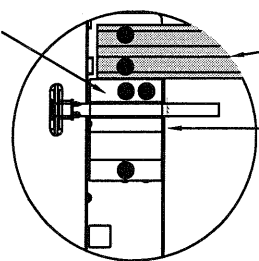


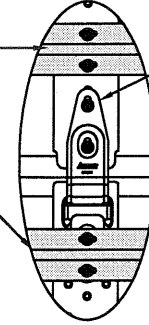
16 GA. GALV. RESIDENTIAL TOP ROLLER BRACKET ATTACHED W/ (3) 1/4" x 3/4" HEX HEAD SCREWS PER BRACKET



TYPICAL TOP FIXTURES
N.T.S.

3" 20GA. STRUTS ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT EACH CENTER STILE
ADJUSTABLE ROLLER CARRIER ATTACHED W/ (2) 1/4" x 1/2" BOLT & NUT PER BRACKET

2" 20GA. STRUTS ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT EACH CENTER STILE
3" 20GA. STRUTS ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT EACH CENTER STILE

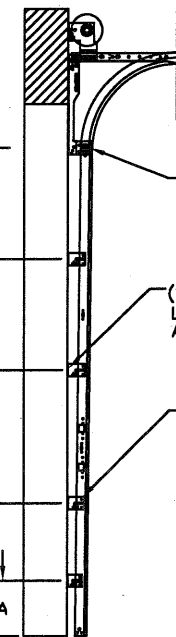


TYPICAL DURASAFE CENTER HINGE
N.T.S.

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

25 GA SKIN (M600 & M650)
24 GA SKIN (M950)

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



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

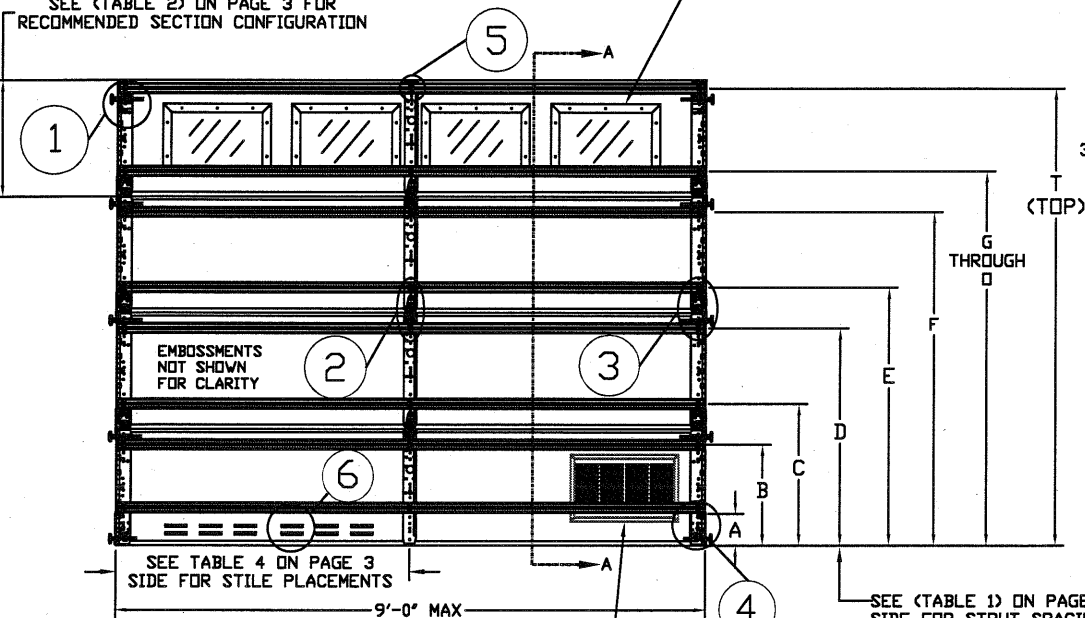
SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS
SECURE TO JAMB WITH (3) 5/16" DIA. x 1-5/8" LAG BOLTS

(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 TRACK SPLICE BOLT & NUT OR (2) RIVETS

SEE (TABLE 3) ON PAGE 3
SIDE FOR JAMB BRACKET SPACING

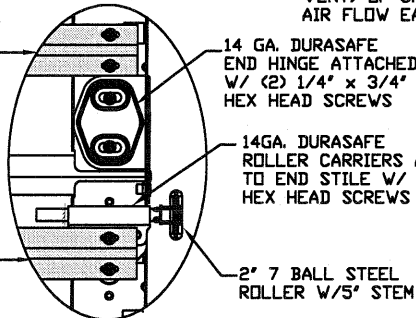
SEE (TABLE 2) ON PAGE 3 FOR
RECOMMENDED SECTION CONFIGURATION



INSIDE ELEVATION
N.T.S.

