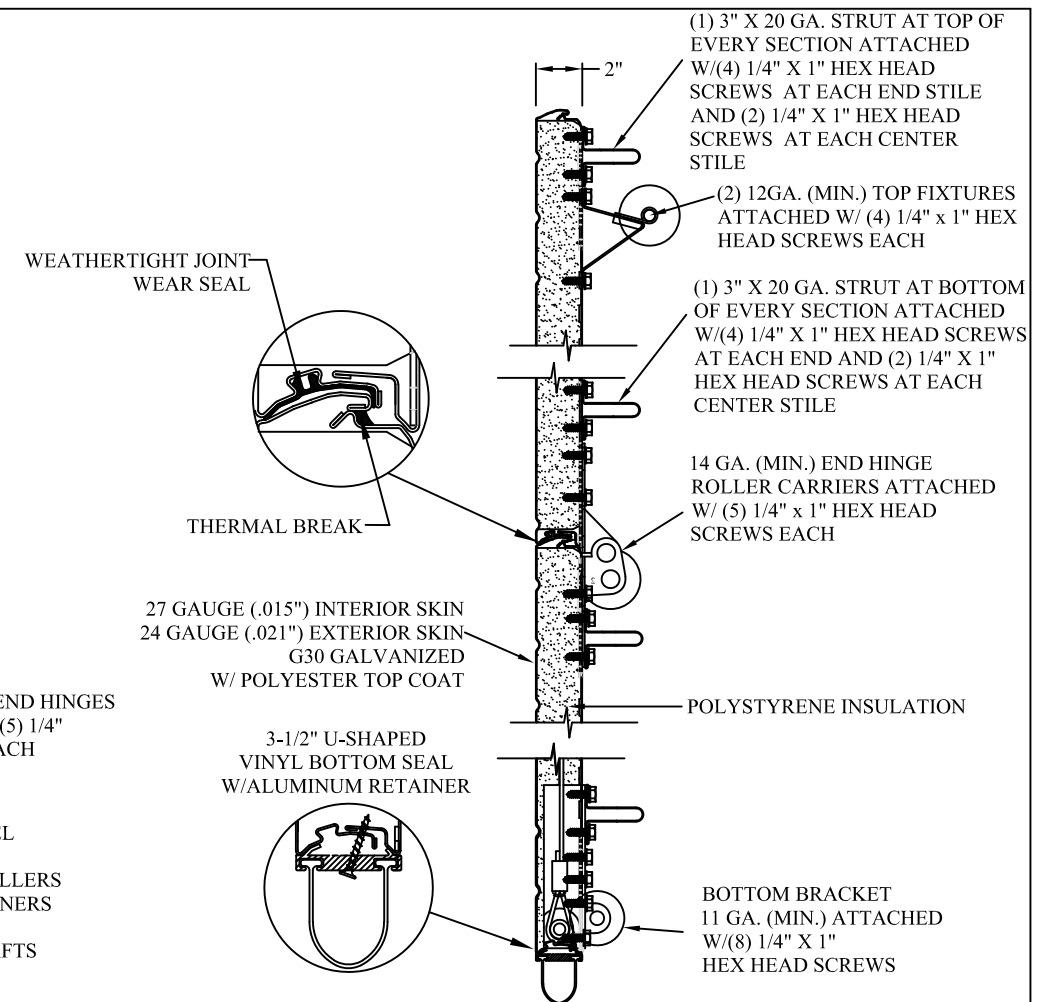
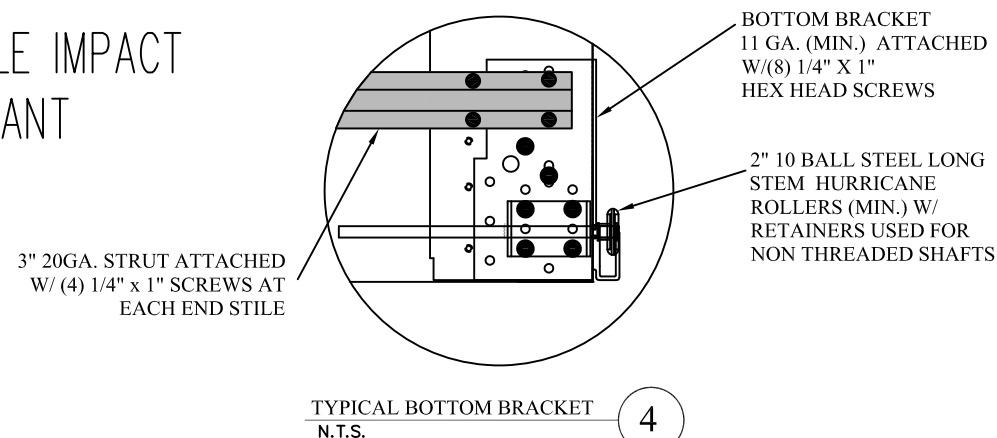
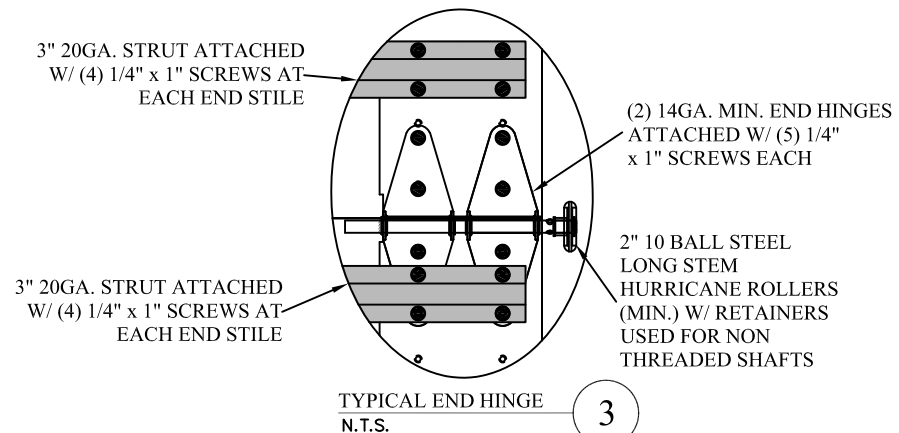
