



**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**

**NOTICE OF ACCEPTANCE (NOA)**

**Marvin Windows & Doors  
Highway 11  
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 High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: Series "Casemaster HP" Aluminum Clad Wood Awning Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. 1100 titled "Aluminum Clad Casemaster Impact HP Awning Window", sheets 1 through 5 of 5, dated April 18, 2002, latest revision dated June 20, 2007, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed & sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

**MISSILE IMPACT RATING: Large & Small Missile Impact**

**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 **renews** NOA # 02-0607.03 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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



*J. Gascon  
8/10/07*

**NOA No 07-0524.07  
Expiration Date: September 26, 2008  
Approval Date: August 30, 2007  
Page 1**

**Marvin Windows & Doors**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **1100**, Sheets 1 through 5 of 5, titled "Aluminum Clad Casemaster Impact HP Awning Window", dated April 18, 2002, latest revision dated June 20, 2007, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed & sealed by Warren W. Schaefer, P.E.

**B. TESTS**

1. Test reports on
  - 1) Air Infiltration Test, per SFBC, PA 202-94
  - 2) Uniform Static Air Pressure Test, Loading per SFBC PA 202-94
  - 3) Water Resistance Test, per SFBC, PA 202-94
  - 4) Large Missile Impact Test per SFBC, PA 201-94
  - 5) Cyclic Wind Pressure Loading per SFBC, PA 203-94
  - 6) Forced Entry Test, per SFBC 3603.2 (b) and PA 202-94along with marked-up drawings and installation diagram of alum. Clad wood awning windows in single, two-wide and awning mulled below stationary configurations, prepared by Architectural Testing, Inc., Test Report No. **ATI 02-33632.01**, dated 11/21/01, signed and sealed by Allen N. Reeves, P.E.  
**"Submitted under NOA# 02-0607.03"**

**C. CALCULATIONS**

1. Anchor Calculations and structural analysis, dated June 20, 2007, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed & sealed by Warren W. Schaefer, P.E.  
**Complies with ASTM E1300-98/ 02**

**D. MATERIAL CERTIFICATIONS**

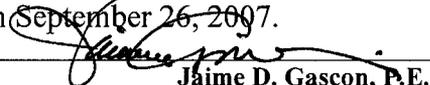
1. Notice of Acceptance No. **03-0417.01** issued to Cardinal LG for their "Laminated Glass Cardinal Sea-Storm Type B" dated May 15, 2003, expiring on December 30, 2007.

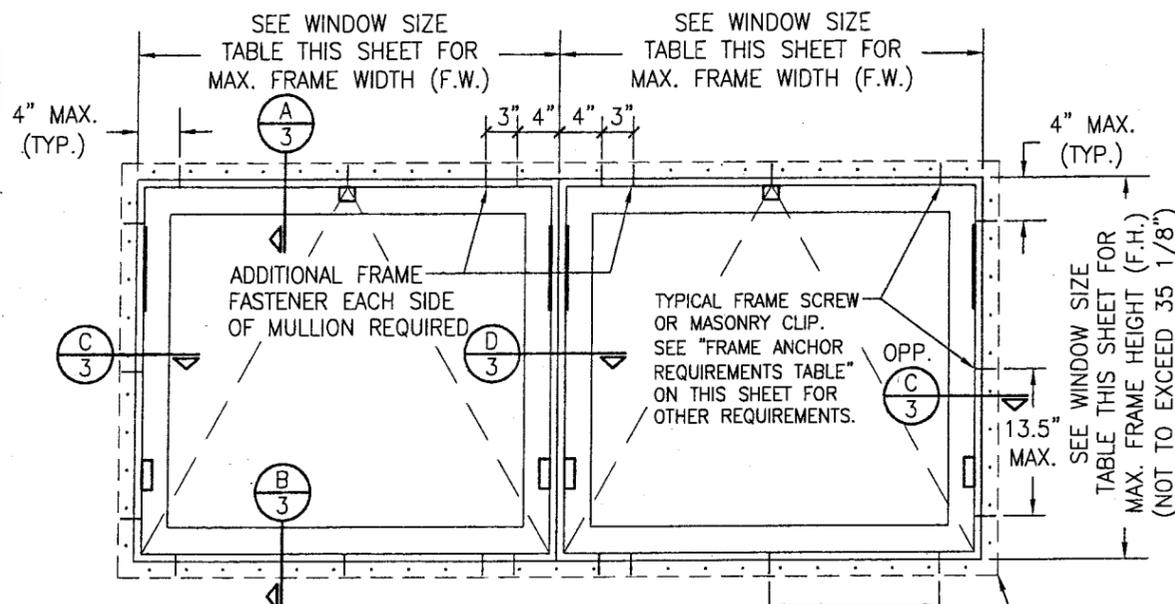
**E. STATEMENTS**

1. Statement letter of conformance, dated June 20, 2007, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated April 29, 2002, signed and sealed by Warren W. Schaefer, P.E.
3. Laboratory compliance letter for Test Report No. ATI 02-33632.01, issued by Architectural Testing, Inc., dated January 21, 2002, signed and sealed by Allen N. Reeves, P.E.

