



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

MIAMI-DADE COUNTY, FLORIDA  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
T (786) 315-2590 F (786) 315-2599

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**Marvin Windows and Doors**  
**Highway 11 West (P.O. Box 100)**  
**Warroad, MN 56763-0100**

**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 "StormPlus IZ4 Clad Casemaster Picture" Aluminum Clad Wood Fixed Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **1536**, titled "Clad Casemaster Picture StormPlus IZ4", sheets 01 through 10 of 10, dated 04/02/08, with revision "A" dated 10/17/11, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P. E., bearing the Miami-Dade County Product Control Section 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, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**REVISION** 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 **renews NOA No. 11-1021.10** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



*J. Gascon*  
*4/23/13*

NOA No. 13-0205.16  
Expiration Date: July 03, 2018  
Approval Date: May 03, 2013  
Page 1

Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under NOA No. 08-0213.08)*
2. Drawing No. **1536**, titled "Clad Casemaster Picture StormPlus IZ4", sheets 01 through 10 of 10, dated 04/02/08, with revision "A" dated 10/17/11, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P. E.  
*(Submitted under NOA No. 11-1021.10)*

**B. TESTS**

1. Test reports on:
  - 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of aluminum clad wood awning windows, prepared by Architectural Testing, Inc., Test Report No. **ATI-77780.01-201-18**, dated 01/28/08, signed and sealed by Joseph A. Reed, P. E.  
*(Submitted under previous NOA No. 08-0213.08)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC-2010**, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 01/30/11, signed and sealed by Warren W. Schaefer, P. E.
2. **Glazing complies with ASTM E1300-04**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC-2010**, and with **ANSI/AAMA/ NWWDA 101/ I.S.2-97**, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 01/30/13, signed and sealed by Warren W. Schaefer, P. E.



Jaime D. Gascon, P. E.  
Product Control Section Supervisor  
NOA No. 13-0205.16  
Expiration Date: July 03, 2018  
Approval Date: May 03, 2013

Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**F. STATEMENTS (CONTINUED)**

2. Statement letter of no financial interest and independency, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 01/30/13, signed and sealed by Warren W. Schaefer, P. E.
3. Laboratory compliance letter for Test Report No. **ATI-77780.01-201-18** issued by Architectural Testing, Inc., dated 01/28/08, signed and sealed by Joseph A. Reed, P. E. *(Submitted under previous NOA No. 08-0213.08)*
4. Test Proposal No. **07-3071** issued by Product Control dated 06/21/07, revised on 07/02/07, signed by Manuel Perez, P. E. *(Submitted under previous NOA No. 08-0213.08)*

**G. OTHERS**

1. Notice of Acceptance No. **11-1021.10**, issued to Marvin Windows and Doors for their Series "StormPlus IZ4 Clad Casemaster Picture Aluminum Clad Wood Fixed Window - L.M.I.", approved on 12/22/11 and expiring on 07/03/13.



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Jaime D. Gascon, P. E.  
Product Control Section Supervisor  
NOA No. 13-0205.16  
Expiration Date: July 03, 2018  
Approval Date: May 03, 2013

**GENERAL NOTES:**

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S).
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.
7. ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF KD = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR CD = 1.6 WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
11. ALL WOOD MEMBERS OF WINDOWS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.

**CORNER CONSTRUCTION (STANDARD RECTANGULAR WINDOWS)**

**FRAME CORNERS:** THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS, SECURED WITH THREE(3) GS16 1/2 X 1 1/2" STAPLES THROUGH THE HEAD & SILL INTO THE JAMB & ONE(1) 14 GA. 1/2 X 2" STAPLE THROUGH THE JAMB INTO THE HEAD & SILL & SEALED WITH SEALANT.  
**FRAME CLADDING CORNERS:** CLADDING IS MITERED TOGETHER & JOINED WITH A CORNER KEY PART NO. 37A.  
**SASH CORNERS:** SASH MEMBERS ARE MORTISED & TENONED AND SECURED WITH ONE(1) GS16 X 1 1/8" STAPLE.  
**SASH CLADDING CORNERS:** CLADDING IS MITERED TOGETHER & JOINED WITH A CORNER KEY PART NO. 37B.

**CORNER CONSTRUCTION (SHAPED WINDOWS)**

**FRAME CORNERS:** THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH NO. 7 X 2" SCREWS (3 AT SQUARE CORNERS; 4 AT SHAPED CORNERS) AND SEALED WITH SEALANT.  
**FRAME CLADDING CORNERS:** CLADDING IS MITERED TOGETHER & JOINED WITH A CORNER KEY PART NO. 37C WHICH IS SCREWED CLAD TO KEY WITH 4 NO. 7 X 1/2" SCREWS (2 PER KEY LEG).  
**SASH CORNERS:** SASH MEMBERS ARE BUTTED TOGETHER, JOINED WITH 2 NO. 7 X 2" TRIM HEAD SCREWS & SEALED WITH SEALANT.  
**SASH CLADDING CORNERS:** MITER CUT, BUTTED TOGETHER AND SEALED WITH SEALANT

**CORNER CONSTRUCTION (WIDE SASH WINDOWS)**

**FRAME CORNERS:** THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH NO. 7 X 2" SCREWS (3 AT SQUARE CORNERS; 4 AT SHAPED CORNERS) AND SEALED WITH SEALANT.  
**FRAME CLADDING CORNERS:** CLADDING IS MITERED TOGETHER & JOINED WITH A CORNER KEY PART NO. 37C WHICH IS SCREWED CLAD TO KEY WITH 4 NO. 7 X 1/2" SCREWS (2 PER KEY LEG).  
**SASH CORNERS:** SASH MEMBERS ARE BUTTED TOGETHER, JOINED WITH ONE NO. 10 X 6" SCREW.  
**SASH CLADDING CORNERS:** SQUARE CUT, BUTTED TOGETHER AND SEALED WITH SEALANT

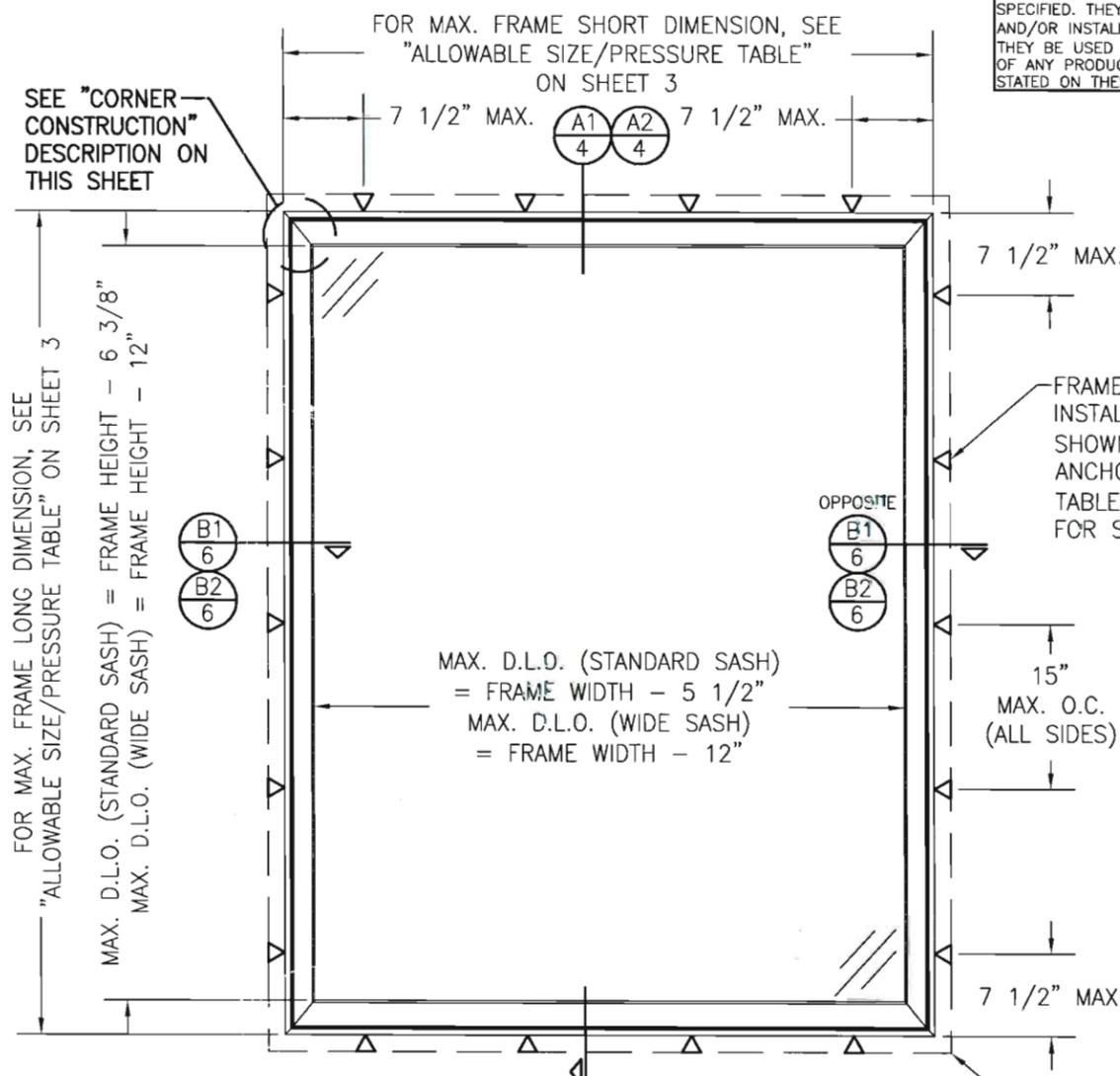
**FRAME ANCHOR REQUIREMENTS TABLE**

OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
<b>FRAME SHEAR SCREWS</b>			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
<b>INSTALLATION CLIP SCREWS</b>			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILLING SCREW	FULL	1/2"

(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-16	DATE: 04/02/08
DATE: 10/17/11	
BY: W.R.M.	
REVISION DESCRIPTION	
NO. A1	UPDATE TO CURRENT STANDARDS



