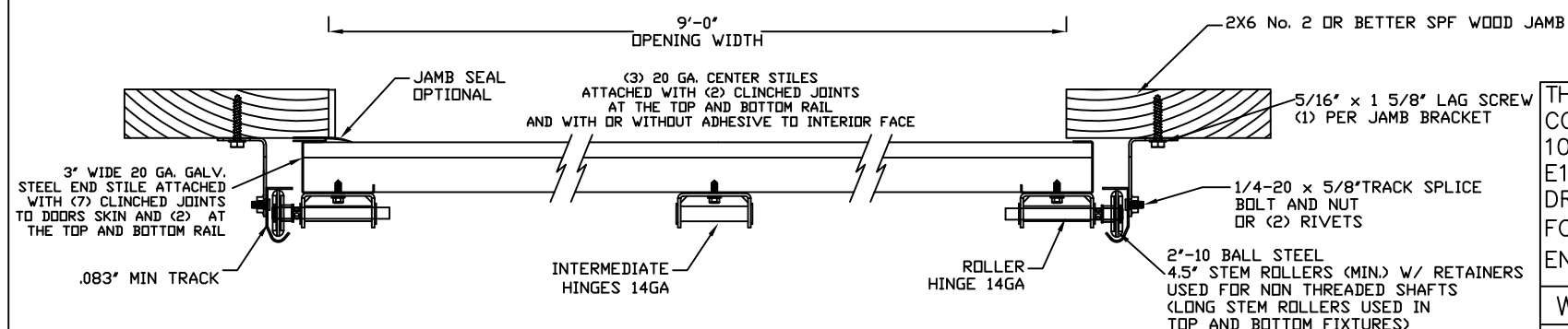
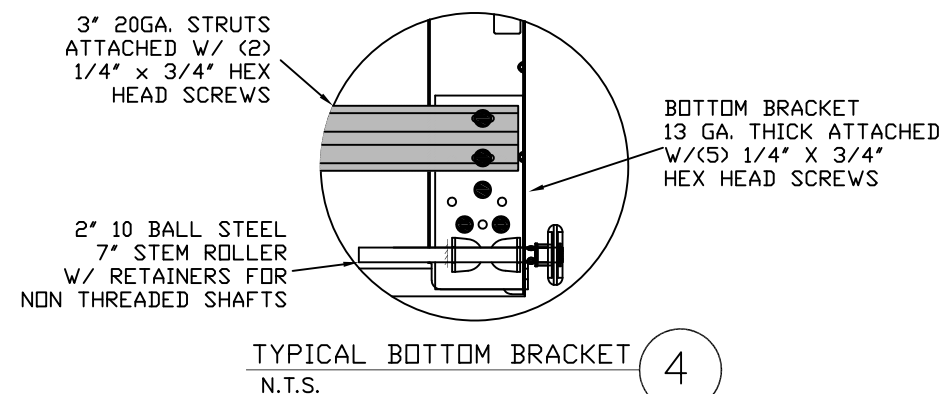
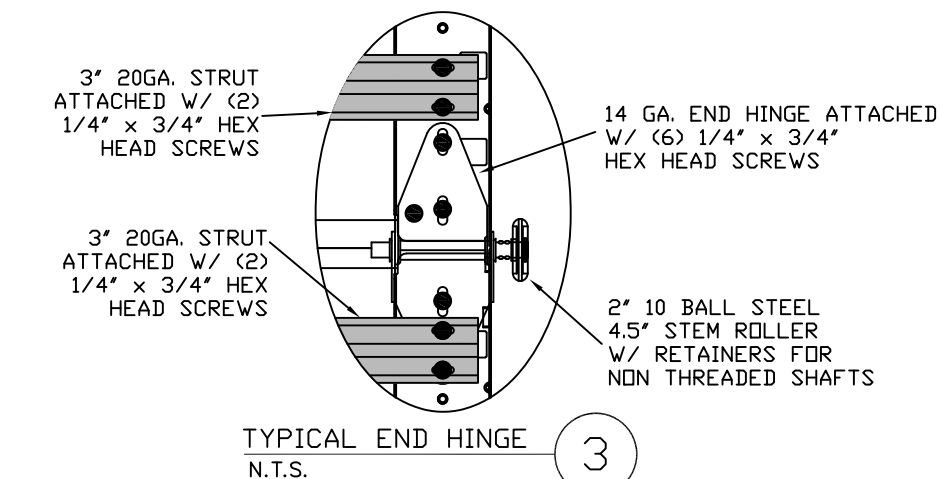
