



**BUILDING CODE COMPLIANCE OFFICE**  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908

**CONTRACTOR LICENSING SECTION**  
(305) 375-2527 FAX (305) 375-2558

**CONTRACTOR ENFORCEMENT DIVISION**  
(305) 375-2966 FAX (305) 375-2908

**PRODUCT CONTROL DIVISION**  
(305) 375-2902 FAX (305) 372-6339

**PRODUCT CONTROL NOTICE OF ACCEPTANCE**

**Marvin Windows & Doors**  
**Highway 11 West (P.O. Box 100)**  
**Warroad, MN 56763-0100**

Your application for Notice of Acceptance (NOA) of:

**"Clad Casemaster Operator" Aluminum Clad Wood Casement Window - Impact HP**  
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Raul Rodriguez  
Chief Product Control Division

**ACCEPTANCE NO.: 00-0327.10**  
**EXPIRES: 11/18/2002**

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL  
CONDITIONS  
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.  
Director  
Miami-Dade County  
Building Code Compliance Office

**APPROVED: 10/26/2000**

**Marvin Windows and Doors.**

ACCEPTANCE No.: 00-0327.10

APPROVED : OCT 26 2000

EXPIRES : November 18, 2002

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

- 1.1 This revises the Notice of Acceptance No. 99-0611.03 which was issued on November 18, 1999. It approves a wood casement window as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

**2. PRODUCT DESCRIPTION**

- 2.1 The "Clad Casemaster Operator" Aluminum Clad Wood Casement Window - Impact Resistant and its components shall be constructed in strict compliance with the following document: Drawing No. 00013081A, titled "Clad Casemaster Operator Impact HP", Sheets 1 thru 8 of 8, dated March 31, 1999 with revision A1 dated 03/03/00, 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. These documents shall hereinafter be referred to as the approved drawings.

**3. LIMITATIONS**

- 3.1 This approval applies to single unit applications and side-by-side installations, as shown in approved drawings.

**4. INSTALLATION**

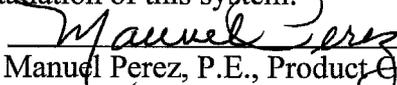
- 4.1 The wood operable casement window and its components shall be installed in strict compliance with the approved drawings.
- 4.2 Hurricane protection system (shutters): the installation of this unit **will not require** a hurricane protection system.

**5. LABELING**

- 5.1 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".

**6. BUILDING PERMIT REQUIREMENTS**

- 6.1 Application for building permit shall be accompanied by two copies of the following:
- 6.1.1 This Notice of Acceptance.
- 6.1.2 Duplicate copies of the approved drawings, as identified in section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
- 6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

  
Manuel Perez, P.E., Product Control Examiner  
Product Control Division

**Marvin Windows and Doors.**

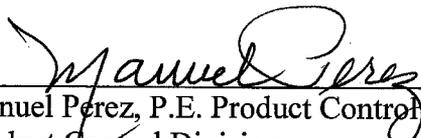
**ACCEPTANCE No.:** 00-0327.10

**APPROVED** : OCT 26 2000

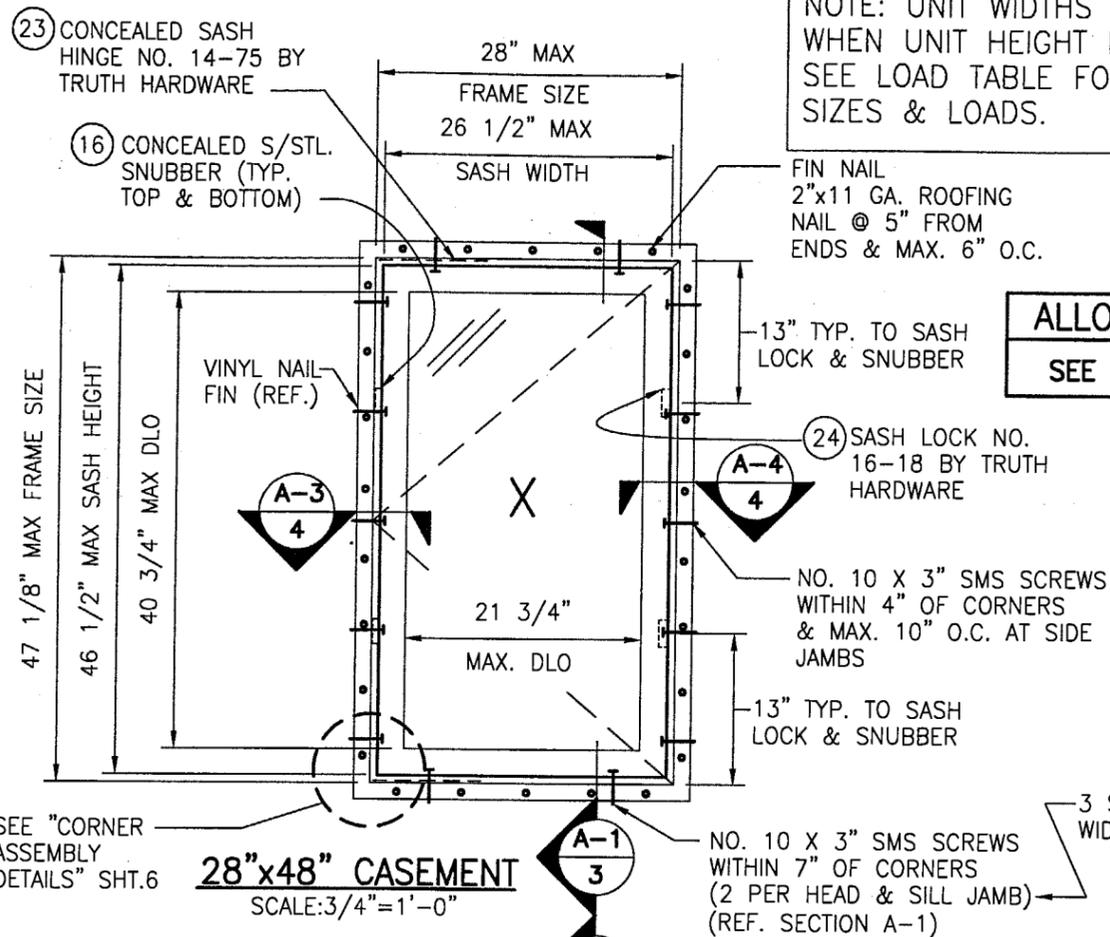
**EXPIRES** : November 18, 2002

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
  - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
  - b) The product is no longer the same product (identical) as the one originally approved.
  - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
  - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
  - a) Unsatisfactory performance of this product or process;
  - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purpose.
6. The Notice of Acceptance number preceded by the words Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The engineer does not need to reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Acceptance contains pages 1, 2, this last page 3.

