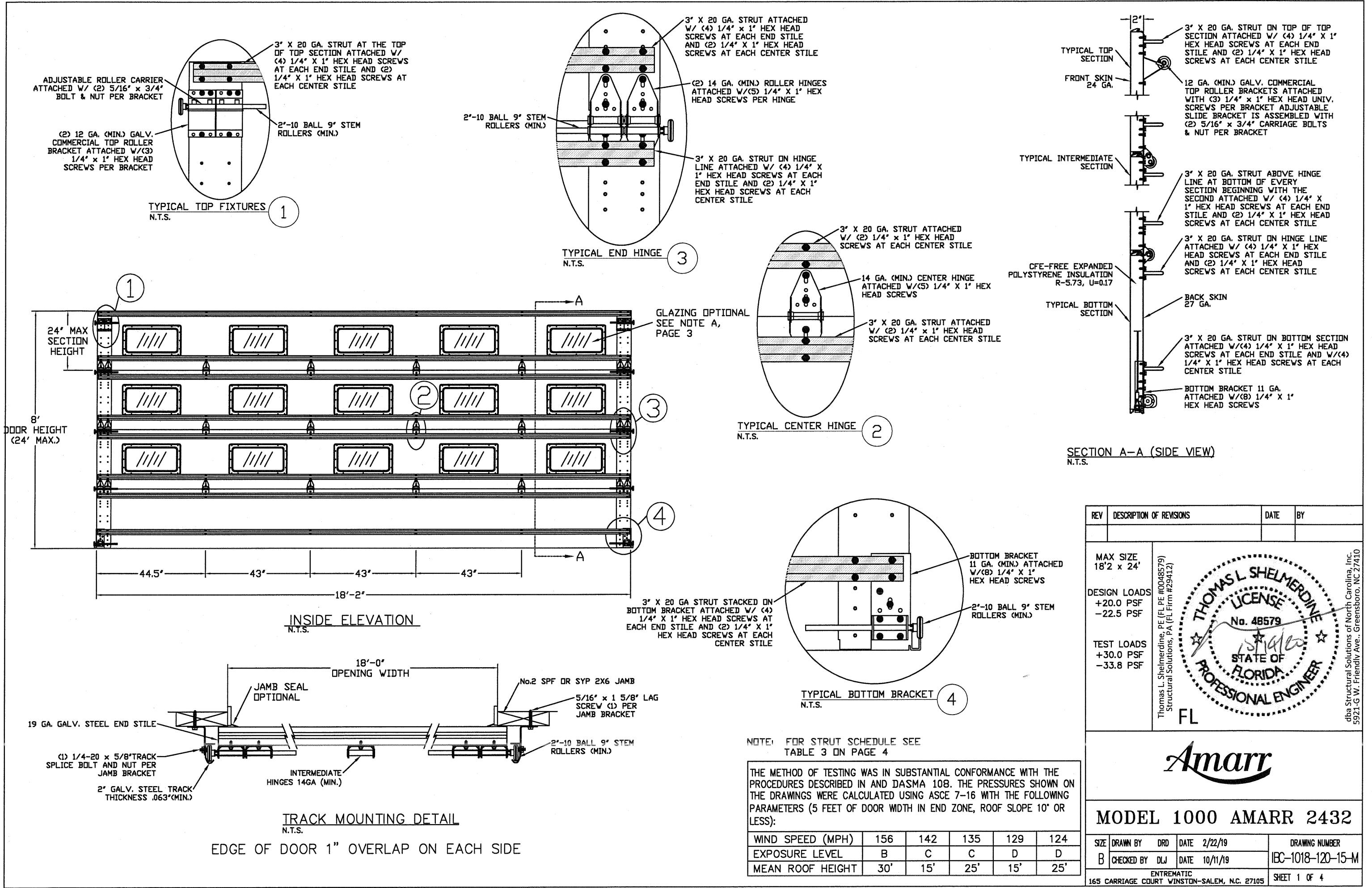




REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18'2" x 24'