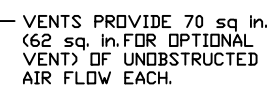
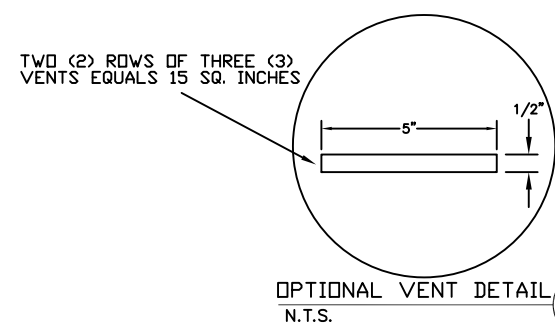
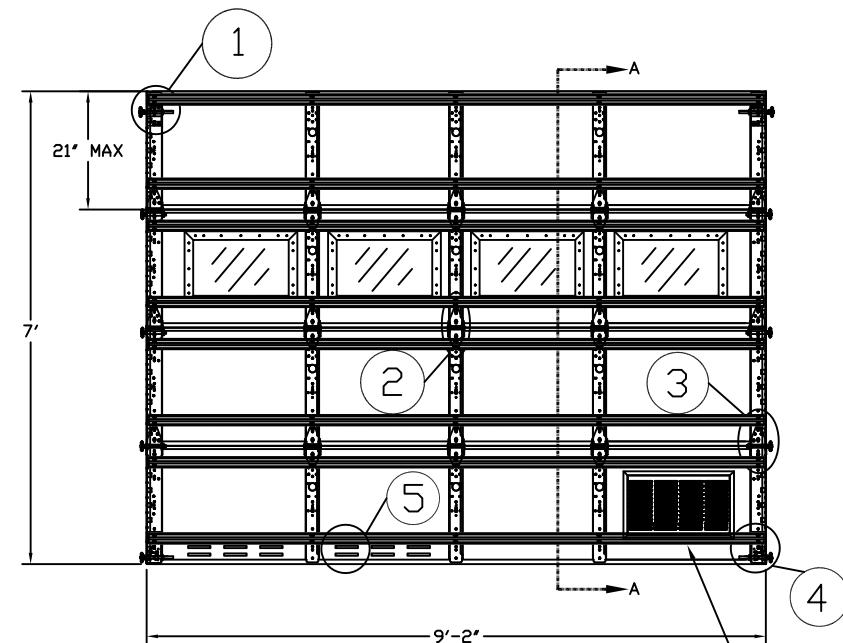
