



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

## NOTICE OF ACCEPTANCE (NOA)

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](http://www.miamidade.gov/economy)

**Metro Door, LLC**  
**821 Industrial drive**  
**Lewisburg, TN 37091**

### 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 Section (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 Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: 20 Gage Slat Steel Roll-up Door up to 18'-1" Wide with Optional Insulated Slats

**APPROVAL DOCUMENT:** Drawing No. **21-110**, titled "18'-1" Maximum Wide, 20 Gage Slat Roll-Up Door Large Missile, sheets 1 and 7 of 7, dated 08/20/2021, with revision 1 dated 10/18/2021, prepared by the Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** A permanent label with the manufacturer's name or logo, manufacturing address, model number, the positive and negative design pressure rating, indicate impact rated if applicable, installation instruction drawing reference number, approval number (NOA), the applicable test standards, and the statement reading 'Miami-Dade County Product Control Approved' is to be located on the door's sidetrack, bottom angle, or inner surface of a panel.

**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.

**LIMITATION:** Roll-up mechanism is not part of this approval.

**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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**

MIAMI-DADE COUNTY  
APPROVED

NOA No. 21-0917.09  
Expiration Date: December 2, 2026  
Approval Date: December 2, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **21-110**, titled “18’-1” Maximum Wide, 20 Gage Slat Roll-Up Door Large Missile, sheets 1 and 7 of 7, dated 08/20/2021, with revision 1 dated 10/18/2021, prepared by the Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.

**B. TESTS**

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
4) Forced Entry Test, per FBC, TAS 202-94  
along with marked-up drawings and installation diagram of a 20 Gage Slat Roll-Up Doors, prepared by Blackwater Technical Services Inc., Test Report No. **BT-MTD-20-001**, dated 10/27/2021, signed and sealed by Michael D. Caldwell, P.E.

**C. CALCULATIONS**

1. Vx force sample calculation, prepared by Tilteco, Inc., dated 10/18/2021, signed and sealed by Walter A. Tillit Jr., P.E.
2. Slats’ structural and anchoring calculations, prepared by Tilteco, Inc., dated 08/20/2021, signed and sealed by Walter A. Tillit Jr., P.E.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **17-1010.32**, issued to Rmax Operating, LLC, for their “Rmax Foil Faced Rigid Polyisocyanurate Foam Sheathing Insulation”, approved on 05/10/2018 and expiring on 07/08/2022.

**F. STATEMENTS**

1. Statement letter of code conformance to the 7<sup>th</sup> edition (2020) of the FBC, issued by Tilteco, Inc., dated 08/20/2021, signed and sealed by Walter A. Tillit Jr., P.E.
3. Statement letter of no financial interest, issued by Tilteco, Inc., dated 08/20/2021, signed and sealed by Walter A. Tillit Jr., P.E.



Carlos M. Utrera, P.E.

Product Control Examiner

NOA No. 21-0917.09

Expiration Date: December 2, 2026

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GENERAL NOTES:

1. ROLL-UP DOOR SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. THIS PRODUCT MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES.

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE. USING ASCE 7-16 AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED BELOW AND SCHEDULE ON SHEET 7.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 1.

ROLL-UP DOOR'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER BLACKWATER TECHNICAL SERVICES INC. REPORT # BT-MTD-20-001 PER TAS-201, TAS 202 & TAS-203 PROTOCOLS.

