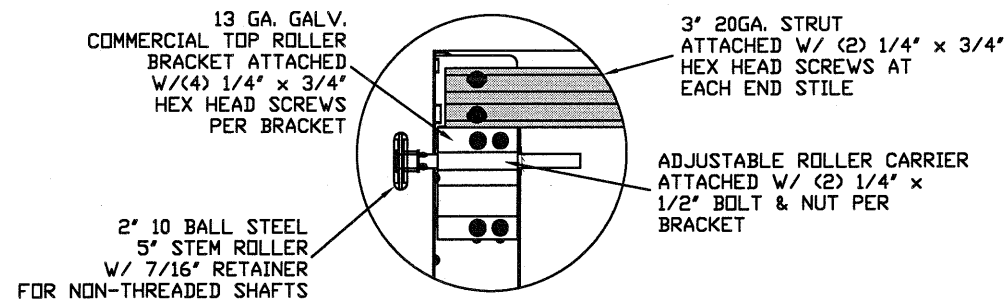
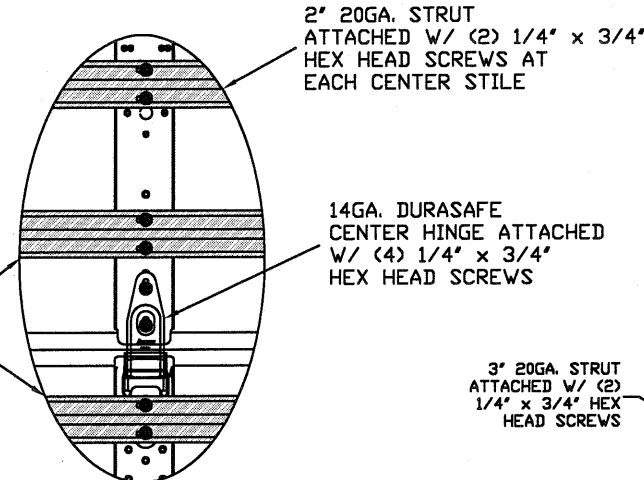


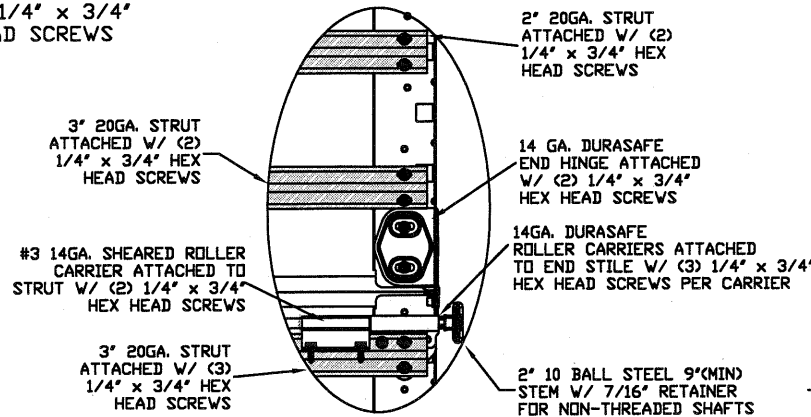


TYPICAL TOP FIXTURES
N.T.S.

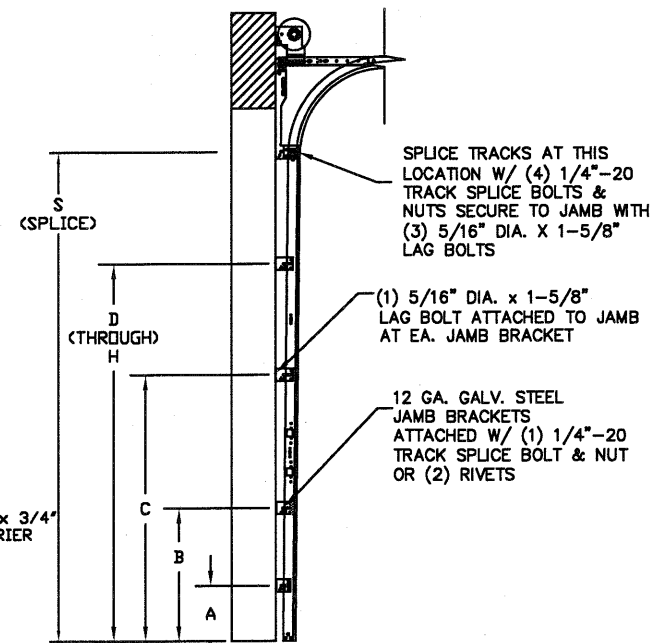
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TYPICAL DURASAFE CENTER HINGE
N.T.S.



