



**MIAMI-DADE COUNTY**  
**DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)**  
**BOARD AND CODE ADMINISTRATION DIVISION**  
**NOTICE OF ACCEPTANCE (NOA)**

**MIAMI-DADE COUNTY**  
**PRODUCT CONTROL SECTION**  
 11805 SW 26 Street, Room 208  
 T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**WinDoor, Inc.**  
**7500 Amsterdam Drive**  
**Orlando, FL 32832**

**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 Deep 135° Thermally Broken" Aluminum Clipped Mullion - L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **08-00922**, titled "Series 9000 Deep Thermally Broken 135° Vertical Mullion Impact HVHZ", sheets 1 through 4 of 4, dated 03/05/10, with revision "C" dated 06/20/16, prepared by manufacturer, dated 08/26/16, signed and sealed by Luis R. Lomas, 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 NOA No. **11-1011.03** 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 **Jorge M. Plasencia, P.E.**



*[Signature]*  
 10/20/2016

**NOA No. 15-0618.09**  
**Expiration Date: October 03, 2018**  
**Approval Date: October 27, 2016**  
 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under previous NOA No. 11-1011.03)*
2. Drawing No. **08-00922**, titled "Series 9000 Deep Thermally Broken 135° Vertical Mullion Impact HVHZ", sheets 1 through 4 of 4, dated 03/05/10, with revision "C" dated 06/20/16, prepared by manufacturer, dated 08/26/16, 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 135° thermally broken aluminum mullion, prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3884-3**, dated 05/30/13, signed and sealed by Gerard J. Ferrara, P.E.  
*(Submitted under previous NOA No. 11-1011.03)*
2. Test Report No. **ETC-08-1043-20974.0**, prepared by ETC Laboratories and issued to Technoform Bautech NA, Inc., for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D1929** "Standard Test Method for Ignition Properties of Plastics", dated 07/01/08, signed and sealed by Joseph Labora Doldan, P.E.  
*(Submitted under previous NOA No. 11-1011.03)*
3. Test Report No. **ETC-07-1043-19094.0**, prepared by ETC Laboratories and issued to Technoform Bautech NA, Inc., for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D638** "Standard Test Methods for Tensile Properties of Plastics", for exposed & unexposed sample per Xenon Arc after 4500 Hours, dated 02/04/08, signed and sealed by Joseph Labora Doldan, P.E.  
*(Submitted under previous NOA No. 11-1011.03)*
4. Test Report No. **ATI-61261.01-106-18**, prepared by Architectural Testing, Inc. and issued to Technoform Bautech NA, Inc., for their **I-Strut Insulating Strip** comprised of Polyamide with 25% glass fibers, per **ASTM D635** "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position" and **ASTM D2843** "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", dated 12/08/05, revised on 01/04/06, signed and sealed by Joseph A. Reed, P.E.  
*(Submitted under previous NOA No. 11-1011.03)*

  
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**Jorge M. Plasencia, P. E.**  
Product Control Unit Supervisor  
NOA No. 15-0618.09  
Expiration Date: October 03, 2018  
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**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATIONS:**

1. Anchor verification calculations and structural analysis, complying with **FBC 5<sup>th</sup> Edition (2014)**, dated 06/21/16, revised on 09/22/16, 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.  
*(Submitted under previous NOA No. 11-1011.03)*

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 5<sup>th</sup> Edition (2014)**, and of no financial interest, dated 06/05/15, issued, signed and sealed by Luis R. Lomas, P.E.
2. Laboratory compliance letter for Test Report No. **NCTL-210-3884-3**, issued by National Certified Testing Laboratories, dated 05/30/13, signed and sealed by Gerald J. Ferrara, P. E.  
*(Submitted under previous NOA No. 11-1011.03)*
3. Laboratory compliance letter for Test Report No. **ETC-08-1043-20974.0**, issued by ETC Laboratories, dated 07/01/08, signed and sealed by Joseph Doldan, P. E.  
*(Submitted under previous NOA No. 11-1011.03)*
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*(Submitted under previous NOA No. 11-1011.03)*

**G. OTHERS**

1. Notice of Acceptance No. **11-1011.03**, issued to WinDoor, Inc. for their Series “9000 Deep 135° Thermally Broken” Clipped Aluminum Tube Mullion - L.M.I., approved on 10/03/13 and expiring on 10/03/18.

