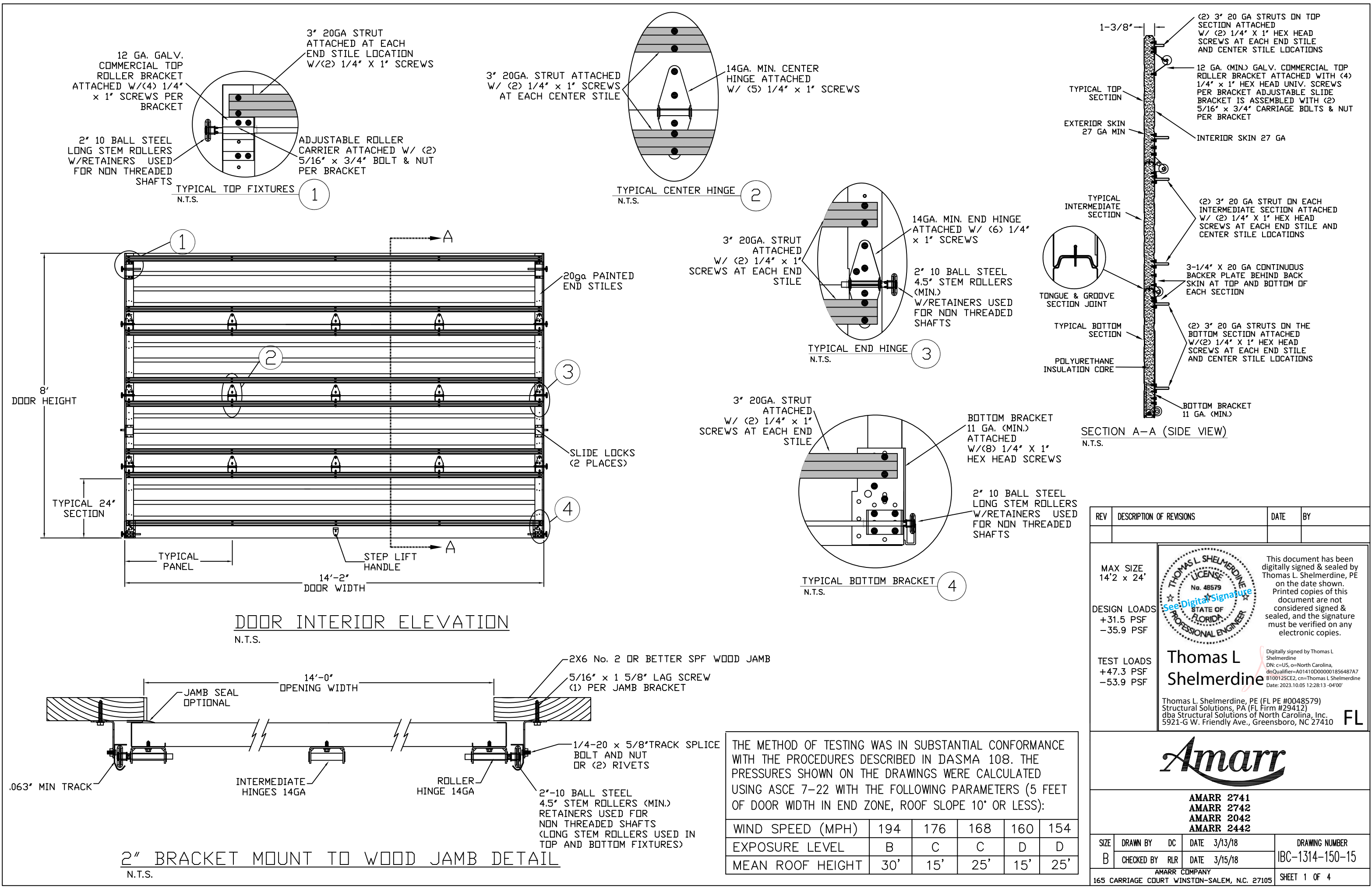




REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
14'2" x 24'

