



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

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" Aluminum Clad Wood Casement Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **1535**, titled "Clad Casemaster Casement StormPlus IZ4", sheets 1 through 9 of 9, dated 04/03/08, 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

LIMITATION: Allowable Design Pressure Table – Sheet 3 of 9 – Non-Reinforced Mullion (Details E1 & F1) limited to max. ±70 PSF and Reinforced Mullion (Details E2 & F2) limited to max. +70 PSF, -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 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



NOA No. 08-1014.06
Expiration Date: March 4, 2014
Approval Date: March 4, 2009
Page 1

Marvin Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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 12/02/08, signed and sealed by Warren W. Schaefer, P.E.
Complies with ASTM E1300-02/03

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 August 28, 2008, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated August 28, 2008, signed and sealed by Warren W. Schaefer, P.E.
3. Laboratory compliance letter for Test Report No. **ATI-77675.01-201-18**, issued by Architectural Testing, Inc., dated September 25, 2008, signed and sealed by Joseph A. Reed, P.E.
4. Laboratory compliance letter for Test Report No. **ATI-77676.01-201-18**, issued by Architectural Testing, Inc., dated September 26, 2008, signed and sealed by Joseph A. Reed, P.E.

G. OTHER

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-1014.06

Expiration Date: March 4, 2014
Approval Date: March 4, 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.

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

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.
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 CALADDING CORNERS: CLADDING IS MITERED TOGETHER & JOINED WITH A CORNER KEY PART NO. 37B.

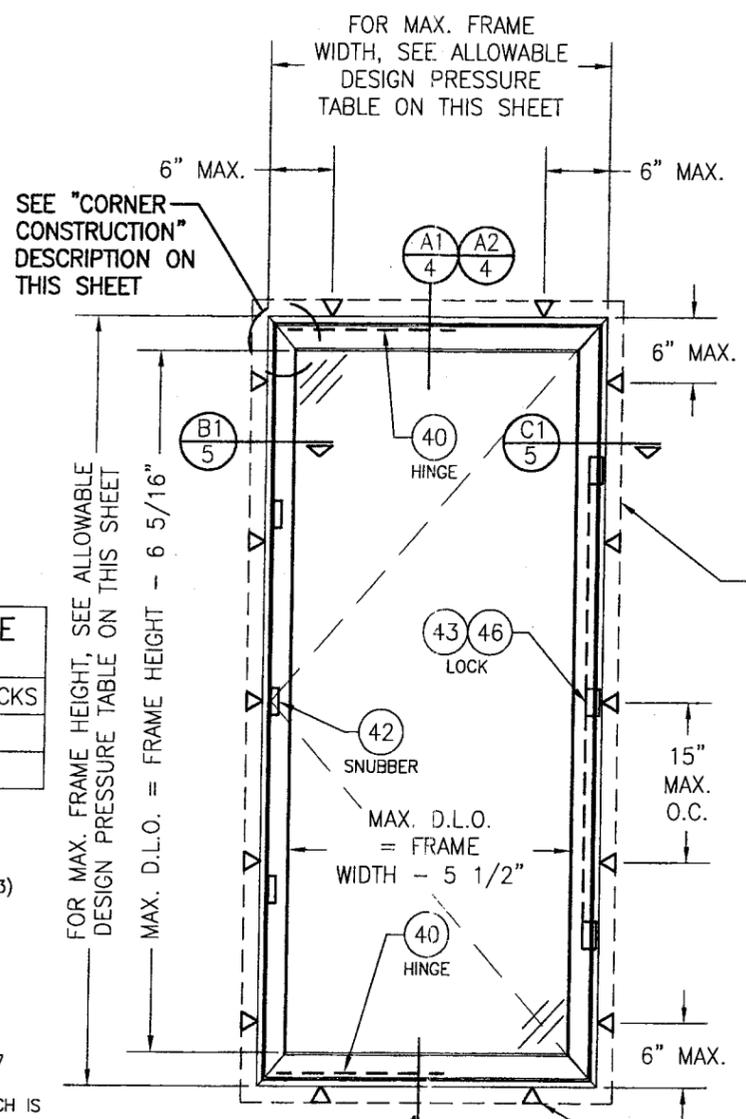
CORNER CONSTRUCTION (SHAPED WINDOWS)

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 CALADDING CORNERS: MITER 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.
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.).

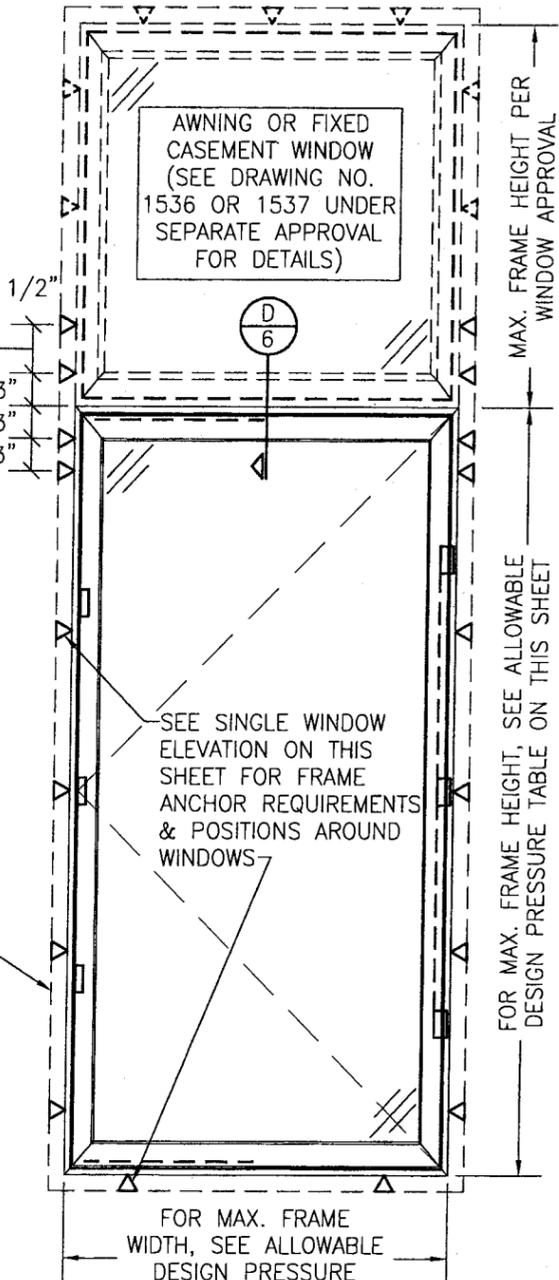


EXTERIOR ELEVATION SINGLE RECTANGULAR CASEMENT WINDOW
SCALE: 3/4" = 1'-0"

(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.

