



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode

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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 "1000" 180° Clipped, Extruded Aluminum Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **08-00663**, titled "1000 Series 180° LMI Vertical Mullion – 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", sheets 1 through 5 of 5, dated 12/18/08, with revision A dated 06/05/09, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

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 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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez, P.E.**



NOA No. 08-0902.04
Expiration Date: December 23, 2014
Approval Date: December 23, 2009
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **08-00663**, Sheets 1 through 5 of 5, titled "1000 Series 180° LMI Vertical Mullion – 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", dated 12/18/08, with revision A dated 06/05/09, 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: series 1000 fixed windows w/180°aluminum impact mullion, series 2000 fixed windows w/180° mullion, series 1000/2000 fixed windows w/135°fixed mullion and series 1000/2000 fixed windows w/135°adjustable mullion, all prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3632-1**, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 6/9/08, 05/04/09 and 10/11/09, prepared, signed and sealed by Luis R. Lomas, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

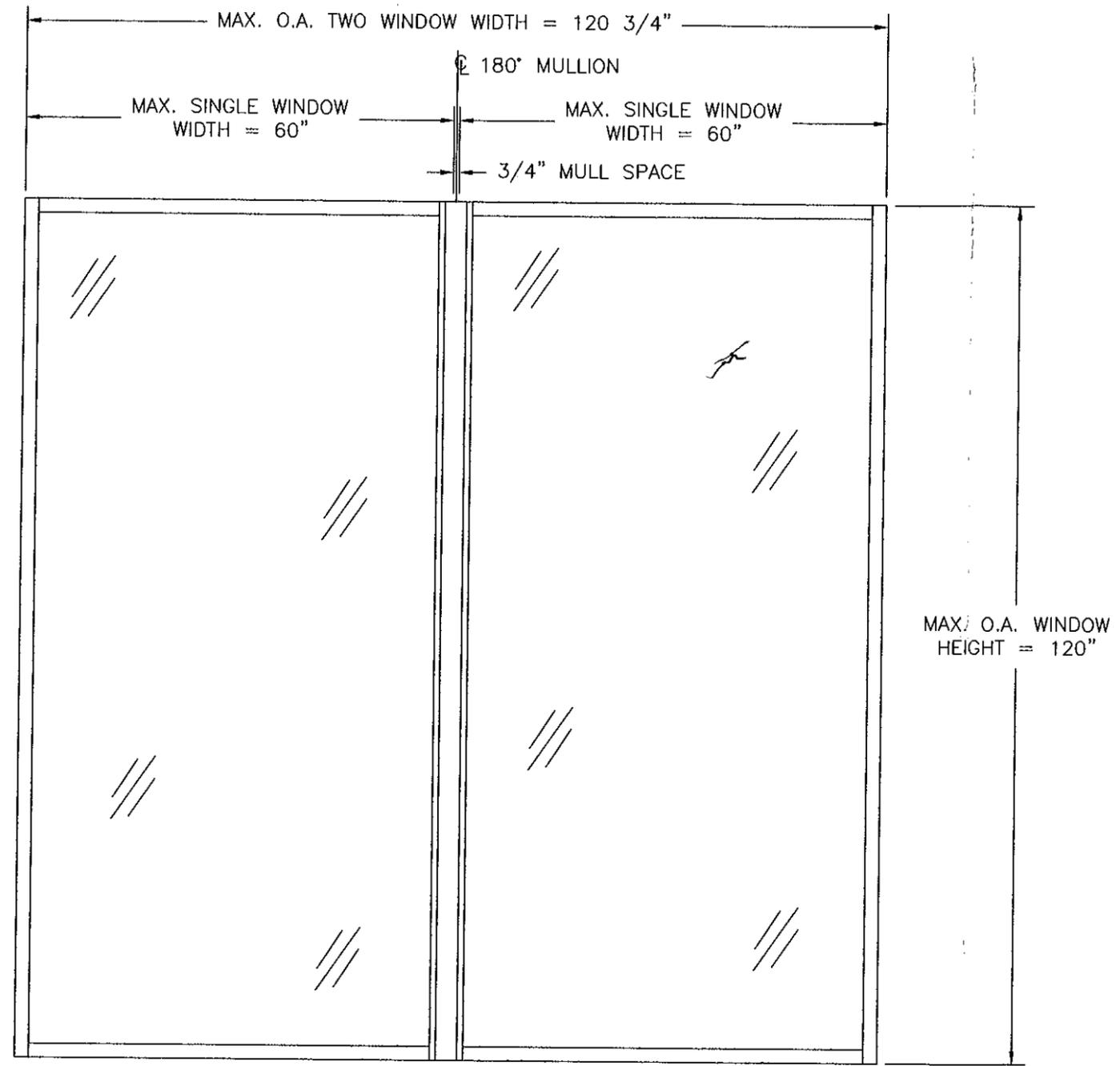
1. Statement letter of conformance and of no financial interest, dated July 28, 2008, signed and sealed by Luis R. Lomas, P.E.
2. Laboratory compliance letter for Test Report No. **NCTL-210-3632-1**, issued by National Certified Testing Laboratories, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E.

