



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Alutech United, Inc.
117 Dixon Street
Selbyville, Delaware 19975

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Magnum Security Star Aluminum Roll-Down Shutter – L.M.I.

APPROVAL DOCUMENT: Drawing No. **23-59550**, titled "Magnum Security Star Roll-Down Shutter", prepared by Engineering Express, dated 06/05/20, last revised on 03/09/26 sheets 1 through 15 of 15, signed and sealed by Frank Bennardo, P.E., on 03/09/26, bearing the Miami-Dade County Product Control Revised stamp with the Notice of Acceptance number and the expiration date by Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LIMITATIONS:

1. Roll-up Mechanism is NOT part of this approval and must be certified by independent testing agency.
2. Minimum separation to existing glass shall be as shown on sheet 2 of 15.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises and renews** NOA #21-0312.10 and consists of this page 1 and evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
04/30/26

NOA No. 26-0407.01
Expiration Date: 06/10/2031
Approval Date: 04/30/2026

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #21-0312.10

A. DRAWINGS

1. *Manufacturer's die drawings and sections.*
2. *Drawing No. 20-30244, titled "Magnum Security Star Roll-Down Shutter", prepared by Engineering Express, dated 06/05/20, sheets 1 through 15 of 15, signed and sealed by Frank Bennardo, P.E., on 03/05/21.*

B. TESTS

1. *Test report on: 1) Uniform Static Air Pressure Test per PA 202,
2) Large Missile Impact Test per PA 201
3) Cyclic Wind Pressure Test per PA 203
along with marked-up drawings and installation diagram of Magnum Security Star Roll-Down Shutter, prepared by Blackwater Technical Services, Inc., Test Report No. BT-ATC-19-002, dated 04/02/2020, signed and sealed by Michael D. Caldwell, P. E.*

C. CALCULATIONS

1. *Comparative analysis for slats; storm bars, headers, tracks, mullions and anchors, using rational analysis dated 03/05/21, pages 1 through 31, prepared by Engineering Express, signed and sealed by Frank Bennardo, P.E., on 03/05/21.*

D. QUALITY ASSURANCE

1. *By Miami- Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement Letter of product compliance to FBC, 2020, prepared by Engineering Express, signed and sealed by Frank Bennardo, P.E., on 03/05/21.*

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

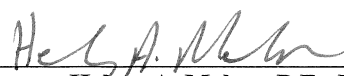
1. *Drawing No. 23-59550, titled "Magnum Security Star Roll-Down Shutter", prepared by Engineering Express, dated 06/05/20, last revised on 03/09/26 sheets 1 through 15 of 15, signed and sealed by Frank Bennardo, P.E., on 03/09/26.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 26-0407.01
Expiration Date: 06/10/2031
Approval Date: 04/30/2026

Alutech United, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. QUALITY ASSURANCE

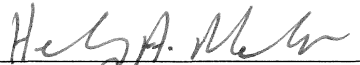
1. *By Miami- Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Statement Letter of product compliance to FBC, 2023, dated 03/09/26 prepared by Engineering Express, signed and sealed by Frank Bennardo, P.E., on 04/02/26.*

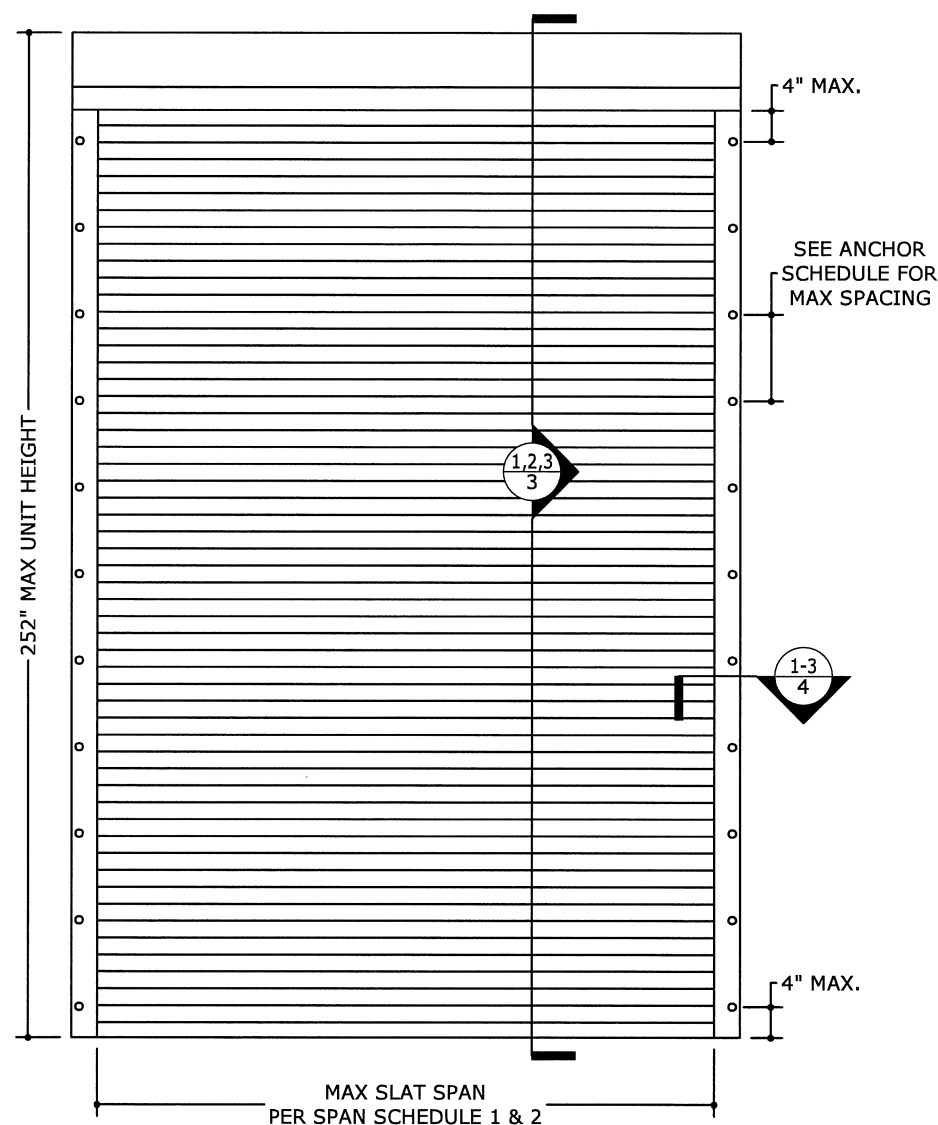
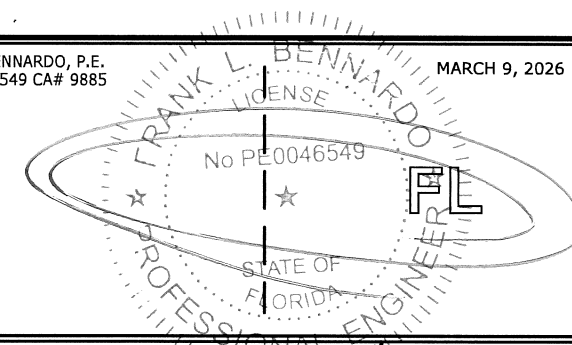


Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 26-0407.01
Expiration Date: 06/10/2031
Approval Date: 04/30/2026

