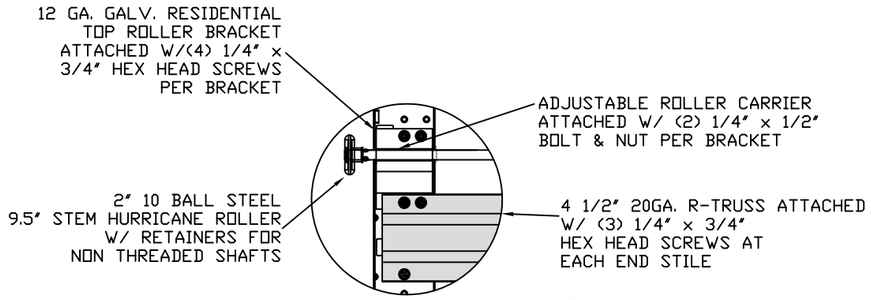
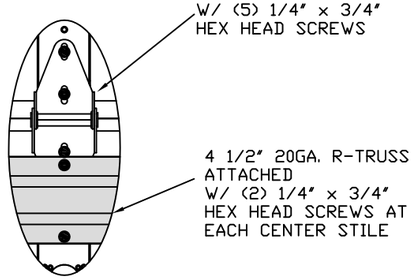
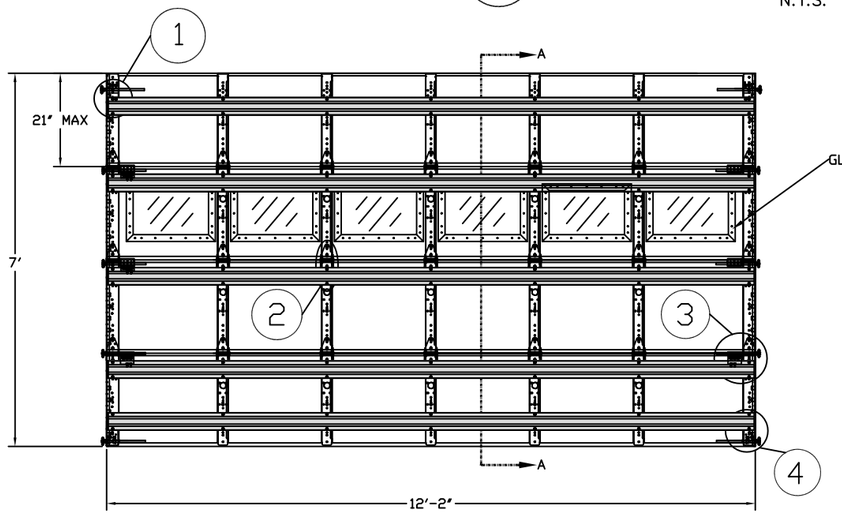
LARGE MISSILE IMPACT RESISTANT



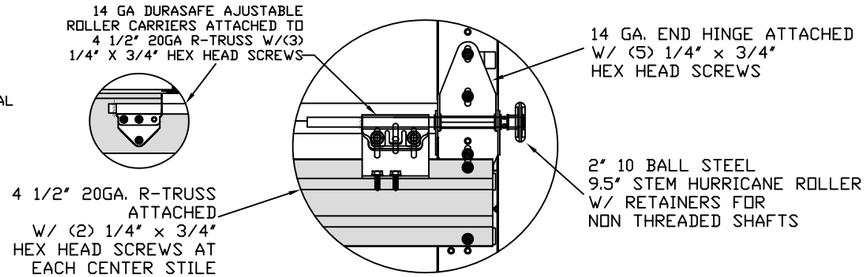
TYPICAL TOP FIXTURES 1
N.T.S.



TYPICAL CENTER HINGE 2
N.T.S.



INSIDE ELEVATION
N.T.S.