MAX. A.S.D. DESIGN PRESSURE RATING: +70.0. -70.0 PSF

2. SLAT TO BE A.S.T.M. A-653 GR 45 STRUCTURAL QUALITY STEEL WITH MIN  $F_y = 45.0$  ksi AND G-60 GALVANIZED PER A.S.T.M. A-653.
3. ALL STEEL ANGELS TO BE A.S.T.M. A-36 DESIGNATION, SHOP PRIMED AGAINST CORROSION PRIOR TO INSTALLATION. PAINT TO CONFORM TO FEDERAL SPECIFICATIONS CORRESPONDING TO GRAY PAINT OR EQUAL.
4. WINDLOCKS TO BE A.S.T.M. A-1011 GRADE 60 W/ A.S.T.M. A-123 G-60 GALVANIZED STEEL. ( $F_y = 60$  ksi,  $F_u = 80$  ksi).
5. ALL ASSEMBLY BOLTS TO BE S.A.E. GRADE 5 CADMIUM PLATED OR GALVANIZED STEEL.
6. STEEL WIND ANGLES TO BE A.S.T.M/ A-36 DESIGNATION, SHOP PRIMED PRIOR TO INSTALLATION. PAINT TO CONFORM TO FEDERAL SPECIFICATIONS CORRESPONDING TO RED OXIDE PAINT OR EQUAL.
7. HOOD TO BE 24 GAGE A.S.T.M. A-653 DESIGNATION, G-90 FINISH TYPE COATING.
8. ALL RIVETS TO BE A.I.S.I.  $\frac{1}{4}$ "  $\phi$  W/  $\frac{1}{2}$ " FLANGE  $\phi$  STAINLESS STEEL MODEL # STS84D DOMED HD, W/ 1460 Lb SHEAR STRENGTH & 1800 TENSILE STRENGTH.
9. CONCRETE ANCHORS TO BE AS MANUFACTURED BY RED HEAD AND SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER. ANCHOR FOR STEEL SHALL BE AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS.
10. ALL WELDING TO CONFORM TO AMERICAN WELDING SOCIETY'S AWS D1.1 REGULATIONS. USE A.W.S. AS.1 OR A5.5 E60XX ELECTRODES MIN.  $\frac{3}{16}$ " FILLET SIZE.
11. INSULATION MATERIAL SHALL BE RMAX FOIL FACED RIGID POLYISOCYANURATE FOAM SHEATHING INSULATION, MANUFACTURED BY Rmax Operating, LLC W/ MIAMI DADE COUNTY APPROVAL.
12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE EXISTING STRUCTURE IS DESIGNED TO SUPPORT  $V_x$  AND  $V_y$  FORCES AT BOTH JAMBS. SEE SCHEDULE ON SHEET 7 OF 7, FOR  $V_x$  &  $V_y$  VALUES.
13. ROLL-UP MECHANISM NOT PART OF THIS APPROVAL.
14. (A) THIS P.A.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT: I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.  
(B) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS P.A.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT, CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.  
(C) THIS P.A.D. WILL BE CONSIDERED INVALID IF MODIFIED.  
(D) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.  
(E) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
15. ROLL-UP DOOR MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION. ONE LABEL SHALL BE PLACED FOR EVERY UNIT. LABELING MUST BE PER FLORIDA BUILDING CODE 1709.5.2.1.1

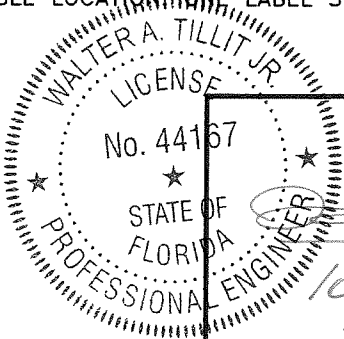
PRODUCT APPROVED  
as complying with the Florida  
Building Code

NOA-No. 21-0917.09

Approval Date 12/02/2021

By   
Miami-Dade Product Control

THIS DRAWING SHALL ONLY BE USED TO  
OBTAIN PERMITS IN THE STATE OF FLORIDA



P.E. SEAL/SIGNATURE/DATE

©2021 TILTECO, INC.

**TILTECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone : (305)871-1530 . Fax : (305)871-1531  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

18'-1" MAXIMUM WIDE, 20 GAGE SLAT  
ROLL-UP DOOR LARGE MISSILE

M.P.  
DRAWN BY:

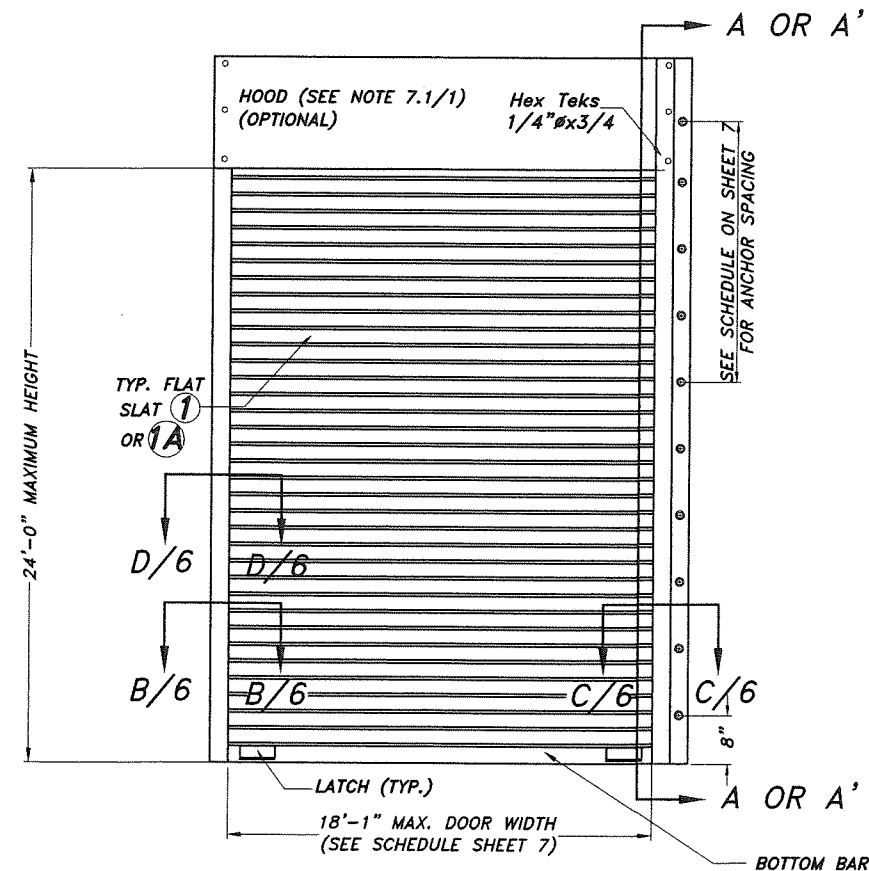
**METRO DOOR LLC.**  
821 INDUSTRIAL DRIVE  
LEWISBURG, TN 37091  
PHONE: (833) 969-3667

