



**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)

**EFCO Corporation
P.O. Box 609
1000 County Road
Monett MO 65708**

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 "810-I" Aluminum Fixed Window

APPROVAL DOCUMENT: Drawing No. 1080, titled "Series 810-1 Small & Large Missile Impact Fixed Window", Sheets 1 through 4 of 4, dated 12/28/01, 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

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 as well as approval document mentioned above.

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



**NOA No 02-0410.04
Expiration Date: November 7, 2007
Approval Date: November 7, 2002**

EFCO Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA)

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **1080**, titled "Series 810-I Small & Large Missile Impact Fixed Window", sheets 1 through 4 of 4, dated 12/28/01, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

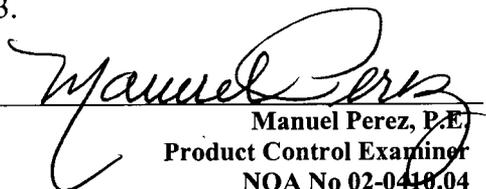
1. Test reports on 1) Uniform Static Air Pressure Test, Loading per SFBCPA 202-94
2) Large Missile Impact Test per SFBC, PA 201-94
3) Cyclic Wind Pressure Loading per SFBC, PA 203-94
along with marked-up drawings and installation diagram of an aluminum fixed window (spec.#7), prepared by Hurricane Test Laboratory, Test Report No. **0046-1116-01**, dated 11/26/01, signed and sealed by Vinu J. Abraham, P.E.
2. 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 202-94
along with marked-up drawings and installation diagram of an aluminum fixed window (spec. #1,2,3,4,5,7) prepared by Hurricane Test Laboratory, Test Report No. **0046-0101-02**, dated 12/26/01, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS

1. Anchor Calculations and structural analysis, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 2/20/02, signed and sealed by Warren W. Schaefer, P.E.

D. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **98-0728.05** issued to Solutia, Inc. for "Saflex IIIG PVB Polyvinyl butryal interlayer" dated 8/27/98, expiring on 5/21/01.
2. Notice of Acceptance No. **98-0608.03** issued to E.I. DuPont DeNemours for "Sentry Glass Plus" dated 1/14/99, expiring on 1/14/02.
3. Notice of Acceptance No. **00-0524.06** issued to Nebula Glass International, Inc. for "Glasslam Safety-Plus Laminated Glass" dated 9/21/00, expiring on 9/9/03.
4. Notice of Acceptance No. **99-1227.02** issued to Solutia, Inc. for "Saflex HP" dated 4/14/00, expiring on 4/14/03.
5. Notice of Acceptance No. **00-0509.06** issued to Viracon, Inc. for "StormGuard (laminate)" dated 1/25/01, expiring on 4/14/03.


Manuel Perez, P.E.
Product Control Examiner
NOA No 02-0418.04
Expiration Date: November 7, 2007
Approval Date: November 7, 2002

EFCO Corporation

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(For File ONLY. Not part of NOA)

6. Test report No. **ATI-01-42376.01** , prepared by Architectural Testing, Inc., dated 08/29/02, issued to EFCO Corporation, for their Insul-Bar Thermal Barrier plastic per ASTM E-D635-98 "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position" and ASTM D2843-99 "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", signed and sealed by Allen N. Reeves, P.E.
7. Test report No. **SGS-170336** , prepared by SGS U.S. Testing Company Inc., dated 08/21/02, issued to Architectural Testing Inc. for EFCO Corporation's Insul-Bar Thermal Barrier plastic per ASTM D2843-99 "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", signed and sealed by Piyush Shah.
8. Test report No. **ATI-01-42376.02** , prepared by Architectural Testing, Inc., dated 10/01/02, issued to EFCO Corporation, for their Insul-Bar Thermal Barrier plastic per ASTM E-D1929-96 "Standard Test Method for Determining Ignition Temperature of Plastics", signed and sealed by Allen N. Reeves, P.E.

