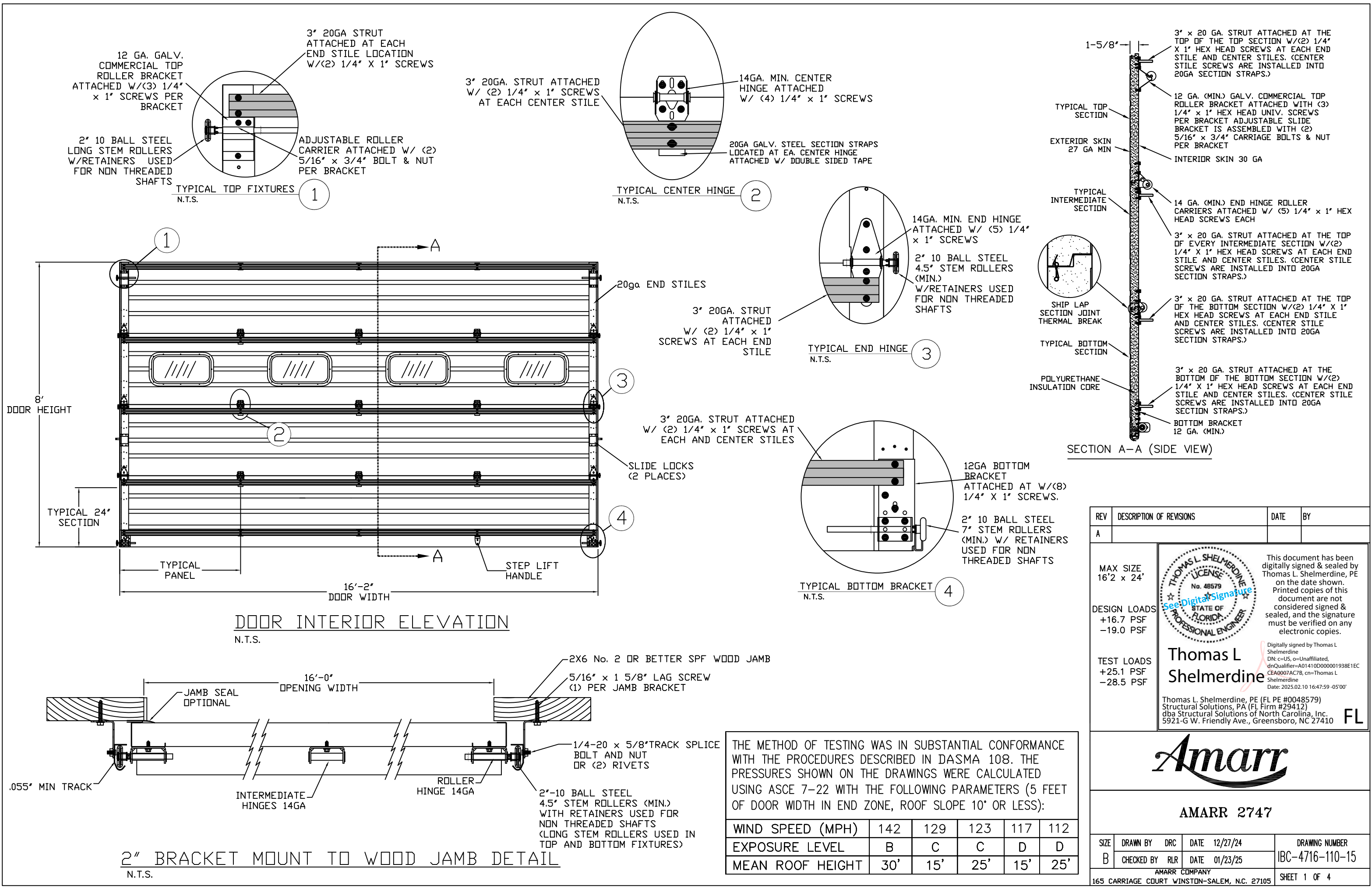




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):

WIND SPEED (MPH)	142	129	123	117	112
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
+16.7 PSF
-19.0 PSF

