



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 "5800 - 4.5" Deep Frame" Aluminum Curtain Wall System - 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.: 01-0525.04
EXPIRES: 02/14/2006

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: 02/14/2002

EFCO Corporation

ACCEPTANCE No.: 01-0525.04

APPROVED : FEB 14 2002

EXPIRES : FEB 14 2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. DESCRIPTION OF UNIT

1.1 This approves an aluminum curtainwall system, 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 "5800 - 4.5" Deep Frame" Aluminum Curtain Wall System - Large and Small Missile Impact Resistant and its components shall be constructed in strict compliance with the following documents: Drawing No 1050, Sheets 1 through 4 of 4, titled "Series 5800 Curtain Wall Impact System (4.5" Deep Frame)", prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 4/20/01, 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 multiple unit applications of an aluminum curtainwall system.
3.2 For Design Pressure Rating vs. Window Size, see Comparative Analysis Tables in approved drawings.

4. INSTALLATION

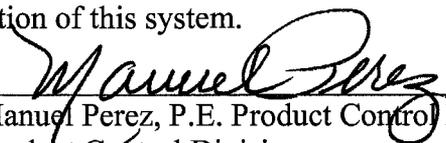
4.1 The aluminum curtainwall system and its components shall be installed in strict compliance with the approved drawings
4.1 Hurricane protection system (shutters): to determine whether the installation requires a hurricane protection system or not, see corresponding table in approved drawing.

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.: 01-0525.04

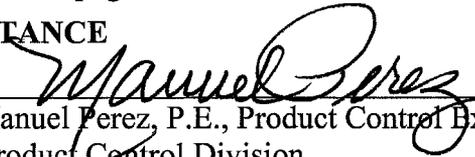
APPROVED : FEB 14 2002

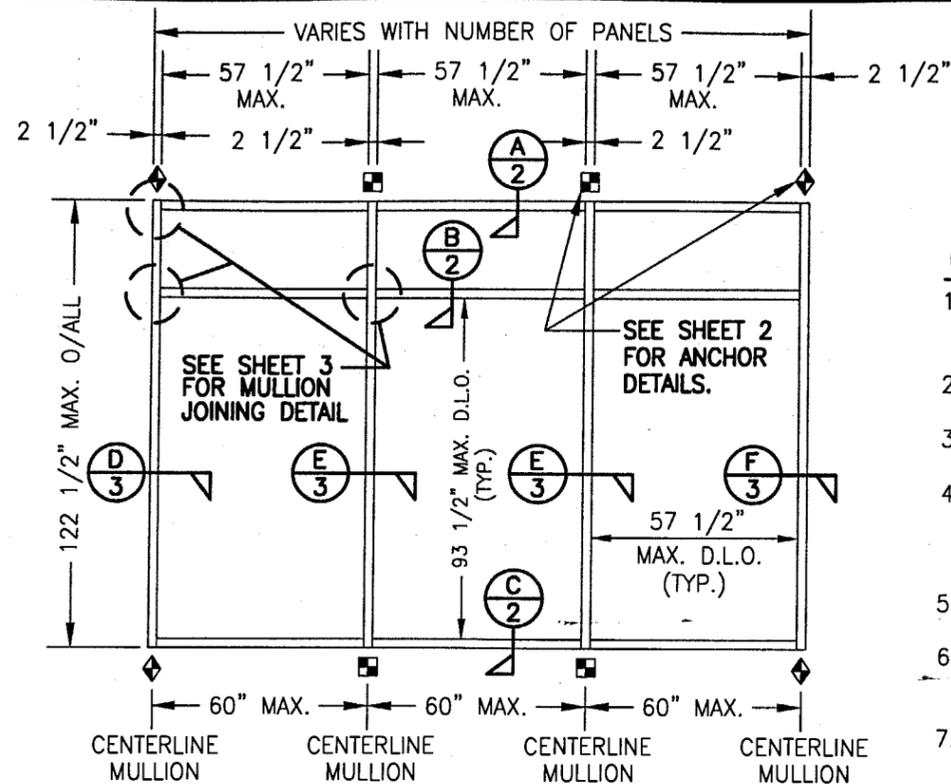
EXPIRES : FEB 14 2006

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 purposes.
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 needs 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



EXTERIOR ELEVATION

SCALE: 1/4"=1'-0"

NOTE: THIS ELEVATION SHOWS THE 5800 CURTAIN WALL SYSTEM IN A SINGLE SPAN APPLICATION. ALL SINGLE SPAN APPLICATIONS ARE LIMITED BY EACH THE D.L.O. SIZES OF THE LIGHTS & THE HEIGHT/SPAN SHOWN. HEIGHT MAY NOT EXCEED THAT SHOWN.

