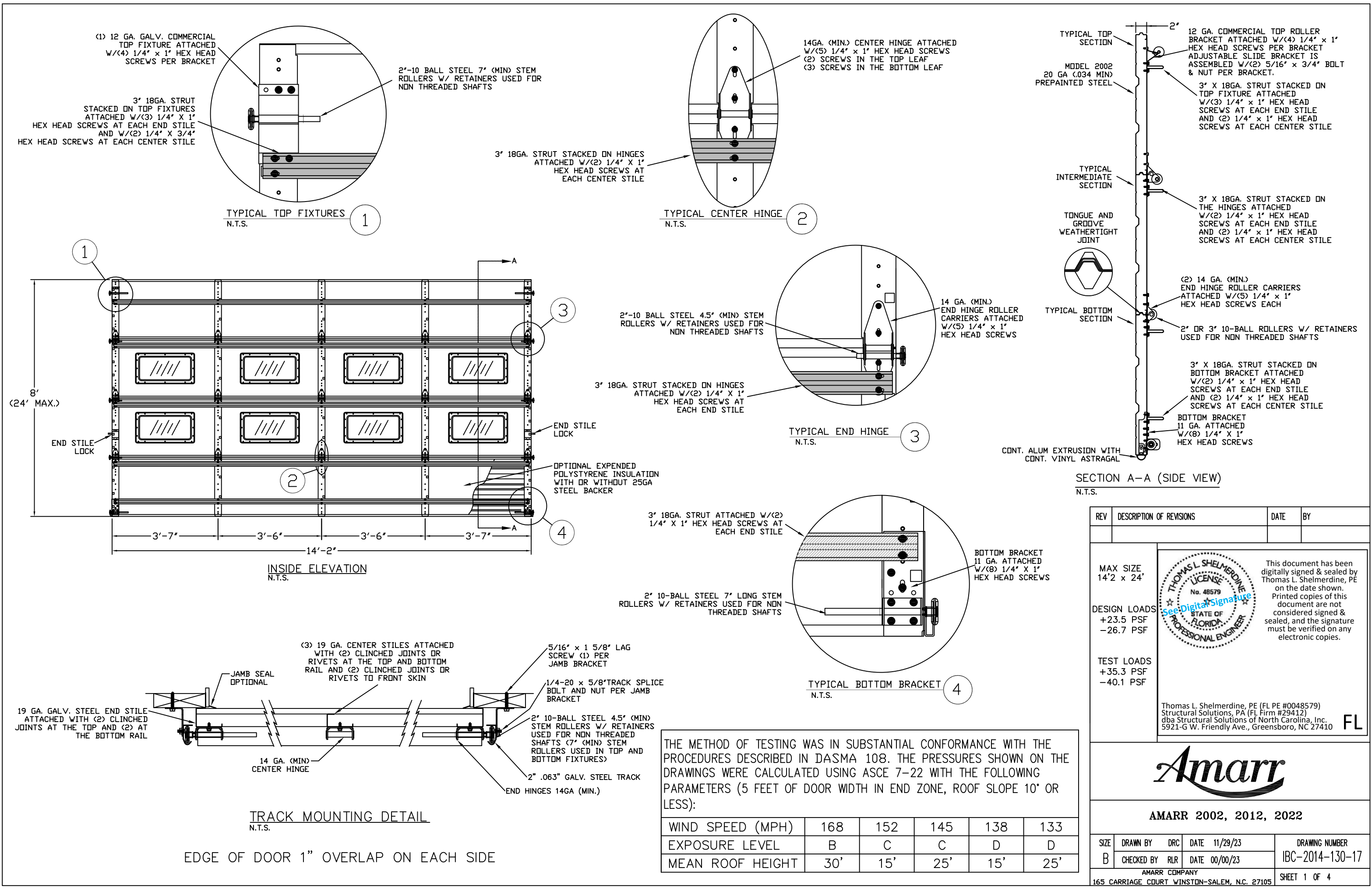




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):

