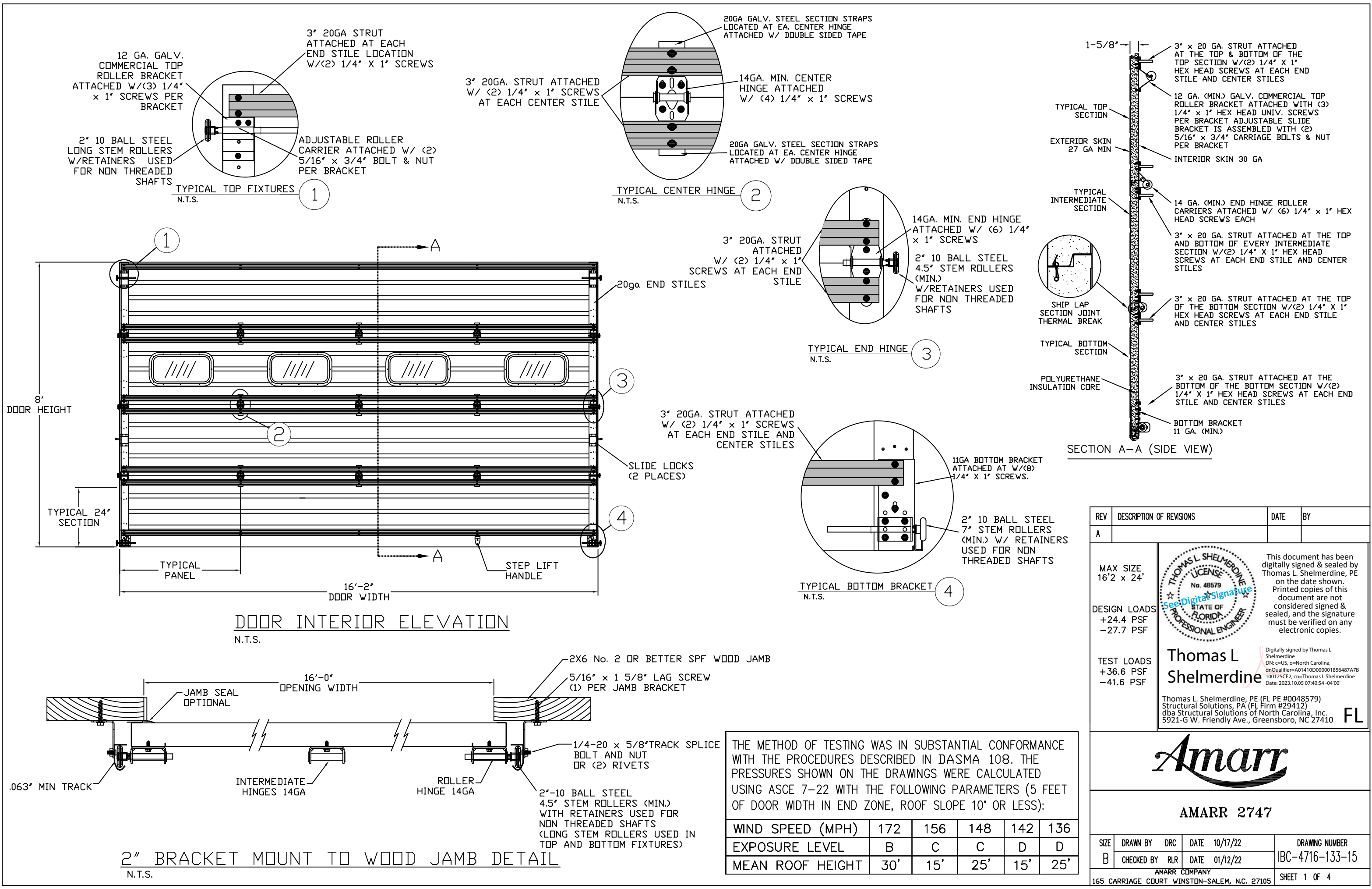




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):

WIND SPEED (MPH)	172	156	148	142	136
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY
A			

MAX SIZE
16'2 x 24'

