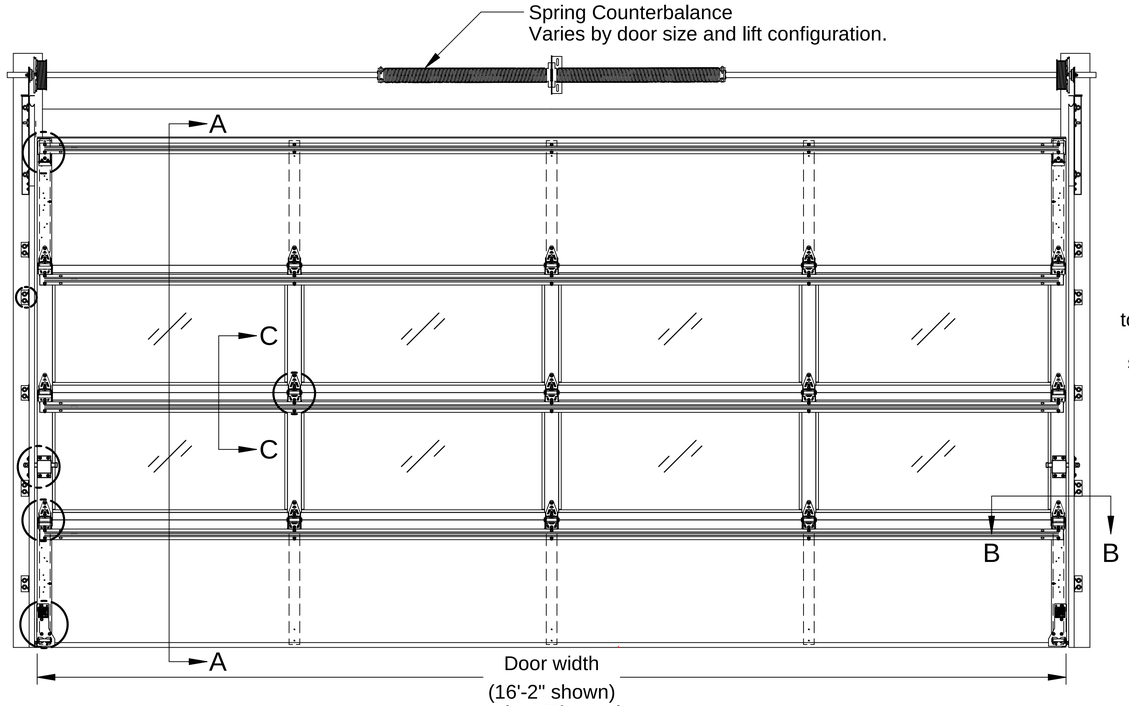
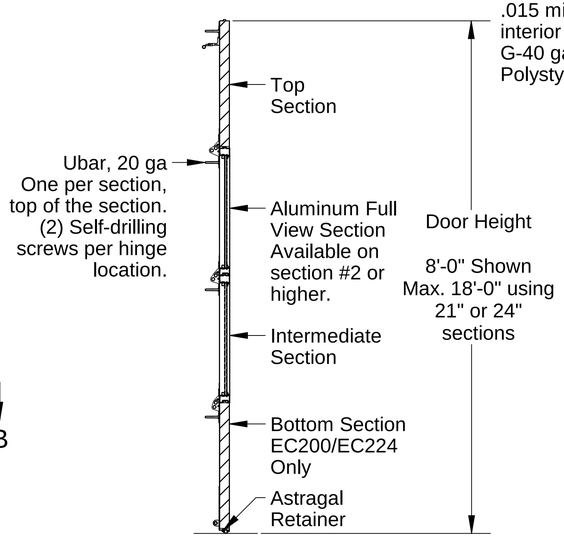
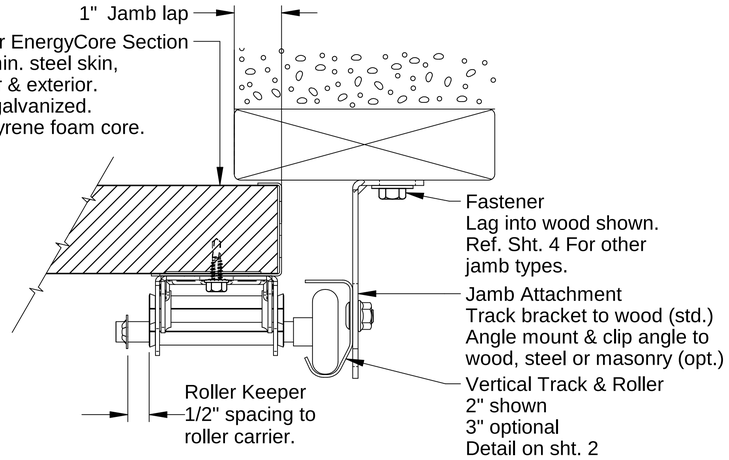