WIND SPEED (MPH)	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

MAX SIZE
14'2 x 24'

DESIGN LOADS
+23.5 PSF
-26.7 PSF

TEST LOADS
+35.3 PSF
-40.1 PSF

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FL

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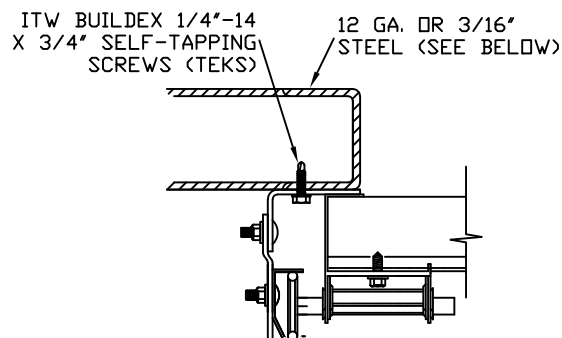
AMARR 2002, 2012, 2022

SIZE B	DRAWN BY DRC	DATE 11/29/23	DRAWING NUMBER IBC-2014-130-17
CHECKED BY RLR	DATE 00/00/23		

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

SHEET 1 OF 4

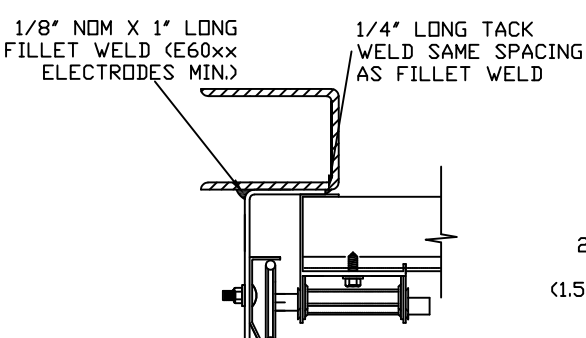
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

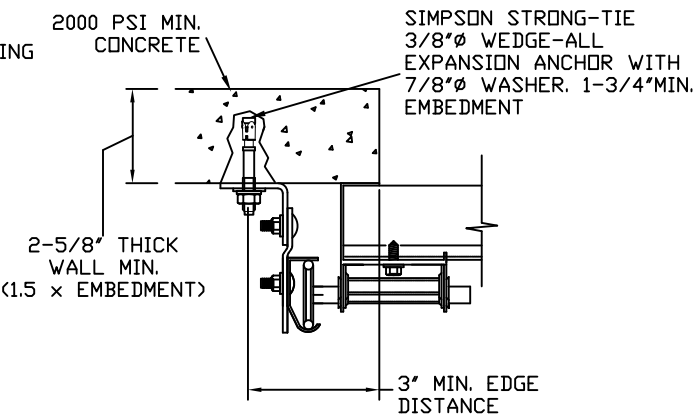
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 16" O.C.
REFER TO NOTES: 1, 2 AND 5

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



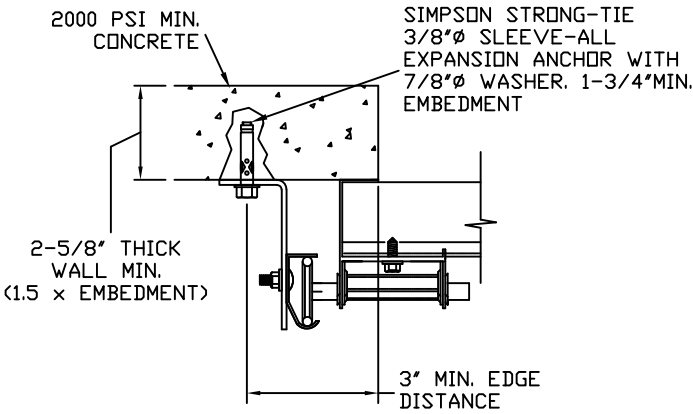
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