DESIGN LOADS
+24.4 PSF
-27.7 PSF

TEST LOADS
+36.6 PSF
-41.6 PSF

THOMAS L. SHELDERDINE
No. 48579
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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Digitally signed by Thomas L. Shelmerdine
DN: c=US, o=North Carolina, dnQualifier=A01410D000001856487A7B
100125CE2, cn=Thomas L. Shelmerdine
Date: 2023.10.05 07:40:54 -04'00'

Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)
dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

FL

Amarr

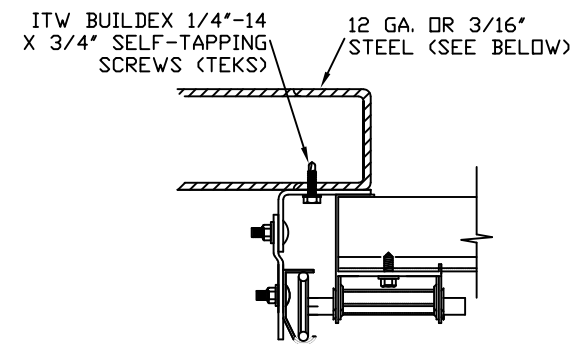
AMARR 2747

SIZE B	DRAWN BY DRC	DATE 10/17/22	DRAWING NUMBER IBC-4716-133-15
CHECKED BY RLR	DATE 01/12/22		

AMARR COMPANY
165 CARRIAGE COURT WINSTON-SALEM, NC. 27105

SHEET 1 OF 4

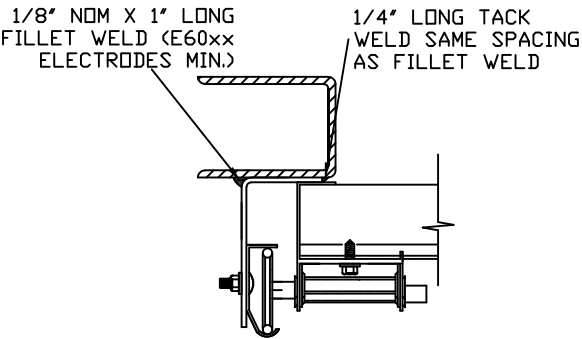
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

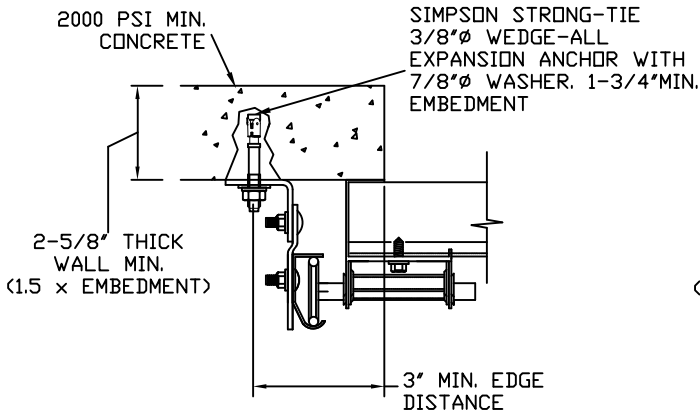
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 14" O.C.
REFER TO NOTES: 1, 2 AND 5

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



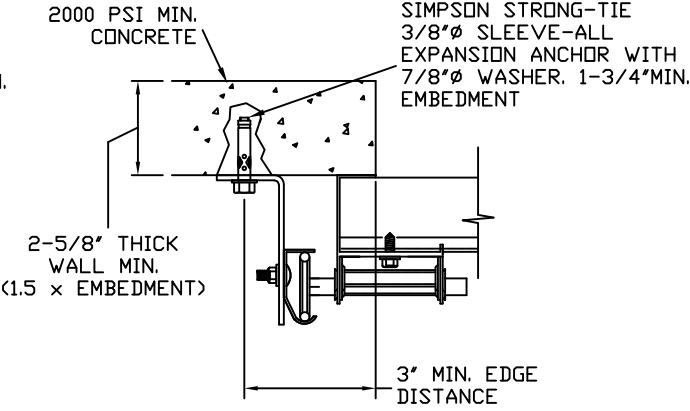
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

