

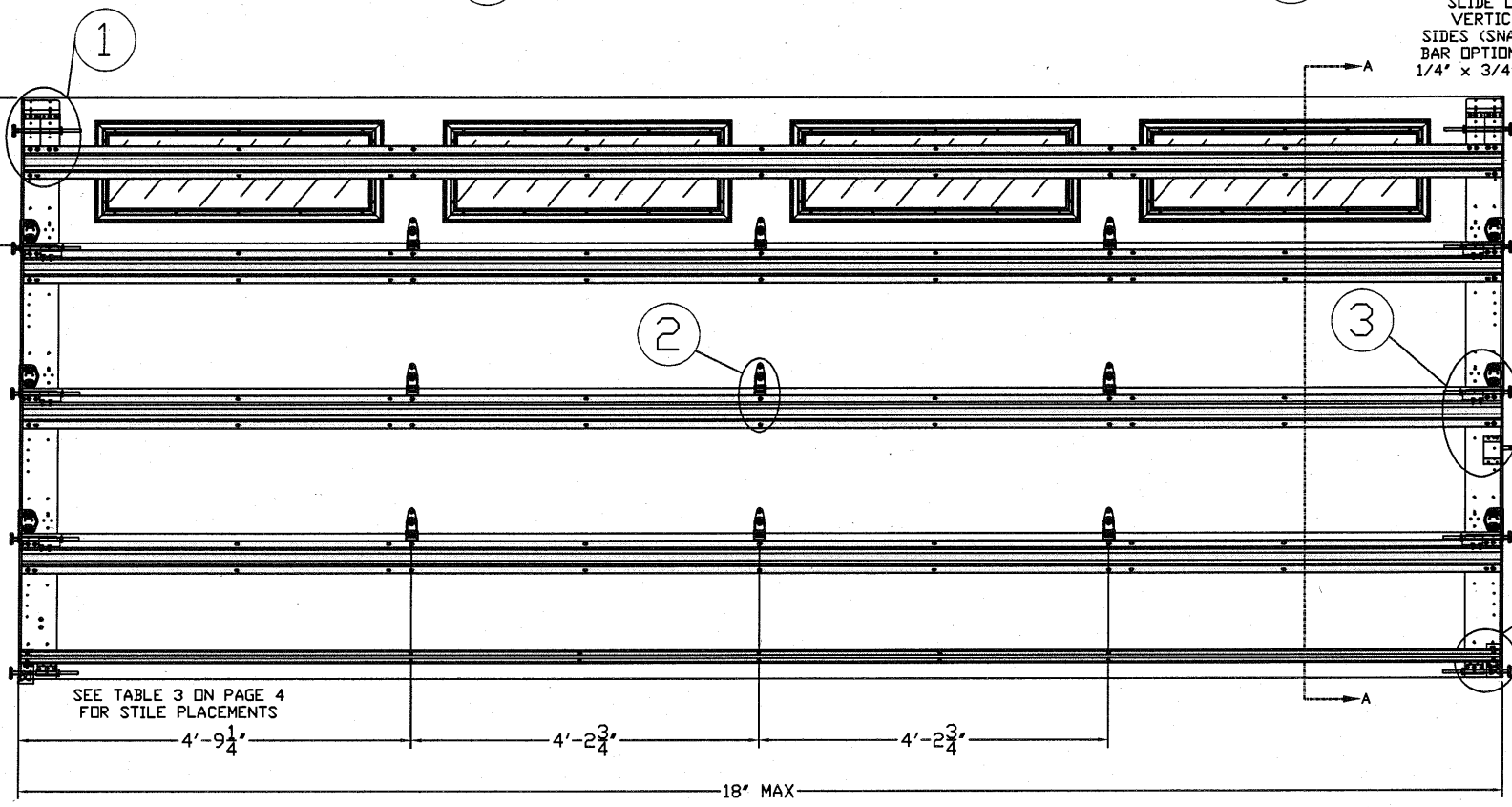
TYPICAL TOP FIXTURES  
N.T.S.

TYPICAL DURASAFE CENTER HINGE  
N.T.S.