  
\_\_\_\_\_  
**Jorge M. Plasencia, P. E.**  
Product Control Unit Supervisor  
NOA No. 15-0618.09  
Expiration Date: October 03, 2018  
Approval Date: October 27, 2016

**NOTES:**

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE 5th. EDITION 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.

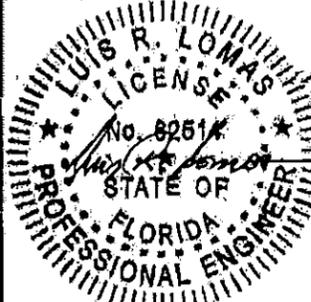
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/13/13	R.L.
B	REVISED BOM AND CLIP	08/30/13	R.L.
C	REVISED PER NEW REQUIREMENTS	06/20/16	R.L.

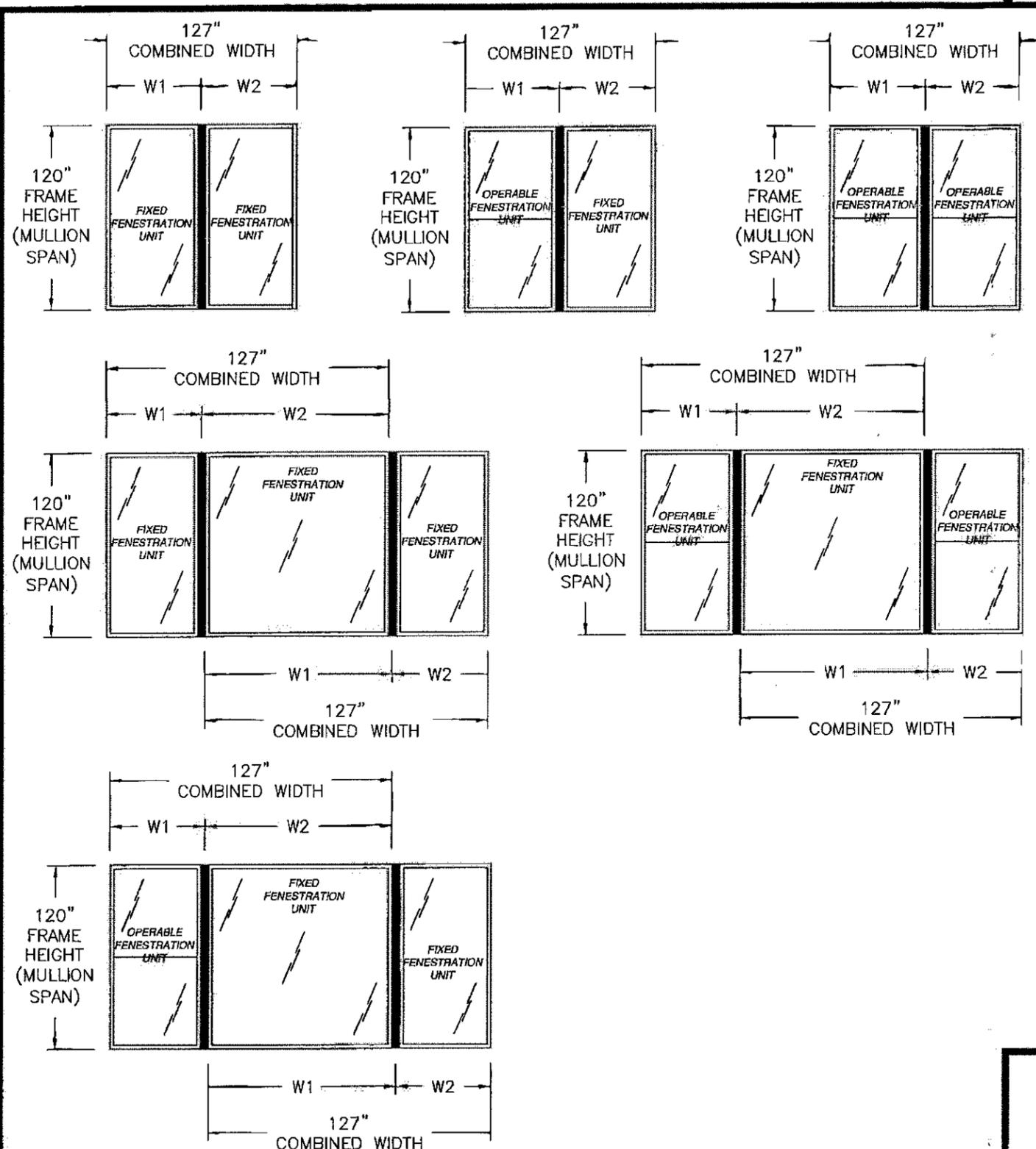
**ANCHORING NOTES:**

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" ELCO CRETE-FLEX 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 ITW TEK SMS OR SELF DRILLING GRADE 5 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 3,350 PSI.
  - C. METAL STRUCTURE: STEEL 16GA, 33KSI OR ALUMINUM 6063-T5 1/8" THICK MINIMUM

SIGNED: 08/26/2016

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

<p><b>WinDoor</b> INCORPORATED</p> <p>7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com</p>	<p>SERIES 9000 DEEP THERMALLY BROKEN 135" VERTICAL MULLION IMPACT HVHZ NOTES</p>		
	<p><b>PRODUCT REVISED</b> as complying with the Florida Building Code NOA-No. <b>15-0618.09</b> Expiration Date <b>10/03/2018</b></p> <p>By <i>[Signature]</i> Miami-Dade Product Control</p>	<p>DRAWN: V.L.</p> <p>SCALE NTS</p>	



