

# MAGNUM SECURITY STAR ROLL DOWN SHUTTER

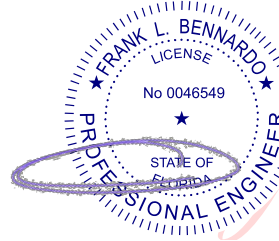
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FRANK BENNARDO, PE  
PE# 46549 CA# 9885



Digitally signed by

Frank Bennardo

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14:35:31 -04'00'

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MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

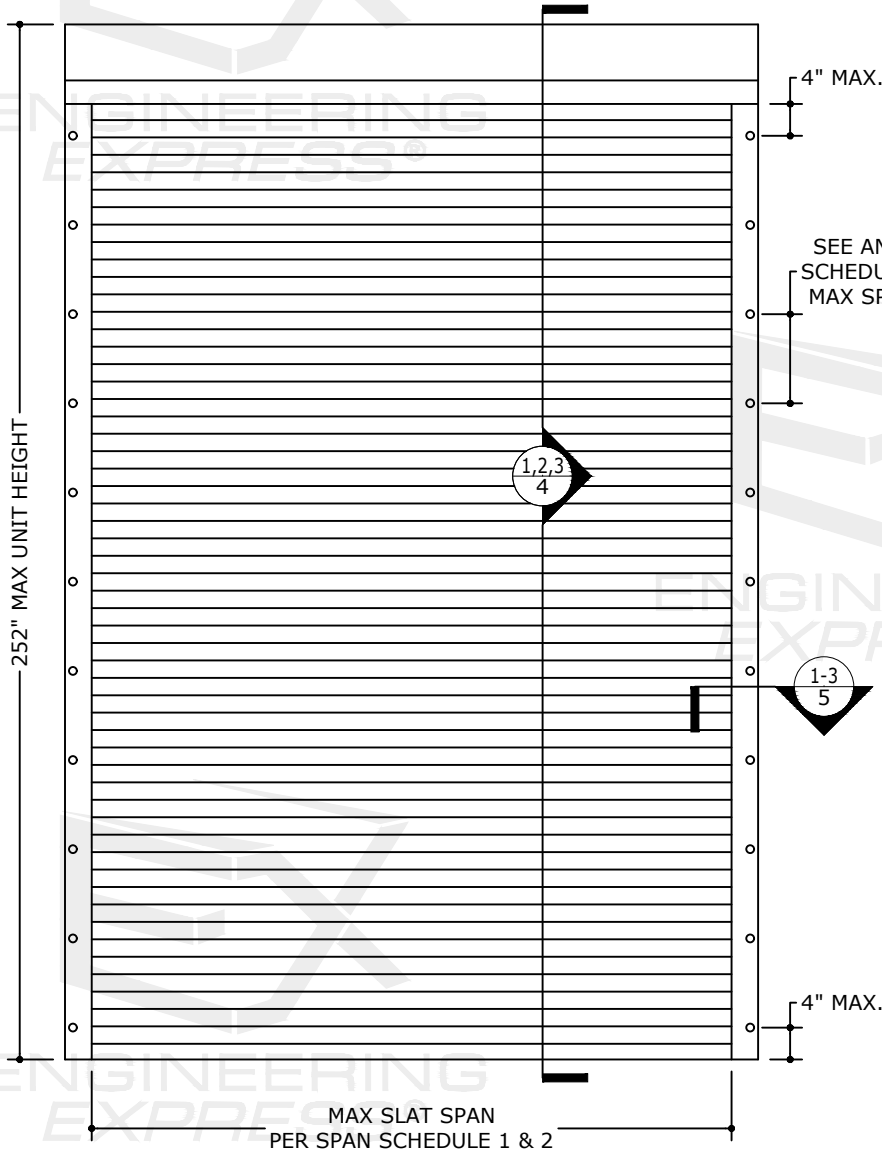
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| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-5951)   | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
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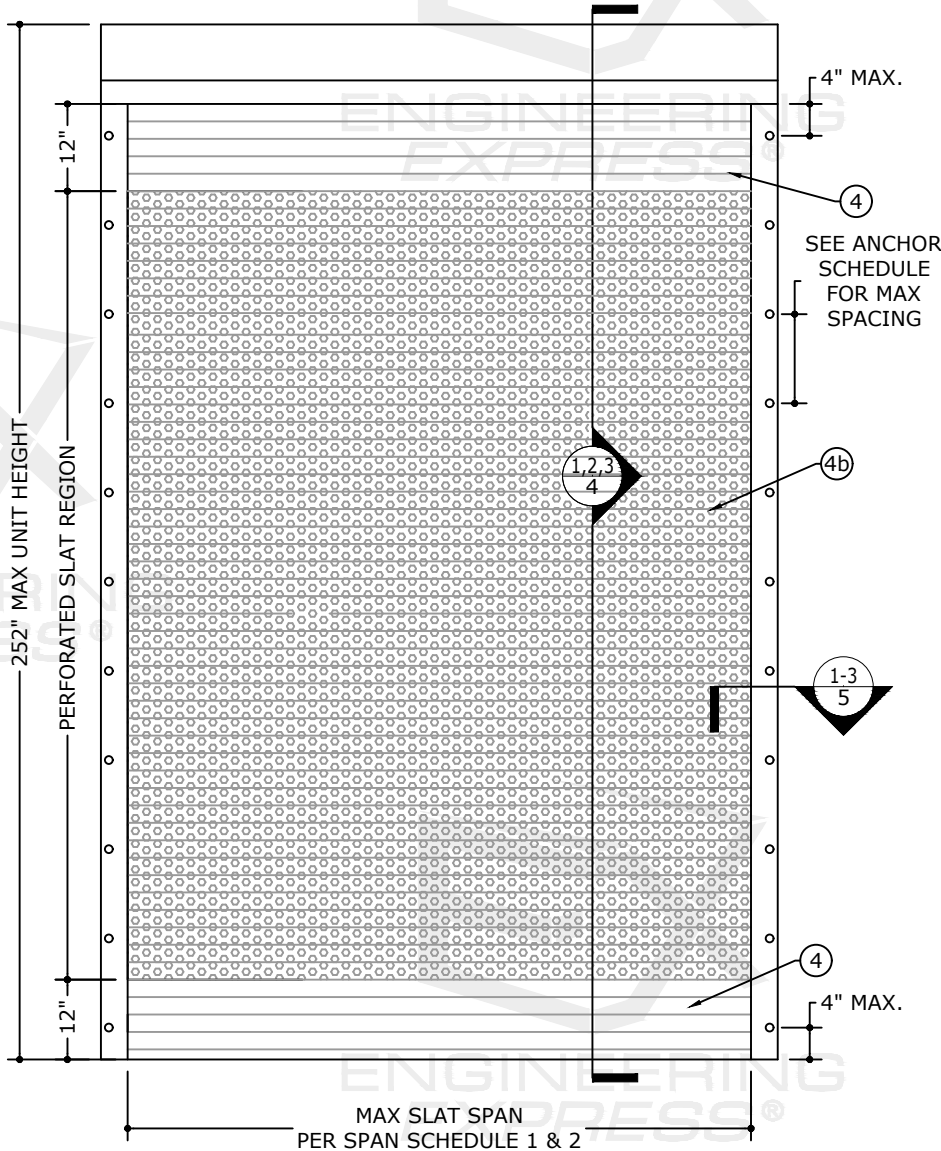
1 OF 16



## END RETENTION SHUTTER WITH SINGLE WALL SLATS

N.T.S.

EXTERIOR ELEV



## END RETENTION SHUTTER WITH SINGLE WALL SLATS PERFORATED OPTION

N.T.S.

EXTERIOR ELEV

## TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS MAY APPEAR IN THIS APPROVAL:

"ALUM" FOR "ALUMINUM", "ASD" FOR "ALLOWABLE STRESS DESIGN", "ASTM" FOR "AMERICAN SOCIETY FOR TESTING AND MATERIALS", "CS" FOR "CARBON STEEL", "CONN" FOR "CONNECTION", "EMBED" FOR "EMBEDMENT", "DIST." FOR "DISTANCE", "GA" FOR "GAUGE", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "LB" FOR "POUND", "MAX" FOR "MAXIMUM", "N.T.S." FOR "NOT TO SCALE", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft<sup>2</sup>)", "SPECS" FOR "SPECIFICATIONS", "&" FOR "AND", "MAX" FOR "MAXIMUM", "W/" FOR "WITH".

VISIT [ECALC.IO/GLOSSARY](https://ecalculator.com/glossary) OR CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

## PAGE INDEX:

| DESCRIPTION                    | PAGE # |
|--------------------------------|--------|
| COVER PAGE                     | 1      |
| DESIGN & GENERAL NOTES         | 2      |
| PARTS & SCHEDULES              | 3      |
| INSTALLATION DETAILS           | 4 - 5  |
| ANCHOR SCHEDULES               | 6 - 14 |
| INSTALLATION DETAILS           | 15     |
| END RETENTION MULLION SCHEDULE | 16     |

FRANK BENNARDO, PE  
PE# 46549 CA# 9885

SIGNED:  
08/14/2026

MAXIMUM (ASD) ALLOWABLE  
DESIGN PRESSURES:

AS NOTED IN  
SCHEDULES

DESIGN NOTES:

POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. SITE-SPECIFIC WIND LOAD REQUIREMENTS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7 AND THE GOVERNING BUILDING CODE BY SEPARATE ENGINEERING CERTIFICATION AND SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUE LISTED HEREIN FOR ANY ASSEMBLY WITHIN THE LIMITATIONS STATED HEREIN.

GENERAL NOTES:

- THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE NINTH EDITION (2026), FOR USE INSIDE AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE. THIS SYSTEM HAS BEEN TESTED IN ACCORDANCE WITH TAS 201, 202, AND 203 TESTING STANDARDS PER TEST REPORT BT-ATC-19-002 BY BLACKWATER TECHNICAL SERVICES INC.
- PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
- WIND LOAD DURATION FACTOR Cd = 1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO EXISTING STRUCTURE.
- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION INC., AND ANY APPLICABLE FEDERAL, STATE AND OR LOCAL CODES.
- CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO UN-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- FOR PERMANENT OUTDOOR INSTALLATIONS, ALL EXPOSED ANCHORS, FASTENERS, CONNECTORS, AND METAL PLATES SHALL BE CORROSION RESISTANT. CORROSION RESISTANCE MAY BE PROVIDED BY INHERENT MATERIAL COMPOSITION OR, WHERE PERMITTED BY CODE, BY AN APPROVED PROTECTIVE COATING OR GALVANIZATION. WHERE APPLICABLE NEAR A SALTWATER COASTLINE, SUCH COMPONENTS SHALL COMPLY WITH FBC SECTION 1711, INCLUDING APPLICABLE REQUIREMENTS FOR EXPOSED, PROTECTED, OR ENCLOSED CONDITIONS. MATERIALS, COATINGS, AND FINISHES SHALL BE COMPATIBLE WITH CONNECTED MATERIALS, AND PROTECTIVE COATINGS SHALL BE CONTINUOUS OVER EXPOSED SURFACES. FASTENERS USED WITH ALUMINUM MEMBERS SHALL ALSO COMPLY WITH SECTION J.3.7.2 OF THE ALUMINUM DESIGN MANUAL, "SPECIFICATION FOR ALUMINUM STRUCTURES." SUBSTITUTION OF COMPONENTS FROM ALTERNATE MANUFACTURERS, OR WITH DIFFERENT MATERIALS, COATINGS, OR FINISHES, SHALL NOT BE ASSUMED EQUIVALENT AND MAY REQUIRE ADDITIONAL ENGINEERING REVIEW OR SITE-SPECIFIC ANALYSIS.
- MAXIMUM SLAT SPAN: 24'-0".
- MAXIMUM ALLOWABLE DESIGN PRESSURE: PER DESIGN SCHEDULES.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- END RETENTION SHUTTER ASSEMBLY WITH SINGLE WALL SLATS SHALL BEAR A PERMANENT LABEL ON THE BOTTOM OF THE HOOD OR ON THE BOTTOM SLAT FACING THE EXTERIOR WITH THE FOLLOWING MINIMUM INFORMATION:  
ALUTECH UNITED, INC.  
SELBYVILLE, DE  
MISSILE LEVEL D, WIND ZONE 4 - TAS 201, 202, & 203  
FLORIDA PRODUCT APPROVAL #17344.1
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- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

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FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL #17344.1)

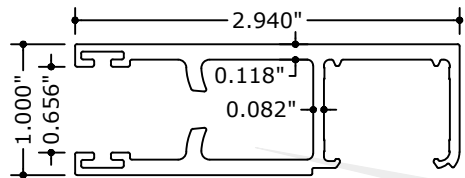
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| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
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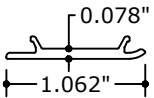
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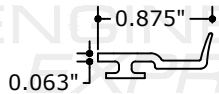


SNAP RAIL

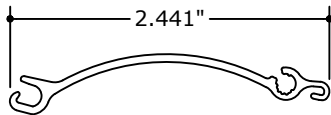
1 END-RETENTION RAIL  
8" = 1'-0" 6063-T5 ALUM.



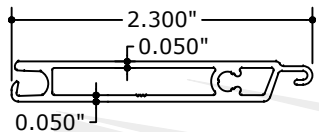
2 END-RETENTION RAIL SNAP COVER  
8" = 1'-0" 6063-T5 ALUM.



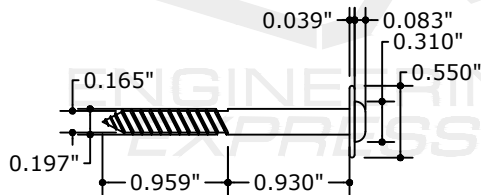
3 END-RETENTION RAIL INSERT  
8" = 1'-0" PLASTIC



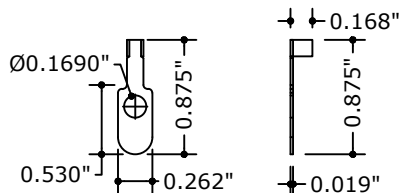
4 SINGLE WALL SLAT  
8" = 1'-0" 6063-T5 ALUM.



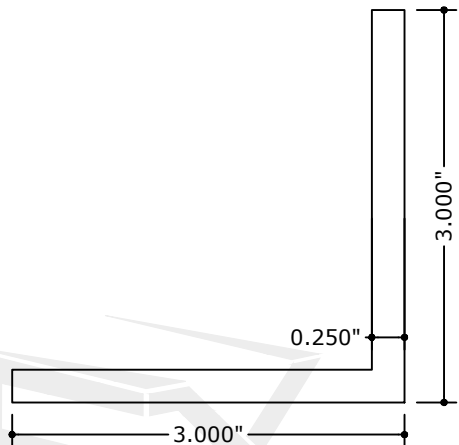
5 BASE SLAT  
8" = 1'-0" 6063-T5 ALUM.



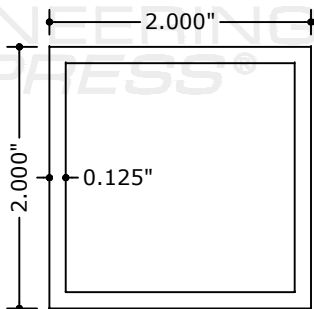
6 RETAINING SCREW  
8" = 1'-0" 304 S.S.



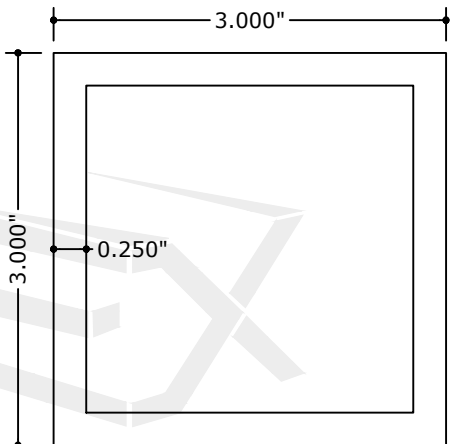
7 SLAT SIDE LOCK  
8" = 1'-0" 316 STAINLESS STEEL



8 3"x3"x0.250" ANGLE  
8" = 1'-0" 6063-T5 ALUM.



9 2"x2"x0.125" TUBE  
8" = 1'-0" 6063-T5 ALUM.



10 3"x3"x0.250" TUBE  
8" = 1'-0" 6063-T5 ALUM.

