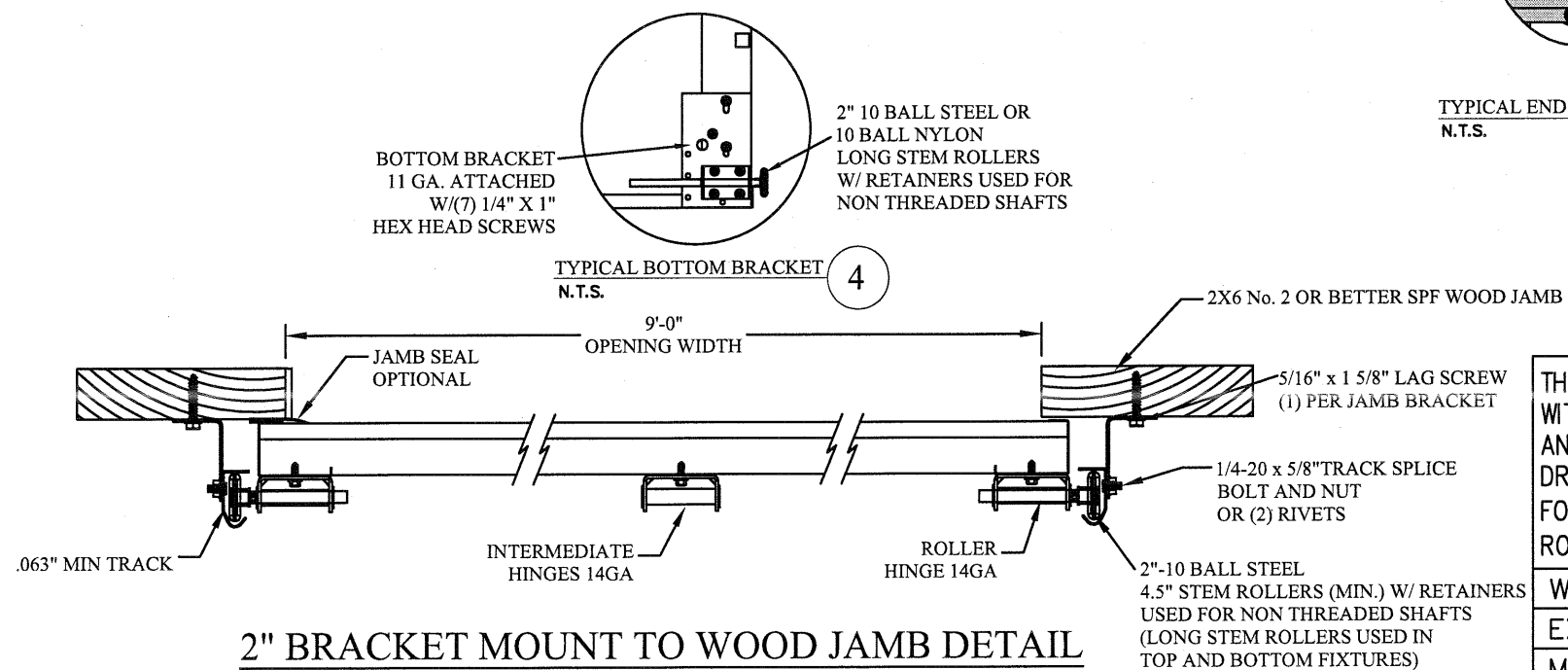
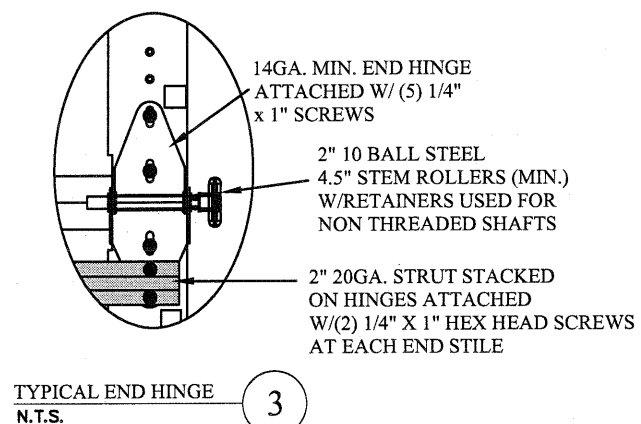