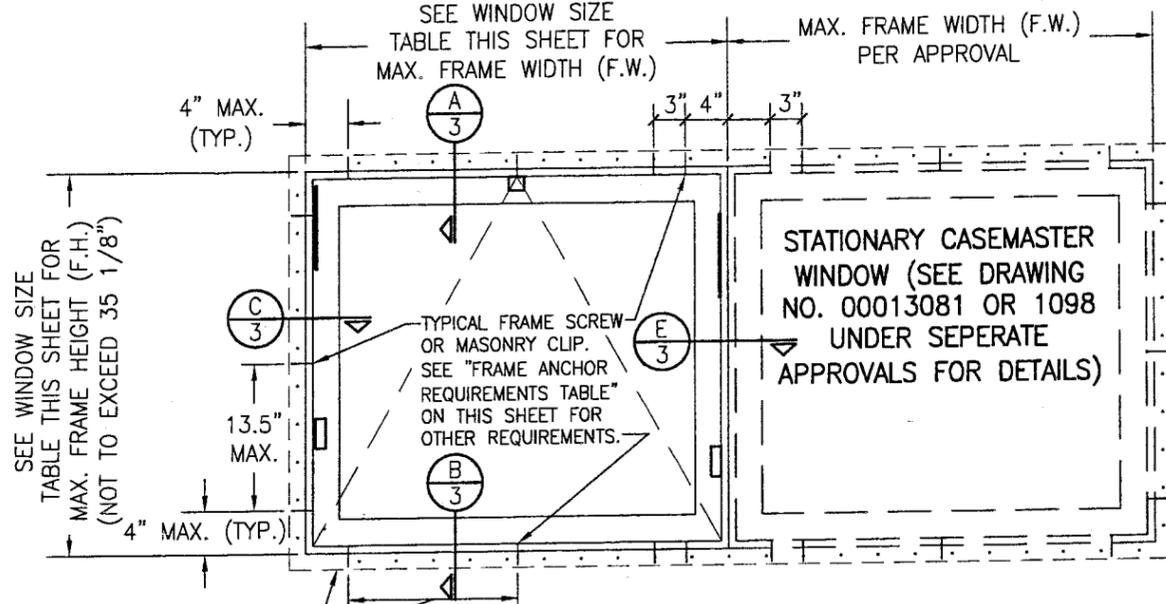
**F. OTHER**

1. Notice of Acceptance No. **02-0607.03**, issued to Marvin Windows & Doors, approved on September 26, 2002 and expiring on ~~September 26, 2007~~.

  
\_\_\_\_\_  
Jaime D. Gascon, P.E.  
Chief, Product Control Division  
NOA No 07-0524.07  
Expiration Date: September 26, 2008  
Approval Date: August 30, 2007



**EXTERIOR ELEVATION**  
**MULTIPLE AWNING WINDOWS SIDE BY SIDE**  
 (MAX. FOUR WINDOWS MAY BE COMBINED)  
 SCALE: 3/4"=1'-0"  
 FOR DETAILS NOT SHOWN SEE SINGLE WINDOW ELEVATION



**EXTERIOR ELEVATION**  
**MULTIPLE AWNING/FIXED WINDOWS SIDE BY SIDE**  
 (MAX. FOUR WINDOWS MAY BE COMBINED)  
 SCALE: 3/4"=1'-0"  
 FOR DETAILS NOT SHOWN SEE SINGLE WINDOW ELEVATION

16" MAX. WITH SCREWS;  
 15" MAX. WITH CLIPS.  
 (TYP. AT HEAD & SILL)

16" MAX. WITH SCREWS;  
 15" MAX. WITH CLIPS.  
 (TYP. AT HEAD & SILL)

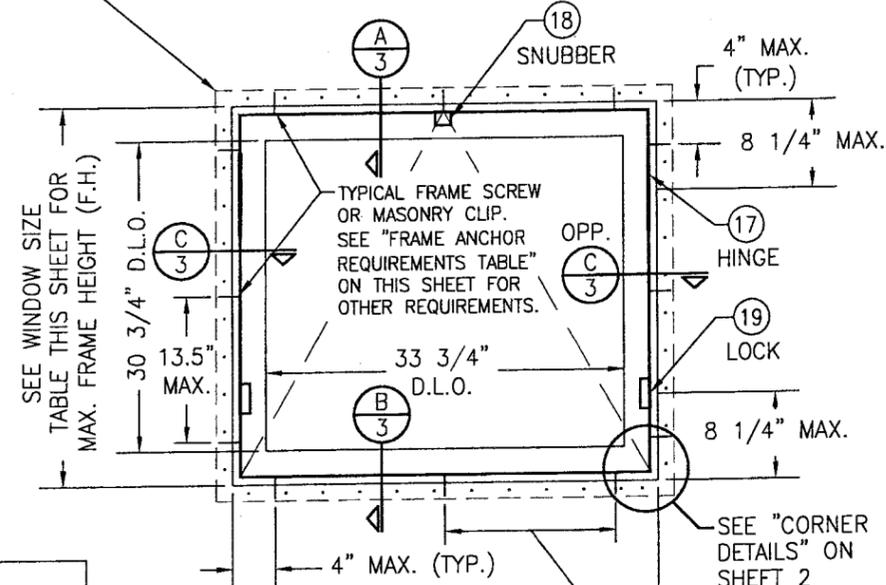
OPTIONAL NAILING FIN. SECURE TO  
 BUCK WITH 2" X 11 GA. ROOFING  
 NAIL WITHIN 4" OF CORNERS AND  
 MAX. 10.5" O.C. (NOT TO REPLACE  
 FRAME ANCHORS/CLIPS)

ALLOWABLE WINDOW SIZE & DESIGN PRESSURE TABLE			
WINDOW		PRESSURE	
WIDTH	HEIGHT	POSITIVE	NEGATIVE
40"	35" OR LESS	75 PSF	75 PSF
48"	30" OR LESS	65 PSF	70 PSF

FRAME ANCHOR REQUIREMENTS TABLE			
OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
2X WOOD FRAME OR BUCK	NO. 10 SMS SCREW	1 1/4"	3/4"
CMU/CONCRETE	3/16" CONCR. SCREW	1 1/4"	2"

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

**\* FRAME ANCHOR NOTE:** FRAME MAY BE EITHER DIRECT MOUNTED TO THE OPENING, MOUNTED ONTO A CONTINUOUS SPACER, OR ANCHORED TO A MIN. 2X4 NO. 3 SOUTHERN PINE WOOD BUCK. WHEN ANCHORED TO A 2X4 BUCK, NO. 10 SCREWS SHALL BE USED. WHEN DIRECT MOUNTED OR MOUNTED WITH SPACER, 3/16" CONCRETE SCREWS SHALL BE USED. SEE "FRAME ANCHOR REQUIREMENTS TABLE" FOR EMBED REQUIREMENTS. PROPER MATERIAL SHALL BE USED BETWEEN ALL DISIMILAR MATERIALS (BLOCK/CONCRETE & ALUMINUM).