DESIGN LOADS
+31.5 PSF
-35.9 PSF

TEST LOADS
+47.3 PSF
-53.9 PSF

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Thomas L Shelmerdine

Digitally signed by Thomas L. Shelmerdine
DN: c=US, o=North Carolina, dnQualifier=A01410D000001856487A7
8100125CE2, cn=Thomas L. Shelmerdine
Date: 2023.10.05 12:28:13 -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

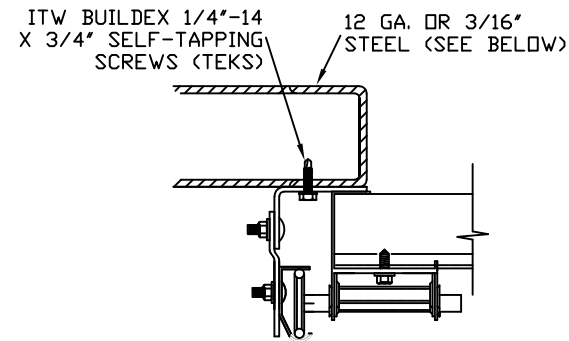
THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):					
WIND SPEED (MPH)	194	176	168	160	154
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

AMARR 2741
AMARR 2742
AMARR 2042
AMARR 2442

SIZE B	DRAWN BY DC	DATE 3/13/18	DRAWING NUMBER IBC-1314-150-15
CHECKED BY RLR	DATE 3/15/18	AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105	

SHEET 1 OF 4

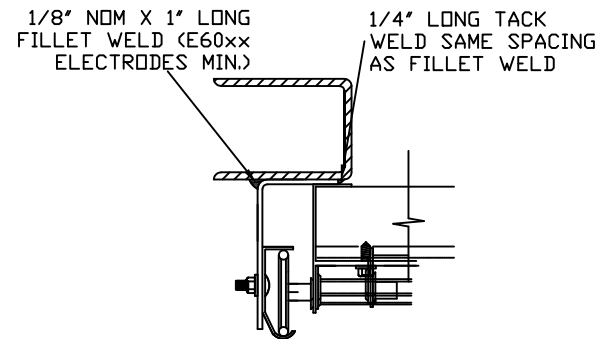
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

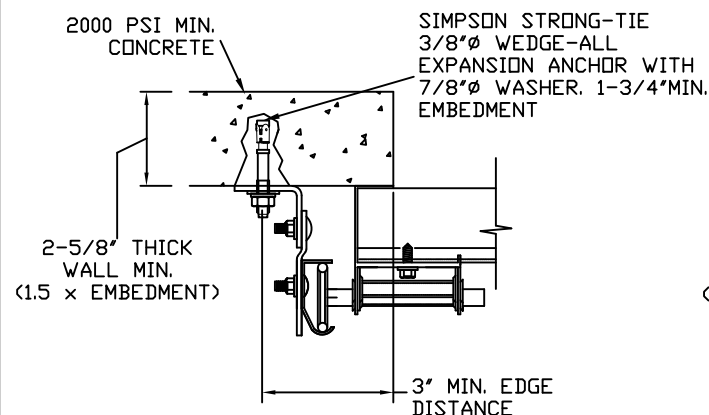
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 12" O.C.
REFER TO NOTES: 1, 2 AND 5

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



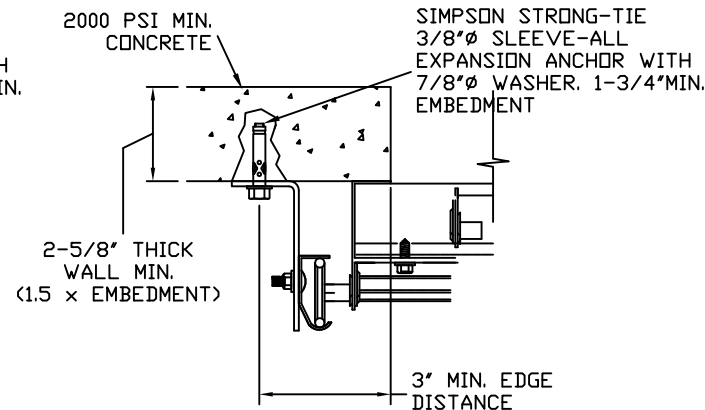
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

