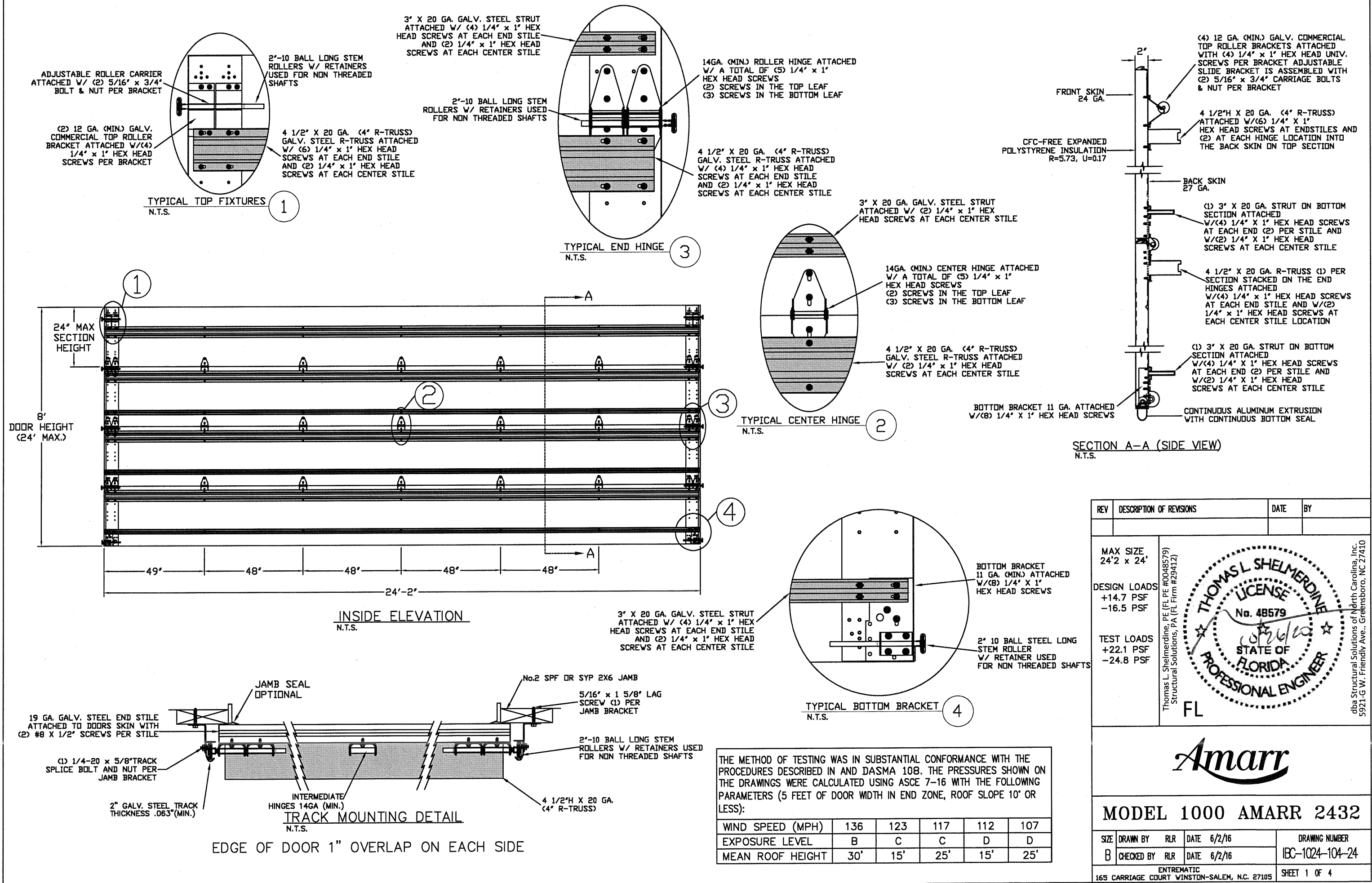




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN AND DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-16 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):

WIND SPEED (MPH)	136	123	117	112	107
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
24'2 x 24'