SEE SHEET 2 → = F-ANCHOR
SEE SHEET 2 → = M-ANCHOR

GENERAL NOTES

1. THESE CURTAIN WALL 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 PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
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 IMPACT REQUIREMENTS.
5. THESE CURTAIN WALL SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 MIAMI-DADE COUNTY EDITION.
6. ALL ANCHORS SHALL BE INSTALLED AS SPECIFIED ON THESE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
7. THERE SHALL BE NO LIMIT TO THE NUMBER OF HORIZONTAL & VERTICAL PANELS USED FOR ANY JOB PROVIDING ALL RESTRICTIONS ARE MET PER THE ELEVATIONS.
8. ALL SUBSTRATE SHALL HAVE THE FOLLOWING MINIMUM REQUIREMENTS.
 - a) ALL CONCRETE SUBSTRATE SHALL BE MIN. 3000 PSI.
 - b) ALL WOOD SUBSTRATE SHALL BE MIN. G = 0.55 DENSITY.
 - c) ALL METAL STUD SUBSTRATE SHALL BE MIN. 16 GA. Fy = 50 ksi.
 - d) ALL STRUCTURAL STEEL SUBSTRATE SHALL BE MIN. Fy = 36 ksi.

ALLOWABLE DESIGN LOAD TABLE

MULLION HEIGHT (IN.)	MULLION SPACING (IN.)	ALLOWABLE PRESSURE (PSF) (3)
122.5	60	21.5
122.5	54	23.9
122.5	48	26.9
122.5	42	30.7
122.5	36	35.8
122.5	30	43.0
122.5	24	45.0
120	60	22.9
120	54	25.4
120	48	28.6
120	42	32.7
120	36	38.1
120	30	45.0
114	60	26.7
114	54	29.6
114	48	33.3
114	42	38.1
114	36	44.5
114	30	45.0
108	60	31.4
108	54	34.9
108	48	39.2
108	42	44.8
108	36	45.0
102	60	36.0
102	54	40.0
102	48	45.0
96	60	38.3
96	54	42.5
96	48	45.0
90	60	40.8
90	54	45.0
84	60	43.8
84	54	45.0

- 1) PRESSURES ARE FOR BOTH POSITIVE & NEGATIVE.
- 2) MULLION HEIGHT = UNIT 0/ALL HEIGHT.
- 3) WHEN 9/16" GLOBE CHEM-TEMP GLASS IS USED, ALLOWABLE PRESSURE MAY NOT EXCEED 30 PSF

OPENING TYPE (SUBSTRATE)	ANCHOR TO OPENING FASTENER TYPE	NO. FASTENERS PER ANCHOR INTO SUBSTRATE	MINIMUM EMBED	MINIMUM EDGE DIST.
WOOD	(1) 3/8" LAG SCREW	4	1.5"	1"
MIN. 16 GA. STUD	NO. 14 TEK SCREW	4	FULL	1/2"
STRUCT. STEEL	NO. 14 TEK SCREW	4	FULL	1/2"
CONCRETE	3/8" HILTI QUIK BOLT II S.S. EXPANSION ANCHOR OR 3/8" S.S. RAWL POWER-BOLT	4	2 1/2"	2 1/2"