  
Manuel Perez, P.E. Product Control Examiner  
Product Control Division

**END OF THIS ACCEPTANCE**



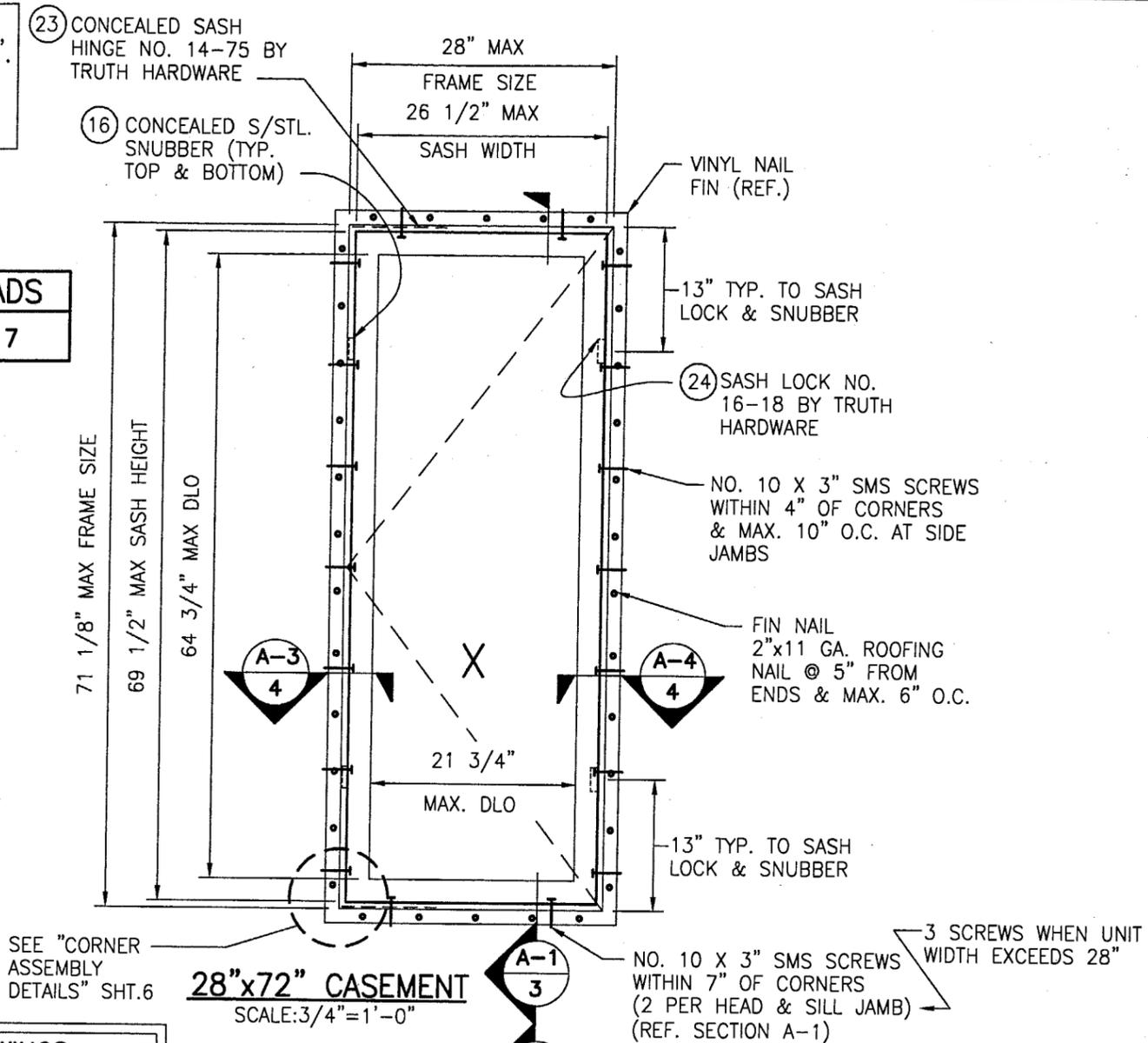
SEE "CORNER ASSEMBLY DETAILS" SHT.6

**28"x48" CASEMENT**  
SCALE: 3/4" = 1'-0"



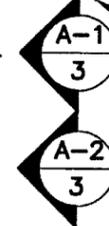
NOTE: UNIT WIDTHS MAY BE UP TO 36" WHEN UNIT HEIGHT IS SHORTER THAN 71". SEE LOAD TABLE FOR ALLOWABLE UNIT SIZES & LOADS.

**ALLOWABLE DESIGN LOADS**  
SEE LOAD TABLES ON SHEET 7



SEE "CORNER ASSEMBLY DETAILS" SHT.6

**28"x72" CASEMENT**  
SCALE: 3/4" = 1'-0"



**GENERAL NOTES**

1. THESE CASEMENT WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE LOAD TABLES ON SHEET 7.
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION
3. BUCKING FASTENERS MAY NOT EXCEED 16" O.C. SPACING AROUND OPENINGS REGARDLESS OF CIRCUMSTANCE.
4. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
5. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH DADE COUNTY PROTOCOLS PA 201, 202 & 203.
6. ALL JAMB TO BUCKING FASTENERS MUST PENETRATE BUCK A MINIMUM OF 1 1/4". IF PENETRATION IS LESS THAN 1 1/4" THEN SCREW LENGTH SHALL INCREASE AS REQUIRED.
7. THESE CASEMENT WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION.
8. THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS PA-201, PA-202 & PA-203 FOR LARGE MISSILE IMPACT, STRUCTURAL & CYCLIC TESTING.

**ALL ELEVATIONS VIEWED FROM EXTERIOR**

**THE DETAILS ON THESE DRAWINGS ARE FOR OPERABLE CASEMENT WINDOWS. FOR STATIONARY CASEMENT WINDOWS SEE DRAWINGS NO. 00013081 & SEPERATE DADE N.O.A. NO. 99-0611.02**

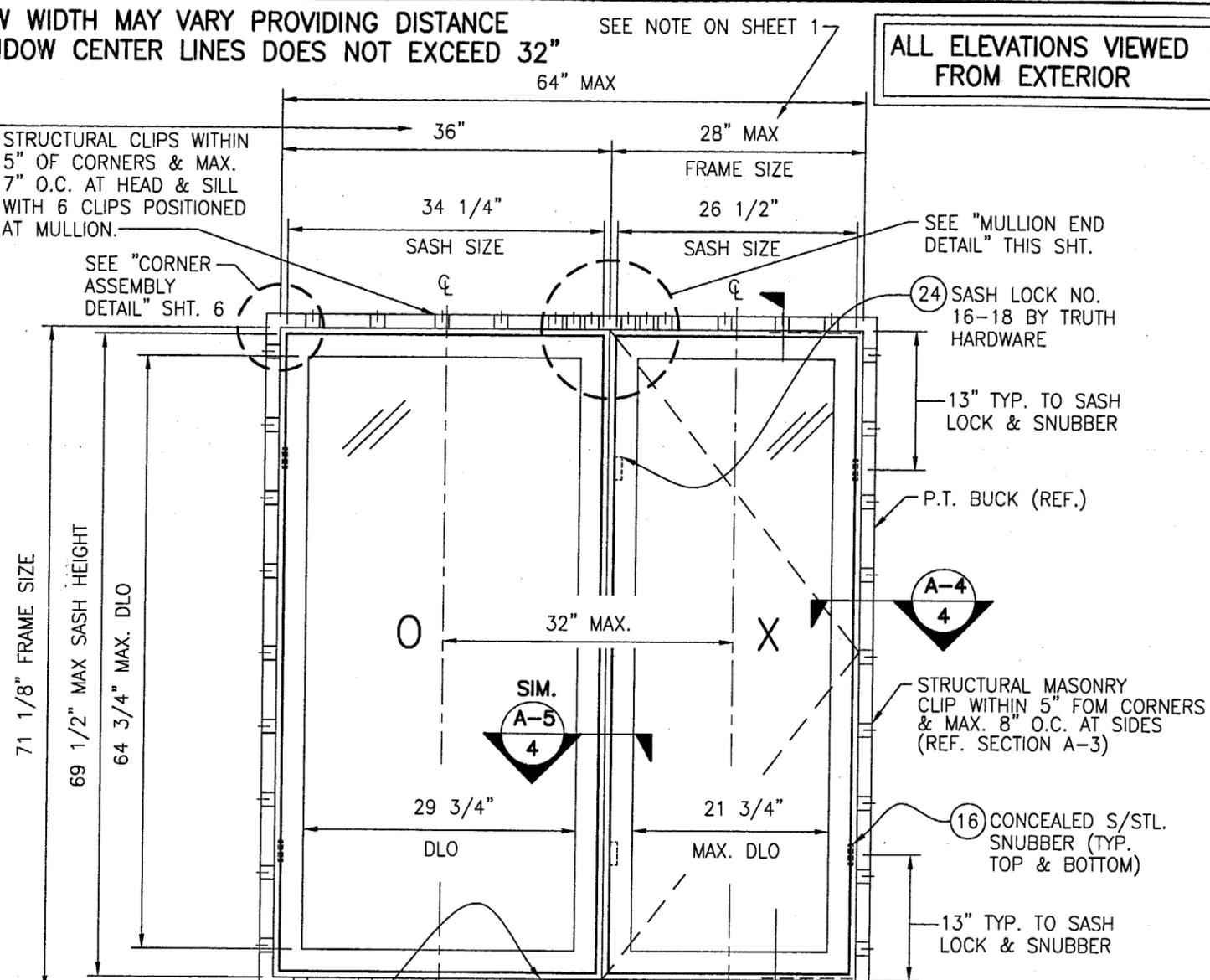
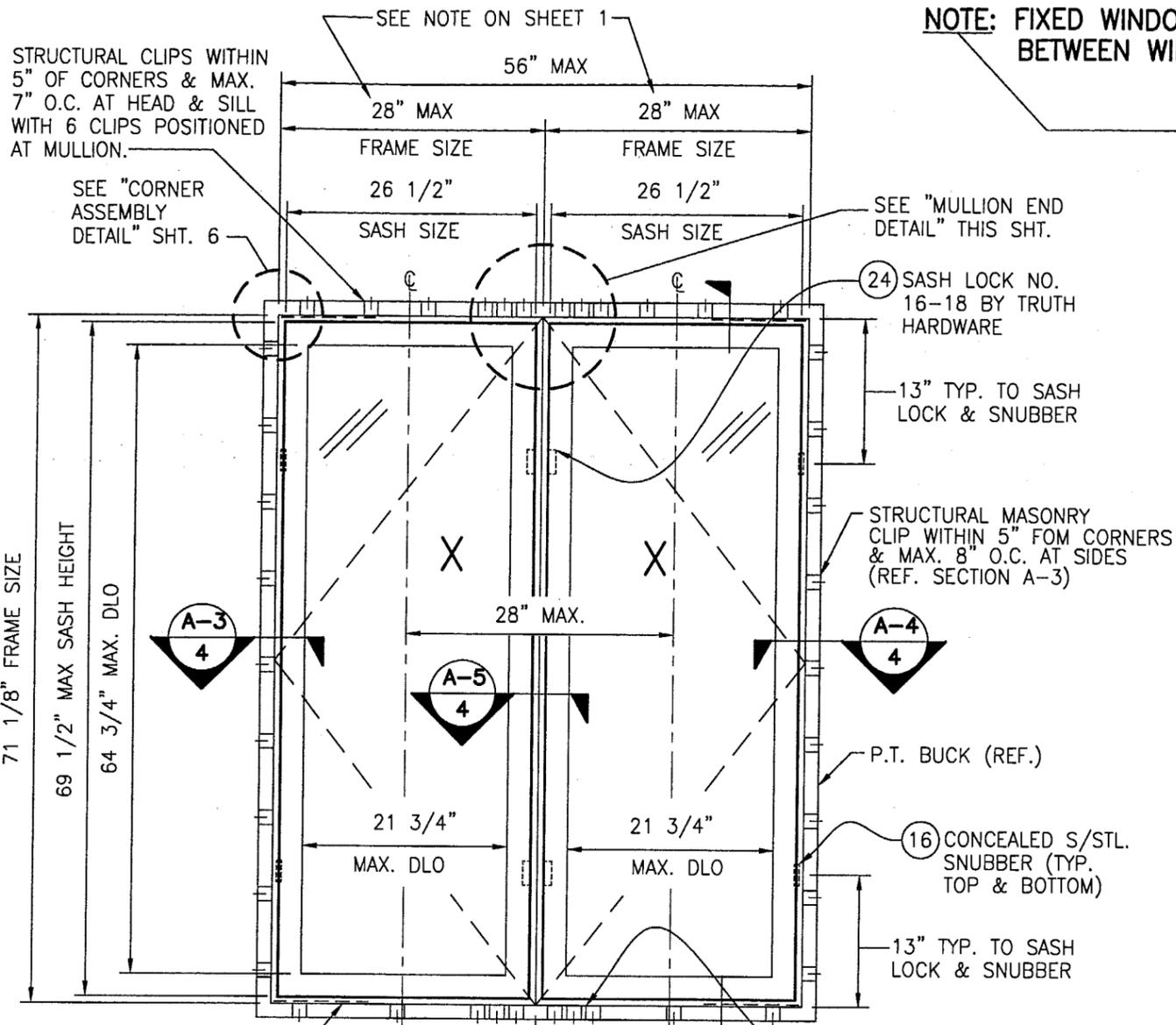
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE October 26, 2000  
BY Manuel J...  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-0327.10

