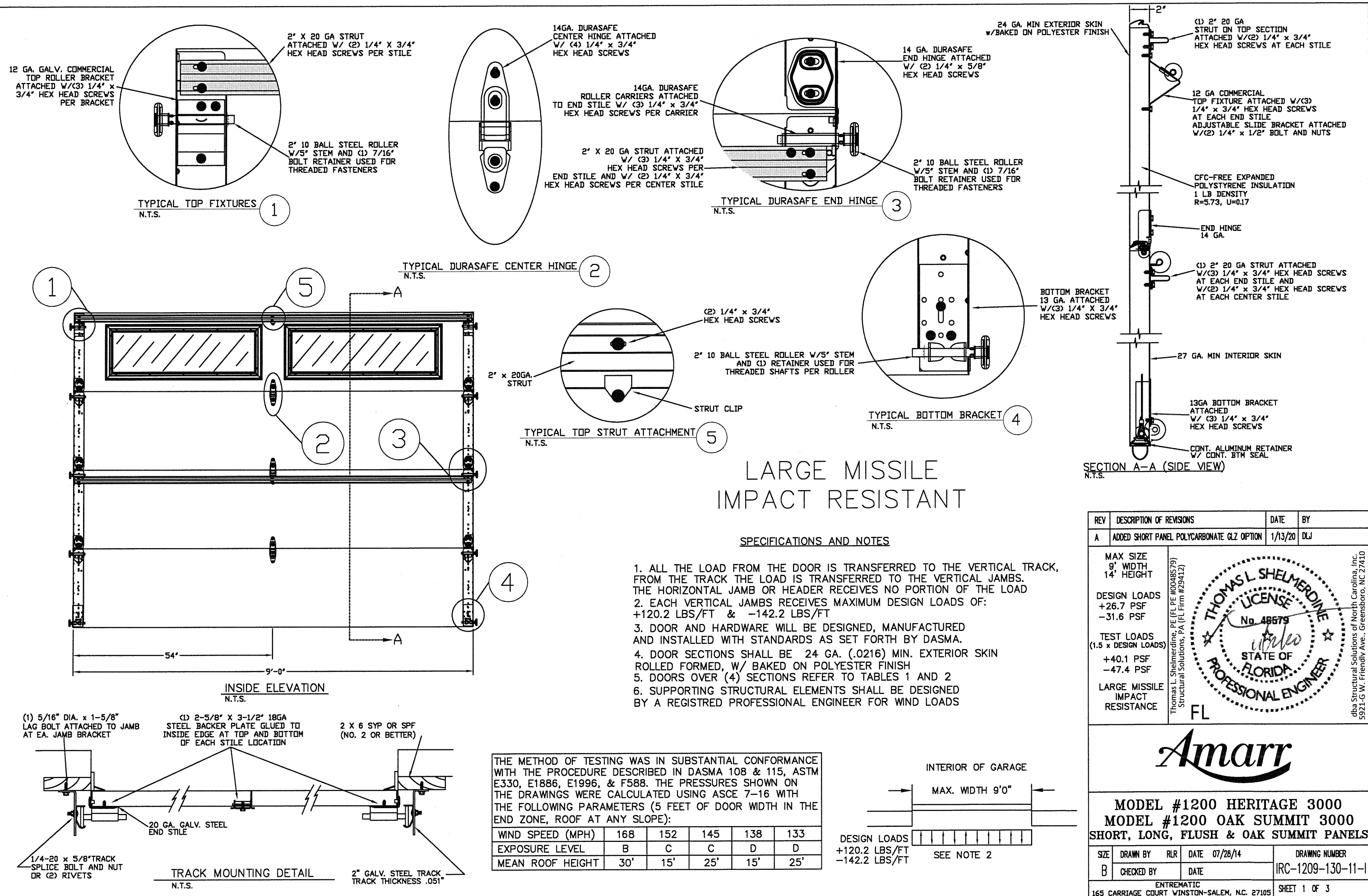


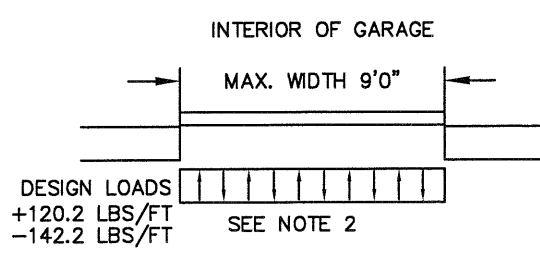


LARGE MISSILE IMPACT RESISTANT

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
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +120.2 LBS/FT & -142.2 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.0216) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS OVER (4) SECTIONS REFER TO TABLES 1 AND 2
6. 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 7-16 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
A	ADDED SHORT PANEL POLYCARBONATE GLZ OPTION	1/13/20	DLJ