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 SEPERATELY ANCHORED

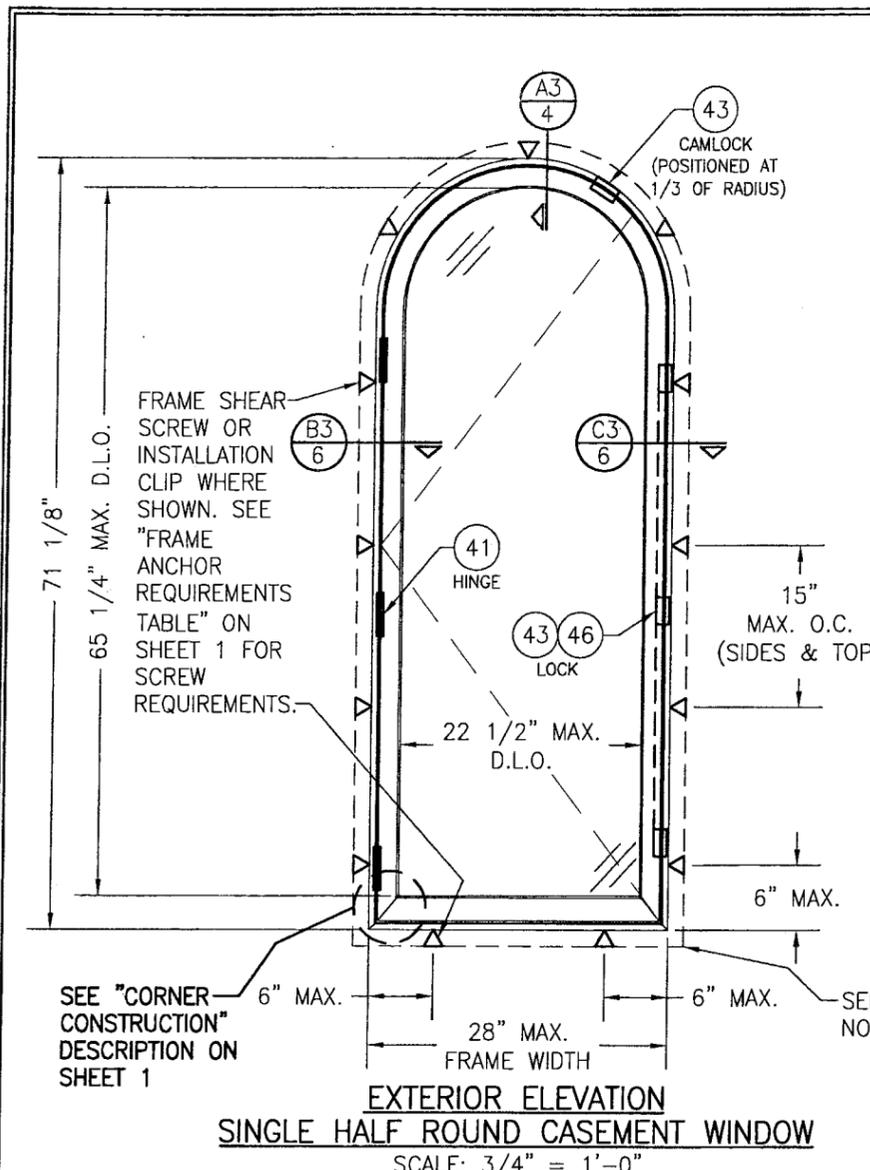


EXTERIOR ELEVATION SINGLE RECTANGULAR CASEMENT WINDOW WITH TRANSOM
SCALE: 3/4" = 1'-0"

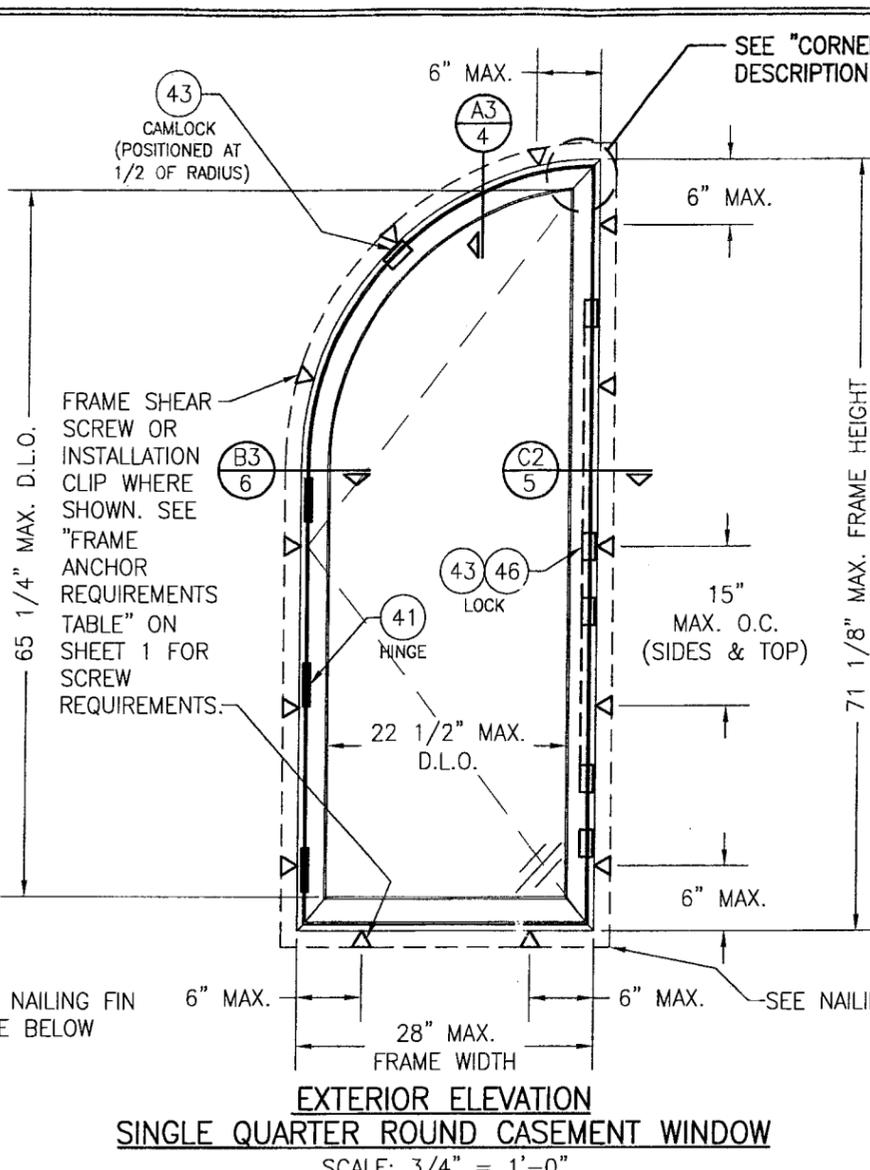
(FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION)

Approved as complying with the Florida Building Code
 Date: **MARCH 4, 2009**
 NOAH: **08-1014.06**
 Miami Dade Product Control
 Division
 By: *Maureen Perry*

