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 "3-1/4" Shallow 135° Thermally Broken Clipped Aluminum Tube Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. **325SW135MUL-NOA**, titled "3-1/4" Shallow 135° Thermally Broken Clipped Aluminum Tube Mullion (LM)", sheets 1 through 4 of 4, dated 11/01/19, with revision A dated 08/17/2020, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Renewal 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 # 19-1105.03** and 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.

11/19/2020

NOA No. 20-0826.11
Expiration Date: December 18, 2024
Approval Date: November 19, 2020

WinDoor, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections. ***(Submitted under NOA No. 13-0827.08)***

2. Drawing No. **325SW135MUL-NOA**, titled "3-1/4" Shallow 135° Thermally Broken Clipped Aluminum Tube Mullion (LM)", sheets 1 through 4 of 4, dated 11/01/19, prepared by A. Lynn Miller, 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 a series "900" 135° shallow thermally broken aluminum mullion, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3931-01**, dated 02/26/14, signed and sealed by Gerard J. Ferrara, P.E. ***(Submitted under previous NOA# 13-0827.08)***

C. CALCULATIONS

1. Anchor verification calculations, complying with **FBC 6th Edition (2017)**, dated 11/28/2017, prepared, signed and sealed by Luis R. Lomas, P.E.
(Submitted under previous NOA# 17-1219.38)

2. Anchor verification calculations and structural analysis, complying with **FBC-2010**, dated 07/16/13 and updated on 10/21/14, prepared, signed and sealed by Luis R. Lomas, P.E. ***(Submitted under previous NOA# 13-0827.08)***

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.
(Submitted under previous NOA# 13-0827.08)

2. Test report No. **ATI–61261.01–106-18**, prepared by Architectural Testing, Inc., dated 12/08/05, with revision date 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. ***(Submitted under previous NOA# 13-0827.08)***

3. Test report No. **ETC–07–1043–19094.0**, prepared by ETC Laboratories, dated 02/04/08, issued to Technoform Bautec NA, Inc., for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, 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.
(Submitted under previous NOA# 13-0827.08)

Sifang Zhao, P.E.
Product Control Examiner
NOA No. 20-0826.11
Expiration Date: December 18, 2024
Approval Date: November 19, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS (CONTINUED)

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** comprised of Polyamide with 25% glass fibers, per **ASTM D1929–96** *"Standard Test Method for Ignition Properties of Plastics"*, signed and sealed by Joseph Doldan, P.E.
(Submitted under previous NOA# 13-0827.08)

F. STATEMENTS

1. Statement letter of conformance, of complying with **FBC 6th Edition (2017)**, and of no financial interest dated 11/01/19, issued by WinDoor, Inc., signed and sealed by Anthony Lynn Miller, P.E.

2. Notification of successor engineer letter to Luis Roberto Lomas, P.E. for WinDoor NOA documents, dated 08/16/19, issued by WinDoor, Inc., signed and sealed by Anthony Lynn Miller, P.E. ***(Submitted under previous NOA# 19-1105.03)***

G. OTHER

1. NOA No. 17-1219.38, issued to WinDoor, Inc., for their Series "3-1/4" 136° Thermally Broken" Clipped Aluminum Tube Mullion – L.M.I.", expiring on 12/18/19.

1. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **325SW135MUL-NOA**, titled "3-1/4" Shallow 135° Thermally Broken Clipped Aluminum Tube Mullion (LM)", sheets 1 through 4 of 4, dated 11/01/19, with revision A dated 08/17/2020, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

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 August 17, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

G. OTHERS

1. Notice of Acceptance No. **19-1105.03**, issued to WinDoor, Inc., for their Series "3-1/4" 136° Thermally Broken" Clipped Aluminum Tube Mullion – L.M.I.", approved on 12/19/19 and expiring on 12/18/24.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 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 WIND ZONE 3 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.