DESIGN LOADS
+20.0 PSF
-22.5 PSF

TEST LOADS
+30.0 PSF
-33.8 PSF

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 1000 AMARR 2432

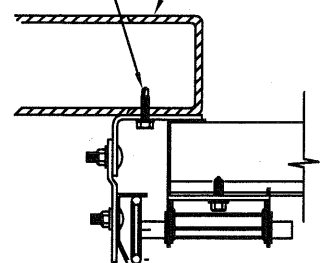
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B	CHECKED BY	DLJ	DATE	10/11/19	IBC-1018-120-15-M
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 1 OF 4

NOTE: FOR STRUT SCHEDULE SEE TABLE 3 ON PAGE 4

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)	156	142	135	129	124
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

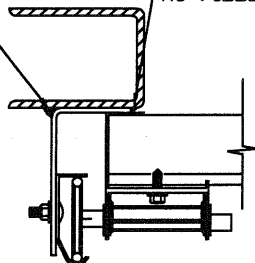
ITW BUILDEX 1/4"-14
X 3/4" SELF-TAPPING
SCREWS (TEKS) / 12 GA. OR 3/16"
STEEL (SEE BELOW)



12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6'
FROM ENDS AND 14" 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

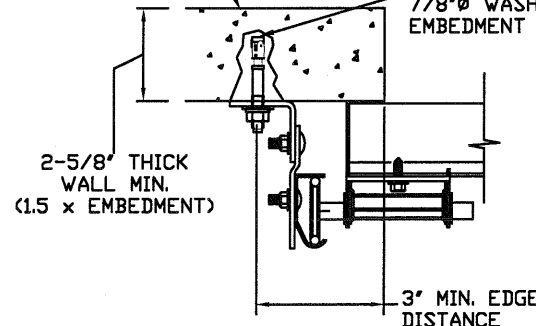
1/8" NOM X 1' LONG FILLET WELD (E60xx ELECTRODES MIN.)	1/4" LONG TACK WELD SAME SPACING AS FILLET WELD
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STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD -
6' FROM ENDS AND 24' O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8
AND 9

2000 PSI MIN.
CONCRETE

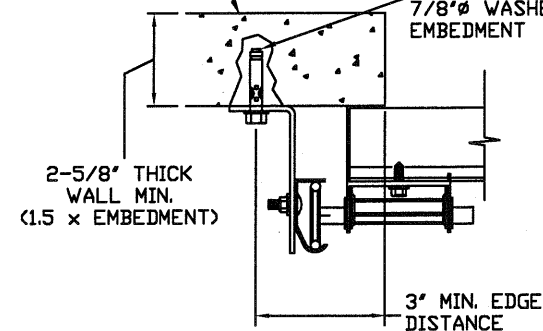
SIMPSON STRONG-TIE
3/8" WEDGE-ALL
EXPANSION ANCHOR WITH
7/8" WASHER, 1-3/4" MIN.
EMBEDMENT



2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD -
6" FROM ENDS AND 22" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

2000 PSI MIN.
CONCRETE

SIMPSON STRONG-TIE
3/8" SLEEVE-ALL
EXPANSION ANCHOR WITH
7/8" WASHER, 1-3/4" MIN.
EMBEDMENT



2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 22" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/2" EMBEDMENT)

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)

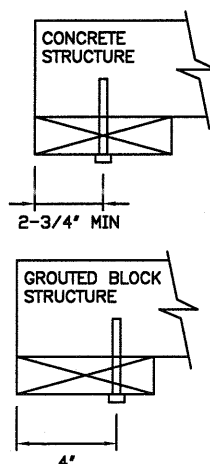
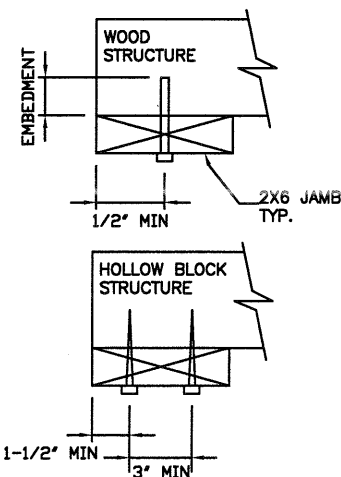
2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART)
AT 16" O.C. (1 1/2" EMBEDMENT)

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



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.

