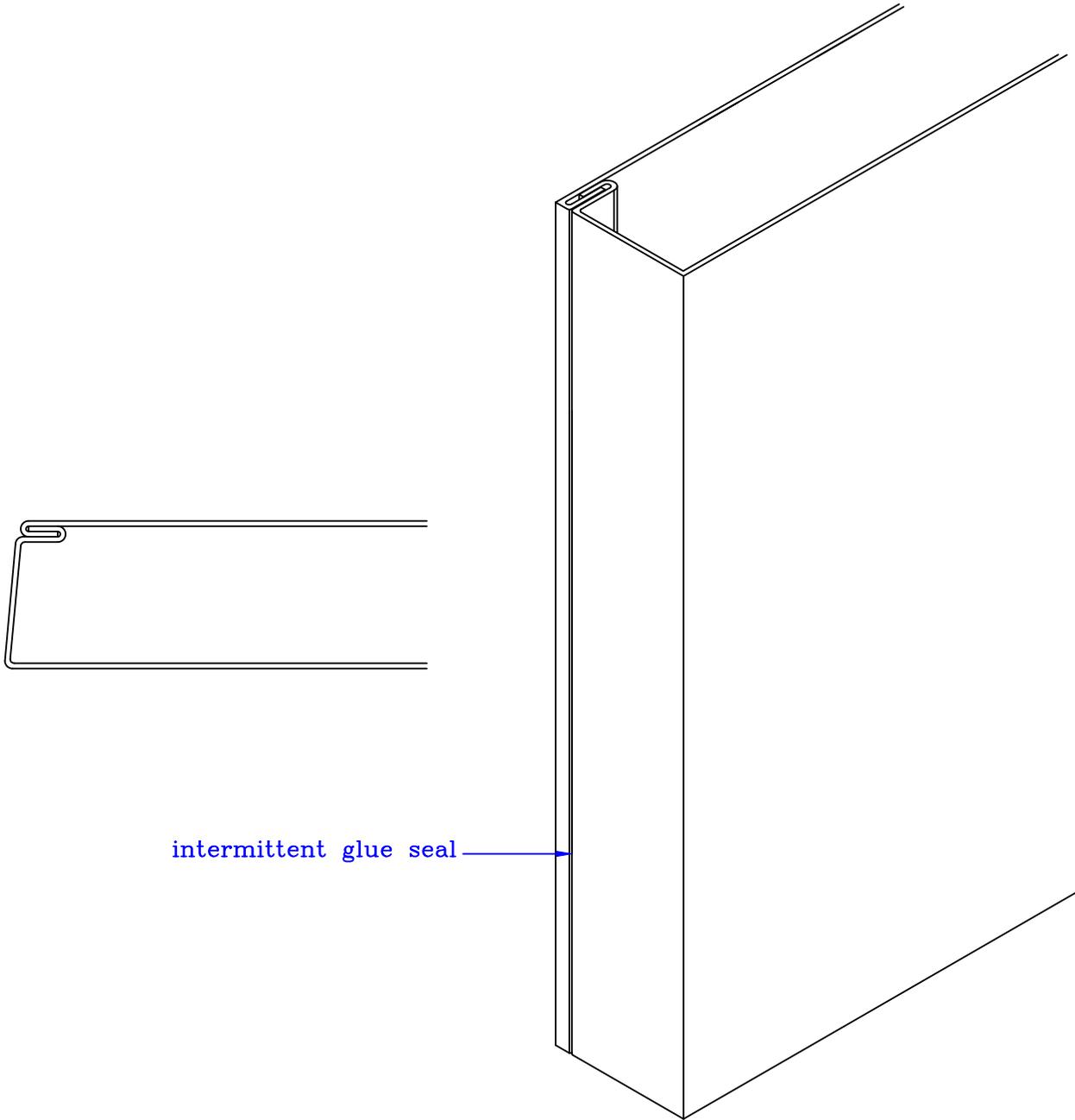
-with aluminum molding



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

Standard lock seam edge

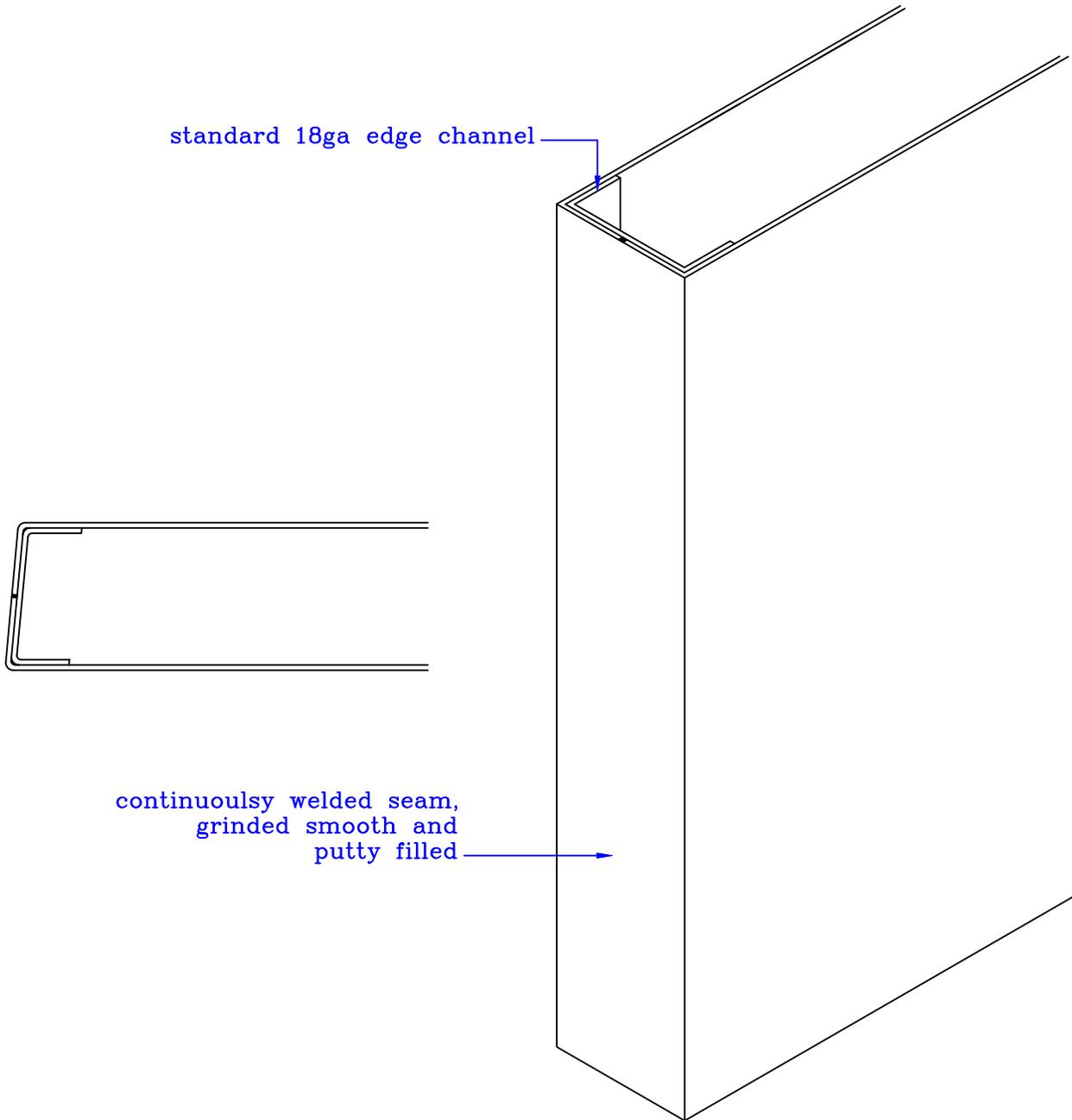
Door edge seam



intermittent glue seal

Continuously welded seamless

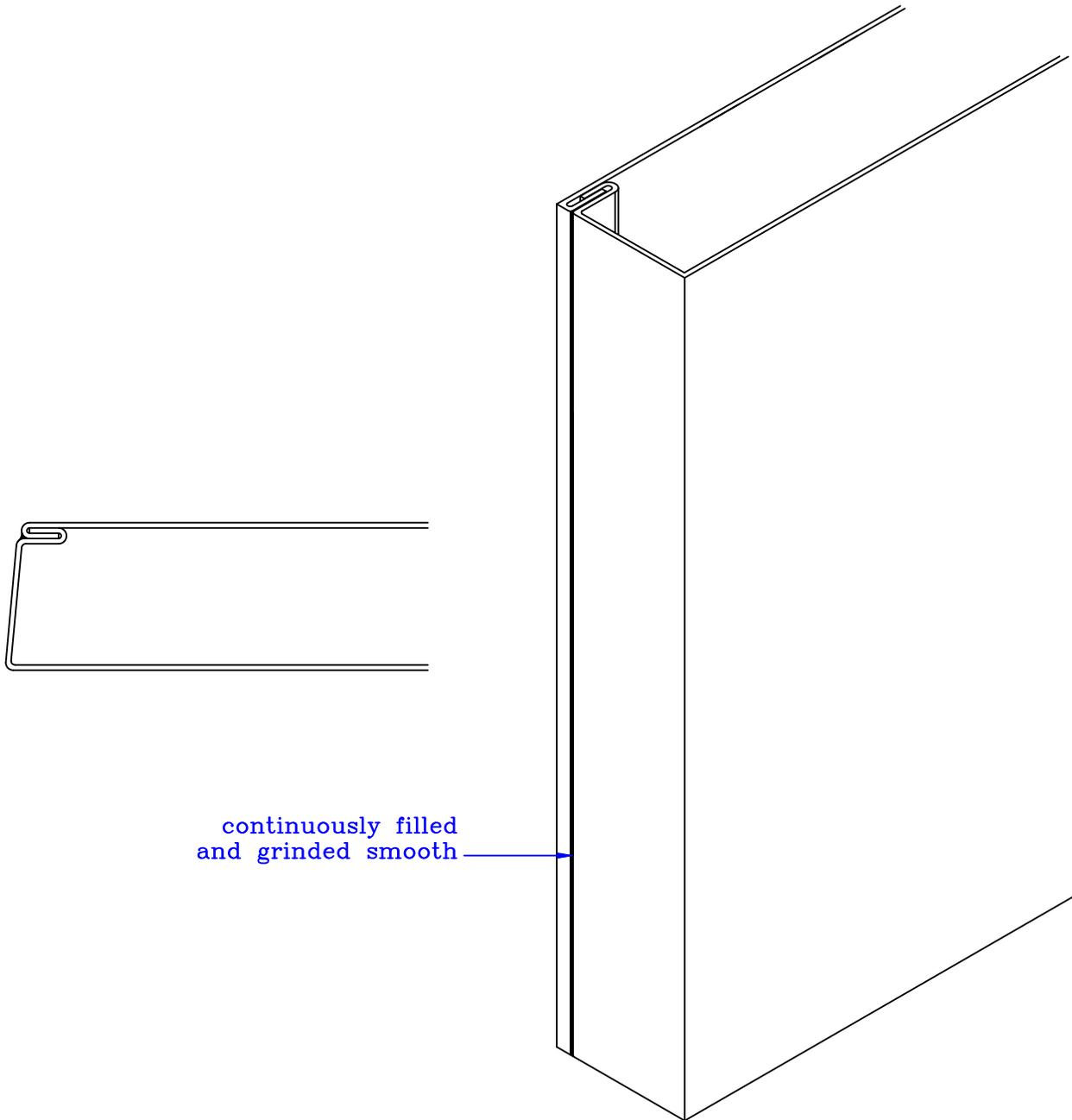
Door edge seam



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

CW

Lock seam edge filled seamless

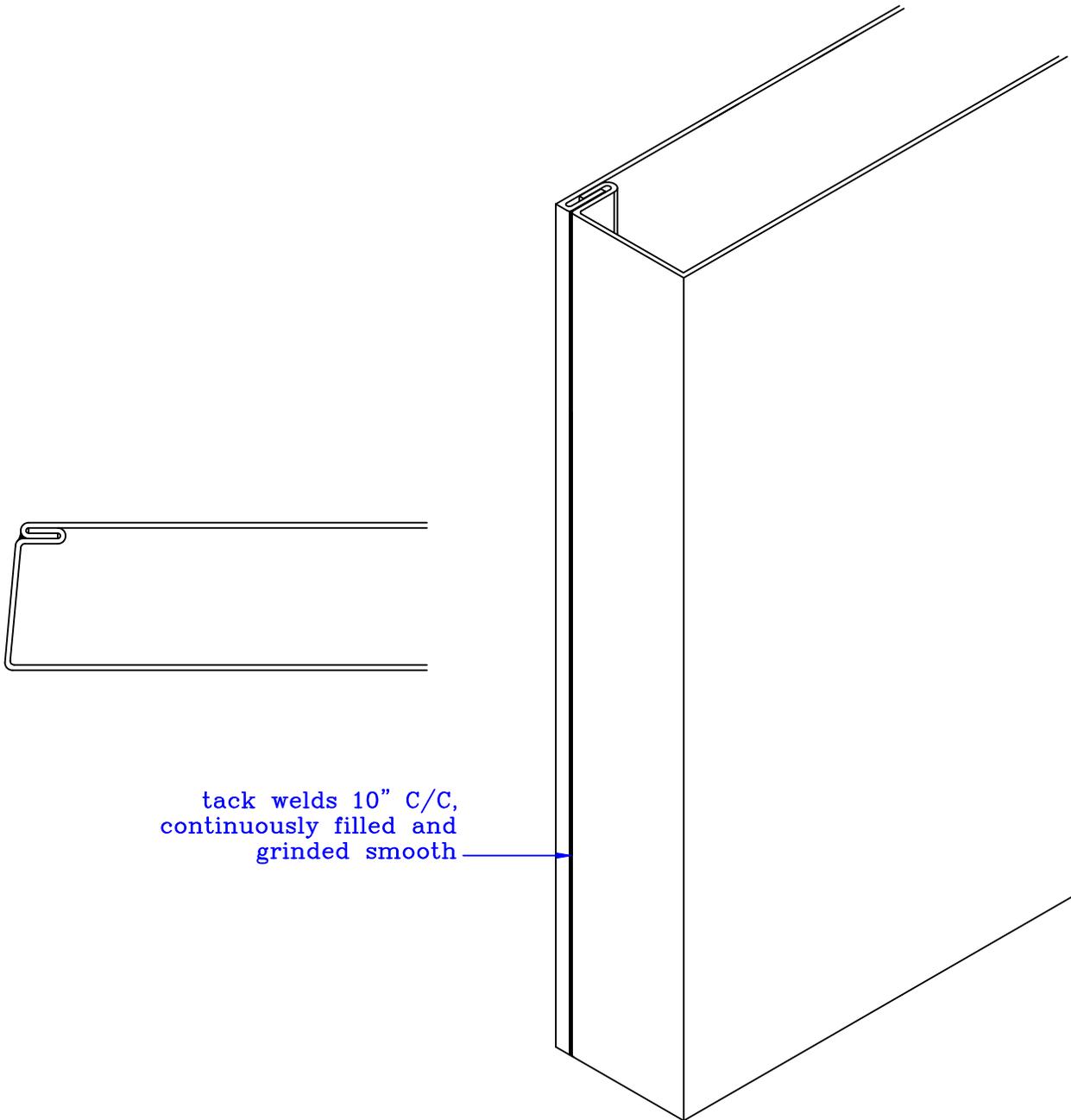


Door edge seam option

PAF

Available for beveled or square edge doors

Lock seam edge tack welded and filled seamless



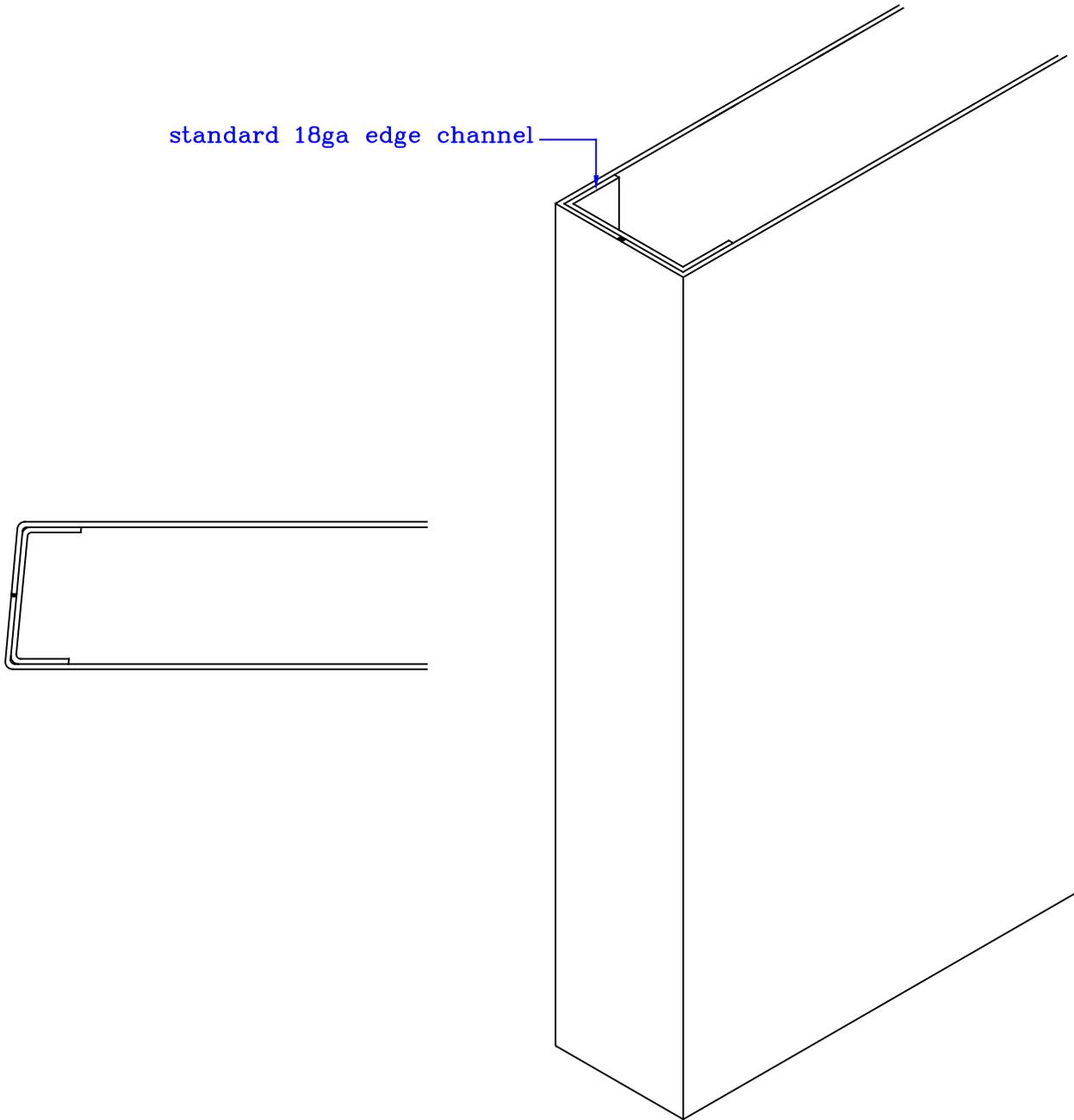
tack welds 10" C/C,
continuously filled and
grinded smooth

Door edge seam option

TWPF

Available for beveled or square edge doors

18ga edge channel

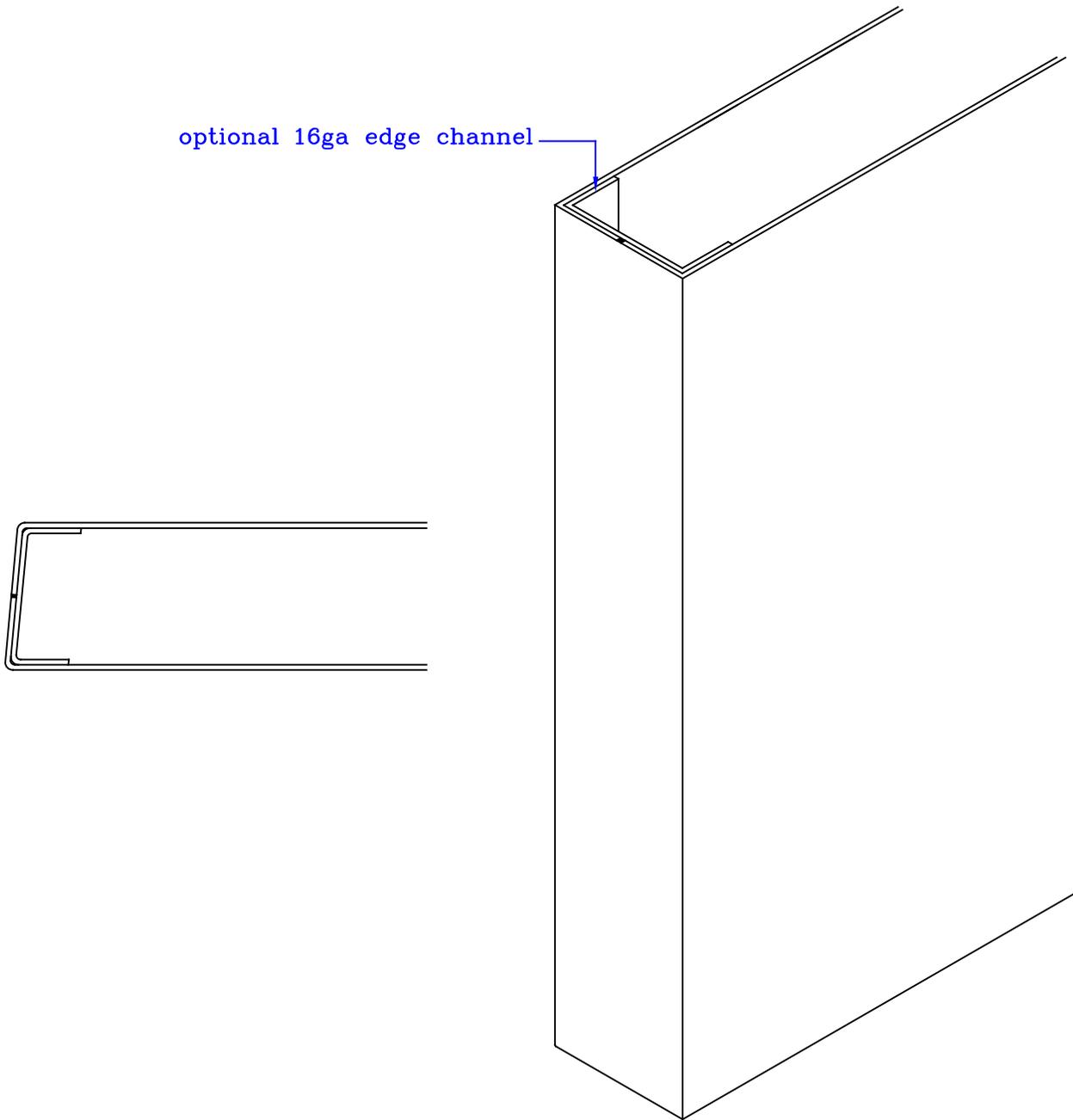


standard 18ga edge channel

18EC

Continuously welded edge channel

16ga edge channel

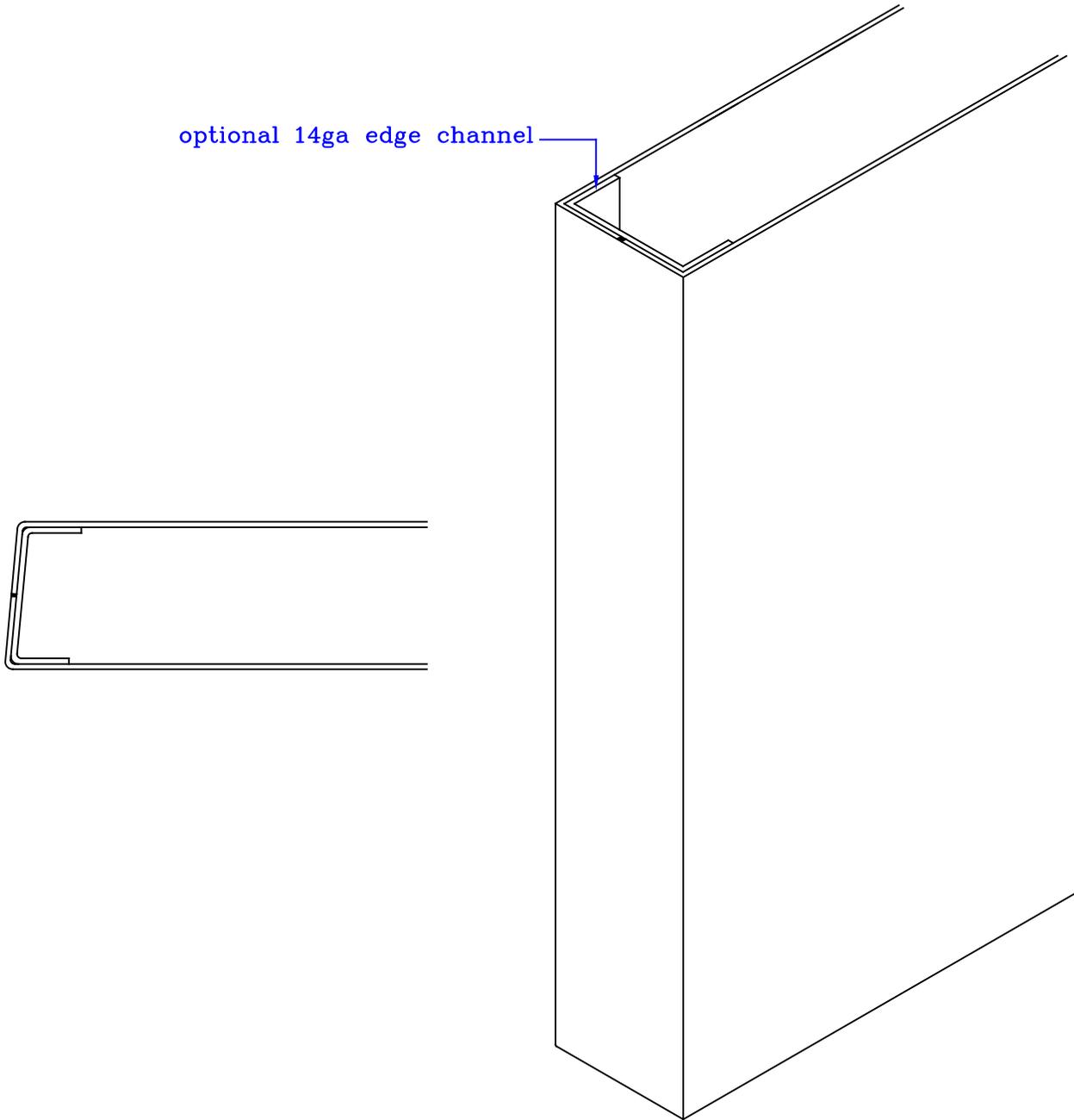


optional 16ga edge channel

16EC

Continuously welded edge channel

14ga edge channel

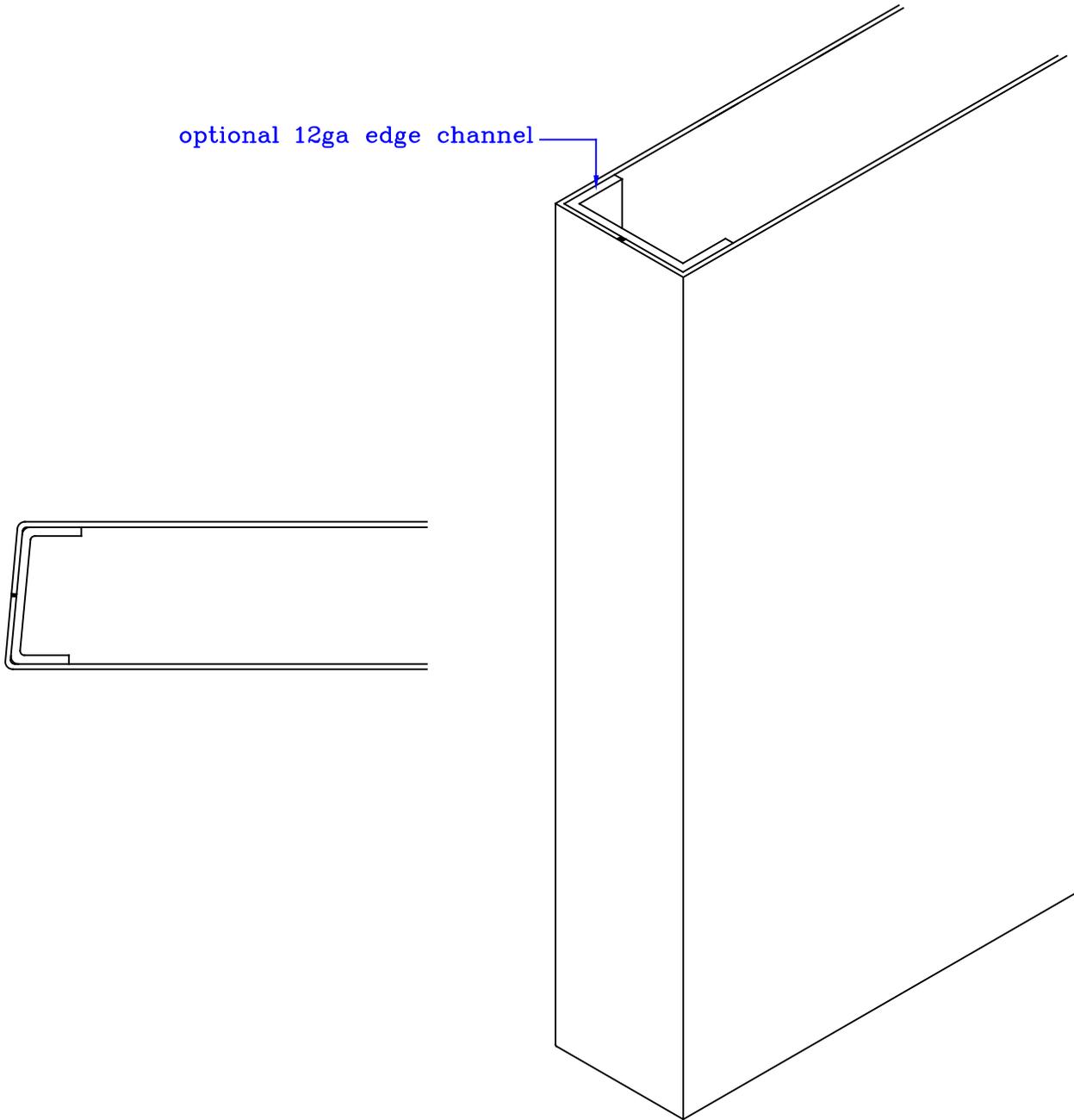


optional 14ga edge channel

14EC

Continuously welded edge channel

12ga edge channel

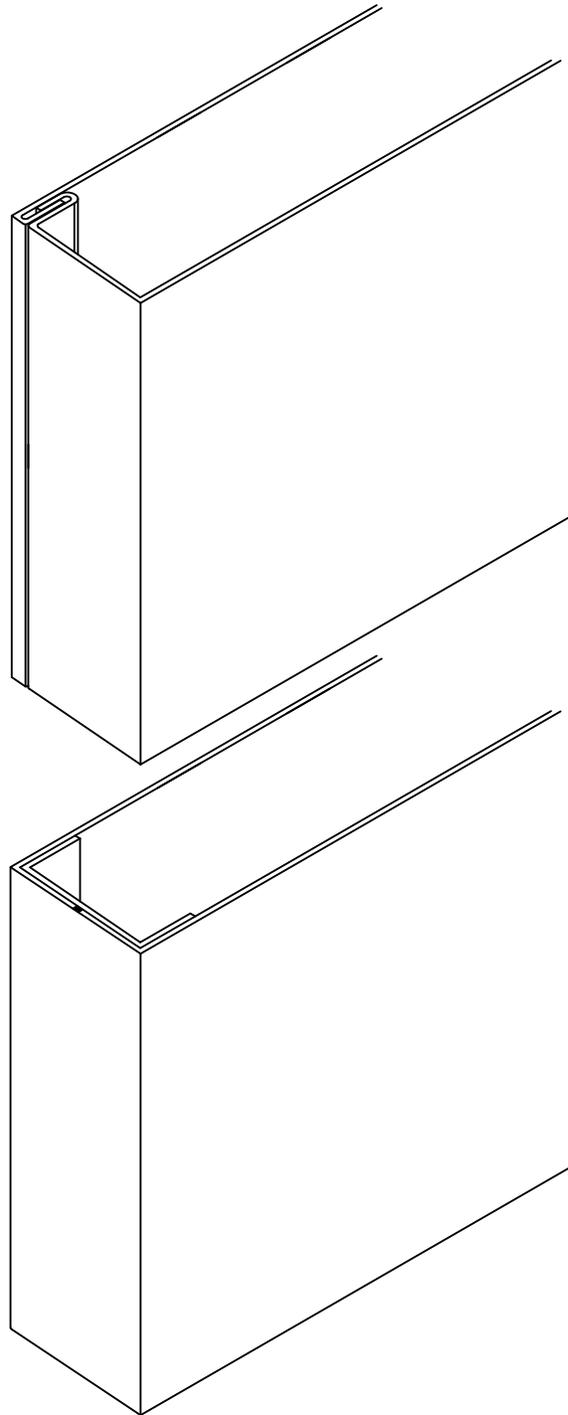
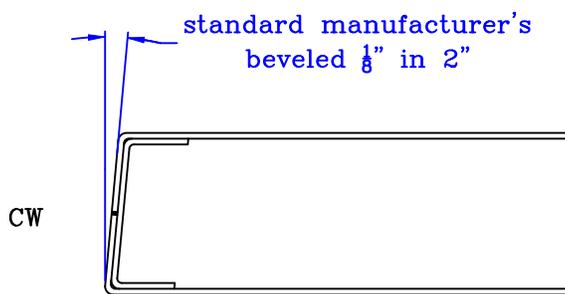
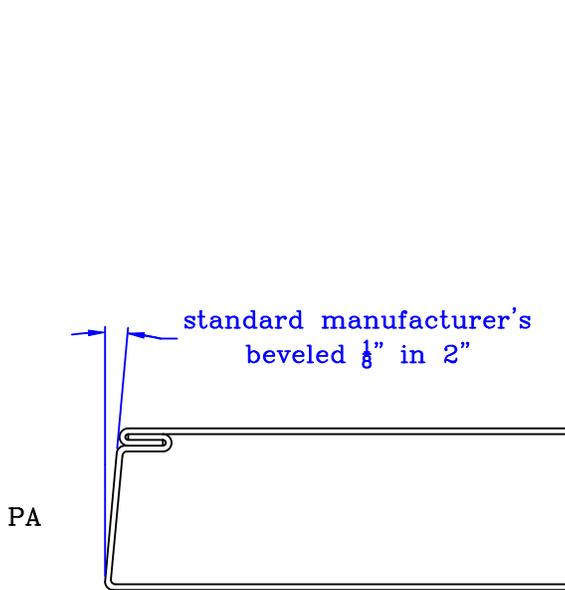


optional 12ga edge channel

12EC

Continuously welded edge channel

Beveled edge door

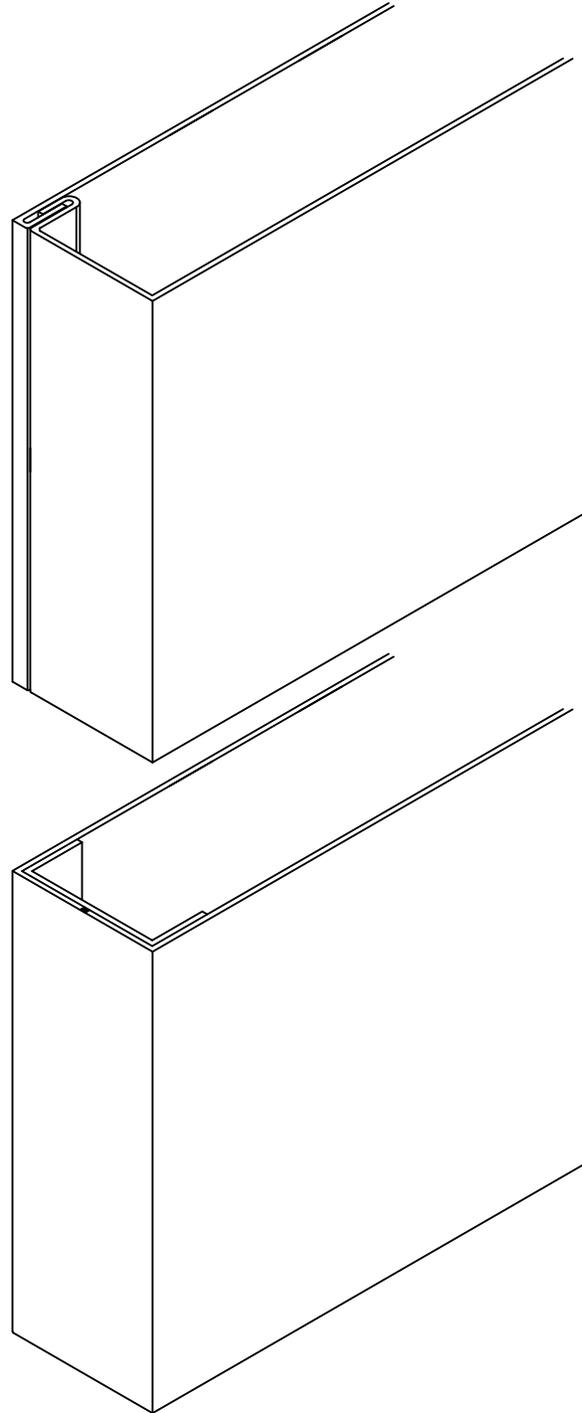
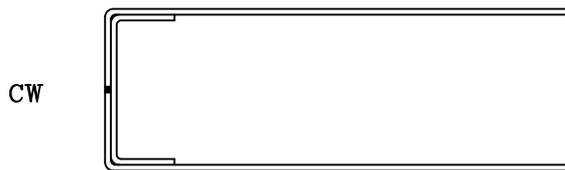
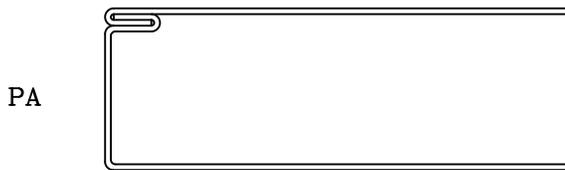


Hinge edge construction

Standard for doors with butt hinges

BEVH

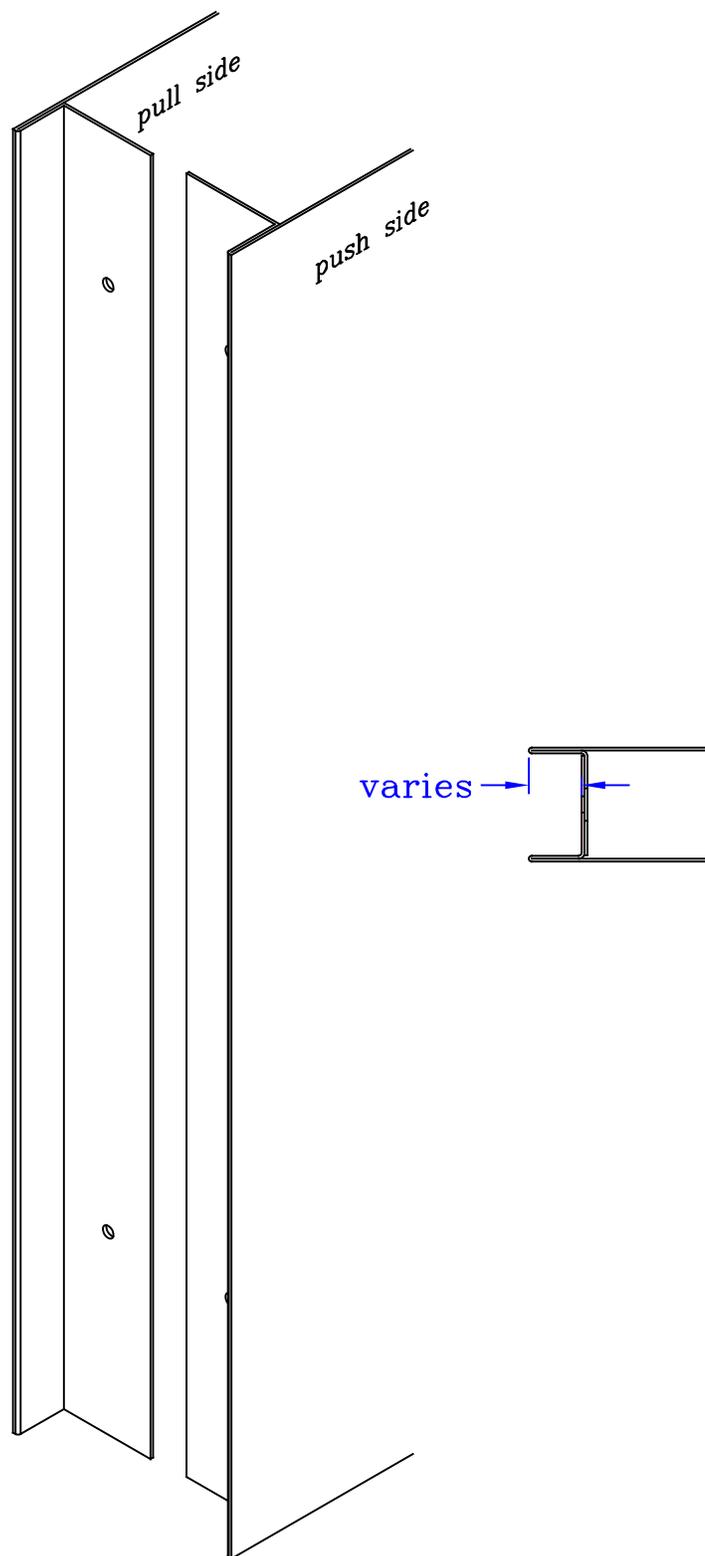
Square edge door



Hinge edge construction

Standard for doors with continuous hinge

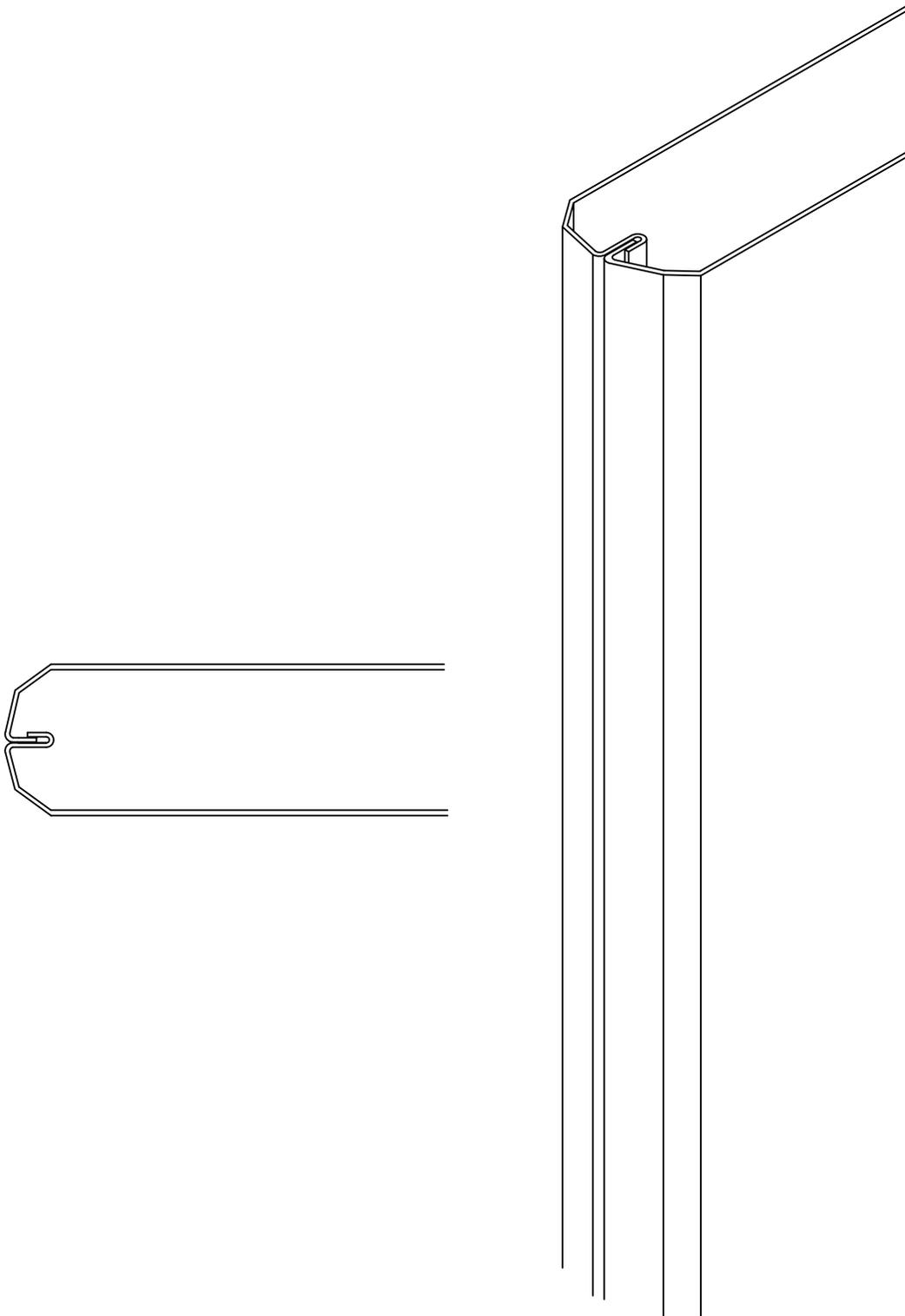
Pocket pivot edge



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

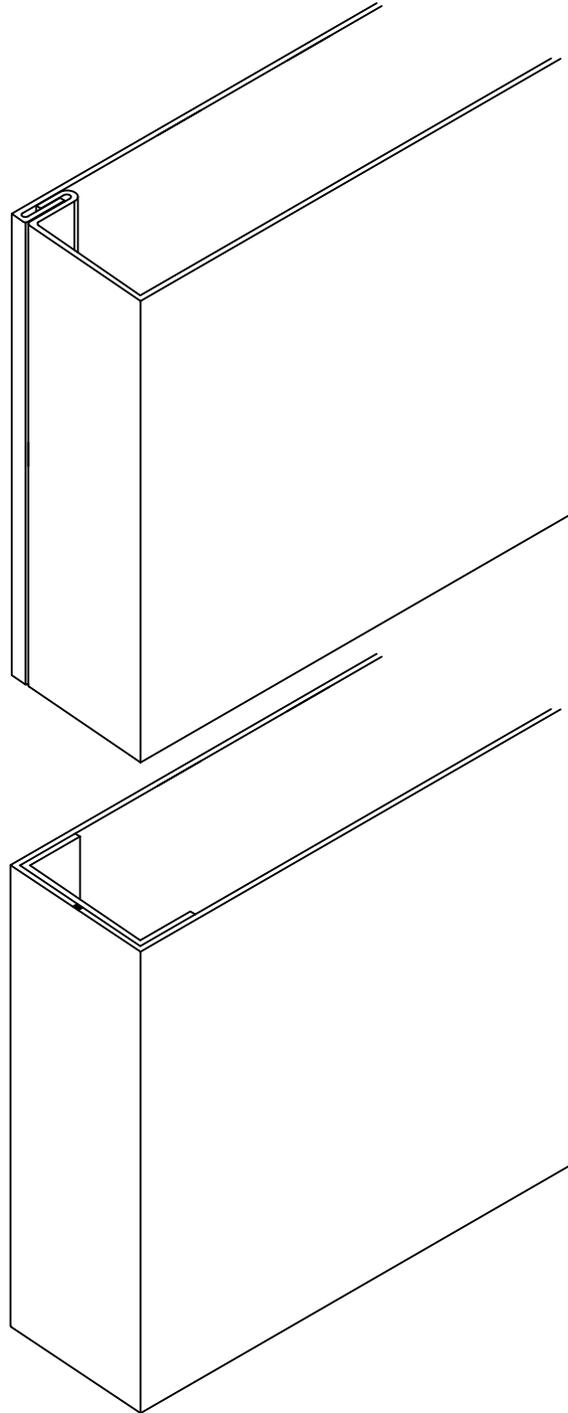
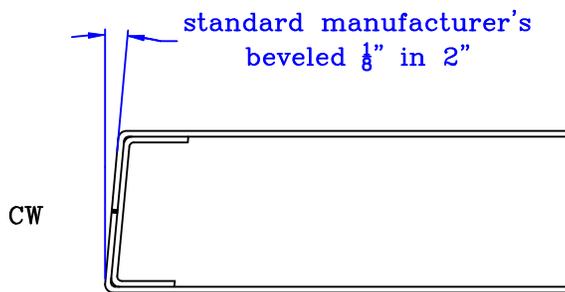
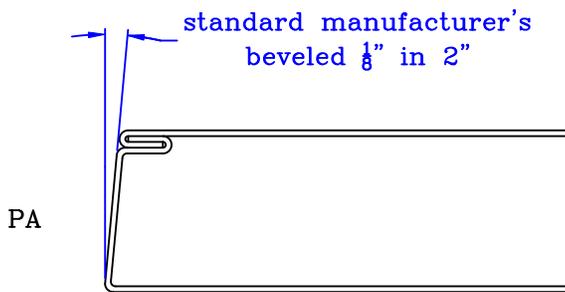
Segmented radius pivot edge for double acting door

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

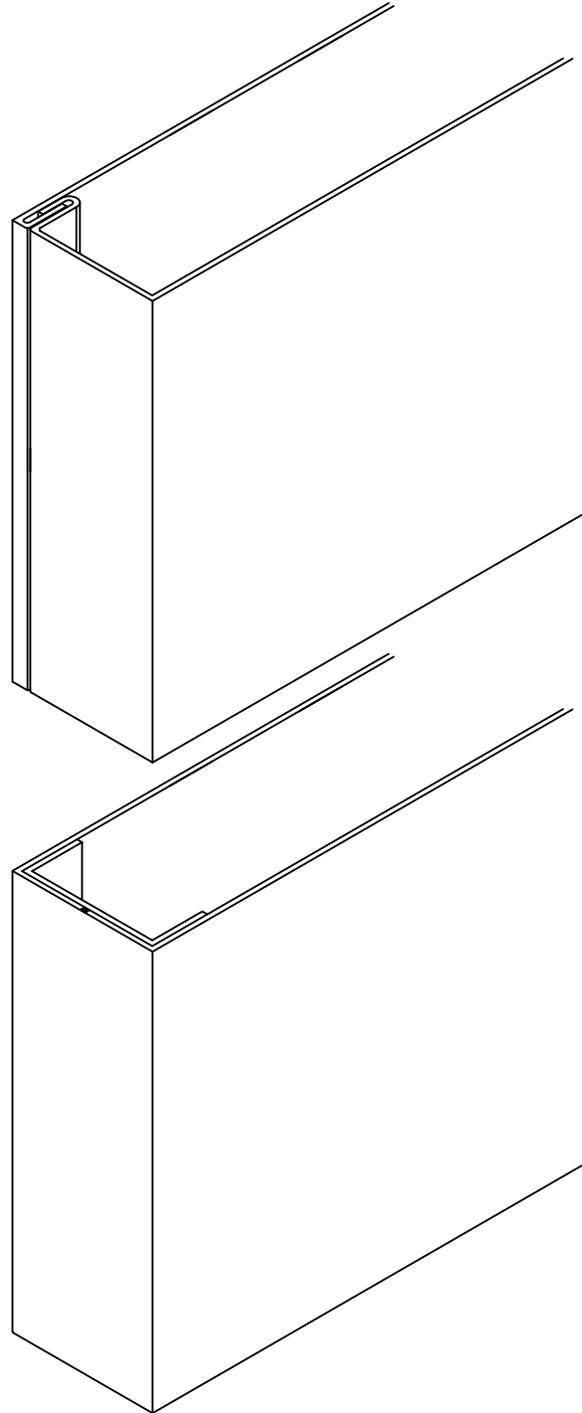
BEVL

Square edge door

PA



CW

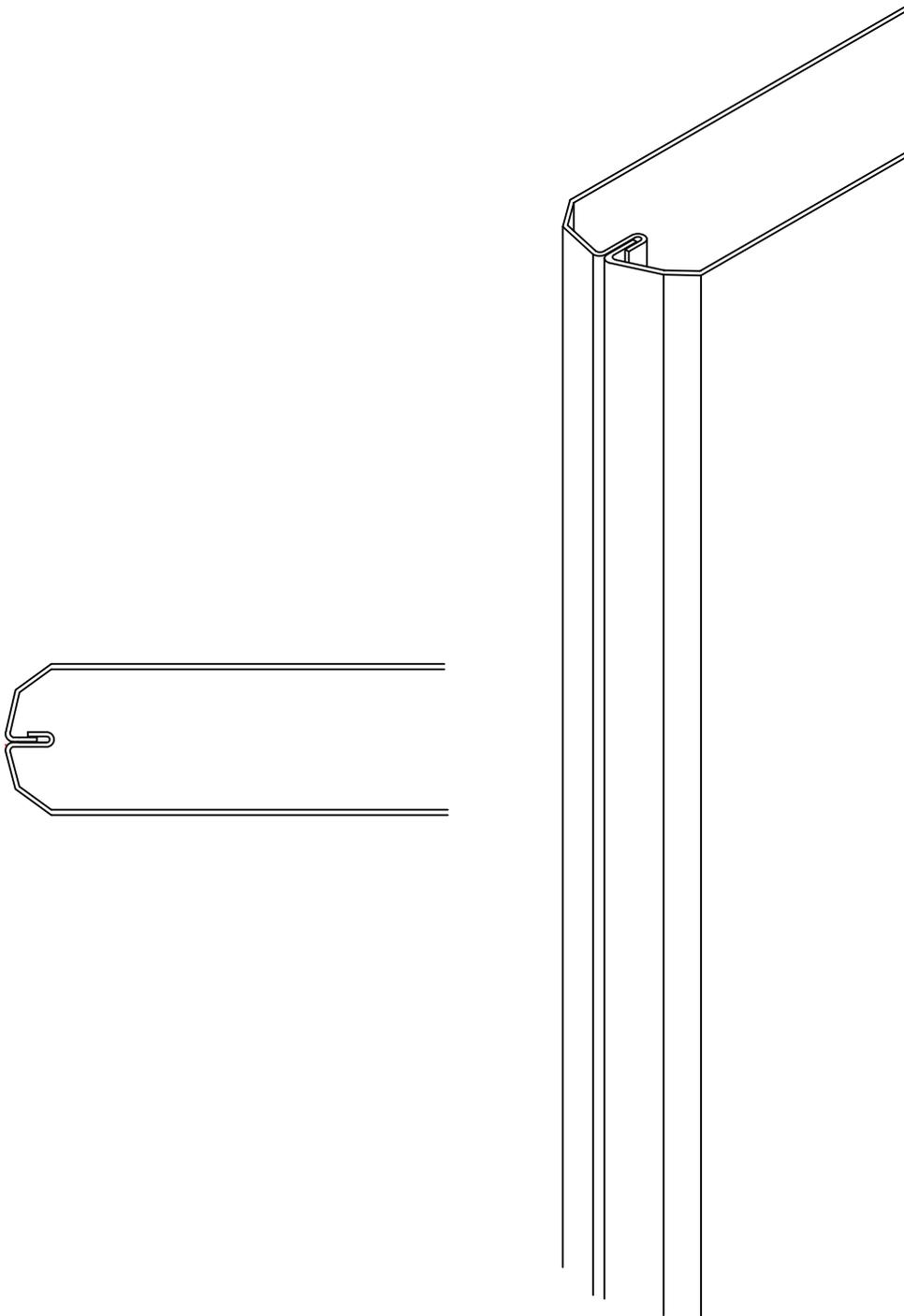


Lock edge construction

Standard at strike edge

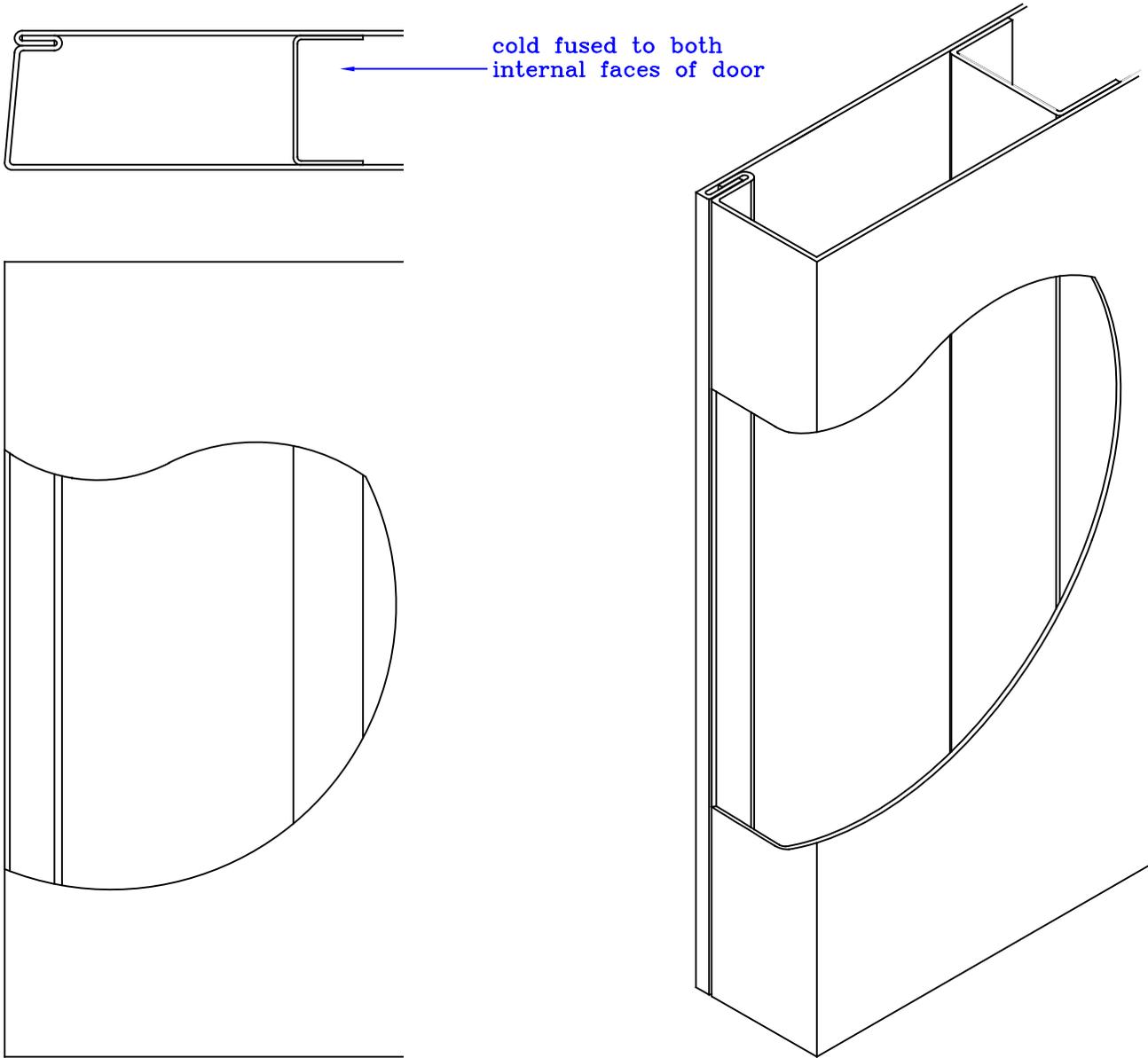
Segmented radius at lock edge

Available for 18 and 16ga.



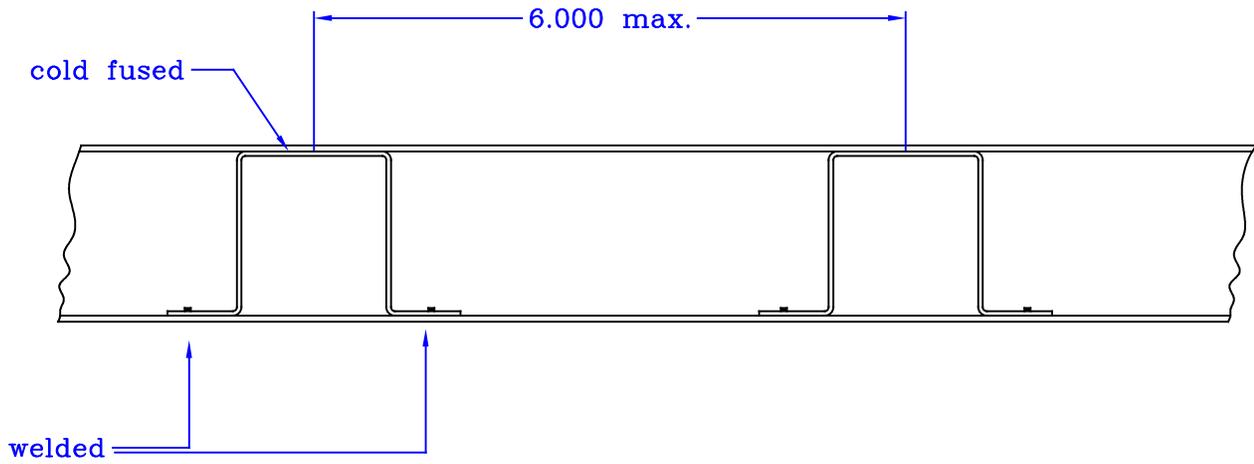
Edge putty filled if PA or CW on hinge edge

Bonded stiffener



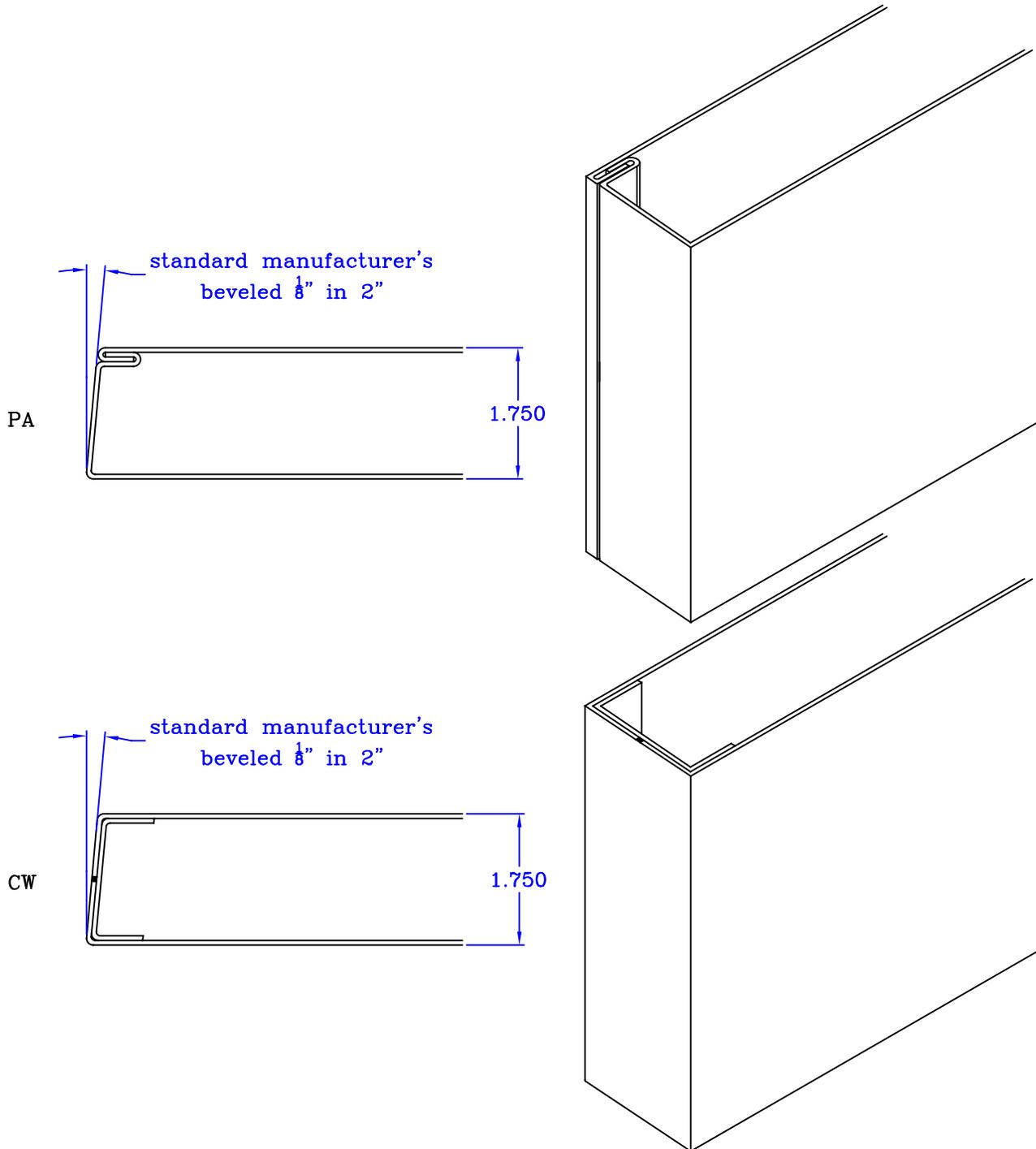
Stiffener option

Welded stiffener



1 3/4" door thickness

Nominal thickness shown, may vary with gage

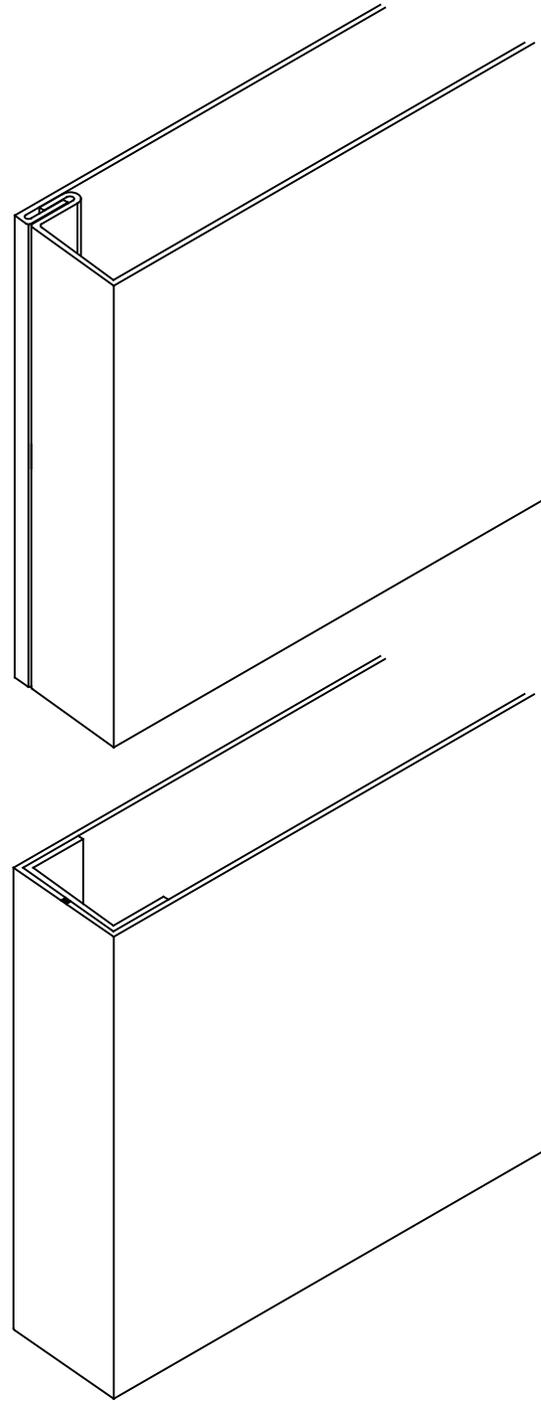
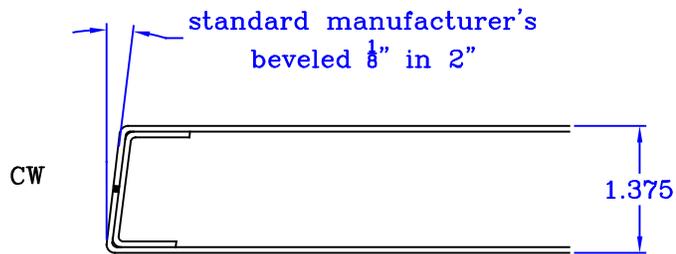
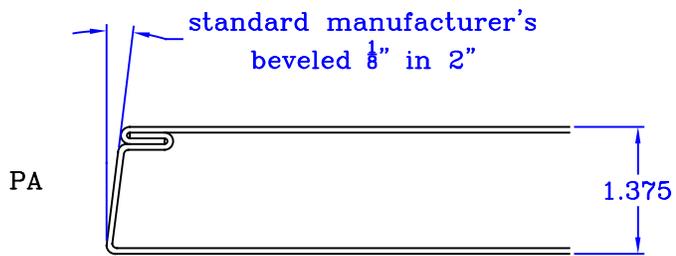


Door thickness

Beveled edge shown, square edge available

1 3/8" door thickness

Nominal thickness shown, may vary with gage

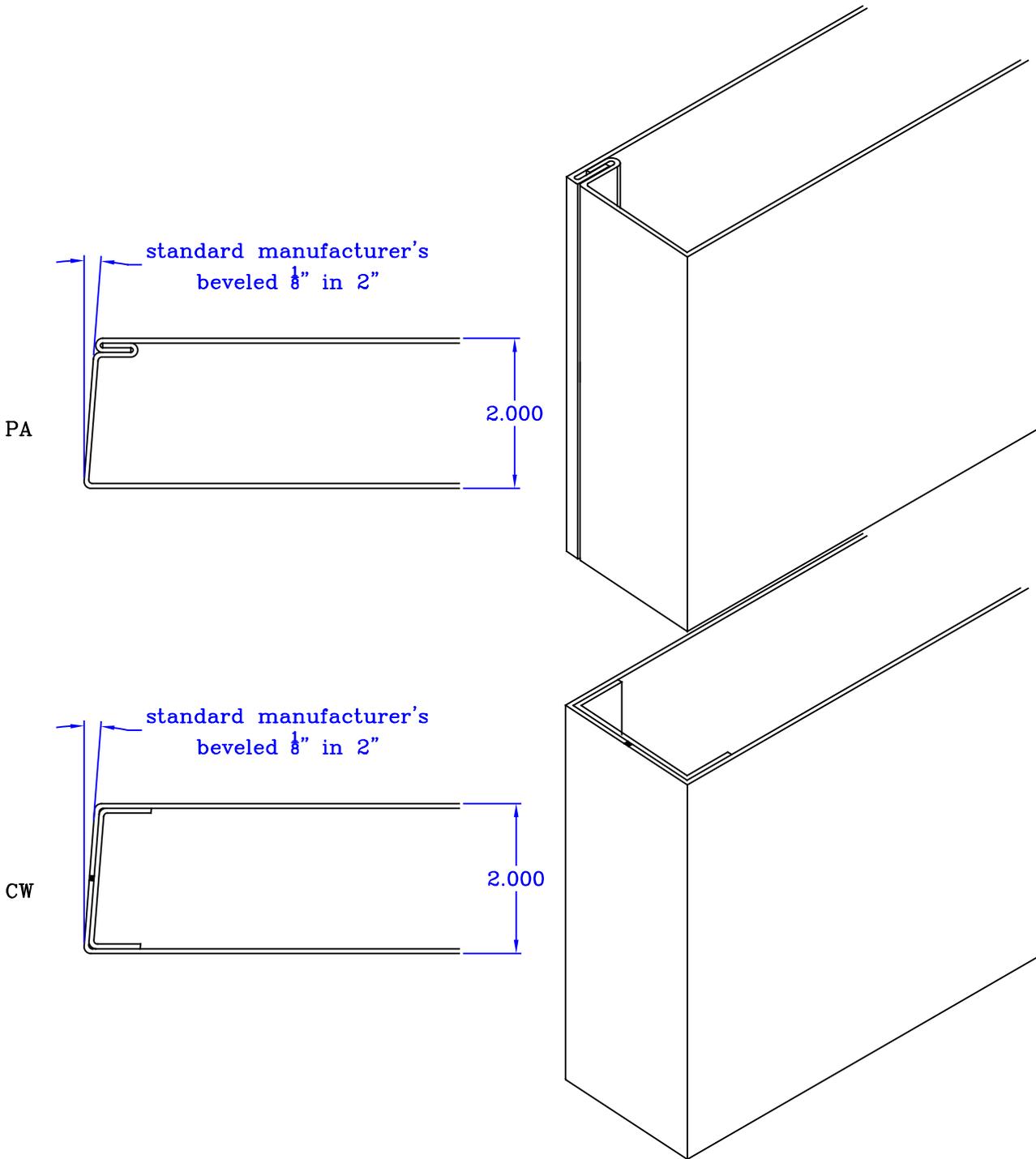


Door thickness

Beveled edge shown, square edge available
Polystyrene core only

2" door thickness

Nominal thickness shown, may vary with gage

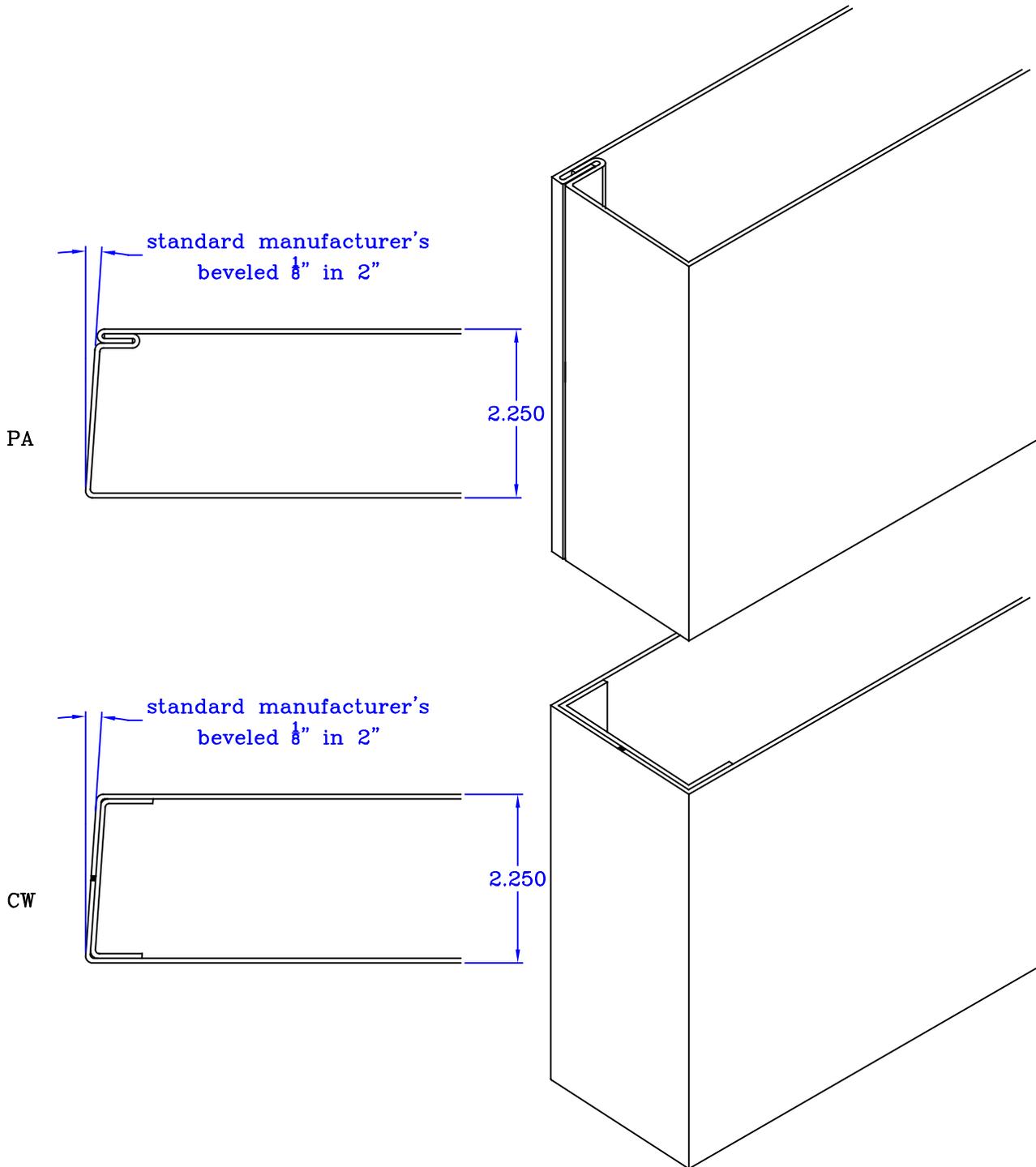


Beveled edge shown, square edge available
Polystyrene core only
Standard 1/4" hinge backset unless stated otherwise

2 1/4" door thickness

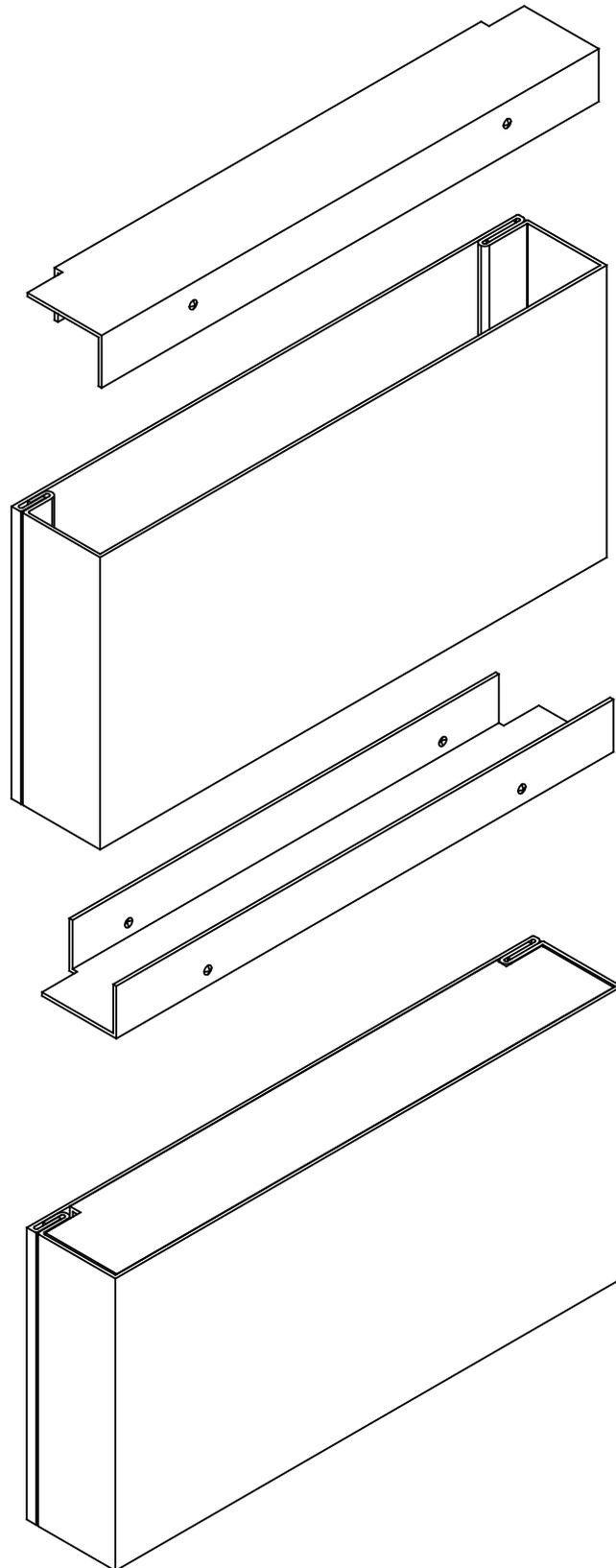
Nominal thickness shown, may vary with gage

Door thickness



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

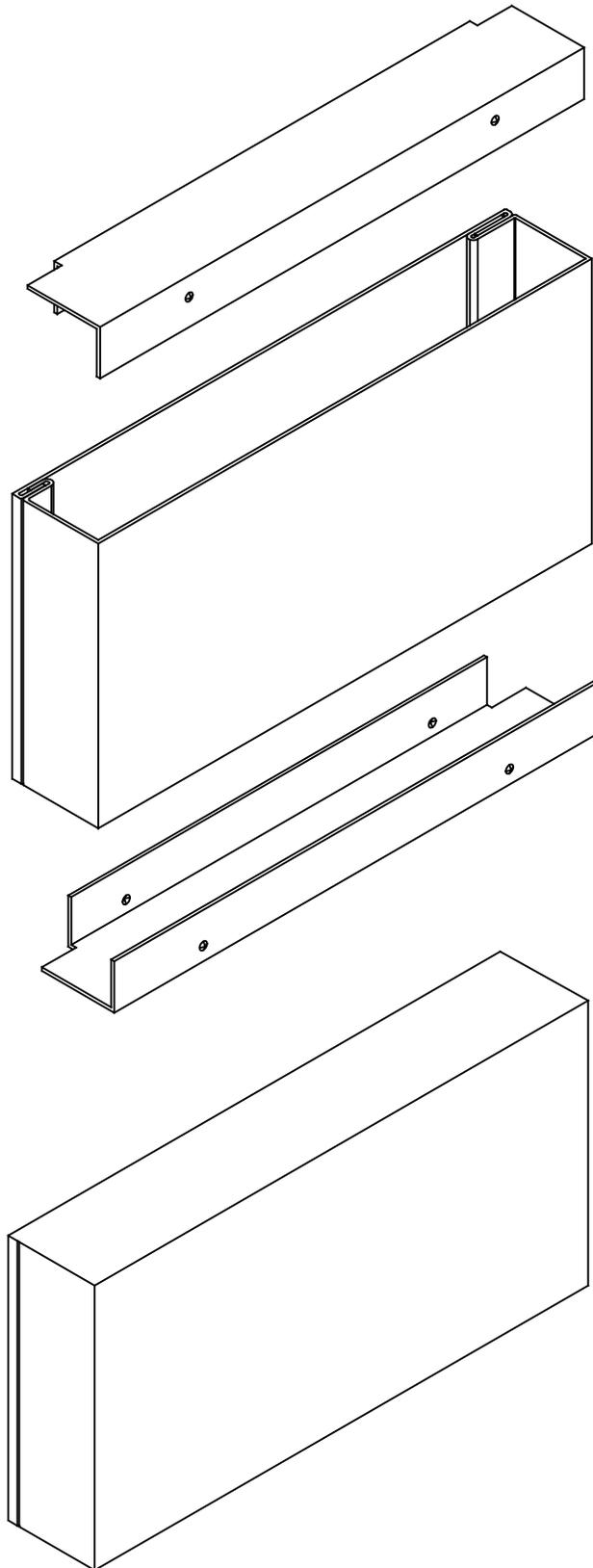
Flush welded cap
Projection welded



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

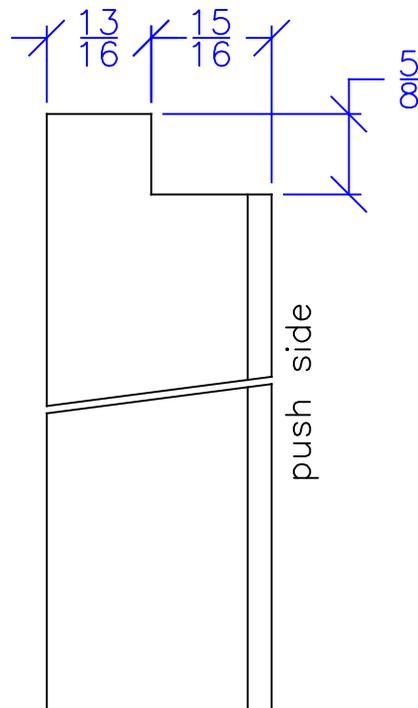
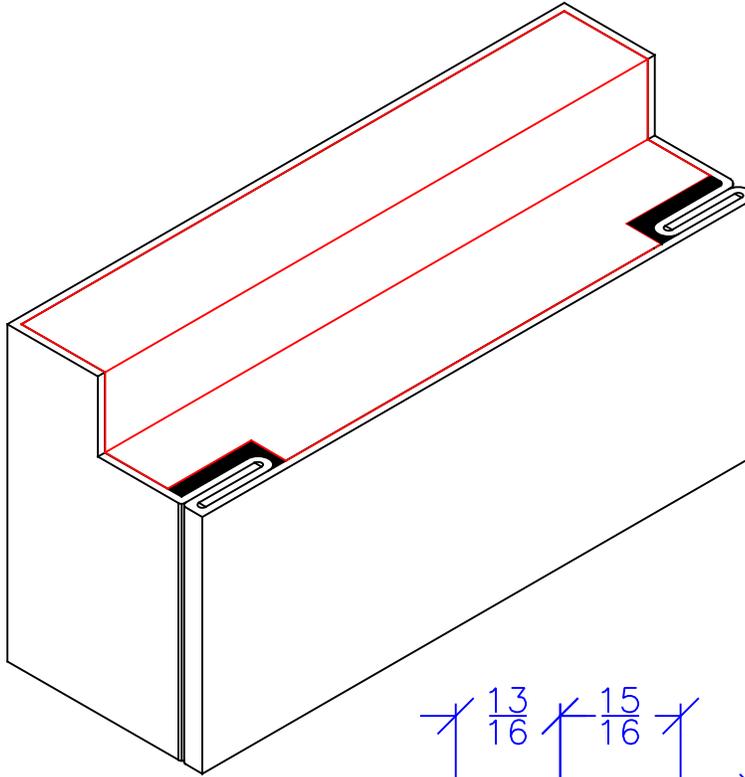
Flush welded and sealed cap

Projection welded



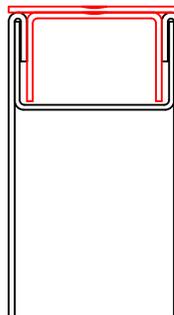
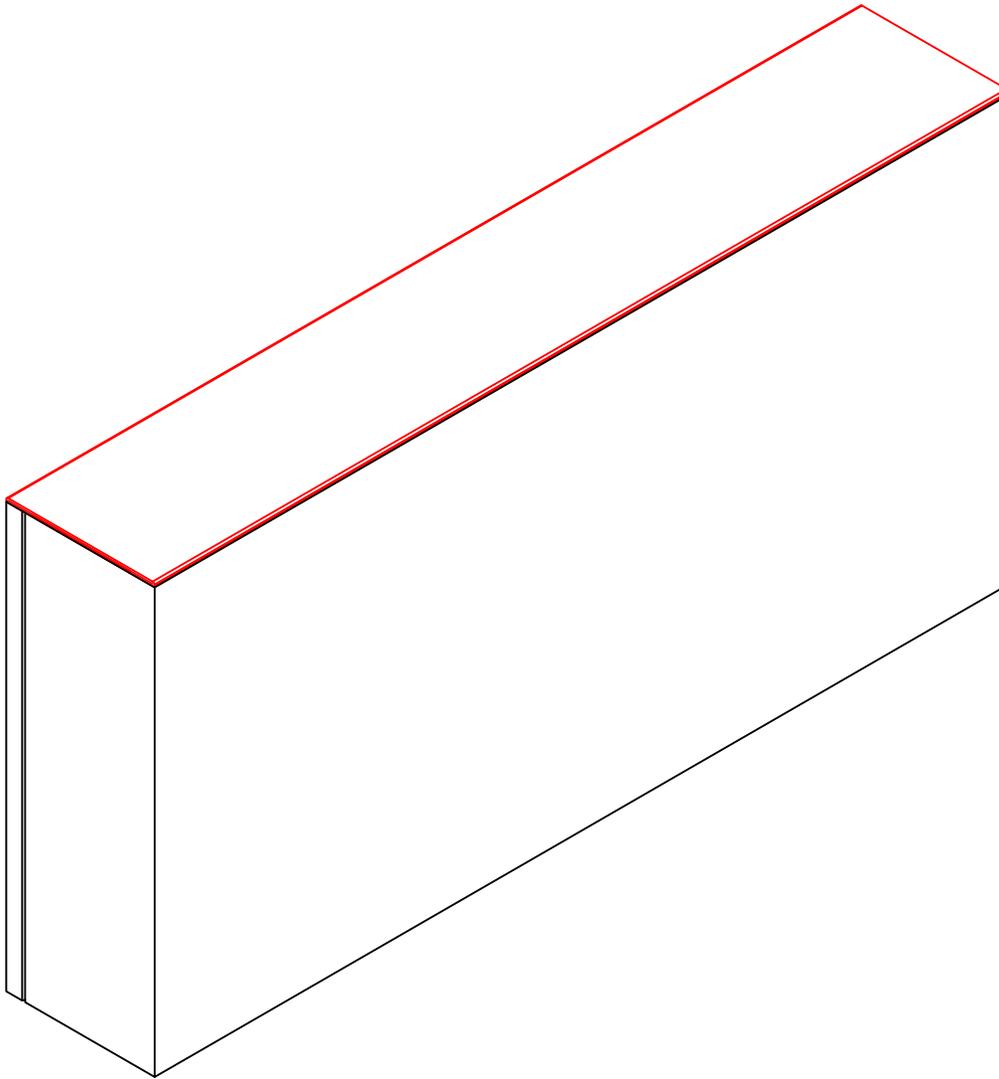
Available for top and/or bottom
*16ga, 14ga & 12ga optional see CH14 & CH12

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

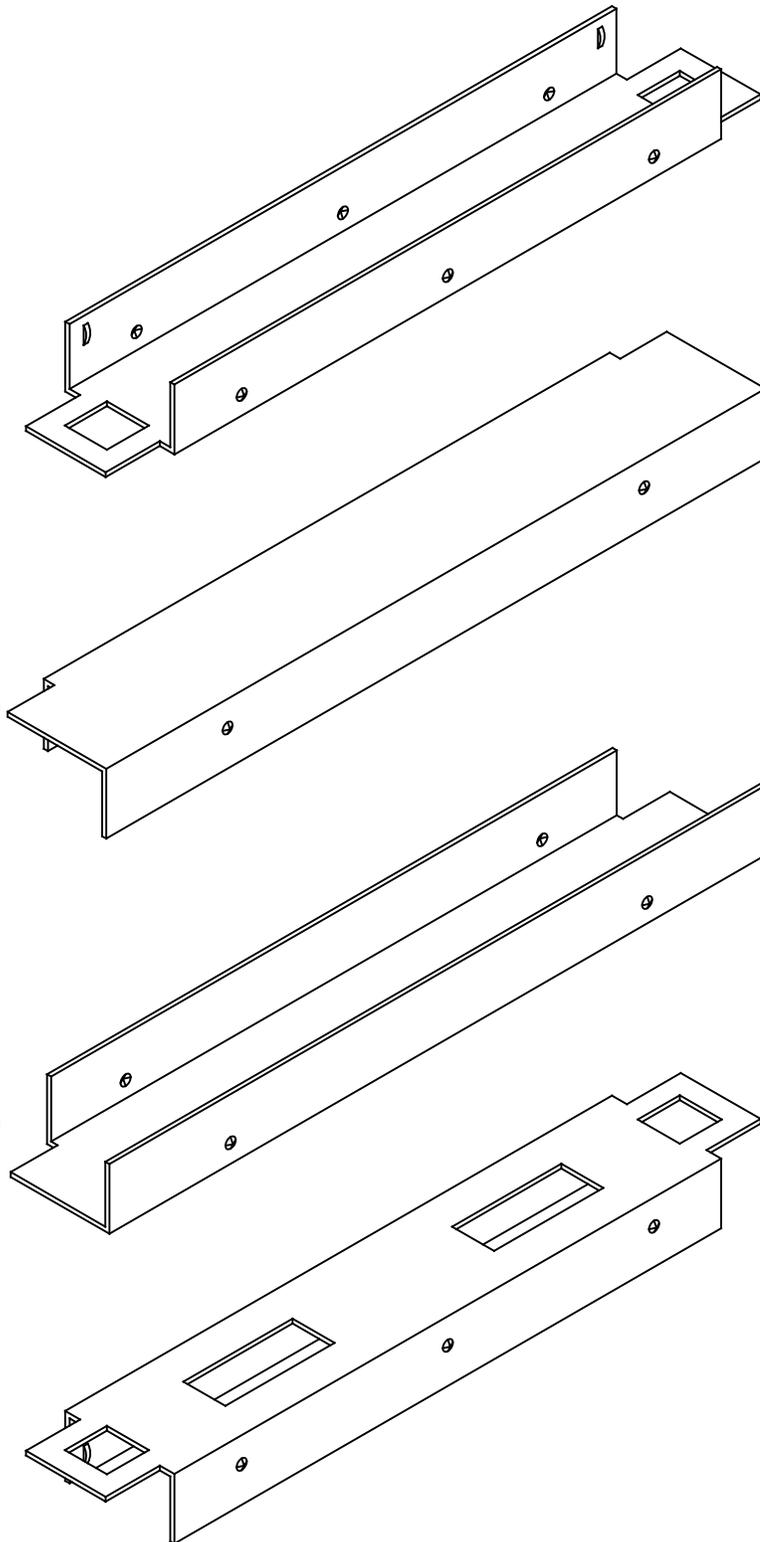
ST

FWC/FWSC

BOTTOM

FWC/FWSC

ST



End channel / Cap option

CH14

12 gauge end channel/cap

Tack and/or plug welded

TOP

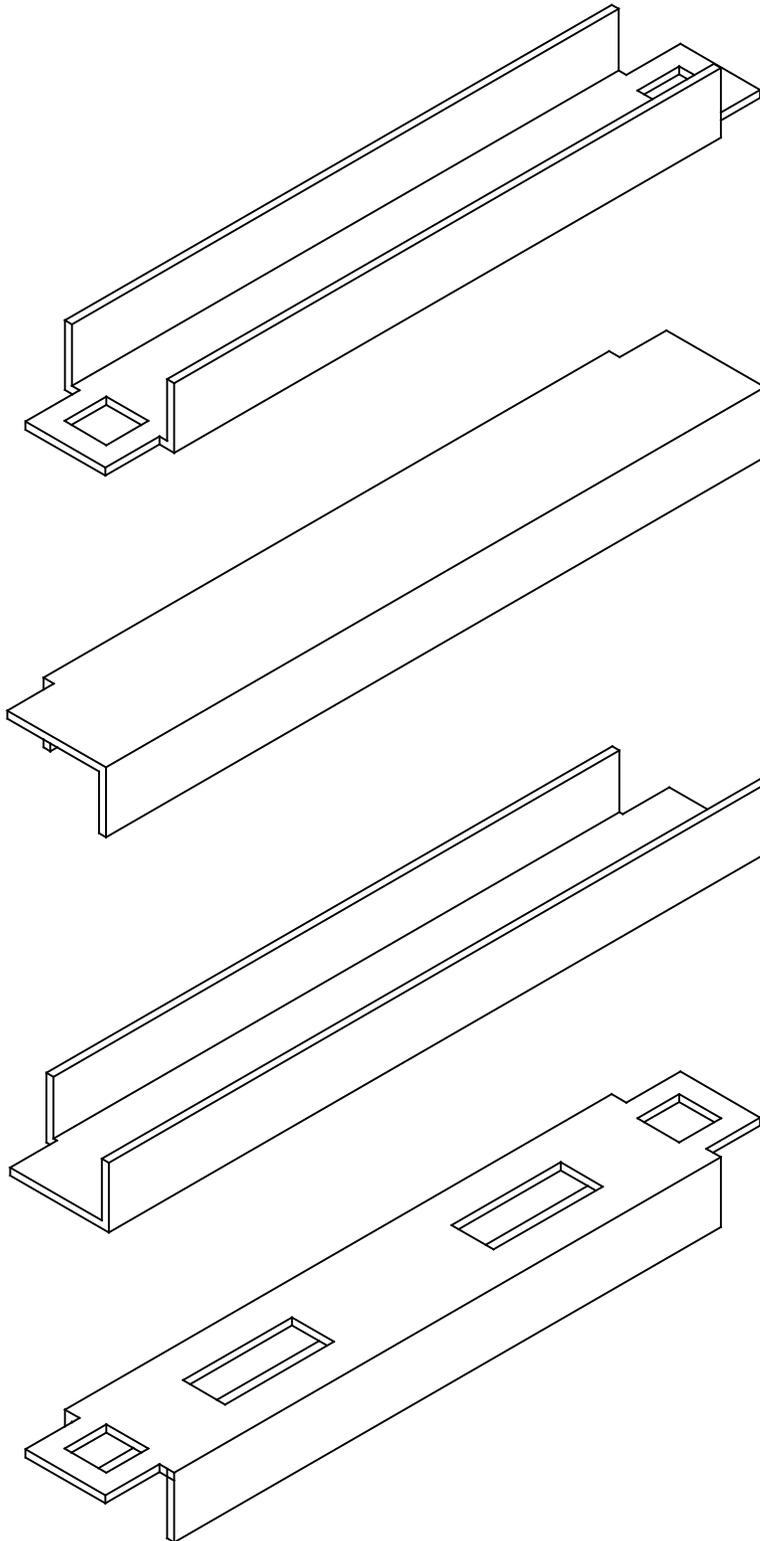
ST

FWC/FWSC

BOTTOM

FWC/FWSC

ST



End channel / Cap option

CH12

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

Average volume solids: 34.3%

Thinner: water

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 (ft²/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

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



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



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>CONSTRUCTION LABEL - FIRE DOOR OR FRAME</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>000000-00161</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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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

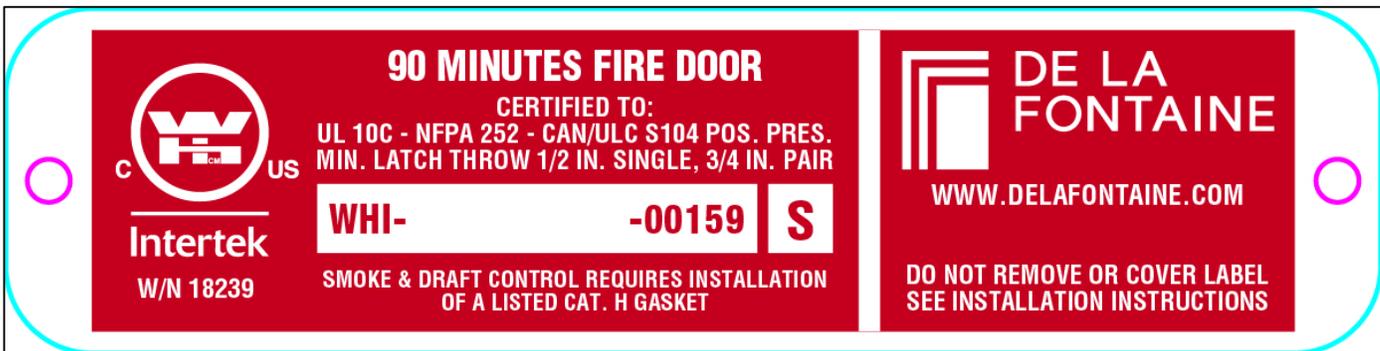


Located between 1st and 2nd hinge prep when butt hinges or
at top channel when continuous hinge.

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

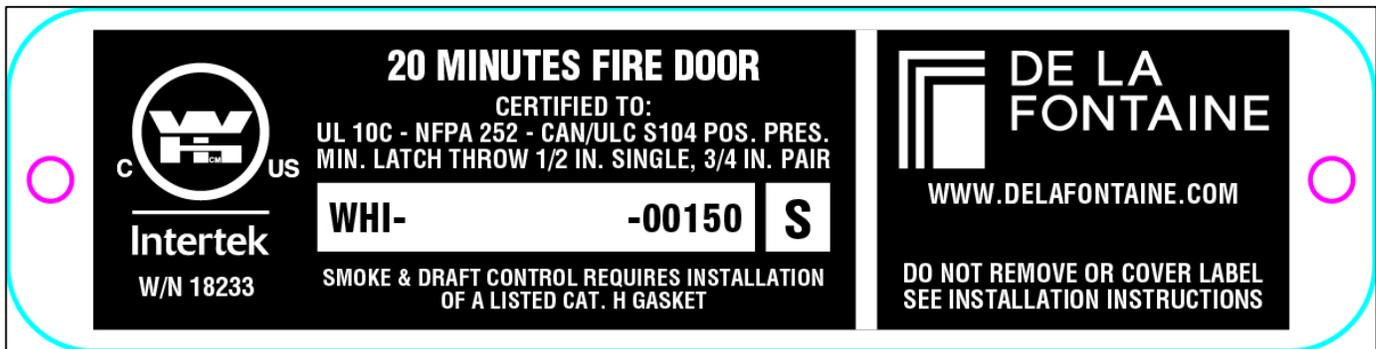
Label



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

<p>FLORIDA BUILDING CODE APPROVED PRODUCT</p> <p>FL46851</p> <p>DO NOT REMOVE OR COVER LABEL</p>	<p>SINGLE & 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>	 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.

HUR50

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

Label

<p>FLORIDA BUILDING CODE APPROVED PRODUCT</p> <p>FL46851</p> <p>SINGLE & 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> 000000-21001</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
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<p>FLORIDA BUILDING CODE APPROVED PRODUCT</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> 000000-21000</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
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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

FLORIDA BUILDING CODE APPROVED PRODUCT FL21194		 DE LA FONTAINE WWW.DELAFONTAINE.COM ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC
 Intertek W/N 16686	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  000000-20751 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

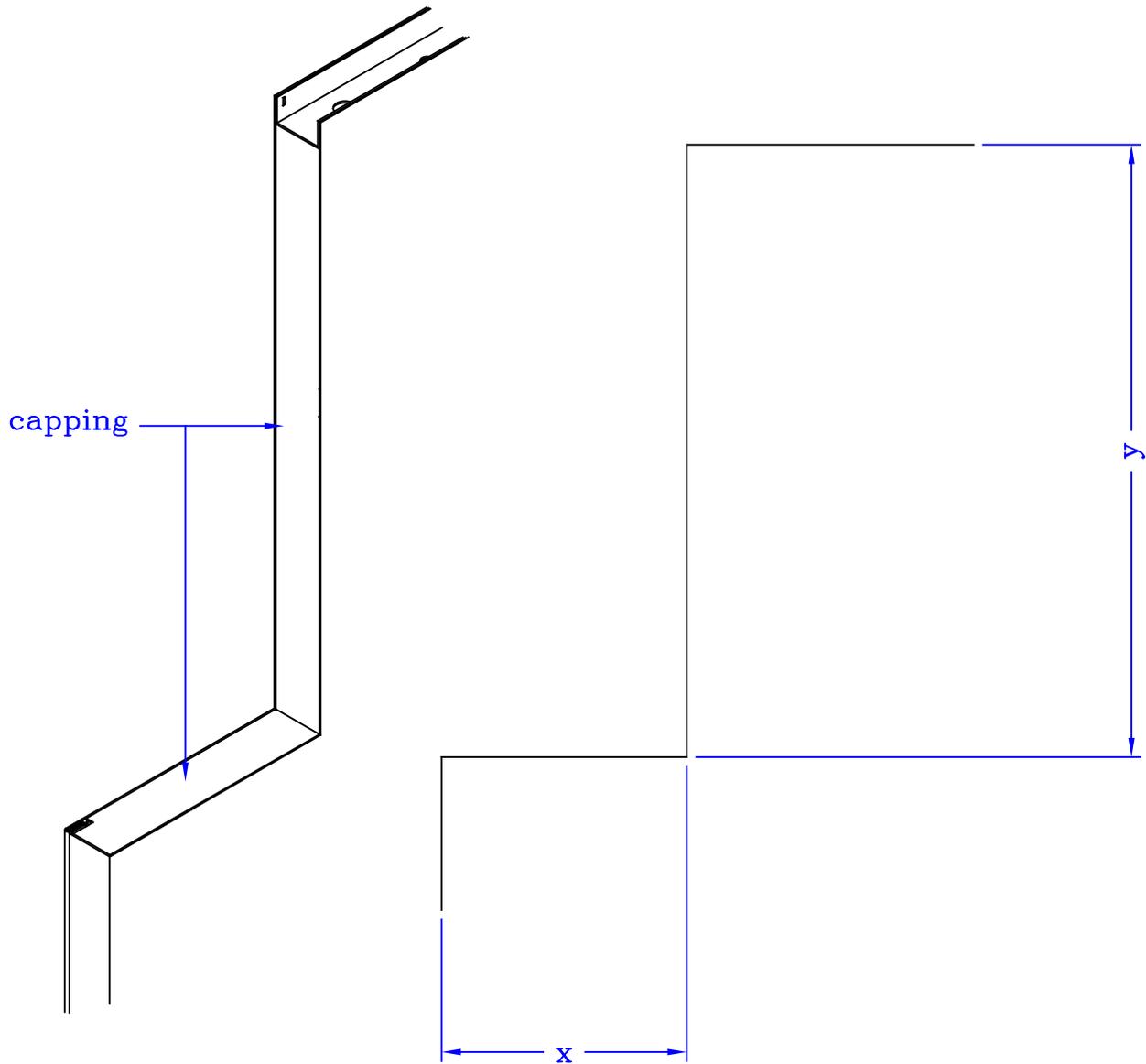
Label

<p>HURRICANE-RESISTANT DOOR/FRAME CONSTRUCTION</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/ft² total both sides per the single spot test.

In SI units it would be 90g/m² 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.

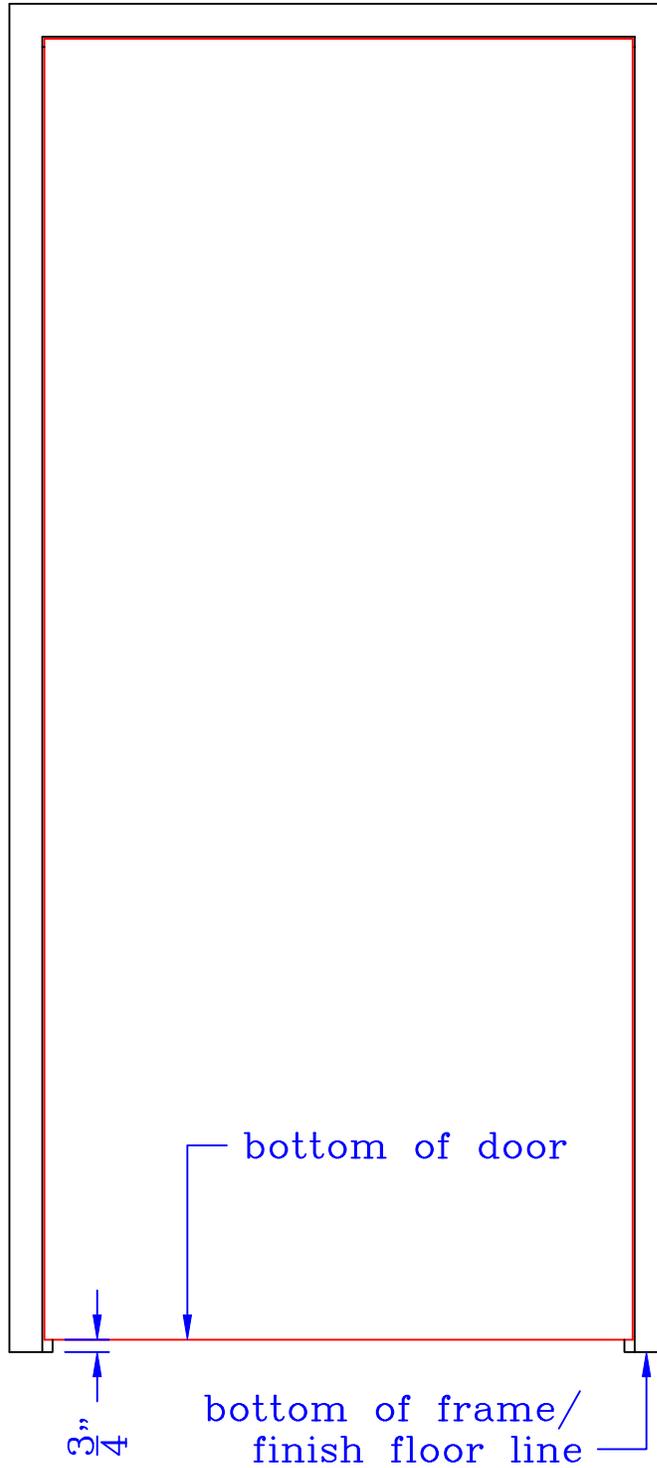
Recommended in damp or salty environment.

Also called as Z275 in SI units.

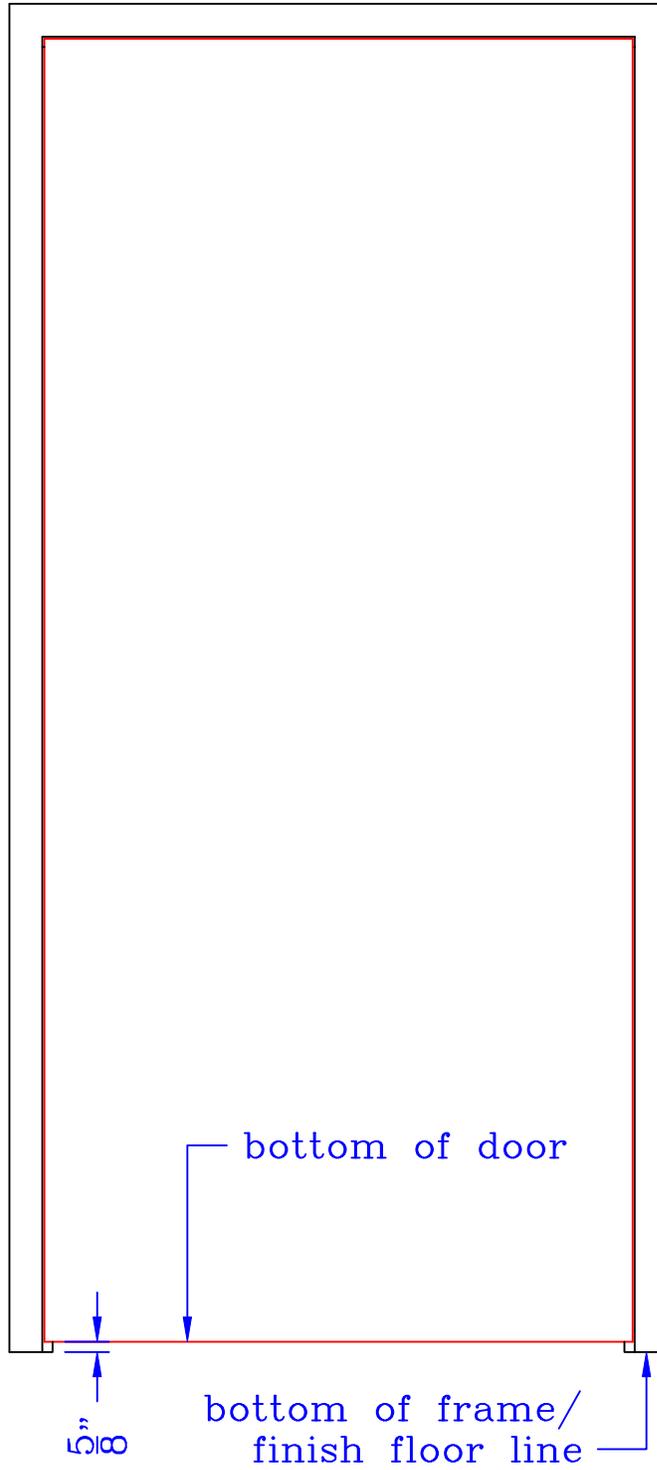
Doors(PA) and frames(KD) available unprimed only.

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

3/4" undercut



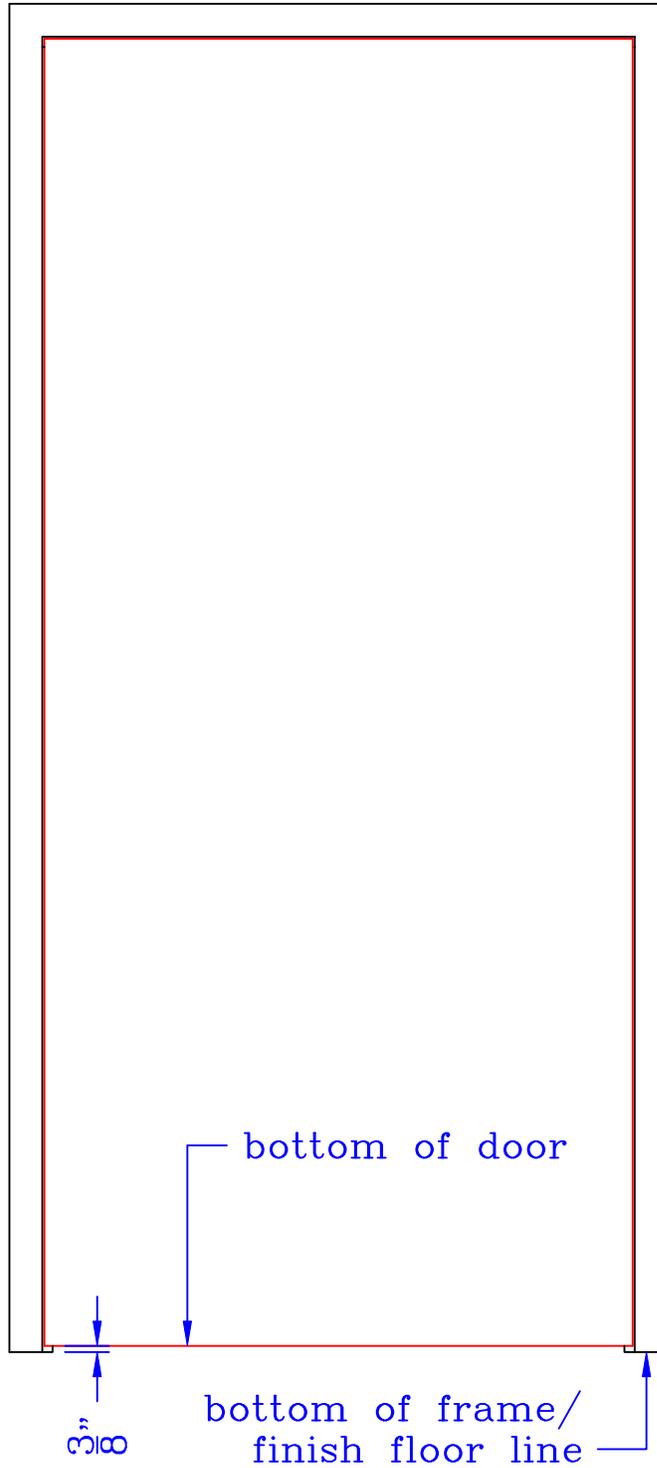
5/8" undercut



Undercut

58UC

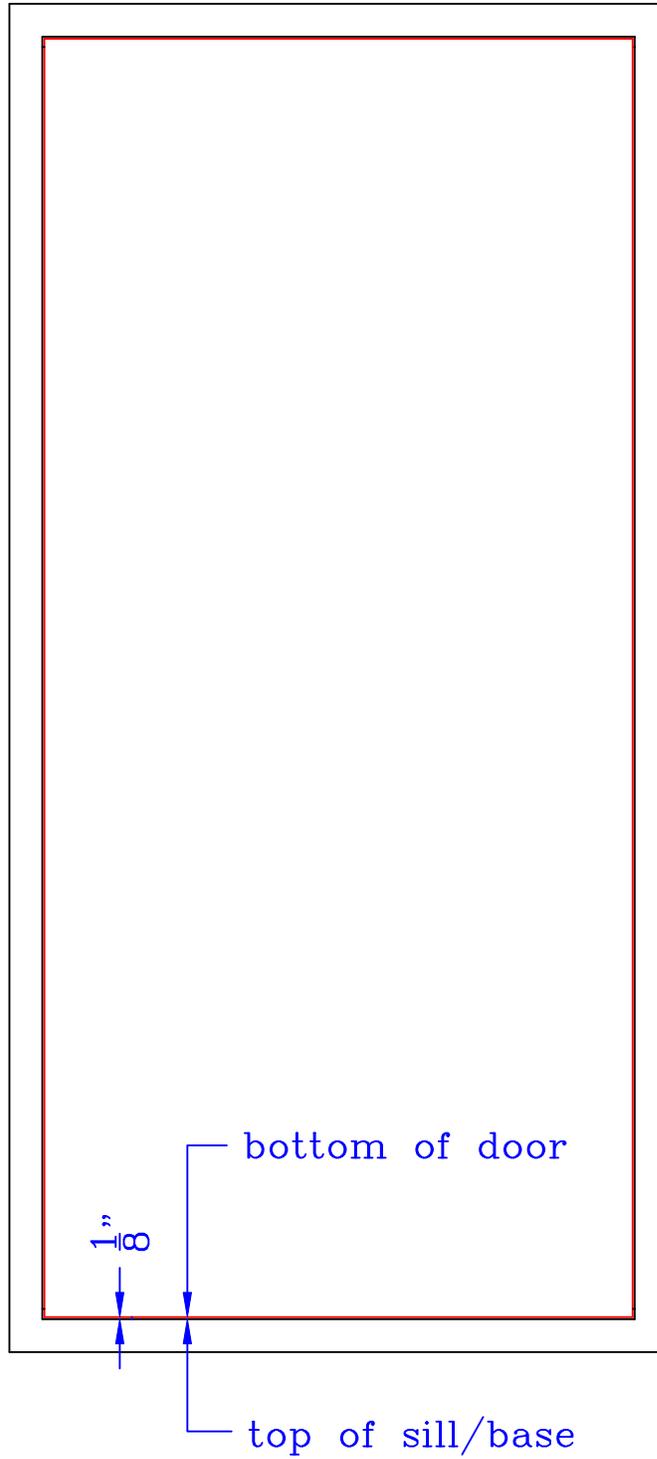
3/8" undercut



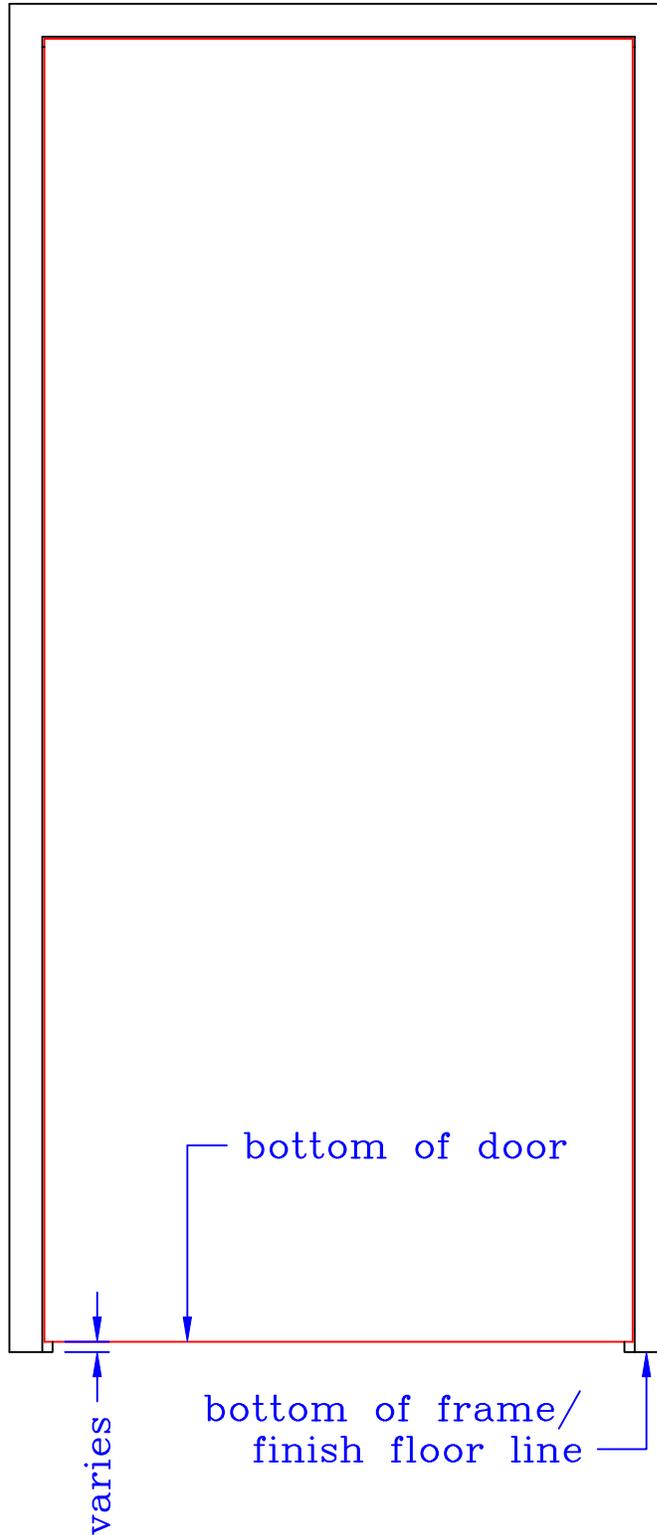
Undercut

38UC

1/8" undercut



Special undercut

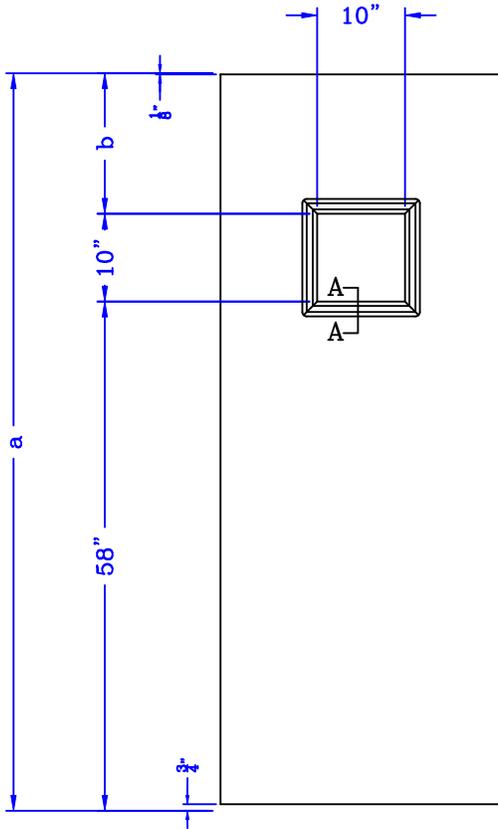


10" x 10" exposed glass

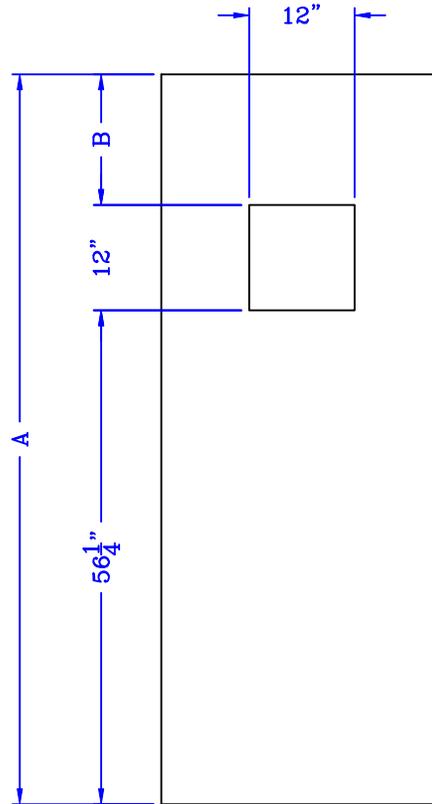
Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

EXPOSED GLASS



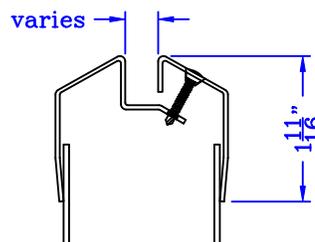
CUT OUT



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"

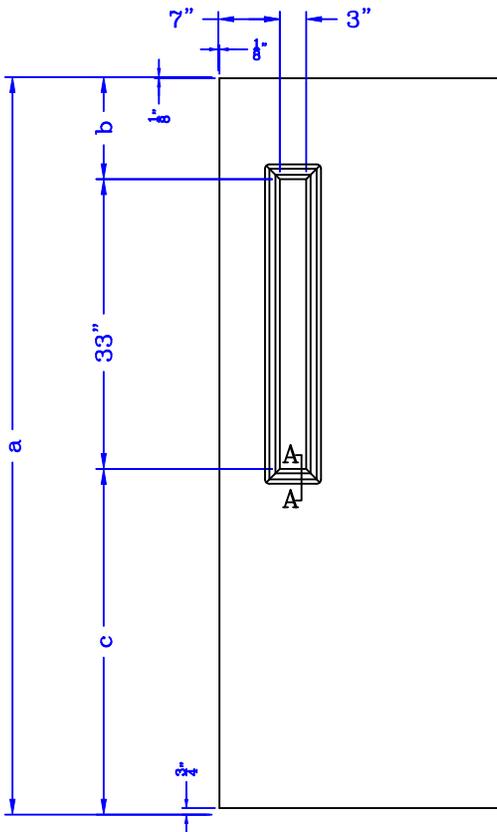
For 3/16" to 1" thick glass



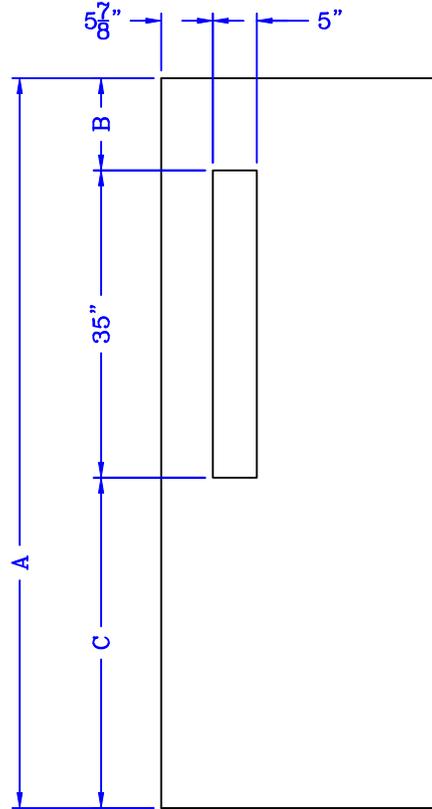
3" x 33" exposed glass

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



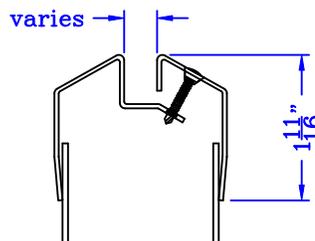
CUT OUT



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



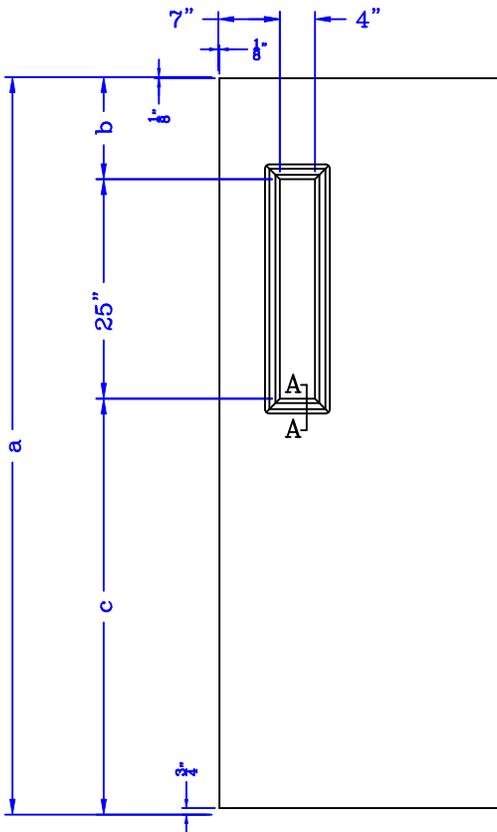
4" x 25" exposed glass

Actual glass size is 1" larger than exposed glass

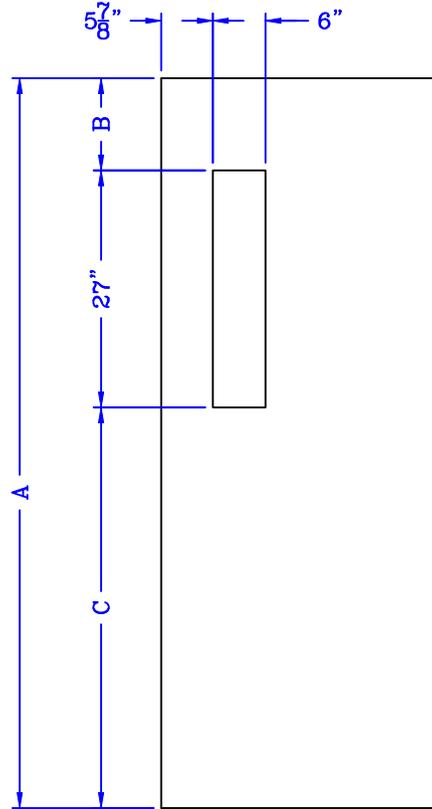
This lite **DOES NOT** meet ADA standards

Sandwich kit

EXPOSED GLASS



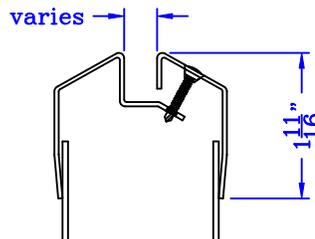
CUT OUT



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



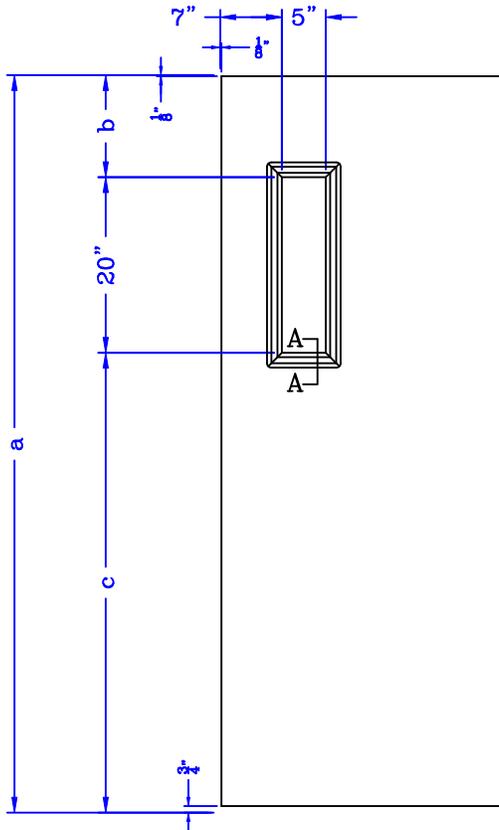
5" x 20" exposed glass

Actual glass size is 1" larger than exposed glass

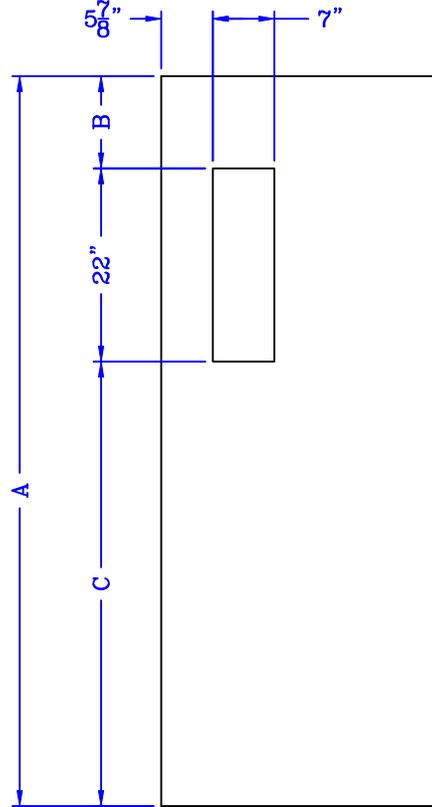
This lite **DOES NOT** meet ADA standards

Sandwich kit

EXPOSED GLASS



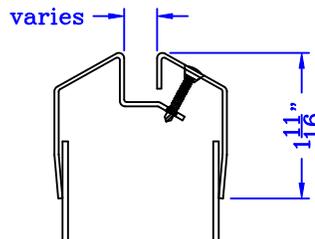
CUT OUT



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"

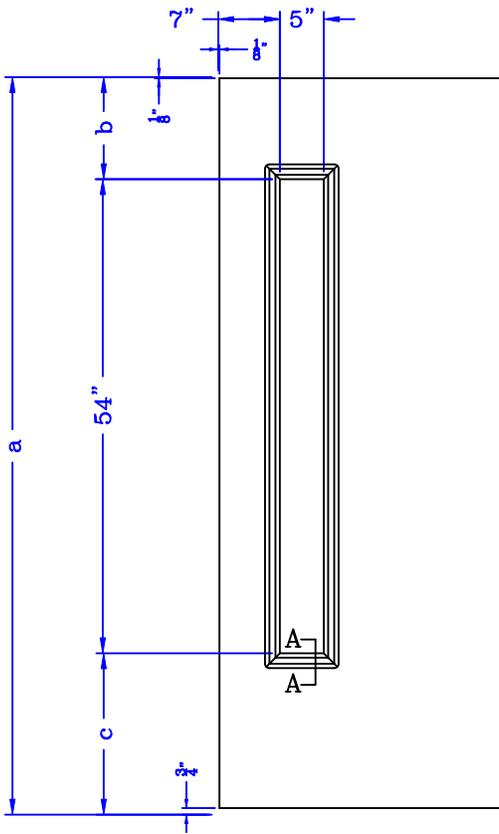
For 3/16" to 1" thick glass



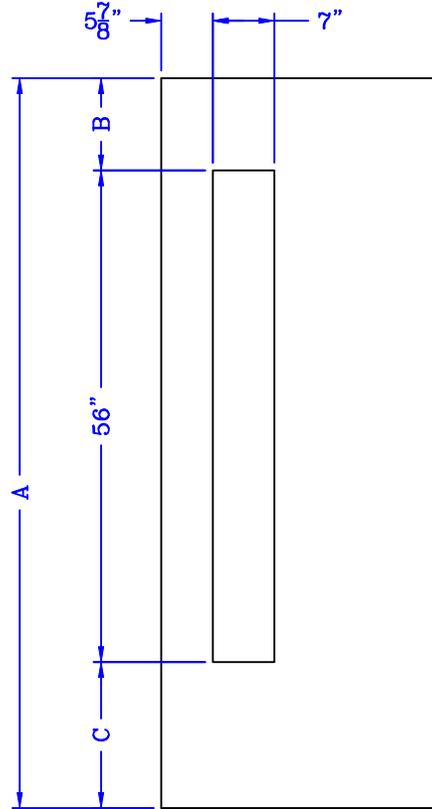
5" x 54" exposed glass

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



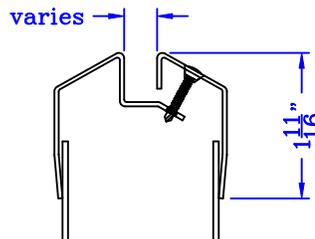
CUT OUT



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

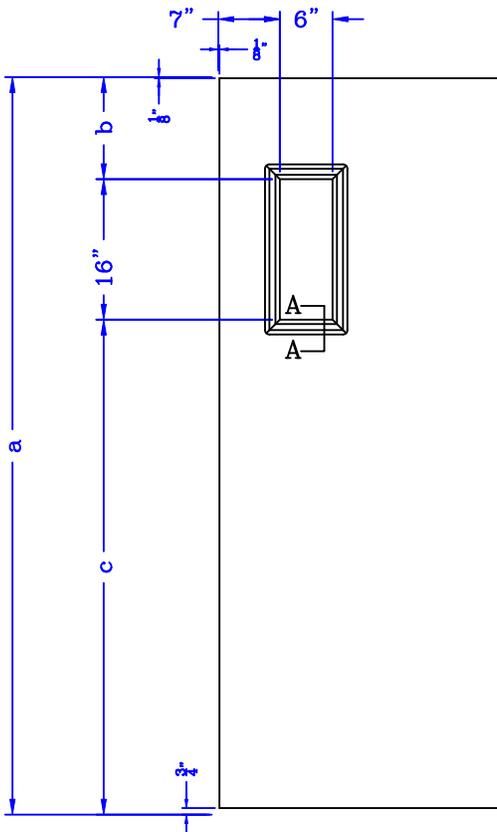


6" x 16" exposed glass

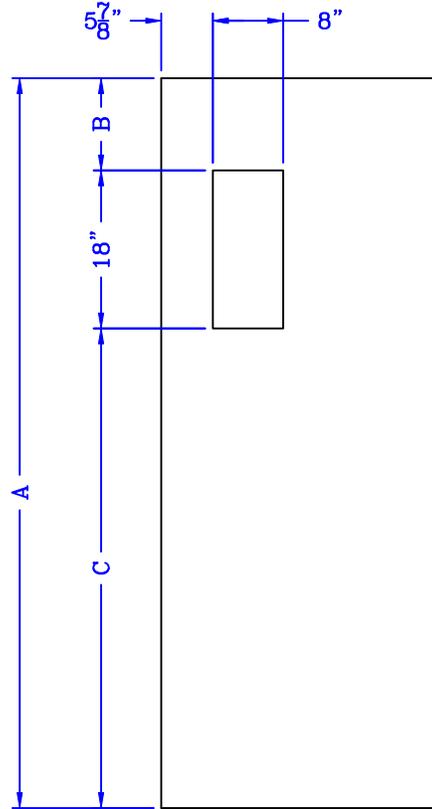
Actual glass size is 1" larger than exposed glass
 This lie **DOES NOT** meet ADA standards

Sandwich kit

EXPOSED GLASS



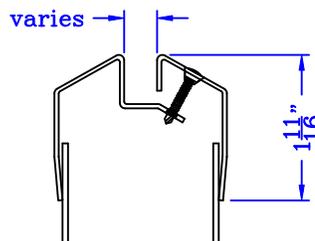
CUT OUT



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"

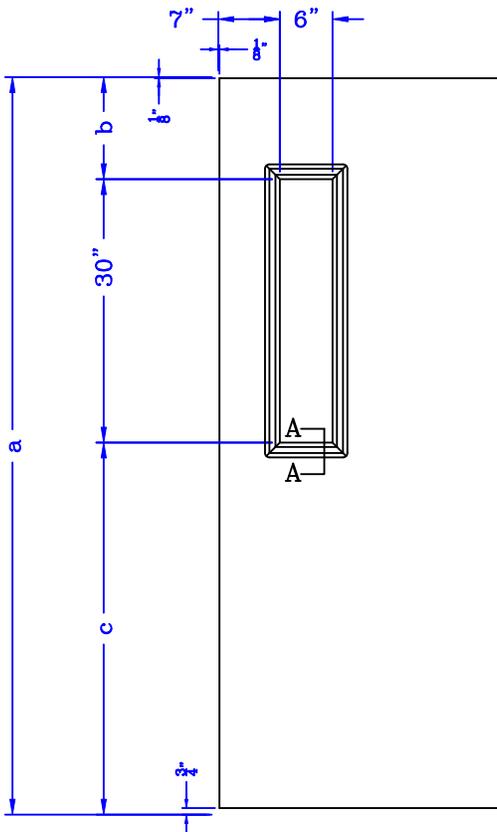
For 3/16" to 1" thick glass



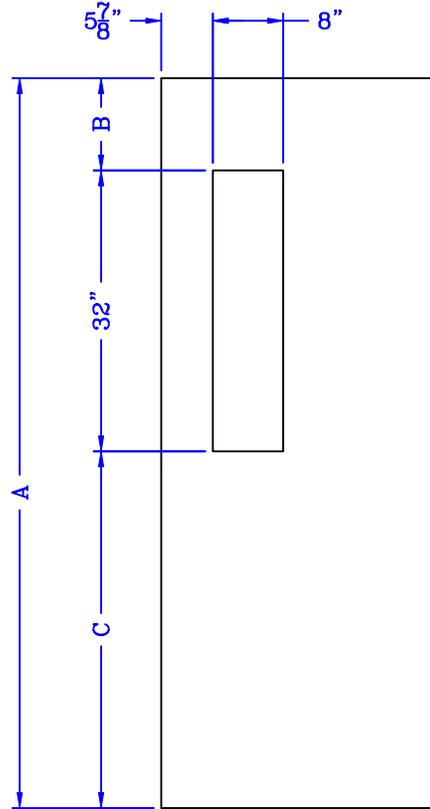
6" x 30" exposed glass

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



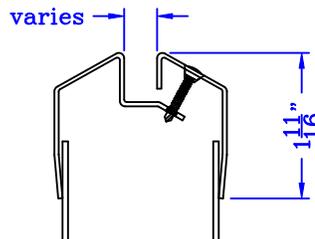
CUT OUT



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"

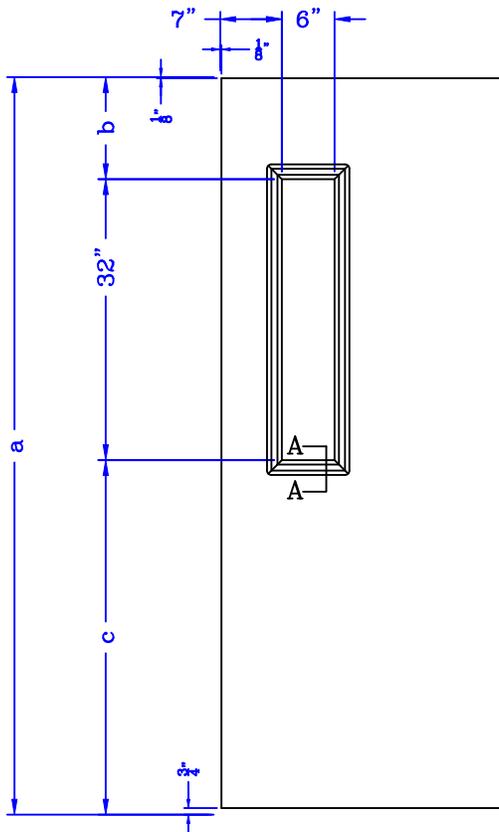
For 3/16" to 1" thick glass



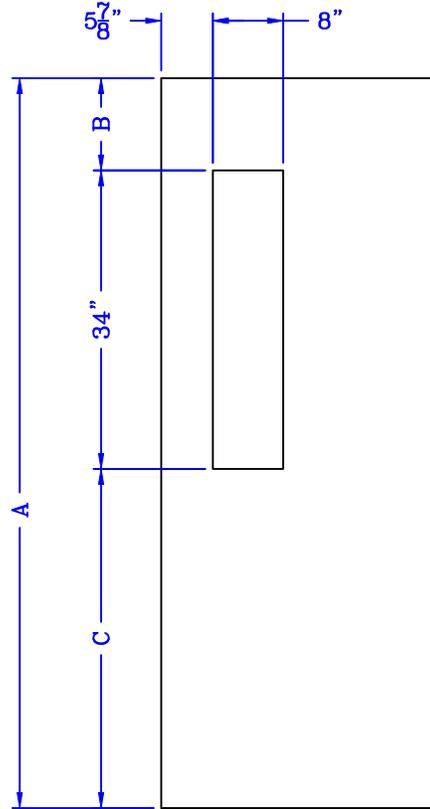
6" x 32" exposed glass

Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



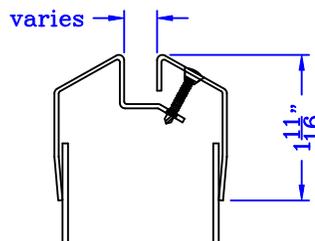
CUT OUT



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

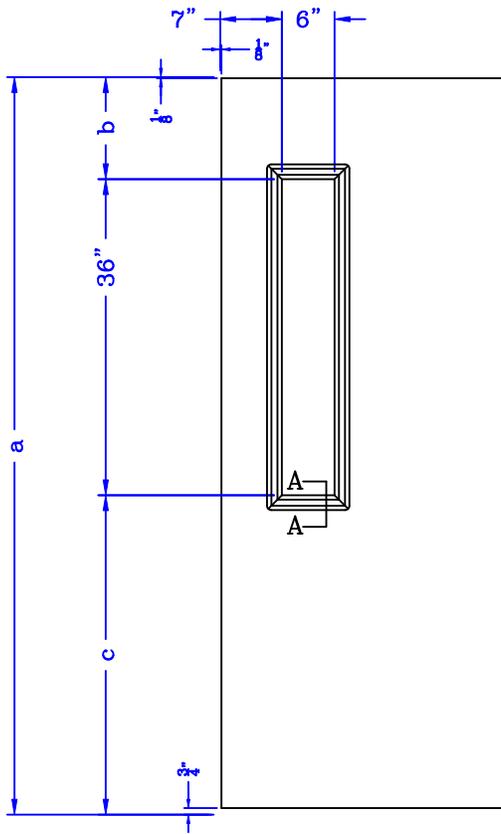


6" x 36" exposed glass

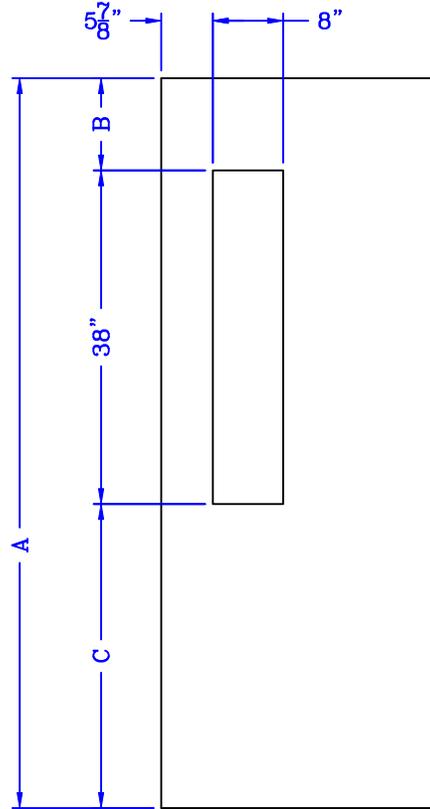
Actual glass size is 1" larger than exposed glass

Sandwich kit

EXPOSED GLASS



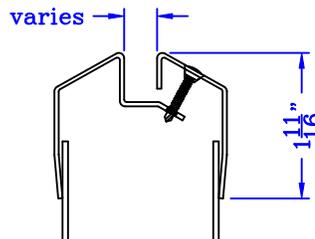
CUT OUT



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"

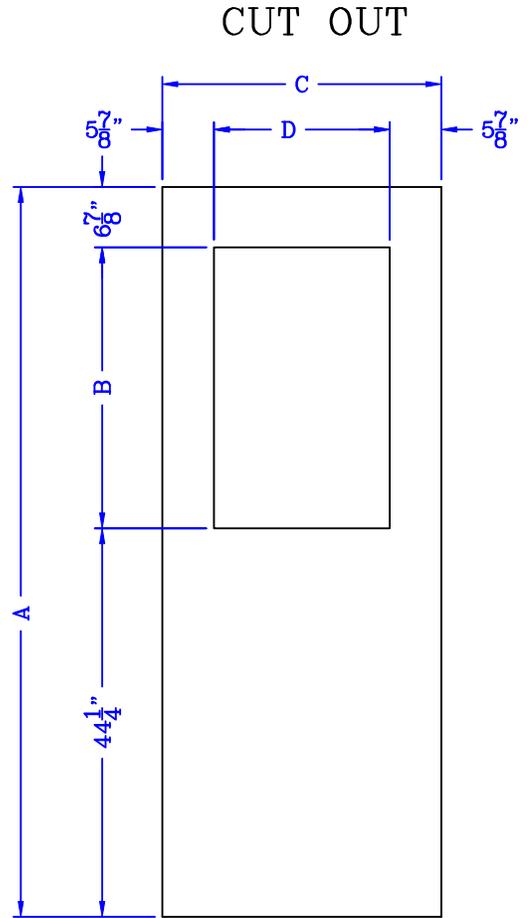
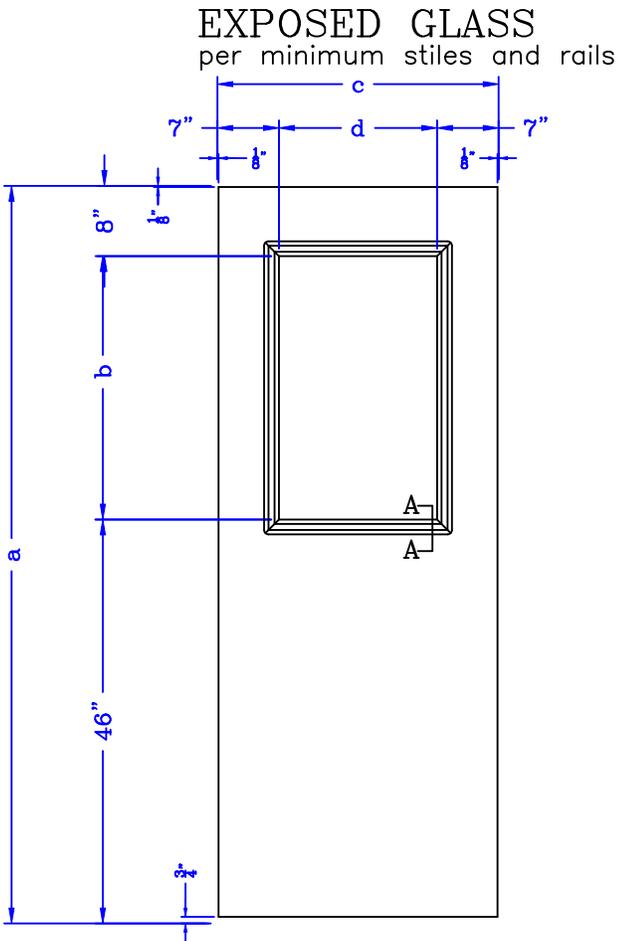
Net Height		
A	B	C
79 1/8"	6 7/8"	34 1/4"
81 1/8"	8 1/2"	34 5/8"
83 1/8"	10 1/2"	34 5/8"
85 1/8"	12 1/2"	34 5/8"
95 1/8"	22 1/2"	34 5/8"

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

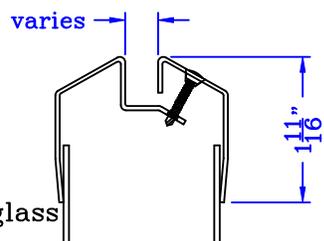


Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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"

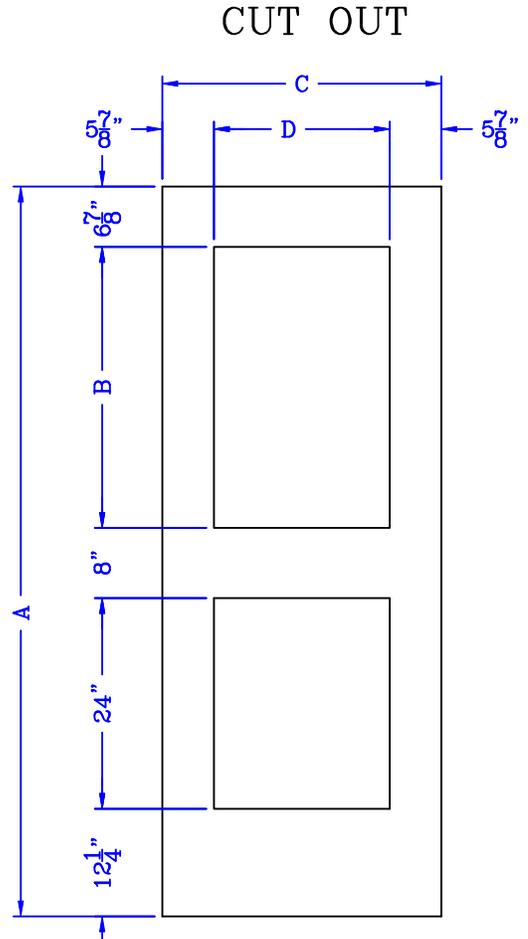
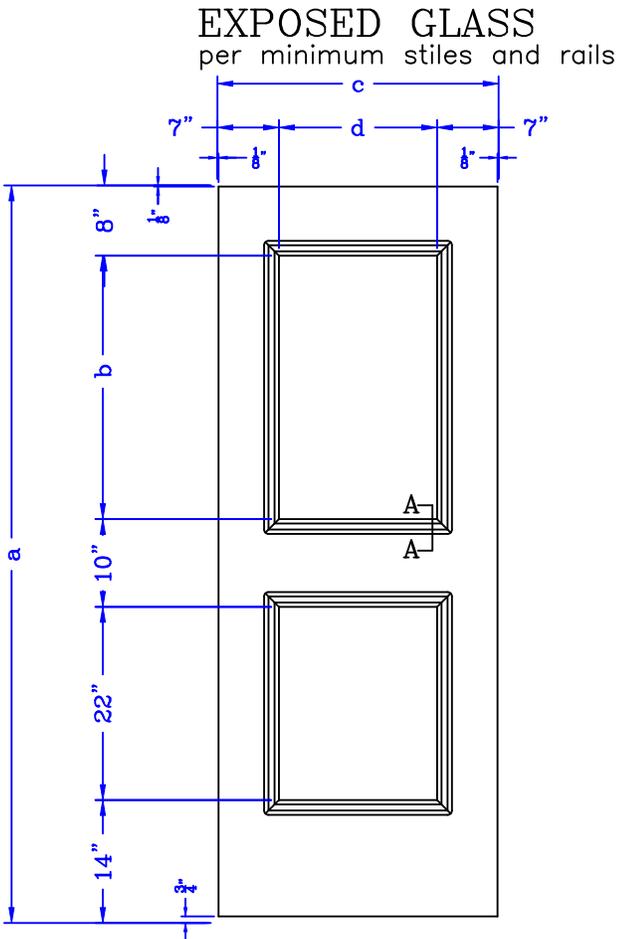


For 3/16" to 1" thick glass

Sandwich kit

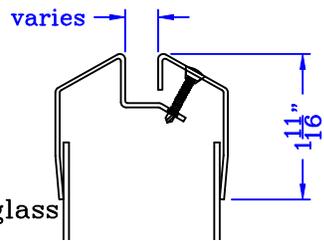
Two half glass

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"



For 3/16" to 1" thick glass

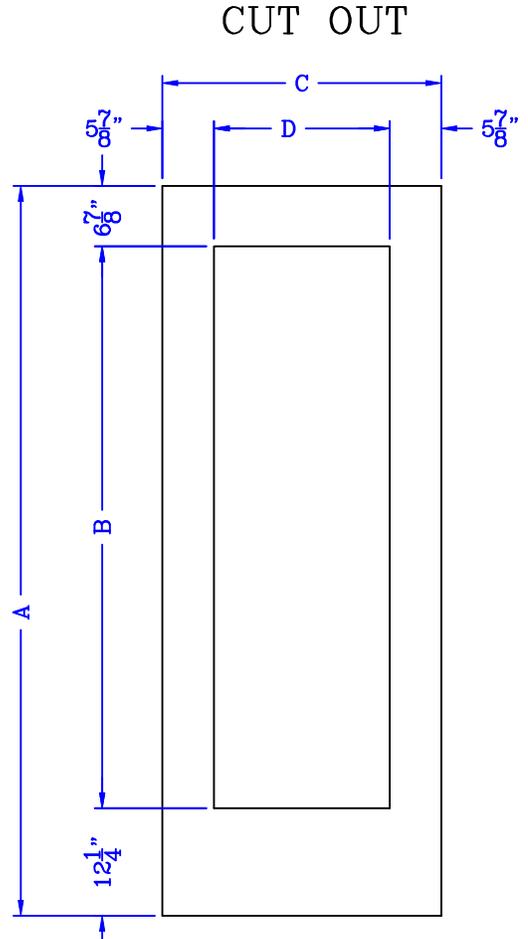
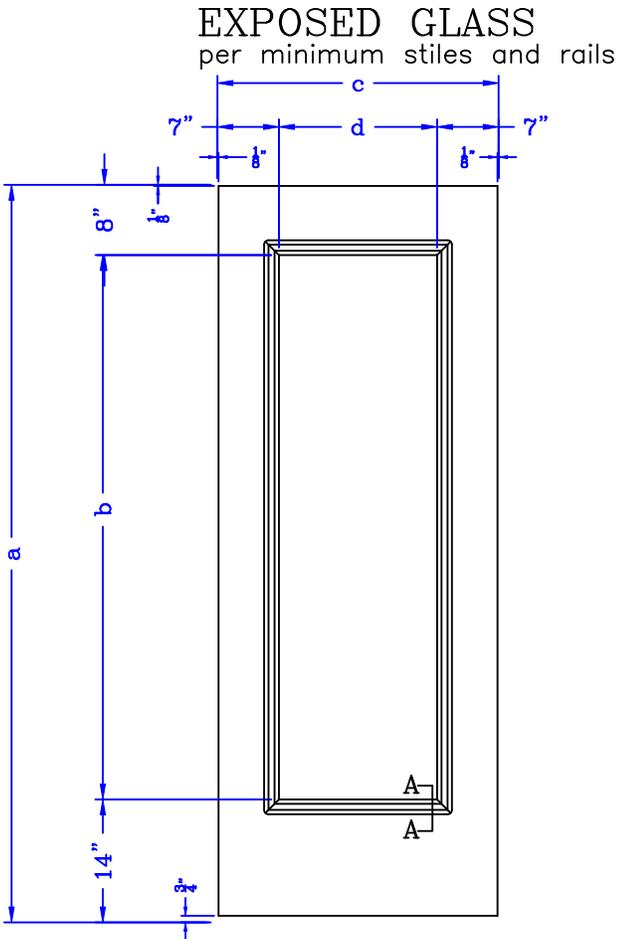
Net Width	
C	D
29 3/4"	18"
33 3/4"	22"
35 3/4"	24"
41 3/4"	30"
47 3/4"	36"

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

Sandwich kit

Full glass

Actual glass size is 1" larger than exposed glass

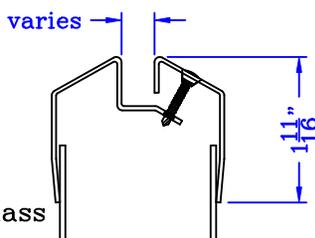


Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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

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

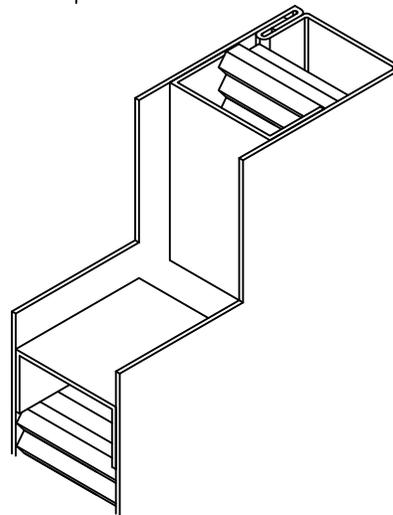
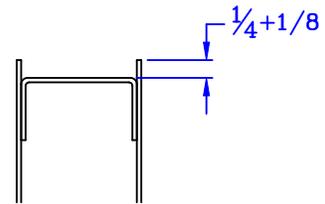
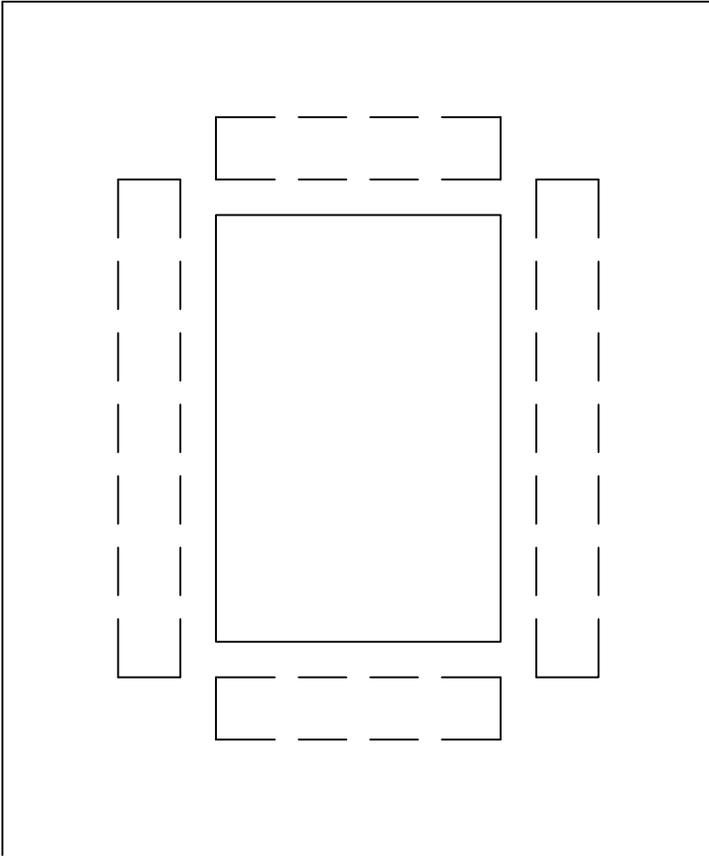
Net Height	
A	B
79 1/8"	60"
81 1/8"	62"
83 1/8"	64"
85 1/8"	66"
95 1/8"	76"



For 3/16" to 1" thick glass

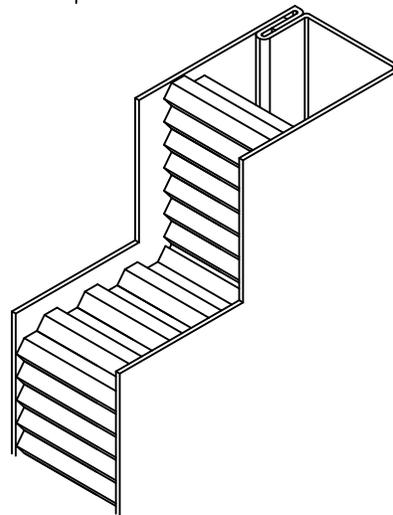
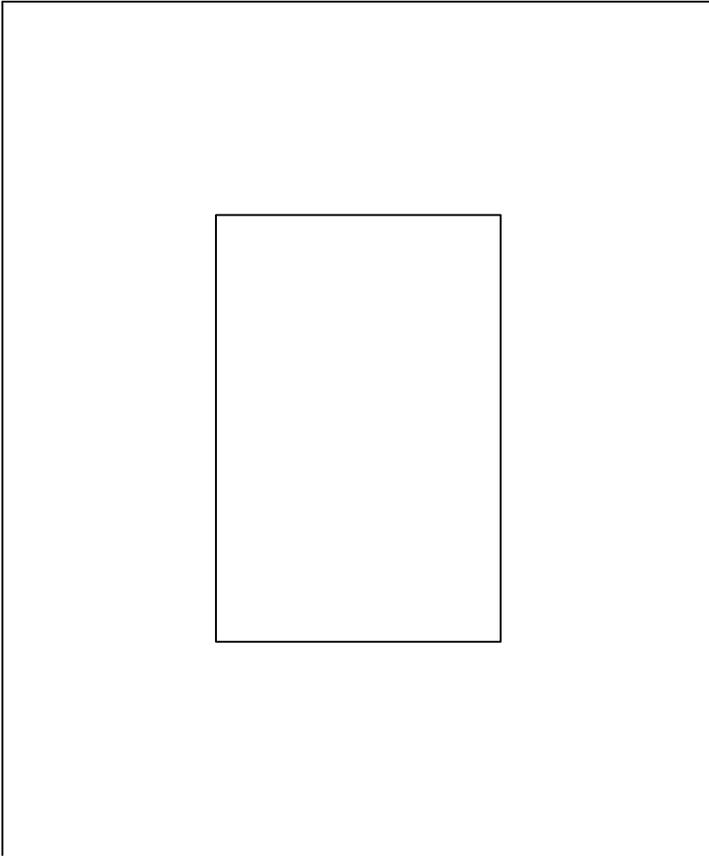
Including channel

Mandatory for some lite sizes and/or options



Without channel

Not available for some lite sizes and/or options

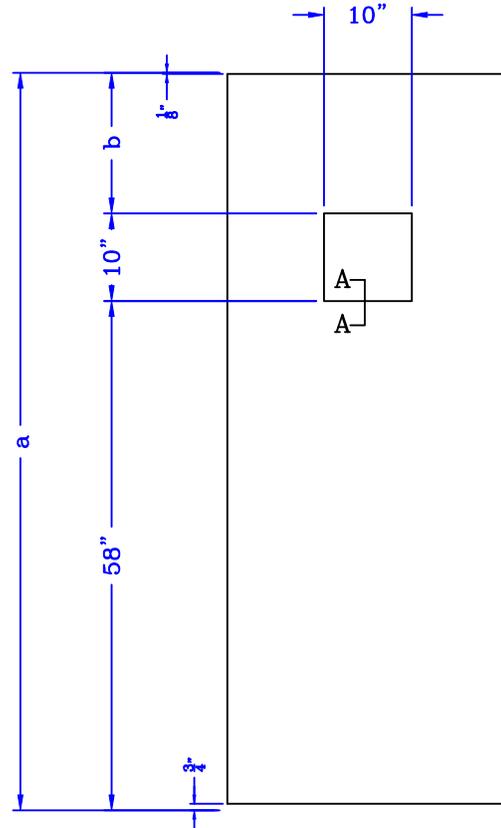


10" x 10" exposed glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

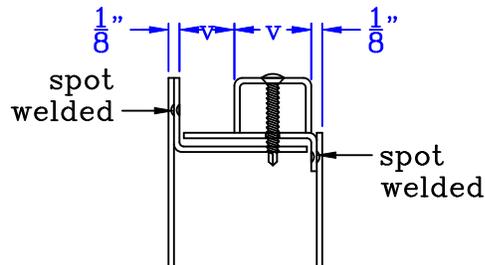
EXPOSED GLASS



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

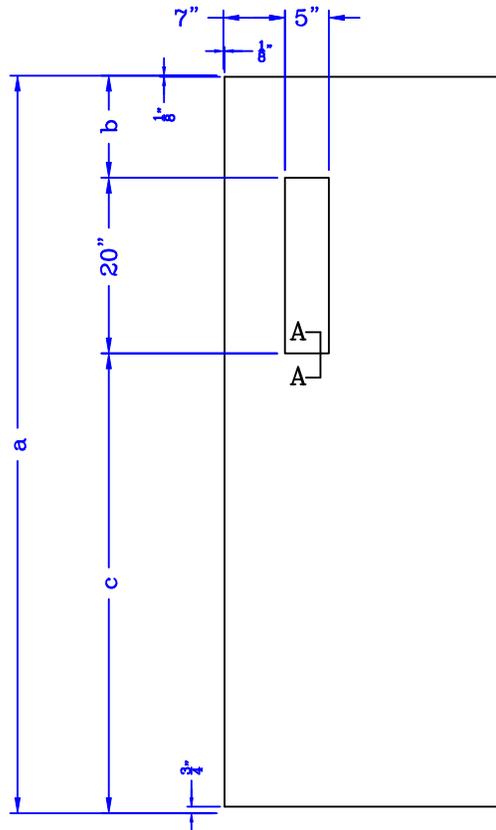


5" x 20" exposed glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

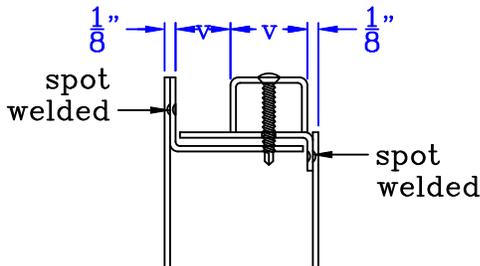
EXPOSED GLASS



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"

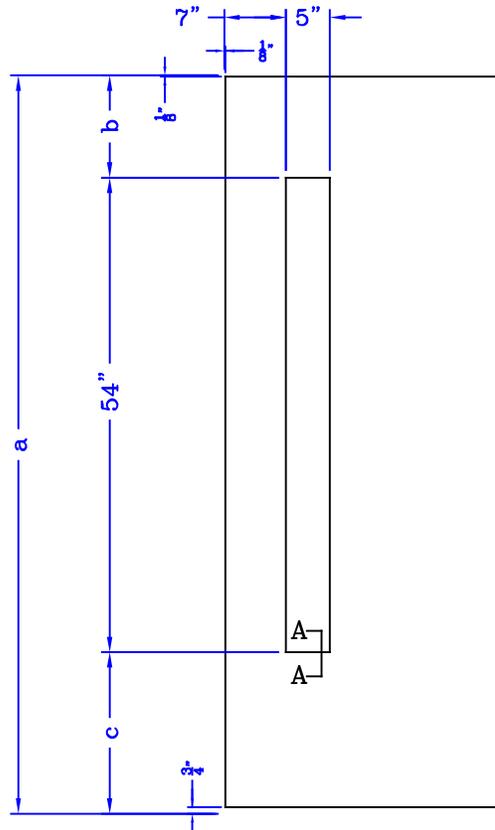
For 3/16" to 1" thick glass



5" x 54" exposed glass

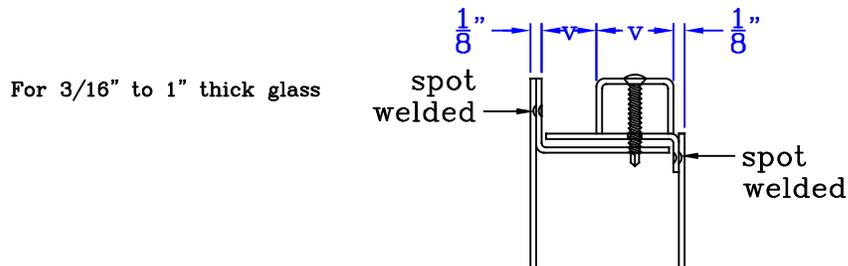
Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



Outside view

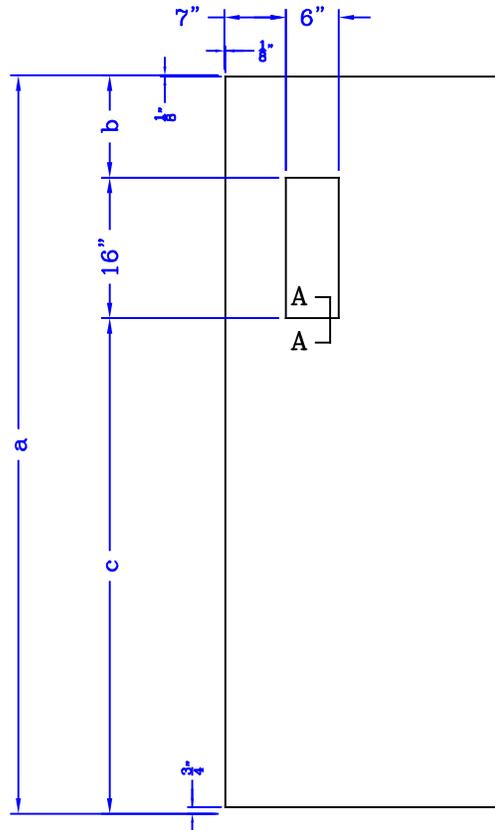
Nominal Height		
a	b	c
6' 8" (80")	8"	18"
6' 10" (82")	9 5/8"	18 3/8"
7' 0" (84")	11 5/8"	18 3/8"
7' 2" (86")	13 5/8"	18 3/8"
8' 0" (96")	23 5/8"	18 3/8"



6" x 16" exposed glass

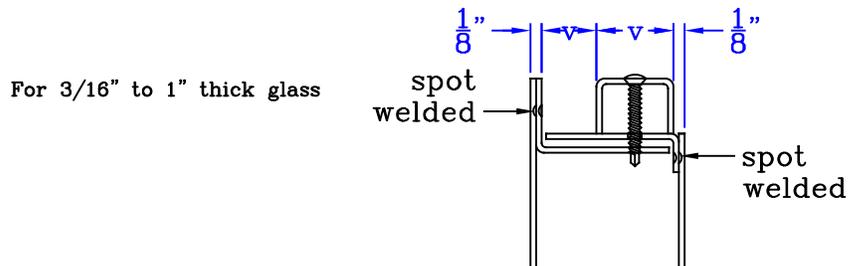
Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



Outside view

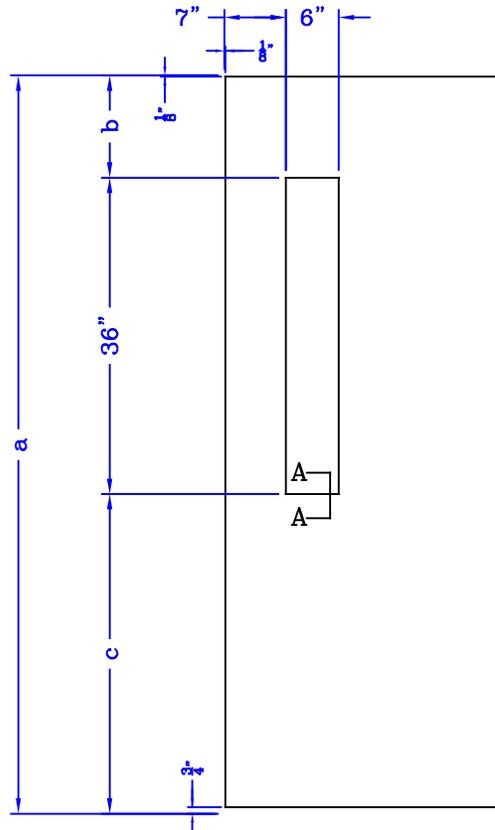
Nominal Height		
a	b	c
6' 8" (80")	8"	56"
6' 10" (82")	9 5/8"	56 3/8"
7' 0" (84")	11 5/8"	56 3/8"
7' 2" (86")	13 5/8"	56 3/8"
8' 0" (96")	23 5/8"	56 3/8"



6" x 36" exposed glass

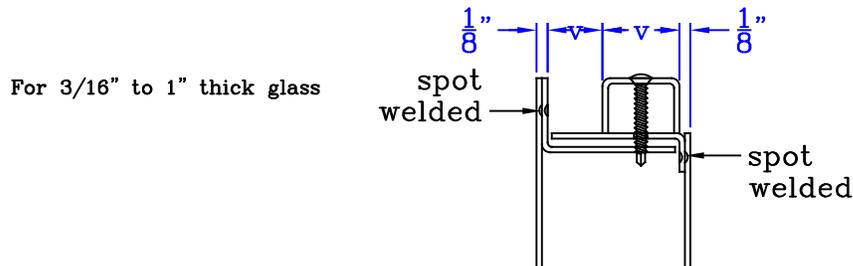
Actual glass size is 1" larger than exposed glass

EXPOSED GLASS



Outside view

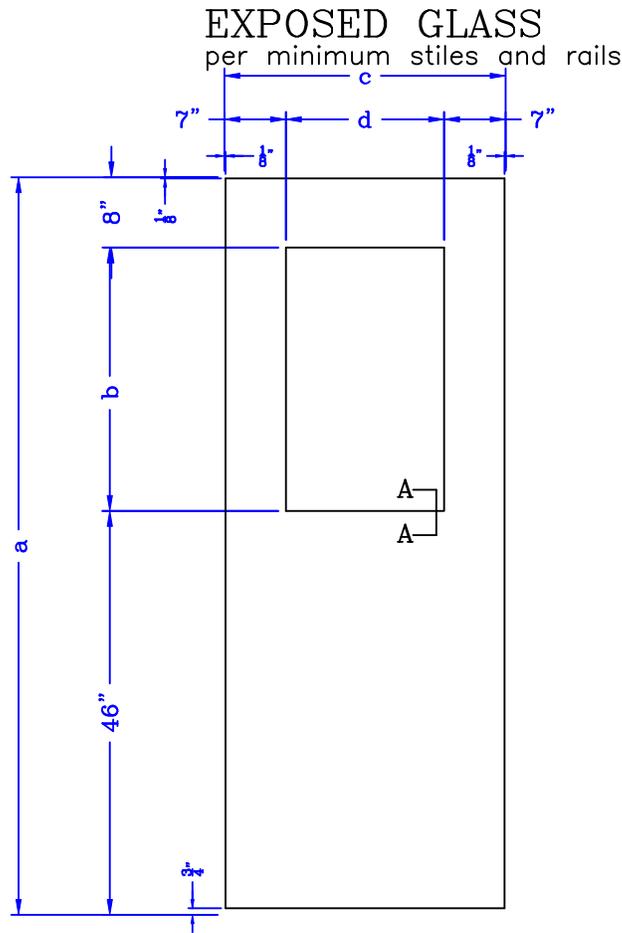
Nominal Height		
a	b	c
6' 8" (80")	8"	36"
6' 10" (82")	9 5/8"	36 3/8"
7' 0" (84")	11 5/8"	36 3/8"
7' 2" (86")	13 5/8"	36 3/8"
8' 0" (96")	23 5/8"	36 3/8"



Half glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

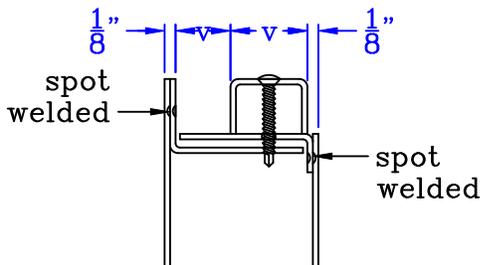


Outside view

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

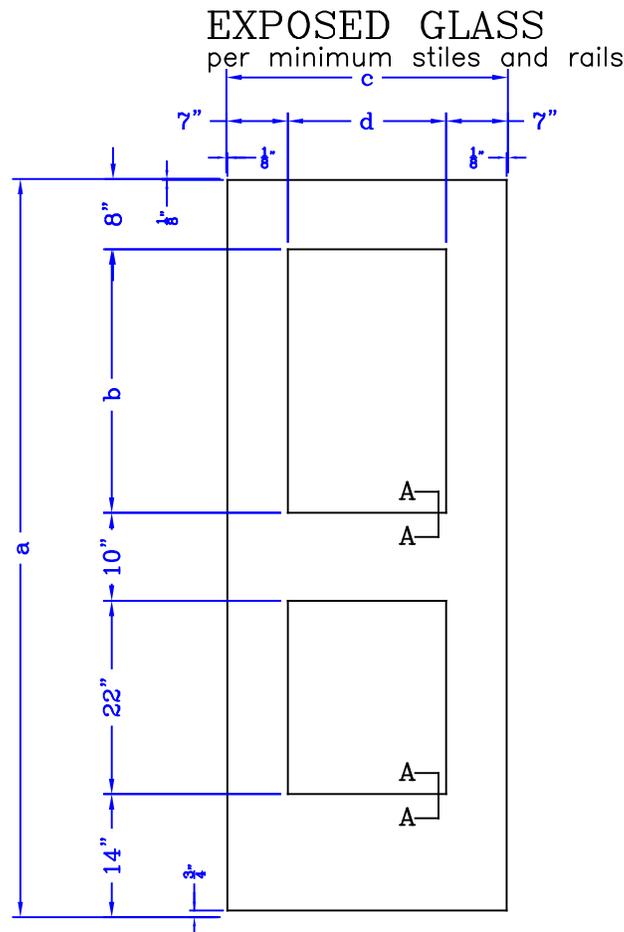
Nominal Height	
a	b
6' 8" (80")	26"
6' 10" (82")	28"
7' 0" (84")	30"
7' 2" (86")	32"
8' 0" (96")	42"

For 3/16" to 1" thick glass



Two half glass

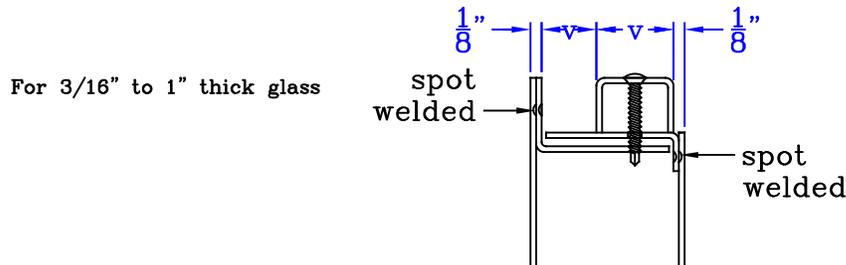
Actual glass size is 1" larger than exposed glass



Outside view

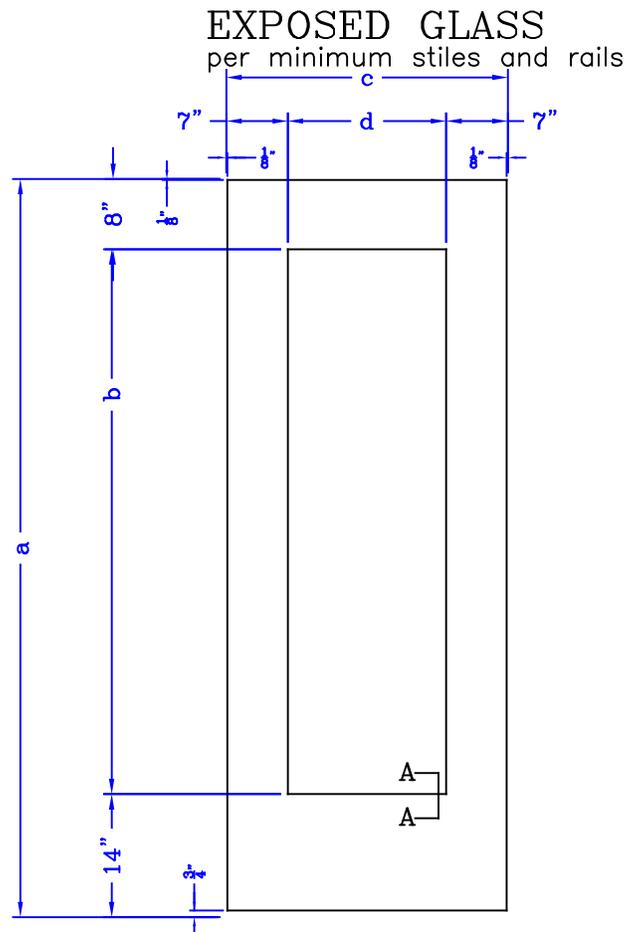
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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



Full glass

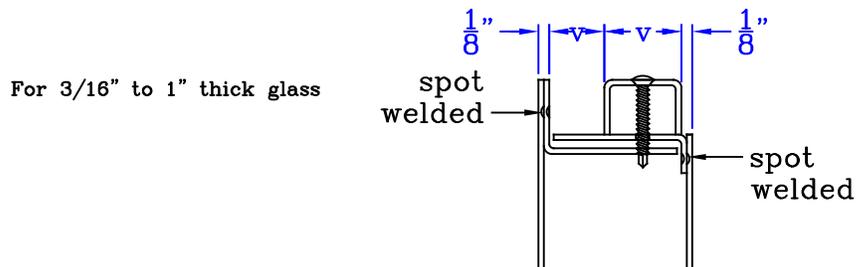
Actual glass size is 1" larger than exposed glass



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"

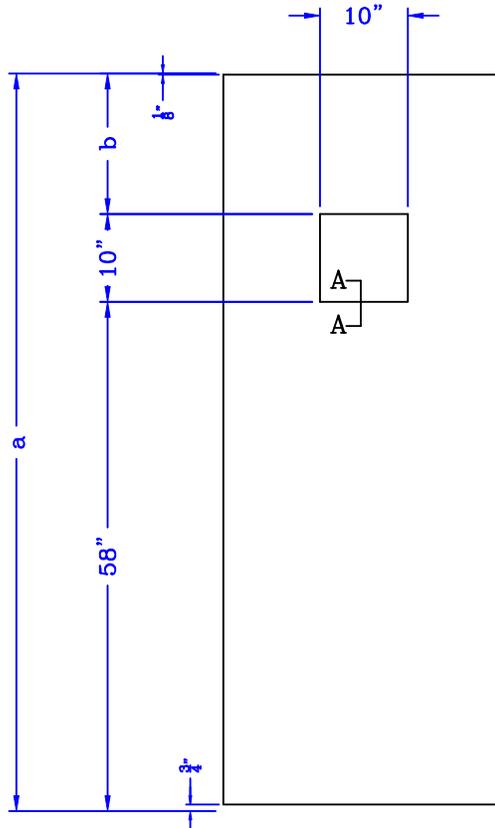


10" x 10" exposed glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

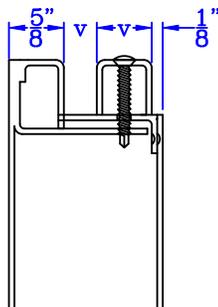
EXPOSED GLASS



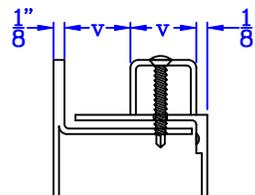
Outside view

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.

