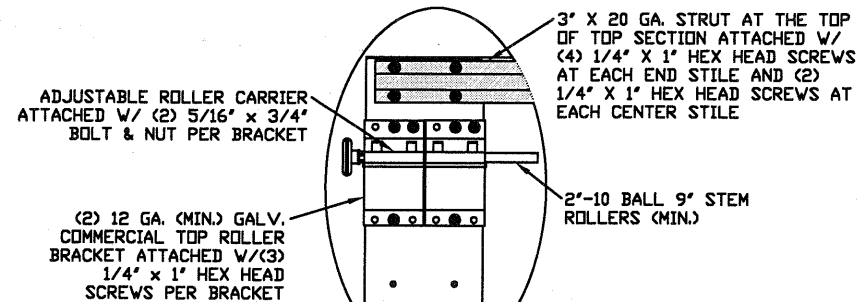
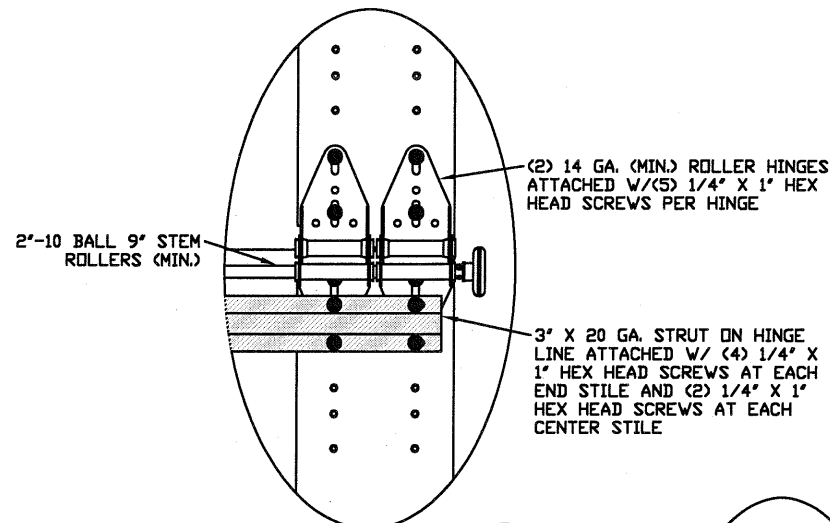
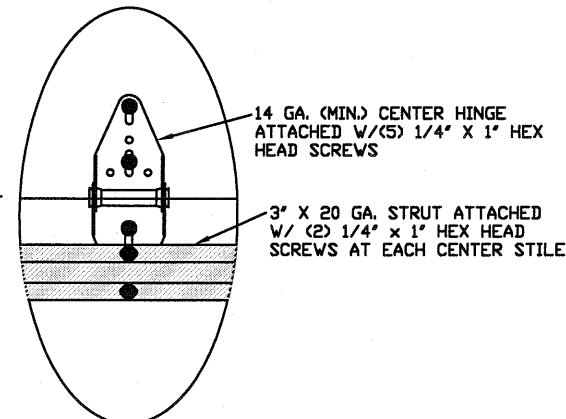




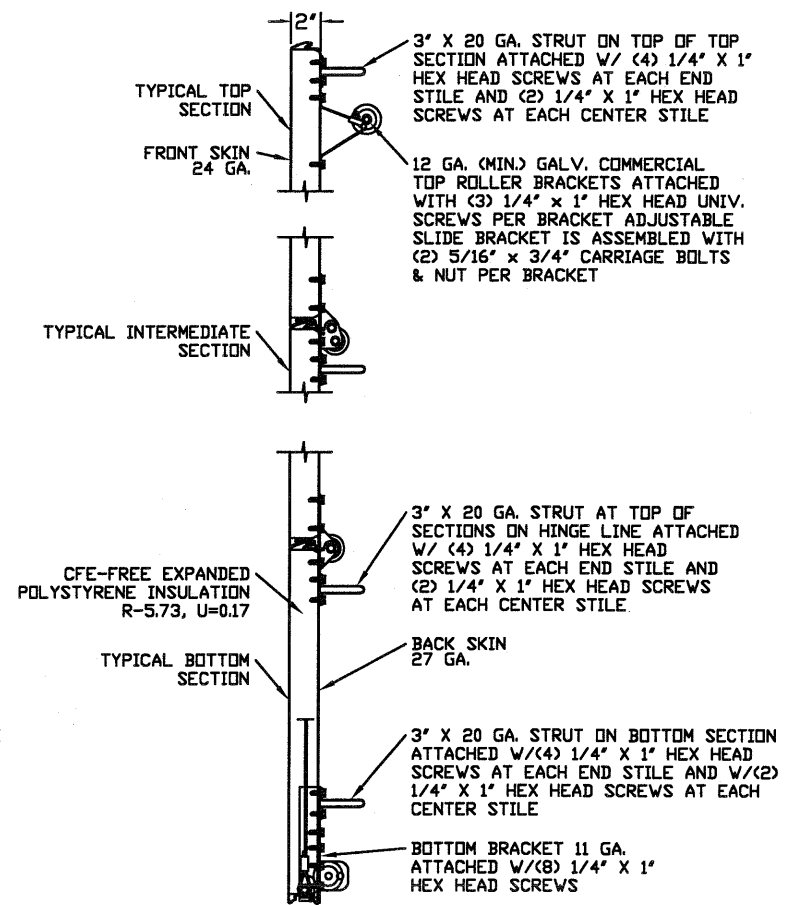
TYPICAL TOP FIXTURES
N.T.S.



