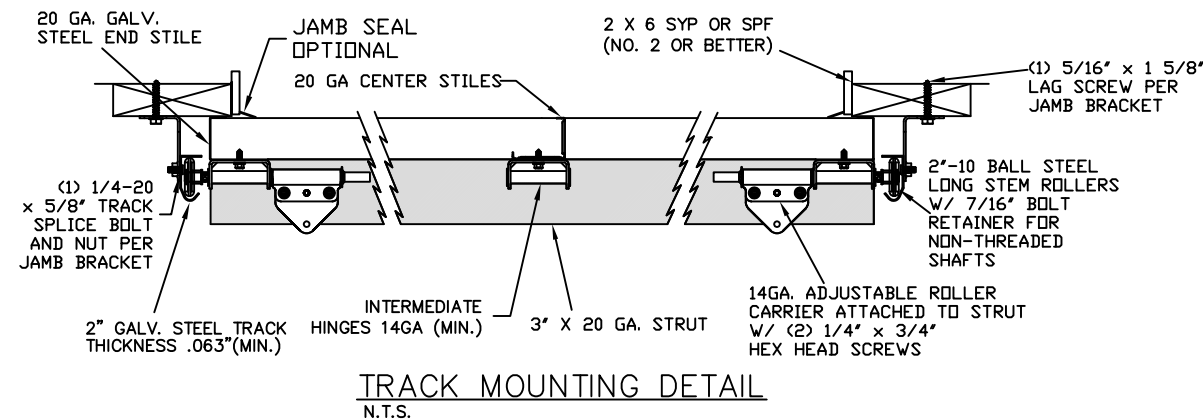
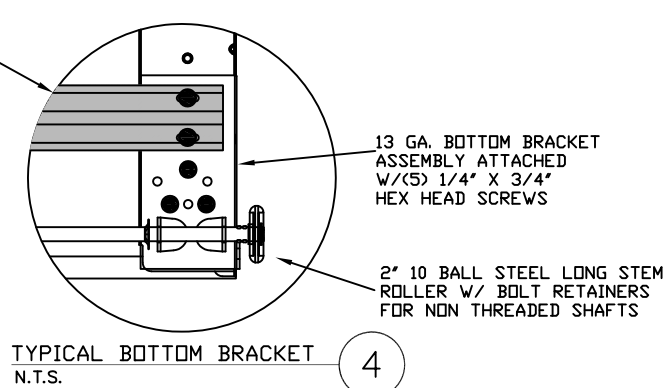