ALUTECH UNITED, INC.
MAGNUM SECURITY STAR
ROLL DOWN SHUTTER

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026

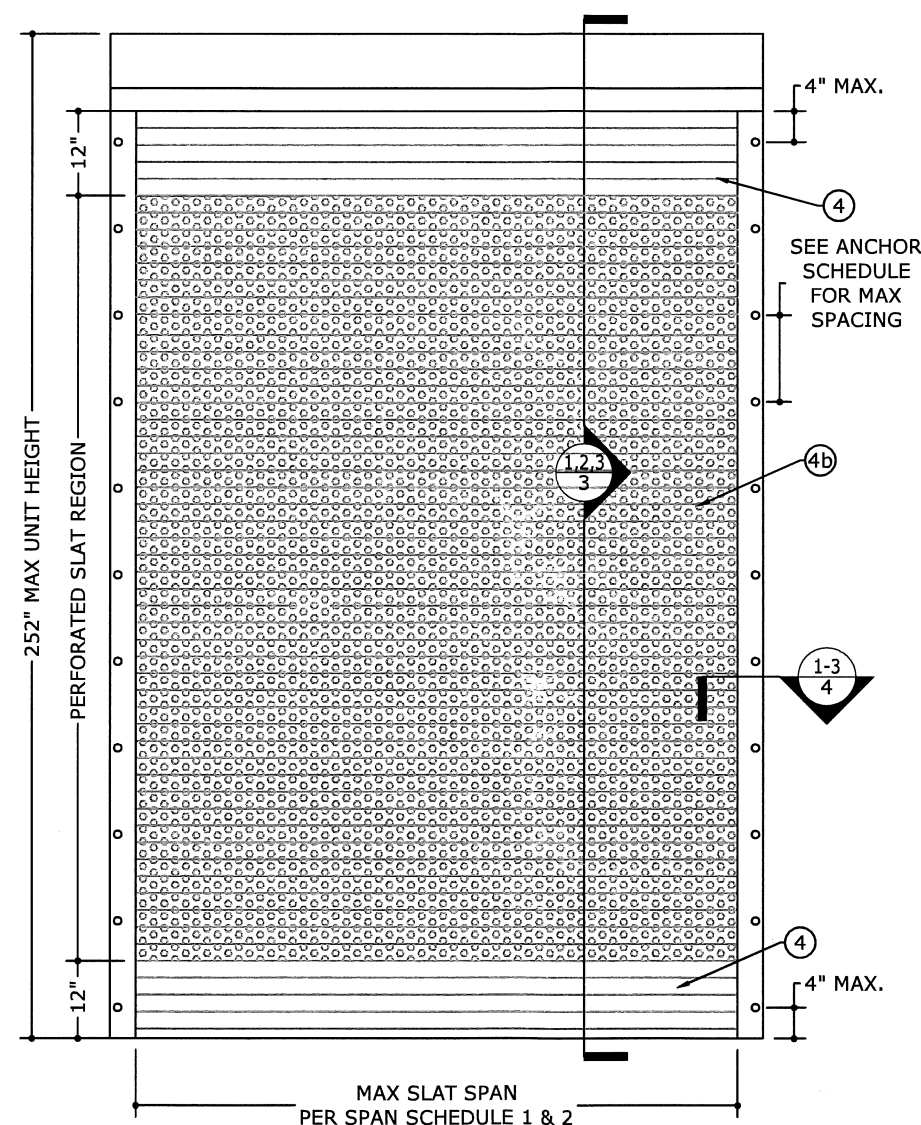


1
1

END RETENTION SHUTTER
WITH SINGLE WALL SLATS

N.T.S.

EXTERIOR ELEV



2 END RETENTION SHUTTER WITH
1 SINGLE WALL SLATS PERFORATED OPTION
N.T.S. EXTERIOR ELEV

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 26-0407.01
Expiration Date 06/10/2031
By H. G. A. M. M.
Miami Dade Product Control

MAXIMUM 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:

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING/RESIDENTIAL CODE EIGHTH EDITION (2023), 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.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR $C_d=1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. 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.
4. 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.
5. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
6. 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.
7. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS.
8. CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO UN-CRAKCED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
9. 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.
10. MAXIMUM SLAT SPAN: 24'-0".
11. MAXIMUM ALLOWABLE DESIGN PRESSURE: PER DESIGN SCHEDULES.
12. 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.
13. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
14. ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
15. 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
PRODUCT APPROVAL #



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

ALUTECH UNITED, INC.

1537 NORTHGATE BLVD
SARASOTA, FL 34234
(941) 355-0970

941) 355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

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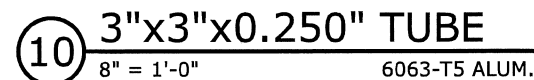
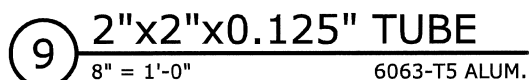
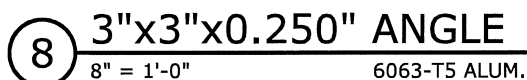
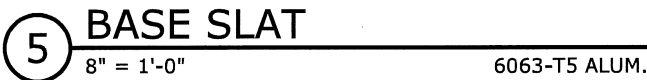
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23-59550

SCALE: NTS UNLESS NOTED

1

OF
15



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

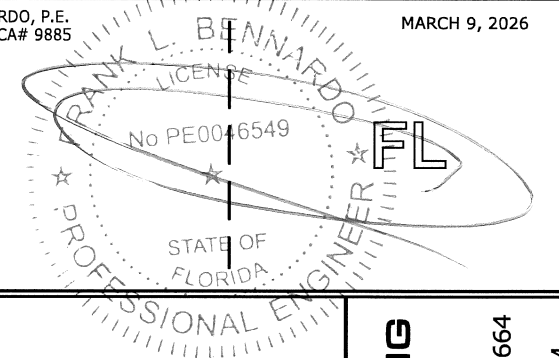
SLAT SPAN	INSTALLATIONS ≤ 30' ABOVE GRADE	INSTALLATIONS > 30' ABOVE GRADE
48.0"	6.4"	6.4"
60.0"	9.8"	6.8"
72.0"	9.8"	7.3"
84.0"	9.8"	7.9"
96.0"	9.8"	8.5"
108.0"	9.8"	9.0"
120.0"	9.8"	9.5"
132.0"	10.0"	10.0"
144.0"	10.6"	10.6"
156.0"	13.2"	10.9"
168.0"	13.2"	11.3"
180.0"	13.2"	11.6"
192.0"	13.2"	12.0"
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"

- 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 UNLESS LOCAL AUTHORITY ADOPTS ADDITIONAL CRITERIA.
- 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.**



MARCH 9, 2026



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance 25-040
Expiration Date 10 JUN
By H. A. M. M.
Miami Data Product Control

EXENGINEERING EXPRESS®

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BOCA RATON, FL 33431
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ALUTECH UNITED, INC.
1527 NORTHCATE BLVD

1537 NORTHGATE BLVD
SARASOTA, FL 34234
(941) 355-0970

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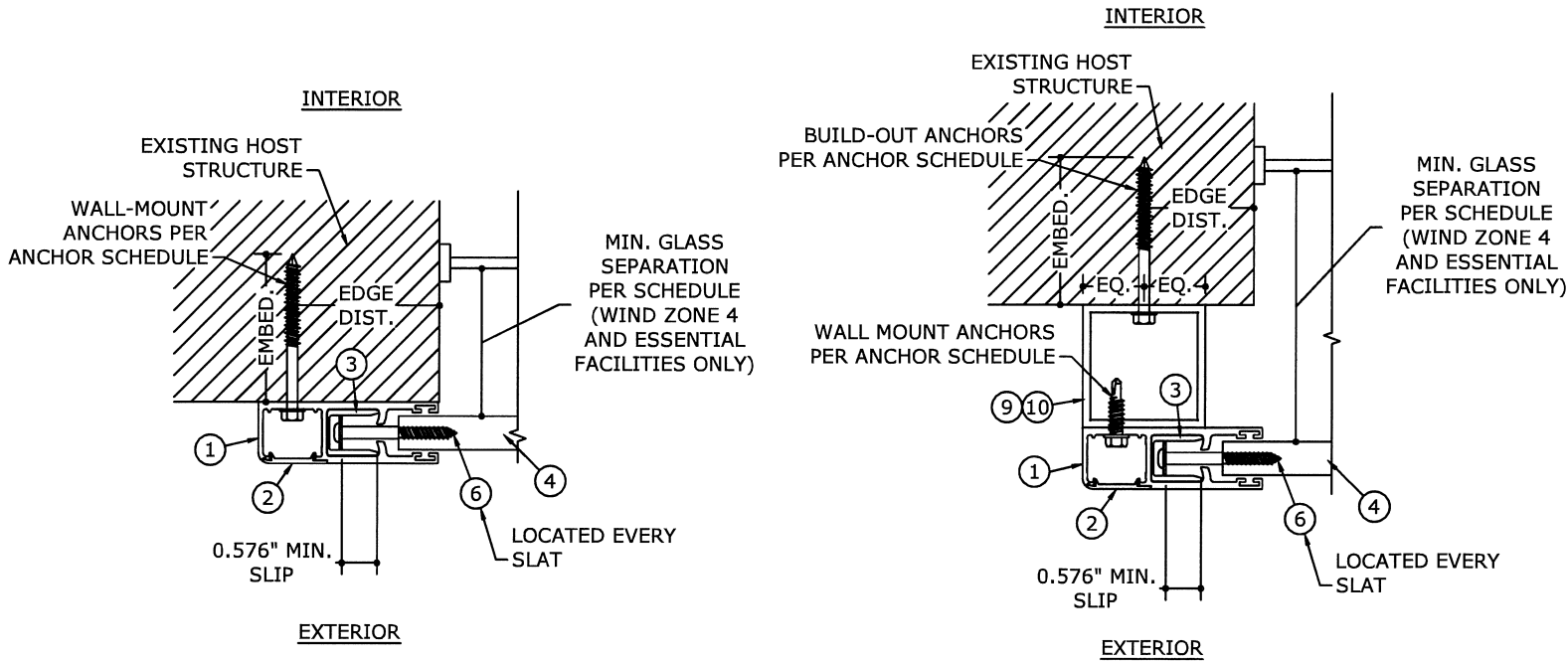
23-59550

