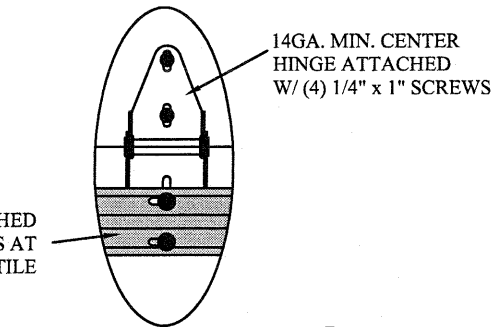


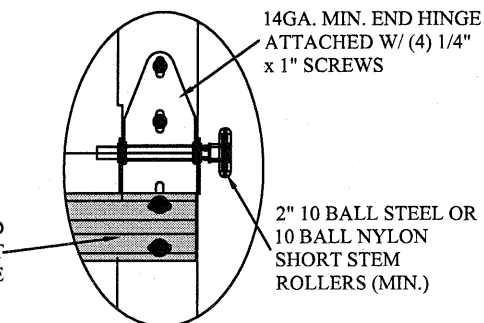
TYPICAL TOP FIXTURES
N.T.S.

1



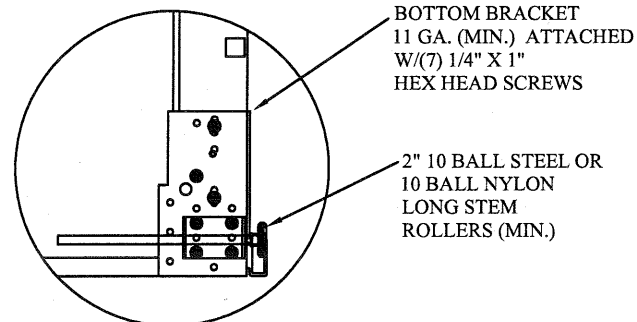
TYPICAL CENTER HINGE
N.T.S.

2



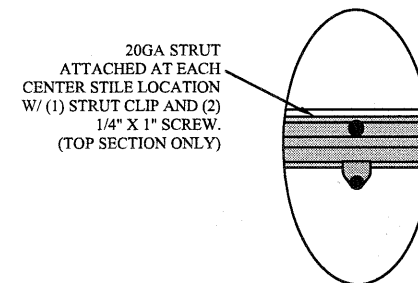
TYPICAL END HINGE
N.T.S.

3



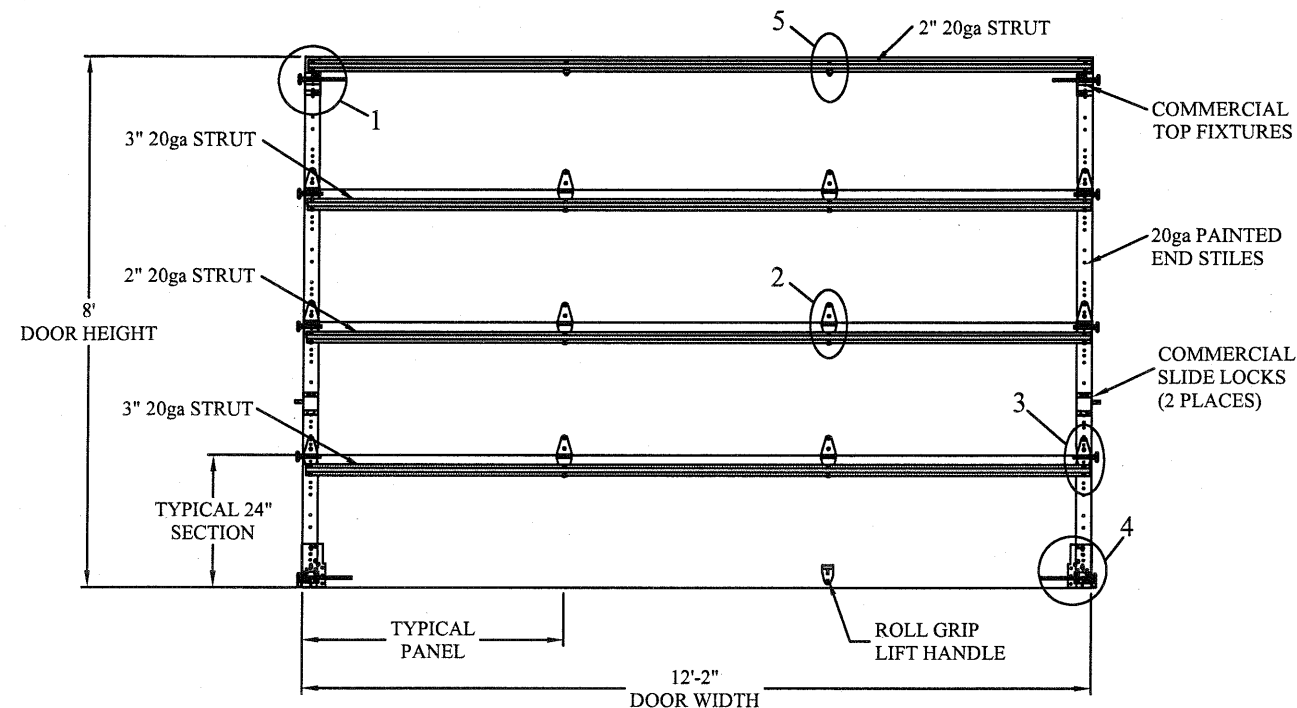
TYPICAL BOTTOM BRACKET
N.T.S.