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

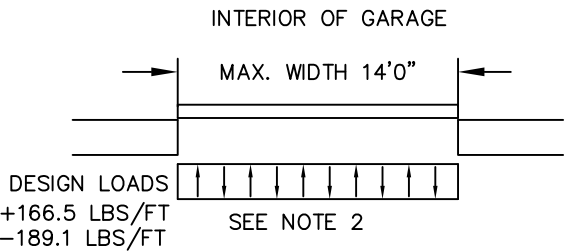
2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

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: +166.5 LBS/FT AND -189.1 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 20 GA. (.034) MIN. EXTERIOR SKIN ROLLED FORMED, GALVANIZATION W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 24' HIGH USE (1) 18GA 3" STRUT PER SECTION AND (1) 3" 18GA STRUT ON BOTTOM OF THE BOTTOM 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.

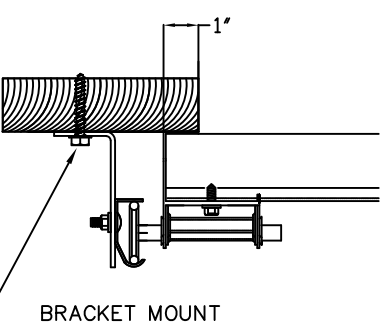
NOTES:

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.

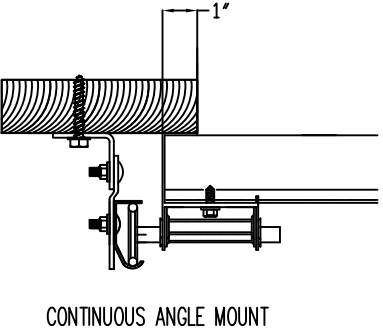


TRACK CONNECTION TO WOOD JAMB OPTIONS

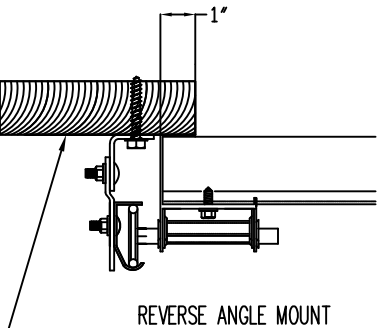
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 4 FOR TRACK CONFIGURATION DETAIL



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



CONTINUOUS ANGLE MOUNT



REVERSE ANGLE MOUNT

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

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

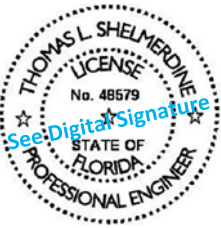
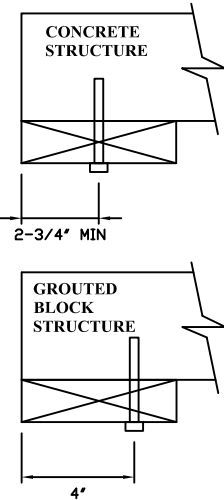
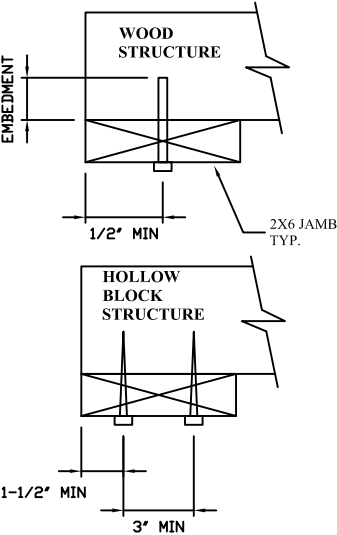
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 24" O.C. (1 1/2" EMBEDMENT)

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 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



