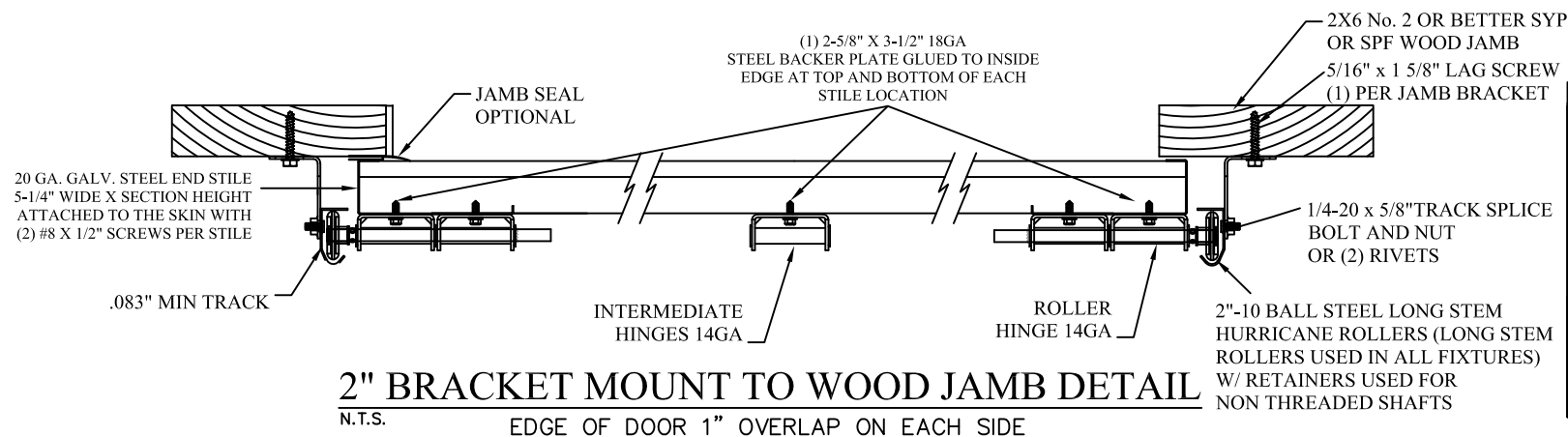
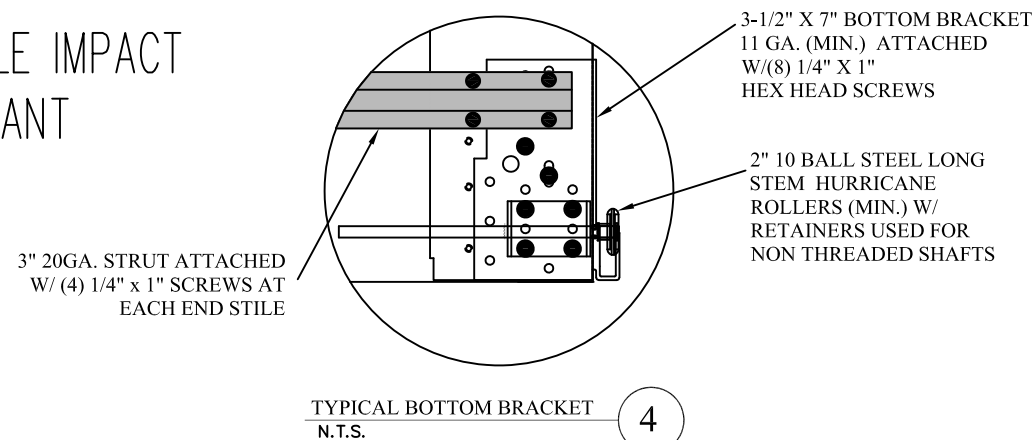
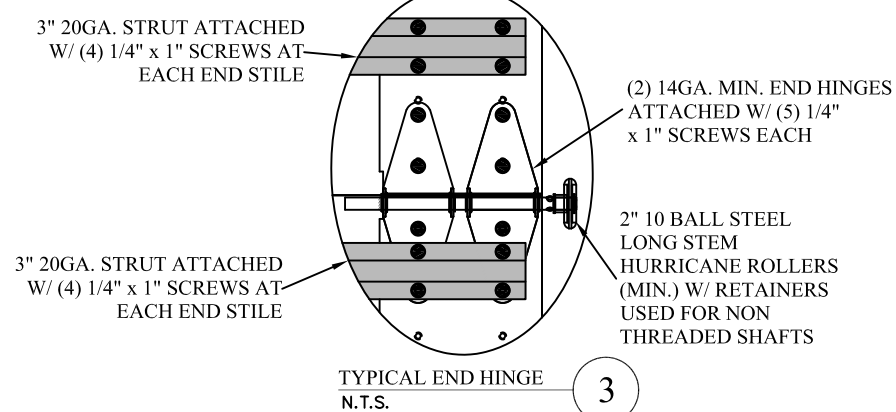
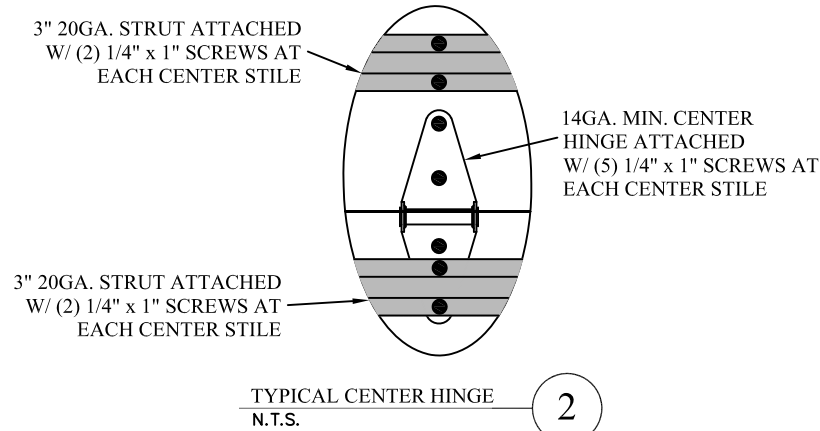




