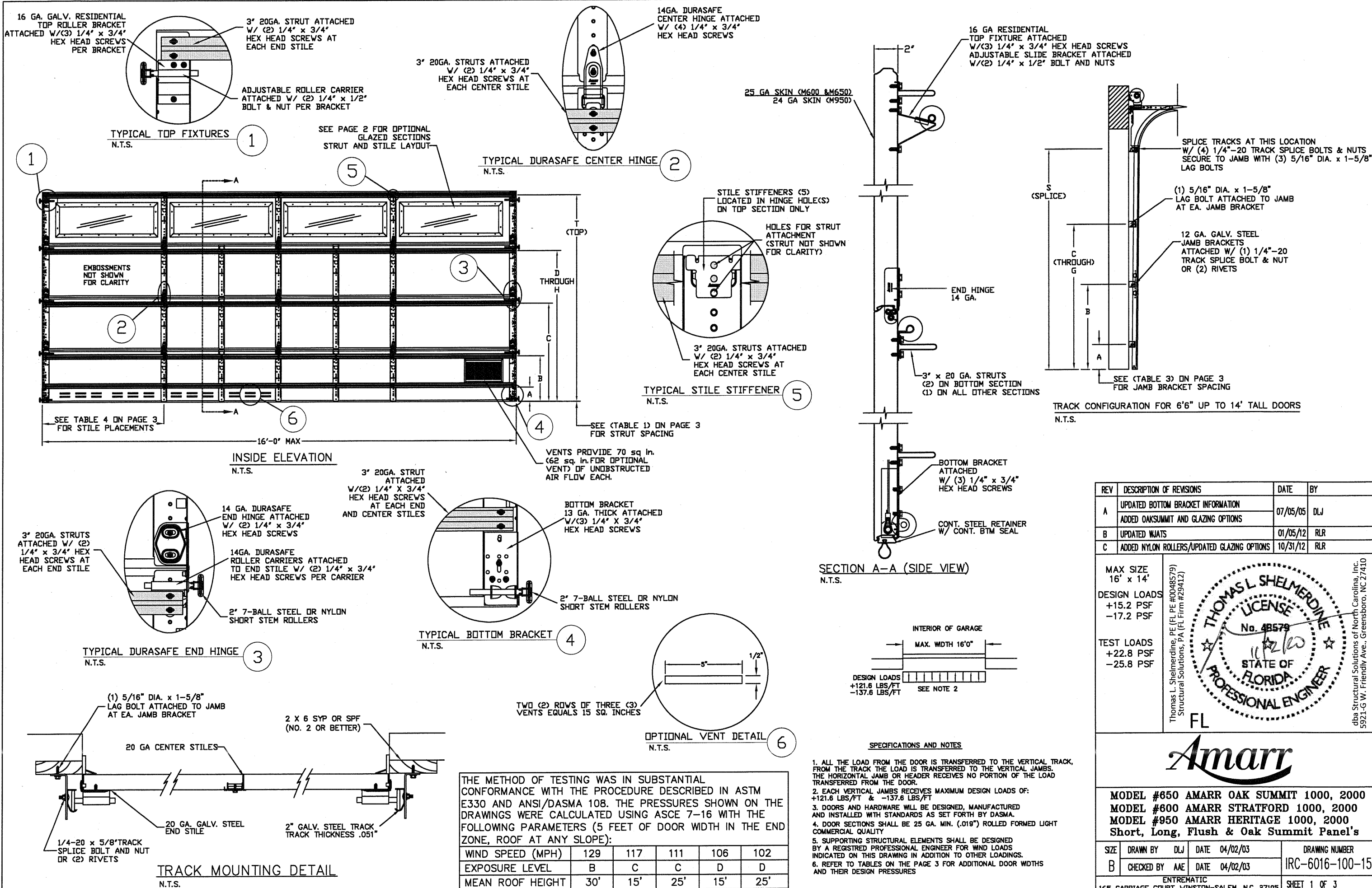




REV	DESCRIPTION OF REVISIONS	DATE	BY
A	UPDATED BOTTOM BRACKET INFORMATION	07/05/05	DLJ
	ADDED OAKSUMMIT AND GLAZING OPTIONS		
B	UPDATED WJATS	01/05/12	RLR
C	ADDED NYLON ROLLERS/UPDATED GLAZING OPTIONS	10/31/12	RLR