2" 20GA. STRUTS ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT EACH END STILE

3" 20GA. STRUTS ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT EACH END STILE

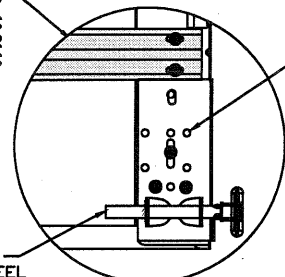


TYPICAL DURASAFE END HINGE
N.T.S.

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

14 GA. DURASAFE END HINGE ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS
14GA. DURASAFE ROLLER CARRIERS ATTACHED TO END STILE W/ (2) 1/4" x 3/4" HEX HEAD SCREWS PER CARRIER

2" 20GA. STRUT ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT END AND CENTER STILES



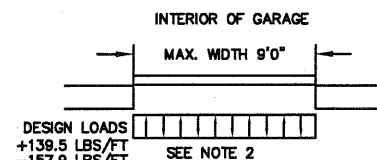
2" 7 BALL STEEL ROLLER W/ 5" STEM

TYPICAL BOTTOM BRACKET
N.T.S.

OPTIONAL VENT DETAIL
N.T.S.

BOTTOM BRACKET 14 GA. THICK ATTACHED W/ (3) 1/4" x 3/4" HEX HEAD SCREWS

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



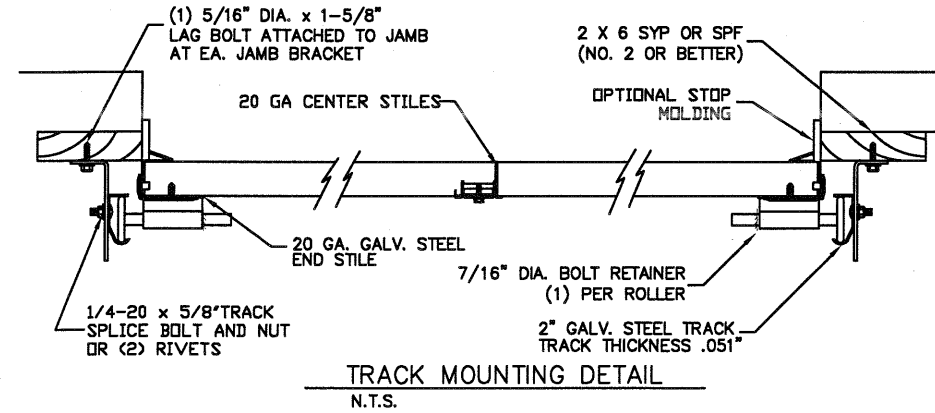
DESIGN LOADS
+139.5 LBS/FT
-157.9 LBS/FT

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: +139.5 LBS/FT & -157.9 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.

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)	177	161	153	146	140
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'



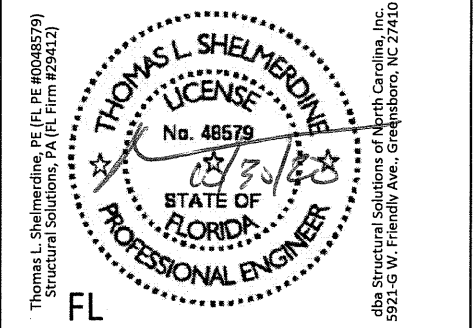
TRACK MOUNTING DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	UPDATED BOTTOM BRACKET INFORMATION ADDED OAKSUMMIT AND GLAZING OPTIONS	08/08/05	DLJ
B	UPDATED NOTE 6	09/02/08	DLJ
C	CHANGED STRUT CONFIGURATION	02/27/13	RLR

MAX SIZE
9' x 14'

