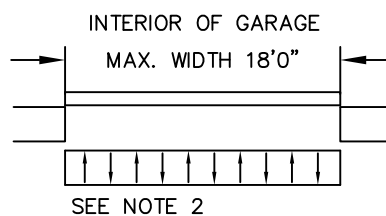
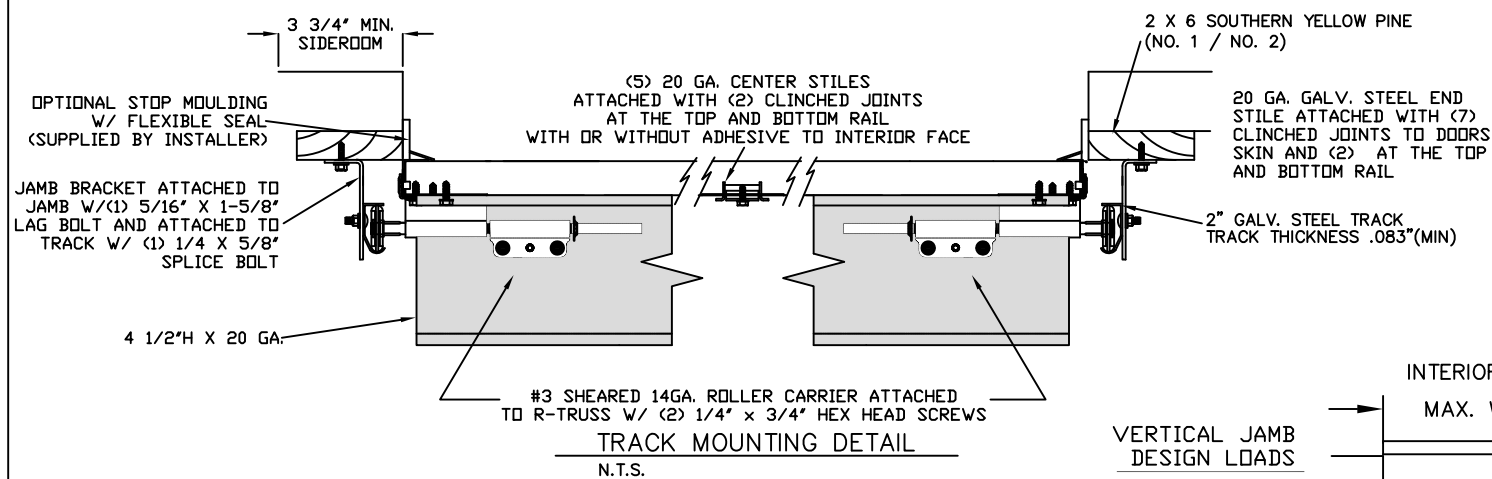


LARGE MISSILE IMPACT RESISTANT

INSIDE ELEVATION
N.T.S.



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330 AND DASMA 108. 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, AND I=1.0):

WIND SPEED (MPH)	130	118	112	107	102
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 JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +228.6 LBS/FT & -258.3 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.
- SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.
- AMARR MANUFACTURES AND DISTRIBUTES GARAGE DOORS UNDER MANY BRAND LABELS. PLEASE SEE AMARR-MANUFACTURED PRIVATE LABEL CHART FOR REFERENCE OF EQUIVALENT PRODUCTS FOR WINDLOAD APPROVAL.
- REFER TO TABLES ON PAGE 3 FOR ADDITIONAL DOOR WIDTHS
- PANEL STAMP DOES NOT EFFECT WINDLOAD CAPABILITIES.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	WIND SPEED TABLE & TRACK CONFIGURATIONS	5/1/12	RLR

MAX SIZE
18' x 14'