08/20/2021  
DATE

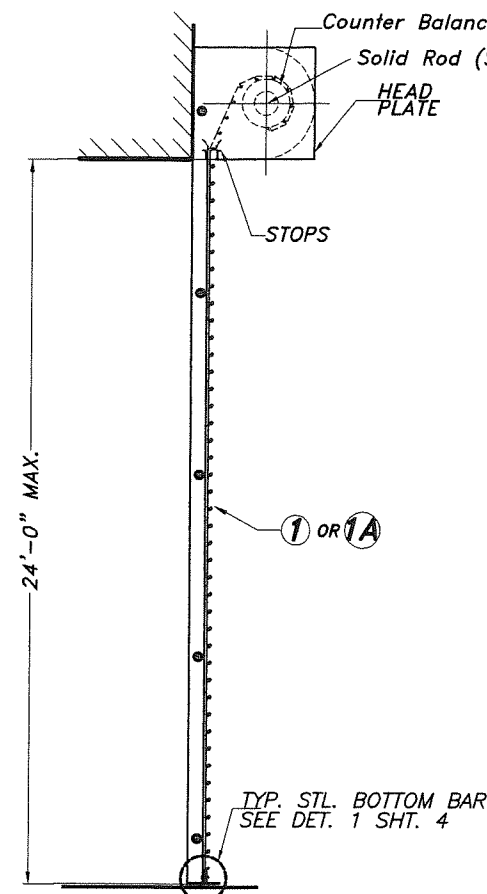
21-110  
DRAWING No

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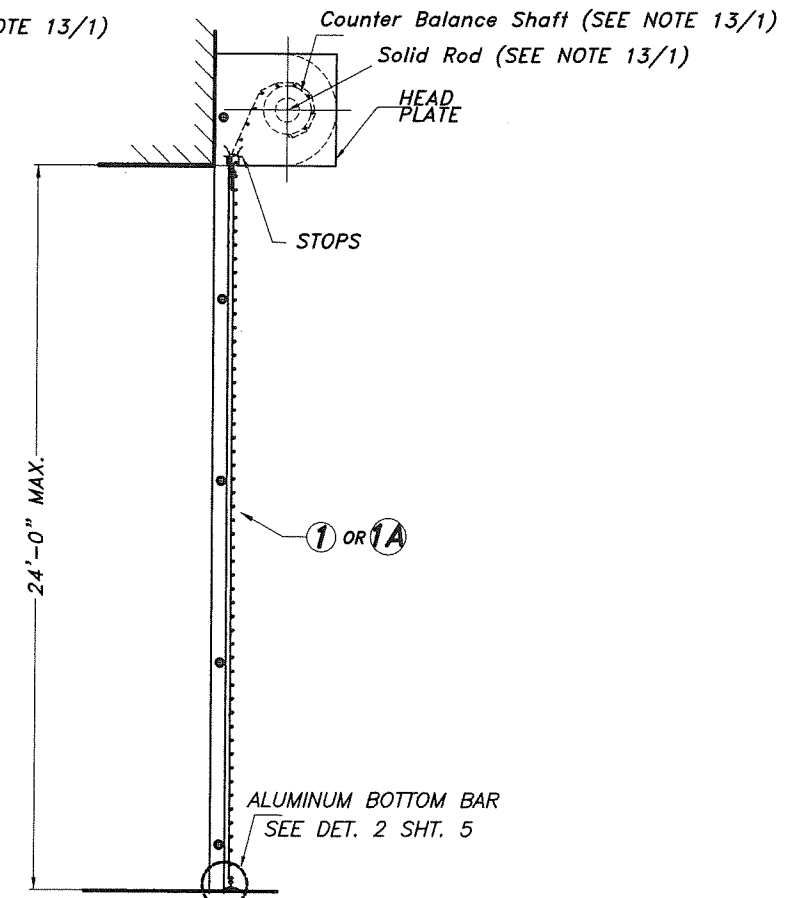
SHEET 1 OF 7