SCALE: NTS UNLESS NOTED

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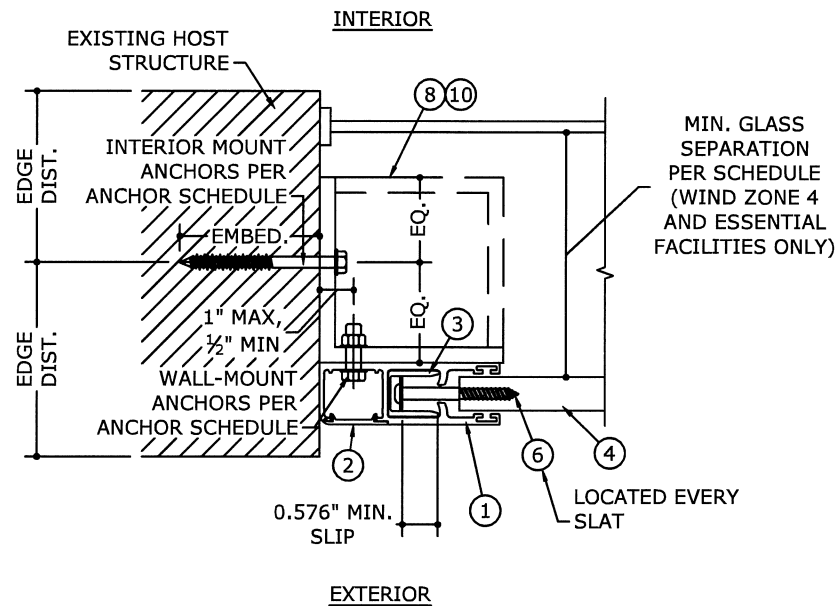
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3/9/2026 4:13 PM ERICREITEI z:\shared\projects\23-123-59550 multiple products 2023 fbc update fl17344\work\2023 fbc\drawings & cad\submittal 2026-02-20 - renewal w fbc update\7 - 23-59550b noa dwg.dwg



1 4 END RETENTION TYPICAL WALL MOUNT N.T.S. HORIZ SECTION

2 4 END RETENTION TYP. BUILD-OUT MOUNT N.T.S. HORIZ SECTION



3 4 END RETENTION TYP. INTERIOR MOUNT N.T.S. HORIZ SECTION

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 26-0407.07 Expiration Date 10 JUN 2031 By H. G. A. M. Miami Dade Product Control

ANCHOR SCHEDULE:

(SEE DESIGN SCHEDULES ON SHEETS 5-13 FOR REQUIRED ANCHOR SPACING)

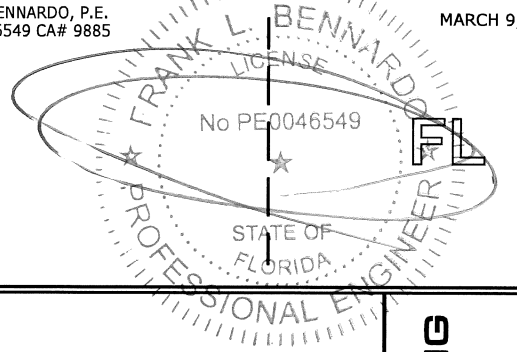
ANCHOR	SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DISTANCE
1/4" DEWALT ULTRACON	2846 PSI MIN. CONCRETE	1.75"	2.5"
1/4" SS ITW TAPCON	3192 PSI MIN. CONCRETE	1.75"	2.5"
5/16" ITW TAPCON	2899 PSI MIN. CONCRETE	2.25"	3.125"
	GROUT-FILLED CONCRETE BLOCK	2.25"	4.0"
	HOLLOW CONCRETE BLOCK	1.75"	4.0"
1/4" DEWALT POWER-BOLT	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, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026



ENGINEERING EXPRESS

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

ALUTECH UNITED, INC.

1537 NORTHGATE BLVD
SARASOTA, FL 34234
(941) 355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

REMARKS	DRWN	CHKD	DATE
PREV. NOA 21-0312.10	RN	RWN	06/05/20
2023 FBC UPDATE & RENEWAL	EPR		03/09/26

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23-59550

SCALE: NTS UNLESS NOTED

4

OF 15

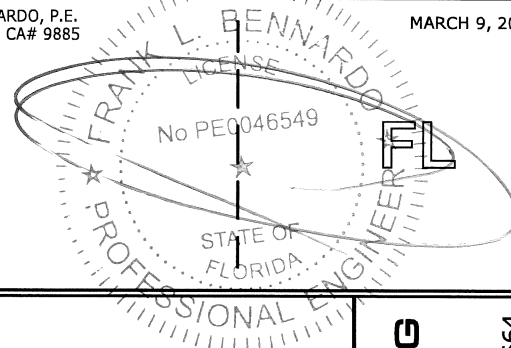
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

WALL MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026



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ALUTECH UNITED, INC.

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SARASOTA, FL 34234
(941) 355-0970

(941) 355-0970

[illegible]

PRODUCT REVISED
as complying with the Florida
Building Code. 26-0207, 01
Acceptance No. 10 JUN 2031
Expiration Date
By: *Heidi A. Miller*
Miami Dade Product Control

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23-59550

SCALE: NTS UNLESS NOTED

5

OF
15

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

MARCH 9, 2026



POSTAL ADDRESS:
22234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

ALUTECH UNITED, INC.

1537 NORTHGATE BLVD
SARASOTA, FL 34234
(941) 355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)
(941) 355-0970

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 0607, 01
Expiration Date 10 JUN 2031
By *Healy-McIn*
Miami Dade Product Control

By H. G. A. N. N.
Miami Dade Product Control

23-59550

SCALE: NTS UNLESS NOTED

6

15

15



1000

By H. A. M. M.
Miami Dade Product Control

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

FRANK BENNARDO, P.E.
0046549 CA# 9885

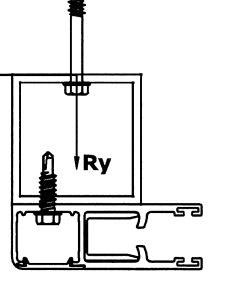
MARCH 2014

FL

STATE OF FLORIDA

PROFESSIONAL ENGINEER



				MAXIMUM SPACING (O.C.)													
				1/4" DEWALT ULTRACON TO 2846 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" POWERS POWER- BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	1/4" ALL-POINTS SOLID- SET		1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.125" MIN. 6063-T5 ALUM.; 0.5" MIN. EDGE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.25" MIN. 6063-T5 ALUM.; 0.5" MIN. EDGE	3/8" DEWALT SCREWBOL TO 3000 PS MIN. CONCRETE; 3.5" MIN. EMBEDMENT 4.5" MIN. EDGE DISTANCE
SLAT SPAN	DESIGN 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"	3.9"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.9"	4.0"	4.0"
	+/- 160 PSF	251.4 LB/FT	713.1 LB/FT	4.0"	4.0"	4.0"	4.0"	3.9"	4.0"	4.0"	3.9"	4.0"	4.0"	4.0"	3.9"	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"	4.0"	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"	4.0"	4.0"	4.0"	3.9"	4.0"	3.6"	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"	4.0"	4.0"	4.0"	3.3"	3.4"	3.1"	3.4"	2.8"	4.0"	4.0"
72"	+/- 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"	4.0"	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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.8"	4.0"	4.0"
84"	+/- 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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.8"	4.0"	4.0"
96"	+/- 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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.8"	4.0"	4.0"

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EXPRESS.

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ALUTECH UNITED, INC.

1537 NORTHGATE BLVD
SARASOTA, FL 34234

355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

REMARKS	DRWN	CHKD	DATE
PREV NOA 21-0312.10	-	RN	06/05/20
2023 FBC UPDATE & RENEWAL	EPR	RWN	03/09/26
	-	-	-
	-	-	-
	-	-	-

23-59550

SCALE: NTS UNLESS NOTED

8

15

PRODUCT REVISED
as complying with the Florida
Building Code
Accession No. 126 0407.0
Expiration Date 10 JUN 2031
By *H. G. A. M.*
Miami Dade Product Control

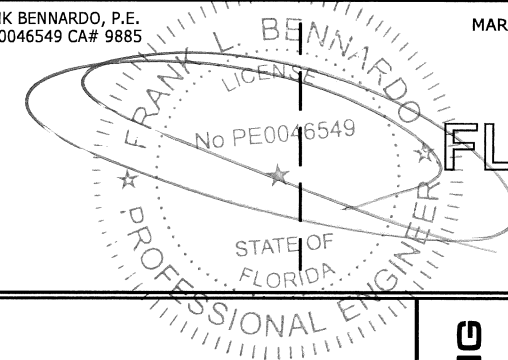
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

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

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026



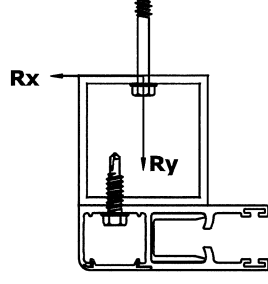
POSTAL ADDRESS:
22234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

ALUTECH UNITED, INC.

