MIAMI–DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, FL 33175
T (786) 315–2590 F (786) 315–2599
www.miamidade.gov/economy

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

NOTICE OF ACCEPTANCE (NOA)

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: Series "9000 Thermally Broken Universal" Clipped Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **2 TB-LMI-NOA**, titled "2" x 4-1/8" Thermally Broken Mullion", sheets 1 through 16 of 16, dated 08/14/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control 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, 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 and renews NOA No. 18-0123.15** consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY APPROVED

S.Z.

10/01/2020

NOA No. 20-0826.02
Expiration Date: October 22, 2025
Approval Date: October 01, 2020

WinDoor, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA #14-0515.02

A. DRAWINGS

1. Manufacturer's die drawings and sections.

2. Drawing No. 08-02300, titled "Series 9000 Thermally Broken 2" x 4-1/8" Universal Mullion", sheets 1 through 14 of 14, dated 03/11/14, with revision B dated 12/07/17, prepared by manufacturer, signed and sealed by Luis R. Lomas, 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 a thermally broken aluminum mullion, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3995-02**, dated 03/05/15, signed and sealed by Gerard J. Ferrara, P.E.

C. CALCULATIONS:

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 05/06/14 revised on 10/06/15, prepared, signed and sealed by Luis R. Lomas, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Material Data Sheet for "Insulating profiles made of **PA 66 GF25 - dry impact resistant**, to fit into Technoform I-Strut™ Aluminum Standard Reglet.

2. Test report No. **ATI-61261.01-106-18**, prepared by Architectural Testing, Inc., dated 12/08/05, revised on 01/04/06, issued to **Technoform**, for their **I–Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D635–03** "Standard Test Method for Rate of Burning and/ or Extent and Time of Burning of Plastics in a Horizontal Position" and ASTM **D2843-99** "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", signed and sealed by Joseph A. Reed, P.E.

3. Test report No. **ETC-07-1043-19094.0**, prepared by ETC Laboratories, dated 02/18/08, issued to Technoform Bautec NA, Inc., for their **Technoform 18.6mm Flat I-Strut** comprised of 5.91% difference, per **ASTM D638-03** *"Standard Test Methods for Tensile Properties of Plastics"*, for exposed & unexposed sample per Xenon Arc after 4500 Hours, signed and sealed by Joseph Labora Doldan, P.E.

4. Test report No. **ETC-08-1043-20974.0**, prepared by ETC Laboratories, dated 07/01/08, issued to Technoform, for their **I-Strut Insulating Strip PA 66 GF25** passed, per **ASTM D1929-96** *"Standard Test Method for Ignition Properties of Plastics"*, signed and sealed by Joseph Labora Doldan, P.E.

Sifang Zhao, P.E.
Product Control Examiner
NOA No. 20-0826.02
Expiration Date: October 22, 2025
Approval Date: October 01, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS (CONTINUED)

5. Test report No. **ATI-60520.02-106-18**, prepared by Architectural Testing, Inc., dated 11/09/06, revised on 11/29/06, issued to **Ensinger, Inc.**, for their **Tecatherm 66 GF**, per **ASTM D635-03** "Standard Test Method for Rate of Burning and/ or Extent and Time of Burning of Plastics in a Horizontal Position" and ASTM **D2843-99** "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", **ASTM D638-03** *"Standard Test Methods for Tensile Properties of Plastics"*, for exposed & unexposed sample per Xenon Arc after 4500 Hours, **ASTM D1929-96** *"Standard Test Method for Ignition Properties of Plastics"*, signed by Joseph A. Reed, P.E.

F. STATEMENTS

1. Statement letter of conformance, complying with the FBC 6th Edition (2017) and of no financial interest, dated 12/07/17, signed and sealed by Luis R. Lomas, P.E.

G. OTHERS

1. None.

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 2 TB-LMI-NOA, titled "2" x 4-1/8" Thermally Broken Mullion", sheets 1 through 16 of 16, dated 08/14/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS

1. None.

C. CALCULATIONS:

1. Anchor verification calculations, complying with **FBC 6th Edition (2017)**, dated 12/07/17, prepared, signed and sealed by Luis R. Lom as, P.E.

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, complying with FBC 6th Edition (2017) and with FBC 7th Edition (2020), and of no financial interest, dated 08/17/2020, signed and sealed by Anthony Lynn Miller, P.E.

2. Statement letter of successor engineer per 61G15-27.001 Florida Administrative Code.

G. OTHERS

1. Notice of Acceptance No. **18-0123.15**, issued to WinDoor, Inc., for their Series "9000 Thermally Broken Universal" Clipped Aluminum Tube Mullion -L.M.I.", approved on 03/01/18 and expiring on 10/22/20.

Sifang Zhao, P.E.
Product Control Examiner
NOA No. 20-0826.02
Expiration Date: October 22, 2025
Approval Date: October 01, 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 UP TO WIND ZONE 4 AND HVHZ.
5. DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
6. SINGLE WINDOWS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. WINDOWS 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 WINDOW OR DOOR 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. VERTICAL AND HORIZONTAL MULLION INSTALLATION IS SHOWN.

ANCHORING NOTES:

1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/16" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
2. FOR ANCHORING INTO CONCRETE USE 1/4" ITW TAPCON WITH ADVANCED THREAD FROM TECHNOLOGY OR 1/4" CRETE-FREX SS4 WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" 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 GRADE 5 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 USE #10 GRADE 5 SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS 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 2,000 PSI.
   C. NORMAL WEIGHT MASONRY HOLLOW FILLED BLOCK PER AS ASTM C90 WITH F'm= 2,000 PSI MINIMUM.
   D. METAL STRUCTURE: STEEL 18GA (.048"), Fy= 33KSI/ Fu= 52KSI OR ALUMINUM 6063-T5 Fu= 30KSI 1/8" THICK MINIMUM

TABLE OF CONTENTS

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: UPDATES FOR 2020 FBC. UPDATED MANUFACTURING ADDRESS.

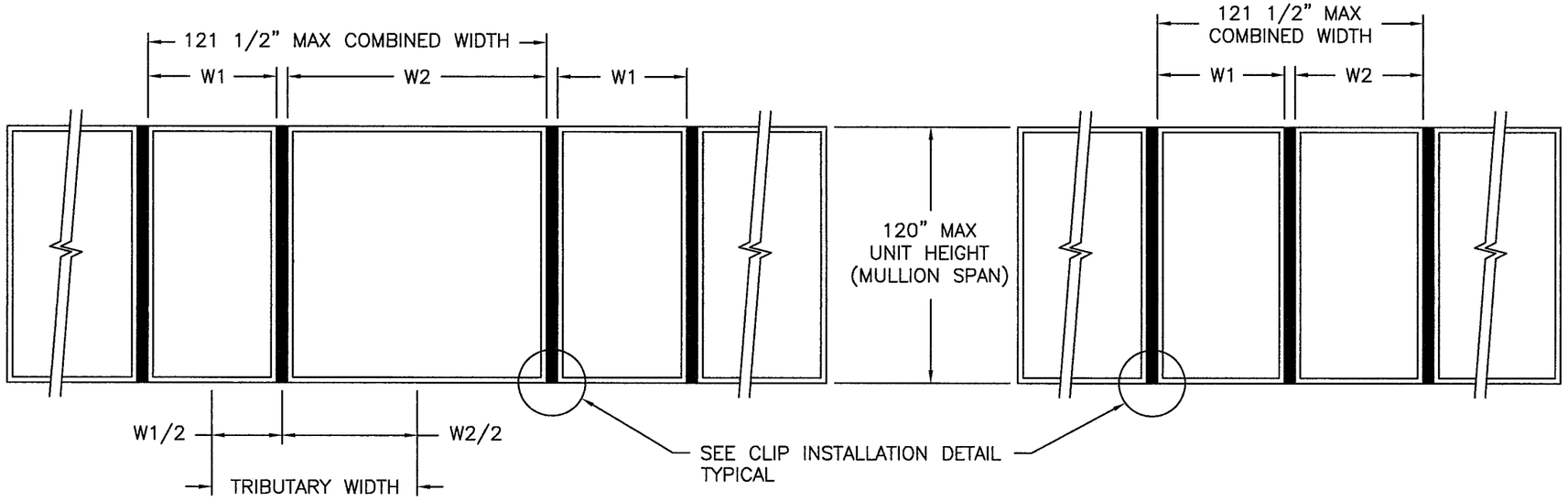
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	1 OF 16

Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: GENERAL NOTES
Series: MULLION

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



VERTICAL MULLION

SINGLE UNITS

SEE CHART #1 FOR RATINGS

CHART #1

Design pressure rating (psf)

Mullion span (in)	Tributary width (in)				
	36.00	***42.00***	***48.00***	***54.00***	***60.00***
48.00	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	150.0
72.00	150.0	150.0	150.0	149.1	143.8
78.00	150.0	150.0	139.8	130.2	122.7
84.00	143.9	126.8	114.6	105.8	99.3
90.00	115.8	101.7	91.5	84.0	78.4
96.00	94.7	82.9	74.3	67.9	63.1
102.00	78.4	68.5	61.2	55.8	51.6
108.00	65.7	57.2	51.1	46.4	42.8
114.00	55.6	48.4	43.1	39.0	35.9
120.00	47.5	41.2	36.6	33.2	30.4

IMPACT RATED UP TO WIND ZONE 4 & HVHZ

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
3. LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
4. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2)]/2. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0826.02
Expiration Date 10/22/2025
By
Miami–Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
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WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
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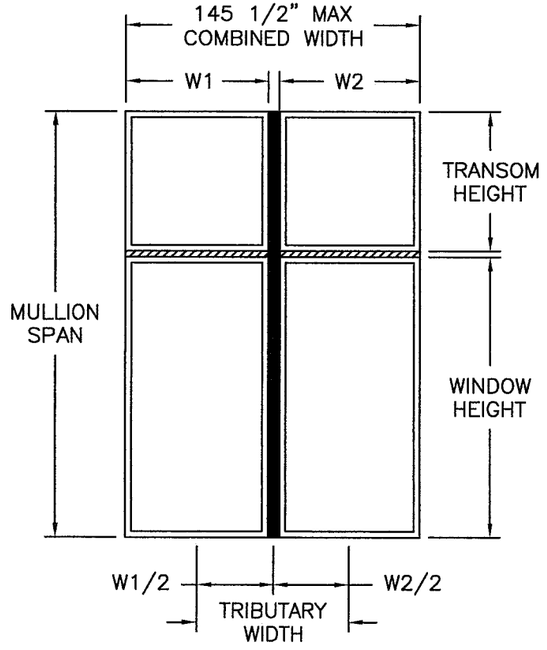
Rev.	Date	Drawn By	DWG No.	Sheet
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	2 OF 16

Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: SINGLE UNITS MULLED TO SINGLE UNITS
Series: MULLION

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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



VERTICAL MULLION

TWIN UNITS WITH TWIN TRANSOMS
SEE CHARTS #2, #3, #4, #5 AND #6 FOR RATINGS

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
3. LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
4. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2)]/2. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