4

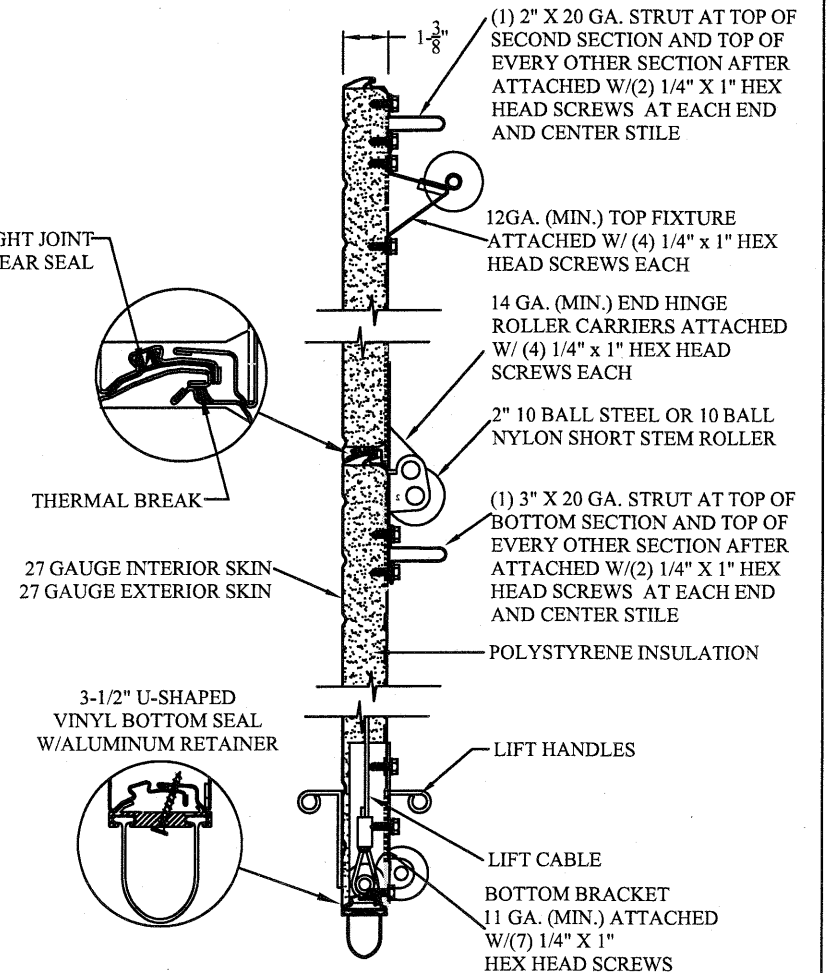


TYPICAL STRUT CLIP ATTACHMENT
N.T.S.