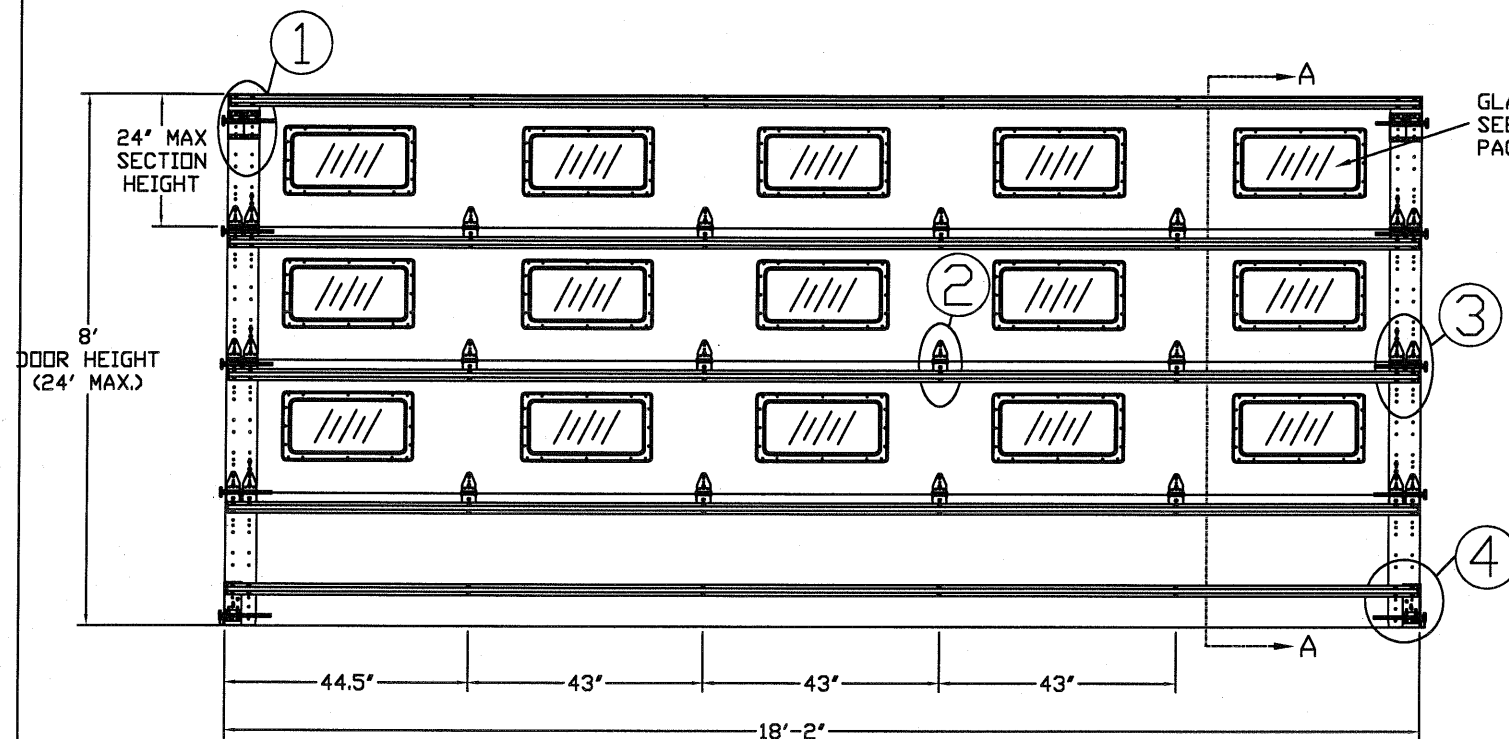
TYPICAL END HINGE
N.T.S.