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

16" MAX. WITH SCREWS;  
 15" MAX. WITH CLIPS.  
 (TYP. AT HEAD & SILL)

PRODUCT RENEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 07-0524.07  
 Expiration Date 09/26/2008

By: *[Signature]*  
 Miami Dade Product Control  
 Division

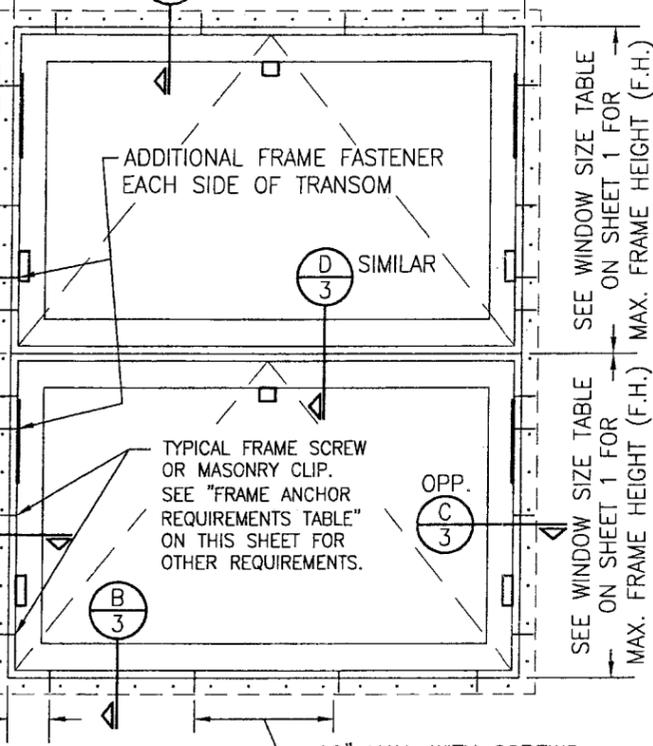
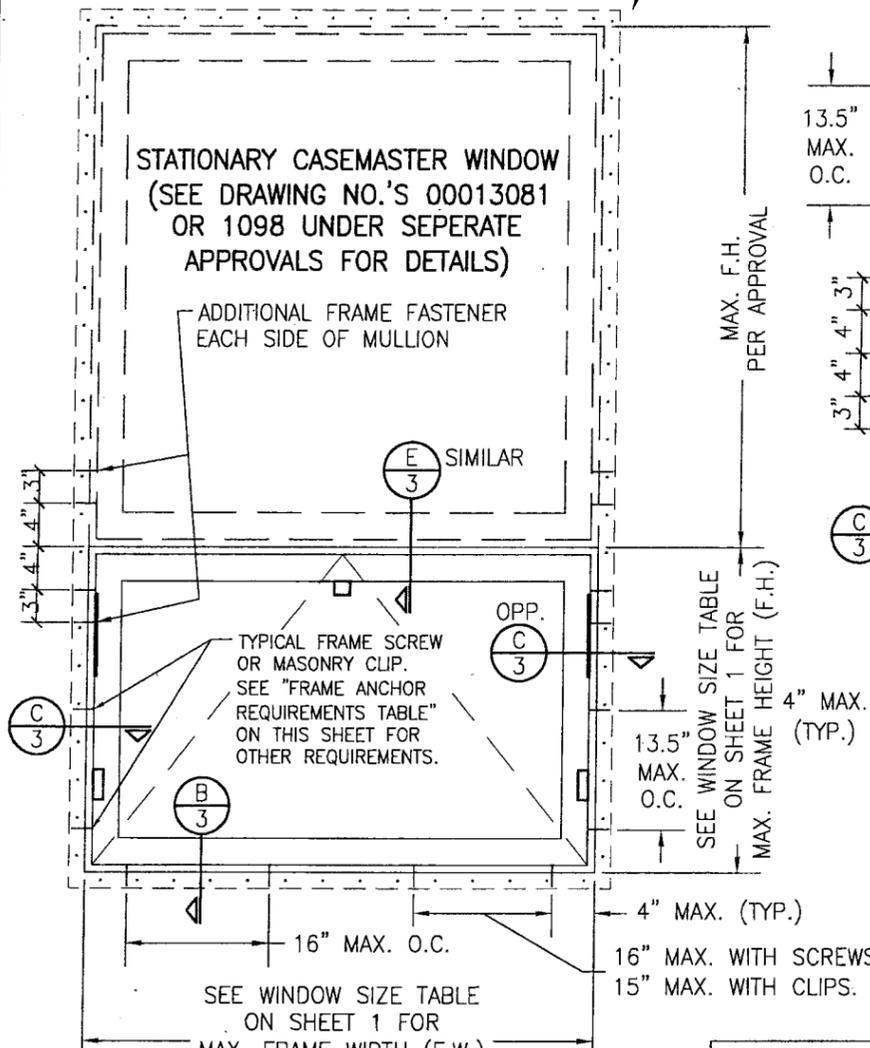
**GENERAL NOTES**

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE(S).
2. BUCKING, OPENINGS & 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.
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 2004 FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.
7. ALL ANCHORS SHALL BE INSTALLED AS SPECIFIED ON THESE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
8. ALL FRAME ANCHORS SECURING WINDOW/DOOR FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
9. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BUILDING CODE SECTION 2003.8.4.

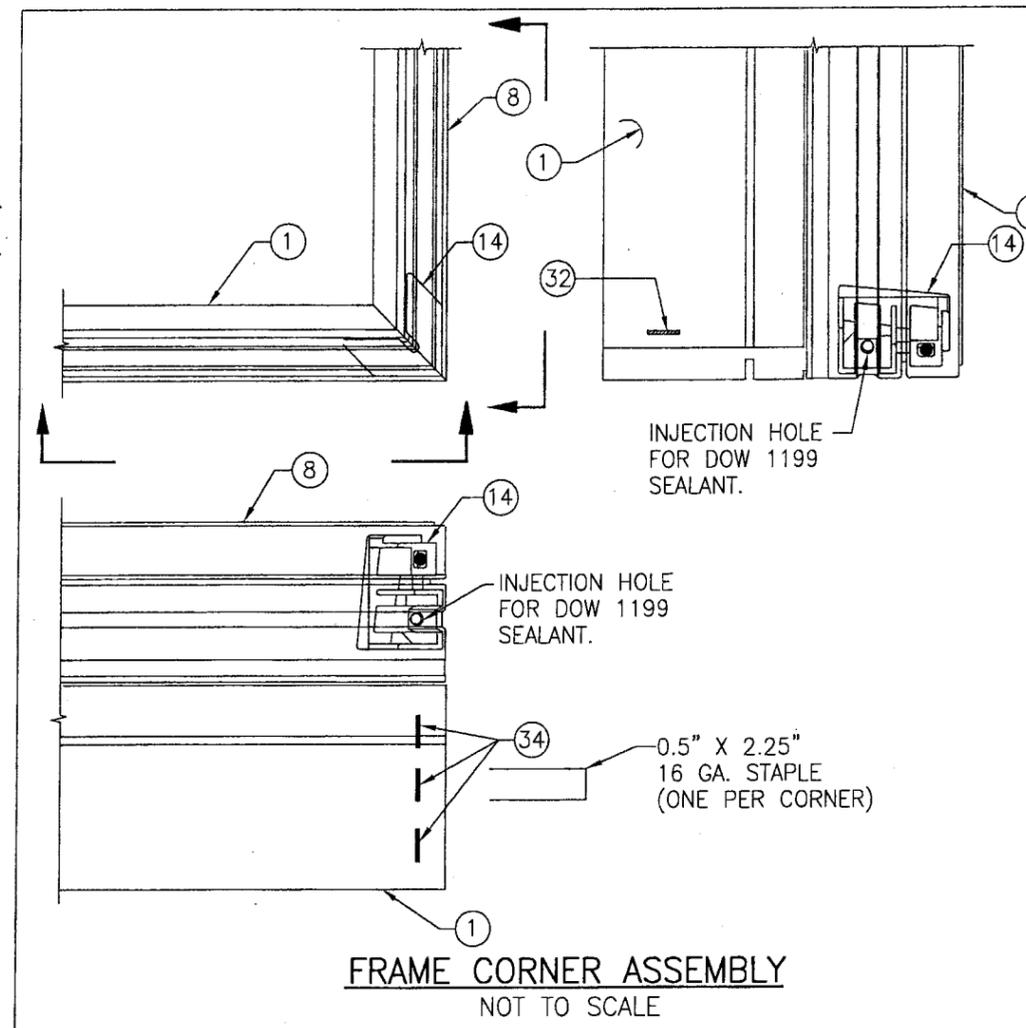
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PLOT: 1=16	DATE: 04/18/02
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>ALUMINUM CLAD CASEMASTER IMPACT HP AWNING WINDOW</b>	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b>	MANUFACTURER <b>MARVIN WINDOWS &amp; DOORS</b>
600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	HIGHWAY 11 WEST WARROAD, MN 56763-0100 218-386-1430
CERTIFICATION JUN 20 2007	WARREN W. SCHAEFER P.E. P.E. NO. 44135
DRAWING NO. 1100	REV.
SHEET NO. 1	OF 5