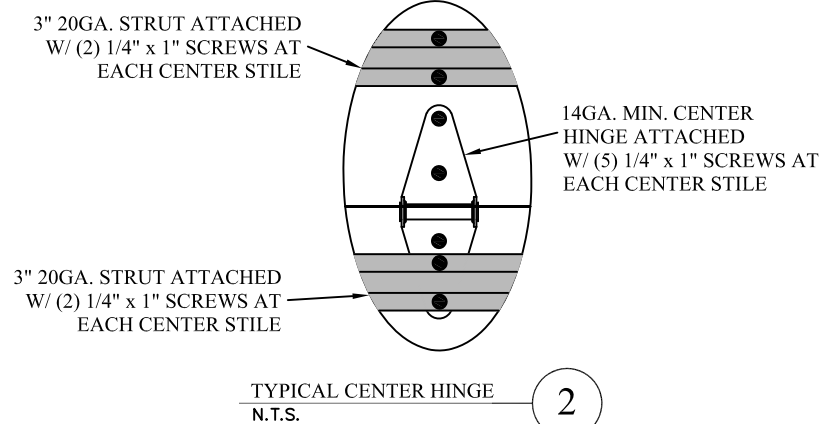
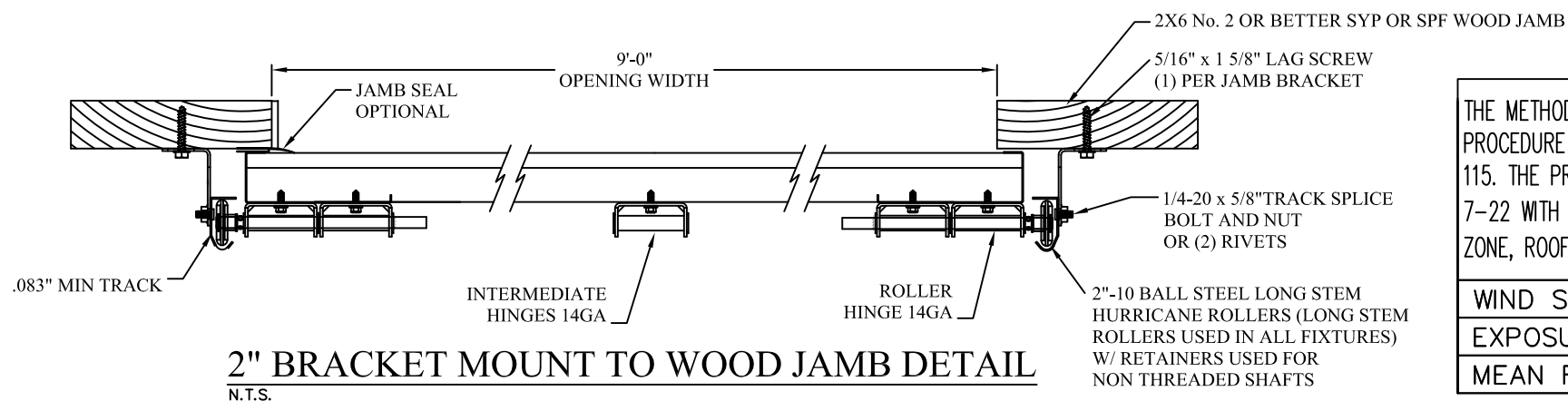