G. OTHER

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-0902.04
Expiration Date: December 23, 2014
Approval Date: December 23, 2009

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2) WOOD FRAMING/2X BUCK, 16GA. STEEL STUD OR MASONRY/CONCRETE OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. WOOD FRAMING/2X BUCK, 16GA. STEEL STUD OR MASONRY/CONCRETE OPENING 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) MULLION MATERIAL: EXTRUDED ALUMINUM 6063-T6
- 5) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN AREAS WHERE WIND BORNE DEBRIS PROTECTION IS REQUIRED.
- 6) DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO THE MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 7) MASONRY INSTALLATION:
SEE SHEET 3.
- 8) 2X BUCK/WOOD FRAMING INSTALLATION:
SEE SHEET 4.
- 9) 16GA. STEEL STUD FRAMING INSTALLATION:
SEE SHEET 5.
- 10) SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE UNITS TO BE MULLED TOGETHER MUST BE MANUFACTURED BY WinDoor INC. AND MUST BE MADE OUT OF EXTRUDED ALUMINUM 6063-T6.
- 11) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 12) TWIN CONFIGURATION SHOWN. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS THE SINGLE UNIT WIDTH AND THE SINGLE UNIT HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
- 13) MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.
- 14) 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. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - D. METAL STUD - 16GA. .060" MINIMUM THICKNESS.

1000 SERIES LARGE MISSILE IMPACT 180° MULLION
 TYPICAL ELEVATION EXTERIOR VIEW. DOUBLE SHOWN, MULTIPLES ARE APPROVED, SEE NOTE 12 SHEET 1

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATION AND GENERAL NOTES
2	BILL OF MATERIALS, COMPONENTS AND CROSS SECTION
3 - 5	INSTALLATION DETAILS AND DESIGN PRESSURE CHART

Approved as complying with the Florida Building Code
 Date: DEC. 13, 2009
 No. 08-0902.04
 Miami Dade Product Control Division
 By: _____

WinDoor INCORPORATED
 7500 AMSTERDAM DRIVE
 ORLANDO, FL 32832
 Phone: 407.481.8400
 Fax: 407.481.0505
 www.windoorinc.com

1000 SERIES 180° LMI VERTICAL MULLION
 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS
 ELEVATION AND GENERAL NOTES

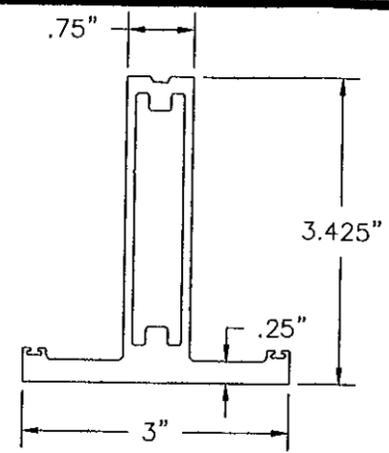
DRAWN: TJH DWG NO. 08-00663 REV A
 SCALE NTS DATE 12/18/08 SHEET 1 OF 5

Luis R. Lomas
 11/18/09
 8/11/09
LUIS R. LOMAS P.E.
 Florida No. 62514

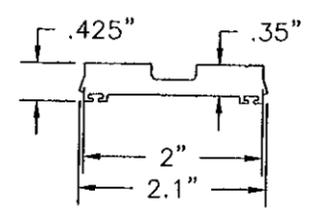
PARTS LIST

NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	FH-02488	1000 SERIES 180° MULLION	KEYMARK	ALUMINUM 6063-T6
2	FH-03038	1000 SERIES 180° MULLION CAP	KEYMARK	ALUMINUM 6063-T6
3	FH-03040	1000 SERIES 180° MULLION COVER	KEYMARK	ALUMINUM 6063-T6
4		MULLION GLAZING VINYL		
5	FS-03854	4" x 8" x 1/8" 4HOLE T-CLIP	KEYMARK	ALUMINUM 6063-T6
6		1/4" ELCO CRETE-FLEX	ELCO	STAINLESS STEEL
7		#14 CUT THREAD WOOD SCREW		STAINLESS STEEL
8		1/4"-14 3-POINT TEK SCREW	ITW	STAINLESS STEEL
9		#12 TEK SCREW		STAINLESS STEEL
10		#10 x 3/4" SELF TAPPING SCREW		STAINLESS STEEL
11	FH-02485	HEAD, SILL & JAMB FRAME	KEYMARK	ALUMINUM 6063-T6
12	FS-02862	FLUSH FRAME PLATE	KEYMARK	ALUMINUM 6063-T6
13	FS-01882	INSERT	KEYMARK	ALUMINUM 6063-T6
14	FS-02479	SINGLE GLAZED GLASS STOP	KEYMARK	ALUMINUM 6063-T6

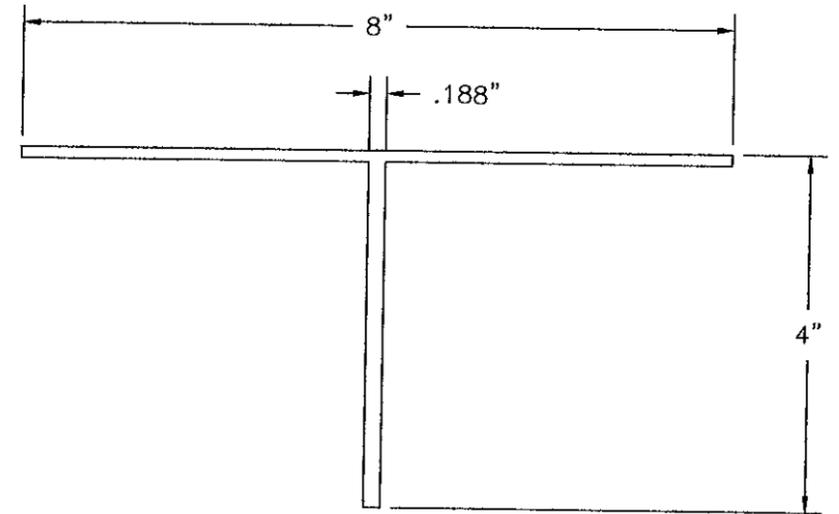
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