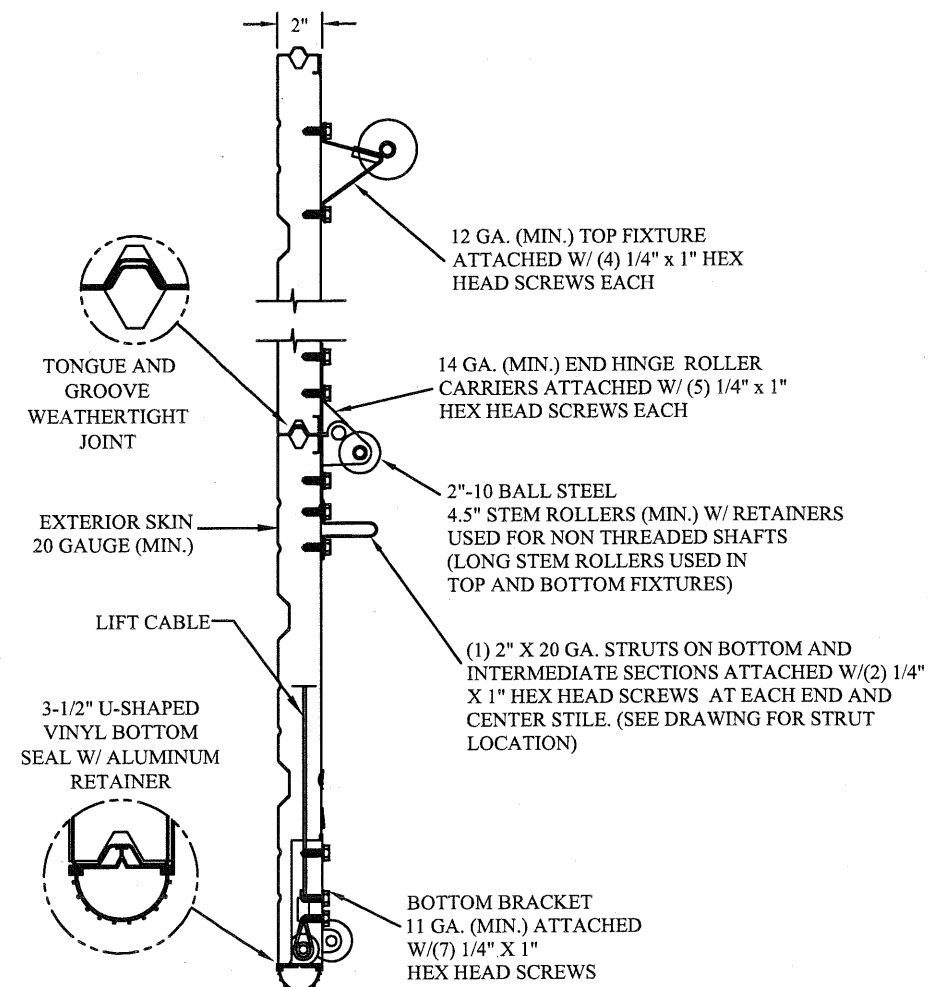
