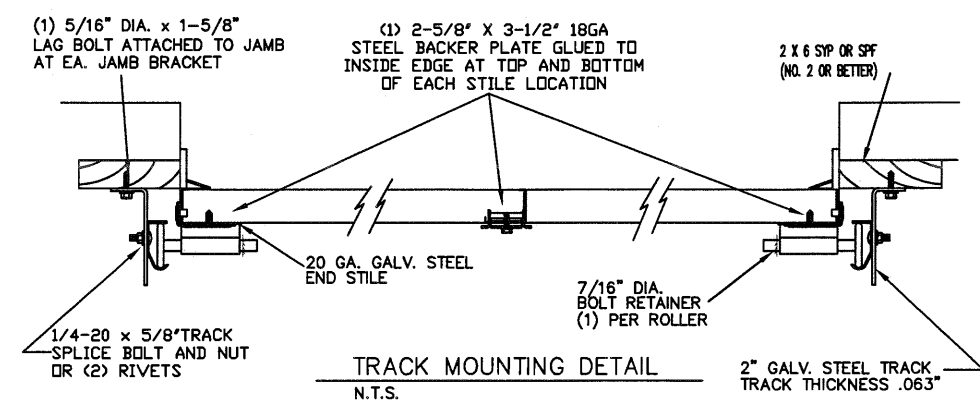


LARGE MISSILE IMPACT RESISTANT



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108 & 115, ASTM E1886, E1996, E330, F588. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-98/02/05 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT ANY SLOPE I=1.0):

WIND SPEED (MPH)	130	118	112	107	103
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 16' WIDTH 14' HEIGHT (DOOR HEIGHT SUBJECT TO WEIGHT LIMITATIONS)		
	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		

TX

**Amarr**  
ENTREMATICS

**MODEL #1200 AMARR HERITAGE 3000**  
**MODEL #1200 AMARR OAK SUMMIT 3000**  
SHORT, LONG, FLUSH & OAK SUMMIT PANELS

SIZE	DRAWN BY	RLR	DATE	6/5/18	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	6/5/18	IRC-1216-130-15-F

