



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208

Miami, FL 33175

T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

WinDoor, Inc.

104 Triple Diamond Blvd.

North Venice, FL 34275

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: Clipped, Extruded Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. TUBE-LMI-NOA, titled "Tube Mullions (LM) -1"x4", 2"x4", 2"x6", 2"x8" ", sheets 1 through 9 of 9, dated 08/13/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Section Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", 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 NOA# 15-0728.01** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Sifang Zhao, P.E.**



S.Z.
11/12/2020

NOA No. 20-0826.03
Expiration Date: March 14, 2024
Approval Date: November 1, 2020
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections. (*Submitted under NOA# 15-0728.01*)
2. Drawing No. TUBE-LMI-NOA, titled "Tube Mullions (LM) -1"x4", 2"x4", 2"x6", 2"x8" ", sheets 1 through 9 of 9, dated 08/13/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller,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
along with marked-up drawings and installation diagram of two series 1000 fixed windows mullied together, prepared by Fenestration Testing Laboratory, Inc. Test Report No. **FTL-18-8511**, dated 11/27/18, signed and sealed by Idalmis Ortega, P.E. (*Submitted under NOA# 15-0728.01*)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 02/15/29, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E. (*Submitted under NOA# 15-0728.01*)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of conformance, of complying with FBC 6th Edition (2017), and FBC 7th Edition (2020), and of no financial interest, dated July 20, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
2. Notification of Successor Engineer for manufacturer's NOA document per **Section 61G15-27.001** of the **Florida Administrative Code**, dated August 17, 2020, signed and sealed by Anthony Lynn Miller, P.E.

G. OTHERS

1. This NOA revises NOA #15-0728.01, expiring on 03/14/24.




Sifang Zhao, P.E.
Product Control Examiner
NOA No. 20-0826.03
Expiration Date: March 14, 2024
Approval Date: November 12, 2020

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE 6TH EDITION (2017) AND 7TH EDITION (2020) INCLUDING THE HVHZ.
2. WOOD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
4. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
5. DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. FENESTRATION UNITS MUST BE APPROVED UNDER SEPARATE APPROVAL.
6. SINGLE FENESTRATION UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. FENESTRATION UNITS MUST BE MANUFACTURED BY WinDoor INC.
7. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL FENESTRATION UNIT.
8. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
9. MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.

ANCHORING NOTES:

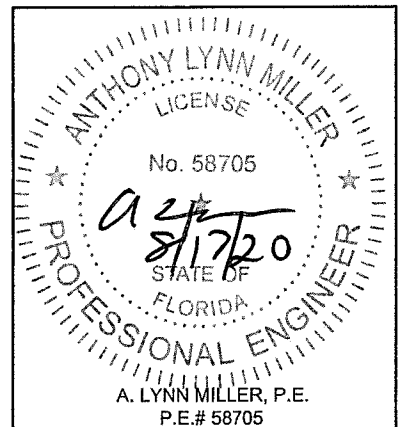
1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 7/16" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
2. FOR ANCHORING INTO CONCRETE USE 1/4" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
3. FOR ANCHORING INTO METAL STRUCTURE USE #12 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
4. FOR ATTACHING WINDOW UNITS TO MULLION SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF THREE THREADS PAST THE MULLION WALL. SCREW TYPE AND SPACING MUST BE IN ACCORDANCE WITH WINDOW ANCHORING SCHEDULE AS SHOWN IN WINDOW SEPARATE APPROVAL.
5. ALL FASTENERS TO BE CORROSION RESISTANT.
6. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
 - A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
 - C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 1/8" THICK MINIMUM

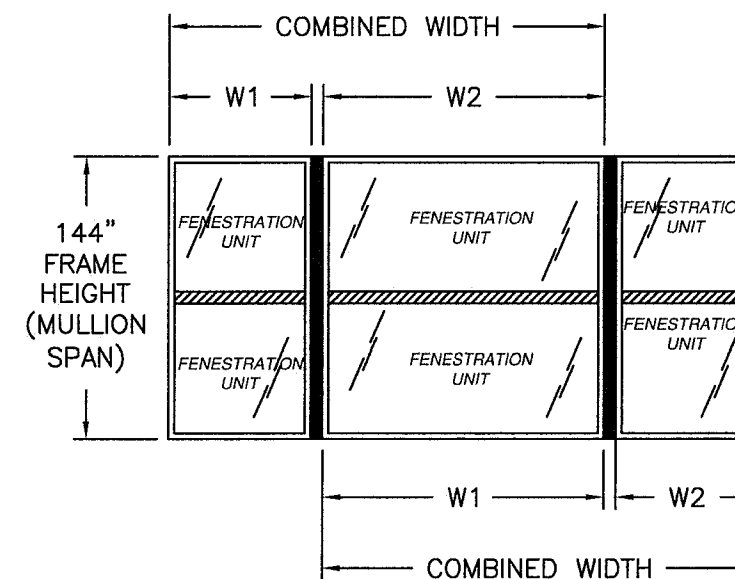
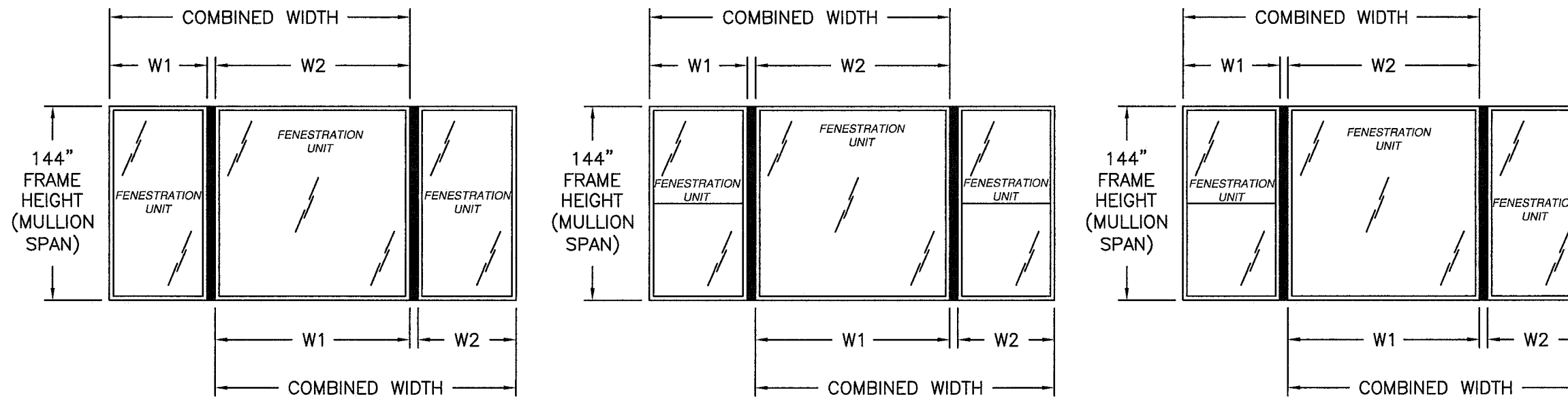
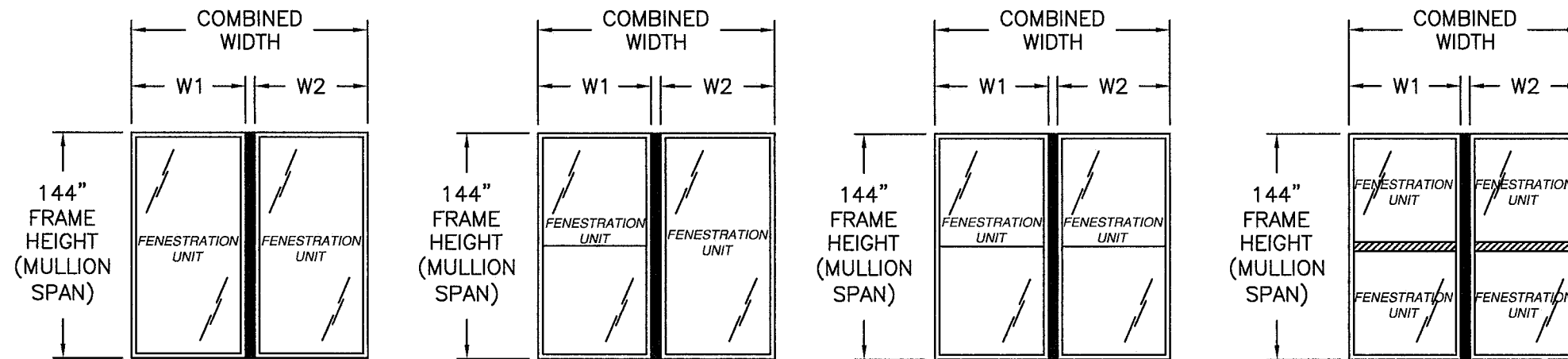
PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. 20-0826.03
 Expiration Date 03/14/2024
 By 
 Miami-Dade Product Control