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 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 #14 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. ALL FASTENERS TO BE CORROSION RESISTANT.
5. 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 16GA, 33KSI OR ALUMINUM 6063-T5 1/8" THICK MINIMUM

TABLE OF CONTENTS

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0826.11
Expiration Date 12/18/2024
By
Miami-Dade Product Control

Revision: A-UPDATED FOR 2020 FBC. UPDATED MANUFACTURING ADDRESS. EK 8/17/20

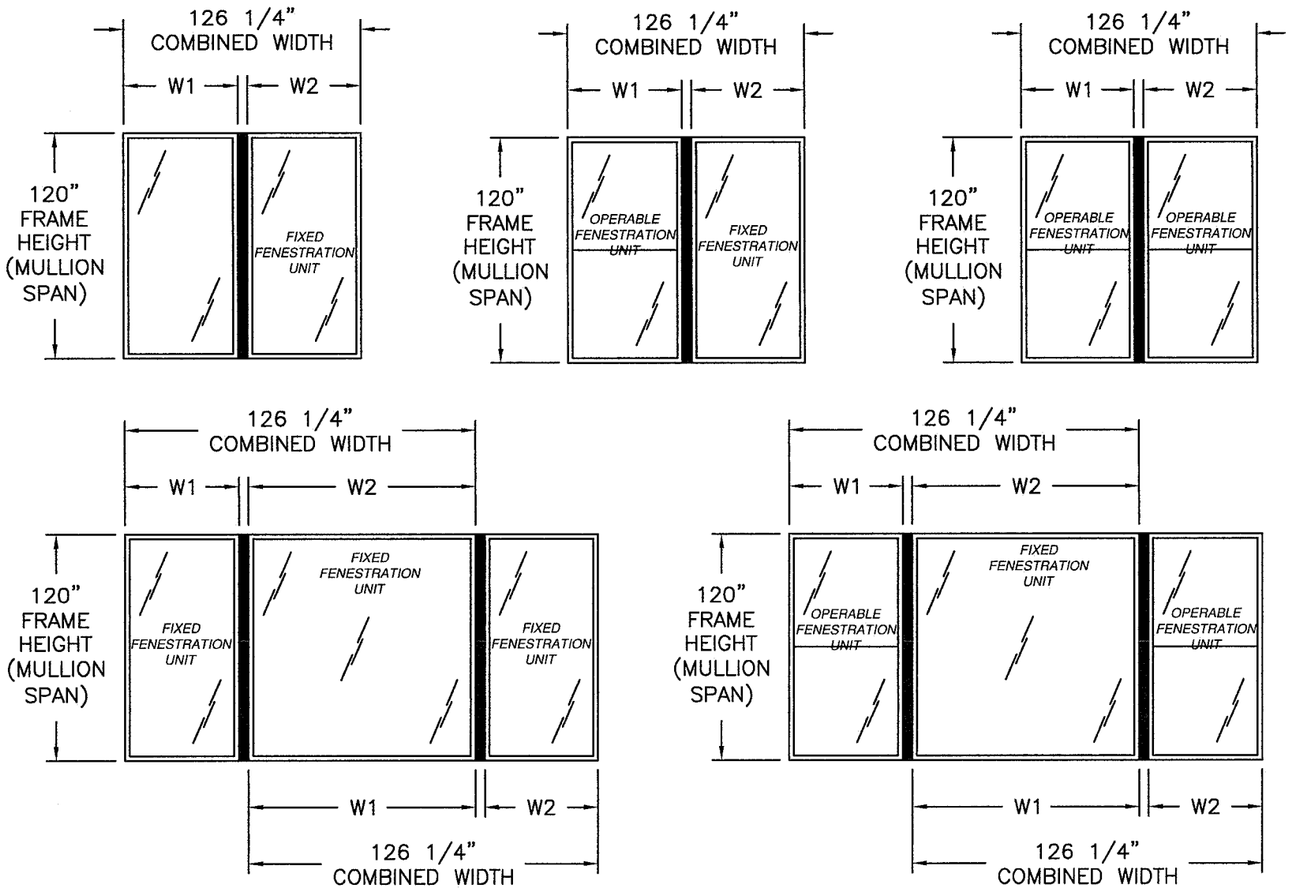
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