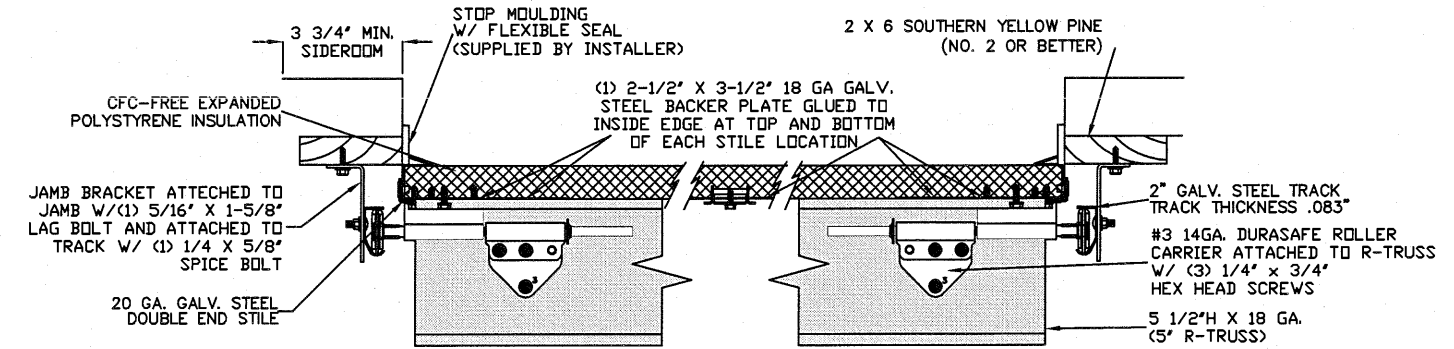
TYPICAL DURASAFE END HINGE  
N.T.S.

TYPICAL BOTTOM BRACKET  
N.T.S.

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



INSIDE ELEVATION  
N.T.S.



TRACK MOUNTING DETAIL  
N.T.S.

# LARGE MISSILE IMPACT RESISTANCE

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996, & F588, ANSI/DASMA 108, & 115, AND TAS 201, 202, & 203. 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)	165	149	142	136	130
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	UPDATED WHATS AND ADDED ASCE MPH DETAIL	11/29/11	RLR
B	ADDED GLAZING	11/11/13	RLR

MAX SIZE 18' x 14'

DESIGN LOADS +42.0 PSF -46.0 PSF

LARGE MISSILE IMPACT RESISTANCE

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

STATE OF TEXAS  
THOMAS L. SHELMERDINE  
85829  
LICENSED PROFESSIONAL ENGINEER

TX

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

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**MODEL #1200 HERITAGE 3000**  
**MODEL #1200 OAK SUMMIT 3000**  
Short, Long, Flush & Oak Summit Panels

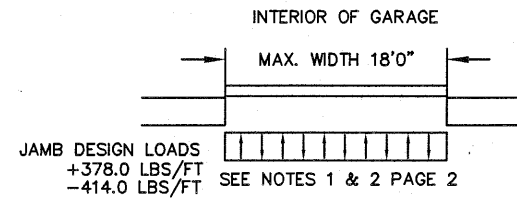
SIZE	DRAWN BY	SKW	DATE	5/21/07	DRAWING NUMBER
B	CHECKED BY	BHG	DATE	6/07/07	IRC-1218-165-26-1

SHEET 1 OF 4

# WOOD JAMB ATTACHMENT TO STRUCTURE

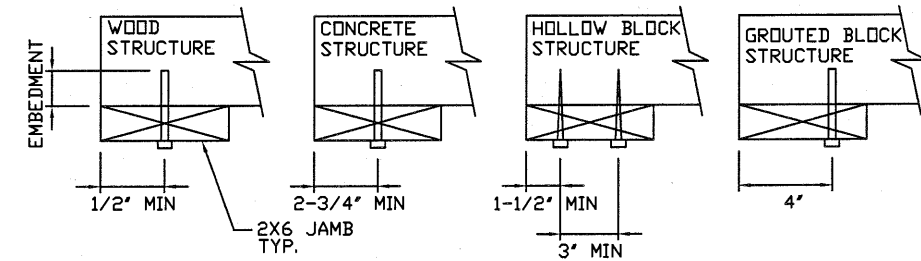
## SPECIFICATIONS AND NOTES

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: +378.0 LBS/FT & -414.0 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. (.022) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS USE (1) 5.5" 18 GA R-TRUSS PER SECTION AND (1) 3" 20 GA STRUT ON THE BOTTOM SECTION.
6. DOORS OVER (4) SECTIONS REFER TO TABLE 1
7. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



