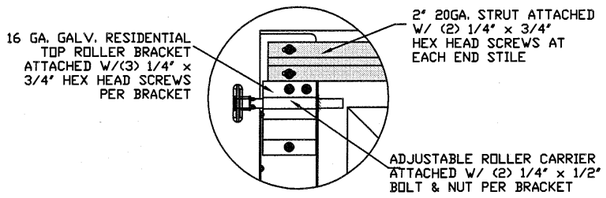
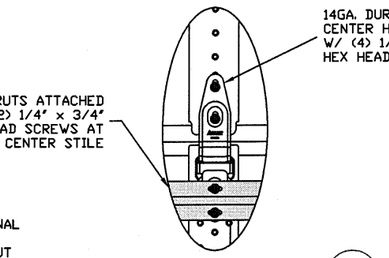
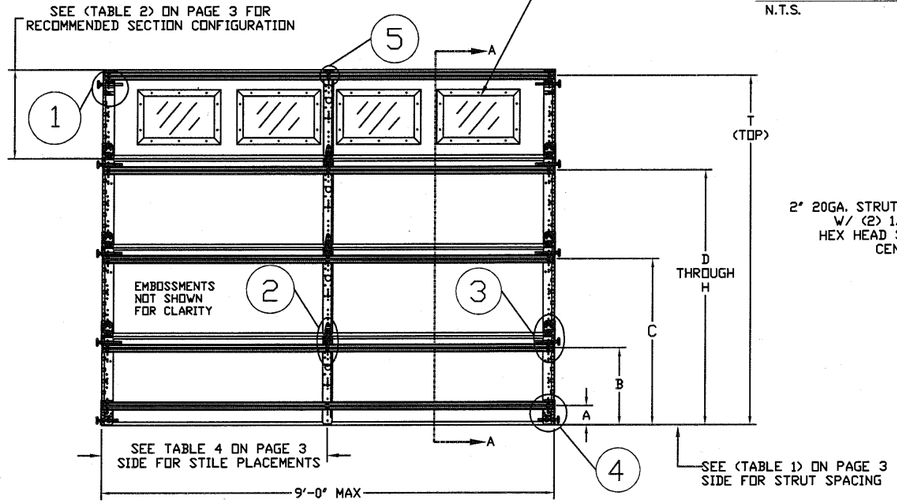


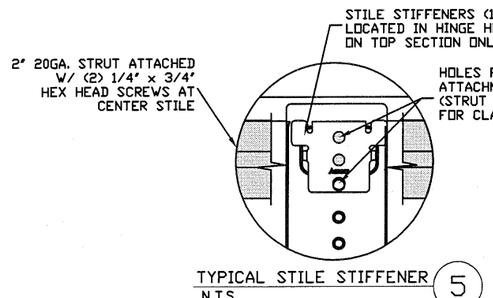
TYPICAL TOP FIXTURES (1)
N.T.S.



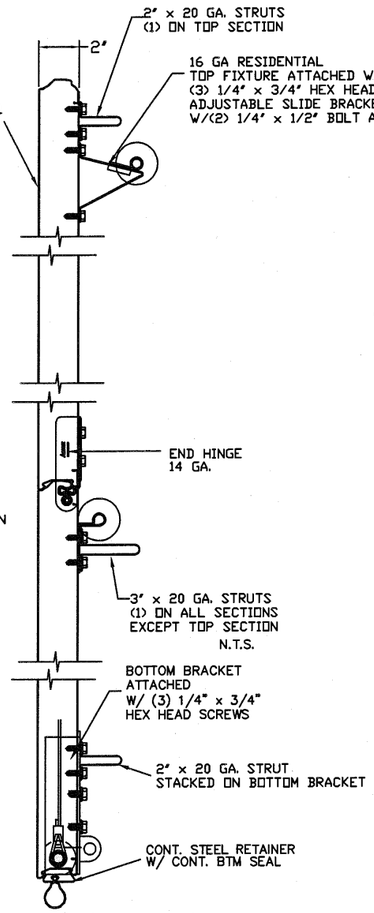
TYPICAL DURASAFE CENTER HINGE (2)
N.T.S.