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURE DESCRIBED IN ASTM E330, E1886, E1996 & F588, DASH 108 & 115. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-22 WITH THE FOLLOWING PARAMETERS(5 FEET OF DOOR WIDTH IN THE END ZONE, ROOF AT LESS THAN OR EQUAL TO 10 DEGREES SLOPE):

|                  |     |     |     |     |     |
|------------------|-----|-----|-----|-----|-----|
| WIND SPEED (MPH) | 253 | 229 | 218 | 208 | 200 |
| EXPOSURE LEVEL   | B   | C   | C   | D   | D   |
| MEAN ROOF HEIGHT | 30' | 15' | 25' | 15' | 25' |

**MAX SIZE**  
9'2" x 24"

**TEST LOADS**  
+55.1 PSF  
-64.5 PSF

**TEST LOADS**  
+82.7 PSF  
-96.8 PSF

**LARGE MISSILE IMPACT  
RESISTANCE**



**Thomas L  
Shelmerdine**

Digitally signed by Thomas L Shelmerdine  
DN: cn=US, o=North Carolina,  
dnQualifier=A01410D000001856487A7B1  
00125CE2, cn=Thomas L Shelmerdine  
Date: 2023.09.26 21:16:16 -0400

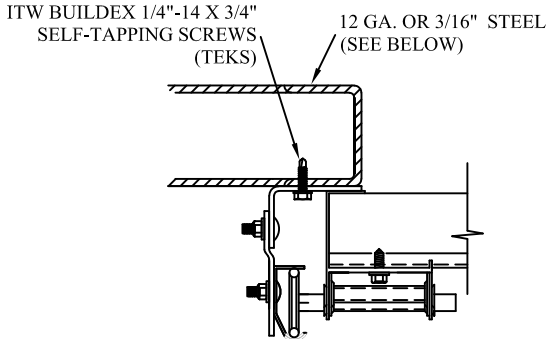
Thomas L. Shelmerdine, PE (FL PE #0048579)  
Structural Solutions, PA (FL Firm #29412)  
dba Structural Solutions of North Carolina, Inc.  
5921-G W. Friendly Ave., Greensboro, NC 27410