MAX SIZE
16' x 14'

DESIGN LOADS
+15.2 PSF
-17.2 PSF

TEST LOADS
+22.8 PSF
-25.8 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

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 04/02/03	DRAWING NUMBER
B	CHECKED BY AAE	DATE 04/02/03	IRC-6016-100-15

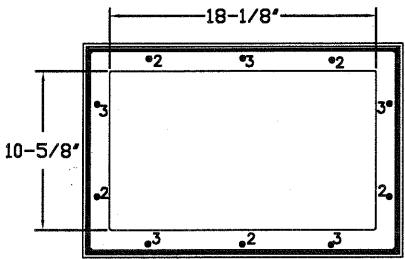
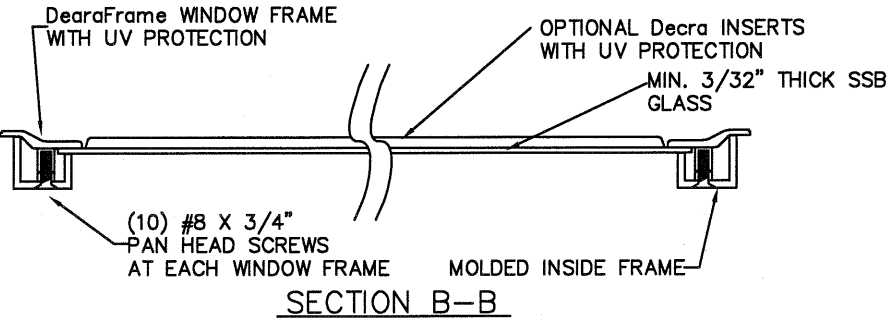
ENTREMATTEC
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 3

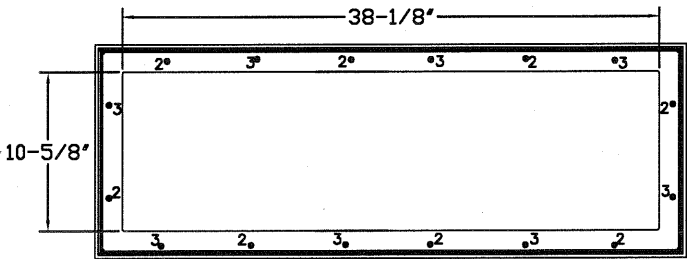
WOOD JAMB ATTACHMENT TO STRUCTURE

GLAZING OPTION CROSS SECTION

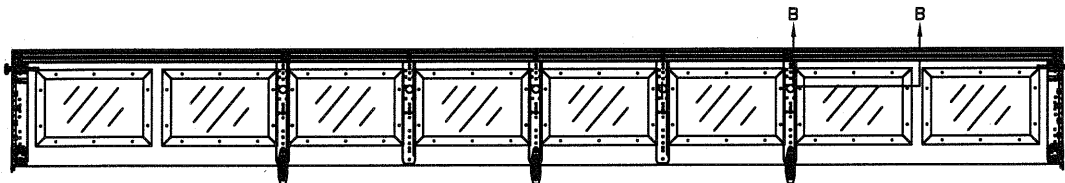
GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION
GLAZING MEETS ASTM E1300-04



SHORT PANEL GLAZING FASTENER DETAIL
N.T.S.

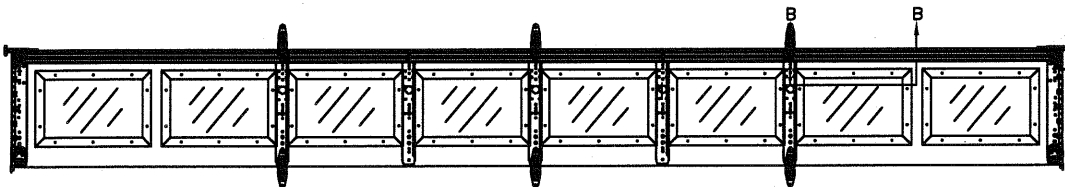


LONG PANEL GLAZING FASTENER DETAIL
N.T.S.