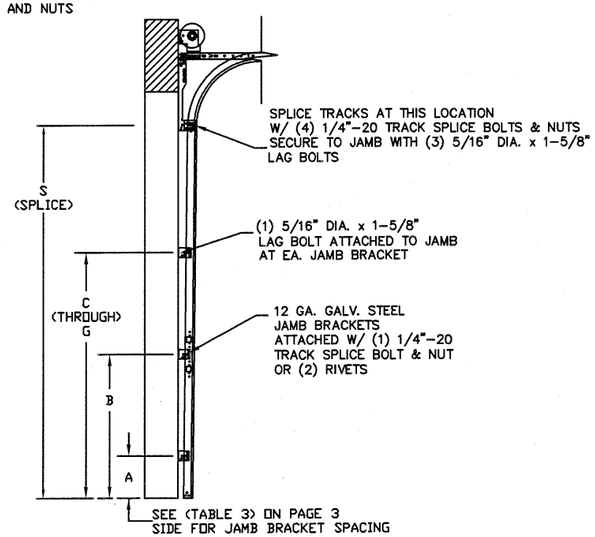
INSIDE ELEVATION
N.T.S.



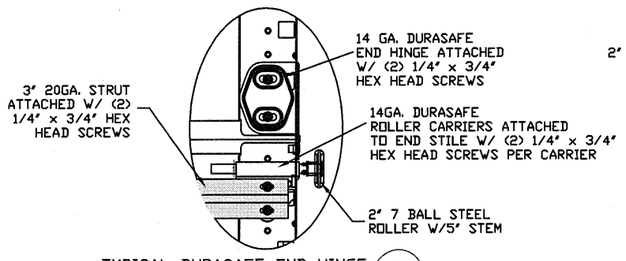
TYPICAL STILE STIFFENER (5)
N.T.S.



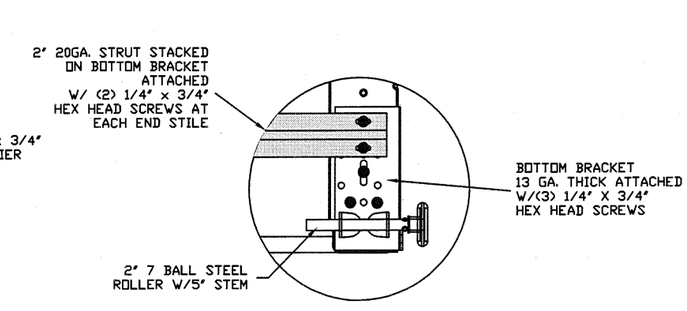
SECTION A–A (SIDE VIEW)
N.T.S.



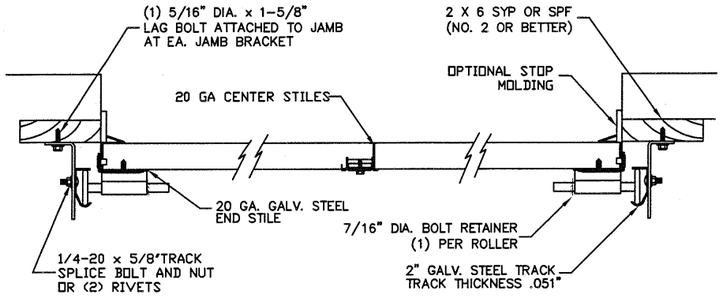
TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS



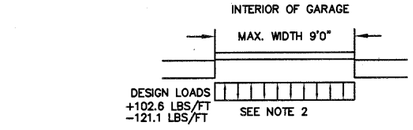
TYPICAL DURASAFE END HINGE (3)
N.T.S.



