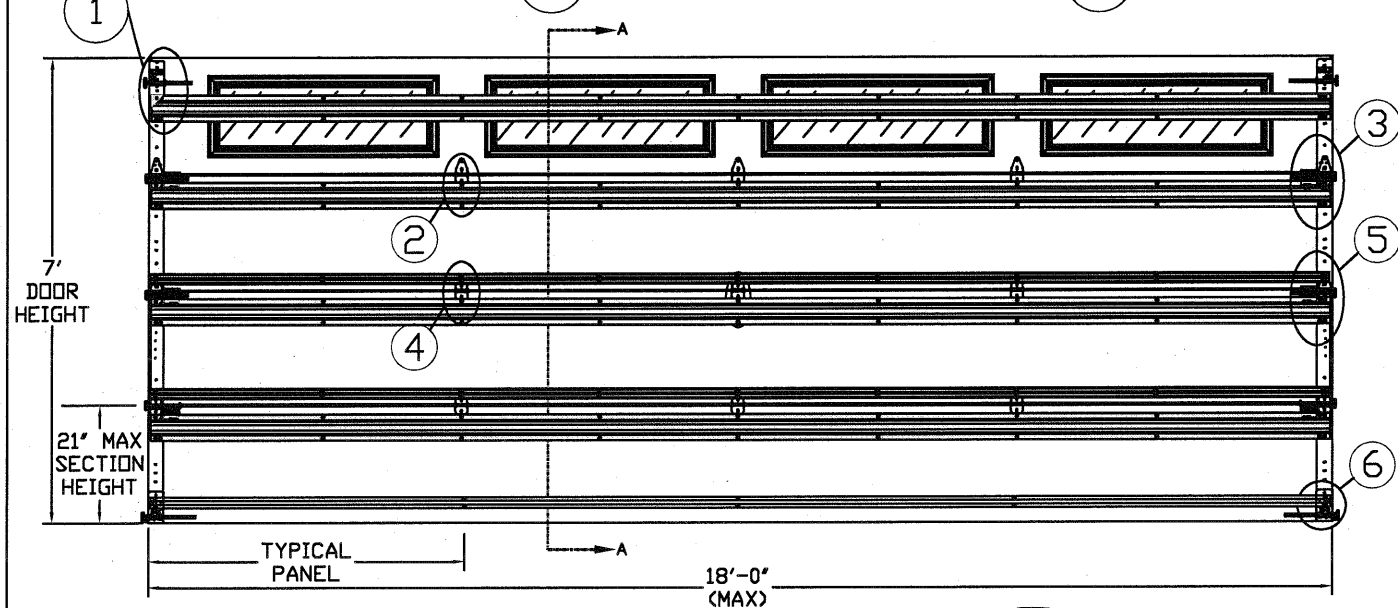
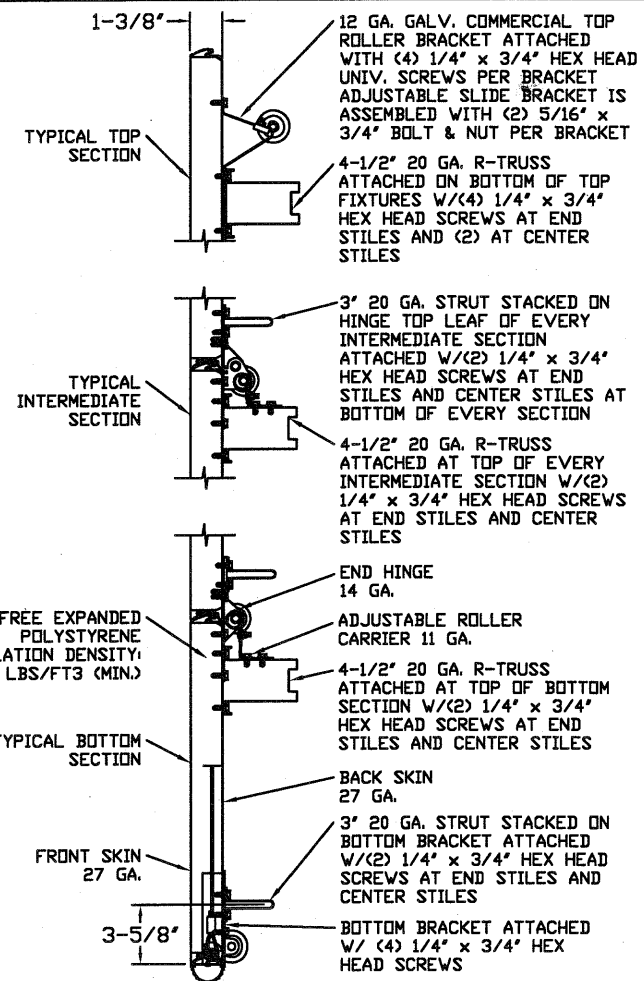
