

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASHA 108 AND ASTM E330. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-05 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' x 14'

DESIGN LOADS +25.6 PSF -29.1 PSF

TEST LOADS +38.4 PSF -43.6 PSF

Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063)

STATE OF TEXAS  
THOMAS L. SHELMERDINE  
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LICENSED PROFESSIONAL ENGINEER

TX

**Amarr**  
ENTREMATICS

MODEL #3100 AMARR LINCOLN 3138  
MODEL #3150 AMARR HILLCREST 3138  
MODEL #1600 AMARR LINCOLN 3000  
MODEL #1650 AMARR HILLCREST 3000

SIZE	DRAWN BY DRD	DATE 12/20/18	DRAWING NUMBER
B	CHECKED BY DLJ	DATE 02/11/19	IRC-3116-130-15

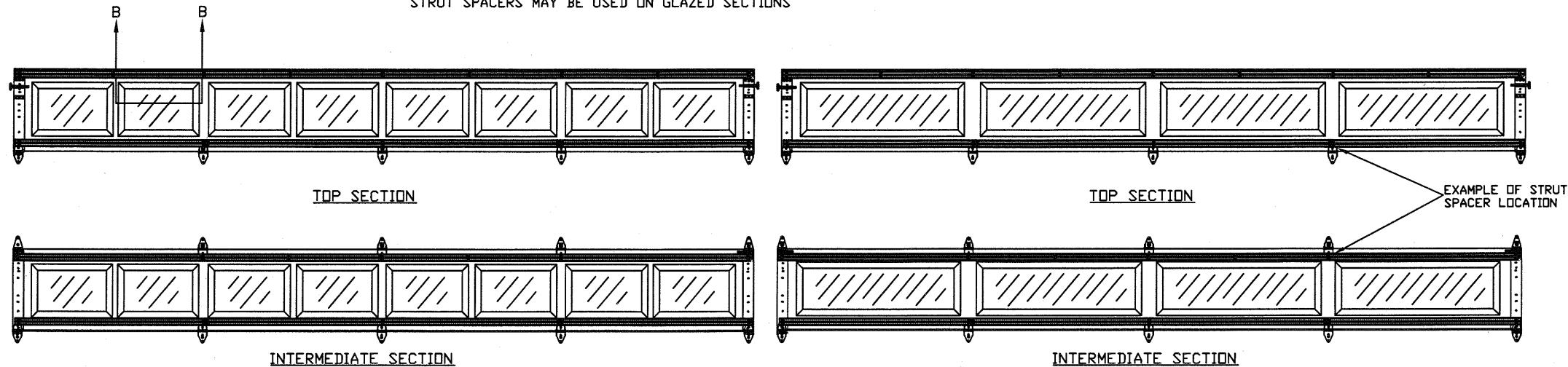
ENTREMATICS  
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 3

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

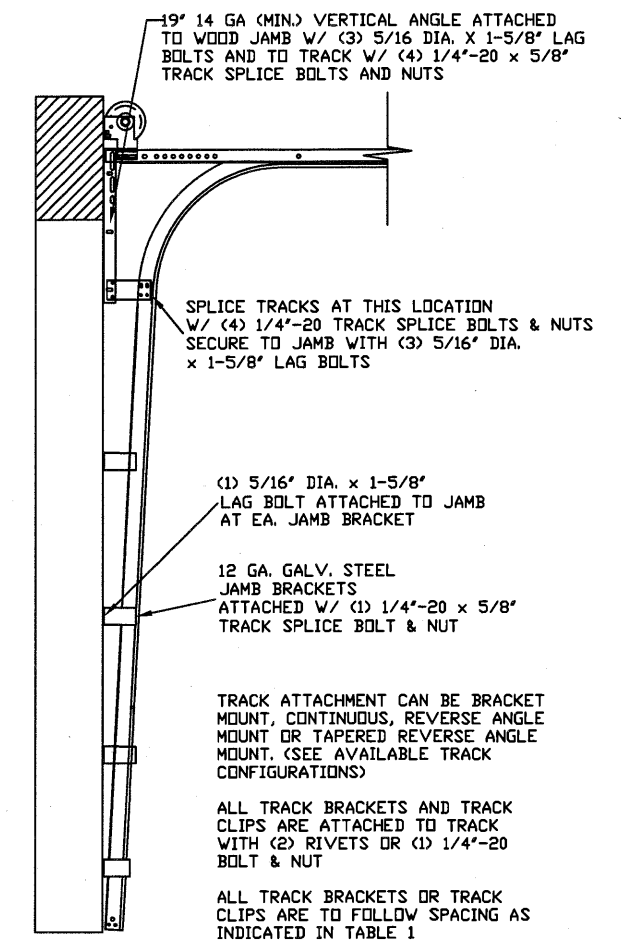
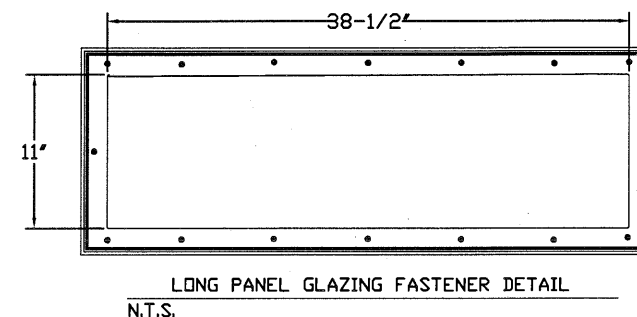
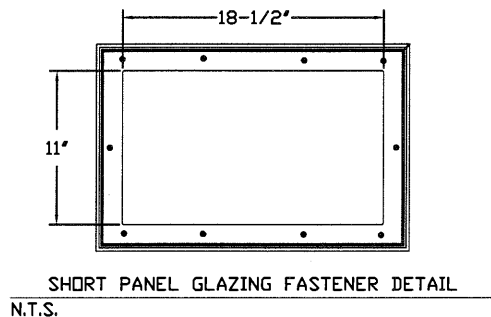
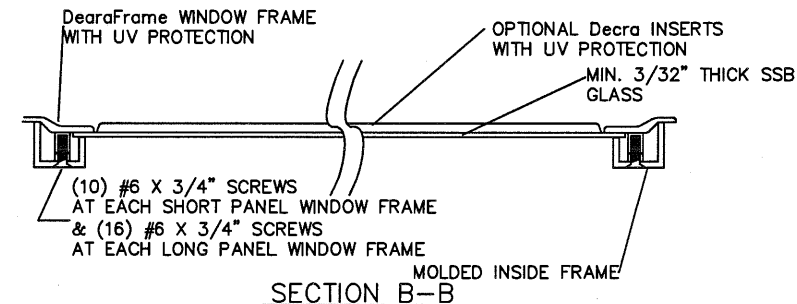
## OPTIONAL SHORT AND LONG PANEL GLAZING LAYOUTS