**EXTERIOR ELEVATION SINGLE RECTANGULAR FIXED CASEMENT WINDOW**

(STANDARD SASH CONDITION SHOWN, WIDE SASH CONDITION ALSO APPLIES)  
 SCALE: 3/4" = 1'-0"

**ALLOWABLE DESIGN PRESSURE (SINGLE STANDARD SASH & SINGLE WIDE SASH WINDOWS)**  
 SEE LOAD TABLE ON SHEET 3

NAILING FIN IS REQUIRED WITH CLIP MOUNT CONDITION AND IS OPTIONAL & MAY BE REMOVED FOR A FRAME SHEAR SCREW MOUNT CONDITION (NAIL FIN SHALL NOT ACT AS A SUBSTITUTE FOR THE FRAME SHEAR SCREWS SPECIFIED).  
 NOTE: NAIL FIN IS NOT REQUIRED TO BE ANCHORED

PRODUCT RENEWED as complying with the Florida Building Code  
 Acceptance No. 13-0205.16  
 Expiration Date 07/03/2018  
 By [Signature]  
 Miami Dade Product Control

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No. 11-1021.10  
 Expiration Date July 3, 2013  
 By [Signature]  
 Miami Dade Product Control

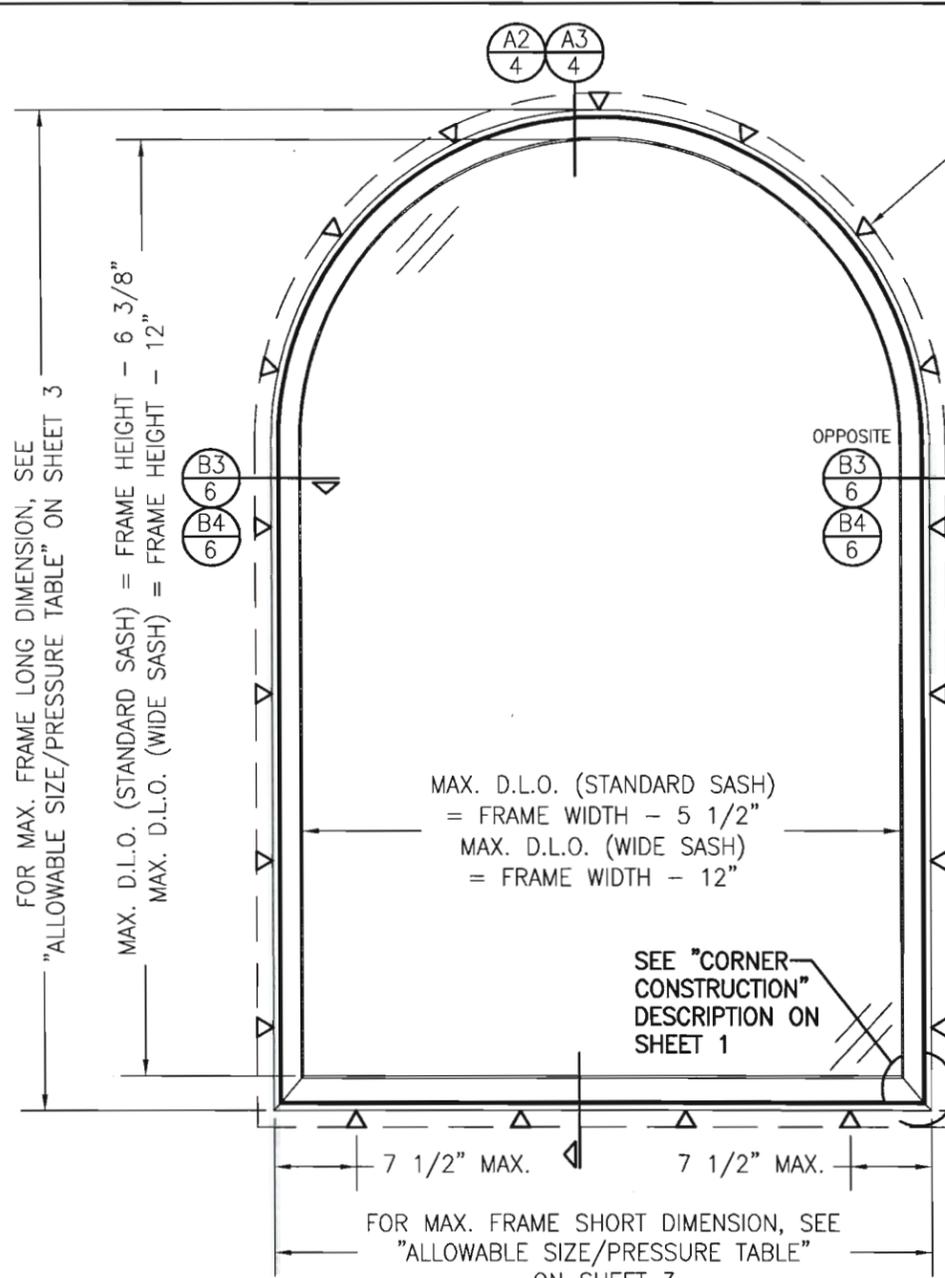


DRAWING TITLE: CLAD CASEMASTER PICTURE STORMPLUS IZ4

MANUFACTURER: MARVIN WINDOWS & DOORS  
 HIGHWAY 11; P.O. BOX 100  
 WARROAD, MN 56763  
 800-346-5044

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)  
 7480 150TH COURT NORTH  
 PALM BEACH GARDENS, FL 33418  
 PHONE: 561-744-3424

CERTIFICATION	DATE: OCT 17 2011
DRAWING NO.	REV.
1536	A
SHEET NO.	1 OF 10

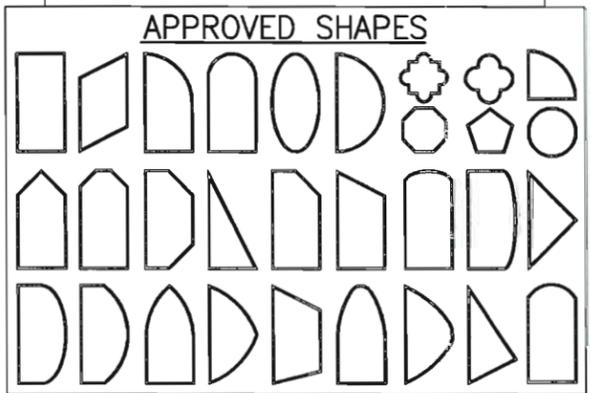


FRAME SHEAR SCREWS OR INSTALLATION CLIPS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR SCREW REQUIREMENTS.

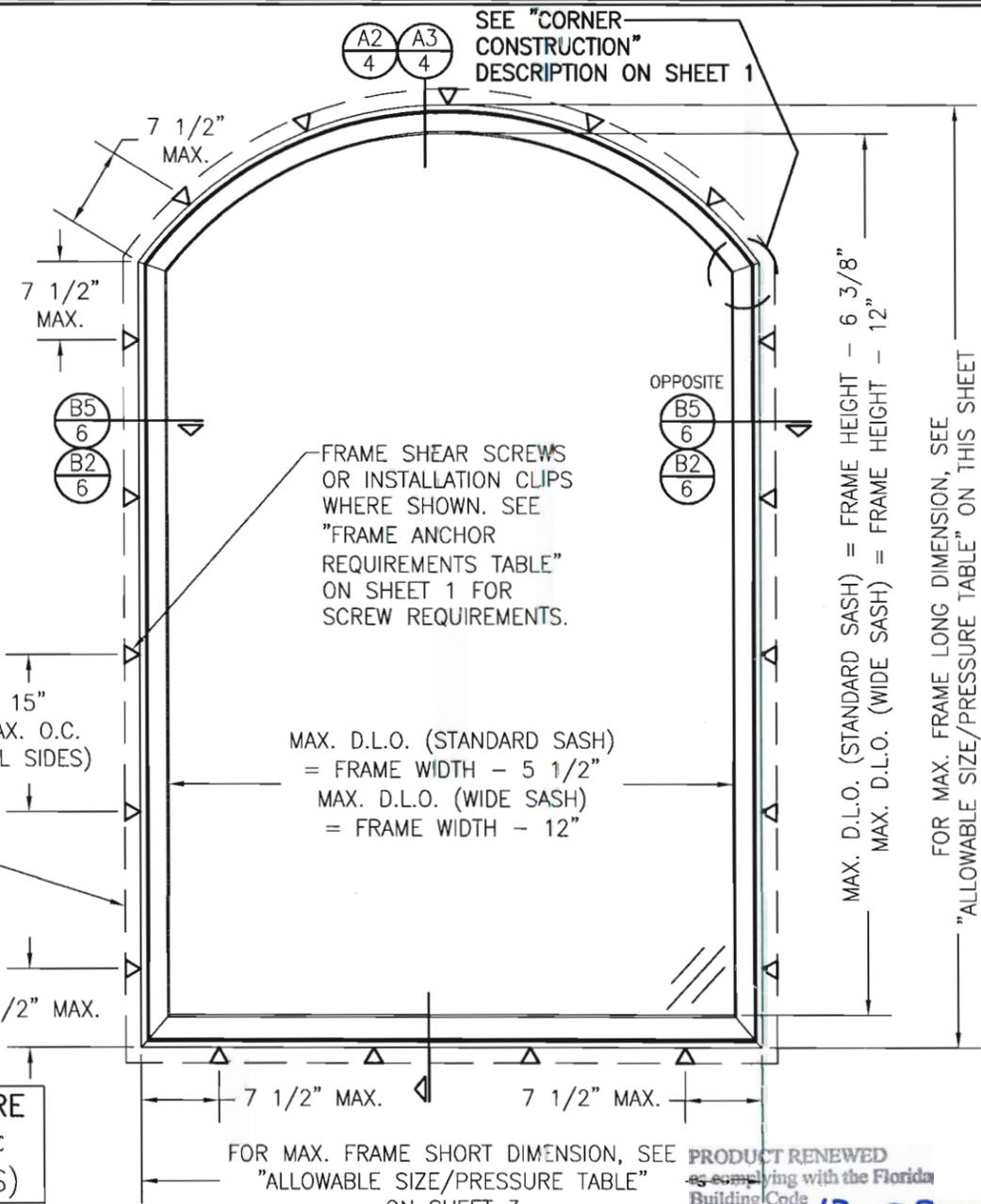
NAILING FIN IS REQUIRED WITH CLIP MOUNT CONDITION AND IS OPTIONAL & MAY BE REMOVED FOR A FRAME SHEAR SCREW MOUNT CONDITION (NAIL FIN SHALL NOT ACT AS A SUBSTITUTE FOR THE FRAME SHEAR SCREWS SPECIFIED).  
NOTE: NAIL FIN IS NOT REQUIRED TO BE ANCHORED

**EXTERIOR ELEVATION**  
**SINGLE EXTENDED LEG HALF ROUND TOP**  
**FIXED CASEMENT WINDOW**  
(STANDARD SASH CONDITION SHOWN, WIDE SASH CONDITION ALSO APPLIES)  
SCALE: 3/4" = 1'-0"

ALLOWABLE DESIGN PRESSURE  
(SINGLE STANDARD SASH & SINGLE WIDE SASH WINDOWS)  
SEE LOAD TABLE ON SHEET 3



NOTES:  
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED ON THIS SHEET.  
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.



