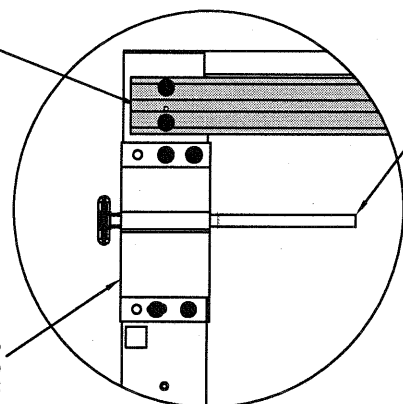


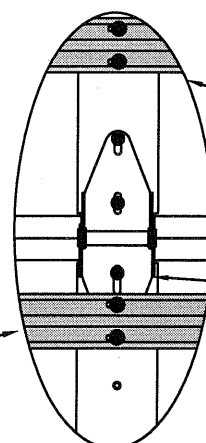
2" 20GA. STRUT
STACKED ON TOP FIXTURES
ATTACHED W/(2) 1/4" X 1"
HEX HEAD SCREWS AT EACH END STILE
AND W/(2) 1/4" X 1"
HEX HEAD SCREWS AT EACH CENTER STILE



TYPICAL TOP FIXTURE
N.T.S.

2"-10 BALL STEEL LONG STEM
ROLLERS W/ RETAINERS USED FOR
NON THREADED SHAFTS

3" 20GA. STRUT STACKED
ON HINGES ATTACHED
W/(2) 1/4" X 1"
HEX HEAD SCREWS AT
EACH CENTER STILE



TYPICAL CENTER HINGE
N.T.S.

2" 20GA. STRUT ATTACHED
W/(2) 1/4" X 1"
HEX HEAD SCREWS AT
EACH CENTER STILE

14GA. (MIN.) CENTER HINGE ATTACHED
W/(5) 1/4" X 1" HEX HEAD SCREWS
(2) SCREWS IN THE TOP LEAF
(3) SCREWS IN THE BOTTOM LEAF

24 GA. (.022" MIN) OR 20 GA
PREPAINTED STEEL

2" X 20GA. STRUT ATTACHED
ABOVE THE TOP FIXTURE W/(2)
1/4" X 1" HEX HEAD SCREWS AT
EACH END STILE AND (2) 1/4" X 1"
HEX HEAD SCREWS AT EACH
CENTER STILE

12 GA. COMMERCIAL TOP FIXTURE
ATTACHED WITH (4) 1/4" X 1"
HEX HEAD UNIV. SCREWS PER BRACKET
ADJUSTABLE SLIDE BRACKET IS ASSEMBLED
WITH (2) 5/16" X 3/4" BOLT & NUT PER BRACKET