**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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/13/13	R.L.
B	REVISED BOM AND CLIP	08/30/13	R.L.
C	REVISED PER NEW REQUIREMENTS	06/20/16	R.L.

Design pressure rating (psf)							
Mullion span (in)	Tributary width/single unit width (in)						
	27.50	33.50	39.50	45.50	51.50	57.50	63.50
24.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
30.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
36.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
42.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
48.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
54.00	186.5	186.5	186.5	186.5	186.5	186.5	186.5
60.00	186.5	186.5	186.5	186.5	186.5	186.5	170.8
66.00	186.5	186.5	186.5	186.5	186.5	171.5	155.3
72.00	186.5	186.5	186.5	186.5	175.5	157.2	142.4
78.00	186.5	186.5	186.5	183.4	162.0	145.1	131.4
84.00	186.5	186.5	186.5	170.3	150.5	134.8	122.0
90.00	186.5	186.5	183.1	158.9	140.4	125.8	113.9
96.00	186.5	186.5	171.6	149.0	131.7	117.9	106.8
102.00	186.5	186.5	161.5	140.2	123.9	111.0	100.5
108.00	186.5	179.9	152.6	132.5	117.0	104.8	94.9
114.00	186.5	170.4	144.5	125.5	110.9	99.3	89.9
120.00	186.5	161.9	137.3	119.2	105.3	94.3	85.4

