



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

**NOTICE OF ACCEPTANCE (NOA)**

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

**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 PERA - 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. PERA 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 Casemaster Awning" Wood Awning Window - L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. 1552, titled "Wood Casemaster Awning StormPlus IZ4", sheets 1 through 5 of 5, dated 04/02/08, with revision A1 dated 10/14/11, 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 Revision 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, model/series, 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 revises NOA # 08-0310.12 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. 11-1021.09  
Expiration Date: June 19, 2013  
Approval Date: December 22, 2011  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No. **1552**, titled "Wood Casemaster Awning StormPlus IZ4", sheets 1 through 5 of 5, dated 04/02/08, with revision A1 dated 10/14/11, 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
  - 6) Forced Entry Test, per FBC 2411 3.2.1 (b) and TAS 202-94along with marked-up drawings and installation diagram of wood awning windows, prepared by Architectural Testing, Inc., Test Report No. **ATI 77677.01-201-18**, dated 12/18/07, signed and sealed by Joseph A. Reed, P.E.  
*(Submitted under NOA# 08-0310.12)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2007 and FBC-2010, prepared by prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 02/14/08 and updated on 10/14/11, signed and sealed by Warren W. Schaefer, P.E.
2. Glazing complies with ASTM E1300-04

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **10-0413.04** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass® Interlayer**" dated 05/26/10, expiring on 01/14/12.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 11-1021.09  
Expiration Date: June 19, 2013  
Approval Date: December 22, 2011

**Marvin Windows and Doors**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**F. STATEMENTS**

1. Statement letter of conformance complying with the FBC-2007 and FBC-2010, dated October 14, 2011, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated October 14, 2011, signed and sealed by Warren W. Schaefer, P.E.
3. Laboratory compliance letter for Test Report No. **ATI 77677.01-201-18** issued by Architectural Testing, Inc., dated 02/19/08, signed and sealed by Joseph A. Reed, P.E.

**G. OTHERS**

1. Notice of Acceptance No. **08-0310.12**, issued to Marvin Windows and Doors for their Series "StormPlus IZ4 Casemaster" Wood Awning Window – L.M.I., approved on 06/19/08 and expiring on 06/19/13.



Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 11-1021.09

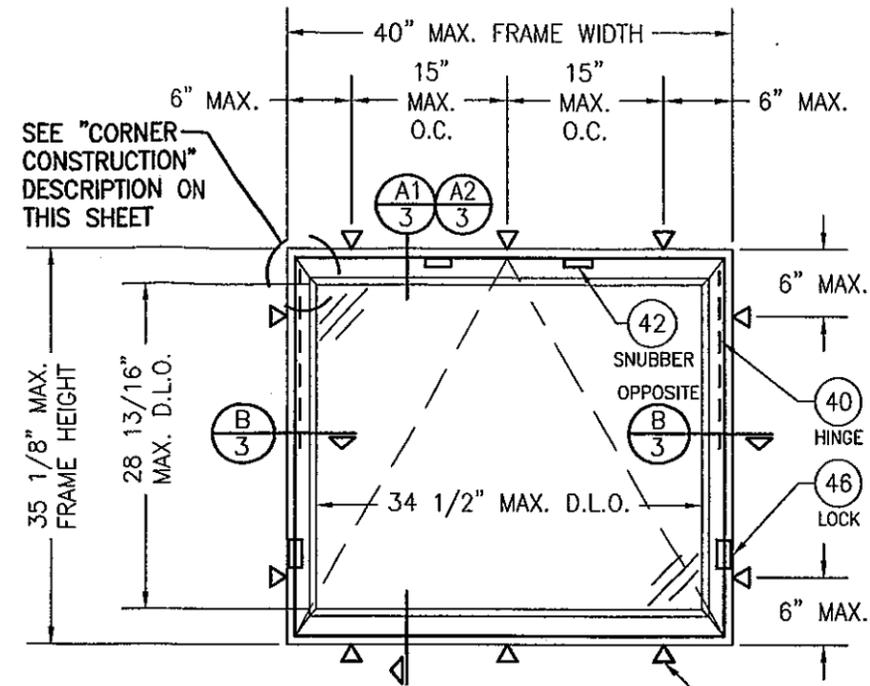
Expiration Date: June 19, 2013  
Approval Date: December 22, 2011

**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 PER 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.

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.
DATE:	10/14/11	DATE:	04/02/08
PLLOT:	1-16		
NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS		



**EXTERIOR ELEVATION  
SINGLE AWNING 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.

MAX. FRAME WIDTH	MIN. NO. OF SNUBBERS
40"	2
20"	1

+70/-85 PSF
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**CORNER CONSTRUCTION**

**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) 16 GA. X 1 3/8" BRAD NAILS.

**FRAME ANCHOR REQUIREMENTS TABLE**

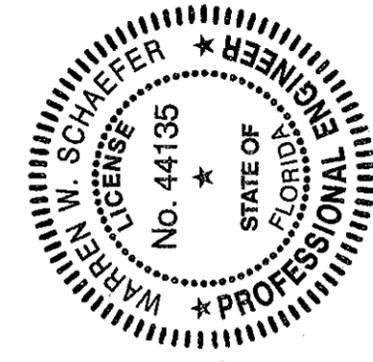
OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
<b>FRAME SHEAR SCREWS</b>			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL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

