



**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.maimidade.gov/buildingcode](http://www.maimidade.gov/buildingcode)

**Marvin Windows & Doors**  
**P.O. Box 100**  
**Highway 11 West**  
**Warroad, MN, FL 56763**

**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 "Storm Plus IZ 4 Casemaster" Wood Fixed Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. 1551, titled "Wood Casemaster Fixed Casement StormPlus IZ4", sheets 1 through 6 of 6, dated 04/02/08, 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 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 pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



NOA No. 08-0213.09  
 Expiration Date: July 03, 2013  
 Approval Date: July 03, 2008  
 Page 1

Marvin Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **1551**, Sheets 1 through 6 of 6, titled "Wood Casemaster Fixed Casement StormPlus IZ4, dated 04/02/08, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

**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 203-94

Along with marked-up drawings and installation diagram of *Storm Plus IZ4 Casemaster* wood fixed window, Units 3, 8, 9, 10, 11, 12 & 13, prepared by Architectural Testing, Inc., **ATI-77779.01-201-18**, dated 01/28/08, signed and sealed by Joseph A. Reed, P.E.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2004, dated 02/07/08, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.  
**Complies with ASTM E1300-02**

**D. QUALITY ASSURANCE**

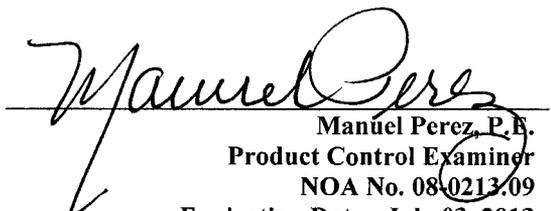
1. Miami Dade Building Code Compliance Office (BCCO).

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **07-1116.04** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont SentryGlas® Plus**" dated 01/03/08, expiring on 01/14/12.

**F. STATEMENTS**

1. Statement letter of conformance, dated November 20, 2007, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated November 20, 2007, signed and sealed by Warren W. Schaefer, P.E.
3. Laboratory compliance letter for Test Report No. **ATI-77779.01-201-18**, issued by Architectural Testing, Inc., dated January 28, 2008, signed and sealed by Joseph A. Reed, P.E.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 08-0213.09  
Expiration Date: July 03, 2013  
Approval Date: July 03, 2008

**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  $K_d = 0.85$  MAY BE APPLIED WHEN USED IN CONJUNCTION WITH LOAD COMBINATIONS SPECIFIED IN SECTION 2.0 OF THE ASCE 7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR  $C_d = 1.6$  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.

**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.

SASH CORNERS: SASH MEMBERS ARE MORTISED & TENONED AND SECURED WITH TWO(2) GS16 X 1 3/8" BRAD NAILS.

**CORNER CONSTRUCTION (SHAPE WINDOWS)**

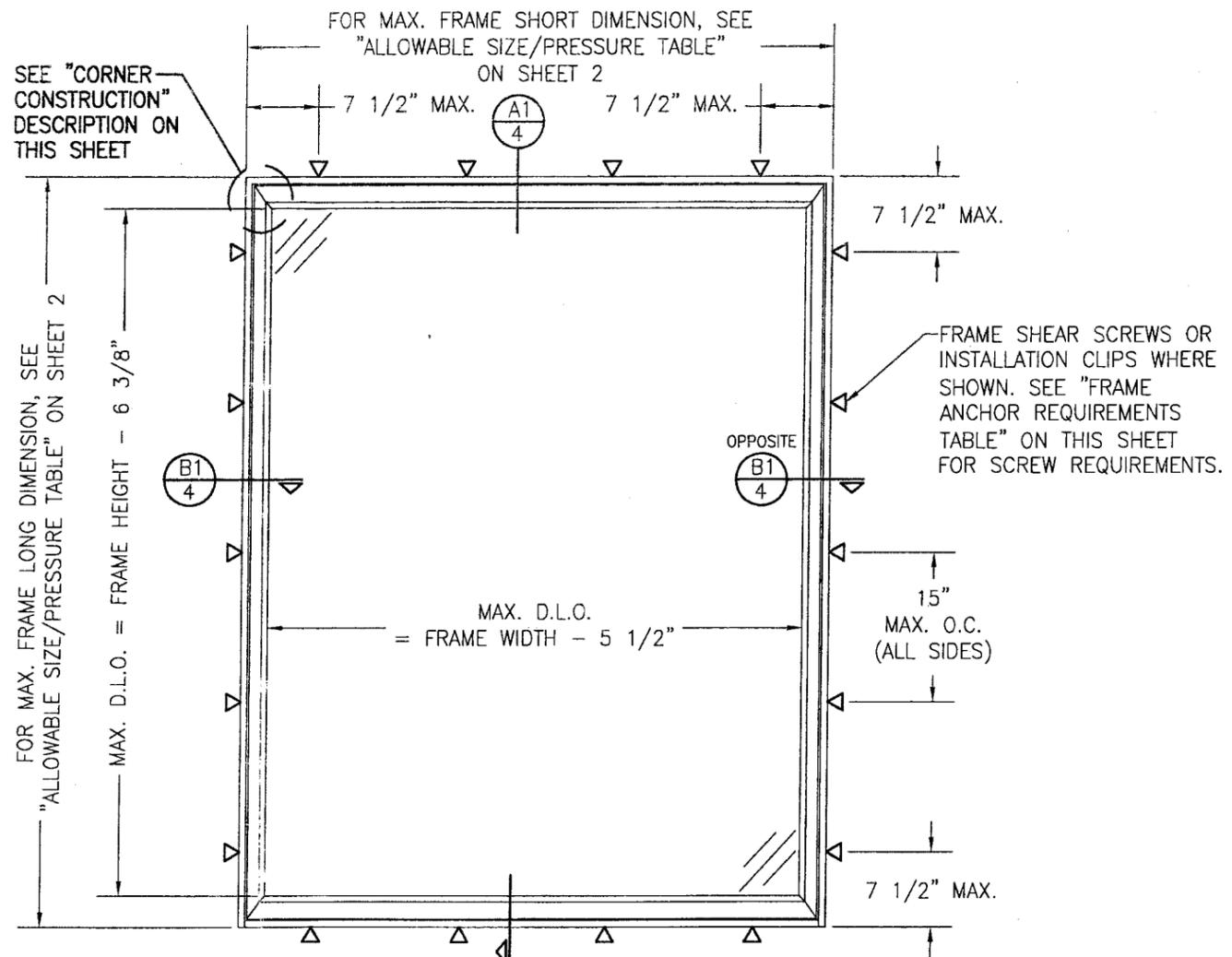
FRAME CORNERS: THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH NO. 7 X 2" SCREWS (3 AT SQUARE CORNERS; 4 AT SHAPED CORNERS) AND SEALED WITH SEALANT.

SASH CORNERS: SASH MEMBERS ARE BUTTED TOGETHER, JOINED WITH 2 NO. 7 X 2" TRIM HEAD SCREWS & 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</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 OR ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).