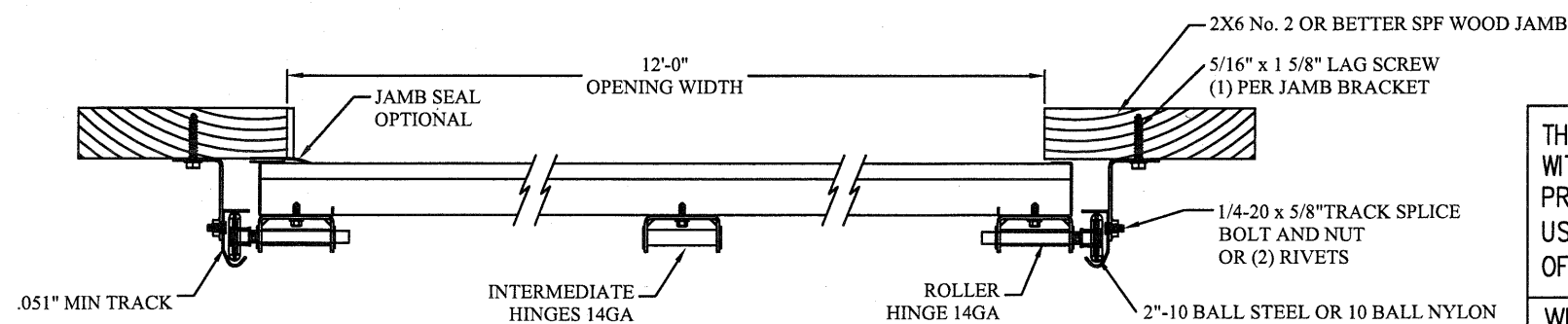
5



DOOR INTERIOR ELEVATION



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



2" BRACKET MOUNT TO WOOD JAMB DETAIL

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN 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)	135	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
12'2" x 24'

DESIGN LOADS
+15.3 PSF
-17.6 PSF

TEST LOADS
+22.9 PSF
-26.4 PSF

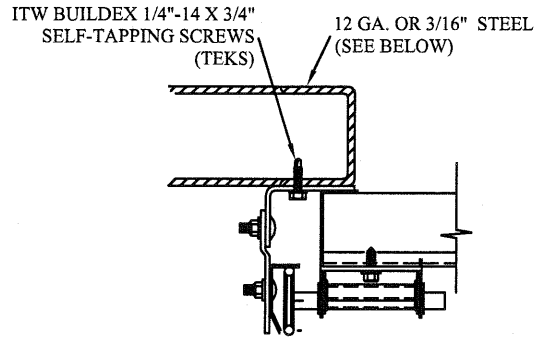
Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

FL

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

MODEL 1380 AMARR 2731 (27 GA)			
MODEL 1000 AMARR 2432 (24 GA)			
SIZE	DRAWN BY	RS	DATE 09/08/14
B	CHECKED BY	RLR	DATE 09/08/14
ENTREMATICS 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1812-104-15
SHEET 1 OF 4			

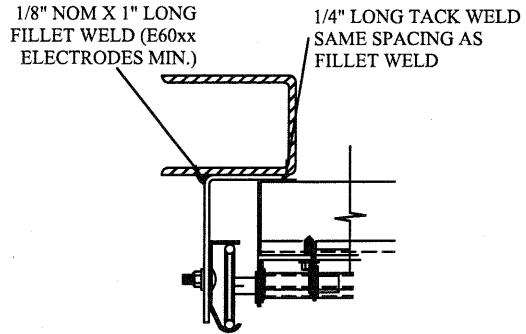
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