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

**DESIGN PRESSURE TABLE INSTRUCTIONS:**

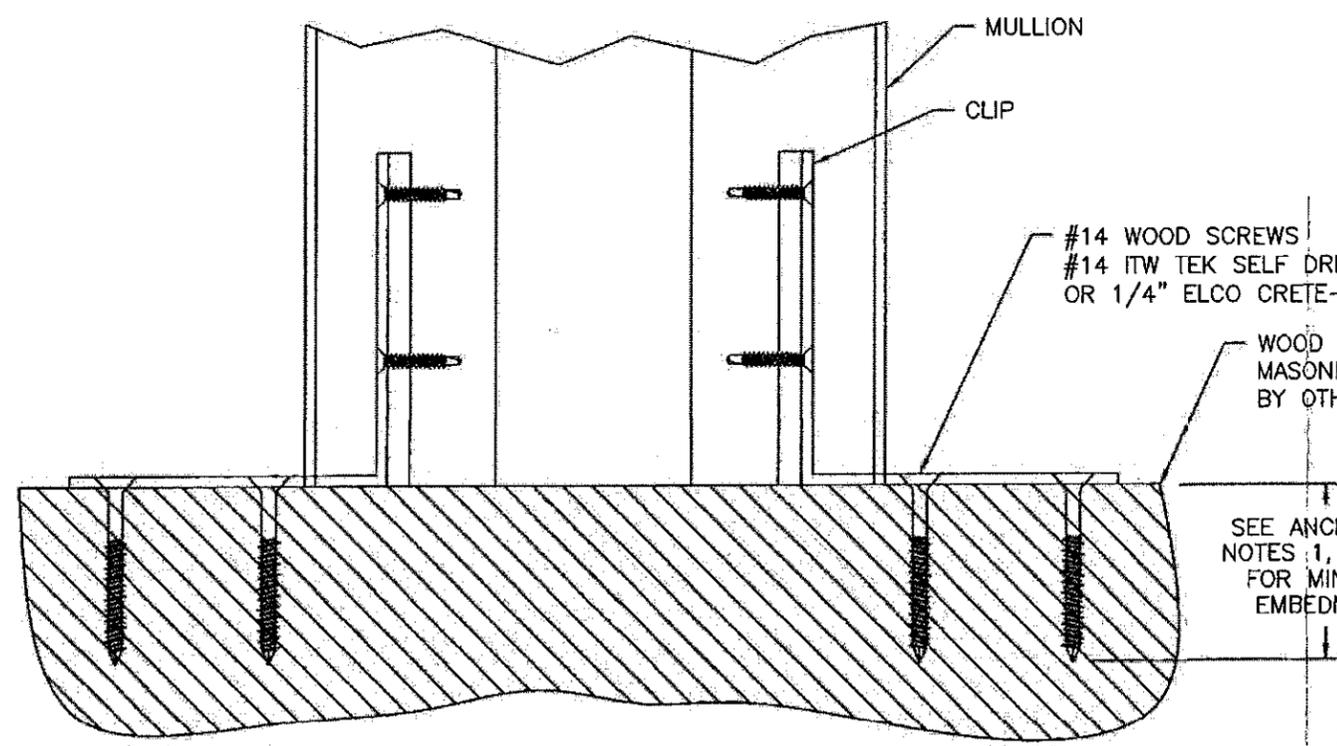
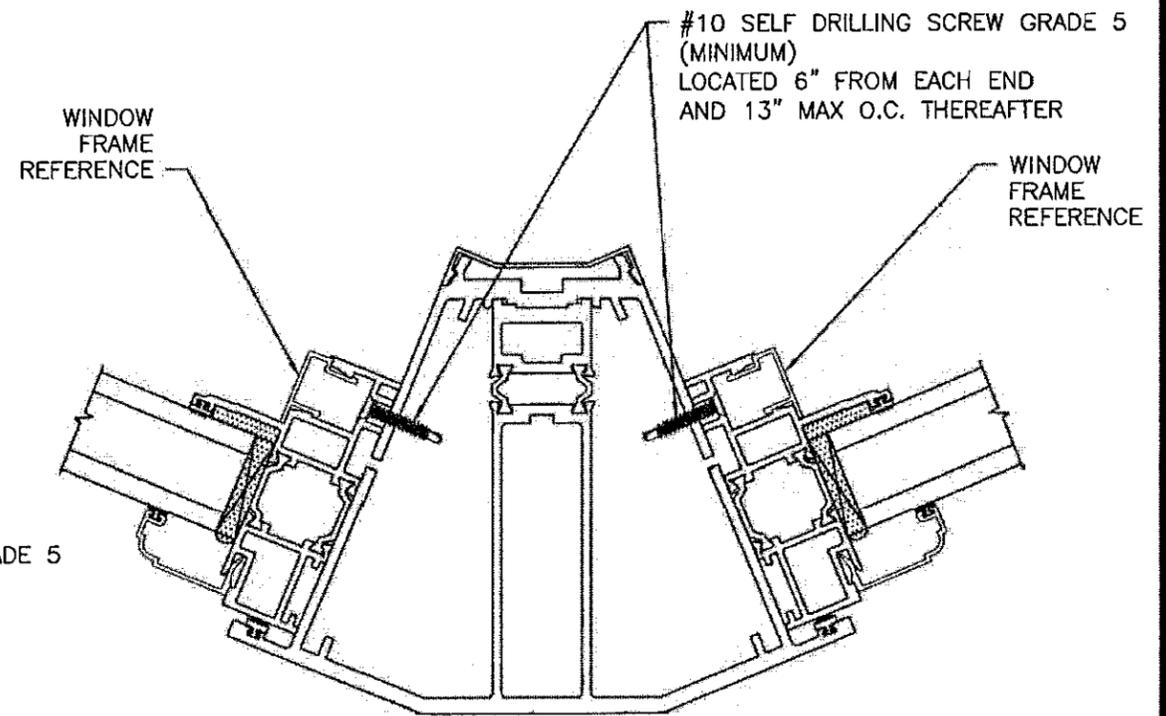
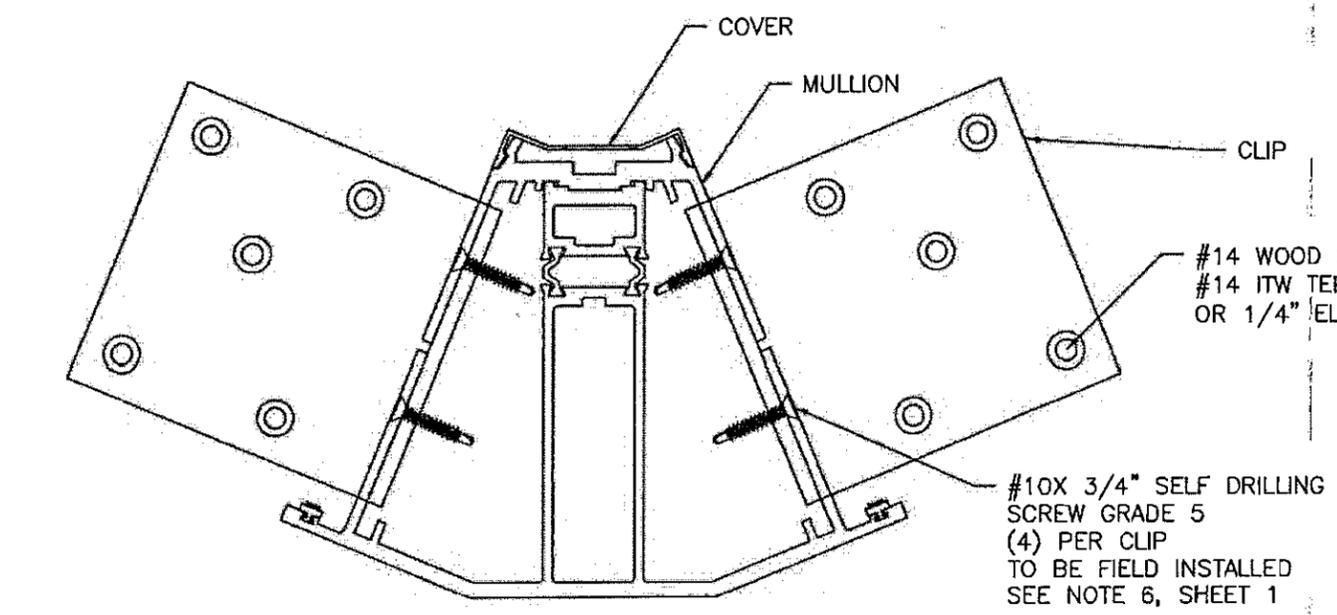
1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
2. DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
3. LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION 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.