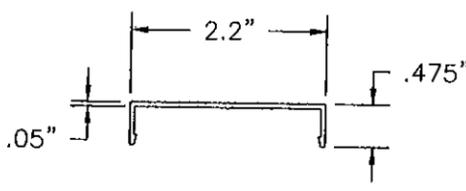
① 1000 SERIES 180° WINDOW MULLION
6063-T6 ALUM.



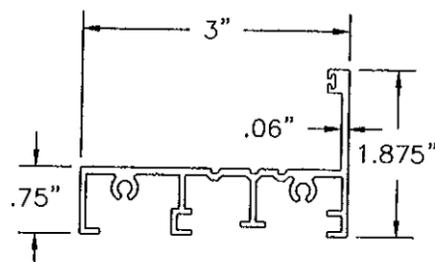
② 1000 SERIES 180° MULLION CAP
6063-T6 ALUM.



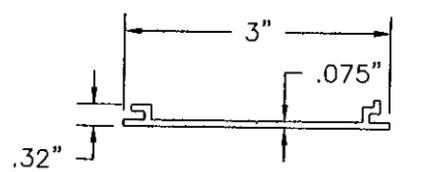
⑤ 4" x 8" x 1/8" 4HOLE T-CLIP
6063-T6 ALUMINUM .125" THICK



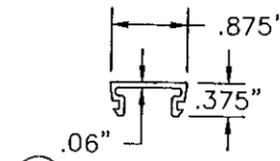
③ 1000 SERIES 180° MULLION COVER
6063-T6 ALUM.



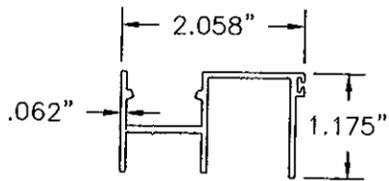
⑪ HEAD, SILL & JAMB FRAME
6063-T6 ALUM.



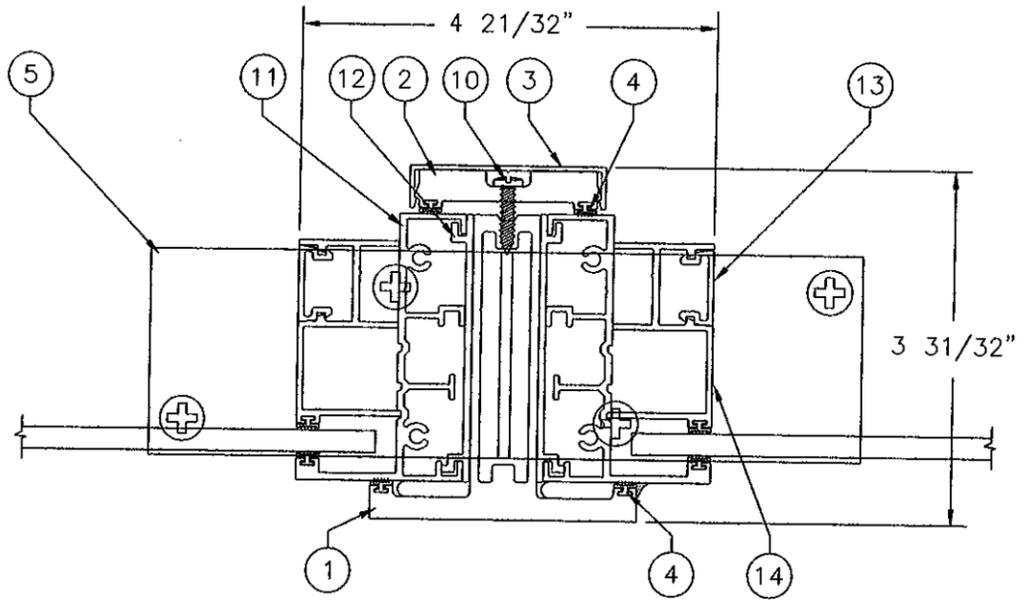
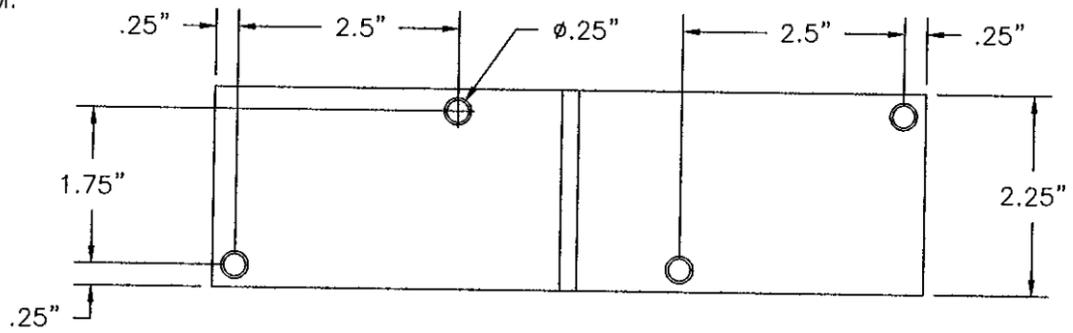
⑫ FLUSH FRAME PLATE
6063-T6 ALUM.