Interior Elevation

Shown with two aluminum full view sections. One full view section minimum.
Full view sections available on every section except bottom section.

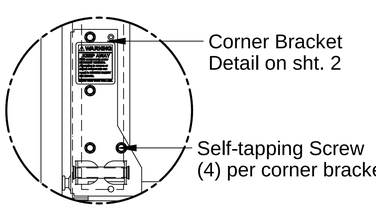


Section A-A

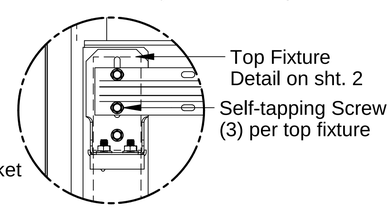


Section B-B

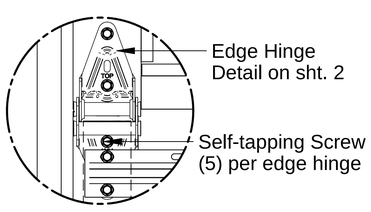
Trussing omitted for clarity.



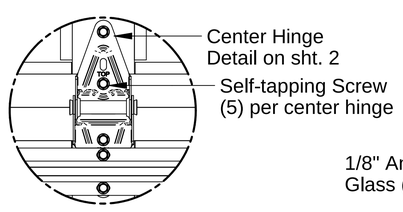
Corner Bracket Attachment



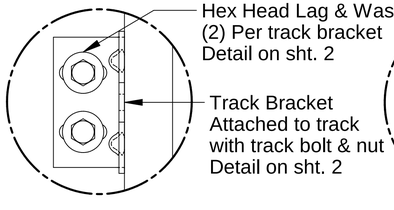
Top Fixture Attachment



Edge Hinge Attachment

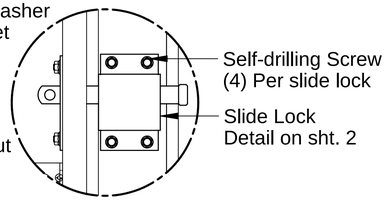


Center Hinge Attachment



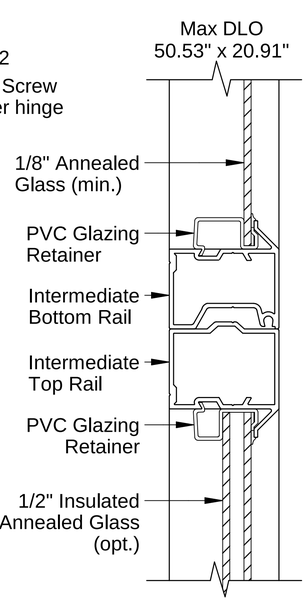
Track Bracket Attachment

Alternate mounting details on sht. 4



Slide Lock Attachment

Required on doors without operators.



Section C-C

Doors tested per
ANSI/DASMA 108 for static air pressure

EC200 / EC224				
Max. Section Width	Max. Opening Width	Stiles	Design Load	
8'-2"	8'-0"	1	31.2	-36.9
9'-2"	9'-0"		27.7	-32.8
10'-2"	10'-0"	2	21.0	-23.8
12'-2"	12'-0"		17.5	-19.8
14'-2"	14'-0"	3	11.9	-13.3
16'-2"	16'-0"		10.4	-11.6

FL#20374

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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: 2024.02.26 14:15:16-06'00'

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

Wind loaded sectional doors are designed, tested, and sold by PSF. The AHJ of a given jobsite is responsible for determining the appropriate PSF.

