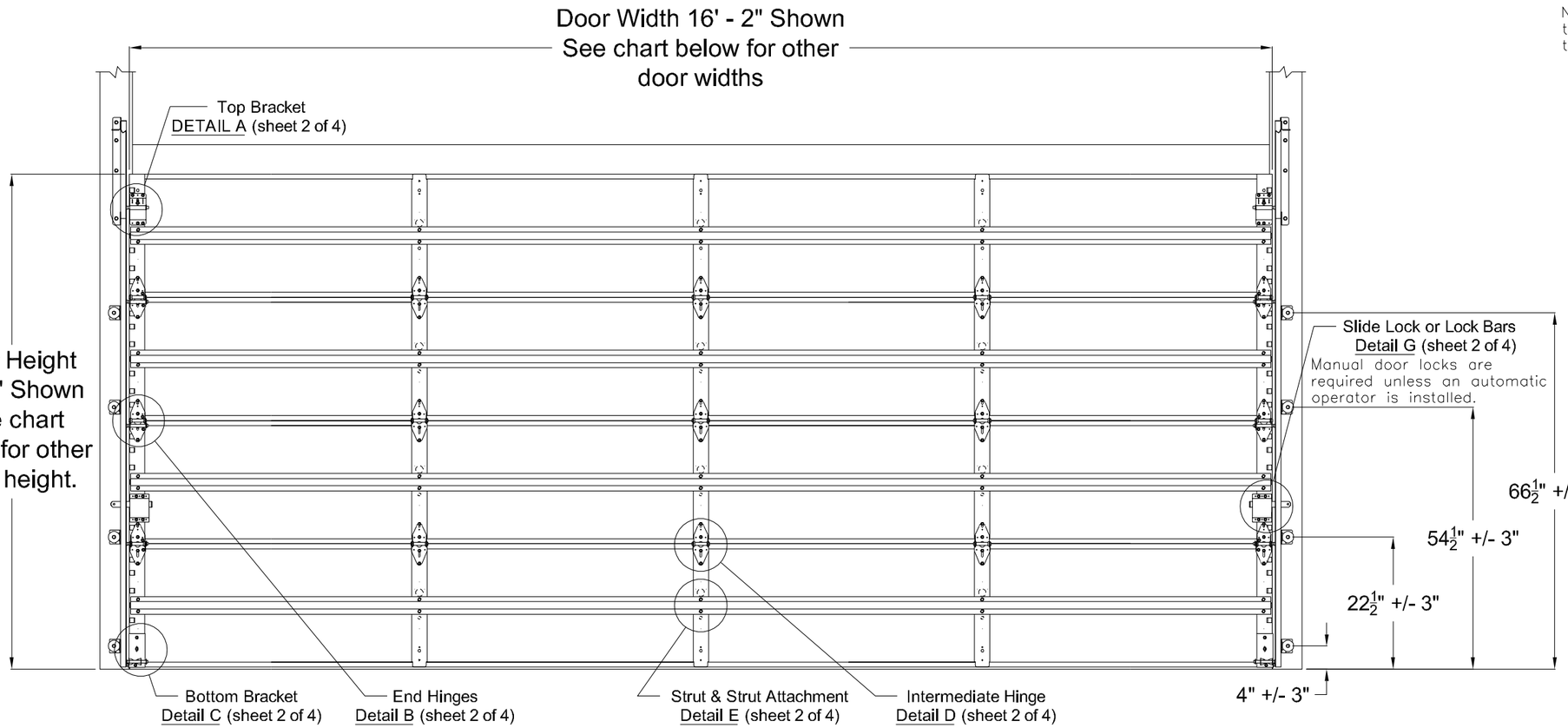
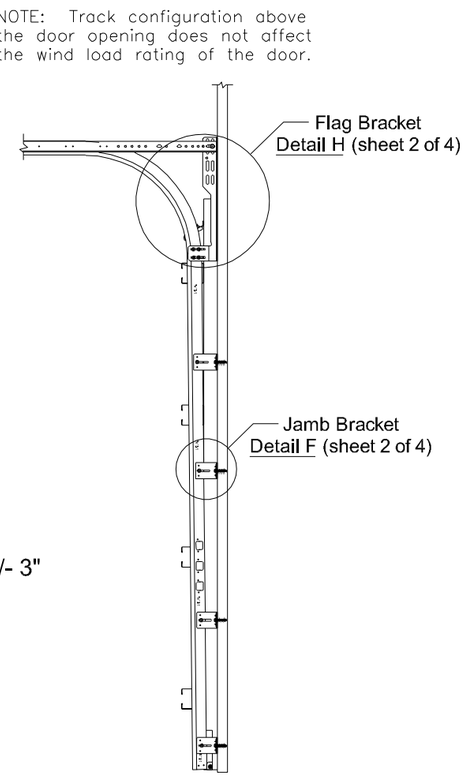