SEP 14 2000  
WARREN W. SCHAEFER, P.E.  
STRUCTURAL ENGINEER  
P.E. No. 44135  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**  
STRUCTURAL CONSULTING ENGINEERS  
600 SANDTREE DRIVE, SUITE 203B  
PALM BEACH GARDENS, FL 33403  
PHONE: 561-775-4902

WOOD PART DIP SPEC  
 DIP  AT MLDR.  IN PROD.  
 NO DIP  
**MARVIN** RESEARCH AND DEVELOPMENT  
BOX 100, WARROAD, MN 56763  
(218) 386-1430 FAX 386-1913  
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP  
PRODUCT: IMPACT HP  
ASSEMBLY  
ELEVATIONS OF DADE-COUNTY QUALIFIED SHAPES  
MATERIAL: N/A  
SIZE: B  
DRAWING NO: 00013081A  
SCALE: NOTED  
DATE: 03/31/99  
DRAWN BY: T.M.H.  
SHEET: 1 OF 8

A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER

**NOTE: FIXED WINDOW WIDTH MAY VARY PROVIDING DISTANCE BETWEEN WINDOW CENTER LINES DOES NOT EXCEED 32"**



**ALL ELEVATIONS VIEWED FROM EXTERIOR**

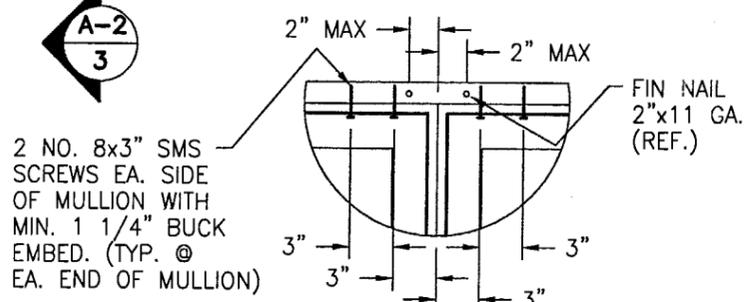
**OPERABLE/OPERABLE CASEMENT**  
SCALE: 3/4" = 1'-0"

**FIXED/OPERABLE CASEMENT**  
SCALE: 3/4" = 1'-0"

**ALLOWABLE DESIGN LOADS**  
SEE LOAD TABLES ON SHEET 7

**ALLOWABLE DESIGN LOADS FOR UNREINFORCED MULLED UNITS IS LIMITED TO +65/-65 PSF.**

THE DETAILS ON THESE DRAWINGS ARE FOR OPERABLE CASEMENT WINDOWS FOR STATIONARY CASEMENT WINDOWS SEE DRAWINGS NO. 00013081 & SEPERATE DADE N.O.A. NO. 99-0611.02



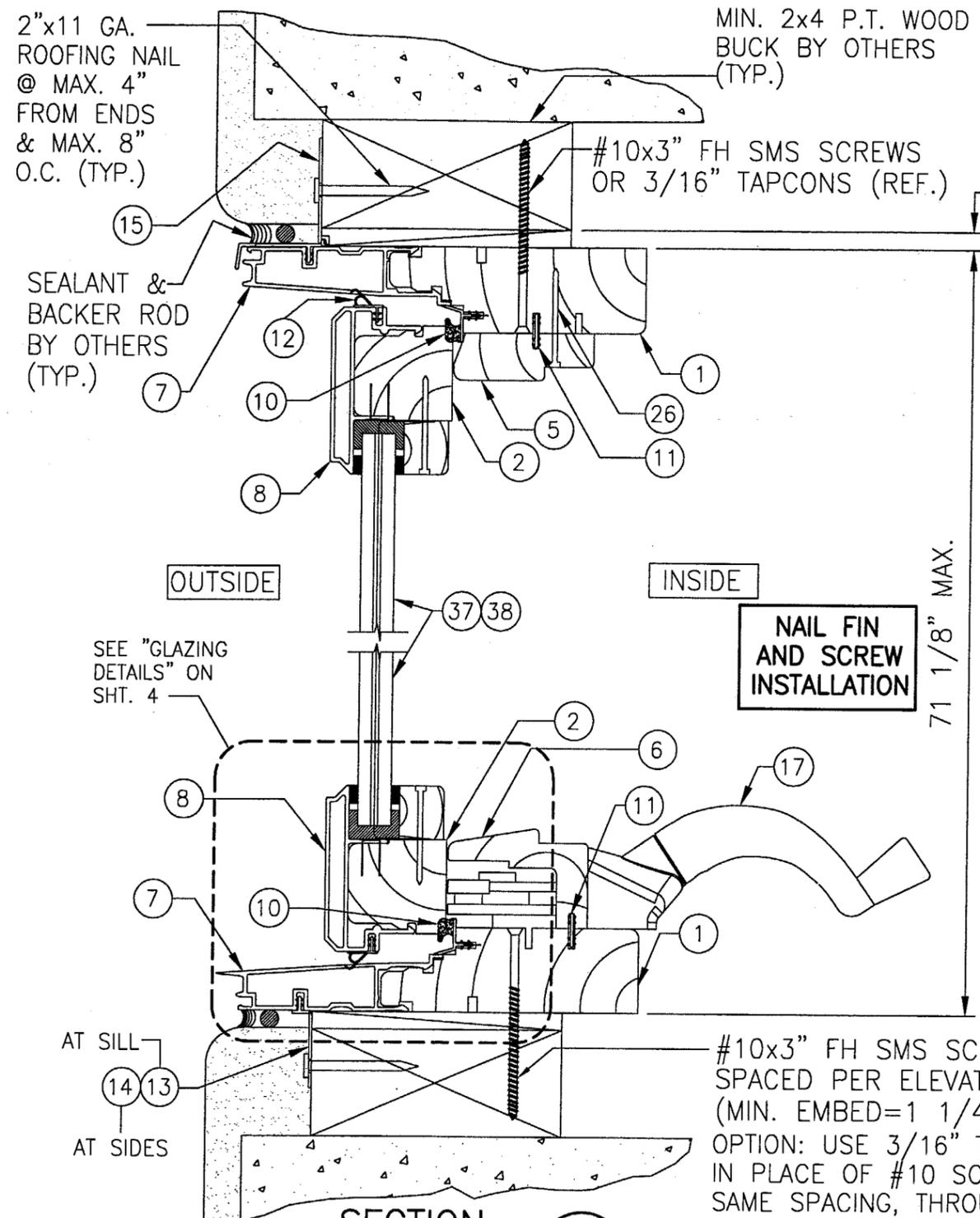
**MULLION END DETAIL FOR FIN MOUNT**

PROVED AS COMPLYING WITH THE FLORIDA BUILDING CODE  
DATE October 26, 2000  
BY Maurice J. ...  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-0327-10

SEP 14 2000  
WARREN W. SCHAEFER, P.E.  
STRUCTURAL ENGINEER  
P.E. No. 44185  
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**  
STRUCTURAL CONSULTING ENGINEERS  
600 SANDTREE DRIVE, SUITE 203B  
PALM BEACH GARDENS, FL 33403  
PHONE: 561-775-4902

WOOD PART DIP SPEC  
 DIP  AT MLDR.  
 NO DIP  IN PROD.  
MARVIN RESEARCH AND DEVELOPMENT  
BOX 100, WARROAD, MN 56763  
(218) 386-1430 FAX 386-1913  
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP  
PRODUCT: IMPACT HP  
ASSEMBLY  
ELEVATIONS OF DADE-COUNTY QUALIFIED SHAPES  
MATERIAL: N/A  
SIZE: B  
DRAWING NO: 00013081A  
SCALE: DATE: NOTED 03/31/99  
DRAWN BY: T.M.H.  
SHEET: 2 OF 8

REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER
A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS

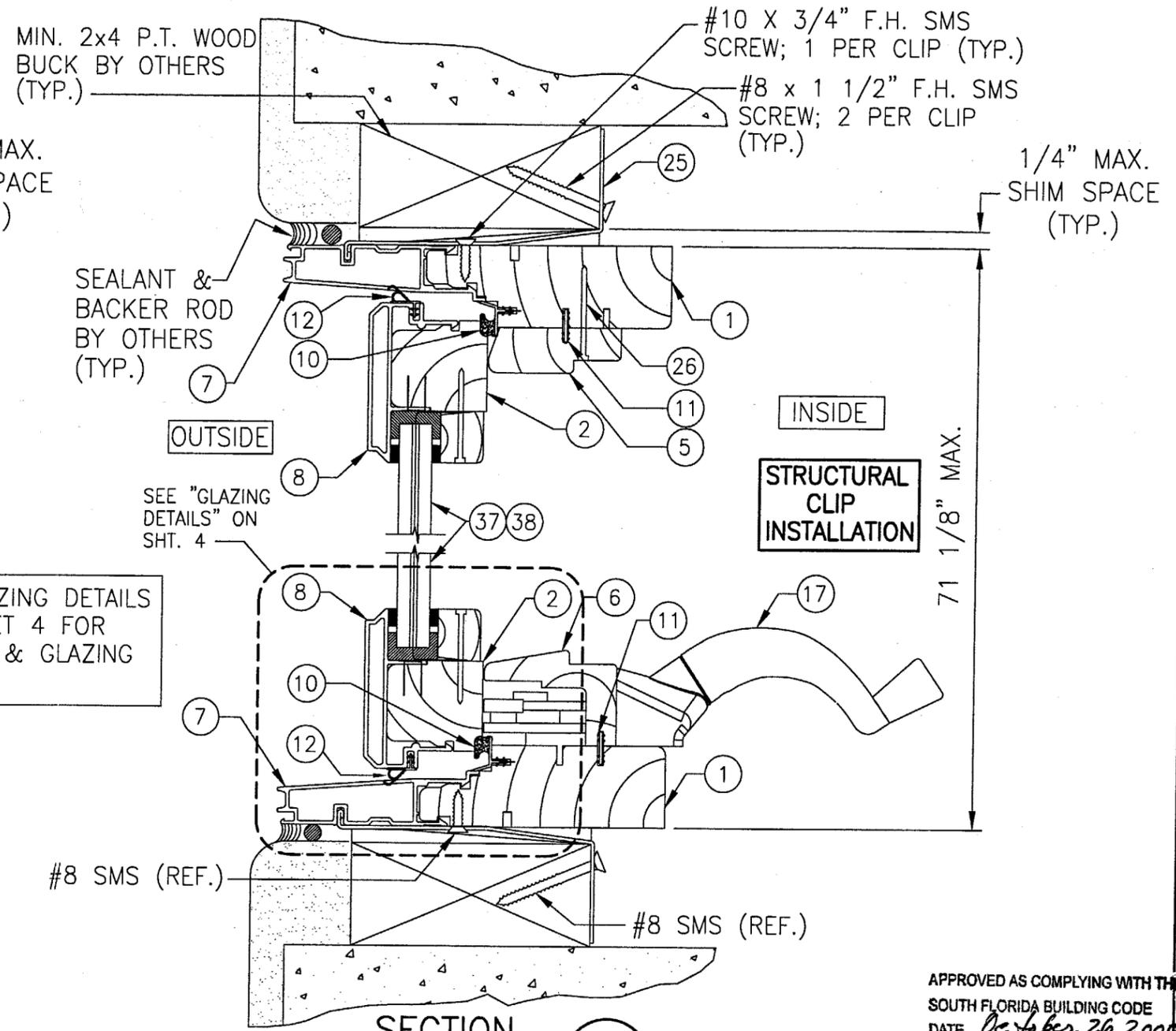


**SECTION A-1**  
SCALE: HALF FULL SIZE

#10x3" FH SMS SCREWS SPACED PER ELEVATIONS. (MIN. EMBED=1 1/4")  
 OPTION: USE 3/16" TAPCONS IN PLACE OF #10 SCREWS, @ SAME SPACING, THROUGH JAMB & INTO BLOCK OR CONCRETE WHEN A SMALLER OR NO BUCK IS SPECIFIED. (MIN. TAPCON EMBED=1 1/4" & MIN. TAPCON EDGE DISTANCE TO BLOCK EDGE=2")

1/4" MAX. SHIM SPACE (TYP.)

SEE GLAZING DETAILS ON SHEET 4 FOR GLAZING & GLAZING STOPS.



**SECTION A-2**  
SCALE: HALF FULL SIZE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE *October 26, 2000*  
 BY *Manuel Juez*  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. *00-0327-10*

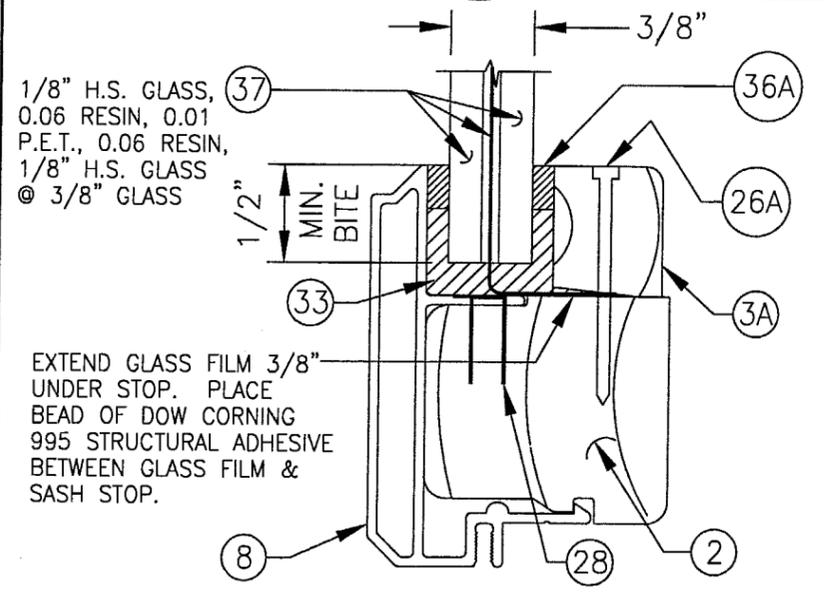
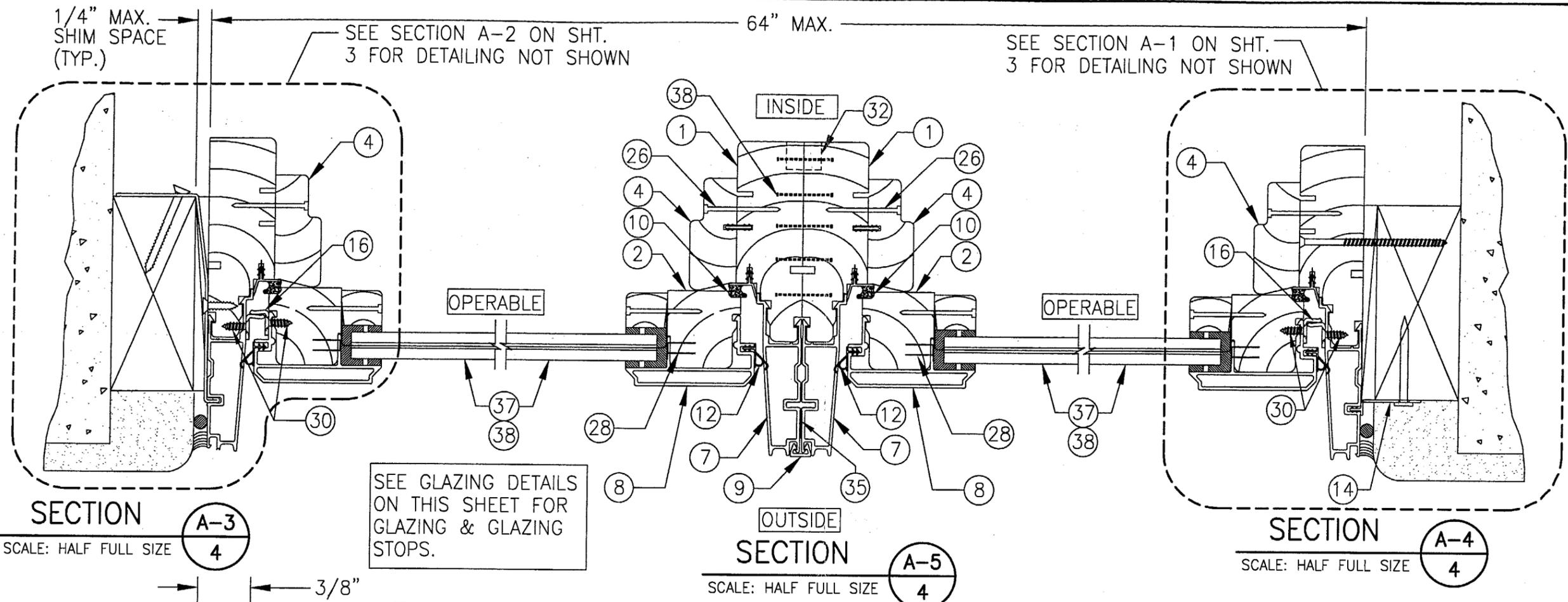
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER
A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS

**SEP 14 2000**

WARREN W. SCHAEFER, P.E.  
 STRUCTURAL ENGINEER  
 P.E. No. 44135

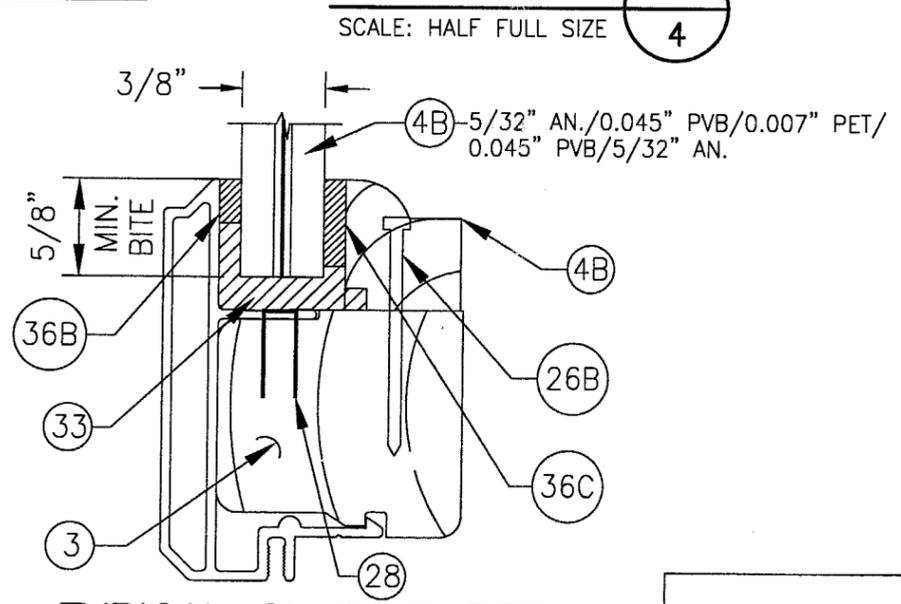
**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**  
 STRUCTURAL CONSULTING ENGINEERS  
 600 SANDTREE DRIVE, SUITE 203B  
 PALM BEACH GARDENS, FL 33403  
 PHONE: 561-775-4902

WOOD PART DIP SPEC <input type="checkbox"/> DIP <input type="checkbox"/> AT MLDR. <input type="checkbox"/> NO DIP <input type="checkbox"/> IN PROD.	<b>MARVIN</b> RESEARCH AND DEVELOPMENT BOX 100, WARROAD, MN 56763 WINDOWS&DOORS. (218) 386-1430 FAX 386-1913
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP PRODUCT: IMPACT HP	ASSEMBLY: CROSS SECTIONS
MATERIAL: N/A	SIZE: B
DRAWING NO: 00013081A	SCALE: DATE: 03/31/99
DRAWN BY: T.M.H.	SHEET: 3 OF 8



**TYPICAL GLAZING DETAIL (GLASS NO. 37)**

SCALE: HALF FULL SIZE  
NEBULA SAFETY-PLUS 7/16" OR 3/8" HEAT STRENGTHENED LAMINATED GLASS



**TYPICAL GLAZING DETAIL (GLASS 38)**

SCALE: FULL SIZE  
CARDINAL SEA-STORM 3/8" LAMINATED ANNEALED GLASS

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE October 26, 2000  
BY Manuel Sig  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-0327-10

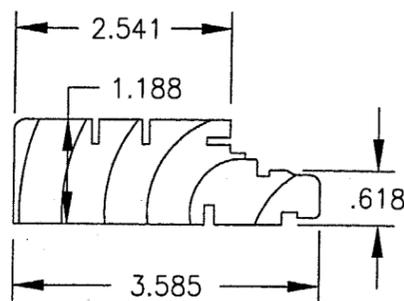
SEP 14 2000

WARREN W. SCHAEFER, P.E.  
STRUCTURAL ENGINEER  
P.E. No. 44135

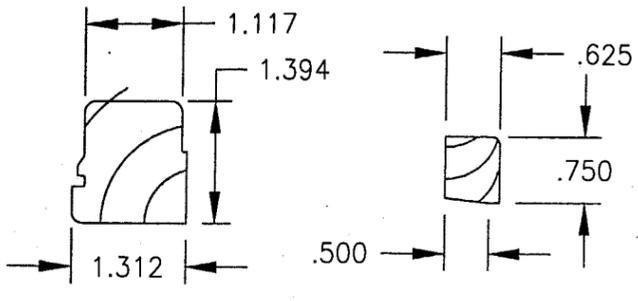
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.  
STRUCTURAL CONSULTING ENGINEERS  
600 SANDTREE DRIVE, SUITE 203B  
PALM BEACH GARDENS, FL 33403  
PHONE: 561-775-4902

WOOD PART DIP SPEC		MARVIN RESEARCH AND DEVELOPMENT	
<input type="checkbox"/> DIP	<input type="checkbox"/> AT MLDR.	BOX 100, WARROAD, MN 56763	
<input type="checkbox"/> NO DIP	<input type="checkbox"/> IN PROD.	WINDOWS & DOORS. (218) 386-1430 FAX 386-1913	
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP		PRODUCT: IMPACT HP	
ASSEMBLY: MULLION-CROSS SECTION & GLASS DETAIL			
MATERIAL: N/A	SIZE: B	DRAWING NO: 00013081A	
SCALE: NOTED	DATE: 03/31/99	DRAWN BY: T.M.H.	SHEET: 4 OF 8

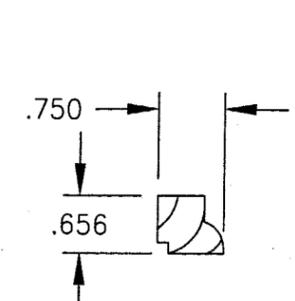
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER
A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS



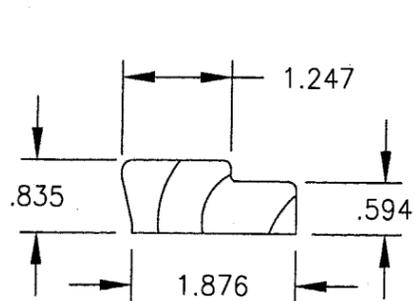
① **WOOD FRAME**  
SUGAR OR PONDEROSA  
PINE G=0.04



② **WOOD SASH**  
SUGAR OR PONDEROSA  
PINE G=0.04

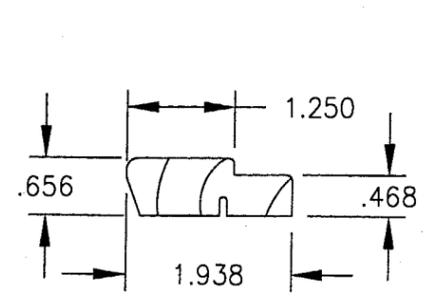


③A **GLAZING STOP**  
SUGAR OR PONDEROSA  
PINE G=0.04

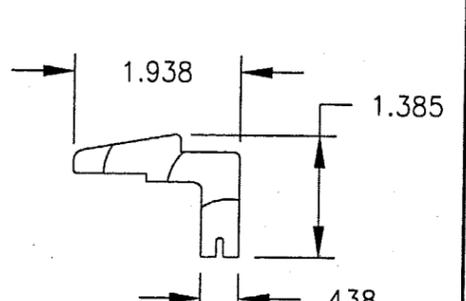


③B **GLAZING STOP**  
SUGAR OR PONDEROSA  
PINE G=0.04

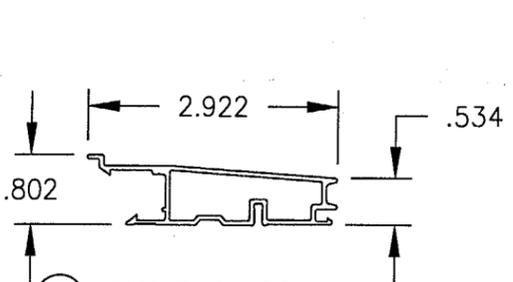
④ **JAMB SIDE STOP**  
SUGAR OR PONDEROSA  
PINE G=0.04



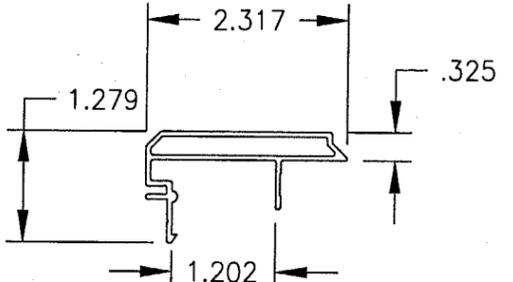
⑤ **HEAD JAMB SIDE STOP**  
SUGAR OR PONDEROSA  
PINE G=0.04