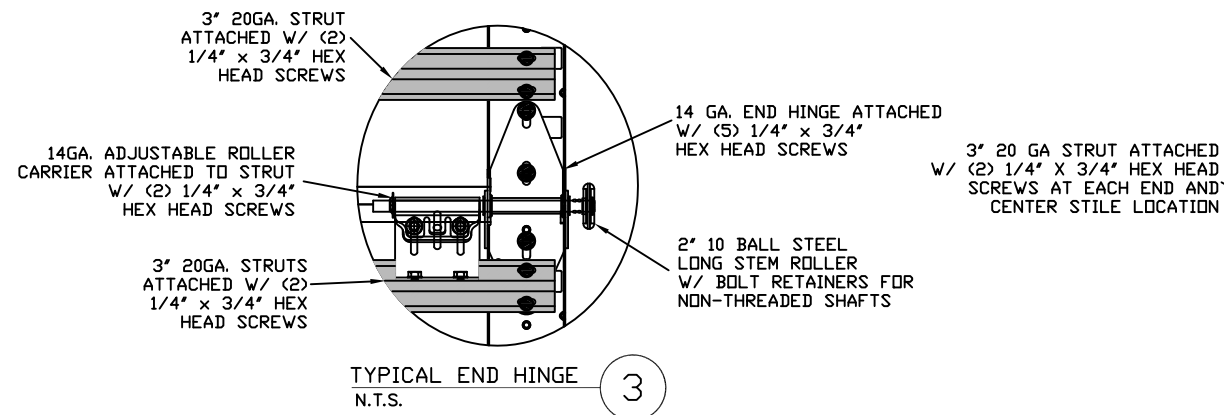
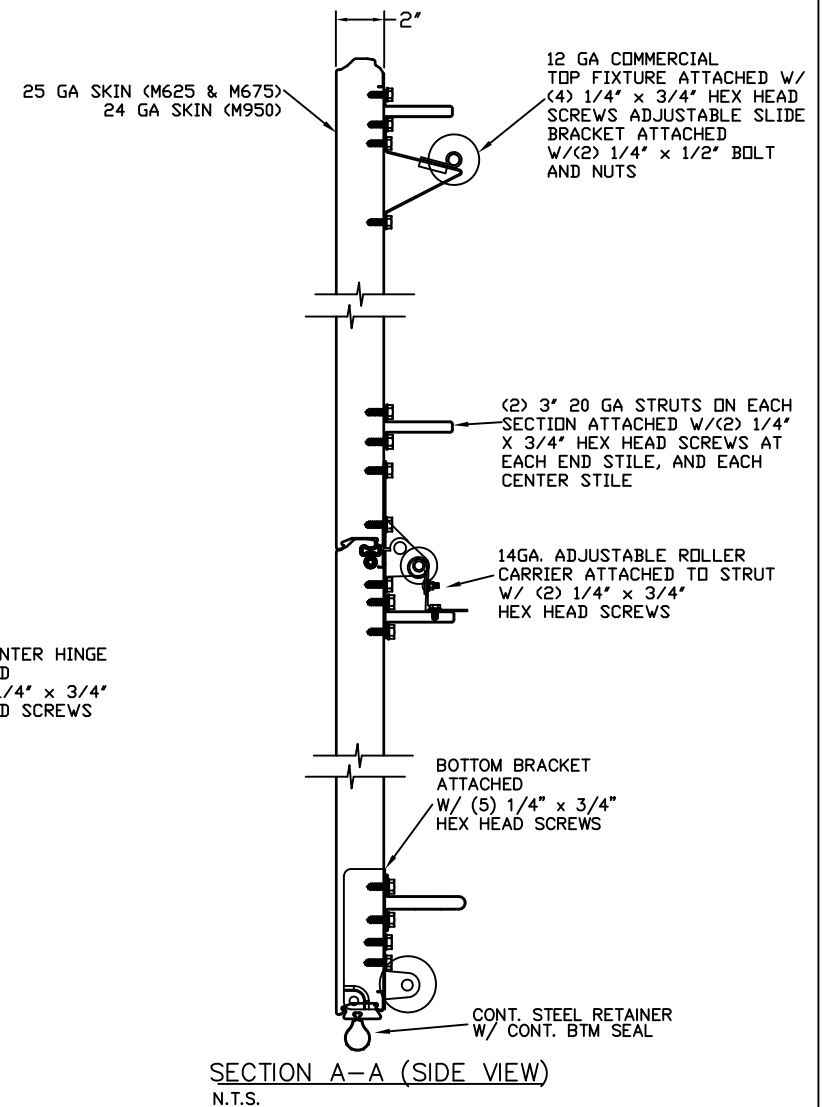
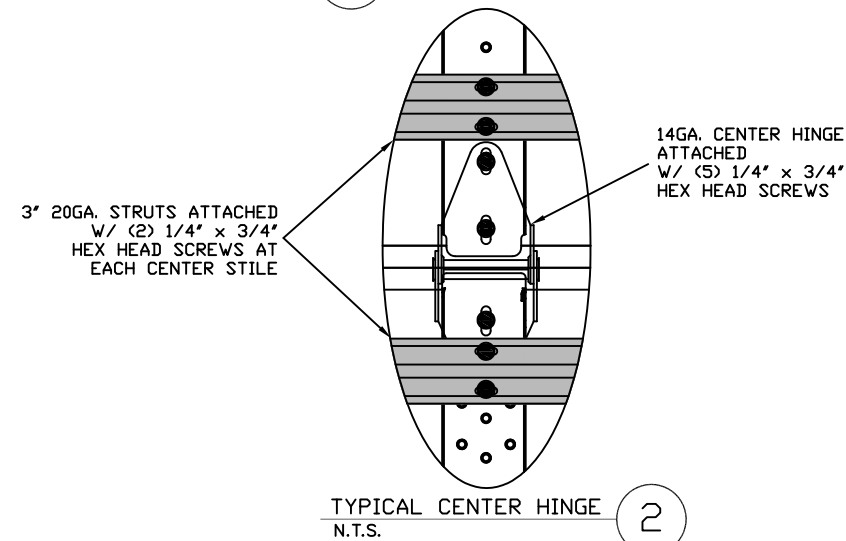
