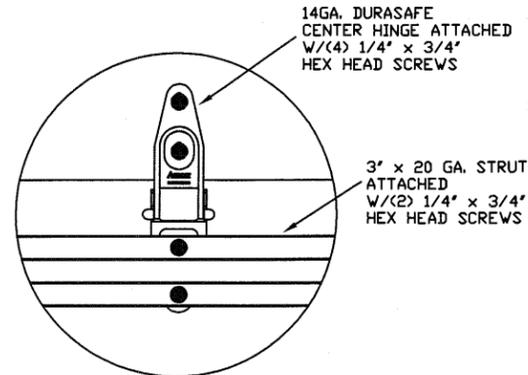
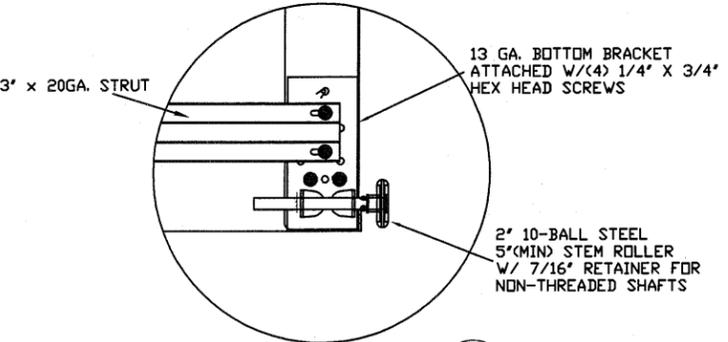


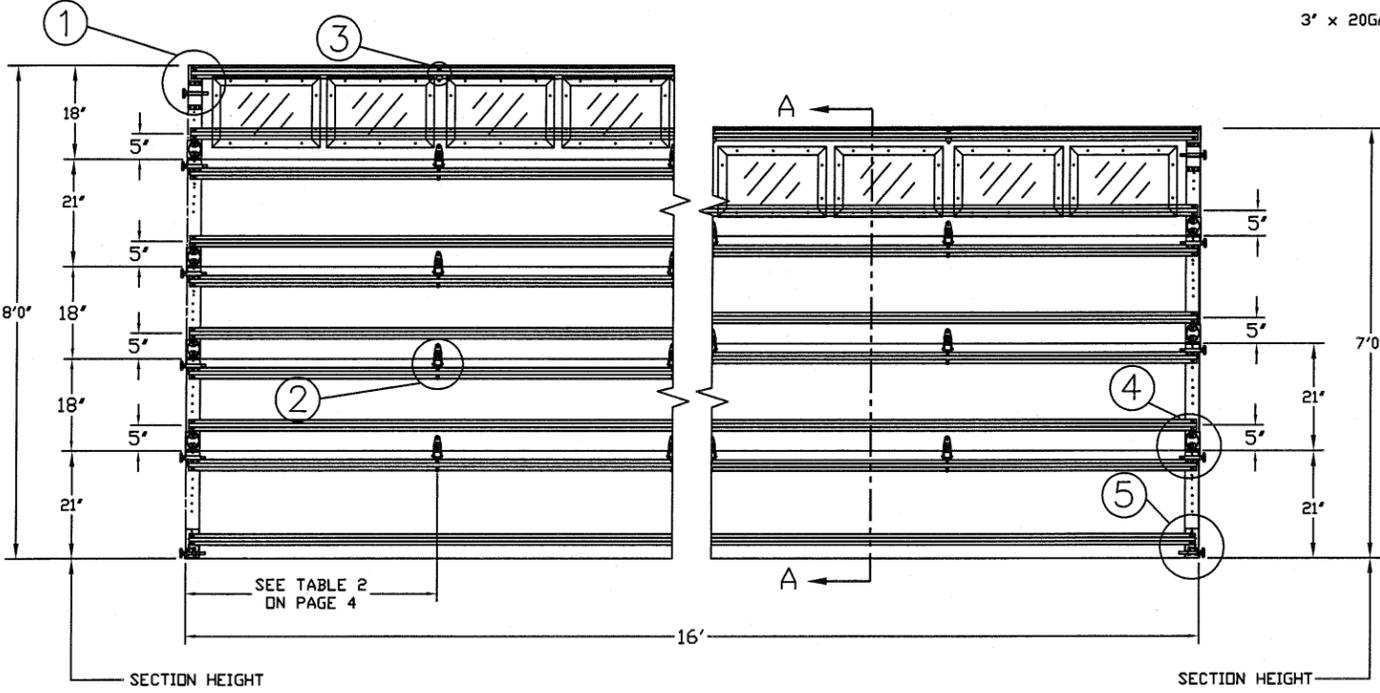
TYPICAL TOP FIXTURES ①
N.T.S.