**EXTERIOR ELEVATION  
SINGLE RECTANGULAR FIXED  
CASEMENT WINDOW**  
SCALE: 3/4" = 1'-0"

**ALLOWABLE DESIGN PRESSURE  
(SINGLE WINDOWS)**  
SEE LOAD TABLE ON SHEET 2

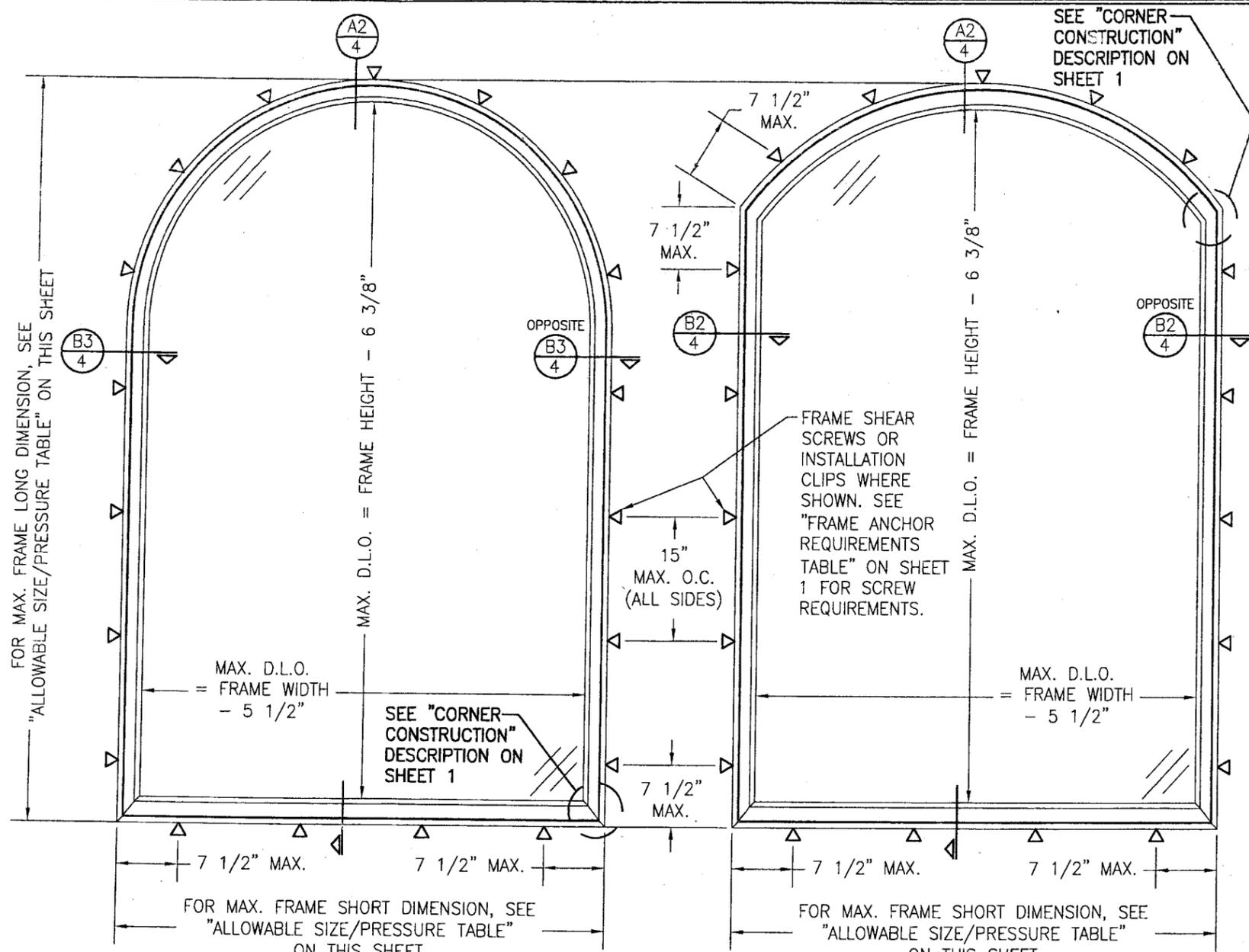
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.	PLOT: 1=16	DATE: 04/02/08
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: <b>WOOD CASEMASTER FIXED CASEMENT STORMPLUS IZ4</b> MANUFACTURER: <b>MARVIN WINDOWS &amp; DOORS</b> HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044			
CONSULTANTS: <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION APR 02 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	Approved as complying with the Florida Building Code Date: 07/03/08 NCAT: 08-0213.09 Miami Dade Product Control Division By: <i>Warren Schaefer</i>		
DRAWING NO. <b>1551</b>	REV.	SHEET NO. <b>1 OF 6</b>	

**ALLOWABLE WINDOW SIZE/PRESSURE TABLE**

MAX. WINDOW FRAME LONG DIMENSION (IN.)	MAX. WINDOW FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)					
		GLASS OPTION "A"		GLASS OPTIONS "B"		GLASS OPTIONS "C"	
		POS.	NEG.	POS.	NEG.	POS.	NEG.
144	50	59.1	59.1	75.0	75.0		
	48	63.1	63.1	75.0	75.0		
	42	75.0	75.0	75.0	75.0		
	36	75.0	80.0	75.0	80.0		
	24	95.0	95.0	95.0	95.0	75.0	85.0
132	54	56.0	56.0	75.0	75.0		
	48	65.7	65.7	75.0	75.0		
	42	75.0	75.0	75.0	75.0		
	39	75.0	80.0	75.0	80.0		
120	26	95.0	95.0	95.0	95.0	75.0	85.0
	60	53.1	53.1	75.0	75.0		
	54	59.7	59.7	75.0	75.0		
	48	69.6	69.6	75.0	75.0		
	43	75.0	80.0	75.0	80.0		
108	28	95.0	95.0	95.0	95.0	75.0	85.0
	66	55.2	55.2	73.6	73.6		
	60	59.8	59.8	75.0	75.0		
	54	66.4	66.4	75.0	75.0		
	48	75.0	75.7	75.0	75.0		
96	45	75.0	80.0	75.0	80.0		
	36	95.0	95.0	95.0	95.0	75.0	85.0
	72	58.6	58.6	75.0	75.0		
	66	62.5	62.5	75.0	75.0		
	60	67.7	67.7	75.0	75.0		
	54	74.1	74.1	75.0	75.0		
90	49	75.0	80.0	75.0	80.0		
	36	95.0	95.0	95.0	95.0	75.0	85.0
	72	62.2	62.2	75.0	75.0		
	66	66.8	66.8	75.0	75.0		
	60	72.1	72.1	75.0	75.0		
84	54	75.0	78.1	75.0	75.0		
	52	75.0	80.0	75.0	80.0		
	38	95.0	95.0	95.0	95.0	75.0	85.0
	72	67.5	67.5	75.0	75.0		
	66	71.9	71.9	75.0	75.0		
78	60	75.0	76.9	75.0	75.0		
	56	75.0	80.0	75.0	80.0		
	41	95.0	95.0	95.0	95.0	75.0	85.0
	72	72.7	72.7	75.0	75.0		
72	66	75.0	76.7	75.0	75.0		
	61	75.0	80.0	75.0	80.0		
	44	95.0	95.0	95.0	95.0	75.0	85.0
66	72	75.0	78.2	75.0	75.0		
	68	75.0	80.0	75.0	80.0		
60	48	95.0	95.0	95.0	95.0	75.0	85.0
	66	75.0	80.0	75.0	80.0		
60	52	95.0	95.0	95.0	95.0	75.0	85.0
	60	75.0	80.0	75.0	80.0		
60	57	95.0	95.0	95.0	95.0	75.0	85.0
	60	75.0	80.0	75.0	80.0		

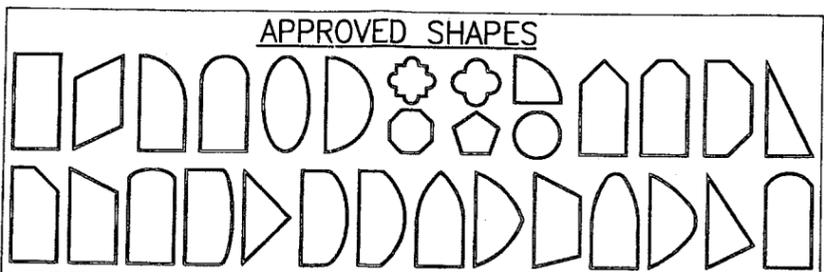
1. WINDOW SIZE DIMENSIONS SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.  
 2. CROSSED OUT BOXES DESIGNATE SIZES NOT ACCEPTABLE FOR THE RESPECTIVE OPTIONS.