Revision: UPDATES FOR 2020 FBC.
 UPDATED MANUFACTURING
 ADDRESS.

WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20
		By	ERIN KOSS
TUBE MULLIONS (LM) - 1"x4", 2"x4", 2"x6", 2"x8"		DWG No.	TUBE-LMI-NOA
GENERAL NOTES		Sheet	1 OF 9
MULLION		Series	

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATIONS
3	CHARTS
4-9	INSTALLATION DETAILS & COMPONENTS





APPROVED CONFIGURATIONS

TWIN AND TRIPLE UNITS ARE SHOWN. UNLIMITED NUMBER OF UNITS MAY BE MULLED TOGETHER AS LONG AS UNIT SIZES DO NOT EXCEED SIZES SHOWN HEREIN AND MULLION IS ANCHORED AS SHOWN IN INSTALLATION DETAILS
MULLION MAY BE USED HORIZONTALLY

NOTE:

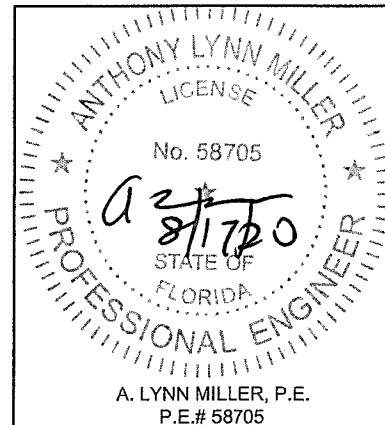
1. COMBINED WIDTH= W1 + W2 + MULLION WIDTH
2. TRIBUTARY WIDTH= (W1 + W2)/2

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By
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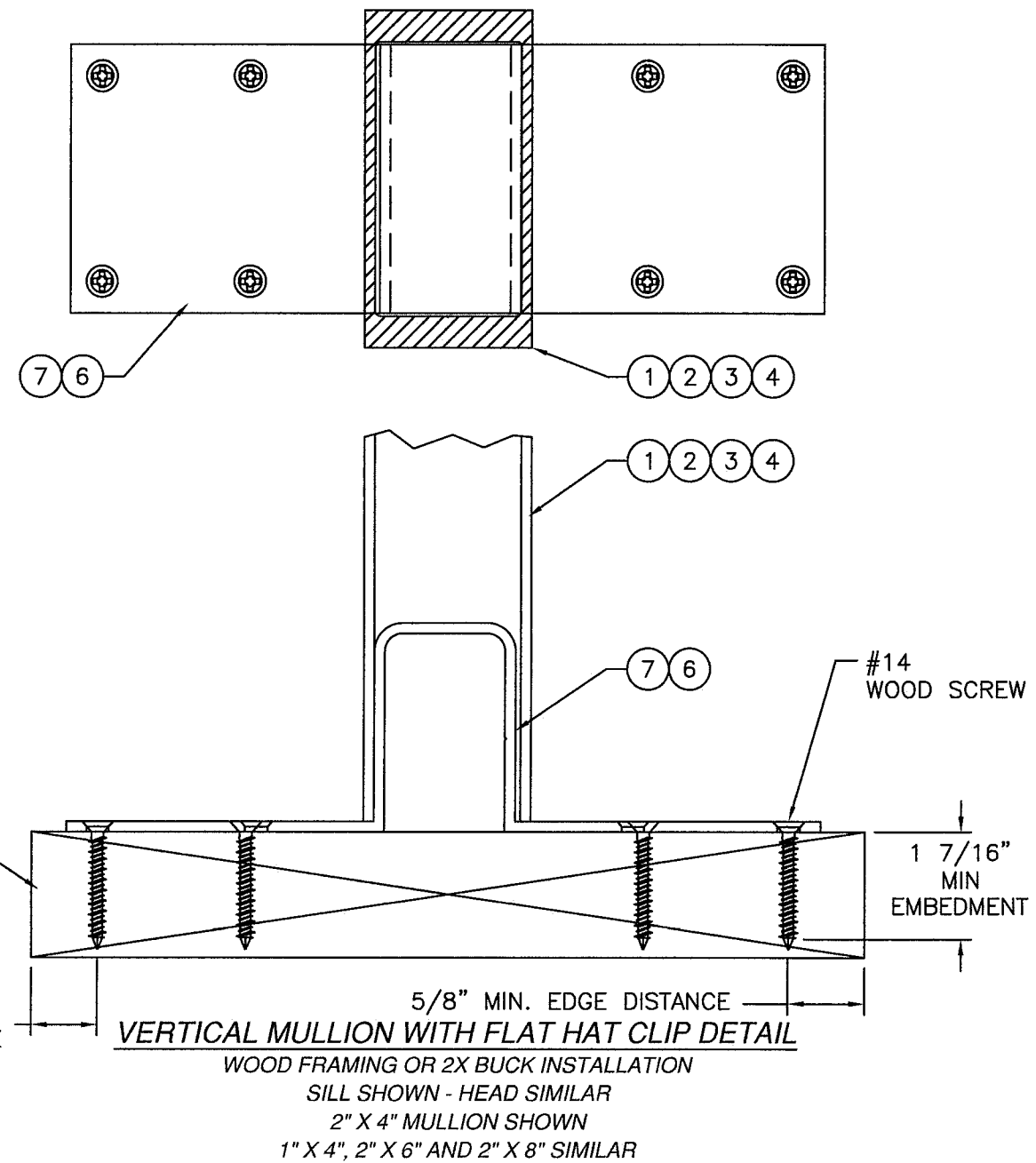
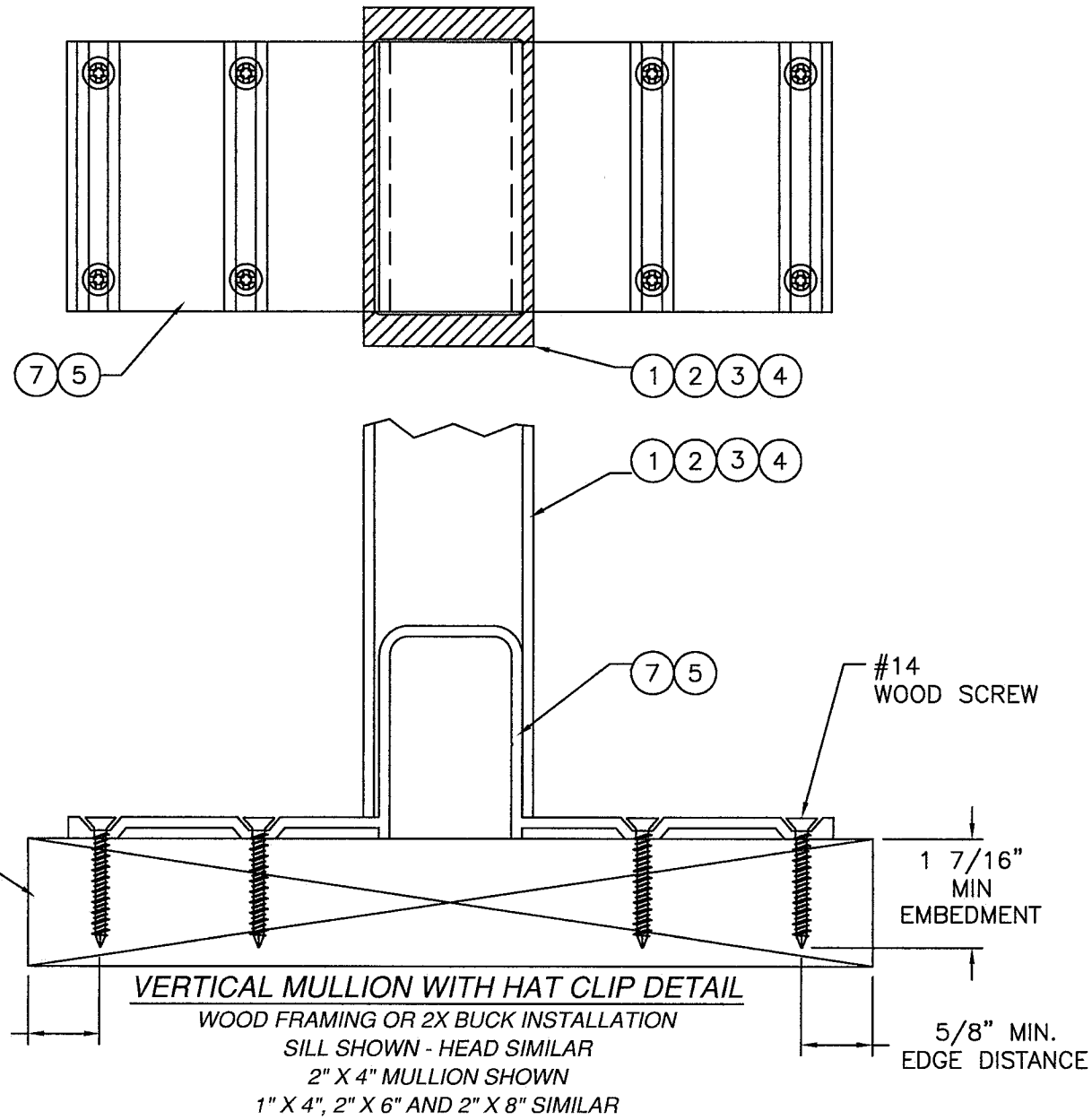
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Revision:

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20
	By	ERIN KOSS
WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	DWG No.	TUBE-LMI-NOA
	Sheet	2 OF 9
Series	ELEVATIONS	
Desc.	MULLION	



A. LYNN MILLER, P.E.
P.E.# 58705

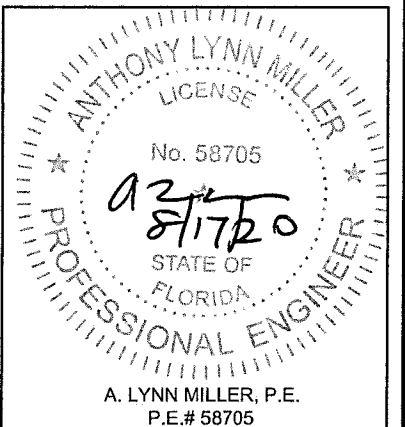


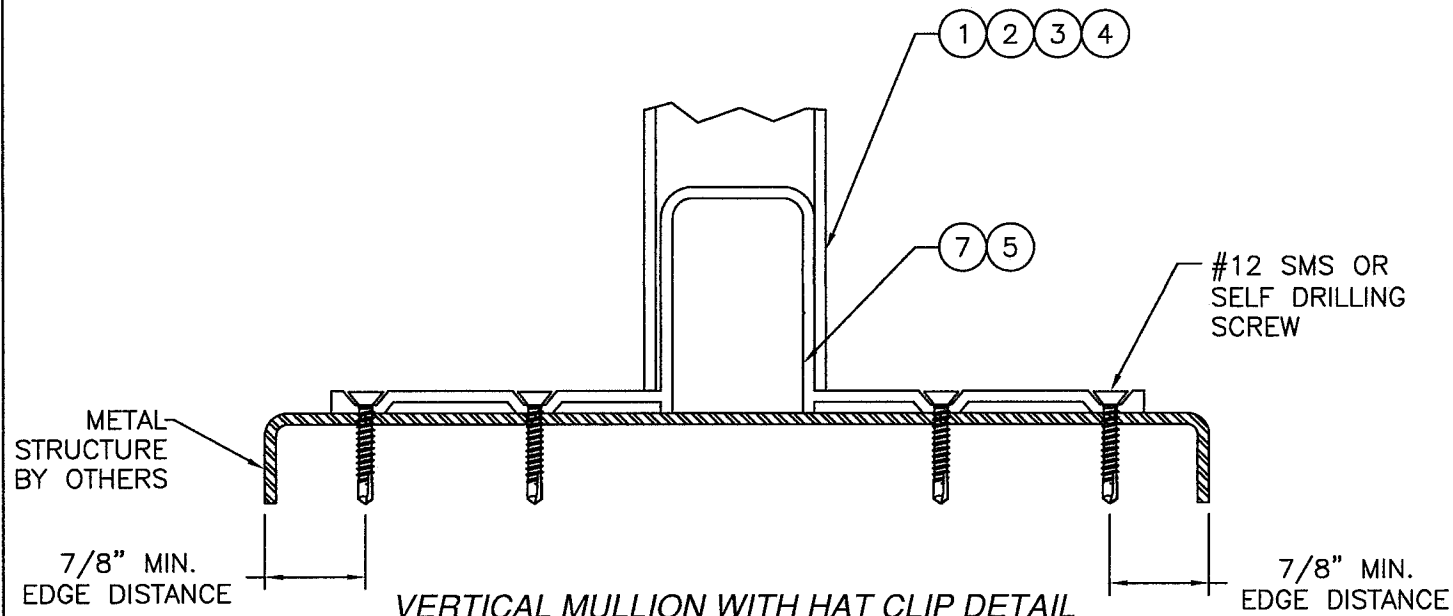
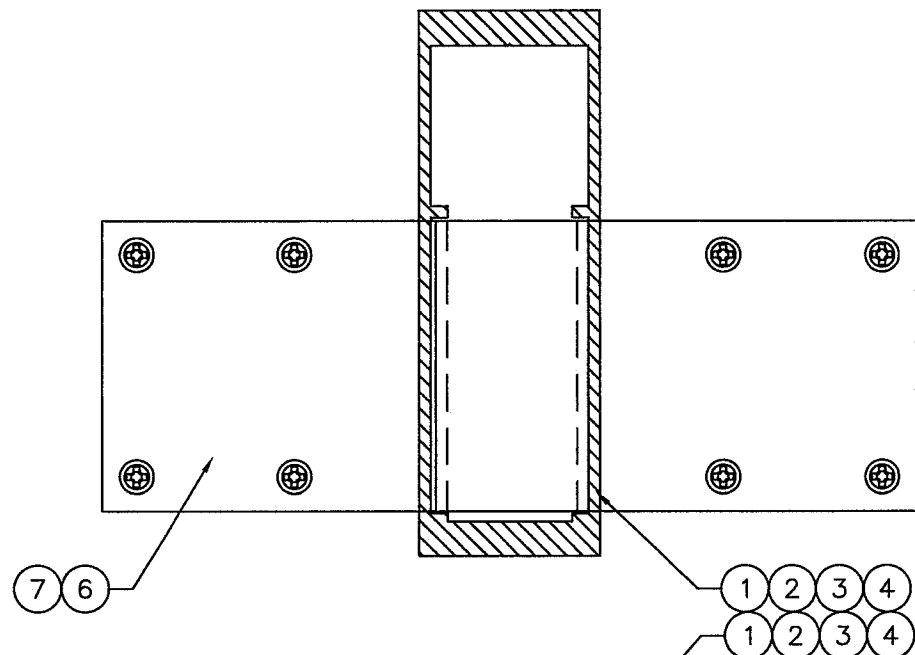
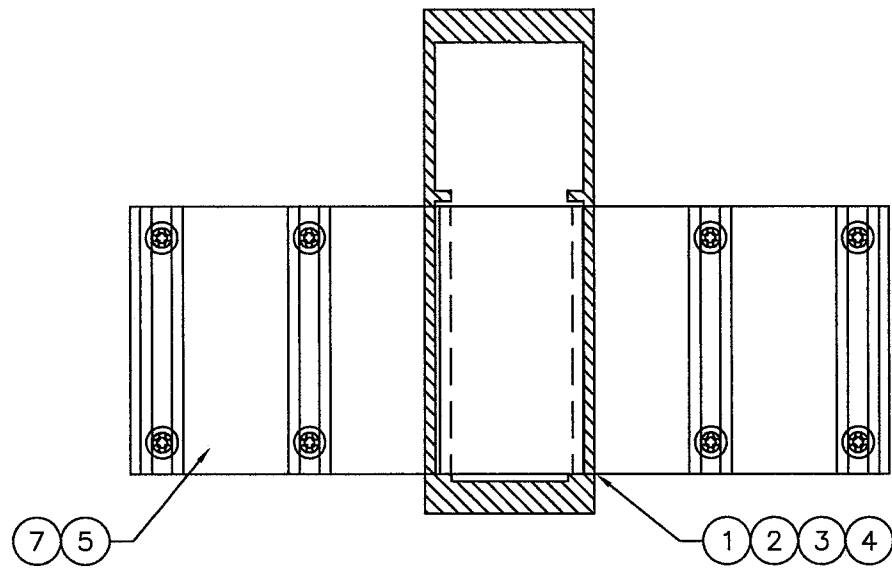
PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.03
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By 
Miami-Dade Product Control