TYPICAL CENTER HINGE
N.T.S.

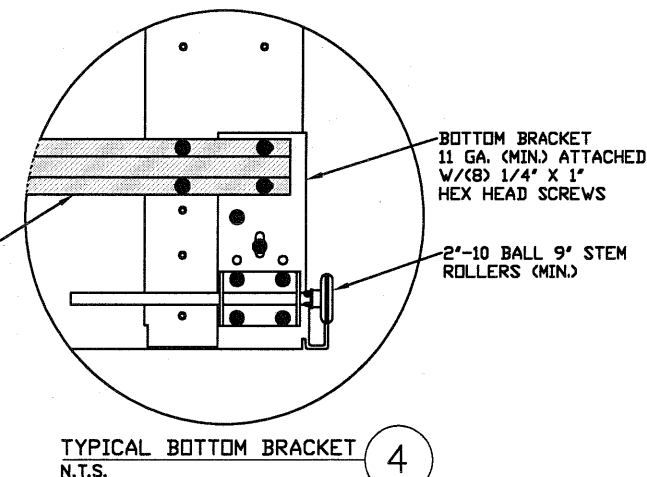


SECTION A-A (SIDE VIEW)
N.T.S.

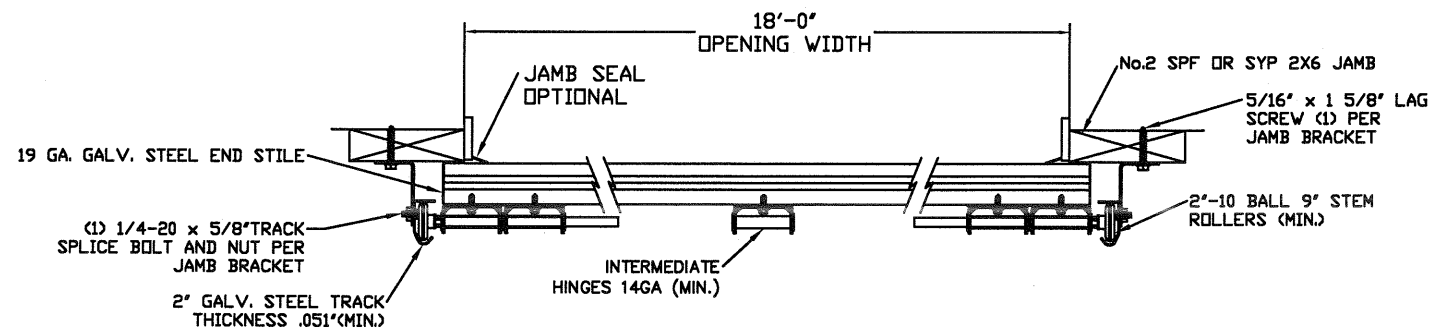


INSIDE ELEVATION
N.T.S.

3" X 20 GA STRUT STACKED ON BOTTOM BRACKET ATTACHED W/ (4) 1/4" X 1" HEX HEAD SCREWS AT EACH END STILE AND (2) 1/4" X 1" HEX HEAD SCREWS AT EACH CENTER STILE



TYPICAL BOTTOM BRACKET
N.T.S.



TRACK MOUNTING DETAIL
N.T.S.

EDGE OF DOOR 1" OVERLAP ON EACH SIDE

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)	134	122	116	111	106
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18'2" x 24'

DESIGN LOADS
+14.8 PSF
-16.7 PSF

TEST LOADS
+22.2 PSF
-25.1 PSF

FL

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

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

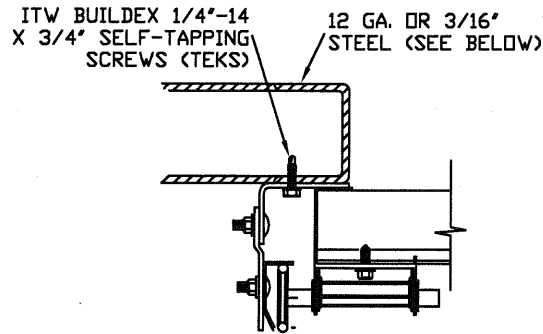
MODEL 1000 AMARR 2432

SIZE	DRAWN BY	DLJ	DATE	10/17/19	DRAWING NUMBER
B	CHECKED BY	DRC	DATE	10/17/19	IBC-1018-104-15-M

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165 CARRIAGE COURT WINSTON-SALEM, NC. 27105