TYPICAL END HINGE 3
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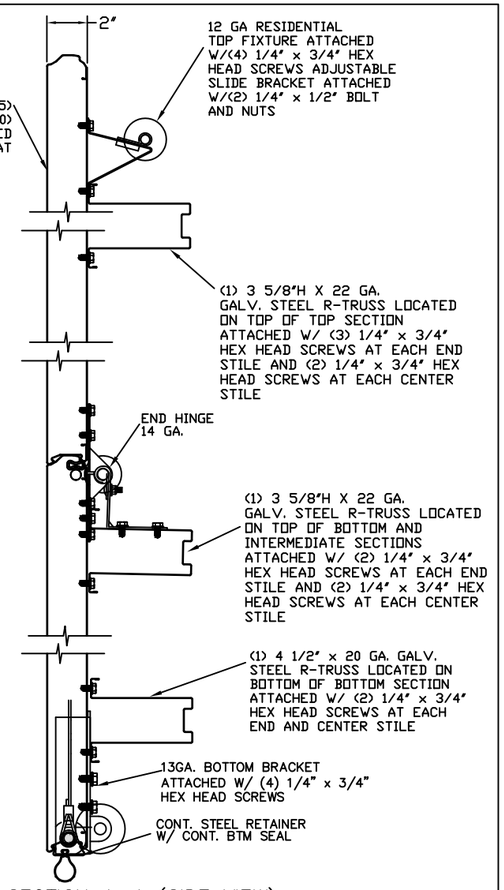
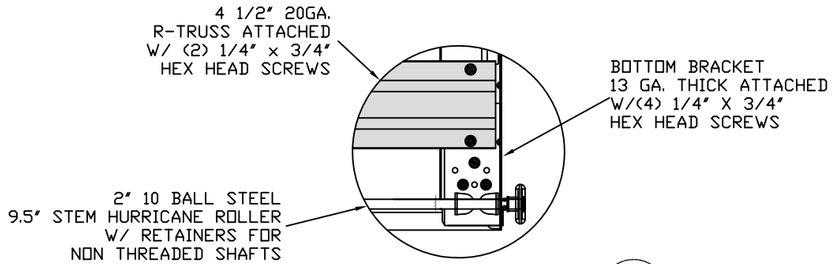
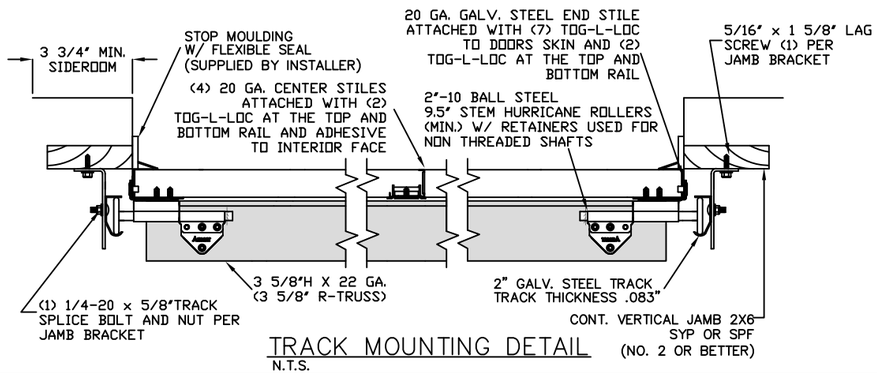


SECTION A-A (SIDE VIEW)
N.T.S.



TYPICAL BOTTOM BRACKET 4
N.T.S.



TRACK MOUNTING DETAIL
N.T.S.

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 7-16 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT ANY SLOPE):

WIND SPEED (MPH)	226	205	195	186	179
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
12'2 x 14'

DESIGN LOADS
+47.4 PSF
-54.8 PSF

TEST LOADS
+71.1 PSF
-82.2 PSF

LARGE MISSILE IMPACT RESISTANCE

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED
PROFESSIONAL ENGINEER
See Digital Signature

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Thomas L Shelmerdine

Digitally signed by Thomas L Shelmerdine
DN: c=US, o=North Carolina, dnQualifier=A01410D0000017E7DCF965F0002DE45, cn=Thomas L Shelmerdine
Date: 2022.03.11 08:46:57 -05'00'

Thomas L. Shelmerdine, PE (TX PE #85829)
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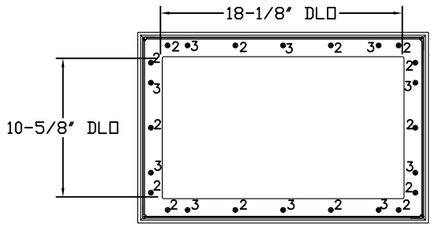
5921-G W. Friendly Ave., Greensboro, NC 27410

TX

Amarr

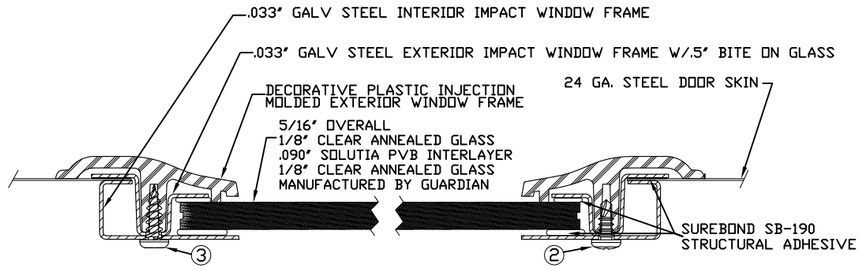
MODEL #625 AMARR LINCOLN 1000, 2000
MODEL #675 AMARR HILLCREST 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	RLR	DATE	12/04/17	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	12/04/17	IRC-6212-175-24-I
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 1 OF 3