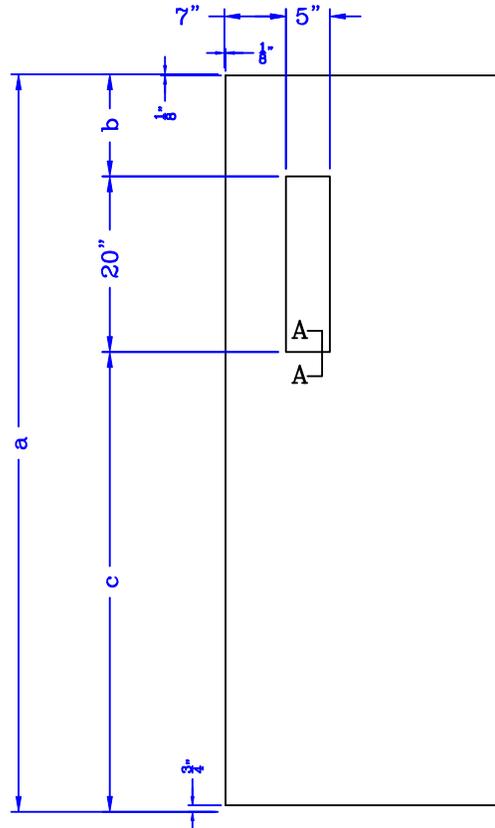
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

5" x 20" exposed glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

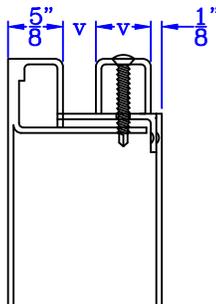
EXPOSED GLASS



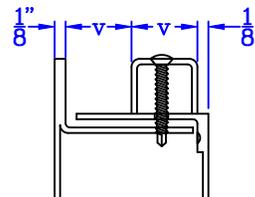
Outside view

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



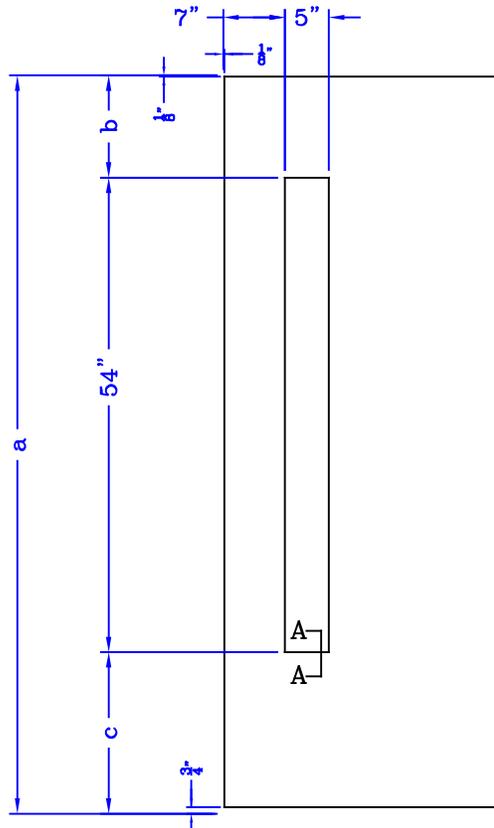
*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

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

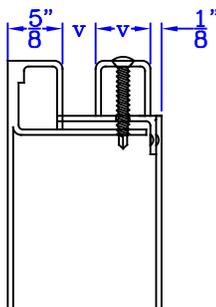
EXPOSED GLASS



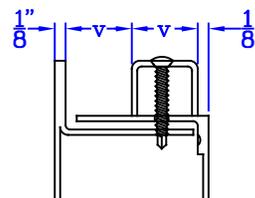
Outside view

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.

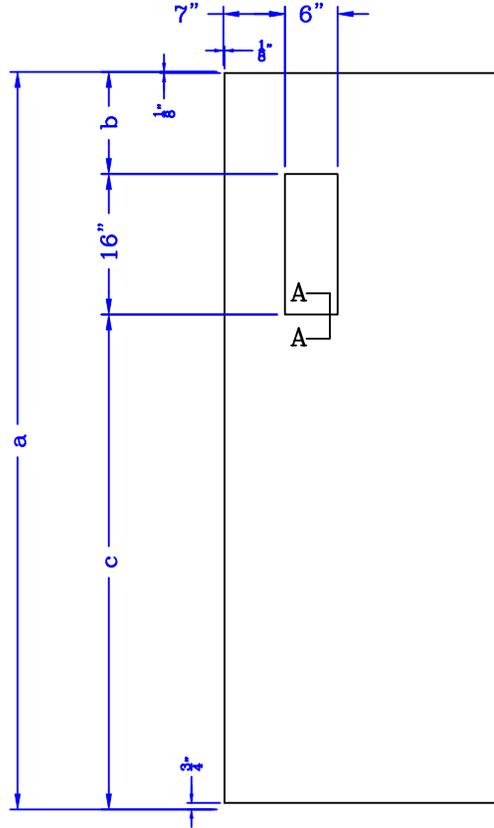
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

6" x 16" exposed glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

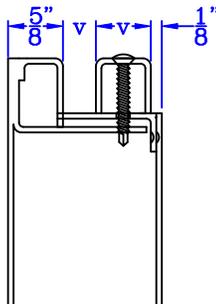
EXPOSED GLASS



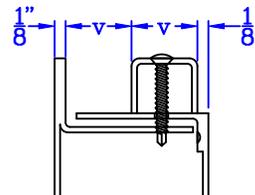
Outside view

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



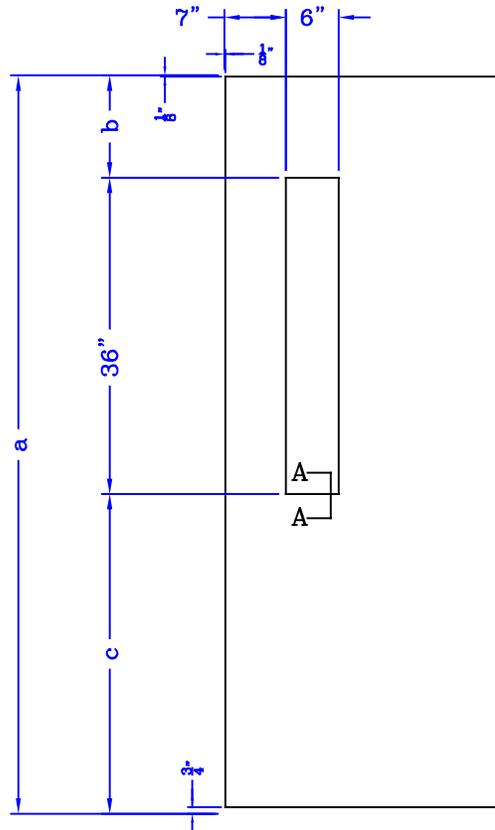
*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

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

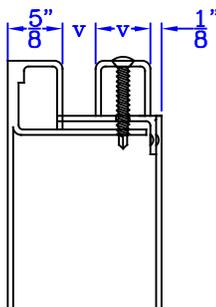
EXPOSED GLASS



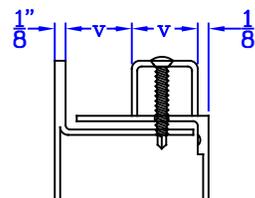
Outside view

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.

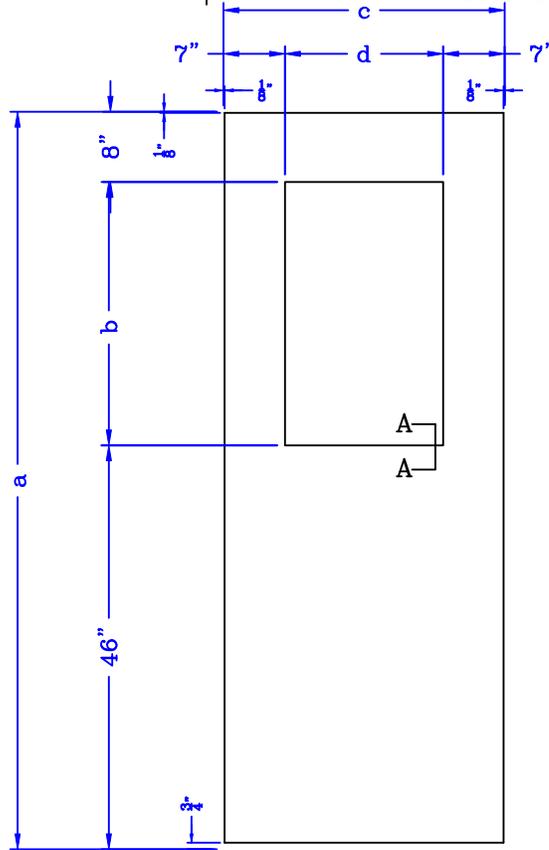
Half glass

Actual glass size is 1" larger than exposed glass

This lite **DOES NOT** meet ADA standards

Flush kit seamless

EXPOSED GLASS
per minimum stiles and rails

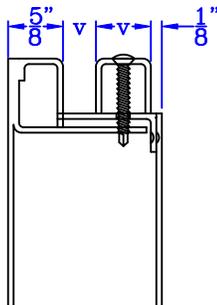


Outside view

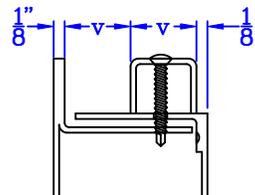
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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



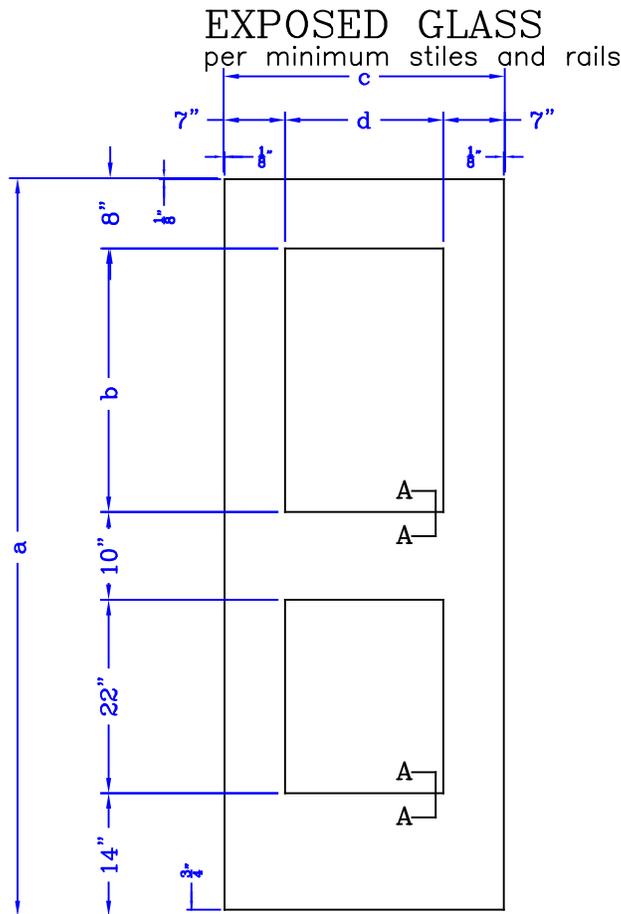
*The manufacturing process of these lite kits (tack welding, putty filled) may results in a show-through after application of a finished paint. These characteristics are inherent in production and are not to be considered as manufacturing defects.

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

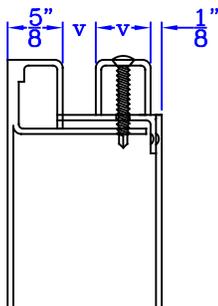


Outside view

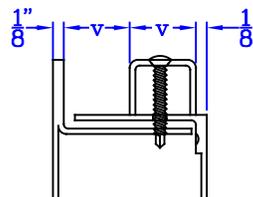
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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.

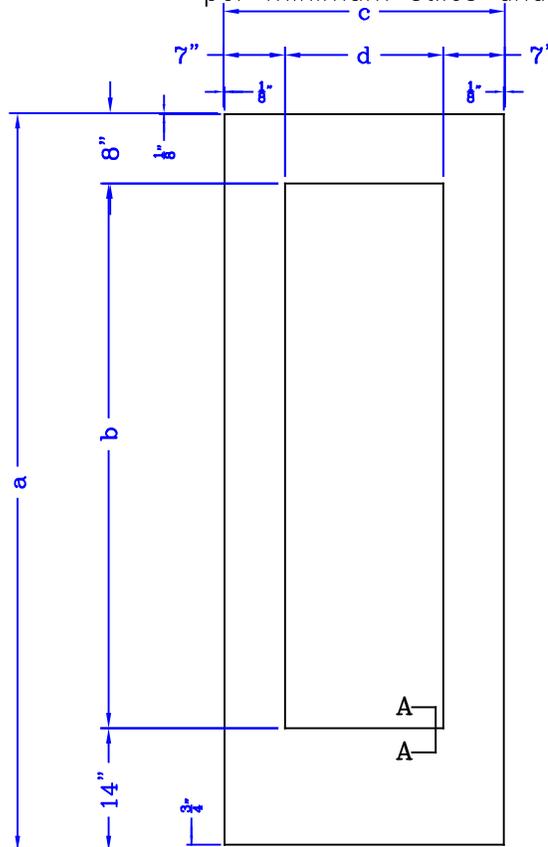
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

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

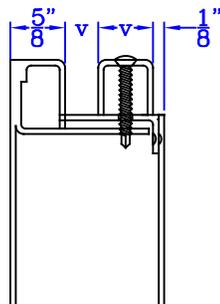


Outside view

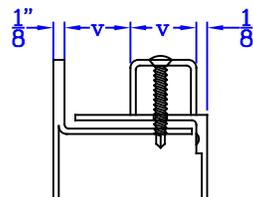
Nominal Width	
c	d
2' 6" (30")	16"
2' 10" (34")	20"
3' 0" (36")	22"
3' 6" (42")	28"
4' 0" (48")	34"

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.

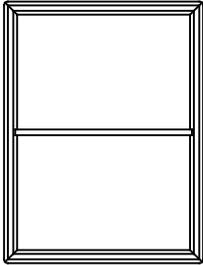
Per ANSI A250.8-2003(R2008), previously ANSI SDI 100-91 Appendix A.

Minimum shown to allow proper clearance for hardware.

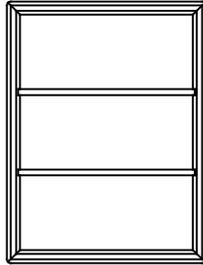
Sandwich kit (N Series) with muntins

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

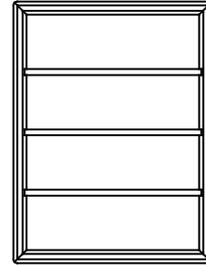
1H



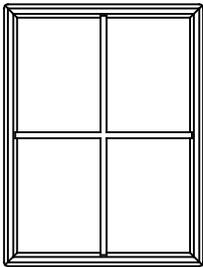
2H



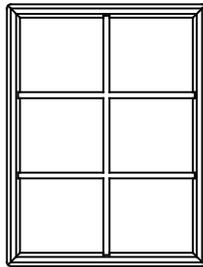
3H



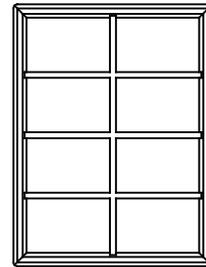
1H1V



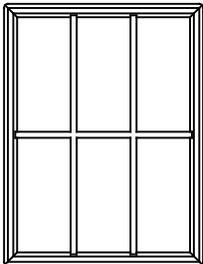
2H1V



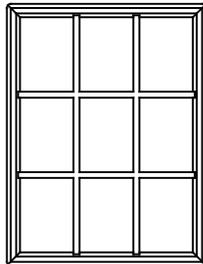
3H1V



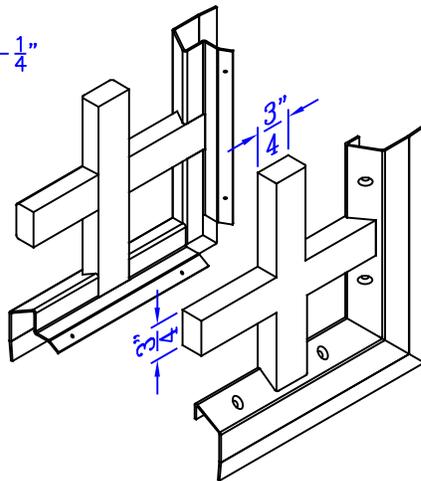
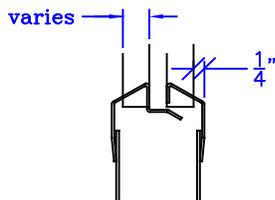
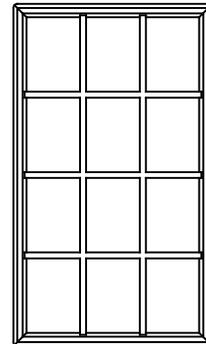
1H2V



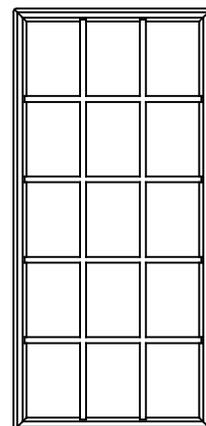
2H2V



3H2V



4H2V

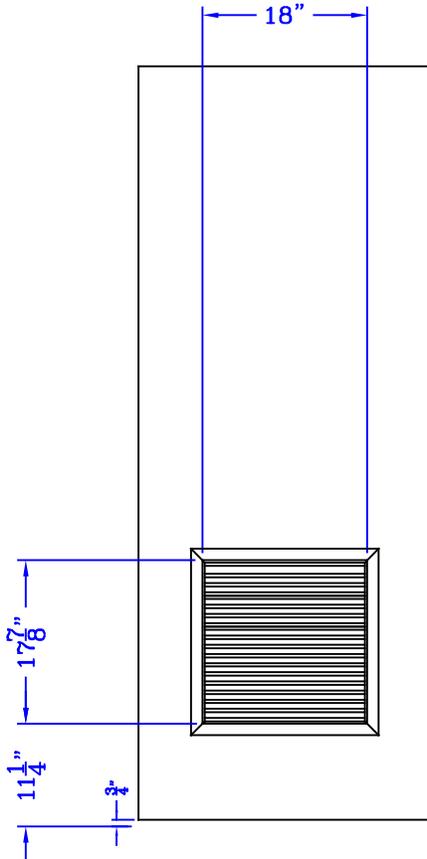


Vision kit with muntins

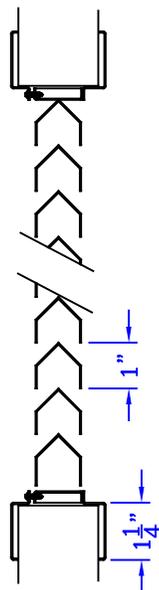
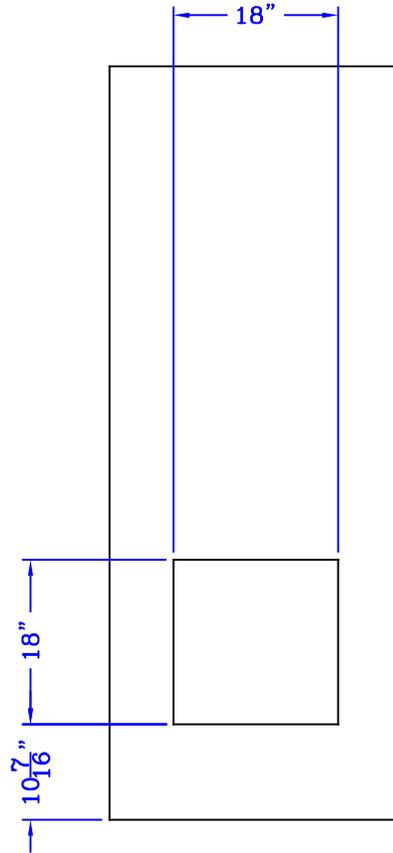
18" x 18" louver, sandwich type

Not rated. Available with or without channel

LOUVER SIZES



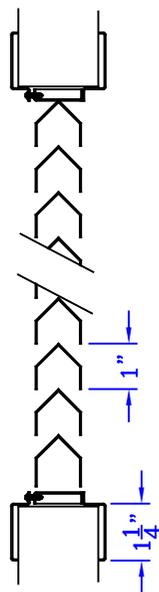
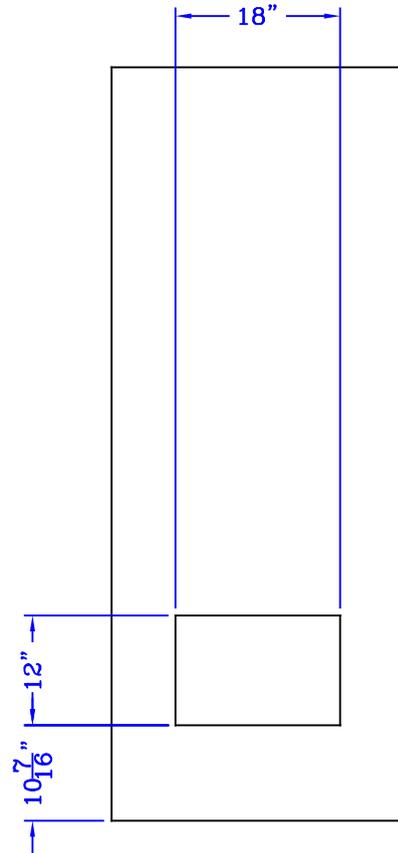
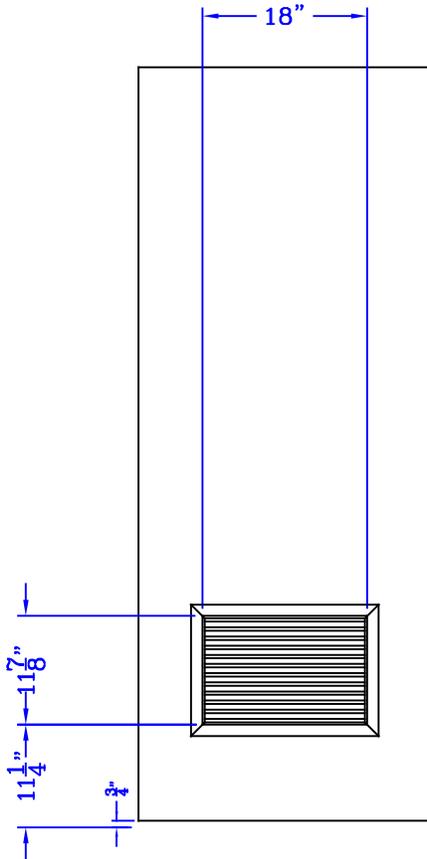
CUT OUT



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

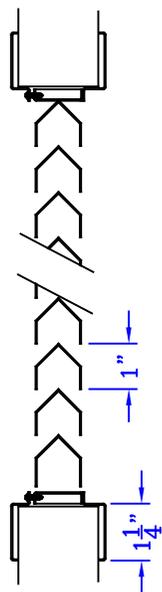
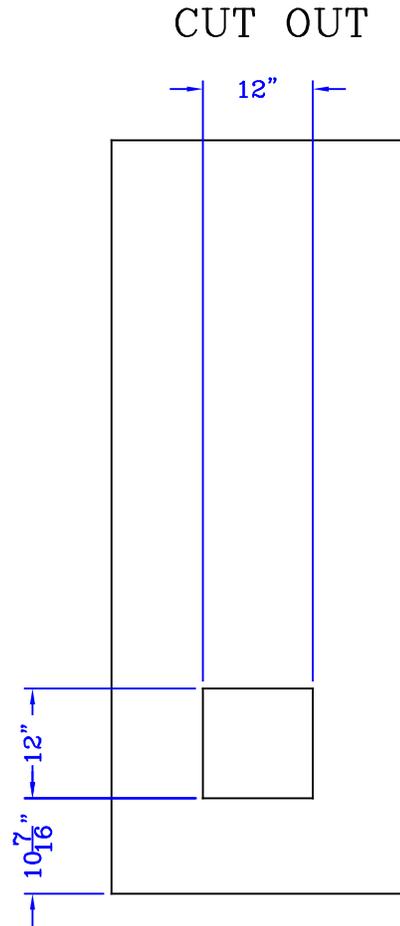
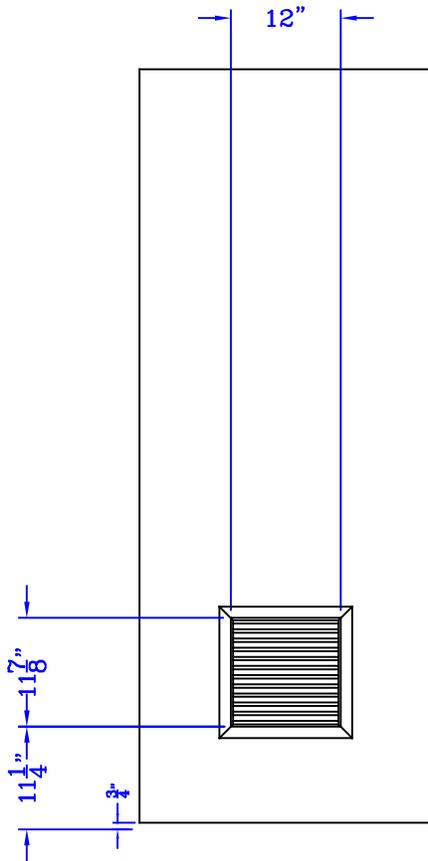
18" x 12" louver, sandwich type
 Not rated. Available with or without channel
LOUVER SIZES

CUT OUT



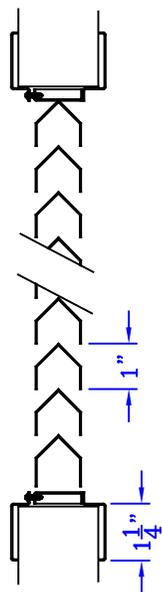
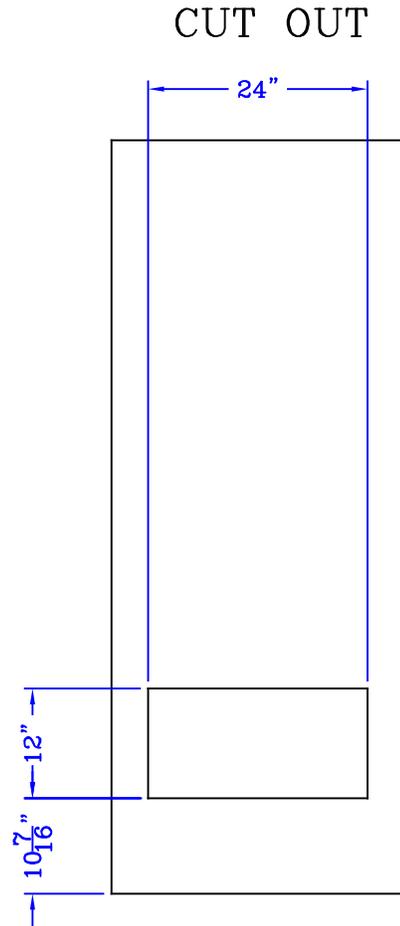
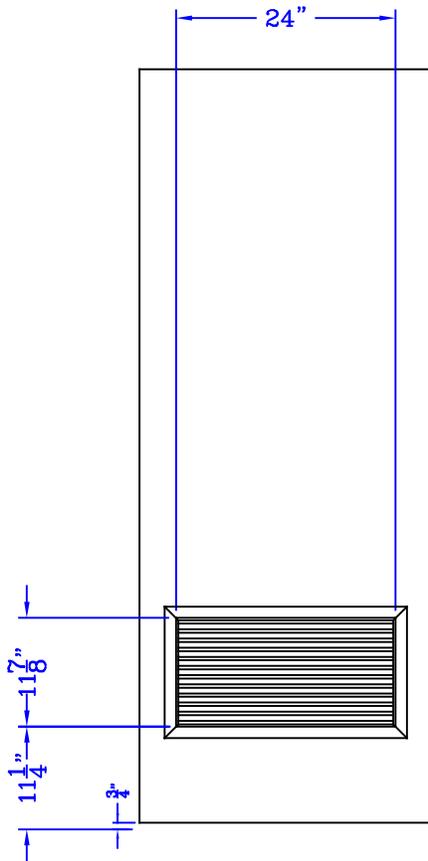
Per ADA standards, 10" from floor to casing.
 Louvers made by others from cold rolled steel, available in galvanized.

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



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

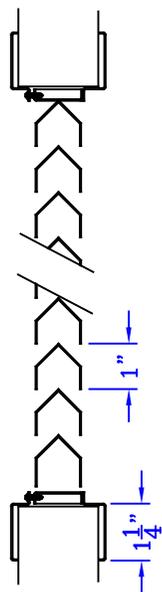
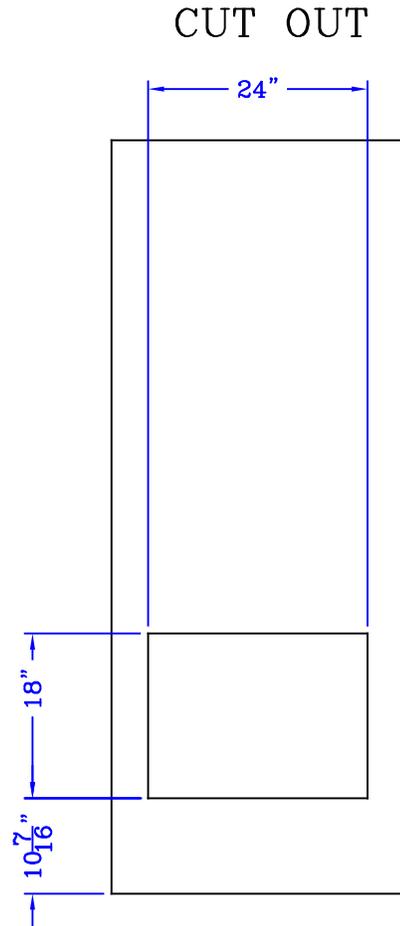
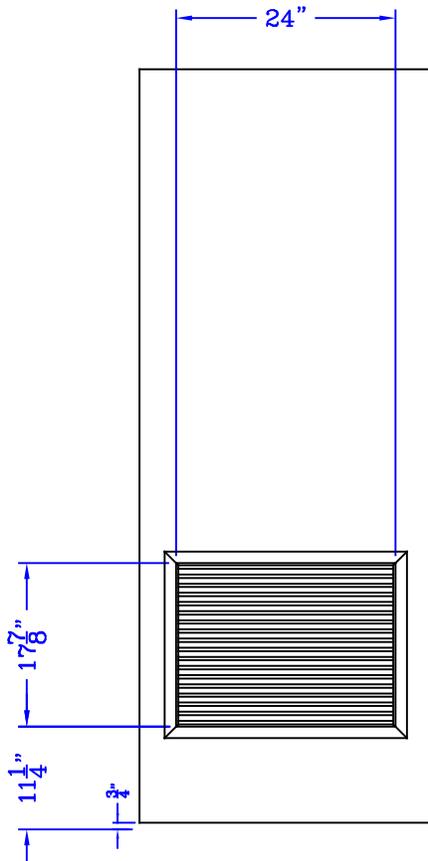
24" x 12" louver, sandwich type
 Not rated. Available with or without channel
LOUVER SIZES



CUT OUT

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

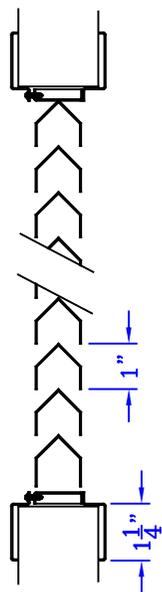
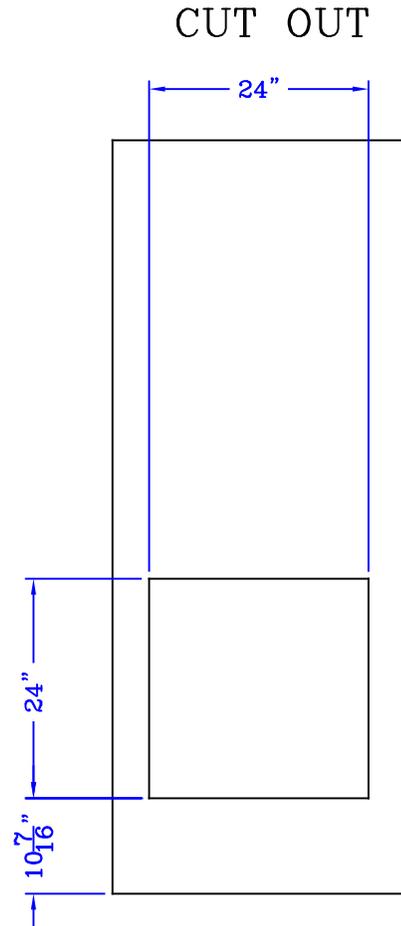
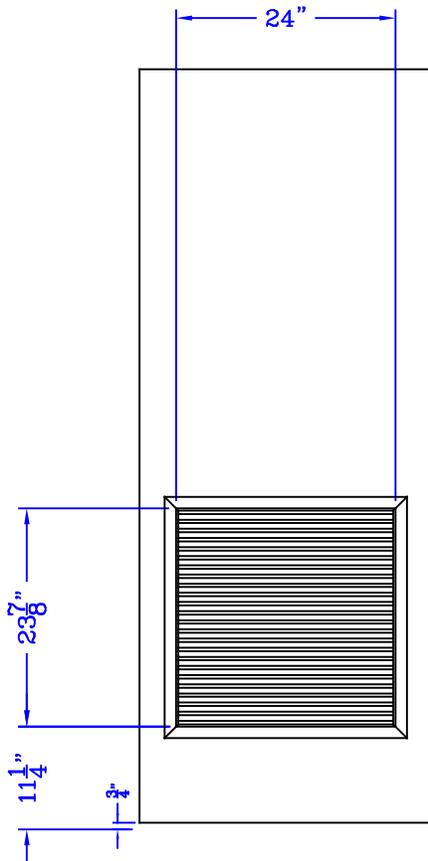
24" x 18" louver, sandwich type
Not rated. Available with or without channel
LOUVER SIZES



CUT OUT

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

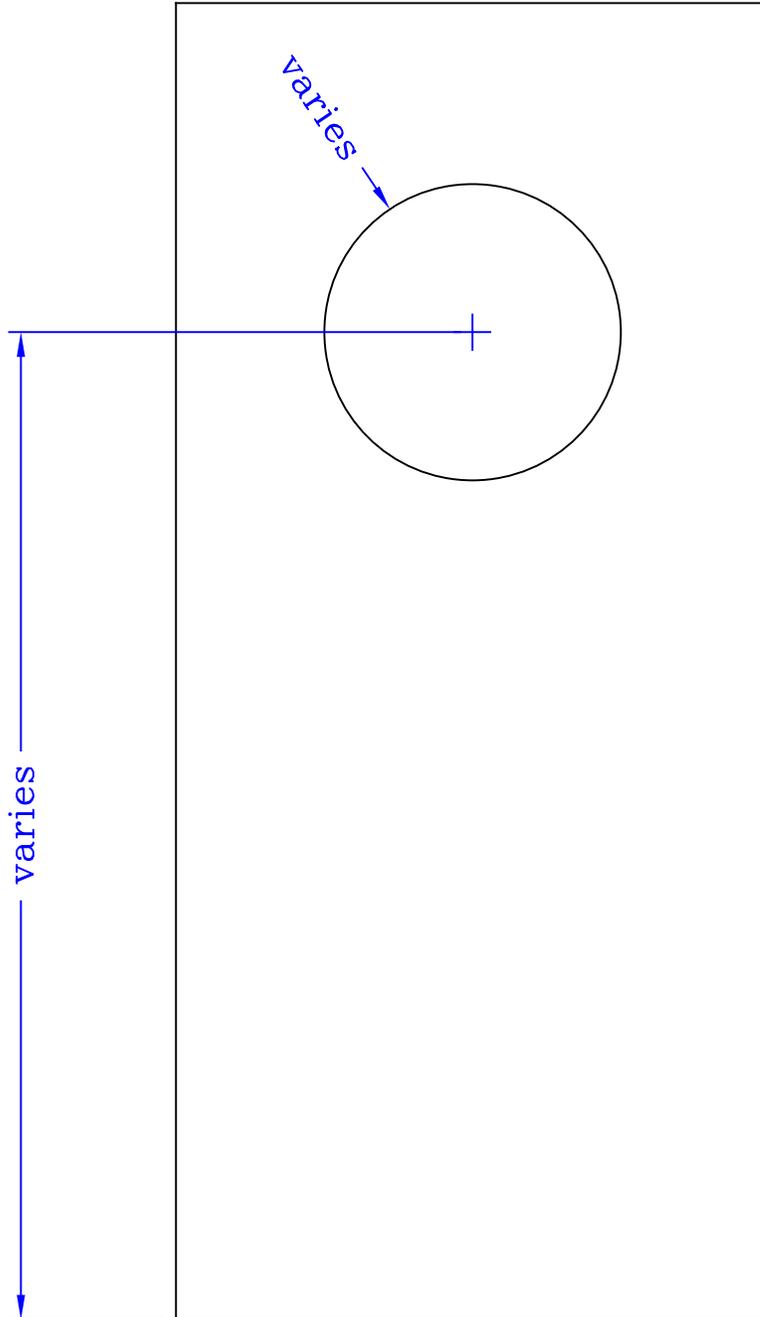
24" x 24" louver, sandwich type
 Not rated. Available with or without channel
LOUVER SIZES



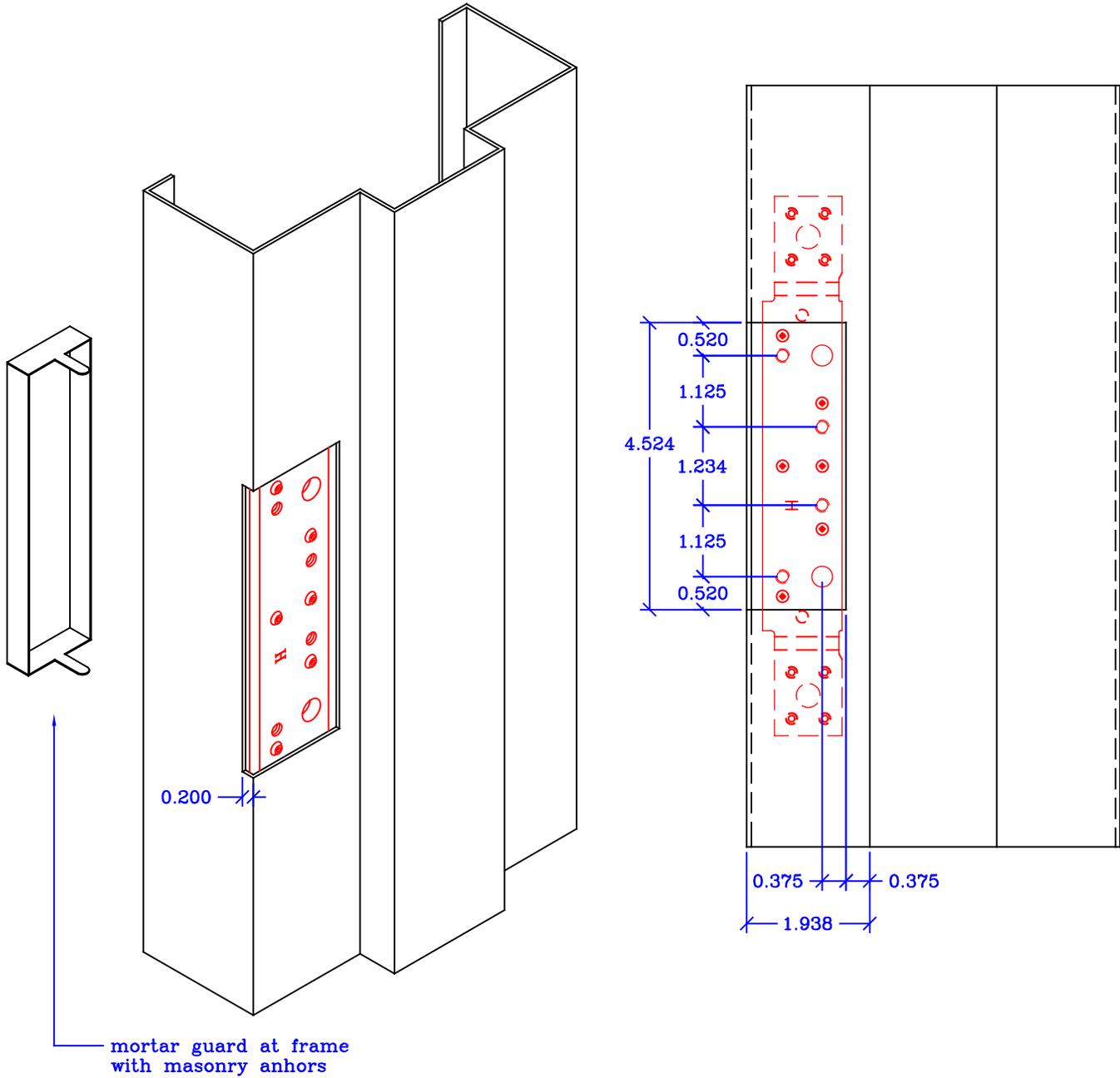
CUT OUT

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

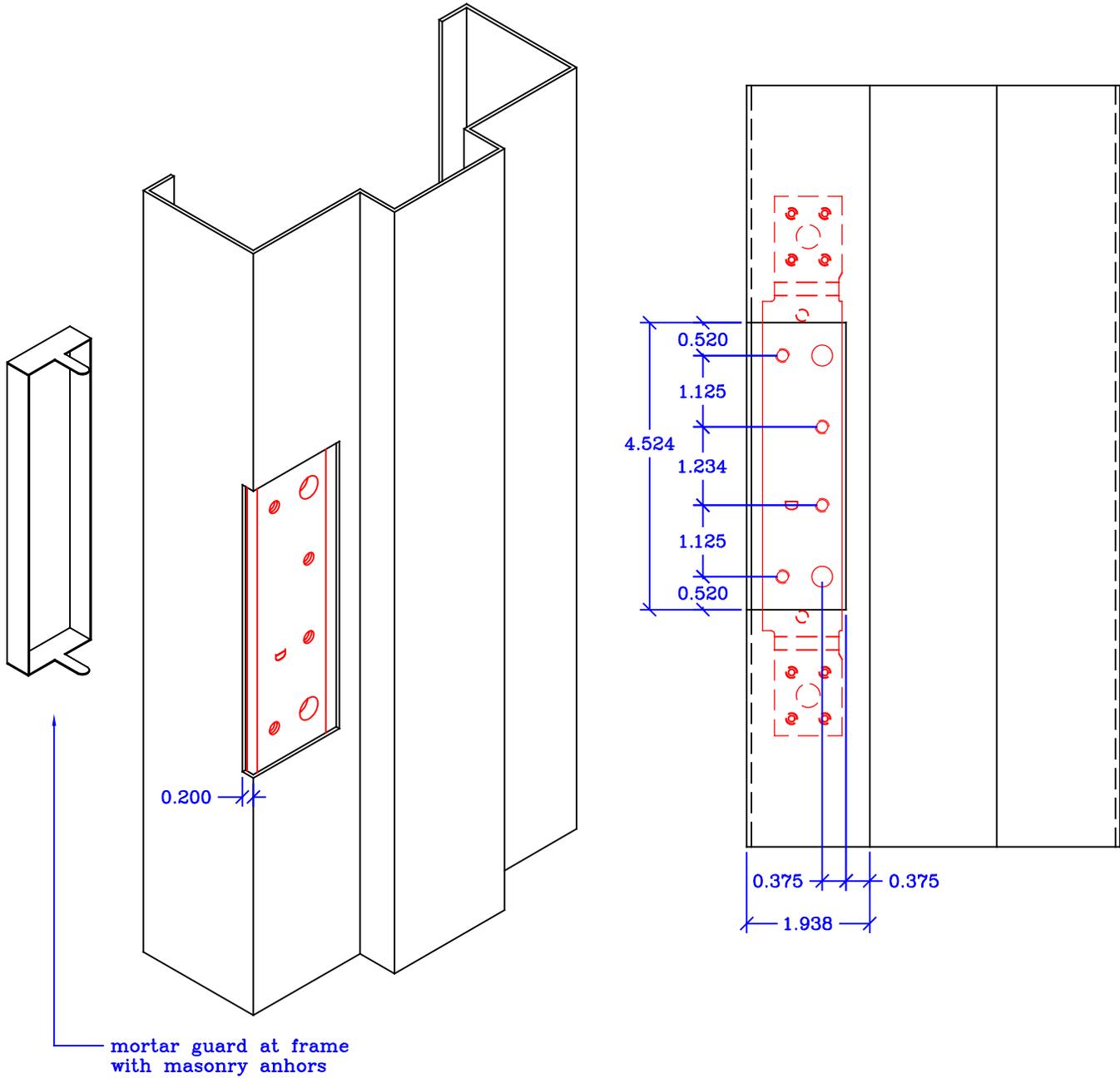
Round cut out
perimeter channel not available



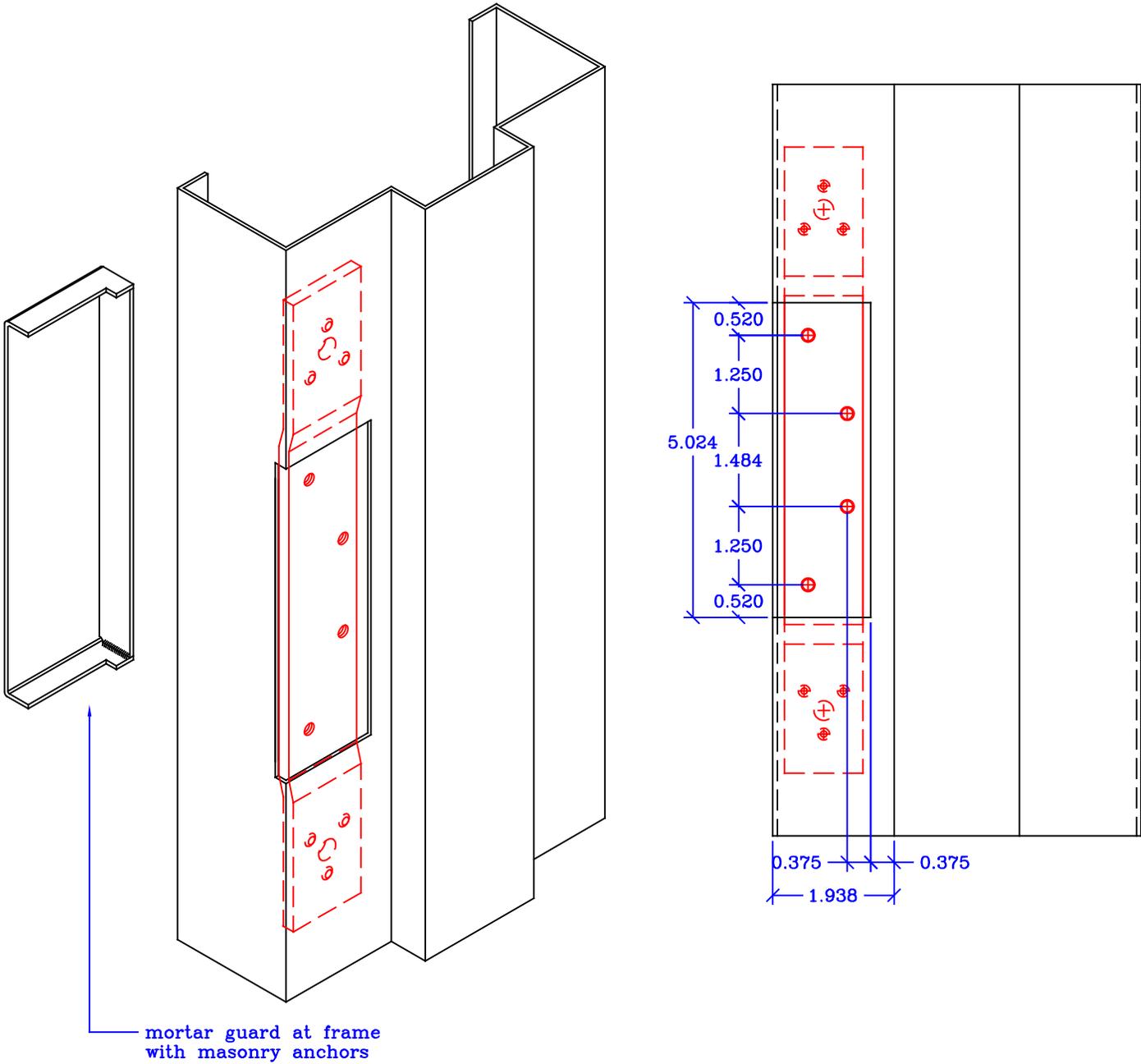
4 1/2" standard weight hinge reinforcement (0.134), 7ga
Projection welded



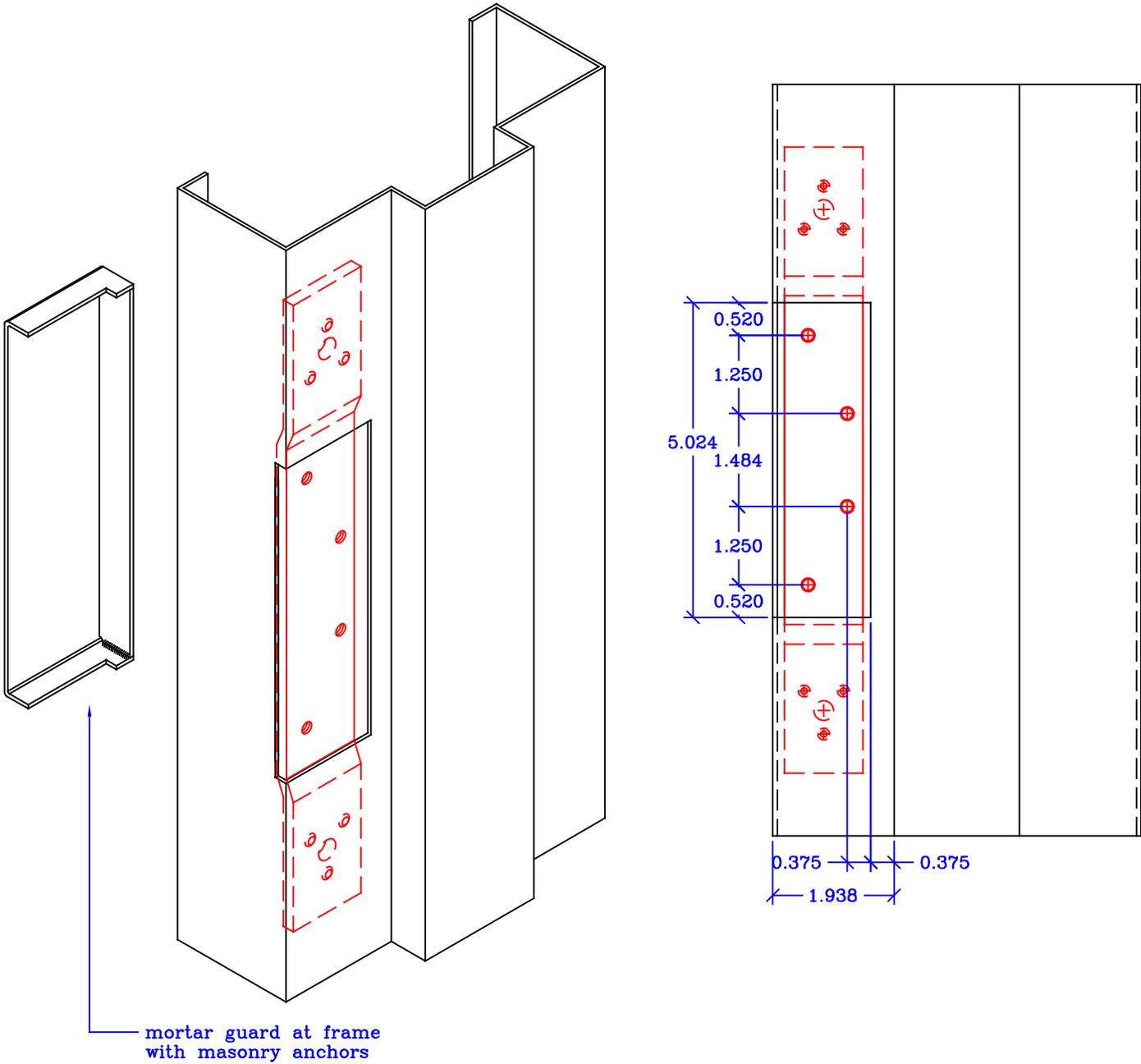
4 1/2" heavy weight hinge reinforcement (0.180), 7ga
Projection welded



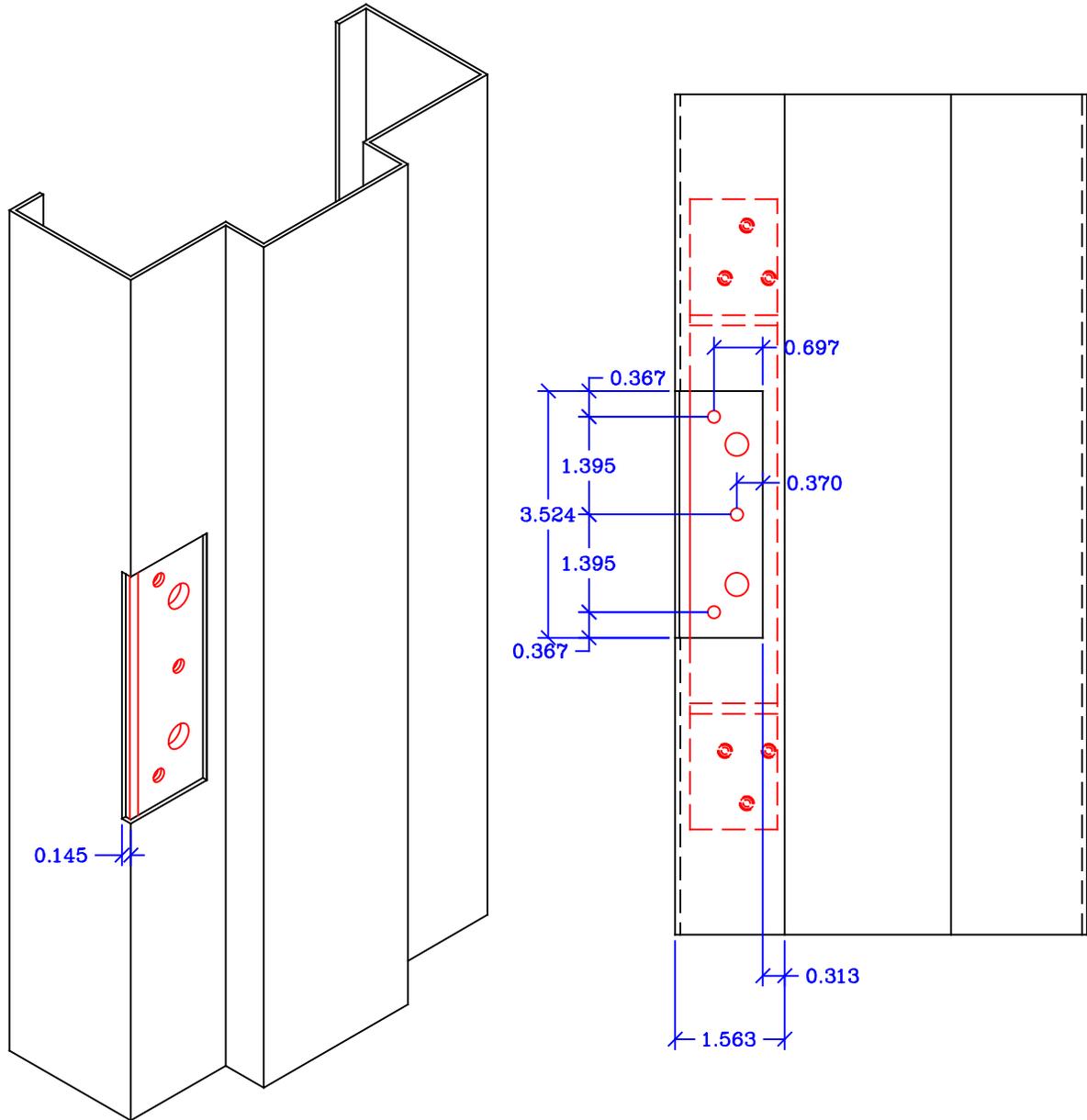
5" standard weight hinge reinforcement (0.146), 7ga
Projection welded



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

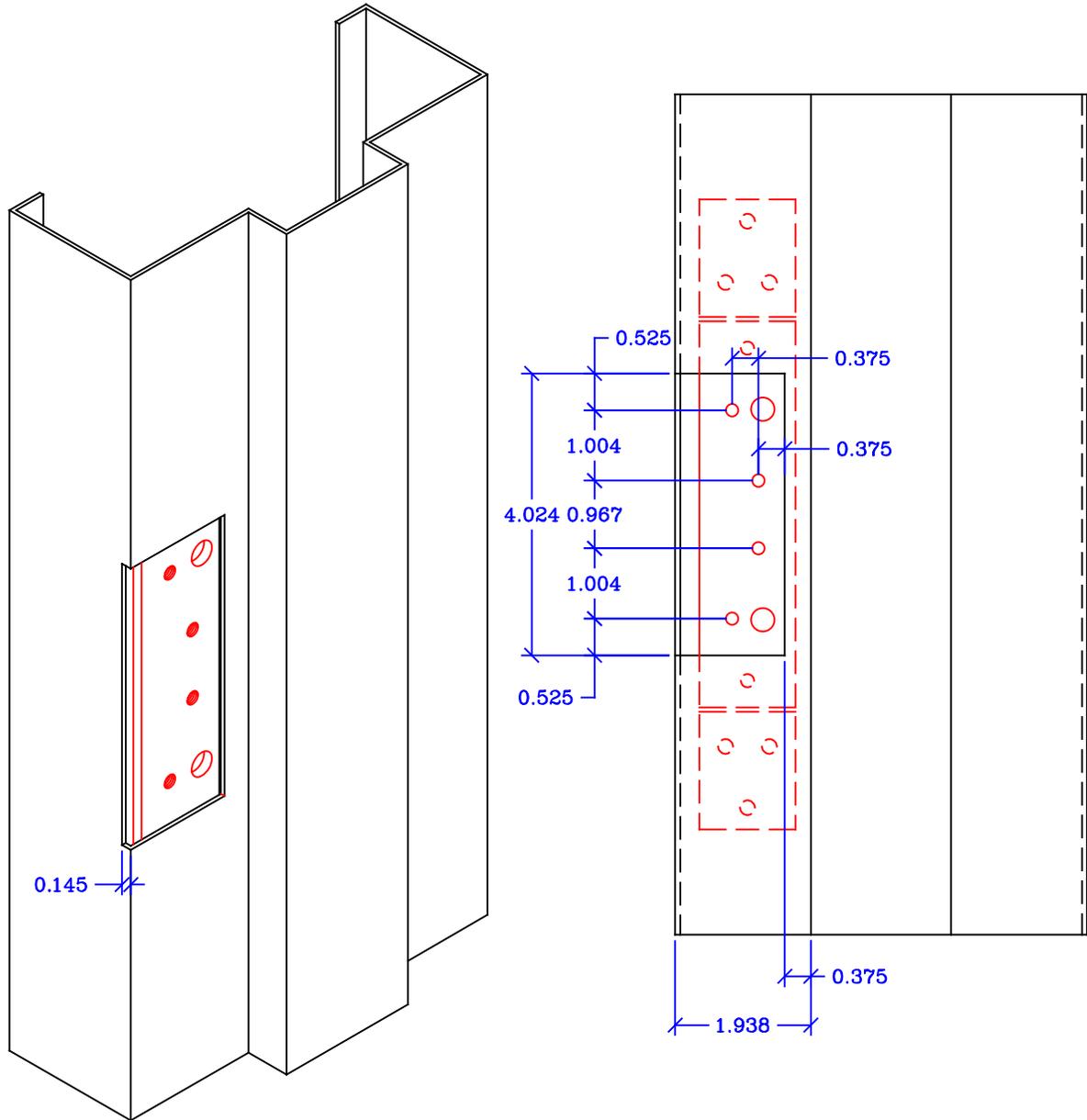


3 1/2" standard weight hinge reinforcement (0.125), 10ga
Projection welded

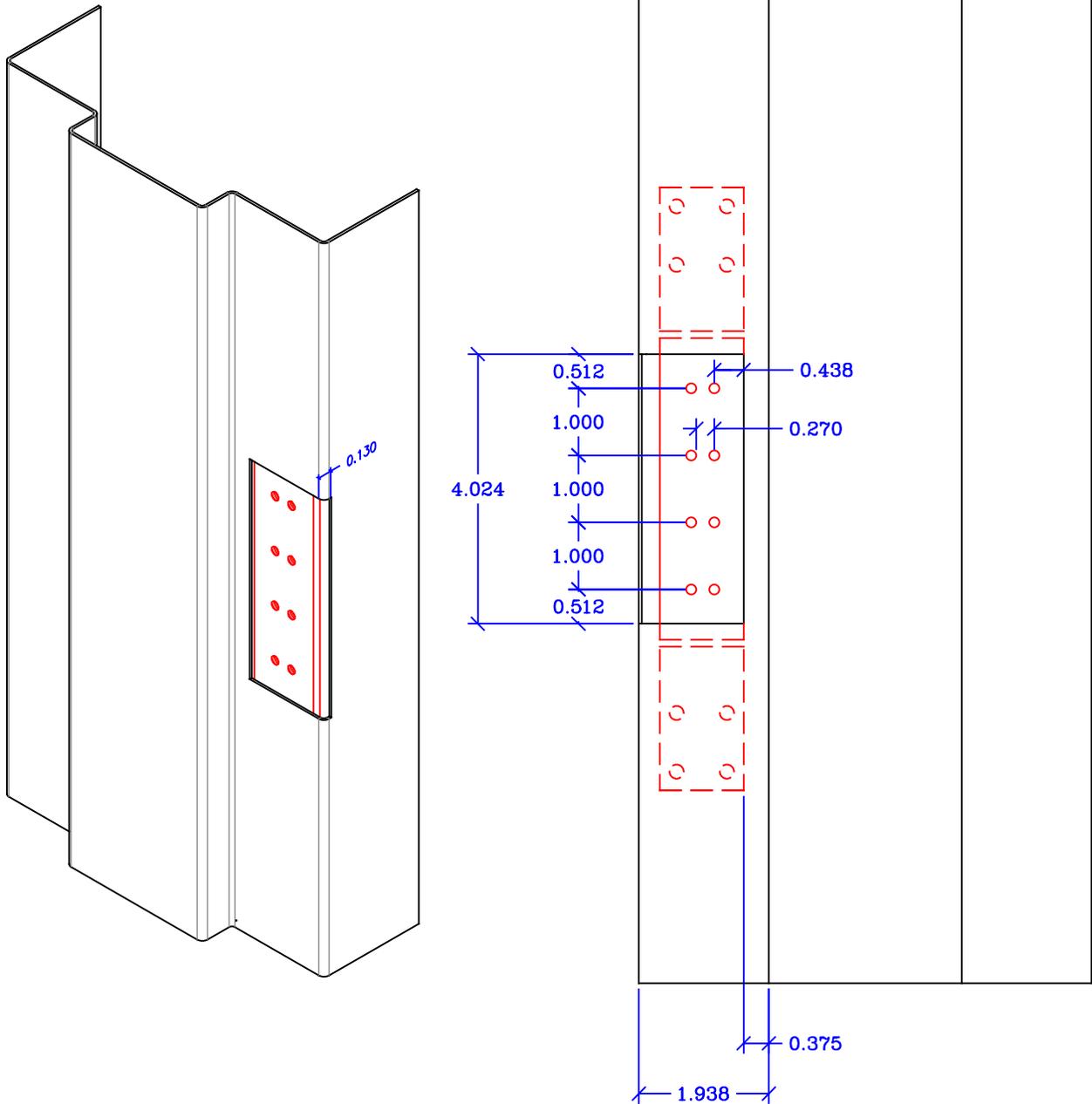


Shown for a 1 3/8" thick door

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

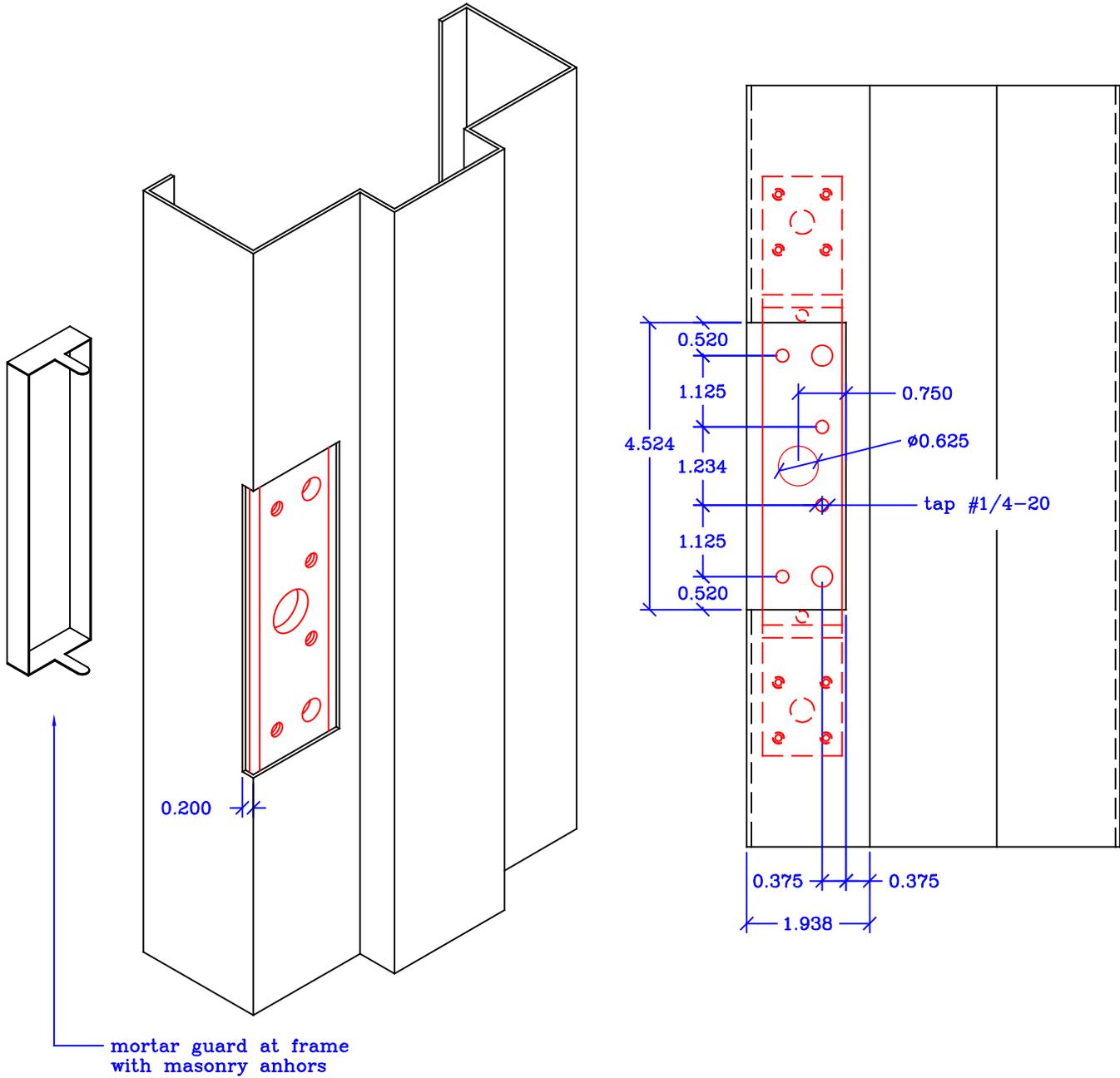


4" thin reinforcement, 10ga
Projection welded

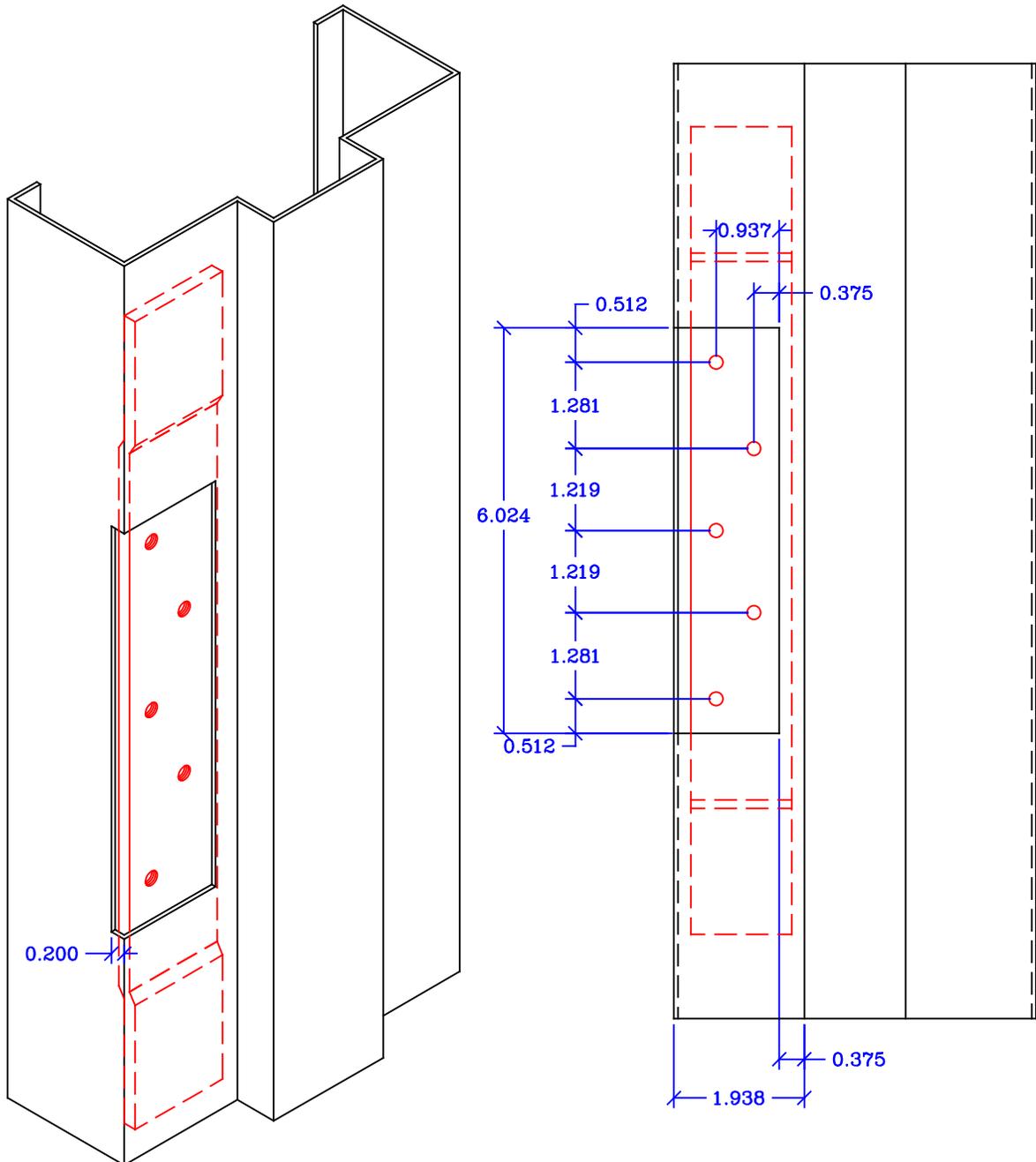


4 1/2" institutional hinge reinforcement (0.190), 7ga

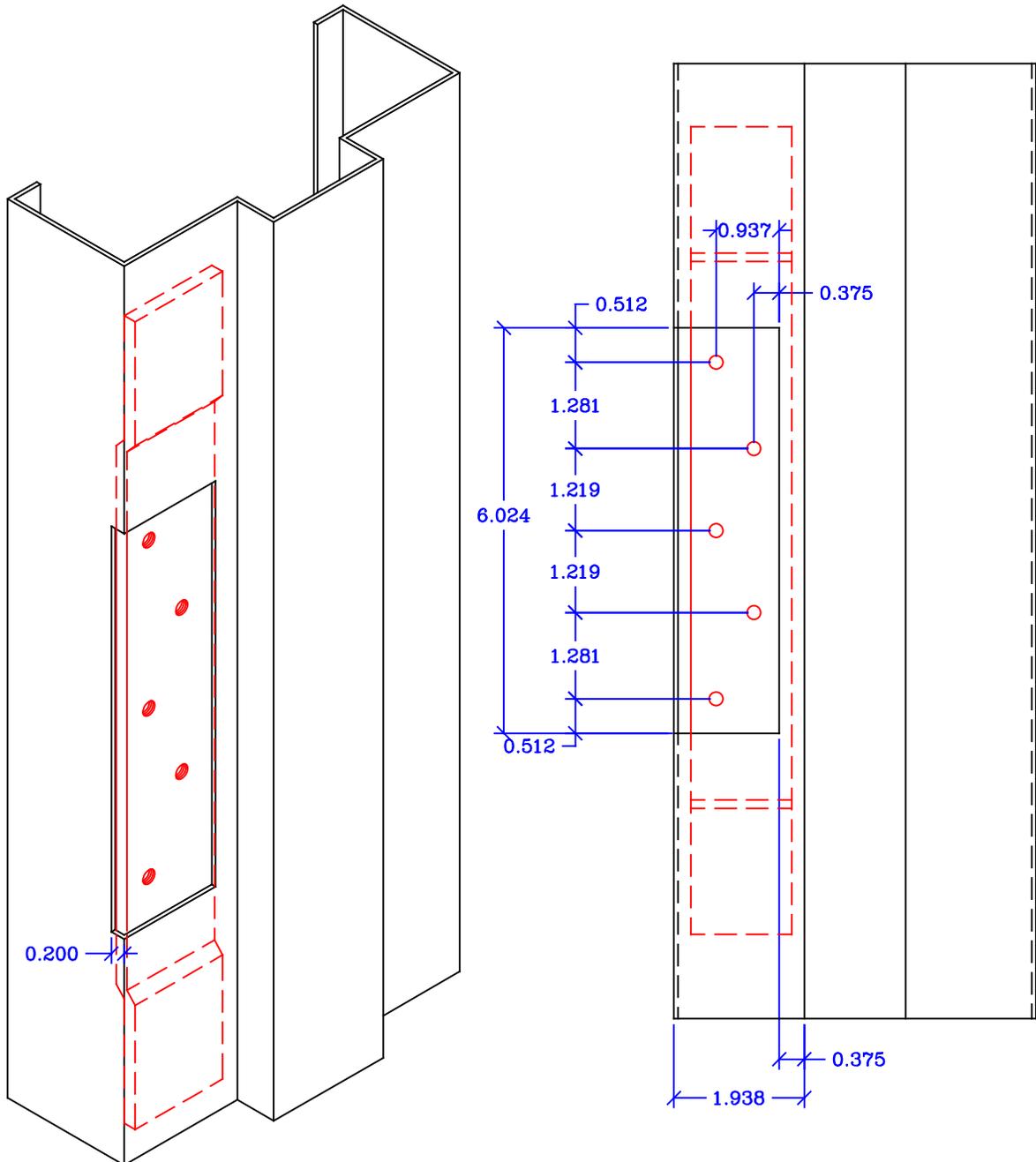
Projection welded



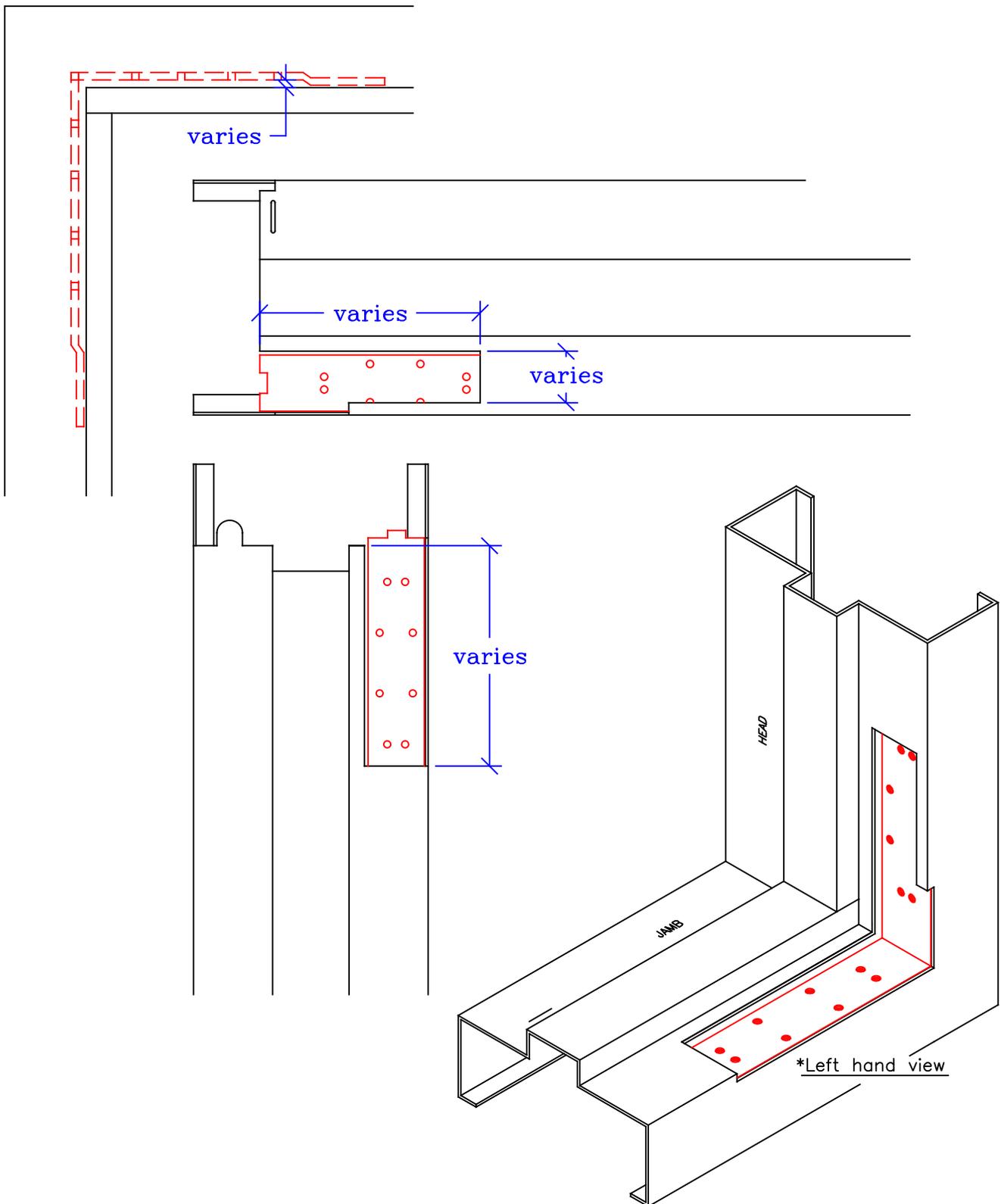
6" standard weight hinge reinforcement (0.160), 7ga
Projection welded



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

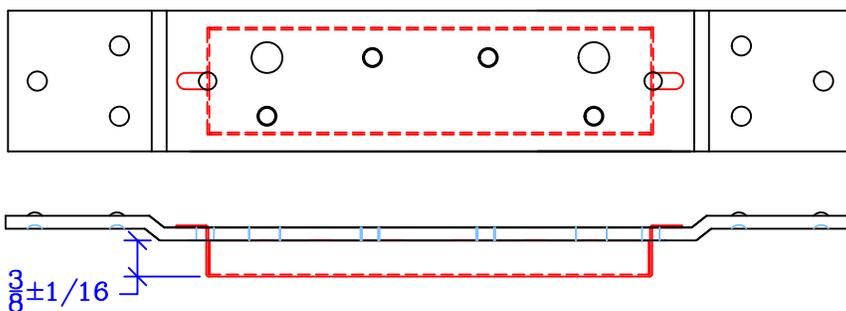
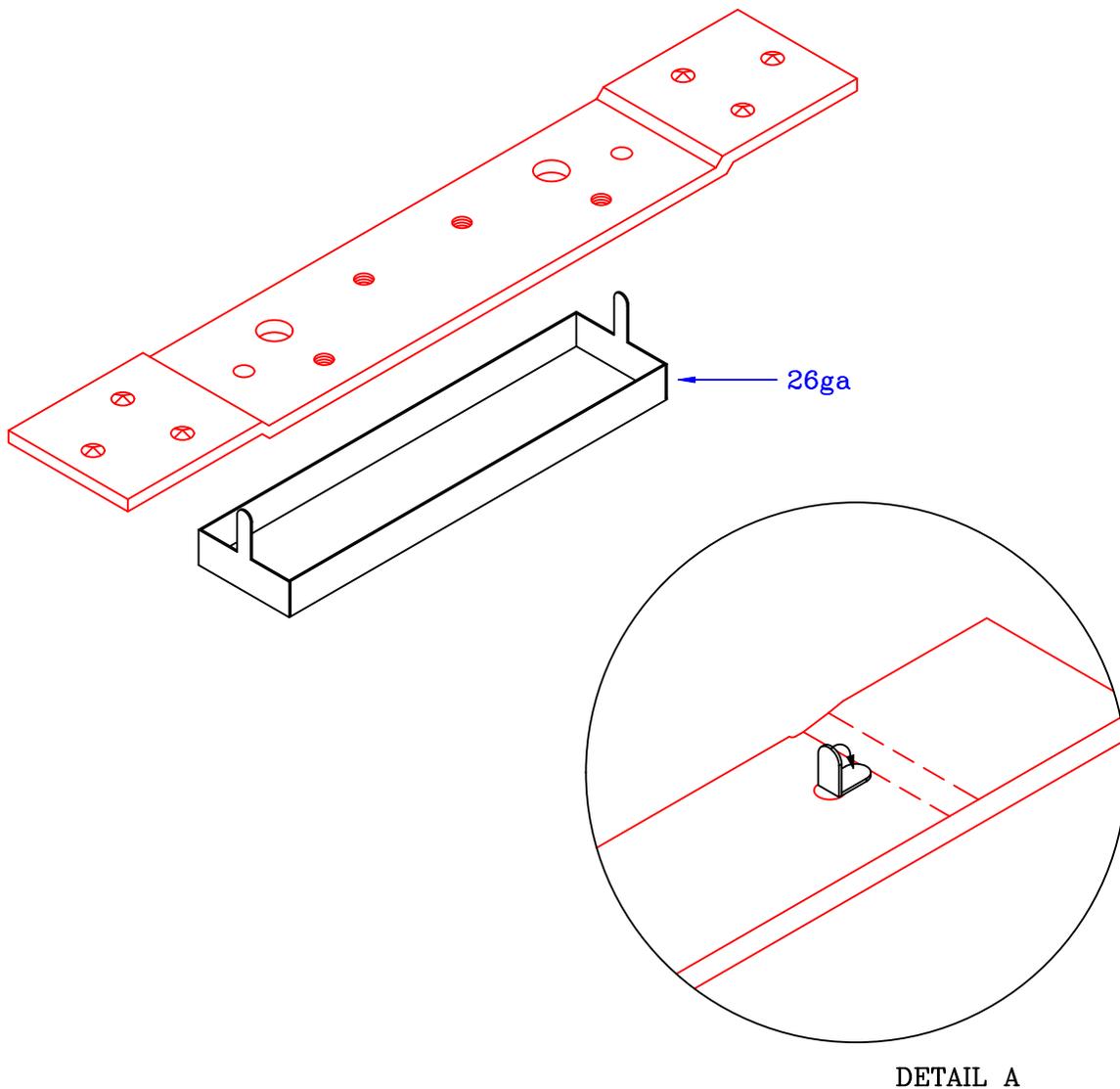


Anchor hinge, 10ga Projection welded



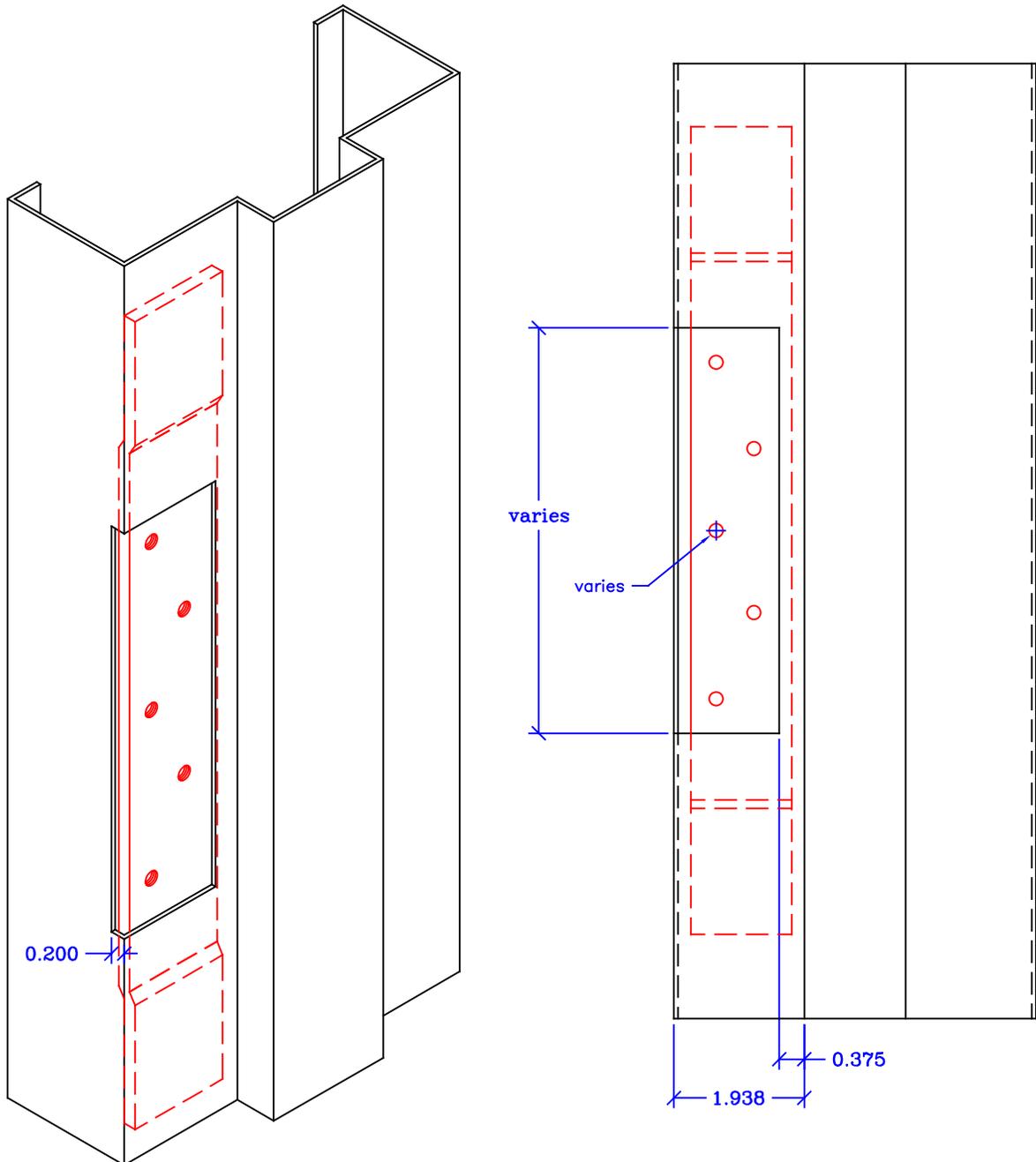
*manufacturer's template to be provided

Mortar guard



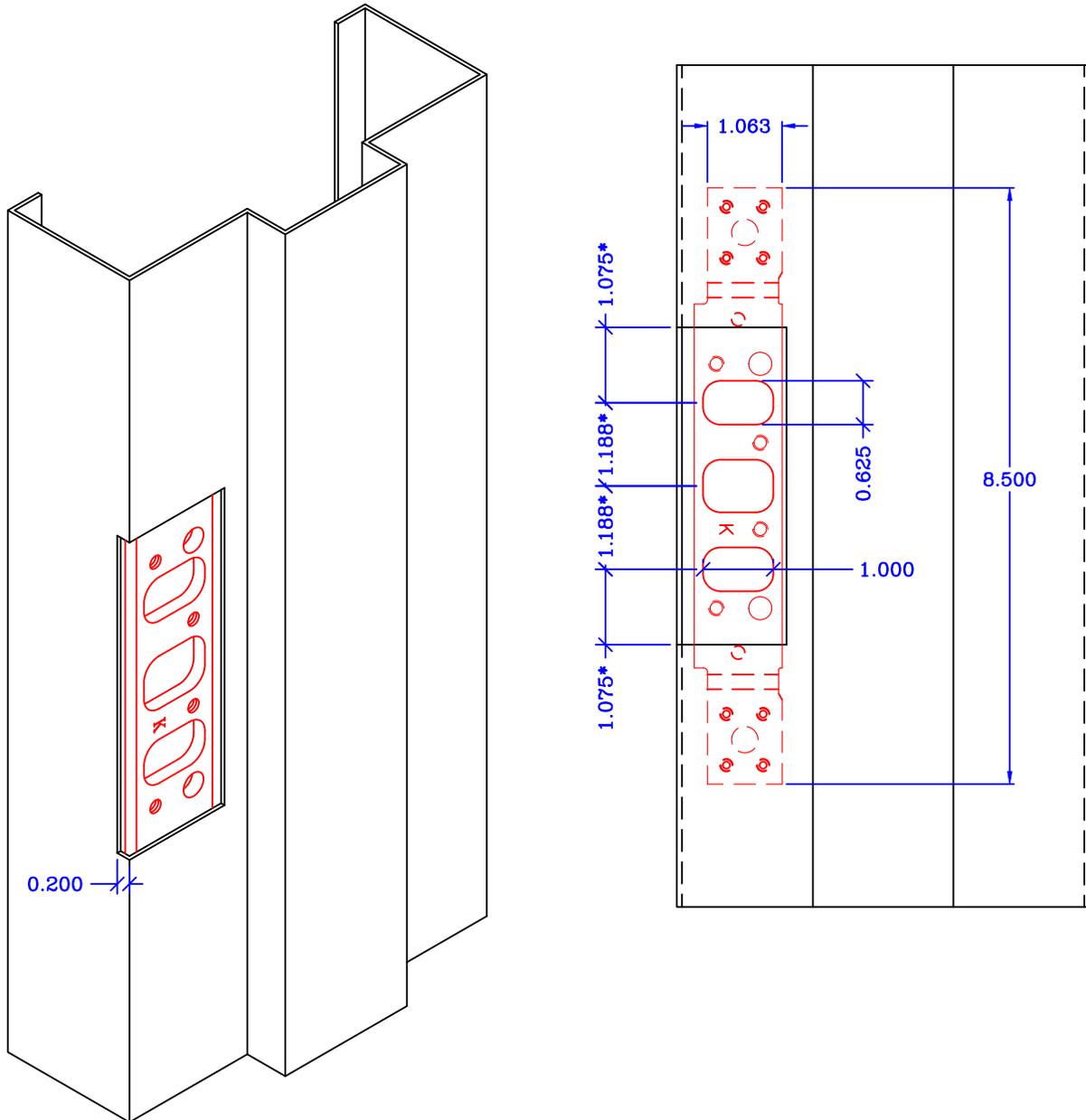
Added at all frames with masonry anchors
Model for 4 1/2" butt hinge reinforcement shown.

Special mortise hinge, 7ga
Projection welded



*manufacturer's template to be provided

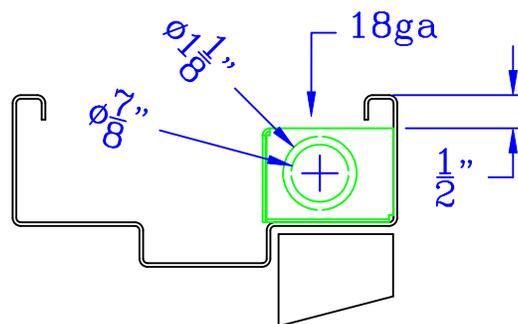
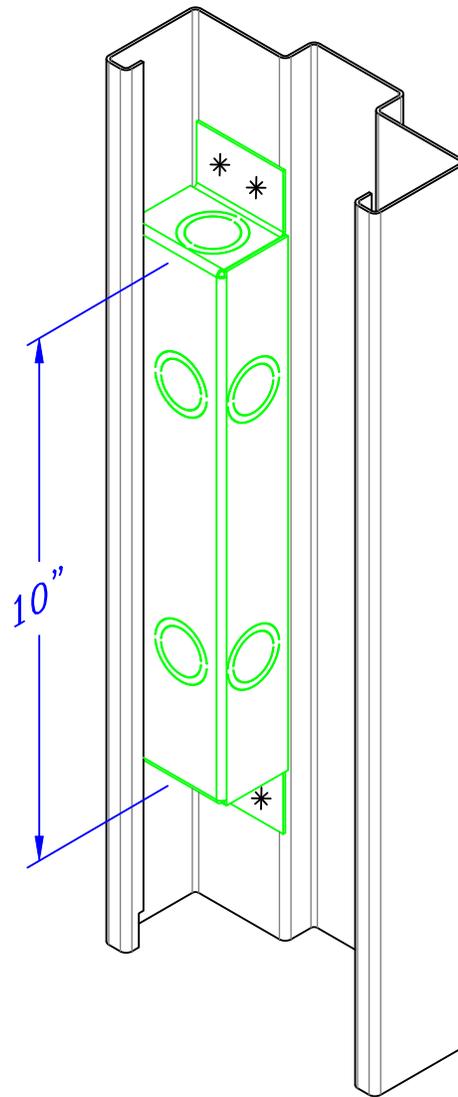
Electric hinge reinforcement, 7ga
Projection welded



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

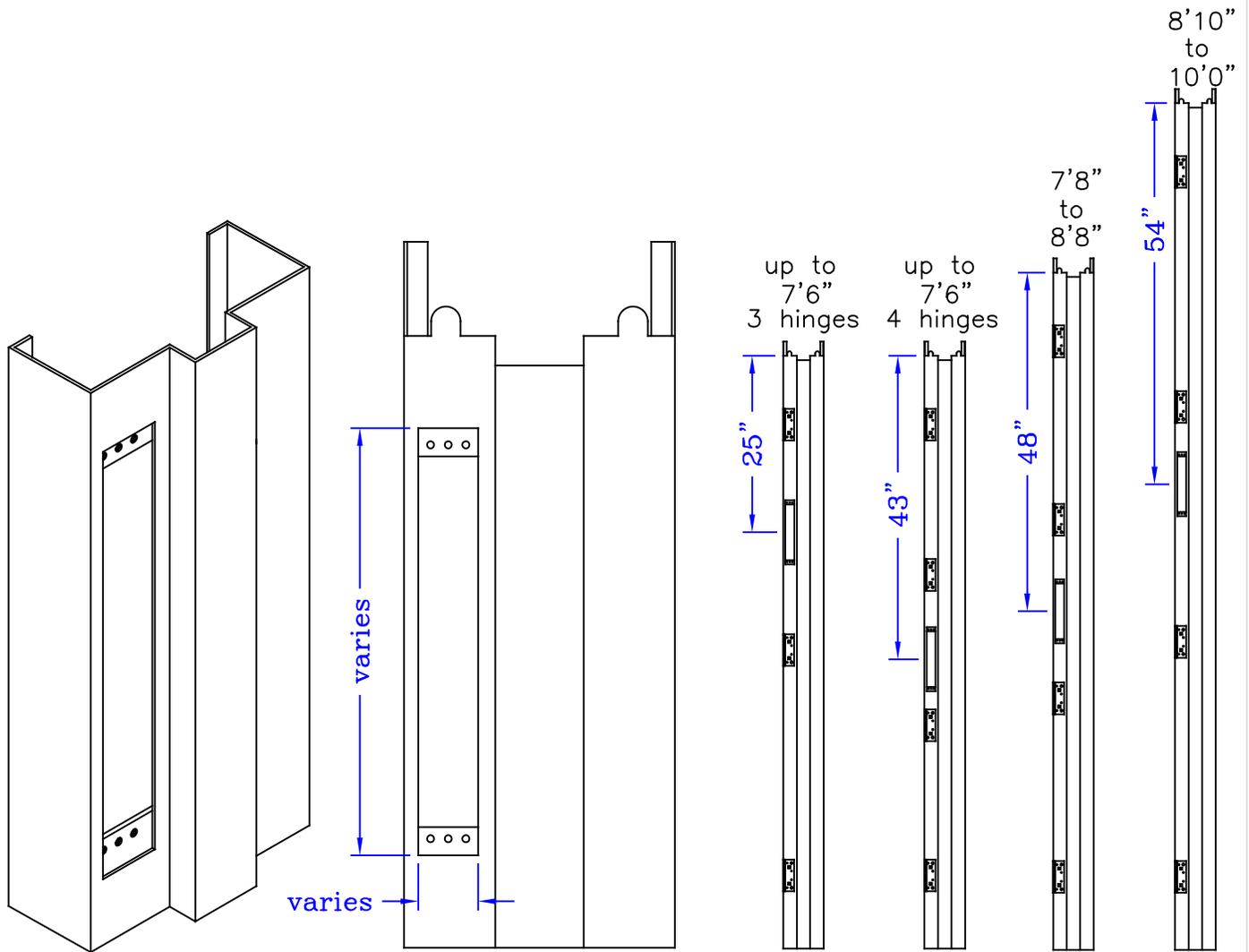
Box for electric hinge with knockouts

Spot welded



For 2" face frame or more.

Electric power transfer reinforcements, 12ga
Projection welded



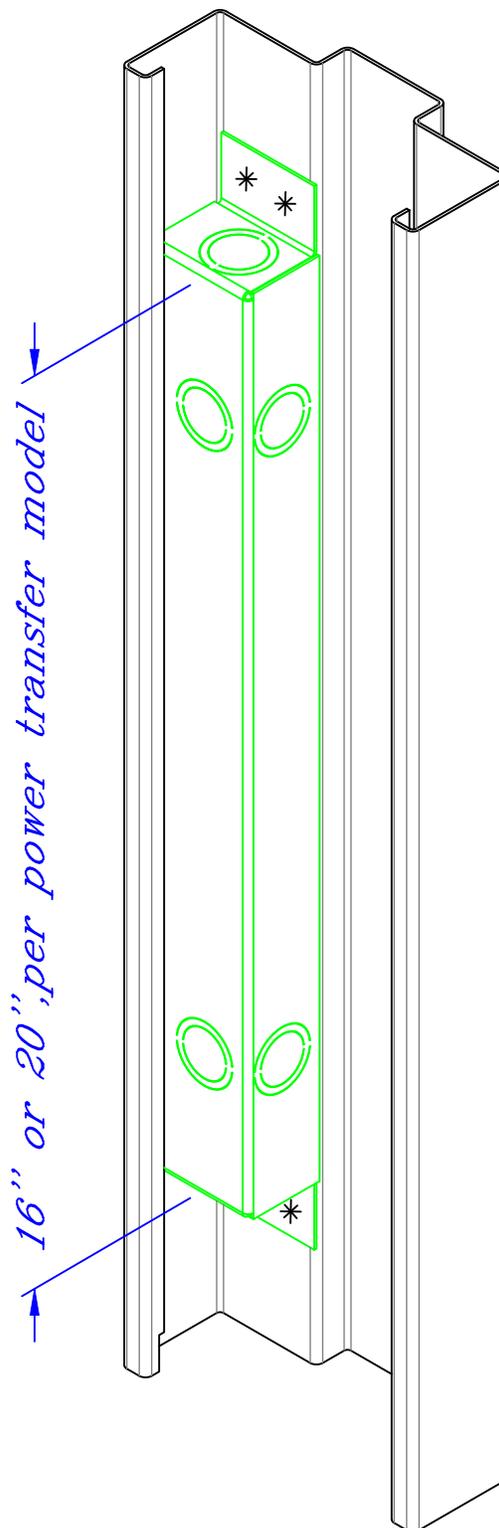
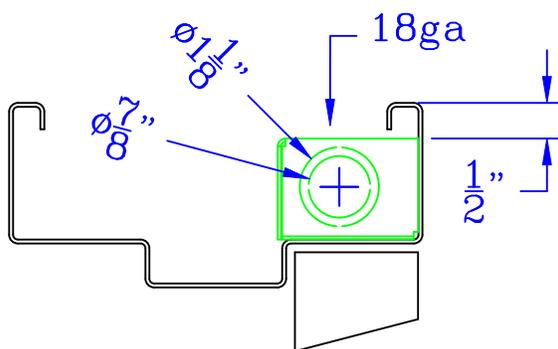
Electrical prep

*manufacturer's template to be provided

EPT

Box for power transfer with knockouts

Spot welded



Electrical prep

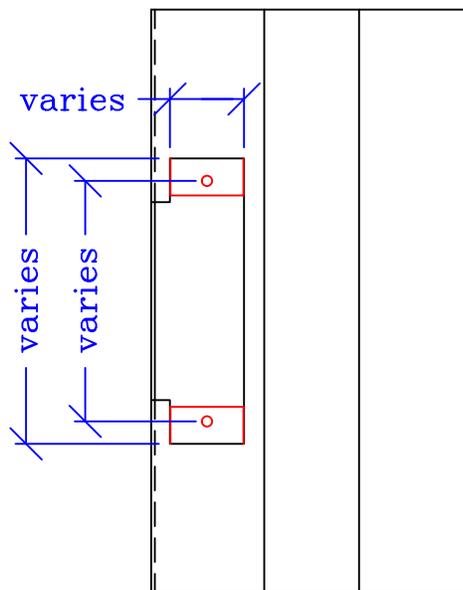
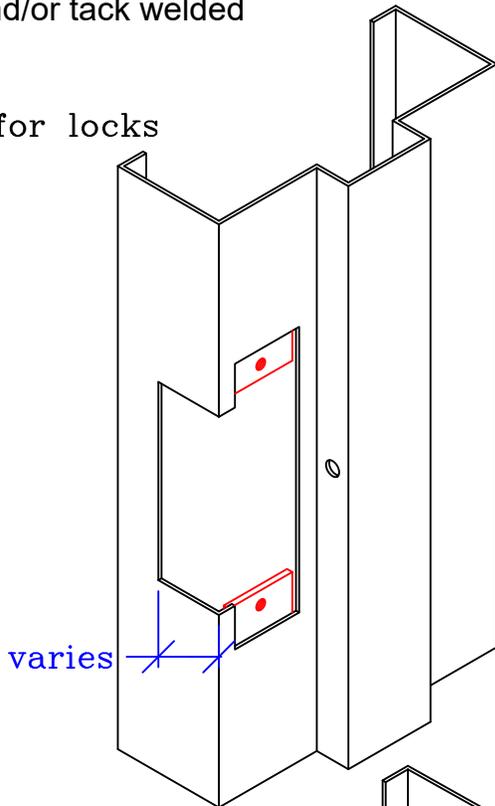
EPTBOX

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

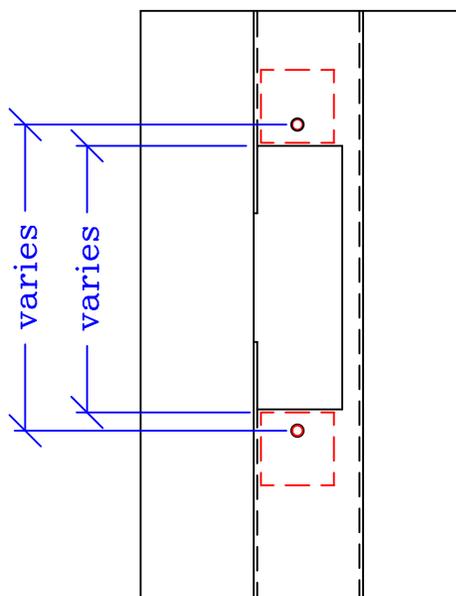
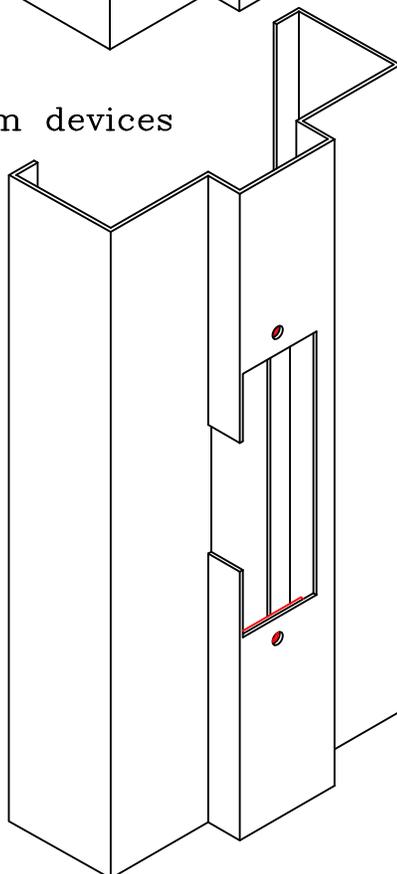
Prep. for electric strike, 12ga

Spot and/or tack welded

for locks



for rim devices

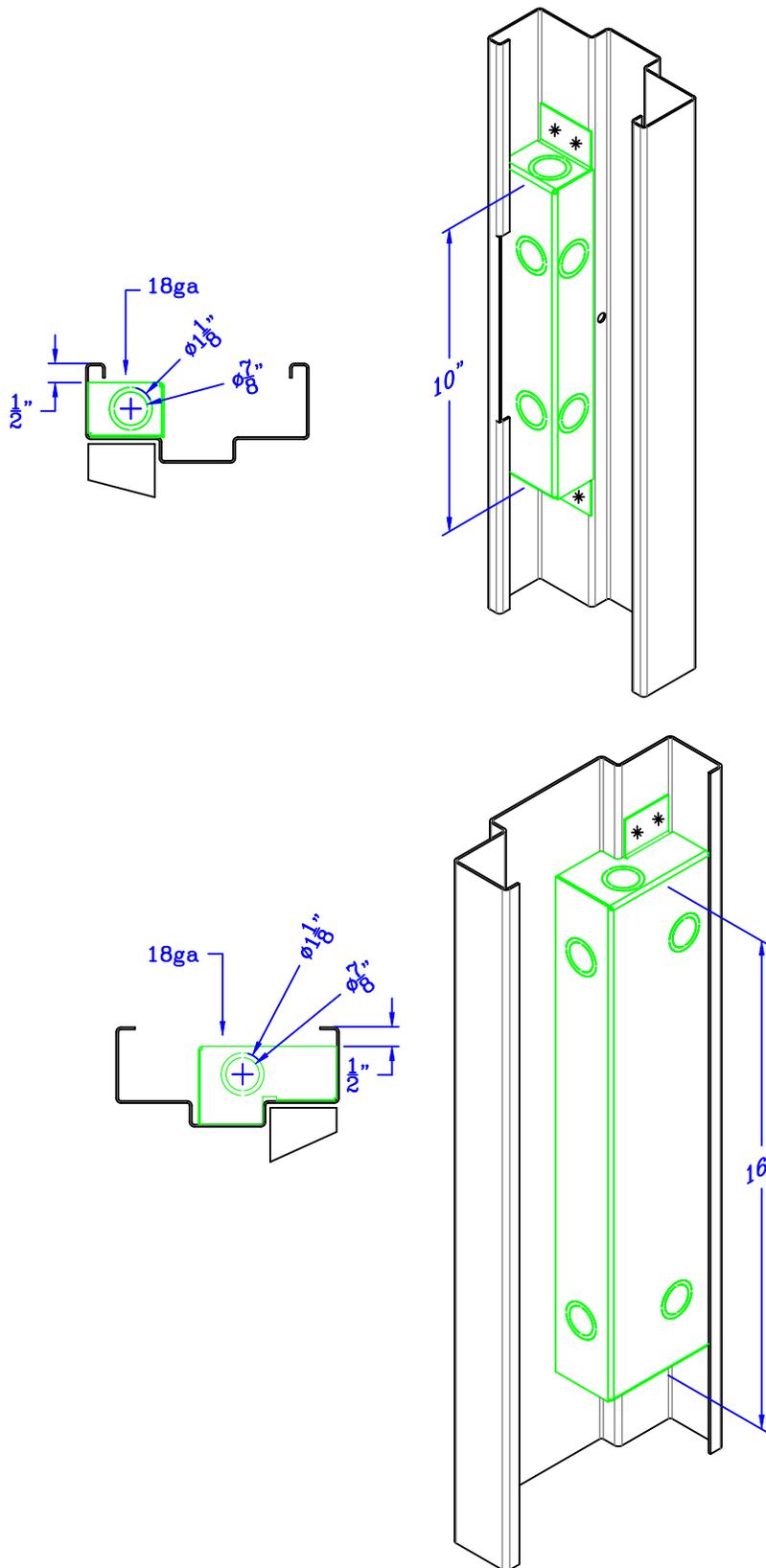


*availability per soffit's width

*manufacturer's template to be provided

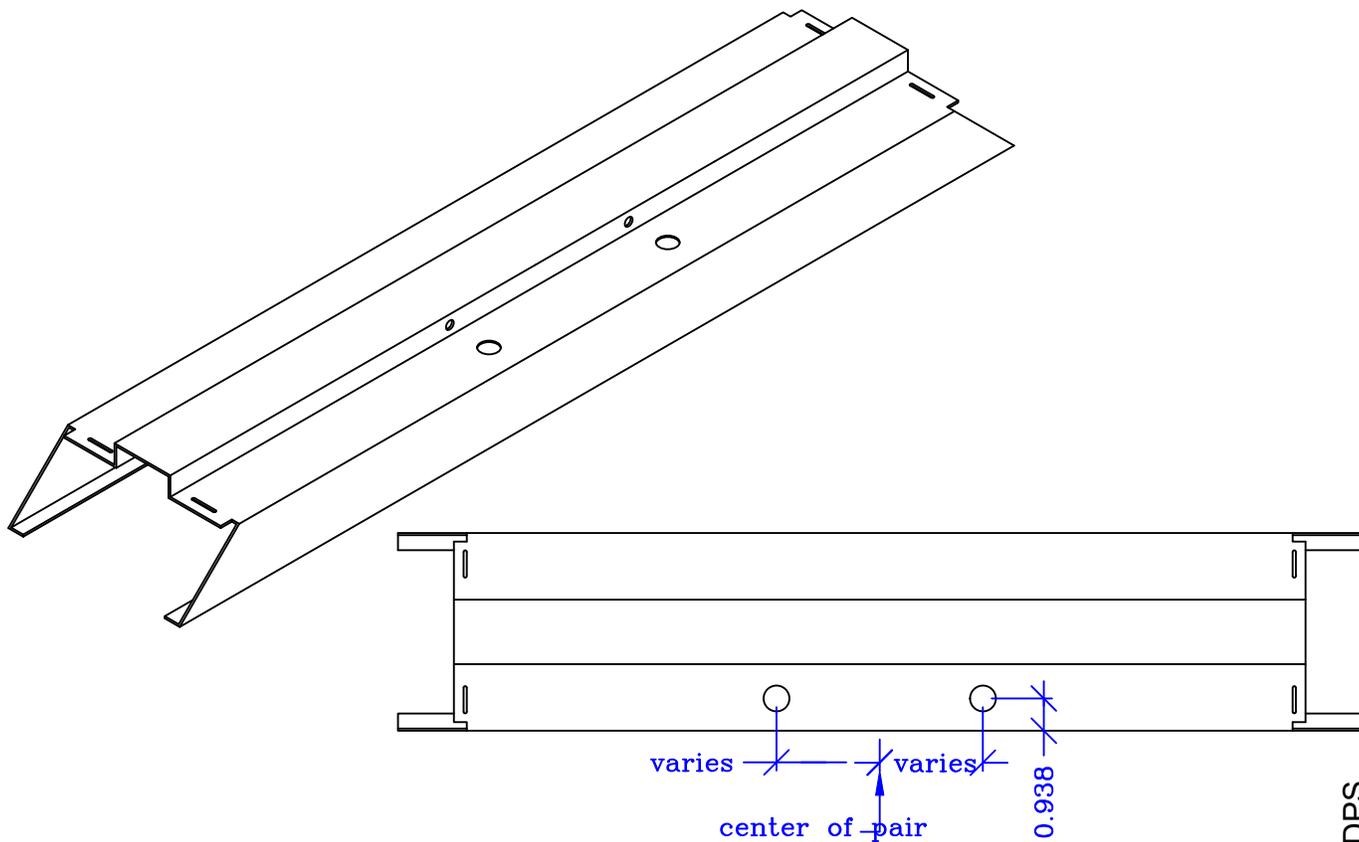
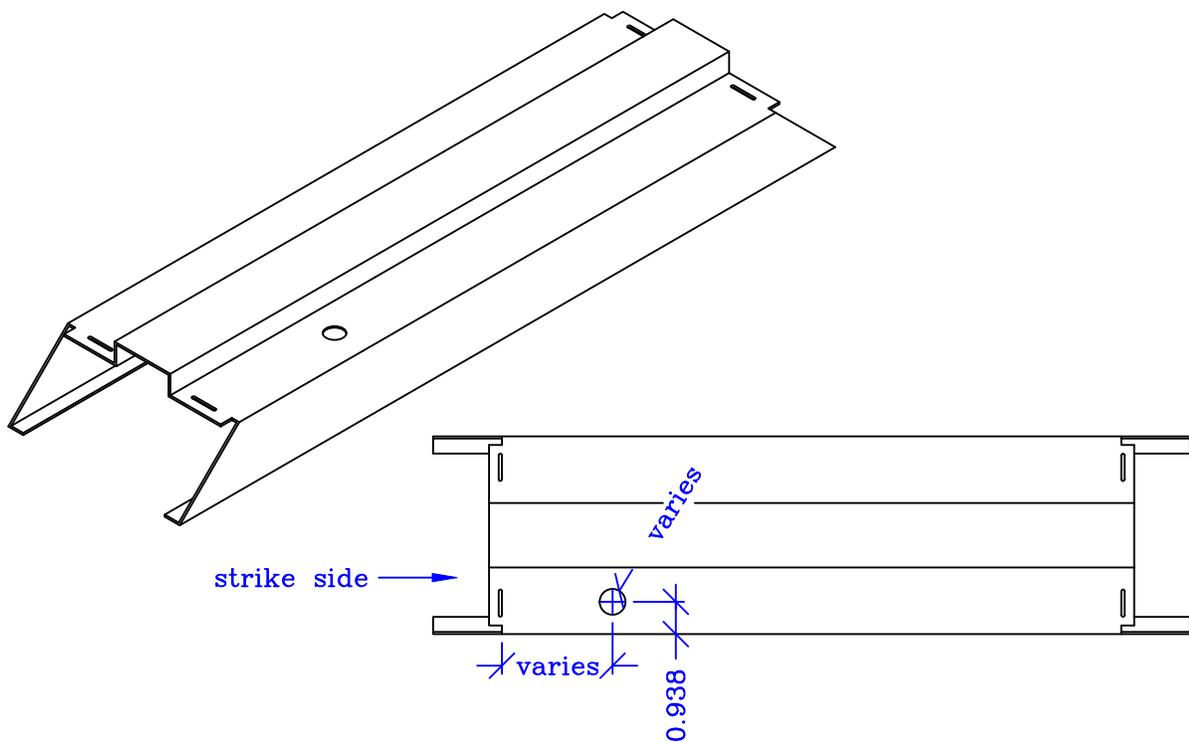
Box for electric strike with knockouts

Spot welded



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

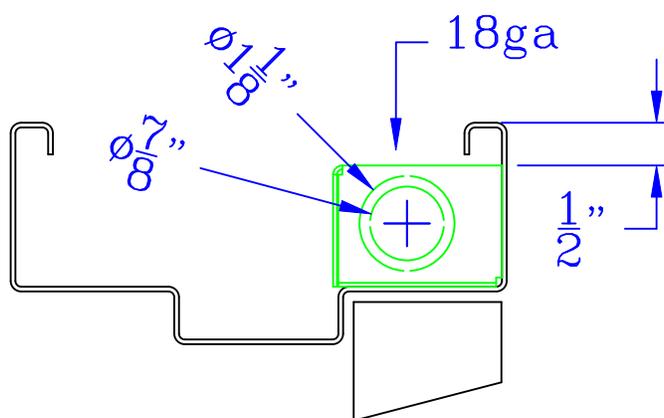
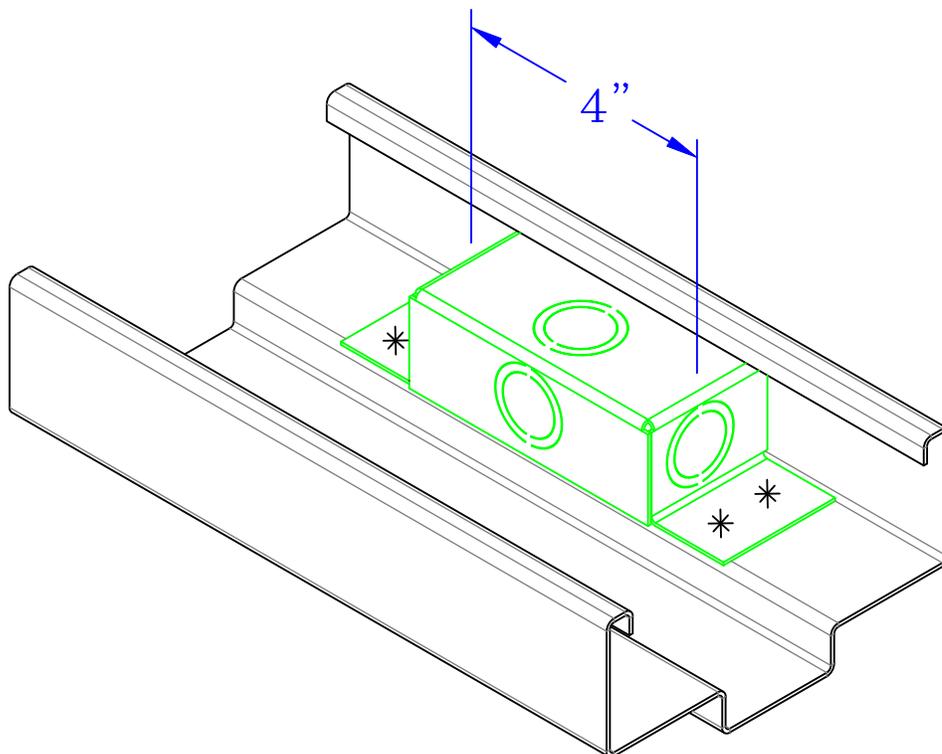
Prep. for magnetic contact, hole only at head



*manufacturer's template to be provided

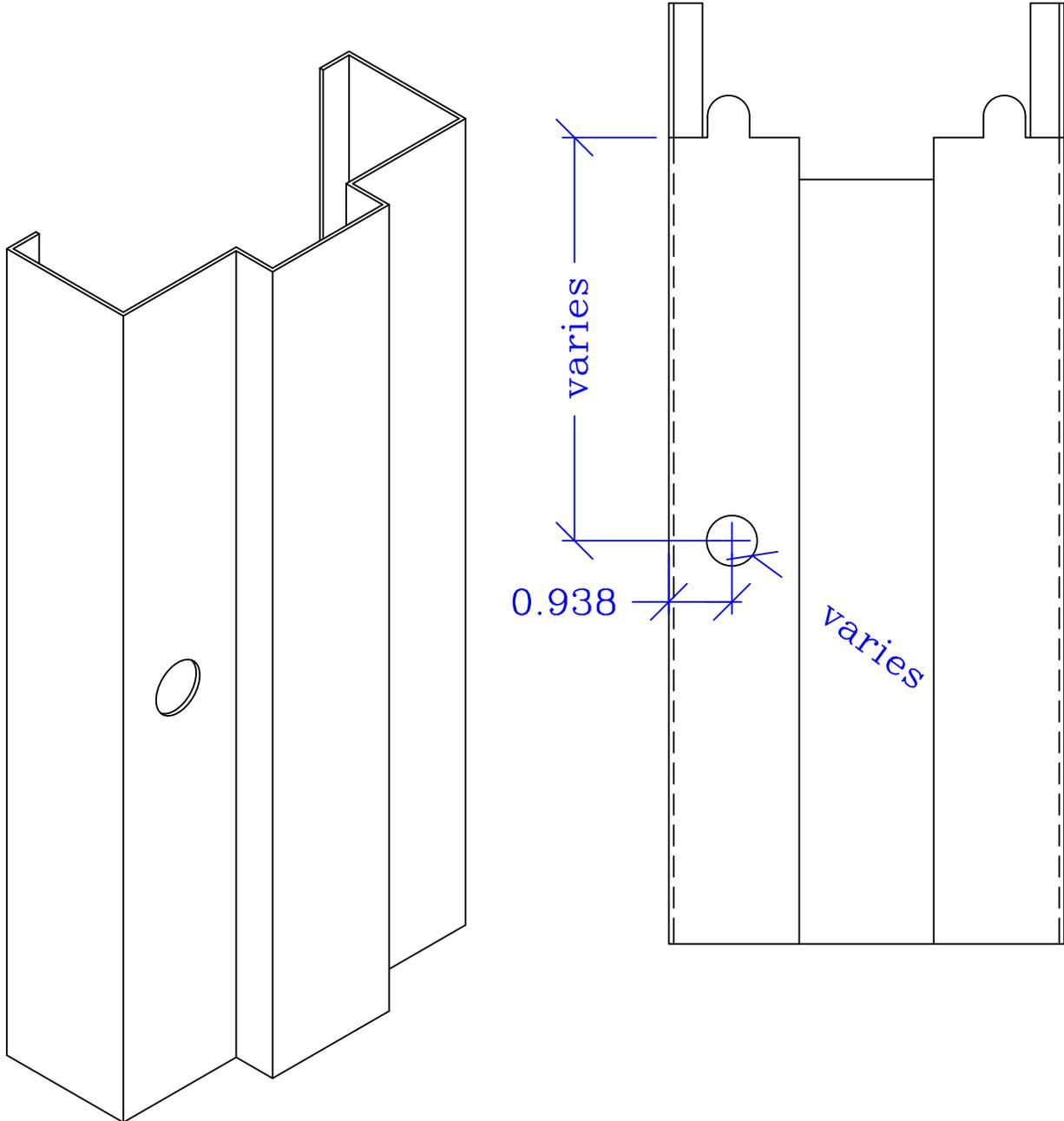
Box for magnetic contact with knockouts

Spot welded



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

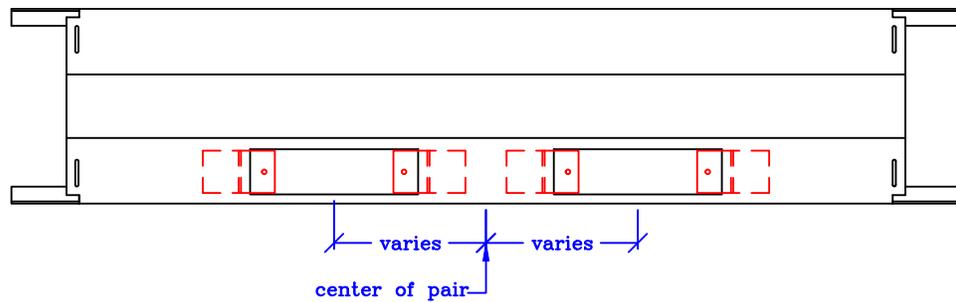
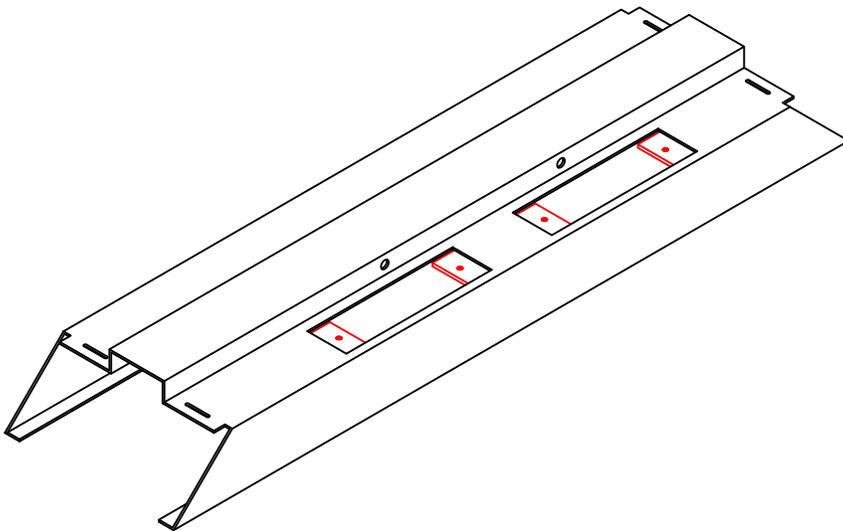
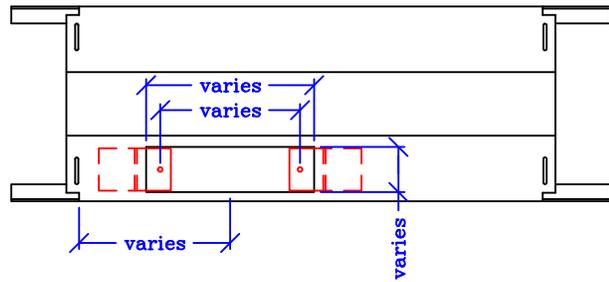
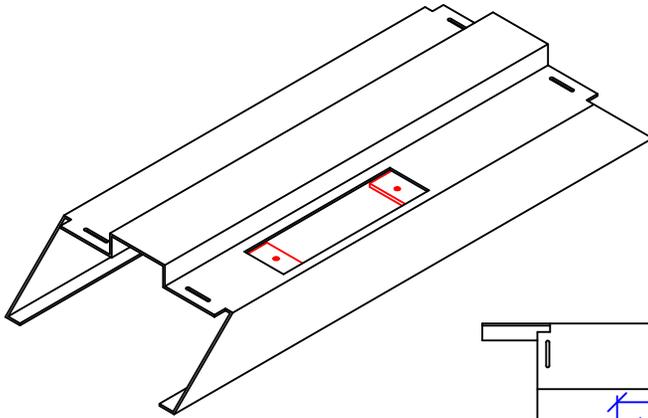
Prep. for magnetic contact, hole only at jamb



Electrical prep

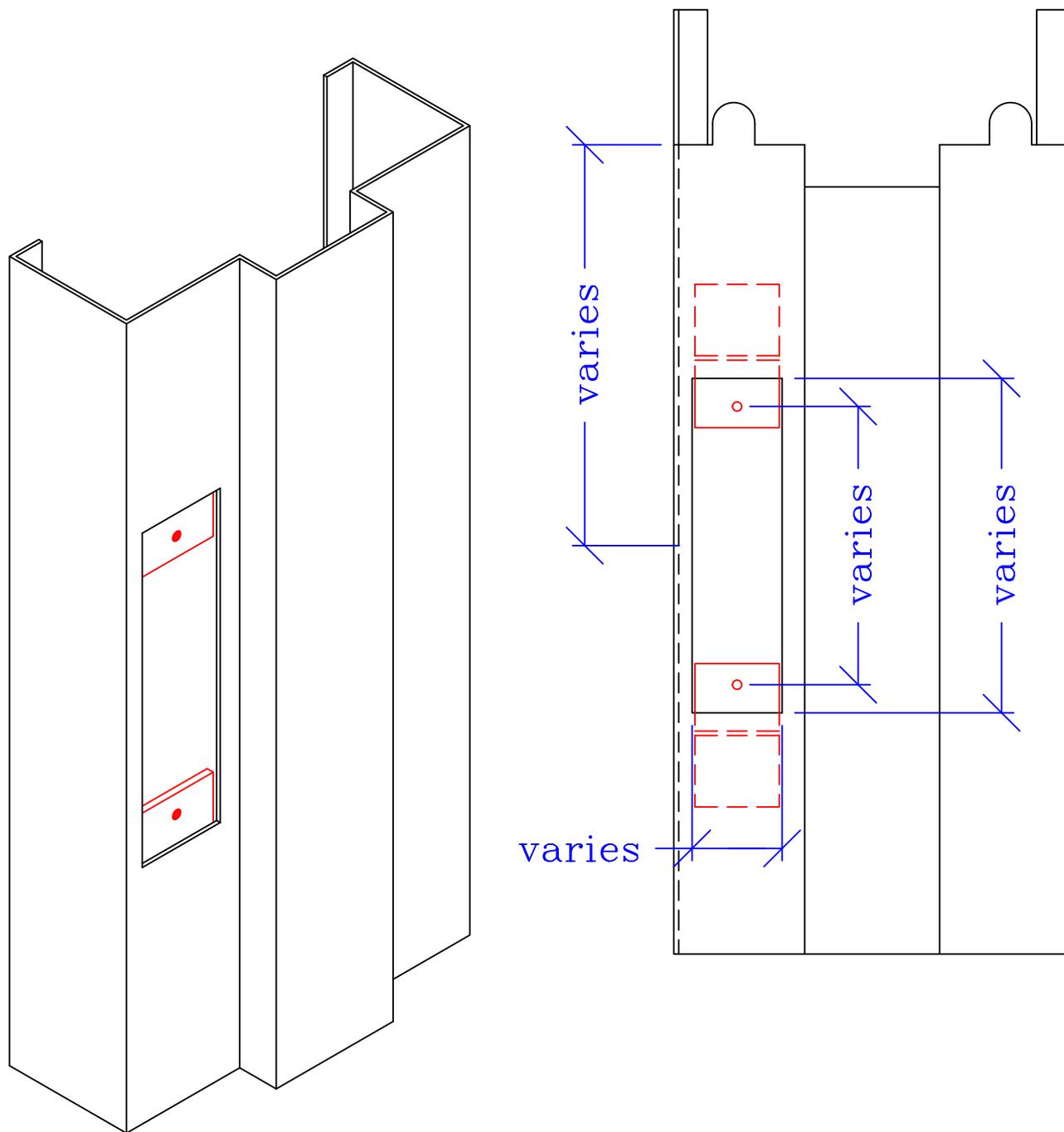
*manufacturer's template to be provided

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



*manufacturer's template to be provided

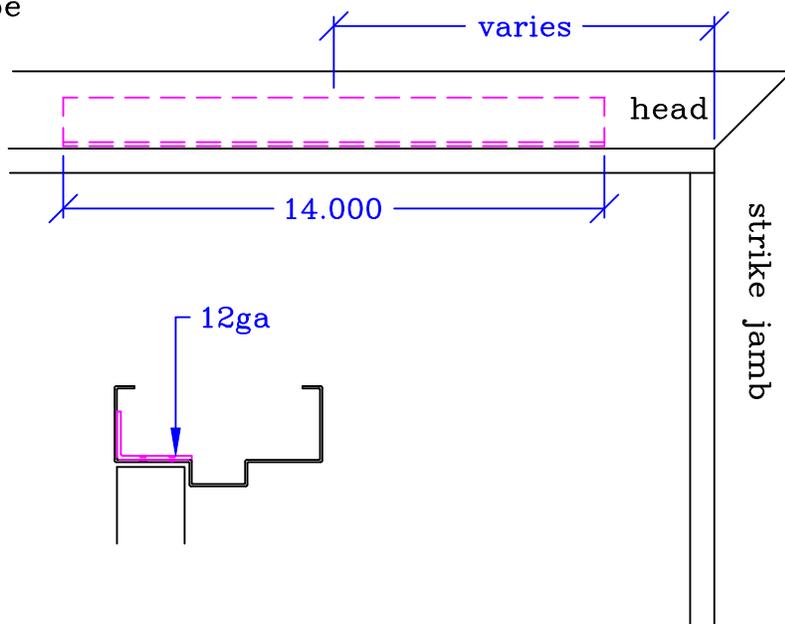
Prep. for magnetic contact with reinforcement, 12ga, at jamb



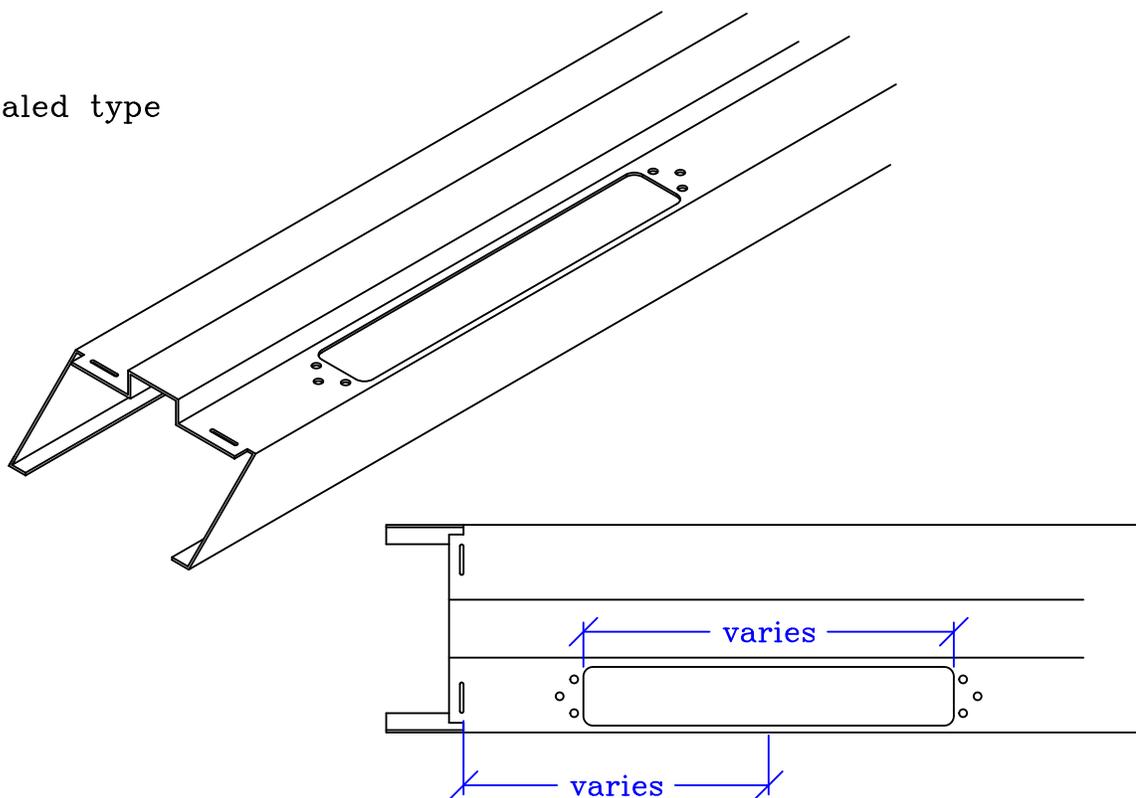
*manufacturer's template to be provided

Shearlock head reinforcement

Surface type

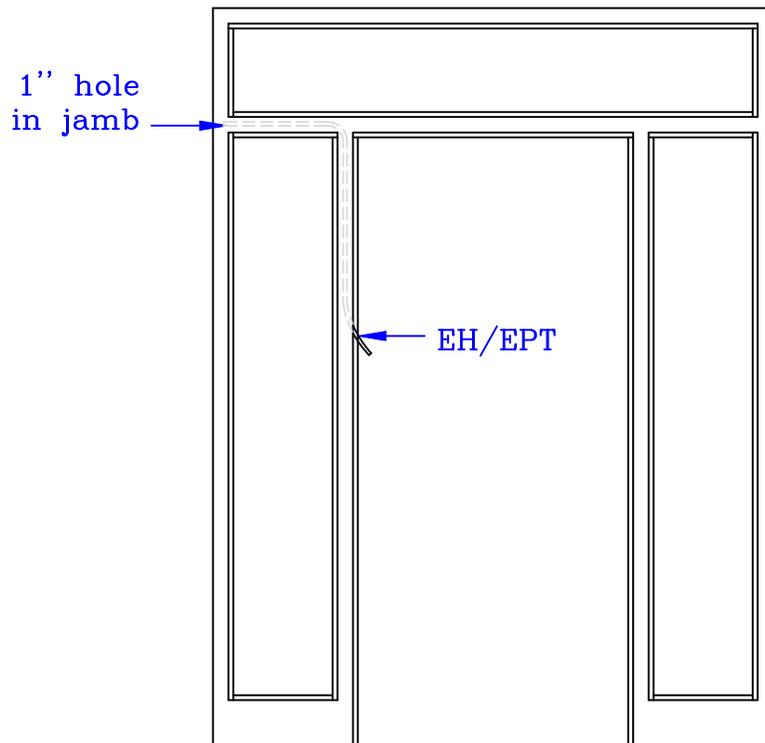
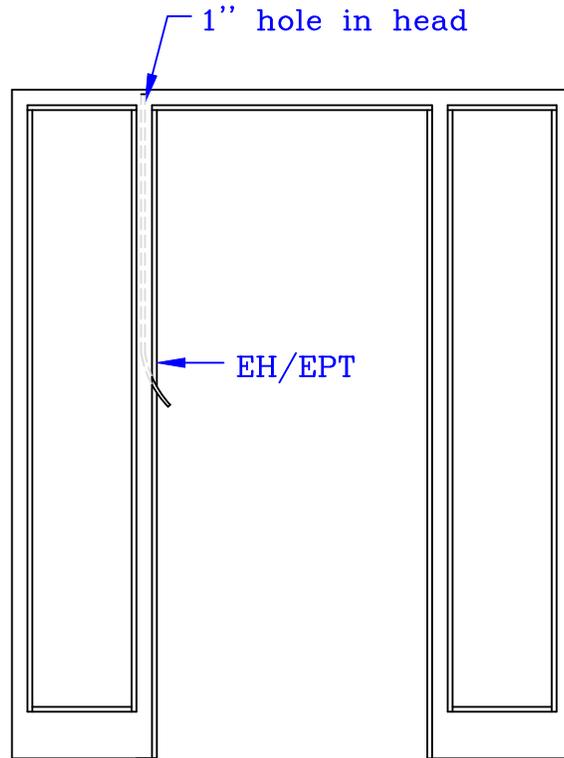


Concealed type

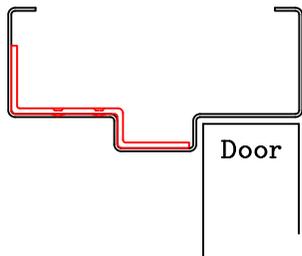
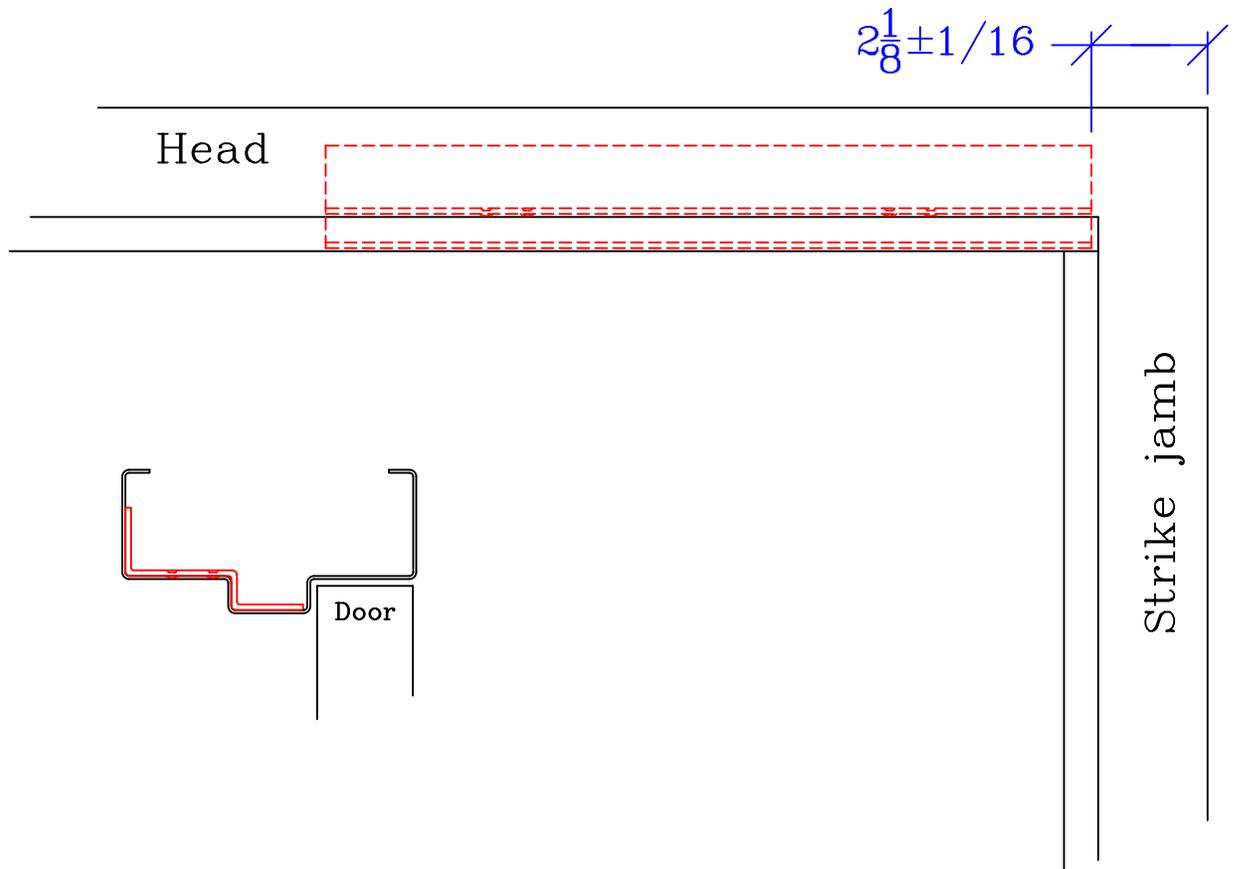
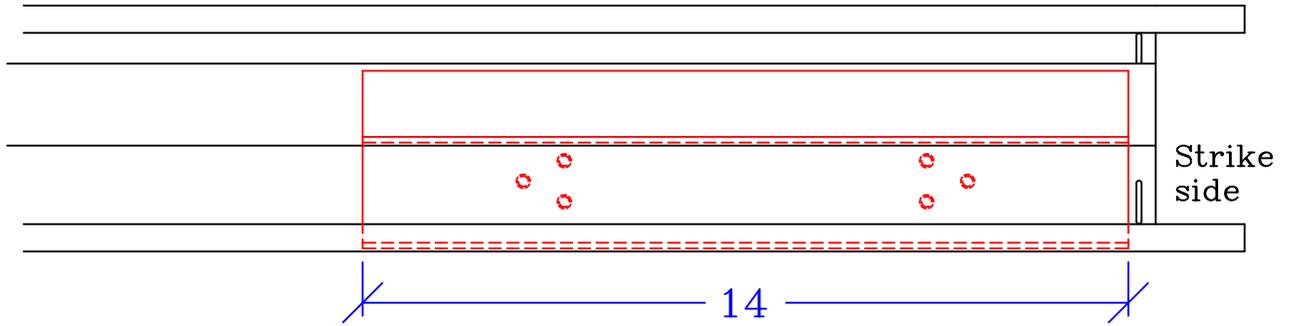


*manufacturer's template to be provided

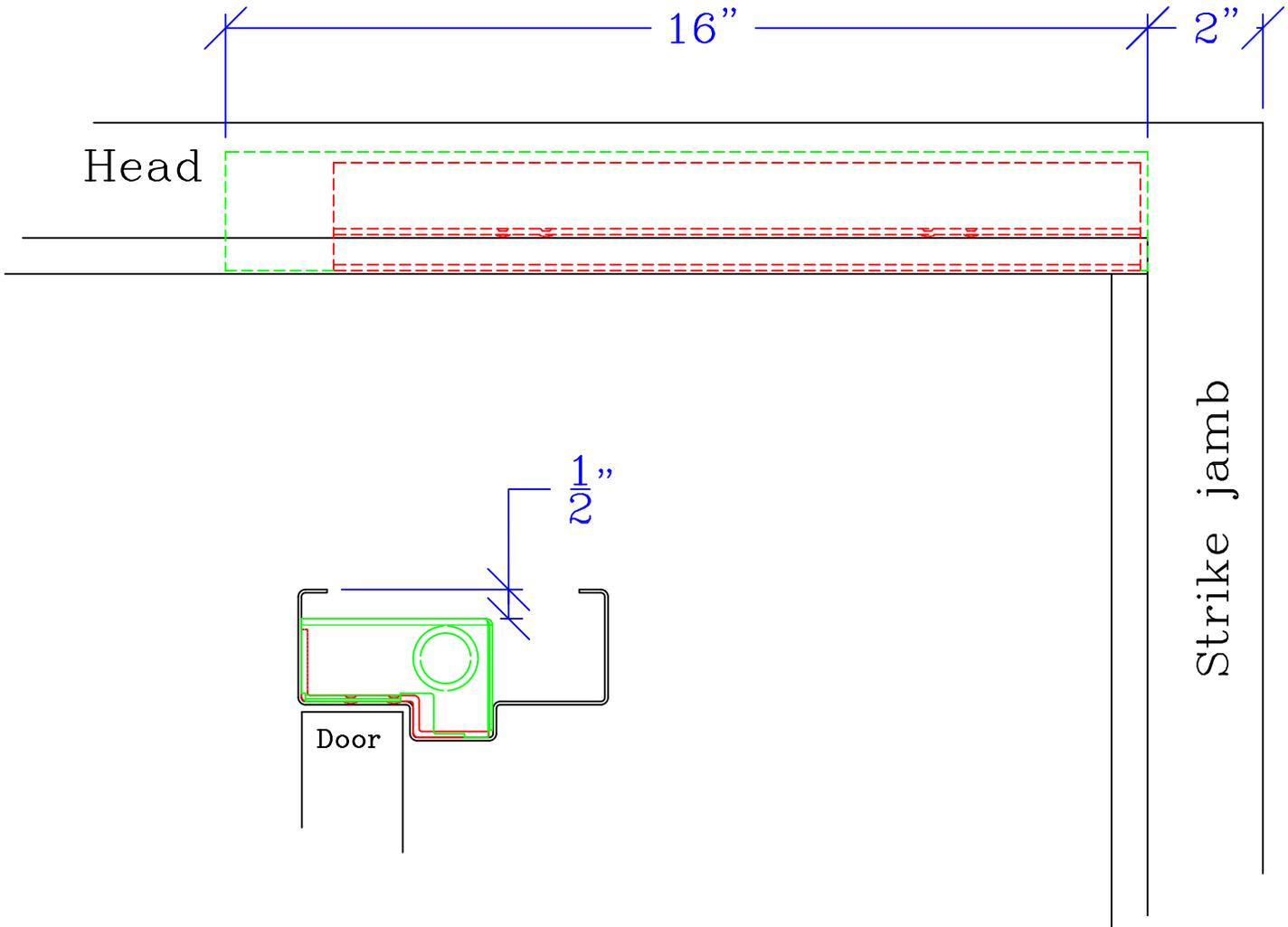
Raceway for electric hardware



Prep. for electromagnetic lock reinforcement, 12ga



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

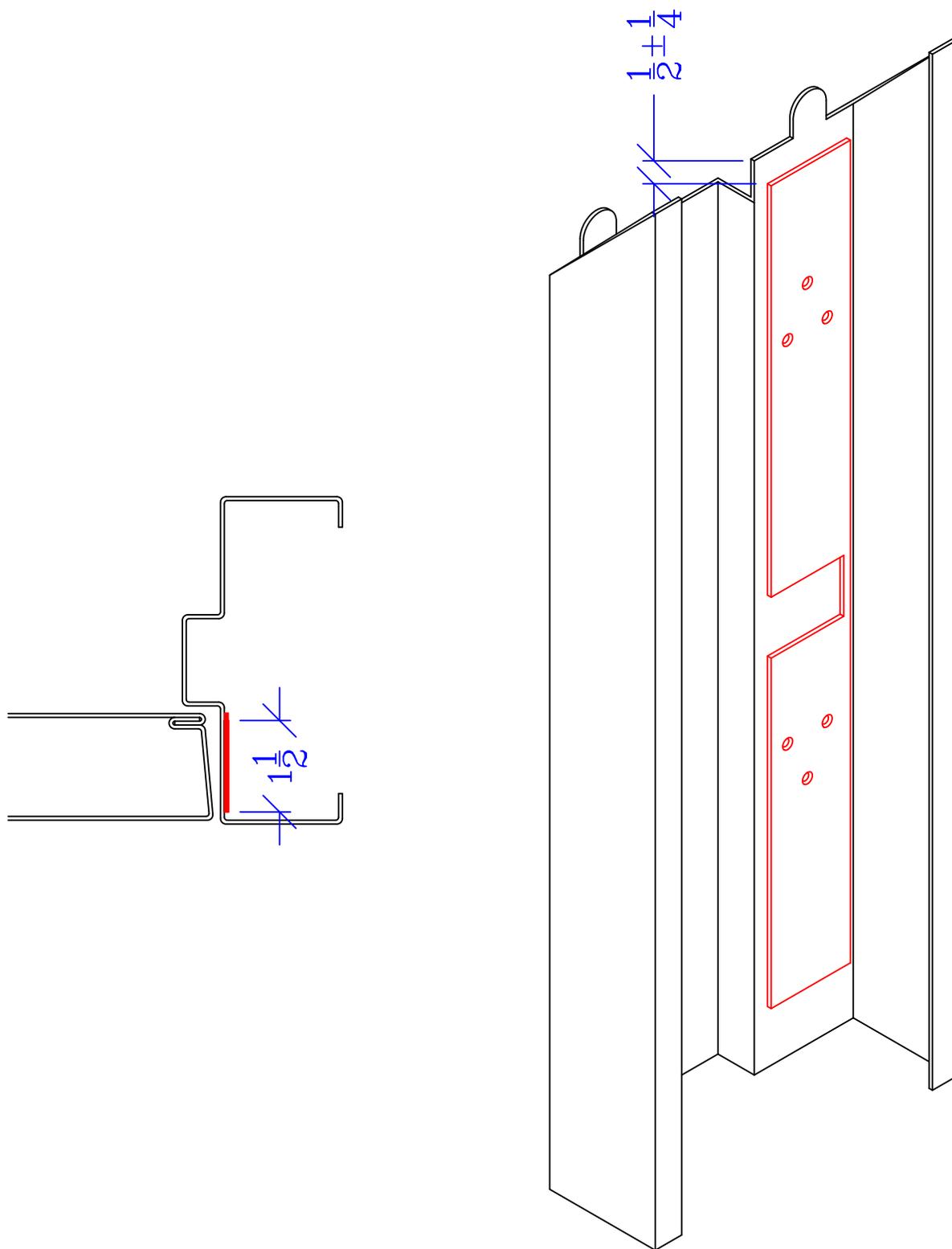


Electrical prep

ELMAGEB

Concealed leaf continuous hinge reinforcement, 14ga

Projection welded

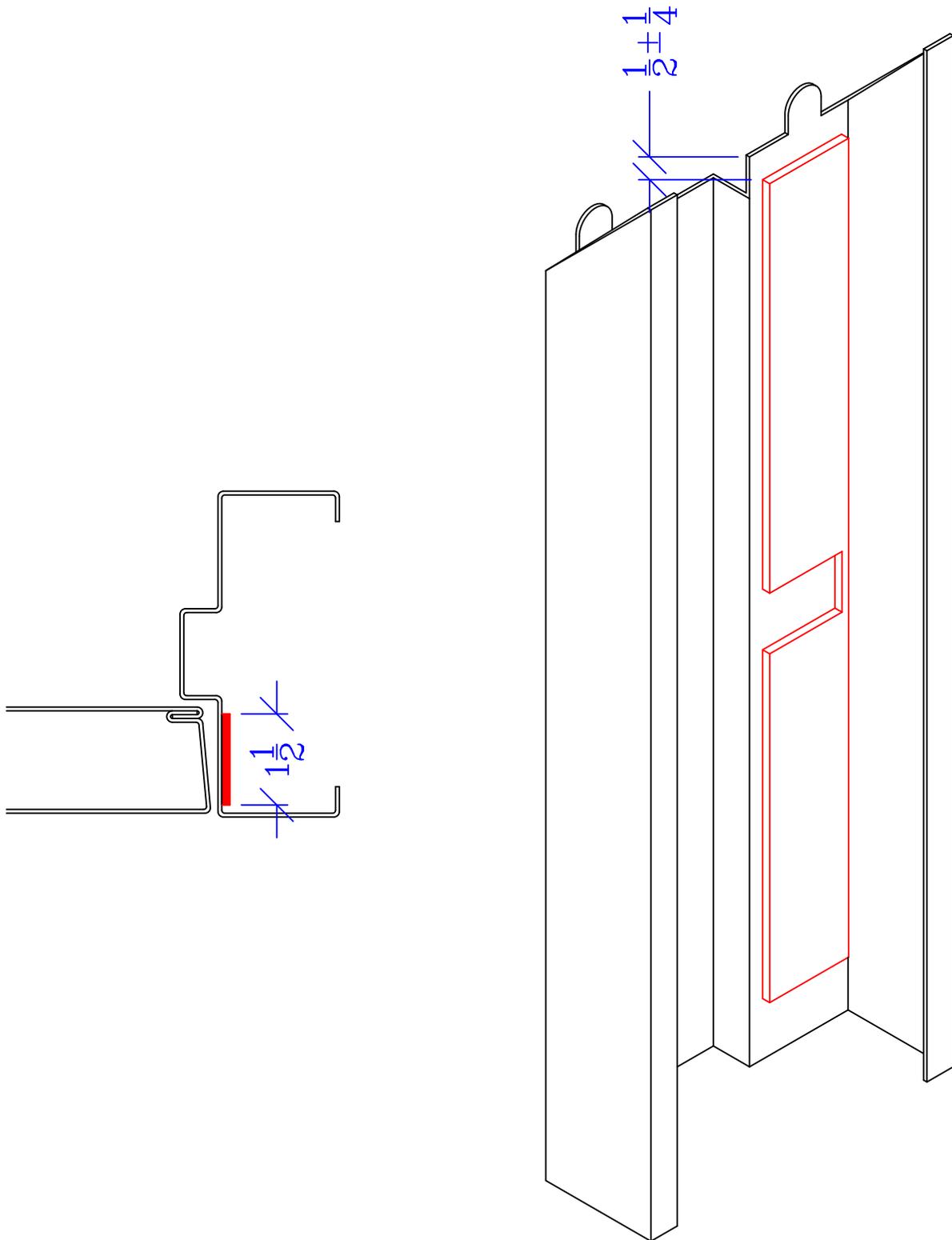


Reinforcement notched for anchors

Continuous hinge

CCH

Concealed leaf continuous hinge reinforcement, 10ga
Plug welded



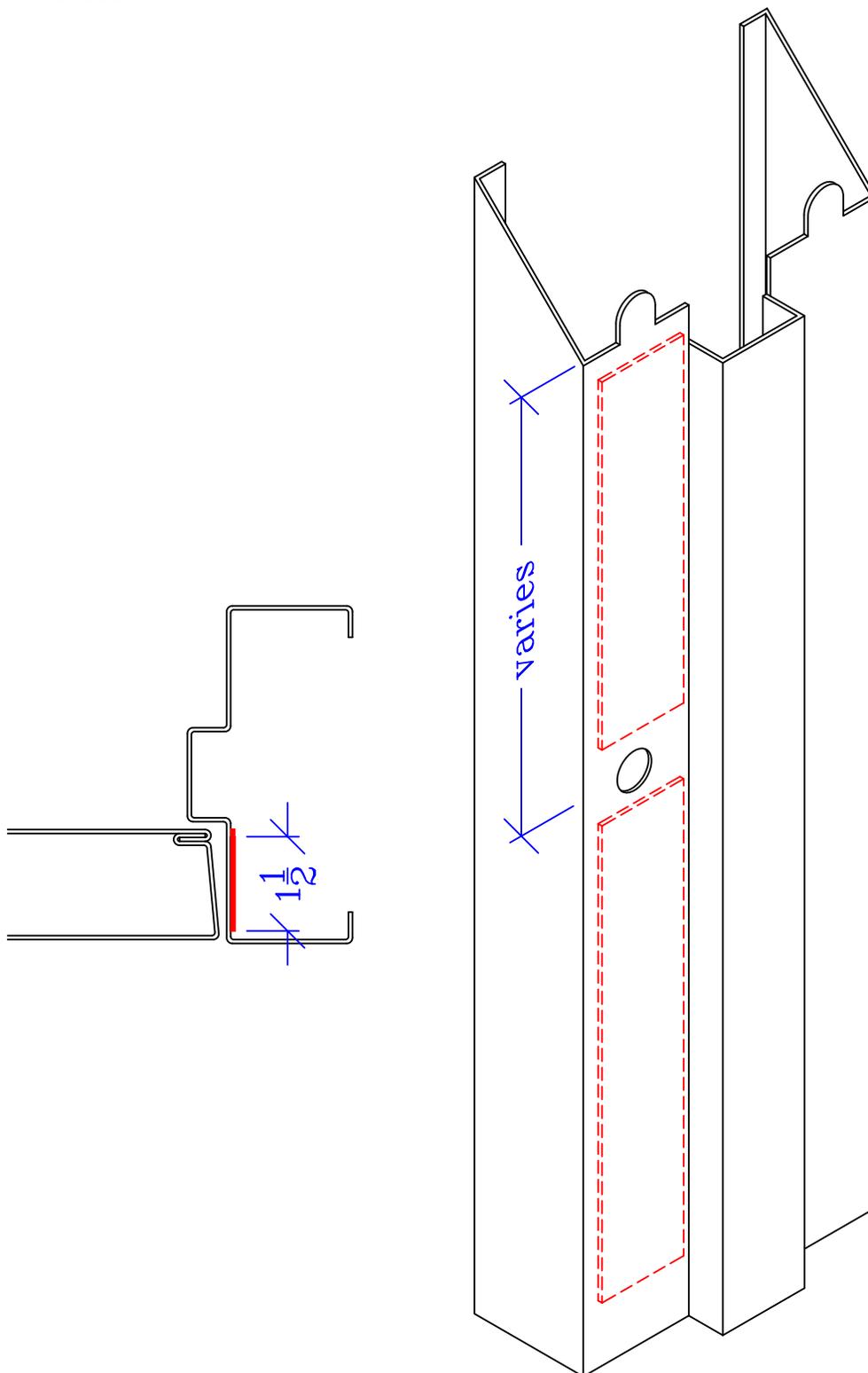
Reinforcement notched for anchors

Continuous hinge

CCH10

Concealed leaf continuous electric hinge reinforcement, 14ga

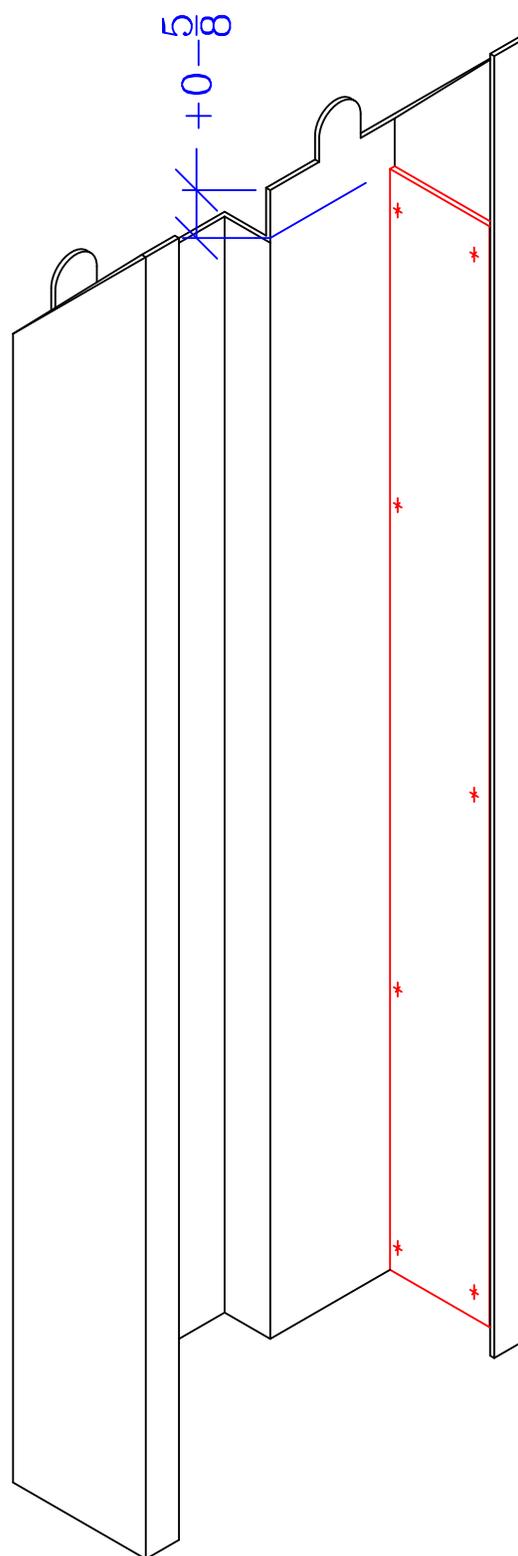
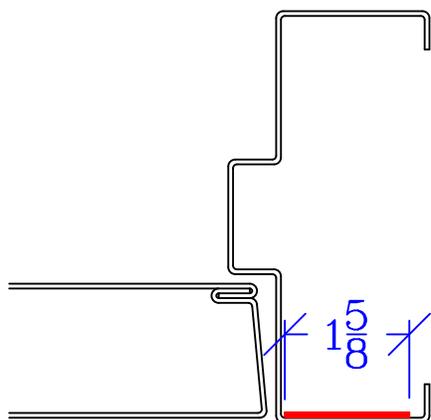
Projection welded