SEE "CORNER CONSTRUCTION" DESCRIPTION ON SHEET 1

FRAME SHEAR SCREWS OR INSTALLATION CLIPS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR SCREW REQUIREMENTS.

**EXTERIOR ELEVATION**  
**SINGLE EYEBROW TOP FIXED**  
**CASEMENT WINDOW**  
(STANDARD SASH CONDITION SHOWN, WIDE SASH CONDITION ALSO APPLIES)  
SCALE: 3/4" = 1'-0"

ALLOWABLE DESIGN PRESSURE  
(SINGLE STANDARD SASH & SINGLE WIDE SASH WINDOWS)  
SEE LOAD TABLE ON SHEET 3

PRODUCT RENEWED  
as complying with the Florida Building Code  
Acceptance No. 13-0205.16  
Expiration Date 07/03/2018  
By [Signature]  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida Building Code  
Acceptance No. 11-1021.10  
Expiration Date July 3, 2013  
By [Signature]  
Miami Dade Product Control



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 04/02/08	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE: CLAD CASEMASTER PICTURE STORMPLUS IZ4			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MARVIN WINDOWS & DOORS	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	WARREN W. SCHAEFER, P.E. P.E. NO. 44135		
DRAWING NO.	REV.	SHEET NO.	
1536	A	2 OF 10	

**ALLOWABLE WINDOW SIZE/PRESSURE TABLE  
(SINGLE STANDARD SASH WINDOW)**

MAX. WINDOW FRAME LONG DIMENSION (IN.)	MAX. WINDOW FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)						MAX. WINDOW FRAME LONG DIMENSION (IN.)	MAX. WINDOW FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)					
		GLASS OPTION "A"		GLASS OPTIONS "B"		GLASS OPTIONS "C"				GLASS OPTION "A"		GLASS OPTIONS "B"		GLASS OPTIONS "C"	
		POS.	NEG.	POS.	NEG.	POS.	NEG.			POS.	NEG.	POS.	NEG.	POS.	NEG.
144	50	59.1	59.1	75.0	75.0			90	72	62.2	62.2	75.0	75.0		
	48	63.1	63.1	75.0	75.0				66	66.8	66.8	75.0	75.0		
	42	75.0	75.0	75.0	75.0				60	72.1	72.1	75.0	75.0		
	36	75.0	80.0	75.0	80.0				54	75.0	78.1	75.0	75.0		
	24	95.0	95.0	95.0	95.0	75.0	85.0		52	75.0	80.0	75.0	80.0		
132	54	56.0	56.0	75.0	75.0			38	95.0	95.0	95.0	95.0	75.0	85.0	
	48	65.7	65.7	75.0	75.0			72	67.5	67.5	75.0	75.0			
	42	75.0	75.0	75.0	75.0			66	71.9	71.9	75.0	75.0			
	39	75.0	80.0	75.0	80.0			60	75.0	76.9	75.0	75.0			
120	26	95.0	95.0	95.0	95.0	75.0	85.0	56	75.0	80.0	75.0	80.0			
	60	53.1	53.1	75.0	75.0			41	95.0	95.0	95.0	95.0	75.0	85.0	
	54	59.7	59.7	75.0	75.0			72	72.7	72.7	75.0	75.0			
	48	69.6	69.6	75.0	75.0			66	75.0	76.7	75.0	75.0			
108	43	75.0	80.0	75.0	80.0			61	75.0	80.0	75.0	80.0			
	28	95.0	95.0	95.0	95.0	75.0	85.0	44	95.0	95.0	95.0	95.0	75.0	85.0	
	66	55.2	55.2	73.6	73.6			72	75.0	78.2	75.0	75.0			
	60	59.8	59.8	75.0	75.0			68	75.0	80.0	75.0	80.0			
96	54	66.4	66.4	75.0	75.0			48	95.0	95.0	95.0	95.0	75.0	85.0	
	48	75.0	75.7	75.0	75.0			66	75.0	80.0	75.0	80.0			
	45	75.0	80.0	75.0	80.0			52	95.0	95.0	95.0	95.0	75.0	85.0	
	36	95.0	95.0	95.0	95.0	75.0	85.0	60	75.0	80.0	75.0	80.0			
96	72	58.6	58.6	75.0	75.0			57	95.0	95.0	95.0	95.0	75.0	85.0	
	66	62.5	62.5	75.0	75.0			1. WINDOW SIZE DIMENSIONS SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.							
	60	67.7	67.7	75.0	75.0			2. CROSSED OUT BOXES DESIGNATE SIZES NOT ACCEPTABLE FOR THE RESPECTIVE OPTIONS.							
	54	74.1	74.1	75.0	75.0										
96	49	75.0	80.0	75.0	80.0										
	36	95.0	95.0	95.0	95.0	75.0	85.0								

SEE SHEET 8 FOR GLASS OPTIONS

**ALLOWABLE WINDOW SIZE/PRESSURE TABLE  
(SINGLE WIDE SASH WINDOW)**

MAX. WINDOW FRAME LONG DIMENSION (IN.)	MAX. WINDOW FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)						MAX. WINDOW FRAME LONG DIMENSION (IN.)	MAX. WINDOW FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)					
		GLASS OPTION "A"		GLASS OPTIONS "B"		GLASS OPTIONS "C"				GLASS OPTION "A"		GLASS OPTIONS "B"		GLASS OPTIONS "C"	
		POS.	NEG.	POS.	NEG.	POS.	NEG.			POS.	NEG.	POS.	NEG.	POS.	NEG.
144	36	75.0	80.0	75.0	80.0			90	72	62.2	62.2	75.0	75.0		
	24	95.0	95.0	95.0	95.0	95.0	95.0		66	66.8	66.8	75.0	75.0		
132	39	75.0	80.0	75.0	80.0			84	60	72.1	72.1	75.0	75.0		
	26	95.0	95.0	95.0	95.0	95.0	95.0		54	75.0	78.1	75.0	75.0		
120	43	75.0	80.0	75.0	80.0			78	52	75.0	80.0	75.0	80.0		
	28	95.0	95.0	95.0	95.0	95.0	95.0		38	95.0	95.0	95.0	95.0	75.0	85.0
108	48	75.0	80.0	75.0	80.0			72	72	67.5	67.5	75.0	75.0		
	32	95.0	95.0	95.0	95.0	95.0	95.0		66	71.9	71.9	75.0	75.0		
96	54	75.0	80.0	75.0	80.0			66	60	75.0	76.9	75.0	75.0		
	36	95.0	95.0	95.0	95.0	95.0	95.0		56	75.0	80.0	75.0	80.0		
90	58	75.0	80.0	75.0	80.0			60	41	95.0	95.0	95.0	95.0	75.0	85.0
	38	95.0	95.0	95.0	95.0	95.0	95.0		72	72.7	72.7	75.0	75.0		
84	62	75.0	80.0	75.0	80.0			78	66	75.0	76.7	75.0	75.0		
	41	95.0	95.0	95.0	95.0	95.0	95.0		61	75.0	80.0	75.0	80.0		
78	67	75.0	80.0	75.0	80.0			72	44	95.0	95.0	95.0	95.0	75.0	85.0
	44	95.0	95.0	95.0	95.0	95.0	95.0		72	75.0	78.2	75.0	75.0		
72.625	72	75.0	80.0	75.0	80.0			66	68	75.0	80.0	75.0	80.0		
	48	95.0	95.0	95.0	95.0	95.0	95.0		48	95.0	95.0	95.0	95.0	75.0	85.0
66	66	75.0	80.0	75.0	80.0			60	66	75.0	80.0	75.0	80.0		
	52	95.0	95.0	95.0	95.0	95.0	95.0		52	95.0	95.0	95.0	95.0	75.0	85.0
60	60	75.0	80.0	75.0	80.0			60	60	75.0	80.0	75.0	80.0		
	57	95.0	95.0	95.0	95.0	95.0	95.0		57	95.0	95.0	95.0	95.0	75.0	85.0

SEE SHEET 8 FOR GLASS OPTIONS

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. **13-0205.16**  
Expiration Date **07/03/2018**  
By *[Signature]*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. **11-1021.10**  
Expiration Date **JULY 3, 2013**  
By *[Signature]*  
Miami Dade Product Control

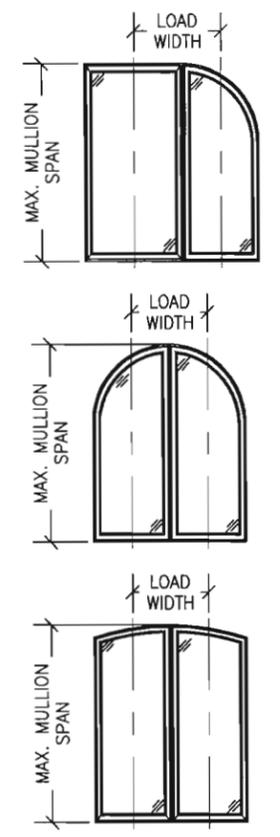


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>CLAD CASEMASTER PICTURE STORMPLUS IZ4</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
MANUFACTURER <b>MARVIN WINDOWS &amp; DOORS</b> HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	<i>[Signature]</i> OCT 17 2011 WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. <b>1536</b>	REV. <b>A</b>
SHEET NO. <b>3 OF 10</b>	