SECTION A-A (SIDE VIEW)
N.T.S.

LARGE MISSILE IMPACT RESISTANT



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996 & F588, DASHMA 108 & 115. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS(5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT LESS THAN OR EQUAL TO 10 DEGREES SLOPE):

WIND SPEED (MPH)	253	229	218	208	200
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE

9'2 x 24'

DESIGN LOADS

+55.1 PSF

-64.5 PSF

TEST LOADS

+82.7 PSF

-96.8 PSF

LARGE MISSILE IMPACT

RESISTANCE

Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)
dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

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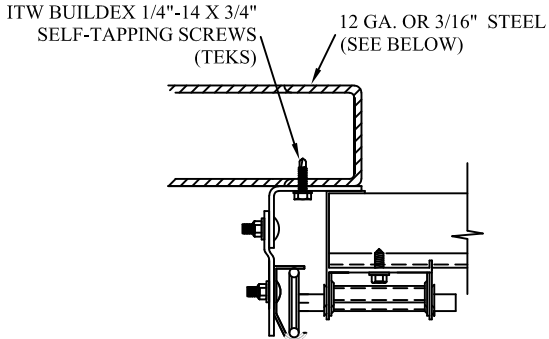
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100125CE2, cn=Thomas L. Shelmerdine
Date: 2023.09.27 14:05:57 -04'00'

Amar

AMARR 2432

SIZE	DRAWN BY DRD	DATE 11/16/16	DRAWING NUMBER IBC-1009-195-15-1
B	CHECKED BY RLR	DATE 12/05/16	
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 1 OF 4

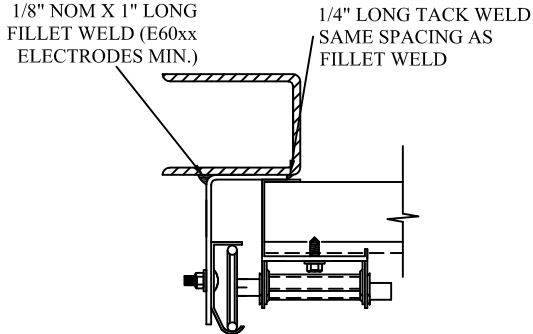
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



