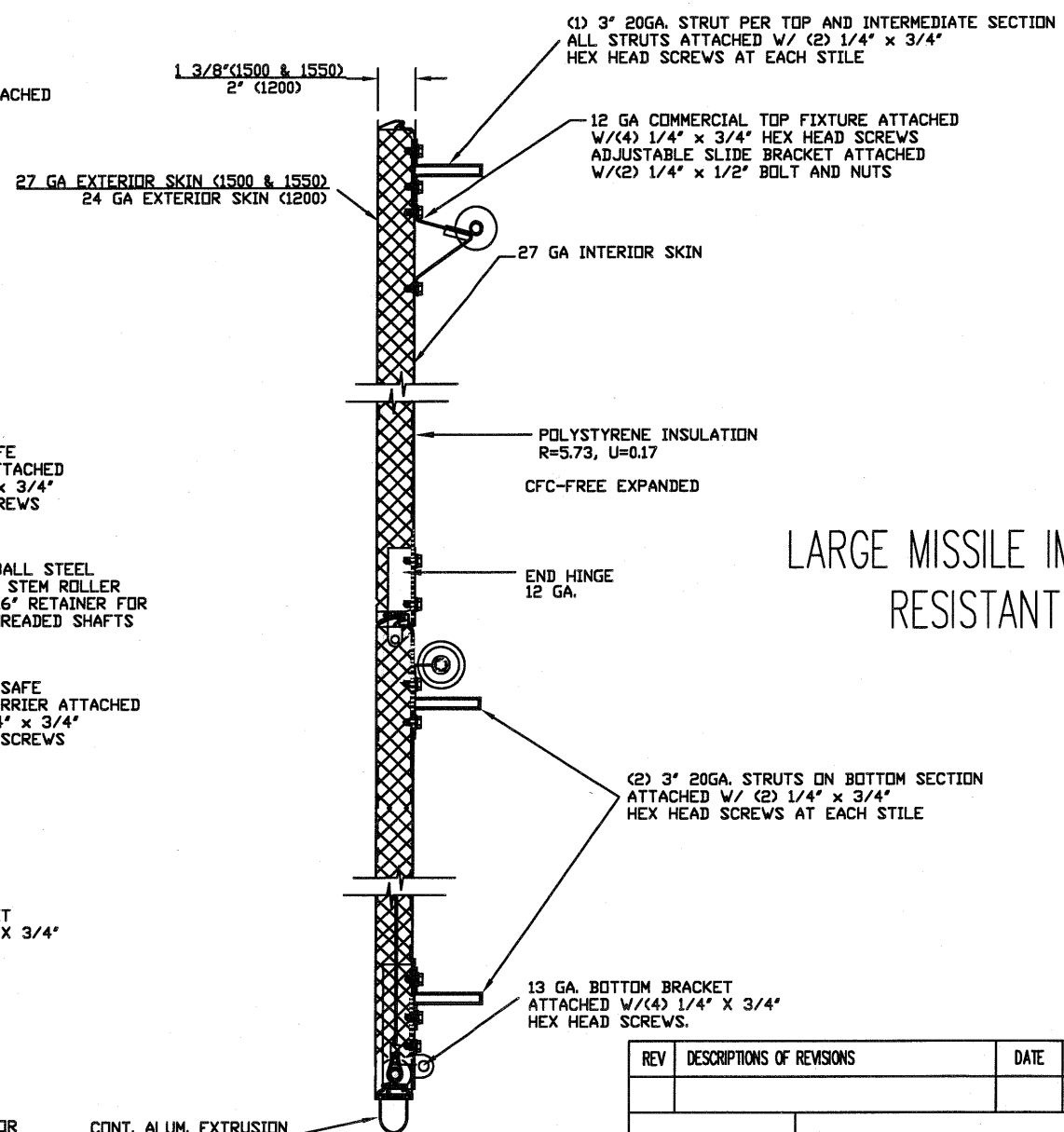
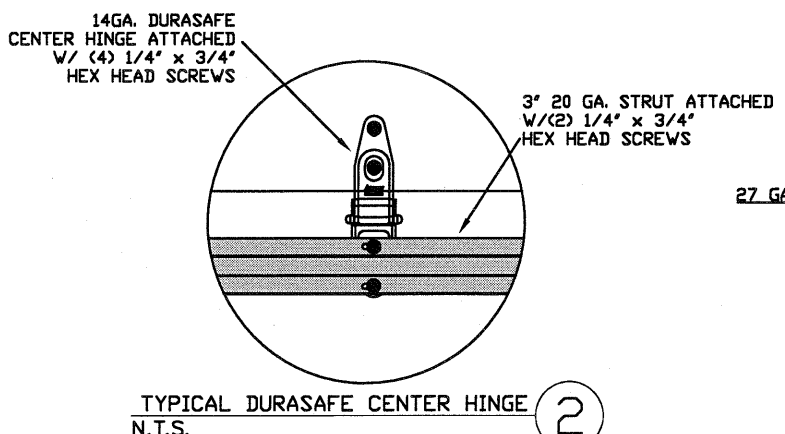
