

Aspen Section Thickness
AP138 = 1-3/8"
AP200 = 2"

Top Section

Window in top section shown.
May also be located in section
#3 or higher.

Self-drilling Screw
(4) Req'd per
corner bracket

Corner Bracket
Attachment

Intermediate
Sections

Self-drilling Screw
(4) req'd

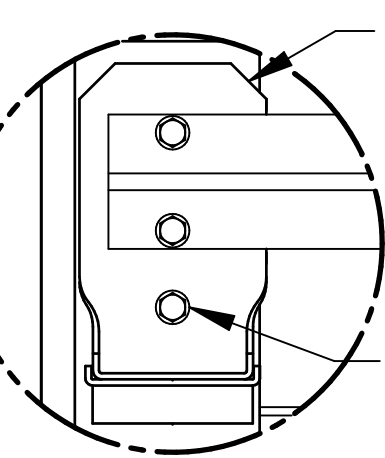
End Stile

U-bar

Bottom
Section

Astragal
Retainer

Section A-A

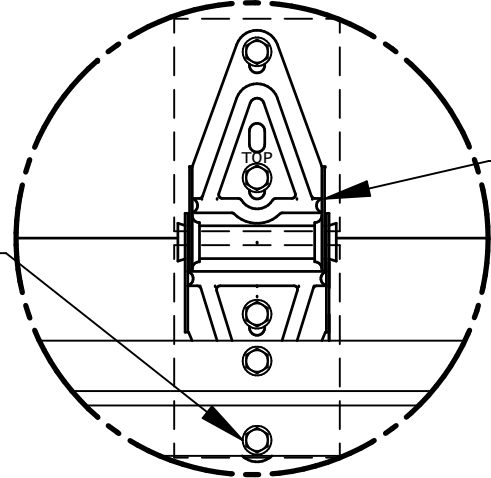


Top Fixture
See detail on sheet 3

Self-drilling Screw
(3) Req'd per top fixture

Top Fixture
Attachment

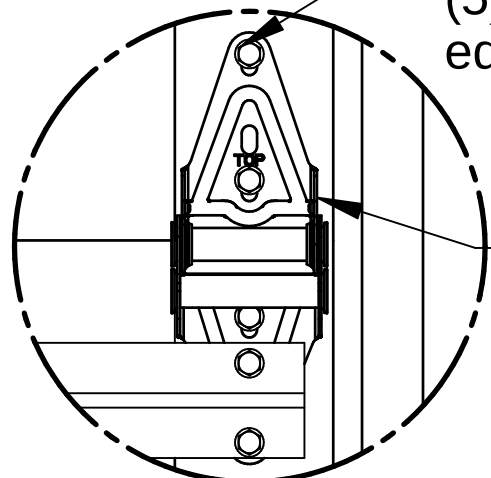
Self-drilling Screw
(5) Req'd per
center hinge.



Center Hinge
See detail on sheet 3

Center Hinge
Attachment

Self-drilling Screw
(5) Req'd per
edge hinge



Edge Hinge
See detail on sheet 3

Edge Hinge
Attachment

Optional Interior Lock
Attachment

Doors tested per ANSI/DASMA 108
for static air pressure

AP138											
Max. Door Width	Ctr. Hngs. per Sect.	Colonial		Ctr. Hngs. per Sect.	Ranch		Ctr. Hngs. per Sect.	Carriage House		Ctr. Hngs. per Sect.	Ctr. Hngs. per Sect.
		21" Max Section Height	24" Max Section Height		21" Max Section Height	24" Max Section Height		21" Max Section Height	24" Max Section Height		
8'-0"	1	55.1	-61.2	52.0	-61.2	52.0	1	55.1	-61.2	52.0	-61.2
9'-0"	1	49.0	-54.4	46.2	-54.4	46.2	1	49.0	-54.4	46.2	-54.4
10'-0"	2	39.7	-44.1	25.6	-33.0	37.4	1	39.7	-44.1	37.4	-44.1
12'-0"	2	27.6	-30.6	21.3	-27.5	21.3	2	27.6	-30.6	16.0	-19.5
14'-0"	4	20.3	-22.5	15.6	-20.2	20.3	2	20.3	-22.5	13.7	-16.7
16'-0"	3	15.5	-19.7	13.1	-17.2	15.5	3	15.5	-19.7	13.1	-17.2
18'-0"	3	12.3	-13.6	9.6	-12.6	12.3	3	12.3	-13.6	10.4	-13.6
20'-2"	5	9.9	-11.0	7.7	-9.9	9.9	3	9.9	-11.0	7.5	-9.2

AP200 / MAP200											
Max. Door Width	Ctr. Hngs. per Sect.	Colonial		Ctr. Hngs. per Sect.	Ranch		Ctr. Hngs. per Sect.	Carriage House		Ctr. Hngs. per Sect.	Ctr. Hngs. per Sect.
		21" Max Section Height	24" Max Section Height		21" Max Section Height	24" Max Section Height		21" Max Section Height	24" Max Section Height		
8'-0"	1	63.1	-70.4	52.0	-61.2	63.1	1	63.1	-70.4	52.0	-61.2
9'-0"	1	56.1	-62.6	46.2	-54.4	56.1	1	56.1	-62.6	46.2	-54.4
10'-0"	2	45.4	-50.7	25.6	-33.0	45.4	1	45.4	-50.7	37.4	-44.1
12'-0"	2	31.6	-35.2	21.3	-27.5	31.6	2	31.6	-35.2	16.0	-19.5
14'-0"	4	23.2	-25.9	15.6	-20.2	23.2	2	23.2	-25.9	13.7	-16.7
16'-0"	3	17.8	-19.8	13.1	-17.2	17.8	3	17.8	-19.8	13.1	-17.2
18'-0"	3	14.0	-15.7	9.6	-12.6	14.0	3	14.0	-15.7	10.4	-13.6
20'-2"	5	11.4	-12.7	7.7	-9.9	11.4	3	11.4	-12.7	7.5	-9.2

Interior Skin
.013 Thick G-40 galvanized steel with an epoxy primer and
baked on polyester finish which is roll-formed with wood
grain texture.
Exterior Skin
.014 Thick G-40 galvanized steel with an
epoxy primer and baked on polyester finish
which is roll-formed with wood grain texture.

Hardware Plate .036 thick

U-bar
See detail on sht. 3

Section B-B

Retaining Nut
7/16" push on
retaining nut
(1) req'd per roller.
See detail on sht. 3

Perimeter Seal
Nailed 8" O.C. with
4d steel nails

Insulation Core
Polyurethane Foam

Jambs
See sht. 2 for attachment

Hex Head Lag Screw
(2) per bracket.
See detail on sht. 3

Track Bracket shown
See detail on sht. 3
Full Angle optional

Track Bolt / Whiz Lock Nut
See detail on sht. 3

End stile
20 Ga. Galv. Steel

Track Roller
See detail on sht. 3

Track, 2" shown, 3" optional
See detail on sht. 3

Polypropylene
Exterior Window
Frame

Glass Options: 1/8" Annealed, 1/8" Tempered
3/4" Annealed I.G., 3/4" Tempered I.G.

