

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

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

2" 10 BALL STEEL ROLLER W/ 5" STEM W/ 7/16" RETAINER FOR NON-THREADED SHAFTS

ADJUSTABLE ROLLER CARRIER ATTACHED W/ (2) 1/4" x 1/2" BOLT & NUT 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

TYPICAL DURASAFE CENTER HINGE
N.T.S.

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

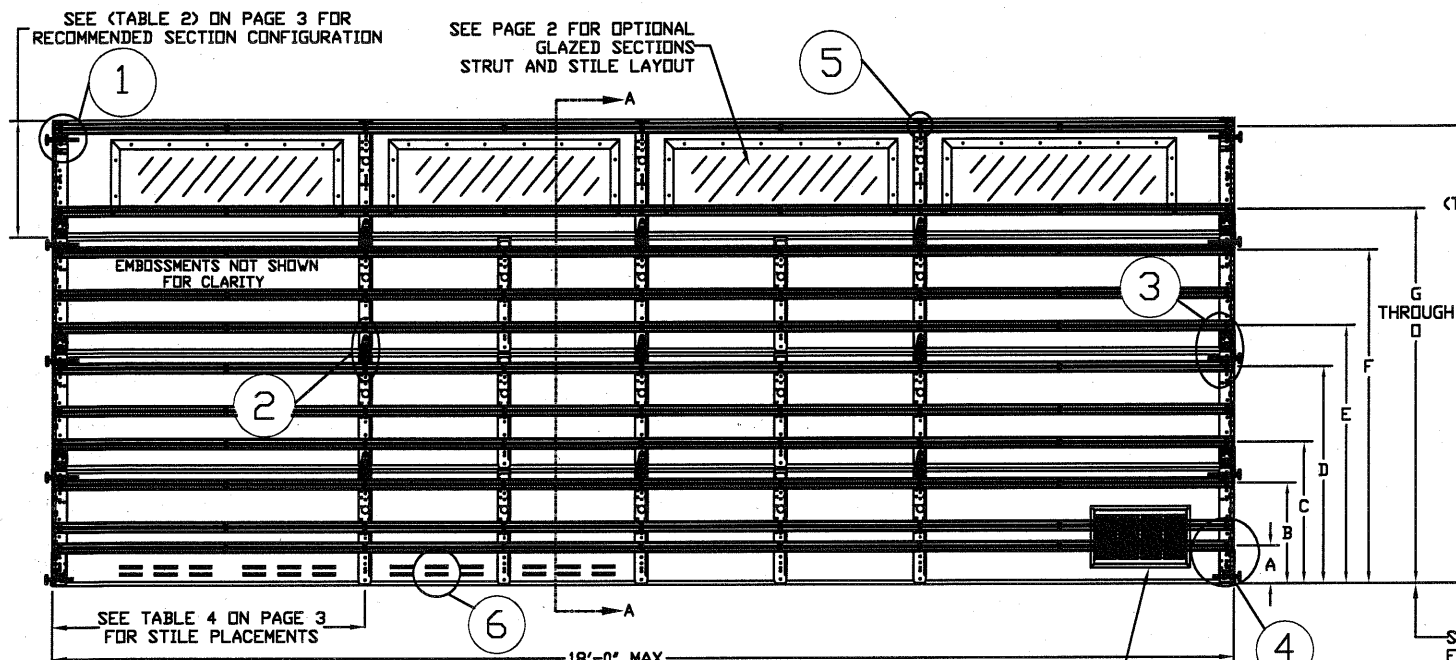
25 GA SKIN (M600 & M650)
24 GA SKIN (M950)

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

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

OPTIONAL VENT DETAIL
N.T.S.