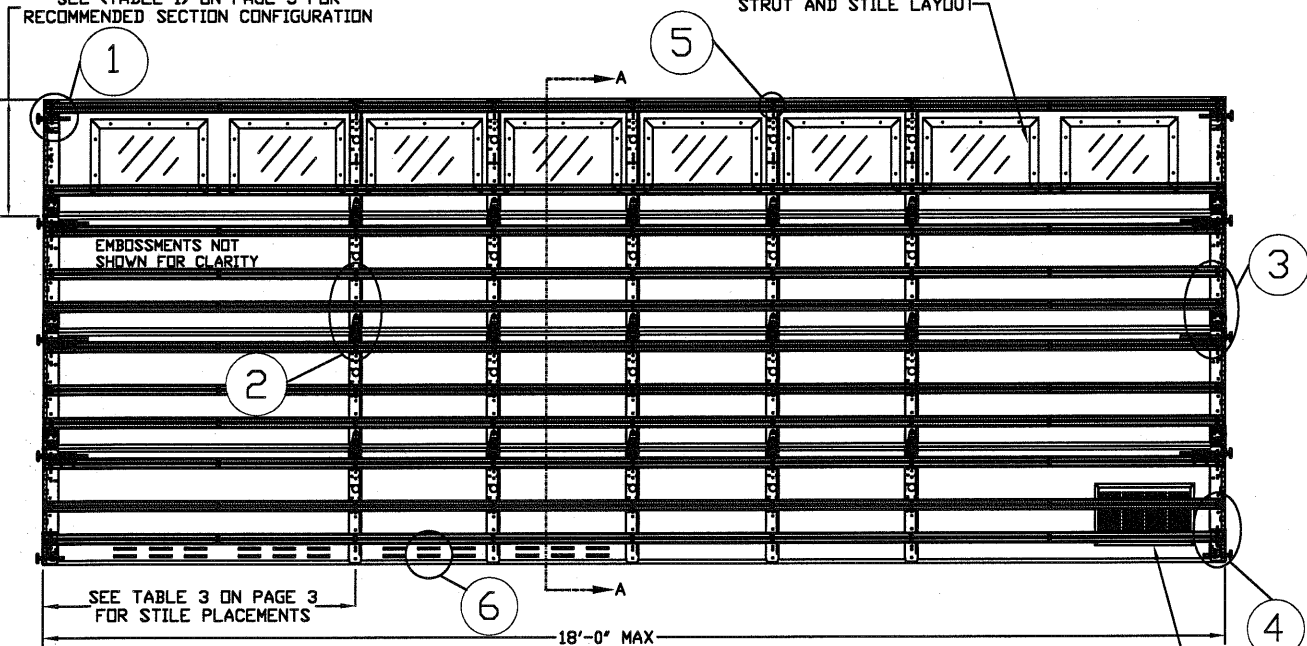
TYPICAL DURASAFE END HINGE
N.T.S.



TRACK CONFIGURATION FOR 6'6\"/>

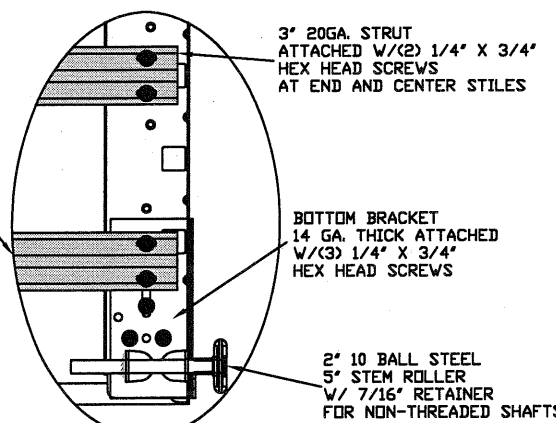
SEE (TABLE 1) ON PAGE 3 FOR
RECOMMENDED SECTION CONFIGURATION

SEE PAGE 2 FOR OPTIONAL
GLAZED SECTIONS
STRUT AND STILE LAYOUT



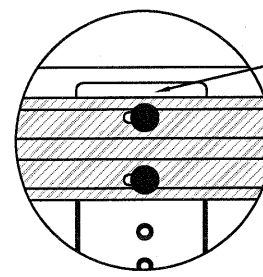
INSIDE ELEVATION
N.T.S.