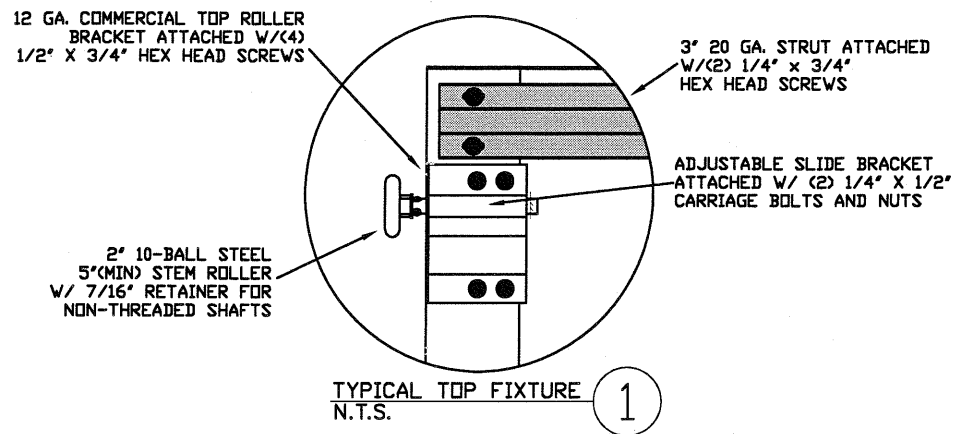
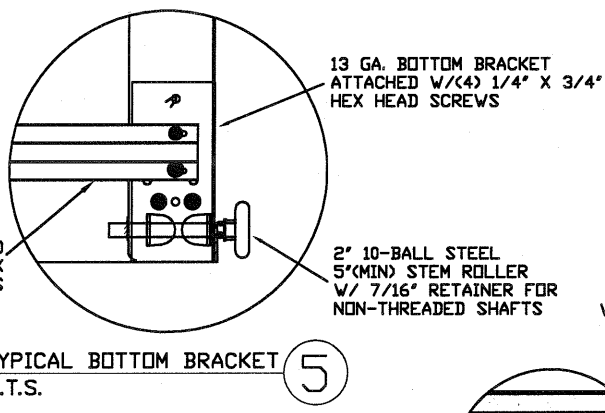