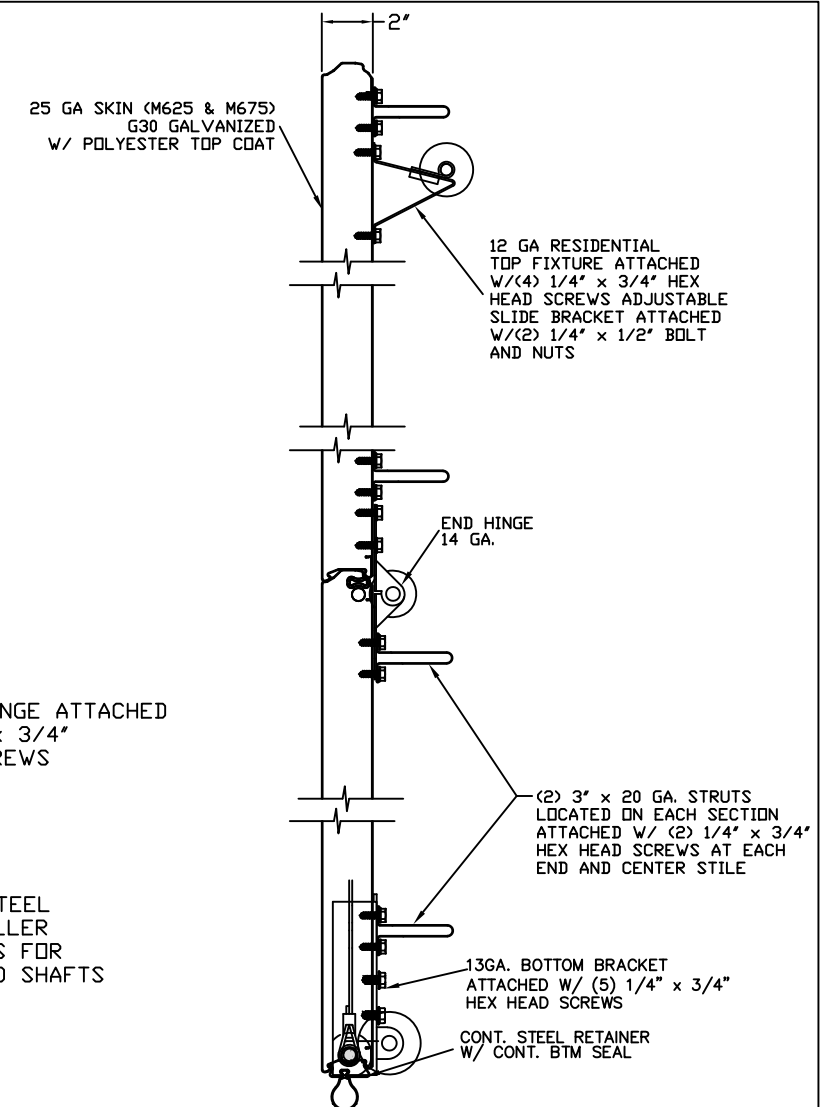
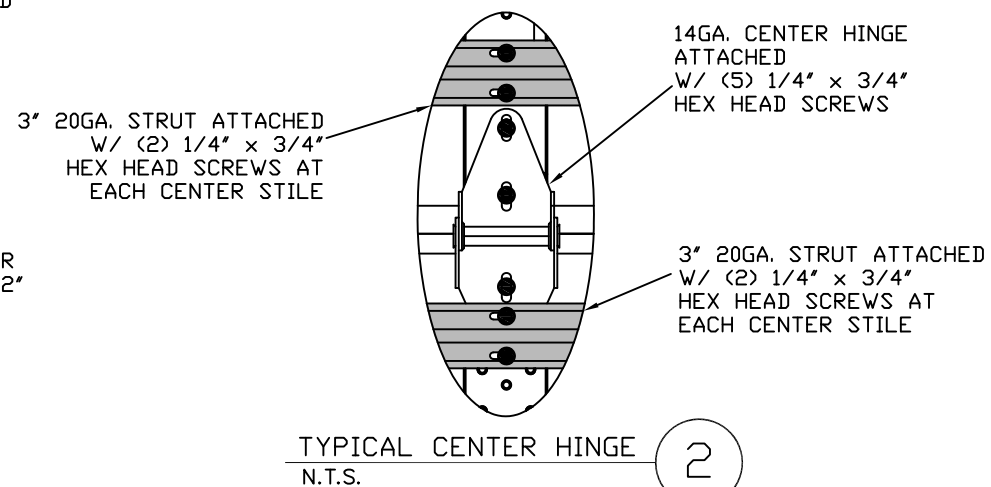
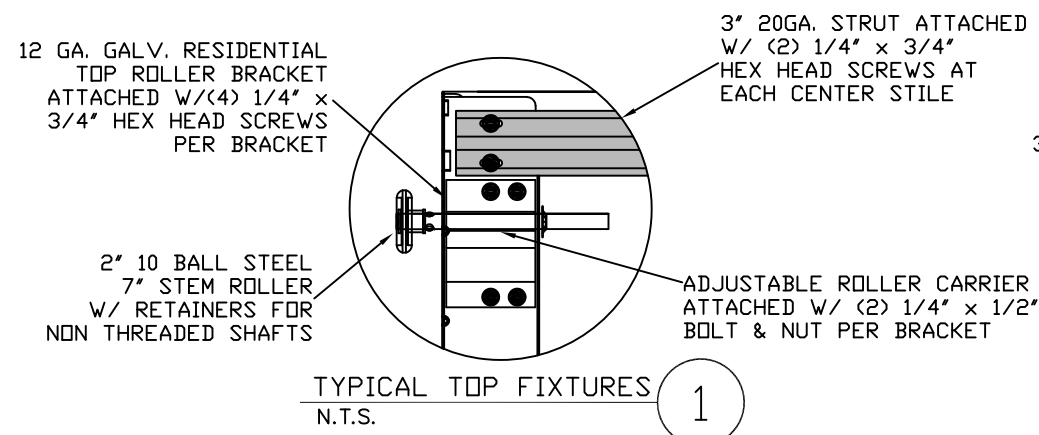




W THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108-05 & 115-05, AND ASTM E330-02, E1886-05, E1996-09, & F588-07. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT ANY SLOPE):

WIND SPEED (MPH)	218	198	188	180	173
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 14'		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.
DESIGN LOADS +45.2 PSF -53.4 PSF		
TEST LOADS +67.8 PSF -80.1 PSF		
LARGE MISSILE IMPACT RESISTANCE	Thomas L Shelmerdine	Digitally signed by Thomas L Shelmerdine DN: cn=US, o=North Carolina, dnQualifier=A01410D000001856487A7 B100125CE2, cn=Thomas L Shelmerdine Date: 2023.09.21 16:36:25 -0400'

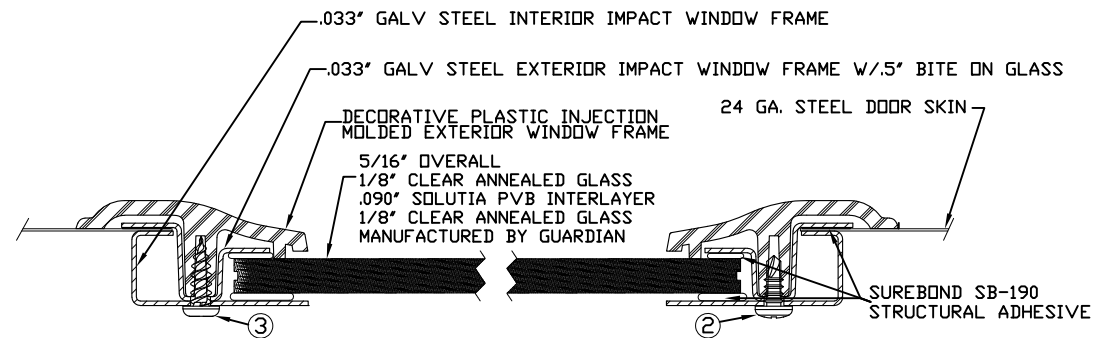
Amar

MODEL #625 AMARR LINCOLN 1000, 1500, 2000
MODEL #675 AMARR HILLCREST 1000, 1500, 2000

SIZE B	DRAWN BY	RLR	DATE	11/9/17	DRAWING NUMBER IRC-6209-169-15-1
	CHECKED BY	RLR	DATE	11/9/17	
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 1 OF 3