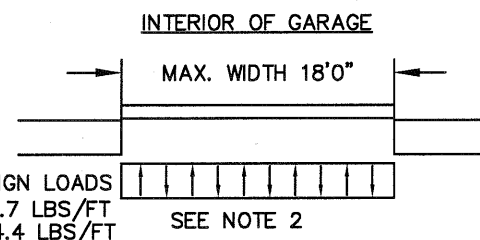
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS IN ADDITION TO OTHER LOADS.

6. MOST GARAGE DOOR TRACK IS GALVANIZED STEEL. USE ALL NECESSARY PRECAUTIONS WHEN WELDING GALVANIZED STEEL.

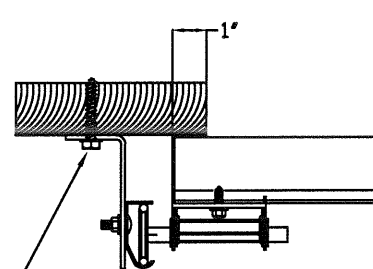
7. ALL WELDS SHOULD BE PERFORMED BY A CERTIFIED WELDER OR INSPECTED BY A CERTIFIED WELDING INSPECTOR TO VERIFY THE INTEGRITY OF THE WELD.

8. FILLET WELDS TO HAVE A STRAIGHT OR CONVEX FACE SURFACE.

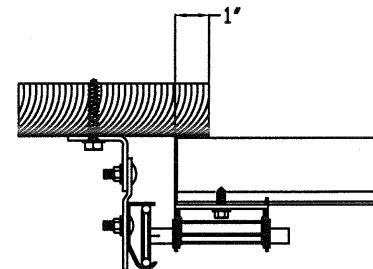
9. TACK WELD TOE OF ANGLE AT SAME SPACING TO PREVENT ROTATION OF TRACK ANGLE.



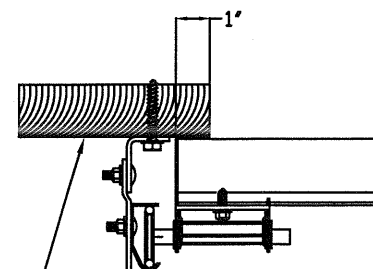
FOR LAG SCREWS & BRACKET SPACING SEE TABLE 2 ON PAGE 4



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



CONTINUOUS ANGLE MOUNT



REVERSE ANGLE MOUNT

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:
+181.7 LBS/FT & -204.4 LBS/FT

3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.

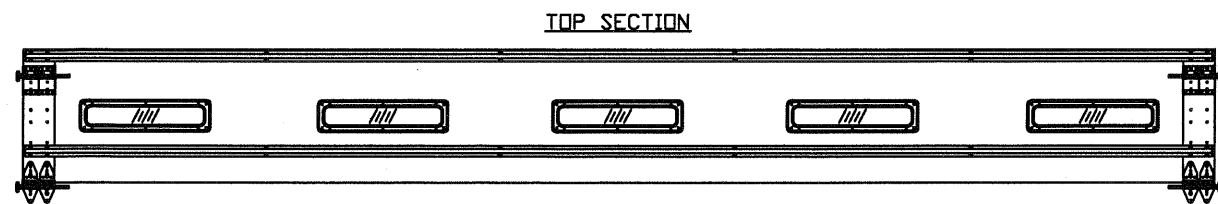
4. DOOR SECTIONS SHALL BE 24 GA. (.022) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH

5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADING

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 18'2 x 24' DESIGN LOADS +20.0 PSF -22.5 PSF TEST LOADS +30.0 PSF -33.8 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. Eriepark Ave., Greensboro, NC 27410
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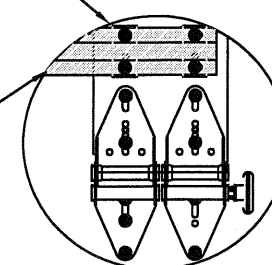
MODEL 1000 AMARR 2432			
SIZE	DRAWN BY DRD	DATE 2/22/19	DRAWING NUMBER IBC-1018-120-15-M
B	CHECKED BY DLJ	DATE 10/11/19	
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 2 OF 4



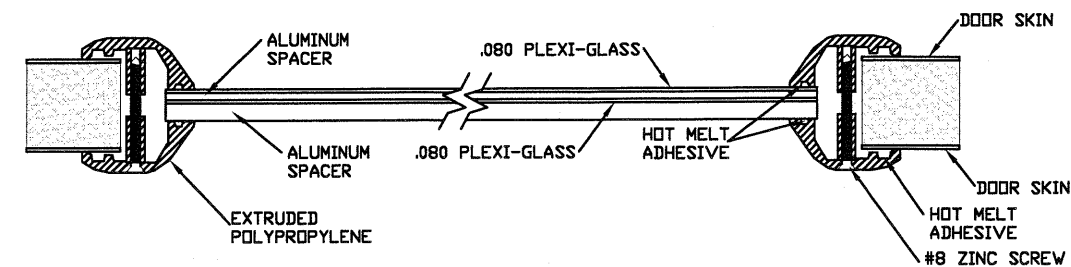
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS
N.T.S.

OPTIONAL STRUT SPACER

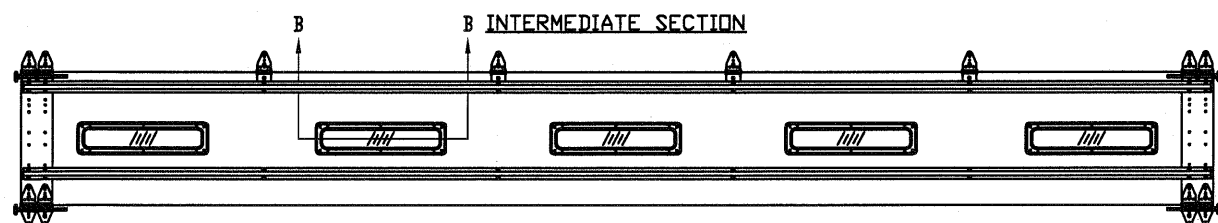
3" X 20 GA. STRUT ATTACHED
W/ (4) 1/4" X 1" HEX HEAD
SCREWS PER END STILE W/ (2)
1/4" X 1" HEX HEAD SCREWS
PER CENTER STILE