DESIGN LOADS
+31.0 PSF
-35.1 PSF

TEST LOADS
+46.5 PSF
-52.6 PSF



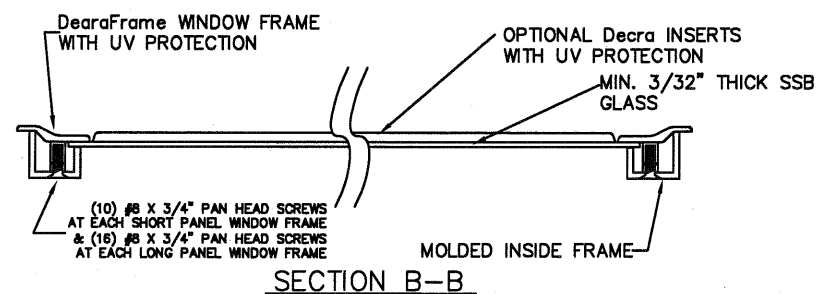
Amarr

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

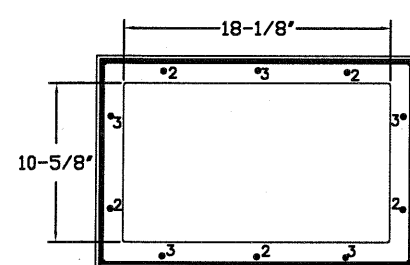
SIZE	DRAWN BY	DATE	DRAWING NUMBER
B	CHECKED BY AAE	DATE 05/27/03	IRC-6009-140-15

GLAZING OPTION CROSS SECTION

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

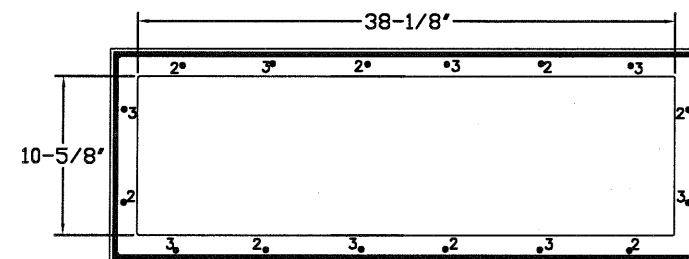


SECTION B-B



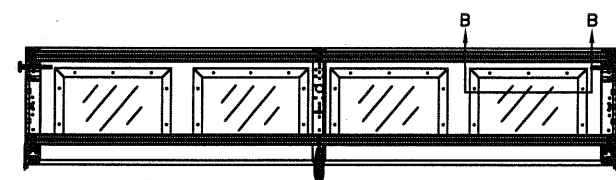
SHORT PANEL GLAZING FASTENER DETAIL

N.T.S.

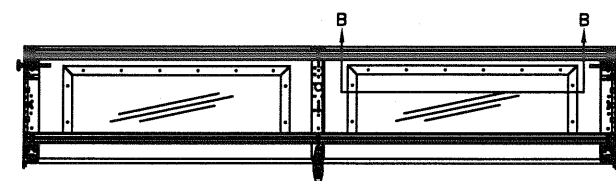


LONG PANEL GLAZING FASTENER DETAIL

N.T.S.



OPTIONAL SHORT PANEL GLAZED SECTION STRUT AND STILE LAYOUT



OPTIONAL LONG PANEL GLAZED SECTION STRUT AND STILE LAYOUT

3\" 20GA. STRUT LOCATED AT THE TOP AND 2\" 20GA STRUT AT THE BOTTOM OF GLAZED SECTION ATTACHED W/(2) 1/4\" X 3/4\" HEX HEAD SCREWS AT END AND CENTER STILES