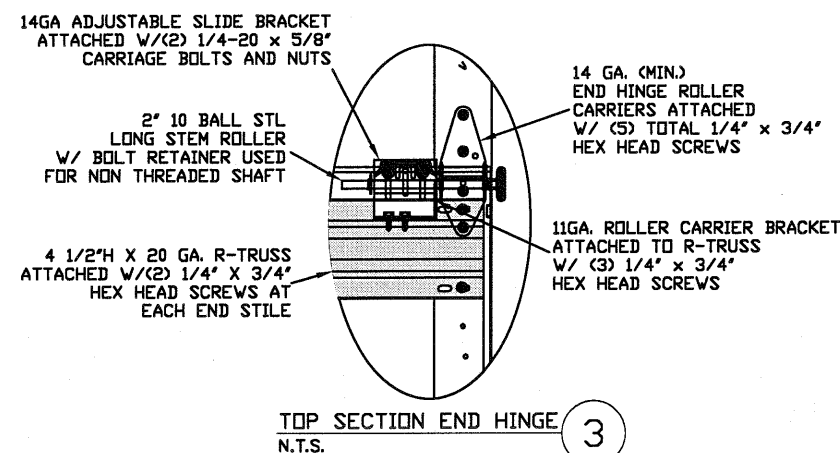
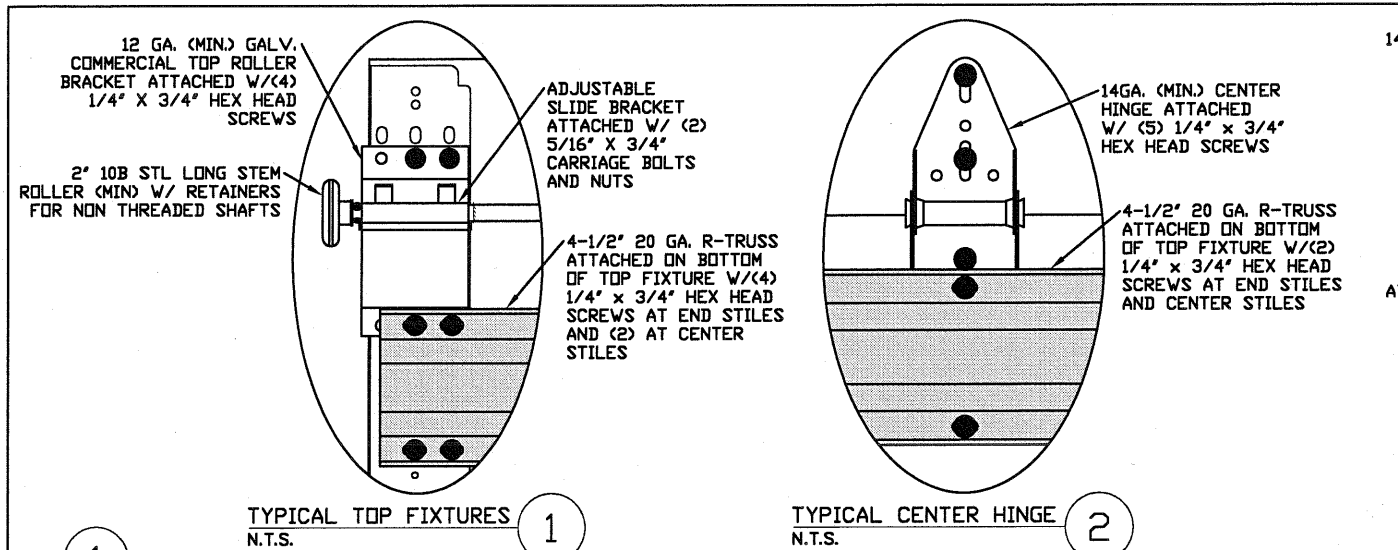