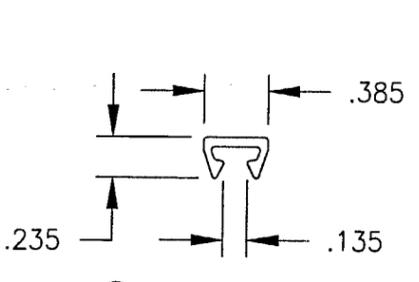
⑥ **HARDWARE COVER**  
SUGAR OR PONDEROSA  
PINE G=0.04



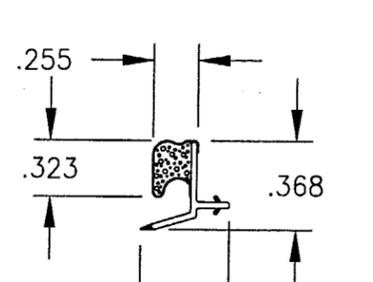
⑦ **FRAME CLADDING**  
6063-T5



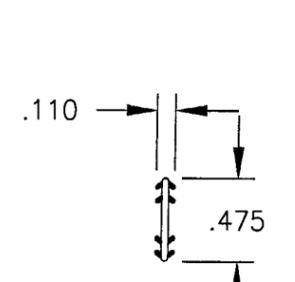
⑧ **SASH CLADDING**  
6063-T5



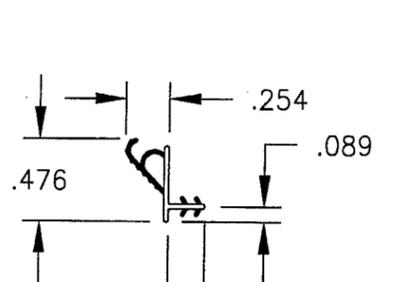
⑨ **MULL CLIP**  
6063-T5



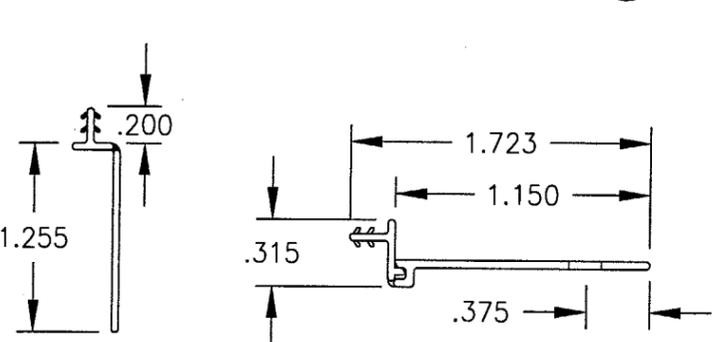
⑩ **VINYL FRAME WEATHERSTRIP**



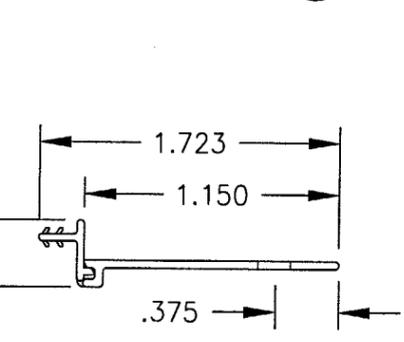
⑪ **CONNECTING BARB**  
PVC & GEON C70a0



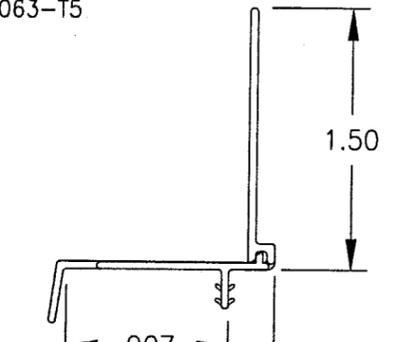
⑫ **VINYL SASH WEATHERSTRIP**



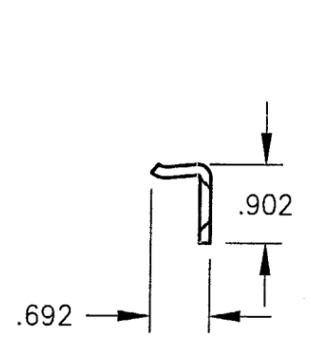
⑬ **SILL NAILING FIN**  
VINYL



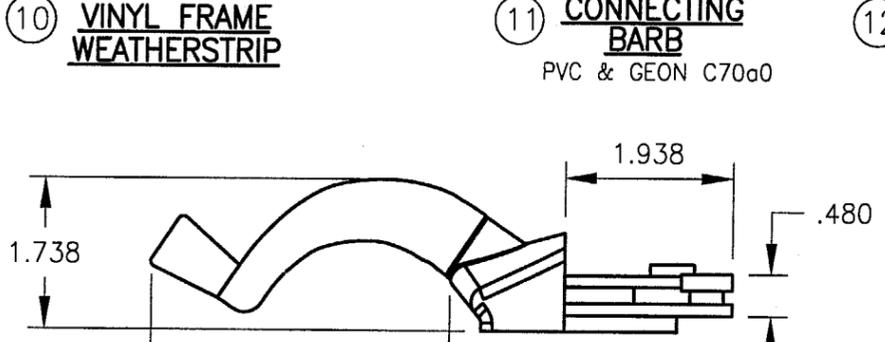
⑭ **JAMB NAILING FIN**  
VINYL



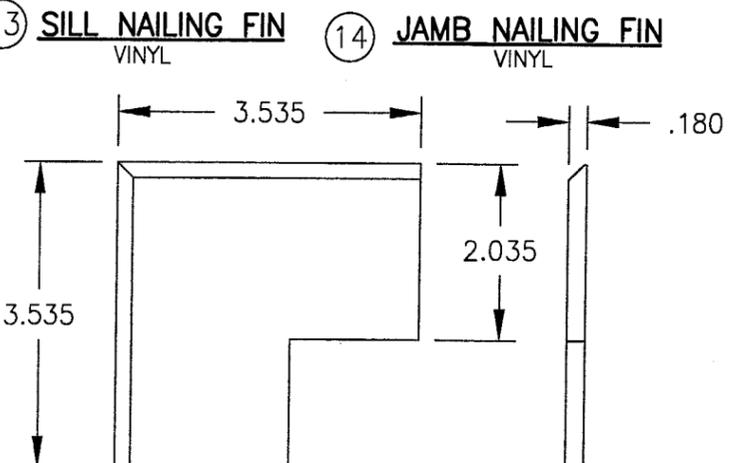
⑮ **DRIP CAP NAILING FIN**  
VINYL



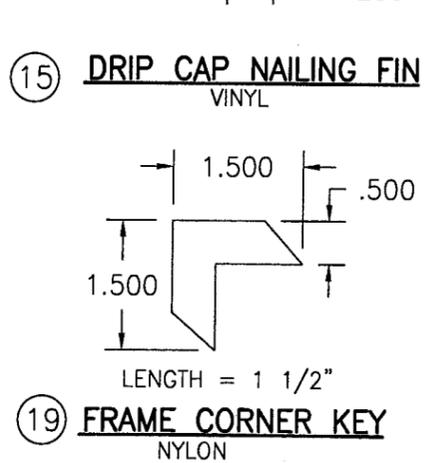
⑯ **SASH SNUBBER**  
STAINLESS STEEL



⑰ **OPERATOR WITH HANDLE**



⑱ **SASH CORNER KEY**  
NYLON



⑲ **FRAME CORNER KEY**  
NYLON

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE *December 26, 2000*  
BY *Manuel Ruiz*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. *00-0329.10*