SIZES SUBJECT TO WEIGHT LIMITATIONS

DESIGN LOADS
+25.4 PSF
-28.7 PSF

TEST LOADS
+38.1 PSF
-43.1 PSF

LARGE MISSILE IMPACT RESISTANT

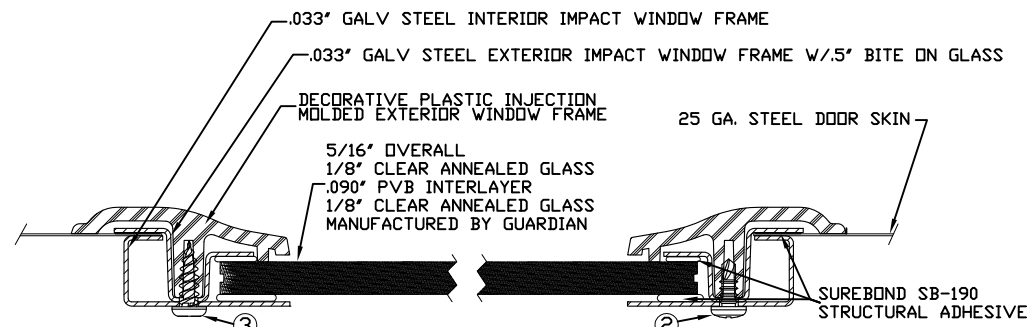


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MODEL #650 OAK SUMMIT SERIES 1000 & 2000
MODEL #600 STRATFORD SERIES 1000 & 2000
MODEL #950 HERITAGE SERIES 1000 & 2000

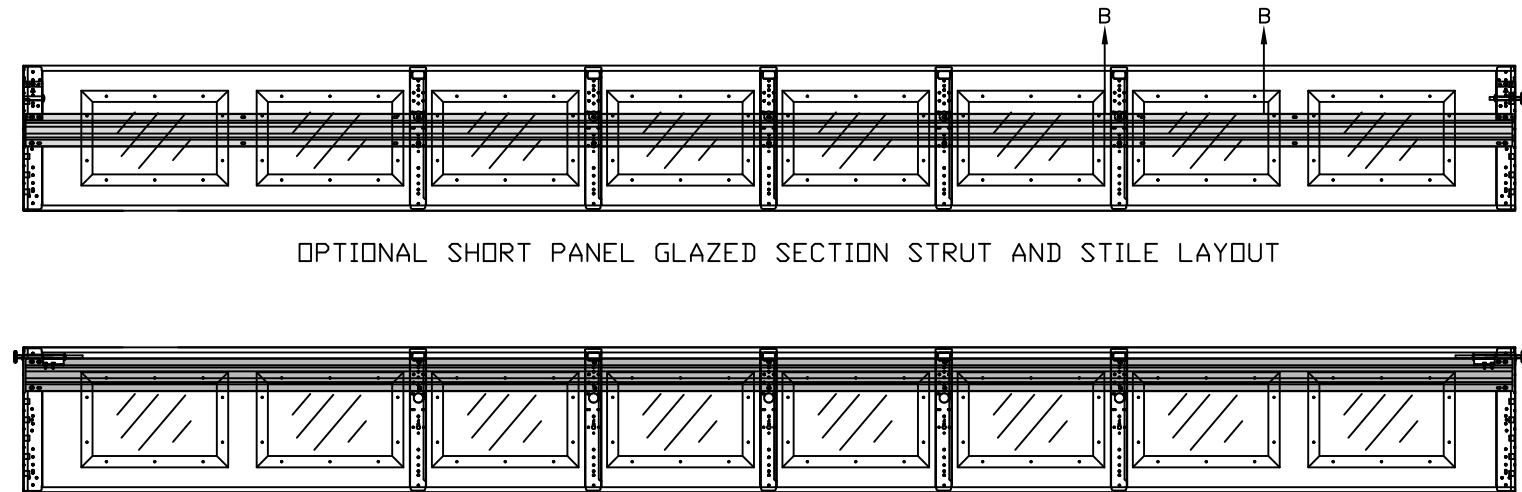
SIZE	DRAWN BY	DRC	03/18/10	DRAWING NUMBER
B	CHECKED BY	BHG	DATE 03/18/10	IRC-6018-130-24-1