DESIGN LOADS
+14.7 PSF
-16.5 PSF

TEST LOADS
+22.1 PSF
-24.8 PSF

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

FL

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

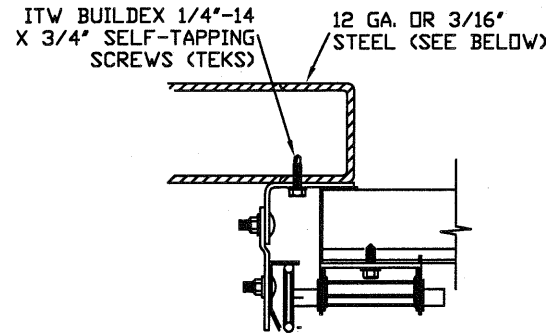
MODEL 1000 AMARR 2432

SIZE	DRAWN BY	RLR	DATE	6/2/16	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	6/2/16	IBC-1024-104-24

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

SHEET 1 OF 4

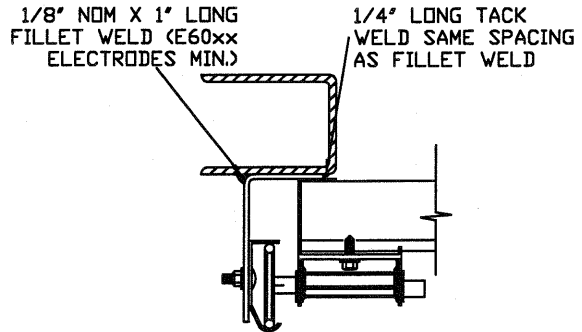
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



CLIP STYLE REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

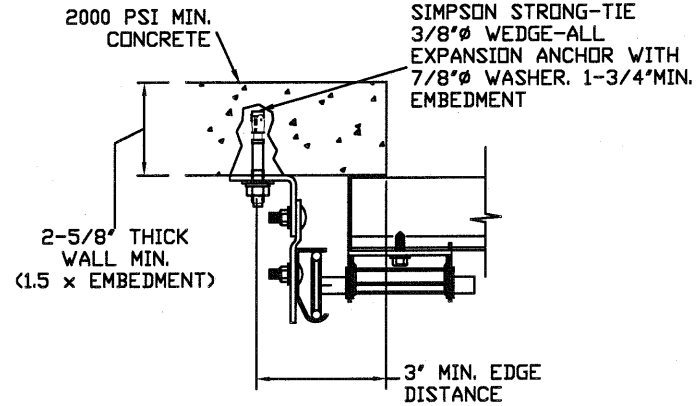
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 12" O.C.
REFER TO NOTES: 1, 2 AND 5

3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



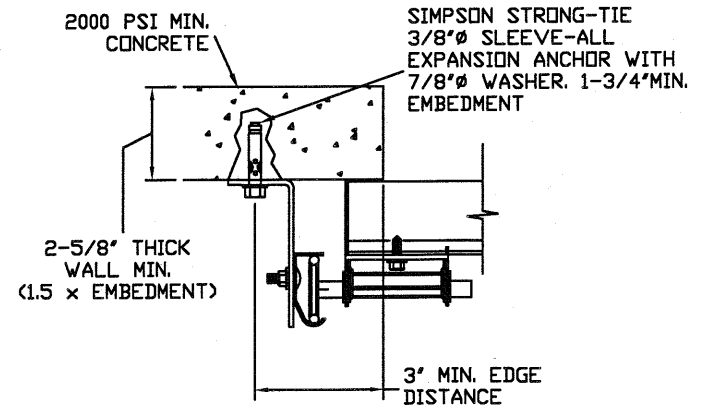
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD -
6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8
AND 9



CLIP STYLE CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, REVERSE AND TAPERED ANGLE MOUNT
AVAILABLE

2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD -
6' FROM ENDS AND 18' O.C.
REFER TO NOTES 1, 2, 3, 4 AND 5



CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 18" O.C.
REFER TO NOTES 1, 2, 3, 4 AND 5