SHEET 1 OF 4

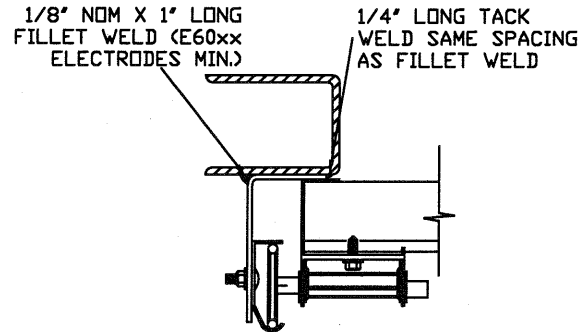
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

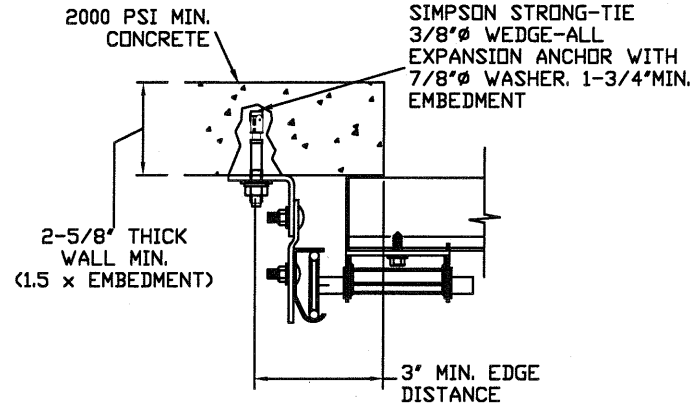
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 20" O.C.
REFER TO NOTES 1, 2 AND 5

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



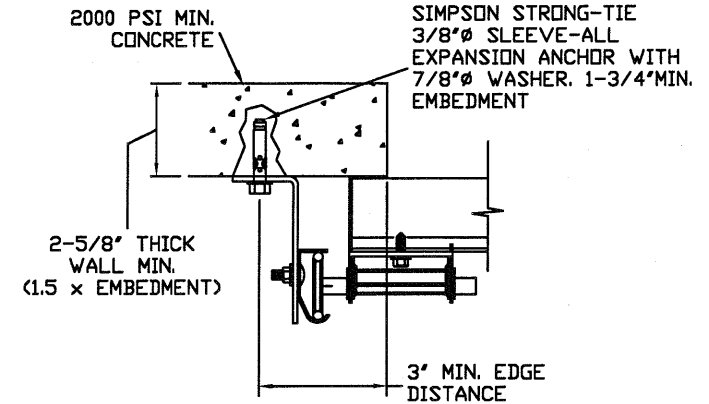
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

**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 24" 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 24" O.C.
REFER TO NOTES 1, 2, 3, 4 AND 5

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 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)

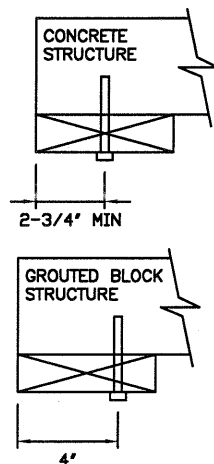
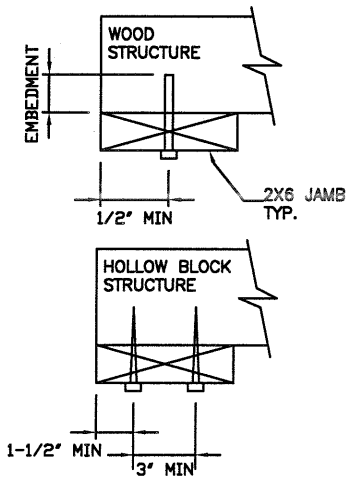
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

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

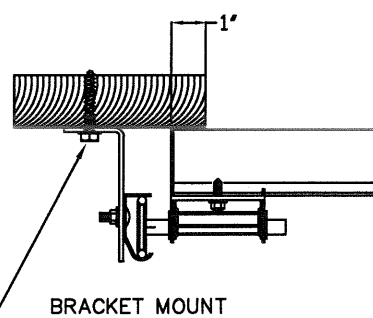


NOTES:

