



**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) 375-2908**

www.miamidade.gov/buildingcode

NOTICE OF ACCEPTANCE (NOA)

**Marvin Windows & 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 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 "StormPlus IZ 4 Casemaster" Wood Casement Window -Impact

APPROVAL DOCUMENT: Drawing No. 1550, titled "Wood Casemaster Casement StormPlus IZ4", sheets 1 through 8 of 8, dated 04/03/08 and last revised on Dec. 02, 2008, 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

Limitation: 1. Allowable Design Pressure table (Sheet 3 of 8): Non-Reinforced mullion (Detail E1/6 & F1/6) is limited to max. +/-70 PSF and Reinforced mullion (Detail E-2/6 & F-2/6) is limited to max. +70/-85 PSF.

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 as well as approval document mentioned above. The submitted documentation was reviewed by **Ishaq I. Chanda, P. E.**



**NOA No 08-1014.07
Expiration Date: March 04, 2014
Approval Date: March 04, 2009
Page 1**

2/12/19

Marvin Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's drawings and sections.
2. Drawing No. **1550**, titled "Wood Casemaster Casement StormPlus IZ4", sheets 1 through 8 of 8, dated 04/03/08 and last revised on Dec. 02, 2008, 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, 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
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of "StormPlus IZ4 wood casement window, prepared by Architectural Testing, Inc., Test Report No.

ATI-77675.01-201-18, dated 06/16/08, and addendum letter dated 01/09/09, all signed and sealed by Joseph A. Reed, P.E. (This test report has been revised by an addendum letter dated 01/29/09 issued by Architectural Testing, signed & sealed by Joseph A. Reed, P.E.)

2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, 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
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of "StormPlus IZ4 wood casement window, prepared by Architectural Testing, Inc., Test Report No. **ATI-77779.01-201-18**, dated 12/20/07 and **ATI-77676.01-201-18**, dated 08/05/08, signed and sealed by Joseph A. Reed, P.E. *(For reference only)*

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004 and 2007, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 08/28/08 and last revised on 12/02/08, signed and sealed by Warren W. Schaefer, P.E.
2. Complies with ASTM E1300-02/04

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 and "No financial interest", dated August 28, 2008, signed and sealed by Warren W. Schaefer, P.E.
2. Statement of lab compliance, part of above test reports.

G. OTHER

1. Test proposal # **07-3071** dated June 21, 2007 approved by BCCO.

Ishaq I. Chanda

Ishaq I. Chanda, P. E.
Product Control Examiner
NOA No 08-1014.07

Expiration Date: March 04, 2014
Approval Date: March 04, 2009

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.
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.

SNUBBER REQUIREMENTS TABLE (RECTANGULAR WINDOWS)

MAX. FRAME HEIGHT	MIN. NO. OF SNUBBERS
71 1/8"	3
47 3/8"	2
23 5/8"	1

LOCK REQUIREMENTS TABLE (RECTANGULAR WINDOWS)

MAX. FRAME HEIGHT	MIN. NO. OF LOCKS
71 1/8"	3
47 3/8"	2

CORNER CONSTRUCTION (STANDARD RECTANGULAR WINDOWS)

FRAME CORNERS: THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS, SECURED WITH THREE(3) GS16 X 1 1/2" STAPLES THROUGH THE HEAD & SILL INTO THE JAMB & ONE(1) 14 GA. 7/16 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)

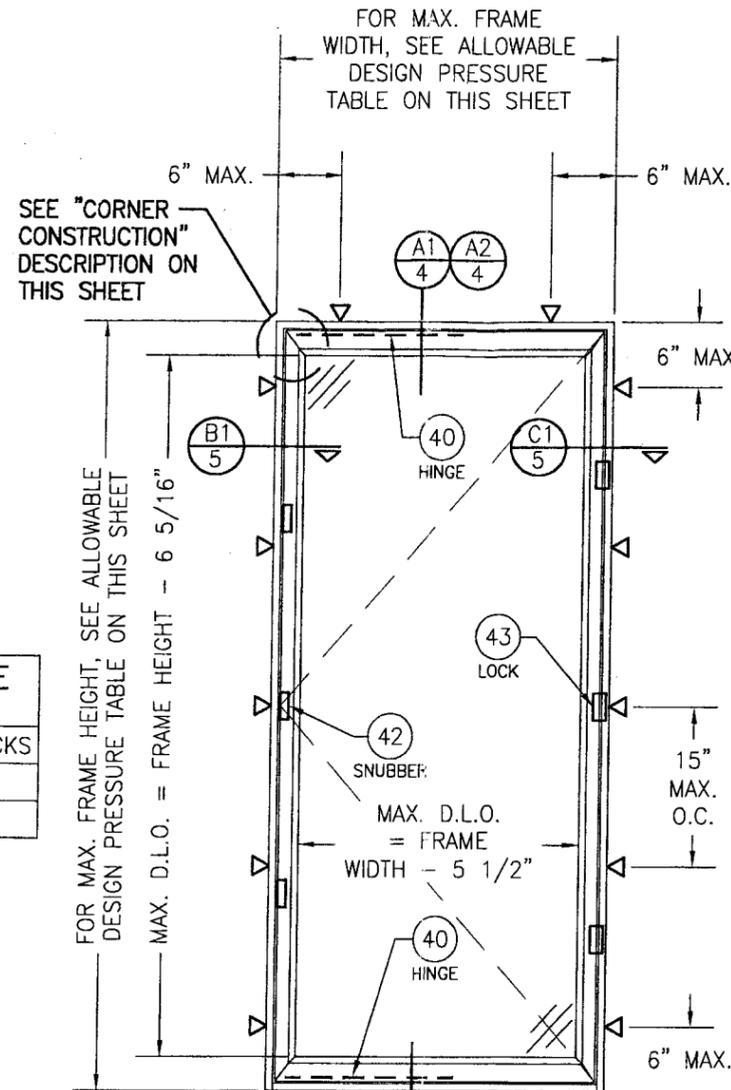
FRAME CORNERS: THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH NO. 7 X 2" SCREWS (3 AT SQUARE CORNERS; 4 AT SHAPED CORNERS) AND SEALED WITH SEALANT.