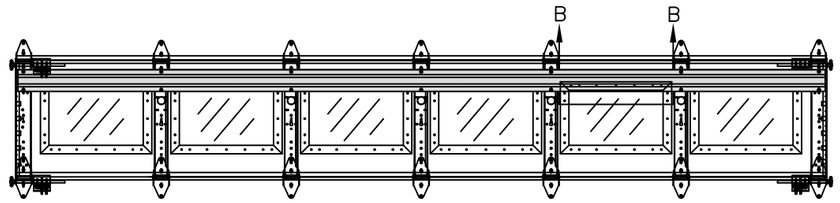
IMPACT GLAZING FASTENER DETAIL
N.T.S.

GLAZING MEETS ASTM E1300-04

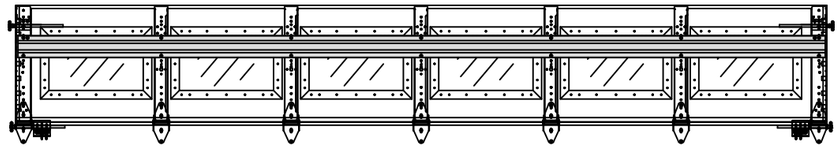


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

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)

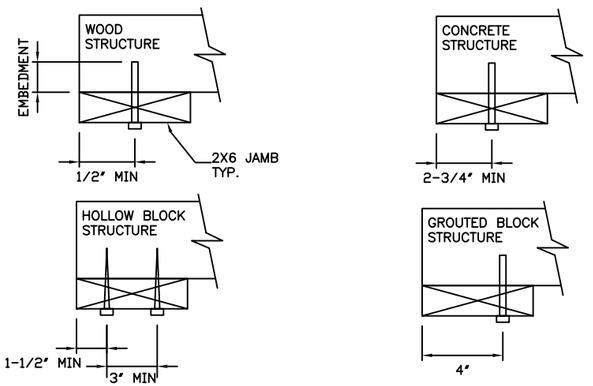
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 16" O.C. (1 1/2" EMBEDMENT)

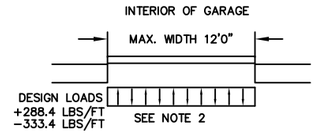
2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE
HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 14" O.C. (1 1/4" EMBEDMENT)
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 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 18" O.C. (1 1/4" EMBEDMENT)
(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

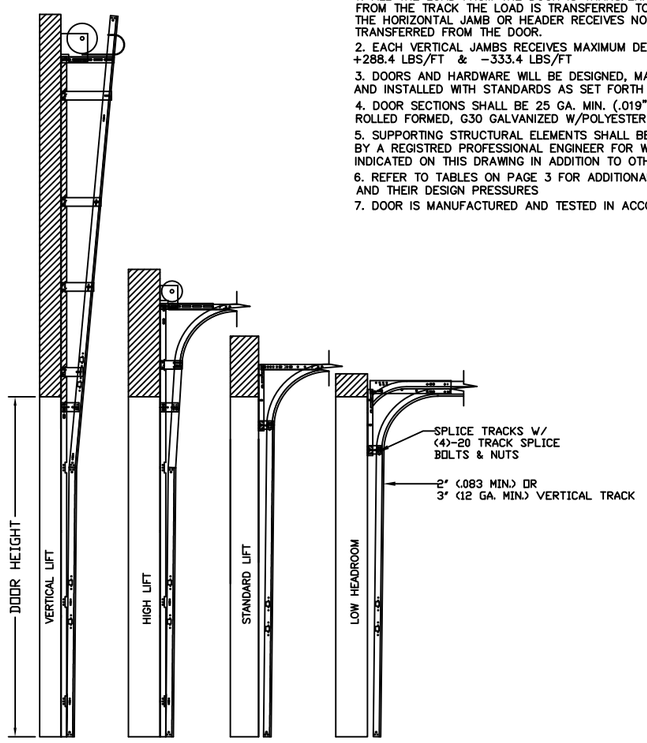
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
*PREPARATION OF WOOD JAMBS BY OTHERS





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 JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +288.4 LBS/FT & -333.4 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 REGISTRED 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
7. DOOR IS MANUFACTURED AND TESTED IN ACCORDANCE WITH THE 2018 IRC/IBC.