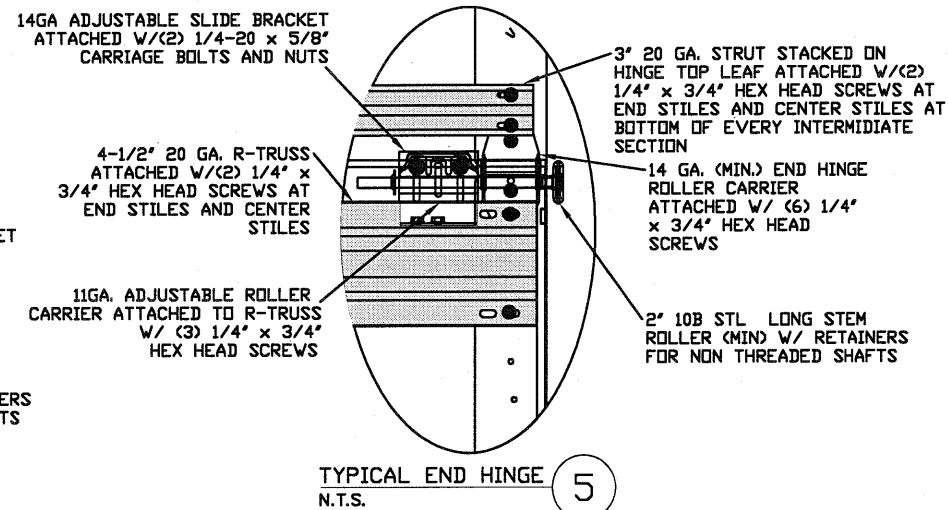
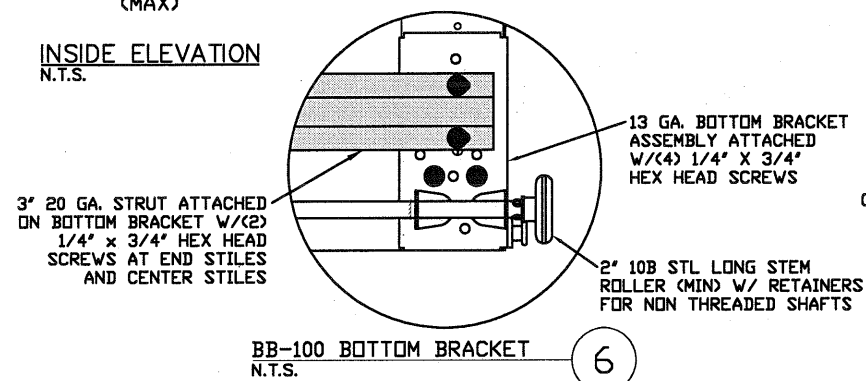