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

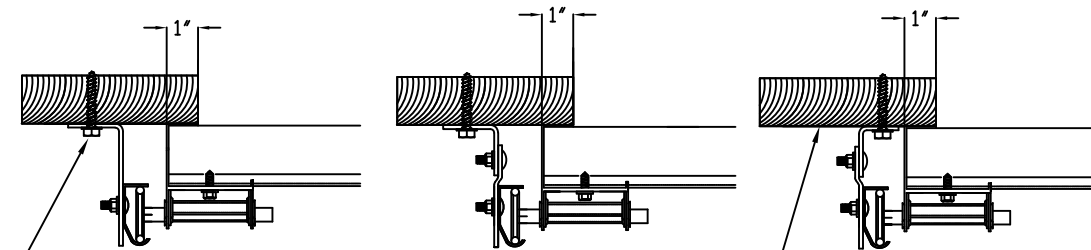


CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 18" 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.)

CONTINUOUS ANGLE MOUNT

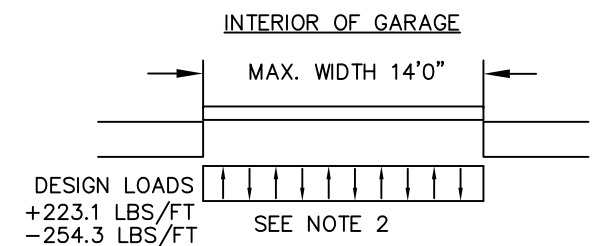
2x6 WOOD JAMB SYP OR SPF
(NO.2) OR BETTER (TYP.)

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.

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: +223.1 LBS/FT & -254.3 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 HAVE (2) 3" 20GA STRUTS 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.



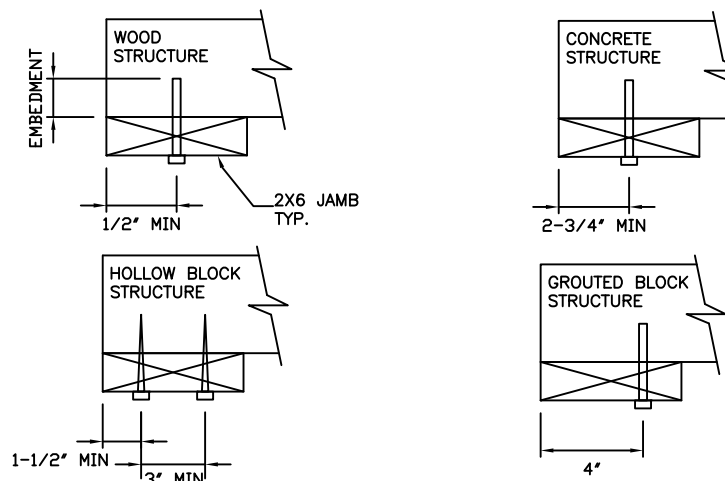
WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

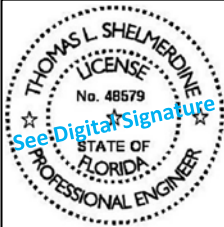
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 22" O.C. (1 1/2" EMBEDMENT)

