

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)	202	183	174	166	160
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

- SPECIFICATIONS AND NOTES**
- 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.
 - EACH VERTICAL JAMB RECEIVES MAXIMUM DESIGN LOADS OF: +333.0 LBS/FT & -365.4 LBS/FT
 - DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
 - DOOR SECTIONS SHALL BE 25 GA. MIN. (.019") ROLLED FORMED LIGHT COMMERCIAL QUALITY
 - DOORS UP TO 14'0" HIGH HAVE (1) 5.5" 18GA R-TRUSS ON EACH TOP AND INTERMEDIATE SECTION, AND (1) 3" STRUT AND (1) 5.5" R-TRUSS ON THE BOTTOM SECTION (SEE TABLE 4 FOR REINFORCEMENT SCHEDULE)
 - SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.
 - REFER TO TABLES ON PAGE 3 FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES
 - DOOR IS MANUFACTURED AND TESTED IN ACCORDANCE WITH THE 2018 IRC/IBC

LARGE MISSILE IMPACT RESISTANT

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

MAX SIZE 18' x 14'

DESIGN LOADS +37.0 PSF -40.6 PSF

TEST LOADS (1.5 x DESIGN LOADS) +55.5 PSF -60.9 PSF

LARGE MISSILE IMPACT RESISTANCE

Thomas L. Shelmerdine, PE (TX PE #85829)
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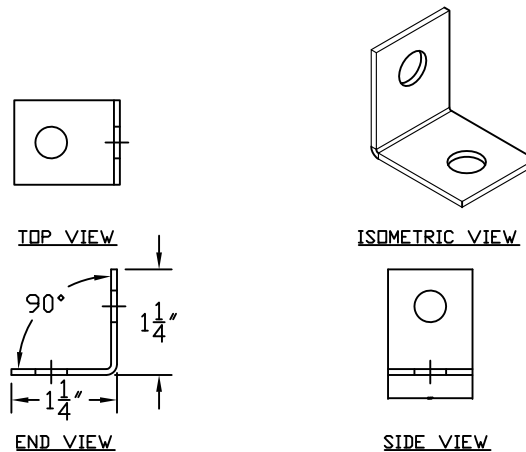
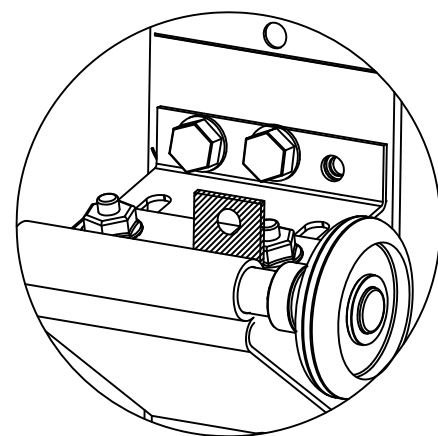
MODEL #625 AMARR LINCOLN 1000, 2000
MODEL #675 AMARR HILLCREST 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000

SIZE	DRAWN BY	RLR	DATE	2/25/20	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	2/25/20	IRC-6218-155-26-1

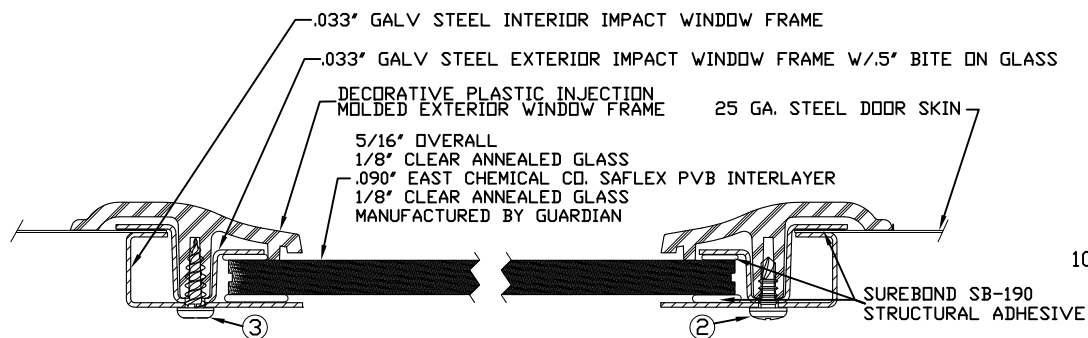
AMARR COMPANY
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 3