537 NORTHGATE BLVD
SARASOTA, FL 34234

RASOIA, FL 3423
(941) 355-0970

**MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)**

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

PRODUCT REVISED
as complying with the Florida
Building Code
Accepted 26 - 0 4 0
Expiration Date 10 JUL
By H. G. A. M. M.
Miami Dade Product Control

Building Code
Acceptance No. 26-0407,01
Expiration Date 10 JUN 2031
By *H. G. A. Miller*
Miami Dade Product Control

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SCALE: NTS UNLESS NOTED

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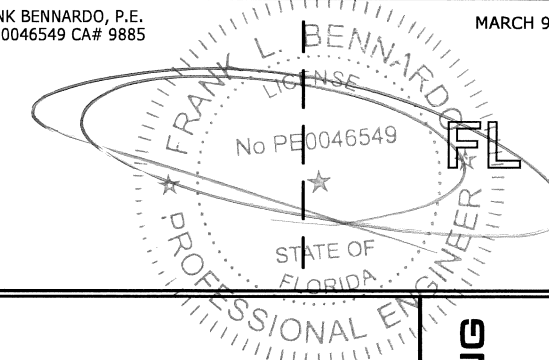
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

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

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026



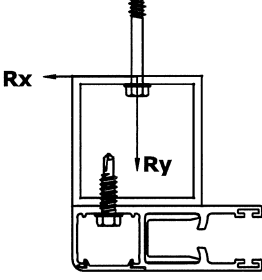
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355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

				MAXIMUM SPACING (O.C.)														
				1/4" DEWALT ULTRACON TO 2846 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT : 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT : 2.5" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" POWERS POWER- BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT : 3" MIN. EDGE DISTANCE	1/4" ALL-POINTS SOLID- SET		1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT : 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT : 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT : 0.75" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.125" MIN. 6063-T5 ALUM; 0.5" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.25" MIN. 6063-T5 ALUM; 0.5" MIN. EDGE DISTANCE	3/8" DEWALT SCREW/BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT : 4.5" MIN. EDGE DISTANCE	
SLAT SPAN	DESIGN PRESSURE	R _x	R _y															
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"	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	825.9 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"	
	+/- 40 PSF	1626.5 LB/FT	1123.5 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"	
	+/- 50 PSF	2039.1 LB/FT	1430.3 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"	
	+/- 58 PSF	2368.3 LB/FT	1682.3 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"	
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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	881.4 LB/FT	575.3 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	1336.2 LB/FT	883.9 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"	
	+/- 40 PSF	1789.6 LB/FT	1203.0 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"	
	+/- 50 PSF	2241.6 LB/FT	1532.6 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"	
	+/- 54 PSF	2421.9 LB/FT	1667.4 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"	
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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	967.0 LB/FT	613.0 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"	
	+/- 30 PSF	1462.6 LB/FT	942.0 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"	
	+/- 40 PSF	1956.7 LB/FT	1283.1 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"	
	+/- 50 PSF	2449.2 LB/FT	1636.0 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"	
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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	1054.4 LB/FT	650.8 LB/FT	4.0"	3.5"	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	1592.1 LB/FT	1000.5 LB/FT	4.0"	4.0"	3.8"	3.1"	2.4"	2.8"	1.5"	1.2"	1.0"	1.2"	1.0"	1.0"	3.1"	4.0"	
	+/- 40 PSF	2128.0 LB/FT	1363.8 LB/FT	4.0"	4.0"	4.0"	2.3"	1.1"	1.0"	1.0"	0.9"	0.7"	0.9"	1.0"	1.0"	2.3"	4.0"	
	+/- 47 PSF	2502.1 LB/FT	1626.2 LB/FT	4.0"	4.0"	4.0"	2.0"	0.9"	1.0"	0.9"	0.7"	0.6"	0.9"	1.0"	1.0"	2.0"	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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	1143.6 LB/FT	688.5 LB/FT	4.0"	3.3"	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	1724.4 LB/FT	1059.3 LB/FT	4.0"	4.0"	4.0"	2.8"	1.0"	2.0"	1.4"	1.1"	0.9"	1.1"	1.0"	1.0"	2.9"	4.0"	
	+/- 40 PSF	2303.3 LB/FT	1445.4 LB/FT	4.0"	4.0"	4.0"	2.1"	1.0"	1.5"	1.0"	0.9"	0.7"	0.9"	1.0"	1.0"	2.1"	4.0"	
	+/- 44 PSF	2534.3 LB/FT	1604.1 LB/FT	4.0"	4.0"	4.0"	1.9"	0.9"	1.4"	1.0"	0.9"	0.7"	0.9"	1.0"	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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	1234.7 LB/FT	726.4 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	1859.7 LB/FT	1118.6 LB/FT	4.0"	4.0"	4.0"	2.1"	1.3"	1.9"	1.3"	1.0"	0.8"	1.0"	1.0"	1.0"	2.7"	4.0"	
	+/- 41 PSF	2544.7 LB/FT	1569.7 LB/FT	4.0"	4.0"	4.0"	2.0"	0.9"	1.4"	1.0"	0.9"	0.7"	0.9"	1.0"	1.0"	2.0"	4.0"	
264"	+/- 10 PSF	655.3 LB/FT	369.9 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"	
	+/- 20 PSF	1327.7 LB/FT	764.5 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"	
	+/- 30 PSF	1997.9 LB/FT	1178.3 LB/FT	4.0"	4.0"	4.0"	2.5"	1.2"	2.1"	1.2"	0.9"	0.6"	1.0"	1.0"	1.0"	2.5"	4.0"	
	+/- 39 PSF	2599.2 LB/FT	1567.0 LB/FT	4.0"	4.0"	4.0"	1.9"	0.9"	1.4"	1.0"	0.9"	0.7"	0.9"	1.0"	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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	1422.5 LB/FT	802.7 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"	
	+/- 30 PSF	2139.0 LB/FT	1238.4 LB/FT	4.0"	4.0"	4.0"	2.4"	1.1"	1.7"	1.1"	0.9"	0.7"	0.9"	1.0"	1.0"	2.4"	4.0"	
	+/- 37 PSF	2639.1 LB/FT	1556.1 LB/FT	4.0"	4.0"	4.0"	1.9"	0.9"	1.4"	1.0"	0.9"	0.7"	0.9"	1.0"	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"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	
	+/- 20 PSF	1519.2 LB/FT	841.1 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"	
	+/- 30 PSF	2283.0 LB/FT	1299.2 LB/FT	4.0"	4.0"	4.0"	2.2"	1.1"	1.6"	1.1"	0.9"	0.6"	0.9"	1.0"	1.0"	2.2"	4.0"	
	+/- 35 PSF	2663.9 LB/FT	1537.0 LB/FT	4.0"	4.0"	4.0"	1.9"	0.9"	1.4"	1.0"	0.9"	0.7"	0.9"	1.0"	1.0"	1.9"	4.0"	

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 26-0407.01
Expiration Date 10 JUN 2031
By H. G. A. M. M.
Miami Dept. Product Control

[illegible]

23-59550

SCALE: NTS UNLESS NOTED

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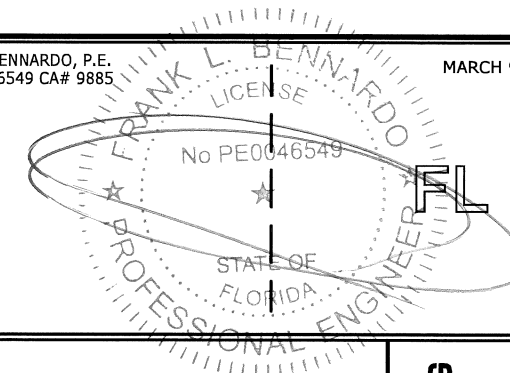
ANCHOR SCHEDULE: : INDICATES VALUES NOT APPROVED FOR USE.

INTERIOR MOUNT: MAGNUM END RETENTION SHUTTER WITH SINGLE WALL SLATS

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

FRANK BENNARD, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026



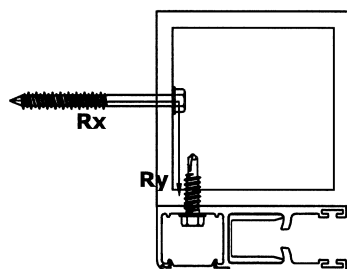
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MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