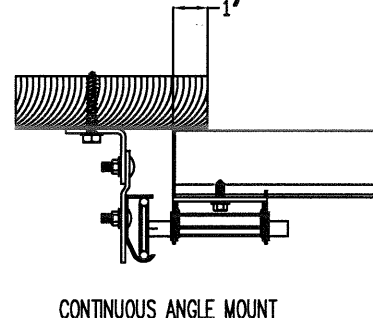
1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3" REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.
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

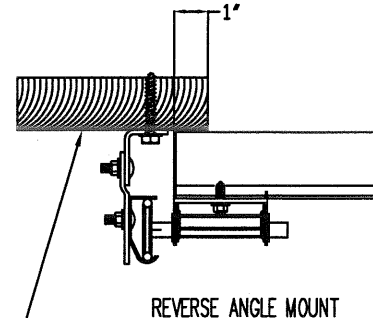
FOR LAG SCREWS & BRACKET SPACING SEE TABLE 2 ON PAGE 4



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

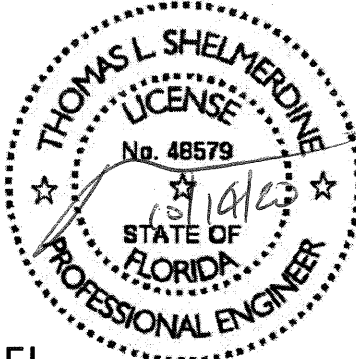


CONTINUOUS ANGLE MOUNT



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

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 18'2 x 24'	Thomas L. Shelmerdine, PE (FL PE #00048579) Structural Solutions, PA (FL Firm #29412)		dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410
DESIGN LOADS +14.8 PSF -16.7 PSF			
TEST LOADS +22.2 PSF -25.1 PSF			

FL

Amarr

MODEL 1000 AMARR 2432

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B	CHECKED BY	DRC	DATE	10/17/19	
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					IBC-1018-104-15-M

SHEET 2 OF 4

Diagram illustrating an intermediate section of a continuous beam. The beam is supported by five supports, with reaction forces labeled B at the second and third supports. The beam is divided into four spans. Below the beam, four rectangular cross-sections are shown, each containing diagonal hatching.

1/8"DSB GLASS

HOT MELT ADHESIVE

DOOR SKIN

7/8" SPACER

#8 ZINC SCREW

1/8"DSB GLASS

HOT MELT ADHESIVE

DOOR SKIN

EXTRUDED POLYPROPYLENE

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 18'2 x 24' DESIGN LOADS +14.8 PSF -16.7 PSF TEST LOADS +22.2 PSF -25.1 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL	dba Structural Solutions of North Carolina, Inc. 500 W. ...
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MODEL 1000 AMARR 2432