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)	120	109	104	99	95
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: +102.6 LBS/FT & –121.1 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 REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

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E	WIND SPEED TABLE & TRACK CONFIGURATIONS	04/04/12	RLR
F	ADDED 2" STRUT TO BOTTOM SECTION	02/08/13	RLR

MAX SIZE
9' x 14'

DESIGN LOADS
+22.8 PSF
–26.9 PSF

TEST LOADS
+34.2 PSF
–40.4 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

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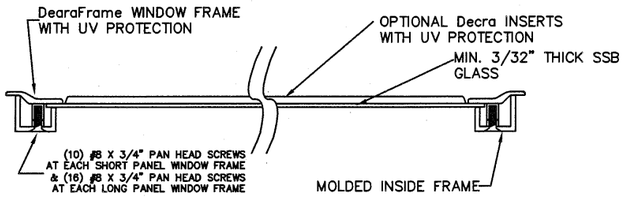
Short, Long, Flush & Oak Summit Panel's

SIZE	DRAWN BY	DLJ	DATE	05/14/03	DRAWING NUMBER
B	CHECKED BY	AAE	DATE	05/14/03	IRC-6009-120-15
					SHEET 1 OF 3

GLAZING OPTION CROSS SECTION

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



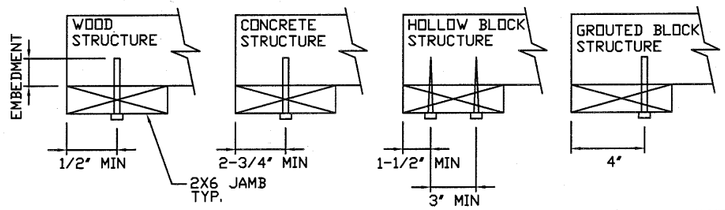
SECTION B-B

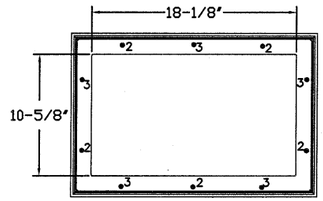
WOOD JAMB ATTACHMENT TO STRUCTURE

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)

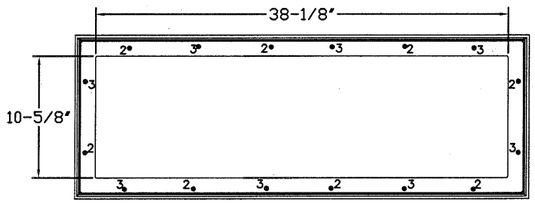
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS THEN 24" O.C. (1 1/4" EMBEDMENT) (OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
*PREPARATION OF WOOD JAMBS BY OTHERS

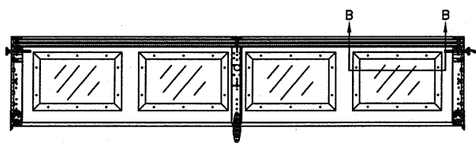




SHORT PANEL GLAZING FASTENER DETAIL
N.T.S.

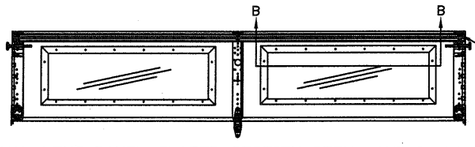


LONG PANEL GLAZING FASTENER DETAIL
N.T.S.