DRAWING TITLE: **WOOD CASEMASTER AWNING STORMPLUS IZ4**

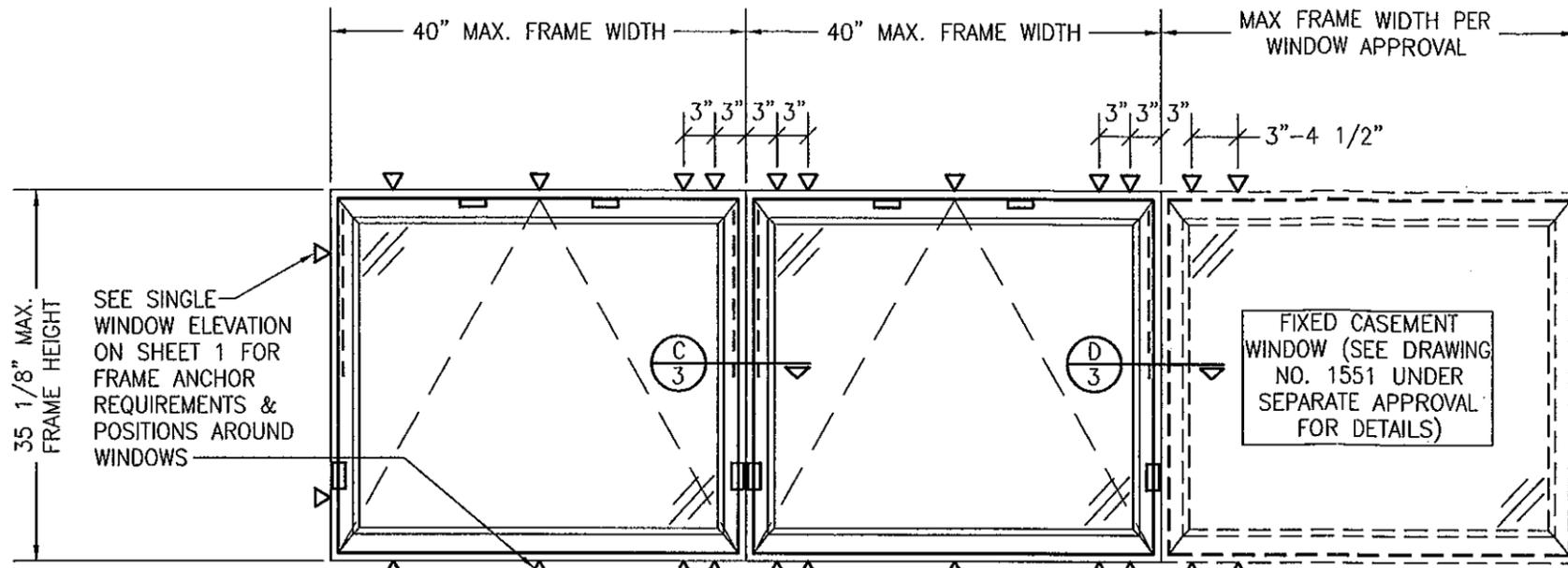
MANUFACTURER: **MARVIN WINDOWS & DOORS**  
HIGHWAY 11; P.O. BOX 100  
WARROLD, MN 56763  
800-346-5044

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



PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No. 11-1021-09  
 Expiration Date: July 19, 2013  
 By: *Manuel Perez*  
 Miami Dade Product Control

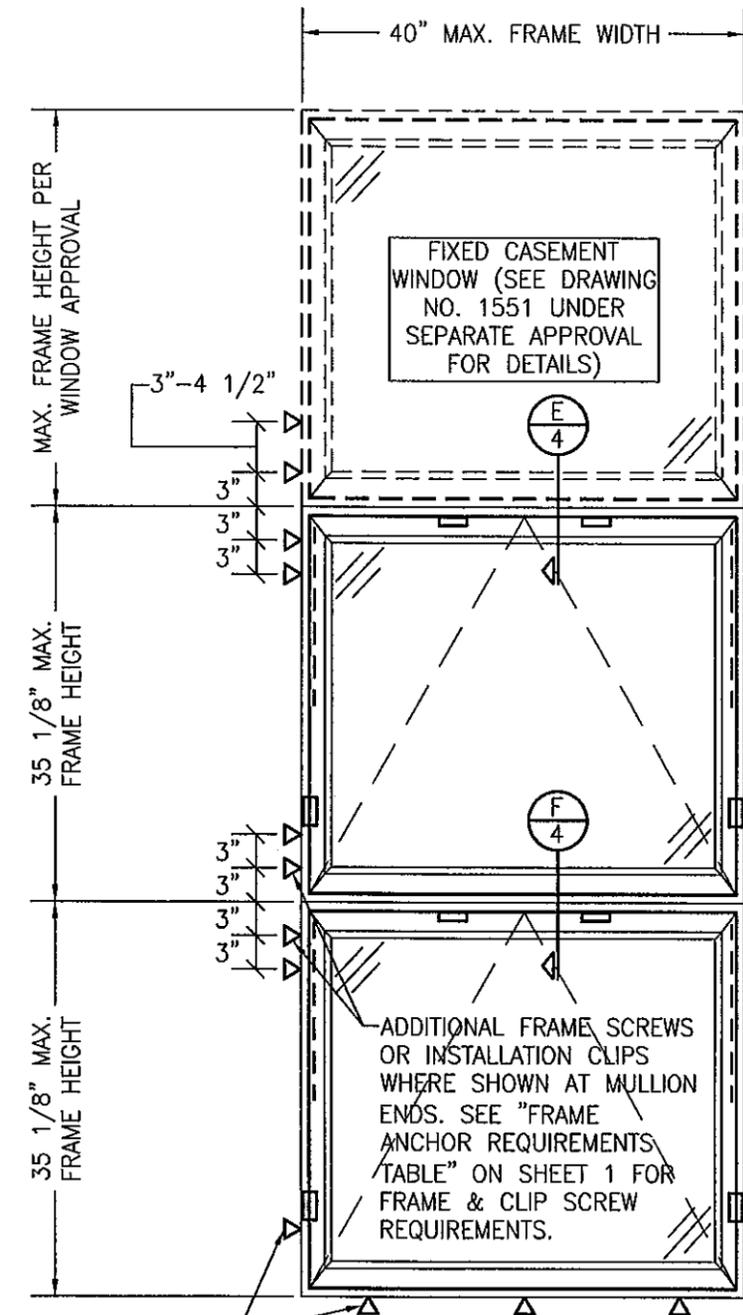
CERTIFICATION	DATE: OCT 14 2011
DRAWING NO.	1552
REV.	A
SHEET NO.	1 OF 5



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

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 AWNING/FIXED WINDOW**  
SCALE: 3/4" = 1'-0"