CHART #4

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			36.00	42.00	48.00	54.00	60.00	66.00	72.00
84.00	36.00	48.00	76.3	68.2	62.1	57.2	53.0	49.3	46.2
90.00	42.00	48.00	69.9	62.5	57.0	52.6	48.7	45.4	42.6
96.00	48.00	48.00	64.5	57.5	52.4	48.4	44.9	41.9	39.3
102.00	54.00	48.00	59.9	53.3	48.4	44.6	41.5	38.8	36.4
108.00	60.00	48.00	55.9	49.6	44.9	41.3	38.4	36.0	33.8
114.00	66.00	48.00	52.4	45.7	40.6	36.7	33.6	31.0	28.8
120.00	72.00	48.00	44.6	38.8	34.5	31.1	28.4	26.3	24.4
126.00	78.00	48.00	38.1	33.2	29.5	26.6	24.3	22.4	20.9
132.00	84.00	48.00	32.8	28.5	25.3	22.9	20.9	19.3	17.9

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #2

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			36.00	42.00	48.00	54.00	60.00	66.00	72.00
72.00	36.00	36.00	93.2	83.9	76.3	69.9	64.5	59.9	55.9
78.00	42.00	36.00	83.9	75.4	68.7	63.1	58.4	54.3	50.7
84.00	48.00	36.00	76.3	68.2	62.1	57.2	53.0	49.3	46.2
90.00	54.00	36.00	69.9	62.3	56.6	52.0	48.3	45.0	42.2
96.00	60.00	36.00	64.5	57.4	51.9	47.6	44.2	41.3	38.7
102.00	66.00	36.00	59.9	53.1	47.9	43.9	40.6	37.9	35.6
108.00	72.00	36.00	55.9	49.5	44.5	40.7	37.6	35.0	32.9
114.00	78.00	36.00	50.6	44.2	39.4	35.7	32.8	30.4	28.5
120.00	84.00	36.00	42.8	37.3	33.3	30.2	27.7	25.7	24.0

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #5

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			36.00	42.00	48.00	54.00	60.00	66.00	72.00
90.00	36.00	54.00	69.9	62.3	56.6	52.0	48.3	45.0	42.2
96.00	42.00	54.00	64.5	57.5	52.3	48.2	44.7	41.8	39.2
102.00	48.00	54.00	59.9	53.3	48.4	44.6	41.5	38.8	36.4
108.00	54.00	54.00	55.9	49.6	44.9	41.4	38.6	36.1	33.9
114.00	60.00	54.00	52.4	46.0	40.9	36.9	33.7	31.1	28.9
120.00	66.00	54.00	45.0	39.1	34.8	31.4	28.7	26.4	24.6
126.00	72.00	54.00	38.6	33.5	29.8	26.9	24.5	22.6	21.0
132.00	78.00	54.00	33.3	28.9	25.7	23.1	21.1	19.5	18.1
138.00	84.00	54.00	28.9	25.1	22.3	20.1	18.3	16.9	15.7

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #3

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			36.00	42.00	48.00	54.00	60.00	66.00	72.00
78.00	36.00	42.00	83.9	75.4	68.7	63.1	58.4	54.3	50.7
84.00	42.00	42.00	76.3	68.5	62.5	57.5	53.3	49.6	46.4
90.00	48.00	42.00	69.9	62.5	57.0	52.6	48.7	45.4	42.6
96.00	54.00	42.00	64.5	57.5	52.3	48.2	44.7	41.8	39.2
102.00	60.00	42.00	59.9	53.3	48.3	44.3	41.2	38.5	36.1
108.00	66.00	42.00	55.9	49.6	44.8	41.1	38.1	35.6	33.4
114.00	72.00	42.00	51.7	45.1	40.1	36.3	33.2	30.8	28.7
120.00	78.00	42.00	43.8	38.2	34.0	30.7	28.1	26.0	24.3
126.00	84.00	42.00	37.4	32.6	29.0	26.2	24.0	22.2	20.7

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #6

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			36.00	42.00	48.00	54.00	60.00	66.00	72.00
96.00	36.00	60.00	64.5	57.4	51.9	47.6	44.2	41.3	38.7
102.00	42.00	60.00	59.9	53.3	48.3	44.3	41.2	38.5	36.1
108.00	48.00	60.00	55.9	49.6	44.9	41.3	38.4	36.0	33.8
114.00	54.00	60.00	52.4	45.9	40.8	36.9	33.7	31.1	28.8
120.00	60.00	60.00	45.1	39.2	34.8	31.4	28.7	26.5	24.6
126.00	66.00	60.00	38.8	33.7	29.9	27.0	24.6	22.7	21.1
132.00	72.00	60.00	33.6	29.1	25.8	23.3	21.3	19.6	18.2
138.00	78.00	60.00	29.2	25.3	22.5	20.2	18.4	17.0	15.8
144.00	84.00	60.00	25.5	22.1	19.6	17.7	16.1	-	-

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
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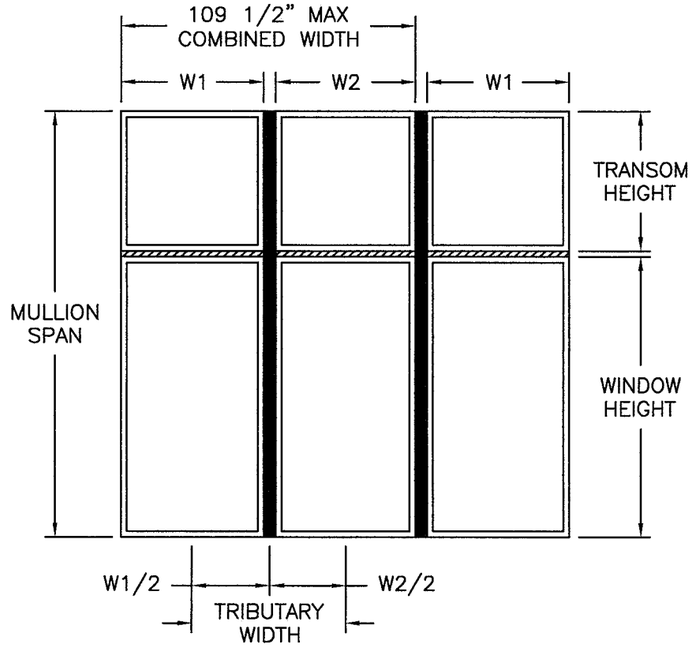
Rev.	Date	Drawn By	Sheet	DWG No.
	08/14/20	ERIN KOSS	3 OF 16	2 TB-LMI-NOA

Series: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: VERTICAL TWIN w/TRANSOM
Title: MULLION

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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



VERTICAL MULLION

TRIPLE UNITS WITH TRIPLE TRANSOMS

SEE CHARTS #7, #8, #9 AND #10 FOR RATINGS

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
3. LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
4. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2)]/2. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

CHART #7

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			18.00	24.00	30.00	36.00	42.00	48.00	54.00
54.00	36.00	18.00	120.0	120.0	120.0	120.0	117.7	106.5	97.3
60.00	42.00	18.00	120.0	120.0	120.0	113.7	101.7	92.4	84.6
66.00	48.00	18.00	120.0	120.0	115.7	100.2	89.1	80.9	74.3
72.00	54.00	18.00	120.0	120.0	103.8	89.5	79.3	71.7	65.8
78.00	60.00	18.00	120.0	113.7	94.1	80.9	71.4	64.3	58.9
84.00	66.00	18.00	120.0	104.3	86.0	73.7	64.9	58.4	53.3
90.00	72.00	18.00	120.0	96.3	79.3	67.8	59.6	53.4	48.6
96.00	78.00	18.00	115.7	89.5	73.5	62.7	55.0	49.2	44.7
102.00	84.00	18.00	108.2	83.5	68.5	58.4	51.1	45.7	41.4

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #8

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			18.00	24.00	30.00	36.00	42.00	48.00	54.00
60.00	36.00	24.00	120.0	120.0	120.0	117.1	104.9	95.0	86.8
66.00	42.00	24.00	120.0	120.0	117.7	102.7	91.9	83.5	76.6
72.00	48.00	24.00	120.0	120.0	105.4	91.5	81.5	74.0	68.0
78.00	54.00	24.00	120.0	114.4	95.4	82.5	73.2	66.2	60.8
84.00	60.00	24.00	120.0	104.9	87.2	75.1	66.4	59.9	54.9
90.00	66.00	24.00	120.0	96.8	80.2	69.0	60.8	54.7	50.0
96.00	72.00	24.00	115.7	89.9	74.3	63.7	56.1	50.3	45.9
102.00	78.00	24.00	108.2	83.9	69.2	59.2	52.0	46.6	42.4
108.00	84.00	24.00	101.7	78.6	64.7	55.3	48.5	43.4	39.4

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #9

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			18.00	24.00	30.00	36.00	42.00	48.00	54.00
66.00	36.00	30.00	120.0	120.0	118.4	104.3	93.6	85.0	77.7
72.00	42.00	30.00	120.0	120.0	106.0	92.8	83.2	75.7	69.4
78.00	48.00	30.00	120.0	114.4	95.9	83.5	74.6	67.8	62.3
84.00	54.00	30.00	120.0	104.9	87.5	76.0	67.6	61.2	56.2
90.00	60.00	30.00	120.0	96.8	80.5	69.7	61.8	55.8	51.1
96.00	66.00	30.00	115.7	89.9	74.6	64.3	56.9	51.2	46.8
102.00	72.00	30.00	108.2	83.9	69.4	59.7	52.7	47.4	43.2
108.00	78.00	30.00	101.7	78.6	64.9	55.8	49.1	44.1	40.1
114.00	84.00	30.00	92.4	70.7	57.7	49.1	43.0	38.5	35.0

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

CHART #10

Design pressure chart (psf)									
Mullion span (in)	Window Height (in)	Transom Height (in)	Tributary width (in)						
			18.00	24.00	30.00	36.00	42.00	48.00	54.00
72.00	36.00	36.00	120.0	120.0	106.0	93.2	83.9	76.3	69.9
78.00	42.00	36.00	120.0	114.4	95.9	83.9	75.4	68.7	63.1
84.00	48.00	36.00	120.0	104.9	87.5	76.3	68.2	62.1	57.2
90.00	54.00	36.00	120.0	96.8	80.5	69.9	62.3	56.6	52.0
96.00	60.00	36.00	115.7	89.9	74.6	64.5	57.4	51.9	47.6
102.00	66.00	36.00	108.2	83.9	69.4	59.9	53.1	47.9	43.9
108.00	72.00	36.00	101.7	78.6	64.9	55.9	49.5	44.5	40.7
114.00	78.00	36.00	95.8	73.1	59.6	50.6	44.2	39.4	35.7
120.00	84.00	36.00	81.1	61.9	50.4	42.8	37.3	33.3	30.2

IMPACT RATED UP TO WIND ZONE 4 AND HVHZ

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

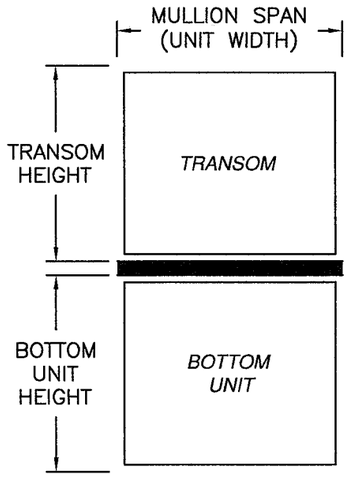
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet	Series
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	4 OF 16	MULLION

Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: VERTICAL TRIPLE w/TRIPLE TRANSOM

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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



DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE MULLION SPAN BASED ON PRODUCT TO BE INSTALLED.
3. TO DETERMINE MULLION RATING LOCATE MULLION SPAN COLUMN AND BOTTOM UNIT HEIGHT ROW. RATING FOR MULLION IS LOCATED AT INTERSECTION OF COLUMN (MULLION SPAN) AND ROW (BOTTOM UNIT HEIGHT).
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.