- 2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE  
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 12" 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 10" O.C. (1 1/4" EMBEDMENT)  
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS THEN 22" 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 12" 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

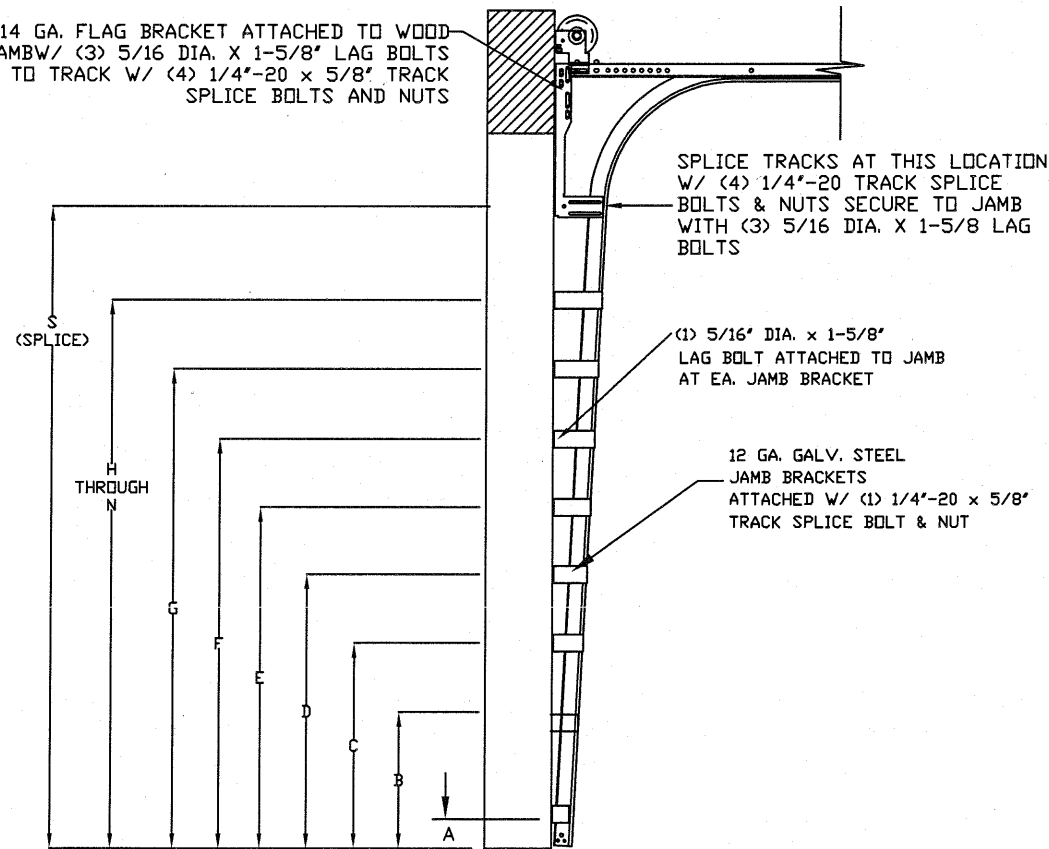


14 GA. FLAG BRACKET ATTACHED TO WOOD JAMB W/ (3) 5/16 DIA. X 1-5/8" LAG BOLTS AND TO TRACK W/ (4) 1/4"-20 X 5/8" TRACK SPLICE BOLTS AND NUTS