*manufacturer's template to be provided

Surface continuous hinge reinforcement, 14ga

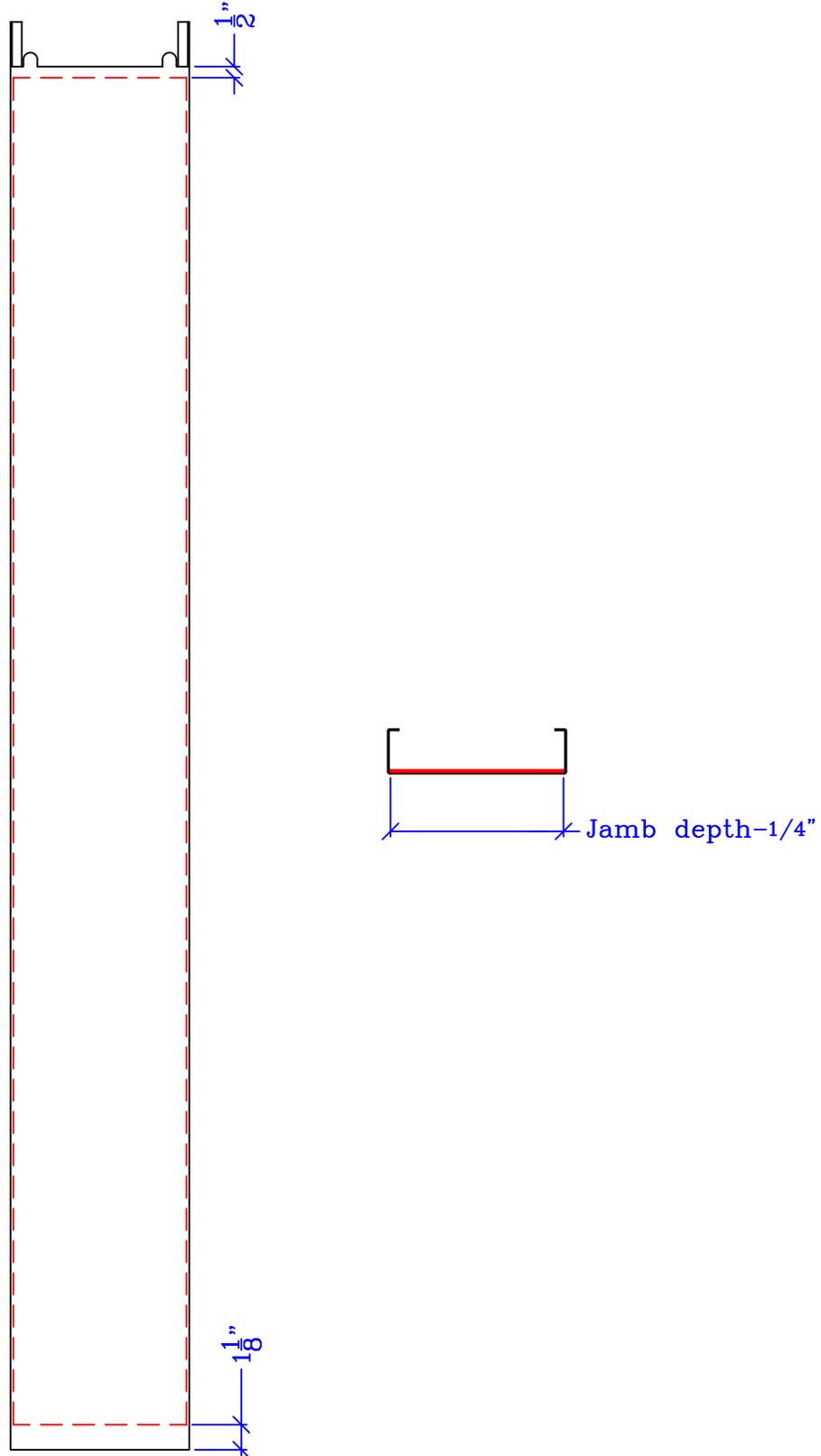
Spot welded, 10" C/C



Continuous hinge

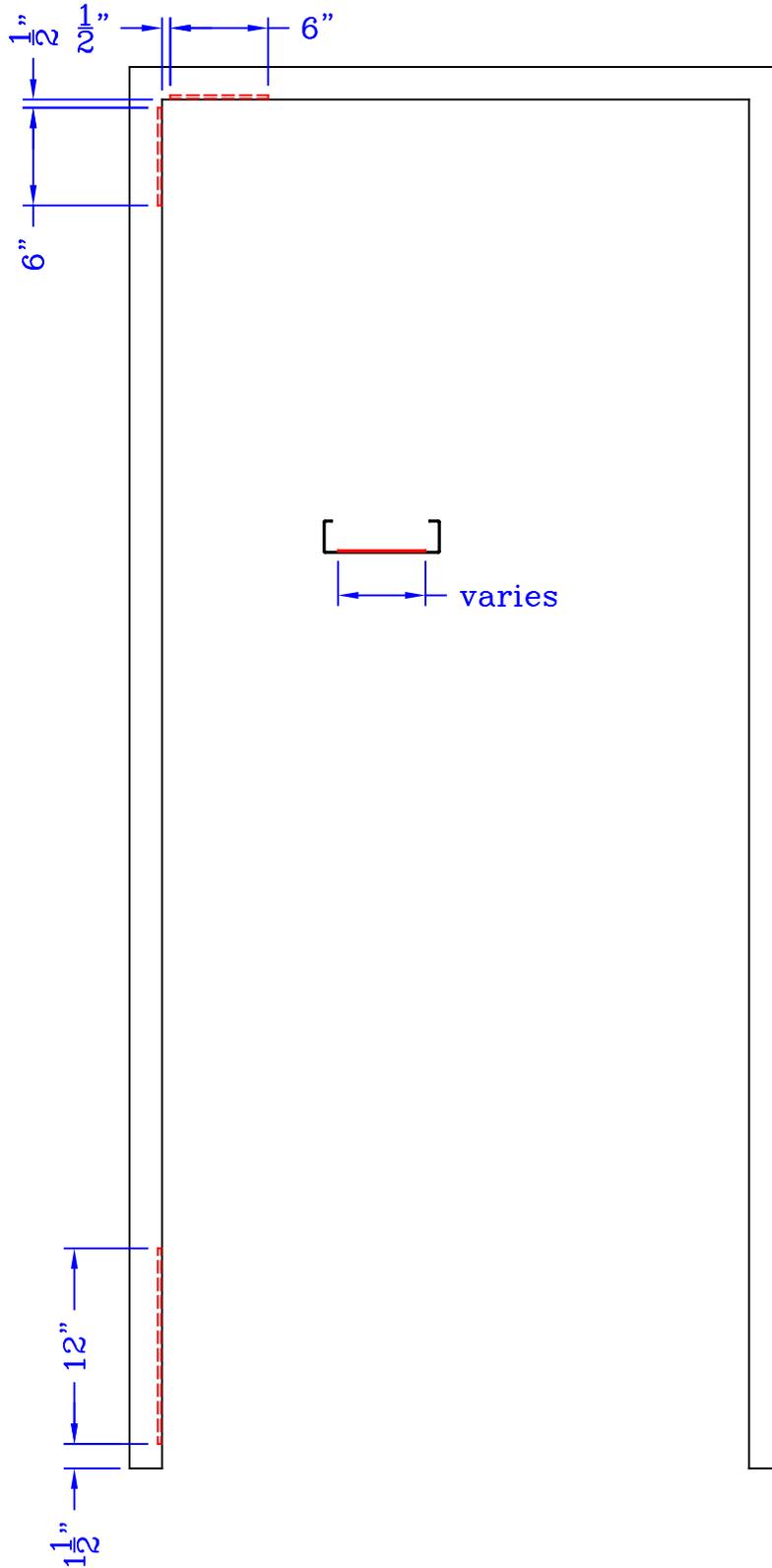
SCH

Reinforcement for double acting hinge, 12ga
Spot welded

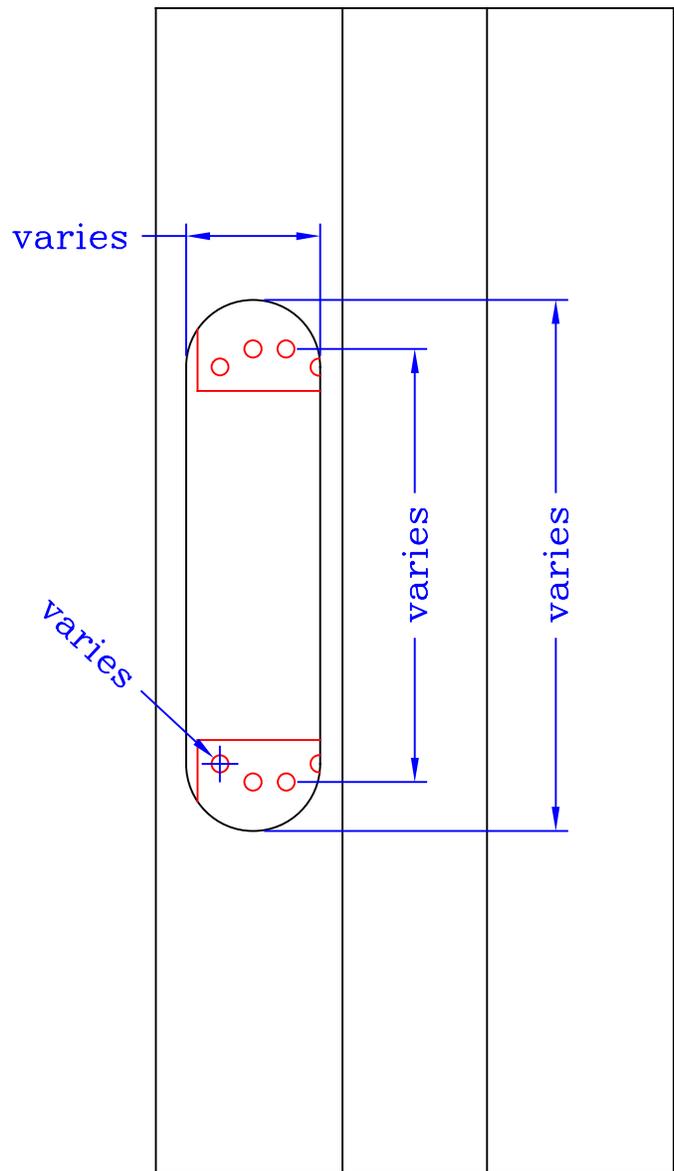
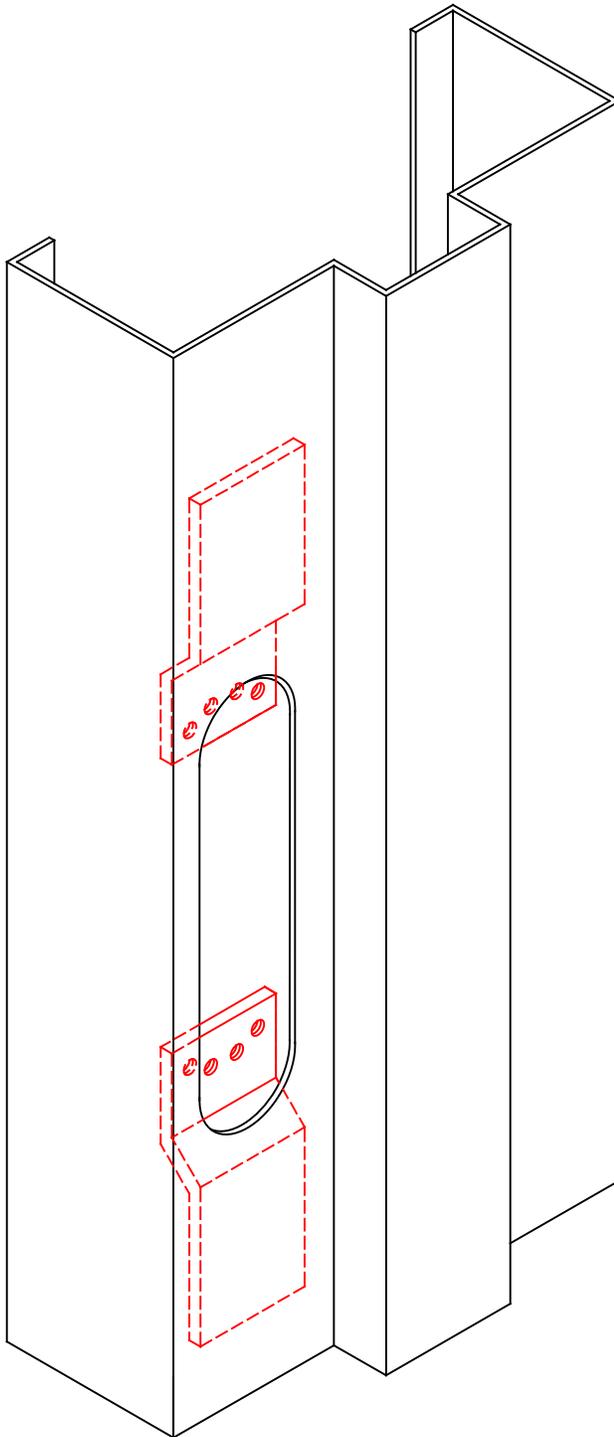


For cased open frame only

Prep. for "Eliason" pivot, 12ga
Spot welded



Invisible hinge reinforcement, 12ga
Spot welded



Invisible hinge

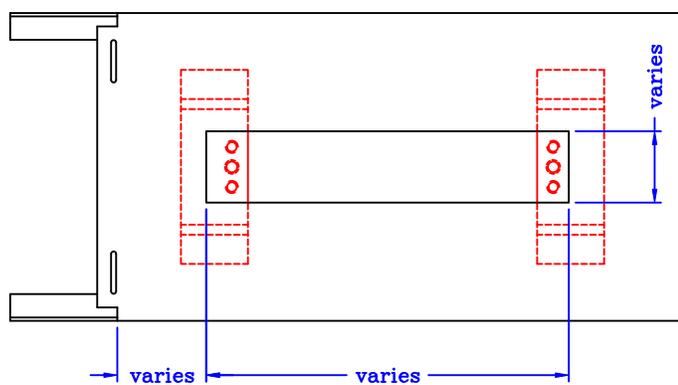
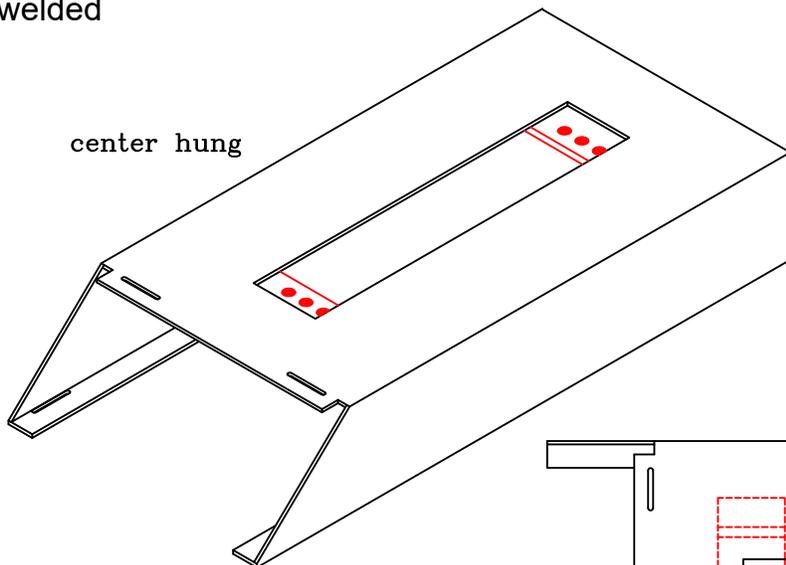
*manufacturer's template to be provided

INVH

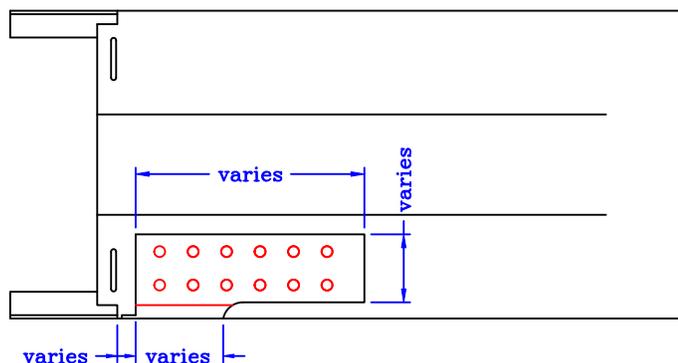
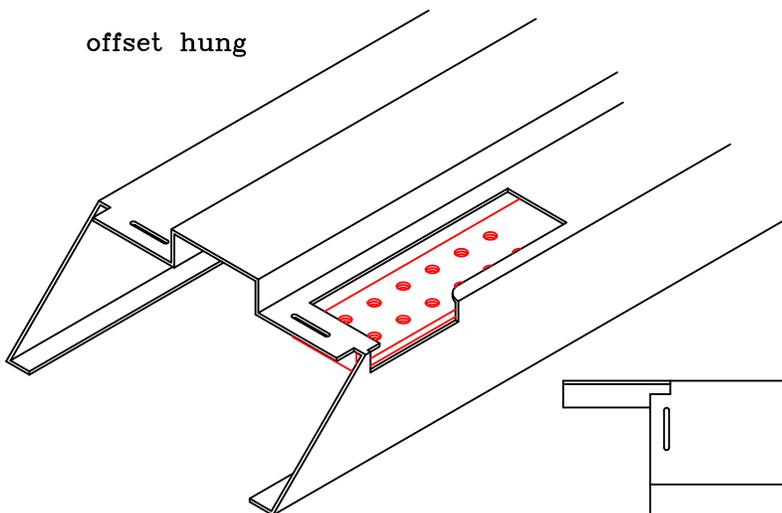
Prep. for top pivot, 10ga

Spot welded

center hung

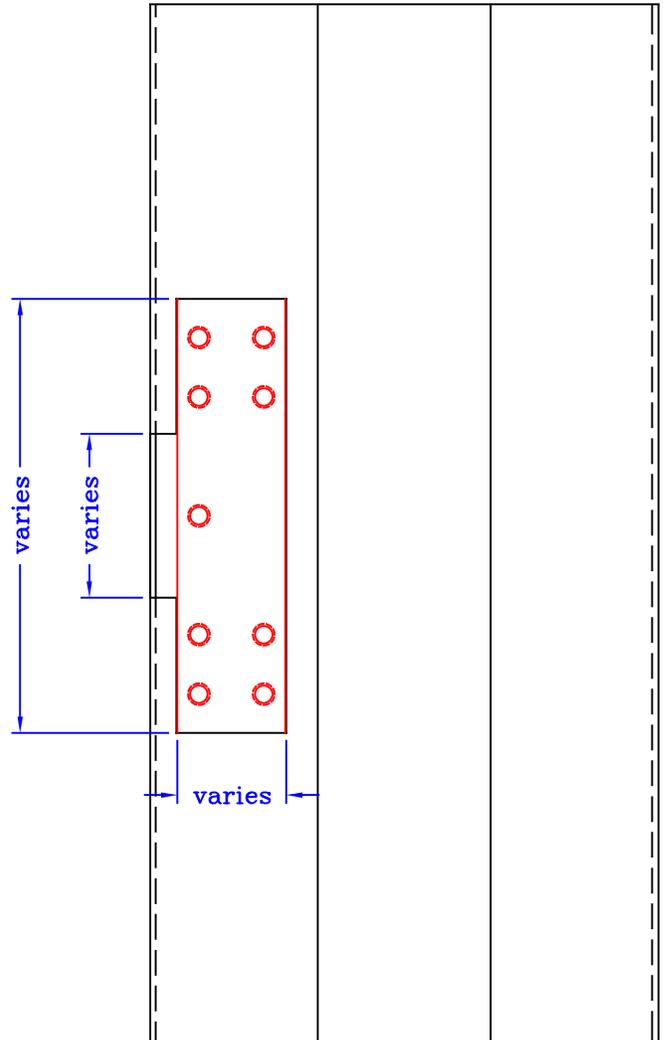
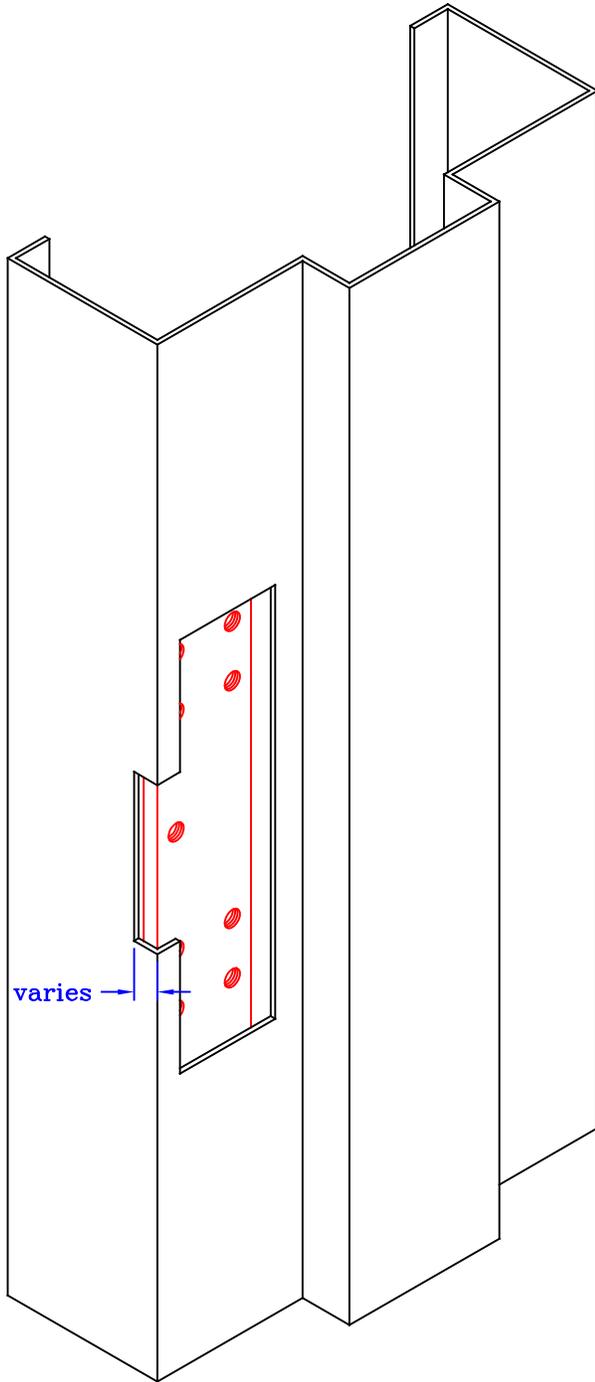


offset hung



*manufacturer's template to be provided

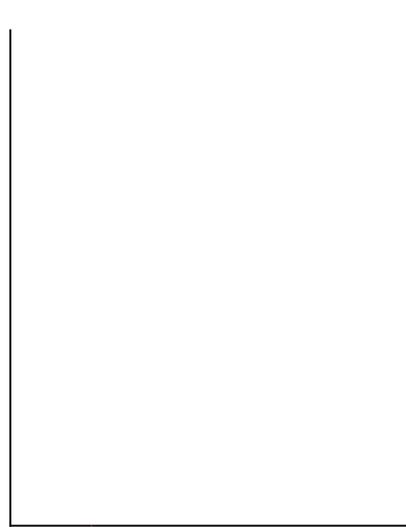
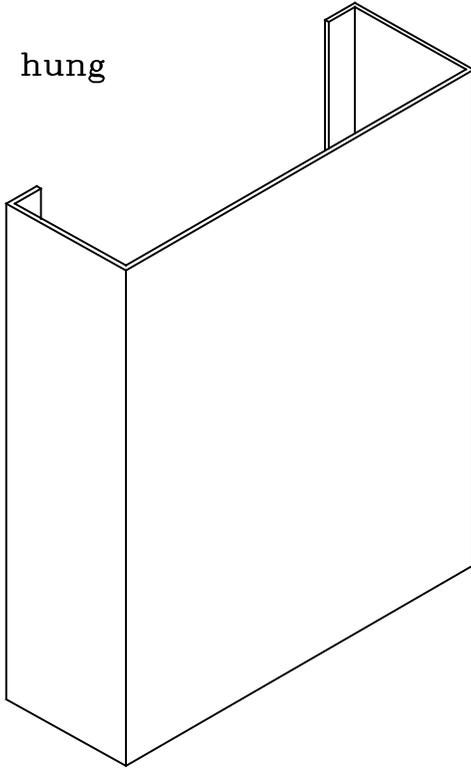
Prep. for intermediate pivot, 7ga
Spot welded



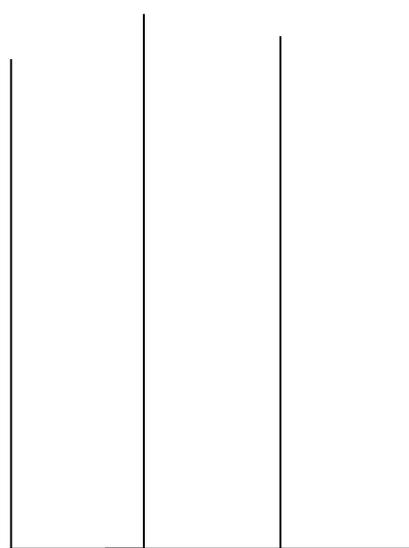
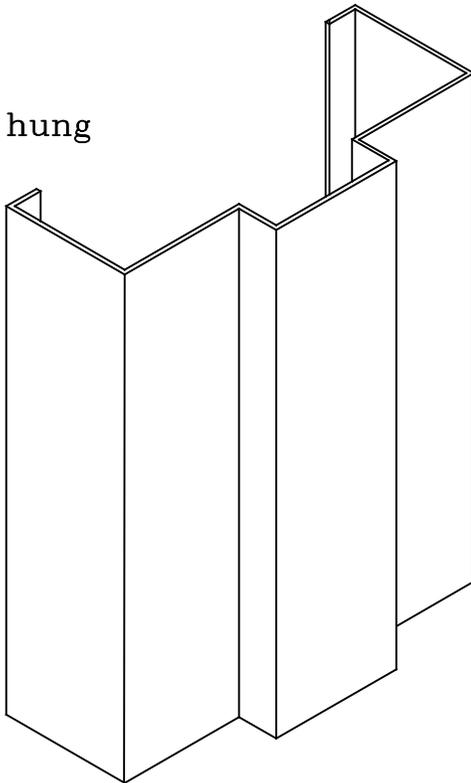
*manufacturer's template to be provided

Prep. for bottom pivot on floor

center hung

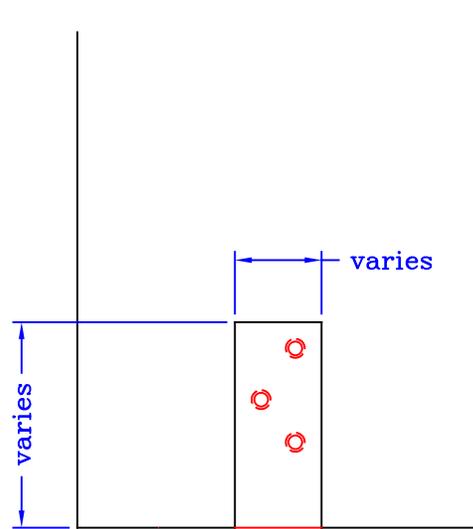
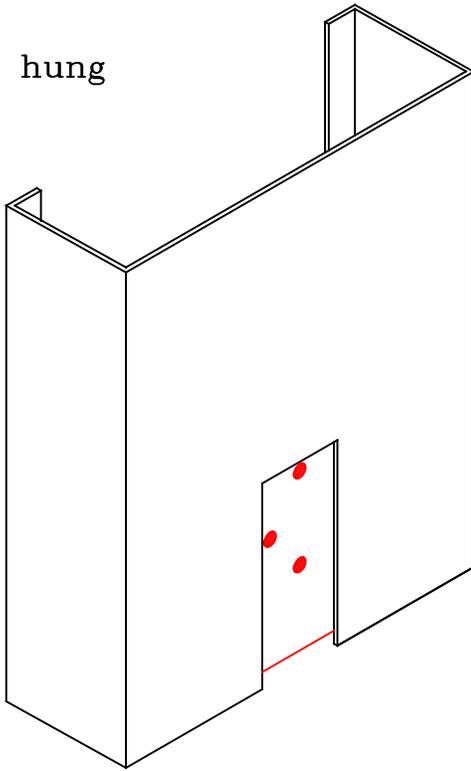


offset hung

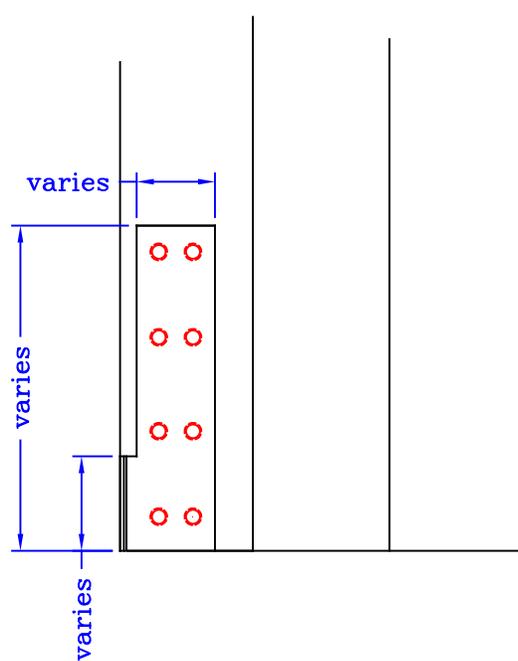
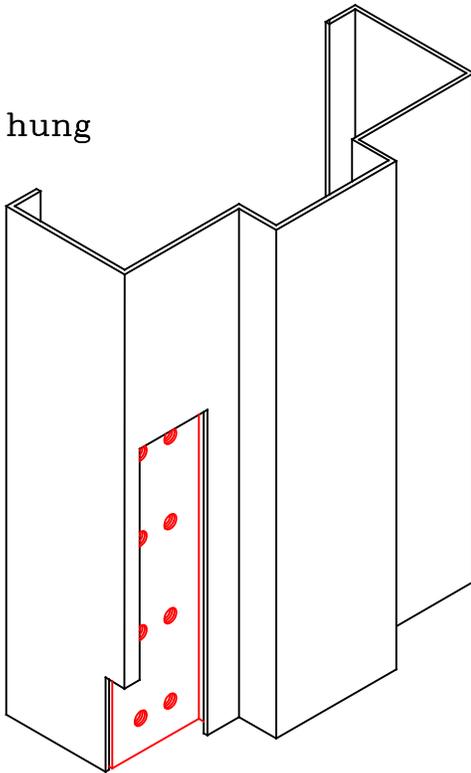


Prep. for bottom pivot in jamb, 10ga
Spot welded

center hung



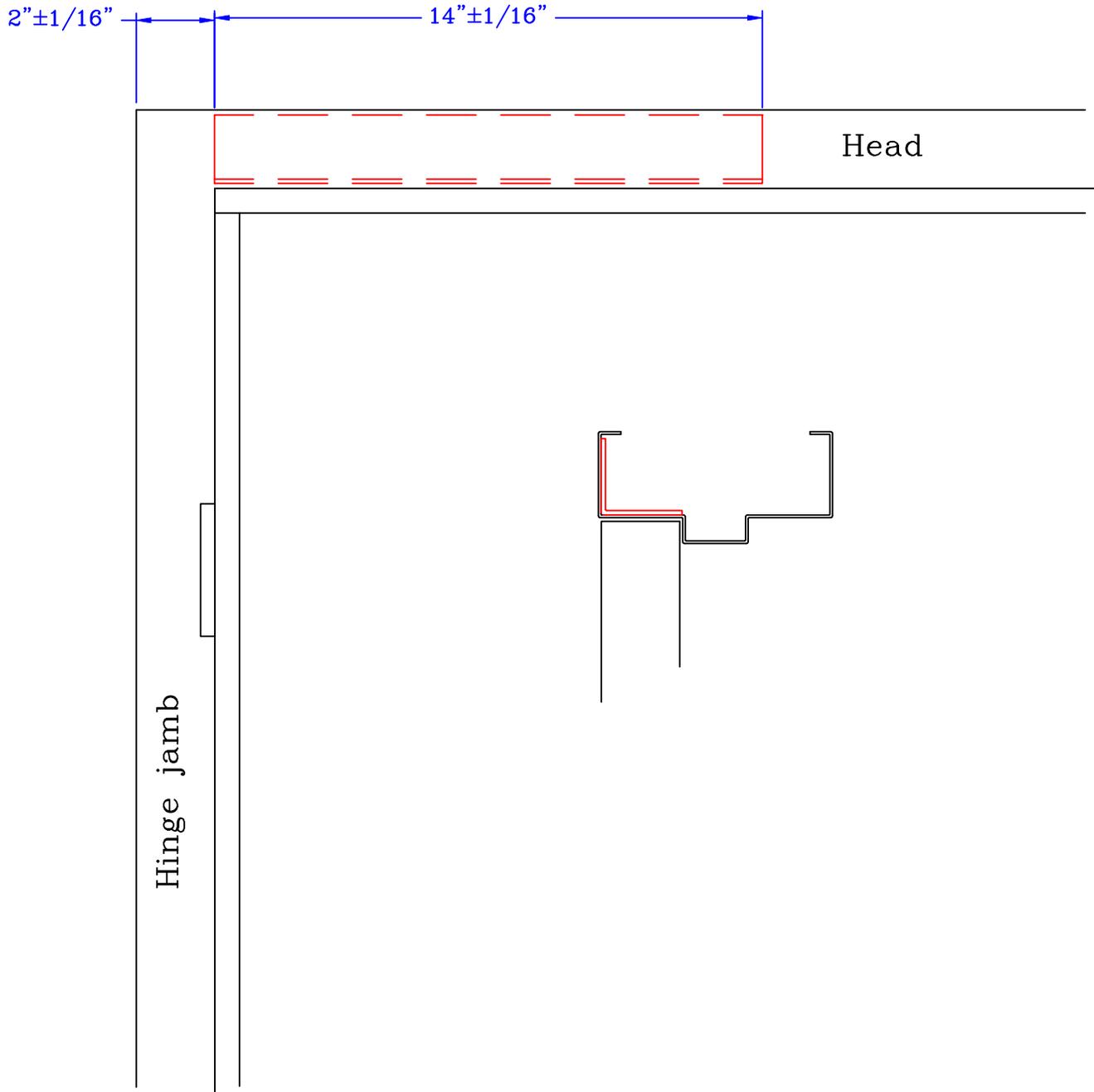
offset hung



*manufacturer's template to be provided

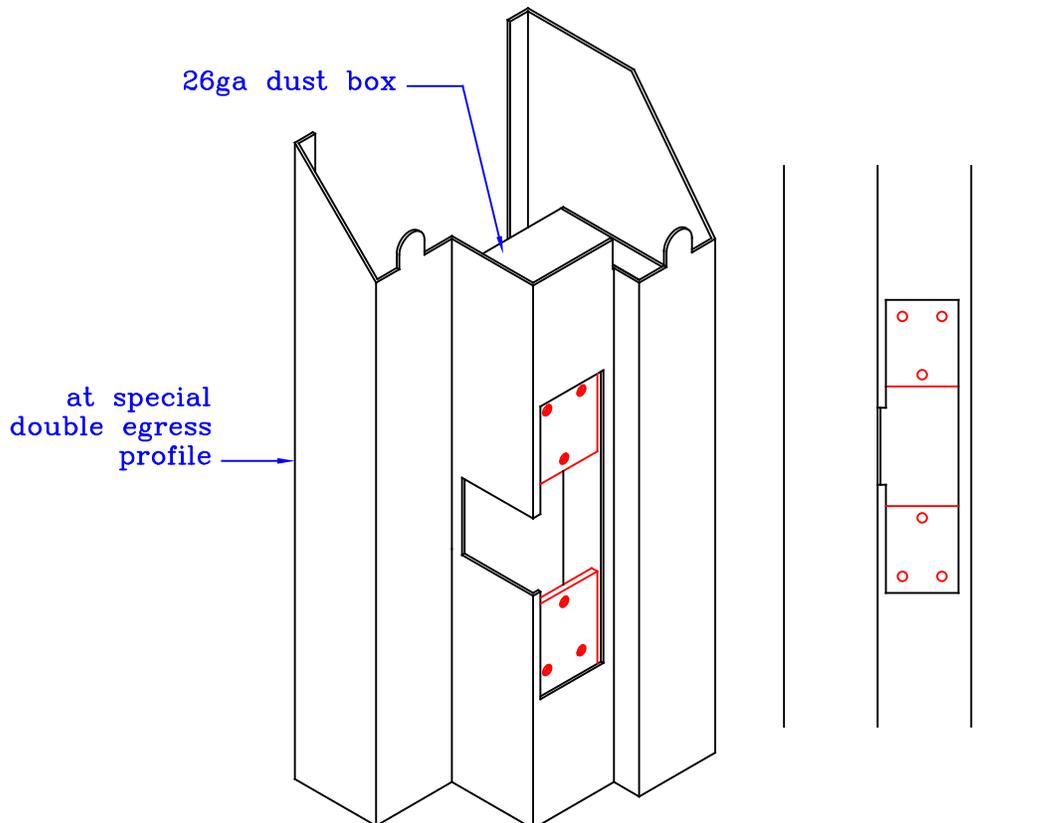
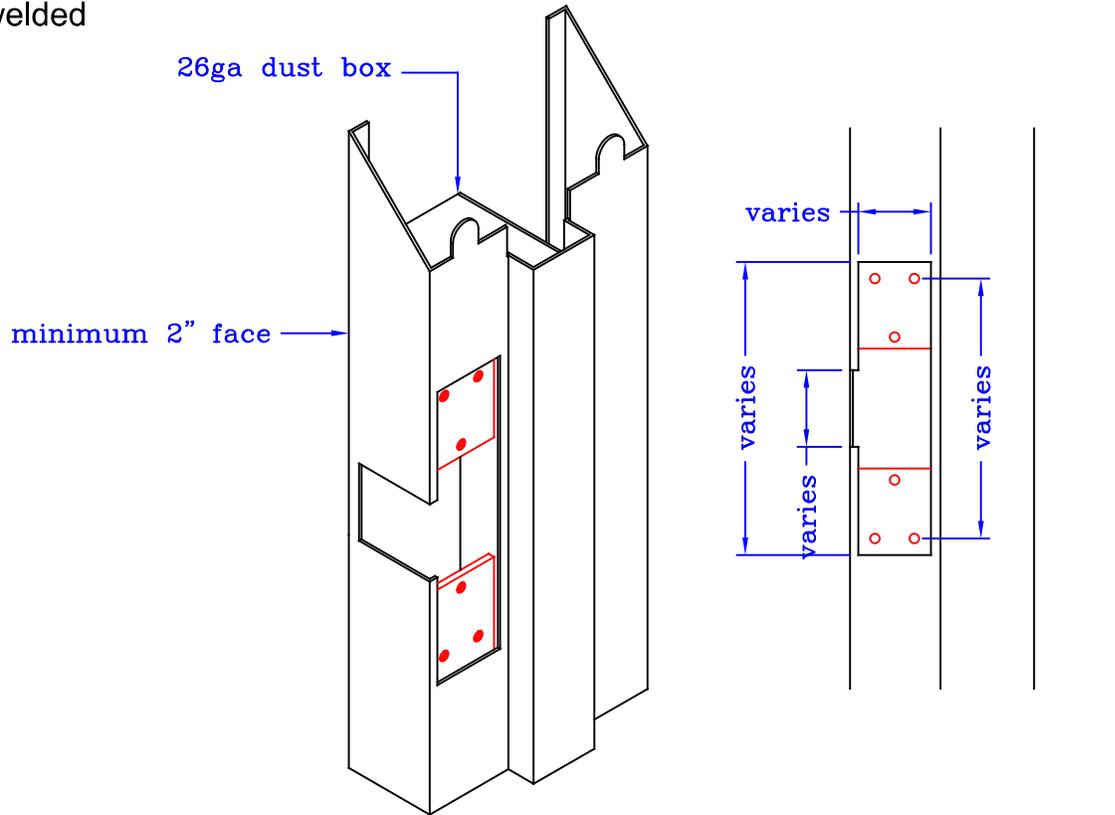
Reinforcement for surface corner pivot, 12ga
Projection welded

Pivot



Pocket pivot reinforcements, 10ga

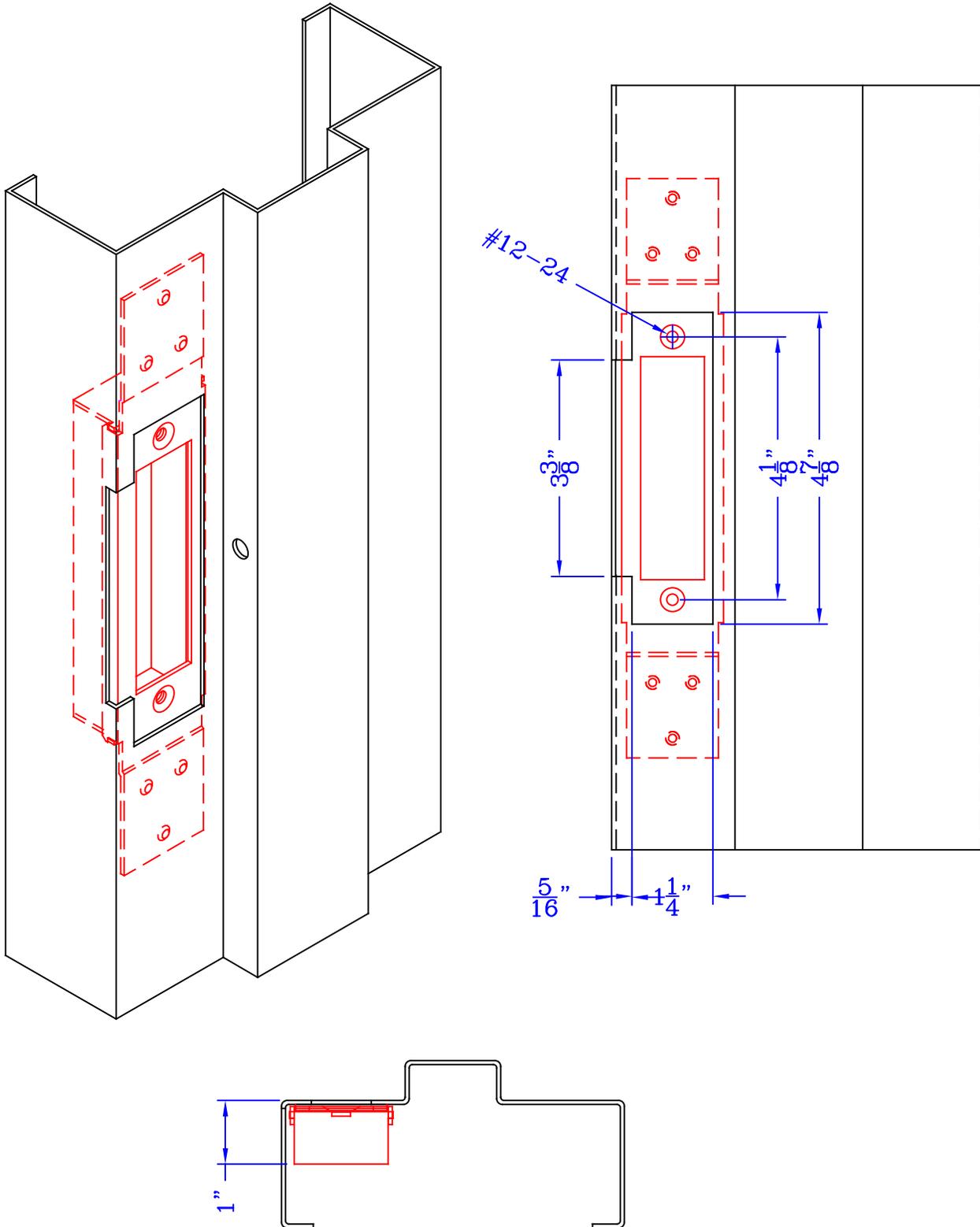
Spot welded



*manufacturer's template to be provided

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

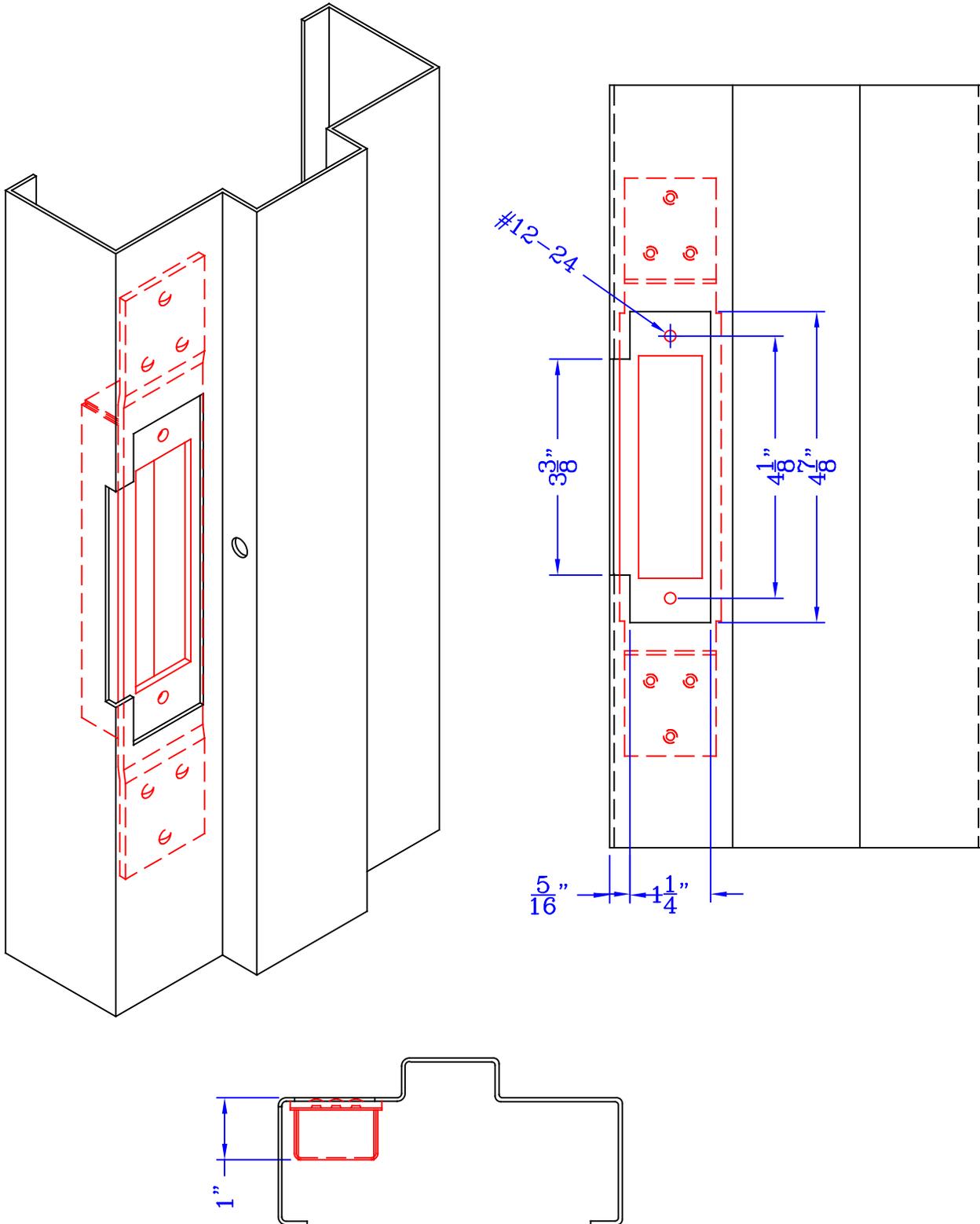
Strike



Tapped extruded holes per ANSI/SDI A250.6.

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

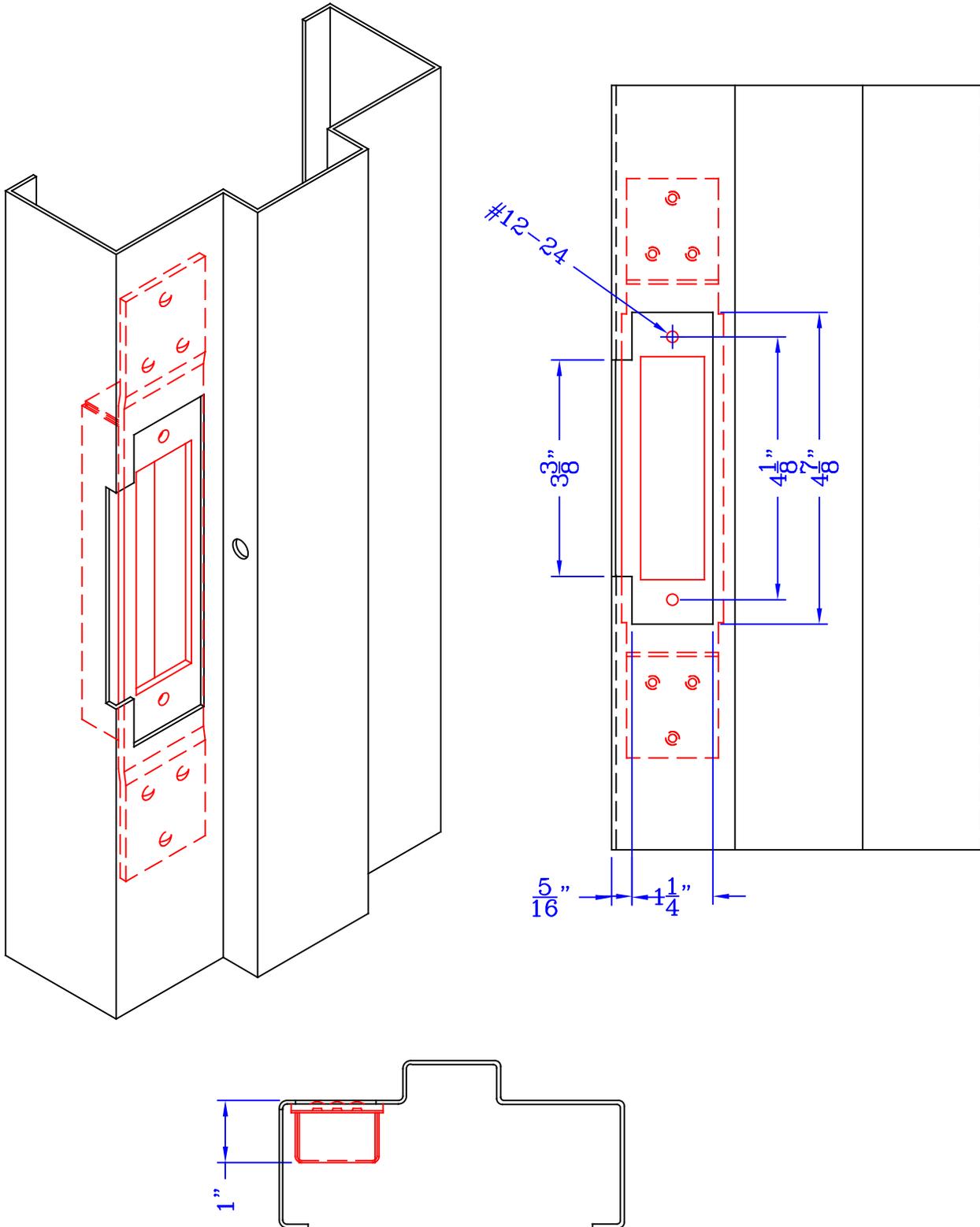
Strike



ASA12

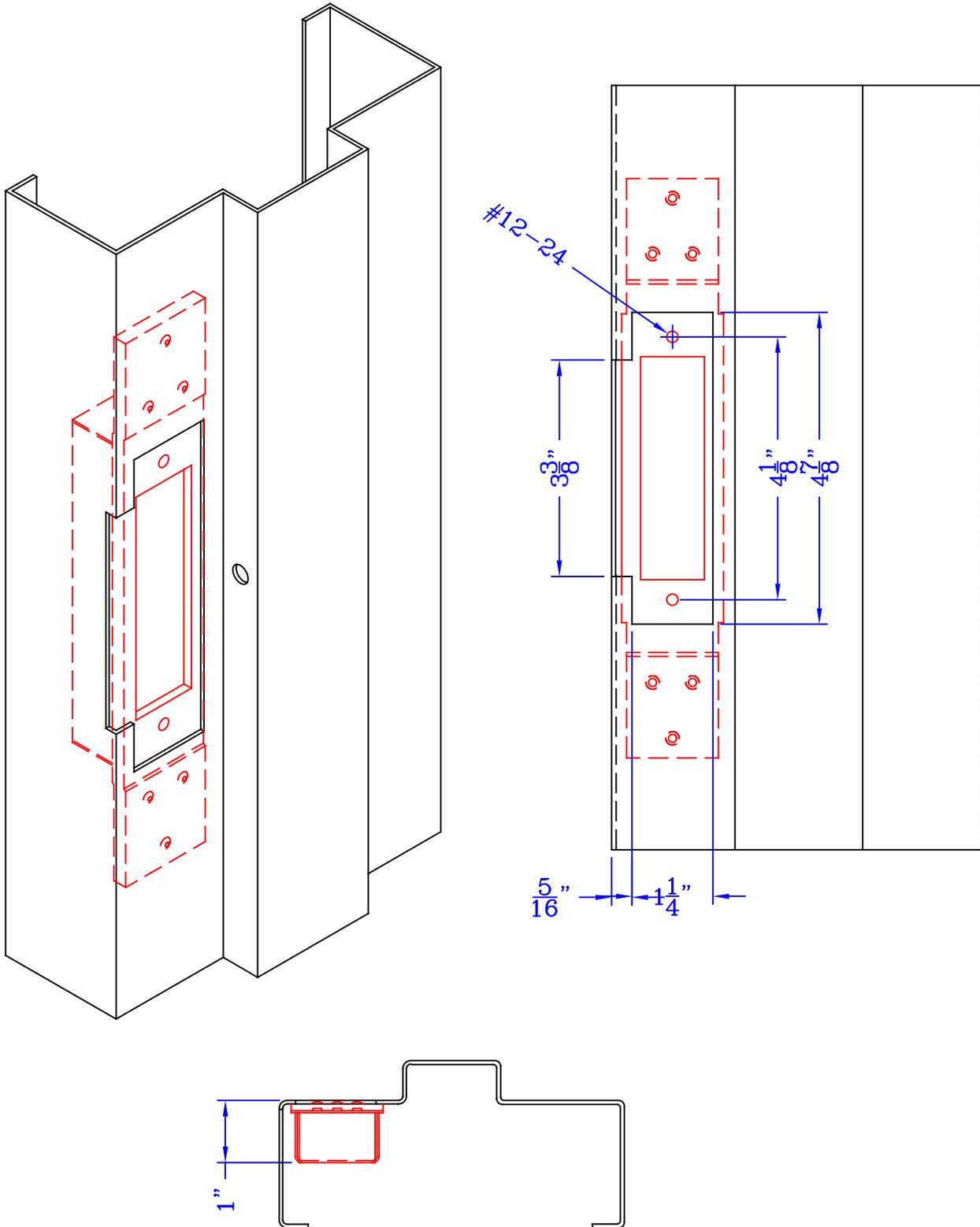
Standard ANSI 4 7/8" strike reinforcement, 10ga
Projection welded

Strike



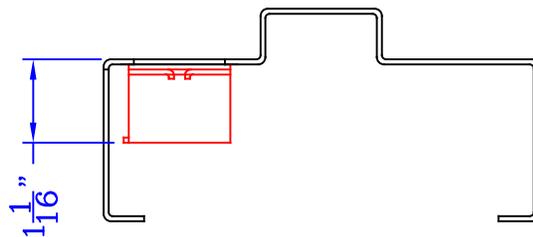
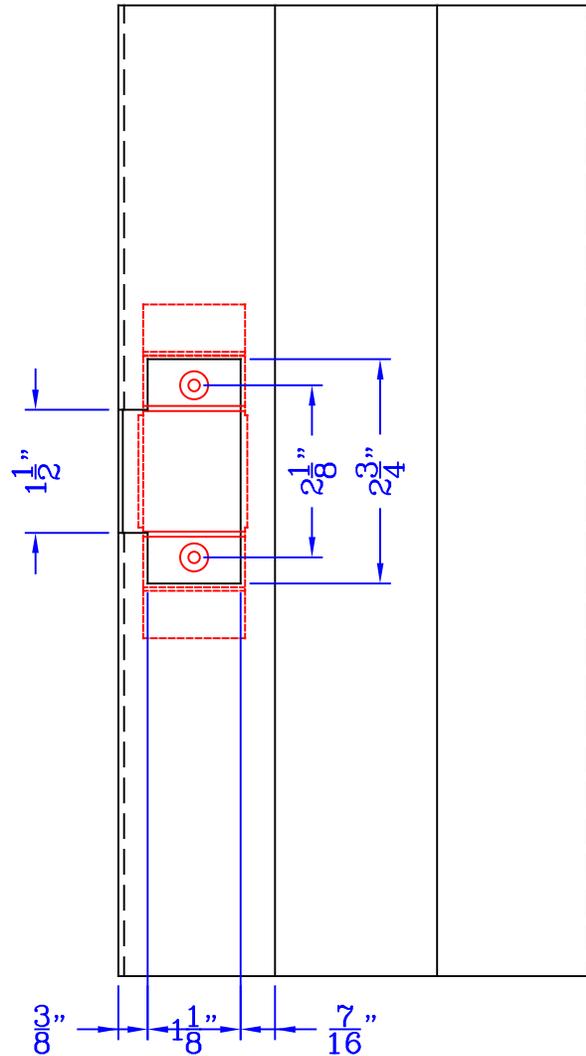
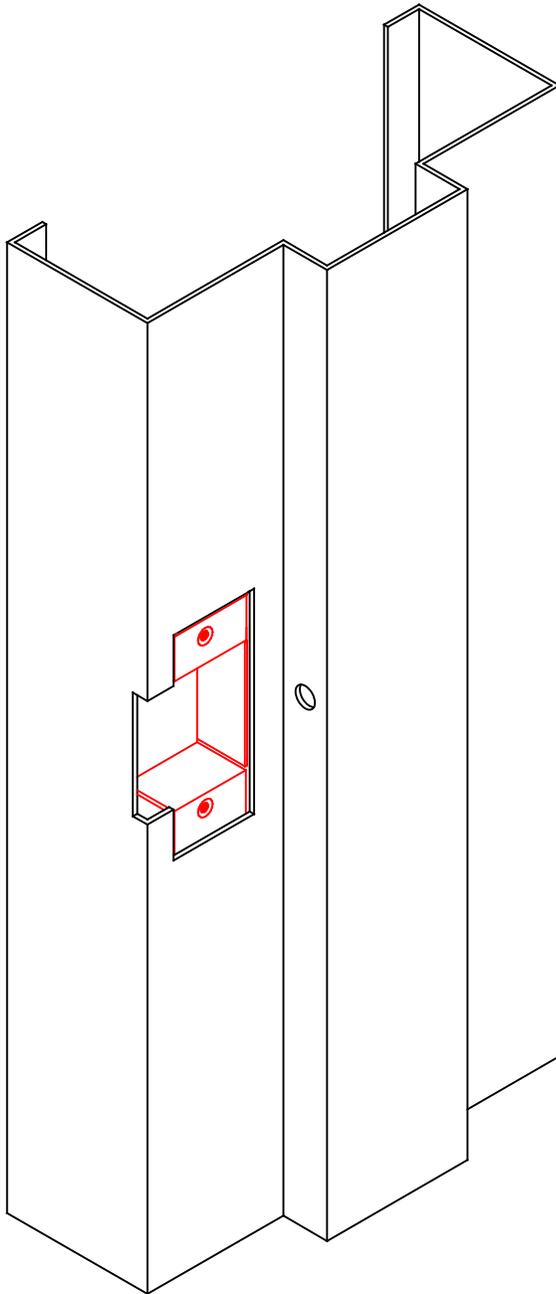
Standard ANSI 4 7/8" strike reinforcement, 7ga
Projection welded

Strike



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

Strike

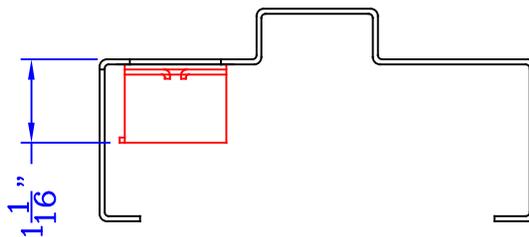
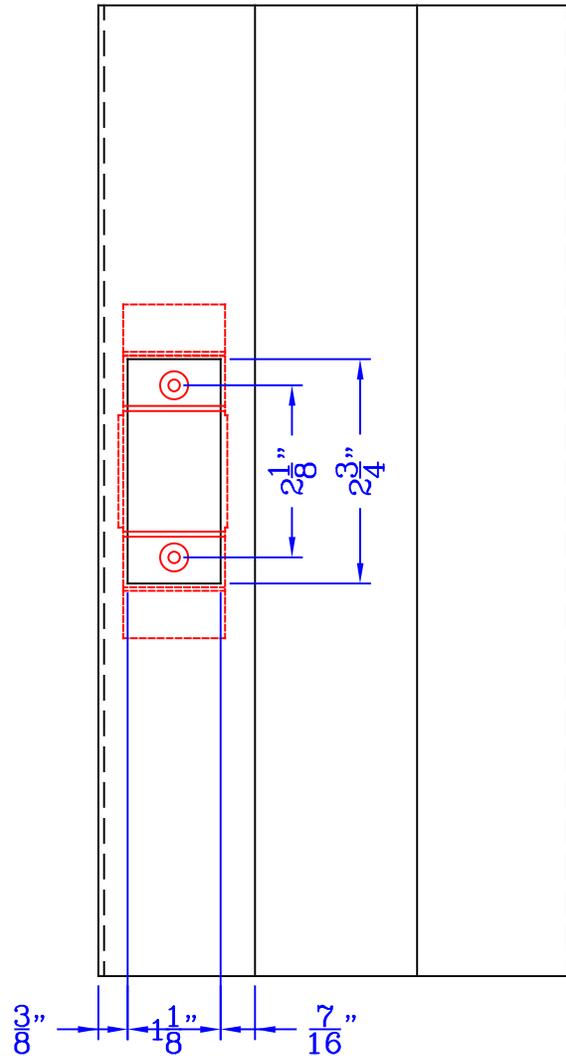
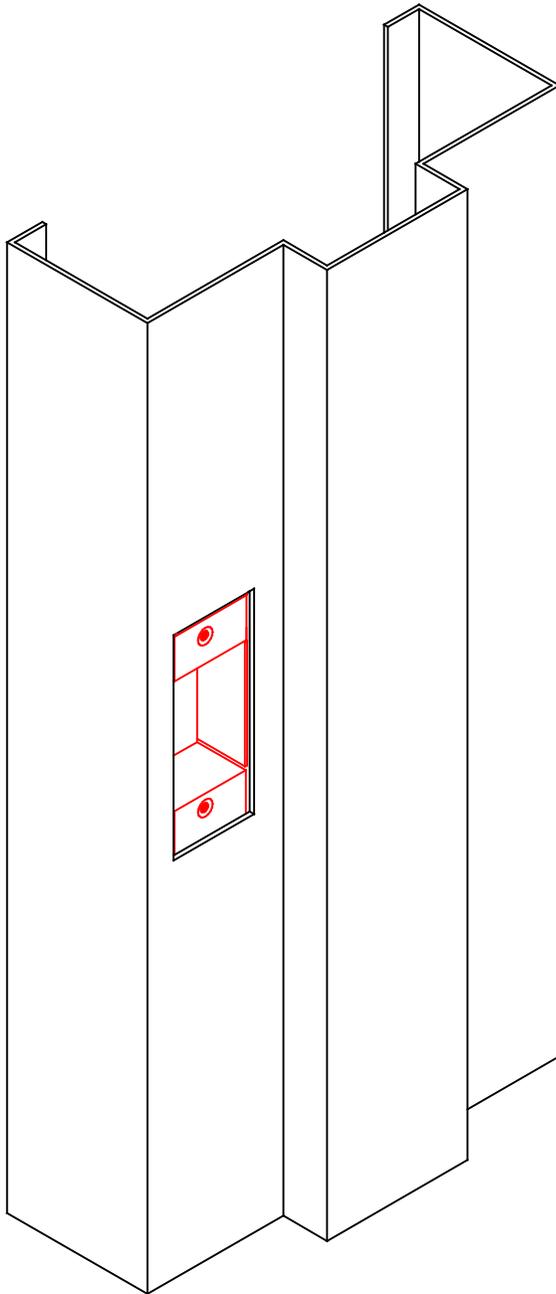


Tapped extruded holes per ANSI/SDI A250.6.

T

Cylindrical deadlock strike reinforcement, 16ga
Projection welded

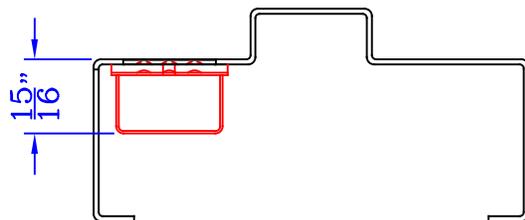
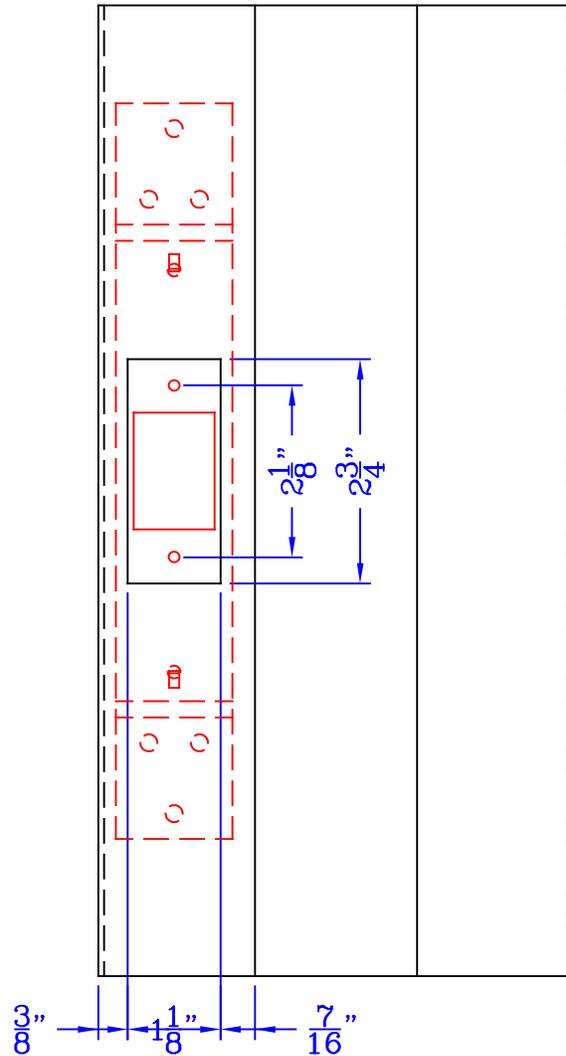
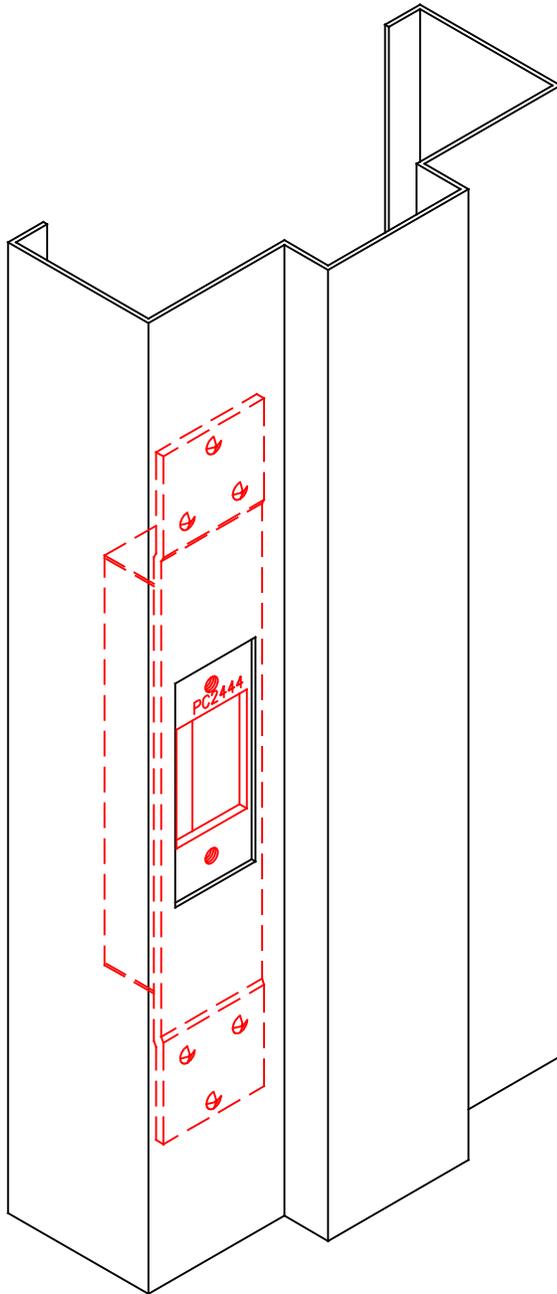
Strike



Tapped extruded holes per ANSI/SDI A250.6.

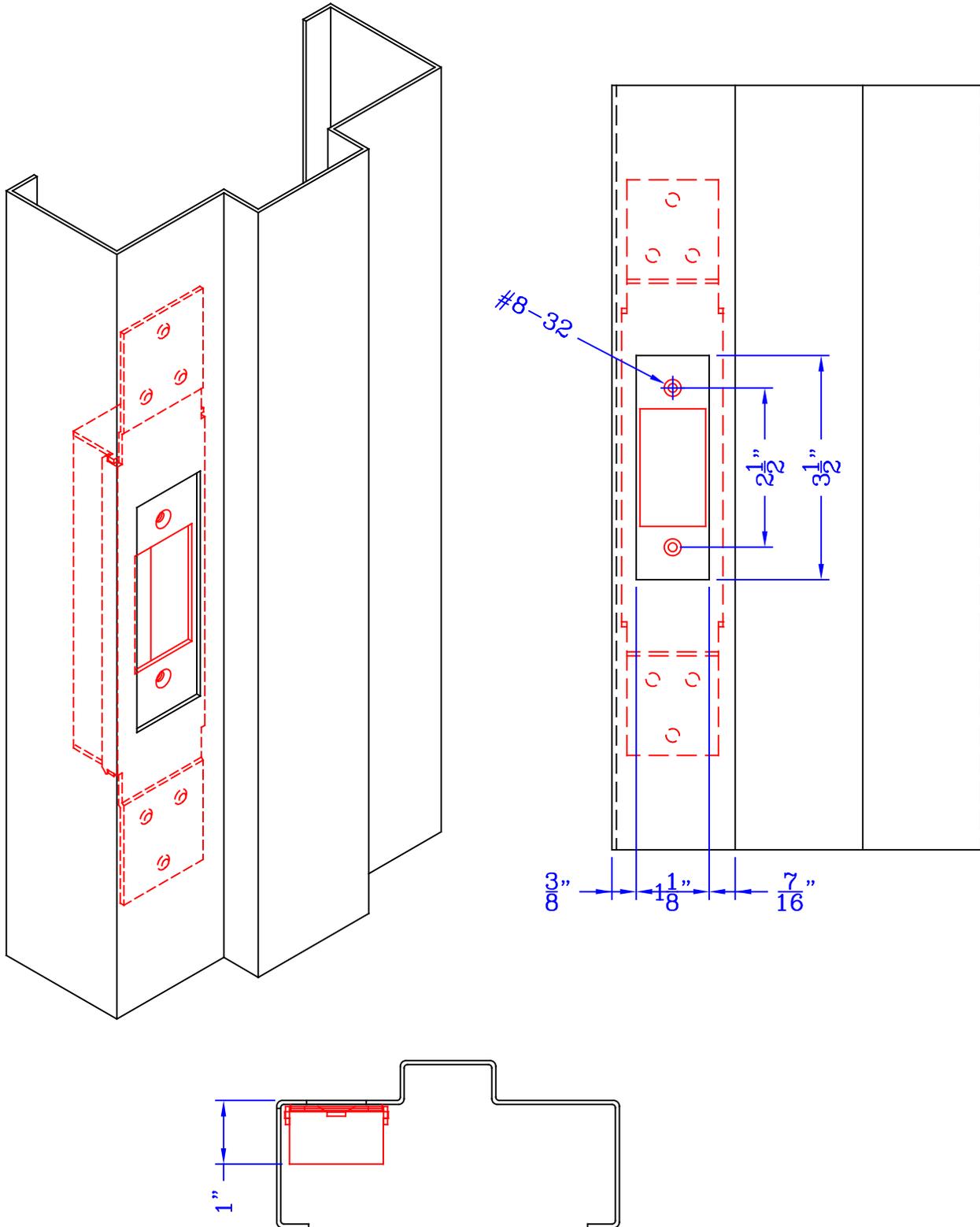
DL234

Cylindrical deadlock strike reinforcement, 12ga
Projection welded



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

Projection welded



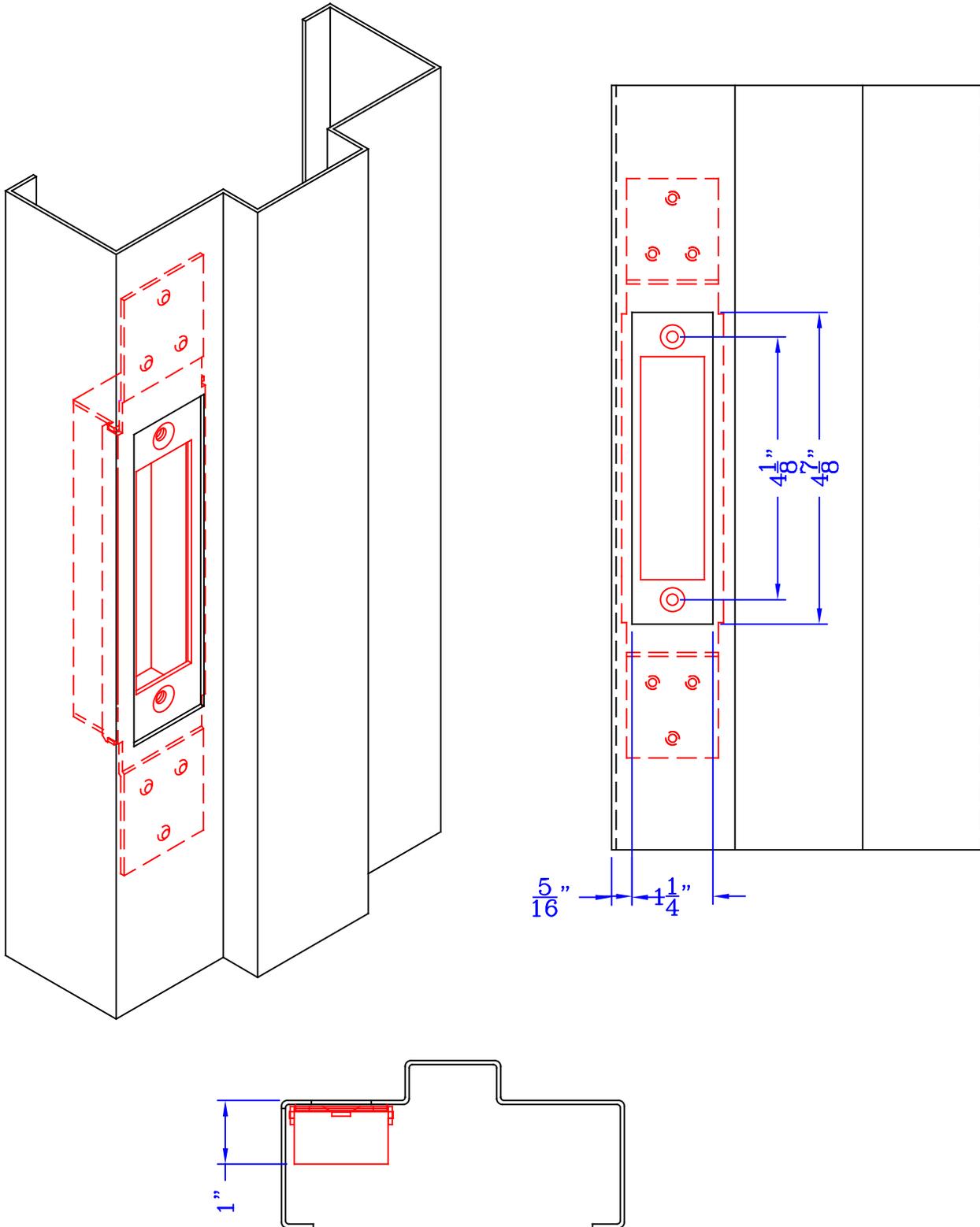
Tapped extruded holes per ANSI/SDI A250.6.

Strike

DL312M

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

Strike

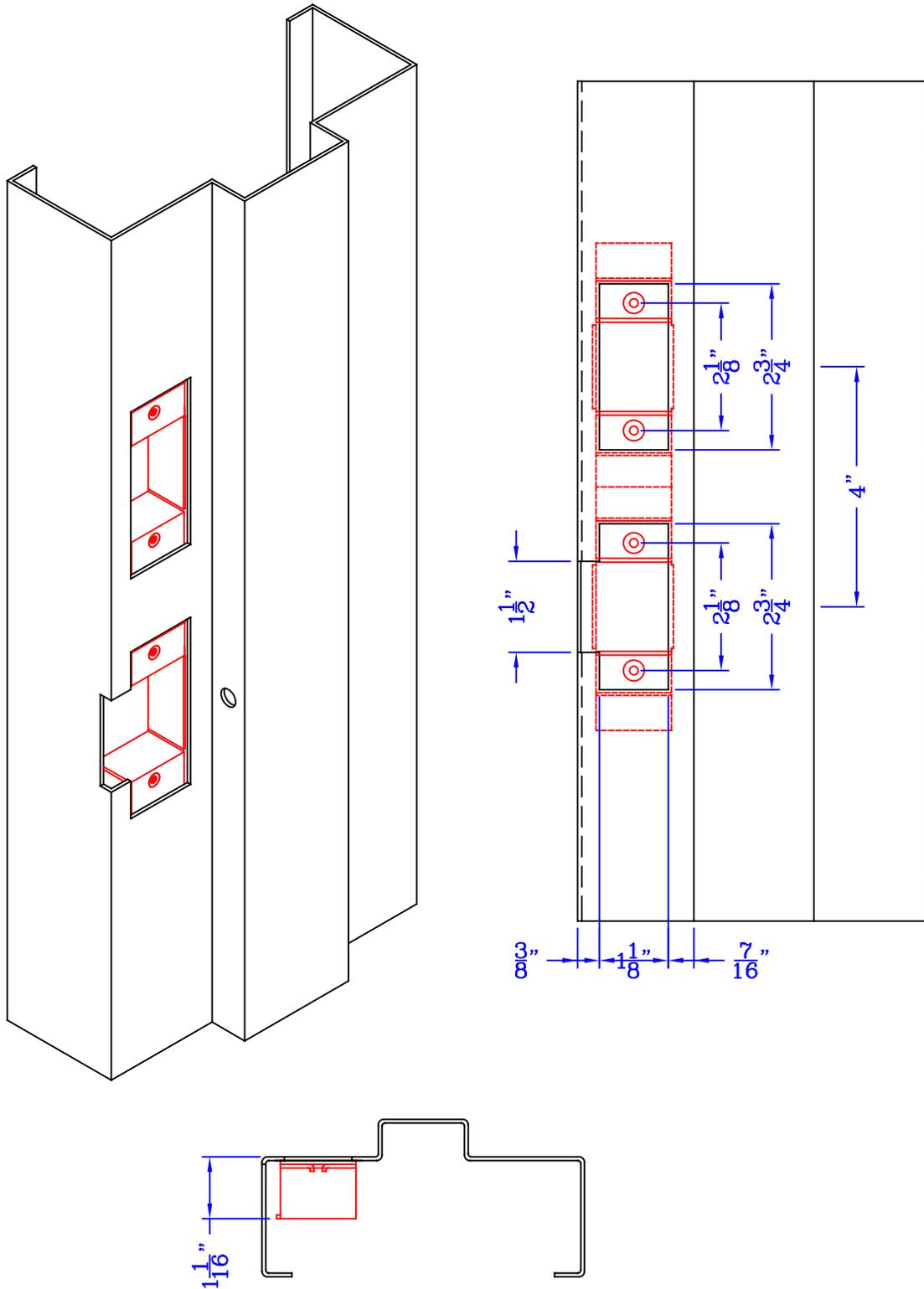


Tapped extruded holes per ANSI/SDI A250.6.

DL478

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

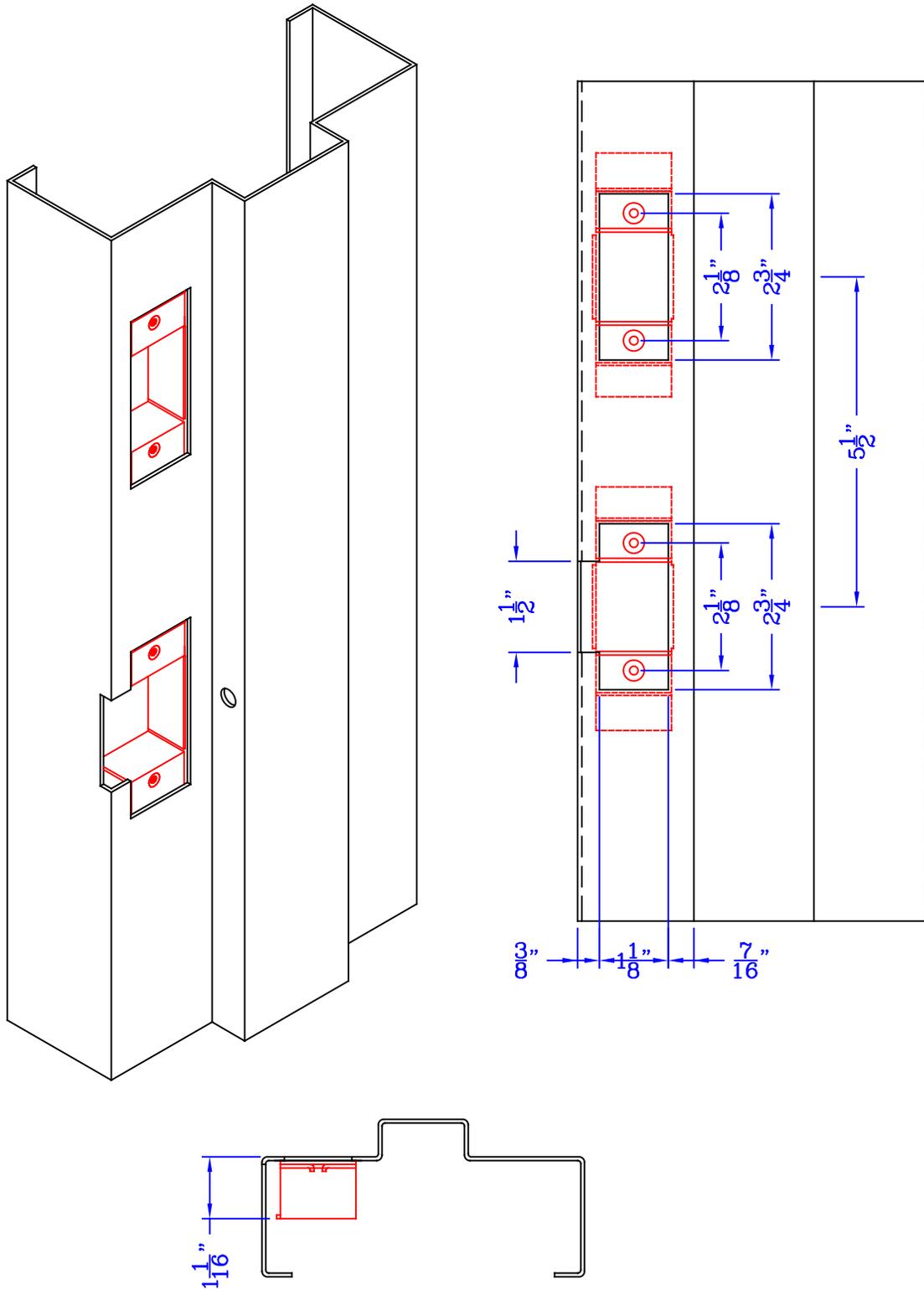
Projection welded



Tapped extruded holes per ANSI/SDI A250.6.

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

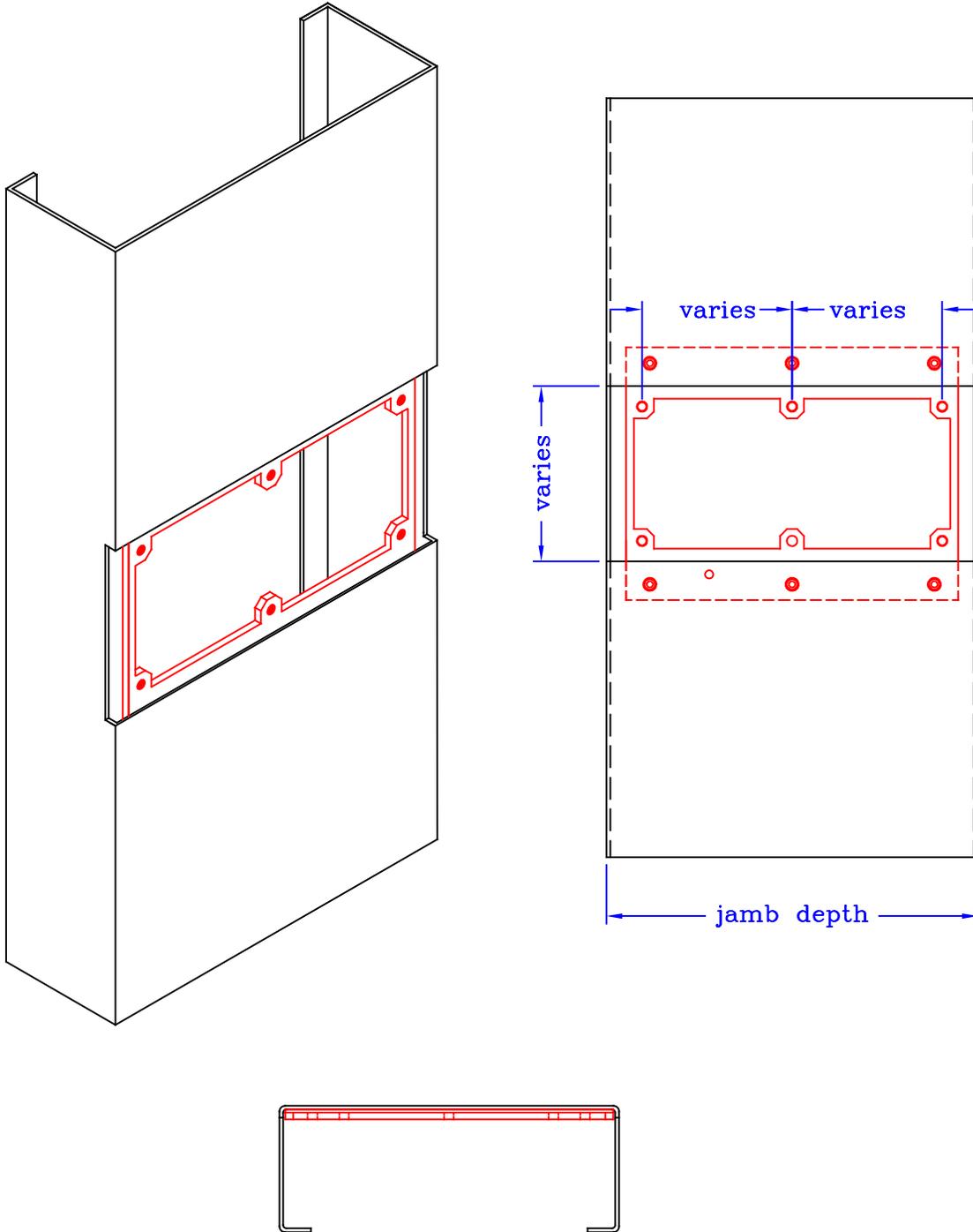
Projection welded



Tapped extruded holes per ANSI/SDI A250.6.

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

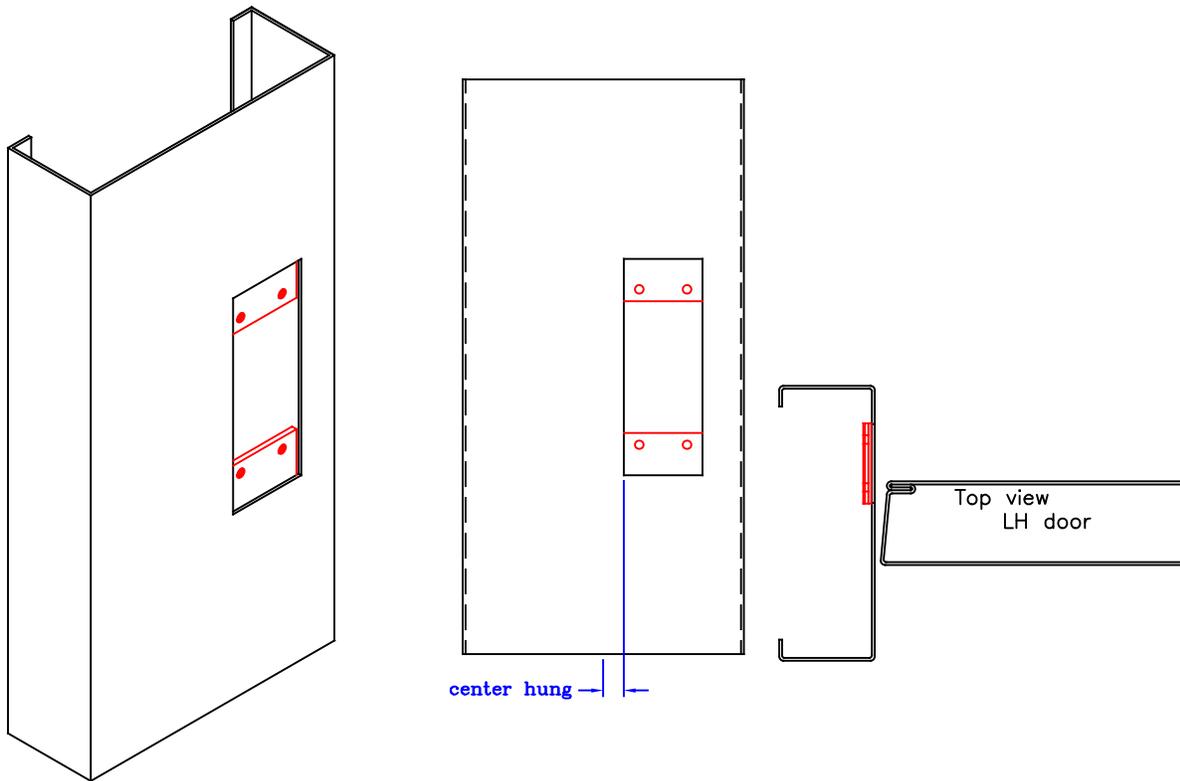
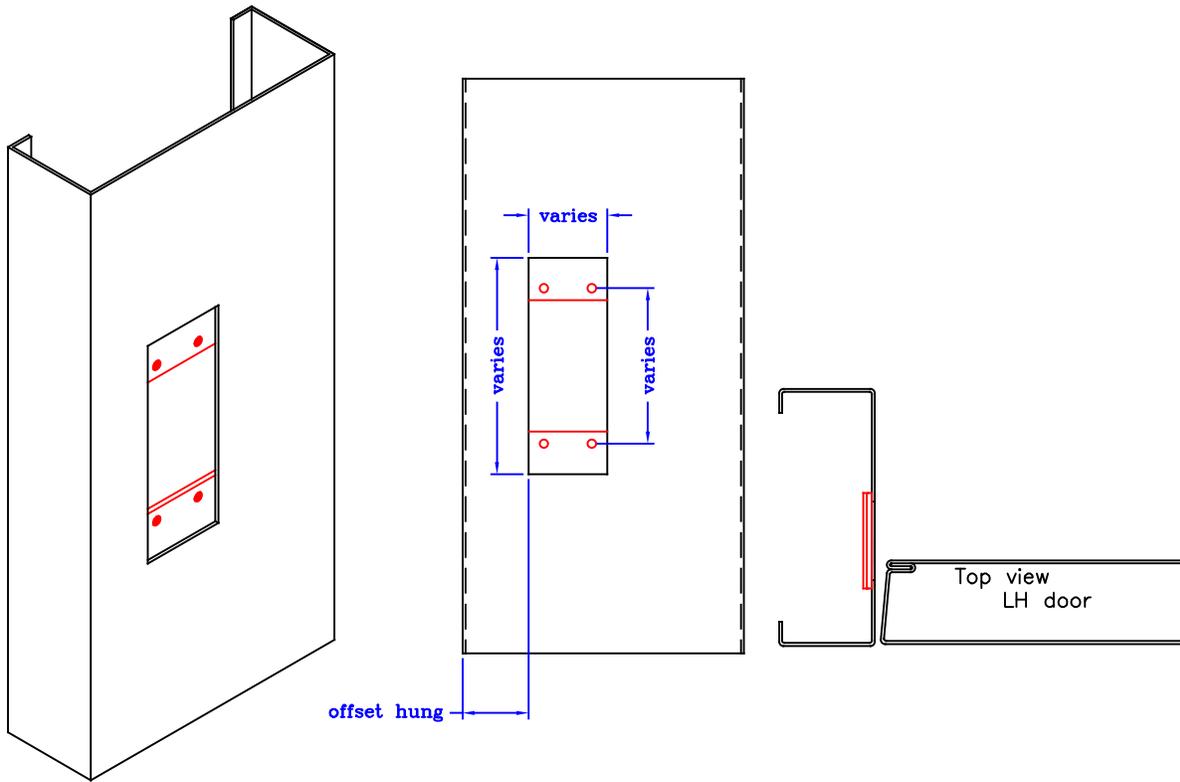
Strike



*manufacturer's template to be provided

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

Strike

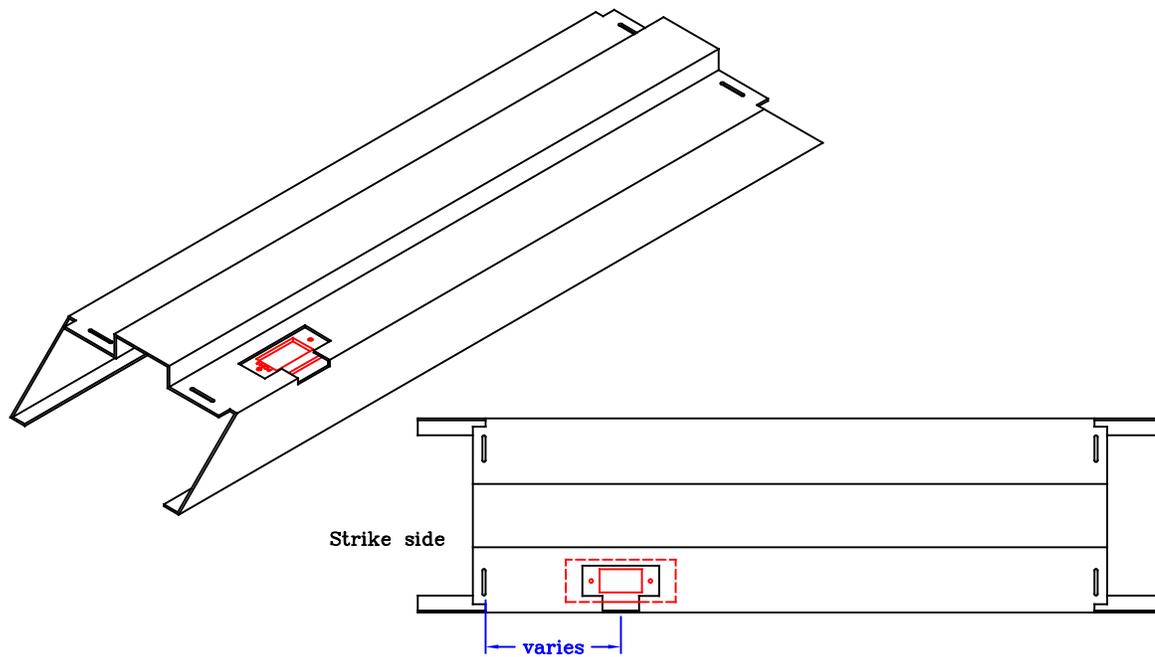
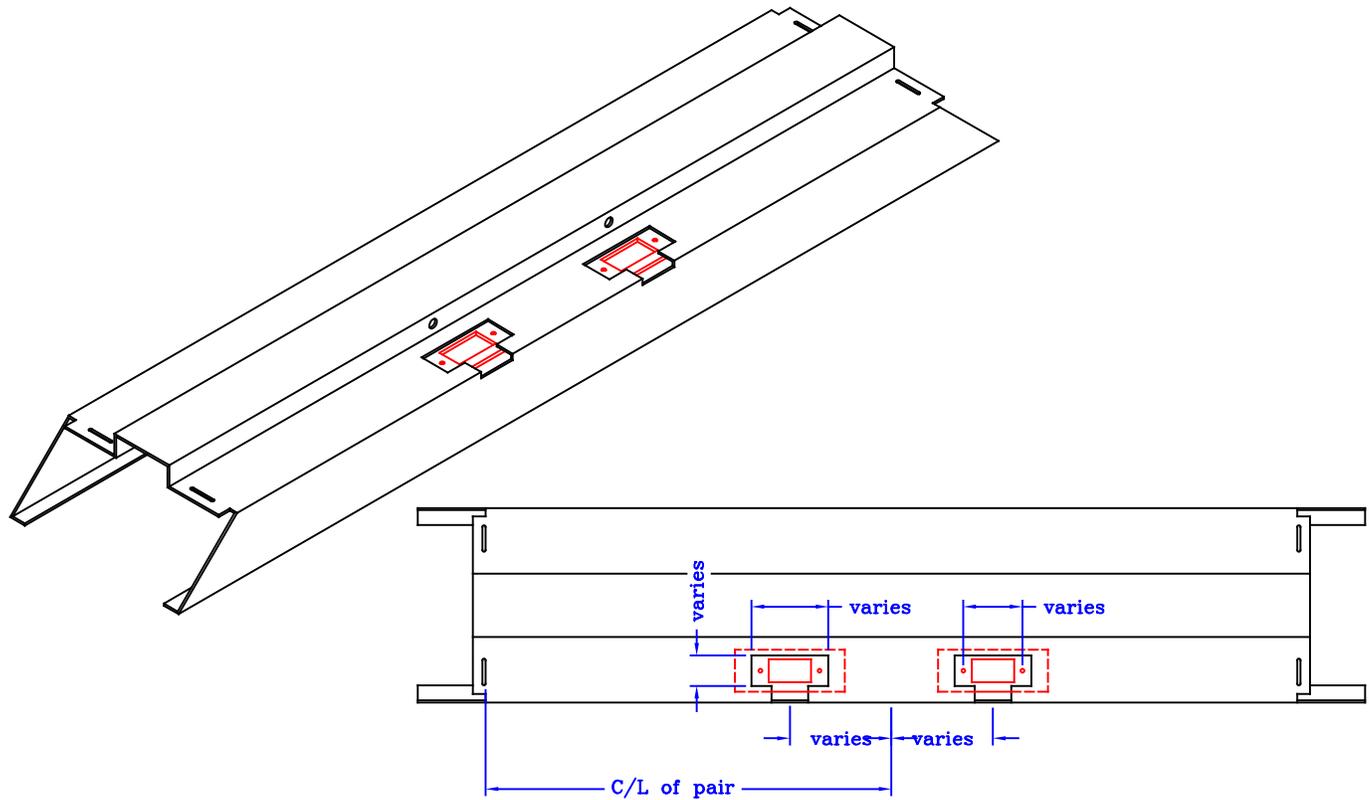


*manufacturer's template to be provided

ESTOP

Roller latch strike reinforcement at head, 12ga
Spot welded

Strike

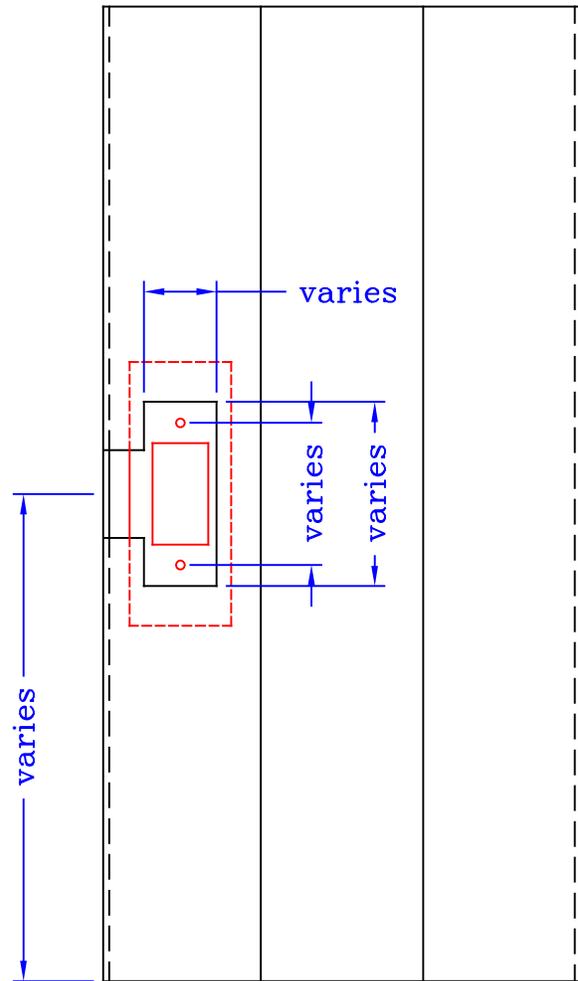
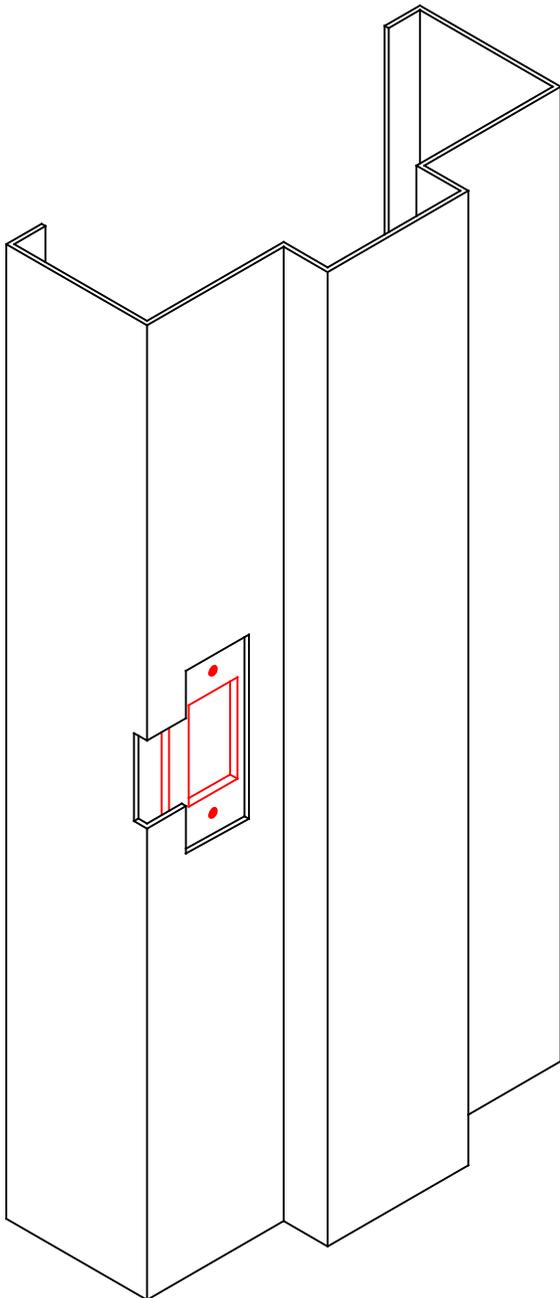


*manufacturer's template to be provided

RLH

Roller latch strike reinforcement at jamb, 12ga

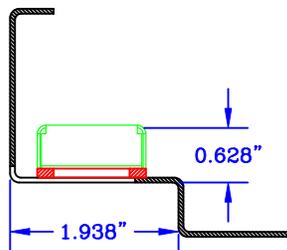
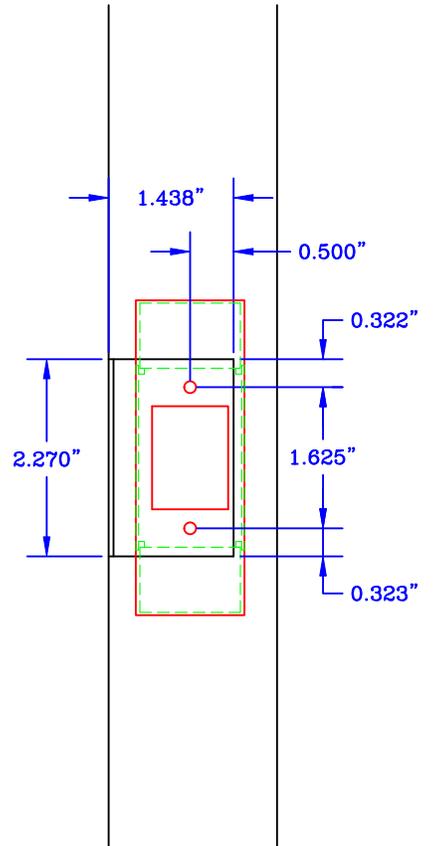
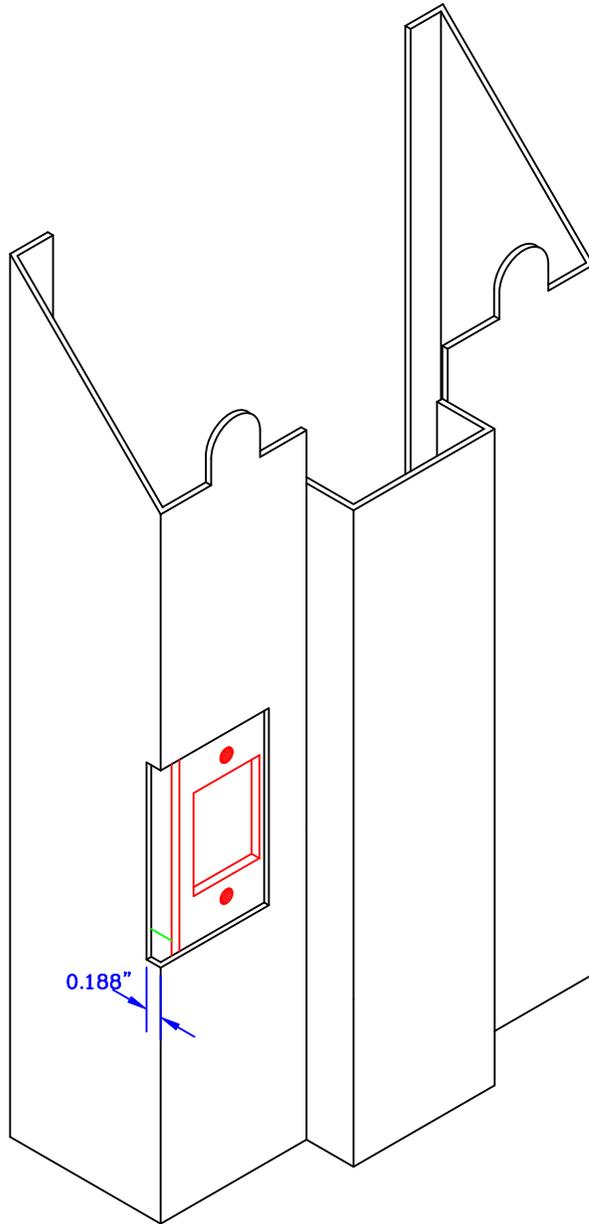
Spot welded



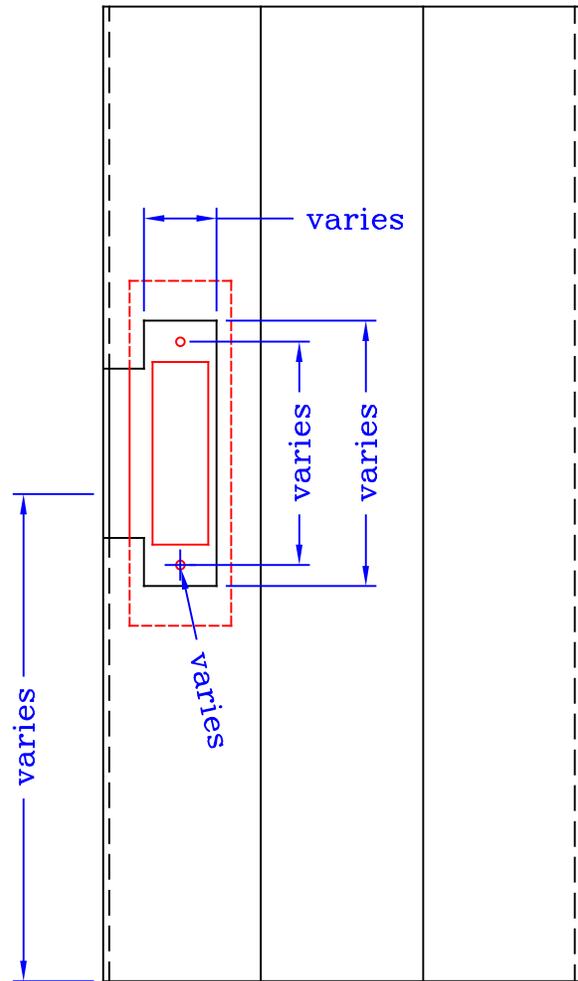
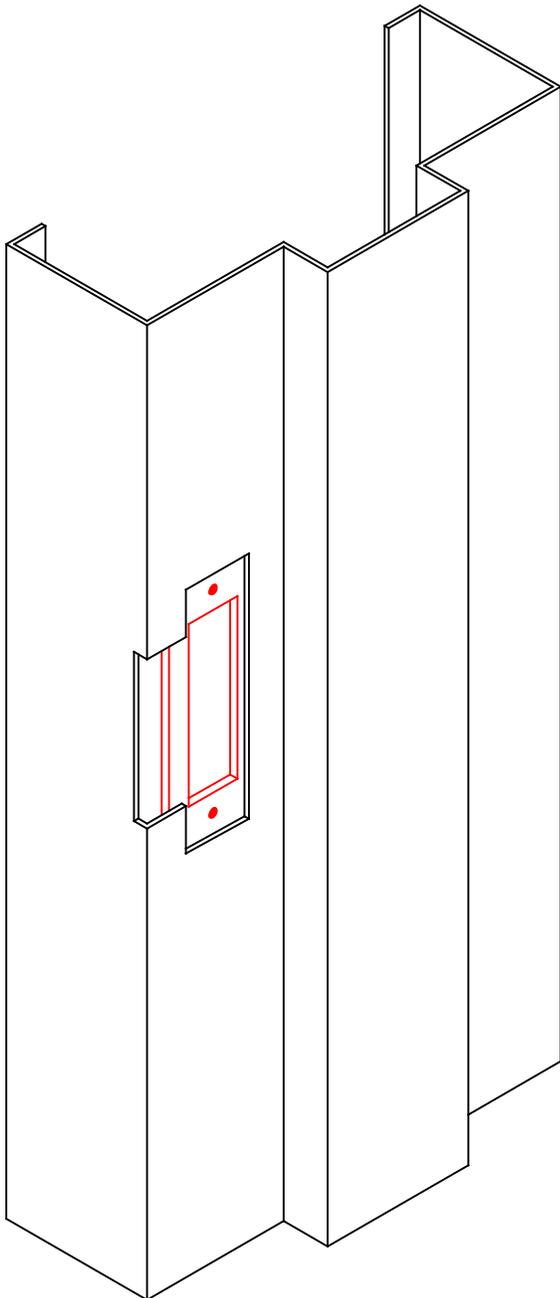
*manufacturer's template to be provided

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

Strike

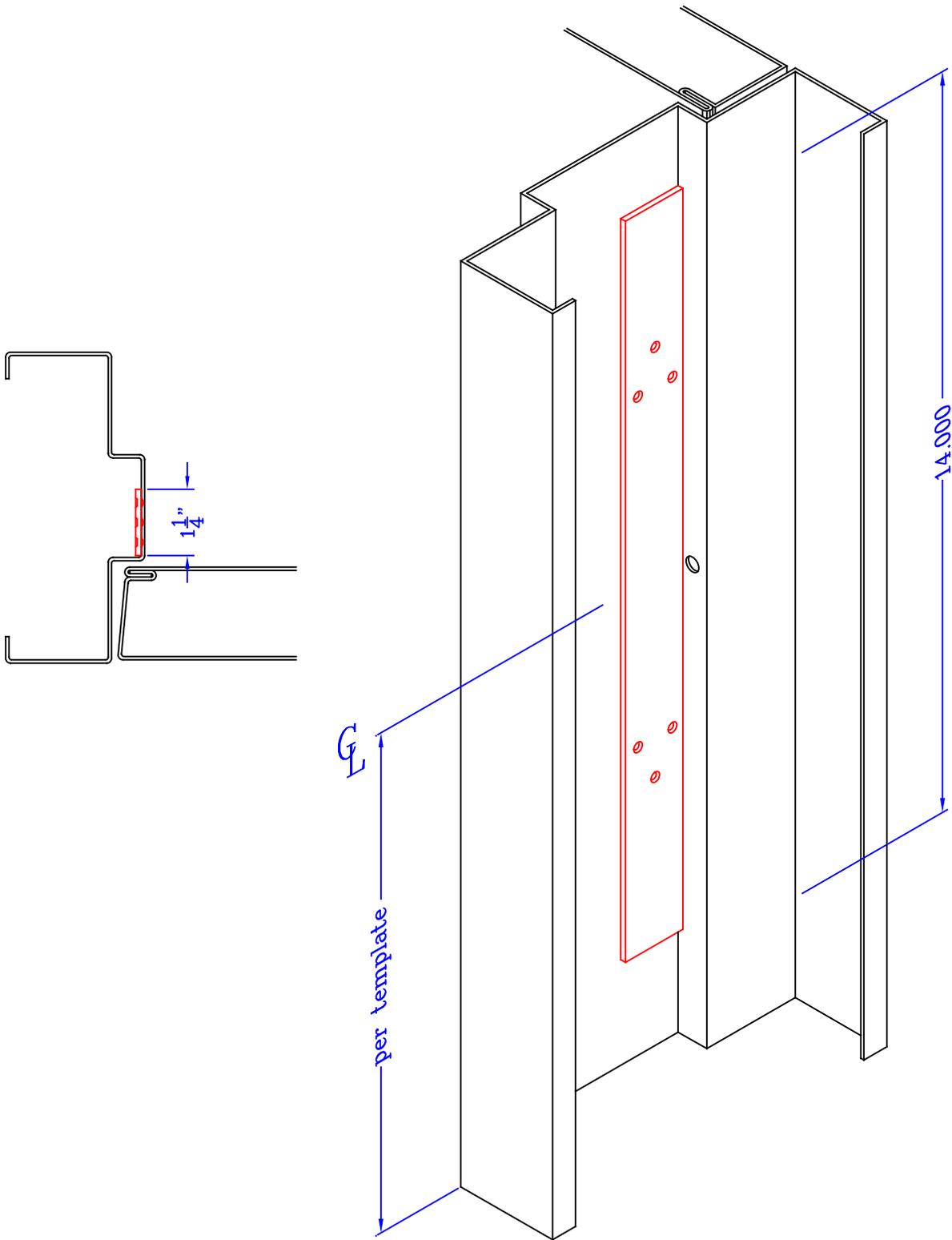


Special strike reinforcement, 12ga
Spot welded



*manufacturer's template to be provided

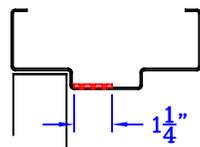
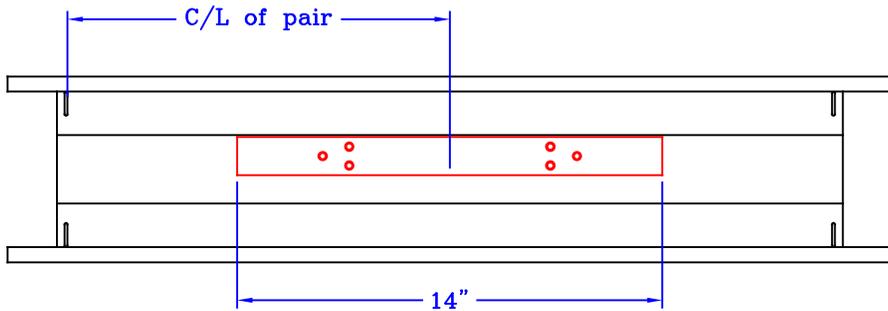
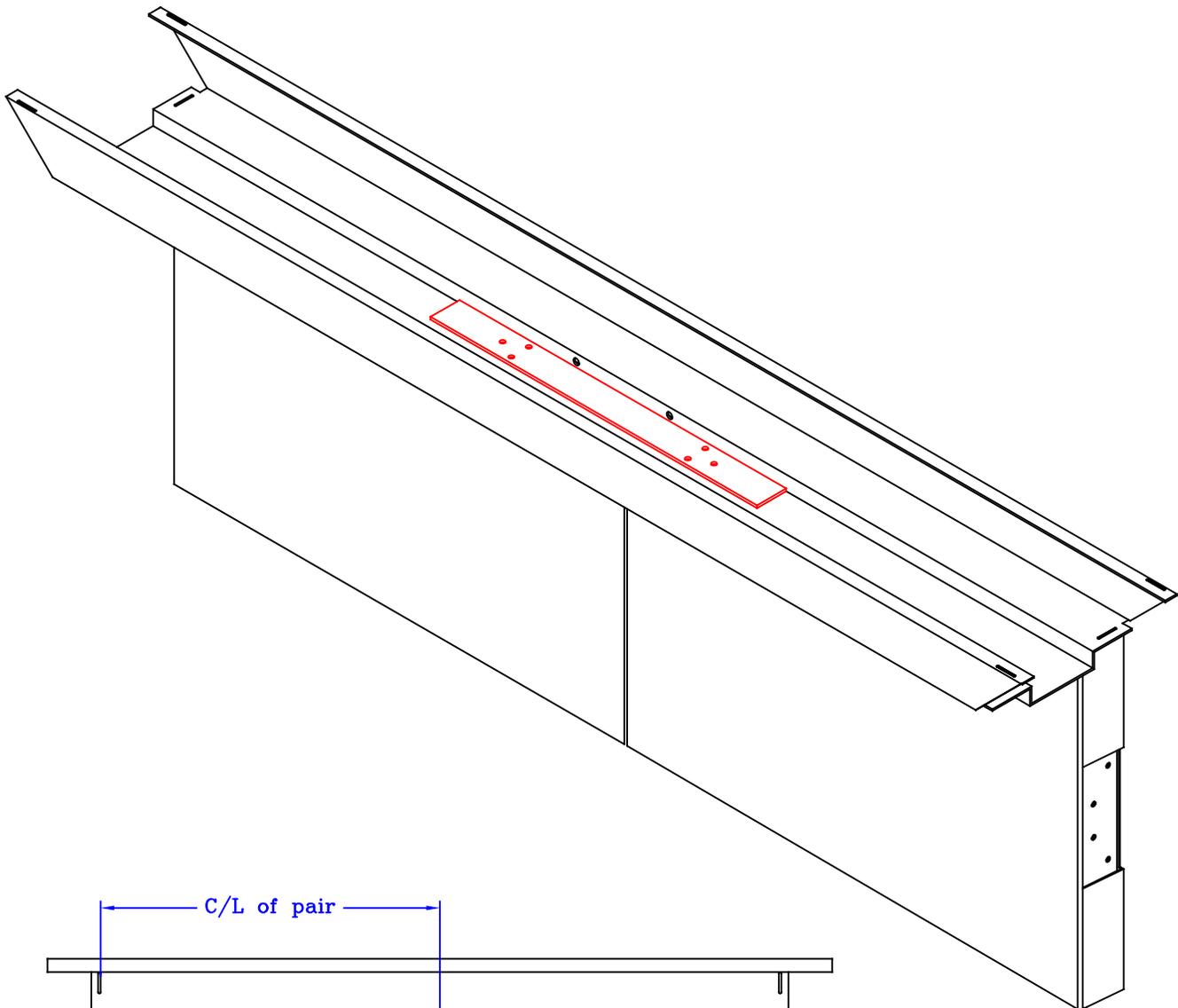
Rim exit device reinforcement, 12ga
Projection welded



Exit device strike

RED

Prep for surface vertical rod strike, 12ga
Projection welded

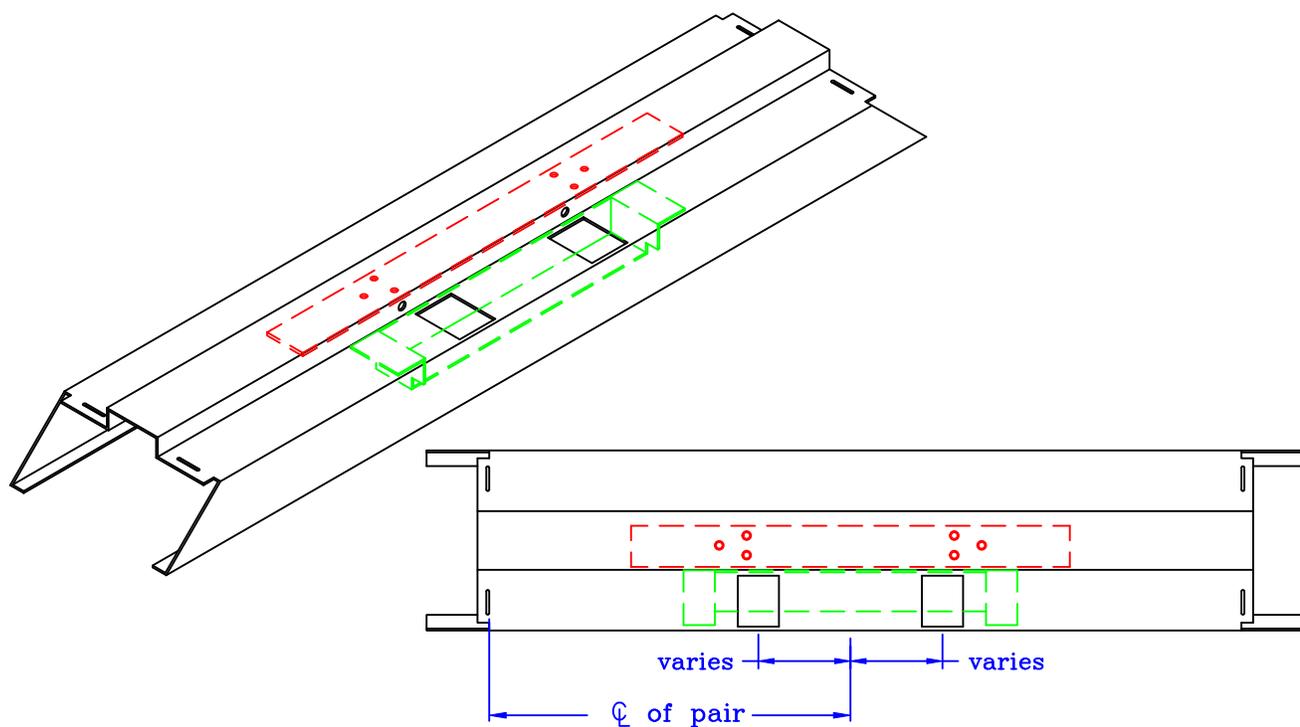


Exit device strike

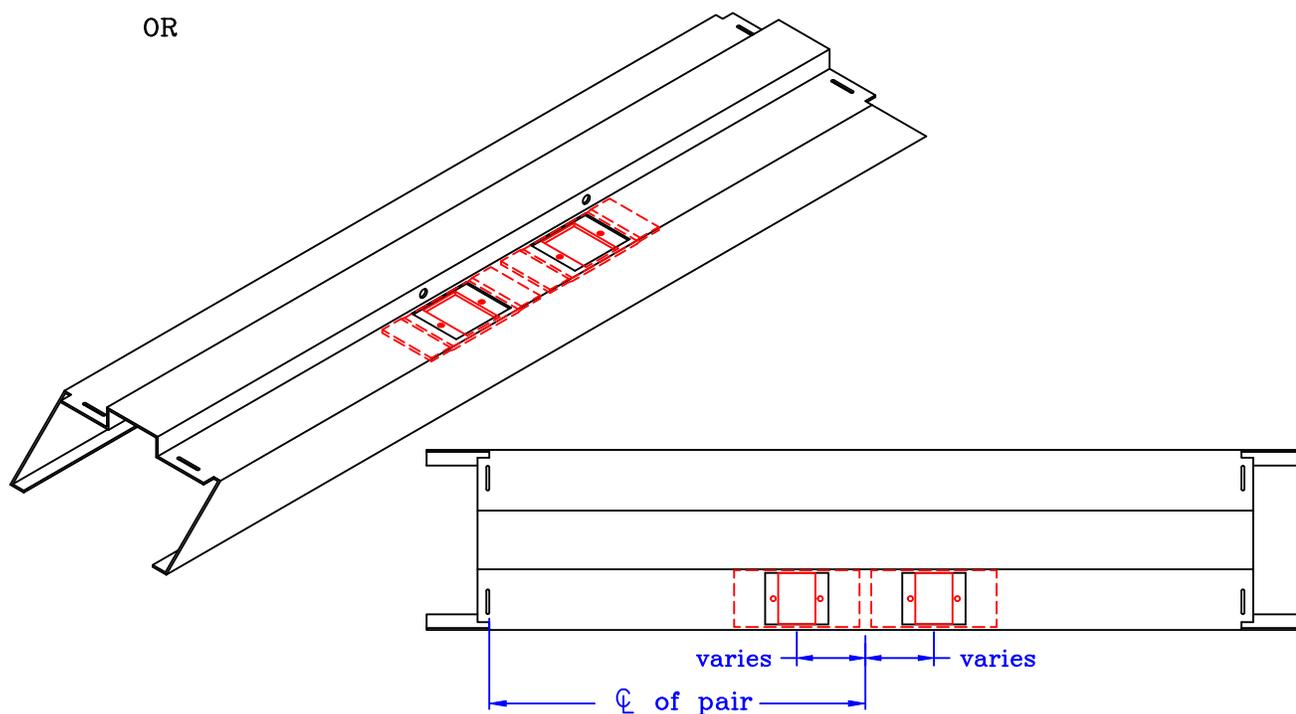
SVRS

Prep for concealed vertical rod strike, 12ga

Spot welded

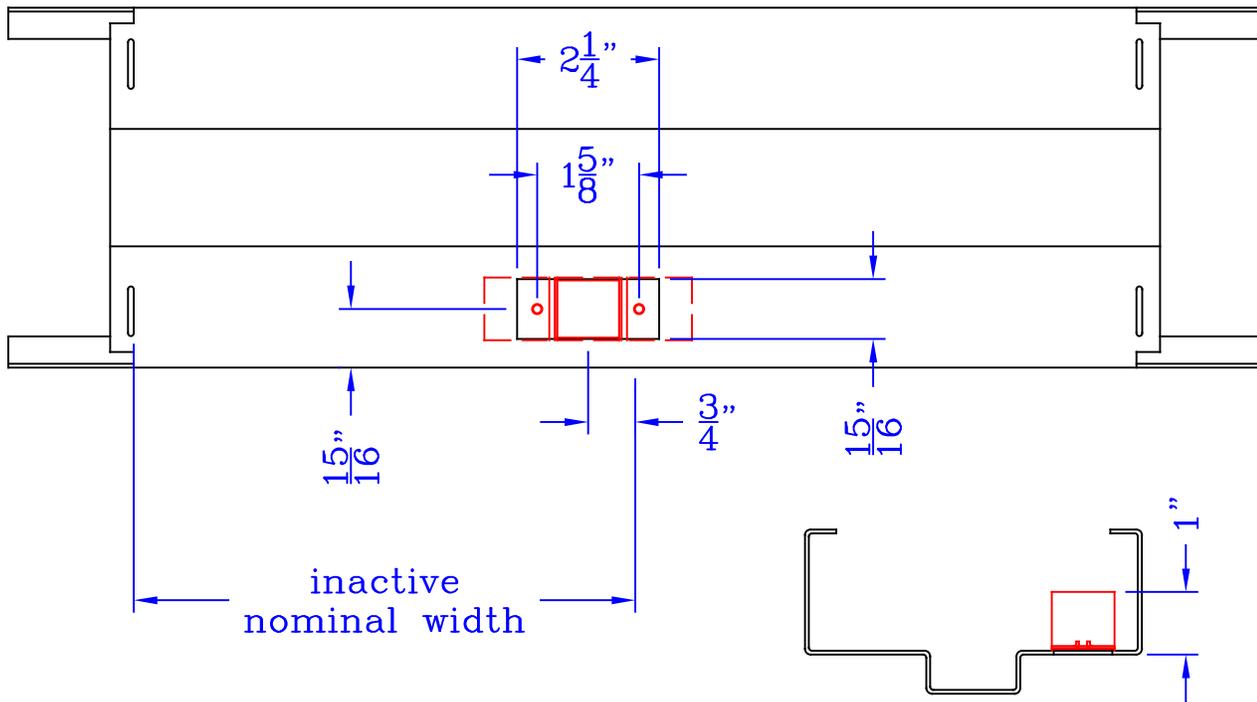
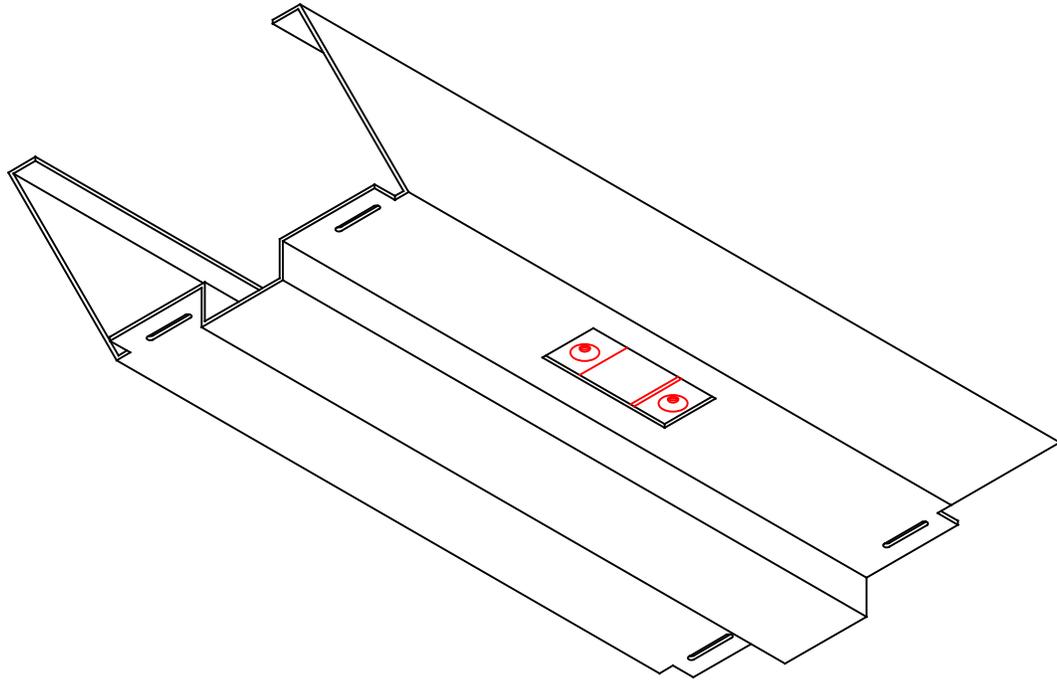


OR



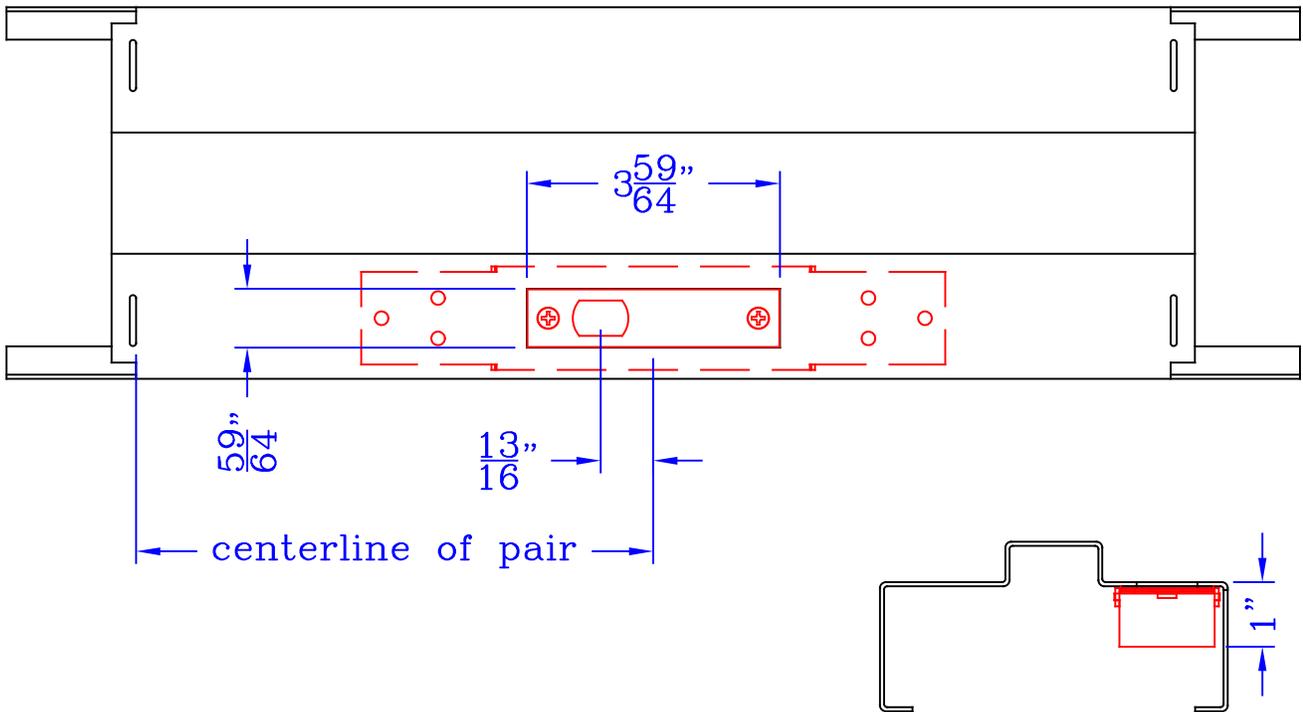
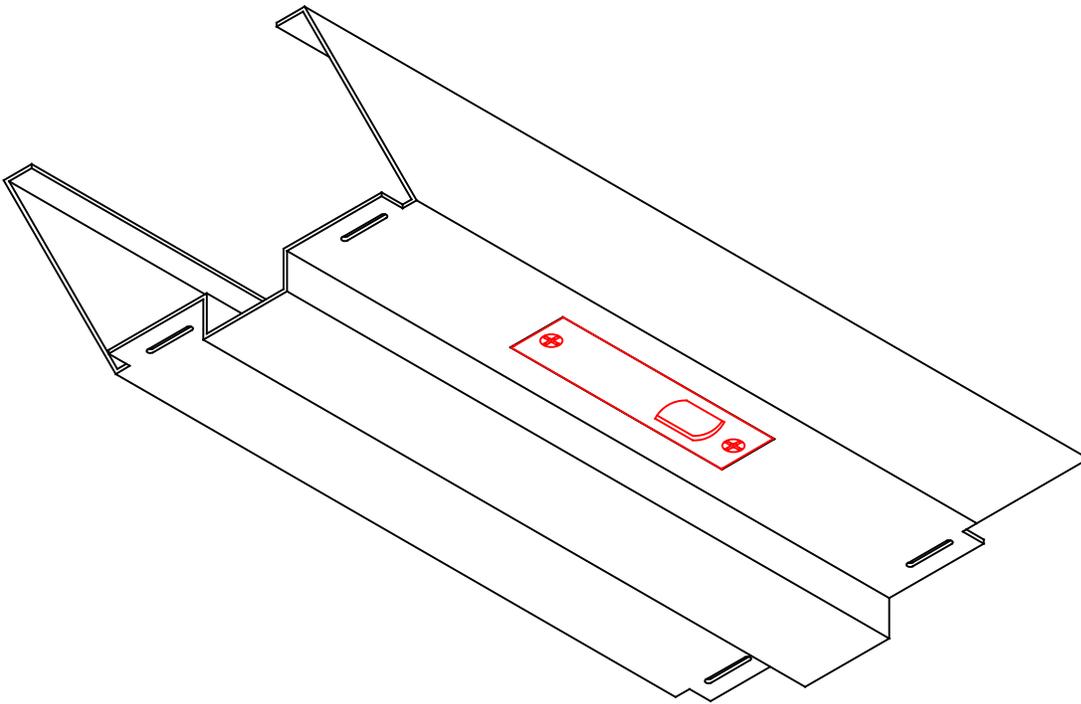
*manufacturer's template to be provided

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



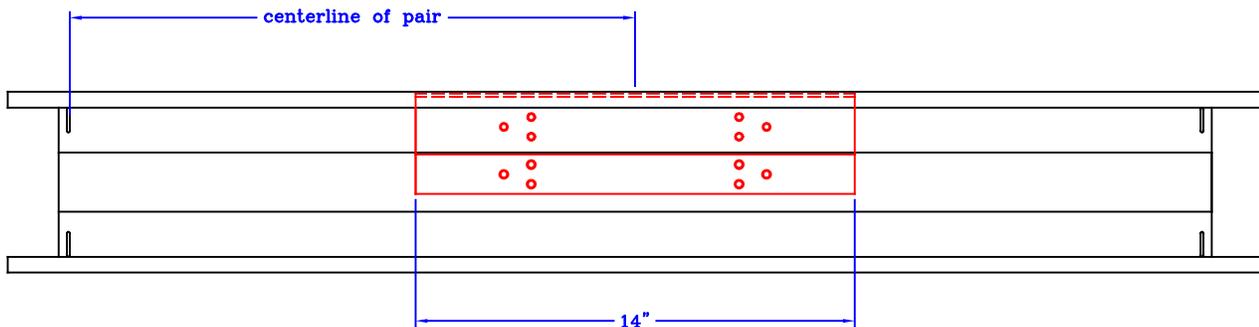
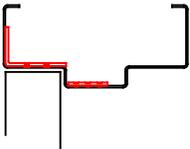
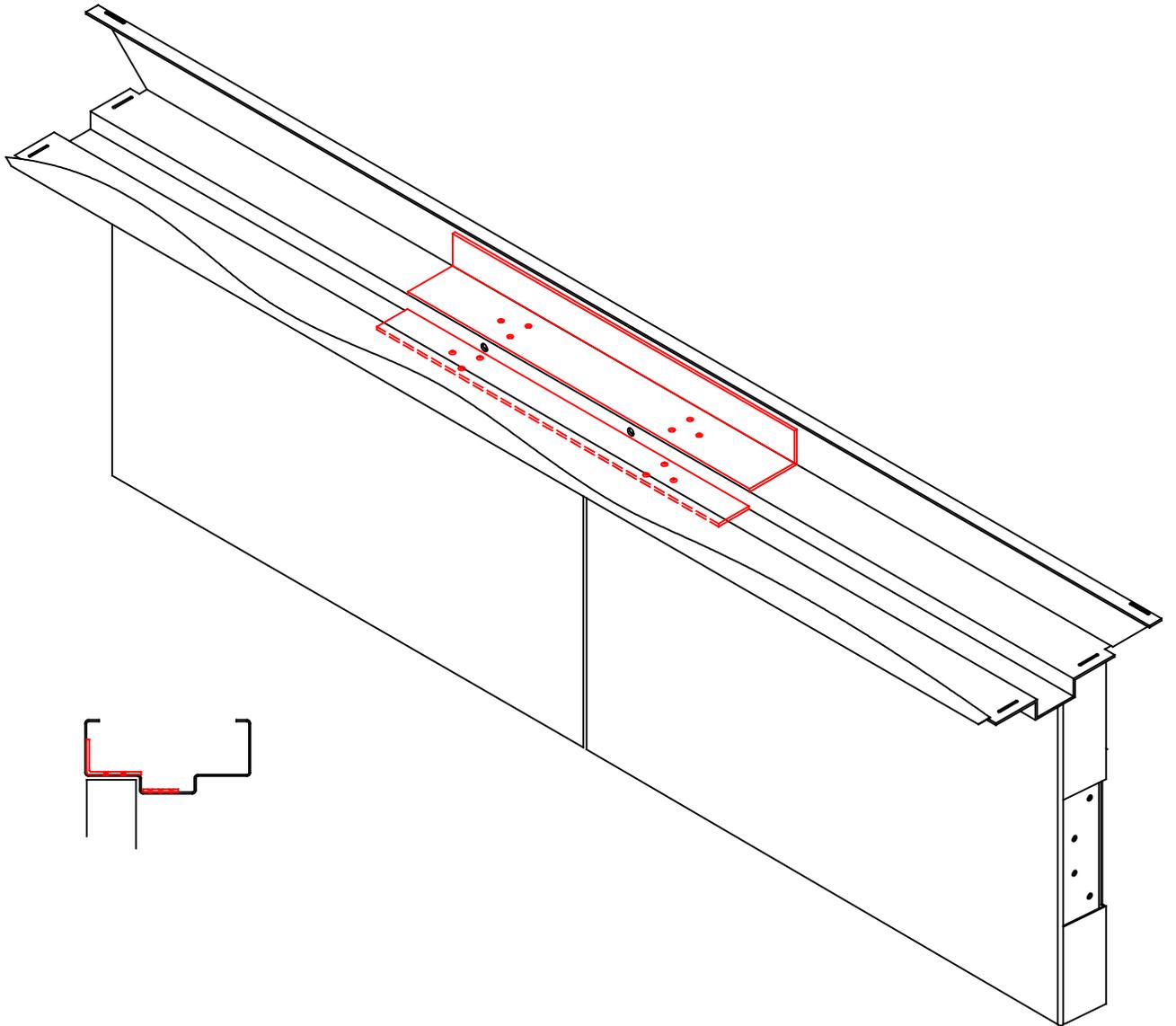
Tapped extruded holes per ANSI/SDI A250.6.

Reversible flush bolt strike reinforcement, 18ga
Projection welded



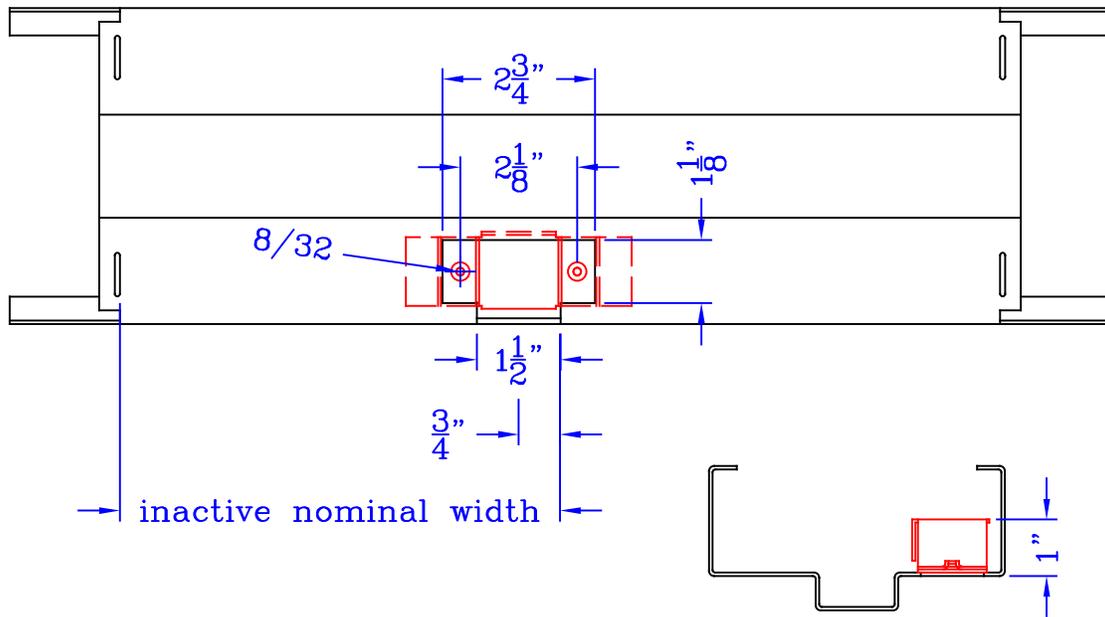
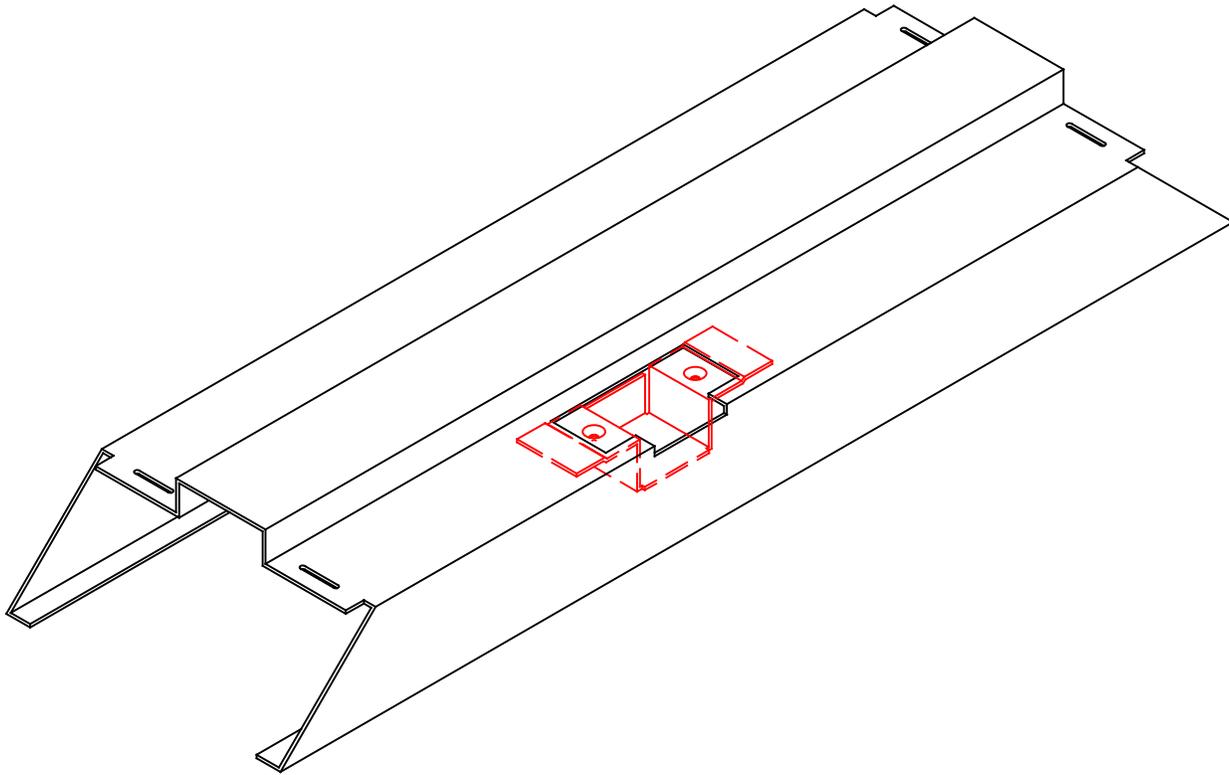
Tapped extruded holes per ANSI/SDI A250.6.

Surface bolt strike reinforcement, 12ga
Projection welded



Self latching flush bolt strike reinforcement, 18ga
Projection welded

Bolt strike

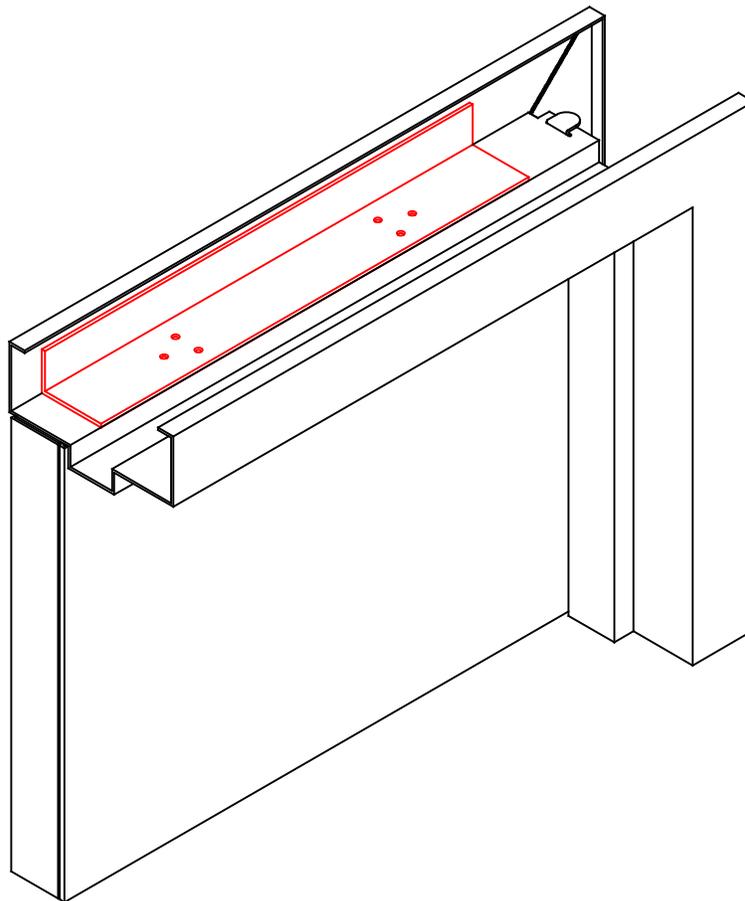
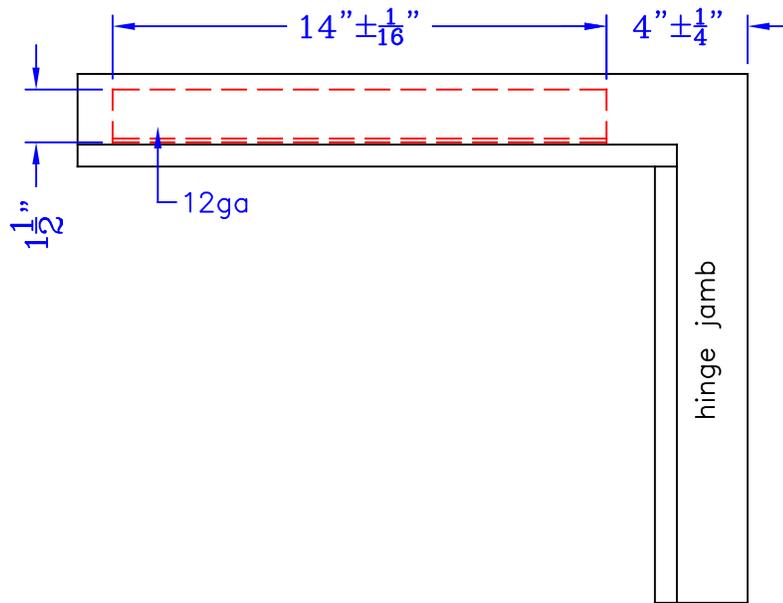


Tapped extruded holes per ANSI/SDI A250.6.

SLFBS

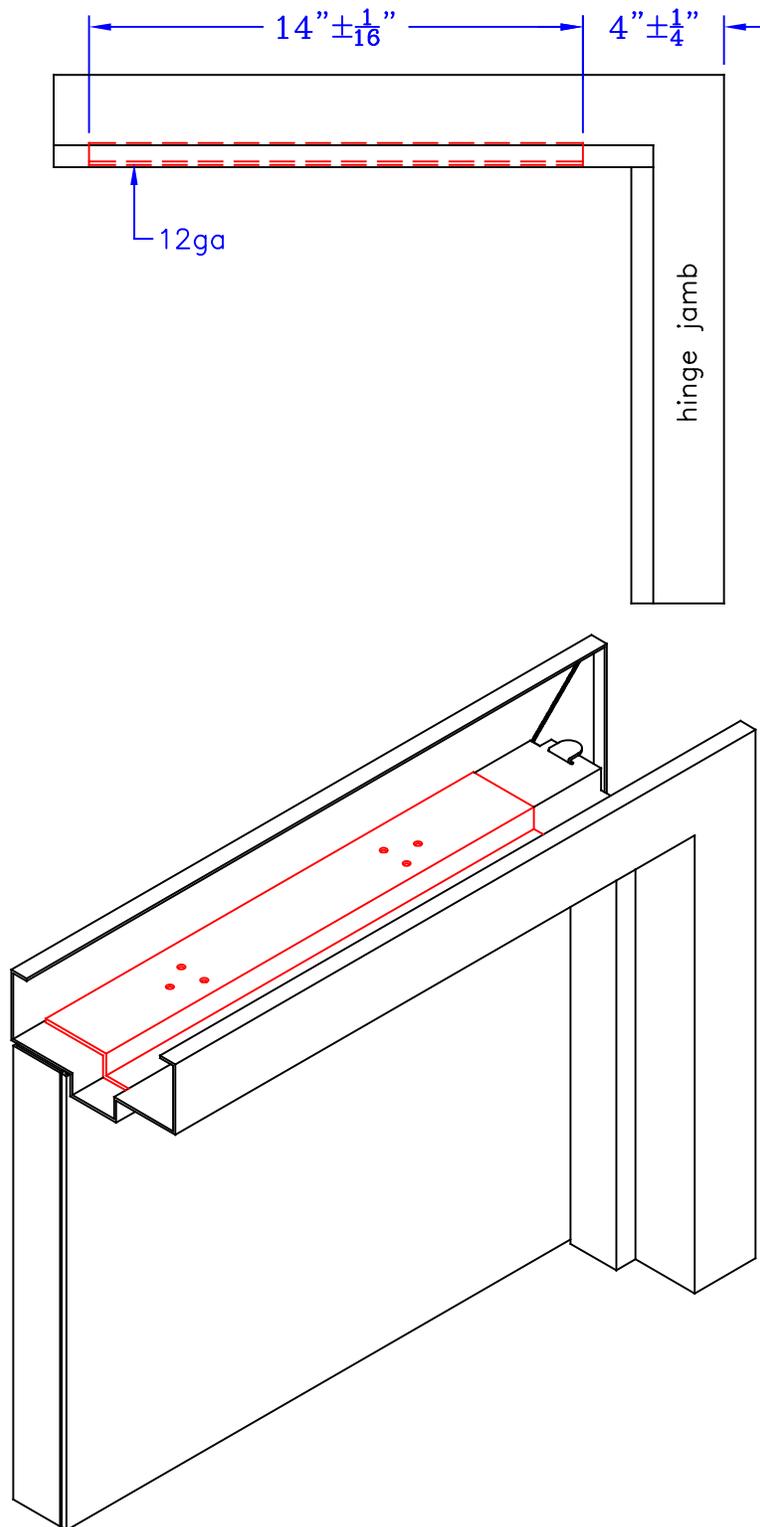
Regular arm closer reinforcement, 12ga

Projection welded



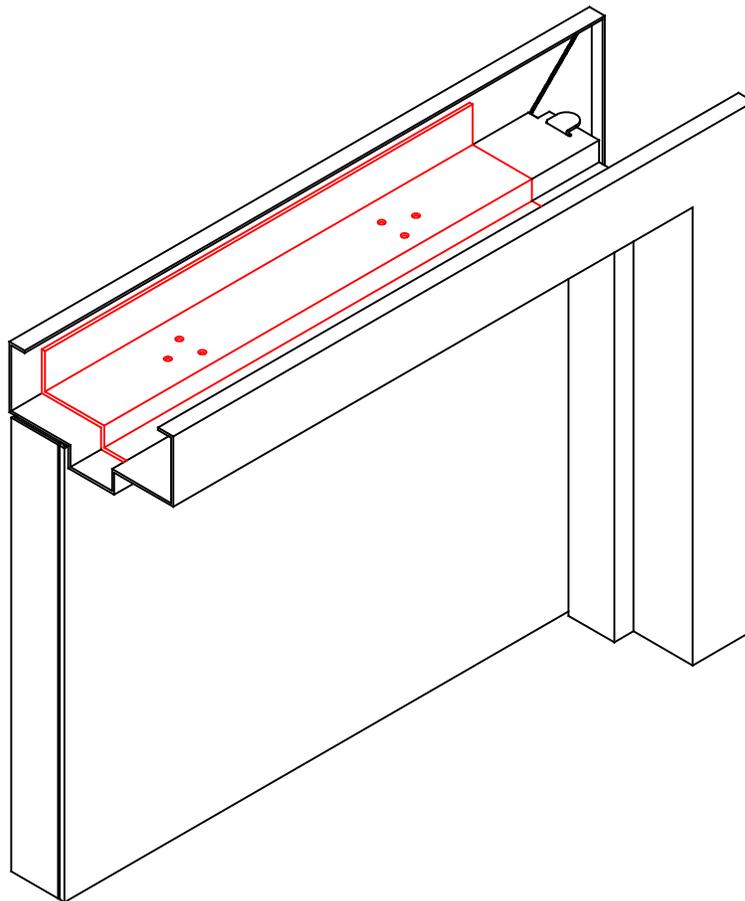
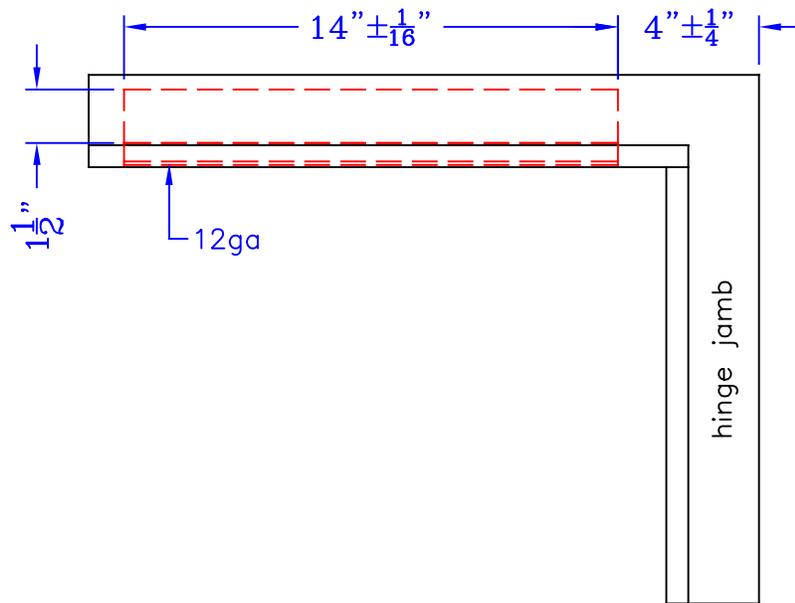
Parallel arm closer reinforcement, 12ga

Projection welded



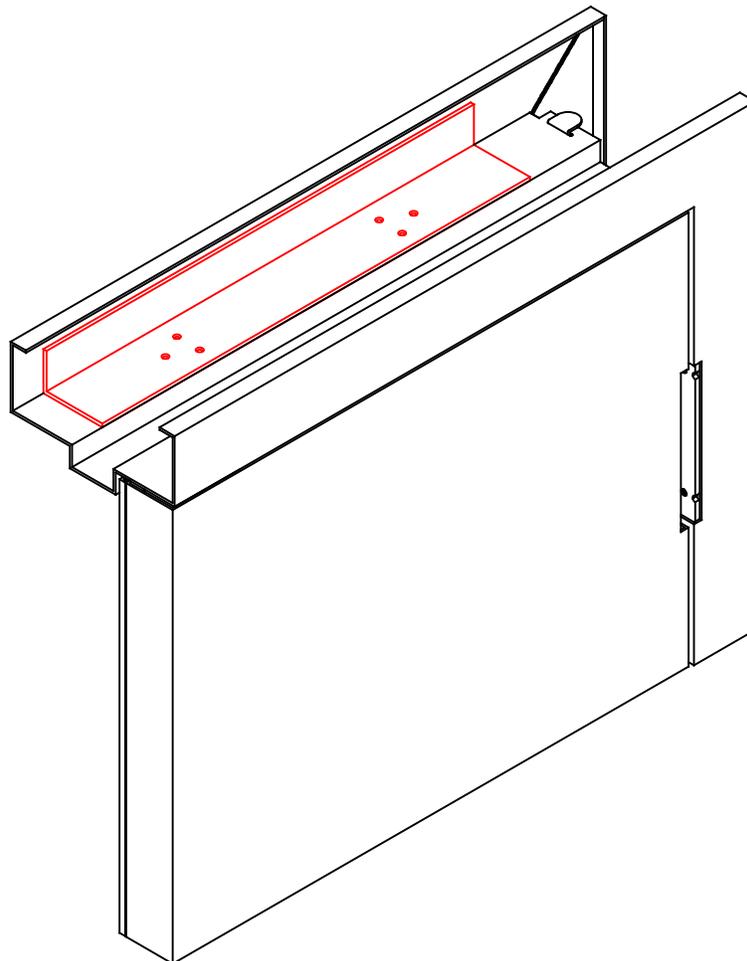
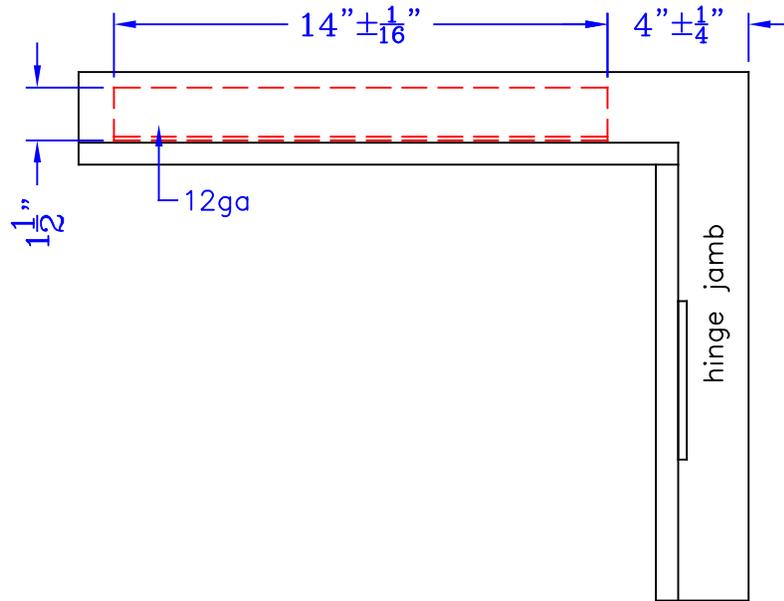
Regular and parallel arm closer reinforcement, 12ga

Projection welded

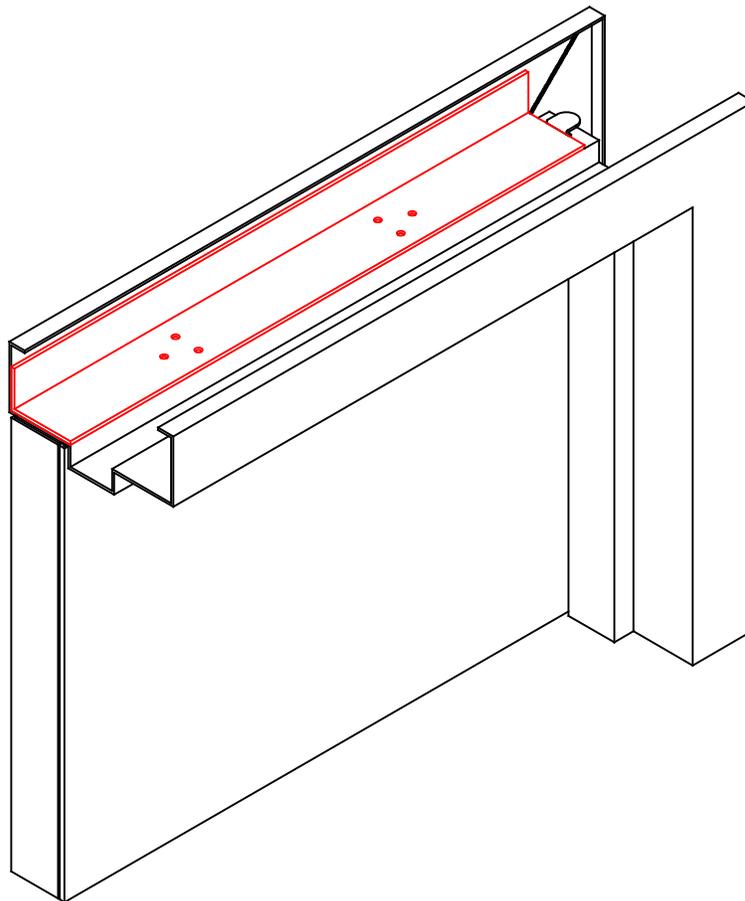
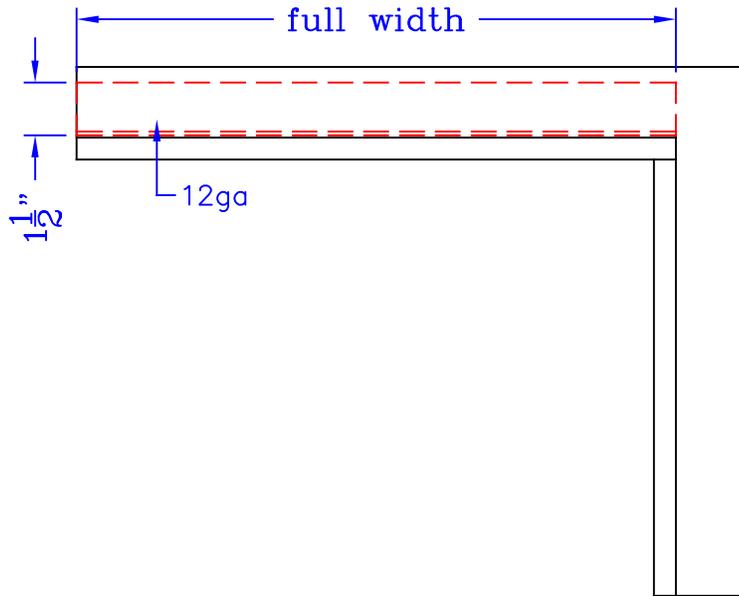


Top jamb closer reinforcement, 12ga

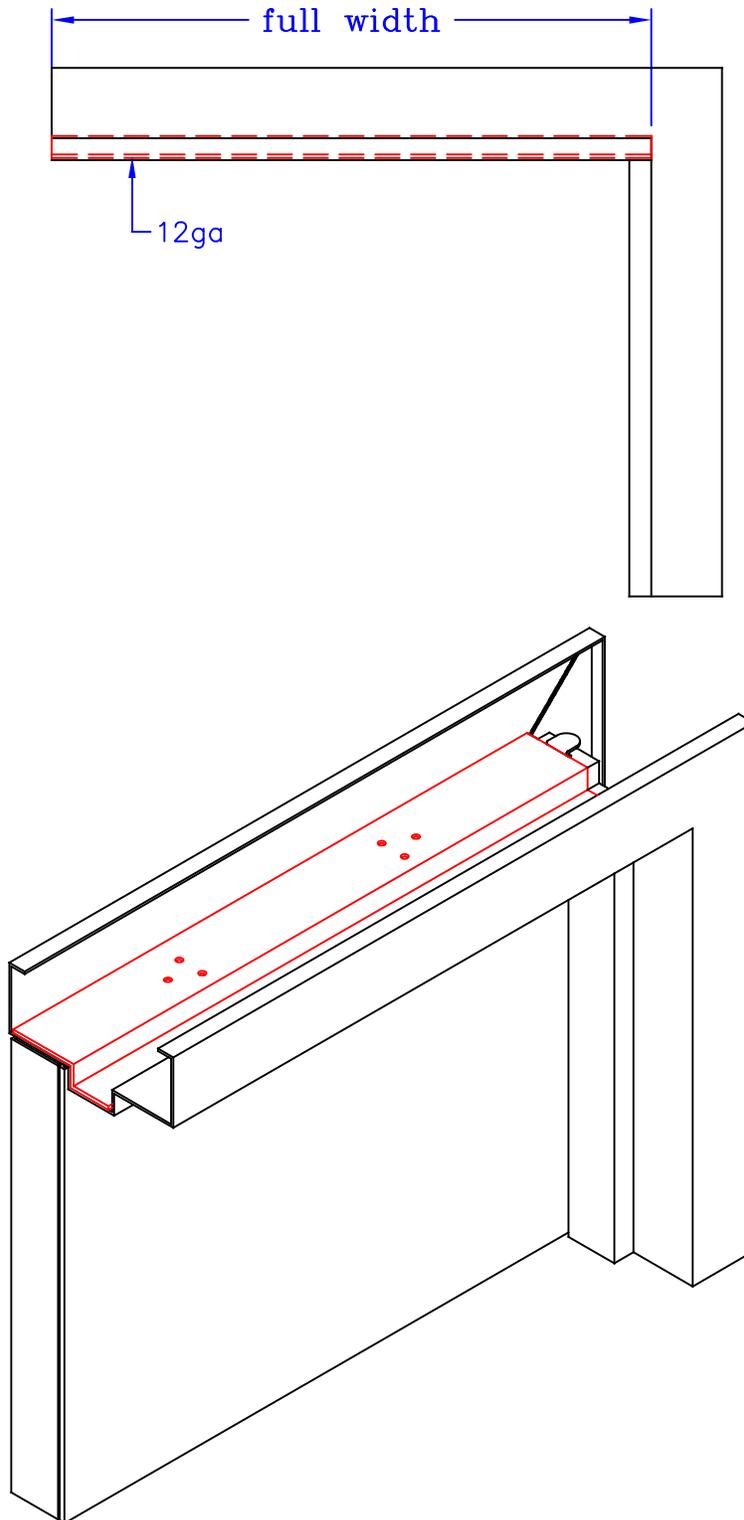
Projection welded



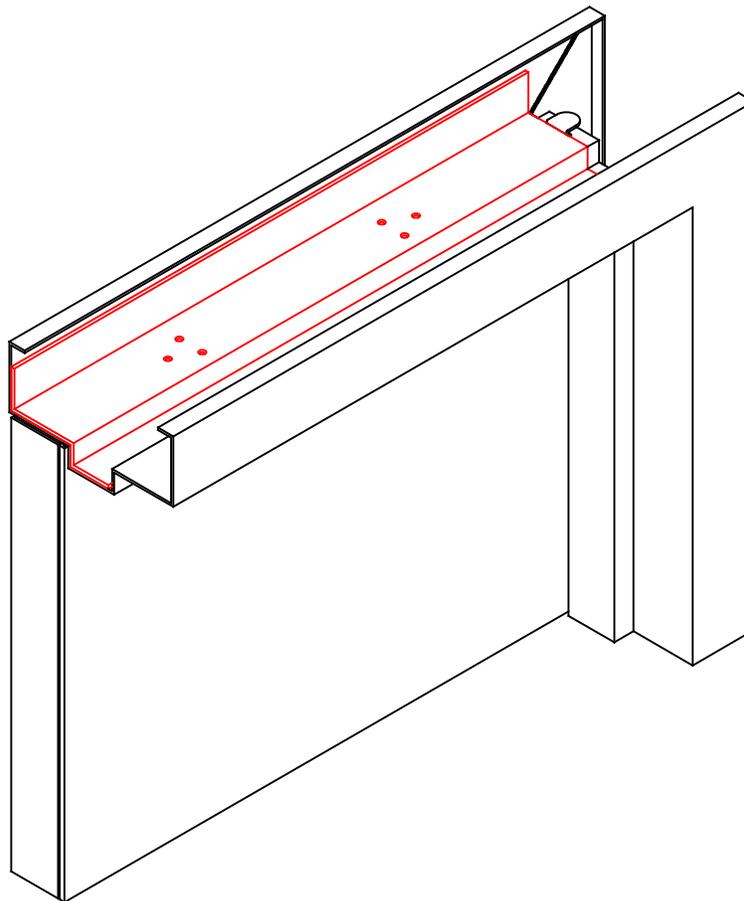
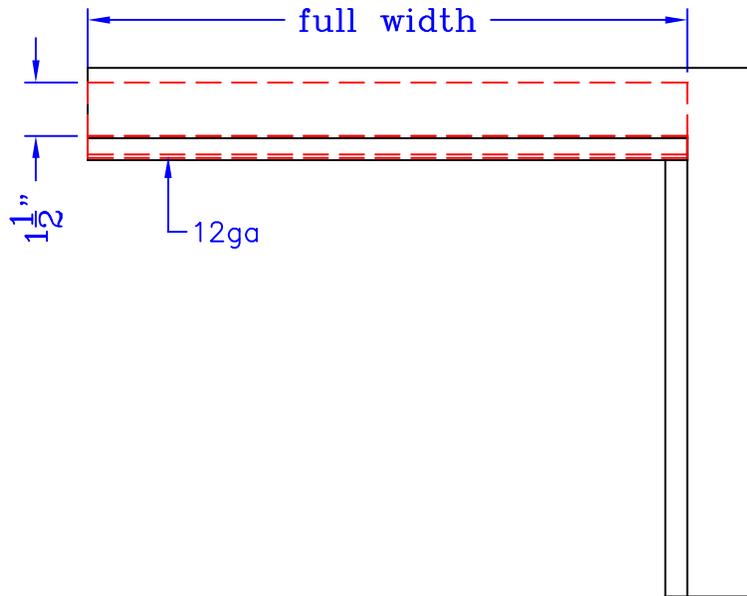
Full width regular arm closer reinforcement, 12ga
Projection welded



Full width parallel arm closer reinforcement, 12ga
Projection welded

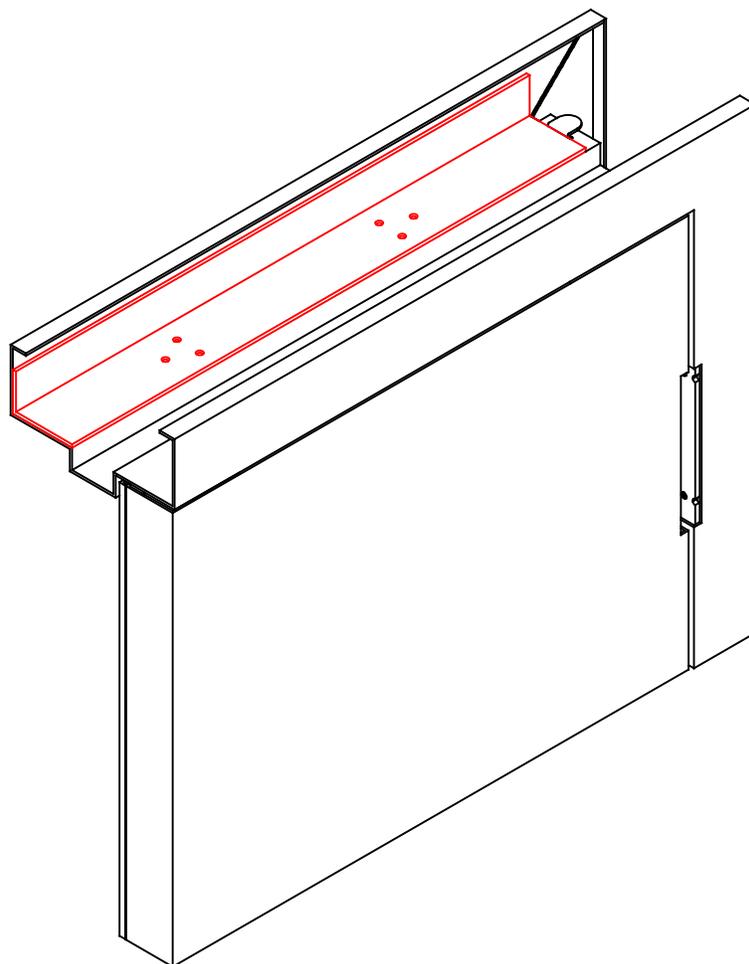
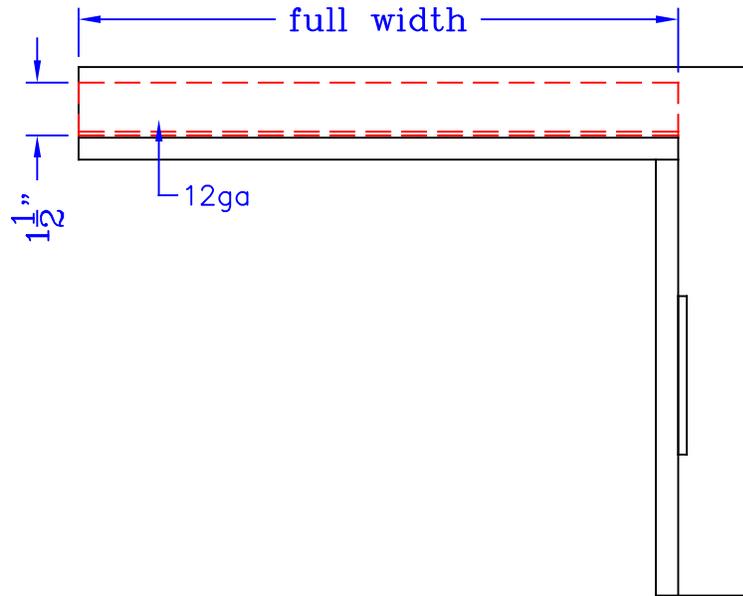


Full width regular and parallel arm closer reinforcement, 12ga
Projection welded

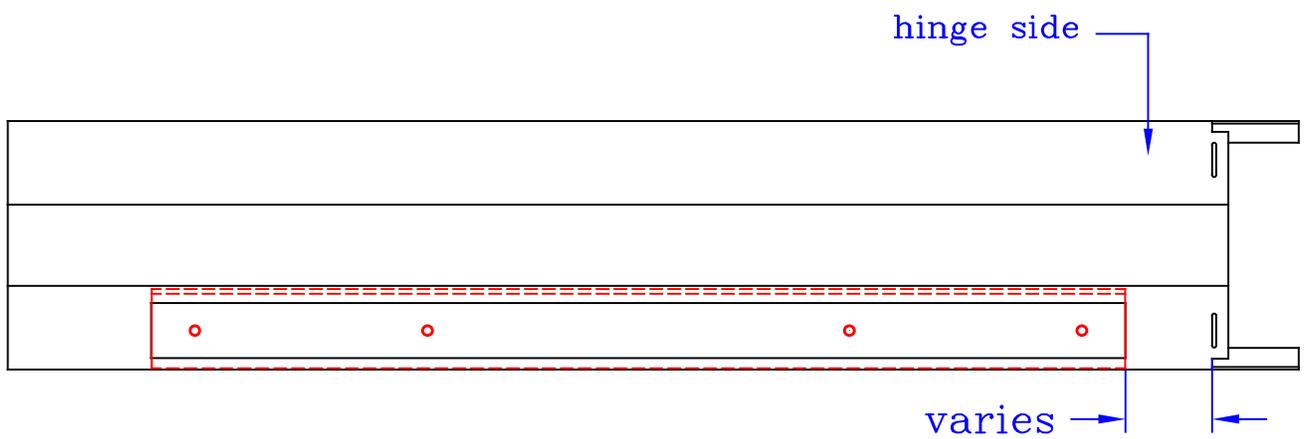
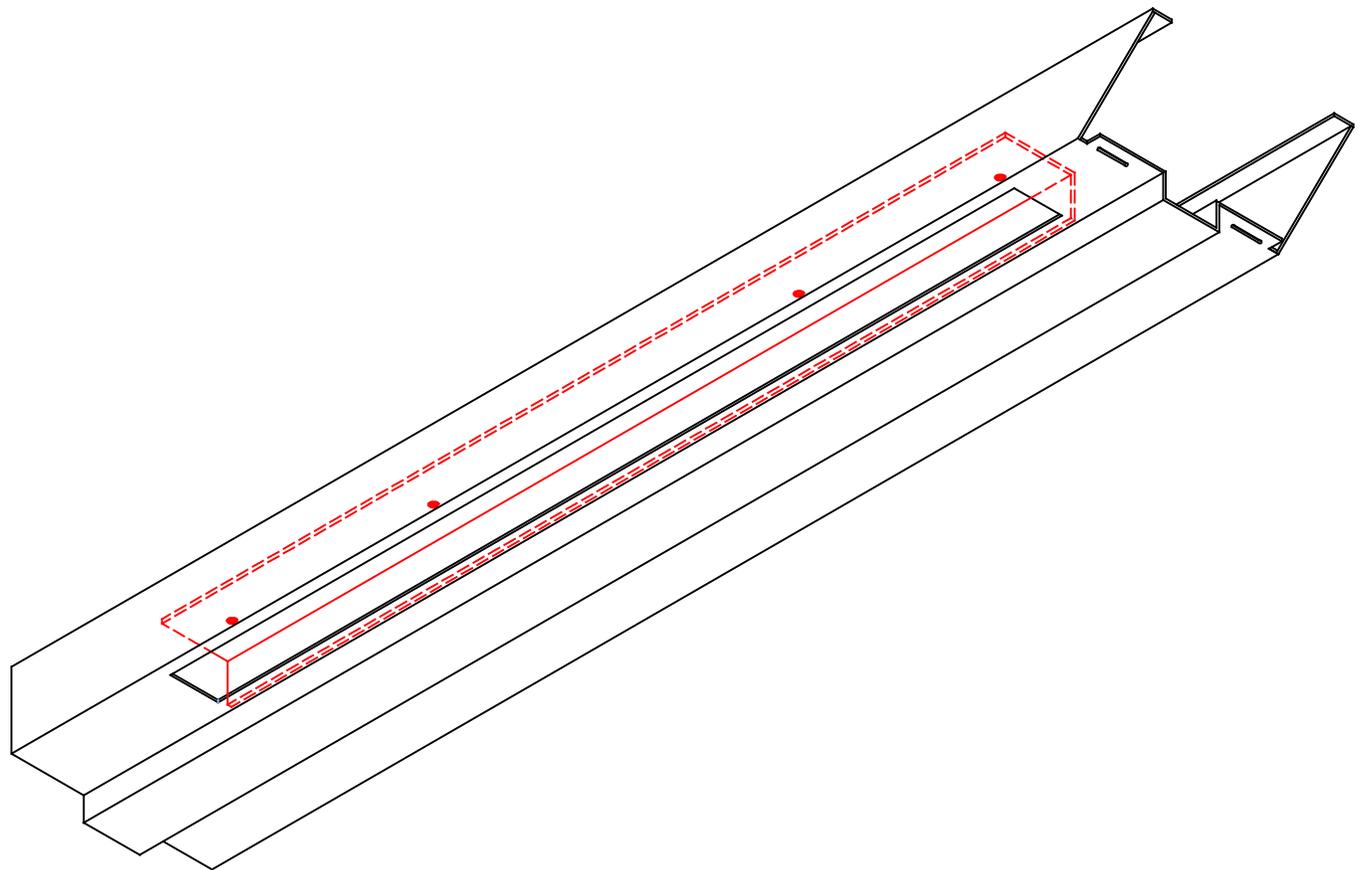


