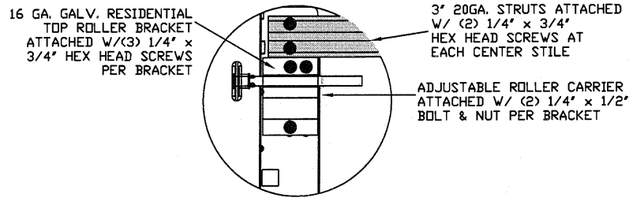
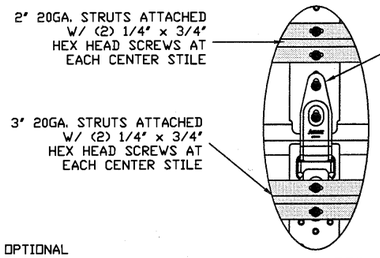
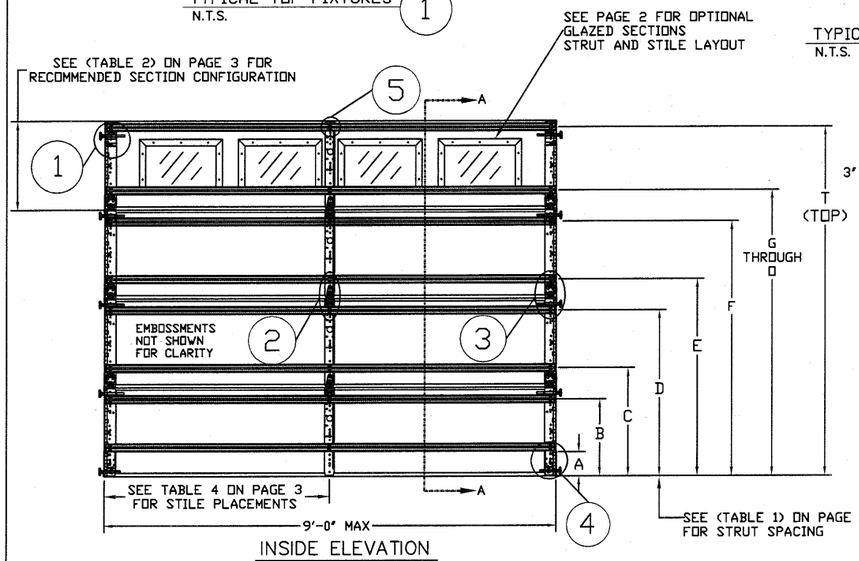


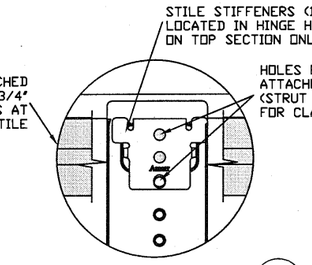
TYPICAL TOP FIXTURES 1
N.T.S.



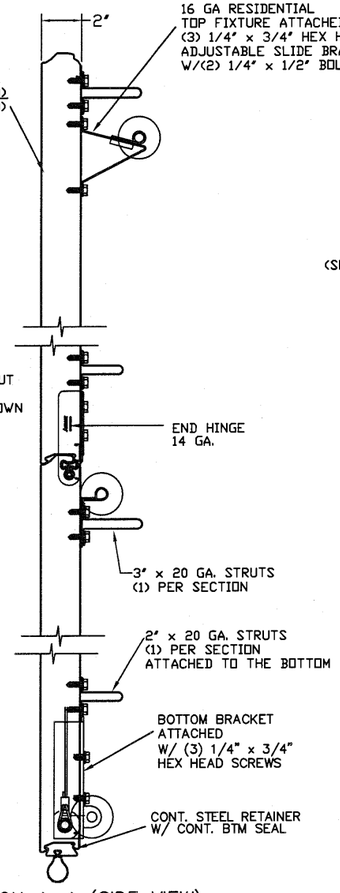
TYPICAL DURASAFE CENTER HINGE 2
N.T.S.



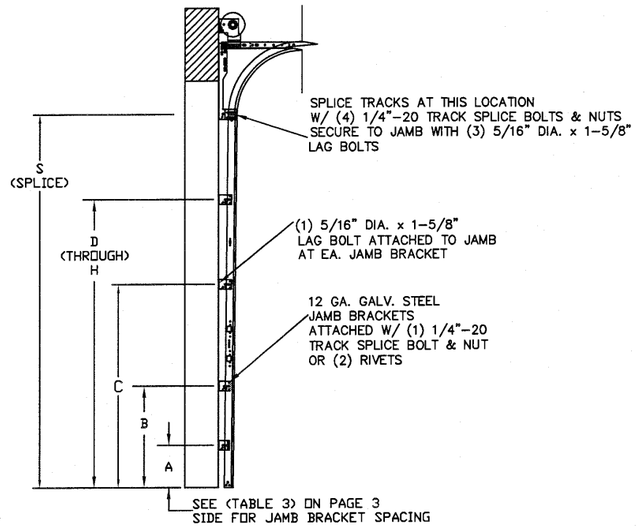
INSIDE ELEVATION
N.T.S.