CLIP STYLE REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

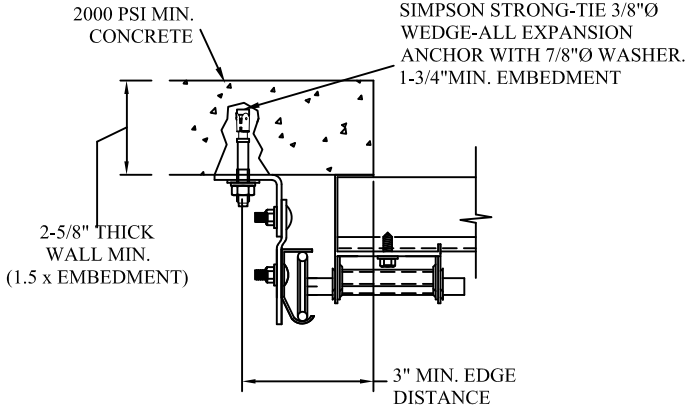
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS
AND 10" O.C.
REFER TO NOTES: 1, 2 AND 5

3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS
AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



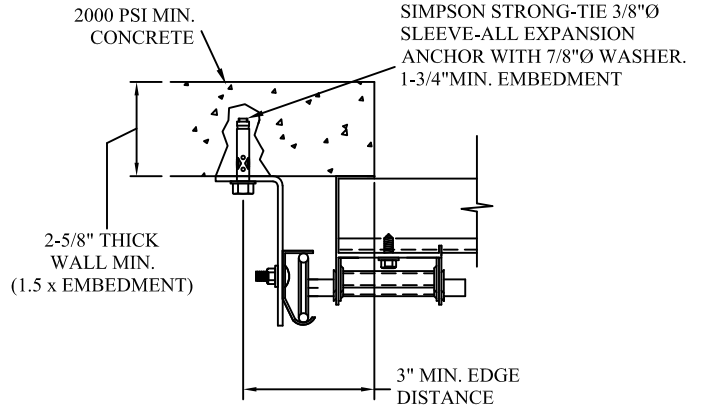
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED
ANGLE MOUNT AVAILABLE

STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8 AND 9



CLIP STYLE CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, REVERSE AND TAPERED ANGLE MOUNT
AVAILABLE

2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD - 6"
FROM ENDS AND 16" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5



CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE LOAD - 6"
FROM ENDS AND 16" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 18" O.C. (1 1/2" EMBEDMENT)

2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE

HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS

THEN 24" O.C. (2 1/2" EMBEDMENT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 16" O.C. (1 1/4" EMBEDMENT)
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)

2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK

SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART)

AT 8" O.C. (1 1/2" EMBEDMENT)

HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART) AT 8" O.C. (1 1/4" EMBEDMENT)

2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

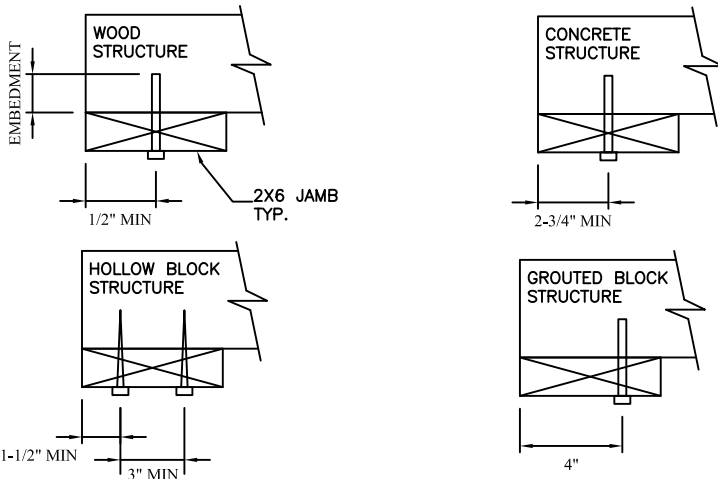
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS

THEN 20" O.C. (1 1/4" EMBEDMENT)