This product has been evaluated per ANSI/DASMA 108 for static air pressure.

Door Widths Up To	Design Pressures + psf	Design Pressures - psf	End Stile	Model Number: PAN C2410 & R2410 SERIES; PAN C2480 & R2480 SERIES; PAN C2481 & R2481 SERIES; PAN C2482 & R2482 SERIES; PAN R2580 SERIES; PAN R2581 SERIES; PAN R2582 SERIES — Minimum Center Stiles	Minimum Center Hinges	Model Number: PAN C2460 & R2460 SERIES; PAN C2461 & R2461 SERIES; PAN C2470 & R2470 SERIES; PAN C2471 & R2471 SERIES; PAN C2472 & R2472 SERIES; PAN R2560 SERIES; PAN R2561 SERIES; PAN R2570 SERIES; PAN R2571 SERIES; PAN R2572 SERIES — Minimum Center Stiles	Minimum Center Hinges	Model Number: PAN C2011 SERIES; PAN C2015 SERIES; PAN C2411 SERIES; PAN C2415 SERIES; PAN C2511 SERIES — Minimum Center Stiles	Minimum Center Hinges
12'-2"	24.3	-27.1	Single	2	2	2	2	2	2
14'-2"	20.8	-23.2	Single	4	4	2	2	3	3
16'-2"	18.3	-20.4	Single	3	3	3	3	3	3

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.

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

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

Door Height	Total No. of Sections	Total # of Struts	Jamb Brkts/Side
6'-0"	3	3	3
6'-0"	4	4	3
6'-3"	4	4	3
6'-6"	4	4	4
6'-9"	4	4	4
7'-0"	4	4	4
7'-3"	4	4	4
7'-6"	4	4	4
7'-6"	5	5	4
7'-9"	4	4	4
7'-9"	5	5	4
8'-0"	4	4	4
8'-0"	5	5	4

Maximum section height is 24 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.

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.

Digitally signed by John E Scates
Date: 2022.04.18 16:43:03 -05'00'

STATE OF TEXAS
JOHN E. SCATES
56308
LICENSED
PROFESSIONAL ENGINEER

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

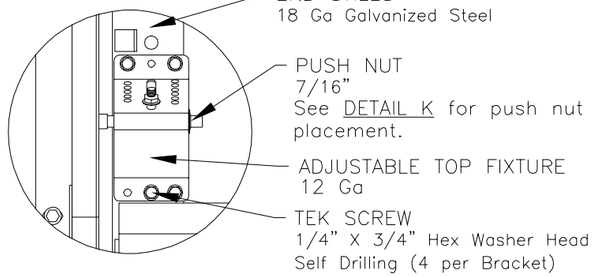
COMPLIES WITH IBC/IRC 2018

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

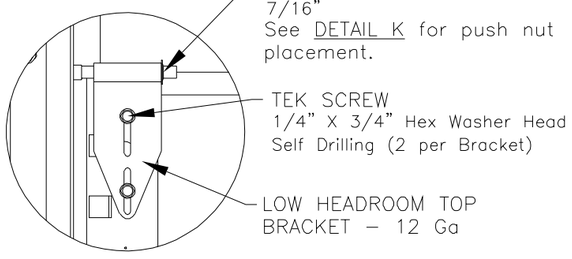
Haas Door
A Nofziger Company
320 Sycamore
Wauseon, Ohio 43567

