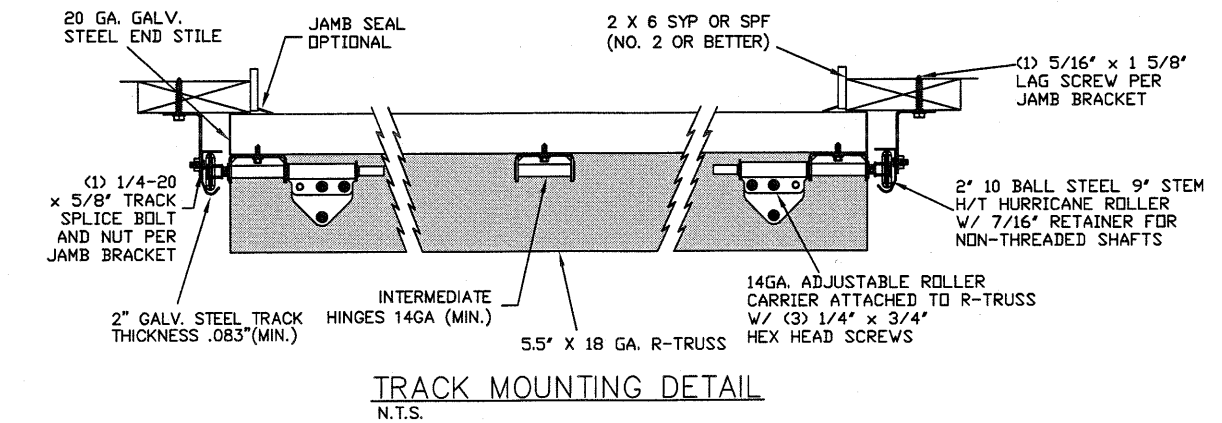


LARGE MISSILE IMPACT RESISTANCE



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996 & F588, DASMA 108 & 115. 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)	194	176	168	160	154
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 +33.7 PSF -38.1 PSF

TEST LOADS (1.5 x DESIGN LOADS) +50.6 PSF -57.2 PSF

LARGE MISSILE IMPACT RESISTANCE

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

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED PROFESSIONAL ENGINEER

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Amarr

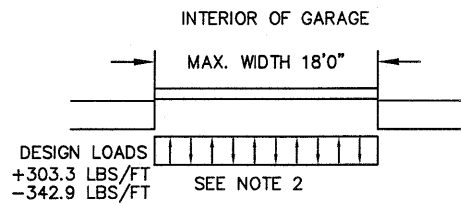
MODEL #3000 AMARR CLASSICA 3000

SIZE	DRAWN BY	DLJ	DATE	01/08/2021	DRAWING NUMBER
B	CHECKED BY	DRC	DATE	01/08/2021	IRC-3318-150-26-1

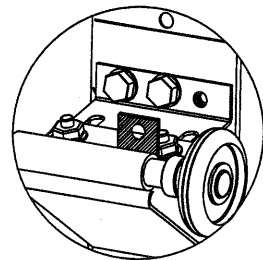
AMARR COMPANY
165 CARRIAGE COURT WINSTON-SALEM, NC. 27105

SHEET 1 OF 3

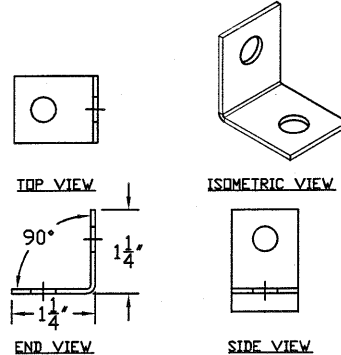
WOOD JAMB ATTACHMENT TO STRUCTURE



TOP FIXTURE REINFORCEMENT ILLUSTRATION



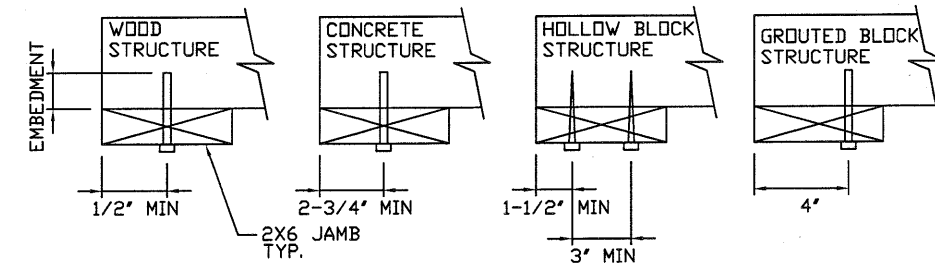
TOP FIXTURE ADDER PIECE



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 16" O.C. (1 1/4" EMBEDMENT) (OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

