

This product has been evaluated per ANSI/DASMA 108 for static air pressure.

This product has been evaluated per ANSI/DASMA 115 for large missile impact and cyclic wind pressure.

Jamb bracket quantities shown are for use with grade 2 or better southern pine jambs.

Supporting structural elements are to be designed by a professional engineer for specific wind loads.

Door Widths Up To	Design Pressures		End Stile	Model Number				Impact Resistant
	+ psf	- psf		RA 360i SERIES		CA 320i SERIES		
				Minimum Stiles	Center Hinges	Minimum Stiles	Center Hinges	
12'-2"	31.3	-34.9	Double	2	2	3	3	YES
14'-2"	31.3	-34.9	Double	3	3	3	3	YES
16'-2"	31.3	-34.9	Double	3	3	4	4	YES

This product is available in narrower sizes with the same PSF and constructed as shown. This product is designed and sold by PSF. The AHJ or Engineer of Record is responsible for determining the PSF required for any given site.

Door Height	Total # of Sections	Total # of Struts		Jamb Brkts per Side
		E Strut	Cap Strut	
6'-0"	3	2	2	5
6'-0"	4	2	3	5
6'-3"	4	2	3	5
6'-6"	4	2	3	5
6'-9"	4	2	3	6
7'-0"	4	2	3	6
7'-3"	4	2	3	6
7'-6"	4	2	3	6
7'-6"	5	2	4	6
7'-9"	4	2	3	6
7'-9"	5	2	4	6
8'-0"	4	2	3	6
8'-0"	5	2	4	6

**NOTICE:** These drawings are a supplement to the installation instructions for a standard door and only covers those procedures that vary from standard door installation. If these specific procedures are not followed, the door may not perform as designed.


Maximum section height is 27 in.  
 Maximum door height is 20 ft.  
 All doors, even those above the tested height, are available with jamb brackets or commercial full angle. The maximum spacing of the jamb brackets/track clips should be maintained.