⑬ INSERT
6063-T6 ALUM.



⑭ SINGLE GLAZED GLASS STOP
6063-T6 ALUM.



MULLION CROSS SECTION
TOTAL MI VALUE = 8.9641

Approved as complying with the Florida Building Code
 Date DEC. 23, 2009
 No. 08-0902-04
 Miami Dade Product Control Division
 By: *Maureen Perry*

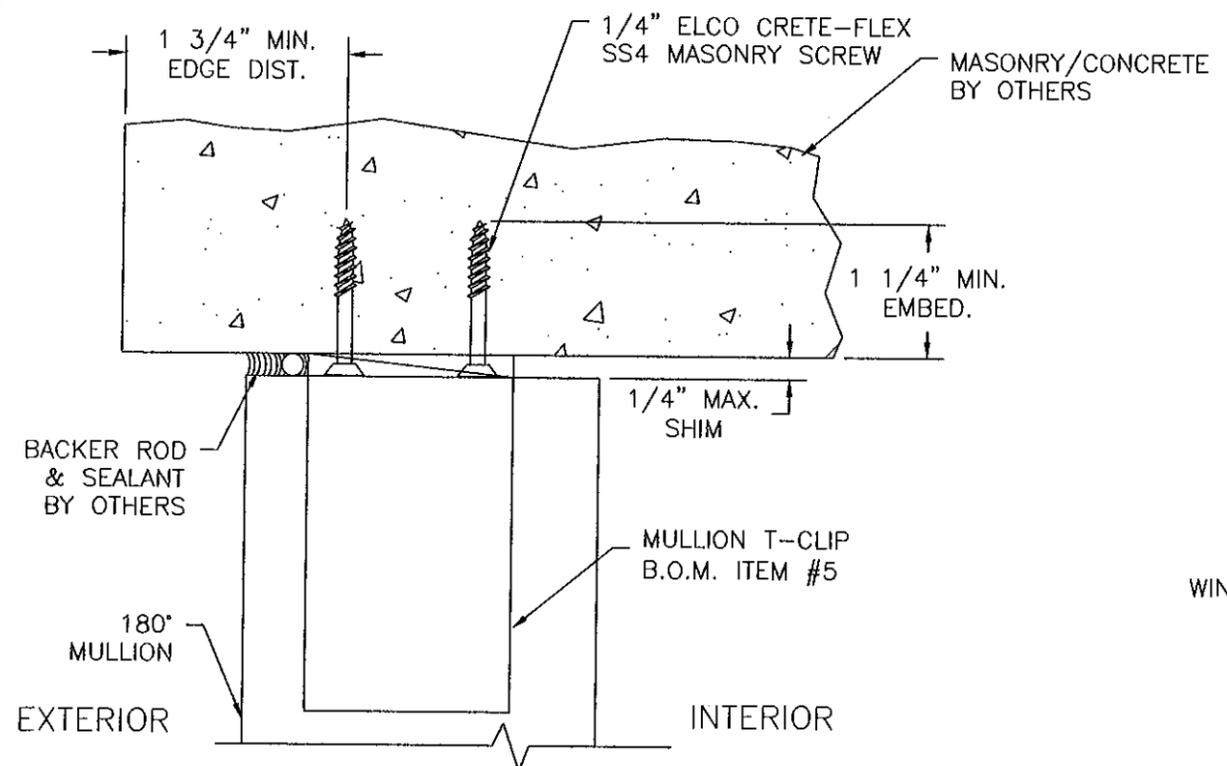
WinDoor
 INCORPORATED
 7500 AMSTERDAM DRIVE
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1000 SERIES 180° LMI VERTICAL MULLION
 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS
 BILL OF MATERIALS, COPONENTS & CROSS SECTION

