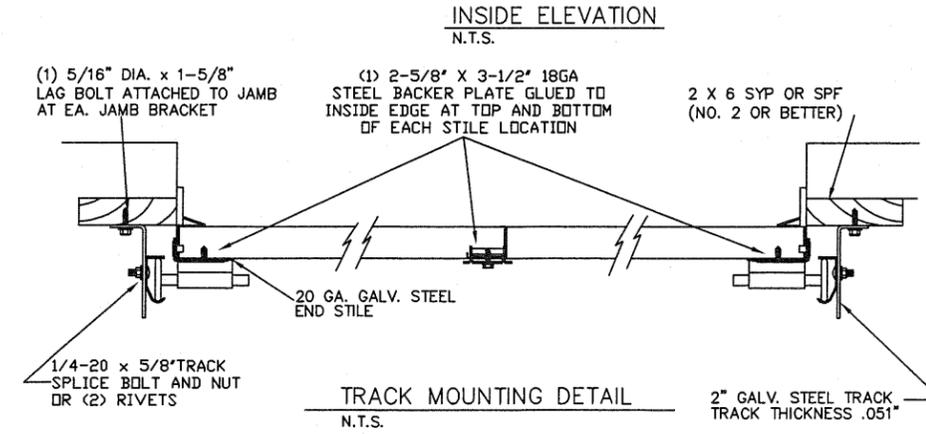


# LARGE MISSILE IMPACT RESISTANT

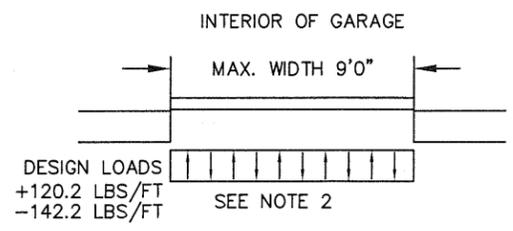
## SPECIFICATIONS AND NOTES

- 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
- EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +120.2 LBS/FT & -142.2 LBS/FT
- DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
- DOOR SECTIONS SHALL BE 24 GA. (.0216) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
- DOORS OVER (4) SECTIONS REFER TO TABLES 1 AND 2
- SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108 & 115, ASTM E330, E1886, E1996, & 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  
9' WIDTH  
14' HEIGHT

DESIGN LOADS  
+26.7 PSF  
-31.6 PSF

TEST LOADS  
(1.5 x DESIGN LOADS)  
+40.1 PSF  
-47.4 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  
TX

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

**Amarr**  
**ENTRE/MATIC**  
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

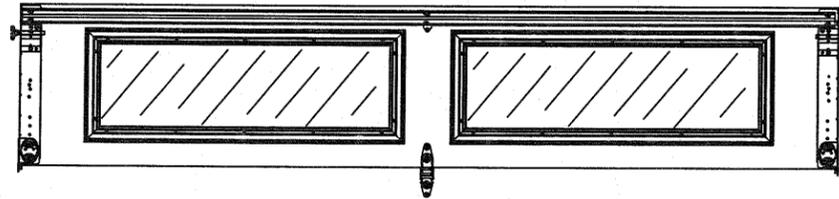
**MODEL #1200 HERITAGE 3000**  
**MODEL #1200 OAK SUMMIT 3000**  
SHORT, LONG, FLUSH & OAK SUMMIT PANELS