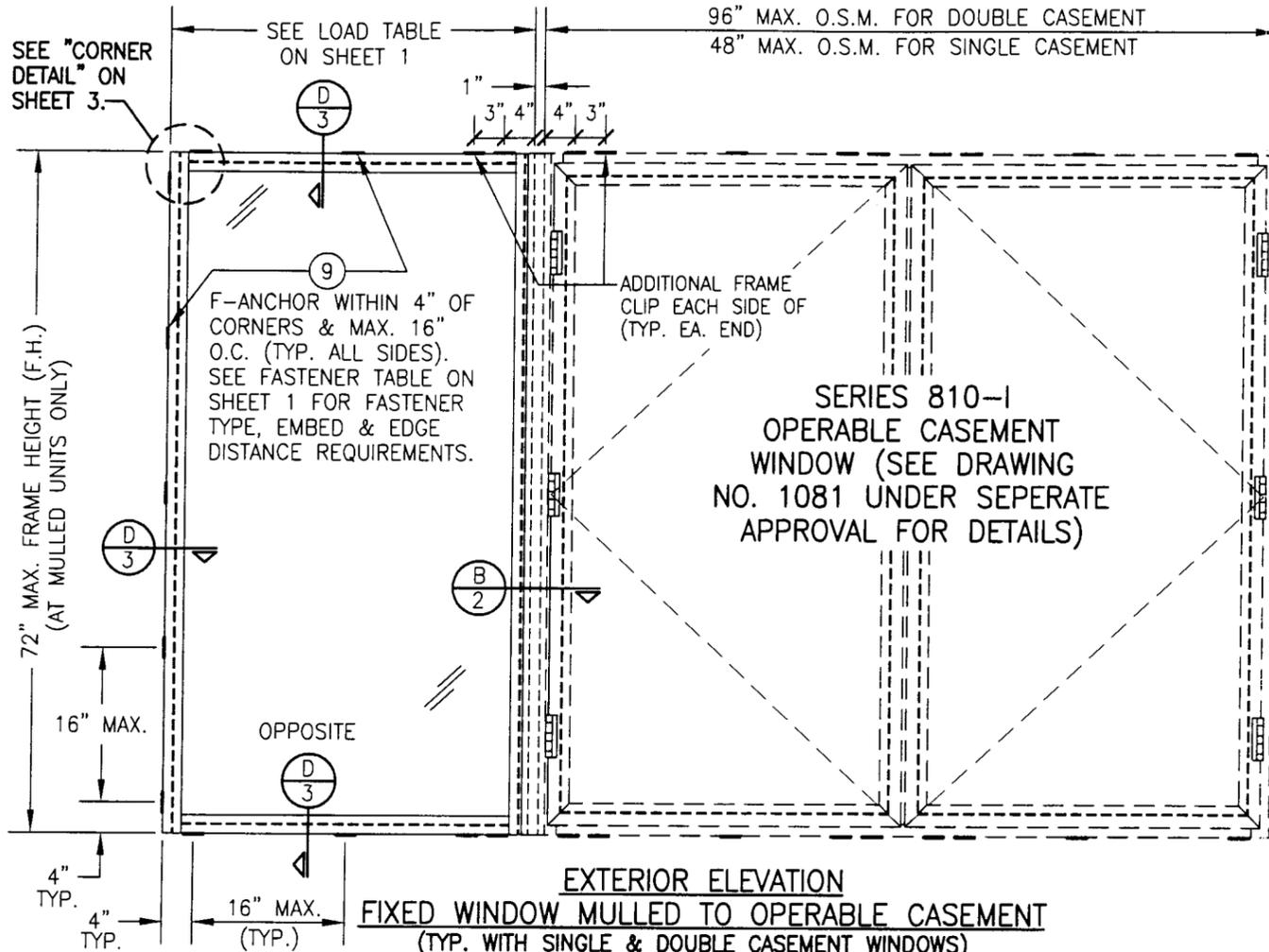
E. STATEMENTS

1. Statement letter of conformance, dated 3/12/02, signed and sealed by Warren Schaefer, P.E.
2. Statement letter of no financial interest, dated 3/13/02, signed and sealed by Warren Schaefer, P.E.
3. Laboratory compliance letter for Test Report no. HTL01085 issued by Hurricane Test Laboratory, dated 3/15/02, signed and sealed by Vinu J. Abraham, P.E.