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 (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

FL

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

Amarr

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

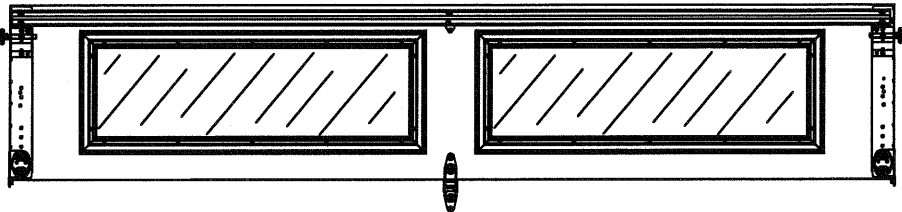
SIZE	DRAWN BY	RLR	DATE	07/28/14	DRAWING NUMBER
B	CHECKED BY	DATE			IRC-1209-130-11-1

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

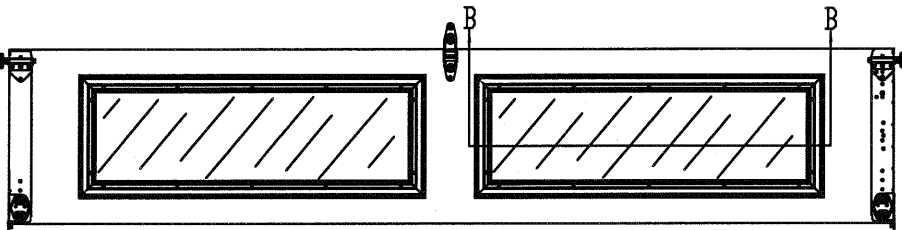
SHEET 1 OF 3

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

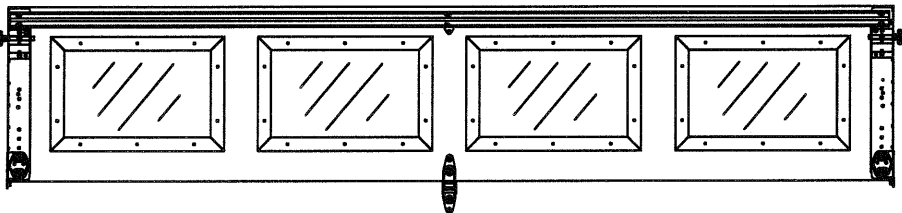
TOP SECTION



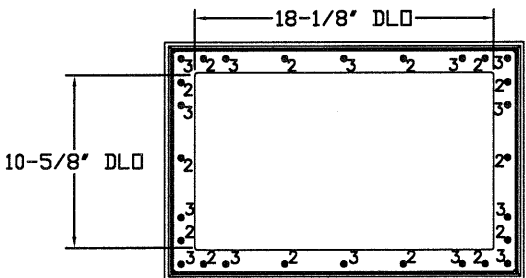
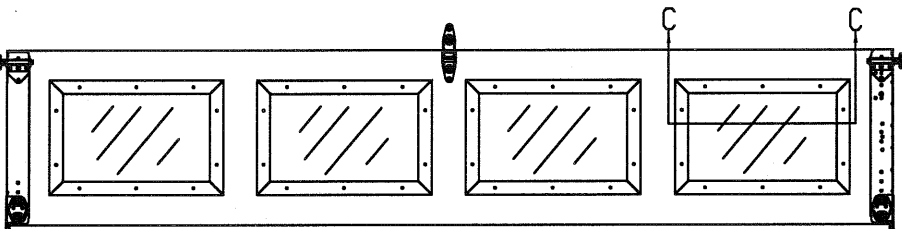
INTERMEDIATE SECTION