SEE SHEET 5 FOR GLASS OPTIONS



**EXTERIOR ELEVATION  
 SINGLE EXTENDED LEG HALF ROUND  
 TOP FIXED CASEMENT WINDOW  
 SCALE: 3/4" = 1'-0"**

**EXTERIOR ELEVATION  
 SINGLE EYEBROW TOP FIXED  
 CASEMENT WINDOW  
 SCALE: 3/4" = 1'-0"**



**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.

**ALLOWABLE DESIGN PRESSURE  
 (SINGLE WINDOWS)  
 SEE LOAD TABLE ON THIS SHEET**

Approved as complying with the Florida Building Code  
 Date 07/03/08  
 NOA# 08-0213.09  
 Miami Dade Product Control Division  
 By *Manuel Perez*

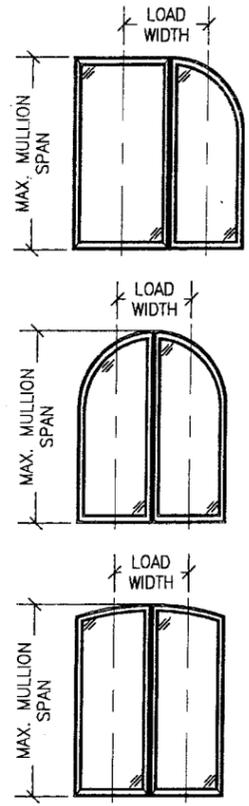
DRAWING BY: W.R.M. PLOT: 1=16 DATE: 04/02/08 CHECKED BY: W.W.S. DATE: 04/02/08	NO. _____ REVISION DESCRIPTION _____ DATE _____ BY _____
DRAWING TITLE: <b>WOOD CASEMASTER FIXED CASEMENT STORMPLUS IZ4</b>	
CONSULTANTS: <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
MANUFACTURER: <b>MARVIN WINDOWS &amp; DOORS</b> HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION: <b>APR 02 2008</b> W. W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. <b>1551</b> REV. _____ SHEET NO. <b>2</b> OF <b>6</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	
	30		85.1	95.0	
	24		95.0	95.0	
	72		53.2	63.6	
90	66		55.0	65.7	
	60		57.5	68.6	
	54		60.8	72.6	
	48		65.3	78.0	
	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	
84	60		63.9	76.3	
	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	
	60		71.8	85.8	
	54		75.1	89.7	
78	48		79.8	95.0	
	42		86.4	95.0	
	36		95.0	95.0	
	72 OR MORE		79.8	95.0	
	72	66		80.4	95.0
		60		82.1	95.0
		54		85.1	95.0
		48		89.8	95.0
		42		95.0	95.0
		71 OR MORE		82.1	95.0
71 1/8	66	67.4	82.1	95.0	
	60	68.2	82.5	95.0	
	54	70.0	84.1	95.0	
	48	72.5	87.1	95.0	
	42	76.3	91.7	95.0	
	36	82.0	95.0	95.0	
	30	90.3	95.0	95.0	
	66 OR MORE	95.0	95.0	95.0	
66	60	79.1	95.0	95.0	
	54	79.7	95.0	95.0	
	48	81.8	95.0	95.0	
	42	85.4	95.0	95.0	
	36	91.1	95.0	95.0	
	30	95.0	95.0	95.0	
60	60 OR MORE	95.0	95.0	95.0	

**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.

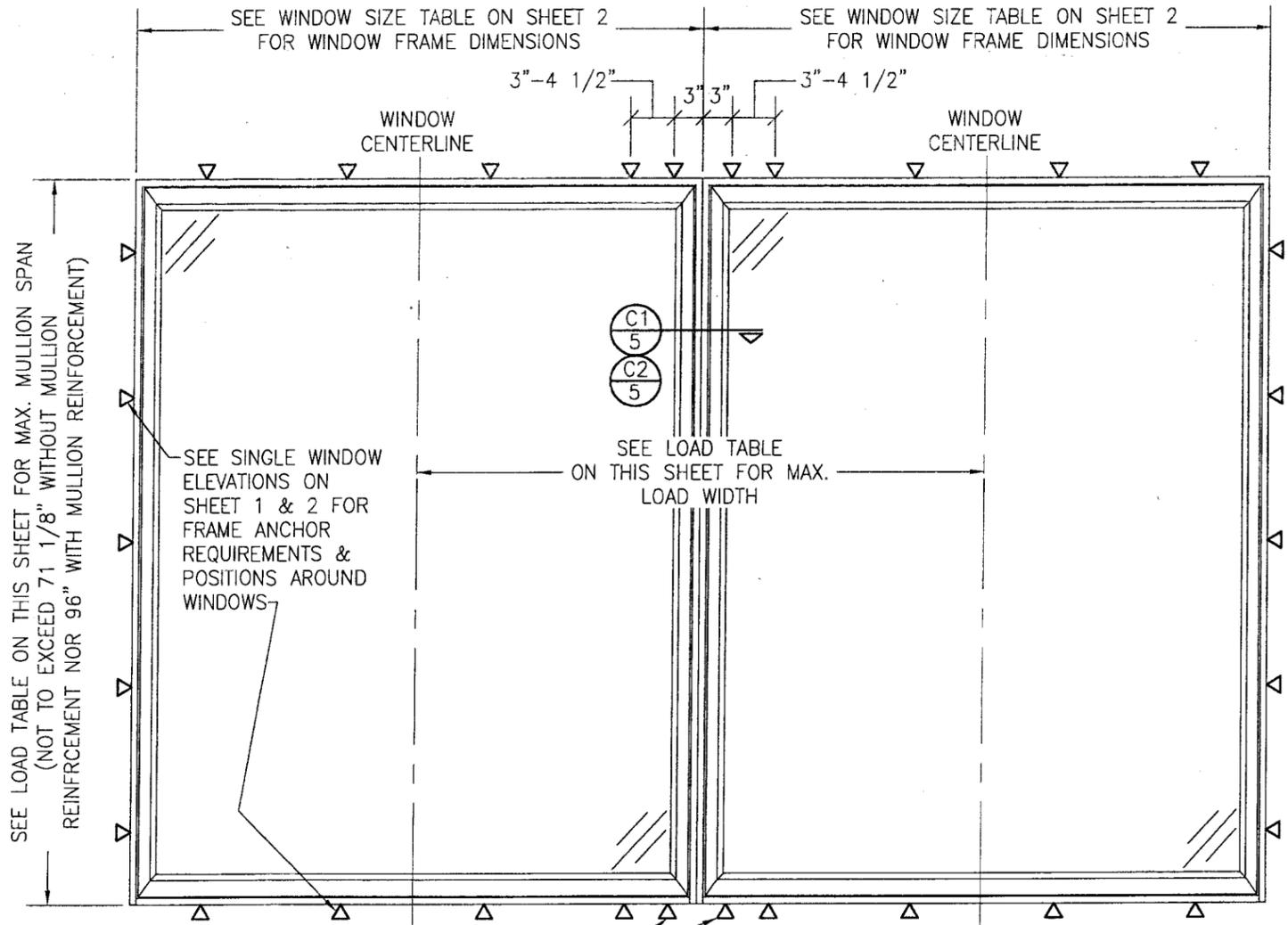
FOR NON-REINFORCED MULLION CONDITION, SEE SECTION C1/5. FOR REINFORCED MULLION CONDITION, SEE SECTION C2/5.