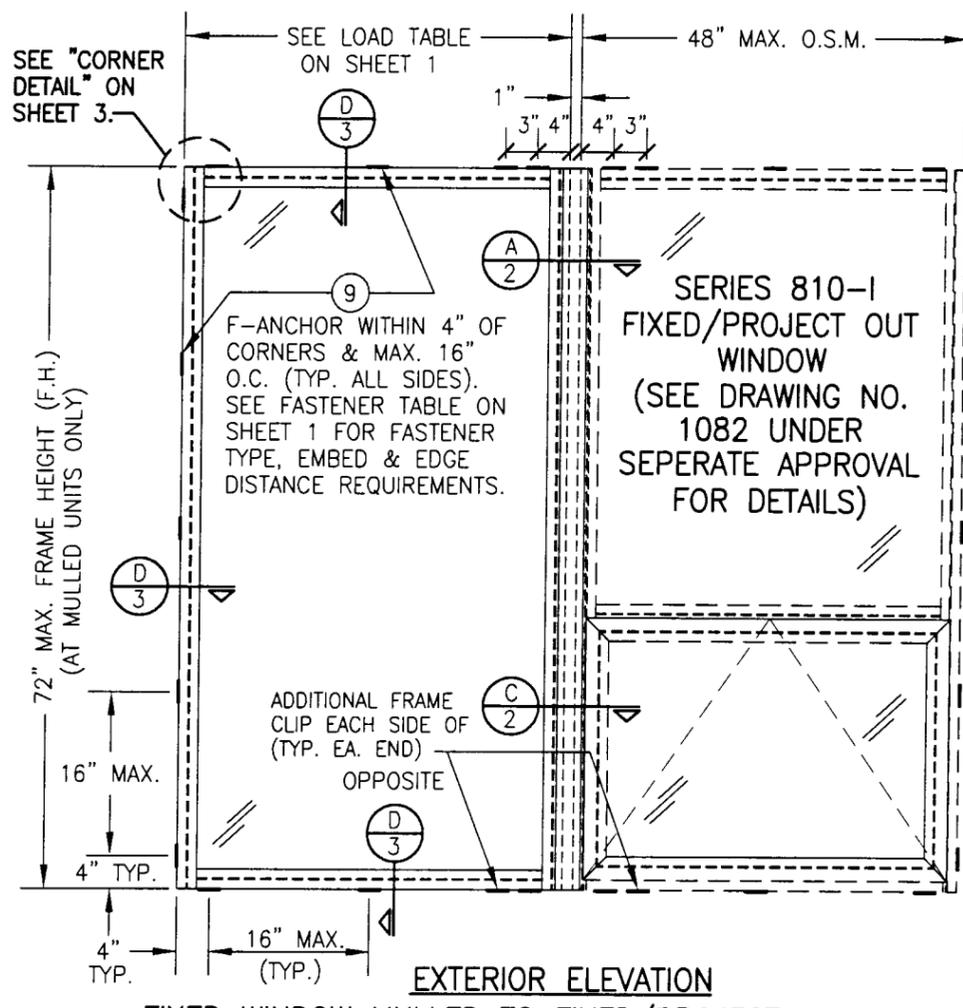
F. OTHER

1. Letter from San Martin Associates, Inc.

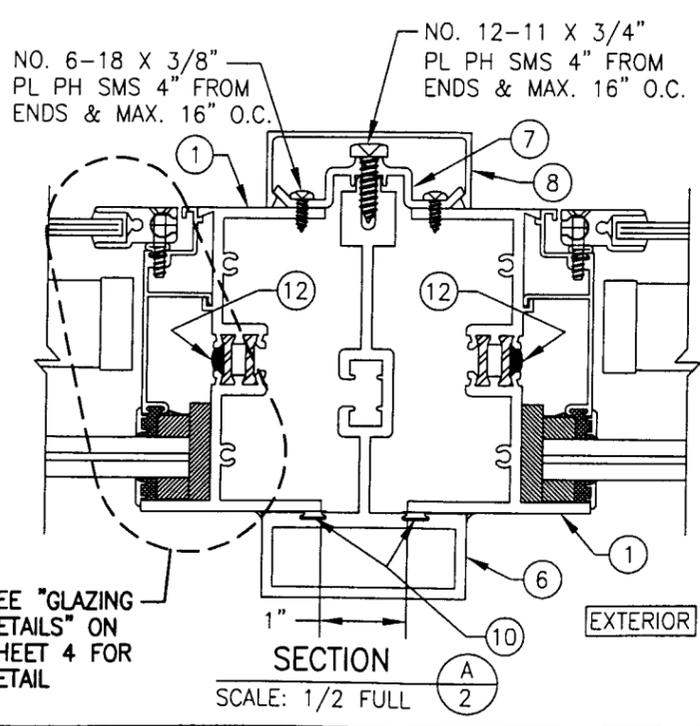

Manuel Perez, P.E.
Product Control Examiner
NOA No 02-0410-04
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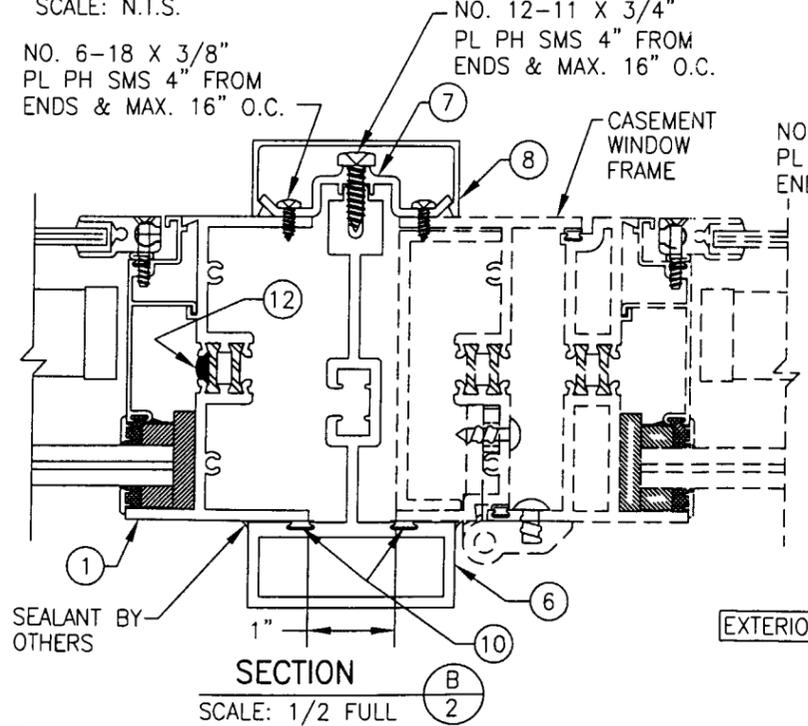
EXTERIOR ELEVATION
FIXED WINDOW MULLED TO OPERABLE CASEMENT
 (TYP. WITH SINGLE & DOUBLE CASEMENT WINDOWS)
 (MORE THAN 2 WINDOWS MAY BE STACKED HORIZONTALLY)
 SEE SINGLE WINDOW ELEVATION FOR FIXED WINDOW DETAILS