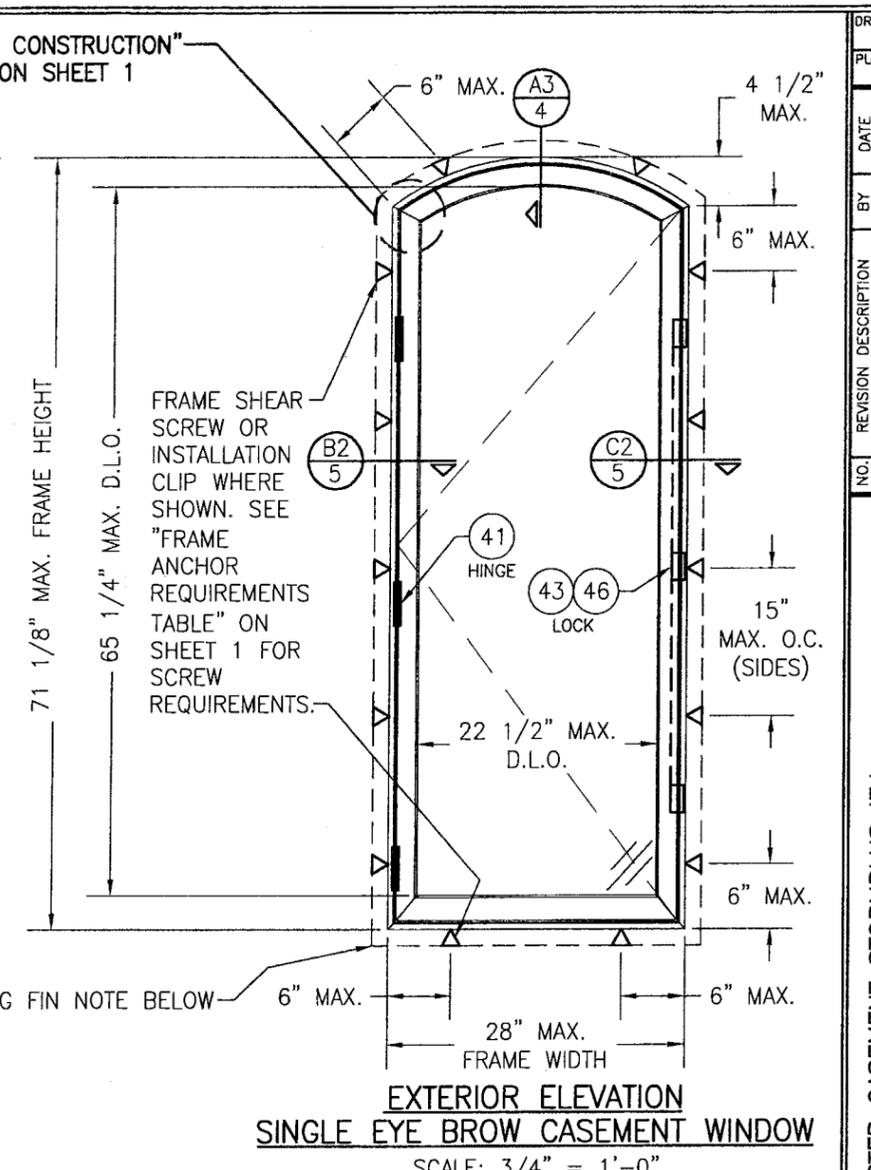
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 04/03/08	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE			
CLAD CASEMASTER CASEMENT STORMPLUS IZ4			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION:			
DEC 02 2008			
W. W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1535		REV.	
SHEET NO. 1		OF 9	



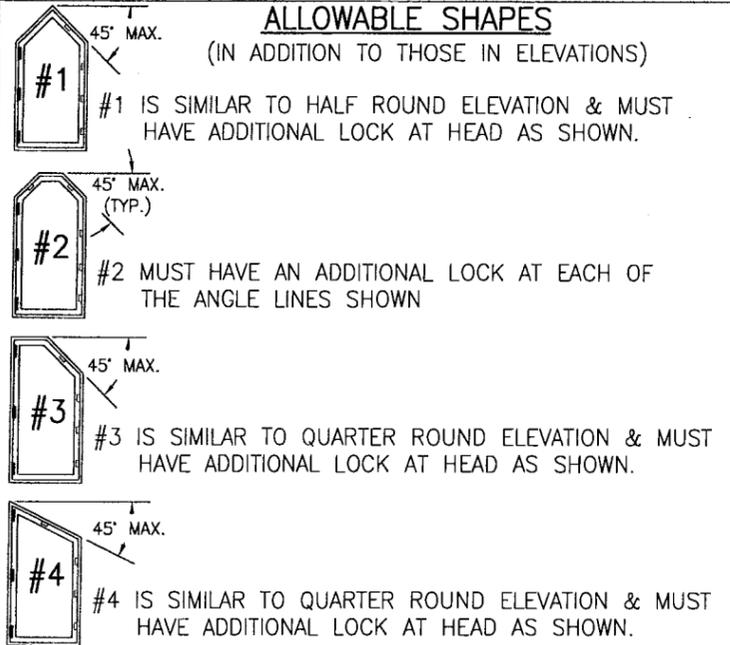
EXTERIOR ELEVATION
SINGLE HALF ROUND CASEMENT WINDOW
SCALE: 3/4" = 1'-0"



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



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



ALLOWABLE DESIGN PRESSURE
(SINGLE SHAPED WINDOWS)

+70/-85 PSF

LOCK/HINGE REQUIREMENTS TABLE
(SHAPED WINDOWS)

MAX. FRAME HEIGHT	MIN. QUANTITY OF LOCKS	MIN. QUANTITY OF HINGES
71 1/8"	* 3	3
47 1/8"	* 2	2

* THE LOCKS SPECIFIED IN THIS TABLE ARE THOSE AT THE SIDES OF THE WINDOWS ONLY. AN ADDITIONAL LOCK IS REQUIRED AT THE RADIUS HEAD OF THOSE SHAPES SPECIFIED (SEE ELEVATIONS).

NAILING FIN NOTE:
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 SEPERATELY ANCHORED

Approved as complying with the
Florida Building Code
Date: **MARCH 4, 2009**
NOA# **08-1014.06**
Miami-Dade Pre-Code Control
By: *Manuel Perez*

**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
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

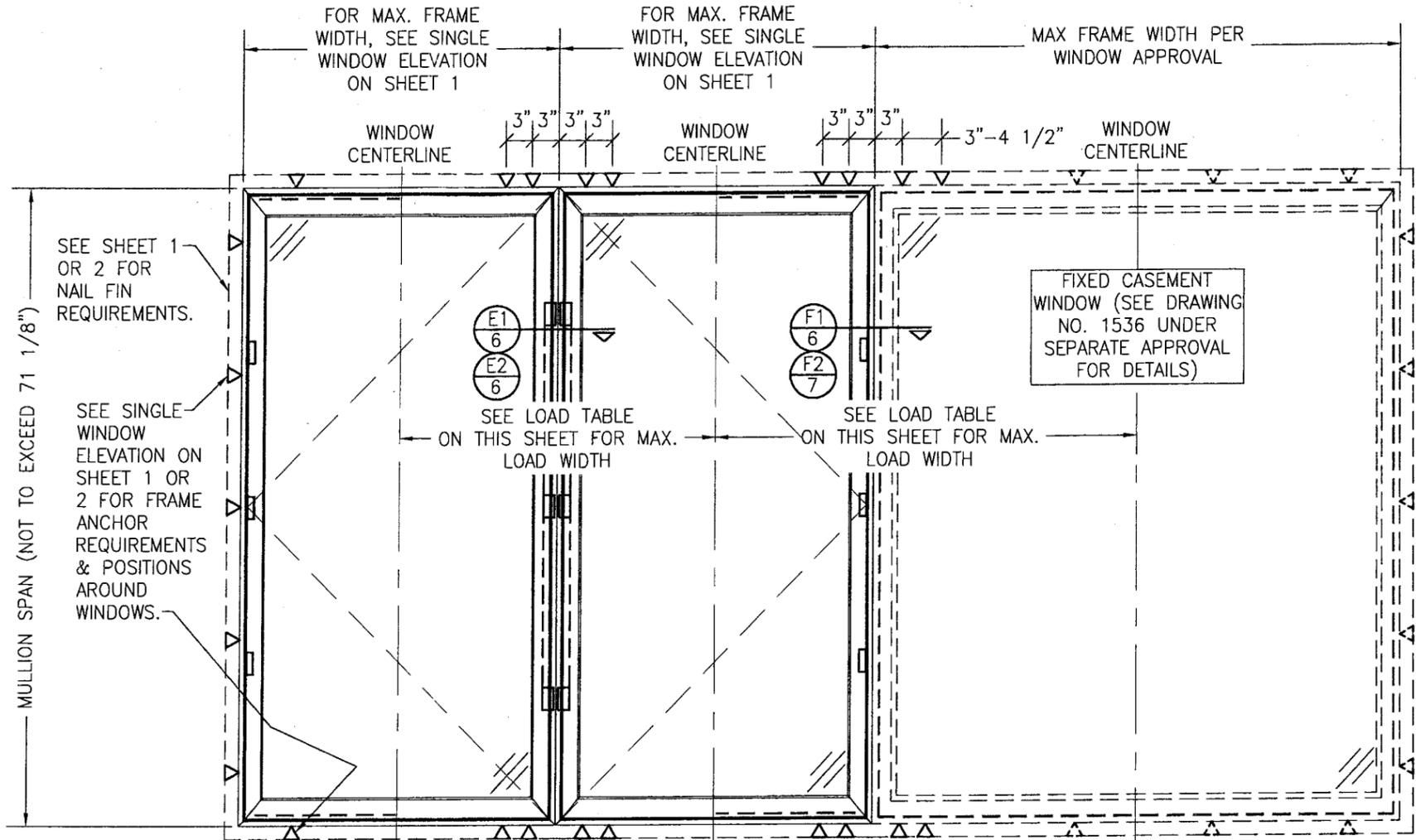
LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT ALLOWED FOR THE INDIVIDUAL WINDOW SHALL CONTROL AS ALLOWABLE FOR THE OVERALL UNIT.

