

LARGE MISSILE IMPACT RESISTANCE

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, ANSI/DASMA 108, TAS 201 202 AND 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):

WIND SPEED (MPH)	165	150	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	CORRECTION TO CENTER STILE PLACEMENTS	3/12/08	SKW
B	UPDATED WJATS, AND ADDED ASCE MPH DETAIL	11/29/11	RLR

MAX SIZE 18' x 14'

DESIGN LOADS +42.0 PSF -46.0 PSF

SIZES SUBJECT TO WEIGHT RESTRICTIONS

LARGE MISSILE IMPACT RESISTANCE

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

TX

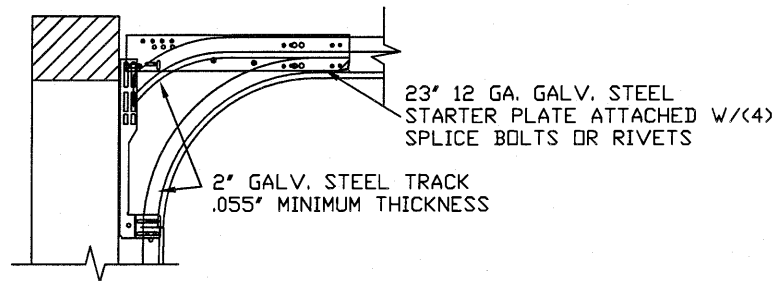
dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410

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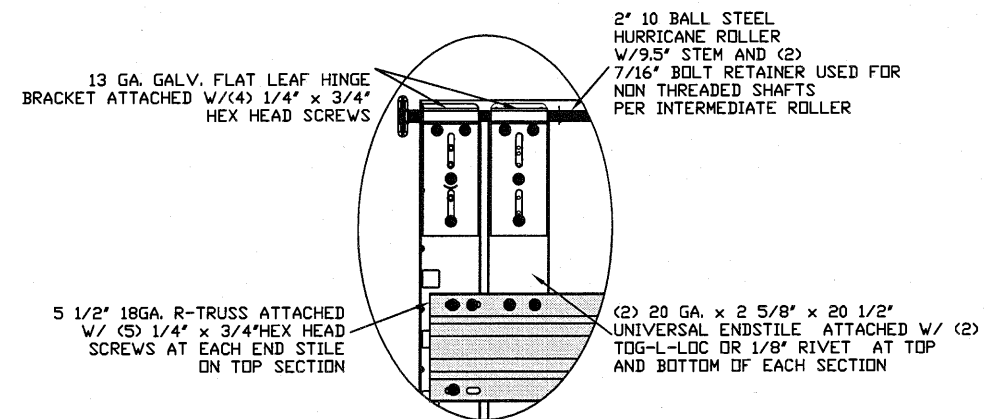
MODEL #950 HERITAGE 1000, 2000
MODEL #655 OAK SUMMIT (24ga) 1000, 2000
Short, Long, Flush & Oak Summit Panels