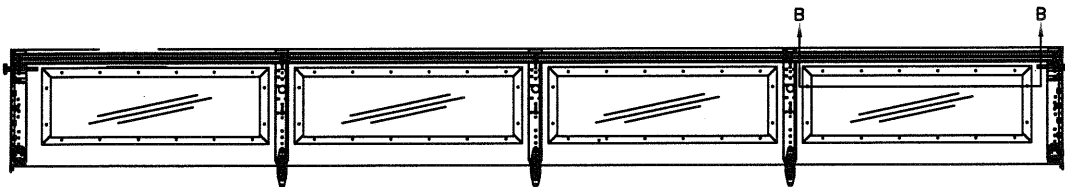
OPTIONAL SHORT PANEL TOP GLAZED SECTION (STRUT AND STILE LAYOUT)

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



OPTIONAL SHORT PANEL INTERMEDIATE GLAZED SECTION (STRUT AND STILE LAYOUT)

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



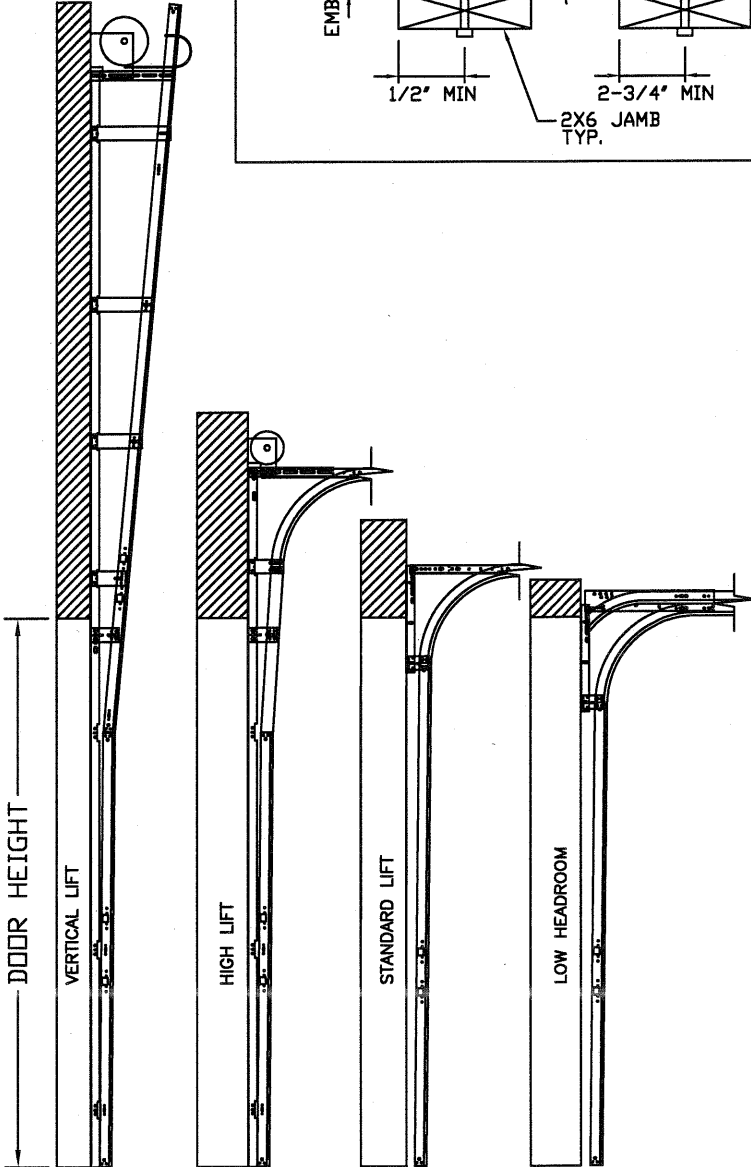
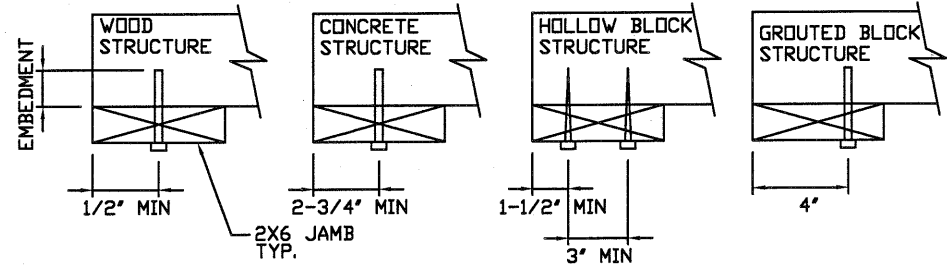
OPTIONAL LONG PANEL TOP GLAZED SECTION (STRUT AND STILE LAYOUT)