3\"/>



TYPICAL BOTTOM BRACKET
N.T.S.

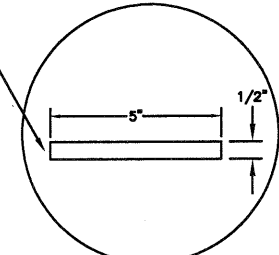
STILE STIFFENERS (5)
LOCATED IN HINGE HOLE(S)
ON TOP SECTION ONLY



TYPICAL STILE STIFFENER
N.T.S.

TWO (2) ROWS OF THREE (3)
VENTS EQUALS 15 SQ. INCHES
OF VENTILATION.

VENTS PROVIDE 70 sq. in.
(62 sq. in. FOR OPTIONAL
VENT) OF UNOBSTRUCTED
AIR FLOW EACH.



OPTIONAL VENT DETAIL
N.T.S.

OPTIONAL STOP MOULDING
W/ FLEXIBLE SEAL
(SUPPLIED BY INSTALLER)

JAMB BRACKET ATTACHED TO
JAMB W/(1) 5/16\"/>

3\"/>

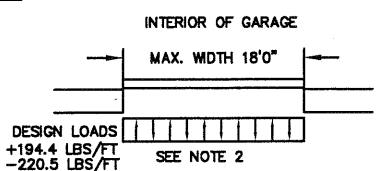
(5) 20 GA. CENTER STILES
ATTACHED WITH (3) MAIN STILES HINGED

2 X 6 SOUTHERN YELLOW PINE
(NO. 2 OR BETTER)

20 GA. GALV. STEEL END
STILE

2\"/>

TRACK MOUNTING DETAIL
N.T.S.



DESIGN LOADS
+194.4 LBS/FT
-220.5 LBS/FT

INTERIOR OF GARAGE

MAX. WIDTH 18'0\"/>

SEE NOTE 2

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 JAMB RECEIVES MAXIMUM DESIGN LOADS OF:
+194.4 LBS/FT & -220.5 LBS/FT
- DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASHA.
- 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.
- REFER TO TABLES ON PAGE 3 FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330 AND ANSI/DASHA 108. 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)	155	141	134	128	122
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

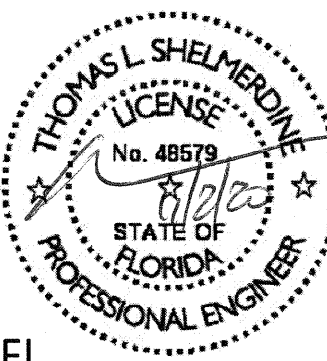
REV	DESCRIPTION OF REVISIONS	DATE	BY
A	UPDATED BOTTOM BRACKET INFORMATION ADDED OAKSUMMIT AND GLAZING OPTIONS	08/30/05	DLJ
B	REVISED NOTE 6	09/02/08	DLJ
C	CHANGED STRUT CONFIGURATION & TRACK GAUGE	01/14/13	RLR

MAX SIZE
18' WIDTH
14' HEIGHT
(DOOR HEIGHT
SUBJECT TO
WEIGHT LIMITATIONS)

DESIGN LOADS
+21.6 PSF
-24.5 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+32.4 PSF
-36.8 PSF

Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

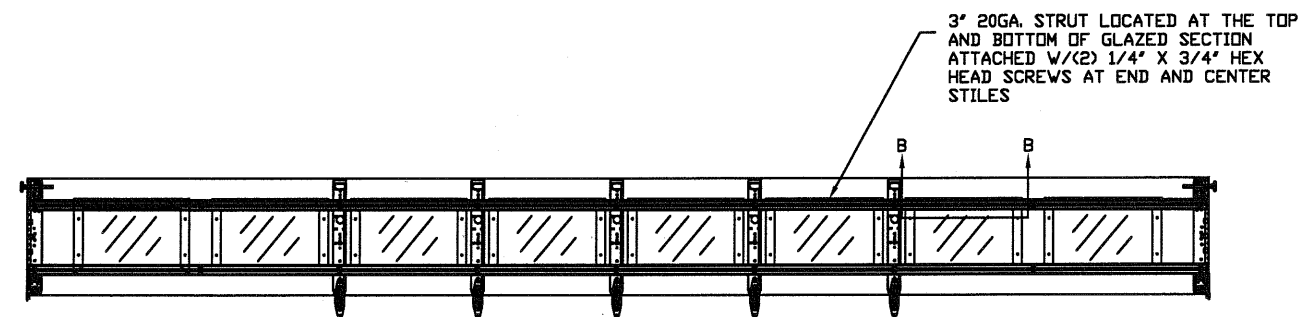


Amarr

MODEL #650 AMARR OAK SUMMIT 1000, 2000
MODEL #600 AMARR STRATFORD 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000
Short, Long, Flush & Oak Summit Panel's

SIZE	DRAWN BY	DATE	DRAWING NUMBER
B	DLJ	10/16/03	IRC-6018-120-15

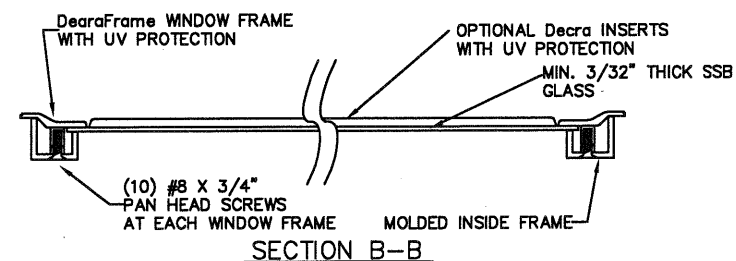
ENTREMATICS
165 CARRIAGE COURT WINSTON-SALEM, NC. 27105
SHEET 1 OF 3



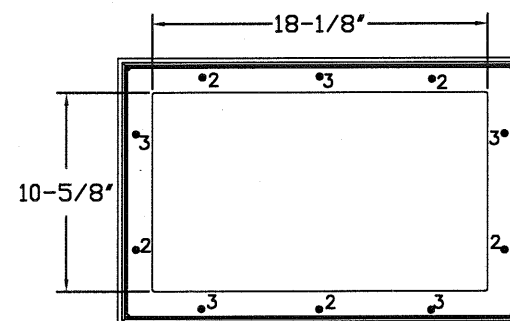
OPTIONAL SHORT PANEL GLAZED SECTION STRUT AND STILE LAYOUT

GLAZING OPTION CROSS SECTION

GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION
GLAZING MEETS ASTM E1300-04



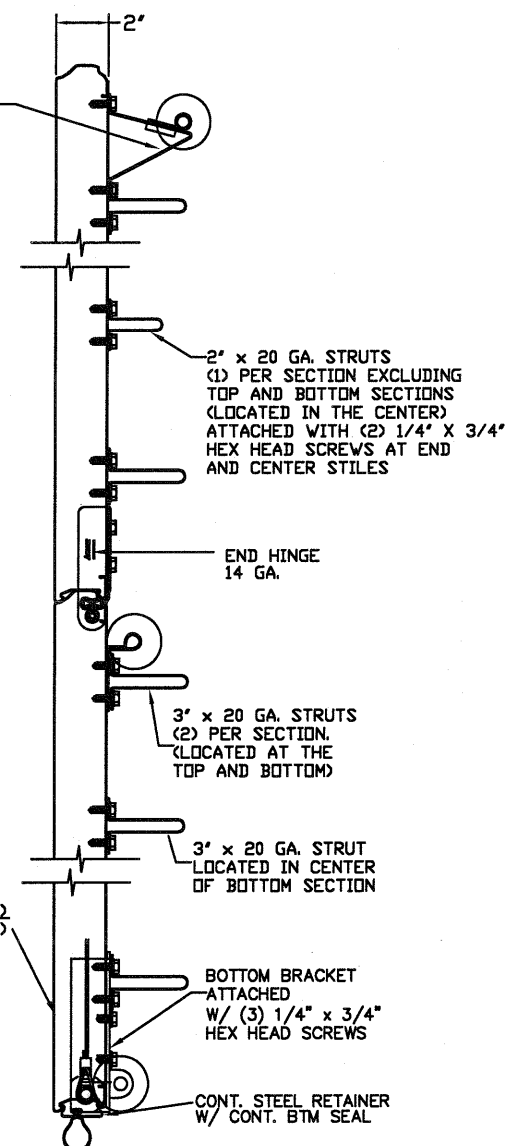
SECTION B-B



SHORT PANEL GLAZING FASTENER DETAIL

N.T.S.