Complies with the Wind Load requirements of the IBC/IRC 2021

Rev.	Description	ECO	Date
A	New release for production.	8937.01	02/29/24

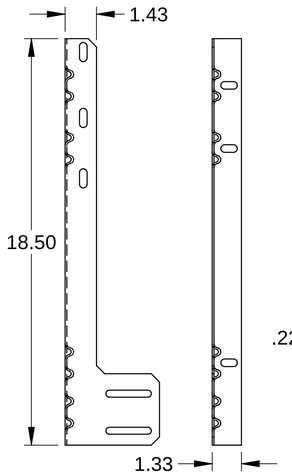
Scale: None
Drawn by: J. Poitras
Checked by: R. Frey
Date: 02/29/24
ECO: 8937.01

RAYNOR
1101 East River Road
Dixon, IL. 61021

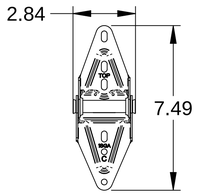
Title: Spec, Wind Load
Raynor EnergyCore

No. P-2608 | Sheet 1 of 4 | Rev A

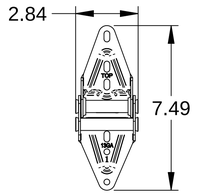
Installation Hardware



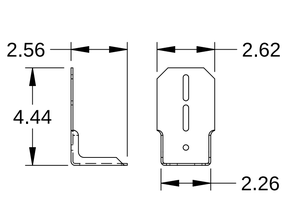
Jamb Angle
.078 Galv. Steel (14 ga.)



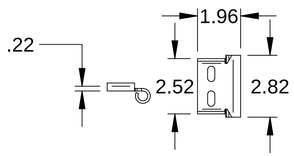
Center Hinge
.045 Galv. Steel (18 ga.)



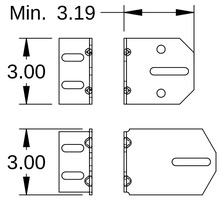
Edge Hinge
.086 Galv. Steel (13 ga.)



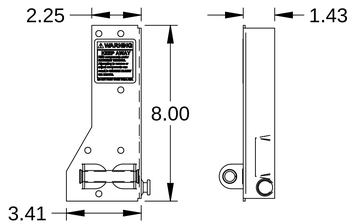
Top Fixture
.086 Galv. Steel (13 ga.)



Roller Carrier
.114 Galv. Steel (11 ga.)

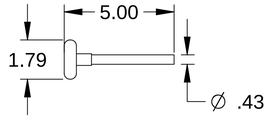


Track Bracket
.116 Galv. Steel (11 ga.)

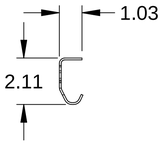


Corner Bracket
.086 Galv. Steel (13 ga.)

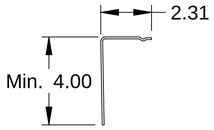
Slide Lock



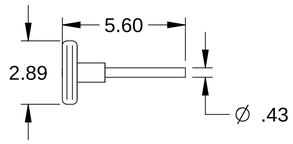
2" Roller
Nylon 10-ball (Std.)
Steel 10-ball (Opt.)



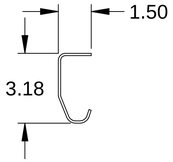
2" Track
.055 Galv. Steel (16 ga.)



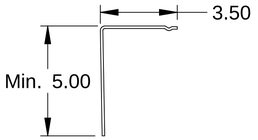
2" Angle Mount (Opt.)
.086 Galv. Steel (13 ga.)



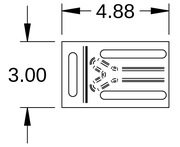
3" Roller
Steel 10-ball (Opt.)



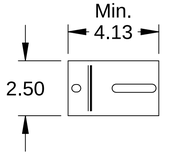
3" Track (Opt.)
.105 Galv. Steel (12 ga.)



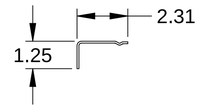
3" Angle Mount (Opt.)
.086 Min. Galv. Steel (13 ga.)

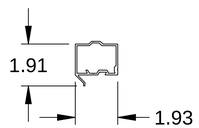


Track Splice Clips (Opt.)
.105 Galv. Steel (12 ga.)