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

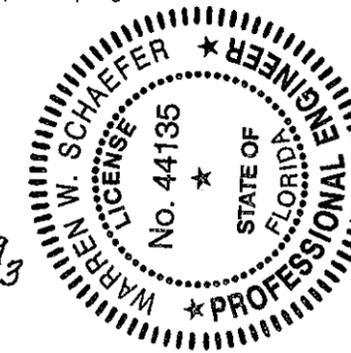
**EXTERIOR ELEVATION  
MULTIPLE AWNING WITH TRANSOM**  
SCALE: 3/4" = 1'-0"

**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.

PRODUCT REVISED  
as complying with the Florida  
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Acceptance No. 11-1021-09  
Expiration Date JUNE 19, 2013

By *Warren Schaefer*  
Miami Dade Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-16	DATE: 04/02/08
NO.	DATE
BY	REVISION DESCRIPTION

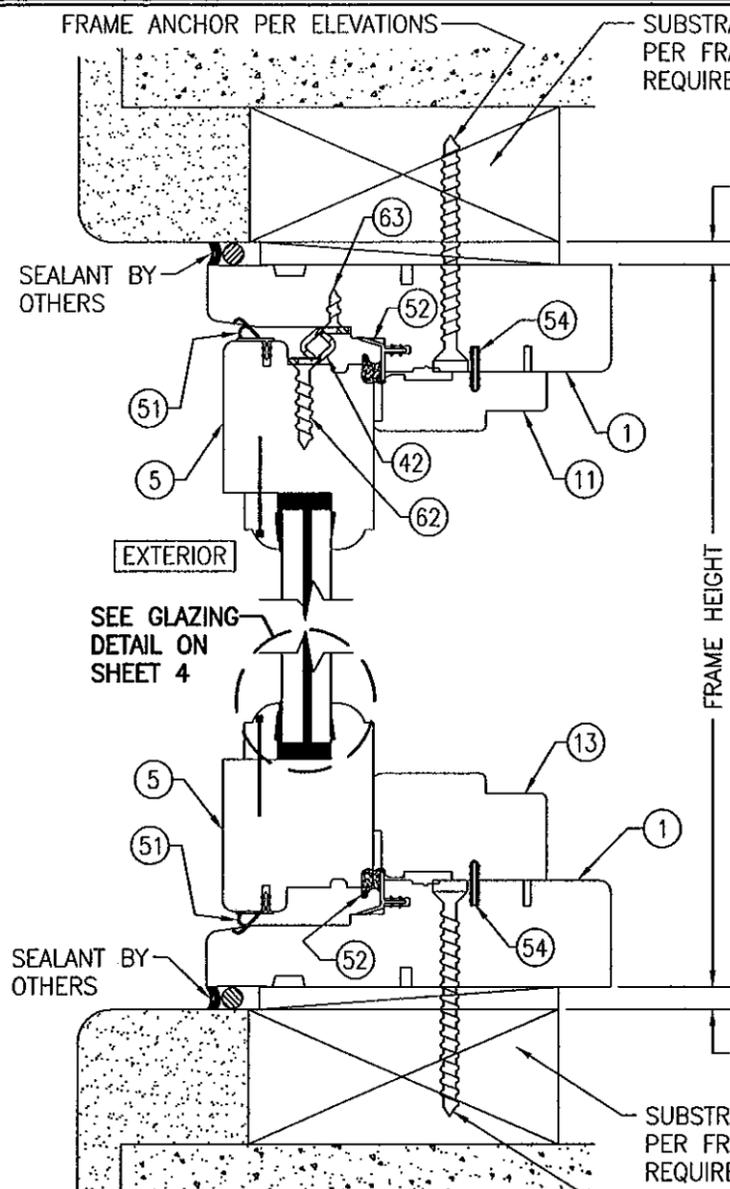
DRAWING TITLE: **WOOD CASEMASTER AWNING STORMPLUS IZ4**

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

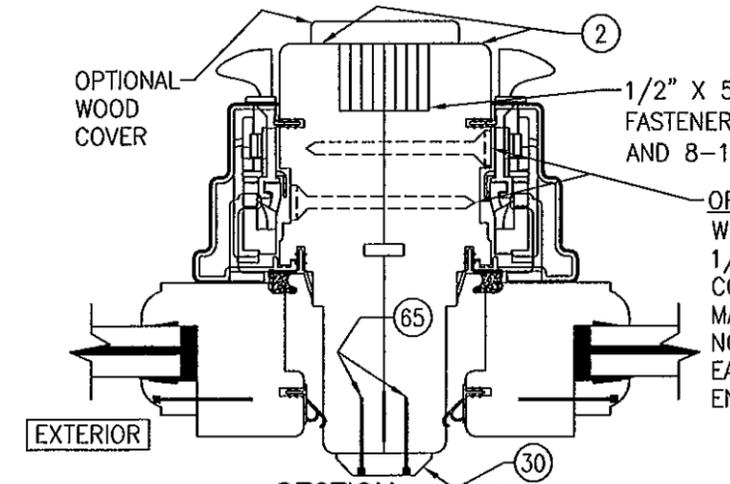
CONSULTANTS:  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

CERTIFICATION  
OCT 14 2011  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