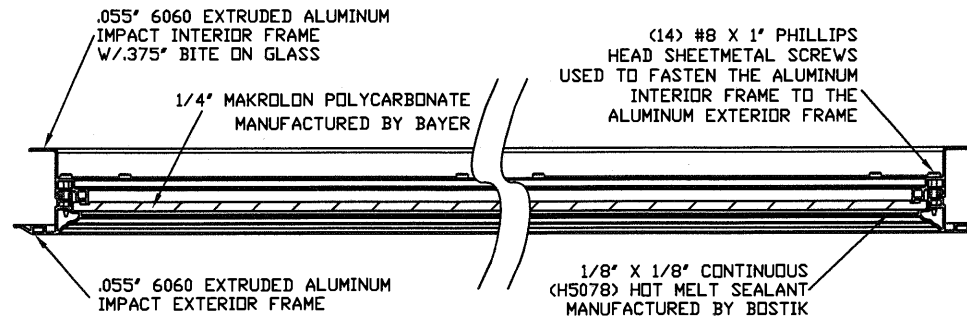
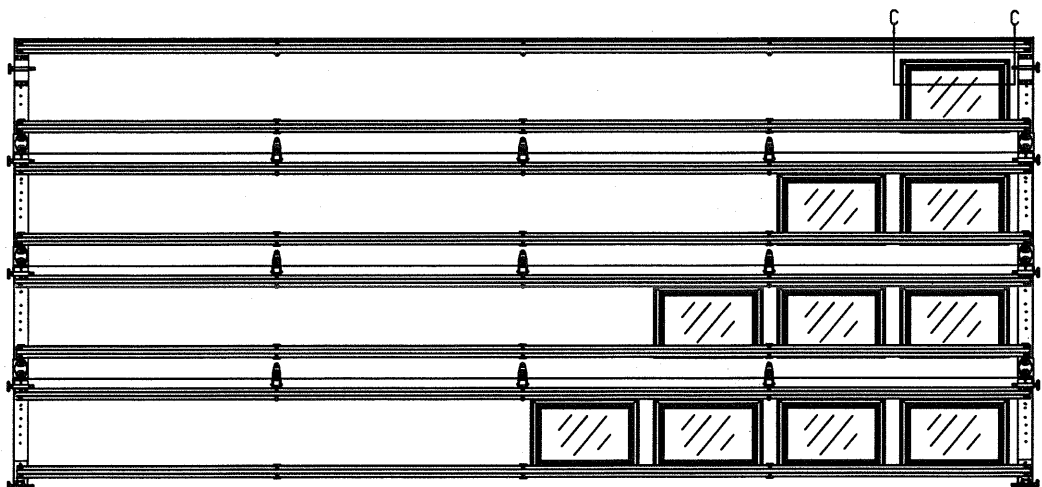
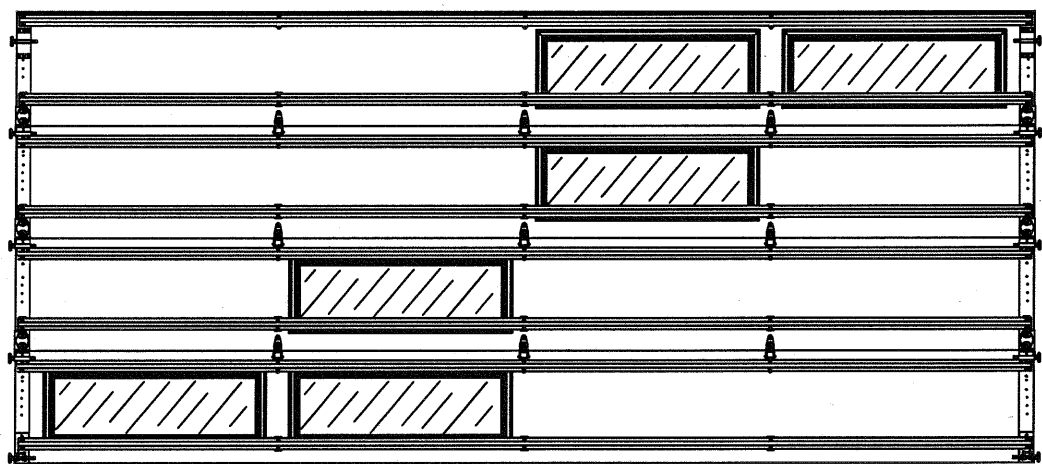
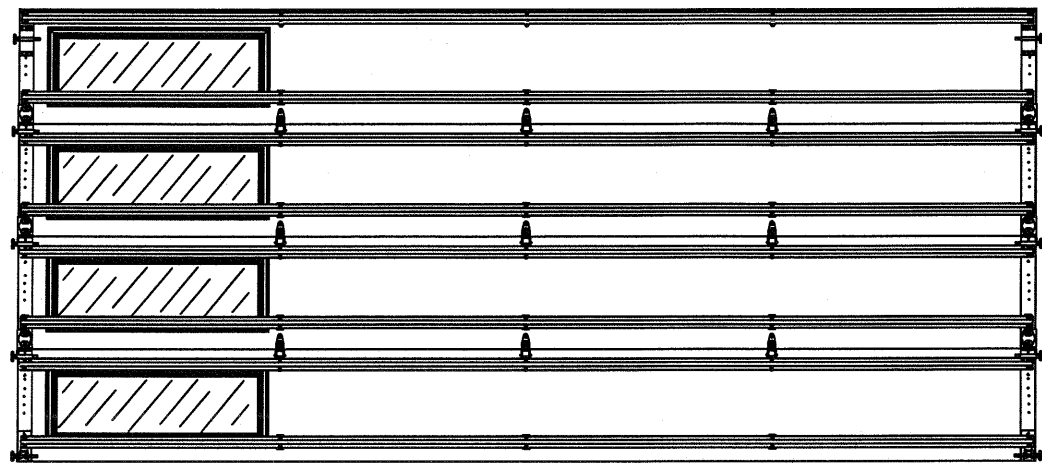
ENTREMATICS  
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 4

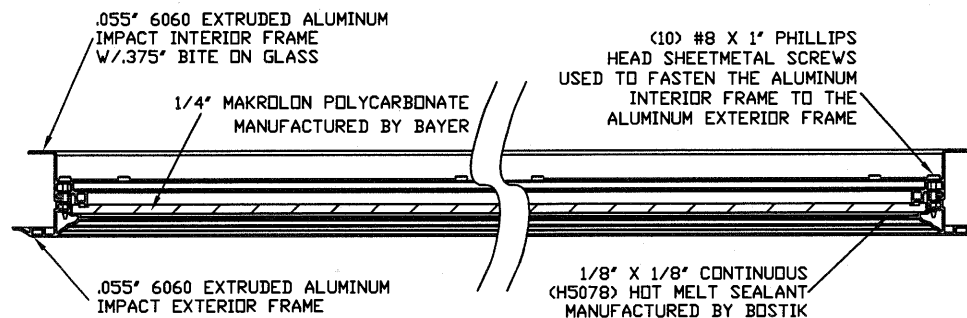
5921-G W. Friendly Ave., Greensboro, NC 27410

