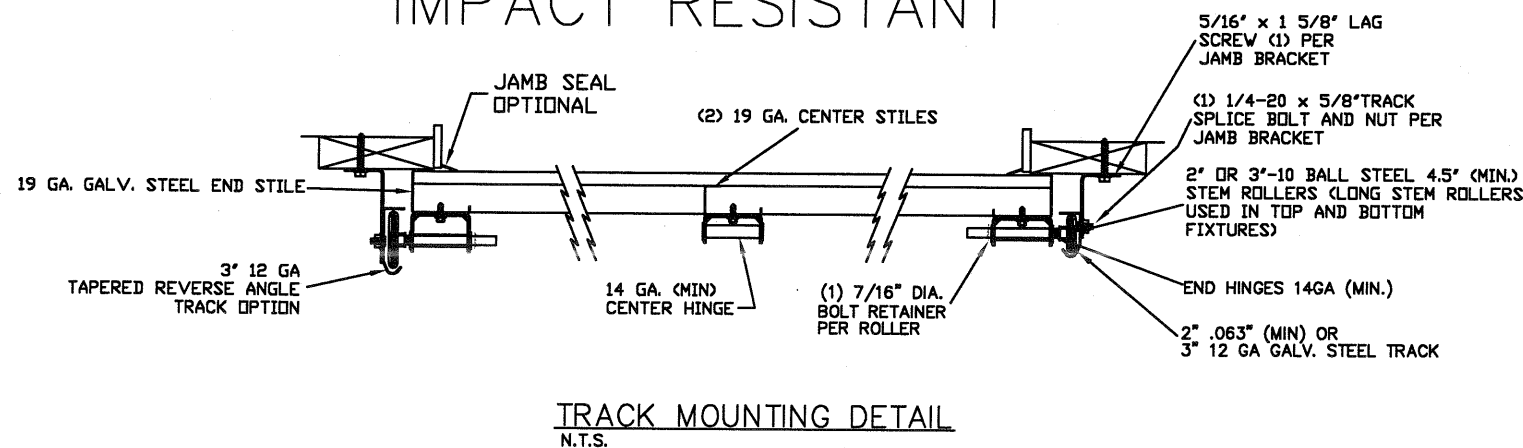
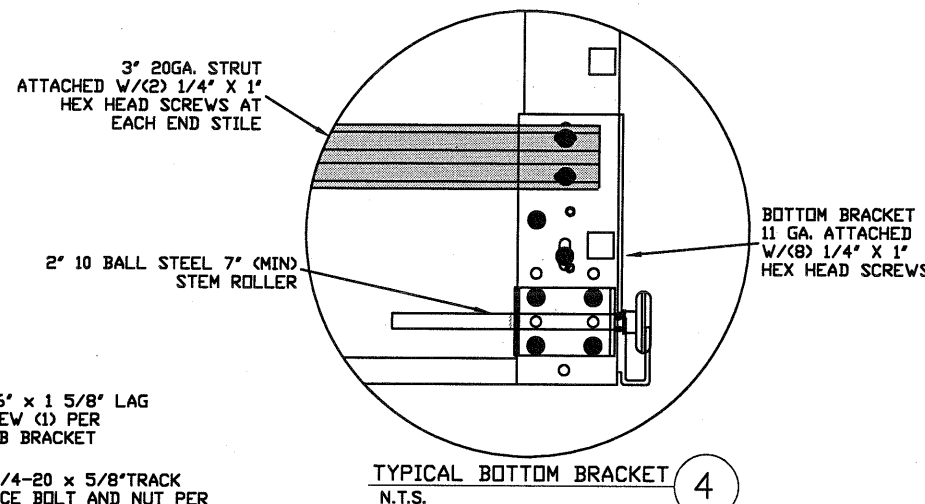