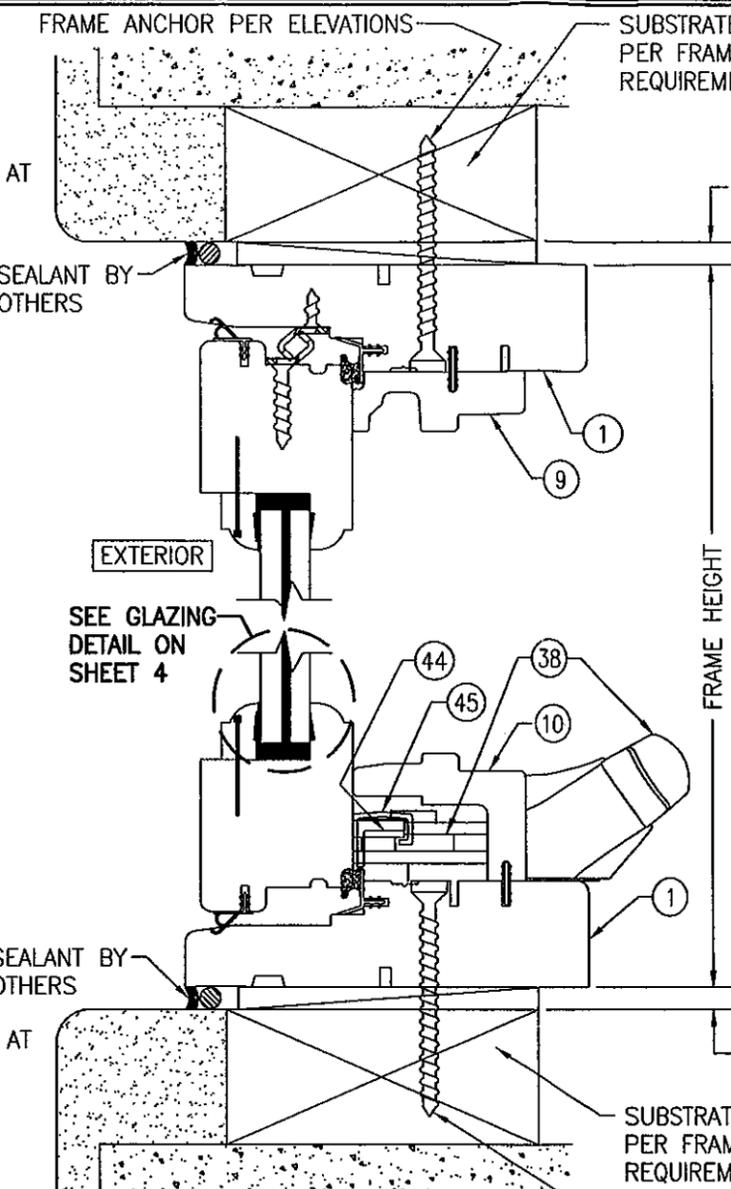
DRAWING NO. 1552  
SHEET NO. 2 OF 5



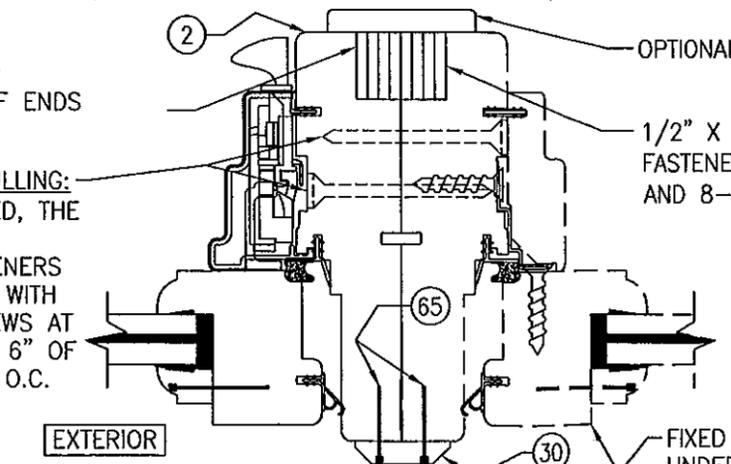
SECTION A1  
SCALE: 1/2 FULL  
(PUSH/PULL OPERATOR HARDWARE CONDITION)



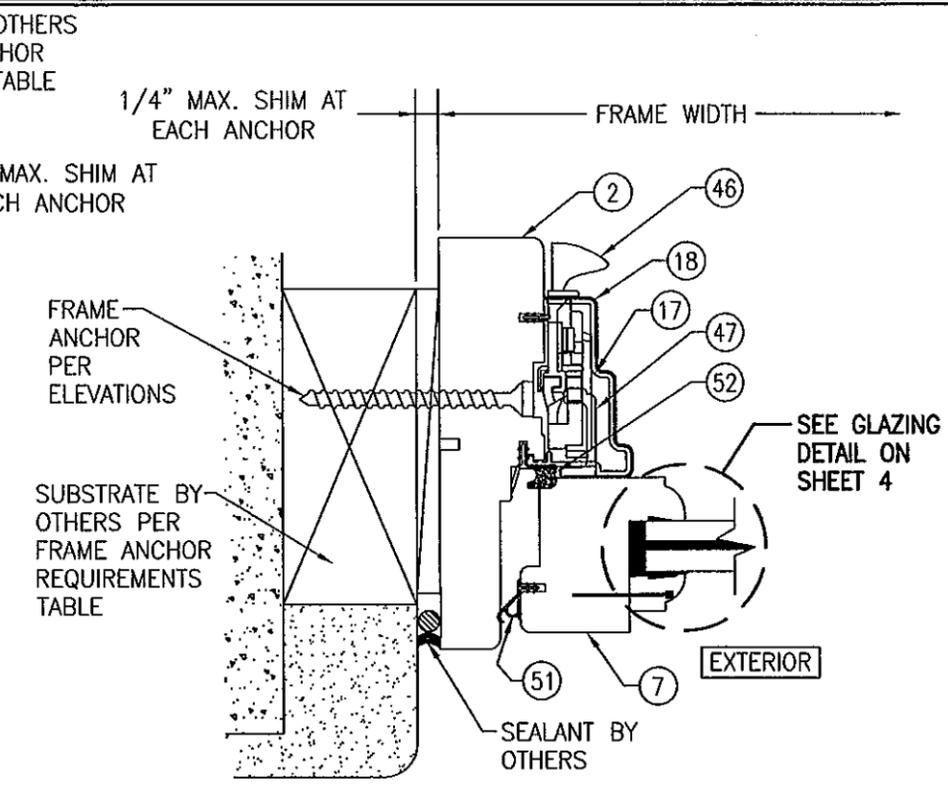
SECTION C  
SCALE: 1/2 FULL  
FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS



SECTION A2  
SCALE: 1/2 FULL  
FOR DETAILS NOT SHOWN SEE SECTION A1/3  
(ROTO OPERATOR HARDWARE CONDITION)