CHART 13
48" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (Unit width) (in)							
Bottom	Transom	**30.0**	**36.0**	**42.0**	**48.0**	**54.0**	**60.0**	**66.0**	**72.0**
48.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	157.3
54.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.1
60.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	173.6	150.3
66.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	172.8	148.6
72.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	172.8	148.0
78.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	172.8	148.0
84.0	**48.0**	175.0	175.0	175.0	175.0	175.0	175.0	172.8	148.0

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 11
36" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (Unit width) (in)							
Bottom	Transom	**30.0**	**36.0**	**42.0**	**48.0**	**54.0**	**60.0**	**66.0**	**72.0**
48.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	170.6
54.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	165.7
60.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	162.4
66.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	160.4
72.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	159.8
78.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	159.8
84.0	**36.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	159.8

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 12
42" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (Unit width) (in)							
Bottom	Transom	**30.0**	**36.0**	**42.0**	**48.0**	**54.0**	**60.0**	**66.0**	**72.0**
48.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	163.0
54.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	158.5
60.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	155.5
66.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.7
72.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.1
78.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.1
84.0	**42.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.1

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 14
54" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (Unit width) (in)							
Bottom	Transom	**30.0**	**36.0**	**42.0**	**48.0**	**54.0**	**60.0**	**66.0**	**72.0**
48.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	175.0	153.1
54.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	172.1	149.1
60.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.9	146.4
66.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.2	144.8
72.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.2	144.3
78.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.2	144.3
84.0	**54.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.2	144.3

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 15
60" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (Unit width) (in)							
Bottom	Transom	**30.0**	**36.0**	**42.0**	**48.0**	**54.0**	**60.0**	**66.0**	**72.0**
48.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	173.6	150.3
54.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	169.9	146.4
60.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	167.8	143.8
66.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	167.1	142.3
72.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	167.1	141.8
78.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	167.1	141.8
84.0	**60.0**	175.0	175.0	175.0	175.0	175.0	175.0	167.1	141.8

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
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REGISTRATION #29296

WINDOOR® INCORPORATED
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104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: HORIZONTAL SINGLE w/TRANSOM
Series: MULLION
Sheet: 5 OF 16
DWG No.: 2 TB-LMI-NOA
Drawn By: ERIN KOSS
Date: 08/14/20
Rev.

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

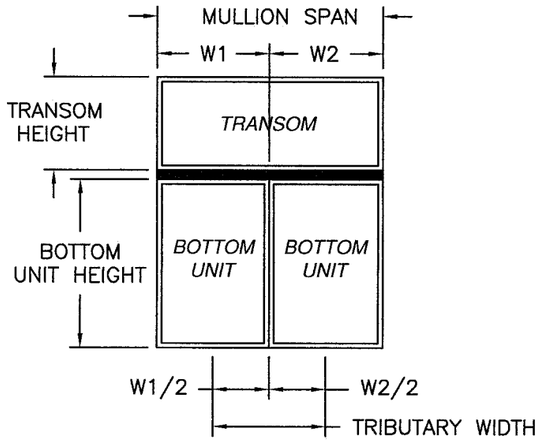

CHART 16
36" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)						
		72.00	84.00	96.00	108.00	120.00	132.00	144.00
		Tributary width (in)						
Window	Transom	36.00	42.00	48.00	54.00	60.00	66.00	72.00
48.00	36.00	167.8	123.1	80.9	56.0	40.3	30.0	23.0
54.00	36.00	159.4	115.9	76.3	52.8	38.0	28.2	21.6
60.00	36.00	149.1	108.6	72.2	50.0	35.9	26.7	20.4
66.00	36.00	140.1	102.1	68.5	47.4	34.2	25.4	19.3
72.00	36.00	132.1	96.3	65.2	45.2	32.5	24.2	18.4
78.00	36.00	124.9	91.1	62.1	43.1	31.1	23.1	17.6
84.00	36.00	118.5	86.5	59.4	41.2	29.7	22.1	16.9

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 17
42" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)						
		72.00	84.00	96.00	108.00	120.00	132.00	144.00
		Tributary width (in)						
Window	Transom	36.00	42.00	48.00	54.00	60.00	66.00	72.00
48.00	42.00	160.4	116.4	76.2	52.6	37.9	28.2	21.5
54.00	42.00	152.0	110.0	72.1	49.8	35.8	26.6	20.3
60.00	42.00	142.6	103.4	68.5	47.3	34.0	25.2	19.3
66.00	42.00	134.3	97.5	65.1	45.0	32.4	24.0	18.3
72.00	42.00	126.9	92.2	62.1	43.0	30.9	23.0	17.5
78.00	42.00	120.3	87.4	59.4	41.1	29.6	22.0	16.8
84.00	42.00	114.4	83.2	56.9	39.4	28.4	21.1	16.1

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 18
48" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)						
		72.00	84.00	96.00	108.00	120.00	132.00	144.00
		Tributary width (in)						
Window	Transom	36.00	42.00	48.00	54.00	60.00	66.00	72.00
48.00	48.00	154.9	110.9	72.4	49.9	35.8	26.6	20.3
54.00	48.00	146.1	105.1	68.7	47.3	34.0	25.2	19.2
60.00	48.00	137.4	99.1	65.4	45.0	32.3	24.0	18.3
66.00	48.00	129.7	93.7	62.3	43.0	30.9	22.9	17.4
72.00	48.00	122.8	88.8	59.6	41.1	29.5	21.9	16.7
78.00	48.00	116.6	84.3	57.0	39.4	28.3	21.0	16.0
84.00	48.00	111.0	80.4	54.7	37.8	27.2	20.2	15.4

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 19
54" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)						
		72.00	84.00	96.00	108.00	120.00	132.00	144.00
		Tributary width (in)						
Window	Transom	36.00	42.00	48.00	54.00	60.00	66.00	72.00
48.00	54.00	150.8	106.6	69.2	47.5	34.1	25.3	19.3
54.00	54.00	141.7	101.2	65.8	45.2	32.4	24.0	18.3
60.00	54.00	133.5	95.6	62.8	43.1	30.9	22.9	17.4
66.00	54.00	126.2	90.5	60.0	41.2	29.6	21.9	16.7
72.00	54.00	119.7	85.9	57.4	39.5	28.3	21.0	16.0
78.00	54.00	113.8	81.8	55.0	37.9	27.2	20.2	15.4
84.00	54.00	108.4	78.0	52.9	36.5	26.2	19.4	14.8

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 20
60" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)						
		72.00	84.00	96.00	108.00	120.00	132.00	144.00
		Tributary width (in)						
Window	Transom	36.00	42.00	48.00	54.00	60.00	66.00	72.00
48.00	60.00	147.3	103.3	66.7	45.6	32.6	24.1	18.4
54.00	60.00	138.5	98.1	63.5	43.4	31.0	23.0	17.5
60.00	60.00	130.7	92.8	60.6	41.5	29.7	21.9	16.7
66.00	60.00	123.7	88.0	58.0	39.8	28.4	21.0	16.0
72.00	60.00	117.4	83.6	55.6	38.2	27.3	20.2	15.3
78.00	60.00	111.7	79.7	53.4	36.7	26.3	19.4	14.8
84.00	60.00	106.6	76.1	51.3	35.3	25.3	18.7	14.2

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.
7. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2)]/2. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

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NOA-No. 20-0826.02
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Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	Title	Desc.	Series	Sheet	DWG No.
2 TB-LMI-NOA	08/14/20	ERIN KOSS	2x4-1/8" THERMALLY BROKEN MULLION (LM)	HORIZONTAL TWIN w/TRANSOM	MULLION	6 OF 16	

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/17/20

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

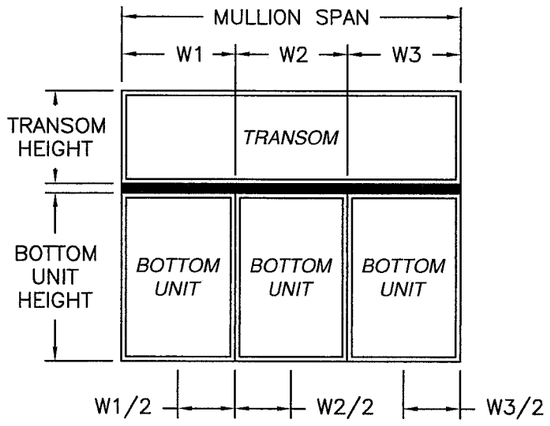

CHART 23
48" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)				
		72.00	*84.00*	*96.00*	*108.00*	*120.00*
Bottom unit	Transom	Tributary width (in)				
		24.00	*28.00*	*32.00*	*36.00*	*40.00*
48.00	*48.00*	148.0	109.9	72.2	50.0	36.1
54.00	*48.00*	139.8	103.4	68.1	47.2	34.1
60.00	*48.00*	132.5	97.7	64.4	44.6	32.2
66.00	*48.00*	125.8	92.6	61.0	42.4	30.6
72.00	*48.00*	119.8	87.9	58.0	40.3	29.1
78.00	*48.00*	114.4	83.8	55.3	38.4	27.8
84.00	*48.00*	109.4	80.0	52.8	36.7	26.6

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 21
36" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)				
		72.00	*84.00*	*96.00*	*108.00*	*120.00*
Bottom unit	Transom	Tributary width (in)				
		24.00	*28.00*	*32.00*	*36.00*	*40.00*
48.00	*36.00*	159.8	121.7	80.7	56.2	40.7
54.00	*36.00*	150.3	113.9	75.5	52.6	38.1
60.00	*36.00*	141.8	107.0	71.0	49.5	35.8
66.00	*36.00*	134.2	100.8	66.9	46.7	33.8
72.00	*36.00*	127.4	95.4	63.3	44.2	32.0
78.00	*36.00*	121.3	90.5	60.1	42.0	30.4
84.00	*36.00*	115.7	86.1	57.2	39.9	29.0

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 22
42" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)				
		72.00	*84.00*	*96.00*	*108.00*	*120.00*
Bottom unit	Transom	Tributary width (in)				
		24.00	*28.00*	*32.00*	*36.00*	*40.00*
48.00	*42.00*	153.1	115.2	76.0	52.8	38.2
54.00	*42.00*	144.3	108.1	71.4	49.7	35.9
60.00	*42.00*	136.5	101.9	67.4	46.9	33.9
66.00	*42.00*	129.5	96.3	63.7	44.4	32.1
72.00	*42.00*	123.1	91.3	60.5	42.1	30.5
78.00	*42.00*	117.4	86.8	57.5	40.1	29.0
84.00	*42.00*	112.2	82.7	54.9	38.2	27.7

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 24
54" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)				
		72.00	*84.00*	*96.00*	*108.00*	*120.00*
Bottom unit	Transom	Tributary width (in)				
		24.00	*28.00*	*32.00*	*36.00*	*40.00*
48.00	*54.00*	144.3	105.6	69.1	47.7	34.3
54.00	*54.00*	136.5	99.7	65.3	45.1	32.5
60.00	*54.00*	129.5	94.3	61.8	42.8	30.8
66.00	*54.00*	123.1	89.5	58.8	40.7	29.3
72.00	*54.00*	117.4	85.2	56.0	38.8	28.0
78.00	*54.00*	112.2	81.3	53.4	37.0	26.7
84.00	*54.00*	107.4	77.7	51.1	35.5	25.6