DESCRIPTION:
16' 2" PAN 2000 SERIES W/LITES WIND LOAD SECTIONAL DOOR
DESIGN PRESSURE +18.3/-20.4 PSF

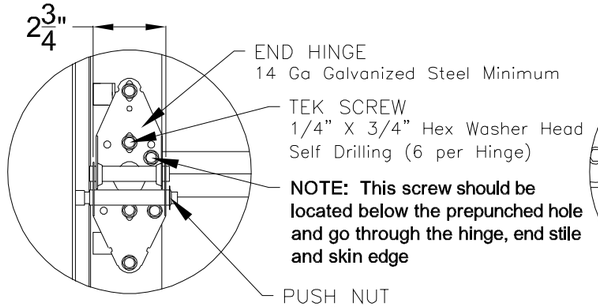
DRAWING NO.: WLT-2000-0194-08-18-20 **REV.** A
DRAWN BY: MVS **DATE DRAWN:** 11/6/18 **REV. DATE:** 3/8/22
MODEL(S): See Sheet 3 **SHEET:** 1 **OF** 4



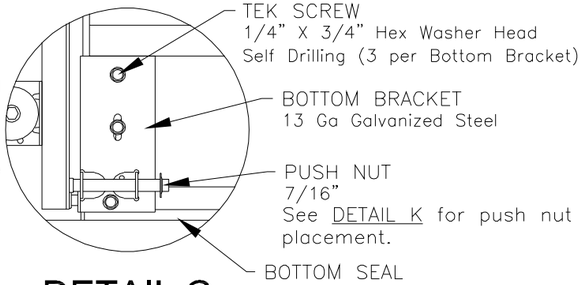
DETAIL A



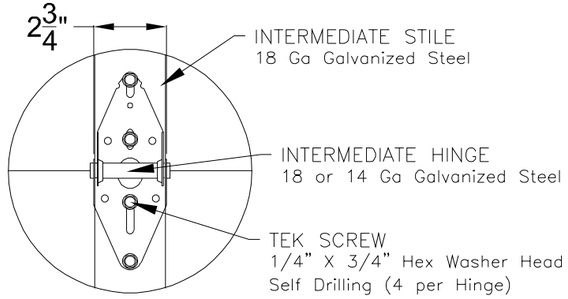
LOW HEADROOM TOP BRACKET



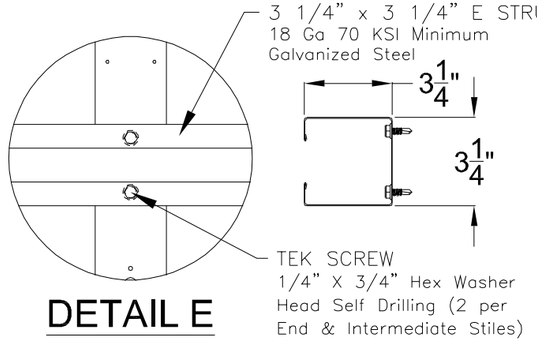
DETAIL B



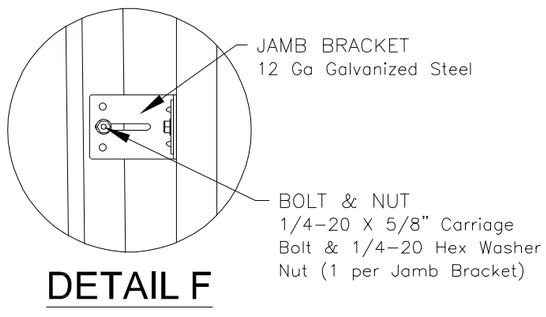
DETAIL C



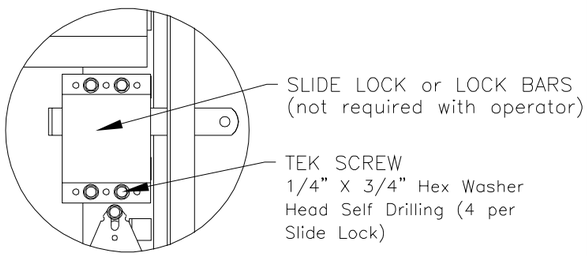
DETAIL D



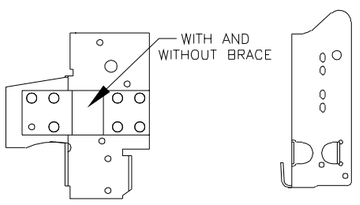
DETAIL E



DETAIL F

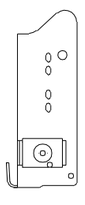


DETAIL G

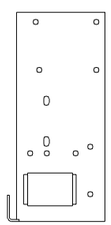


RESIDENTIAL & LIGHT COMMERCIAL
For Low Headroom With 2" Track and Single End Stiles

