



MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

Efco Corporation
1000 County Road
Monett, MO 65708

Your application for Notice of Acceptance (NOA) of:

Series 6600 Aluminum Fixed Window - Impact Resistant

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.

ACCEPTANCE NO.: 00-0207.15
EXPIRES: 10/04/2006

Raul Rodriguez
Chief Product Control Division

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: 10/04/2001

EFCO Corporation

ACCEPTANCE No.: 00-0207.15

APPROVED : OCT 04 2001

EXPIRES : OCT 04 2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

- 1.1 This approves an aluminum fixed 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 **Series S-6600 Aluminum Fixed Window – Large Missile & Small Missile Impact Resistant** and its components shall be constructed in strict compliance with the following documents: Drawing No **1025**, Sheets 1 thru 3 of 3, titled "S-6600 Small & Large Missile Impact Fixed Window" dated 11/06/00, 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

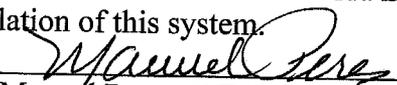
- 4.1 The aluminum fixed window and its components shall be installed in strict compliance with the approved drawings.
- 4.2 Hurricane protection system (shutters):
- 4.2.1 For Large Missile Impact Glass: the installation of this unit **will not require** a hurricane protection system.
- 4.2.2 For Small Missile Impact Glass: the installation of this unit up to 30 feet above grade, **will require** a hurricane protection system, but for installations above 30 feet above grade **will not require** a hurricane protection system.
- 4.2.3 To determine if the glass is large missile or small missile impact resistant, see glazing detail on Sheet 3 of approved drawings.

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 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

EFCO Corporation

ACCEPTANCE No.: 00-0207.15

APPROVED : OCT 04 2001

EXPIRES : OCT 04 2006

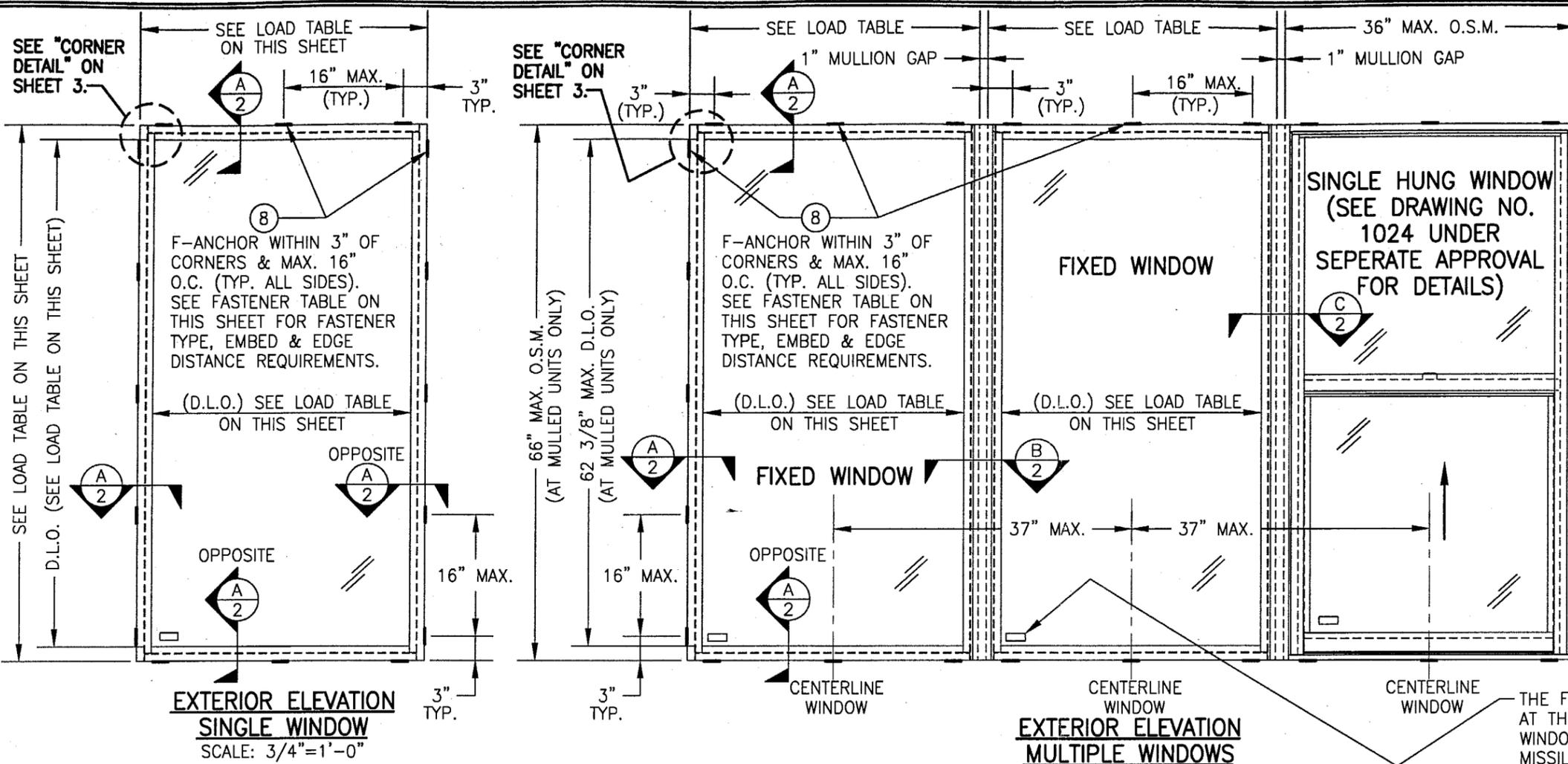
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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 Miami-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 time. The engineer need not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE



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



ALLOWABLE DESIGN LOAD FOR MULLED UNITS			
LARGE MISSILE GLASS "A"		SMALL MISSILE GLASS "B"	
POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
80 PSF	90 PSF	73.3 PSF	120 PSF

ALL MULLED UNITS ARE LIMITED TO MAX. 66" HEIGHT.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE **OCT 04 2001**
 BY *[Signature]*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. **00-0207-15**

THE FOLLOWING LABEL SHALL BE PLACED AT THE INNER BOTTOM RIGHT CORNER OF THE WINDOW TO DISTINGUISH BETWEEN SMALL & LARGE MISSILE GLASS:
 EFCO CORPORATION, MONETT MISSOURI
 MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
 SMALL (OR LARGE) MISSILE IMPACT UNIT

O.S.M. = OUTSIDE FRAME MEASUREMENT

MORE THAN 3 WINDOWS MAY BE STACKED HORIZONTALLY

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.
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY 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 DADE COUNTY PROTOCOLS PA 201, 202 & 203 FOR BOTH LARGE MISSILE IMPACT & SMALL MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION.

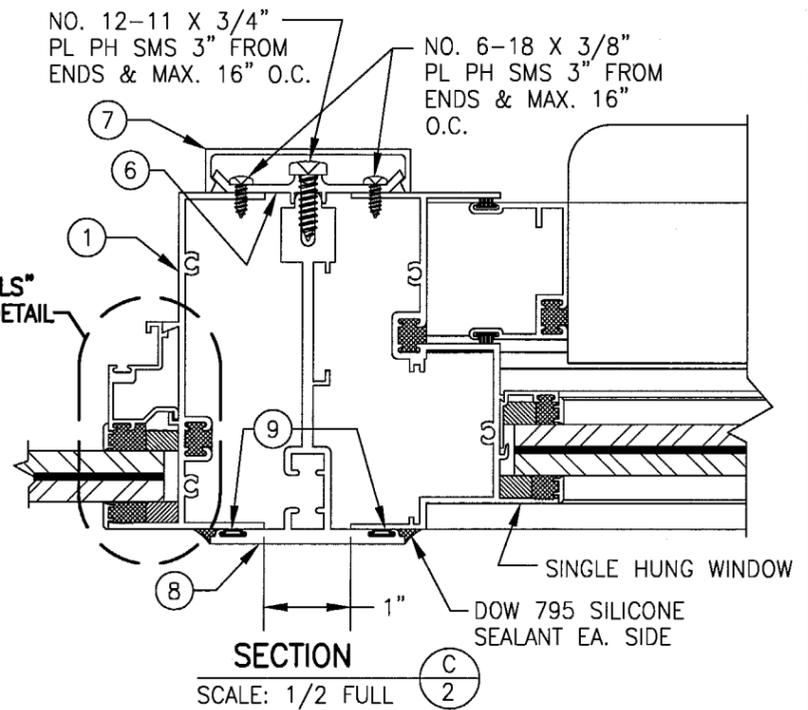
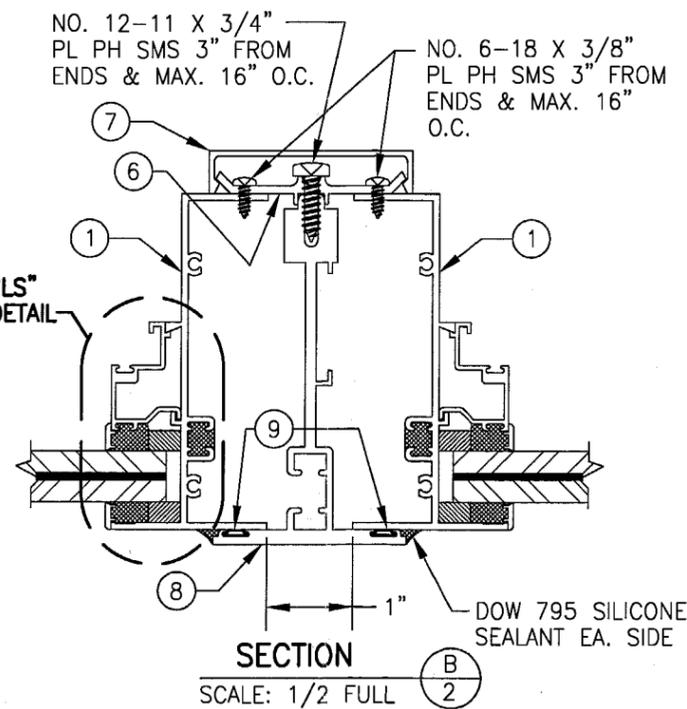
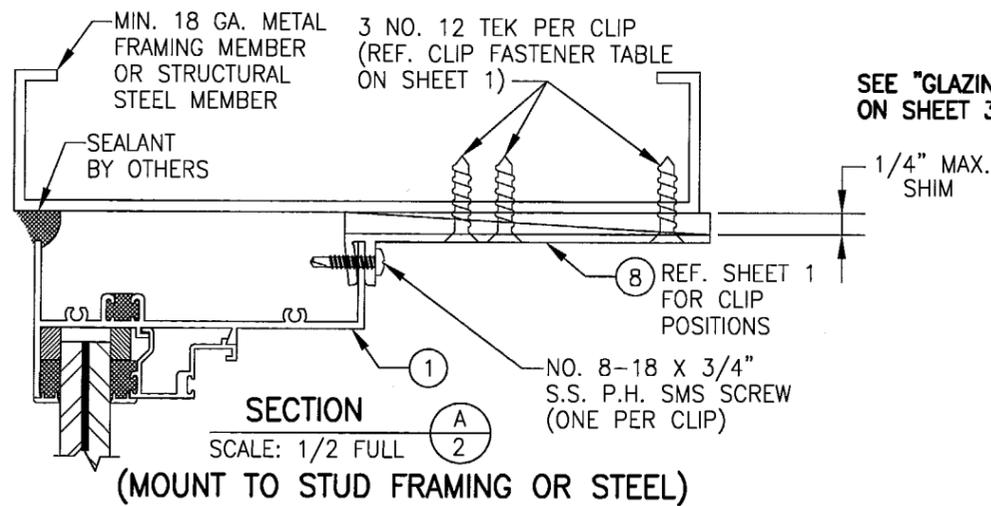
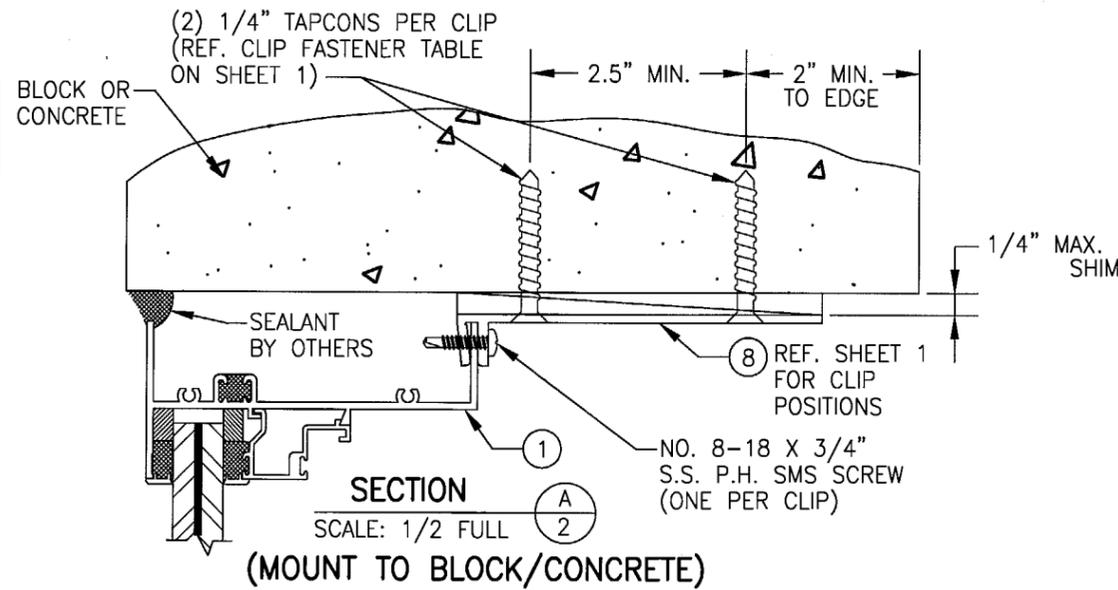
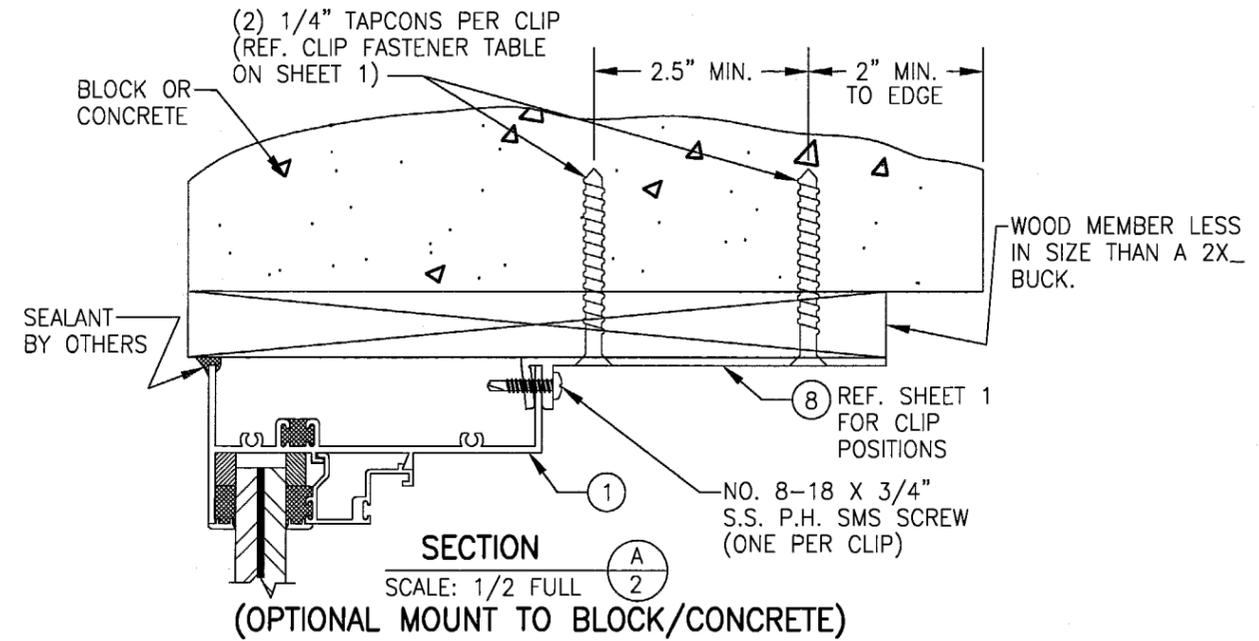
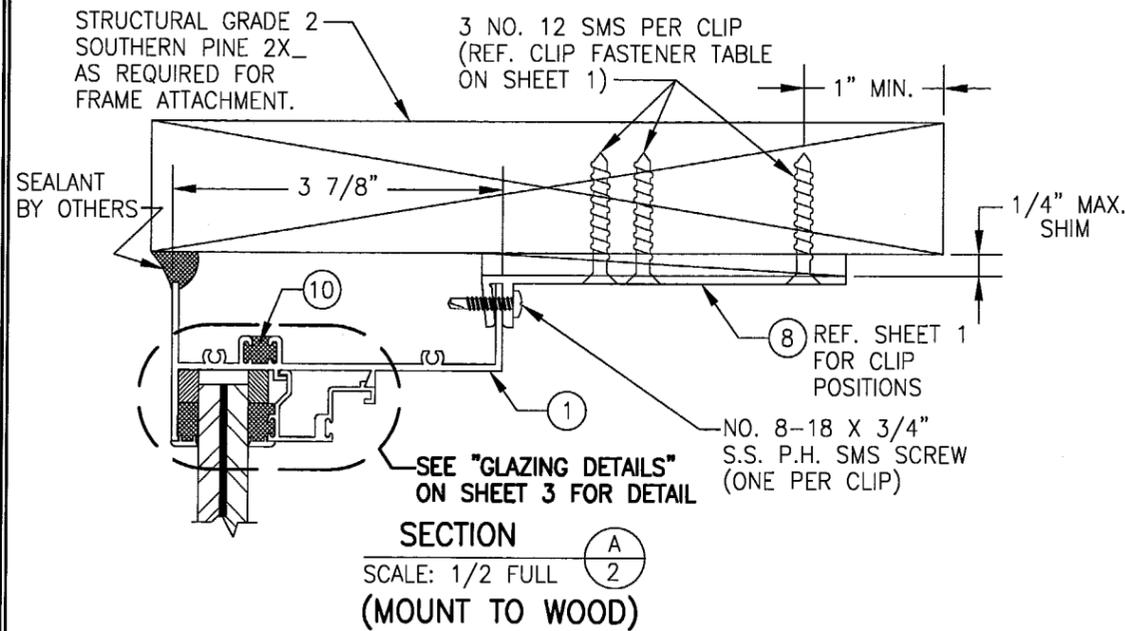
OPENING TYPE (SUBSTRATE)	CLIP TO OPENING FASTENER TYPE	NO. FASTENERS PER CLIP INTO SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
WOOD	NO. 12 SMS SCREW	3	1 1/8"	1"
MIN. 18 GA. STUD	NO. 12 TEK SCREW	3	FULL	1/2"
STRUCT. STEEL	NO. 12 TEK SCREW	3	FULL	1/2"
CMU/CONCRETE	1/4" TAPCON	2	1 1/4"	2"