(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

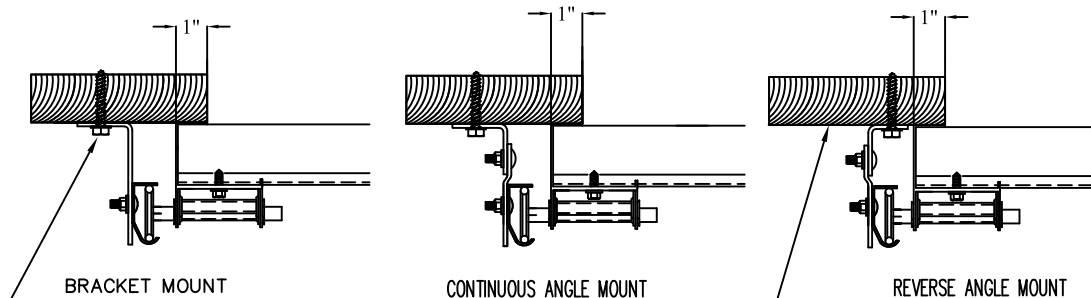
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

*PREPARATION OF WOOD JAMBS BY OTHERS



TRACK CONNECTION TO WOOD JAMB OPTIONS

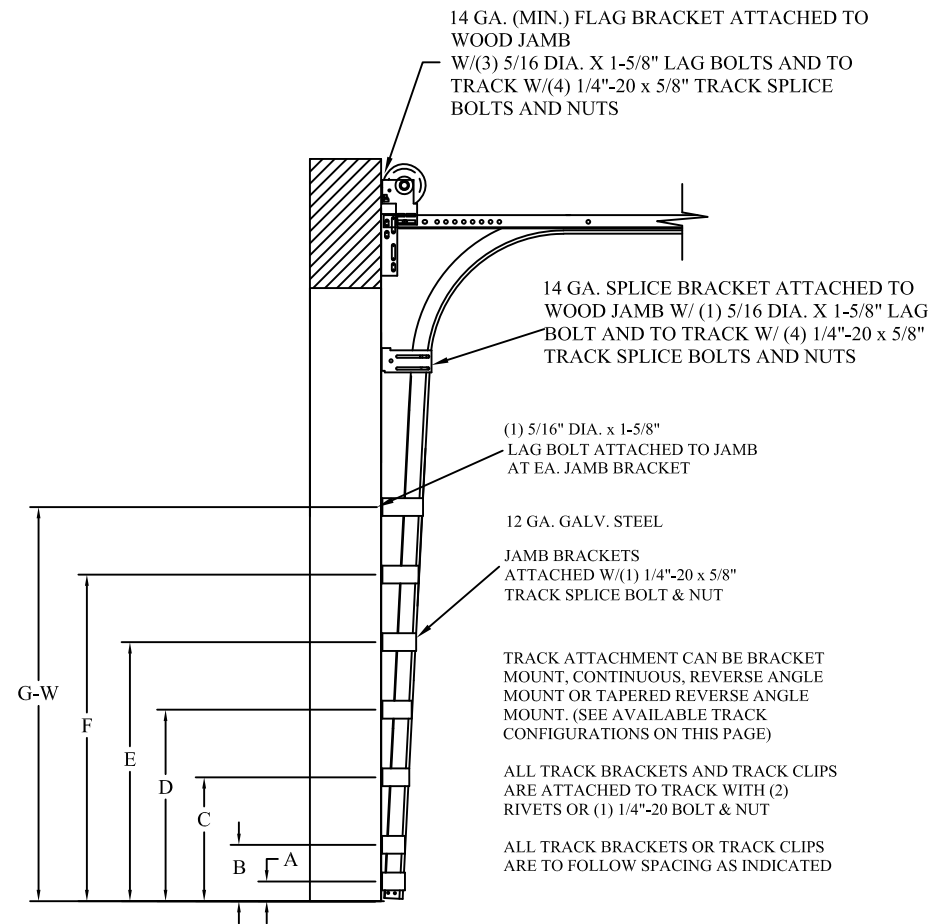
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 3 FOR TRACK CONFIGURATION DETAIL



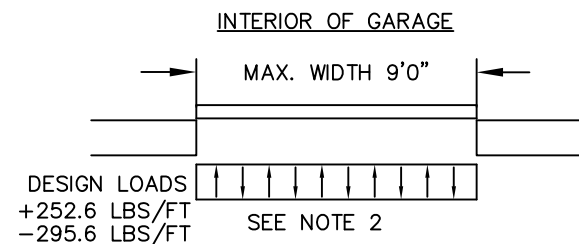
5/16" x 1 5/8" LAG SCREW (1) PER
JAMB BRACKET (1-1/2" EMBEDMENT
MINIMUM) (TYP.)