SIZE	DRAWN BY	RLR	DATE	07/28/14	DRAWING NUMBER
B	CHECKED BY		DATE		IRC-1209-130-11-1

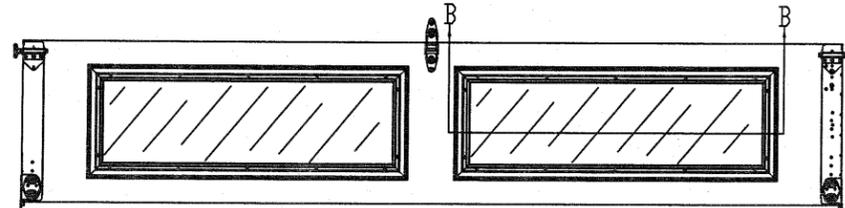
SHEET 1 OF 3

**OPTIONAL SHORT AND LONG PANEL GLAZING LAYOUTS**  
GLAZING MEETS ASTM E1300-04

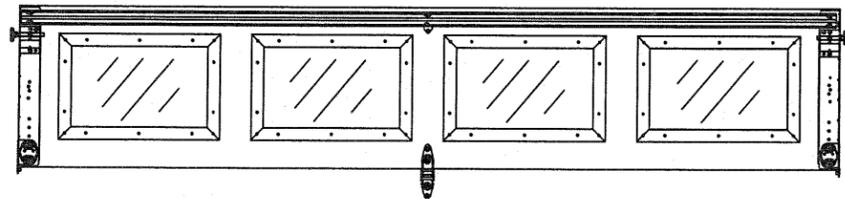
TOP SECTION



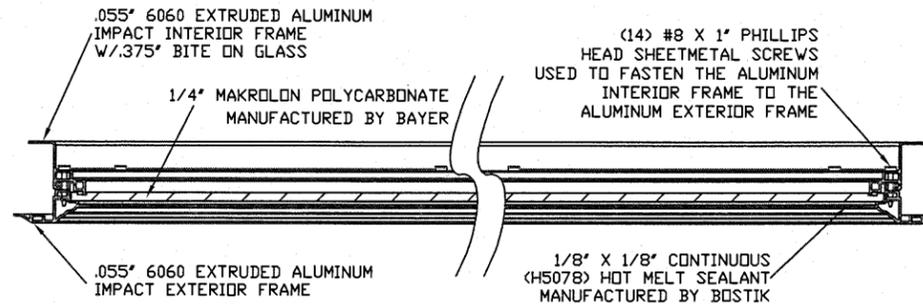
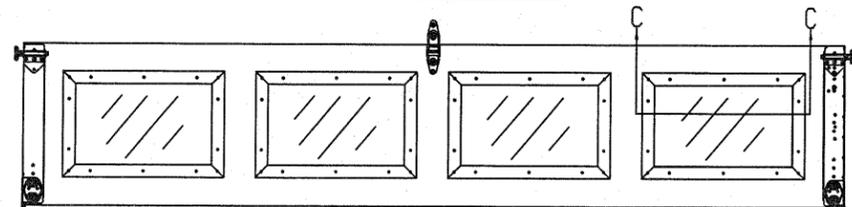
INTERMEDIATE SECTION