MAXIMUM SIZE		MAXIMUM ALLOWABLE PRESSURE (PSF)					
FRAME WIDTH	FRAME HEIGHT	WINDOW D.L.O.		LARGE MISSILE IMPACT GLASS "A"		SMALL MISSILE IMPACT GLASS "B"	
		HORIZONTAL	VERTICAL	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
24"	99"	20 3/8"	95 3/8"	80.0 PSF	90.0 PSF	73.3 PSF	120.0 PSF
27"	88"	23 3/8"	84 3/8"	80.0 PSF	90.0 PSF	73.3 PSF	120.0 PSF
30"	79"	26 3/8"	75 3/8"	80.0 PSF	90.0 PSF	73.3 PSF	120.0 PSF
33"	72"	29 3/8"	68 3/8"	80.0 PSF	90.0 PSF	73.3 PSF	120.0 PSF
36"	66"	32 3/8"	62 3/8"	80.0 PSF	90.0 PSF	73.3 PSF	120.0 PSF
40"	59"	36 3/8"	55 3/8"	72.0 PSF	81.0 PSF	73.3 PSF	108.0 PSF
44"	54"	40 3/8"	50 3/8"	65.5 PSF	73.6 PSF	73.3 PSF	98.2 PSF
48"	49"	44 3/8"	45 3/8"	60.0 PSF	67.5 PSF	73.3 PSF	90.0 PSF