ALLOWABLE SLAT SPAN SCHEDULES:

| SPAN SCHEDULE 1                                      |                           |
|------------------------------------------------------|---------------------------|
| MAGNUM 3.57 RETENTION SHUTTER WITH SINGLE WALL SLATS |                           |
| SLAT SPAN                                            | ALLOWABLE DESIGN PRESSURE |
| 48.0"                                                | ± 200.0 PSF               |
| 60.0"                                                | ± 145.1 PSF               |
| 72.0"                                                | ± 121.7 PSF               |
| 84.0"                                                | ± 109.3 PSF               |
| 96.0"                                                | ± 101.4 PSF               |
| 108.0"                                               | ± 95.9 PSF                |
| 120.0"                                               | ± 91.6 PSF                |
| 132.0"                                               | ± 88.0 PSF                |
| 144.0"                                               | ± 85.0 PSF                |
| 156.0"                                               | ± 76.3 PSF                |
| 168.0"                                               | ± 69.1 PSF                |
| 180.0"                                               | ± 63.1 PSF                |
| 192.0"                                               | ± 58.0 PSF                |
| 204.0"                                               | ± 53.6 PSF                |
| 216.0"                                               | ± 49.9 PSF                |
| 228.0"                                               | ± 46.6 PSF                |
| 240.0"                                               | ± 43.7 PSF                |
| 252.0"                                               | ± 41.2 PSF                |
| 264.0"                                               | ± 38.9 PSF                |
| 276.0"                                               | ± 36.8 PSF                |
| 288.0"                                               | ± 35.0 PSF                |

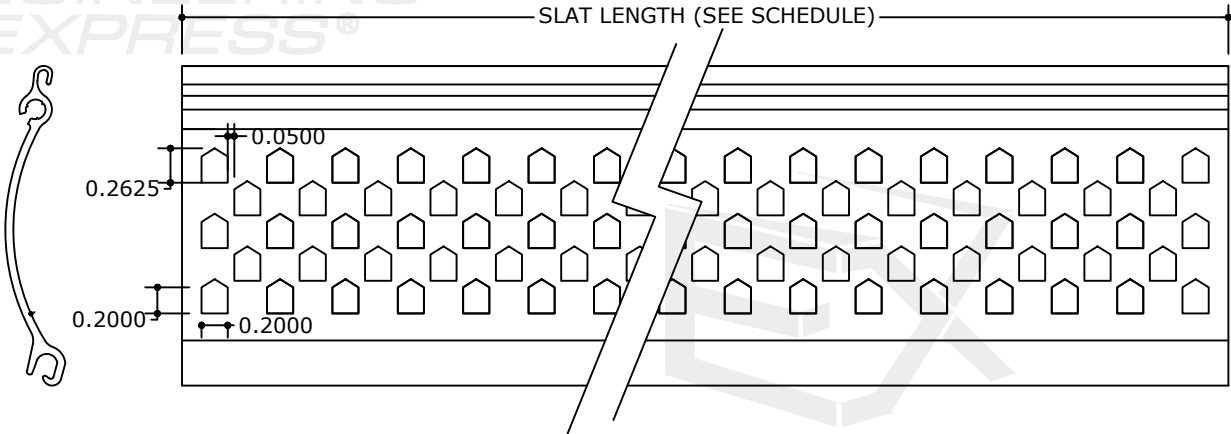
SPAN AND GLAZING SEPARATION NOTES:

- SLAT SPAN IS DEFINED AS THE DISTANCE BETWEEN RAILS.
- SEPARATION FROM GLAZING IS ONLY REQUIRED IN ASTM WIND ZONE 4 OR ESSENTIAL FACILITIES AS DEFINED IN ASTM E1996.
- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE SEPARATION FROM GLASS AND/OR DESIGN PRESSURE FOR THE NEXT HIGHER SPAN SHALL BE USED.

\* NOTE: APPLIES TO INSTALLATIONS LOCATED WITHIN WIND ZONE 4 OR ESSENTIAL FACILITIES.

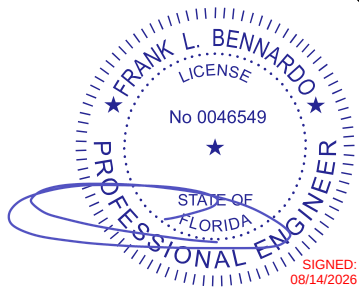
SEPARATION FROM GLAZING SCHEDULES\*:

| GLASS SEPARATION SCHEDULE                                 |                                 |                                 |
|-----------------------------------------------------------|---------------------------------|---------------------------------|
| MAGNUM 3.57 END RETENTION SHUTTER WITH SINGLE WALL SLATS* |                                 |                                 |
| SLAT SPAN                                                 | INSTALLATIONS ≤ 30' ABOVE GRADE | INSTALLATIONS > 30' ABOVE GRADE |
| 48.0"                                                     | 6.4"                            | 6.4"                            |
| 60.0"                                                     | 9.8"                            | 6.8"                            |
| 72.0"                                                     | 9.8"                            | 7.3"                            |
| 84.0"                                                     | 9.8"                            | 7.9"                            |
| 96.0"                                                     | 9.8"                            | 8.5"                            |
| 108.0"                                                    | 9.8"                            | 9.0"                            |
| 120.0"                                                    | 9.8"                            | 9.5"                            |
| 132.0"                                                    | 10.0"                           | 10.0"                           |
| 144.0"                                                    | 10.6"                           | 10.6"                           |
| 156.0"                                                    | 13.2"                           | 10.9"                           |
| 168.0"                                                    | 13.2"                           | 11.3"                           |
| 180.0"                                                    | 13.2"                           | 11.6"                           |
| 192.0"                                                    | 13.2"                           | 12.0"                           |
| 204.0"                                                    | 13.2"                           | 12.3"                           |
| 216.0"                                                    | 13.2"                           | 12.6"                           |
| 228.0"                                                    | 13.2"                           | 13.0"                           |
| 240.0"                                                    | 13.3"                           | 13.3"                           |
| 252.0"                                                    | 13.6"                           | 13.6"                           |
| 264.0"                                                    | 13.9"                           | 13.9"                           |
| 276.0"                                                    | 14.2"                           | 14.2"                           |
| 288.0"                                                    | 14.5"                           | 14.5"                           |



4b PERFORATED SINGLE WALL SLAT  
12" = 1'-0" 6063-T5 ALUM.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



FL 17344.1

ALUTECH UNITED, INC.  
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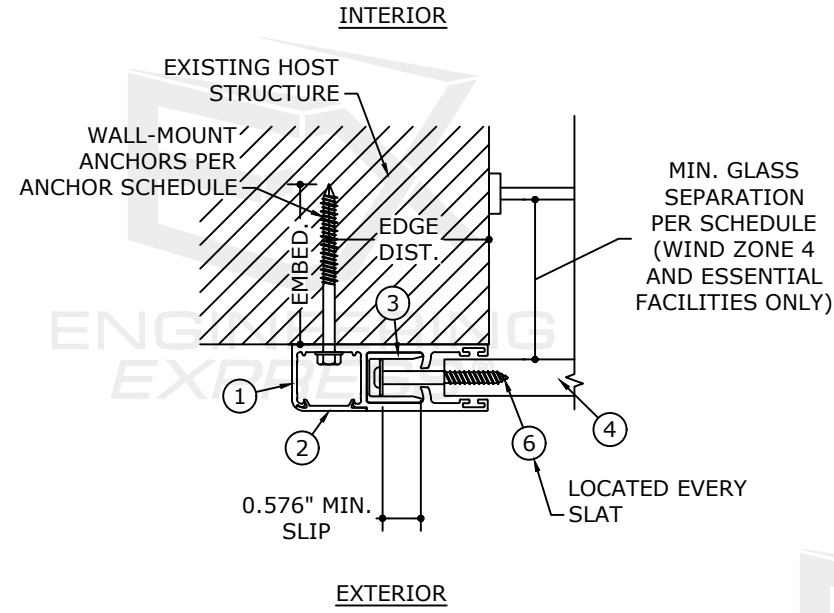
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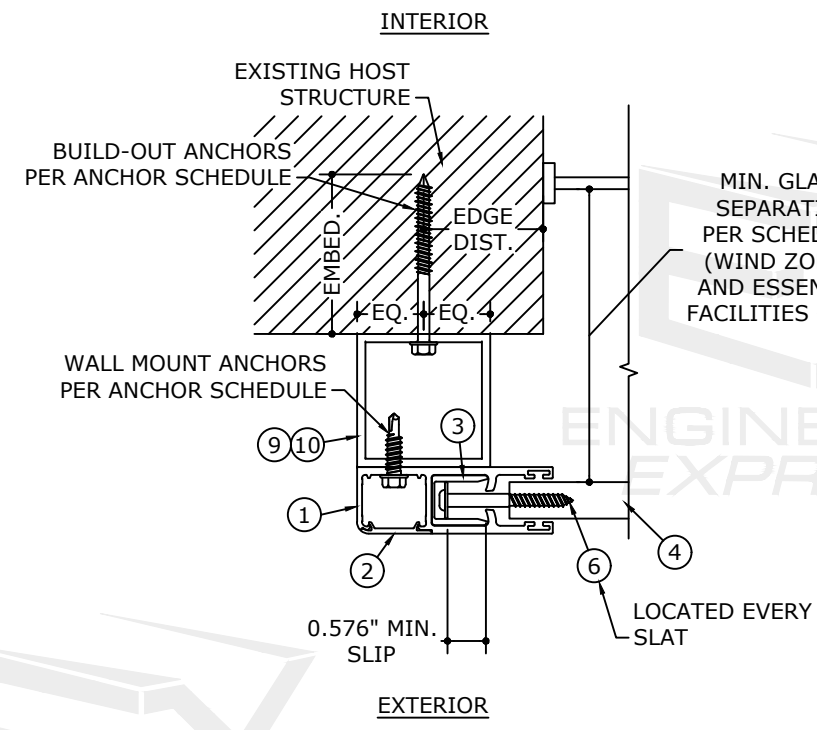
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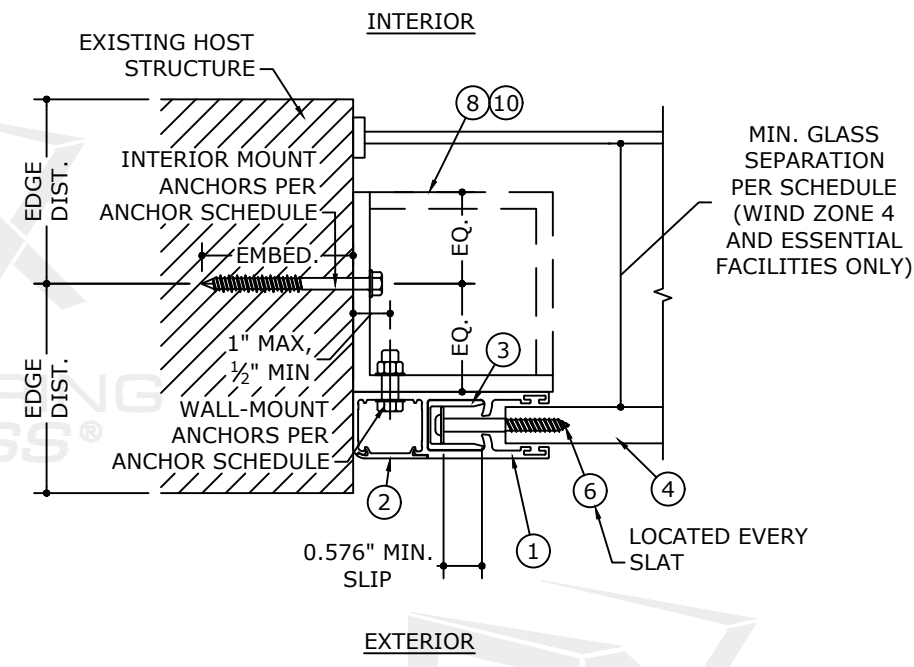
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1  
5  
END RETENTION  
TYPICAL WALL MOUNT  
N.T.S. HORIZ SECTION



2  
5  
END RETENTION  
TYP. BUILD-OUT MOUNT  
N.T.S. HORIZ SECTION



3  
5  
END RETENTION  
TYP. INTERIOR MOUNT  
N.T.S. HORIZ SECTION

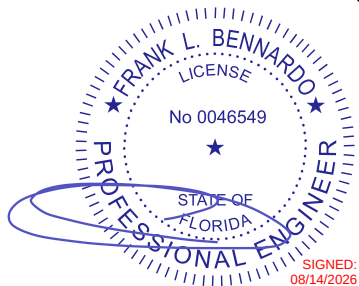
**ANCHOR SCHEDULE:**  
(SEE DESIGN SCHEDULES ON SHEETS 6-14 FOR REQUIRED ANCHOR SPACING)

| ANCHOR                                                     | SUBSTRATE                                      | MINIMUM EMBEDMENT       | MINIMUM EDGE DISTANCE |
|------------------------------------------------------------|------------------------------------------------|-------------------------|-----------------------|
| 1/4" DEWALT ULTRACON                                       | 2846 PSI MIN. CONCRETE                         | 1.75"                   | 2.5"                  |
| 1/4" SS ITW TAPCON                                         | 3192 PSI MIN. CONCRETE                         | 1.75"                   | 2.5"                  |
| 5/16" ITW TAPCON                                           | 2899 PSI MIN. CONCRETE                         | 2.25"                   | 3.125"                |
|                                                            | GROUT-FILLED CONCRETE BLOCK                    | 2.25"                   | 4.0"                  |
| 1/4" DEWALT POWER-BOLT                                     | HOLLOW CONCRETE BLOCK                          | 1.75"                   | 4.0"                  |
|                                                            | 3000 PSI MIN. CONCRETE                         | 2.5"                    | 3.0"                  |
| 1/4" ALL-POINTS SOLID-SET                                  | 3000 PSI MIN. CONCRETE                         | 0.875"                  | 3.0"                  |
|                                                            | HOLLOW CONCRETE BLOCK                          | 0.875"                  | 3.0"                  |
| 1/4" LAG SCREW                                             | G=0.55 MIN. WOOD                               | 1.5"                    | 0.75"                 |
| 5/16" LAG SCREW                                            | G=0.42 MIN. WOOD                               | 2.0"                    | 0.75"                 |
| #14 WOOD SCREW                                             | G=0.55 MIN. WOOD                               | 1.5"                    | 0.75"                 |
| #14 316 SS SMS (OR 1/4-20 316 SS THRU-BOLT) W/ 5/8" WASHER | 1/8" THICK MIN. 6063-T5 ALUMINUM OR A36 STEEL  | FULL THREAD PENETRATION | 0.5"                  |
| #14 316 SS SMS (OR 1/4-20 316 SS THRU-BOLT) W/ 5/8" WASHER | 0.25" THICK MIN. 6063-T5 ALUMINUM OR A36 STEEL | FULL THREAD PENETRATION | 0.5"                  |
| 3/8" DEWALT SCREWBOLT                                      | 3000 PSI MIN. CONCRETE                         | 3.5"                    | 4.5"                  |

**ANCHOR NOTES:**

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2x (MIN) WOOD STUD (i.e. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING).
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- ANCHOR SCHEDULE APPLIES TO ALL PRODUCTS CERTIFIED HEREIN, BUT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM ALLOWABLE SPANS AND PRESSURES INDICATED IN SPAN SCHEDULE SHALL APPLY.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- SHEET METAL SCREWS SHALL BE INSTALLED WITH FULL ENGAGEMENT OF THREADS INTO METAL HOST STRUCTURE.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



FL 17344.1

**ENGINEERING EXPRESS**  
POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY # 7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

**ALUTECH UNITED, INC.**  
117 DIXON STREET  
SELBYVILLE, DE 19975  
(302) 436-6005  
MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

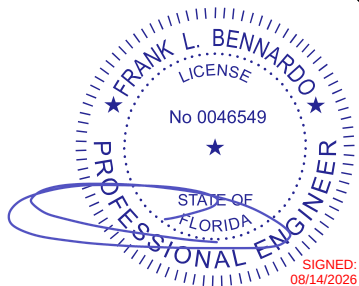
| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |

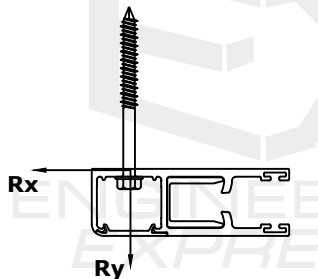
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