Full width top jamb closer reinforcement, 12ga

Projection welded

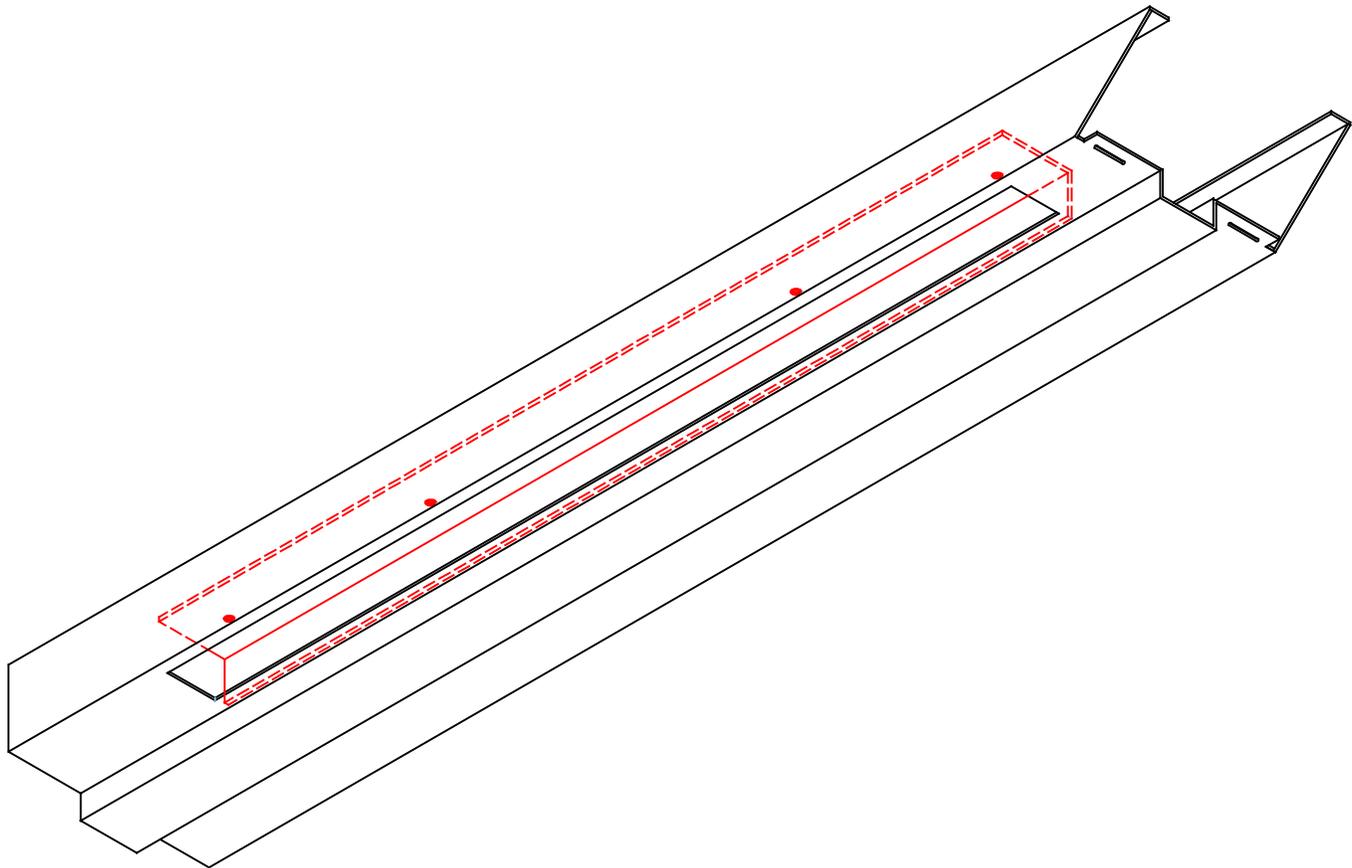


Concealed closer, 12ga
Spot welded



*manufacturer's template to be provided

Prep. for concealed overhead stop, 12ga
Spot welded

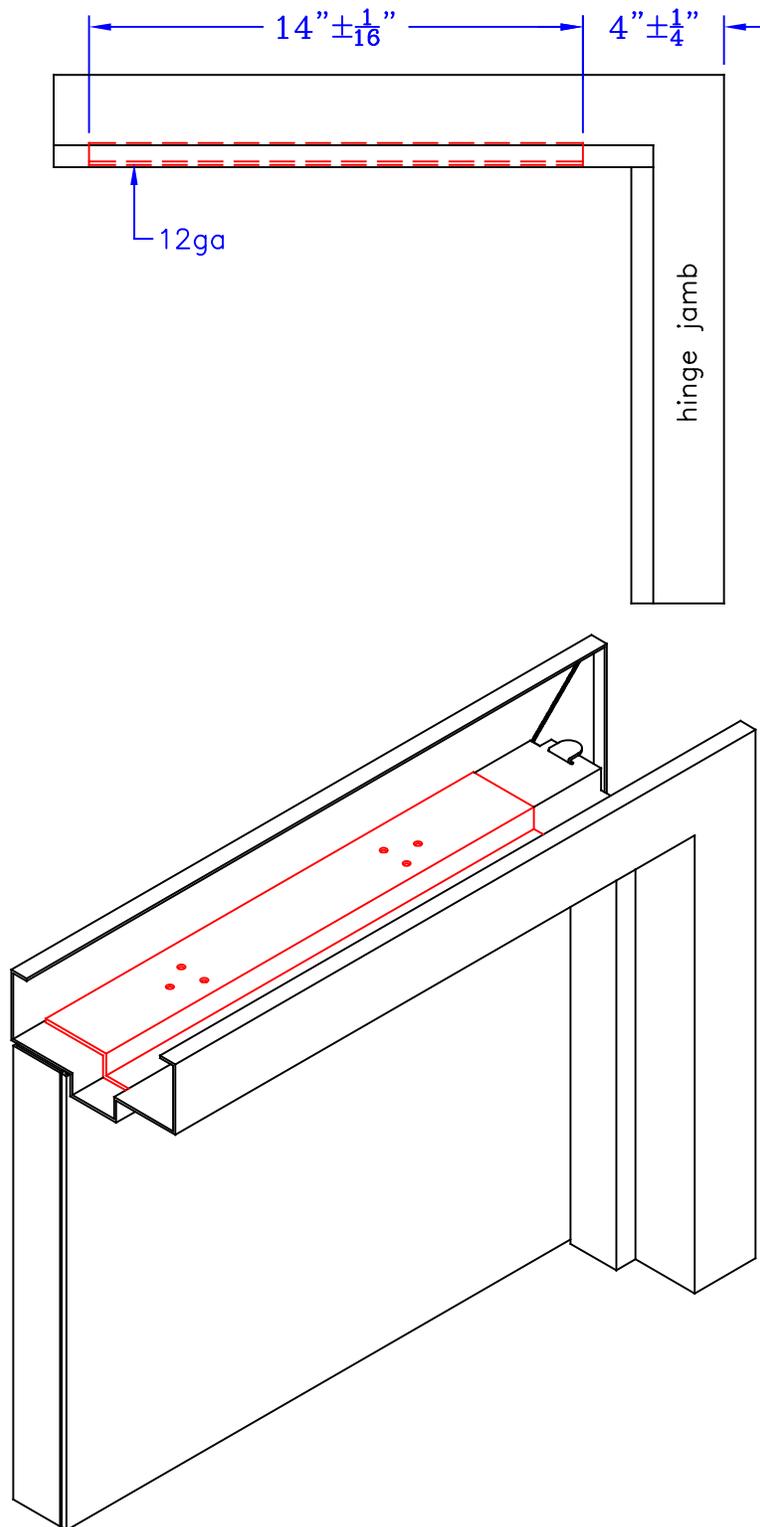


COHS

*manufacturer's template to be provided

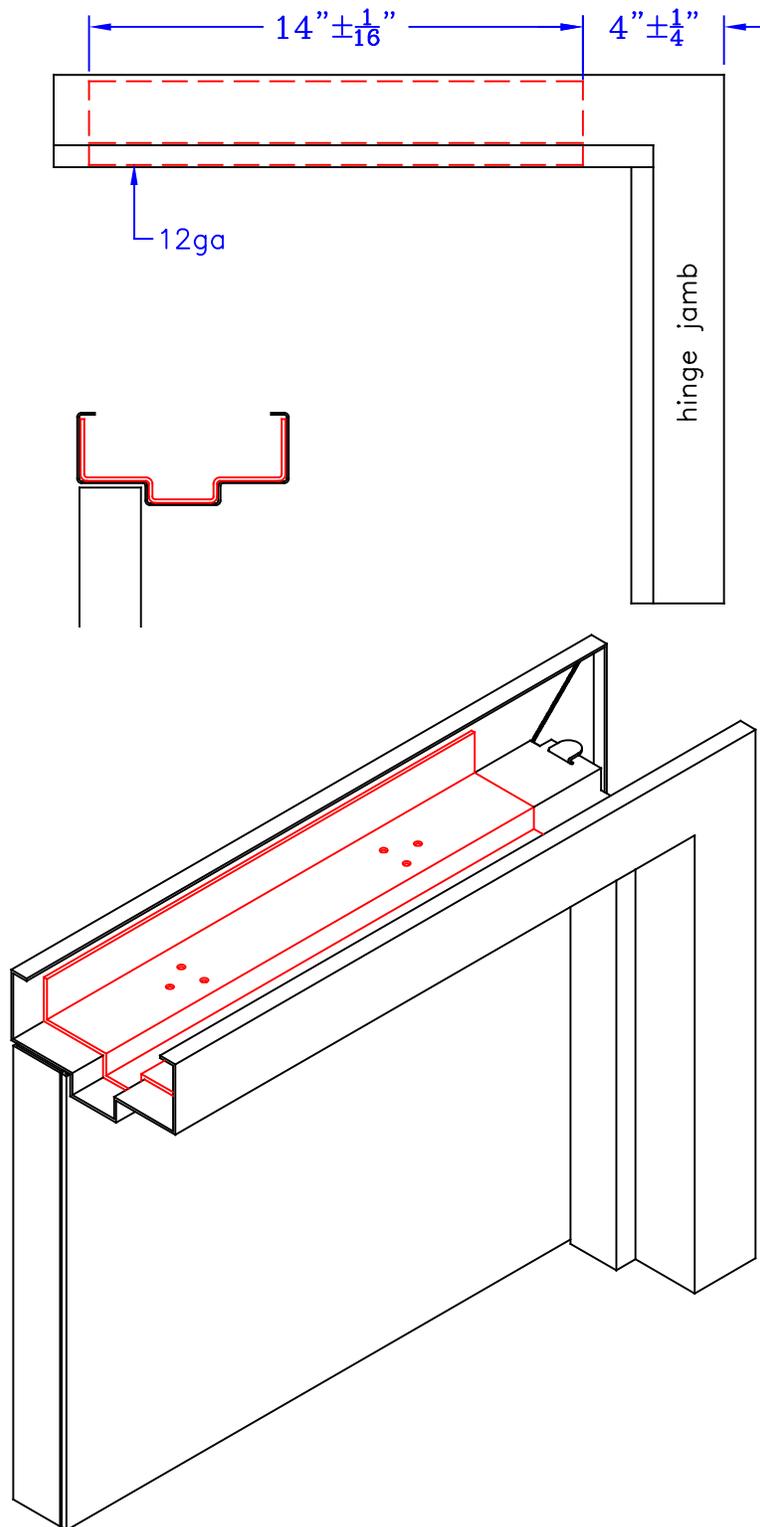
Prep. for surface overhead stop, 12ga

Projection welded

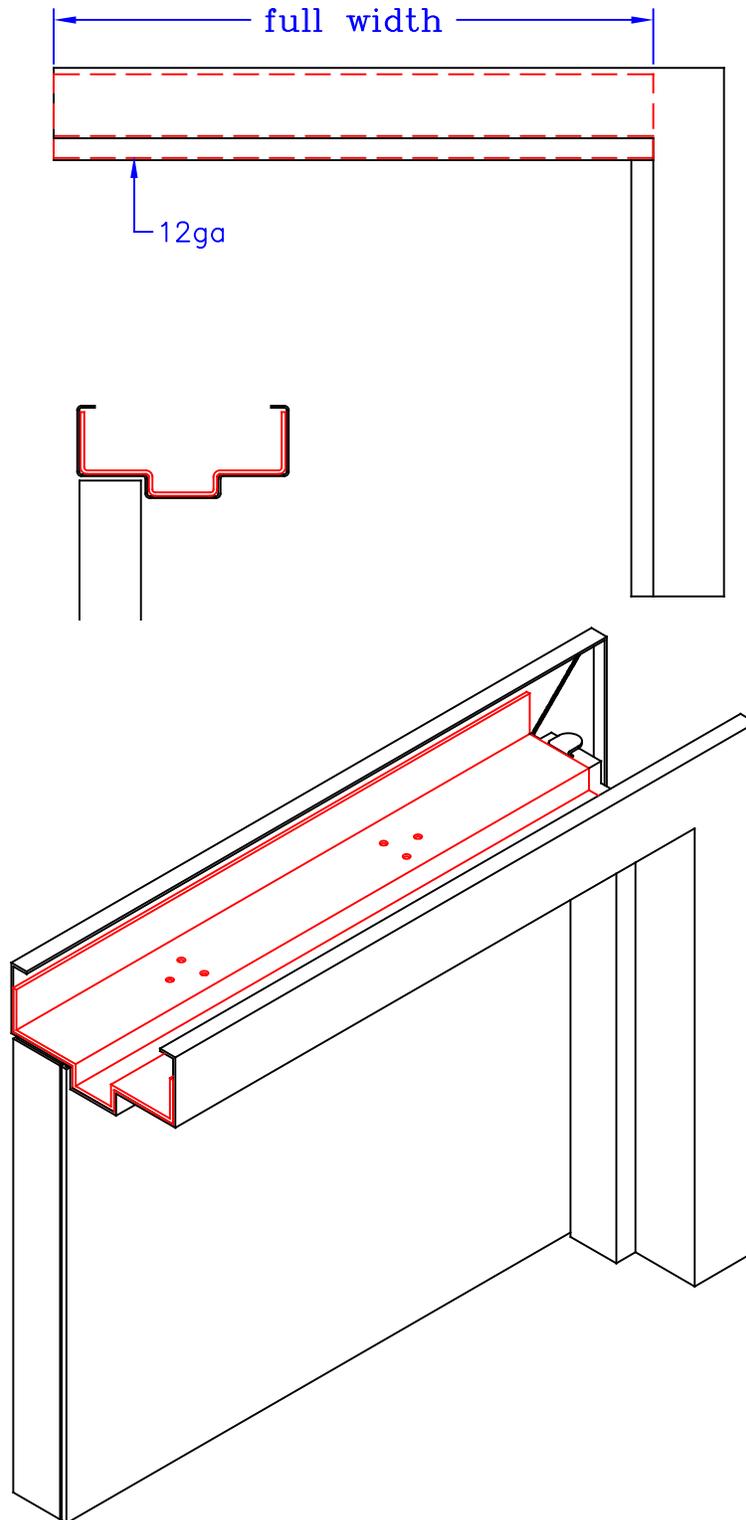


Full sleeve closer reinforcement, 12ga

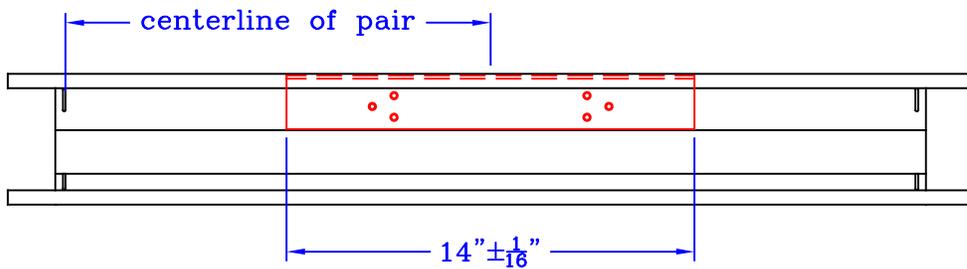
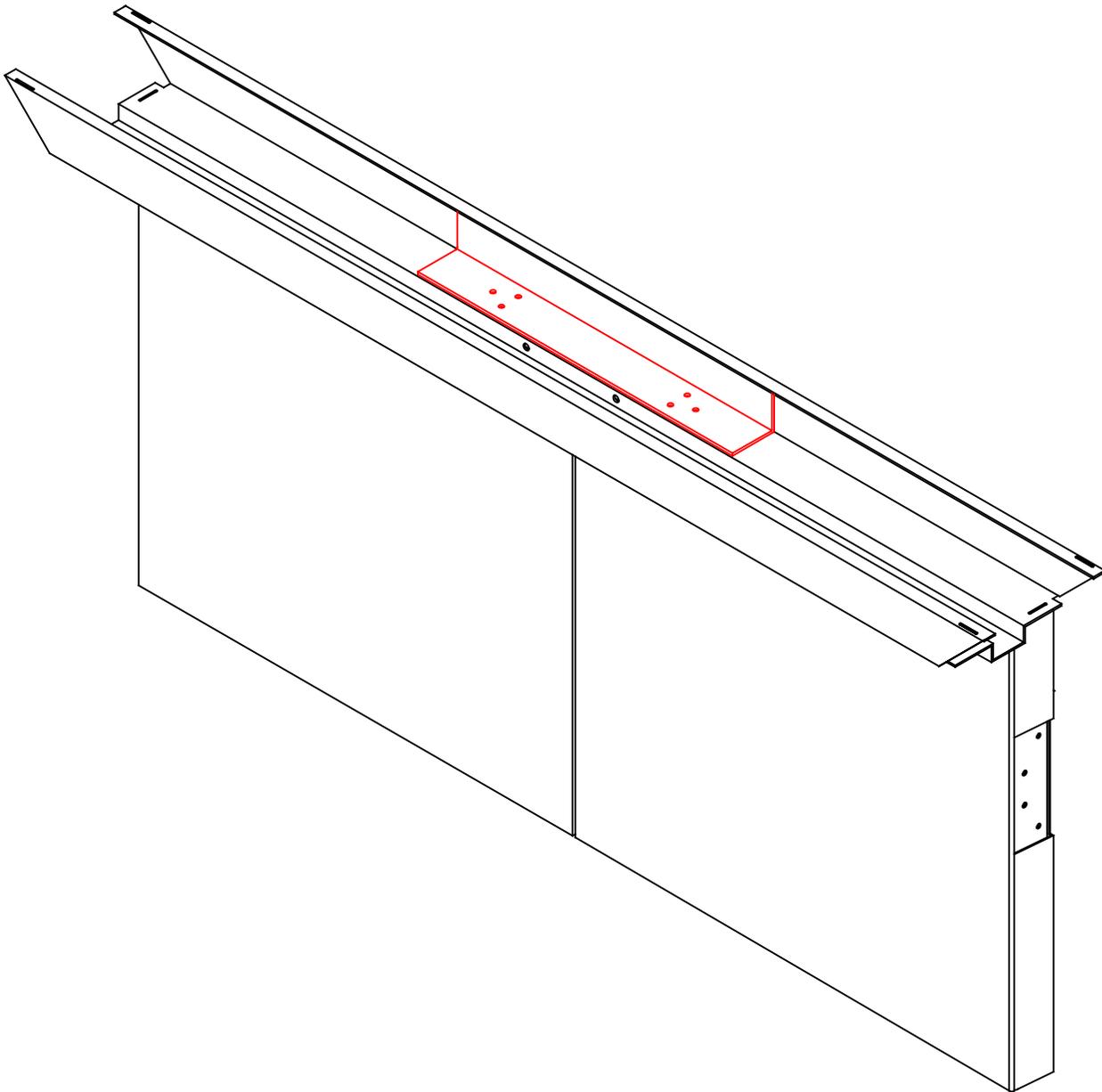
Projection welded



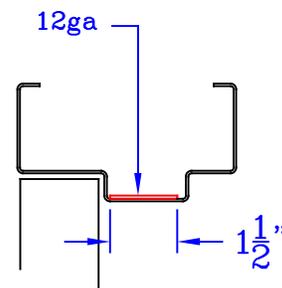
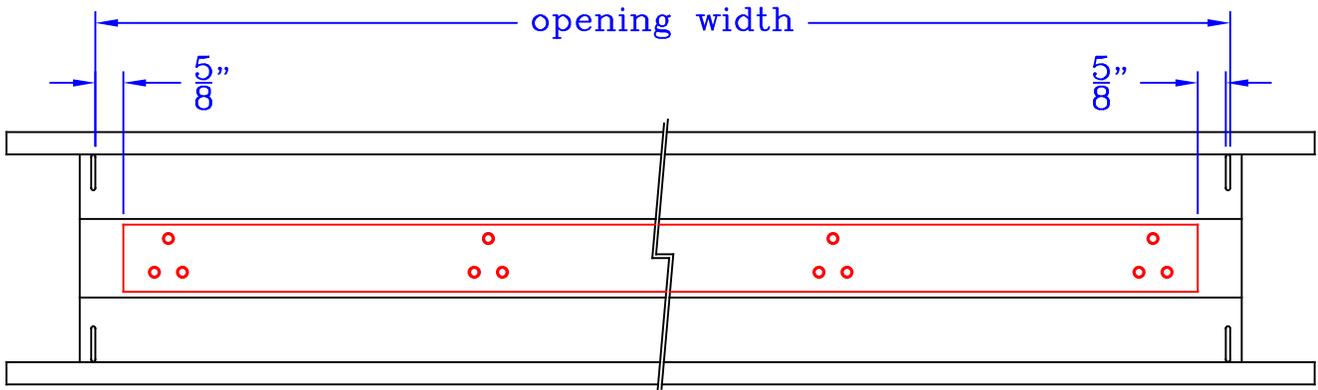
Full width full sleeve closer reinforcement, 12ga
Projection welded



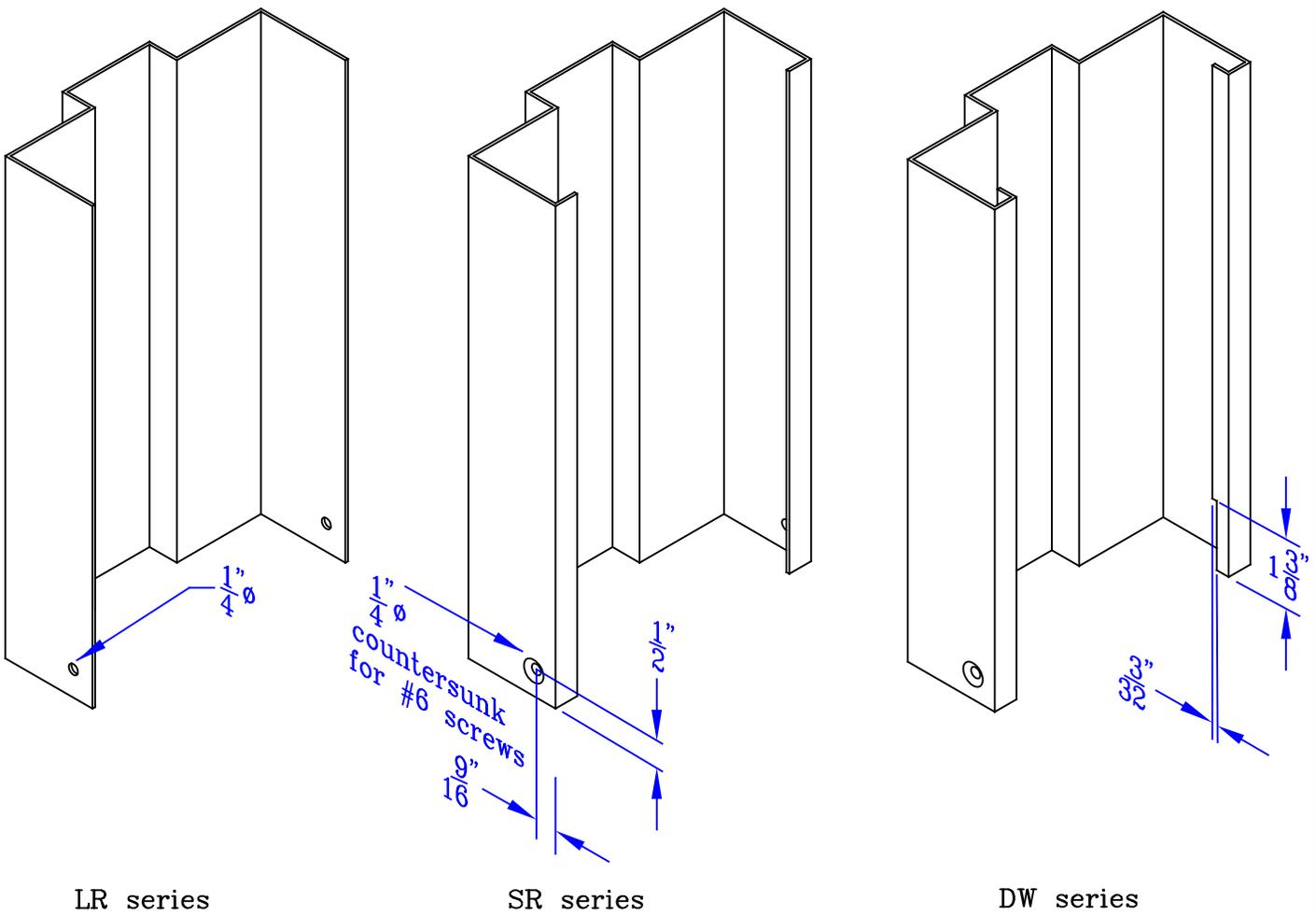
Face mounted coordinator reinforcement, 12ga
Projection welded



Soffit mounted coordinator reinforcement, 12ga
Projection welded



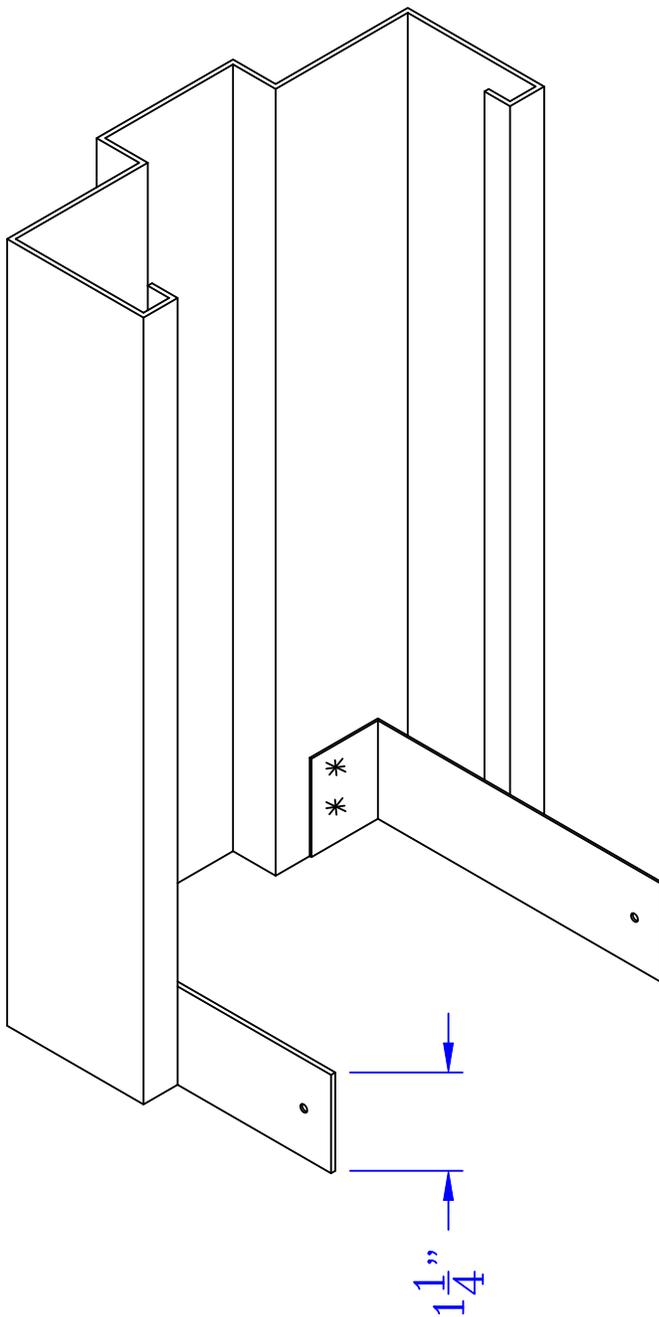
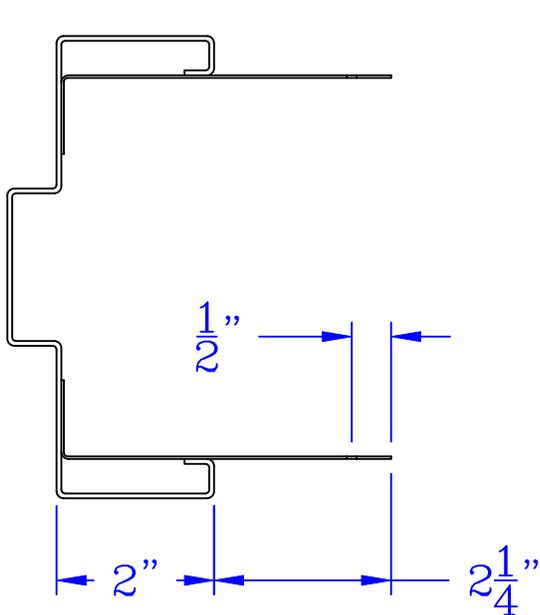
Screw base anchor



Fasteners by others, use #6 drywall screws.

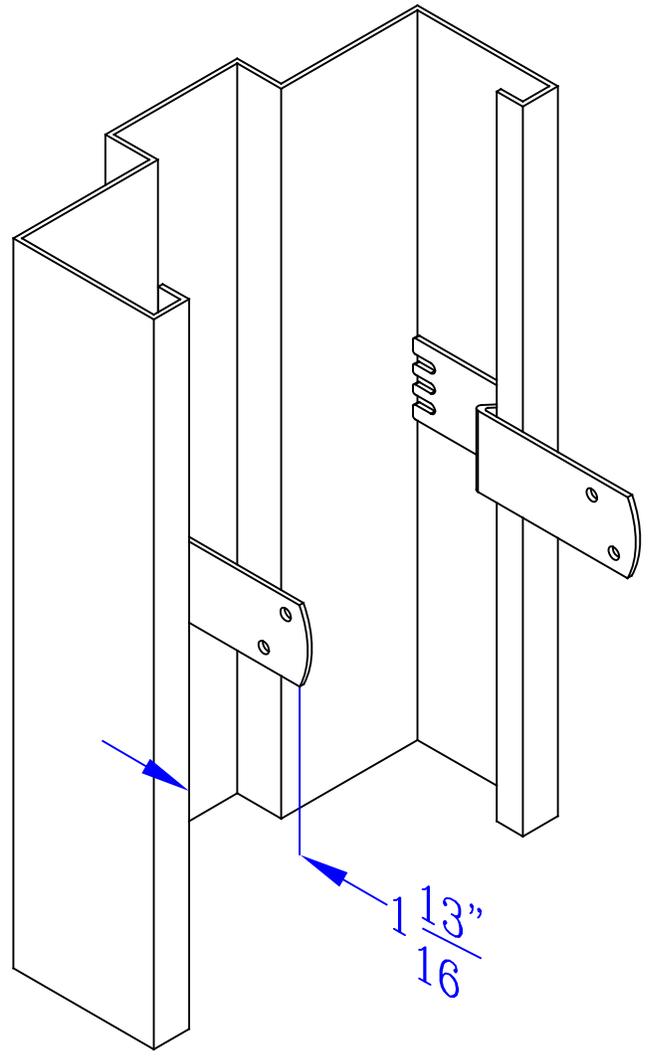
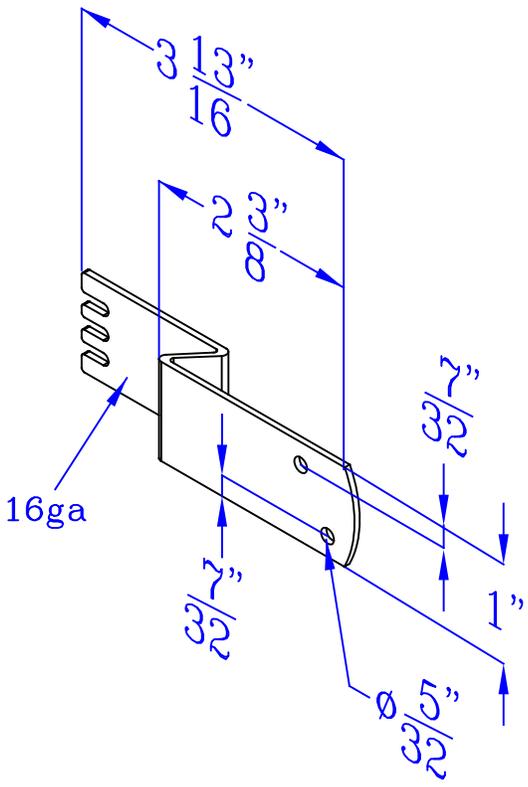
Drywall strap anchor, 18ga

Spot welded



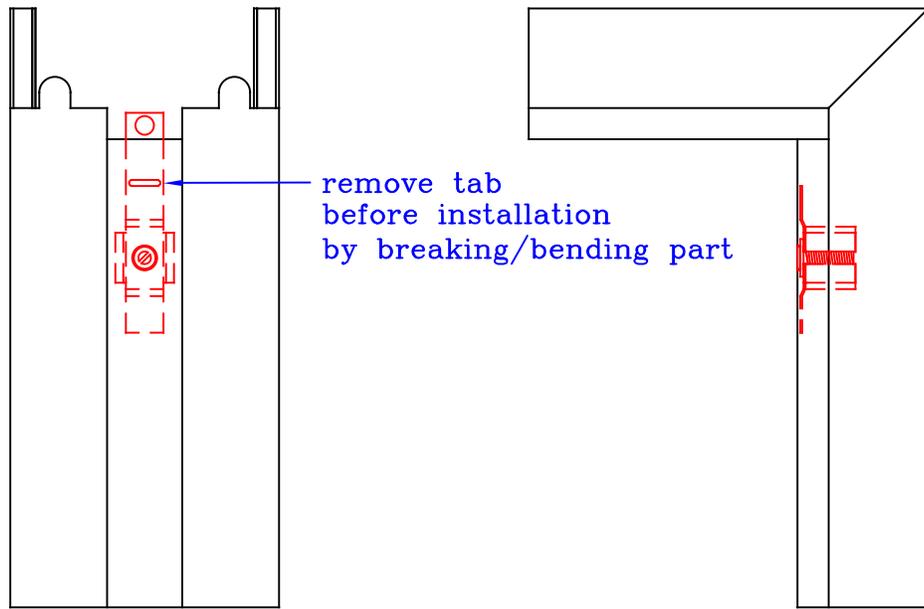
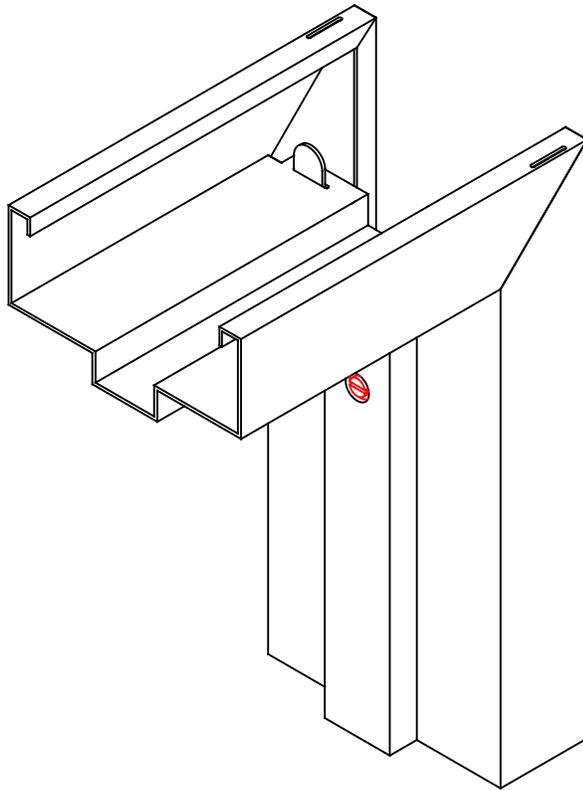
*at 5/8" from returns if requested on pre-drywall frame

Snap in anchor for drywall partition, 16ga
Shipped loose



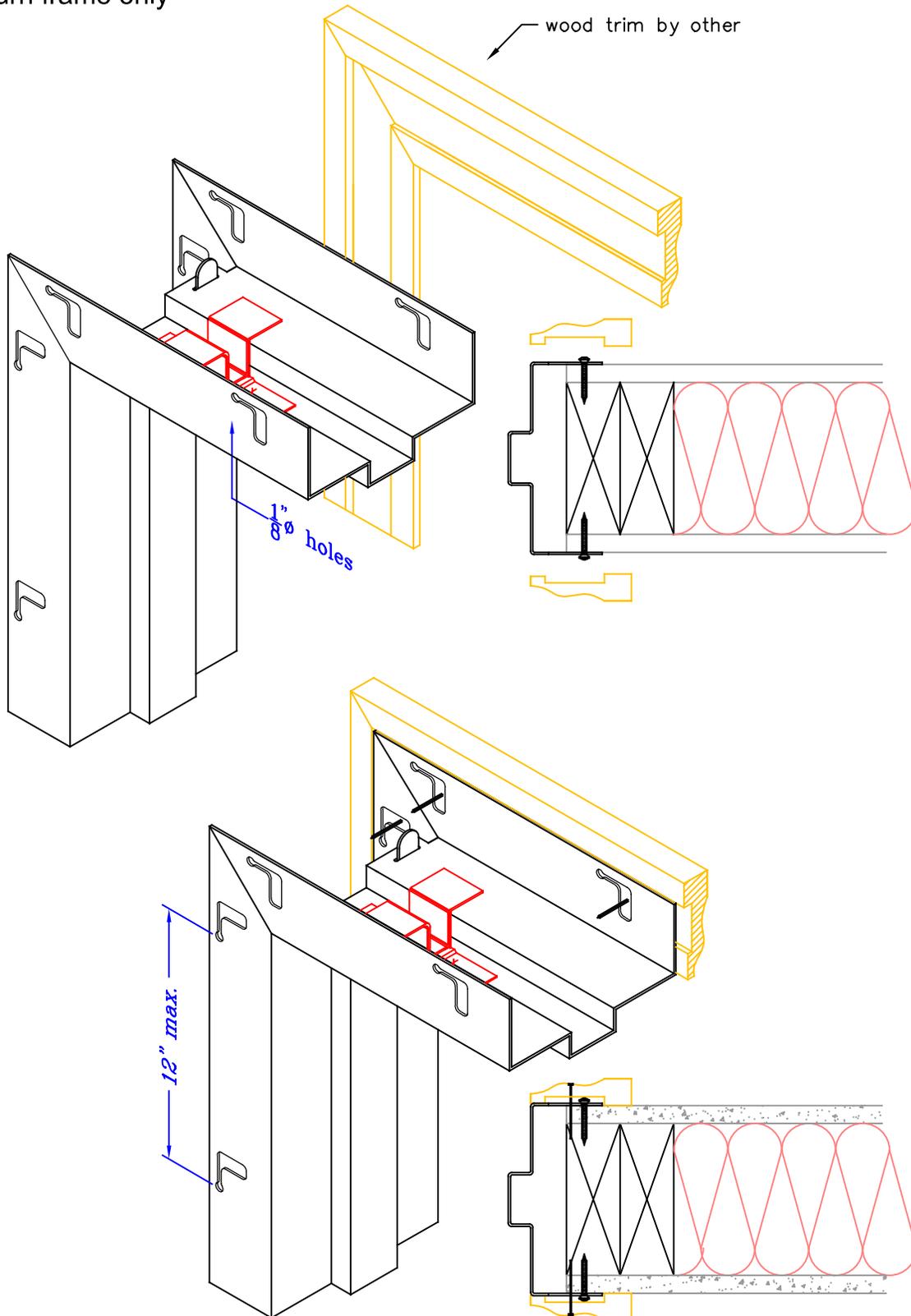
DW/DR series with 2" face and 16ga frame only.
Must order 2 pieces for a full anchor

Compression anchor, 18/20ga
Spot welded

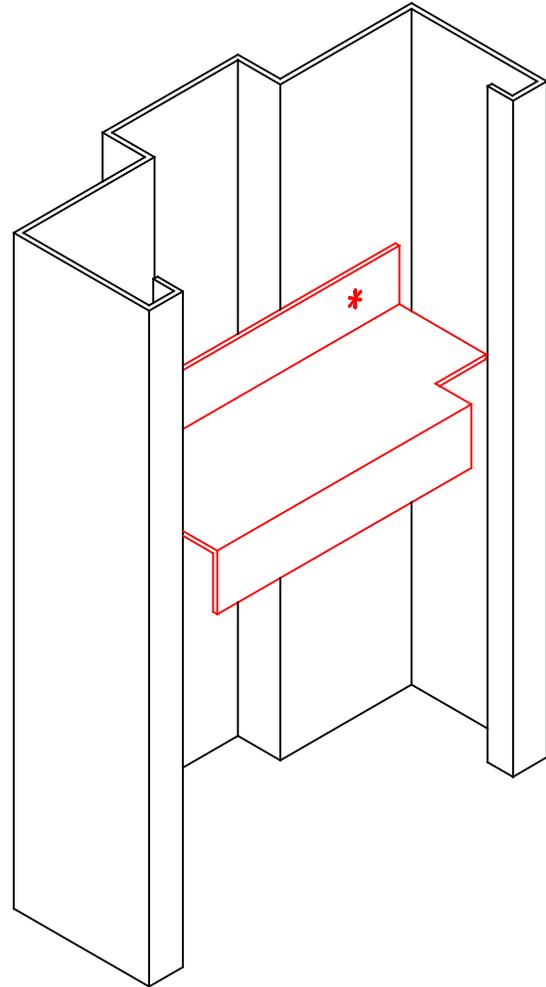
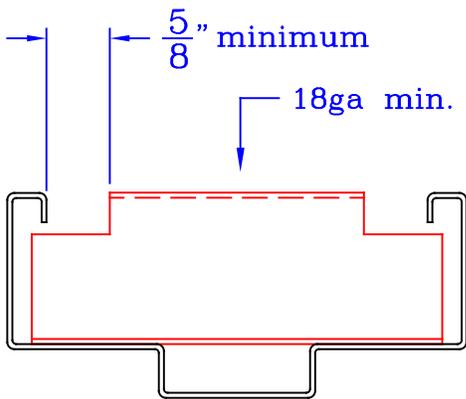


By default at knock down frames.
Additional CPA at head when 4" face and/or LR series.
2 of in width from 8-3/4"JD and up.

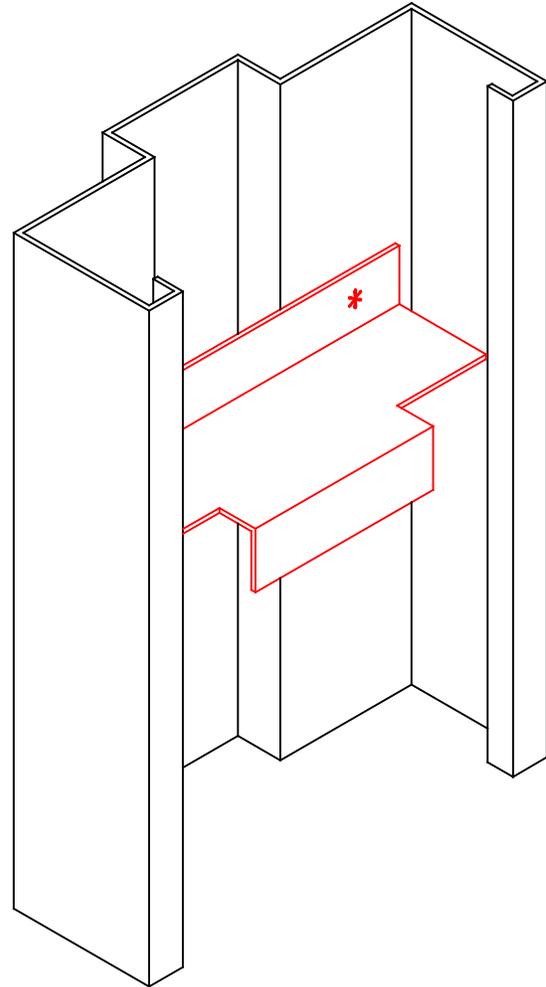
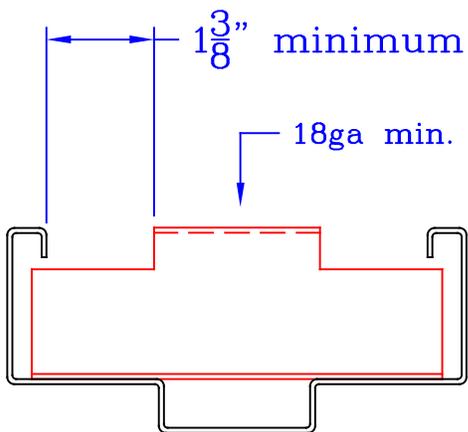
Wood trim prep
Less return frame only



"Z" bracket anchor
Spot welded

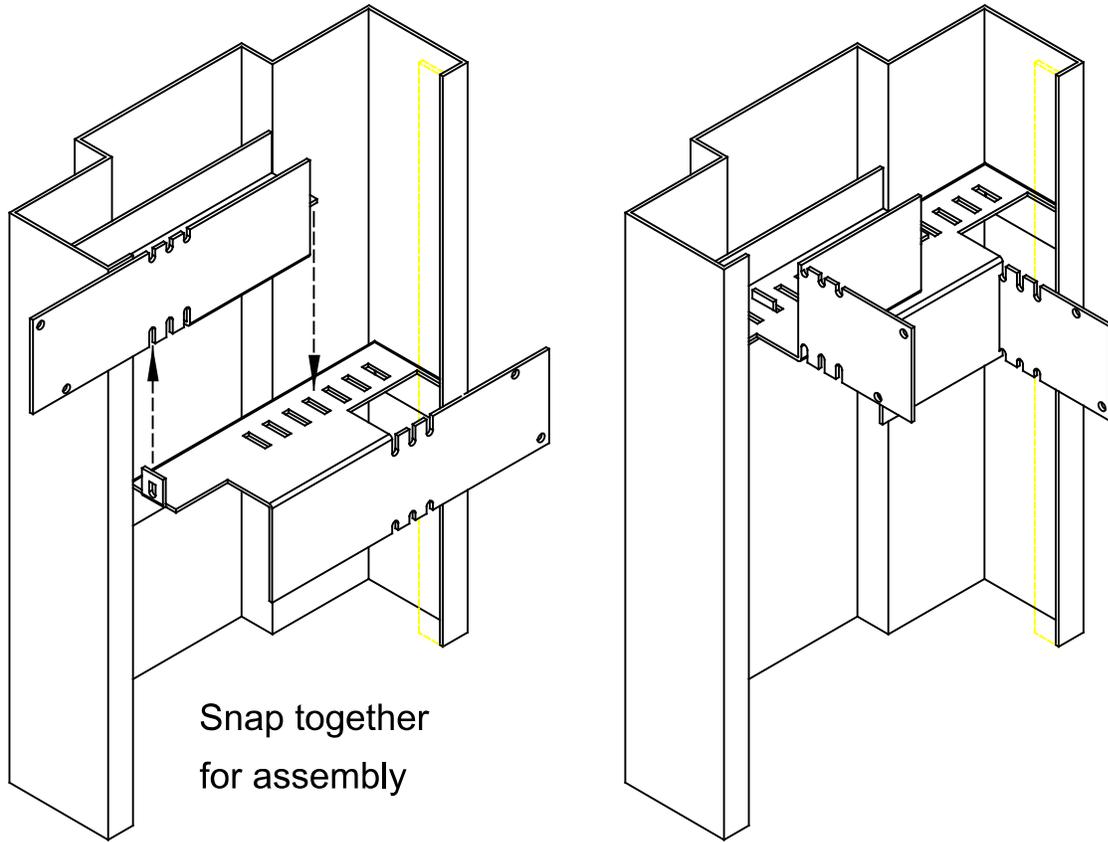


"Z" bracket anchor for double layer of dryall
Spot welded

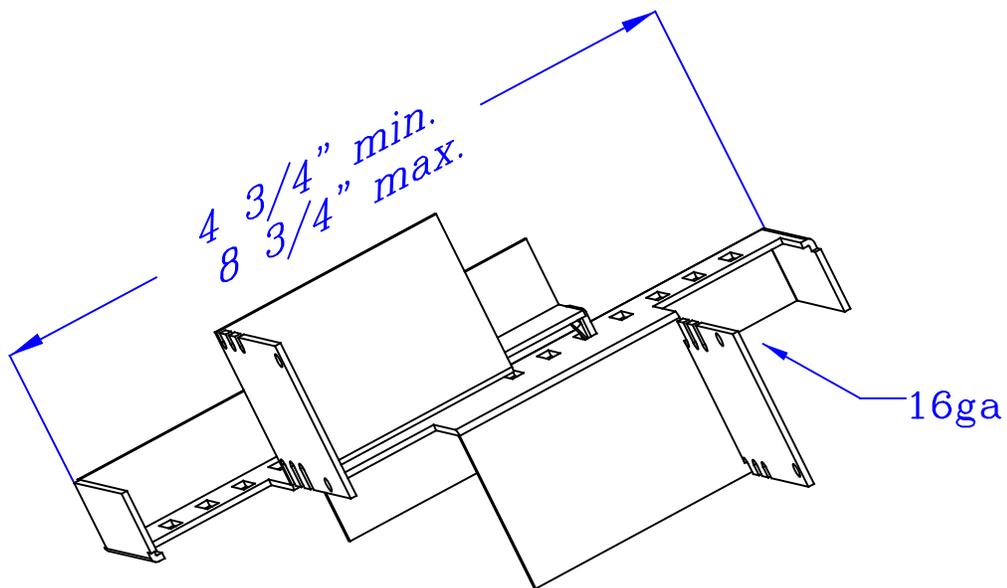


Snap in for wood and steel stud

Shipped loose

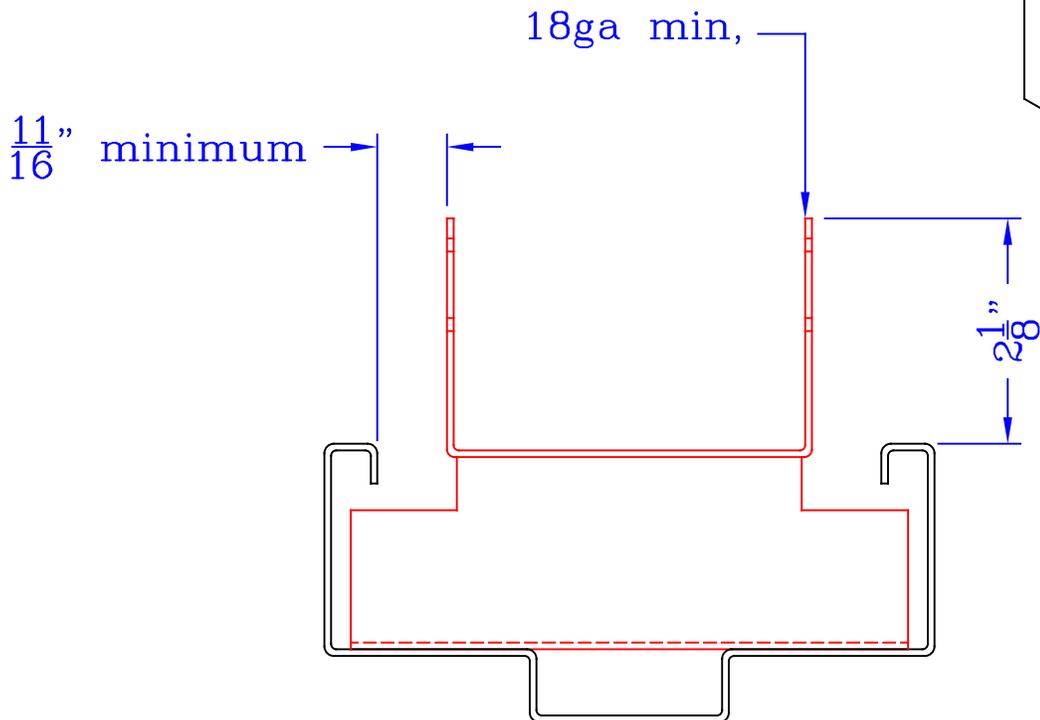
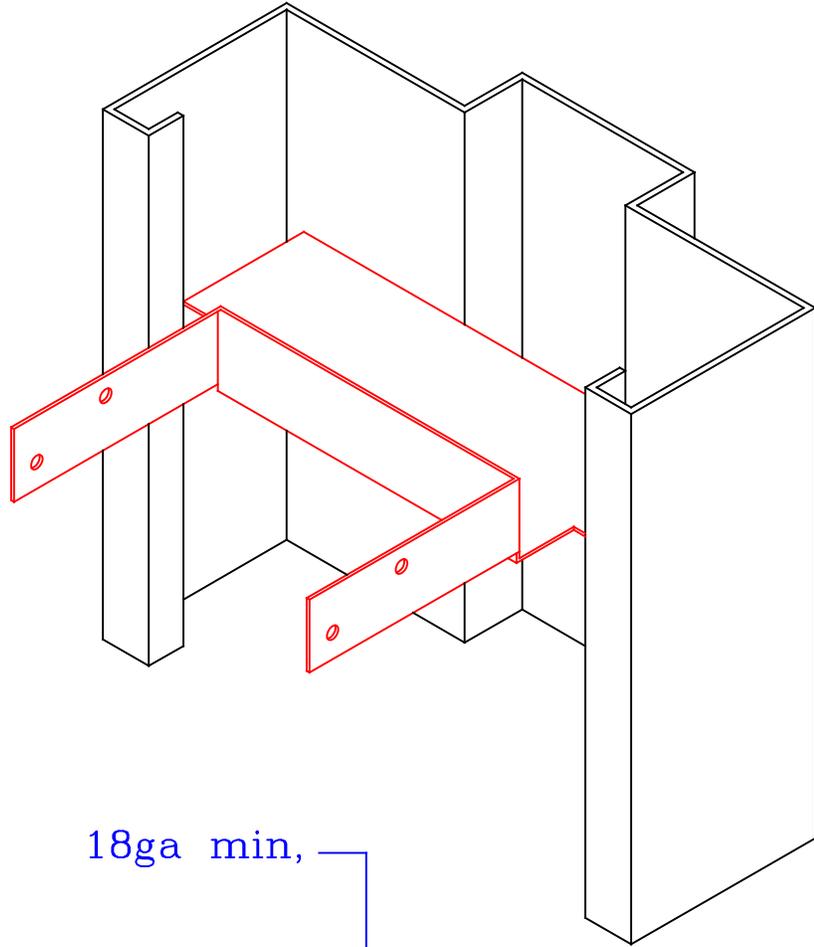


Snap together
for assembly



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 ± 1/8" of ones listed above.

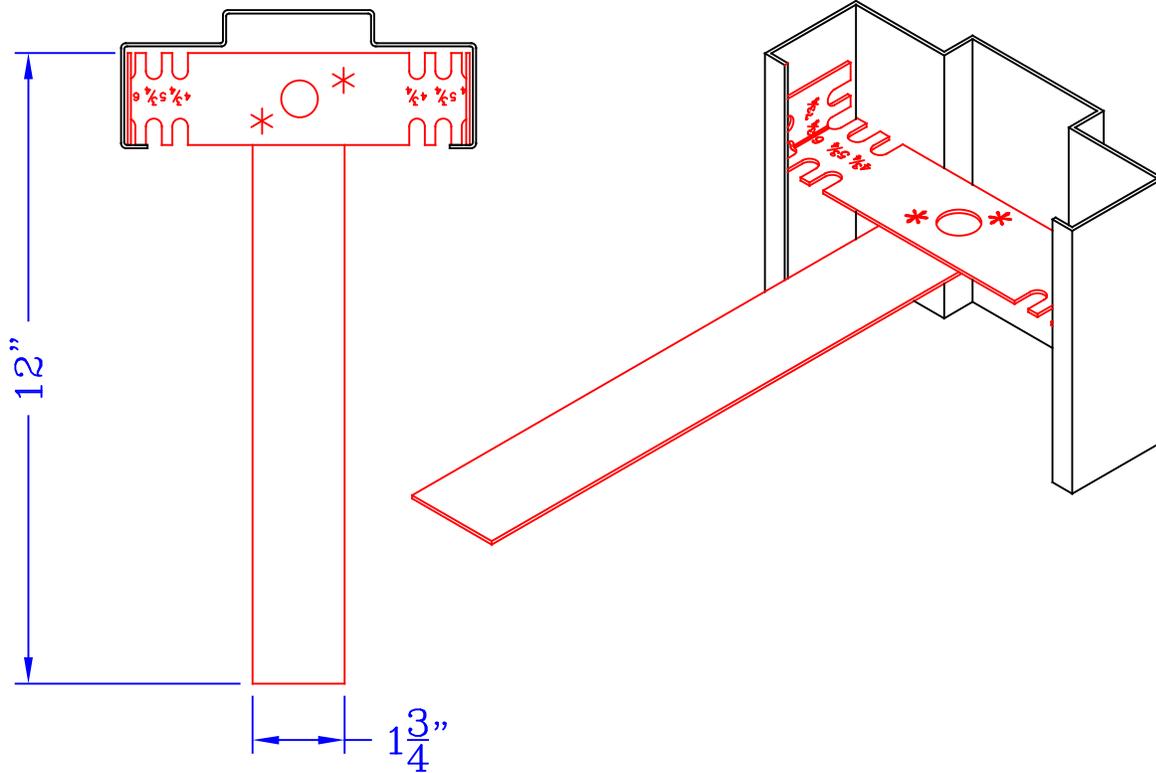
Combination wood and steel stud anchor
Spot welded



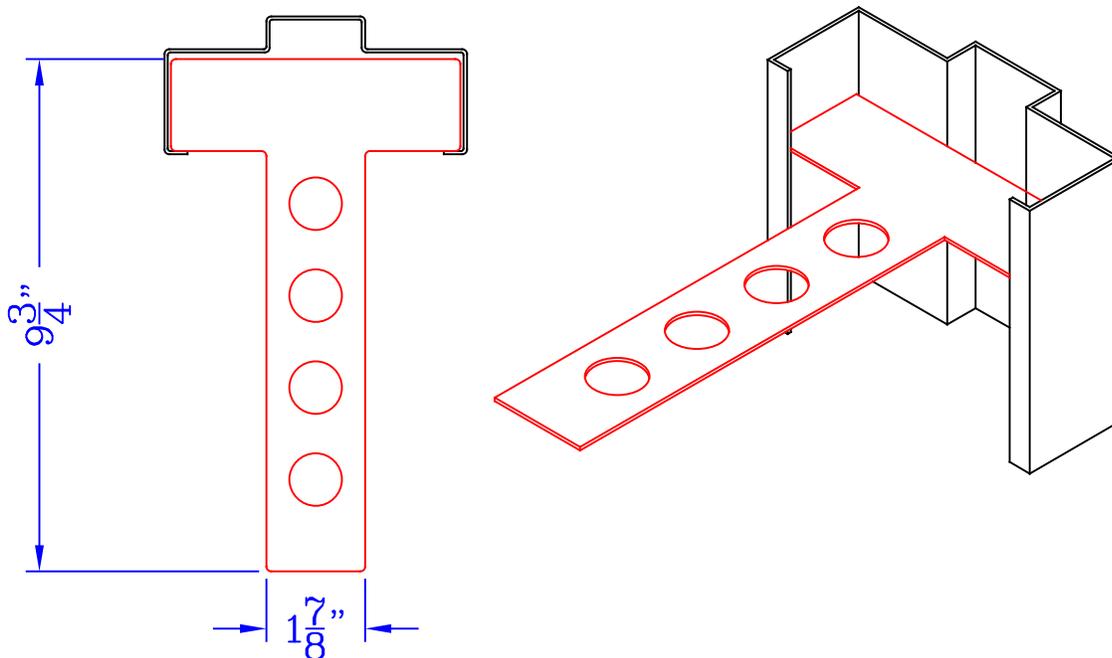
"T" masonry anchor, 16ga

Shipped loose

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



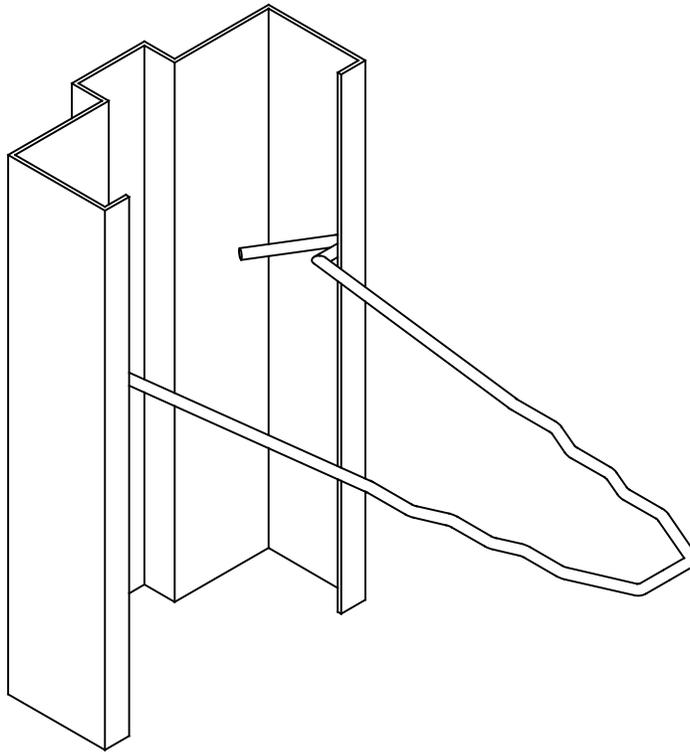
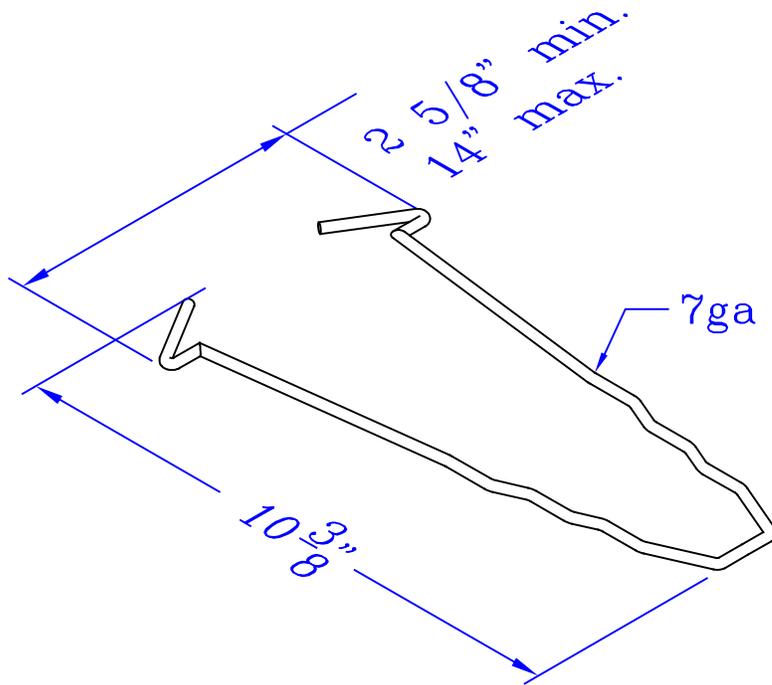
SR16 5 3/4"-4 7/8" frames



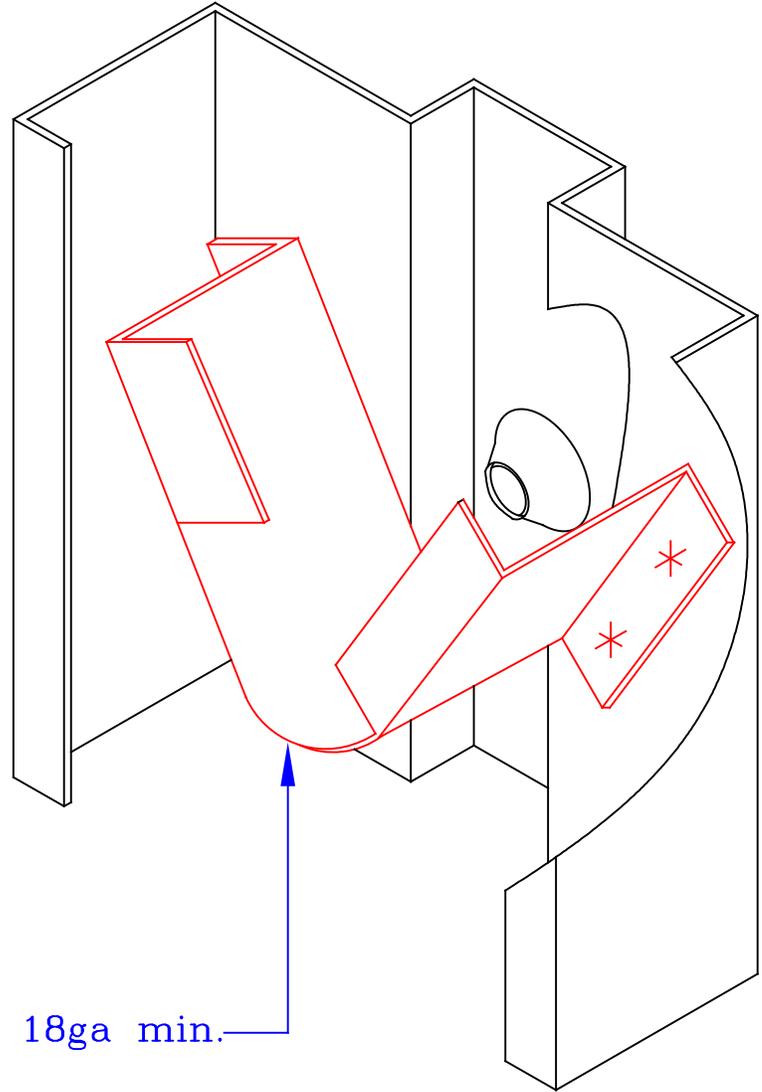
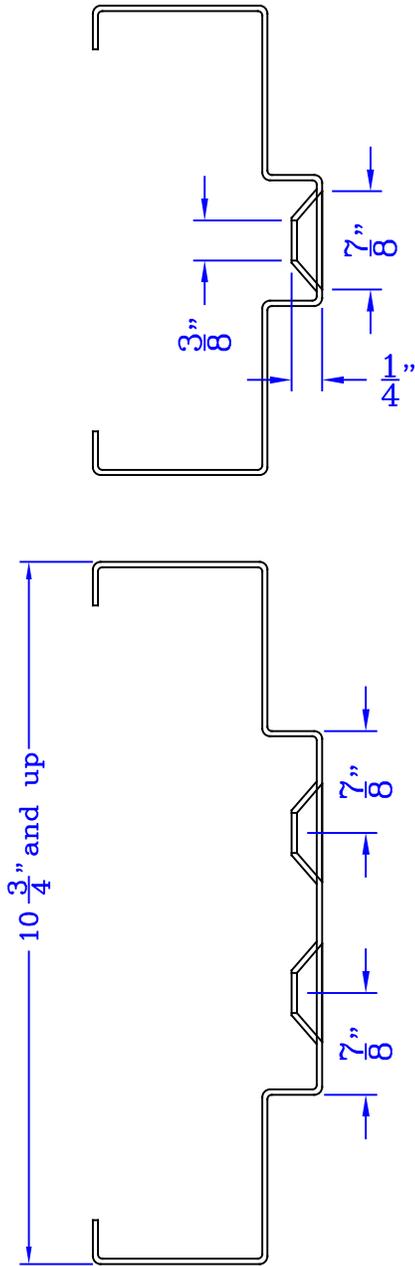
Available for DR series.

Wire masonry anchor

Shipped loose



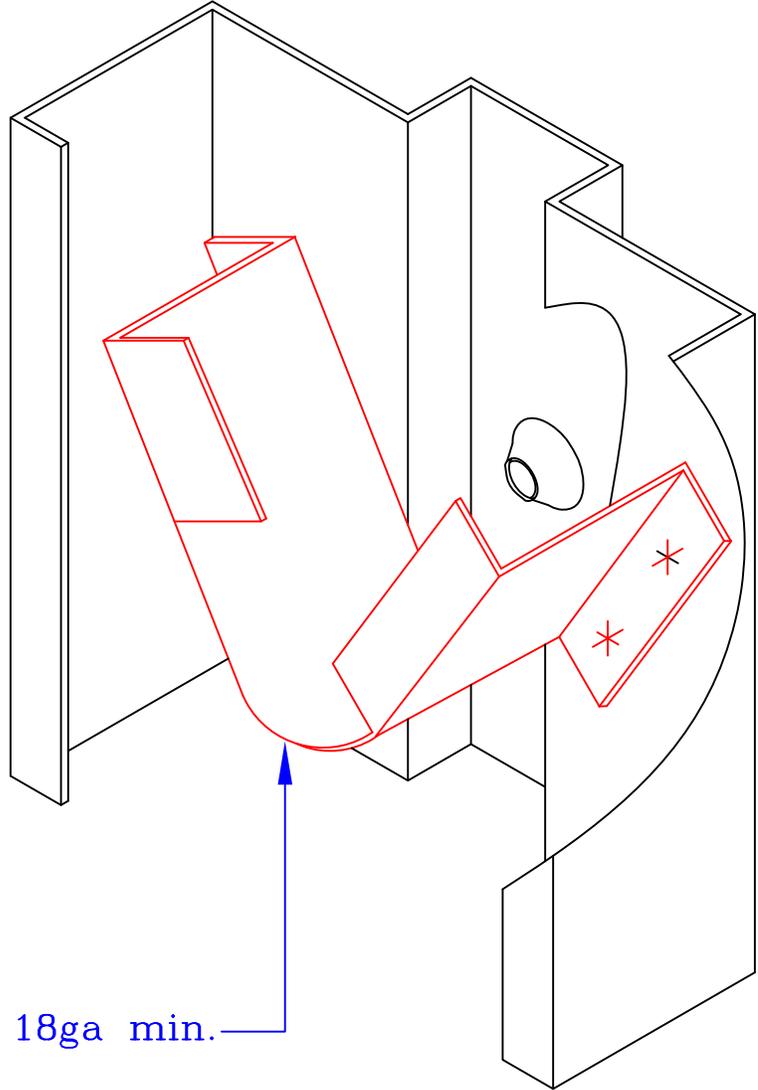
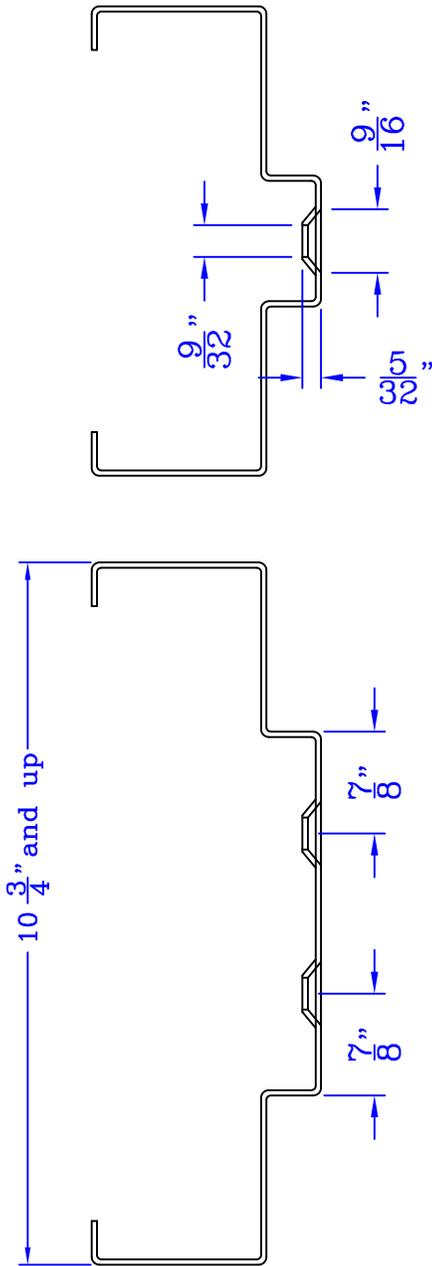
Existing wall anchor
Spot welded



Dynabolts are optional see option DYN4 and DYN5.

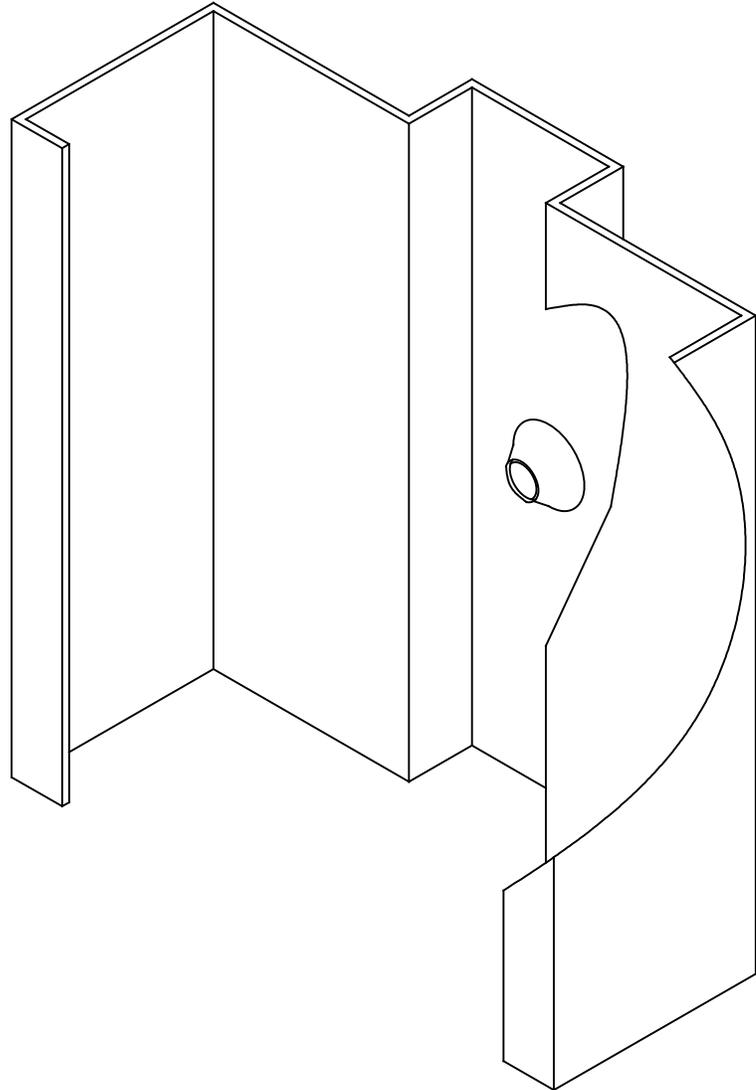
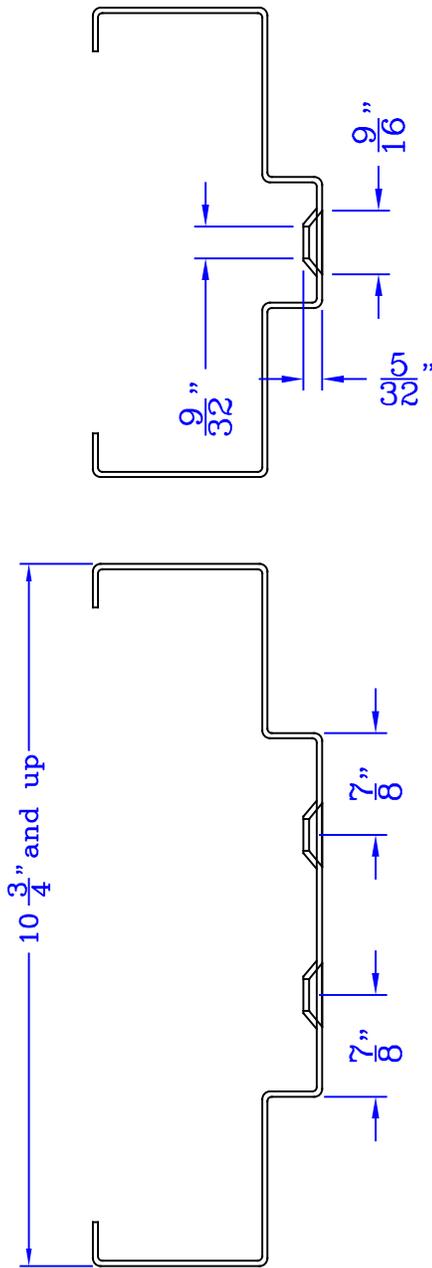
Existing wall anchor for 1/4" screw

Spot welded



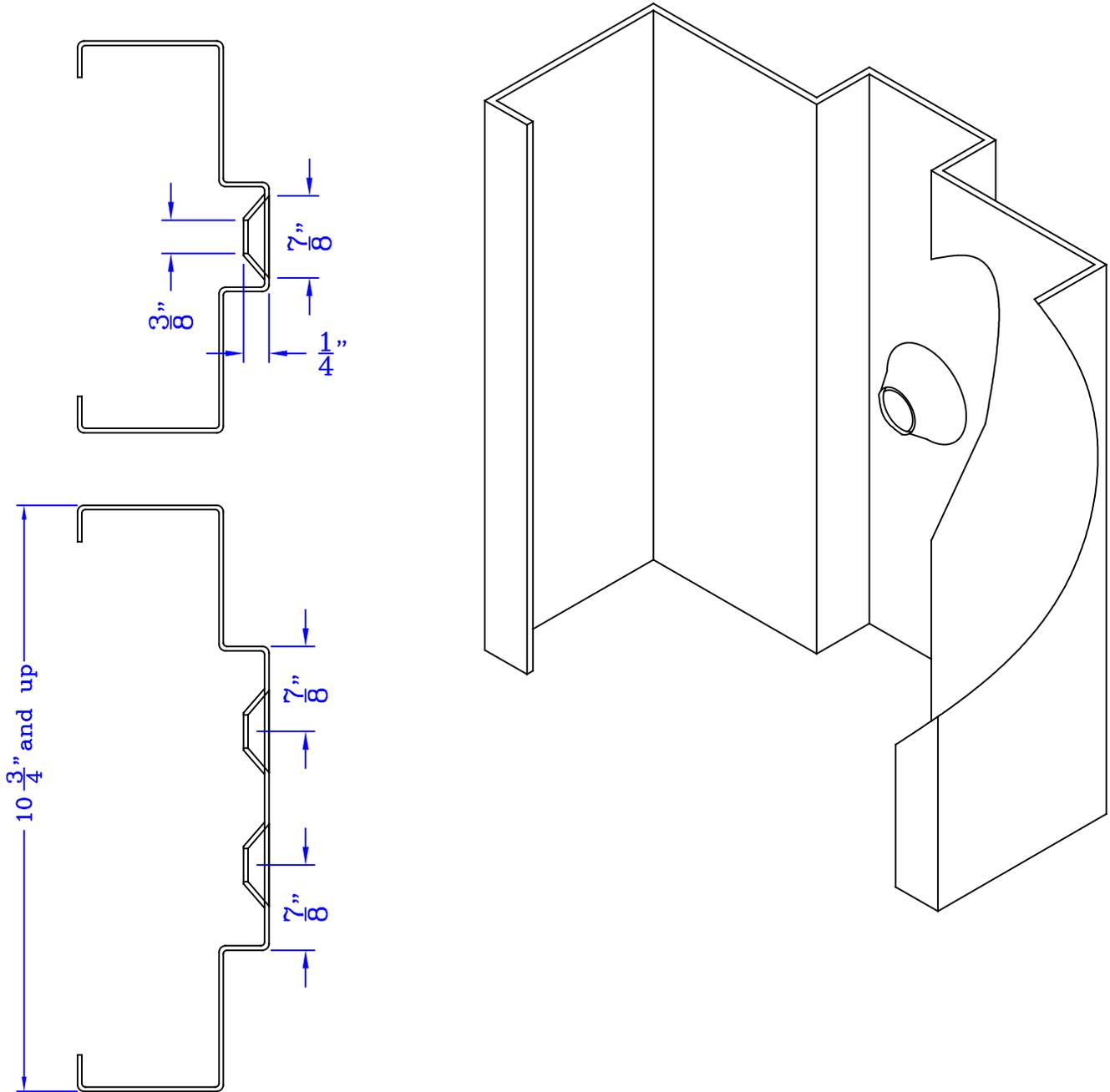
1/4" wood screws by others.

Existing wall anchor for 1/4" screw without reinforcement



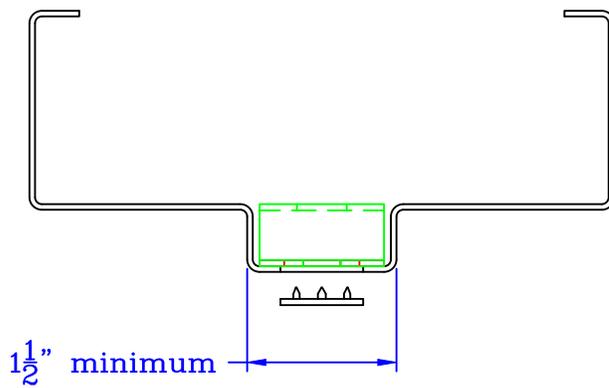
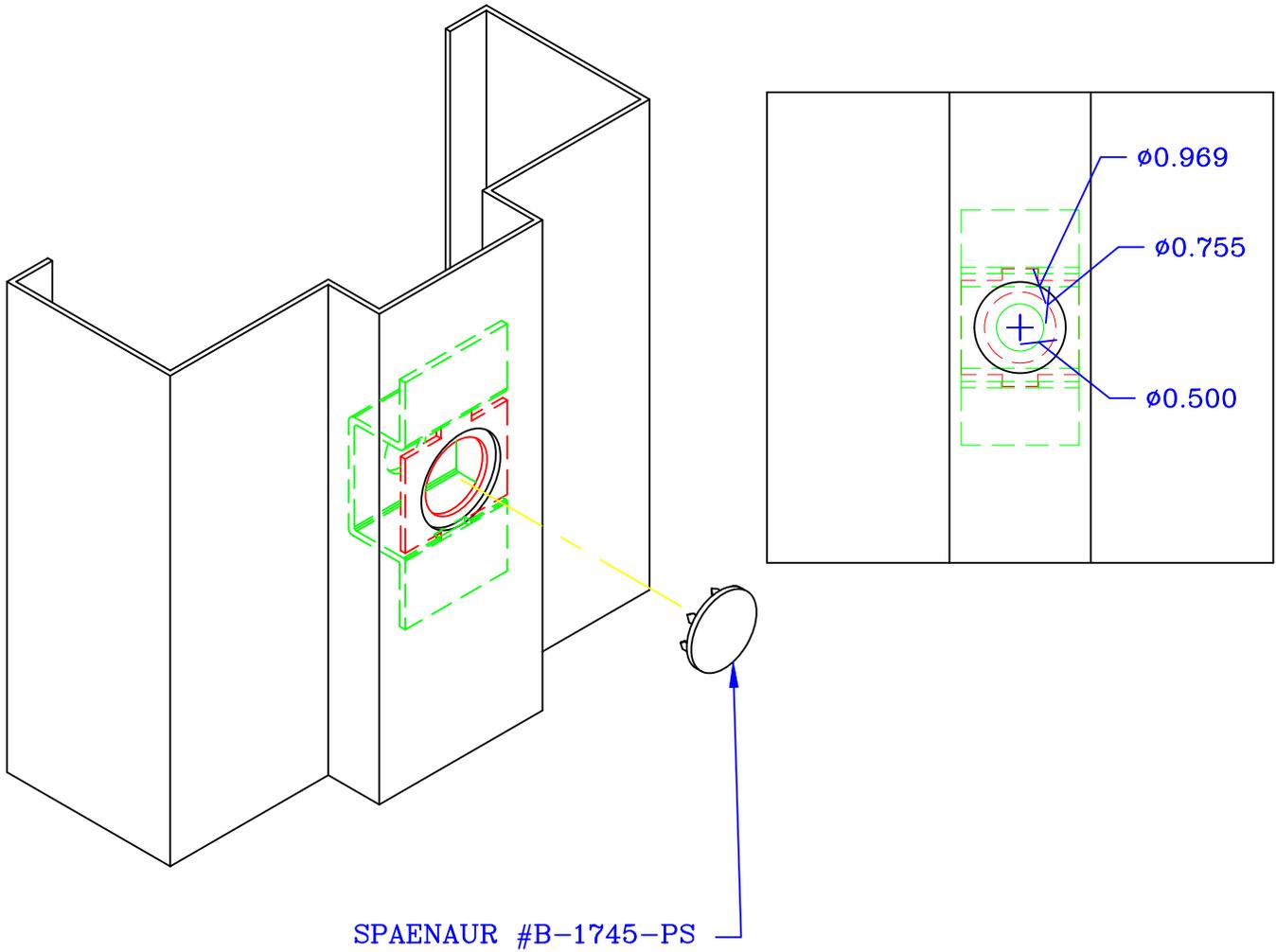
1/4" wood screws by others.

Existing wall anchor without reinforcement



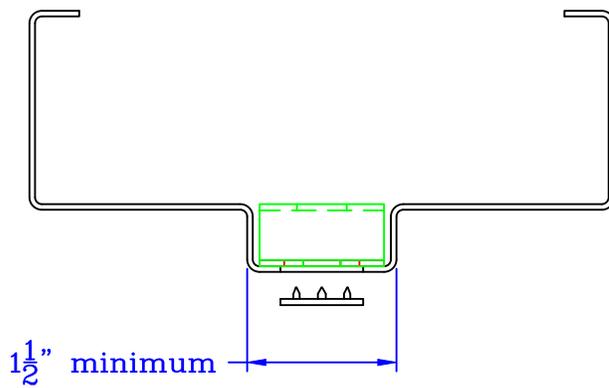
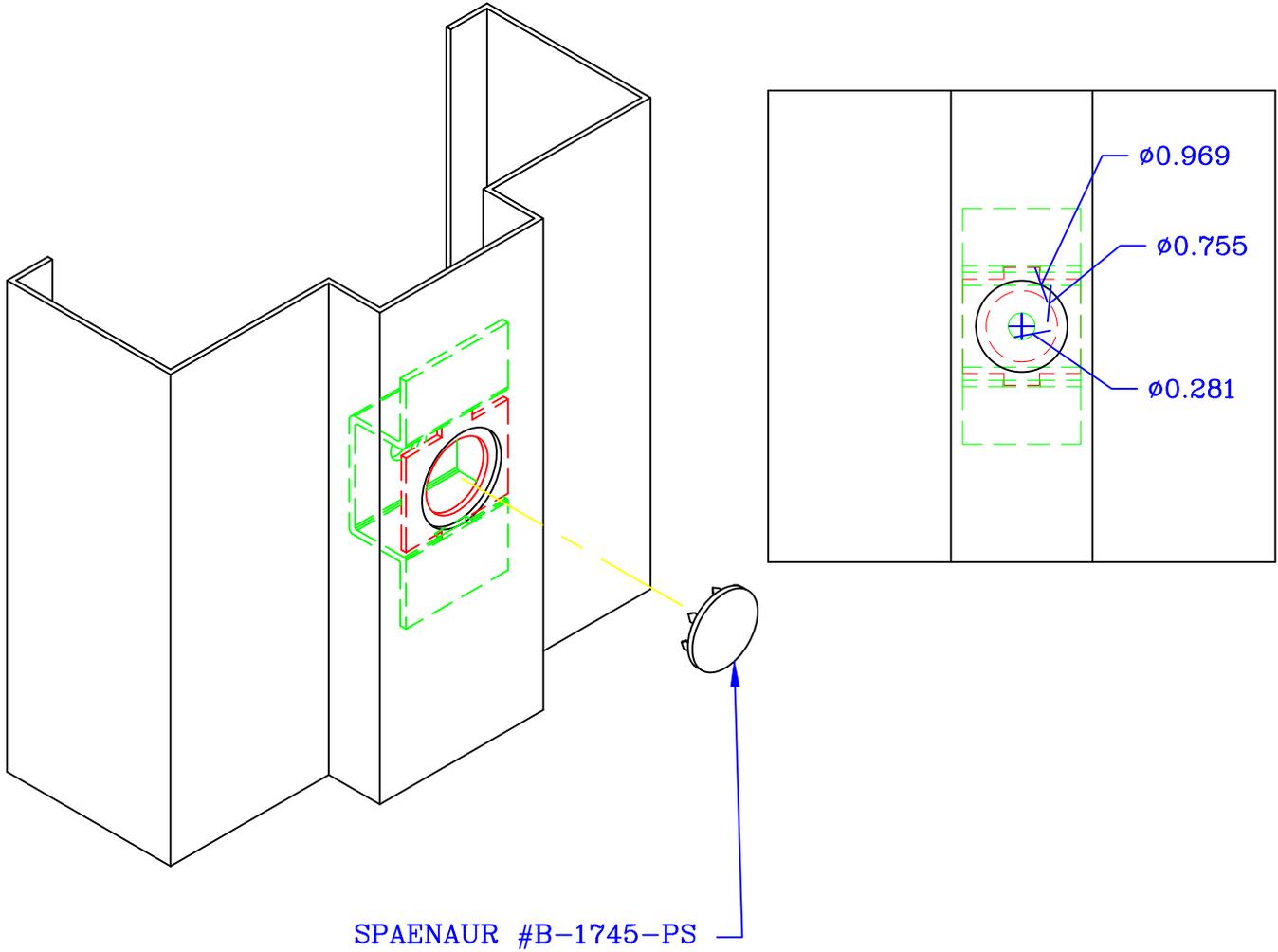
Dynabolts are optional see option DYN4 and DYN5.

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.

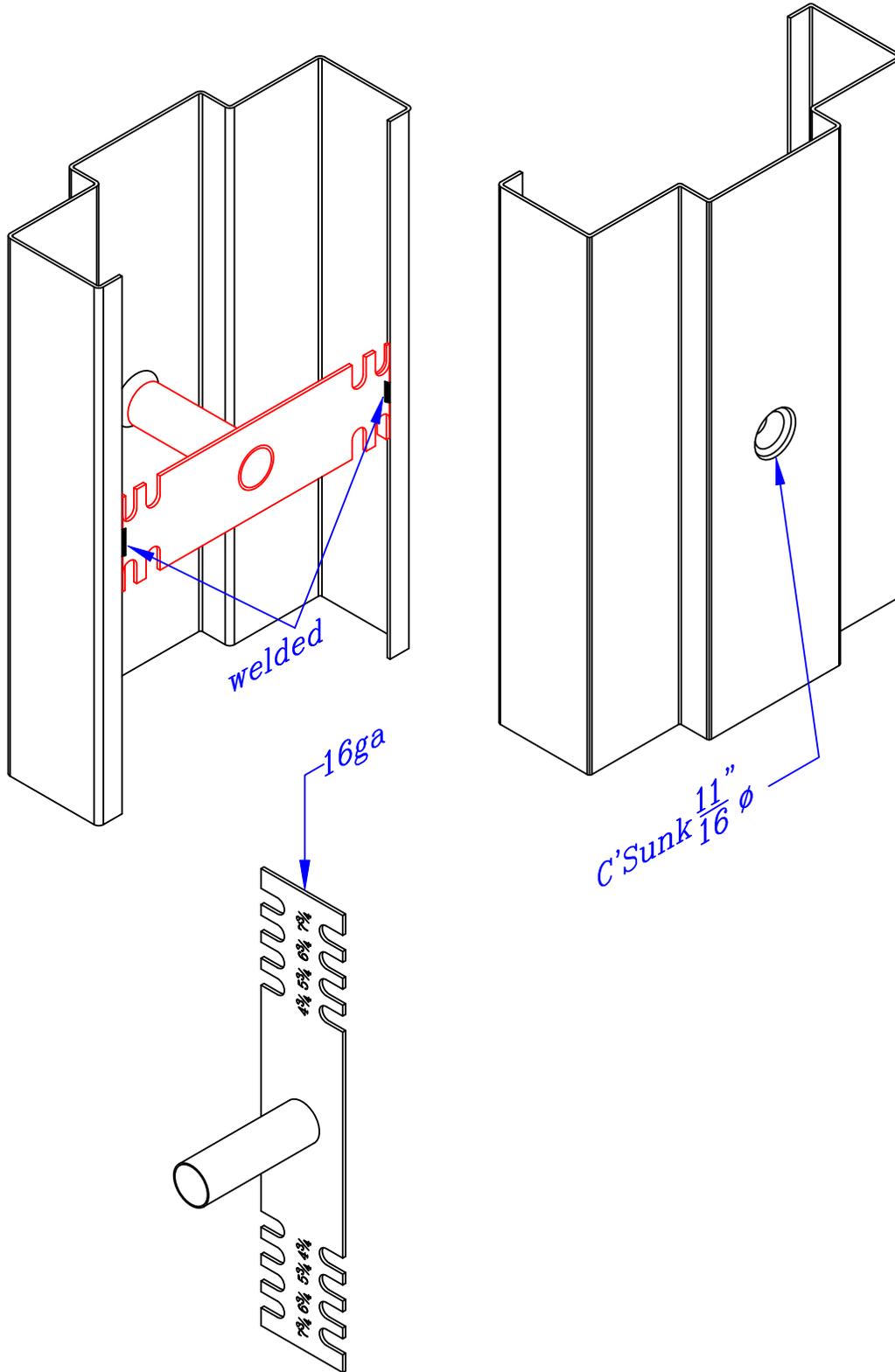
Existing wall anchor for 1/4" screw with plug
Spot welded



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

Existing wall anchor with tube

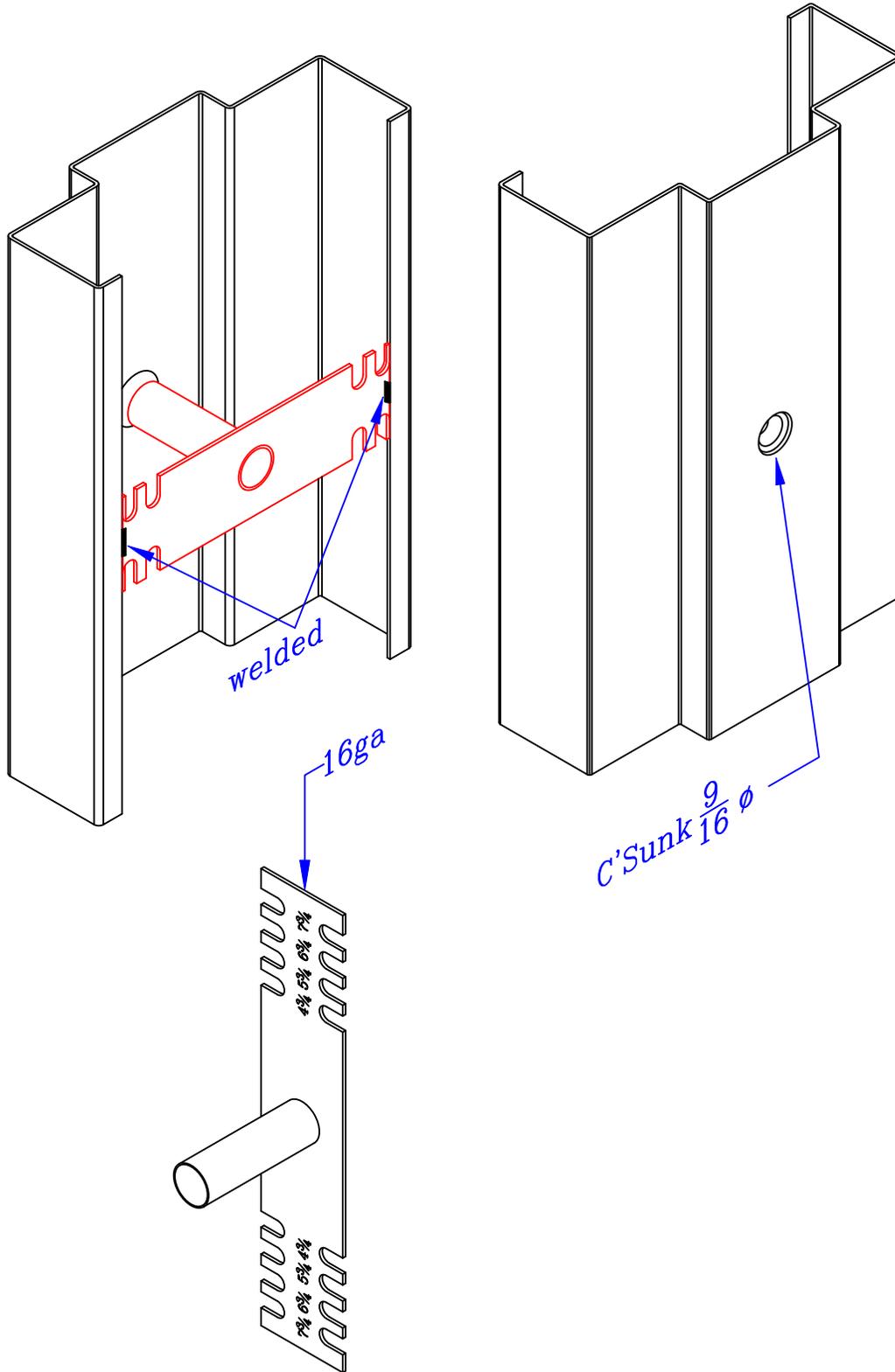
Tack welded



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

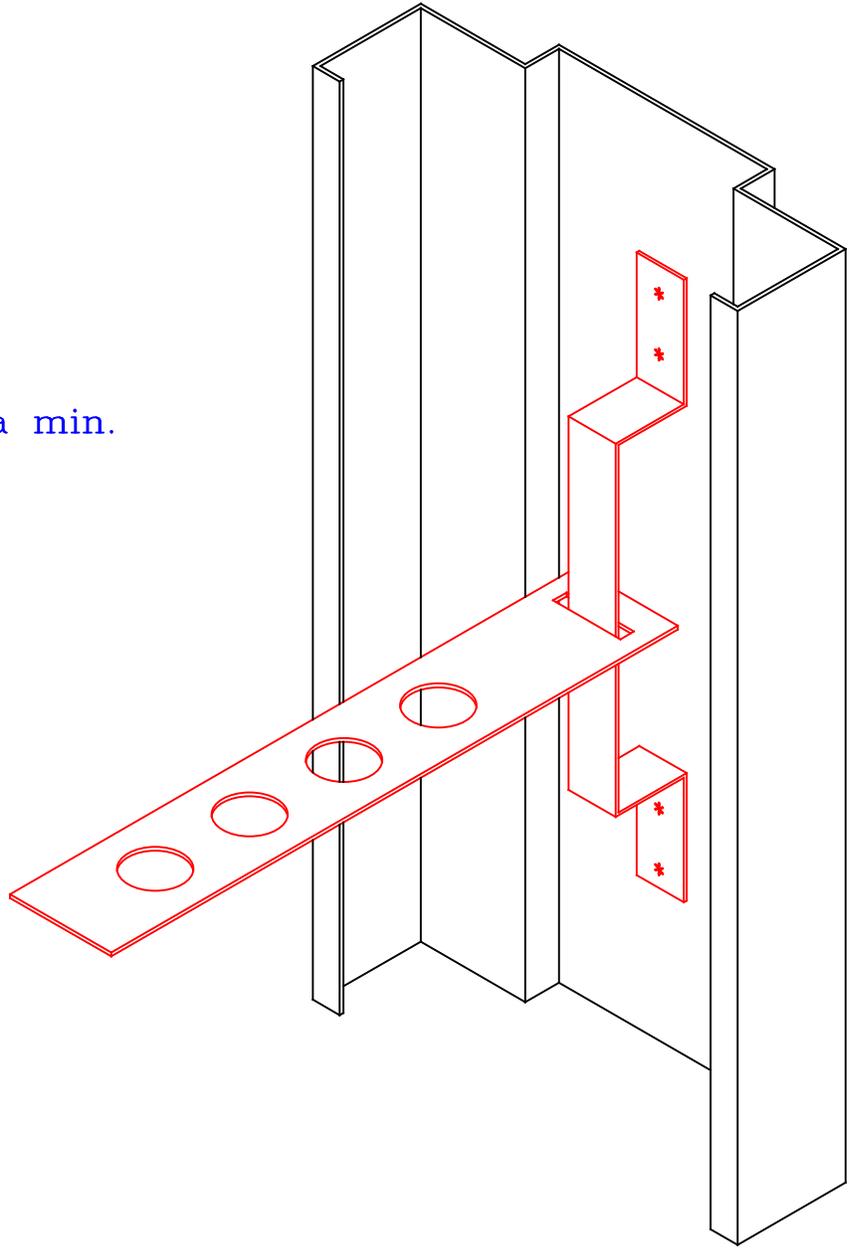
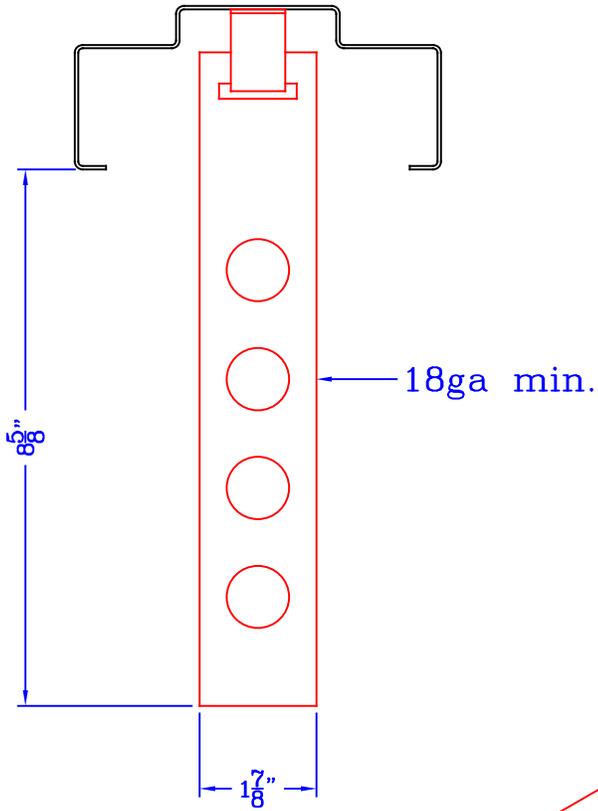
Existing wall anchor for 1/4" screw with tube

Tack welded

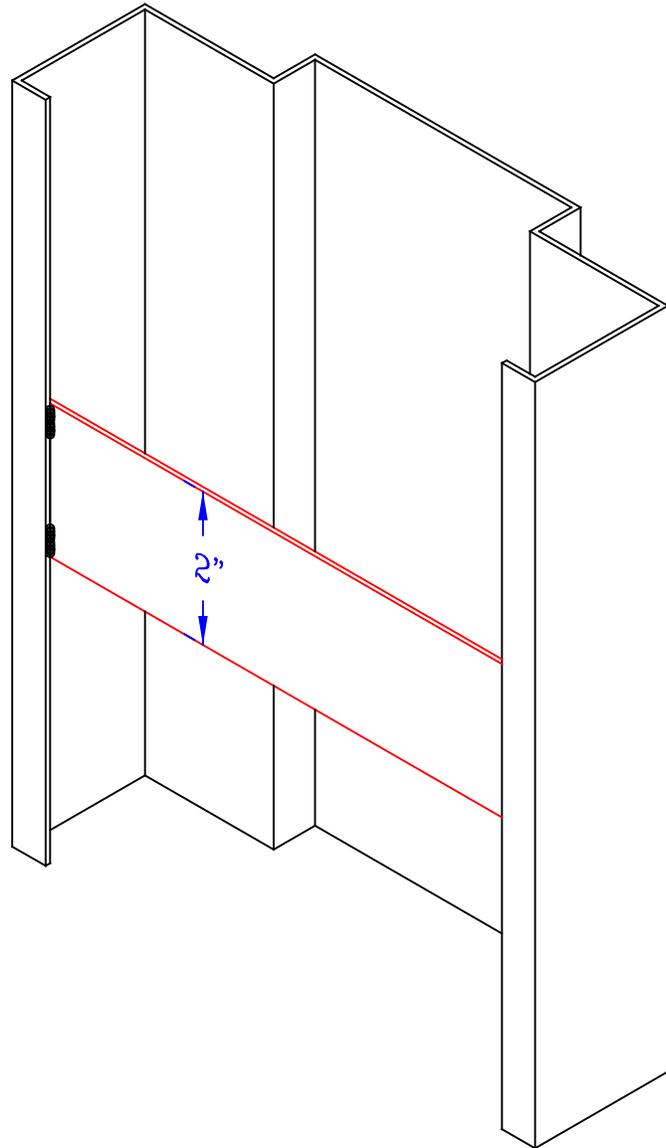
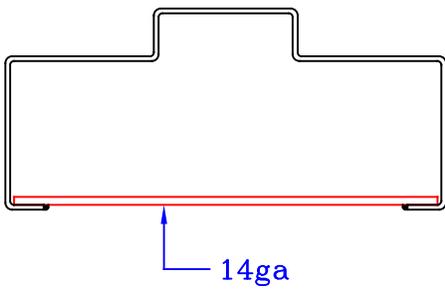


2 sets of anchors for 10 3/4" JD and up.
1/4" wood screws by others.

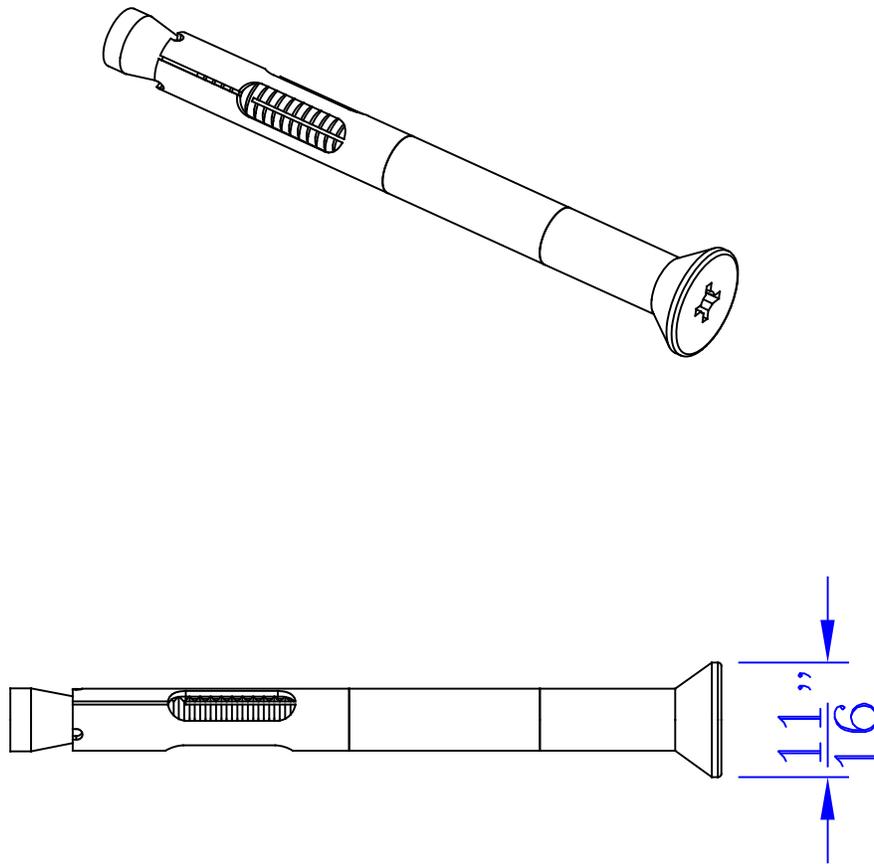
Adjustable "T" anchor
Spot welded



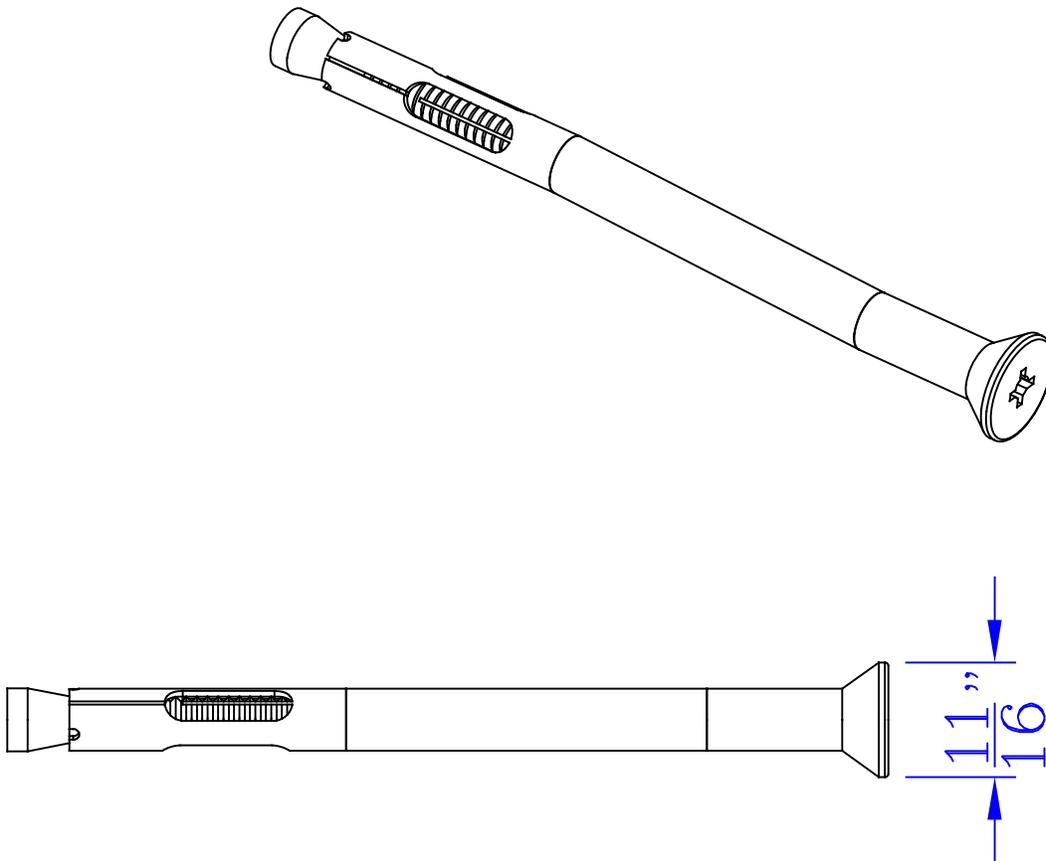
Metal builder anchor
tack welded



4" long dynabolt for existing wall
ship loose

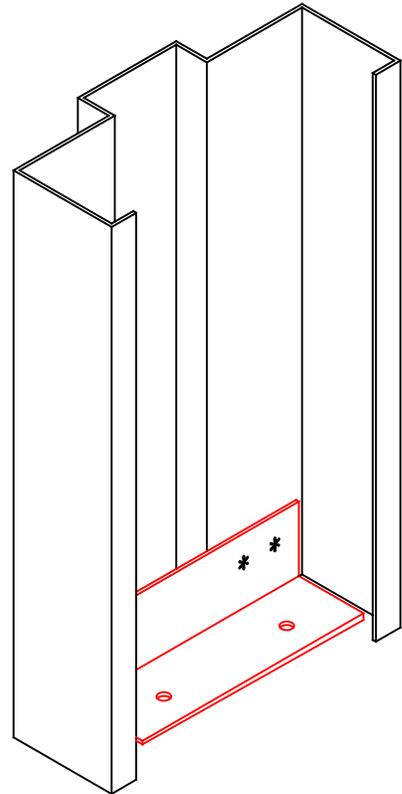
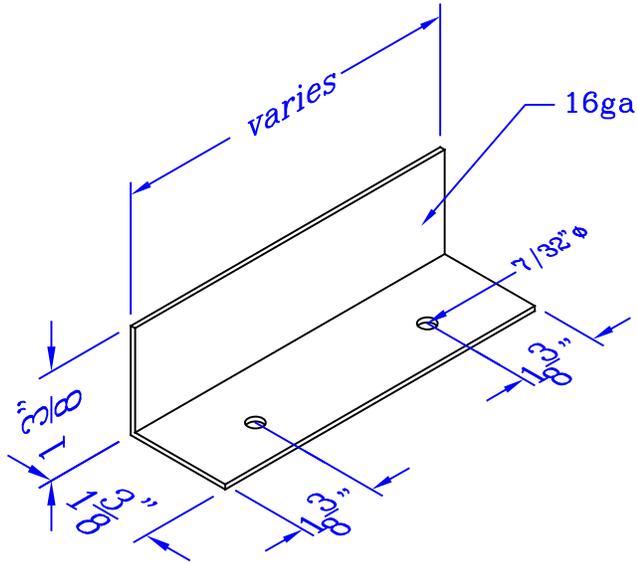


5" long dynabolt for existing wall
ship loose

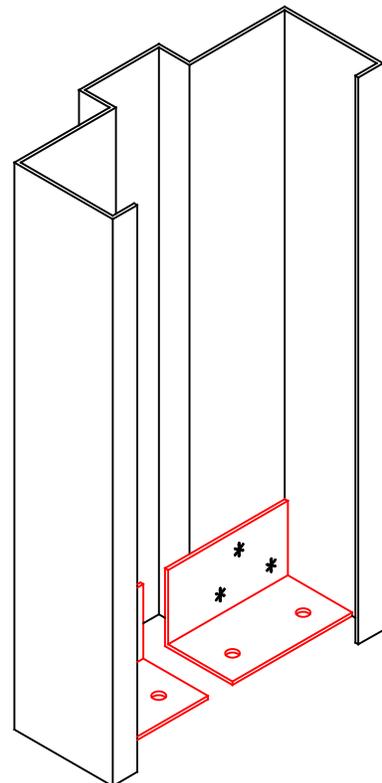
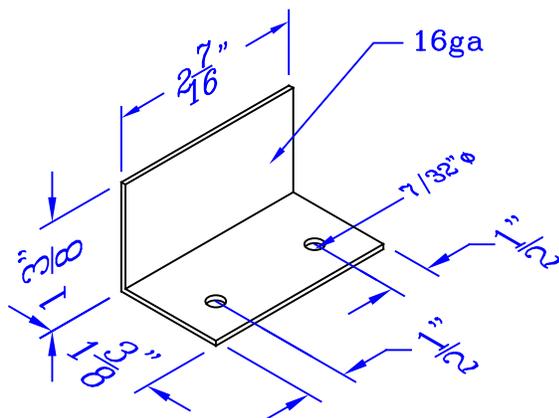


Floor anchor
Spot welded

One part model
up to 5 7/8" JD

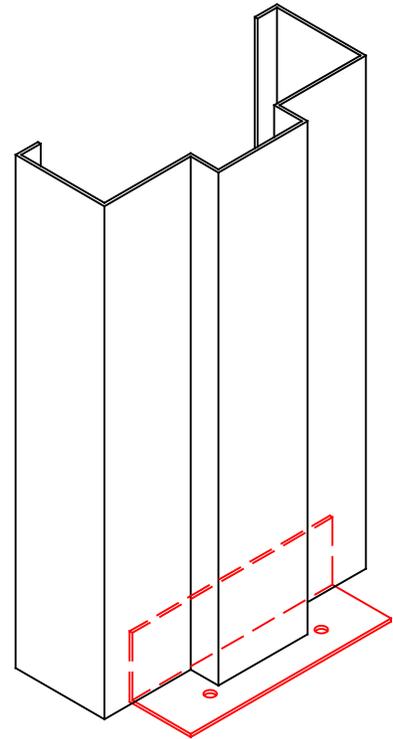
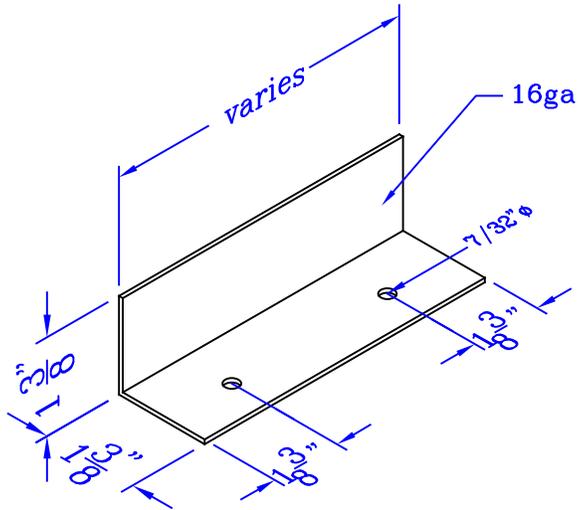


Two parts model
6"JD and up

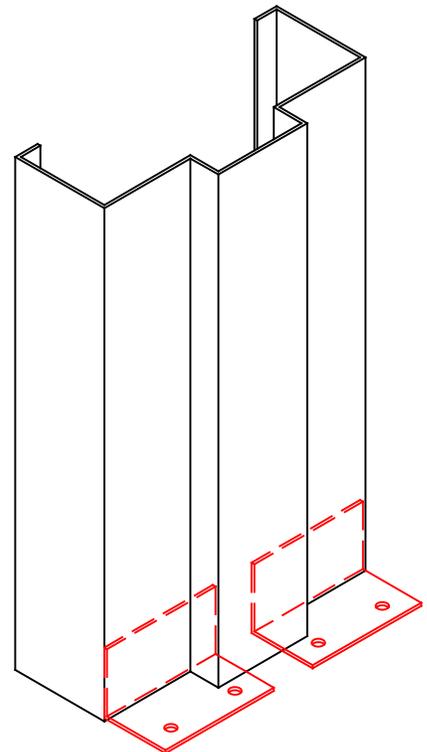
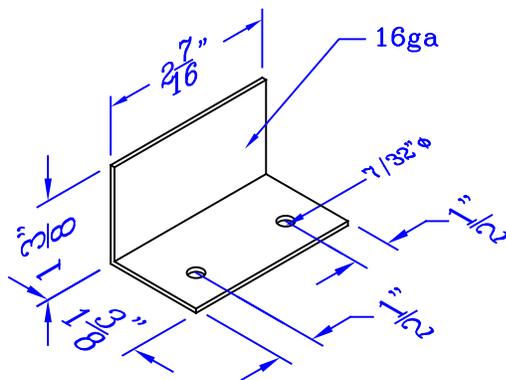


Inverted floor anchor
Spot welded

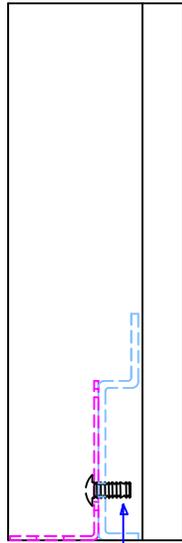
One part model
up to 5 3/8" JD



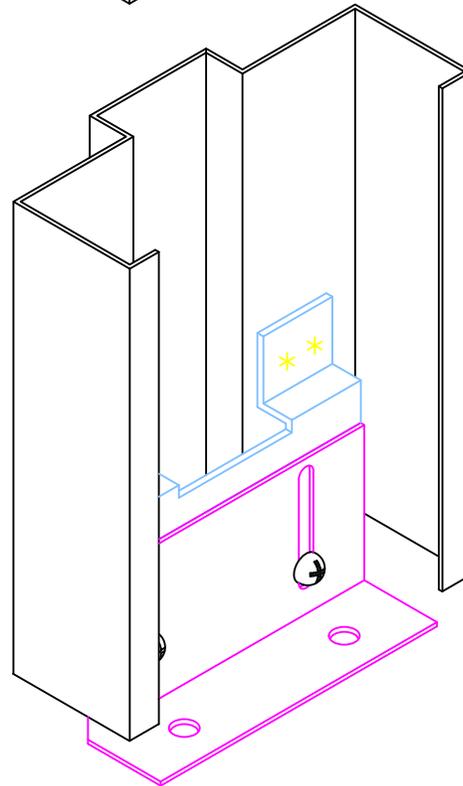
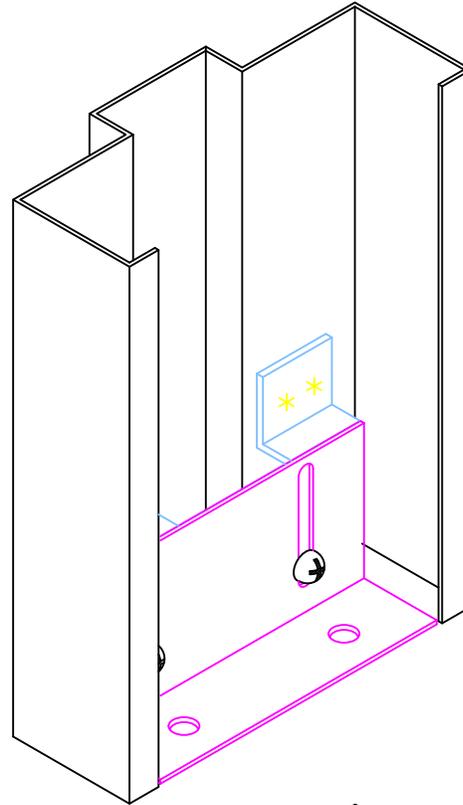
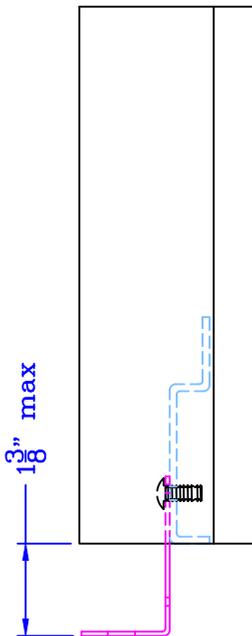
Two parts model
5 1/2" JD and up



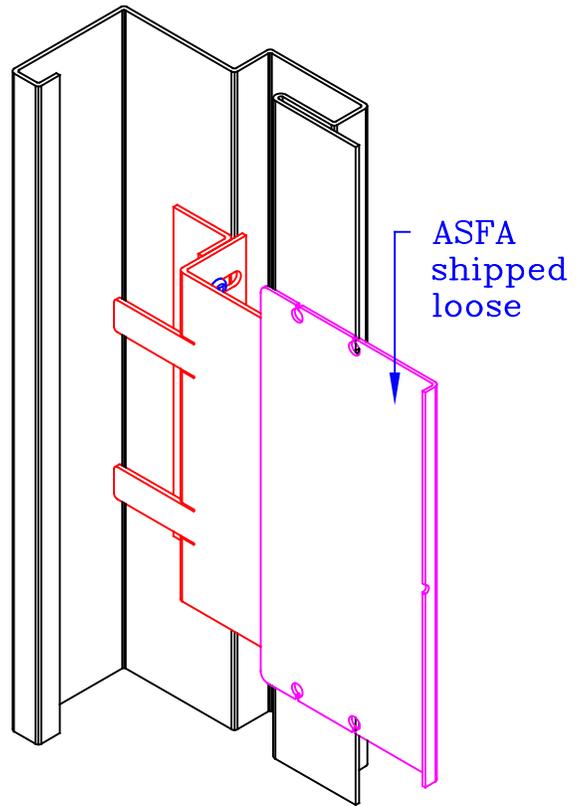
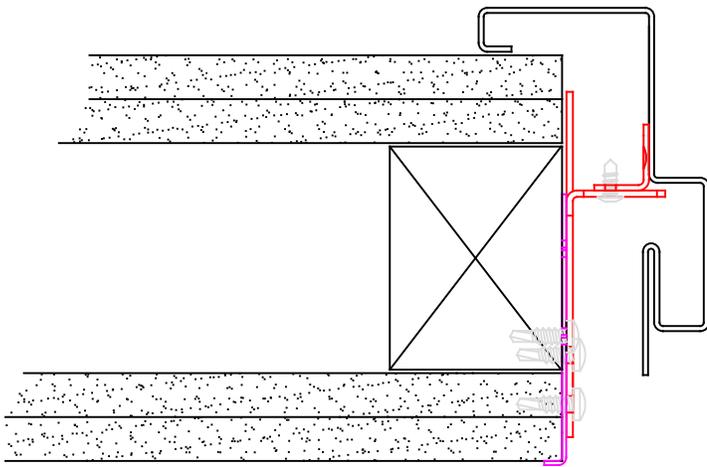
Adjustable floor anchor, 16/12ga
Spot welded



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

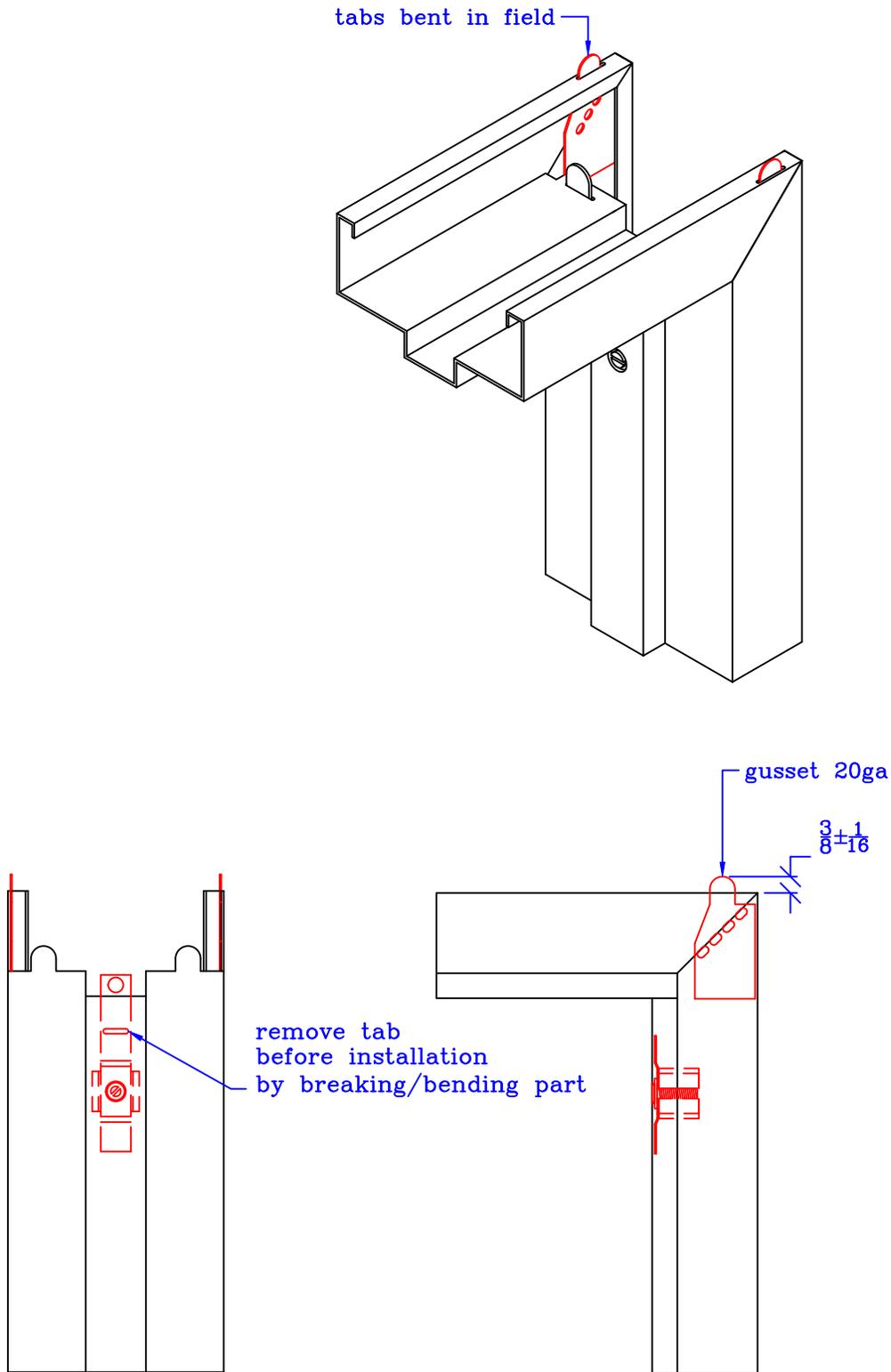


Additional split frame anchor, 16ga



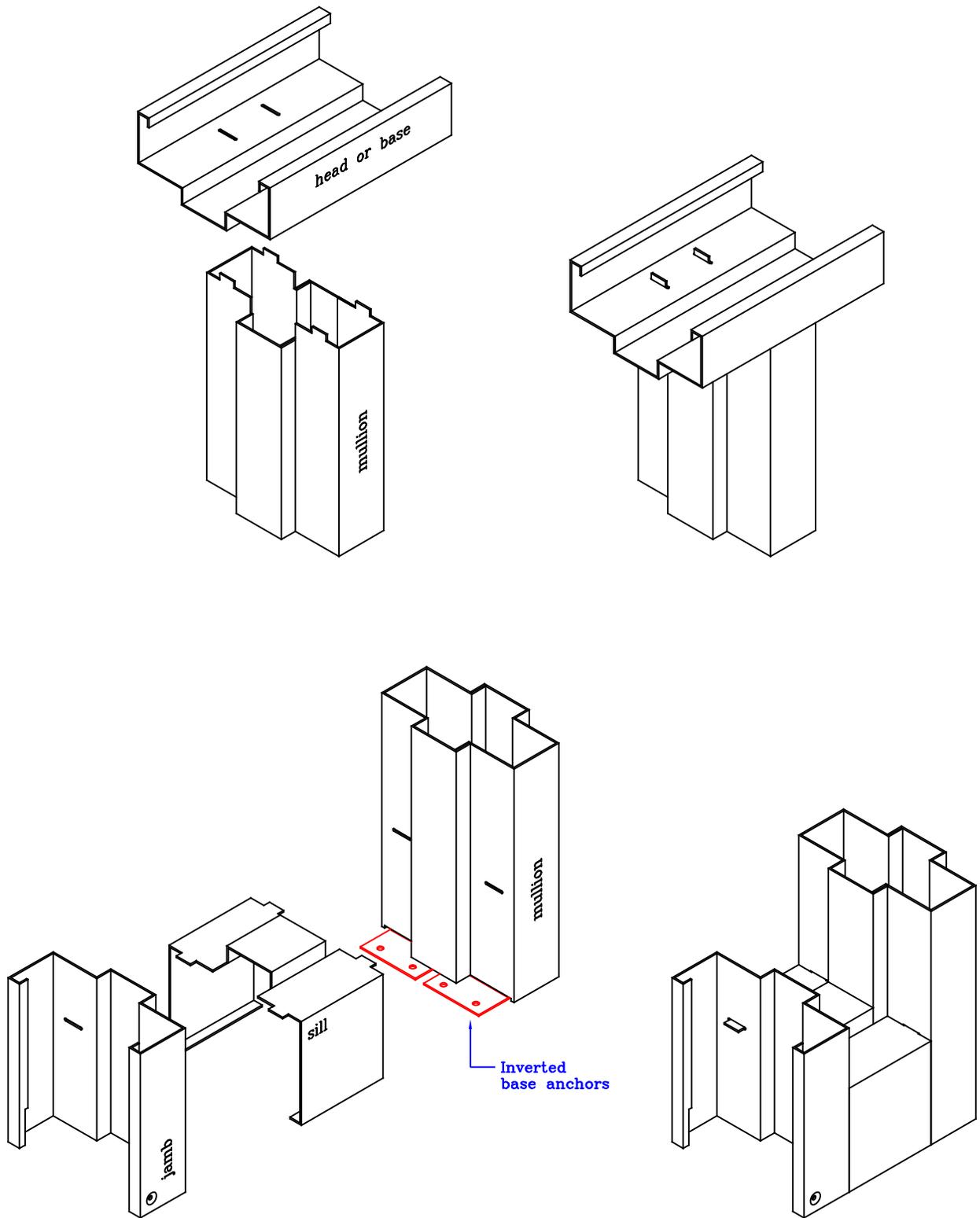
Knocked down corner with tabs

Corner detail with compression anchor at jamb,



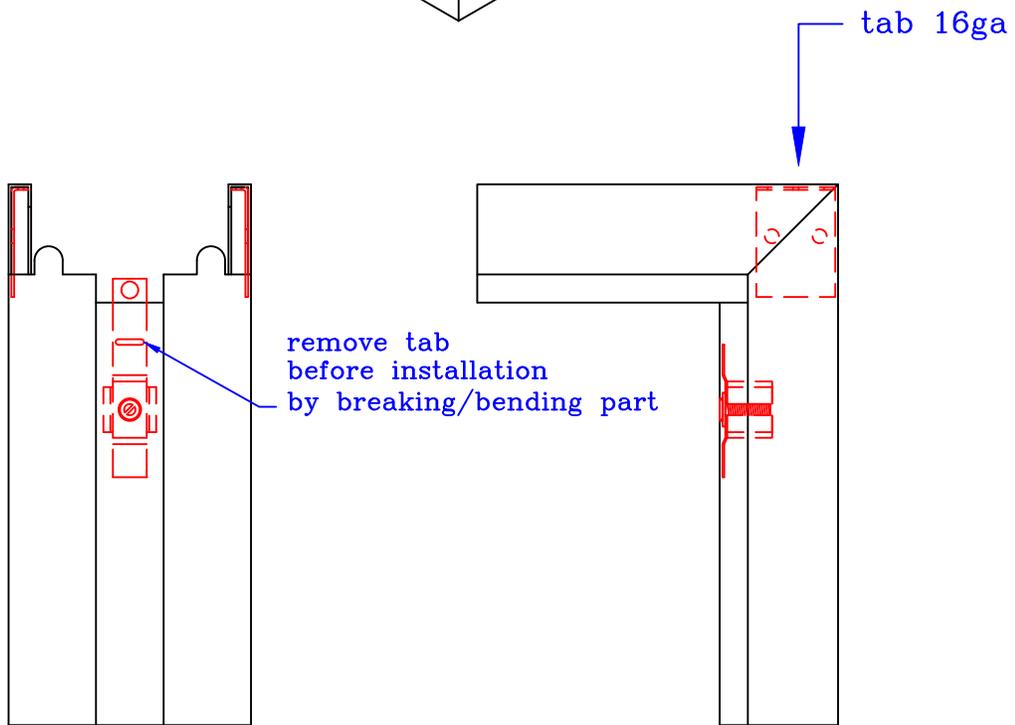
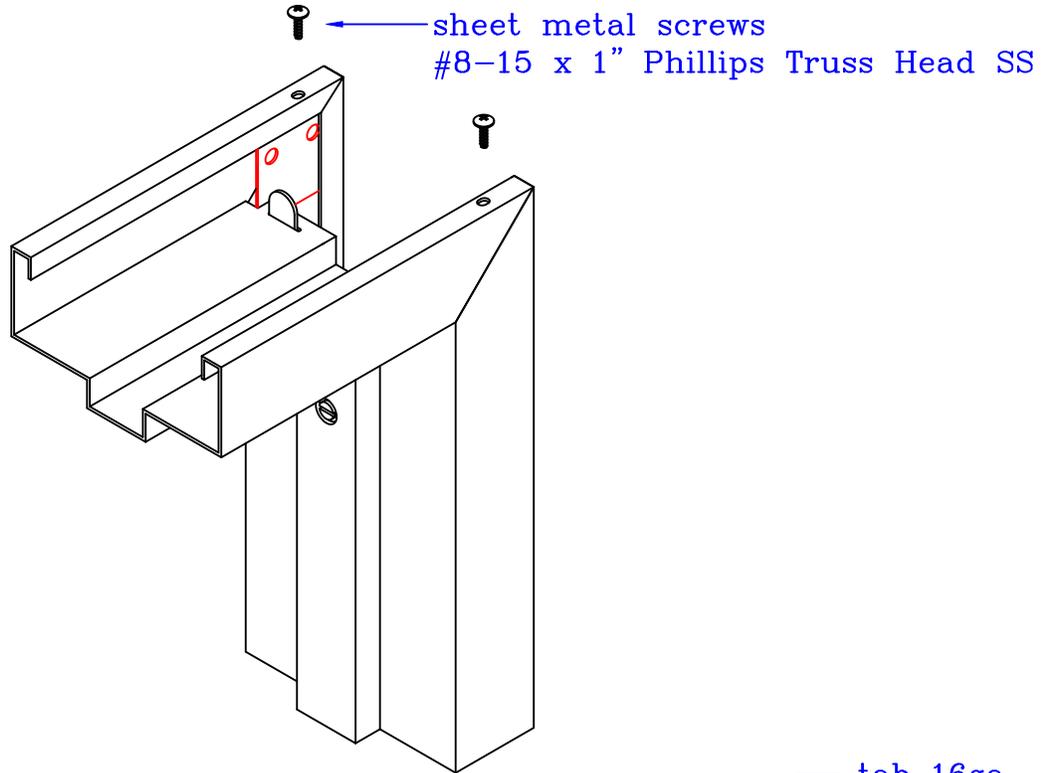
Knocked down intersection

Corner detail with compression anchor at jambs.



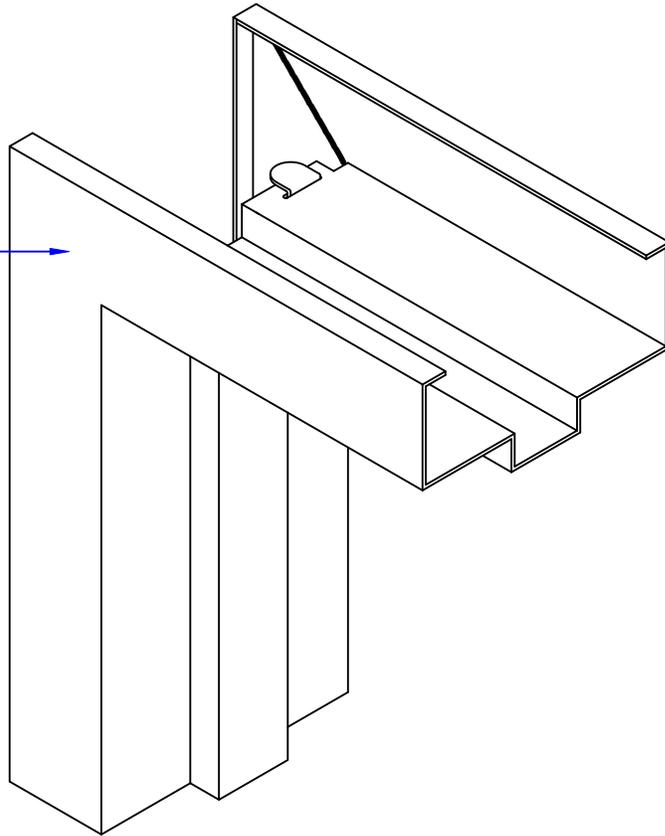
Knocked down corner with screws

Corner detail with compression anchor at jamb,

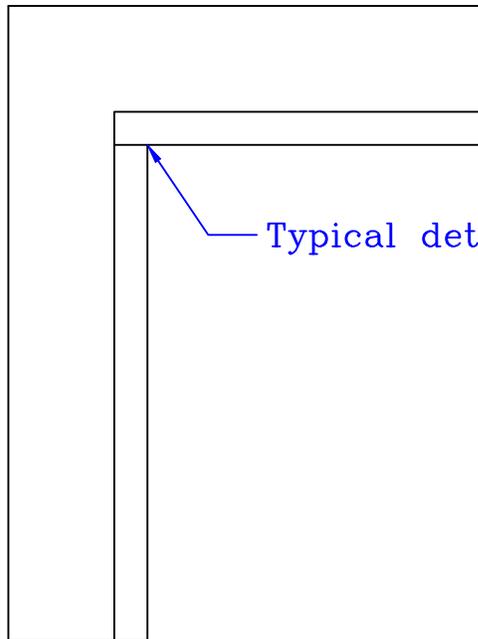


Face welded corner

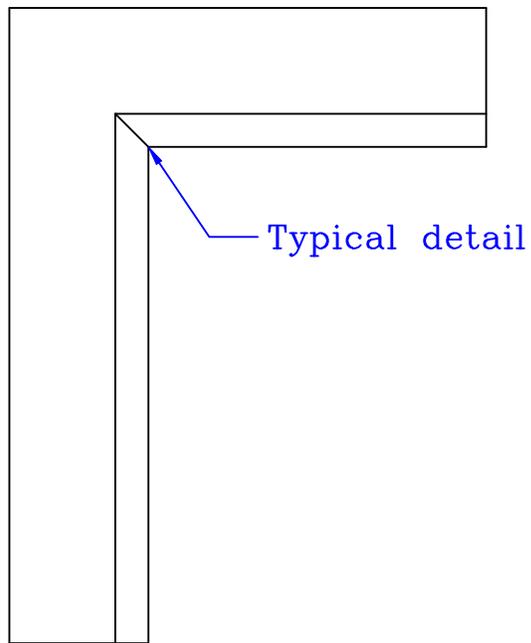
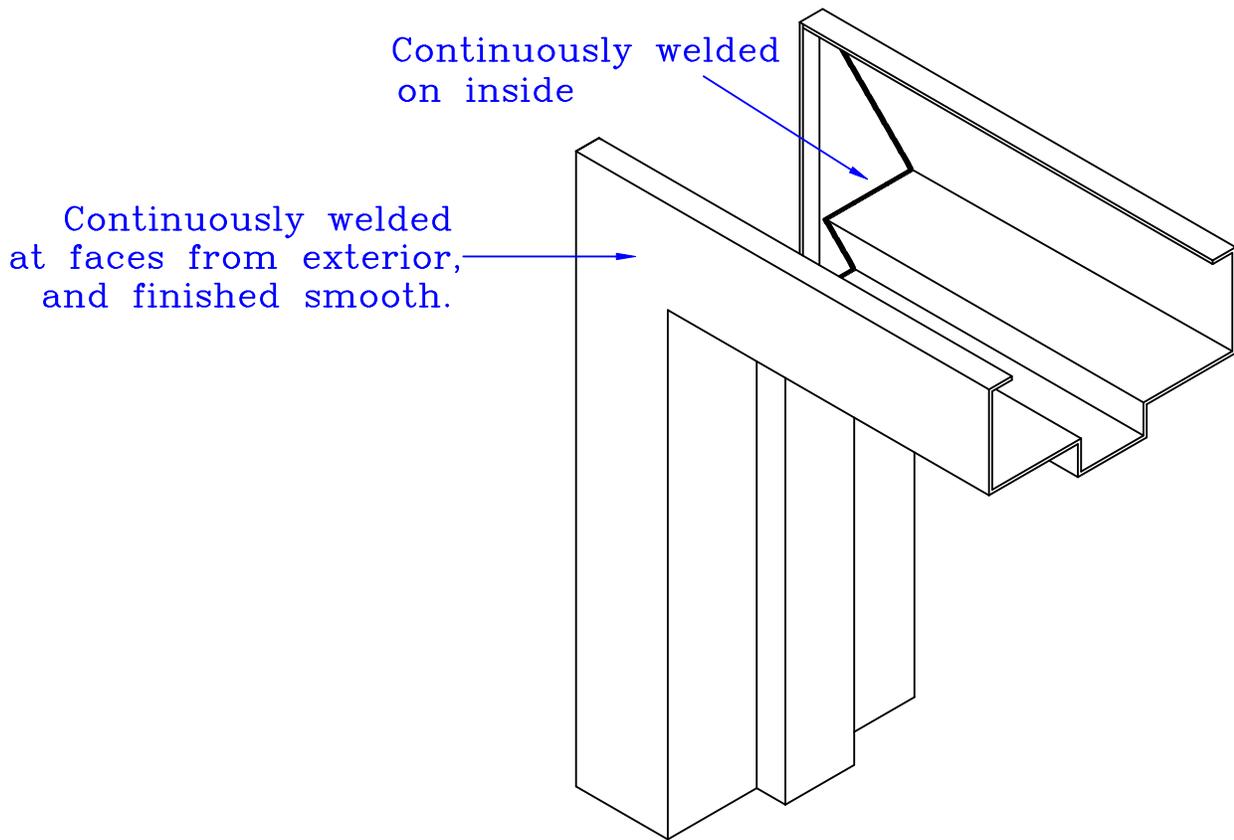
Face welded
and finished smooth



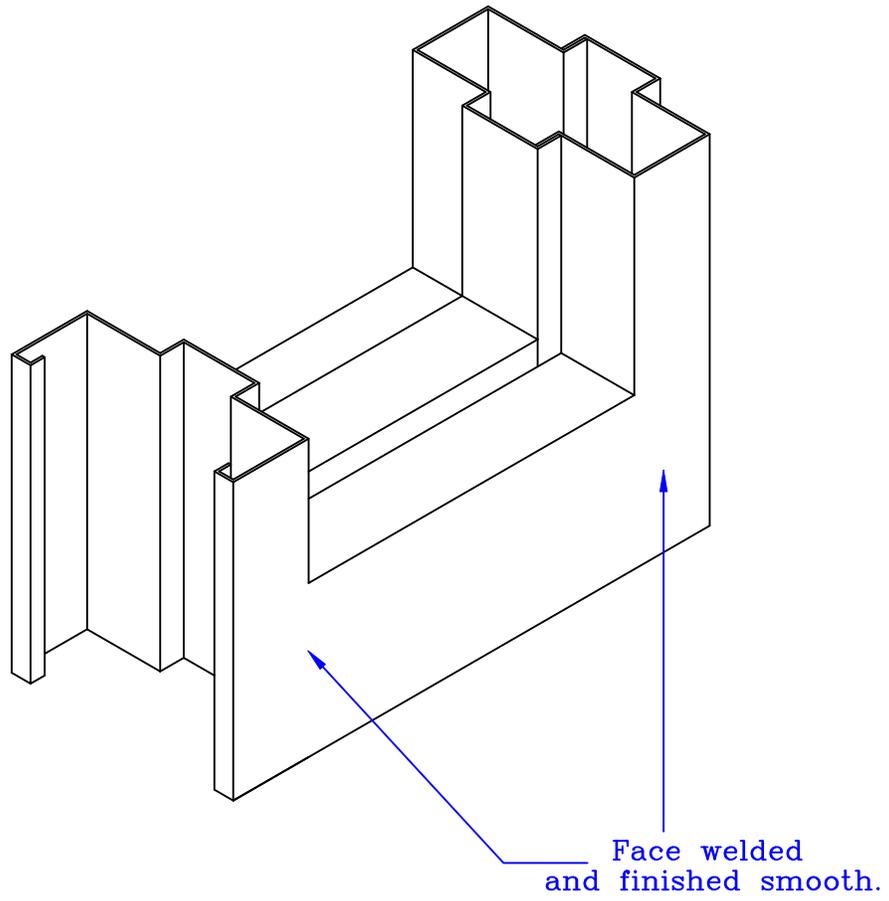
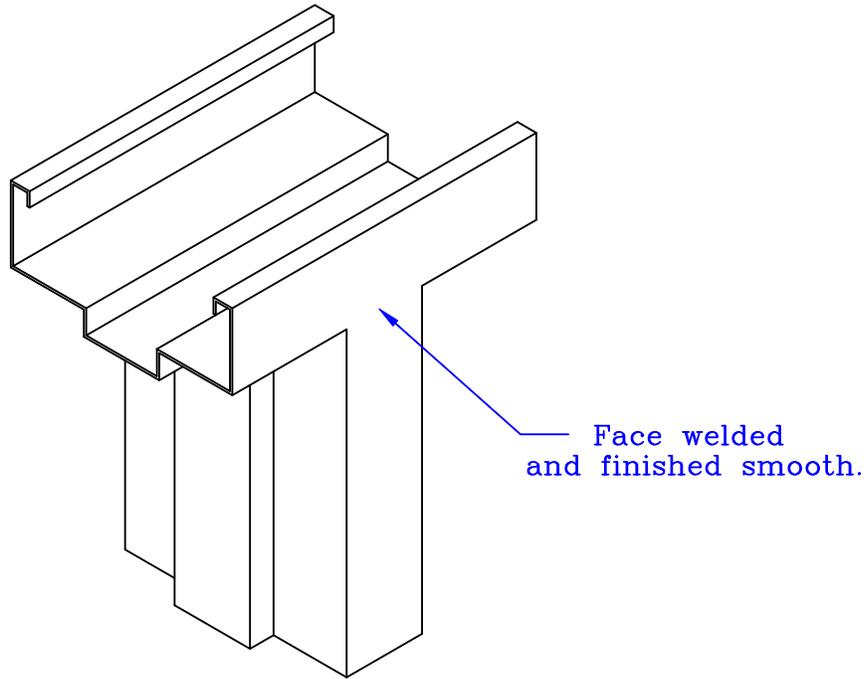
Typical detail



Full depth continuous welded corner

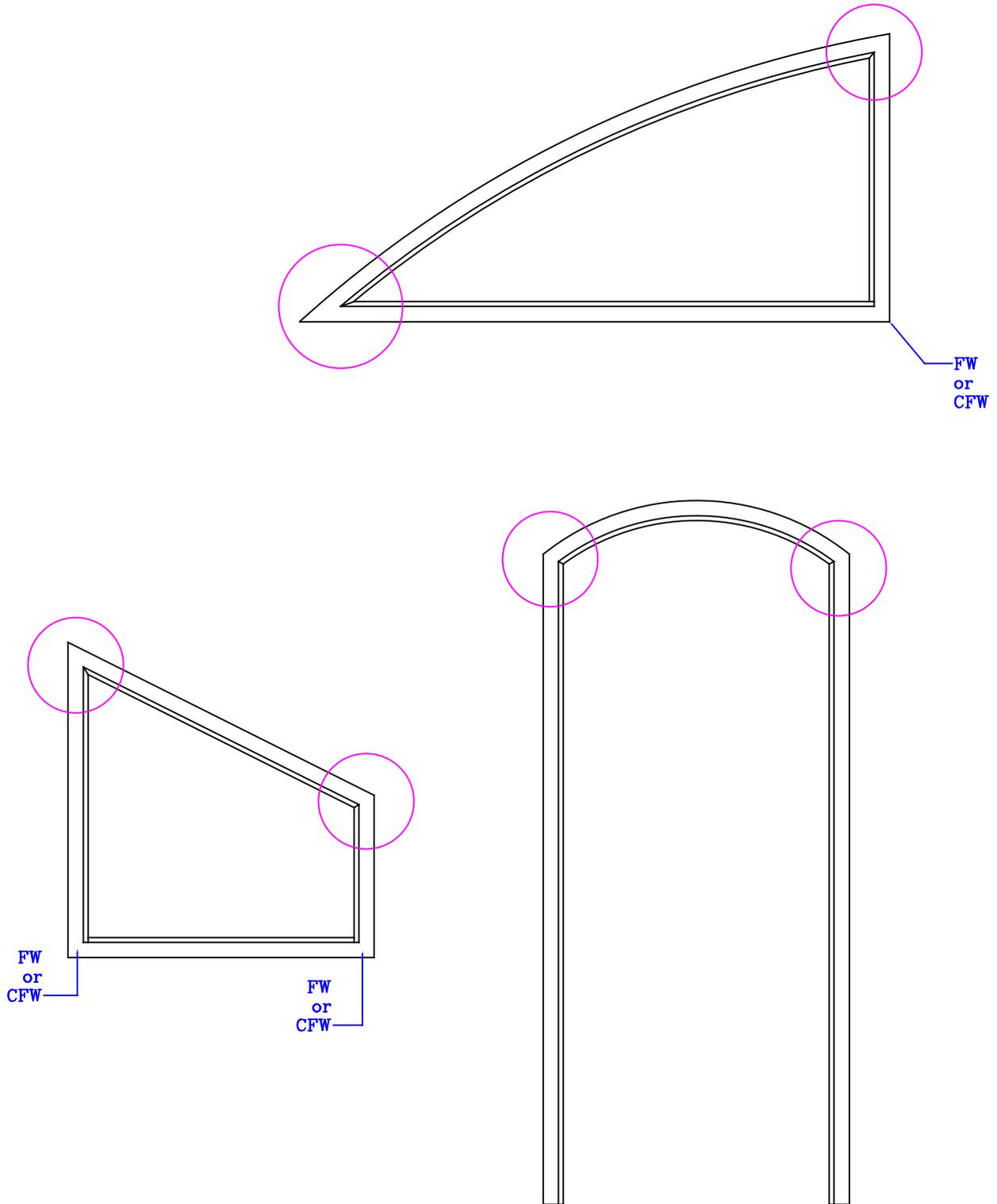


Face welded intersection

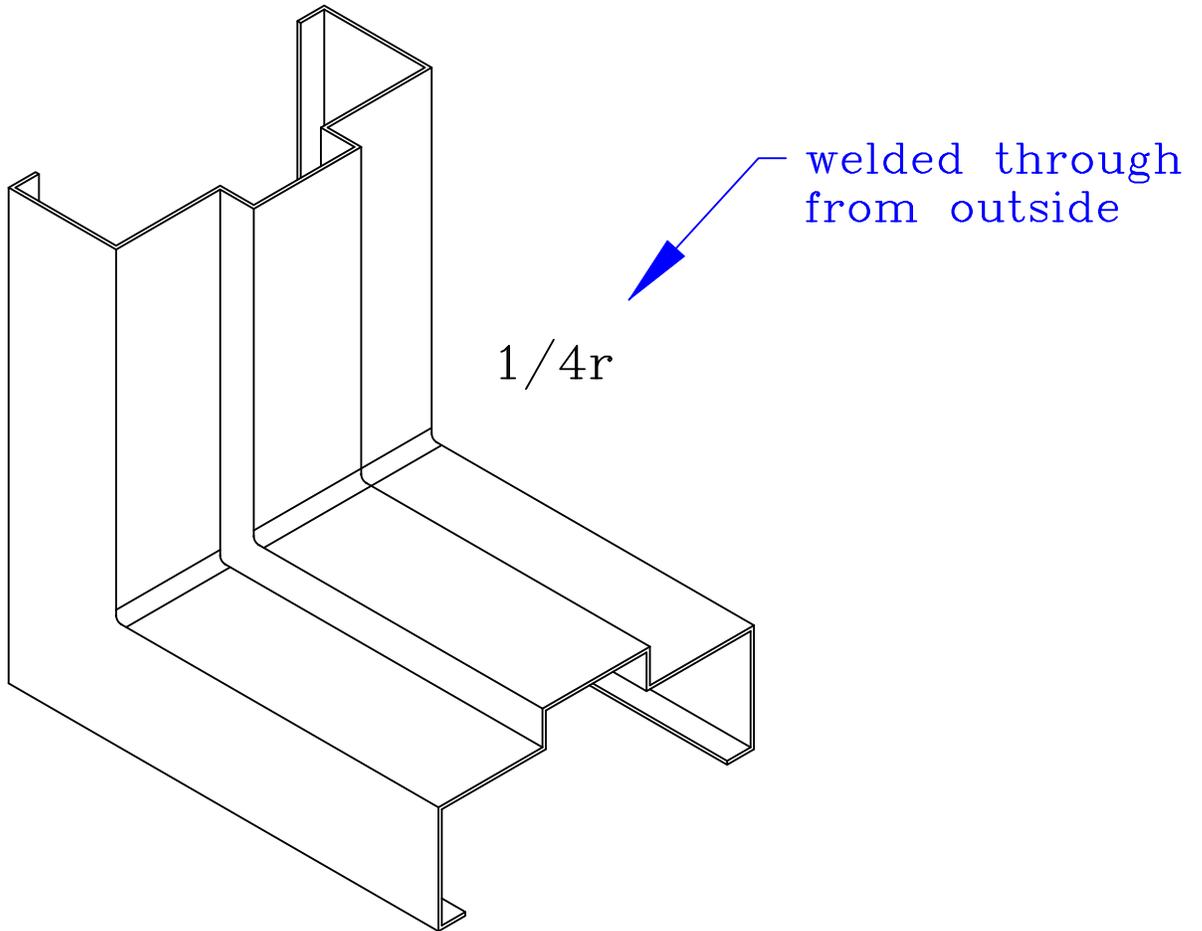


Non standard welded corner

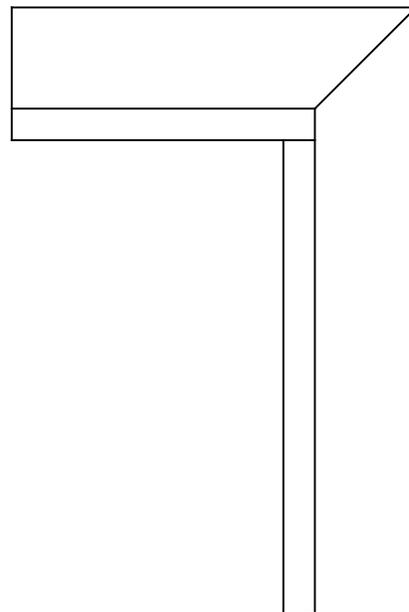
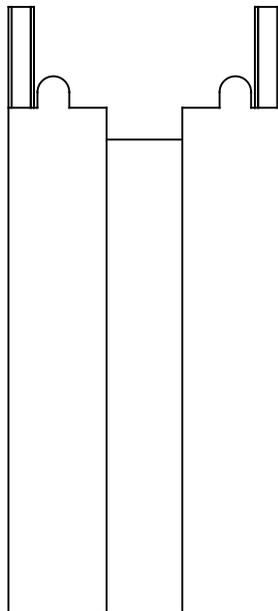
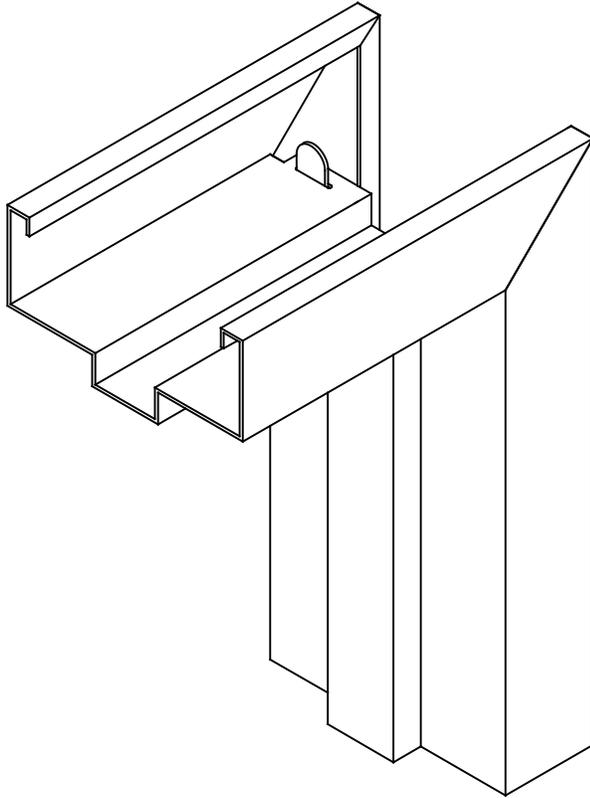
At all corners other than 90°



Sanitary weld

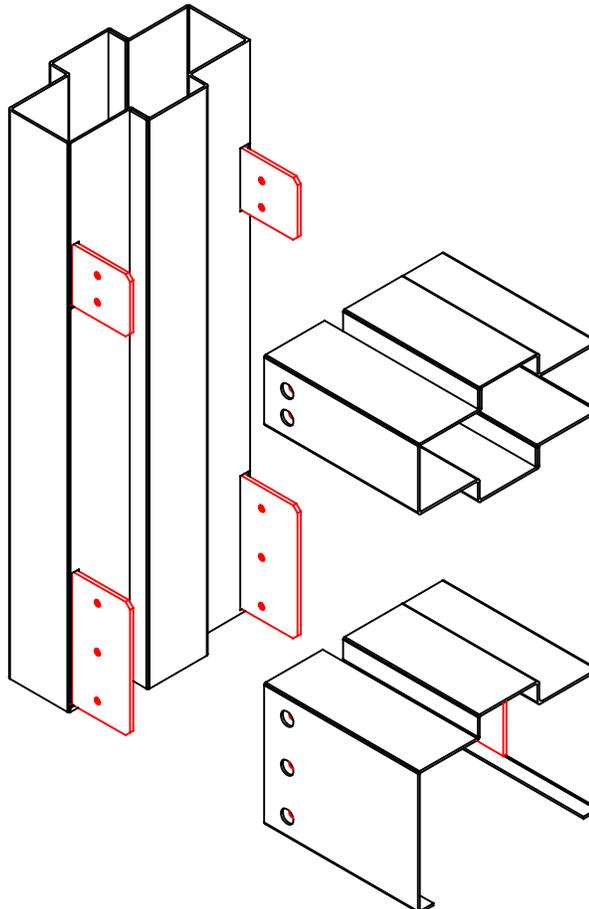
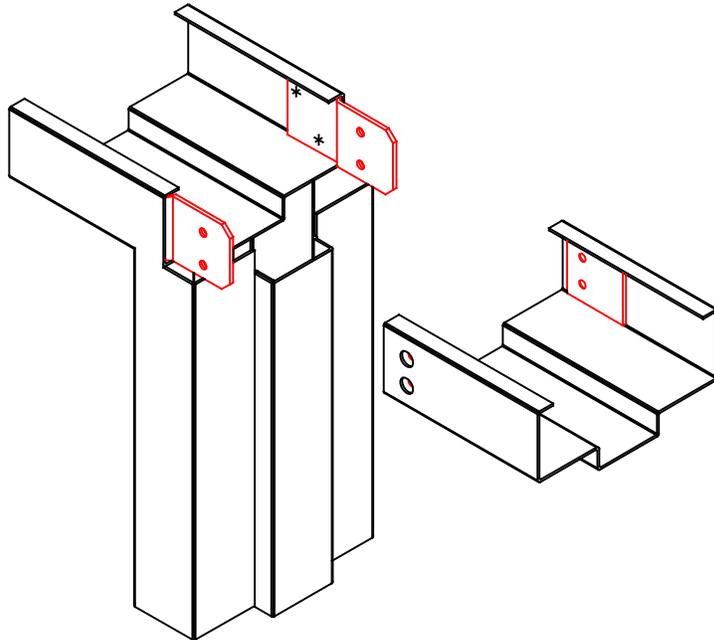


Welded by others (KD w/o tabs)

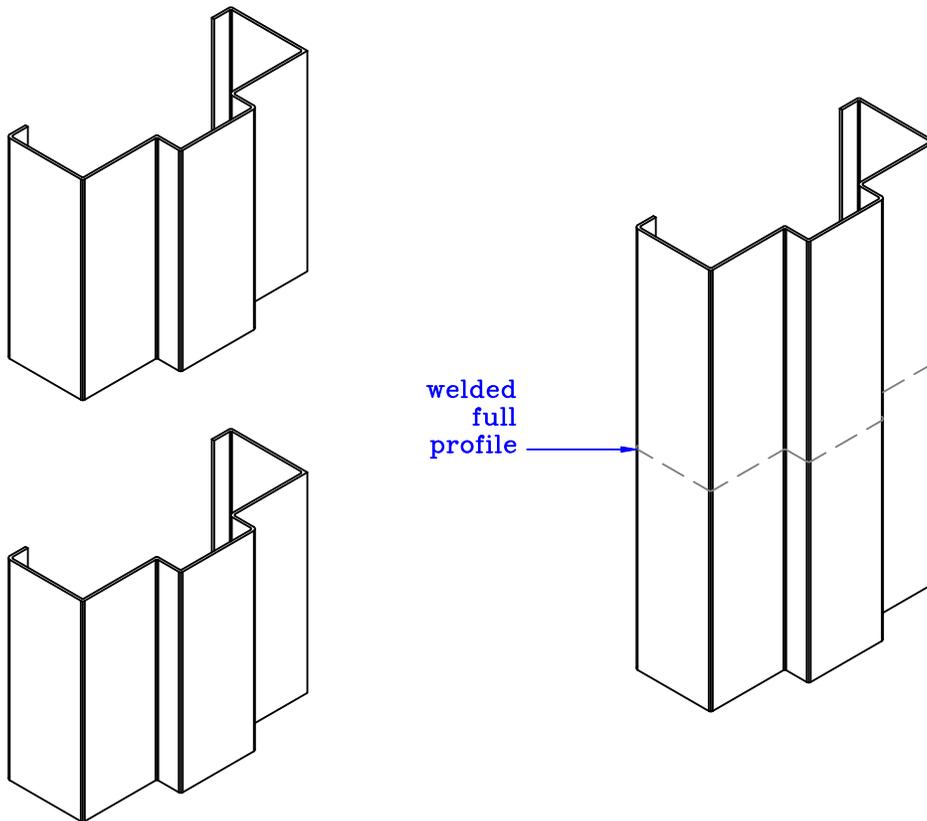
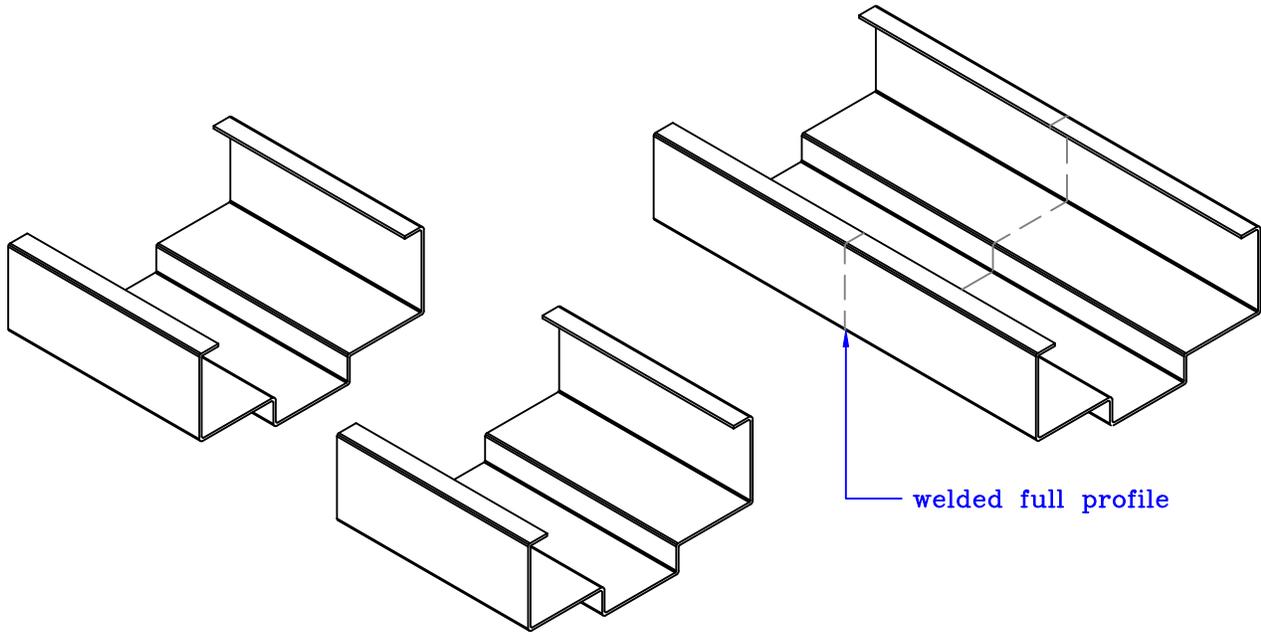


Mechanical field splice for oversized units

Includes #12-24 mechanical screws



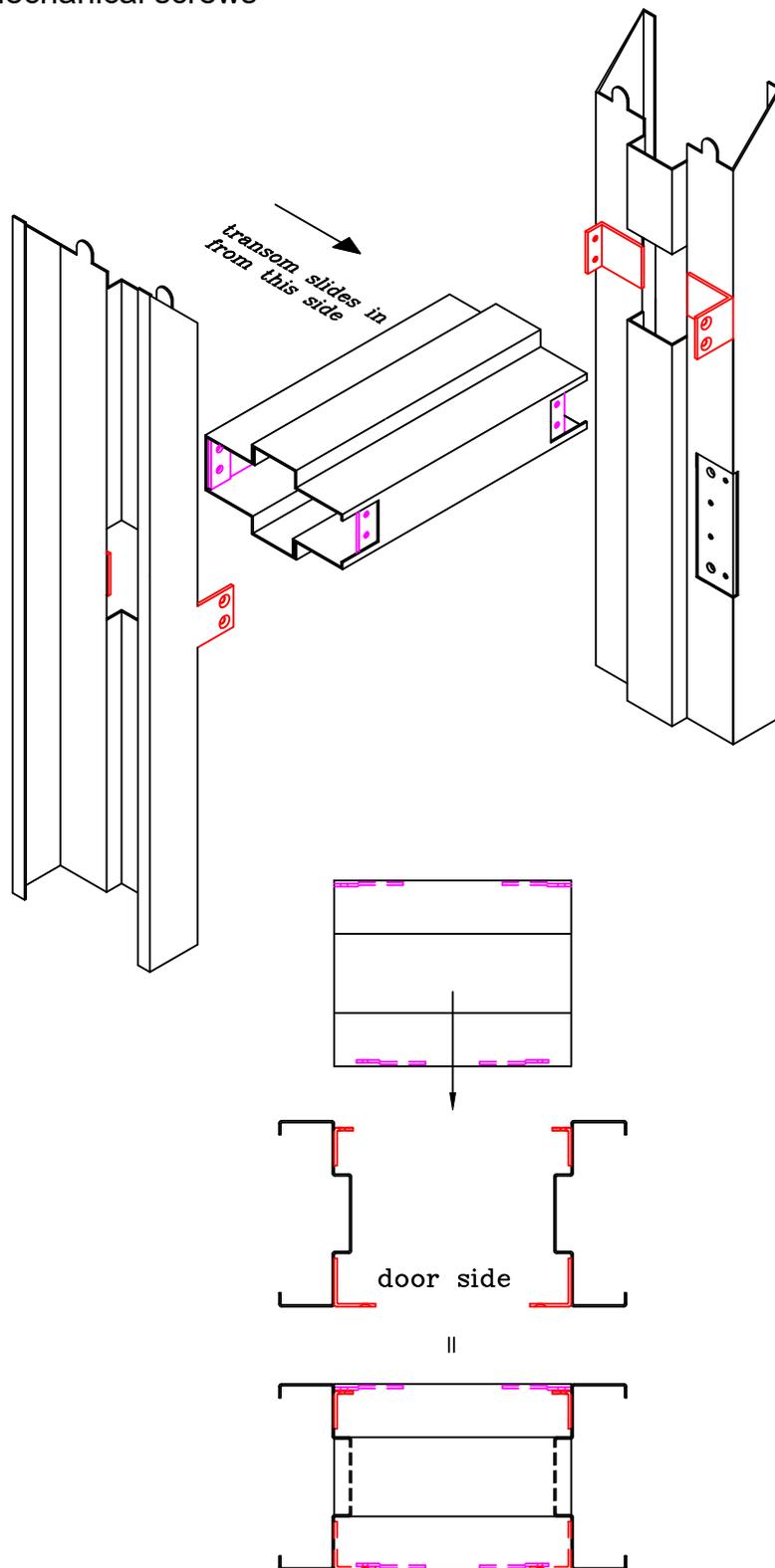
Splice for oversized units



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

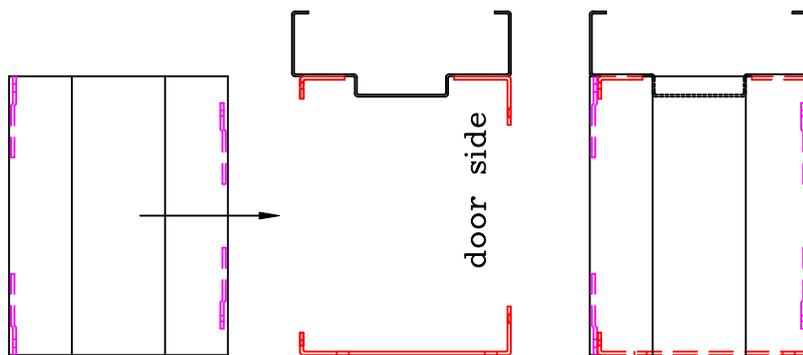
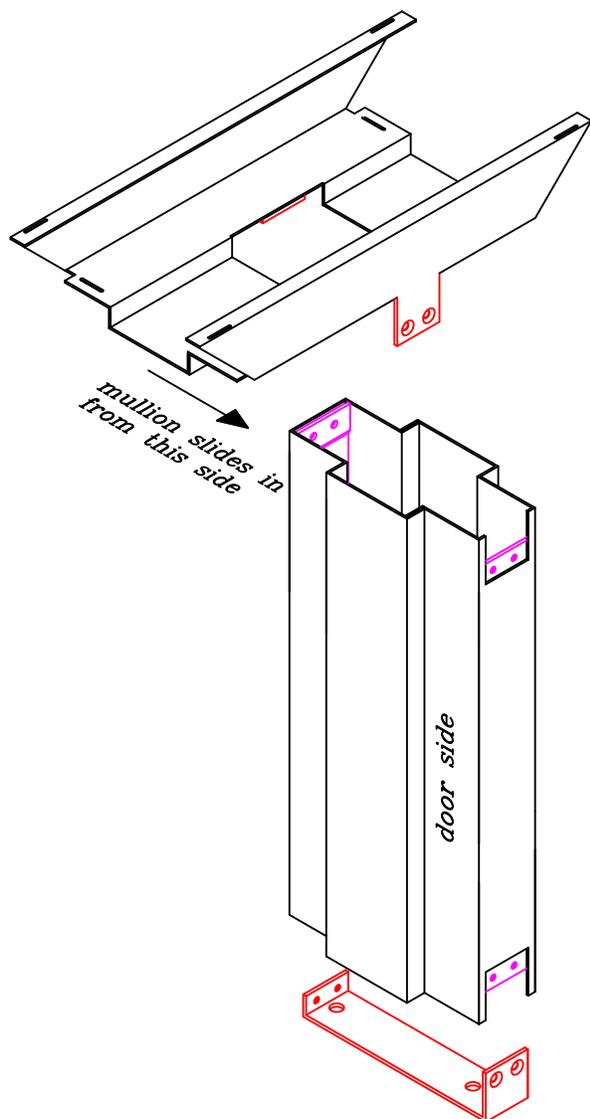
Removable mullion/transom bar

Includes #12-24 mechanical screws

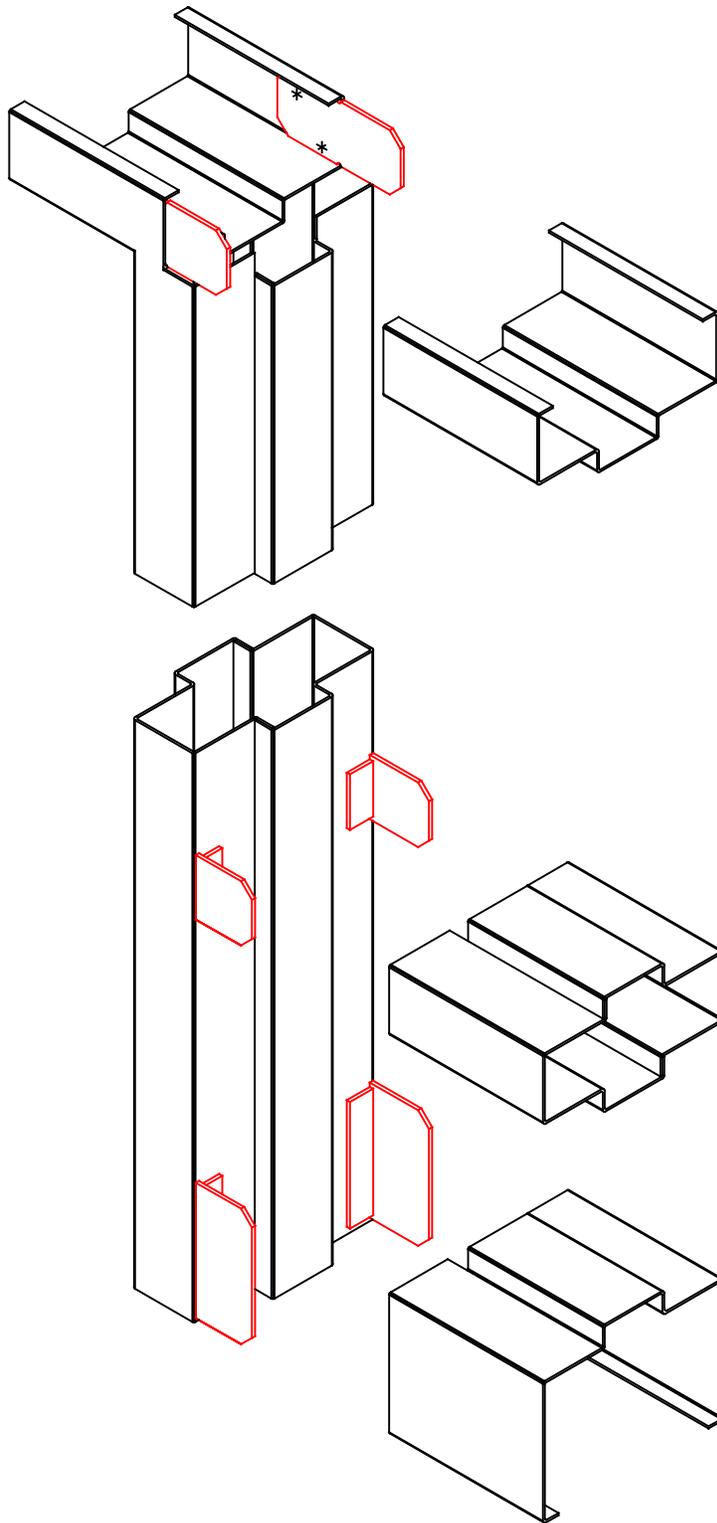


Removable mullion with floor anchor

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

Average volume solids: 34.3%

Thinner: water

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

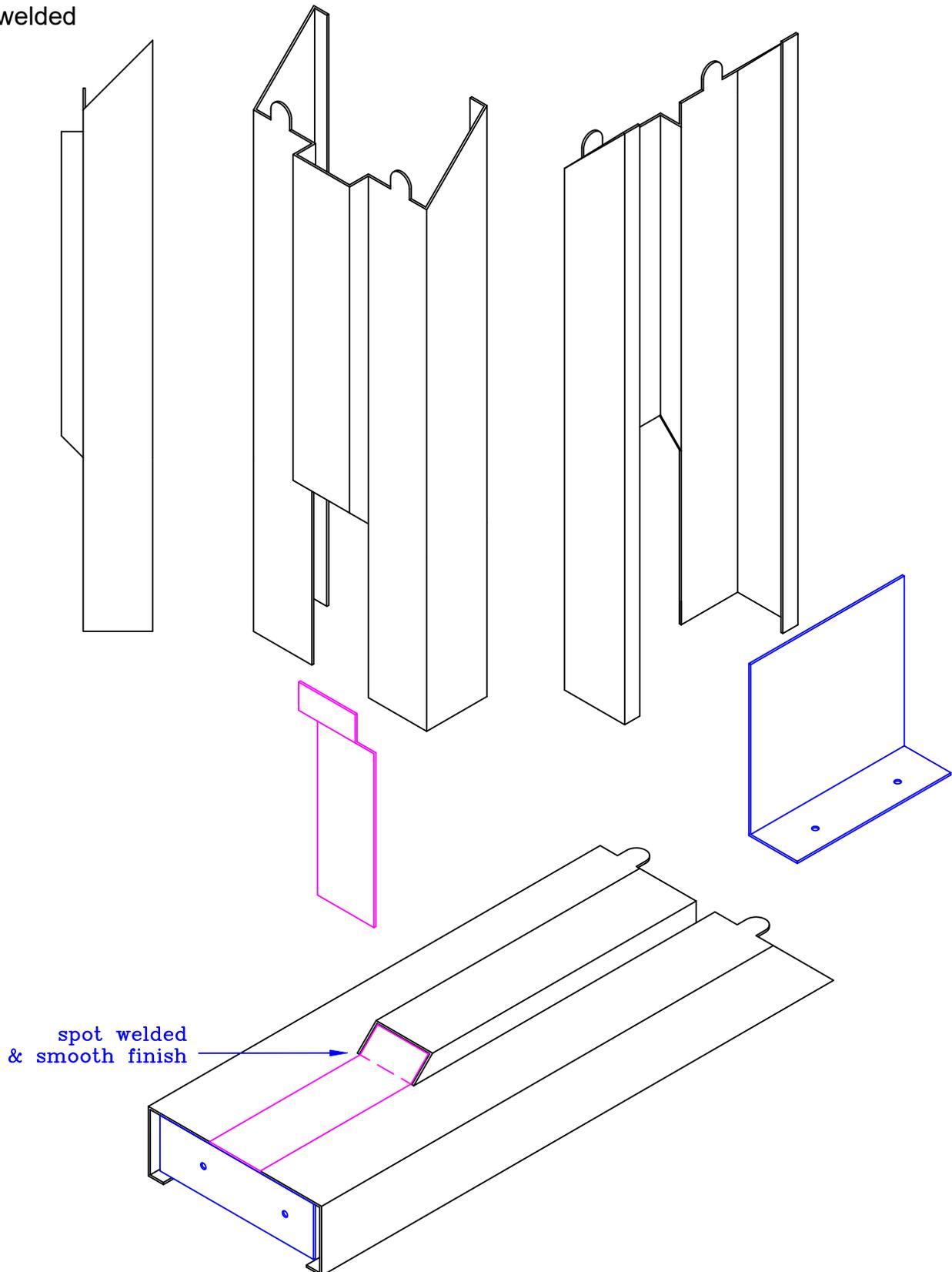
Specific gravity (g/ml)	1.68
Coverage at 1.0 Mil (ft ² /lb)	114.8
60° gloss (ASTM D-523)	28-42
Adhesion (ASTM D-3359)	5B
Flexibility (ASTM D-522)	pass 1/8"
Pencil hardness (ASTM D-3363)	H-2H
Impact resistance (in lb.) (ASTM D-2794)	Dir 160 in-lbs Rev 160 in-lbs

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

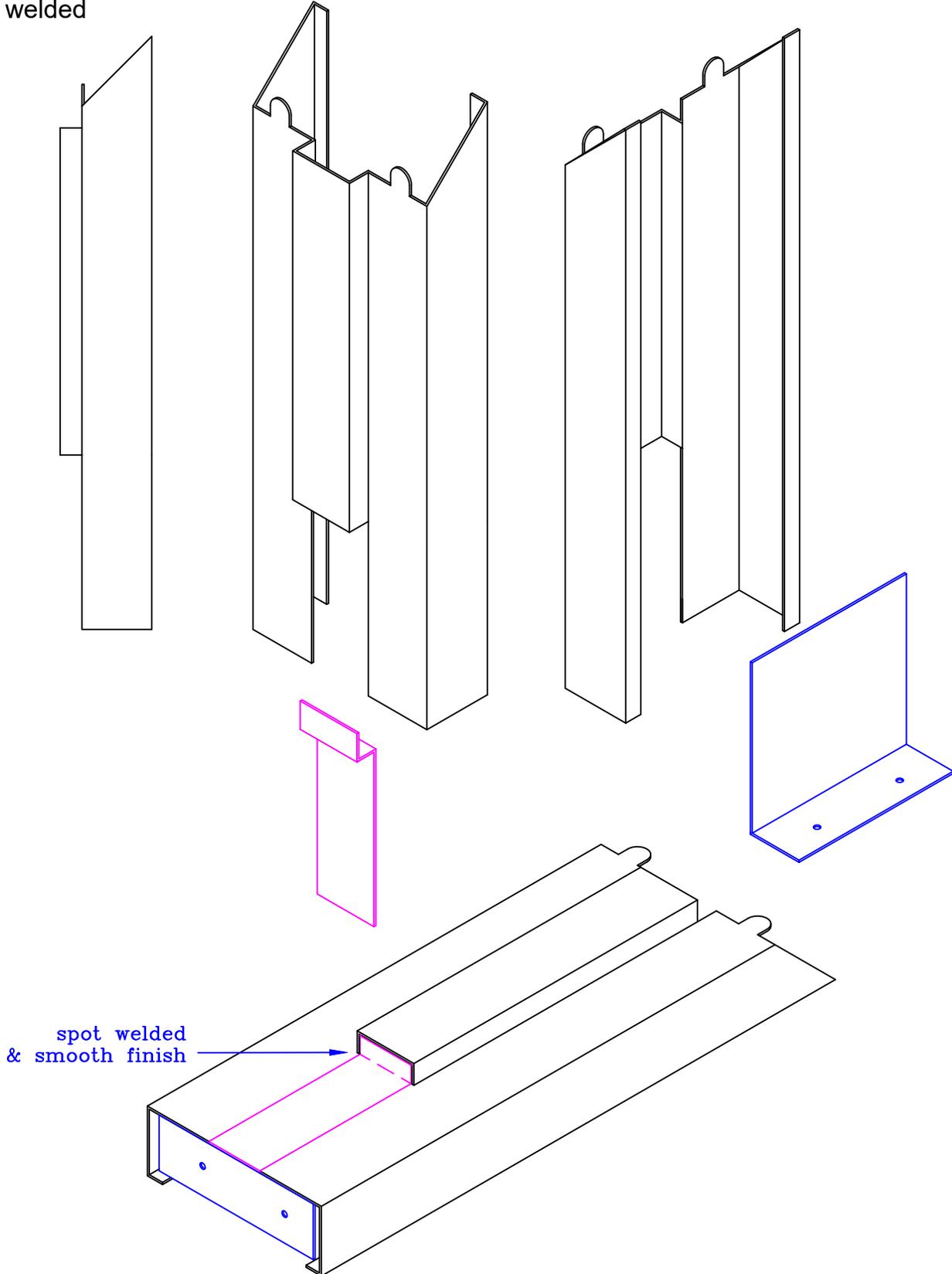
See www.ralcolor.com
All units over 90" in width and 100" in height will be spliced.