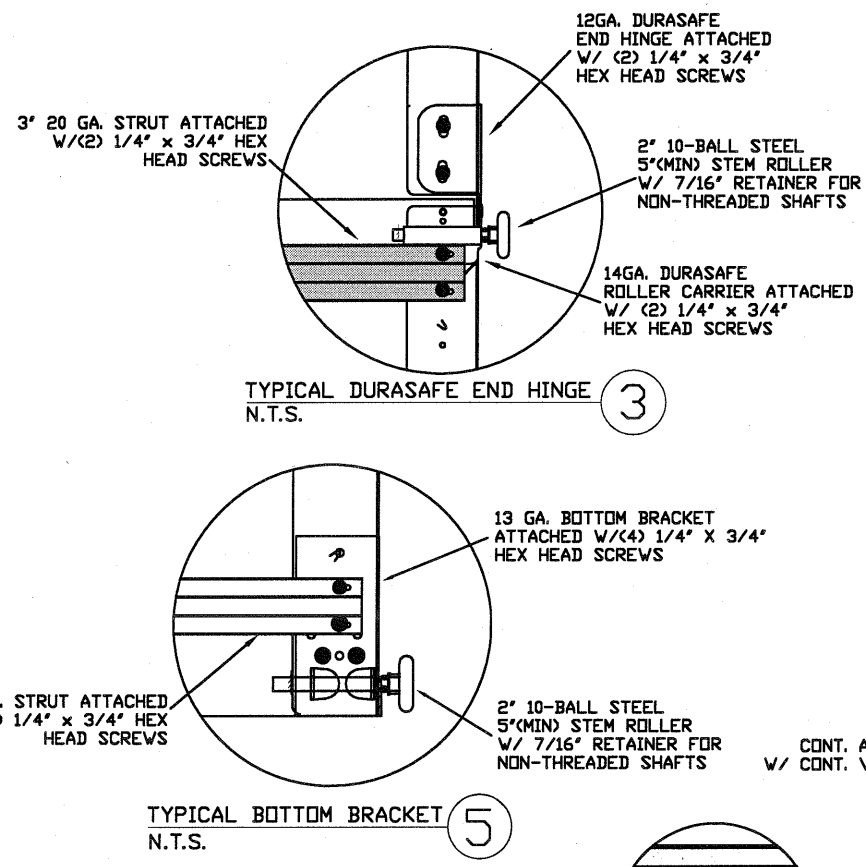
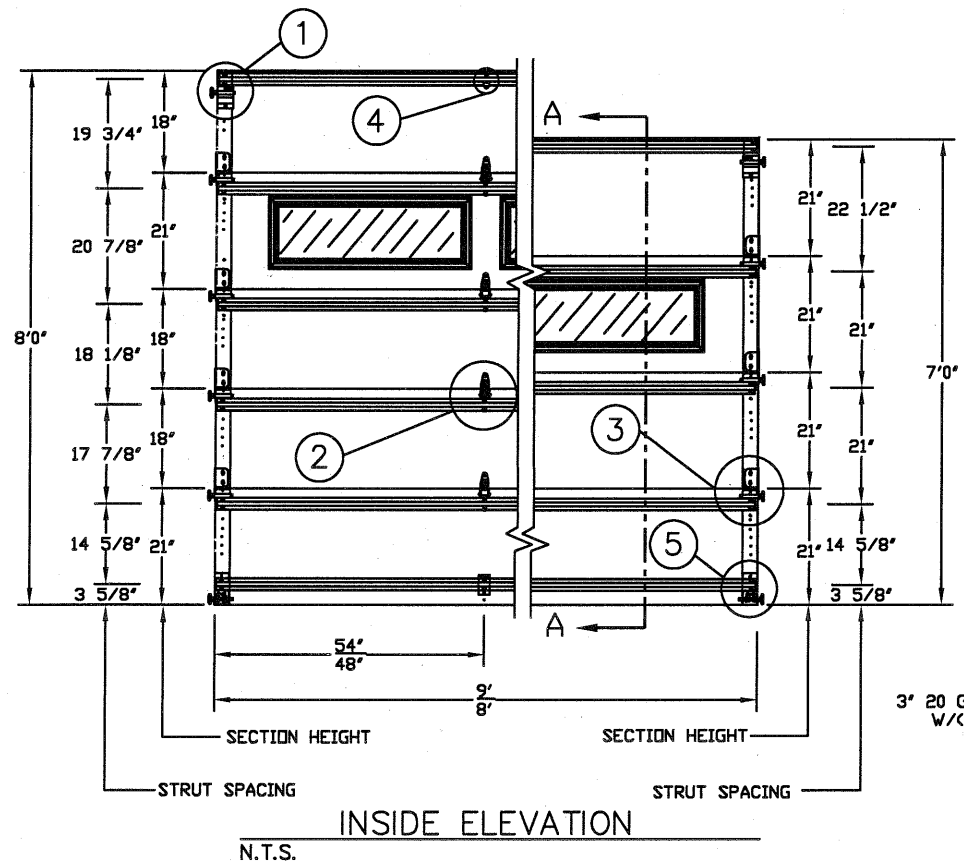