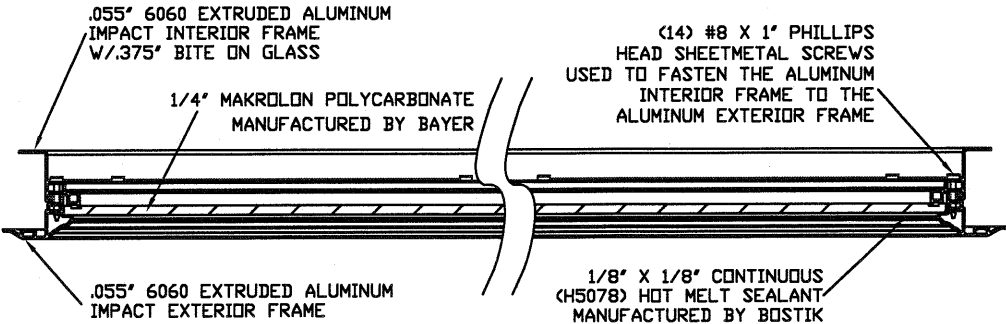
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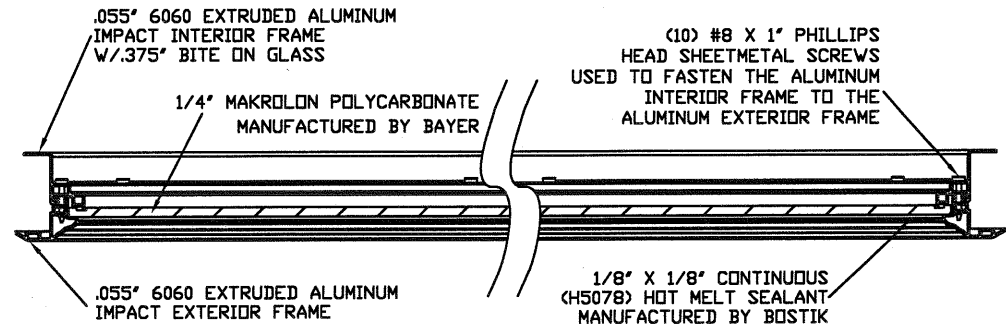
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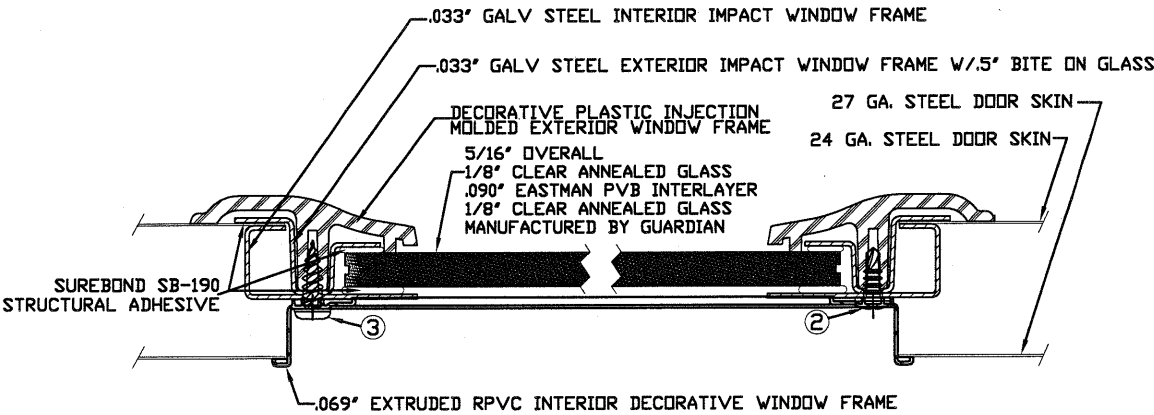
ALTERNATE IMPACT GLAZING FASTENER DETAIL
N.T.S.
GLAZING MEETS ASTM E1300-04