LONG PANEL GLAZING OPTION AVAILABLE ONLY ON DOORS 15'6" THROUGH 16'0" WIDE. DOORS LESS THAN 15'6" WIDE MUST USE SHORT PANEL GLAZING OR CLOSED SECTIONS

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	07/05/05	DLJ
	ADDED OAKSUMMIT AND GLAZING OPTIONS		
B	UPDATED WJATS	01/05/12	RLR
C	ADDED NYLON ROLLERS/UPDATED GLAZING OPTIONS	10/31/12	RLR

MAX SIZE
16' x 14'
DESIGN LOADS
+15.2 PSF
-17.2 PSF
TEST LOADS
+22.8 PSF
-25.8 PSF

Professional Engineer Seal for Thomas L. Shelmerdine, No. 48579, State of Florida. License No. 48579. State of Florida Professional Engineer.

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	04/02/03	DRAWING NUMBER
B	CHECKED BY	AAE	DATE	04/02/03	IRC-6016-100-15
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 2 OF 3

TABLE 1

DOOR HEIGHT	STRUT SPACING (BASED ON RECOMMENDED SECTION CONFIGURATION)								TOP T
	A	B	C	D	E	F	G	H	
6' 6"	5 1/2"	18 1/4"	36 1/4"	54 1/4"					76 1/2"
7'	5 1/2"	18 1/4"	39 1/4"	60 1/4"					82 1/2"
7' 6"	5 1/2"	15 1/4"	33 1/4"	51 1/4"	69 1/4"				88 1/2"
8'	5 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"				94 1/2"
8' 6"	5 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"				100 1/2"
9'	5 1/2"	15 1/4"	33 1/4"	51 1/4"	69 1/4"	87 1/4"			106 1/2"
9' 6"	5 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"	90 1/4"			112 1/2"
10'	5 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"	96 1/4"			118 1/2"
10' 6"	5 1/2"	18 1/4"	39 1/4"	60 1/4"	81 1/4"	102 1/4"			124 1/2"
11'	5 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"	90 1/4"	108 1/4"		130 1/2"
11' 6"	5 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"	96 1/4"	114 1/4"		136 1/2"
12'	5 1/2"	18 1/4"	39 1/4"	60 1/4"	81 1/4"	102 1/4"	120 1/4"		142 1/2"
12' 6"	5 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"	90 1/4"	108 1/4"	126 1/4"	148 1/2"
13'	5 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"	96 1/4"	114 1/4"	132 1/4"	154 1/2"
13' 6"	5 1/2"	18 1/4"	39 1/4"	60 1/4"	81 1/4"	102 1/4"	120 1/4"	138 1/4"	160 1/2"
14'	5 1/2"	18 1/4"	39 1/4"	60 1/4"	81 1/4"	102 1/4"	123 1/4"	144 1/4"	166 1/2"

TABLE 2

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

TABLE 3

DOOR HEIGHT	TRACK ATTACHMENT								SPLICE S
	A	B	C	D	E	F	G		
6' 6"	10"	38"	58"						70"
7'	10"	38"	58"						76"
7' 6"	4"	28"	52"	76"					82"
8'	10"	34"	58"	82"					88"
8' 6"	4"	28"	52"	76"					94"
9'	10"	34"	58"	82"					100"
9' 6"	4"	28"	52"	76"	100"				106"
10'	10"	34"	58"	82"	106"				112"
10' 6"	4"	28"	52"	76"	100"				118"
11'	10"	34"	58"	82"	106"				124"
11' 6"	4"	28"	52"	76"	100"	124"			130"
12'	10"	34"	58"	82"	106"	130"			136"
12' 6"	4"	28"	52"	76"	100"	124"			142"
13'	10"	34"	58"	82"	106"	130"			148"
13' 6"	4"	28"	52"	76"	100"	124"	148"		154"
14'	10"	34"	58"	82"	106"	130"	154"		160"