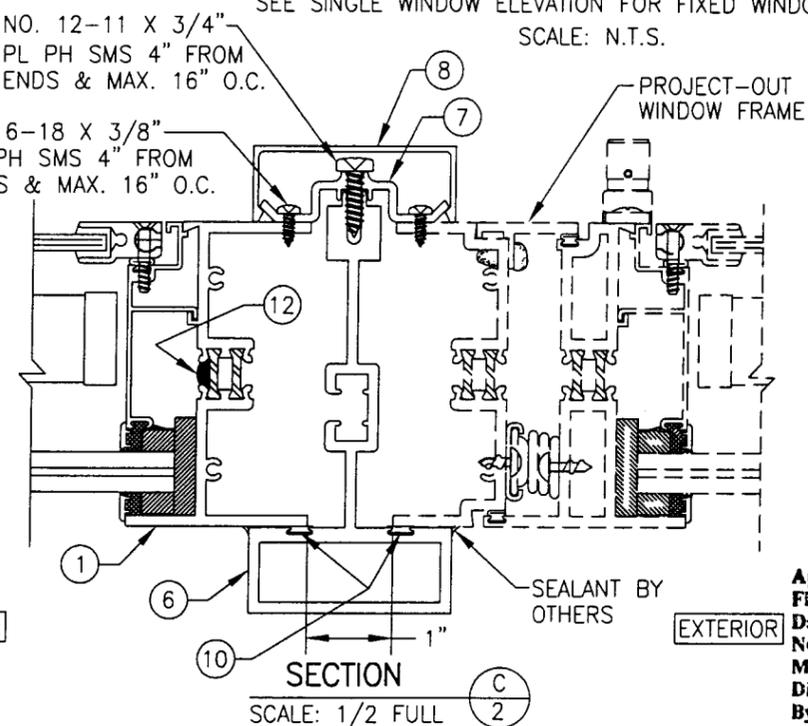
EXTERIOR ELEVATION
FIXED WINDOW MULLED TO FIXED/PROJECT OUT WINDOW
 (MORE THAN 2 WINDOWS MAY BE STACKED HORIZONTALLY)
 SEE SINGLE WINDOW ELEVATION FOR FIXED WINDOW DETAILS



SECTION A-A
 SCALE: 1/2 FULL



SECTION B-B
 SCALE: 1/2 FULL

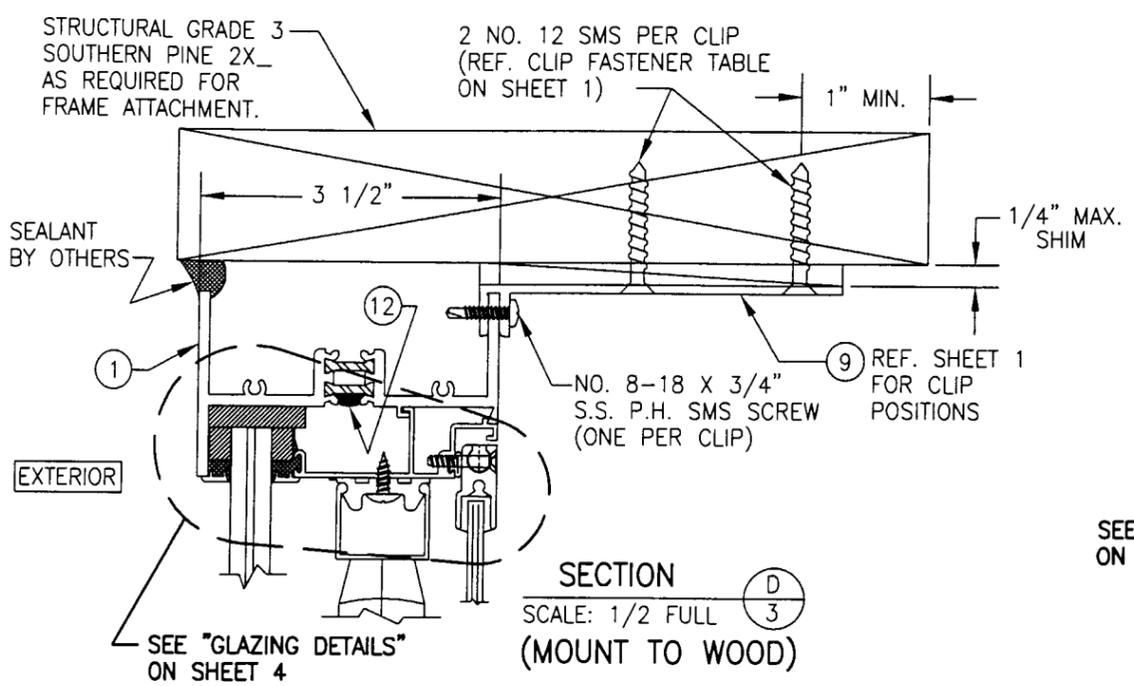
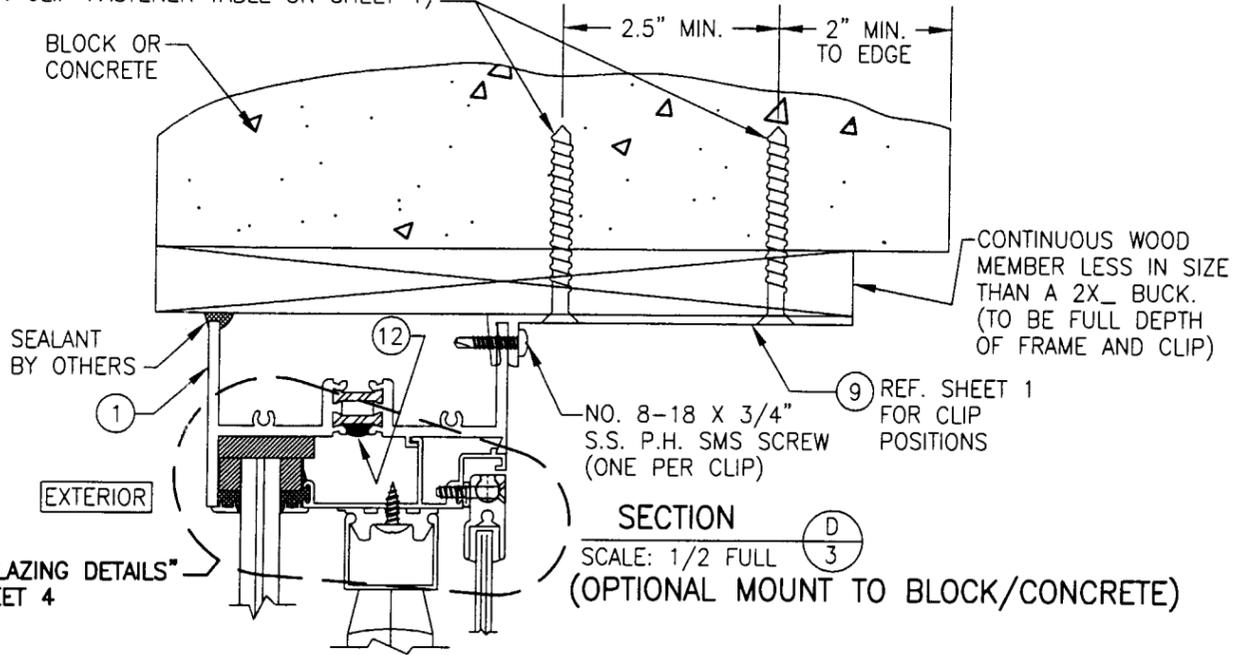