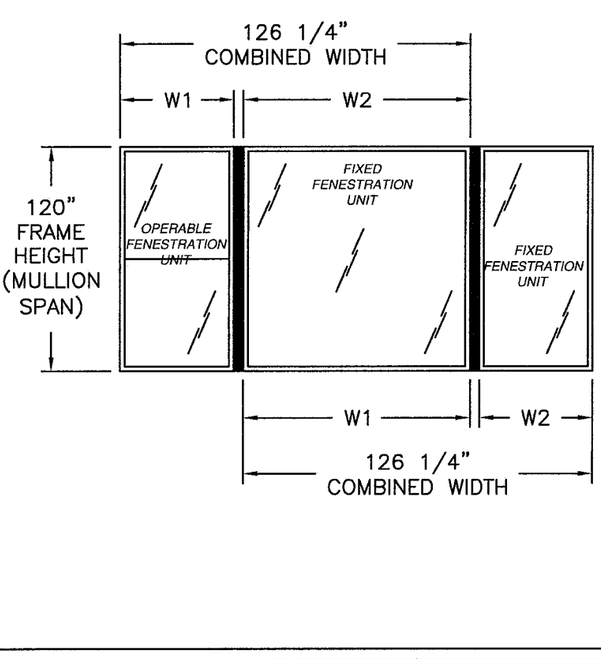
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
(407) 481-8400

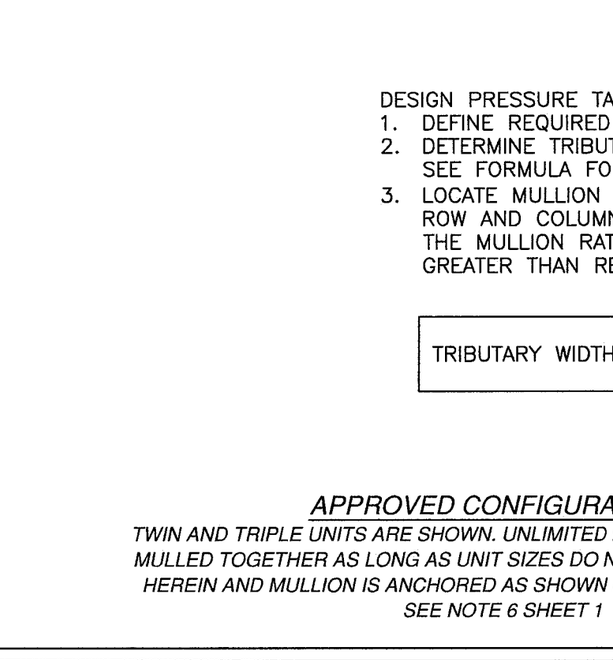
Title	Desc.	Series
3 1/4" SHALLOW 135° THERMALLY BROKEN CLIPPED ALUMINUM TUBE MULLION (LM)	NOTES, TABLE OF CONTENTS	325SWMULL

Date 11/1/19
Drawn By ALAN KINNE
DWG No. 325SW135MUL-NOA
Rev. A
Sheet 1 OF 4

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







Design pressure rating (psf)							
Mullion span (in)	Tributary width (in)						
	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
78.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
90.00	150.0	150.0	150.0	150.0	150.0	147.6	139.5
96.00	150.0	150.0	150.0	150.0	145.3	134.8	126.8
102.00	150.0	150.0	150.0	147.6	134.2	124.0	116.3
108.00	150.0	150.0	150.0	137.5	124.6	114.8	107.3
114.00	150.0	150.0	145.3	128.6	114.6	103.9	95.6
120.00	150.0	150.0	126.4	109.8	97.6	88.3	81.1

LARGE AND SMALL MISSILE IMPACT WIND ZONE 4, LEVEL D AND 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.

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

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 SEE NOTE 6 SHEET 1

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0826.11
Expiration Date 12/18/2024
By
Miami–Dade Product Control