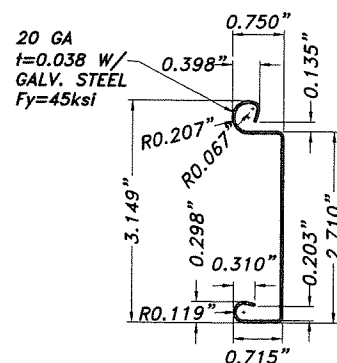
**TYPICAL DOOR ELEVATION**  
N. T. S.



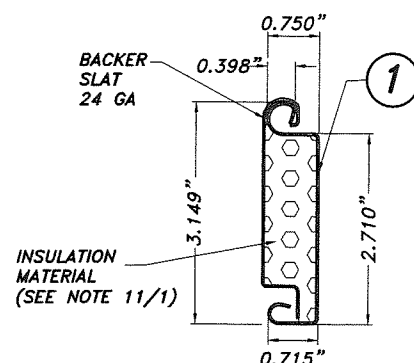
**SECTION A-A**  
N. T. S.



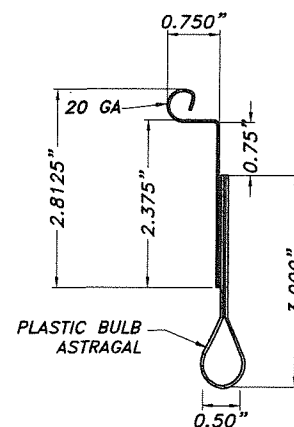
**SECTION A'-A'**  
N. T. S.



- 1 FLAT SLAT**  
Fy=45ksi  
ASTM A-653 GRADE 45  
G-60 GALV. STL



- 1A SLAT**  
Fy=45ksi  
ASTM A-653 GRADE 45  
G-60 GALV. STL



- 2 STL BOTTOM SLAT FOR SECTION A-A**  
Fy=45ksi  
ASTM A-653 GRADE 45  
G-60 GALV. STL

WALTER A. TILLIT JR.  
No. 44167  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
9/2021  
P.E. SEAL/SIGNATURE/DATE

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Approval Date 12/02/2021  
By *[Signature]*  
Miami-Dade Product Control

18'-1" MAXIMUM WIDE, 20 GAGE SLAT  
ROLL-UP DOOR LARGE MISSILE

**METRO DOOR LLC.**  
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M.P.  
DRAWN BY:

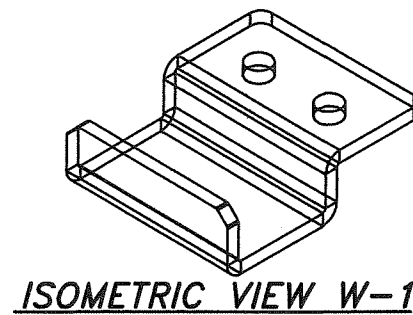
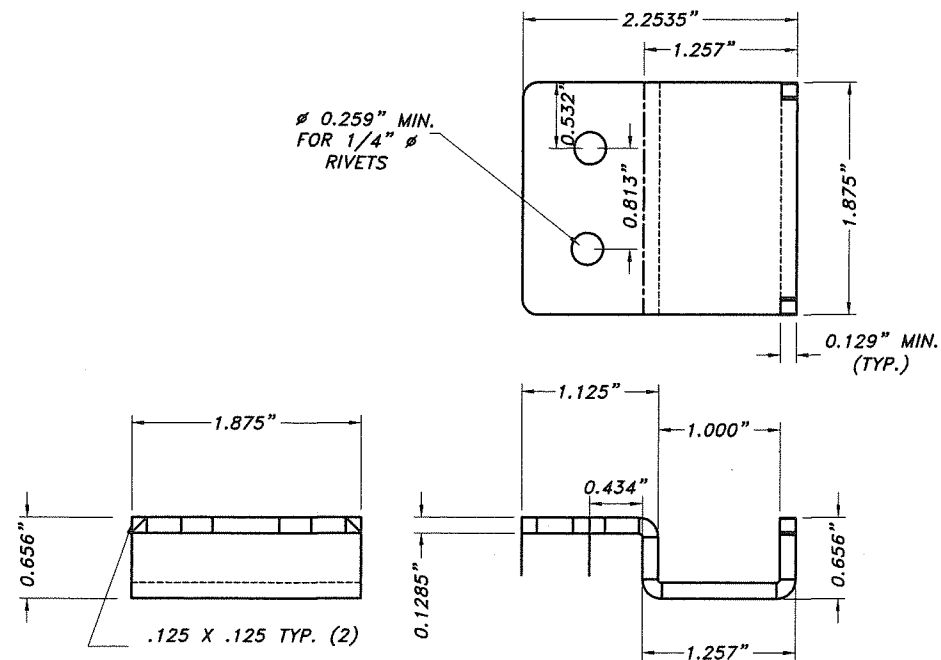
08/20/2021  
DATE