Hospital stops 45°

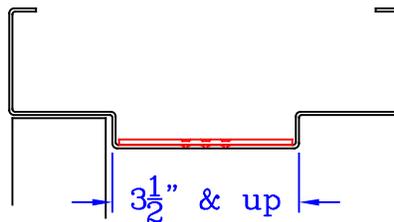
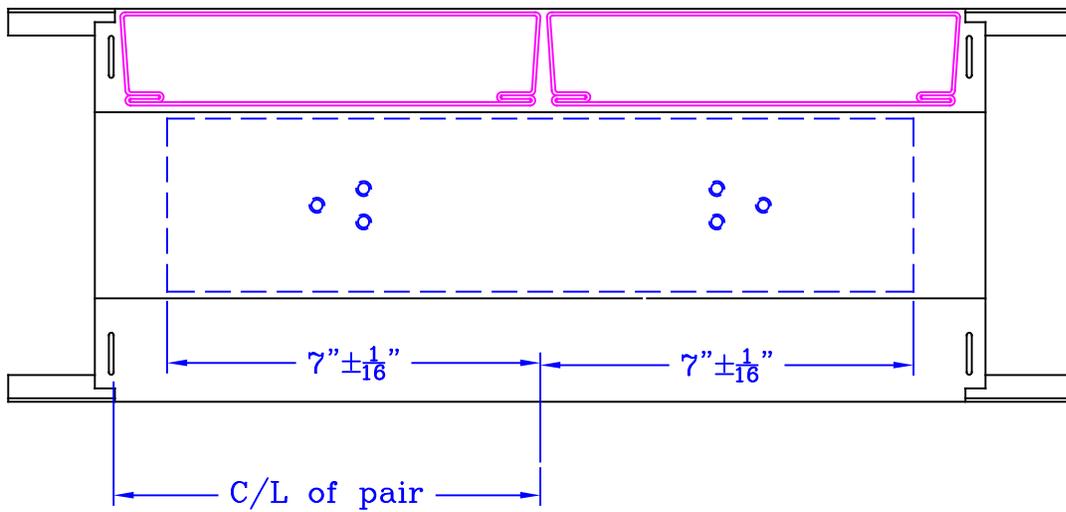
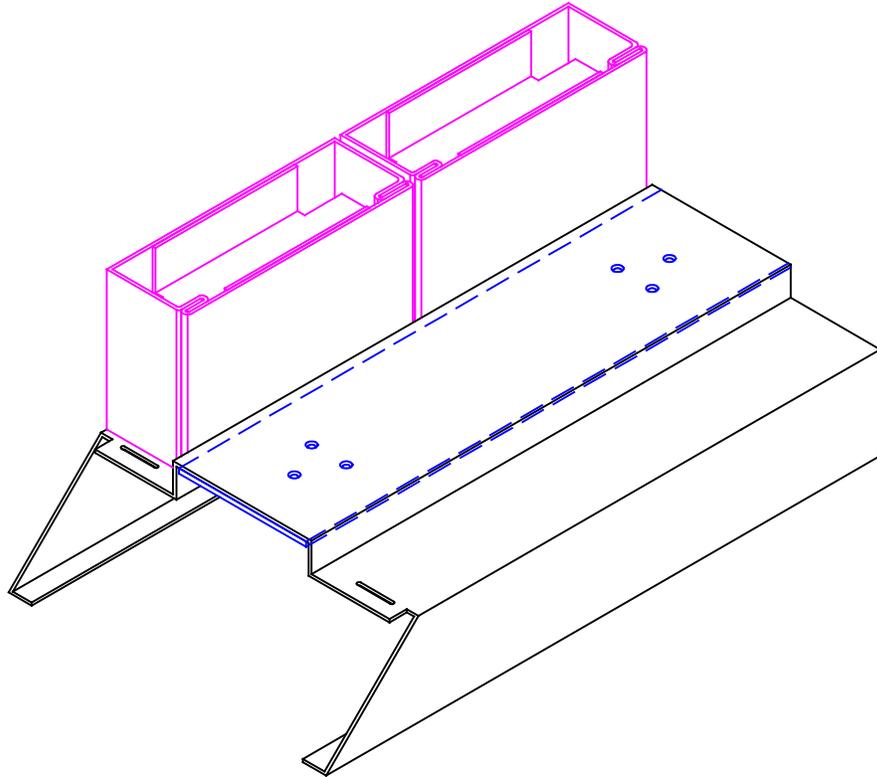
Spot welded



Hospital stops 90°
Spot welded



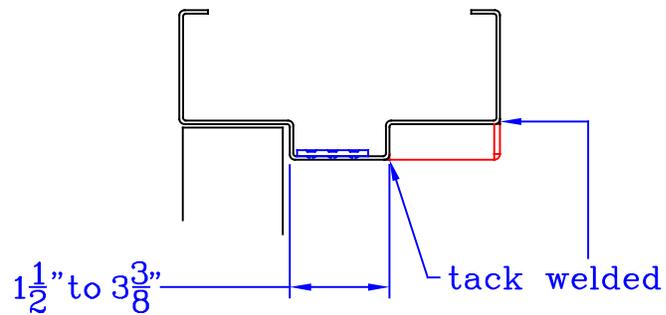
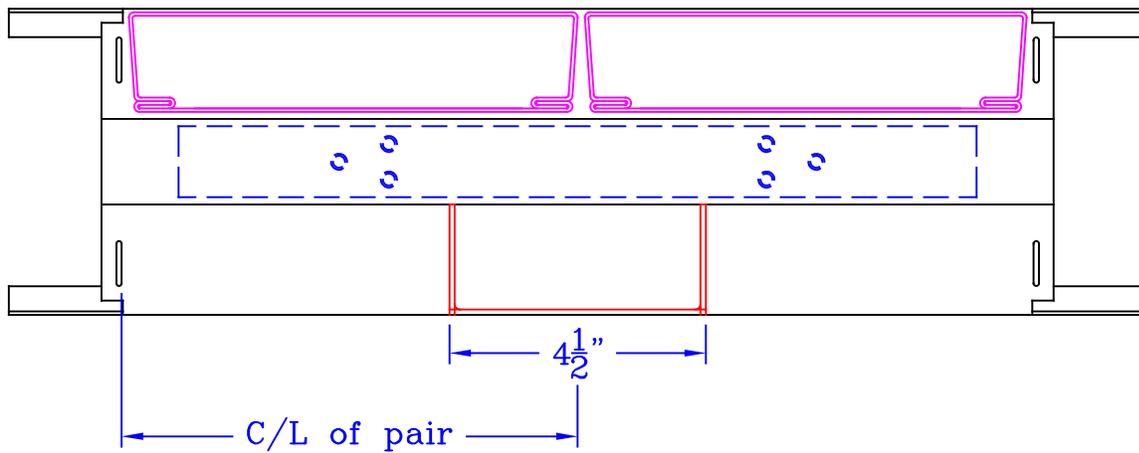
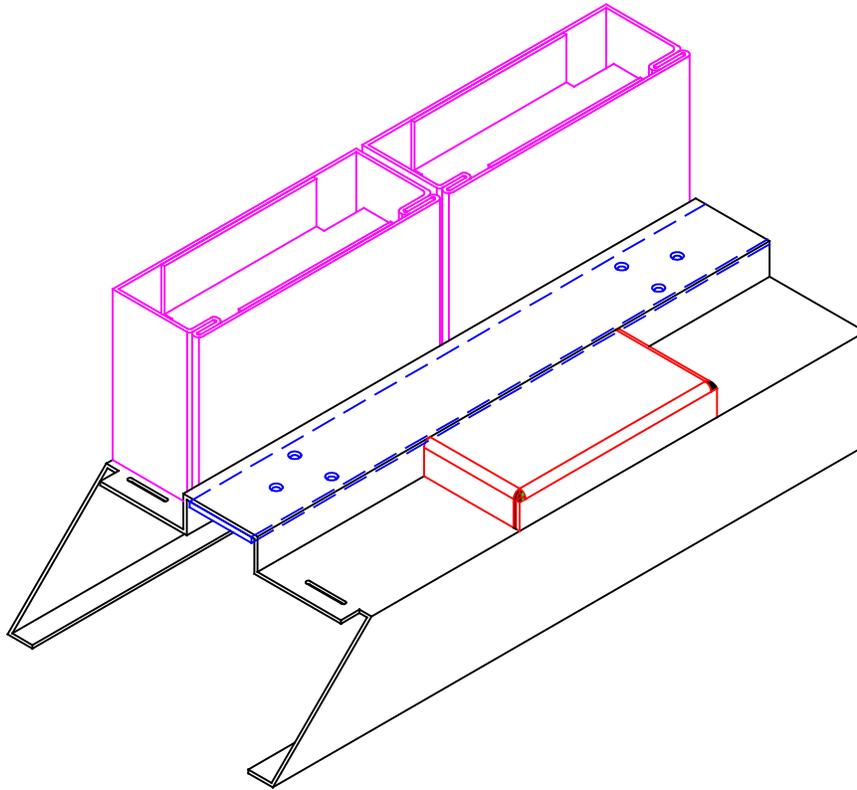
Removable hardware mullion reinforcement, 12ga, without filler block



Removable hardware mullion

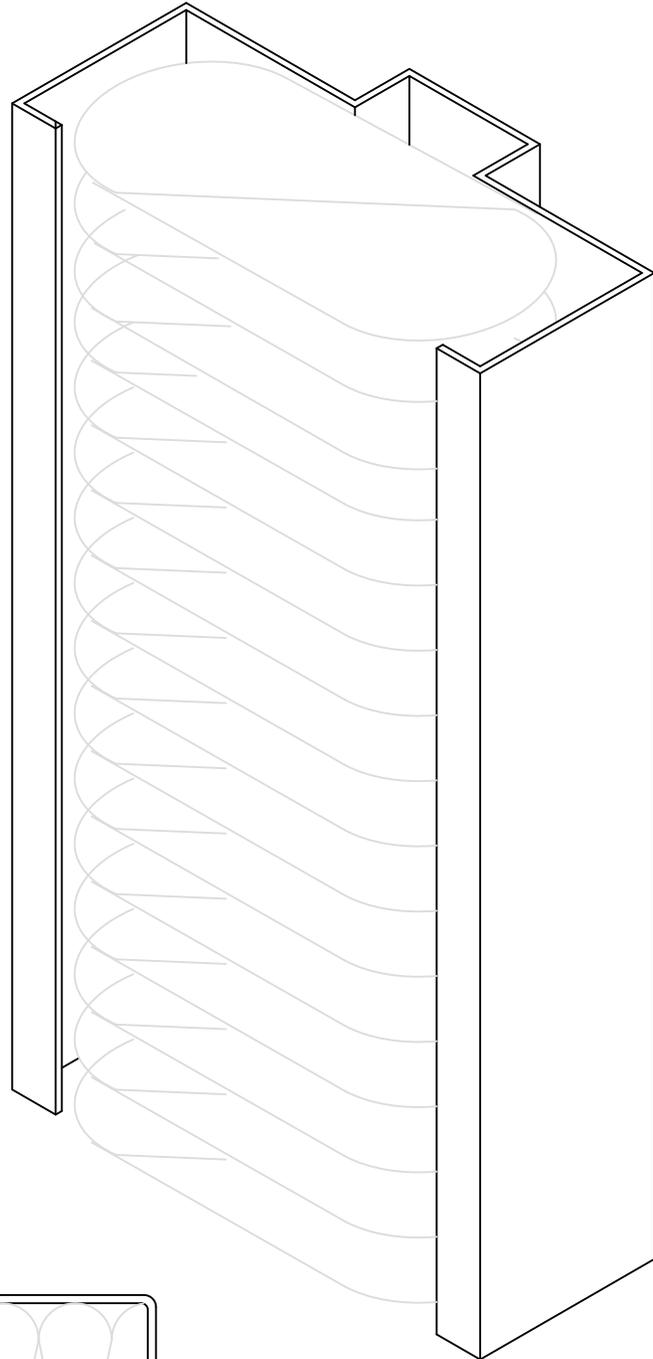
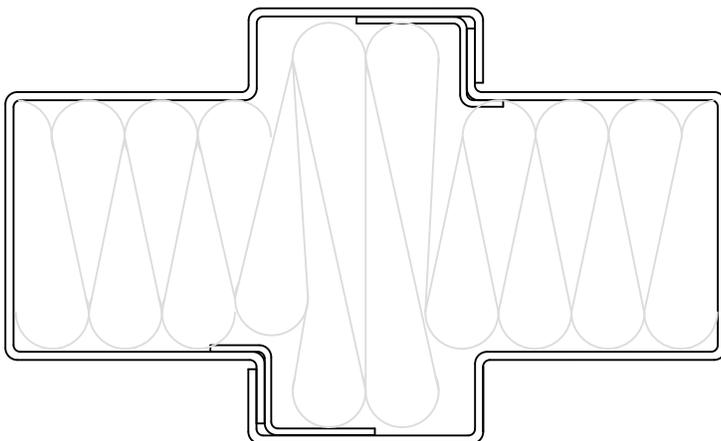
HWEMUA

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



Sound deadening mineral wool
For mullion upon request

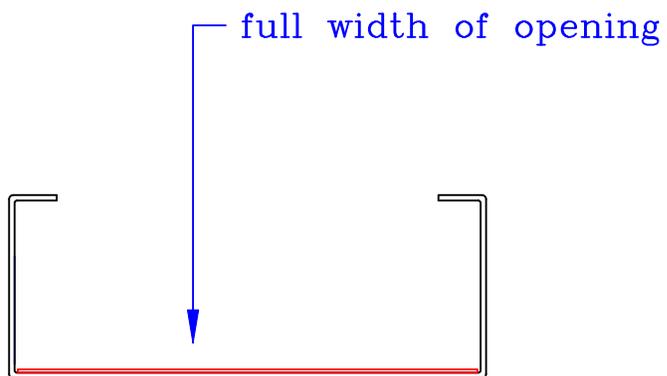
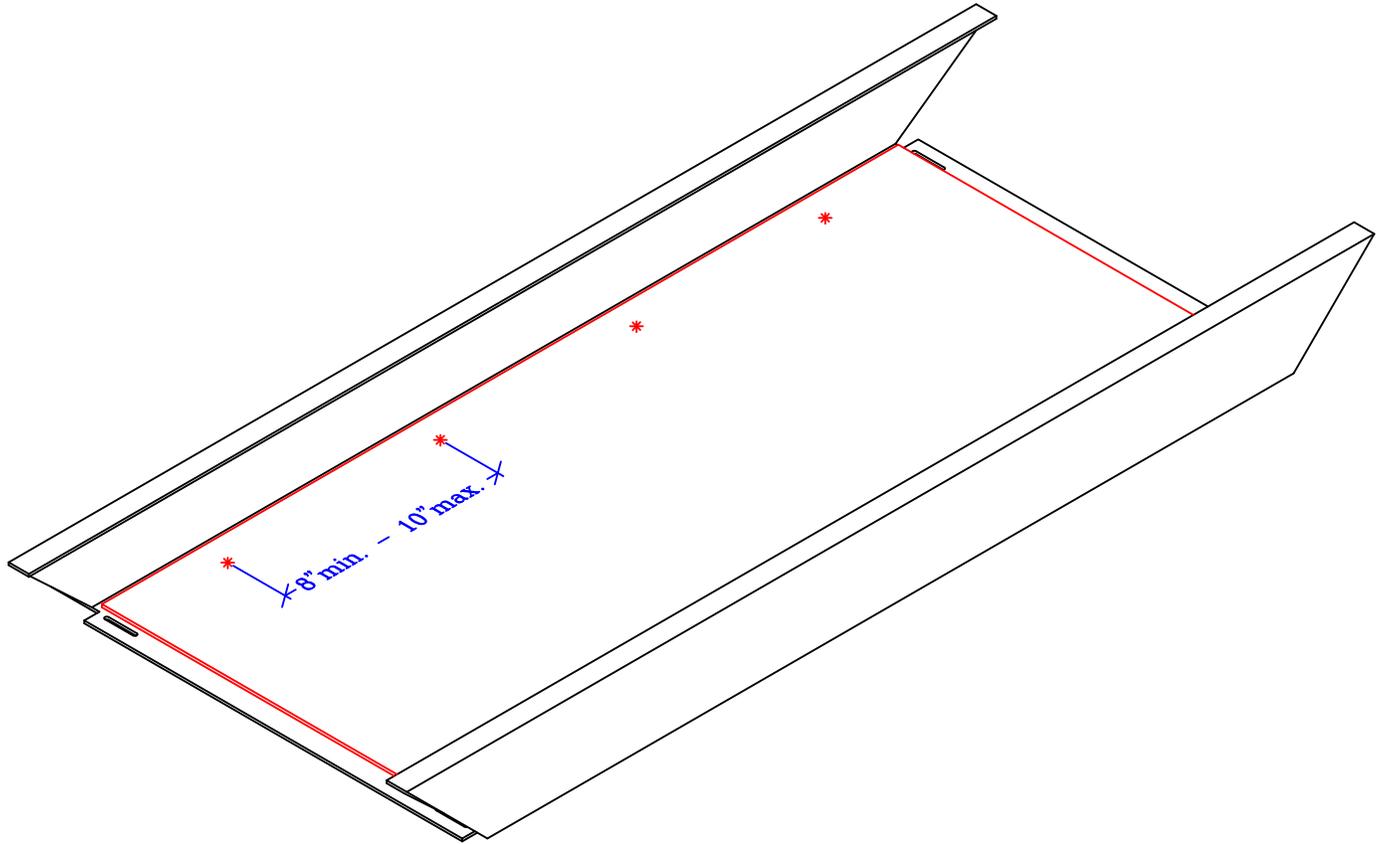
Other frame prep



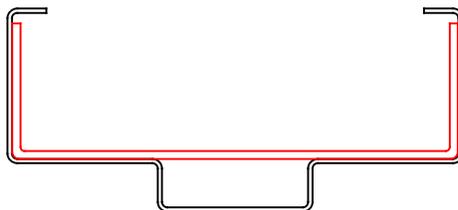
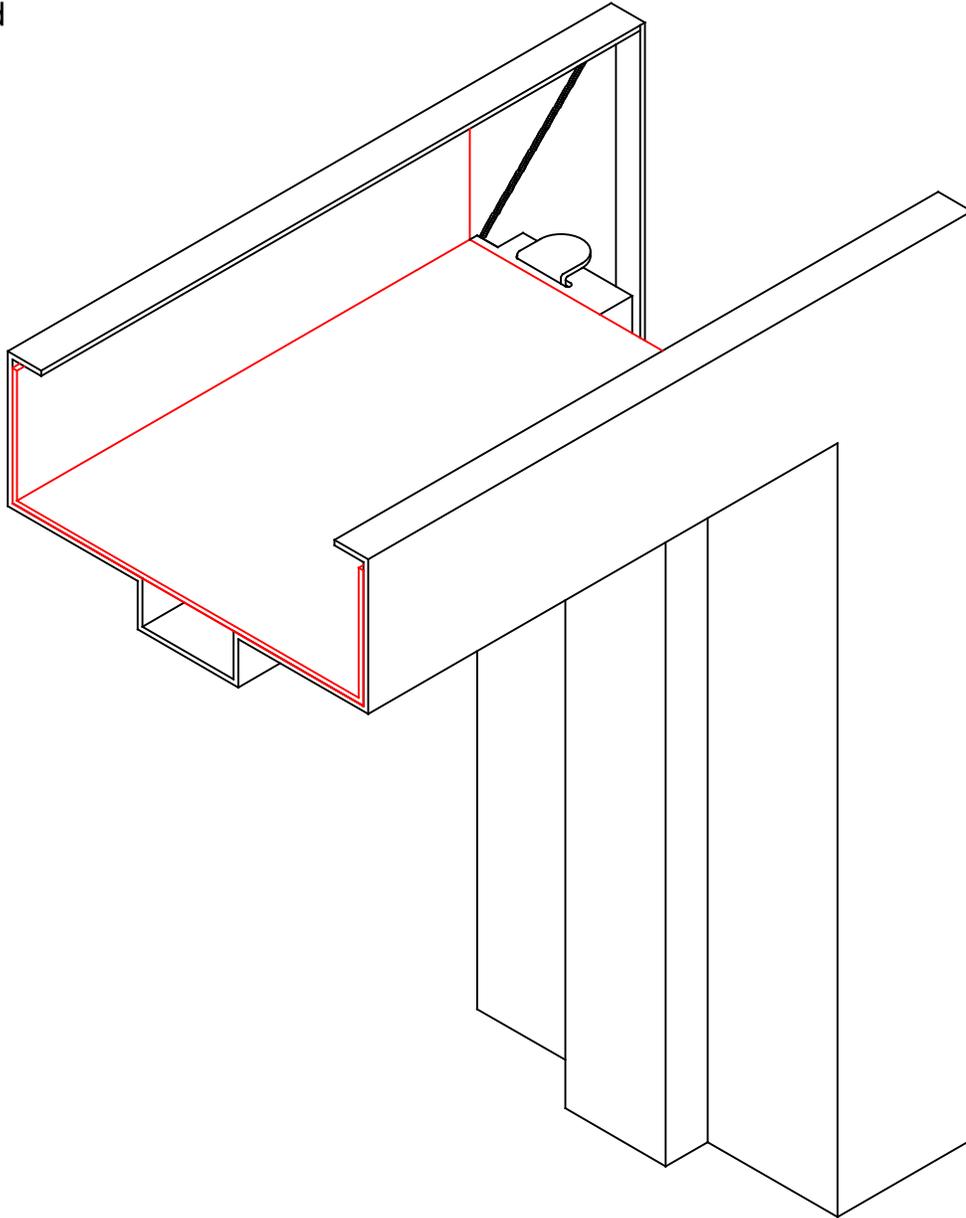
Mandatory for mullion when thermal break frame.

MW

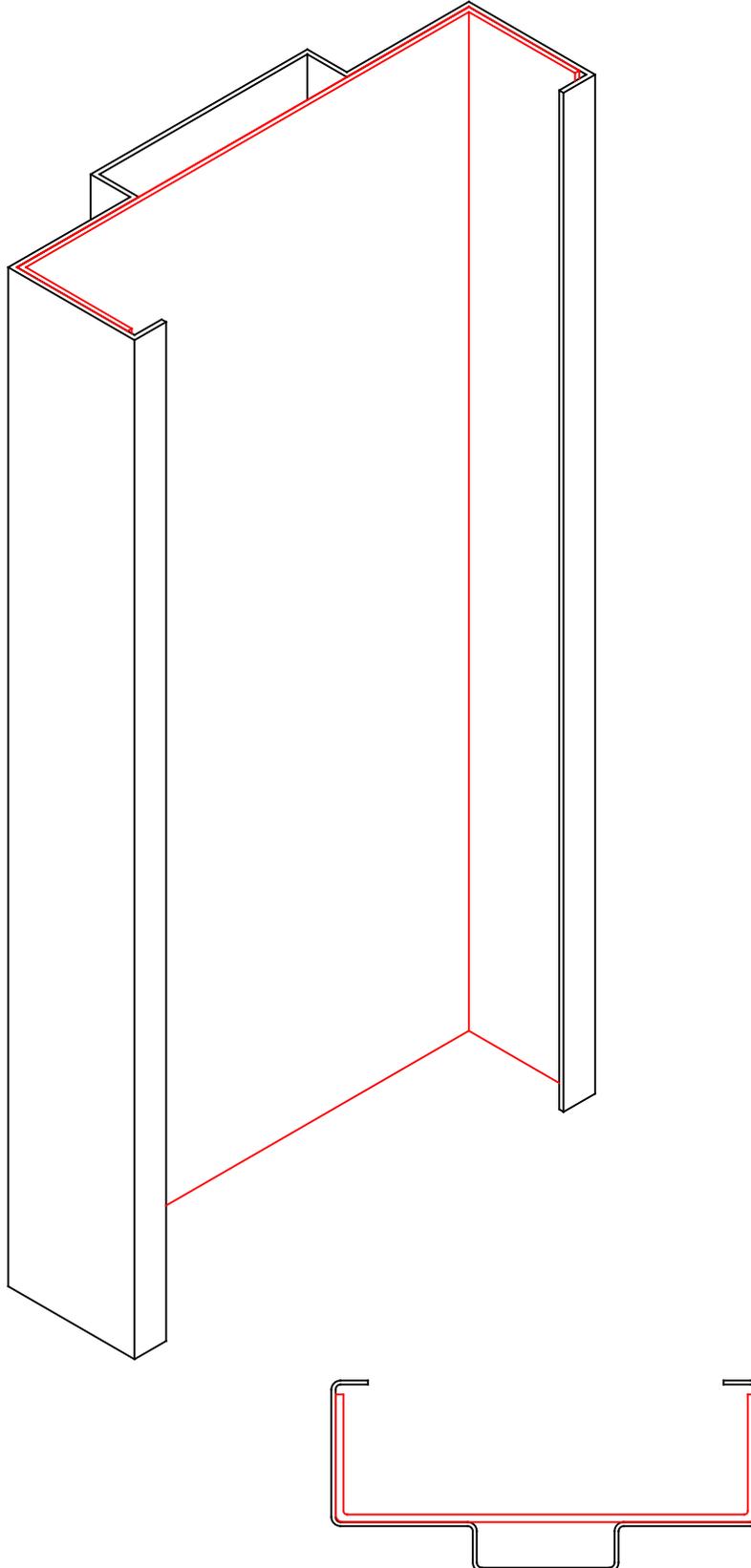
Reinforcing for by passing or bifold hardware, 12ga
Spot welded



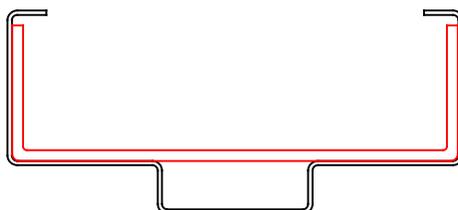
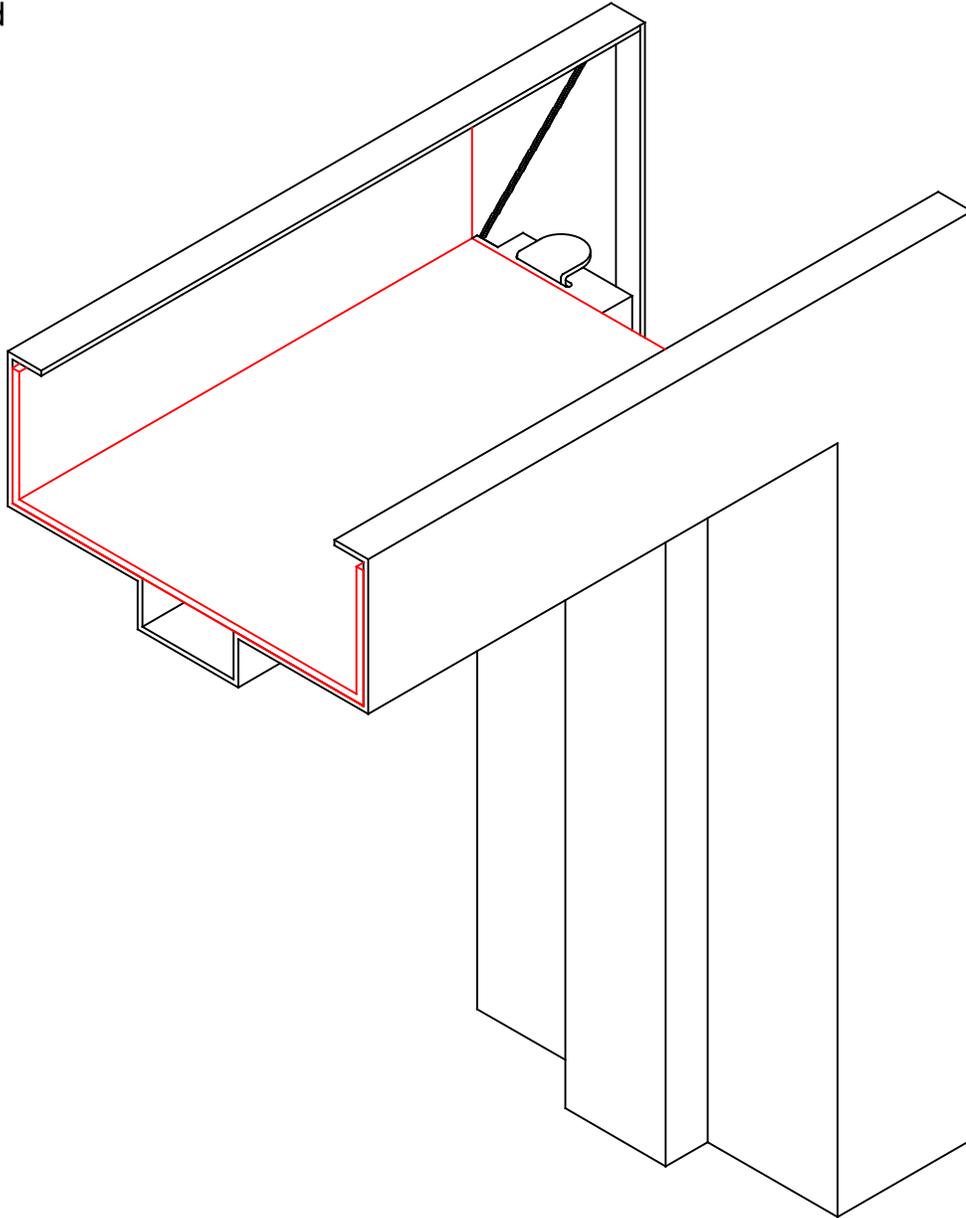
U reinforcement at head, 14ga
Spot welded



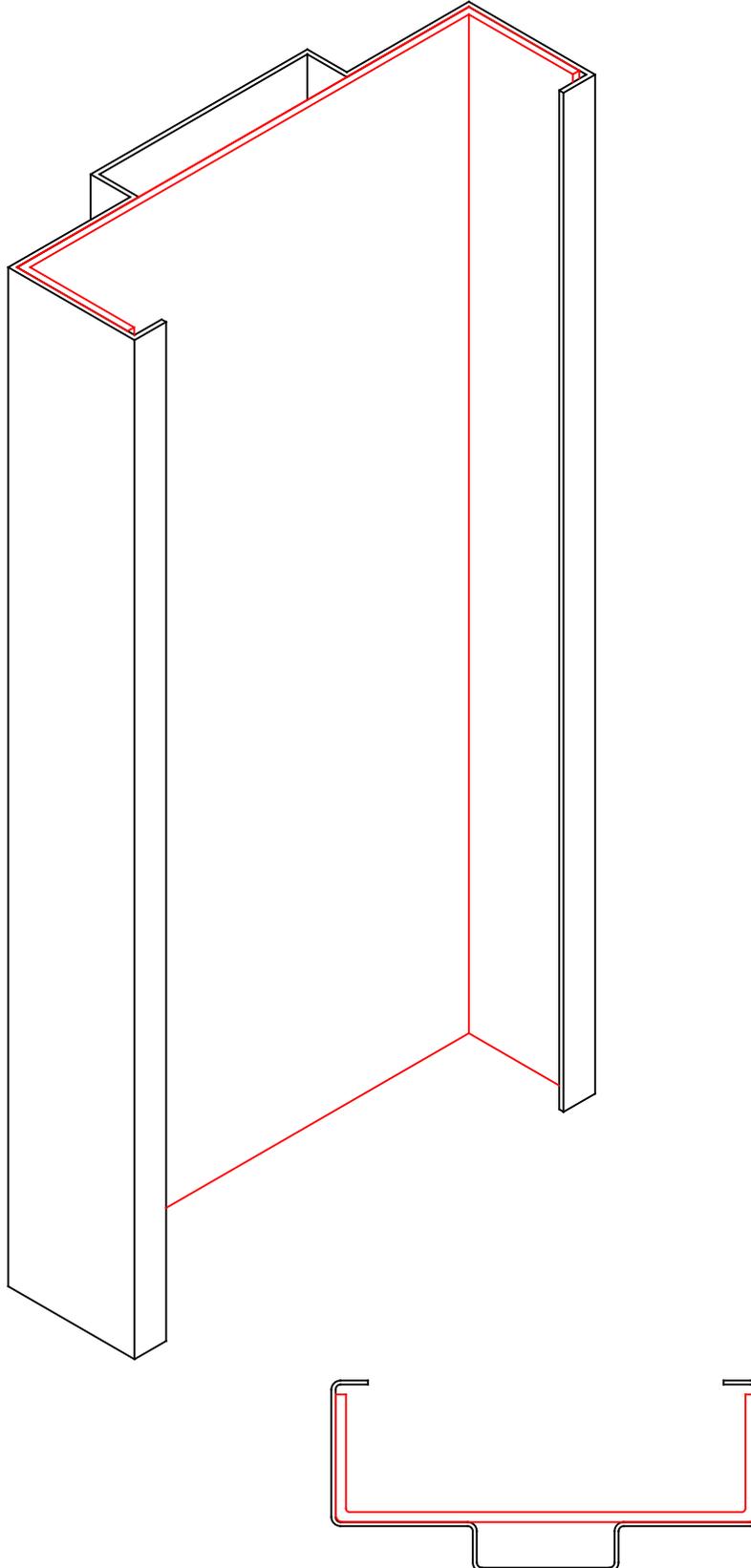
U reinforcement at jamb, 14ga
Spot welded



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>180 MINUTES FIRE DOOR FRAME</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  WHI- 000000-00144 <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
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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>Intertek W/N 18226</p>	<p>90 MINUTES FIRE DOOR FRAME</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <p>WHI- 000000-00163</p> <p>S</p> <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
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 <p>Intertek W/N 18242</p>	<p>90 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  <p>WHI- 000000-00222</p> <p>S</p> <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
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 <p>Intertek W/N 18244</p>	<p>90 MINUTES FIRE WINDOW FRAME</p> <p>CERTIFIED TO: UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p>  <p>WHI- 000000-54121</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
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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

 Intertek W/N 18240	<p>60 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p>  WHI- 000000-00156  SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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 Intertek W/N 18246	<p>60 MINUTES FIRE WINDOW FRAME CERTIFIED TO: UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p>  WHI- 000000-54123	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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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

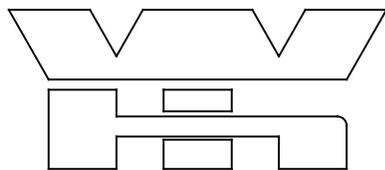
Mylar label with protective film

Label

<p>CONSTRUCTION LABEL - FIRE DOOR OR FRAME</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>000000-00161</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS</p>
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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

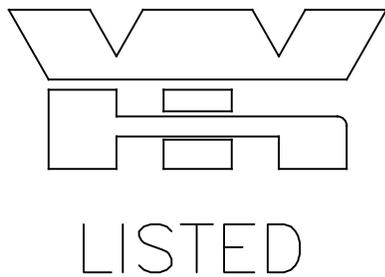
DE LA FONTAINE
FIRE DOOR FRAME
RATING 3 HRS

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

 Intertek W/N 18227	<p>90 MINUTES FIRE DOOR FRAME</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p>WHI- -00157 S</p> <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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 Intertek W/N 18243	<p>90 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p>WHI- -00160 S</p> <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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 Intertek W/N 18245	<p>90 MINUTES FIRE WINDOW FRAME</p> <p>CERTIFIED TO: UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p> <p>WHI- -54122</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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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

 Intertek W/N 18241	<p>60 MINUTES FIRE DOOR FRAME WITH TRANSOM AND/OR SIDELIGHT</p> <p>CERTIFIED TO: UL 10C - NFPA 252 - CAN/ULC S104 POS. PRES.</p> <p>WHI- -00155 S</p> <p>SMOKE & DRAFT CONTROL REQUIRES INSTALLATION OF A LISTED CAT. H GASKET</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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 Intertek W/N 18247	<p>60 MINUTES FIRE WINDOW FRAME</p> <p>CERTIFIED TO: UL 9 - NFPA 257 - CAN/ULC S106 POS. PRES.</p> <p>WHI- -54124</p>	 DE LA FONTAINE WWW.DELAFONTAINE.COM DO NOT REMOVE OR COVER LABEL SEE INSTALLATION INSTRUCTIONS
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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.

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

Label

FLORIDA BUILDING CODE APPROVED PRODUCT	 DE LA FONTAINE
FL46851	WWW.DELAFONTAINE.COM
DO NOT REMOVE OR COVER LABEL	ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC
SINGLE & 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	
 000000-21001	

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>FLORIDA BUILDING CODE APPROVED PRODUCT</p> <p>FL46851</p> <p>SINGLE & 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> 000000-21001</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
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<p>FLORIDA BUILDING CODE APPROVED PRODUCT</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> 000000-21000</p>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
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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

FLORIDA BUILDING CODE APPROVED PRODUCT	
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	 000000-20751 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>HURRICANE-RESISTANT DOOR/FRAME CONSTRUCTION</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>	 <p>DE LA FONTAINE</p> <p>WWW.DELAFONTAINE.COM</p> <p>ORLANDO, FL GRAND PRAIRIE, TX CHARLOTTE, NC SHERBROOKE, QC</p>
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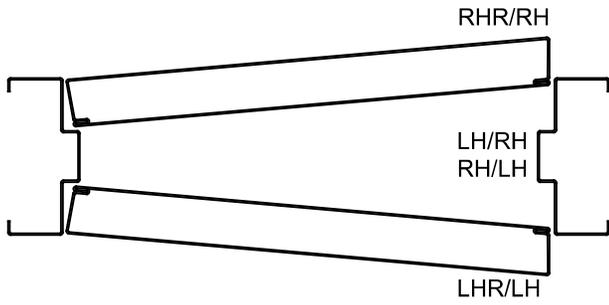
Located between 1st and 2nd hinge prep when butt hinges or
at top channel when continuous hinge.

HURCL

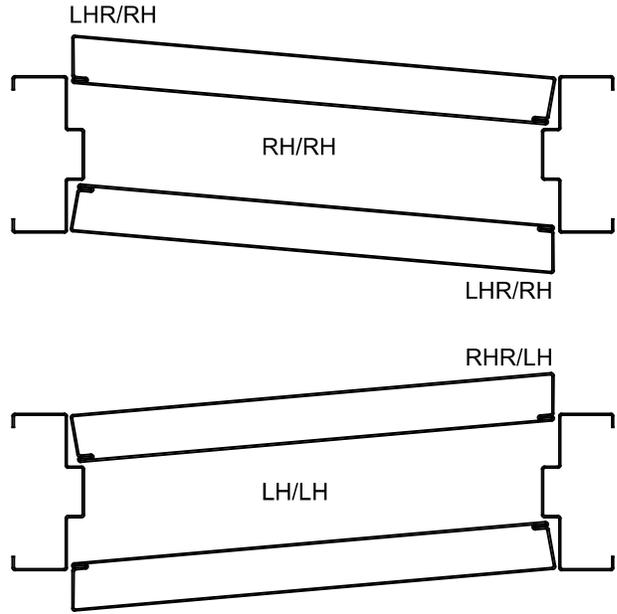
Communicating frame

Handing shown based on any and all point of views

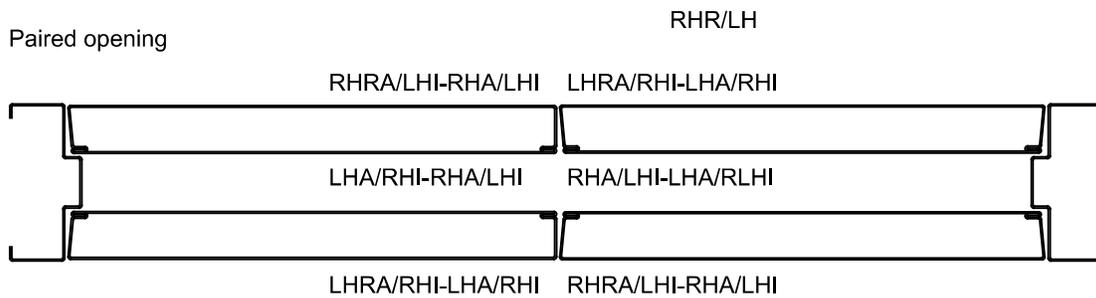
Single opening : hinges on same jamb



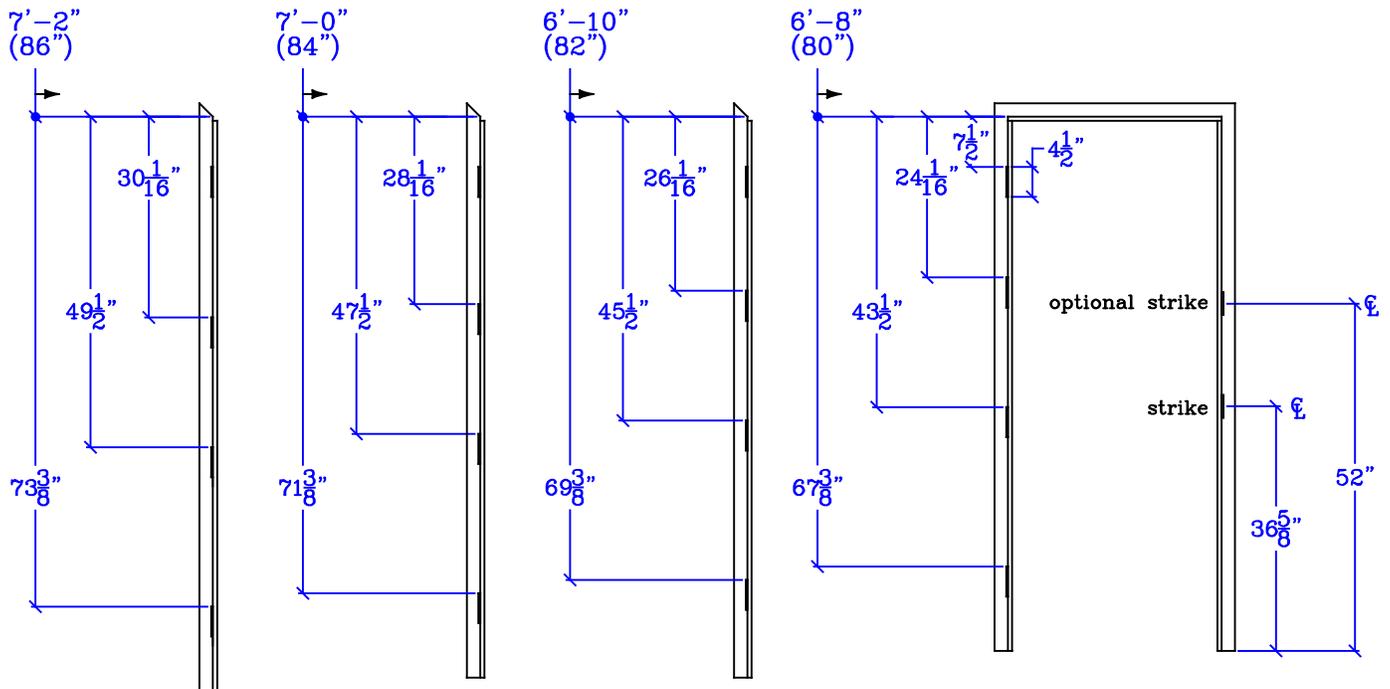
Single opening : hinges on opposite jambs



Paired opening



Dutch door frame
DLF location shown

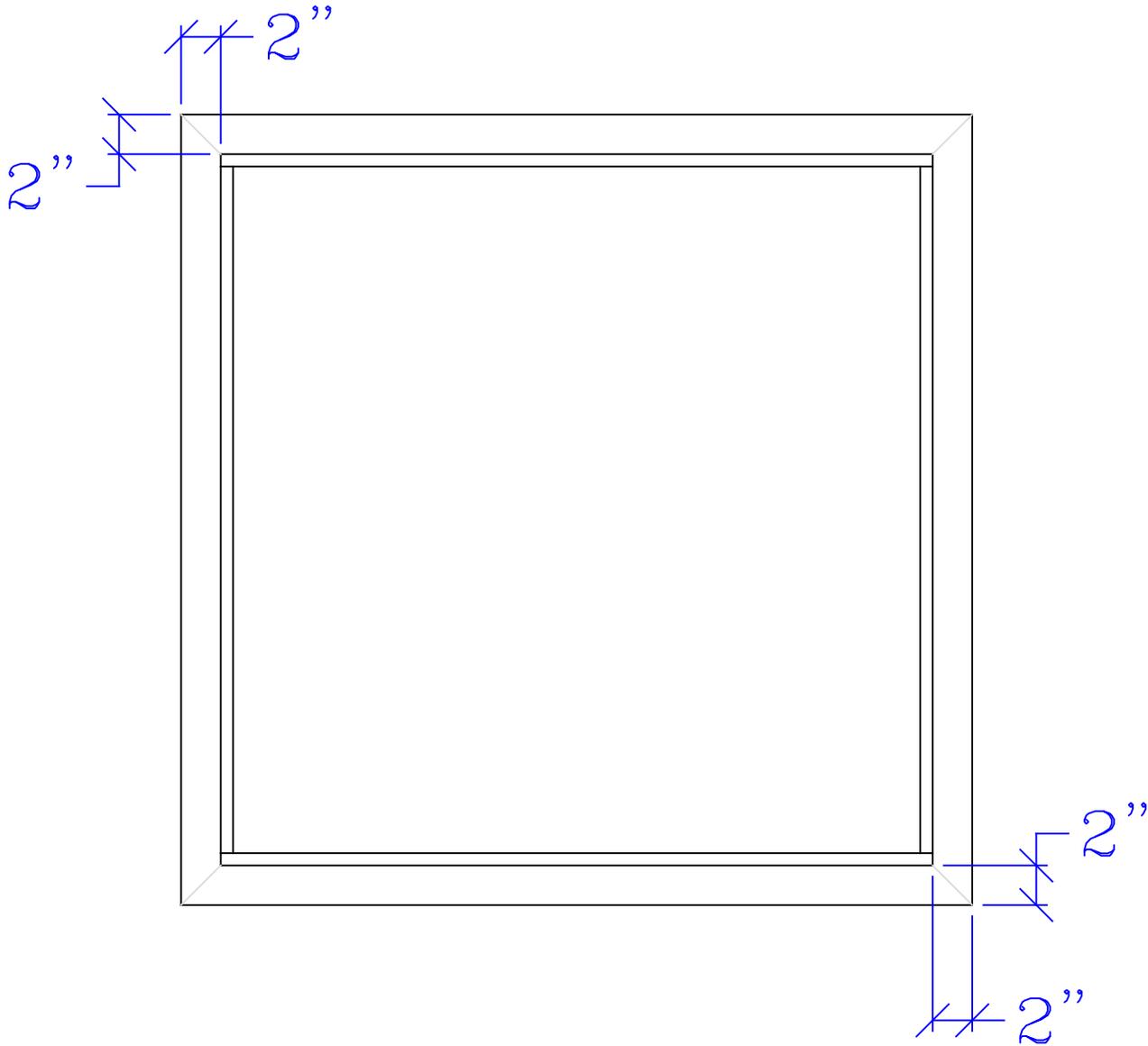


Specialty frame

DUTCH

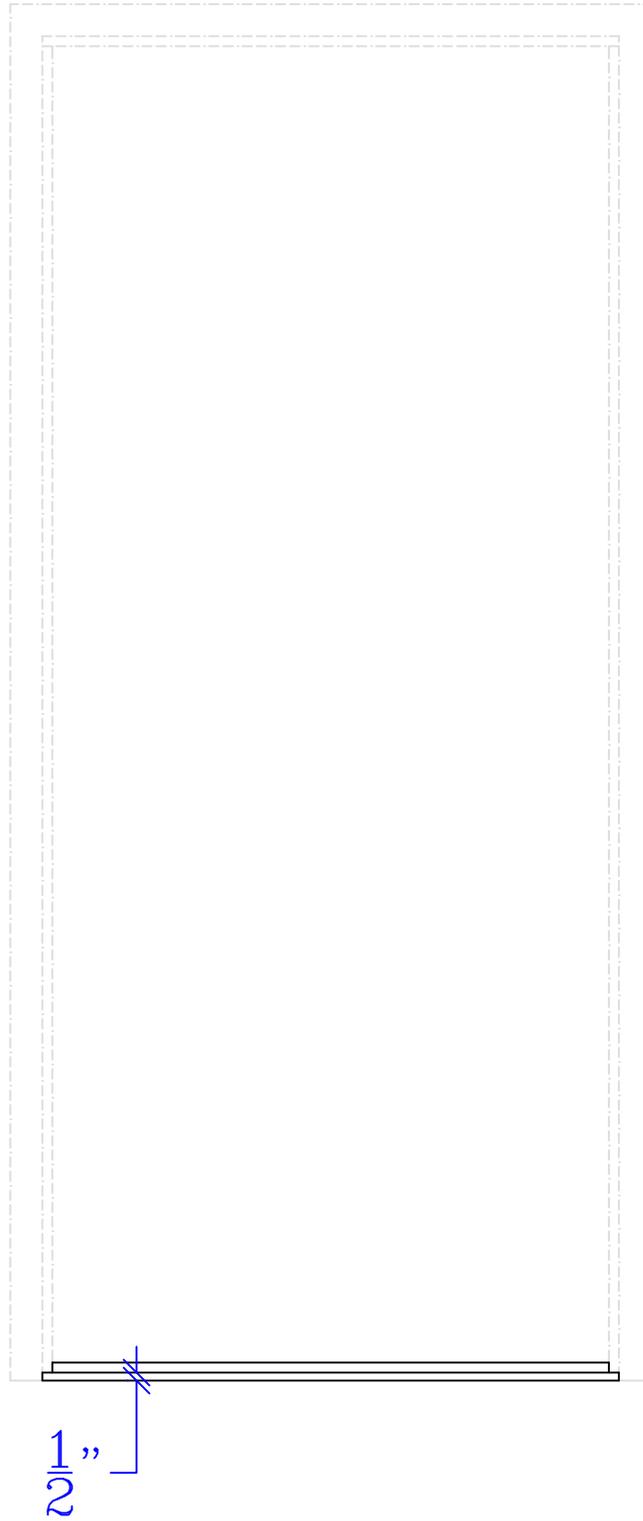
2" sill with 45° miters (4 sided frame)

Welded or knock down



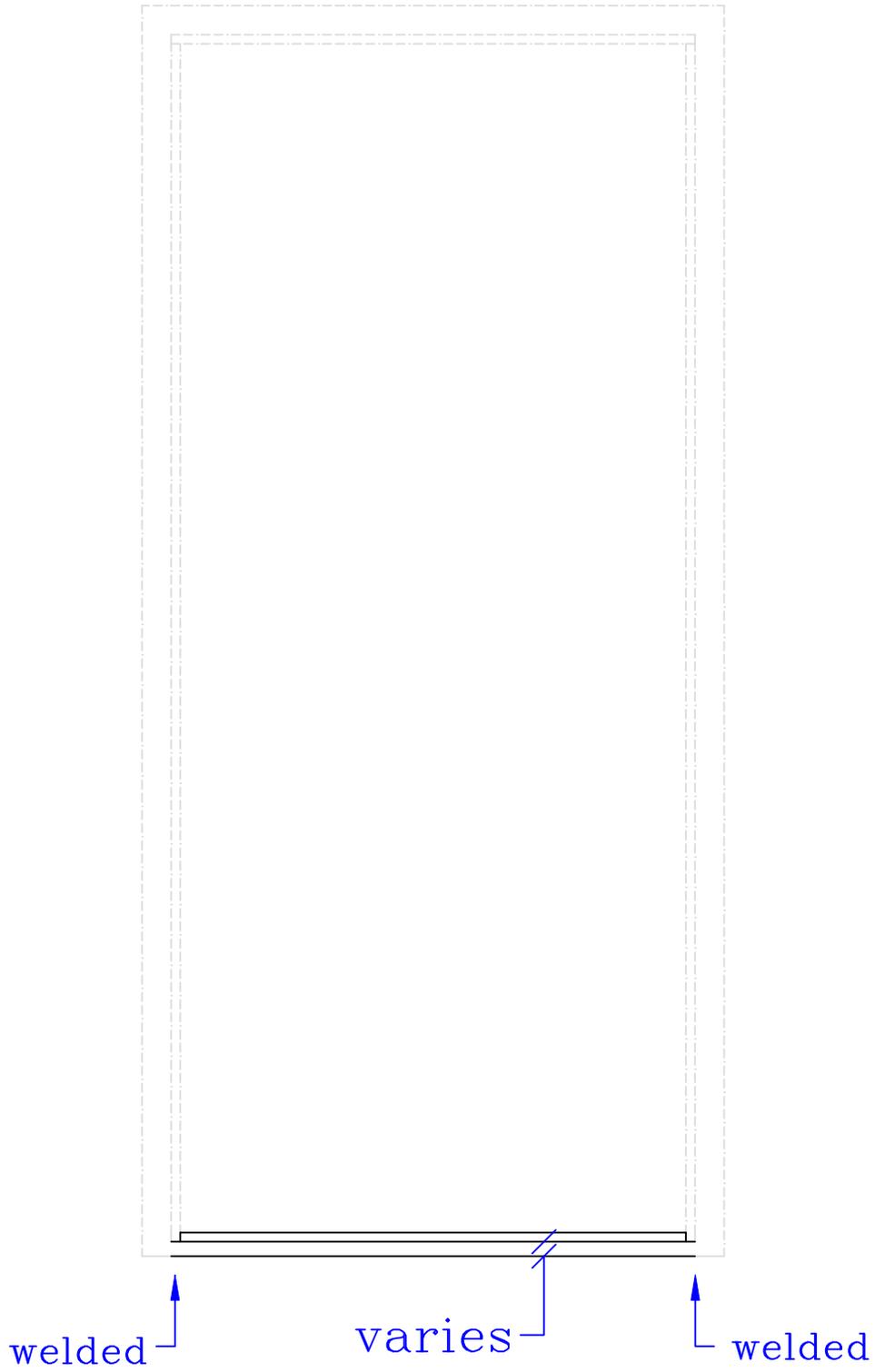
1/2" sill with square ends for standard 3 sided frame
Shipped loose

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/ft² total both sides per the single spot test. In SI units it would be 90g/m² 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/ft² total both sides per the single spot test. In SI units it would be 150g/m² total both sides per the same test and listed under ZF180.

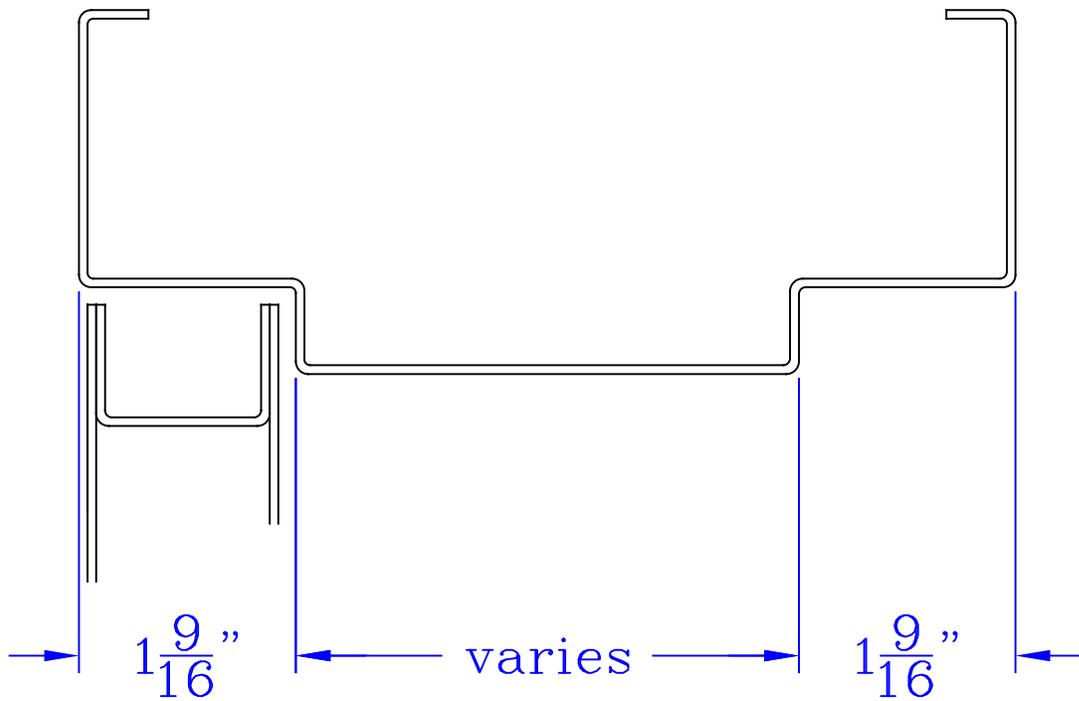
G90(Z275) hot dipped galvanized steel

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.

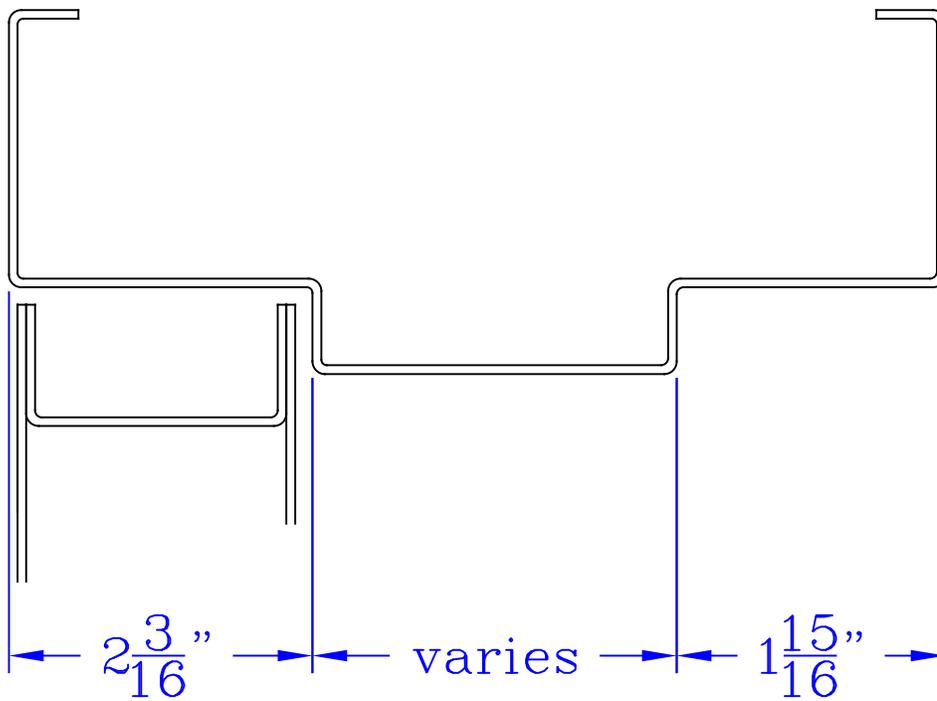
Zinc coating of 0.80 oz/ft² total both sides per the single spot test. In SI units it would be 235g/m² total both sides per the same test and listed under Z275.

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



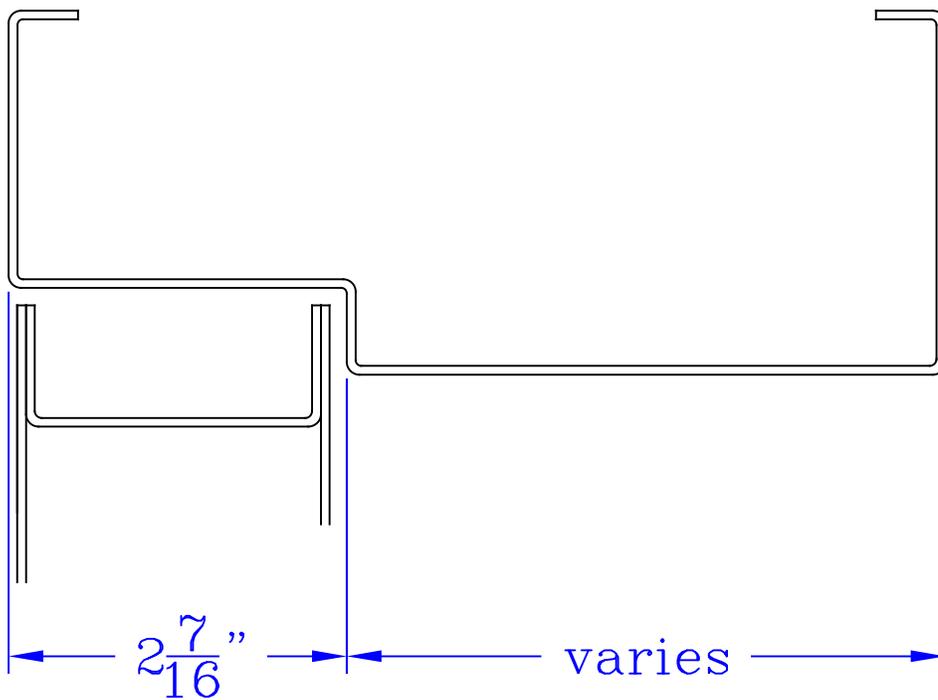
For LR, SR, DR and DW series

Frame profile for 2" door thickness
At jambs and head



For LR, SR, DR and DW series

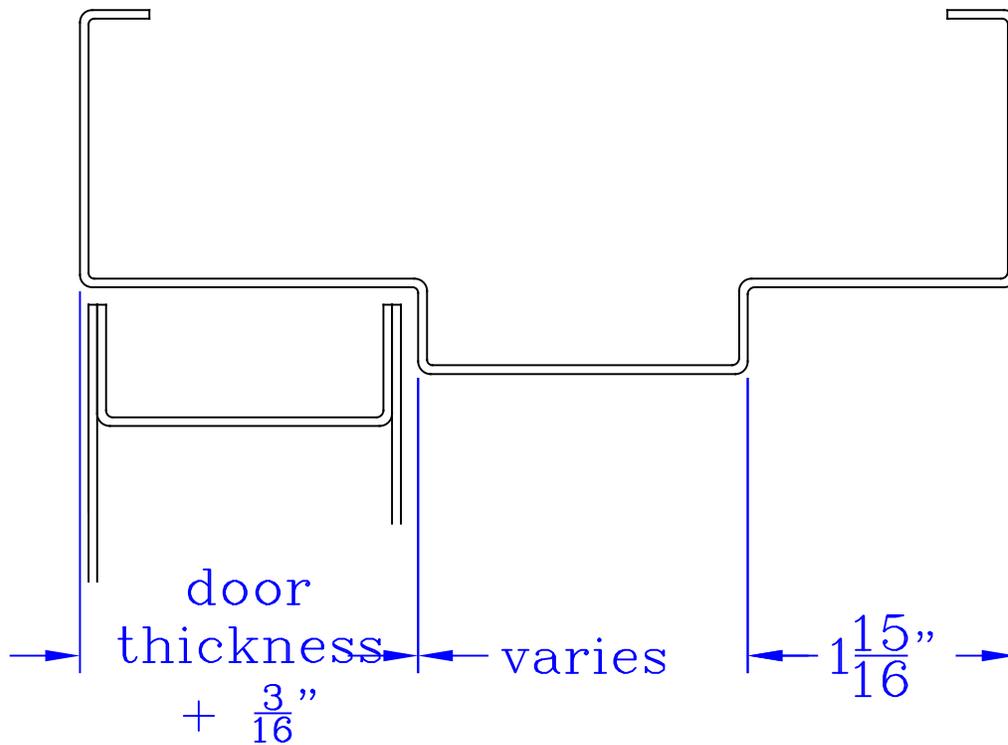
Frame profile for 2 1/4" door thickness
At jambs and head



For LR, SR, DR and DW series

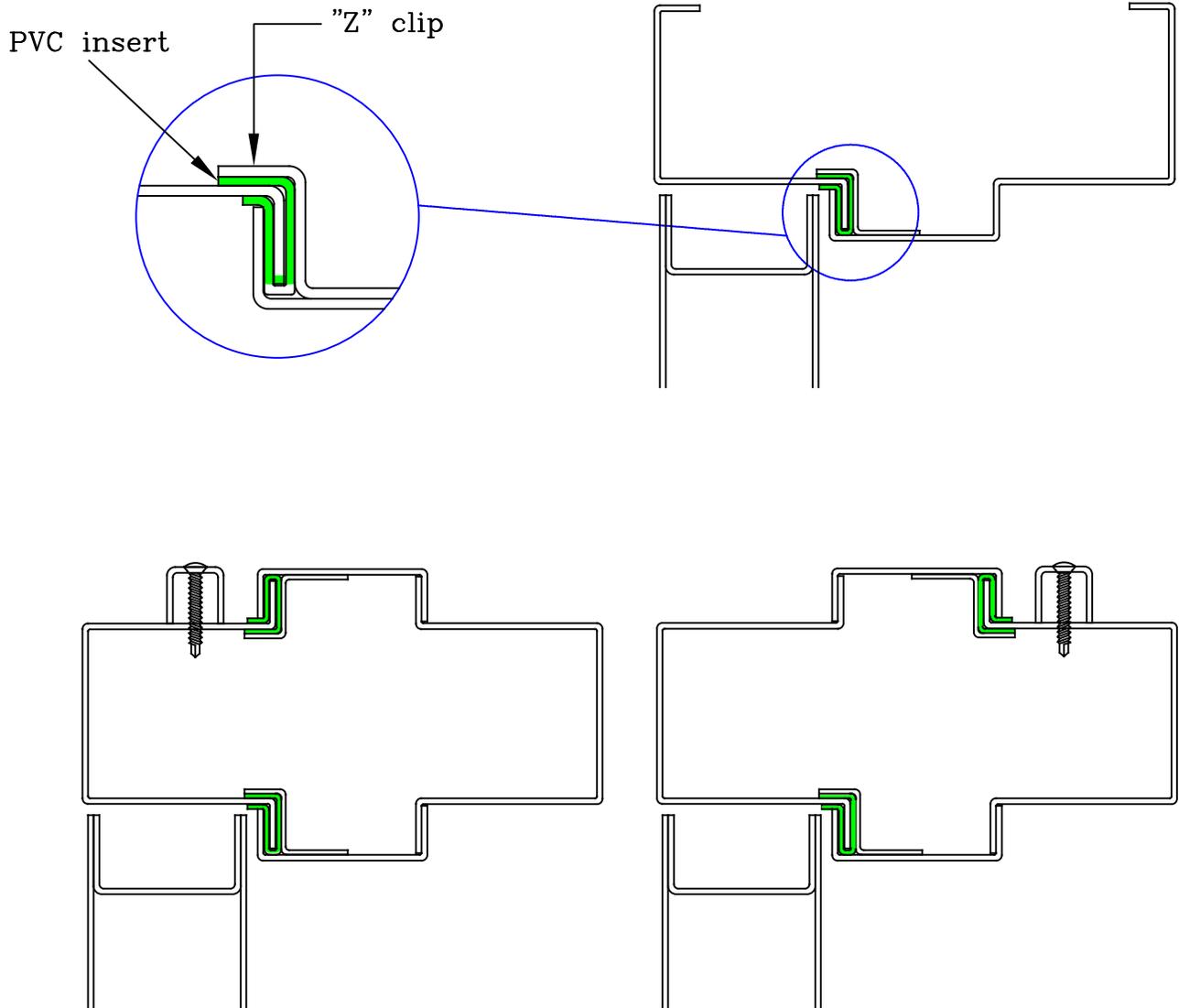
Frame profile for special door thickness

At jambs and head



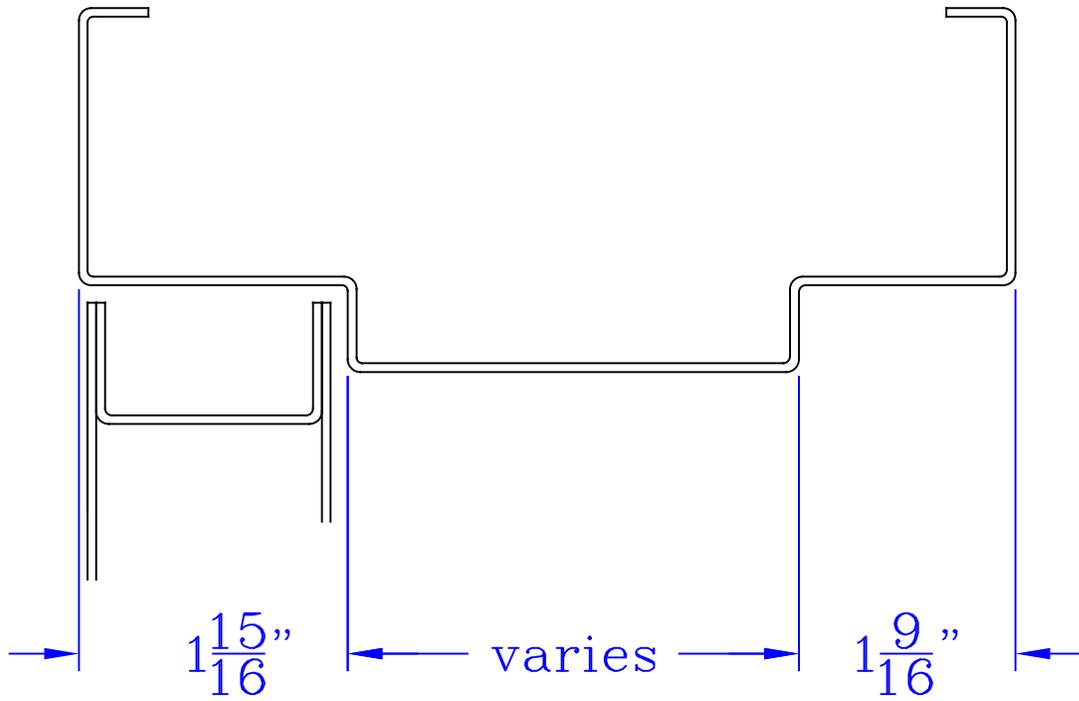
For LR, SR, DR and DW series

Thermal break frame
At jambs, head and mullion



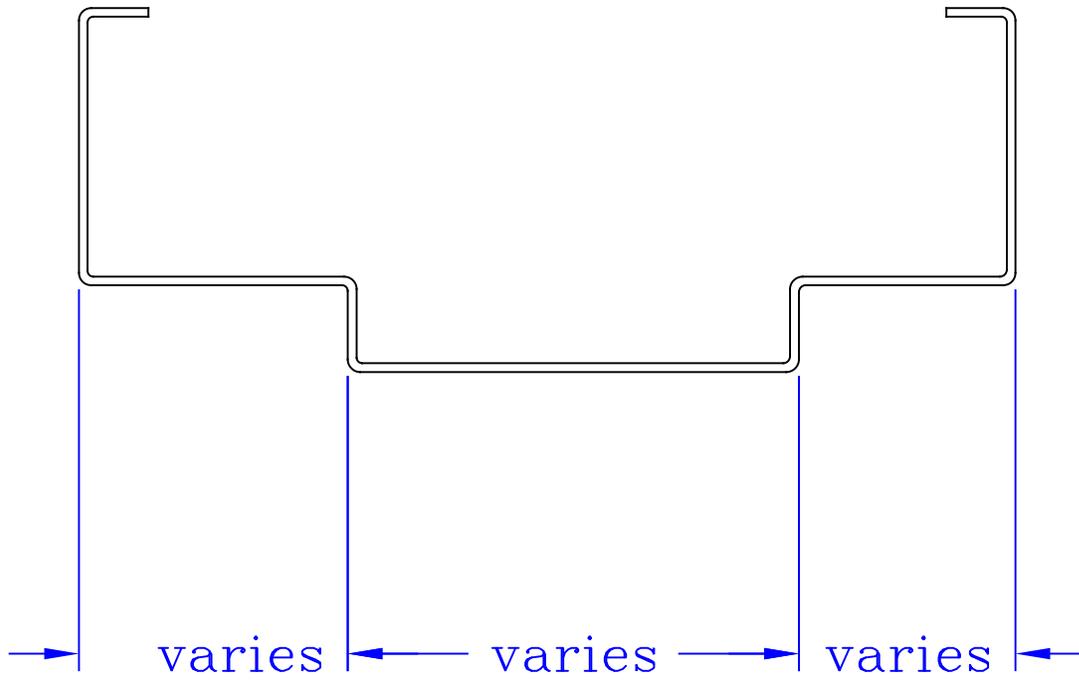
For welded 16ga or 14ga frames only.
Not available fire rated.

Unequal rabbet
At jambs and head



For LR, SR, DR and DW series

Unequal rabbet
For elevations



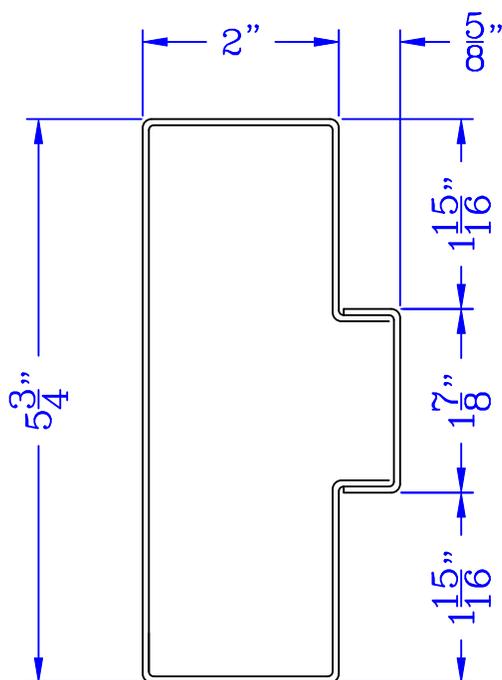
For LR, SR, DR and DW series

Closed back

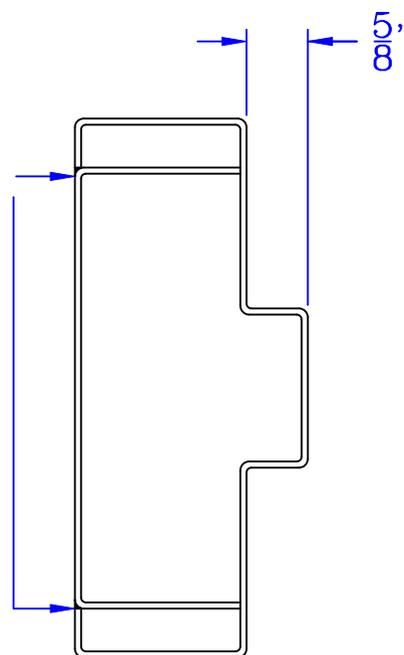
At jambs and head

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

For all else.

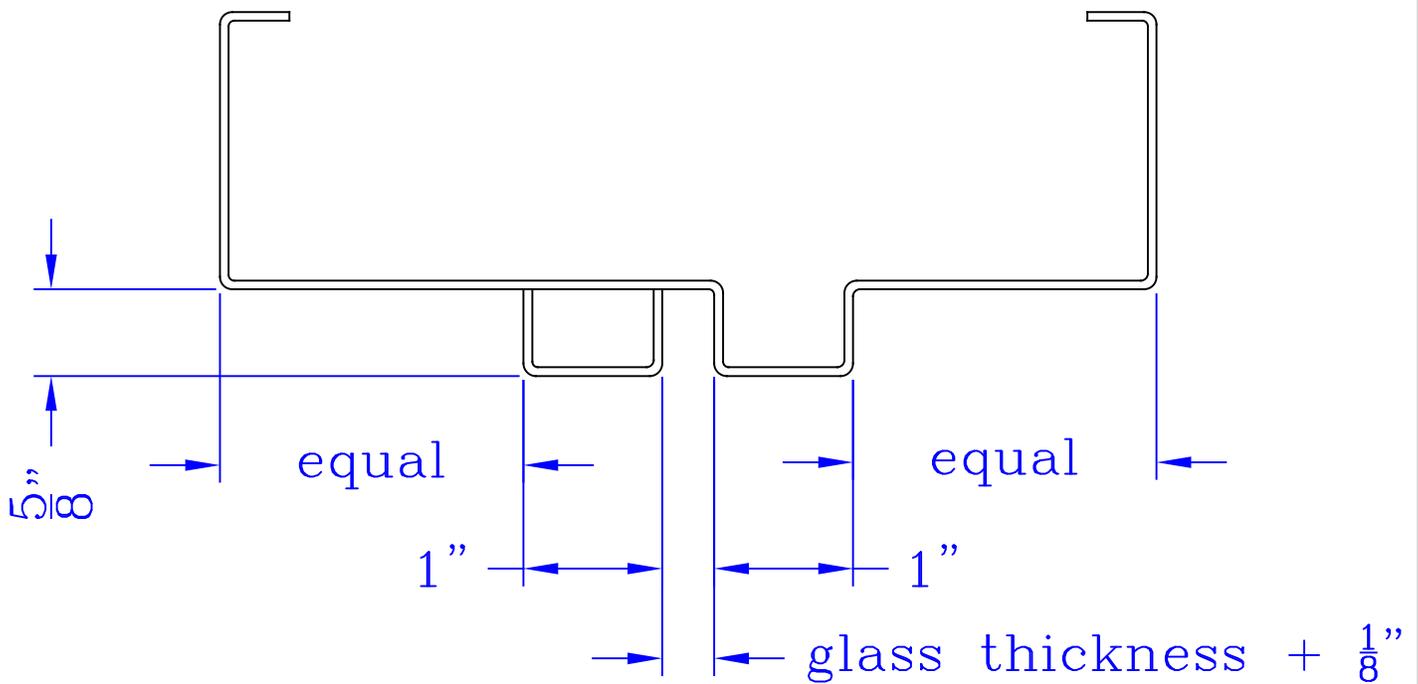


tack welded,
bonded,
grinded smooth



Centered glass

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

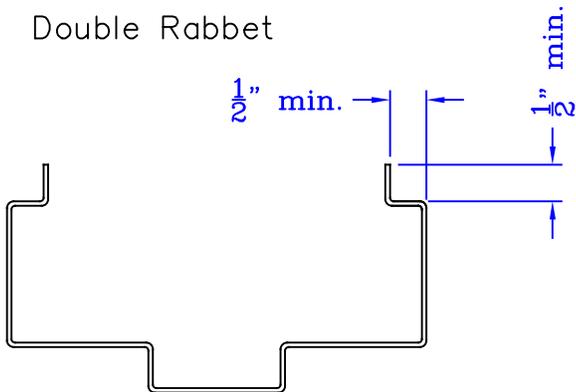


For LR, SR, DR and DW series

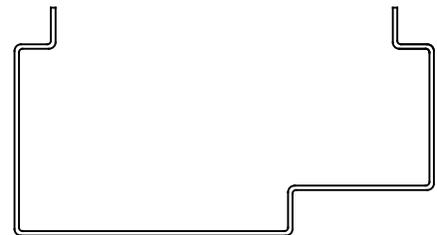
Caulking groove

At jambs and head

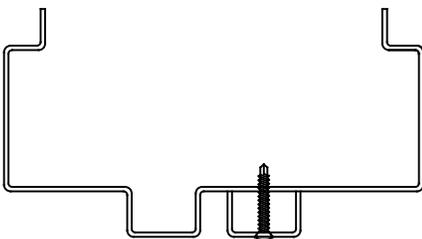
Double Rabbet



Single Rabbet



Centered glass



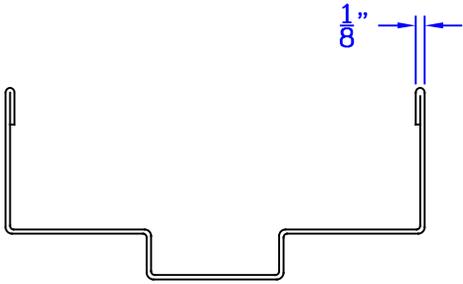
Cased Open



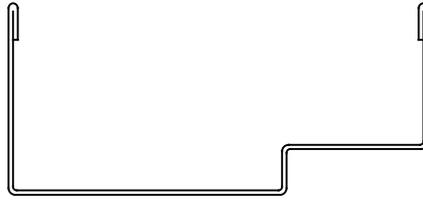
Hemmed

At jambs and head

Double Rabbet



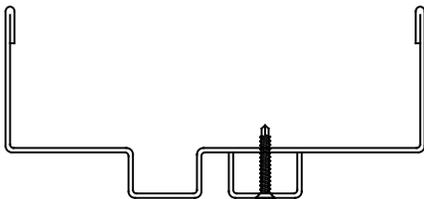
Single Rabbet



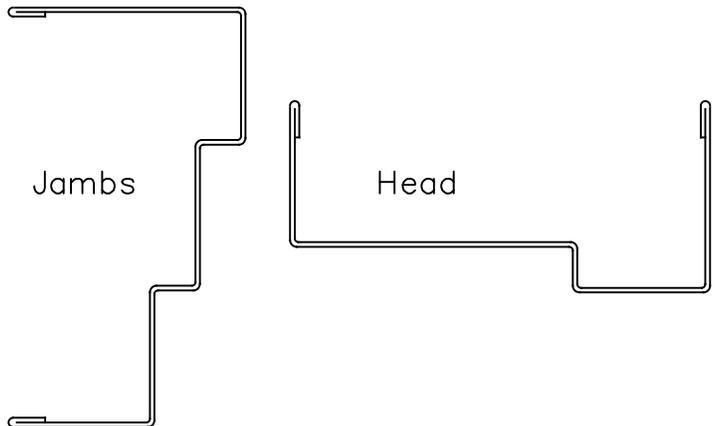
Cased Open



Centered glass

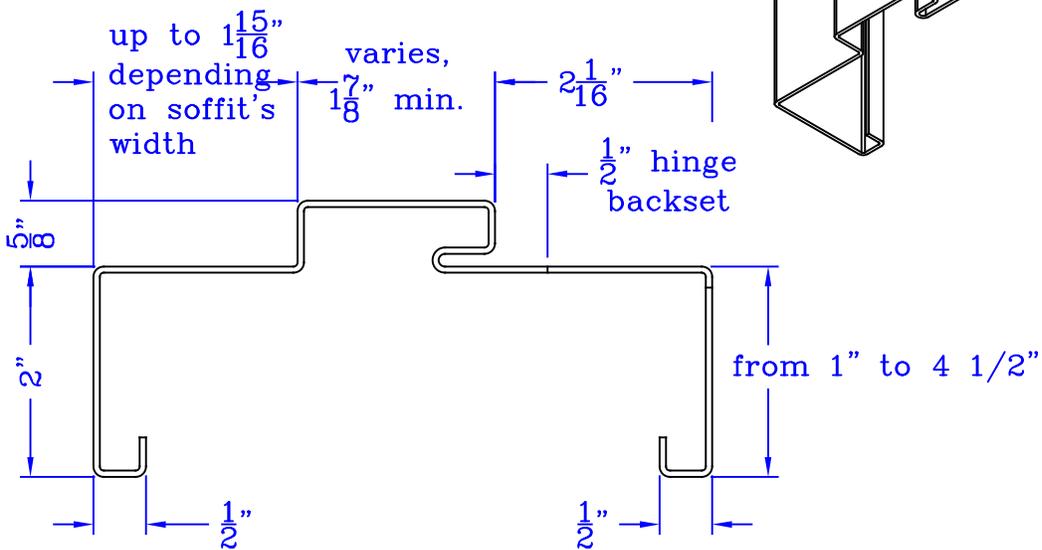
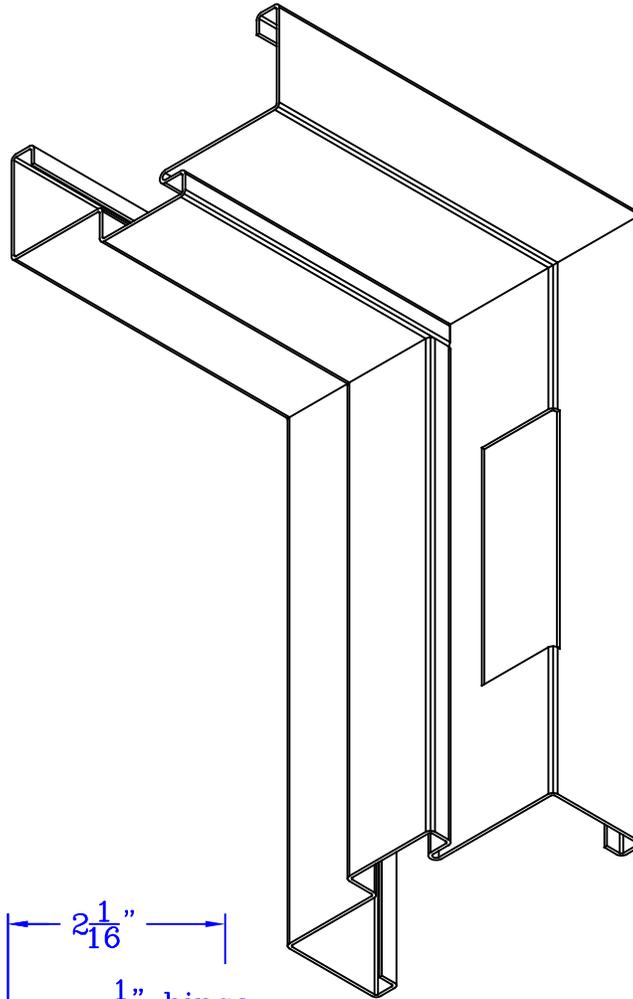


Double Egress



Kerf frame

At jambs and head



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



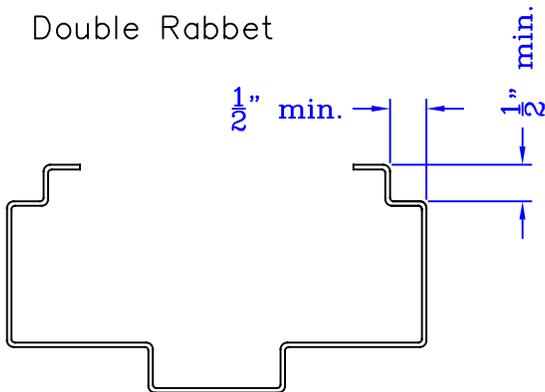
Weatherstripping for Kerf frame

Shipped loose

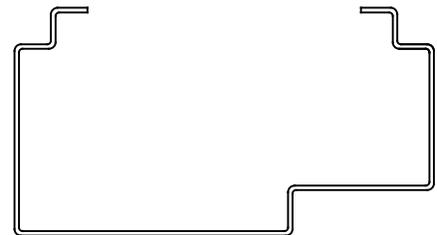


Shadow line
At jambs and head

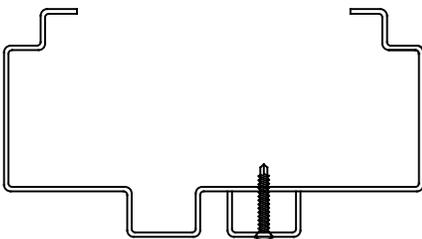
Double Rabbet



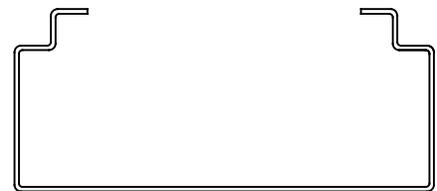
Single Rabbet



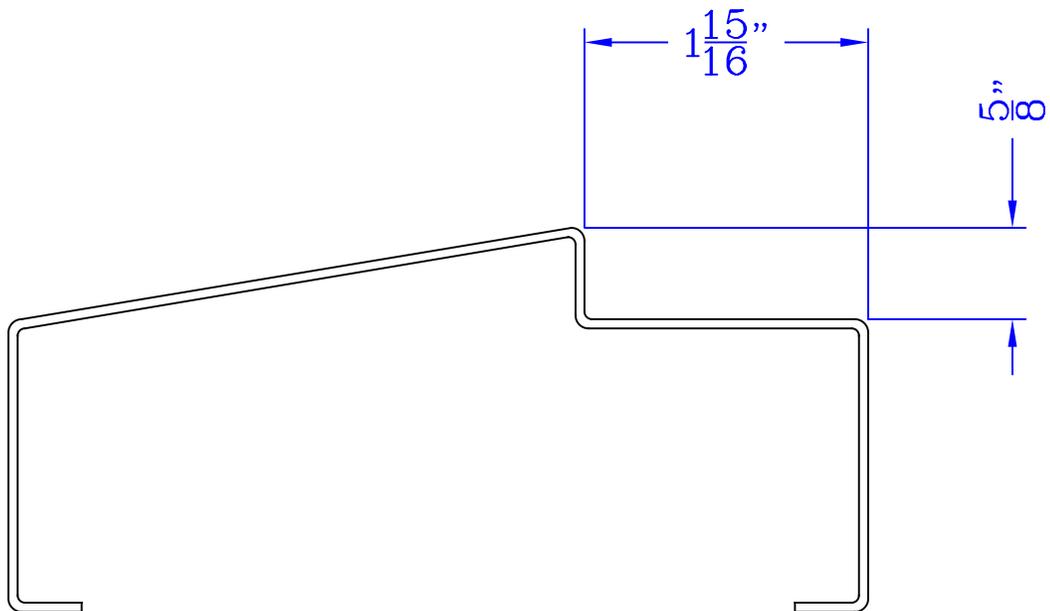
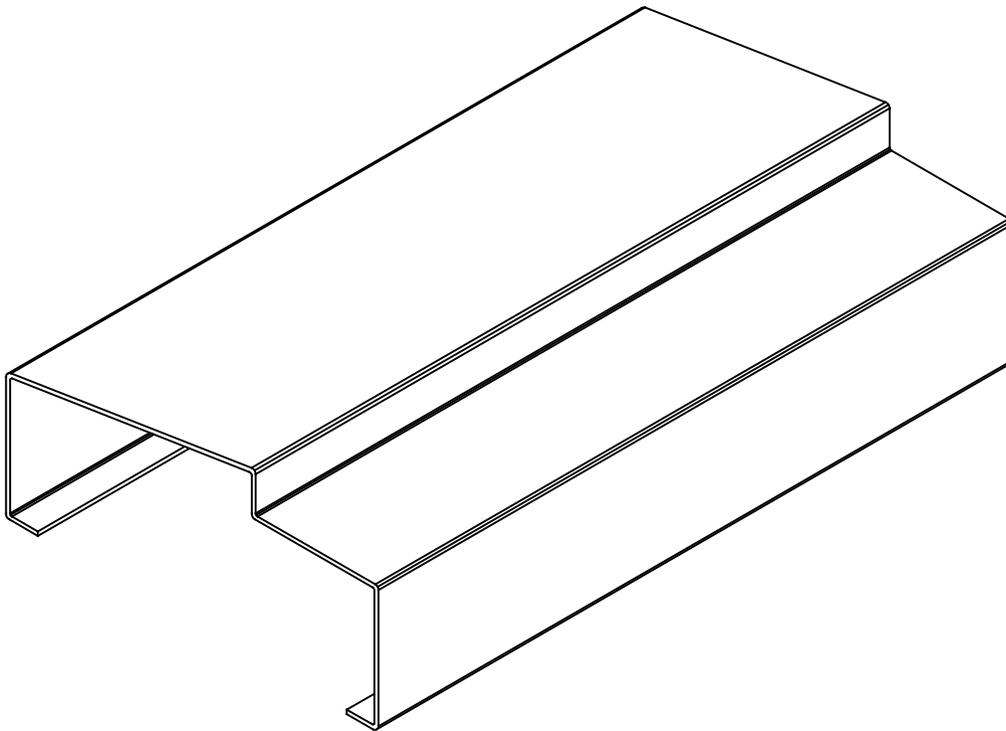
Centered glass



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

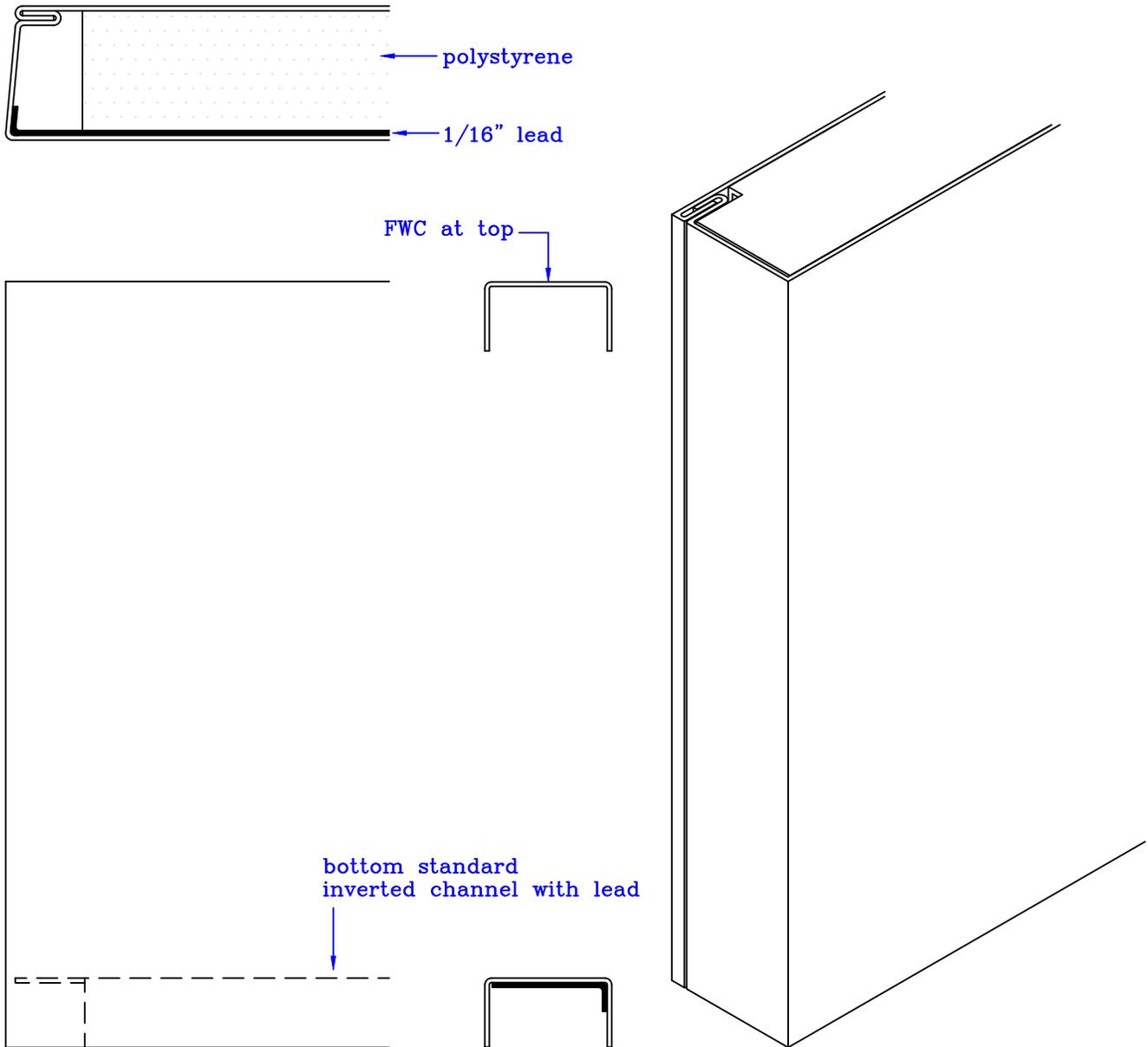
ERS - Emergency Release Stop Frame, Cased Open with Single Rabbet	S-18
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Windstorm

HUR - General information.....	S-19
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Lead-lined

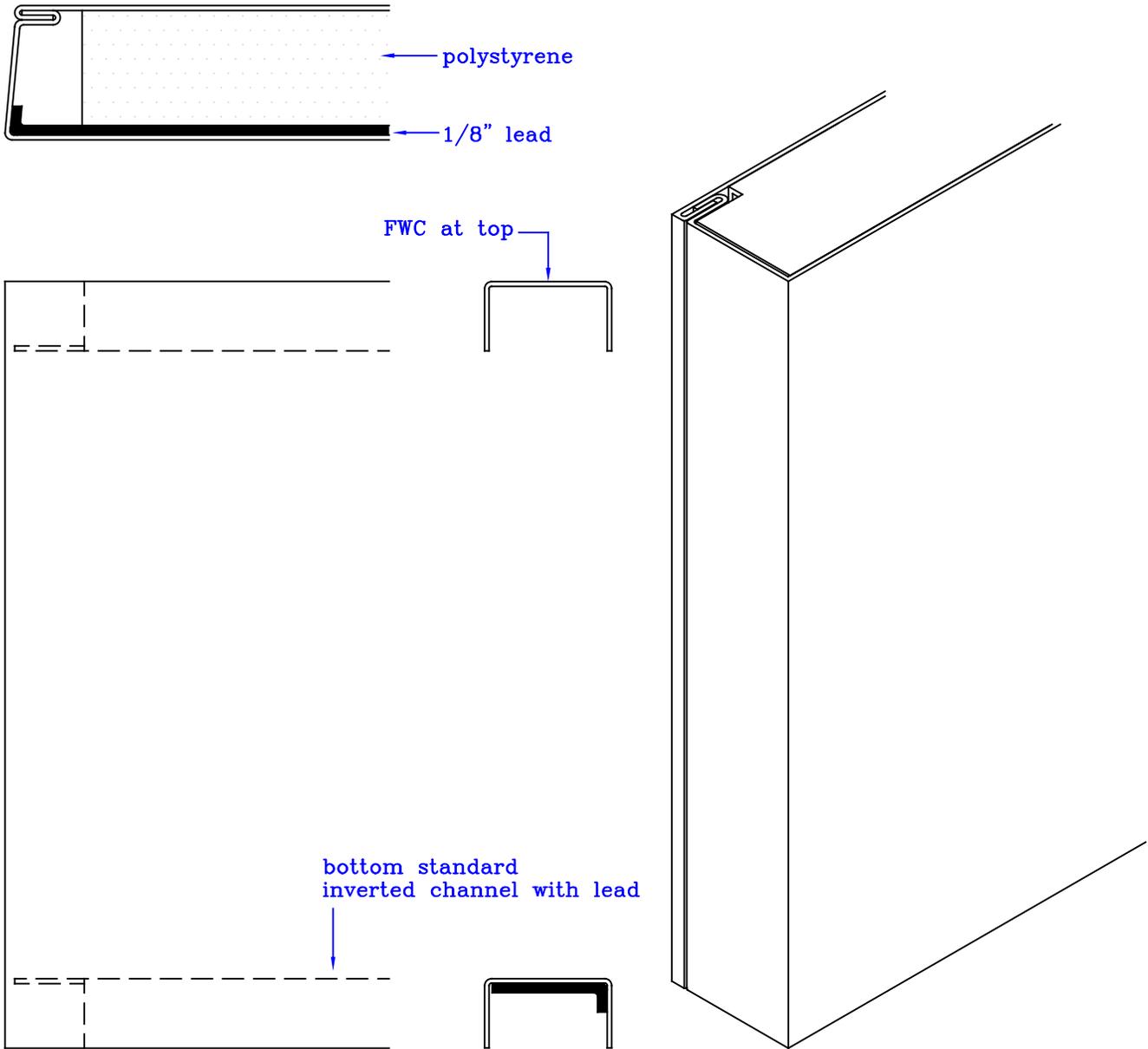
Continuous bonding of core to steel faces.



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.

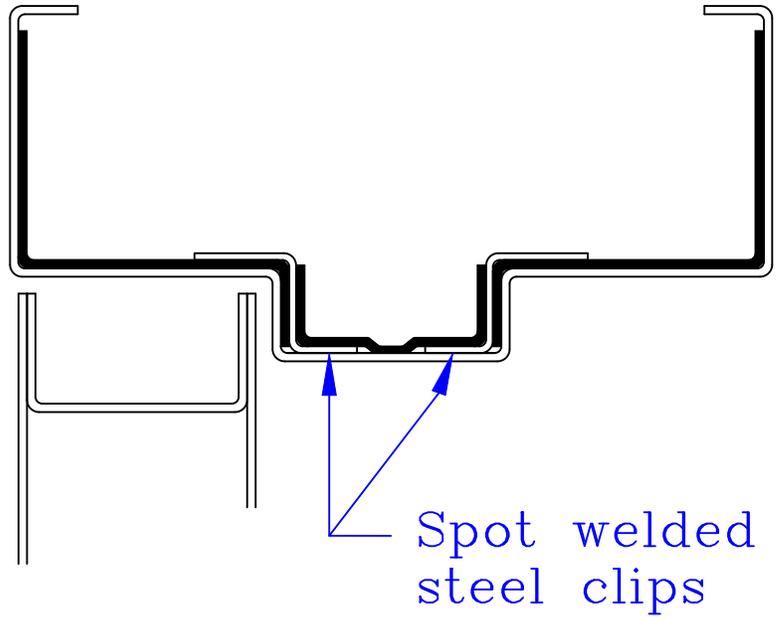


Complies with ASTM B29, QQ-L-201 "C" Category and CSA HP2 type 2 lead.
No fire rating available

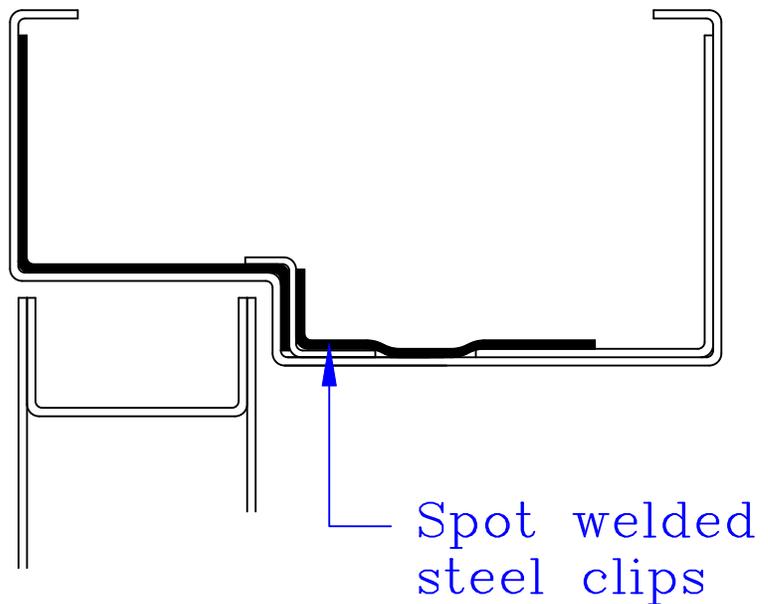
Lead lined frame, full width 1/16"

Lead lined

at double rabbet



at single rabbet



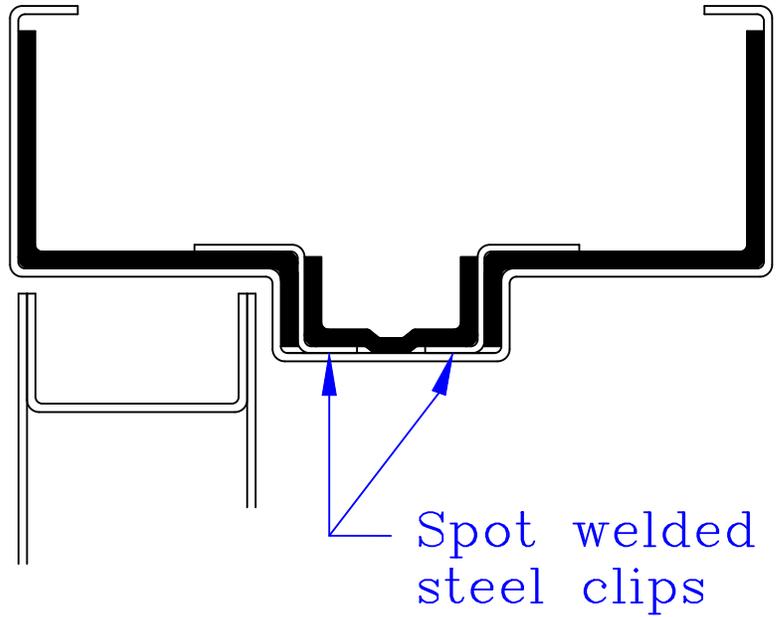
For LR, SR, and DW/DR series
Lead complies with ASTM B749
Installation note: Lead linings need to overlap at miters

LLFW116

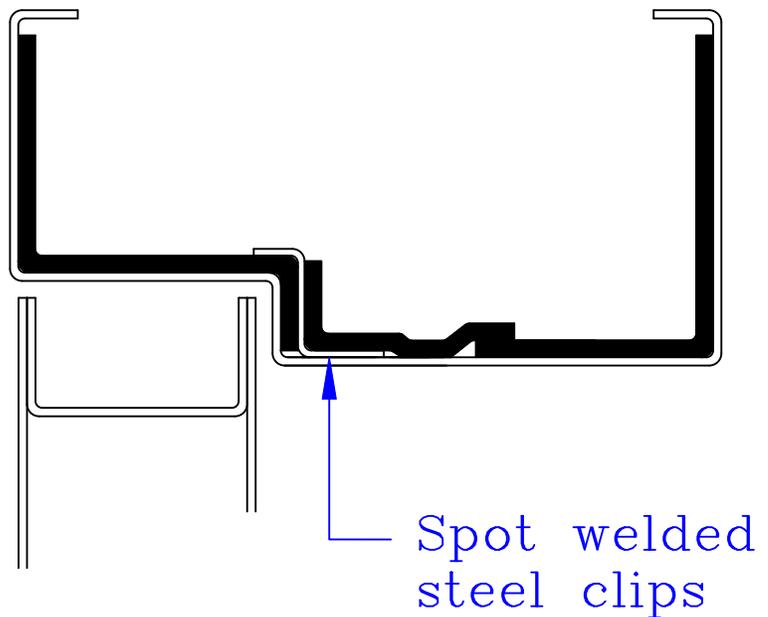
Lead lined frame, full width 1/8"
14ga frame minimum

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

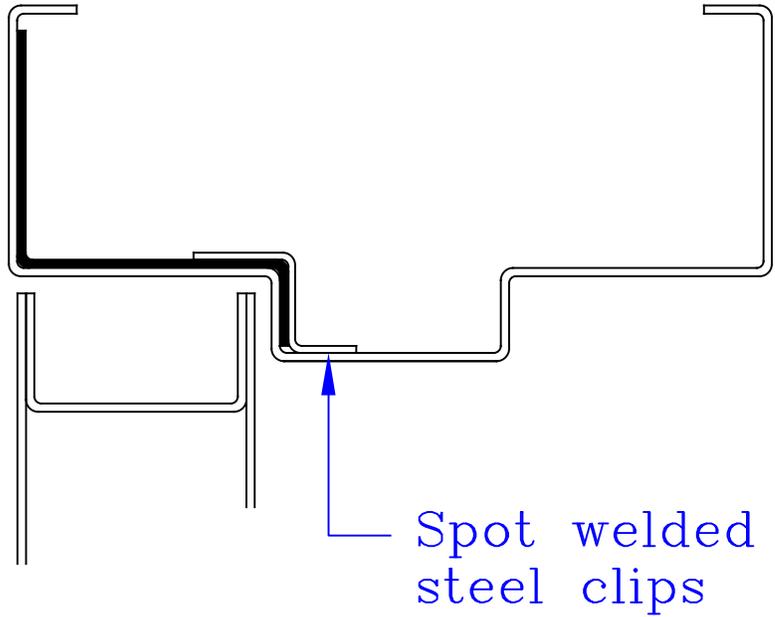
LLFW18

Lead lined frame, half width 1/16"

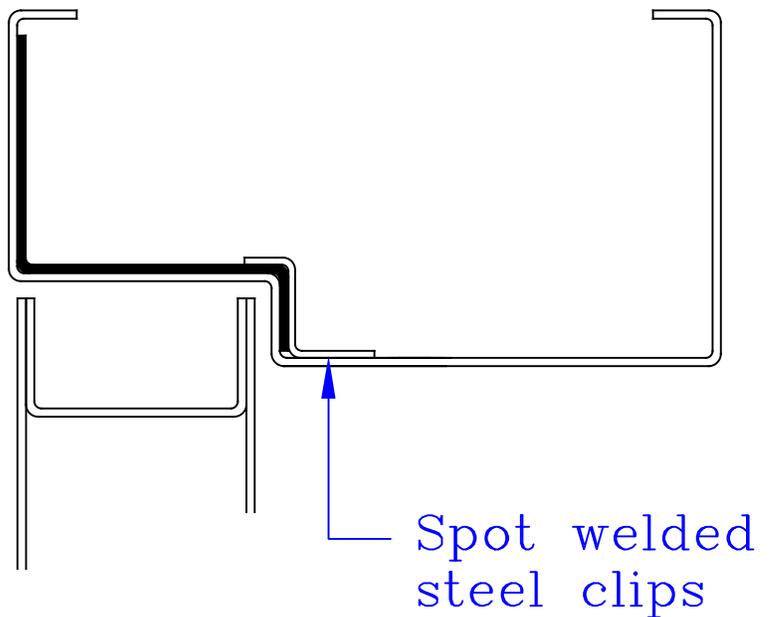
On door/glass side

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

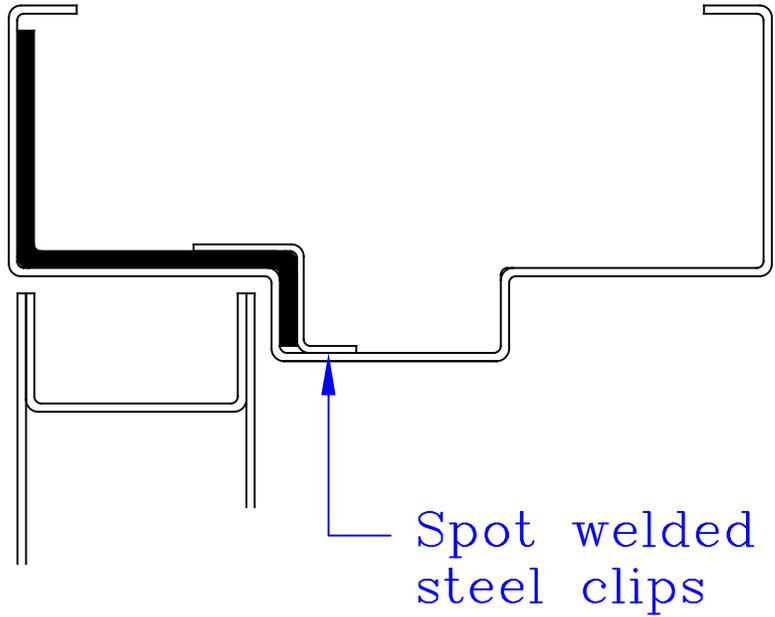
Lead lined frame, half width 1/8"

14ga frame minimum

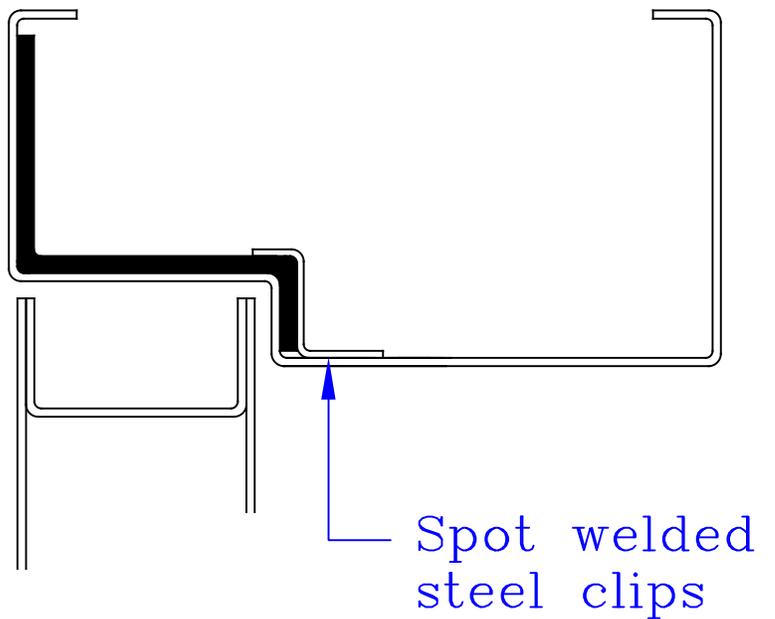
On door/glass side

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)

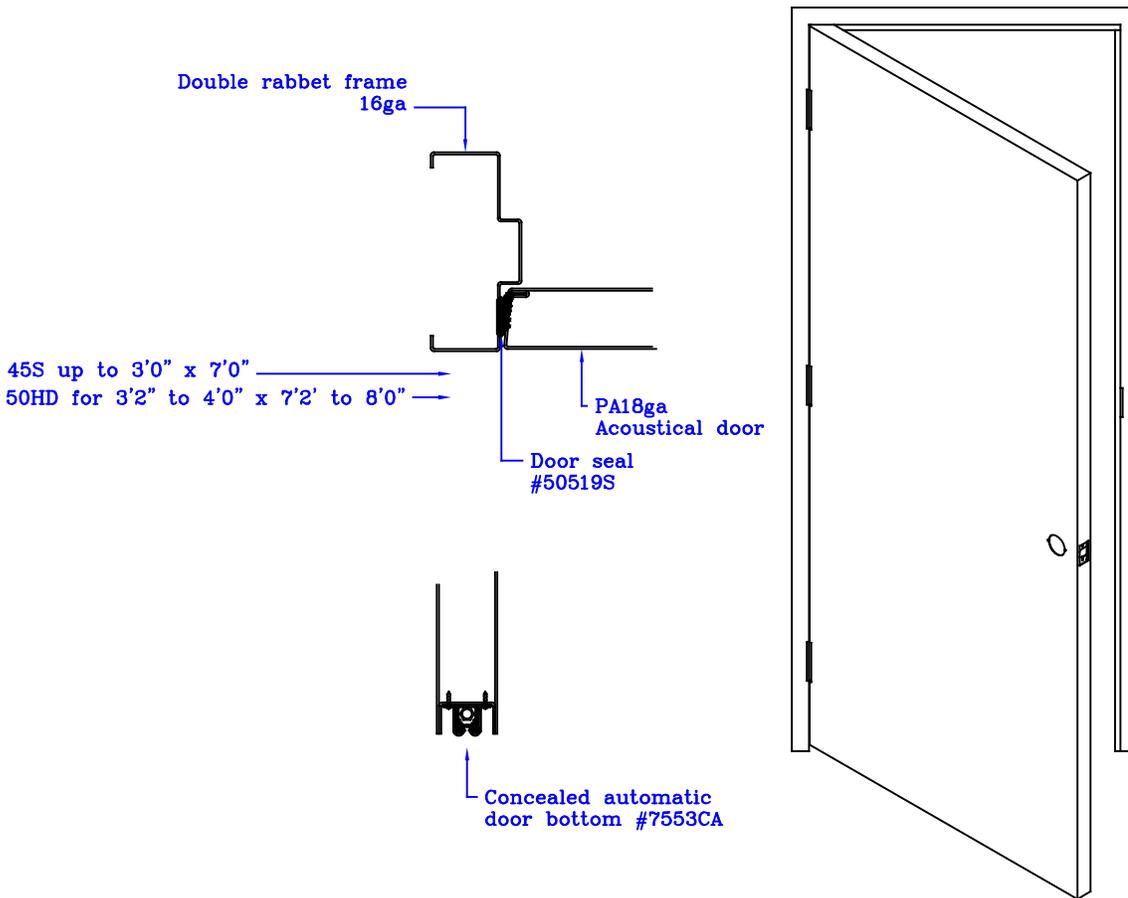
This rating is evaluated according to the operable method. The opening includes the frame, the door, and the acoustical gasketing.

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 sound deadening material 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

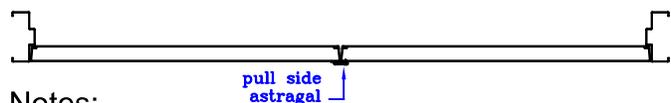


*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

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

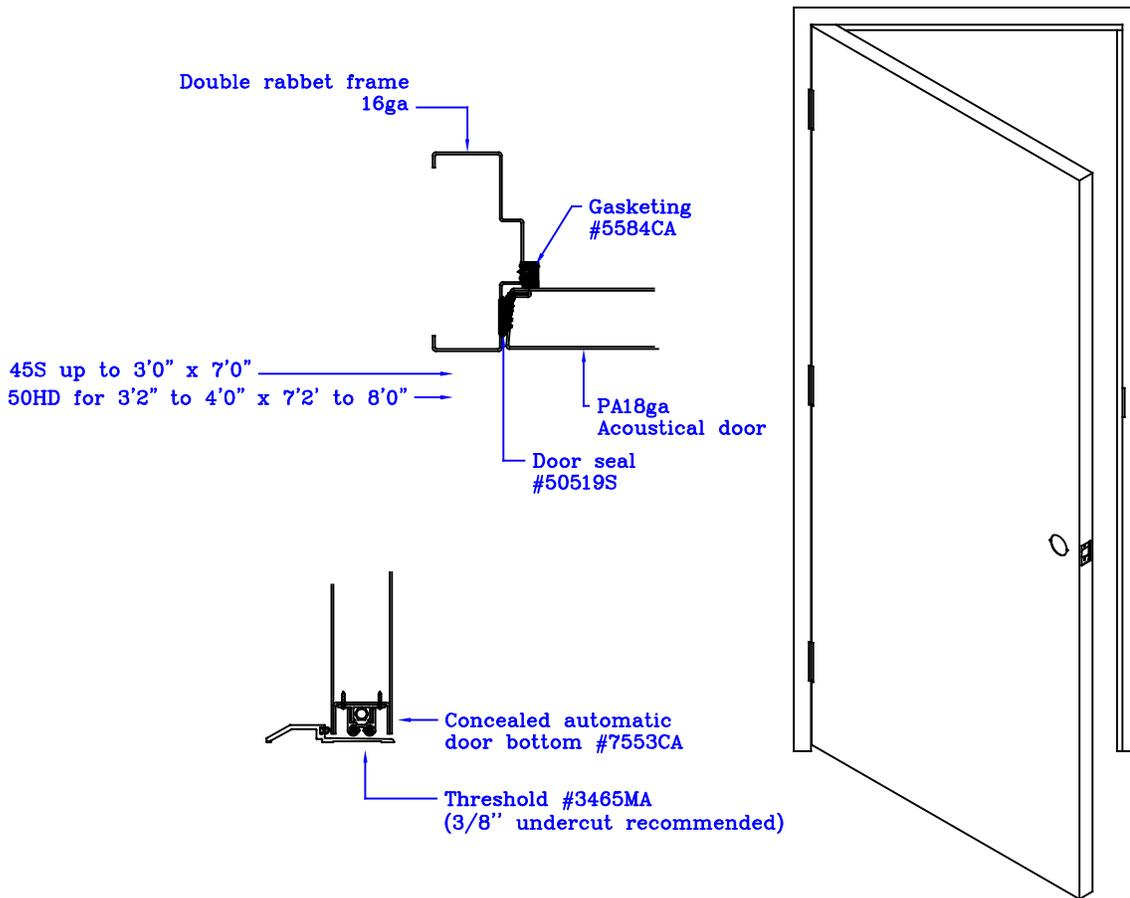


Notes:

- 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

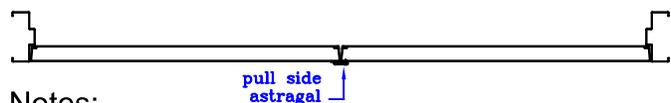


*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

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

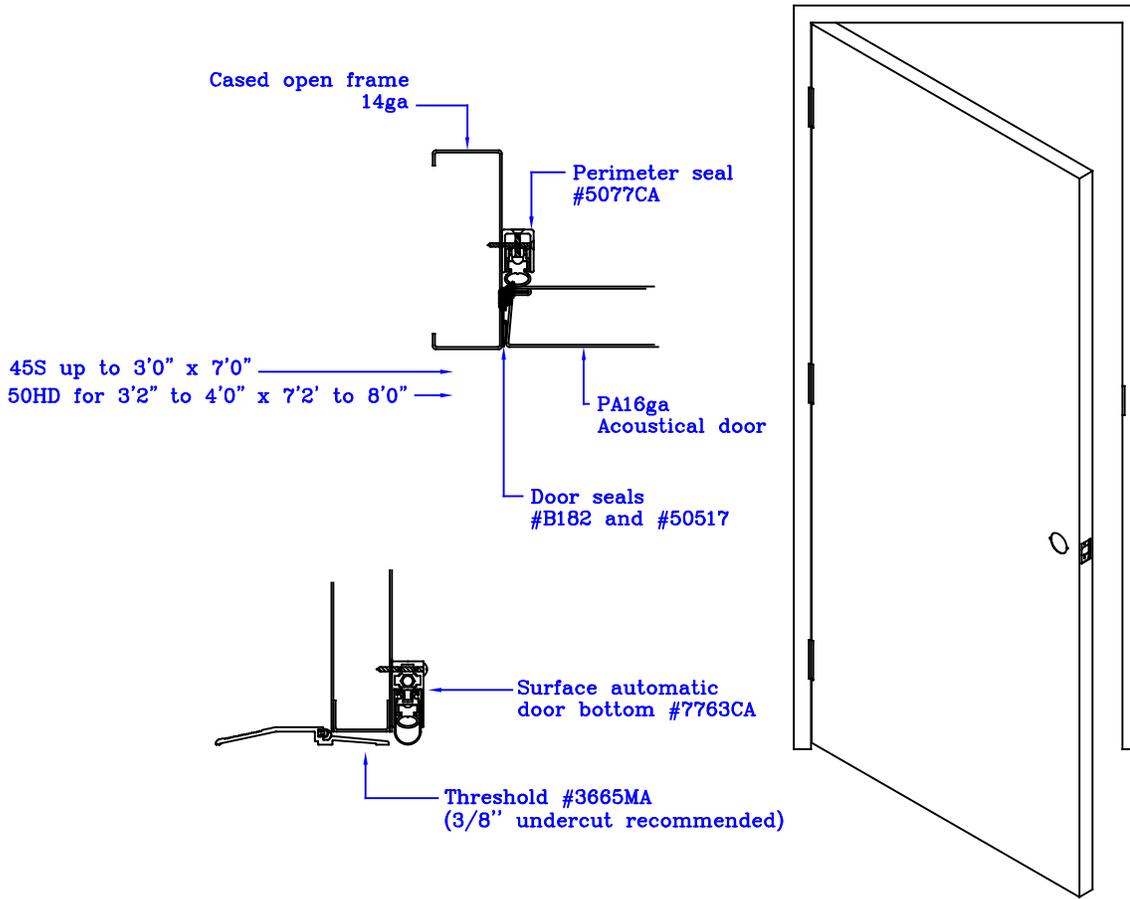


Notes:

- 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

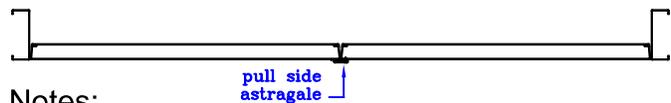


*Hardware is provided by others. Prep for hinges, cylindrical or mortise lock and surface closer reinforcements.

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.

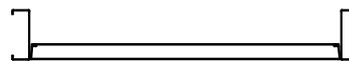
Double opening assembly



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



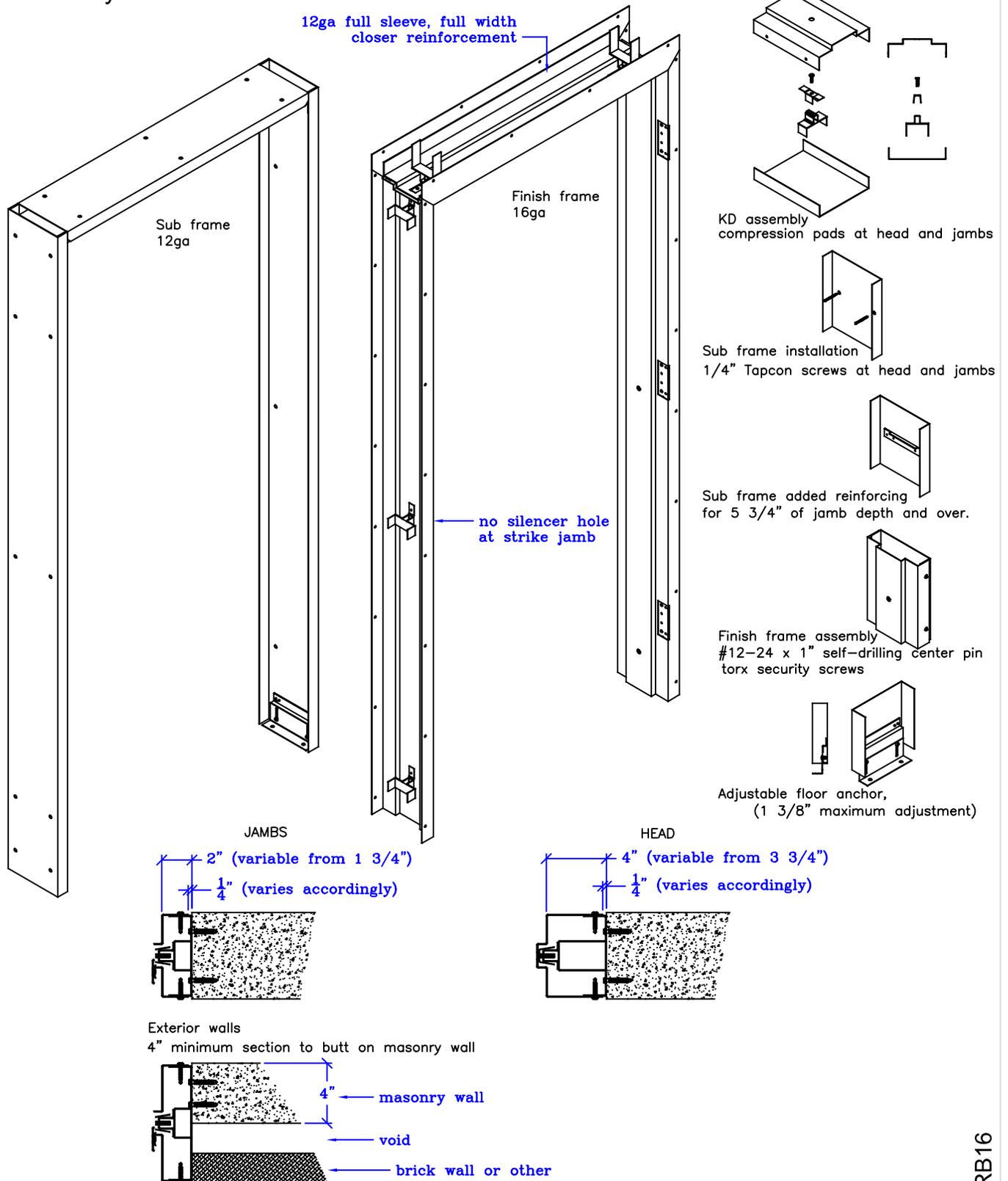
Notes:

- 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 astragale.

16ga Rough buck frame

KD assembly



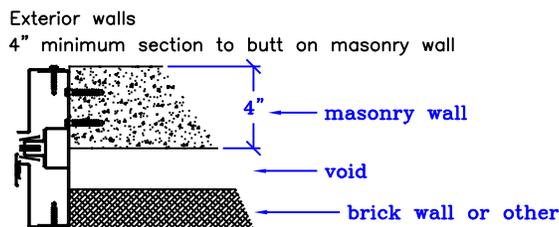
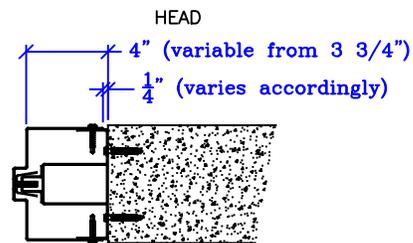
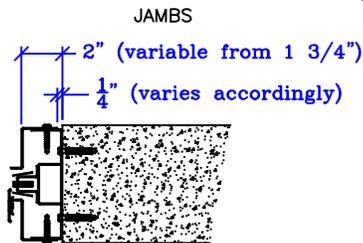
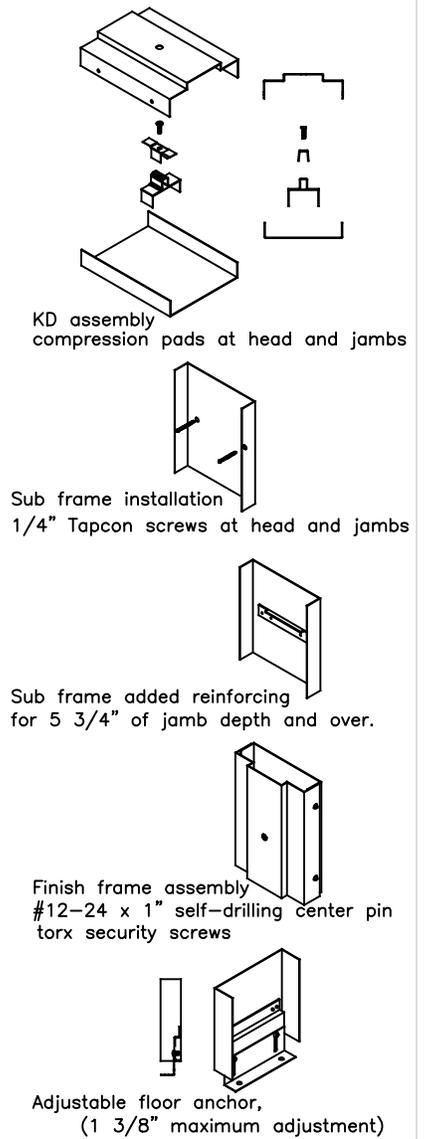
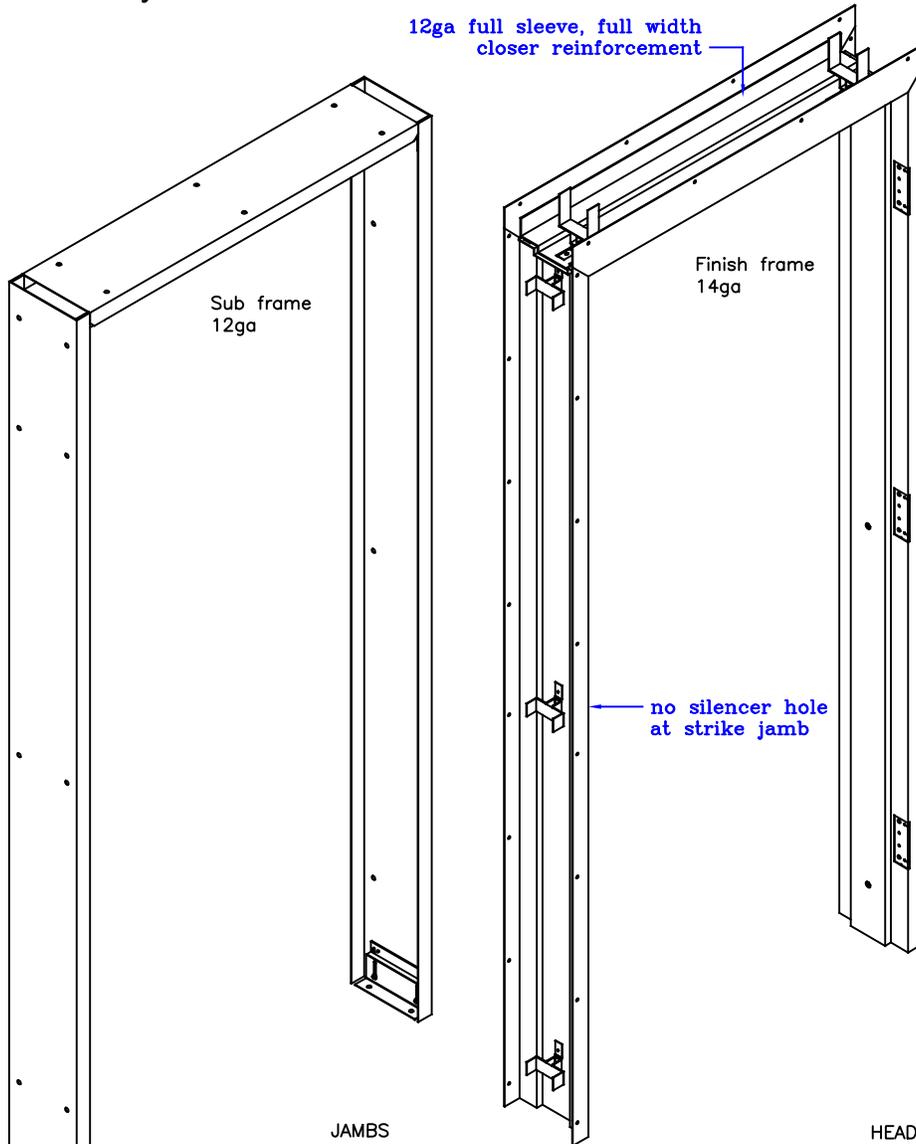
Specialty products

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

RB16

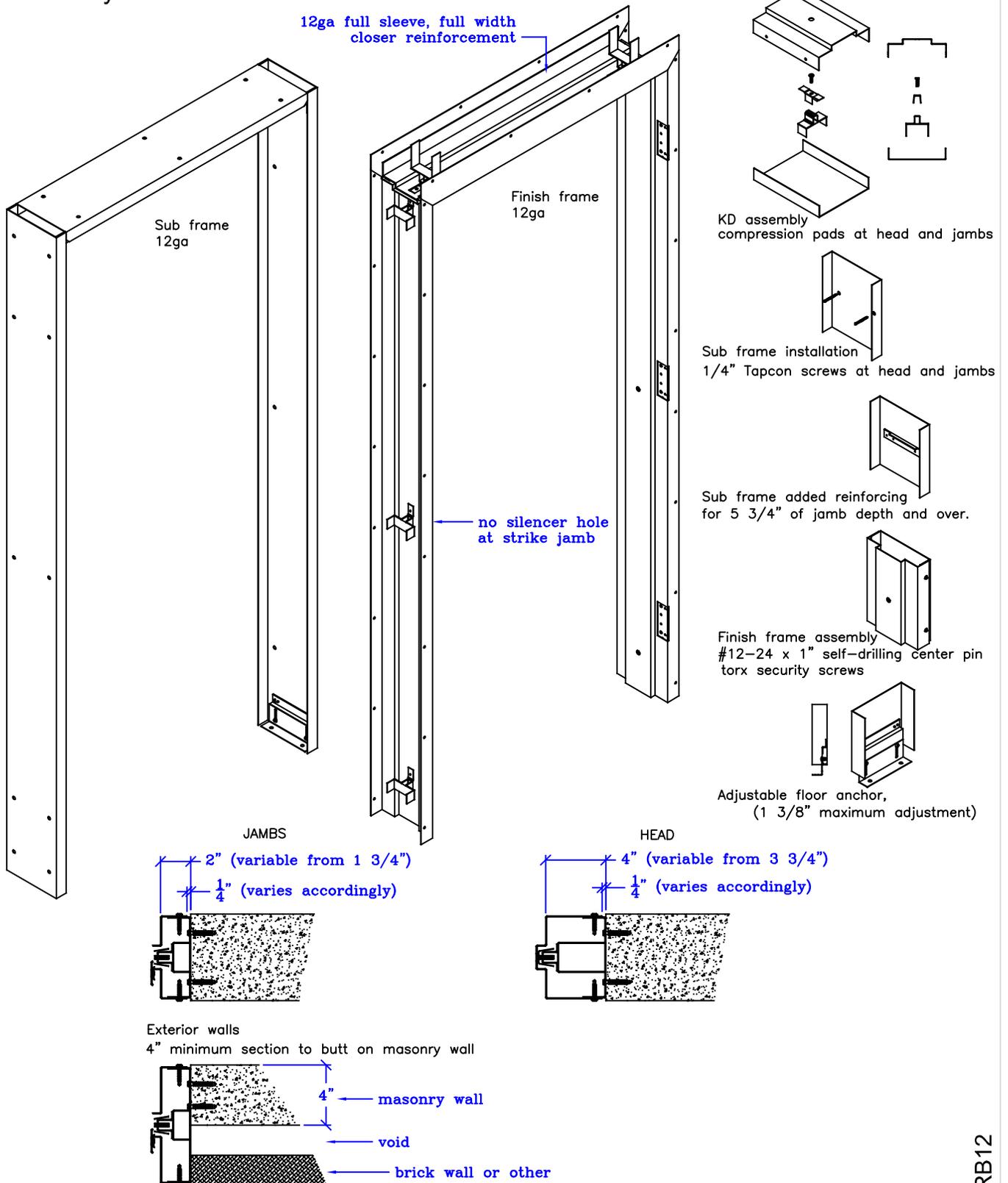
14ga Rough buck frame

KD assembly



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

12ga Rough buck frame
KD assembly

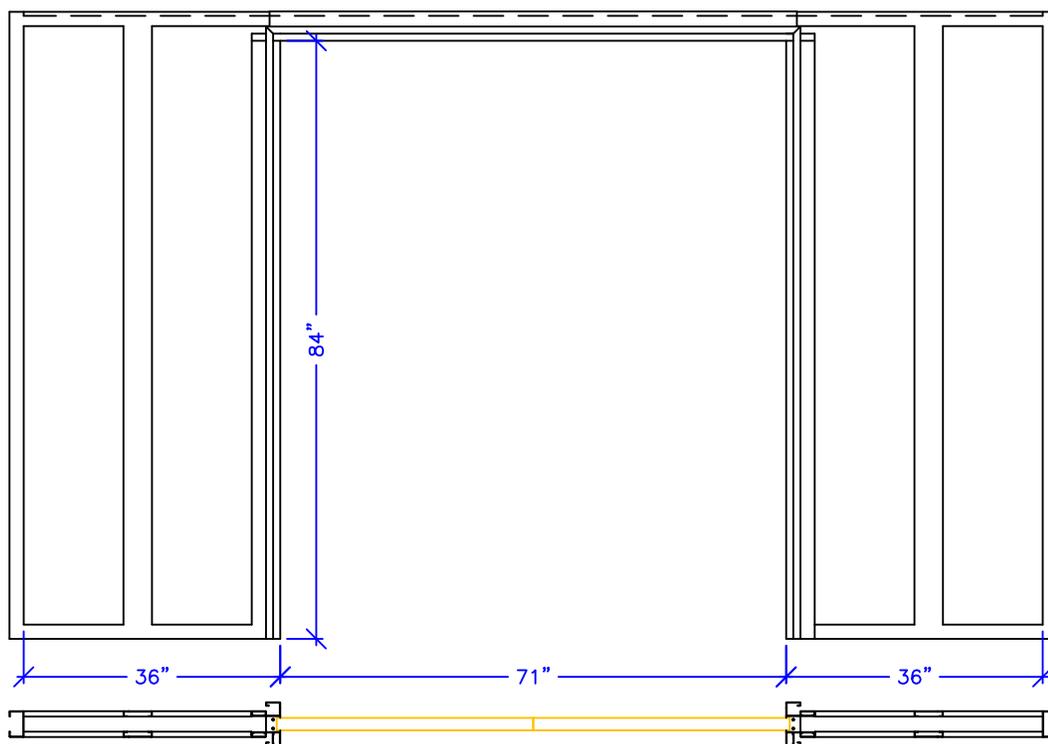
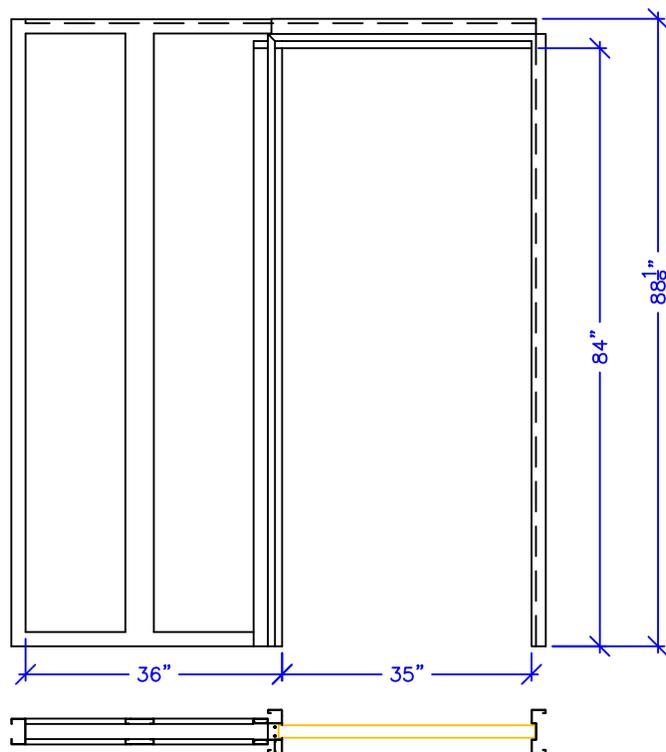
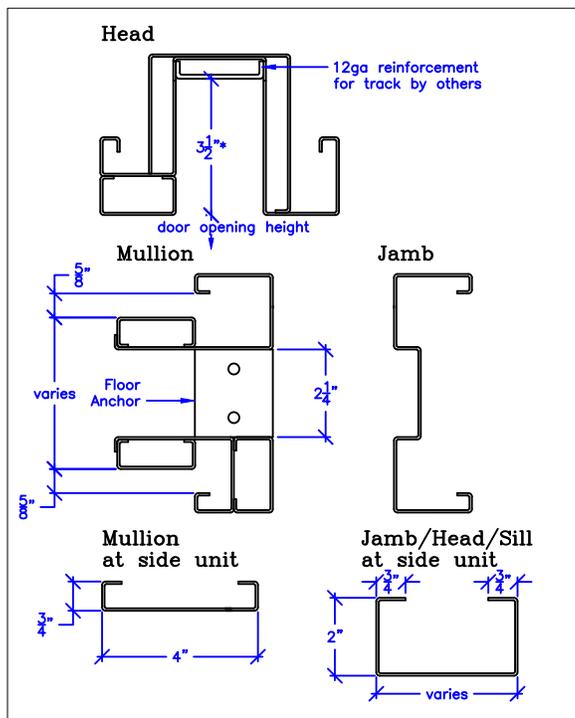


Specialty products

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

Pocket door frame

Available single or double, with or without side unit

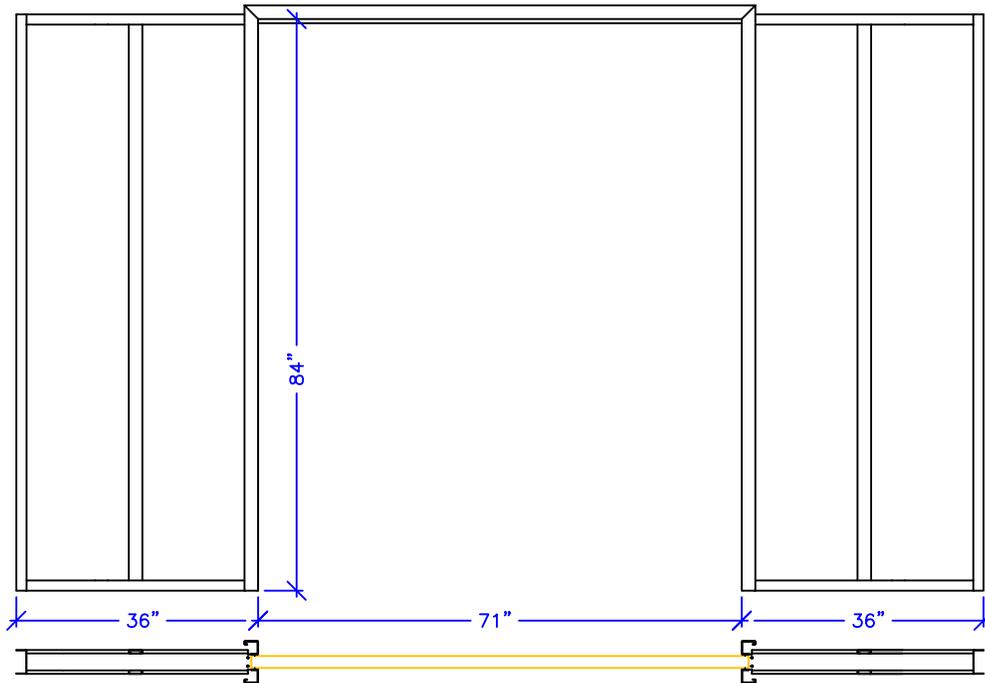
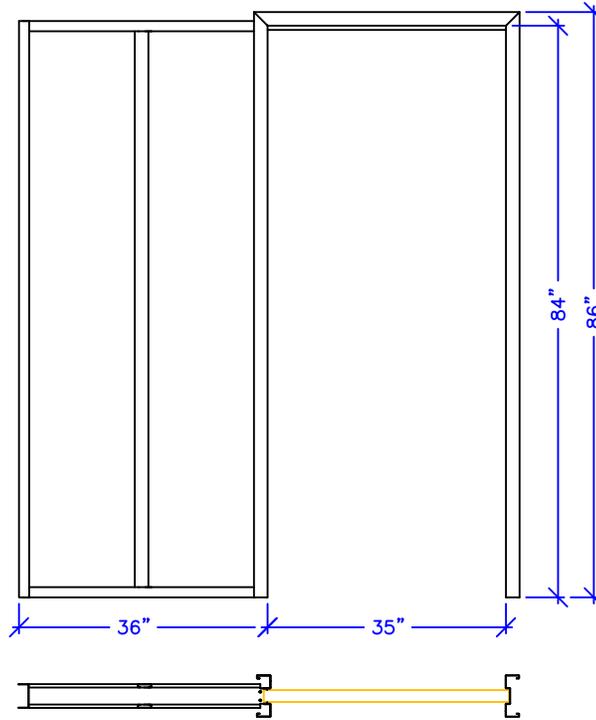
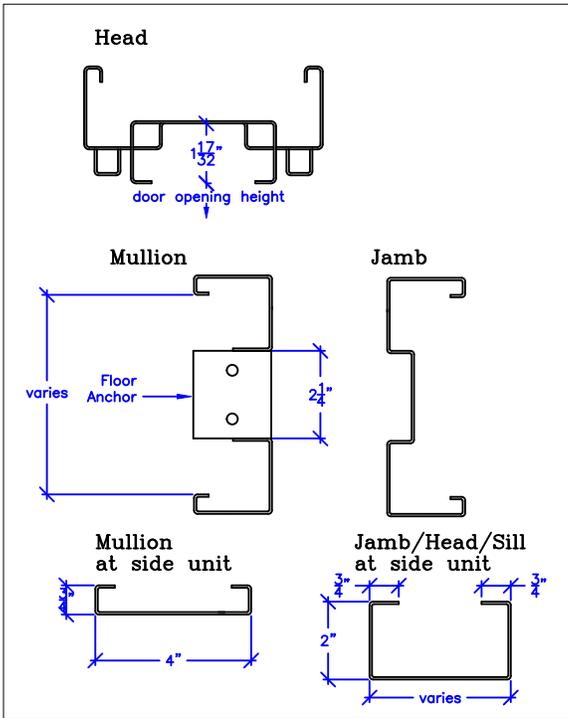


Face welded, 16ga, "Z" anchors, 1 3/4" door, 5 3/4" minimum jamb depth.
Based on a 3070 slab door.

* manufacturer's template to be provided

Pocket door frame

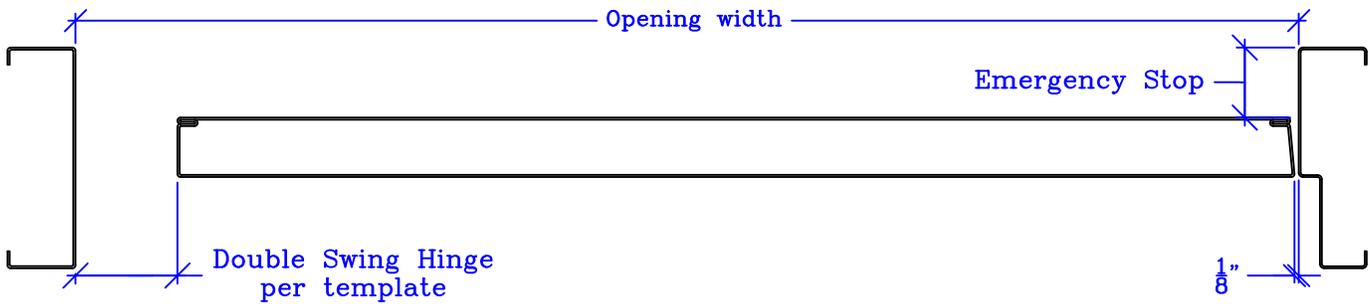
Available single or double, with or without side unit



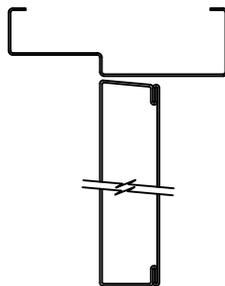
Face welded, 16ga, "Z" anchors, 1 3/4" door, 5 3/4" minimum jamb depth.

Emergency Release Stop Frame

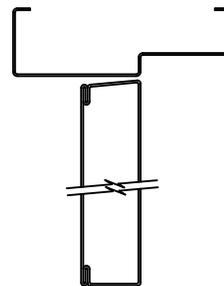
Cased open with single rabbet strike jamb



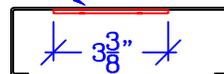
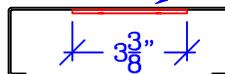
LEFT HAND
Strike side



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 ± 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

Consult our Technical Data Sheet for limitations on the DE LA FONTAINE website.
www.delafontaine.com/products/specialty-products/

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

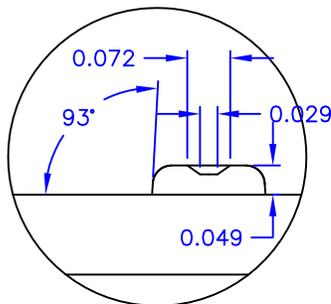
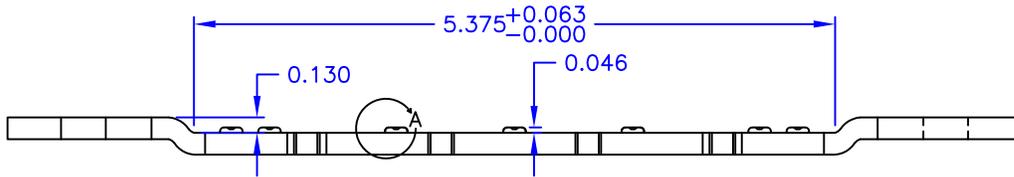
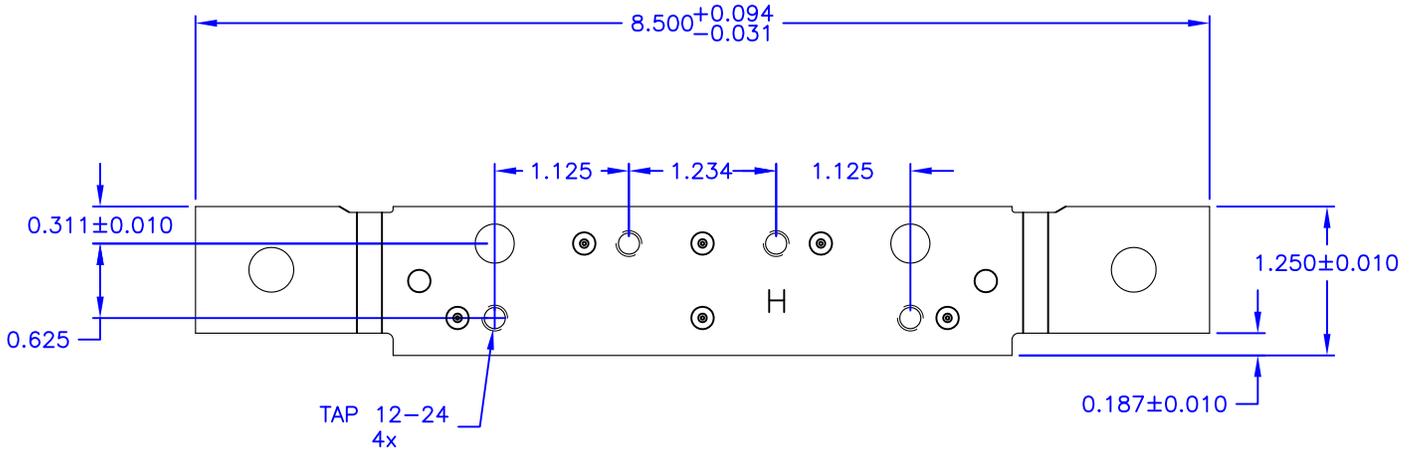
03059 - 3'0" Long	P-8.13
03063 - 4'0" Long	P-8.14
03064 - 5'0" Long	P-8.15
03065 - 6'0" Long	P-8.16
03066 - 10'0" Long	P-8.17

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



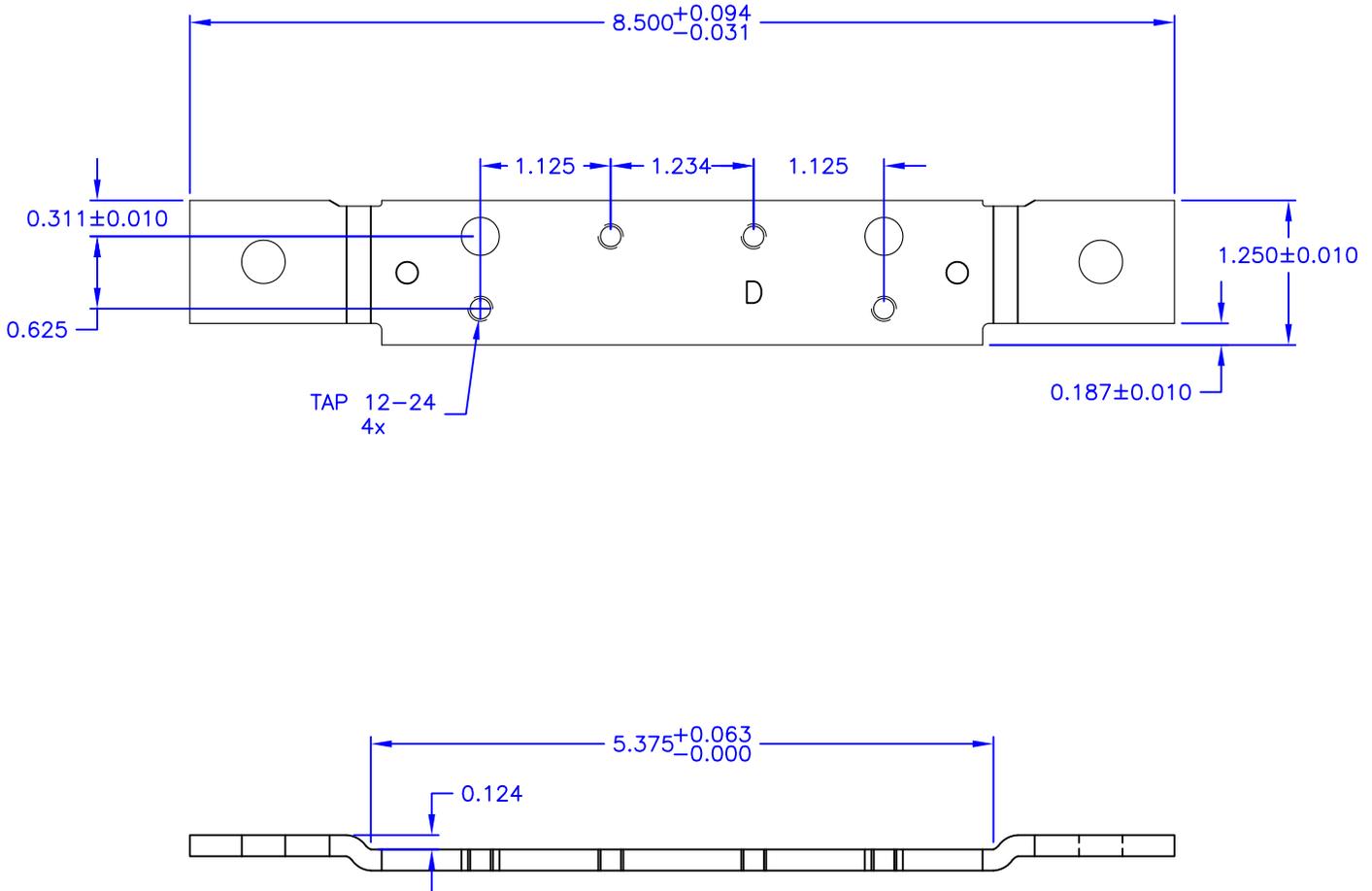
DETAIL A

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

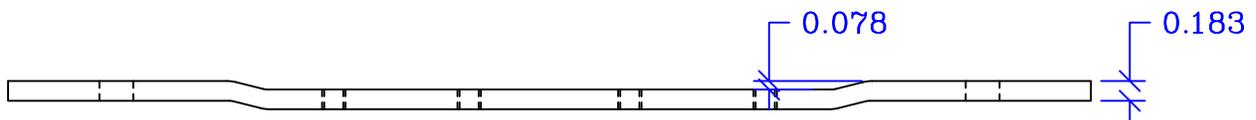
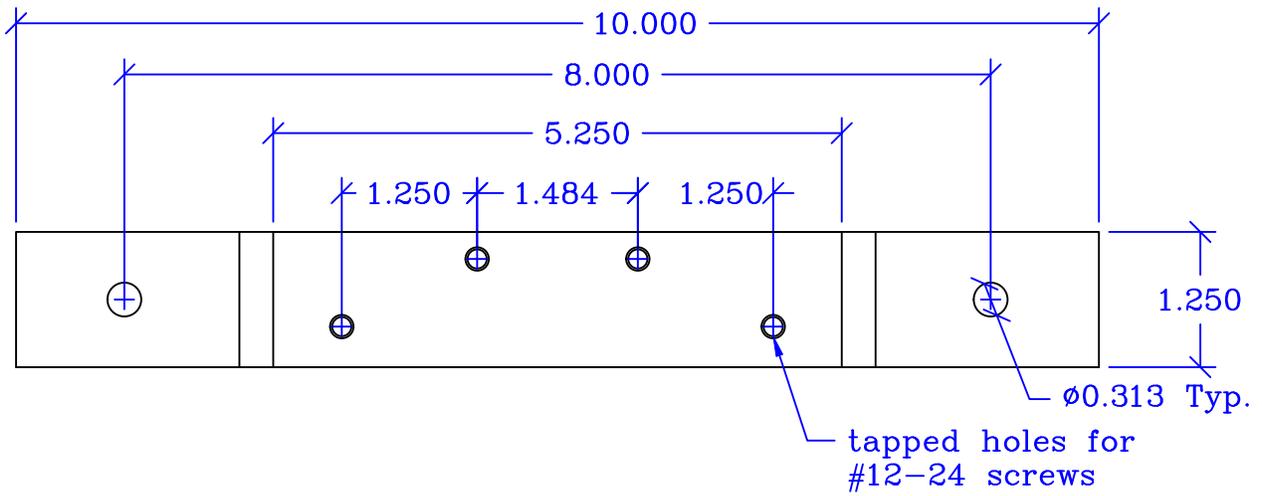
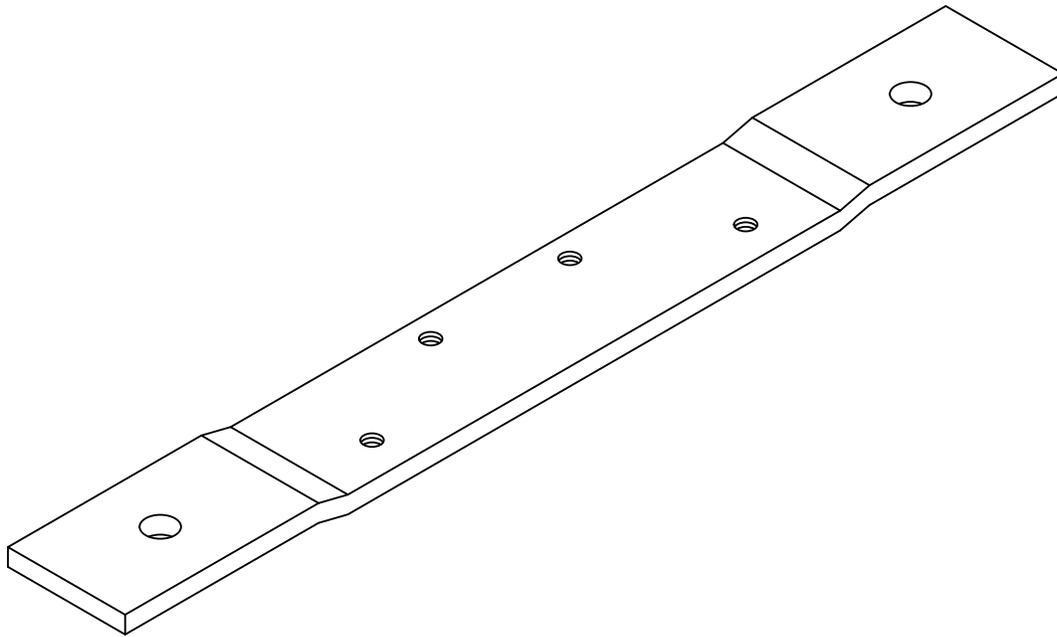


Hinge reinforcement

56511

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

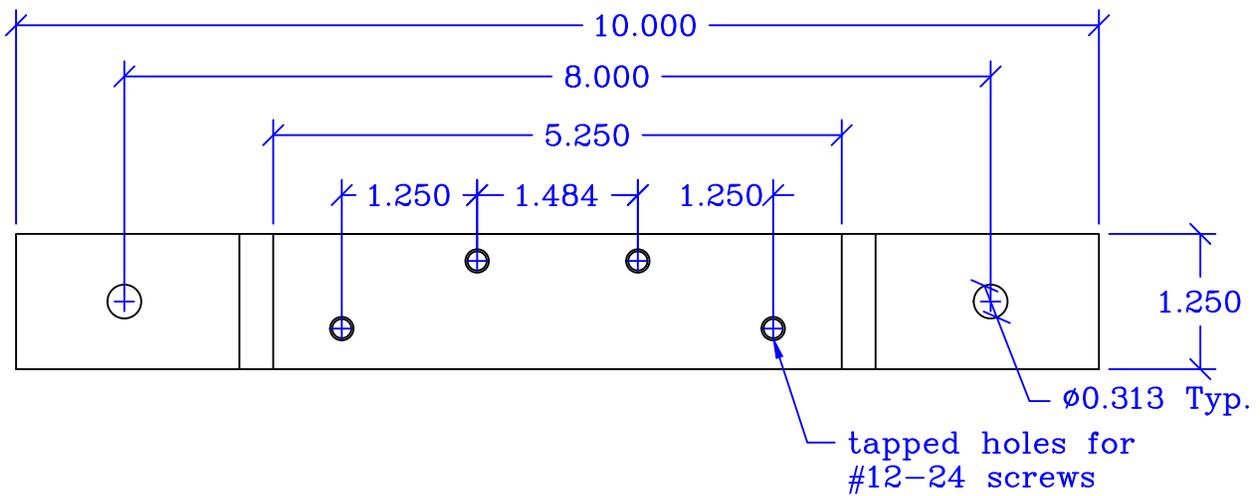
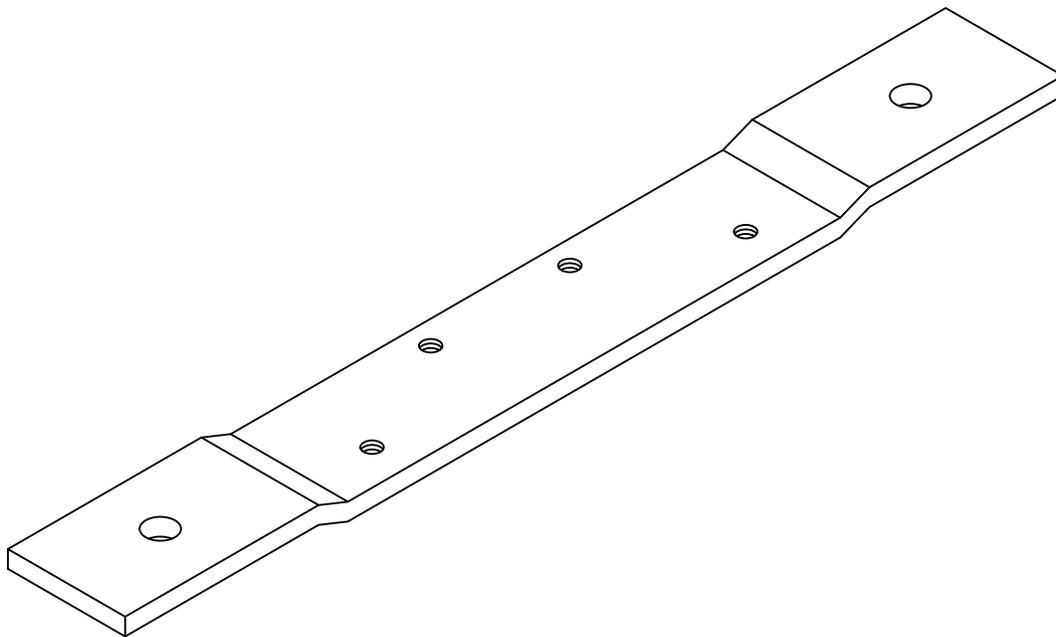
5" standard weight hinge reinforcement (0.146), 7ga
at PA door



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

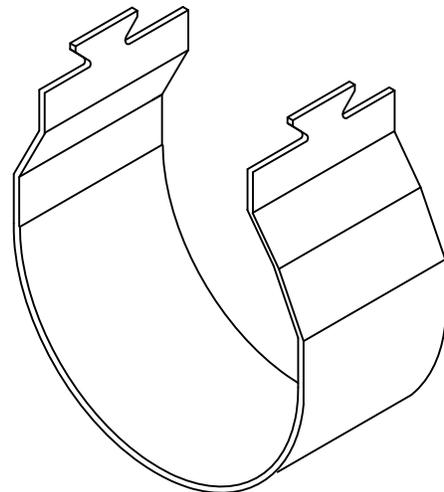
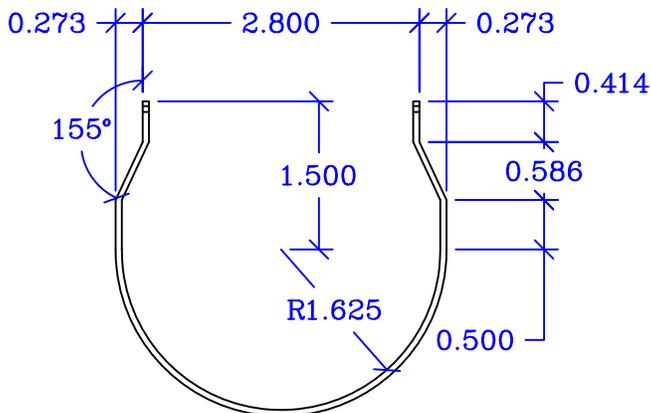
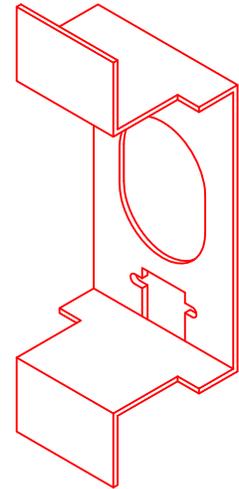
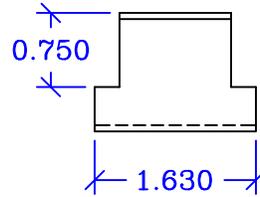
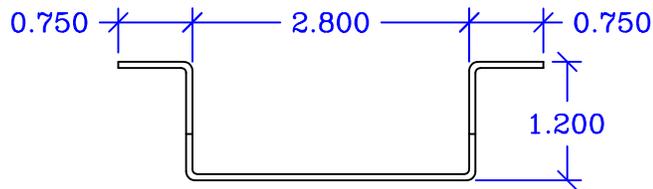
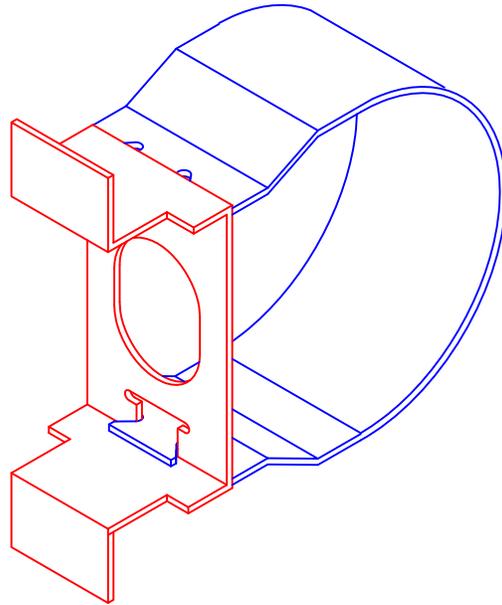


Hinge reinforcement

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

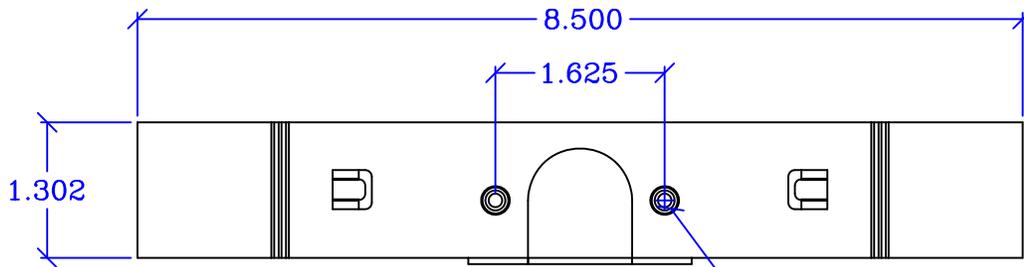
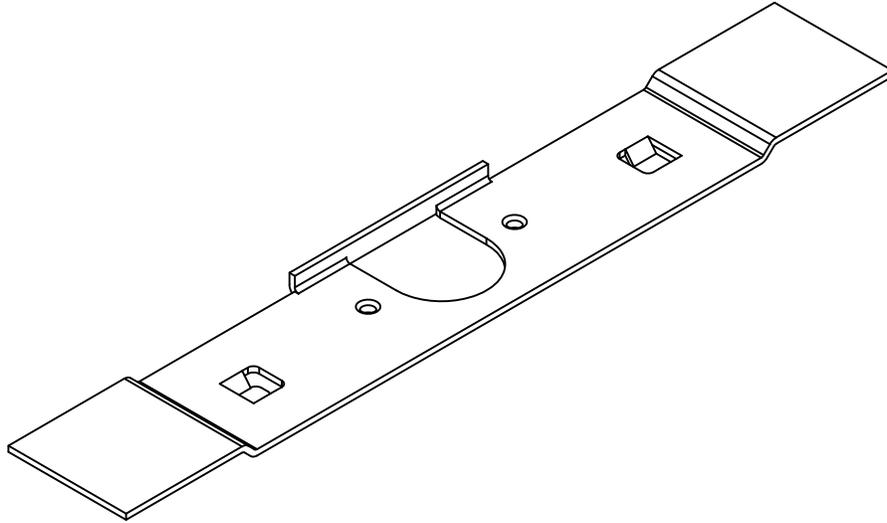


Lock/strike reinforcement

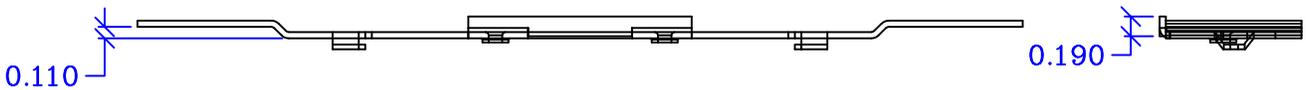
39406

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.

