



MIAMI-DADE COUNTY
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
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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "3005" Aluminum Sliding Glass Door w & w/o Reinforcement

APPROVAL DOCUMENT: Drawing No **97-0227-02**, dated 02/13/01, with revision "A3" dated 10/22/03, titled "S-3005 Sliding Glass Door (Large Missile Impact)", sheets 1 through 5 of 5, 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 Revision stamp with the Notice of Acceptance number and expiration 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 revises NOA# **00-1031.04** and consists of this page 1 and evidence pages E-1and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Theodore Berman, P.E.**

Handwritten signature
 1/14/2004



NOA No 03-1113.04
Expiration Date: October 02, 2005
Approval Date: February 05, 2004
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's parts and sections drawings.
2. Drawing No **97-0227-02**, dated 02/13/01, with revision A3 dated 10/22/03, titled "S-3005 Sliding Glass Door (Large Missile Impact)", sheets 1 through 5 of 5, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer P. E.

B. TESTS

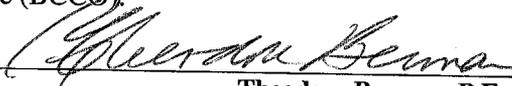
1. Test reports on 1) Uniform Static Air Pressure Test, Loading per TAS 202-94
2) Large Missile Impact Test per FBC TAS 201-94
3) Cyclic Wind Pressure Test per FBC TAS 203-94
along with installation diagram and marked-up drawings of an aluminum sliding glass door, prepared by Hurricane Test Laboratory, Inc. test No. **HTL-0046-0623-02**, dated 06/27/02 and 07/03/02, signed and sealed by Vinu J. Abraham, P.E.
2. Test reports on 1) Uniform Static Air Pressure Test, Loading per TAS 202-94
2) Large Missile Impact Test per FBC TAS 201-94
3) Cyclic Wind Pressure Test per FBC TAS 203-94
along with installation diagram and marked-up drawings of an aluminum sliding glass door, prepared by Hurricane Test Laboratory, Inc. test No. **HTL-0046-0820-02**, dated 09/27/02, signed and sealed by Vinu J. Abraham, P.E.
3. Test reports on 1) Air Infiltration Test, per TASA 202-94
2) Uniform Static Air Pressure Test, Loading per TAS 202-94
3) Water Resistance Test, per TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94,
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of a series 3014 aluminum sliding glass door with and without reinforcement, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0046-1207-96** dated from 12/16/96 to 1/17/97, signed and sealed by Timothy S. Marshall, P.E.
"Submitted under NOA# 00-1031.04"

C. CALCULATIONS

1. Anchor Calculations and structural analysis, prepared by Efco Corporation, dated 10/15/96, 6/3/97 and revised on 2/8/01, signed and sealed by Richard DiBlasi, P.E. *"Submitted under NOA# 00-1031.04"*
2. Anchor Calculations, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 6/6/01, signed and sealed by Warren W. Schaefer, P.E. *"Submitted under NOA# 00-1031.04"*
3. ASTM-1300-E1300-98 analysis.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO)


Theodore Berman, P.E.

Deputy Director, Product Control Division

NOA No 03-1113.04

Expiration Date: October 02, 2005

Approval Date: February 05, 2004

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **00-0614.09** issued to Viracon, Inc. for their "HRG-2 Laminated Glass" dated 11/02/00, expiring on 10/16/03.
2. Notice of Acceptance No. **01-1204.01** issued to E.I. DuPont DeNemours, for their "Sentre Glass ® Plus" dated 01/17/02, expiring on 01/14/07.
3. Notice of Acceptance No. **02-1205.03** issued to Security Impact Glass Holding L.L.C. for their "SAF-GLAS Polycarbonate Laminate" dated 01/02/03, expiring on 12/16/07.
4. Notice of Acceptance No. **02-0916.04** issued to Viracon, Inc. for their "Laminate with Polyvinyl Butryal Interlayer" dated 05/22/03, expiring on 04/14/08.