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

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

MAX SIZE
12'2 x 14'

DESIGN LOADS
+47.4 PSF
-54.8 PSF

TEST LOADS
+71.1 PSF
-82.2 PSF

LARGE MISSILE IMPACT RESISTANCE

STATE OF TEXAS
See Digital Signature
THOMAS L. SHELMERDINE
85829
LICENSED
PROFESSIONAL ENGINEER

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

Amarr

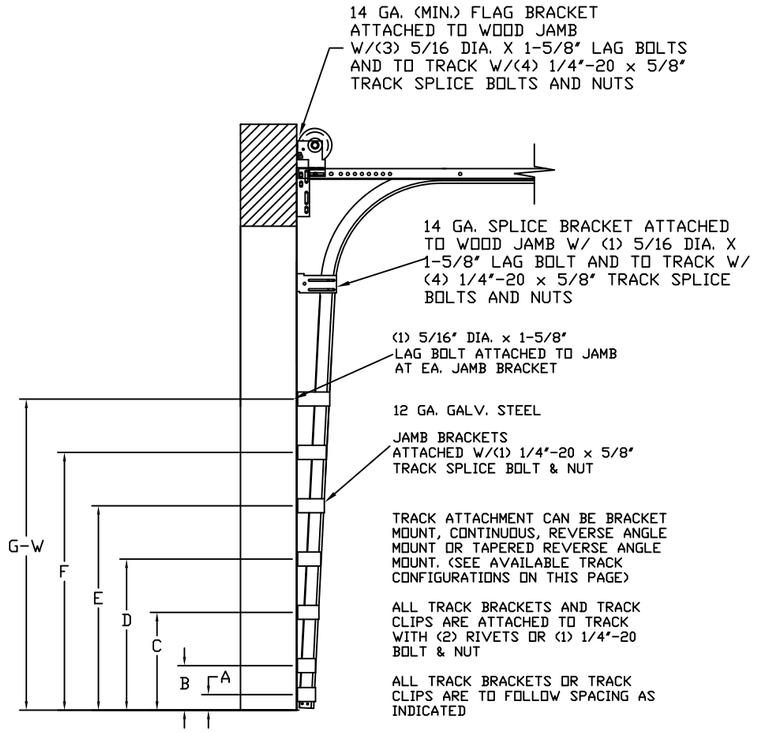
MODEL #625 AMARR LINCOLN 1000, 2000
MODEL #675 AMARR HILLCREST 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY RLR	DATE 12/04/17	DRAWING NUMBER
B	CHECKED BY RLR	DATE 12/04/17	IRC-6212-175-24-I
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			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"	70"																
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



TRACK CONFIGURATION FOR UP TO 14' TALL DOORS

TABLE 2

Section Width (ft)		Panel Type	Center Stile Location (Measured from Left Edge)				
8'	0	Short, Bead Board	24.8	48.0	71.2		
8'	2	Short, Bead Board	25.8	49.0	72.2		
8'	4	Short, Bead Board	26.6	50.0	73.4		
8'	6	Short, Bead Board	26.7	51.0	75.3		
8'	8	Short, Bead Board	27.3	52.0	76.8		
8'	10	Short, Bead Board	28.0	53.0	78.0		
9'	0	Short, Bead Board	28.6	54.0	79.4		
9'	2	Short, Bead Board	29.4	55.0	80.6		
9'	4	Short, Bead Board	30.4	56.0	81.6		
9'	6	Short, Bead Board	31.4	57.0	82.6		
9'	8	Short, Bead Board	32.4	58.0	83.6		
9'	10	Short, Bead Board	33.4	59.0	84.6		
10'	0	Short, Bead Board	25.2	48.4	71.6	94.8	
10'	2	Short, Bead Board	25.9	49.3	72.7	96.1	
10'	4	Short, Bead Board	26.0	50.3	73.7	97.1	
10'	6	Short, Bead Board	26.4	50.8	75.2	99.6	
10'	8	Short, Bead Board	27.4	51.8	76.2	100.6	
10'	10	Short, Bead Board	27.5	52.5	77.5	102.5	
11'	0	Short, Bead Board	28.5	53.5	78.5	103.5	
11'	2	Short, Bead Board	28.6	54.2	79.8	105.4	
11'	4	Short, Bead Board	29.6	55.2	80.8	106.4	
11'	6	Short, Bead Board	30.6	56.2	81.8	107.4	
11'	8	Short, Bead Board	31.6	57.2	82.8	108.4	
11'	10	Short, Bead Board	24.6	47.8	71.0	94.2	117.4
12'	0	Short, Bead Board	25.6	48.8	72.0	95.2	118.4
12'	2	Short, Bead Board	26.2	49.6	73.0	96.4	119.8

TABLE 3

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"				

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

MAX SIZE
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DESIGN LOADS
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B	CHECKED BY	RLR	DATE	12/04/17	IRC-6212-175-24-I
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 3 OF 3