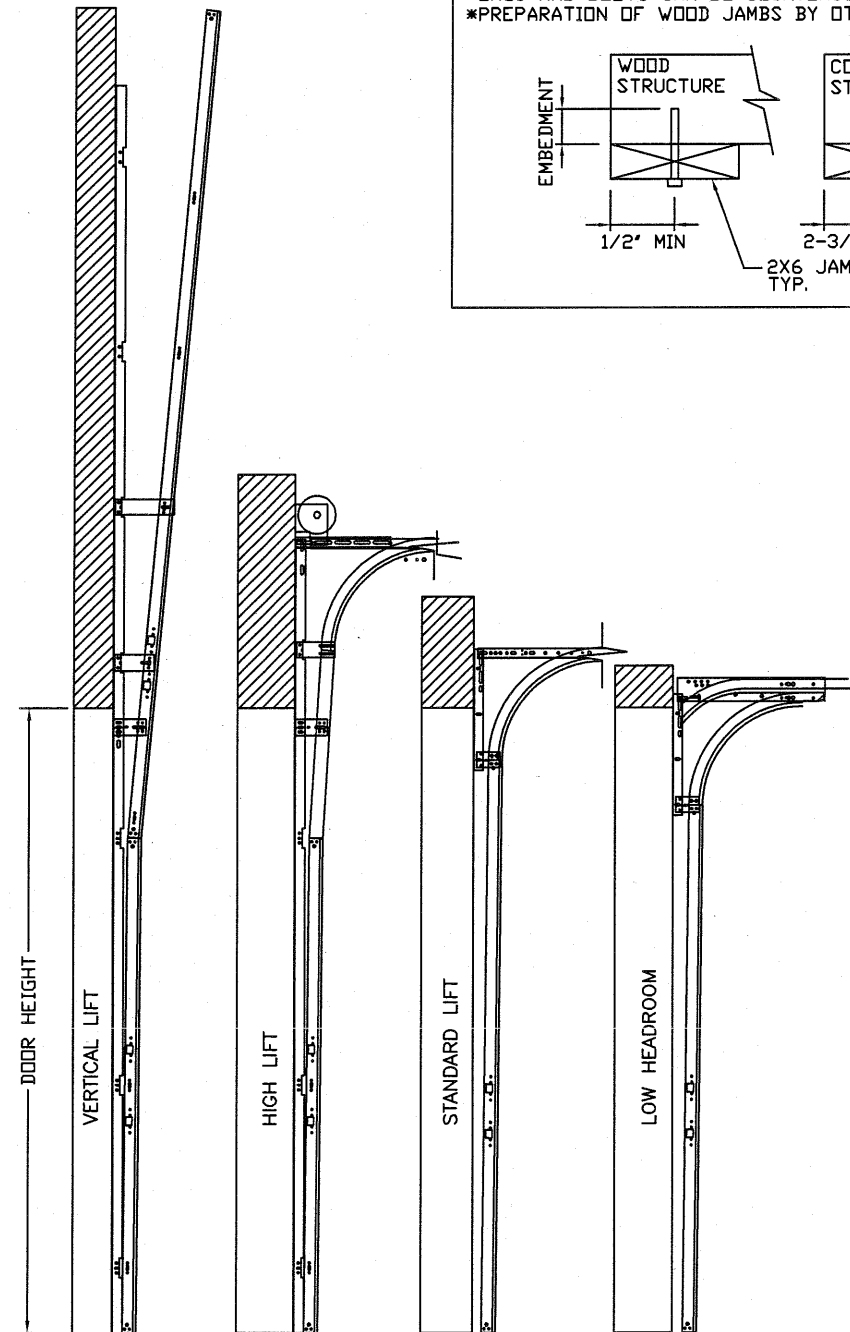
SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS SECURE TO JAMB WITH (3) 5/16 DIA. X 1-5/8 LAG BOLTS

(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 X 5/8" TRACK SPLICE BOLT & NUT



STANDARD TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS  
N.T.S.