F. STATEMENTS

1. Laboratory compliance letter for Test Report no. **HTL- 0046-0623-02** and **HTL-0046-0820-02**, issued by Hurricane Test Laboratory, Inc., dated June 25, 2003, signed and sealed by Vinu J. Abraham, P.E.
2. Statement letter of conformance, dated October 31, 1996, signed by Richard DiBlasi, P.E. "*Submitted under NOA# 00-1031.04*"
3. Statement letter of no financial interest, dated January 31, 1997, signed by Steve Cantrell. "*Submitted under NOA# 00-1031.04*"
4. Letter stating that the product has not changed and that the engineer is still in business, dated October 26, 2000, signed by Steve Cantrell. "*Submitted under NOA# 00-1031.04*"

F. OTHERS

1. Notice of Acceptance No. **00-1031.04**, issued to Efco Corporation for their Series "3005" Aluminum Sliding Glass Door, approved on 07/05/01 and expiring on 10/02/05.
2. Test proposal dated 09-24.01 approved by BCCO. "*Submitted under NOA# 02-0722.02*"
3. Letter from the consultant stating that the product is in compliance with the Florida Building Code (FBC)

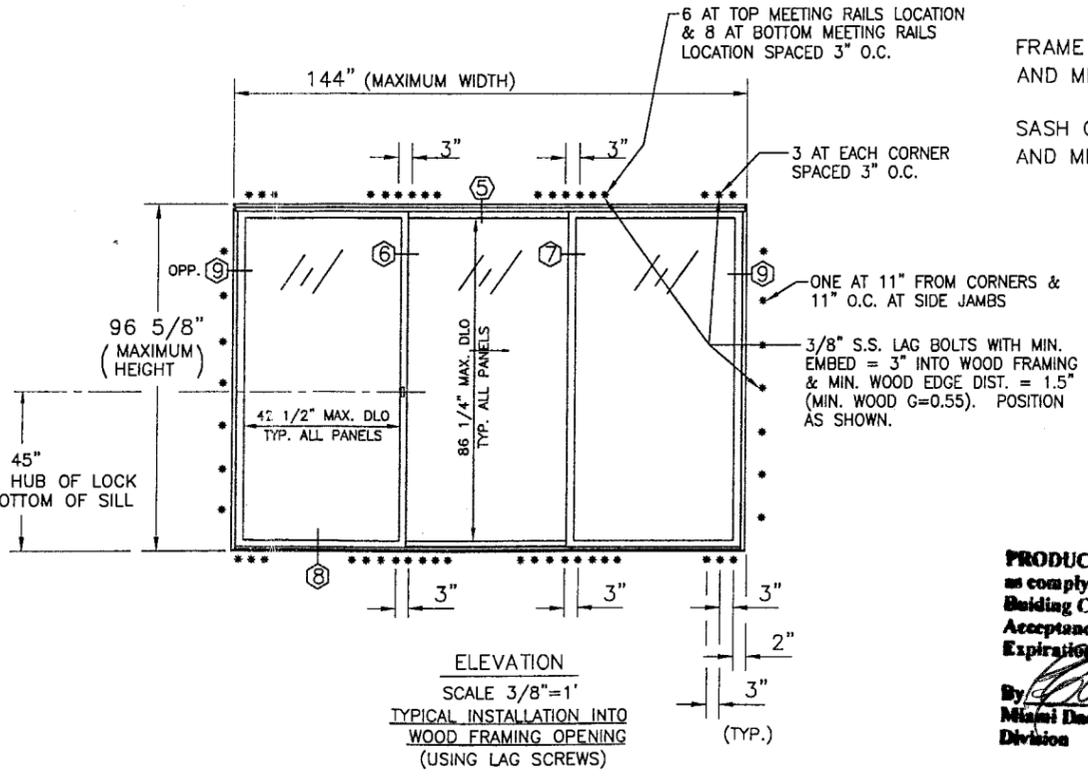
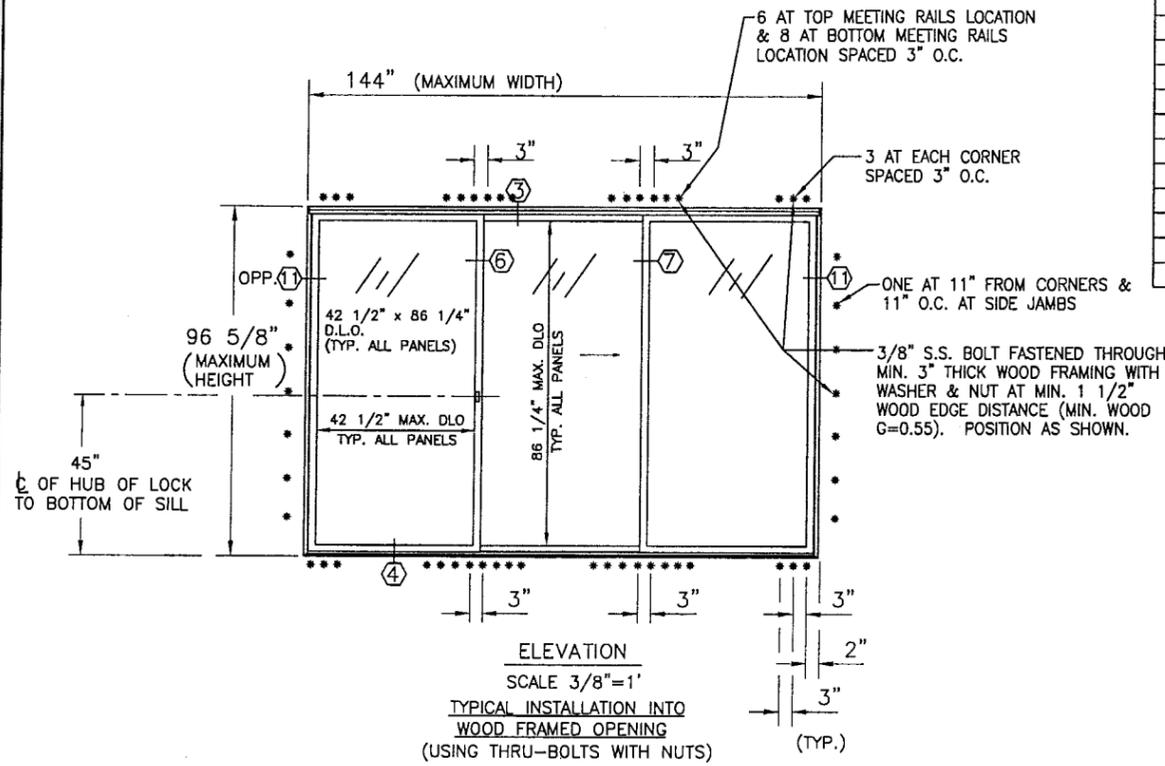