OPTIONAL NAILING FIN. SECURE TO BUCK WITH 2" X 11 GA. ROOFING NAIL WITHIN 4" OF CORNERS AND MAX. 10.5" O.C. (NOT TO REPLACE FRAME ANCHORS/CLIPS)

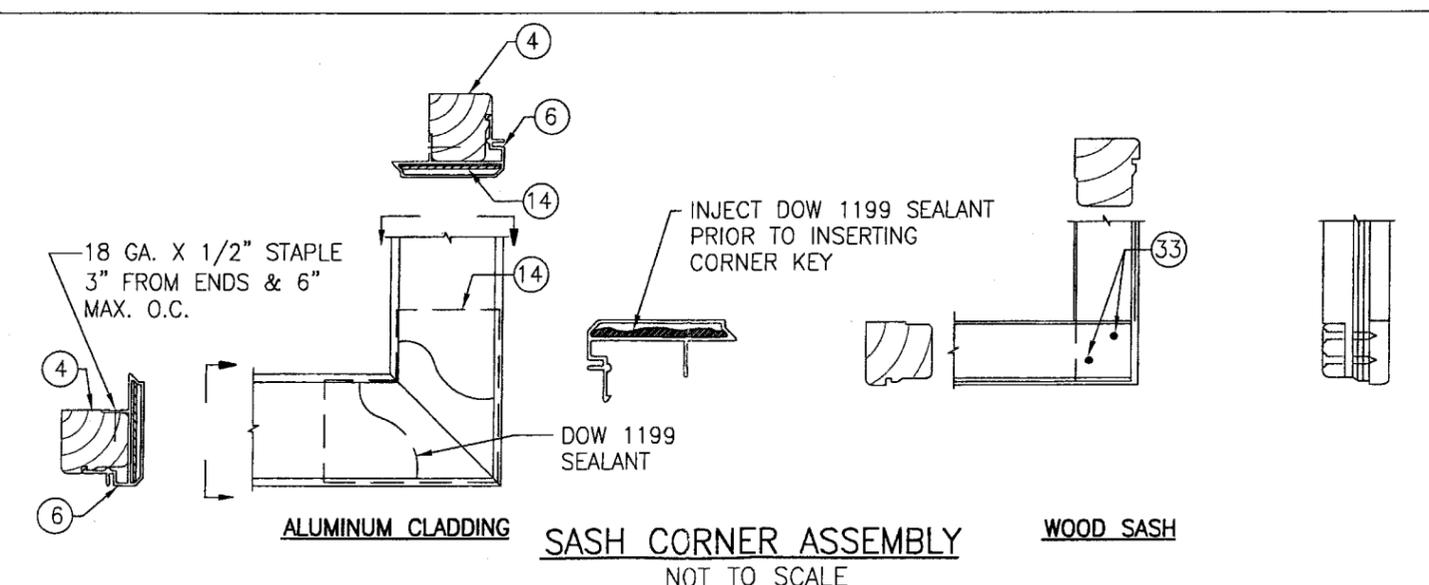
SEE WINDOW SIZE TABLE ON SHEET 1 FOR MAX. FRAME WIDTH (F.W.) (NOT TO EXCEED 48")



**EXTERIOR ELEVATION MULTIPLE AWNING WINDOWS (VERTICALLY STACKED)**  
 (MAX. FOUR WINDOWS MAY BE COMBINED)  
 SCALE: 3/4"=1'-0"  
 FOR DETAILS NOT SHOWN; SEE SINGLE WINDOW ELEVATION ON SHEET 1