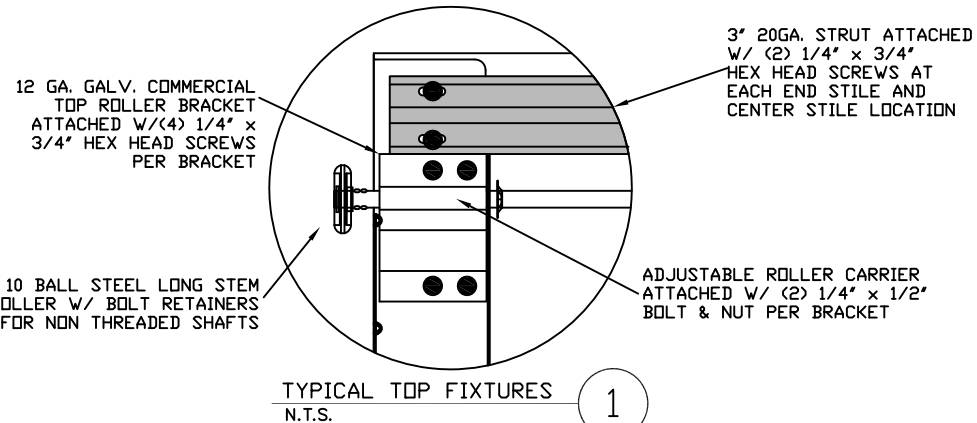
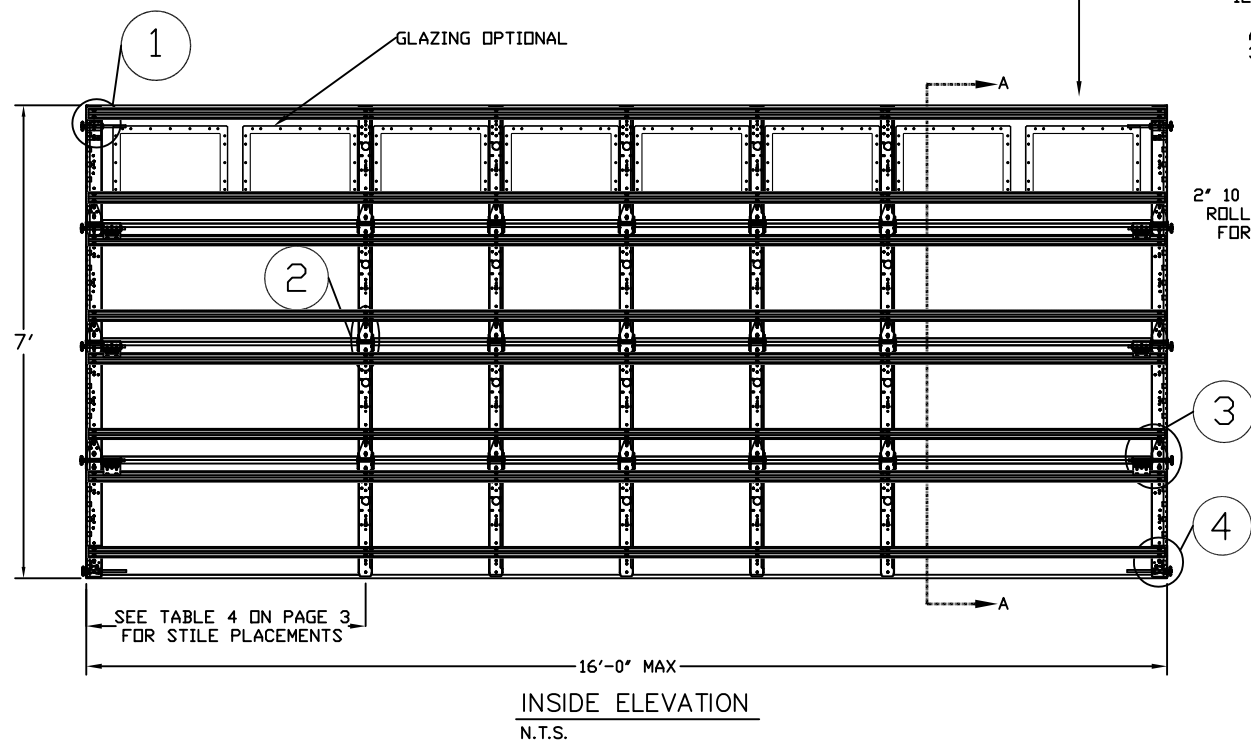