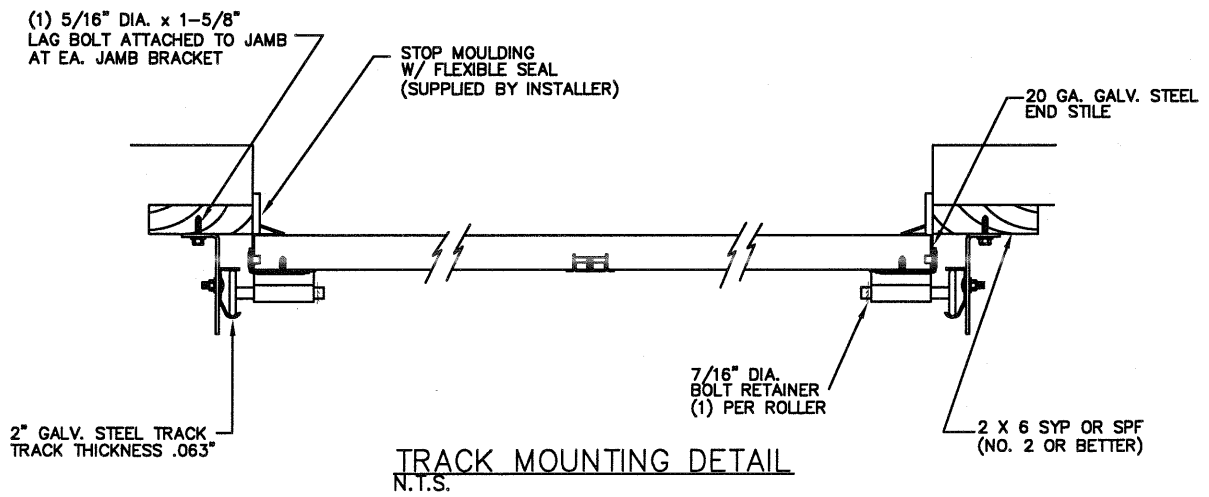
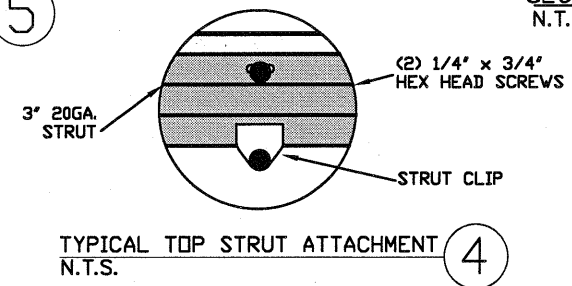