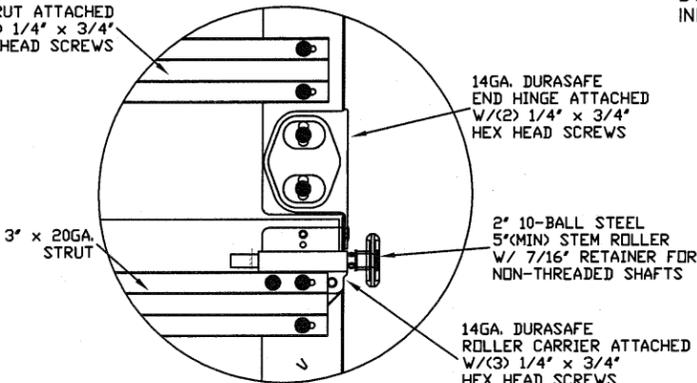
TYPICAL DURASAFE CENTER HINGE ②
N.T.S.



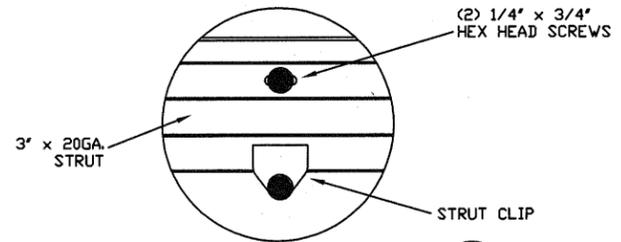
TYPICAL BOTTOM BRACKET ⑤
N.T.S.



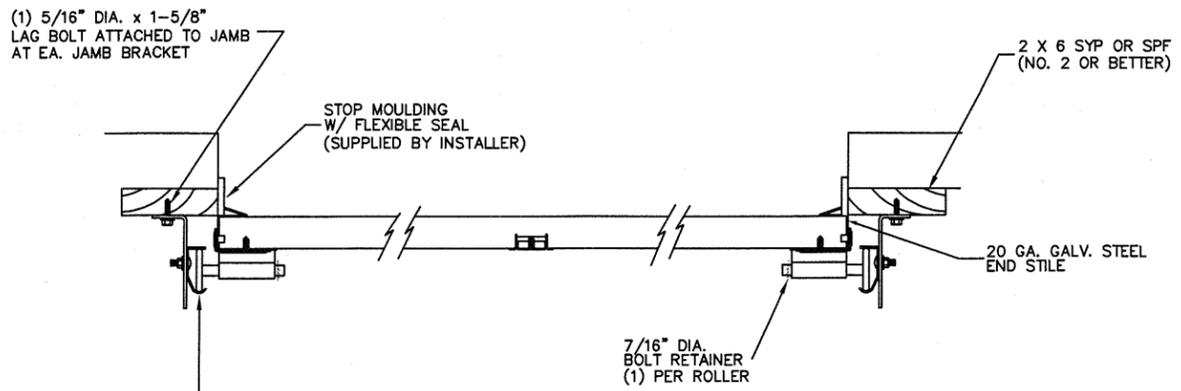
INSIDE ELEVATION
N.T.S.



TYPICAL DURASAFE END HINGE ④
N.T.S.



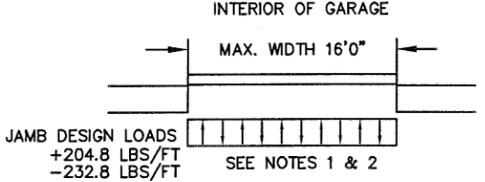
TYPICAL TOP STRUT ATTACHMENT ③
N.T.S.