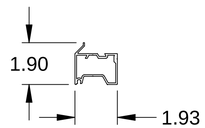


Track Clips (Opt.)
.09 Galv. Steel (13 ga.)

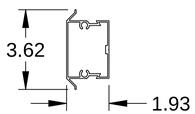




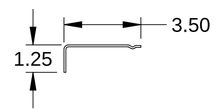
Intermediate Top Rail
.080 Extruded Aluminum



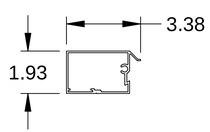
Intermediate Bottom Rail
.080 Extruded Aluminum



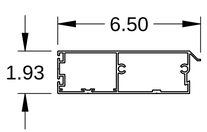
Center Stile
.080 Extruded Aluminum



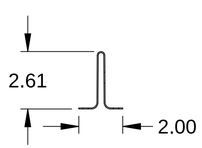
3" Clip Angle (Opt.)
.086 Galv. Steel (13 ga.)



End Stile
.080 Extruded Aluminum

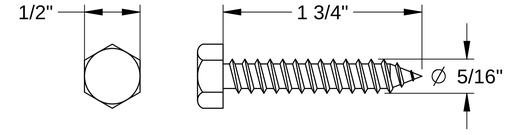


Double End Stile (Opt.)
.080 Extruded Aluminum

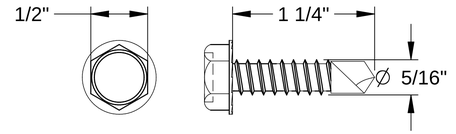


Steel U-bar
.035 (20 ga) Galvanized
High Tensile Steel
80 KSI Min. Yield

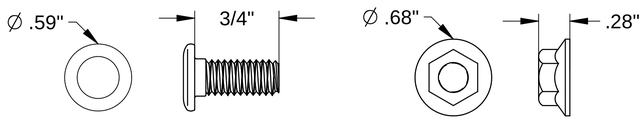
Fasteners & Small Hardware



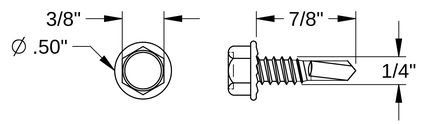
Hex Head Lag Screw
Wood jambs, all jamb attachments.
Install with supplied washer.
Spacing & embedment specifications on sht. 4



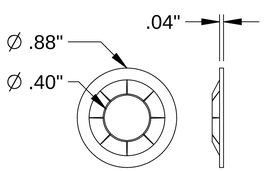
5/16" x 1-1/4" Self Drilling Screw
Angle mount to steel jambs.
Spacing & embedment specifications on sht. 4



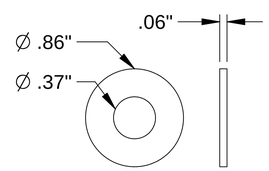
Track Bolt & Serrated Hex Flange Nut
Attach track to jamb attachment with track bolt and hex flange nut. (1) each required per punch.
(2) Track bolts and (2) nuts connect top fixture and roller carrier.



1/4" x 7/8" Self Drilling Screw
Attach hardware to sections.
Quanity & location on sht. 1 elevation details.



Roller Keeper
(1) per roller.
Install at 1/2" space to roller carrier.
Ref. Section B-B on sht. 1