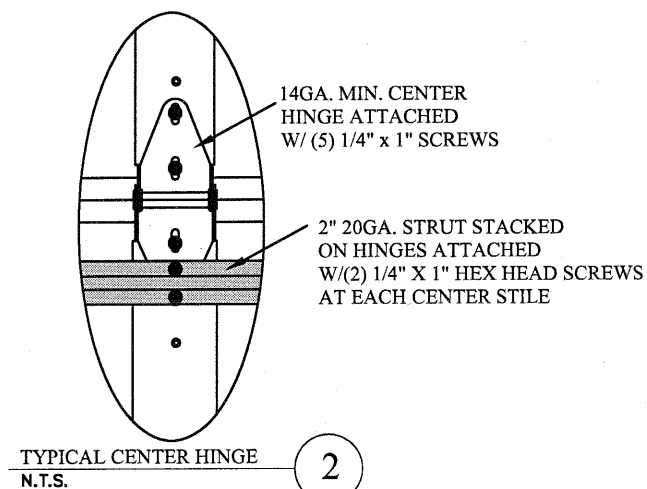
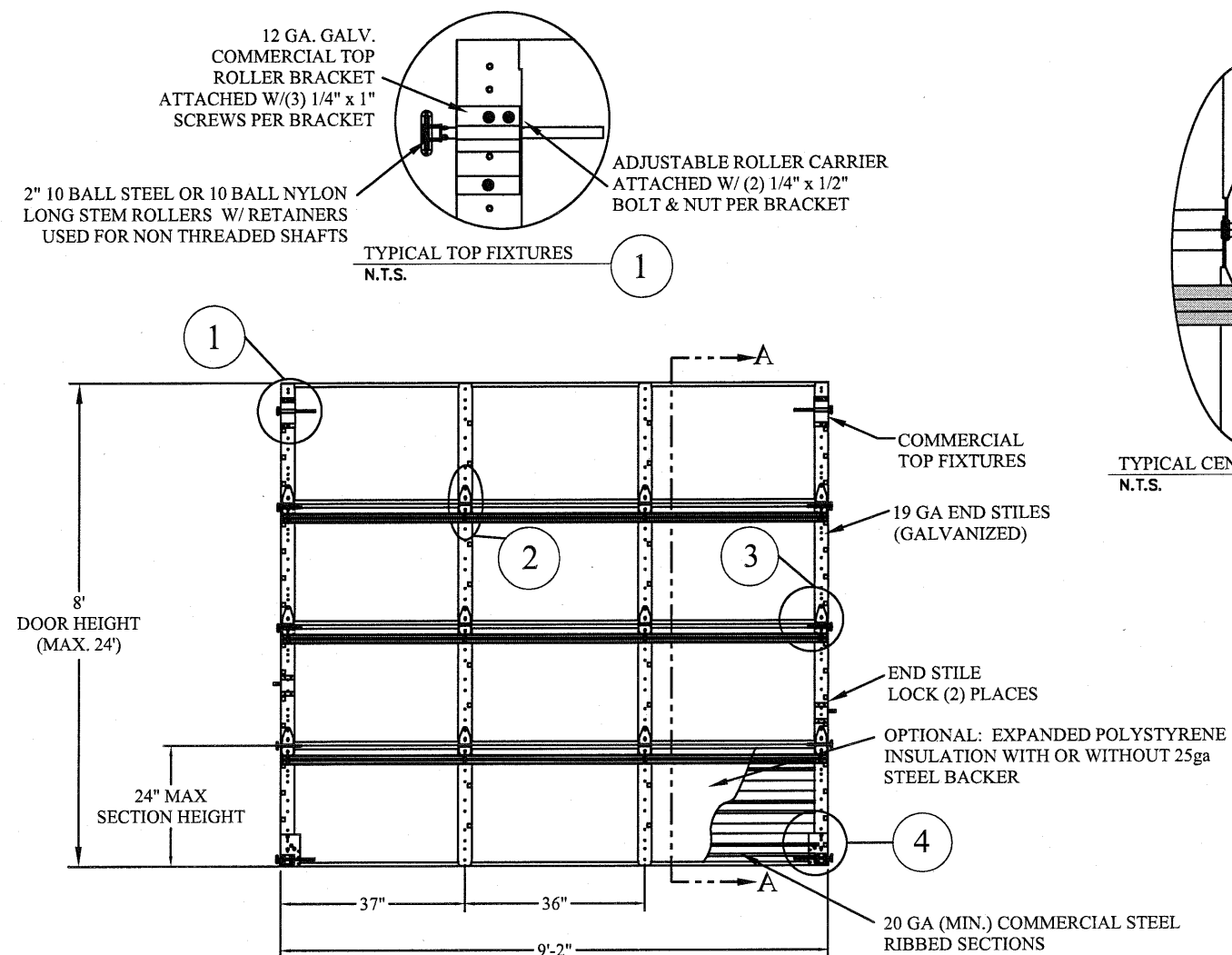