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.



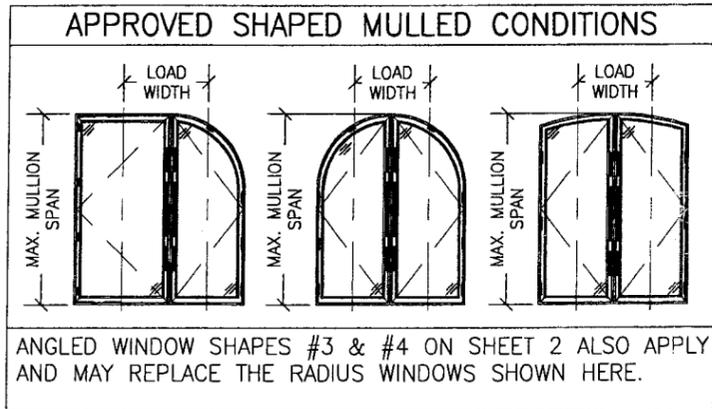
ADDITIONAL FRAME SCREWS OR INSTALLATION CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & CLIP SCREW REQUIREMENTS.

**EXTERIOR ELEVATION
MULTIPLE CASEMENT/FIXED WINDOW**

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

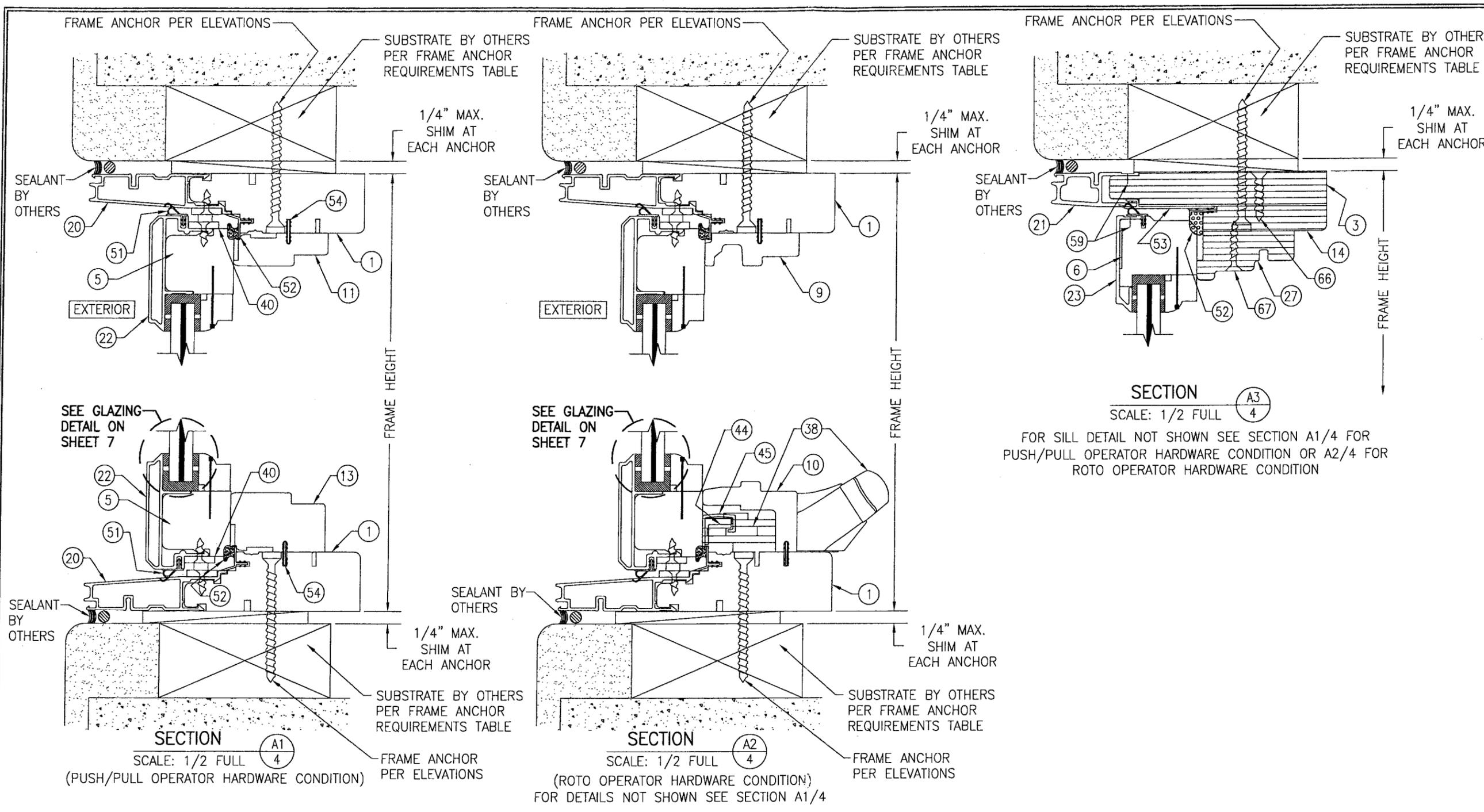
(RECTANGULAR WINDOW SHOWN, SHAPED WINDOWS ALSO APPLY. SEE "APPROVED SHAPED MULLION CONDITIONS" TABLE ON THIS SHEET)

- 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.