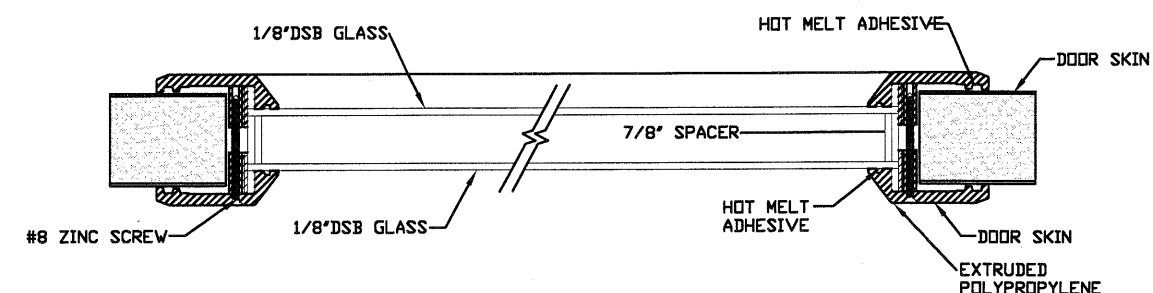
STRUT SPACER
N.T.S. 5



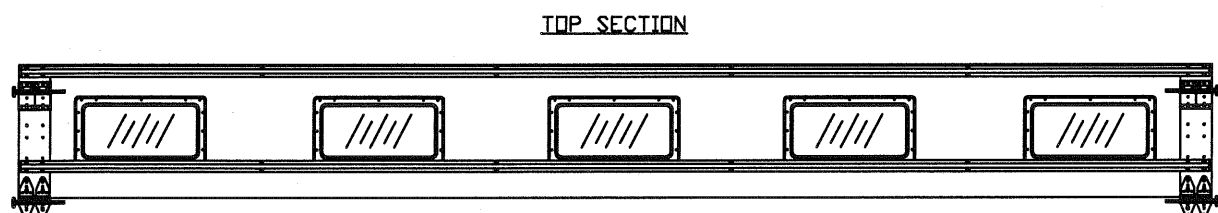
SECTION B-B 24" X 6" WINDOW DETAIL W/ .080 PLEXI-GLASS
N.T.S.



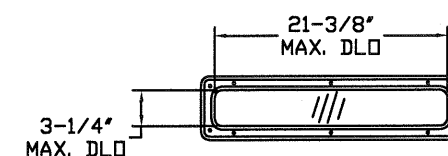
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS
N.T.S.



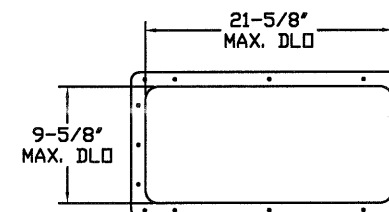
SECTION C-C 24" X 12" WINDOW DETAIL W/ 1-1/8" INSULATED GLASS
N.T.S.



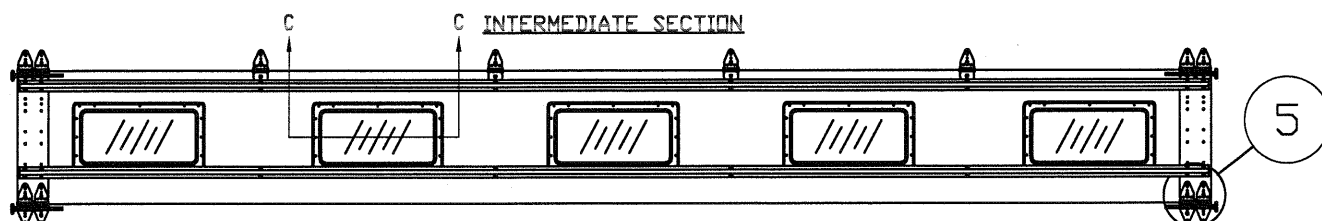
OPTIONAL GLAZED SECTION W/ 24" X 12" WINDOWS
N.T.S.



24" X 6" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



24" X 12" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



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

NOTE A: GLAZED SECTIONS ALLOWED
IN ANY ARRANGEMENT EXCEPT
IN THE BOTTOM SECTION.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE,
18'2" x 24'