**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.

**ALLOWABLE DESIGN PRESSURE (MULTIPLE WINDOWS)**  
 SEE LOAD TABLE ON THIS SHEET



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

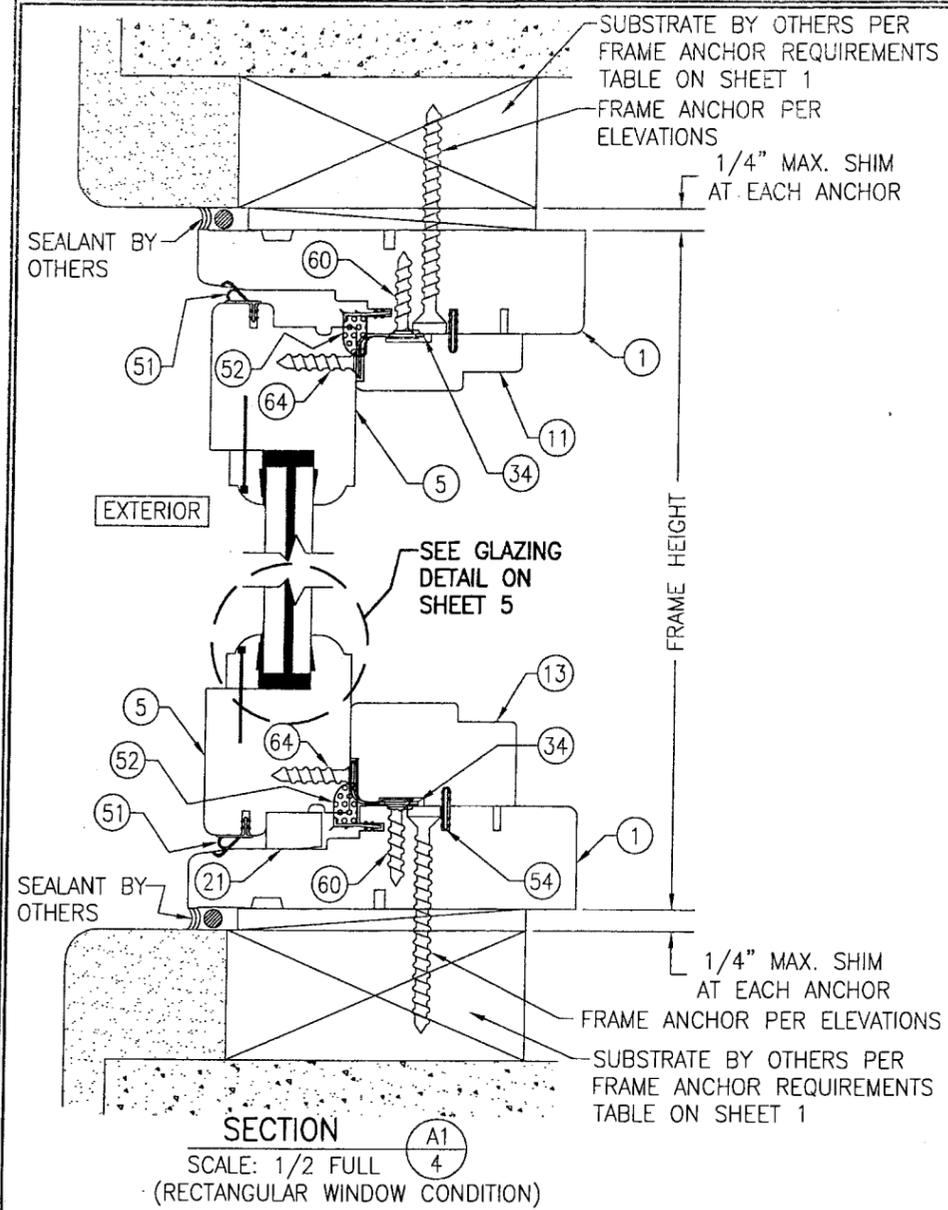
**EXTERIOR ELEVATION**  
**MULTIPLE CASEMENT/FIXED WINDOW**  
 SCALE: 3/4" = 1'-0"

(RECTANGULAR WINDOW SHOWN, SHAPED WINDOWS ALSO APPLY. SEE "APPROVED SHAPED MULLED CONDITIONS" TABLE ON THIS SHEET)

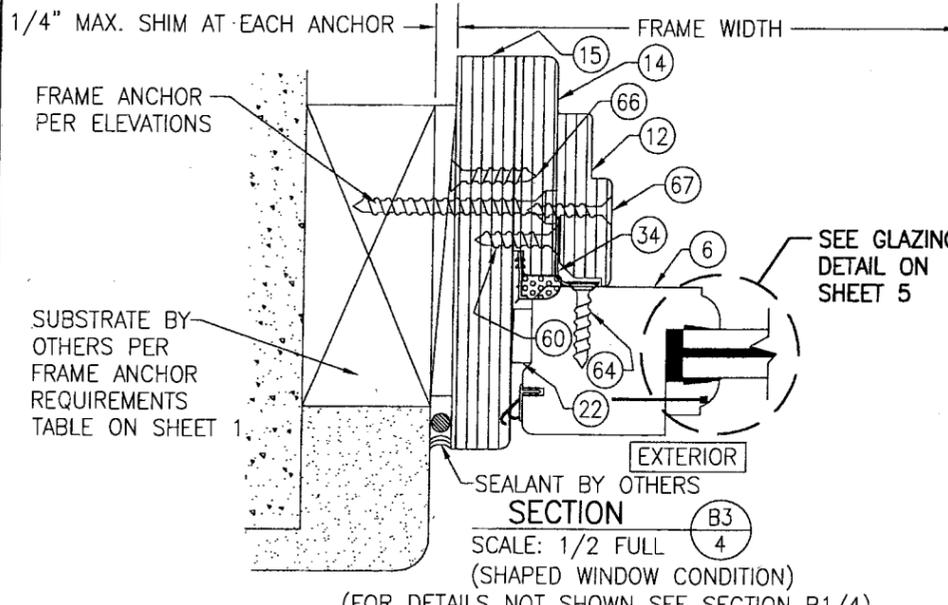
- MULTIPLE UNIT NOTES:**
1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
  2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING WINDOW SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
  3. IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE 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.