NO CHANGE THIS SHEET.

Revision:

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20	Rev.	
	Drawn	ERIN KOSS	Rev.	
WINDOOR INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	TUBE MULLIONS (LM) - 1"x4", 2"x4", 2"x6", 2"x8" INSTALLATION DETAILS - WOOD	4 OF 9	Sheet	TUBE-LMI-NOA
			Series	MULLION





7/8" MIN. EDGE DISTANCE

VERTICAL MULLION WITH HAT CLIP DETAIL

METAL STRUCTURE INSTALLATION
SILL SHOWN - HEAD SIMILAR
2" X 6" MULLION SHOWN
1" X 4", 2" X 4" AND 2" X 8" SIMILAR

METAL STRUCTURE BY OTHERS


7/8" MIN. EDGE DISTANCE

VERTICAL MULLION WITH FLAT HAT CLIP DETAIL

METAL STRUCTURE INSTALLATION
SILL SHOWN - HEAD SIMILAR
2" X 6" MULLION SHOWN
1" X 4", 2" X 4" AND 2" X 8" SIMILAR

#12 SMS OR SELF DRILLING SCREW

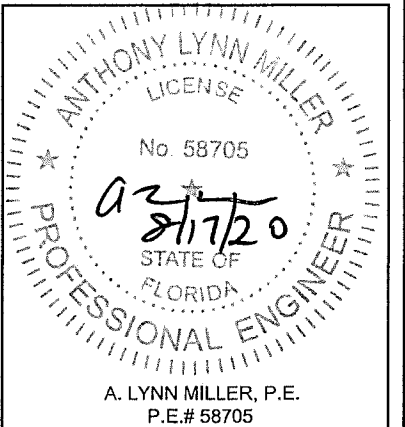
7/8" MIN. EDGE DISTANCE

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By 
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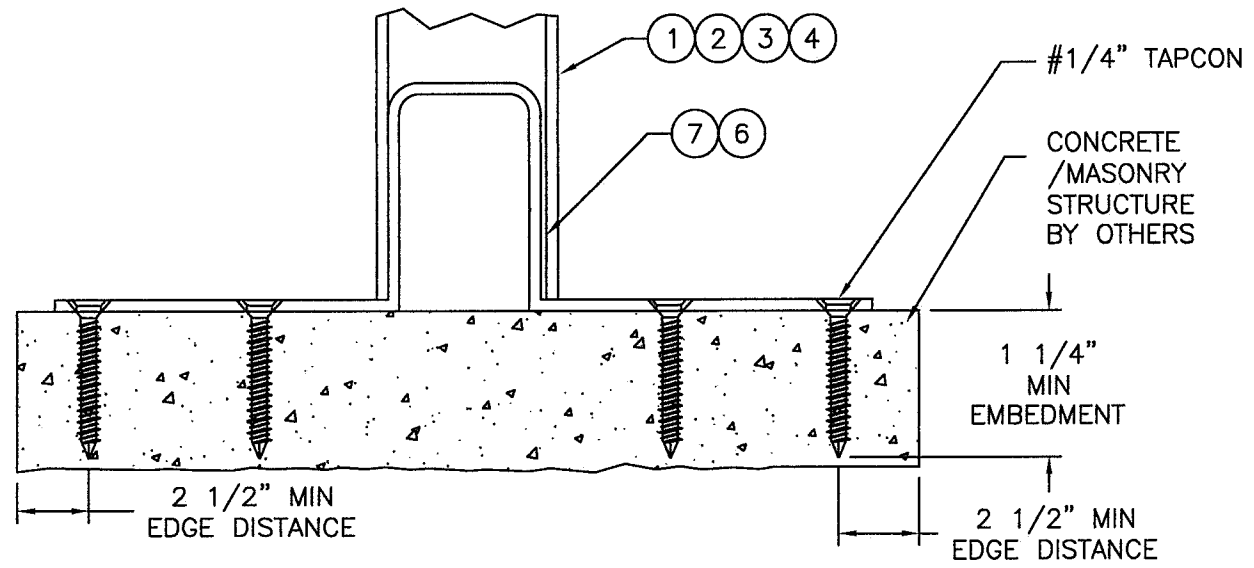
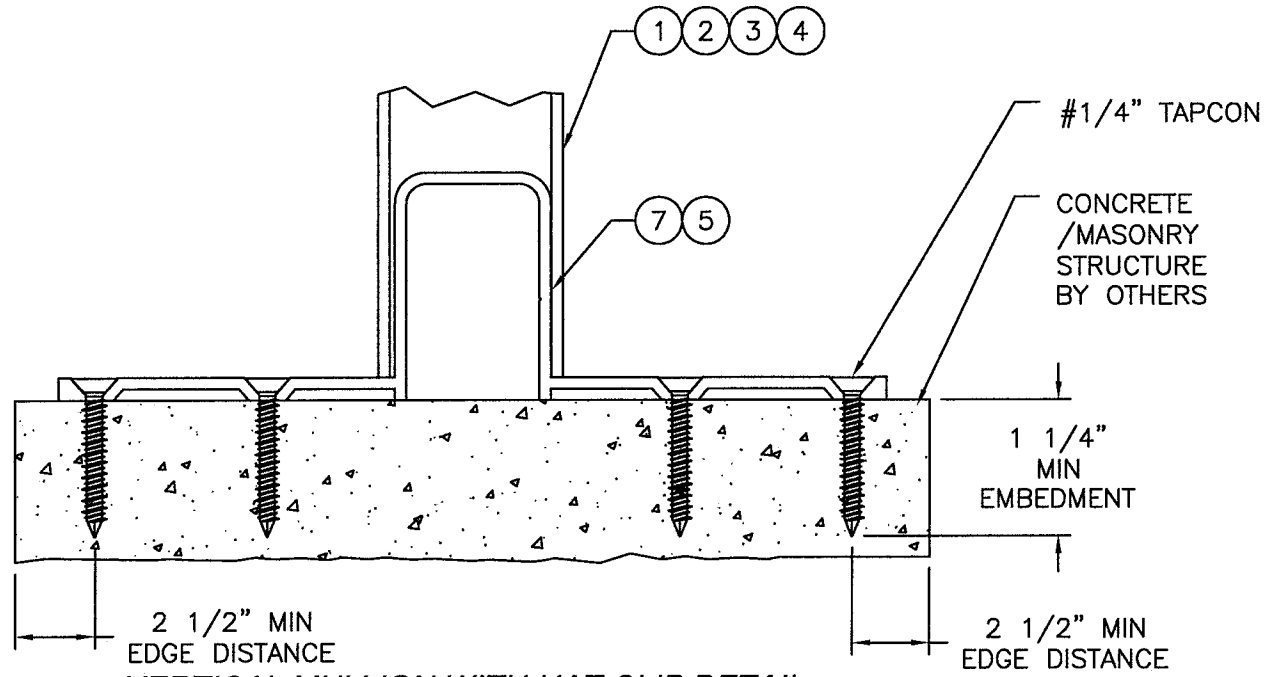
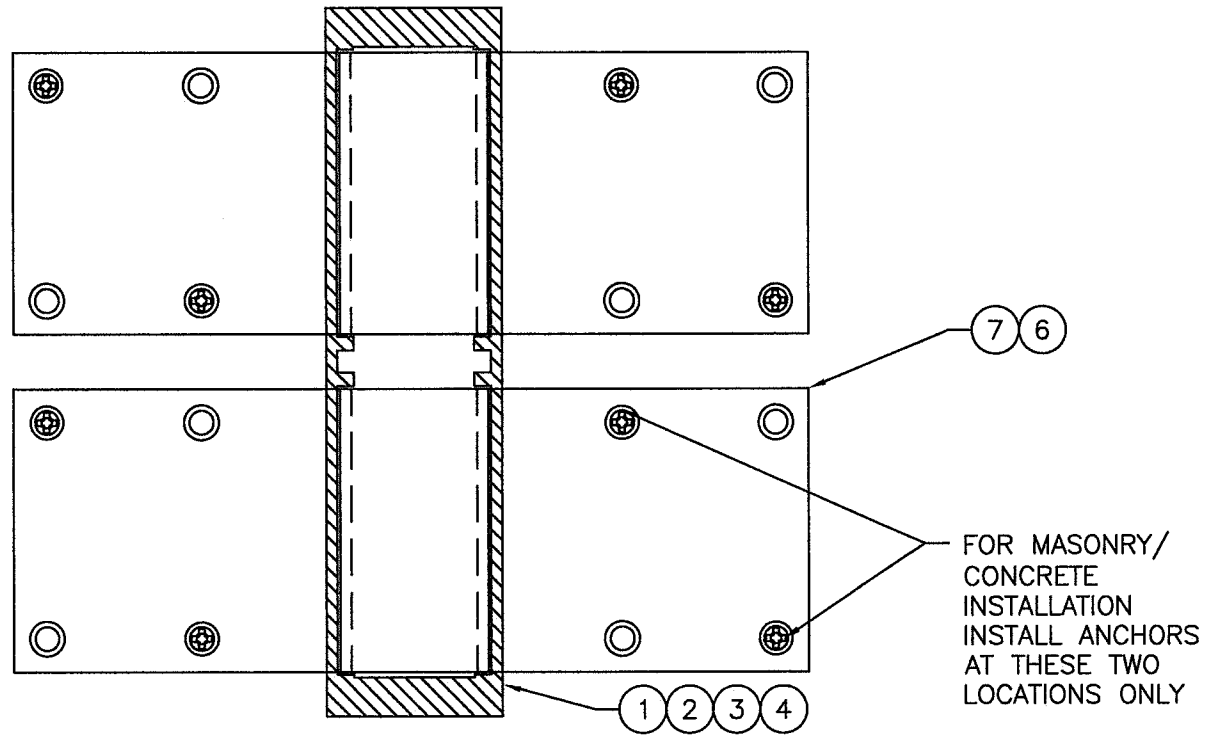
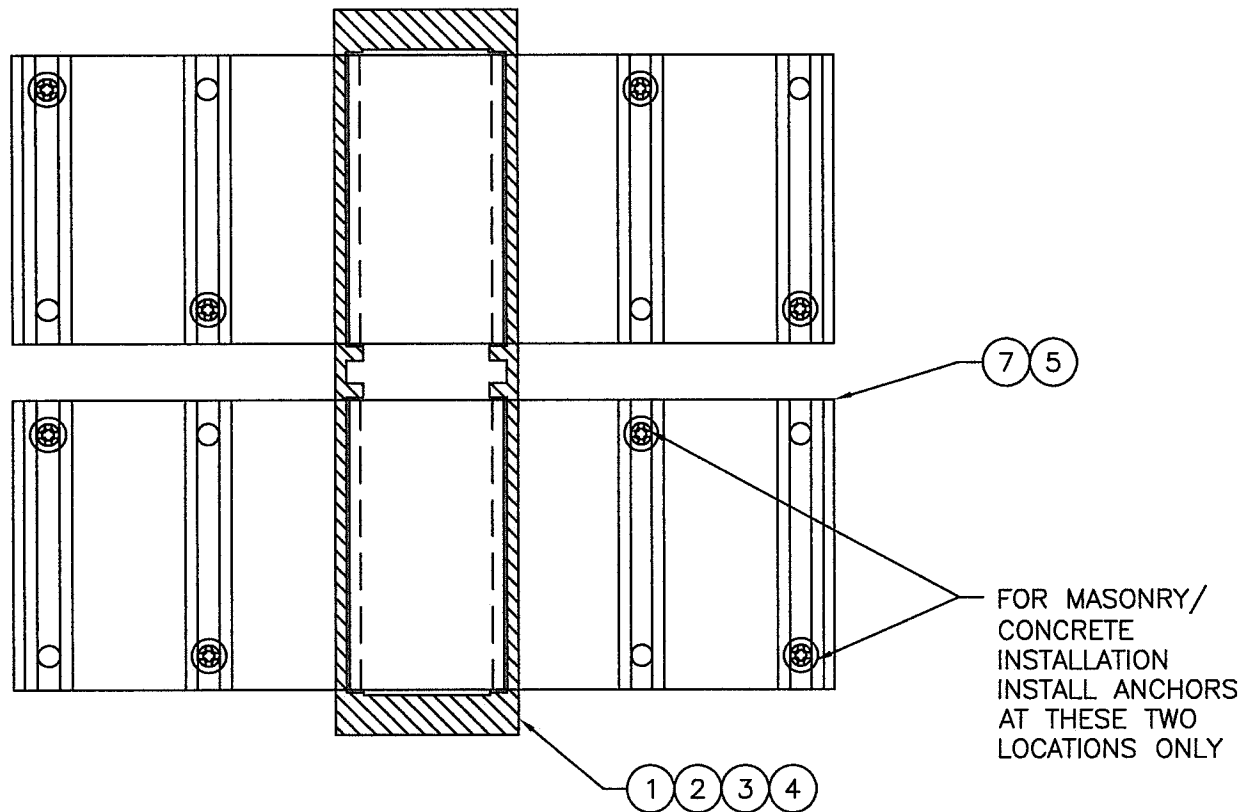
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Revision:

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20	Drawn By ERIN KOSS TUBE-LMI-NOA	Rev.
	WINDOOR [®] INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	Tube Mullions (LM) - 1"x4", 2"x4", 2"x6", 2"x8" INSTALLATION DETAILS - METAL MULLION		5 OF 9
				Sheet



A. LYNN MILLER, P.E.
P.E.# 58705



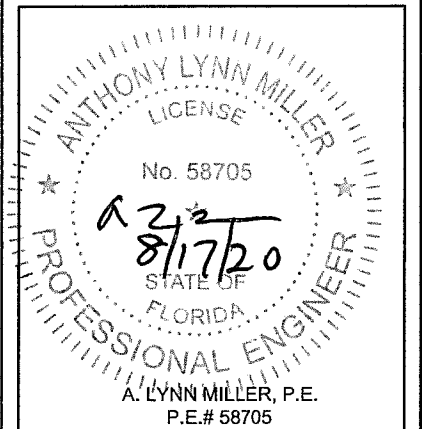
VERTICAL MULLION WITH HAT CLIP DETAIL
 CONCRETE/MASONRY INSTALLATION
 SILL SHOWN - HEAD SIMILAR
 2" X 8" MULLION SHOWN
 1" X 4", 2" X 4" AND 2" X 6" SIMILAR

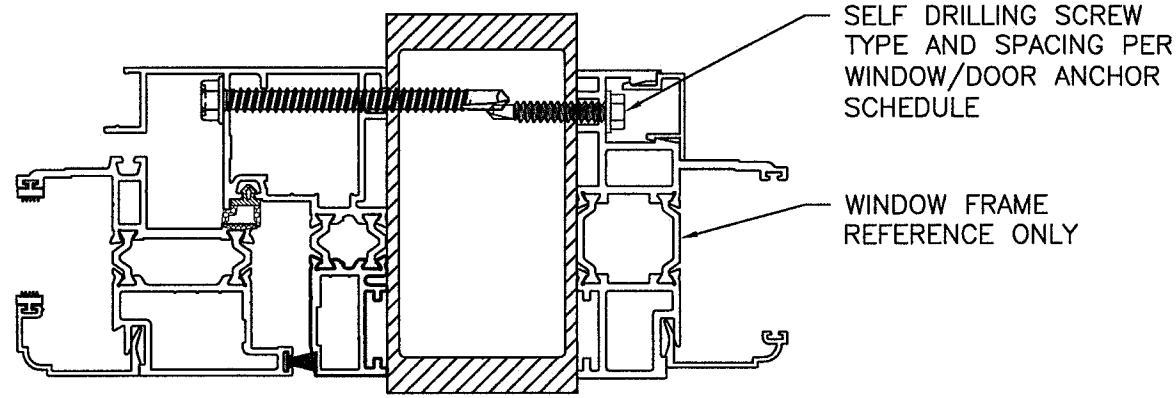
VERTICAL MULLION WITH FLAT HAT CLIP DETAIL
 CONCRETE/MASONRY INSTALLATION
 SILL SHOWN - HEAD SIMILAR
 2" X 8" MULLION SHOWN
 1" X 4", 2" X 4" AND 2" X 6" SIMILAR

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 as complying with the Florida
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 NOA-No. 20-0826.03
 Expiration Date 03/14/2024
 By *[Signature]*
 Miami-Dade Product Control

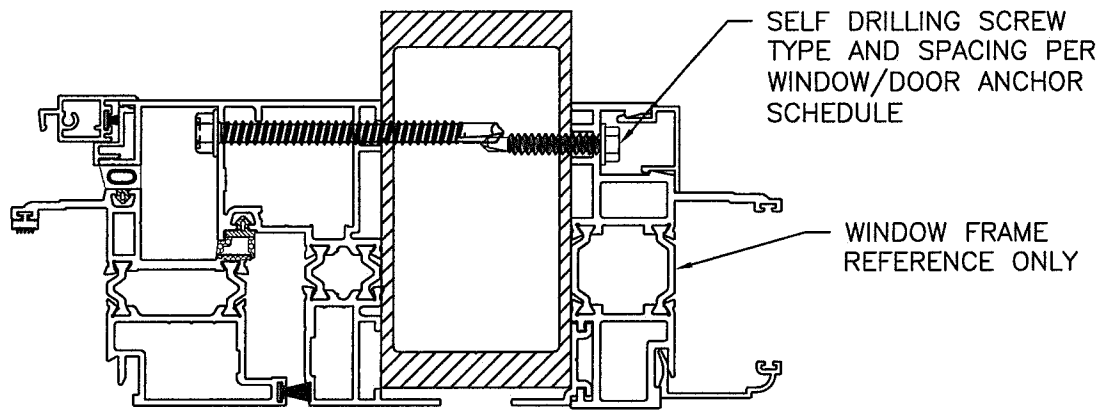
Revision: NO CHANGE THIS SHEET.

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20
	By	ERIN KOSS
WINDOOR INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	DWG No.	TUBE-LMI-NOA
	Sheet	6 OF 9
Series	MULLION	
Desc.	INSTALLATION DETAILS - MASONRY	
Title	TUBE MULLIONS (LM) - 1"x4", 2"x4", 2"x6", 2"x8"	





WINDOW TO MULLION FLUSH INSTALLATION DETAIL
 WINDOW FRAME SHOWN FOR DETAIL PURPOSES ONLY, MULLION IS NOT LIMITED TO THIS PRODUCT



WINDOW TO MULLION FLANGE INSTALLATION DETAIL
 WINDOW FRAME SHOWN FOR DETAIL PURPOSES ONLY, MULLION IS NOT LIMITED TO THIS PRODUCT