TRACK MOUNTING DETAIL
N.T.S.

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: +204.8 LBS/FT & -232.8 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 27 GA. (.016) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 7'0" HIGH CONSIST OF (4) SECTIONS AS SHOWN USE (2) 3" 20GA STRUT PER SECTION
6. DOORS UP TO 8'0" HIGH CONSIST OF (5) SECTIONS AS SHOWN USE (2) 3" 20GA STRUT PER SECTION
7. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



REV	DESCRIPTIONS OF REVISIONS	DATE	BY
A	ADDED GLAZING	5-07-13	RLR

MAX SIZE
16' x 14'

DESIGN LOADS
+25.6 PSF
-29.1 PSF

TEST LOADS
+38.4 PSF
-43.7 PSF

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

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED PROFESSIONAL ENGINEER

TX

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

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN 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)	130	118	112	107	103
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

Amarr

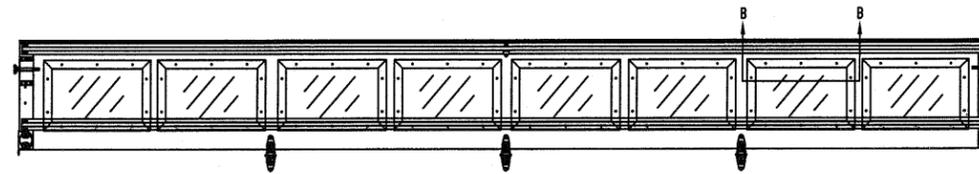
165 CARRIAGE COURT WINSTON-SALEM, NC. 27105 WWW.AMARR.COM

MODEL #1500 STRATFORD 3000
MODEL #1200 HERITAGE 3000
MODEL #1550 OAK SUMMIT 3000
SHORT, LONG, FLUSH & OAK SUMMIT PANELS

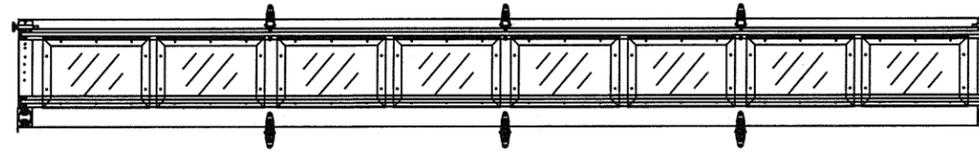
SIZE	DRAWN BY	RLR	DATE	07/30/12	DRAWING NUMBER
B	CHECKED BY		DATE		IRC-1516-130-15