MULLION ALLOWABLE LOAD TABLE				
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (POS. & NEG. PSF)		
		NON-REINFORCED MULLION	REINFORCED MULLION	
			4 ANCHORS	6 ANCHORS
96	72		47.9	57.2
	66		49.8	59.4
	60		52.2	62.4
	54		55.5	66.3
	48		59.9	71.5
	42		65.7	78.4
	36		73.7	88.0
90	30		85.1	95.0
	24		95.0	95.0
	72		53.2	63.6
	66		55.0	65.7
	60		57.5	68.6
	54		60.8	72.6
	48		65.3	78.0
84	42		71.4	85.3
	36		79.8	95.0
	30		91.9	95.0
	24		95.0	95.0
	72		59.9	71.5
	66		61.5	73.4
	60		63.9	76.3
78	54		67.2	80.3
	48		71.8	85.8
	42		78.2	93.4
	36		87.1	95.0
	30		95.0	95.0
	72		68.4	81.7
	66		69.7	83.2
72	60		71.8	85.8
	54		75.1	89.7
	48		79.8	95.0
	42		86.4	95.0
	36		95.0	95.0
	72 OR MORE		79.8	95.0
	66		80.4	95.0
71 1/8	60		82.1	95.0
	54		85.1	95.0
	48		89.8	95.0
	42		95.0	95.0
	71 OR MORE		67.4	82.1
	66		68.2	82.5
	60		70.0	84.1
66	54		72.5	87.1
	48		76.3	91.7
	42		82.0	95.0
	36		90.3	95.0
	30		95.0	95.0
	66 OR MORE		79.1	95.0
	60		79.7	95.0
60	54		81.8	95.0
	48		85.4	95.0
	42		91.1	95.0
	36		95.0	95.0
60 OR MORE		95.0	95.0	

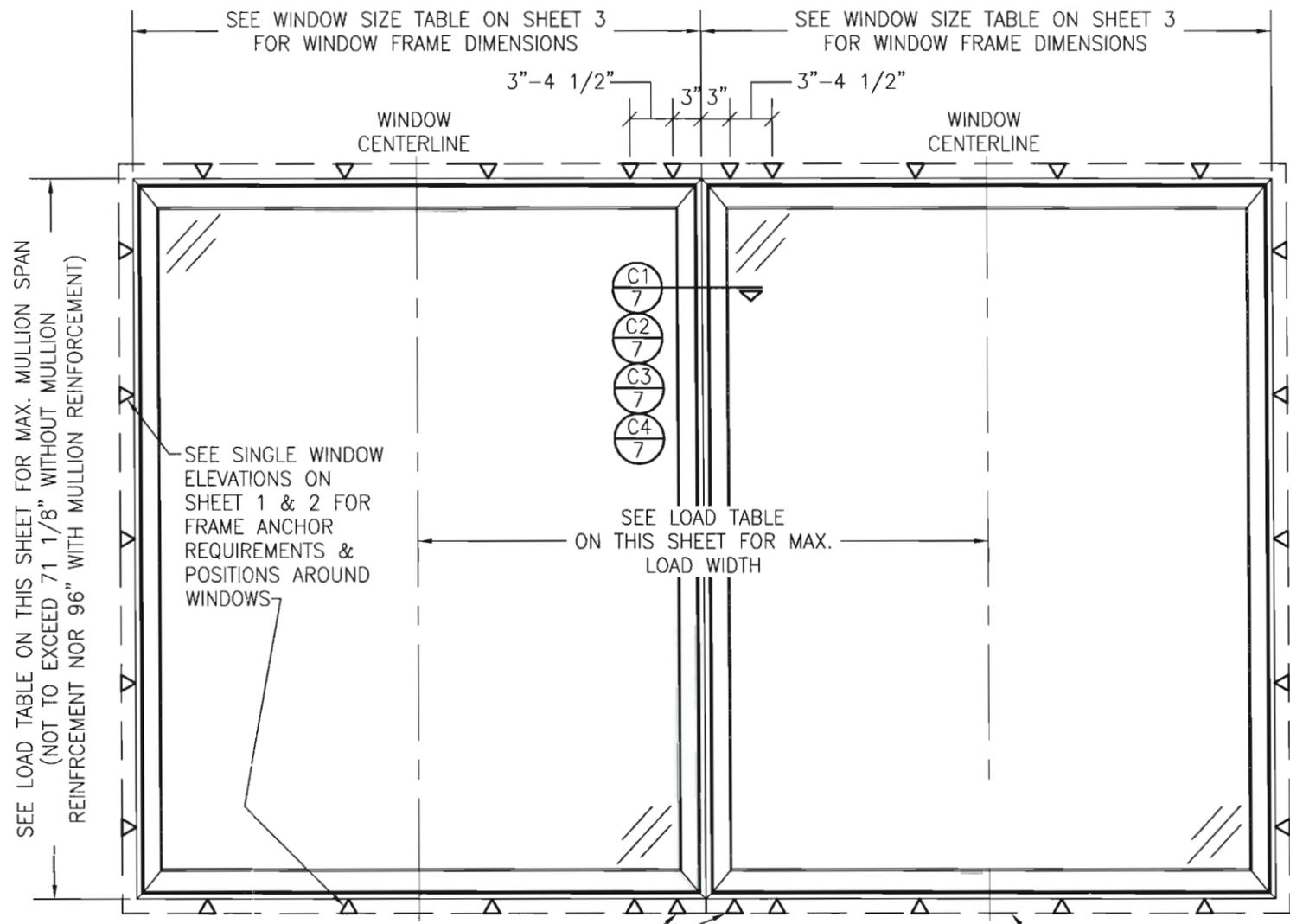
FOR NON-REINFORCED MULLION CONDITIONS, SEE SECTIONS C1/7 & C3/7. FOR REINFORCED MULLION CONDITIONS, SEE SECTIONS C2/7 & C4/7.

**EXAMPLES OF SIDE-BY-SIDE SHAPED MULLED CONDITIONS**



1. WINDOW SHAPES OTHER THAN THOSE SHOWN MAY APPLY PROVIDING THEY ARE APPLICABLE TO THOSE SHOWN ON SHEET 2.
2. SHAPED WINDOWS MAY ALSO BE MULLED TO RECTANGULAR WINDOWS AS TRANSOMS UNDER THE SAME RESTRICTIONS AS SIDE BY SIDE CONDITION SHOWN IN ELEVATION.

**TABLE NOTES:**  
 1. LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT ALLOWED FOR THE INDIVIDUAL WINDOW SHALL CONTROL AS ALLOWABLE FOR THE OVERALL UNIT.  
 2. ADD 3/8" TO LOAD WIDTH VALUES IN THIS TABLE WHEN 3/8" ALUMINUM REINFORCEMENT PLATE IS USED.  
 3. CROSSED OUT BOXES DESIGNATE SIZES NOT ACCEPTABLE FOR THE RESPECTIVE OPTIONS.



SEE LOAD TABLE ON THIS SHEET FOR MAX. MULLION SPAN (NOT TO EXCEED 71 1/8" WITHOUT MULLION REINFORCEMENT NOR 96" WITH MULLION REINFORCEMENT)

SEE SINGLE WINDOW ELEVATIONS ON SHEET 1 & 2 FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND WINDOWS

SEE LOAD TABLE ON THIS SHEET FOR MAX. LOAD WIDTH

SEE SHEET 1 OR 2 FOR NAIL FIN REQUIREMENTS.

ADDITIONAL FRAME SCREWS OR INSTALLATION CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & CLIP SCREW REQUIREMENTS.

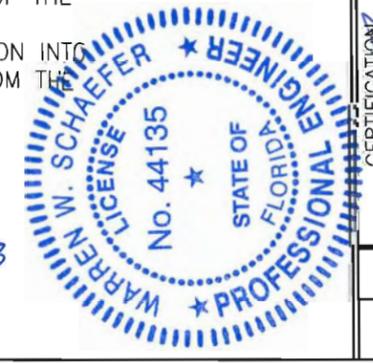
**EXTERIOR ELEVATION  
 MULTIPLE CASEMENT/FIXED WINDOW**

SCALE: 3/4" = 1'-0"  
 (RECTANGULAR WINDOW SHOWN, SHAPED WINDOWS ALSO APPLY. SEE "APPROVED SHAPED MULLED CONDITIONS" TABLE ON THIS SHEET)  
 (STANDARD SASH CONDITION SHOWN, WIDE SASH CONDITION ALSO APPLIES)

- MULTIPLE UNIT NOTES:**
1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
  2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING WINDOW SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
  3. IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE UNDUE FAILURE.
  4. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
  5. INDIVIDUAL WINDOW SIZES SHALL BE AS SPECIFIED IN THE SINGLE WINDOW ELEVATION.