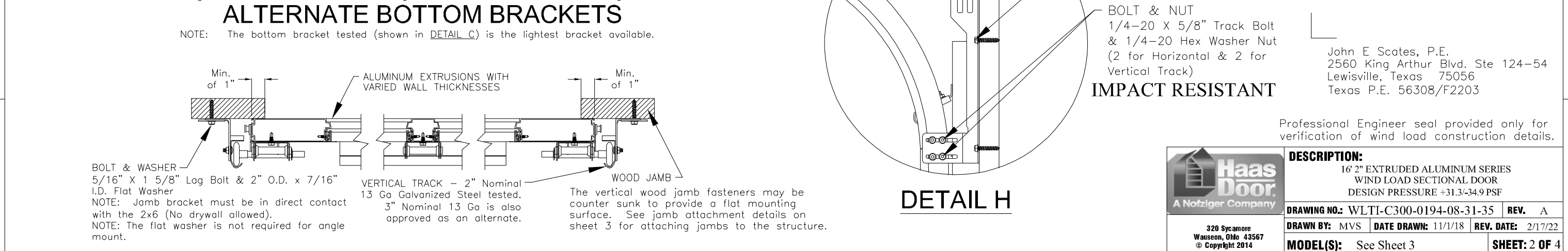
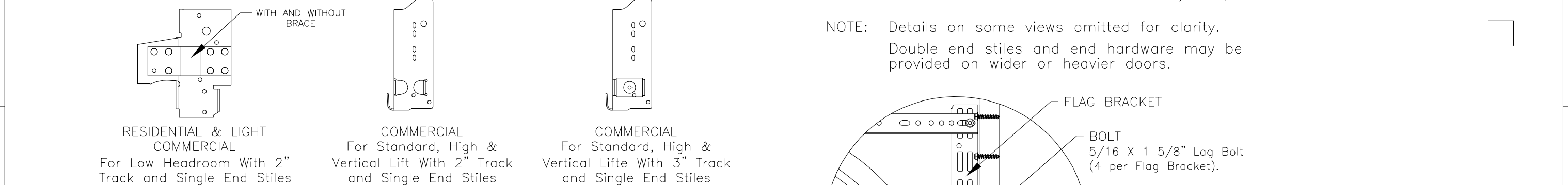
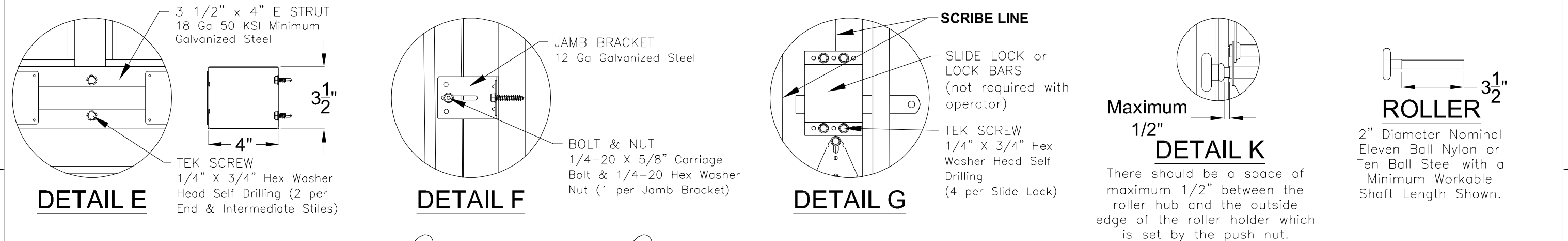
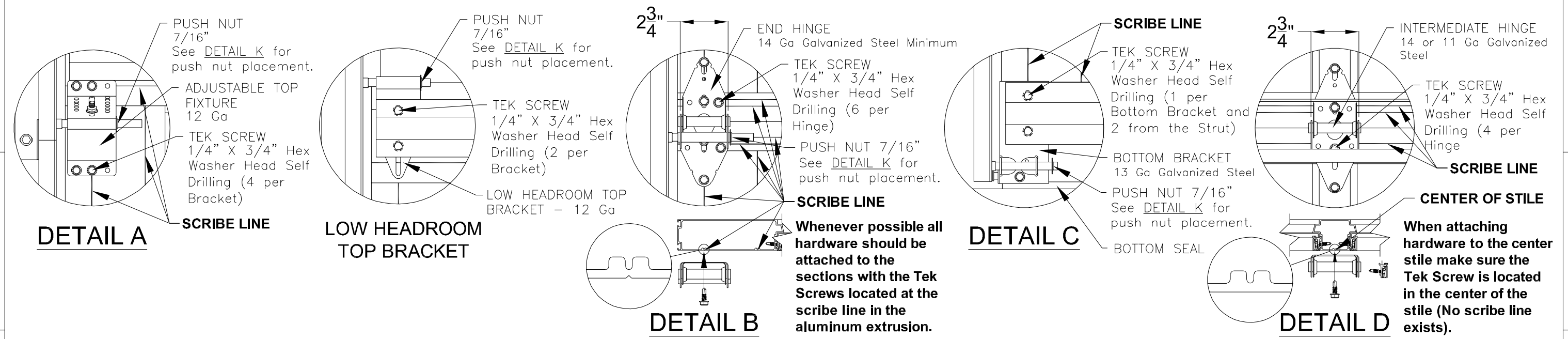
**IMPACT RESISTANT**

COMPLIES WITH IBC/IRC 2018

John E. Scates, P.E.  
 2560 King Arthur Blvd. Ste 124-54  
 Lewisville, Texas 75056  
 Texas P.E. 56308/F2203

Professional Engineer seal provided only for verification of wind load construction details.

 320 Sycamore Wauseon, Ohio 43567 © Copyright 2014	<b>DESCRIPTION:</b> 16' 2" EXTRUDED ALUMINUM SERIES WIND LOAD SECTIONAL DOOR DESIGN PRESSURE +31.3/-34.9 PSF	
	<b>DRAWING NO.:</b> WLTl-C300-0194-08-31-35	<b>REV.:</b> A
	<b>DRAWN BY:</b> MVS	<b>DATE DRAWN:</b> 11/1/18
	<b>MODEL(S):</b> See Sheet 3	<b>REV. DATE:</b> 2/17/22
		<b>SHEET: 1 OF 4</b>