# LARGE MISSILE IMPACT RESISTANT

SEE PAGE 2 FOR OPTIONAL  
GLAZED SECTIONS  
STRUT AND STILE LAYOUT



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108 & 115, AND ASTM E330, E1886, E1996, & F588. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-16 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT ANY SLOPE):

WIND SPEED (MPH)	167	152	144	138	132
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	ADDED HERITAGE MODEL/DRAWING UPDATES	3/1/22	RLR

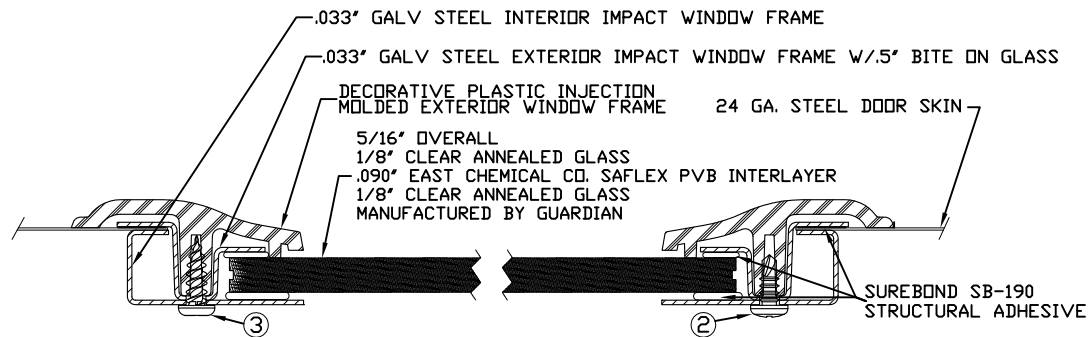
  

MAX SIZE 16' x 14'	<p>This document has been digitally signed &amp; sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed &amp; sealed, and the signature must be verified on any electronic copies.</p>	
DESIGN LOADS +25.6 PSF -29.1 PSF		
TEST LOADS (1.5 x DESIGN LOADS) +38.4 PSF -43.6 PSF		
LARGE MISSILE IMPACT RESISTANCE	Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063) 5921-G W. Friendly Ave., Greensboro, NC 27410	TX



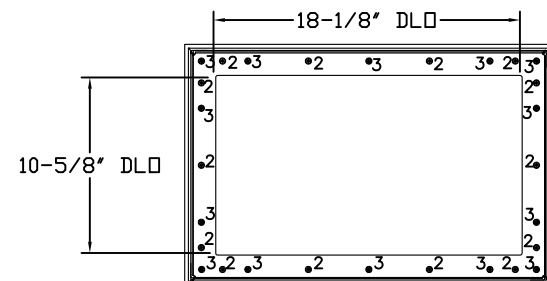
MODEL #625 AMARR LINCOLN 1000, 2000  
MODEL #675 AMARR HILLCREST 1000, 2000  
MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	RLR	DATE	4/14/20	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	4/14/20	IRC-6216-130-15-1
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 1 OF 3

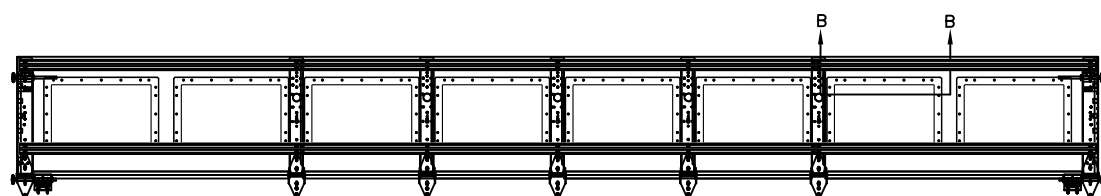


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

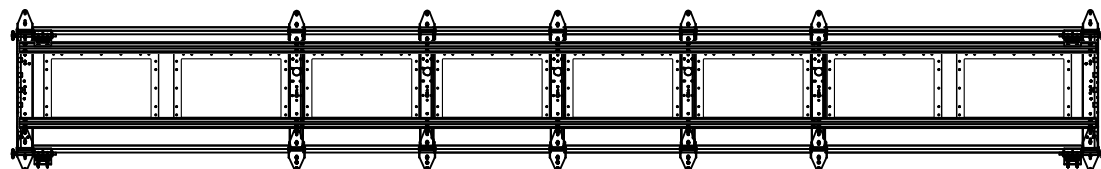
SECTION B-B IMPACT WINDOW DETAIL  
N.T.S.