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 20" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

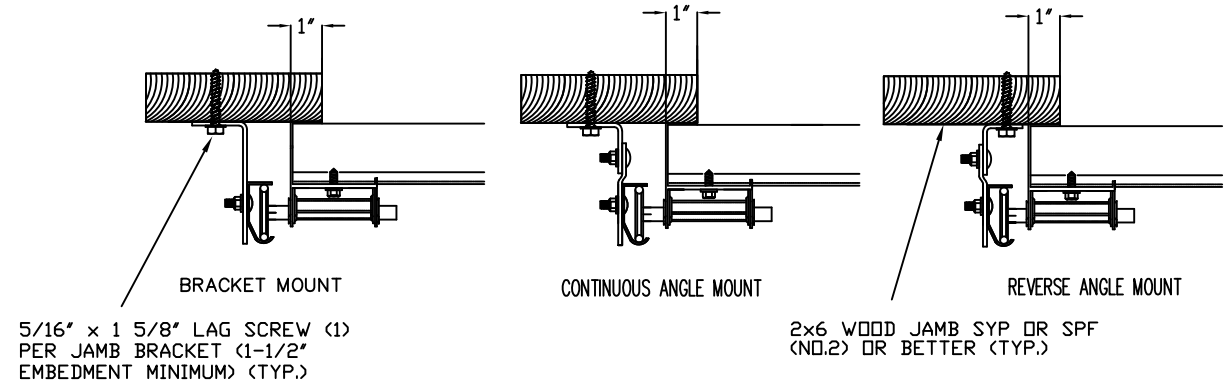


CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 20" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

TRACK CONNECTION TO WOOD JAMB OPTIONS

FOR LAG SCREWS & BRACKET SPACING SEE TRACK CONFIGURATION DETAIL

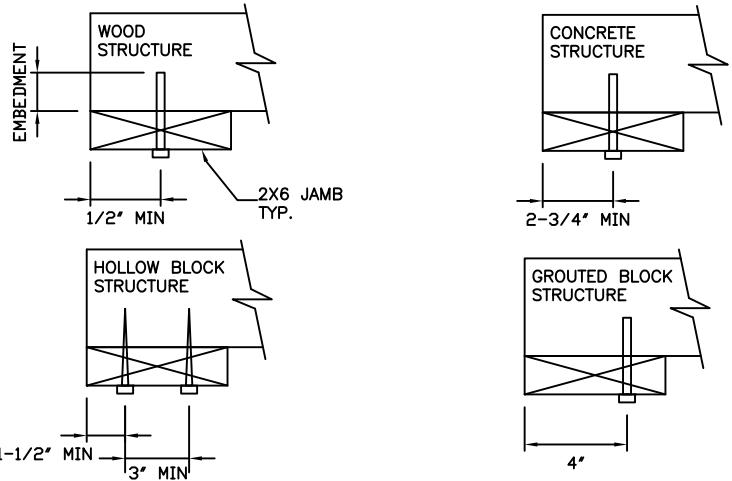


- NOTES:
1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
 2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
 3. MIN. EGDE DISTANCE OF 3" REQUIRED.
 4. USE WASHERS PROVIDED BY THE ANCHOR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

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

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



REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
16'2 x 24'

DESIGN LOADS
+24.4 PSF
-27.7 PSF

TEST LOADS
+36.6 PSF
-41.6 PSF

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LICENSE
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Structural Solutions, PA (FL Firm #29412)
dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