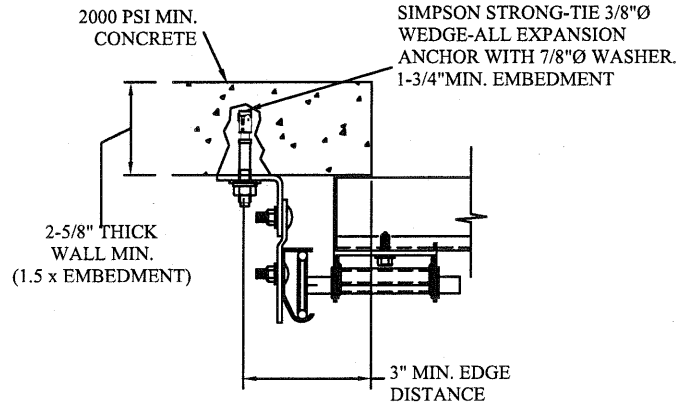
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS
AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5

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



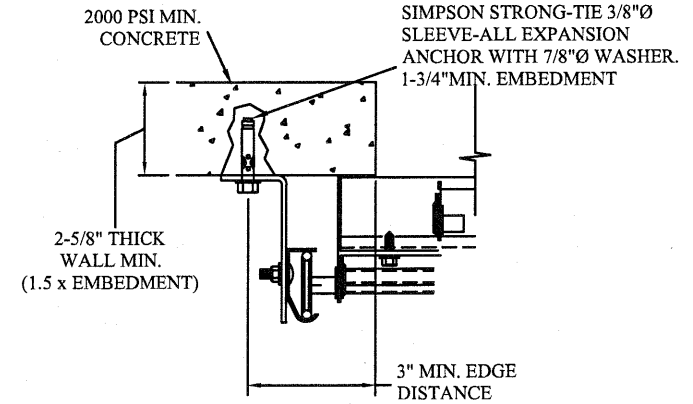
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED
ANGLE MOUNT AVAILABLE

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

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: +93.1 LBS/FT & -107.1 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 27 GA. (.015) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 24"0" HIGH ALTERNATE BETWEEN (1) 3" 20GA STRUT & (1) 2" 20GA STRUT PER 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 24" O.C. (1 1/2" EMBEDMENT)
HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS,

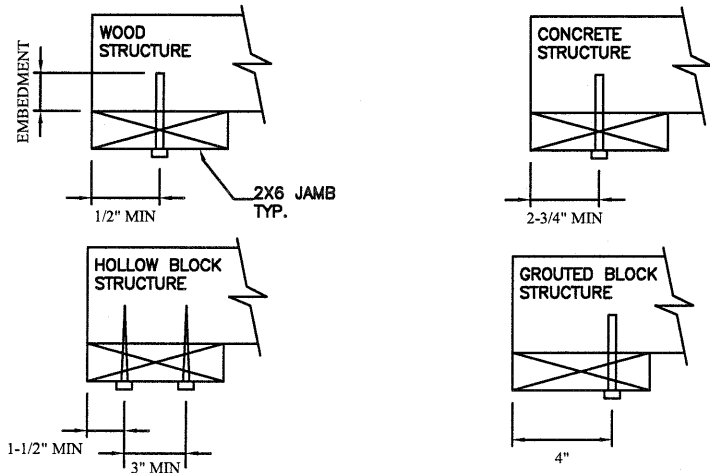
USE PAIRS OF FASTENERS (3" APART) AT 24" O.C. (1 1/4" EMBEDMENT)
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

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)

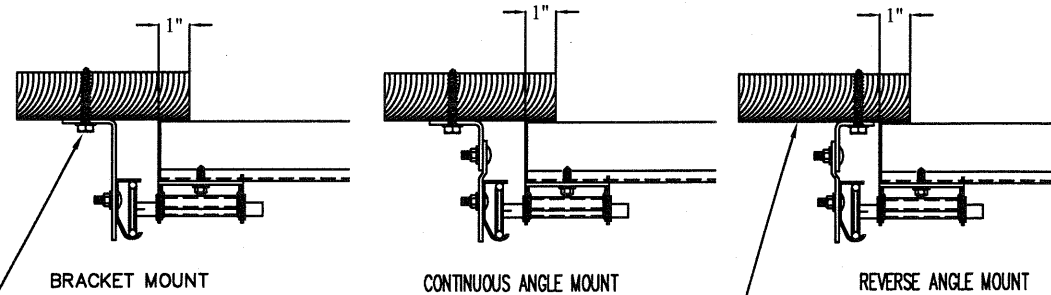
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