WALL MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS

ANCHOR NOTES: SEE SHEET 5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



|  |                    |                |                | MAXIMUM SPACING (O.C.)                                                                                                       |                                                                                                                            |                                                                                                                         |      |      |                                                                                                          |                                                                                                |                                                                                                                                 |                                                                                                                                   |      |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------|--------------------|----------------|----------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------|------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                    |                |                | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 5/16" ITW TAPCON<br>TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>3.125" MIN.<br>EDGE<br>DISTANCE |      |      | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" ALL-POINTS SOLID-<br>SET<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE |      | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE<br>DISTANCE |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | R <sub>x</sub> | R <sub>y</sub> |                                                                                                                              |                                                                                                                            |                                                                                                                         |      |      |                                                                                                          |                                                                                                |                                                                                                                                 |                                                                                                                                   |      |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
| 48"                                                                               | +/- 40 PSF         | 0.0 LB/FT      | 80.0 LB/FT     | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 0.0 LB/FT      | 100.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 0.0 LB/FT      | 120.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 0.0 LB/FT      | 140.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 0.0 LB/FT      | 160.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 0.0 LB/FT      | 180.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 100 PSF        | 0.0 LB/FT      | 200.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 1.2 LB/FT      | 220.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 120 PSF        | 51.9 LB/FT     | 260.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 130 PSF        | 102.2 LB/FT    | 301.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 140 PSF        | 152.3 LB/FT    | 342.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 150 PSF        | 202.0 LB/FT    | 384.8 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 60"                                                                               | +/- 40 PSF         | 0.0 LB/FT      | 100.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 0.0 LB/FT      | 125.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 68.7 LB/FT     | 173.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 139.8 LB/FT    | 224.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 210.8 LB/FT    | 275.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 281.5 LB/FT    | 327.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 100 PSF        | 351.9 LB/FT    | 380.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 422.1 LB/FT    | 433.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 3.4" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 120 PSF        | 492.0 LB/FT    | 487.3 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.9"                                                                                                                            | 3.4"                                                                                                                              | 3.0" | 3.5"                                                                                | 3.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 130 PSF        | 561.7 LB/FT    | 541.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.4"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 145 PSF        | 665.7 LB/FT    | 625.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.4"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 160 PSF        | 788.2 LB/FT    | 604.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.4"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 72"                                                                               | +/- 40 PSF         | 125.8 LB/FT    | 160.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 219.8 LB/FT    | 221.2 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 313.6 LB/FT    | 283.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 407.1 LB/FT    | 345.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.7"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 500.3 LB/FT    | 409.2 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.5"                                                                                                                              | 3.0" | 3.6"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 593.2 LB/FT    | 473.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.6"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 778.2 LB/FT    | 604.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.6"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 122 PSF        | 888.6 LB/FT    | 684.6 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 140 PSF        | 1022.1 LB/FT   | 749.0 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 160 PSF        | 1258.2 LB/FT   | 804.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 180 PSF        | 1515.3 LB/FT   | 961.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 200 PSF        | 1788.2 LB/FT   | 1004.5 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.5" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 84"                                                                               | +/- 40 PSF         | 291.1 LB/FT    | 227.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 409.7 LB/FT    | 300.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 3.7" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 528.0 LB/FT    | 373.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.4"                                                                                                                              | 2.9" | 3.5"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 645.9 LB/FT    | 448.3 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.5"                                                                                                                            | 2.8"                                                                                                                              | 2.4" | 2.9"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 763.6 LB/FT    | 523.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.5"                                                                                                                            | 2.8"                                                                                                                              | 2.4" | 2.9"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 880.8 LB/FT    | 600.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.5"                                                                                                                            | 2.8"                                                                                                                              | 2.4" | 2.9"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 109 PSF        | 1102.7 LB/FT   | 749.0 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.6"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 120 PSF        | 1258.2 LB/FT   | 804.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 140 PSF        | 1515.3 LB/FT   | 961.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 160 PSF        | 1888.6 LB/FT   | 1169.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 180 PSF        | 2281.5 LB/FT   | 1398.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 200 PSF        | 2686.2 LB/FT   | 1618.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.4"                                                                                                                            | 3.0"                                                                                                                              | 2.6" | 3.1"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 96"                                                                               | +/- 40 PSF         | 441.0 LB/FT    | 285.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 3.5" | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 586.1 LB/FT    | 369.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 3.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.1"                                                                                                                              | 2.7" | 3.3"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 730.8 LB/FT    | 455.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.6"                                                                                | 3.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 875.1 LB/FT    | 541.8 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 2.1"                                                                                                                              | 1.8" | 2.2"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 1019.0 LB/FT   | 629.8 LB/FT    | 4.0"                                                                                                                         | 3.6"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.8"                                                                                                                              | 1.6" | 1.8"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 1162.5 LB/FT   | 719.0 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.6"                                                                                                                              | 1.4" | 1.6"                                                                                | 2.2"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 101 PSF        | 1319.9 LB/FT   | 818.7 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 2.9"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 120 PSF        | 1645.9 LB/FT   | 1018.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 140 PSF        | 2022.0 LB/FT   | 1248.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 160 PSF        | 2408.0 LB/FT   | 1488.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 180 PSF        | 2794.0 LB/FT   | 1728.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 200 PSF        | 3180.0 LB/FT   | 1968.0 LB/FT   | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.5"                                                                                                                              | 2.1" | 2.5"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |

FL 17344.1

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SELBYVILLE, DE 19975  
(302) 436-6005  
MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

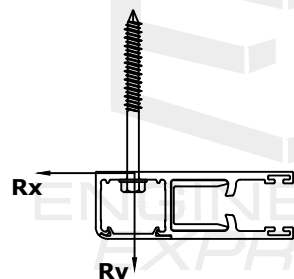
| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-302446) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |

26-98726

SCALE: NTS UNLESS NOTED

## WALL MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS (CONTINUED)

ANCHOR NOTES: SEE SHEET  
5 FOR ANCHOR NOTES.

|  |                    |                |                | MAXIMUM SPACING (O.C.)                                                                  |                                                                                      |                                 |                             |                             |                                                                                             |                               |                             |                                                                       |                                                                      |                                                                       |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                     |
|-----------------------------------------------------------------------------------|--------------------|----------------|----------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------|-----------------------------|-----------------------------|---------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                   |                    |                |                | 1/4" DEWALT<br>ULTRA-CON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 5/16" ITW TAPCON                |                             |                             | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT | 1/4" ALL-POINTS SOLID-<br>SET |                             | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | 3/8" DEWALT<br>SCREWBOL<br>TO 3000 PS<br>MIN.<br>CONCRETE<br>3.5" MIN.<br>EMBEDMENT |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | R <sub>x</sub> | R <sub>y</sub> | 2.5" MIN.<br>EDGE<br>DISTANCE                                                           | 2.5" MIN.<br>EDGE<br>DISTANCE                                                        | 3.125" MIN.<br>EDGE<br>DISTANCE | 4" MIN.<br>EDGE<br>DISTANCE | 4" MIN.<br>EDGE<br>DISTANCE | 3" MIN.<br>EDGE<br>DISTANCE                                                                 | 3" MIN.<br>EDGE<br>DISTANCE   | 3" MIN.<br>EDGE<br>DISTANCE | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.75" MIN.<br>EDGE<br>DISTANCE                                       | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.5" MIN.<br>EDGE<br>DISTANCE                                                                                                                                           | 0.5" MIN.<br>EDGE<br>DISTANCE                                                                                                                                          | 4.5" MIN.<br>EDGE<br>DISTANCE                                                       |
| 108"                                                                              | +/- 40 PSF         | 584.5 LB/FT    | 338.5 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 3.2"                                                                  | 2.7"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 757.9 LB/FT    | 434.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 3.2"                        | 2.5"                                                                  | 2.1"                                                                 | 2.6"                                                                  | 3.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 930.7 LB/FT    | 531.8 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.6"                        | 2.0"                                                                  | 1.7"                                                                 | 2.1"                                                                  | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 70 PSF         | 1103.2 LB/FT   | 630.8 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.2"                        | 1.7"                                                                  | 1.4"                                                                 | 1.8"                                                                  | 2.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 80 PSF         | 1275.1 LB/FT   | 731.4 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.9"                        | 1.5"                                                                  | 1.2"                                                                 | 1.5"                                                                  | 2.1"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 90 PSF         | 1446.5 LB/FT   | 833.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.7"                        | 1.3"                                                                  | 1.1"                                                                 | 1.3"                                                                  | 1.9"                                                                                                                                                                    | 3.5"                                                                                                                                                                   | 4.0"                                                                                |
| 120"                                                                              | +/- 96 PSF         | 1549.1 LB/FT   | 895.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.6"                        | 1.2"                                                                  | 1.0"                                                                 | 1.2"                                                                  | 1.7"                                                                                                                                                                    | 3.3"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 30 PSF         | 522.5 LB/FT    | 283.0 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 3.6"                                                                  | 3.1"                                                                 | 3.8"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 40 PSF         | 726.3 LB/FT    | 388.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 3.4"                        | 2.6"                                                                  | 2.2"                                                                 | 2.7"                                                                  | 3.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 929.5 LB/FT    | 496.4 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.7"                        | 2.0"                                                                  | 1.7"                                                                 | 2.1"                                                                  | 3.1"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 1132.2 LB/FT   | 606.1 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.2"                        | 1.7"                                                                  | 1.4"                                                                 | 1.7"                                                                  | 2.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 70 PSF         | 1334.3 LB/FT   | 717.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 3.9"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.9"                        | 1.4"                                                                  | 1.2"                                                                 | 1.5"                                                                  | 2.1"                                                                                                                                                                    | 3.9"                                                                                                                                                                   | 4.0"                                                                                |
| 132"                                                                              | +/- 80 PSF         | 1535.9 LB/FT   | 831.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.6"                        | 1.2"                                                                  | 1.0"                                                                 | 1.3"                                                                  | 3.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 92 PSF         | 1776.9 LB/FT   | 970.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.4"                        | 1.1"                                                                  | 0.9"                                                                 | 1.1"                                                                  | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 30 PSF         | 633.4 LB/FT    | 319.9 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 3.0"                                                                  | 2.5"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 40 PSF         | 868.8 LB/FT    | 437.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.9"                        | 2.2"                                                                  | 1.8"                                                                 | 2.3"                                                                  | 3.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 1103.4 LB/FT   | 557.1 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.3"                        | 1.7"                                                                  | 1.5"                                                                 | 1.8"                                                                  | 2.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 1337.5 LB/FT   | 679.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.9"                        | 1.4"                                                                  | 1.2"                                                                 | 1.5"                                                                  | 2.2"                                                                                                                                                                    | 3.9"                                                                                                                                                                   | 4.0"                                                                                |
| 144"                                                                              | +/- 70 PSF         | 1570.8 LB/FT   | 803.9 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.6"                        | 1.2"                                                                  | 1.0"                                                                 | 1.3"                                                                  | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 80 PSF         | 1803.5 LB/FT   | 930.8 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.4"                        | 1.1"                                                                  | 0.9"                                                                 | 1.1"                                                                  | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 88 PSF         | 1989.2 LB/FT   | 1034.1 LB/FT   | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.3"                        | 1.0"                                                                  | 0.8"                                                                 | 1.0"                                                                  | 2.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 20 PSF         | 476.1 LB/FT    | 229.6 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 30 PSF         | 745.1 LB/FT    | 355.8 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 3.5"                        | 2.6"                                                                  | 2.2"                                                                 | 2.7"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 40 PSF         | 1013.5 LB/FT   | 485.0 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.5"                        | 1.9"                                                                  | 1.6"                                                                 | 2.0"                                                                  | 3.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
| 156"                                                                              | +/- 50 PSF         | 1281.0 LB/FT   | 617.0 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.0"                        | 1.5"                                                                  | 1.3"                                                                 | 1.6"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 1547.9 LB/FT   | 752.1 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.7"                        | 1.2"                                                                  | 1.0"                                                                 | 1.3"                                                                  | 3.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 70 PSF         | 1813.9 LB/FT   | 890.0 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.4"                        | 1.0"                                                                  | 0.8"                                                                 | 1.0"                                                                  | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 85 PSF         | 2211.5 LB/FT   | 1102.2 LB/FT   | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.1"                        | 0.9"                                                                  | 0.7"                                                                 | 0.9"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 20 PSF         | 554.9 LB/FT    | 253.4 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 3.4"                                                                  | 2.9"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 30 PSF         | 858.4 LB/FT    | 391.1 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 3.0"                        | 2.2"                                                                  | 1.9"                                                                 | 2.4"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
| 168"                                                                              | +/- 40 PSF         | 1161.2 LB/FT   | 532.3 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.2"                        | 1.6"                                                                  | 1.4"                                                                 | 1.7"                                                                  | 2.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 1463.1 LB/FT   | 675.9 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.8"                        | 1.3"                                                                  | 1.1"                                                                 | 1.4"                                                                  | 2.1"                                                                                                                                                                    | 3.7"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 1764.1 LB/FT   | 825.1 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 3.8"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.5"                        | 1.1"                                                                  | 0.9"                                                                 | 1.1"                                                                  | 3.1"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 70 PSF         | 2064.2 LB/FT   | 976.6 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.3"                        | 0.9"                                                                  | 0.8"                                                                 | 1.0"                                                                  | 2.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 76 PSF         | 2243.8 LB/FT   | 1069.2 LB/FT   | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.1"                        | 0.8"                                                                  | 0.7"                                                                 | 0.9"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 20 PSF         | 634.5 LB/FT    | 276.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 4.0"                        | 3.0"                                                                  | 2.6"                                                                 | 3.2"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
| 180"                                                                              | +/- 30 PSF         | 973.9 LB/FT    | 426.0 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.7"                        | 2.0"                                                                  | 1.7"                                                                 | 2.1"                                                                  | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 40 PSF         | 1312.4 LB/FT   | 579.4 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.0"                        | 1.5"                                                                  | 1.2"                                                                 | 1.5"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 1649.9 LB/FT   | 736.9 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.6"                        | 1.2"                                                                  | 1.0"                                                                 | 1.2"                                                                  | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 60 PSF         | 1986.5 LB/FT   | 898.5 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.3"                        | 1.0"                                                                  | 0.8"                                                                 | 1.0"                                                                  | 2.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 69 PSF         | 2288.4 LB/FT   | 1047.3 LB/FT   | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.1"                        | 0.9"                                                                  | 0.7"                                                                 | 0.9"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 20 PSF         | 715.3 LB/FT    | 299.6 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 3.7"                        | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
| 180"                                                                              | +/- 30 PSF         | 1091.9 LB/FT   | 460.7 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 2.5"                        | 1.8"                                                                  | 1.5"                                                                 | 1.9"                                                                  | 3.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 40 PSF         | 1467.5 LB/FT   | 626.6 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 3.8"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.9"                        | 1.3"                                                                  | 1.1"                                                                 | 1.4"                                                                  | 3.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
|                                                                                   | +/- 50 PSF         | 1841.9 LB/FT   | 797.2 LB/FT    | 4.0"                                                                                    | 4.0"                                                                                 | 3.8"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.4"                        | 1.0"                                                                  | 0.9"                                                                 | 1.1"                                                                  | 3.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |
| 180"                                                                              | +/- 63 PSF         | 2327.0 LB/FT   | 1026.1 LB/FT   | 4.0"                                                                                    | 4.0"                                                                                 | 4.0"                            | 4.0"                        | 4.0"                        | 4.0"                                                                                        | 4.0"                          | 1.1"                        | 0.8"                                                                  | 0.7"                                                                 | 0.9"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                |

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MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

| REMARKS                    | DRWN | CHKD  | DATE     |
|----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-3555)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE            | APF  | CCB   | 6/10/26  |
|                            | -    | -     | -        |
|                            | -    | -     | -        |
|                            |      |       |          |
|                            |      |       |          |
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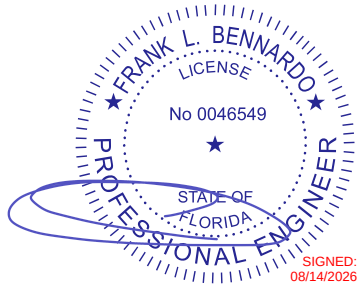
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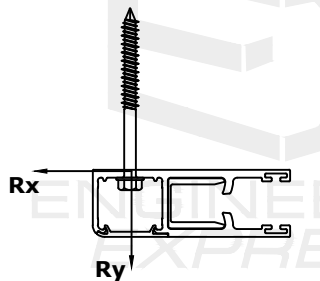
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

WALL MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS (CONTINUED)