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.
FRAME SHEAR SCREWS			
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"
INSTALLATION CLIP SCREWS			
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.).

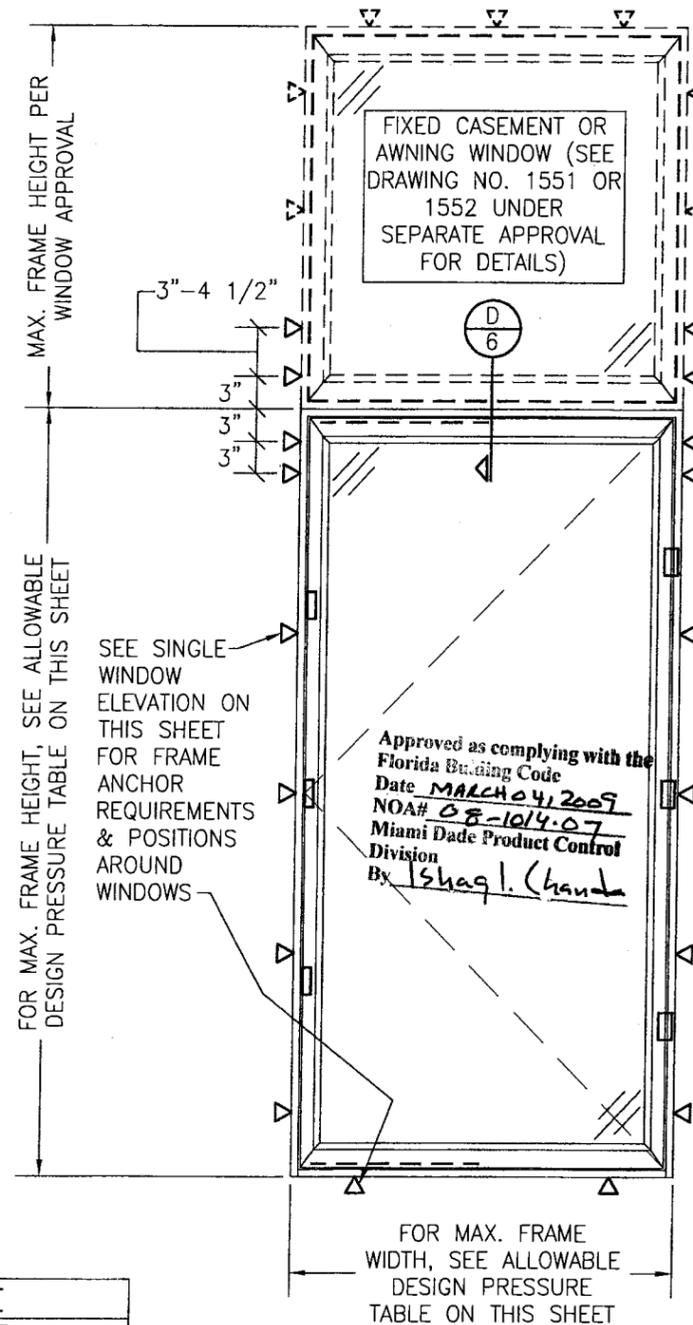


EXTERIOR ELEVATION SINGLE RECTANGULAR CASEMENT WINDOW
SCALE: 3/4" = 1'-0"

FRAME SHEAR SCREW OR INSTALLATION CLIP WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.

ALLOWABLE DESIGN PRESSURE		
(1) (SINGLE RECTANGULAR WINDOW & SINGLE WINDOW WITH TRANSOM)		
MAXIMUM FRAME WIDTH	MAXIMUM FRAME HEIGHT	ALLOWABLE PRESSURE
28"	71 1/8"	+70/-85 PSF
32"	71 1/8"	+70/-70 PSF
36"	59 1/8"	+70/-70 PSF

1. WITH TRANSOM UNITS, THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE OR THAT SPECIFIED IN THE INDIVIDUAL FIXED OR AWNING WINDOW APPROVAL SHALL CONTROL AS THE ALLOWABLE FOR THE OVERALL UNIT.



EXTERIOR ELEVATION SINGLE RECTANGULAR CASEMENT WINDOW WITH TRANSOM
SCALE: 3/4" = 1'-0"
(FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/03/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
WOOD CASEMASTER CASEMENT STORMPLUS IZ4	
<p>MANUFACTURER 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</p>	<p>MARVIN WINDOWS & DOORS HIGHWAY 11, P.O. BOX 100 WARROAD, MN 56763 800-346-5044</p>
<p>Approved as complying with the Florida Building Code Date <u>MARCH 04, 2009</u> NOA# <u>08-1014-07</u> Miami Dade Product Control Division By <u>Ishaq I. Chanda</u></p>	
<p>CERTIFICATION DEC 02 2008 W. W. SCHAEFER, P.E. P.E. NO. 44133</p>	
DRAWING NO. 1550	REV.
SHEET NO. 1	OF 8

**ALLOWABLE DESIGN PRESSURE TABLE
(SIDE BY SIDE WINDOWS)**

MAXIMUM FRAME HEIGHT (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)	
		"XX"	"XO"
71 1/8	52	-	+61.9/-61.9
	48	-	+67.1/-67.1
	46	-	+70.0/-70.0
	42	-	+70.0/-76.7
	37	-	+70.0/-85.0
	32	+70.0/-70.0	+70.0/-85.0
	28	+70.0/-80.0	+70.0/-85.0
	26	+70.0/-85.0	+70.0/-85.0
65 1/8	52	-	+70.0/-71.8
	49	-	+70.0/-71.8
	48	-	+70.0/-73.3
	46	-	+70.0/-76.4
	42	-	+70.0/-83.7
	40	-	+70.0/-85.0
	32	+70.0/-76.4	+70.0/-85.0
	28	+70.0/-85.0	+70.0/-85.0
59 1/8	54	-	+70.0/-80.7
	48	-	+70.0/-80.7
	46	-	+70.0/-84.2
	45	-	+70.0/-85.0
	36	+70.0/-74.9	+70.0/-85.0
	32	+70.0/-84.2	+70.0/-85.0
	31	+70.0/-85.0	+70.0/-85.0
53 1/8	54	-	+70.0/-85.0
	36	+70.0/-83.3	+70.0/-85.0
	35	+70.0/-85.0	+70.0/-85.0
47 1/8	54	-	+70.0/-85.0
	36	+70.0/-85.0	+70.0/-85.0