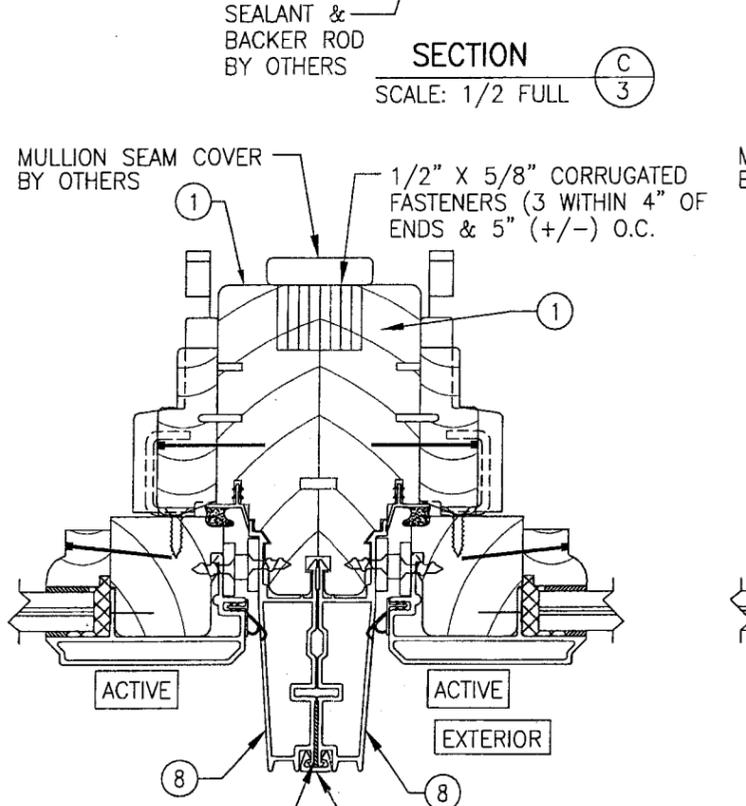
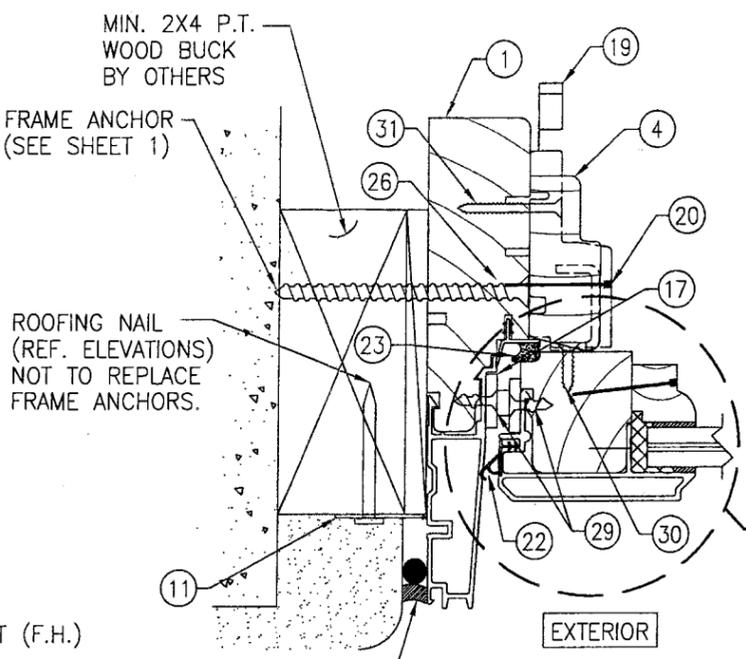
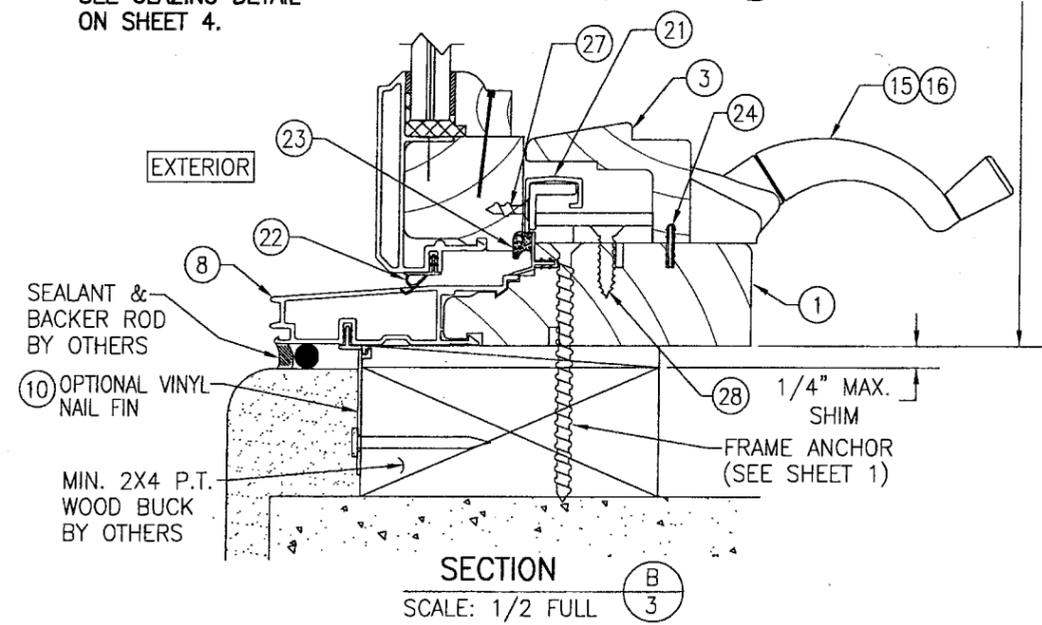
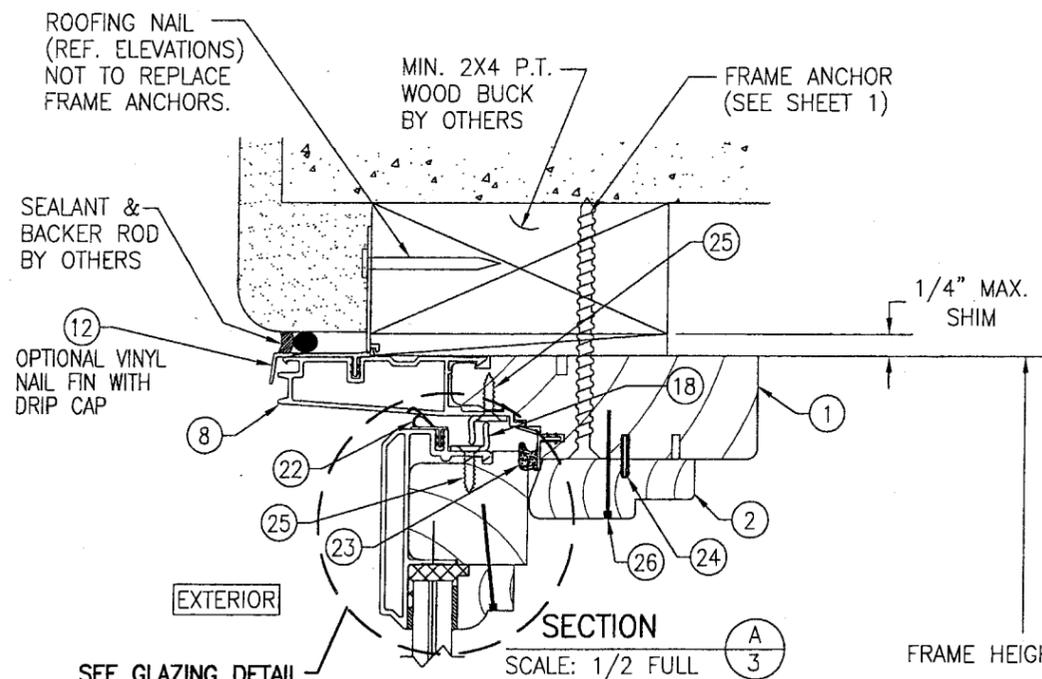


