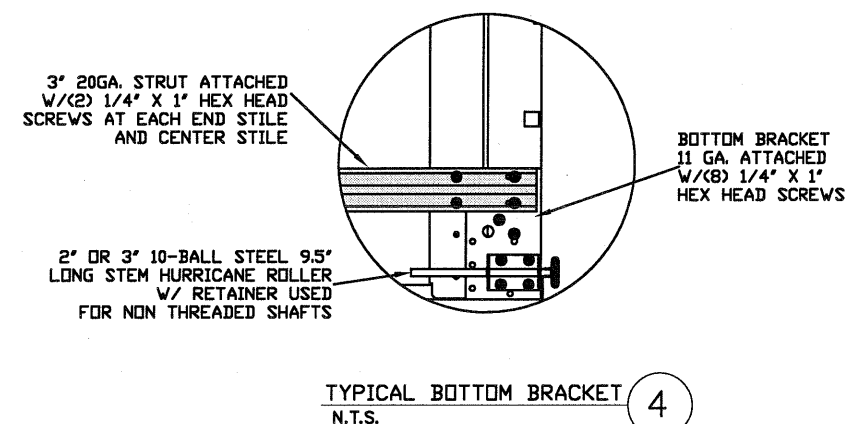
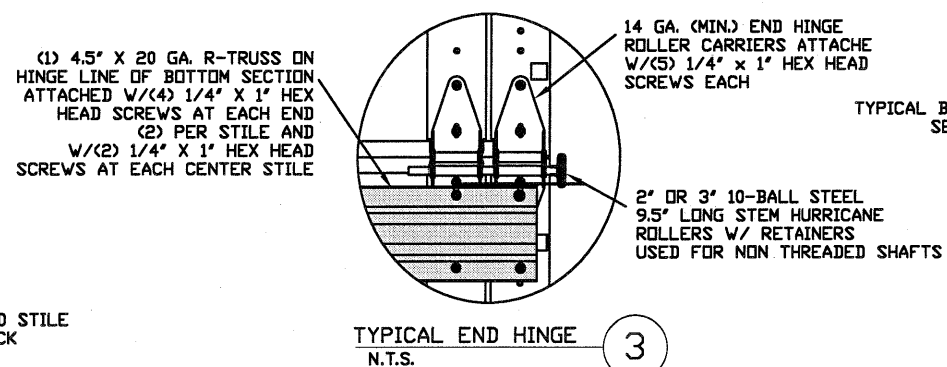
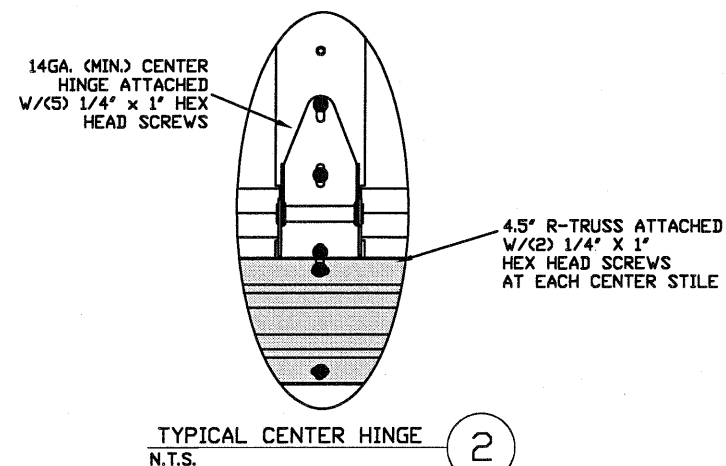
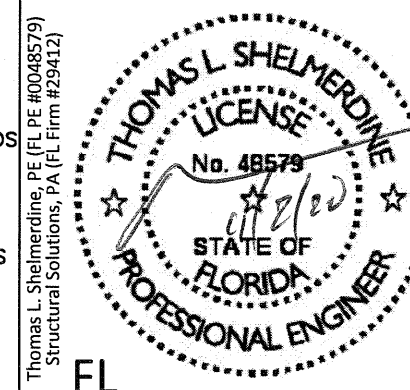