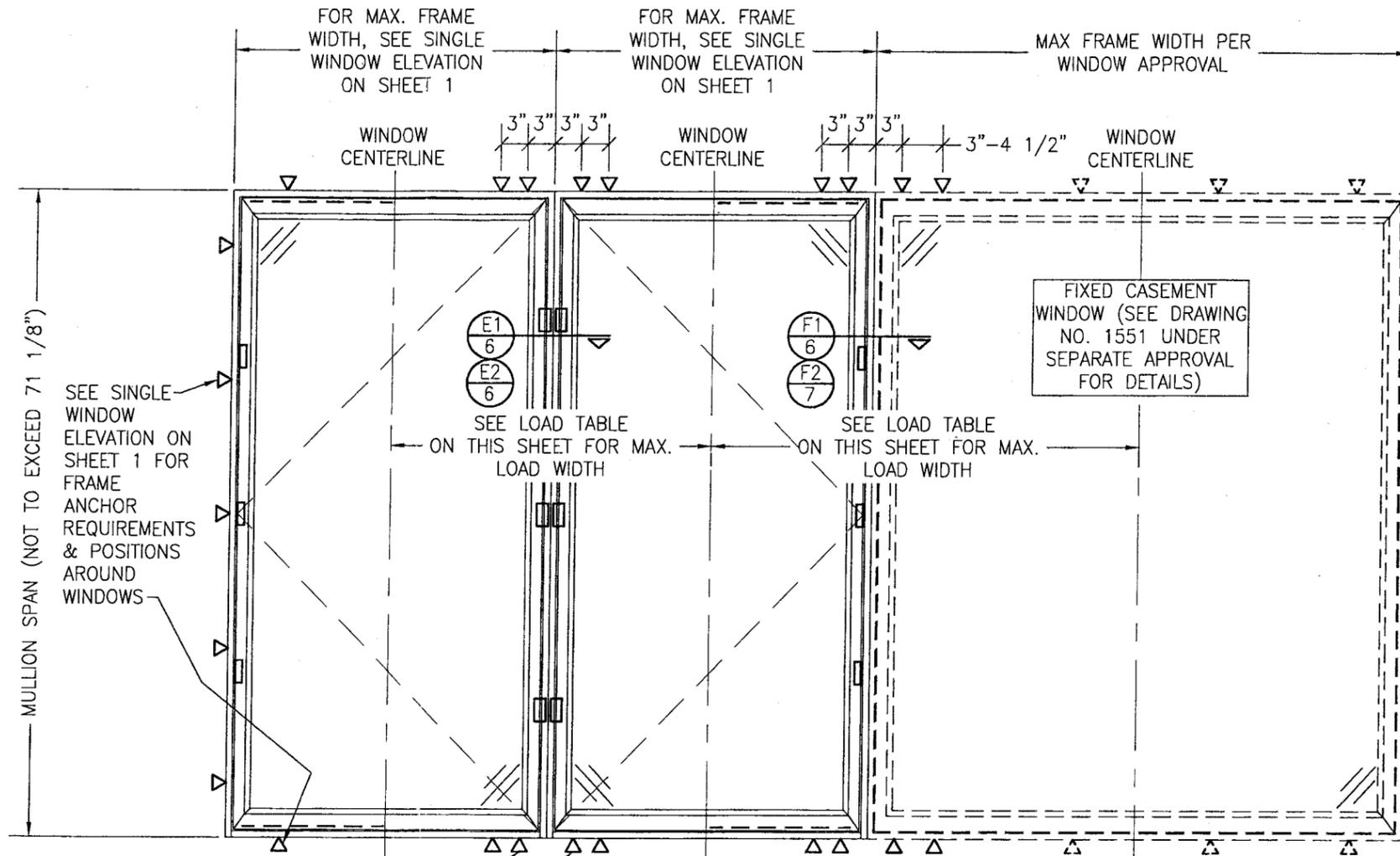
LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT ALLOWED FOR THE INDIVIDUAL WINDOW SHALL CONTROL AS ALLOWABLE FOR THE OVERALL UNIT.

THE VALUES IN THIS TABLE APPLY TO BOTH BAR REINFORCED & NON-REINFORCED MULLION CONDITIONS.

ADD 3/8" TO LOAD WIDTH VALUES IN THIS TABLE WHEN 3/8" ALUMINUM REINFORCEMENT PLATE IS USED.

LOAD WIDTH IS THE DISTANCE BETWEEN THE WINDOW CENTERLINES.

"XX" = MULLION BETWEEN 2 OPERABLE WINDOWS.
"XO" = MULLION BETWEEN AN OPERABLE & FIXED WINDOW.