SECTION C-C
 SCALE: 1/2 FULL

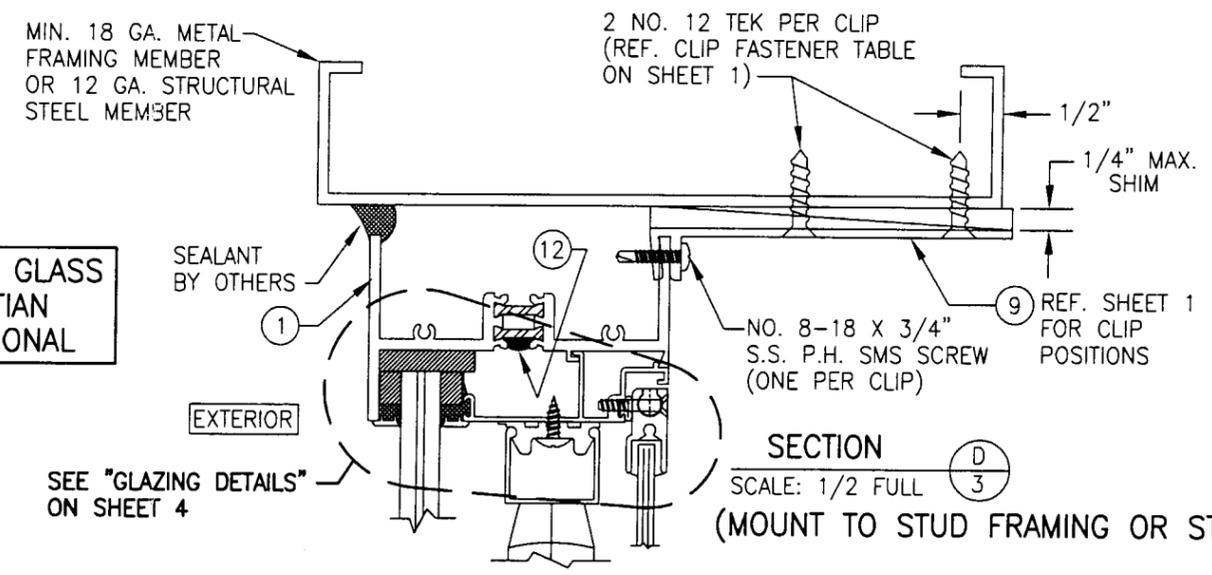
Approved as complying with the
 Florida Building Code
 Date **NOV. 7, 2002**
 NOA# **02-0410.04**
 Miami Dade Product Control
 Division
 By *Manuel J...*

DRAWN BY: J.C.F.	CHECKED BY: W.W.S.
PLOT: 1-16	DATE: 02/20/02
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE SERIES 810-1 SMALL & LARGE MISSILE IMPACT FIXED WINDOW	
MANUFACTURER EFCO CORPORATION 1000 COUNTY ROAD, P.O. BOX 609 MONETT, MO 65708-0609 800-221-4169	
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 JUL 17 2002 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1080	REV.
SHEET NO. 2	OF 4