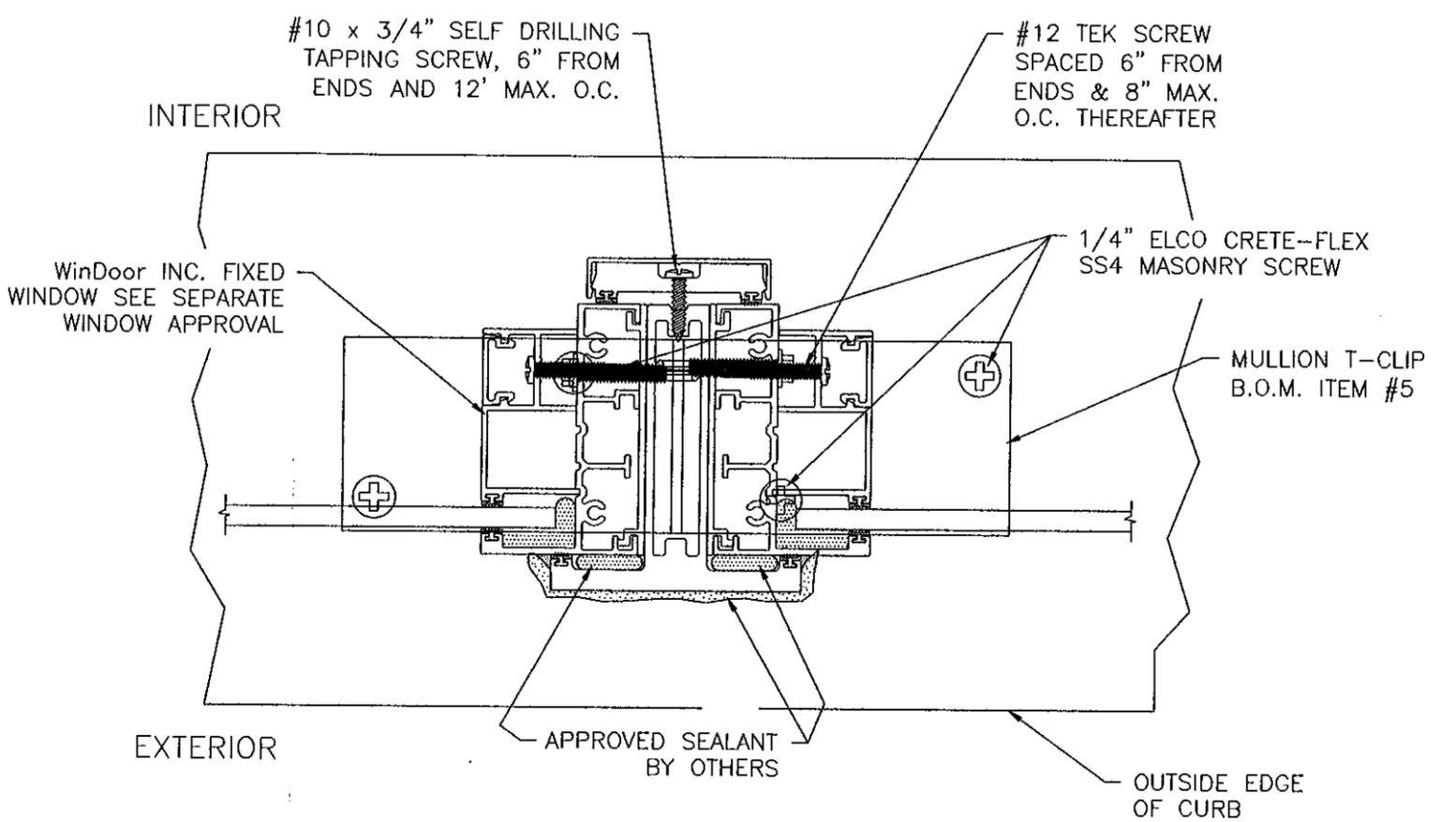
DRAWN: TJH	DWG NO. 08-00663	REV A
SCALE NTS	DATE 12/18/08	SHEET 2 OF 5

Luis R. Lomas
 11/18/09
 LUIS R. LOMAS P.E.
 Florida No. 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