Approved as complying with the Florida Building Code  
 Date: 03/03/08  
 MOA: 08-0213.09  
 Miami Dade Product Control  
 Division  
 By: *Manuel Perez*

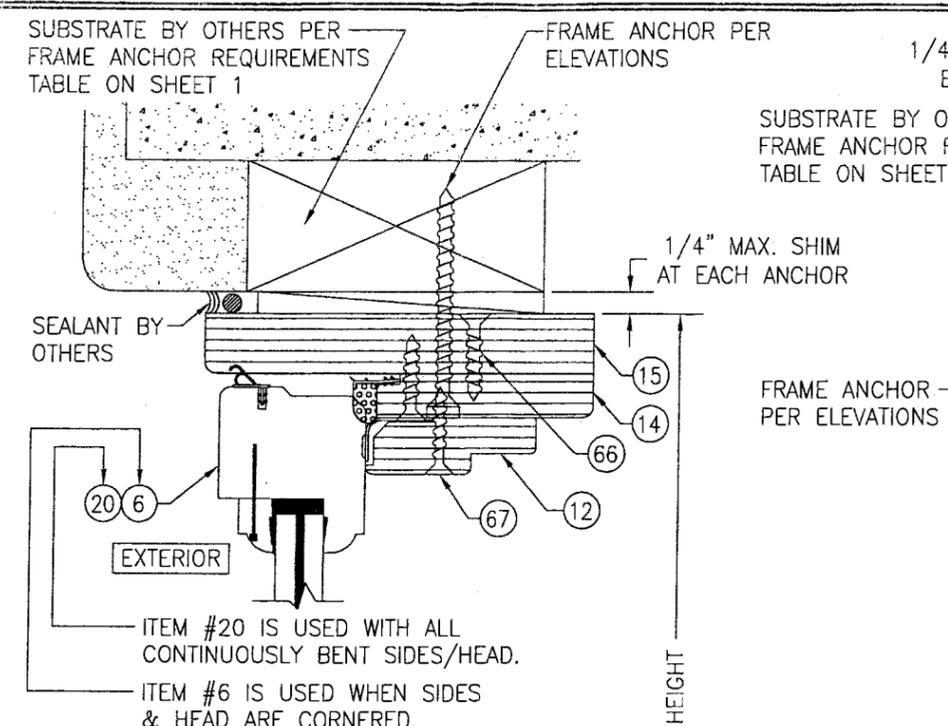
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: I=16	DATE: 04/02/08
NO.	REVISION DESCRIPTION
BY	DATE
DRAWING TITLE: WOOD CASEMASTER FIXED CASEMENT STORMPLUS IZ4	
CONSULTANTS:	MANUFACTURER:
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	MARVIN WINDOWS & DOORS
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044
CERTIFICATION:	
APR 02 2008	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1551	REV.
SHEET NO. 3	OF 6



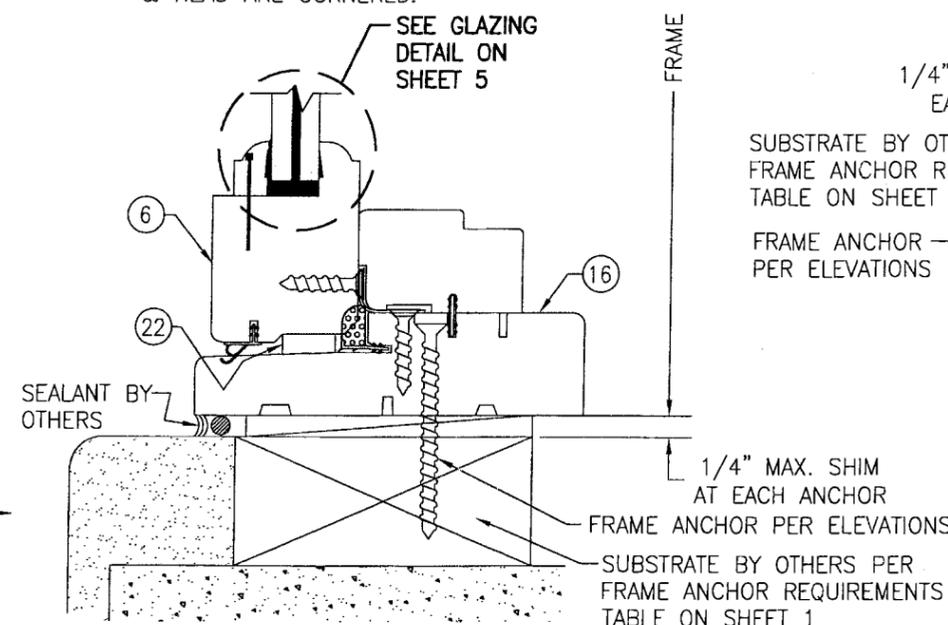
SECTION A1  
SCALE: 1/2 FULL  
(RECTANGULAR WINDOW CONDITION)



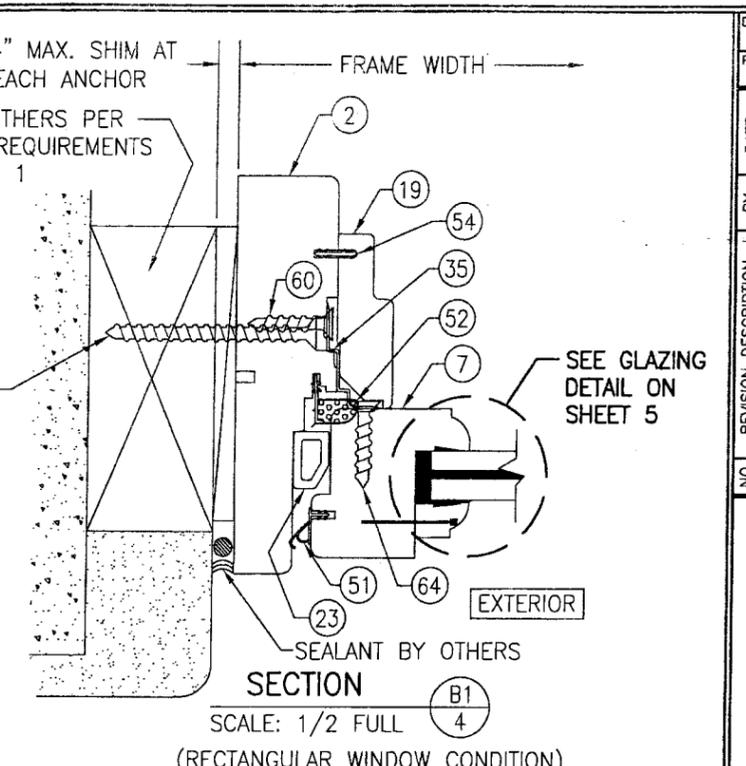
SECTION B3  
SCALE: 1/2 FULL  
(SHAPED WINDOW CONDITION)  
(FOR DETAILS NOT SHOWN SEE SECTION B1/4)



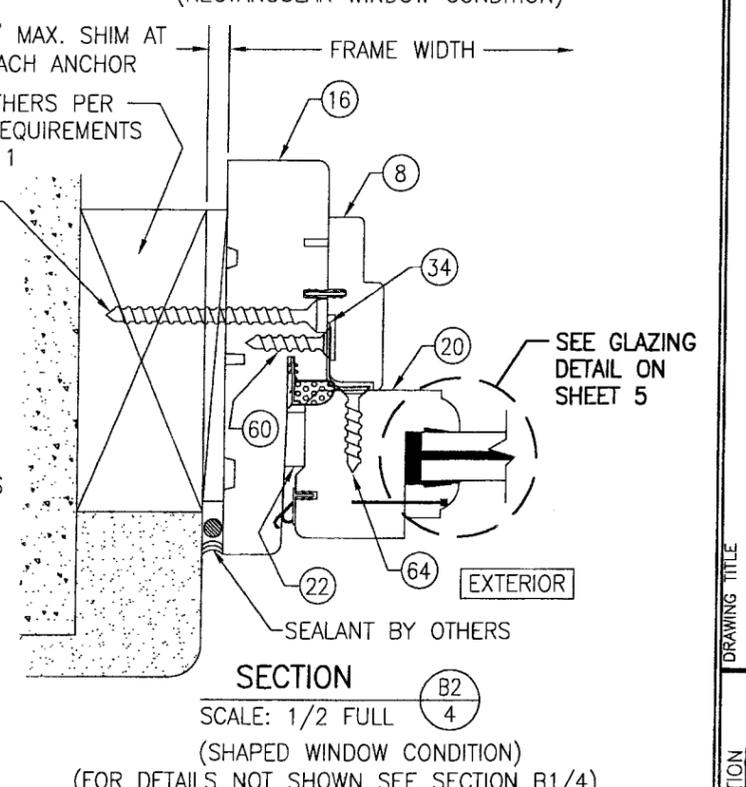
SECTION A2  
SCALE: 1/2 FULL  
(SHAPED WINDOW CONDITION)  
(FOR DETAILS NOT SHOWN SEE SECTION A1/4)