TEST LOADS
+25.1 PSF
-28.5 PSF

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

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DN: c=US, o=Unaffiliated, dnQualifier=A01410D000001938E1EC, cEA0007AC7B, cn=Thomas L. Shelmerdine
Date: 2025.02.10 16:47:59 -05'00'

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

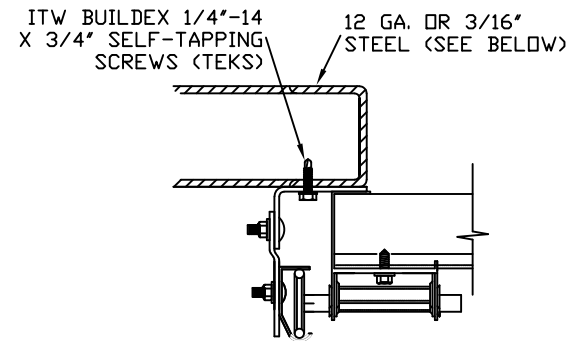
AMARR 2747

SIZE B	DRAWN BY DRC	DATE 12/27/24	DRAWING NUMBER IBC-4716-110-15
CHECKED BY RLR	DATE 01/23/25		

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

SHEET 1 OF 4

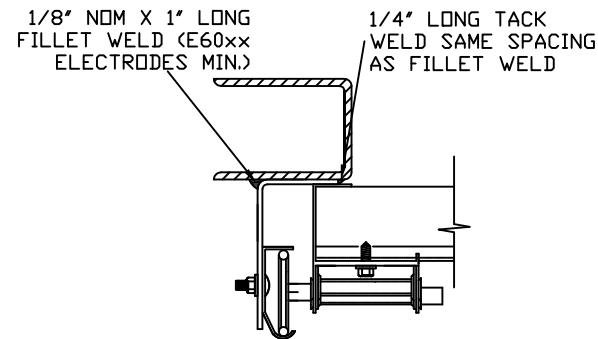
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

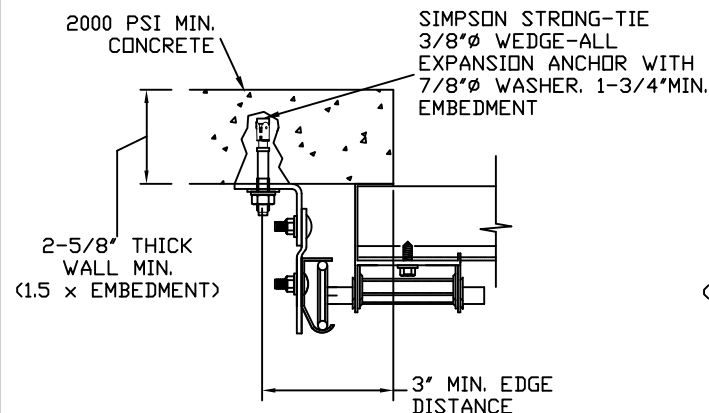
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 20" O.C.
REFER TO NOTES: 1, 2 AND 5

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



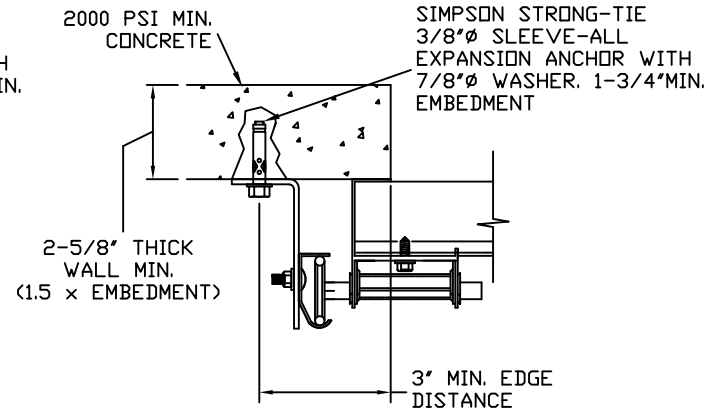
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