2x6 WOOD JAMB SYP OR SPF
(NO.2) OR BETTER (TYP.)

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9'2" x 24' DESIGN LOADS +55.1 PSF -64.5 PSF TEST LOADS +82.7 PSF -96.8 PSF LARGE MISSILE IMPACT RESISTANCE		 This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies. Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410 FL	
			
AMARR 2432			
SIZE B	DRAWN BY	DRD	DATE 11/16/16
	CHECKED BY	RLR	DATE 12/05/16
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1009-195-15-I SHEET 2 OF 4

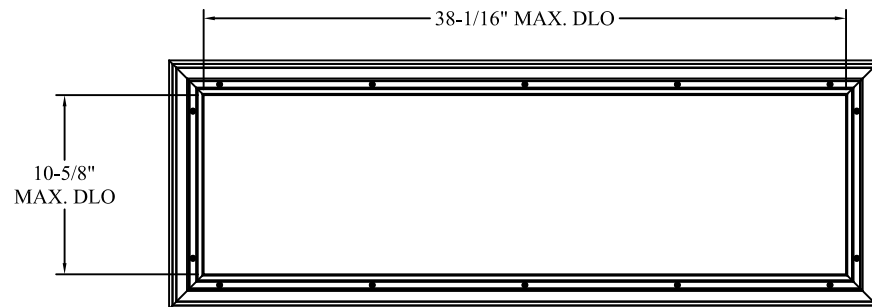


TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
SEE TABLE 1 ON PAGE 4

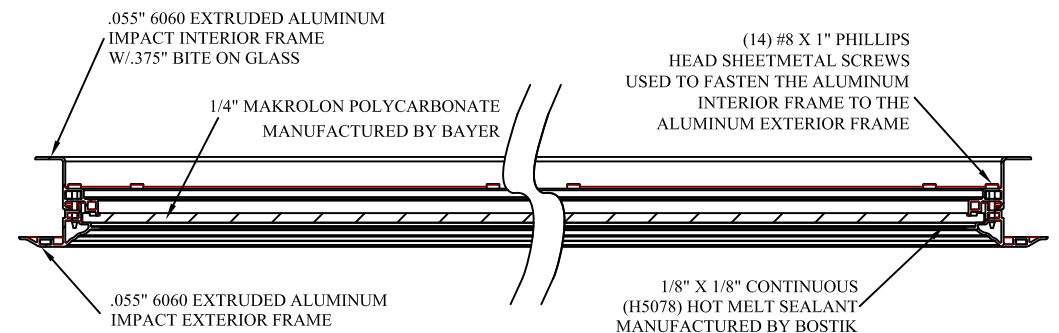


SPECIFICATIONS AND NOTES

1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE VERTICAL TRACK, FROM THE TRACK THE LOAD IS TRANSFERRED TO THE VERTICAL JAMBS. THE HORIZONTAL JAMB OR HEADER RECEIVES NO PORTION OF THE LOAD TRANSFERRED FROM THE DOOR.
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +252.6 LBS/FT & -295.6 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.021) MIN. EXTERIOR SKIN ROLLED FORMED, G30 GALVANIZED W/ POLYESTER TOP COAT
5. DOORS UP TO 24'0" HIGH HAVE (2) 3" 20GA STRUTS PER SECTION
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