SECTION B2  
SCALE: 1/2 FULL  
(SHAPED WINDOW CONDITION)  
(FOR DETAILS NOT SHOWN SEE SECTION B1/4)



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



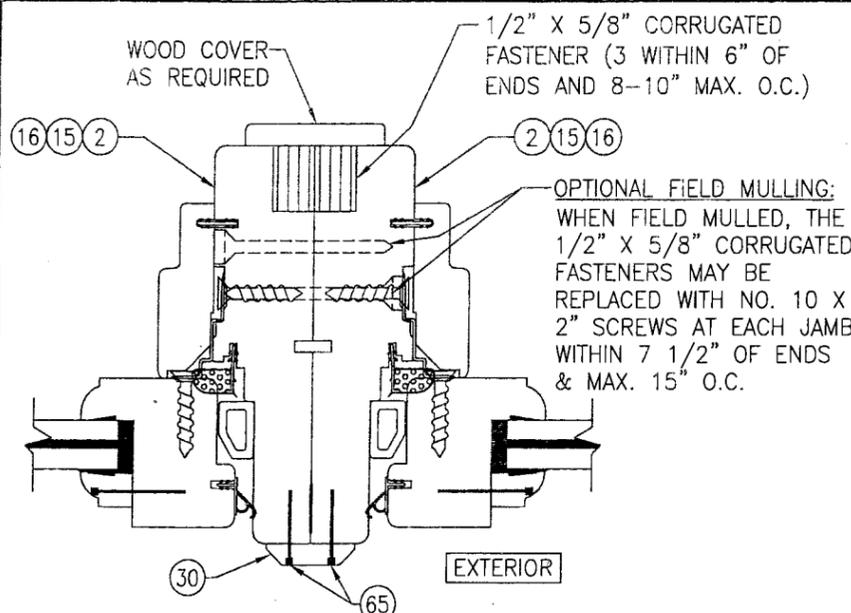
SECTION B2  
SCALE: 1/2 FULL  
(SHAPED WINDOW CONDITION)  
(FOR DETAILS NOT SHOWN SEE SECTION B1/4)

SHAPED WINDOW SECTIONS MAY BE USED WITH EITHER SHAPED OR RECTANGULAR WINDOWS

BRICKMOLDS ARE NOT SHOWN BUT MAY BE USED IN ADDITION TO ANCHORS SHOWN.

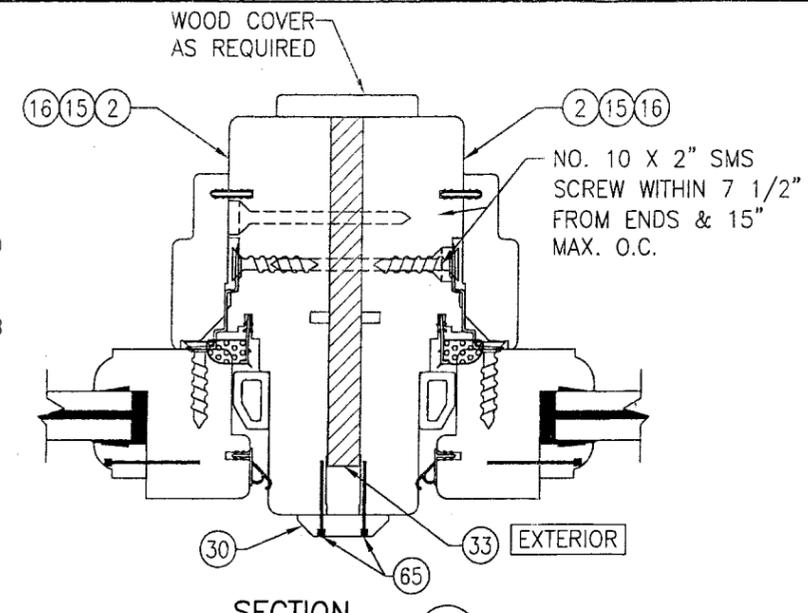
Approved as complying with the Florida Building Code  
Date: 07/10/2008  
NOA#: 08-0273.09  
Miami Dade Product Control  
Division  
By: *Manuel Perez*

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE WOOD CASEMASTER FIXED CASEMENT STORMPLUS IZ4	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
MANUFACTURER MARVIN WINDOWS & DOORS	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
HIGHWAY 11, P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	APR 02 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1551	REV.
SHEET NO. 4 OF 6	



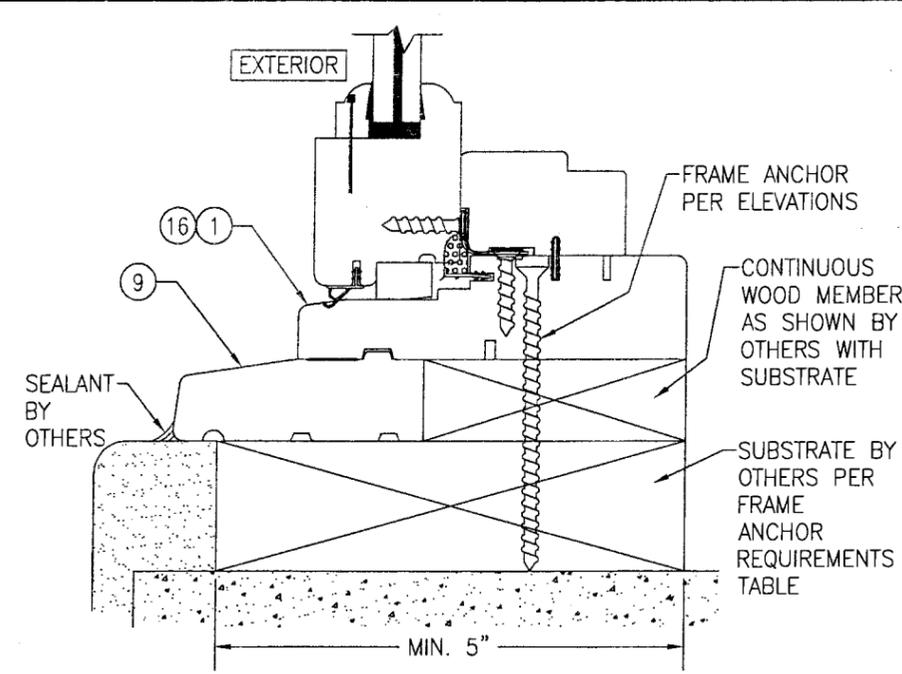
SECTION C1  
SCALE: 1/2 FULL  
(NON-REINFORCED MULLION)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)  
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)