ANCHOR NOTES: SEE SHEET 5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



|  |                    |                |                | MAXIMUM SPACING (O.C.)                                                                                                       |                                                                                                                            |                                                                                                                         |      |      |                                                                                                          |                                                                                                |                                                                                                                                 |                                                                                                                                   |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------|--------------------|----------------|----------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------|------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                    |                |                | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 5/16" ITW TAPCON<br>TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>3.125" MIN.<br>EDGE<br>DISTANCE |      |      | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" ALL-POINTS SOLID-<br>SET<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE<br>DISTANCE |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | R <sub>x</sub> | R <sub>y</sub> |                                                                                                                              |                                                                                                                            |                                                                                                                         |      |      |                                                                                                          |                                                                                                |                                                                                                                                 |                                                                                                                                   |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
| 192"                                                                              | +/- 10 PSF         | 381.2 LB/FT    | 155.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 797.5 LB/FT    | 322.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 4.0"                                                                                                                              | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1212.6 LB/FT   | 495.4 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.4"                                                                                           | 2.4"                                                                                                                            | 2.1"                                                                                                                              | 2.6"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 40 PSF         | 1626.5 LB/FT   | 674.0 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.9"                                                                                           | 2.2"                                                                                                                            | 1.4"                                                                                                                              | 1.7"                                                                                | 2.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 2039.1 LB/FT   | 858.0 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.9"                                                                                           | 2.2"                                                                                                                            | 1.4"                                                                                                                              | 1.7"                                                                                | 2.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 58 PSF         | 2368.3 LB/FT   | 1009.2 LB/FT   | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.9"                                                                                           | 2.2"                                                                                                                            | 1.4"                                                                                                                              | 1.7"                                                                                | 2.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 204"                                                                              | +/- 10 PSF         | 425.3 LB/FT    | 166.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.9"                                                                                                                              | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 881.4 LB/FT    | 345.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.1"                                                                                                                            | 2.2"                                                                                                                              | 1.5"                                                                                | 2.3"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1336.2 LB/FT   | 530.2 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.6"                                                                                           | 2.0"                                                                                                                            | 1.3"                                                                                                                              | 1.5"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 40 PSF         | 1789.6 LB/FT   | 721.6 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.6"                                                                                           | 2.0"                                                                                                                            | 1.3"                                                                                                                              | 1.5"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 2241.6 LB/FT   | 919.4 LB/FT    | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.6"                                                                                           | 2.0"                                                                                                                            | 1.3"                                                                                                                              | 1.5"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 54 PSF         | 2421.9 LB/FT   | 1000.2 LB/FT   | 4.0"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.6"                                                                                           | 2.0"                                                                                                                            | 1.3"                                                                                                                              | 1.5"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 216"                                                                              | +/- 10 PSF         | 469.9 LB/FT    | 177.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.5"                                                                                                                              | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 967.0 LB/FT    | 367.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 2.0"                                                                                                                              | 1.7"                                                                                | 2.1"                                                                                                         | 3.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1462.6 LB/FT   | 565.1 LB/FT    | 4.0"                                                                                                                         | 3.9"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.3"                                                                                           | 1.9"                                                                                                                            | 1.3"                                                                                                                              | 1.4"                                                                                | 2.4"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 40 PSF         | 1956.7 LB/FT   | 769.7 LB/FT    | 4.0"                                                                                                                         | 3.9"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.3"                                                                                           | 1.9"                                                                                                                            | 1.3"                                                                                                                              | 1.4"                                                                                | 2.4"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 2449.2 LB/FT   | 981.4 LB/FT    | 4.0"                                                                                                                         | 3.9"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.3"                                                                                           | 1.9"                                                                                                                            | 1.3"                                                                                                                              | 1.4"                                                                                | 2.4"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 2449.2 LB/FT   | 981.4 LB/FT    | 4.0"                                                                                                                         | 3.9"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.3"                                                                                           | 1.9"                                                                                                                            | 1.3"                                                                                                                              | 1.4"                                                                                | 2.4"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 228"                                                                              | +/- 10 PSF         | 515.1 LB/FT    | 188.8 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.8"                                                                                                                              | 3.2"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1054.4 LB/FT   | 390.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.9"                                                                                                                              | 1.6"                                                                                | 2.0"                                                                                                         | 3.3"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1592.1 LB/FT   | 600.2 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 1.7"                                                                                                                            | 1.2"                                                                                                                              | 1.0"                                                                                | 2.2"                                                                                                         | 3.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 40 PSF         | 2128.0 LB/FT   | 818.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 1.7"                                                                                                                            | 1.2"                                                                                                                              | 1.0"                                                                                | 2.2"                                                                                                         | 3.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 47 PSF         | 2502.1 LB/FT   | 975.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 1.7"                                                                                                                            | 1.2"                                                                                                                              | 1.0"                                                                                | 2.2"                                                                                                         | 3.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 47 PSF         | 2502.1 LB/FT   | 975.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 1.7"                                                                                                                            | 1.2"                                                                                                                              | 1.0"                                                                                | 2.2"                                                                                                         | 3.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 240"                                                                              | +/- 10 PSF         | 561.1 LB/FT    | 199.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.5"                                                                                                                              | 3.0"                                                                                | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1143.6 LB/FT   | 413.0 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.7"                                                                                                                              | 1.4"                                                                                | 1.6"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1724.4 LB/FT   | 635.5 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 1.0"                                                                                | 2.1"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 40 PSF         | 2303.3 LB/FT   | 867.1 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 1.0"                                                                                | 2.1"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 44 PSF         | 2534.3 LB/FT   | 962.3 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 1.0"                                                                                | 2.1"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 44 PSF         | 2534.3 LB/FT   | 962.3 LB/FT    | 4.0"                                                                                                                         | 3.8"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 1.0"                                                                                | 2.1"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 252"                                                                              | +/- 10 PSF         | 607.8 LB/FT    | 210.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.2"                                                                                                                              | 2.7"                                                                                | 3.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1234.7 LB/FT   | 435.8 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.6"                                                                                                                              | 1.3"                                                                                | 1.7"                                                                                                         | 2.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1859.7 LB/FT   | 671.0 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 0.9"                                                                                | 1.1"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 41 PSF         | 2544.7 LB/FT   | 941.6 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 0.9"                                                                                | 1.1"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 41 PSF         | 2544.7 LB/FT   | 941.6 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 0.9"                                                                                | 1.1"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 41 PSF         | 2544.7 LB/FT   | 941.6 LB/FT    | 4.0"                                                                                                                         | 3.5"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 2.5"                                                                                           | 1.6"                                                                                                                            | 1.1"                                                                                                                              | 0.9"                                                                                | 1.1"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 264"                                                                              | +/- 10 PSF         | 655.3 LB/FT    | 221.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.0"                                                                                                                              | 2.5"                                                                                | 3.2"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1327.7 LB/FT   | 458.6 LB/FT    | 4.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.8"                                                                                           | 2.1"                                                                                                                            | 1.5"                                                                                                                              | 1.3"                                                                                | 1.6"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 1997.9 LB/FT   | 706.8 LB/FT    | 4.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.8"                                                                                           | 2.1"                                                                                                                            | 1.5"                                                                                                                              | 1.3"                                                                                | 1.6"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 39 PSF         | 2599.2 LB/FT   | 940.0 LB/FT    | 4.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.8"                                                                                           | 2.1"                                                                                                                            | 1.5"                                                                                                                              | 1.3"                                                                                | 1.6"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 39 PSF         | 2599.2 LB/FT   | 940.0 LB/FT    | 4.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.8"                                                                                           | 2.1"                                                                                                                            | 1.5"                                                                                                                              | 1.3"                                                                                | 1.6"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 39 PSF         | 2599.2 LB/FT   | 940.0 LB/FT    | 4.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.8"                                                                                           | 2.1"                                                                                                                            | 1.5"                                                                                                                              | 1.3"                                                                                | 1.6"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 276"                                                                              | +/- 10 PSF         | 703.6 LB/FT    | 232.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 2.8"                                                                                                                              | 2.4"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1422.5 LB/FT   | 481.5 LB/FT    | 4.0"                                                                                                                         | 3.1"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 2.6"                                                                                                                            | 1.4"                                                                                                                              | 1.2"                                                                                | 1.5"                                                                                                         | 2.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 2139.0 LB/FT   | 742.9 LB/FT    | 4.0"                                                                                                                         | 3.1"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 2.6"                                                                                                                            | 1.4"                                                                                                                              | 1.2"                                                                                | 1.5"                                                                                                         | 2.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 37 PSF         | 2639.1 LB/FT   | 933.5 LB/FT    | 4.0"                                                                                                                         | 3.1"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 2.6"                                                                                                                            | 1.4"                                                                                                                              | 1.2"                                                                                | 1.5"                                                                                                         | 2.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 37 PSF         | 2639.1 LB/FT   | 933.5 LB/FT    | 4.0"                                                                                                                         | 3.1"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 2.6"                                                                                                                            | 1.4"                                                                                                                              | 1.2"                                                                                | 1.5"                                                                                                         | 2.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 37 PSF         | 2639.1 LB/FT   | 933.5 LB/FT    | 4.0"                                                                                                                         | 3.1"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 2.6"                                                                                                                            | 1.4"                                                                                                                              | 1.2"                                                                                | 1.5"                                                                                                         | 2.6"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| 288"                                                                              | +/- 10 PSF         | 752.7 LB/FT    | 243.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 3.8"                                                                                                                              | 2.6"                                                                                | 2.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 20 PSF         | 1519.2 LB/FT   | 504.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.3"                                                                                                                              | 1.1"                                                                                | 1.4"                                                                                                         | 2.5"                                                                                                        | 3.9"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 30 PSF         | 2283.0 LB/FT   | 779.3 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.3"                                                                                                                              | 1.1"                                                                                | 1.4"                                                                                                         | 2.5"                                                                                                        | 3.9"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 35 PSF         | 2663.9 LB/FT   | 922.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.3"                                                                                                                              | 1.1"                                                                                | 1.4"                                                                                                         | 2.5"                                                                                                        | 3.9"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 35 PSF         | 2663.9 LB/FT   | 922.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.3"                                                                                                                              | 1.1"                                                                                | 1.4"                                                                                                         | 2.5"                                                                                                        | 3.9"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 35 PSF         | 2663.9 LB/FT   | 922.0 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                    | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                            | 1.3"                                                                                                                              | 1.1"                                                                                | 1.4"                                                                                                         | 2.5"                                                                                                        | 3.9"                                                                                                         | 4.0"                                                                                                                                                                                |

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| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |

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26-98726

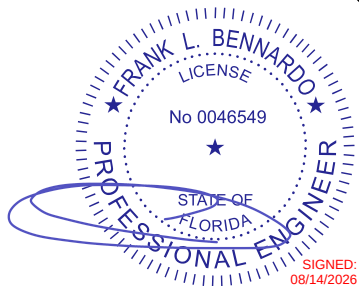
SCALE: NTS UNLESS NOTED

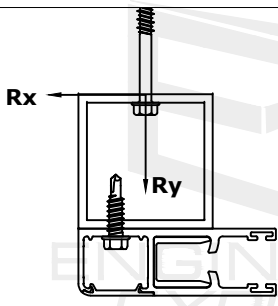
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

BUILD-OUT MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS

ANCHOR NOTES: SEE SHEET 5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



|  |                    |              |              | MAXIMUM SPACING (O.C.)                                                                                                       |                                                                                                                            |                                                                                                                             |      |      |                                                                                                          |                                                                                                |                                                                                                                                    |                                                                                                                                       |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------|--------------------|--------------|--------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------|------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                    |              |              | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 1/4" SS ITW<br>TAPCON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 5/16" ITW TAPCON<br><br>TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>3.125" MIN.<br>EDGE<br>DISTANCE |      |      | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT<br>;<br>4" MIN.<br>EDGE<br>DISTANCE | 1/4"<br>POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" ALL-POINTS SOLID-<br>SET<br><br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE<br>DISTANCE |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | Rx           | Ry           |                                                                                                                              |                                                                                                                            |                                                                                                                             |      |      |                                                                                                          |                                                                                                |                                                                                                                                    |                                                                                                                                       |                                                                                     |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |
| 48"                                                                               | +/- 40 PSF         | 0.0 LB/FT    | 133.4 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 0.0 LB/FT    | 166.7 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 0.0 LB/FT    | 200.0 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 0.0 LB/FT    | 233.4 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 0.0 LB/FT    | 266.7 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 0.0 LB/FT    | 300.1 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 100 PSF        | 0.0 LB/FT    | 333.4 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 1.2 LB/FT    | 367.5 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 120 PSF        | 51.9 LB/FT   | 434.1 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 130 PSF        | 102.2 LB/FT  | 501.9 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 140 PSF        | 152.3 LB/FT  | 571.1 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 150 PSF        | 202.0 LB/FT  | 641.5 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.4" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| +/- 160 PSF                                                                       | 251.4 LB/FT        | 713.1 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 3.0" | 4.0" | 4.0"                                                                                                     | 3.9"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 170 PSF                                                                       | 300.4 LB/FT        | 786.0 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 2.7" | 4.0" | 4.0"                                                                                                     | 3.5"                                                                                           | 4.0"                                                                                                                               | 3.7"                                                                                                                                  | 3.9"                                                                                | 2.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 180 PSF                                                                       | 349.1 LB/FT        | 860.0 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 2.5" | 4.0" | 4.0"                                                                                                     | 3.1"                                                                                           | 3.6"                                                                                                                               | 3.3"                                                                                                                                  | 3.5"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 190 PSF                                                                       | 397.5 LB/FT        | 935.3 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 2.2" | 4.0" | 4.0"                                                                                                     | 3.2"                                                                                           | 2.9"                                                                                                                               | 3.1"                                                                                                                                  | 3.1"                                                                                | 2.3"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 200 PSF                                                                       | 445.6 LB/FT        | 1011.7 LB/FT | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 1.9" | 4.0" | 4.0"                                                                                                     | 2.9"                                                                                           | 2.7"                                                                                                                               | 2.8"                                                                                                                                  | 2.8"                                                                                | 2.1"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| 60"                                                                               | +/- 40 PSF         | 0.0 LB/FT    | 166.7 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 0.0 LB/FT    | 208.4 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 68.7 LB/FT   | 289.9 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 139.8 LB/FT  | 374.1 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 210.8 LB/FT  | 459.5 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 281.5 LB/FT  | 546.0 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.7" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 3.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 100 PSF        | 351.9 LB/FT  | 633.7 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.2" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.9"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 3.2"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 422.1 LB/FT  | 722.4 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.3"                                                                                                                               | 3.4"                                                                                                                                  | 3.1"                                                                                | 3.4"                                                                                                         | 2.8"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| +/- 120 PSF                                                                       | 492.0 LB/FT        | 812.3 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 2.4" | 4.0" | 4.0"                                                                                                     | 3.0"                                                                                           | 3.0"                                                                                                                               | 2.6"                                                                                                                                  | 2.9"                                                                                | 2.5"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 130 PSF                                                                       | 561.7 LB/FT        | 903.3 LB/FT  | 4.0"         | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 2.2" | 4.0" | 4.0"                                                                                                     | 2.6"                                                                                           | 2.6"                                                                                                                               | 2.3"                                                                                                                                  | 2.6"                                                                                | 2.2"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| +/- 145 PSF                                                                       | 665.7 LB/FT        | 1041.8 LB/FT | 4.0"         | 3.6"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 1.9" | 4.0" | 3.9"                                                                                                     | 2.2"                                                                                           | 2.2"                                                                                                                               | 2.0"                                                                                                                                  | 2.2"                                                                                | 1.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| 72"                                                                               | +/- 40 PSF         | 125.8 LB/FT  | 266.9 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 219.8 LB/FT  | 368.7 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 313.6 LB/FT  | 471.8 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 407.1 LB/FT  | 576.3 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.9"                                                                                                                               | 3.8"                                                                                                                                  | 3.3"                                                                                | 3.8"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 500.3 LB/FT  | 682.1 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.2" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.2"                                                                                                                               | 3.1"                                                                                                                                  | 2.7"                                                                                | 3.1"                                                                                                         | 2.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 593.2 LB/FT  | 789.3 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.4" | 4.0"                                                                                                     | 4.0"                                                                                           | 2.6"                                                                                                                               | 2.3"                                                                                                                                  | 2.6"                                                                                | 2.6"                                                                                                         | 2.5"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 110 PSF        | 778.2 LB/FT  | 1007.6 LB/FT | 3.3"                                                                                                                         | 3.4"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 1.9" | 3.9"                                                                                                     | 3.7"                                                                                           | 2.0"                                                                                                                               | 2.0"                                                                                                                                  | 2.0"                                                                                | 2.0"                                                                                                         | 1.7"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| +/- 122 PSF                                                                       | 888.6 LB/FT        | 1141.2 LB/FT | 2.7"         | 3.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 1.6" | 3.3" | 3.3"                                                                                                     | 1.6"                                                                                           | 1.5"                                                                                                                               | 1.6"                                                                                                                                  | 1.5"                                                                                | 1.4"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |
| 84"                                                                               | +/- 40 PSF         | 291.1 LB/FT  | 379.2 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 4.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 4.0"                                                                                                                               | 4.0"                                                                                                                                  | 4.0"                                                                                | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 409.7 LB/FT  | 500.2 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.6" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.9"                                                                                                                               | 3.4"                                                                                                                                  | 3.9"                                                                                | 3.8"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 528.0 LB/FT  | 622.9 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.3"                                                                                                                               | 3.1"                                                                                                                                  | 2.7"                                                                                | 3.1"                                                                                                         | 3.1"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 645.9 LB/FT  | 747.3 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.4" | 4.0"                                                                                                     | 4.0"                                                                                           | 2.5"                                                                                                                               | 2.5"                                                                                                                                  | 2.2"                                                                                | 2.5"                                                                                                         | 2.5"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 763.6 LB/FT  | 873.4 LB/FT  | 4.0"                                                                                                                         | 3.7"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.0" | 4.0"                                                                                                     | 4.0"                                                                                           | 2.1"                                                                                                                               | 2.1"                                                                                                                                  | 1.8"                                                                                | 2.1"                                                                                                         | 2.2"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 880.8 LB/FT  | 1001.2 LB/FT | 2.8"                                                                                                                         | 3.2"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 1.6" | 3.5"                                                                                                     | 3.5"                                                                                           | 1.6"                                                                                                                               | 1.5"                                                                                                                                  | 1.6"                                                                                | 1.5"                                                                                                         | 1.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 109 PSF        | 1102.7 LB/FT | 1248.6 LB/FT | 2.5"                                                                                                                         | 2.8"                                                                                                                       | 4.0"                                                                                                                        | 3.3" | 1.4" | 2.9"                                                                                                     | 2.9"                                                                                           | 1.5"                                                                                                                               | 1.3"                                                                                                                                  | 1.6"                                                                                | 1.3"                                                                                                         | 1.3"                                                                                                        | 3.4"                                                                                                         | 4.0"                                                                                                                                                                                |
| 96"                                                                               | +/- 40 PSF         | 441.0 LB/FT  | 476.0 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 3.7" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.7"                                                                                                                               | 3.3"                                                                                                                                  | 3.8"                                                                                | 3.9"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 50 PSF         | 586.1 LB/FT  | 616.2 LB/FT  | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.9" | 4.0"                                                                                                     | 4.0"                                                                                           | 3.2"                                                                                                                               | 2.8"                                                                                                                                  | 2.9"                                                                                | 2.9"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 60 PSF         | 730.8 LB/FT  | 758.6 LB/FT  | 2.7"                                                                                                                         | 4.0"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 2.3" | 4.0"                                                                                                     | 4.0"                                                                                           | 2.3"                                                                                                                               | 2.0"                                                                                                                                  | 2.3"                                                                                | 2.4"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 70 PSF         | 875.1 LB/FT  | 903.2 LB/FT  | 3.1"                                                                                                                         | 3.4"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 1.9" | 3.7"                                                                                                     | 3.7"                                                                                           | 1.9"                                                                                                                               | 1.7"                                                                                                                                  | 1.9"                                                                                | 2.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 80 PSF         | 1019.0 LB/FT | 1049.9 LB/FT | 2.7"                                                                                                                         | 2.8"                                                                                                                       | 4.0"                                                                                                                        | 4.0" | 1.7" | 3.2"                                                                                                     | 3.2"                                                                                           | 1.6"                                                                                                                               | 1.4"                                                                                                                                  | 1.7"                                                                                | 1.5"                                                                                                         | 3.9"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
|                                                                                   | +/- 90 PSF         | 1162.5 LB/FT | 1198.7 LB/FT | 2.3"                                                                                                                         | 2.6"                                                                                                                       | 4.0"                                                                                                                        | 3.5" | 1.4" | 2.9"                                                                                                     | 2.9"                                                                                           | 1.4"                                                                                                                               | 1.2"                                                                                                                                  | 1.5"                                                                                | 1.5"                                                                                                         | 3.4"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                |
| +/- 101 PSF                                                                       | 1319.9 LB/FT       | 1364.8 LB/FT | 2.0"         | 2.3"                                                                                                                         | 3.9"                                                                                                                       | 3.1"                                                                                                                        | 1.3" | 2.5" | 2.5"                                                                                                     | 1.3"                                                                                           | 1.1"                                                                                                                               | 1.3"                                                                                                                                  | 1.3"                                                                                | 3.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         |                                                                                                                                                                                     |