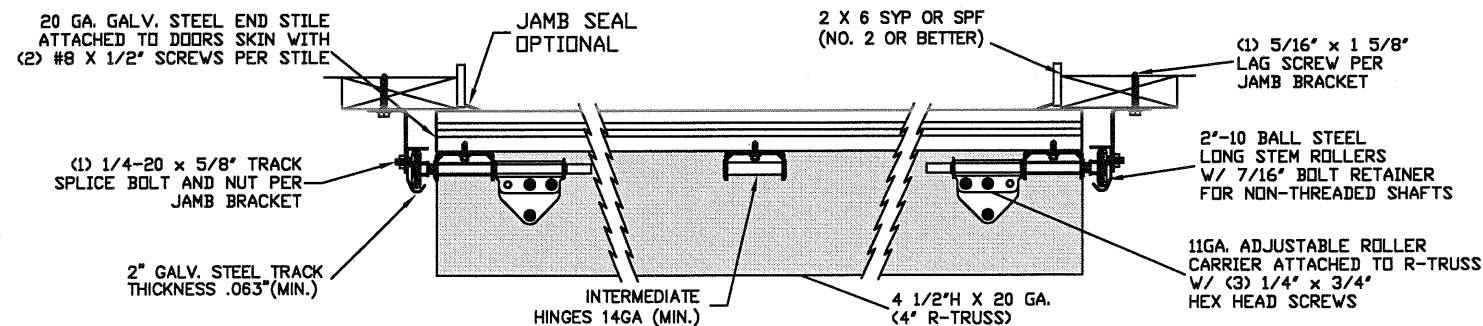


LARGE
MISSILE
IMPACT
RESISTANT

INSIDE ELEVATION N.T.S.



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



TRACK MOUNTING DETAIL N.T.S.

NOTE: FOR STRUT SCHEDULE SEE TABLE 4 ON PAGE 3

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)	168	152	145	138	133
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18' x 14'

DESIGN LOADS
+25.4 PSF
-28.7 PSF

TEST LOADS
+38.1 PSF
-43.0 PSF

LARGE
MISSILE
IMPACT
RESISTANT

Thomas L. Shelmerdine, PE (EL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

FL

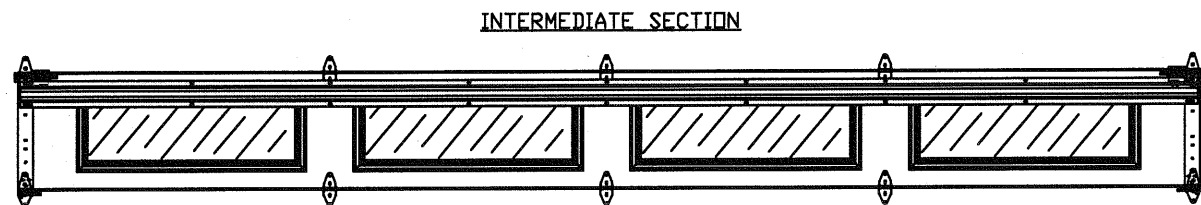
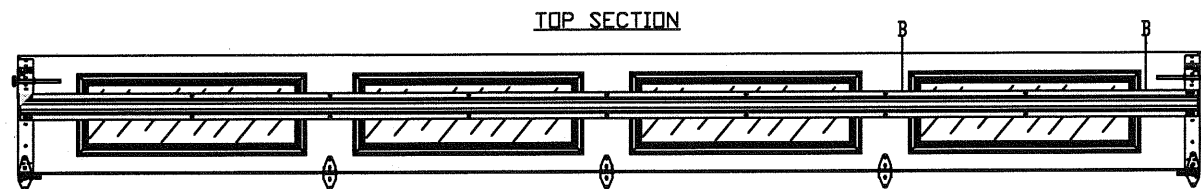
dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