				MAXIMUM SPACING (O.C.)														
				1/4" DEWALT ULTRACON TO 2846 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" POWERS POWER- BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	1/4" ALL-POINTS SOLID- SET		1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.125" MIN. 6063-T5 ALUM.; 0.5" MIN. EDGE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.25" MIN. 6063-T5 ALUM.; 0.5" MIN. EDGE	3/8" DEWALT SCREWBOL TO 3000 PS MIN. CONCRETE 3.5" MIN. EMBEDMEN 4.5" MIN. EDGE DISTANCE	
SLAT SPAN	DESIGN PRESSURE	R _x	R _y															
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"
	+/- 160 PSF	536.7 LB/FT	427.8 LB/FT	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.9"	3.3"	2.8"	3.4"	4.0"	4.0"	4.0"	4.0"
60"	+/- 170 PSF	614.9 LB/FT	471.5 LB/FT	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.5"	2.9"	2.5"	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"	3.1"	2.6"	2.2"	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"	2.3"	2.3"	2.4"	3.0"	4.0"	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"	2.1"	2.1"	2.2"	2.8"	4.0"	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"	3.9"	3.1"	4.0"	4.0"	4.0"	4.0"	4.0"
72"	+/- 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"	4.0"	4.0"	4.0"	3.9"	3.0"	2.6"	3.2"	4.0"	4.0"	4.0"	4.0"
	+/- 110 PSF	711.2 LB/FT	433.4 LB/FT	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	4.0"	3.3"	2.6"	2.2"	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"	2.3"	1.9"	2.4"	3.2"	4.0"	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"	2.1"	1.7"	2.1"	2.9"	4.0"	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"	4.0"	3.9"	2.2"	1.5"	1.5"	2.5"	4.0"	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"
84"	+/- 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"	4.0"	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"	3.2"	2.4"	2.1"	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"	2.6"	2.1"	1.9"	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"	2.1"	1.4"	1.4"	2.5"	4.0"	4.0"	4.0"	4.0"
	+/- 122 PSF	1345.2 LB/FT	684.6 LB/FT	4.0"	2.4"	4.0"	3.9"	4.0"	4.0"	3.3"	1.9"	1.2"	1.2"	2.2"	3.9"	4.0"	4.0"	4.0"
96"	+/- 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"	3.3"	2.4"	2.1"	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"	2.7"	2.0"	1.7"	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"	2.3"	1.7"	1.5"	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"	2.0"	1.3"	1.3"	2.4"	4.0"	4.0"	4.0"	4.0"
108"	+/- 109 PSF	1602.3 LB/FT	749.0 LB/FT	4.0"	2.3"	4.0"	4.0"	4.0"	4.0"	4.0"	2.5"	1.8"	1.2"	1.5"	3.4"	4.0"	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"	3.2"	2.3"	2.0"	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"	2.8"	2.0"	1.6"	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"	2.1"	1.4"	1.3"	2.6"	4.0"	4.0"	4.0"	4.0"
	+/- 80 PSF	1439.1 LB/FT	629.8 LB/FT	4.0"	2.8"	4.0"	3.8"	4.0"	4.0"	3.2"	1.6"	1.0"	1.0"	2.2"	3.8"	4.0"	4.0"	4.0"
	+/- 90 PSF	1642.1 LB/FT	719.0 LB/FT	4.0"	2.5"	4.0"	4.0"	4.0"	4.0"	2.6"	1.4"	1.0"	1.0"	2.1"	3.4"	4.0"	4.0"	4.0"
120"	+/- 101 PSF	1866.0 LB/FT	818.7 LB/FT	4.0"	2.2"	4.0"	4.0"	4.0"	4.0"	2.2"	1.3"	1.0"	0.8"	1.7"	3.0"	4.0"	4.0"	4.0"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 26-9690
Expiration Date 9/6/90
By H. G. A. M. Jr.
Miami Dade Product Control

Building Code
Accepted No. 26-9407
Expiration Date 10 JUN 2031
By H. G. M. M.
Miami Dade Product Control

[illegible]

23-59550

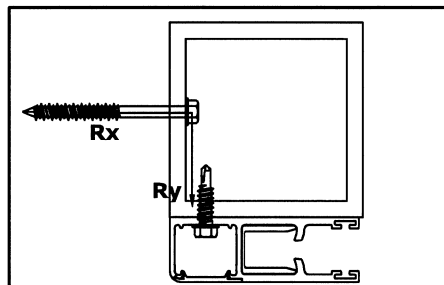
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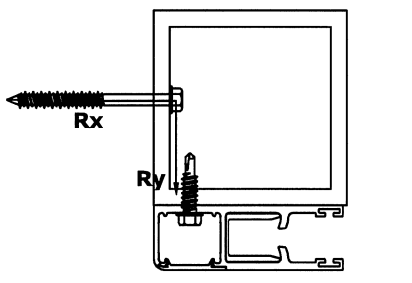
11

OF
15

ANCHOR NOTES: SEE SHEET
4 FOR ANCHOR NOTES.

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



				MAXIMUM SPACING (O.C.)														
				1/4" DEWALT ULTRACON TO 2846 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	5/16" ITW TAPCON		TO 2899 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMENT 3.125" MIN. EDGE DISTANCE	TO GROUT- FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMENT 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMENT 4" MIN. EDGE DISTANCE	1/4" POWERS POWER- BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	1/4" ALL-POINTS SOLID- SET		TO 3000 PSI MIN. CONCRETE; 0.875" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	TO HOLLOW BLOCK; 0.875" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE
SLAT SPAN	DESIGN PRESSURE	Rx	Ry															
108"	+/- 40 PSF	810.3 LB/FT	338.5 LB/FT	4.0"	4.0"	4.0"	4.0"	3.5"	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	3.7"	4.0"	4.0"	4.0"	2.7"	3.3"	4.0"	2.6"	1.9"	1.6"	2.0"	3.2"	4.0"	4.0"	
	+/- 60 PSF	1285.4 LB/FT	531.8 LB/FT	3.0"	3.2"	4.0"	4.0"	2.2"	3.2"	3.7"	2.1"	1.5"	1.0"	1.0"	2.6"	4.0"	4.0"	
	+/- 70 PSF	1523.9 LB/FT	630.8 LB/FT	2.5"	2.7"	4.0"	4.0"	1.8"	3.7"	3.1"	1.4"	1.3"	1.1"	1.0"	2.2"	3.7"	4.0"	
	+/- 80 PSF	1763.0 LB/FT	731.4 LB/FT	2.2"	2.4"	4.0"	4.0"	1.6"	2.9"	2.7"	1.3"	1.1"	0.9"	1.2"	1.0"	3.2"	4.0"	
	+/- 90 PSF	2002.6 LB/FT	833.7 LB/FT	1.9"	2.1"	3.5"	4.0"	1.4"	2.1"	2.4"	1.0"	1.0"	0.8"	1.2"	0.8"	2.8"	4.0"	
120"	+/- 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"	3.0"	4.0"	4.0"	2.8"	2.0"	1.7"	2.1"	3.5"	4.0"	4.0"	
	+/- 50 PSF	1260.6 LB/FT	496.4 LB/FT	3.1"	3.4"	4.0"	4.0"	2.3"	3.5"	3.8"	2.5"	1.5"	1.5"	1.0"	2.7"	4.0"	4.0"	
	+/- 60 PSF	1536.4 LB/FT	606.1 LB/FT	2.5"	2.6"	4.0"	4.0"	1.9"	2.7"	3.1"	1.6"	1.3"	1.1"	1.3"	2.2"	3.7"	4.0"	
	+/- 70 PSF	1813.0 LB/FT	717.7 LB/FT	2.1"	2.3"	3.9"	4.0"	1.8"	2.4"	2.7"	1.5"	1.1"	0.9"	1.4"	1.4"	3.1"	4.0"	
	+/- 80 PSF	2090.4 LB/FT	831.3 LB/FT	1.9"	2.0"	3.4"	4.0"	1.6"	2.0"	2.3"	1.3"	0.9"	0.8"	1.0"	1.0"	2.7"	4.0"	
132"	+/- 30 PSF	846.9 LB/FT	319.9 LB/FT	4.0"	4.0"	4.0"	4.0"	3.5"	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	3.4"	3.7"	4.0"	4.0"	2.8"	3.7"	4.0"	2.4"	1.7"	1.4"	1.6"	3.0"	4.0"	4.0"	
	+/- 50 PSF	1475.0 LB/FT	557.1 LB/FT	2.7"	2.8"	4.0"	4.0"	2.0"	2.9"	3.3"	1.8"	1.3"	1.1"	1.4"	2.4"	3.9"	4.0"	
	+/- 60 PSF	1790.5 LB/FT	679.3 LB/FT	2.3"	2.4"	4.0"	4.0"	1.7"	2.4"	2.7"	1.5"	1.1"	0.9"	1.2"	1.9"	3.2"	4.0"	
	+/- 70 PSF	2107.0 LB/FT	803.9 LB/FT	1.9"	2.0"	3.4"	4.0"	1.4"	2.0"	2.3"	1.3"	0.9"	0.8"	1.0"	1.8"	2.7"	4.0"	
	+/- 80 PSF	2424.4 LB/FT	930.8 LB/FT	1.6"	1.8"	3.0"	4.0"	1.2"	1.8"	2.0"	1.1"	0.8"	0.7"	0.9"	1.4"	2.4"	4.0"	
144"	+/- 88 PSF	2678.9 LB/FT	1034.1 LB/FT	1.5"	1.6"	2.7"	4.0"	1.1"	1.6"	1.6"	1.0"	0.7"	0.6"	0.9"	1.3"	2.1"	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"	3.1"	4.0"	4.0"	2.8"	2.0"	1.7"	2.1"	3.6"	4.0"	4.0"	
	+/- 40 PSF	1336.9 LB/FT	485.0 LB/FT	3.0"	3.2"	4.0"	4.0"	2.3"	3.2"	3.7"	2.1"	1.5"	1.2"	1.6"	2.7"	4.0"	4.0"	
	+/- 50 PSF	1692.6 LB/FT	617.1 LB/FT	2.4"	2.5"	4.0"	4.0"	1.8"	2.6"	2.8"	1.6"	1.2"	1.0"	1.3"	2.1"	3.4"	4.0"	
	+/- 60 PSF	2049.5 LB/FT	752.1 LB/FT	1.9"	2.1"	3.6"	4.0"	1.5"	2.1"	2.4"	1.4"	1.0"	0.8"	1.1"	1.7"	2.8"	4.0"	
156"	+/- 70 PSF	2407.5 LB/FT	890.0 LB/FT	1.6"	1.8"	3.0"	4.0"	1.3"	1.8"	2.0"	1.2"	0.8"	0.7"	0.9"	1.5"	2.4"	4.0"	
	+/- 85 PSF	2946.6 LB/FT	1102.2 LB/FT	1.2"	1.5"	2.5"	4.0"	1.0"	1.5"	1.7"	0.9"	0.7"	0.6"	0.7"	1.2"	2.0"	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	3.6"	3.9"	4.0"	4.0"	2.8"	3.9"	4.0"	2.5"	1.8"	1.5"	1.8"	3.3"	4.0"	4.0"	
	+/- 40 PSF	1516.2 LB/FT	532.3 LB/FT	2.7"	2.9"	4.0"	4.0"	2.0"	2.8"	3.3"	1.6"	1.3"	1.1"	1.4"	2.4"	3.9"	4.0"	
	+/- 50 PSF	1914.6 LB/FT	676.9 LB/FT	2.1"	2.3"	3.9"	4.0"	1.6"	2.2"	2.6"	1.3"	1.0"	0.9"	1.1"	1.9"	3.0"	4.0"	
168"	+/- 60 PSF	2314.4 LB/FT	825.1 LB/FT	1.7"	1.9"	3.2"	4.0"	1.3"	1.9"	2.1"	1.2"	0.8"	0.7"	0.9"	1.6"	2.5"	4.0"	
	+/- 70 PSF	2715.6 LB/FT	976.6 LB/FT	1.5"	1.6"	2.7"	4.0"	1.1"	1.6"	1.6"	1.0"	0.7"	0.6"	0.8"	1.3"	2.1"	4.0"	
	+/- 76 PSF	2956.9 LB/FT	1069.2 LB/FT	1.3"	1.5"	2.5"	4.0"	1.0"	1.5"	1.7"	0.9"	0.7"	0.6"	0.7"	1.2"	2.0"	4.0"	
	+/- 20 PSF	819.0 LB/FT	276.9 LB/FT	4.0"	4.0"	4.0"	4.0"	3.8"	4.0"	4.0"	3.5"	2.4"	2.0"	2.6"	4.0"	4.0"	4.0"	
	+/- 30 PSF	1258.0 LB/FT	426.0 LB/FT	3.2"	3.5"	4.0"	4.0"	2.5"	3.4"	4.0"	2.3"	1.6"	1.3"	1.7"	2.9"	4.0"	4.0"	
	+/- 40 PSF	1698.9 LB/FT	579.4 LB/FT	2.4"	2.6"	4.0"	4.0"	1.8"	2.6"	2.8"	1.7"	1.2"	1.0"	1.2"	2.2"	3.5"	4.0"	
180"	+/- 50 PSF	2141.5 LB/FT	736.9 LB/FT	1.9"	2.0"	3.5"	4.0"	1.5"	2.1"	2.3"	1.3"	0.9"	0.8"	1.0"	1.7"	2.7"	4.0"	
	+/- 60 PSF	2585.7 LB/FT	898.5 LB/FT	1.6"	1.7"	2.8"	4.0"	1.2"	1.7"	1.9"	1.0"	0.8"	0.6"	0.9"	1.4"	2.3"	4.0"	
	+/- 69 PSF	2987.0 LB/FT	1047.3 LB/FT	1.3"	1.5"	2.5"	4.0"	1.0"	1.5"	1.7"	0.9"	0.7"	0.6"	0.7"	1.3"	2.0"	4.0"	
	+/- 20 PSF	915.1 LB/FT	299.6 LB/FT	4.0"	4.0"	4.0"	4.0"	3.5"	4.0"	4.0"	3.1"	2.2"	1.9"	2.3"	4.0"	4.0"	4.0"	
	+/- 30 PSF	1399.2 LB/FT	460.7 LB/FT	2.9"	3.2"	4.0"	4.0"	1.9"	2.8"	3.6"	2.0"	1.4"	1.1"	1.5"	2.7"	4.0"	4.0"	
	+/- 40 PSF	1885.4 LB/FT	626.6 LB/FT	2.2"	2.3"	4.0"	4.0"	1.7"	2.4"	2.7"	1.4"	1.0"	0.9"	1.1"	2.0"	3.1"	4.0"	
180"	+/- 50 PSF	2373.7 LB/FT	797.2 LB/FT	1.7"	1.8"	3.0"	4.0"	1.3"	1.9"	2.1"	1.2"	0.8"	0.7"	0.9"	1.5"	2.5"	4.0"	
	+/- 63 PSF	3011.4 LB/FT	1026.1 LB/FT	1.3"	1.5"	2.5"	4.0"	1.0"	1.5"	1.7"	0.9"	0.7"	0.6"	0.7"	1.3"	2.0"	4.0"	