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 25
60" TRANSOM

Maximum design pressure capacity chart (psf)

Height (in)		Mullion Span (in)				
		72.00	*84.00*	*96.00*	*108.00*	*120.00*
Bottom unit	Transom	Tributary width (in)				
		24.00	*28.00*	*32.00*	*36.00*	*40.00*
48.00	*60.00*	141.8	102.3	66.5	45.7	32.8
54.00	*60.00*	134.2	96.7	63.0	43.3	31.1
60.00	*60.00*	127.4	91.7	59.8	41.2	29.6
66.00	*60.00*	121.3	87.1	56.9	39.2	28.2
72.00	*60.00*	115.7	83.0	54.3	37.5	26.9
78.00	*60.00*	110.6	79.3	51.9	35.8	25.8
84.00	*60.00*	106.0	75.9	49.7	34.4	24.7

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.
7. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2) + WINDOW WIDTH (W3)]/3. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2 + W3}{3}$$

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision:	NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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WINDOOR® INCORPORATED

WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	7 OF 16

Series	Desc.	Title
MULLION	HORIZONTAL TRIPLE w/TRANSOM	2x4-1/8" THERMALLY BROKEN MULLION (LM)

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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

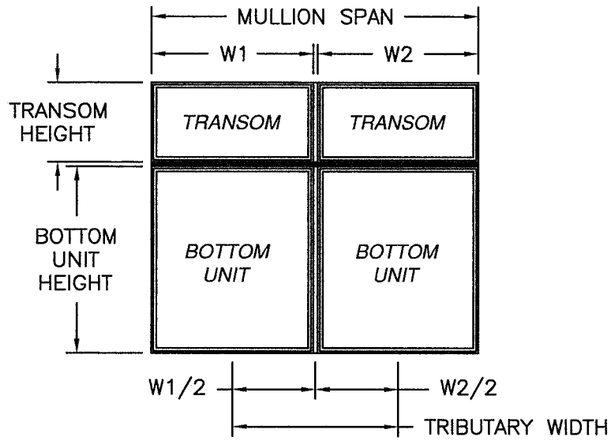

CHART 28
48" TRANSOM

Design pressure chart (psf)								
Height (in)		Total Unit and Tributary width (in)						
		72.0	***84.0***	***96.0***	***108.0***	***120.0***	***132.0***	***144.0***
Window	Transom	***36.0***	***42.0***	***48.0***	***54.0***	***60.0***	***66.0***	***72.0***
36.0	***48.0***	150.0	120.6	79.3	54.9	39.5	29.4	22.5
42.0	***48.0***	150.0	113.2	74.6	51.6	37.1	27.6	21.1
48.0	***48.0***	144.4	106.1	70.6	48.7	35.0	26.0	19.9
54.0	***48.0***	135.9	99.9	67.1	46.3	33.2	24.7	18.8
60.0	***48.0***	128.4	94.3	63.9	44.1	31.7	23.5	17.9
66.0	***48.0***	121.6	89.4	61.0	42.1	30.3	22.5	17.1
72.0	***48.0***	115.6	84.9	58.3	40.3	29.0	21.5	16.4
78.0	***48.0***	110.1	80.9	55.9	38.7	27.8	20.7	15.7
84.0	***48.0***	105.1	77.2	53.7	37.2	26.7	19.9	15.1

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 26
36" TRANSOM

Design pressure chart (psf)								
Height (in)		Total Unit and Tributary width (in)						
		72.0	***84.0***	***96.0***	***108.0***	***120.0***	***132.0***	***144.0***
Window	Transom	***36.0***	***42.0***	***48.0***	***54.0***	***60.0***	***66.0***	***72.0***
36.0	***36.0***	150.0	137.4	90.6	62.8	45.3	33.8	25.9
42.0	***36.0***	150.0	128.4	84.5	58.5	42.2	31.4	24.0
48.0	***36.0***	150.0	120.6	79.3	54.9	39.5	29.4	22.5
54.0	***36.0***	150.0	113.2	74.9	51.8	37.3	27.7	21.1
60.0	***36.0***	144.4	106.1	71.0	49.1	35.3	26.2	20.0
66.0	***36.0***	135.9	99.9	67.4	46.7	33.6	24.9	19.0
72.0	***36.0***	128.4	94.3	64.2	44.5	32.0	23.8	18.1
78.0	***36.0***	121.6	89.4	61.2	42.5	30.6	22.7	17.3
84.0	***36.0***	115.6	84.9	58.6	40.6	29.3	21.8	16.6

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 29
54" TRANSOM

Design pressure chart (psf)								
Height (in)		Total Unit and Tributary width (in)						
		72.0	***84.0***	***96.0***	***108.0***	***120.0***	***132.0***	***144.0***
Window	Transom	***36.0***	***42.0***	***48.0***	***54.0***	***60.0***	***66.0***	***72.0***
36.0	***54.0***	150.0	113.2	74.9	51.8	37.3	27.7	21.1
42.0	***54.0***	144.4	106.1	70.7	48.8	35.1	26.1	19.9
48.0	***54.0***	135.9	99.9	67.1	46.3	33.2	24.7	18.8
54.0	***54.0***	128.4	94.3	63.9	44.1	31.6	23.5	17.9
60.0	***54.0***	121.6	89.4	61.0	42.1	30.2	22.4	17.1
66.0	***54.0***	115.6	84.9	58.3	40.3	28.9	21.4	16.3
72.0	***54.0***	110.1	80.9	55.9	38.7	27.8	20.6	15.7
78.0	***54.0***	105.1	77.2	53.7	37.1	26.7	19.8	15.1
84.0	***54.0***	100.5	73.8	51.6	35.7	25.7	19.1	-

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 27
42" TRANSOM

Design pressure chart (psf)								
Height (in)		Total Unit and Tributary width (in)						
		72.0	***84.0***	***96.0***	***108.0***	***120.0***	***132.0***	***144.0***
Window	Transom	***36.0***	***42.0***	***48.0***	***54.0***	***60.0***	***66.0***	***72.0***
36.0	***42.0***	150.0	128.4	84.5	58.5	42.2	31.4	24.0
42.0	***42.0***	150.0	120.4	79.1	54.7	39.4	29.4	22.4
48.0	***42.0***	150.0	113.2	74.6	51.6	37.1	27.6	21.1
54.0	***42.0***	144.4	106.1	70.7	48.8	35.1	26.1	19.9
60.0	***42.0***	135.9	99.9	67.1	46.4	33.4	24.8	18.9
66.0	***42.0***	128.4	94.3	63.9	44.2	31.8	23.6	18.0
72.0	***42.0***	121.6	89.4	61.0	42.3	30.4	22.6	17.2
78.0	***42.0***	115.6	84.9	58.4	40.4	29.1	21.6	16.5
84.0	***42.0***	110.1	80.9	55.9	38.8	27.9	20.8	15.8

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

CHART 30
60" TRANSOM

Design pressure chart (psf)								
Height (in)		Total Unit and Tributary width (in)						
		72.0	***84.0***	***96.0***	***108.0***	***120.0***	***132.0***	***144.0***
Window	Transom	***36.0***	***42.0***	***48.0***	***54.0***	***60.0***	***66.0***	***72.0***
36.0	***60.0***	144.4	106.1	71.0	49.1	35.3	26.2	20.0
42.0	***60.0***	135.9	99.9	67.1	46.4	33.4	24.8	18.9
48.0	***60.0***	128.4	94.3	63.9	44.1	31.7	23.5	17.9
54.0	***60.0***	121.6	89.4	61.0	42.1	30.2	22.4	17.1
60.0	***60.0***	115.6	84.9	58.3	40.3	28.9	21.4	16.3
66.0	***60.0***	110.1	80.9	55.9	38.7	27.7	20.6	15.6
72.0	***60.0***	105.1	77.2	53.7	37.1	26.7	19.8	15.0
78.0	***60.0***	100.5	73.8	51.6	35.7	25.7	19.0	-
84.0	***60.0***	96.3	70.7	49.7	34.4	24.7	18.4	-

IMPACT RATING: LARGE AND SMALL MISSILE IMPACT
MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.
7. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2)]/2. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
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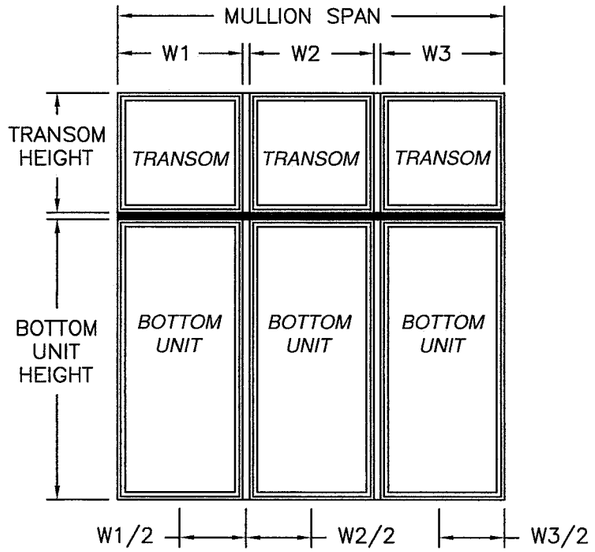
Series	Desc.	Title	Sheet	DWG No.	Drawn By	Date	Rev.
MULLION	2x4-1/8" THERMALLY BROKEN MULLION (LM)	HORIZONTAL TWIN w/TWIN TRANSOM (LM)	8 OF 16	2 TB-LMI-NOA	ERIN KOSS	08/14/20	

ANTHONY LYNN MILLER LICENSE No. 56705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20
A. LYNN MILLER, P.E.
P.E.# 58705



DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.
7. TRIBUTARY WINDOW WIDTH (TW)= [WINDOW WIDTH (W1) + WINDOW WIDTH (W2) + WINDOW WIDTH (W3)]/3. SEE FORMULA BELOW.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2 + W3}{3}$$

CHART 31
18" TRANSOM

Design pressure (psf)							
Height (in)		Total Unit and Tributary width (in)					
		72.0	90.0	108.0	126.0	144.0	162.0
Window	Transom	24.0	30.0	36.0	42.0	48.0	54.0
36.0	18.0	150.0	147.8	84.6	52.9	35.2	24.6
42.0	18.0	150.0	134.0	76.8	48.0	31.9	22.3
48.0	18.0	150.0	122.5	70.3	43.9	29.2	20.4
54.0	18.0	150.0	112.9	64.8	40.5	27.0	18.8
60.0	18.0	150.0	104.6	60.1	37.6	25.0	17.5
66.0	18.0	150.0	97.5	56.0	35.1	23.4	16.3
72.0	18.0	150.0	91.3	52.5	32.9	21.9	15.3
78.0	18.0	150.0	85.8	49.4	30.9	20.6	-
84.0	18.0	144.7	81.0	46.6	29.2	19.5	-