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

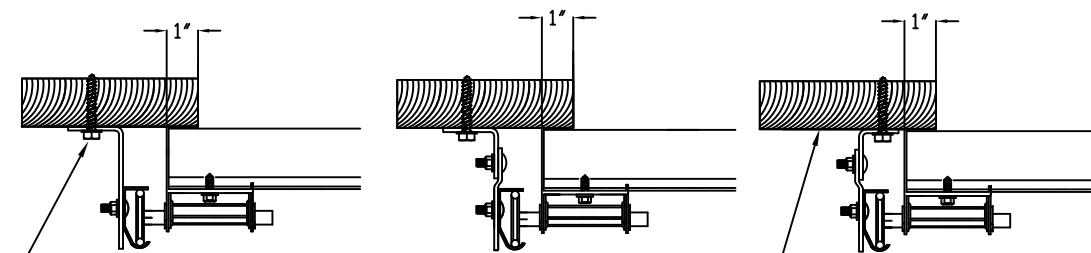


CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

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

TRACK CONNECTION TO WOOD JAMB OPTIONS

FOR LAG SCREWS & BRACKET SPACING SEE 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.)

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. 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.

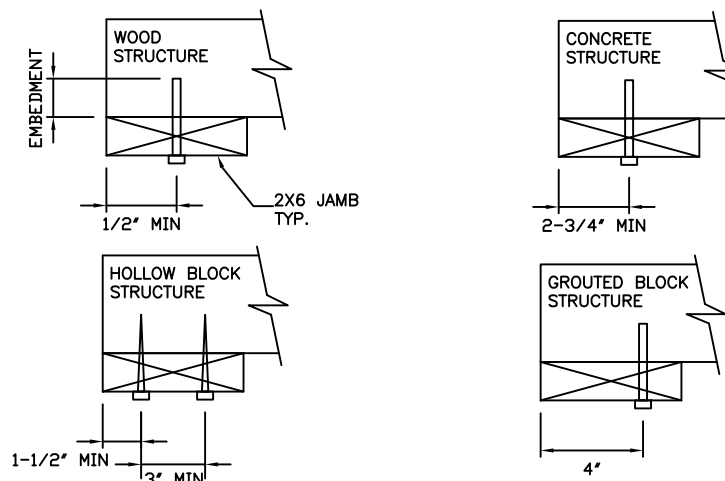
WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

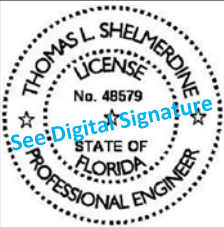
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/2" EMBEDMENT)