1000 SERIES 180° MULLION
 MASONRY/CONCRETE HIGH LOADS
 INSTALLATION HEAD SHOWN, SILL IS SAME
 FIXED WINDOW NOT SHOWN



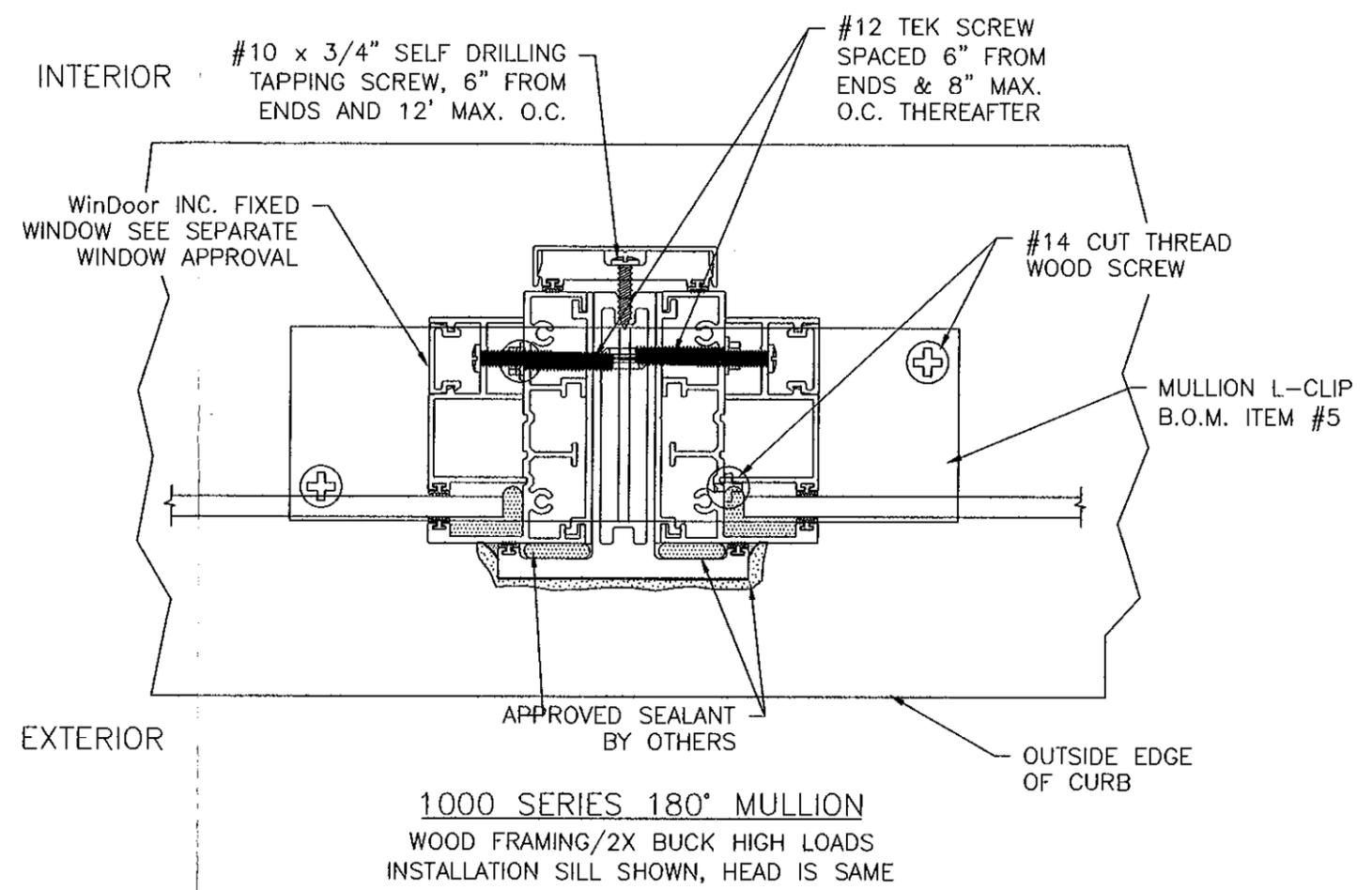
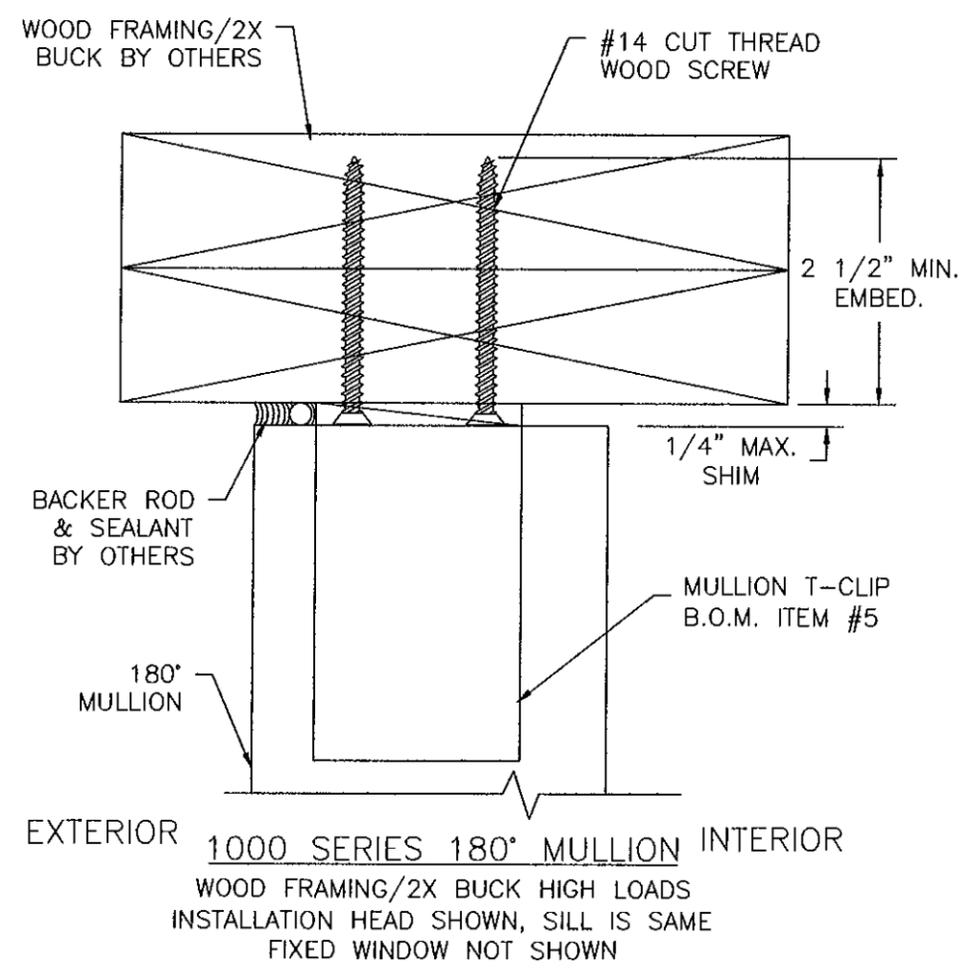
1000 SERIES 180° MULLION
 MASONRY/CONCRETE HIGH LOADS
 INSTALLATION SILL SHOWN, HEAD IS SAME

Maximum design pressure capacity chart (psf)
1000 Series FW 180° Mull Masonry Installation