WIND SPEED (MPH)	168	152	145	138	133
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

TEST LOADS
+35.0 PSF
-39.5 PSF



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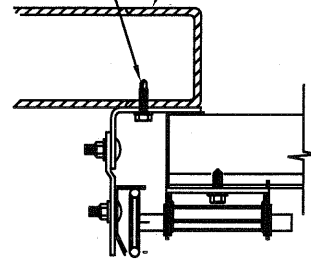
Amar

MODEL 2500 AMARR 2502, 2512
MODEL 2400 AMARR 2402, 2412, 2422
MODEL 2000 AMARR 2002, 2012, 2022

SIZE	DRAWN BY RS	DATE 1/22/15	DRAWING NUMBER IBC-2516-130-24
B	CHECKED BY RLR	DATE 1/22/15	

ENTREMATIC	SHEET 1 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105	

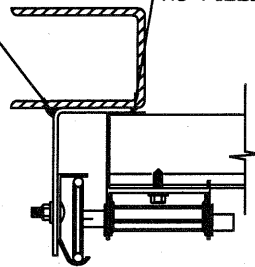
ITW BUILDEX 1/4"-14 X 3/4" SELF-TAPPING SCREWS (TEKS) 12 GA. OR 3/16" STEEL (SEE BELOW)



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

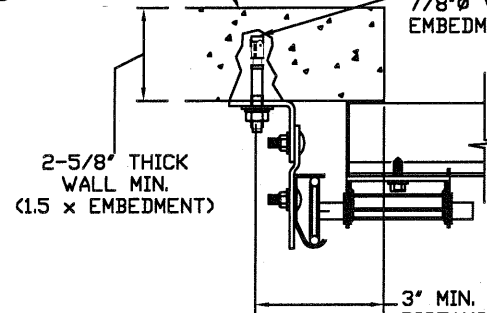
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5

1/8" NOM X 1" LONG
FILLET WELD (E60xx
ELECTRODES MIN.)



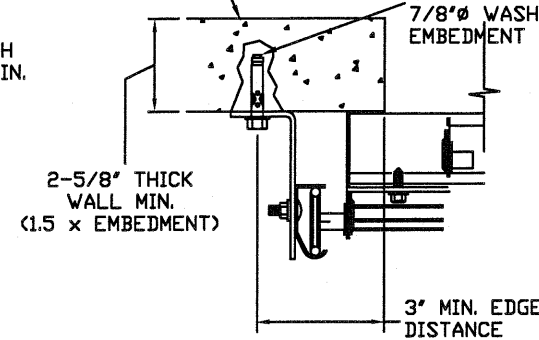
STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD -
6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8
AND 9

1/4" LONG TACK
WELD SAME SPACING
AS FILLET WELD



2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD -
6' FROM ENDS AND 18" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

2000 PSI MIN.
CONCRETE



2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 18" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

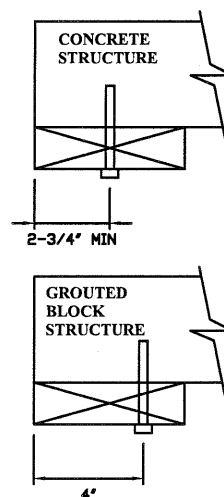
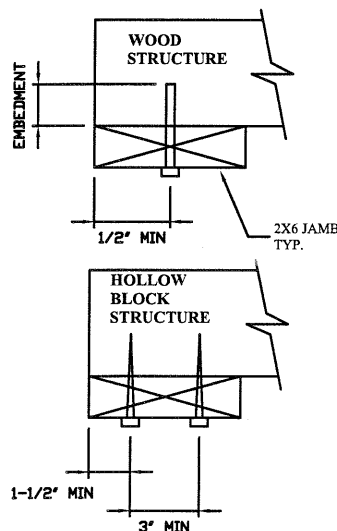
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 24" O.C. (1 1/2" EMBEDMENT)