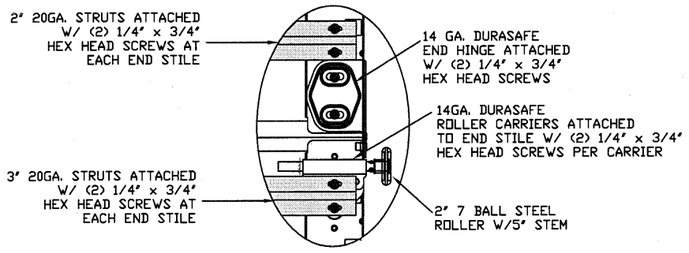
TYPICAL STILE STIFFENER 5
N.T.S.



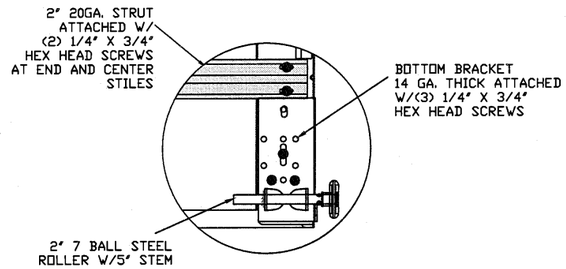
SECTION A-A (SIDE VIEW)
N.T.S.



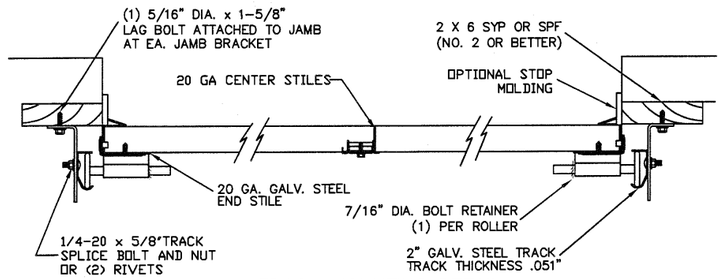
TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS
N.T.S.



TYPICAL DURASAFE END HINGE 3
N.T.S.



TYPICAL BOTTOM BRACKET 4
N.T.S.



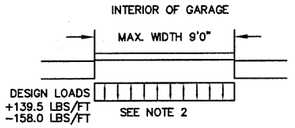
TRACK MOUNTING DETAIL
N.T.S.

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)	137	124	118	113	108
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

SPECIFICATIONS AND NOTES

1. 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.
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +139.5 LBS/FT & -158.0 LBS/FT
3. DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 25 GA. MIN. (.019") ROLLED FORMED LIGHT COMMERCIAL QUALITY
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTRED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



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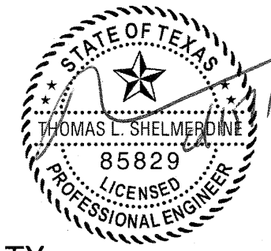
MAX SIZE
9' x 14'

DESIGN LOADS
+31.0 PSF
-35.1 PSF

TEST LOADS
+46.5 PSF
-52.7 PSF

Thomas L. Shelmerdine, PE (TX PE #85829)
Structural Solutions, PA (TX Firm #F-004063)



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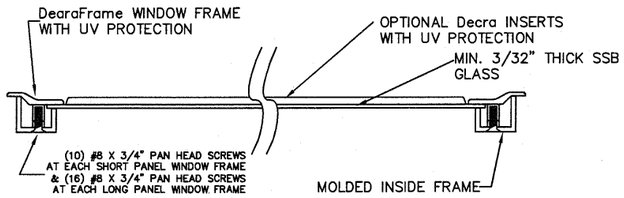
Amarr
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

MODEL #650 OAK SUMMIT w/DuraSafe
MODEL #600 STRATFORD w/DuraSafe
MODEL #950 HERITAGE w/DuraSafe
Short, Long, Flush & Oak Summit Panel's

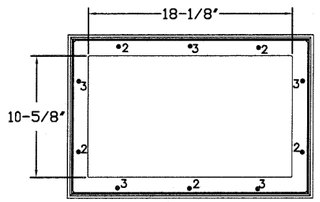
SIZE	DRAWN BY	DLJ	DATE	05/27/03	DRAWING NUMBER
B	CHECKED BY	AAE	DATE	05/27/03	IRC-6009-140-15
					SHEET 1 OF 3