IMPACT GLAZING FASTENER DETAIL  
N.T.S.



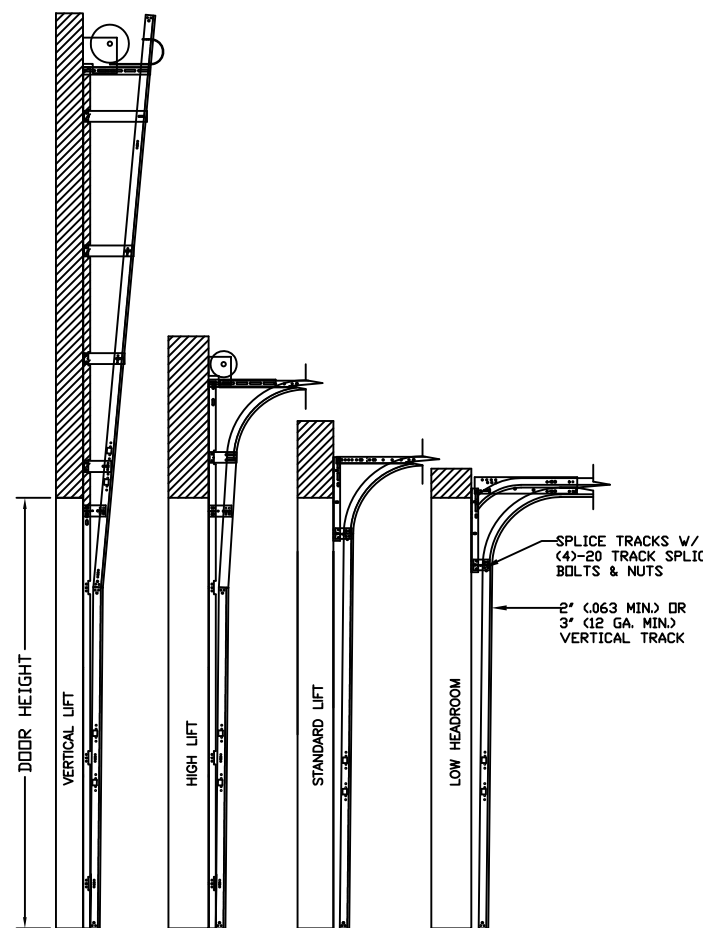
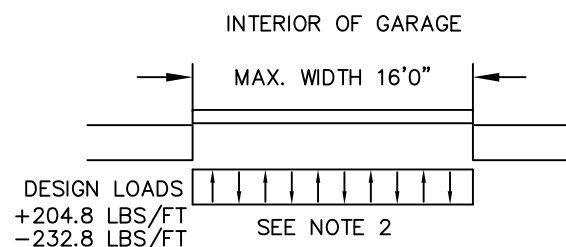
OPTIONAL SHORT PANEL TOP GLAZED SECTION (STRUT AND STILE LAYOUT)