LARGE MISSILE IMPACT
RESISTANT

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN ASTM E1886, E1996, F588, AND DASHA 108, 115. 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)	168	152	145	138	133
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 9'2" x 24' DESIGN LOADS +24.2 PSF -28.4 PSF TEST LOADS +36.3 PSF -42.6 PSF LARGE MISSILE IMPACT RESISTANCE	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (PL Firm #29412) FL	dba Structural Solutions of North Carolina, Inc. 5021 G.W. Fwy. Suite 100 Charlotte, NC 28217
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MODEL 2000 AMARR 2002, 2012, 2022			
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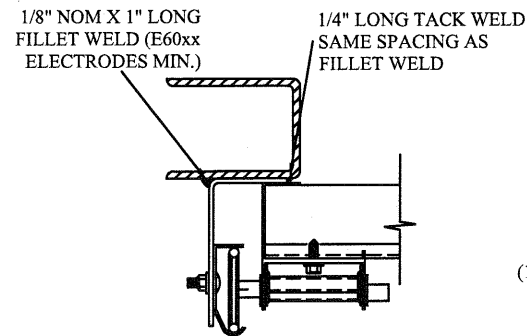
SIZE	DRAWN BY	R/LR	DATE	8/1/17	DRAWING NUMBER IBC-2009-130-11-
B	CHECKED BY	R/LR	DATE	8/1/17	

ENTREMATIC

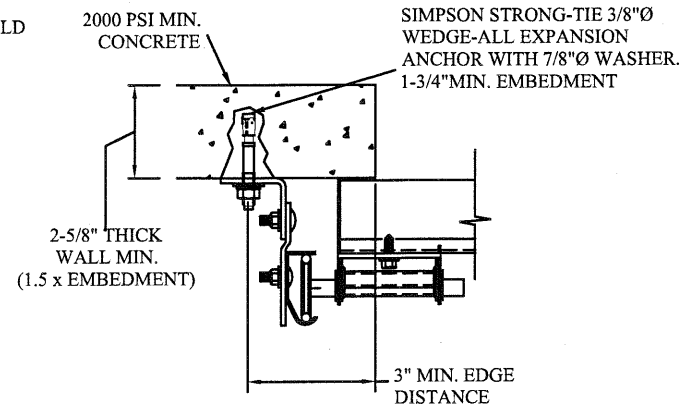
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 3

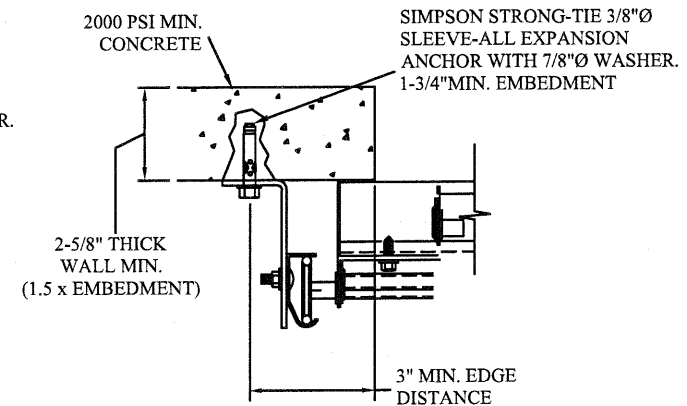
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS
AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



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



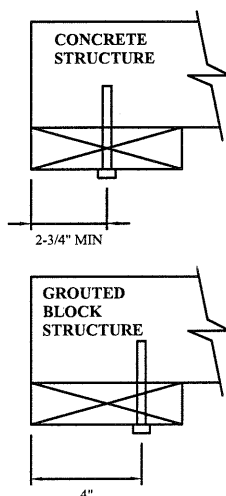
2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