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

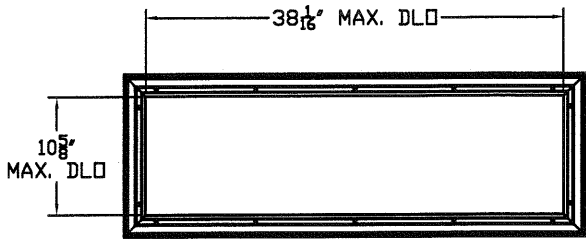


SECTION C-C SHORT PANEL IMPACT WINDOW DETAIL
N.T.S.

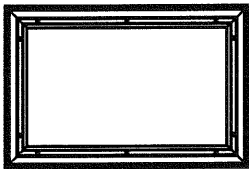


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

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

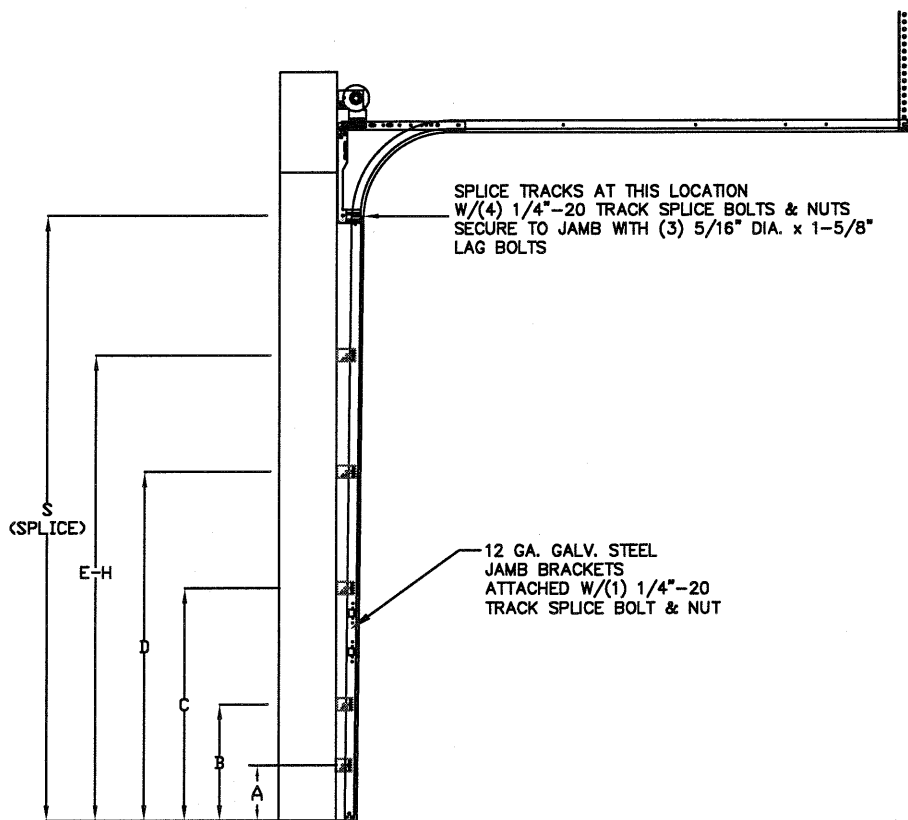


LONG PANEL IMPACT GLAZING FASTENER DETAIL
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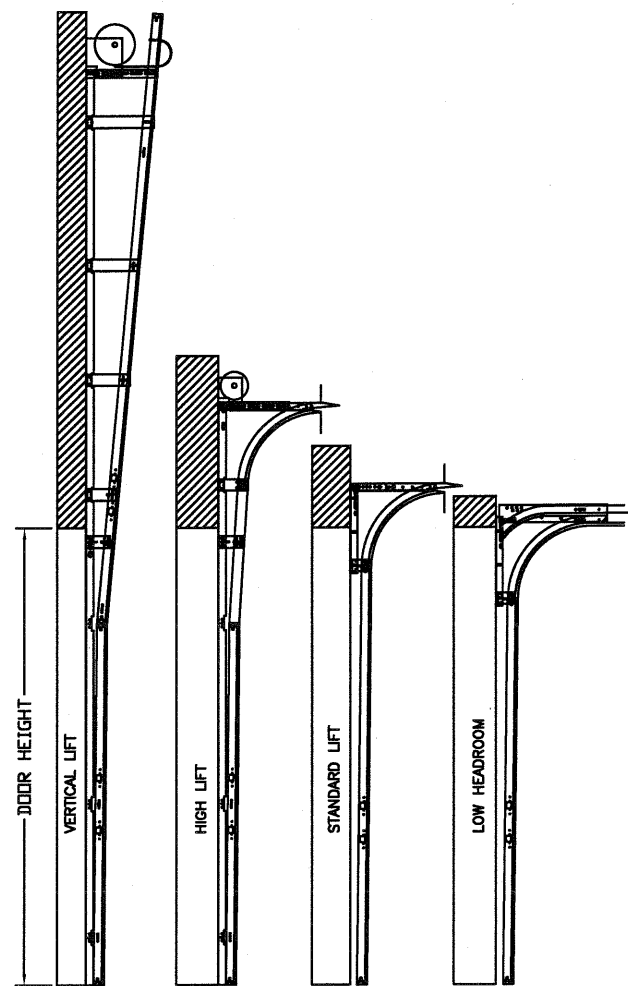


SHORT PANEL IMPACT GLAZING FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	ADDED SHORT PANEL POLYCARBONATE GLZ OPTION	1/13/20	DLJ
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 (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) THOMAS L. SHELMERDINE LICENSE No. 48579 STATE OF FLORIDA PROFESSIONAL ENGINEER FL dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410			
Amarr MODEL #1200 HERITAGE 3000 MODEL #1200 OAK SUMMIT 3000 SHORT, LONG, FLUSH & OAK SUMMIT PANELS SIZE B DRAWN BY RJR DATE 07/28/14 CHECKED BY DATE ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 DRAWING NUMBER IRC-1209-130-11-1 SHEET 2 OF 3			



TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS (SEE TABLE 1)
N.T.S.



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 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

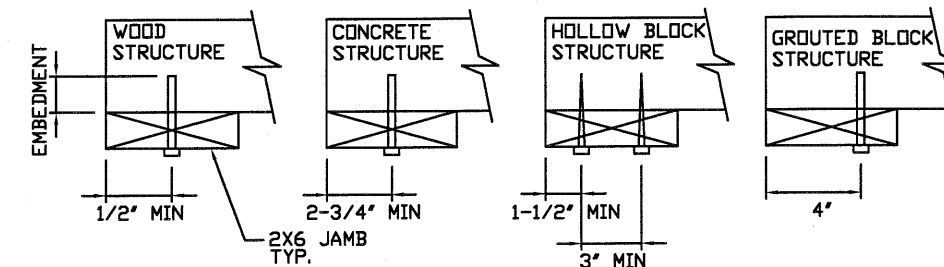


TABLE 1

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)	Max Design Loads Allowed	
			Positive (PSF)	Negative (PSF)
8' 0"	Short	48.000	30.0	35.5
8' 0"	Long	48.000	30.0	35.5
8' 2"	Short	49.000	29.4	34.8
8' 2"	Long	49.000	29.4	34.8
8' 4"	Short	50.000	28.8	34.1
8' 4"	Long	50.000	28.8	34.1
8' 6"	Short	51.000	28.2	33.4
8' 6"	Long	51.000	28.2	33.4
8' 8"	Short	52.000	27.7	32.8
8' 8"	Long	52.000	27.7	32.8
8' 10"	Short	53.000	27.2	32.1
8' 10"	Long	53.000	27.2	32.1
9' 0"	Short	54.000	26.7	31.6
9' 0"	Long	54.000	26.7	31.6

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(1.5 x DESIGN LOADS)
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SHEET 3 OF 3