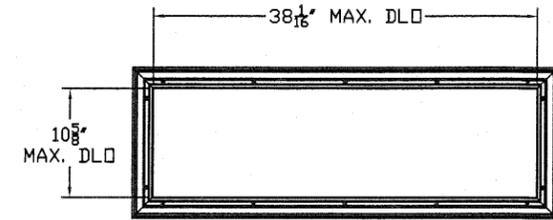
TOP SECTION



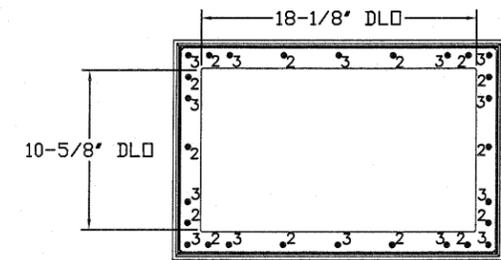
INTERMEDIATE SECTION



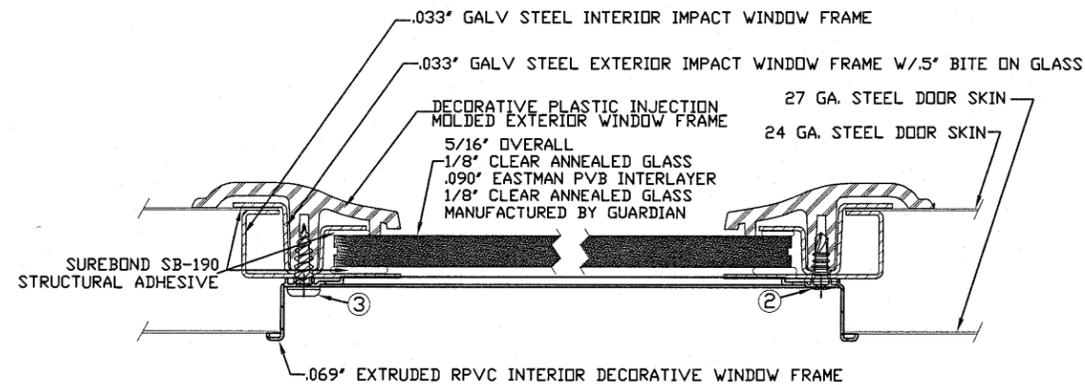
SECTION B-B IMPACT WINDOW DETAIL  
N.T.S.



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



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



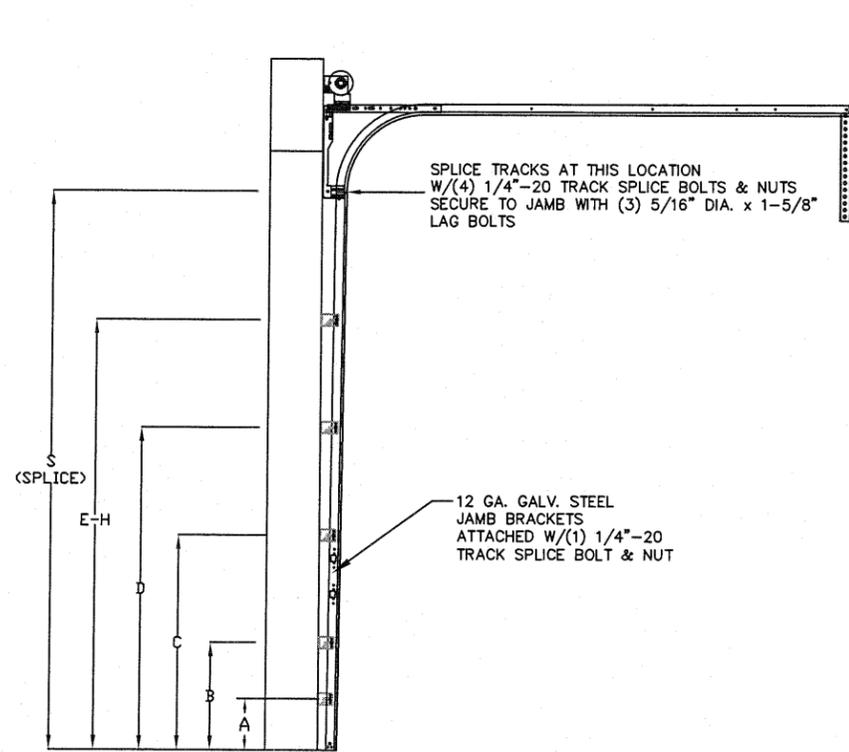
2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