SHEET 1 OF 4

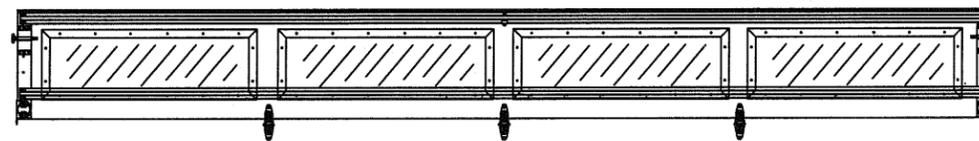
OPTIONAL SHORT AND LONG PANEL GLAZING LAYOUTS
GLAZING MEETS ASTM E1300-04



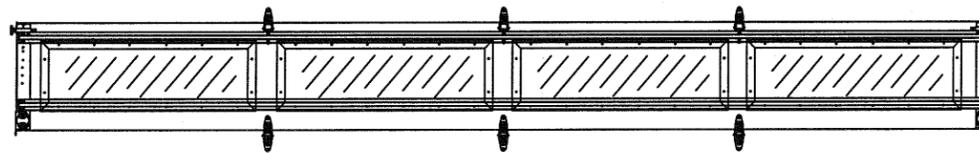
TOP SECTION



INTERMEDIATE SECTION



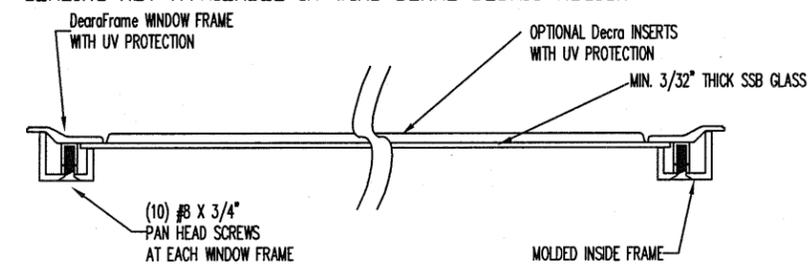
TOP SECTION



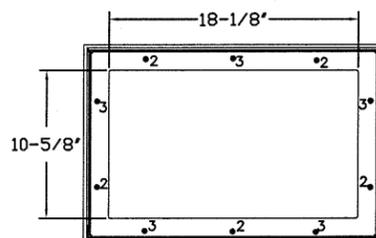
INTERMEDIATE SECTION

GLAZING OPTION CROSS SECTION

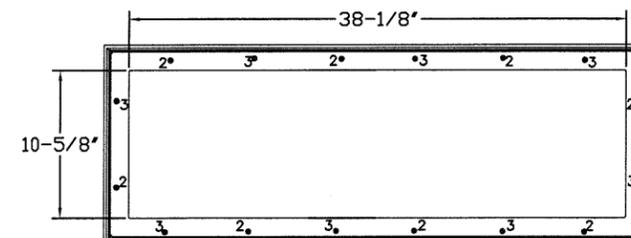
GLAZING NOT AVAILABLE IN WIND-BORNE DEBRIS REGION