FL 17344.1

ENGINEERING  
EXPRESS

POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY # 7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

ALUTECH UNITED, INC.

117 DIXON STREET  
SELBYVILLE, DE 19975  
(302) 436-6005

MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-302440) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
|                             |      |       |          |
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26-98726

SCALE: NTS UNLESS NOTED

9

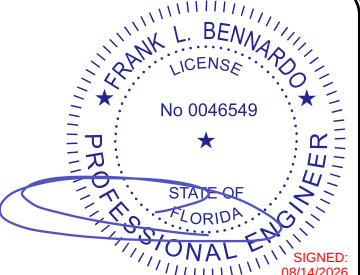
OF 16

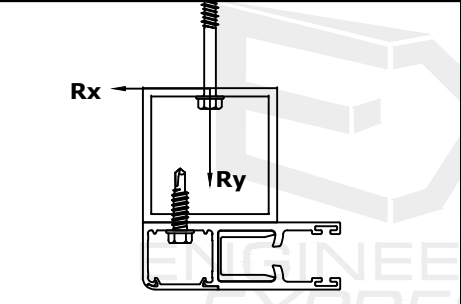
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

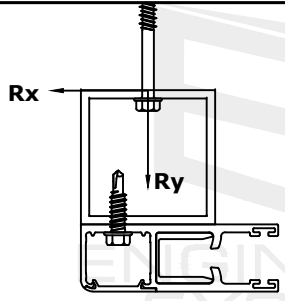
BUILD-OUT MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS (CONTINUED)

ANCHOR NOTES: SEE SHEET 5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885





|  |                    |              |              | MAXIMUM SPACING (O.C.)                                                                                                      |                                                                                                                           |                  |      |      |                                                                                                                                |                               |      |                                                                                                             |                                                                                                            |                                                                                                             |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                                                             |
|-----------------------------------------------------------------------------------|--------------------|--------------|--------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|------|------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                    |              |              | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br><br>2.5" MIN.<br>EDGE<br>DISTANCE | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT<br><br>2.5" MIN.<br>EDGE<br>DISTANCE | 5/16" ITW TAPCON |      |      | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT<br><br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" ALL-POINTS SOLID-<br>SET |      | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br><br>0.75" MIN.<br>EDGE<br>DISTANCE | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT<br><br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT<br><br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | 3/8" DEWALT<br>SCREWBOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBEDMENT<br><br>4.5" MIN.<br>EDGE<br>DISTANCE |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | Rx           | Ry           |                                                                                                                             |                                                                                                                           |                  |      |      |                                                                                                                                |                               |      |                                                                                                             |                                                                                                            |                                                                                                             |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                                                             |
| 108"                                                                              | +/- 40 PSF         | 584.5 LB/FT  | 564.3 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.0" | 4.0"                                                                                                                           | 4.0"                          | 3.3" | 2.9"                                                                                                        | 2.5"                                                                                                       | 3.0"                                                                                                        | 3.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 757.9 LB/FT  | 724.1 LB/FT  | 3.5"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 2.5" | 3.5"                                                                                                                           | 4.0"                          | 2.6" | 2.2"                                                                                                        | 1.9"                                                                                                       | 2.3"                                                                                                        | 2.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 930.7 LB/FT  | 886.5 LB/FT  | 3.0"                                                                                                                        | 3.3"                                                                                                                      | 4.0"             | 4.0" | 1.9" | 3.0"                                                                                                                           | 3.7"                          | 2.1" | 1.8"                                                                                                        | 1.5"                                                                                                       | 1.9"                                                                                                        | 2.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 70 PSF         | 1103.2 LB/FT | 1051.6 LB/FT | 2.6"                                                                                                                        | 2.6"                                                                                                                      | 4.0"             | 3.8" | 1.6" | 2.5"                                                                                                                           | 3.1"                          | 1.5" | 1.5"                                                                                                        | 1.3"                                                                                                       | 1.6"                                                                                                        | 1.7"                                                                                                                                                                    | 3.7"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 80 PSF         | 1275.1 LB/FT | 1219.3 LB/FT | 2.2"                                                                                                                        | 2.4"                                                                                                                      | 3.9"             | 3.5" | 1.4" | 2.2"                                                                                                                           | 2.7"                          | 1.5" | 1.3"                                                                                                        | 1.2"                                                                                                       | 1.4"                                                                                                        | 1.5"                                                                                                                                                                    | 3.2"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 90 PSF         | 1446.5 LB/FT | 1389.7 LB/FT | 1.9"                                                                                                                        | 2.1"                                                                                                                      | 3.5"             | 2.9" | 1.2" | 1.9"                                                                                                                           | 2.3"                          | 1.3" | 1.2"                                                                                                        | 1.0"                                                                                                       | 1.3"                                                                                                        | 1.3"                                                                                                                                                                    | 2.8"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 96 PSF                                                                        | 1549.1 LB/FT       | 1493.2 LB/FT | 1.8"         | 2.0"                                                                                                                        | 3.2"                                                                                                                      | 2.7"             | 1.1" | 1.8" | 2.2"                                                                                                                           | 1.2"                          | 1.1" | 0.9"                                                                                                        | 1.1"                                                                                                       | 1.2"                                                                                                        | 2.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |
| 120"                                                                              | +/- 30 PSF         | 522.5 LB/FT  | 471.8 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.5" | 4.0"                                                                                                                           | 4.0"                          | 3.8" | 3.3"                                                                                                        | 2.8"                                                                                                       | 3.4"                                                                                                        | 3.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 726.3 LB/FT  | 648.0 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 2.9" | 4.0"                                                                                                                           | 4.0"                          | 2.6" | 2.4"                                                                                                        | 2.1"                                                                                                       | 2.4"                                                                                                        | 2.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 929.5 LB/FT  | 827.5 LB/FT  | 3.1"                                                                                                                        | 3.4"                                                                                                                      | 4.0"             | 4.0" | 2.0" | 3.1"                                                                                                                           | 3.8"                          | 2.2" | 1.9"                                                                                                        | 1.6"                                                                                                       | 1.9"                                                                                                        | 2.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 1132.2 LB/FT | 1010.3 LB/FT | 2.6"                                                                                                                        | 2.6"                                                                                                                      | 4.0"             | 3.8" | 1.6" | 2.6"                                                                                                                           | 3.1"                          | 1.8" | 1.6"                                                                                                        | 1.3"                                                                                                       | 1.6"                                                                                                        | 1.9"                                                                                                                                                                    | 3.7"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 70 PSF         | 1334.3 LB/FT | 1196.4 LB/FT | 2.2"                                                                                                                        | 2.4"                                                                                                                      | 3.9"             | 3.5" | 1.4" | 2.2"                                                                                                                           | 2.6"                          | 1.5" | 1.3"                                                                                                        | 1.2"                                                                                                       | 1.5"                                                                                                        | 1.5"                                                                                                                                                                    | 3.2"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 80 PSF         | 1535.9 LB/FT | 1385.8 LB/FT | 1.9"                                                                                                                        | 2.1"                                                                                                                      | 3.4"             | 2.9" | 1.2" | 1.9"                                                                                                                           | 2.3"                          | 1.3" | 1.2"                                                                                                        | 1.0"                                                                                                       | 1.1"                                                                                                        | 1.3"                                                                                                                                                                    | 2.7"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 92 PSF                                                                        | 1776.9 LB/FT       | 1617.4 LB/FT | 1.6"         | 1.8"                                                                                                                        | 2.9"                                                                                                                      | 2.4"             | 1.0" | 1.6" | 2.0"                                                                                                                           | 1.4"                          | 1.0" | 0.8"                                                                                                        | 1.0"                                                                                                       | 1.1"                                                                                                        | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |
| 132"                                                                              | +/- 30 PSF         | 633.4 LB/FT  | 533.3 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.0" | 4.0"                                                                                                                           | 4.0"                          | 3.3" | 2.7"                                                                                                        | 2.4"                                                                                                       | 2.8"                                                                                                        | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 868.8 LB/FT  | 729.0 LB/FT  | 3.4"                                                                                                                        | 3.8"                                                                                                                      | 4.0"             | 4.0" | 2.2" | 3.5"                                                                                                                           | 4.0"                          | 2.4" | 2.0"                                                                                                        | 1.7"                                                                                                       | 2.1"                                                                                                        | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 1103.4 LB/FT | 928.6 LB/FT  | 2.7"                                                                                                                        | 3.0"                                                                                                                      | 4.0"             | 4.0" | 1.7" | 2.7"                                                                                                                           | 3.3"                          | 1.8" | 1.6"                                                                                                        | 1.4"                                                                                                       | 1.6"                                                                                                        | 1.9"                                                                                                                                                                    | 3.9"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 1337.5 LB/FT | 1132.3 LB/FT | 2.2"                                                                                                                        | 2.4"                                                                                                                      | 4.0"             | 3.5" | 1.4" | 2.2"                                                                                                                           | 2.7"                          | 1.5" | 1.3"                                                                                                        | 1.1"                                                                                                       | 1.3"                                                                                                        | 1.6"                                                                                                                                                                    | 3.2"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 70 PSF         | 1570.8 LB/FT | 1340.0 LB/FT | 1.9"                                                                                                                        | 2.1"                                                                                                                      | 3.4"             | 2.6" | 1.2" | 1.9"                                                                                                                           | 2.3"                          | 1.3" | 1.1"                                                                                                        | 1.0"                                                                                                       | 1.3"                                                                                                        | 1.3"                                                                                                                                                                    | 2.8"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 80 PSF         | 1803.5 LB/FT | 1551.7 LB/FT | 1.6"                                                                                                                        | 1.8"                                                                                                                      | 2.9"             | 2.4" | 1.1" | 1.6"                                                                                                                           | 2.0"                          | 1.1" | 1.0"                                                                                                        | 0.9"                                                                                                       | 1.0"                                                                                                        | 1.1"                                                                                                                                                                    | 2.4"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 88 PSF                                                                        | 1989.2 LB/FT       | 1723.9 LB/FT | 1.5"         | 1.6"                                                                                                                        | 2.7"                                                                                                                      | 2.2"             | 1.0" | 1.5" | 1.8"                                                                                                                           | 1.0"                          | 0.9" | 0.8"                                                                                                        | 0.9"                                                                                                       | 1.0"                                                                                                        | 2.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |
| 144"                                                                              | +/- 20 PSF         | 476.1 LB/FT  | 382.7 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                           | 4.0"                          | 4.0" | 3.7"                                                                                                        | 3.2"                                                                                                       | 3.8"                                                                                                        | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 745.1 LB/FT  | 593.2 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.7" | 4.0"                                                                                                                           | 4.0"                          | 3.4" | 2.4"                                                                                                        | 2.0"                                                                                                       | 2.4"                                                                                                        | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1013.5 LB/FT | 808.5 LB/FT  | 3.0"                                                                                                                        | 3.3"                                                                                                                      | 4.0"             | 4.0" | 2.9" | 3.0"                                                                                                                           | 3.7"                          | 2.1" | 1.7"                                                                                                        | 1.5"                                                                                                       | 1.6"                                                                                                        | 2.1"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 1281.0 LB/FT | 1028.7 LB/FT | 2.4"                                                                                                                        | 2.6"                                                                                                                      | 4.0"             | 3.5" | 1.6" | 2.4"                                                                                                                           | 2.6"                          | 1.6" | 1.4"                                                                                                        | 1.2"                                                                                                       | 1.4"                                                                                                        | 1.7"                                                                                                                                                                    | 3.5"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 1547.9 LB/FT | 1253.7 LB/FT | 2.0"                                                                                                                        | 2.2"                                                                                                                      | 3.5"             | 2.6" | 1.3" | 2.0"                                                                                                                           | 2.4"                          | 1.4" | 1.1"                                                                                                        | 1.0"                                                                                                       | 1.2"                                                                                                        | 1.4"                                                                                                                                                                    | 2.9"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 70 PSF         | 1813.9 LB/FT | 1483.6 LB/FT | 1.7"                                                                                                                        | 1.9"                                                                                                                      | 3.3"             | 2.5" | 1.1" | 1.7"                                                                                                                           | 2.0"                          | 1.2" | 1.0"                                                                                                        | 0.9"                                                                                                       | 1.0"                                                                                                        | 1.2"                                                                                                                                                                    | 2.4"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 85 PSF                                                                        | 2211.5 LB/FT       | 1837.3 LB/FT | 1.3"         | 1.5"                                                                                                                        | 2.4"                                                                                                                      | 2.0"             | 0.9" | 1.4" | 1.6"                                                                                                                           | 0.9"                          | 0.7" | 0.6"                                                                                                        | 0.8"                                                                                                       | 1.0"                                                                                                        | 2.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |
| 156"                                                                              | +/- 20 PSF         | 554.9 LB/FT  | 422.4 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.5" | 4.0"                                                                                                                           | 4.0"                          | 3.9" | 3.2"                                                                                                        | 2.8"                                                                                                       | 3.3"                                                                                                        | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 858.4 LB/FT  | 651.9 LB/FT  | 3.6"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 2.4" | 3.7"                                                                                                                           | 4.0"                          | 2.5" | 2.1"                                                                                                        | 1.9"                                                                                                       | 2.1"                                                                                                        | 2.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1161.2 LB/FT | 887.3 LB/FT  | 2.7"                                                                                                                        | 2.9"                                                                                                                      | 4.0"             | 4.0" | 1.6" | 2.7"                                                                                                                           | 3.3"                          | 1.9" | 1.5"                                                                                                        | 1.3"                                                                                                       | 1.6"                                                                                                        | 1.9"                                                                                                                                                                    | 3.9"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 1463.1 LB/FT | 1128.5 LB/FT | 2.1"                                                                                                                        | 2.3"                                                                                                                      | 3.8"             | 3.1" | 1.4" | 2.1"                                                                                                                           | 2.6"                          | 1.6" | 1.3"                                                                                                        | 1.2"                                                                                                       | 1.5"                                                                                                        | 1.5"                                                                                                                                                                    | 3.1"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 1764.1 LB/FT | 1375.4 LB/FT | 1.7"                                                                                                                        | 1.9"                                                                                                                      | 3.1"             | 2.6" | 1.1" | 1.9"                                                                                                                           | 2.1"                          | 1.2" | 1.0"                                                                                                        | 0.9"                                                                                                       | 1.0"                                                                                                        | 1.2"                                                                                                                                                                    | 2.6"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 70 PSF         | 2064.2 LB/FT | 1628.0 LB/FT | 1.5"                                                                                                                        | 1.6"                                                                                                                      | 2.7"             | 2.2" | 1.0" | 1.6"                                                                                                                           | 1.8"                          | 1.0" | 0.9"                                                                                                        | 0.7"                                                                                                       | 0.9"                                                                                                        | 1.1"                                                                                                                                                                    | 2.2"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 76 PSF                                                                        | 2243.8 LB/FT       | 1782.3 LB/FT | 1.4"         | 1.5"                                                                                                                        | 2.5"                                                                                                                      | 2.0"             | 0.9" | 1.4" | 1.7"                                                                                                                           | 0.9"                          | 0.8" | 0.6"                                                                                                        | 0.8"                                                                                                       | 1.0"                                                                                                        | 2.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |
| 168"                                                                              | +/- 20 PSF         | 634.5 LB/FT  | 461.2 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.3" | 4.0"                                                                                                                           | 4.0"                          | 3.5" | 2.8"                                                                                                        | 2.4"                                                                                                       | 2.9"                                                                                                        | 3.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 973.9 LB/FT  | 710.1 LB/FT  | 3.4"                                                                                                                        | 3.6"                                                                                                                      | 4.0"             | 4.0" | 2.2" | 3.3"                                                                                                                           | 4.0"                          | 2.3" | 1.6"                                                                                                        | 1.4"                                                                                                       | 1.6"                                                                                                        | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1312.4 LB/FT | 965.9 LB/FT  | 2.4"                                                                                                                        | 2.6"                                                                                                                      | 4.0"             | 3.6" | 1.6" | 2.5"                                                                                                                           | 2.9"                          | 1.7" | 1.4"                                                                                                        | 1.2"                                                                                                       | 1.4"                                                                                                        | 1.7"                                                                                                                                                                    | 3.5"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 1649.9 LB/FT | 1228.4 LB/FT | 1.9"                                                                                                                        | 2.1"                                                                                                                      | 3.4"             | 2.6" | 1.3" | 1.9"                                                                                                                           | 2.4"                          | 1.3" | 1.1"                                                                                                        | 0.9"                                                                                                       | 1.1"                                                                                                        | 1.4"                                                                                                                                                                    | 2.8"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 60 PSF         | 1986.5 LB/FT | 1497.8 LB/FT | 1.6"                                                                                                                        | 1.7"                                                                                                                      | 2.9"             | 2.3" | 1.0" | 1.6"                                                                                                                           | 1.9"                          | 1.1" | 0.9"                                                                                                        | 0.8"                                                                                                       | 0.9"                                                                                                        | 1.1"                                                                                                                                                                    | 2.3"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 69 PSF         | 2288.4 LB/FT | 1745.9 LB/FT | 1.4"                                                                                                                        | 1.5"                                                                                                                      | 2.4"             | 2.0" | 0.9" | 1.4"                                                                                                                           | 1.7"                          | 0.9" | 0.7"                                                                                                        | 0.6"                                                                                                       | 0.8"                                                                                                        | 1.0"                                                                                                                                                                    | 2.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
| 180"                                                                              | +/- 20 PSF         | 715.3 LB/FT  | 499.5 LB/FT  | 4.0"                                                                                                                        | 4.0"                                                                                                                      | 4.0"             | 4.0" | 3.0" | 4.0"                                                                                                                           | 4.0"                          | 3.1" | 2.5"                                                                                                        | 2.2"                                                                                                       | 2.6"                                                                                                        | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1091.9 LB/FT | 768.0 LB/FT  | 2.6"                                                                                                                        | 3.2"                                                                                                                      | 4.0"             | 4.0" | 2.0" | 3.0"                                                                                                                           | 3.6"                          | 2.0" | 1.6"                                                                                                        | 1.4"                                                                                                       | 1.7"                                                                                                        | 2.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1467.5 LB/FT | 1044.5 LB/FT | 2.2"                                                                                                                        | 2.4"                                                                                                                      | 3.9"             | 3.5" | 1.5" | 2.2"                                                                                                                           | 2.7"                          | 1.6" | 1.3"                                                                                                        | 1.1"                                                                                                       | 1.3"                                                                                                        | 1.6"                                                                                                                                                                    | 3.2"                                                                                                                                                                   | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 1841.9 LB/FT | 1329.0 LB/FT | 1.7"                                                                                                                        | 1.9"                                                                                                                      | 3.1"             | 2.6" | 1.1" | 1.8"                                                                                                                           | 2.1"                          | 1.2" | 1.0"                                                                                                        | 0.9"                                                                                                       | 1.0"                                                                                                        | 1.3"                                                                                                                                                                    | 2.5"                                                                                                                                                                   | 4.0"                                                                                                                        |
| +/- 63 PSF                                                                        | 2327.0 LB/FT       | 1710.5 LB/FT | 1.4"         | 1.5"                                                                                                                        | 2.4"                                                                                                                      | 2.0"             | 0.9" | 1.4" | 1.7"                                                                                                                           | 0.9"                          | 0.7" | 0.6"                                                                                                        | 0.8"                                                                                                       | 1.0"                                                                                                        | 2.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   |                                                                                                                             |