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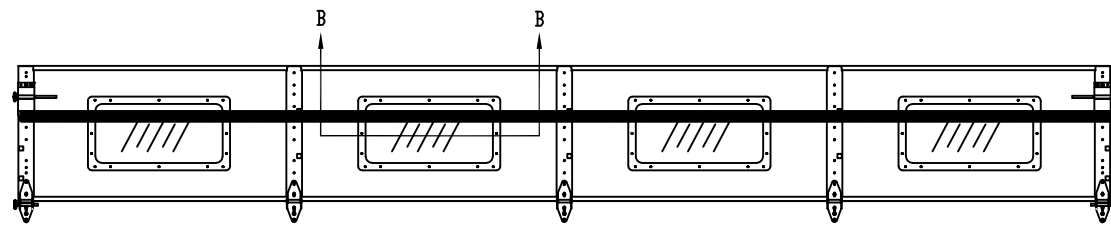
FL

Amarr

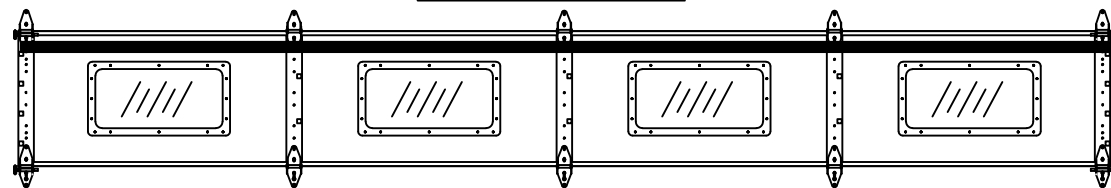
AMARR 2002, 2012, 2022

SIZE	DRAWN BY	DRC	DATE	11/29/23	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	00/00/23	IBC-2014-130-17
AMARR COMPANY					SHEET 2 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					

TOP SECTION

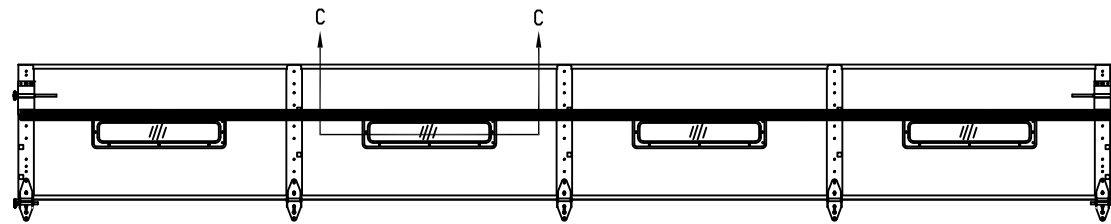


INTERMEDIATE SECTION

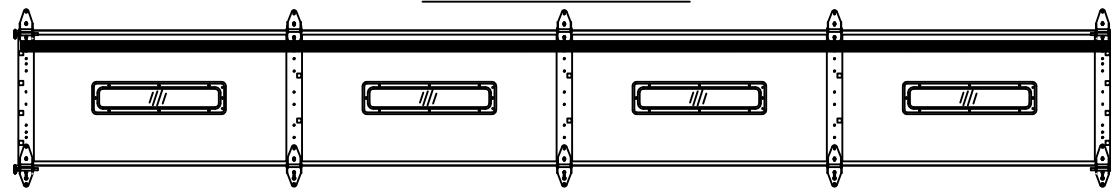


OPTIONAL GLAZED SECTION W/ 24" X 12" WINDOWS AND R-TRUSS LAYOUT
N.T.S.