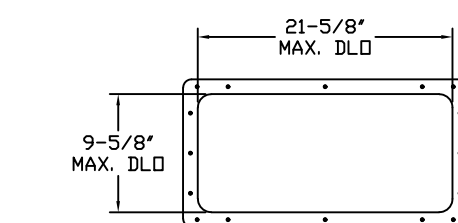
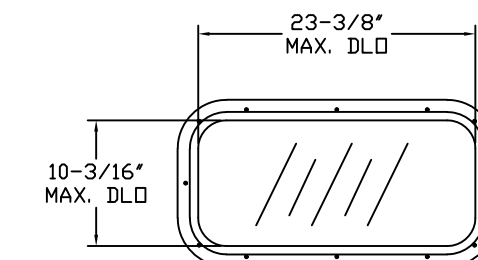
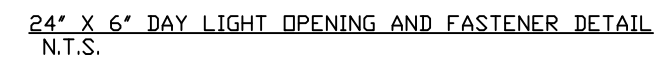
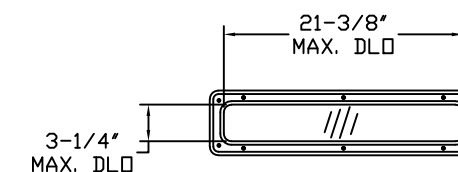
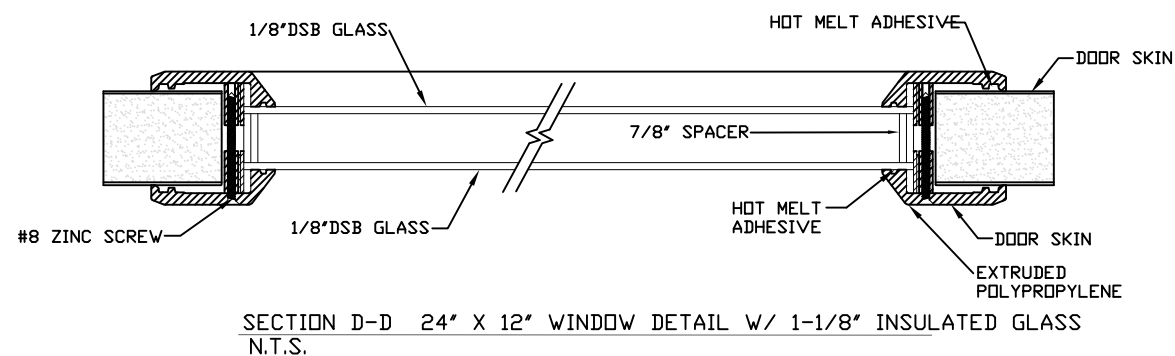
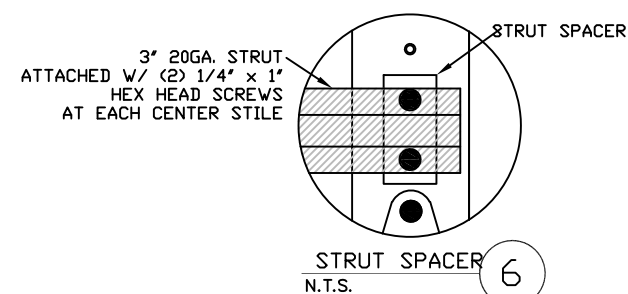
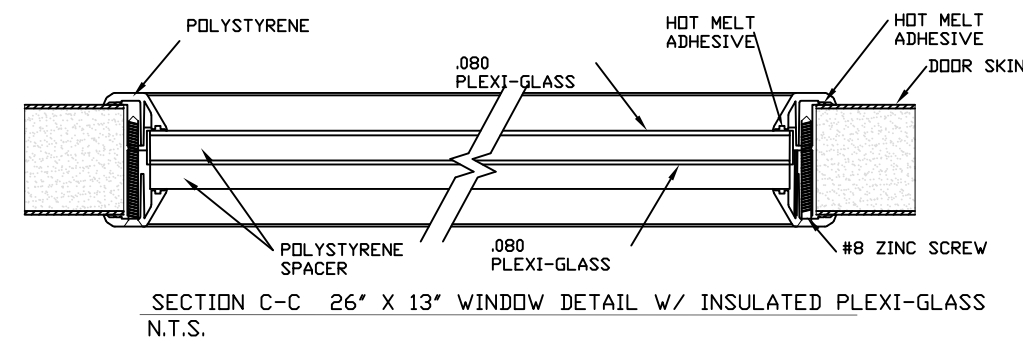
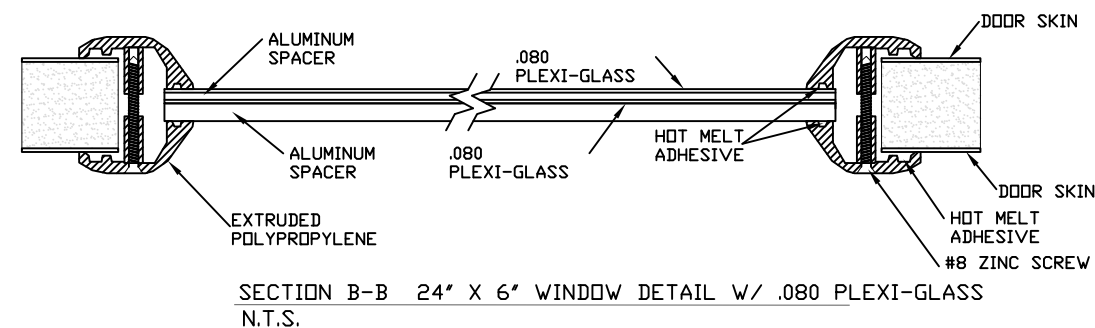
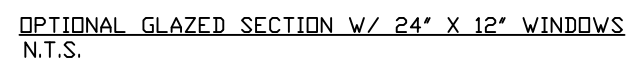
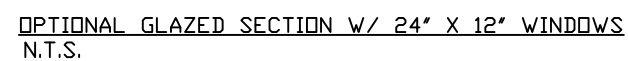
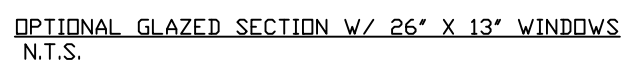
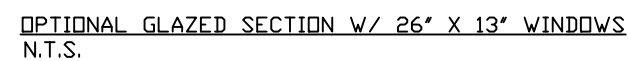
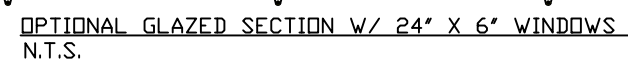
2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE
HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 18" O.C. (1 1/4" EMBEDMENT)
ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 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 22" 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, 14'2" x 24' DESIGN LOADS +31.5 PSF -35.9 PSF TEST LOADS +47.3 PSF -53.9 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 & 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 2741 AMARR 2742 AMARR 2042 AMARR 2442			
SIZE	DRAWN BY	DC	DATE 3/13/18
B	CHECKED BY	RLR	DATE 3/15/18
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			DRAWING NUMBER IBC-1314-150-15
AMARR COMPANY 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 2 OF 4