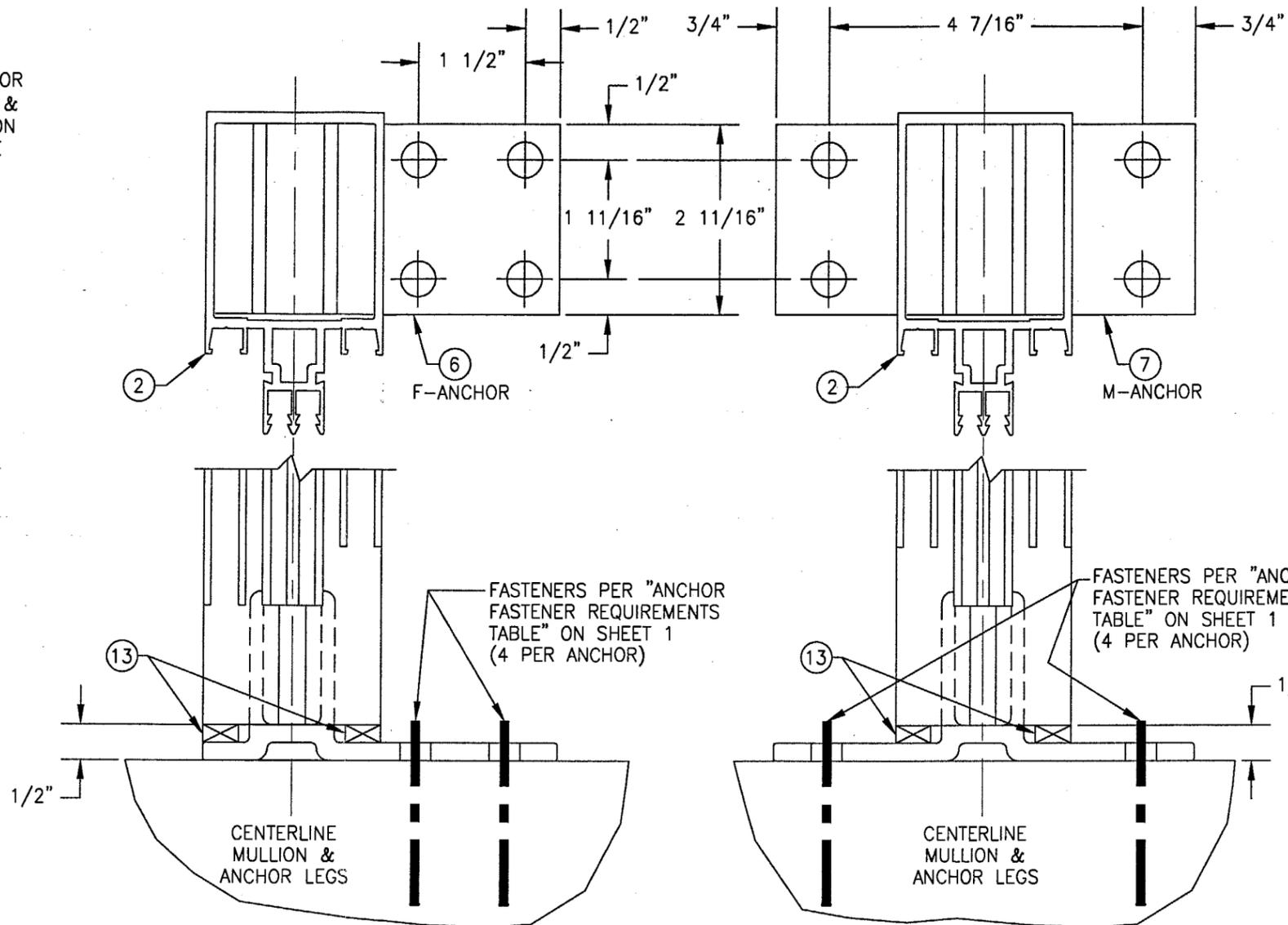
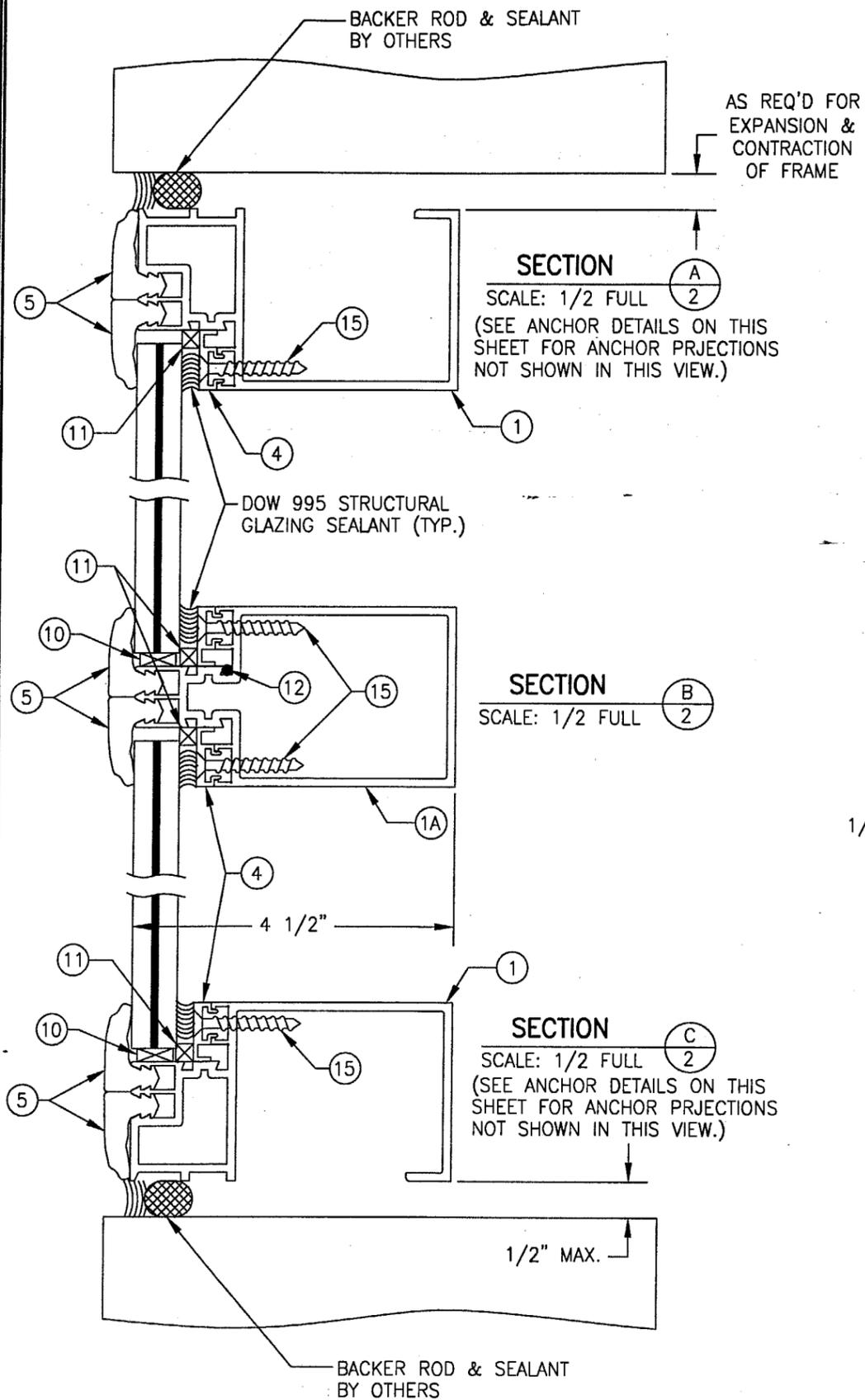
(1) PREDRILL REQUIRED SIZE HOLES IN WOOD FOR PLACEMENT OF LAG SCREWS.