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: +177.6 LBS/FT & -199.4 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.022) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 24'0" HIGH USE (1) 4.5" 20GA R-TRUSS PER SECTION AND (1) 3" 20GA STRUT ON ALL SECTIONS BUT THE TOP SECTION.
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

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)

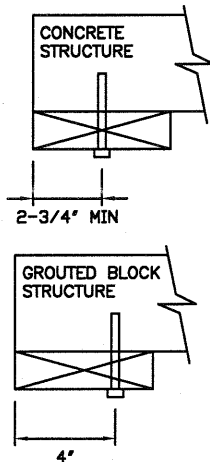
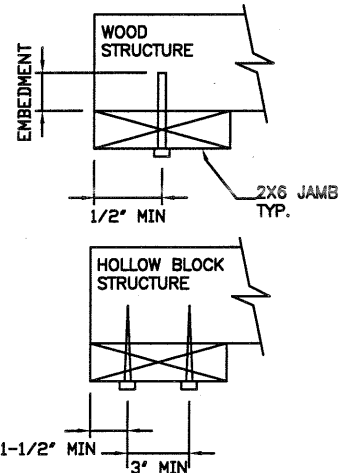
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

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)

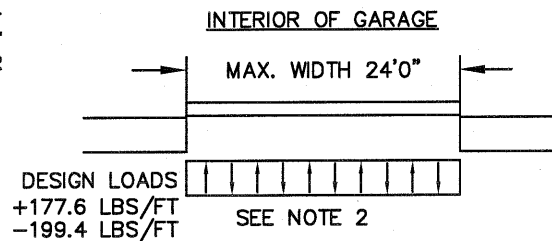
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

*PREPARATION OF WOOD JAMBS BY OTHERS



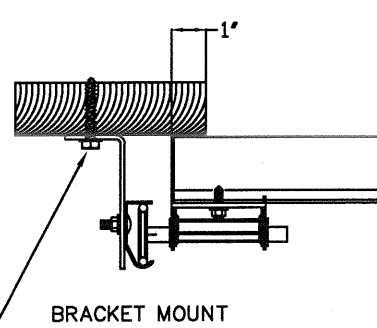
NOTES:

1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3' REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS IN ADDITION TO OTHER LOADS.
6. MOST GARAGE DOOR TRACK IS GALVANIZED STEEL. USE ALL NECESSARY PRECAUTIONS WHEN WELDING GALVANIZED STEEL.
7. ALL WELDS SHOULD BE PERFORMED BY A CERTIFIED WELDER OR INSPECTED BY A CERTIFIED WELDING INSPECTOR TO VERIFY THE INTEGRITY OF THE WELD.
8. FILLET WELDS TO HAVE A STRAIGHT OR CONVEX FACE SURFACE.
9. TACK WELD TOE OF ANGLE AT SAME SPACING TO PREVENT ROTATION OF TRACK ANGLE.

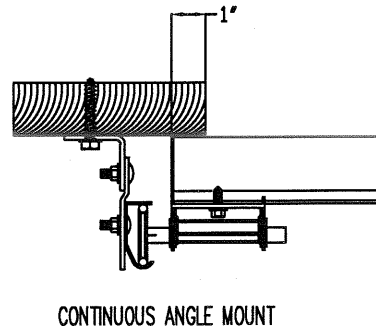


TRACK CONNECTION TO WOOD JAMB OPTIONS

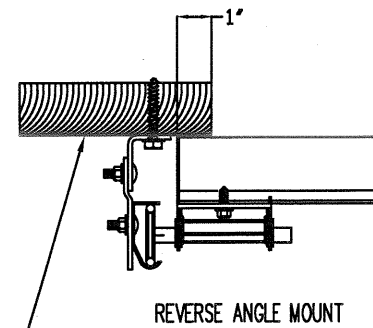
FOR LAG SCREWS & BRACKET SPACING SEE TABLE 2 ON PAGE 4



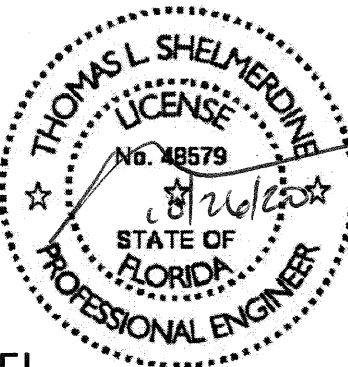
5/16" x 1 5/8" LAG SCREW (1)
PER JAMB BRACKET (1-1/2"
EMBEDMENT MINIMUM) (TYP.)