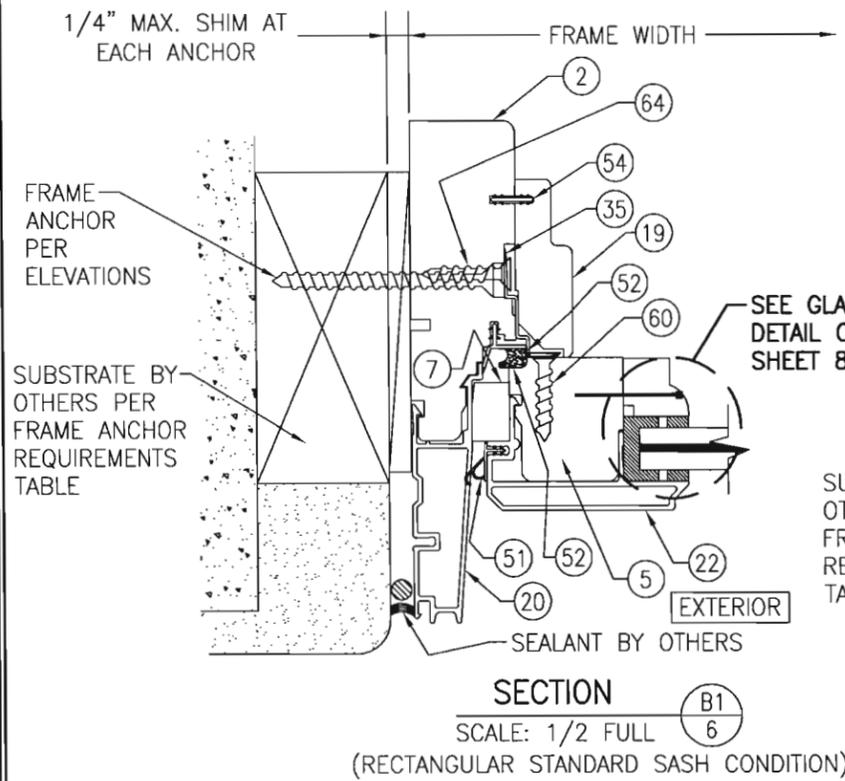
**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No. 13-0205.16  
 Expiration Date 07/03/2018  
 By: [Signature]  
 Miami Dade Product Control

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No. 11-1021.10  
 Expiration Date: July 3, 2013  
 By: [Signature]  
 Miami Dade Product Control

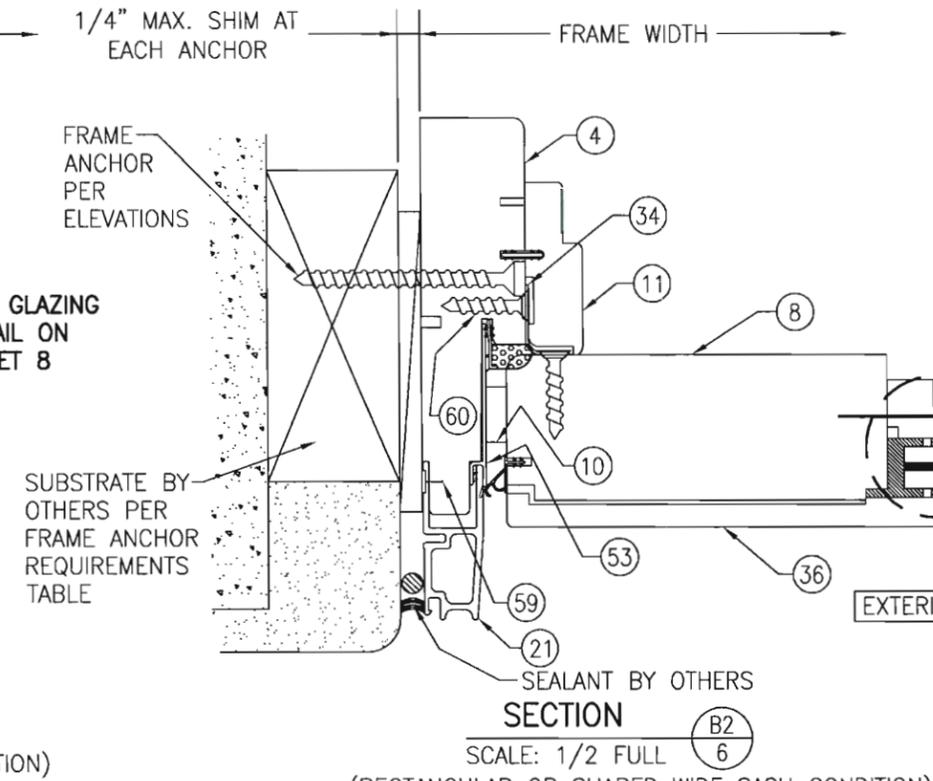


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-16	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE: CLAD CASEMASTER PICTURE STORMPLUS IZ4	
MANUFACTURER: MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION: [Signature] OCT 17 2011 WARREN W. SCHAEFER, P.E. LICENSE NO. 44135	
DRAWING NO. 1536	REV. A
SHEET NO. 4 OF 10	

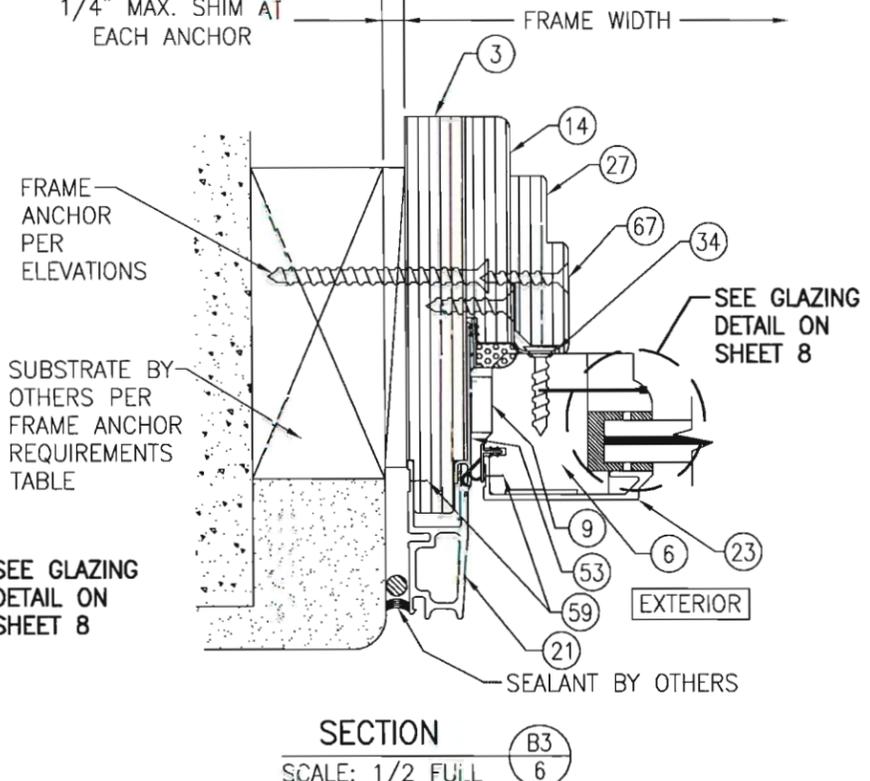




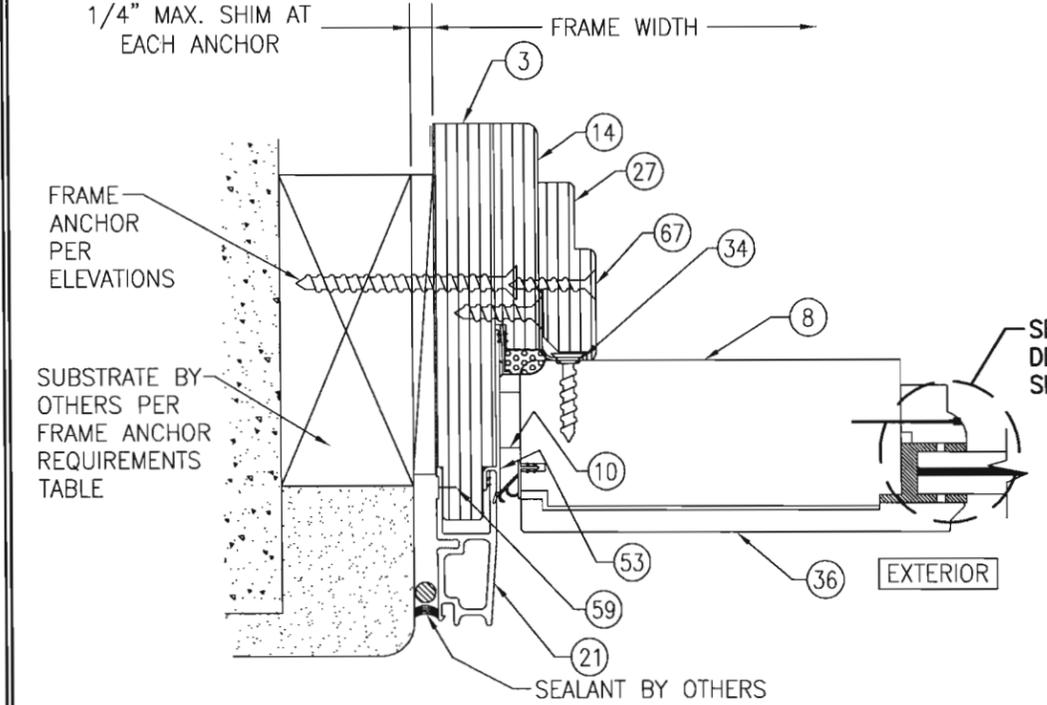
SECTION B1  
SCALE: 1/2 FULL  
(RECTANGULAR STANDARD SASH CONDITION)



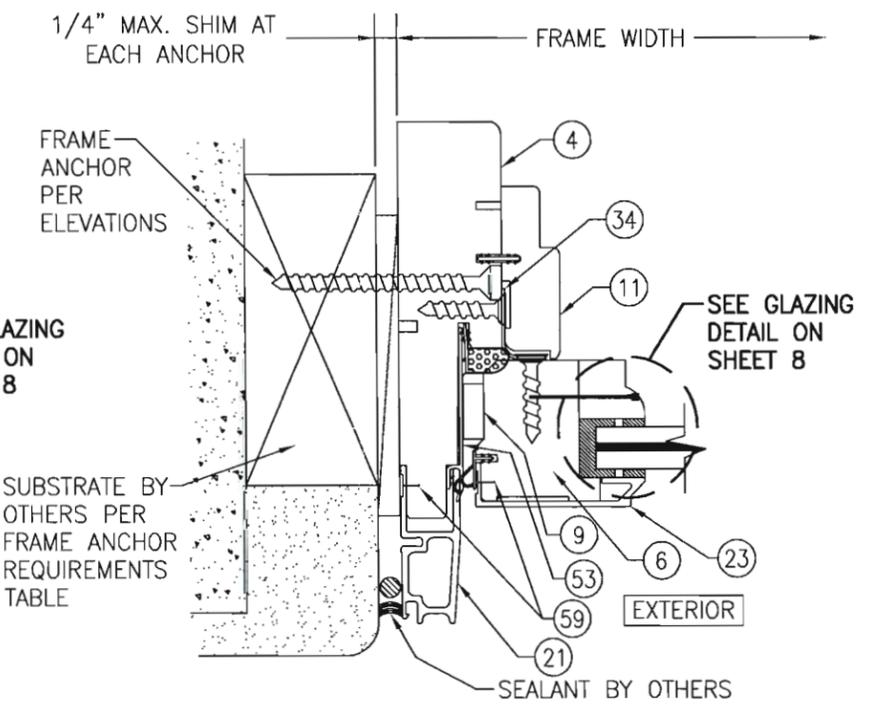
SECTION B2  
SCALE: 1/2 FULL  
(RECTANGULAR OR SHAPED WIDE SASH CONDITION)