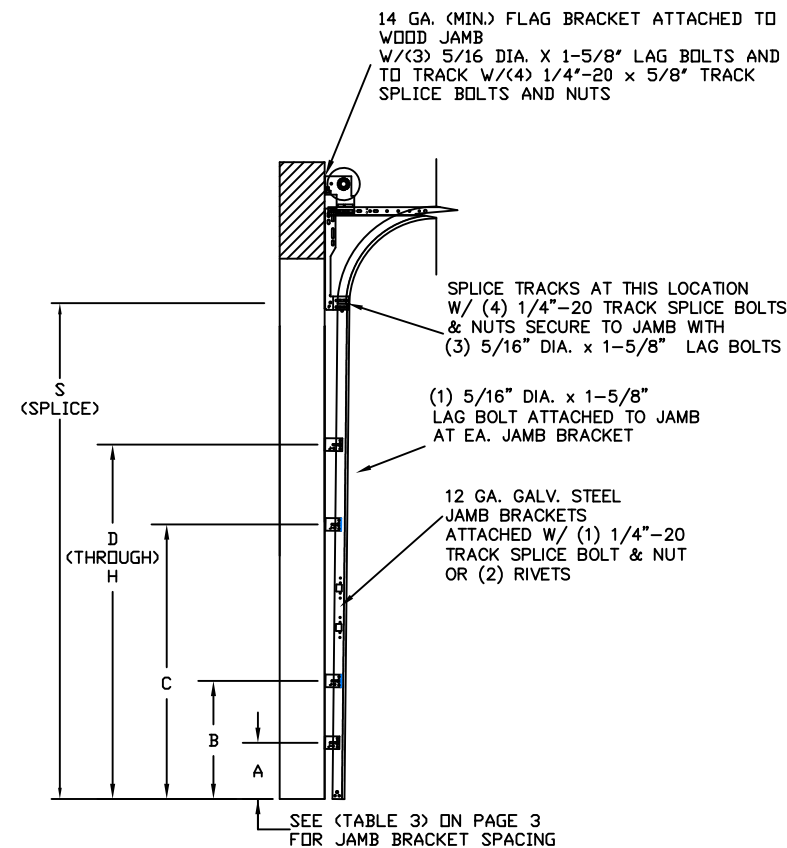
OPTIONAL SHORT PANEL INTERMEDIATE GLAZED SECTION (STRUT AND STILE LAYOUT)

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: +204.8 LBS/FT & -232.8 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 25 GA. (.019) MIN. ROLLED FORMED LIGHT COMMERCIAL QUALITY
5. DOORS UP TO 14'0" HIGH HAVE (2) 3" 20GA STRUTS ON EACH SECTION (SEE TABLE 2 FOR STRUT SCHEDULE)
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.
7. REFER TO TABLES ON PAGE 3 FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES
8. DOOR IS MANUFACTURED AND TESTED IN ACCORDANCE WITH THE 2018 IRC/IBC



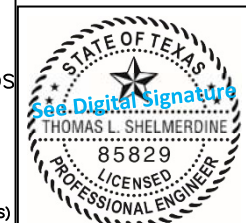
AVAILABLE TRACK CONFIGURATIONS  
N.T.S.



TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS  
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	ADDED HERITAGE MODEL/DRAWING UPDATES	3/1/22	RLR

MAX SIZE  
16' x 14'  
DESIGN LOADS  
+25.6 PSF  
-29.1 PSF  
TEST LOADS  
(1.5 x DESIGN LOADS)  
+38.4 PSF  
-43.6 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 (TX PE #85829)  
Structural Solutions, PA (TX Firm #F-004063)  
5921-G W. Friendly Ave., Greensboro, NC 27410



MODEL #625 AMARR LINCOLN 1000, 2000  
MODEL #675 AMARR HILLCREST 1000, 2000  
MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	RLR	DATE	4/14/20	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	4/14/20	IRC-6216-130-15-1

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

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

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

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 24" 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 20" 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 16" 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 16" 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 24" 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