LARGE MISSILE IMPACT RESISTANT



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



THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN DASMA 108-05 & 115-05, AND ASTM E330-02, E1886-05, E1996-09, & F588-07. 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)	200	182	173	165	158
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTIONS OF REVISIONS	DATE	BY

MAX SIZE
9' x 14'

DESIGN LOADS
+38.0 PSF
-45.0 PSF

TEST LOADS
+57.0 PSF
-67.5 PSF

LARGE MISSILE IMPACT RESISTANCE

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

FL

Thomas L. Shelmerdine
LICENSE
No. 48579
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

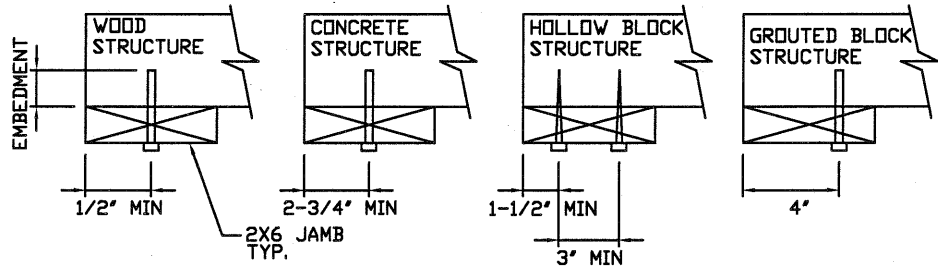
MODEL #1500 AMARR STRATFORD 3000 MODEL #1200 AMARR HERITAGE 3000 MODEL #1550 AMARR OAK SUMMIT 3000 SHORT, LONG, FLUSH & OAK SUMMIT PANELS			
SIZE	DRAWN BY	RLR	DATE 10/10/16
B	CHECKED BY	RLR	DATE 10/10/16
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IRC-1509-155-15-1 SHEET 1 OF 3

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 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)

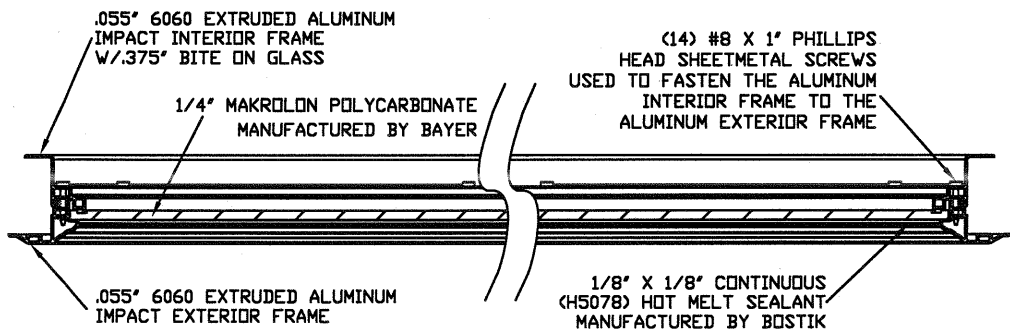
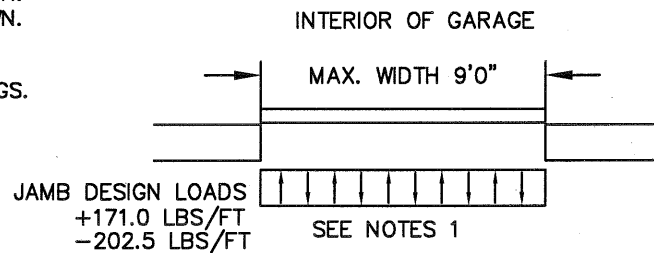
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS THEN 24" O.C. (1 1/4"
EMBEDMENT) (OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