GLAZING DESCRIPTION	IMPACT RATING	ALLOWABLE PRESSURE
5/8" VIRACON HRG2 LAMINATED HT. ST. GLASS	LARGE MISSILE	SEE LOAD TABLE
9/16" SOLUTIA SAFLEX PVB LAMINATED HT. ST. GLASS	SMALL MISSILE (1)	SEE LOAD TABLE
9/16" GLOBE CHEM TEMP LAMINATED GLASS	LARGE MISSILE	SEE LOAD TABLE
9/16" SECURITY SAF-GLAS LAMINATED HT. ST. GLASS	LARGE MISSILE	SEE LOAD TABLE
5/8" GLASSLAM SAFETY-PLUS LAMINATED HT. ST. GLASS	LARGE MISSILE	SEE LOAD TABLE

(1) SMALL MISSILE IMPACT WINDOWS MAY NOT BE INSTALLED WITHOUT AN APPROVED SHUTTER AT A SILL ELEVATION LESS THAN 30 FT. ABOVE GRADE.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE **FEB 14 2002**
BY *Manuel Terry*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **01-0525-04**

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-48	DATE: 04/20/01
DATE	BY
REVISION DESCRIPTION	NO.
SERIES 5800 CURTAIN WALL IMPACT SYSTEM (4.5" DEEP FRAME) 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: JAN 16 2002 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1050	REV.
SHEET NO. 1	OF 4



"F-ANCHOR" DETAIL
(TYP. AT SIDE JAMB MULLIONS)