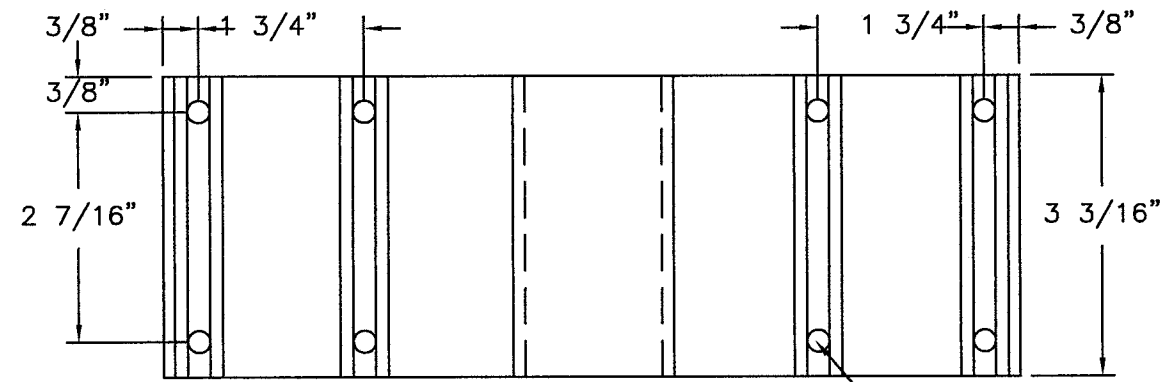
EXTERIOR
 ↓

PRODUCT REVISED
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 Expiration Date 03/14/2024
 By *[Signature]*
 Miami-Dade Product Control

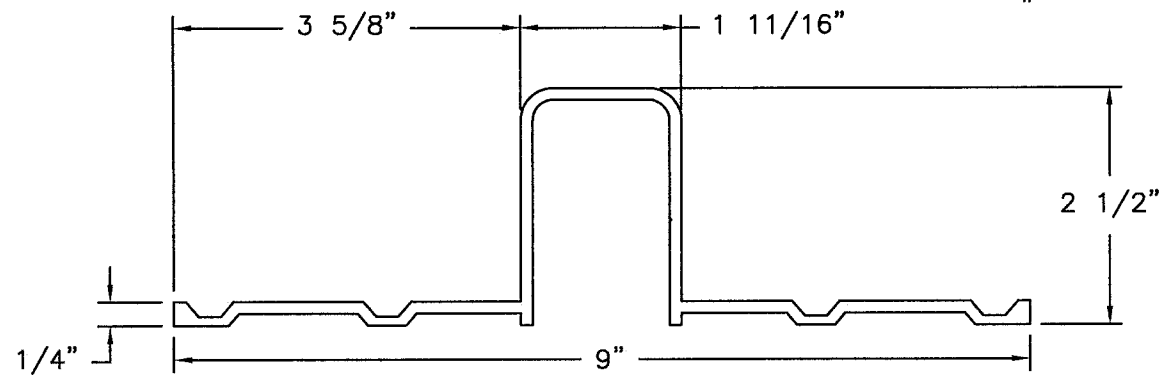
Revision:
 NO CHANGE THIS SHEET.

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20	Drawn By ERIN KOSS TUBE-LMI-NOA	Rev.
	DWG No.	7 OF 9		Sheet
WINDOOR [®] INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	TUBE MULLIONS (LM) - 1"x4", 2"x4", 2"x6", 2"x8" INSTALLATION DETAILS - WINDOW TO MULLION MULLION	Desc. Title	Series	7 OF 9 Sheet

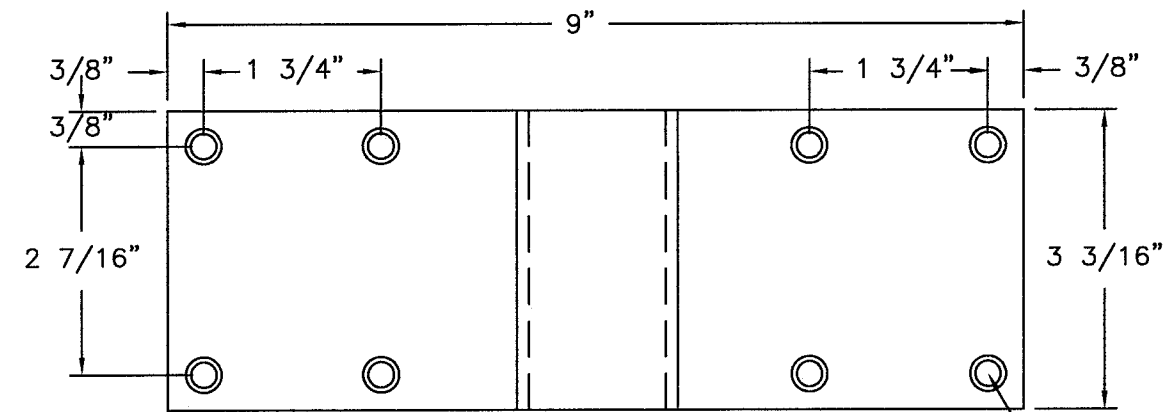
ANTHONY LYNN MILLER
 LICENSE
 No. 58705
[Signature]
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
 A. LYNN MILLER, P.E.
 P.E.# 58705



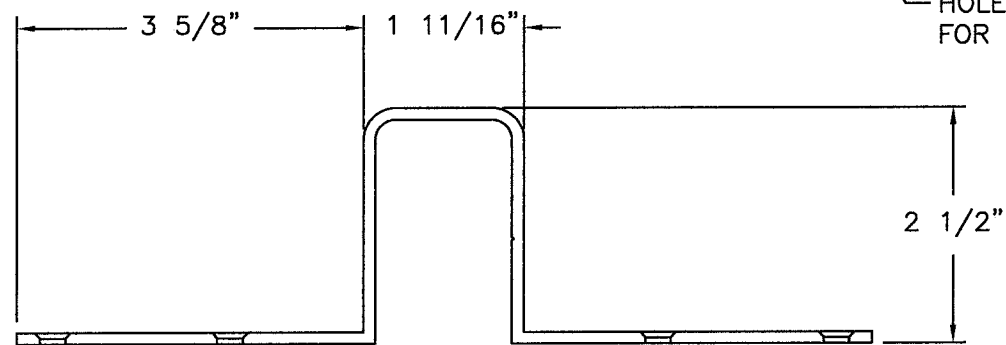
HOLES ARE FOR #14 SCREW



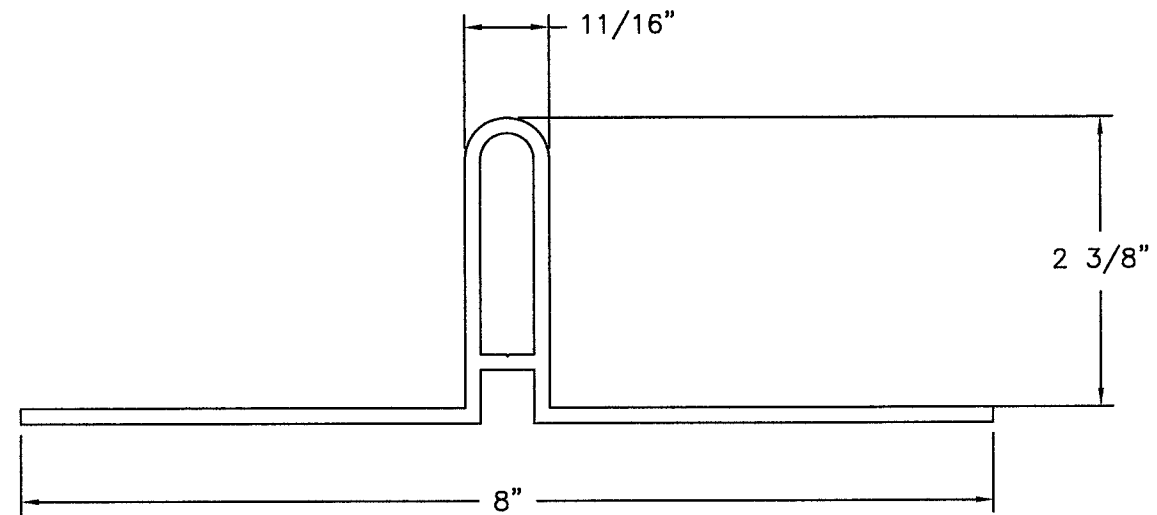
⑤ HAT CLIP 11008482
ALUMINUM 6063-T6 .125" THICK