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**

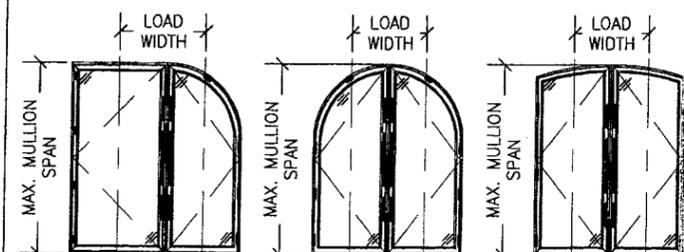
SCALE: 3/4" = 1'-0"

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

MULTIPLE UNIT NOTES:

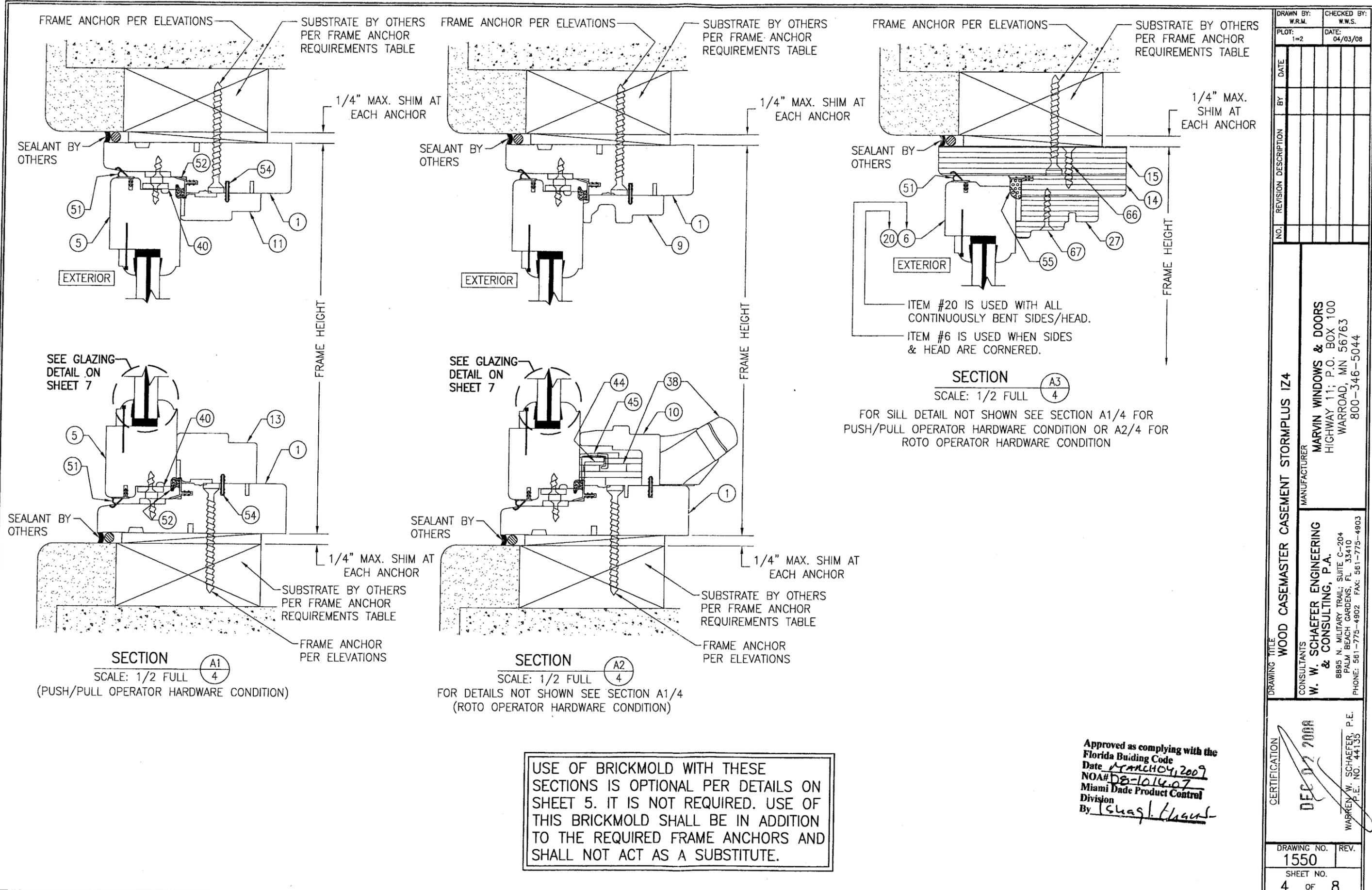
1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.

APPROVED SHAPED MULLED CONDITIONS



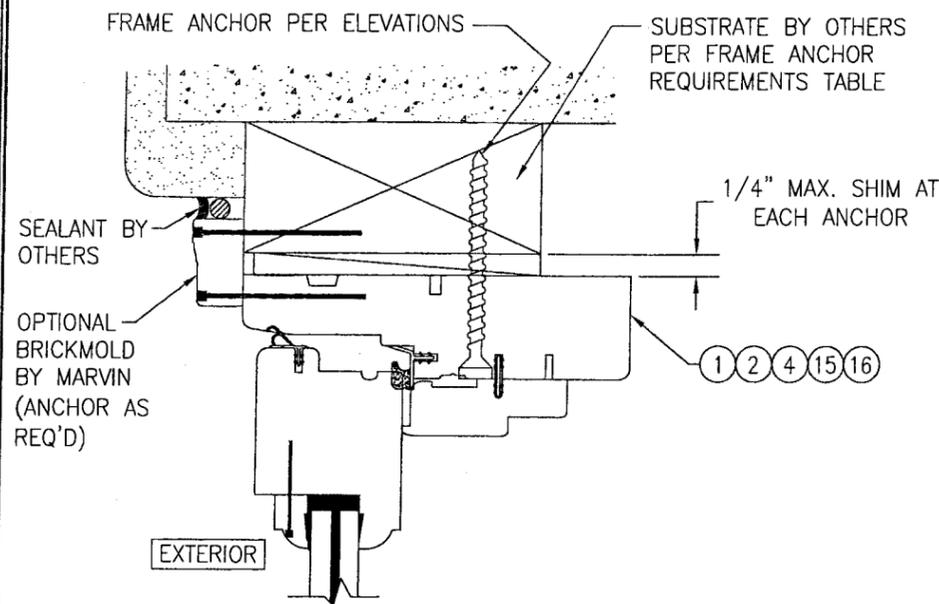
ANGLED WINDOW SHAPES #3 & #4 ON SHEET 2 ALSO APPLY AND MAY REPLACE THE RADIUS WINDOWS SHOWN HERE.

