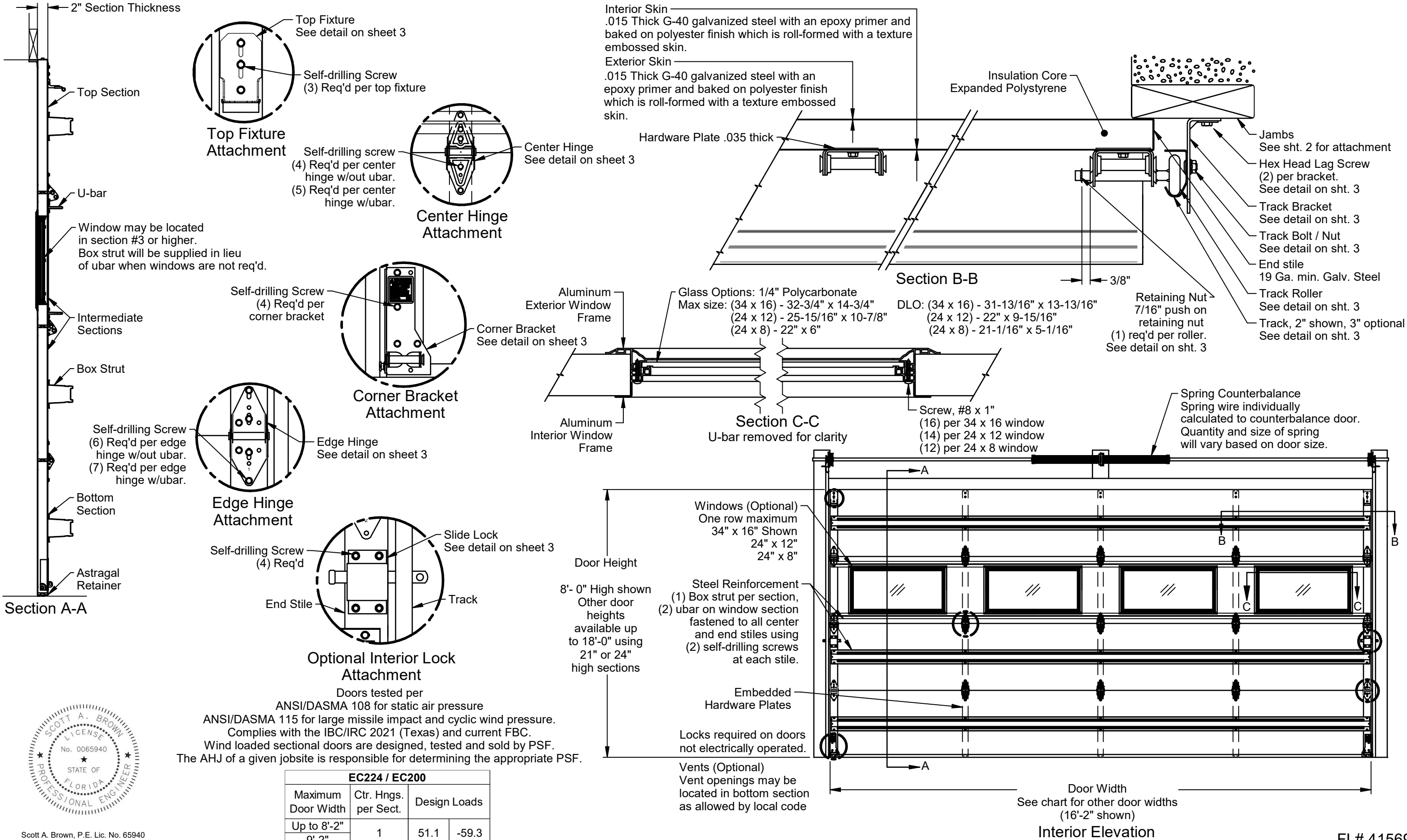


Scott A. Brown, P.E. Lic. No. 65940
Willett Hofmann & Associates, Inc.
809 E 2nd St, Dixon, IL 61021
FBPE CA Lic. No. 31544
Structural Adequacy for Wind Load

Digitally signed by Scott A Brown
Date: 2026.02.17 12:23:06-06'00'

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

Doors tested per
ANSI/DASMA 108 for static air pressure
ANSI/DASMA 115 for large missile impact and cyclic wind pressure.
Complies with the IBC/IRC 2021 (Texas) and current FBC.
Wind loaded sectional doors are designed, tested and sold by PSF.
The AHJ of a given jobsite is responsible for determining the appropriate PSF.