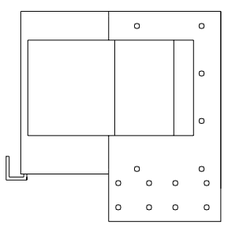
COMMERCIAL
For Standard, High & Vertical Lift With 2" Track and Single End Stiles



COMMERCIAL
For Standard, High & Vertical Lifte With 3" Track and Single End Stiles



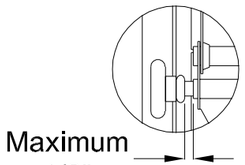
COMMERCIAL HEAVY DUTY
For Standard, High & Vertical Lift With 3" Track and Double End Stiles



COMMERCIAL HEAVY DUTY
For Low Headroom With 3" Track and Double End Stiles

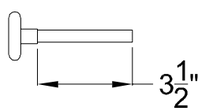
ALTERNATE BOTTOM BRACKETS

NOTE: The bottom bracket tested (shown in DETAIL C) is the lightest bracket available.



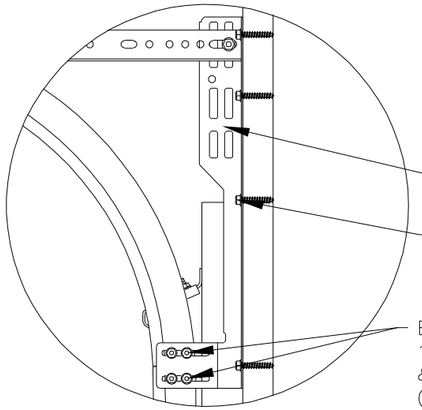
DETAIL K

There should be a space of maximum 1/2" between the roller hub and the outside edge of the roller holder which is set by the push nut.

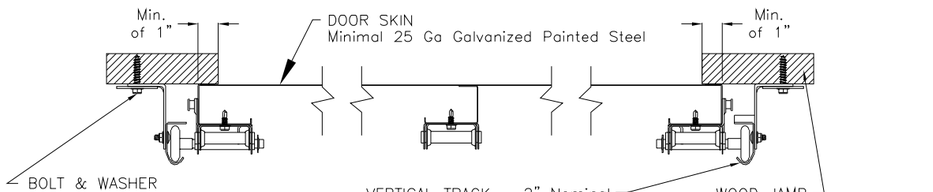


ROLLER

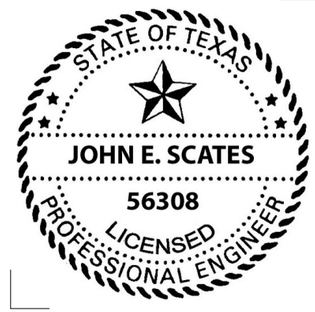
2" Diameter Nominal Eleven Ball Nylon or Ten Ball Steel with a Minimum Workable Shaft Length Shown.



DETAIL H



NOTE: Details on some views omitted for clarity.
Double end stiles and end hardware may be provided on wider or heavier doors.



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.