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/03/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE WOOD CASEMASTER CASEMENTSTORMPLUS 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	
MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	
Approved as complying with the Florida Building Code Date <u>MARCH 04, 2009</u> NOAH <u>09-1014.07</u> Miami Dade Product Control Division By <u>Shagil Chandra</u>	
DRAWING NO. 1550	REV.
SHEET NO. 3	OF 8



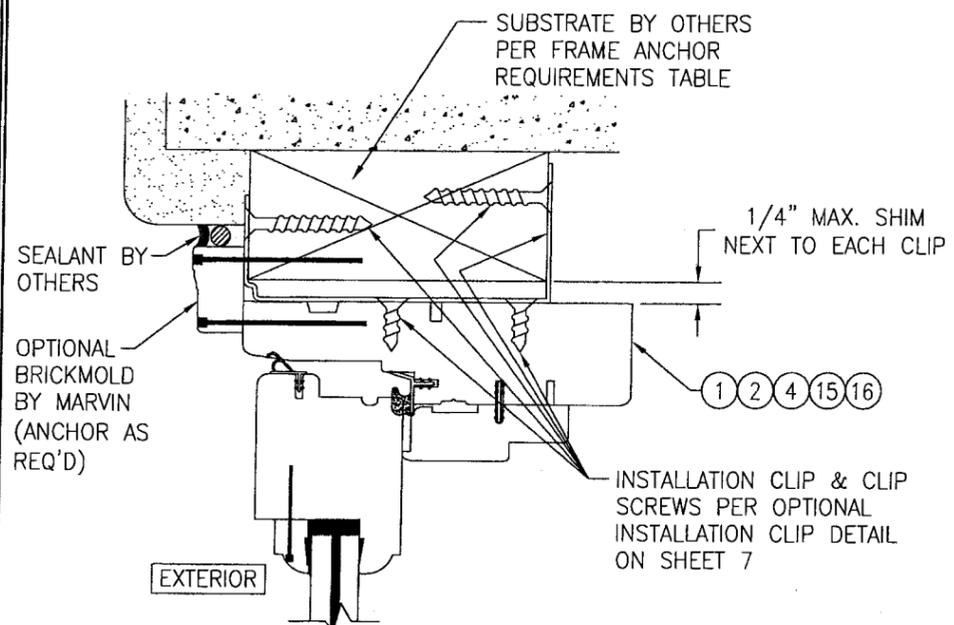
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/03/08	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: WOOD CASEMASTER CASEMENT STORMPLUS IZ4			
MANUFACTURER: MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: Approved as complying with the Florida Building Code Date: MARCH 04, 2009 NOA#: 08-1014-07 Miami Dade Product Control Division By: [Signature]			
DRAWING NO. 1550		REV.	
SHEET NO. 4		OF 8	

USE OF BRICKMOLD WITH THESE SECTIONS IS OPTIONAL PER DETAILS ON SHEET 5. IT IS NOT REQUIRED. USE OF THIS BRICKMOLD SHALL BE IN ADDITION TO THE REQUIRED FRAME ANCHORS AND SHALL NOT ACT AS A SUBSTITUTE.