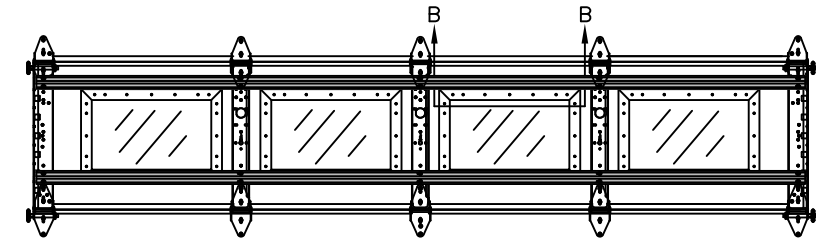
IMPACT GLAZING FASTENER DETAIL
N.T.S.

GLAZING MEETS ASTM E1300-04

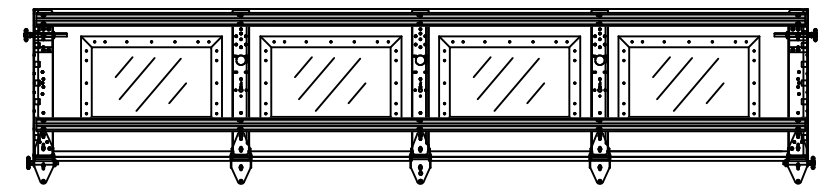


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

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



OPTIONAL TOP SECTION IMPACT GLAZED LAYOUT
N.T.S.



OPTIONAL INTERMEDIATE SECTION IMPACT GLAZED LAYOUT
N.T.S.

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 22" 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

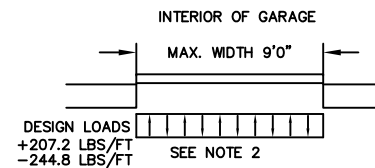
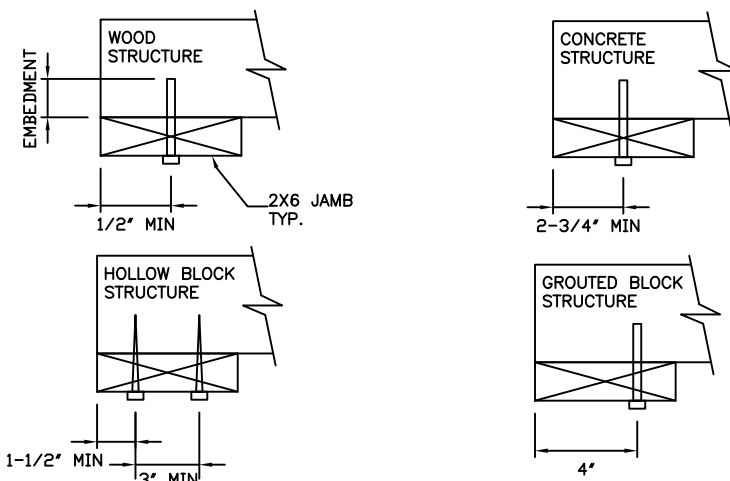
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART)
AT 16" O.C. (1 1/2" EMBEDMENT)

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)

