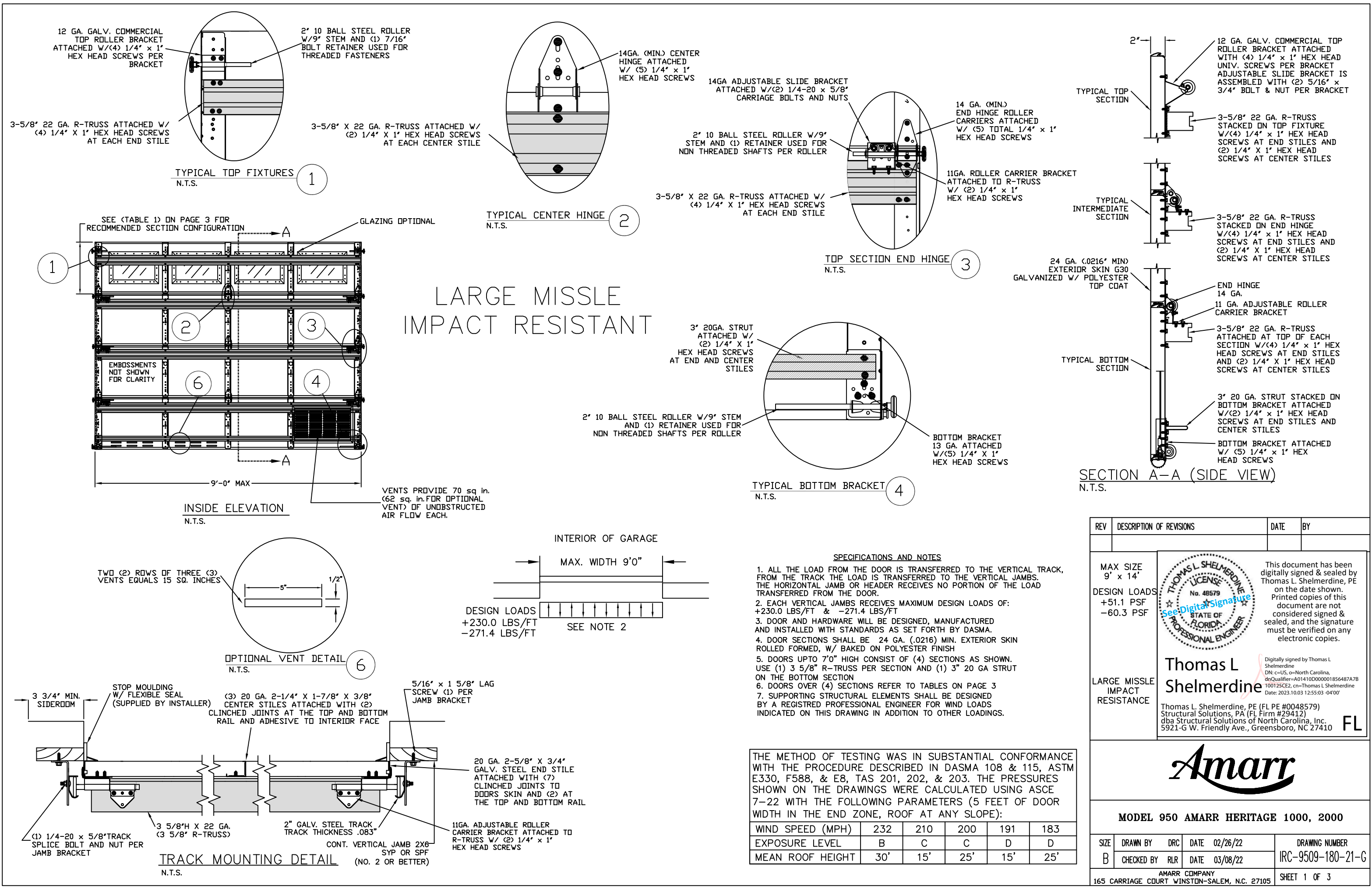




LARGE MISSILE IMPACT RESISTANT

- 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: +230.0 LBS/FT & -271.4 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. (.0216) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
 5. DOORS UPTO 7'0" HIGH CONSIST OF (4) SECTIONS AS SHOWN. USE (1) 3 5/8" R-TRUSS PER SECTION AND (1) 3" 20 GA STRUT ON THE BOTTOM SECTION
 6. DOORS OVER (4) SECTIONS REFER TO TABLES ON PAGE 3
 7. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108 & 115, ASTM E330, F588, & E8, TAS 201, 202, & 203. 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 ANY SLOPE):

WIND SPEED (MPH)	232	210	200	191	183
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 9' x 14'

DESIGN LOADS +51.1 PSF -60.3 PSF

LARGE MISSILE IMPACT RESISTANCE

THOMAS L. SHELMERDINE
LICENSE
No. 48579
See Digital Signature
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
Structural Solutions, PA (FL Firm #29412)
dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

FL

Amarr

MODEL 950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	DRC	DATE	02/26/22	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	03/08/22	IRC-9509-180-21-G

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

SHEET 1 OF 3

A technical drawing of a continuous beam with four supports. The beam is supported by two fixed supports at the ends and two roller supports in the middle. Two point loads, labeled 'B', are applied downwards at the center of each span between the roller supports. The beam is divided into three equal segments by the roller supports. The drawing shows the beam's profile, including the top and bottom flanges, and the internal structure of the supports.