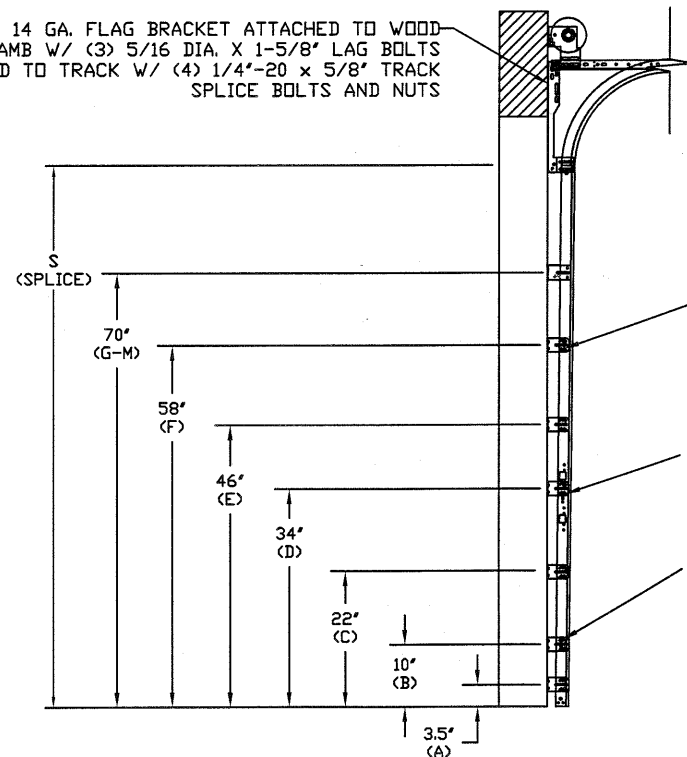
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
 *PREPARATION OF WOOD JAMBS BY OTHERS



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: +303.3 LBS/FT & -342.9 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. EXTERIOR MIN. (.019"), AND 27 GA. INTERIOR MIN. (.014") ROLLED FORMED LIGHT COMMERCIAL QUALITY
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. DOOR IS MANUFACTURED AND TESTED IN ACCORDANCE WITH THE 2018 IRC/IBC

14 GA. FLAG BRACKET ATTACHED TO WOOD JAMB W/ (3) 5/16" DIA. X 1-5/8" LAG BOLTS AND TO TRACK W/ (4) 1/4"-20 X 5/8" TRACK SPLICE BOLTS AND NUTS

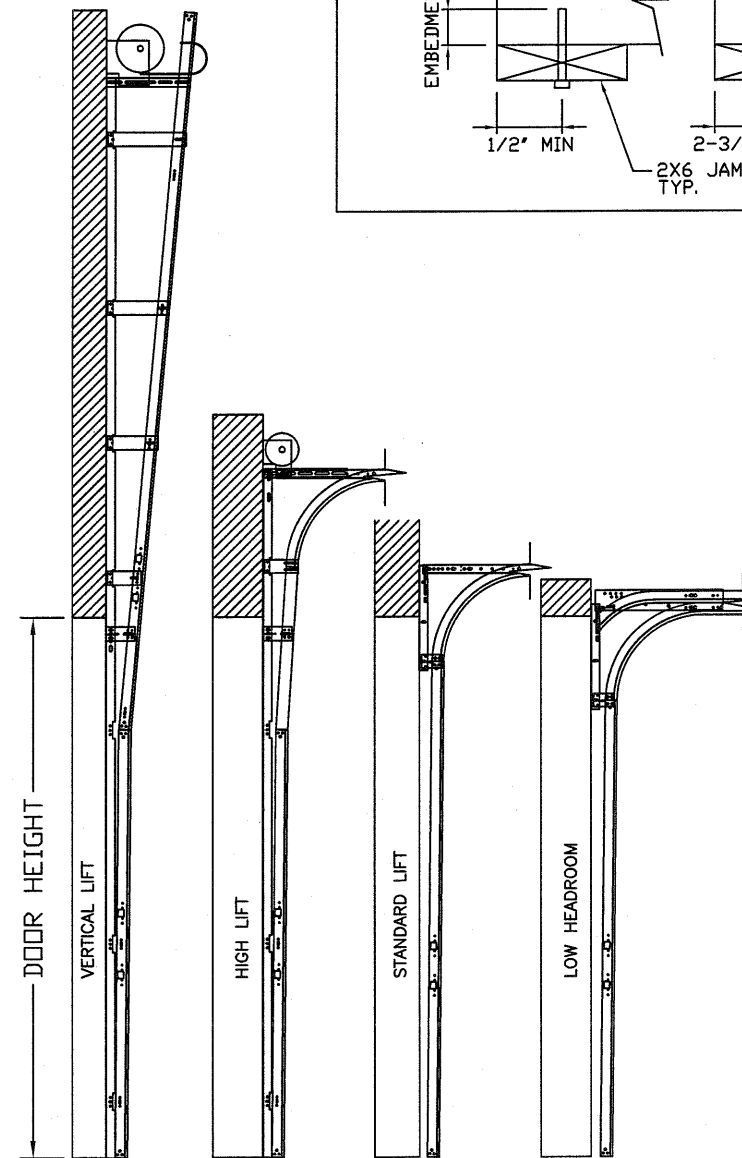


SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS SECURE TO JAMB WITH (3) 5/16" DIA. X 1-5/8" LAG BOLTS

(1) 5/16" DIA. X 1-5/8" LAG BOLT ATTACHED TO JAMB AT EA. JAMB BRACKET

12 GA. GALV. STEEL JAMB BRACKETS ATTACHED W/ (1) 1/4"-20 TRACK SPLICE BOLT & NUT OR (2) RIVETS

TRACK CONFIGURATION FOR 8' TALL DOORS
 N.T.S SEE TABLE 2 PAGE 3



AVAILABLE TRACK CONFIGURATIONS
 N.T.S.