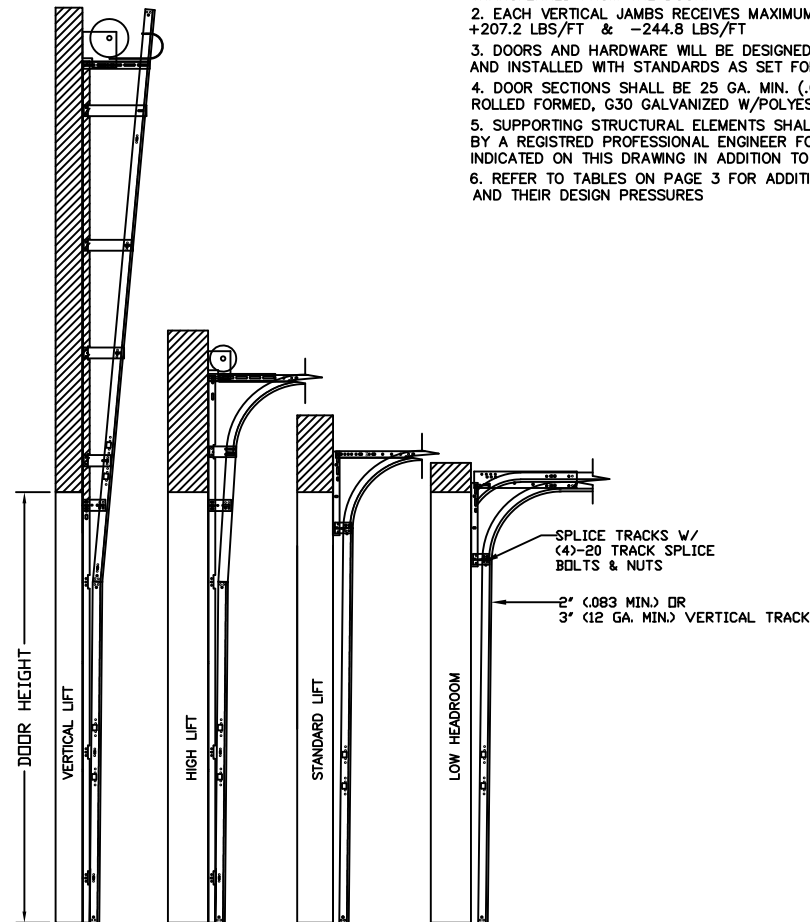
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)
(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

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



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 JAMB RECEIVES MAXIMUM DESIGN LOADS OF:
+207.2 LBS/FT & -244.8 LBS/FT
3. DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 25 GA. MIN. (.019") EXTERIOR SKIN ROLLED FORMED, G30 GALVANIZED W/POLYESTER TOP COAT
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.
6. REFER TO TABLES ON PAGE 3 FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9'2 x 14' DESIGN LOADS +45.2 PSF -53.4 PSF TEST LOADS +67.8 PSF -80.1 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		
			
MODEL #625 AMARR LINCOLN 1000, 1500, 2000 MODEL #675 AMARR HILLCREST 1000, 1500, 2000			
SIZE B	DRAWN BY	RLR	DATE 11/9/17
	CHECKED BY	RLR	DATE 11/9/17
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 DRAWING NUMBER IRC-6209-169-15-I			
SHEET 2 OF 3			

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"	10.0"	22.0"	34"	46"	58"																		
7'	6"	3.5"	10.0"	22.0"	34"	46"	58"	70"																	
8'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"																	
8'	6"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"																
9'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"																
9'	6"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"															
10'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"															
11'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"														
12'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"													
13'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"												
14'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"											
15'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"										
16'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"									
17'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"								
18'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"							
19'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"						
20'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"					
21'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"				
22'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"			
23'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"		
24'	0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"	262"	