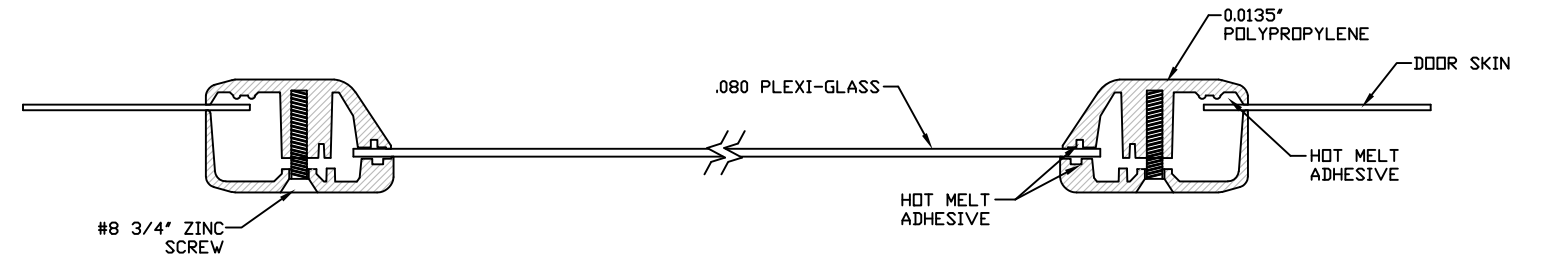
TOP SECTION



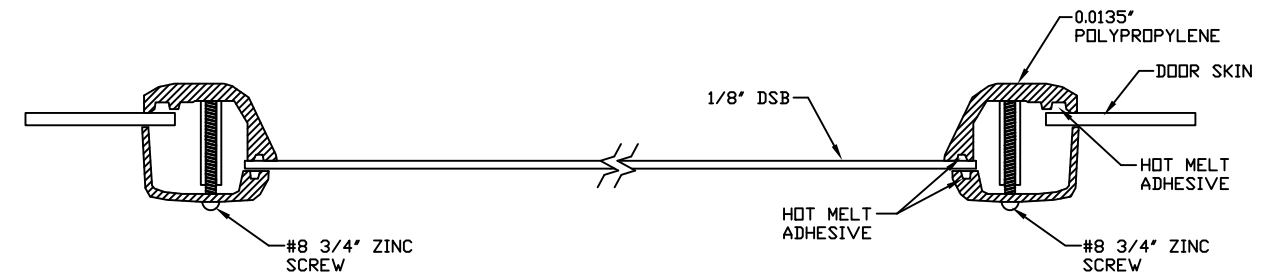
INTERMEDIATE SECTION



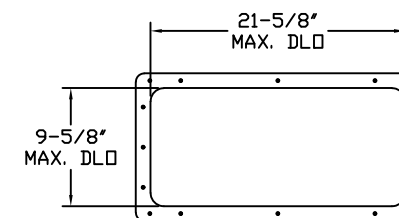
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS AND R-TRUSS LAYOUT
N.T.S.



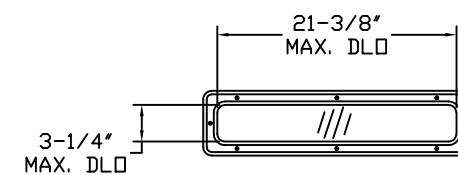
SECTION B-B 24" X 12" WINDOW DETAIL W/ .080 PLEXI-GLASS
N.T.S.



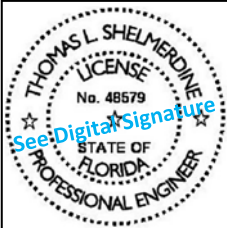
SECTION C-C 24" X 6" WINDOW DETAIL W/ 1/8" DSB
N.T.S. (ALSO AVAILABLE WITH .080" PLEXI-GLASS)