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 22" 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)

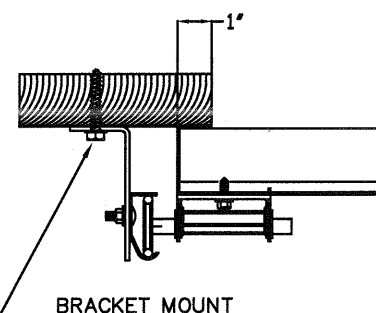
2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS
(3" APART) AT 16" O.C. (1 1/2" EMBEDMENT)
HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS
(3" APART) AT 16" O.C. (1 1/4" EMBEDMENT)

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)

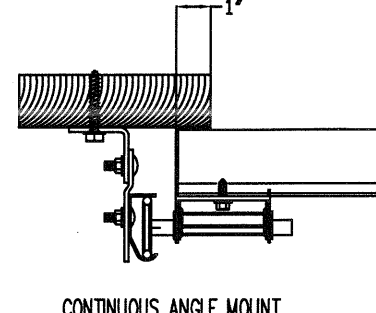
***LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.**
***PREPARATION OF WOOD JAMBS BY OTHERS**



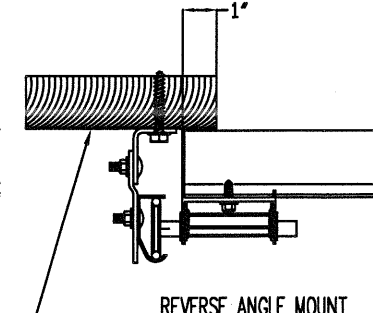
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 4 FOR TRACK CONFIGURATION DETAIL



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

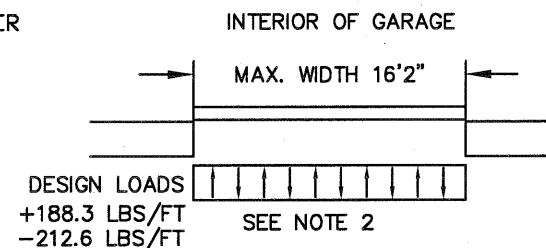


CONTINUOUS ANGLE MOUNT

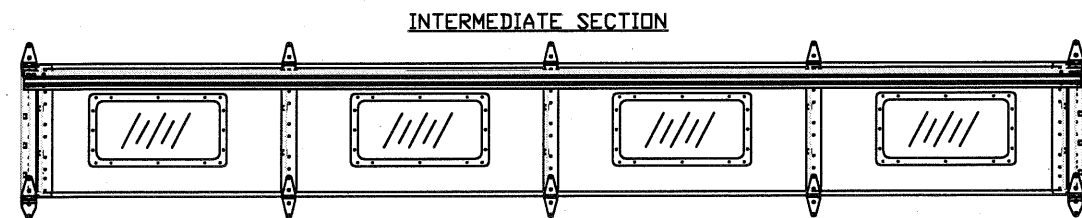
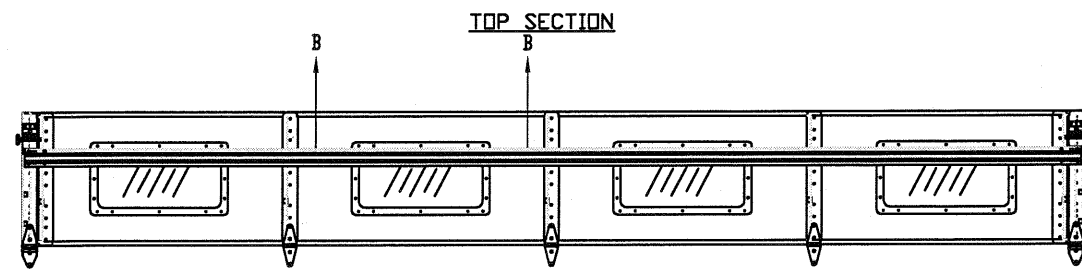