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

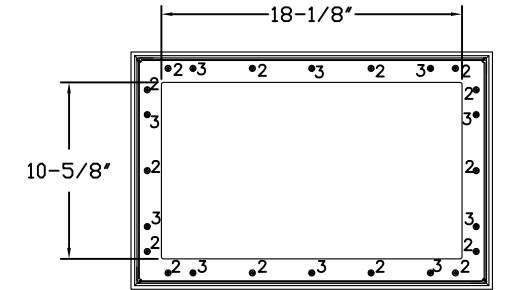


2. 3/16" X 1/2" SCREW - USED TO FASTEN THE STEEL EXTERIOR IMPACT WINDOW FRAME TO THE STEEL INTERIOR IMPACT WINDOW FRAME.
3. 11/64" X 1/2" SCREW - USED TO FASTEN DECORATIVE PLASTIC MOLDED WINDOW FRAME TO THE ASSEMBLY

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



OPTIONAL SHORT PANEL GLAZED SECTION STRUT AND STILE LAYOUT

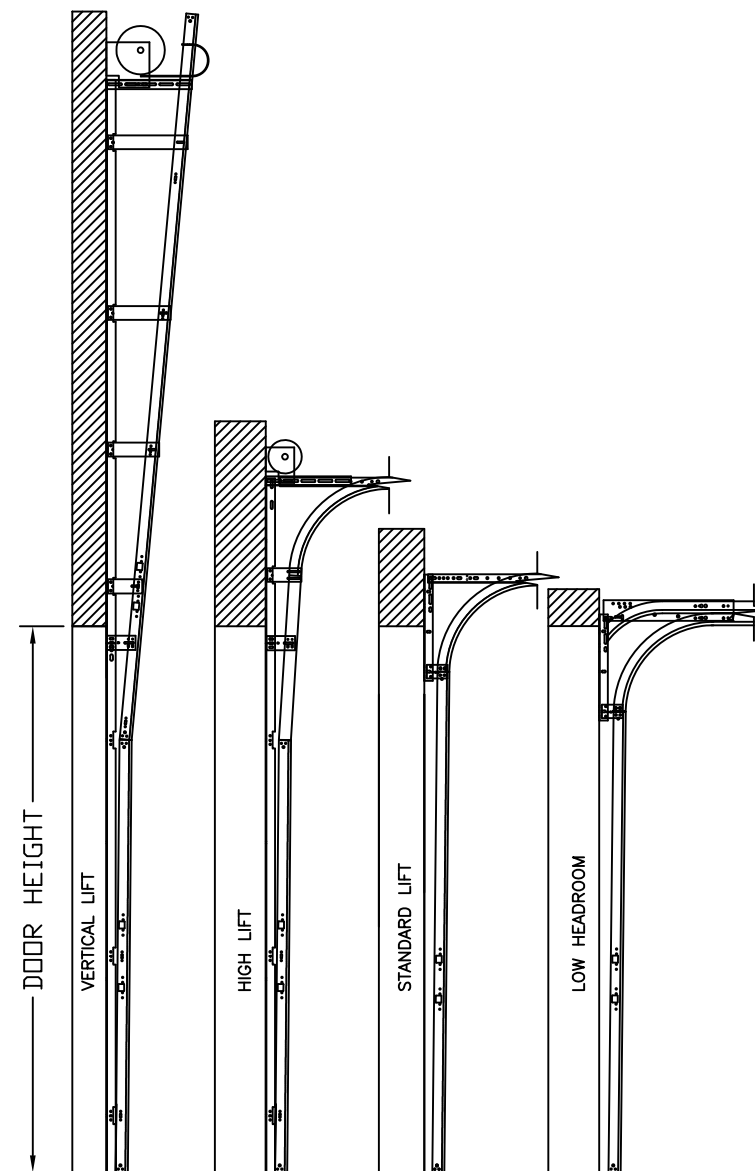
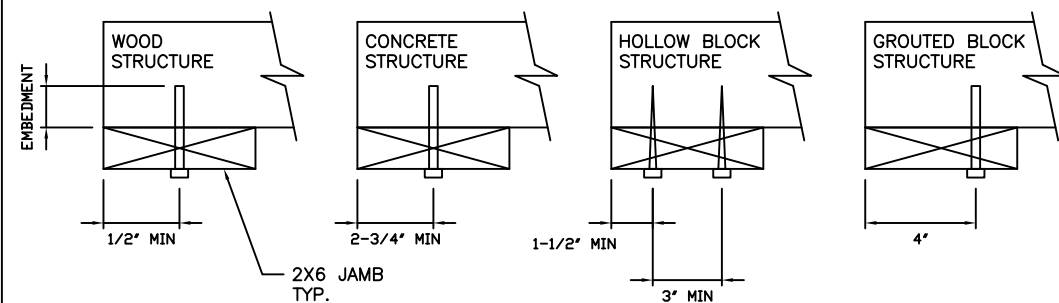