Max size: Colonial - 17-3/4" x 12-3/4"

Ranch - 40-3/4" x 12-3/4"

DLO: Colonial - 16-3/4" x 11-3/4"

Ranch - 39-3/4" x 11-3/4"

Optional
Decorative Inserts

Polypropylene
Interior Window
Frame

Section C-C

U-bar removed for clarity

Screw, #8 x 1"
(10) per col. window
(18) per ranch window

Spring Counterbalance
Spring wire individually
calculated to counterbalance door.
Quantity and size of spring
will vary based on door size.

Door Height

7'-0" High shown
Other door
heights
available up
to 10'-0" using
18", 21" or 24"
high sections

Windows (Optional)
One row maximum
See window styles
on sht. 2

Steel Reinforcement
(1) U-bar per section
fastened to all center
and end stiles using
(2) self-drilling screws
at each stile.

Embedded
Hardware Plates

Locks required on doors
not electrically operated.

Vents (Optional)
Vent openings may be
located in bottom section
as allowed by local code

Door Width
See chart for other door widths
(16'-0" Ranch shown)
Interior Elevation

FL#21471

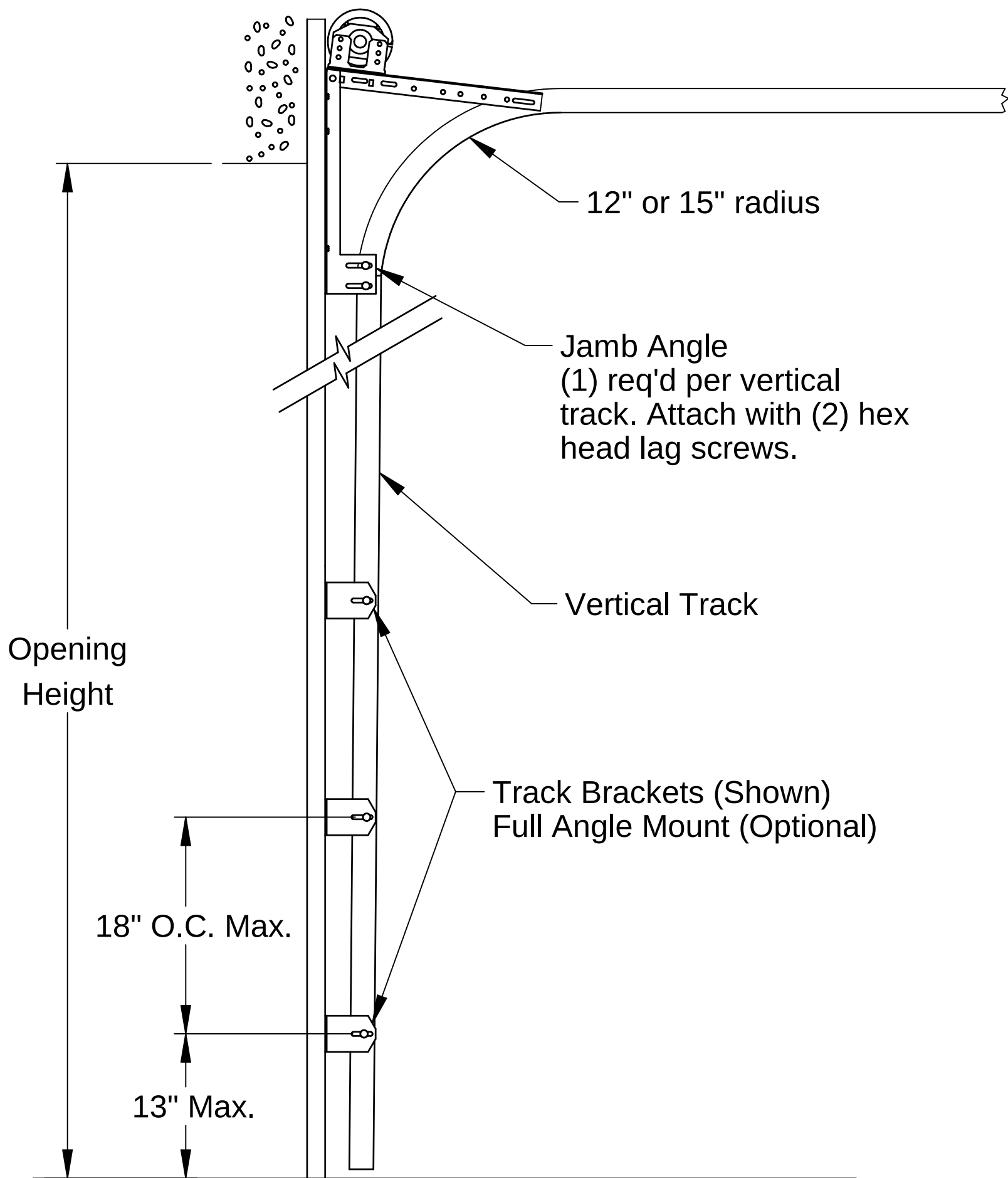


Scott A. Brown, P.E. Lic. No. 65940
Willett, Hofmann & Associates, Inc.
809 E. 2nd Street, Dixon, IL 61021
FBPE CA Lic. No. 35415
Structural Adequacy for Wind Load

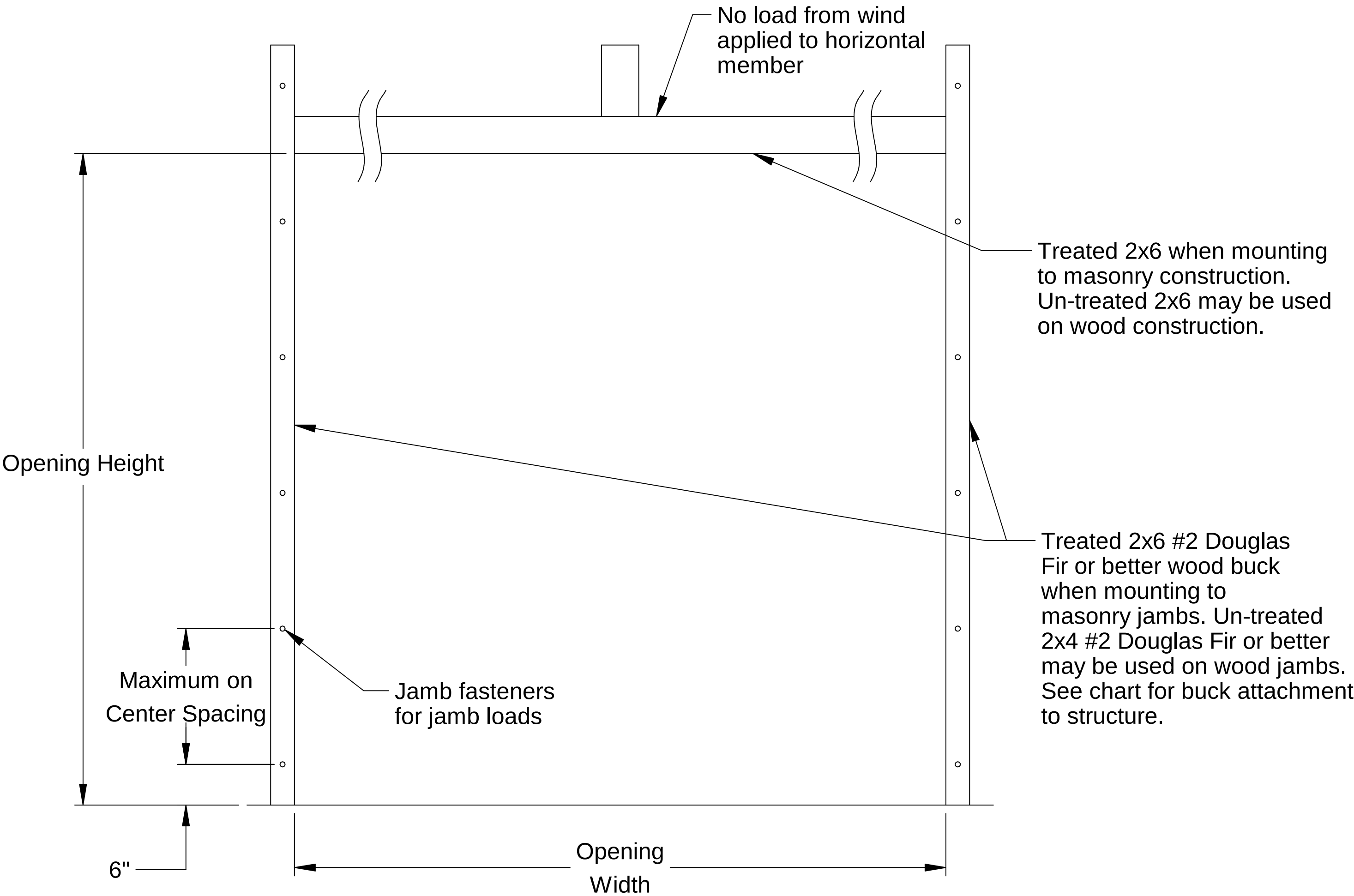
Digitally signed by Scott A Brown
Date: 2023.12.20 14:39:21-06'00'