STRUT SPACERS MAY BE USED ON GLAZED SECTIONS

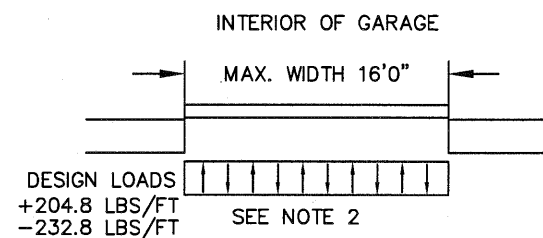


### GLAZING OPTION CROSS SECTION

GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION  
GLAZING MEETS ASTM E1300-04



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



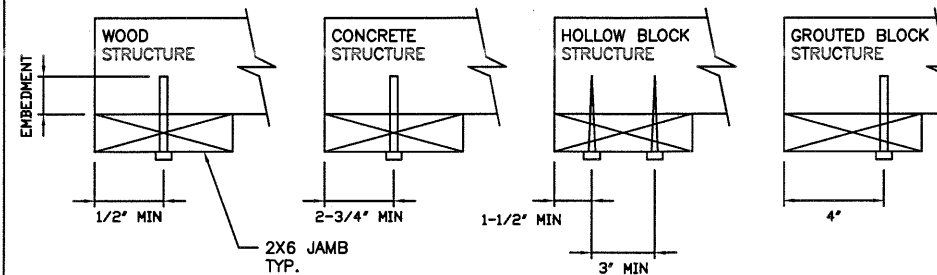
### SPECIFICATIONS AND NOTES

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 27GA MIN. INTERIOR AND 27GA 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.
6. PANEL STAMP DOES NOT AFFECT WINDLOAD CAPABILITIES.

### WOOD JAMB ATTACHMENT TO STRUCTURE

- 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



REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 16' x 14'		
	DESIGN LOADS +25.6 PSF -29.1 PSF		
	TEST LOADS +38.4 PSF -43.6 PSF		
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: small;">                     Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063)                 </div> <div style="text-align: center;"> </div> <div style="font-size: x-small;">                     5921-G W. Friendly Ave., Greensboro, NC 27410                 </div> </div>			
<b>TX</b>  <b>Amarr</b> <b>ENTREMATIC</b>			
<b>MODEL #3100 AMARR LINCOLN 3138</b> <b>MODEL #3150 AMARR HILLCREST 3138</b> <b>MODEL #1600 AMARR LINCOLN 3000</b> <b>MODEL #1650 AMARR HILLCREST 3000</b>			
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ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, NC 27105			SHEET 2 OF 3