SIZE	DRAWN BY	SKW	DATE	DRAWING NUMBER
	B	CHKD BY	BHJ	

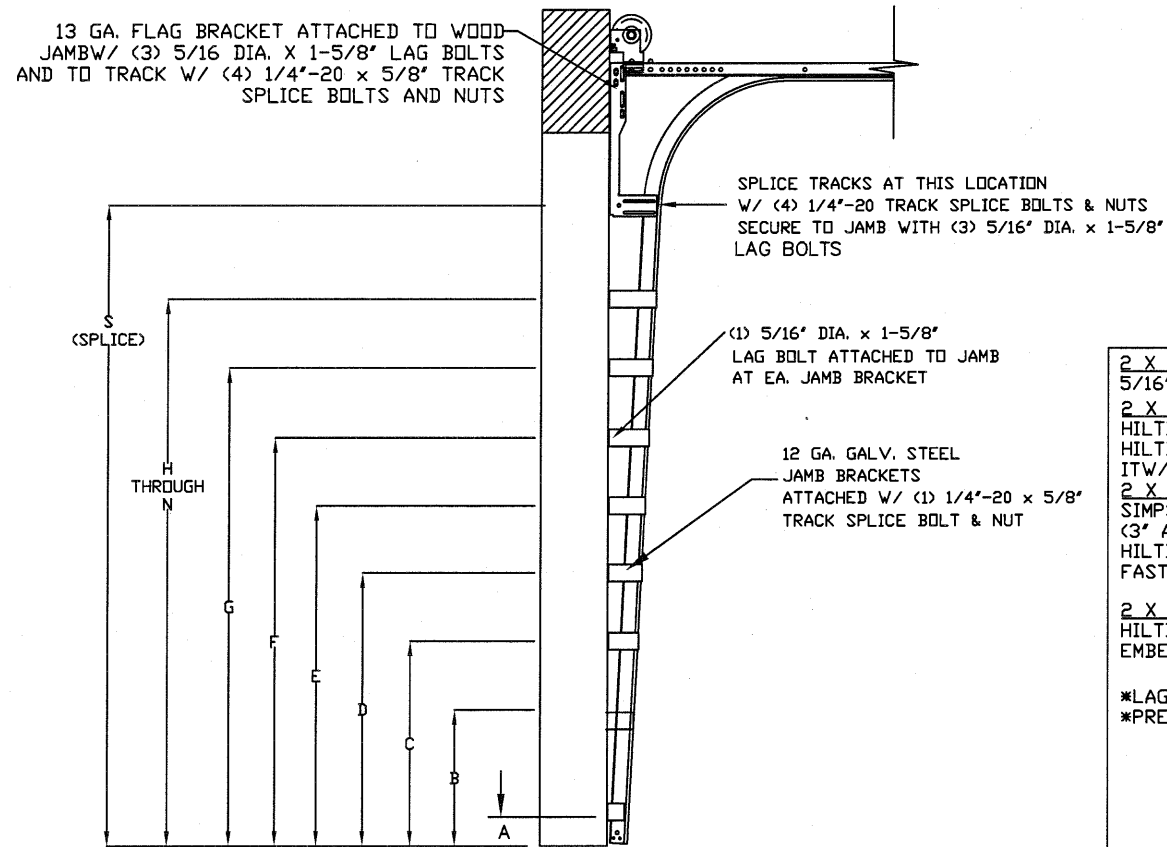
ENGINEER: THOMAS L. SHLMERDINE P.E. LIC. No. 0048579 SHEET 1 OF 3



LOW HEADROOM TRACK OPTION
N.T.S.



ALT. LOW HEADROOM TOP FIXTURE 1B
N.T.S.



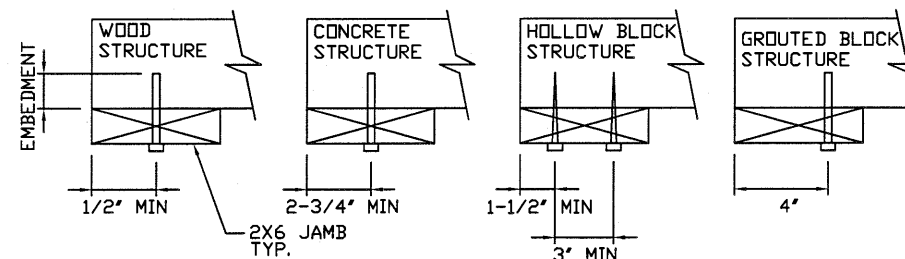
SEE (TABLE 2) FOR JAMB BRACKET SPACING
STANDARD TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS
N.T.S.

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 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