# Amarra

AMARR 2432

|                                                               |            |     |      |        |                                     |
|---------------------------------------------------------------|------------|-----|------|--------|-------------------------------------|
| SIZE                                                          | DRAWN BY   | RLR | DATE | 6/5/17 | DRAWING NUMBER<br>IBC-1009-195-15-F |
| B                                                             | CHECKED BY | RLR | DATE | 6/5/17 |                                     |
| AMARR COMPANY<br>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105 |            |     |      |        | SHEET 1 OF 3                        |

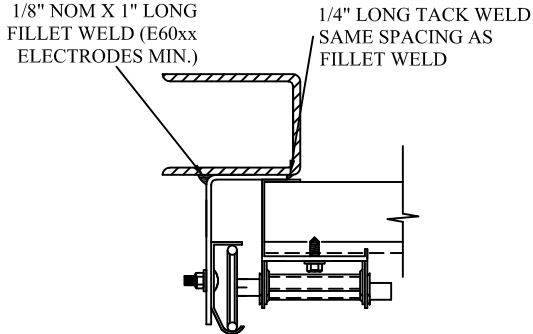
## TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

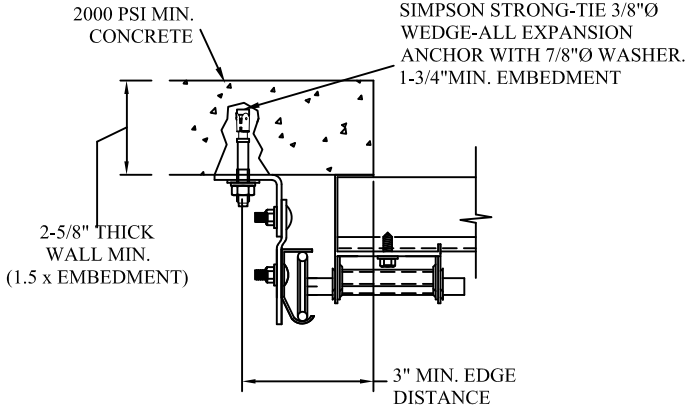
12 GA. STEEL FRAMING  
232 LBS./SCREW ALLOWABLE LOAD - 5" FROM ENDS  
AND 10" O.C.  
REFER TO NOTES: 1, 2 AND 5

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



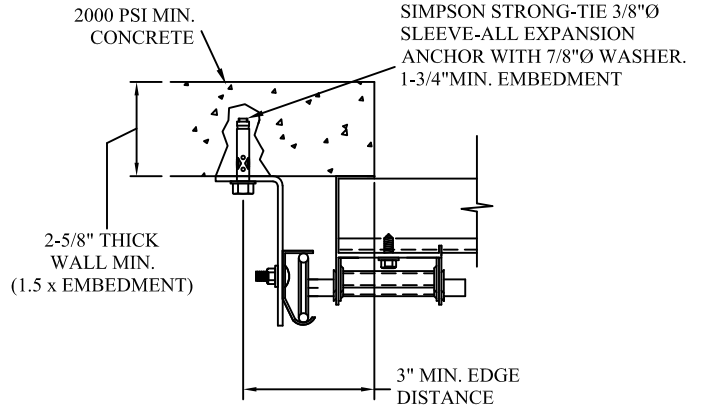
REVERSE ANGLE MOUNT SHOWN  
BRACKET, CONTINUOUS AND TAPERED  
ANGLE MOUNT AVAILABLE

**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 16" 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 16" 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 18" 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 16" 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 (1900 PSI MIN)

SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,  
USE PAIRS OF FASTENERS (3" APART)  
AT 8" 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 8" O.C. (1 1/4" EMBEDMENT)

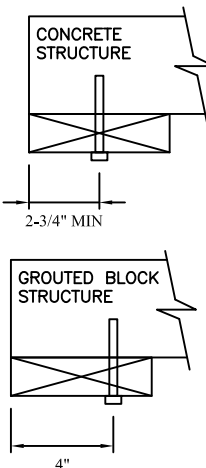
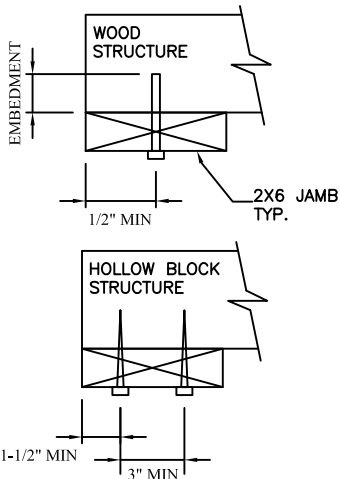
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS  
THEN 20" O.C. (1 1/4" EMBEDMENT)

(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

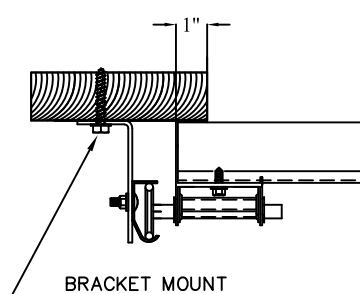
\*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

\*PREPARATION OF WOOD JAMBS BY OTHERS

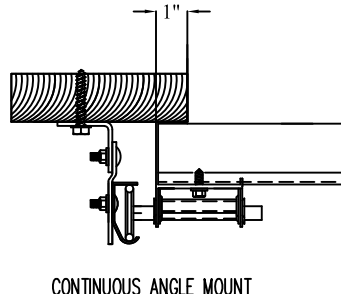


## TRACK CONNECTION TO WOOD JAMB OPTIONS

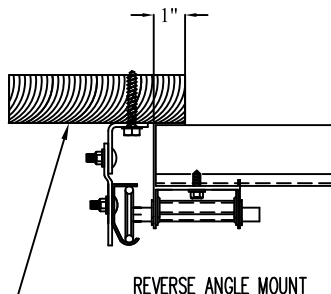
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 3 FOR TRACK CONFIGURATION DETAIL



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

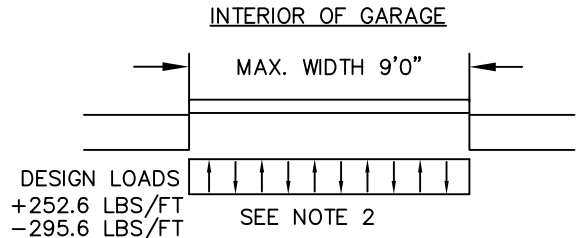


### CONTINUOUS ANGLE MOUNT

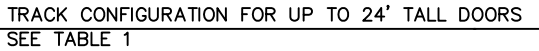


2x6 WOOD JAMB SYP OR SPF  
(NO.2) OR BETTER (TYP.)