A technical drawing of a continuous beam with four spans. The beam is supported by five vertical supports. The first and last supports are fixed, while the intermediate supports are roller supports. A hinge is located at the second support from the left. The beam is divided into four equal spans by these supports. Each span contains a rectangular section with diagonal hatching. The beam is labeled with 'B' at the second and third supports, indicating a reaction force. The drawing shows the beam's profile, including the top and bottom flanges and the web, with various dimensions and labels.

.033" GALV STEEL INTERIOR IMPACT WINDOW FRAME
 .033" GALV STEEL EXTERIOR IMPACT WINDOW FRAME W/.5" BITE ON GLASS
 DECORATIVE PLASTIC INJECTION MOLDED EXTERIOR WINDOW FRAME
 5/16" OVERALL
 1/8" CLEAR ANNEALED GLASS
 .090" SAFLEX PVB INTERLAYER
 1/8" CLEAR ANNEALED GLASS
 MANUFACTURED BY GUARDIAN
 24 GA. STEEL DOOR SKIN
 SUREBOND SB-190 STRUCTURAL ADHESIVE
 3
 2

2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

GLAZING MEETS ASTM E1300-04

14 GA. FLAG BRACKET ATTACHED TO WOOD JAMB W/ (3) 5/16 DIA. X 1-5/8" LAG BOLTS AND TO TRACK W/ (4) 1/4"-20 X 5/8 TRACK SPLICE BOLTS AND NUTS

S (SPLICE)

G (THROUGH) N

F

E

D

C

B

A

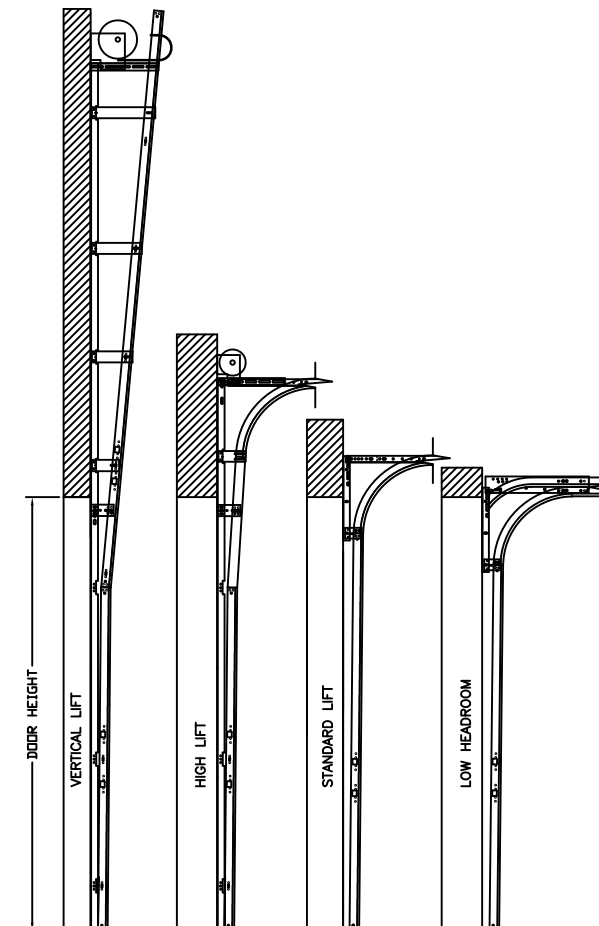
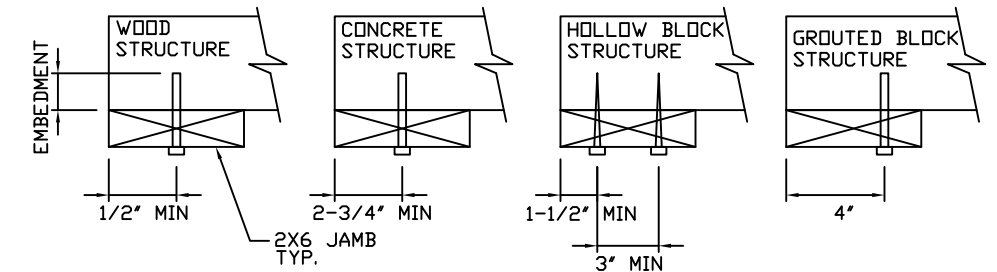
SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS SECURE TO JAMB WITH (3) 5/16" DIA. x 1-5/8" LAG BOLTS

(1) 5/16" DIA. x 1-5/8" LAG BOLT ATTACHED TO JAMB AT EA. JAMB BRACKET

12 GA. GALV. STEEL X 2-1/2" WIDE JAMB BRACKETS ATTACHED W/ (1) 1/4"-20 TRACK SPLICE BOLT & NUT

2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 20" 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 18" 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)

*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
*PREPARATION OF WOOD JAMBS BY OTHERS