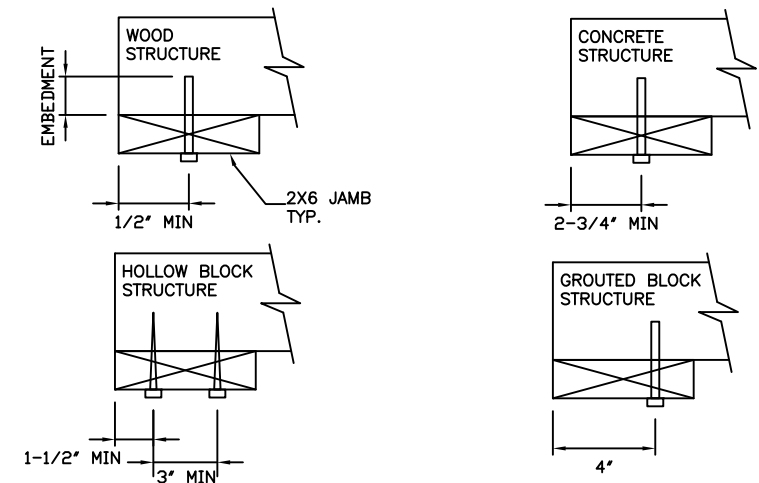


TABLE 4

TABLE 3

DOOR HEIGHT	TRACK ATTACHMENT									
	A	B	C	D	E	F	G	H	I	
6' 6"	3.5"	10"	21"	39"	57"					
7'	3.5"	10"	21"	42"	63"					
7' 6"	3.5"	10"	18"	36"	54"	72"				
8'	3.5"	10"	21"	39"	57"	75"				
8' 6"	3.5"	10"	21"	42"	63"	81"				
9'	3.5"	10"	18"	36"	54"	72"	90"			
9' 6"	3.5"	10"	21"	39"	57"	75"	93"			
10'	3.5"	10"	21"	42"	63"	81"	99"			
10' 6"	3.5"	10"	21"	42"	63"	84"	105"			
11'	3.5"	10"	21"	39"	57"	75"	93"	111"		
11' 6"	3.5"	10"	21"	42"	63"	81"	99"	117"		
12'	3.5"	10"	21"	42"	63"	84"	105"	123"		
12' 6"	3.5"	10"	21"	39"	57"	75"	93"	111"	129"	
13'	3.5"	10"	21"	42"	63"	81"	99"	117"	135"	
13' 6"	3.5"	10"	21"	42"	63"	84"	105"	123"	141"	
14'	3.5"	10"	21"	42"	63"	84"	105"	126"	147"	

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

Section	Panel Type	Center Stile Locations (Measured from Left Edge)					
		1st (in)	2st (in)	3rd (in)	4th (in)	5th (in)	6th (in)
10' 0"	Short	25.22	48.41	71.59	94.78		
10' 0"	Long	30.00	60.00	90.00			
10' 0"	Bead Board	30.63	60.00	89.38			
12' 0"	Short	25.62	48.81	72.00	95.19	118.38	
12' 0"	Long	27.25	49.63	72.00	94.38	116.75	
12' 0"	Bead Board	24.63	48.31	72.00	95.69	119.38	
12' 2"	Short	26.27	49.64	73.00	96.36	119.73	
12' 2"	Long	27.17	50.08	73.00	95.92	118.83	
12' 2"	Bead Board	25.13	49.06	73.00	96.94	120.88	
12' 4"	Short	27.27	50.64	74.00	97.36	120.73	
12' 4"	Long	28.17	51.08	74.00	96.92	119.83	
12' 4"	Bead Board	25.63	49.81	74.00	98.19	122.38	
12' 6"	Short	26.34	50.67	75.00	99.33	123.66	
12' 6"	Long	27.34	51.17	75.00	98.83	122.66	
12' 6"	Bead Board	26.13	50.56	75.00	99.44	123.88	
12' 8"	Short	27.34	51.67	76.00	100.33	124.66	
12' 8"	Long	28.20	52.10	76.00	99.90	123.80	
12' 8"	Bead Board	26.63	51.31	76.00	100.69	125.38	
12' 10"	Short	27.50	52.25	77.00	101.75	126.50	
12' 10"	Long	29.20	53.10	77.00	100.90	124.80	
12' 10"	Bead Board	27.13	52.06	77.00	101.94	126.88	
13' 0"	Short	28.00	53.00	78.00	103.00	128.00	
13' 0"	Long	30.20	54.10	78.00	101.90	125.80	
13' 0"	Bead Board	27.63	52.81	78.00	103.19	128.38	
13' 2"	Short	29.00	54.00	79.00	104.00	129.00	
13' 2"	Long	31.20	55.10	79.00	102.90	126.80	
13' 2"	Bead Board	28.13	53.56	79.00	104.44	129.88	
13' 4"	Short	28.80	54.40	80.00	105.60	131.20	
13' 4"	Long	29.80	54.90	80.00	105.10	130.20	
13' 4"	Bead Board	28.63	54.31	80.00	105.69	131.38	
13' 6"	Short	29.80	55.40	81.00	106.60	132.20	
13' 6"	Long	30.80	55.90	81.00	106.10	131.20	
13' 6"	Bead Board	29.13	55.06	81.00	106.94	132.88	
13' 8"	Short	30.80	56.40	82.00	107.60	133.20	
13' 8"	Long	31.25	56.63	82.00	107.38	132.75	
13' 8"	Bead Board	29.63	55.81	82.00	108.19	134.38	
13' 10"	Short	31.39	57.16	82.94	108.71	134.49	
13' 10"	Long	31.34	57.17	83.00	108.83	134.66	
13' 10"	Bead Board	30.13	56.56	83.00	109.44	135.88	
14' 0"	Short	31.59	57.76	83.94	110.11	136.29	
14' 0"	Long	33.25	58.63	84.00	109.38	134.75	
14' 0"	Bead Board	30.63	57.31	84.00	110.69	137.38	
14' 2"	Short	32.75	58.85	84.94	111.41	137.89	
14' 2"	Long	33.34	59.17	85.00	110.83	136.66	
14' 2"	Bead Board	31.13	58.06	85.00	111.94	138.88	