Haas Door
A Nofziger Company

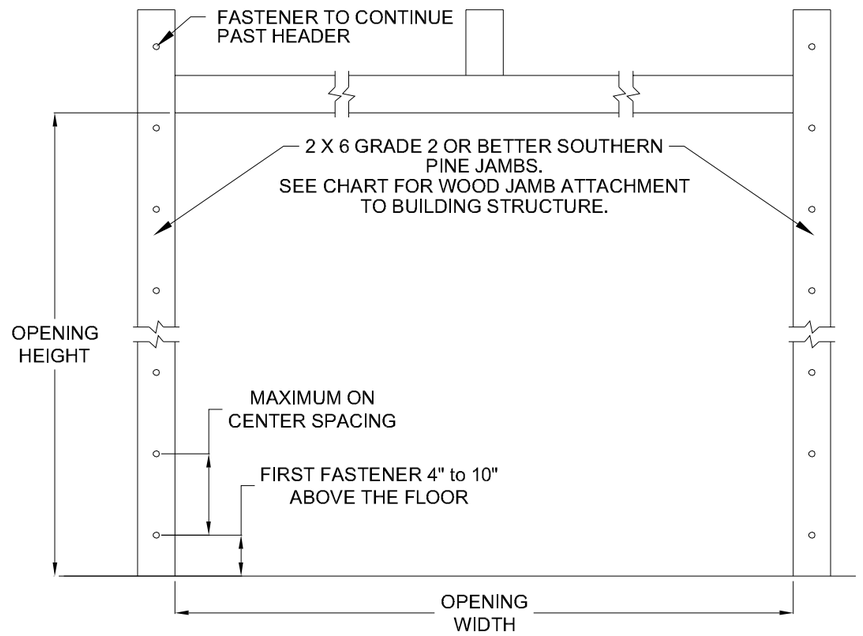
320 Sycamore
Wauseon, Ohio 43567

DESCRIPTION:
16' 2" PAN 2000 SERIES W/LITES WIND LOAD SECTIONAL DOOR
DESIGN PRESSURE +18.3/-20.4 PSF

DRAWING NO.: WLT-2000-0194-08-18-20		**REV.**	A
DRAWN BY: MVS	**DATE DRAWN:** 11/6/18	**REV. DATE:**	3/8/22
MODEL(S): See Sheet 3		**SHEET:**	2 **OF** 4

MODEL NUMBERS

MODEL NUMBERS AVAILABLE
PAN C2011 SERIES
PAN C2015 SERIES
PAN C2411 SERIES
PAN C2415 SERIES
PAN C2511 SERIES
PAN C2410 & R2410 SERIES
PAN C2460 & R2460 SERIES
PAN C2461 & R2461 SERIES
PAN C2470 & R2470 SERIES
PAN C2471 & R2471 SERIES
PAN C2472 & R2472 SERIES
PAN C2480 & R2480 SERIES
PAN C2481 & R2481 SERIES
PAN C2482 & R2482 SERIES
PAN R2560 SERIES
PAN R2561 SERIES
PAN R2570 SERIES
PAN R2571 SERIES
PAN R2572 SERIES
PAN R2580 SERIES
PAN R2581 SERIES
PAN R2582 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"	24"	482

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

STATE OF TEXAS
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LICENSED
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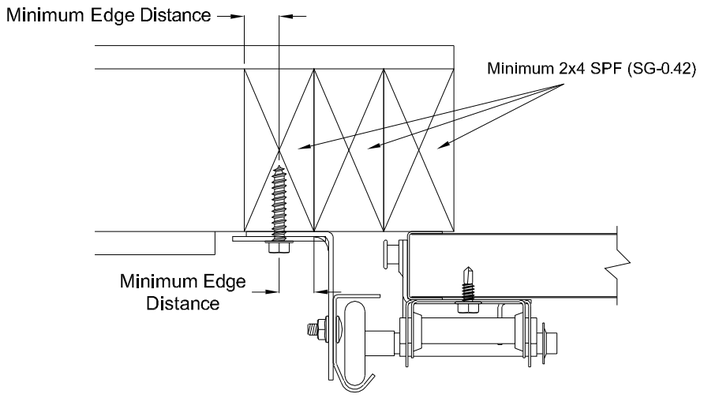
DESIGN PRESSURE +18.3/-20.4 PSF

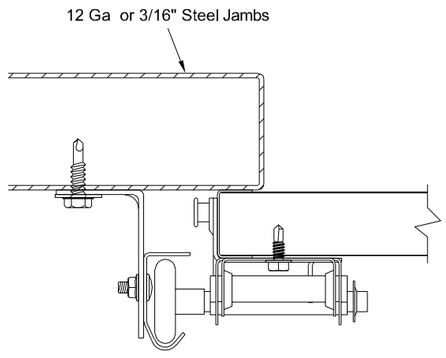
DRAWING NO.: WLT-2000-0194-08-18-20		**REV.** A	
DRAWN BY: MVS	**DATE DRAWN:** 11/6/18	**REV. DATE:** 3/8/22	
MODEL(S): See Sheet 3		**SHEET:** 3 **OF** 4	