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

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

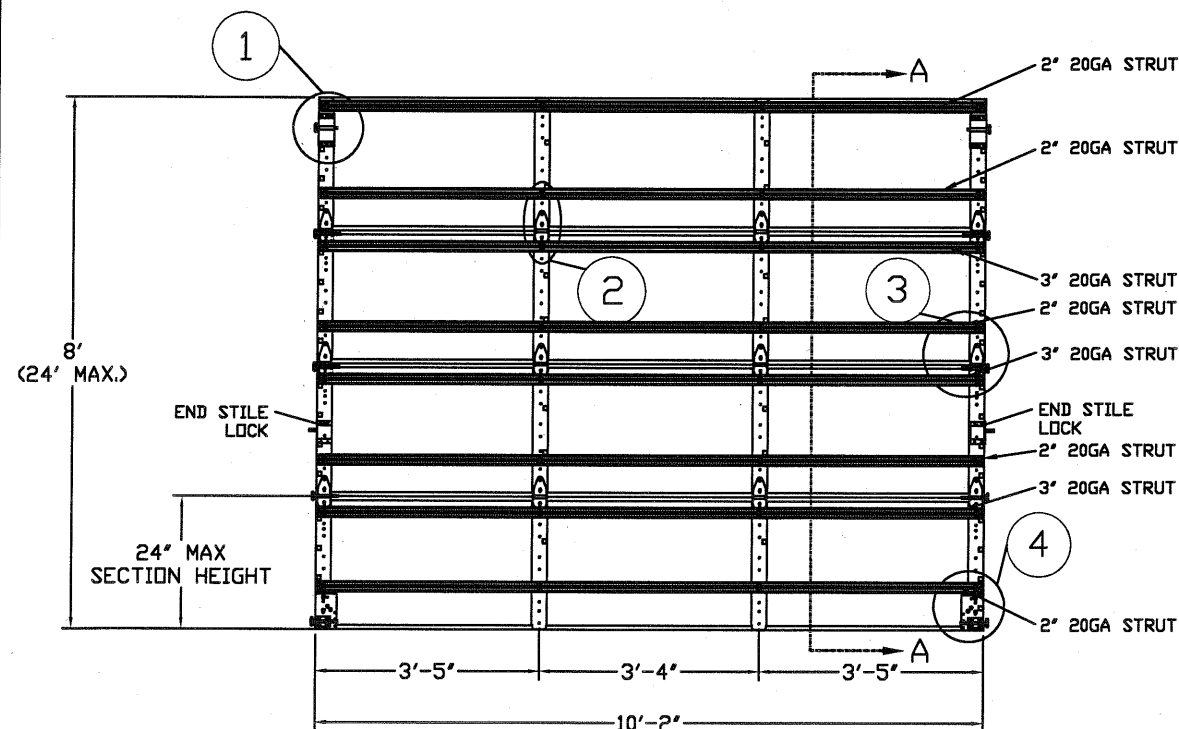
2" X 20GA. STRUT ATTACHED
W/(2) 1/4" X 1" HEX HEAD
SCREWS AT EACH END STILE
AND (2) 1/4" X 1" HEX HEAD
SCREWS AT EACH CENTER STILE

14 GA. (MIN.) GALV. STEEL
ROLLER HINGE ATTACHED
WITH (5) 1/4" X 1"
HEX HEAD UNIV. SCREWS

11 GA. BOTTOM
BRACKET ATTACHED
WITH (7) 1/4" X 1"
HEX HEAD UNIV. SCREWS

CONT. ALUM. EXTRUSION
WITH CONT. VINYL ASTRAGAL

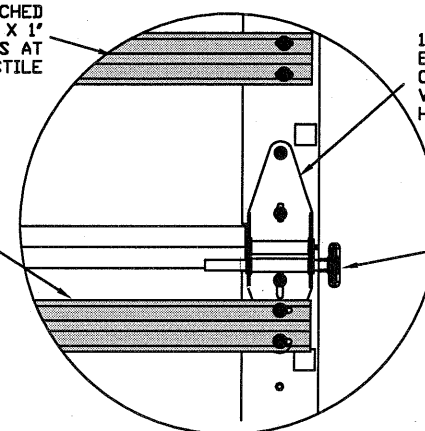
SECTION A-A (SIDE VIEW)
N.T.S.



INSIDE ELEVATION
N.T.S.

2" 20GA. STRUT ATTACHED
W/(2) 1/4" X 1"
HEX HEAD SCREWS AT
EACH END STILE

3" 20GA. STRUT STACKED
ON HINGES ATTACHED
W/(2) 1/4" X 1"
HEX HEAD SCREWS AT
EACH END STILE

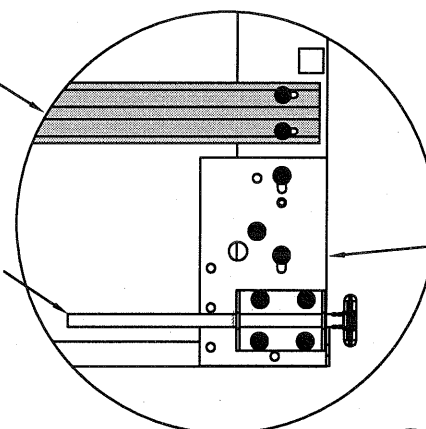


TYPICAL END HINGE
N.T.S.