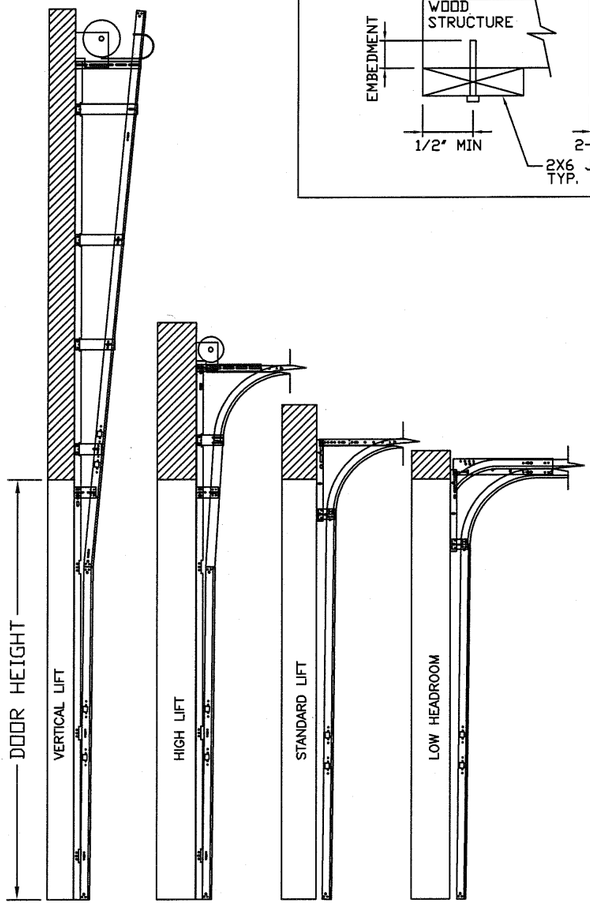
2" 20GA. STRUT LOCATED AT THE TOP OF GLAZED SECTION ATTACHED W/(2) 1/4" X 3/4" HEX HEAD SCREWS AT END AND CENTER STILE

OPTIONAL SHORT PANEL GLAZED SECTION STRUT AND STILE LAYOUT



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

OPTIONAL LONG PANEL GLAZED SECTION STRUT AND STILE LAYOUT



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

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MAX SIZE
9' x 14'

DESIGN LOADS
+22.8 PSF
-26.9 PSF

TEST LOADS
+34.2 PSF
-40.4 PSF

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

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SIZE	DRAWN BY	DATE	DRAWING NUMBER
B	DLJ	05/14/03	IRC-6009-120-15
	CHECKED BY AAE	DATE 05/14/03	
			SHEET 2 OF 3

TABLE 1

DOOR HEIGHT	STRUT SPACING (BASED ON RECOMMENDED SECTION CONFIGURATION)								TOP
	A	B	C	D	E	F	G	H	T
6' 6"	4 1/2"	18 1/4"	36 1/4"	54 1/4"					76 1/2"
7'	4 1/2"	18 1/4"	39 1/4"	60 1/4"					82 1/2"
7' 6"	4 1/2"	15 1/4"	33 1/4"	51 1/4"	69 1/4"				88 1/2"
8'	4 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"				94 1/2"
8' 6"	4 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"				100 1/2"
9'	4 1/2"	15 1/4"	33 1/4"	51 1/4"	69 1/4"	87 1/4"			106 1/2"
9' 6"	4 1/2"	18 1/4"	36 1/4"	54 1/4"	72 1/4"	90 1/4"			112 1/2"
10'	4 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"	96 1/4"			118 1/2"
10' 6"	4 1/2"	18 1/4"	39 1/4"	60 1/4"	81 1/4"	102 1/4"			124 1/2"
11'	4 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"	4 1/2"	18 1/4"	39 1/4"	60 1/4"	78 1/4"	96 1/4"	114 1/4"		136 1/2"
12'	4 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"	4 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'	4 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"	4 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'	4 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	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	S
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 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	25.5	30.1
8' 0	Long	48.000	25.5	30.1
8' 2	Short, Oak Summit	49.000	25.0	29.5
8' 2	Long	49.000	25.0	29.5
8' 4	Short, Oak Summit	50.000	24.5	28.9
8' 4	Long	50.000	24.5	28.9
8' 6	Short, Oak Summit	51.000	24.0	28.3
8' 6	Long	51.000	24.0	28.3
8' 8	Short, Oak Summit	52.000	23.6	27.8
8' 8	Long	52.000	23.6	27.8
8' 10	Short, Oak Summit	53.000	23.1	27.3
8' 10	Long	53.000	23.1	27.3
9' 0	Short, Oak Summit	54.000	22.8	26.9
9' 0	Long	54.000	22.8	26.9

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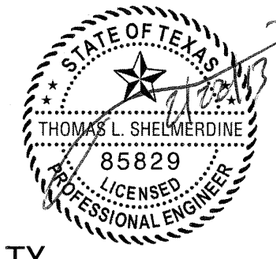

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			SHEET 3 OF 3