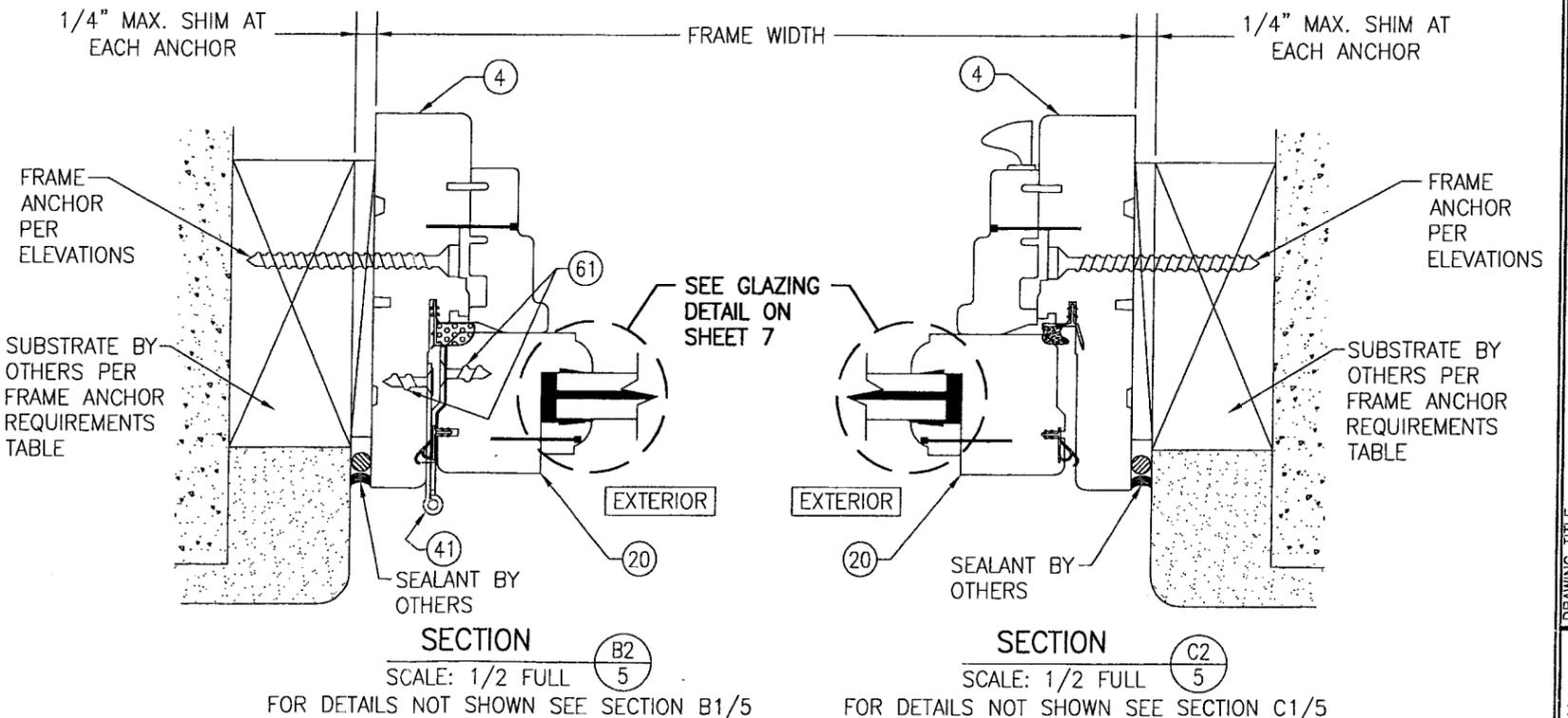
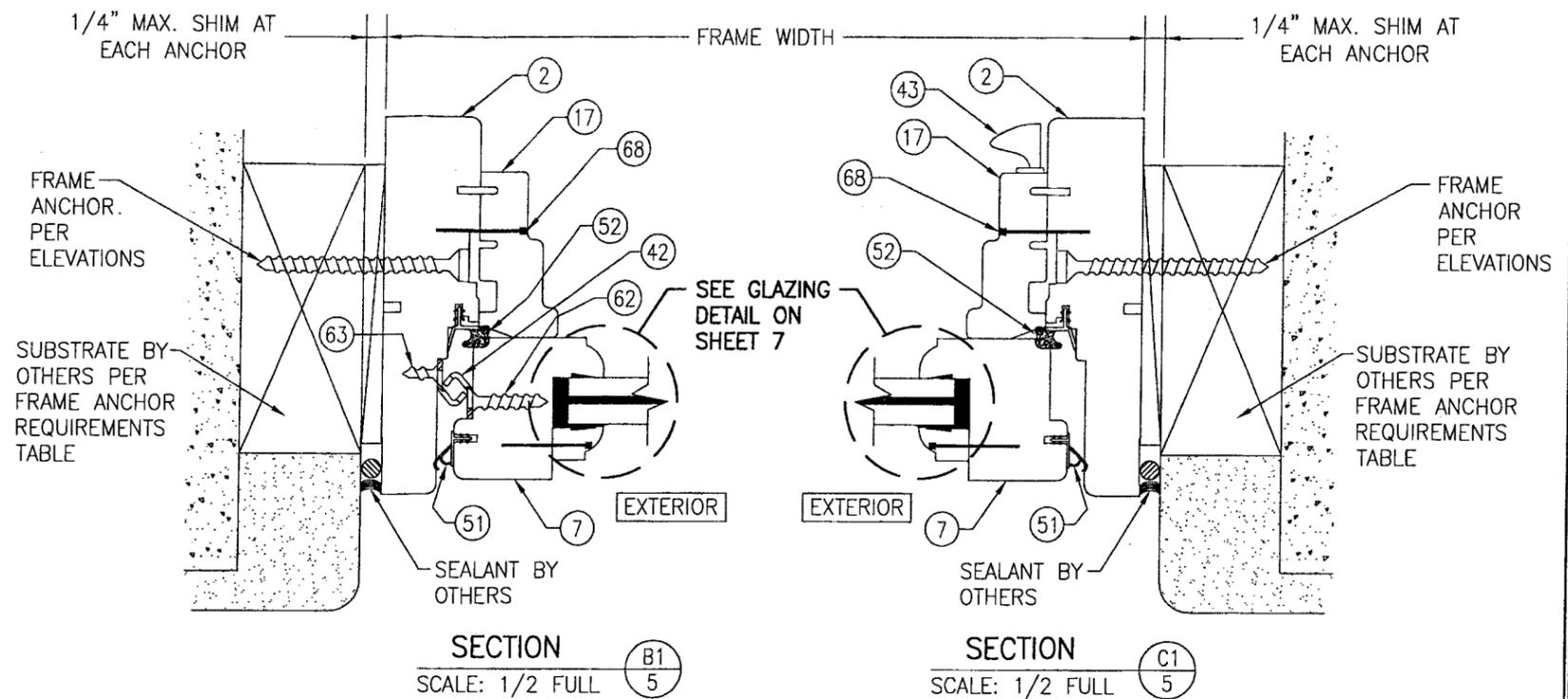
TYPICAL SCREW MOUNT INSTALLATION DETAIL WITH BRICKMOLD

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



TYPICAL CLIP MOUNT INSTALLATION DETAIL WITH BRICKMOLD

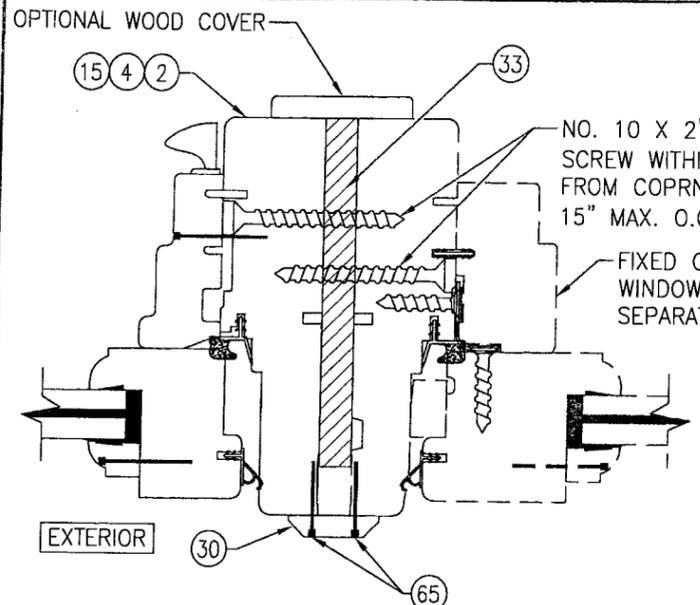
(HEAD SECTION SHOWN, SIDES ARE INSTALLED THE SAME)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)
 (RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE INSTALLED THE SAME)



USE OF BRICKMOLD WITH THESE SECTIONS IS OPTIONAL PER DETAILS ON THIS SHEET. IT IS NOT REQUIRED. USE OF THIS BRICKMOLD SHALL BE IN ADDITION TO THE REQUIRED FRAME ANCHORS AND SHALL NOT ACT AS A SUBSTITUTE.