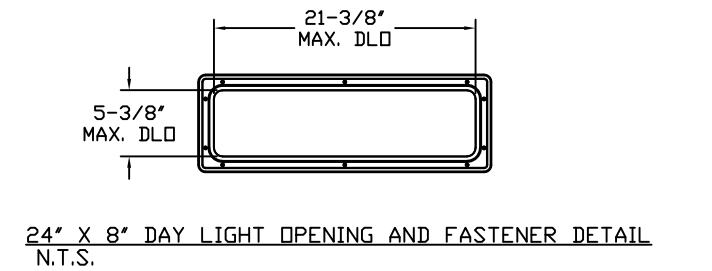
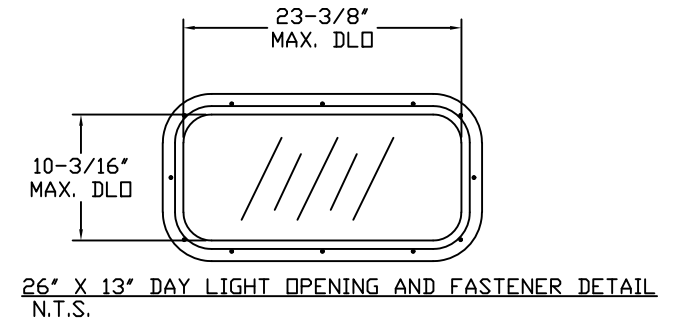
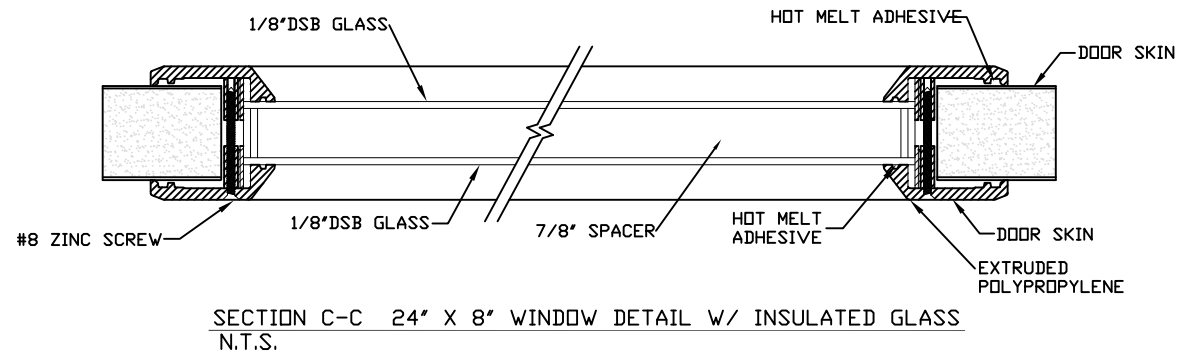
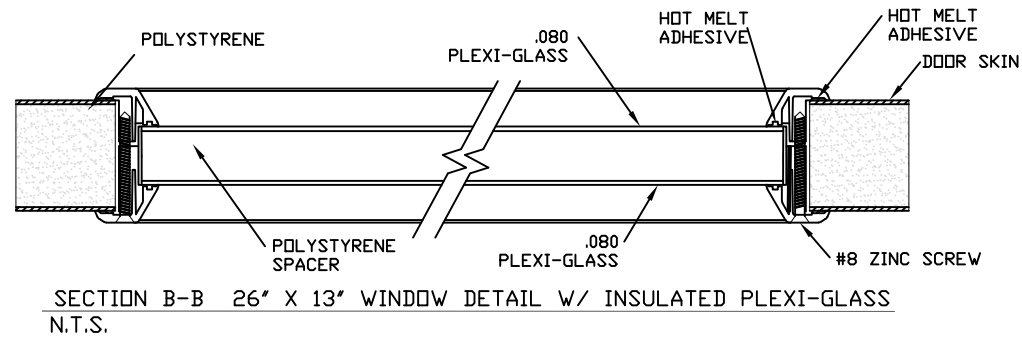
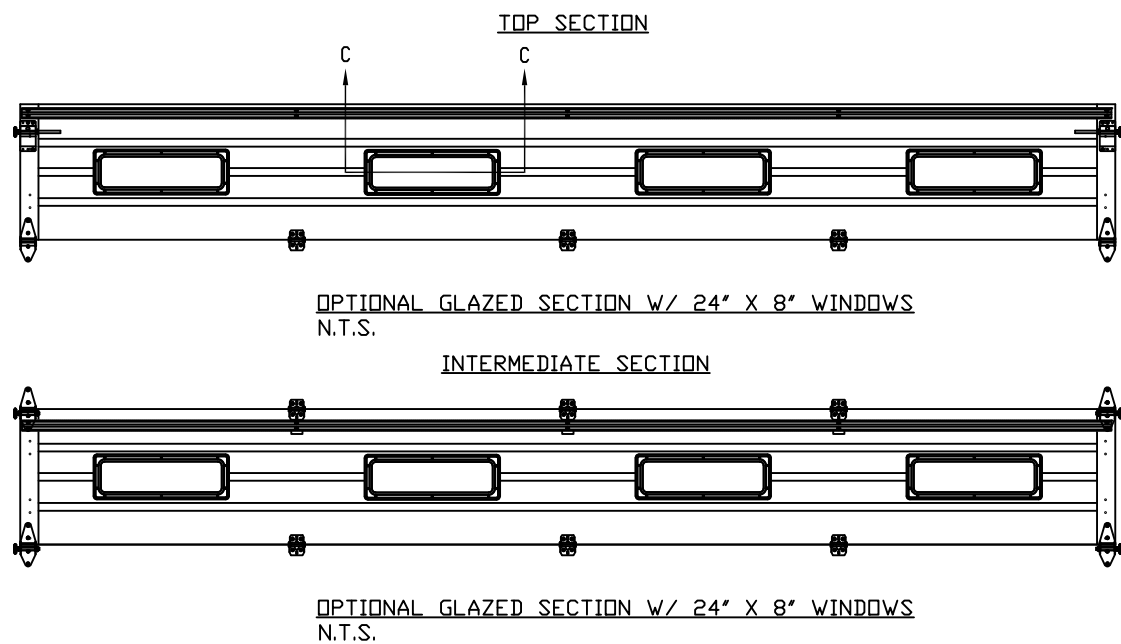