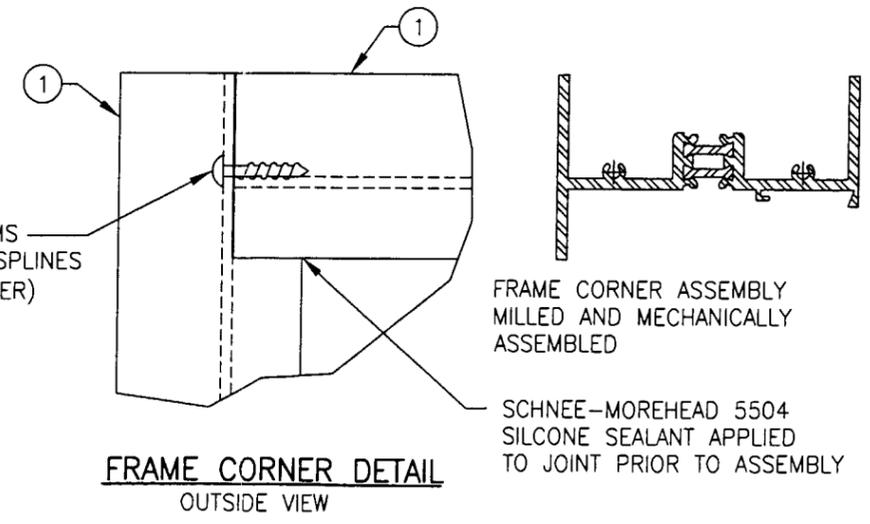
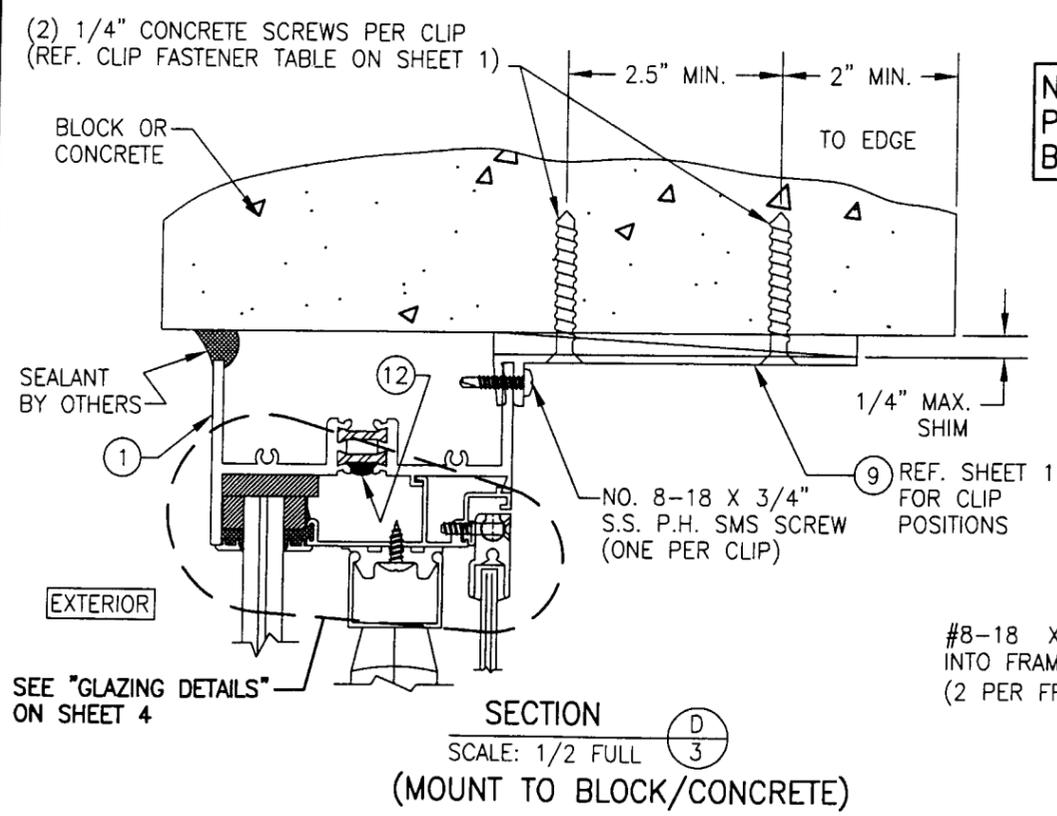
(2) 1/4" CONCRETE SCREWS PER CLIP
(REF. CLIP FASTENER TABLE ON SHEET 1)