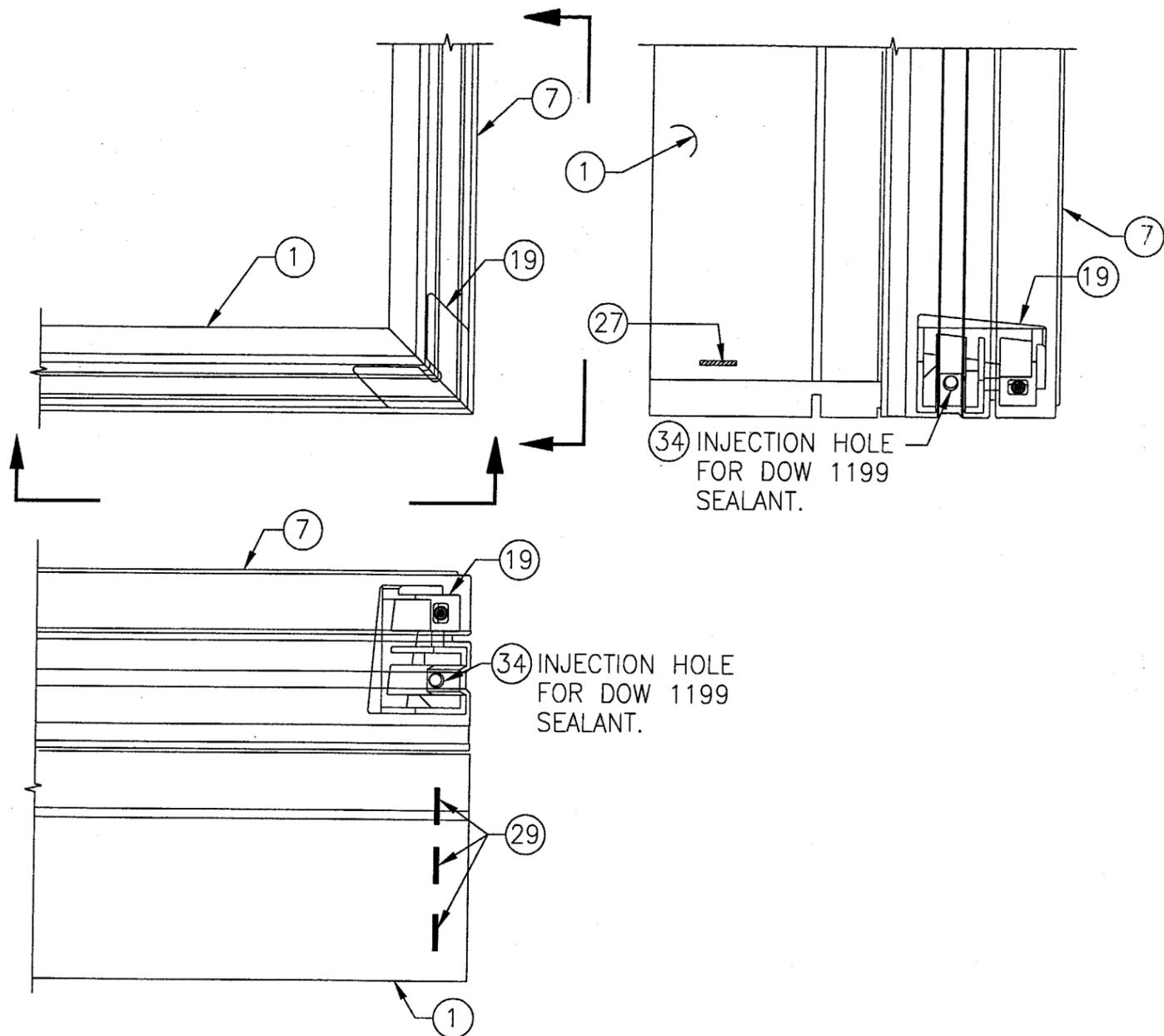
SEP 14 2000

*Warren W. Schaefer*  
WARREN W. SCHAEFER, P.E.  
STRUCTURAL ENGINEER  
P.E. No. 44135

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

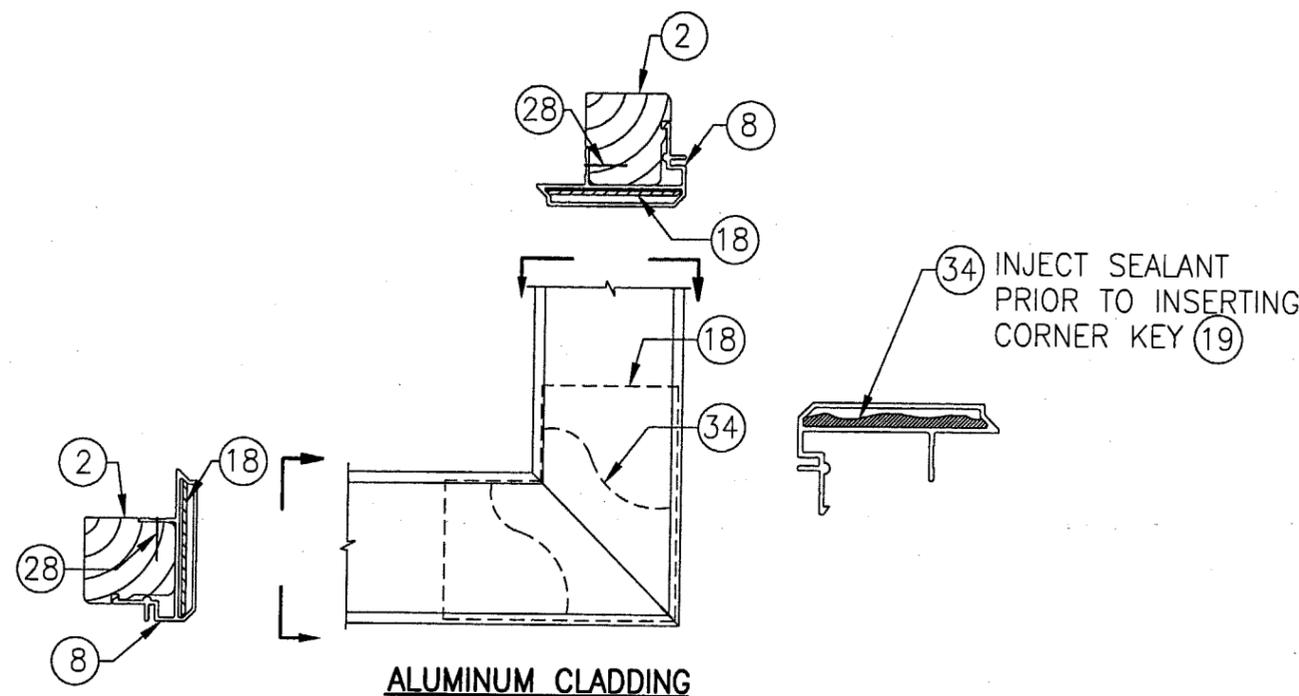
WOOD PART DIP SPEC		MARVIN RESEARCH AND DEVELOPMENT	
<input type="checkbox"/> DIP	<input type="checkbox"/> AT MLDR.	BOX 100, WARROAD, MN 56763	
<input type="checkbox"/> NO DIP	<input type="checkbox"/> IN PROD.	WINDOWS&DOORS. (218) 386-1430 FAX 386-1913	
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP		PRODUCT: IMPACT HP	
ASSEMBLY: PARTS & EXTRUSIONS			
MATERIAL: N/A	SIZE: B	DRAWING NO: 00013081A	
SCALE: 1:2	DATE: 03/31/99	DRAWN BY: T.M.H.	SHEET: 5 OF 8

REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER
A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS

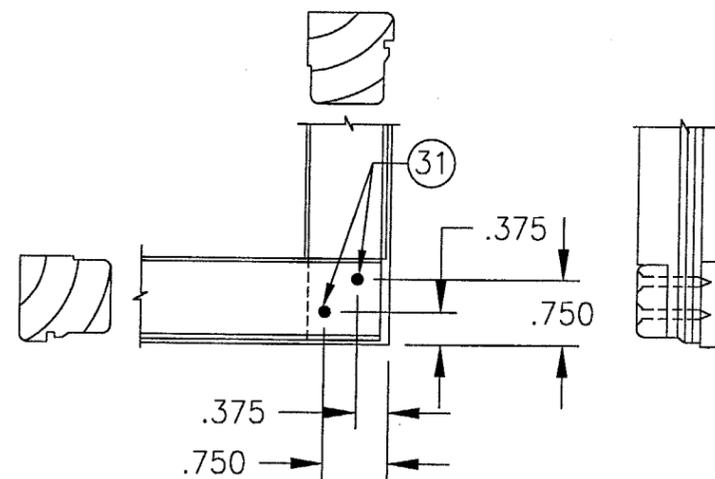


**FRAME CORNER ASSEMBLY**

SCALE: HALF FULL SIZE



**ALUMINUM CLADDING**



**WOOD SASH**

**SASH CORNER ASSEMBLY**

SCALE: HALF FULL SIZE

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE October 26, 2000  
BY Maunuluz  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-0327.10

A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER

<b>SEP 14 2000</b>   WARREN W. SCHAEFER, P.E. STRUCTURAL ENGINEER P.E. No. 44135	WOOD PART DIP SPEC <input type="checkbox"/> DIP <input type="checkbox"/> AT MLDR. <input type="checkbox"/> NO DIP <input type="checkbox"/> IN PROD.	<b>MARVIN</b> RESEARCH AND DEVELOPMENT BOX 100, WARROAD, MN 56763 WINDOWS&DOORS. (218) 386-1430 FAX 386-1913
	PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP PRODUCT: IMPACT HP	
ASSEMBLY: CORNER ASSEMBLY DETAILS		
MATERIAL: N/A	SIZE: B DRAWING NO: 00013081A	SCALE: DATE: DRAWN BY: SHEET: NOTED 03/31/99 T.M.H. 6 of 8
<b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> STRUCTURAL CONSULTING ENGINEERS 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902		

DESIGN LOAD CAPACITY-PSF			
WINDOW DIMENSIONS		GLASS NO. 37 & 38	
WIDTH	HEIGHT	POSITIVE	NEGATIVE
20"	32"	75	75
24"		75	75
28"		75	75
32"		75	75
36"		75	75
20"	36"	75	75
24"		75	75
28"		75	75
32"		75	75
36"		75	75
20"	40"	75	75
24"		75	75
28"		75	75
32"		75	75
36"		65	65
20"	44"	75	75
24"		75	75
28"		75	75
32"		65	65
36"		65	65
20"	48"	75	75
24"		75	75
28"		75	75
32"		65	65
36"		65	65

DESIGN LOAD CAPACITY-PSF			
WINDOW DIMENSIONS		GLASS NO. 37 & 38	
WIDTH	HEIGHT	POSITIVE	NEGATIVE
20"	52"	65	65
24"		65	65
28"		65	65
32"		65	65
36"		65	65
20"	56"	65	65
24"		65	65
28"		65	65
32"		65	65
36"		-	-
20"	60"	65	65
24"		65	65
28"		65	65
32"		65	65
36"		-	-
20"	64"	65	65
24"		65	65
28"		65	65
32"		-	-
36"		-	-
20"	68"	65	65
24"		65	65
28"		65	65
32"		-	-
36"		-	-
20"	72"	65	65
24"		65	65
28"		65	65
32"		-	-
36"		-	-

GLASS NO. 37 = NEBULA SAFETY PLUS 3/8"  
 LAMINATED HEAT STRENGTHENED GLASS  
 GLASS NO. 38 = CARDINAL SEA-STORM 3/8"  
 LAMINATED ANNEALED GLASS

NOTE: ALL UNREINFORCED JAMB TO JAMB COMBINED UNITS ARE LIMITED TO  
 +/-65 PSF ALLOWABLE DESIGN PRESSURE AS CONTROLLED BY TESTING.