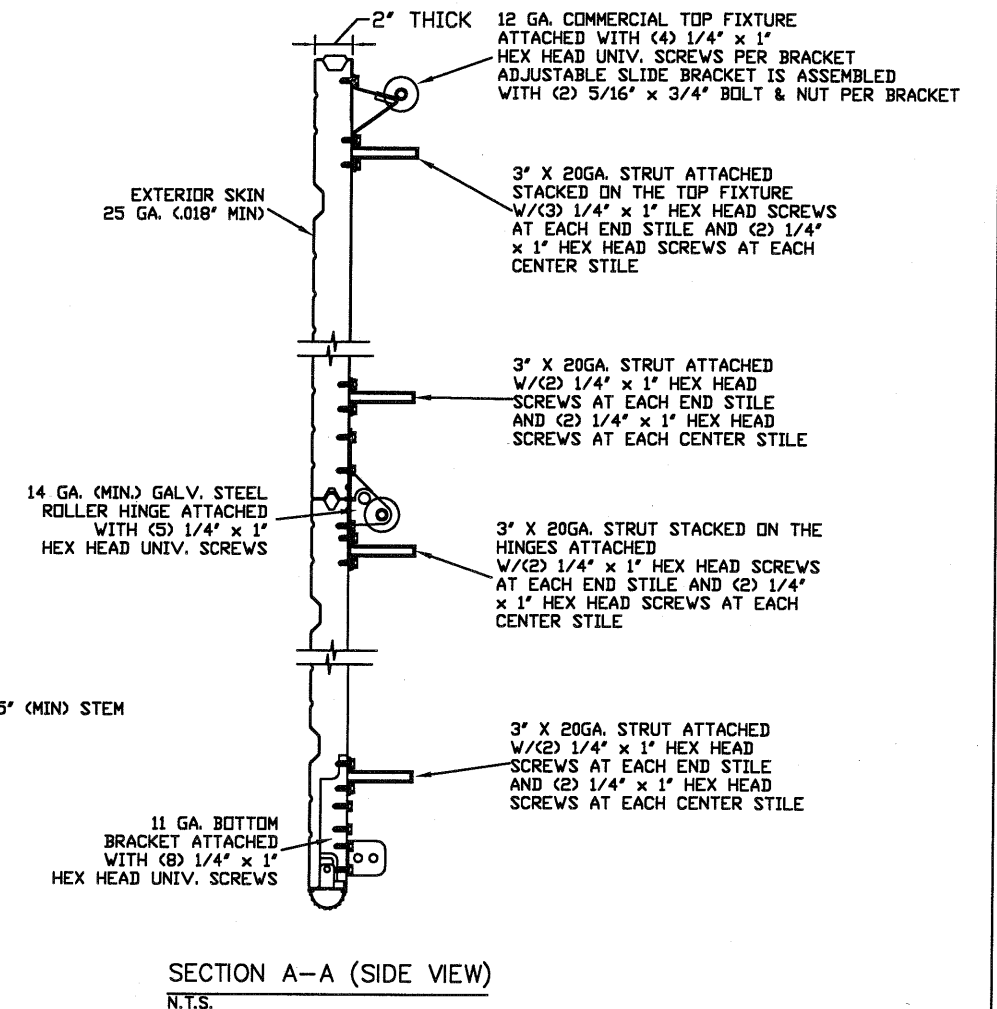
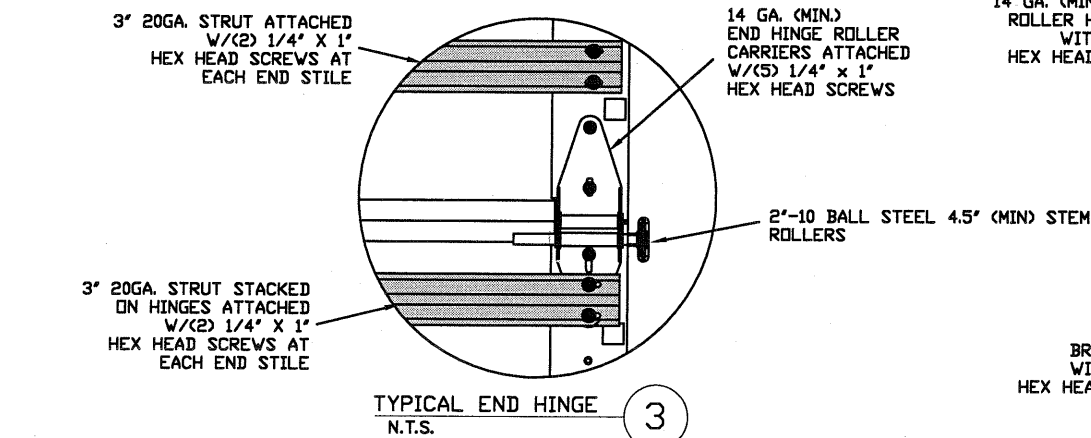
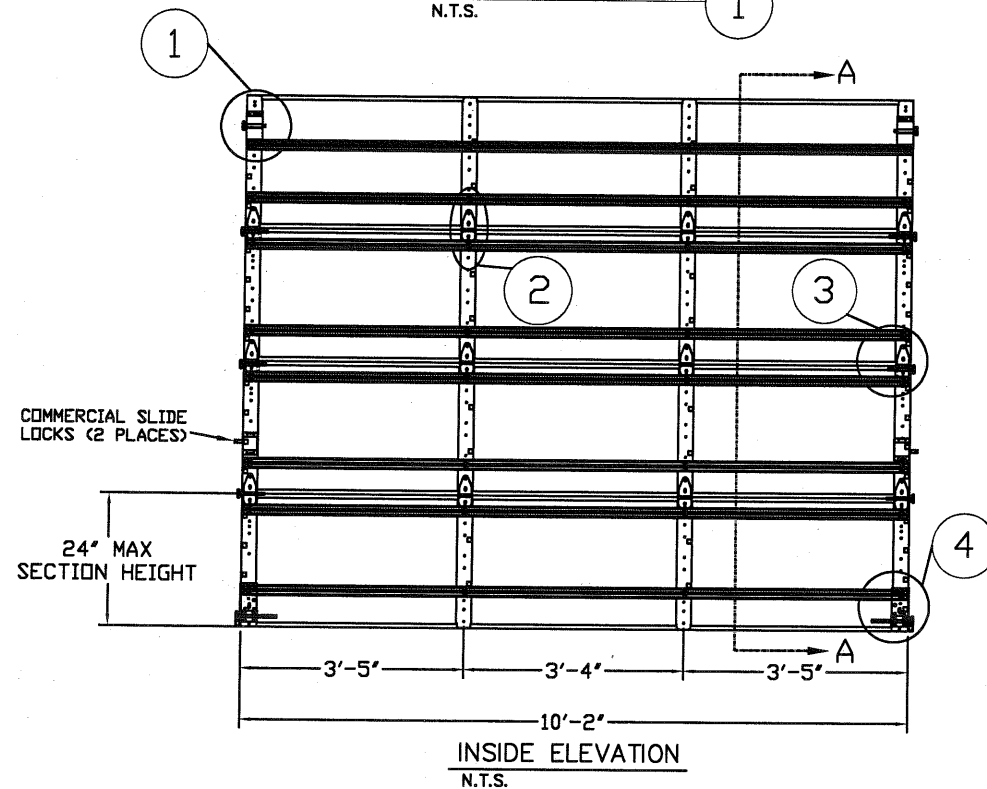