Washer
(1) per hex head lag

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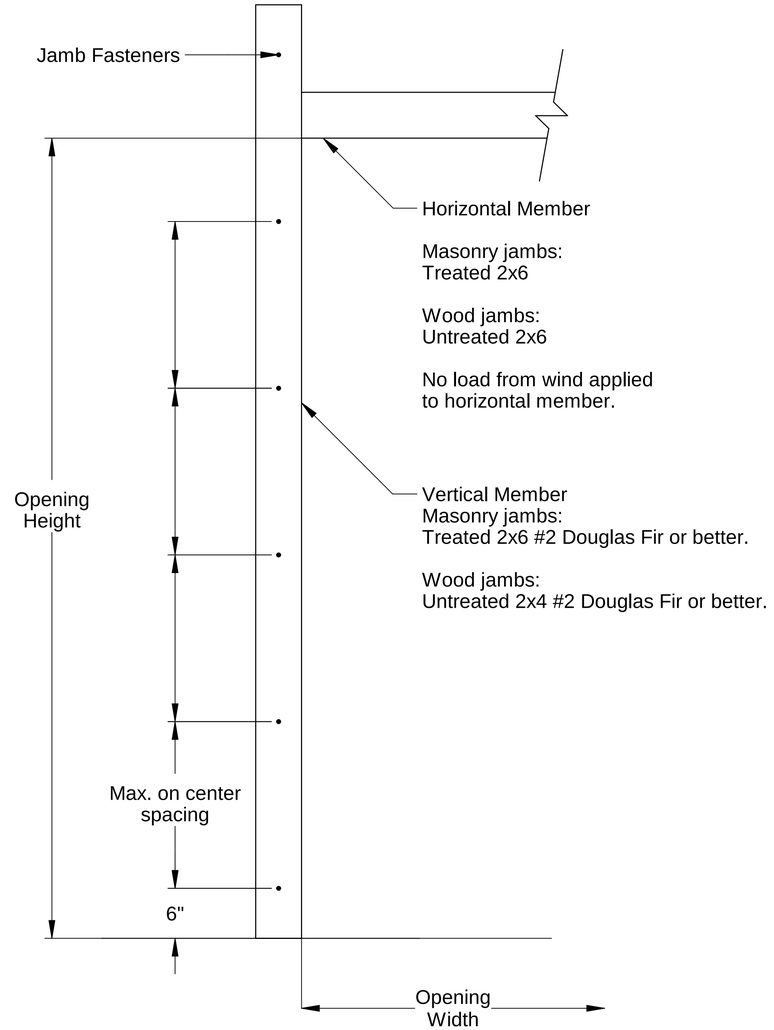
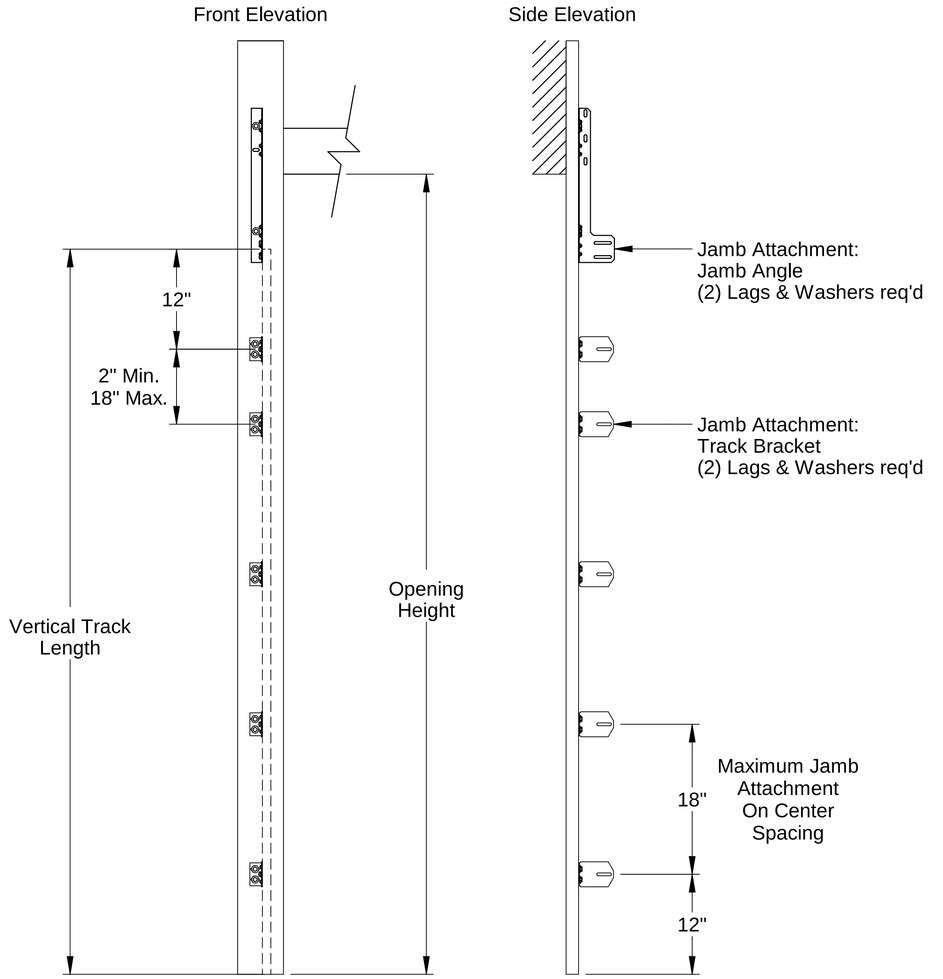
Willett, Hofmann & Associates, Inc.
809 E. 2nd Street, Dixon, IL 61021
FBPE CA Lic. No. 35415
Structural Adequacy for Wind Load