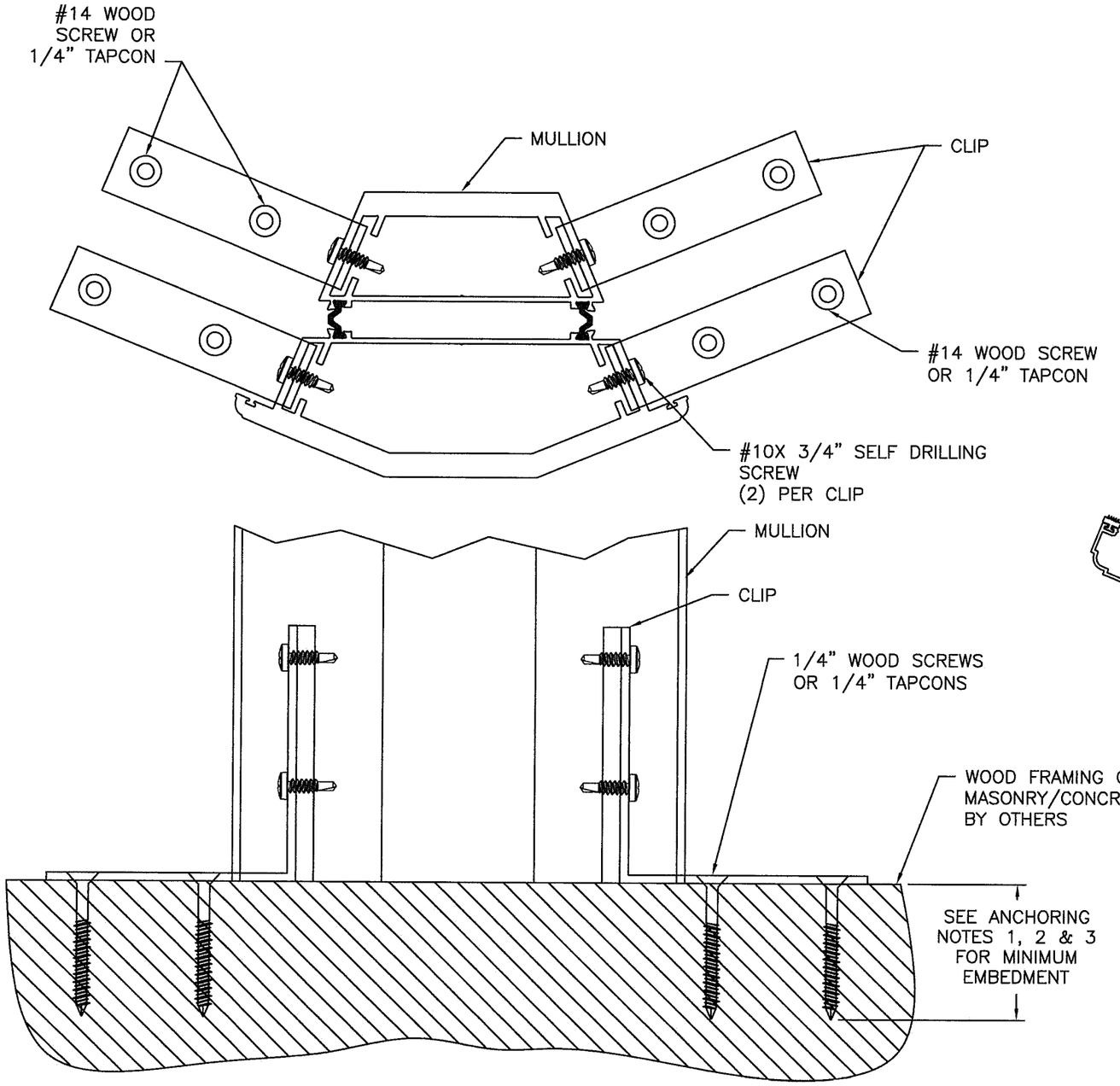
Revision:
A–NO CHANGES THIS SHEET.
EK 8/17/20