Printed copies of this document are not considered signed and sealed and
the SHA authentication code must be verified on any electronic copies.

Rev.	D	Added MAP200, updated P.E. information	8997.01	12/08/23	Scale: None	 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Residential Aspen		
	C	Added 24" section heights, removed AP138C/AP200C and updated drawing layout.	8399.01	05/18/21	Drawn by: G. Wedekind		No. P-2341	Sheet 1 of 3	Rev D
	B	Added AP200 pressures, added window chart, added AP138C and AP200C, added window sizes and types.	7512.02	02/03/17	Checked by: G. Wedekind				
			ECO	Date	Date: 10/31/16 ECO: 7512.01				



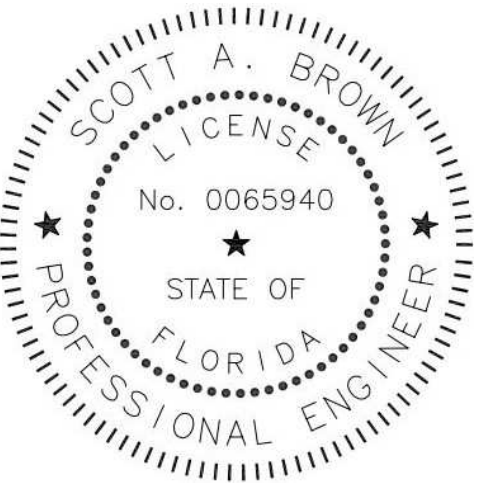
Typical Track Installation
Normal headroom track shown
Low headroom and lift clearance available



Jamb Attachment Notes:

1. Maximum Positive Load per Jamb = (9'-0" x 56.1 PSF) / 2 = 253 lbs. per foot.
2. Maximum Negative Load per Jamb = (9'-0" x -62.6 PSF) / 2 = 282 lbs. per foot.
3. Design of the supporting structure shall be the sole responsibility of the building designer and shall be designed for the jamb loads listed in notes 1 and 2.
4. Alternate jamb attachments may be used if approved by a registered Professional Engineer.
5. DASMA Technical Data Sheet TDS-161 may be used for alternate jamb attachments.
6. 3/8" diameter lag screws required 1/16" pilot hole and 1-1/2" minimum required distance.

2x6 Attachment to Structure						
Structure Type	Fastener Type	Minimum Embedment	Minimum Edge Distance	Minimum on Center Spacing	Maximum on Center Spacing	Allowable Tension Load
2500 PSI Min. Concrete	1/4" Tapcon+ (Plus) with 1-1/8" OD Washer	2"	2.5	6"	24"	526
Southern Pine	3/8" x 3" Lag with 1-1/8" OD Washer	1.50"	1.50"	1.50"	24"	655
Spruce Pine Fir	3/8" x 3" LAG with 1-1/8" OD Washer	1.50"	1.50"	1.50"	22"	482

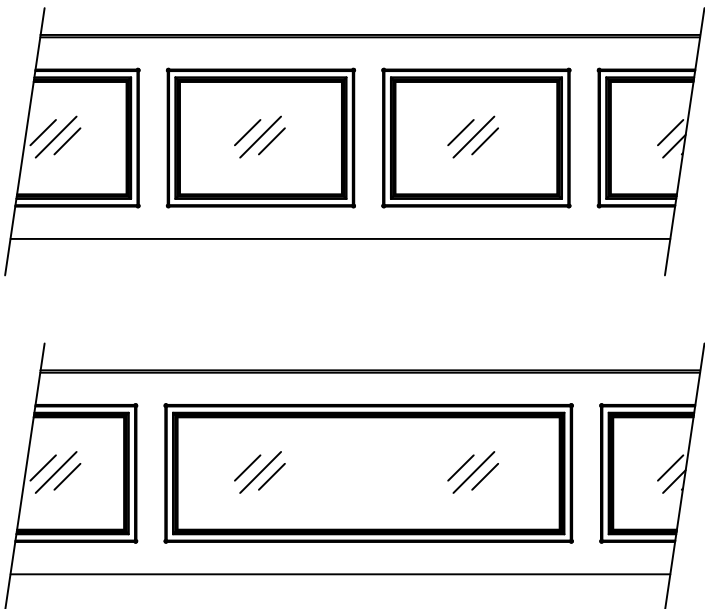


Scott A. Brown, P.E. Lic. No. 65940
Willett, Hofmann & Associates, Inc.
809 E. 2nd Street, Dixon, IL 61021
FBPE CA Lic. No. 35415
Structural Adequacy for Wind Load