Digitally signed by Scott A Brown
Date: 2024.02.26 14:15:37-06'00'

Scale: None	RAYNOR	Title: Spec, Wind Load Raynor EnergyCore	
Drawn by: J. Poitras			
Checked by: R. Frey			
Date: 02/29/24	1101 East River Road Dixon, IL. 61021	No. P-2608	Sheet 2 / Rev A
ECO: 8937.01			





Track Bracket
To Wood Jambs

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"	24"	482

1. Maximum Positive Load per Jamb = (8'-2" x 31.2 PSF) / 2 = 128 lbs. per foot.
2. Maximum Negative Load per Jamb = (8'-2" x -36.9 PSF) / 2 = 151 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. DASMA Technical Data Sheet TDS-161 may be used for alternate jamb attachments. Alternate jamb attachments may be used if approved by a registered Professional Engineer.
5. 3/8" diameter lag screws required 1/4" pilot hole and 1-1/2" minimum required distance.
6. Masonry fasteners by others.
7. Garage doors evaluated as attached to enclosed buildings.
8. Garage doors evaluated as components and clading.

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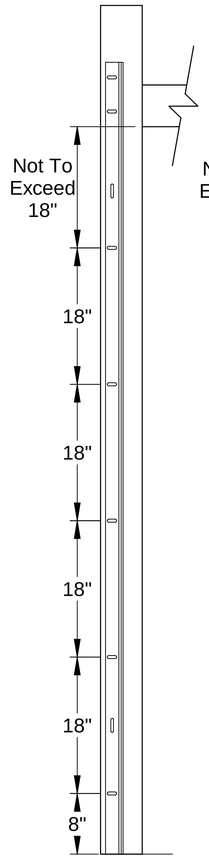
FBPE CA Lic. No. 35415
Structural Adequacy for Wind Load

Digitally signed by Scott A Brown
Date: 2024.02.26 14:15:59-06'00'

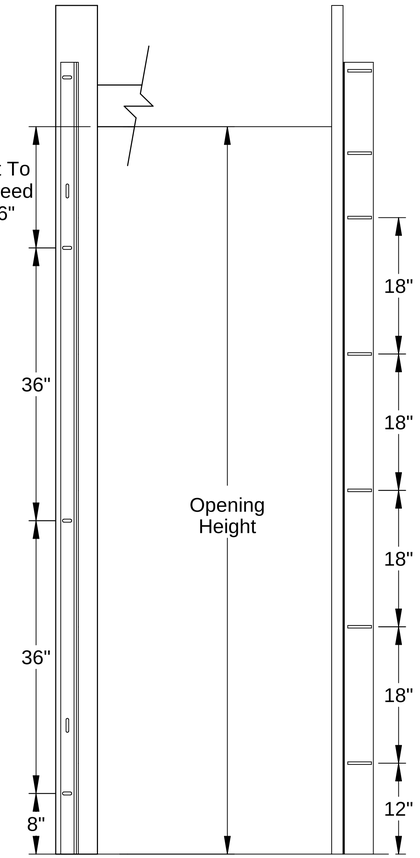
Scale: None	RAYNOR 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Raynor EnergyCore	
Drawn by: J. Poitras			
Checked by: R. Frey			
Date: 02/29/24		No. P-2608	Sheet 3 / Rev A
ECO: 8937.01			

Angle Mount to Structure: Wall Leg Spacing



Wood Jambs
18" O.C.

Angle Mount to Structure: Track Leg Spacing



Steel Jambs
Masonry Jambs
36" O.C.