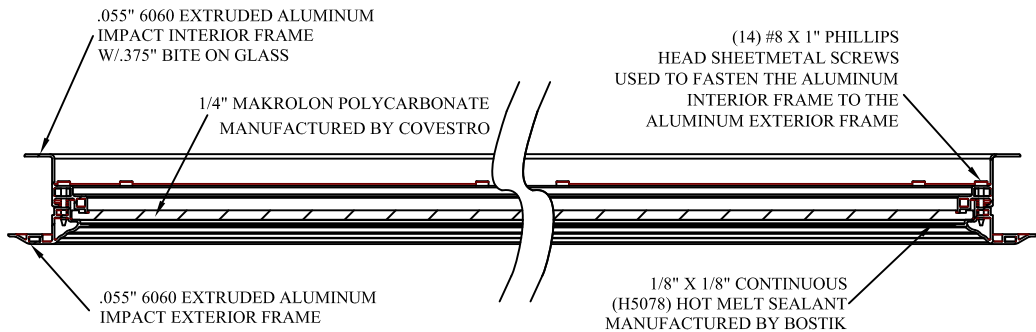
1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE VERTICAL TRACK, FROM THE TRACK THE LOAD IS TRANSFERRED TO THE VERTICAL JAMBS. THE HORIZONTAL JAMB OR HEADER RECEIVES NO PORTION OF THE LOAD TRANSFERRED FROM THE DOOR.
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF:  
+252.6 LBS/FT & -295.6 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.021) MIN. EXTERIOR SKIN ROLLED FORMED, G30 GALVANIZED W/ POLYESTER TOP COAT
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.



|                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| REV                                                                                                                                                                    | DESCRIPTION OF REVISIONS | DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BY                                                                                            |
|                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                               |
| <p>MAX SIZE<br/>9'2 x 24'</p> <p>DESIGN LOADS<br/>+55.1 PSF<br/>-64.5 PSF</p> <p>TEST LOADS<br/>+82.7 PSF<br/>-96.8 PSF</p> <p>LARGE MISSILE IMPACT<br/>RESISTANCE</p> |                          |  <p>This document has been digitally signed &amp; sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed &amp; sealed, and the signature must be verified on any electronic copies.</p> <p>Thomas L. Shelmerdine, PE (FL PE #0048579)<br/>Structural Solutions, PA (FL Firm #29412)<br/>dba Structural Solutions of North Carolina, Inc.<br/>5921-G W. Friendly Ave., Greensboro, NC 27410</p> <p><b>FL</b></p> |                                                                                               |
|                                                                                   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                               |
| <p align="center"><b>AMARR 2432</b></p>                                                                                                                                |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                               |
| SIZE                                                                                                                                                                   | DRAWN BY                 | DRD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DATE 6/5/17                                                                                   |
| B                                                                                                                                                                      | CHECKED BY               | RLR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DATE 6/5/17                                                                                   |
| <p align="center">AMARR COMPANY<br/>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27109</p>                                                                                   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p align="center">DRAWING NUMBER<br/>IBC-1009-195-15-F</p> <p align="center">SHEET 2 OF 3</p> |



| Section Width<br>(ft) |     | Center Stile Locations<br>(Measured from Left Edge) | Max Design Loads Allowed |                |
|-----------------------|-----|-----------------------------------------------------|--------------------------|----------------|
|                       |     |                                                     | Positive (PSF)           | Negative (PSF) |
| 6'                    | 0"  | 36"                                                 | 84.1                     | 98.5           |
| 6'                    | 2"  | 37"                                                 | 81.9                     | 95.8           |
| 6'                    | 4"  | 38"                                                 | 79.7                     | 93.3           |
| 6'                    | 6"  | 39"                                                 | 77.7                     | 90.9           |
| 6'                    | 8"  | 40"                                                 | 75.7                     | 88.6           |
| 6'                    | 10" | 41"                                                 | 73.9                     | 86.5           |
| 7'                    | 0"  | 42"                                                 | 72.1                     | 84.4           |
| 7'                    | 2"  | 43"                                                 | 70.4                     | 82.5           |
| 7'                    | 4"  | 44"                                                 | 68.8                     | 80.6           |
| 7'                    | 6"  | 45"                                                 | 67.3                     | 78.8           |
| 7'                    | 8"  | 46"                                                 | 65.8                     | 77.1           |
| 7'                    | 10" | 47"                                                 | 64.4                     | 75.4           |
| 8'                    | 0"  | 48"                                                 | 63.1                     | 73.9           |
| 8'                    | 2"  | 49"                                                 | 61.8                     | 72.3           |
| 8'                    | 4"  | 50"                                                 | 60.6                     | 70.9           |
| 8'                    | 6"  | 51"                                                 | 59.4                     | 69.5           |
| 8'                    | 8"  | 52"                                                 | 58.2                     | 68.2           |
| 8'                    | 10" | 53"                                                 | 57.1                     | 66.9           |
| 9'                    | 0"  | 54"                                                 | 56.1                     | 65.6           |
| 9'                    | 2"  | 55"                                                 | 55.1                     | 64.5           |



N.T.S.