*PREPARATION OF WOOD JAMBS BY OTHERS



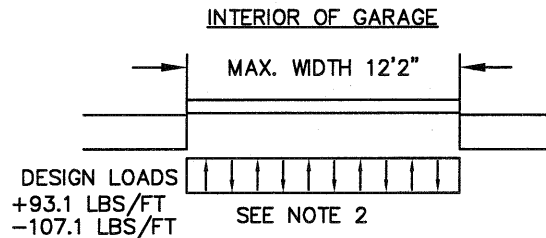
TRACK CONNECTION TO WOOD JAMB OPTIONS

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

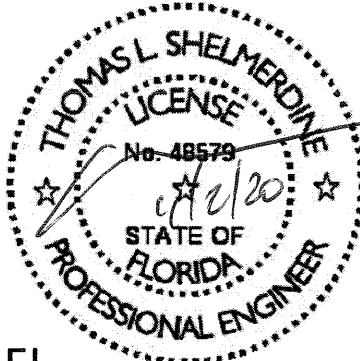


5/16" x 1 5/8" LAG SCREW (1) PER
JAMB BRACKET (1-1/2" EMBEDMENT
MINIMUM) (TYP.)

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



REV	DESCRIPTION OF REVISIONS	DATE	BY

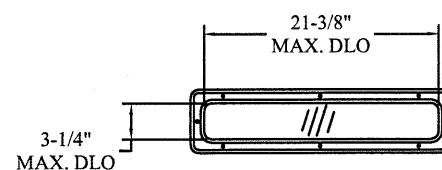
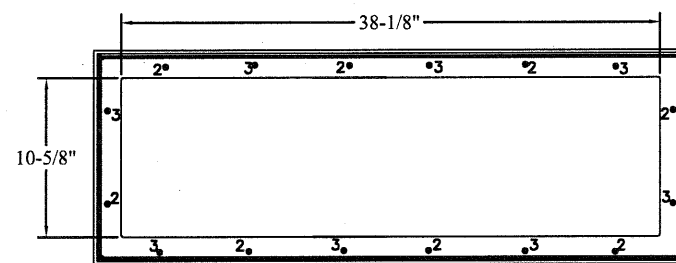
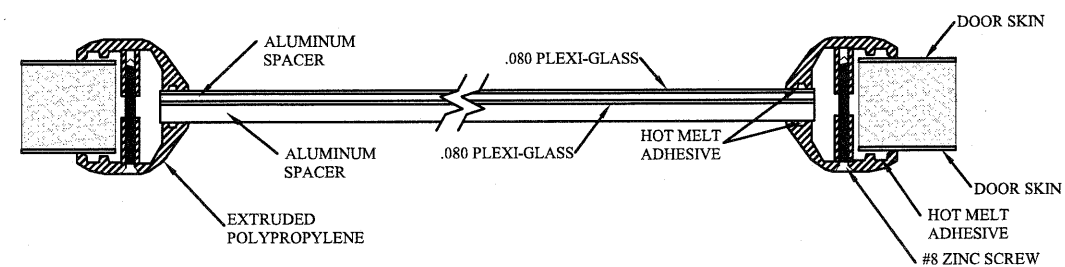
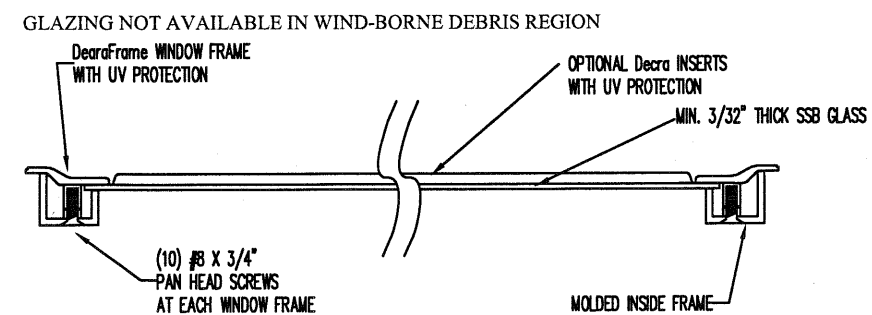
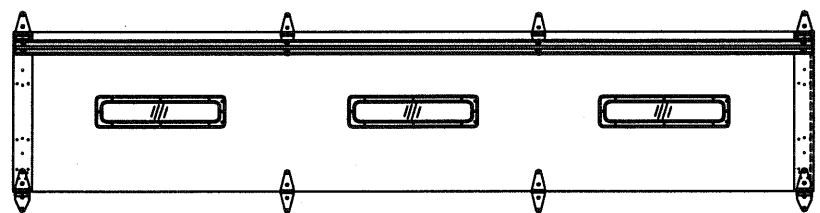
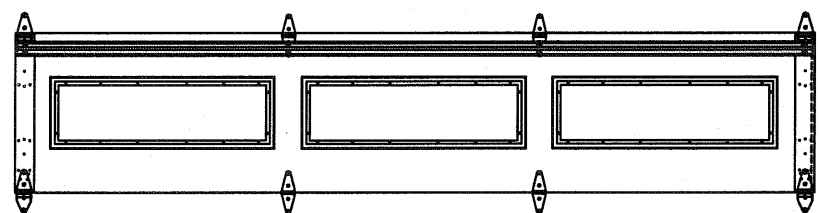