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FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-302440) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
|                             |      |       |          |
|                             |      |       |          |
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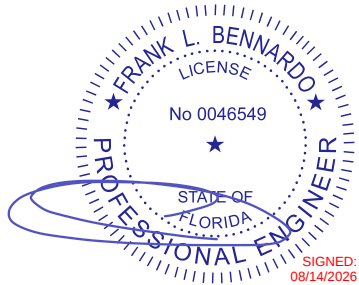
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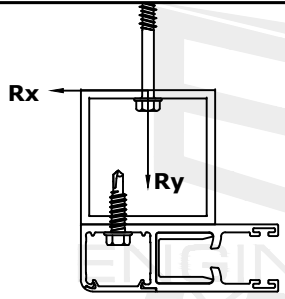
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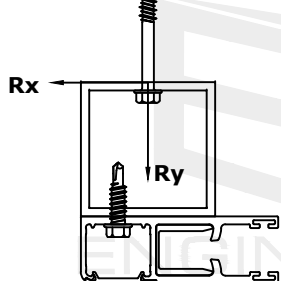
| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
| -                           | -    | -     | -        |
| -                           | -    | -     | -        |
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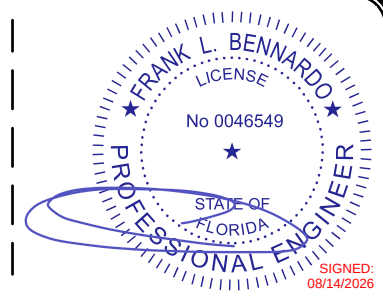
|  |                    |                |                | MAXIMUM SPACING (O.C.)                                                                                                       |                                                                                                                            |                  |      |      |                                                                                                                                    |                               |      |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |                                                                                                                                                                                    |                                                                                                                             |
|-----------------------------------------------------------------------------------|--------------------|----------------|----------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------|------|------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                    |                |                | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBODMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBODMENT<br>;<br>2.5" MIN.<br>EDGE<br>DISTANCE | 5/16" ITW TAPCON |      |      | 1/4"<br>POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBODMENT<br>;<br>3" MIN.<br>EDGE<br>DISTANCE | 1/4" ALL-POINTS SOLID-<br>SET |      | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBODMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBODMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBODMENT<br>;<br>0.75" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE<br>DISTANCE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE<br>DISTANCE | 3/8" DEWALT<br>SCREWBOL<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBODMENT<br>;<br>4.5" MIN.<br>EDGE<br>DISTANCE |
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | R <sub>x</sub> | R <sub>y</sub> |                                                                                                                              |                                                                                                                            |                  |      |      |                                                                                                                                    |                               |      |                                                                                                              |                                                                                                             |                                                                                                              |                                                                                                                                                                                     |                                                                                                                                                                                    |                                                                                                                             |
| 192"                                                                              | +/- 10 PSF         | 381.2 LB/FT    | 258.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 4.0"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 797.5 LB/FT    | 537.5 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 2.9" | 4.0"                                                                                                                               | 4.0"                          | 2.3" | 1.9"                                                                                                         | 2.4"                                                                                                        | 3.1"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1212.6 LB/FT   | 825.9 LB/FT    | 2.7"                                                                                                                         | 2.9"                                                                                                                       | 4.0"             | 4.0" | 1.6" | 2.9"                                                                                                                               | 3.3"                          | 1.9" | 1.5"                                                                                                         | 1.5"                                                                                                        | 2.0"                                                                                                         | 3.9"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1626.5 LB/FT   | 1123.5 LB/FT   | 2.0"                                                                                                                         | 2.2"                                                                                                                       | 3.6"             | 2.6" | 1.3" | 2.0"                                                                                                                               | 2.4"                          | 1.4" | 1.1"                                                                                                         | 1.0"                                                                                                        | 1.2"                                                                                                         | 2.9"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 2039.1 LB/FT   | 1430.3 LB/FT   | 1.6"                                                                                                                         | 1.7"                                                                                                                       | 2.9"             | 2.2" | 1.1" | 1.6"                                                                                                                               | 1.9"                          | 1.1" | 0.9"                                                                                                         | 0.6"                                                                                                        | 0.6"                                                                                                         | 1.2"                                                                                                                                                                                | 2.3"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 58 PSF         | 2368.3 LB/FT   | 1682.3 LB/FT   | 1.4"                                                                                                                         | 1.5"                                                                                                                       | 2.4"             | 2.0" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.6"                                                                                                         | 0.7"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 2.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 204"                                                                              | +/- 10 PSF         | 425.3 LB/FT    | 277.4 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 3.7"                                                                                                         | 4.0"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 881.4 LB/FT    | 575.3 LB/FT    | 3.6"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 2.6" | 3.9"                                                                                                                               | 4.0"                          | 2.6" | 2.1"                                                                                                         | 1.6"                                                                                                        | 2.2"                                                                                                         | 2.8"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1336.2 LB/FT   | 883.9 LB/FT    | 2.5"                                                                                                                         | 2.7"                                                                                                                       | 4.0"             | 3.6" | 1.7" | 2.5"                                                                                                                               | 3.0"                          | 1.7" | 1.4"                                                                                                         | 1.2"                                                                                                        | 1.4"                                                                                                         | 1.6"                                                                                                                                                                                | 3.6"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1789.6 LB/FT   | 1203.0 LB/FT   | 1.9"                                                                                                                         | 2.0"                                                                                                                       | 3.5"             | 2.7" | 1.2" | 1.8"                                                                                                                               | 2.2"                          | 1.3" | 1.0"                                                                                                         | 0.9"                                                                                                        | 1.1"                                                                                                         | 1.4"                                                                                                                                                                                | 2.7"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 2241.6 LB/FT   | 1532.6 LB/FT   | 1.5"                                                                                                                         | 1.6"                                                                                                                       | 2.6"             | 2.1" | 1.0" | 1.5"                                                                                                                               | 1.6"                          | 1.0" | 0.8"                                                                                                         | 0.7"                                                                                                        | 0.9"                                                                                                         | 1.1"                                                                                                                                                                                | 2.1"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 54 PSF         | 2421.9 LB/FT   | 1667.4 LB/FT   | 1.3"                                                                                                                         | 1.5"                                                                                                                       | 2.4"             | 2.0" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 2.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 216"                                                                              | +/- 10 PSF         | 469.9 LB/FT    | 296.1 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 3.9"                                                                                                         | 3.3"                                                                                                        | 4.0"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 967.0 LB/FT    | 613.0 LB/FT    | 3.6"                                                                                                                         | 3.8"                                                                                                                       | 4.0"             | 4.0" | 2.4" | 3.6"                                                                                                                               | 4.0"                          | 2.4" | 1.9"                                                                                                         | 1.6"                                                                                                        | 2.0"                                                                                                         | 2.6"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1462.6 LB/FT   | 942.0 LB/FT    | 2.5"                                                                                                                         | 2.7"                                                                                                                       | 4.0"             | 3.6" | 1.6" | 2.5"                                                                                                                               | 3.0"                          | 1.6" | 1.2"                                                                                                         | 1.1"                                                                                                        | 1.3"                                                                                                         | 1.7"                                                                                                                                                                                | 3.3"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 1956.7 LB/FT   | 1283.1 LB/FT   | 1.7"                                                                                                                         | 1.8"                                                                                                                       | 3.1"             | 2.5" | 1.1" | 1.7"                                                                                                                               | 2.1"                          | 1.2" | 0.9"                                                                                                         | 0.8"                                                                                                        | 1.0"                                                                                                         | 1.3"                                                                                                                                                                                | 2.5"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 50 PSF         | 2449.2 LB/FT   | 1636.0 LB/FT   | 1.3"                                                                                                                         | 1.5"                                                                                                                       | 2.4"             | 2.0" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 2.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 228"                                                                              | +/- 10 PSF         | 515.1 LB/FT    | 314.7 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 3.6"                                                                                                         | 3.1"                                                                                                        | 3.7"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1054.4 LB/FT   | 650.8 LB/FT    | 3.2"                                                                                                                         | 3.5"                                                                                                                       | 4.0"             | 4.0" | 2.2" | 3.3"                                                                                                                               | 3.9"                          | 2.2" | 1.7"                                                                                                         | 1.5"                                                                                                        | 1.6"                                                                                                         | 2.5"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1592.1 LB/FT   | 1000.5 LB/FT   | 2.1"                                                                                                                         | 2.3"                                                                                                                       | 3.8"             | 3.1" | 1.4" | 2.0"                                                                                                                               | 2.6"                          | 1.5" | 1.2"                                                                                                         | 1.0"                                                                                                        | 1.2"                                                                                                         | 1.6"                                                                                                                                                                                | 3.1"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 2128.0 LB/FT   | 1363.8 LB/FT   | 1.6"                                                                                                                         | 1.7"                                                                                                                       | 2.6"             | 2.1" | 1.1" | 1.6"                                                                                                                               | 1.9"                          | 1.1" | 0.9"                                                                                                         | 0.7"                                                                                                        | 0.9"                                                                                                         | 1.2"                                                                                                                                                                                | 2.3"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 47 PSF         | 2502.1 LB/FT   | 1626.2 LB/FT   | 1.5"                                                                                                                         | 1.6"                                                                                                                       | 2.4"             | 2.0" | 0.9" | 1.5"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 240"                                                                              | +/- 10 PSF         | 561.1 LB/FT    | 333.2 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 3.3"                                                                                                         | 2.8"                                                                                                        | 3.4"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1143.6 LB/FT   | 688.5 LB/FT    | 3.0"                                                                                                                         | 3.3"                                                                                                                       | 4.0"             | 4.0" | 2.1" | 3.1"                                                                                                                               | 3.6"                          | 2.1" | 1.6"                                                                                                         | 1.4"                                                                                                        | 1.7"                                                                                                         | 2.3"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1724.4 LB/FT   | 1059.3 LB/FT   | 2.0"                                                                                                                         | 2.1"                                                                                                                       | 3.6"             | 2.4" | 1.4" | 2.0"                                                                                                                               | 2.4"                          | 1.4" | 1.1"                                                                                                         | 0.9"                                                                                                        | 1.1"                                                                                                         | 1.5"                                                                                                                                                                                | 2.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 40 PSF         | 2303.3 LB/FT   | 1445.4 LB/FT   | 1.5"                                                                                                                         | 1.6"                                                                                                                       | 2.6"             | 2.1" | 1.0" | 1.5"                                                                                                                               | 1.6"                          | 1.0" | 0.9"                                                                                                         | 0.7"                                                                                                        | 0.9"                                                                                                         | 1.1"                                                                                                                                                                                | 2.1"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 44 PSF         | 2534.3 LB/FT   | 1604.1 LB/FT   | 1.3"                                                                                                                         | 1.4"                                                                                                                       | 2.4"             | 1.9" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 252"                                                                              | +/- 10 PSF         | 607.8 LB/FT    | 351.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 4.0" | 4.0"                                                                                                                               | 4.0"                          | 4.0" | 3.1"                                                                                                         | 2.6"                                                                                                        | 3.2"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1234.7 LB/FT   | 726.4 LB/FT    | 2.1"                                                                                                                         | 3.0"                                                                                                                       | 4.0"             | 4.0" | 1.9" | 2.9"                                                                                                                               | 3.4"                          | 1.9" | 1.5"                                                                                                         | 1.3"                                                                                                        | 1.6"                                                                                                         | 2.2"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1859.7 LB/FT   | 1118.6 LB/FT   | 1.6"                                                                                                                         | 2.0"                                                                                                                       | 3.5"             | 2.7" | 1.3" | 1.9"                                                                                                                               | 2.2"                          | 1.3" | 1.0"                                                                                                         | 0.8"                                                                                                        | 1.0"                                                                                                         | 1.4"                                                                                                                                                                                | 2.7"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 41 PSF         | 2544.7 LB/FT   | 1569.7 LB/FT   | 1.6"                                                                                                                         | 1.5"                                                                                                                       | 2.4"             | 2.0" | 0.9" | 1.5"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.8"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 264"                                                                              | +/- 10 PSF         | 655.3 LB/FT    | 369.9 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 3.7" | 4.0"                                                                                                                               | 4.0"                          | 3.7" | 2.8"                                                                                                         | 2.4"                                                                                                        | 3.0"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1327.7 LB/FT   | 764.5 LB/FT    | 2.6"                                                                                                                         | 2.9"                                                                                                                       | 4.0"             | 3.8" | 1.9" | 2.9"                                                                                                                               | 3.2"                          | 1.9" | 1.4"                                                                                                         | 1.2"                                                                                                        | 1.5"                                                                                                         | 2.0"                                                                                                                                                                                | 3.8"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 1997.9 LB/FT   | 1178.3 LB/FT   | 1.7"                                                                                                                         | 1.9"                                                                                                                       | 3.1"             | 1.7" | 1.2" | 1.8"                                                                                                                               | 2.1"                          | 1.2" | 0.9"                                                                                                         | 0.8"                                                                                                        | 1.0"                                                                                                         | 1.3"                                                                                                                                                                                | 2.5"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 39 PSF         | 2599.2 LB/FT   | 1567.0 LB/FT   | 1.6"                                                                                                                         | 1.4"                                                                                                                       | 2.4"             | 1.9" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.7"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 276"                                                                              | +/- 10 PSF         | 703.6 LB/FT    | 388.3 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 3.5" | 4.0"                                                                                                                               | 4.0"                          | 3.5" | 2.7"                                                                                                         | 2.3"                                                                                                        | 2.8"                                                                                                         | 4.0"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1422.5 LB/FT   | 802.7 LB/FT    | 2.5"                                                                                                                         | 2.7"                                                                                                                       | 4.0"             | 3.6" | 1.7" | 2.6"                                                                                                                               | 3.0"                          | 1.7" | 1.3"                                                                                                         | 1.1"                                                                                                        | 1.4"                                                                                                         | 1.9"                                                                                                                                                                                | 3.6"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 2139.0 LB/FT   | 1238.4 LB/FT   | 1.6"                                                                                                                         | 1.8"                                                                                                                       | 2.9"             | 2.4" | 1.1" | 1.7"                                                                                                                               | 2.0"                          | 1.1" | 0.9"                                                                                                         | 0.7"                                                                                                        | 0.9"                                                                                                         | 1.3"                                                                                                                                                                                | 2.4"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 37 PSF         | 2639.1 LB/FT   | 1556.1 LB/FT   | 1.3"                                                                                                                         | 1.4"                                                                                                                       | 2.4"             | 1.9" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.7"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |
| 288"                                                                              | +/- 10 PSF         | 752.7 LB/FT    | 406.6 LB/FT    | 4.0"                                                                                                                         | 4.0"                                                                                                                       | 4.0"             | 4.0" | 3.3" | 4.0"                                                                                                                               | 4.0"                          | 3.3" | 2.5"                                                                                                         | 2.1"                                                                                                        | 2.6"                                                                                                         | 3.8"                                                                                                                                                                                | 4.0"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 20 PSF         | 1519.2 LB/FT   | 841.1 LB/FT    | 2.3"                                                                                                                         | 2.5"                                                                                                                       | 4.0"             | 3.4" | 1.6" | 2.4"                                                                                                                               | 2.6"                          | 1.6" | 1.2"                                                                                                         | 1.0"                                                                                                        | 1.3"                                                                                                         | 1.6"                                                                                                                                                                                | 3.4"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 30 PSF         | 2283.0 LB/FT   | 1299.2 LB/FT   | 1.5"                                                                                                                         | 1.7"                                                                                                                       | 2.9"             | 2.3" | 1.1" | 1.6"                                                                                                                               | 1.9"                          | 1.1" | 0.8"                                                                                                         | 0.7"                                                                                                        | 0.9"                                                                                                         | 1.2"                                                                                                                                                                                | 2.2"                                                                                                                                                                               | 4.0"                                                                                                                        |
|                                                                                   | +/- 35 PSF         | 2663.9 LB/FT   | 1537.0 LB/FT   | 1.3"                                                                                                                         | 1.4"                                                                                                                       | 2.4"             | 1.9" | 0.9" | 1.4"                                                                                                                               | 1.6"                          | 0.9" | 0.7"                                                                                                         | 0.6"                                                                                                        | 0.7"                                                                                                         | 1.0"                                                                                                                                                                                | 1.9"                                                                                                                                                                               | 4.0"                                                                                                                        |