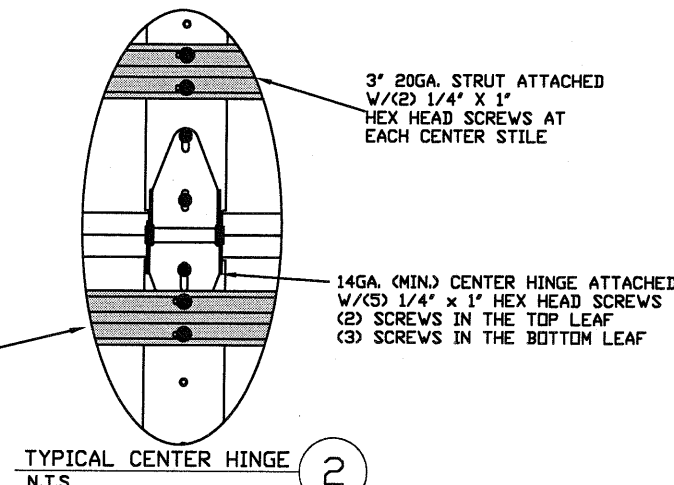
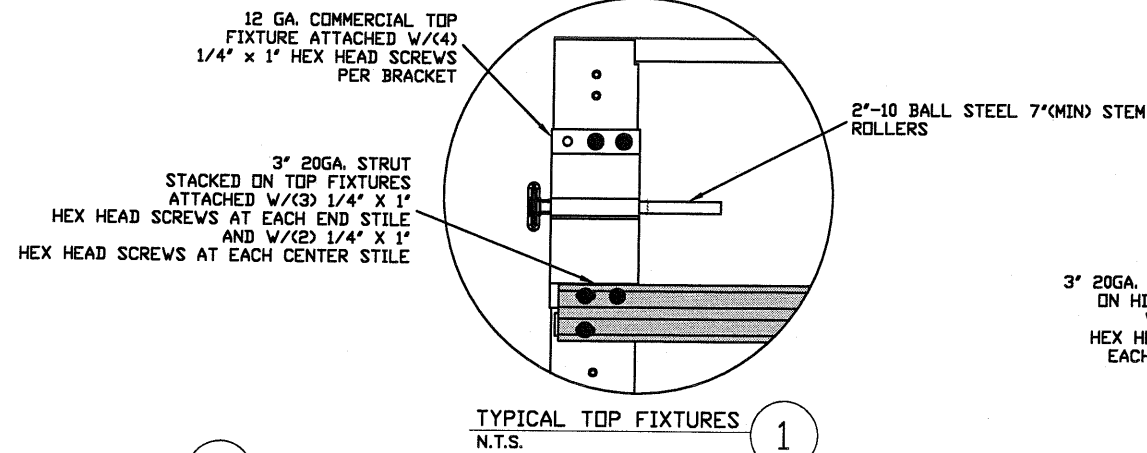