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



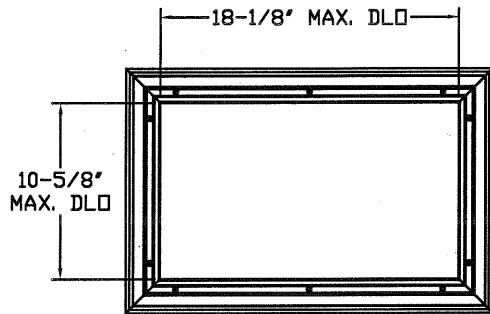
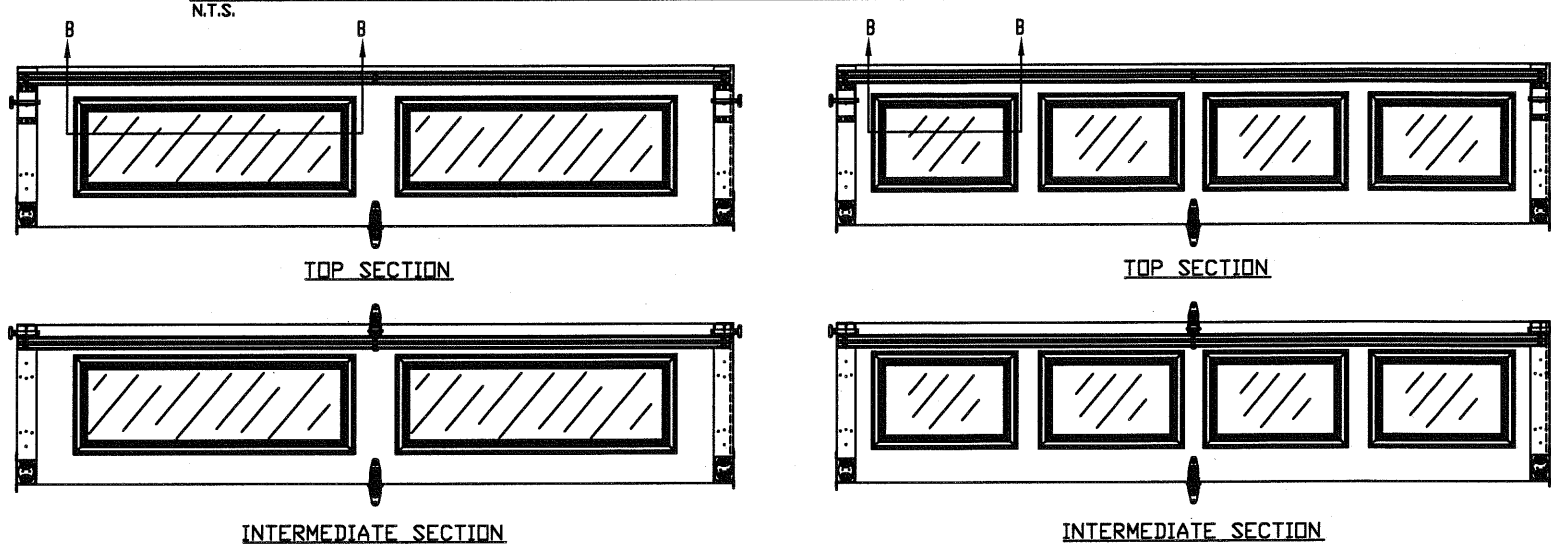
SPECIFICATIONS AND NOTES

1. DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
2. DOOR SECTIONS SHALL BE 27 GA. MIN. (.016") INTERIOR AND EXTERIOR ROLLED FORMED LIGHT COMMERCIAL QUALITY
3. DOORS UP TO 7'0" HIGH CONSIST OF (4) SECTIONS AS SHOWN.
4. DOORS UP TO 8'0" HIGH CONSIST OF (5) SECTIONS AS SHOWN.
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

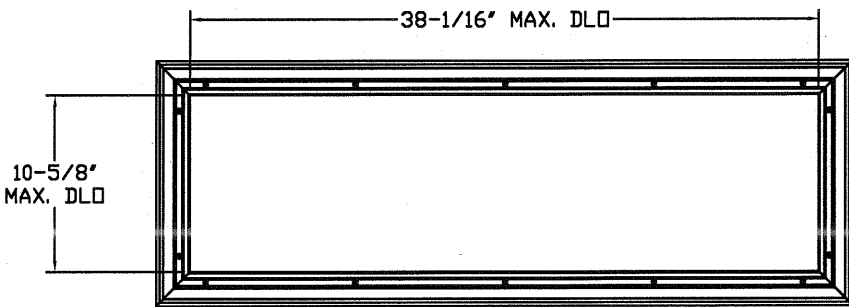


SECTION B-B IMPACT WINDOW DETAIL
N.T.S.

OPTIONAL SHORT AND LONG PANEL GLAZING LAYOUTS



SHORT PANEL IMPACT GLAZING FASTENER DETAIL
N.T.S.