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

SIGNED: 08/26/2016

<b>PRODUCT REVISED</b> as complying with the Florida Building Code NOA-No. <b>15-0618.09</b> Expiration Date <b>10/03/2018</b> By <i>[Signature]</i> Miami-Dade Product Control	<b>WinDoor</b> INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	
	SERIES 9000 DEEP THERMALLY BROKEN 135° VERTICAL MULLION IMPACT HVHZ CONFIGURATIONS & DP CHART	
DRAWN: V.L. SCALE NTS	DWG NO. 08-00922 DATE 03/05/10	REV C SHEET 2 OF 4

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW TESTING	08/13/13	R.L.
B	REVISED BOM AND CLIP	08/30/13	R.L.
C	REVISED PER NEW REQUIREMENTS	06/20/16	R.L.



WINDOW/MULLION CONNECTION

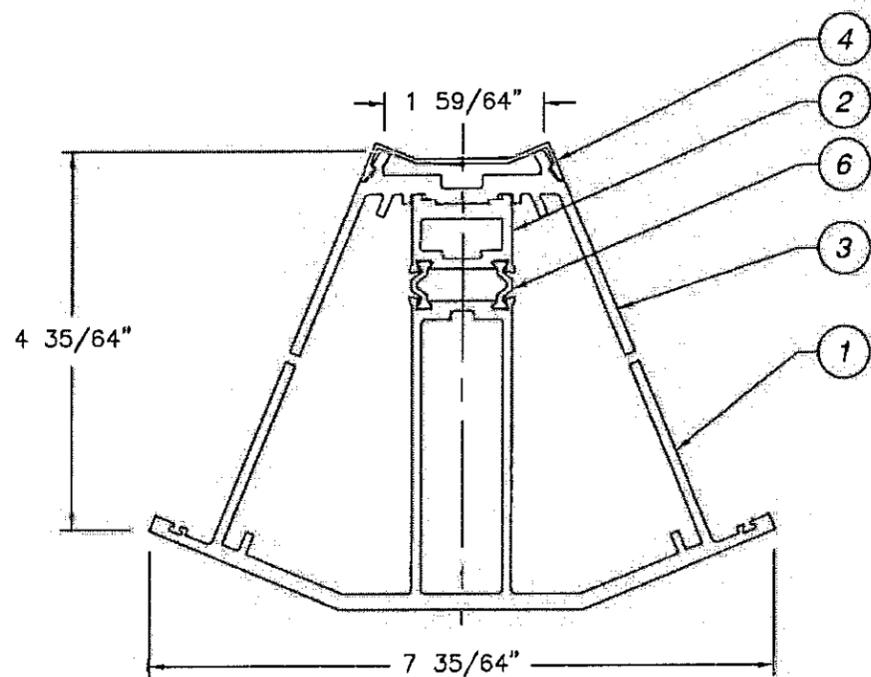
MULLION INSTALLATION DETAIL  
BOTTOM SHOWN, TOP SIMILAR