2"-10 BALL STEEL 4.5" (MIN) STEM
ROLLERS W/ RETAINERS USED FOR
NON THREADED SHAFTS

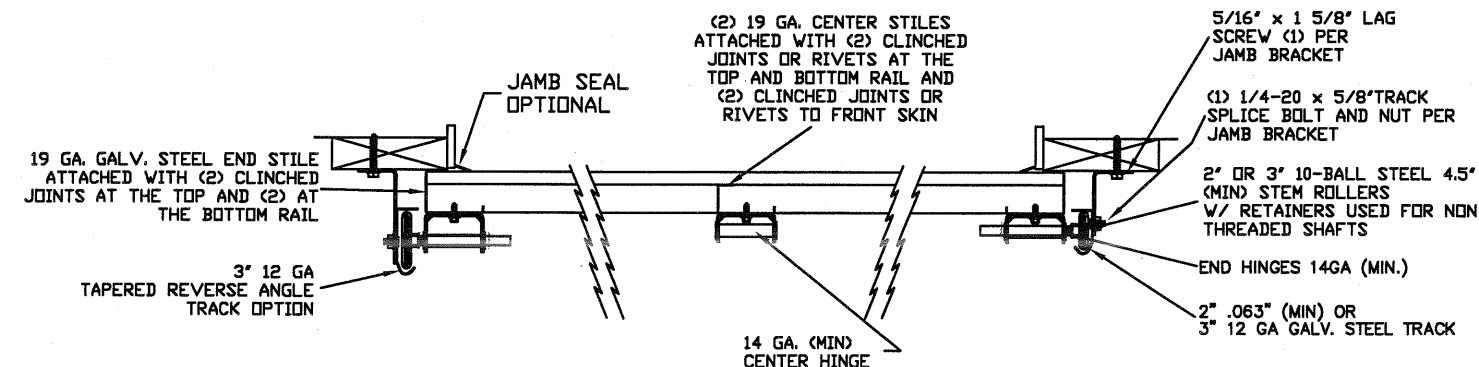
2" 20GA. STRUT
ATTACHED W/(2) 1/4" X 1"
HEX HEAD SCREWS AT
EACH END STILE

2" 10 BALL STEEL LONG STEM ROLLER
W/ RETAINER USED
FOR NON THREADED SHAFTS



TYPICAL BOTTOM BRACKET
N.T.S.

BOTTOM BRACKET
11 GA. ATTACHED
W/(7) 1/4" X 1"
HEX HEAD SCREWS



TRACK MOUNTING DETAIL
N.T.S.

EDGE OF DOOR 1" OVERLAP ON EACH SIDE

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)	187	170	162	154	148
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
10'2 x 24'

DESIGN LOADS
+30.0 PSF
-34.9 PSF

TEST LOADS
+45.0 PSF
-52.4 PSF

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

FL

Amarr

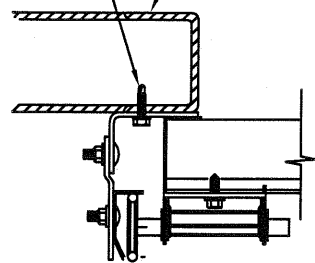
MODEL 2400 AMARR 2402, 2412, 2422
MODEL 2000 AMARR 2002, 2012, 2022

SIZE	DRAWN BY	RS	DATE	1/21/15	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	1/21/15	IBC-2410-145-15

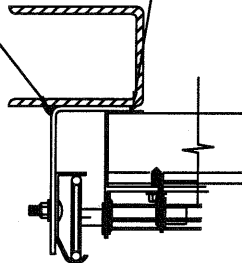
ENTREMATICS
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 4

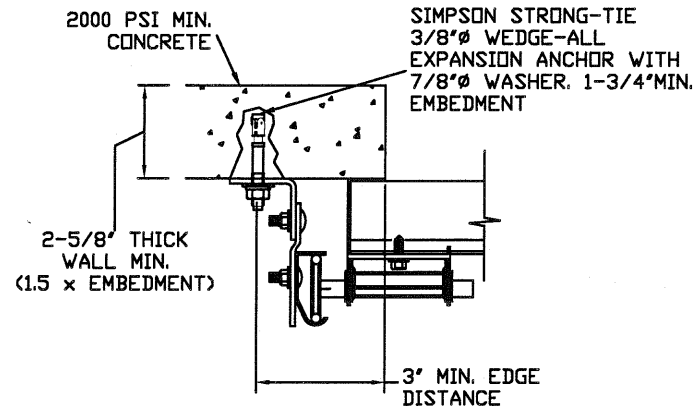
ITW BUILDDEX 1/4"-14 X 3/4" SELF-TAPPING SCREWS (TEKS) 12 GA. OR 3/16" STEEL (SEE BELOW)