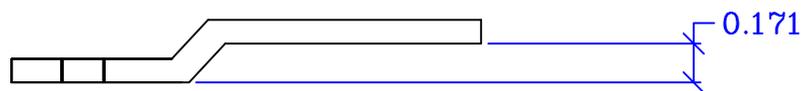
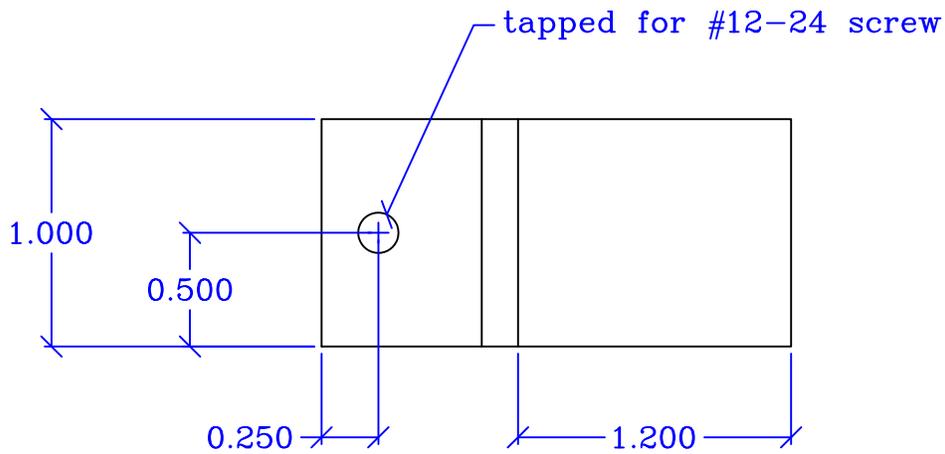
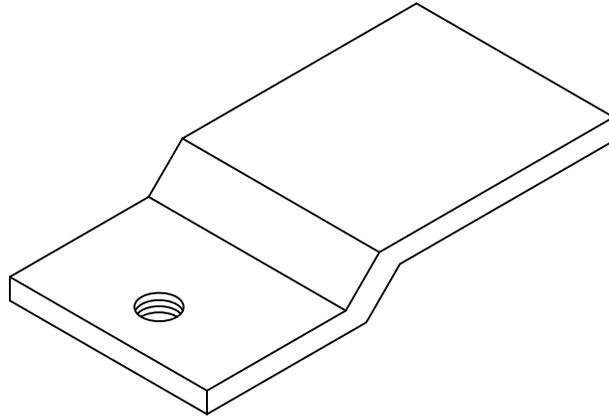


Lock/strike reinforcement

00789

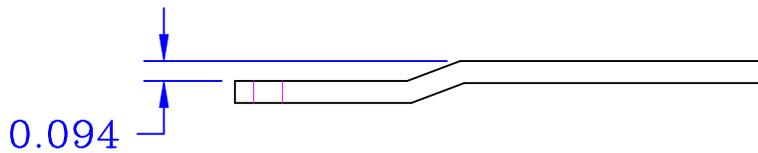
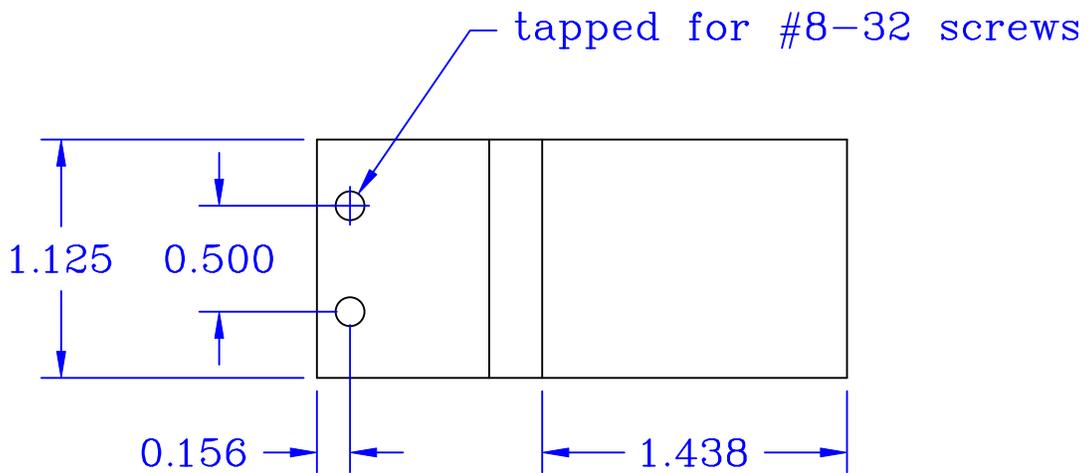
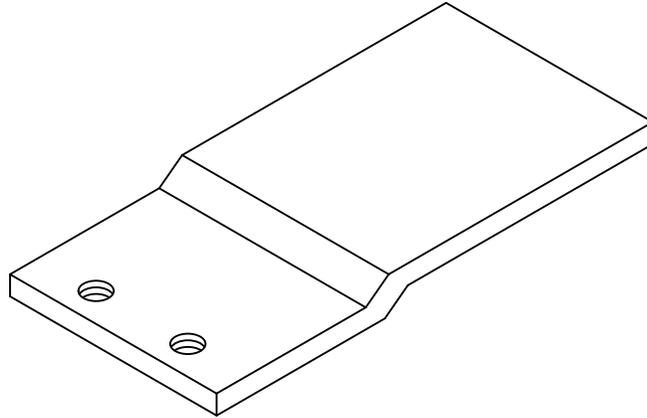
See option 161 on page O-4.27 for additional information

Mortise lock tab, 12ga
at PA door



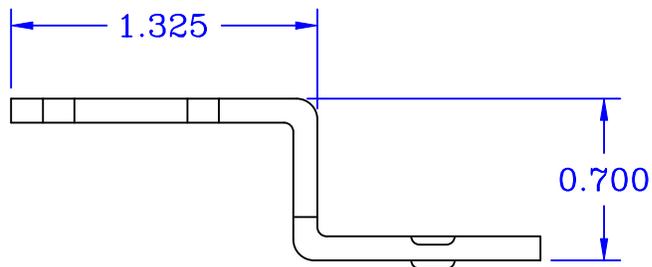
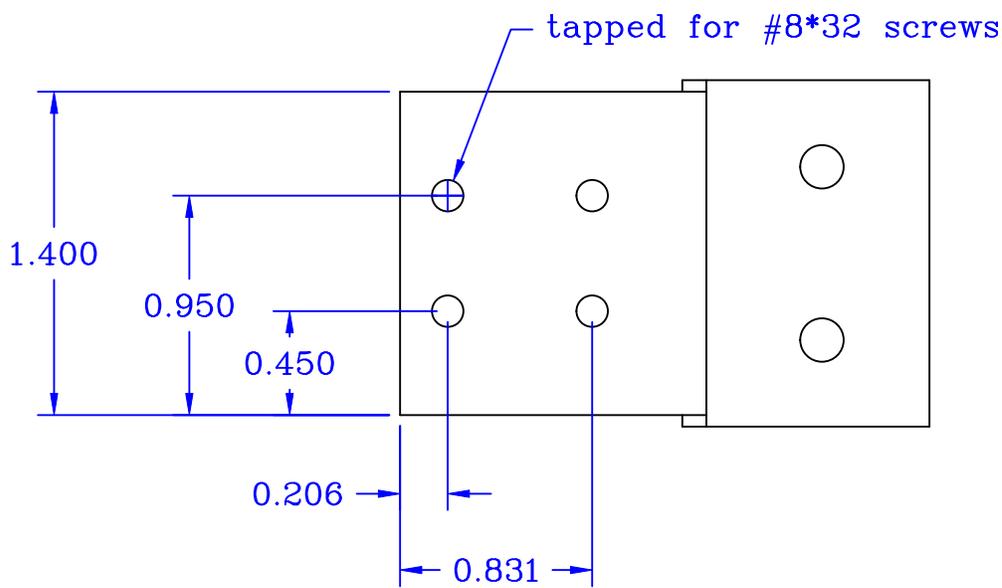
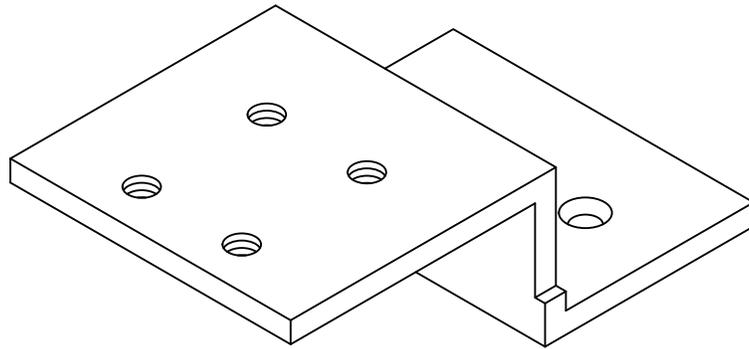
See option 86ED on page O-4.31 for additional information

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



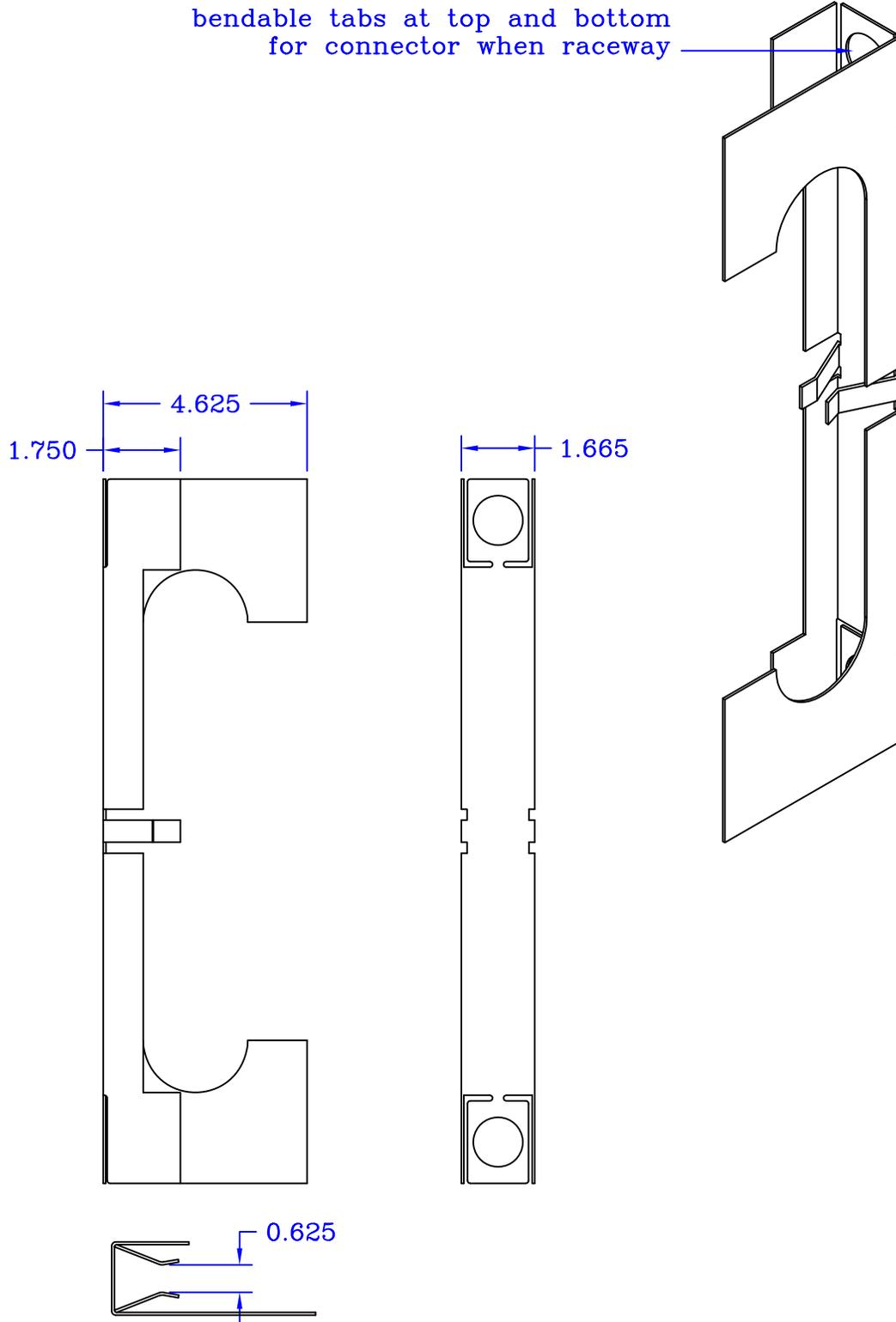
See option FB on page O-5.29 for additional information

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

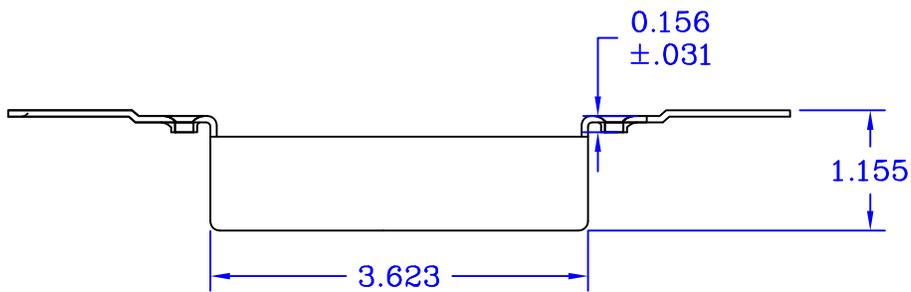
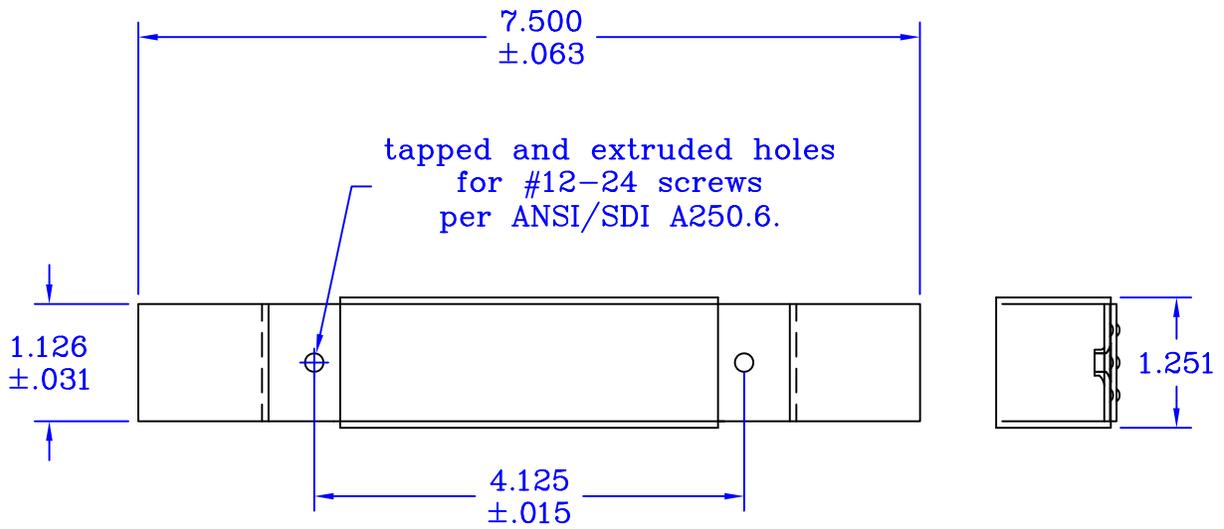
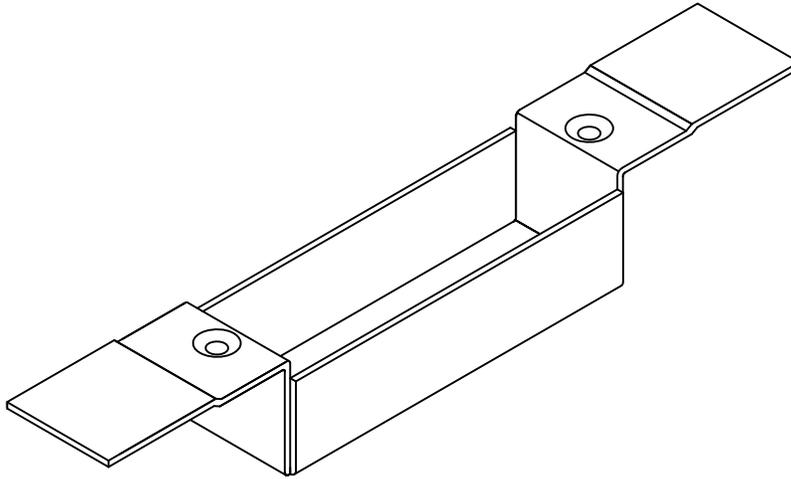


Lock/strike reinforcement

39438

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

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

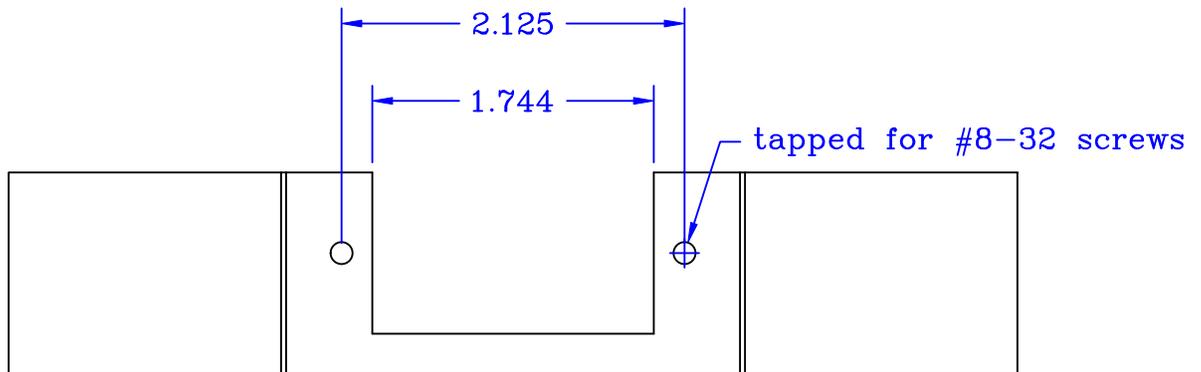
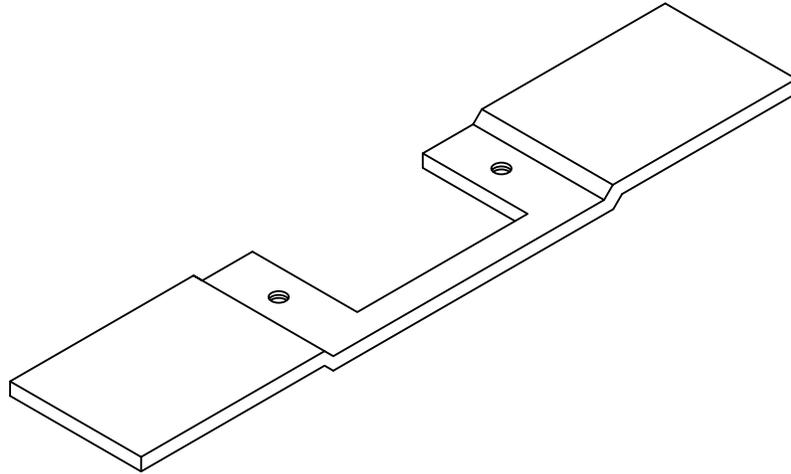


Lock/strike reinforcement

00710

See option ASA on page O-5.19 for additional information

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

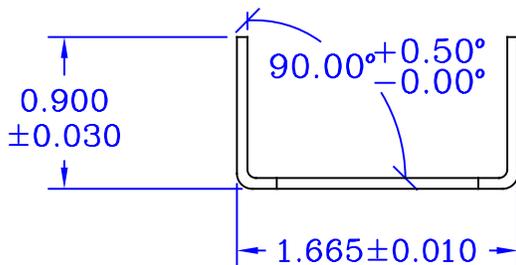
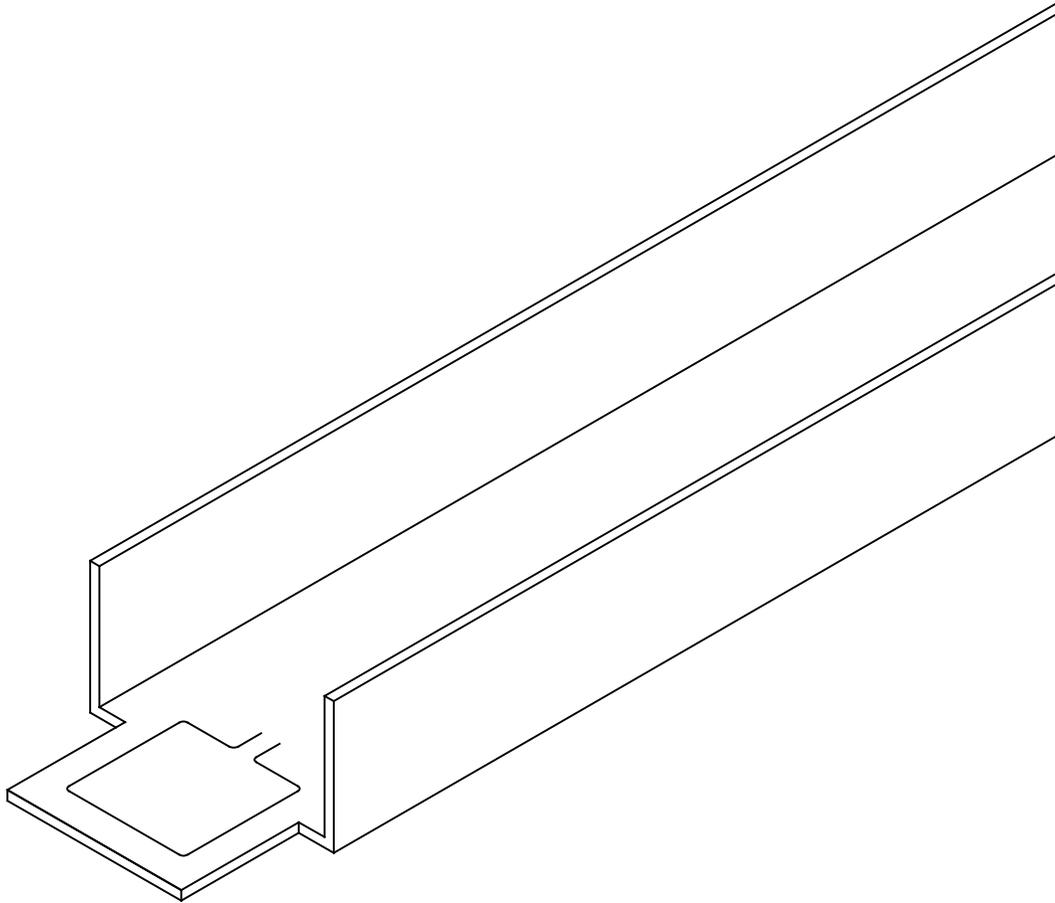


Lock/strike reinforcement

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

00597

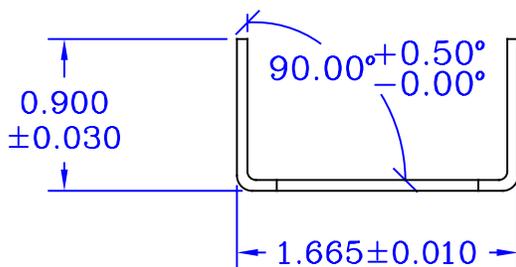
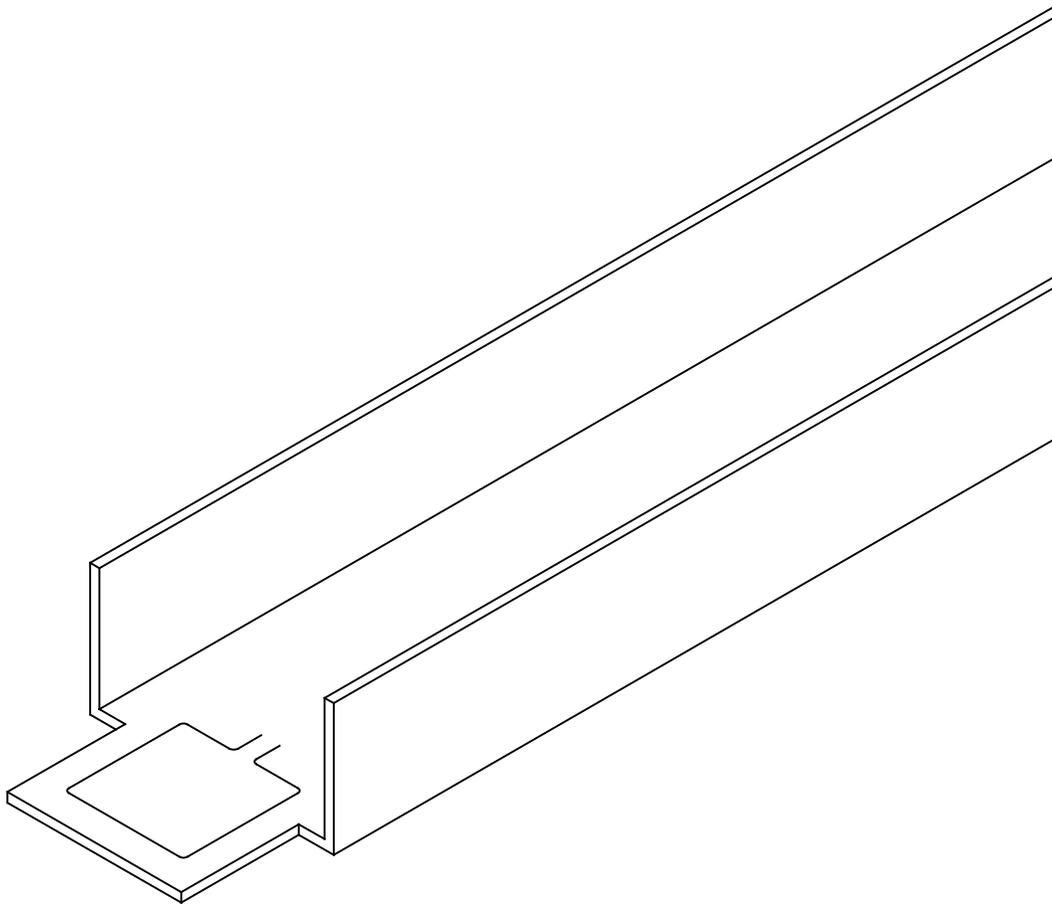
Standard inverted end channel for 3'0" door, 16ga
35 5/16" finished width



End channels/cap

03085

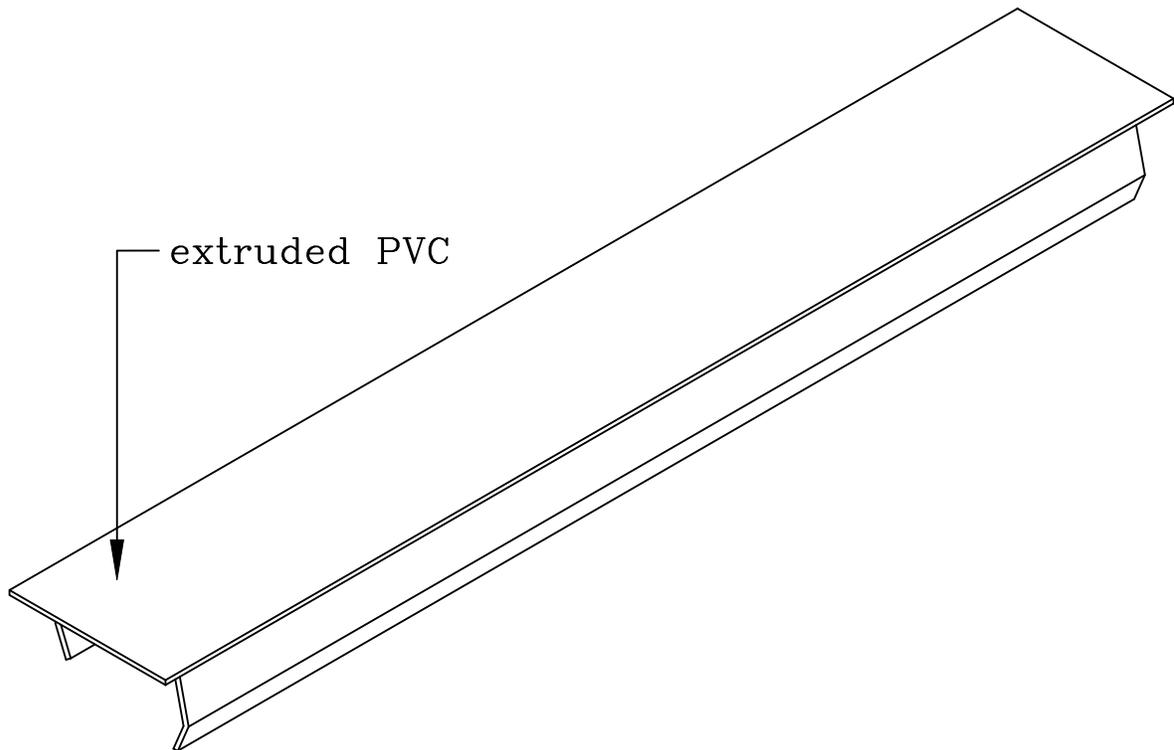
Standard inverted end channel for 4'0" door, 16ga
47 5/16" finished width



End channels/cap

03096

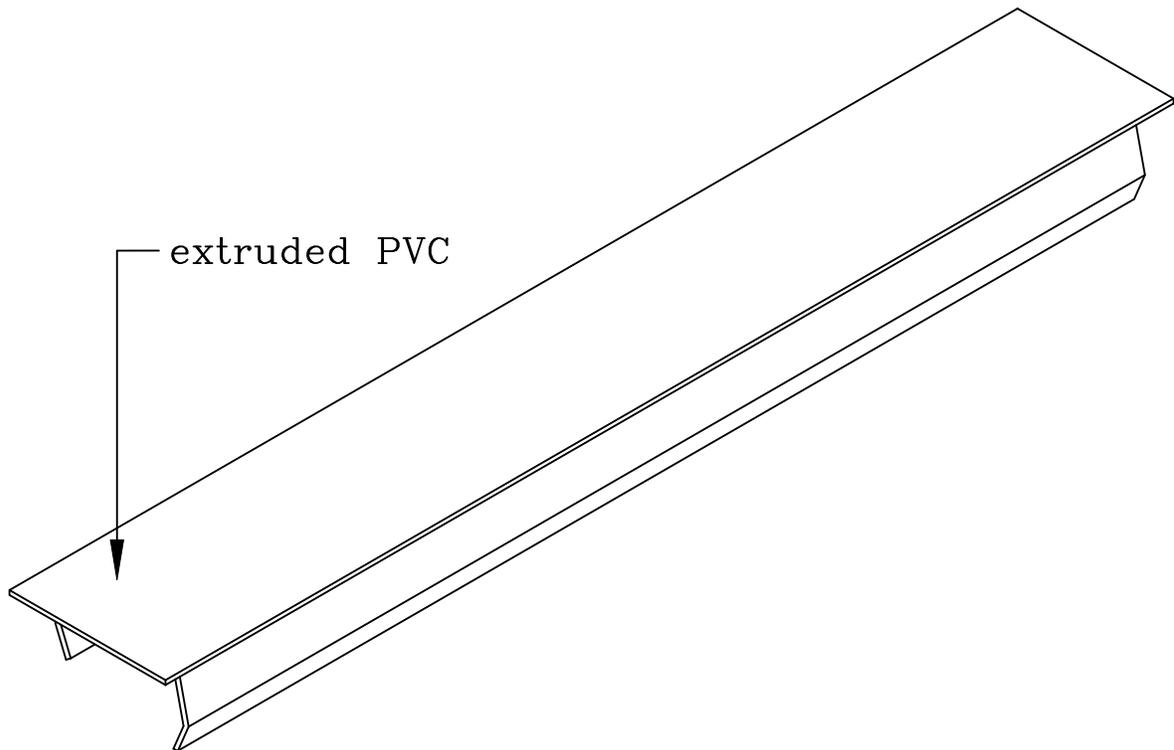
Vinyl cap for 3'0" door
36 1/4" finished width



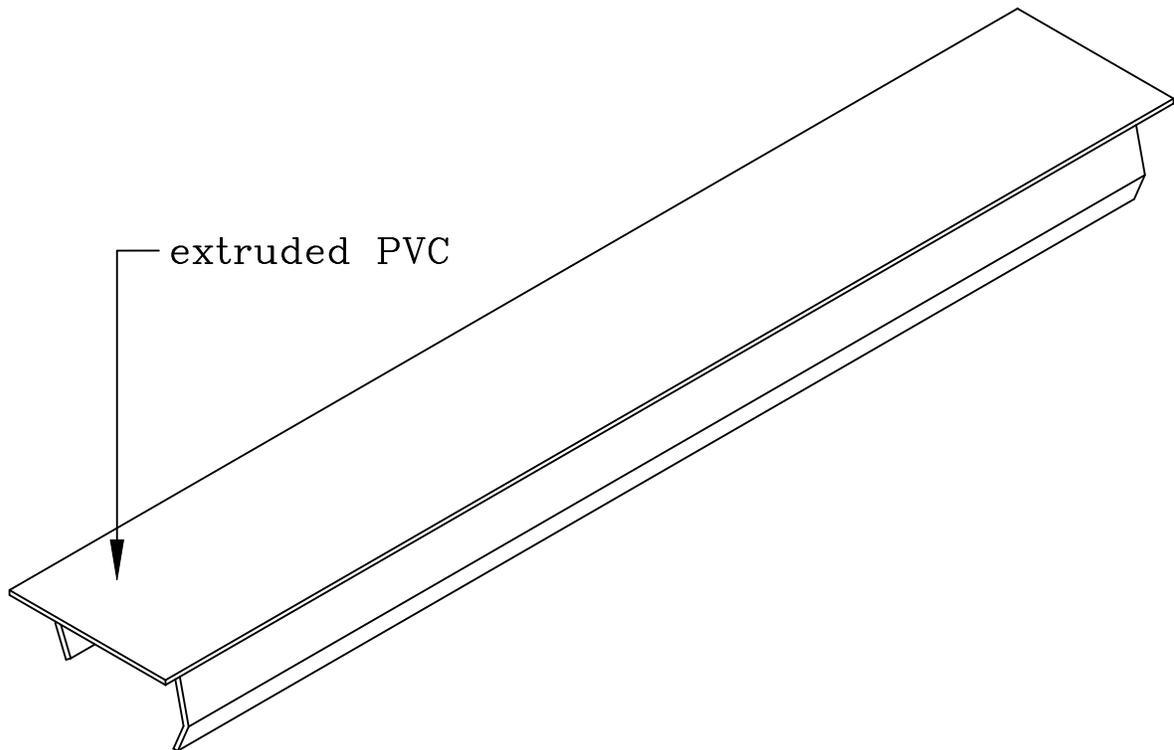
End channels/cap

00092

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



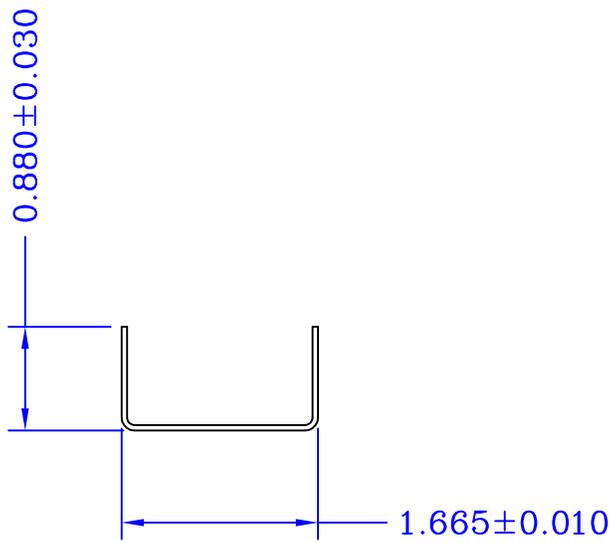
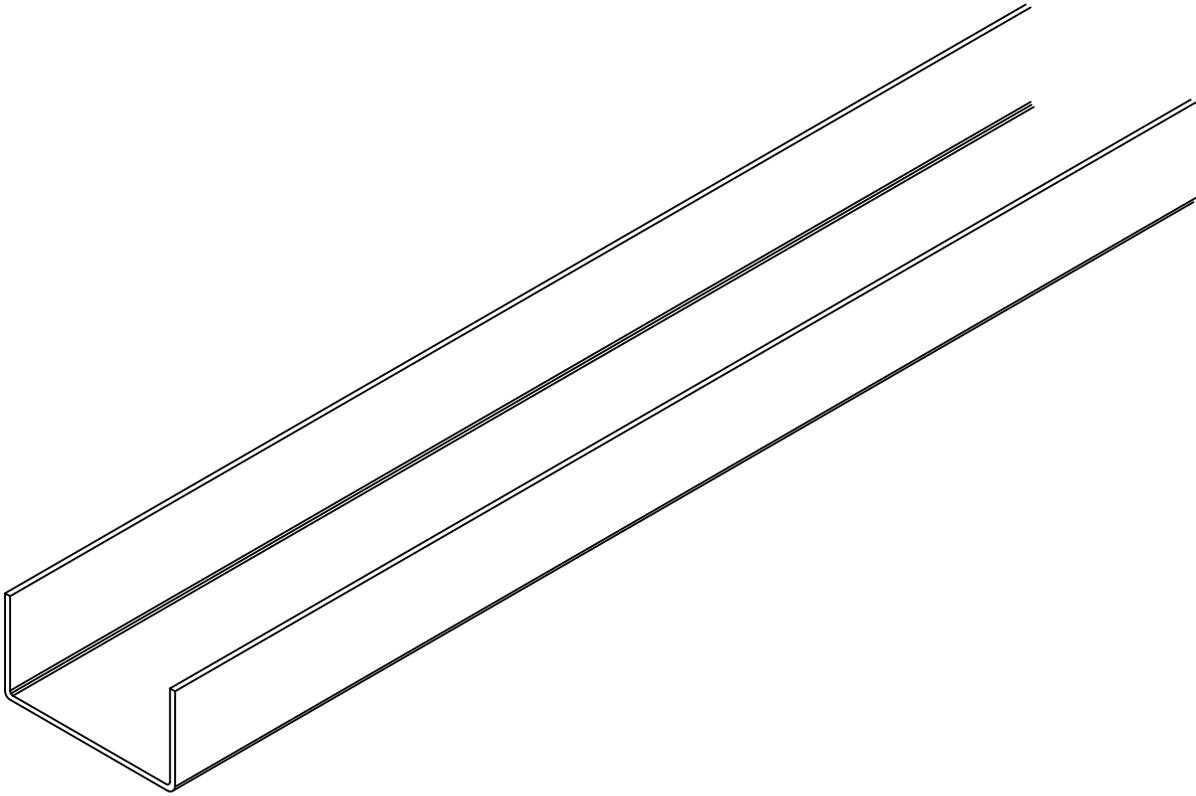
Vinyl cap 12'0" long



End channels/cap

00111

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

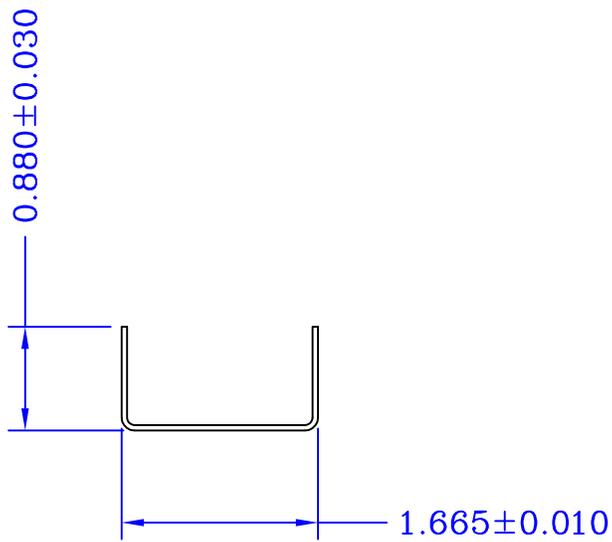
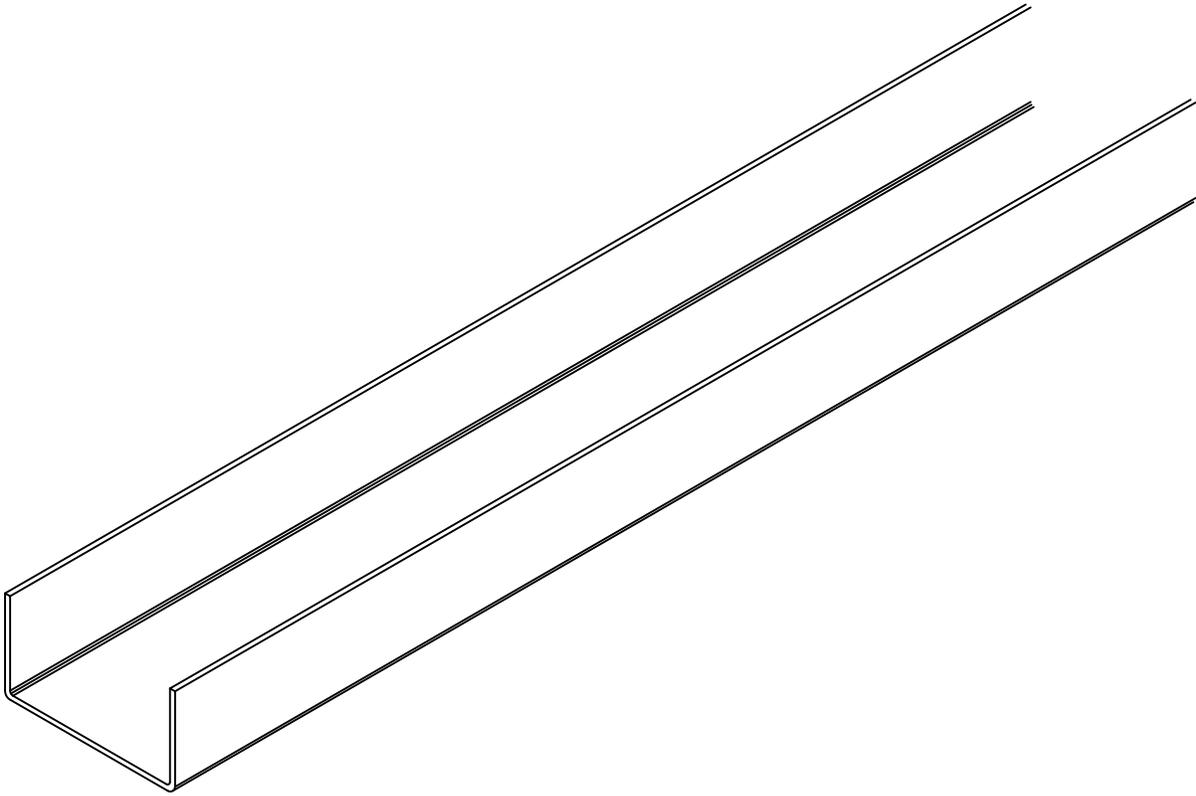


Capping channel for cutout

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

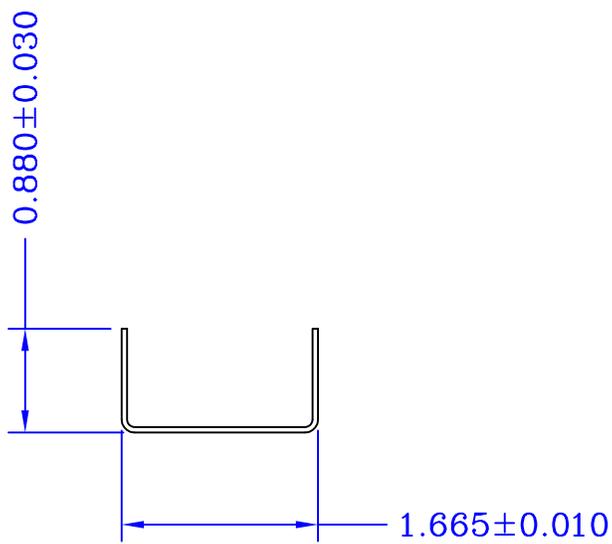
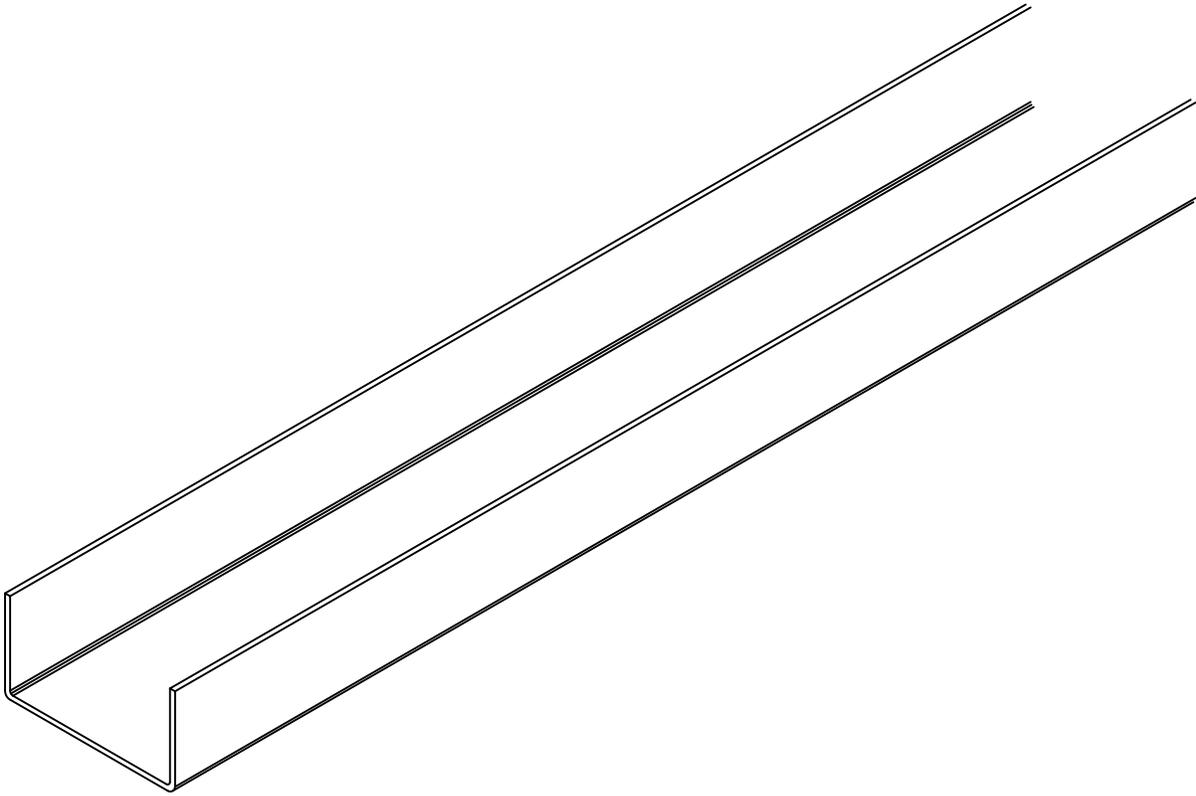


Capping channel for cutout

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

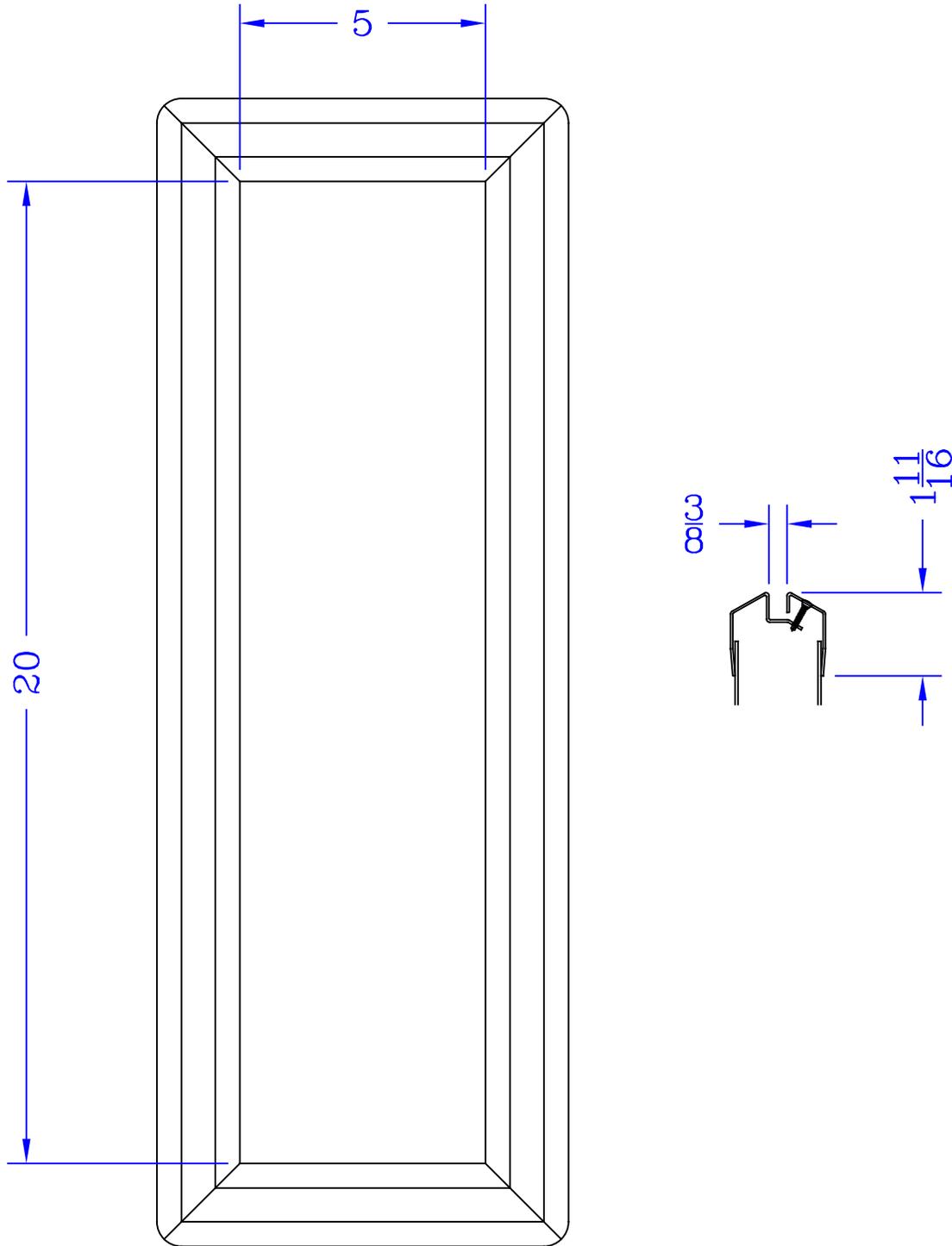


Capping channel for cutout

54494

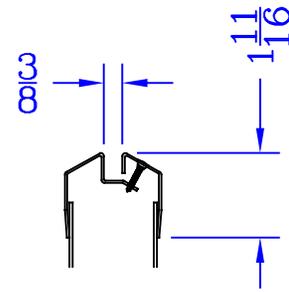
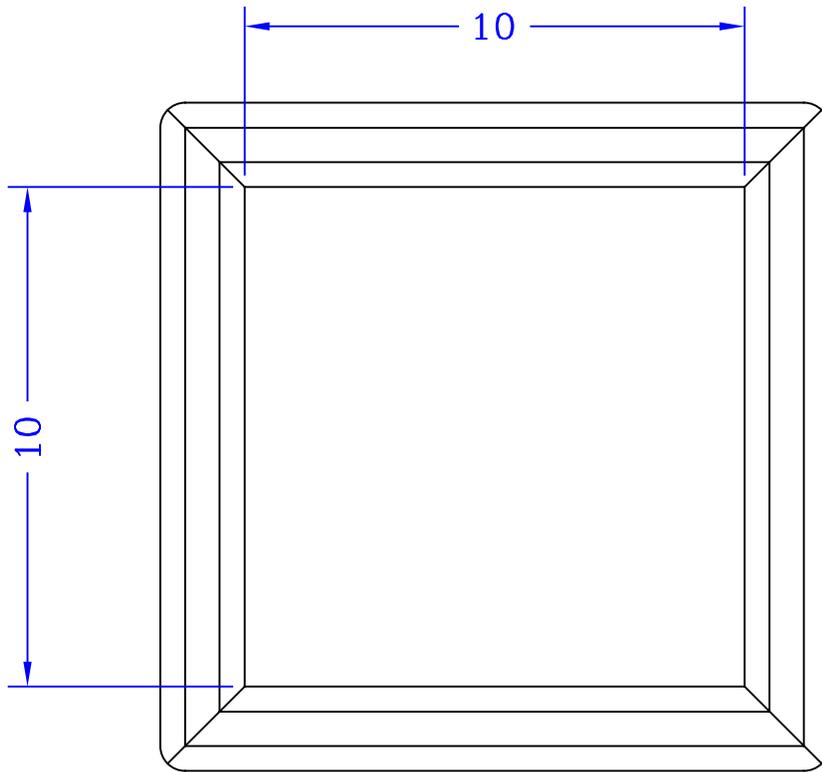
See option CH on page O-10.13 for additional information

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

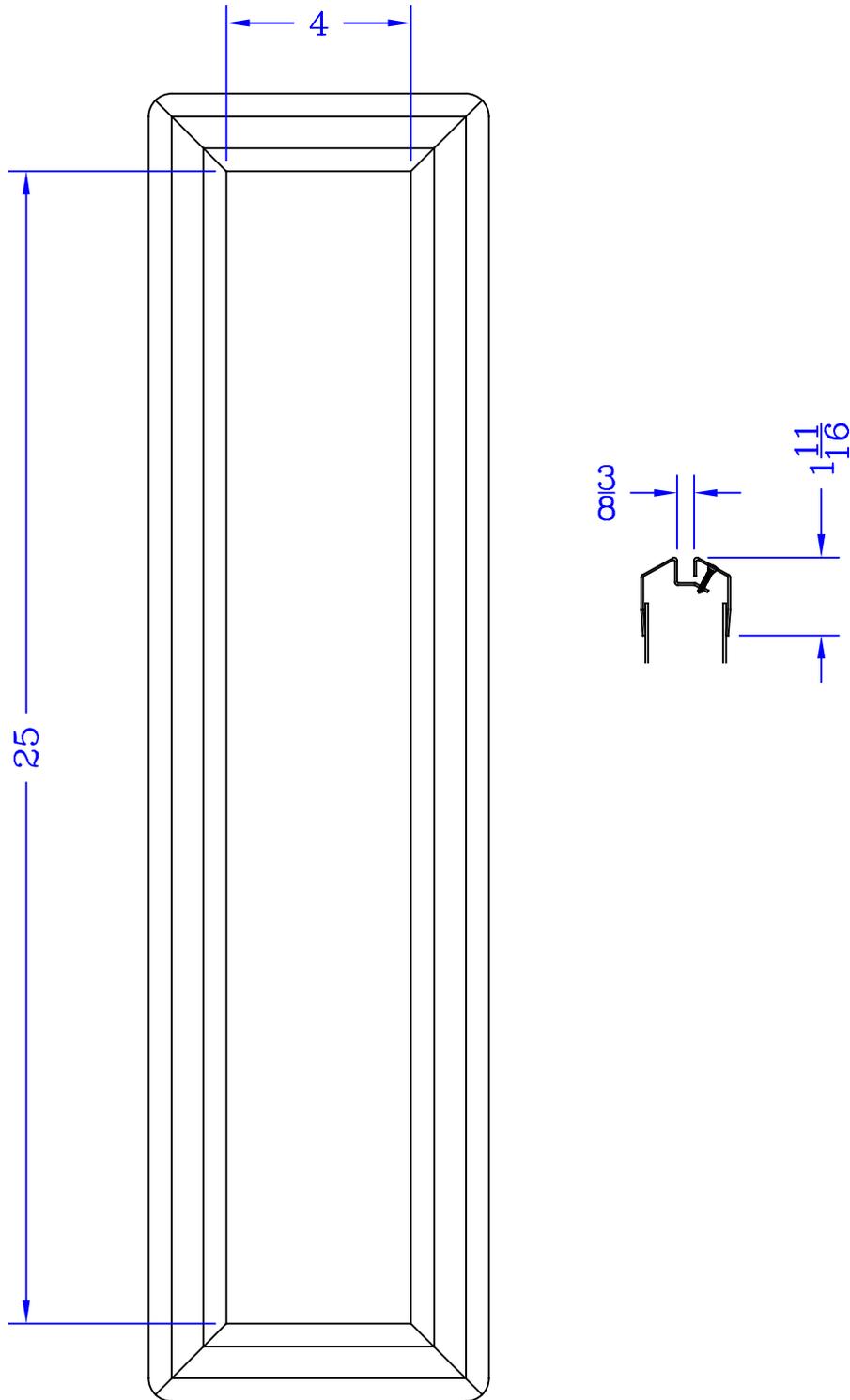
10" x 10" exposed glass, for 1/4" thick glass
for 1 3/4" thick door



Sandwich type lite kit

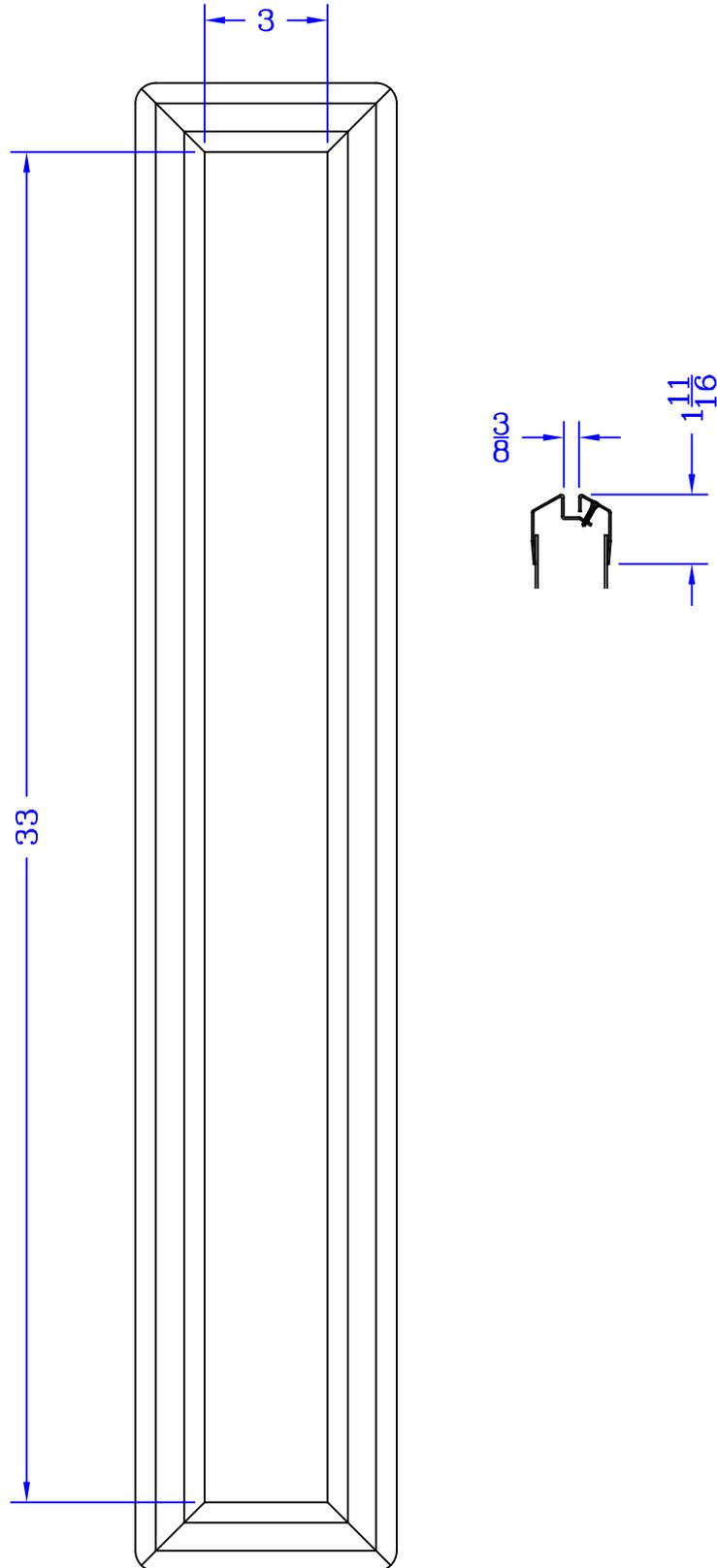
See option SK on page O-10.1 for additional information

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



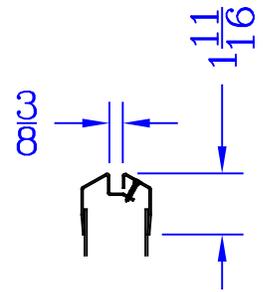
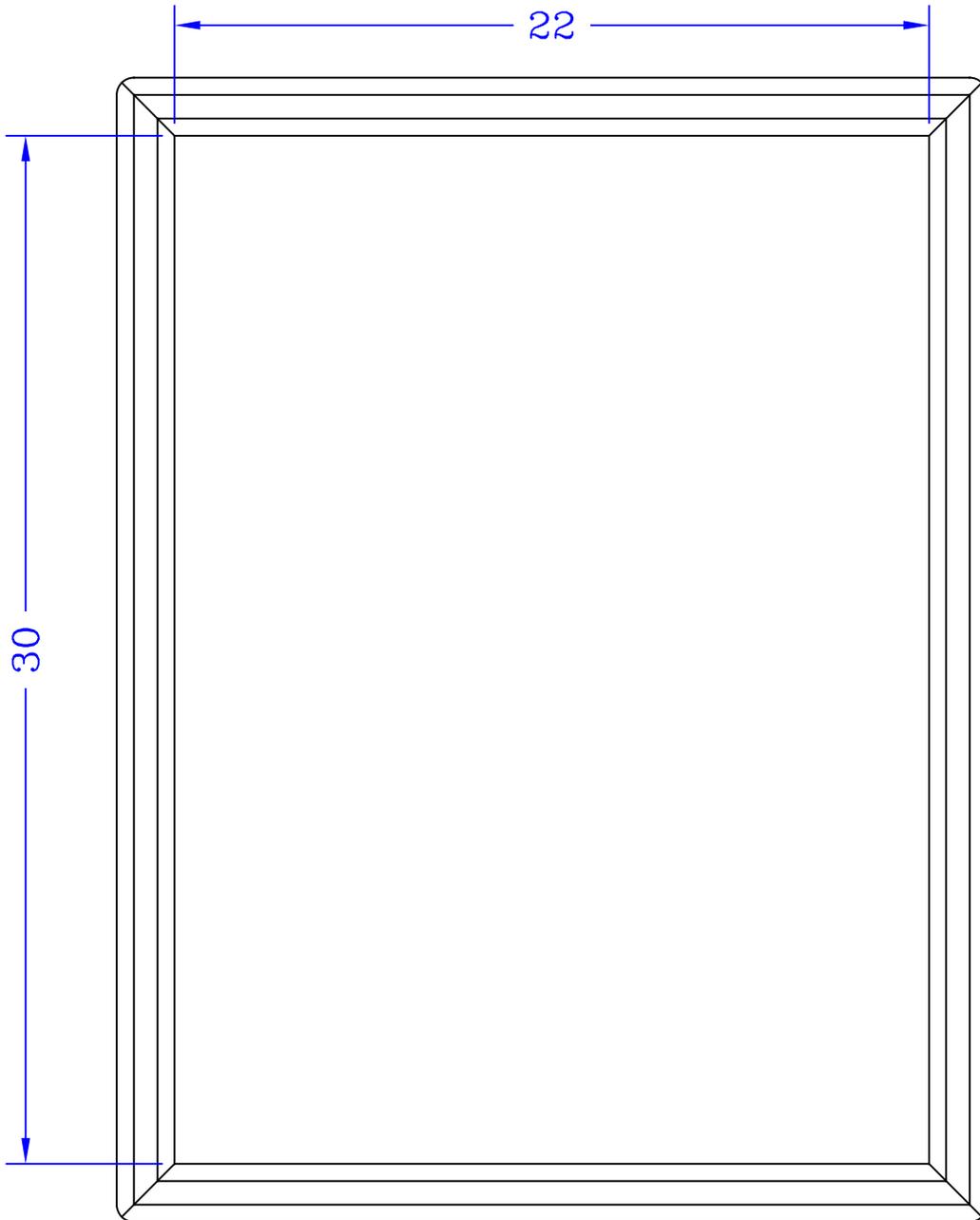
See option SK on page O-10.3 for additional information

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

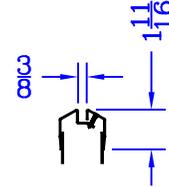
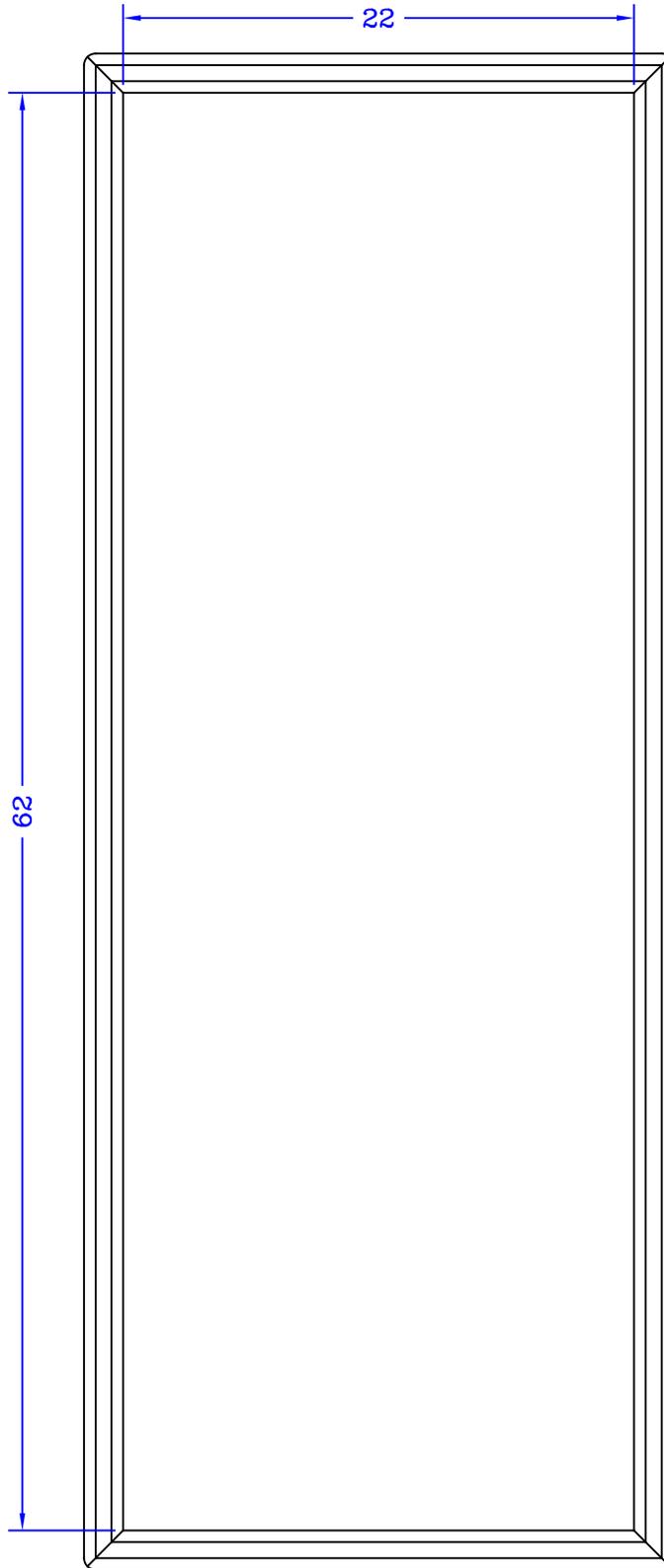
22" x 30" exposed glass, for 1/4" thick glass
for 1 3/4" thick door



Sandwich type lite kit

See option SK on page O-10.10 for additional information

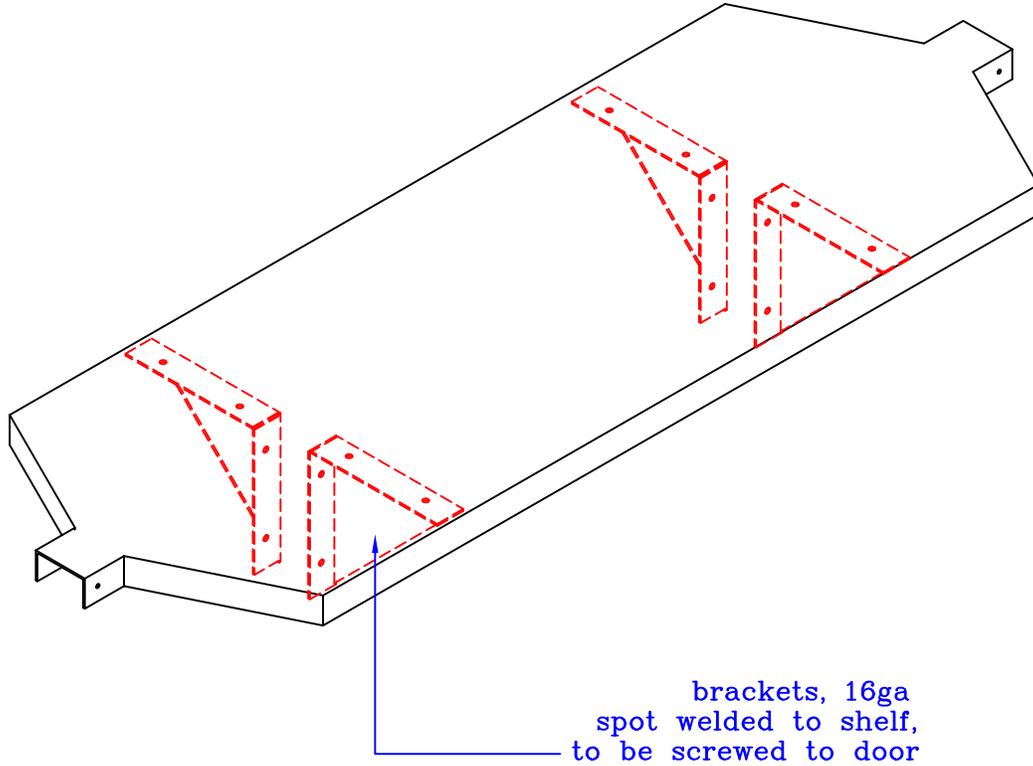
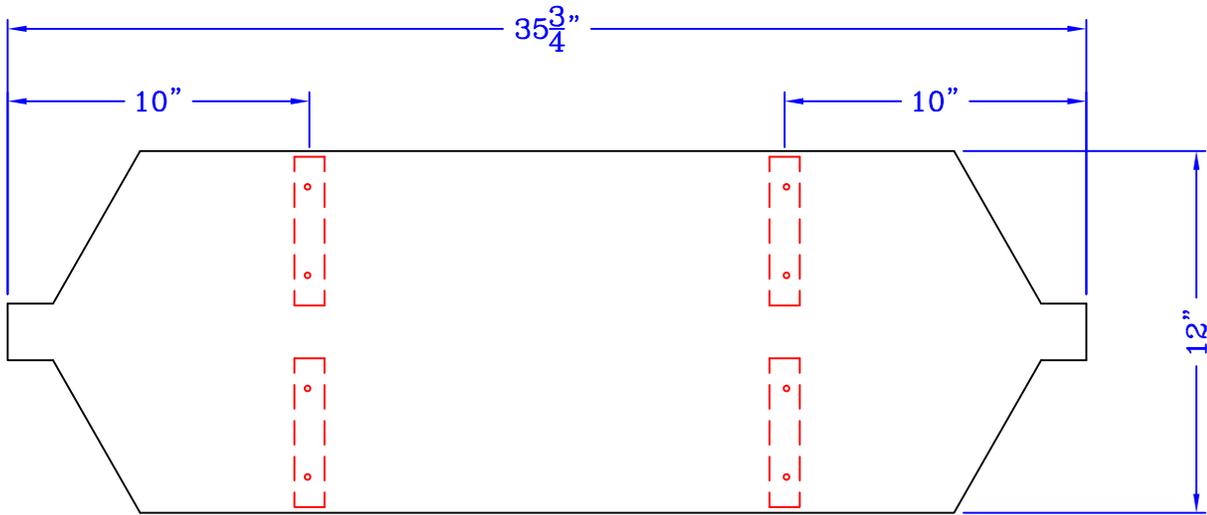
22" x 62" exposed glass, for 1/4" thick glass
for 1 3/4" thick door



Sandwich type lite kit

See option SK on page O-10.12 for additional information

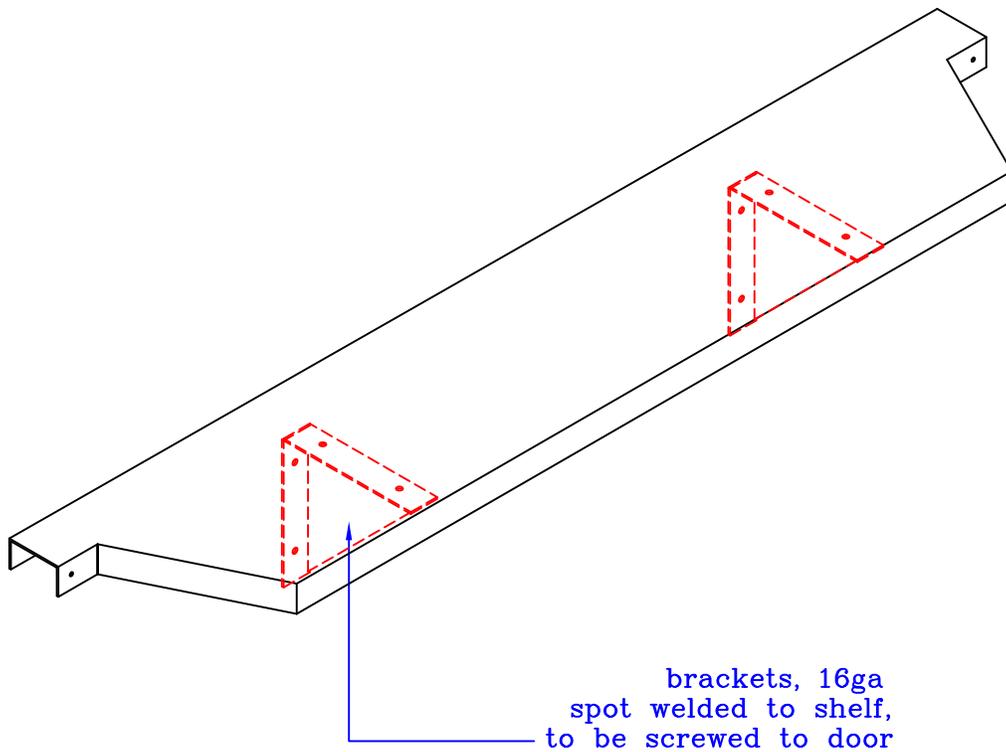
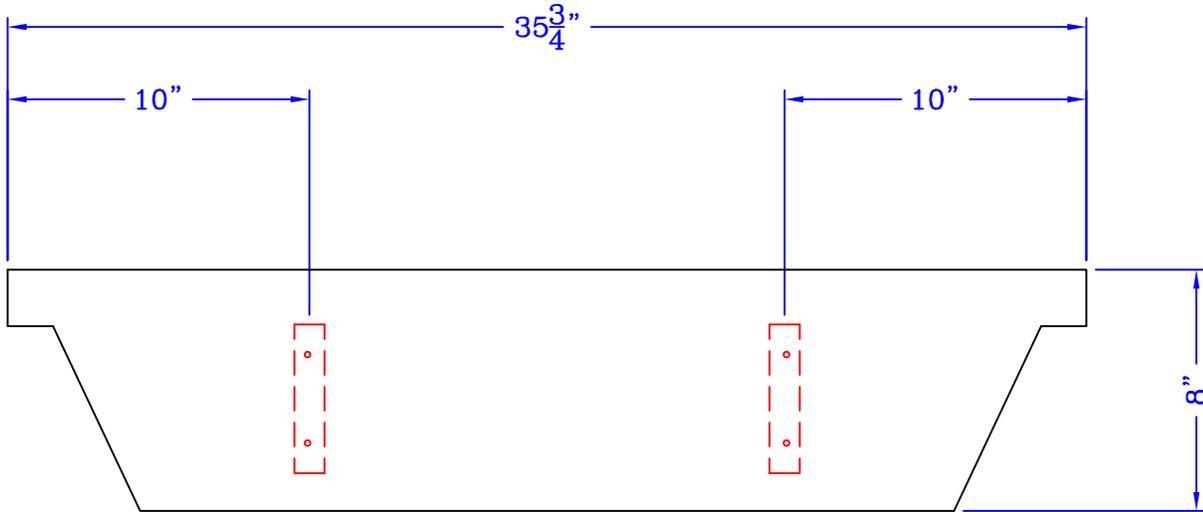
Full dutch door shelf, 16ga, for 3'0" nominal door
for 1 3/4" thick door



Dutch door shelf

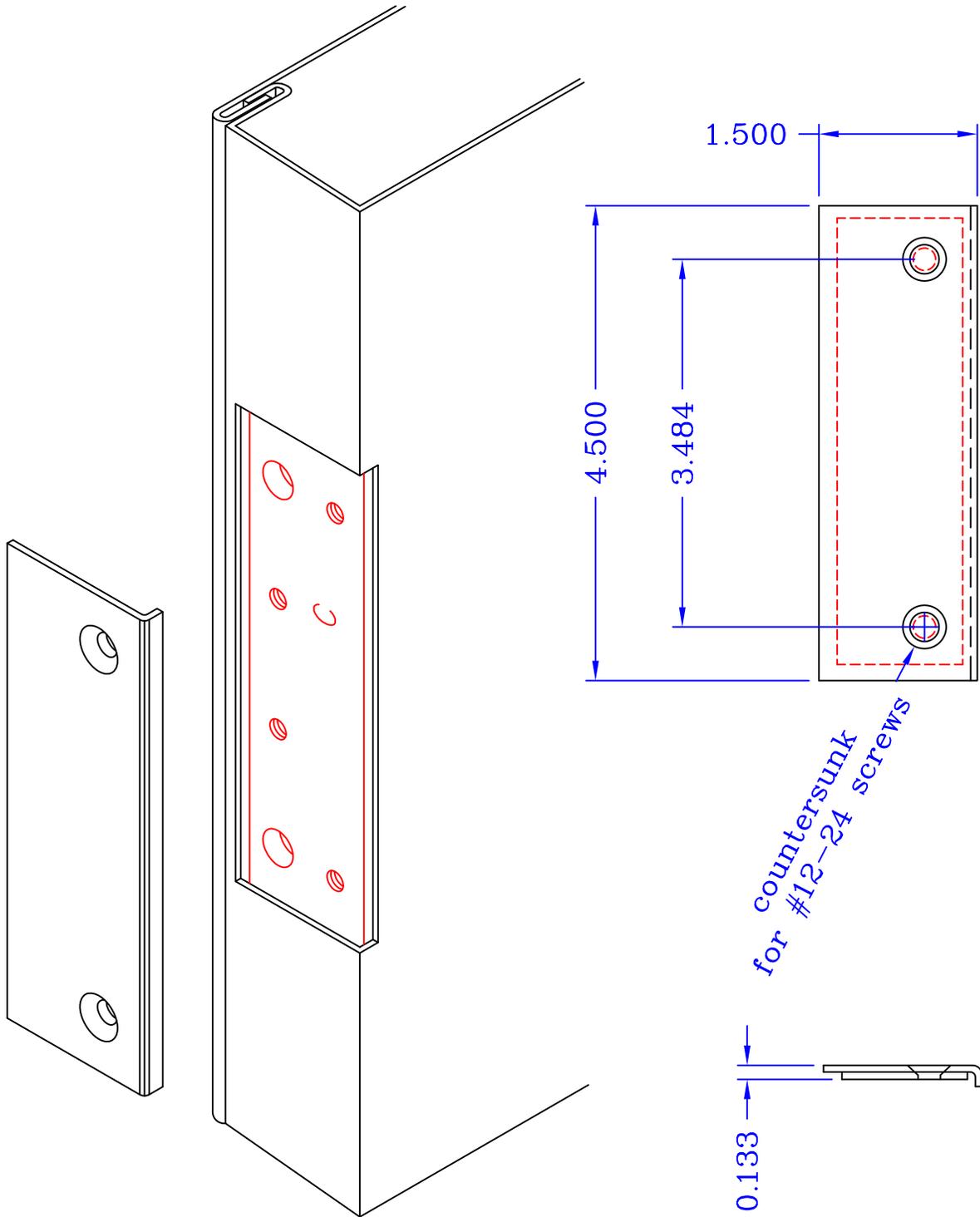
00851

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

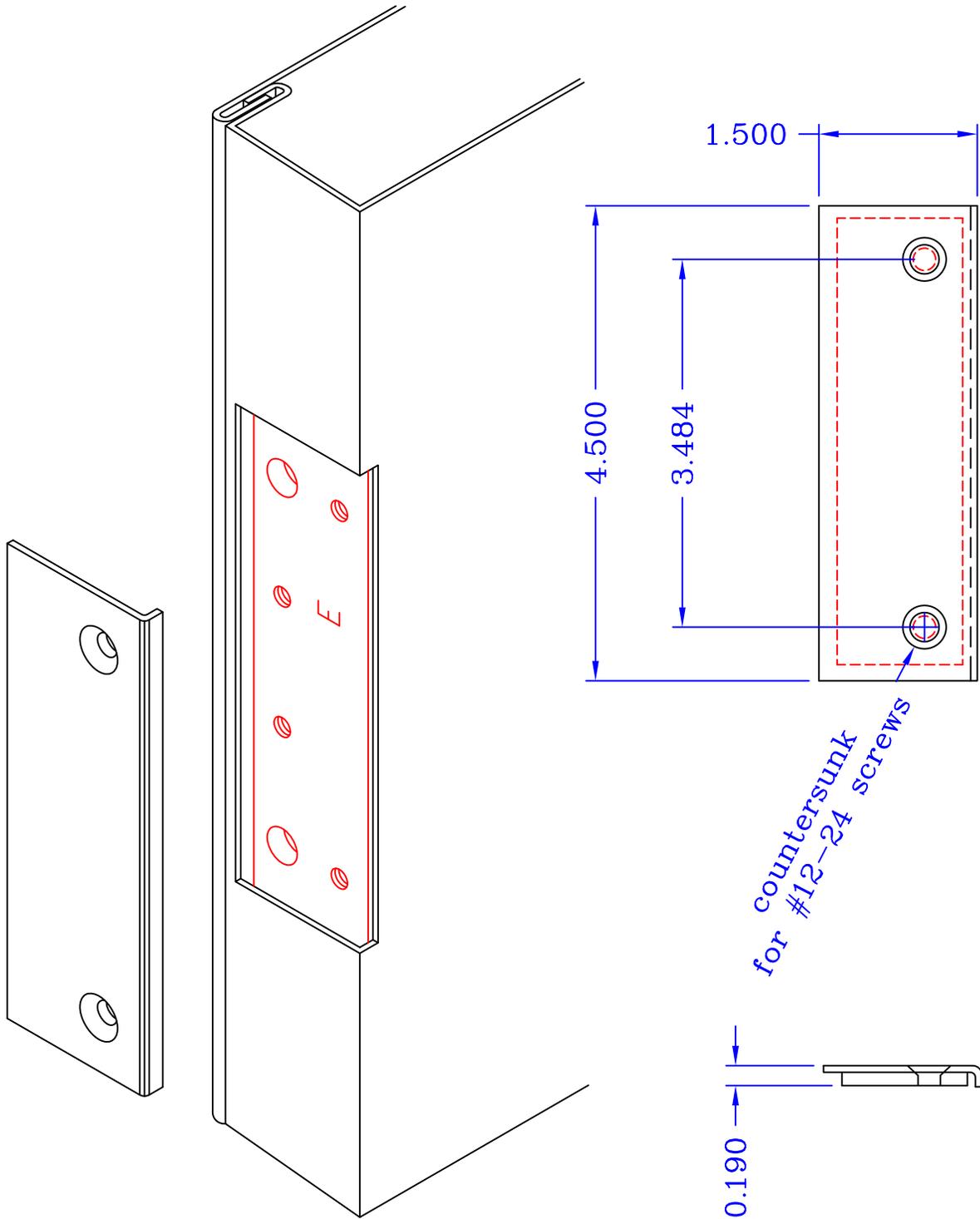


Dutch door shelf

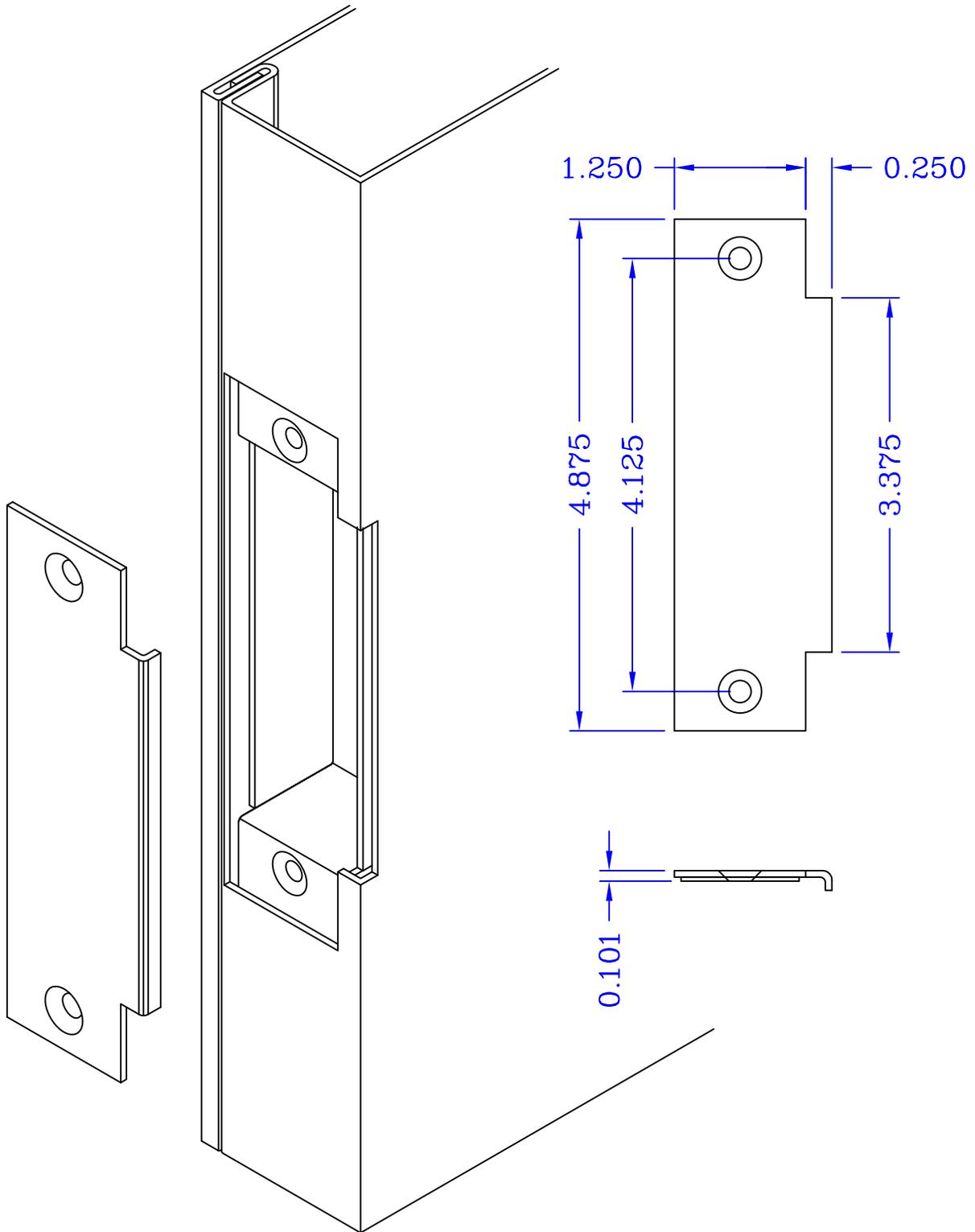
4 1/2" standard weight hinge filler, screwed
for 1 3/4" thick door



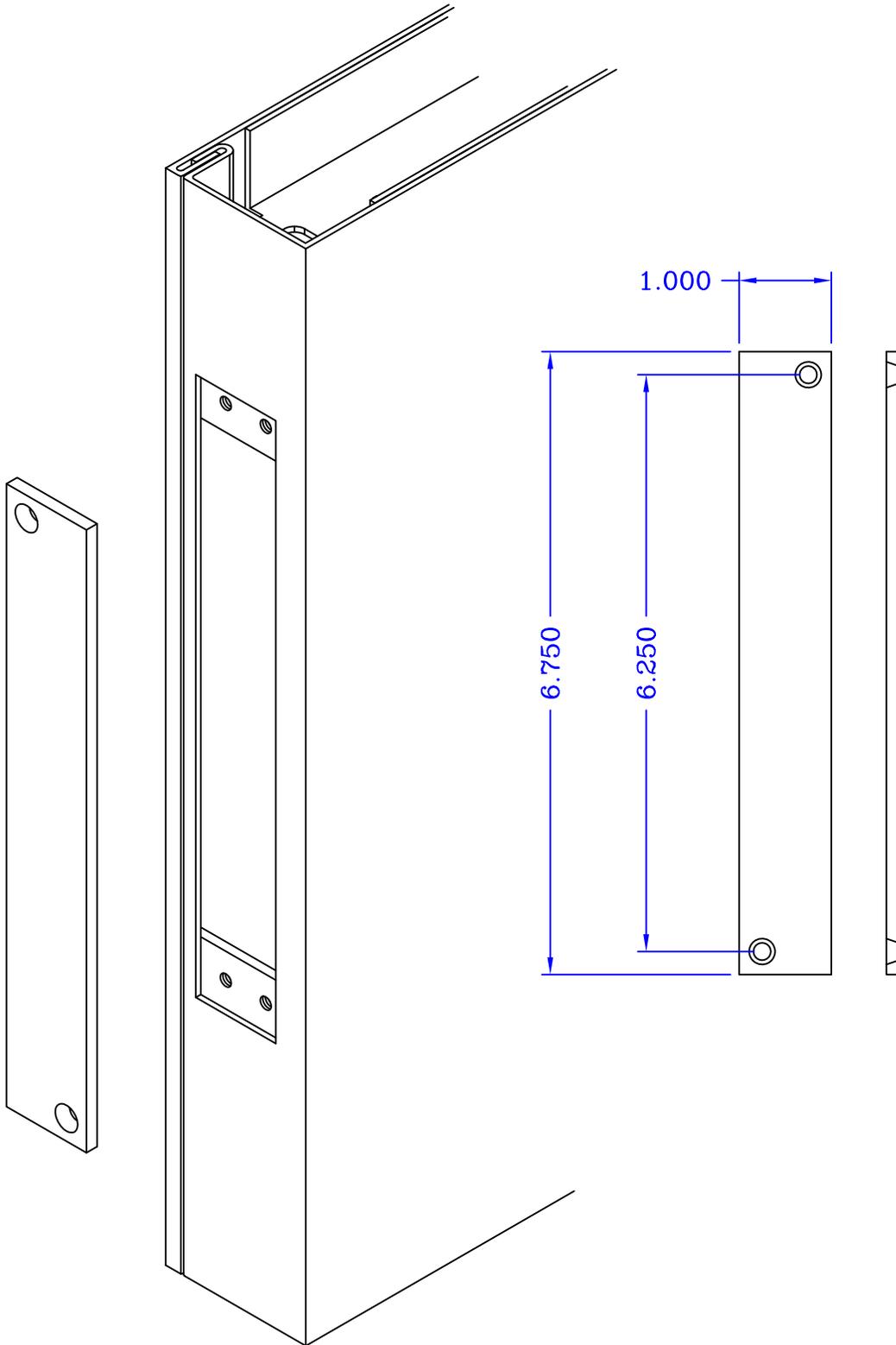
4 1/2" heavy weight hinge filler, screwed
for 1 3/4" thick door



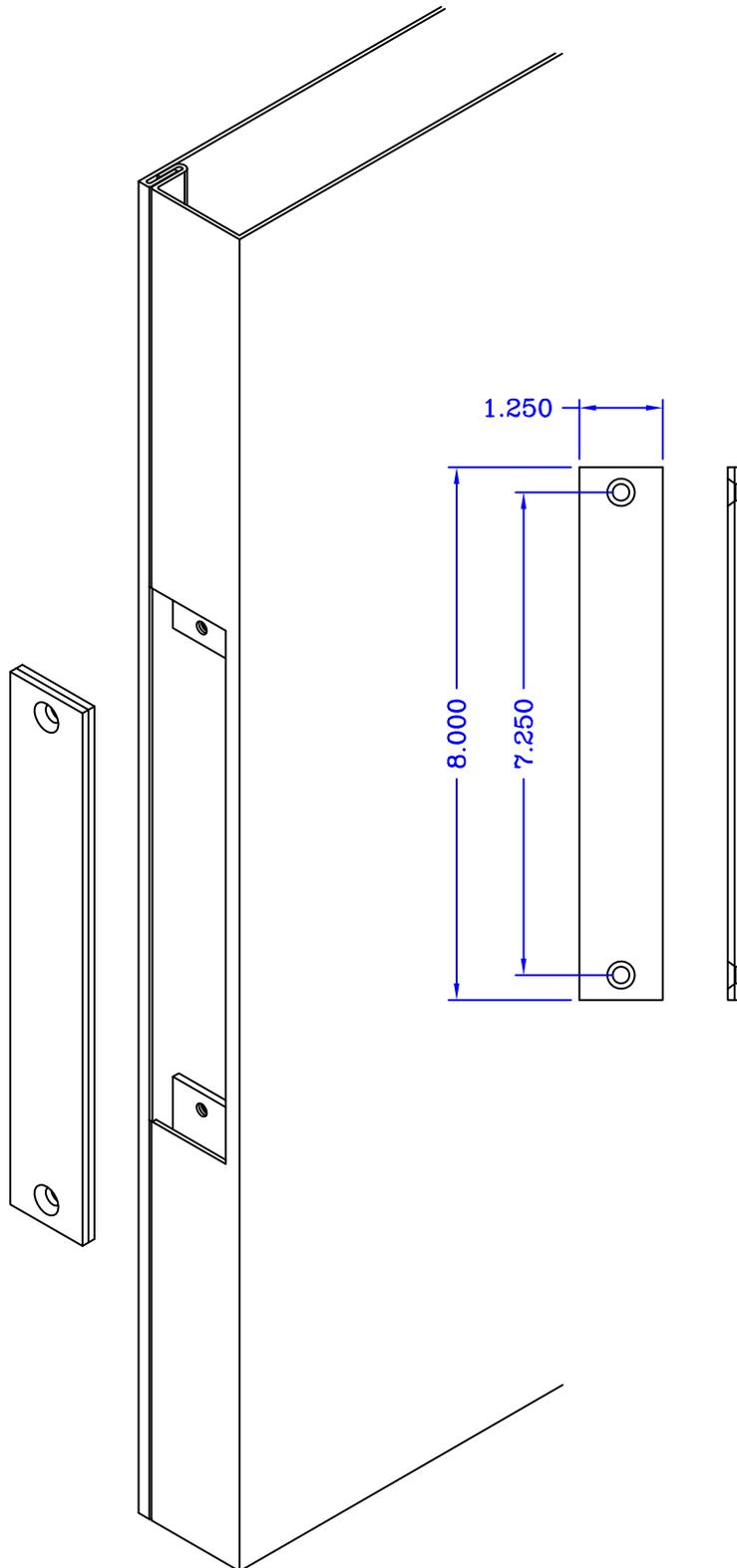
ASA strike filler, screwed
for 1 3/4" thick door



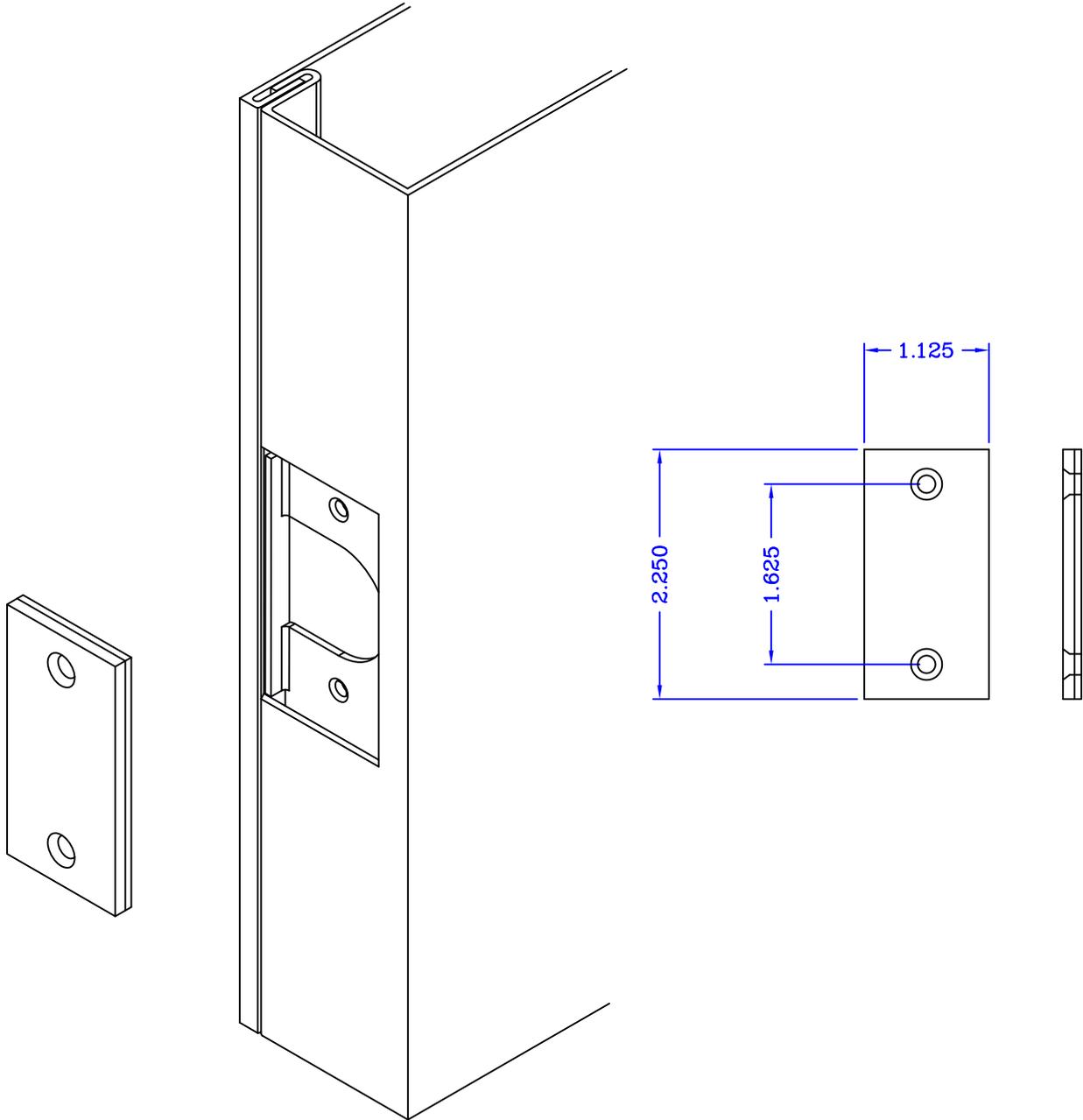
Flush bolt, edge prep filler, screwed
for 1 3/4" thick door



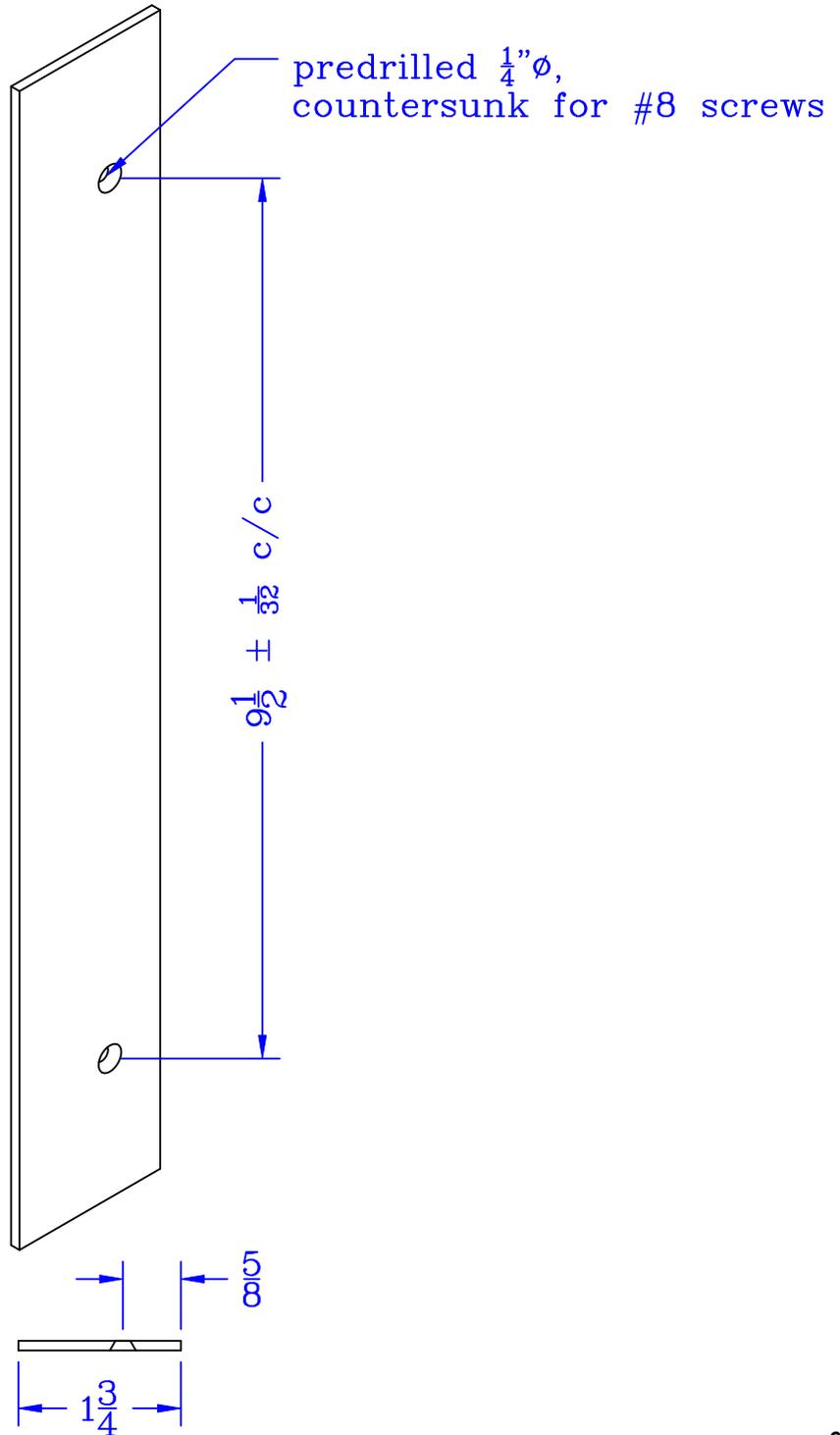
Mortise filler, screwed
for 1 3/4" thick door



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

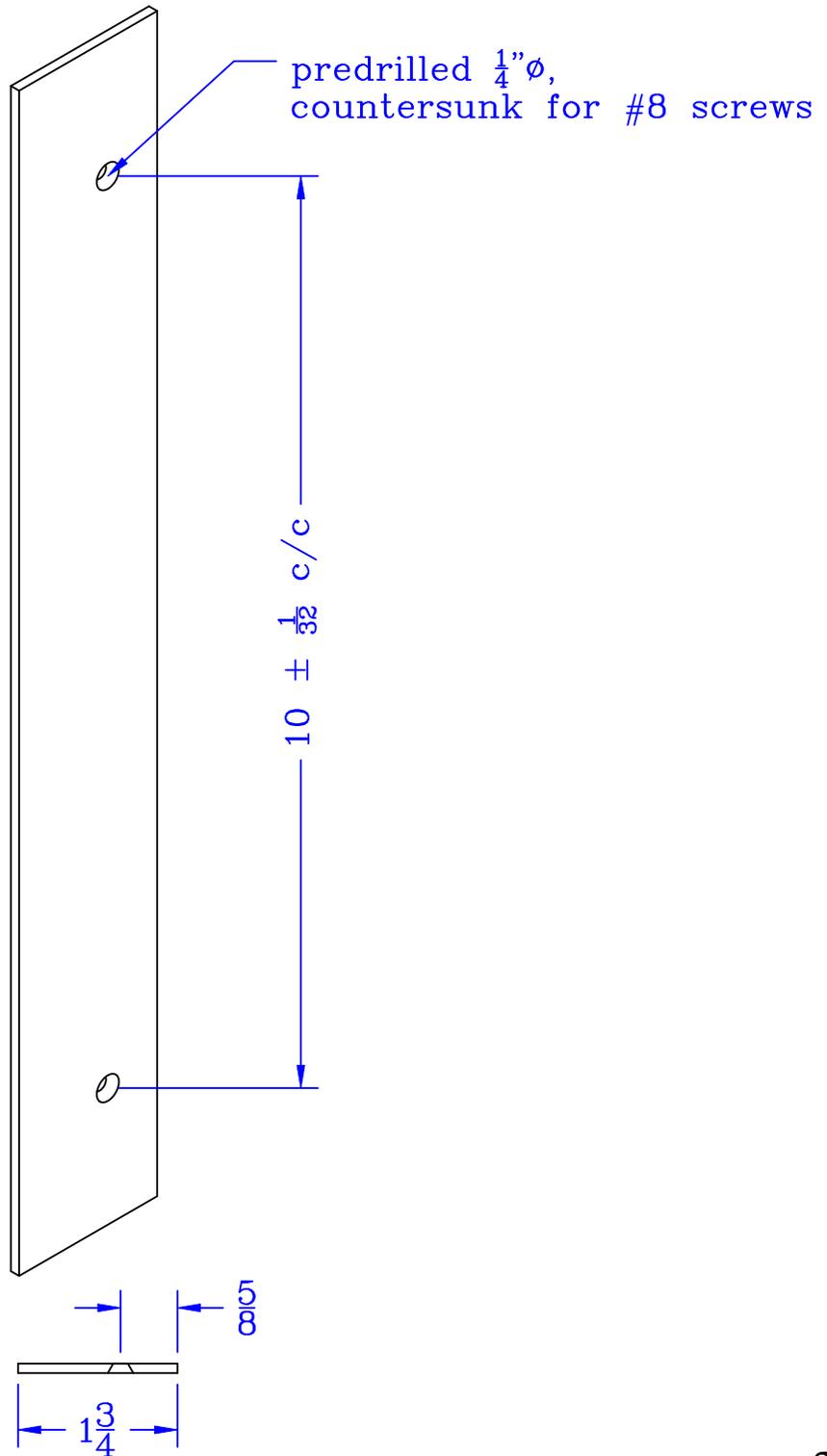


Flat bar astragal 79 1/8", 12ga



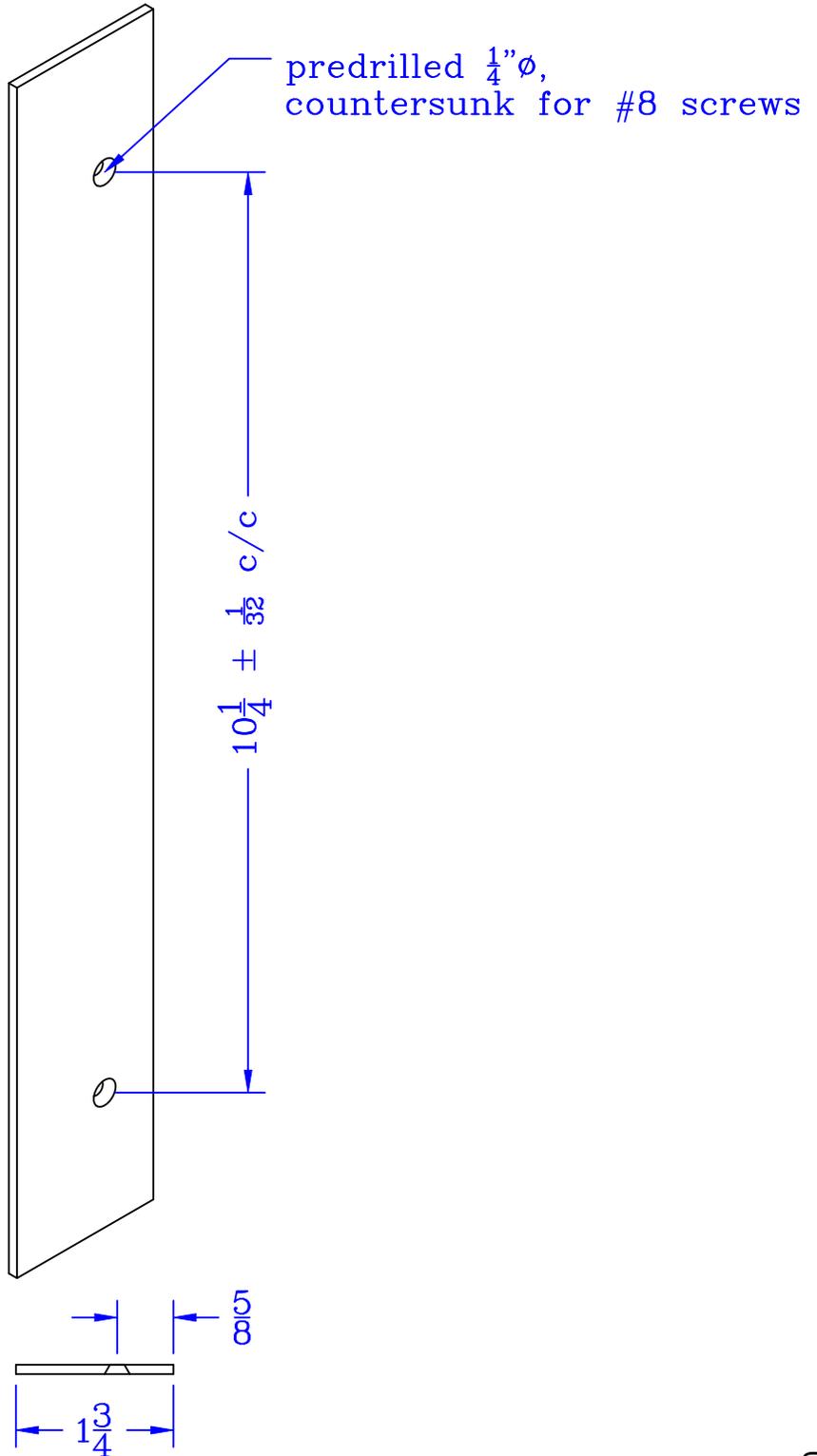
See option FAS on page O-6.6 for additional information

Flat bar astragal 83 1/8", 12ga



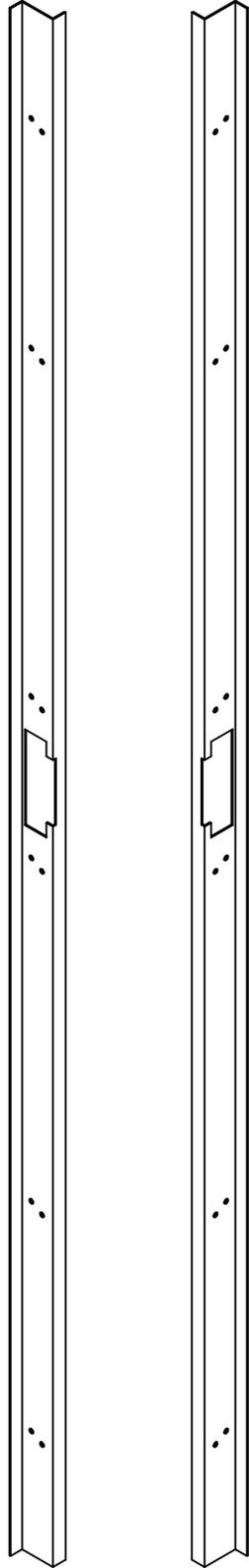
See option FAS on page O-6.6 for additional information

Flat bar astragal 95 1/8", 12ga



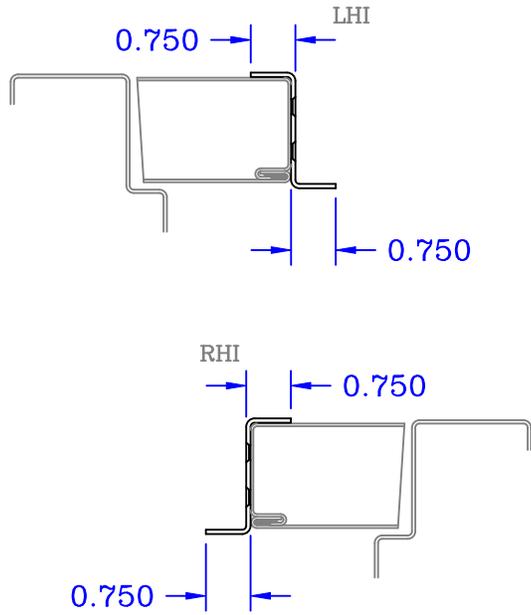
See option FAS on page O-6.6 for additional information

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



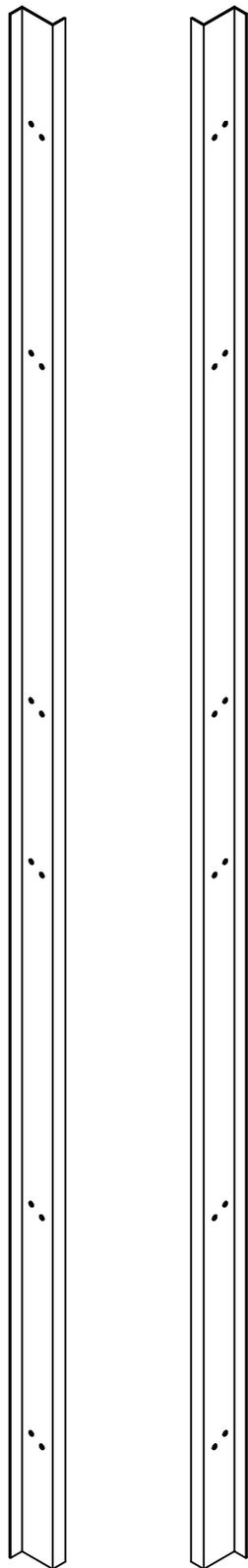
LHI

RHI



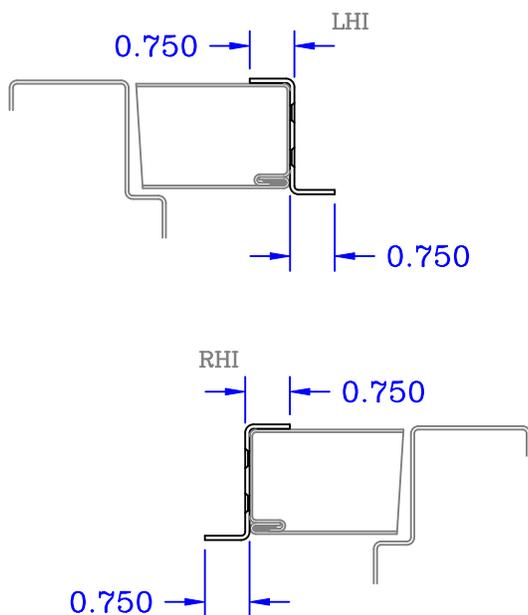
See option ZAS on page O-6.7 for additional information

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



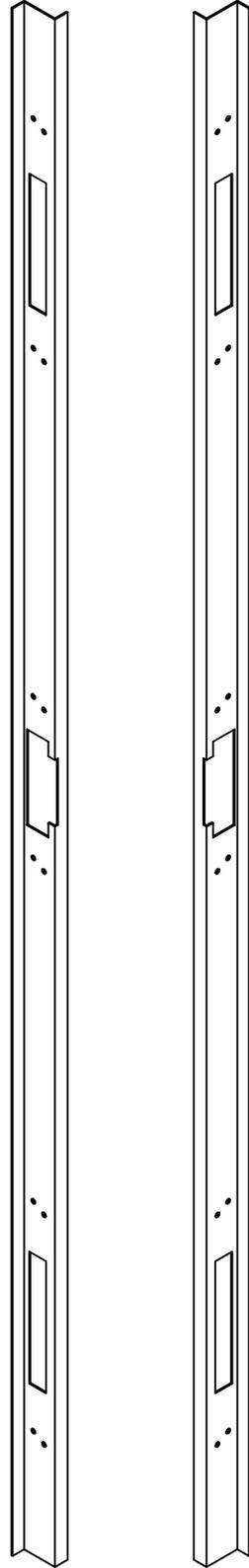
LHI

RHI



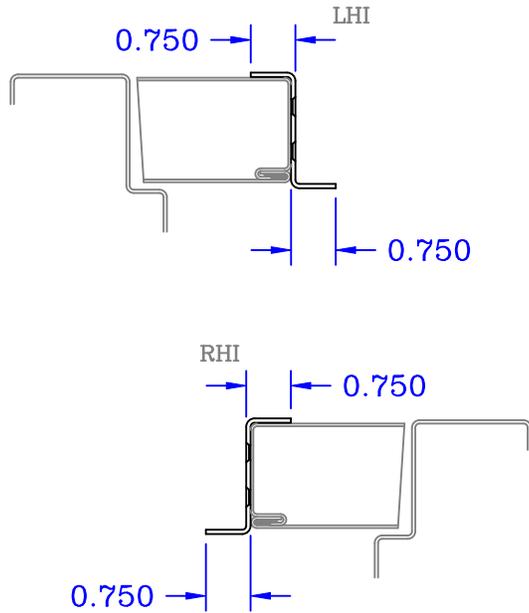
See option ZAS on page O-6.7 for additional information

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



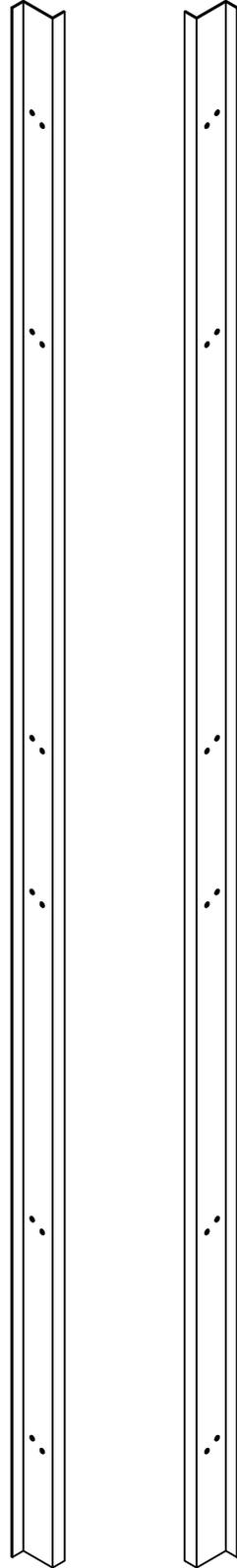
LHI

RHI



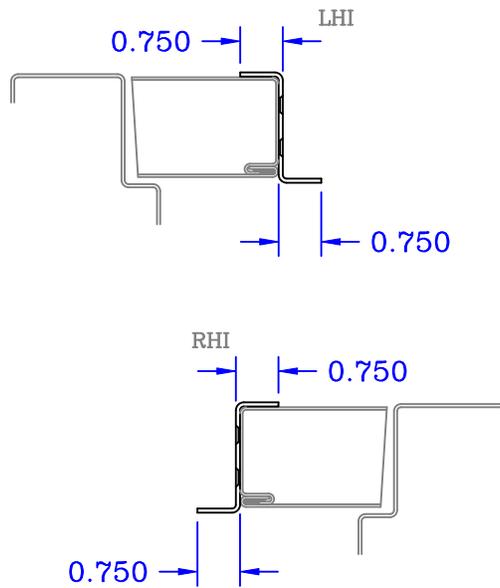
See option ZAS on page O-6.7 for additional information

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



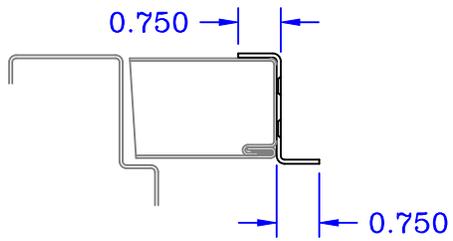
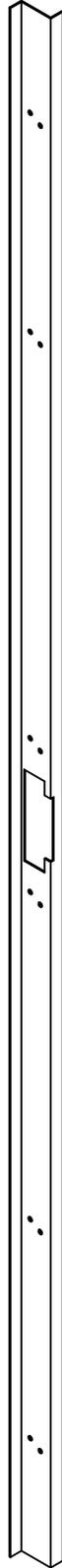
LHI

RHI



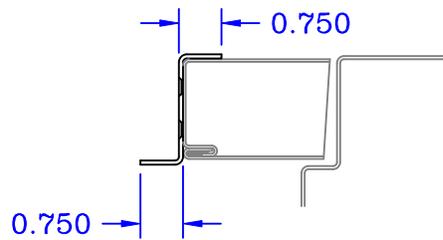
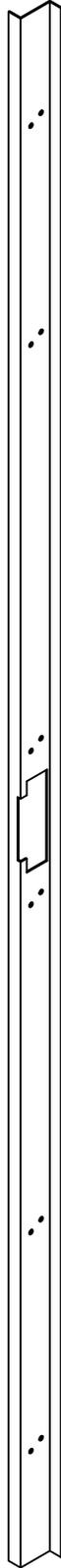
See option ZAS on page O-6.7 for additional information

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



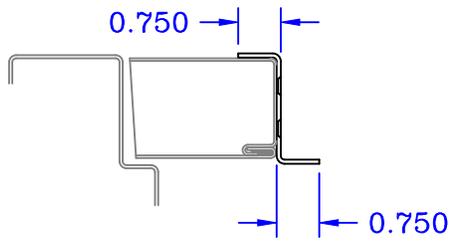
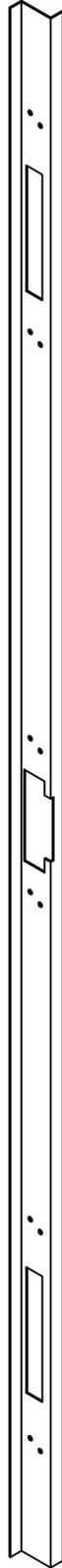
See option ZAS on page O-6.7 for additional information

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



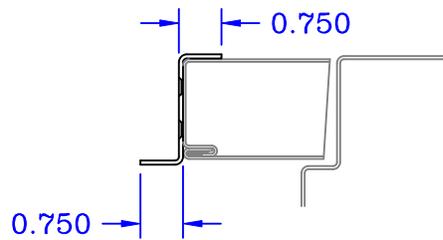
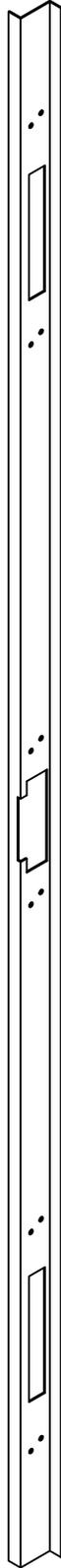
See option ZAS on page O-6.7 for additional information

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



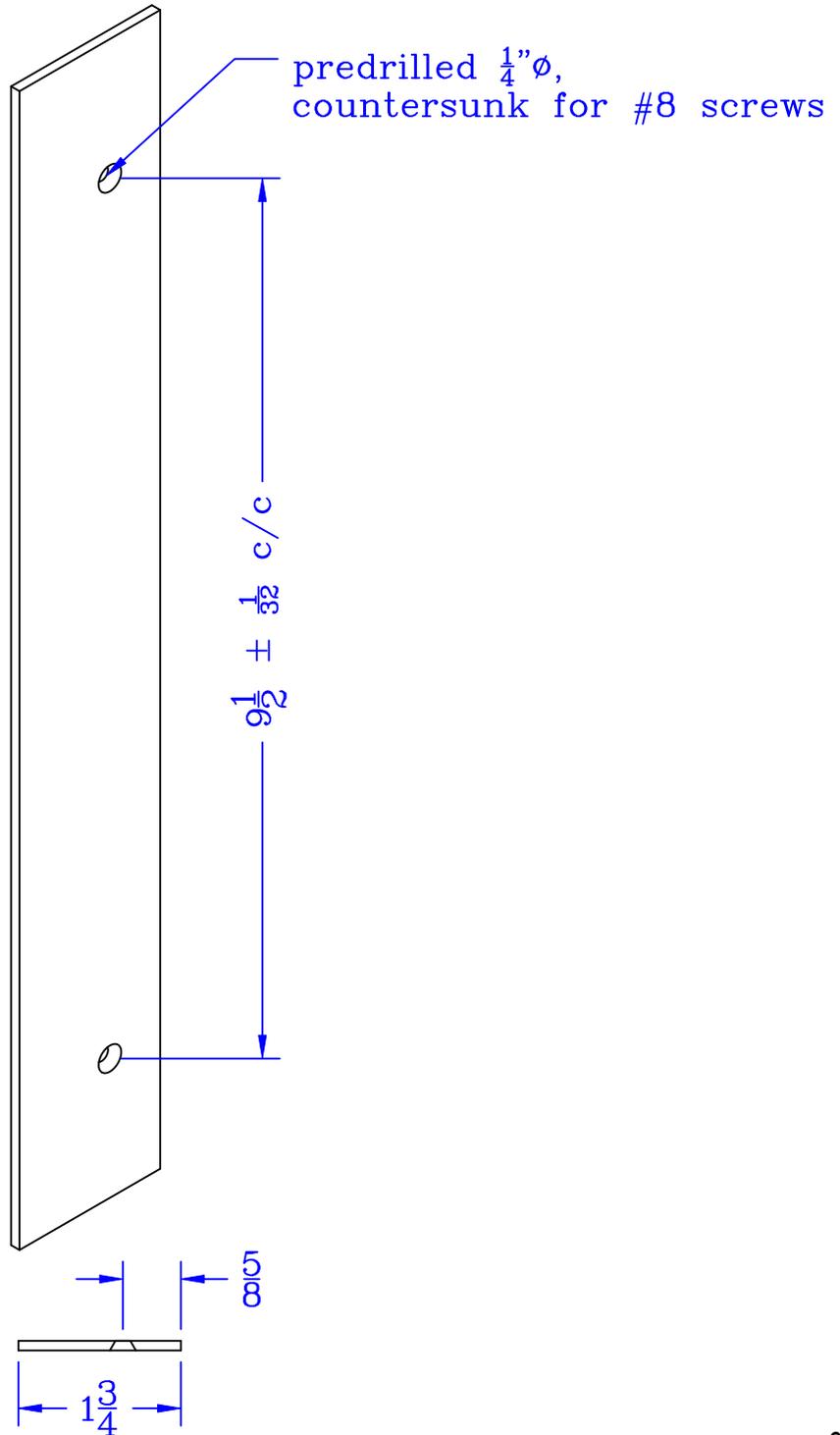
See option ZAS on page O-6.7 for additional information

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



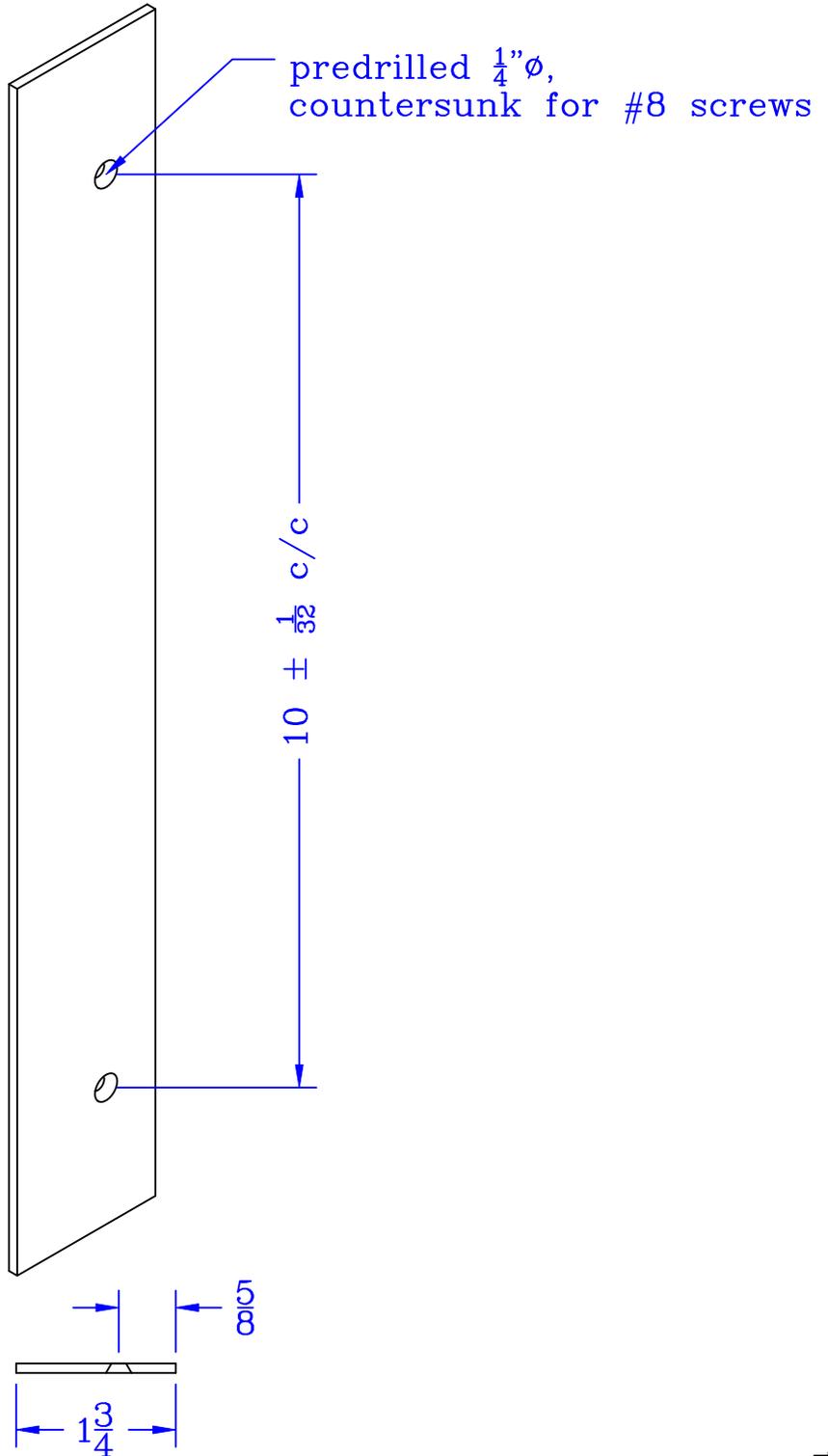
See option ZAS on page O-6.7 for additional information

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



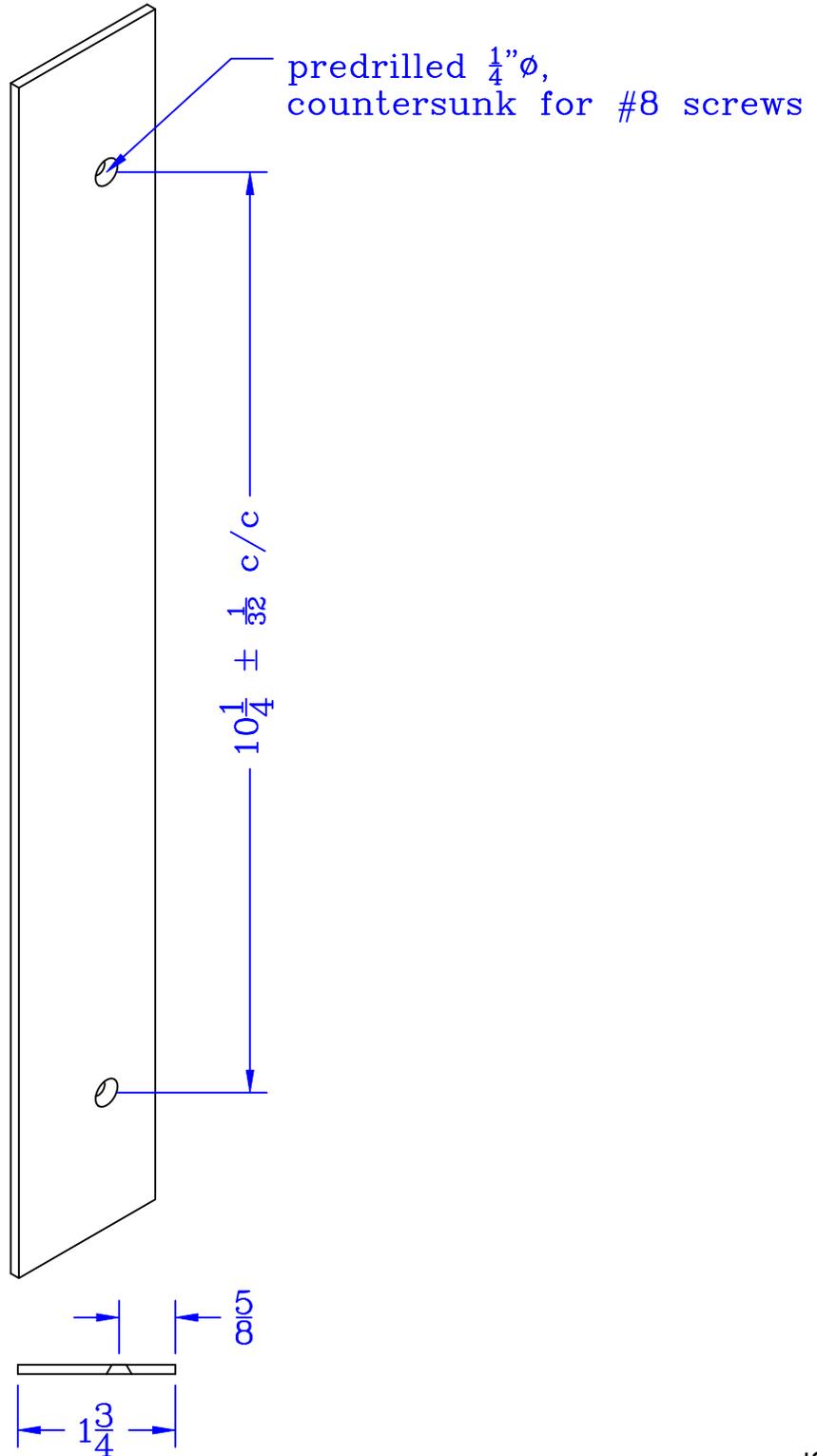
See option FAS on page O-6.6 for additional information

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



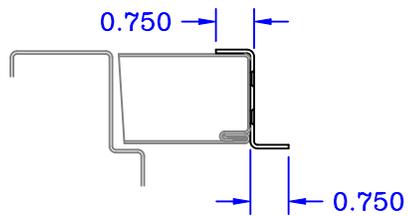
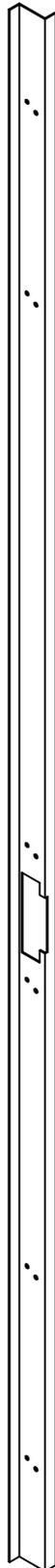
See option FAS on page O-6.6 for additional information

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



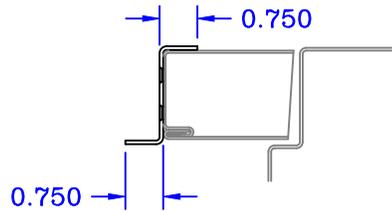
See option FAS on page O-6.6 for additional information

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



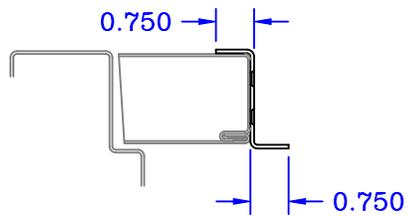
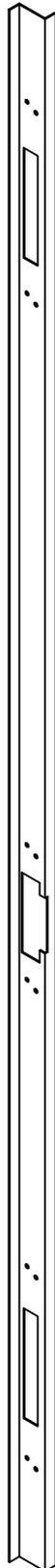
See option ZAS on page O-6.7 for additional information

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



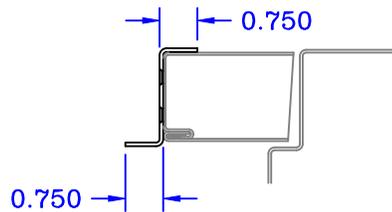
See option ZAS on page O-6.7 for additional information

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



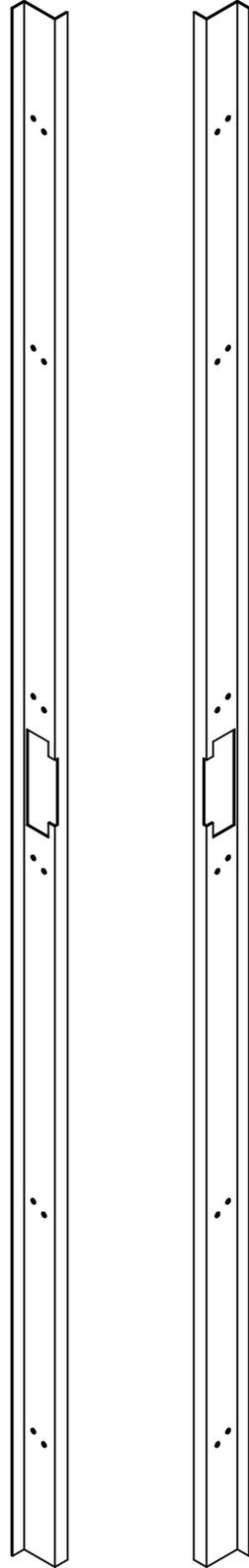
See option ZAS on page O-6.7 for additional information

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



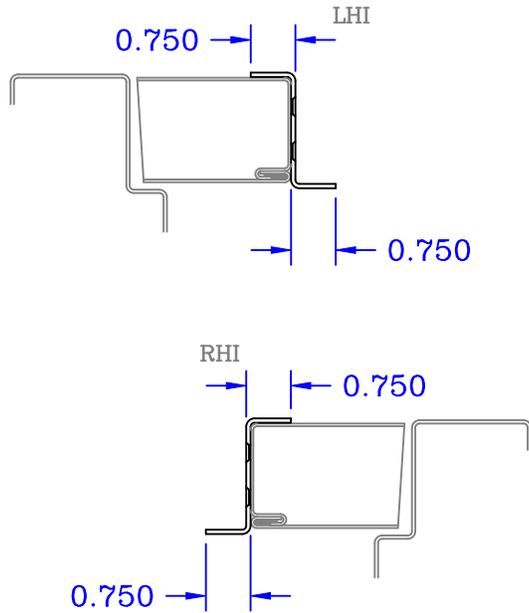
See option ZAS on page O-6.7 for additional information

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



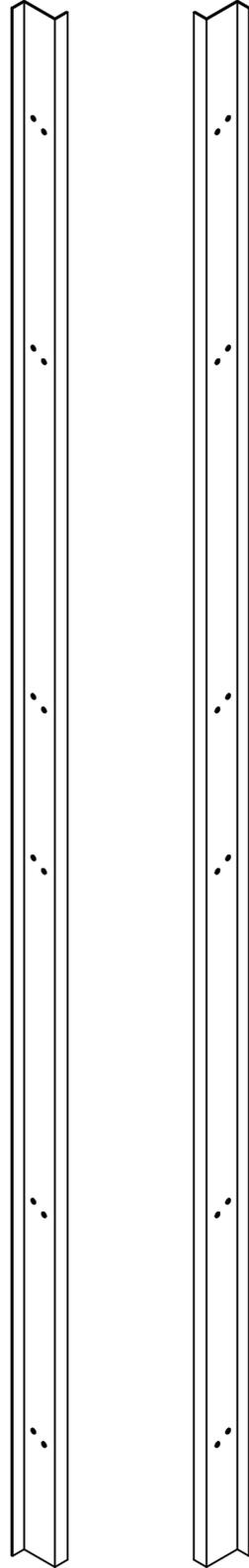
LHI

RHI



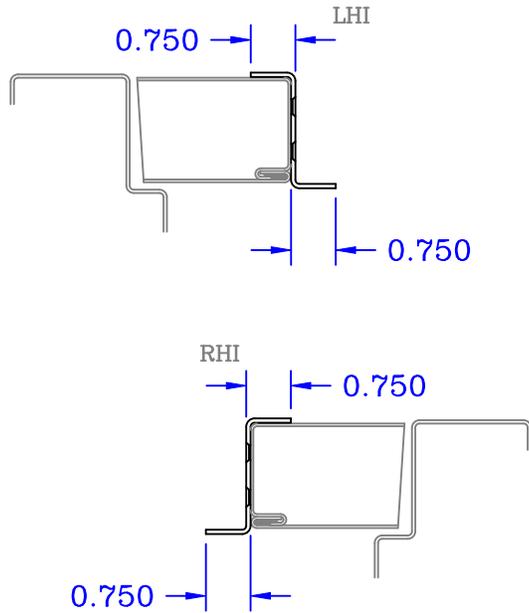
See option ZAS on page O-6.7 for additional information

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



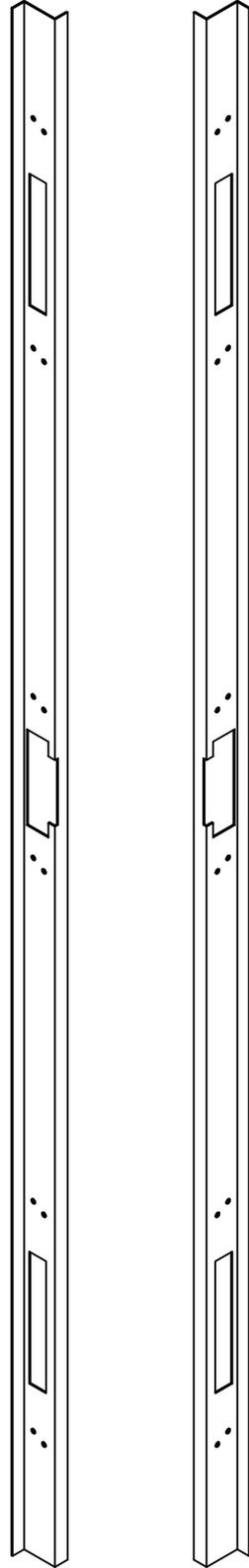
LHI

RHI



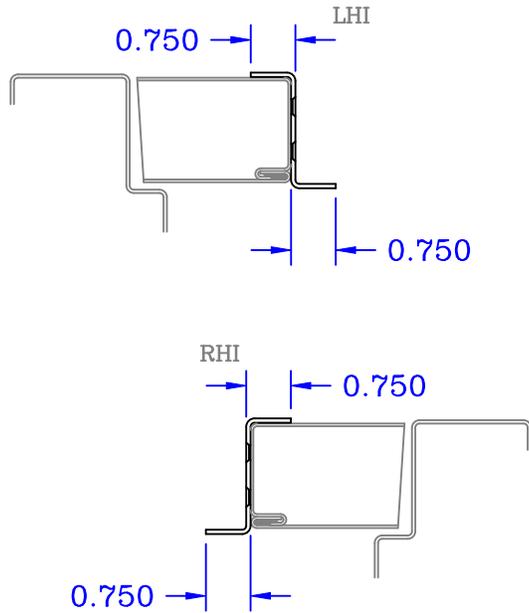
See option ZAS on page O-6.7 for additional information

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



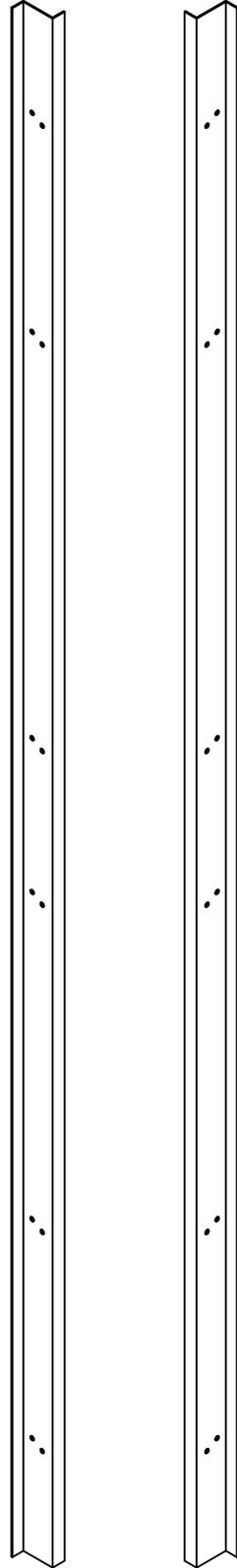
LHI

RHI



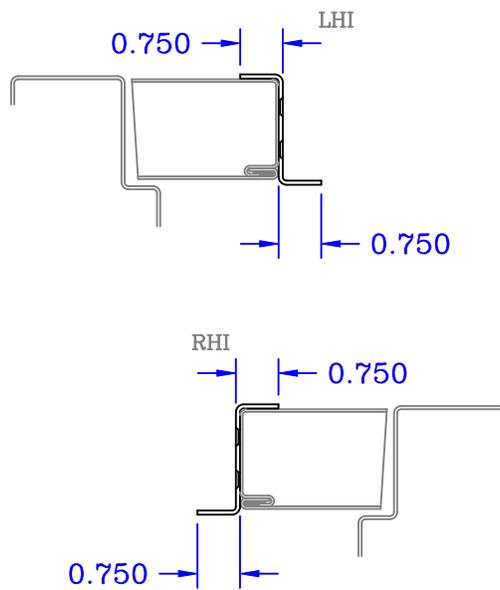
See option ZAS on page O-6.7 for additional information

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



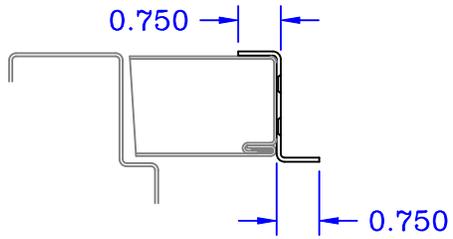
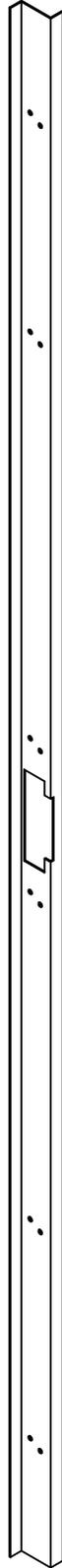
LHI

RHI



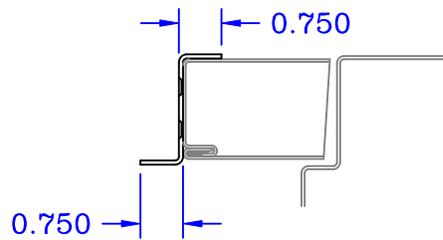
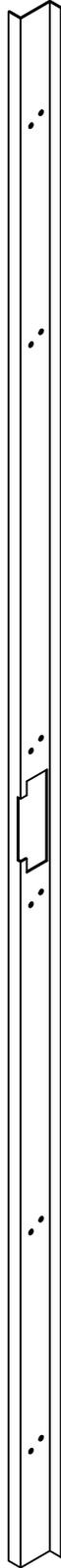
See option ZAS on page O-6.7 for additional information

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



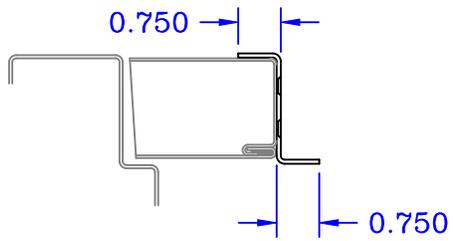
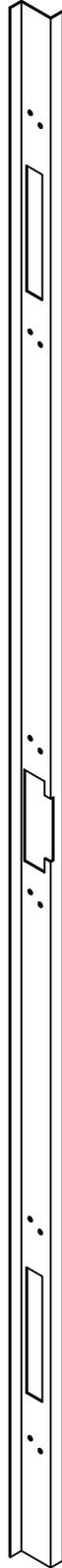
See option ZAS on page O-6.7 for additional information

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



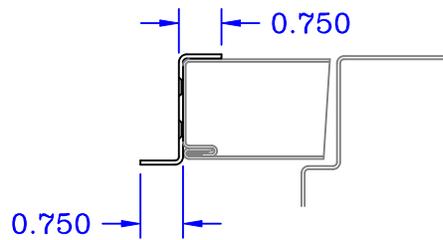
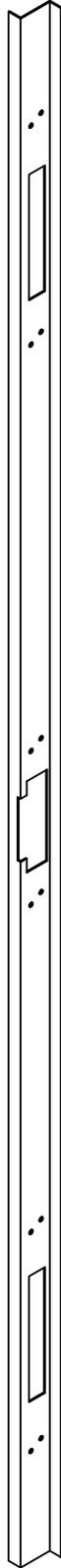
See option ZAS on page O-6.7 for additional information

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



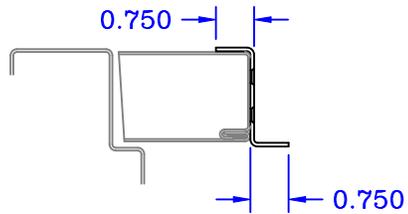
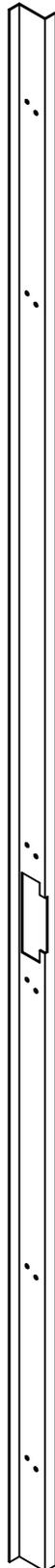
See option ZAS on page O-6.7 for additional information

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



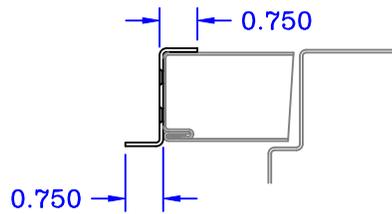
See option ZAS on page O-6.7 for additional information

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



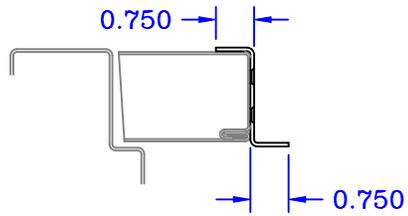
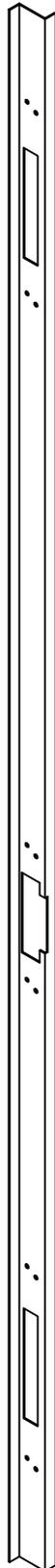
See option ZAS on page O-6.7 for additional information

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



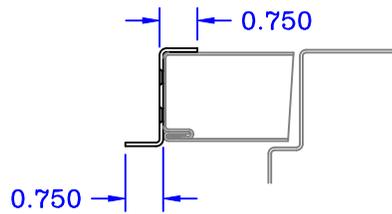
See option ZAS on page O-6.7 for additional information

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



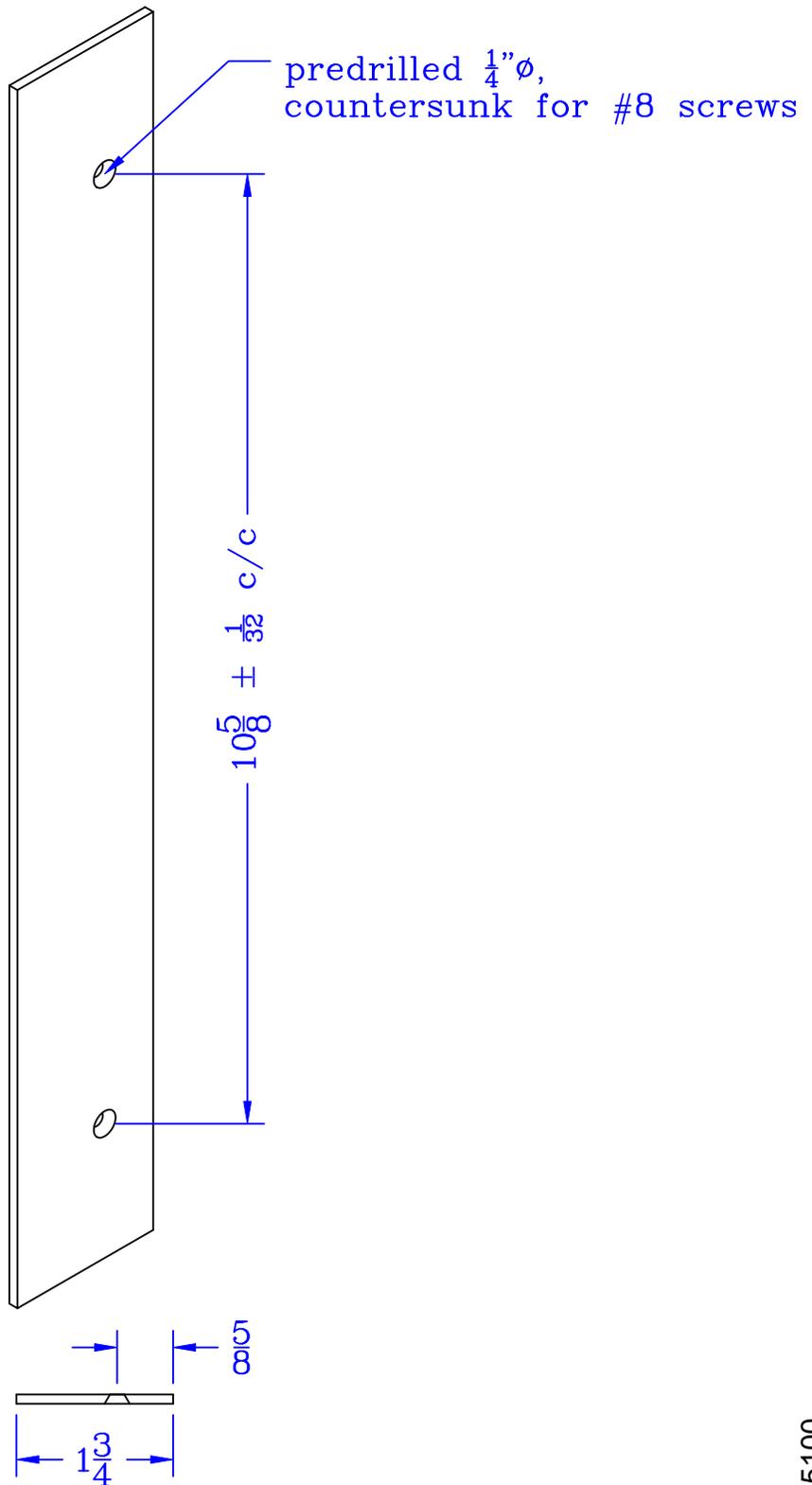
See option ZAS on page O-6.7 for additional information

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



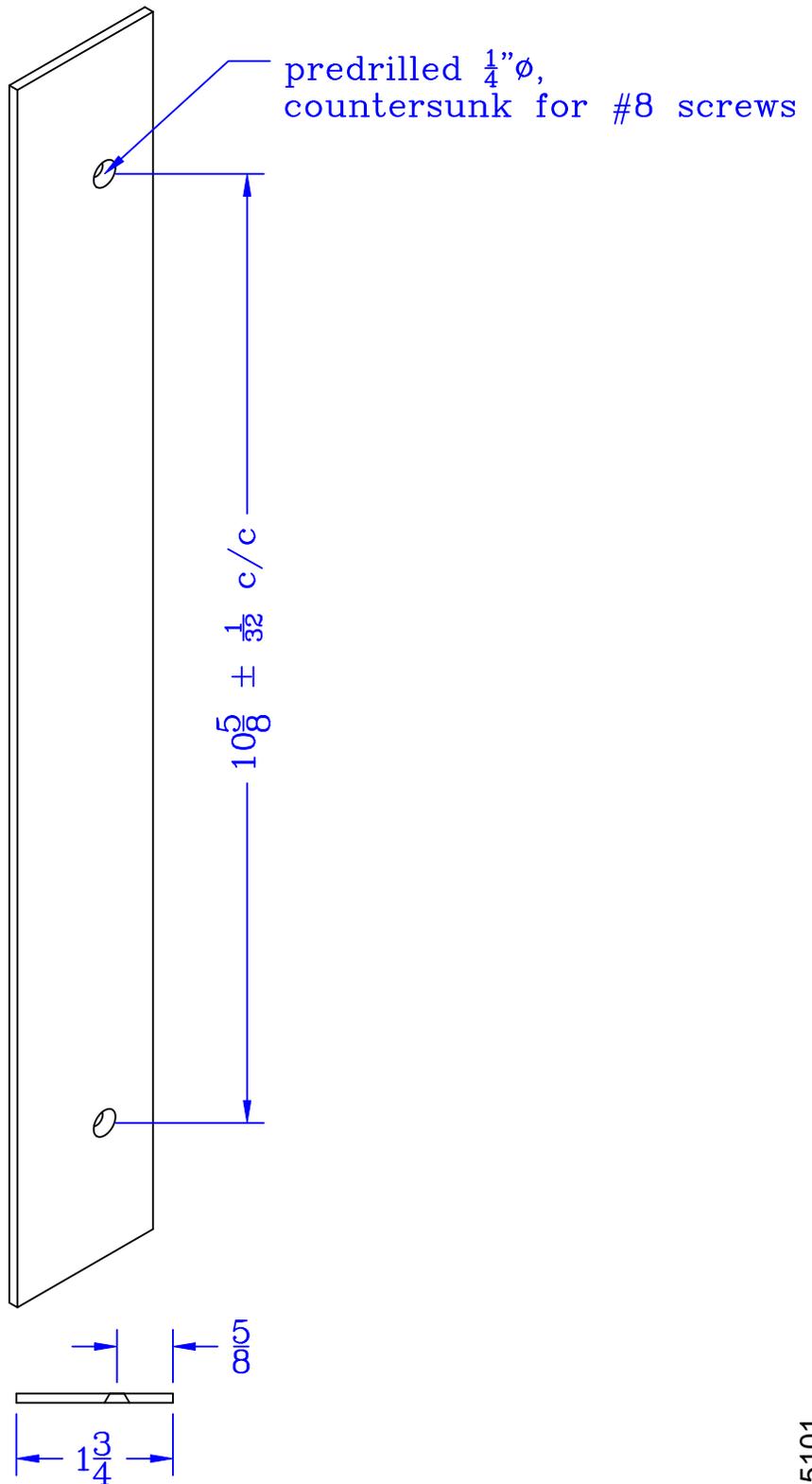
See option ZAS on page O-6.7 for additional information

Flat bar astragal 120", 12ga



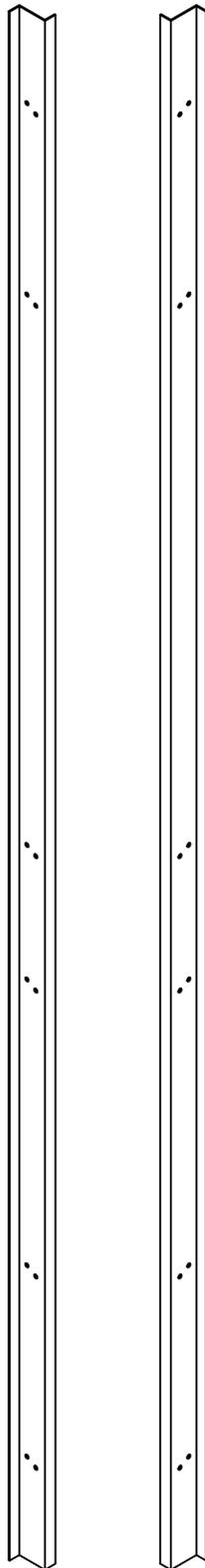
See option FAS on page O-6.6 for additional information

Flat bar astragal 120", 12ga, Primed



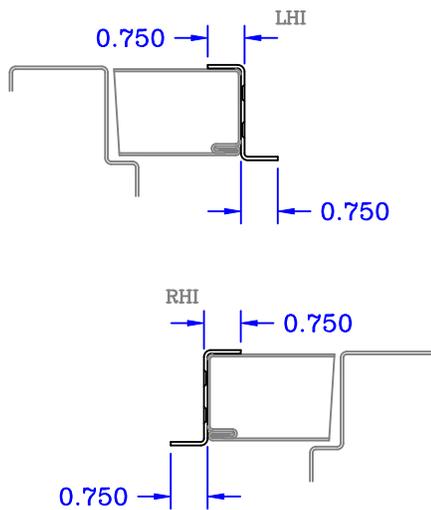
See option FAS on page O-6.6 for additional information

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



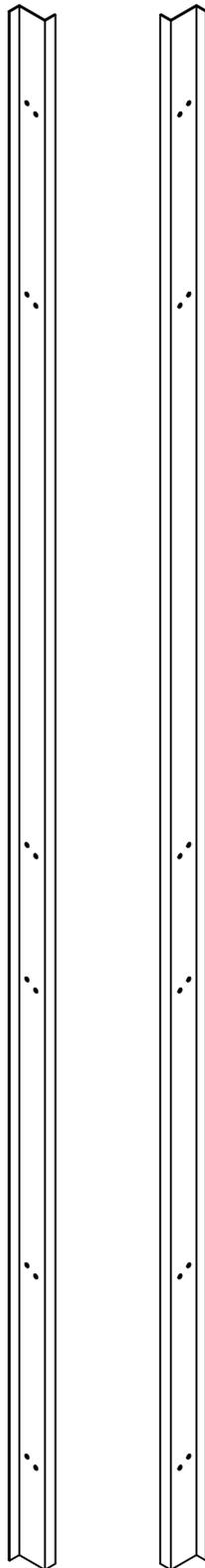
LHI

RHI



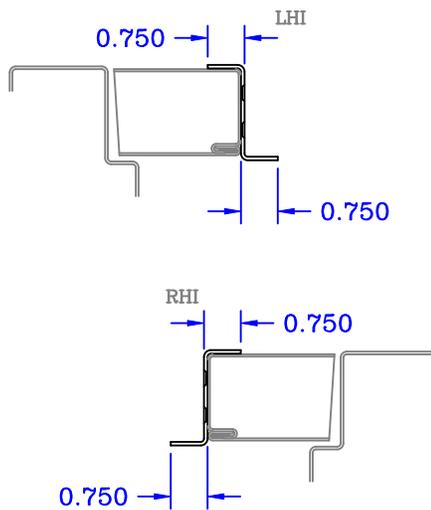
See option ZAS on page O-6.7 for additional information

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



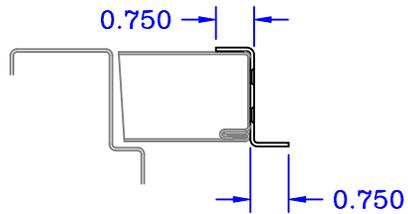
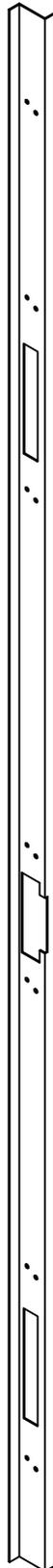
LHI

RHI



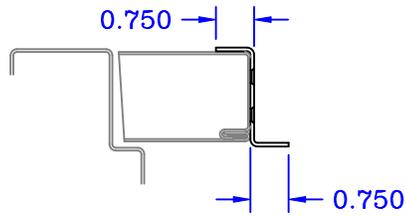
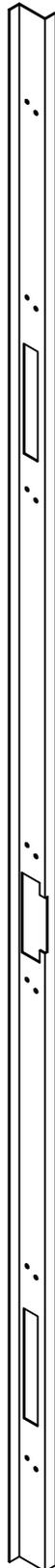
See option ZAS on page O-6.7 for additional information

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



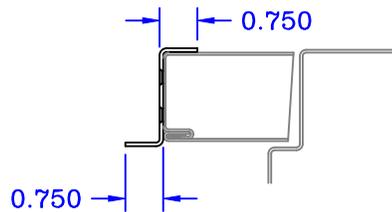
See option ZAS on page O-6.7 for additional information

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



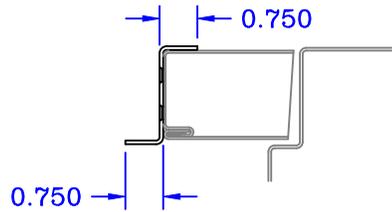
See option ZAS on page O-6.7 for additional information

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



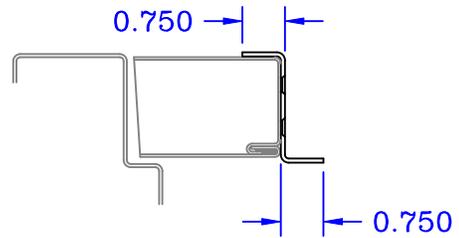
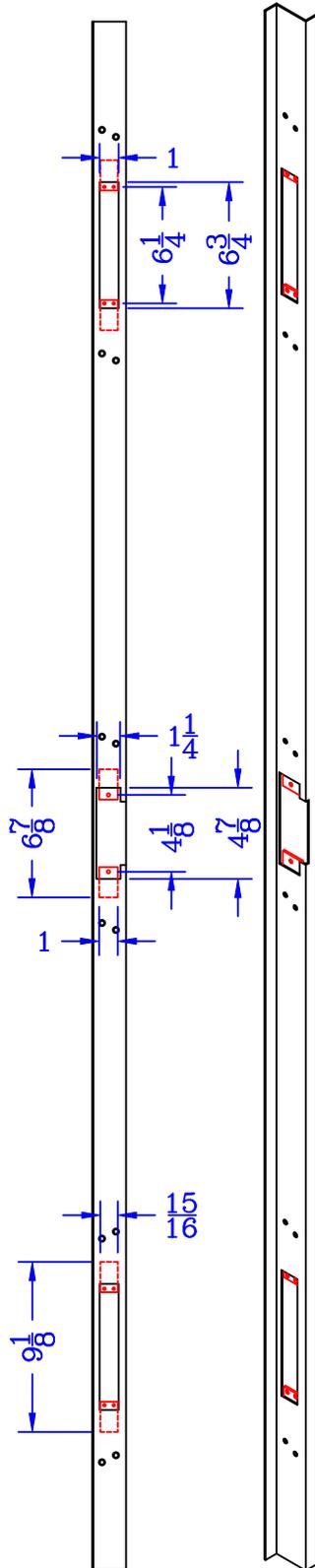
See option ZAS on page O-6.7 for additional information

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



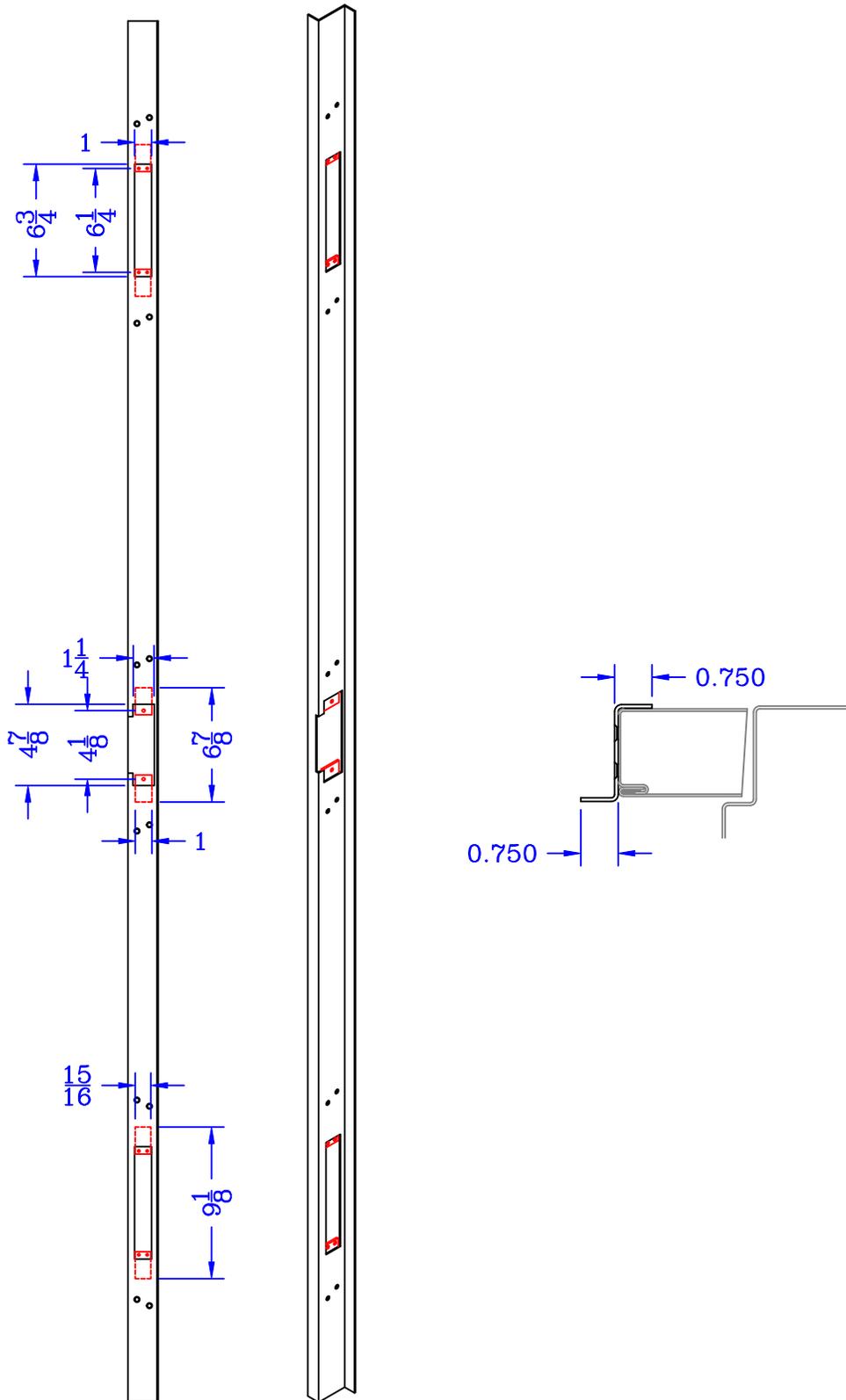
See option ZAS on page O-6.7 for additional information