SIGNED: 08/26/2016

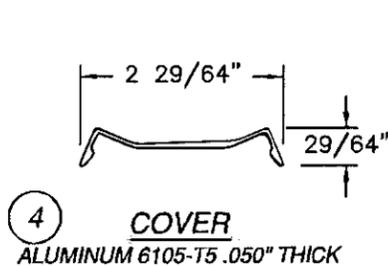
<b>WinDoor</b> INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	SERIES 9000 DEEP THERMALLY BROKEN 135° VERTICAL MULLION IMPACT HVHZ INSTALLATION DETAILS		
	PRODUCT REVISED as complying with the Florida Building Code NOA-No. 15-0618.09 Expiration Date 10/03/2018 By <i>[Signature]</i> Miami-Dade Product Control	DRAWN : V.L. SCALE NTS	

BILL OF MATERIALS				
NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	H-11095	135° MULLION EXTERIOR EXTRUSION	KEYMARK	ALUMINUM 6105-T5
2	H-11096	135° MULLION INTERIOR EXTRUSION	KEYMARK	ALUMINUM 6105-T5
3	S-46281	135° MULLION INTERIOR BAR	KEYMARK	ALUMINUM 6105-T5
4	S-46282	135° MULLION PUSH BAR COVER	KEYMARK	ALUMINUM 6105-T5
5		4" X 4" MULL L-CLIP	WINDOOR INC	ALUMINUM 6105-T5
6		14.6MM THERMAL I-STRUT	TECHNOFORM	NYLON POLYAMIDE

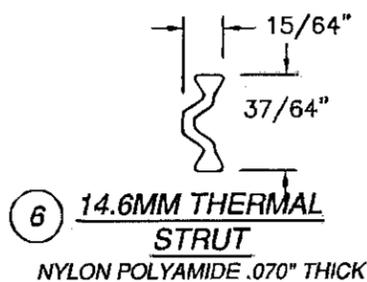
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
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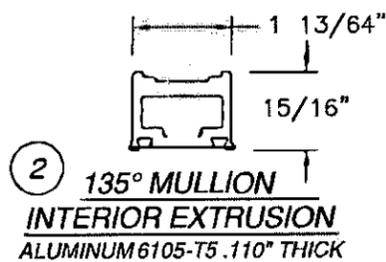
**SERIES 9000 DEEP 135° MULLION (90A345-WDI)**  
 ALUMINUM 6063-T6 .125" THICK  
 MOMENT OF INERTIA: 16.86 IN<sup>4</sup>  
 SECTION MODULUS: 5.61 IN<sup>3</sup>  
 EFFECTIVE MOMENT OF INERTIA: 16.86 IN<sup>4</sup>  
 EFFECTIVE SECTION MODULUS: 5.071 IN<sup>3</sup>



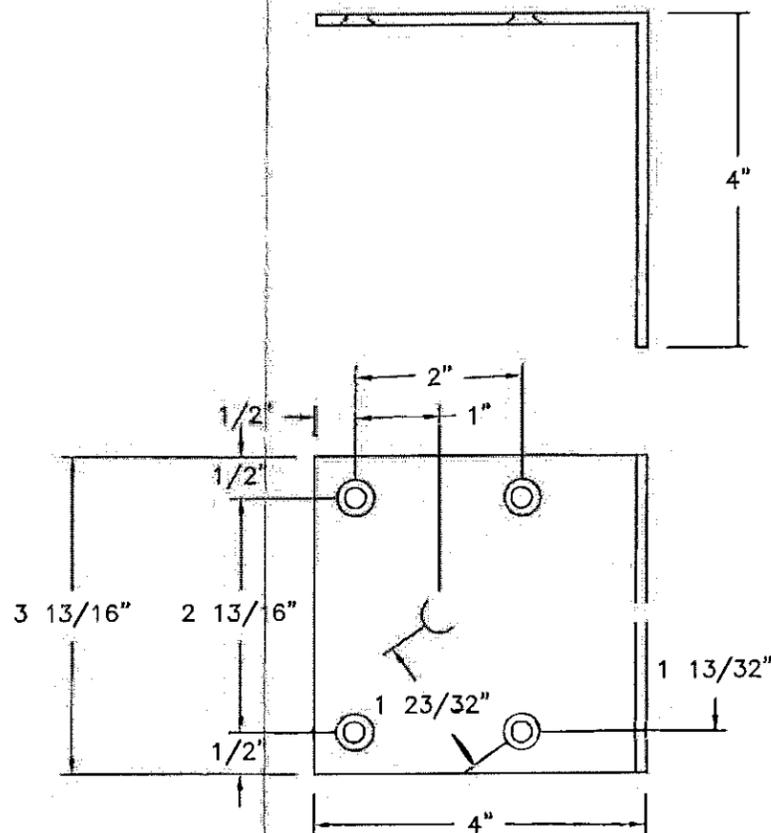
**4 COVER**  
ALUMINUM 6105-T5 .050" THICK