13 GA COMMERCIAL
TOP FIXTURE ATTACHED W/
(4) 1/4" x 3/4" HEX HEAD
SCREWS ADJUSTABLE SLIDE
BRACKET ATTACHED
W/(2) 1/4" x 1/2" BOLT
AND NUTS

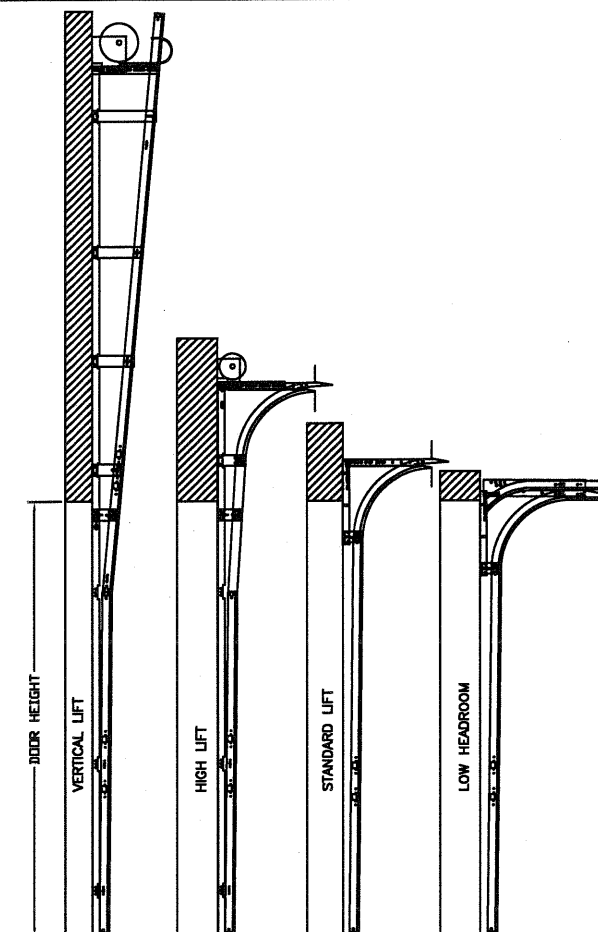
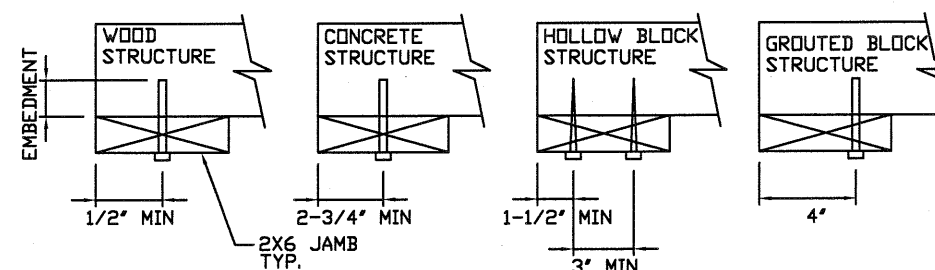


SECTION A-A (SIDE VIEW)
N.T.S.

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 22" 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 16" 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 16" 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



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

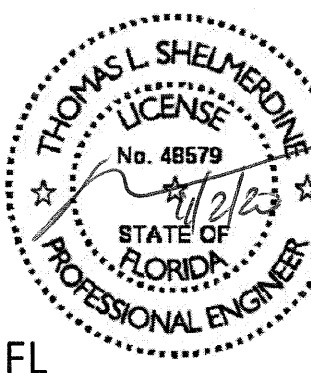
REV	DESCRIPTION OF REVISIONS	DATE	BY
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B	REVISED NOTE 6	09/02/08	DLJ
C	CHANGED STRUT CONFIGURATION & TRACK GAUGE	01/14/13	RLR