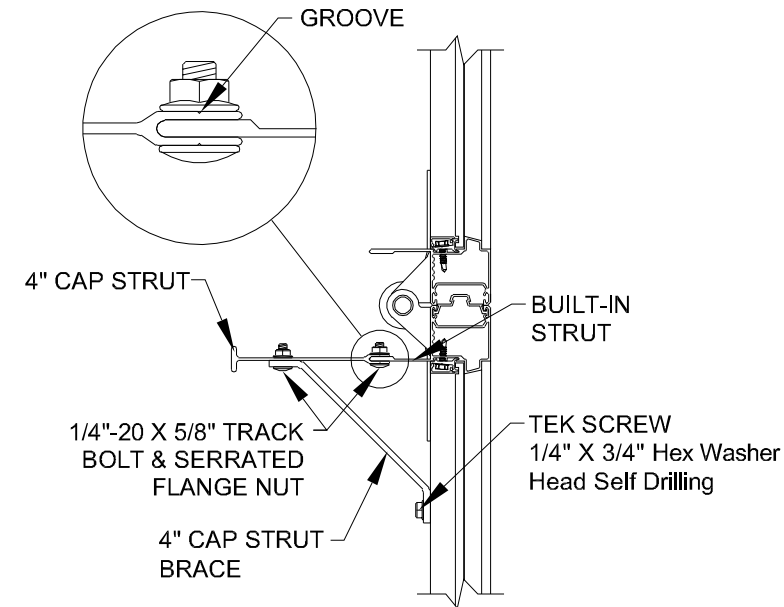
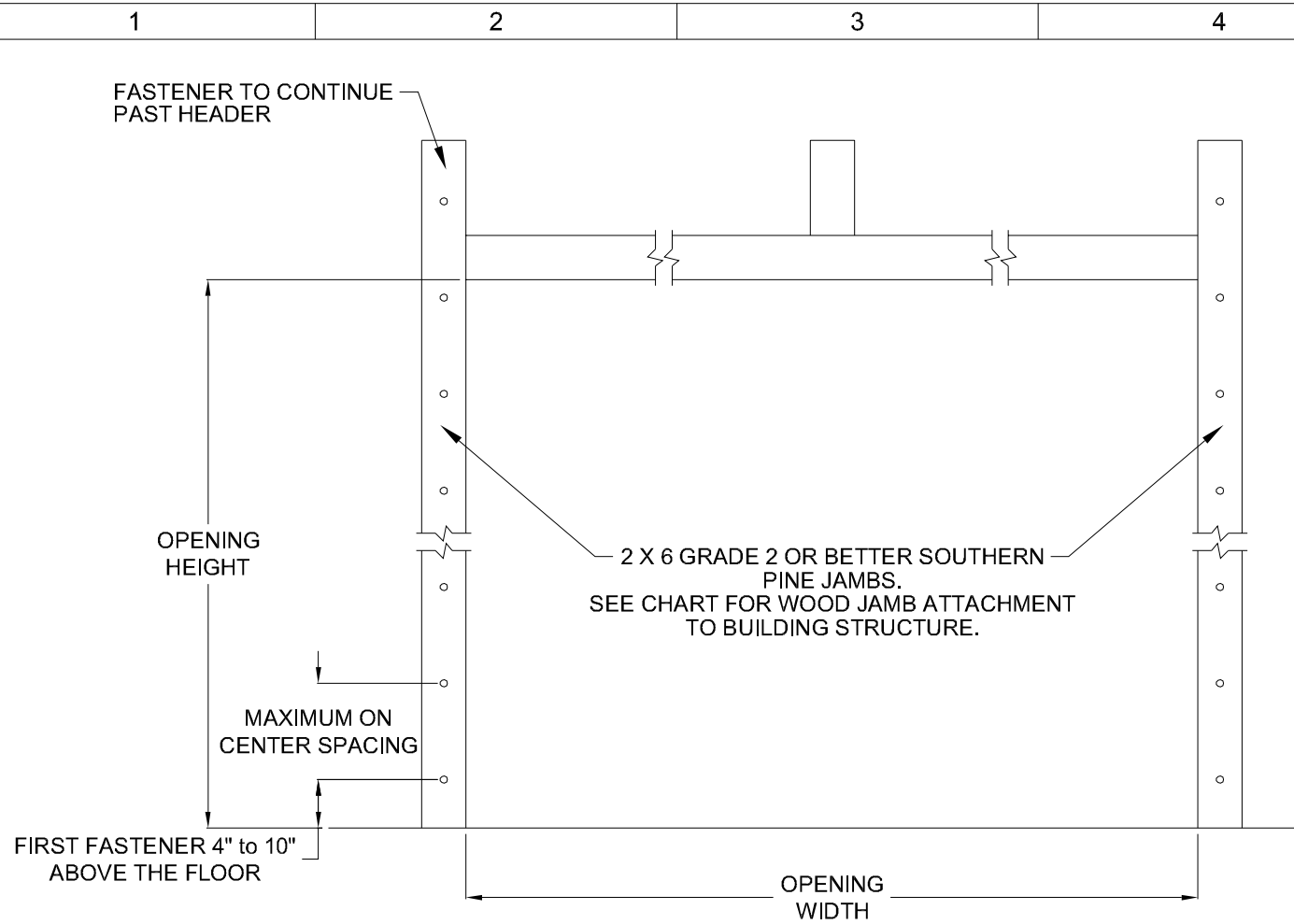