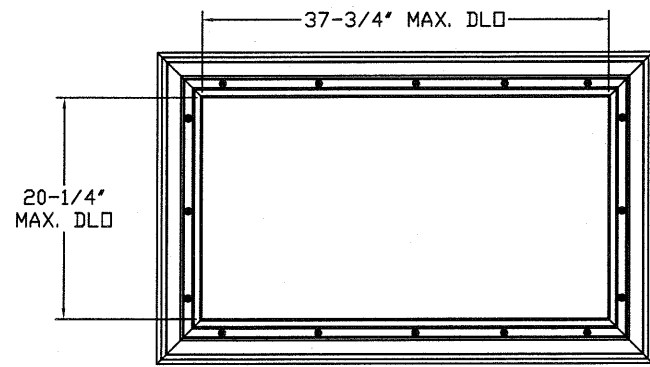
REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 18' x 14'		
	DESIGN LOADS +33.7 PSF -38.1 PSF		
	TEST LOADS (1.5 x DESIGN LOADS) +50.6 PSF -57.2 PSF		
	LARGE MISSILE IMPACT RESISTANCE		

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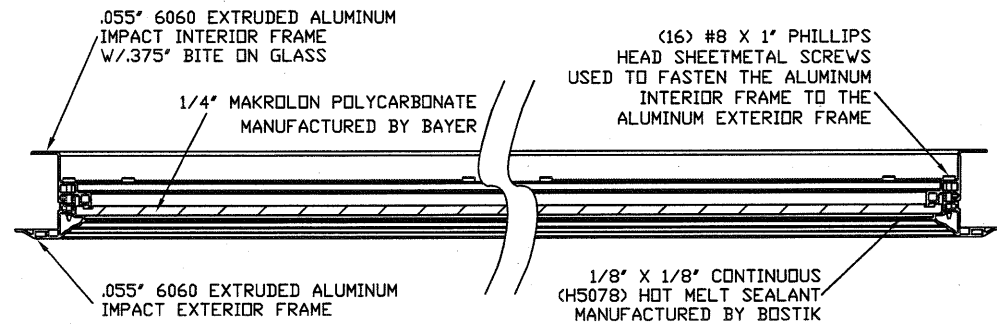


MODEL 3000 AMARR CLASSICA 3000

SIZE	DRAWN BY	DLJ	DATE	01/08/2021	DRAWING NUMBER
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AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 2 OF 3



GLAZING FASTENER DETAIL
N.T.S.



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

TABLE 3

Section Width (ft)	Center Stile Locations (Measured from Left Edge)		
	1st (in)	3rd (in)	5th (in)
16' 2	48.75	97.00	145.25
16' 4	49.08	98.00	146.92
16' 6	49.42	99.00	148.59
16' 8	49.92	100.00	150.09
16' 10	50.15	101.00	151.59
17' 0	50.92	102.00	153.09
17' 2	51.42	103.00	154.59
17' 4	51.92	104.00	156.09
17' 6	52.42	105.00	157.59
17' 8	52.92	106.00	159.09
17' 10	53.42	107.00	160.59
18' 0	53.92	108.00	162.09

TABLE 1

SECTION	STRUT SIZE
TOP	5.5"
	3"
5TH	5.5"
	5.5"
4TH	5.5"
	5.5"
3RD	5.5"
	5.5"
2ND	5.5"
	5.5"
BOTTOM	5.5"
	5.5"

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT												
	A	B	C	D	E	F	G	H	I	J	K	L	M
7' 0	3.5"	10"	22"	34"	46"	58"							
7' 6	3.5"	10"	22"	34"	46"	58"	70"						
8' 0	3.5"	10"	22"	34"	46"	58"	70"						
8' 6	3.5"	10"	22"	34"	46"	58"	70"	82"					
9' 0	3.5"	10"	22"	34"	46"	58"	70"	82"					
9' 6	3.5"	10"	22"	34"	46"	58"	70"	82"	94"				
10' 0	3.5"	10"	22"	34"	46"	58"	70"	82"	94"				
11' 0	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"			
12' 0	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"		
13' 0	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	
14' 0	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"

ALL TRACK AND 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
+33.7 PSF
-38.1 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+50.6 PSF
-57.2 PSF

LARGE MISSILE
IMPACT
RESISTANCE

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TX

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