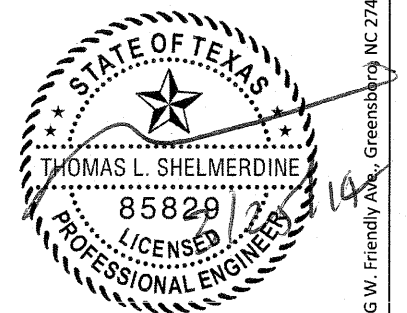
AVAILABLE TRACK CONFIGURATIONS  
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
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B	ADDED GLAZING	11/11/13	RLR

MAX SIZE  
18' x 14'  
DESIGN LOADS  
+42.0 PSF  
-46.0 PSF

LARGE MISSILE  
IMPACT  
RESISTANCE

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



TX

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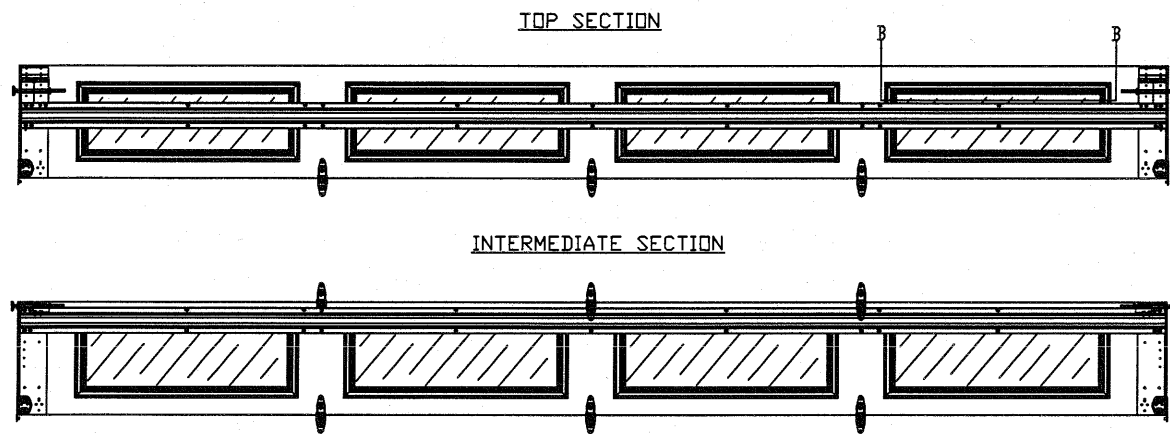
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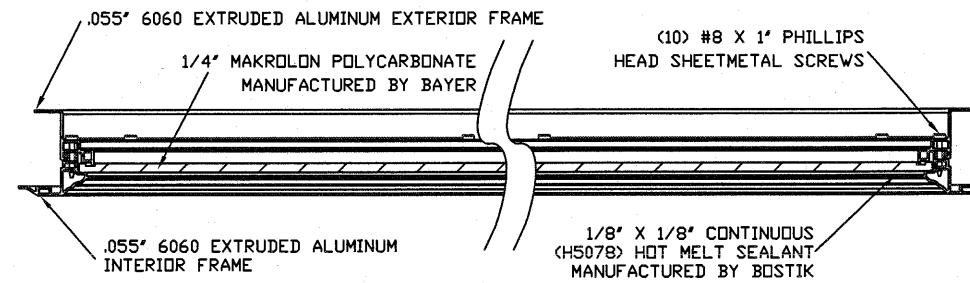
MODEL #1200 HERITAGE 3000  
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Short, Long, Flush & Oak Summit Panels