SECTION B3  
SCALE: 1/2 FULL  
(SHAPED STANDARD SASH CONDITION)  
FOR DETAILS NOT SHOWN SEE SECTION B1/6



SECTION B4  
SCALE: 1/2 FULL  
(SHAPED WIDE SASH CONDITION)  
FOR DETAILS NOT SHOWN SEE SECTION B1/6



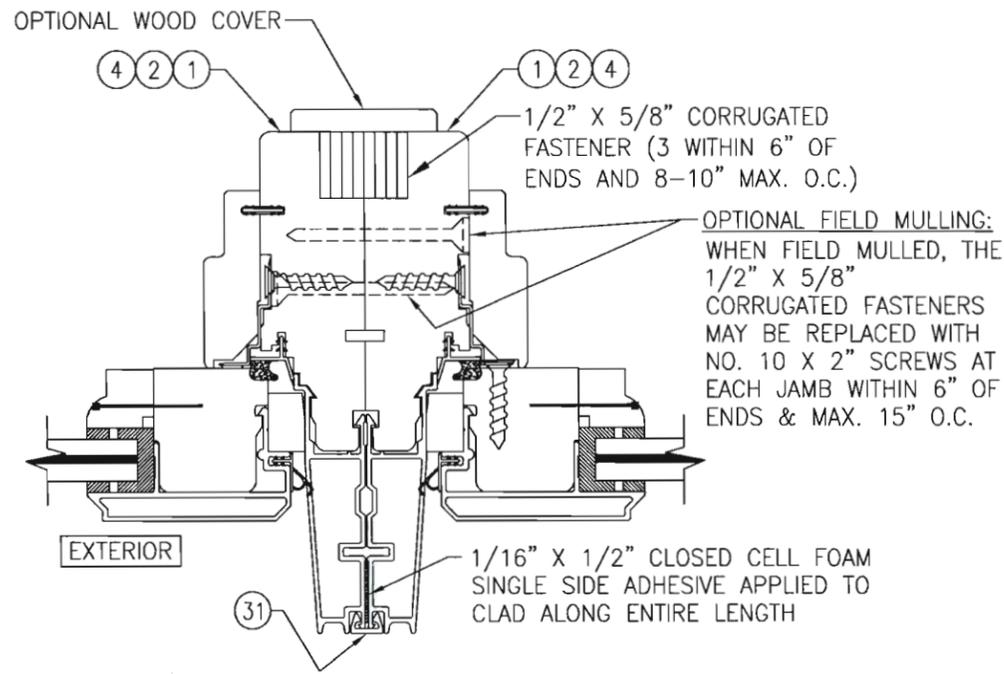
SECTION B5  
SCALE: 1/2 FULL  
(SHAPED STANDARD SASH CONDITION)  
FOR DETAILS NOT SHOWN SEE SECTION B1/6

PRODUCT RENEWED  
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Expiration Date 07/03/2018  
By *[Signature]*  
Miami Dade Product Control

PRODUCT REVIEWED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1021-10  
Expiration Date JULY 3, 2013  
By *[Signature]*  
Miami Dade Product Control



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PLOT: 1=2		DATE: 04/02/08	
DATE			
BY			
REVISION DESCRIPTION			
NO.			
DRAWING TITLE: CLAD CASEMASTER PICTURE STORMPLUS IZ4			
MANUFACTURER: MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION: <i>[Signature]</i> WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO.	REV.		
1536	A		
SHEET NO.			
6 OF 10			



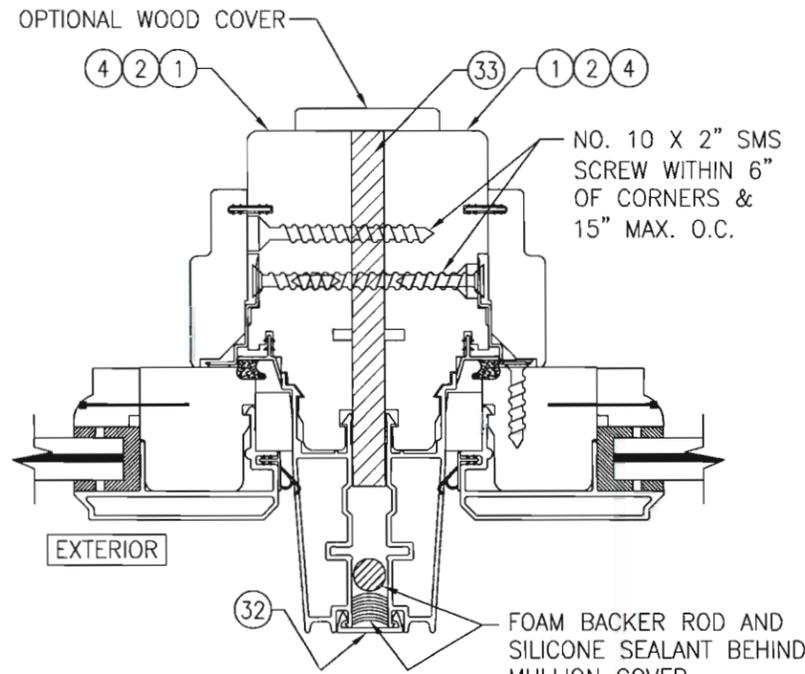
SECTION

SCALE: 1/2 FULL C1  
7

(NON-REINFORCED MULLION WITH STANDARD SASH)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)

(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)



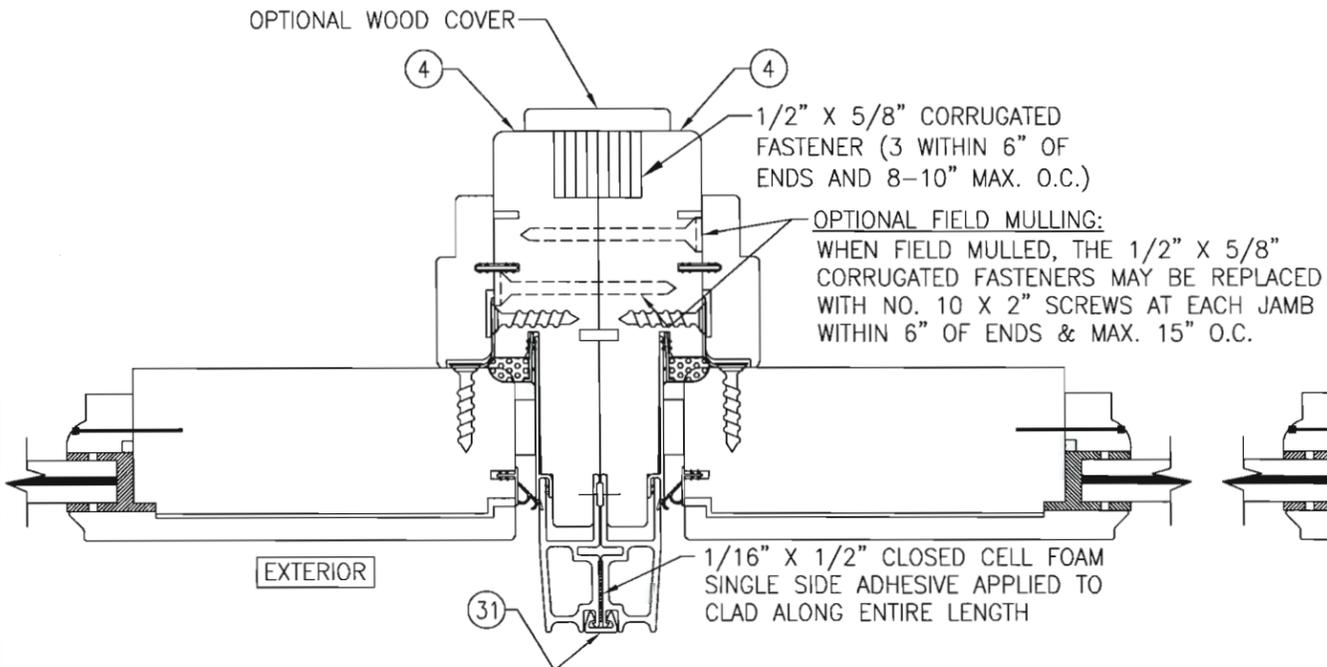
SECTION

SCALE: 1/2 FULL C2  
7

(REINFORCED MULLION WITH STANDARD SASH)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)

(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)