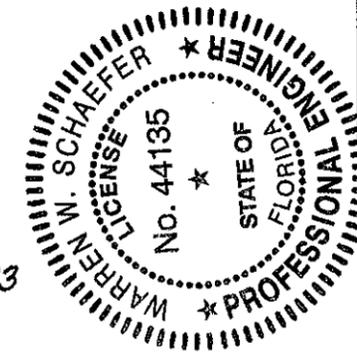
SECTION D  
SCALE: 1/2 FULL  
FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS



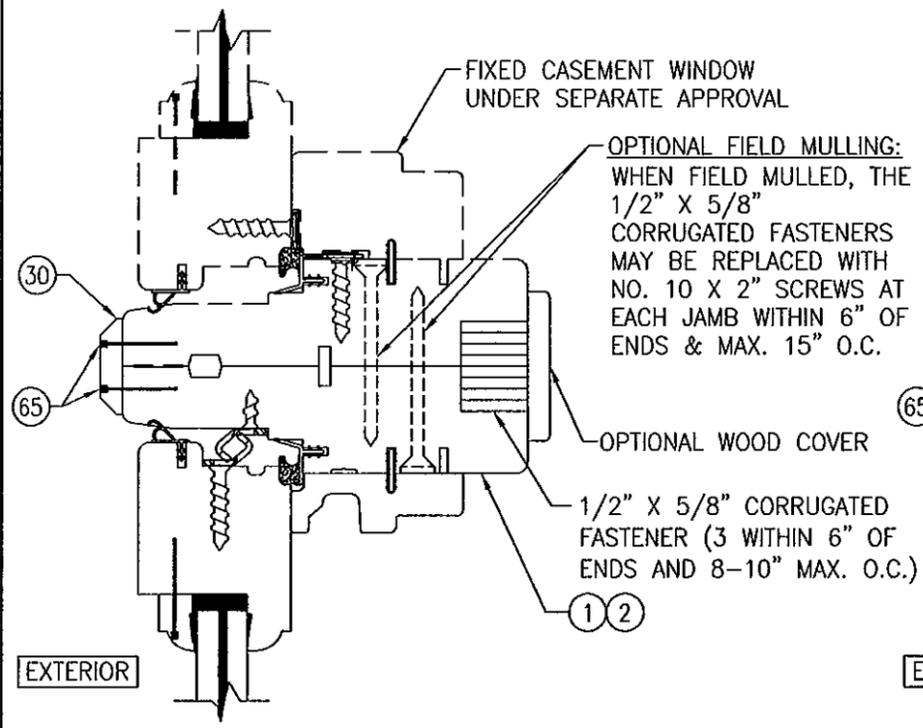
SECTION B  
SCALE: 1/2 FULL

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

PRODUCT REVISED as complying with the Florida Building Code  
Acceptance No 11-1021-09  
Expiration Date JUNE 14, 2013  
By *Warren Schaefer*  
Miami/Dade Product Control

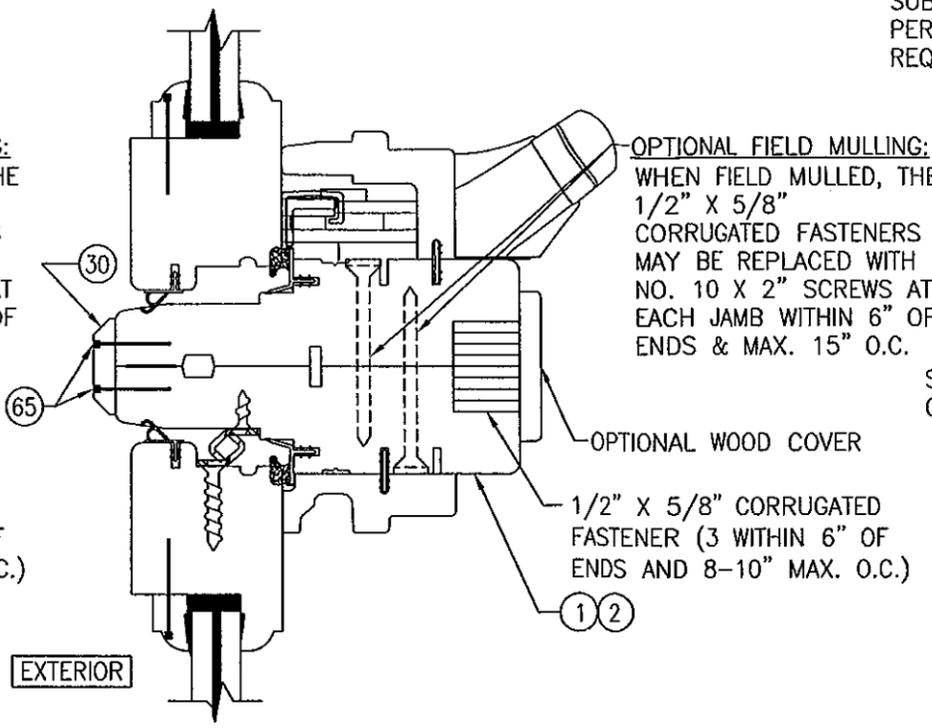


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/02/08
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE WOOD CASEMASTER AWNING STORMPLUS IZ4	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	DATE OCT 14 2011
DRAWING NO. 1552	REV. A
SHEET NO. 3 OF 5	