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<b>SHEET: 2 OF 4</b>	

**Haas Door**  
 A Nofziger Company  
 320 Sycamore  
 Wauseon, Ohio 43567  
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**Section A-A**  
Scale: 4 = 1

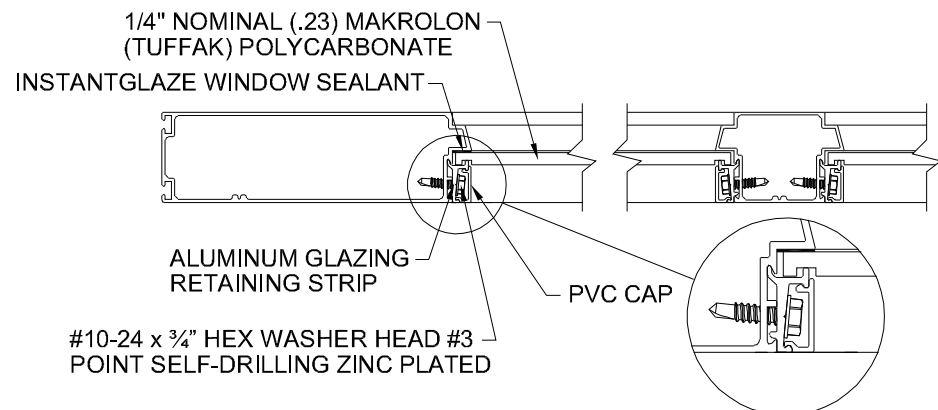
NOTE: To install the cap strut, first center it horizontally with the built-in strut. Next tap on the flat end until it is fully engaged with the built-in strut. Fasten the two together using the provided track bolts. A bolt should be used at each hinge location and at the end of each cap strut. The end bolts should be located a minimum of 1" from the end of the cap strut. There is a groove in the cap strut that should be used as a guide for drilling the holes. Finally attach the cap strut brace at each hinge location using a track bolt and tek screw.

## MODEL NUMBERS

MODEL NUMBERS AVAILABLE
RA 360i SERIES
CA 320i SERIES

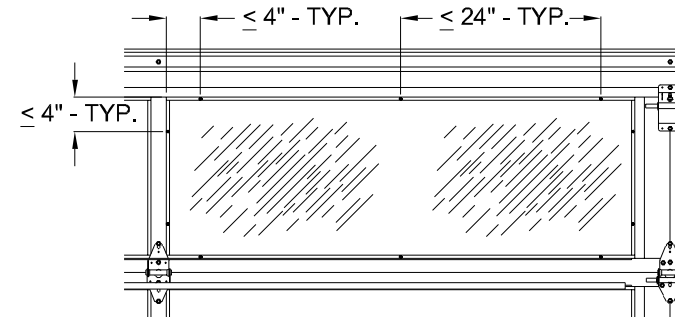
WOOD JAMB ATTACHMENT						
Building Structure	Fastener Type	Minimum Embedment	Minimum Edge Distance	Minimum on Center Spacing	Maximum on Center Spacing	Allowable Tension Load
Min. 2500 PSI to 4000 PSI Concrete	Tapcon + (PLUS) 1/4" w/ 1" OD washer	2"	2.50"	5.00"	24"	551
Southern Pine	3/8" Lag w/ 1 1/8" OD washer	1.50"	1.50"	1.50"	24"	620
Spruce Pine Fir	3/8" Lag w/ 1 1/8" OD washer	1.50"	1.50"	1.50"	22"	482

NOTE: 2X6 mounted to the wall must be Southern Pine Grade 2 or better.



## GLAZING DETAIL

NOTE: ALL GLAZING IS IMPACT RESISTANT MAKROLON (TUFFAK) GENERAL PURPOSE OR UV RESISTANT POLYCARBONATE WITH A 1/4" NOMINAL (.23) THICKNESS. THE MAXIMUM DAY LIGHT OPENING (DLO) IS 43-5/8" X 18".