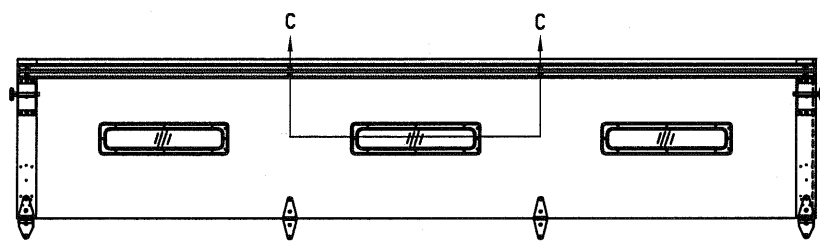
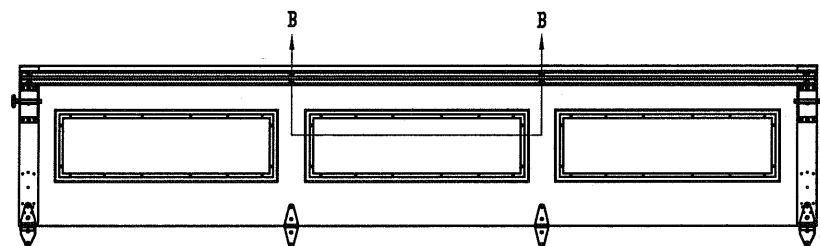
MAX SIZE 12'2" x 24' DESIGN LOADS +15.3 PSF -17.6 PSF TEST LOADS +22.9 PSF -26.4 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL	 Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions of North Carolina, Inc. 5921-G Way, Friendly Ave., Greensboro, NC 27410
---	--	--



MODEL 1380 AMARR 2731 (27 GA)			
MODEL 1000 AMARR 2432 (24 GA)			

SIZE	DRAWN BY	RS	DATE	09/08/14	DRAWING NUMBER IBC-1812-104-15
B	CHECKED BY	RLR	DATE	09/08/14	

ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105	SHEET 2 OF 4
--	--------------