APPROVED AS COMPLYING WITH THE  
 SOUTH FLORIDA BUILDING CODE  
 DATE October 26, 2000  
 BY Manuel Juez  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 00-0327-10

A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER

<b>SEP 14 2000</b>  WARREN W. SCHAEFER, P.E. STRUCTURAL ENGINEER P.E. No. 44135	WOOD PART DIP SPEC <input type="checkbox"/> DIP <input type="checkbox"/> AT MLDR. <input type="checkbox"/> NO DIP <input type="checkbox"/> IN PROD.		<b>MARVIN</b> RESEARCH AND DEVELOPMENT BOX 100, WARROAD, MN 56763 WINDOWS&DOORS. (218) 386-1430 FAX 386-1913	
	PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP PRODUCT: MPACT HP			
ASSEMBLY: LOAD CAPACITY CHARTS				
MATERIAL: N/A		SIZE: B		
DRAWING NO: 00013081A		SCALE: FULL		
DATE: 03/31/99		DRAWN BY: T.M.H.		
SHEET: 7 OF 8				

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

## MATERIAL LIST

PART NO.	REFERENCE NO.	DESCRIPTION	NOTES
<b>PARTS &amp; EXTRUSIONS</b>			
1	W1994	3.585"x 1.188" WOOD JAMB	
2	W3707	1.312"x1.394" WOOD SASH	
3A	W4002	0.750"x0.625" WOOD GLAZING STOP	USED WITH GLASS NO. 37
3B	--	0.750"x0.656" WOOD GLAZING STOP	USED WITH GLASS NO. 38
4	W2068	1.86"x0.835" JAMB SIDE STOP	
5	W7016	1.938"x0.656" HEAD JAMB STOP	
6	W7018	HARDWARE COVER	
7	A323	ALUMINUM FRAME CLADDING	ALUMINUM (6063-T5)
8	A209	ALUMINUM SASH CLADDING	ALUMINUM (6063-T5)
9	A104	MULLION CLIP	ALUMINUM (6063-T5) FULL LENGTH OF MULLION
10	V138	VINYL FRAME WEATHERSTRIP	BY AMSBURY
11	V803	0.110" x 0.475" CONNECTING BARB	PVC & GEON C70a0
12	V195	SASH WEATHERSTRIP	BY INTEK
13	V084	VINYL SILL NAILING FIN	BY AMES
14	V104	VINYL JAMB NAILING FIN	BY AMES
15	V114	VINYL DRIP CAP NAILING FIN	BY AMES
16	--	CONCEALED SASH SNUBBER	STAINLESS STEEL (2 EA. WINDOW; EA. PLACED 13" FROM TOP & BOTTOM OF FRAME)
17	--	OPERATOR WITH HANDLE	TRUTH-SERIES 15 DUAL ARM OPERATOR MW ZINC HANDLE MW PLASTIC HARDWARE COVER
18	--	3 1/2"x3 1/2"x3/16" CORNER KEY	NYLON; AT ALL MITERED CORNERS OF SASH
19	--	1 1/2"x1 1/2"x1/2" CORNER KEY	NYLON; AT ALL MITERED CORNERS OF FRAME
20	31359	TRUTH - KEEPER	STAINLESS STEEL
21	30706	SASH OPERATOR TRACK	STAINLESS STEEL
22	205450	TRUTH - STUD BRACKET	STAINLESS STEEL
23	--	SASH HINGE, TRUTH - #14-75	10" LONG TRACK & ARM WITH STAINLESS STEEL INSERT INSIDE DELRIN SLIDE SHOE WITH A BRASS POST AND LOCKING SNAP RING
24	--	SASH LOCK	TRUTH - #16-18 (2 EA. WINDOW; EA PLACED 13" FROM TOP & BOTTOM OF FRAME) SECURE KEEPERS TO JAMB WITH 2 NO. 8 X 1 1/4" SMS. SECURE CAM LOCKS TO SASH WITH 2 NO. 8 X 1 1/2" SMS.
25	11860012-3	6.5"-10.5" LONG, STRUCTURAL MASONRY CLIP	690 LOCFORM GALV. STEEL BY WABINICA, INC. LOCATED 3" FOM CORNERS & 8" O.C.

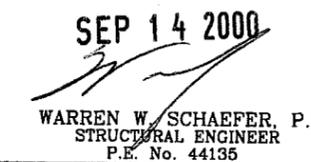
## MATERIAL LIST

PART NO.	REFERENCE NO.	DESCRIPTION	NOTES
<b>FASTENERS</b>			
26A	11892207	F-14 x 1.375" BRAD NAIL	2" FROM CORNERS & MAX. 5" O.C.
26B	--	F-18 x 1.125" BRAD NAIL	3" FROM CORNERS & MAX. 8" O.C.
27	--	GS14 x 2.25" STAPLE	1 PER JAMB CORNER
28	--	GNS-18 x 0.500" STAPLE	2" FROM CORNERS & MAX. 6" O.C. FASTENING CLADDING TO SASH
29	--	GS16 x 2.00" STAPLE	3 PER FRAME (JAMB) CORNER.
30	--	#8 x 1/2" F.H. SMS SCREW	2 PER SNUBBER
31	--	#8 x 1 1/4" F.H. SMS SCREW	2 AT EA. SASH CORNER
32	11820012	5/8" x 1/2" CORRUGATED STEEL FASTENER	FASTENES INTERIOR SIDE OF JAMBS TOGETHER @ JAMB TO JAMB MULLION. 3 @ EA. END & MAX. 16" O.C.
<b>SEALANTS</b>			
33	--	DOW 995 SILICON SEALANT	BY DOW CORNING
34	--	DOW 1199 SILICON SEALANT	CORNER INJECTION SEALANT; DOW CORNING
35	00003991	.063" x .500 FOAM TAPE	@ MULLED UNITS; BY 3M (FULL LENGTH)
36A	--	.0625" x .375" GLAZING TAPE	POLYOLEFIN FOAM W/ ACRYLIC ADHESIVE
36B	--	.0625" x .25" GLAZING TAPE	POLYOLEFIN FOAM W/ ACRYLIC ADHESIVE
36C	--	.0625" x .5" GLAZING TAPE	POLYOLEFIN FOAM W/ ACRYLIC ADHESIVE
<b>OTHER</b>			
37	--	3/8" HEAT STRENGTHENED LAMINATED GLASS	NEBULA SAFETY-PLUS LAMINATED GLASS (1/8" HEAT STRENGTH/0.06" RESIN/0.01 P.E.T./0.06" RESIN/ 1/8" HEAT STRENGTH)
38	--	3/8" ANNELAED LAMINATED GLASS	CARCINAL SEA-STORM LAMINATED GLASS 5/32" AN./0.045" PVB/0.007" PET/ 0.045" PVB/5/32" AN.

NOTE: 1. ALL WOOD USED WITH TESTED UNITS IS PONDEROSA OR SUGAR PINE.  
ALTERNATIVE WOOD SPECIES TO PINE:

1. MAHOGANY
2. OAK
3. CHERRY
4. CYPRUS
5. DOUGLAS FIR

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE October 26, 2000  
BY Manuel...  
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BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-0327-10

 SEP 14 2000 WARREN W. SCHAEFER, P.E. STRUCTURAL ENGINEER P.E. No. 44135	WOOD PART DIP SPEC <input type="checkbox"/> DIP <input type="checkbox"/> AT MLDR. <input type="checkbox"/> NO DIP <input type="checkbox"/> IN PROD.	<b>MARVIN</b> RESEARCH AND DEVELOPMENT BOX 100, WARROAD, MN 56763 WINDOWS&DOORS. (218) 386-1430 FAX 386-1913
PRODUCT LINE: CLAD CASEMASTER OPERATOR IMPACT HP PRODUCT: MPACT HP		ASSEMBLY: MATERIAL LIST
MATERIAL: N/A	SIZE: B	DRAWING NO: 00013081A
SCALE: 1:1	DATE: 03/31/99	DRAWN BY: T.M.H.
		SHEET: 8 OF 8

A1	ADDED CARDINAL SEA-STORM GLASS		09/14/00	WWS
REV#	DESCRIPTION / REQUESTER	ECN NO	DATE	DRAFTER