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/03/08
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE CLAD 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. 1535	REV.
SHEET NO. 3	OF 9

Approved as complying with the Florida Building Code
Date: **MARCH 4, 2009**
NOA: **08-1014.06**
Miami-Dade Building Department
Warren W. Schaefer



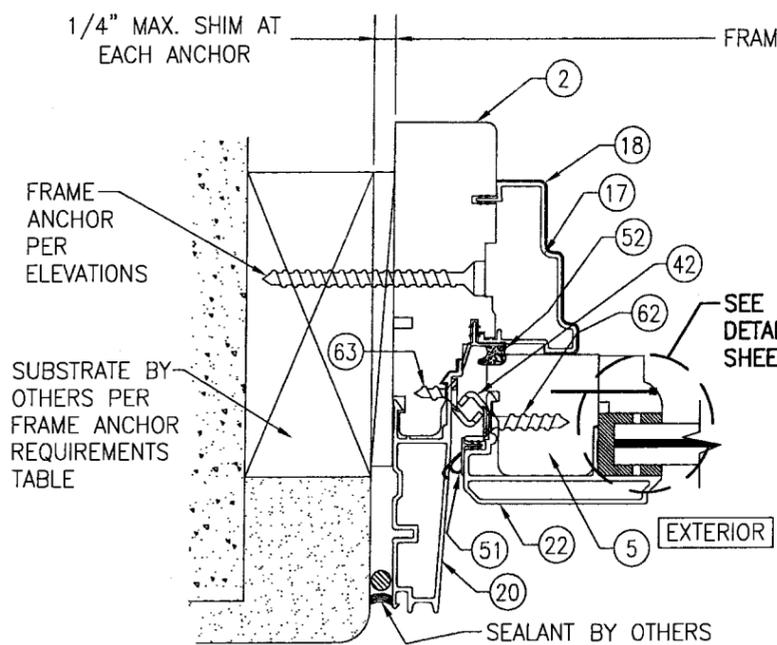
SECTION A3
 SCALE: 1/2 FULL
 FOR SILL DETAIL NOT SHOWN SEE SECTION A1/4 FOR PUSH/PULL OPERATOR HARDWARE CONDITION OR A2/4 FOR ROTO OPERATOR HARDWARE CONDITION

SECTION A1
 SCALE: 1/2 FULL
 (PUSH/PULL OPERATOR HARDWARE CONDITION)

SECTION A2
 SCALE: 1/2 FULL
 (ROTO OPERATOR HARDWARE CONDITION)
 FOR DETAILS NOT SHOWN SEE SECTION A1/4

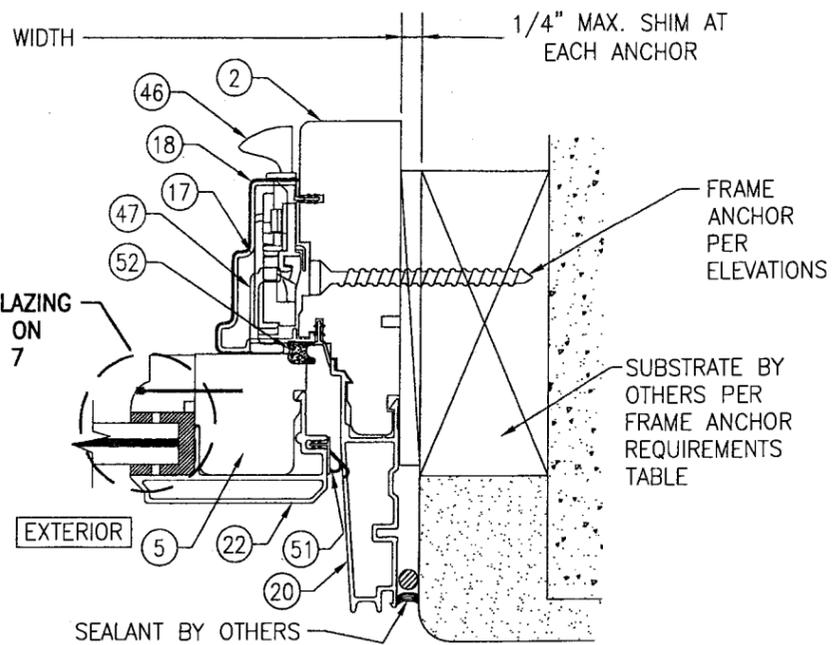
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/03/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE CLAD CASEMASTER CASEMENT STORMPLUS IZ4			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4802 FAX: 561-775-4903			
MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11, P.O. BOX 100 WARROAD, MN 56763 800-346-5044			
CERTIFICATION DEC 17 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1535		REV.	
SHEET NO. 4		OF 9	

Approved as complying with the Florida Building Code
MARCH 4, 2009
08-1014.06
Warren W. Schaefer



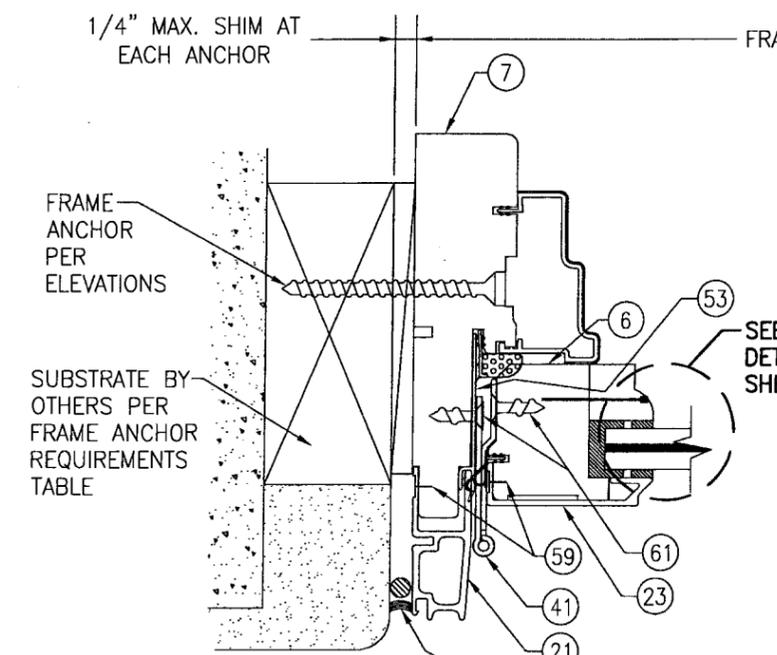
SECTION B1
SCALE: 1/2 FULL

(MULTI-POINT SASH LOCK CONDITION SHOWN;
FOR CAMLOCK CONDITION SEE ALTERNATE
WINDOW SECTION ON THIS SHEET)



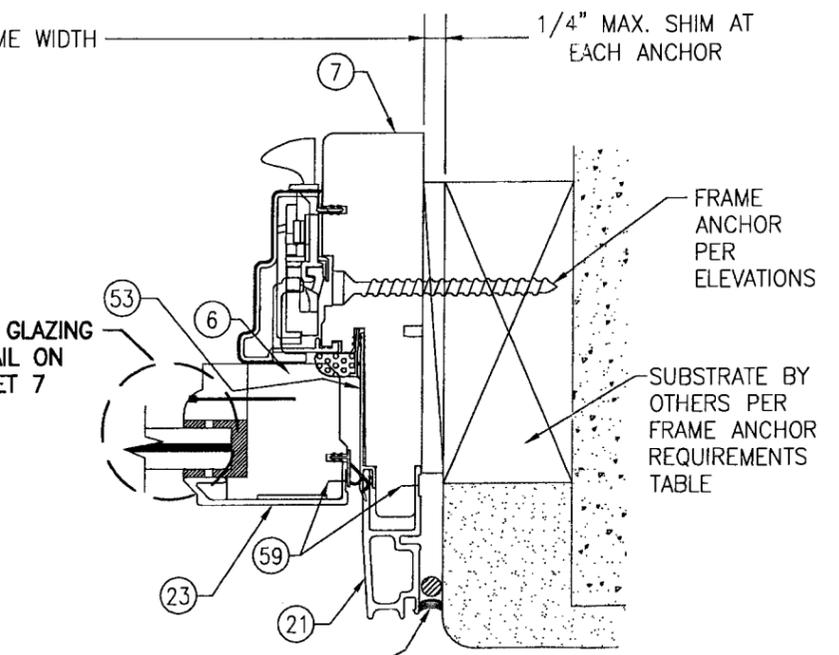
SECTION C1
SCALE: 1/2 FULL

(MULTI-POINT SASH LOCK CONDITION SHOWN;
FOR CAMLOCK CONDITION SEE ALTERNATE
WINDOW SECTION ON THIS SHEET)