24" X 12" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



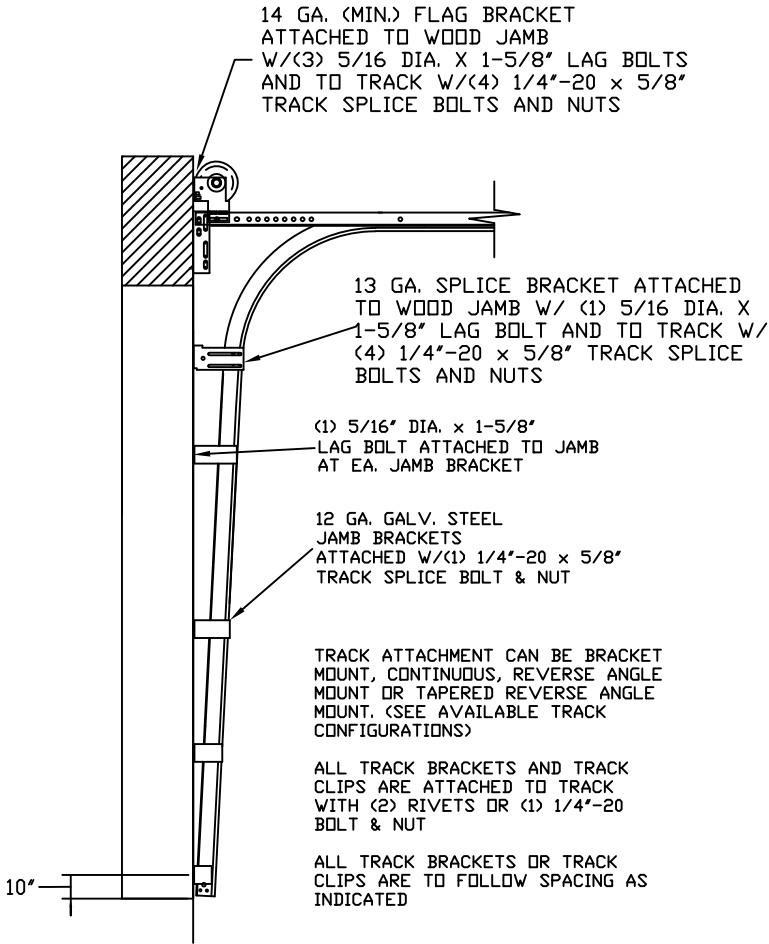
24" X 6" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE, 14'2" x 24' DESIGN LOADS +23.5 PSF -26.7 PSF TEST LOADS +35.3 PSF -40.1 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 2002, 2012, 2022			
SIZE	DRAWN BY	DATE	DRAWING NUMBER
B	DRC	11/29/23	IBC-2014-130-17
	R/R	00/00/23	
AMARR COMPANY			SHEET 3 OF 4
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			

GLAZING AVAILABLE IN ANY
SECTION COMBINATION, EXCLUDING
THE BOTTOM SECTION

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"	-	26.1	29.7
9'	6"	37"	77"	-	25.8	29.3
9'	8"	38"	78"	-	25.4	28.9
9'	10"	39"	79"	-	25.1	28.5
10'	0"	40"	80"	-	24.8	28.2
10'	2"	41"	81"	-	24.5	27.8
10'	4"	42"	82"	-	24.2	27.5
10'	6"	43"	83"	-	23.9	27.2
10'	8"	44"	84"	-	23.6	26.8
10'	10"	45"	85"	-	23.3	26.5
11'	0"	46"	86"	-	23.1	26.2
11'	2"	47"	87"	-	22.8	25.9
11'	4"	48"	88"	-	22.5	25.6
11'	6"	49"	89"	-	22.3	25.3
11'	8"	50"	90"	-	22.0	25.0
11'	10"	51"	91"	-	21.8	24.8
12'	0"	48"	96"	-	20.7	23.5
12'	2"	49"	97"	-	20.4	23.2
12'	4"	50"	98"	-	20.2	23.0
12'	6"	51"	99"	-	20.0	22.8
12'	8"	52"	100"	-	19.8	22.5
12'	10"	53"	101"	-	19.6	22.3
13'	0"	36"	78"	120"	23.6	26.8
13'	2"	37"	79"	121"	23.6	26.8
13'	4"	38"	80"	122"	23.6	26.8
13'	6"	39"	81"	123"	23.6	26.8
13'	8"	40"	82"	124"	23.6	26.8
13'	10"	41"	83"	125"	23.6	26.8
14'	0"	42"	84"	126"	23.6	26.8
14'	2"	43"	85"	127"	23.5	26.7