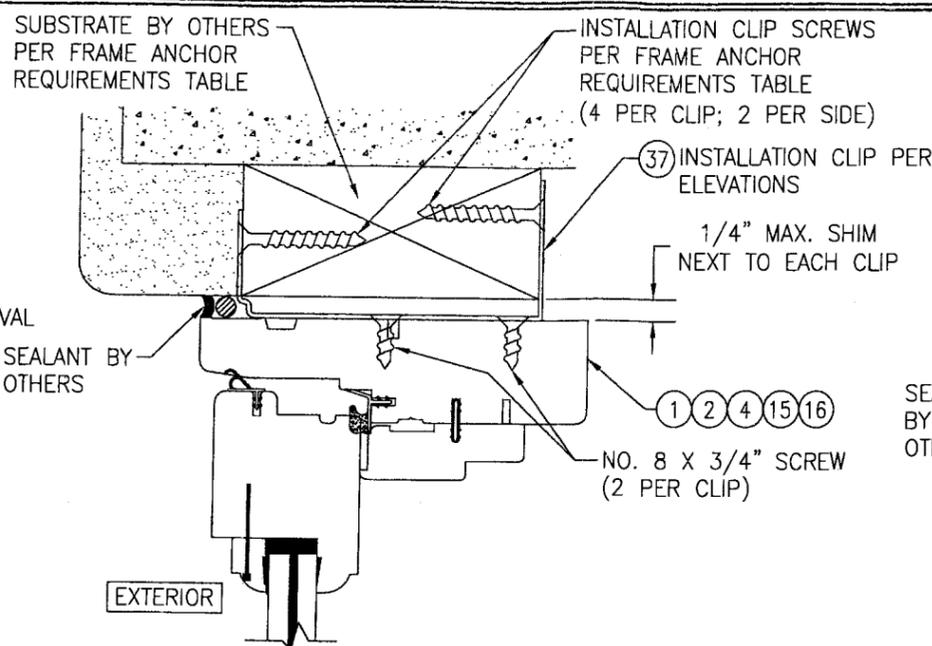
Approved as complying with the Florida Building Code
 Date March 04, 2009
 NOA# 09-1014-07
 Miami Dade Product Control Division
 By Shag I. Chanda

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE WOOD CASEMASTER 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 DEC 02 2008	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1550	REV.
SHEET NO. 5	OF 8



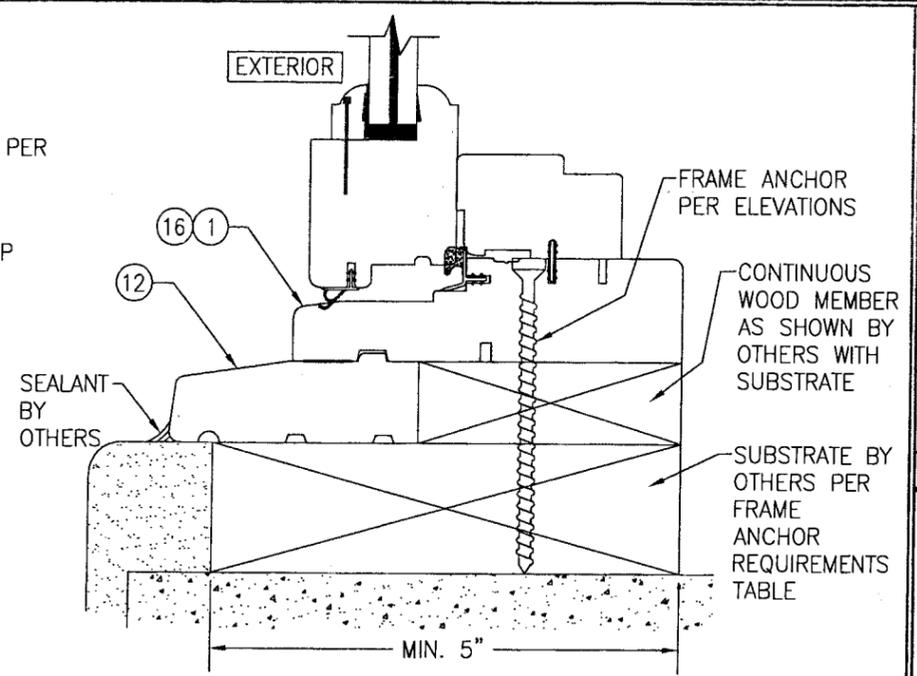
SECTION
SCALE: 1/2 FULL
(REINFORCED MULLION)

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



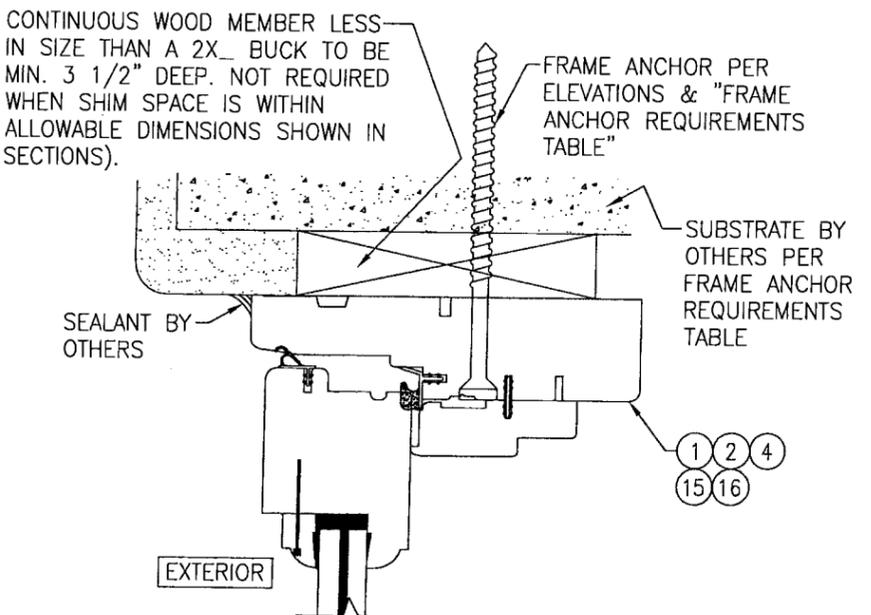
OPTIONAL INSTALLATION CLIP DETAIL

(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)