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE, 14'2 x 24' DESIGN LOADS +31.5 PSF -35.9 PSF TEST LOADS +47.3 PSF -53.9 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 2741 AMARR 2742 AMARR 2042 AMARR 2442			
SIZE	DRAWN BY DC	DATE 3/13/18	DRAWING NUMBER
B	CHECKED BY RLR	DATE 3/15/18	IBC-1314-150-15
AMARR COMPANY			SHEET 3 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			

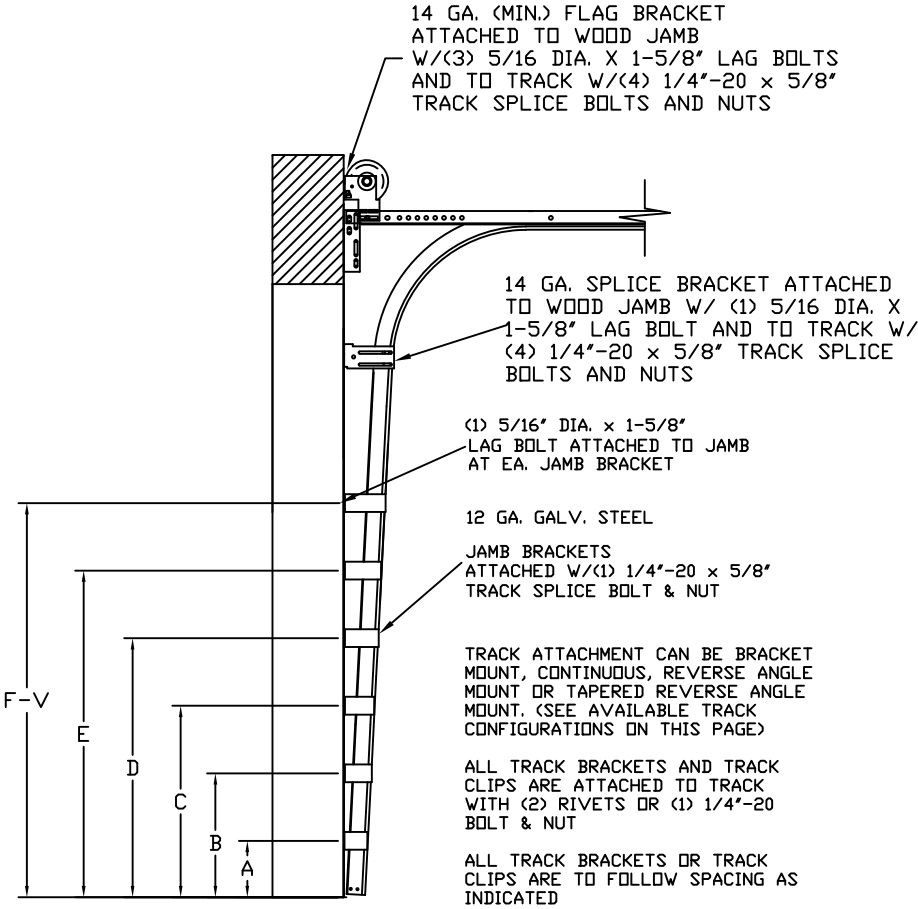
TABLE 1

Section Width (ft)		Center Stile Locations (Measured from Left)			Max Design Loads Allowed	
		1st (in)	2nd (in)	3rd (in)	Positive (PSF)	Negative (PSF)
6'	0"	36"	-	-	37.1	42.3
6'	2"	37"	-	-	36.1	41.2
6'	4"	38"	-	-	35.2	40.1
6'	6"	39"	-	-	34.3	39.1
6'	8"	40"	-	-	33.4	38.1
6'	10"	41"	-	-	32.6	37.2
7'	0"	42"	-	-	31.8	36.3
7'	2"	43"	-	-	31.1	35.4
7'	4"	44"	-	-	30.4	34.6
7'	6"	45"	-	-	29.7	33.9
7'	8"	46"	-	-	29.1	33.1
7'	10"	47"	-	-	28.4	32.4
8'	0"	48"	-	-	27.8	31.7
8'	2"	49"	-	-	27.3	31.1
8'	4"	50"	-	-	26.7	30.5
8'	6"	51"	-	-	26.2	29.9
8'	8"	52"	-	-	25.7	29.3
8'	10"	53"	-	-	25.2	28.7
9'	0"	54"	-	-	24.7	28.2
9'	2"	55"	-	-	24.3	27.7
9'	4"	36"	76"	-	35.0	39.9
9'	6"	37"	77"	-	34.5	39.4
9'	8"	38"	78"	-	34.1	38.9
9'	10"	39"	79"	-	33.7	38.4
10'	0"	40"	80"	-	33.3	37.9
10'	2"	41"	81"	-	32.8	37.4
10'	4"	42"	82"	-	32.4	37.0
10'	6"	43"	83"	-	32.0	36.5
10'	8"	44"	84"	-	31.7	36.1
10'	10"	45"	85"	-	31.3	35.7
11'	0"	46"	86"	-	30.9	35.3
11'	2"	47"	87"	-	30.6	34.8
11'	4"	48"	88"	-	30.2	34.5
11'	6"	49"	89"	-	29.9	34.1
11'	8"	50"	90"	-	29.6	33.7
11'	10"	51"	91"	-	29.2	33.3
12'	0"	48"	96"	-	27.7	31.6
12'	2"	49"	97"	-	27.4	31.3
12'	4"	50"	98"	-	27.1	30.9
12'	6"	51"	99"	-	26.9	30.6
12'	8"	52"	100"	-	26.6	30.3
12'	10"	53"	101"	-	26.3	30.0
13'	0"	36"	78"	120"	31.7	36.1
13'	2"	37"	79"	121"	31.7	36.1
13'	4"	38"	80"	122"	31.7	36.1
13'	6"	39"	81"	123"	31.7	36.1
13'	8"	40"	82"	124"	31.7	36.1
13'	10"	41"	83"	125"	31.7	36.1
14'	0"	42"	84"	126"	31.7	36.1
14'	2"	43"	85"	127"	31.5	35.9