MAX SIZE
18' WIDTH
14' HEIGHT
(DOOR HEIGHT
SUBJECT TO
WEIGHT LIMITATIONS)

DESIGN LOADS
+21.6 PSF
-24.5 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+32.4 PSF
-36.8 PSF

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Structural Solutions, PA (FL Firm #29412)



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

Amarr

MODEL #650 AMARR OAK SUMMIT 1000, 2000
MODEL #600 AMARR STRATFORD 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000
Short, Long, Flush & Oak Summit Panel's

SIZE	DRAWN BY	DLJ	DATE	10/16/03	DRAWING NUMBER
B	CHECKED BY	AAE	DATE	10/16/03	IRC-6018-120-15
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 2 OF 3

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	S	
6' 6"	10"	21"	39"	57"						70"
7'	10"	21"	38"	63"						76"
7' 6"	10"	18"	36"	54"	72"					82"
8'	10"	21"	39"	57"	75"					88"
8' 6"	10"	21"	42"	63"	81"					94"
9'	10"	18"	36"	54"	72"	90"				100"
9' 6"	10"	21"	39"	57"	75"	93"				106"
10'	10"	21"	42"	63"	81"	99"				112"
10' 6"	10"	21"	42"	63"	84"	105"				118"
11'	10"	21"	39"	57"	75"	93"	111"			124"
11' 6"	10"	21"	42"	63"	81"	99"	117"			130"
12'	10"	21"	42"	63"	84"	105"	123"			136"
12'6"	10"	21"	39"	57"	75"	93"	111"	129"		142"
13'	10"	21"	42"	63"	81"	99"	117"	135"		148"
13' 6"	10"	21"	42"	63"	84"	105"	123"	141"		154"
14'	10"	21"	42"	63"	84"	105"	126"	147"		160"

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

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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	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	Oak Summit	53.92	80.96	108.00	135.04	162.09

TABLE 4

Section Width (ft)	Panel Type	Max Design Loads Allowed	
		Positive (PSF)	Negative (PSF)
16' 2	Short	23.9	27.1
16' 2	Long	23.9	27.1
16' 2	Oak Summit	23.9	27.1
16' 4	Short	23.7	26.9
16' 4	Long	23.7	26.8
16' 4	Oak Summit	23.7	26.9
16' 6	Short	23.4	26.6
16' 6	Long	23.4	26.6
16' 6	Oak Summit	23.4	26.6
16' 8	Short	23.2	26.3
16' 8	Long	23.2	26.3
16' 8	Oak Summit	23.2	26.3
16' 10	Short	23.0	26.1
16' 10	Long	23.0	26.1
16' 10	Oak Summit	23.0	26.1
17' 0	Short	22.8	25.8
17' 0	Long	22.7	25.8
17' 0	Oak Summit	22.8	25.8
17' 2	Short	22.5	25.6
17' 2	Long	22.4	25.5
17' 2	Oak Summit	22.5	25.6
17' 4	Short	22.3	25.3
17' 4	Long	22.2	25.1
17' 4	Oak Summit	22.3	25.3
17' 6	Short	22.1	25.1
17' 6	Long	21.9	24.8
17' 6	Oak Summit	22.1	25.1
17' 8	Short	21.9	24.8
17' 8	Long	21.9	24.8
17' 8	Oak Summit	21.9	24.8
17' 10	Short	21.7	24.6
17' 10	Long	21.7	24.6
17' 10	Oak Summit	21.7	24.6
18' 0	Short	21.6	24.5
18' 0	Long	21.5	24.4
18' 0	Oak Summit	21.6	24.5

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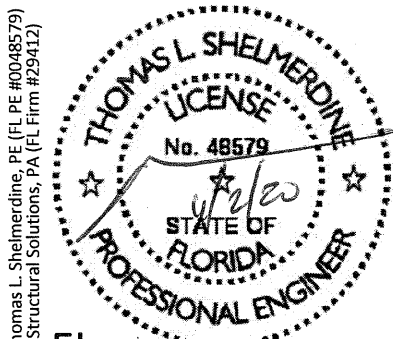
MAX SIZE
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+21.6 PSF
-24.5 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
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-36.8 PSF

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ENTREMATIC			
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			
SHEET 3 OF 3			