CHART 32
24" TRANSOM

Design pressure (psf)							
Height (in)		Total Unit and Tributary width (in)					
		72.0	90.0	108.0	126.0	144.0	162.0
Window	Transom	24.0	30.0	36.0	42.0	48.0	54.0
36.0	24.0	150.0	133.4	76.4	47.7	31.7	22.2
42.0	24.0	150.0	122.0	69.9	43.6	29.0	20.3
48.0	24.0	150.0	112.5	64.5	40.3	26.8	18.7
54.0	24.0	150.0	104.3	59.8	37.4	24.9	17.4
60.0	24.0	150.0	97.2	55.8	34.9	23.2	16.2
66.0	24.0	150.0	91.0	52.3	32.7	21.8	15.2
72.0	24.0	150.0	85.6	49.2	30.8	20.5	-
78.0	24.0	144.4	80.8	46.4	29.1	19.4	-
84.0	24.0	136.8	76.5	44.0	27.5	18.4	-

CHART 33
30" TRANSOM

Design pressure (psf)							
Height (in)		Total Unit and Tributary width (in)					
		72.0	90.0	108.0	126.0	144.0	162.0
Window	Transom	24.0	30.0	36.0	42.0	48.0	54.0
36.0	30.0	150.0	121.9	69.7	43.5	28.9	20.2
42.0	30.0	150.0	112.3	64.3	40.1	26.7	18.6
48.0	30.0	150.0	104.2	59.7	37.3	24.8	17.3
54.0	30.0	150.0	97.1	55.7	34.8	23.1	16.1
60.0	30.0	150.0	90.9	52.2	32.6	21.7	15.1
66.0	30.0	150.0	85.5	49.1	30.7	20.4	-
72.0	30.0	144.4	80.7	46.3	29.0	19.3	-
78.0	30.0	136.8	76.4	43.9	27.5	18.3	-
84.0	30.0	130.0	72.5	41.7	26.1	17.4	-

CHART 34
36" TRANSOM

Design pressure (psf)							
Height (in)		Total Unit and Tributary width (in)					
		72.0	90.0	108.0	126.0	144.0	162.0
Window	Transom	24.0	30.0	36.0	42.0	48.0	54.0
36.0	36.0	150.0	112.3	64.2	40.0	26.6	18.6
42.0	36.0	150.0	104.2	59.6	37.2	24.7	17.2
48.0	36.0	150.0	97.1	55.6	34.7	23.1	16.1
54.0	36.0	150.0	90.9	52.1	32.5	21.6	15.1
60.0	36.0	150.0	85.5	49.0	30.6	20.4	-
66.0	36.0	144.4	80.7	46.3	28.9	19.2	-
72.0	36.0	136.8	76.4	43.9	27.4	18.2	-
78.0	36.0	130.0	72.5	41.7	26.0	17.3	-
84.0	36.0	123.8	69.0	39.7	24.8	16.5	-

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED

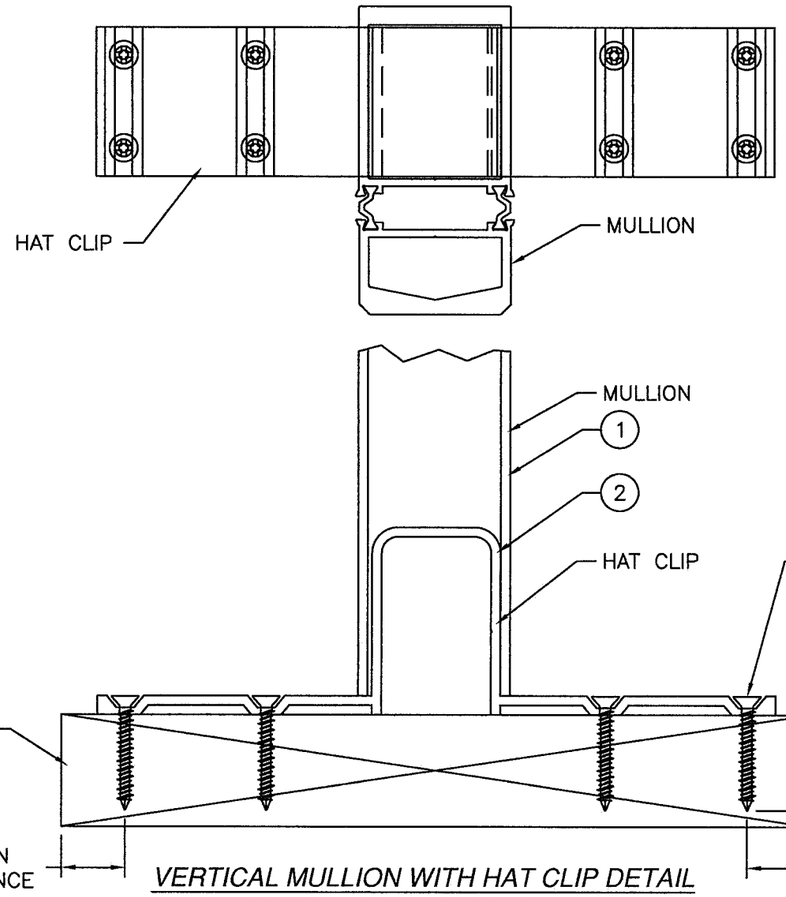
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	9 OF 16

Series: MULLION
Desc.: HORIZONTAL TRIPLE w/TRIPLE TRANSOM
Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)

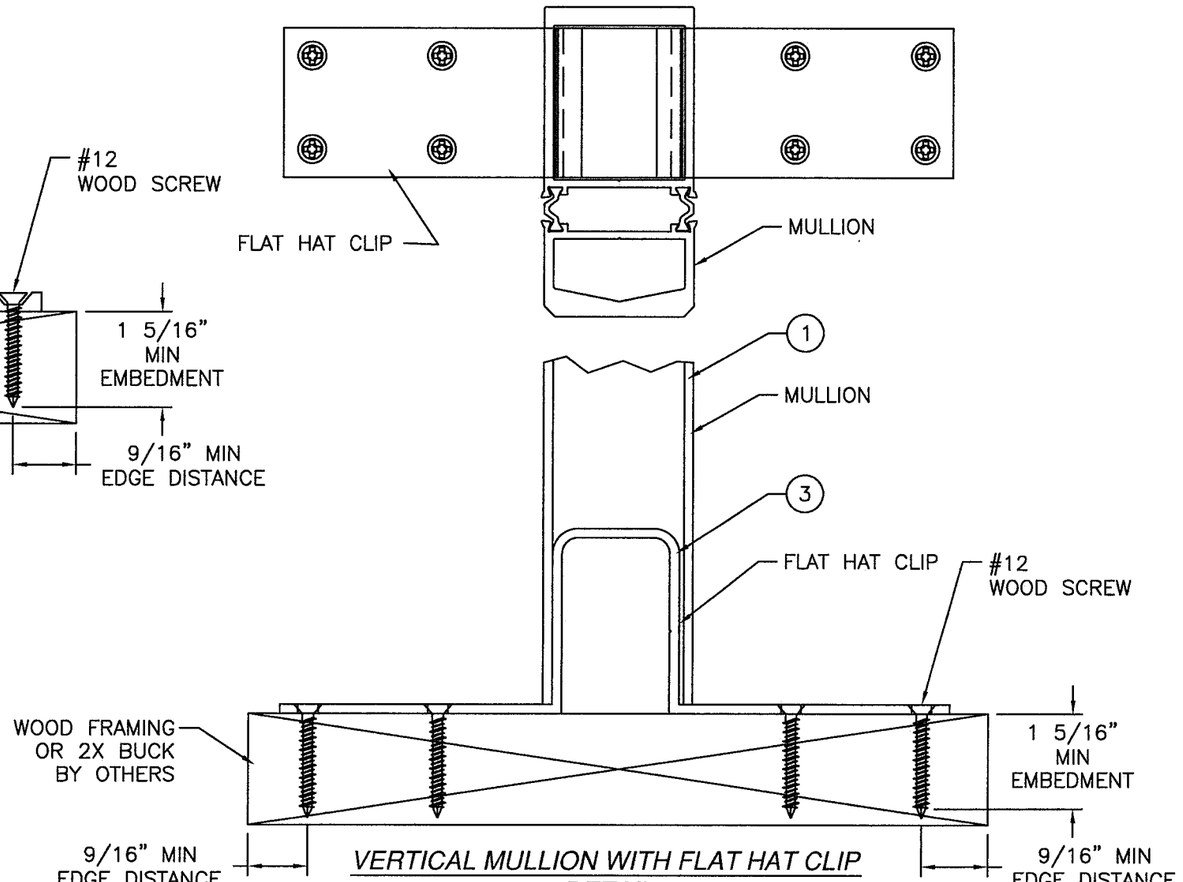
ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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



VERTICAL MULLION WITH HAT CLIP DETAIL

WOOD FRAMING OR 2X BUCK INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR



VERTICAL MULLION WITH FLAT HAT CLIP DETAIL

WOOD FRAMING OR 2X BUCK INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0826.02
Expiration Date 10/22/2025
By
Miami–Dade Product Control

Revision:	NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED

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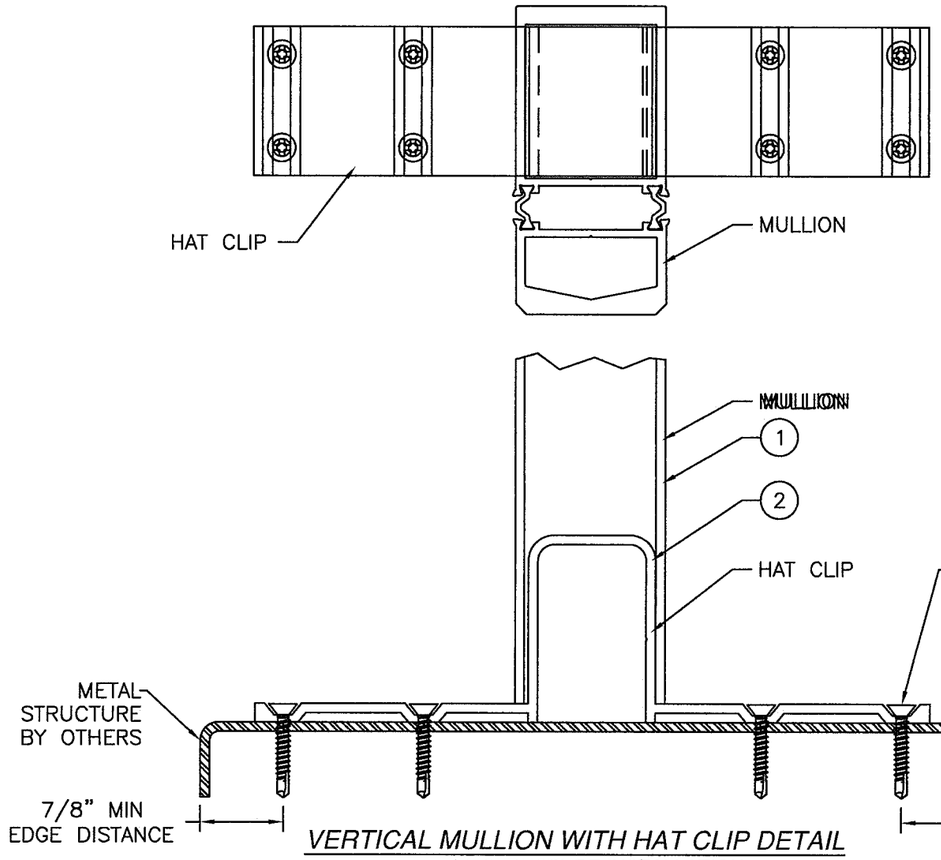
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet	Series	Desc.	Title
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	10 OF 16	MULLION	INSTALLATION DETAILS - WOOD	2x4-1/8" THERMALLY BROKEN MULLION (LM)