Scott A. Brown

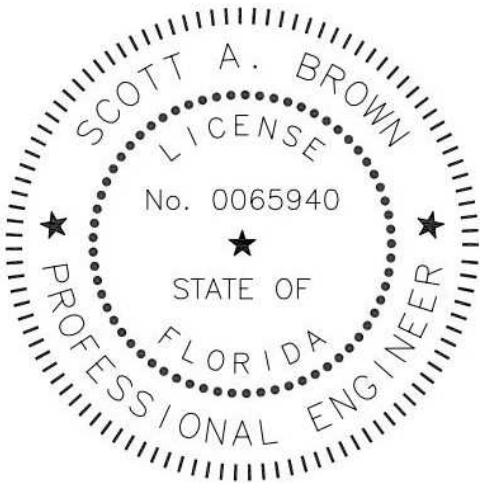
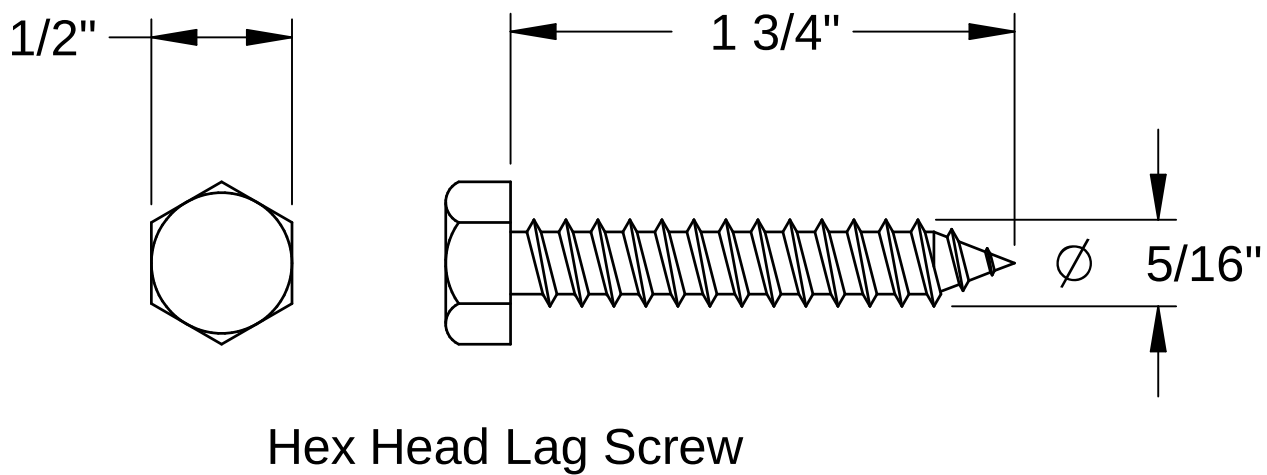
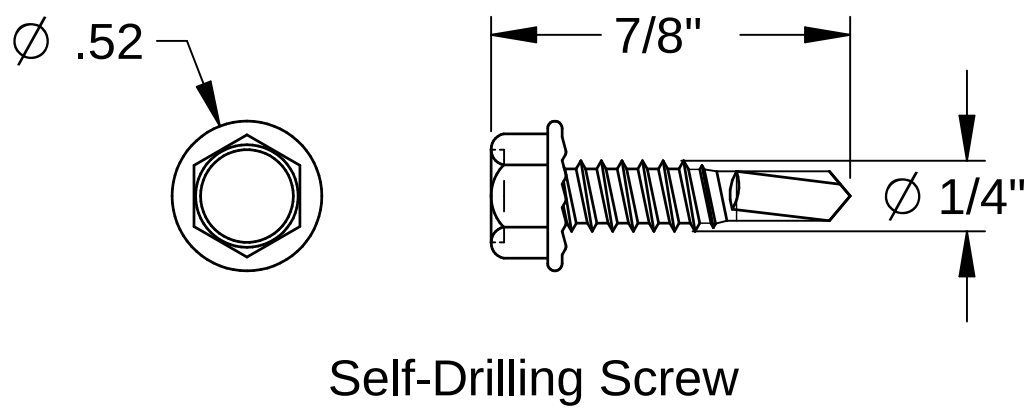
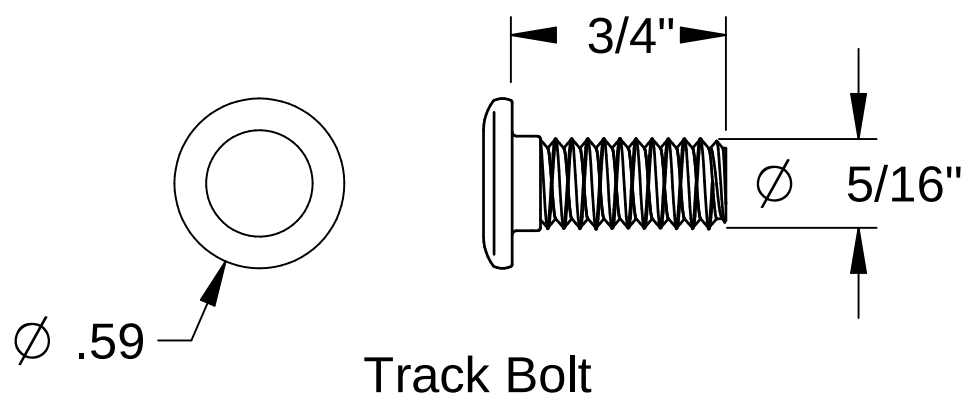
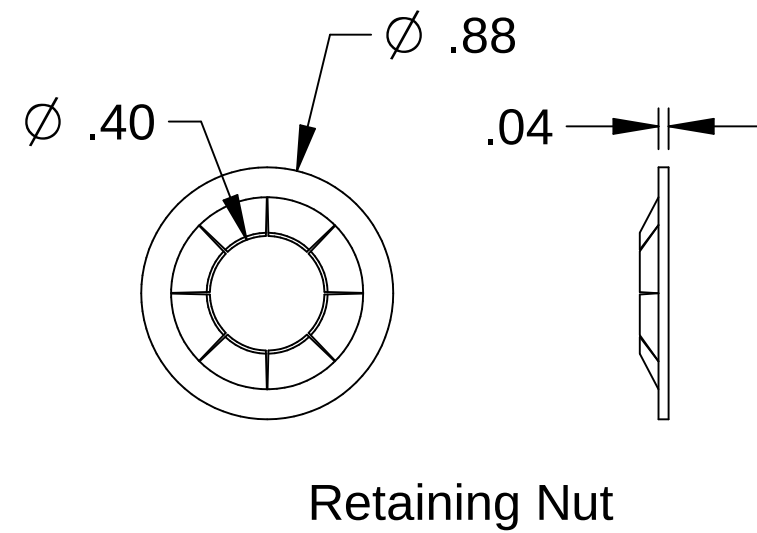
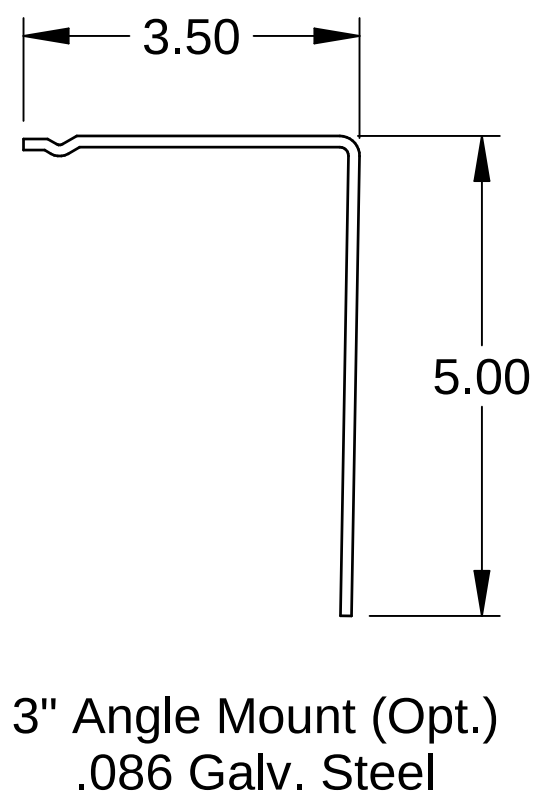
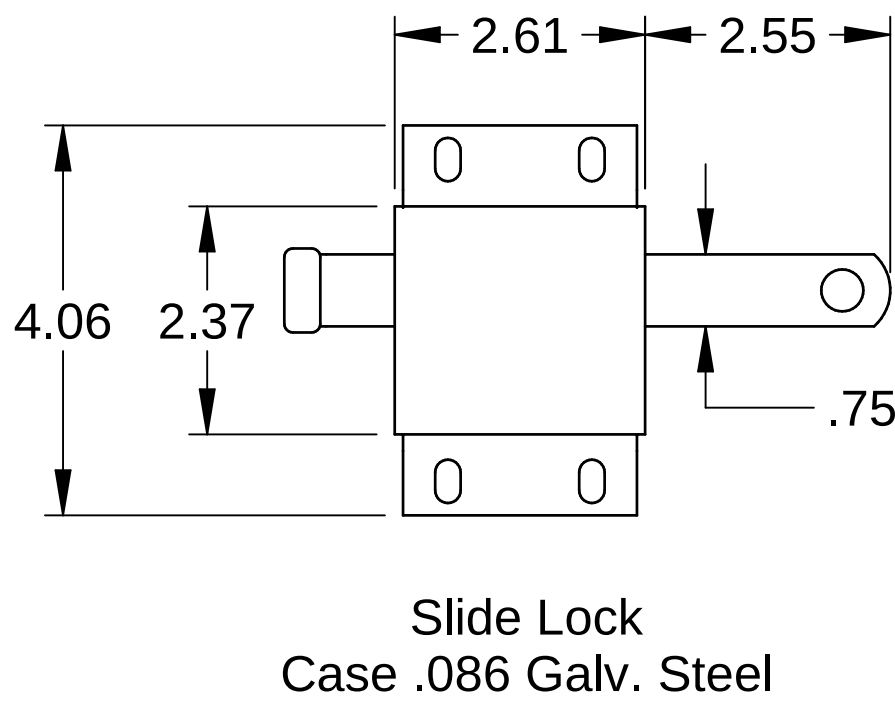