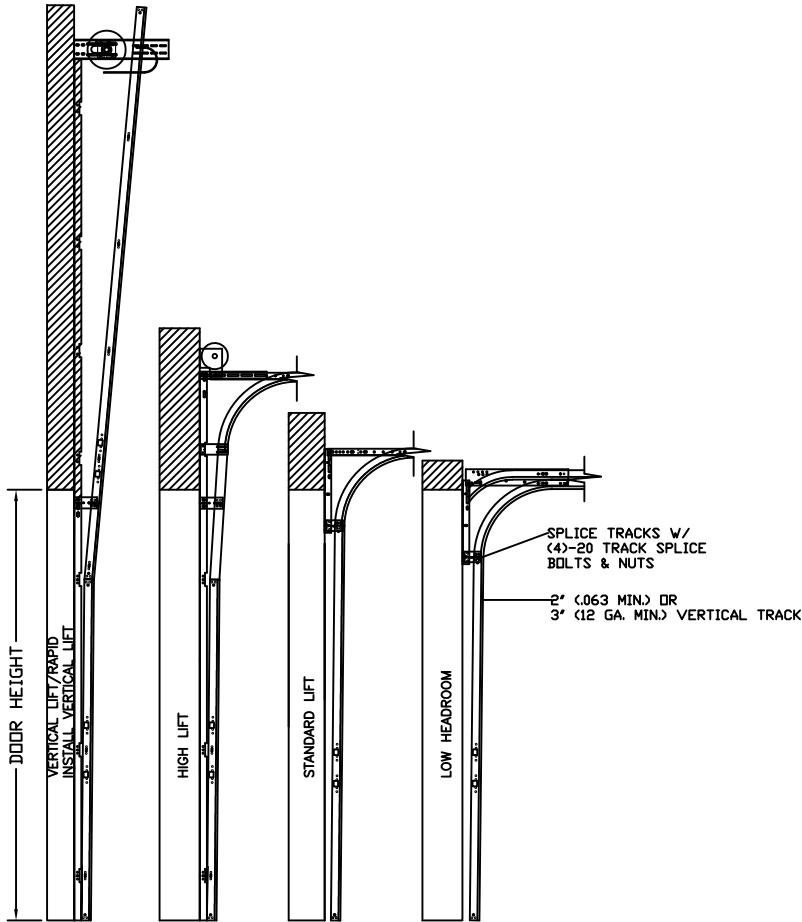


TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
SEE TABLE 2

TABLE 2

DOOR HEIGHT														TYPICAL SPLICE
		B	D	F	G	H	I	J	K	L	M	N	O	
7'	0"	10"	34"	58"										76"
7'	6"	10"	34"	58"	70"									82"
8'	0"	10"	34"	58"	70"									88"
8'	6"	10"	34"	58"	82"									94"
9'	0"	10"	34"	58"	82"									100"
9'	6"	10"	34"	58"	82"	94"								106"
10'	0"	10"	34"	58"	82"	94"								112"
11'	0"	10"	34"	58"	82"	106"								124"
12'	0"	10"	34"	58"	82"	106"	118"							136"
13'	0"	10"	34"	58"	82"	106"	130"							148"
14'	0"	10"	34"	58"	82"	106"	130"	142"						160"
15'	0"	10"	34"	58"	82"	106"	130"	154"						172"
16'	0"	10"	34"	58"	82"	106"	130"	154"	166"					184"
17'	0"	10"	34"	58"	82"	106"	130"	154"	178"					196"
18'	0"	10"	34"	58"	82"	106"	130"	154"	178"	190"				208"
19'	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"				220"
20'	0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	214"			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"	238"		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"	262"	280"

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY.



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

TABLE 3

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

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX. SIZE
14'2" x 24'

DESIGN LOADS
+23.5 PSF
-26.7 PSF

TEST LOADS
+35.3 PSF
-40.1 PSF

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SIZE B	DRAWN BY DRC	DATE 11/29/23	DRAWING NUMBER IBC-2014-130-17
CHECKED BY RLR	DATE 00/00/23		

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

SHEET 4 OF 4