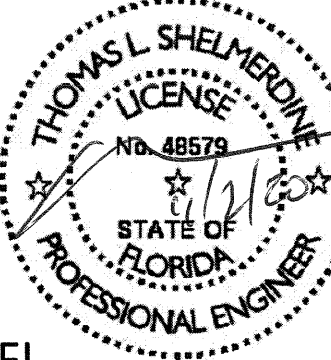
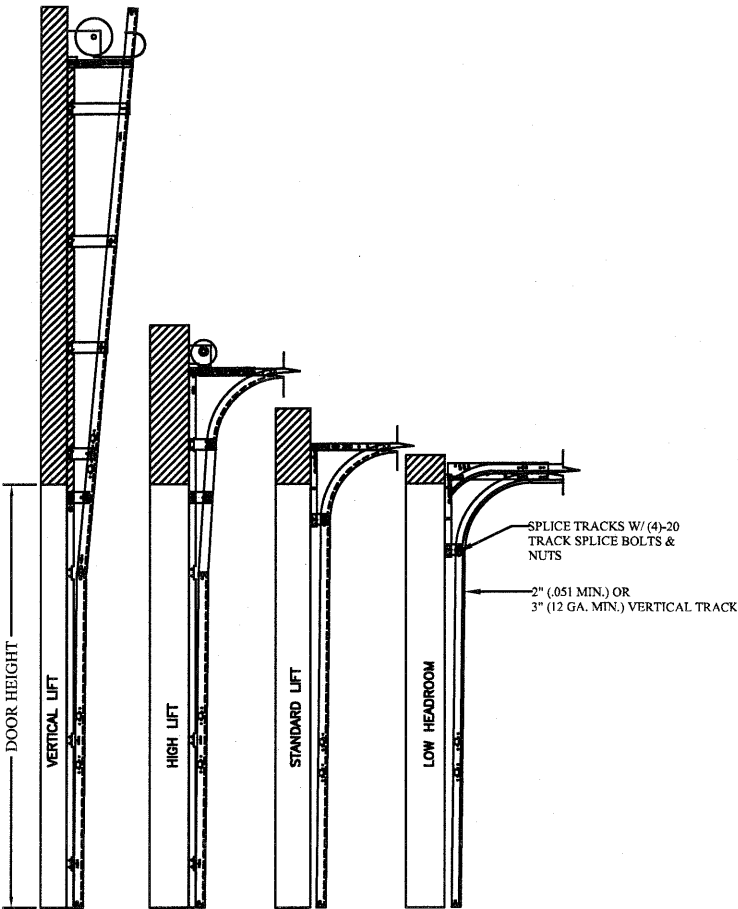
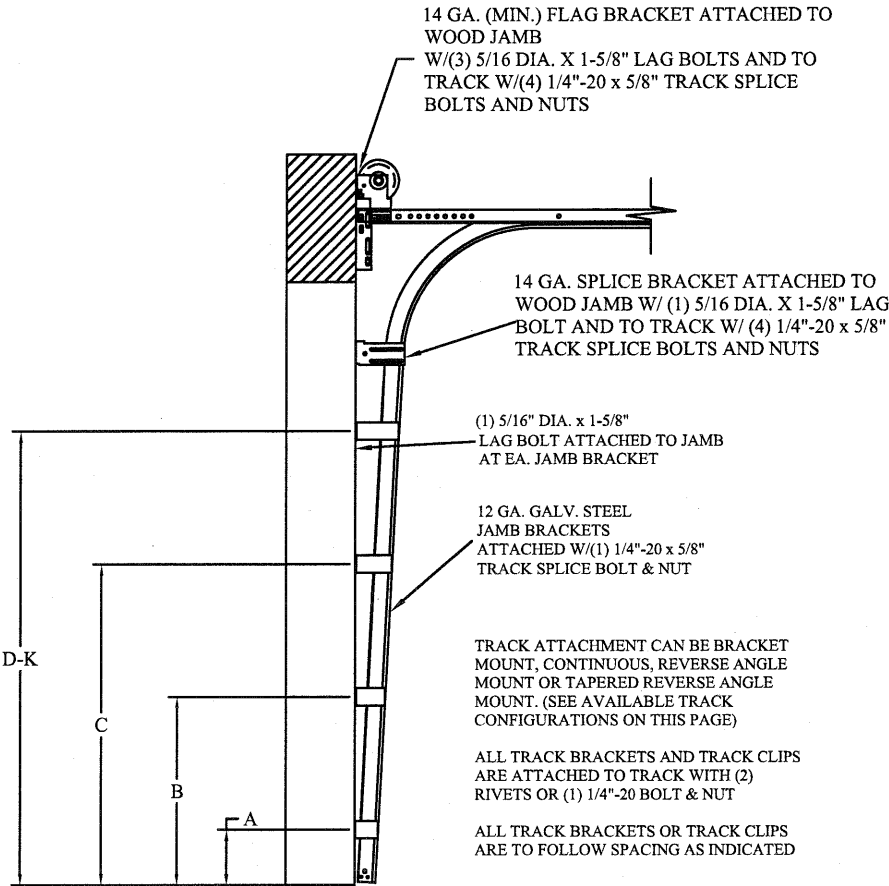
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 12'2" x 24' DESIGN LOADS +15.3 PSF -17.6 PSF TEST LOADS +22.9 PSF -26.4 PSF		Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL  FL	
			