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

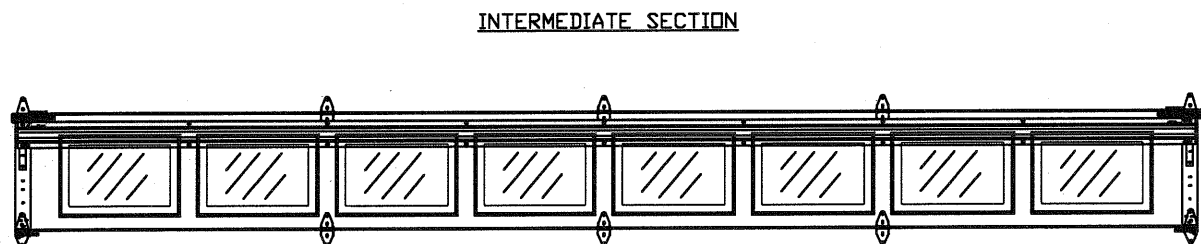
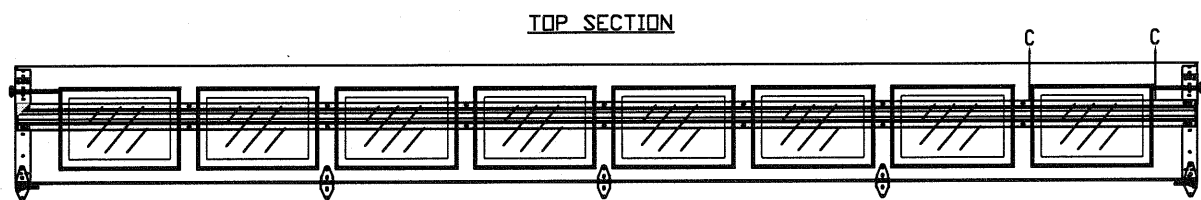
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	CHECKED BY RLR	DATE 3/20/19	

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165 CARRIAGE COURT WINSTON-SALEM, NC 27105

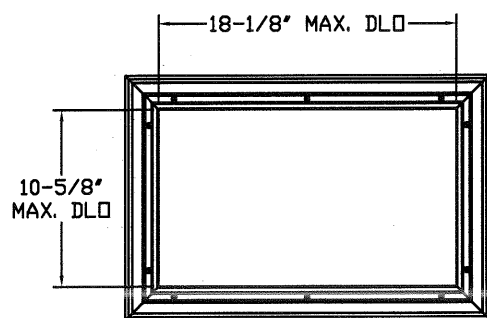
SHEET 1 OF 3



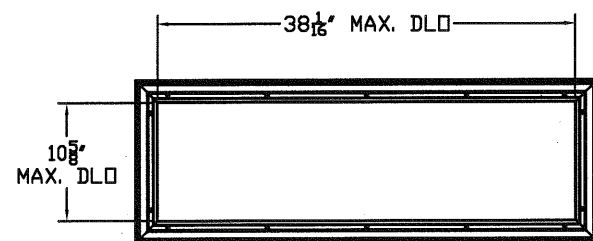
OPTIONAL LONG PANEL GLAZED SECTION R-TRUSS AND STILE LAYOUT
N.T.S.



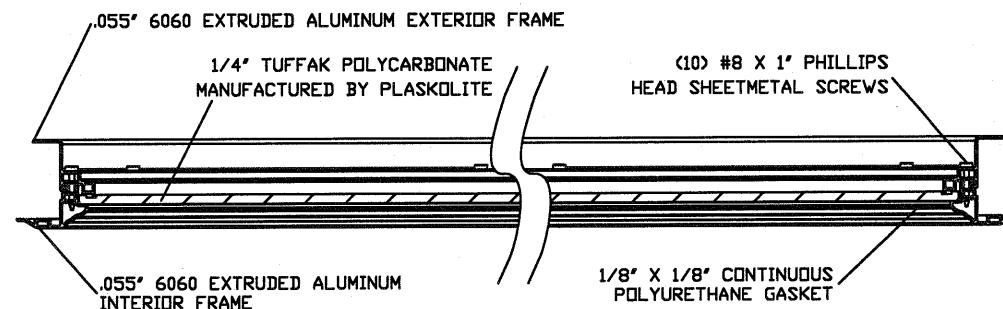
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N.T.S.