HOLES ARE CSK FOR #14 SCREW



⑥ FLAT HAT CLIP 11008611
ALUMINUM 6063-T6 .125" THICK



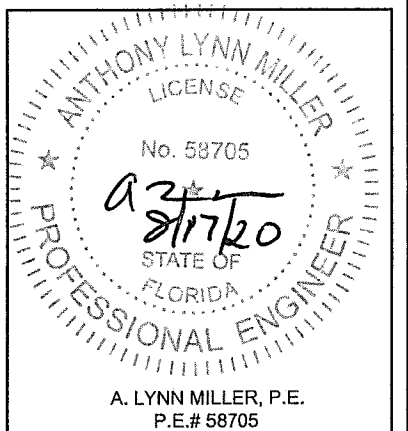
⑦ 1" FLAT HAT CLIP 12010442
ALUMINUM 6063-T6 .125" THICK

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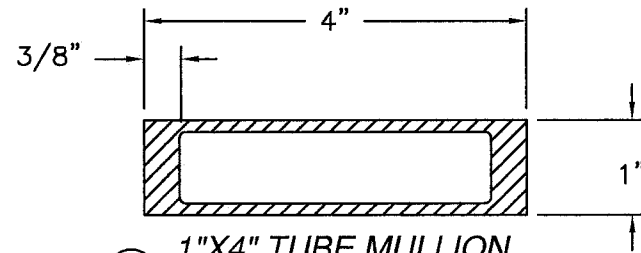
Revision:

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20	ERIN KOSS	Rev
	By			
WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	TUBE MULLIONS (LM) - 1"x4", 2"x4", 2"x6", 2"x8"	EXTRUSIONS	MULLION	DWG No
				TUBE-LMI-NOA
8 OF 9			Sheet	
Series Desc: Title				

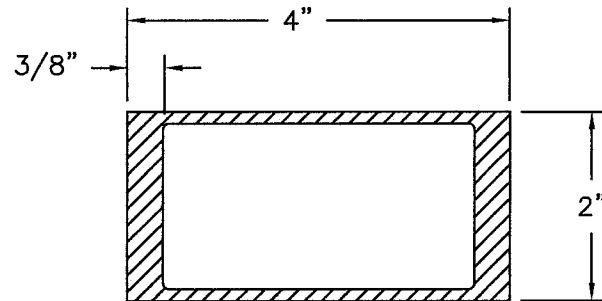


BILL OF MATERIALS

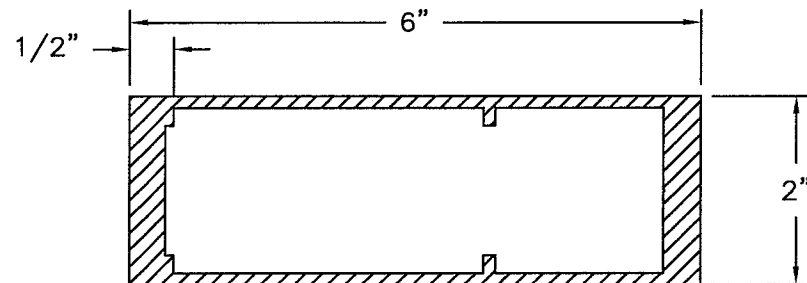
ITEM NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	FH06692	1" X 4" TUBE MULLION	KEYMARK	ALUMINUM 6063-T6
2	FH08517	2" X 4" TUBE MULLION	KEYMARK	ALUMINUM 6063-T6
3	FH08518	2" X 6" TUBE MULLION	KEYMARK	ALUMINUM 6063-T6
4	FH08519	2" X 8" TUBE MULLION	KEYMARK	ALUMINUM 6063-T6
5	11008482	HAT CLIP	KEYMARK	ALUMINUM 6063-T6
6	11008611	FLAT CLIP	KEYMARK	ALUMINUM 6063-T6
7	12010442	1" FLAT HAT CLIP	KEYMARK	ALUMINUM 6063-T6



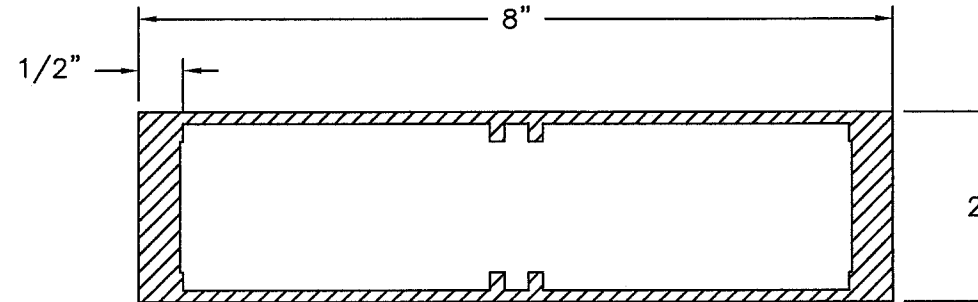
① **1"X4" TUBE MULLION**
ALUMINUM 6063-T6 .125" THICK
MOMENT OF INERTIA: 3.1958 IN⁴
SECTION MODULUS: 1.5963 IN³




② **2"X4" TUBE MULLION**
ALUMINUM 6063-T6 .125" THICK
MOMENT OF INERTIA: 5.668 IN⁴
SECTION MODULUS: 2.834 IN³



③ **FH08518 2"X6" TUBE MULLION**
ALUMINUM 6063-T6 .125" THICK
MOMENT OF INERTIA: 15.380 IN⁴
SECTION MODULUS: 5.123 IN³

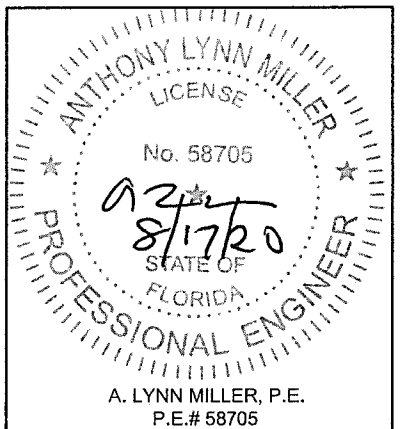


④ **FH08519 2"X8" TUBE MULLION**
ALUMINUM 6063-T6 .125" THICK
MOMENT OF INERTIA: 32.884 IN⁴
SECTION MODULUS: 8.221 IN³

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0826.03
Expiration Date 03/14/2024
By 
Miami-Dade Product Control

Revision: NO CHANGE THIS SHEET.

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	08/13/20
	By	ERIN KOSS
WINDOOR INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	DWG No.	TUBE-LMI-NOA
	Sheet	9 OF 9
Series	TUBE MULLIONS (LM) - 1"X4", 2"X4", 2"X6", 2"X8"	
Desc.	BOM & EXTRUSIONS	
Title	MULLION	



 ANTHONY LYNN MILLER
 LICENSE
 No. 58705
 8/17/20
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
 A. LYNN MILLER, P.E.
 P.E.# 58705