TOP FIXTURE ADDER PIECE

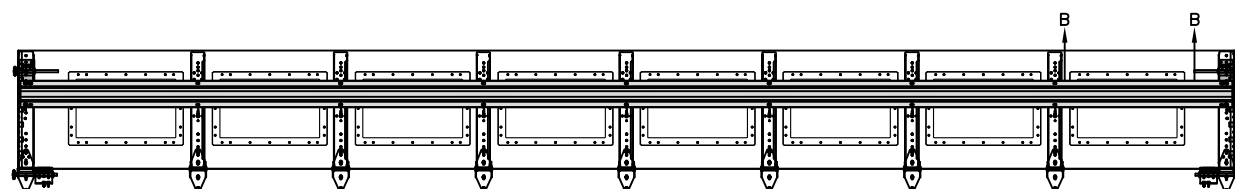


TOP FIXTURE REINFORCEMENT ILLUSTRATION

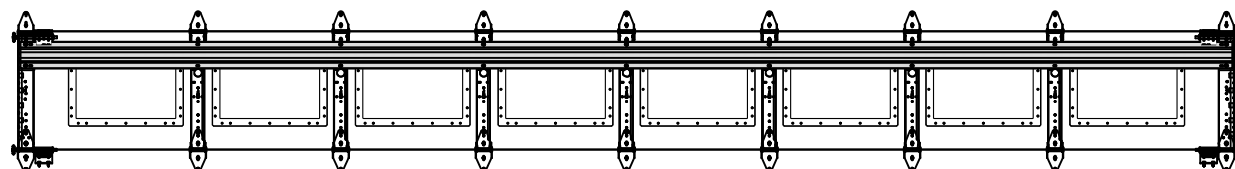


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

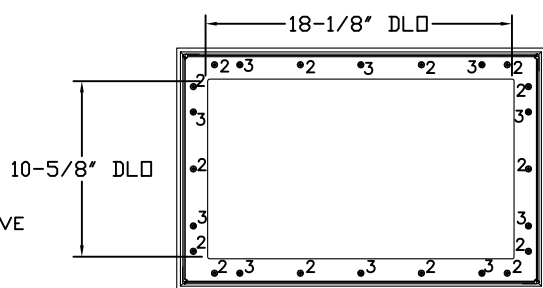
SECTION B-B IMPACT WINDOW DETAIL
N.T.S.