IMPACT GLAZING FASTENER DETAIL
N.T.S.

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 20" 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 18" 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 22" 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



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	WIND SPEED TABLE & TRACK CONFIGURATIONS	5/1/12	RLR

MAX SIZE
18' x 14'
SIZES SUBJECT
TO WEIGHT
LIMITATIONS
DESIGN LOADS
+25.4 PSF
-28.7 PSF
TEST LOADS
+38.1 PSF
-43.1 PSF
LARGE
MISSILE
IMPACT
RESISTANT



Amarr

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MODEL #650 OAK SUMMIT SERIES 1000 & 2000
MODEL #600 STRATFORD SERIES 1000 & 2000
MODEL #950 HERITAGE SERIES 1000 & 2000

SIZE	DRAWN BY	DRC	DATE	DRAWING NUMBER
B	CHECKED BY	BHG	DATE 03/18/10	IRC-6018-130-24-1

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

TABLE 1

DOOR HEIGHT	SECTION HEIGHTS							
	Btm	#2	#3	#4	#5	#6	#7	#8
6' 0"	18"	18"	18"	18"				
6' 6"	21"	18"	18"	21"				
7' 0"	21"	21"	21"	21"				
7' 6"	18"	18"	18"	18"	18"			
8' 0"	21"	18"	18"	18"	21"			
8' 6"	21"	21"	21"	18"	21"			
9' 0"	18"	18"	18"	18"	18"	18"		
9' 6"	21"	18"	18"	18"	18"	21"		
10' 0"	21"	21"	21"	18"	18"	21"		
10' 6"	21"	21"	21"	21"	21"	21"		
11' 0"	21"	18"	18"	18"	18"	18"	21"	
11' 6"	21"	21"	21"	18"	18"	18"	21"	
12' 0"	21"	21"	21"	21"	21"	18"	21"	
12' 6"	21"	18"	18"	18"	18"	18"	18"	21"
13' 0"	21"	21"	21"	18"	18"	18"	18"	21"
13' 6"	21"	21"	21"	21"	21"	18"	18"	21"
14' 0"	21"	21"	21"	21"	21"	21"	21"	21"

TABLE 2

HEIGHT	TRACK ATTACHMENT								SPLICE
	A	B	C	D	E	F	G	H	
6' 0"	3.5"	18"	36"	54"					64"
6' 6"	3.5"	21"	38"	58"					70"
7' 0"	3.5"	21"	42"	63"					76"
7' 6"	3.5"	18"	36"	54"	72"				82"
8' 0"	3.5"	21"	39"	58"	75"				88"
8' 6"	3.5"	21"	42"	63"	81"				94"
9' 0"	3.5"	18"	36"	54"	72"	90"			100"
9' 6"	3.5"	21"	39"	57"	75"	93"			106"
10' 0"	3.5"	21"	42"	63"	81"	99"			112"
10' 6"	3.5"	21"	42"	63"	84"	105"			118"
11' 0"	3.5"	21"	39"	57"	75"	93"	111"		124"
11' 6"	3.5"	21"	42"	63"	81"	99"	117"		130"
12' 0"	3.5"	21"	42"	63"	84"	105"	123"		136"
12' 6"	3.5"	18"	36"	57"	75"	93"	111"	129"	142"
13' 0"	3.5"	21"	42"	63"	81"	99"	117"	135"	148"
13' 6"	3.5"	21"	42"	63"	84"	105"	123"	141"	154"
14' 0"	3.5"	21"	42"	63"	84"	105"	126"	147"	160"