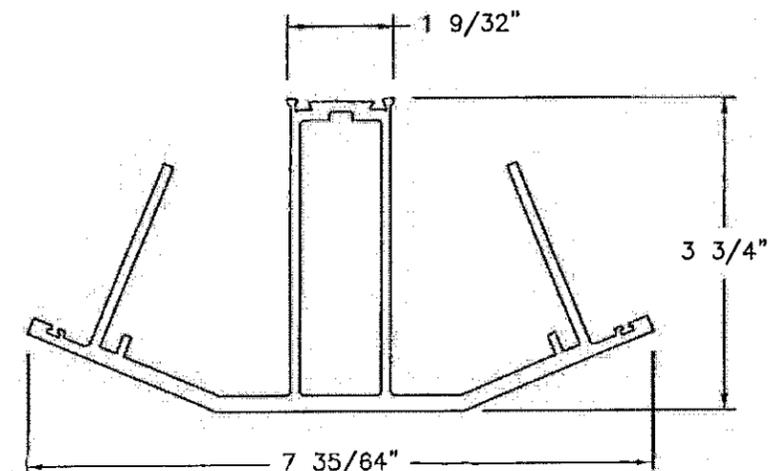
**6 14.6MM THERMAL STRUT**  
NYLON POLYAMIDE .070" THICK



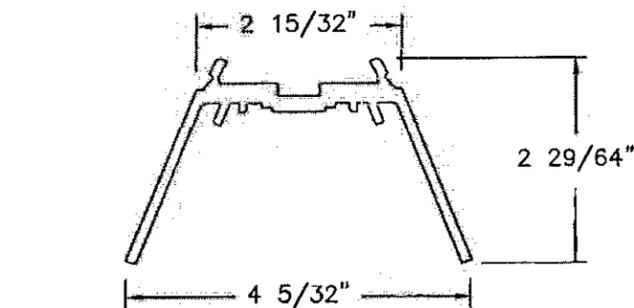
**2 135° MULLION INTERIOR EXTRUSION**  
ALUMINUM 6105-T5 .110" THICK



**5 CLIP**  
ALUMINUM 6105-T5 .125" THICK



**1 135° MULLION EXTERIOR EXTRUSION**  
ALUMINUM 6105-T5 .125" THICK



**3 135° MULLION INTERIOR BAR**  
ALUMINUM 6105-T5 .135" THICK

SIGNED: 08/26/2016

<b>WinDoor INCORPORATED</b> 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	SERIES 9000 DEEP THERMALLY BROKEN 135° VERTICAL MULLION IMPACT HVHZ COMPONENTS	
	PRODUCT REVISED as complying with the Florida Building Code NOA-No. 15-0618.09 Expiration Date 10/03/2018 By <i>[Signature]</i> Miami-Dade Product Control	DRAWN: V.L. SCALE NTS DATE 03/05/10