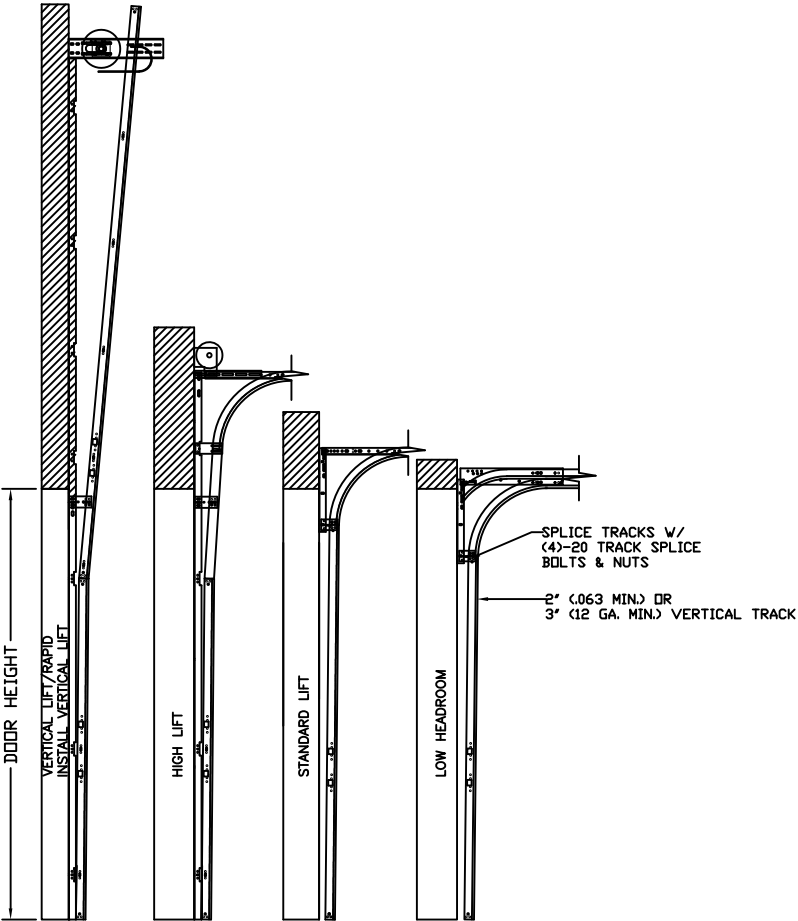
TABLE 3

SECTION	STRUT SIZE
12TH	3"
	3"
11TH	3"
	3"
10TH	3"
	3"
9TH	3"
	3"
8TH	3"
	3"
7TH	3"
	3"
6TH	3"
	3"
5TH	3"
	3"
4TH	3"
	3"
3RD	3"
	3"
2ND	3"
	3"
BOTTOM	3"
	3"

AMARR 2741 ONLY AVAILABLE UP TO 14'



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	L	M	N	O	P	Q	R	S	T	U	V	
7'	0"	10"	22"	34"	46"	58"																		76"
7'	6"	10"	22"	34"	46"	58"	70"																	82"
8'	0"	10"	22"	34"	46"	58"	70"																	88"
8'	6"	10"	22"	34"	46"	58"	70"	82"																94"
9'	0"	10"	22"	34"	46"	58"	70"	82"																100"
9'	6"	10"	22"	34"	46"	58"	70"	82"	94"															106"
10'	0"	10"	22"	34"	46"	58"	70"	82"	94"															112"
11'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"														124"
12'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"													136"
13'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"												148"
14'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"											160"
15'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"										172"
16'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"									184"
17'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"								196"
18'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"							208"
19'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"						220"
20'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"					232"
21'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"				244"
22'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"			256"
23'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"		268"
24'	0"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"	262"	280"

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY
AMARR 2741 ONLY AVAILABLE UP TO 14'

REVDESCRIPTION OF REVISIONSDATEBY

MAX SIZE
14'2 x 24'

DESIGN LOADS
+31.5 PSF
-35.9 PSF

TEST LOADS
+47.3 PSF
-53.9 PSF

THOMAS L. SHELDERDINE
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 2741
AMARR 2742
AMARR 2042
AMARR 2442

SIZE
B

DRAWN BY
DC

CHECKED BY
RLR

DATE
3/13/18

DATE
3/15/18

DRAWING NUMBER
IBC-1314-150-15

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

SHEET 4 OF 4