ALL TRACK ATTACHMENT SPACING +/- 2" 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)	4th (in)	5th (in)
16' 2"	Short	50.27	73.64	97.00	120.36	143.73
16' 2"	Long	51.17	74.08	97.00	119.92	142.83
16' 2"	Bead	48.75	72.88	97.00	121.13	145.25
16' 4"	Short	51.27	74.64	98.00	121.36	144.73
16' 4"	Long	52.17	75.08	98.00	120.92	143.83
16' 4"	Bead	49.08	73.54	98.00	122.46	146.92
16' 6"	Short	52.27	75.64	99.00	122.36	145.73
16' 6"	Long	51.34	75.17	99.00	122.83	146.66
16' 6"	Bead	49.42	74.21	99.00	123.79	148.59
16' 8"	Short	51.34	75.67	100.00	124.33	148.66
16' 8"	Long	52.20	76.10	100.00	123.90	147.80
16' 8"	Bead	49.92	74.96	100.00	125.04	150.09
16' 10"	Short	51.50	76.25	101.00	125.75	150.50
16' 10"	Long	53.20	77.10	101.00	124.90	148.80
16' 10"	Bead	50.15	75.57	101.00	126.29	151.59
17' 0"	Short	53.34	77.67	102.00	126.33	150.66
17' 0"	Long	54.20	78.10	102.00	125.90	149.80
17' 0"	Bead	50.92	76.46	102.00	127.54	153.09
17' 2"	Short	53.00	78.00	103.00	128.00	153.00
17' 2"	Long	55.20	79.10	103.00	126.90	150.80
17' 2"	Bead	51.42	77.21	103.00	128.79	154.59
17' 4"	Short	54.00	79.00	104.00	129.00	154.00
17' 4"	Long	56.20	80.10	104.00	127.90	151.80
17' 4"	Bead	51.92	77.96	104.00	130.04	156.09
17' 6"	Short	55.00	80.00	105.00	130.00	155.00
17' 6"	Long	57.20	81.10	105.00	128.90	152.80
17' 6"	Bead	52.42	78.71	105.00	131.29	157.59
17' 8"	Short	54.80	80.40	106.00	131.60	157.20
17' 8"	Long	55.80	80.90	106.00	131.10	156.20
17' 8"	Bead	52.92	79.46	106.00	132.54	159.09
17' 10"	Short	55.80	81.40	107.00	132.60	158.20
17' 10"	Long	56.25	81.63	107.00	132.38	157.75
17' 10"	Bead	53.42	80.21	107.00	133.79	160.59
18' 0"	Short	57.25	82.63	108.00	133.38	158.75
18' 0"	Long	57.80	82.90	108.00	133.10	158.20
18' 0"	Bead	53.92	80.96	108.00	135.04	162.09

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	WIND SPEED TABLE & TRACK CONFIGURATIONS	5/1/12	RLR

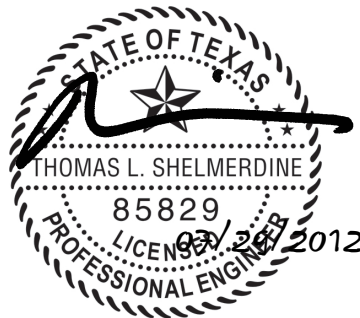
MAX SIZE
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SIZES SUBJECT TO WEIGHT LIMITATIONS

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-28.7 PSF

TEST LOADS
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-43.1 PSF

LARGE MISSILE IMPACT RESISTANT



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SIZE	DRAWN BY	DRC	DATE	DRAWING NUMBER
B	CHKD BY	BHG	DATE 03/18/10	IRC-6018-130-24-1

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