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

TABLE 4

Section Width (ft)	Panel Type	Center Stile Locations (Measured from Left Edge)				
		1st (in)	2st (in)	3rd (in)	4th (in)	5th (in)
10' 0	Short	48.41	71.59			
10' 0	Long	30.00	60.00	90.00		
10' 0	Oak Summit	30.63	60.00	89.38		
12' 0	Short	48.81	72.00	95.19		
12' 0	Long	49.63	72.00	94.38		
12' 0	Oak Summit	48.31	72.00	95.69		
12' 2	Short	49.64	73.00	96.36		
12' 2	Long	50.08	73.00	95.92		
12' 2	Oak Summit	49.06	73.00	96.94		
12' 4	Short	50.64	74.00	97.36		
12' 4	Long	51.08	74.00	96.92		
12' 4	Oak Summit	49.81	74.00	98.19		
12' 6	Short	50.67	75.00	99.33		
12' 6	Long	51.17	75.00	98.83		
12' 6	Oak Summit	50.56	75.00	99.44		
12' 8	Short	51.67	76.00	100.33		
12' 8	Long	52.10	76.00	99.90		
12' 8	Oak Summit	51.31	76.00	100.69		
12' 10	Short	52.25	77.00	101.75		
12' 10	Long	53.10	77.00	100.90		
12' 10	Oak Summit	52.06	77.00	101.94		
13' 0	Short	53.00	78.00	103.00		
13' 0	Long	54.10	78.00	101.90		
13' 0	Oak Summit	52.81	78.00	103.19		
13' 2	Short	54.00	79.00	104.00		
13' 2	Long	55.10	79.00	102.90		
13' 2	Oak Summit	53.56	79.00	104.44		
13' 4	Short	54.40	80.00	105.60		
13' 4	Long	54.90	80.00	105.10		
13' 4	Oak Summit	54.31	80.00	105.69		
13' 6	Short	55.40	81.00	106.60		
13' 6	Long	55.90	81.00	106.10		
13' 6	Oak Summit	55.06	81.00	106.94		
13' 8	Short	56.40	82.00	107.60		
13' 8	Long	56.63	82.00	107.38		
13' 8	Oak Summit	55.81	82.00	108.19		
13' 10	Short	57.16	83.00	108.71		
13' 10	Long	57.17	83.00	108.83		
13' 10	Oak Summit	56.56	83.00	109.44		
14' 0	Short	57.76	84.00	110.11		
14' 0	Long	58.63	84.00	109.38		
14' 0	Oak Summit	57.31	84.00	110.69		
14' 2	Short	58.85	85.00	111.41		
14' 2	Long	59.17	85.00	110.83		
14' 2	Oak Summit	58.06	85.00	111.94		
14' 4	Short	59.16	86.00	112.71		
14' 4	Long	60.17	86.00	111.83		
14' 4	Oak Summit	58.81	86.00	113.19		
14' 6	Short	59.86	87.00	114.01		
14' 6	Long	61.17	87.00	112.83		
14' 6	Oak Summit	59.56	87.00	114.44		
14' 8	Short	60.56	88.00	115.31		
14' 8	Long	64.81	88.00	109.59	131.19	
14' 8	Oak Summit	60.31	88.00	115.69		
14' 10	Short	61.26	89.00	116.61		
14' 10	Long	65.60	89.00	110.70	132.40	
14' 10	Oak Summit	61.06	89.00	116.94		
15' 0	Short	61.94	90.00	117.94		
15' 0	Long	66.60	90.00	111.70	133.40	
15' 0	Oak Summit	63.63	90.00	118.19	146.38	
15' 2	Short	62.66	91.00	118.11	119.21	
15' 2	Long	67.60	91.00	112.70	134.40	
15' 2	Oak Summit	64.13	91.00	119.44	147.88	
15' 4	Short	63.60	92.00	120.40	130.40	
15' 4	Long	67.25	92.00	114.38	136.75	
15' 4	Oak Summit	64.63	92.00	120.69	149.38	
15' 6	Short	66.62	93.00	116.19	139.38	
15' 6	Long	67.60	93.00	115.70	138.40	
15' 6	Oak Summit	67.42	93.00	115.79	138.58	
15' 8	Short	67.62	94.00	117.19	140.38	
15' 8	Long	68.60	94.00	116.70	139.40	
15' 8	Oak Summit	68.02	94.00	116.99	139.98	
15' 10	Short	68.62	95.00	118.19	141.38	
15' 10	Long	69.17	95.00	117.92	140.83	
15' 10	Oak Summit	68.62	95.00	118.19	141.38	
16' 0	Short	69.62	96.00	119.19	142.38	
16' 0	Long	70.60	96.00	118.70	141.40	
16' 0	Oak Summit	69.42	96.00	119.79	143.58	