LONG PANEL IMPACT GLAZING FASTENER DETAIL
N.T.S.

REV	DESCRIPTIONS OF REVISIONS	DATE	BY
MAX SIZE 9' x 14' DESIGN LOADS +38.0 PSF -45.0 PSF TEST LOADS +57.0 PSF -67.5 PSF LARGE MISSILE IMPACT RESISTANCE 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			
Amarr MODEL #1500 AMARR STRATFORD 3000 MODEL #1200 AMARR HERITAGE 3000 MODEL #1550 AMARR OAK SUMMIT 3000 SHORT, LONG, FLUSH & OAK SUMMIT PANELS			
SIZE	DRAWN BY RLR	DATE 10/10/16	DRAWING NUMBER
B	CHECKED BY RLR	DATE 10/10/16	IRC-1509-155-15-1
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, NC. 27105			SHEET 2 OF 3

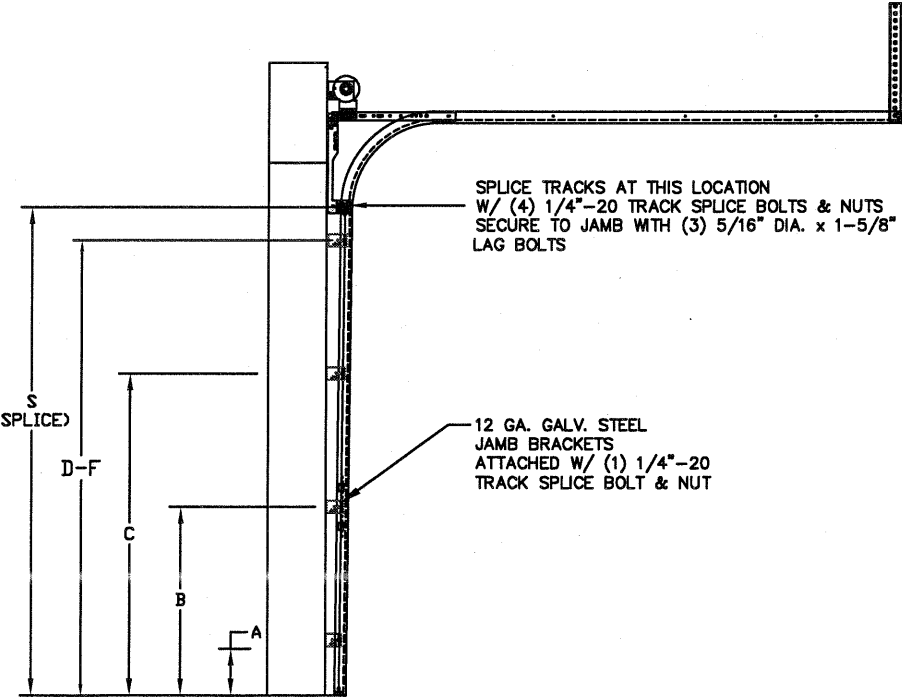
TABLE 1

Section	Panel Type	Center Stile Location (Measured from Left Edge)		Max Design Loads Allowed	
		1st (in)	2nd (in)	Positive (PSF)	Negative (PSF)
6'0	Short	24.406	47.594	57.0	67.5
6'0	Oak Summit	24.644	47.357	57.0	67.5
7'0	Short	29.200	54.800	48.8	57.8
7'0	Oak Summit	29.144	54.857	48.8	57.8
7'2	Short	30.200	55.800	47.7	56.5
7'2	Oak Summit	29.894	56.107	47.7	56.5
7'4	Short	31.200	56.800	46.6	55.2
7'4	Oak Summit	30.644	57.357	46.6	55.2
7'6	Short	32.200	57.800	45.6	54.0
7'6	Long	45.000		45.6	54.0
7'6	Oak Summit	45.000		45.6	54.0
7'8	Short	32.200	60.000	44.6	52.8
7'8	Long	46.000		44.6	52.8
7'8	Oak Summit	46.000		44.6	52.8
7'10	Short	33.000	61.000	43.6	51.7
7'10	Long	47.000		43.6	51.7
7'10	Oak Summit	47.000		43.6	51.7
8'0	Short	48.000		42.7	50.6
8'0	Long	48.000		42.7	50.6