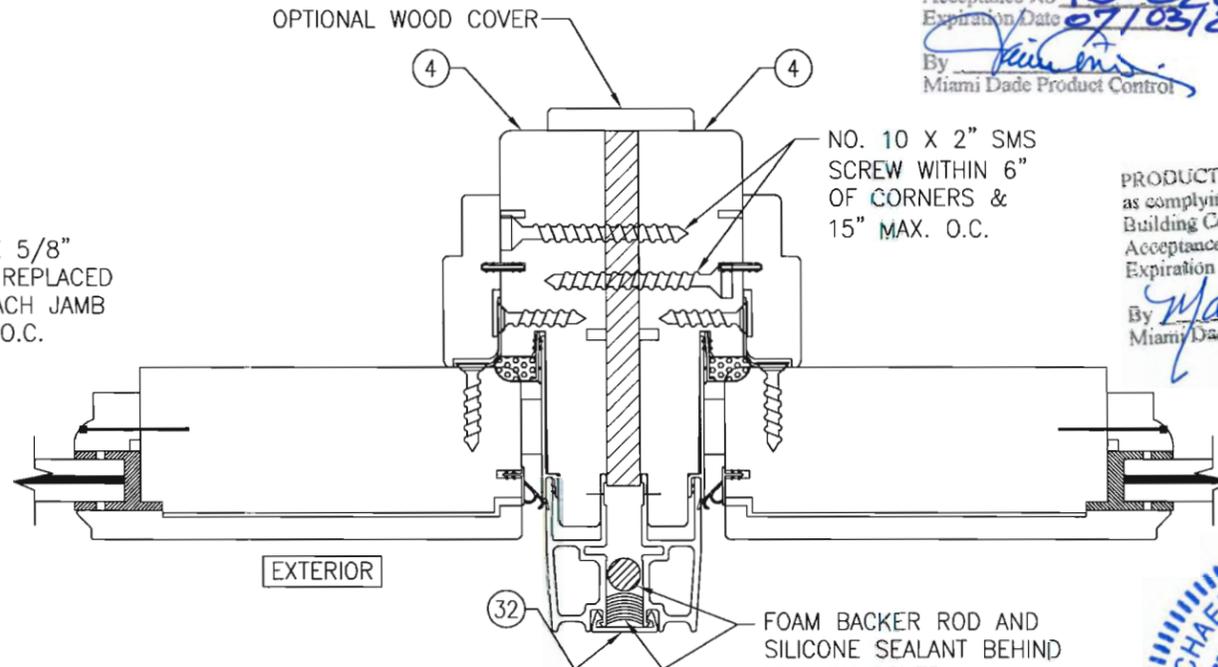
SECTION

SCALE: 1/2 FULL C3  
7

(NON-REINFORCED MULLION WITH WIDE SASH)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)

(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)



SECTION

SCALE: 1/2 FULL C4  
7

(REINFORCED MULLION WITH WIDE SASH)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)

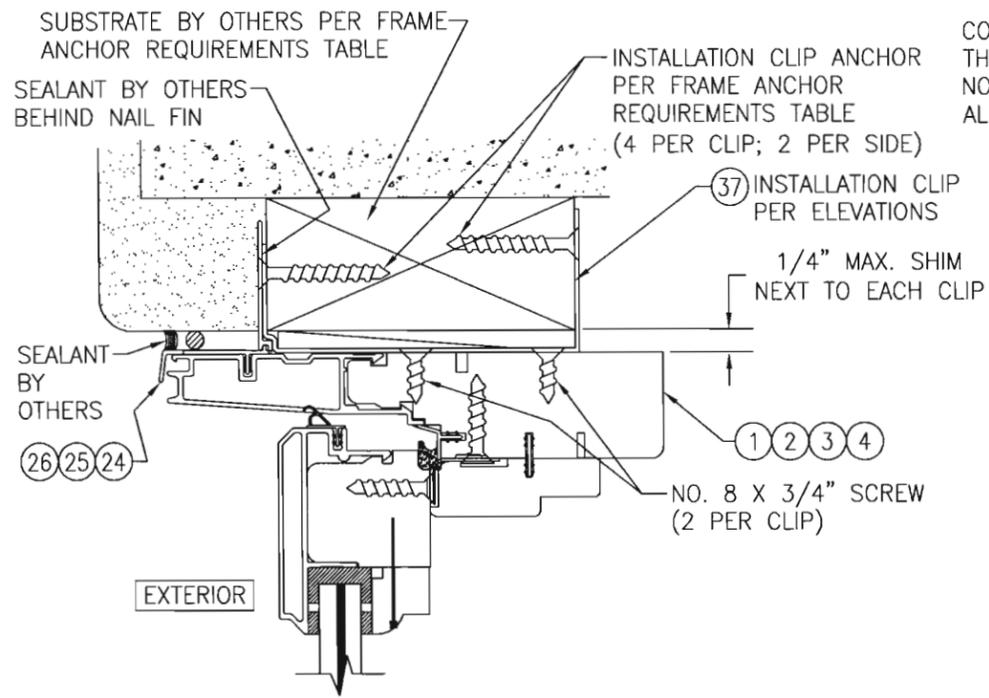
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. **13-0205.16**  
Expiration Date **07/03/2018**  
By *[Signature]*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. **11-1021.10**  
Expiration Date **JULY 3, 2013**  
By *[Signature]*  
Miami Dade Product Control

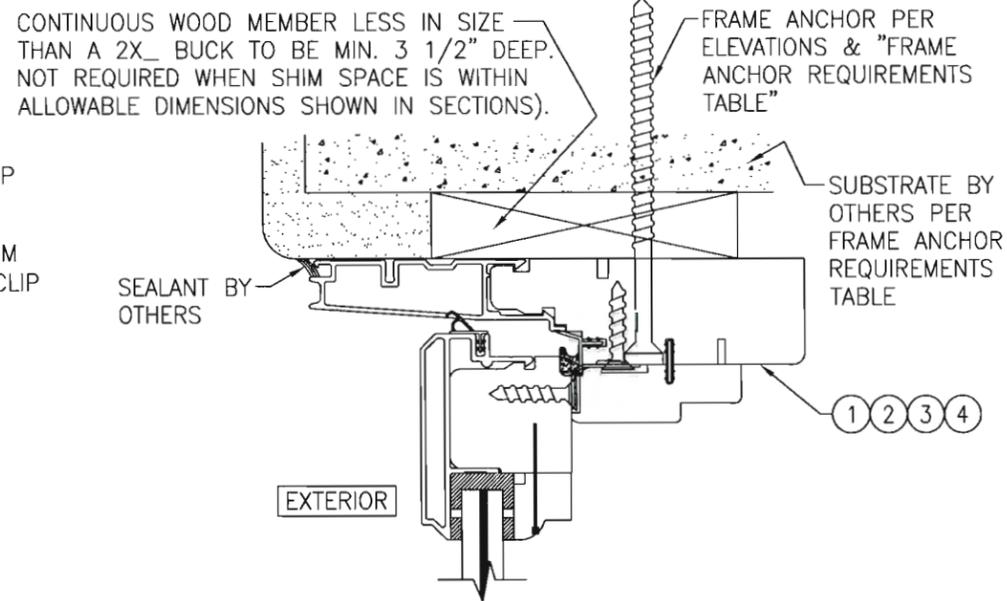


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>CLAD CASEMASTER PICTURE STORMPLUS IZ4</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	MANUFACTURER <b>MARVIN WINDOWS &amp; DOORS</b> HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044
CERTIFICATION <i>[Signature]</i> DEC 17 2011 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. <b>1536</b> REV. <b>A</b> SHEET NO. <b>7</b> OF <b>10</b>



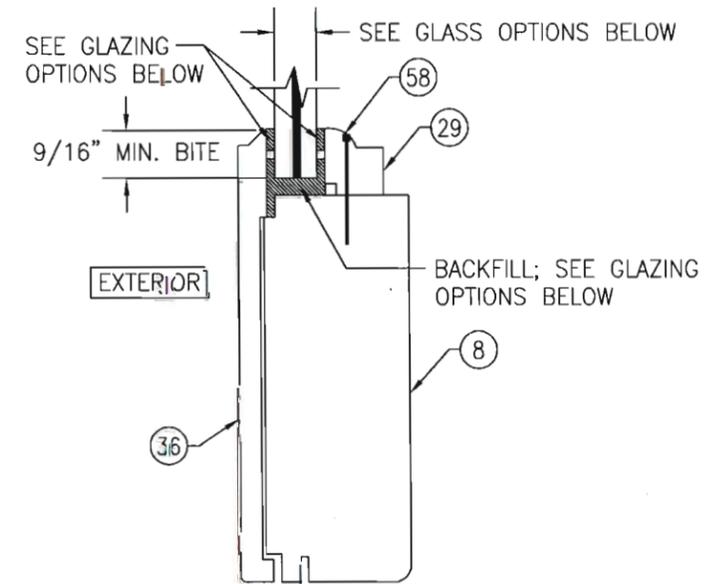
**OPTIONAL INSTALLATION CLIP DETAIL**

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

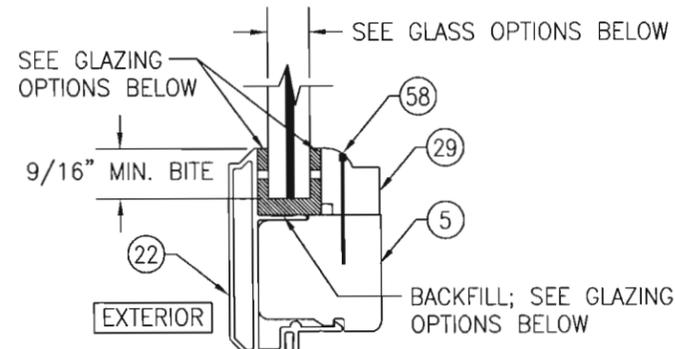


**OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER**

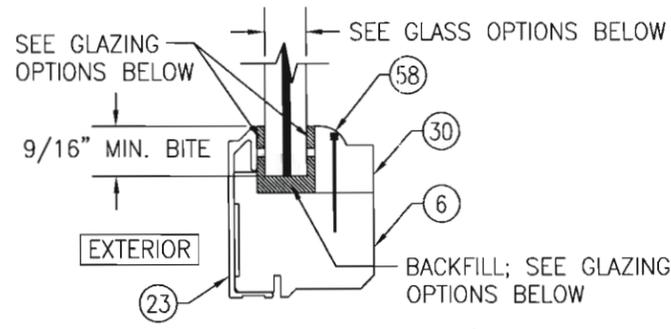
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**TYPICAL GLAZING DETAIL (RECTANGULAR OR SHAPED WINDOW WITH WIDE SASH)**



**TYPICAL GLAZING DETAIL (RECTANGULAR WINDOW WITH STANDARD SASH)**



**TYPICAL GLAZING DETAIL (SHAPED WINDOW WITH STANDARD SASH)**

**GLASS OPTIONS**

- GLASS OPTION A: 9/16" THICK LAMINATED GLASS (1/4" AN./0.09" DUPONT SG/1/4" AN.)
- GLASS OPTION B: 9/16" THICK LAMINATED GLASS (1/4" HT.ST./0.09" DUPONT SG/1/4" HT.ST.)
- GLASS OPTION C: 3/8" THICK LAMINATED GLASS (5/32" AN./0.090" DUPONT SG/5/32" AN.)