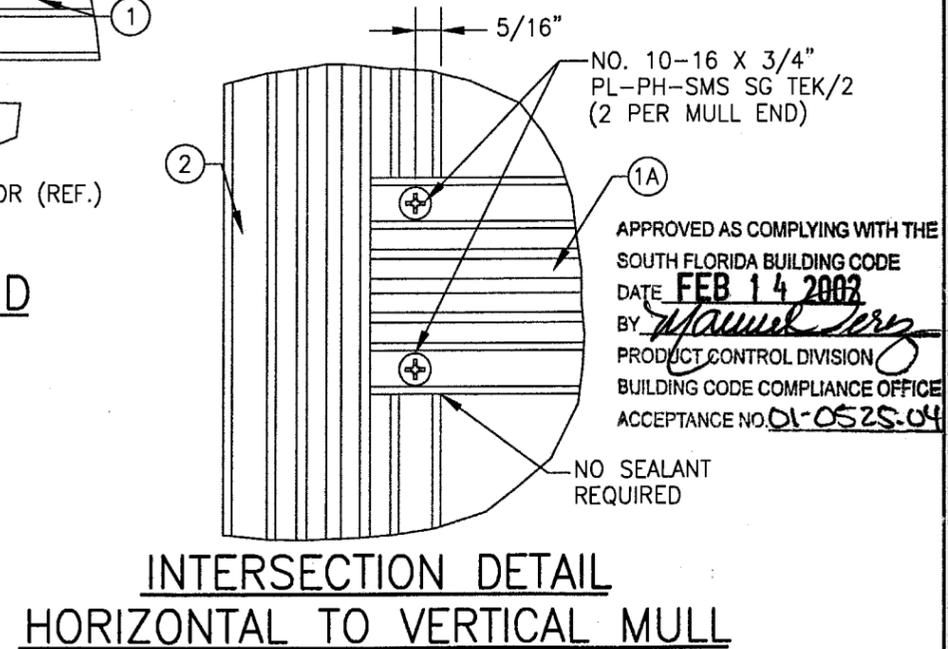
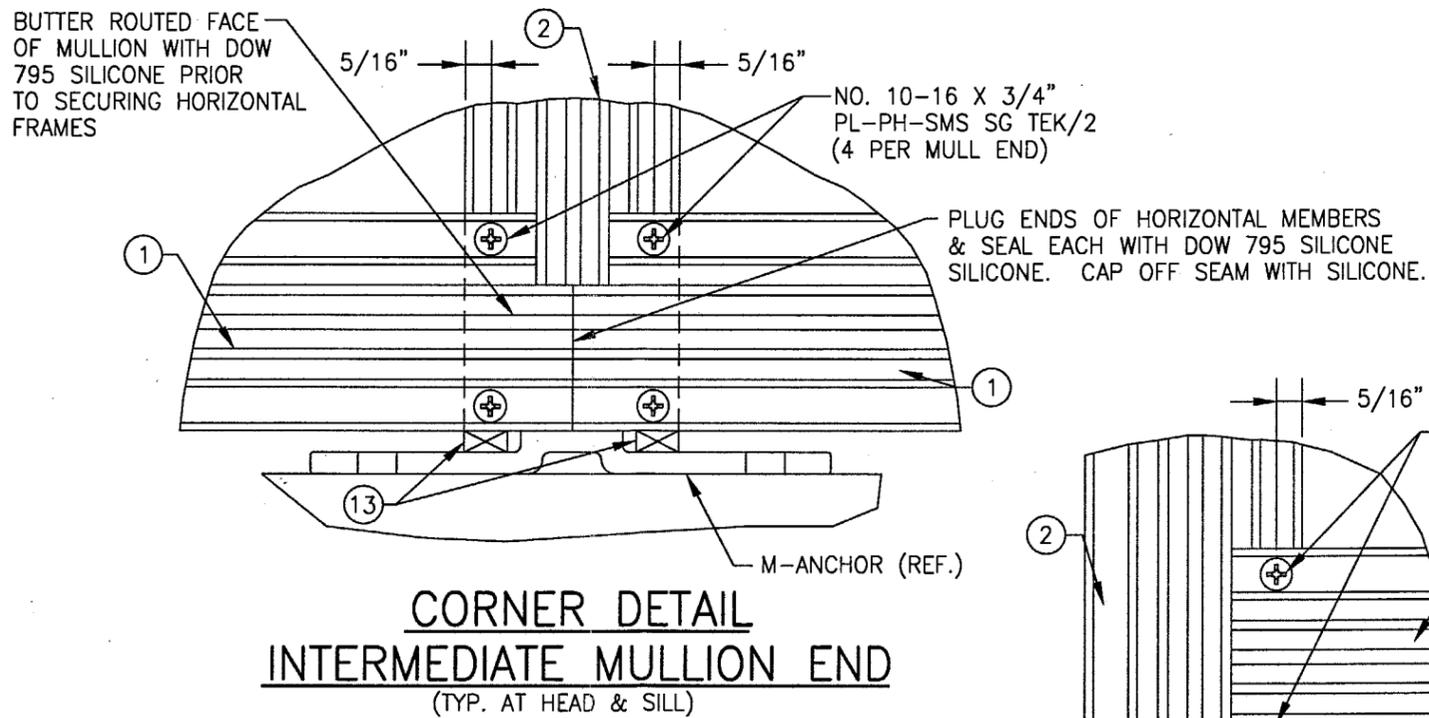
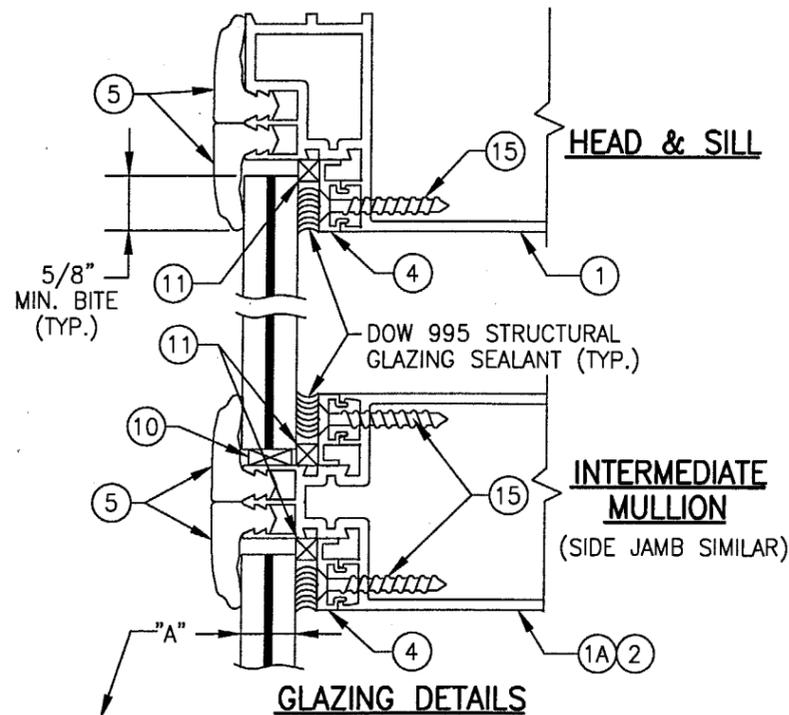