EC224 / EC200			
Maximum Door Width	Ctr. Hngs. per Sect.	Design Loads	
Up to 8'-2"	1	51.1	-59.3
9'-2"	2	41.1	-49.8
10'-2"			
12'-2"			
14'-2"			
16'-2"	3	27.8	-33.1
18'-2"	4	16.8	-18.7
20'-2"			

Rev.	Description	ECO	Date
B	Added IBC/IRC note and drywall/sheathing detail on sht 2. Updated title, P.E. info. Corrected sec. C-C screws callout. 12" negative pressure was 46.4 in error, changed to 49.8.	9383.02	02/16/26
A	New release for production.	8593.03	10/04/22

Scale: None
Drawn by: R. Frey
Checked by: G. Wedekind
Date: 10/04/22
ECO: 8593.03

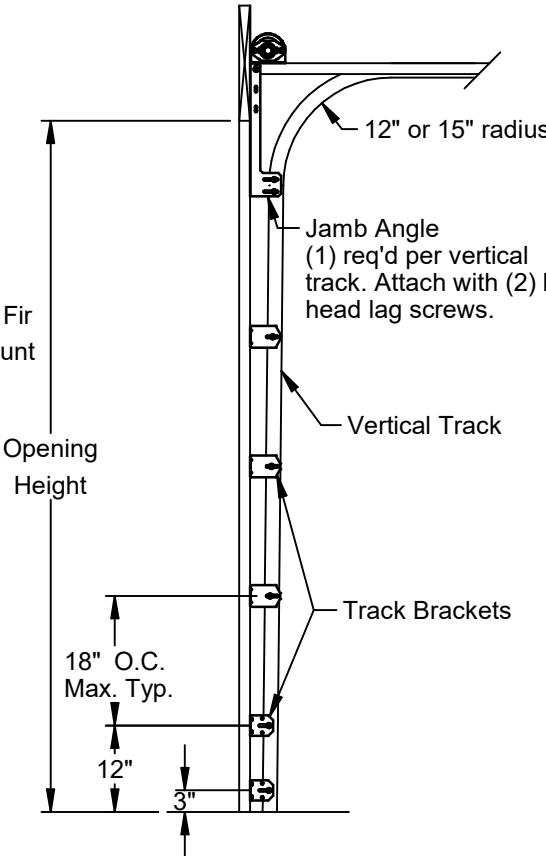
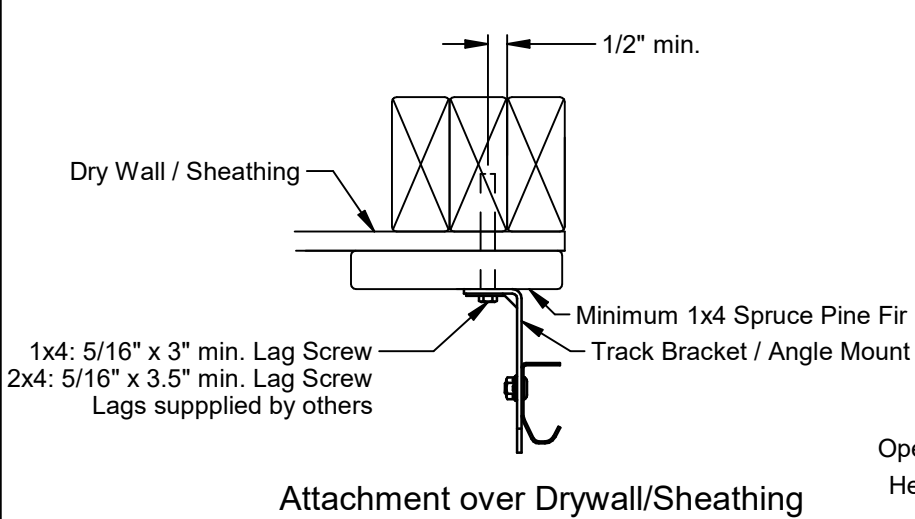
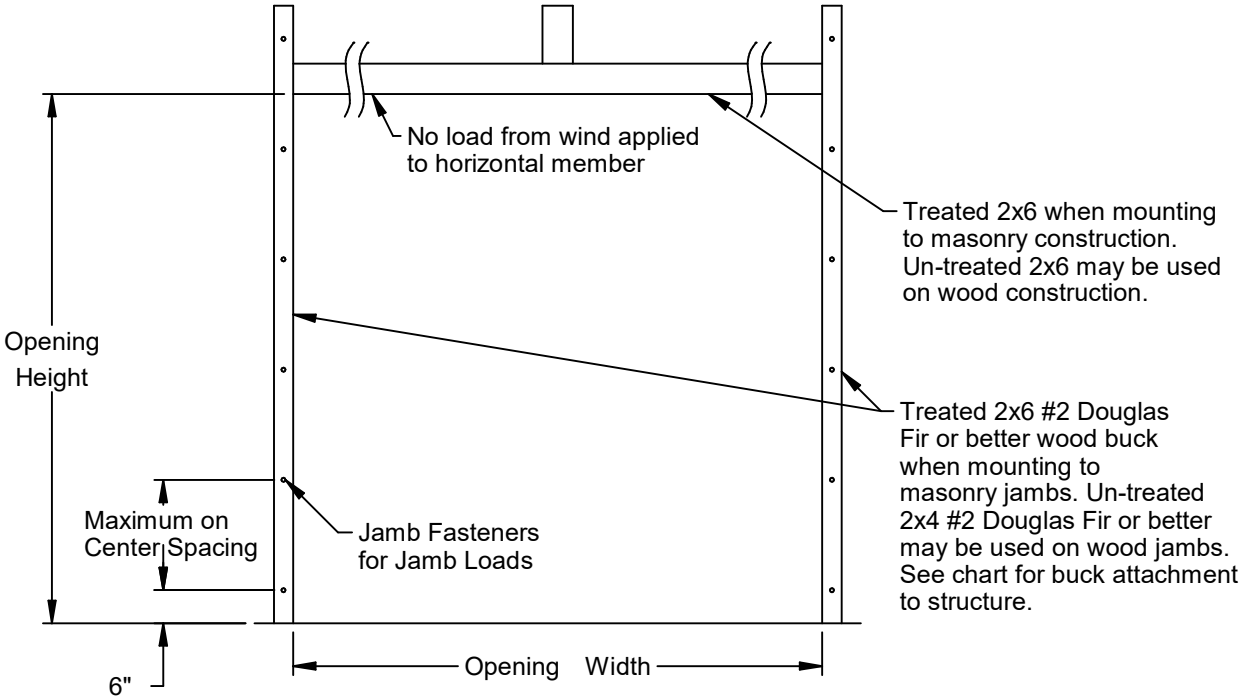