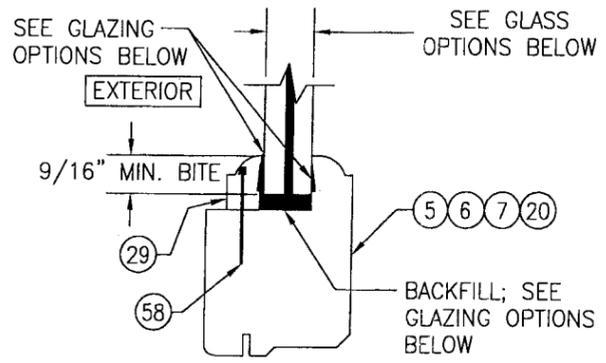
OPTIONAL DIRECT MOUNT DETAIL WITH SUB-SILL

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

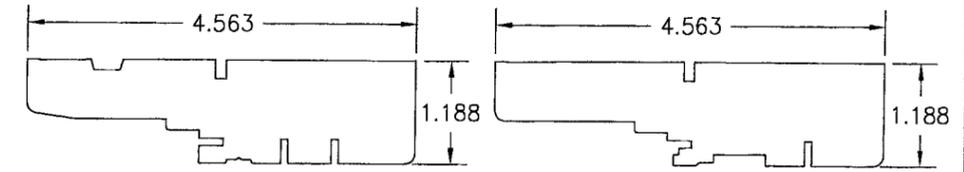
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)
(RECTANGULAR WINDOW CONDITION SHOWN; SHAPED WINDOW CONDITIONS ARE INSTALLED THE SAME)



TYPICAL GLAZING DETAIL

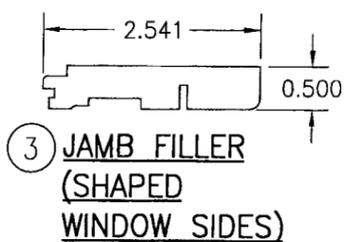
GLASS OPTIONS:
GLASS OPTION A: 9/16" THICK LAMINATED GLASS (1/4" AN./0.09" DUPONT SGP/1/4" AN.)
GLASS OPTION B: 9/16" THICK LAMINATED GLASS (1/4" HT.ST./0.09" DUPONT SGP/1/4" HT.ST.)
GLASS OPTION C: 3/8" THICK LAMINATED GLASS (5/32" AN./0.090" DUPONT SGP/5/32" AN.)
GLAZING OPTIONS:
GLAZING OPTION A: DOW 1199 EXTERIOR & INTERIOR WITH DOW 995 BACKFILL
GLAZING OPTION B: GE RAPID STRENGTH EXTERIOR, INTERIOR & BACKFILL

USE OF BRICKMOLD WITH THE OPTIONAL INSTALLATION CLIP DETAIL IS OPTIONAL PER DETAIL ON SHEET 5. IT IS NOT REQUIRED. USE OF THIS BRICKMOLD SHALL BE IN ADDITION TO THE REQUIRED CLIP AND SHALL NOT ACT AS A SUBSTITUTE.

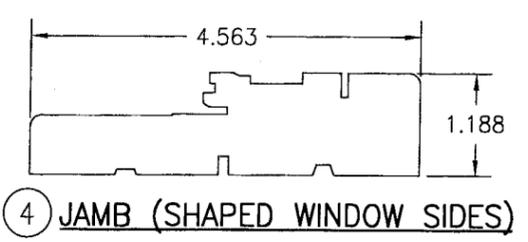


1 JAMB (RECTANGULAR WINDOW HEAD & SILL)

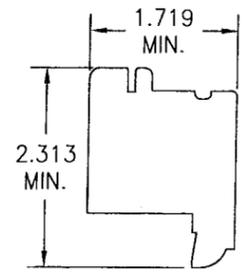
2 JAMB (RECTANGULAR WINDOW SIDES)



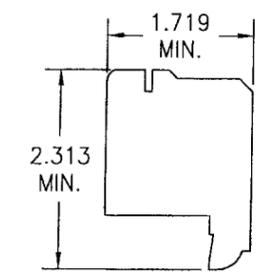
3 JAMB FILLER (SHAPED WINDOW SIDES)



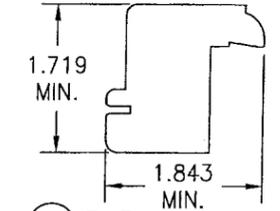
4 JAMB (SHAPED WINDOW SIDES)



5 SASH (RECTANGULAR WINDOW HEAD & SILL)



6 SASH (SHAPED WINDOW HEAD & SILL)



7 SASH (RECTANGULAR WINDOW STILE)

MINIMUM SASH DIMENSIONS SHOWN; THICKER OR WIDER SASH ALSO APPLIES

Approved as complying with the Florida Building Code
Date MARCH 04, 2009
NOA# 09-1014-07
Miami Dade Product Control Division
By Isaac J. Gumb

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 04/03/08
NO.	DATE
BY	BY
REVISION DESCRIPTION	REVISION DESCRIPTION
DRAWING TITLE WOOD CASEMASTER CASEMENT STORMPLUS IZ4	
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	
MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11, P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION DEC 07 2008	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1550	REV.
SHEET NO. 7	OF 8