PRODUCT REVISED
as complying with the Florida
Building Code
Accepted Date **26 - 0407, 01**
Expiration Date **10 JUN 2031**
By *H. S. A. Miller*
Miami Dade Product Control

**EX ENGINEERING
EXPRESS.**

POSTAL ADDRESS:
22234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

ALUTECH UNITED, INC.
1537 NORTHGATE BLVD
SARASOTA, FL 34234
(941) 355-0970

MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

[illegible]

23-59550

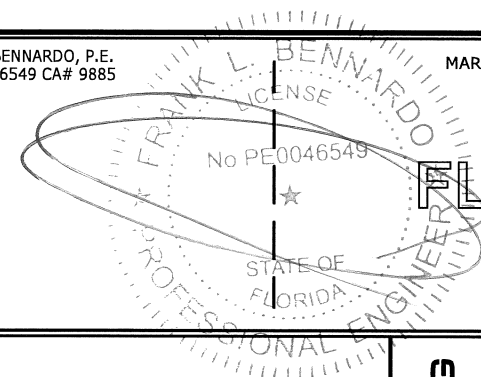
SCALE: NTS UNLESS NOTED

12

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

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

MARCH 9, 2026

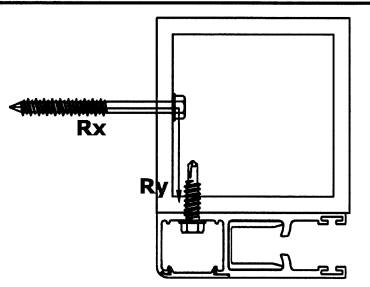


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FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