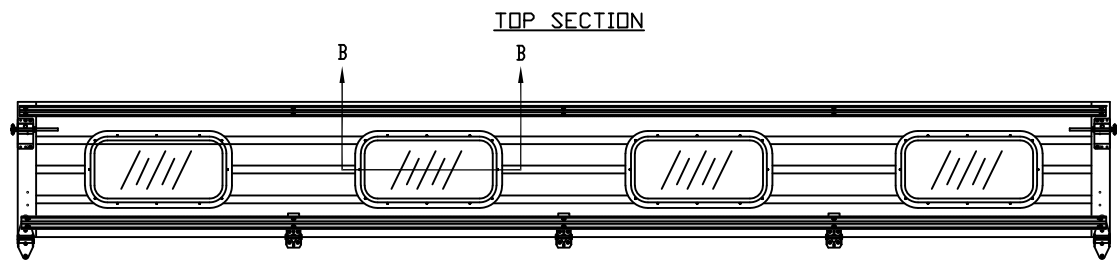
FL

Amarr

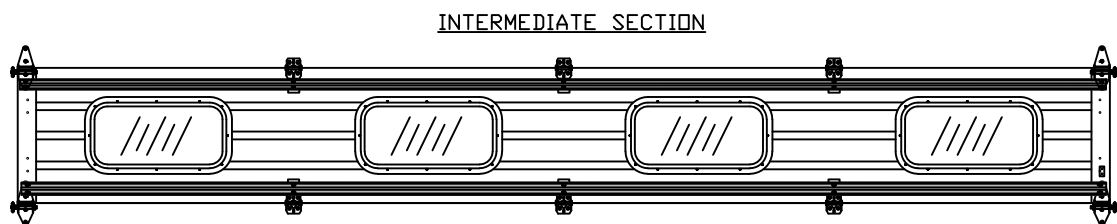
AMARR 2747

SIZE B	DRAWN BY DRC	DATE 10/17/22	DRAWING NUMBER IBC-4716-133-15
CHECKED BY RLR	DATE 01/12/22	SHEET 2 OF 4	

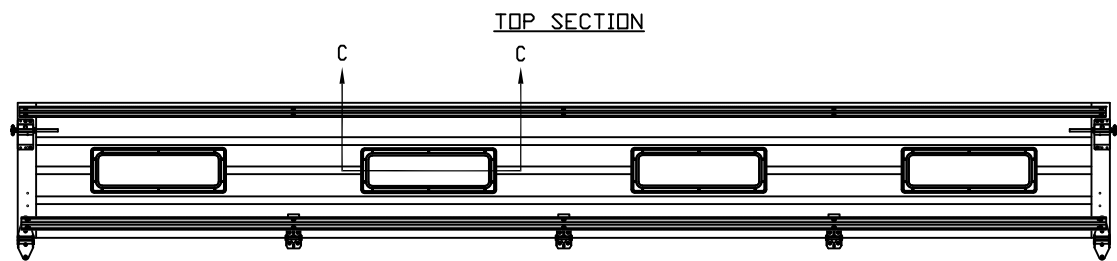
AMARR COMPANY
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105



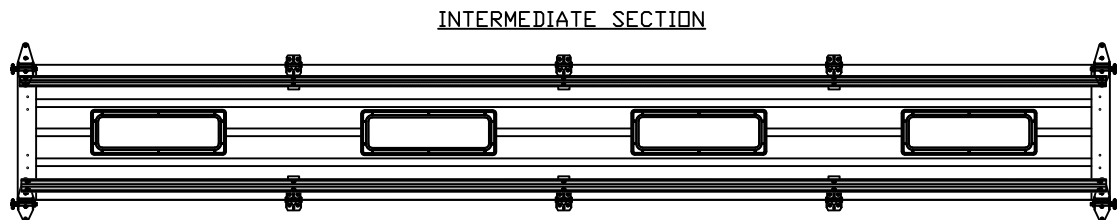
OPTIONAL GLAZED SECTION W/ 26' X 13' WINDOWS
N.T.S.



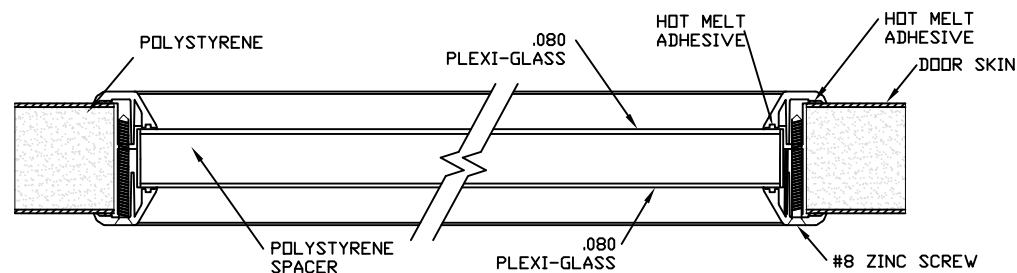
OPTIONAL GLAZED SECTION W/ 26' X 13' WINDOWS
N.T.S.