6



3" 20GA. STRUT ATTACHED W/ (2) 1/4" x 3/4" HEX HEAD SCREWS

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/ (3) 1/4" x 3/4" HEX HEAD SCREWS PER CARRIER

2" 10 BALL STEEL ROLLER W/ 5" STEM W/ 7/16" RETAINER FOR NON-THREADED SHAFTS

3" 20GA. STRUT ATTACHED W/ (3) 1/4" x 3/4" HEX HEAD SCREWS

TYPICAL DURASAFE END HINGE
N.T.S.

STILE STIFFENERS (3) LOCATED IN HINGE HOLE(S) ON TOP SECTION ONLY

HOLES FOR STRUT ATTACHMENT (STRUT NOT SHOWN FOR CLARITY)

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

TYPICAL STILE STIFFENER
N.T.S.

2" x 20 GA. STRUTS LOCATED CENTER OF SECTION (1) PER SECTION EXCEPT THE TOP SECTION

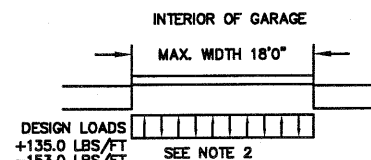
END HINGE 14 GA.

3" x 20 GA. STRUTS (2) PER SECTION

BOTTOM BRACKET ATTACHED W/ (3) 1/4" x 3/4" HEX HEAD SCREWS

CONT. STEEL RETAINER W/ CONT. BTM SEAL

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



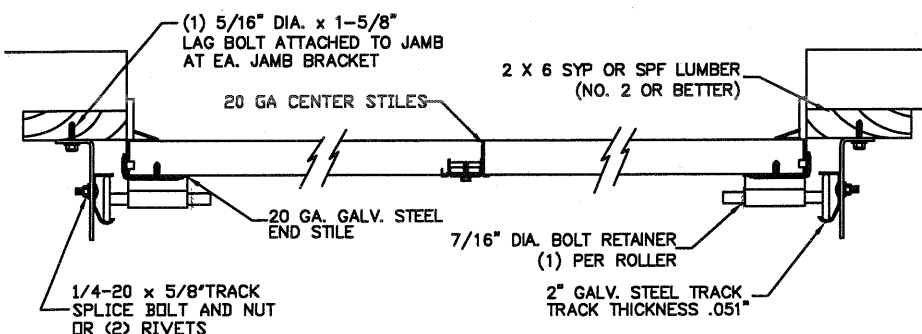
2" 20GA. STRUT ATTACHED TO THE MIDDLE OF THE SECTION W/ (2) 1/4" x 3/4" HEX HEAD SCREWS AT END AND CENTER STILES

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

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

2" 10 BALL STEEL ROLLER W/ 5" STEM W/ 7/16" RETAINER FOR NON-THREADED SHAFTS

TYPICAL BOTTOM BRACKET
N.T.S.



TRACK MOUNTING DETAIL
N.T.S.

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ANSI/DASMA 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)	129	117	111	106	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 JAMB RECEIVES MAXIMUM DESIGN LOADS OF: +135.0 LBS/FT & -153.0 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.
- REFER TO TABLES ON THE REVERSE SIDE FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES

REV	DESCRIPTION OF REVISIONS	DATE	BY

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

DESIGN LOADS
+15.0 PSF
-17.0 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+22.5 PSF
-25.5 PSF

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

FL

THOMAS L. SHELMERDINE
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No. 48579
STATE OF
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Amarr