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:
+110.9 LBS/FT AND -130.2 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 20 GA. (.033) MIN. EXTERIOR SKIN ROLLED FORMED, GALVANIZATION W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 24' HIGH USE (1) 2" 20GA STRUTS ON INTERMEDIATE AND BOTTOM SECTIONS.
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

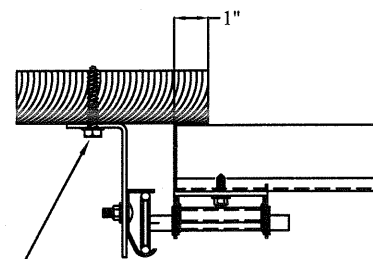
The image contains two technical drawings illustrating the installation of a jamb and plate into different types of masonry structures.

Top Drawing: WOOD STRUCTURE
 This drawing shows a cross-section of a wood structure. A vertical line represents the jamb, and a horizontal line represents the plate. The jamb is shown with a small square base. The plate is shown with a small square base. The distance between the jamb and the plate is labeled "1/2\" MIN". The label "WOOD STRUCTURE" is at the top. The label "2X6 JAMB TYP." is on the right. The label "EMBEDMENT" is on the left, with arrows indicating the depth of the jamb and plate into the structure.

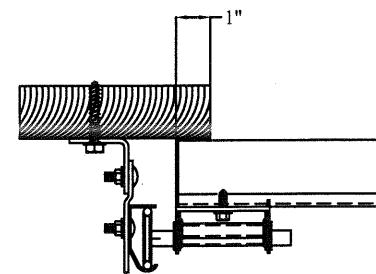
Bottom Drawing: HOLLOW BLOCK STRUCTURE
 This drawing shows a cross-section of a hollow block structure. Two vertical lines represent the jamb, and two horizontal lines represent the plate. The jamb is shown with small square bases. The plate is shown with small square bases. The distance between the jamb and the plate is labeled "1-1/2\" MIN". The distance between the two jamb lines is labeled "3\" MIN". The label "HOLLOW BLOCK STRUCTURE" is at the top.



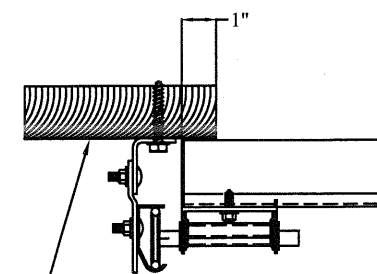
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 4 FOR TRACK CONFIGURATION DETAIL



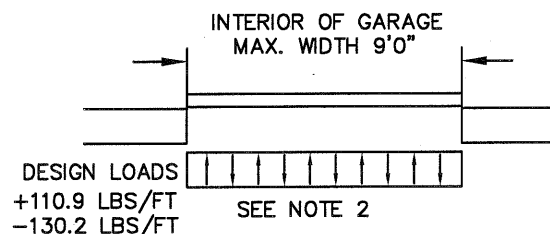
5/16" x 1 5/8" LAG SCREW (1) PER
JAMB BRACKET (1-1/2" EMBEDMENT
MINIMUM) (TYP.)



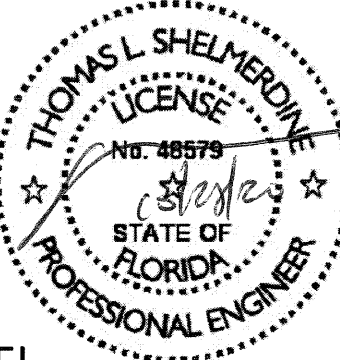
CONTINUOUS ANGLE MOUNT



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



REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 9'2" x 24' DESIGN LOADS +24.2 PSF -28.4 PSF TEST LOADS +36.3 PSF -42.6 PSF LARGE MISSILE IMPACT RESISTANCE	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 2000 AMARR 2002, 2012, 2022