Title: Spec, Wind Load Raynor EnergyCore			
No. P-3406	Sheet 1 of 4	Rev B	

Jamb Attachment Notes:

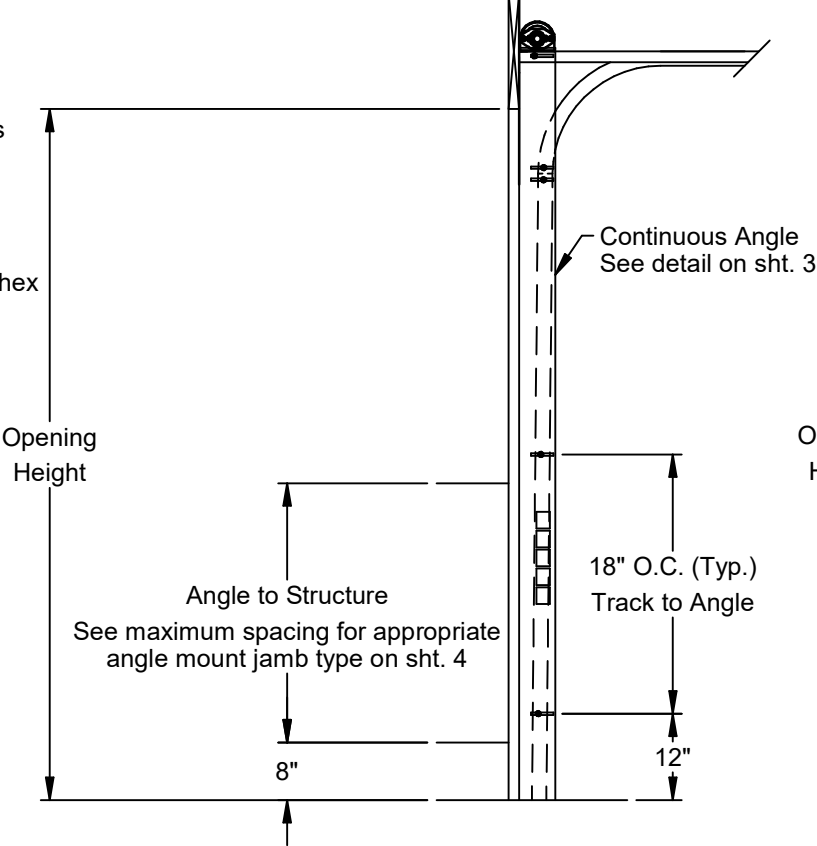
- 1. Maximum Positive Load per Jamb = (12'-2" x 41.1 PSF) / 2 = 251 lbs. per foot.
- 2. Maximum Negative Load per Jamb = (12'-2" x -49.8 PSF) / 2 = 302 lbs. per foot.
- 3. Design of the supporting structure shall be the sole responsibility of the building designer and shall be designed for the jamb loads 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 1/4" pilot hole and 1-1/2" minimum required distance.
- 7. Masonry fasteners by others.