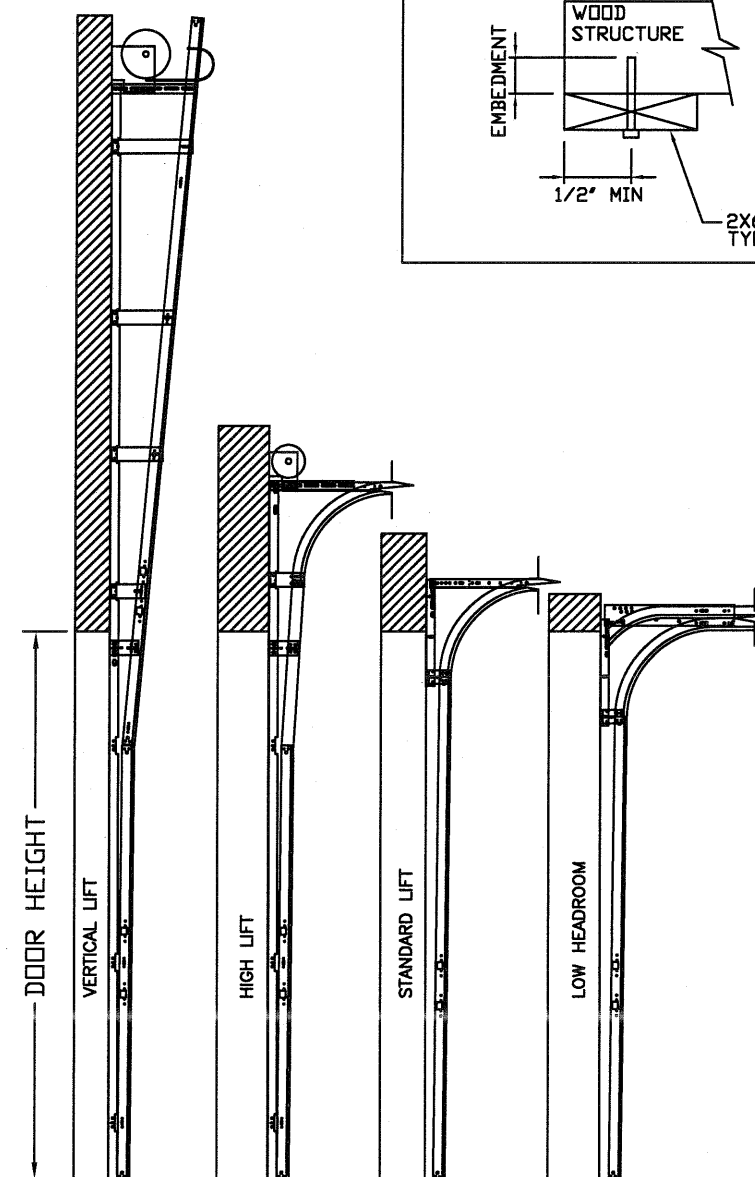
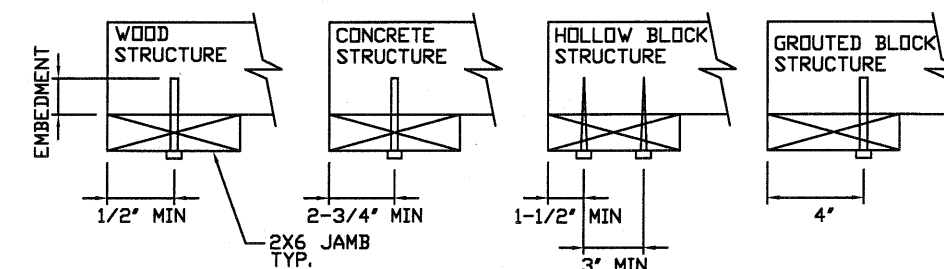
3\" 20GA. STRUT LOCATED AT THE TOP AND 2\" 20GA STRUT AT THE BOTTOM OF GLAZED SECTION ATTACHED W/(2) 1/4\" X 3/4\" HEX HEAD SCREWS AT END AND CENTER STILES

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



AVAILABLE TRACK CONFIGURATIONS

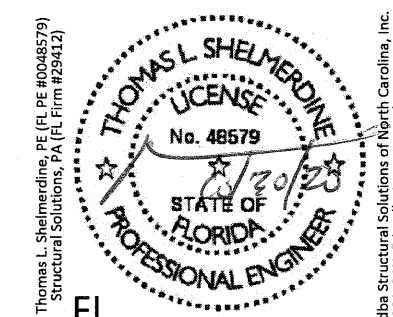
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
A	UPDATED BOTTOM BRACKET INFORMATION ADDED OAKSUMMIT AND GLAZING OPTIONS	08/08/05	DLJ
B	UPDATED NOTE 6	09/02/08	DLJ
C	CHANGED STRUT CONFIGURATION	02/27/13	RLR

MAX SIZE
9' x 14'