Height (in)	Single Window Width (in)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	188	180	176
72.0	200	200	195	177	165	156	150
78.0	200	200	176	158	146	138	132
84.0	200	183	160	143	132	123	117
90.0	200	168	146	131	120	111	105
96.0	188	156	135	120	110	102	96
102.0	176	145	125	111	100	91	-
108.0	157	127	107	93	83	-	-
114.0	133	107	91	79	70	-	-
120.0	114	92	77	67	59	-	-

Approved as complying with the Florida Building Code Date: <i>DEC 23, 2009</i> NDA# <i>08-0902.04</i> Release Date Product Control By: <i>Manuel Perez</i>	WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	<i>Luis R. Lomas</i> 11/18/09 LUIS R. LOMAS P.E. Florida No. 62514
	1000 SERIES 180° LMI VERTICAL MULLION 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS INSTALLATION DETAILS AND DESIGN PRESSURE CHART	
DRAWN: TJH SCALE NTS	DWG NO. 08-00663 DATE 12/18/08	REV A SHEET 3 OF 5

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.

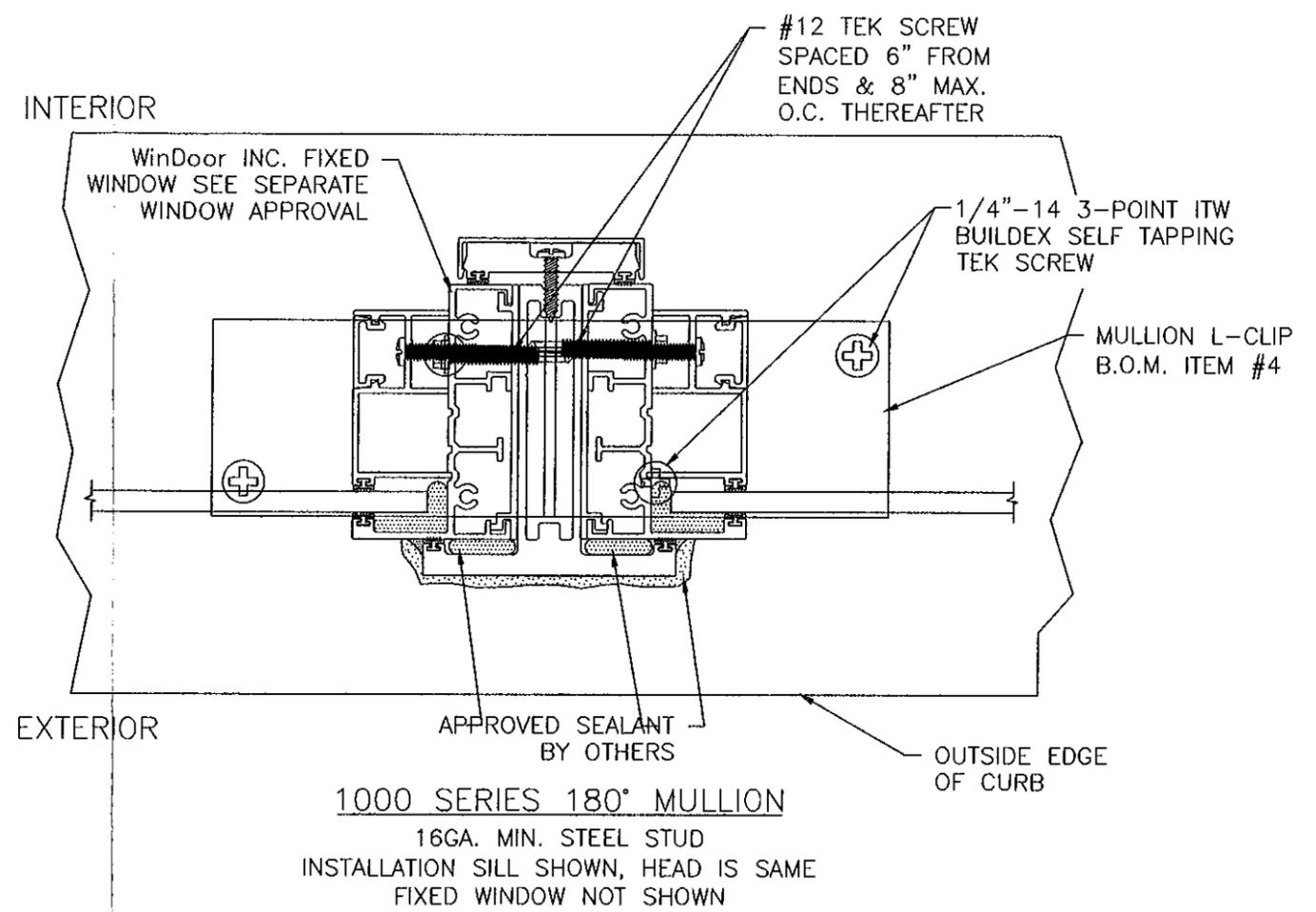
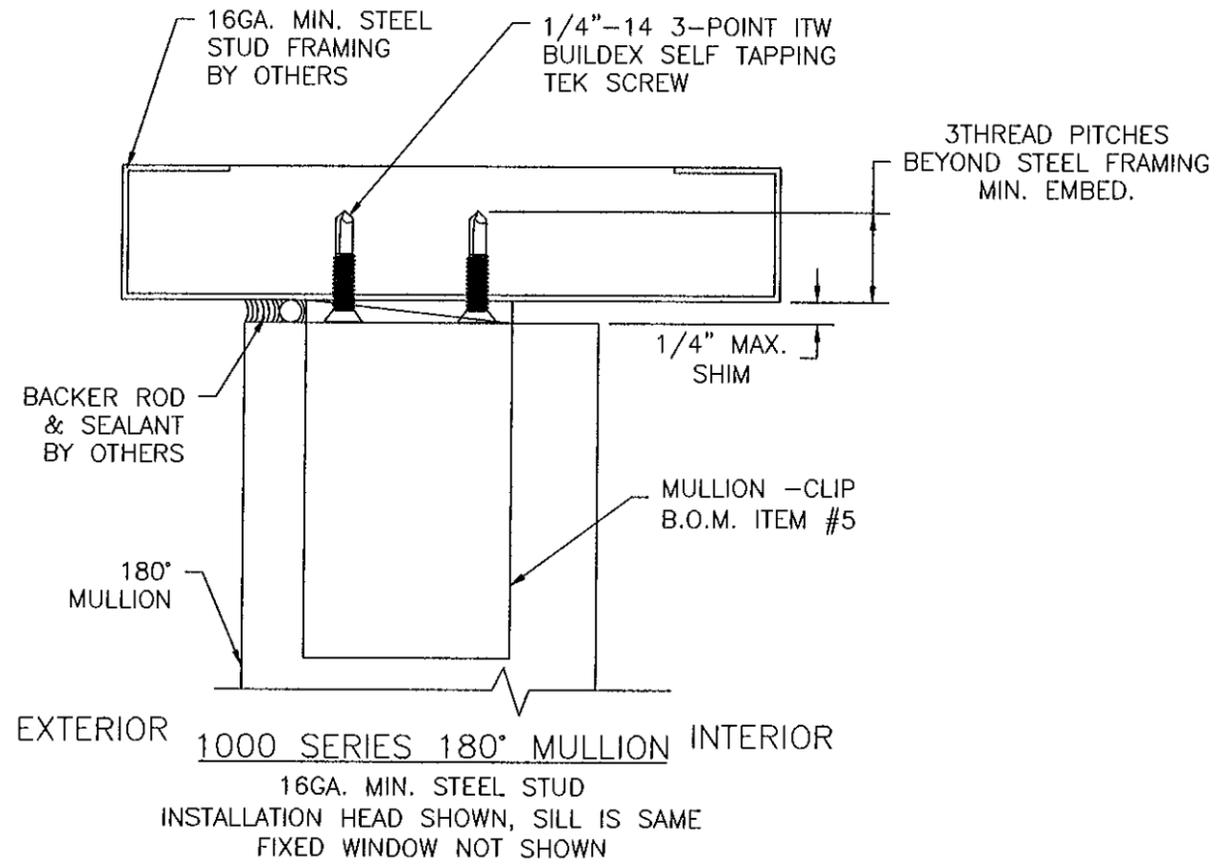