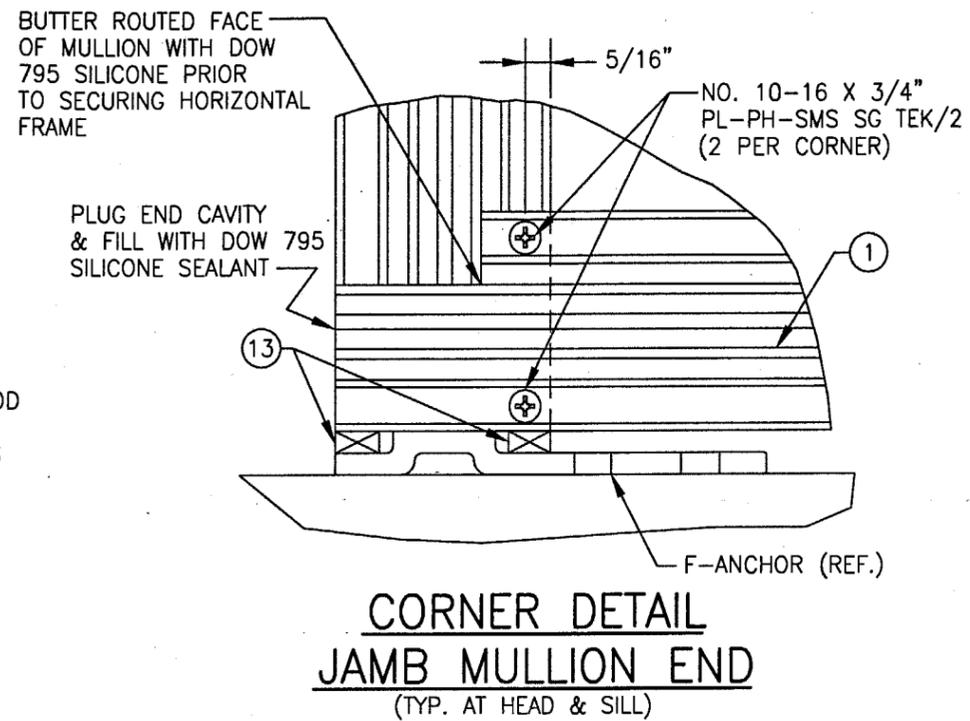
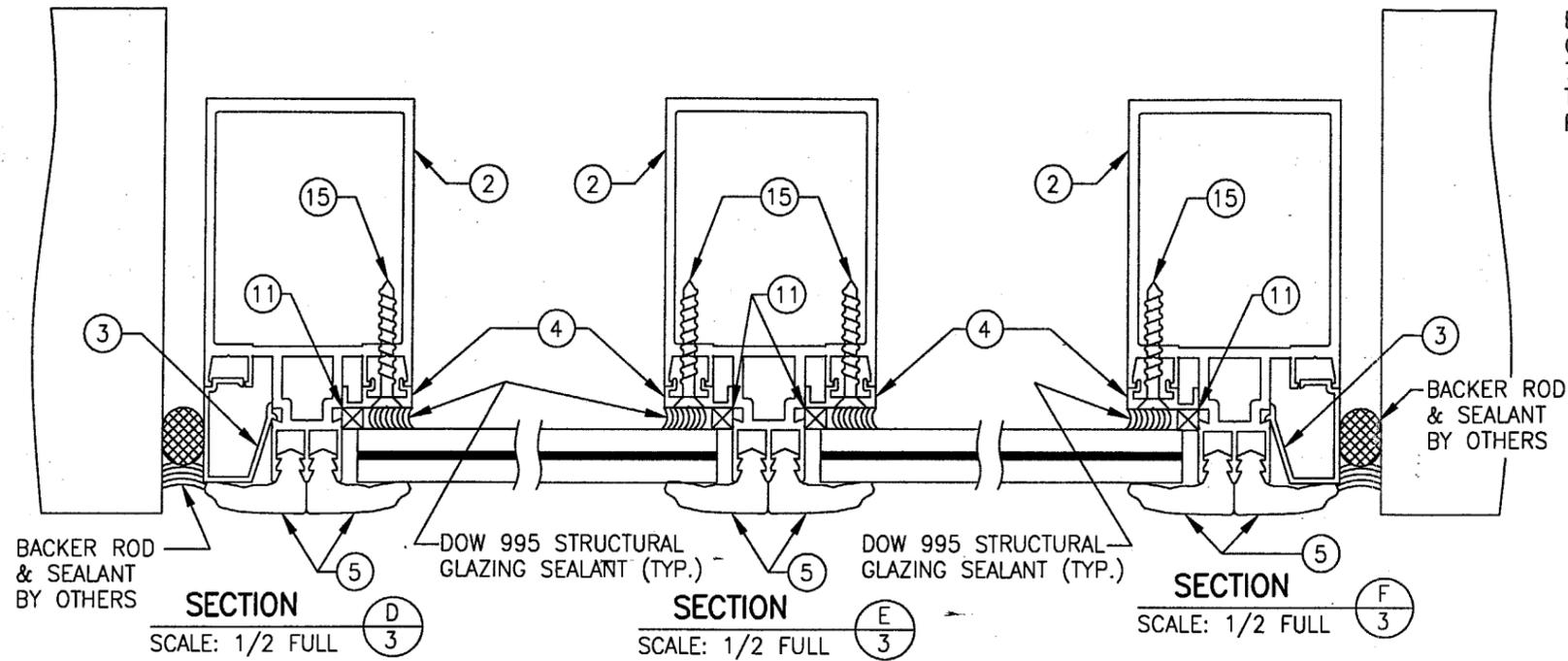
NOTE: GLAZING & HORIZONTAL MEMBER NOT SHOWN FOR CLARITY.