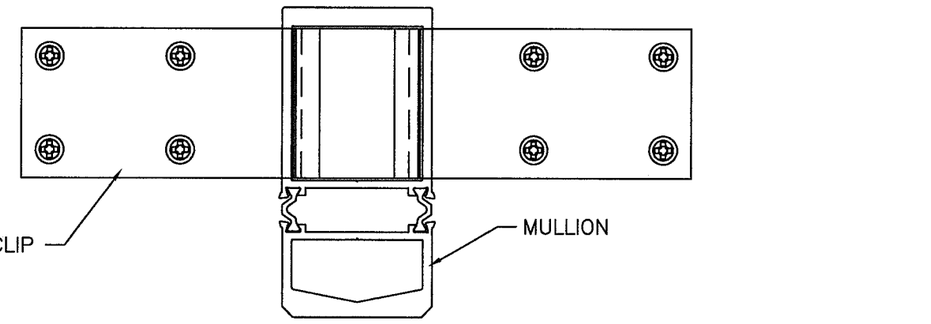
ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/17/20

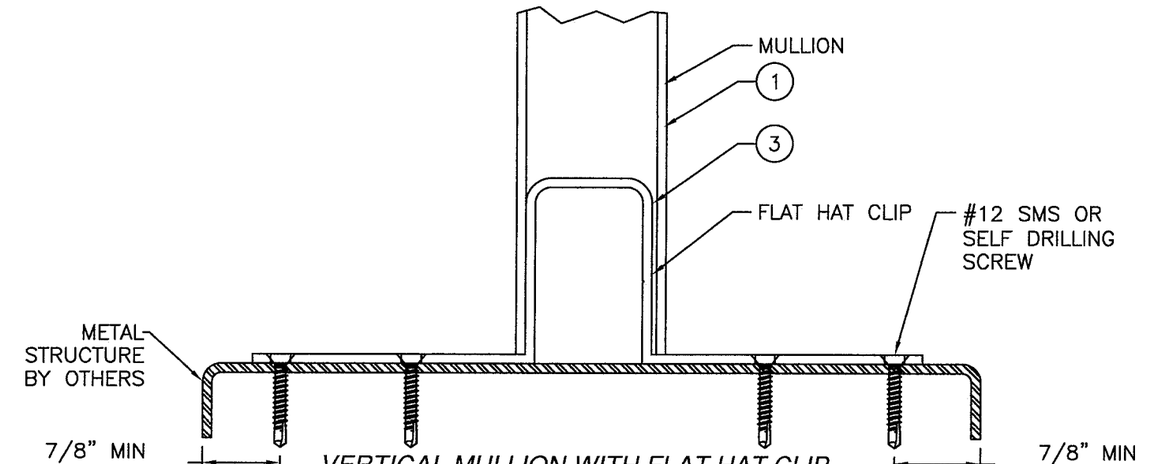
A. LYNN MILLER, P.E.
P.E.# 58705



VERTICAL MULLION WITH HAT CLIP DETAIL

METAL STRUCTURE INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR





VERTICAL MULLION WITH FLAT HAT CLIP DETAIL

METAL STRUCTURE INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

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1070 TECHNOLOGY DRIVE
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(941) 480-1600
REGISTRATION #29296

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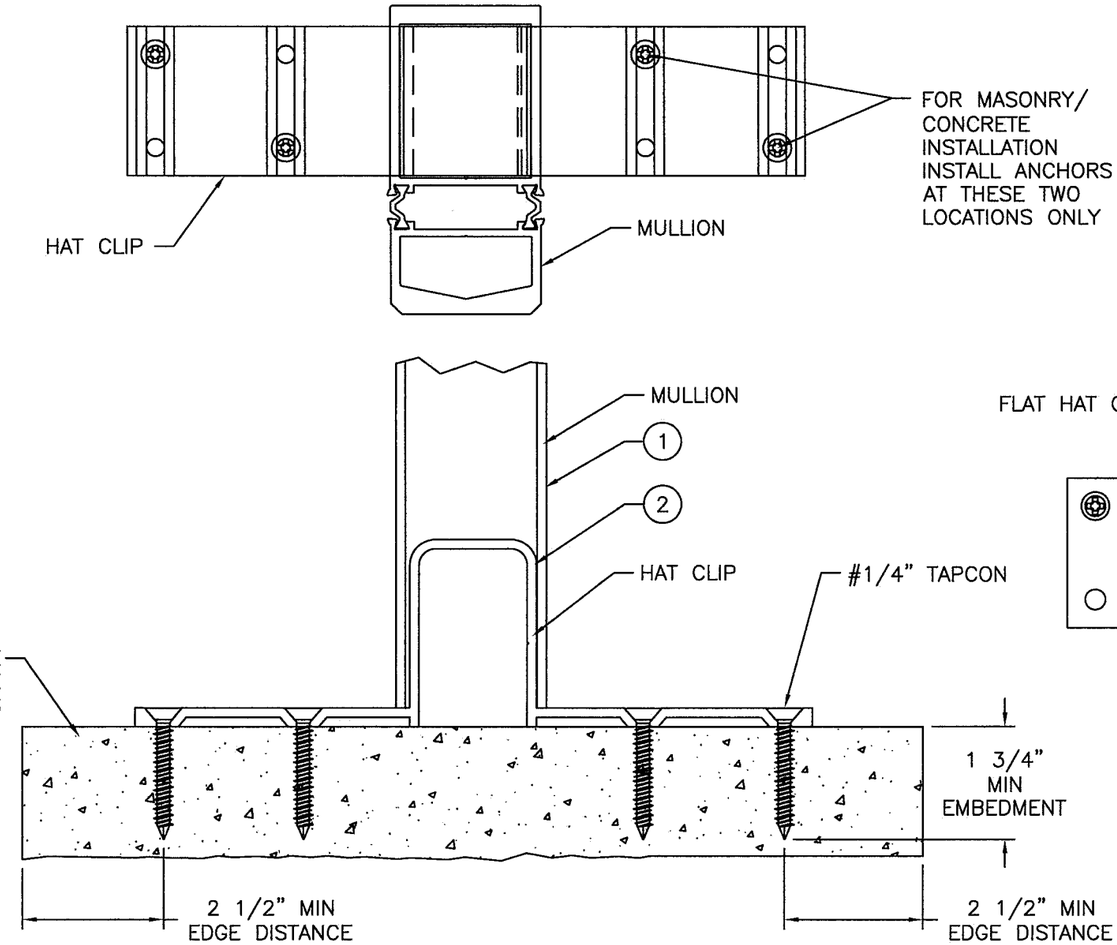
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	11 OF 16

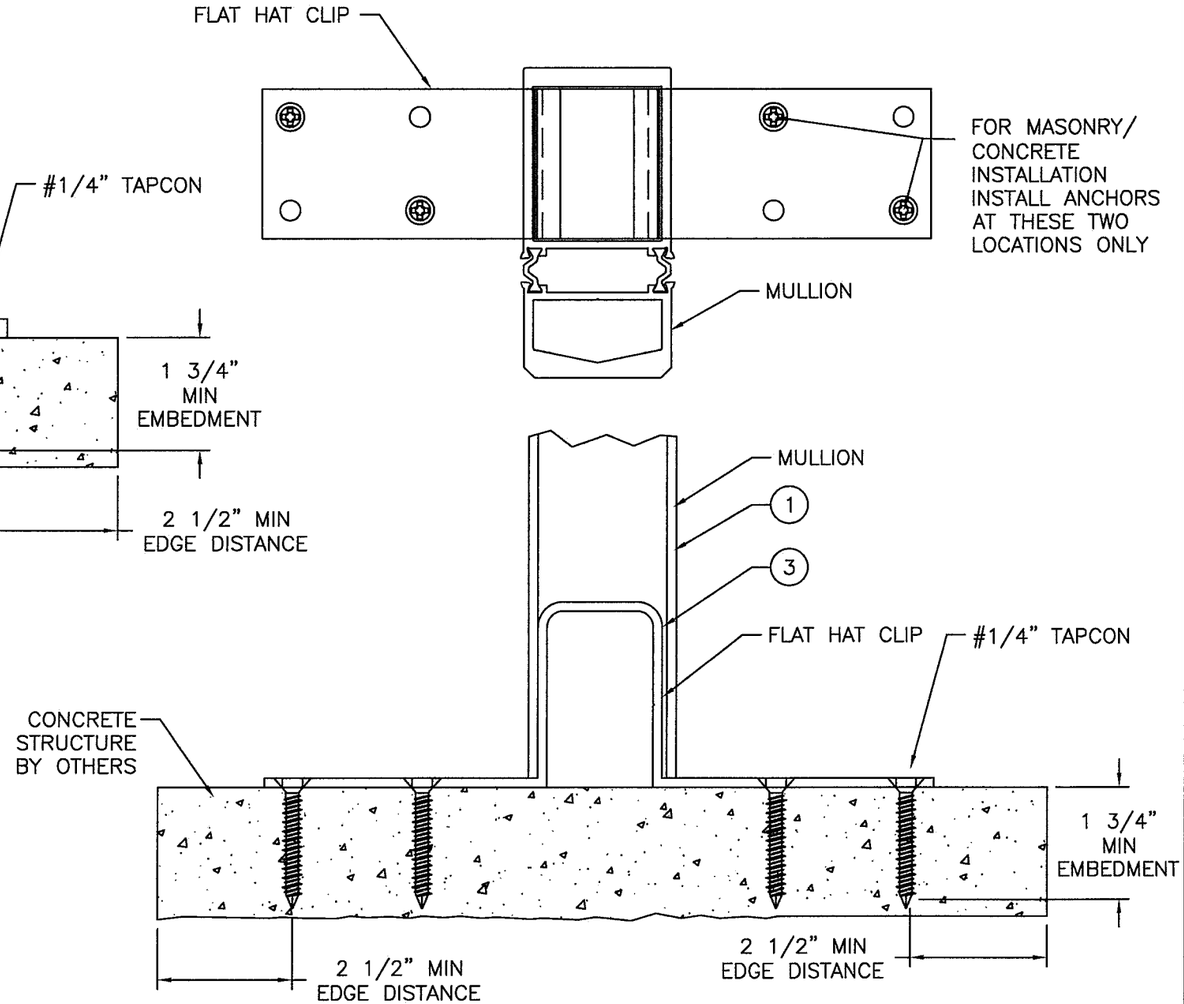
Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: INSTALLATION DETAILS - METAL
Series: MULLION

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
3/17/20
A. LYNN MILLER, P.E.
P.E.# 58705



VERTICAL MULLION WITH HAT CLIP DETAIL

CONCRETE/MASONRY INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR



VERTICAL MULLION WITH FLAT HAT CLIP DETAIL

CONCRETE/MASONRY INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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(941) 480-1600
REGISTRATION #29296