GLASS "A" = 9/16" THK. LAMINATED GLASS (1/4" HT. STR./0.09" PVB/1/4" HT. STR.) BY SAFLEX (LARGE MISSILE)
 GLASS "B" = 9/16" THK. LAMINATED GLASS (1/4" HT. STR./0.06" PVB/1/4" HT. STR.) BY SAFLEX (SMALL MISSILE)

LOAD TABLE NOTE:
 1. SMALL MISSILE IMPACT WINDOWS MAY NOT BE INSTALLED AT A SILL ELEVATION LESS THAN 30 FT. ABOVE GRADE.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLLOT: 1-16	DATE: 11/06/00
DATE	BY
REVISION DESCRIPTION	NO.
S-6600 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 JUN 25 2001 WARREN W. SCHAEFER P.E. P.E. NO. 44135	
DRAWING NO. 1025	REV.
SHEET NO.	
1 OF 3	



APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE **OCT 04 2001**
BY *Warren W. Schaeffer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **00-0207.15**

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 11/06/00
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE: **S-6600 SMALL & LARGE MISSILE IMPACT FIXED WINDOW**

MANUFACTURER: **EFCO CORPORATION**
1000 COUNTY ROAD; P.O. BOX 609
MONETT, MO 65708-0609
800-221-4169

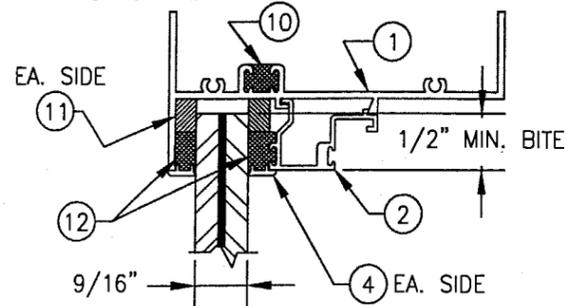
CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**
600 SANDTREE DRIVE; SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION: **JUN 25 2001**