SEE "GLAZING DETAILS"
ON SHEET 4

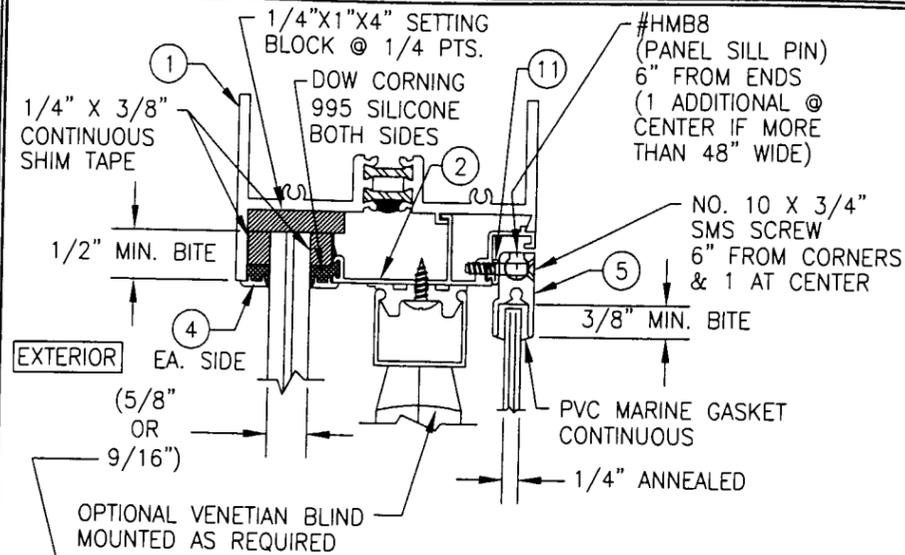


NOTE: INTERIOR GLASS
PANEL & VENETIAN
BLIND ARE OPTIONAL



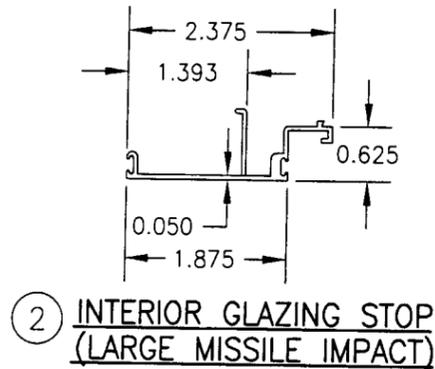
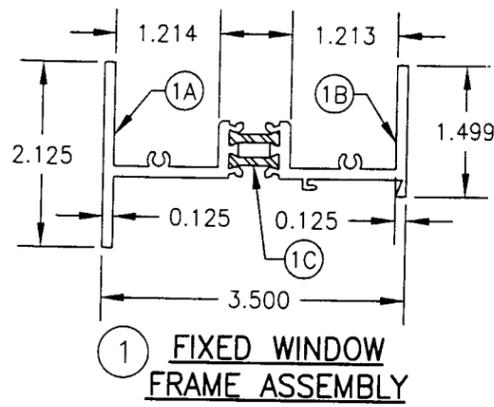
Approved as complying with the
Florida Building Code
Date NOV. 7, 2002
NOA# 02-0410.04
Miami Dade Product Control
Division
By Manuel Juez

DRAWN BY: J.C.F.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 02/20/02
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE SERIES 810-I SMALL & LARGE MISSILE IMPACT FIXED WINDOW	
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	
MANUFACTURER EFCO CORPORATION 1000 COUNTY ROAD, P.O. BOX 609 MONETT, MO 65708-0609 800-221-4169	
CERTIFICATION JUL 17 2002	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1080	REV.
SHEET NO. 3	OF 4

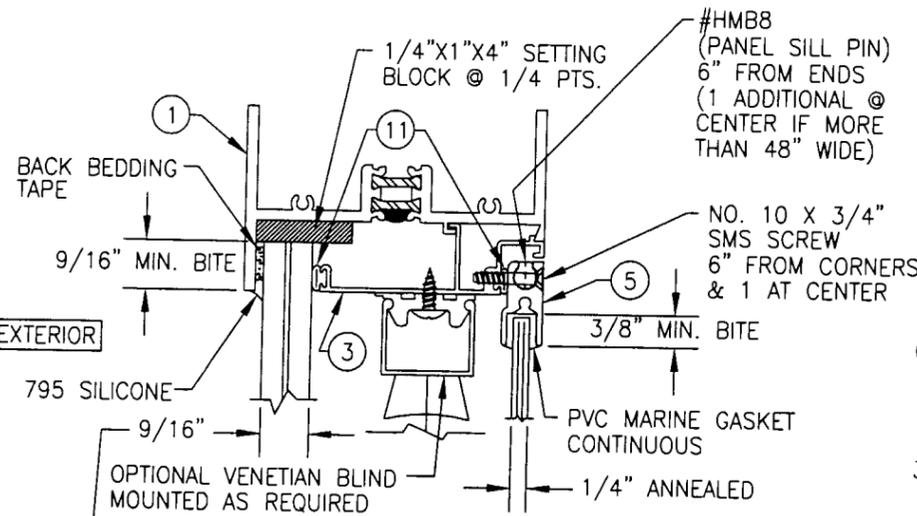
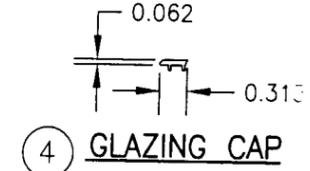
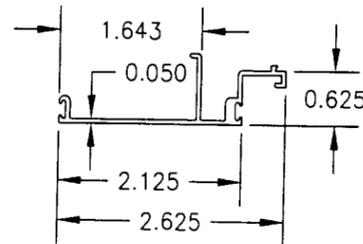


**GLAZING DETAIL
LARGE MISSILE IMPACT**

- GLASS "A": 5/8" VIRACON STORM GUARD: (1/4" AN./0.10" SOLUTIA SAFLEX HP/ 1/4" AN.)
- GLASS "B": 5/8" NEBULA GLASSLAM SAFETY-PLUS: (1/4" AN./0.060" RESIN/0.010" PET/0.060" RESIN/ 1/4" AN.)
- GLASS "C": 9/16" DUPONT SENTRY GLASS PLUS: (1/4" HT. ST./0.090" DUPONT SGP/ 1/4" HT. ST.)
- GLASS "D": 9/16" SECURITY IMPACT GLASS SAF-GLAS: (1/4" HT. ST./0.015" SIG ADHESIVE/0.070" POLYCARB./0.015" SIG ADHESIVE/ 1/4" HT. ST.)