REVERSE ANGLE MOUNT

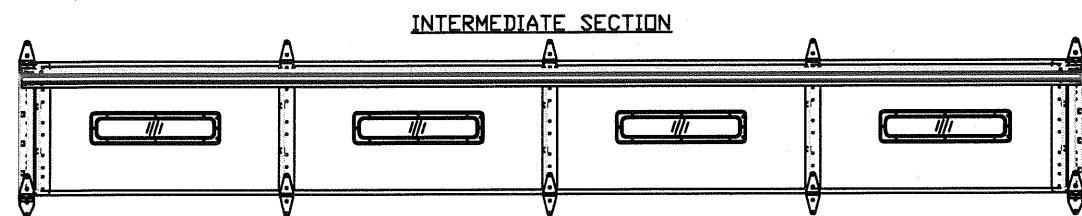
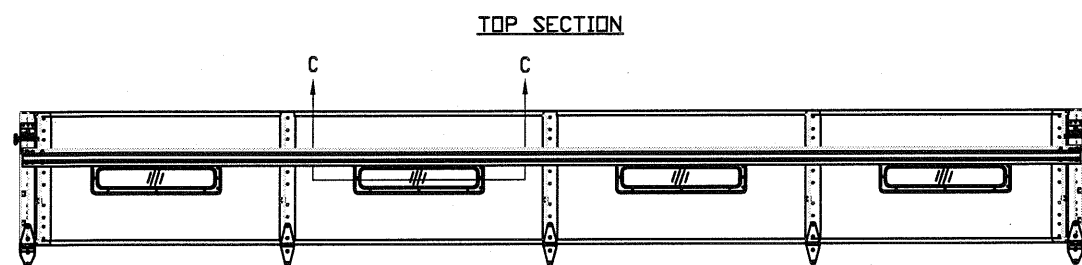
1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3" REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.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



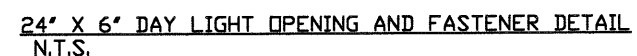
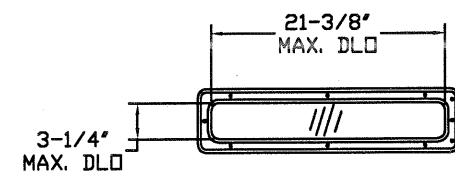
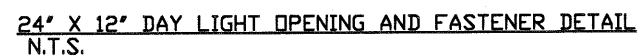
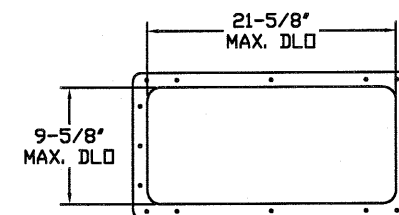
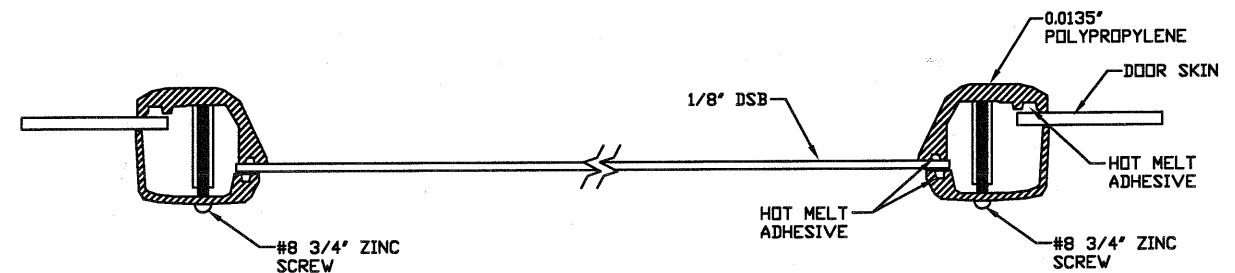
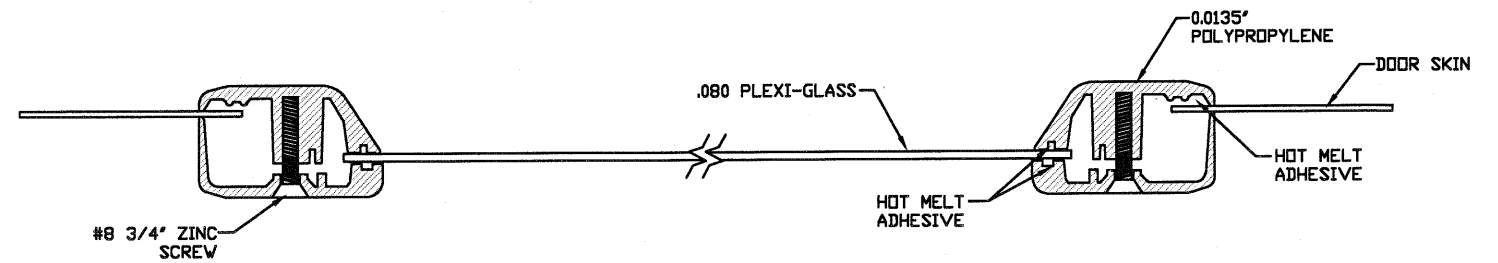
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 16'2" x 24' DESIGN LOADS +23.3 PSF -26.3 PSF TEST LOADS +35.0 PSF -39.5 PSF		Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
MODEL 2500 AMARR 2502, 2512 MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022			
SIZE	DRAWN BY RS	DATE 1/22/15	DRAWING NUMBER IBC-2516-130-24
B	CHECKED BY RLR	DATE 1/22/15	
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 2 OF 4