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996 & F588, DASMA 108 & 115. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-16 WITH THE FOLLOWING PARAMETERS(5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT LESS THAN 10 DEGREES SLOPE):

WIND SPEED (MPH)	194	176	167	160	153
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

NOTE: FOR STRUT SCHEDULE SEE TABLE 3 ON PAGE 3

EDGE OF DOOR 1" OVERLAP ON EACH SIDE

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
10'2 x 24'

DESIGN LOADS
+32.1 PSF
-37.3 PSF

TEST LOADS
+48.2 PSF
-56.0 PSF

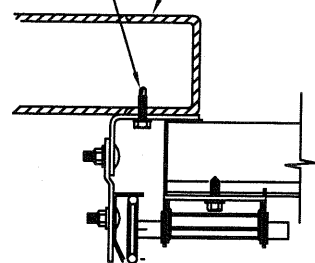
Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

FL

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

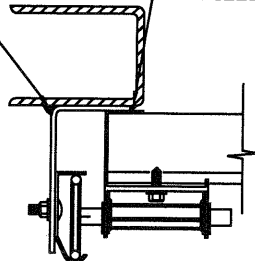
MODEL 2500 AMARR 2502, 2512				
MODEL 2400 AMARR 2402, 2412, 2422				
MODEL 2000 AMARR 2002, 2012, 2022				
SIZE	DRAWN BY	DRC	DATE	DRAWING NUMBER
B	DLJ	DLJ	10/29/19	IBC-2510-150-15-1
ENTREMATICS			SHEET 1 OF 3	
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105				