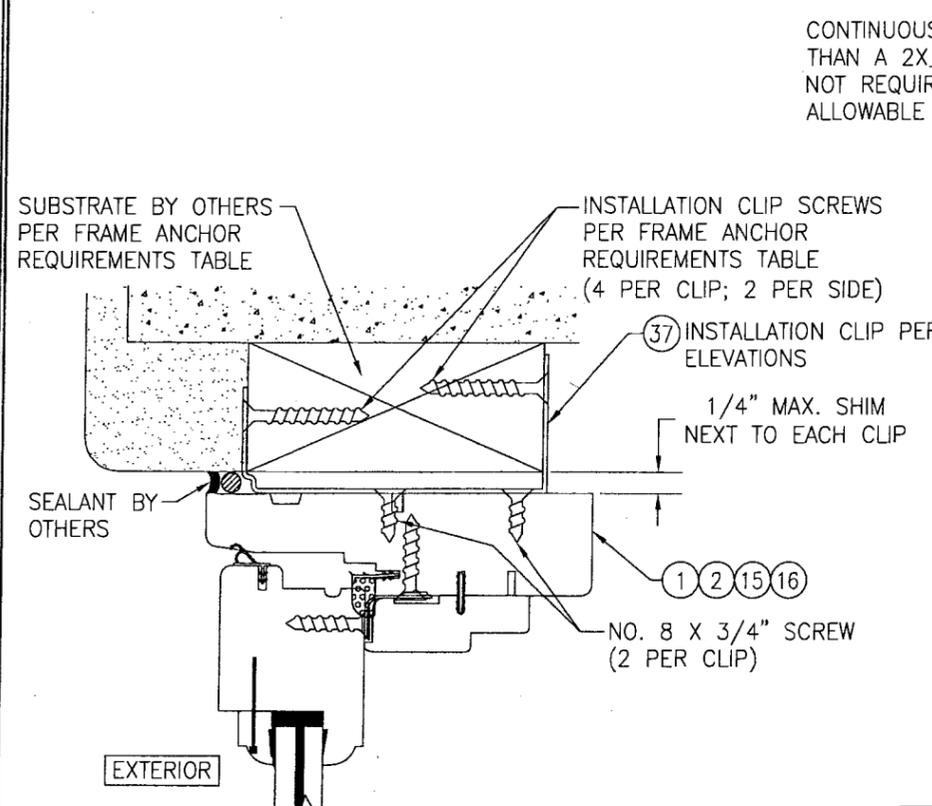


SECTION C2  
SCALE: 1/2 FULL  
(REINFORCED MULLION)

(FOR DETAILS NOT SHOWN SEE OTHER SECTIONS)  
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE JOINED THE SAME)

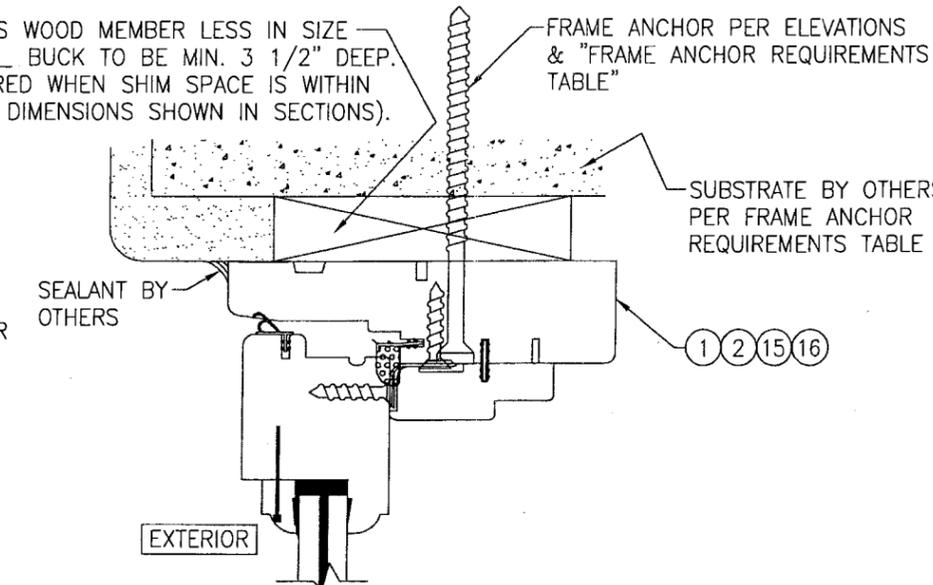


OPTIONAL DIRECT MOUNT DETAIL WITH SUB-SILL  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



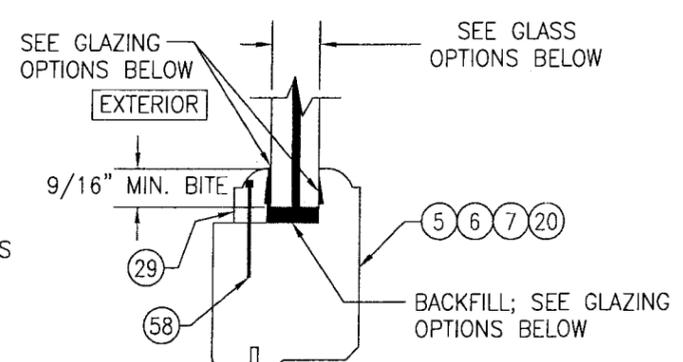
OPTIONAL INSTALLATION CLIP DETAIL

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)  
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE INSTALLED THE SAME)



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)  
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE INSTALLED THE SAME)



TYPICAL GLAZING DETAIL

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

**GLAZING OPTIONS:**  
GLAZING OPTION A: DOW 1199 EXTERIOR & INTERIOR WITH DOW 995 BACKFILL  
GLAZING OPTION B: GE RAPID STRENGTH EXTERIOR, INTERIOR & BACKFILL

BRICKMOLDS ARE NOT SHOWN BUT MAY BE USED IN ADDITION TO ANCHORS SHOWN.