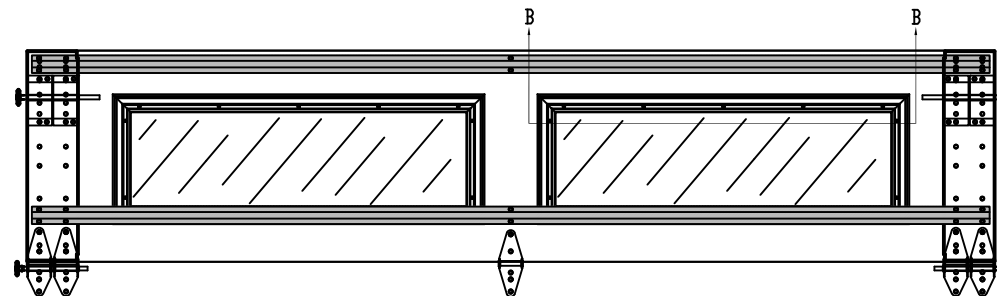


LONG PANEL IMPACT GLAZING FASTENER DETAIL
N.T.S.



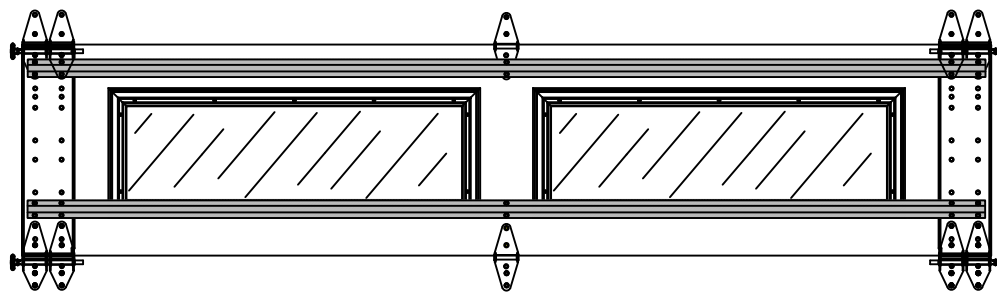
SECTION B-B IMPACT WINDOW DETAIL
N.T.S.

TOP SECTION



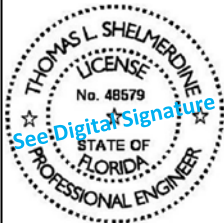
OPTIONAL GLAZED SECTION W/LONG PANEL IMPACT WINDOWS
N.T.S.

INTERMEDIATE SECTION



OPTIONAL GLAZED SECTION W/LONG PANEL IMPACT WINDOWS
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 9'2 x 24' DESIGN LOADS +55.1 PSF -64.5 PSF TEST LOADS +82.7 PSF -96.8 PSF LARGE MISSILE IMPACT RESISTANCE	 This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies. Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410 FL
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AMARR 2432			

SIZE	DRAWN BY	DRD	DATE	DRAWING NUMBER
B			11/16/16	IBC-1009-195-15-I
	CHECKED BY	RLR	DATE 12/05/16	

AMARR COMPANY			
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			

SHEET 3 OF 4			
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TABLE 1

DOOR HEIGHT		TRACK ATTACHMENT																							
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	
7'	0"	3.5"	10"	22"	34"	46"	58"																		
7'	6"	3.5"	10"	22"	34"	46"	58"	70"																	
8'	0"	3.5"	10"	22"	34"	46"	58"	70"																	
8'	6"	3.5"	10"	22"	34"	46"	58"	70"	82"																
9'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"																
9'	6"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"															
10'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"															
11'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"														
12'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"													
13'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"												
14'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"											
15'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"										
16'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"									
17'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"								
18'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"							
19'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"						
20'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"					
21'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"				
22'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"			
23'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"		
24'	0"	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"	262"	