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

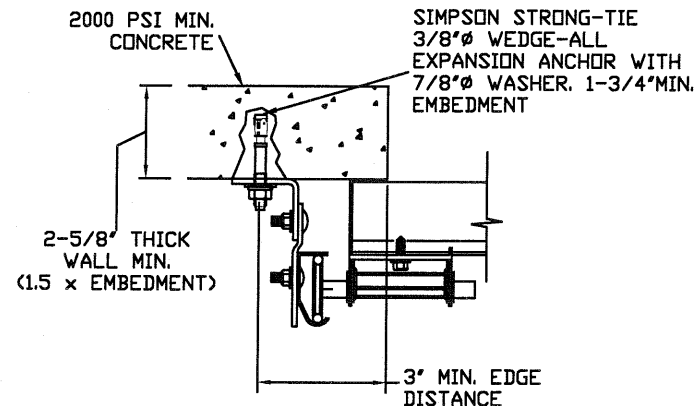


12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6'
FROM ENDS AND 16' O.C.
REFER TO NOTES: 1, 2 AND 5

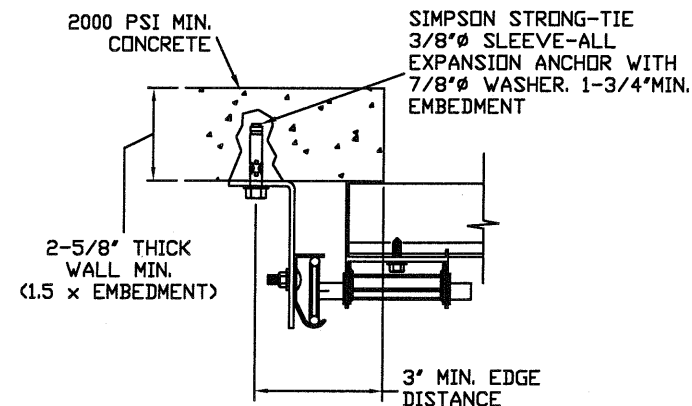
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



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 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



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

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)

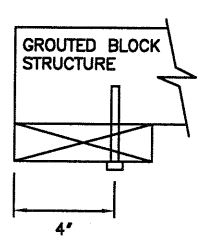
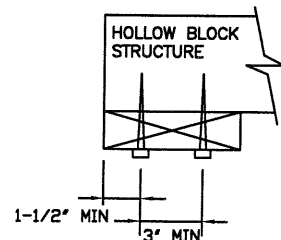
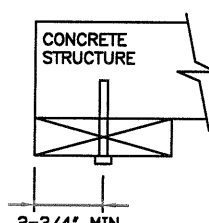
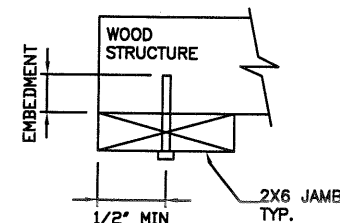
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART)
AT 16" O.C. (1 1/2" EMBEDMENT)

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)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)

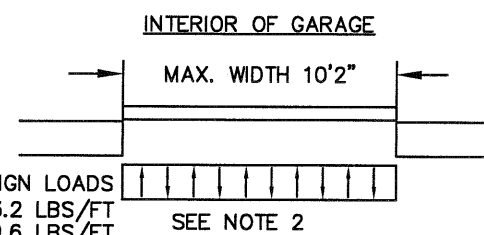
(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

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

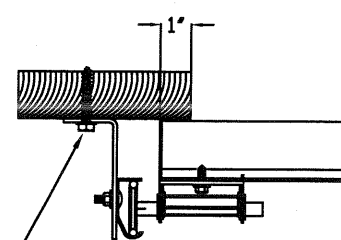


1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.

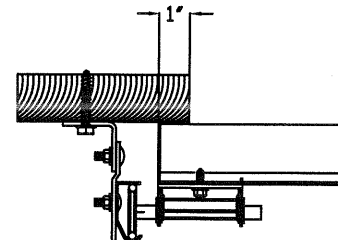
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3" REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED 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.