SIZE	DRAWN BY	RLR	DATE 8/1/17	DRAWING NUMBER IBC-2009-130-11-1
B	CHECKED BY	RLR	DATE 8/1/17	

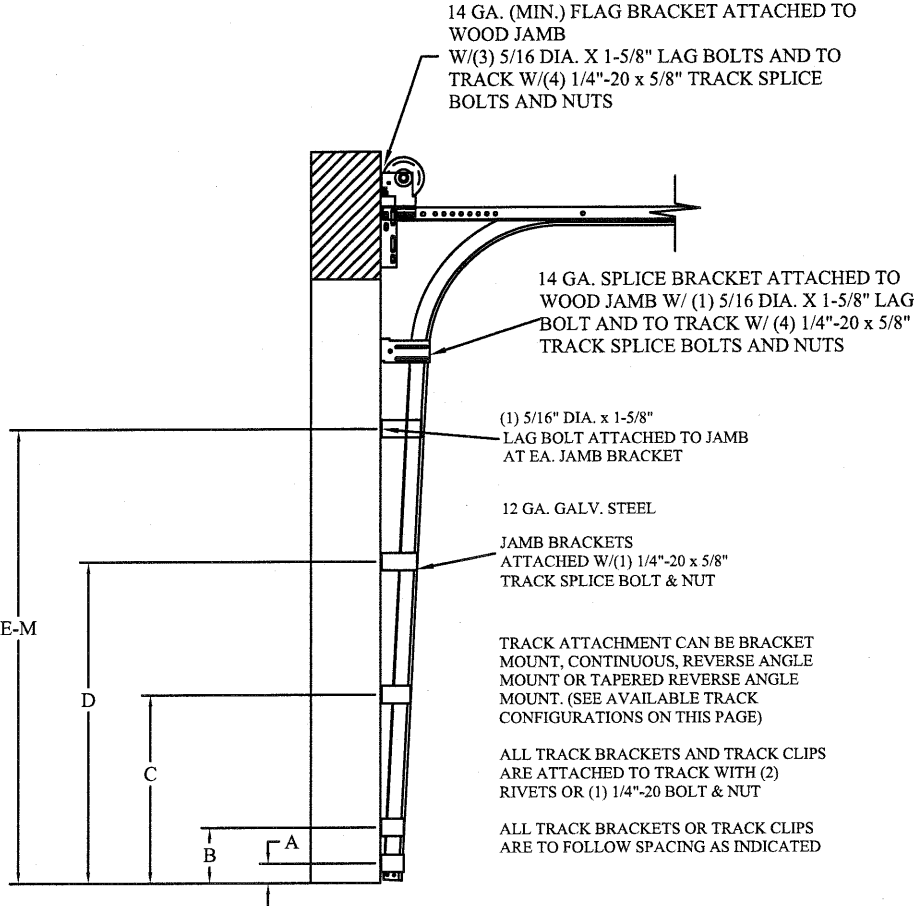
ENTREMATICS

165 CARRIAGE COURT WINSTON-SALEM, NC 27109

SHEET 2 OF 3

TABLE 1

Section	Center Stile Locations		Max Design Loads Allowed	
	Width (ft)	1st (in)	2nd (in)	Positive (PSF) Negative (PSF)
6' 0	36"			24.5 28.7
6' 2	37"			23.8 28.0
6' 4	23"	53"		33.3 39.1
6' 6	24"	54"		32.7 38.3
6' 8	25"	55"		32.1 37.6
6' 10	26"	56"		31.5 37.0
7' 0	27"	57"		30.9 36.3
7' 2	28"	58"		30.4 35.7
7' 4	27"	61"		28.9 33.9
7' 6	28"	62"		28.4 33.4
7' 8	29"	63"		28.0 32.9
7' 10	30"	64"		27.6 32.3
8' 0	31"	65"		27.1 31.8
8' 2	32"	66"		26.7 31.4
8' 4	32"	68"		25.9 30.4
8' 6	33"	69"		25.6 30.0
8' 8	34"	70"		25.2 29.6
8' 10	35"	71"		24.8 29.2
9' 0	36"	72"		24.5 28.7
9' 2	37"	73"		24.2 28.4