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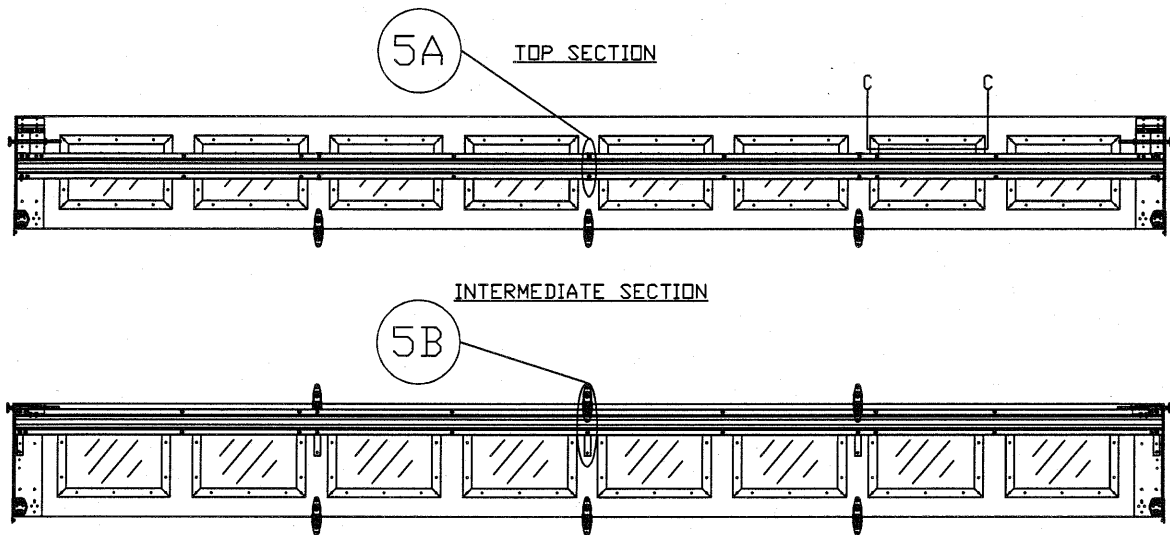
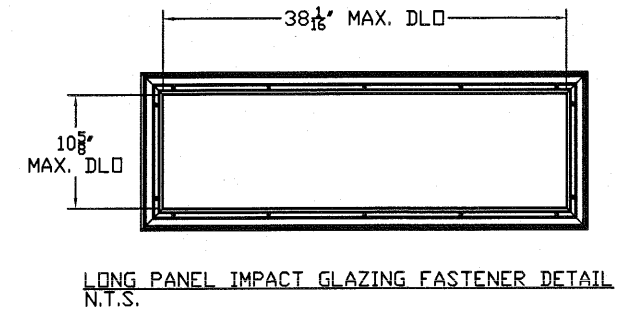
SHEET 2 OF 4



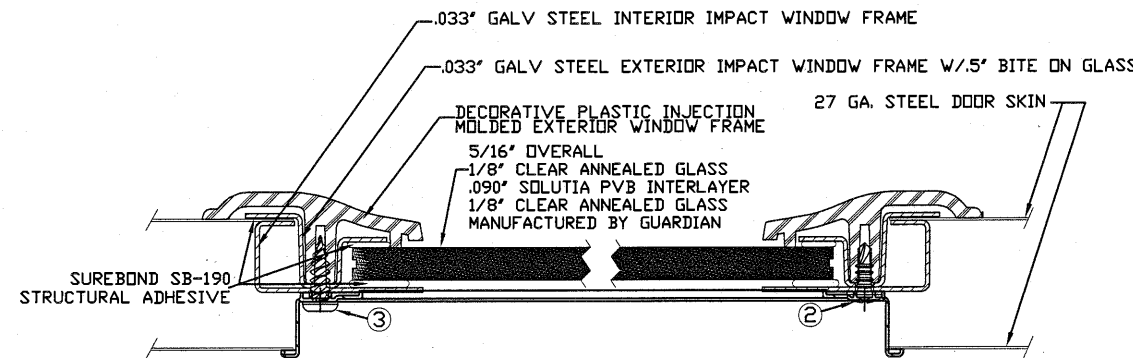
OPTIONAL LONG PANEL GLAZED SECTION R-TRUSS AND STILE LAYOUT  
N.T.S.



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

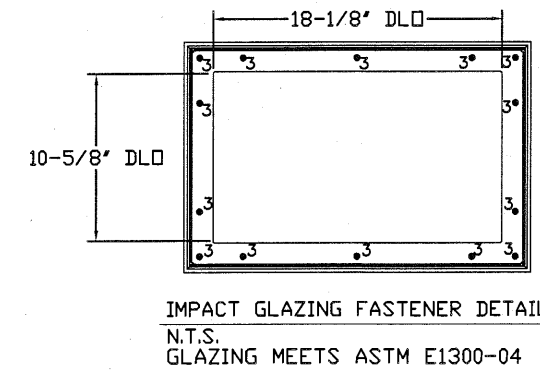


OPTIONAL SHORT PANEL GLAZED SECTION R-TRUSS AND STILE LAYOUT  
N.T.S.