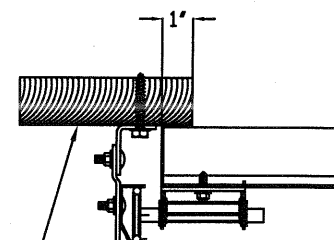
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 3 FOR TRACK CONFIGURATION DETAIL



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



CONTINUOUS ANGLE MOUNT

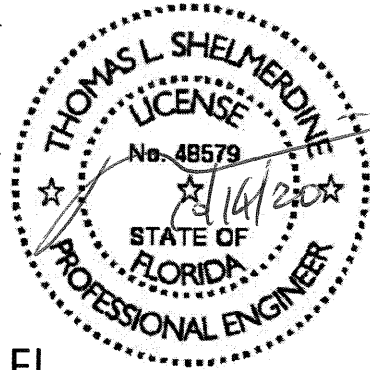


2x6 WOOD JAMB SYP OR SPF
(NO.2) OR BETTER (TYP.)

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:
+163.2 LBS/FT & -189.6 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED
AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 25 GA. (.018) 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 LOADINGS.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 10'2 x 24' DESIGN LOADS +32.1 PSF -37.3 PSF TEST LOADS +48.2 PSF -56.0 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL		dba Structural Solutions of North Carolina, Inc. 5034 C.W.
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MODEL 2500 AMARR 2502, 2512 MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022				
SIZE	DRAWN BY	DRC	DATE	DRAWING NUMBER
	B	CHECKED BY	DLJ	
			10/29/19	IBC-2510-150-15-
			11/01/19	

ENTREMATIC

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

SHEET 2 OF 3

Section Width (ft)		Center Stile Locations		Max Design Loads Allowed	
		1st (in)	2nd (in)	Positive (PSF)	Negative (PSF)
6'	0"	36"	-	35.9	41.7
6'	2"	37"	-	34.9	40.6
6'	4"	38"	-	34.0	39.5
6'	6"	39"	-	33.1	38.5
6'	8"	40"	-	32.3	37.5
6'	10"	41"	-	31.5	36.6
7'	0"	42"	-	30.7	35.7
7'	2"	43"	-	30.0	34.9
7'	4"	44"	-	29.3	34.1
7'	6"	45"	-	28.7	33.4
7'	8"	46"	-	28.1	32.6
7'	10"	47"	-	27.5	31.9
8'	0"	48"	-	26.9	31.3
8'	2"	49"	-	26.3	30.6
8'	4"	50"	-	25.8	30.0
8'	6"	51"	-	25.3	29.4
8'	8"	52"	-	24.8	28.9
8'	10"	53"	-	24.4	28.3
9'	0"	54"	-	23.9	27.8
9'	2"	37"	73"	35.4	41.1
9'	4"	36"	76"	34.0	39.5
9'	6"	37"	77"	33.5	39.0
9'	8"	38"	78"	33.1	38.5
9'	10"	39"	79"	32.7	38.0
10'	0"	40"	80"	32.3	37.5
10'	2"	41"	81"	32.1	37.3

SECTION	STRUT SIZE
8TH	3"
	3"
7TH	3"
	3"
6TH	3"
	3"
5TH	3"
	3"
4TH	3"
	3"
3RD	3"
	3"
2ND	3"
	3"
BOTTOM	3"
	3"

DOOR HEIGHT		TRACK ATTACHMENT												TYPICAL SPLICE
		A	B	C	D	E	F	G	H	I	J	K	L	
7'	0"	3.5	10"	34"	58"									76"
7'	6"	3.5	10"	34"	58"									82"
8'	0"	3.5	10"	34"	58"									88"
8'	6"	3.5	10"	34"	58"	82"								94"
9'	0"	3.5	10"	34"	58"	82"								100"
9'	6"	3.5	10"	34"	58"	82"								106"
10'	0"	3.5	10"	34"	58"	82"								112"
11'	0"	3.5	10"	34"	58"	82"	106"							124"
12'	0"	3.5	10"	34"	58"	82"	106"							136"
13'	0"	3.5	10"	34"	58"	82"	106"	130"						148"
14'	0"	3.5	10"	34"	58"	82"	106"	130"						160"
15'	0"	3.5	10"	34"	58"	82"	106"	130"	154"					172"
16'	0"	3.5	10"	34"	58"	82"	106"	130"	154"					184"
17'	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"				196"
18'	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"				208"
19'	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"			220"
20'	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"			232"
21	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		244"
22	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		256"
23	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	268"
24	0"	3.5	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	280"