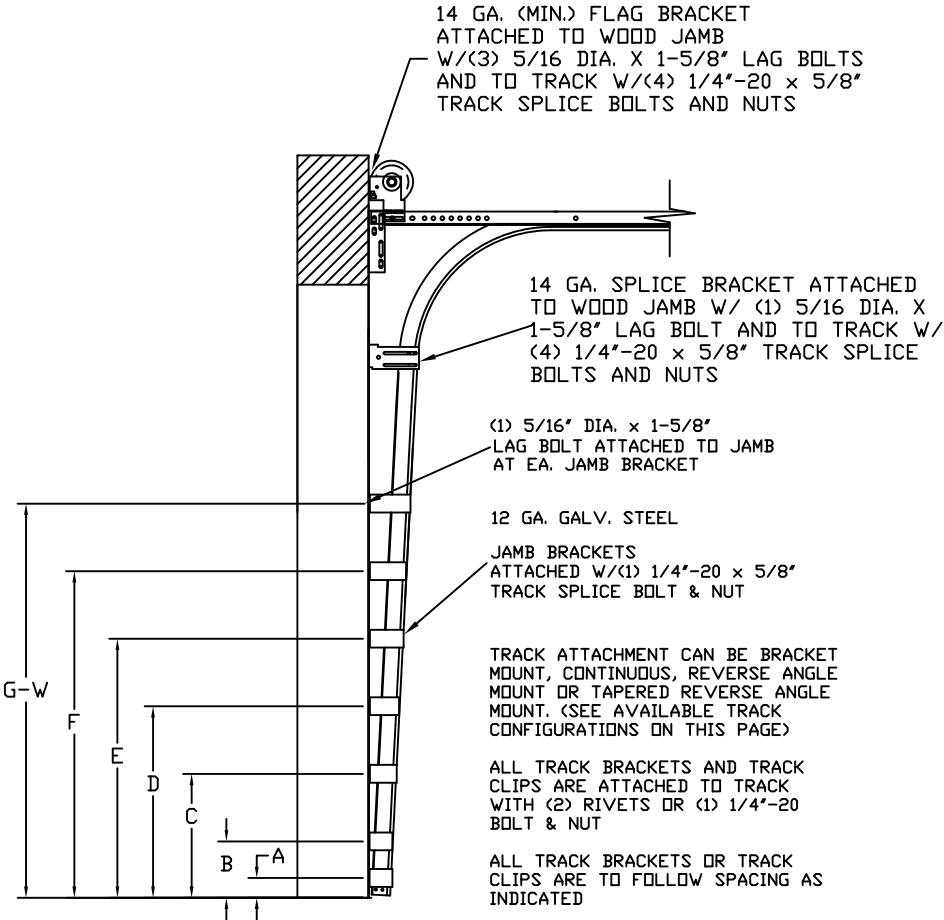
ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY

TABLE 2

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 4

SECTION	STRUT SIZE
8TH	3"
	3"
7TH	3"
	3"
6TH	3"
	3"
5TH	3"
	3"
4TH	3"
	3"
3RD	3"
	3"
2ND	3"
	3"
BOTTOM	3"
	3"



TRACK CONFIGURATION FOR UP TO 14' TALL DOORS
SEE TABLE 1

TABLE 3

Section Width (ft)	Panel Type	Center Stile Location (Measured from Left Edge)			Max Design Loads Allowed	
					Positive (PSF)	Negative (PSF)
8' 0	Short, Hillcrest	24.8	48.0	71.2	51.5	60.9
8' 2	Short, Hillcrest	25.8	49.0	72.2	50.5	59.6
8' 4	Short, Hillcrest	26.6	50.0	73.4	49.5	58.4
8' 6	Short, Hillcrest	26.7	51.0	75.3	48.5	57.3
8' 8	Short, Hillcrest	27.3	52.0	76.8	47.6	56.2
8' 10	Short, Hillcrest	28.0	53.0	78.0	46.7	55.1
9' 0	Short, Hillcrest	28.6	54.0	79.4	45.8	54.1
9' 2	Short, Hillcrest	29.4	55.0	80.6	45.2	53.4

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
9'2 x 14'

DESIGN LOADS
+45.2 PSF
-53.4 PSF

TEST LOADS
+67.8 PSF
-80.1 PSF

LARGE MISSILE
IMPACT
RESISTANCE

THOMAS L. SHELMERDINE
LICENSE
No. 48579
See Digital Signature
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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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

MODEL #625 AMARR LINCOLN 1000, 1500, 2000
MODEL #675 AMARR HILLCREST 1000, 1500, 2000

SIZE	DRAWN BY	RLR	DATE	11/9/17	DRAWING NUMBER IRC-6209-169-15-I
B	CHECKED BY	RLR	DATE	11/9/17	
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 3 OF 3