TABLE 1

DOOR HEIGHT	SPLICE								
	A	B	C	D	E	F	C	D	S
6' 6"	10"	21"	42"	63"					70"
7'	10"	21"	42"	63"					76"
7' 6"	10"	21"	42"	63"	56"				82"
8'	10"	21"	42"	63"	56"				88"
8' 6"	10"	21"	42"	63"	56"				94"
9'	10"	21"	42"	63"	56"	68"			100"
9' 6"	10"	21"	42"	63"	56"	68"			106"
10'	10"	21"	42"	63"	56"	68"			112"
10' 6"	10"	21"	42"	63"	56"	68"			118"
11'	10"	21"	42"	63"	56"	68"	78"		124"
11' 6"	10"	21"	42"	63"	56"	68"	78"		130"
12'	10"	21"	42"	63"	56"	68"	78"		136"
12' 6"	10"	21"	42"	63"	56"	68"	78"	88"	142"
13'	10"	21"	42"	63"	56"	68"	78"	88"	148"
13' 6"	10"	21"	42"	63"	56"	68"	78"	88"	154"
14'	10"	21"	42"	63"	56"	68"	78"	88"	160"

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

TABLE 2

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

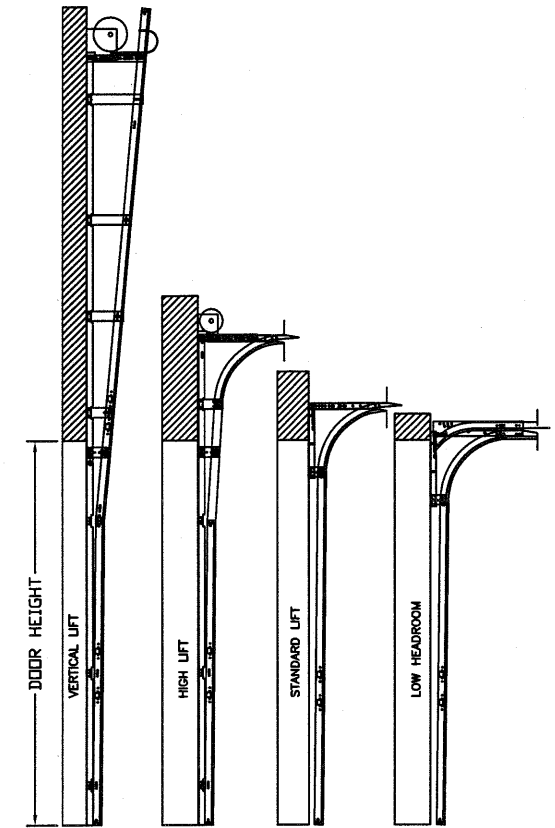
TABLE 4

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

TABLE 3

Section Width (ft)	Panel Type	Center Stile Locations (Measured from Left Edge)				Max Design Loads Allowed	
		1st (in)	2st (in)	3rd (in)	4th (in)	Positive (PSF)	Negative (PSF)
14' 0"	Short	57.76	84.00	110.11		29.1	33.1
14' 0"	Long	58.63	84.00	109.38		29.1	33.1
14' 2"	Short	58.85	85.00	111.41		28.8	32.7
14' 2"	Long	59.17	85.00	110.83		28.8	32.7
14' 4"	Short	59.16	86.00	112.71		28.4	32.3
14' 4"	Long	60.17	86.00	111.83		28.4	32.3
14' 6"	Short	59.86	87.00	114.01		28.1	31.9
14' 6"	Long	61.17	87.00	112.83		28.1	31.9
14' 8"	Short	60.56	88.00	115.31		27.8	31.6
14' 8"	Long	44.81	88.00	131.19		27.8	31.6
14' 10"	Short	61.26	89.00	116.61		27.5	31.2
14' 10"	Long	45.60	89.00	132.40		27.5	31.2
15' 0"	Short	61.94	90.00	117.94		27.2	30.9
15' 0"	Long	46.60	90.00	133.40		27.2	30.9
15' 2"	Short	62.66	91.00	119.21		26.9	30.5
15' 2"	Long	47.60	91.00	134.40		26.9	30.5
15' 4"	Short	53.60	79.20	104.80	130.40	26.6	30.2
15' 4"	Long	47.25	92.00	136.75		26.6	30.2
15' 6"	Short	46.62	93.00	139.38		26.3	29.9
15' 6"	Long	47.60	93.00	138.40		26.3	29.9
15' 6"	Hillcrest	47.42	93.00	138.58		26.3	29.9
15' 8"	Short	47.62	94.00	140.38		26.0	29.6
15' 8"	Long	48.60	94.00	139.40		26.0	29.6
15' 8"	Hillcrest	48.02	94.00	139.98		26.0	29.6
15' 10"	Short	48.62	95.00	141.38		25.7	29.3
15' 10"	Long	49.17	95.00	140.83		25.7	29.3
15' 10"	Hillcrest	48.62	95.00	141.38		25.7	29.3
16' 0"	Short	49.62	96.00	142.38		25.6	29.1
16' 0"	Long	50.60	96.00	141.40		25.6	29.1
16' 0"	Hillcrest	48.42	96.00	143.58		25.6	29.1

CONTACT ENGINEERING REGARDING SIZES NOT LISTED



AVAILABLE TRACK CONFIGURATIONS N.T.S.

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