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

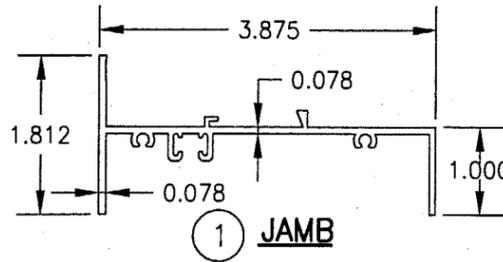
DRAWING NO. **1025**
SHEET NO. **2** OF **3**

NOTE: AT SILL, TWO 1/4" SETTING BLOCKS ARE USED TO SHIM GLASS



**GLAZING DETAIL
LARGE MISSILE IMPACT**

9/16" THK. LAMINATED GLASS BY SAFLEX WITH 1/4" THK. HEAT STRENGTHENED PANES EA. SIDE & 0.09" PVB INNER LAYER

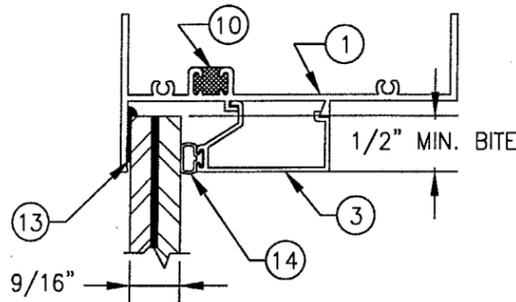


① JAMB

ITEM #	PART	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	6031	JAMB/FRAME	EFCO; 6063-T6 ALUMINUM
2	2170	INT. GLAZING STOP (LG. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM
3	EF32	INT. GLAZING STOP (SM. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM
4	LB00	GLAZING CAP	FIBER REINFORCED NYLON
5	EG16	MULLION	EFCO; 6063-T6 ALUMINUM
6	ED25	MULLION CLIP	EFCO; 6063-T6 ALUMINUM
7	ED24	MULLION COVER	EFCO; 6063-T6 ALUMINUM
8	KA23/1880	F-ANCHOR	EFCO; 6063-T6 ALUMINUM
SEALS & SEALANTS			
9	WVB2	CONT. VINYL BULB SEAL	CENTRAL PLASTICS
10	-	FULLY INJECTED POLYURETHANE SEALANT	P.R.C.
11	-	3/16 FOAM TAPE	NORTON
12	-	DOW 995 SILICONE	DOW CORNING
13	-	DOW 795 SILICONE	DOW CORNING
14	WVB2	CONT. VINYL BULB SEAL	CENTRAL PLASTICS

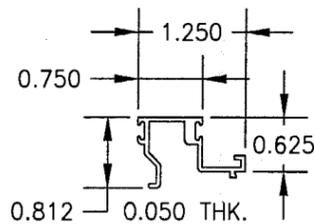
DATE	BY	REVISION DESCRIPTION	NO.

NOTE: AT SILL, TWO 1/4" SETTING BLOCKS ARE USED TO SHIM GLASS

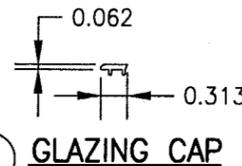


**GLAZING DETAIL
SMALL MISSILE IMPACT**

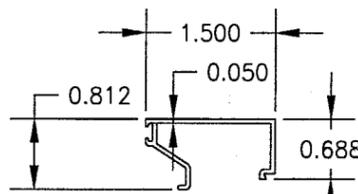
9/16" THK. LAMINATED GLASS BY SAFLEX WITH 1/4" THK. HEAT STRENGTHENED PANES EA. SIDE & 0.06" PVB INNER LAYER