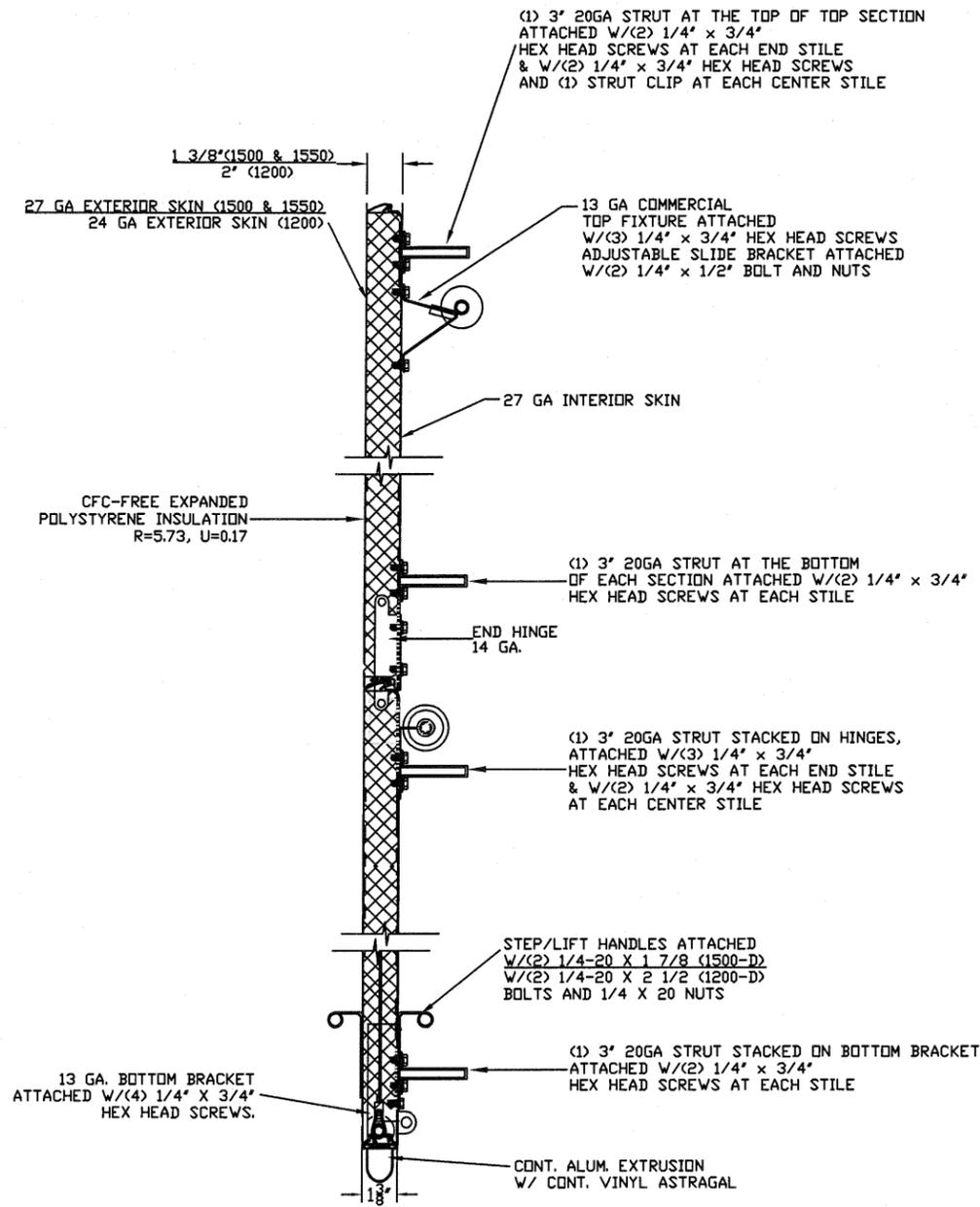
SECTION B-B



SHORT PANEL GLAZING FASTENER DETAIL
N.T.S.



LONG PANEL GLAZING FASTENER DETAIL
N.T.S.



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

REV	DESCRIPTIONS OF REVISIONS	DATE	BY
A	ADDED GLAZING	5-07-13	RLR

MAX SIZE
16' x 14'

DESIGN LOADS
+25.6 PSF
-29.1 PSF

TEST LOADS
+38.4 PSF
-43.7 PSF

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

TX

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

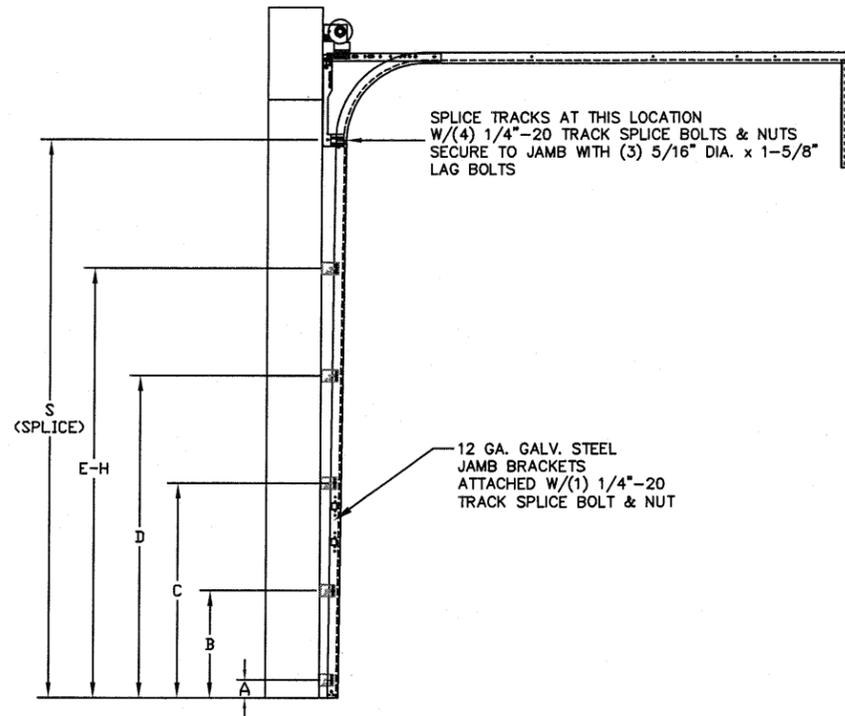
Amarr

165 CARRIAGE COURT WINSTON-SALEM, NC. 27105 WWW.AMARR.COM

MODEL #1500 STRATFORD 3000
 MODEL #1200 HERITAGE 3000
 MODEL #1550 OAK SUMMIT 3000
 SHORT, LONG, FLUSH & OAK SUMMIT PANELS

SIZE	DRAWN BY	RLR	DATE	07/30/12	DRAWING NUMBER
B	CHECKED BY		DATE		IRC-1516-130-15

SHEET 2 OF 4



TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS (SEE TABLE 1)
N.T.S.