"M-ANCHOR" DETAIL
(TYP. AT INTERMEDIATE MULLIONS)

NOTE: GLAZING & HORIZONTAL MEMBERS NOT SHOWN FOR CLARITY.

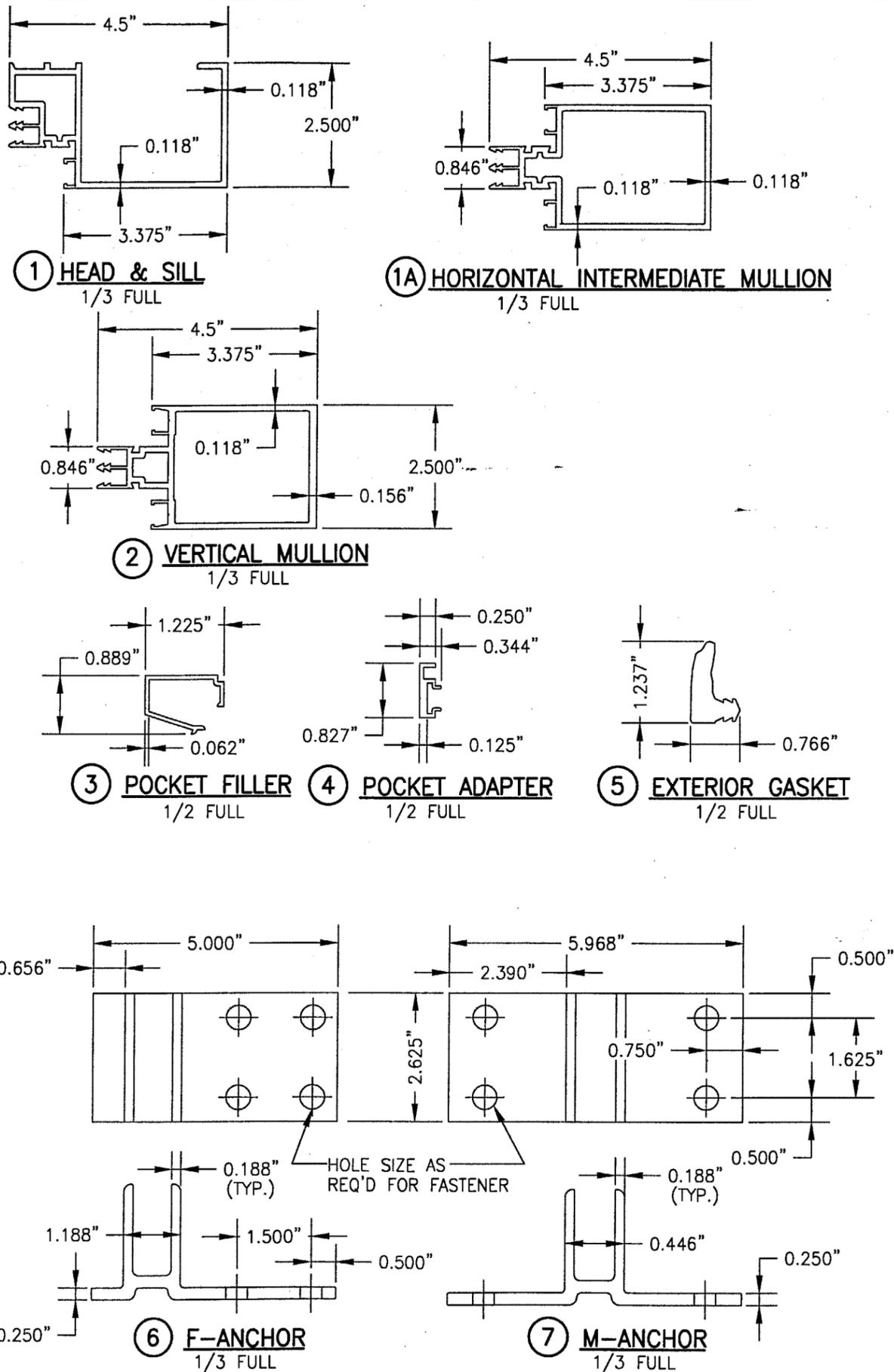
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE **FEB 14 2002**
BY *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **01-0525-04**