Maximum design pressure capacity chart (psf)
1000 Series FW 180° Mull Wood Framing Installation

Height (in)	Single Window Width (in)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	199	184	174	169	167
66.0	200	197	174	159	149	143	139
72.0	200	176	155	140	131	124	119
78.0	190	159	139	126	116	109	104
84.0	174	145	127	114	104	98	93
90.0	161	134	116	104	95	88	83
96.0	149	124	107	95	87	81	76
102.0	139	115	99	88	80	74	-
108.0	131	108	93	82	74	-	-
114.0	123	101	87	77	69	-	-
120.0	114	92	77	67	59	-	-

Approved as complying with the Florida Building Code Date: <i>DEC. 23, 2009</i> NO. <i>08-0902.04</i> Miami Dade Product Control Osceola By: <i>Manuel Perez</i>	WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	
	1000 SERIES 180° LMI VERTICAL MULLION 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS INSTALLATION DETAILS AND DESIGN PRESSURE CHART	
DRAWN: TJH SCALE NTS	DWG NO. 08-00663 DATE 12/18/08	REV A SHEET 4 OF 5

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



Maximum design pressure capacity chart (psf)
1000 Series FW 180° Mull Steel Framing Installation

Height (in)	Single Window Width (in)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	200	200	200
72.0	200	200	200	200	200	200	200
78.0	200	200	200	200	200	200	200
84.0	200	200	200	200	187	173	162
90.0	200	200	189	166	149	137	128
96.0	200	182	154	135	121	111	103
102.0	187	151	128	112	100	91	-
108.0	157	127	107	93	83	-	-
114.0	133	107	91	79	70	-	-
120.0	114	92	77	67	59	-	-

Approved as complying with the Florida Building Code Date <i>DEC 23, 2009</i> NDA# <i>05-0902.04</i> Manual Data Product Control Checked By <i>Manuel Perez</i>	WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	<i>Manuel Perez</i> 11/18/09 LUIS R. LOMAS/P.E. Florida No. 62514
	1000 SERIES 180° LMI VERTICAL MULLION 4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS INSTALLATION DETAILS AND DESIGN PRESSURE CHART	
DRAWN: TJH SCALE NTS	DWG NO. 08-00663 DATE 12/18/08	REV A SHEET 5 OF 5