**EXTERIOR ELEVATION MULTIPLE AWNING/FIXED WINDOWS (VERTICALLY STACKED)**  
 (MAX. FOUR WINDOWS MAY BE COMBINED)  
 SCALE: 3/4"=1'-0"  
 FOR DETAILS NOT SHOWN; SEE SINGLE WINDOW ELEVATION ON SHEET 1



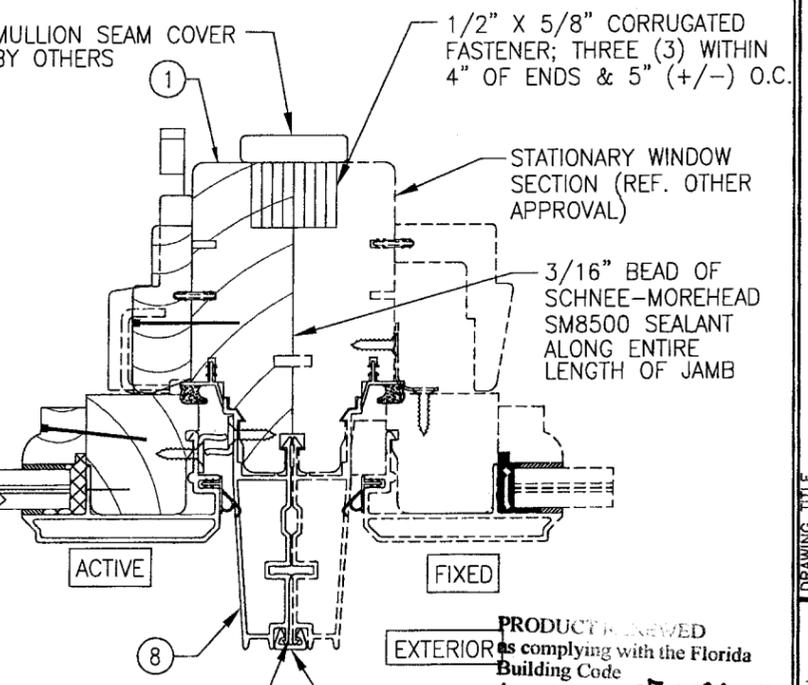
**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No **07-0524.07**  
 Expiration Date **09/26/2008**  
 By *[Signature]*  
 Miami Dade Product Control Division

DRAWN BY: J.C.F.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/18/02
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE <b>ALUMINUM CLAD CASEMASTER IMPACT HP AWNING WINDOW</b>	
MANUFACTURER <b>MARVIN WINDOWS &amp; DOORS</b> HIGHWAY 11 WEST WARROAD, MN 56763-0100 218-386-1430	
CONSULTANTS <b>W. W. SCHAEFFER ENGINEERING &amp; CONSULTING, P.A.</b> 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION <b>JUN 20 2007</b>	WARREN W. SCHAEFFER, P.E. P.E. NO. 44135
DRAWING NO. <b>1100</b>	REV.
SHEET NO. <b>2</b>	OF <b>5</b>



1/16" X 1/2" CLOSED CELL FOAM SINGLE SIDE ADHESIVE APPLIED TO CLAD ALONG ENTIRE LENGTH

(SEE JAMB SECTIONS FOR DETAIL NOT SHOWN)



1/16" X 1/2" CLOSED CELL FOAM SINGLE SIDE ADHESIVE APPLIED TO CLAD ALONG ENTIRE LENGTH

(SEE JAMB SECTIONS FOR DETAIL NOT SHOWN)