**SCREW LOCATIONS**  
NOTE: THE MINIMUM AMOUNT OF SCREWS USED ON ANY SIZE OF GLAZING IS 8. THE MAXIMUM IS 10.

## IMPACT RESISTANT

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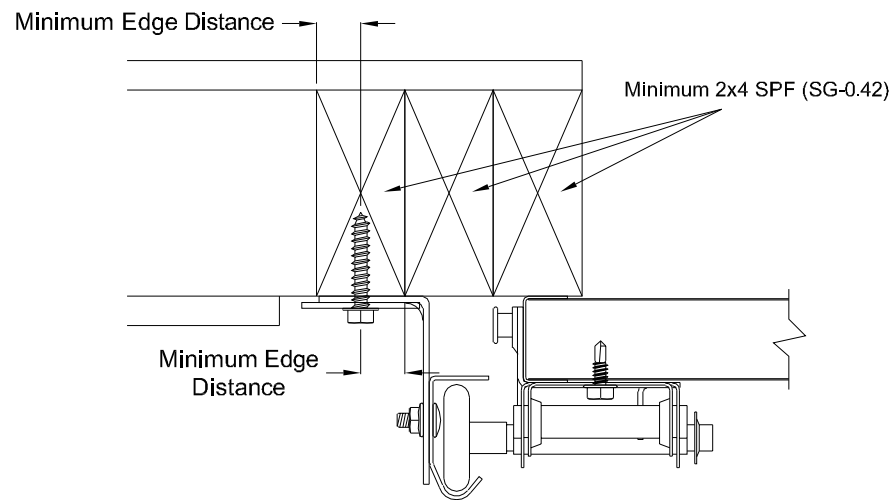
**DESCRIPTION:**  
16' 2" EXTRUDED ALUMINUM SERIES  
WIND LOAD SECTIONAL DOOR  
DESIGN PRESSURE +31.3-34.9 PSF

**DRAWING NO.:** WLTl-C300-0194-08-31-35 **REV.:** A

**DRAWN BY:** MVS **DATE DRAWN:** 11/1/18 **REV. DATE:** 2/17/22

**MODEL(S):** See Sheet 3 **SHEET: 3 OF 4**

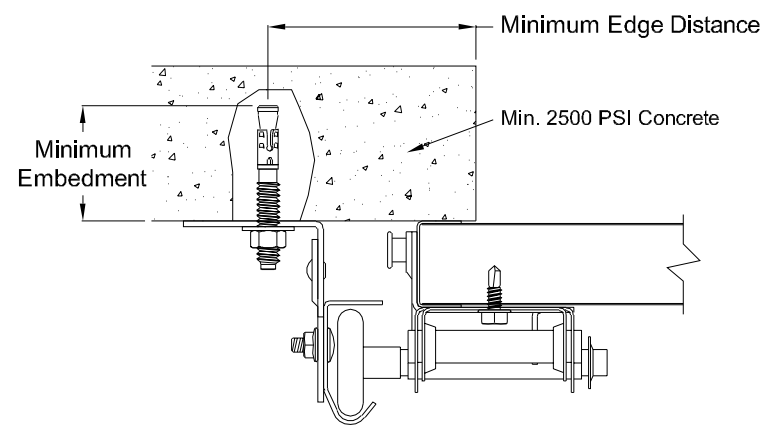
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Wauseon, Ohio 43567  
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### Direct Wood Mounting Detail

Bracket Mount Shown, Reverse and Continuous Angle Mount Also Approved As Alternate.

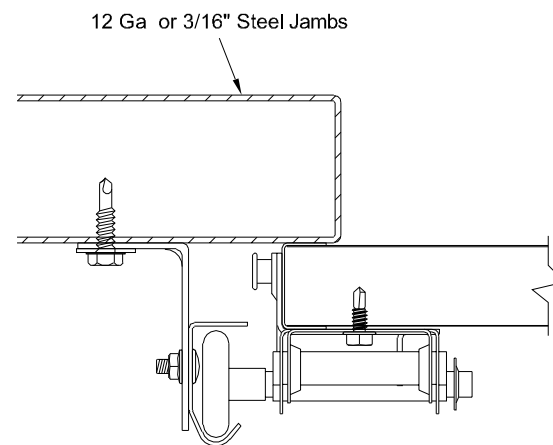
- 439 lbs. per anchor allowable load
- 5/16" Dia. Lag Screw w/1-1/8" O.D. Flat Washer (shall conform to ANSI/ASME standard B18.2.1)
- Minimum Screw Length: Spruce-Pine-Fur (SPF) - 2-1/2"  
Southern Pine - 1-5/8"
- Minimum Edge Distance: 1/2"
- Maximum on Center Spacing: 21"



### Direct Concrete Mounting Detail

Continuous Angle Clip Mount Shown, Bracket and Reverse Continuous Angle Mount Also Approved As Alternate.