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



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



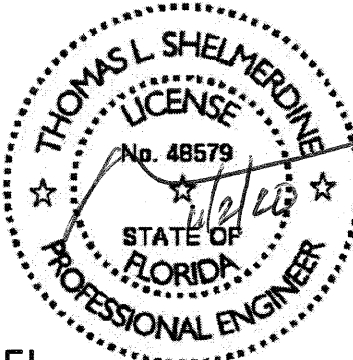
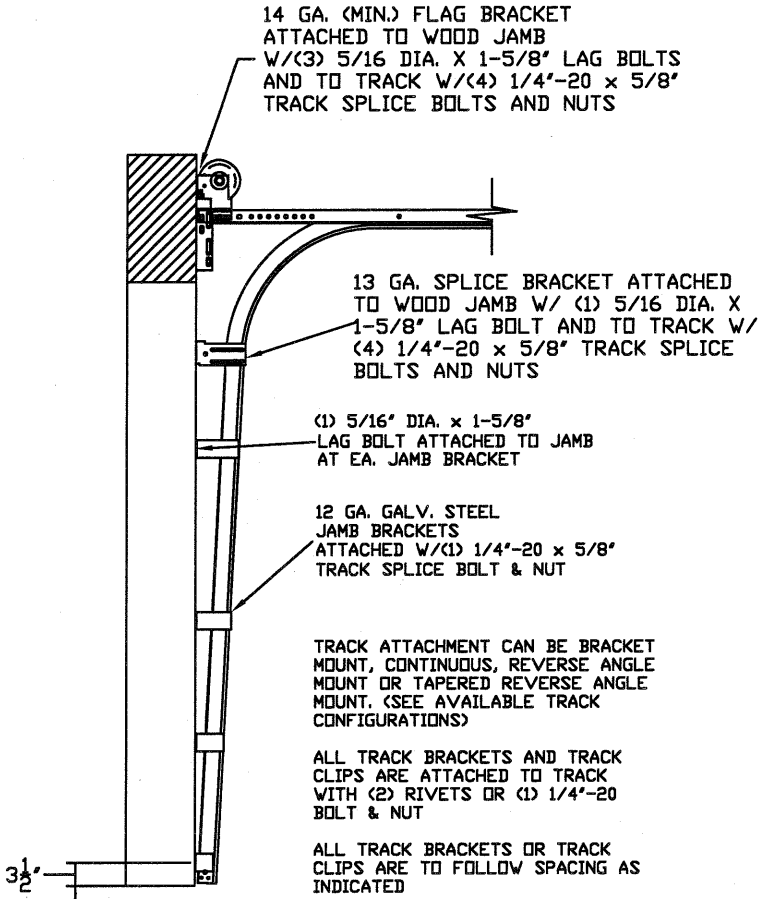
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 16'2 x 24' DESIGN LOADS +23.3 PSF -26.3 PSF TEST LOADS +35.0 PSF -39.5 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL	 dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
			