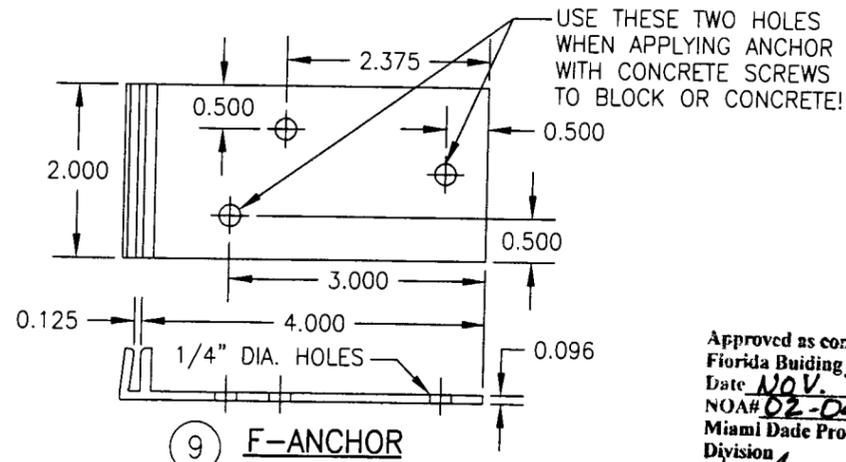
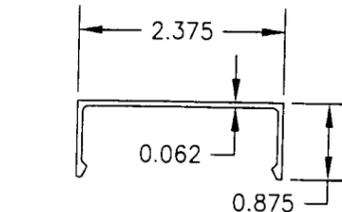
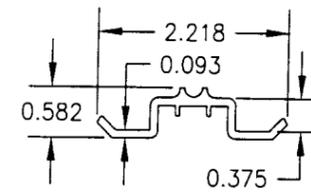
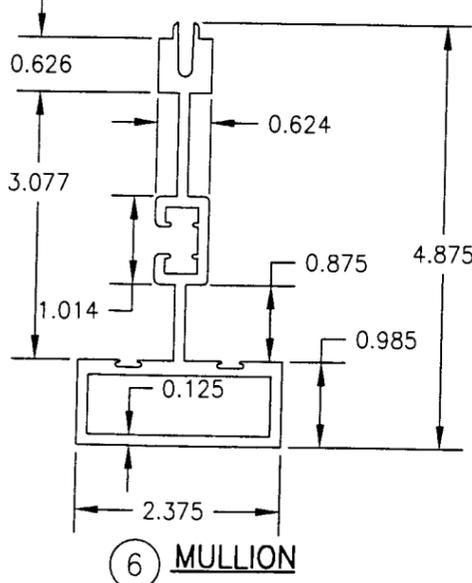
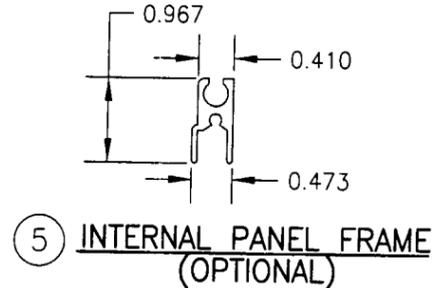
ITEM #	PART	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1A	8019	FRAME EXTERIOR MEMBER	EFCO; 6063-T6 ALUMINUM
1B	8018	FRAME INTERIOR MEMBER	EFCO; 6063-T6 ALUMINUM
1C	LAA3	INSULBAR STRUT	ENSINGER PLASTICS
2	EJ51	INT. GLAZING STOP (LG. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM
3	2097	INT. GLAZING STOP (SM. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM
4	LB00	GLAZING CAP	FIBER REINFORCED NYLON
5	ER65	INTERNAL PANEL FRAME (OPTIONAL)	EFCO; 6063-T6 ALUMINUM
6	1303	MULLION	EFCO; 6063-T6 ALUMINUM
7	EG78	MULLION CLIP	EFCO; 6063-T6 ALUMINUM
8	EG79	MULLION COVER	EFCO; 6063-T6 ALUMINUM
9	1880	F-ANCHOR	EFCO; 6063-T6 ALUMINUM
SEALS & SEALANTS			
10	WVB4	BULB GASKET	VINYL
11	WA04	BULB GASKET	VINYL
12	-	INSULBAR SEALANT (CONTINUOUS)	COLORED DOW 795



**GLAZING DETAIL
SMALL MISSILE IMPACT**

- GLASS "E": 9/16" SOLUTIA SAFLEX III G: (1/4" HT. ST./0.060" SAFLEX III G PVB/ 1/4" HT. ST.)

WHEN GLAZED FOR SMALL MISSILE IMPACT, THE WINDOWS MAY NOT BE INSTALLED AT SILL ELEVATIONS LESS THAN 30 FT. ABOVE GRADE.



Approved as complying with the Florida Building Code
Date Nov. 7, 2002
NOA# 02-0410-04
Miami Dade Product Control Division
By *Manuel Perez*

DRAWN BY: J.C.F.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 02/20/02
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE: SERIES 810-1 SMALL & LARGE MISSILE IMPACT FIXED WINDOW

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

MANUFACTURER: EFCO CORPORATION
1000 COUNTY ROAD, P.O. BOX 609
MONETT, MO 65708-0609
800-221-1159

CERTIFICATION: JUL 17 2007
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1080
SHEET NO. 4 OF 4