EXAMPLES OF OPTIONAL SHORT AND LONG PANEL GLAZING LAYOUTS

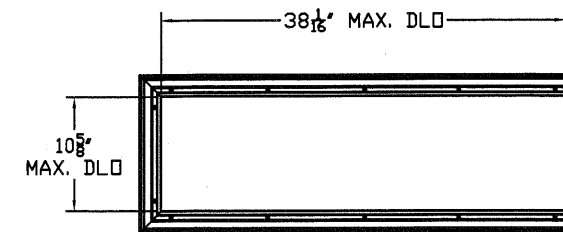
GLAZING AVAILABLE IN ANY COMBINATION  
GLAZING MEETS ASTM E1300-04



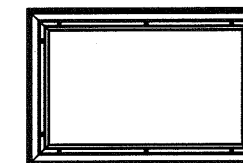
SECTION B-B IMPACT WINDOW DETAIL  
N.T.S.



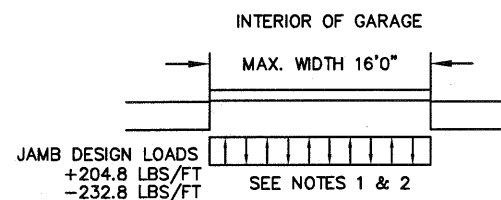
SECTION C-C IMPACT WINDOW DETAIL  
N.T.S.



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



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



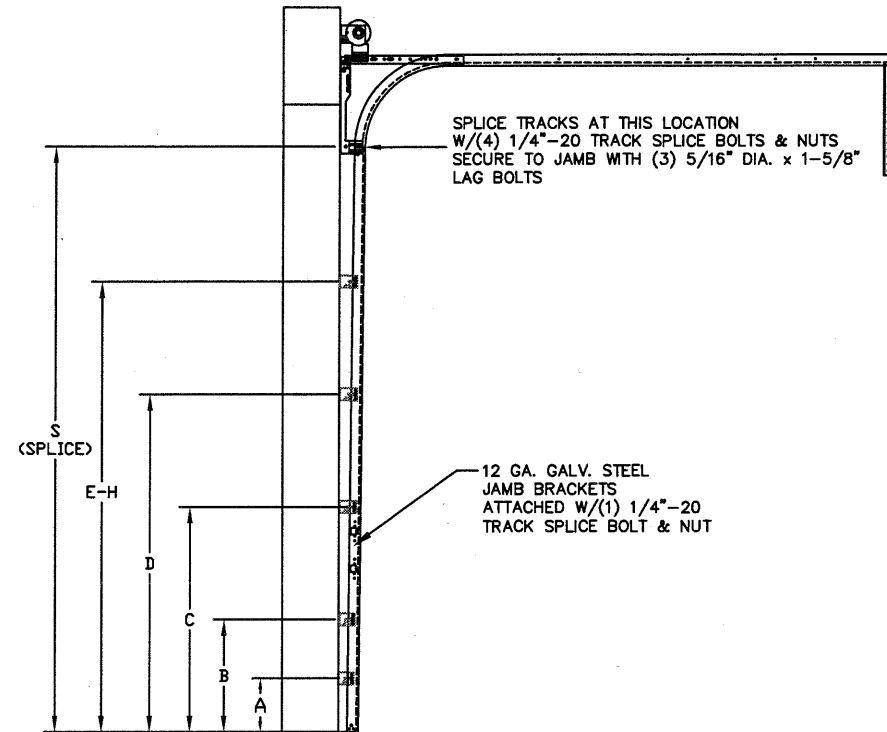
SPECIFICATIONS AND NOTES

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 24 GA. (.0216) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

REV	DESCRIPTION OF REVISIONS	DATE	BY
<p>MAX SIZE 16' WIDTH 14' HEIGHT (DOOR HEIGHT SUBJECT TO WEIGHT LIMITATIONS)</p> <p>DESIGN LOADS +25.6 PSF -29.1 PSF</p> <p>TEST LOADS (1.5 x DESIGN LOADS) +38.4 PSF -43.6 PSF</p> <p>LARGE MISSILE IMPACT RESISTANCE</p>			
<p>Thomas L. Shelmerdine, PE (TX PE #855829) Structural Solutions, PA (TX Firm #F-004063)</p>			
<p>TX</p> <p><b>Amarr</b> ENTREMATIC</p>			
<p>MODEL #1200 AMARR HERITAGE 3000 MODEL #1200 AMARR OAK SUMMIT 3000 SHORT, LONG, FLUSH &amp; OAK SUMMIT PANELS</p>			
SIZE	DRAWN BY RLR	DATE 6/5/18	DRAWING NUMBER
B	CHECKED BY RLR	DATE 6/5/18	IRC-1216-130-15-F
<p>ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105</p>			<p>SHEET 2 OF 4</p>