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"	23"	482



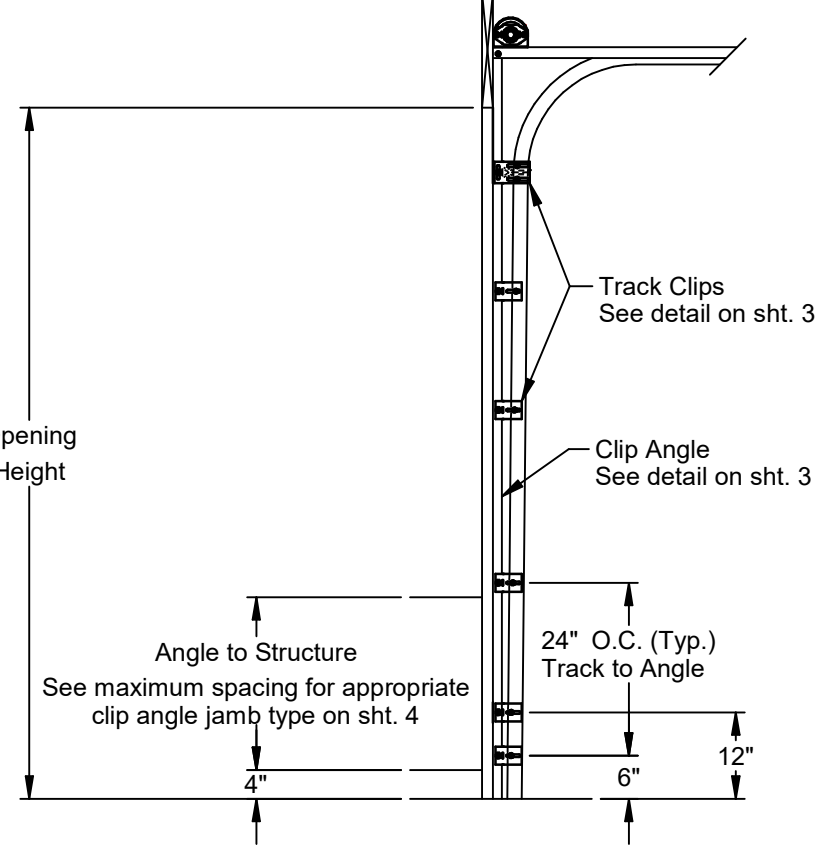
Typical Track Installation
Bracket Mount
Wood Jambs

Normal headroom track shown, low headroom, lift clearance and verical lift track available.



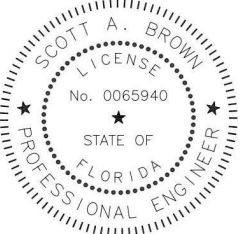
Typical Track Installation
Angle Mount
Wood, Steel or Concrete Jambs

Normal headroom track shown, low headroom, lift clearance and verical lift track available.



Typical Track Installation
Pre-Assembled Clip Angle
Wood, Steel or Concrete Jambs

Normal headroom track shown, lift clearance and verical lift track available.