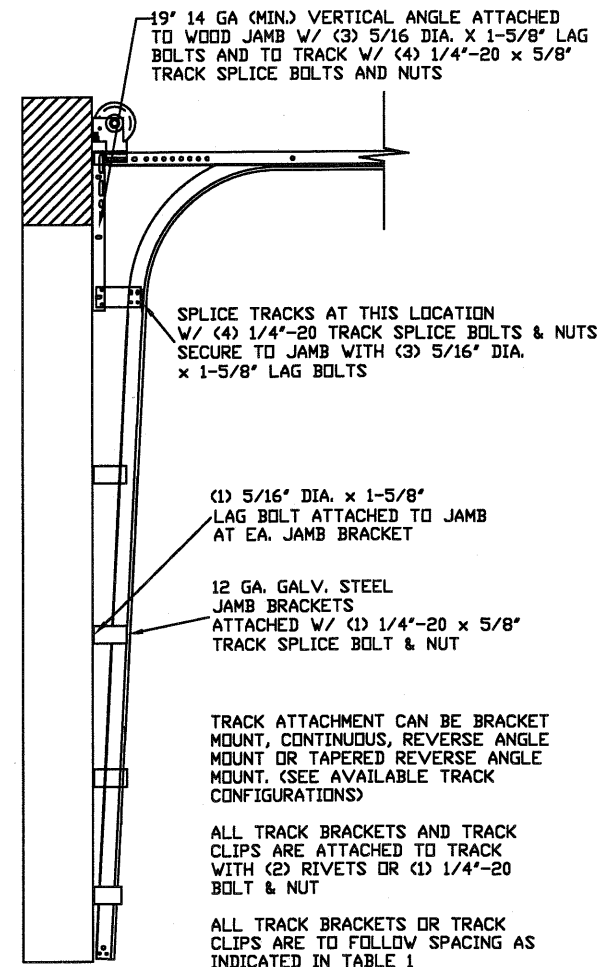
SHORT PANEL IMPACT GLAZING FASTENER DETAIL
N.T.S.



LONG PANEL GLAZING FASTENER DETAIL
N.T.S.



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



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

TABLE 1

DOOR HEIGHT	TRACK ATTACHMENT								
	A	B	C	D	E	F	G	H	I
6' 6"	3.5"	10"	21"	42"	63"				
7'	3.5"	10"	21"	42"	63"				
7' 6"	3.5"	10"	21"	42"	63"	56"			
8'	3.5"	10"	21"	42"	63"	56"			
8' 6"	3.5"	10"	21"	42"	63"	56"			
9'	3.5"	10"	21"	42"	63"	56"	68"		
9' 6"	3.5"	10"	21"	42"	63"	56"	68"		
10'	3.5"	10"	21"	42"	63"	56"	68"		
10' 6"	3.5"	10"	21"	42"	63"	56"	68"		
11'	3.5"	10"	21"	42"	63"	56"	68"	78"	
11' 6"	3.5"	10"	21"	42"	63"	56"	68"	78"	
12'	3.5"	10"	21"	42"	63"	56"	68"	78"	
12' 6"	3.5"	10"	21"	42"	63"	56"	68"	78"	88"
13'	3.5"	10"	21"	42"	63"	56"	68"	78"	88"
13' 6"	3.5"	10"	21"	42"	63"	56"	68"	78"	88"
14'	3.5"	10"	21"	42"	63"	56"	68"	78"	88"

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

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18' x 14'

DESIGN LOADS
+25.4 PSF
-28.7 PSF

TEST LOADS
+38.1 PSF
-43.0 PSF

LARGE
MISSILE
IMPACT
RESISTANT

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

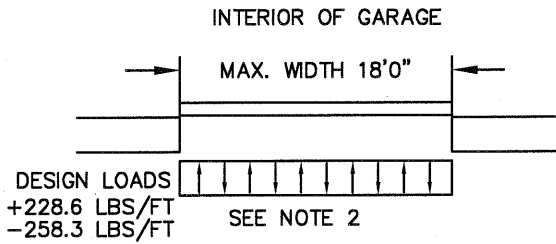
Amarr

MODEL #3100 AMARR LINCOLN 3138		DRAWING NUMBER	
MODEL #3150 AMARR HILLCREST 3138		IRC-3118-130-24-I	
MODEL #1600 AMARR LINCOLN 3000		SHEET 2 OF 3	
MODEL #1650 AMARR HILLCREST 3000			