MODEL 2500 AMARR 2502, 2512 MODEL 2400 AMARR 2402, 2412, 2422 MODEL 2000 AMARR 2002, 2012, 2022			
SIZE	DRAWN BY RS B	DATE 1/22/15 DATE 1/22/15	DRAWING NUMBER IBC-2516-130-24
ENTREMATIAC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 4

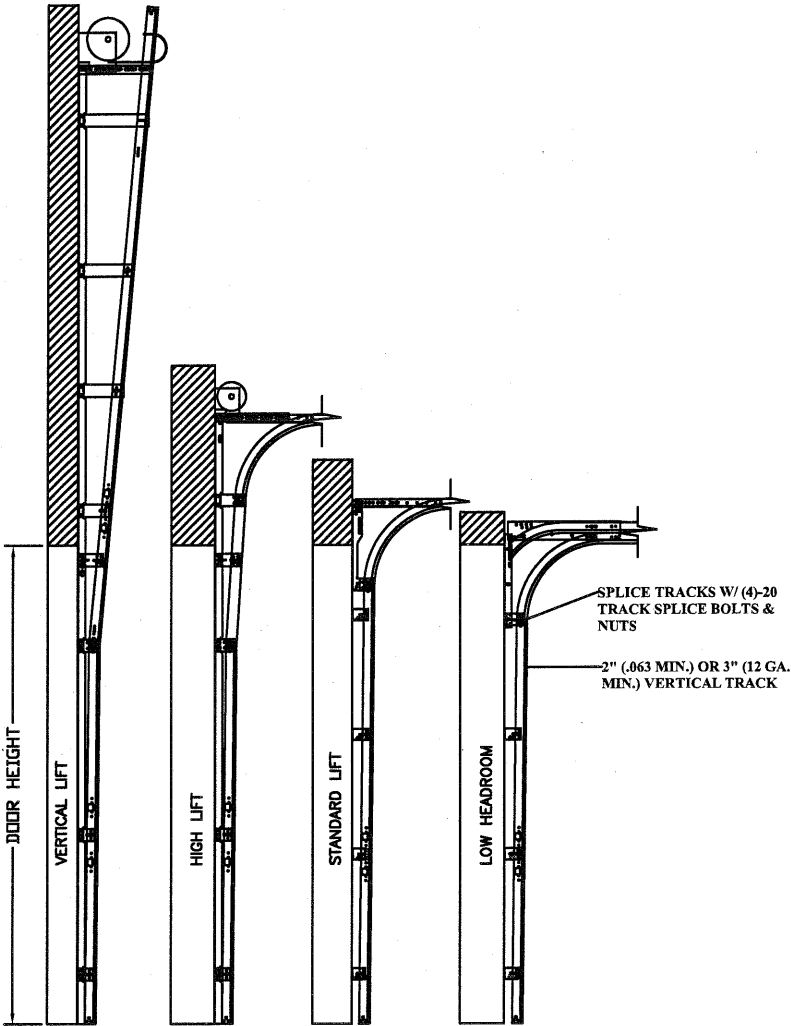
TABLE 1

Section Width (ft)		Center Stile Locations (Measured from Left)			Max Design Loads Allowed	
		1st (in)	2nd (in)	3rd (in)	Positive (PSF)	Negative (PSF)
9'	4"	36"	76"	-	29.5	33.3
9'	6"	37"	77"	-	29.2	32.9
9'	8"	38"	78"	-	28.8	32.5
9'	10"	39"	79"	-	28.4	32.1
10'	0"	40"	80"	-	28.1	31.7
10'	2"	41"	81"	-	27.7	31.3
10'	4"	42"	82"	-	27.4	30.9
10'	6"	43"	83"	-	27.0	30.5
10'	8"	44"	84"	-	26.7	30.2
10'	10"	45"	85"	-	26.4	29.8
11'	0"	46"	86"	-	26.1	29.5
11'	2"	47"	87"	-	25.8	29.1
11'	4"	48"	88"	-	25.5	28.8
11'	6"	49"	89"	-	25.2	28.5
11'	8"	50"	90"	-	24.9	28.2
11'	10"	51"	91"	-	24.7	27.8
12'	0"	48"	96"	-	23.4	26.4
13'	0"	36"	78"	120"	26.7	30.2
13'	2"	37"	79"	121"	26.7	30.2
13'	4"	38"	80"	122"	26.7	30.2
13'	6"	39"	81"	123"	26.7	30.2
13'	8"	40"	82"	124"	26.7	30.2
13'	10"	41"	83"	125"	26.7	30.2
14'	0"	42"	84"	126"	26.7	30.2
14'	2"	43"	85"	127"	26.4	29.8
14'	4"	44"	86"	128"	26.1	29.5
14'	6"	45"	87"	129"	25.8	29.1
14'	8"	46"	88"	130"	25.5	28.8
14'	10"	47"	89"	131"	25.2	28.5
15'	0"	48"	90"	132"	24.9	28.2
15'	2"	49"	91"	133"	24.7	27.8
15'	4"	50"	92"	134"	24.4	27.5
15'	6"	51"	93"	135"	24.1	27.2
15'	8"	52"	94"	136"	23.9	27.0
15'	10"	53"	95"	137"	23.6	26.7
16'	0"	48"	96"	144"	23.4	26.4
16'	2"	49"	97"	145"	23.3	26.3

*FOR WIDTHS 12'-2" TO 12'-10" CONTACT ENGINEERING FOR STILE PLACEMENT



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