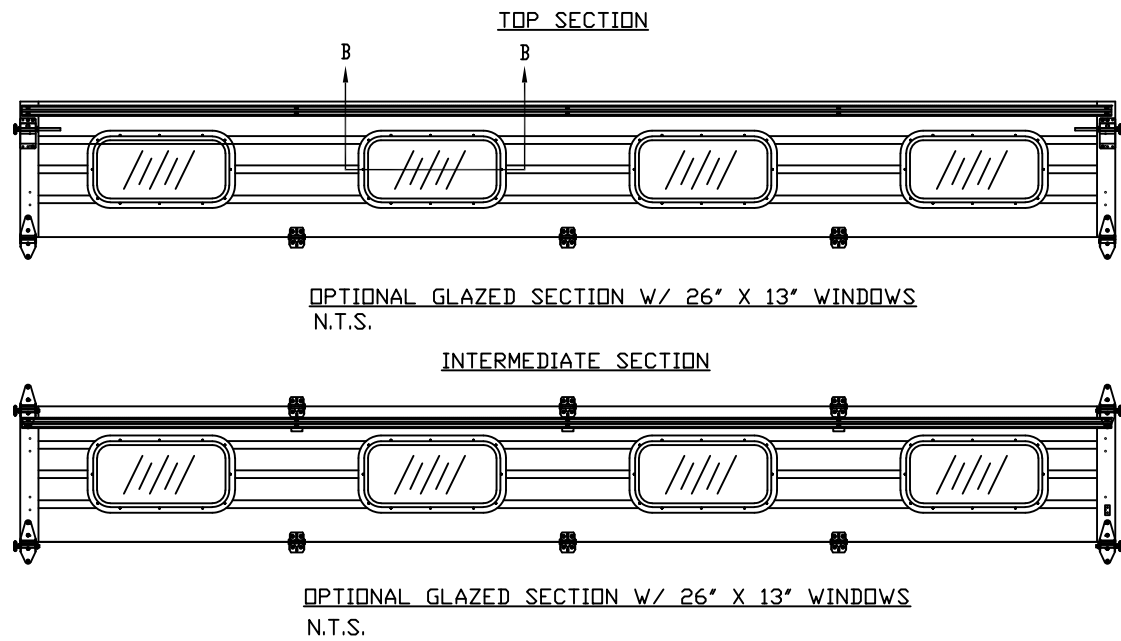
2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE
HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 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