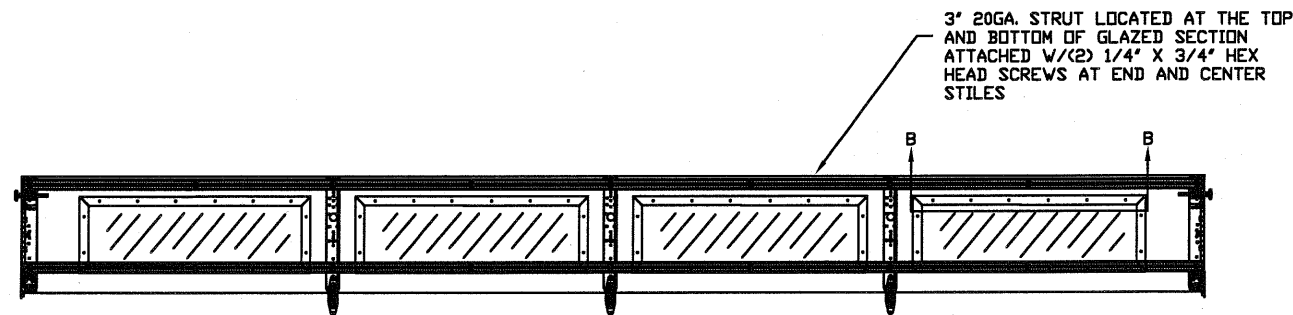
MODEL #650 AMARR OAK SUMMIT 1000, 2000
MODEL #600 AMARR STRATFORD 1000, 2000
MODEL #950 AMARR HERITAGE 1000, 2000
Short, Long, Flush & Oak Summit Panel's

SIZE: B
DRAWN BY: RLR
CHECKED BY: DATE: 07/01/13
DATE: 07/01/13

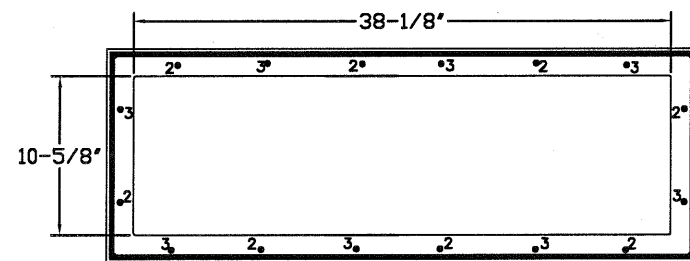
DRAWING NUMBER
IRC-6018-100-15

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

SHEET 1 OF 3



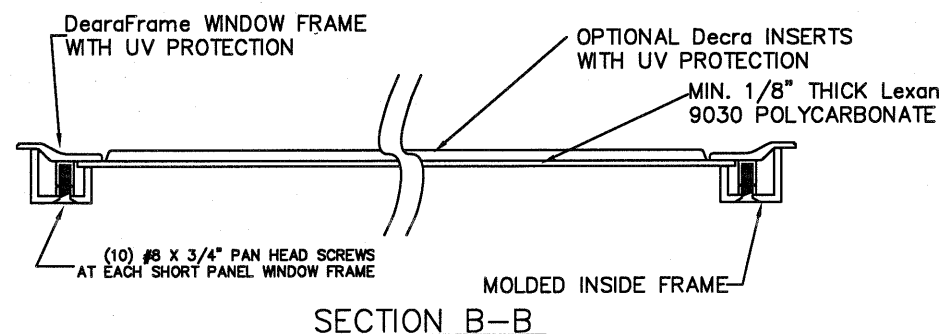
OPTIONAL SHORT PANEL GLAZED SECTION STRUT AND STILE LAYOUT