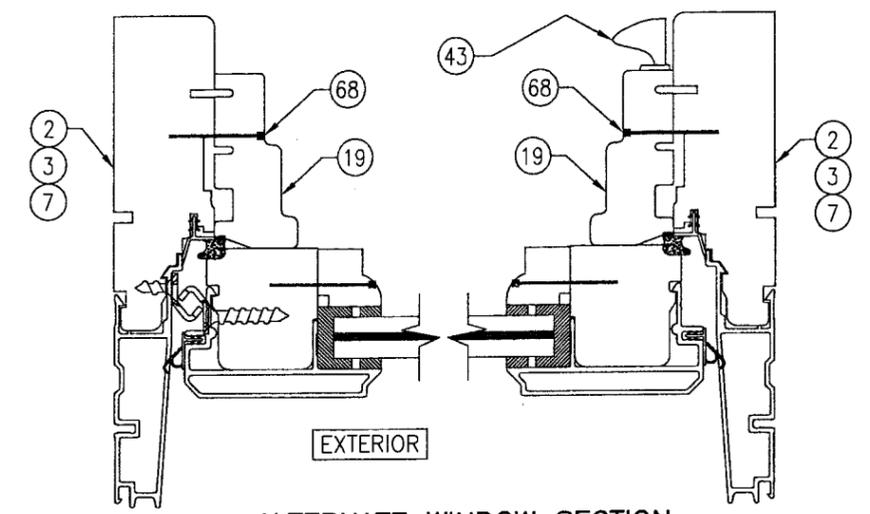
SECTION B2
SCALE: 1/2 FULL

FOR DETAILS NOT SHOWN SEE SECTION B1/5
(MULTI-POINT SASH LOCK CONDITION SHOWN;
FOR CAMLOCK CONDITION SEE ALTERNATE
WINDOW SECTION ON THIS SHEET)



SECTION C2
SCALE: 1/2 FULL

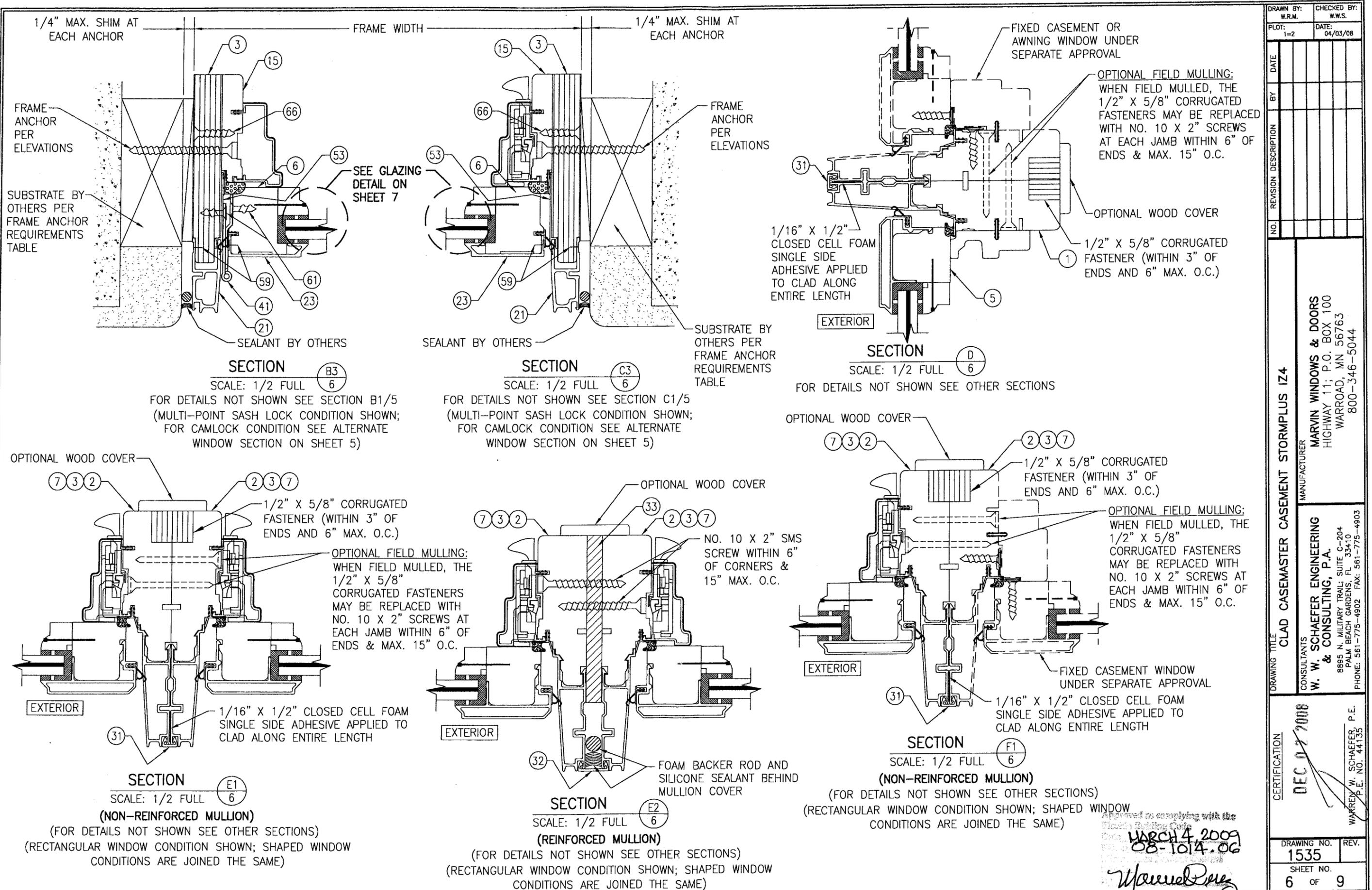
FOR DETAILS NOT SHOWN SEE SECTION C1/5
(MULTI-POINT SASH LOCK CONDITION SHOWN;
FOR CAMLOCK CONDITION SEE ALTERNATE
WINDOW SECTION ON THIS SHEET)



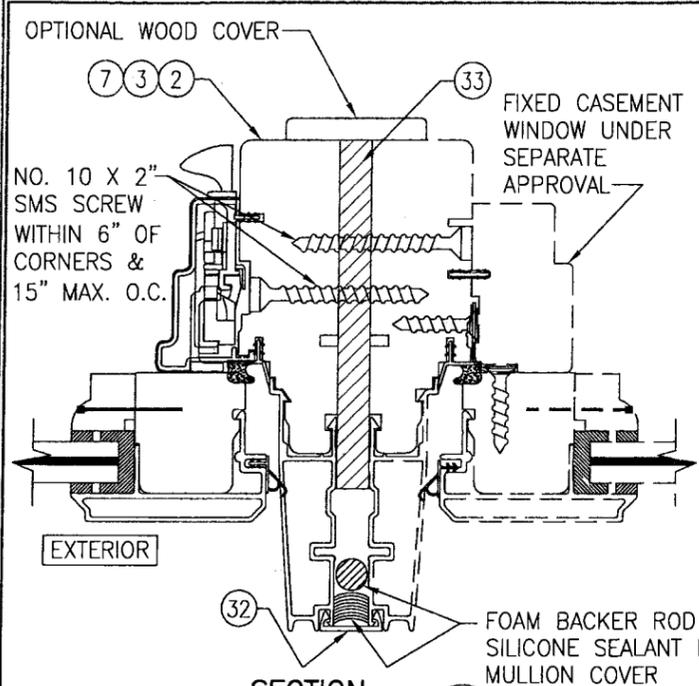
ALTERNATE WINDOW SECTION
(APPLICABLE WHEN CAMLOCKS ARE USED)
(FOR DETAIL NOT SHOWN; SEE OTHER SECTIONS)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 04/03/08
DATE	BY
REVISION DESCRIPTION	
NO.	
DRAWING TITLE CLAD CASEMASTER 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 DEC 07 2008	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1535	REV.
SHEET NO. 5	OF 9