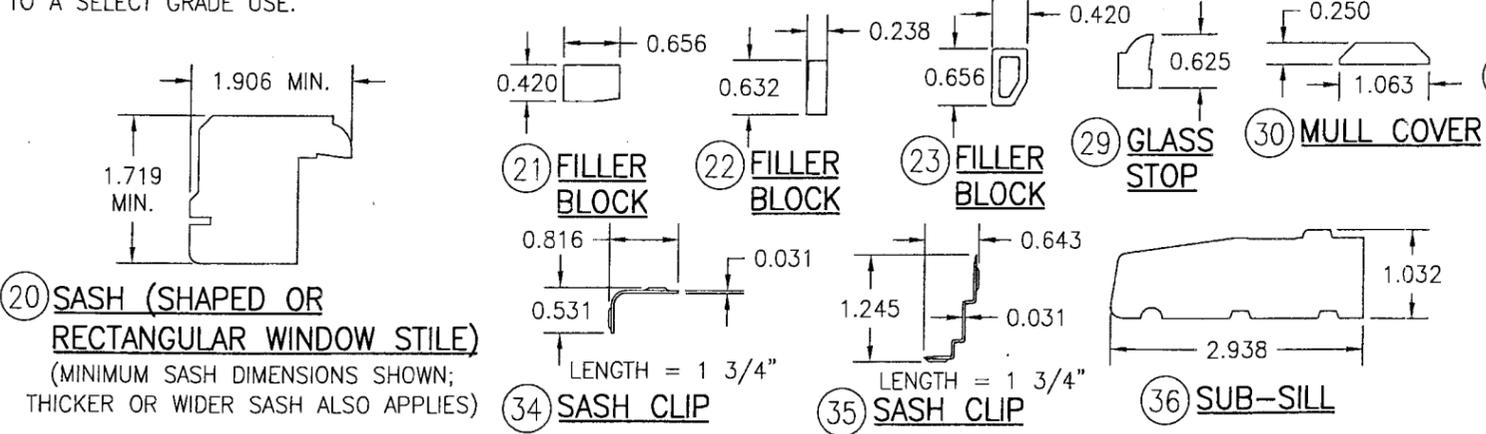
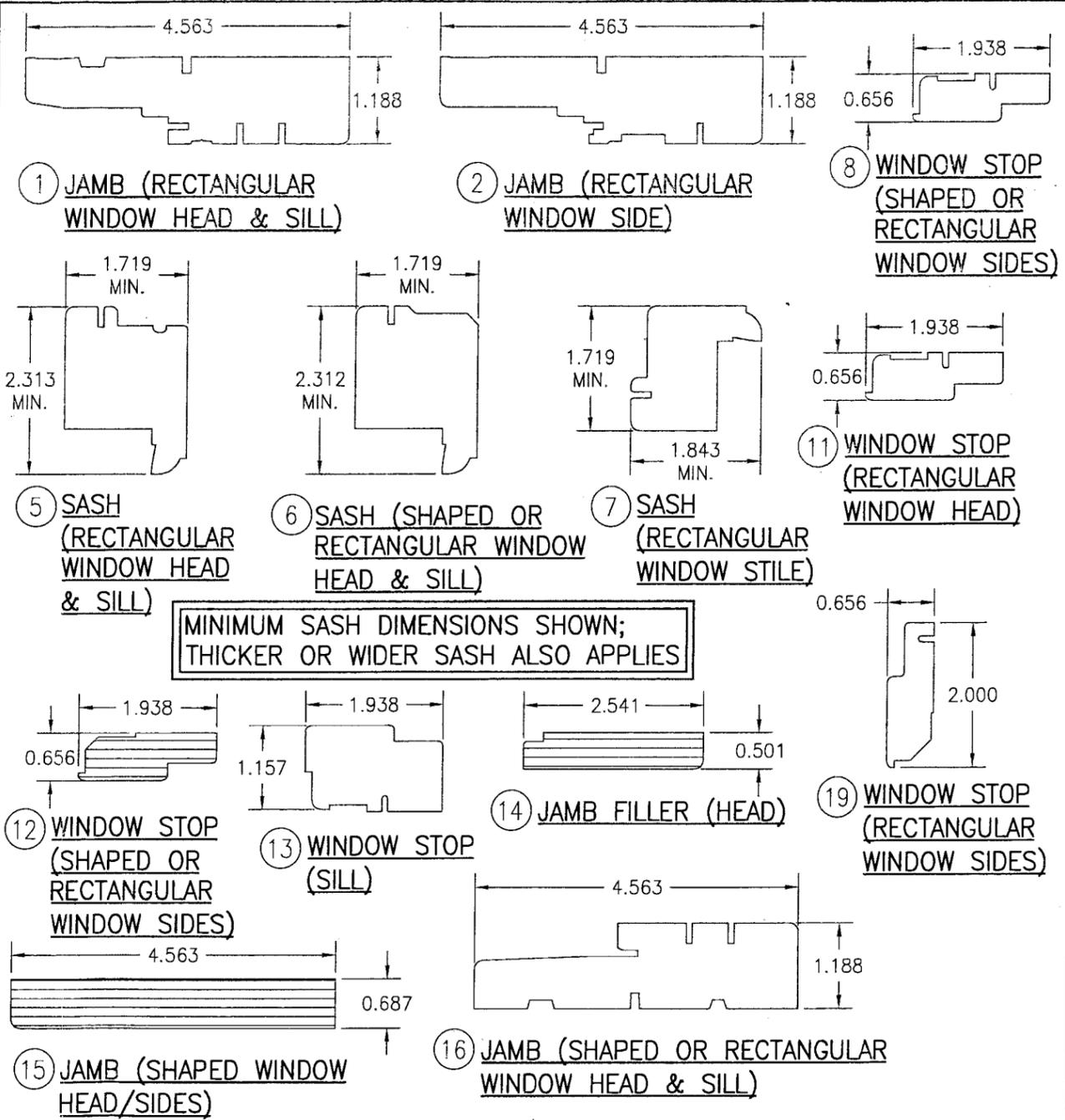
SHAPED WINDOW SECTIONS MAY BE USED WITH EITHER SHAPED OR RECTANGULAR WINDOWS

Approved as complying with the Florida Building Code  
Date 07/03/08  
NOA# 08-0213.09  
Miami Dade Product Control Division  
By *Manuel Perez*

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 04/02/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD CASEMASTER FIXED CASEMENT 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. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: APR 02 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1551		REV.	
SHEET NO. 5		OF 6	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	JAMB (RECTANGULAR WINDOW HEAD & SILL)	* WOOD
2	JAMB (RECTANGULAR WINDOW SIDES)	* WOOD
5	SASH (RECTANGULAR WINDOW HEAD & SILL)	* WOOD
6	SASH (SHAPED OR RECTANGULAR WINDOW HEAD & SILL)	* WOOD
7	SASH (RECTANGULAR WINDOW STILE)	* WOOD
8	WINDOW STOP (SHAPED OR RECTANGULAR WINDOW SIDES)	* WOOD
11	WINDOW STOP (RECTANGULAR WINDOW HEAD)	* WOOD
12	WINDOW STOP (SHAPED OR RECTANGULAR WINDOW SIDES)	* WOOD
13	WINDOW STOP (SILL)	* WOOD
14	JAMB FILLER (SHAPED WINDOW HEAD)	LVL
15	JAMB (SHAPED WINDOW HEAD/SIDES)	LVL
16	JAMB (SHAPED OR RECTANGULAR WINDOW HEAD & SILL)	PINE
19	WINDOW STOP (RECTANGULAR WINDOW SIDES)	* WOOD
20	SASH (SHAPED OR RECTANGULAR WINDOW STILE)	* WOOD
21	FILLER BLOCK	* WOOD (1 PER SIDE)
22	FILLER BLOCK	* WOOD (1 PER SIDE)
23	FILLER BLOCK	PVC (1 PER SIDE)
29	GLASS STOP	* WOOD
30	MULLION COVER	* WOOD
33	MULLION REINFORCEMENT PLATE	6061-T6 ALUMINUM
34	SASH CLIP	50 KSI GALV. STEEL 6" FROM CORNERS & MAX. 14" O.C.
35	SASH CLIP (USED ONLY AT RECTANGULAR WINDOW SIDES)	50 KSI GALV. STEEL 6" FROM CORNERS & MAX. 14" O.C.
36	SUB-SILL	* WOOD
37	INSTALLATION C-CLIP	50 KSI GALV. STEEL
SEALS & SEALANTS		
51	SASH WEATHERSTRIP	RIGID GLASS FILLED POLYPROPYLENE BY INTEK
52	VINYL FRAME WEATHERSTRIP	BY AMSBURY
54	CONNECTING BARB	PVC & GEON C70d0
MISC. FASTENERS		
58	F-18 x 1.125" BRAD NAIL	3" FROM CORNERS & MAX. 8" O.C.
60	NO. 8 X 1" SMS SCREW	2 PER CLIP INTO JAMB
64	NO. 7 X 1/2" SMS	2 PER CLIP INTO SASH
65	18 GA. X 3/4" BRAD NAIL	2" FROM ENDS & 5" TO 8" O.C.
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 ARE MIN. GRADE 2 MAHOGANY, OAK, CHERRY, CYPRUS, & DOUGLAS FIR  
 NOTE: ALL WOOD IS RECEIVED BY MARVIN WINDOWS & DOORS AS GRADE 2, BUT IS MACHINED BY MARVIN TO A SELECT GRADE USE.



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 Date: 07/03/08  
 NOA# 08-0213.09  
 Miami Dade Product Control Division  
 By: *Manuel Perez*

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/02/08
DATE	BY
REVISION DESCRIPTION	NO.
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MANUFACTURER	
MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
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DRAWING TITLE	
WOOD CASEMASTER FIXED CASEMENT STORMPLUS IZ4	
CERTIFICATION	APR 02 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1551	REV. 6 OF 6