TABLE 1

DOOR HEIGHT	TRACK ATTACHMENT								SPLICE
	A	B	C	D	E	F	G	H	
6' 6"	3.5"	21"	42"	63"					70"
7'	3.5"	21"	42"	63"					76"
7' 6"	3.5"	21"	42"	63"					82"
8'	3.5"	21"	42"	63"					88"
8' 6"	3.5"	21"	42"	63"	84"				94"
9'	3.5"	21"	42"	63"	84"				100"
9' 6"	3.5"	21"	42"	63"	84"				106"
10'	3.5"	21"	42"	63"	84"	105"			112"
10' 6"	3.5"	21"	42"	63"	84"	105"			118"
11'	3.5"	21"	42"	63"	84"	105"			124"
11' 6"	3.5"	21"	42"	63"	84"	105"			130"
12'	3.5"	21"	42"	63"	84"	105"	126"		136"
12' 6"	3.5"	21"	42"	63"	84"	105"	126"		142"
13'	3.5"	21"	42"	63"	84"	105"	126"		148"
13' 6"	3.5"	21"	42"	63"	84"	105"	126"	147"	154"
14'	3.5"	21"	42"	63"	84"	105"	126"	147"	160"

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

WOOD JAMB ATTACHMENT TO STRUCTURE

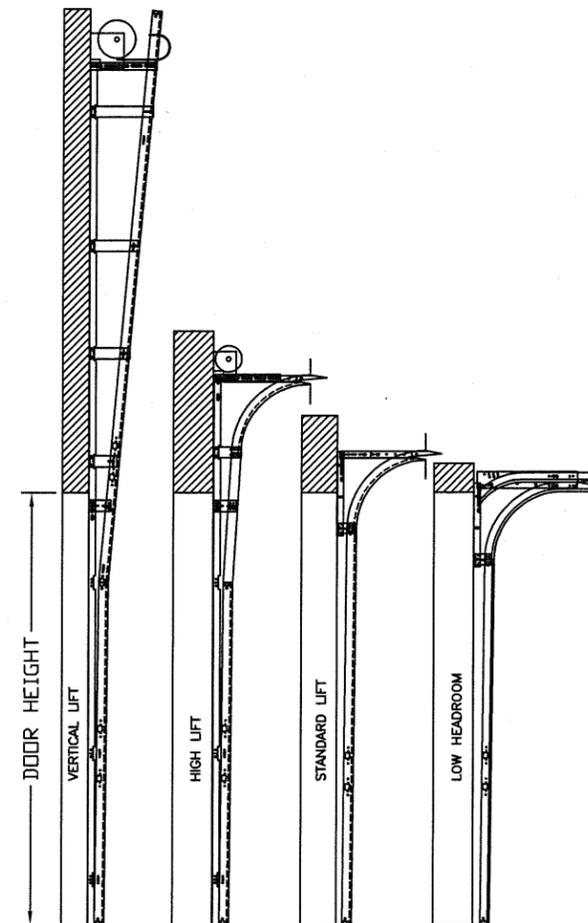
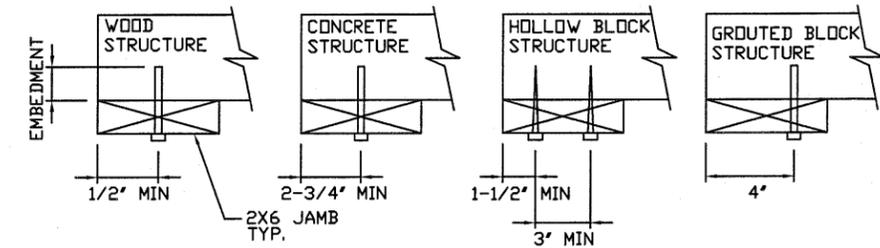
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 24" O.C. (1 1/2' EMBEDMENT)

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 20" 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.