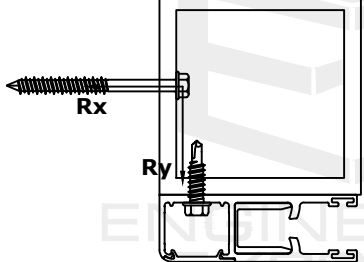
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

INTERIOR MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS

ANCHOR NOTES: SEE SHEET 5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



|  |                    |              |             | MAXIMUM SPACING (O.C.)                                                                 |                                                                                      |                                                             |                                                                      |                                                            |                                                                                             |                                                 |                             |                                                                       |                                                                      |                                                                       |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                        |      |
|-----------------------------------------------------------------------------------|--------------------|--------------|-------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------|
| SLAT<br>SPAN                                                                      | DESIGN<br>PRESSURE | Rx           | Ry          | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 5/16" ITW TAPCON                                            |                                                                      |                                                            | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT | 1/4" ALL-POINTS SOLID-<br>SET                   |                             | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | 3/8" DEWALT<br>SCREWBOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBEDMENT |      |
|                                                                                   |                    |              |             | 2.5" MIN.<br>EDGE<br>DISTANCE                                                          | 2.5" MIN.<br>EDGE<br>DISTANCE                                                        | TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT | 3" MIN.<br>EDGE<br>DISTANCE                                                                 | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT | 3" MIN.<br>EDGE<br>DISTANCE | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.75" MIN.<br>EDGE<br>DISTANCE                                       | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.75" MIN.<br>EDGE<br>DISTANCE                                                                                                                                          | 0.75" MIN.<br>EDGE<br>DISTANCE                                                                                                                                         | 4.5" MIN.<br>EDGE<br>DISTANCE                                                          |      |
| 48"                                                                               | +/- 40 PSF         | 53.4 LB/FT   | 80.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 50 PSF         | 66.7 LB/FT   | 100.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 60 PSF         | 80.0 LB/FT   | 120.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 70 PSF         | 93.4 LB/FT   | 140.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 80 PSF         | 106.7 LB/FT  | 160.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 90 PSF         | 120.1 LB/FT  | 180.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 100 PSF        | 133.4 LB/FT  | 200.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 110 PSF        | 148.3 LB/FT  | 220.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 120 PSF        | 225.6 LB/FT  | 260.4 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 130 PSF        | 303.1 LB/FT  | 301.1 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 140 PSF        | 380.8 LB/FT  | 342.6 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 3.9"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 150 PSF        | 458.6 LB/FT  | 384.8 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.8"                                                                  | 3.3"                                                                 | 3.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
| 60"                                                                               | +/- 160 PSF        | 536.7 LB/FT  | 427.8 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.3"                                                                  | 2.8"                                                                 | 3.4"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 170 PSF        | 614.9 LB/FT  | 471.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.5"                                                                  | 2.9"                                                                 | 3.0"                                                                  | 3.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 180 PSF        | 693.2 LB/FT  | 515.9 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.1"                                                                  | 2.6"                                                                 | 2.7"                                                                  | 3.3"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 190 PSF        | 771.7 LB/FT  | 561.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.3"                                                                  | 2.2"                                                                 | 2.7"                                                                  | 3.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 200 PSF        | 850.3 LB/FT  | 606.9 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.1"                                                                  | 2.2"                                                                 | 2.7"                                                                  | 2.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 40 PSF         | 66.7 LB/FT   | 100.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 50 PSF         | 83.4 LB/FT   | 125.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 60 PSF         | 184.6 LB/FT  | 173.9 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 70 PSF         | 289.5 LB/FT  | 224.4 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 80 PSF         | 394.6 LB/FT  | 275.6 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 3.9"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 90 PSF         | 500.0 LB/FT  | 327.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.6"                                                                  | 3.1"                                                                 | 3.8"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 100 PSF        | 605.5 LB/FT  | 380.1 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 3.8"                                                       | 4.0"                                                                                        | 4.0"                                            | 3.9"                        | 3.0"                                                                  | 2.6"                                                                 | 3.2"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
| 72"                                                                               | +/- 110 PSF        | 711.2 LB/FT  | 433.4 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.3"                                                                  | 2.6"                                                                 | 2.7"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 120 PSF        | 817.1 LB/FT  | 487.3 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.3"                                                                  | 2.2"                                                                 | 2.4"                                                                  | 3.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 130 PSF        | 923.1 LB/FT  | 541.9 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.0"                                                                  | 2.0"                                                                 | 2.1"                                                                  | 2.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 145 PSF        | 1082.5 LB/FT | 625.0 LB/FT | 4.0"                                                                                   | 3.5"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 3.9"                                                                                        | 3.9"                                            | 3.9"                        | 1.7"                                                                  | 1.5"                                                                 | 1.5"                                                                  | 2.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 40 PSF         | 232.6 LB/FT  | 160.1 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 50 PSF         | 367.4 LB/FT  | 221.2 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 4.0"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 60 PSF         | 502.4 LB/FT  | 283.0 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.7"                                                                  | 3.2"                                                                 | 3.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 70 PSF         | 637.7 LB/FT  | 345.7 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 3.9"                                                       | 4.0"                                                                                        | 4.0"                                            | 3.9"                        | 2.9"                                                                  | 2.5"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 80 PSF         | 773.2 LB/FT  | 409.2 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.2"                                                                  | 2.4"                                                                 | 2.6"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 90 PSF         | 909.0 LB/FT  | 473.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.4"                                                                  | 2.1"                                                                 | 2.2"                                                                  | 3.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 110 PSF        | 1181.3 LB/FT | 604.5 LB/FT | 4.0"                                                                                   | 3.3"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 3.7"                                            | 3.7"                        | 1.6"                                                                  | 1.4"                                                                 | 1.7"                                                                  | 2.5"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 122 PSF        | 1345.2 LB/FT | 684.6 LB/FT | 4.0"                                                                                   | 2.8"                                                                                 | 4.0"                                                        | 3.9"                                                                 | 4.0"                                                       | 3.9"                                                                                        | 3.3"                                            | 3.3"                        | 1.4"                                                                  | 1.2"                                                                 | 1.3"                                                                  | 2.2"                                                                                                                                                                    | 3.9"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
| 84"                                                                               | +/- 40 PSF         | 442.9 LB/FT  | 227.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 4.0"                                                                  | 3.6"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 50 PSF         | 609.9 LB/FT  | 300.1 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 60 PSF         | 777.2 LB/FT  | 373.7 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.3"                                                                  | 2.4"                                                                 | 2.6"                                                                  | 3.9"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 70 PSF         | 945.0 LB/FT  | 448.3 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.7"                                                                  | 2.0"                                                                 | 2.1"                                                                  | 3.2"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 80 PSF         | 1113.0 LB/FT | 523.9 LB/FT | 4.0"                                                                                   | 3.6"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.3"                                                                  | 1.7"                                                                 | 1.8"                                                                  | 2.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 90 PSF         | 1281.4 LB/FT | 600.6 LB/FT | 4.0"                                                                                   | 3.1"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 3.6"                                            | 3.6"                        | 2.0"                                                                  | 1.5"                                                                 | 1.6"                                                                  | 2.4"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 109 PSF        | 1602.3 LB/FT | 749.0 LB/FT | 4.0"                                                                                   | 2.4"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 1.5"                                                                  | 1.2"                                                                 | 1.3"                                                                  | 2.4"                                                                                                                                                                    | 3.4"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 40 PSF         | 631.5 LB/FT  | 285.5 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.0"                                                                  | 2.6"                                                                 | 3.2"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 50 PSF         | 832.7 LB/FT  | 369.7 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 3.2"                                                                  | 2.3"                                                                 | 2.4"                                                                  | 3.8"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 60 PSF         | 1034.4 LB/FT | 455.1 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 4.0"                        | 2.6"                                                                  | 1.8"                                                                 | 2.0"                                                                  | 3.1"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 70 PSF         | 1236.5 LB/FT | 541.8 LB/FT | 4.0"                                                                                   | 3.3"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 3.8"                                            | 3.8"                        | 2.4"                                                                  | 1.6"                                                                 | 1.6"                                                                  | 2.6"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 80 PSF         | 1439.1 LB/FT | 629.8 LB/FT | 4.0"                                                                                   | 2.9"                                                                                 | 4.0"                                                        | 3.8"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 3.2"                                            | 3.2"                        | 1.8"                                                                  | 1.3"                                                                 | 1.4"                                                                  | 2.2"                                                                                                                                                                    | 3.8"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
| 96"                                                                               | +/- 90 PSF         | 1642.1 LB/FT | 719.0 LB/FT | 4.0"                                                                                   | 2.6"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 2.5"                        | 1.5"                                                                  | 1.2"                                                                 | 1.2"                                                                  | 3.0"                                                                                                                                                                    | 3.4"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |
|                                                                                   | +/- 101 PSF        | 1866.0 LB/FT | 818.7 LB/FT | 4.0"                                                                                   | 2.2"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                            | 2.3"                        | 1.4"                                                                  | 1.0"                                                                 | 1.1"                                                                  | 2.7"                                                                                                                                                                    | 3.0"                                                                                                                                                                   | 4.0"                                                                                   | 4.0" |