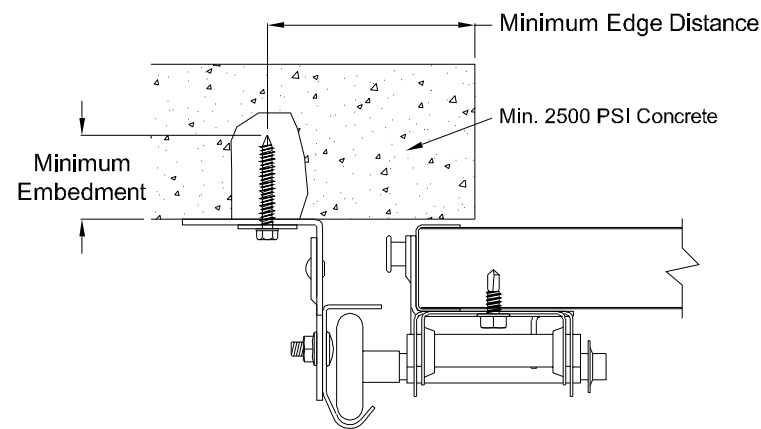
- 831 lbs. per anchor allowable load
- 3/8" Dia. Ankr-Tite CCAT w/1-1/8" O.D. Flat Washer (by Wej-It Fastening Systems)
- Minimum Embedment: 2-5/8"
- Minimum Edge Distance: 2-1/2"
- Minimum on Center Spacing: 6"
- Maximum on Center Spacing: 24"



### Direct Steel Mounting Detail

Bracket Mount Shown, Reverse and Continuous Angle Mount Also Approved As Alternate.

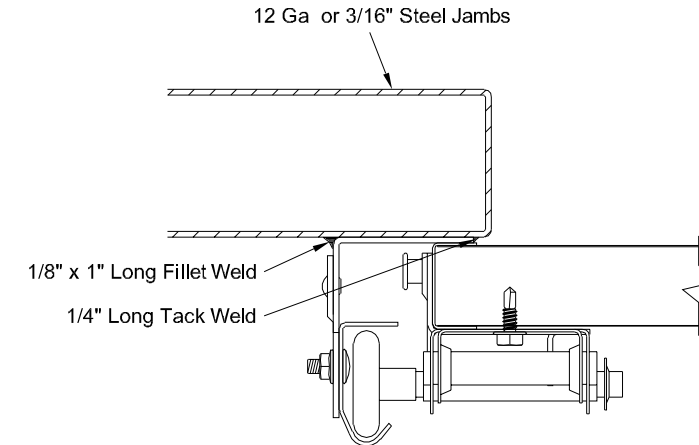
- 232 lbs. per anchor allowable load - 12 Ga Steel
- 569 lbs. per anchor allowable load - 3/16" Ga Steel
- 5/16"-12 Tek Self-Drilling Screw w/9/16" O.D. Flat Washer
- 12 Ga Maximum on Center Spacing: 11"
- 3/16" Maximum on Center Spacing: 24"



### Direct Concrete Mounting Detail

Continuous Angle Clip Mount Shown, Bracket and Reverse Continuous Angle Mount Also Approved As Alternate.

- 562 lbs. per anchor allowable load
- 1/4" Dia. Concrete Self-Tapping & Wedge Anchor w/1" O.D. Flat Washer (Includes Tapcon+ (by ITW), Wedge-Bolt+ (by Powers Fasteners) & Red Head TruBolt wedge anchor (by ITW))
- Minimum Embedment: 2"
- Minimum Edge Distance: 2-1/2"
- Minimum on Center Spacing: 5"
- Maximum on Center Spacing: 24"



### Direct Steel Mounting Detail

Reverse Continuous Angle Clip Mount Shown, Continuous Angle Mount Also Approved As Alternate.

- 1272 lbs. per anchor allowable load
- 1/8" Nom. x 1" Long Fillet and 1/4" Long Tack Weld (E60xx Electrodes Min.)
- Welds performed by a certified welder or inspected by a certified welding inspector to verify integrity of the welds.
- Maximum on Center Spacing: Apply welds at each roller location not to exceed 24"

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