* Stiles do not need to be hinged

TABLE 5

Section Width (ft)	Panel Type	Max Design Loads Allowed	
		Positive (PSF)	Negative (PSF)
10' 0	Short	20.3	22.9
10' 0	Long	24.2	27.4
10' 0	Oak Summit	24.2	27.4
12' 0	Short	20.2	22.8
12' 0	Long	20.2	22.8
12' 0	Oak Summit	20.2	22.8
12' 2	Short	19.9	22.5
12' 2	Long	19.9	22.5
12' 2	Oak Summit	19.9	22.5
12' 4	Short	19.6	22.2
12' 4	Long	19.6	22.2
12' 4	Oak Summit	19.6	22.2
12' 6	Short	19.4	21.9
12' 6	Long	19.4	21.9
12' 6	Oak Summit	19.4	21.9
12' 8	Short	19.1	21.6
12' 8	Long	19.1	21.6
12' 8	Oak Summit	19.1	21.6
12' 10	Short	18.9	21.3
12' 10	Long	18.9	21.3
12' 10	Oak Summit	18.9	21.3
13' 0	Short	18.6	21.1
13' 0	Long	18.6	21.1
13' 0	Oak Summit	18.6	21.1
13' 2	Short	18.4	20.8
13' 2	Long	18.4	20.8
13' 2	Oak Summit	18.4	20.8
13' 4	Short	18.1	20.5
13' 4	Long	18.1	20.5
13' 4	Oak Summit	18.1	20.5
13' 6	Short	17.9	20.3
13' 6	Long	17.9	20.3
13' 6	Oak Summit	17.9	20.3
13' 8	Short	17.7	20.0
13' 8	Long	17.7	20.0
13' 8	Oak Summit	17.7	20.0
13' 10	Short	17.5	19.8
13' 10	Long	17.5	19.8
13' 10	Oak Summit	17.5	19.8
14' 0	Short	17.3	19.6
14' 0	Long	17.3	19.6
14' 0	Oak Summit	17.3	19.6
14' 2	Short	17.1	19.3
14' 2	Long	17.1	19.3
14' 2	Oak Summit	17.1	19.3
14' 4	Short	16.9	19.1
14' 4	Long	16.9	19.1
14' 4	Oak Summit	16.9	19.1
14' 6	Short	16.7	18.9
14' 6	Long	16.7	18.9
14' 6	Oak Summit	16.7	18.9
14' 8	Short	16.5	18.7
14' 8	Long	16.5	18.7
14' 8	Oak Summit	16.5	18.7
14' 10	Short	16.3	18.5
14' 10	Long	16.3	18.5
14' 10	Oak Summit	16.3	18.5
15' 0	Short	16.1	18.3
15' 0	Long	16.1	18.3
15' 0	Oak Summit	16.1	18.3
15' 2	Short	16.0	18.1
15' 2	Long	16.0	18.1
15' 2	Oak Summit	16.0	18.1
15' 4	Short	15.8	17.9
15' 4	Long	15.8	17.9
15' 4	Oak Summit	15.8	17.9
15' 6	Short	15.6	17.7
15' 6	Long	15.6	17.7
15' 6	Oak Summit	15.6	17.7
15' 8	Short	15.4	17.5
15' 8	Long	15.4	17.5
15' 8	Oak Summit	15.4	17.5
15' 10	Short	15.3	17.3
15' 10	Long	15.3	17.3
15' 10	Oak Summit	15.3	17.3
16' 0	Short	15.2	17.2
16' 0	Long	15.2	17.2
16' 0	Oak Summit	15.2	17.2