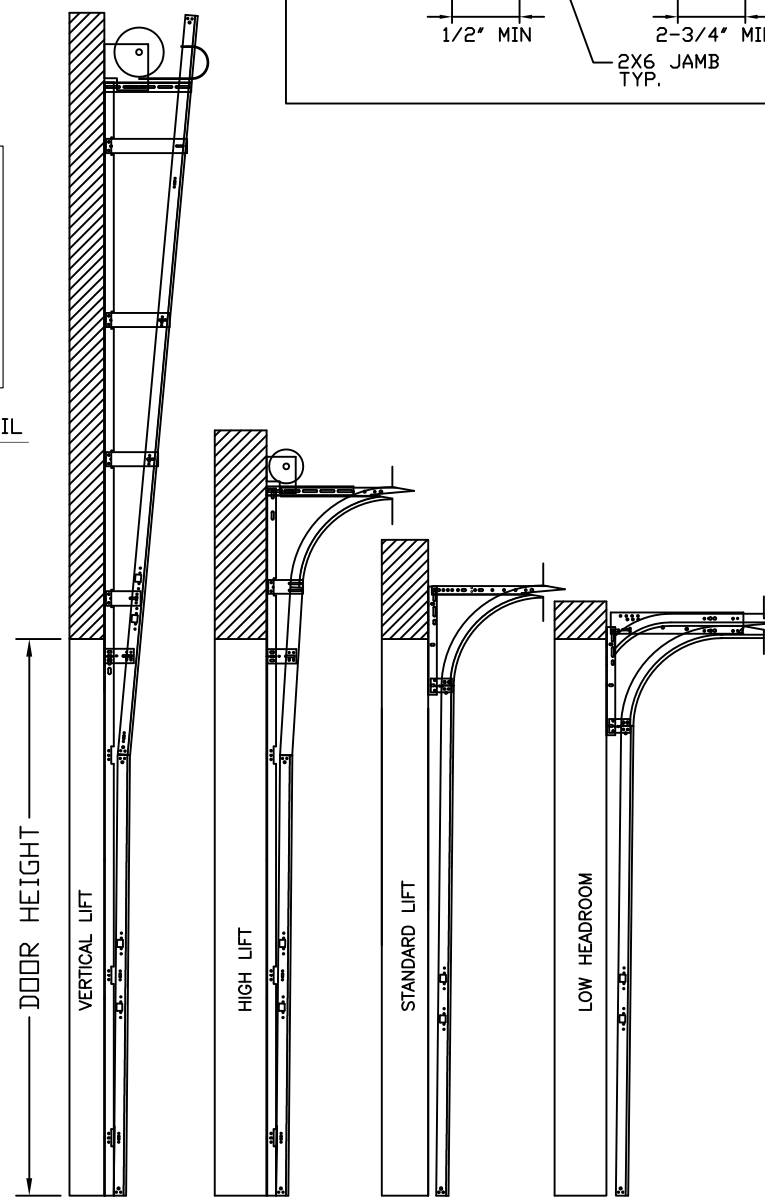
OPTIONAL SHORT PANEL TOP GLAZED SECTION (STRUT AND STILE LAYOUT)



OPTIONAL SHORT PANEL INTERMEDIATE GLAZED SECTION (STRUT AND STILE LAYOUT)



IMPACT GLAZING FASTENER DETAIL
N.T.S.
GLAZING MEETS ASTM E1300-04



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

WOOD JAMB ATTACHMENT TO STRUCTURE

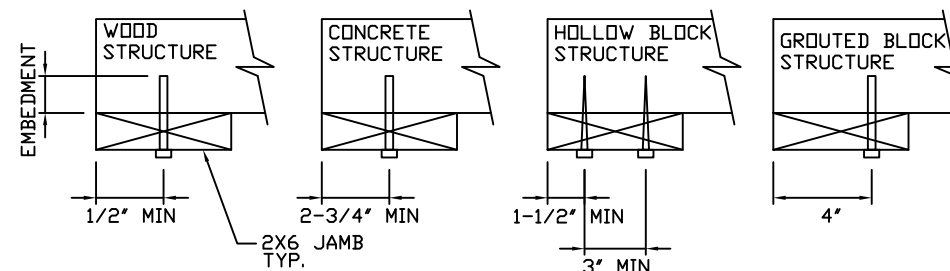
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 14" O.C. (1 1/2" EMBEDMENT)

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 12" 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 14" 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
A	ADDED HERITAGE MODEL/DRAWING UPDATES	3/1/22	RLR

MAX SIZE
18' x 14'

DESIGN LOADS
+37.0 PSF
-40.6 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+55.5 PSF
-60.9 PSF

LARGE MISSILE IMPACT RESISTANCE

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TX



MODEL #625 AMARR LINCOLN 1000, 2000
MODEL #675 AMARR HILLCREST 1000, 2000
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AMARR COMPANY
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 2 OF 3

TABLE 1

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"				

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
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"	82"						
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"	94"					
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"	106"				
11' 0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"			
12' 0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"		
13' 0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	
14' 0"	3.5"	10.0"	22.0"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"