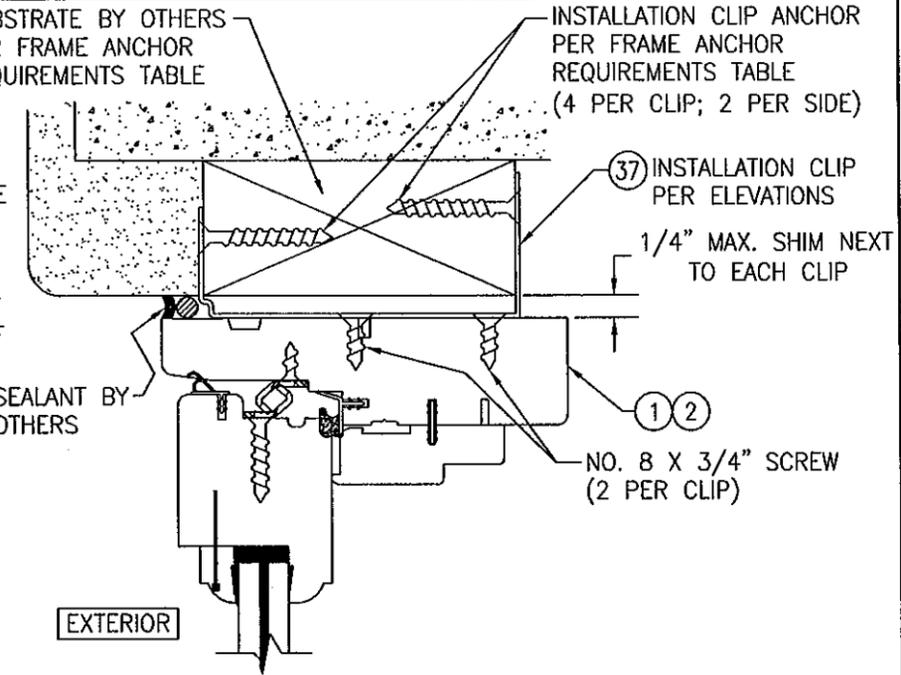
**SECTION E**  
SCALE: 1/2 FULL

FOR DETAILS NOT SHOWN SEE OTHER SECTIONS  
(ROTO OPERATOR HARDWARE CONDITION SHOWN,  
PUSH/PULL OPERATOR CONDITION ALSO APPLIES)

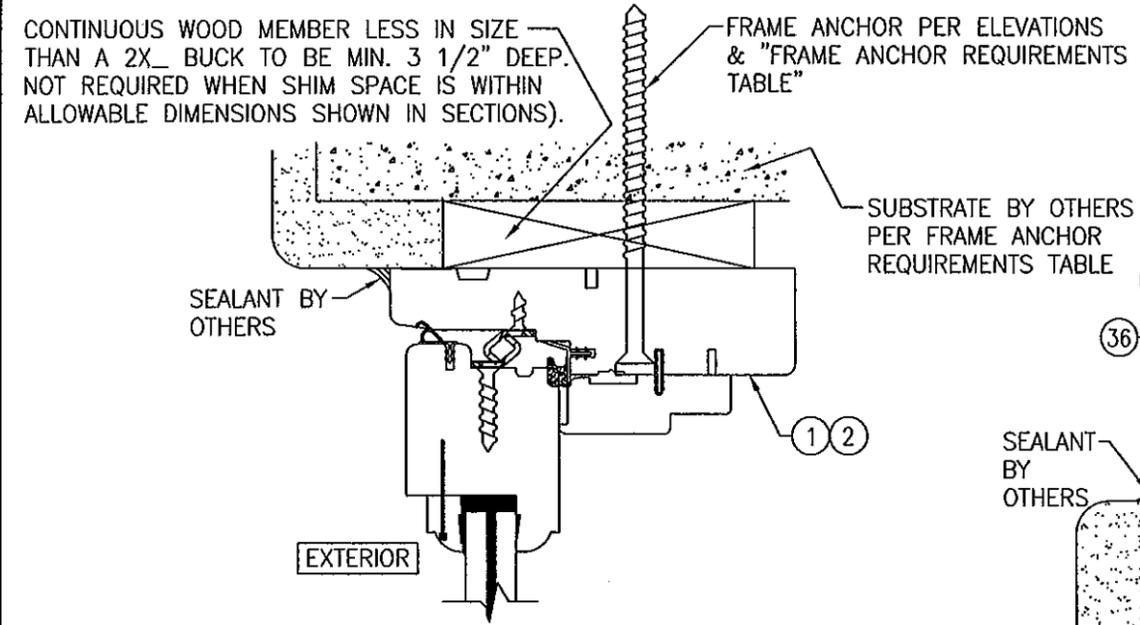


**SECTION F**  
SCALE: 1/2 FULL

FOR DETAILS NOT SHOWN SEE OTHER SECTIONS  
(ROTO OPERATOR HARDWARE CONDITION SHOWN,  
PUSH/PULL OPERATOR CONDITION ALSO APPLIES)

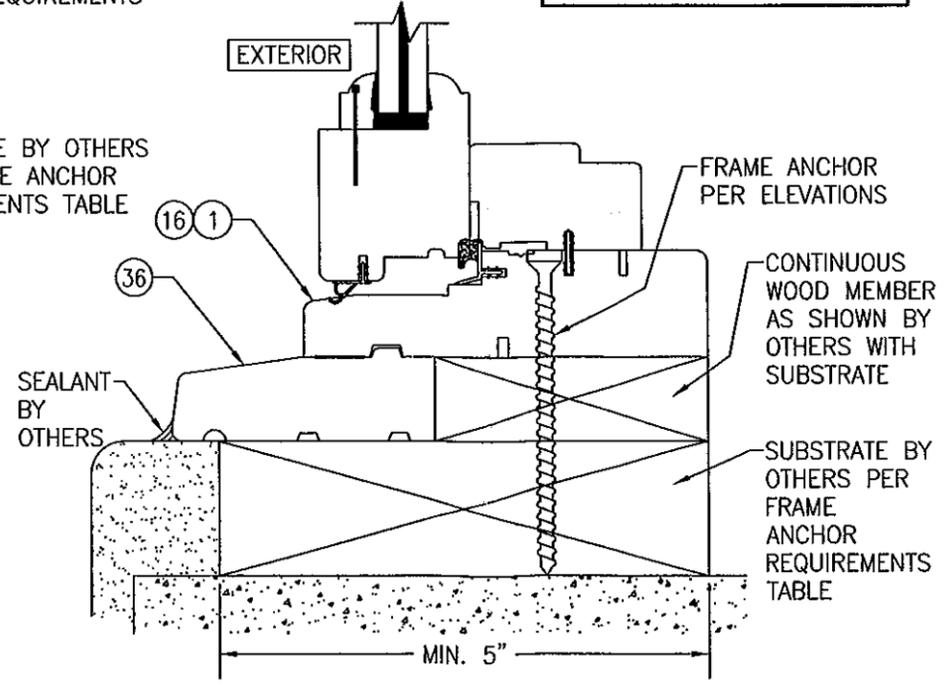


**OPTIONAL INSTALLATION CLIP DETAIL**  
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)  
(PUSH/PULL OPERATOR HARDWARE CONDITION SHOWN, ROTO  
OPERATOR ALSO APPLIES)