CONTINUOUS ANGLE MOUNT



2x6 WOOD JAMB SYP
(NO.2) OR BETTER (TYP.)

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE, 24'2" x 24' DESIGN LOADS +14.7 PSF -16.5 PSF TEST LOADS +22.1 PSF -24.8 PSF		Thomas L. Shelmerdine, PE (FL PE #00048579) Structural Solutions, PA (FL Firm #29412) FL  dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
			
MODEL 1000 AMARR 2432			
SIZE	DRAWN BY	R/LR	DATE 6/2/16
B	CHECKED BY	R/LR	DATE 6/2/16
ENTREMATICS 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1024-104-24 SHEET 2 OF 4

OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS
N.T.S.

R-TRUSS SPACER

A detailed cross-sectional diagram of a door assembly. The diagram shows a central core made of two layers of .080 PLEXI-GLASS held together by HOT MELT ADHESIVE. This core is sandwiched between two ALUMINUM SPACER layers. The entire assembly is mounted on a DOOR SKIN. The door skin is secured to the aluminum spacer using HOT MELT ADHESIVE and #8 ZINC SCREWS. An EXTRUDED POLYPROPYLENE layer is also visible on the left side of the door skin.

Diagram illustrating an intermediate section of a building facade. The section shows a horizontal structure with multiple windows. The top part of the diagram is labeled "INTERMEDIATE SECTION". Below this, a horizontal line represents the roof or upper structure, with several vertical lines indicating window locations. The bottom part of the diagram shows a horizontal line representing the base or lower structure, with several vertical lines indicating window locations. The text "OPTIONAL GLAZED SECTION W/ 24' X 6' WINDOWS" is written below the diagram, followed by "N.T.S." (Not To Scale).

STRUT SPACER
N.T.S.

(5A)

A cross-sectional diagram of a door handle assembly. The assembly consists of a central cylindrical handle with a break in the middle, labeled "7/8\" SPACER". The handle is mounted on a door, which is labeled "DOOR SKIN". The handle is secured to the door skin by "HOT MELT ADHESIVE" and "EXTRUDED POLYPROPYLENE". The handle is also secured to the door skin by "#8 ZINC SCREW". The handle is labeled "1/8\" DSB GLASS".

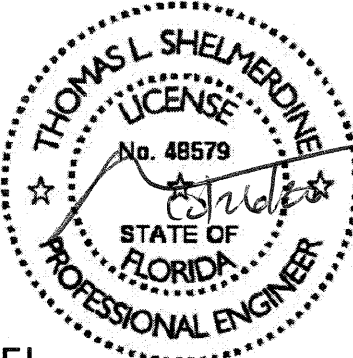
TOP SECTION

OPTIONAL GLAZED SECTION W/ 24" X 12" WINDOWS
N.T.S.

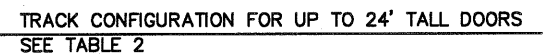
5

Technical drawing of a rectangular metal component. The drawing shows a side view of a rectangular tube or channel. The overall length is dimensioned as 21-3/8" MAX. DLO. The overall width is dimensioned as 3-1/4" MAX. DLO. A weld symbol, consisting of three parallel diagonal lines, is located on the top surface of the component.