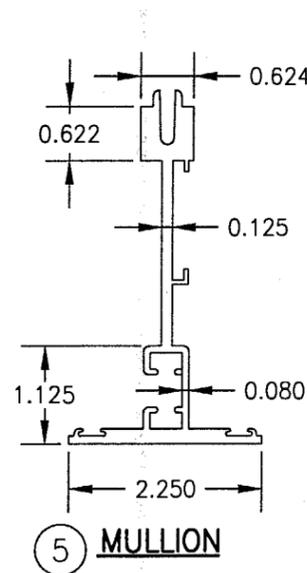
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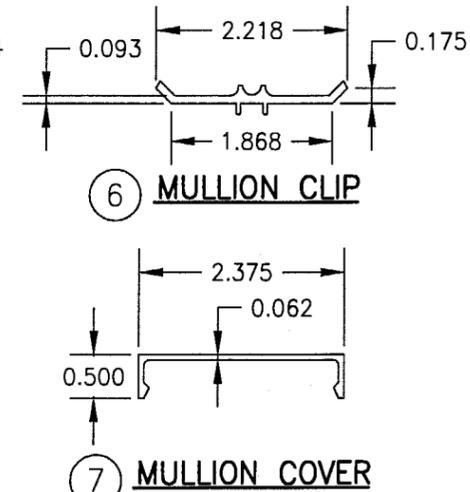
④ GLAZING CAP



③ INTERIOR GLAZING STOP (SMALL MISSILE IMPACT)



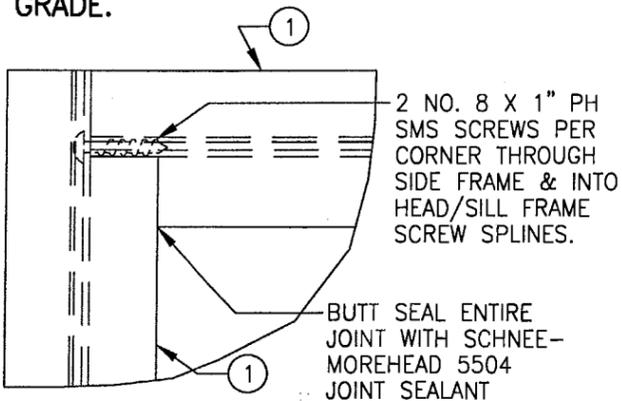
⑤ MULLION



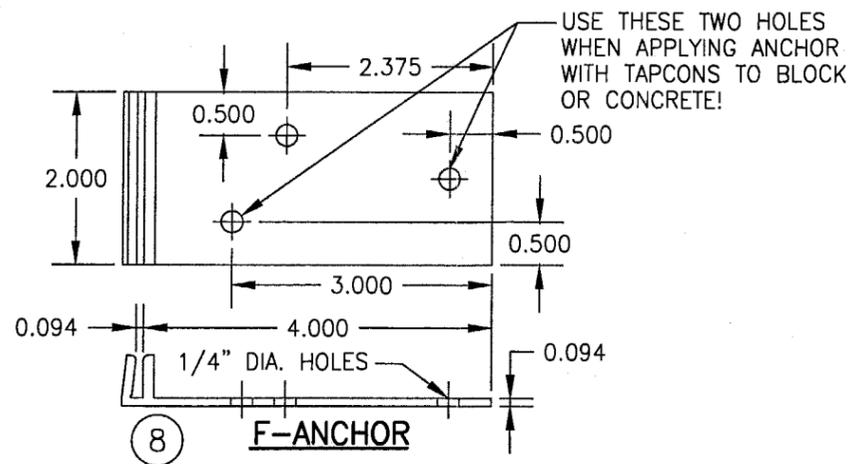
⑥ MULLION CLIP

⑦ MULLION COVER

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



**FRAME CORNER DETAIL
OUTSIDE VIEW**



⑧ F-ANCHOR

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE **OCT 04 2001**
BY *Manuel...*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **00-0207.15**

DRAWING TITLE: S-6600 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: **JUN 25 2001**
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. **1025** REV.
SHEET NO. **3** OF **3**