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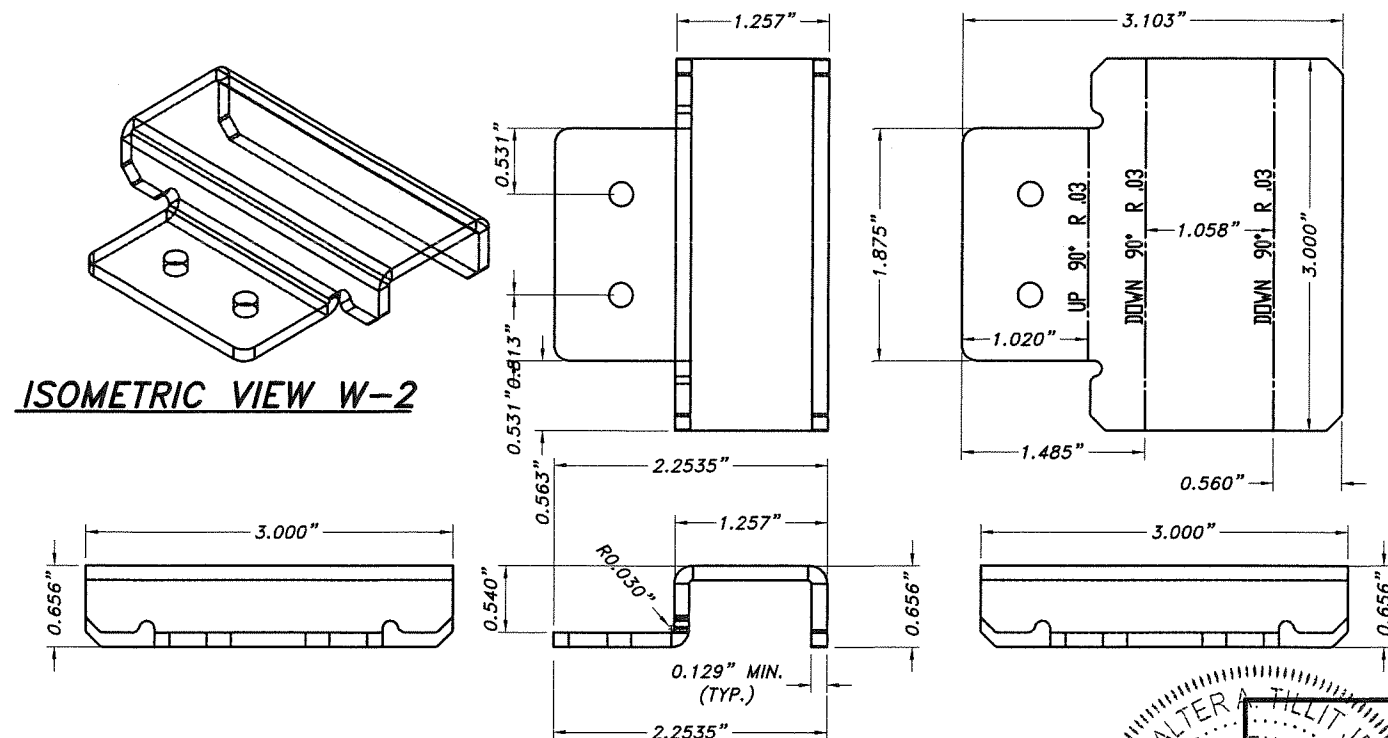
SHEET 2 OF 7