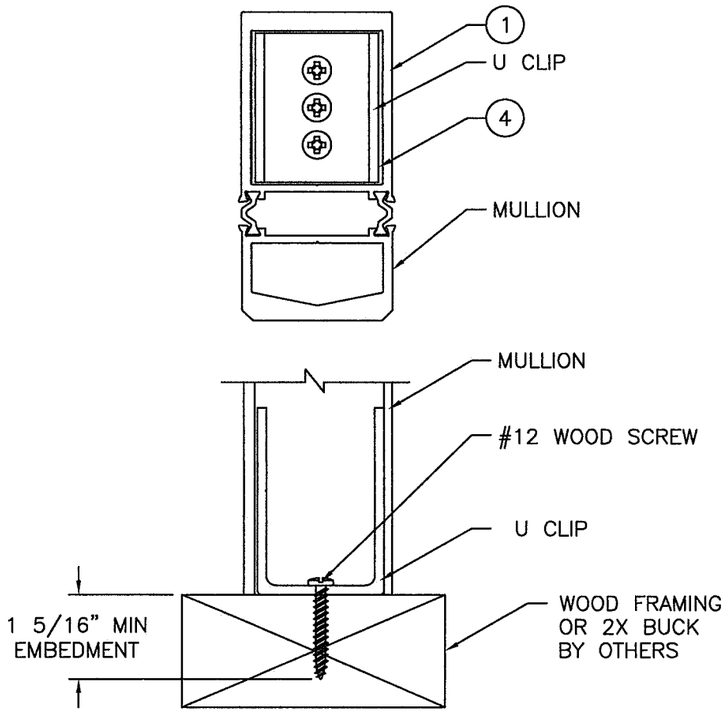
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Series	Desc.	Sheet	DWG No.	Drawn By	Date	Rev.
MULLION	2x4-1/8" THERMALLY BROKEN MULLION (LM)	12 OF 16	2 TB-LMI-NOA	ERIN KOSS	08/14/20	
	Title					

INSTALLATION DETAILS - MASONRY

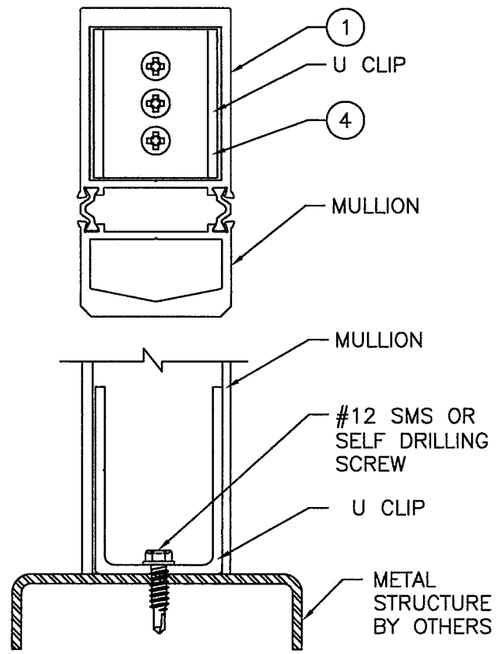
ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/17/20

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



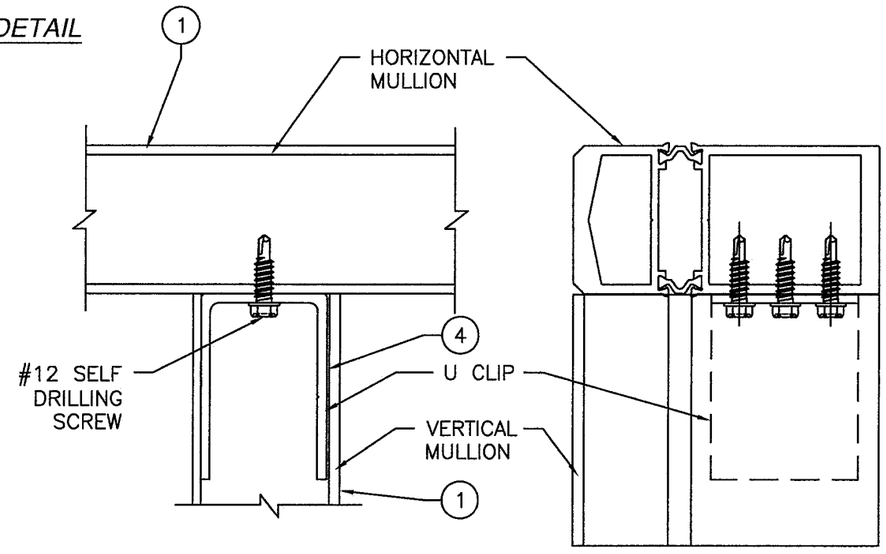
VERTICAL MULLION WITH U CLIP DETAIL

WOOD FRAMING OR 2X BUCK INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR



VERTICAL MULLION WITH U CLIP DETAIL

METAL STRUCTURE INSTALLATION
SILL SHOWN HEAD SIMILAR
HORIZONTAL MULLION SIMILAR



VERTICAL TO HORIZONTAL MULLION WITH U CLIP
CONNECTION DETAIL

VERTICAL TO HORIZONTAL MULLION
CONNECTION DETAIL
HORIZONTAL TO VERTICAL MULLION SIMILAR

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

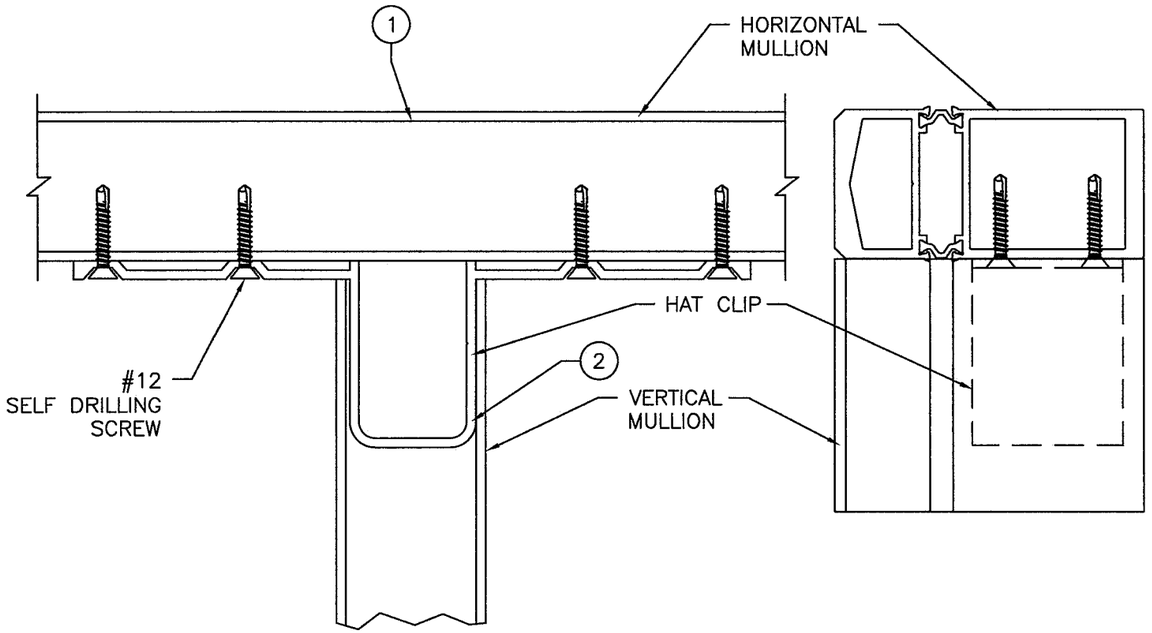
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Title	Desc.	Series
2x4-1/8" THERMALLY BROKEN MULLION (LM)	INSTALLATION DETAILS - U-CLIP	MULLION

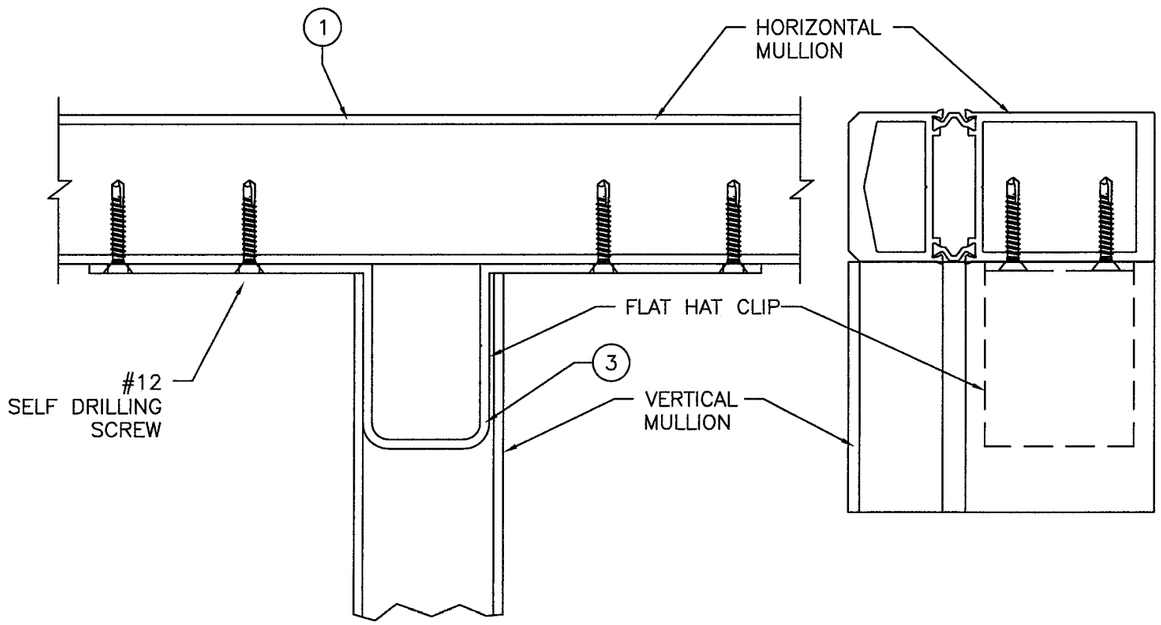
Date	Drawn By	DWG No.	Sheet	Rev.
08/14/20 (LM)	ERIN KOSS	2 TB-LMI-NOA	13 OF 16	

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



VERTICAL TO HORIZONTAL MULLION WITH HAT CLIP CONNECTION DETAIL

VERTICAL TO HORIZONTAL MULLION CONNECTION DETAIL HORIZONTAL TO VERTICAL MULLION SIMILAR



VERTICAL TO HORIZONTAL MULLION WITH FLAT HAT CLIP CONNECTION DETAIL

VERTICAL TO HORIZONTAL MULLION CONNECTION DETAIL HORIZONTAL TO VERTICAL MULLION SIMILAR

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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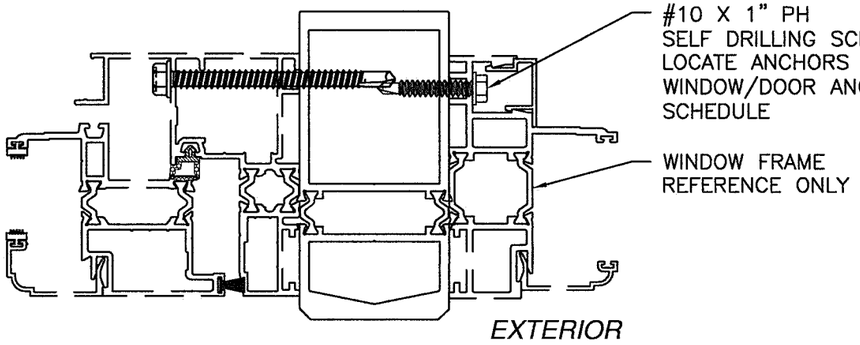
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Title	Desc.	Series
2x4-1/8" THERMALLY BROKEN MULLION (LM)	INSTALLATION DETAILS - HAT CLIP	MULLION