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9' x 14' DESIGN LOADS +51.1 PSF -60.3 PSF LARGE MISSLE 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		
			
MODEL 950 AMARR HERITAGE 1000, 2000			
SIZE	DRAWN BY	DRC	DATE 02/26/22
B	CHECKED BY	RLR	DATE 03/08/22
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, NC 27105			DRAWING NUMBER IRC-9509-180-21-G SHEET 2 OF 3

TABLE 1

DOOR HEIGHT	SECTION HEIGHTS							
	Btm	#2	#3	#4	#5	#6	#7	#8
14' 0"	21"	21"	21"	21"	21"	21"	21"	21"
13' 6"	21"	21"	21"	21"	21"	18"	18"	21"
13' 0"	21"	21"	21"	18"	18"	18"	18"	21"
12' 6"	21"	18"	18"	18"	18"	18"	18"	21"
12' 0"	21"	21"	21"	21"	21"	18"	21"	
11' 6"	21"	21"	21"	18"	18"	18"	21"	
11' 0"	21"	18"	18"	18"	18"	18"	21"	
10' 6"	21"	21"	21"	21"	21"	21"		
10' 0"	21"	21"	21"	18"	18"	21"		
9'6"	21"	18"	18"	18"	18"	21"		
9' 0"	18"	18"	18"	18"	18"	18"		
8' 6"	21"	21"	21"	18"	21"			
8' 0"	21"	18"	18"	18"	21"			
7' 6"	18"	18"	18"	18"	18"			
7' 0"	21"	21"	21"	21"				
6' 6"	21"	18"	18"	21"				

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT														SPLICE
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	S
6' 6"	3"	14"	27"	38"	46"	56"	64"								70"
7'	3"	14"	27"	38"	46"	56"	68"								76"
7' 6"	3"	14"	27"	38"	46"	56"	68"	78"							82"
8'	3"	14"	27"	38"	46"	56"	68"	78"							88"
8' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"						94"
9'	3"	14"	27"	38"	46"	56"	68"	78"	88"						100"
9' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	98"					106"
10'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"					112"
10' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"				118"
11'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"				124"
11' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"	120"			130"
12'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"	122"			136"
12'6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	109"	122"	132"		142"
13'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	114"	122"	134"		148"
13' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	109"	122"	134"	144"	154"
14'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	114"	122"	134"	146"	160"

ALL TRACK ATTACHMENT SPACING +/- 2" ALLOWED WITH SYP OR SPF NO. 2 OR BETTER ONLY

TABLE 4

Section Width (ft)	Panel Type	Center Stile Location (Measured from Left Edge)			Max Design Loads Allowed	
		1st (in)	2st (in)	3rd (in)	Positive (PSF)	Negative (PSF)
8' 0	Short	24.812	48.000	71.188	57.2	67.4
8' 0	Long	24.000	48.000	72.000	57.2	67.4
8' 0	Bead Board	24.625	48.000	71.375	57.2	67.4
8' 2	Short	24.316	49.000	73.684	56.0	66.1
8' 2	Long	24.500	49.000	73.500	56.0	66.1
8' 2	Bead Board	25.125	49.000	72.875	56.0	66.1
8' 4	Short	24.580	50.000	75.420	54.9	64.7
8' 4	Long	25.000	50.000	75.000	54.9	64.7
8' 4	Bead Board	25.625	50.000	74.375	54.9	64.7
8' 6	Short	26.029	51.000	75.971	53.8	63.5
8' 6	Long	25.500	51.000	76.500	53.8	63.5
8' 6	Bead Board	26.125	51.000	75.875	53.8	63.5
8' 8	Short	26.659	52.000	77.341	52.8	62.3
8' 8	Long	26.000	52.000	78.000	52.8	62.3
8' 8	Bead Board	26.625	52.000	77.375	52.8	62.3
8' 10	Short	27.034	53.000	78.966	51.8	61.1
8' 10	Long	26.500	53.000	79.500	51.8	61.1
8' 10	Bead Board	27.125	53.000	78.875	51.8	61.1
9' 0	Short	27.596	54.000	80.404	51.1	60.3
9' 0	Long	27.000	54.000	81.000	51.1	60.3
9' 0	Bead Board	27.625	54.000	80.375	51.1	60.3

TABLE 3

SECTION	STRUT SIZE
TOP	3.625"
7TH	3.625"
6TH	3.625"
5TH	3.625"
4TH	3.625"
3RD	3.625"
2ND	3.625"
BOTTOM	3.625"
	3"

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9' x 14' DESIGN LOADS +51.1 PSF -60.3 PSF LARGE MISSILE IMPACT RESISTANCE		THOMAS L. SHELDERDINE LICENSE No. 48579 See Digital Signature STATE OF FLORIDA PROFESSIONAL ENGINEER This document has been digitally signed & sealed by Thomas L. Shelderdine, 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. Shelderdine, 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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SIZE B	DRAWN BY DRC	DATE 02/26/22	DRAWING NUMBER IRC-9509-180-21-G
	CHECKED BY RLR	DATE 03/08/22	
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 3