### WIND LOCK W-1

Fy= 60ksi  
Fu= 80ksi  
ASTM A-1011 GRADE 60 W/ ASTM A-123  
G-60 GALVANIZED STEEL

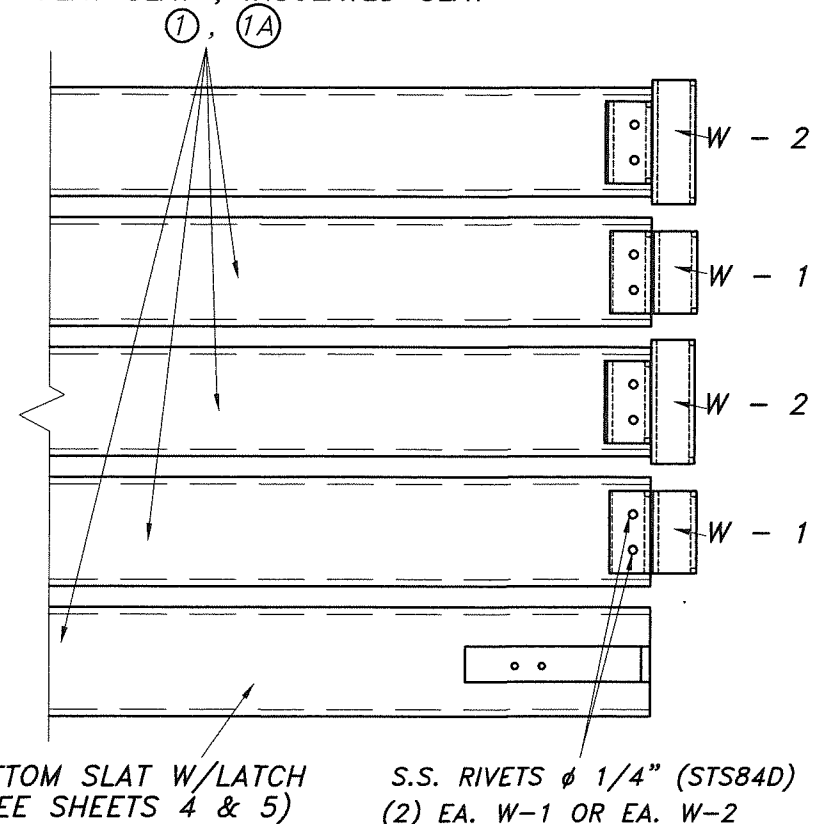


### ISOMETRIC VIEW W-2

### WIND LOCK W-2

Fy= 60ksi  
Fu= 80ksi  
ASTM A-1011 GRADE 60 W/ ASTM A-123  
G-60 GALVANIZED STEEL

### FLAT SLAT, INSULATED SLAT

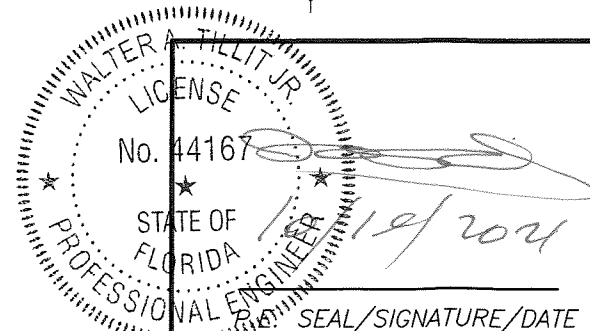


### ELEVATION DETAIL FOR SLAT W/ W-1 & W-2

N.T.S.

**PRODUCT APPROVED**  
as complying with the Florida  
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Approval Date 12/02/2021  
By *[Signature]*  
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FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)