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY

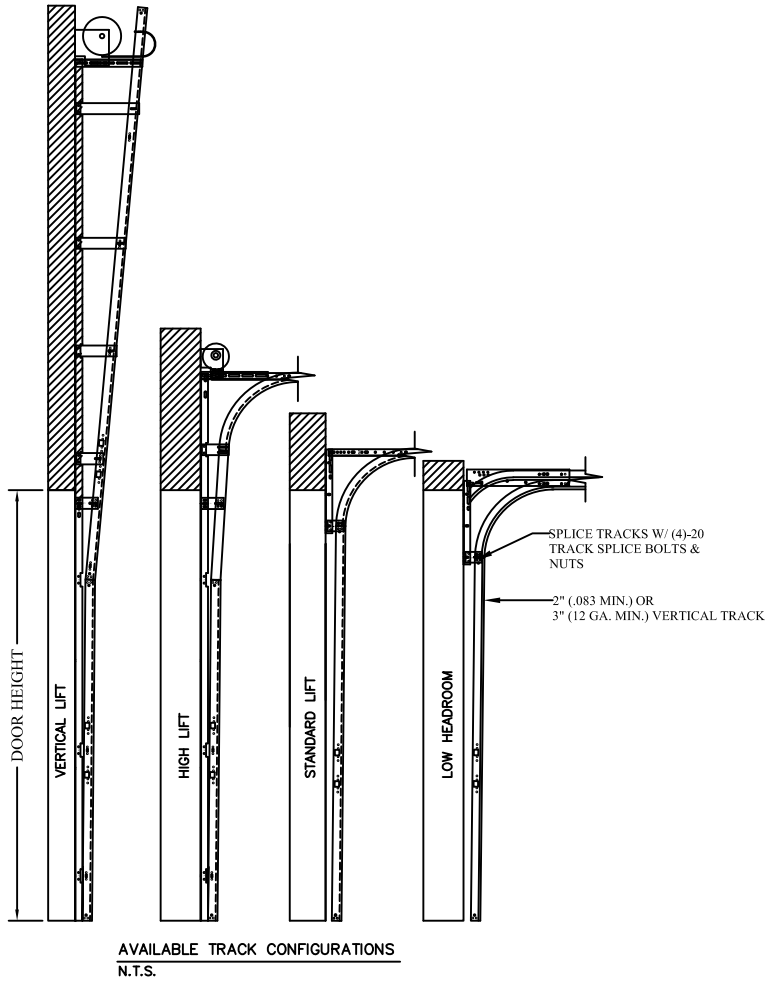


TABLE 2

Section Width (ft)		Center Stile Locations (Measured from Left Edge)	Max Design Loads Allowed	
			Positive (PSF)	Negative (PSF)
6'	0"	36"	84.1	98.5
6'	2"	37"	81.9	95.8
6'	4"	38"	79.7	93.3
6'	6"	39"	77.7	90.9
6'	8"	40"	75.7	88.6
6'	10"	41"	73.9	86.5
7'	0"	42"	72.1	84.4
7'	2"	43"	70.4	82.5
7'	4"	44"	68.8	80.6
7'	6"	45"	67.3	78.8
7'	8"	46"	65.8	77.1
7'	10"	47"	64.4	75.4
8'	0"	48"	63.1	73.9
8'	2"	49"	61.8	72.3
8'	4"	50"	60.6	70.9
8'	6"	51"	59.4	69.5
8'	8"	52"	58.2	68.2
8'	10"	53"	57.1	66.9
9'	0"	54"	56.1	65.6
9'	2"	55"	55.1	64.5

TABLE 3

SECTION	
12TH	3"
	3"
11TH	3"
	3"
10TH	3"
	3"
9TH	3"
	3"
8TH	3"
	3"
7TH	3"
	3"
6TH	3"
	3"
5TH	3"
	3"
4TH	3"
	3"
3RD	3"
	3"
2ND	3"
	3"
BOTTOM	3"
	3"

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9'2 x 24' DESIGN LOADS +55.1 PSF -64.5 PSF TEST LOADS +82.7 PSF -96.8 PSF LARGE MISSILE IMPACT RESISTANCE		THOMAS L. SHELMERDINE LICENSE No. 48579 STATE OF FLORIDA PROFESSIONAL ENGINEER This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies. Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410 FL	
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AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 4 OF 4