				MAXIMUM SPACING (O.C.)													
				1/4" DEWALT ULTRACON TO 2846 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT 2.5" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" POWERS POWER- BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT 3" MIN. EDGE DISTANCE	1/4" ALL-POINTS SOLID- SET		1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT 0.75" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.125" MIN. 6063-T5 ALUM; 0.5" MIN. EDGE DISTANCE	#14 316 SS SMS W/ FULL THREAD PENETRATIO N (OR 1/4-20 316 SS THRU- BOLT) W/ 5/8" WASHER TO 0.25" MIN. 6063-T5 ALUM; 0.5" MIN. EDGE DISTANCE	3/8" DEWALT SCREWBOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT 4.5" MIN. EDGE DISTANCE
SLAT SPAN	DESIGN PRESSURE	Rx	Ry														
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"	2.1"	3.8"	4.0"	4.0"	4.0"
	+/- 30 PSF	1543.1 LB/FT	495.4 LB/FT	4.0"	4.0"	4.0"	3.9"	2.1"	2.3"	3.3"	1.9"	1.3"	1.1"	1.4"	2.5"	3.9"	4.0"
	+/- 40 PSF	2076.0 LB/FT	674.0 LB/FT	4.0"	4.0"	4.0"	3.9"	1.5"	2.2"	2.4"	1.4"	1.0"	0.9"	1.0"	1.6"	2.9"	4.0"
	+/- 50 PSF	2611.4 LB/FT	858.0 LB/FT	4.0"	4.0"	4.0"	3.9"	1.2"	1.7"	1.9"	1.1"	0.9"	0.8"	0.8"	1.4"	2.3"	4.0"
	+/- 58 PSF	3041.4 LB/FT	1009.2 LB/FT	4.0"	4.0"	4.0"	3.9"	1.0"	1.5"	1.7"	0.9"	0.8"	0.7"	0.7"	1.2"	1.9"	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"	2.6"	1.9"	1.3"	1.0"	3.5"	4.0"
	+/- 30 PSF	1689.8 LB/FT	530.2 LB/FT	4.0"	4.0"	4.0"	4.0"	3.5"	2.7"	3.0"	1.7"	1.2"	1.0"	1.3"	2.3"	3.6"	4.0"
	+/- 40 PSF	2270.9 LB/FT	721.6 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.0"	2.2"	1.3"	0.9"	0.7"	0.9"	1.7"	2.6"	4.0"
	+/- 50 PSF	2854.8 LB/FT	919.4 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.3"	1.0"	0.7"	0.6"	0.7"	1.2"	2.1"	4.0"
	+/- 54 PSF	3089.1 LB/FT	1000.2 LB/FT	4.0"	4.0"	4.0"	4.0"	1.9"	1.0"	1.1"	0.9"	0.6"	0.5"	0.6"	1.2"	1.9"	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"	3.7"	4.0"	4.0"	3.7"	3.0"	4.0"	2.4"	1.9"	1.4"	1.3"	3.2"	4.0"	4.0"
	+/- 30 PSF	1839.6 LB/FT	565.1 LB/FT	4.0"	4.0"	4.0"	4.0"	3.2"	2.5"	2.8"	1.6"	1.1"	0.9"	1.2"	2.1"	3.3"	4.0"
	+/- 40 PSF	2470.1 LB/FT	769.7 LB/FT	4.0"	4.0"	4.0"	4.0"	2.4"	1.6"	2.1"	1.2"	0.9"	0.7"	0.9"	1.6"	2.4"	4.0"
	+/- 50 PSF	3103.9 LB/FT	981.4 LB/FT	4.0"	4.0"	4.0"	4.0"	1.9"	1.0"	1.5"	1.0"	0.6"	0.5"	0.7"	1.2"	1.9"	4.0"
	+/- 54 PSF	3338.2 LB/FT	1062.6 LB/FT	4.0"	4.0"	4.0"	4.0"	1.7"	0.9"	1.4"	0.9"	0.6"	0.5"	0.6"	1.2"	1.9"	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"	3.4"	4.0"	4.0"	4.0"	3.9"	4.0"	2.4"	1.9"	1.3"	1.6"	3.0"	4.0"	4.0"
	+/- 30 PSF	1992.4 LB/FT	600.2 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.5"	1.0"	0.9"	1.1"	2.3"	3.0"	4.0"
	+/- 40 PSF	2673.7 LB/FT	818.1 LB/FT	4.0"	4.0"	4.0"	4.0"	2.2"	1.4"	1.9"	1.2"	0.9"	0.7"	0.9"	1.6"	2.3"	4.0"
	+/- 47 PSF	3152.8 LB/FT	975.6 LB/FT	4.0"	4.0"	4.0"	4.0"	1.9"	1.0"	1.5"	1.0"	0.6"	0.5"	0.6"	1.2"	1.9"	4.0"
	+/- 50 PSF	3387.9 LB/FT	1056.8 LB/FT	4.0"	4.0"	4.0"	4.0"	1.7"	0.9"	1.4"	0.9"	0.6"	0.5"	0.6"	1.2"	1.9"	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"	3.2"	4.0"	4.0"	4.0"	3.7"	4.0"	2.1"	1.7"	1.2"	1.5"	2.8"	4.0"	4.0"
	+/- 30 PSF	2148.3 LB/FT	635.5 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.4"	1.0"	0.9"	1.0"	2.8"	4.0"	4.0"
	+/- 40 PSF	2881.6 LB/FT	867.1 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.5"	1.0"	0.7"	0.6"	0.7"	1.4"	2.1"	4.0"
	+/- 44 PSF	3176.1 LB/FT	962.3 LB/FT	4.0"	4.0"	4.0"	4.0"	1.9"	1.0"	1.5"	1.0"	0.6"	0.5"	0.6"	1.2"	1.9"	4.0"
	+/- 50 PSF	3387.9 LB/FT	1056.8 LB/FT	4.0"	4.0"	4.0"	4.0"	1.7"	0.9"	1.4"	0.9"	0.6"	0.5"	0.6"	1.2"	1.9"	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"	3.0"	4.0"	4.0"	4.0"	3.4"	4.0"	1.9"	1.3"	1.1"	1.4"	2.6"	4.0"	4.0"
	+/- 30 PSF	2307.3 LB/FT	671.0 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.5"	1.0"	0.9"	1.1"	2.6"	4.0"	4.0"
	+/- 41 PSF	3172.8 LB/FT	941.6 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.5"	1.0"	0.7"	0.6"	0.7"	1.4"	2.1"	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"	2.8"	4.0"	4.0"	4.0"	3.2"	4.0"	1.9"	1.3"	1.0"	1.3"	2.5"	3.8"	4.0"
	+/- 30 PSF	2469.4 LB/FT	706.8 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.5"	1.0"	0.9"	1.1"	2.5"	4.0"	4.0"
	+/- 39 PSF	3226.2 LB/FT	940.0 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.5"	1.0"	0.7"	0.6"	0.7"	1.4"	2.1"	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"	2.8"	4.0"	4.0"	4.0"	3.0"	4.0"	1.9"	1.3"	1.0"	1.2"	2.3"	3.5"	4.0"
	+/- 30 PSF	2634.6 LB/FT	742.9 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.5"	1.0"	0.9"	1.1"	2.3"	4.0"	4.0"
	+/- 37 PSF	3261.7 LB/FT	933.5 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.5"	1.0"	0.7"	0.6"	0.7"	1.4"	2.1"	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"	1.9"	2.4"	4.0"	4.0"	4.0"
	+/- 20 PSF	1855.7 LB/FT	504.5 LB/FT	4.0"	2.8"	4.0"	4.0"	4.0"	3.0"	4.0"	1.9"	1.3"	1.0"	1.2"	2.2"	3.3"	4.0"
	+/- 30 PSF	2802.8 LB/FT	779.3 LB/FT	4.0"	4.0"	4.0"	4.0"	3.0"	2.3"	2.6"	1.5"	1.0"	0.9"	1.1"	2.2"	4.0"	4.0"
	+/- 35 PSF	3278.9 LB/FT	922.0 LB/FT	4.0"	4.0"	4.0"	4.0"	2.1"	1.1"	1.5"	1.0"	0.7"	0.6"	0.7"	1.4"	2.1"	4.0"

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By H. G. A. M. M.
Miami Dade Product Control

[illegible]

23-59550

SCALE: NTS UNLESS NOTED

13

OF
15

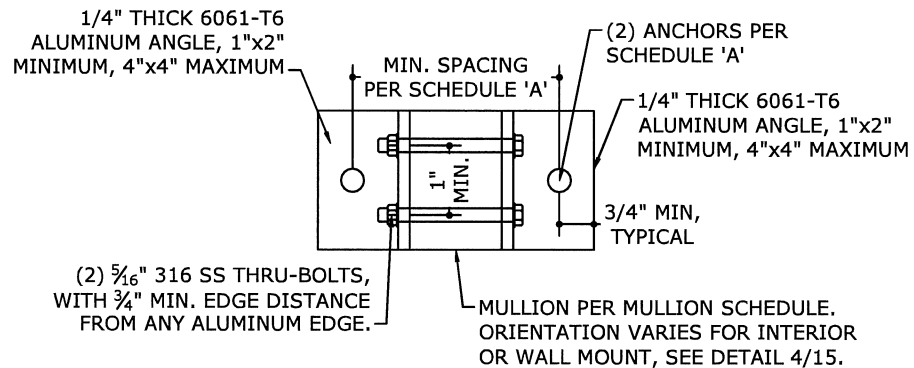


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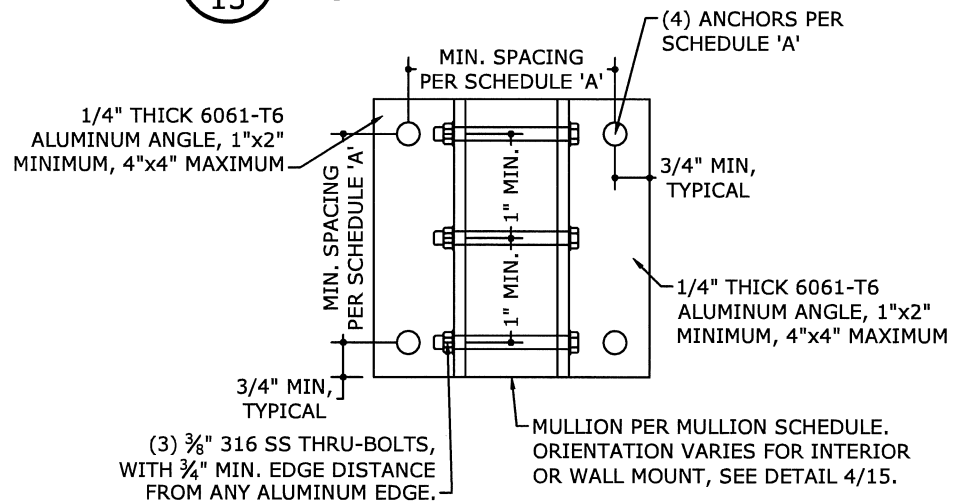
END RETENTION MULLION SCHEDULE