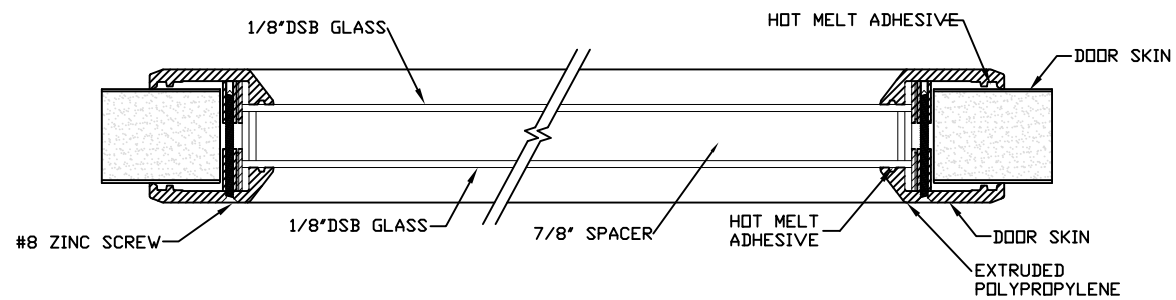
OPTIONAL GLAZED SECTION W/ 24' X 8' WINDOWS
N.T.S.



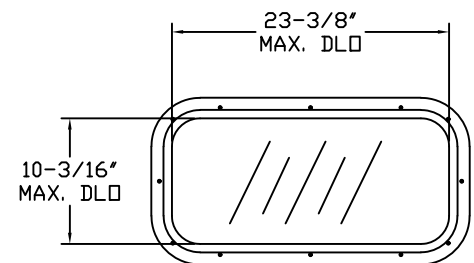
OPTIONAL GLAZED SECTION W/ 24' X 8' WINDOWS
N.T.S.



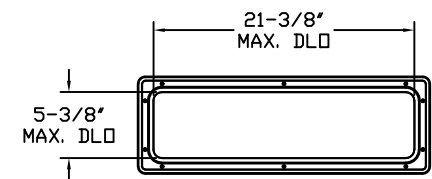
SECTION B-B 26' X 13' WINDOW DETAIL W/ INSULATED PLEXI-GLASS
N.T.S.



SECTION C-C 24' X 8' WINDOW DETAIL W/ INSULATED GLASS
N.T.S.