Direct Wood Mounting Detail

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

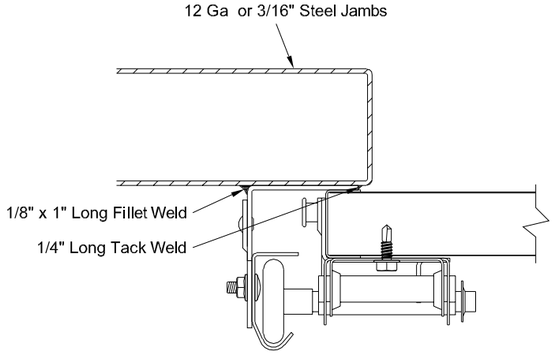
439 lbs. per anchor allowable load
5/16" Dia. Lag Screw w/1-1/8" O.D. Flat Washer (shall conform to ANSI/ASME standard B18.2.1)
Minimum Screw Length: Spruce-Pine-Fur (SPF) - 2-1/2"
Southern Pine - 1-5/8"
Minimum Edge Distance: 1/2"
Maximum on Center Spacing: 24"



Direct Steel Mounting Detail

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

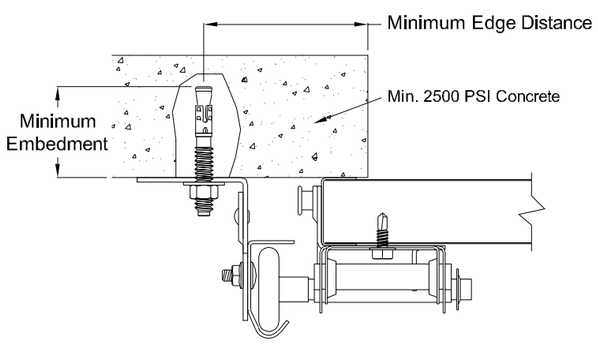
232 lbs. per anchor allowable load - 12 Ga Steel
569 lbs. per anchor allowable load - $\frac{3}{16}$" Ga Steel
5/16"-12 Tek Self-Drilling Screw w/9/16" O.D. Flat Washer
12 Ga Maximum on Center Spacing: 19"
$\frac{3}{16}$" Maximum on Center Spacing: 24"



Direct Steel Mounting Detail

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

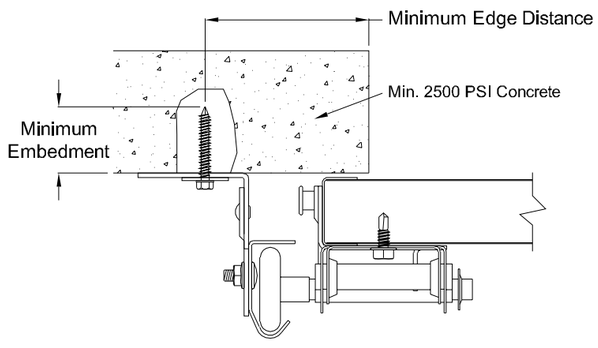
1272 lbs. per anchor allowable load
1/8" Nom. x 1" Long Fillet and 1/4" Long Tack Weld (E60xx Electrodes Min.)
Welds performed by a certified welder or inspected by a certified welding inspector to verify integrity of the welds.
Maximum on Center Spacing: Apply welds at each roller location not to exceed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



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 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"

STATE OF TEXAS
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DESCRIPTION:
16' 2" PAN 2000 SERIES W/LITES WIND LOAD SECTIONAL DOOR
DESIGN PRESSURE +18.3/-20.4 PSF

DRAWING NO.: WLT-2000-0194-08-18-20		**REV.** A	
DRAWN BY: MVS	**DATE DRAWN:** 11/6/18	**REV. DATE:** 3/8/22	
MODEL(S): See Sheet 3		**SHEET:** 4 **OF** 4	