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

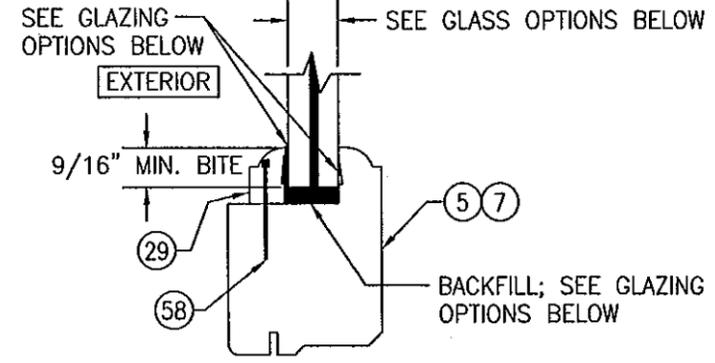
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)  
(PUSH/PULL OPERATOR HARDWARE CONDITION SHOWN, ROTO  
OPERATOR CONDITION ALSO APPLIES)



**OPTIONAL DIRECT MOUNT DETAIL WITH SUB-SILL**

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

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



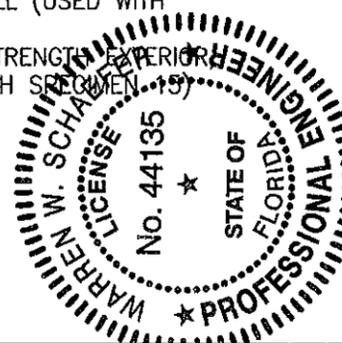
**GLASS OPTIONS**

- 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: DOW 1199 EXTERIOR & INTERIOR WITH DOW 995 BACKFILL (USED WITH SPECIMEN 14)
- GLAZING OPTION B: GE RAPID STRENGTH EXTERIOR & INTERIOR & BACKFILL (USED WITH SPECIMEN 19)

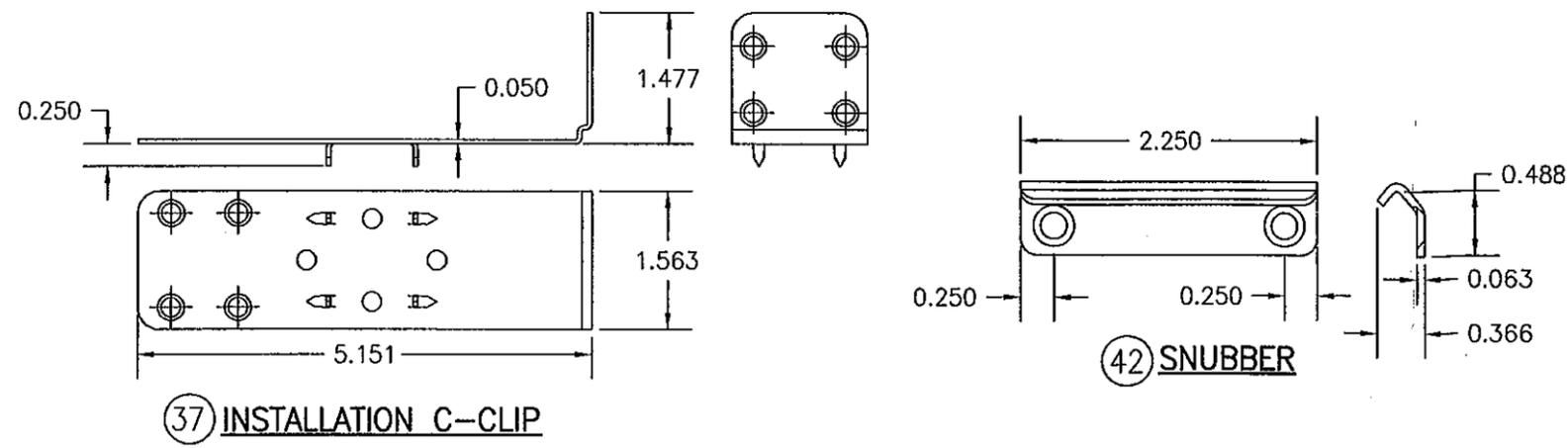
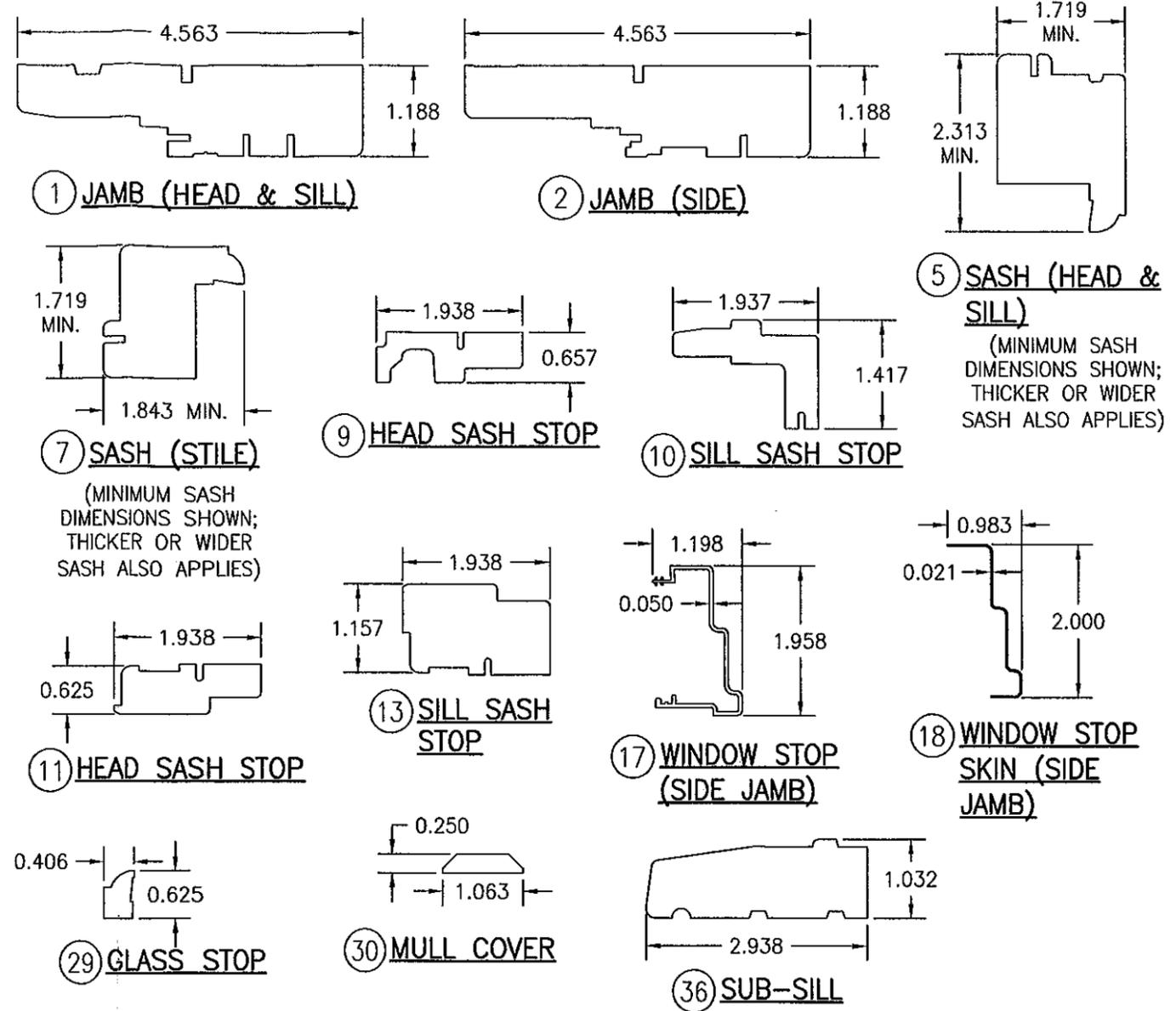
PRODUCT REVISED as complying with the Florida Building Code  
Acceptance No. 11-1021-09  
Expiration Date June 19, 2013  
By *Warren W. Schaefer*  
Miami Dade Product Control