**GLAZING OPTIONS**

- GLAZING OPTION A: POLYOLEFIN FOAM WITH ACRYLIC ADHESIVE GLAZING TAPE AT EXTERIOR & INTERIOR WITH DOW 995 BACKFILL
- GLAZING OPTION B: GE RAPID STRENGTH EXTERIOR, INTERIOR & BACKFILL

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By *[Signature]*  
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Expiration Date 10/13/2013  
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Miami Dade Product Control



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PLOT: 1-2	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

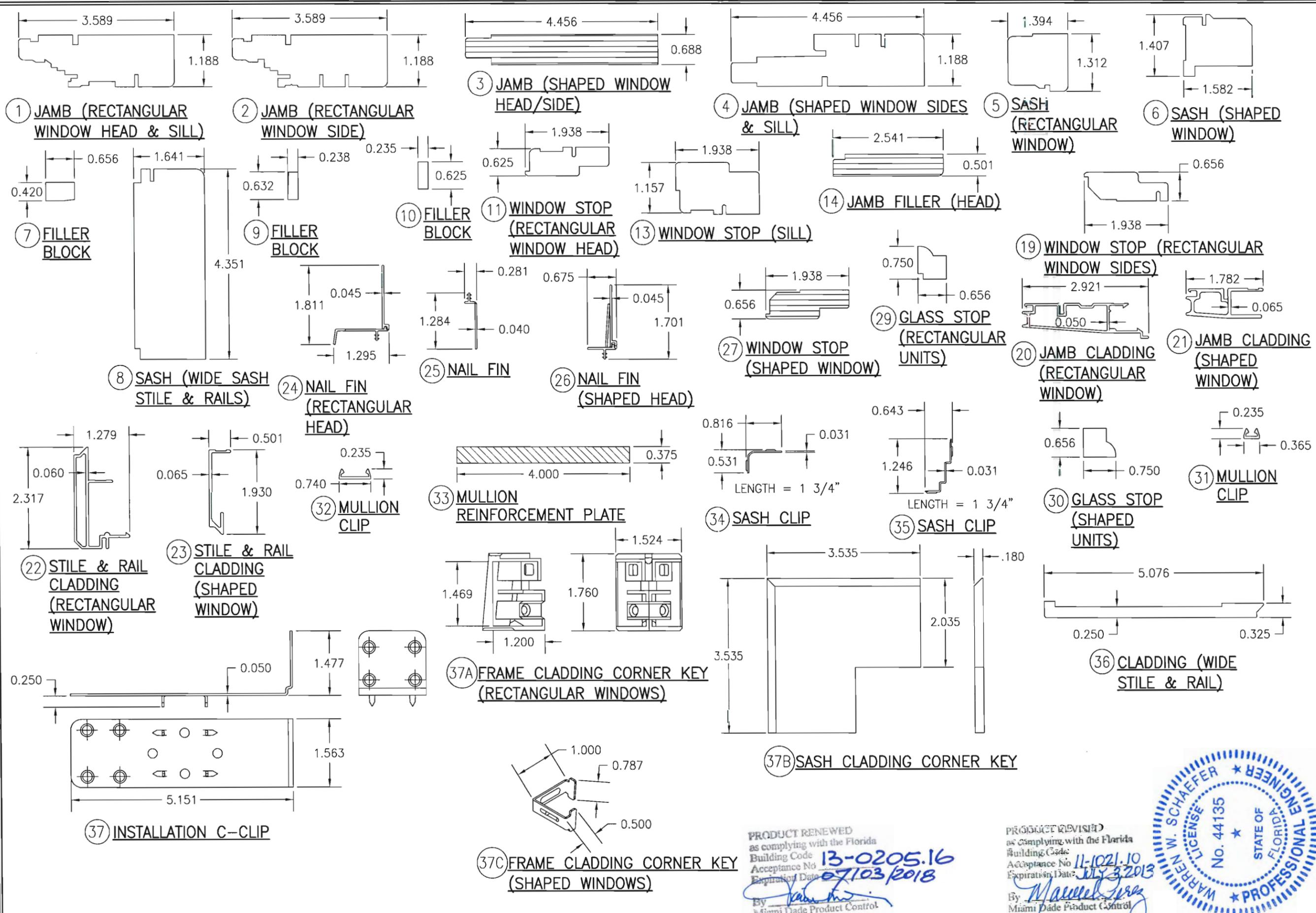
DRAWING TITLE: CLAD CASEMASTER PICTURE STORMPLUS IZ4

MANUFACTURER: MARVIN WINDOWS & DOORS  
HIGHWAY 11; P.O. BOX 100  
WARROAD, MN 56763  
800-346-5044

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

CERTIFICATION: *[Signature]*  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. 1536	REV. A
SHEET NO. 8	OF 10



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/02/08
DATE	BY
REVISION DESCRIPTION	
NO.	
DRAWING TITLE CLAD CASEMASTER PICTURE STORMPLUS IZ4	
MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION WARREN W. SCHAEFER LICENSE NO. 44135 STATE OF FLORIDA PROFESSIONAL ENGINEER	
DRAWING NO. 1536	REV. A
SHEET NO. 9 OF 10	

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 13-0205.16  
Expiration Date 07/03/2018  
By: *Warren W. Schaefer*  
Miami Dade Product Control

PRODUCT REVISED  
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Acceptance No. 11-1021.10  
Expiration Date 07/3/2013  
By: *Warren W. Schaefer*  
Miami Dade Product Control



ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	JAMB (RECTANGULAR WINDOW HEAD & SILL)	* WOOD
2	JAMB (RECTANGULAR WINDOW SIDES)	* WOOD
3	JAMB (SHAPED WINDOW HEAD/SIDE)	LVL
4	JAMB (SHAPED WINDOW SIDES & SILL)	* WOOD
5	SASH (RECTANGULAR WINDOW)	* WOOD
6	SASH (SHAPED WINDOW)	* WOOD
7	FILLER BLOCK	* WOOD
8	SASH (WIDE SASH STILE & RAILS)	* WOOD
9	FILLER BLOCK	* WOOD
10	FILLER BLOCK	* WOOD
11	WINDOW STOP (RECTANGULAR WINDOW HEAD)	* WOOD
13	WINDOW STOP (SILL)	* WOOD
14	JAMB FILLER (SHAPED WINDOW HEAD)	LVL
19	WINDOW STOP (RECTANGULAR WINDOW SIDES)	WOOD
18	WINDOW STOP SKIN (SIDE JAMB)	WOOD VENEER
20	JAMB CLADDING (RECTANGULAR WINDOW)	6063-T5 ALUMINUM
21	JAMB CLADDING (SHAPED WINDOW)	6063-T5 ALUMINUM
22	STILE & RAIL CLADDING (RECTANGULAR WINDOW)	6063-T5 ALUMINUM
23	STILE & RAIL CLADDING (SHAPED WINDOW)	6063-T5 ALUMINUM
24	NAIL FIN (RECTANGULAR HEAD)	6063-T5 ALUMINUM
25	NAIL FIN	6063-T5 ALUMINUM
26	NAIL FIN (SHAPED HEAD)	6063-T5 ALUMINUM
27	WINDOW STOP (SHAPED WINDOW HEAD)	LVL
29	GLASS STOP	* WOOD
30	GLASS STOP	* WOOD
31	MULLION CLIP	6063-T5 ALUMINUM
32	MULLION CLIP	6063-T5 ALUMINUM
33	MULLION REINFORCEMENT PLATE	6061-T6 ALUMINUM
37	INSTALLATION C-CLIP	50 KSI GALV. STEEL
37A	FRAME CLAD CORNER KEY (RECTANGULAR WINDOWS)	NYLON
37B	SASH CLADDING CORNER KEY	5052 ALUMINUM
37C	FRAME CLAD CORNER KEY (SHAPED WINDOWS)	6063-T1 ALUMINUM

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
SEALS & SEALANTS		
51	SASH WEATHERSTRIP	RIGID GLASS FILLED POLYPROPYLENE BY INTEK
52	VINYL FRAME WEATHERSTRIP	BY AMSBURY
53	THERMAL BREAK	BY AMSBURY
54	CONNECTING BARB	PVC & GEON C70a0
MISC. FASTENERS		
58	F-18 x 1.125" BRAD NAIL	3" FROM CORNERS & MAX. 8" O.C.
59	GSN 18 X 1/2" S.S. STAPLE	3" FROM CORNERS & MAX. 6" O.C.
61	NO. 10-32 FH MACHINE SCREW	4 PER HINGE
62	NO. 8 X 1" SMS	2 PER SNUBBER
63	NO. 7 X 1/2" SMS	2 PER SNUBBER
66	NO. 8 X 1" SMS	2" FROM ENDS & 5" TO 8" O.C.
67	NO. 6 X 1" TRIM HEAD WOOD SCREW	2" FROM ENDS & 5" TO 8" O.C.

\* ALL WOOD USED WITH TESTED UNITS IS MIN. GRADE 2 WESTERN PINE. ALTERNATE WOOD SPECIES TO PINE SHALL BE MIN. GRADE 2 WITH "E" = 1200000 PSI MIN. & "G" = 0.43 MIN  
NOTE: ALL WOOD IS RECEIVED BY MARVIN WINDOWS & DOORS AS GRADE 2, BUT IS MACHINED BY MARVIN TO A SELECT GRADE USE.

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE  
**CLAD CASEMASTER PICTURE STORMPLUS IZ4**

MANUFACTURER  
**MARVIN WINDOWS & DOORS**  
HIGHWAY 11; P.O. BOX 100  
WARROAD, MN 56763  
800-346-5044

CONSULTANTS  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

CERTIFICATION  
  
05/17/2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. 1536  
REV. A  
SHEET NO. 10 OF 10

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. **13-0205.16**  
Expiration Date **07/03/2018**  
By *[Signature]*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. **11-1021.10**  
Expiration Date **07/03/2013**  
By *[Signature]*  
Miami Dade Product Control