8'0	Oak Summit	48.000		42.7	50.6
8'2	Short	49.000		41.8	49.5
8'2	Long	49.000		41.8	49.5
8'2	Oak Summit	49.000		41.8	49.5
8'4	Short	50.000		41.0	48.6
8'4	Long	50.000		41.0	48.6
8'4	Oak Summit	50.000		41.0	48.6
8'6	Short	51.000		40.2	47.6
8'6	Long	51.000		40.2	47.6
8'6	Oak Summit	51.000		40.2	47.6
8'8	Short	52.000		39.4	46.7
8'8	Long	52.000		39.4	46.7
8'8	Oak Summit	52.000		39.4	46.7
8'10	Short	53.000		38.7	45.8
8'10	Long	53.000		38.7	45.8
8'10	Oak Summit	53.000		38.7	45.8
9'0	Short	54.000		38.0	45.0
9'0	Long	54.000		38.0	45.0
9'0	Oak Summit	54.000		38.0	45.0

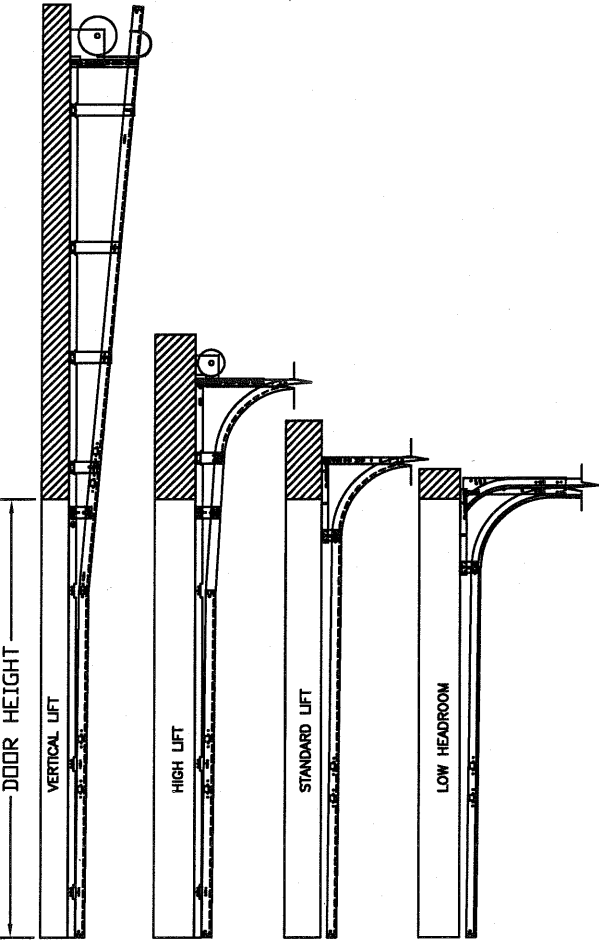
TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT								SPLICE S
	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



TRACK CONFIGURATION FOR 6'6" UP TO 14' TALL DOORS (SEE TABLE 2)
N.T.S.



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

REV	DESCRIPTIONS OF REVISIONS	DATE	BY

MAX SIZE
9' x 14'

DESIGN LOADS
+38.0 PSF
-44.9 PSF

TEST LOADS
+57.0 PSF
-67.4 PSF

LARGE MISSILE IMPACT
RESISTANCE

Thomas L. Shelmerdine, PE (FL PE #0048579)
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FL

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

Amarr

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

SIZE	DRAWN BY	RLR	DATE	10/10/16	DRAWING NUMBER
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ENTREMATIC
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 3 OF 3