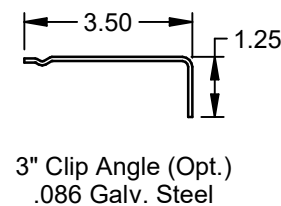
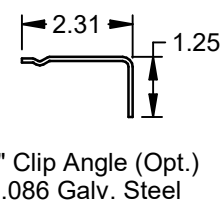
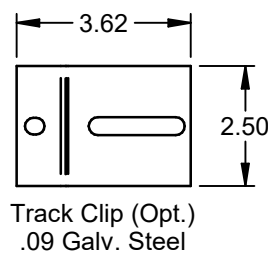
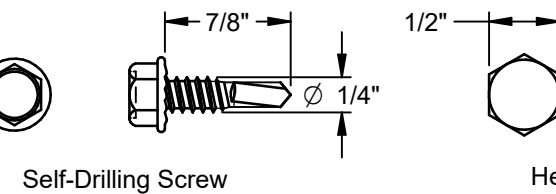
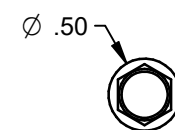
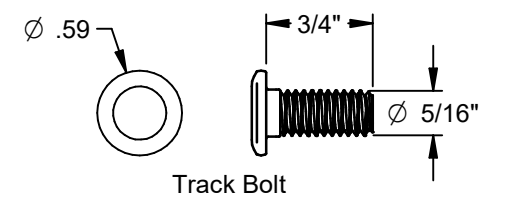
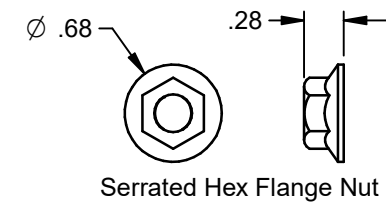
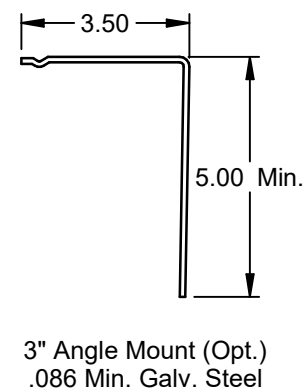
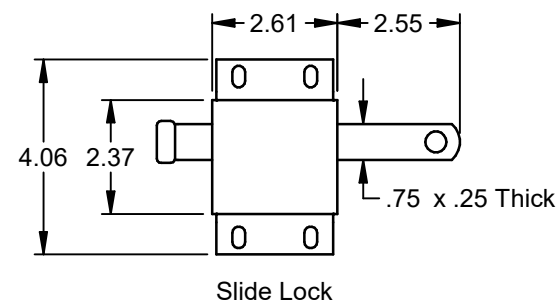
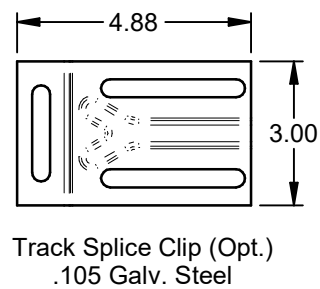
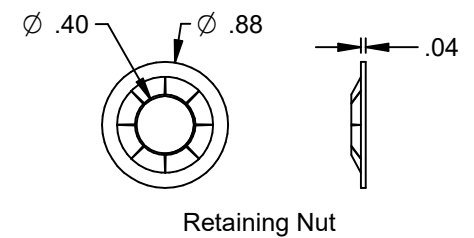
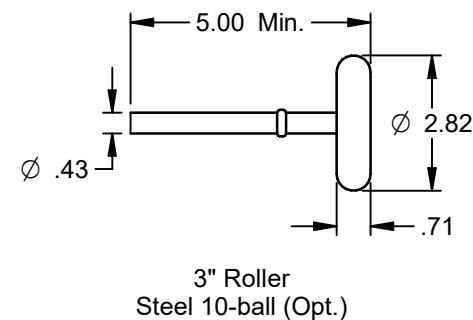