MODEL 1380 AMARR 2731 (27 GA) MODEL 1000 AMARR 2432 (24 GA)			
SIZE B	DRAWN BY	RS	DATE 09/08/14
	CHECKED BY	RLR	DATE 09/08/14
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1812-104-15 SHEET 3 OF 4

TABLE 1

Section Width (ft)		Center Stile Locations		Max Design Loads Allowed	
		1st (in)	2nd (in)	Positive (PSF)	Negative (PSF)
6'	0"	36"	-	20.6	23.7
6'	2"	37"	-	20.0	23.0
6'	4"	38"	-	19.5	22.4
6'	6"	39"	-	19.0	21.8
6'	8"	40"	-	18.5	21.3
6'	10"	41"	-	18.0	20.8
7'	0"	42"	-	17.6	20.3
7'	2"	43"	-	17.2	19.8
7'	4"	44"	-	16.8	19.4
7'	6"	45"	-	16.4	18.9
7'	8"	46"	-	16.1	18.5
7'	10"	47"	-	15.7	18.1
8'	0"	48"	-	15.4	17.7
8'	2"	49"	-	15.1	17.4
8'	4"	50"	-	14.8	17.0
8'	6"	51"	-	14.5	16.7
8'	8"	52"	-	14.2	16.4
8'	10"	53"	-	14.0	16.1
9'	0"	54"	-	13.7	15.8
9'	2"	37"	73"	20.3	23.3
9'	4"	36"	76"	19.4	22.3
9'	6"	37"	77"	19.1	22.0
9'	8"	38"	78"	18.9	21.7
9'	10"	39"	79"	18.6	21.5
10'	0"	40"	80"	18.4	21.2
10'	2"	41"	81"	18.2	20.9
10'	4"	42"	82"	17.9	20.6
10'	6"	43"	83"	17.6	20.2
10'	8"	44"	84"	17.3	19.9
10'	10"	45"	85"	17.0	19.6
11'	0"	46"	86"	16.8	19.3
11'	2"	47"	87"	16.5	19.0
11'	4"	48"	88"	16.3	18.7
11'	6"	49"	89"	16.1	18.5
11'	8"	50"	90"	15.8	18.2
11'	10"	51"	91"	15.6	18.0
12'	0"	48"	96"	15.3	17.6
12'	2"	49"	97"	15.3	17.6



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	
7'	0"	10.0"	34"	58"									76"
7'	6"	10.0"	34"	58"									82"
8'	0"	10.0"	34"	58"									88"
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"

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

REVDESCRIPTION OF REVISIONSDATEBY

MAX SIZE, 12'2 x 24'

DESIGN LOADS +15.3 PSF -17.6 PSF

TEST LOADS +22.9 PSF -26.4 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 1380 AMARR 2731 (27 GA)

MODEL 1000 AMARR 2432 (24 GA)

SIZEB

DRAWN BYRS

CHECKED BYRLR

DATE09/08/14

DATE09/08/14

DRAWING NUMBERIBC-1812-104-15

ENTREMATIC

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

SHEET 4 OF 4