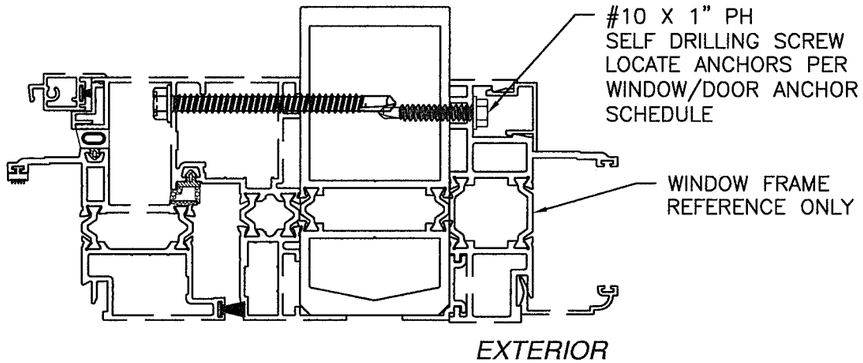
Date	Drawn By	DWG No.	Sheet	Rev.
08/14/20	ERIN KOSS	2 TB-LMI-NOA	14 OF 16	

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
5/17/20
A. LYNN MILLER, P.E.
P.E.# 58705



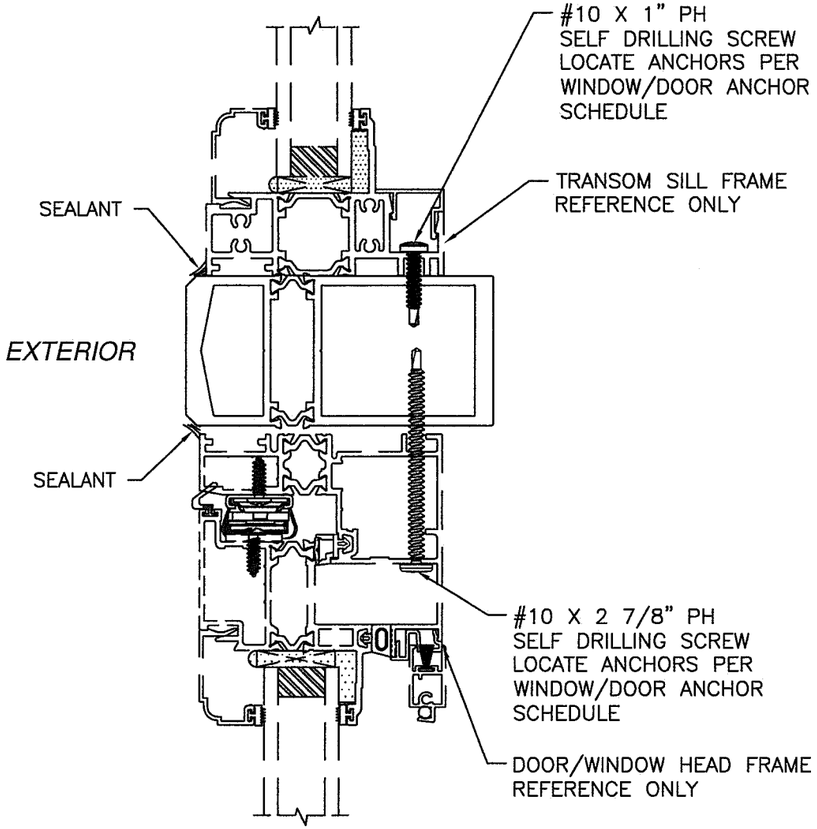
WINDOW TO MULLION FLUSH INSTALLATION DETAIL

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



HORIZONTAL MULLION CONNECTION DETAIL

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

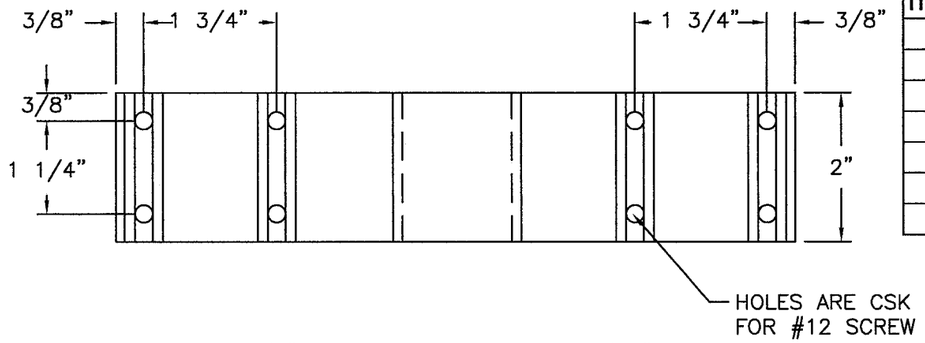
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

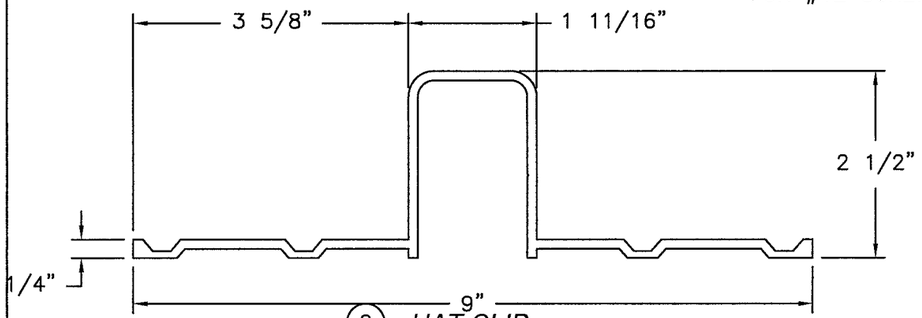
Date: 08/14/20
Drawn By: ERIN KOSS
Rev.:
Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: INSTALLATION DETAILS - WINDOW TO MULL
Series: MULLION
Sheet: 15 OF 16
DWG No.: 2 TB-LMI-NOA

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/17/20

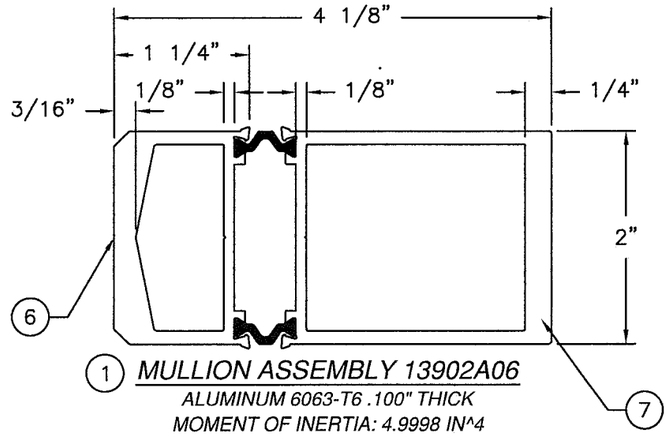
A. LYNN MILLER, P.E.
P.E.# 58705

BILL OF MATERIALS				
ITEM NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	13902A06	UNIVERSAL THERMALLY BROKEN MULLION ASSEMBLY	KEYMARK	ALUMINUM 6063-T6
2	FS-08482	HAT CLIP	KEYMARK	ALUMINUM 6063-T6
3	11008611	MULLION FLAT HAT CLIP	KEYMARK	ALUMINUM 6063-T6
4	11010245	CHANNEL CLIP	KEYMARK	ALUMINUM 6063-T6
5		TECATHERM 66F-INSULBAR	ENSINGER INC	RIGID PVC
6	H-14227	EXTERIOR EXTRUSION	KEYMARK	ALUMINUM 6063-T6
7	H-14225	INTERIOR EXTRUSION	KEYMARK	ALUMINUM 6063-T6

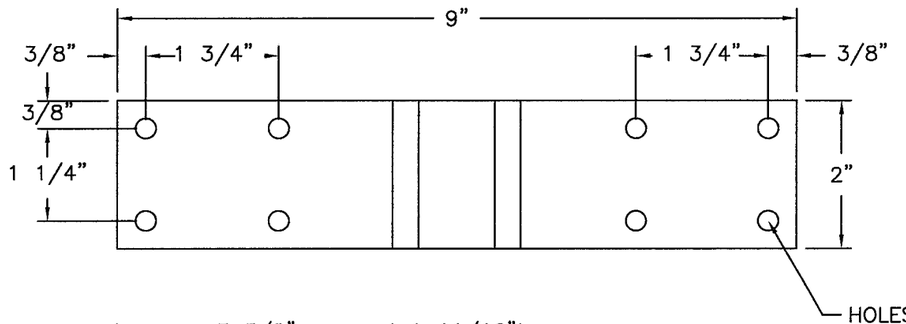


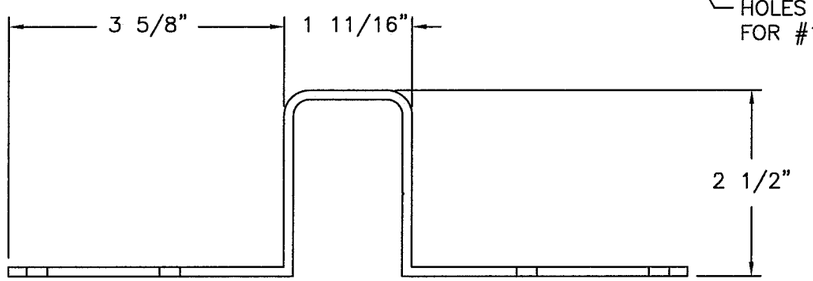


(2) *HAT CLIP*
ALUMINUM 6063-T6 .125" THICK

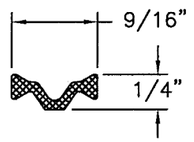


(1) *MULLION ASSEMBLY 13902A06*
ALUMINUM 6063-T6 .100" THICK
MOMENT OF INERTIA: 4.9998 IN^4
SECTION MODULUS: 2.2958 IN^3
EFFECTIVE MOMENT OF INERTIA: 4.590 IN^4
EFFECTIVE SECTION MODULUS: 2.080 IN^3
(EFFECTIVE VALUES BASED ON PREVIOUS TESTING)

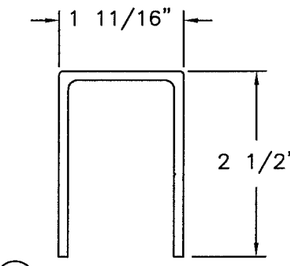




(3) *FLAT HAT CLIP*
ALUMINUM 6063-T6 .125" THICK



(5) *14.6MM THERMAL STRUT*
NYLON POLYAMIDE .070" THICK



(4) *U CLIP*
ALUMINUM 6063-T6 .125" THICK

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.02
Expiration Date 10/22/2025
By
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY
N. VENICE, FL 3427
(941) 480-1600
REGISTRATION #29296

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
(833) 554-5432

Rev.	Date	Drawn By	DWG No.	Sheet	Series
	08/14/20	ERIN KOSS	2 TB-LMI-NOA	16 OF 16	MULLION

Title: 2x4-1/8" THERMALLY BROKEN MULLION (LM)
Desc.: BOM & EXTRUSIONS

LICENSE
ANTHONY LYNN MILLER
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/17/20

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