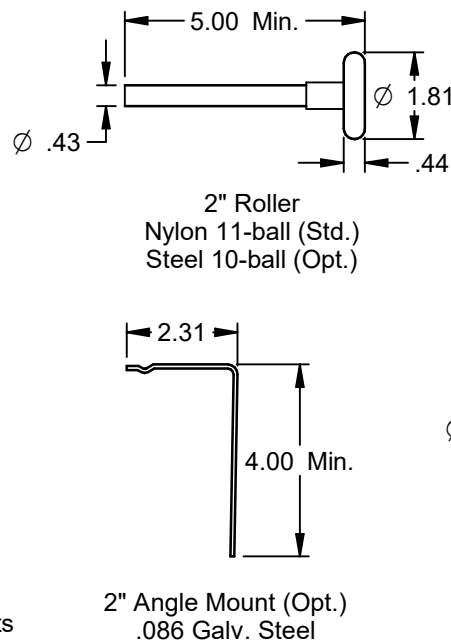
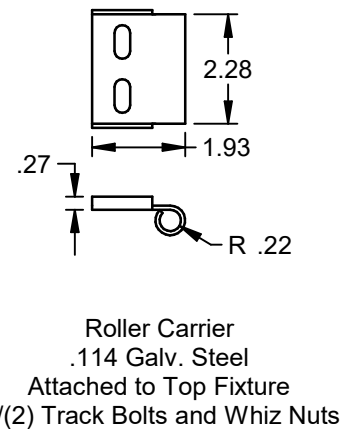
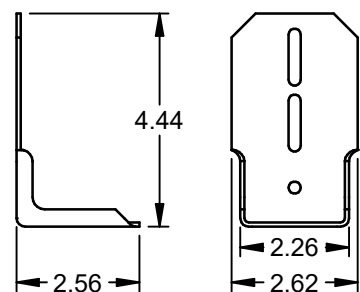
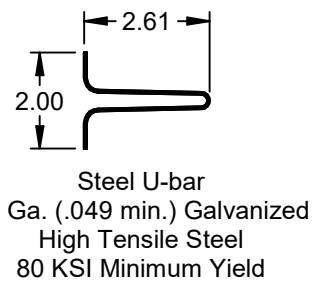
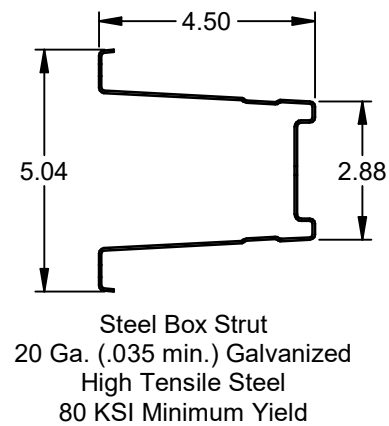
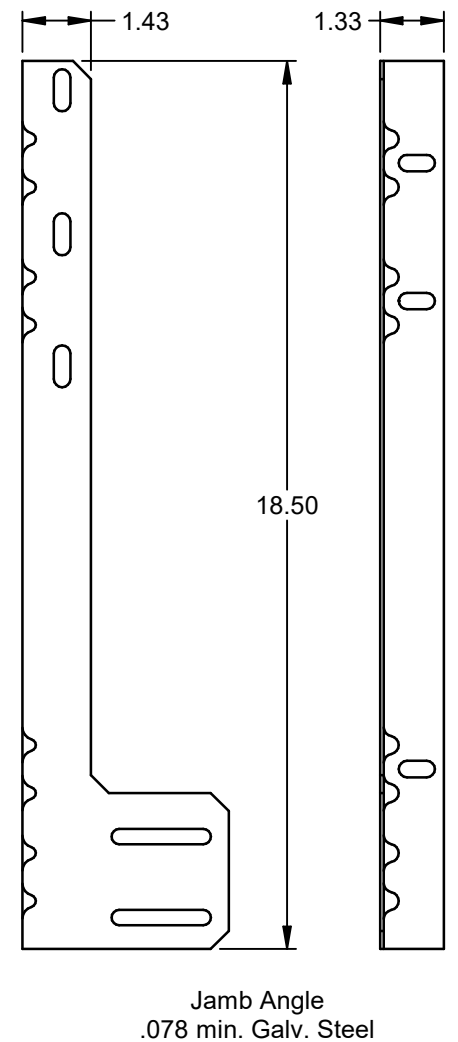
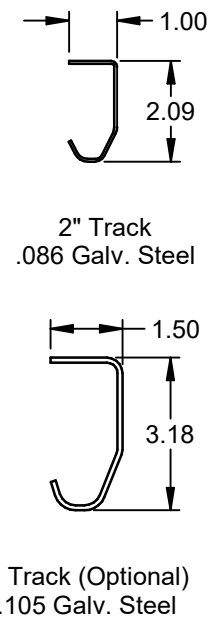
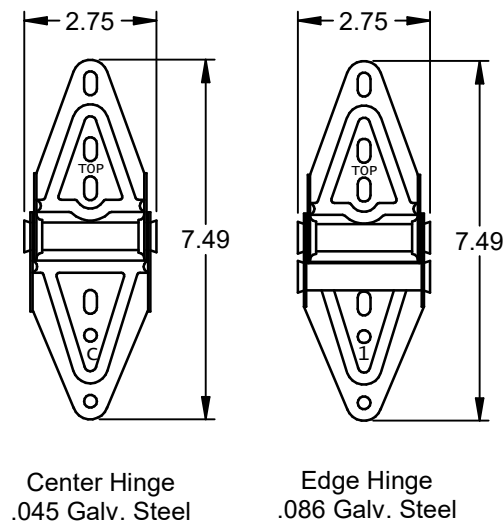
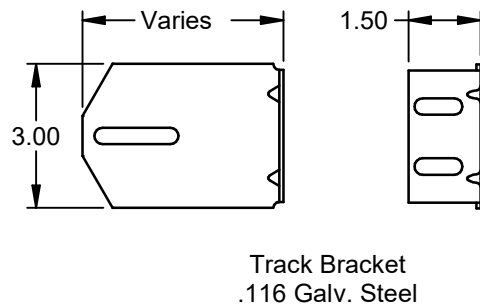
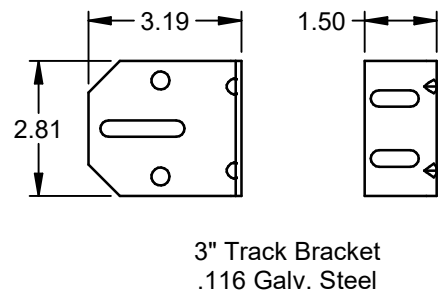
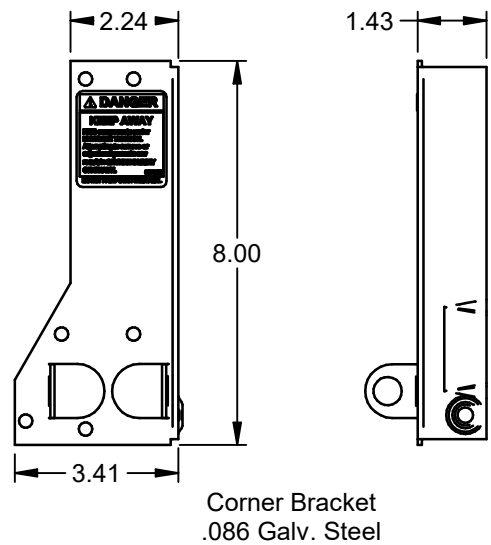