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 16'2 x 24' DESIGN LOADS +16.7 PSF -19.0 PSF TEST LOADS +25.1 PSF -28.5 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	
			
AMARR 2747			
SIZE	DRAWN BY DRC	DATE 12/27/24	DRAWING NUMBER
B	CHECKED BY RLR	DATE 01/23/25	IBC-4716-110-15
AMARR COMPANY			SHEET 2 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 16'2 x 24' DESIGN LOADS +16.7 PSF -19.0 PSF TEST LOADS +25.1 PSF -28.5 PSF		THOMAS L. SHELMERDINE LICENSE No. 48579 See Digital Signature STATE OF FLORIDA PROFESSIONAL ENGINEER 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	
Amarr AMARR 2747			
SIZE	DRAWN BY DRC	DATE 12/27/24	DRAWING NUMBER
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AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 4

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	-		16.4	18.7
12' 6"	51	99	-		16.3	18.5
12' 8"	52	100	-		16.1	18.3
12' 10"	53	101	-		15.9	18.1
13' 0"	36	78	120		19.1	21.8
13' 2"	37	79	121		19.1	21.8
13' 4"	38	80	122		19.1	21.8
13' 6"	39	81	123		19.1	21.8
13' 8"	40	82	124		19.1	21.8
13' 10"	41	83	125		19.1	21.8
14' 0"	42	84	126		19.1	21.8
14' 2"	43	85	127		18.9	21.5
14' 4"	44	86	128		18.7	21.3
14' 6"	45	87	129		18.5	21.0
14' 8"	46	88	130		18.3	20.8
14' 10"	47	89	131		18.1	20.6
15' 0"	48	90	132		17.9	20.3
15' 2"	49	91	133		17.7	20.1
15' 4"	50	92	134		17.5	19.9
15' 6"	51	93	135		17.3	19.7
15' 8"	52	94	136		17.1	19.5
15' 10"	53	95	137		16.9	19.3
16' 0"	48	96	144		16.7	19.1
16' 2"	49	97	145		16.7	19.0