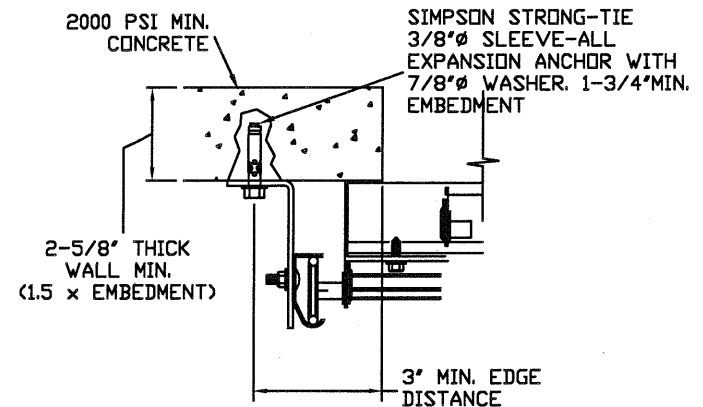
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



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



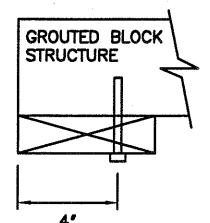
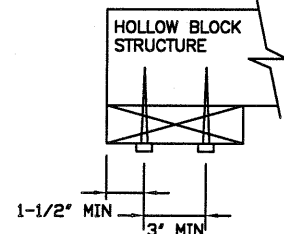
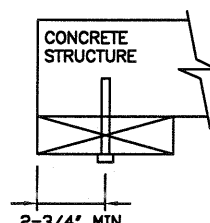
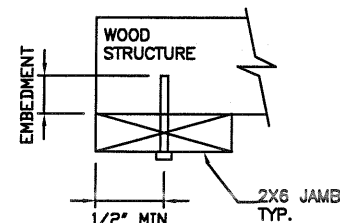
2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD -
6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5



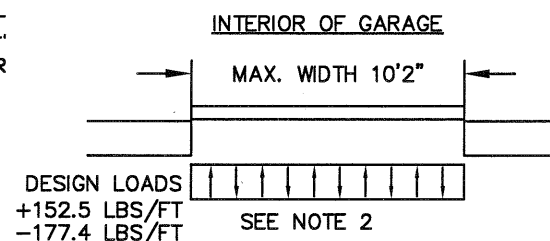
2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

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:
+152.5 LBS/FT & -177.4 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. DOORS UP TO 24'0" HIGH HAVE (1) 3" 20GA STRUT AND (1) 2" 20GA STRUT ON BOTTOM AND INTERMEDIATE SECTIONS. TOP SECTION WILL HAVE (2) 2" 20GA STRUTS.
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

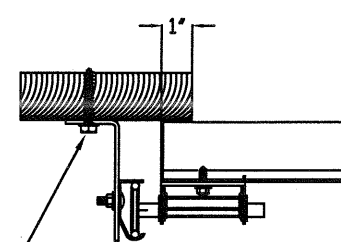
*PREPARATION OF WOOD JAMBS BY OTHERS



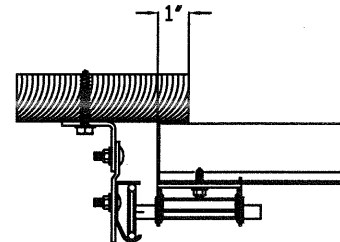
1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3" REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.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



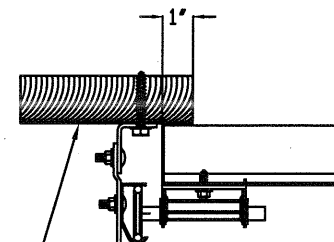
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 3 FOR TRACK CONFIGURATION DETAIL



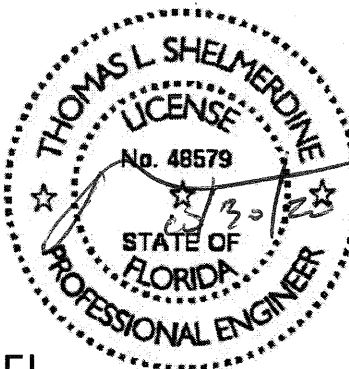
5/16" x 1 5/8" LAG SCREW (1)
PER JAMB BRACKET (1-1/2"
EMBEDMENT MINIMUM) (TYP.)