SLAT SPAN	DESIGN PRESSURE	3"x3"x0.25" 6063-T6 ALUMINUM TUBE								4"x6"x0.25" 6063-T6 ALUMINUM TUBE								4"x8"x0.25" 6063-T6 ALUMINUM TUBE							
		INTERMEDIATE MULLION		END MULLION				INTERMEDIATE MULLION		END MULLION				INTERMEDIATE MULLION		END MULLION									
		MAX MULLION LENGTH	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rsum	MAX MULLION LENGTH	END REACTION N Rv	END REACTION N Rt	END REACTION Rsum						
UP TO 96"	UP TO 60 PSF	58.3"	2213 LB	49.8"	1518 LB	945 LB	1788 LB	110.1"	4175 LB	88.9"	2706 LB	1685 LB	3188 LB	137.6"	5219 LB	96.6"	2942 LB	1832 LB	3466 LB						
	UP TO 80 PSF	51.1"	2680 LB	44.6"	1894 LB	1171 LB	2227 LB	95.1"	4989 LB	79.1"	3360 LB	2077 LB	3950 LB	117.0"	6139 LB	86.7"	3681 LB	2275 LB	4327 LB						
	UP TO 100 PSF	44.8"	3055 LB	39.2"	2155 LB	1337 LB	2536 LB	83.4"	5688 LB	69.5"	3821 LB	2370 LB	4496 LB	102.6"	7000 LB	79.4"	4369 LB	2710 LB	5141 LB						
UP TO 144"	UP TO 60 PSF	46.7"	2928 LB	37.8"	2437 LB	1184 LB	2709 LB	87.0"	5452 LB	67.4"	4350 LB	2114 LB	4836 LB	107.0"	6709 LB	80.0"	5163 LB	2509 LB	5740 LB						
	UP TO 85 PSF	38.6"	3545 LB	31.5"	2901 LB	1446 LB	3241 LB	71.9"	6600 LB	56.2"	5175 LB	2579 LB	5782 LB	88.4"	8121 LB	66.6"	6138 LB	3059 LB	6858 LB						
UP TO 180"	UP TO 63 PSF	39.6"	3456 LB	31.2"	3025 LB	1362 LB	3317 LB	73.7"	6434 LB	55.8"	5411 LB	2435 LB	5934 LB	90.7"	7917 LB	66.3"	6432 LB	2895 LB	7053 LB						
UP TO 216"	UP TO 50 PSF	40.9"	3345 LB	30.9"	3157 LB	1265 LB	3401 LB	76.1"	6228 LB	55.5"	5665 LB	2270 LB	6103 LB	93.7"	7664 LB	66.1"	6751 LB	2705 LB	7273 LB						
UP TO 288"	UP TO 35 PSF	42.2"	3242 LB	30.3"	3359 LB	1163 LB	3555 LB	78.6"	6037 LB	54.5"	6048 LB	2094 LB	6400 LB	96.7"	7428 LB	65.1"	7229 LB	2502 LB	7650 LB						

1. "END RETENTION MULLION SCHEDULE" IS APPLICABLE TO ALL END RETENTION MULLIONS.
2. "INTERMEDIATE MULLIONS" AND "END MULLIONS" ARE AS DEFINED IN ELEVATION 1/15.
3. ALLOWABLE DESIGN PRESSURES AND SLAT SPANS INDICATED ARE FOR DETERMINING PERMISSIBLE MULLION LENGTHS ONLY. ACTUAL SLAT SPANS AND DESIGN PRESSURES SHALL NOT EXCEED THOSE INDICATED IN SPAN SCHEDULES.
4. "END REACTIONS" ARE LISTED FOR EACH COMBINATION OF DESIGN LOAD, MULLION TYPE, & SLAT SPAN. CHOOSE MOUNTING CONNECTIONS (PER APPLICABLE CONNECTION DETAILS HEREIN) THAT PROVIDES "CONNECTION CAPACITY" GREATER THAN OR EQUAL TO "END REACTIONS" GIVEN ABOVE.
5. THIS SCHEDULE MAY BE USED FOR ALL MOUNTING CONDITIONS LISTED HEREIN.
6. SEE MULLION HORIZONTAL SECTIONS ON SHEET 14 FOR REQUIRED MULLION ORIENTATIONS.



1	INTERIOR OR WALL MOUNT
15	N.T.S.



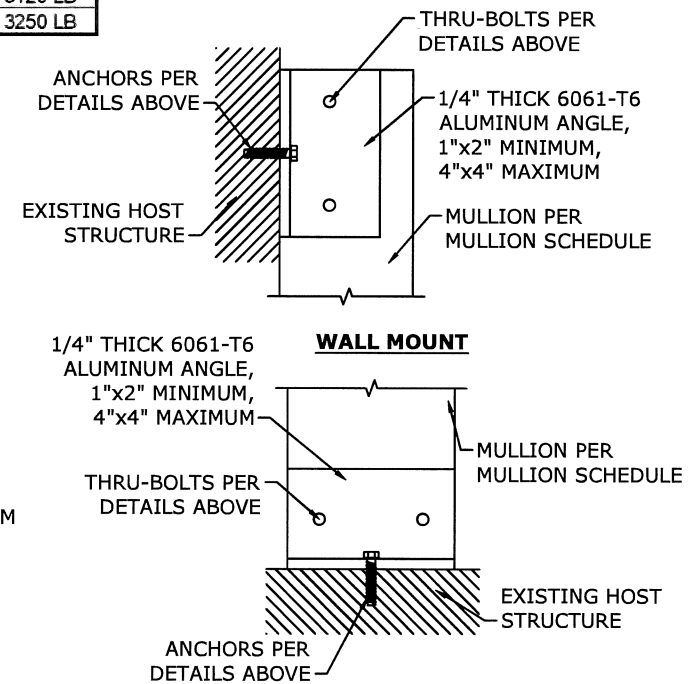
2	INTERIOR OR WALL MOUNT
15	N.T.S.

SCHEDULE 'A'

ANCHOR TYPE	MINIMUM SPACING	MINIMUM EDGE DISTANCE	CONNECTION DETAIL	CONNECTION CAPACITY		
3/8" DEWALT SCREWBOLTS W/ 3-1/2" EMBED TO 3KSI MIN. CONCRETE	4.5"	4.5"	1/15	Tcap	4261 LB	
				Vcap	2998 LB	
	2.5"	4.5"	3/15	2/15	Tcap	8523 LB
				Vcap	5995 LB	
				Tcap	11363 LB	
				Vcap	9992 LB	
3/8" DEWALT STEEL DROPIN W/ 1-9/16" EMBED TO 3KSI MIN. CONCRETE	4.5"	5.25"	1/15	Tcap	1340 LB	
				Vcap	2293 LB	
	2.5"	5.25"	3/15	2/15	Tcap	2680 LB
				Vcap	4585 LB	
				Tcap	2978 LB	
				Vcap	5094 LB	
5/16" ITW TAPCON XL OR DEWALT ULTRACON W/ 2-1/4" MIN. EMBED TO 3.5KSI MIN. CONCRETE	5.0"	3.125"	1/15	Tcap	1560 LB	
				Vcap	1625 LB	
			2/15	Tcap	3120 LB	
				Vcap	3250 LB	

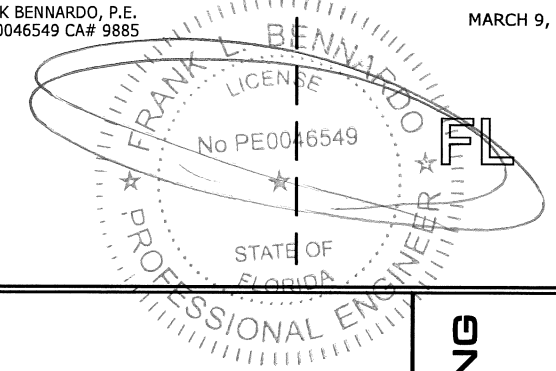
1. INTERIOR MOUNT:

- 1.1. FOR ALL MULLIONS, 'Rsum' VALUES IN MULLION SCHEDULE SHALL NOT EXCEED MAX 'Vcap' VALUES NOTED IN SCHEDULE 'A'.
2. WALL MOUNT:
 - 2.1. FOR INTERMEDIATE END RETENTION MULLIONS AND ALL NON-END RETENTION MULLIONS, 'Rsum' VALUES IN MULLION SCHEDULE SHALL NOT EXCEED MAX 'Tcap' VALUES NOTED IN SCHEDULE 'A'.
 - 2.2. FOR END RETENTION END MULLIONS, **Rv/Vcap + Rt/Tcap SHALL BE LESS THAN OR EQUAL TO 1.0**, WHERE 'Rv' AND 'Rt' ARE PER MULLION SCHEDULE, AND 'Tcap' AND 'Vcap' ARE PER SCHEDULE 'A'.



INTERIOR MOUNT

MOUNTING CONDITIONS VERTICAL SECTIONS



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 26-0407
Expiration Date 10 JUN
By *H. G. A. Miller*
Miami Dept. Product Control



POSTAL ADDRESS:
2234 NORTH FEDERAL HWY #7664
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SARASOTA, FL 34234

(941) 355-0970
MAGNUM SECURITY STAR ROLL-DOWN SHUTTER
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE (NOA)

REMARKS	DRWN	CHKD	DATE
PREV. NOA 21-0312.10	-	RN	06/05/20
2023 FIC UPDATE & RENEWAL	EPR	RWN	03/09/26
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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SCALE: NTS UNLESS NOTED

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