SIZE	DRAWN BY	DRD	DATE	1/23/19	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	3/20/19	
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					

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: +228.6 LBS/FT & -258.3 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 20" 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 18" 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 22" 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

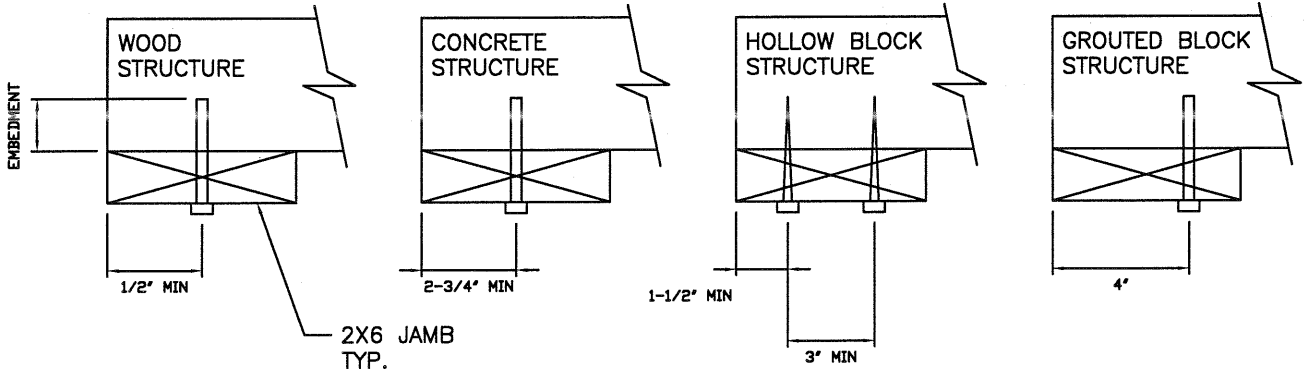


TABLE 2

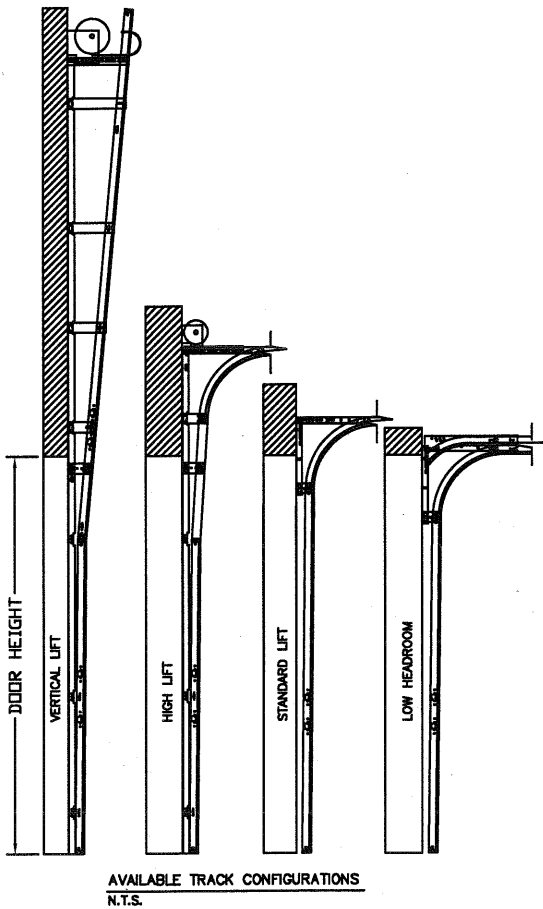
DOOR HEIGHT	SECTION HEIGHTS							
	Btm	#2	#3	#4	#5	#6	#7	#8
6' 0"	18"	18"	18"	18"				
6' 6"	21"	18"	18"	21"				
7' 0"	21"	21"	21"	21"				
7' 6"	18"	18"	18"	18"	18"			
8' 0"	21"	18"	18"	18"	21"			
8' 6"	21"	21"	21"	18"	21"			
9' 0"	18"	18"	18"	18"	18"	18"		
9' 6"	21"	18"	18"	18"	18"	21"		
10' 0"	21"	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"	18"	21"
13' 0"	21"	21"	21"	21"	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
TOP	4.5"
7TH	4.5"
6TH	3"
5TH	4.5"
4TH	3"
3RD	4.5"
2ND	3"
BOTTOM	4.5"