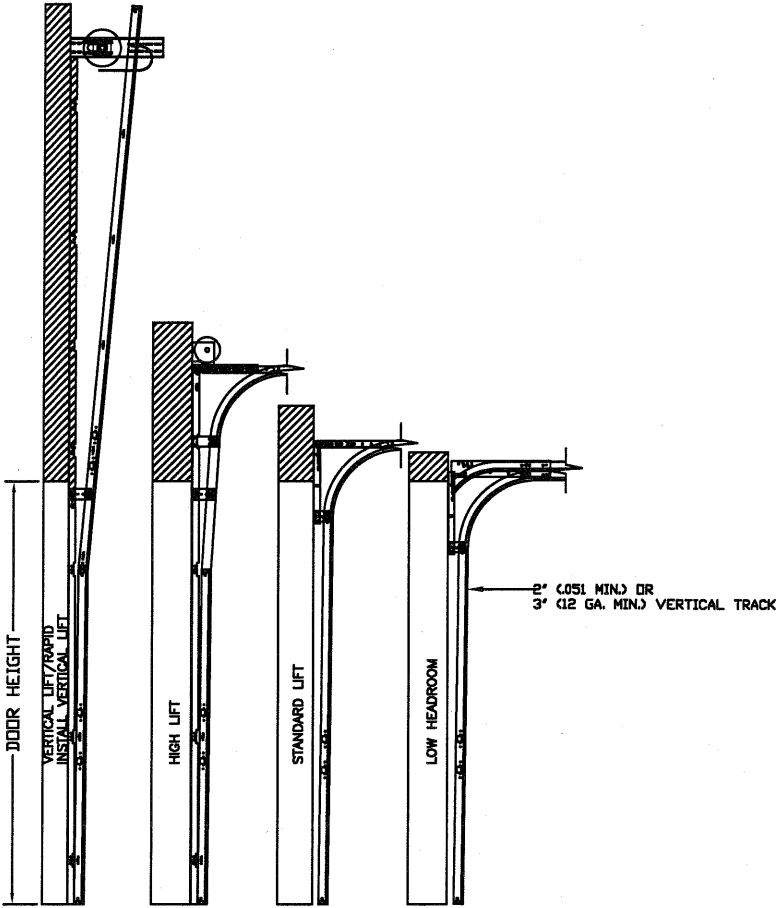
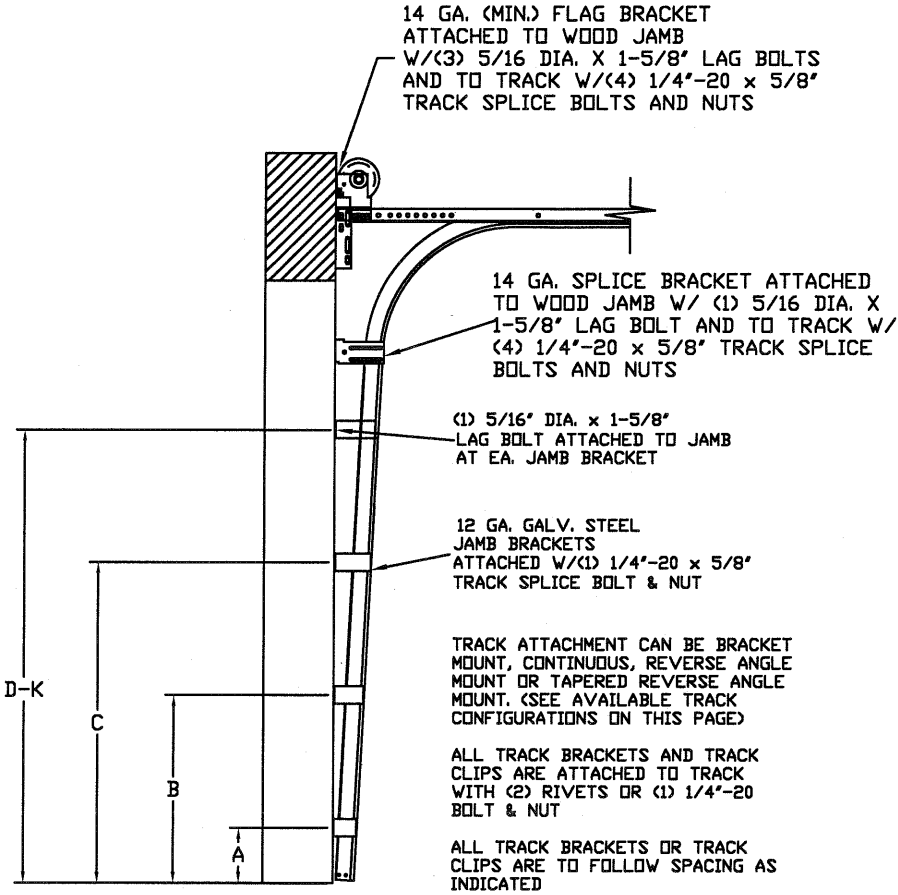
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B	CHECKED BY	DRC	DATE	10/17/19	

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

TABLE 1

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		13.2	14.9
16'	6	51	99	147		13	14.7
16'	8	52	100	148		12.9	14.6
16'	10	53	101	149		12.8	14.4
17'	0	39	81	123	165	15.4	17.3
17'	2	40	82	124	166	15.4	17.3
17'	4	41	83	125	167	15.4	17.3
17'	6	42	84	126	168	15.3	17.3
17'	8	43	85	127	169	15.2	17.1
17'	10	44	86	128	170	15	16.9
18'	0	43.5	86.5	129.5	172.5	14.9	16.8
18'	2	44.5	87.5	130.5	173.5	14.8	16.7



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
SEE TABLE 2

TABLE 3

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

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT											SPLICE S
	A	B	C	D	E	F	G	H	I	J	K	
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"

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18'2 x 24'

DESIGN LOADS
+14.8 PSF
-16.7 PSF

TEST LOADS
+22.2 PSF
-25.1 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

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

SHEET 4 OF 4