Alternate Fastener Charts

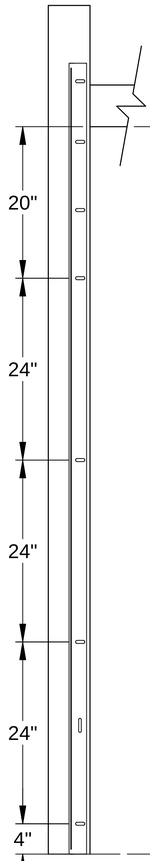
Angle Mount					
Jamb Type	**Fastener Type**	**Minimum Embedment (in.)**	**Minimum Edge Distance (in.)**	**Maximum on Center Spacing (in.)**	**Allowable Tension Load (lbs.)**
2500 PSI Min. Concrete	3/8" ITW Trubolt	2-1/2"	2-1/2"	36"	893
	1/4" Tapcon+ (Plus) with 1-1/8" OD Washer	2"	1-5/8"	36"	687
	1/4"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

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

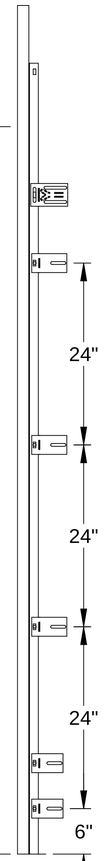
Clip Angle					
Jamb Type	**Fastener Type**	**Minimum Embedment (in.)**	**Minimum Edge Distance (in.)**	**Maximum on Center Spacing (in.)**	**Allowable Tension Load (Lbs.)**
2500 PSI Min. Concrete	3/8" ITW Trubolt	2-1/2"	2-1/2"	24"	893
	1/4" Tapcon+ (Plus) with 1-1/8" OD Washer	2"	1-5/8"	24"	687
	1/4" 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"	24"	352
Grout Filled CMU Block	3/8" Simpson Titen HD	2-3/4"	4"	24"	480

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

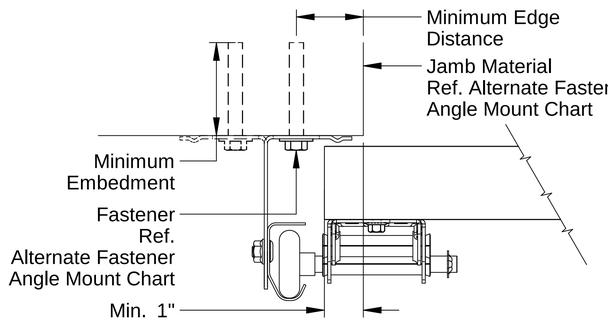
Clip Angle to Structure: Wall Leg Spacing



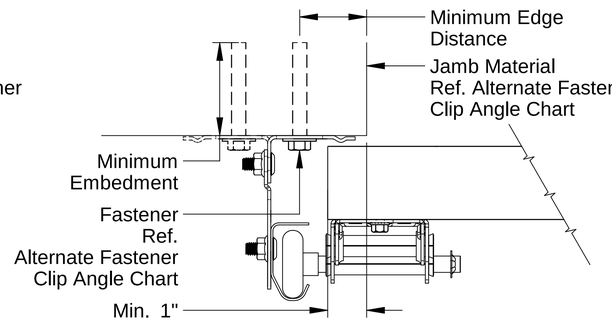
Clip Angle to Structure: Track Leg Spacing



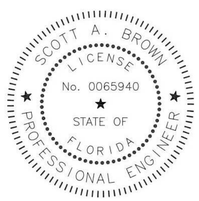
All Jambs
24" O.C. Supplied



Angle Mount To Structure
2" Angle Shown
Leg-in solid, leg-out dashed
3" Available



Clip Angle To Structure
2" Angle Shown
Leg-in solid, leg-out dashed
3" Available



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

Digitally signed by Scott A Brown
Date: 2024.02.26 14:16:19-06'00'

Scale: None	RAYNOR 1101 East River Road Dixon, IL. 61021	Title: Spec, Wind Load Raynor EnergyCore	
Drawn by: J. Poitras			
Checked by: R. Frey			
Date: 02/29/24		No. P-2608	Sheet 4 / Rev A
ECO: 8937.01			