FL 17344.1

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(302) 436-6005

MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |

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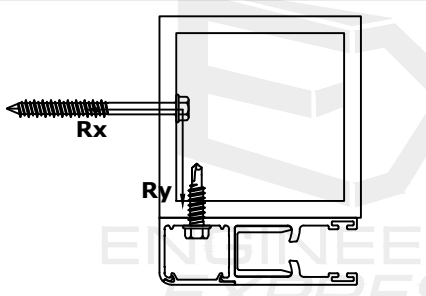
SCALE: NTS UNLESS NOTED

12 OF 16

8/14/2026 12:47 PM COLBYBENNARDOPE w:\shared\projects\26-126-98726 product fbc update fl17344\work\2026 fbc\drawings & cad\26-98726a - fl17344.1 - dwg.dwg

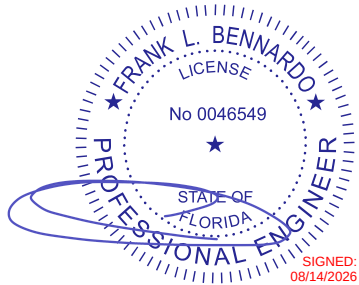
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

INTERIOR MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS (CONTINUED)

| <div></div> |                    |                |                | MAXIMUM SPACING (O.C.)                                                                 |                                                                                      |                                                             |                                                                      |                                                            |                                                                                             |                                                                                               |                                                 |                                                                       |                                                                      |                                                                       |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------------|--------------------|----------------|----------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|                                                                                              |                    |                |                | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 5/16" ITW TAPCON                                            |                                                                      |                                                            | 1/4" POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT | 1/4" ALL-POINTS SOLID-<br>SET<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>0.875" MIN.<br>EMBEDMENT | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | 3/8" DEWALT<br>SCREWBOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBEDMENT |
| SLAT<br>SPAN                                                                                 | DESIGN<br>PRESSURE | R <sub>x</sub> | R <sub>y</sub> | 2.5" MIN.<br>EDGE<br>DISTANCE                                                          | 2.5" MIN.<br>EDGE<br>DISTANCE                                                        | TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT | 3" MIN.<br>EDGE<br>DISTANCE                                                                 | 3" MIN.<br>EDGE<br>DISTANCE                                                                   | 3" MIN.<br>EDGE<br>DISTANCE                     | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.75" MIN.<br>EDGE<br>DISTANCE                                       | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE                                                                                                                              | MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE                                                                                                                             | 4.5" MIN.<br>EDGE<br>DISTANCE                                                          |
| 108"                                                                                         | +/- 40 PSF         | 810.3 LB/FT    | 338.5 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 1047.6 LB/FT   | 434.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 1285.4 LB/FT   | 531.8 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 70 PSF         | 1523.9 LB/FT   | 630.8 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 80 PSF         | 1763.0 LB/FT   | 731.4 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 90 PSF         | 2002.6 LB/FT   | 833.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 120"                                                                                         | +/- 96 PSF         | 2146.6 LB/FT   | 895.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 30 PSF         | 711.3 LB/FT    | 283.0 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.8"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 40 PSF         | 985.5 LB/FT    | 388.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.8"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 1260.6 LB/FT   | 496.4 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.8"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 1536.4 LB/FT   | 606.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.2"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 70 PSF         | 1813.0 LB/FT   | 717.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.2"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 132"                                                                                         | +/- 80 PSF         | 2090.4 LB/FT   | 831.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.2"                                                                  | 3.7"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 92 PSF         | 2424.1 LB/FT   | 970.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 30 PSF         | 846.9 LB/FT    | 319.9 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 40 PSF         | 1160.4 LB/FT   | 437.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 1475.0 LB/FT   | 557.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 1790.5 LB/FT   | 679.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 144"                                                                                         | +/- 70 PSF         | 2107.0 LB/FT   | 803.9 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 80 PSF         | 2424.4 LB/FT   | 930.8 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 88 PSF         | 2678.9 LB/FT   | 1034.1 LB/FT   | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.3"                                            | 2.3"                                                                  | 1.9"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 20 PSF         | 629.2 LB/FT    | 229.6 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 30 PSF         | 982.5 LB/FT    | 355.8 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 40 PSF         | 1336.9 LB/FT   | 485.0 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 156"                                                                                         | +/- 50 PSF         | 1692.6 LB/FT   | 617.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 2049.5 LB/FT   | 752.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 70 PSF         | 2407.5 LB/FT   | 890.0 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 85 PSF         | 2946.6 LB/FT   | 1102.2 LB/FT   | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 4.0"                                            | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 20 PSF         | 723.9 LB/FT    | 253.4 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 30 PSF         | 1119.3 LB/FT   | 391.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 168"                                                                                         | +/- 40 PSF         | 1516.2 LB/FT   | 532.3 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 1914.6 LB/FT   | 676.9 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 2314.4 LB/FT   | 825.1 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 70 PSF         | 2715.6 LB/FT   | 976.6 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 76 PSF         | 2956.9 LB/FT   | 1069.2 LB/FT   | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.9"                                            | 2.7"                                                                  | 2.3"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 20 PSF         | 819.0 LB/FT    | 276.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 180"                                                                                         | +/- 30 PSF         | 1258.0 LB/FT   | 426.0 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 40 PSF         | 1698.9 LB/FT   | 579.4 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 2141.5 LB/FT   | 736.9 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 60 PSF         | 2585.7 LB/FT   | 898.5 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 69 PSF         | 2987.0 LB/FT   | 1047.3 LB/FT   | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.5"                                            | 2.4"                                                                  | 2.0"                                                                 | 2.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 20 PSF         | 915.1 LB/FT    | 299.6 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 180"                                                                                         | +/- 30 PSF         | 1399.2 LB/FT   | 460.7 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 40 PSF         | 1885.4 LB/FT   | 626.6 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
|                                                                                              | +/- 50 PSF         | 2373.7 LB/FT   | 797.2 LB/FT    | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |
| 180"                                                                                         | +/- 63 PSF         | 3011.4 LB/FT   | 1026.1 LB/FT   | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                        | 4.0"                                                                 | 4.0"                                                       | 4.0"                                                                                        | 4.0"                                                                                          | 3.1"                                            | 2.2"                                                                  | 1.9"                                                                 | 2.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                   |

ANCHOR NOTES: SEE SHEET  
5 FOR ANCHOR NOTES.

FRANK BENNARDO, PE  
PE# 46549 CA# 9885



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MAGNUM SECURITY STAR ROLL DOWN SHUTTER  
FLORIDA BUILDING CODE NINTH EDITION (2026)  
FLORIDA STATEWIDE APPROVAL (FSA FL#17344.1)

| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-30244b) | CCB  | RWN   | 09/10/20 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ERJRN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |

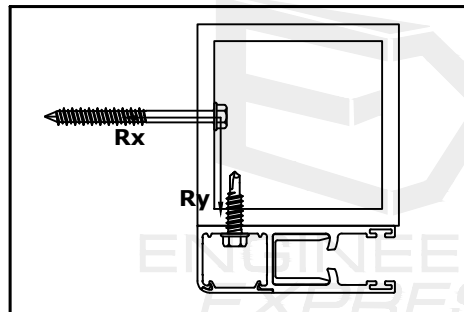
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SCALE: NTS UNLESS NOTED

13 OF 16

### INTERIOR MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS (CONTINUED)



|              |                    |              |              | MAXIMUM SPACING (O.C.)                                                                 |                                                                                      |                                                            |                                                              |                                                 |                                                                                                |                                                |                                                         |                                                                       |                                                                      |                                                                       |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                      |
|--------------|--------------------|--------------|--------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SLAT<br>SPAN | DESIGN<br>PRESSURE | Rx           | Ry           | 1/4" DEWALT<br>ULTRACON<br>TO 2846 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 1/4" SS ITW<br>TAPCON<br>TO 3192 PSI<br>MIN.<br>CONCRETE;<br>1.75" MIN.<br>EMBEDMENT | 5/16" ITW TAPCON                                           |                                                              |                                                 | 1/4"<br>POWERS<br>POWER-<br>BOLT<br>TO 3000 PSI<br>MIN.<br>CONCRETE;<br>2.5" MIN.<br>EMBEDMENT | 1/4" ALL-POINTS SOLID-<br>SET                  |                                                         | 1/4" LAG<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | 5/16" LAG<br>SCREW<br>TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT | #14 WOOD<br>SCREW<br>TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | #14 316 SS<br>SMS W/ FULL<br>THREAD<br>PENETRATIO<br>N (OR 1/4-20<br>316 SS THRU-<br>BOLT) W/<br>5/8" WASHER<br>TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | 3/8" DEWALT<br>SCREWBOL<br>TO 3000 PS<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBEDMENT |
|              |                    |              |              | TO 2899 PSI<br>MIN.<br>CONCRETE;<br>2.25" MIN.<br>EMBEDMENT                            | TO GROUT-<br>FILLED<br>CONCRETE<br>BLOCK;<br>2.25" MIN.<br>EMBEDMENT                 | TO HOLLOW<br>CONCRETE<br>BLOCK;<br>1.75" MIN.<br>EMBEDMENT | TO 3000 PSI<br>MIN.<br>CONCRETE;<br>0.875" MIN.<br>EMBEDMENT | TO HOLLOW<br>BLOCK;<br>0.875" MIN.<br>EMBEDMENT | TO G=0.55<br>MIN WOOD;<br>1.5" MIN.<br>EMBEDMENT                                               | TO G=0.42<br>MIN WOOD;<br>2" MIN.<br>EMBEDMENT | TO 0.125"<br>MIN. 6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE | TO 0.25" MIN.<br>6063-T5<br>ALUM;<br>0.5" MIN.<br>EDGE                | TO 3000 PS<br>MIN.<br>CONCRETE;<br>3.5" MIN.<br>EMBEDMENT            |                                                                       |                                                                                                                                                                         |                                                                                                                                                                        |                                                                                      |
|              |                    |              |              | 2.5" MIN.<br>EDGE<br>DISTANCE                                                          | 2.5" MIN.<br>EDGE<br>DISTANCE                                                        | 3.125" MIN.<br>EDGE<br>DISTANCE                            | 4" MIN.<br>EDGE<br>DISTANCE                                  | 4" MIN.<br>EDGE<br>DISTANCE                     | 3" MIN.<br>EDGE<br>DISTANCE                                                                    | 3" MIN.<br>EDGE<br>DISTANCE                    | 3" MIN.<br>EDGE<br>DISTANCE                             | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.75" MIN.<br>EDGE<br>DISTANCE                                       | 0.75" MIN.<br>EDGE<br>DISTANCE                                        | 0.5" MIN.<br>EDGE                                                                                                                                                       | 0.5" MIN.<br>EDGE                                                                                                                                                      | 4.5" MIN.<br>EDGE<br>DISTANCE                                                        |
| 192"         | +/- 10 PSF         | 484.6 LB/FT  | 155.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1012.6 LB/FT | 322.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 1543.1 LB/FT | 495.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 40 PSF         | 2076.0 LB/FT | 674.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 50 PSF         | 2611.4 LB/FT | 858.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 58 PSF         | 3041.4 LB/FT | 1009.2 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 4.0"                                                                  | 3.4"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 204"         | +/- 10 PSF         | 536.3 LB/FT  | 166.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1111.6 LB/FT | 345.1 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 1689.8 LB/FT | 530.2 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 40 PSF         | 2270.9 LB/FT | 721.6 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 50 PSF         | 2854.8 LB/FT | 919.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 54 PSF         | 3089.1 LB/FT | 1000.2 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.7"                                                                  | 3.1"                                                                 | 4.0"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 216"         | +/- 10 PSF         | 588.4 LB/FT  | 177.7 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1212.3 LB/FT | 367.7 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 1839.6 LB/FT | 565.1 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 40 PSF         | 2470.1 LB/FT | 769.7 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 50 PSF         | 3103.9 LB/FT | 981.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 54 PSF         | 3338.2 LB/FT | 1062.6 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.4"                                                                  | 2.8"                                                                 | 3.6"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 228"         | +/- 10 PSF         | 641.1 LB/FT  | 188.8 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1314.8 LB/FT | 390.4 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 1992.4 LB/FT | 600.2 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 40 PSF         | 2673.7 LB/FT | 818.1 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 47 PSF         | 3152.8 LB/FT | 975.6 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 54 PSF         | 3338.2 LB/FT | 1062.6 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 3.1"                                                                  | 2.6"                                                                 | 3.3"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 240"         | +/- 10 PSF         | 694.4 LB/FT  | 199.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1419.1 LB/FT | 413.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 2148.3 LB/FT | 635.5 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 40 PSF         | 2881.6 LB/FT | 867.1 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 44 PSF         | 3176.1 LB/FT | 962.3 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 54 PSF         | 3338.2 LB/FT | 1062.6 LB/FT | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.9"                                                                  | 2.4"                                                                 | 3.1"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 252"         | +/- 10 PSF         | 748.5 LB/FT  | 210.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.7"                                                                  | 2.2"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1525.4 LB/FT | 435.8 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.7"                                                                  | 2.2"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 2307.3 LB/FT | 671.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.7"                                                                  | 2.2"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 41 PSF         | 3172.8 LB/FT | 941.6 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 4.0"                                                    | 2.7"                                                                  | 2.2"                                                                 | 2.9"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 264"         | +/- 10 PSF         | 803.3 LB/FT  | 221.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.7"                                                    | 2.5"                                                                  | 2.1"                                                                 | 2.7"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1633.6 LB/FT | 458.6 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.7"                                                    | 2.5"                                                                  | 2.1"                                                                 | 2.7"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 2469.4 LB/FT | 706.8 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.7"                                                    | 2.5"                                                                  | 2.1"                                                                 | 2.7"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 39 PSF         | 3226.2 LB/FT | 940.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.7"                                                    | 2.5"                                                                  | 2.1"                                                                 | 2.7"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 276"         | +/- 10 PSF         | 858.9 LB/FT  | 232.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.5"                                                    | 2.3"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1743.7 LB/FT | 481.5 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.5"                                                    | 2.3"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 2634.6 LB/FT | 742.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.5"                                                    | 2.3"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 37 PSF         | 3261.7 LB/FT | 933.5 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 4.0"                                            | 4.0"                                                                                           | 4.0"                                           | 3.5"                                                    | 2.3"                                                                  | 2.0"                                                                 | 2.5"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
| 288"         | +/- 10 PSF         | 915.4 LB/FT  | 243.9 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 3.8"                                            | 4.0"                                                                                           | 4.0"                                           | 3.3"                                                    | 2.2"                                                                  | 1.8"                                                                 | 2.4"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 20 PSF         | 1855.7 LB/FT | 504.5 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 3.8"                                            | 4.0"                                                                                           | 4.0"                                           | 3.3"                                                    | 2.2"                                                                  | 1.8"                                                                 | 2.4"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 30 PSF         | 2802.8 LB/FT | 779.3 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 3.8"                                            | 4.0"                                                                                           | 4.0"                                           | 3.3"                                                    | 2.2"                                                                  | 1.8"                                                                 | 2.4"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |
|              | +/- 35 PSF         | 3278.9 LB/FT | 922.0 LB/FT  | 4.0"                                                                                   | 4.0"                                                                                 | 4.0"                                                       | 4.0"                                                         | 3.8"                                            | 4.0"                                                                                           | 4.0"                                           | 3.3"                                                    | 2.2"                                                                  | 1.8"                                                                 | 2.4"                                                                  | 4.0"                                                                                                                                                                    | 4.0"                                                                                                                                                                   | 4.0"                                                                                 |

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| REMARKS                     | DRWN | CHKD  | DATE     |
|-----------------------------|------|-------|----------|
| 2020 FBC UPDATE (20-307446) | CCB  | RWVN  | 09/10/23 |
| 2023 FBC UPDATE (23-59551)  | MRT  | ER/RN | 08/10/23 |
| 2026 FBC UPDATE             | APF  | CCB   | 6/10/26  |
| -                           | -    | -     | -        |
| -                           | -    | -     | -        |
|                             |      |       |          |
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|                             |      |       |          |

**SCALE:** NTS UNLESS NOTED

15 OF 16


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FL 17344.1

- # 4 16 INTERIOR MOUNT MOUNTING CONDITIONS VERTICAL SECTIONS N.T.S.

16