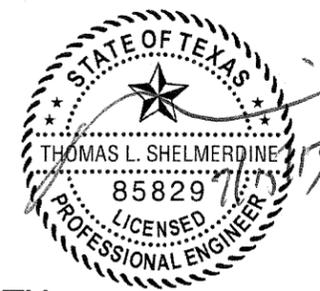
REV	DESCRIPTIONS OF REVISIONS	DATE	BY
A	ADDED GLAZING	5-07-13	RLR

MAX SIZE
16' x 14'

DESIGN LOADS
+25.6 PSF
-29.1 PSF

TEST LOADS
+38.4 PSF
-43.7 PSF

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



TX

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

Amarr

165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 WWW.AMARR.COM

MODEL #1500 STRATFORD 3000
MODEL #1200 HERITAGE 3000
MODEL #1550 OAK SUMMIT 3000
SHORT, LONG, FLUSH & OAK SUMMIT PANELS

SIZE	DRAWN BY	RLR	DATE	07/30/12	DRAWING NUMBER
B	CHECKED BY		DATE		IRC-1516-130-15

SHEET 3 OF 4

TABLE 2

Section	Panel Type	Center Stile Locations			Max Design Loads Allowed	
		1st (in)	2st (in)	3rd (in)	Positive (PSF)	Negative (PSF)
10' 0	Short	48.41	71.59		34.3	39.0
10' 0	Long	30.00	60.00	90.00	40.9	46.5
10' 0	Oak Summit	30.63	60.00	89.38	40.9	46.5
12' 0	Short	48.81	72.00	95.19	34.1	38.8
12' 0	Long	49.63	72.00	94.38	34.1	38.8
12' 0	Oak Summit	48.31	72.00	95.69	34.1	38.8
12' 2	Short	49.64	73.00	96.36	33.6	38.2
12' 2	Long	50.08	73.00	95.92	33.6	38.2
12' 2	Oak Summit	49.06	73.00	96.94	33.6	38.2
12' 4	Short	50.64	74.00	97.36	33.2	37.7
12' 4	Long	51.08	74.00	96.92	33.2	37.7
12' 4	Oak Summit	49.81	74.00	98.19	33.2	37.7
12' 6	Short	50.67	75.00	99.33	32.7	37.2
12' 6	Long	51.17	75.00	98.83	32.7	37.2
12' 6	Oak Summit	50.56	75.00	99.44	32.7	37.2
12' 8	Short	51.67	76.00	100.33	32.3	36.7
12' 8	Long	52.10	76.00	99.90	32.3	36.7
12' 8	Oak Summit	51.31	76.00	100.69	32.3	36.7
12' 10	Short	52.25	77.00	101.75	31.9	36.2
12' 10	Long	53.10	77.00	100.90	31.9	36.2
12' 10	Oak Summit	52.06	77.00	101.94	31.9	36.2
13' 0	Short	53.00	78.00	103.00	31.5	35.8
13' 0	Long	54.10	78.00	101.90	31.5	35.8
13' 0	Oak Summit	52.81	78.00	103.19	31.5	35.8
13' 2	Short	54.00	79.00	104.00	31.1	35.3
13' 2	Long	55.10	79.00	102.90	31.1	35.3
13' 2	Oak Summit	53.56	79.00	104.44	31.1	35.3
13' 4	Short	54.40	80.00	105.60	30.7	34.9
13' 4	Long	54.90	80.00	105.10	30.7	34.9
13' 4	Oak Summit	54.31	80.00	105.69	30.7	34.9
13' 6	Short	55.40	81.00	106.60	30.3	34.4
13' 6	Long	55.90	81.00	106.10	30.3	34.4
13' 6	Oak Summit	55.06	81.00	106.94	30.3	34.4
13' 8	Short	56.40	82.00	107.60	29.9	34.0
13' 8	Long	56.63	82.00	107.38	29.9	34.0
13' 8	Oak Summit	55.81	82.00	108.19	29.9	34.0
13' 10	Short	57.16	83.00	108.71	29.6	33.6
13' 10	Long	57.17	83.00	108.83	29.6	33.6
13' 10	Oak Summit	56.56	83.00	109.44	29.6	33.6