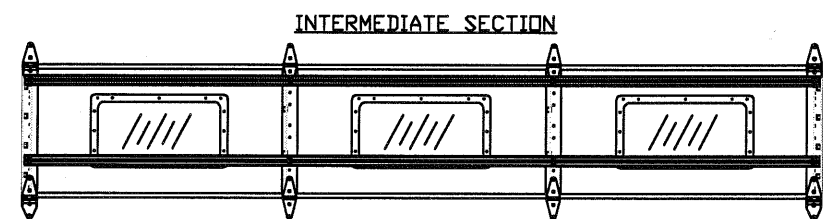
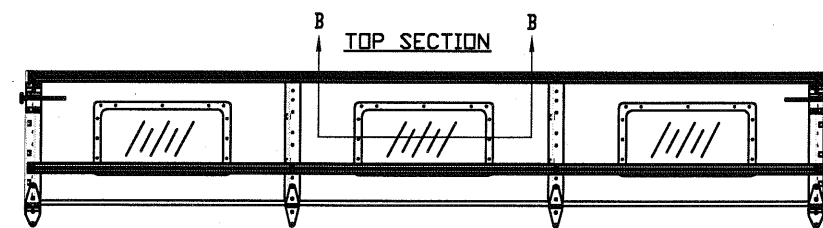


CONTINUOUS ANGLE MOUNT

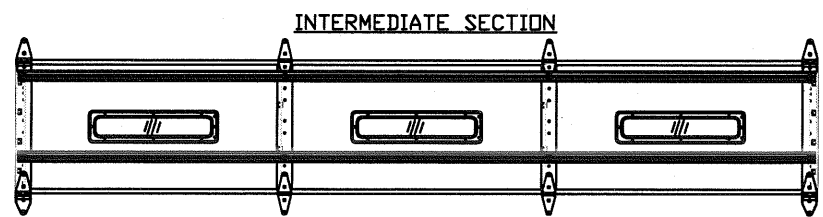
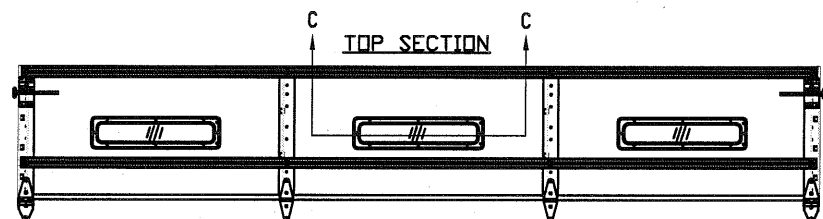


2x6 WOOD JAMB SYP OR SPF
(NO.2) OR BETTER (TYP.)

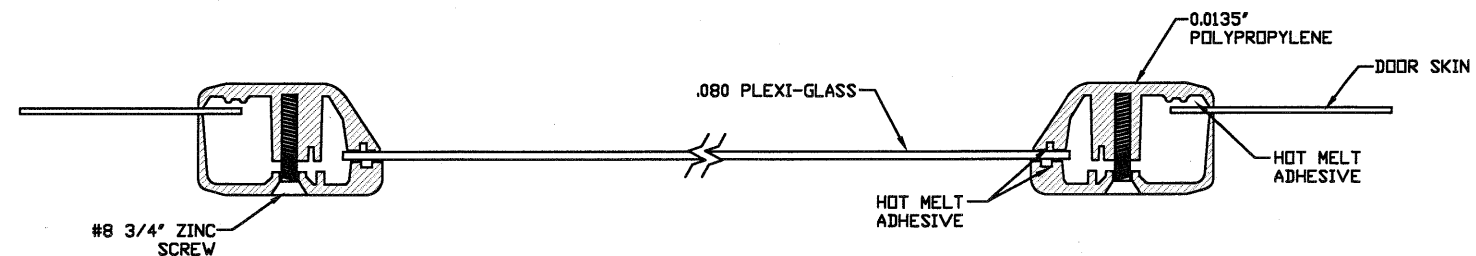
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 10'2" x 24' DESIGN LOADS +30.0 PSF -34.9 PSF TEST LOADS +45.0 PSF -52.4 PSF		Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412)  FL dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
			
MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022			
SIZE	DRAWN BY RS	DATE 1/21/15	DRAWING NUMBER
B	CHECKED BY RLR	DATE 1/21/15	IBC-2410-145-15
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 2 OF 4



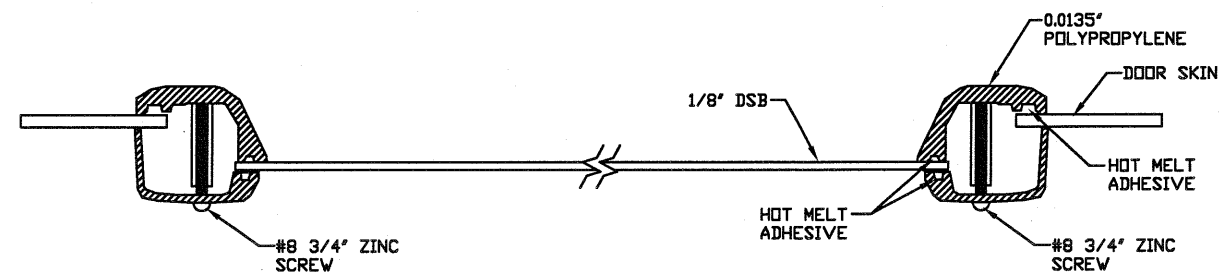
OPTIONAL GLAZED SECTION W/ 24' X 12' WINDOWS AND STRUT LAYOUT
N.T.S.



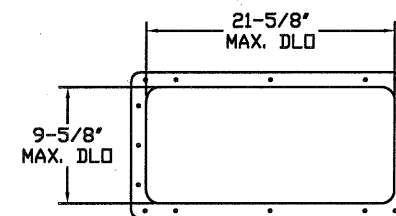
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS AND STRUT LAYOUT
N.T.S.



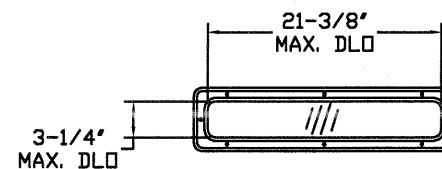
SECTION B-B 24' X 12' WINDOW DETAIL W/ .080 PLEXI-GLASS
N.T.S.



SECTION C-C. 24" X 6" WINDOW DETAIL W/ 1/8" DSB
N.T.S. (ALSO AVAILABLE WITH .080" PLEXI-GLASS)