Approved as complying with the
Florida Building Code
Date: **MARCH 4, 2009**
NO. **08-1014-06**
Warren W. Schaefer

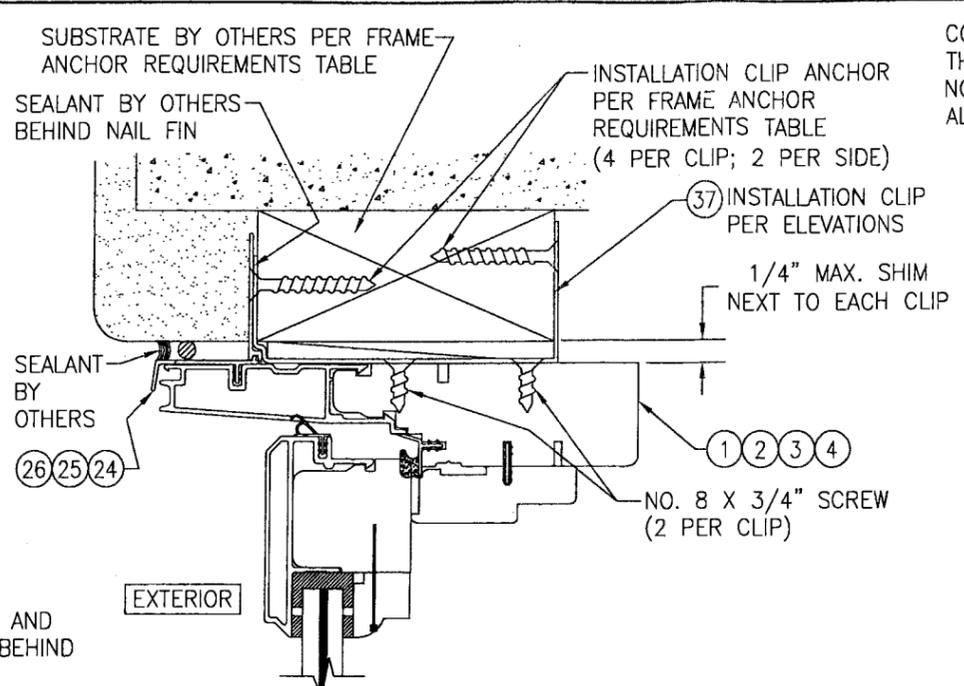


DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/03/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: CLAD CASEMASTER CASEMENT STORMPLUS IZ4			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER: MARVIN WINDOWS & DOORS	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION: DEC 02 2008	Approved as complying with the Florida Building Code MARCH 4 2009 08-1014-06 Manuel Perez		
DRAWING NO. 1535	REV.	SHEET NO. 6 OF 9	



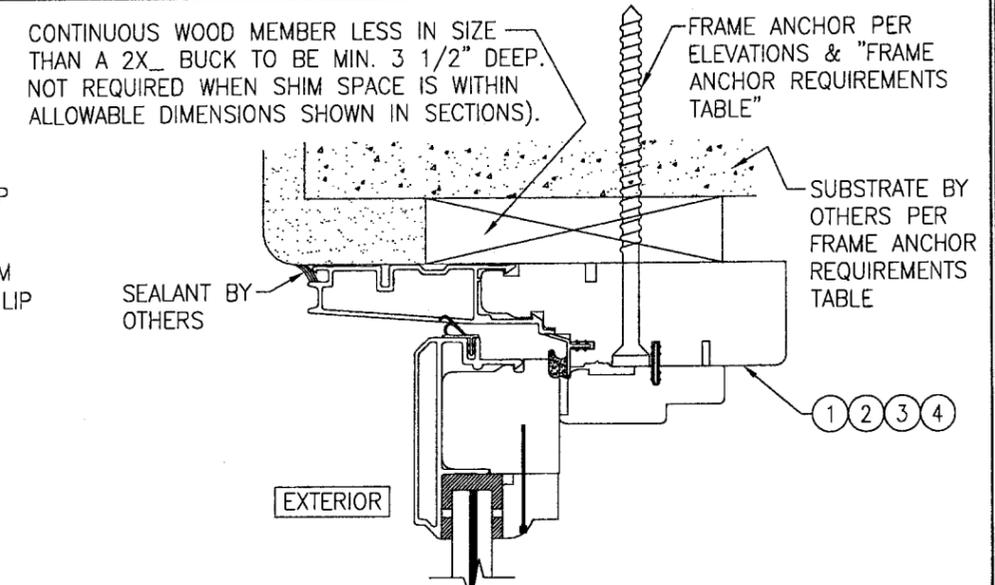
SECTION
SCALE: 1/2 FULL (F2)
(REINFORCED MULLION)

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



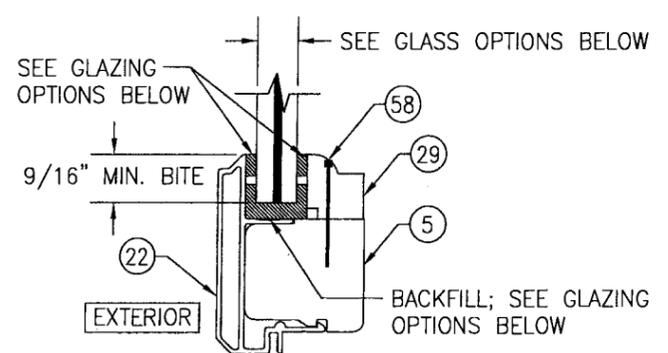
OPTIONAL INSTALLATION CLIP DETAIL

(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)

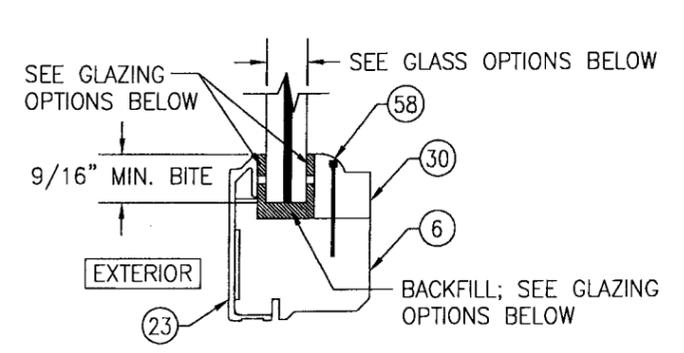


OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(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 (RECTANGULAR WINDOW)



TYPICAL GLAZING DETAIL (SHAPED WINDOW)