DESIGN LOADS
+20.0 PSF
-22.5 PSF

TEST LOADS
+30.0 PSF
-33.8 PSF

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

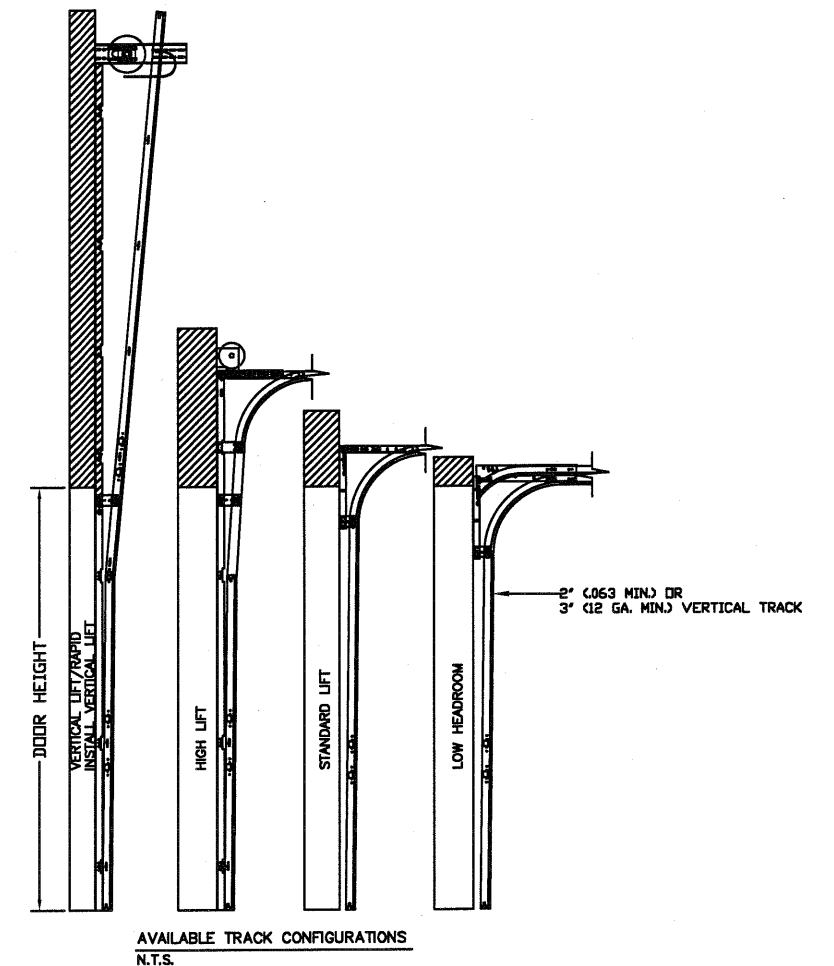
FL

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MODEL 1000 AMARR 2432

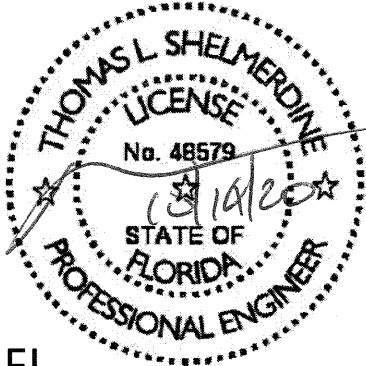
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ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 3 OF 4

Section Width		Center Stile Locations (Measured from Left Edge)				Max Design Loads Allowed	
(ft)	(in)	1st (in)	2nd (in)	3rd (in)	4th (in)	Positive (PSF)	Negative (PSF)
16'	4	50	98	146		17.8	20
16'	6	51	99	147		17.6	19.8
16'	8	52	100	148		17.5	19.6
16'	10	53	101	149		17.3	19.4
17'	0	39	81	123	165	20.8	23.4
17'	2	40	82	124	166	20.8	23.4
17'	4	41	83	125	167	20.8	23.4
17'	6	42	84	126	168	20.7	23.3
17'	8	43	85	127	169	20.5	23.1
17'	10	44	86	128	170	20.3	22.8
18'	0	43.5	86.5	129.5	172.5	20.1	22.7
18'	2	44.5	87.5	130.5	173.5	20.0	22.5



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

SECTION	STRUT SIZE
12TH	3"
	3"
11TH	3"
	3"
10TH	3"
	3"
9TH	3"
	3"
8TH	3"
	3"
7TH	3"
	3"
6TH	3"
	3"
5TH	3"
	3"
4TH	3"
	3"
3RD	3"
	3"
2ND	3"
	3"
BOTTOM	3"
	3"

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 18'2" x 24' DESIGN LOADS +20.0 PSF -22.5 PSF TEST LOADS +30.0 PSF -33.8 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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ENTREMATICS 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1018-120-15-M SHEET 4 OF 4