TABLE 3

Section	Panel Type	Center Stile Locations (Measured from Left Edge)			Max Design Loads Allowed	
		1st (in)	3rd (in)	5th (in)	Positive (PSF)	Negative (PSF)
16' 2"	Short	50.27	97.00	143.73	28.1	31.8
16' 2"	Long	51.17	97.00	142.83	28.1	31.8
16' 2"	Hillcrest	48.75	97.00	145.25	28.1	31.8
16' 4"	Short	51.27	98.00	144.73	27.9	31.5
16' 4"	Long	52.17	98.00	143.83	27.9	31.5
16' 4"	Hillcrest	49.08	98.00	146.92	27.9	31.5
16' 6"	Short	52.27	99.00	145.73	27.6	31.2
16' 6"	Long	51.34	99.00	146.66	27.6	31.2
16' 6"	Hillcrest	49.42	99.00	148.59	27.6	31.2
16' 8"	Short	51.34	100.00	148.66	27.3	30.8
16' 8"	Long	52.20	100.00	147.80	27.3	30.8
16' 8"	Hillcrest	49.92	100.00	150.09	27.3	30.8
16' 10"	Short	51.50	101.00	150.50	27.0	30.5
16' 10"	Long	53.20	101.00	148.80	27.0	30.5
16' 10"	Hillcrest	50.15	101.00	151.59	27.0	30.5
17' 0"	Short	53.34	102.00	150.66	26.8	30.2
17' 0"	Long	54.20	102.00	149.80	26.8	30.2
17' 0"	Hillcrest	50.92	102.00	153.09	26.8	30.2
17' 2"	Short	53.00	103.00	153.00	26.5	29.9
17' 2"	Long	55.20	103.00	150.80	26.5	29.9
17' 2"	Hillcrest	51.42	103.00	154.59	26.5	29.9
17' 4"	Short	54.00	104.00	154.00	26.2	29.7
17' 4"	Long	56.20	104.00	151.80	26.2	29.7
17' 4"	Hillcrest	51.92	104.00	156.09	26.2	29.7
17' 6"	Short	55.00	105.00	155.00	26.0	29.4
17' 6"	Long	57.20	105.00	152.80	26.0	29.4
17' 6"	Hillcrest	52.42	105.00	157.59	26.0	29.4
17' 8"	Short	54.80	106.00	157.20	25.7	29.1
17' 8"	Long	55.80	106.00	156.20	25.7	29.1
17' 8"	Hillcrest	52.92	106.00	159.09	25.7	29.1
17' 10"	Short	55.80	107.00	158.20	25.5	28.8
17' 10"	Long	56.25	107.00	157.75	25.5	28.8
17' 10"	Hillcrest	53.42	107.00	160.59	25.5	28.8
18' 0"	Short	57.25	108.00	158.75	25.4	28.7
18' 0"	Long	57.80	108.00	158.20	25.4	28.7
18' 0"	Hillcrest	53.92	108.00	162.09	25.4	28.7



REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18' x 14'

DESIGN LOADS
+25.4 PSF
-28.7 PSF

TEST LOADS
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LICENSE
No. 48579
STATE OF
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PROFESSIONAL ENGINEER

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Amarr

MODEL #3100 AMARR LINCOLN 3138
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SIZE	DRAWN BY	DRD	DATE	1/23/19	DRAWING NUMBER
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SHEET 3 OF 3