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



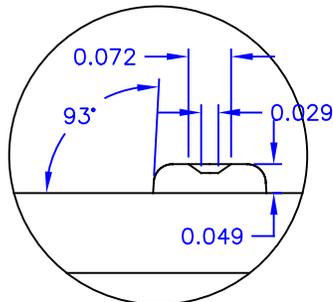
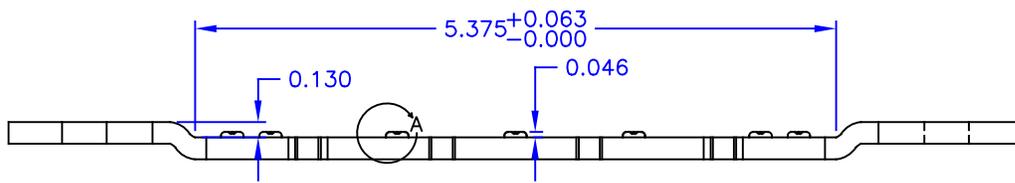
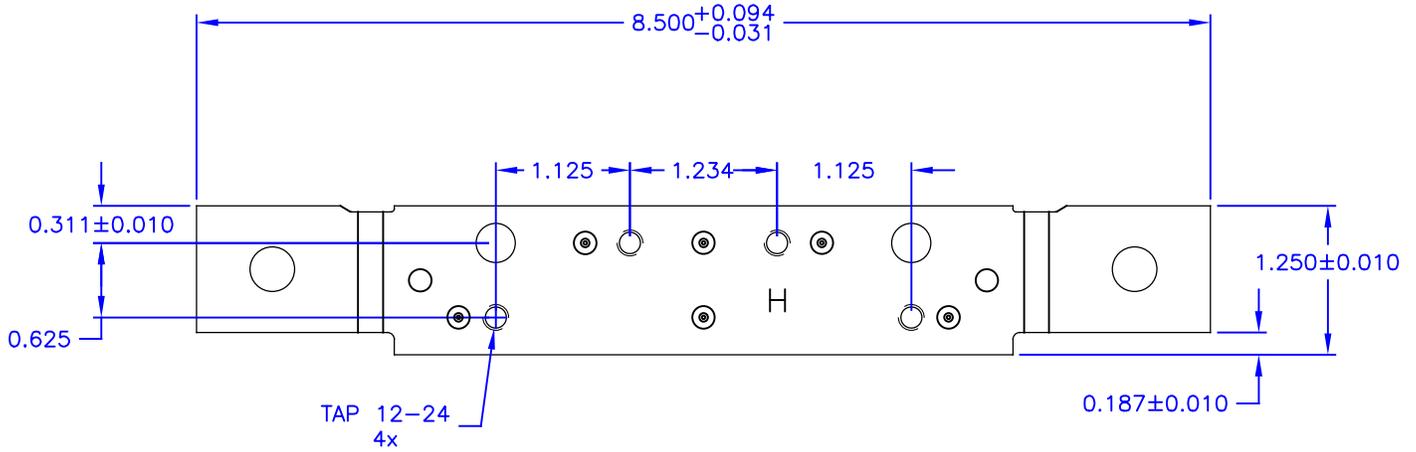
See option ZAS on page O-6.7 for additional information

"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



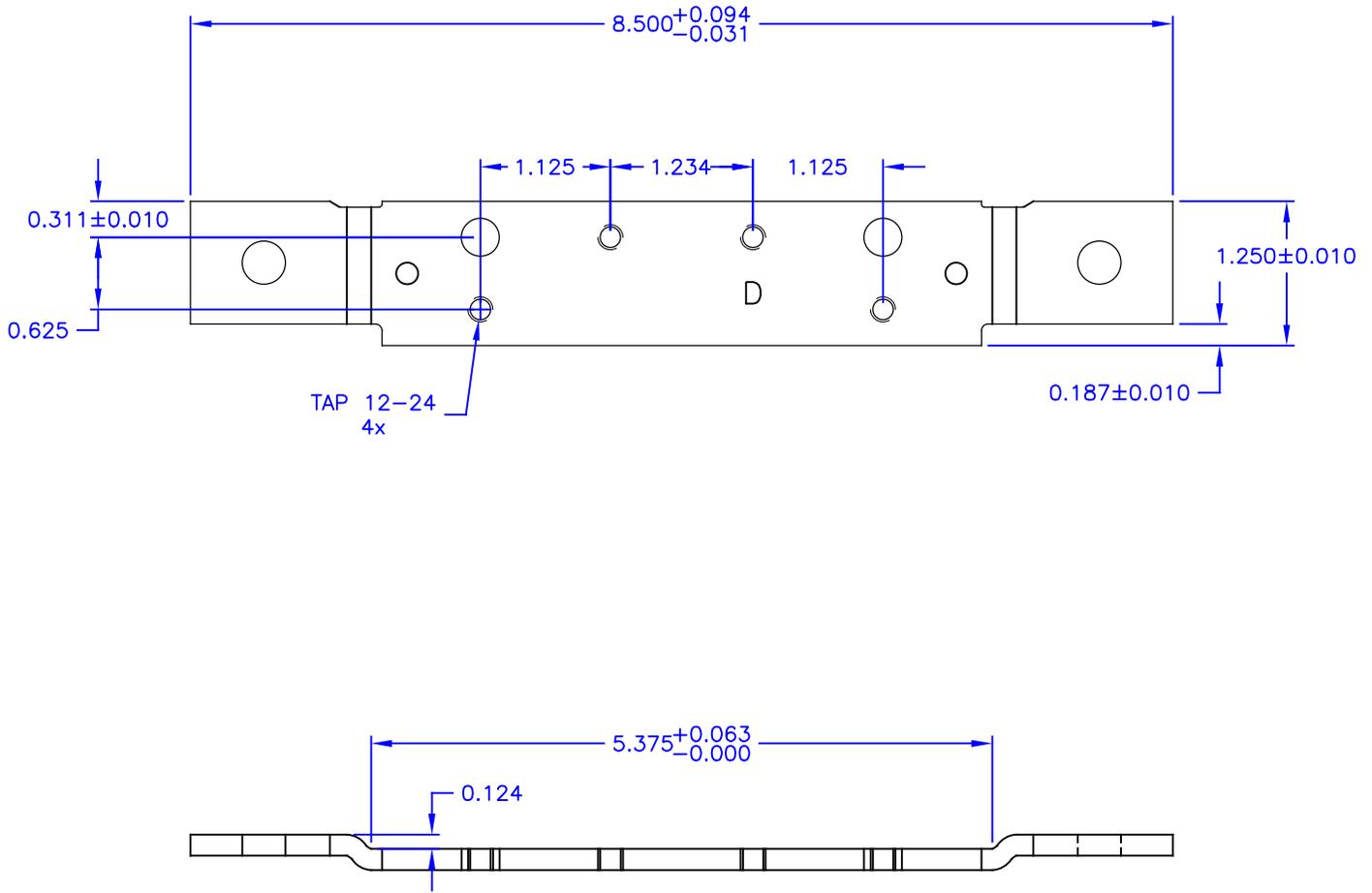
DETAIL A

Hinge reinforcement

56514

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

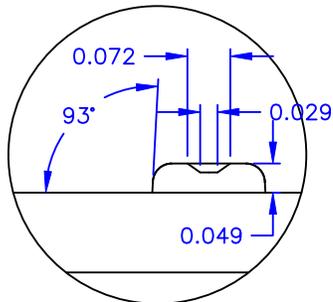
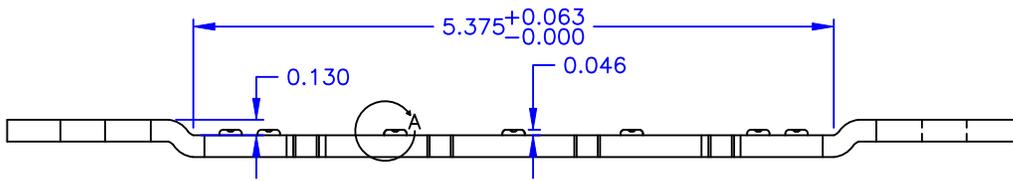
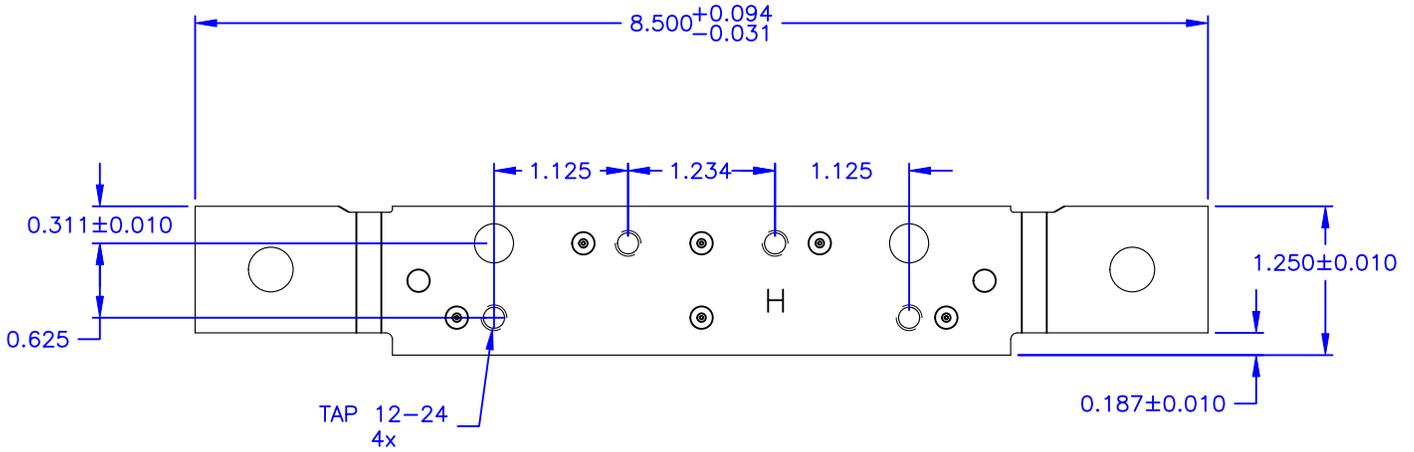
4 1/2" heavy weight hinge reinforcement (0.180), 7ga



Hinge reinforcement

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

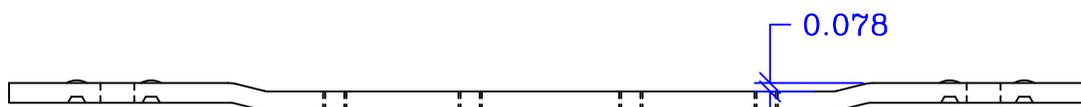
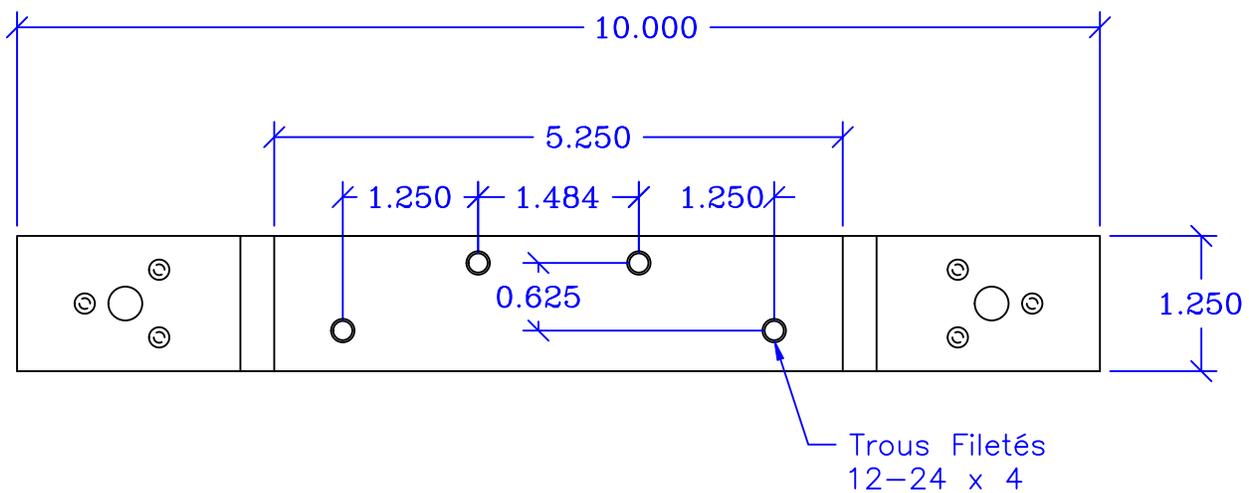
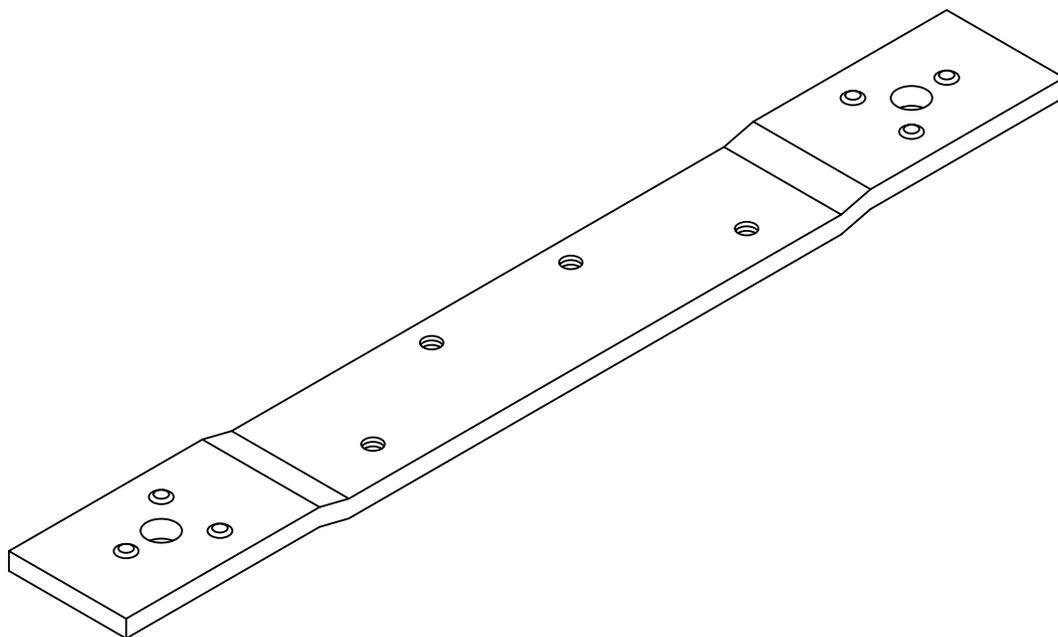
4 1/2" convertible hinge reinforcement (0.134/0.180), 7ga



DETAIL A

Hinge reinforcement

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

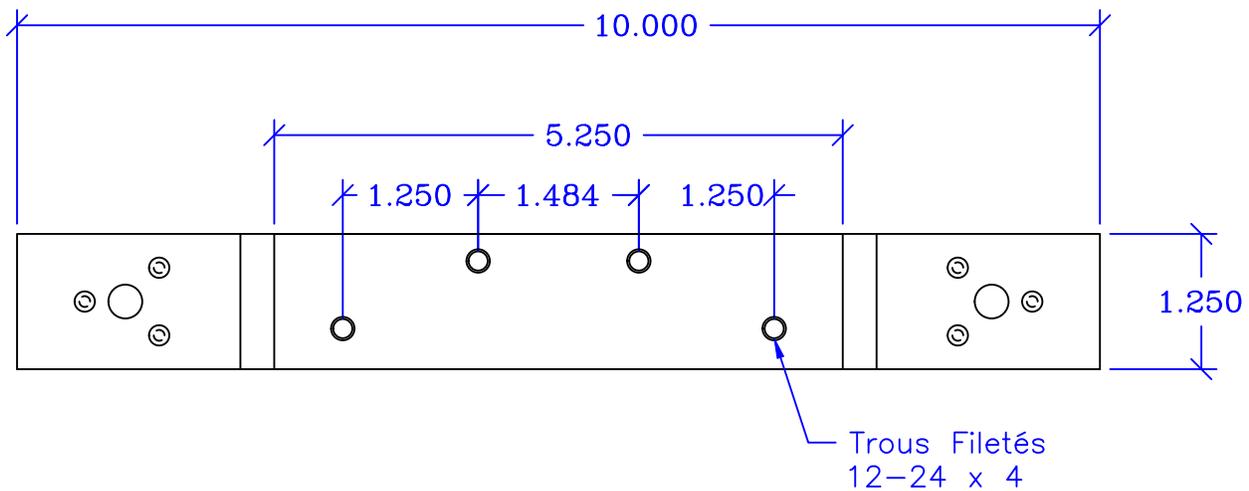
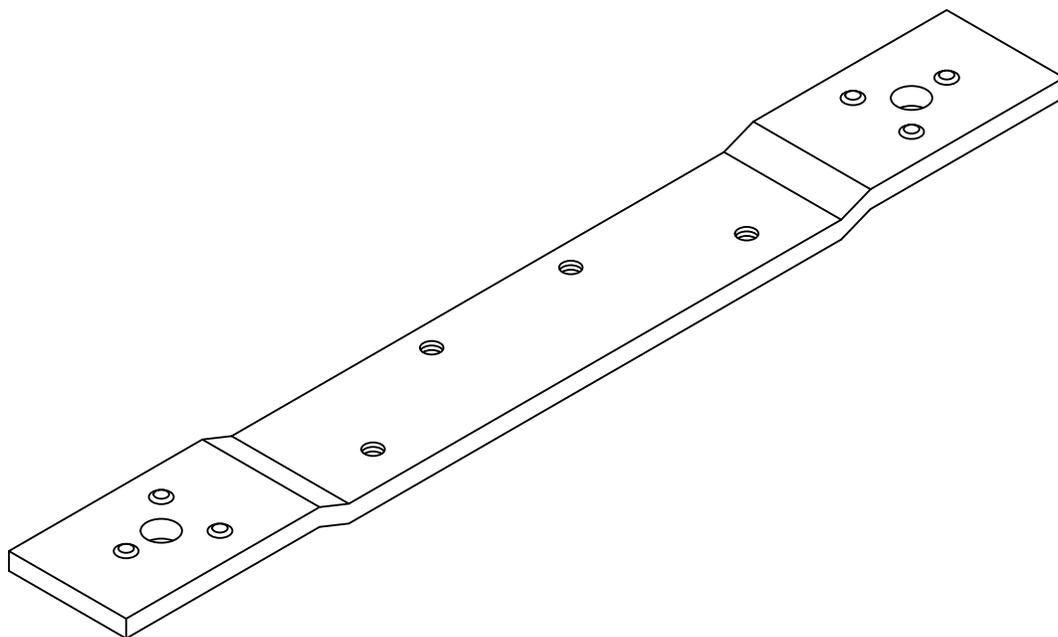


Hinge reinforcement

03105

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

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

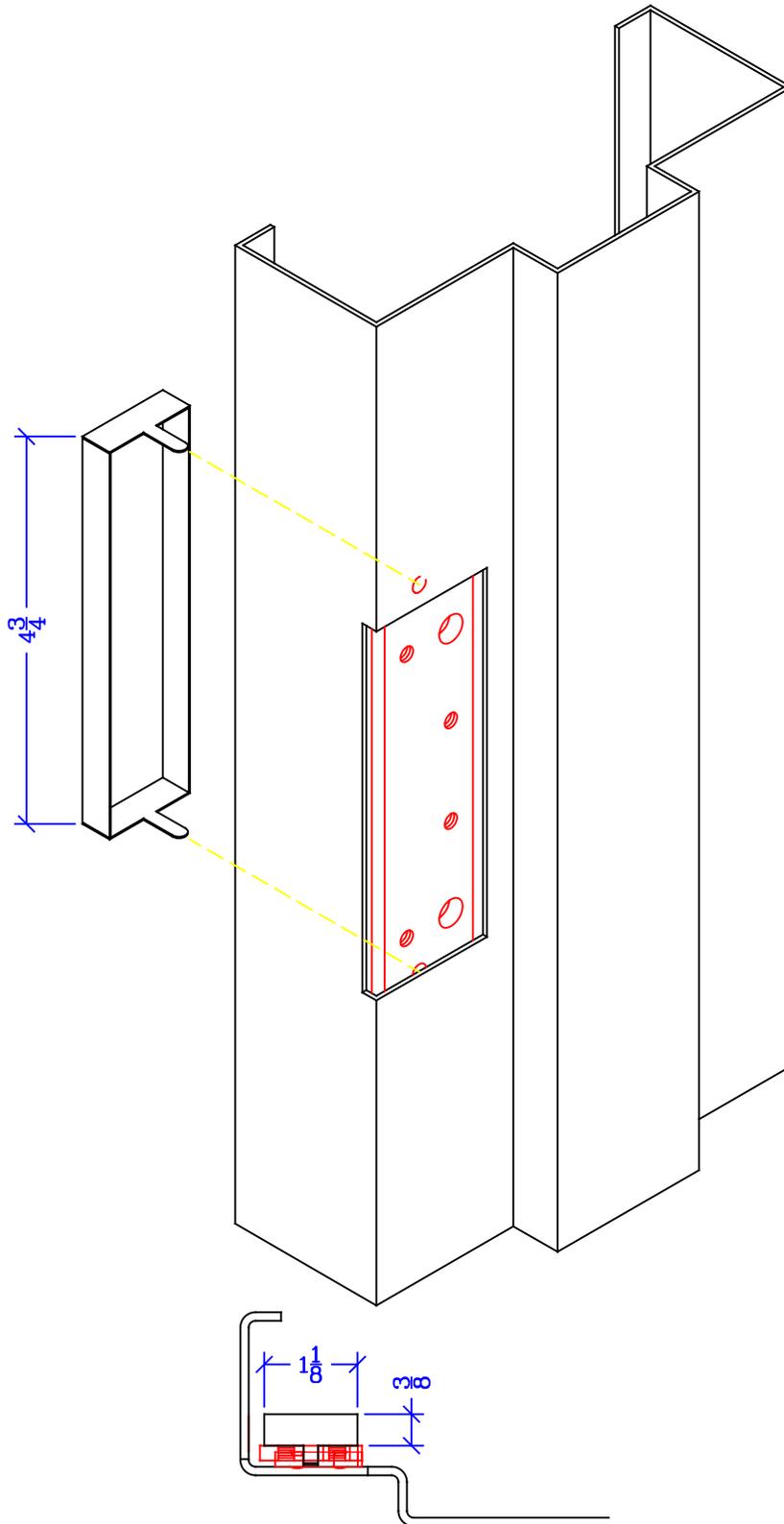


Hinge reinforcement

03104

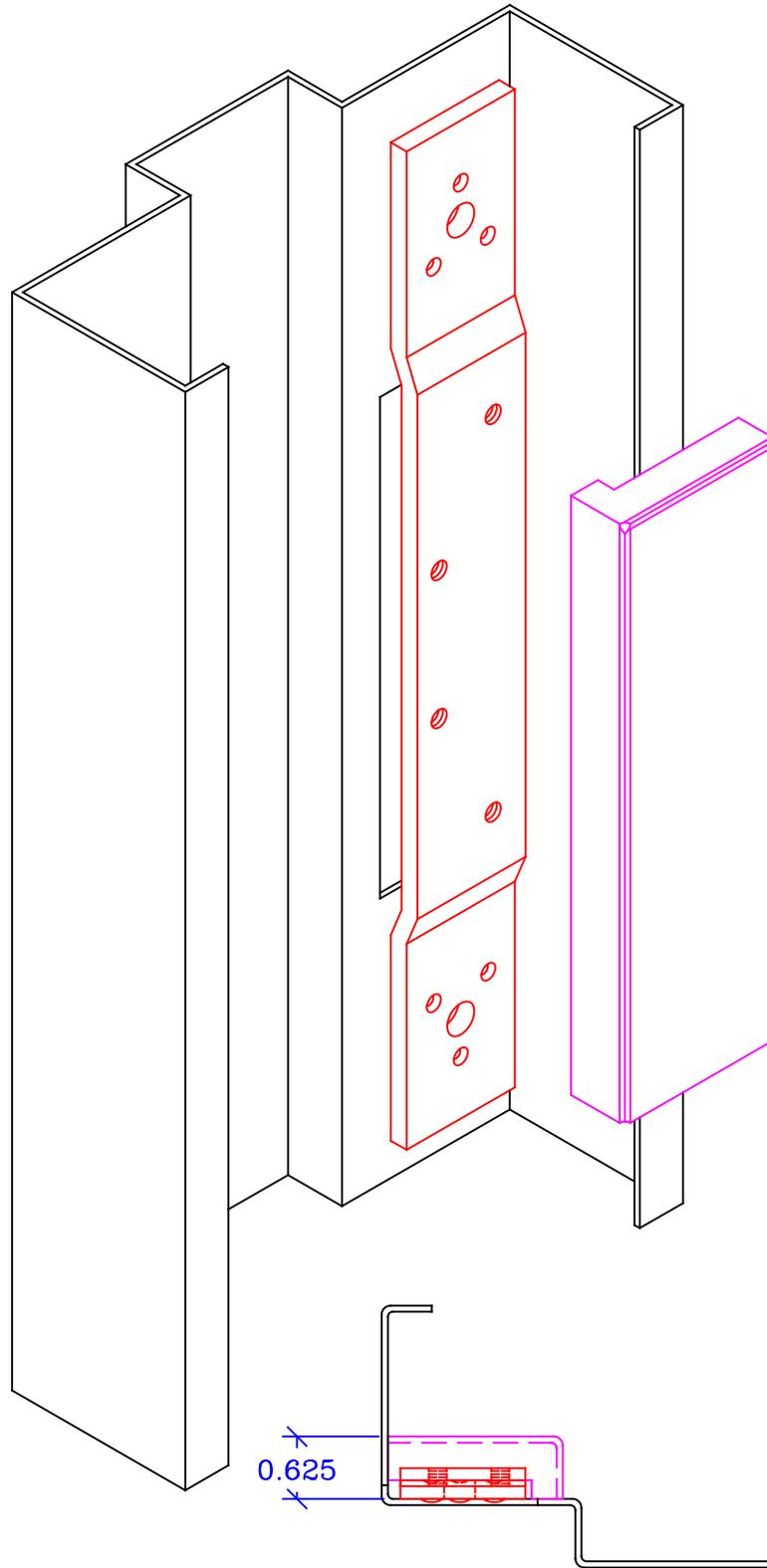
See option 50H on page O-12.4 for additional information

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



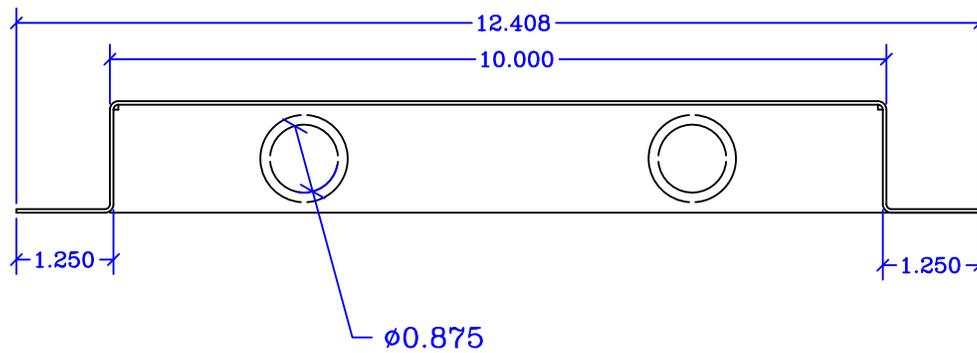
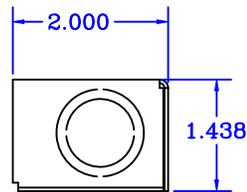
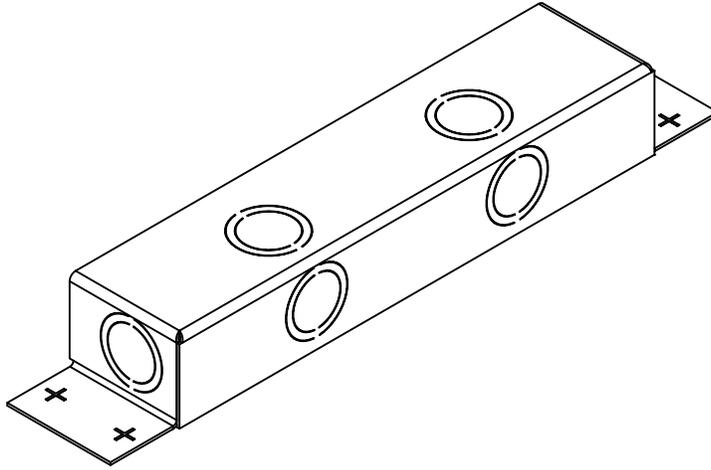
by default at masonry frame with TMA, WMA or ATMA

Mortar guard for 5" hinge, 18ga

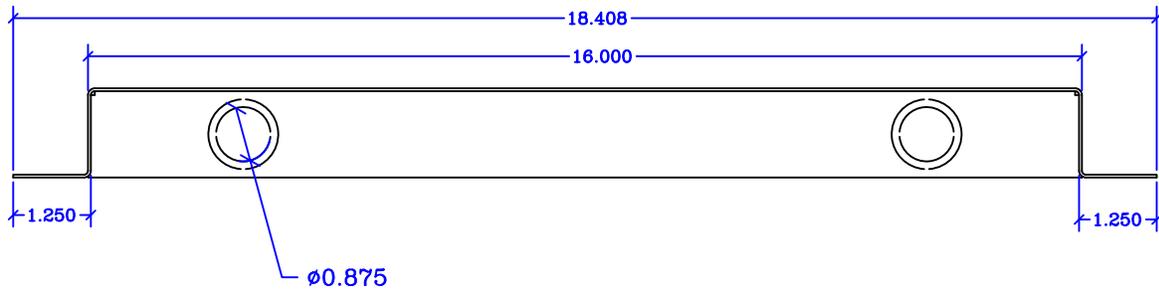
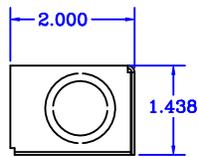
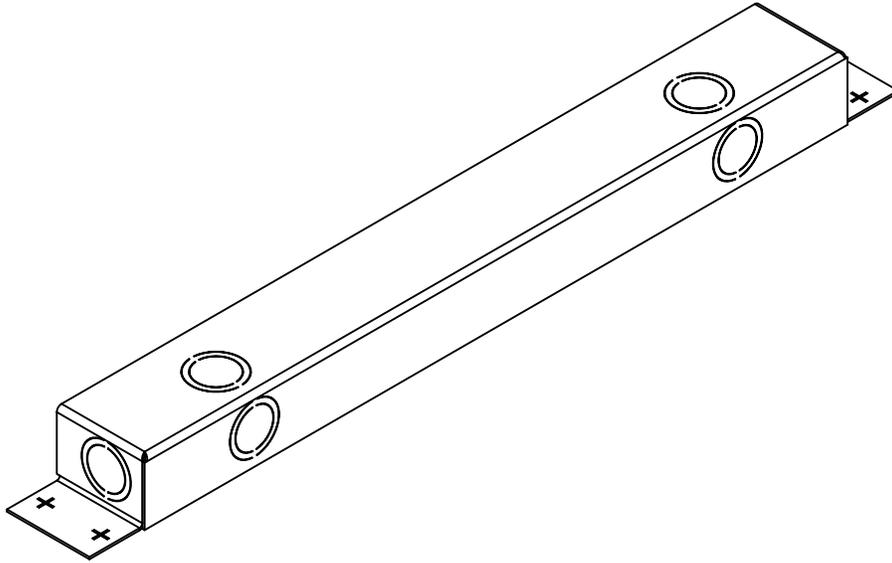


by default at masonry frame with TMA, WMA or ATMA

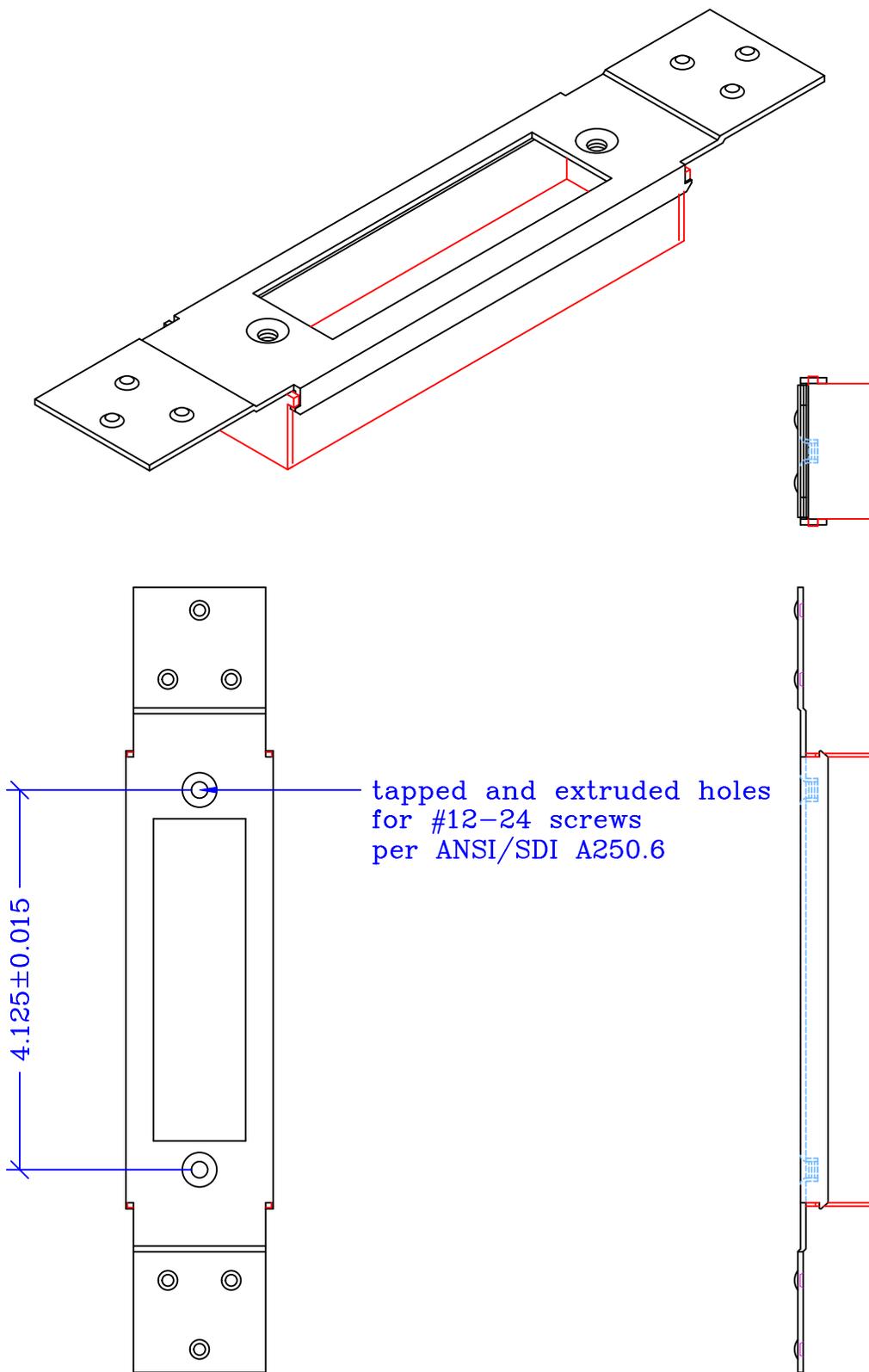
Electric box for Electric Hinge, 16ga



Electric box for EPT, 16ga



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

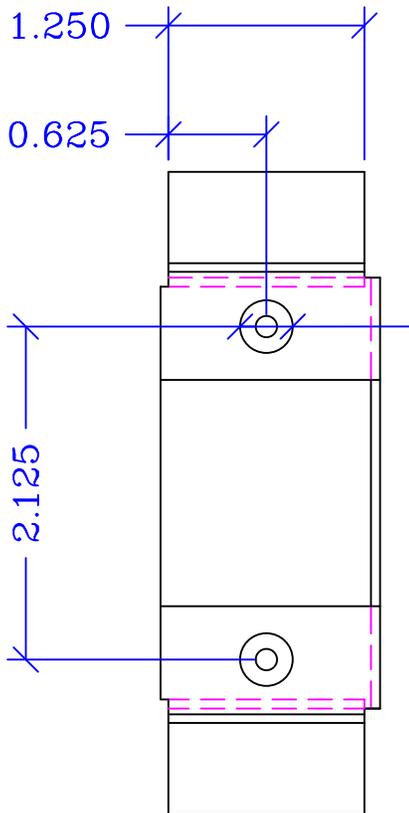
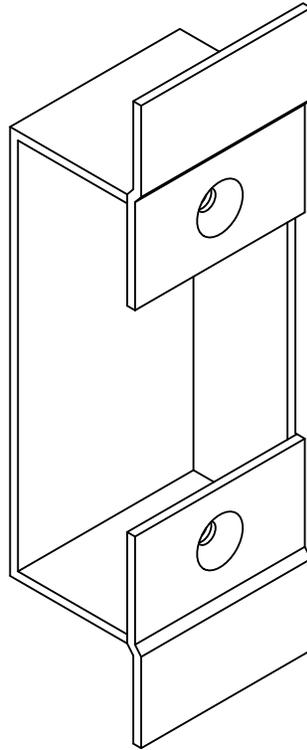


Strike reinforcement

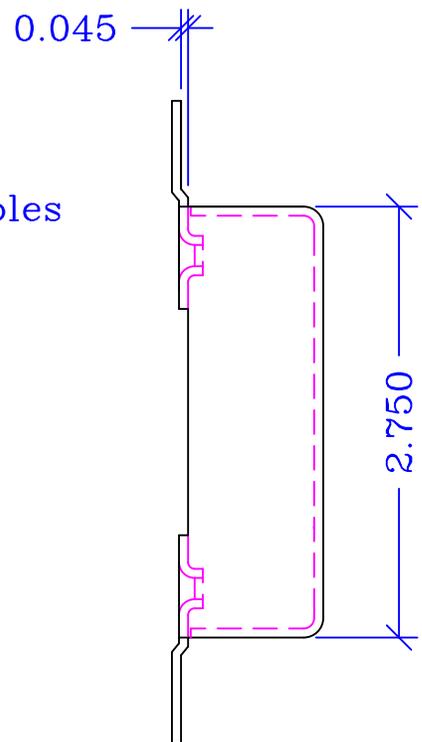
00606

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

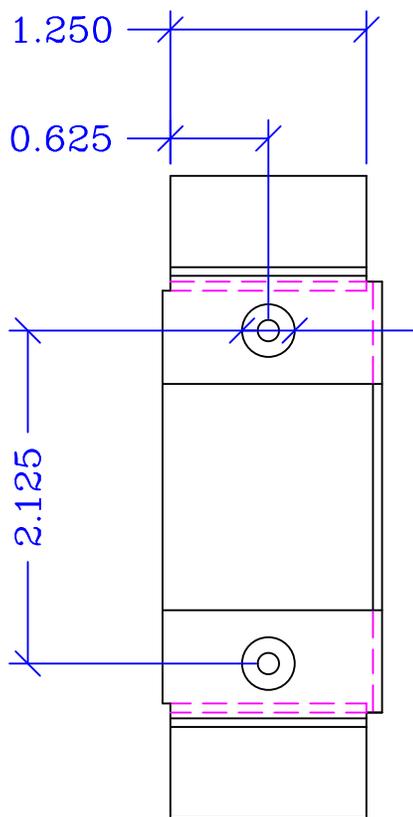
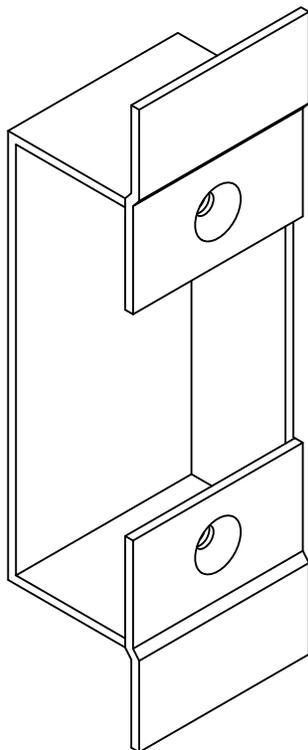


Strike reinforcement

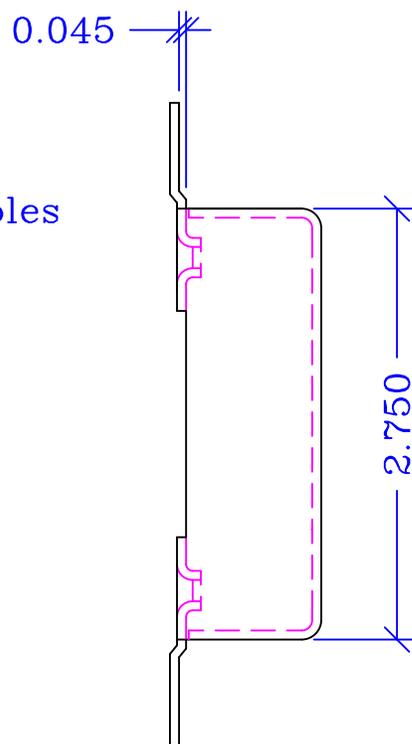
See option T on page O-13.10 for additional information

00832

Deadlock strike reinforcement, 16ga



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

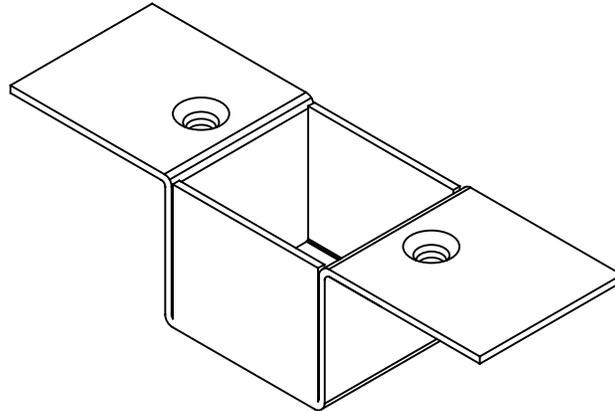


Strike reinforcement

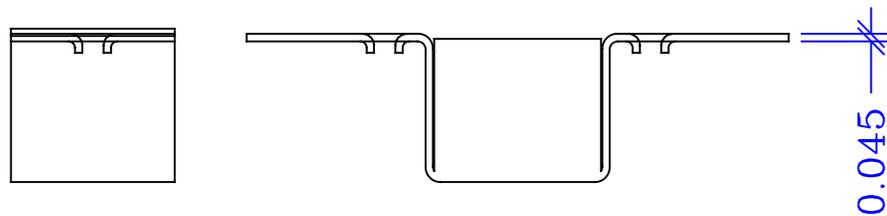
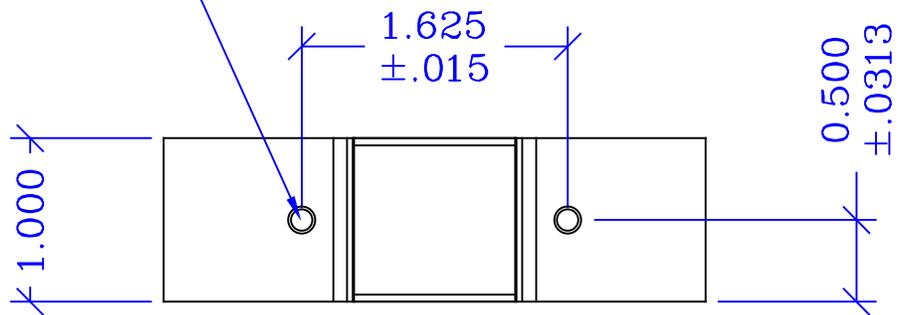
00832

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

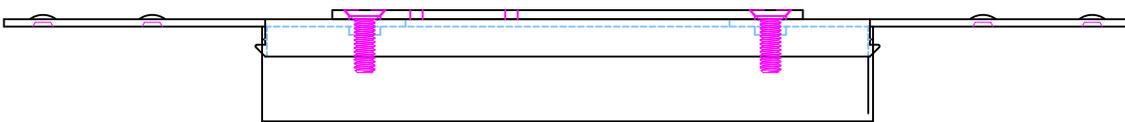
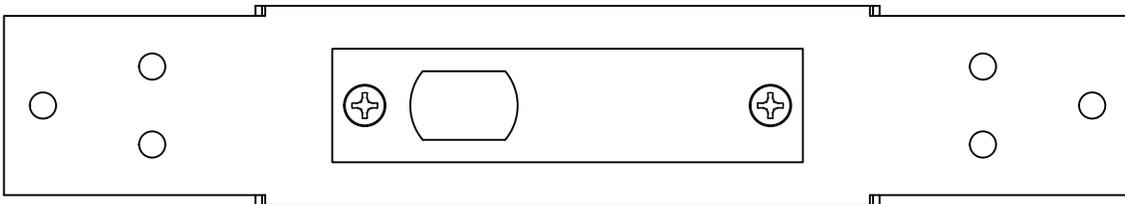
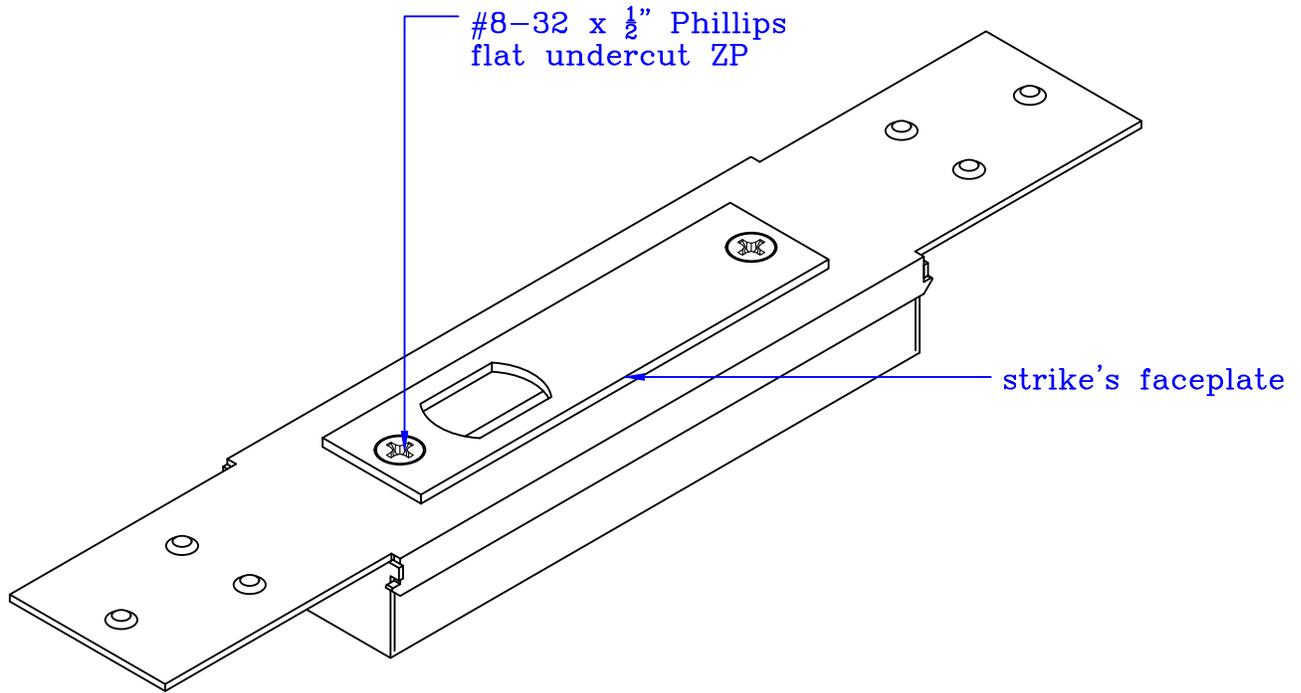


Strike reinforcement

See option FBS on page O-13.26 for additional information

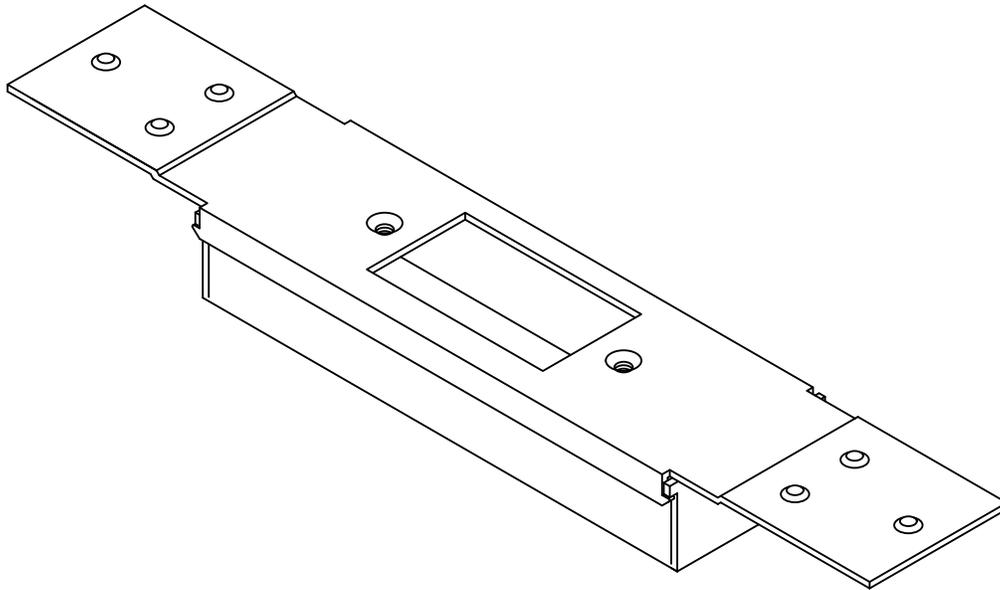
00509

Reversible flush bolt reinforcement, 16ga

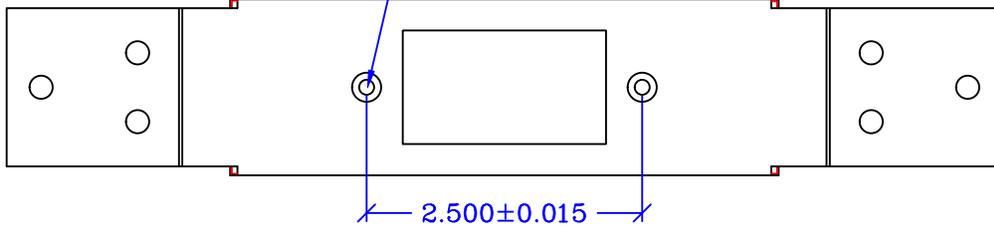


See option RFBS on page O-13.27 for additional information

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



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

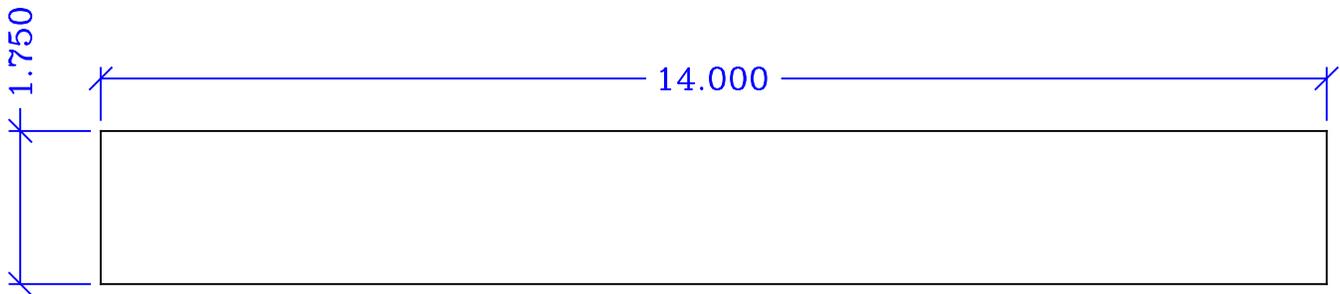
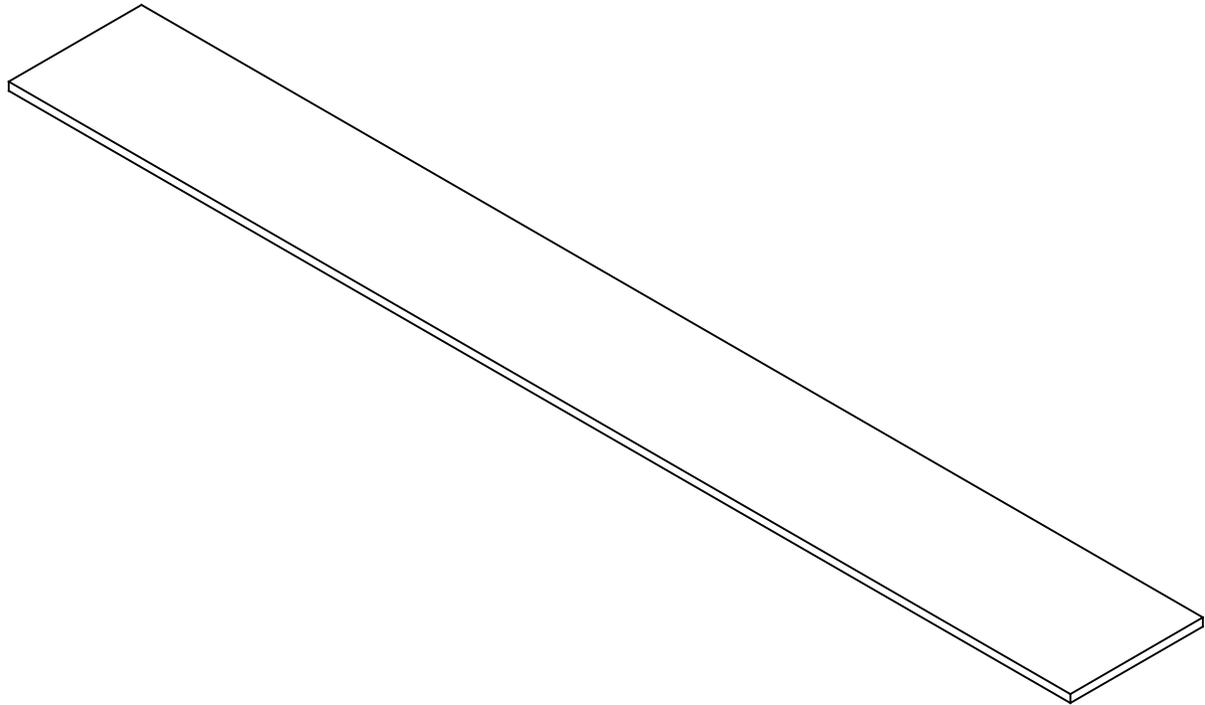


Strike reinforcement

00711

See option DL312 on page O-13.13 for additional information

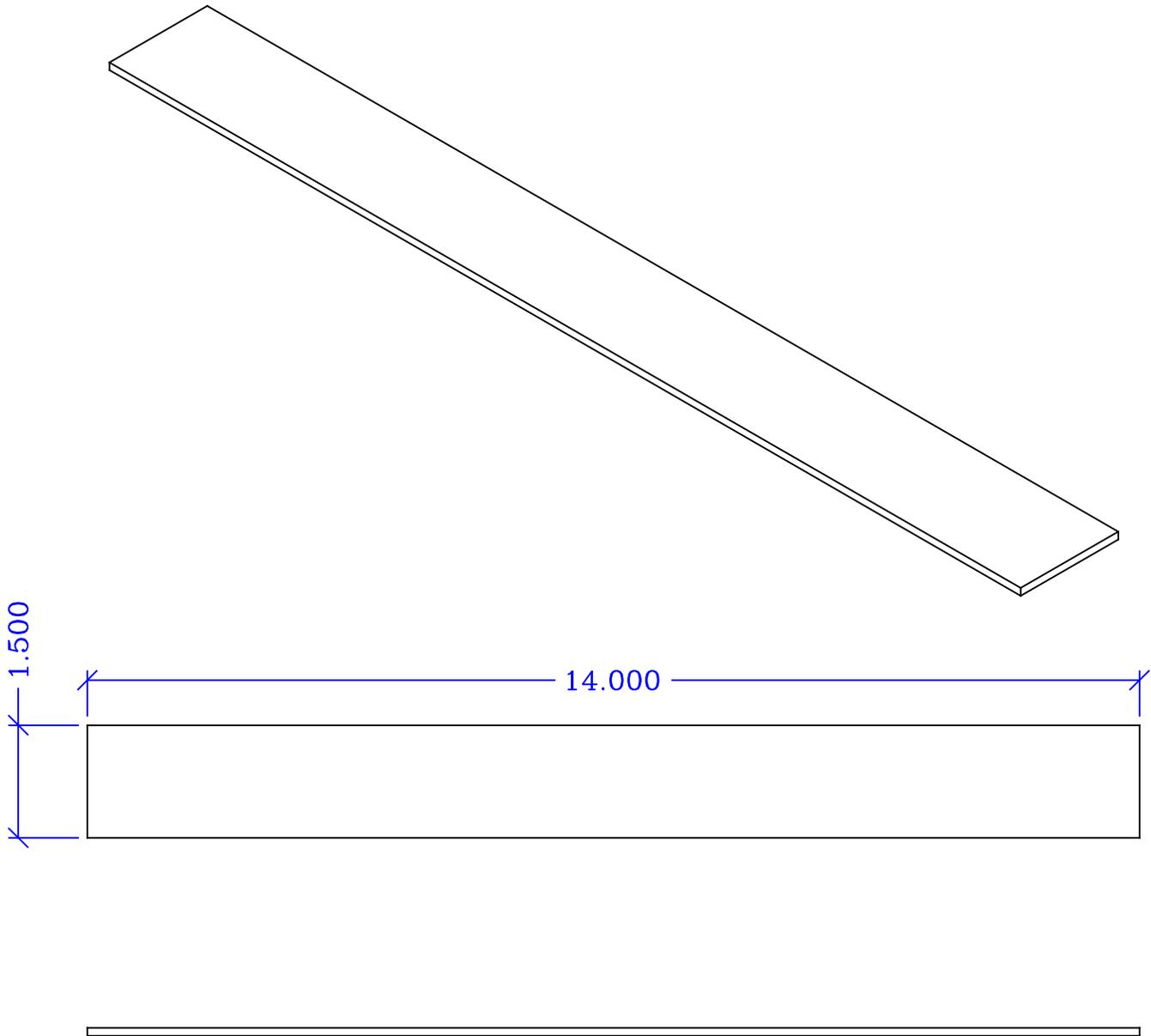
Closer reinforcement, 12ga



Closer reinforcement

00690

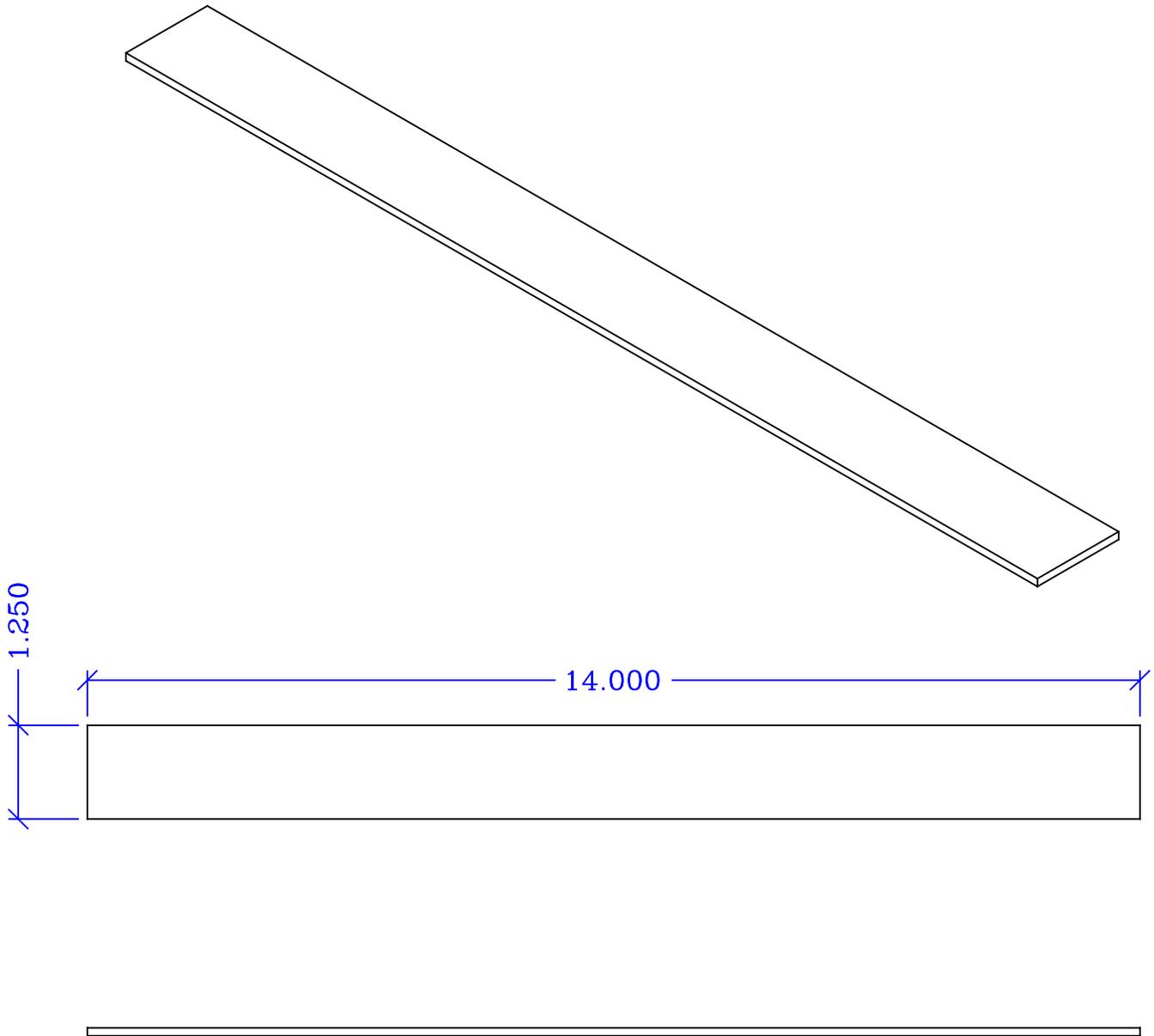
Closer reinforcement, 12ga



Closer reinforcement

00691

Closer reinforcement, 12ga

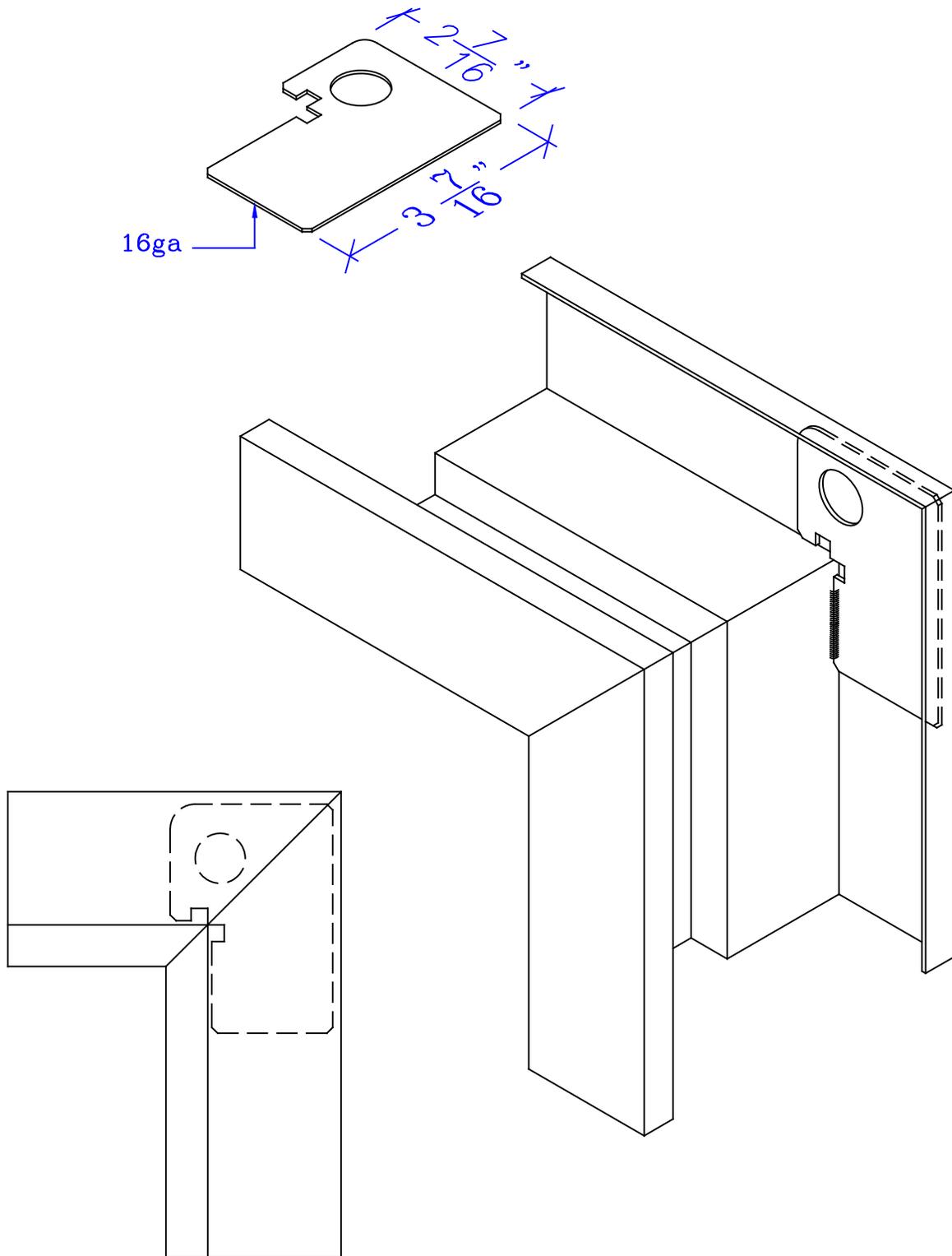


Closer reinforcement

00692

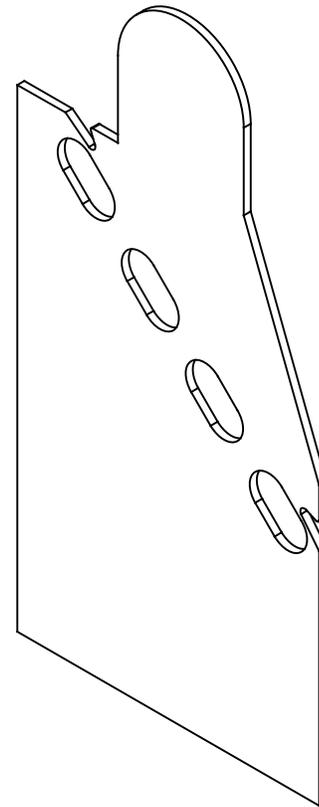
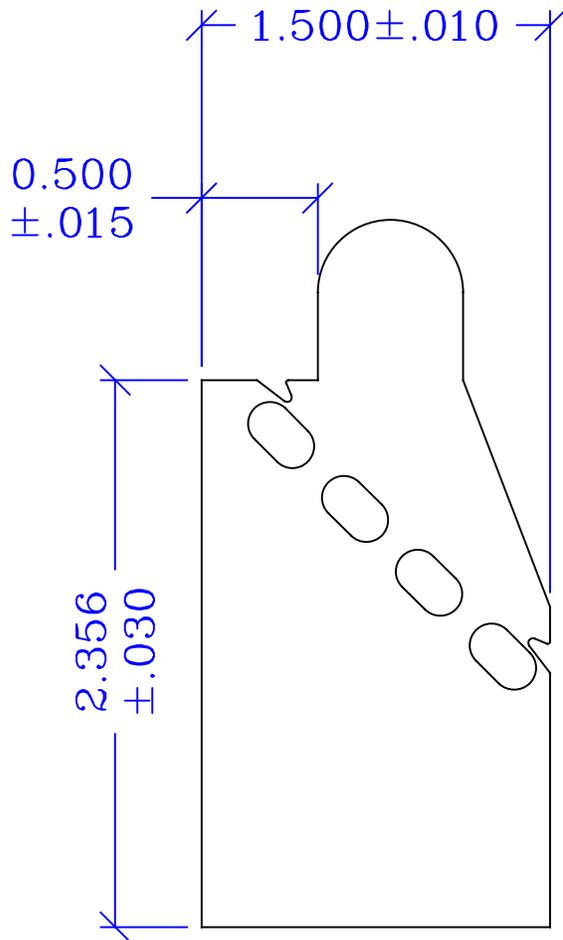
Jamb and head mechanical connecting tab, reversible

For 45° saw mitered knocked down assembly



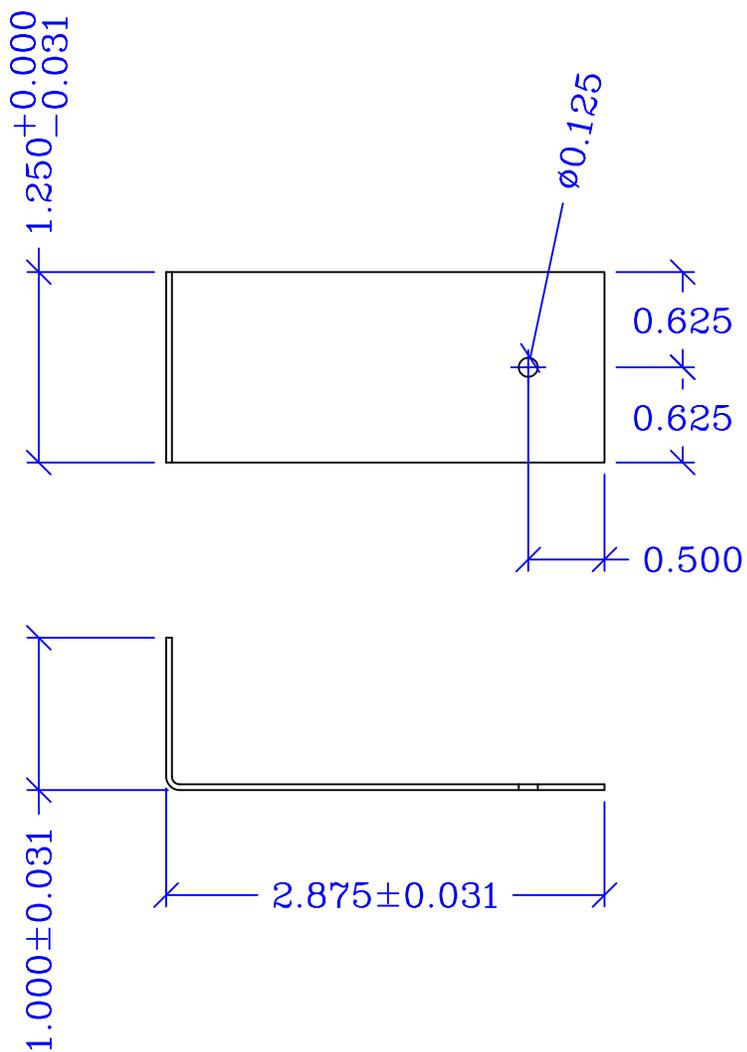
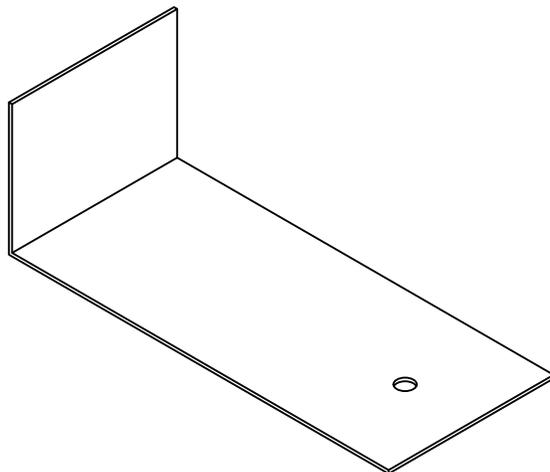
Clean interior burrs prior to reversible tab installation

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



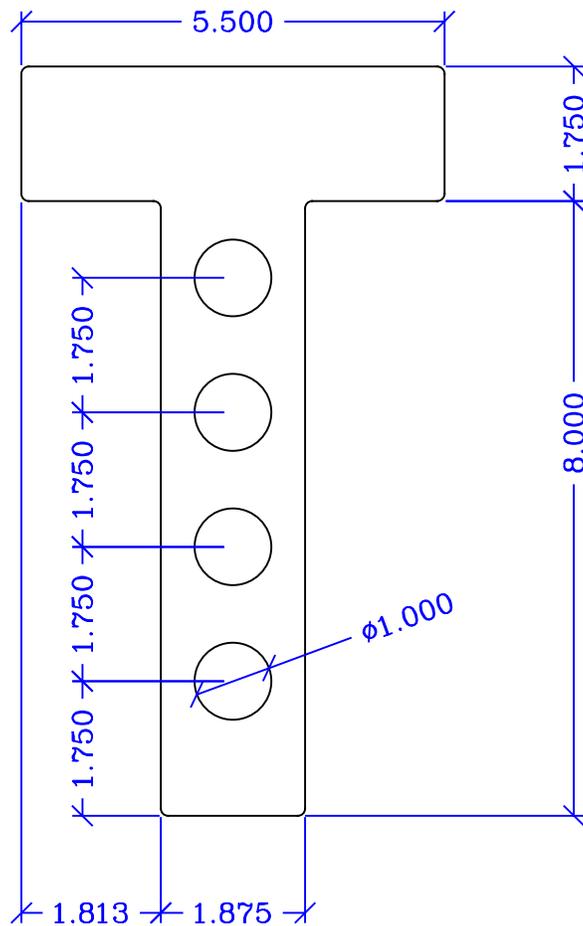
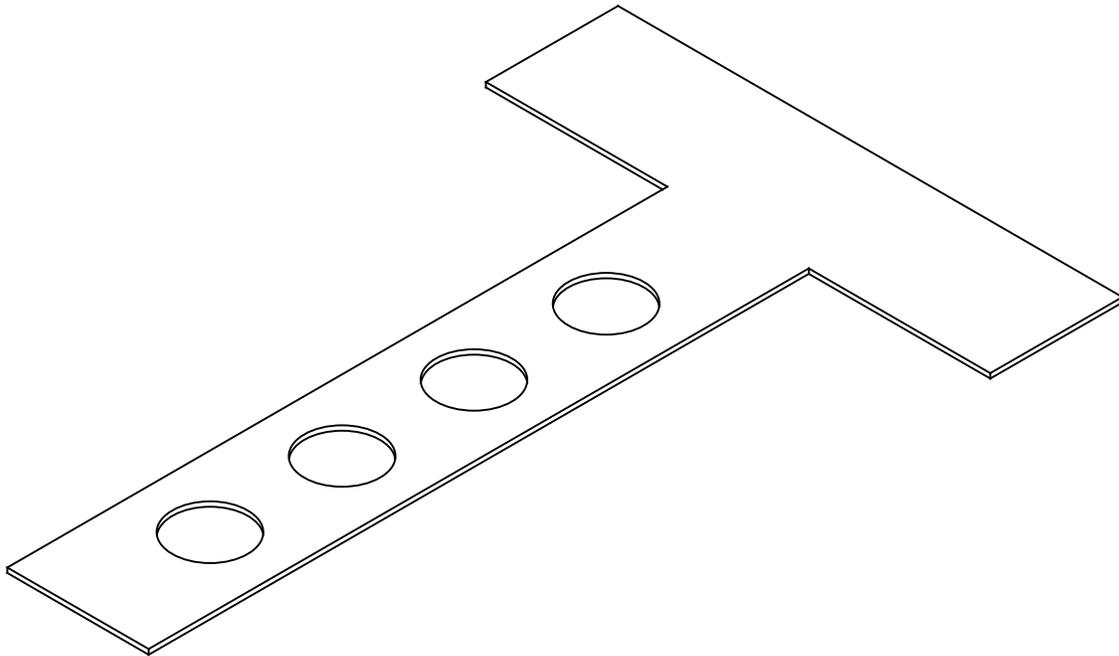
See option KD on page O-15.28 for additional information

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



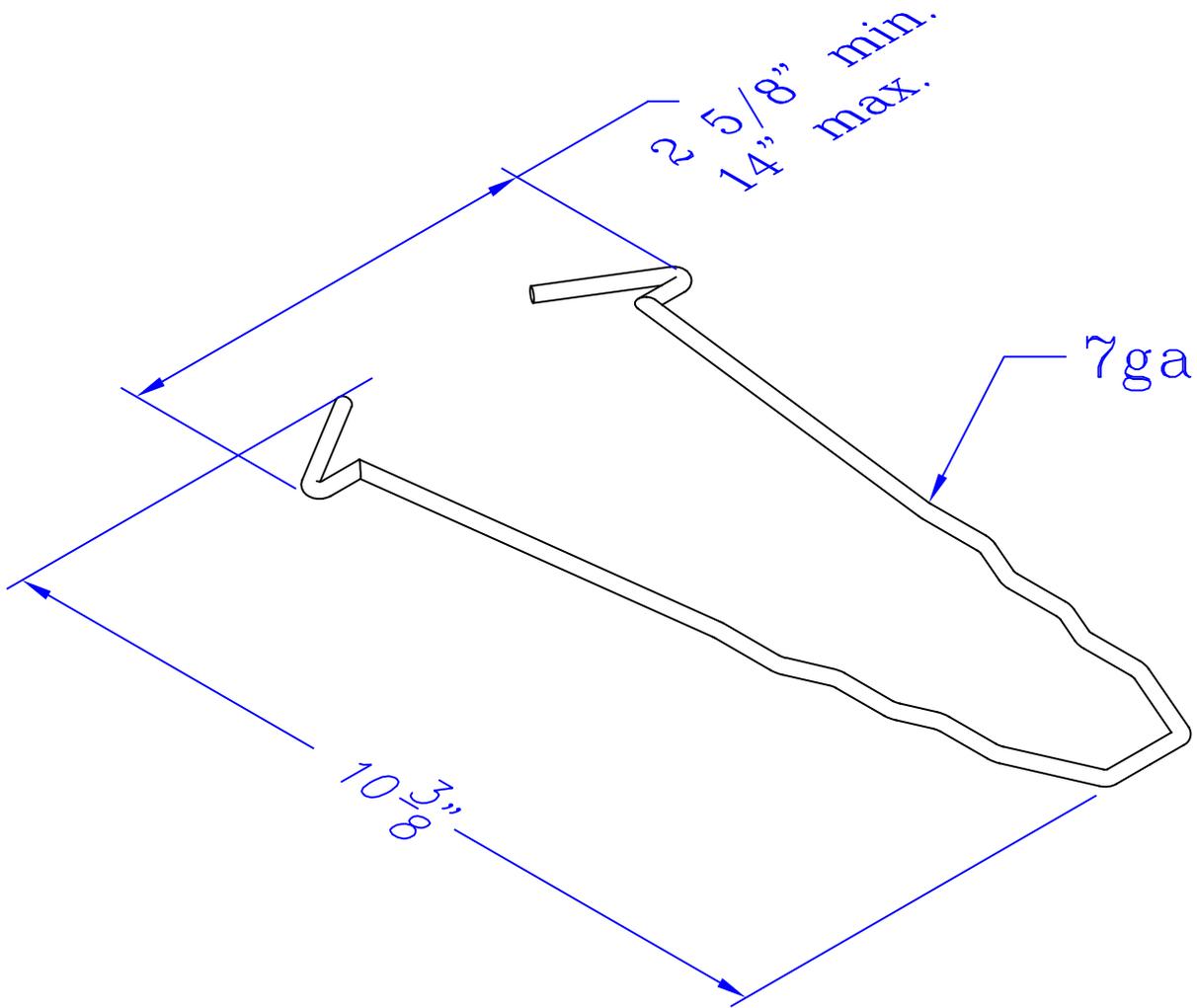
See option DSA on page O-15.2 for additional information

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



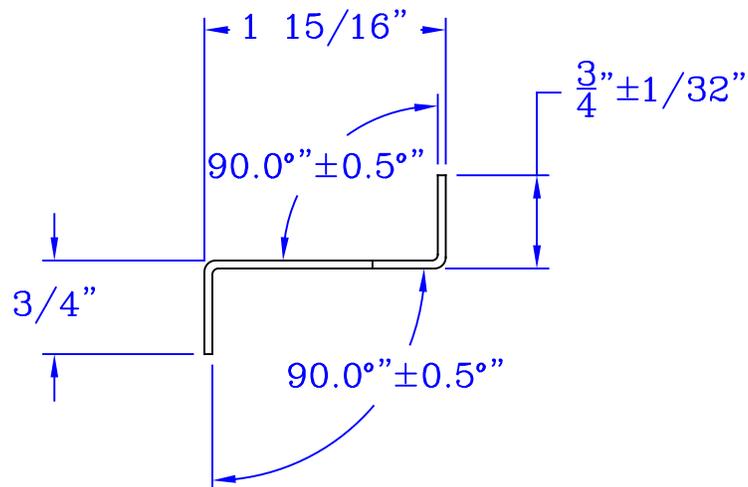
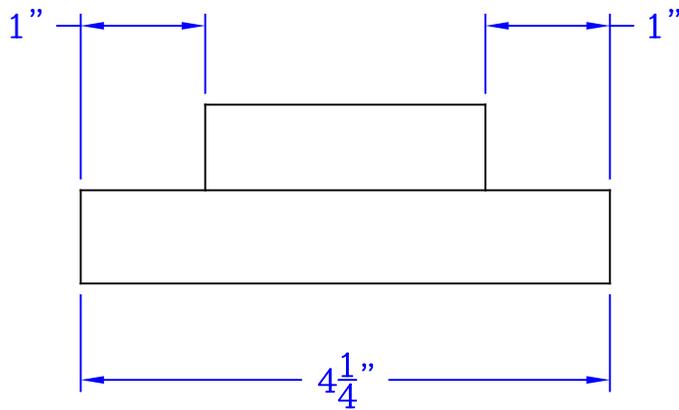
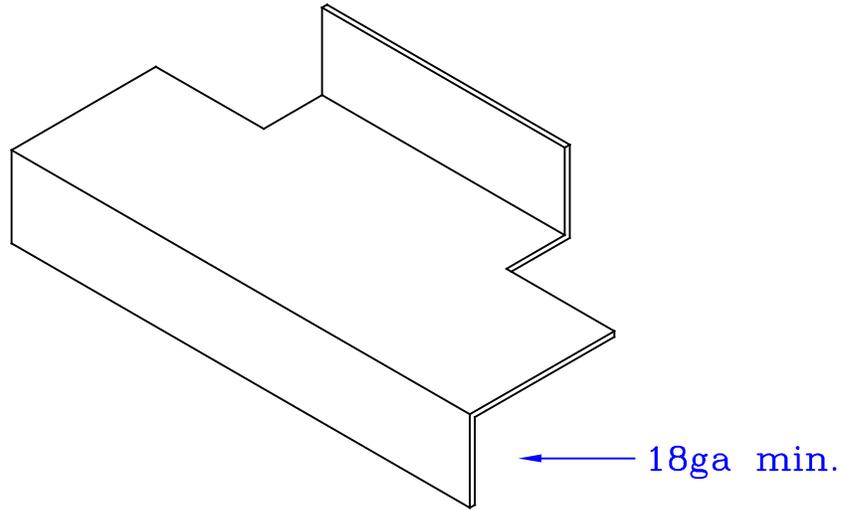
See option TMA on page O-15.10 for additional information

WMA, wire masonry anchor



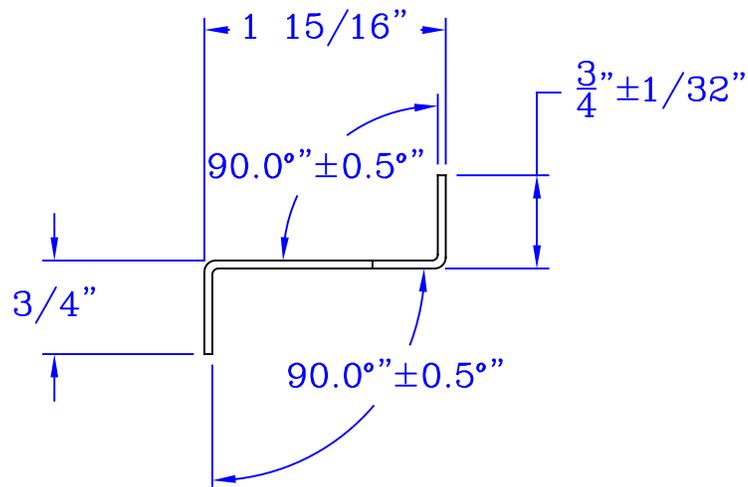
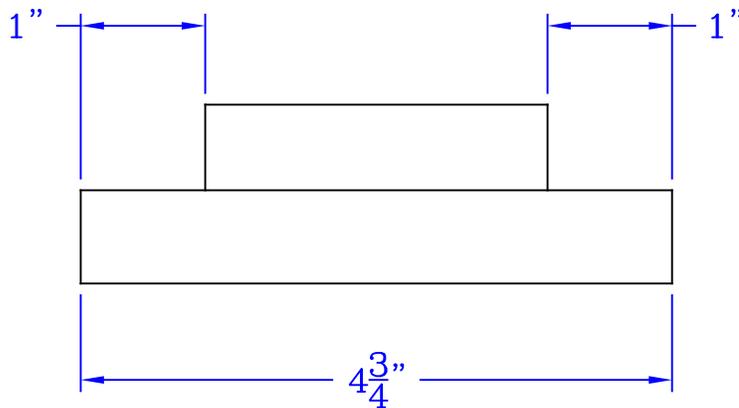
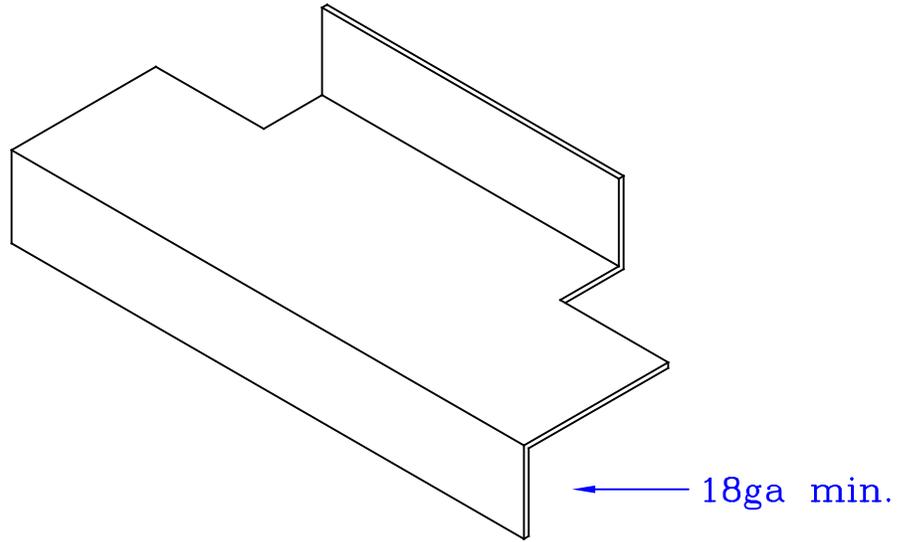
See option WMA on page O-15.11 for additional information

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



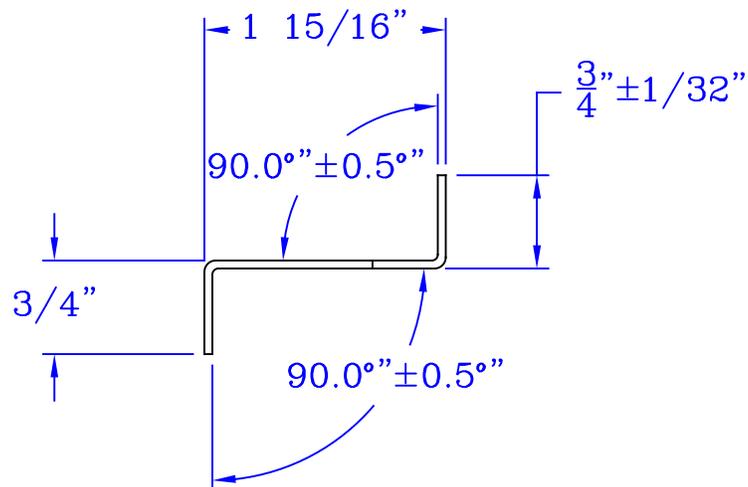
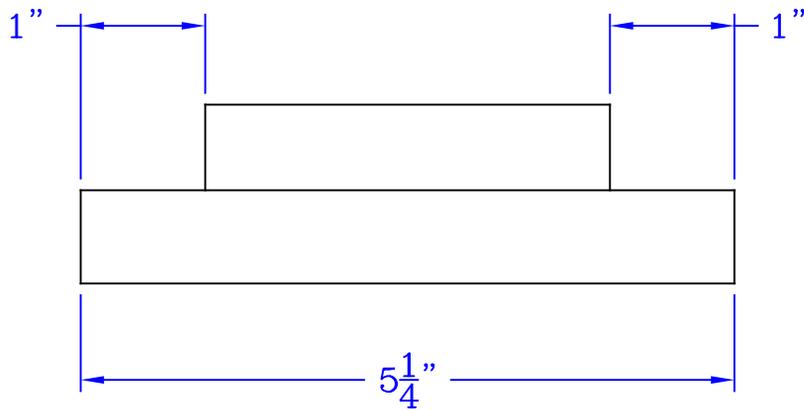
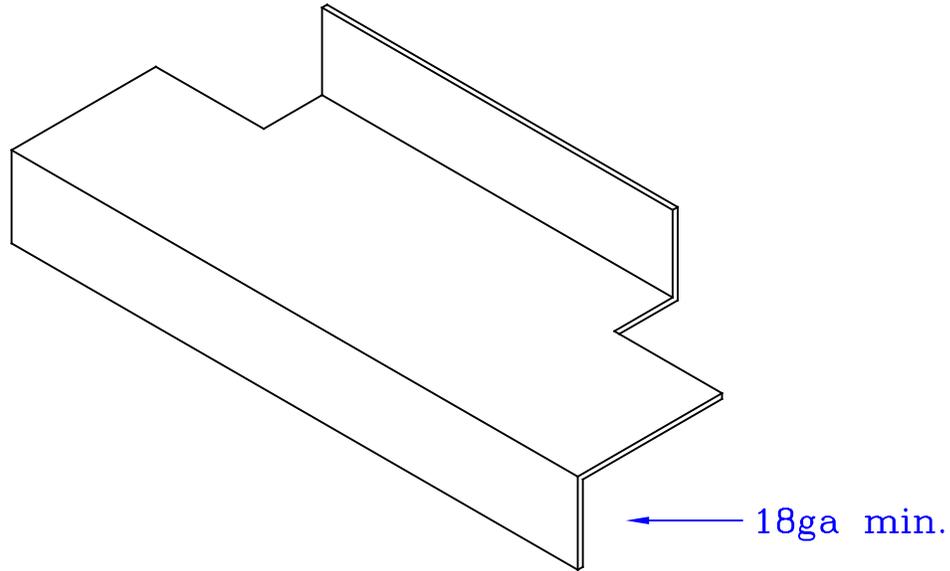
See option ZBA on page O-15.6 for additional information

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



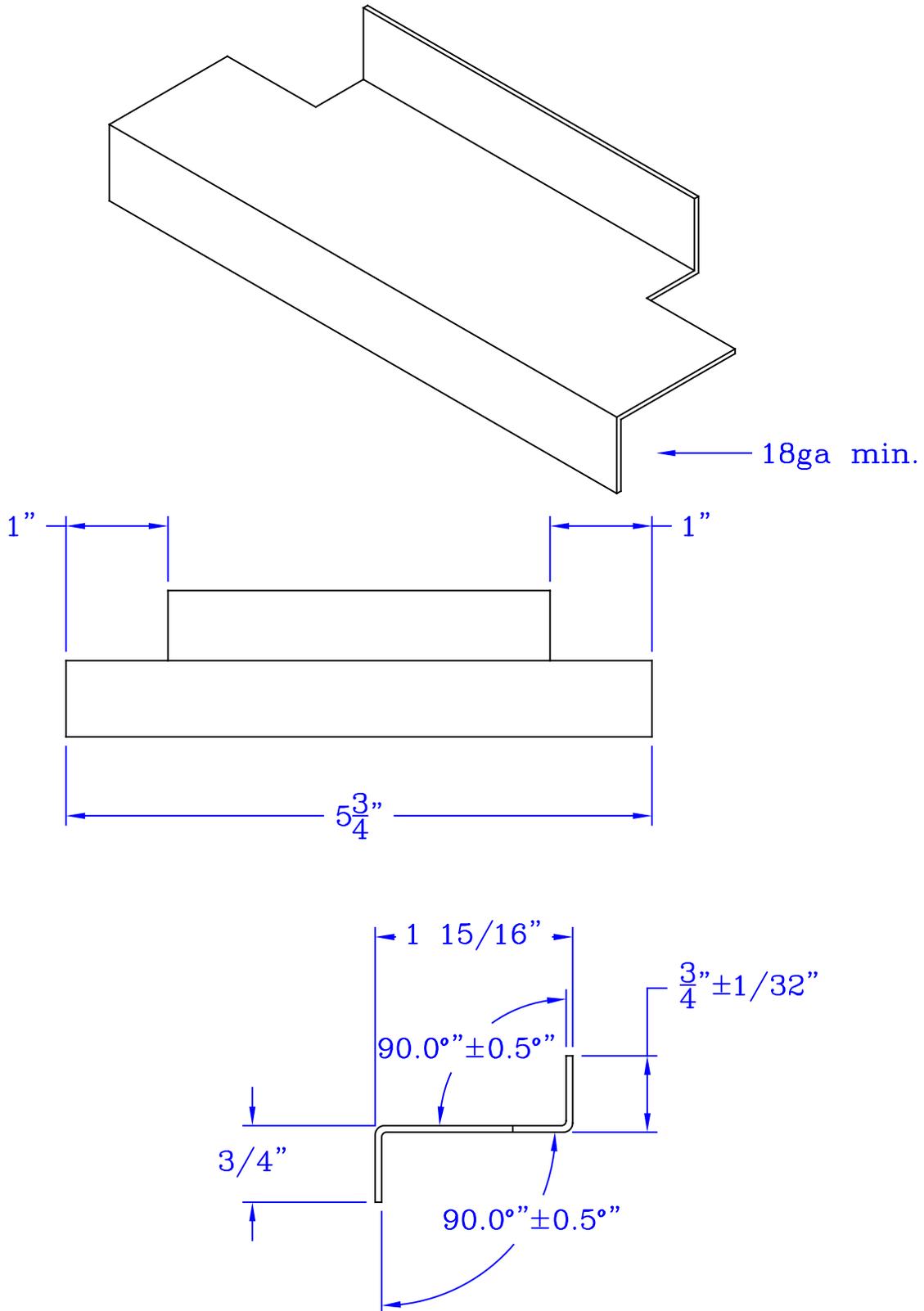
See option ZBA on page O-15.6 for additional information

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



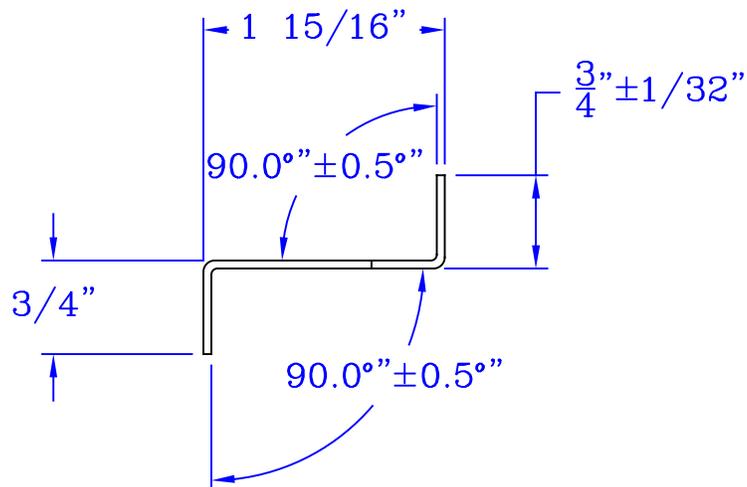
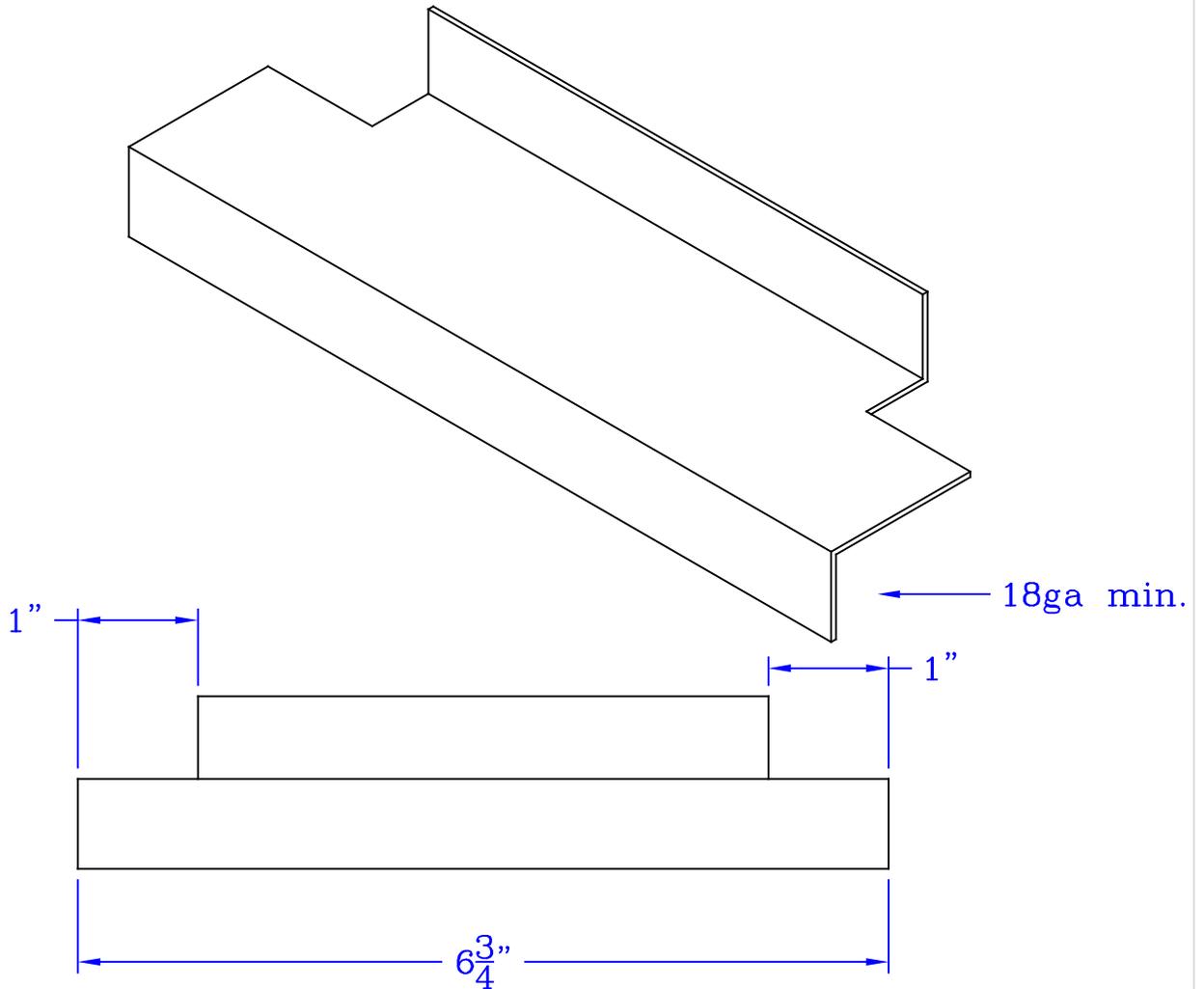
See option ZBA on page O-15.6 for additional information

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



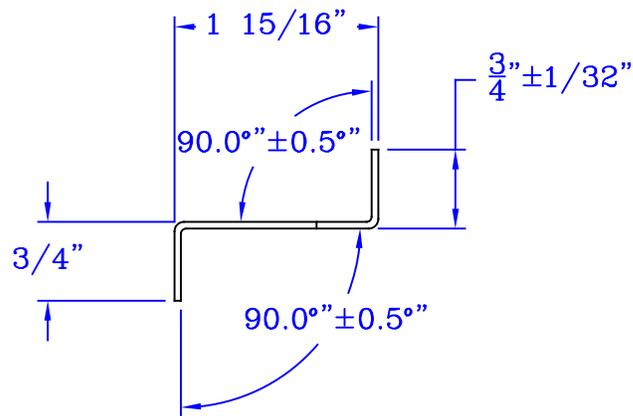
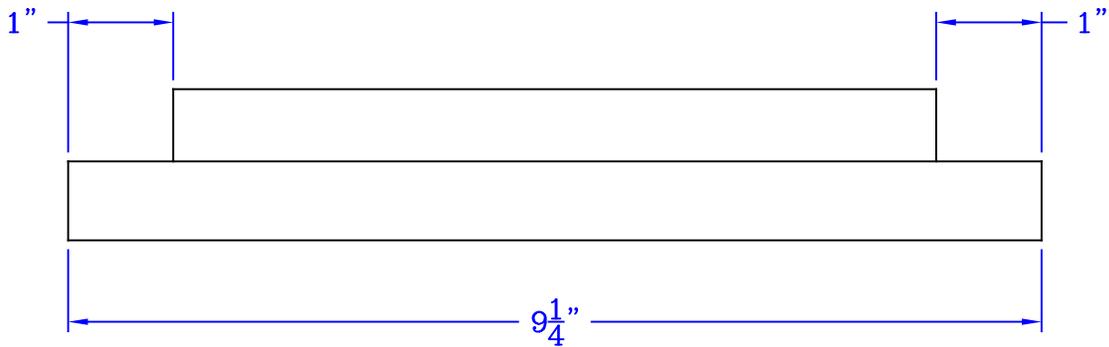
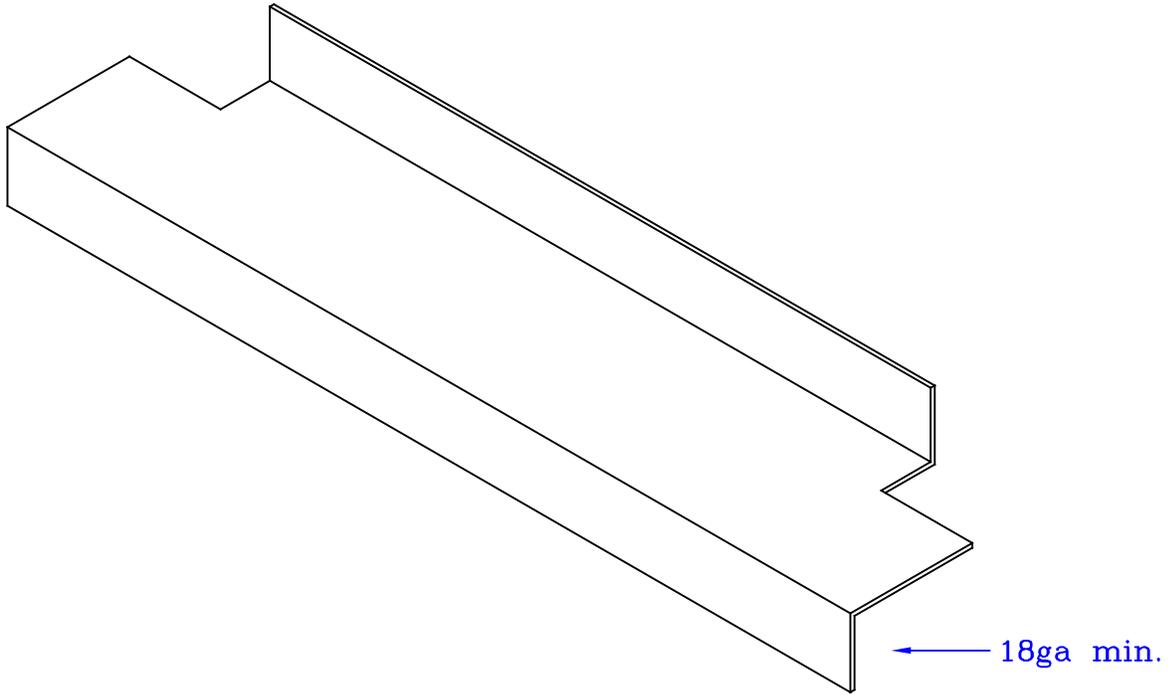
See option ZBA on page O-15.6 for additional information

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



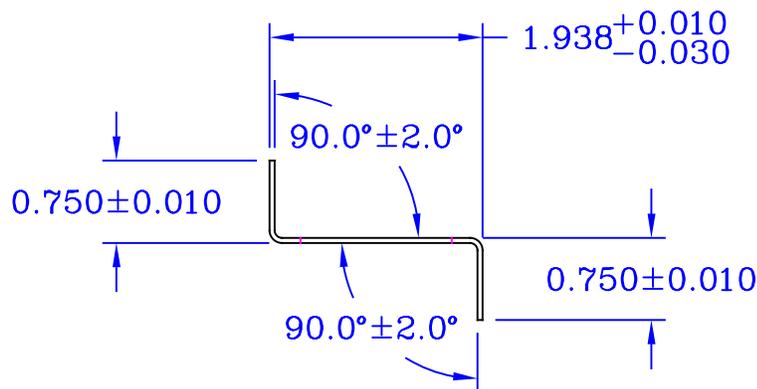
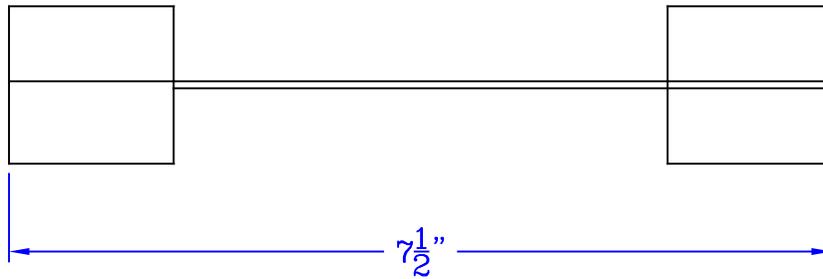
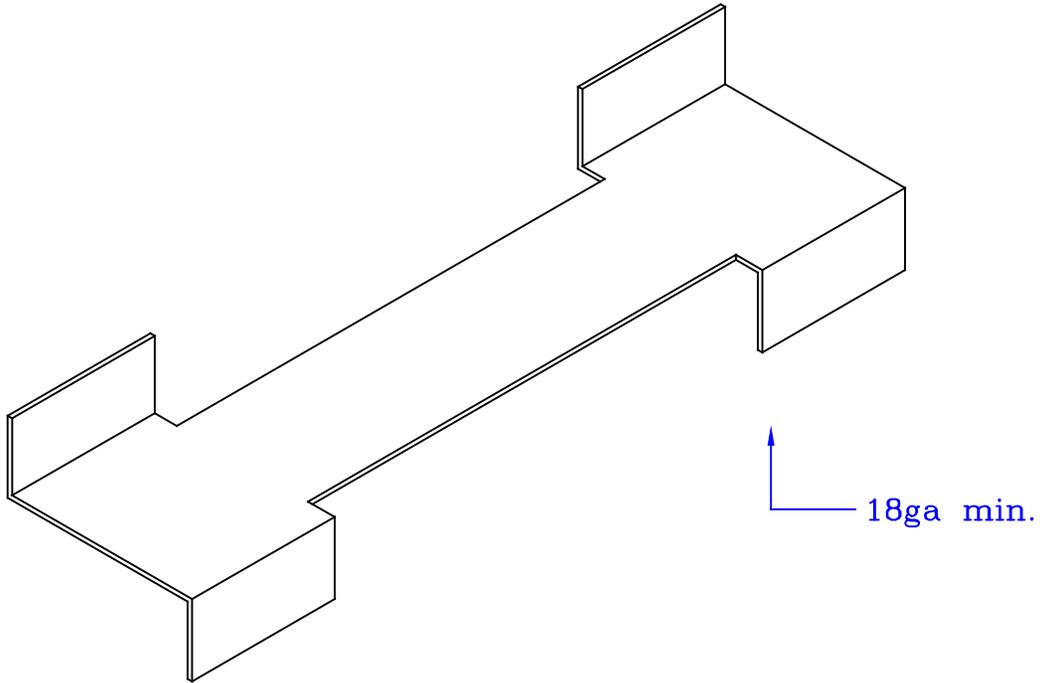
See option ZBA on page O-15.6 for additional information

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



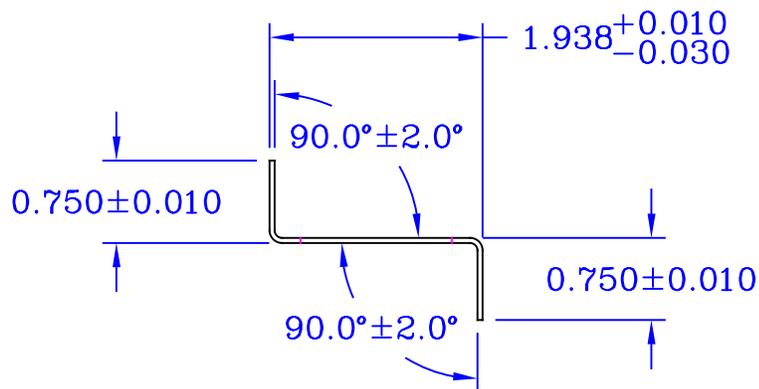
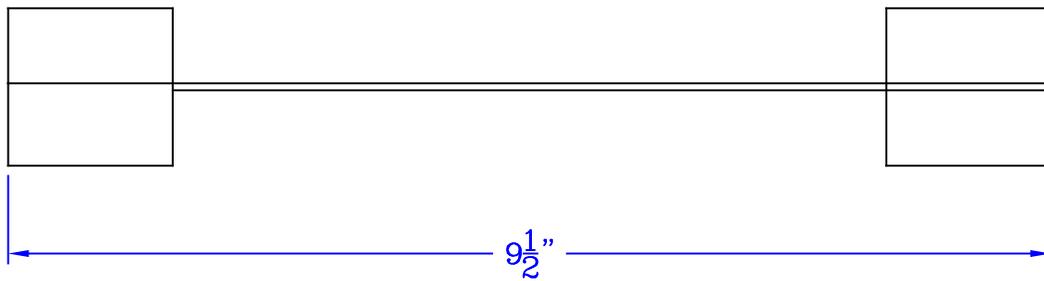
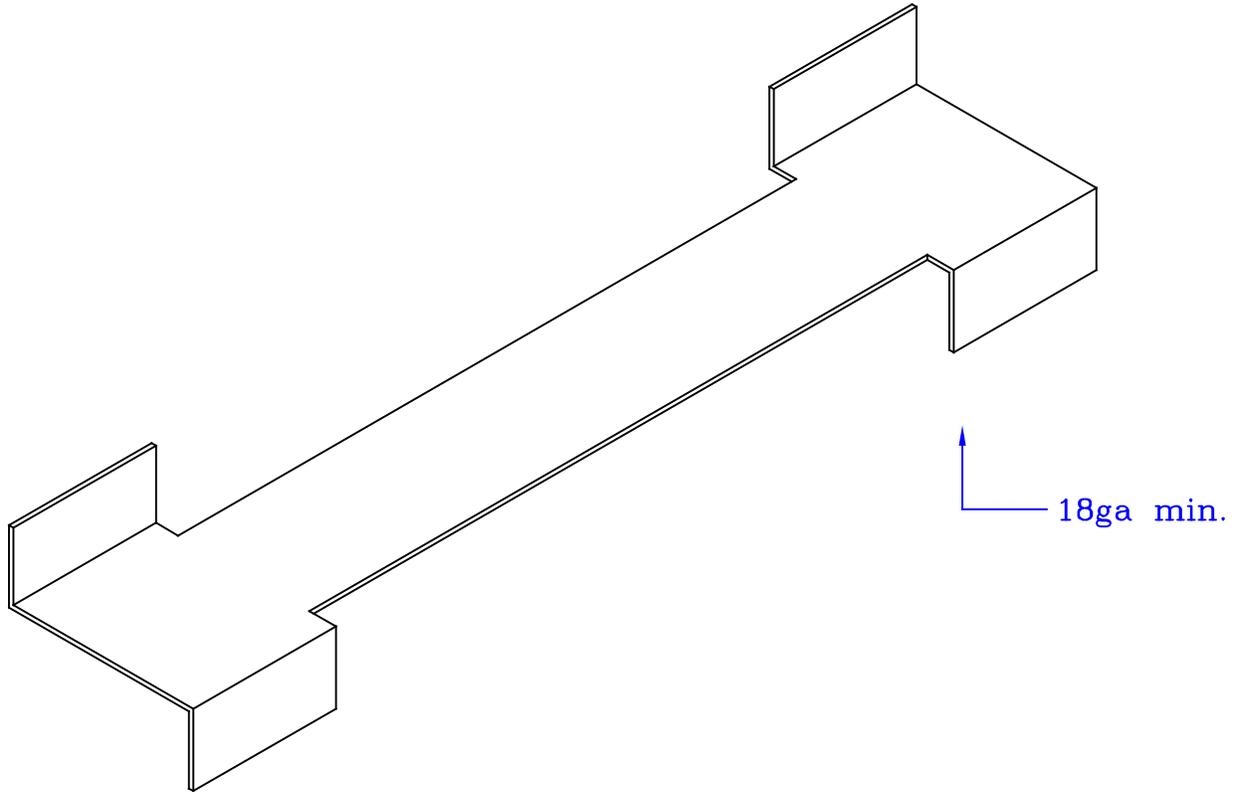
See option ZBA on page O-15.6 for additional information

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



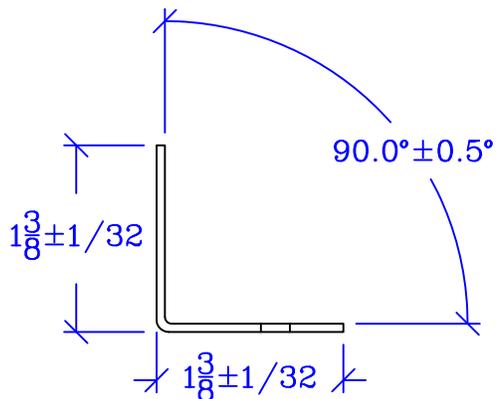
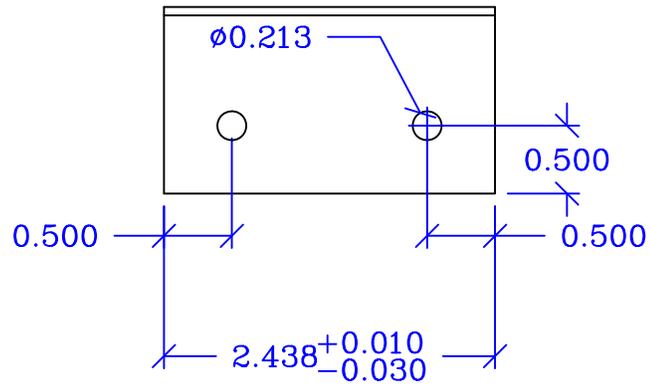
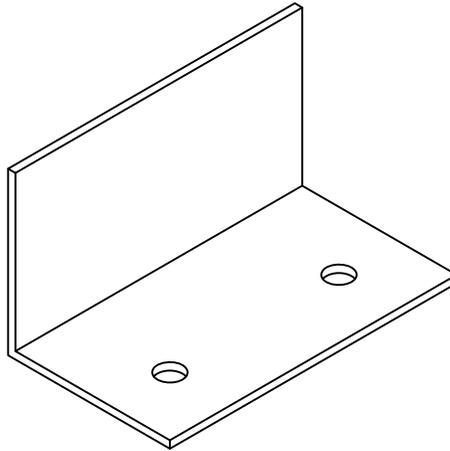
See option EWA on page O-15.12 for additional information

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



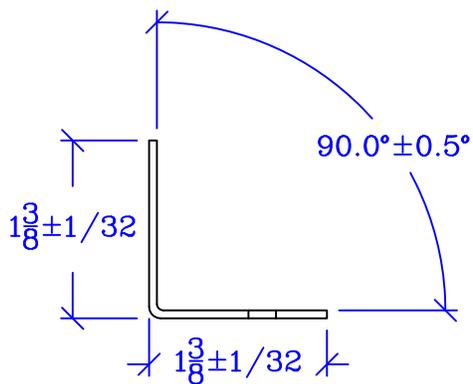
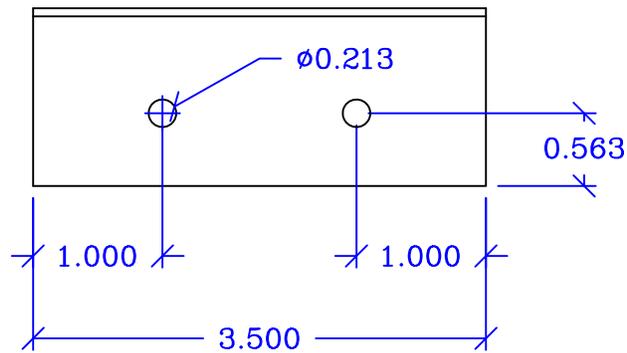
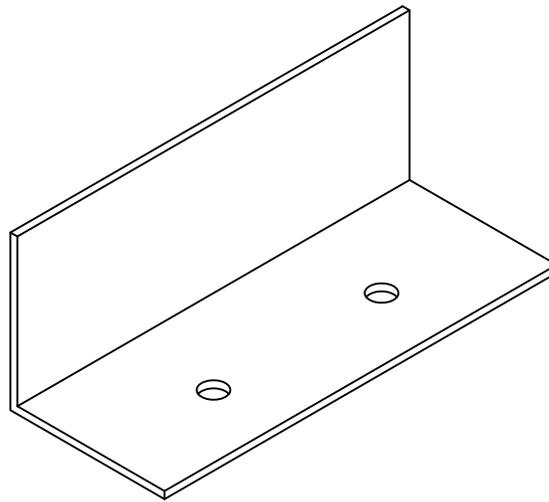
See option EWA on page O-15.12 for additional information

Floor anchor not sized, 16ga



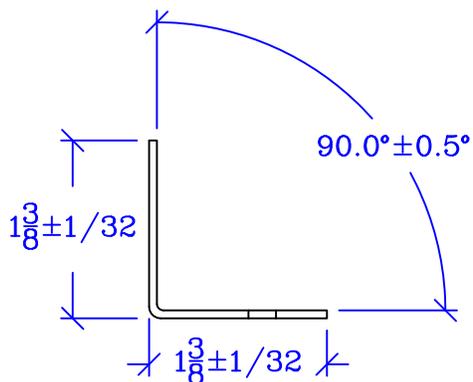
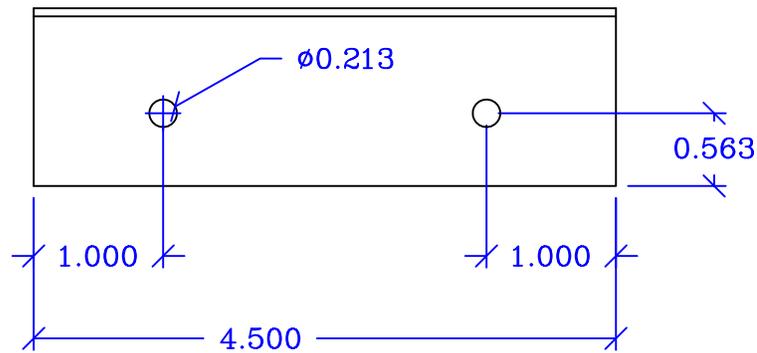
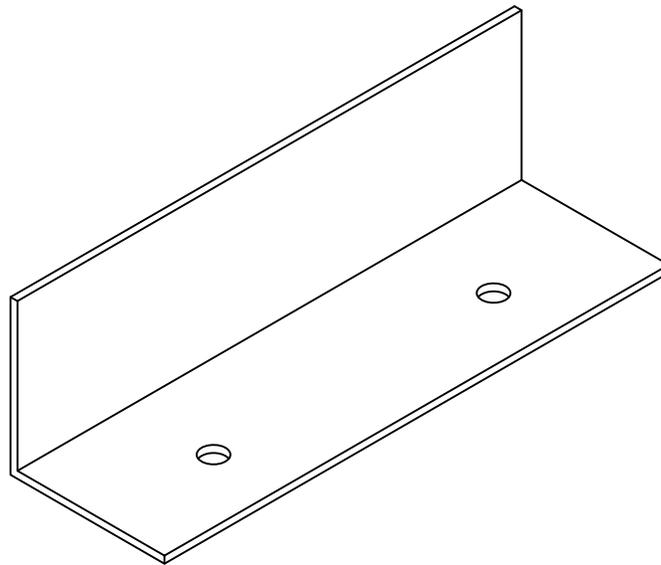
See option FA on page O-15.24 for additional information

Floor anchor 3 1/2, 16ga



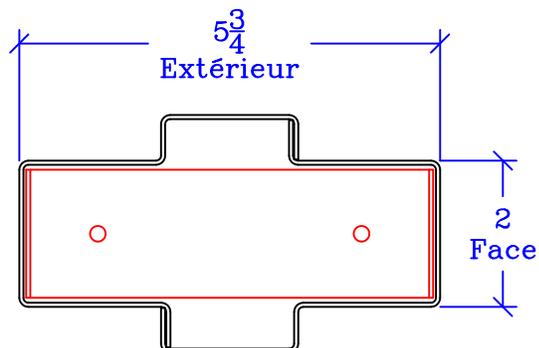
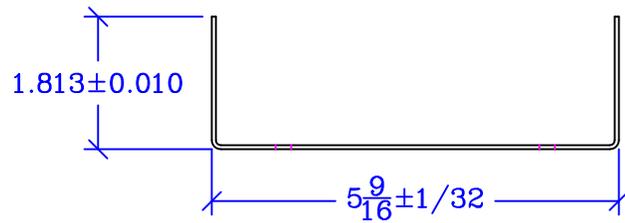
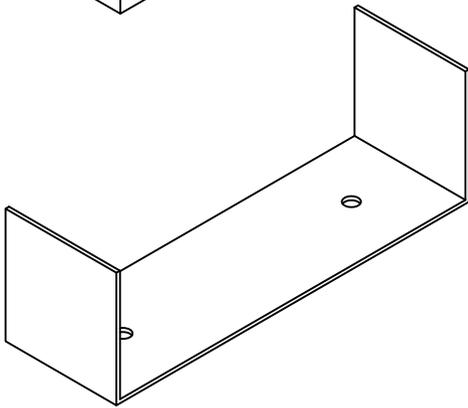
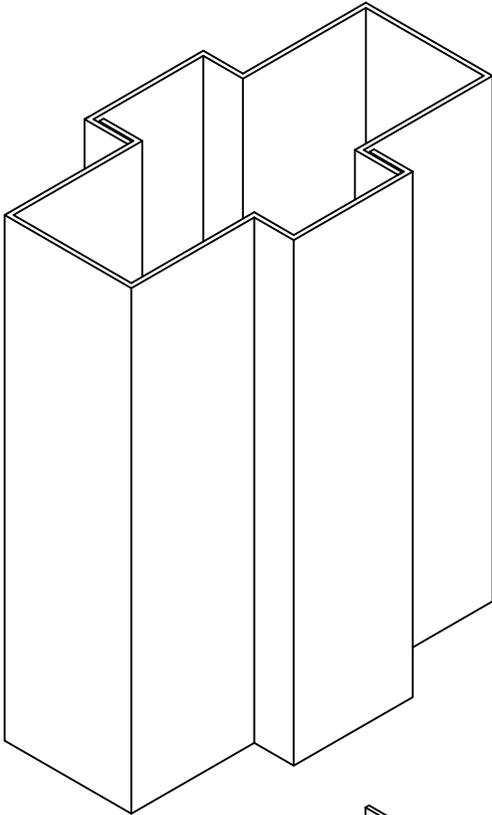
See option FA on page O-15.24 for additional information

Floor anchor 4 1/2, 16ga

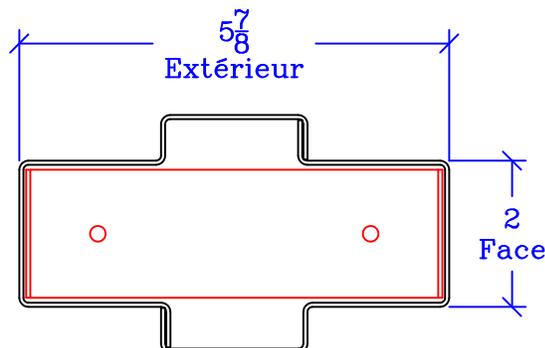
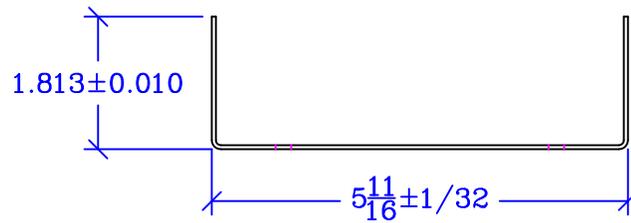
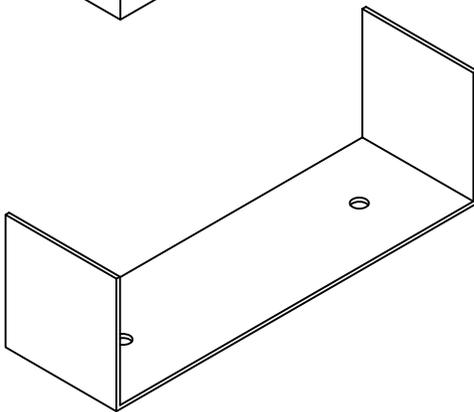
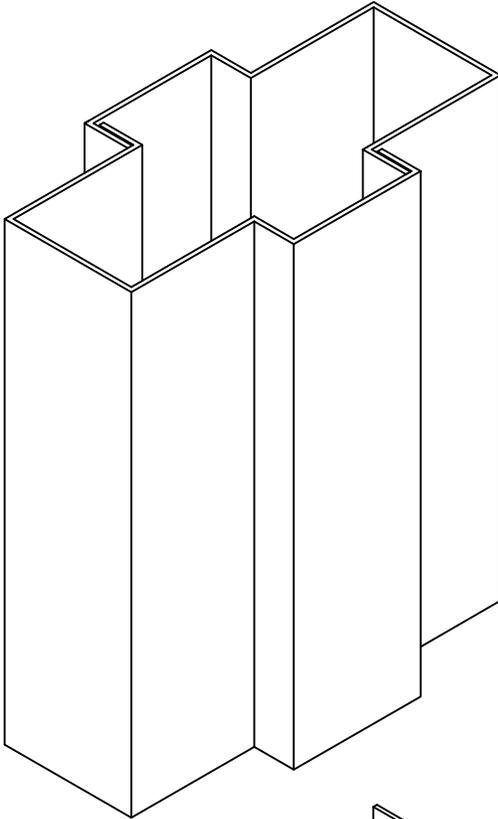


See option FA on page O-15.24 for additional information

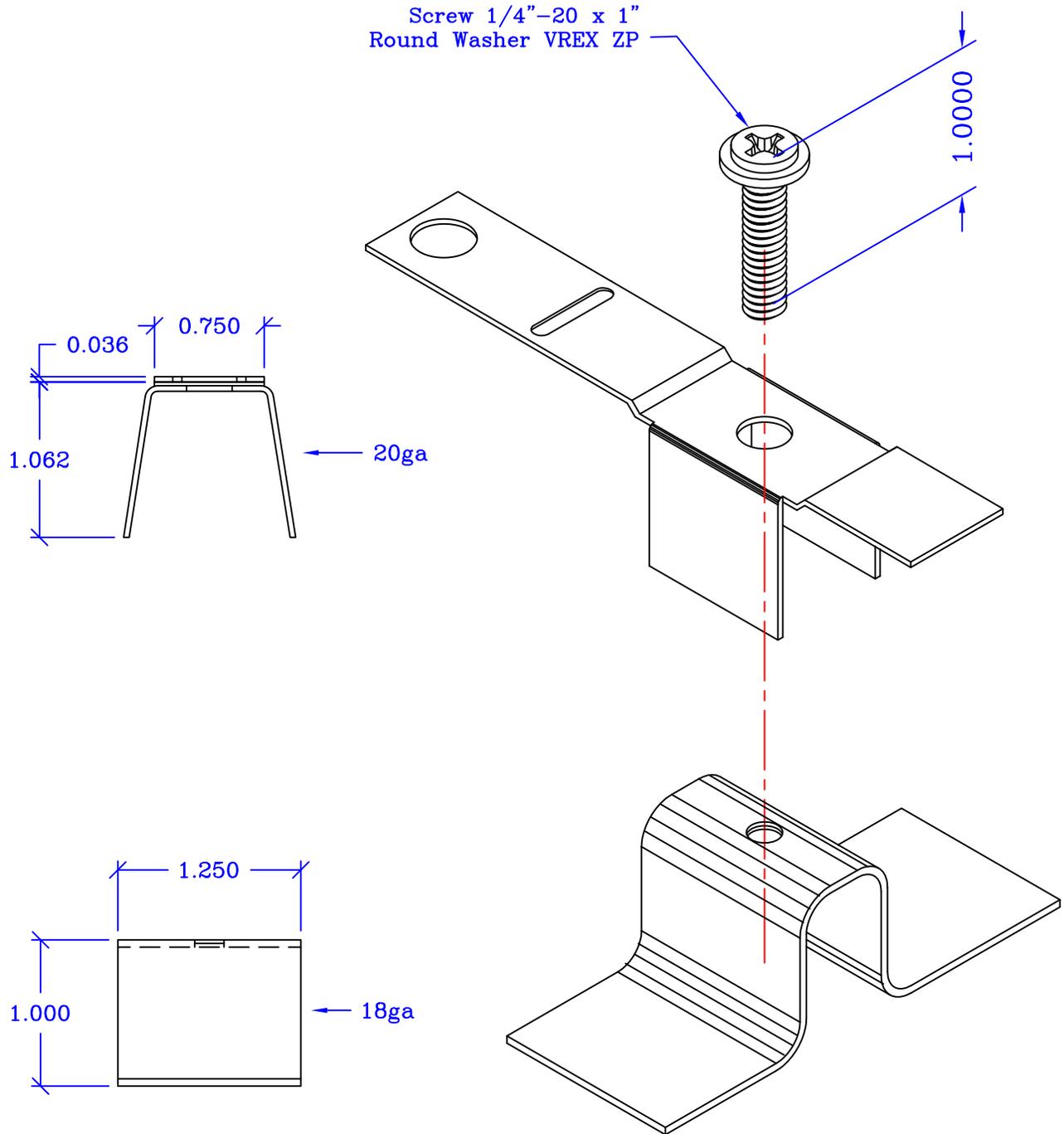
Mullion floor anchor for 5 3/4" jamb depth, 16ga



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



Compression anchor for 16ga knocked down frame

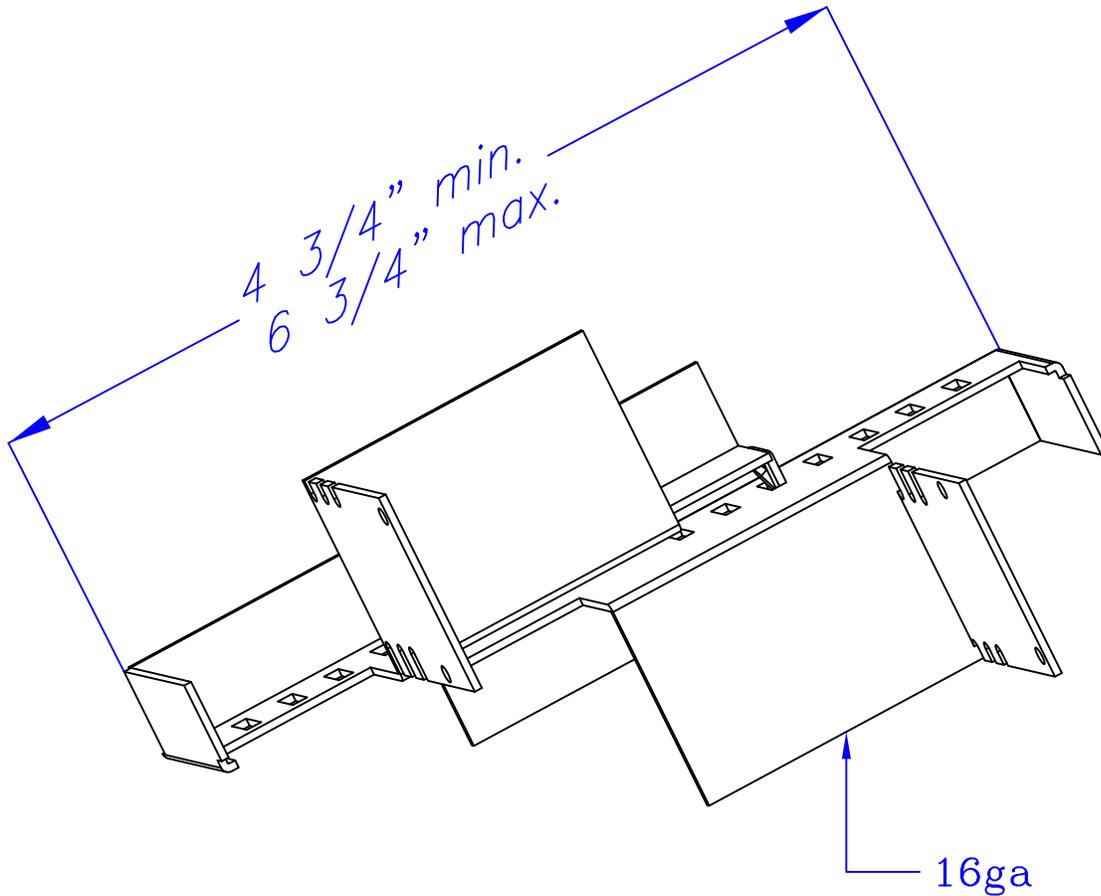


Anchor parts

00858

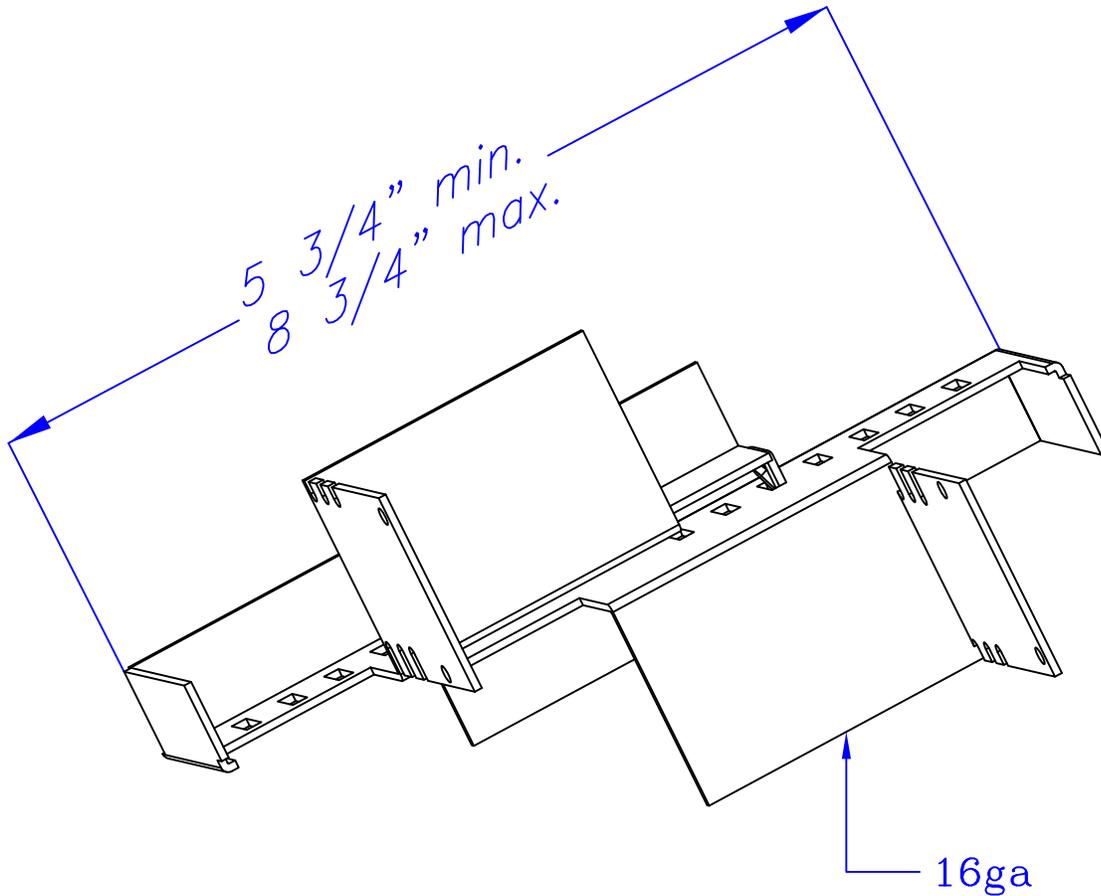
See option KD/KDS on pages O-15.28 and O-15.30 for additional information

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



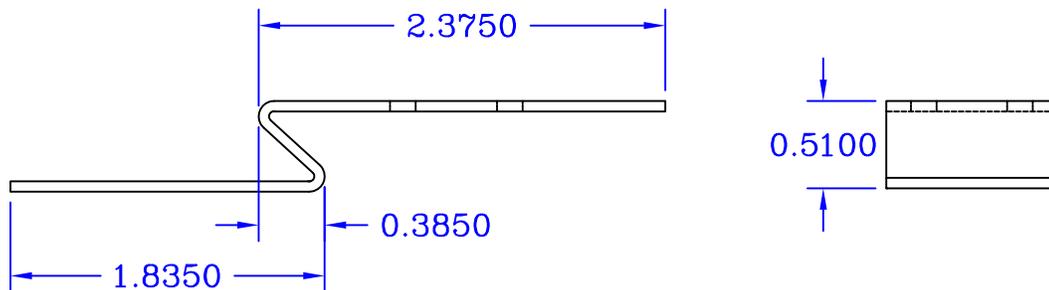
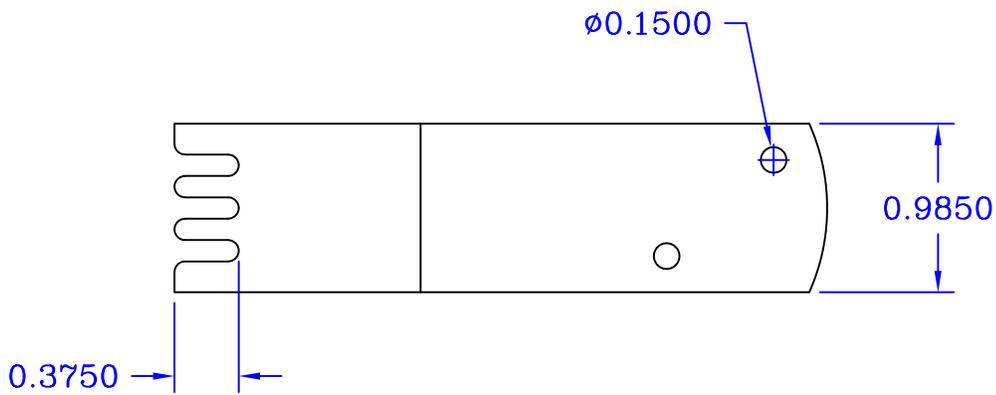
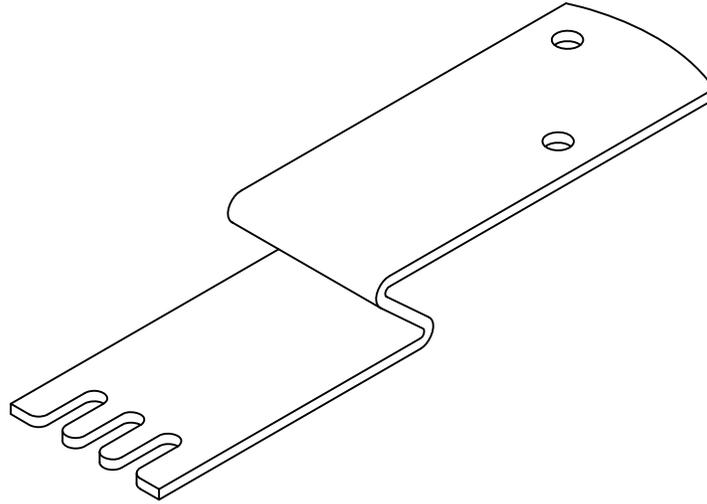
See option SWS on page O-15.8 for additional information

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



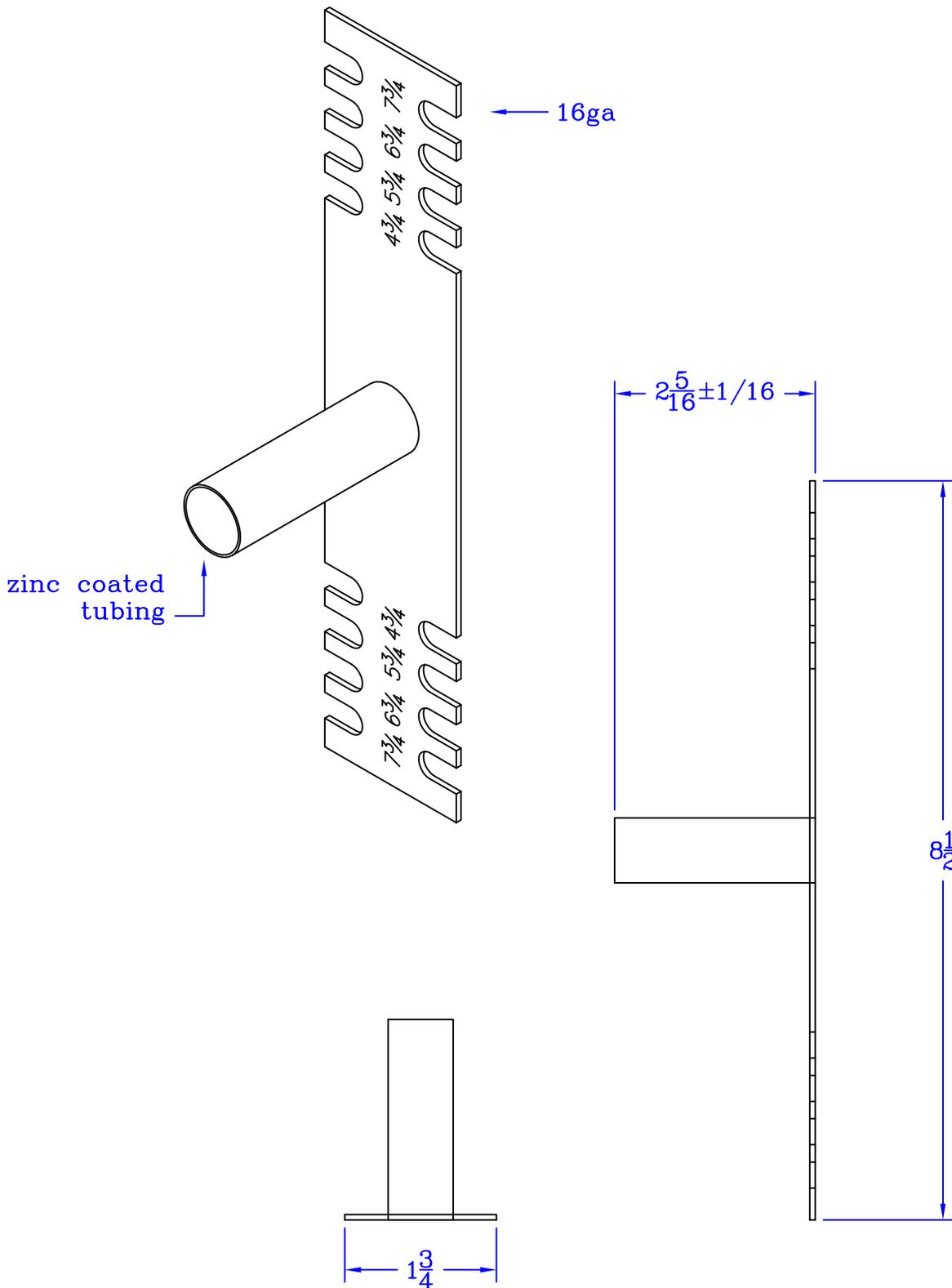
See option SWS on page O-15.8 for additional information

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

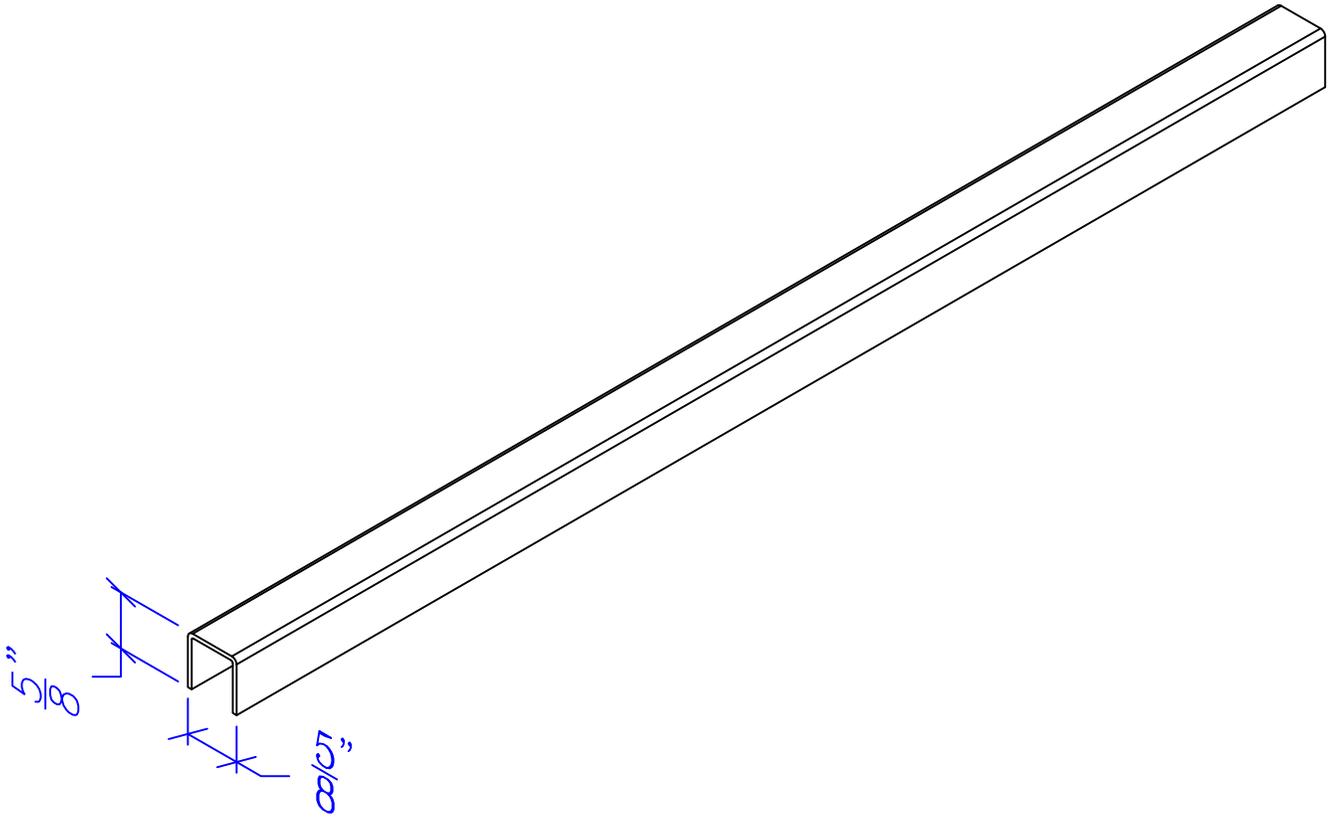


See option SDS on page O-15.3 for additional information

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



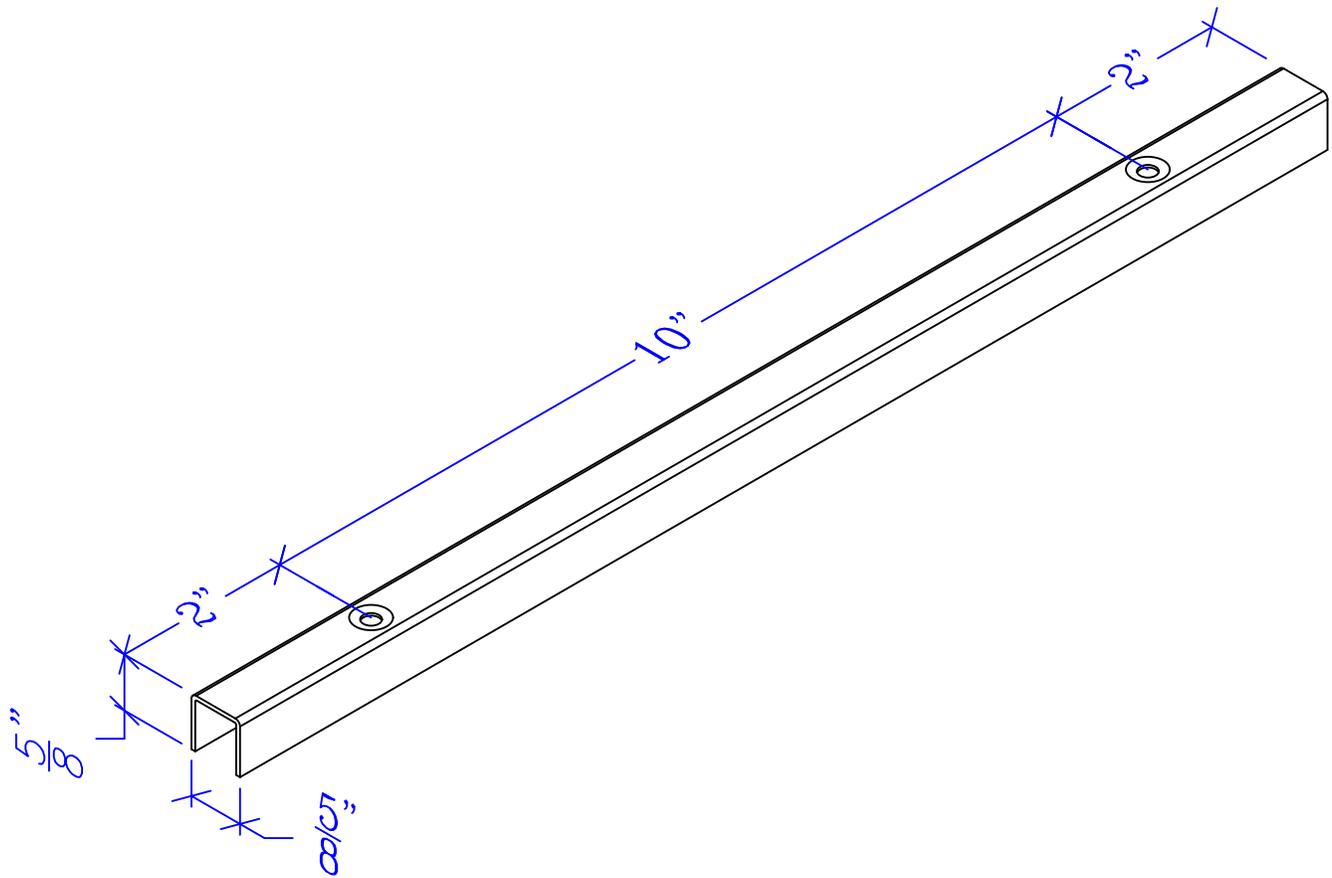
Glazing bead 5/8" x 5/8" x 10'0" without dimples



Glazing bead

00075

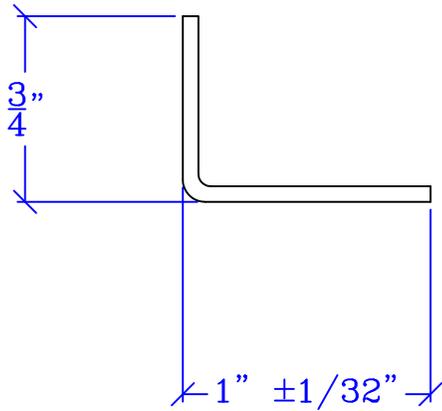
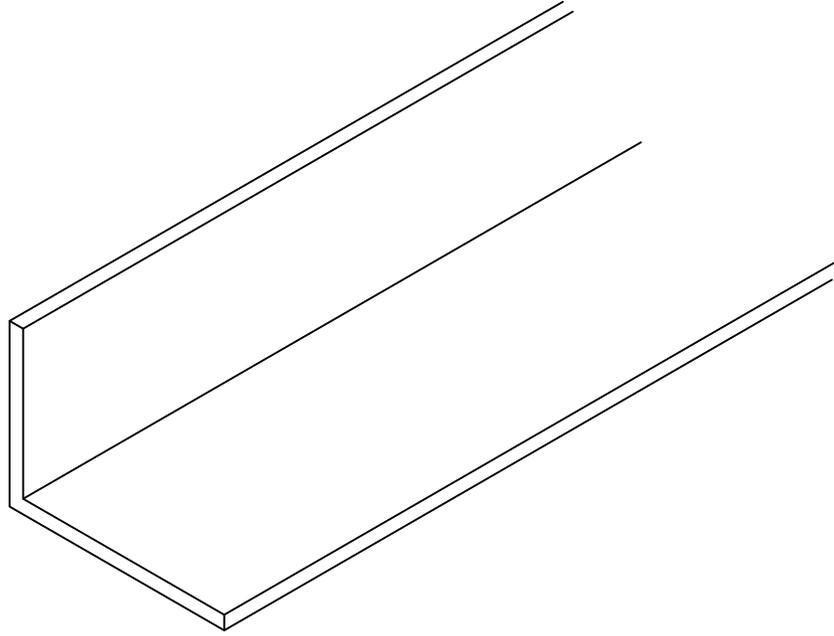
Glazing bead 5/8" x 5/8" x 10'0" punched and dimpled



Glazing bead

00095

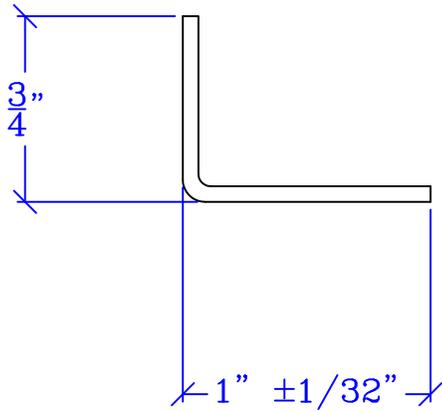
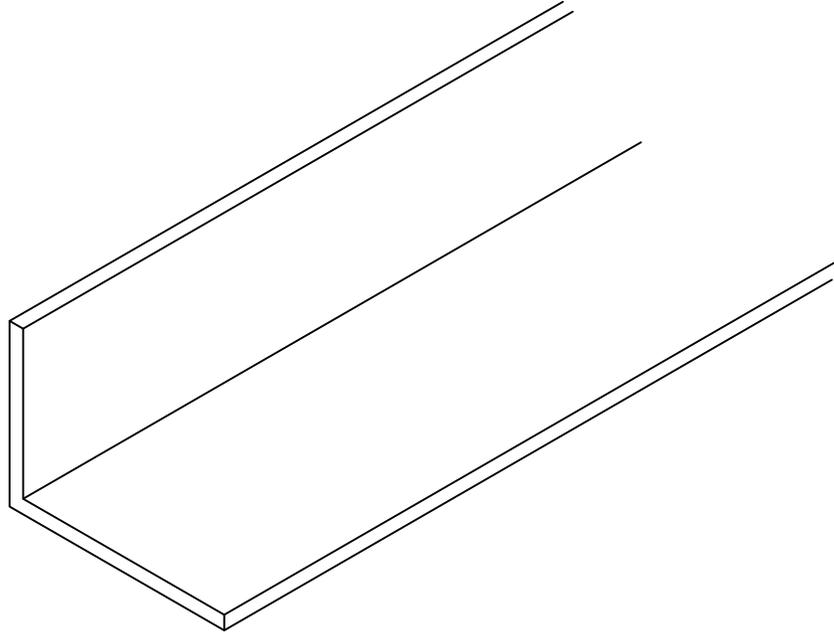
3'0" long, 16ga



Spreader bar

03059

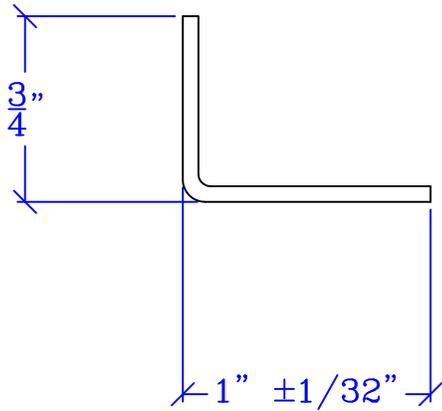
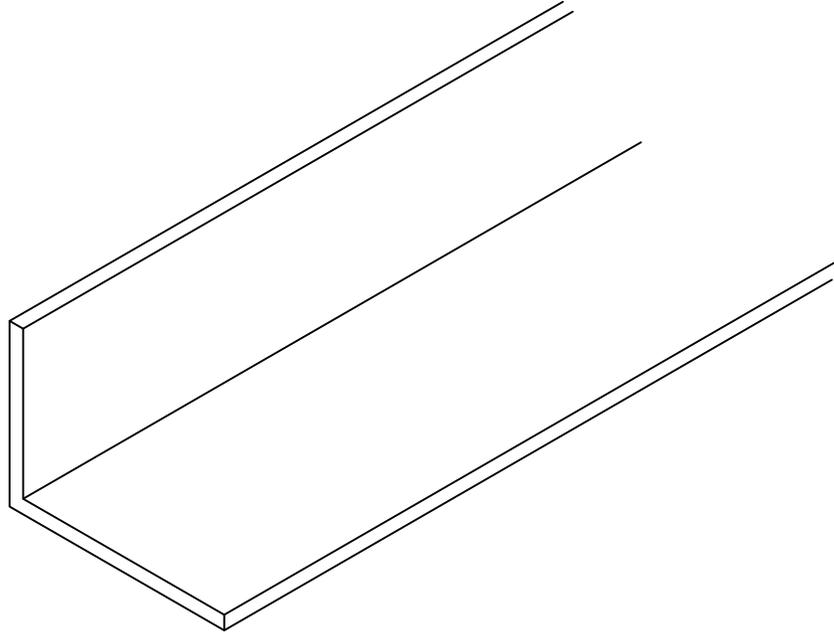
4'0" long, 16ga



Spreader bar

03063

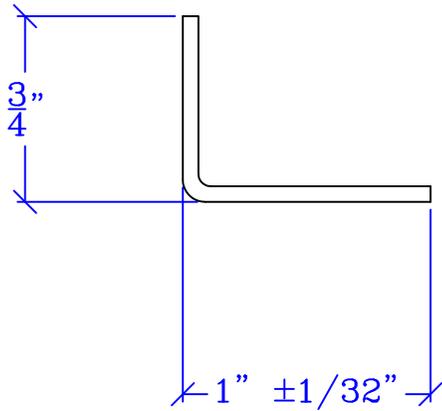
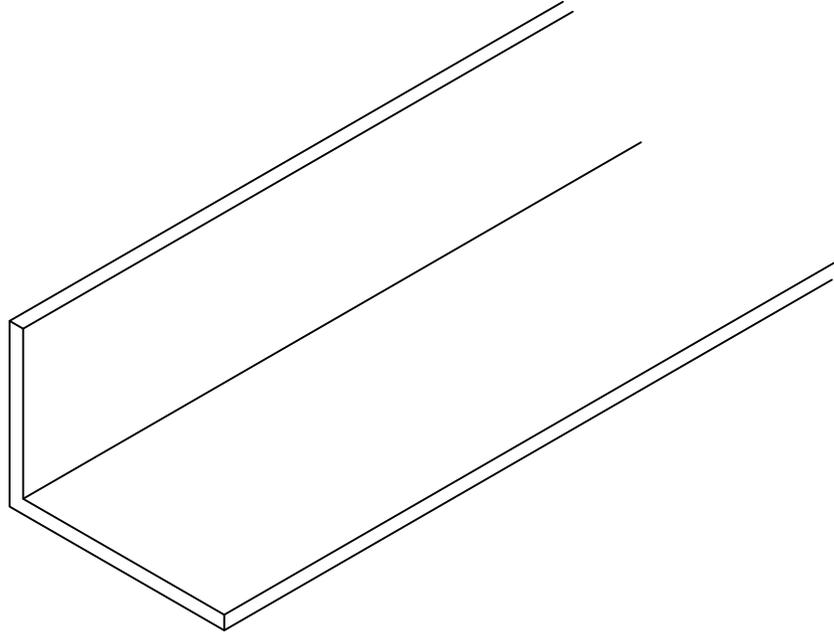
5'0" long, 16ga



Spreader bar

03064

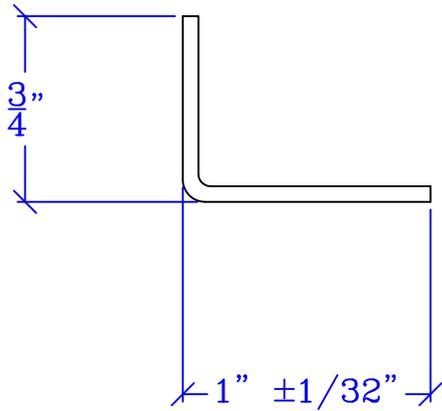
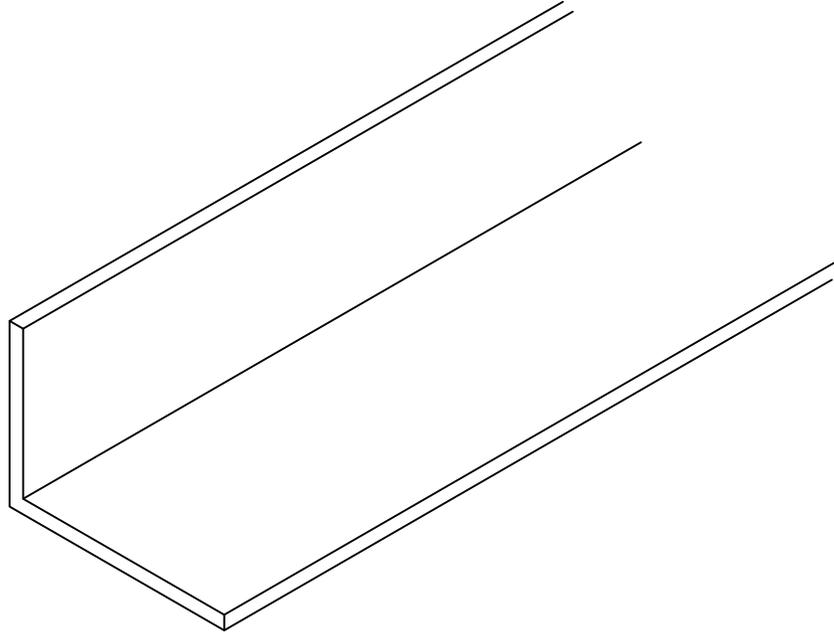
6'0" long, 16ga



Spreader bar

03065

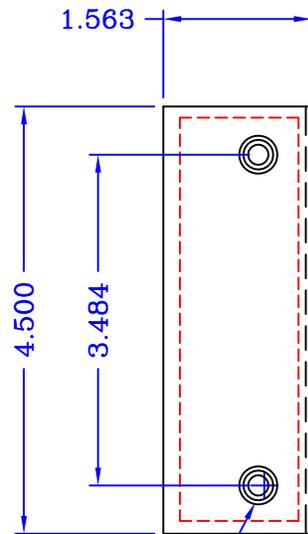
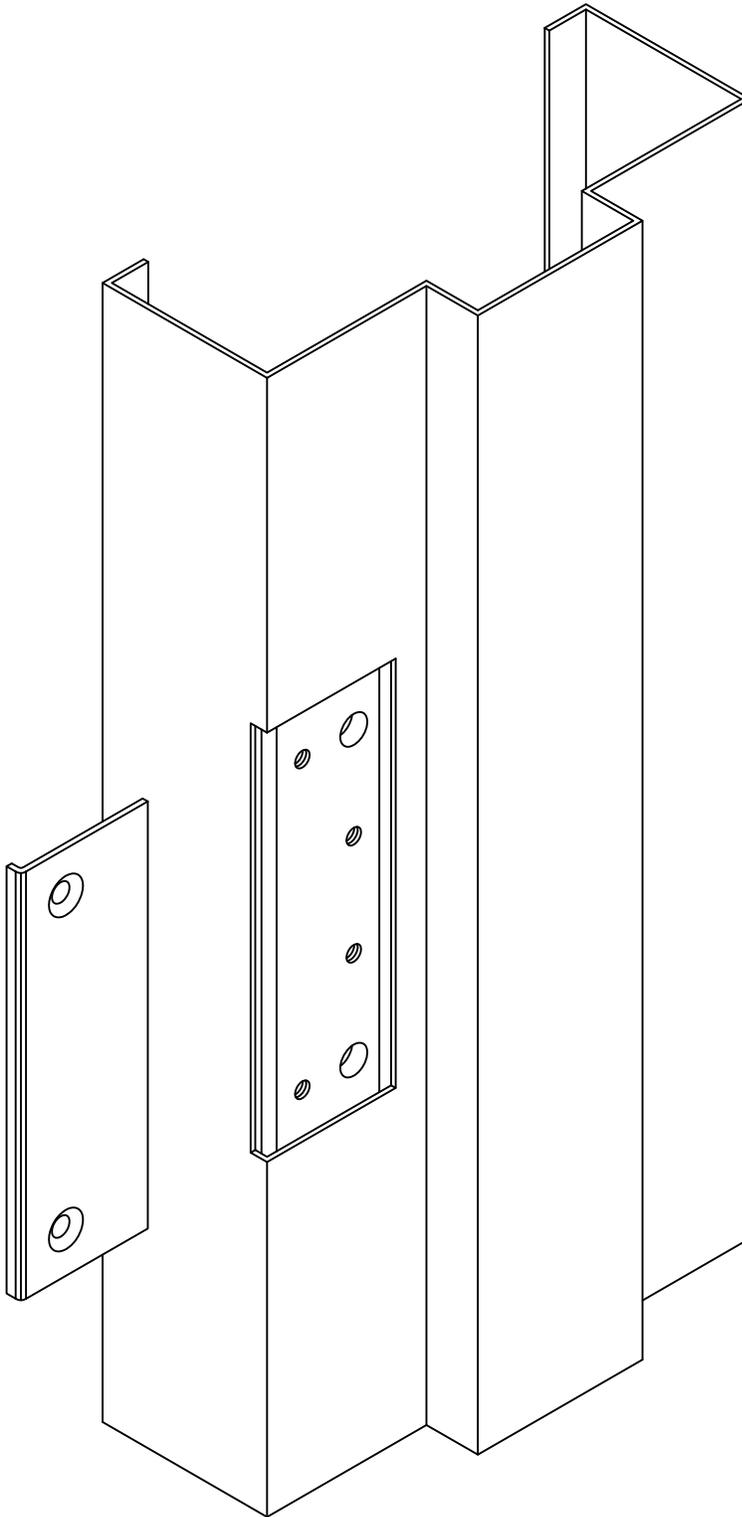
10'0" long, 16ga



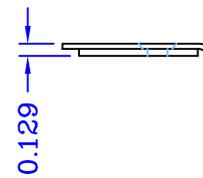
Spreader bar

03066

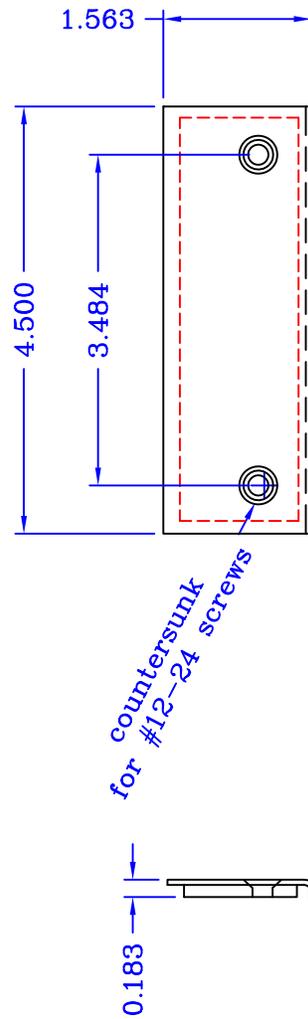
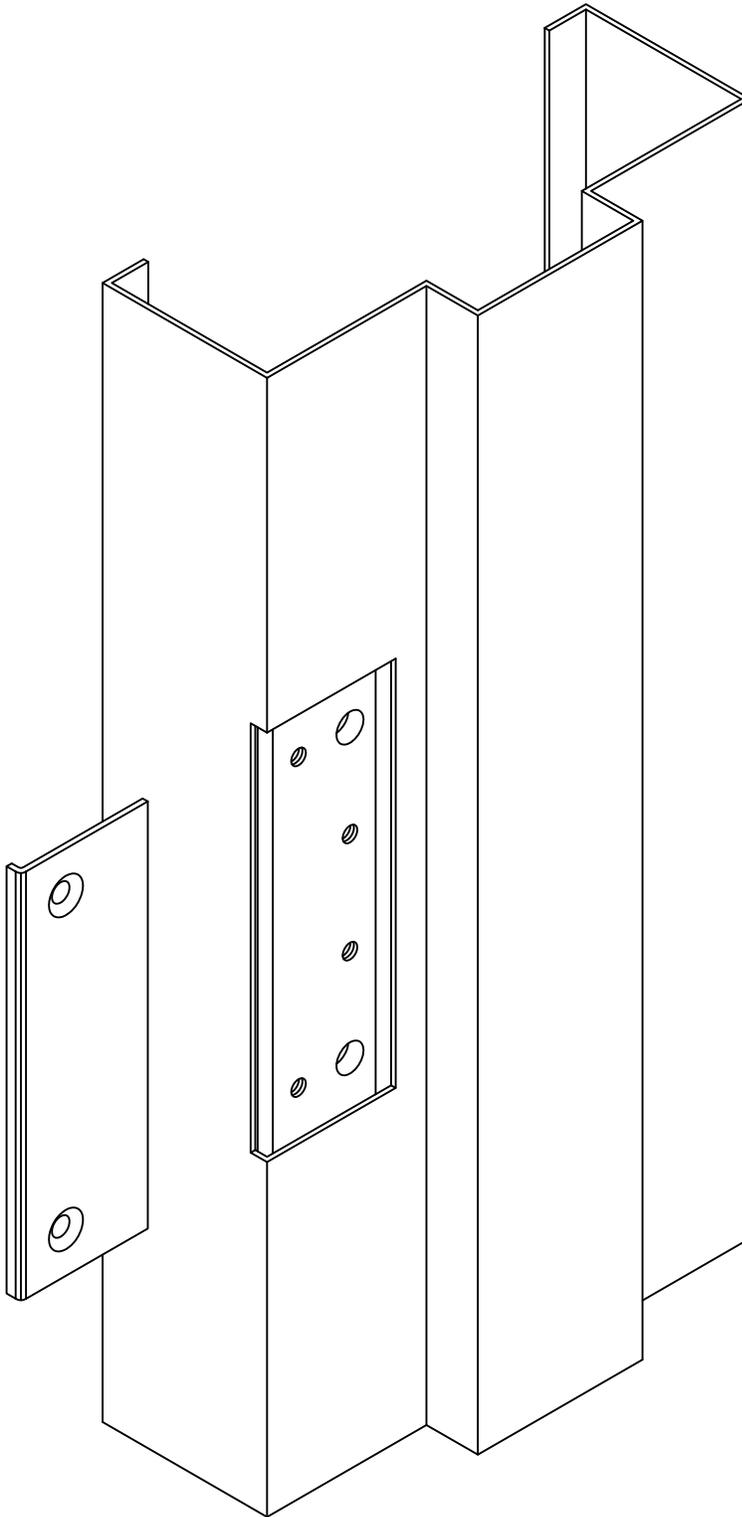
4 1/2" standard weight hinge filler, screwed
for 1 3/4" thick door



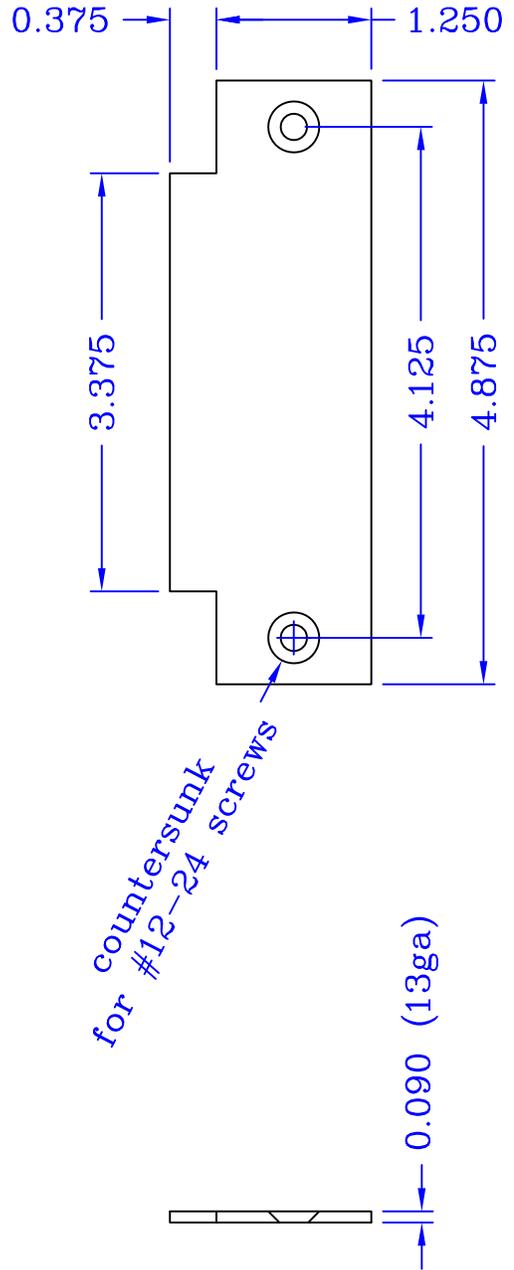
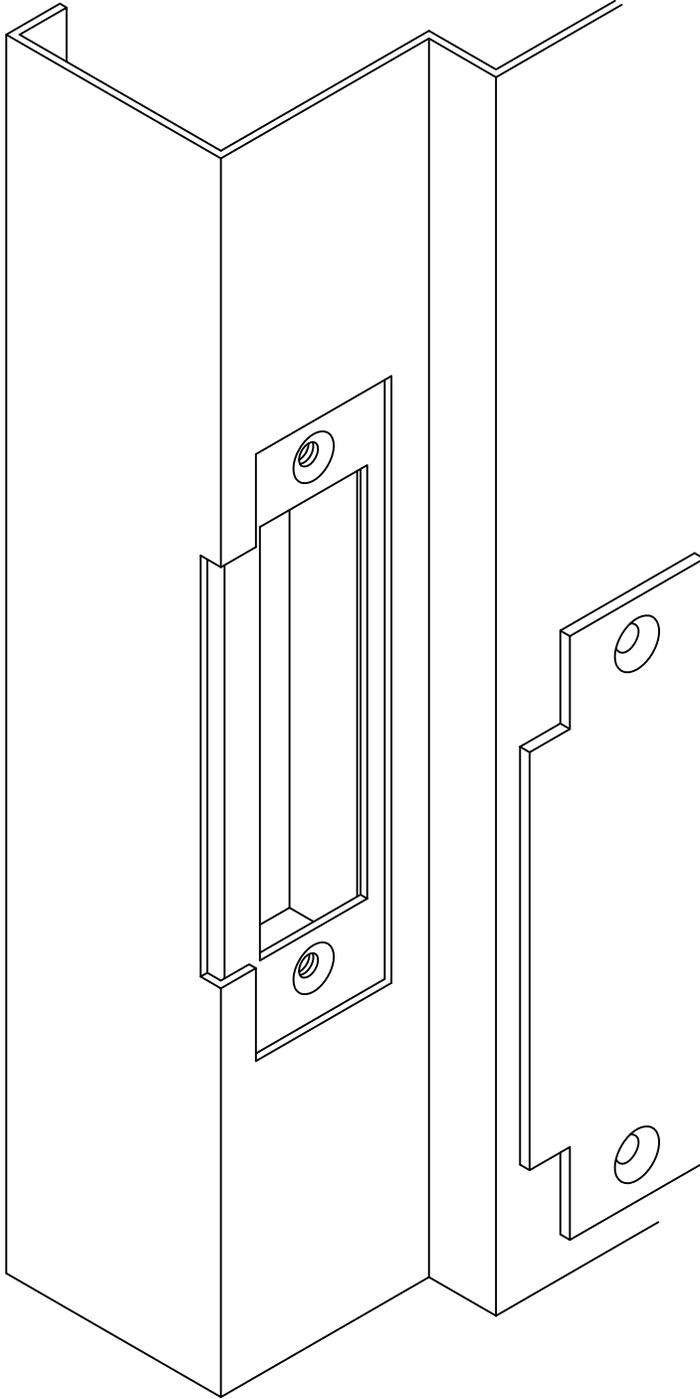
countersunk
for #12-24 screws