PRODUCT REVIEWED as complying with the Florida Building Code

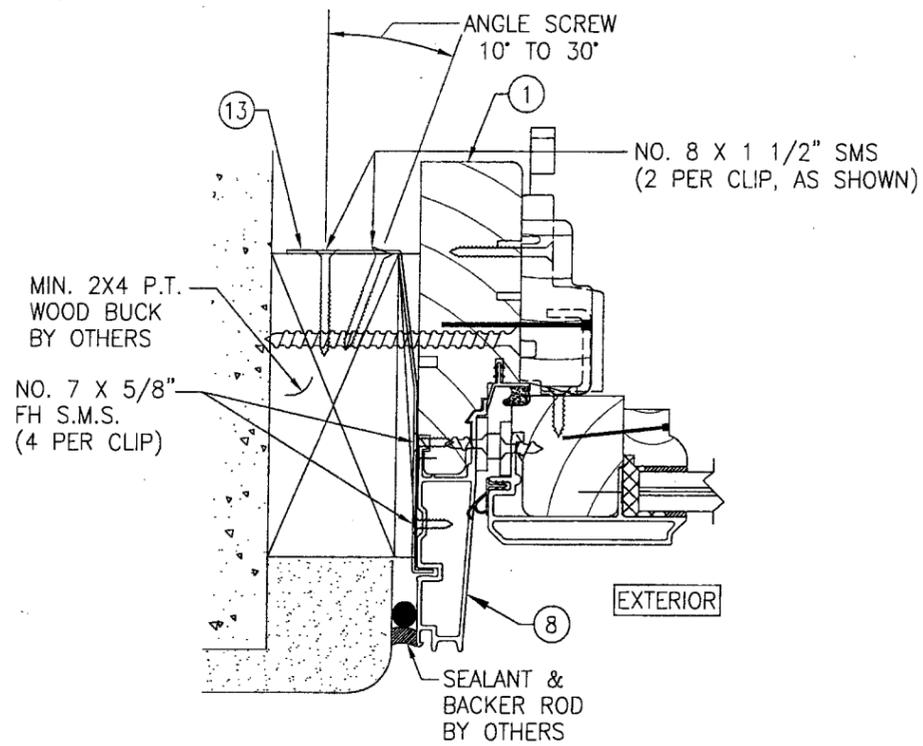
Acceptance No. 07-0524.07

Expiration Date 09/25/2008

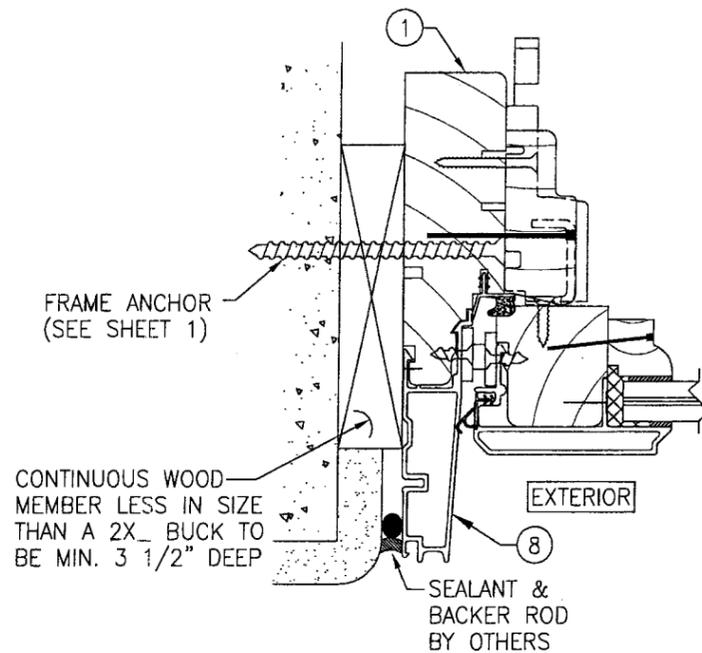
By *[Signature]* Miami Dade Product Control Division

SEE GLAZING DETAIL ON SHEET 4.

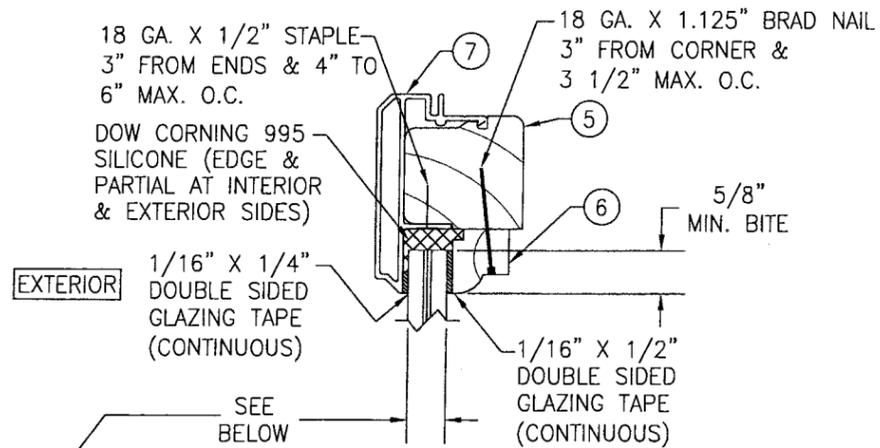
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PLOT: 1-2		DATE: 04/18/02	
NO.	REVISION	DESCRIPTION	DATE
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HIGHWAY 11 WEST WARROAD, MN 56763-0100 218-386-1430			
CERTIFICATION		JUN 20 2007	
WARREN W. SCHAEFER, P.E.		P.E. NO. 44135	
DRAWING NO.	REV.	SHEET NO.	
1100		3 OF 5	



**OPTIONAL CLIP INSTALLATION**  
 SIDE JAMB DETAIL SHOWN; OTHER JAMBS SIMILAR  
 SEE SECTIONS FOR DETAIL NOT SHOWN



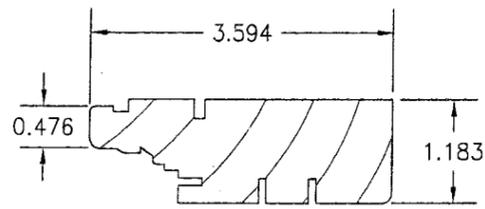
**DIRECT MOUNT DETAIL**  
 SIDE JAMB DETAIL SHOWN; OTHER JAMBS SIMILAR  
 SEE SECTIONS FOR DETAIL NOT SHOWN



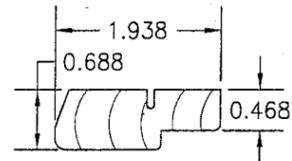
**GLAZING DETAIL**

CARDINAL SEASTORM TYPE "B" LAMINATED GLASS  
 OPTION 1) 7/16" THICK OVERALL (1/4" AN/0.045 PVB/0.007 PET/0.045 PVB/1/4" AN)  
 OR 7/16" THICK OVERALL (1/4" AN/0.015 PVB/0.007 PET/0.075 PVB/1/4" AN)

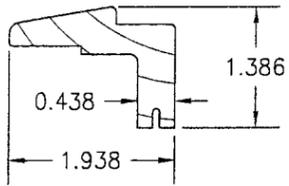
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PLOT: 1=2	DATE: 04/18/02
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DATE	BY
DRAWING TITLE <b>ALUMINUM CLAD CASEMASTER IMPACT HP AWNING WINDOW</b>	
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CERTIFICATION <b>JUN 20 2007</b>	
PRODUCT RENEWED as complying with the Florida Building Code Acceptance No <b>01-0524.07</b> Expiration Date <b>09/26/2008</b> By <i>[Signature]</i> Miami Dade Product Control Division	
DRAWING NO. <b>1100</b>	REV.
SHEET NO. <b>4 OF 5</b>	