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 IMPACT WINDOW DETAIL  
N.T.S.



5 1/2" X 18 GA R TRUSS ATTACHED W/ (2) 1/4" X 3/4" HEX HEAD SCREWS PER STILE

R-TRUSS SPACER

R-TRUSS SPACER  
N.T.S. 5A

5 1/2" 18GA. R-TRUSS ATTACHED W/ (2) 1/4" X 3/4" HEX HEAD SCREWS AT EACH CENTER STILE

R-TRUSS SPACER

R-TRUSS SPACER  
N.T.S. 5B

14GA. DURASAFE CENTER HINGE ATTACHED W/ (4) 1/4" X 3/4" HEX HEAD SCREWS

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MAX SIZE 18' x 14'  
DESIGN LOADS +42.0 PSF -46.0 PSF

LARGE MISSILE IMPACT RESISTANCE

Thomas L. Shelmerdine, PE (TX PE #85829)  
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MODEL #1200 OAK SUMMIT 3000  
Short, Long, Flush & Oak Summit Panels

SIZE	DRAWN BY	SKW	DATE	5/21/07	DRAWING NUMBER
B	CHECKED BY	BHG	DATE	6/07/07	IRC-1218-165-26-1

SHEET 3 OF 4

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															SPLICE
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	S	
6' 6"	3"	14"	27"	38"	46"	56"	64"									70"
7'	3"	14"	27"	38"	46"	56"	68"									76"
7' 6"	3"	14"	27"	38"	46"	56"	68"	78"								82"
8'	3"	14"	27"	38"	46"	56"	68"	78"								88"
8' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"							94"
9'	3"	14"	27"	38"	46"	56"	68"	78"	88"							100"
9' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	98"						106"
10'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"						112"
10' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"					118"
11'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"					124"
11' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"	120"				130"
12'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	110"	122"				136"
12' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	109"	122"	132"			142"
13'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	114"	122"	134"			148"
13' 6"	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	109"	122"	134"	144"		154"
14'	3"	14"	27"	38"	46"	56"	68"	78"	88"	100"	114"	122"	134"	146"		160"

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

TABLE 3

Section Width (ft)	Panel Type	Center Stile Locations (Measured from Left Edge)		
		1st (in)	2st (in)	3rd (in)
16' 2	Short	50.272	97.000	143.728
16' 2	Long	51.168	97.000	142.834
16' 4	Short	51.272	98.000	144.728
16' 4	Long	52.168	98.000	143.834
16' 6	Short	52.272	99.000	145.728
16' 6	Long	51.340	99.000	146.660
16' 8	Short	51.340	100.000	148.660
16' 8	Long	52.200	100.000	147.800
16' 10	Short	51.500	101.000	150.500
16' 10	Long	53.200	101.000	148.800
17' 0	Short	53.340	102.000	150.660
17' 0	Long	54.200	102.000	149.800
17' 2	Short	53.000	103.000	153.000
17' 2	Long	55.200	103.000	150.800
17' 4	Short	54.000	104.000	154.000
17' 4	Long	56.200	104.000	151.800
17' 6	Short	55.000	105.000	155.000
17' 6	Long	57.200	105.000	152.800
17' 8	Short	54.800	106.000	157.200
17' 8	Long	55.800	106.000	156.200
17' 10	Short	55.800	107.000	158.200
17' 10	Long	56.250	107.000	157.750
18' 0	Short	57.250	108.000	158.750
18' 0	Long	57.800	108.000	158.200

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MAX SIZE 18' x 14' DESIGN LOADS +42.0 PSF -46.0 PSF LARGE MISSILE IMPACT RESISTANCE	Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063)		5921-G W. Friendly Ave., Greensboro, NC 27410
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SHEET 4 OF 4