5921-G W. Friendly Ave., Greensboro, NC 27410

## WOOD JAMB ATTACHMENT TO STRUCTURE



TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS (SEE TABLE 1)  
N.T.S.

**TABLE 1**

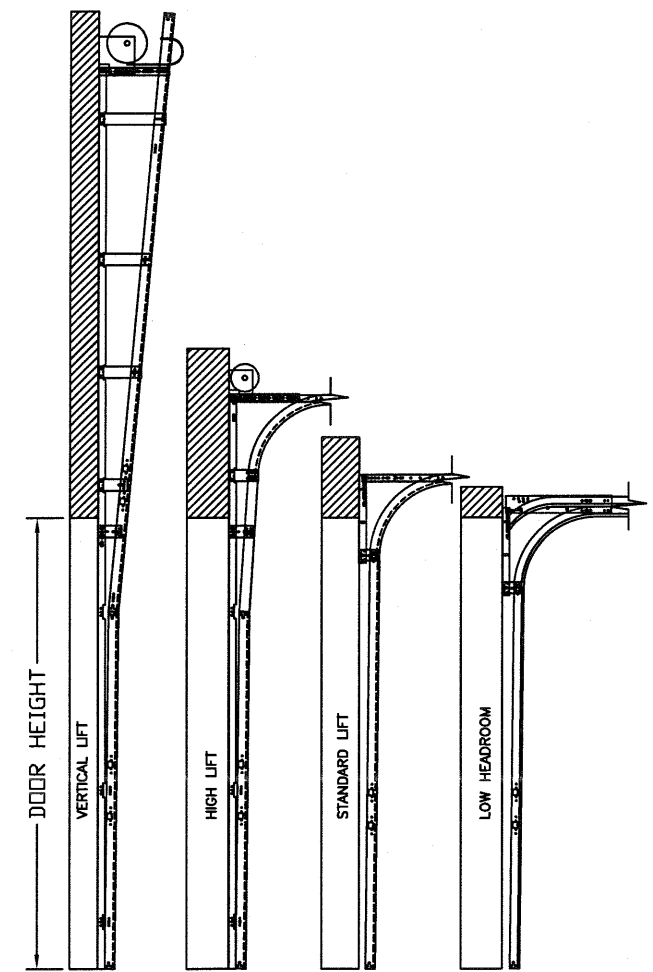
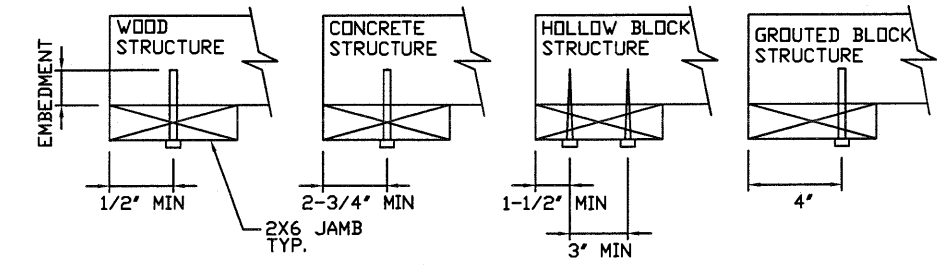
DOOR HEIGHT	TRACK ATTACHMENT								SPLICE
	A	B	C	D	E	F	G	H	
6' 6"	3.5"	21"	42"	63"					70"
7'	3.5"	21"	42"	63"					76"
7' 6"	3.5"	21"	42"	63"					82"
8'	3.5"	21"	42"	63"					88"
8' 6"	3.5"	21"	42"	63"	84"				94"
9'	3.5"	21"	42"	63"	84"				100"
9' 6"	3.5"	21"	42"	63"	84"				106"
10'	3.5"	21"	42"	63"	84"	105"			112"
10' 6"	3.5"	21"	42"	63"	84"	105"			118"
11'	3.5"	21"	42"	63"	84"	105"			124"
11' 6"	3.5"	21"	42"	63"	84"	105"			130"
12'	3.5"	21"	42"	63"	84"	105"	126"		136"
12' 6"	3.5"	21"	42"	63"	84"	105"	126"		142"
13'	3.5"	21"	42"	63"	84"	105"	126"		148"
13' 6"	3.5"	21"	42"	63"	84"	105"	126"	147"	154"
14'	3.5"	21"	42"	63"	84"	105"	126"	147"	160"