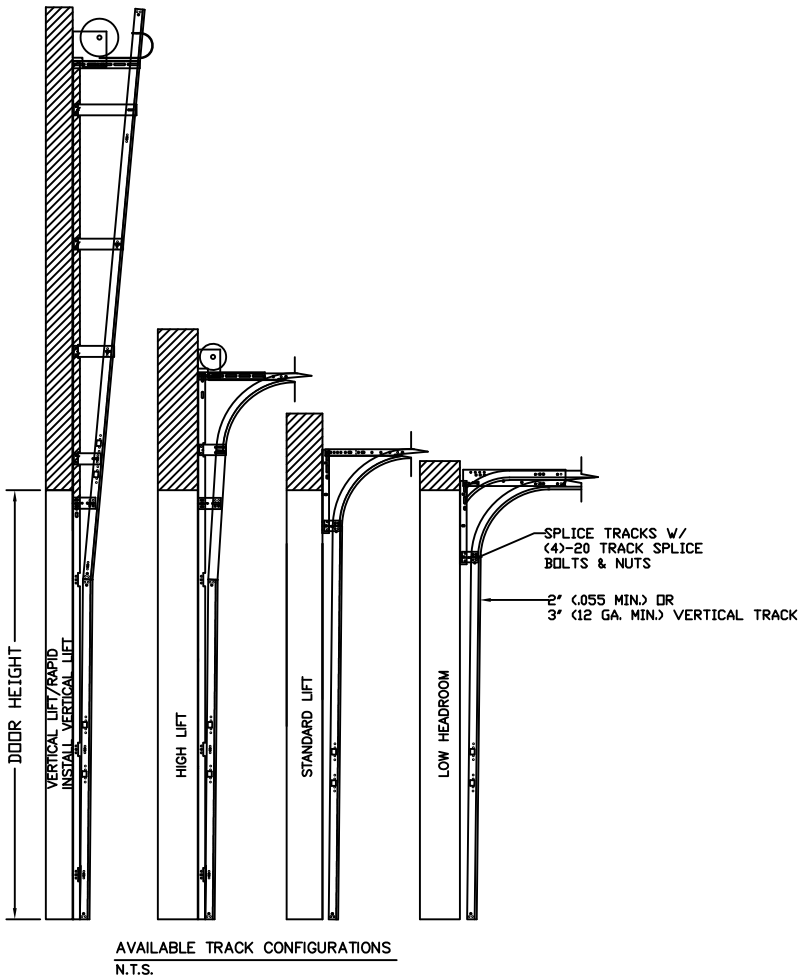
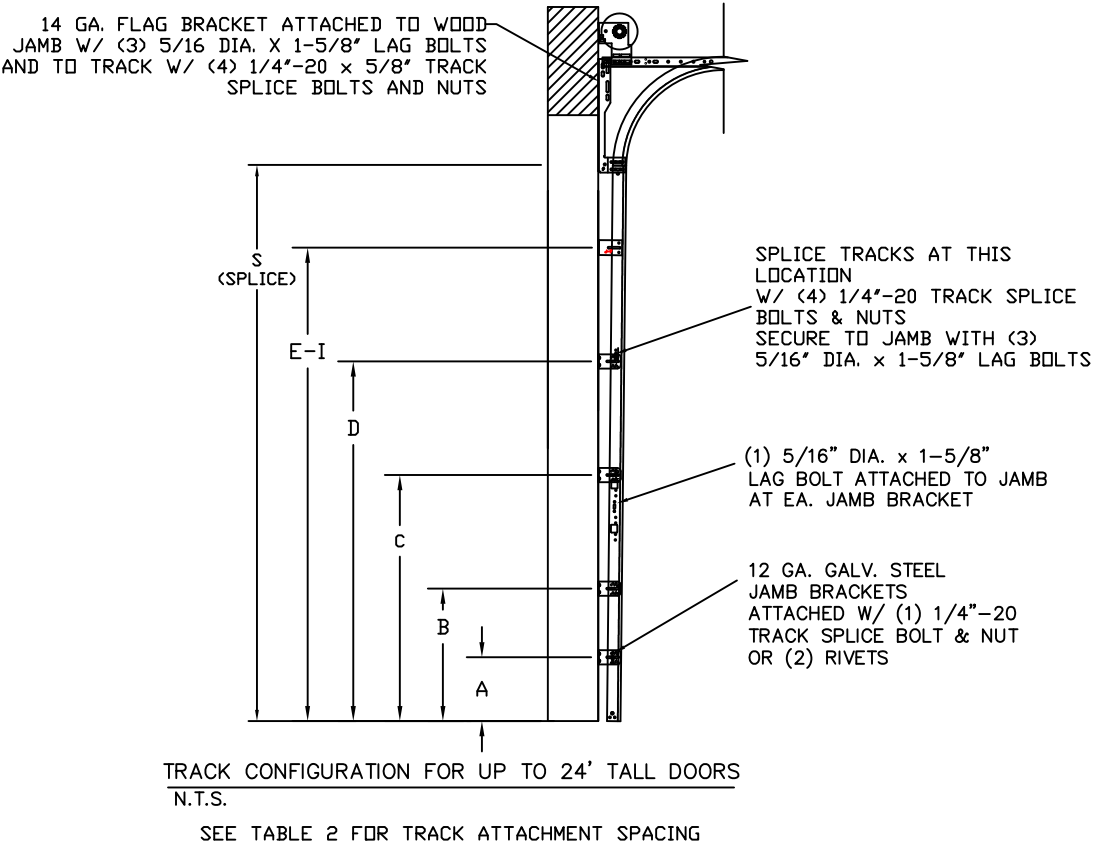
TABLE 2

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

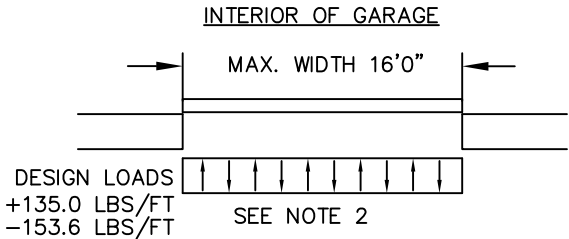
TABLE 3

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



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: +135.0 LBS/FT & -153.6 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. SEE TABLE 3 FOR STRUT CONFIGURATION
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



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MAX SIZE 16'2 x 24' DESIGN LOADS +16.7 PSF -19.0 PSF TEST LOADS +25.1 PSF -28.5 PSF THOMAS L. SHELDERDINE LICENSE No. 48579 STATE OF FLORIDA PROFESSIONAL ENGINEER 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 COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 4 OF 4