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18'-1" MAXIMUM WIDE, 20 GAGE SLAT  
ROLL-UP DOOR LARGE MISSILE

**METRO DOOR LLC.**

821 INDUSTRIAL DRIVE  
LEWISBURG, TN 37091  
PHONE: (833) 969-3667

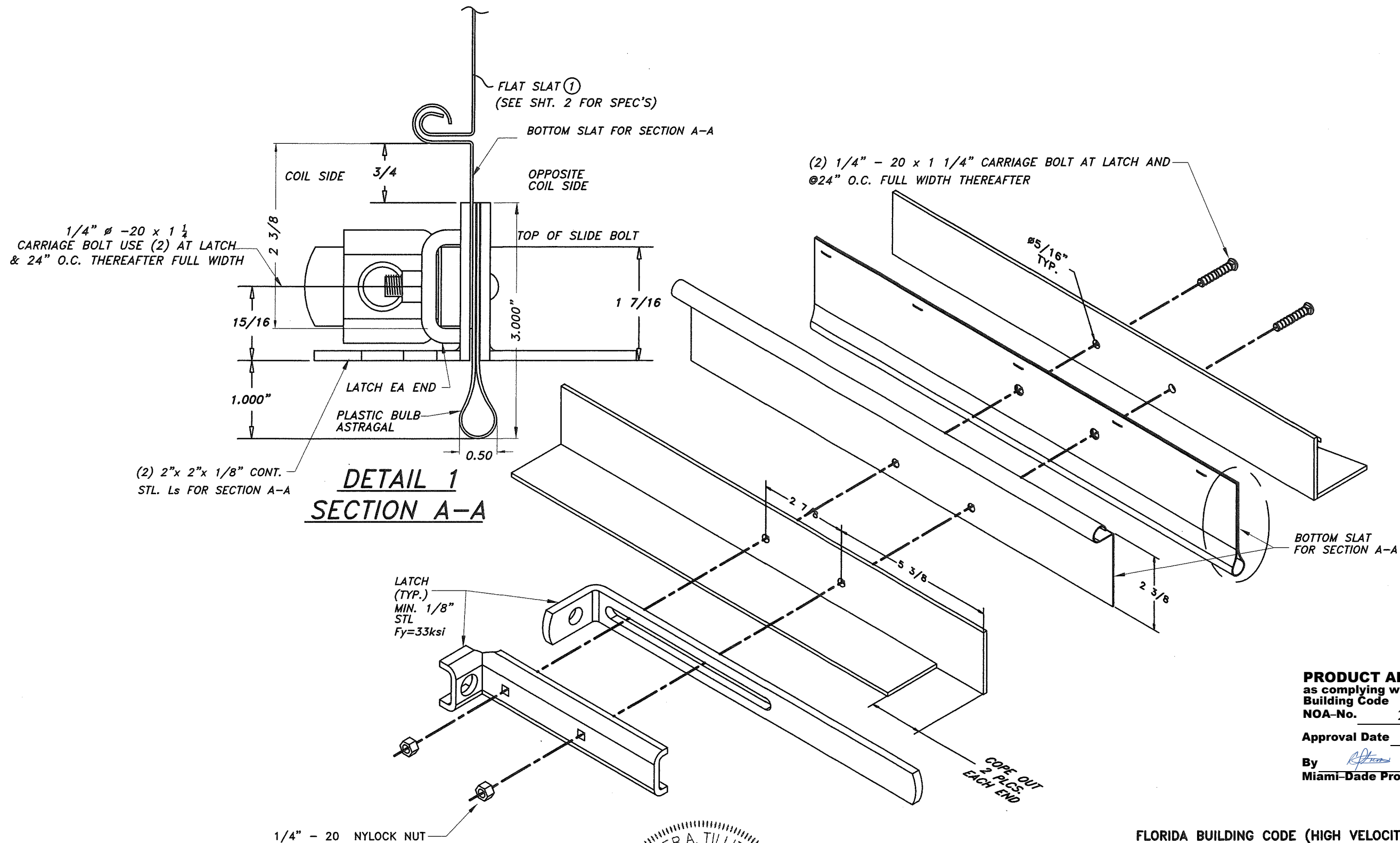
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DRAWN BY:

08/20/2021  
DATE

**21-110**  
DRAWING No

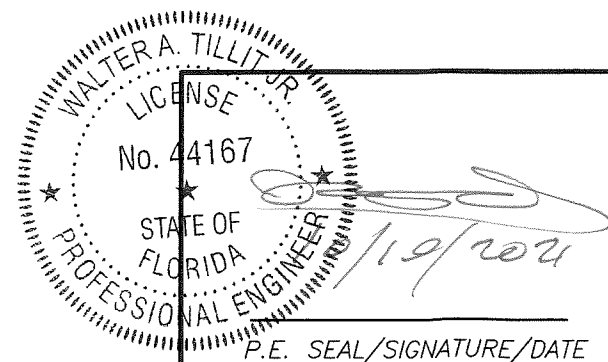
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SHEET 3 OF 7



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By *[Signature]*  
Miami-Dade Product Control

**ASSEMBLY DETAIL OF BOTTOM SLAT  
W/ STEEL ANGLES & W/ LATCH AT  
SECTION A-A**



P.E. SEAL/SIGNATURE/DATE

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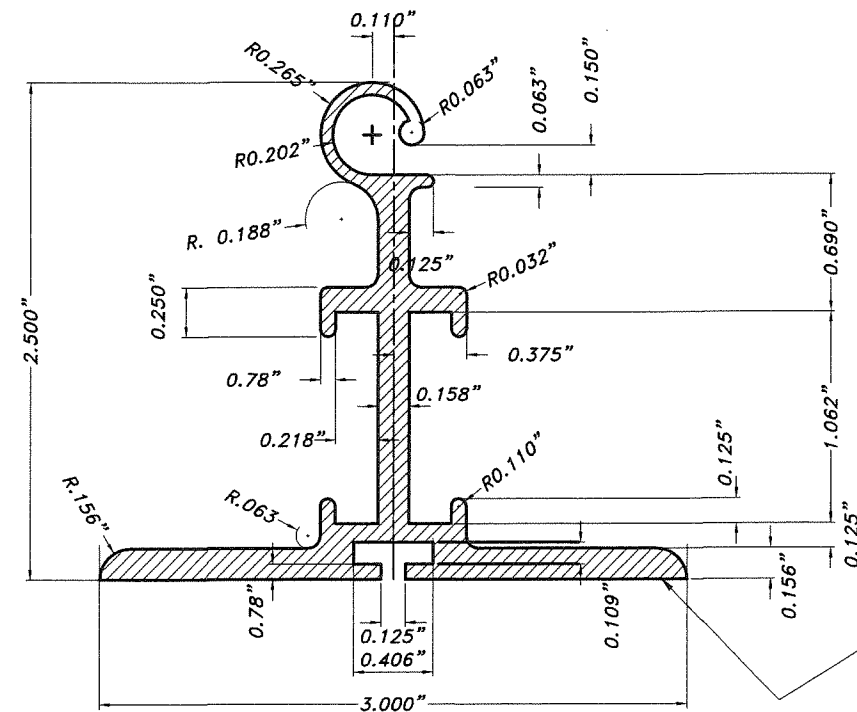
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1	GENERAL	10/18/21	3	-	-
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SHEET 4 OF 7