ALL TRACK ATTACHMENT SPACING +/- 1.5' ALLOWED  
WITH SYP OR SPF NO. 2 OR BETTER ONLY

**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



AVAILABLE TRACK CONFIGURATIONS  
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 16' WIDTH 14' HEIGHT (DOOR HEIGHT SUBJECT TO WEIGHT LIMITATIONS)			
DESIGN LOADS +25.6 PSF -29.1 PSF			
TEST LOADS (1.5 x DESIGN LOADS) +38.4 PSF -43.6 PSF		<b>TX</b>  	
LARGE MISSILE IMPACT RESISTANCE			
<b>MODEL #1200 AMARR HERITAGE 3000</b> <b>MODEL #1200 AMARR OAK SUMMIT 3000</b> SHORT, LONG, FLUSH & OAK SUMMIT PANELS			
SIZE	DRAWN BY RLR	DATE 6/5/18	DRAWING NUMBER
B	CHECKED BY RLR	DATE 6/5/18	RC-1216-130-15-F
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 4

5921-G W. Friendly Ave. Greensboro, NC 27410

**TABLE 2**

Section Width (ft)	Panel Type	Center Stile Locations (Measured from Left Edge)			
		1st (in)	2st (in)	3rd (in)	4th (in)
10' 0	Short	48.41	71.59		
12' 0	Short	48.81	95.19		
12' 0	Long	49.63	94.38		
12' 0	Oak Summit	48.31	95.69		
13' 10	Short	57.16	83.00	108.71	
14' 0	Short	57.76	84.00	110.11	
14' 0	Long	58.63	84.00	109.38	
14' 2	Short	58.85	85.00	111.41	
14' 2	Long	59.17	85.00	110.83	
14' 4	Short	59.16	86.00	112.71	
14' 4	Long	60.17	86.00	111.83	
14' 6	Short	59.86	87.00	114.01	
14' 6	Long	61.17	87.00	112.83	
14' 8	Short	60.56	88.00	115.31	
14' 8	Long	44.81	88.00	131.19	
14' 10	Short	61.26	89.00	116.61	
14' 10	Long	45.60	89.00	132.40	
15' 0	Short	61.94	90.00	117.94	
15' 0	Long	46.60	90.00	133.40	
15' 2	Short	62.66	91.00	119.21	
15' 2	Long	47.60	91.00	134.40	
15' 4	Short	53.60	79.20	104.80	130.40
15' 4	Long	47.25	92.00	136.75	
15' 6	Short	46.62	93.00	139.38	
15' 6	Long	47.60	93.00	138.40	
15' 6	Oak Summit	47.42	93.00	138.58	
15' 8	Short	47.62	94.00	140.38	
15' 8	Long	48.60	94.00	139.40	
15' 8	Oak Summit	48.02	94.00	139.98	
15' 10	Short	48.62	95.00	141.38	
15' 10	Long	49.17	95.00	140.83	
15' 10	Oak Summit	48.62	95.00	141.38	
16' 0	Short	49.62	96.00	142.38	
16' 0	Long	50.60	96.00	141.40	
16' 0	Oak Summit	48.42	96.00	143.58	

CONTACT ENGINEERING REGARDING SIZES NOT LISTED

**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"				

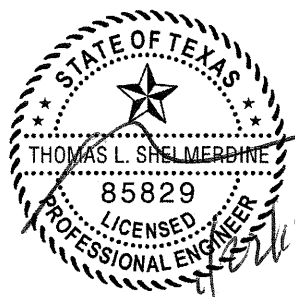
REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE  
16' WIDTH  
14' HEIGHT  
(DOOR HEIGHT SUBJECT TO WEIGHT LIMITATIONS)

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



**MODEL #1200 AMARR HERITAGE 3000**  
**MODEL #1200 AMARR OAK SUMMIT 3000**  
**SHORT, LONG, FLUSH & OAK SUMMIT PANELS**

SIZE	DRAWN BY	RLR	DATE	6/5/18	DRAWING NUMBER	
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ENTREMATIC  
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 4 OF 4