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

TABLE 2

DOOR HEIGHT		TRACK ATTACHMENT											TYPICAL SPLICE
		A	B	C	D	E	F	G	H	I	J	K	
7'	0"	3.5"	22"	44"									
7'	6"	3.5"	22"	44"	68"								
8'	0"	3.5"	22"	44"	75"								
8'	6"	3.5"	22"	44"	75"								
9'	0"	3.5"	22"	44"	75"	92"							
9'	6"	3.5"	22"	44"	68"	92"							
10'	0"	3.5"	22"	44"	68"	92"							
11'	0"	3.5"	22"	44"	68"	92"	116"						
12'	0"	3.5"	22"	44"	68"	92"	116"						
13'	0"	3.5"	22"	44"	68"	92"	116"	140"					
14'	0"	3.5"	22"	44"	68"	92"	116"	140"					
15'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"				
16'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"				
17'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"			
18'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"			
19'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"		
20'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"		
21'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"	236"	
22'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"	236"	
23'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"	236"	260"
24'	0"	3.5"	22"	44"	68"	92"	116"	140"	164"	188"	212"	236"	260"

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY.
AMARR MODEL 2500 ONLY AVAILABLE UP TO 14'

REVDESCRIPTION OF REVISIONSDATEBY

MAX SIZE
16'2 x 24'

DESIGN LOADS
+23.3 PSF
-26.3 PSF

TEST LOADS
+35.0 PSF
-39.5 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 2500 AMARR 2502, 2512
MODEL 2400 AMARR 2402, 2412, 2422
MODEL 2000 AMARR 2002, 2012, 2022

SIZE
B

DRAWN BY
RS

CHECKED BY
RLR

DATE
1/22/15

DATE
1/22/15

DRAWING NUMBER
IBC-2516-130-24

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

SHEET 4 OF 4