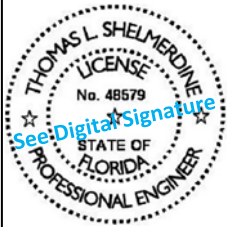


26' X 13' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



24' X 8' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

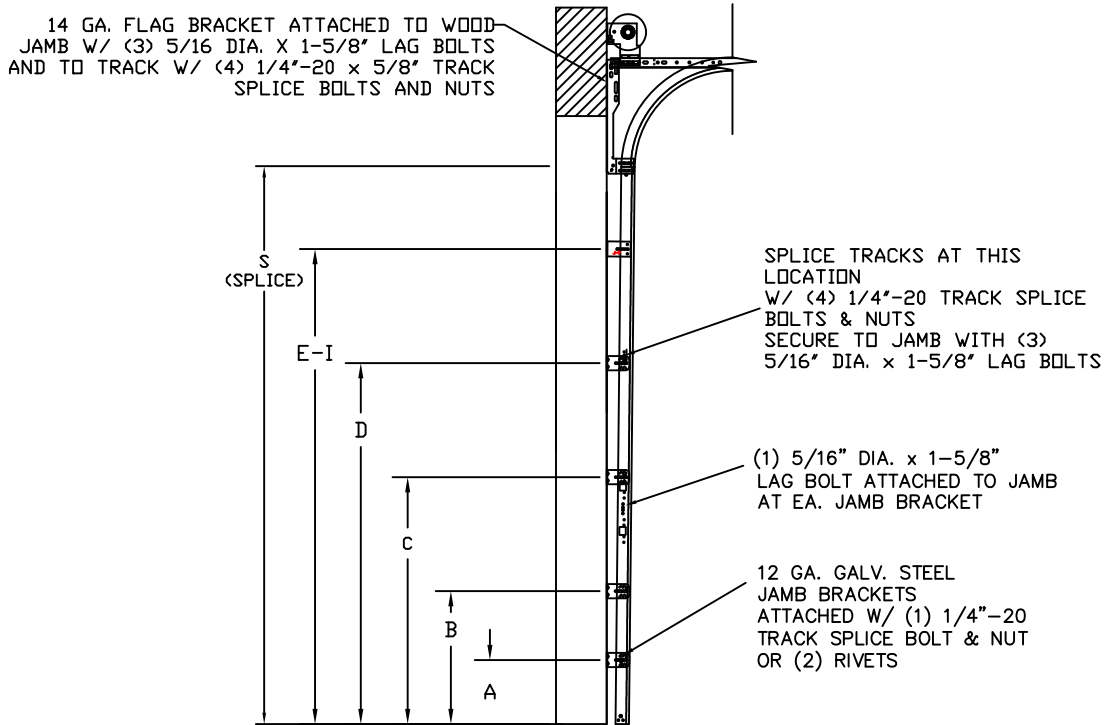
MAX SIZE 16'2 x 24' DESIGN LOADS +24.4 PSF -27.7 PSF TEST LOADS +36.6 PSF -41.6 PSF	 This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies. Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	FL
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Amarr

AMARR 2747			
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SIZE	DRAWN BY	DRC	DATE	10/17/22	DRAWING NUMBER IBC-4716-133-15
B	CHECKED BY	RLR	DATE	01/12/22	

AMARR COMPANY				SHEET 3 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105				



TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
N.T.S.
SEE TABLE 2 FOR TRACK ATTACHMENT SPACING

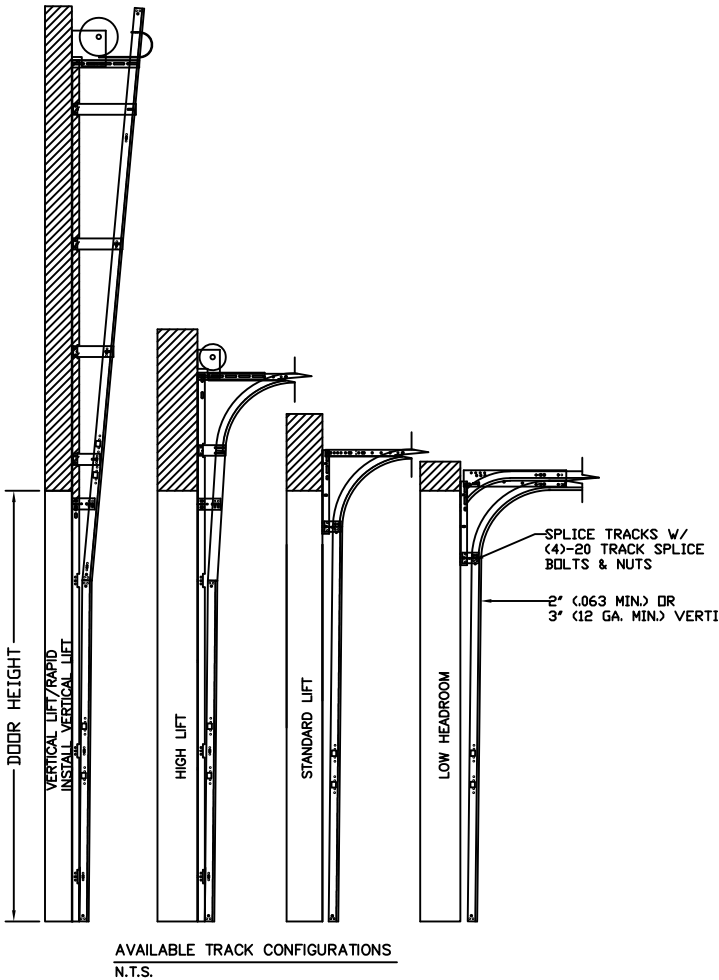


TABLE 1

Section Width (ft)	Center Stile Locations (Measured from Left Edge)				Max Design Loads Allowed	
	1st (in)	2nd (in)	3rd (in)		Positive (PSF)	Negative (PSF)
12' 4"	50	98	-		24.0	27.2
12' 6"	51	99	-		23.8	27.0
12' 8"	52	100	-		23.5	26.7
12' 10"	53	101	-		23.3	26.4
13' 0"	36	78	120		28.0	31.8
13' 2"	37	79	121		28.0	31.8
13' 4"	38	80	122		28.0	31.8
13' 6"	39	81	123		28.0	31.8
13' 8"	40	82	124		28.0	31.8
13' 10"	41	83	125		28.0	31.8
14' 0"	42	84	126		28.0	31.8
14' 2"	43	85	127		27.7	31.4
14' 4"	44	86	128		27.3	31.0
14' 6"	45	87	129		27.0	30.7
14' 8"	46	88	130		26.7	30.3
14' 10"	47	89	131		26.4	30.0
15' 0"	48	90	132		26.1	29.7
15' 2"	49	91	133		25.8	29.3
15' 4"	50	92	134		25.5	29.0
15' 6"	51	93	135		25.3	28.7
15' 8"	52	94	136		25.0	28.4
15' 10"	53	95	137		24.7	28.1
16' 0"	48	96	144		24.5	27.8
16' 2"	49	97	145		24.4	27.7

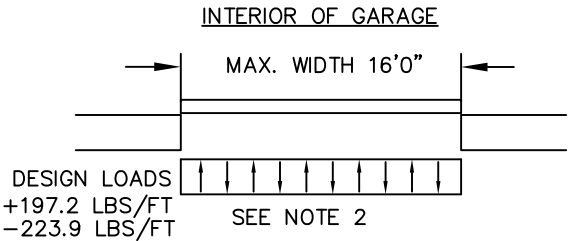
TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT													TYPICAL SPLICE
	A	B	C	D	E	F	G	H	I	J	K	L	M	
7' 0"	10	21"	39"											76"
7' 6"	10	21"	39"	57"										82"
8' 0"	10	21"	39"	57"	75"									88"
8' 6"	10	21"	39"	57"	75"									94"
9' 0"	10	21"	39"	57"	75"									100"
9' 6"	10	21"	39"	57"	75"	93"								106"
10' 0"	10	21"	39"	57"	75"	93"								112"
11' 0"	10	21"	39"	57"	75"	93"	111"							124"
12' 0"	10	21"	39"	57"	75"	93"	111"							136"
13' 0"	10	21"	39"	57"	75"	93"	111"	129"						148"
14' 0"	10	21"	39"	57"	75"	93"	111"	129"						160"
15' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"					172"
16' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"					184"
17' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"				196"
18' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"				208"
19' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"			220"
20' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"			232"
21' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"	201"		244"
22' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"	201"		256"
23' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"	201"	219"	268"
24' 0"	10	21"	39"	57"	75"	93"	111"	129"	147"	165"	183"	201"	219"	280"

ALL TRACK ATTACHMENT SPACING +/-2" ALLOWED WITH SPF OR SYP NO. 2 OR BETTER ONLY

SPECIFICATIONS AND NOTES

- 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.
- EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +197.2 LBS/FT & -223.9 LBS/FT
- DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
- DOOR SECTIONS SHALL BE 27 GA. (.015) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
- DOORS UP TO 24'0" HIGH HAVE (2) 3" 20GA STRUTS PER SECTION
- 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 16'2 x 24' DESIGN LOADS +24.4 PSF -27.7 PSF TEST LOADS +36.6 PSF -41.6 PSF THOMAS L. SHELDERDINE LICENSE No. 48579 STATE OF FLORIDA PROFESSIONAL ENGINEER See Digital Signature This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies. Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410 FL			
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SIZE B	DRAWN BY DRC	DATE 10/17/22	DRAWING NUMBER IBC-4716-133-15
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AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, NC. 27105			SHEET 4 OF 4