**ALUMINUM BAR**

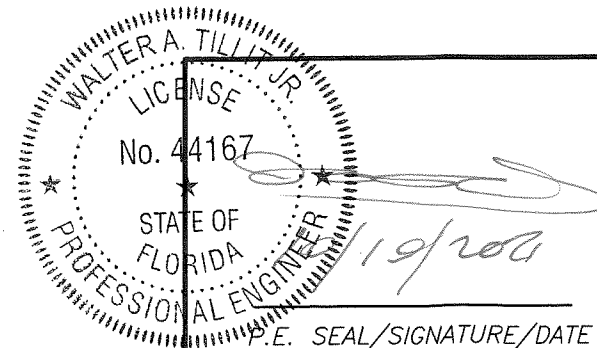
ALUMINUM BOTTOM  
BAR  
6063-T6 ALLOY

FLAT SLAT ① OR ①A  
(SEE SHT. 2 FOR SPEC'S)

**ASSEMBLY DETAIL AT BOTTOM W/ ALUMINUM BAR  
SECTION A'-A'**

N. T. S.

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18'-1" MAXIMUM WIDE, 20 GAGE SLAT  
ROLL-UP DOOR LARGE MISSILE

M.P.  
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SHEET 5 OF 7






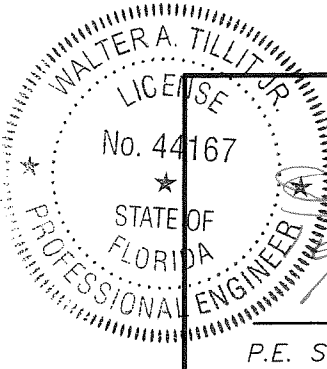
Vx & Vy REACTIONS & ANCHOR SPACING SCHEDULE

MAXIMUM DESIGN LOAD (psf)	DOOR WIDTH (ft-in)	SLIP (in)	Vx (lb/ft)	Vy (lb/ft)	MAXIMUM ANCHOR SPACING	
					ANCHOR TYPE 1 *	ANCHOR TYPE 2 *
					f'c= 3ksi Min.	$\frac{1}{4}$ Min. f'y=36ksi STEEL
+50.0 , -50.0	14'-0"	3/8"	1411	350	10"	10"
	16'-0"	1/2 "	1581	400	10"	10"
	18'-1"	0.634"	1753	453	10"	10"
+55.0 , -55.0	14'-0"	3/8"	1568	385	10"	10"
	16'-0"	1/2 "	1748	440	10"	10"
	18'-1"	0.634"	1932	498	10"	10"
+60.0 , -60.0	14'-0"	3/8"	1724	420	10"	10"
	16'-0"	1/2 "	1913	480	10"	10"
	18'-1"	0.634"	2108	543	10"	10"
+70.0 , -70.0	14'-0"	3/8"	2031	490	10"	10"
	16'-0"	1/2 "	2239	560	10"	10"
	18'-1"	0.634"	2473	634	10"	10"

ANCHOR TYPE 1:  $\frac{5}{8}$ " $\varnothing$  RED HEAD LDT SELF THREADING W/ 4  $\frac{1}{2}$ " MIN. EMBEDMENT & 6" MIN. EDGE DISTANCE INTO f'c= 3ksi MIN. POURED CONCRETE.


ANCHOR TYPE 2: 1/2" $\varnothing$  x 1  $\frac{1}{2}$ " MIN. ELCO CONSTRUCTION PRODUCT TAP-FLEX THREADING SCREW INTO  $\frac{1}{4}$ " MIN. ASTM A-36 STEEL STRUCTURE.

PRODUCT APPROVED  
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P.E. SEAL/SIGNATURE/DATE

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ROLL-UP DOOR LARGE MISSILE

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PHONE: (833) 969-3667

M.P.  
DRAWN BY:

08/20/2021  
DATE

21-110  
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	10/18/21	3	-	-
2	-	-	4	-	-

SHEET 7 OF 7