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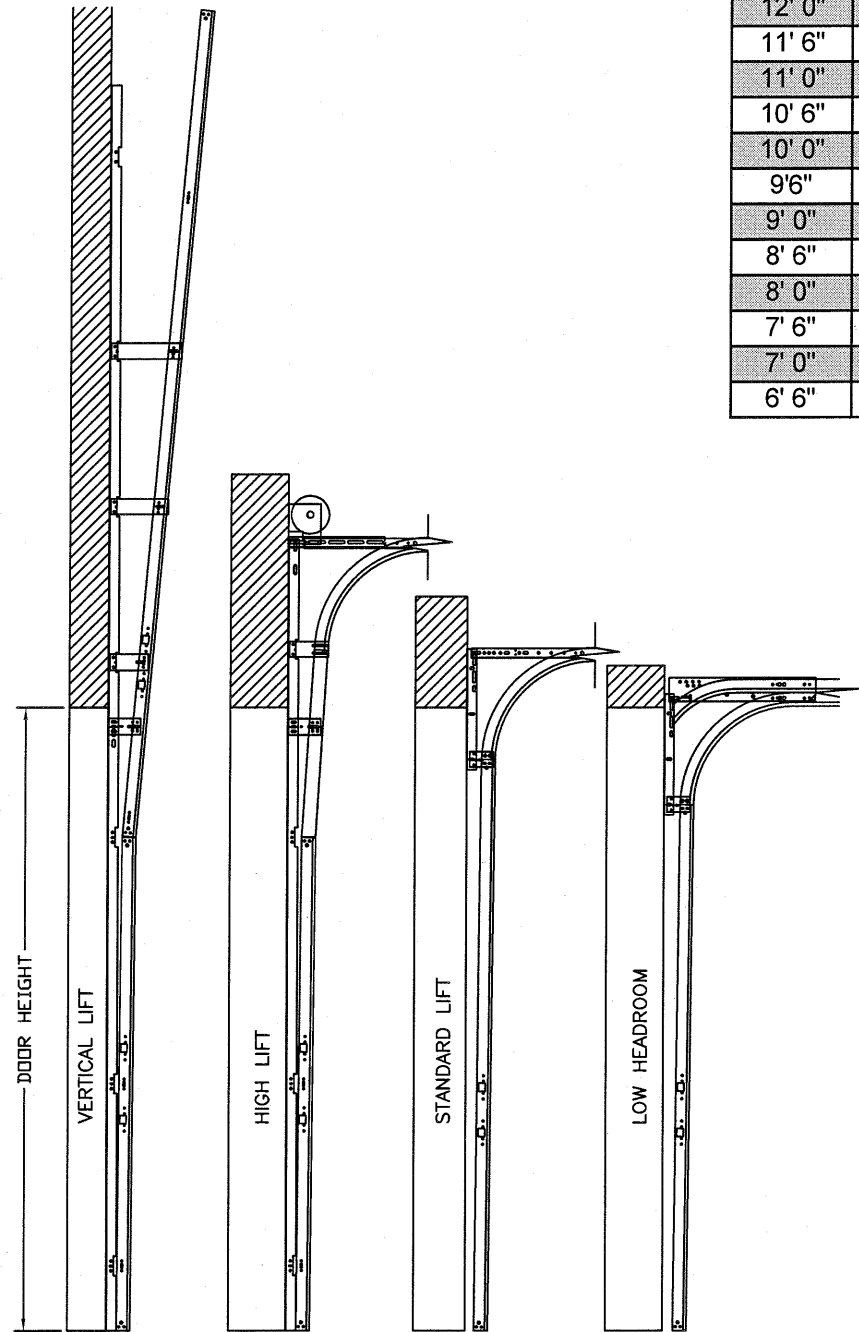
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SIZE	DRAWN BY SKW	DATE	DRAWING NUMBER
B	CHECKED BY BHJ	DATE 06/7/07	IRC-9518-165-26-1

ENGINEER: THOMAS L. SHELMERDINE P.E. LIC. No. 0048579 SHEET 2 OF 3



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

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"				

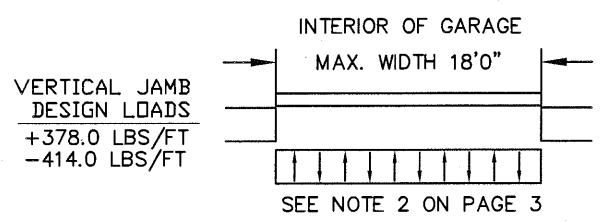
TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT														SPLICE
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
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

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" 18GA R-TRUSS PER SECTION AND (1) 3" 20GA STRUT ON THE BOTTOM SECTION.
6. REFER TO TABLE 1 FOR SECTION CONFIGURATION.
7. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTRED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



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