Scott A. Brown, P.E. Lic. No. 65940
Willett Hofmann & Associates, Inc.
809 E 2nd St, Dixon, IL 61021
FBPE CA Lic. No. 31544
Structural Adequacy for Wind Load

Scott A. Brown
Digitally signed by Scott A Brown
Date: 2026.02.17 12:23:32-06'00'

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	 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Raynor EnergyCore	
Drawn by: R. Frey		No. P-3406	Sheet 2
Checked by: G. Wedekind			
Date: 10/04/22			
ECO: 8593.03			Rev B



All parts shown are for illustration purposes only. The actual product may include equivalent parts due to availability.



Scott A. Brown, P.E. Lic. No. 65940
Willett Hofmann & Associates, Inc.
809 E 2nd St, Dixon, IL 61021
FBPE CA Lic. No. 31544
Structural Adequacy for Wind Load

Digitally signed by Scott A Brown
Date: 2026.02.17 12:23:46-06'00'

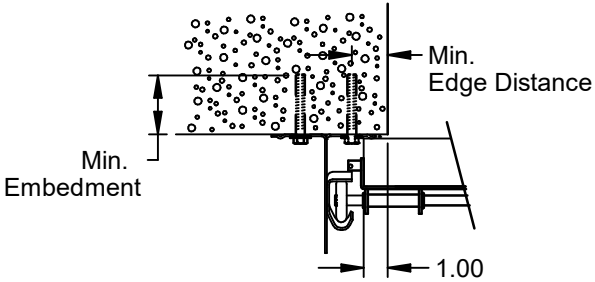
Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Scale: None
Drawn by: R. Frey
Checked by: G. Wedekind
Date: 10/04/22
ECO: 8593.03

Title: Spec, Wind Load Raynor EnergyCore		Sheet 3	Rev B
No. P-3406			

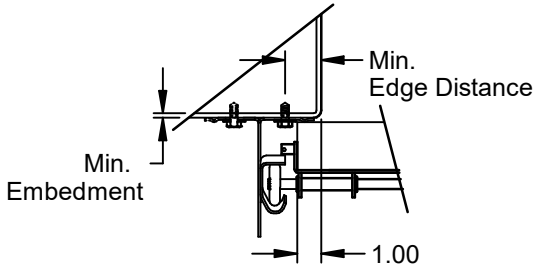
Angle Mount					
Jamb Type	Fastener Type	Minimum Embedment (in.)	Minimum Edge Distance (in.)	Maximum on Center Spacing (in.)	Allowable Tension Load (lbs.)
2500 PSI Min. Concrete	3/8" ITW Trubolt	2-1/2"	2-1/2"	36"	893
	1/4" Tapcon+ (Plus) with 1-1/8" OD Washer	2"	1-5/8"	18"	687
	1/4" x 2-5/8" Screw-Bolt+ with 9/16" OD Washer	2-1/2"	1-1/2"	18"	651
Steel	5/16" x 1" SAE J78, Min. AISI 1022 with 5/16" Washer	3/16"	1-1/2"	36"	971
Wood	5/16" x 1-3/4" Lag with 5/16" Washer	1-1/2"	1-1/2"	12"	352
Grout Filled CMU Block	3/8" Simpson Titen HD	2-3/4"	4"	18"	480

Alternate fasteners may be used if approved by a registered Professional Engineer.



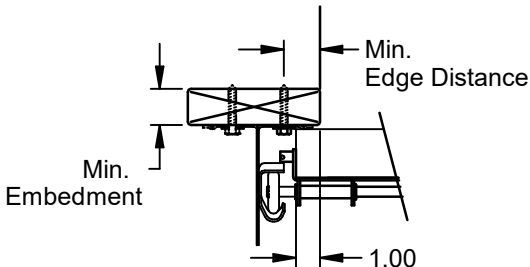
Track Assembly Attachment to 2500 PSI Min. Concrete

2" Angle mount turned-out standard (solid)
2" Angle mount turned-in optional (dashed)
3" Angle mount available



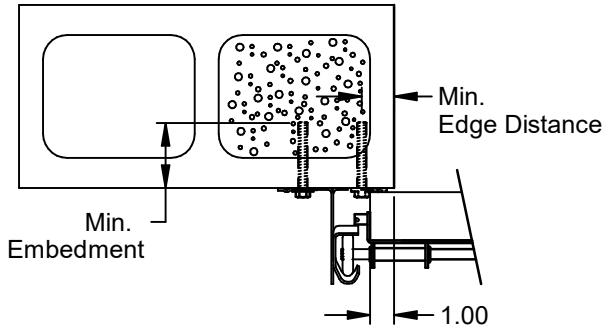
Track Assembly Attachment to 3/16" Min. Steel Jamb

2" Angle mount turned-out standard (solid)
2" Angle mount turned-in optional (dashed)
3" Angle mount available



Track Assembly Attachment to Wood Jamb

2" Angle mount turned-out standard (solid)
2" Angle mount turned-in optional (dashed)
3" Angle mount available