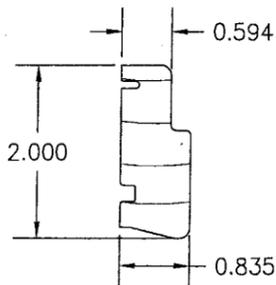
① HEAD & SIDE JAMB



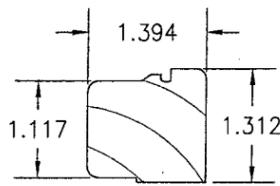
② HEAD JAMB STOP



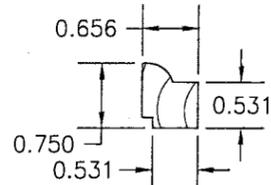
③ SILL HARDWARE COVER



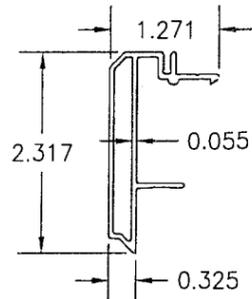
④ SIDE JAMB STOP



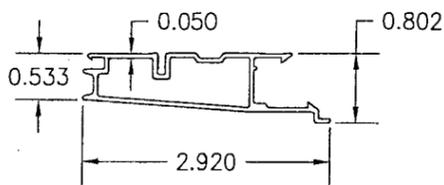
⑤ SASH



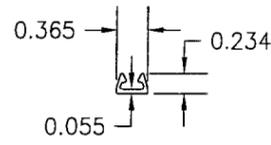
⑥ GLAZING STOP



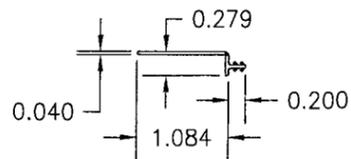
⑦ SASH CLADDING



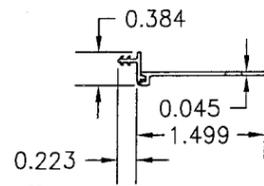
⑧ JAMB CLADDING



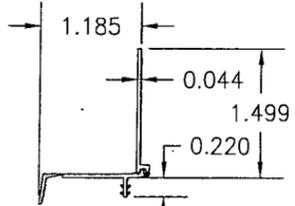
⑨ MULLION CLIP



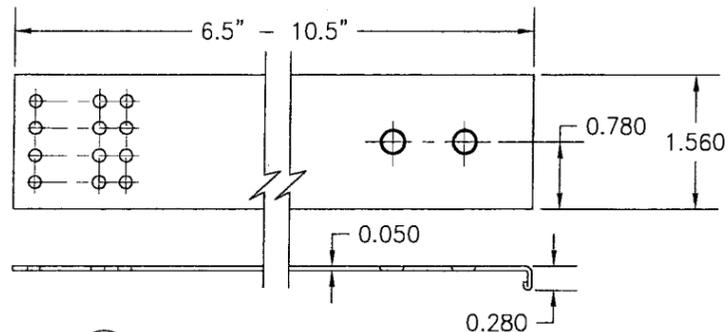
⑩ SILL NAIL FIN



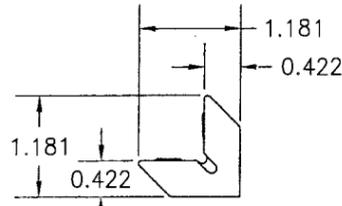
⑪ SIDE JAMB NAIL FIN



⑫ HEAD JAMB NAIL FIN



⑬ MASONRY BRACKET



⑭ CORNER KEY

ITEM #	PART	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	00013982	JAMB	* WOOD
2	00007766	HEAD JAMB STOP	* WOOD
3	00007771	SILL HARDWARE COVER	* WOOD
4	00013245	SIDE JAMB STOP	* WOOD
5	00013141	SASH	* WOOD
6	00013035	GLAZING STOP	* WOOD
7	00012971	SASH CLADDING	6063-T5 ALUMINUM
8	00002334	JAMB CLADDING	6063-T5 ALUMINUM
9	00002026	MILLION CLIP	6063-T5 ALUMINUM
10	V084	SILL NAILING FIN (OPTIONAL)	VINYL
11	V104	JAMB NAILING FIN (OPTIONAL)	VINYL
12	V119	DRIP CAP NAILING FIN (OPTIONAL)	VINYL
13	00003726	MASONRY BRACKET	GALV. STEEL (Fy=50 ksi MIN.)
14	00010038	CORNER KEY	GLASS FILLED NYLON
HARDWARE			
15	00003913	HANDLE	AS REQUIRED TO OPERATE ROTOGEAR
16	00002790	ROTOGEAR	TRUTH SERIES 11
17	00014372	SASH HINGE & TRACK	TRUTH SERIES 13
18	00003736	CONCEALED SNUBBER (1 PER WINDOW)	MARVIN, 403 STAINLESS
19	00014053	CAMLOCK (1 EACH SIDE OF WINDOW)	TRUTH SERIES 16-18
20	00014054	KEEPER, HIGH STRENGTH	TRUTH 31359
21	00018619	GUIDE BAR	MARVIN, 6063-T5 ALUMINUM
SEALS & SEALANTS			
22	00013385	SASH WEATHER STRIP	INTEK
23	00012769	FRAME WEATHER STRIP	AMESBURY
MISCELLANEOUS FASTENERS			
24	00005685	VINYL CONNECTING BARB	PLASTIC PROFILES INC.
25	00003223	NO. 8 X 1" SMS	2 PER SNUBBER
26	00005685	18 GA. X 1 1/8" BRAD NAIL	4" FROM CORNERS & MAX. 6" O.C.
27	00003223	NO. 8 X 1" SMS	2 PER GUIDE BAR
28	00003223	NO. 8 X 1" SMS	5 PER OPERATOR TRACK
29	00003210	NO. 7 X 5/8" SMS	4 PER HINGE INTO SASH & INTO FRAME
30	00003223	NO. 8 X 1 1/4" SMS	2 PER KEEPER
31	00003220	NO. 8 X 1 1/8" SMS	2 PER OPERATOR
32	11892201	GSN 14 GA. X 2 1/4" STAPLE	1 PER JAMB CORNER
33	00003225	NO. 7 X 1 1/4" SMS	2 PER SASH CORNER
34	11820120	GSN 16 GA. X 2" STAPLE	3 PER SILL & HEAD JAMB CORNER

\* WOOD USED WITH TEST UNITS WAS PONDEROSA PINE. ALTERNATE WOOD SPECIES TO BE APPLICABLE WITH THESE WINDOWS IS MIN. GRADE 2 MAHOGANY, SOUTHERN PINE, OAK, CHERRY, MAPLE, DOUGLAS FIR & CYPRUS.

DRAWN BY: J.C.F.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/18/02
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE  
**ALUMINUM CLAD CASEMASTER IMPACT HP AWNING WINDOW**  
 MANUFACTURER  
**MARVIN WINDOWS & DOORS**  
 HIGHWAY 11 WEST  
 WARROAD, MN 56763-0100  
 218-386-1430

CONSULTANTS  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**  
 600 SANDTREE DRIVE, SUITE 203B  
 PALM BEACH GARDENS, FL 33403  
 PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION  
**JUN 20 2007**  
 WARRYN W. SCHAEFER, P.E.  
 P.E. NO. 44135

PRODUCT RENEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No **07-0524.07**  
 Expiration Date **09/26/2008**  
 By *[Signature]*  
 Miami Dade Product Control  
 Division

DRAWING NO.	REV.
1100	
SHEET NO.	
5	OF 5