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

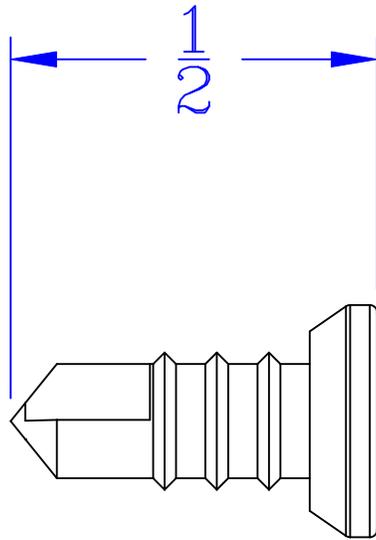
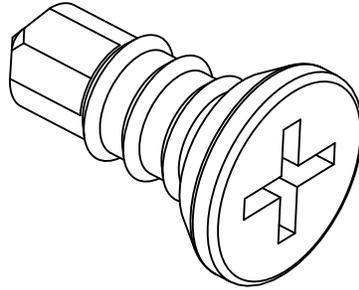


ASA strike filler, screwed
for 1 3/4" thick door



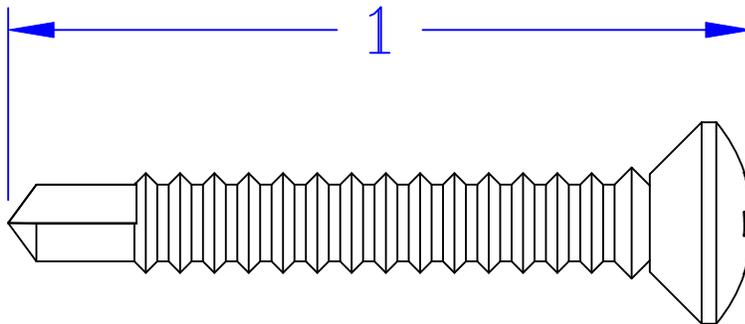
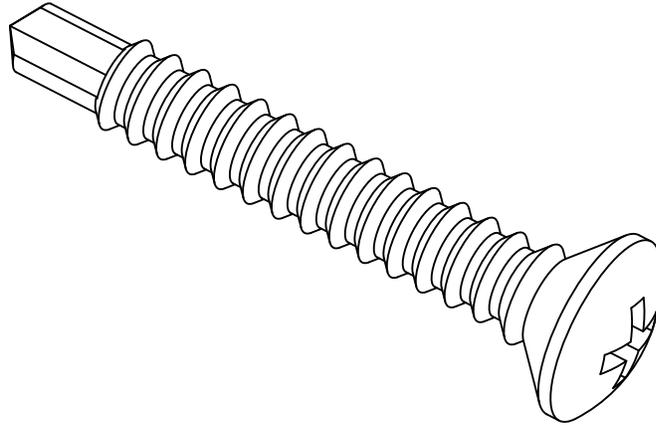
Self drill screw for astragal

#8-18 x 1/2" Phillips flat undercut head ZP #2 point



See options FAS, ZAS, SAS on pages O-6.6, O-6.7, O-6.10 for additional information

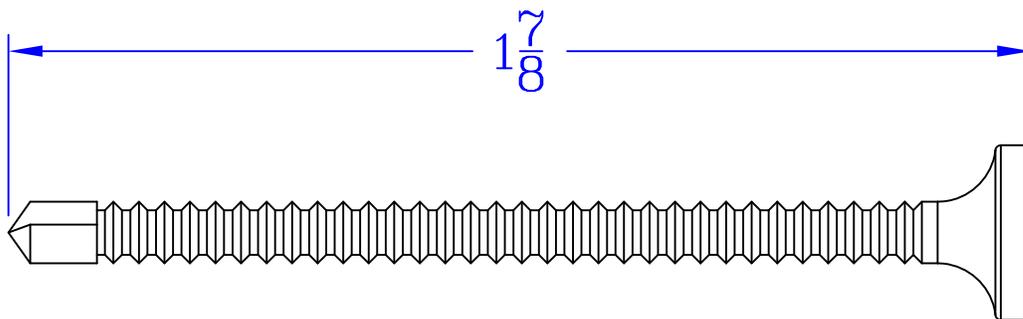
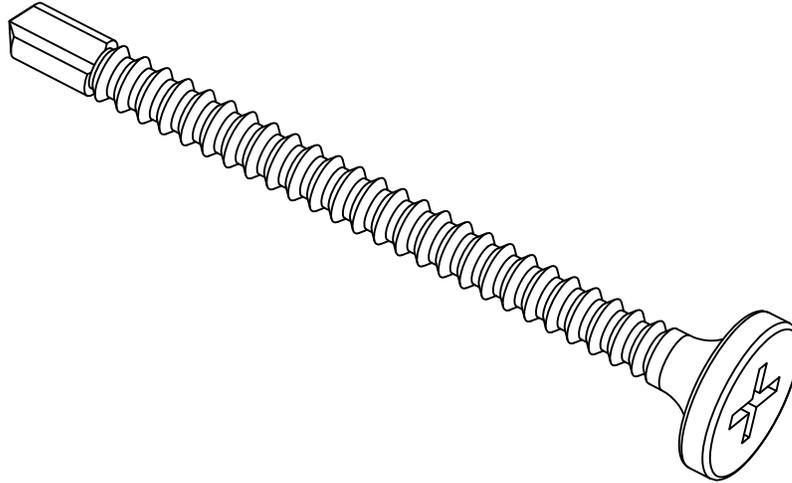
Self drill screw for glazing bead
#6 x 1" Phillips oval head ZP



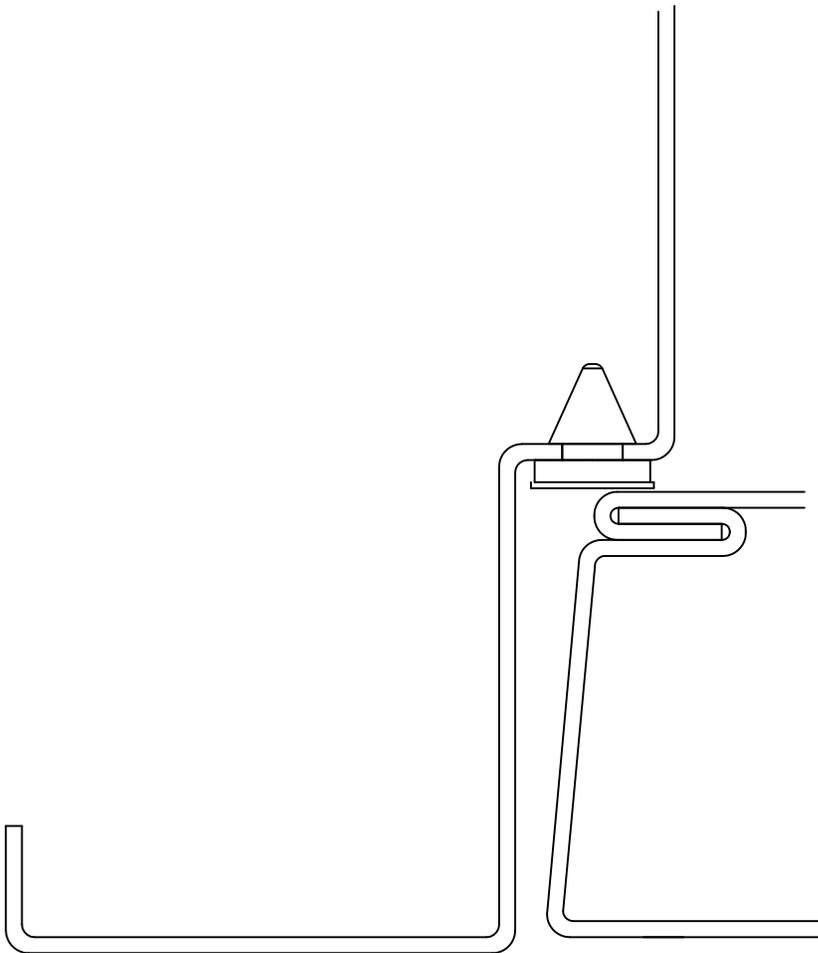
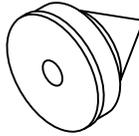
See on page C-21 for additional information

Self drill screw for vinyl cap

#6-20 x 1 7/8" Phillips bugle head ZP #2 point



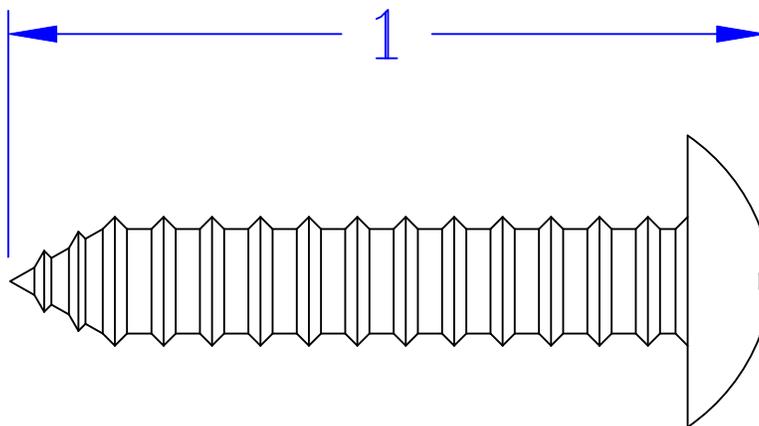
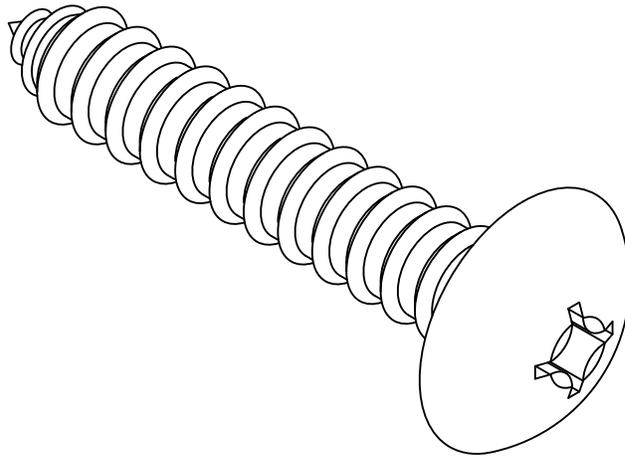
Rubber bumper/silencer



Three at strike jamb or two at head when paired opening

Knock down screw

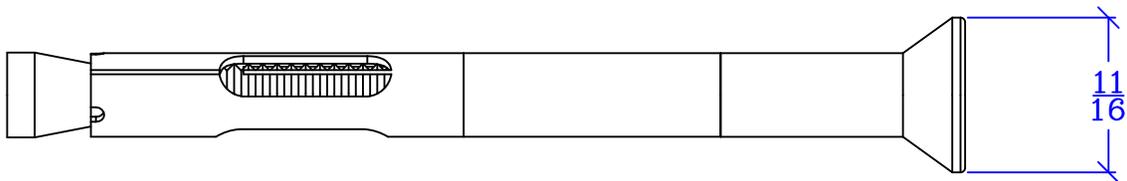
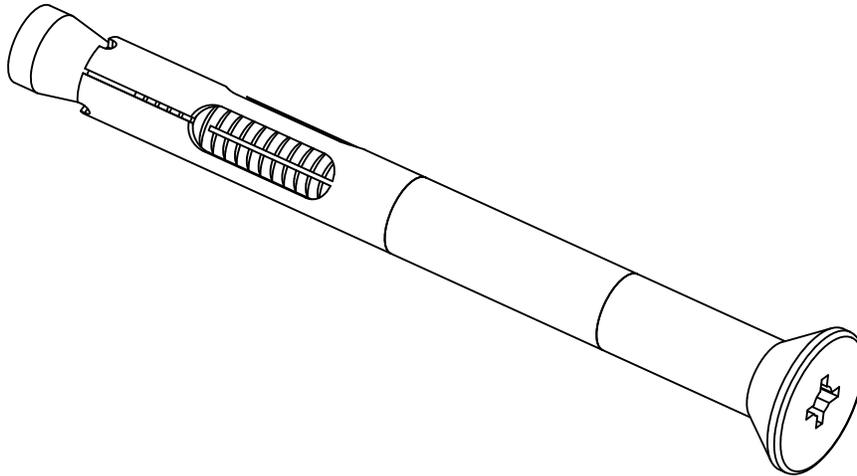
#8 -15 x 1" Phillips Truss Head SS



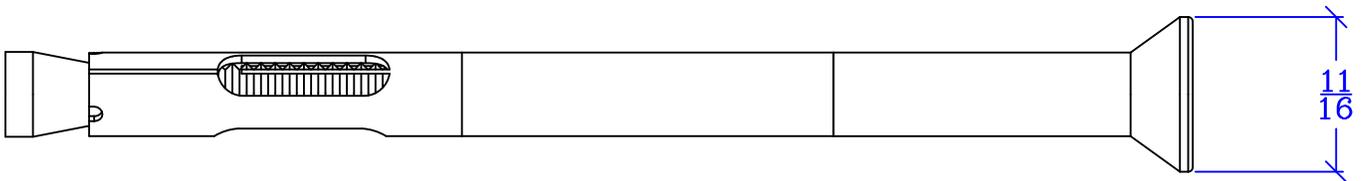
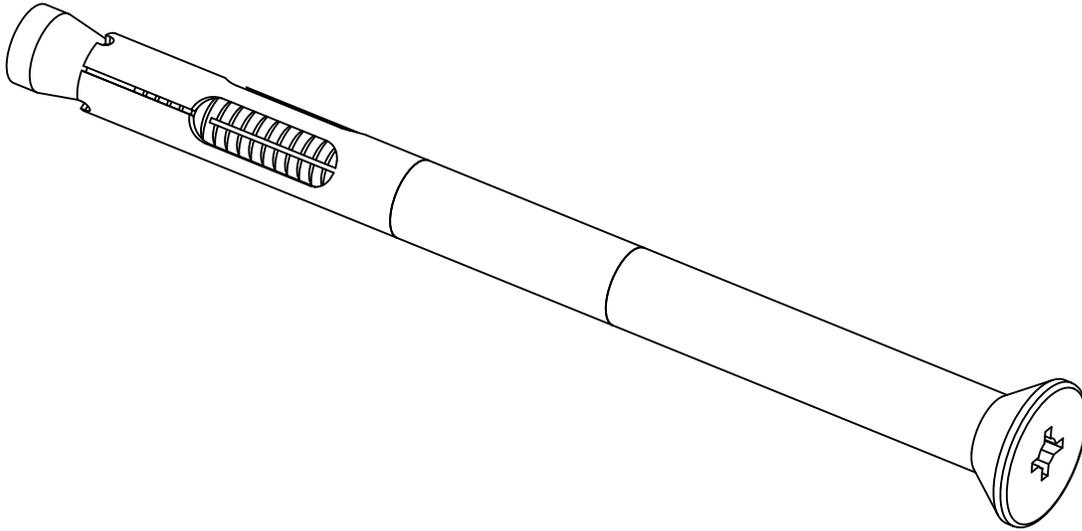
See option KDS on page O-15.30 for additional information

Masonry sleeve anchor

3/8" x 4"



Masonry sleeve anchor
3/8" x 5"

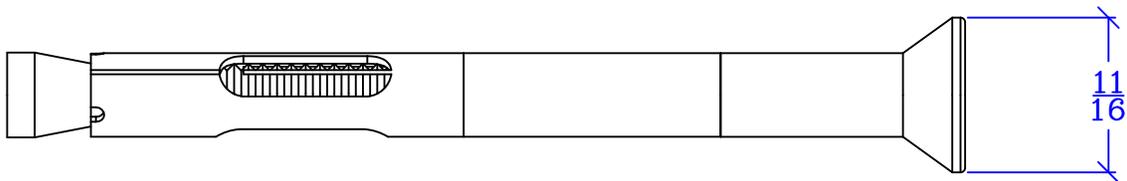
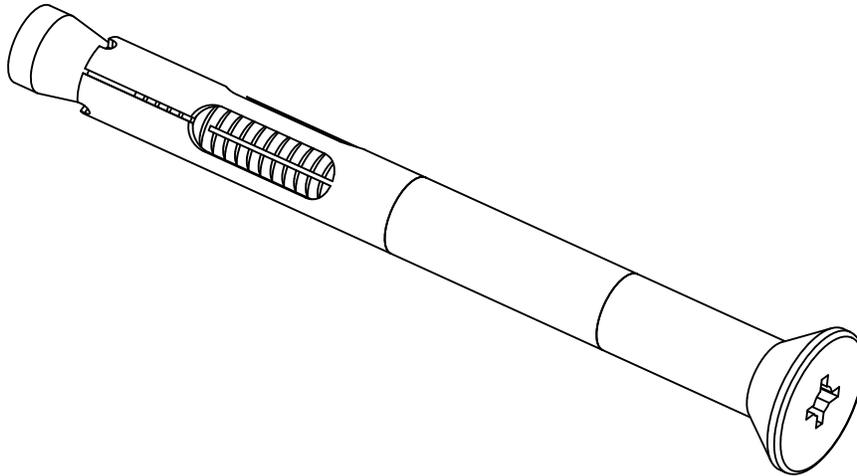


00088

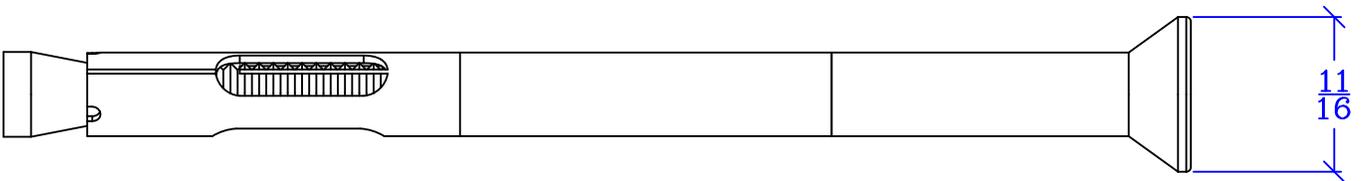
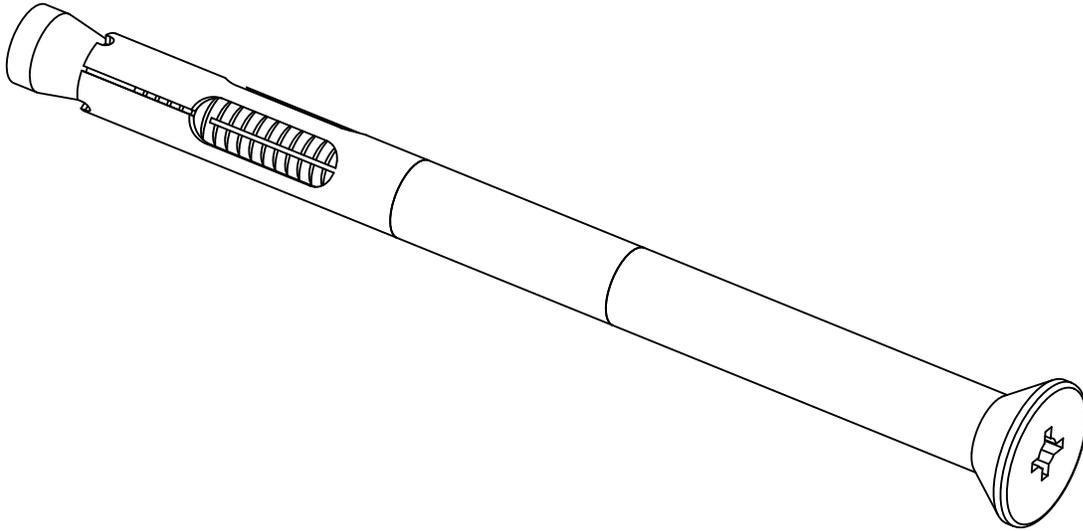
See options EWA, EWANOR, EWAP, EWAT on pages O-15.12, O-15.15, O-15.16, O-15.18 for additional information

Masonry sleeve anchor

3/8" x 4" stainless steel



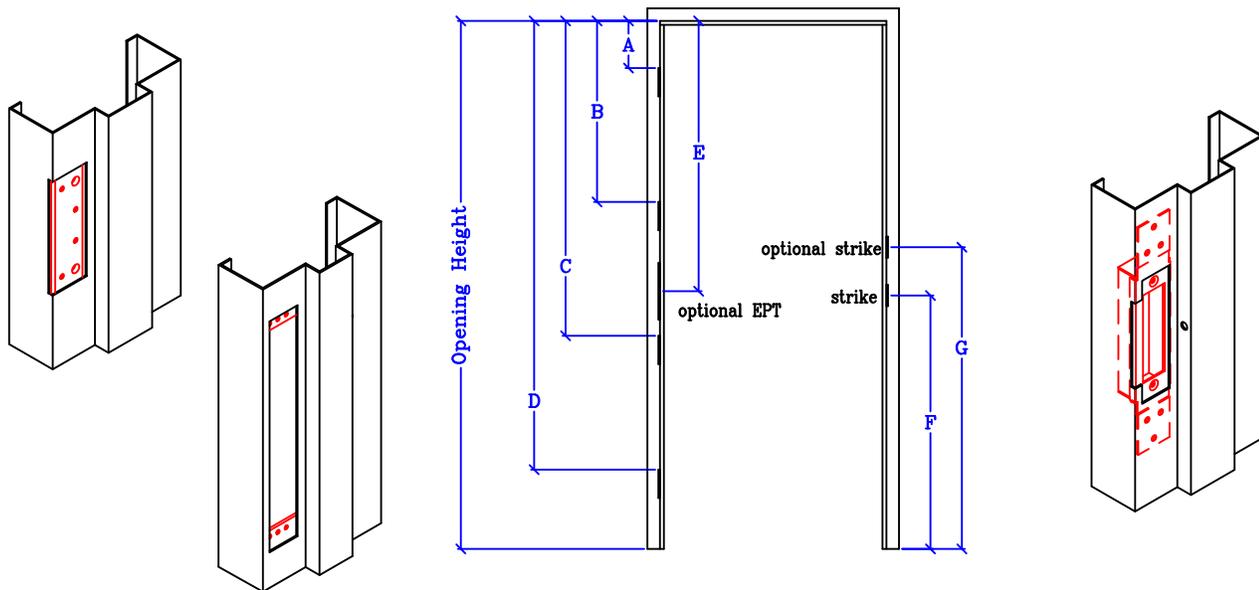
Masonry sleeve anchor
3/8" x 5" stainless steel



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"			40 5/16"	48"
6'8"(80")	4 1/2"	3	7 1/2"	37 7/16"	67 3/8"			40 5/16"	48"
6'8"(80")	4 1/2"	4	7 1/2"	27 29/64"	47 13/32"	67 15/64"		40 5/16"	48"
6'10"(82")	4 1/2"	3	7 1/2"	38 7/16"	69 3/8"			40 5/16"	48"
6'10"(82")	4 1/2"	4	7 1/2"	28 1/8"	48 3/4"	69 1/4"		40 5/16"	48"
7'0"(84")	4 1/2"	3	7 1/2"	39 7/16"	71 3/8"			40 5/16"	48"
7'0"(84")	4 1/2"	4	7 1/2"	28 51/64"	50 3/32"	71 17/64"		40 5/16"	48"
7'2"(86")	4 1/2"	3	7 1/2"	40 7/16"	73 3/8"			40 5/16"	48"
7'2"(86")	4 1/2"	4	7 1/2"	29 29/64"	51 13/32"	73 15/64"		40 5/16"	48"
7'4"(88")	4 1/2"	3	7 1/2"	41 7/16"	75 3/8"			40 5/16"	48"
7'4"(88")	4 1/2"	4	7 1/2"	40 1/8"	52 3/4"	75 1/4"		40 5/16"	48"
7'6"(90")	4 1/2"	3	7 1/2"	42 7/16"	77 3/8"			40 5/16"	48"
7'6"(90")	4 1/2"	4	7 1/2"	30 51/64"	54 3/32"	77 17/64"		40 5/16"	48"
7'8"(92")	4 1/2"	4	7 1/2"	31 29/64"	55 13/32"	79 15/64"		40 5/16"	48"
7'10"(94")	4 1/2"	4	7 1/2"	32 1/8"	56 3/4"	81 1/4"		40 5/16"	48"
8'0"(96")	4 1/2"	4	7 1/2"	32 51/64"	58 3/32"	83 25/64"		40 5/16"	48"
10'0"(120")	4 1/2"	4	7 1/2"	40 51/64"	74 3/32"	107 17/64"		40 5/16"	48"

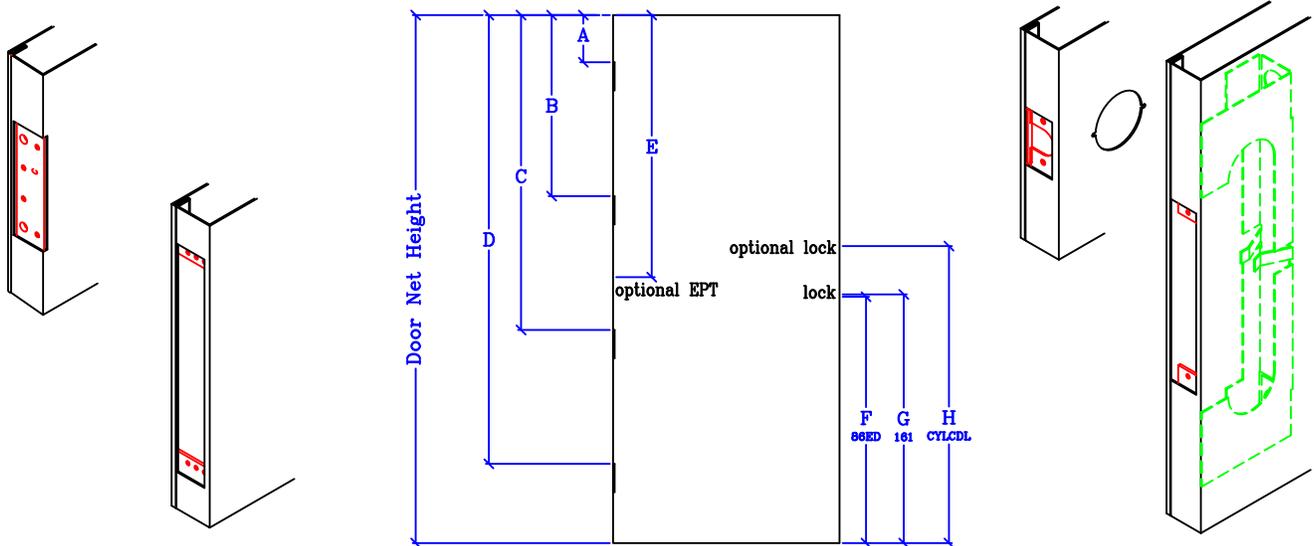
Top to top hinge location

* Location per template. If no location on template, then location must be specified with order.

The quantity of hinges may require coordination of location with door (ex. 4 hinges on a 7'0")

Bottom to center strike location

4 1/2" hinge, EPT and lock location



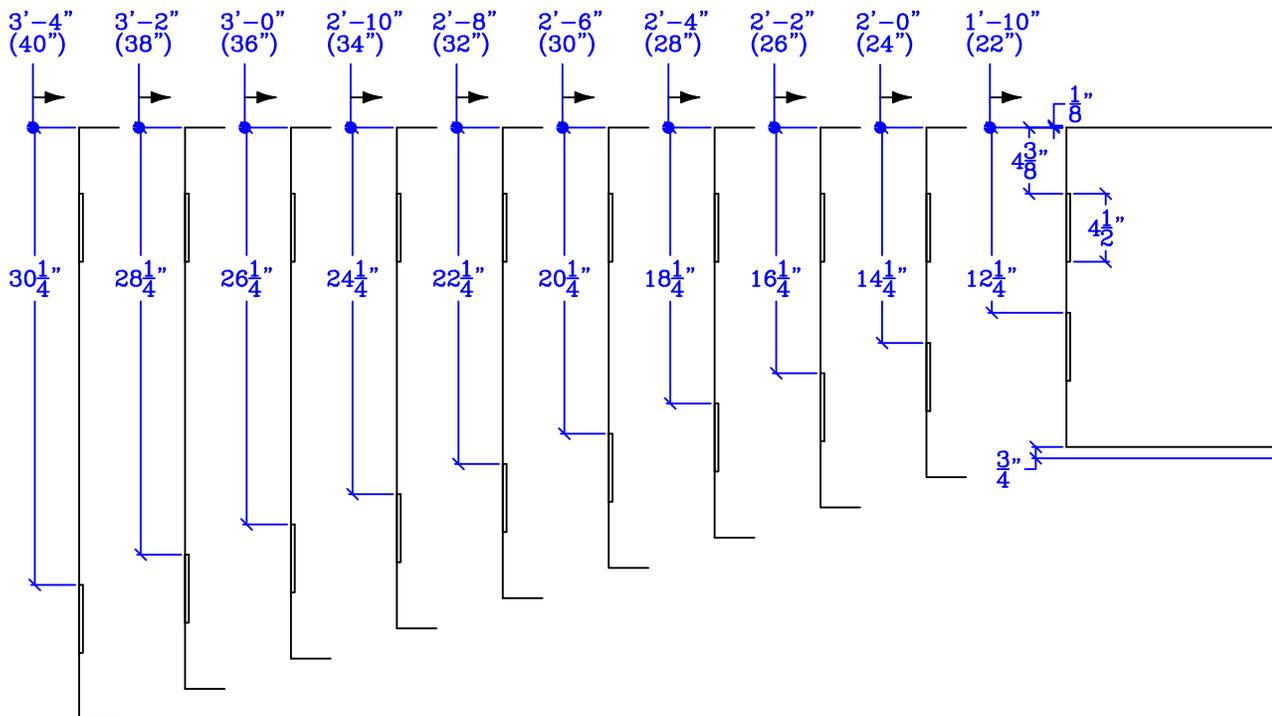
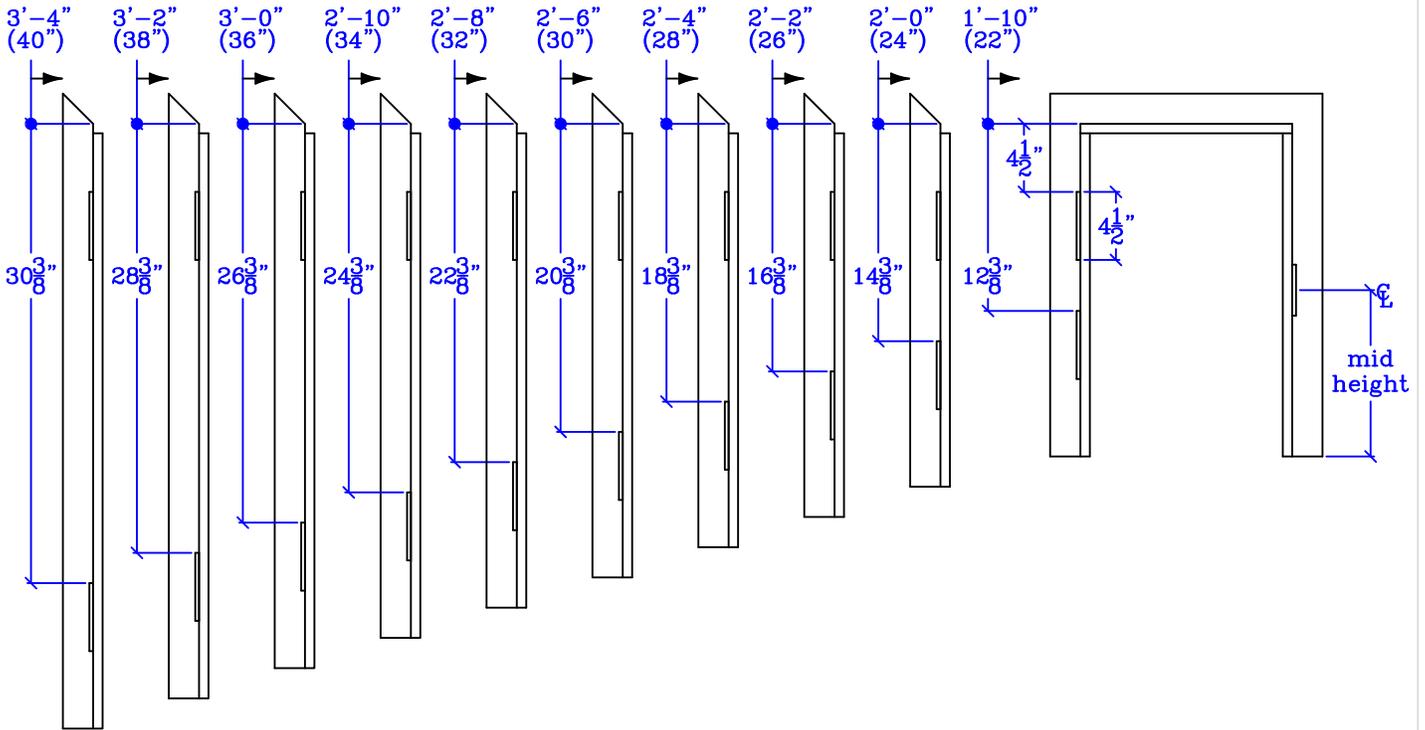
Door Nominal Height	Hinge size	Qt.	Machining Dimensions							
			A	B	C	D	E*	F	G	H
6'6"(78")	4 1/2"	3	7 3/8"	36 5/16"	65 1/4"			39 3/16"	39 9/16"	47 1/4"
6'8"(80")	4 1/2"	3	7 3/8"	37 5/16"	67 1/4"			39 3/16"	39 9/16"	47 1/4"
6'8"(80")	4 1/2"	4	7 3/8"	27 21/64"	47 9/32"	67 15/64"		39 3/16"	39 9/16"	47 1/4"
6'10"(82")	4 1/2"	3	7 3/8"	38 5/16"	69 1/4"			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"		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"			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"		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"			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"		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"			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"		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"			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"		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"		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"		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"		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"		39 3/16"	39 9/16"	47 1/4"

Top to top hinge location

* Location per template. If no location on template, then location must be specified with order.

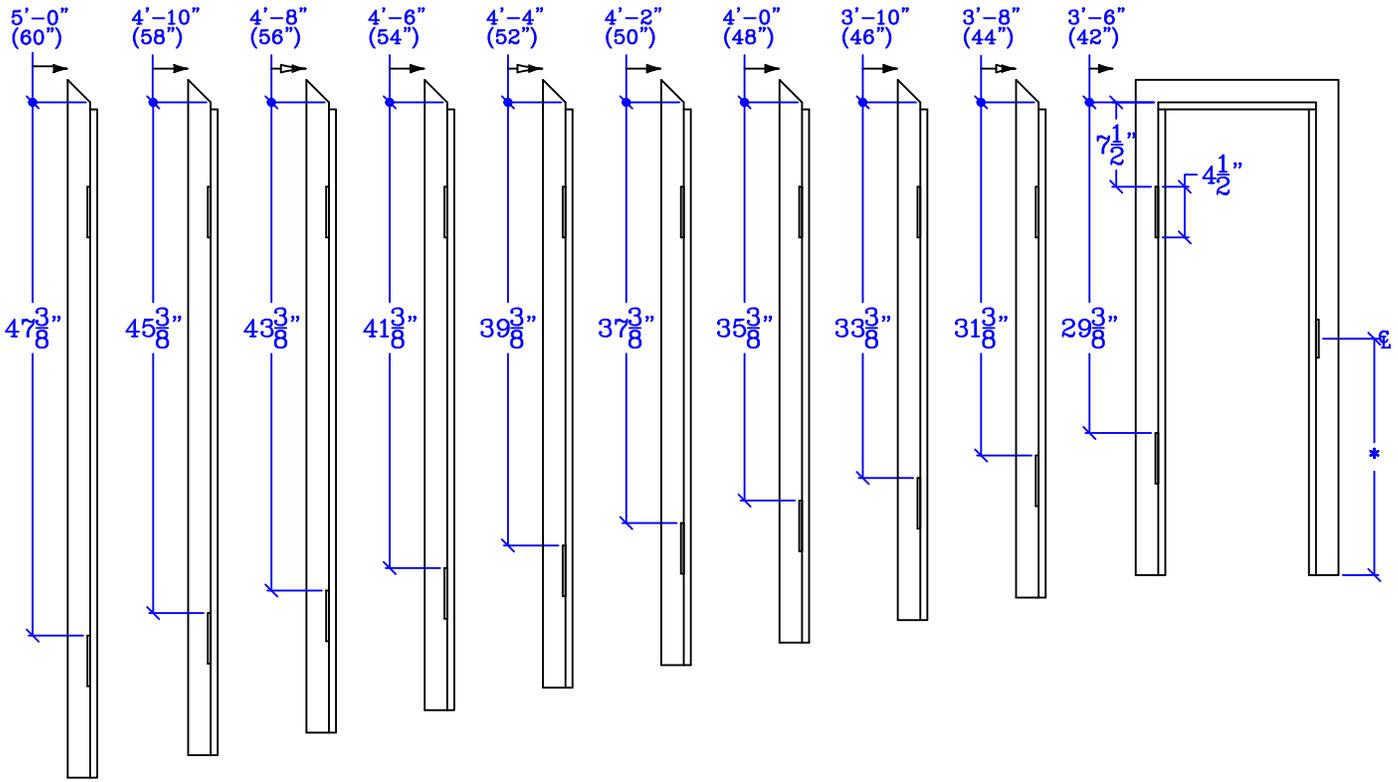
The quantity of hinges may require coordination of location with door (ex. 4 hinges on a 7'0")
Bottom to center lock location, based on 3/4" undercut

4 1/2" hinge location for 1'10" to 3'4"

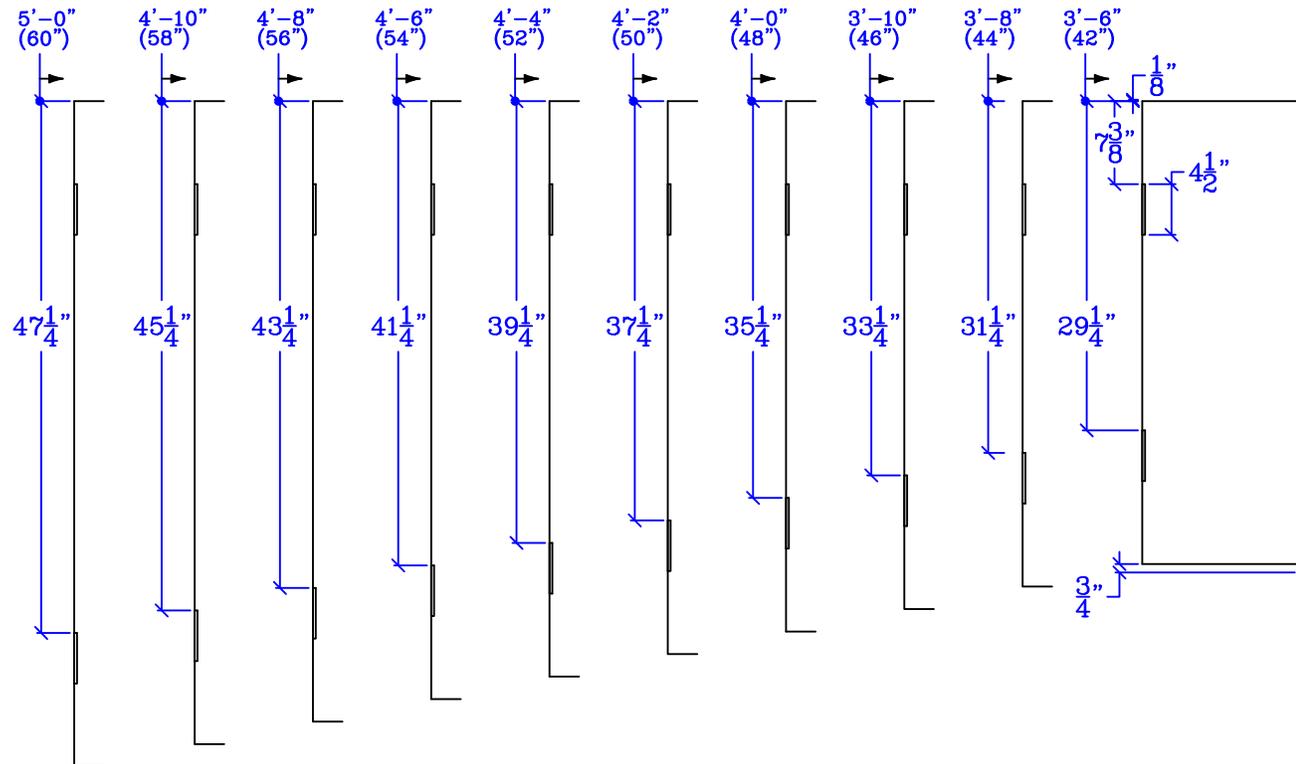


Top to top hinge locations
 Bottom to center strike location

4 1/2" hinge location for 3'6" to 5'0"

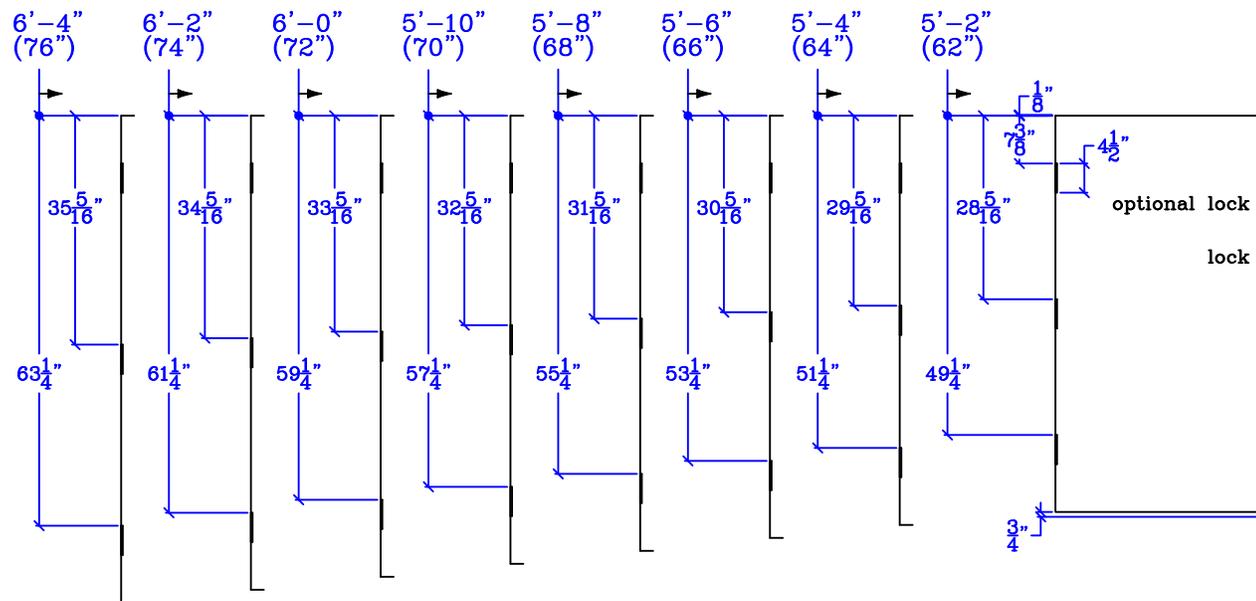
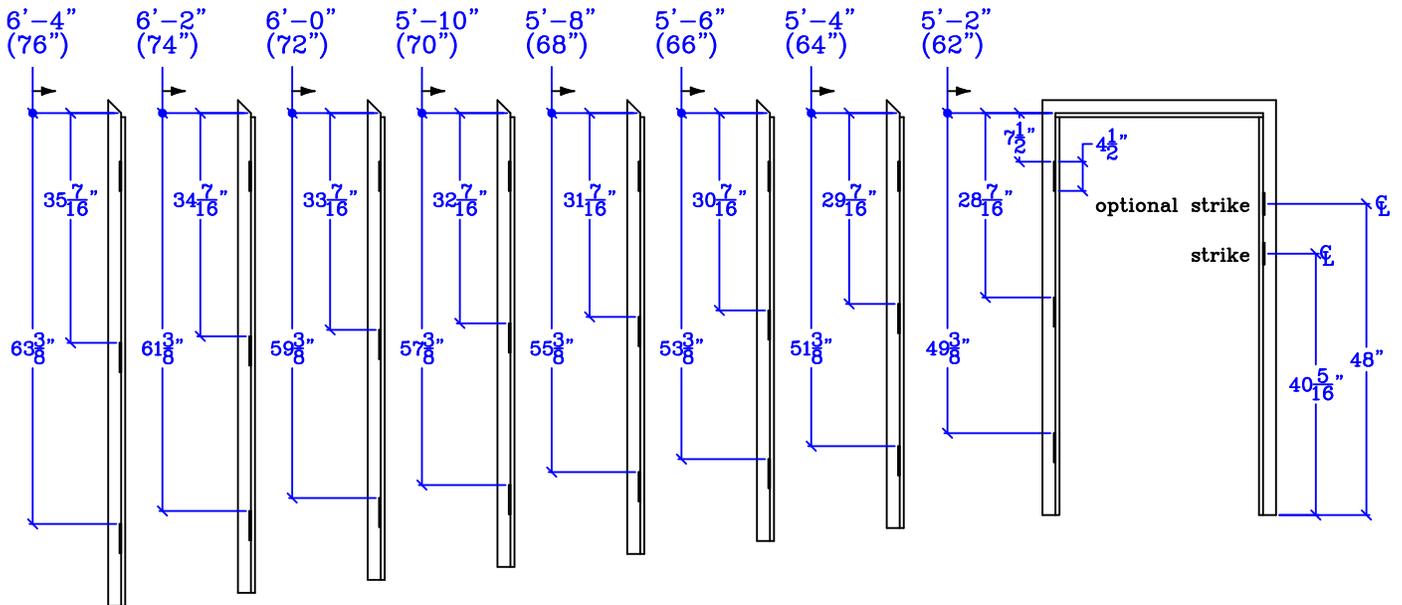


* = Mid height up to 59 15/16", 40 5/16" for greater than 60"



Top to top hinge locations
Bottom to center strike location

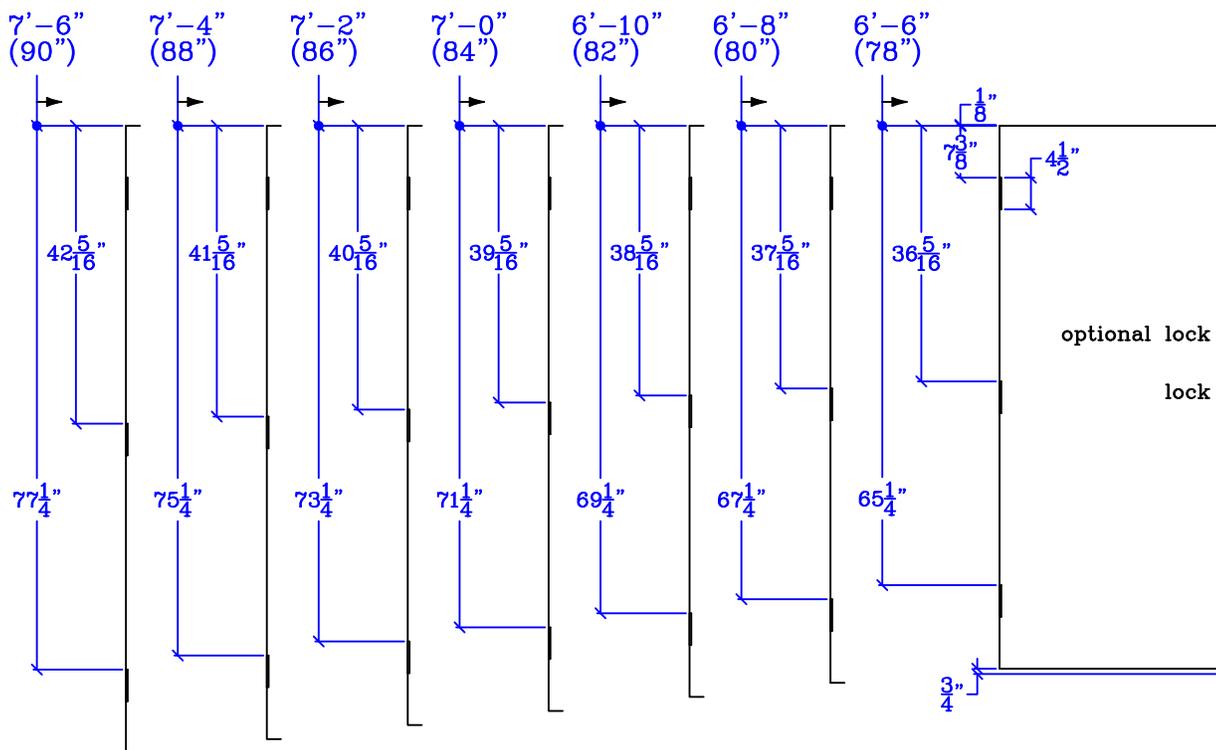
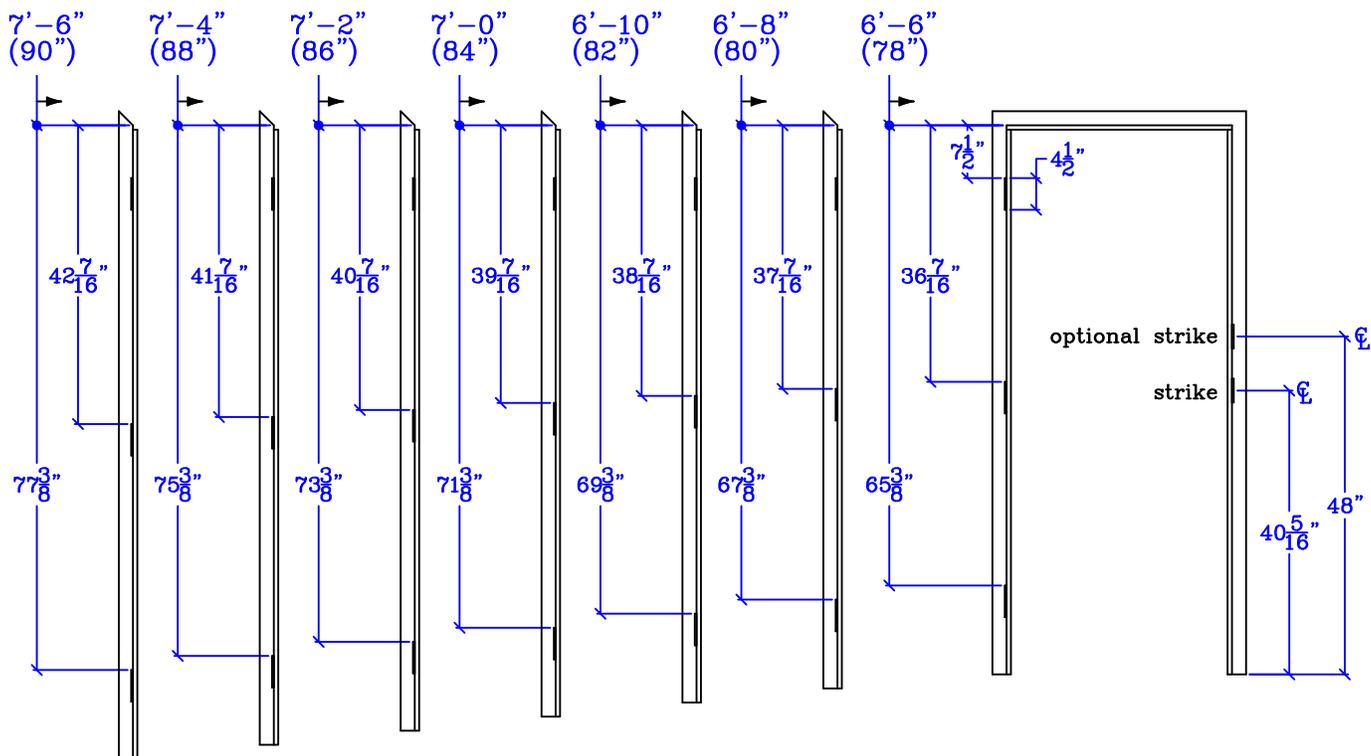
4 1/2" hinge location for 5'2" to 6'4"



Top to top hinge locations
Bottom to center strike location

Hardware location

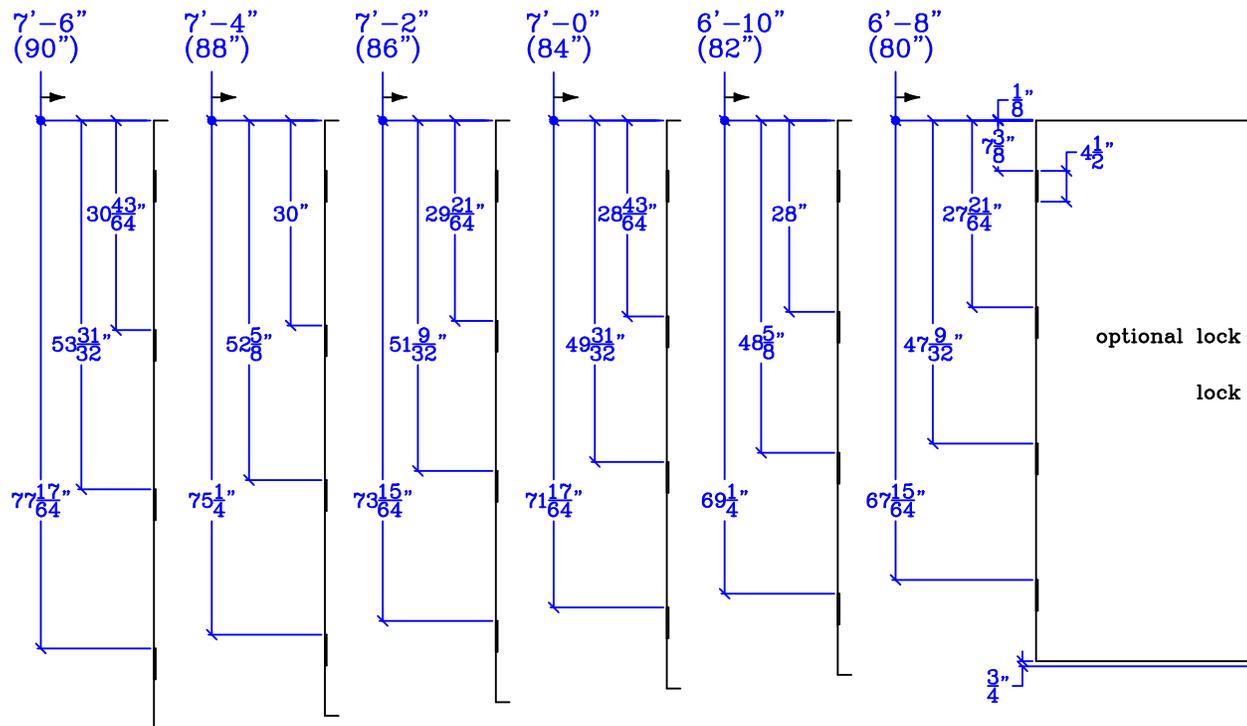
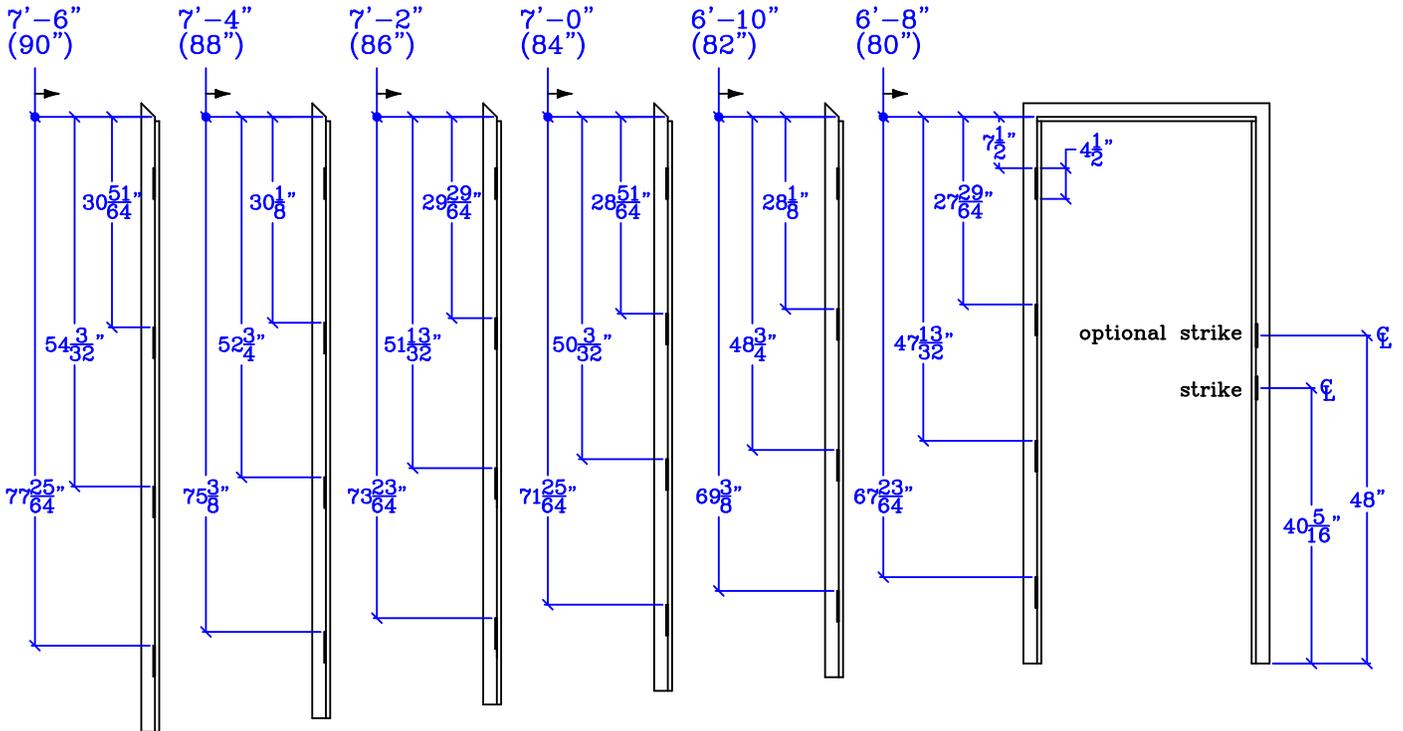
4 1/2" hinge location for 6'6" to 7'6"



Top to top hinge locations
Bottom to center strike location

Hardware location

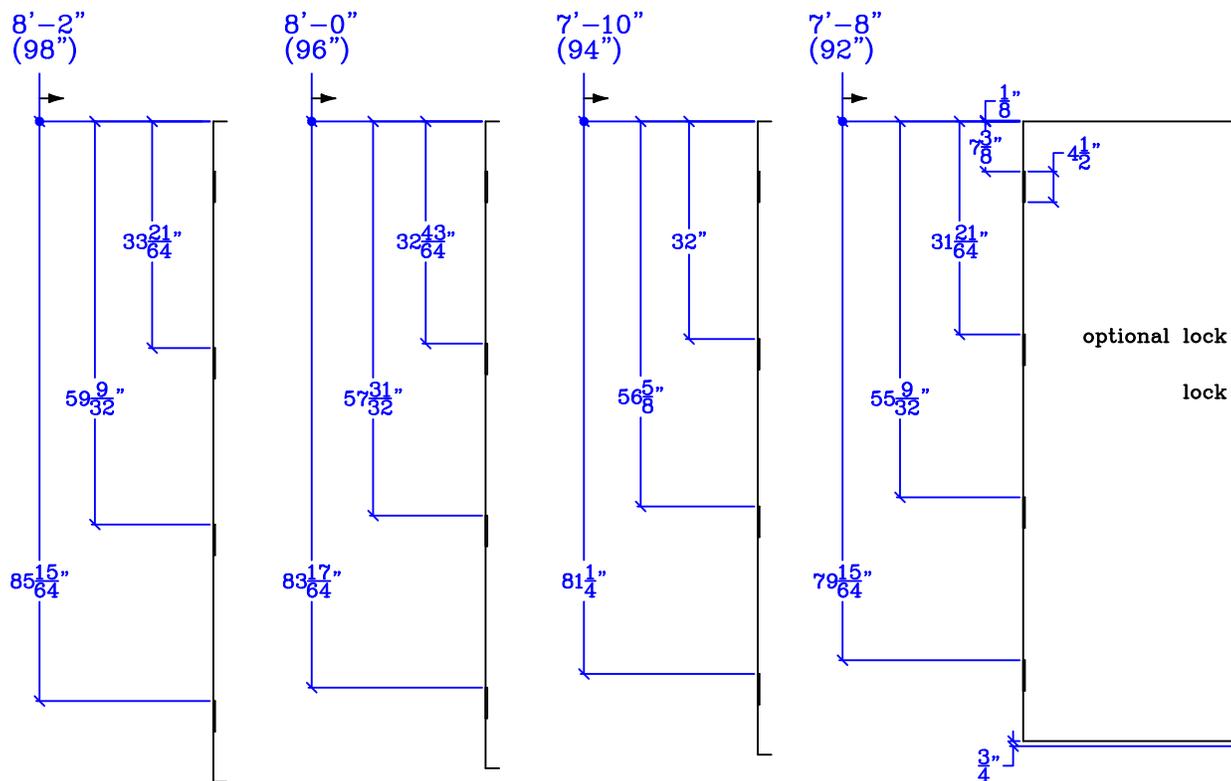
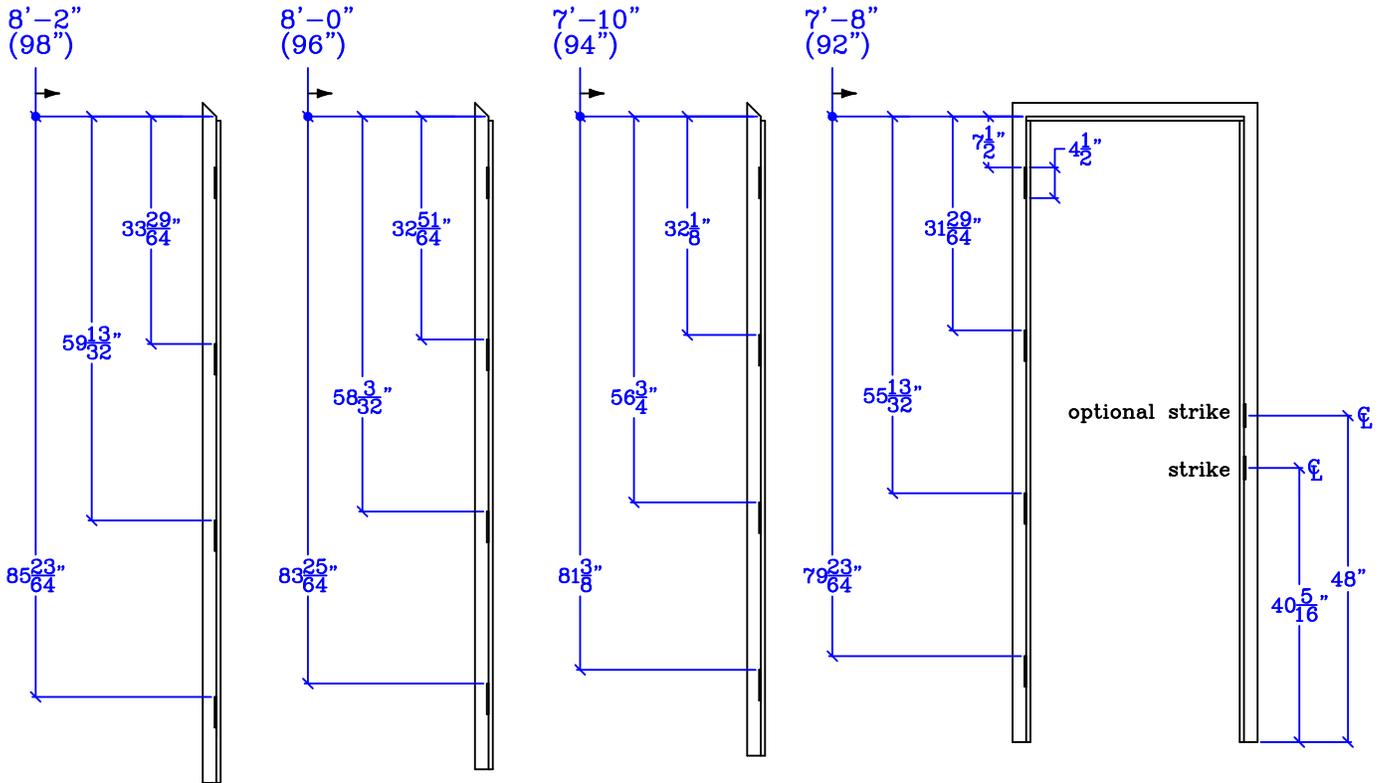
4 1/2" hinge location for 6'8" to 7'6"



Top to top hinge locations
Bottom to center strike location

Hardware location

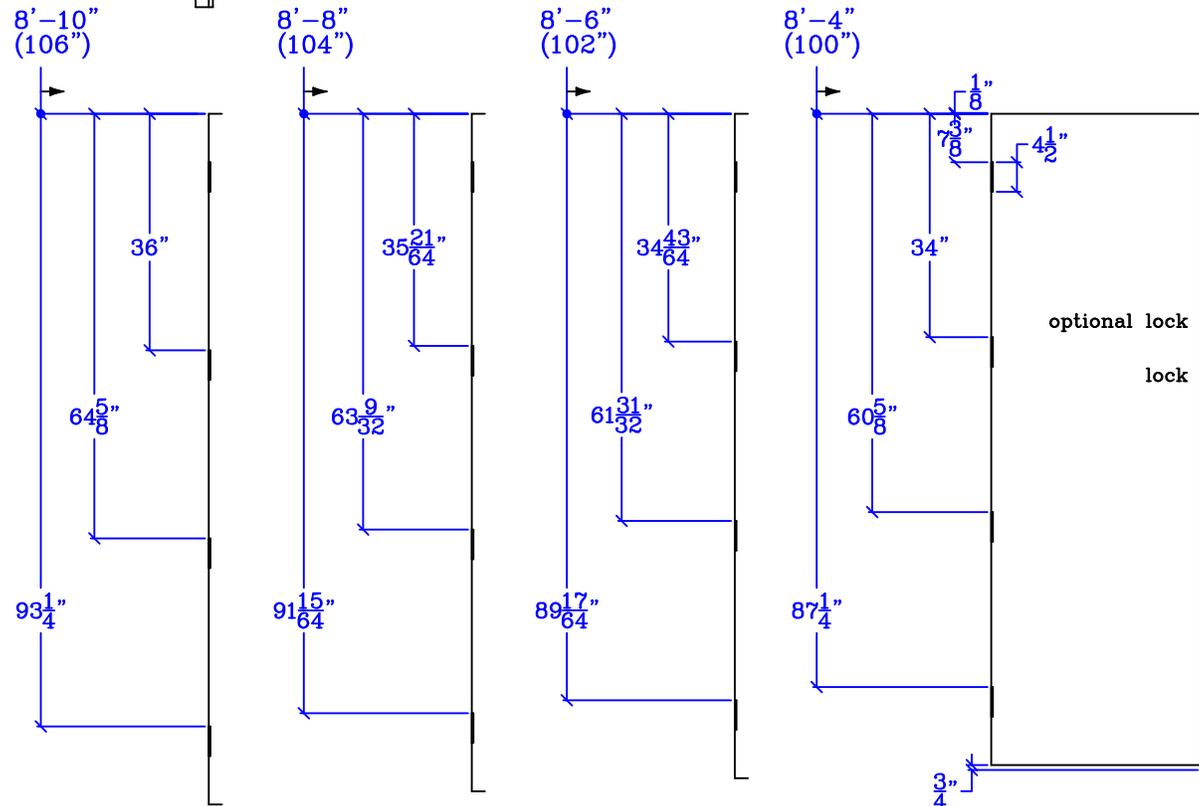
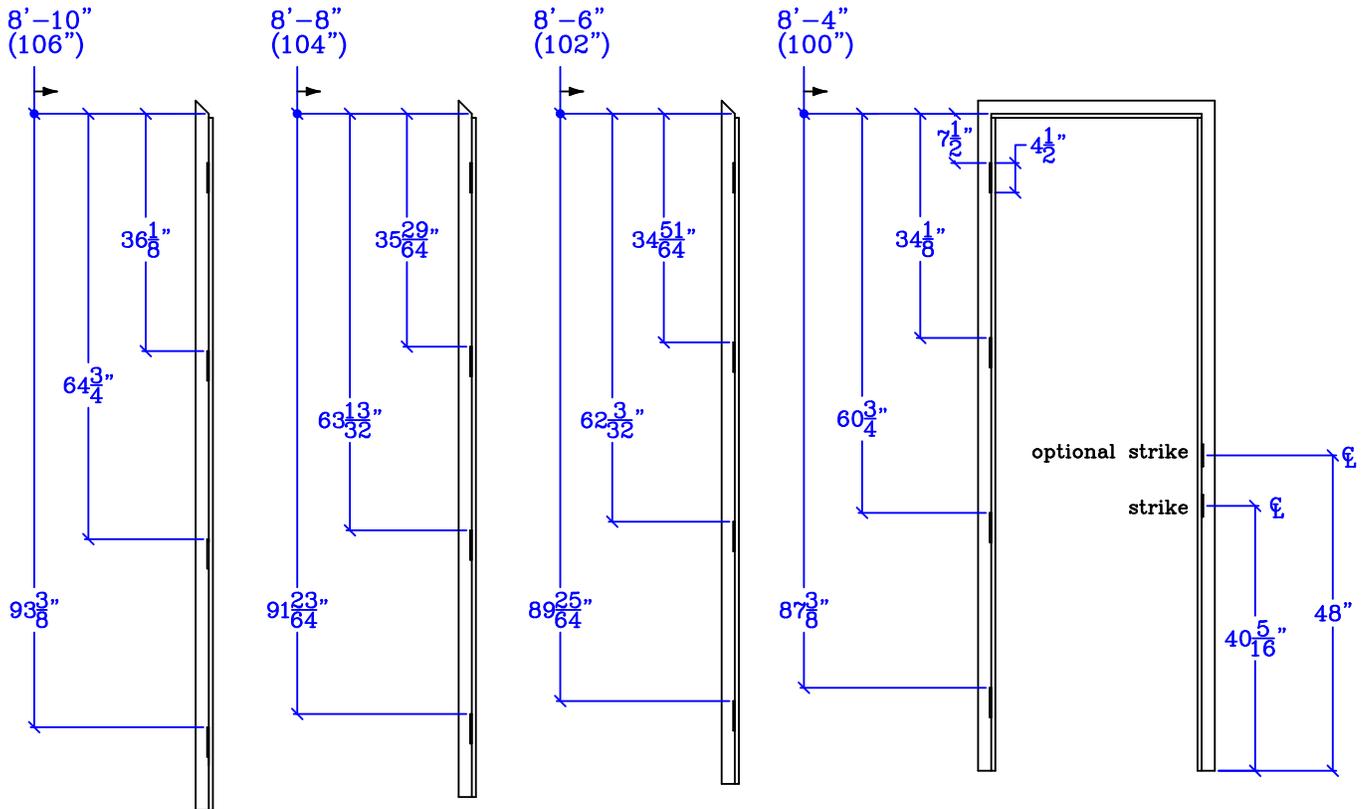
4 1/2" hinge location for 7'8" to 8'2"



Top to top hinge locations
Bottom to center strike location

Hardware location

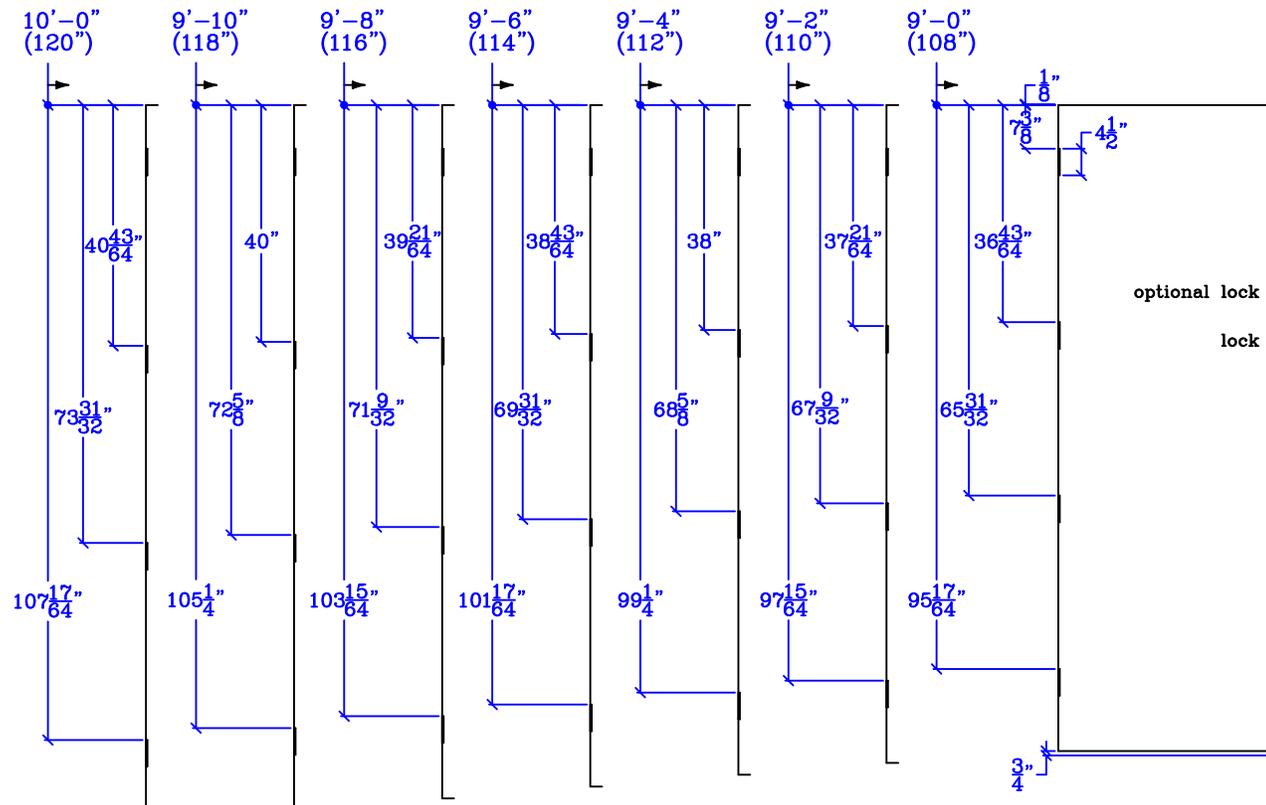
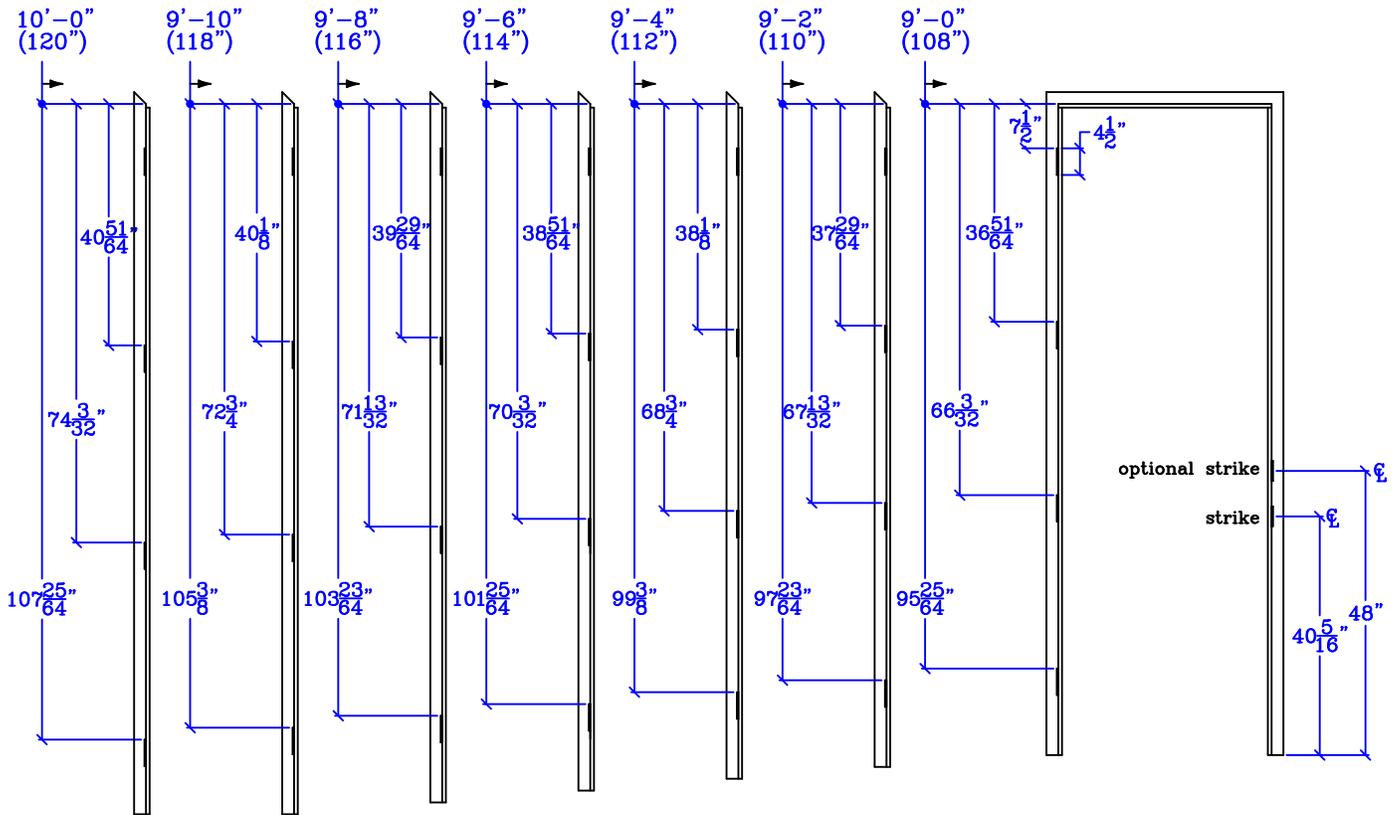
4 1/2" hinge location for 8'4" to 8'10"



Top to top hinge locations
 Bottom to center strike location

Hardware location

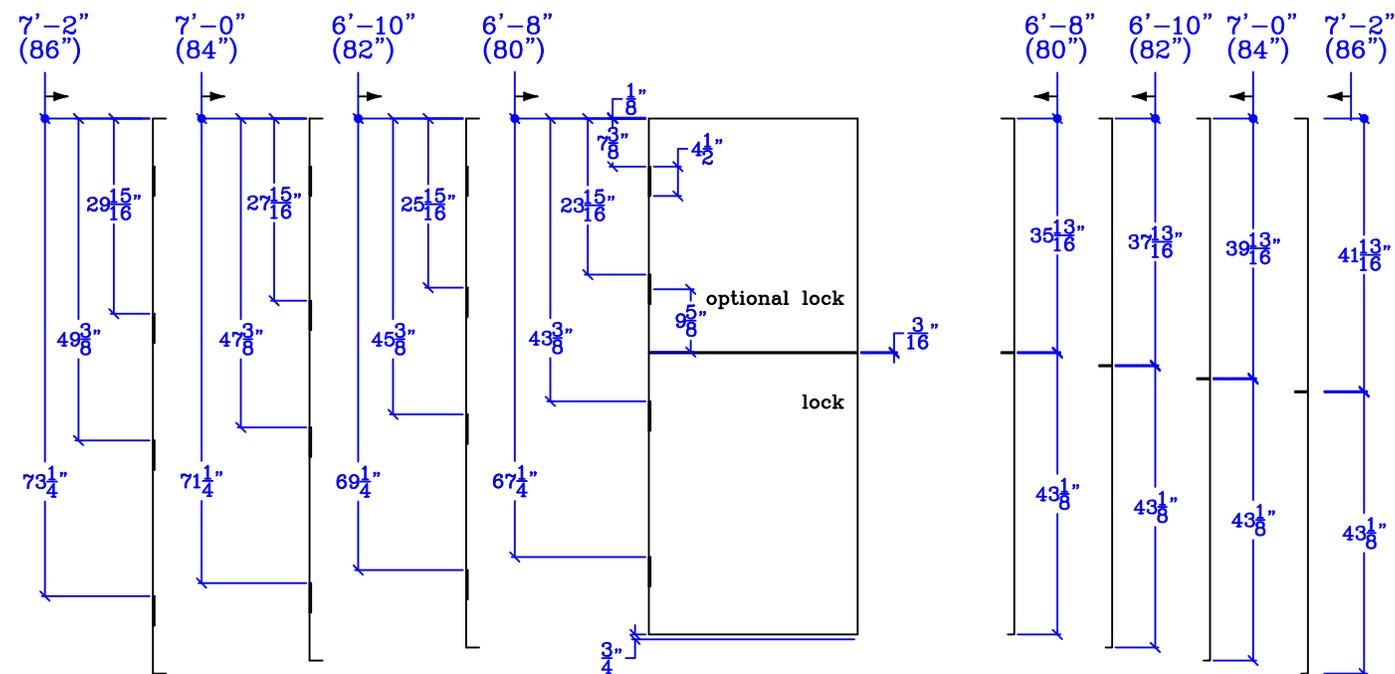
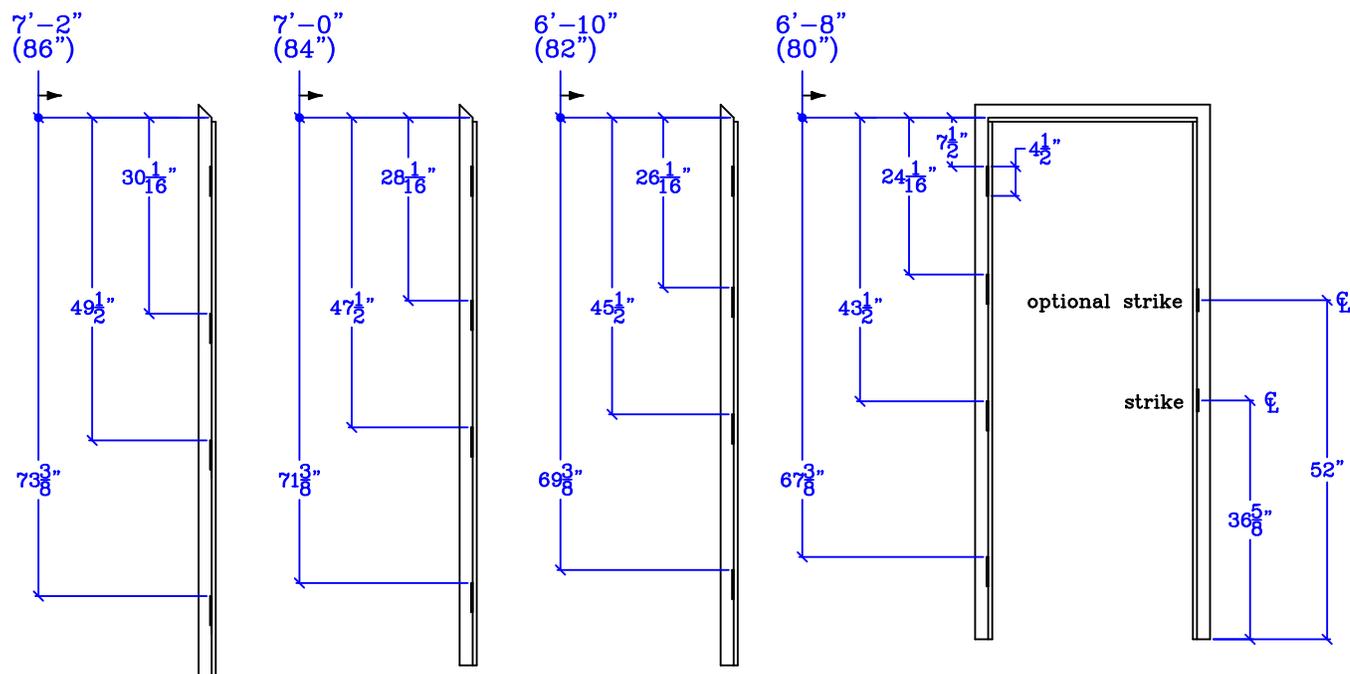
4 1/2" hinge location for 9'0" to 10'0"



Top to top hinge locations
Bottom to center strike location

Hardware location

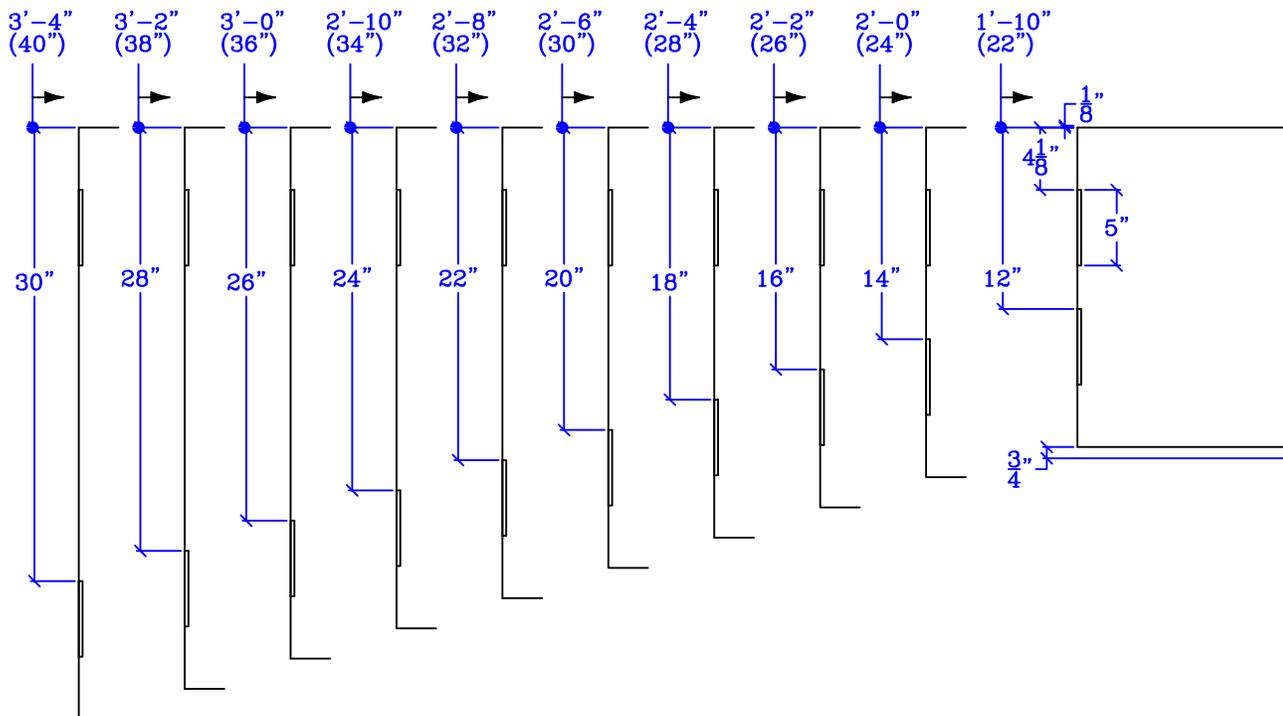
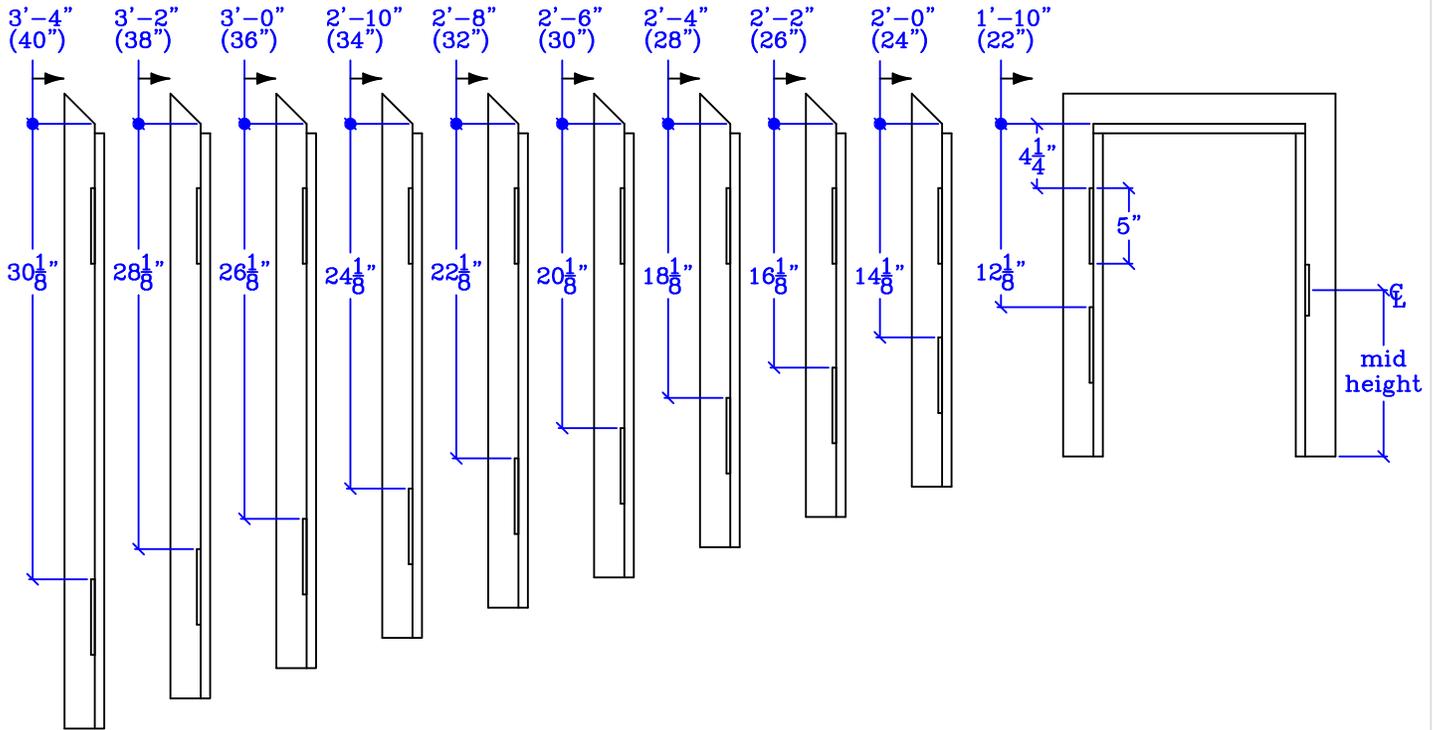
4 1/2" hinge dutch location for 6'8" to 7'2"



Top to top hinge locations
Bottom to center strike location

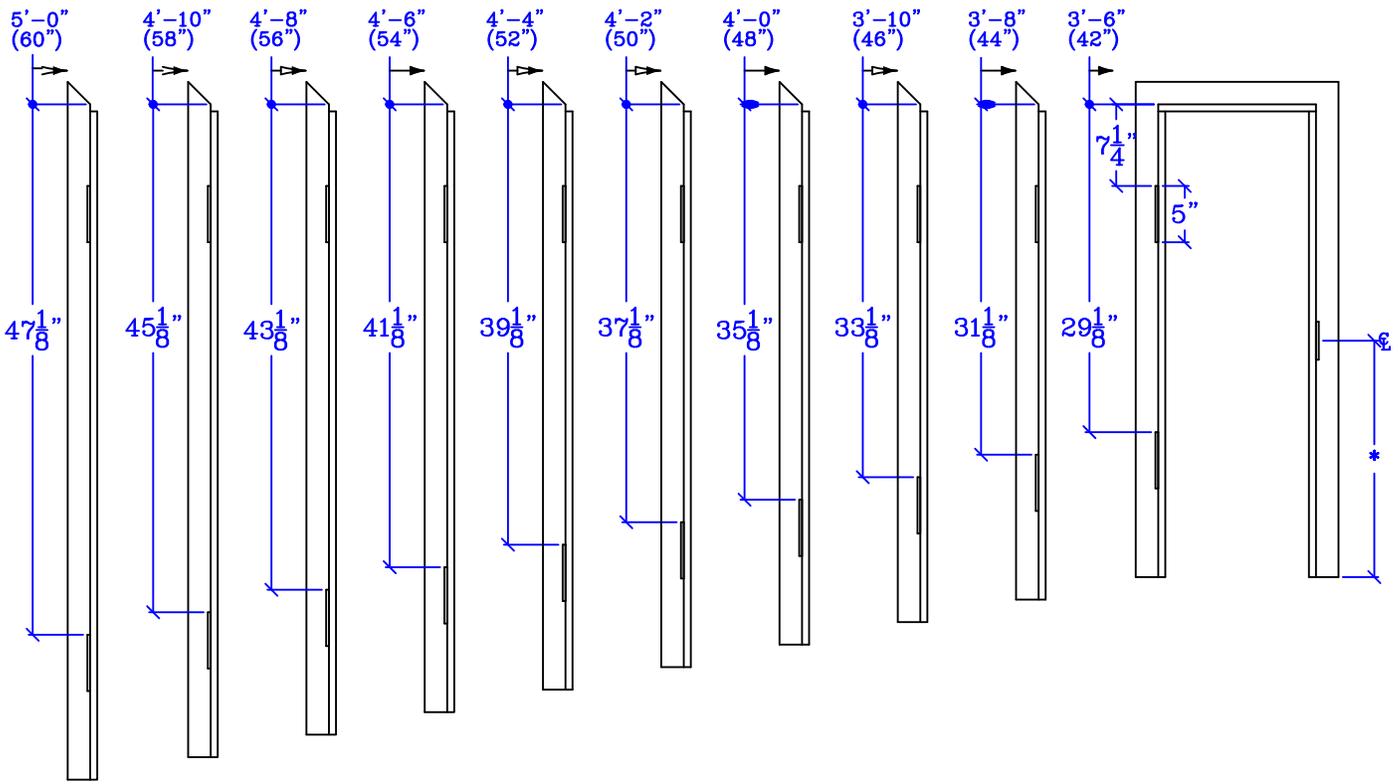
Hardware location

5" hinge location for 1'10" to 3'4"

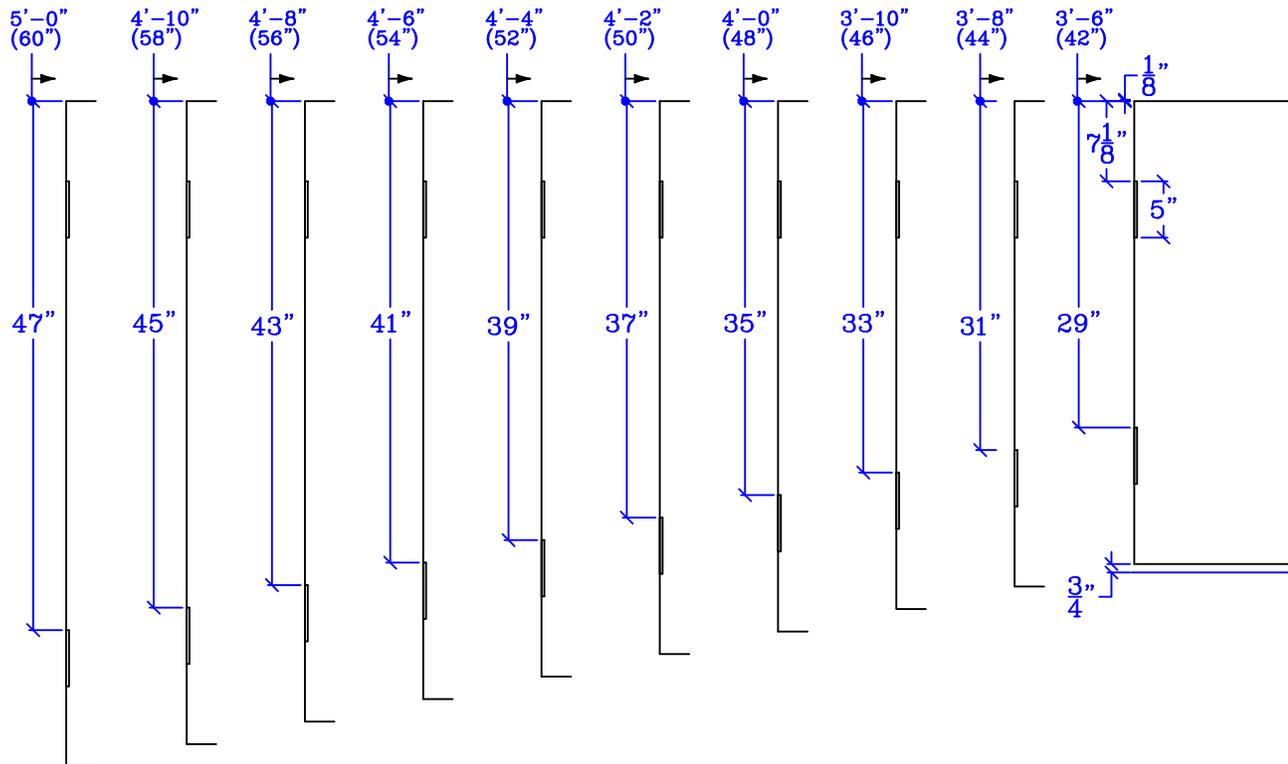


Top to top hinge locations
Bottom to center strike location

5" hinge location for 3'6" to 5'0"

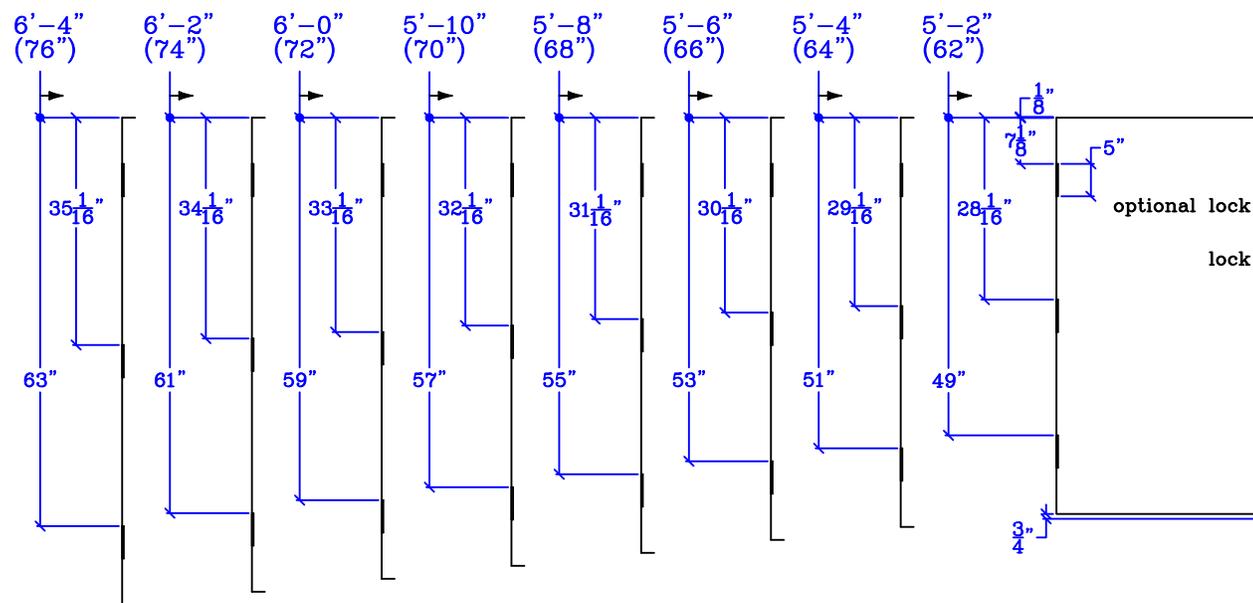
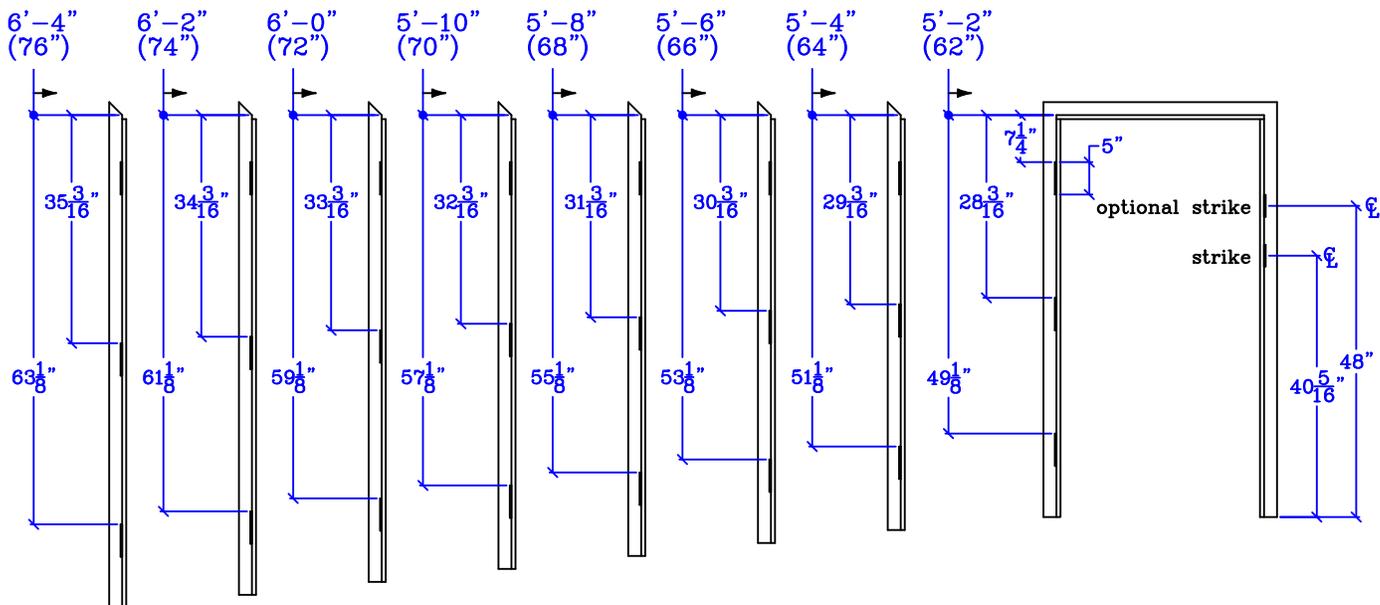


* = Mid height up to 59 15/16", 40 5/16" for greater than 60"



Top to top hinge locations
Bottom to center strike location

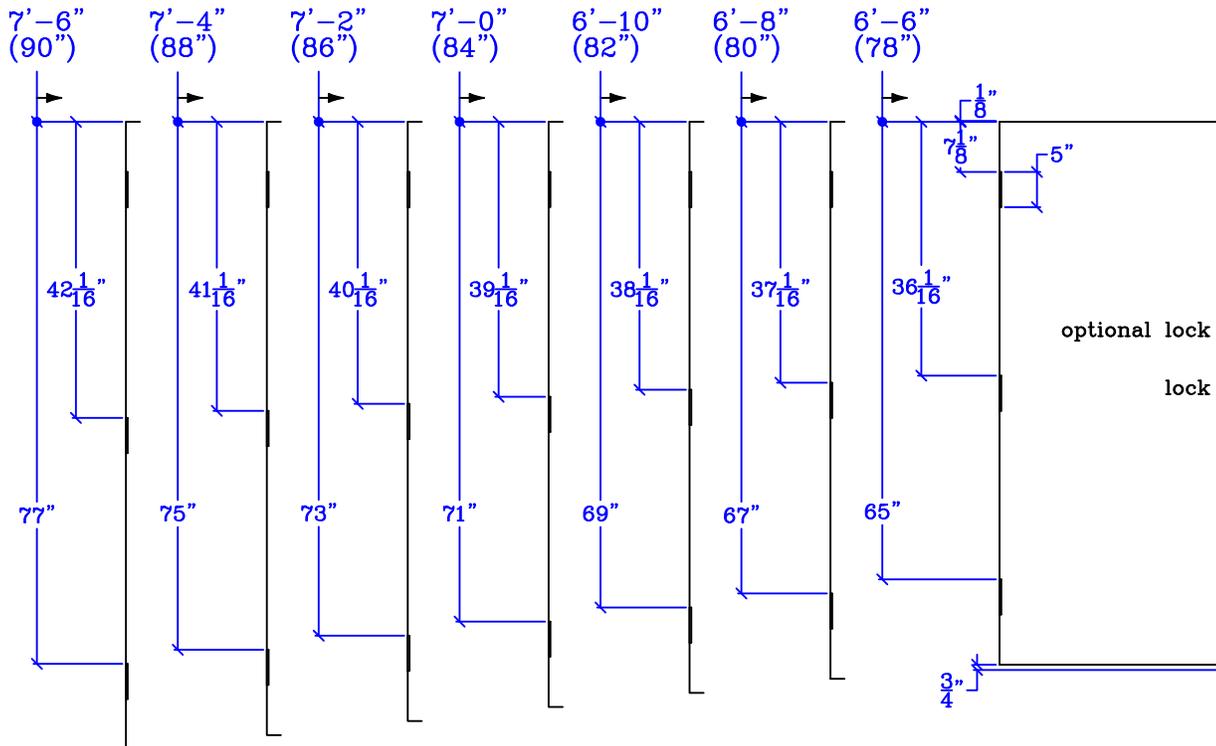
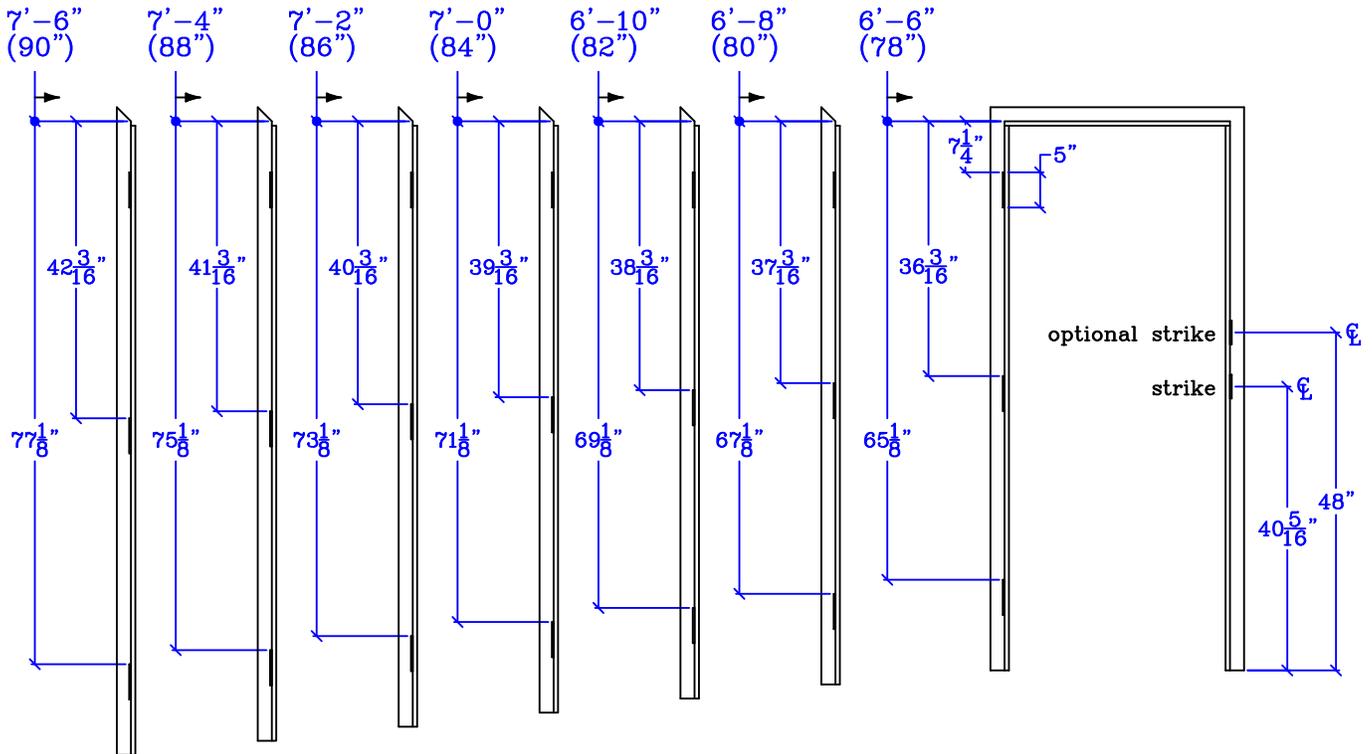
5" hinge location for 5'2" to 6'4"



Top to top hinge locations
Bottom to center strike location

Hardware location

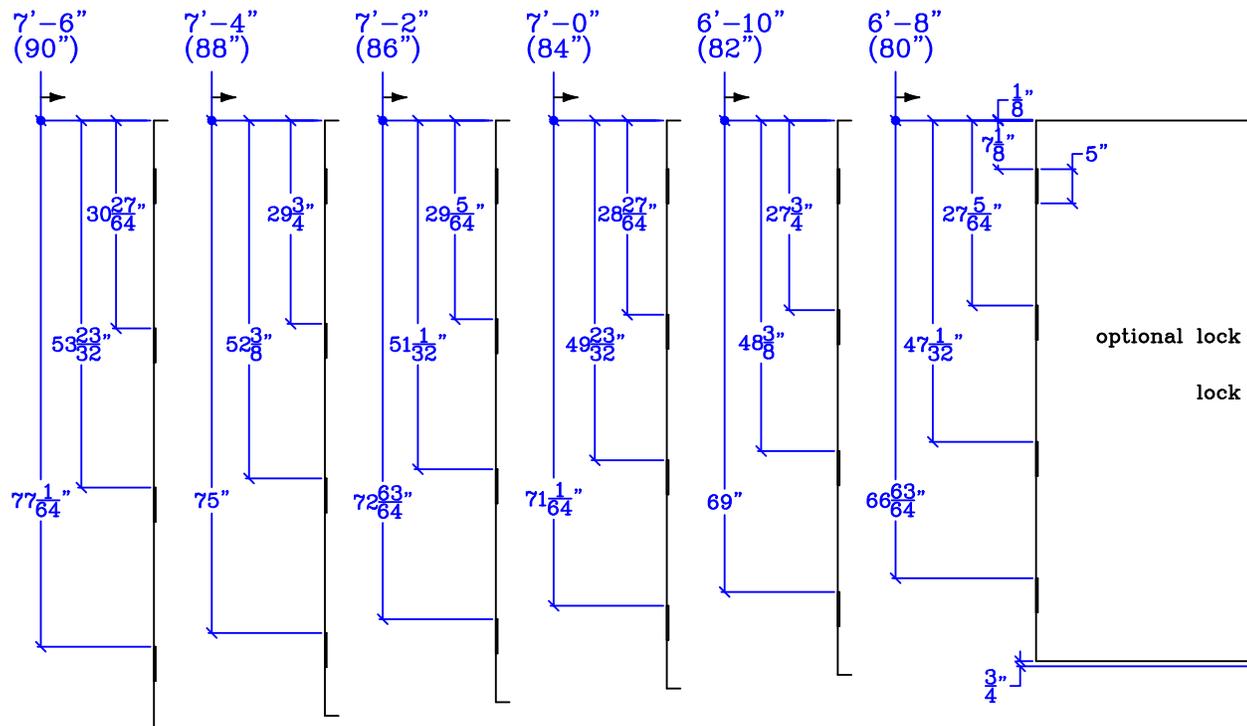
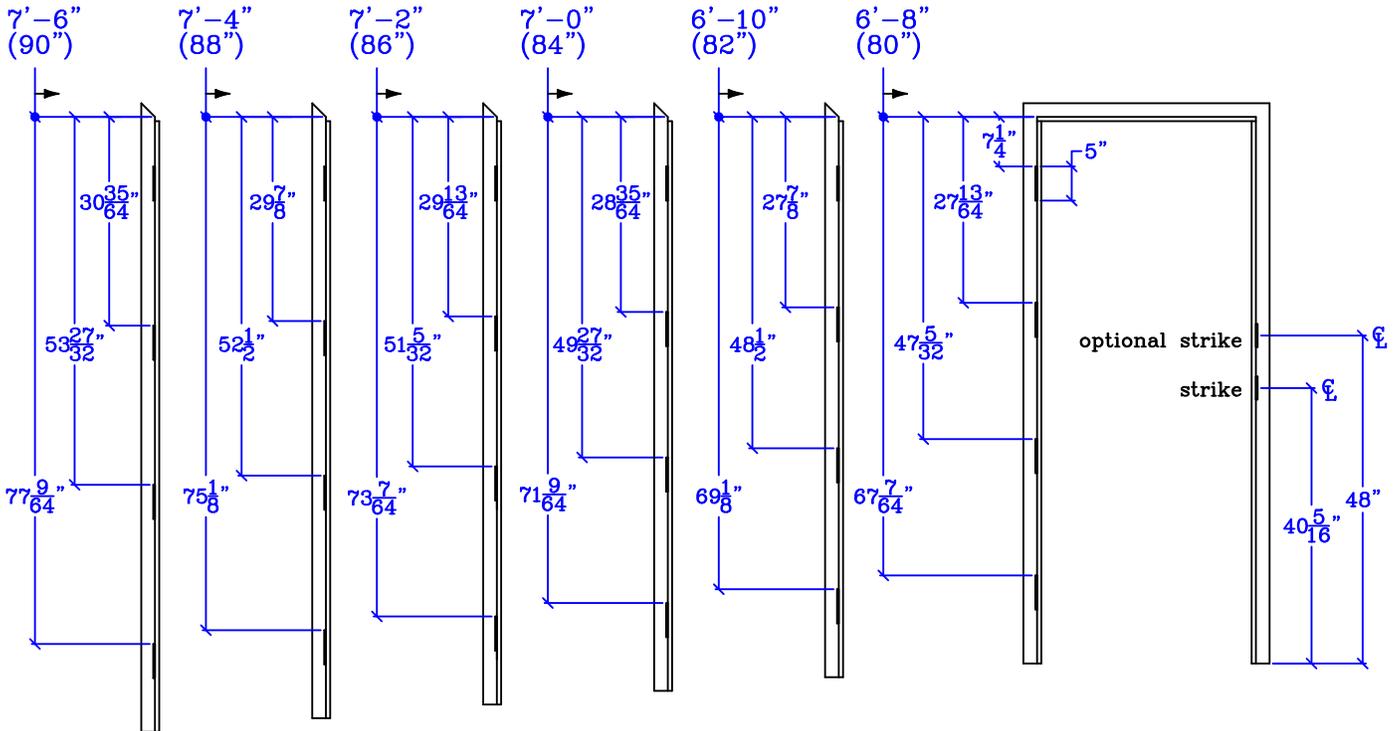
5" hinge location for 6'6" to 7'6"



Top to top hinge locations
Bottom to center strike location

Hardware location

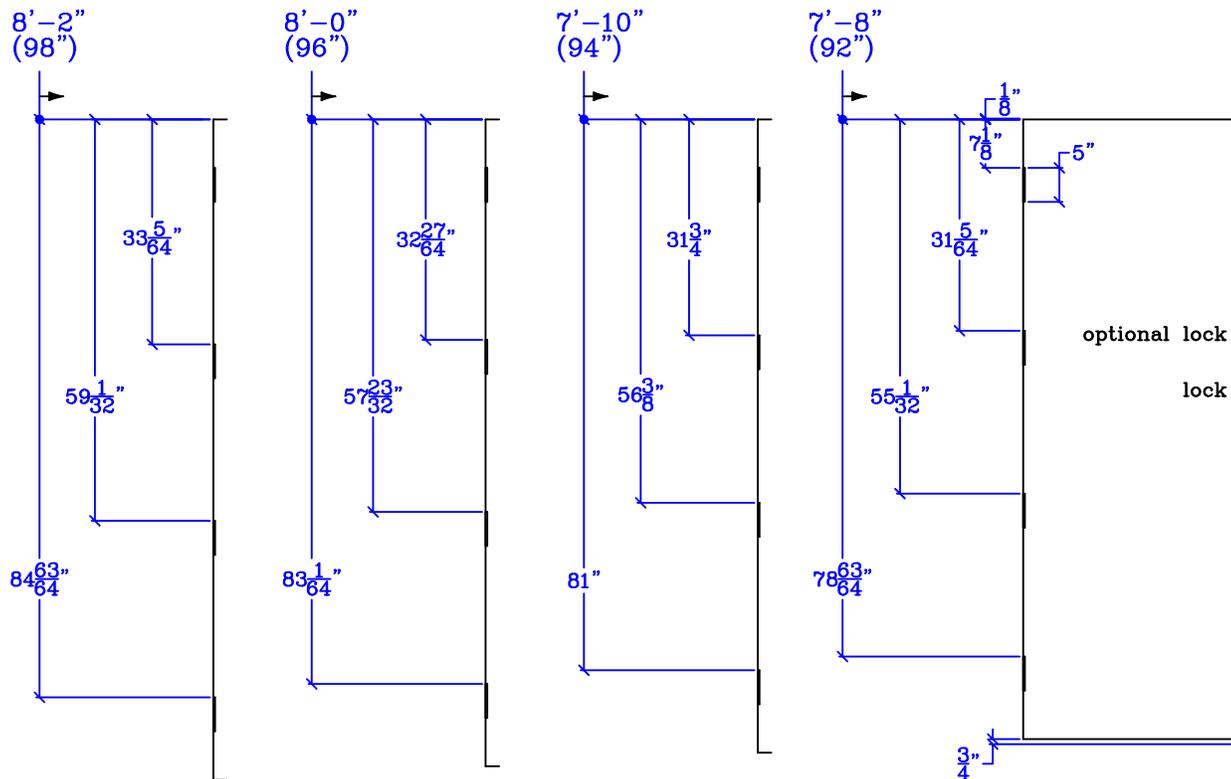
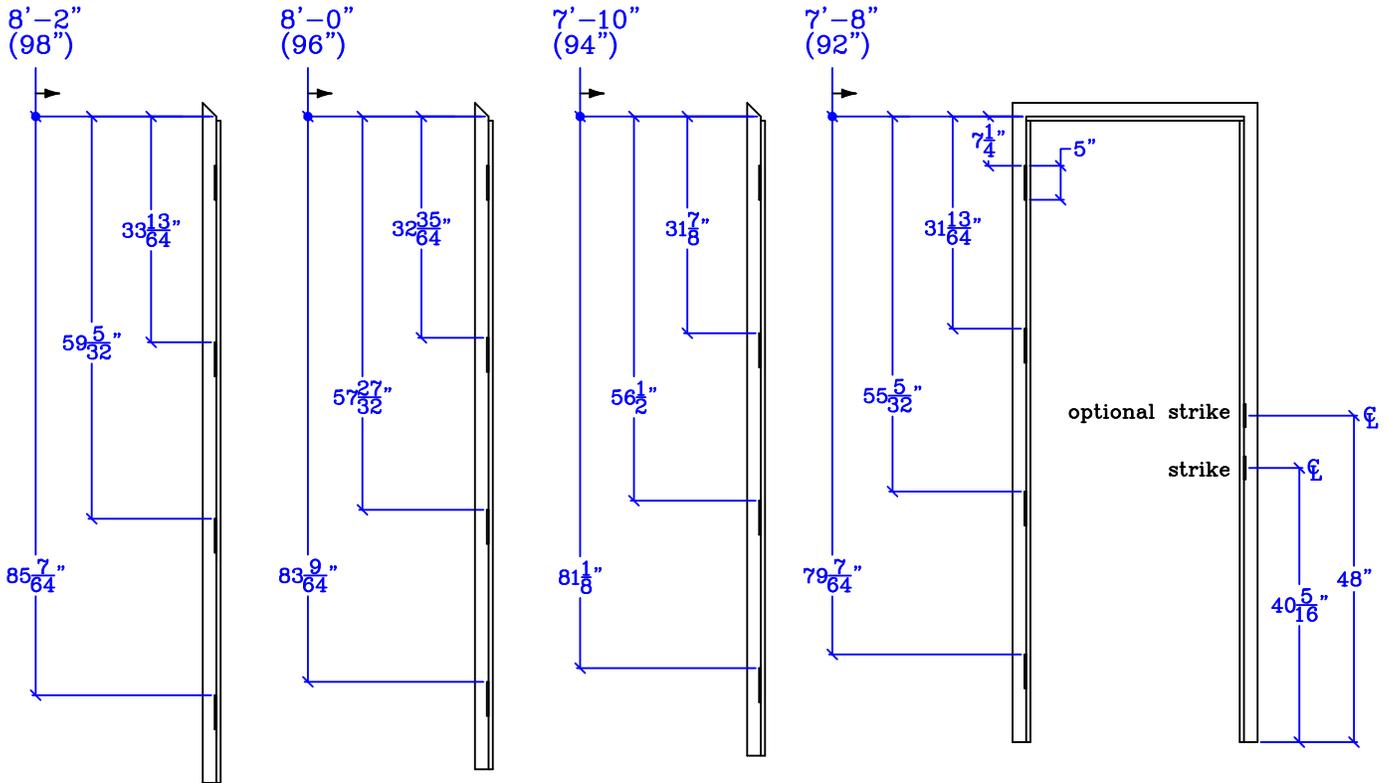
5" hinge location for 6'8" to 7'6"



Top to top hinge locations
Bottom to center strike location

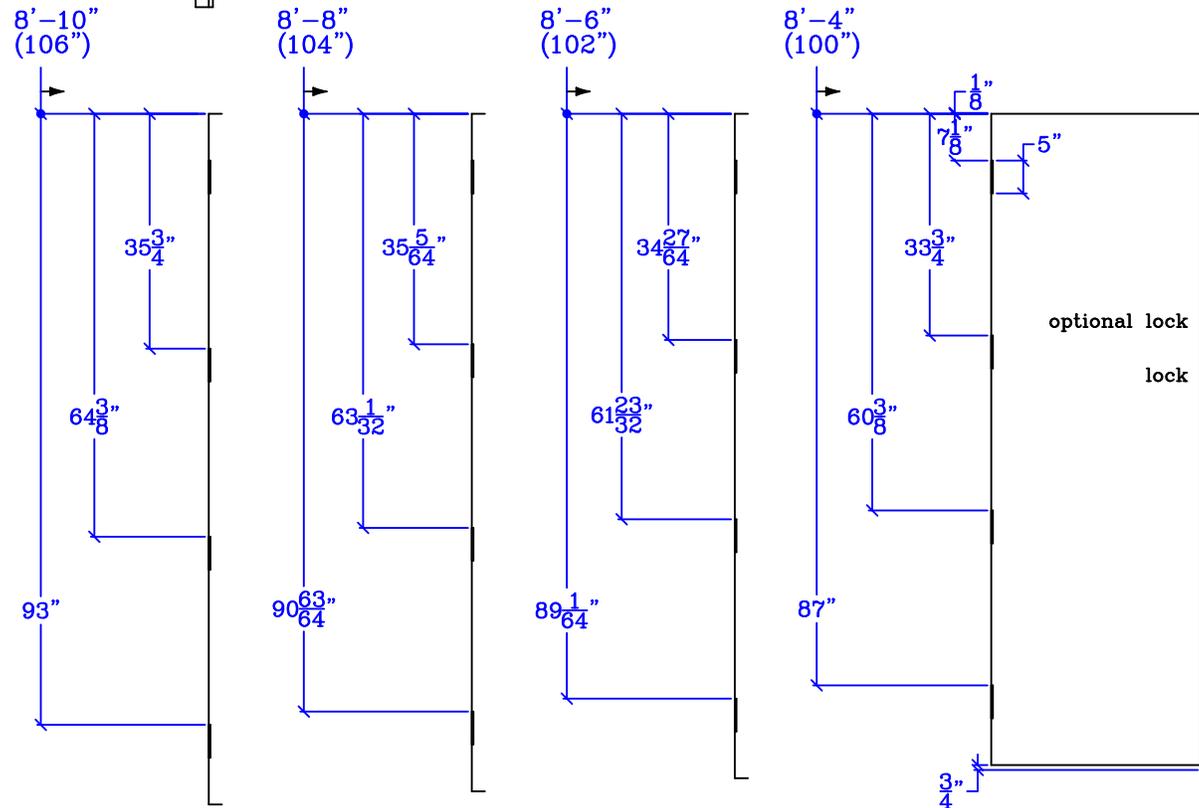
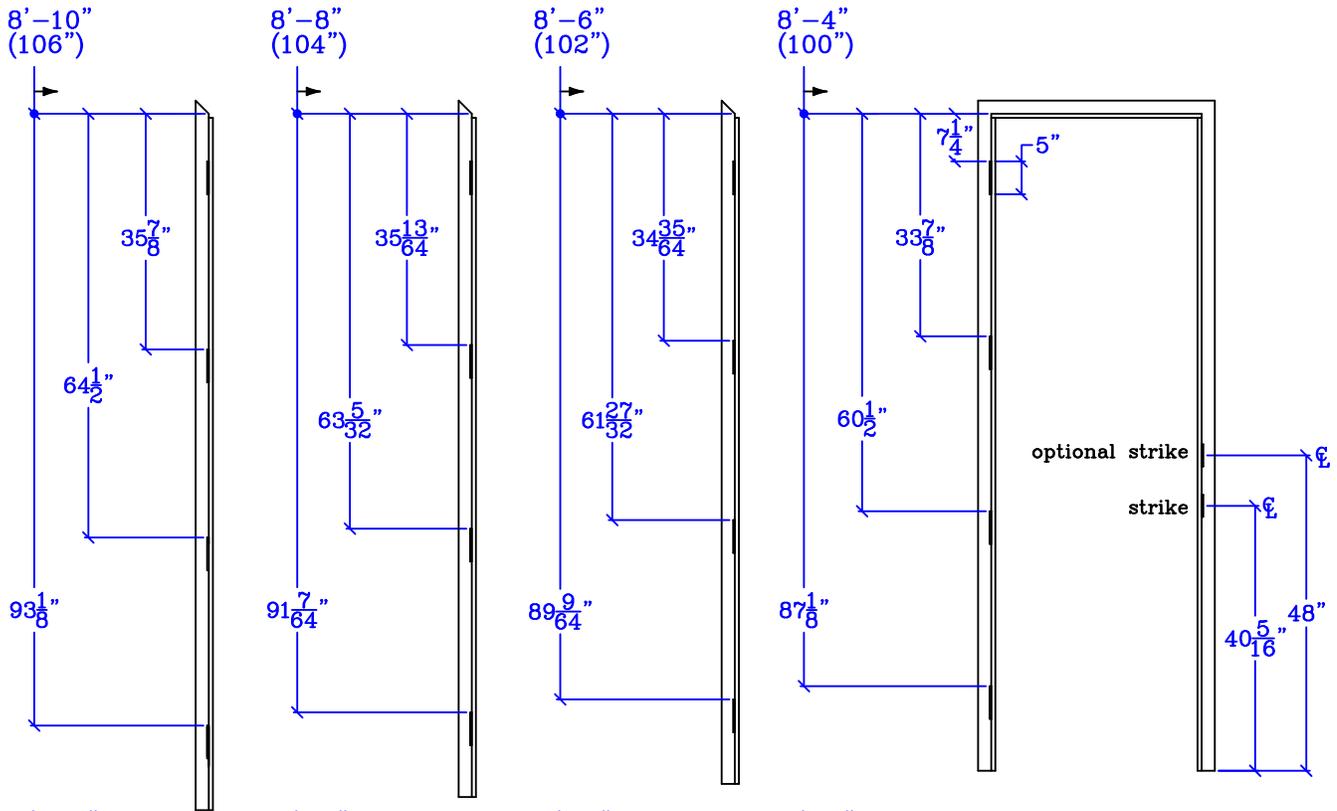
Hardware location

5" hinge location for 7'8" to 8'2"



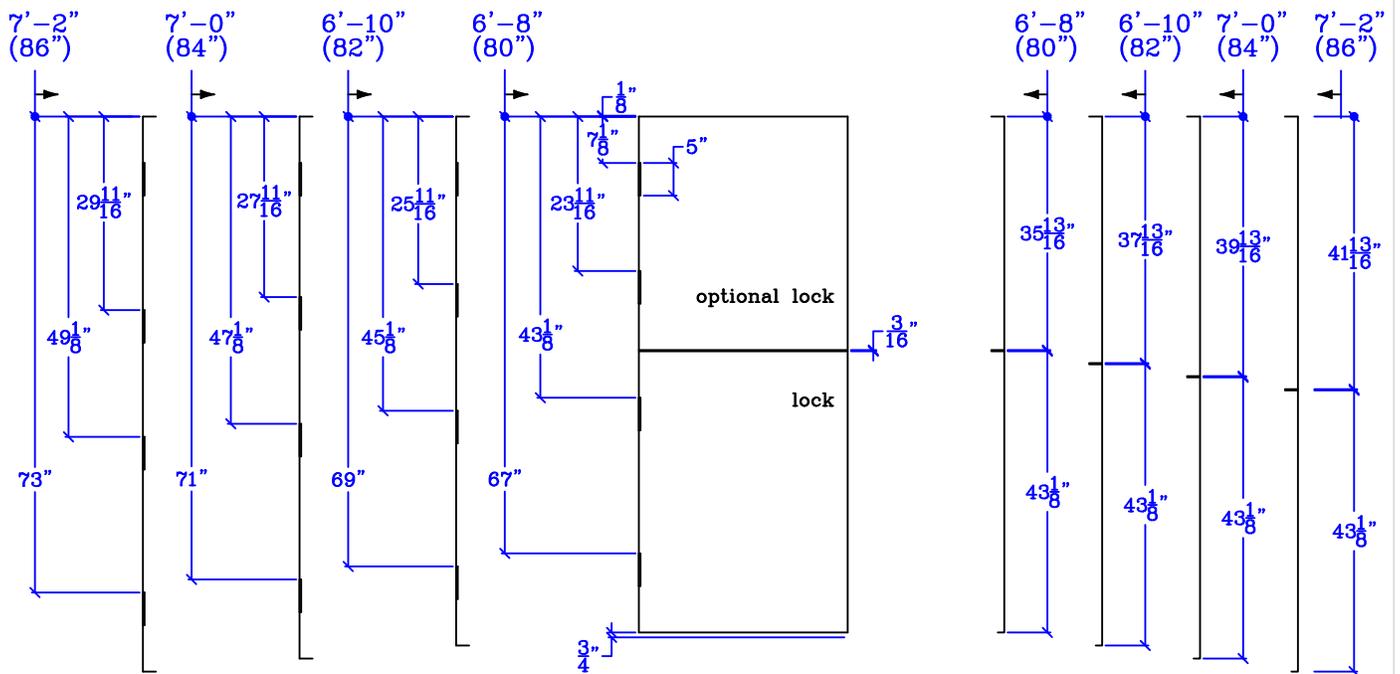
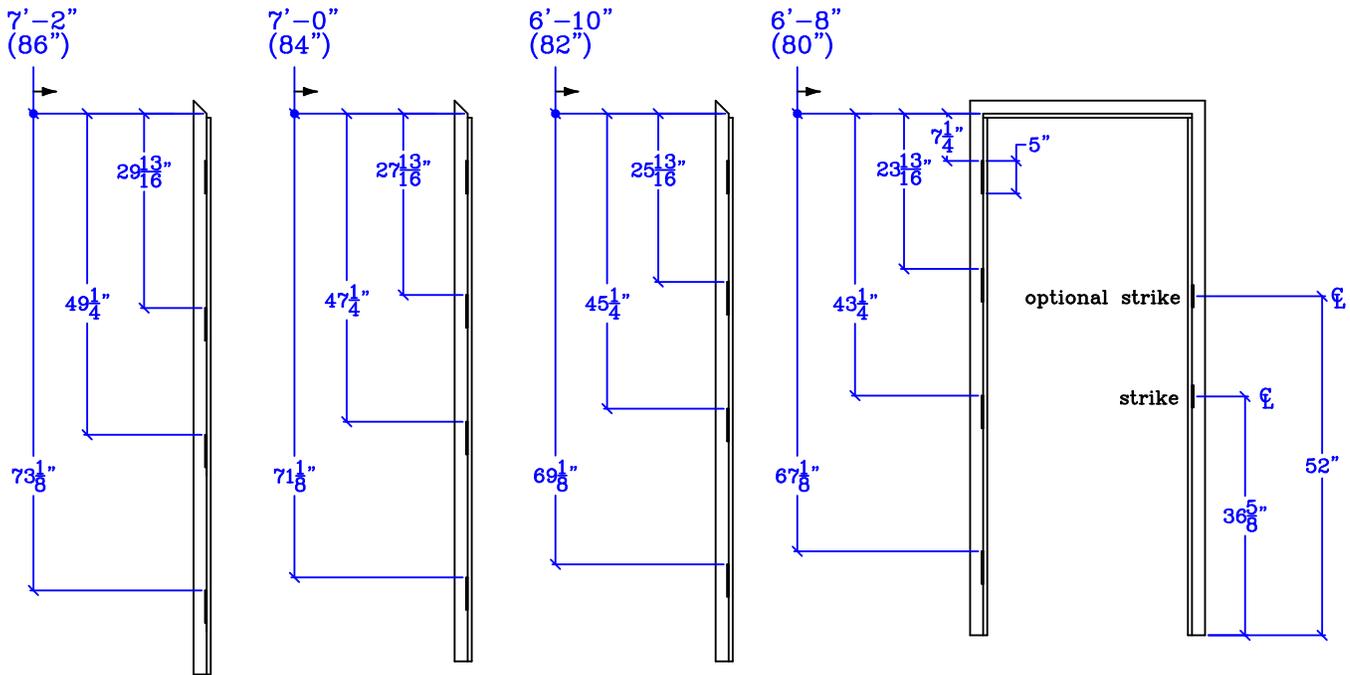
Top to top hinge locations
Bottom to center strike location

5" hinge location for 8'4" to 8'10"



Top to top hinge locations
Bottom to center strike location

5" hinge dutch location for 6'8" to 7'2"



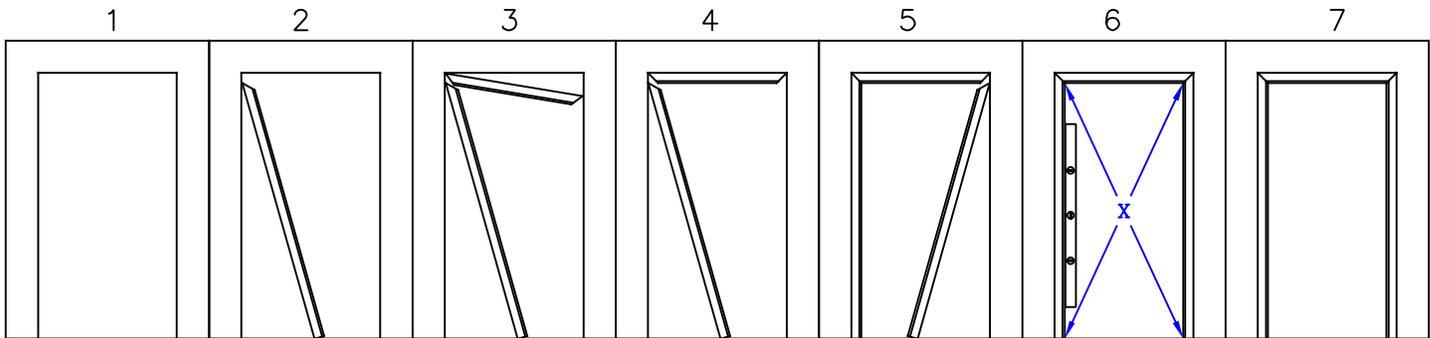
Top to top hinge locations
Bottom to center strike location

Hardware location

INSTALLATION

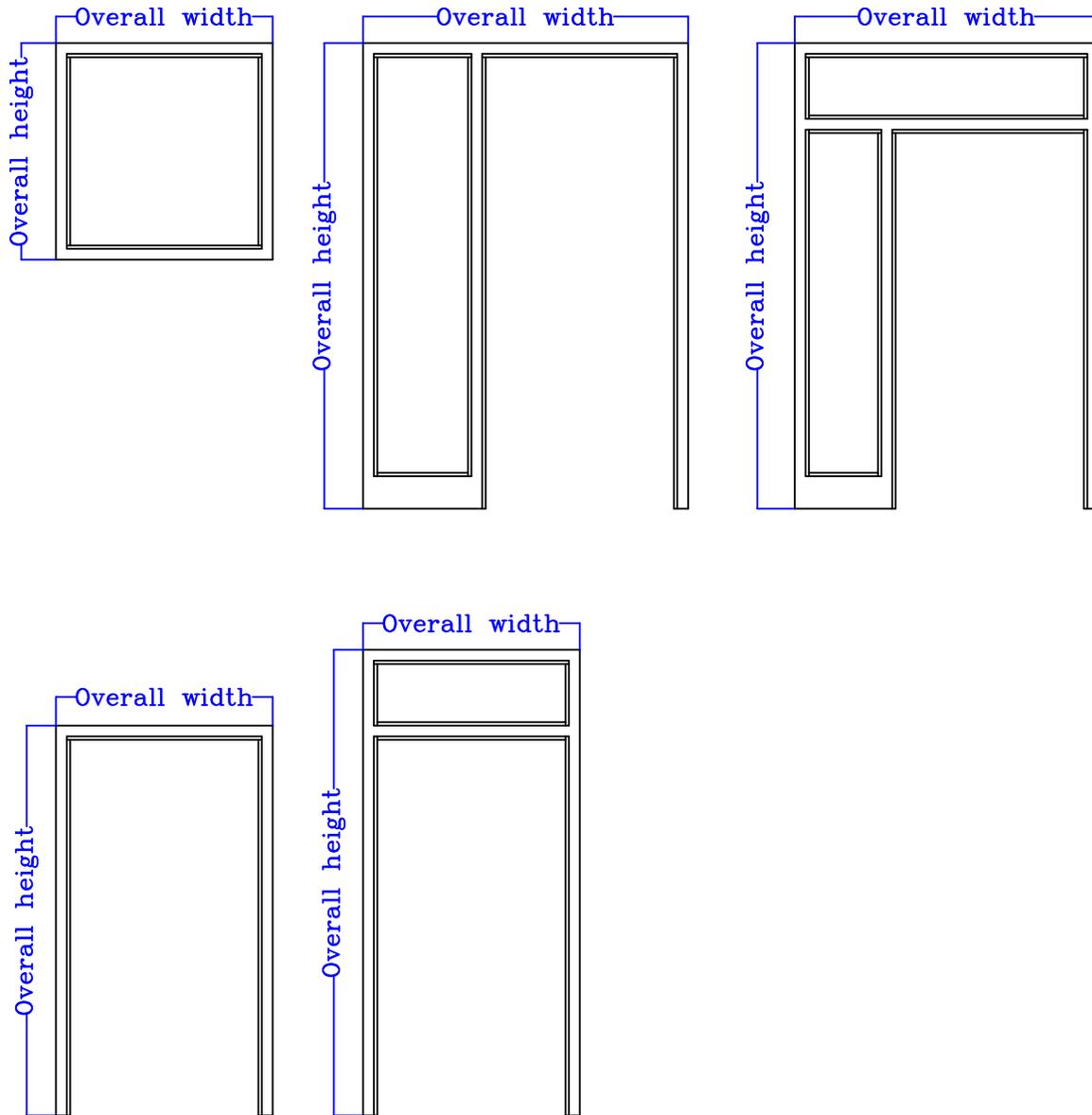
Knocked Down Drywall Frame	R-1.1
Knocked Down Drywall Sidelight	R-1.2
Welded Frames/Elevations	R-1.3
Masonry Frame Page 1	R-1.4
Masonry Frame Page 2	R-1.5
Steel Framing	R-1.6
4 Sided Knocked Down Borrowed Lite.....	R-1.7
Knock Down Double Egress Frame	R-1.8
Glass Sizes in Elevation	R-1.9
Glass Sizes 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.

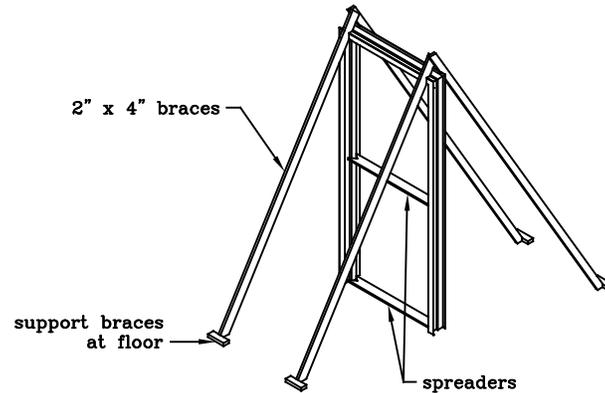


Figure #1 : Frame bracing

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.

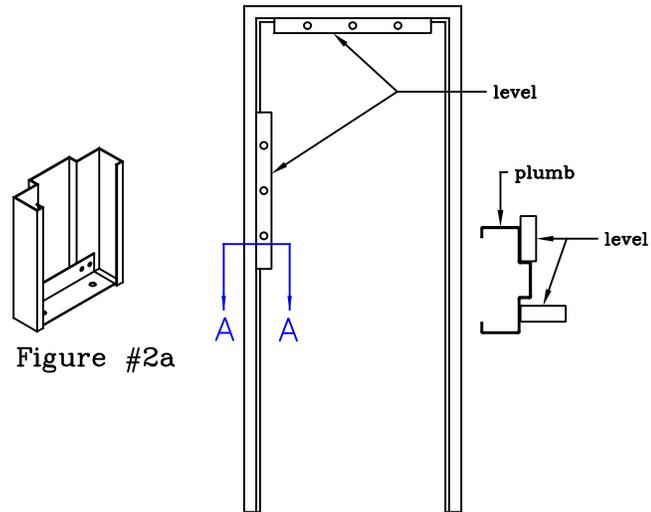


Figure #2 : Plumbing the frame

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.

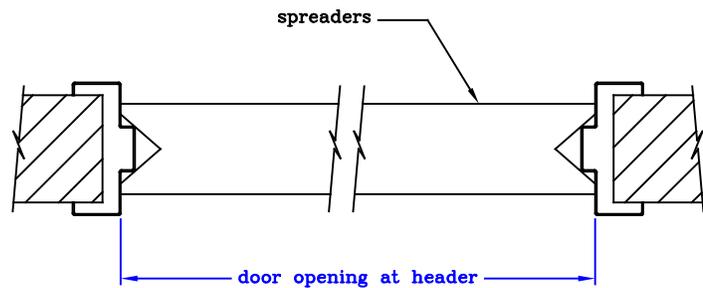


Figure #3 : wood spreaders

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.

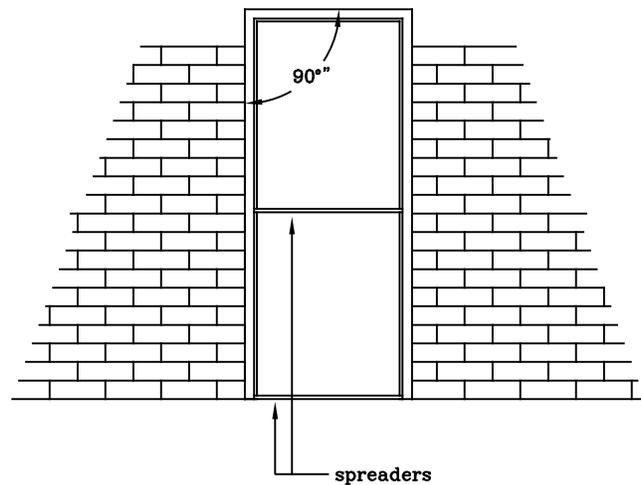
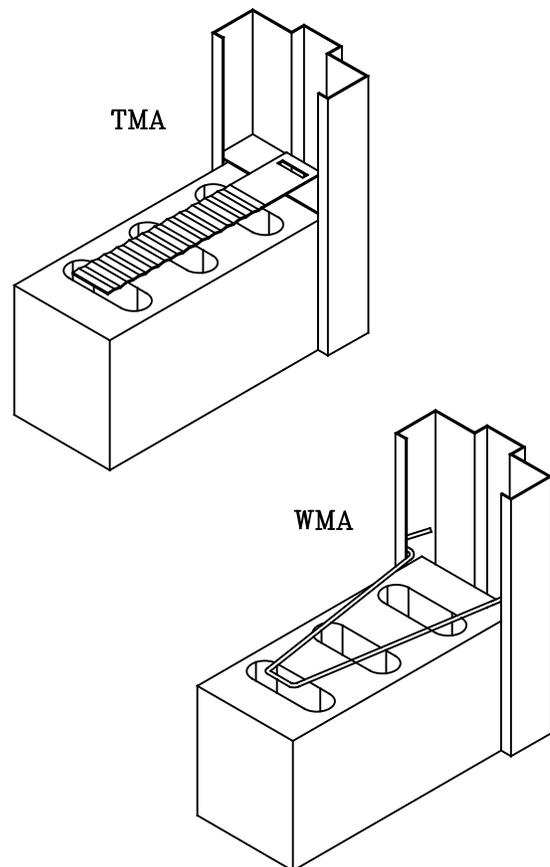


Figure #4 : Spreader locations

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.

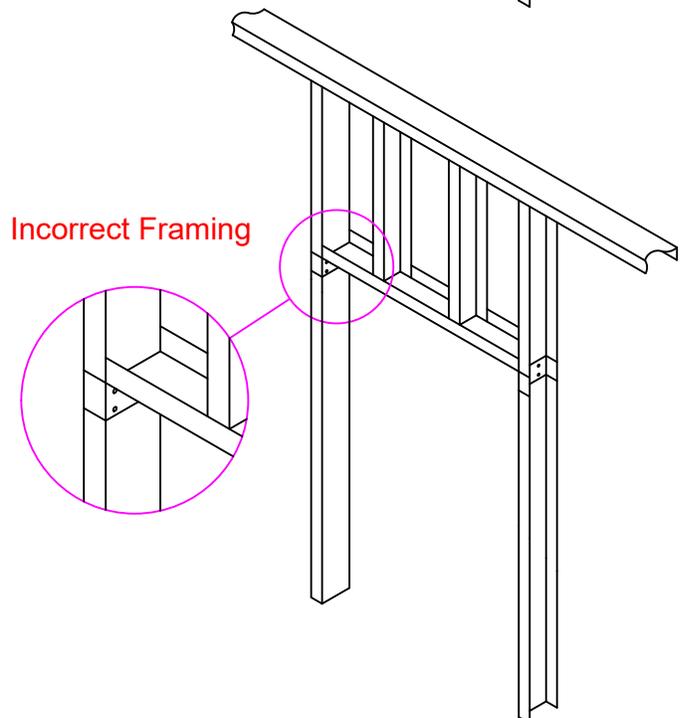
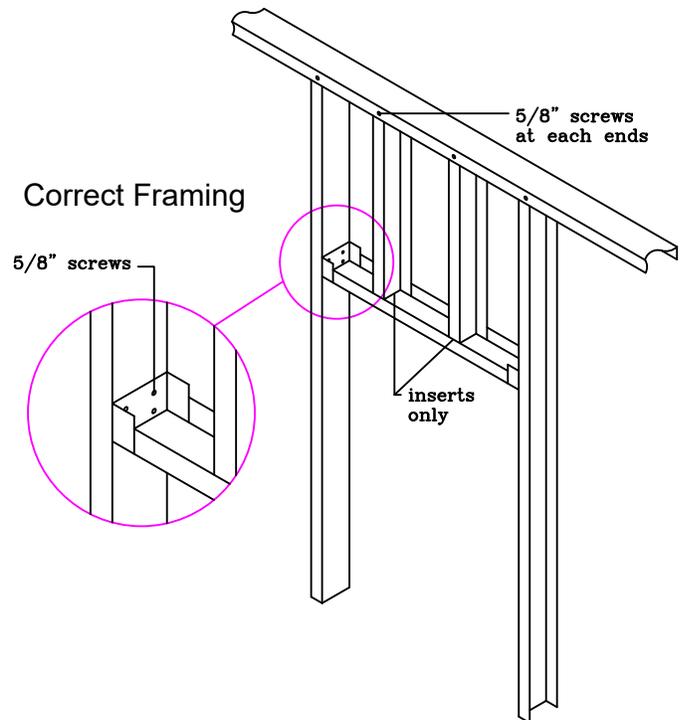
Position floor to ceiling height strut-studs vertically.

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.

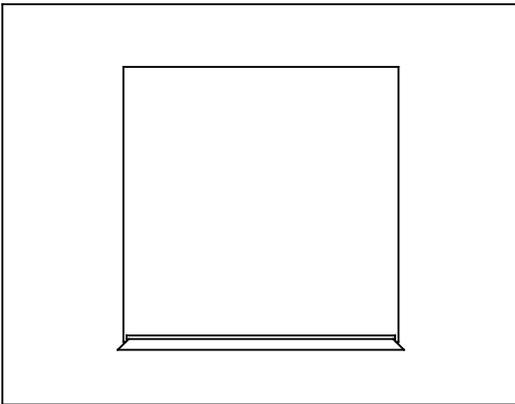
Fabricate sill and header sections from steel runners and install over, less than ceiling height door frame, and above and below borrowed light frames, fabricate from a section of runner cut to length approx. 6" longer than rough opening. Slit flanges and bend web to allow attachment to adjacent vertical strut-studs.

Securely attach through web to strut-stud with 5/8" type S-12 Low profile head screws.

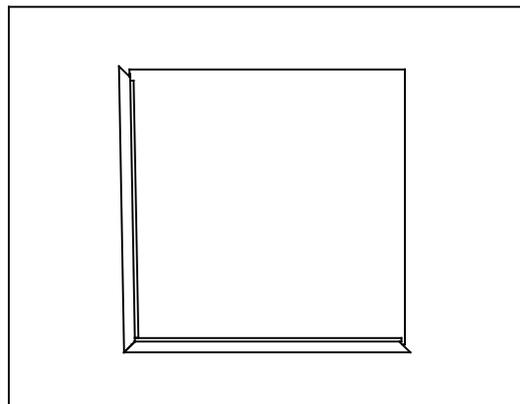


4 sided knocked down frame

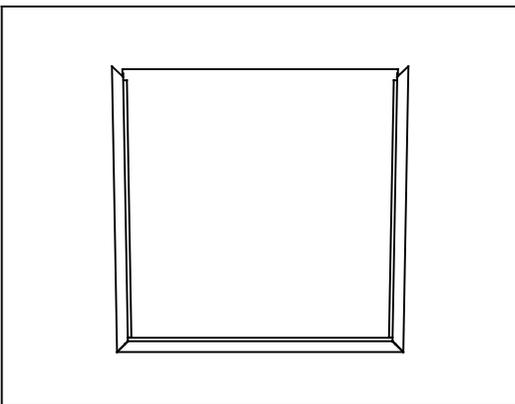
Step # 1



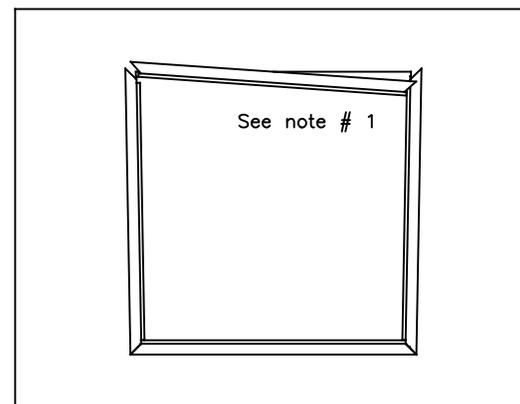
Step # 2



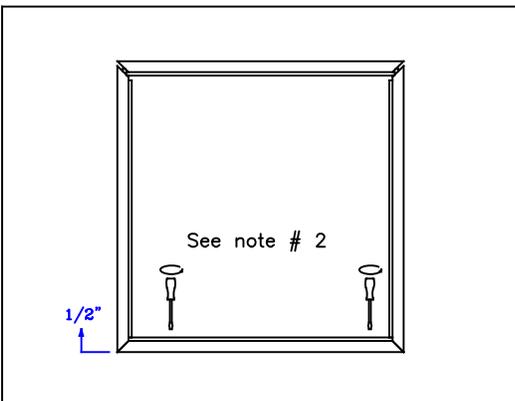
Step # 3



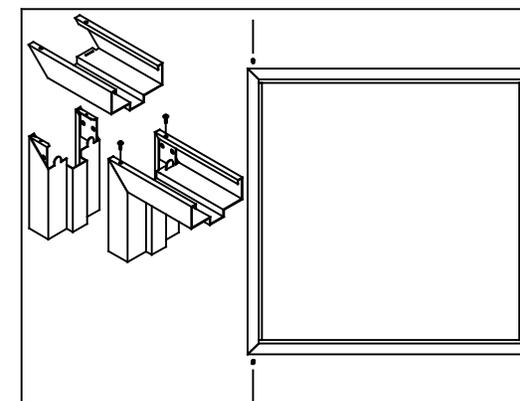
Step # 4



Step # 5

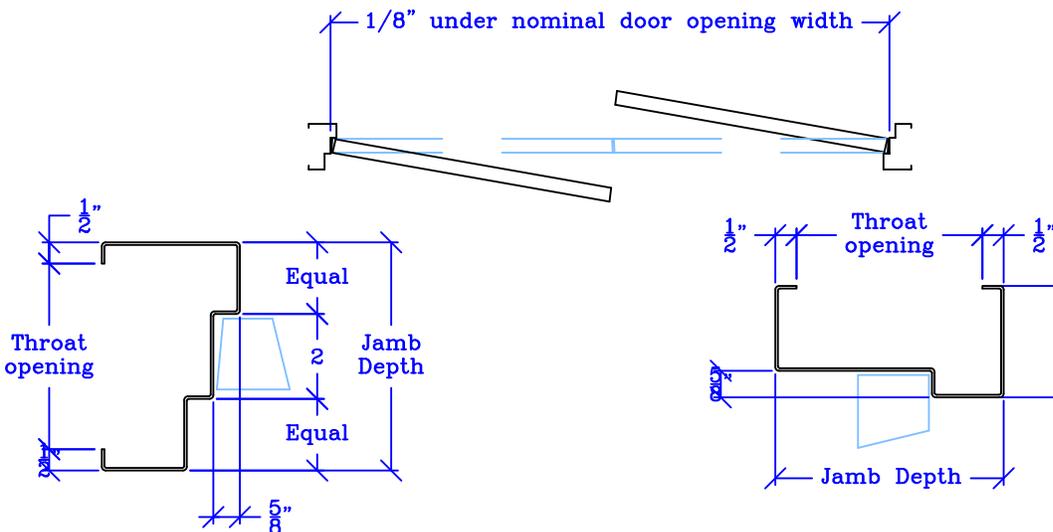
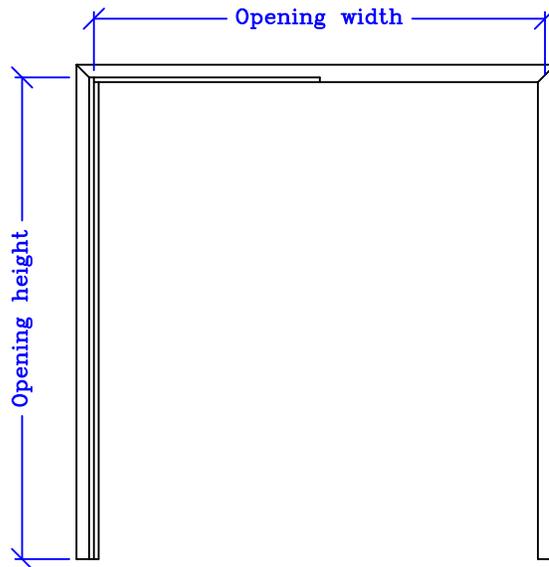


Step # 6



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:

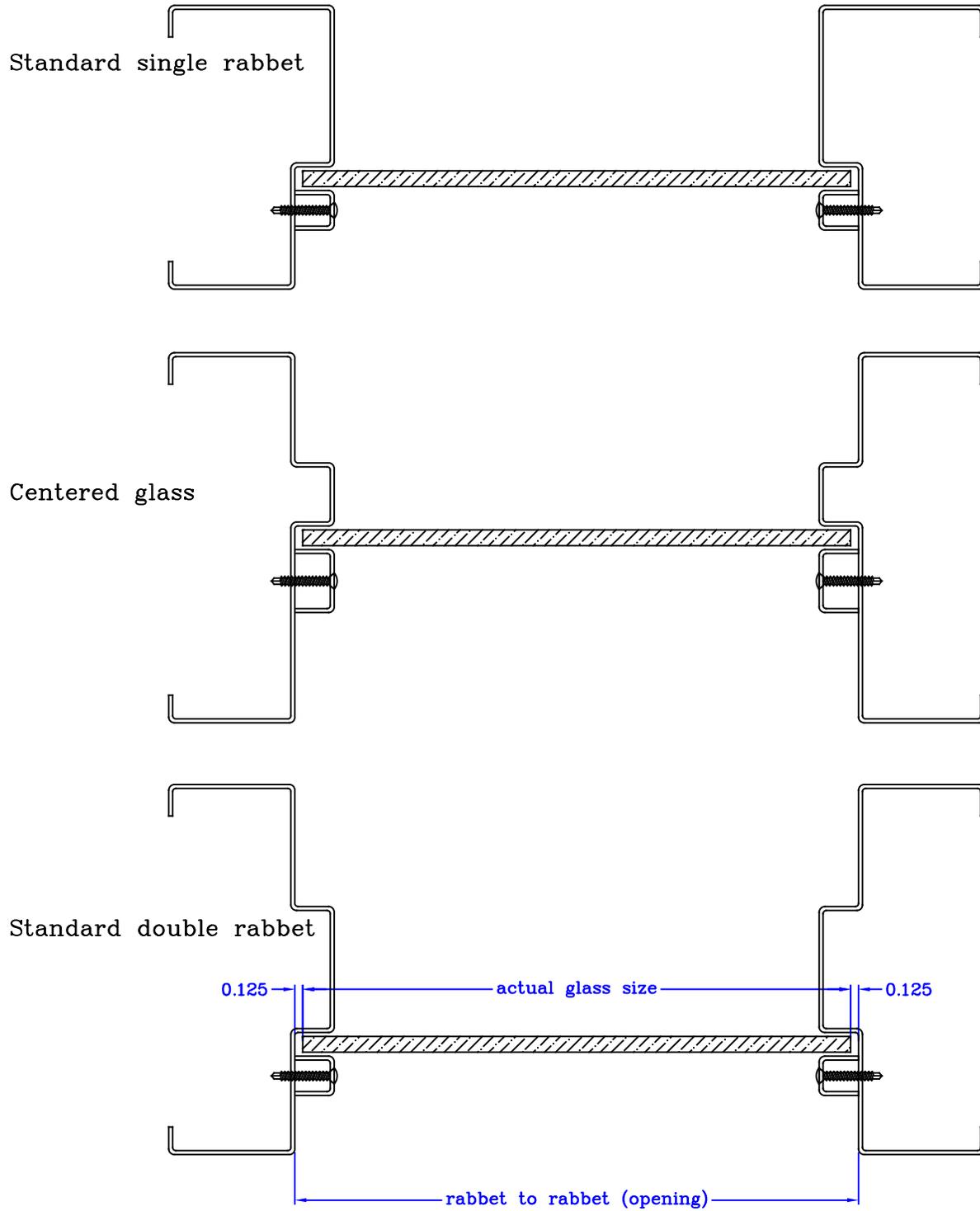
Opening width + 3 1/4"= Rough Opening dimension

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.

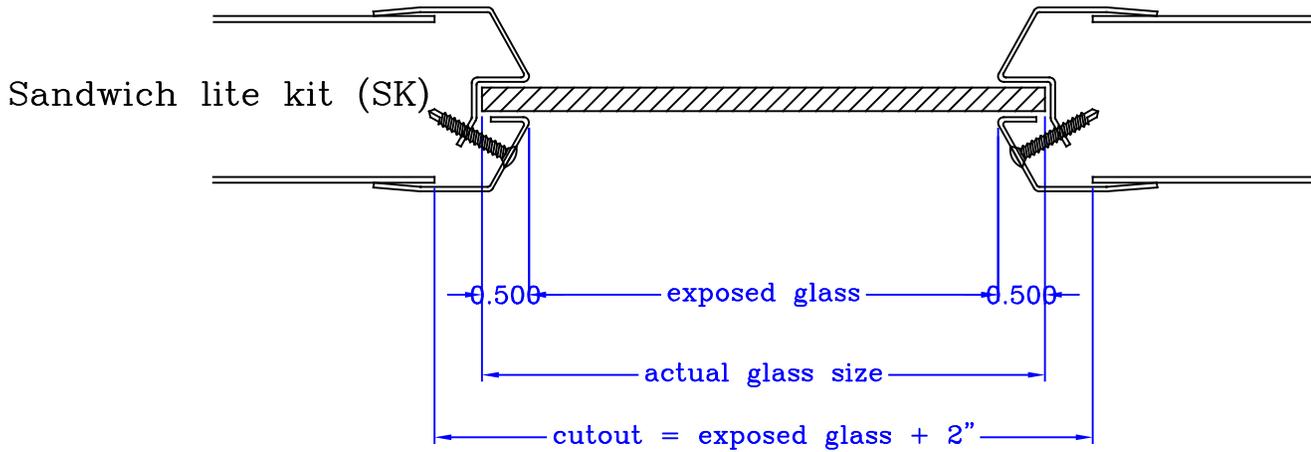
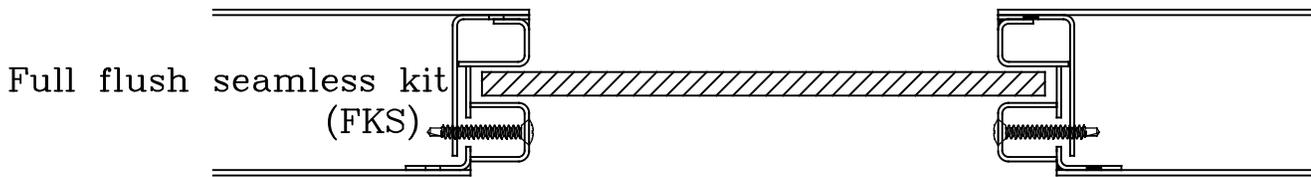
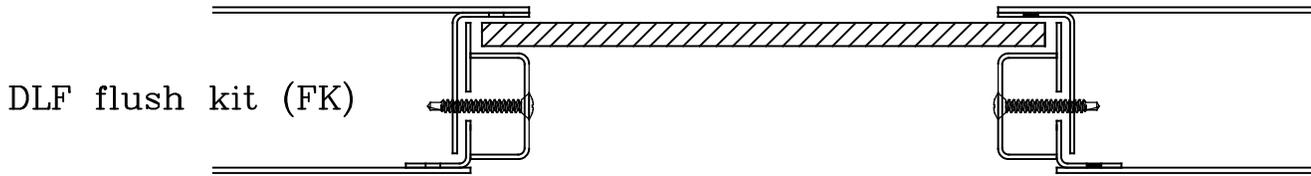
Glass size in elevations



Actual glass sizes :

opening dimension - 1/4" in height and width

Glass size at kits

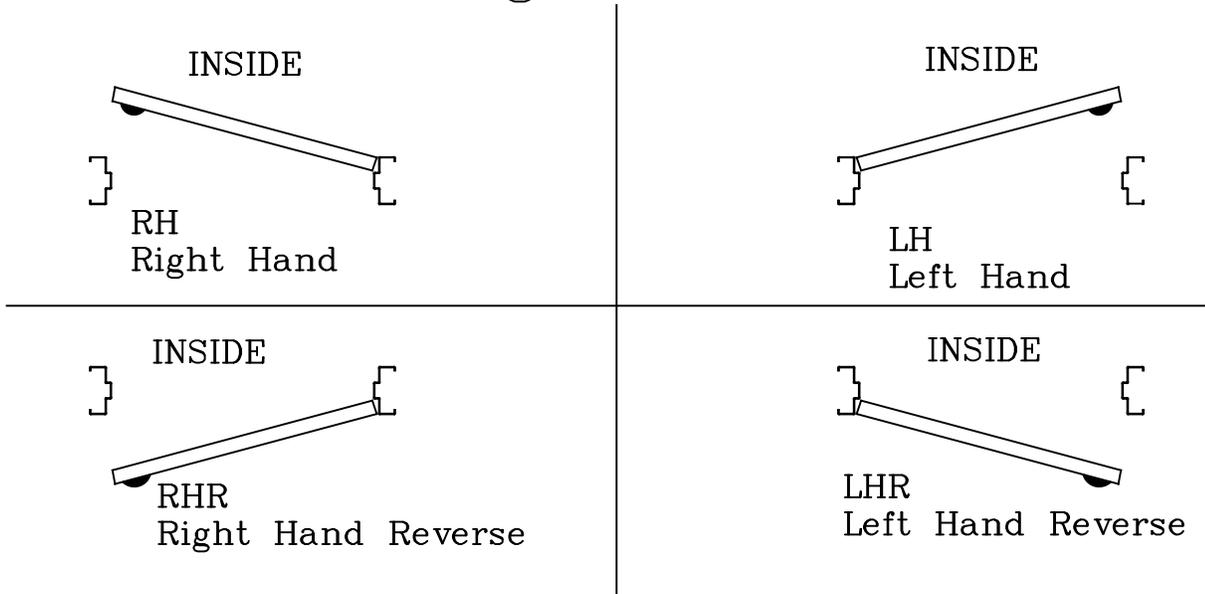


Actual glass sizes :

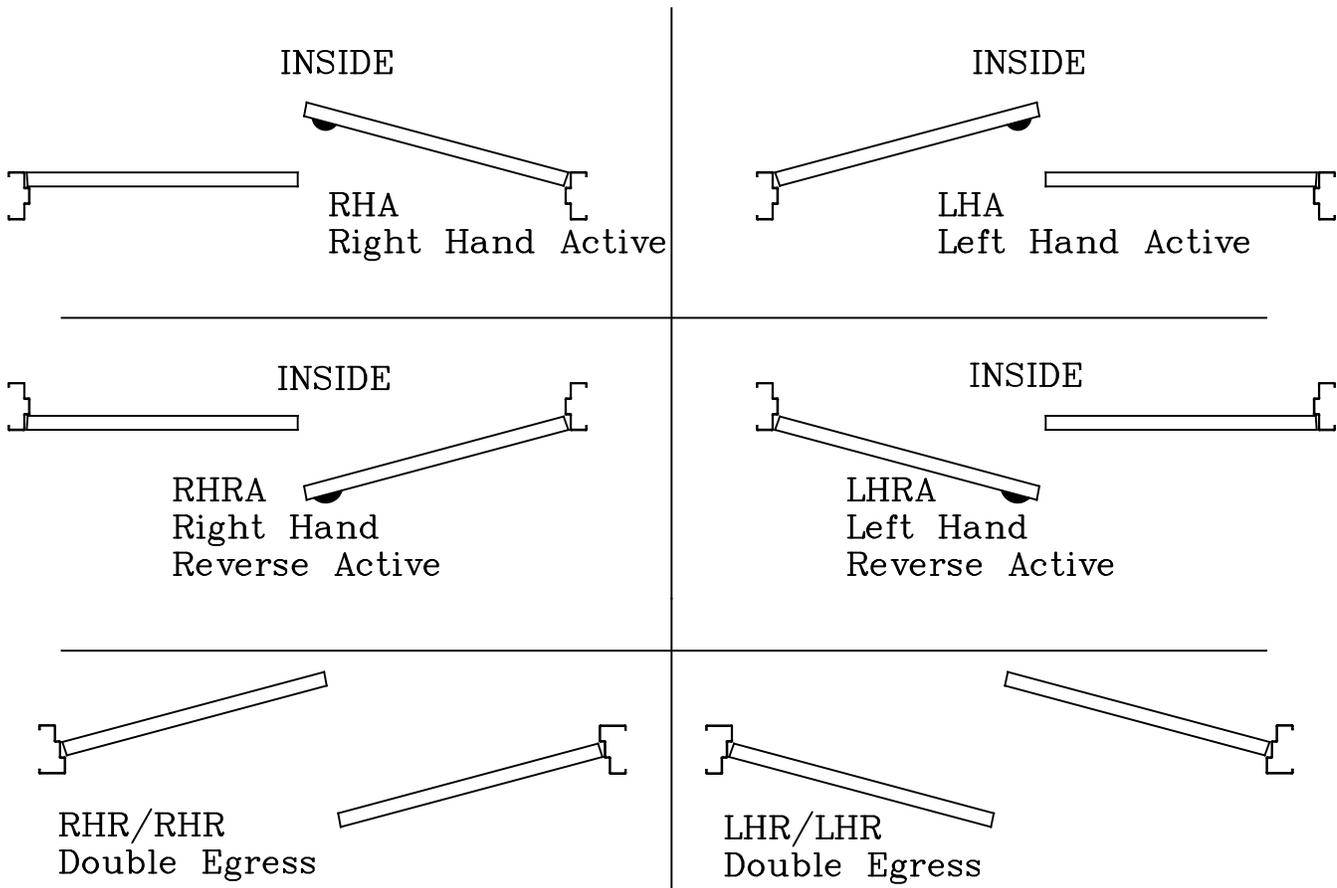
exposed glass + 1" in height and width

Handing chart

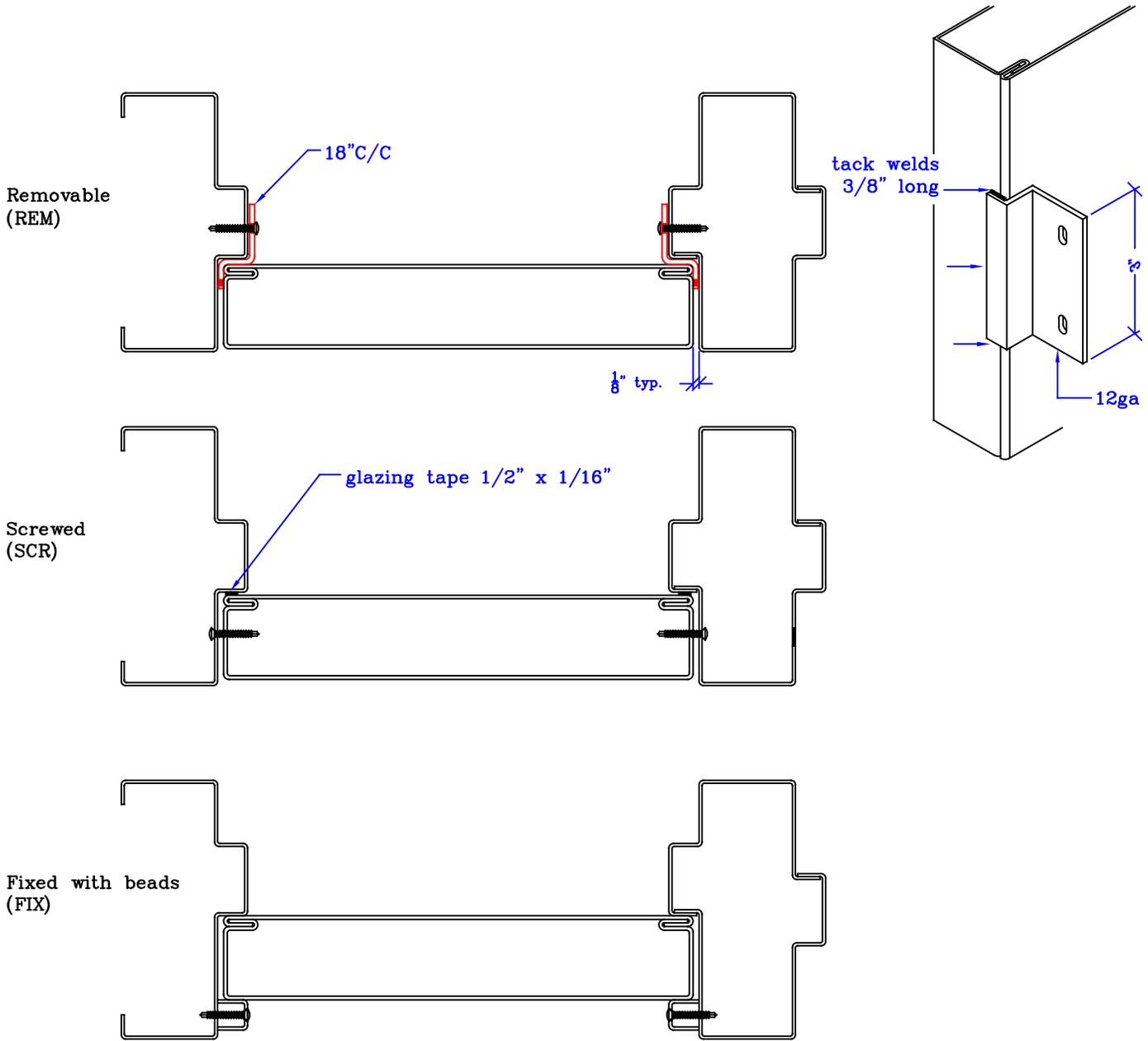
Single Doors



Pair of Doors

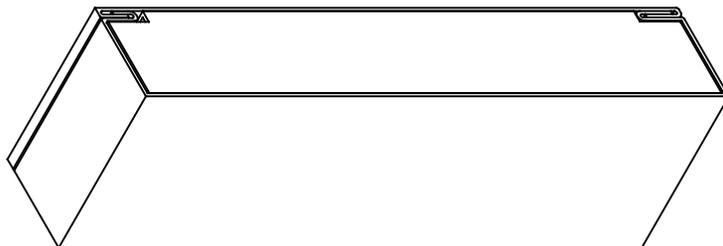


Panel



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	86FHMortise 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
35S3-1/2" Standard Hinge Reinf.	BEVH Beveled Edge Door/Hinge Edge
38UC..... 3/8" Undercut	BEVL Beveled Edge Door/Lock Edge
40S4" 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	BPIVJBottom Pivot on Jamb
45H4-1/2" Heavy Hinge Reinf.	CBClosed 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