Section	Panel Type	Center Stile Locations (Measured from Left Edge)					
		1st (in)	2st (in)	3rd (in)	4th (in)	5th (in)	6th (in)
14' 4"	Short	32.39	59.16	85.94	112.71	139.49	
14' 4"	Long	34.34	60.17	86.00	111.83	137.66	
14' 4"	Bead Board	31.63	58.81	86.00	113.19	140.38	
14' 6"	Short	32.79	59.86	86.94	114.01	141.09	
14' 6"	Long	35.34	61.17	87.00	112.83	138.66	
14' 6"	Bead Board	32.13	59.56	87.00	114.44	141.88	
14' 8"	Short	33.19	60.56	87.94	115.31	142.69	
14' 8"	Long	44.81	66.41	88.00	109.59	131.19	
14' 8"	Bead Board	32.63	60.31	88.00	115.69	143.38	
14' 10"	Short	33.59	61.26	88.94	116.61	144.29	
14' 10"	Long	45.60	67.30	89.00	110.70	132.40	
14' 10"	Bead Board	33.13	61.06	89.00	116.94	144.88	
15' 0"	Long	46.60	68.30	90.00	111.70	133.40	
15' 0"	Bead Board	33.63	61.81	90.00	118.19	146.38	
15' 2"	Short	62.66	76.80	90.94	105.08	119.21	
15' 2"	Long	47.60	69.30	91.00	112.70	134.40	
15' 2"	Bead Board	34.13	62.56	91.00	119.44	147.88	
15' 4"	Short	28.00	53.60	79.20	104.80	130.40	156.00
15' 4"	Long	47.25	69.63	92.00	114.38	136.75	
15' 4"	Bead Board	34.63	63.31	92.00	120.69	149.38	
15' 6"	Short	46.62	69.81	93.00	116.19	139.38	
15' 6"	Long	47.60	70.30	93.00	115.70	138.40	
15' 6"	Bead Board	47.42	70.21	93.00	115.79	138.58	
15' 8"	Short	47.62	70.81	94.00	117.19	140.38	
15' 8"	Long	48.60	71.30	94.00	116.70	139.40	
15' 8"	Bead Board	48.02	71.01	94.00	116.99	139.98	
15' 10"	Short	48.62	71.81	95.00	118.19	141.38	
15' 10"	Long	49.17	72.08	95.00	117.92	140.83	
15' 10"	Bead Board	48.62	71.81	95.00	118.19	141.38	
16' 0"	Short	49.62	72.81	96.00	119.19	142.38	
16' 0"	Long	50.60	73.30	96.00	118.70	141.40	
16' 0"	Bead Board	48.42	72.21	96.00	119.79	143.58	

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	ADDED HERITAGE MODEL/DRAWING UPDATES	3/1/22	RLR

MAX SIZE 16' x 14'

DESIGN LOADS  
 +25.6 PSF  
 -29.1 PSF

TEST LOADS (1.5 x DESIGN LOADS)  
 +38.4 PSF  
 -43.6 PSF

LARGE MISSILE IMPACT RESISTANCE

Thomas L. Shelmerdine, PE (TX PE #85829)  
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**Amarr**

MODEL #625 AMARR LINCOLN 1000, 2000  
 MODEL #675 AMARR HILLCREST 1000, 2000  
 MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	RLR	DATE	4/14/20	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	4/14/20	IRC-6216-130-15-1

AMARR COMPANY  
 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 SHEET 3 OF 3