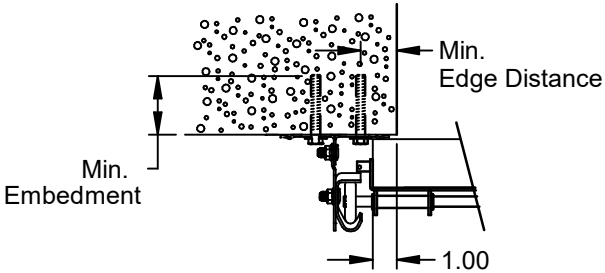
Track Assembly Attachment to Grout Filled CMU Block

2" Angle mount turned-out standard (solid)
2" Angle mount turned-in optional (dashed)
3" Angle mount available

Pre-Assembled Clip Angle					
Jamb Type	Fastener Type	Minimum Embedment (in.)	Minimum Edge Distance (in.)	Maximum on Center Spacing (in.)	Allowable Tension Load (Lbs.)
2500 PSI Min. Concrete	3/8" ITW Trubolt	2-1/2"	2-1/2"	24"	893
	1/4" Tapcon+ (Plus) with 1-1/8" OD Washer	2"	1-5/8"	24"	687
	1/4" x 2-5/8" Screw-Bolt+ with 9/16" OD Washer	2-1/2"	1-1/2"	24"	651
Steel	5/16" x 1" SAE J78, Min. AISI 1022 with 5/16" Washer	3/16"	1-1/2"	24"	971
Wood	5/16" x 1-3/4" Lag with 5/16" Washer	1-1/2"	1-1/2"	*12"	352
Grout Filled CMU Block	3/8" Simpson Titen HD	2-3/4"	4"	*12"	480

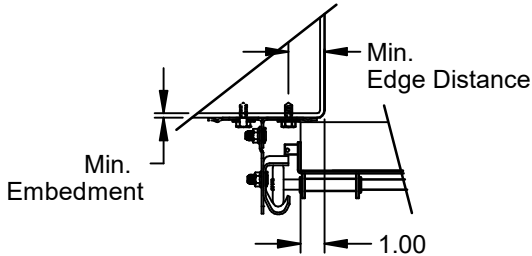
* Field drilling req'd.

Alternate fasteners may be used if approved by a registered Professional Engineer.



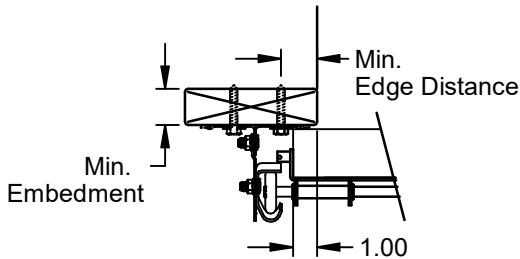
Pre-Assembled Track Assembly Attachment to 2500 PSI Min. Concrete

2" Clip angle turned-in standard (solid)
2" Clip angle turned-out optional (dashed)
3" Clip angle available



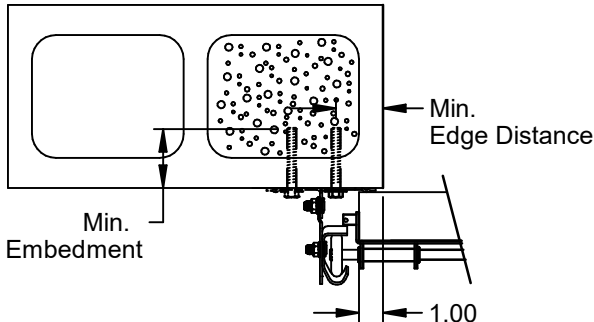
Pre-Assembled Track Assembly Attachment to 3/16" Min. Steel Jamb

2" Clip angle turned-in standard (solid)
2" Clip angle turned-out optional (dashed)
3" Clip angle available



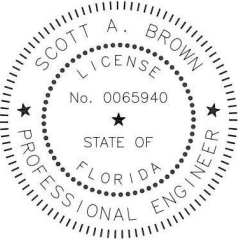
Pre-Assembled Track Assembly Attachment to Wood Jamb

2" Clip angle turned-in standard (solid)
2" Clip angle turned-out optional (dashed)
3" Clip angle available



Pre-Assembled Track Assembly Attachment to Grout Filled CMU Block

2" Clip angle turned-in standard (solid)
2" Clip angle turned-out optional (dashed)
3" Clip angle available



Scott A. Brown, P.E. Lic. No. 65940
Willett Hofmann & Associates, Inc.
809 E 2nd St, Dixon, IL 61021
FBPE CA Lic. No. 31544
Structural Adequacy for Wind Load

Digitally signed by Scott A Brown
Date: 2026.02.17 12:24:02-06'00'

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	 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Raynor EnergyCore	
Drawn by: R. Frey		No. P-3406	Sheet 4
Checked by: G. Wedekind			
Date: 10/04/22			
ECO: 8593.03			Rev B