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

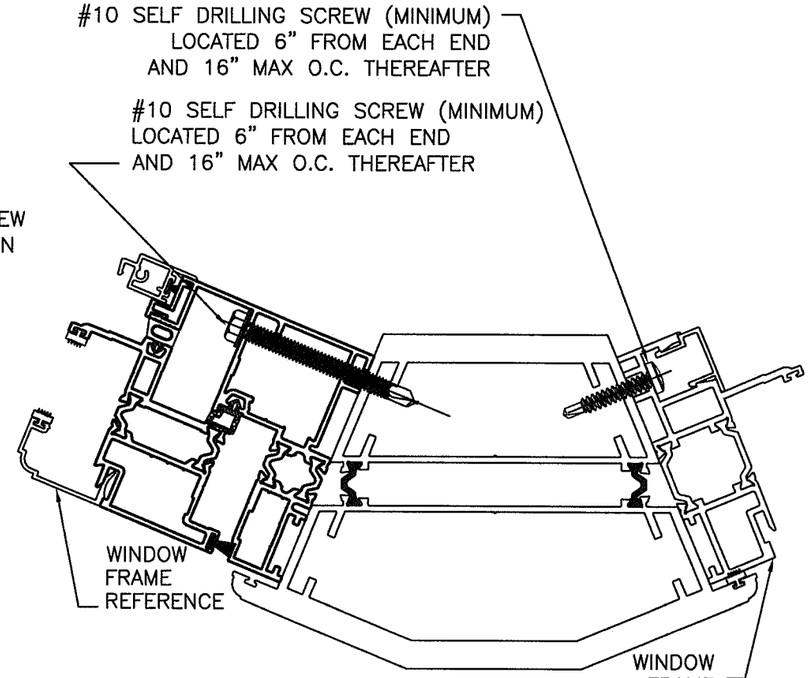
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
(407) 481-8400

Title	3 1/4" SHALLOW 135° THERMALLY BROKEN CLIPPED ALUMINUM TUBE MULLION (LM)
Desc.	CONFIGURATIONS & DP CHART
Series	325SWMULL
Sheet	2 OF 4
DWG No.	325SW135MUL-NOA
Rev.	A
Date	11/1/19
Drawn By	ALAN KINNE

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



MULLION INSTALLATION DETAIL
BOTTOM SHOWN, TOP SIMILAR



WINDOW/MULLION CONNECTION

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By
Miami-Dade Product Control

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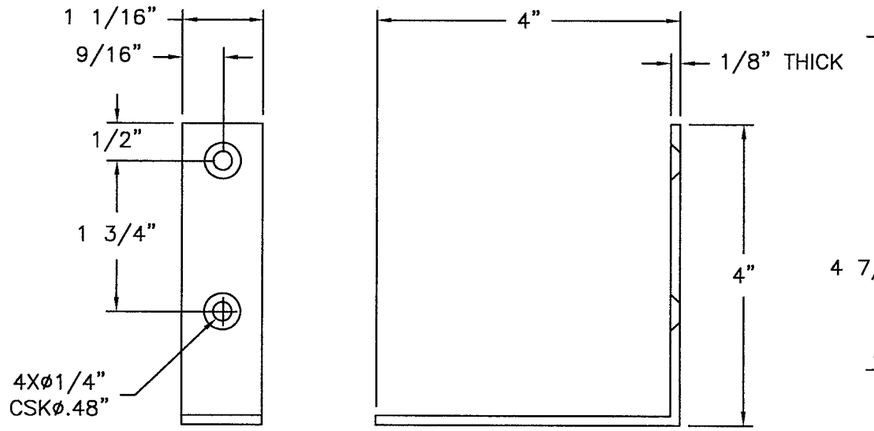
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Date 11/1/19
Drawn By ALAN KINNE
Rev. A
DWG No. 325SW135MUL-NOA
Sheet 3 OF 4
Series 325SWMULL
Desc. 3 1/4" SHALLOW 135° THERMALLY BROKEN CLIPPED ALUMINUM TUBE MULLION (LM)
Title INSTALLATION DETAILS

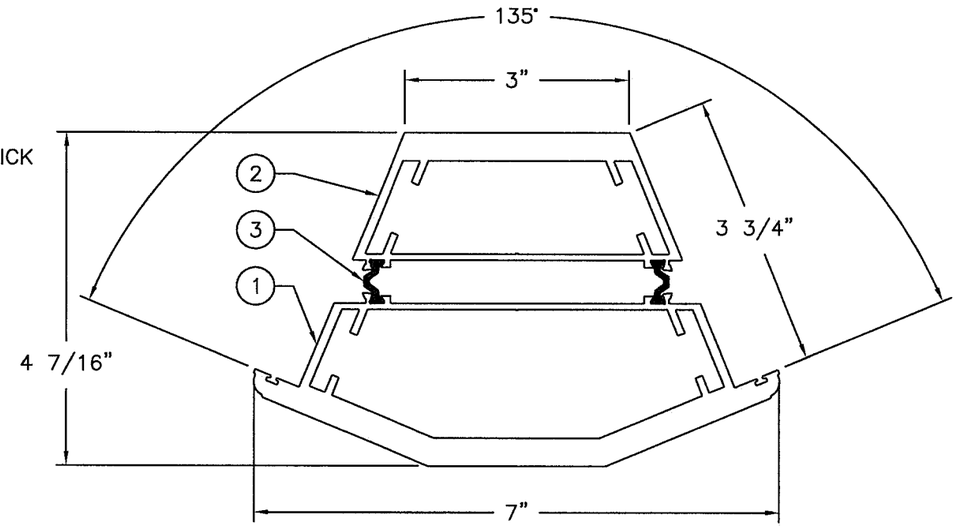
WINDOOR® INCORPORATED
WINDOOR INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
(407) 481-8400