DOOR HEIGHT

VERTICAL LIFT/RAPID  
INSTALL VERTICAL LIFT

HIGH LIFT

STANDARD LIFT

LOW HEADROOM

SPLICE TRACKS W/ (4)-20  
TRACK SPLICE BOLTS &  
NUTS

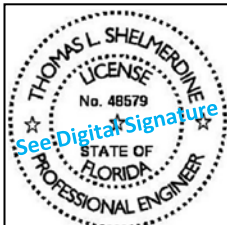
2" (.083 MIN.) OR  
3" (12 GA. MIN.) VERTICAL TRACK

\_\_\_\_\_

| SECTION |    |
|---------|----|
| 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" |

| DOOR HEIGHT |    | TRACK ATTACHMENT |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------|----|------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
|             |    | A                | B   | C   | D   | E   | F   | G   | H   | I   | J    | K    | L    | M    | N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    |  |
| 7'          | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 7'          | 6" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 8'          | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 8'          | 6" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 9'          | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 9'          | 6" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 10'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 11'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 12'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 13'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" |      |      |      |      |      |      |      |      |      |      |      |  |
| 14'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" |      |      |      |      |      |      |      |      |      |      |  |
| 15'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" |      |      |      |      |      |      |      |      |      |  |
| 16'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" |      |      |      |      |      |      |      |      |  |
| 17'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" |      |      |      |      |      |      |      |  |
| 18'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" |      |      |      |      |      |      |  |
| 19'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" |      |      |      |      |      |  |
| 20'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" | 214" |      |      |      |      |  |
| 21'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" | 214" | 226" |      |      |      |  |
| 22'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" | 214" | 226" | 238" |      |      |  |
| 23'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" | 214" | 226" | 238" | 250" |      |  |
| 24'         | 0" | 3.5"             | 10" | 22" | 34" | 46" | 58" | 70" | 82" | 94" | 106" | 118" | 130" | 142" | 154" | 166" | 178" | 190" | 202" | 214" | 226" | 238" | 250" | 262" |  |

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

|                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| REV                                                                                                                                                                    | DESCRIPTION OF REVISIONS | DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BY                                         |
|                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| <p>MAX SIZE<br/>9'2 x 24'</p> <p>DESIGN LOADS<br/>+55.1 PSF<br/>-64.5 PSF</p> <p>TEST LOADS<br/>+82.7 PSF<br/>-96.8 PSF</p> <p>LARGE MISSILE IMPACT<br/>RESISTANCE</p> |                          |  <p>This document has been digitally signed &amp; sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed &amp; sealed, and the signature must be verified on any electronic copies.</p> <p>Thomas L. Shelmerdine, PE (FL PE #0048579)<br/>Structural Solutions, PA (FL Firm #29412)<br/>dba Structural Solutions of North Carolina, Inc.<br/>5921-G W. Friendly Ave., Greensboro, NC 27410</p> <p><b>FL</b></p> |                                            |
|                                                                                   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| <p align="center"><b>AMARR 2432</b></p>                                                                                                                                |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| SIZE<br><b>B</b>                                                                                                                                                       | DRAWN BY<br><b>DRD</b>   | DATE<br>6/5/17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DRAWING NUMBER<br><b>IBC-1009-195-15-F</b> |
|                                                                                                                                                                        | CHECKED BY<br><b>RLR</b> | DATE<br>6/5/17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                            |
| <p align="center">AMARR COMPANY<br/>165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105</p>                                                                                   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p align="center">SHEET 3 OF 3</p>         |