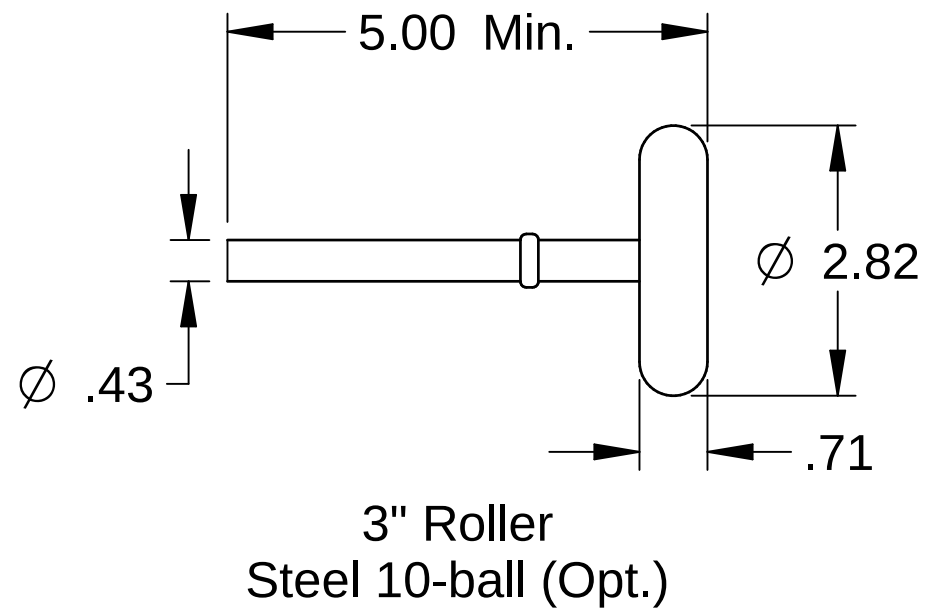
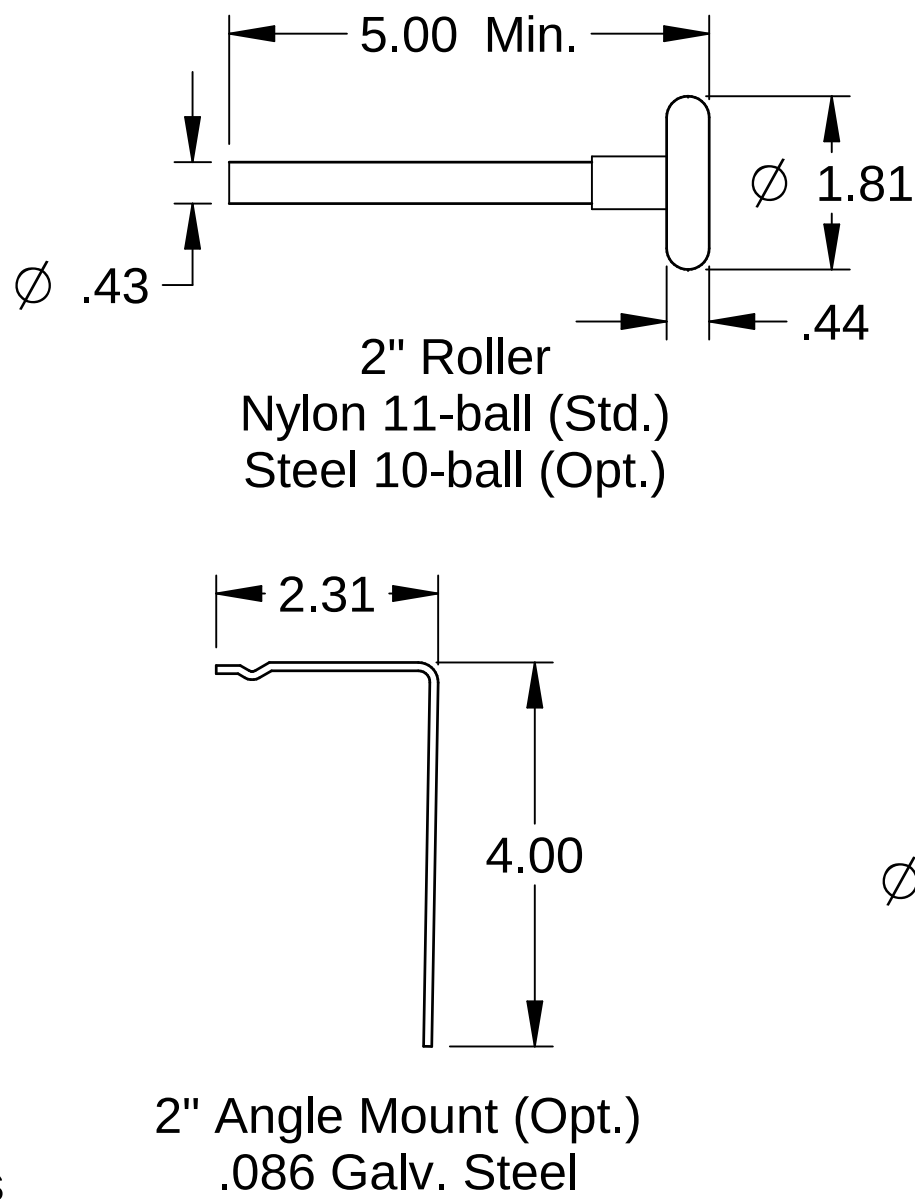
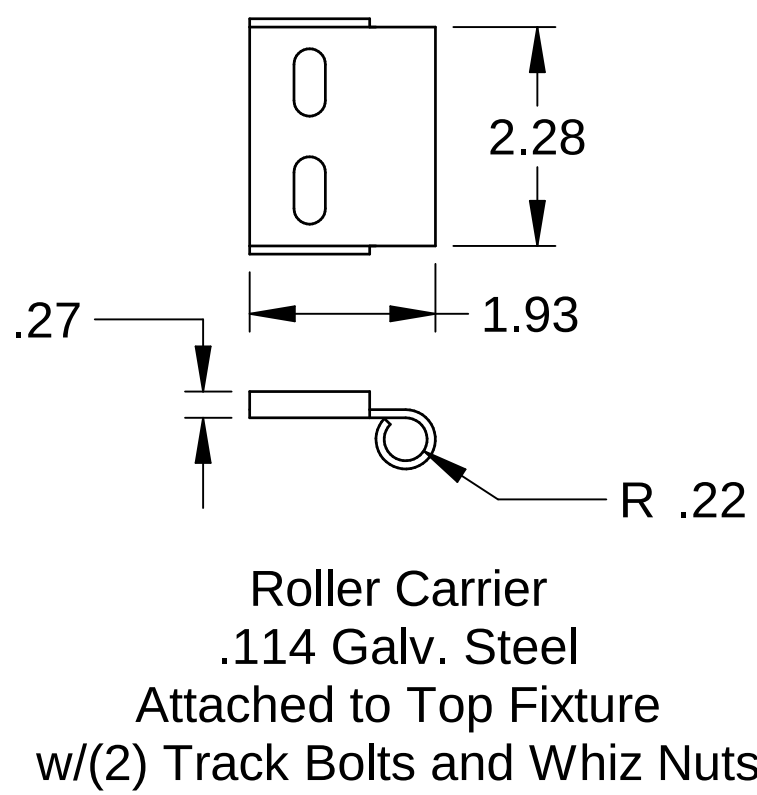
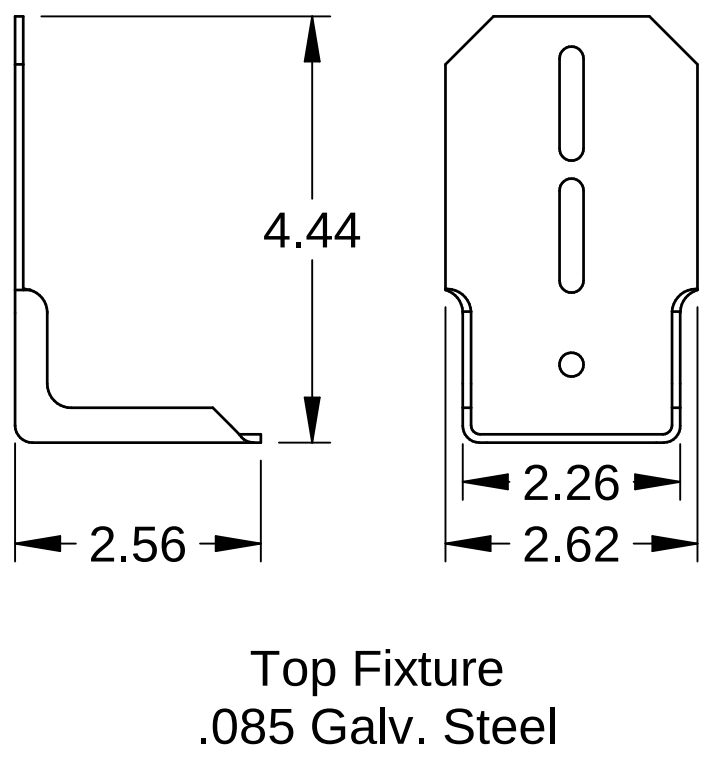
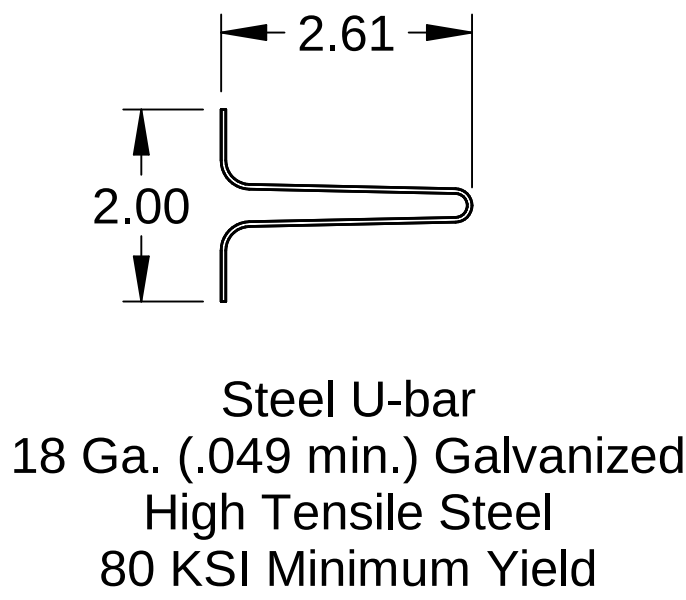
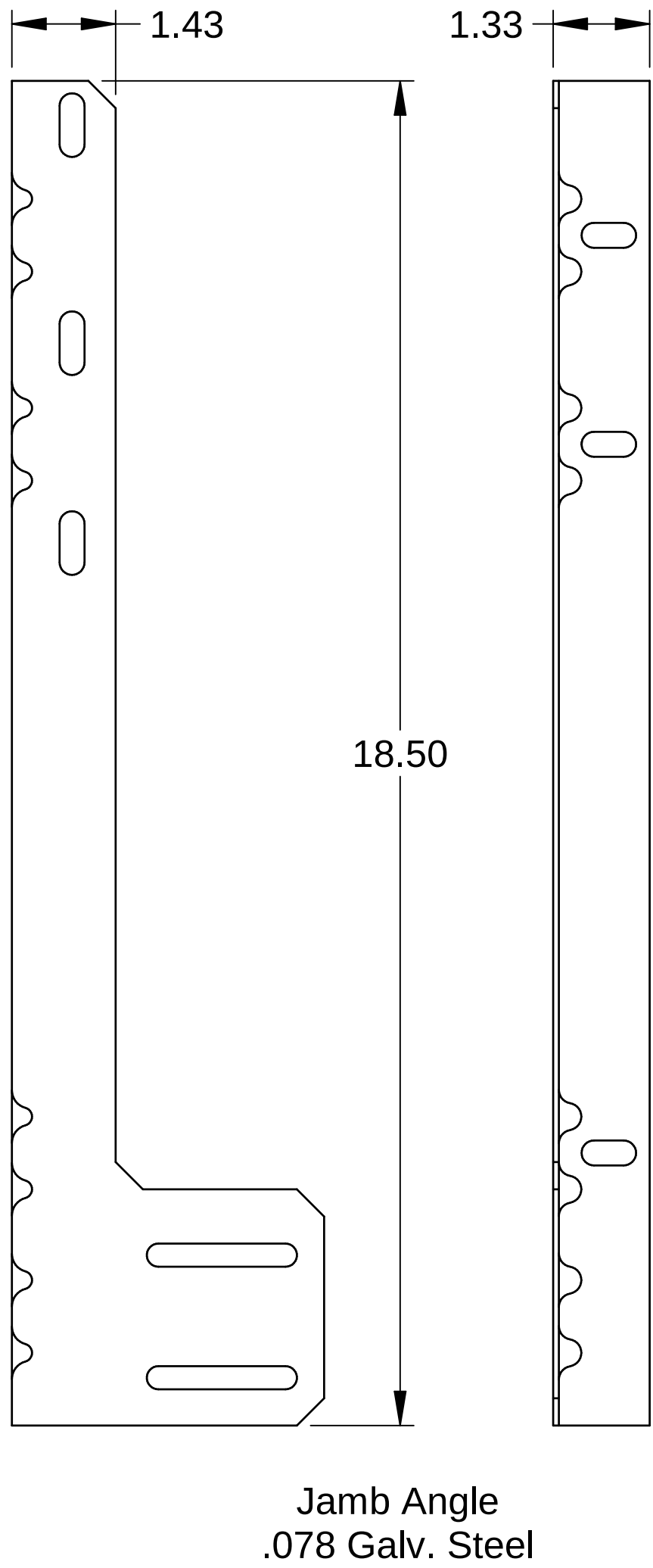
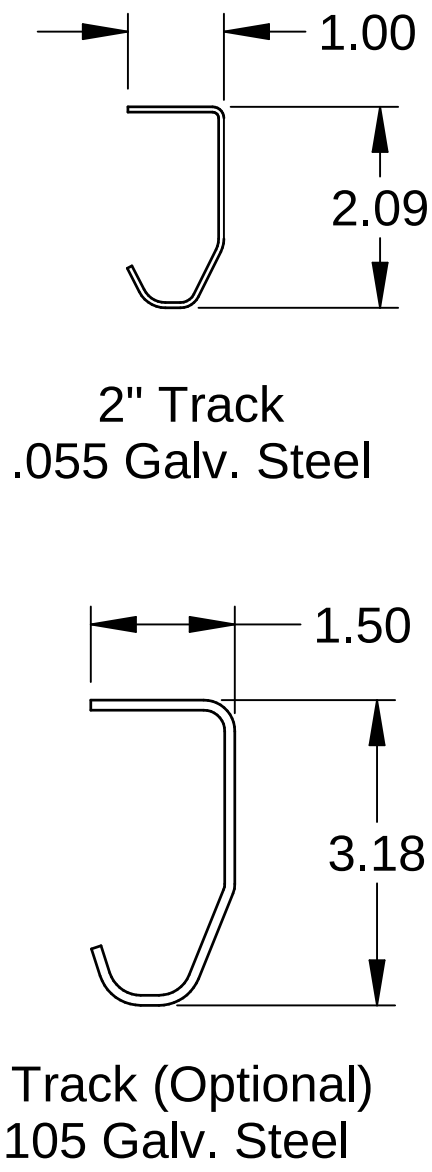
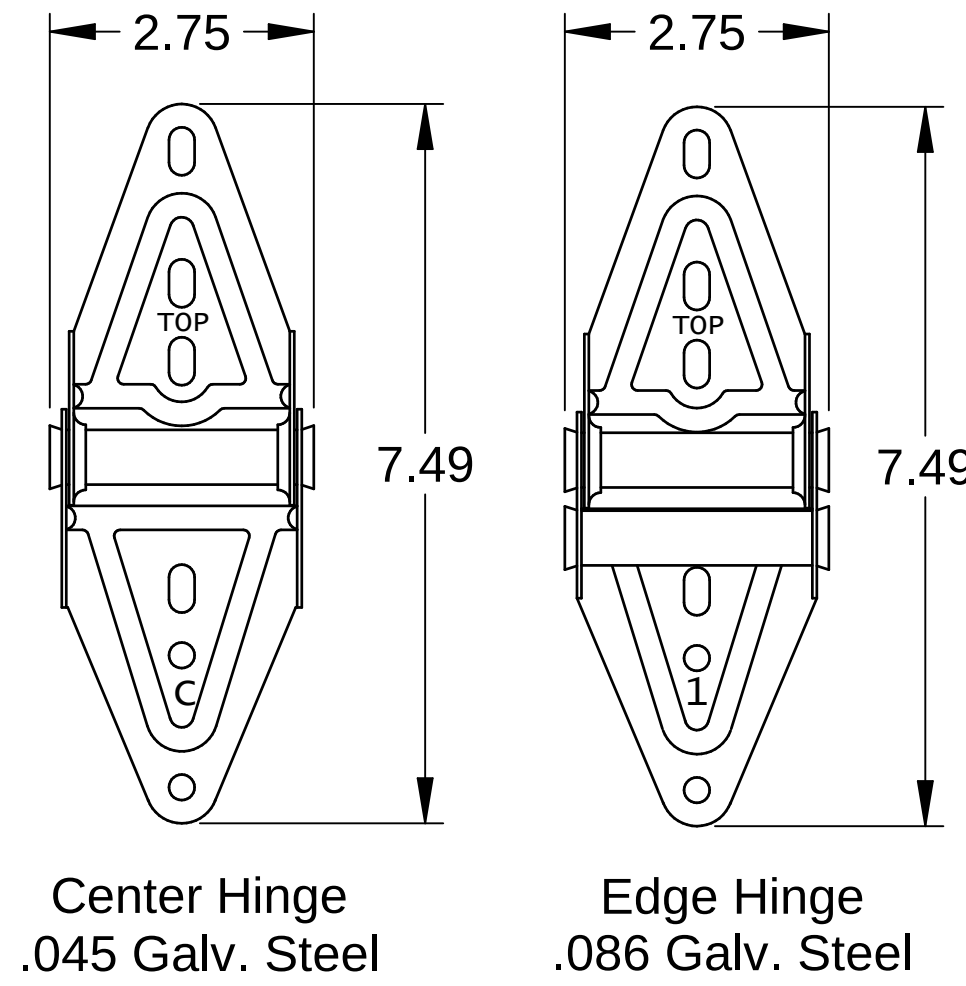