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



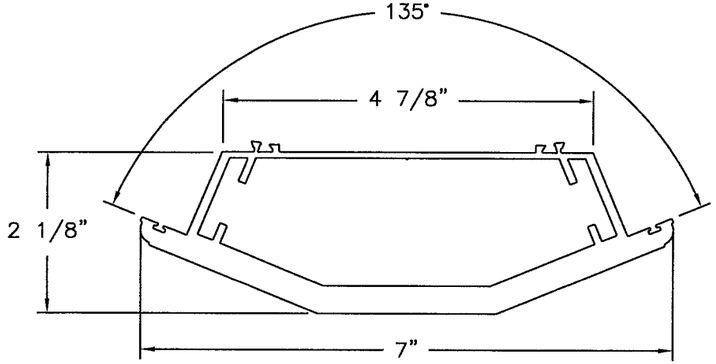
④ *CLIP*

ALUMINUM 6063-T6 .125" THICK



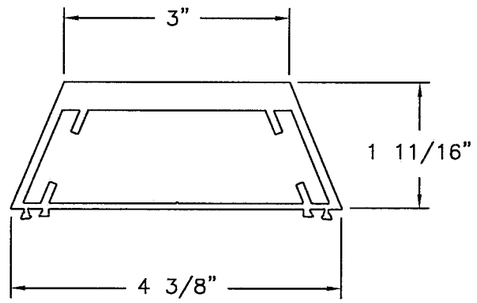
3 1/4" TB 135° MULLION ASSEMBLY (9060A5-WDI)

ALUMINUM 6063-T6 .125" THICK
MOMENT OF INERTIA: 13.58 IN^4
SECTION MODULUS: 5.39 IN^3
EFFECTIVE MOMENT OF INERTIA: 12.222 IN^4
EFFECTIVE SECTION MODULUS: 4.365 IN^3



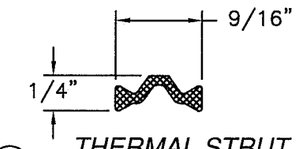
① *135° THERMAL BREAK MULL - EXT.*

ALUMINUM 6063-T6 .375" THICK



② *135° THERMAL BREAK MULL - INT.*

ALUMINUM 6063-T6 .375" THICK



③ *THERMAL STRUT*

NYLON POLYAMIDE .070" THICK
TENSILE STRENGTH 10,390 PSI

BILL OF MATERIALS				
ITEM NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1		135° THERMAL BREAK MULL - EXTERIOR	KEYMARK	ALUMINUM 6063-T6
2		135° THERMAL BREAK MULL - INTERIOR	KEYMARK	ALUMINUM 6063-T6
3	66GF25	THERMAL STRUT	KEYMARK	NYLON POLYAMIDE
4	FS-03855	L CLIP 4" X 4" X1/8" X 1 1/16"	KEYMARK	ALUMINUM 6063-T6

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

Date 11/1/19
Drawn By ALAN KINNE
Rev. A
DWG. No. 325SW135MUL-NOA
Sheet 4 OF 4
Series 325SWMULL
Desc. COMPONENTS
Title 3 1/4" SHALLOW 135° THERMALLY BROKEN CLIPPED ALUMINUM TUBE MULLION (LM)

WINDOOR® INCORPORATED
WINDOOR INCORPORATED
7500 AMSTERDAM DRIVE
ORLANDO, FL 32832
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ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
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8/17/20

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