GLAZING OPTION CROSS SECTION

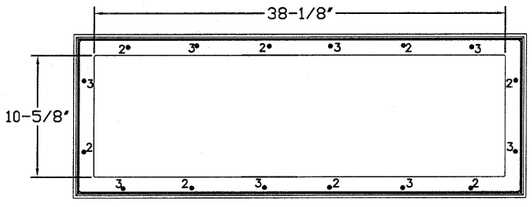
GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION
GLAZING MEETS ASTM E1300-04



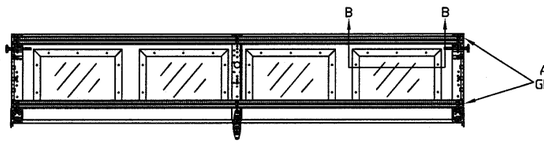
SECTION B–B



SHORT PANEL GLAZING FASTENER DETAIL
N.T.S.

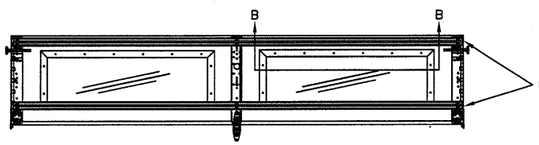


LONG PANEL GLAZING FASTENER DETAIL
N.T.S.



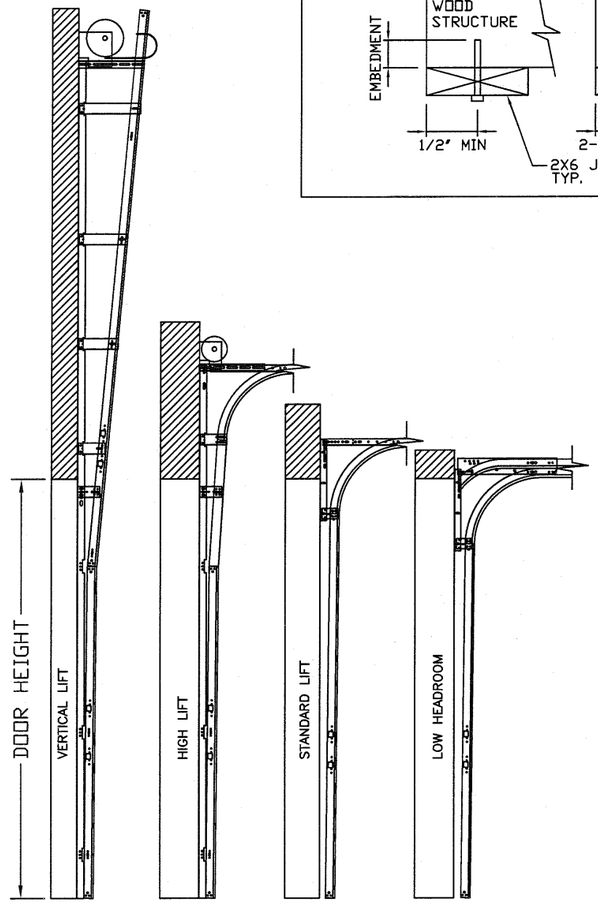
3" 20GA. STRUT LOCATED AT THE TOP AND 2" 20GA STRUT AT THE BOTTOM OF GLAZED SECTION ATTACHED W/(2) 1/4" X 3/4" HEX HEAD SCREWS AT END AND CENTER STILES

OPTIONAL SHORT 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

OPTIONAL LONG PANEL GLAZED SECTION STRUT AND STILE LAYOUT



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

WOOD JAMB ATTACHMENT TO STRUCTURE

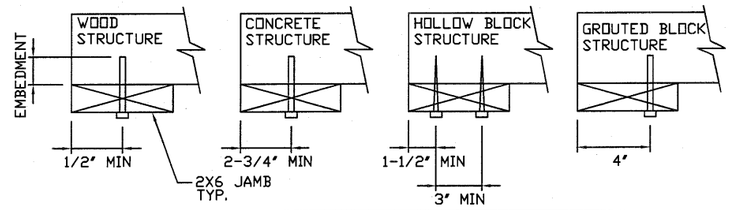
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 24" O.C. (1 1/2" EMBEDMENT)

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



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MAX SIZE
9' x 14'

DESIGN LOADS
+31.0 PSF
−35.1 PSF

TEST LOADS
+46.5 PSF
−52.7 PSF

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Short, Long, Flush & Oak Summit Panel's

SIZE	DRAWN BY DLJ	DATE 05/27/03	DRAWING NUMBER
B	CHECKED BY AAE	DATE 05/27/03	IRC-6009-140-15
			SHEET 2 OF 3

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)	Negitive (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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STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED
PROFESSIONAL ENGINEER
6/27/13

TX

dba Structural Solutions of North Carolina, Inc.
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			SHEET 3 OF 3