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

TABLE 3

Section Width (ft)	Panel Type	Center Stile Locations (Measured from Left Edge)						
		1st (in)	2nd (in)	3rd (in)	4th (in)	5th (in)	6th (in)	7th (in)
16' 2"	Short	26.91	50.27	73.64	97.00	120.36	143.73	167.09
16' 2"	Long	28.25	51.17	74.08	97.00	119.92	142.83	165.75
16' 2"	Bead Board	24.63	48.75	72.88	97.00	121.13	145.25	169.38
16' 4"	Short	27.91	51.27	74.64	98.00	121.36	144.73	168.09
16' 4"	Long	29.25	52.17	75.08	98.00	120.92	143.83	166.75
16' 4"	Bead Board	24.63	49.08	73.54	98.00	122.46	146.92	171.38
16' 6"	Short	28.91	52.27	75.64	99.00	122.36	145.73	169.09
16' 6"	Long	27.51	51.34	75.17	99.00	122.83	146.66	170.49
16' 6"	Bead Board	24.63	49.42	74.21	99.00	123.79	148.59	173.38
16' 8"	Short	27.01	51.34	75.67	100.00	124.33	148.66	172.99
16' 8"	Long	28.30	52.20	76.10	100.00	123.90	147.80	171.70
16' 8"	Bead Board	24.88	49.92	74.96	100.00	125.04	150.09	175.13
16' 10"	Short	26.75	51.50	76.25	101.00	125.75	150.50	175.25
16' 10"	Long	29.30	53.20	77.10	101.00	124.90	148.80	172.70
16' 10"	Bead Board	24.86	50.15	75.57	101.00	126.29	151.59	176.88
17' 0"	Short	29.01	53.34	77.67	102.00	126.33	150.66	174.99
17' 0"	Long	30.30	54.20	78.10	102.00	125.90	149.80	173.70
17' 0"	Bead Board	25.38	50.92	76.46	102.00	127.54	153.09	178.63
17' 2"	Short	28.00	53.00	78.00	103.00	128.00	153.00	178.00
17' 2"	Long	31.30	55.20	79.10	103.00	126.90	150.80	174.70
17' 2"	Bead Board	25.63	51.42	77.21	103.00	128.79	154.59	180.38
17' 4"	Short	29.00	54.00	79.00	104.00	129.00	154.00	179.00
17' 4"	Long	32.30	56.20	80.10	104.00	127.90	151.80	175.70
17' 4"	Bead Board	25.88	51.92	77.96	104.00	130.04	156.09	182.13
17' 6"	Short	30.00	55.00	80.00	105.00	130.00	155.00	180.00
17' 6"	Long	33.30	57.20	81.10	105.00	128.90	152.80	176.70
17' 6"	Bead Board	26.13	52.42	78.71	105.00	131.29	157.59	183.88
17' 8"	Short	29.20	54.80	80.40	106.00	131.60	157.20	182.80
17' 8"	Long	30.70	55.80	80.90	106.00	131.10	156.20	181.30
17' 8"	Bead Board	26.38	52.92	79.46	106.00	132.54	159.09	185.63
17' 10"	Short	30.20	55.80	81.40	107.00	132.60	158.20	183.80
17' 10"	Long	30.88	56.25	81.63	107.00	132.38	157.75	183.13
17' 10"	Bead Board	26.63	53.42	80.21	107.00	133.79	160.59	187.38
18' 0"	Short	31.88	57.25	82.63	108.00	133.38	158.75	184.13
18' 0"	Long	32.70	57.80	82.90	108.00	133.10	158.20	183.30
18' 0"	Bead Board	26.88	53.92	80.96	108.00	135.04	162.09	189.13

TABLE 4

SECTION	STRUT SIZE
TOP	5.5"
7TH	5.5"
6TH	5.5"
5TH	5.5"
4TH	5.5"
3RD	5.5"
2ND	5.5"
BOTTOM	5.5"
	3"


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-40.6 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+55.5 PSF
-60.9 PSF

LARGE MISSILE
IMPACT
RESISTANCE



See Digital Signature
THOMAS L. SHELMERDINE
85829
LICENSED PROFESSIONAL ENGINEER

This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies.

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			DRAWING NUMBER IRC-6218-155-26-1
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 3