GLASS OPTIONS

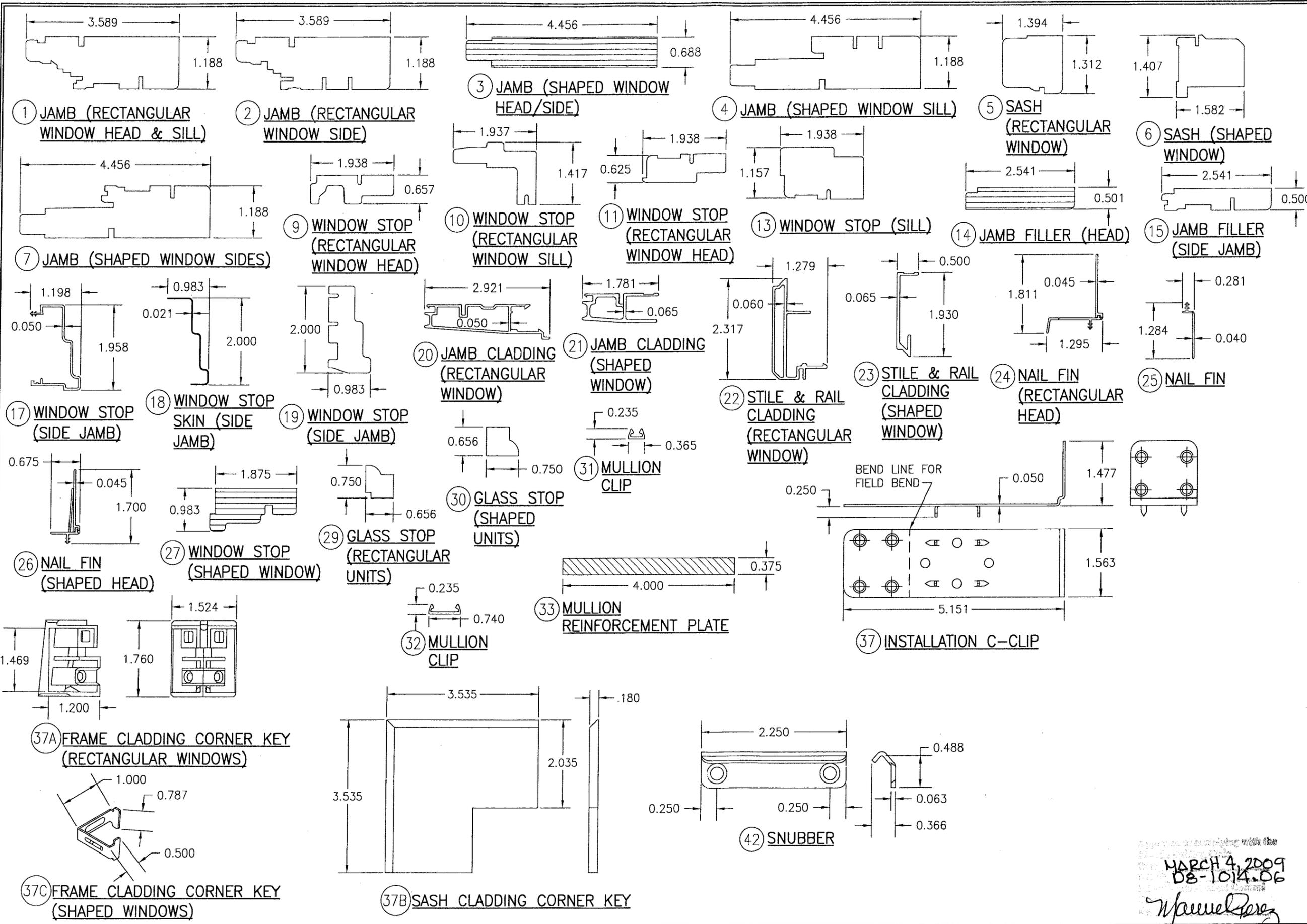
- GLASS OPTION A: 9/16" THICK LAMINATED GLASS (1/4" AN./0.09" DUPONT SGP/1/4" AN.)
- GLASS OPTION B: 9/16" THICK LAMINATED GLASS (1/4" HT.ST./0.09" DUPONT SGP/1/4" HT.ST.)
- GLASS OPTION C: 3/8" THICK LAMINATED GLASS (5/32" AN./0.090" DUPONT SGP/5/32" AN.)

GLAZING OPTIONS

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

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/03/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: CLAD CASEMASTER 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	DEC 02 2008		
WARREN W. SCHAEFER, P.E.	P.E. NO. 44135		
DRAWING NO.	REV.	SHEET NO.	
1535		7 OF 9	

Approved in accordance with the
MARCH 4, 2009
08-1014.06
Yannick Perez



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLLOT: 1=2		DATE: 04/03/08	
DATE	BY	REVISION	DESCRIPTION
NO.			
DRAWING TITLE CLAD CASEMASTER 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 DEC 02 2008	WARREN W. SCHAEFER, P.E. P.E. NO. 44135		
DRAWING NO. 1535	REV.		
SHEET NO. 8	OF 9		

MARCH 4, 2009
08-1014.06
Warren W. Schaefer

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)	* WOOD (LVL AT 1/4 & 1/2 ROUND; FINGER JOINTED AT EYE BROW SHAPES)
4	JAMB (SHAPED WINDOW SILL)	* WOOD
5	SASH (RECTANGULAR WINDOW)	* WOOD
6	SASH (SHAPED WINDOW)	* WOOD
7	JAMB (SHAPED WINDOW SIDES)	* WOOD
9	WINDOW STOP (RECTANGULAR WINDOW HEAD)	* WOOD
10	WINDOW STOP (RECTANGULAR WINDOW SILL)	* WOOD
11	WINDOW STOP (RECTANGULAR WINDOW HEAD)	* WOOD
13	WINDOW STOP (SILL)	* WOOD
14	JAMB FILLER (SHAPED WINDOW HEAD)	* WOOD (LVL AT 1/4 & 1/2 ROUND; FINGER JOINTED AT EYE BROW SHAPES)
15	JAMB FILLER (SIDE JAMB)	* WOOD
17	WINDOW STOP (SIDE JAMB) USED WITH MULTI-POINT SASH LOCK CONDITION	VINYL
18	WINDOW STOP SKIN (SIDE JAMB) USED WITH MULTI-POINT SASH LOCK CONDITION	WOOD VENEER
19	WINDOW STOP (SIDE JAMB) USED WITH CAMLOCK CONDITION	* WOOD
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
HARDWARE		
38	OPERATOR WITH HANDLE	TRUTH-SERIES 15 DUAL ARM OPERATOR MW ZINC HANDLE MW PLASTIC HARDWARE COVER
40	SCISSOR HINGE	10" LONG. S.S. THRUTH 13-16-00-119 (LEFT) THRUTH 13-16-00-120 (RIGHT)
41	BUTT HINGE	304 S.S.; MARVIN #10929105
42	SNUBBER	50 KSI STEEL
43	CAMLOCK	TRUTH #16-18
44	ROLLER TRACK	TRUTH SERIES 30706
45	SASH LIMITER	MARVIN #15808598
46	MULTI-POINT SASH LOCK	TRUTH #16-18
47	SASH LOCK KEEPER	TRUTH #31359

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.
68	F-14 x 1 3/8" BRAD NAIL	2" FROM ENDS & 4" TO 6" 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: 04/03/08	
DATE	BY	REVISION	DESCRIPTION
NO.			
DRAWING TITLE CLAD 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: 561-775-4802 FAX: 561-775-4903			
CERTIFICATION DEC 02 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1535		REV.	
SHEET NO. 9		OF 9	

MARCH 4, 2009
08-1014.06
Warren Perez