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

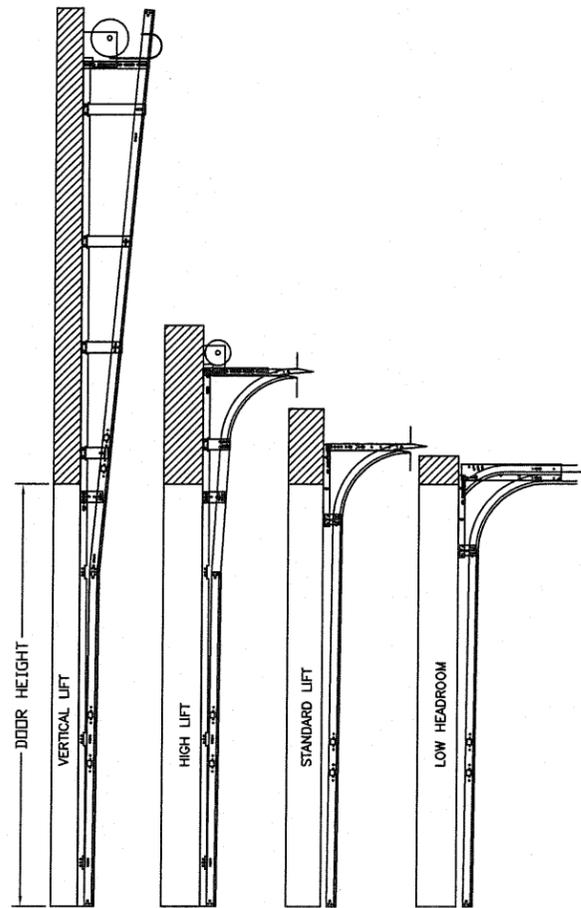
REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 9' WIDTH 14' HEIGHT		
	DESIGN LOADS +26.7 PSF -31.6 PSF		
	TEST LOADS (1.5 x DESIGN LOADS) +40.1 PSF -47.4 PSF		
	LARGE MISSILE IMPACT RESISTANCE		
	Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063)		
	TX		
	ENTRE/MATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105		
	MODEL #1200 HERITAGE 3000 MODEL #1200 OAK SUMMIT 3000 SHORT, LONG, FLUSH & OAK SUMMIT PANELS		
SIZE	DRAWN BY RLR	DATE 07/28/14	DRAWING NUMBER
B	CHECKED BY	DATE	IRC-1209-130-11-1
			SHEET 2 OF 3

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.



AVAILABLE TRACK CONFIGURATIONS  
N.T.S.

- 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 24" 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 24" 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 24" 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

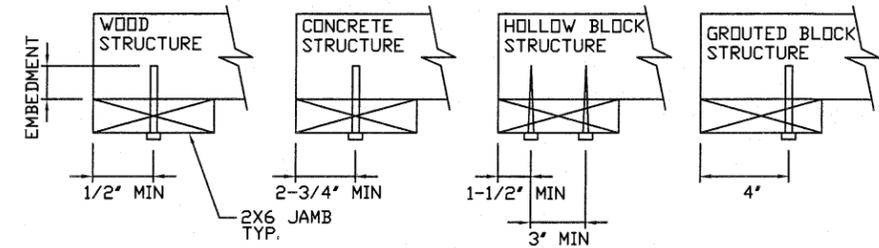


TABLE 1

DOOR HEIGHT	TRACK ATTACHMENT								SPLICE
	A	B	C	D	E	F	G	H	
6' 6"	10"	21"	42"	63"					70"
7'	10"	21"	42"	63"					76"
7' 6"	10"	21"	42"	63"					82"
8'	10"	21"	42"	63"					88"
8' 6"	10"	21"	42"	63"	84"				94"
9'	10"	21"	42"	63"	84"				100"
9' 6"	10"	21"	42"	63"	84"				106"
10'	10"	21"	42"	63"	84"	105"			112"
10' 6"	10"	21"	42"	63"	84"	105"			118"
11'	10"	21"	42"	63"	84"	105"			124"
11' 6"	10"	21"	42"	63"	84"	105"			130"
12'	10"	21"	42"	63"	84"	105"	126"		136"
12' 6"	10"	21"	42"	63"	84"	105"	126"		142"
13'	10"	21"	42"	63"	84"	105"	126"		148"
13' 6"	10"	21"	42"	63"	84"	105"	126"	147"	154"
14'	10"	21"	42"	63"	84"	105"	126"	147"	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
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 3

Section Width (ft)	Panel Type	Center Stile Location (Measured from Left Edge)
8' 0"	Short	48.000
8' 0"	Long	48.000
8' 2"	Short	49.000
8' 2"	Long	49.000
8' 4"	Short	50.000
8' 4"	Long	50.000
8' 6"	Short	51.000
8' 6"	Long	51.000
8' 8"	Short	52.000
8' 8"	Long	52.000
8' 10"	Short	53.000
8' 10"	Long	53.000
9' 0"	Short	54.000
9' 0"	Long	54.000

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE  
9' WIDTH  
14' HEIGHT

DESIGN LOADS  
+26.7 PSF  
-31.6 PSF

TEST LOADS  
(1.5 x DESIGN LOADS)  
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-47.4 PSF

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SHEET 3 OF 3