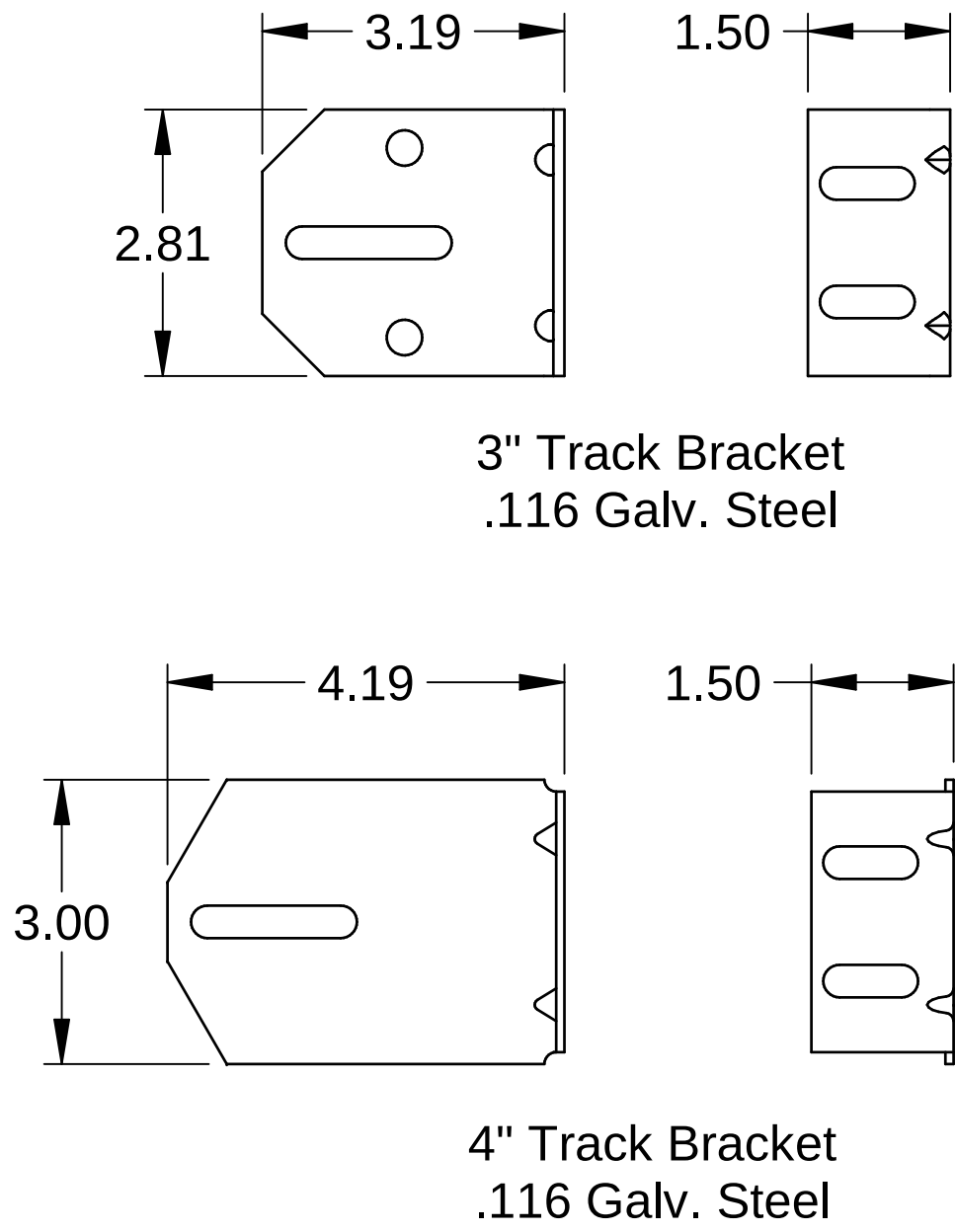
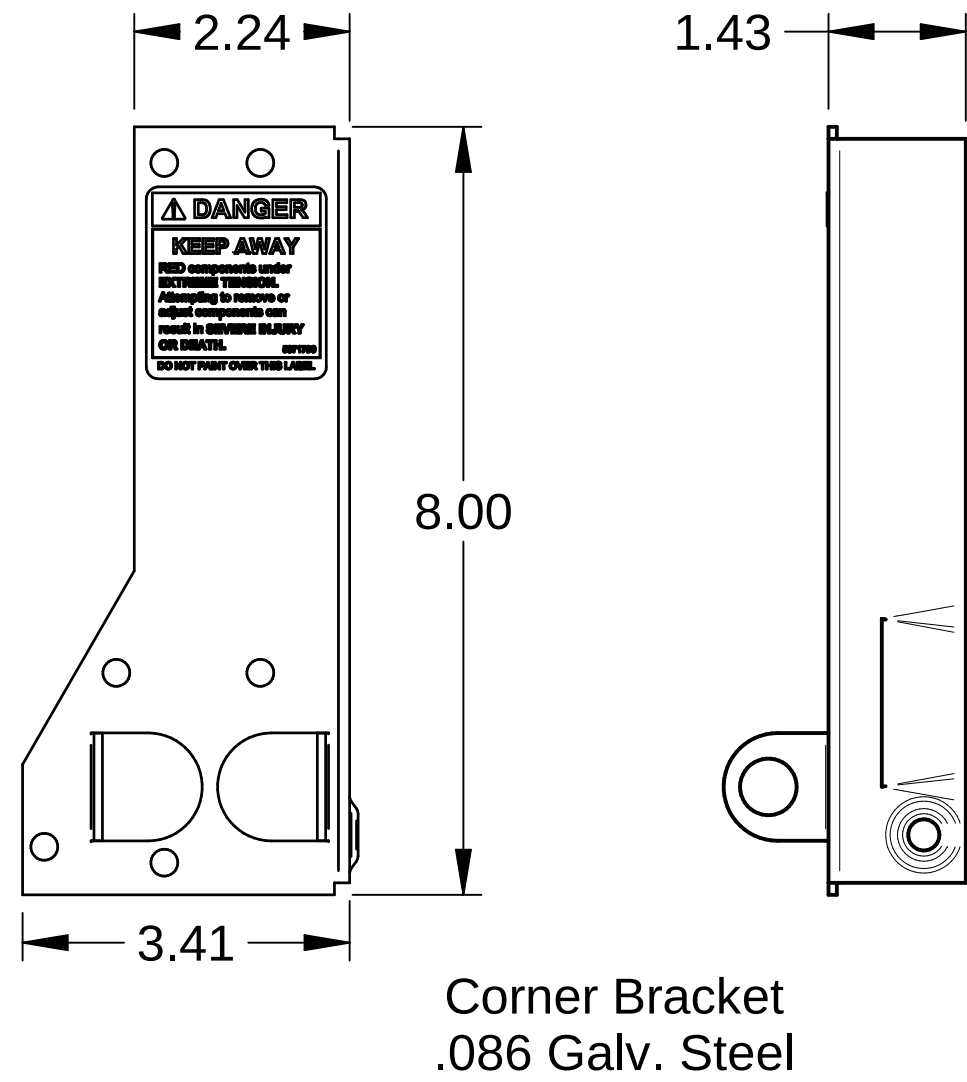
Digitally signed by Scott A Brown
Date: 2023.12.20 14:39:44-06'00'

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



Window Styles

Scale: None	 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Residential Aspen	
Drawn by: G. Wedekind		No. P-2341	Sheet 2
Checked by: G. Wedekind			
Date: 10/31/16			
ECO: 7512.01			Rev D



Scott A. Brown, P.E. Lic. No. 65940
Willett, Hofmann & Associates, Inc.
809 E. 2nd Street, Dixon, IL 61021
FBPE CA Lic. No. 35415
Structural Adequacy for Wind Load

Scott A. Brown

Digitally signed by Scott A Brown
Date: 2023.12.20 14:40:08-06'00'

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Scale: None
Drawn by: G. Wedekind
Checked by: G. Wedekind
Date: 10/31/16
ECO: 7512.01



1101 East River Road
Dixon, IL. 61021

Title: Spec, Wind Load Residential Aspen		
No. P-2341	Sheet 3	Rev D