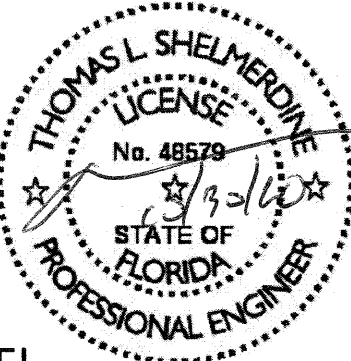


24' X 12' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



24' X 6' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

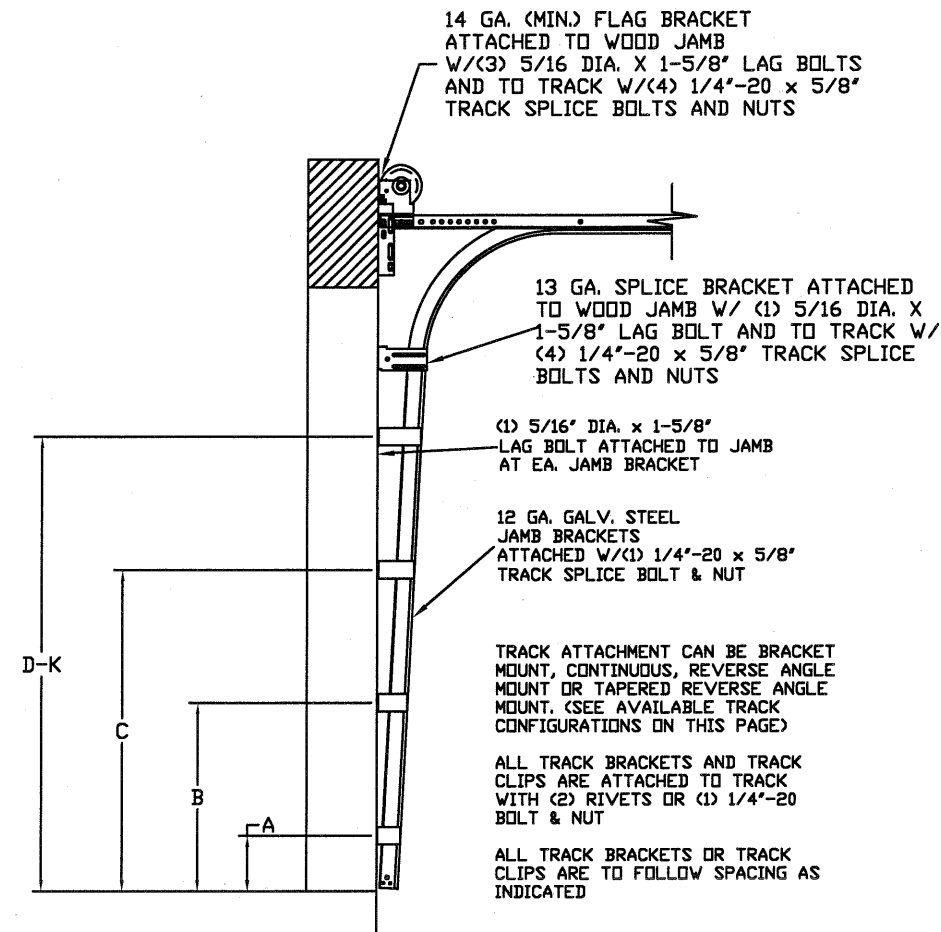
MAX SIZE 10'2" x 24' DESIGN LOADS +30.0 PSF -34.9 PSF TEST LOADS +45.0 PSF -52.4 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL 
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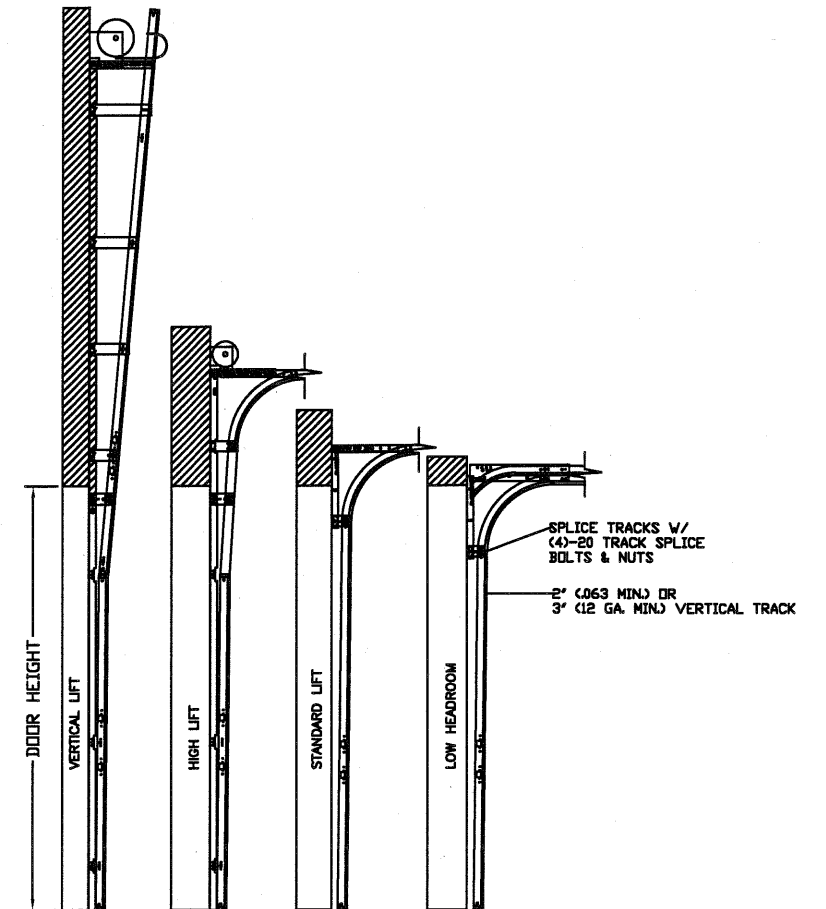
MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022			
SIZE	DRAWN BY	RS	DATE 1/21/15
B	CHECKED BY	RLR	DATE 1/21/15

ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105	DRAWING NUMBER IBC-2410-145-15 SHEET 3 OF 4
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Section Width (ft)		Center Stile Locations		Max Design Loads Allowed	
		1st (in)	2nd (in)	Positive (PSF)	Negative (PSF)
6'	0"	36"	-	33.5	39.0
6'	2"	37"	-	32.6	38.0
6'	4"	38"	-	31.8	37.0
6'	6"	39"	-	30.9	36.0
6'	8"	40"	-	30.2	35.1
6'	10"	41"	-	29.4	34.3
7'	0"	42"	-	28.7	33.4
7'	2"	43"	-	28.1	32.7
7'	4"	44"	-	27.4	31.9
7'	6"	45"	-	26.8	31.2
7'	8"	46"	-	26.2	30.5
7'	10"	47"	-	25.7	29.9
8'	0"	48"	-	25.1	29.2
8'	2"	49"	-	24.6	28.7
8'	4"	50"	-	24.1	28.1
8'	6"	51"	-	23.7	27.5
8'	8"	52"	-	23.2	27.0
8'	10"	53"	-	22.8	26.5
9'	0"	54"	-	22.3	26.0
9'	2"	37"	73"	33.1	38.5
9'	4"	36"	76"	31.8	37.0
9'	6"	37"	77"	31.4	36.5
9'	8"	38"	78"	30.9	36.0
9'	10"	39"	79"	30.6	35.6
10'	0"	40"	80"	30.2	35.1
10'	2"	41"	81"	30.0	34.9



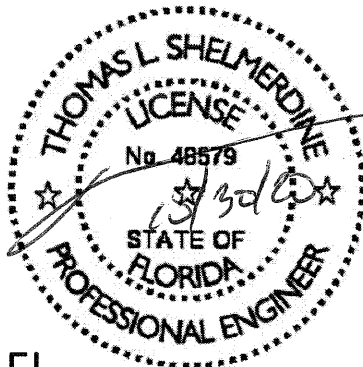
TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
SEE TABLE 2



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

DOOR HEIGHT		TRACK ATTACHMENT										TYPICAL SPLICE	
		A	B	C	D	E	F	G	H	I	J		K
7'	0"	10"	34"	58"									76"
7'	6"	10"	34"	58"									82"
8'	0"	10"	34"	58"									88"
8'	6"	10"	34"	58"	82"								94"
9'	0"	10"	34"	58"	82"								100"
9'	6"	10"	34"	58"	82"								106"
10'	0"	10"	34"	58"	82"								112"
11'	0"	10"	34"	58"	82"	106"							124"
12'	0"	10"	34"	58"	82"	106"							136"
13'	0"	10"	34"	58"	82"	106"	130"						148"
14'	0"	10"	34"	58"	82"	106"	130"						160"
15'	0"	10"	34"	58"	82"	106"	130"	154"					172"
16'	0"	10"	34"	58"	82"	106"	130"	154"					184"
17'	0"	10"	34"	58"	82"	106"	130"	154"	178"				196"
18'	0"	10"	34"	58"	82"	106"	130"	154"	178"				208"
19'	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"			220"
20'	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"			232"
21	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		244"
22	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		256"
23	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	268"
24	0"	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 10'2" x 24' DESIGN LOADS +30.0 PSF -34.9 PSF TEST LOADS +45.0 PSF -52.4 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 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022			
SIZE	DRAWN BY	RS	DATE 1/21/15
B	CHECKED BY	RLR	DATE 1/21/15
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-2410-145-15
SHEET 4 OF 4			SHEET 4 OF 4