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 04/20/01	
NO.	REVISION DESCRIPTION	DATE	BY
<p>DRAWING TITLE: SERIES 5800 CURTAIN WALL IMPACT SYSTEM (4.5" DEEP FRAME)</p> <p>MANUFACTURER: EFCO CORPORATION 1000 COUNTY ROAD, P.O. BOX 609 MONETT, MO 65708-0609 800-221-4169</p> <p>CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 800 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903</p>			
<p>CERTIFICATION: JAN 16 2002</p> <p>WARREN W. SCHAEFER, P.E. P.E. NO. 44135</p>		<p>DRAWING NO. 1050</p> <p>SHEET NO. 2 OF 4</p>	



- 1) 5/8" VIRACON HRG2: 1/4" HT. ST./0.05 URETHANE/0.08 POLYCARBONATE/0.05 URETHANE/1/4" HT. ST.
- 2) 9/16" SAFLEX: 1/4" HT. ST./0.06 SAFLEX PVB/1/4" HT. ST. (SMALL MISSILE GLASS)
- 3) 9/16" GLOBE AMERADA CHEM TEMP: 3/16" CHEM TEMP/0.035 URETHANE 0.118 POLYCARBONATE/0.035 URETHANE/3/16" CHEM TEMP
- 4) 9/16" SECURITY GLASS SAF-GLAS: 1/4" HT. ST./0.011 ALIPHATIC URETHANE/0.07 POLYCARBONATE/0.011 ALIPHATIC URETHANE/1/4" HT. ST.
- 5) 5/8" NEBULA GLASSLAM SAFETY-PLUS: 1/4" HT. ST./0.06 RESIN/0.01 PET/0.06 RESIN/1/4" HT. ST.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 04/20/01	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE SERIES 5800 CURTAIN WALL IMPACT SYSTEM (4.5" DEEP FRAME)			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER EFCO CORPORATION	
600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903		1000 COUNTY ROAD, P.O. BOX 609 MONETT, MO 65708-0609 800-221-4169	
CERTIFICATION JAN 16 2002 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1050		REV. 	
SHEET NO. 3 OF 4			



ITEM #	PART	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	5512	HEAD & SILL MULLION	EFCO; 6063-T6 ALUMINUM
1A	5514	HORIZONTAL INTERMEDIATE MULLION	EFCO; 6063-T6 ALUMINUM
2	5513	VERTICAL JAMB & INTERMEDIATE MULLION	EFCO; 6063-T6 ALUMINUM
3	5515	POCKET FILLER	EFCO; 6063-T6 ALUMINUM
4	6724	GLAZING POCKET ADAPTER	EFCO; 6063-T6 ALUMINUM
5	WG15	EXTERIOR GASKET; EXTRUDED SILICONE	JAMAK OR LAUREN
6	6603	F-ANCHOR	EFCO; 6063-T6 ALUMINUM
7	6604	M-ANCHOR	EFCO; 6063-T6 ALUMINUM
10	HDR6	.25"X.562"X4" SILICONE SETTING BLOCK	EPG SCR-880
11	-	1/4"X5/16" POLY FOAM TAPE	NORTON V2200
12	WDR1	CONDENSATION WICK	PHOENIX ROPE
13	HS01	POLYSTYRENE SHIM	PLYMOUTH PLASTICS
14	-	1/2" THK. MULLION SPLICE GASKET	CLOSED CELL SPUNGE NEOPRENE
15	SFQ0	#10-16 X 1.5" PL-FH-SMS 410 TEK	2" FROM ENDS & MAX. 9" O.C.
16	SDR1	#10-16 X .75" PL-PH-SMS SG TEK/2	CORNER SCREWS

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/20/01
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE	
SERIES 5800 CURTAIN WALL IMPACT SYSTEM (4.5" DEEP FRAME)	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 800 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	EFCO CORPORATION 1000 COUNTY ROAD, P.O. BOX 609 MONETT, MO 65708-0609 800-221-4169
CERTIFICATION	
JAN 16 2002	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.	REV.
1050	
SHEET NO.	
4	OF 4

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **FEB 14 2002**
BY *Maunil...*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **01-0525-04**