24' X 12' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

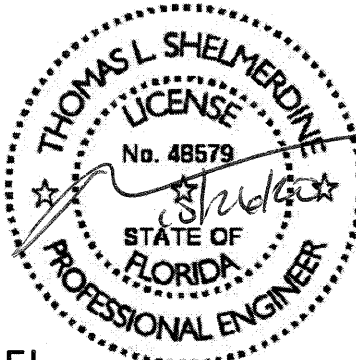
REV	DESCRIPTION OF REVISIONS		DATE	BY
MAX SIZE, 24'2" x 24' DESIGN LOADS +14.7 PSF -16.5 PSF TEST LOADS +22.1 PSF -24.8 PSF		Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL  dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410		
				
MODEL 1000 AMARR 2432				
SIZE	DRAWN BY	RLR	DATE	6/2/16
B	CHECKED BY	RLR	DATE	6/2/16
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105				DRAWING NUMBER IEC-1024-104-24 SHEET 3 OF 4

Section Width		Center Stile Locations (Measured from Left Edge)					Max Design Loads Allowed	
(ft)	(in)	1st (in)	2nd (in)	3rd (in)	4th (in)	5th (in)	Positive (PSF)	Negative (PSF)
19'	4	36	76	116	156	196	17.8	20.0
19'	6	37	77	117	157	197	17.8	20.0
19'	8	38	78	118	158	198	17.8	20.0
19'	10	39	79	119	159	199	17.8	20.0
20'	0	40.0	80	120	160	200	17.7	19.9
20'	2	41.0	81	121	161	201	17.6	19.7
20'	4	42	82	122	162	202	17.3	19.5
20'	6	43	83	123	163	203	17.1	19.2
20'	8	44	84	124	164	204	16.9	19.0
20'	10	45	85	125	165	205	16.7	18.8
21'	0	46	86	126	166	206	16.5	18.6
21'	2	47	87	127	167	207	16.3	18.3
21'	4	48	88	128	168	208	16.2	18.1
21'	6	49	89	129	169	209	16.0	17.9
21'	8	50	90	130	170	210	15.8	17.7
21'	10	51	91	131	171	211	15.6	17.5
22'	0	44	88	132	176	220	16.1	18.1
22'	2	45	89	133	177	221	16.0	17.9
22'	4	46	90	134	178	222	15.8	17.7
22'	6	47	91	135	179	223	15.6	17.5
22'	8	48	92	136	180	224	15.4	17.3
22'	10	49	93	137	181	225	15.3	17.2
23'	0	50	94	138	182	226	15.1	17.0
23'	2	51	95	139	183	227	15.0	16.8
23'	4	44	92	140	188	236	14.8	16.6
23'	6	45	93	141	189	237	14.8	16.6
23'	8	46	94	142	190	238	14.8	16.6
23'	10	47	95	143	191	239	14.8	16.6
24'	0	48	96	144	192	240	14.8	16.6
24'	2	49	97	145	193	241	14.7	16.5



DOOR HEIGHT		TRACK ATTACHMENT										TYPICAL SPLICE	
		A	B	C	D	E	F	G	H	I	J		K
7'	0"	10.0"	34"	58"									76"
7'	6"	10.0"	34"	58"									82"
8'	0"	10.0"	34"	58"									88"
8'	6"	10.0"	34"	58"	82"								94"
9'	0"	10.0"	34"	58"	82"								100"
9'	6"	10.0"	34"	58"	82"								106"
10'	0"	10.0"	34"	58"	82"								112"
11'	0"	10.0"	34"	58"	82"	106"							124"
12'	0"	10.0"	34"	58"	82"	106"							136"
13'	0"	10.0"	34"	58"	82"	106"	130"						148"
14'	0"	10.0"	34"	58"	82"	106"	130"						160"
15'	0"	10.0"	34"	58"	82"	106"	130"	154"					172"
16'	0"	10.0"	34"	58"	82"	106"	130"	154"					184"
17'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"				196"
18'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"				208"
19'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"			220"
20'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"			232"
21'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"	226"		244"
22'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"	226"		256"
23'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	268"
24'	0"	10.0"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	280"

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 24'2 x 24' DESIGN LOADS +14.7 PSF -16.5 PSF TEST LOADS +22.1 PSF -24.8 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL	 dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410
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MODEL 1000 AMARR 2432

SIZE B	DRAWN BY	RLR	DATE	6/2/16	DRAWING NUMBER IBC-1024-104-24
	CHECKED BY	RLR	DATE	6/2/16	

ENTREMATRIC

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

SHEET 4 OF 4