DESIGN LOADS
+31.0 PSF
-35.1 PSF

TEST LOADS
+46.5 PSF
-52.6 PSF



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	05/27/03	IRC-6009-140-15
	CHECKED BY	DATE	
	AJE	05/27/03	
ENTREMATICS			SHEET 2 OF 3
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			

TABLE 1

DOOR HEIGHT	STRUT SPACING (BASED ON RECOMMENDED SECTION CONFIGURATION)															TOP
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	T
6' 6"	6 3/4"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"									76 1/2"
7'	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"									82 1/2"
7' 6"	6 3/4"	15 1/4"	22 1/2"	33 1/4"	40 1/2"	51 1/4"	58 1/2"	69 1/4"	76 1/2"							88 1/2"
8'	6 3/4"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"	72 1/4"	79 1/2"							94 1/2"
8' 6"	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	78 1/4"	85 1/2"							100 1/2"
9'	6 3/4"	15 1/4"	22 1/2"	33 1/4"	40 1/2"	51 1/4"	58 1/2"	69 1/4"	76 1/2"	87 1/4"	94 1/2"					106 1/2"
9' 6"	6 3/4"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"	72 1/4"	79 1/2"	90 1/4"	97 1/2"					112 1/2"
10'	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	78 1/4"	85 1/2"	96 1/4"	103 1/2"					118 1/2"
10' 6"	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	81 1/4"	88 1/2"	102 1/4"	109 1/2"					124 1/2"
11'	6 3/4"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"	72 1/4"	79 1/2"	90 1/4"	97 1/2"	108 1/4"	115 1/2"			130 1/2"
11' 6"	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	78 1/4"	85 1/2"	96 1/4"	103 1/2"	114 1/4"	121 1/2"			136 1/2"
12'	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	81 1/4"	88 1/2"	102 1/4"	109 1/2"	120 1/4"	127 1/2"			142 1/2"
12' 6"	6 3/4"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"	72 1/4"	79 1/2"	90 1/4"	97 1/2"	108 1/4"	115 1/2"	126 1/4"	133 1/2"	148 1/2"
13'	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	61 1/2"	72 1/4"	79 1/2"	90 1/4"	97 1/2"	108 1/4"	115 1/2"	126 1/4"	133 1/2"	154 1/2"
13' 6"	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	81 1/4"	88 1/2"	102 1/4"	109 1/2"	120 1/4"	127 1/2"	138 1/4"	145 1/2"	160 1/2"
14'	6 3/4"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"	81 1/4"	88 1/2"	102 1/4"	109 1/2"	123 1/4"	130 1/2"	144 1/4"	151 1/2"	166 1/2"

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

DOOR HEIGHT	TRACK ATTACHMENT								SPLICE
	A	B	C	D	E	F	G	H	S
6' 6"	10"	21"	39"	57"					70"
7'	10"	21"	42"	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 OR SPF NO. 2 OR BETTER ONLY

TABLE 4

Section Width (ft)	Panel Type	Center Stile Location (Measured from Left Edge)	Max Design Loads Allowed	
			Positive (PSF)	Negative (PSF)
8' 0	Short, Oak Summit	48.000	34.7	39.3
8' 0	Long	48.000	34.7	39.3
8' 2	Short, Oak Summit	49.000	34.0	38.5
8' 2	Long	49.000	34.0	38.5
8' 4	Short, Oak Summit	50.000	33.3	37.7
8' 4	Long	50.000	33.3	37.7
8' 6	Short, Oak Summit	51.000	32.7	37.0
8' 6	Long	51.000	32.7	37.0
8' 8	Short, Oak Summit	52.000	32.0	36.3
8' 8	Long	52.000	32.0	36.3
8' 10	Short, Oak Summit	53.000	31.4	35.6
8' 10	Long	53.000	31.4	35.6
9' 0	Short, Oak Summit	54.000	31.0	35.1
9' 0	Long	54.000	31.0	35.1

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B	UPDATED NOTE 6	09/02/08	DLJ
C	CHANGED STRUT CONFIGURATION	02/27/13	RLR

MAX SIZE
9' x 14'

DESIGN LOADS
+31.0 PSF
-35.1 PSF

TEST LOADS
+46.5 PSF
-52.6 PSF

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 #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	05/27/03	DRAWING NUMBER IRC-6009-140-15
B	CHECKED BY	AAE	DATE	05/27/03	
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 3 OF 3