Section	Panel Type	Center Stile Locations (Measured from Left Edge)				Max Design Loads Allowed	
		1st (in)	2st (in)	3rd (in)	4th (in)	Positive (PSF)	Negative (PSF)
14' 0	Short	57.76	84.00	110.11		29.2	33.2
14' 0	Long	58.63	84.00	109.38		29.2	33.2
14' 0	Oak Summit	57.31	84.00	110.69		29.2	33.2
14' 2	Short	58.85	85.00	111.41		28.9	32.8
14' 2	Long	59.17	85.00	110.83		28.9	32.8
14' 2	Oak Summit	58.06	85.00	111.94		28.9	32.8
14' 4	Short	59.16	86.00	112.71		28.5	32.4
14' 4	Long	60.17	86.00	111.83		28.5	32.4
14' 4	Oak Summit	58.81	86.00	113.19		28.5	32.4
14' 6	Short	59.86	87.00	114.01		28.2	32.1
14' 6	Long	61.17	87.00	112.83		28.2	32.1
14' 6	Oak Summit	59.56	87.00	114.44		28.2	32.1
14' 8	Short	60.56	88.00	115.31		27.9	31.7
14' 8	Long	64.81	88.00	131.19		27.9	31.7
14' 8	Oak Summit	60.31	88.00	115.69		27.9	31.7
14' 10	Short	61.26	89.00	116.61		27.6	31.3
14' 10	Long	65.60	89.00	132.40		27.6	31.3
14' 10	Oak Summit	61.06	89.00	116.94		27.6	31.3
15' 0	Short	61.94	90.00	117.94		27.3	31.0
15' 0	Long	66.60	90.00	133.40		27.3	31.0
15' 0	Oak Summit	63.63	90.00	146.38		21.7	24.7
15' 2	Short	62.66	91.00	119.21		27.0	30.6
15' 2	Long	67.60	91.00	134.40		27.0	30.6
15' 2	Oak Summit	64.13	91.00	147.88		21.6	24.5
15' 4	Short	63.60	79.20	104.80	130.40	26.7	30.3
15' 4	Long	67.25	92.00	136.75		26.7	30.3
15' 4	Oak Summit	64.63	92.00	149.38		21.4	24.3
15' 6	Short	66.62	93.00	139.38		26.4	30.0
15' 6	Long	67.60	93.00	138.40		26.4	30.0
15' 6	Oak Summit	67.42	93.00	138.58		26.4	30.0
15' 8	Short	67.62	94.00	140.38		26.1	29.7
15' 8	Long	68.60	94.00	139.40		26.1	29.7
15' 8	Oak Summit	68.02	94.00	139.98		26.1	29.7
15' 10	Short	68.62	95.00	141.38		25.8	29.4
15' 10	Long	69.17	95.00	140.83		25.8	29.4
15' 10	Oak Summit	68.62	95.00	141.38		25.8	29.4
16' 0	Short	69.62	96.00	142.38		25.6	29.1
16' 0	Long	70.60	96.00	141.40		25.6	29.1
16' 0	Oak Summit	69.42	96.00	143.58		25.6	29.1

REV	DESCRIPTIONS OF REVISIONS	DATE	BY
A	ADDED GLAZING	5-07-13	RLR

MAX SIZE
16' x 14'
 DESIGN LOADS
+25.6 PSF
-29.1 PSF
 TEST LOADS
+38.4 PSF
-43.7 PSF

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

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

Amarr
 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 WWW.AMARR.COM
 MODEL #1500 STRATFORD 3000
 MODEL #1200 HERITAGE 3000
 MODEL #1550 OAK SUMMIT 3000
 SHORT, LONG, FLUSH & OAK SUMMIT PANELS

SIZE	DRAWN BY	RLR	DATE	07/30/12	DRAWING NUMBER
B	CHECKED BY		DATE		IRC-1516-130-15

SHEET 4 OF 4