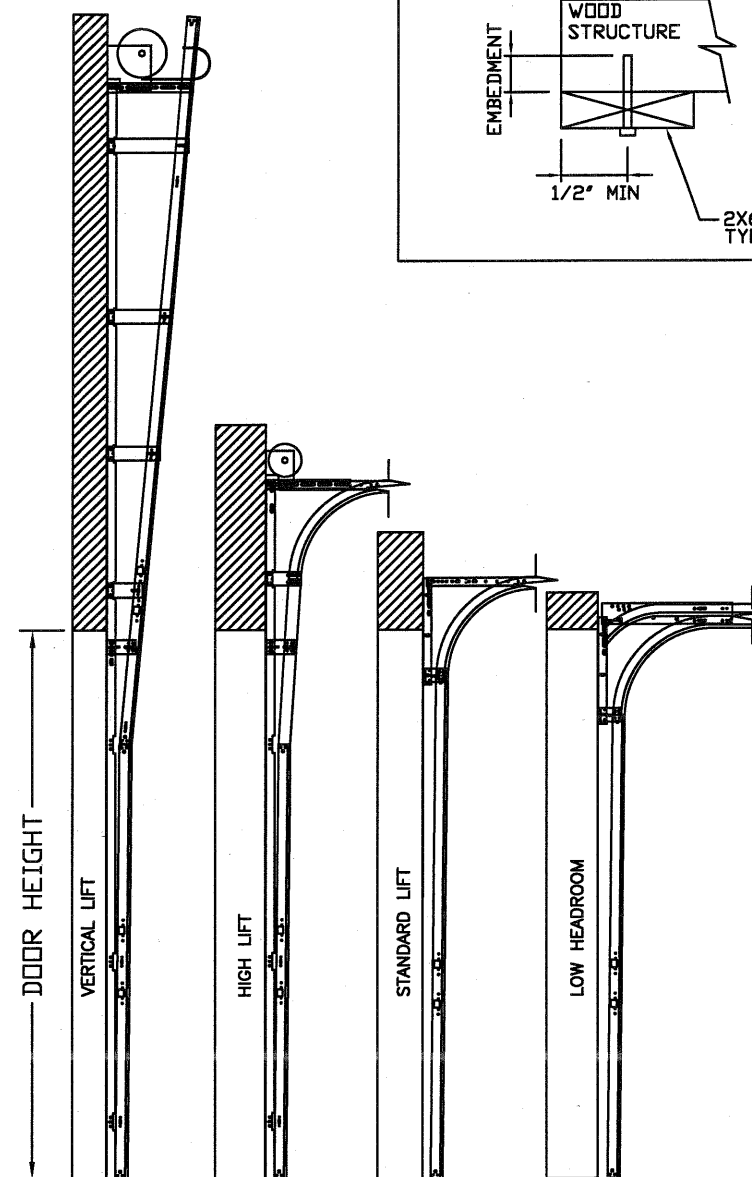
LONG PANEL GLAZING FASTENER DETAIL
N.T.S.

GLAZING OPTION CROSS SECTION

GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION



SECTION B-B



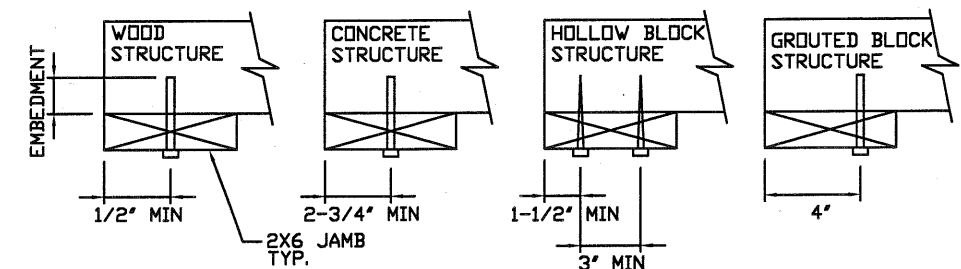
AVAILABLE TRACK CONFIGURATIONS
N.T.S.

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 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



REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 18' WIDTH 14' HEIGHT (DOOR HEIGHT SUBJECT TO WEIGHT LIMITATIONS) DESIGN LOADS +15.0 PSF -17.0 PSF TEST LOADS (1.5 x DESIGN LOADS) +22.5 PSF -25.5 PSF		
	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL		
	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 RLR	DATE 07/01/13	DRAWING NUMBER
B	CHECKED BY	DATE	IRC-6018-100-15
	ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105		SHEET 2 OF 3