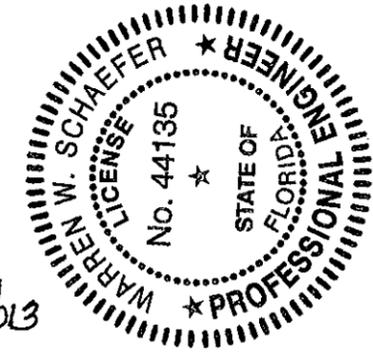
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/02/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD CASEMASTER AWNING STORMPLUS IZ4			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER: MARVIN WINDOWS & DOORS	
7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418		HIGHWAY 11; P.O. BOX 100	
PHONE: 561-744-5424		WARROAD, MN 56763	
		800-346-5044	
CERTIFICATION			
DRAWING NO.	REV.		
1552	A		
SHEET NO.			
4	OF	5	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
<b>PARTS</b>		
1	JAMB (HEAD & SILL)	* WOOD
2	JAMB (SIDE)	* WOOD
5	SASH (HEAD & SILL)	* WOOD
7	SASH (STILE)	* WOOD
9	HEAD SASH STOP	* WOOD
10	SILL SASH STOP	* WOOD
11	HEAD SASH STOP	* WOOD
13	SILL SASH STOP	* WOOD
17	WINDOW STOP (SIDE JAMB)	* WOOD
18	WINDOW STOP SKIN (SIDE JAMB)	* WOOD
29	GLASS STOP	* WOOD
30	MULLION COVER	* WOOD
36	SUB-SILL	* WOOD
37	INSTALLATION C-CLIP	50 KSI GALV. STEEL
<b>HARDWARE</b>		
38	OPERATOR WITH HANDLE	TRUTH-SERIES 15 DUAL ARM OPERATOR
40	SCISSOR HINGE	10" LONG. S.S. THRU 13-16-00-119 (LEFT) THRU 13-16-00-120 (RIGHT)
42	SNUBBER	50 KSI STEEL
44	ROLLER TRACK	TRUTH SERIES 30706
45	SASH LIMITER	MARVIN #15808598
46	CAMLOCK	TRUTH #16-18
47	SASH LOCK KEEPER	TRUTH #31359
<b>SEALS &amp; SEALANTS</b>		
51	SASH WEATHERSTRIP	RIGID GLASS FILLED POLYPROPYLENE BY INTEK
52	VINYL FRAME WEATHERSTRIP	BY AMSBURY
54	CONNECTING BARB	PVC & GEON C70d0
<b>MISC. FASTENERS</b>		
58	F-18 x 1.125" BRAD NAIL	3" FROM CORNERS & MAX. 8" O.C.
62	NO. 8 X 1" SMS	2 PER SNUBBER
63	NO. 7 X 1/2" SMS	2 PER SNUBBER
65	18 GA. X 3/4" BRAD NAIL	2" FROM ENDS & 5" TO 8" MAX. 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.



PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1021.09  
 Expiration Date JUNE 19, 2013  
 By Mauro Lopez  
 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.	

**WOOD CASEMASTER AWNING 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**  
 OCT 14 2011  
 WARREN W. SCHAEFER, P.E.  
 P.E. NO. 44135

DRAWING NO. **1552** REV. **A**  
 SHEET NO. **5** OF **5**