13 GA. (MIN.) FLAG BRACKET
ATTACHED TO WOOD JAMB
W/ (3) 5/16 DIA. X 1-5/8" LAG BOLTS
AND TO TRACK W/ (4) 1/4"-20 X 5/8"
TRACK SPLICE BOLTS AND NUTS

13 GA. SPLICE BRACKET ATTACHED
TO WOOD JAMB W/ (1) 5/16 DIA. X
1-5/8" LAG BOLT AND TO TRACK W/
(4) 1/4"-20 X 5/8" TRACK SPLICE
BOLTS AND NUTS

(1) 5/16" DIA. X 1-5/8"
LAG BOLT ATTACHED TO JAMB
AT EA. JAMB BRACKET

12 GA. GALV. STEEL
JAMB BRACKETS
ATTACHED W/ (1) 1/4"-20 X 5/8"
TRACK SPLICE BOLT & NUT

TRACK ATTACHMENT CAN BE BRACKET
MOUNT, CONTINUOUS, REVERSE ANGLE
MOUNT OR TAPERED REVERSE ANGLE
MOUNT. (SEE AVAILABLE TRACK
CONFIGURATIONS ON THIS PAGE)

ALL TRACK BRACKETS AND TRACK
CLIPS ARE ATTACHED TO TRACK
WITH (2) RIVETS OR (1) 1/4"-20
BOLT & NUT

ALL TRACK BRACKETS OR TRACK
CLIPS ARE TO FOLLOW SPACING AS
INDICATED

13 GA. (MIN.) FLAG BRACKET
ATTACHED TO WOOD JAMB
W/ (3) 5/16 DIA. X 1-5/8" LAG BOLTS
AND TO TRACK W/ (4) 1/4"-20 X 5/8"
TRACK SPLICE BOLTS AND NUTS

13 GA. SPLICE BRACKET ATTACHED
TO WOOD JAMB W/ (1) 5/16 DIA. X
1-5/8" LAG BOLT AND TO TRACK W/
(4) 1/4"-20 X 5/8" TRACK SPLICE
BOLTS AND NUTS

(1) 5/16" DIA. X 1-5/8"
LAG BOLT ATTACHED TO JAMB
AT EA. JAMB BRACKET

12 GA. GALV. STEEL
JAMB BRACKETS
ATTACHED W/ (1) 1/4"-20 X 5/8"
TRACK SPLICE BOLT & NUT

TRACK ATTACHMENT CAN BE BRACKET
MOUNT, CONTINUOUS, REVERSE ANGLE
MOUNT OR TAPERED REVERSE ANGLE
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ALL TRACK BRACKETS AND TRACK
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BOLT & NUT

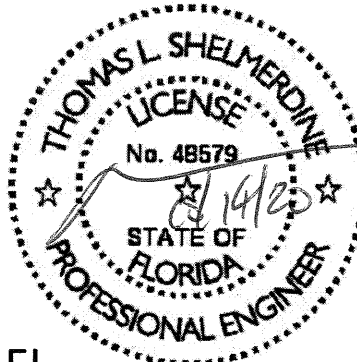
ALL TRACK BRACKETS OR TRACK
CLIPS ARE TO FOLLOW SPACING AS
INDICATED

2" (0.63 MIN) OR
3" (12 GA. MIN) VERTICAL TRACK

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

AVAILABLE TRACK CONFIGURATIONS
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 10'2 x 24' DESIGN LOADS +32.1 PSF -37.3 PSF TEST LOADS +48.2 PSF -56.0 PSF	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
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MODEL 2500 AMARR 2502, 2512 MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022				
SIZE B	DRAWN BY	DRC	DATE 10/29/19	DRAWING NUMBER IBC-2510-150-15-1
	CHECKED BY	DLJ	DATE 11/01/19	

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