TABLE 1

DOOR HEIGHT	3" 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"	5 1/2"	18 1/4"	25 1/2"	36 1/4"	43 1/2"	54 1/4"	61 1/2"									76 1/2"
7'	5 1/2"	18 1/4"	25 1/2"	39 1/4"	46 1/2"	60 1/4"	67 1/2"									82 1/2"
7' 6"	5 1/2"	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'	5 1/2"	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"	5 1/2"	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'	5 1/2"	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"	5 1/2"	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'	5 1/2"	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"	5 1/2"	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'	5 1/2"	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"	5 1/2"	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'	5 1/2"	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"	5 1/2"	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'	5 1/2"	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"	132 1/4"	139 1/2"	154 1/2"
13' 6"	5 1/2"	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'	5 1/2"	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 4

Section	Panel Type	Center Stile Locations (Measured from Left Edge)				
		1st (in)	*2nd (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

* Stiles are not hinged

TABLE 5

Section	Panel Type	Max Design Loads Allowed	
		Positive (PSF)	Negative (PSF)
16' 2	Short	16.6	18.8
16' 2	Long	16.6	18.8
16' 2	Oak Summit	16.6	18.8
16' 4	Short	16.4	18.6
16' 4	Long	16.4	18.6
16' 4	Oak Summit	16.4	18.6
16' 6	Short	16.3	18.5
16' 6	Long	16.3	18.5
16' 6	Oak Summit	16.3	18.5
16' 8	Short	16.1	18.3
16' 8	Long	16.1	18.3
16' 8	Oak Summit	16.1	18.3
16' 10	Short	16.0	18.1
16' 10	Long	16.0	18.1
16' 10	Oak Summit	16.0	18.1
17' 0	Short	15.8	17.9
17' 0	Long	15.8	17.9
17' 0	Oak Summit	15.8	17.9
17' 2	Short	15.6	17.7
17' 2	Long	15.6	17.7
17' 2	Oak Summit	15.6	17.7
17' 4	Short	15.5	17.6
17' 4	Long	15.5	17.6
17' 4	Oak Summit	15.5	17.6
17' 6	Short	15.4	17.4
17' 6	Long	15.4	17.4
17' 6	Oak Summit	15.4	17.4
17' 8	Short	15.2	17.2
17' 8	Long	15.2	17.2
17' 8	Oak Summit	15.2	17.2
17' 10	Short	15.1	17.1
17' 10	Long	15.1	17.1
17' 10	Oak Summit	15.1	17.1
18' 0	Short	15.0	17.0
18' 0	Long	15.0	17.0
18' 0	Oak Summit	15.0	17.0

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"	18"	
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	S
6' 6"	10"	21"	38"	58"				70"
7'	10"	21"	38"	58"				76"
7' 6"	10"	21"	38"	58"	78"			82"
8'	10"	21"	38"	58"	78"			88"
8' 6"	10"	21"	38"	58"	78"			94"
9'	10"	21"	38"	58"	78"			100"
9' 6"	10"	21"	38"	58"	78"	98"		106"
10'	10"	21"	38"	58"	78"	98"		112"
10' 6"	10"	21"	38"	58"	78"	98"		118"
11'	10"	21"	38"	58"	78"	98"	118"	124"
11' 6"	10"	21"	38"	58"	78"	98"	118"	130"
12'	10"	21"	38"	58"	78"	98"	118"	136"
12' 6"	10"	21"	38"	58"	78"	98"	118"	142"
13'	10"	21"	38"	58"	78"	98"	118"	138"
13' 6"	10"	21"	38"	58"	78"	98"	118"	138"
14'	10"	21"	38"	58"	78"	98"	118"	138"

JAMB BRACKET SPACING ALLOWS +/- 2"
WITH SYP OR SPF NO. 2 OR BETTER ONLY

REV

DESCRIPTION OF REVISIONS

DATE

BY

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

DESIGN LOADS
+15.0 PSF
-17.0 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+22.5 PSF
-25.5 PSF

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

SIZE

DRAWN BY

RLR

DATE

07/01/13

DRAWING NUMBER

IRC-6018-100-15

B

CHECKED BY

DATE

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

SHEET 3 OF 3