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

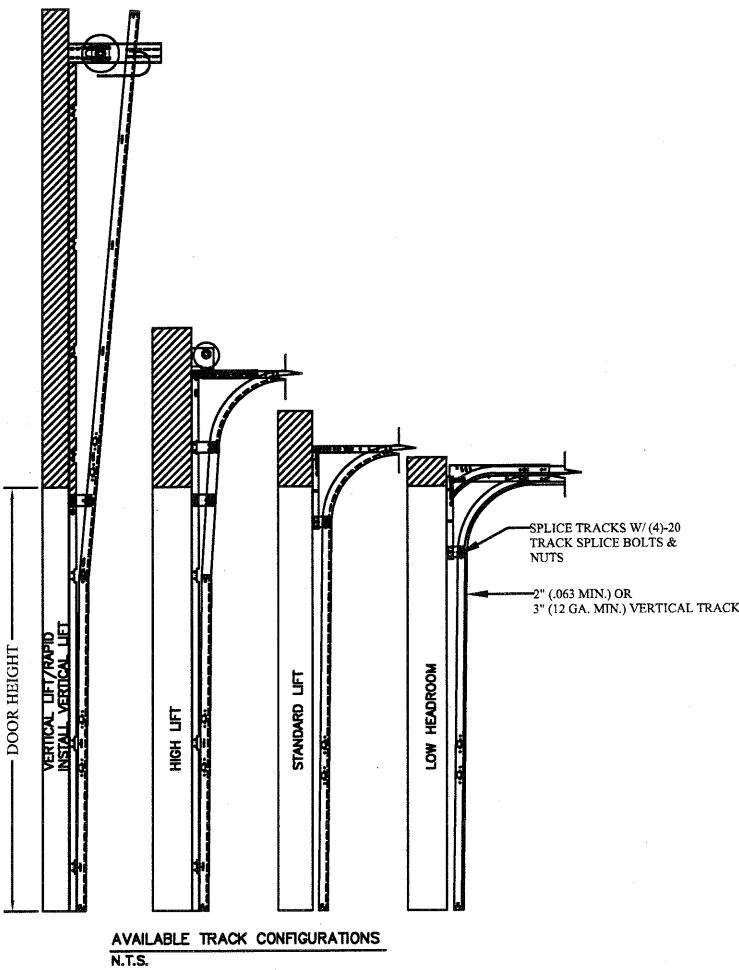


TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT													TYPICAL SPLICE
	A	B	C	D	E	F	G	H	I	J	K	L	M	
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"	70"									94"
9' 0"	3.5"	10"	34"	58"	70"									100"
9' 6"	3.5"	10"	34"	58"	70"	94"								106"
10' 0"	3.5"	10"	34"	58"	70"	94"								112"
11' 0"	3.5"	10"	34"	58"	70"	94"								124"
12' 0"	3.5"	10"	34"	58"	70"	94"	118"							136"
13' 0"	3.5"	10"	34"	58"	70"	94"	118"							148"
14' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"						160"
15' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"						172"
16' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"					184"
17' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"					196"
18' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"				208"
19' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"				220"
20' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"	214"			232"
21' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"	214"			244"
22' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"	214"	238"		256"
23' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"	214"	238"		268"
24' 0"	3.5"	10"	34"	58"	70"	94"	118"	142"	166"	190"	214"	238"	262"	280"

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

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
9'2 x 24'

DESIGN LOADS
+24.2 PSF
-28.4 PSF

TEST LOADS
+36.3 PSF
-42.6 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 2000 AMARR 2002, 2012, 2022

SIZE B	DRAWN BY RLR	DATE 8/1/17	DRAWING NUMBER IBC-2009-130-11-1
CHECKED BY RLR	DATE 8/1/17	ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105	

SHEET 3 OF 3