Theodore Berman, P.E.
Deputy Director, Product Control Division
NOA No 03-1113.04
Expiration Date: October 02, 2005
Approval Date: February 05, 2004

ITEM	# REQD	PART #	DESCRIPTION	MFG.	ITEM	# REQD	PART #	DESCRIPTION	MFG.
1	1	3089	HEAD (4.5 X 2.27 X 0.125 O/ALL)	EFCO	15	2	HEP4	FIXED SASH SETTING CHAIR	CENTRAL PLASTICS
2	1	3884	EXTERIOR HEAD CLOSURE (1.79 X 2.08 X 0.125 O/ALL)	EFCO	16	2	HR33	OPERABLE SASH ROLLER	
3	1	3880	INTERIOR HEAD CLOSURE (0.92 X 2.08 X 0.125 O/ALL)	EFCO	17	AS REQD		.25 X .5 POLYURETHANE TAPE	NORTON
4	1	3090	SILL (4.5 X 4.69 X 0.125 O/ALL)	EFCO	18	AS REQD		3/8" DOW CORNING 995 SILICONE	DOW
5	1	3309	OXO MTG. RAIL (3.13 X 5.56 X 0.125 O/ALL)	EFCO	19	1	3894	WEATHERSTRIP BLOCK	EFCO
6	1	3093	FIXED JAMB (4.5 X 2.63 X 0.125 O/ALL)	EFCO	20	1	F278	EXT. STD. DOOR PULL(3901)	EFCO
7	1	3887	THRESHOLD (2.34 X 0.78 X 0.125 O/ALL)	EFCO	21	1	F273	INT. STD. DOOR PULL(3901)	EFCO
8	8	3764	GLAZING BEAD (0.5 X 0.94 X 0.125 O/ALL)	EFCO	22	AS REQD	STK5	#10-16x3/4" PL PH SMS TEK/3	
9	4	3517	HORIZONTAL SASH RAILS (1.53 X 2.37 X 0.125 O/ALL)	EFCO	23	4	SFP1	#10-16x1" PL PH SMS	
10	1	3308	OPERABLE MTG. RAIL (2.87 X 4.87 X 0.125 O/ALL)	EFCO	24	AS REQD	WF02	FRAME WEATHERSTRIP	TRI-SEAL
11	1	3519	OPERABLE SASH SIDE RAIL (3.0 X 1.53 X 0.125 O/ALL)	EFCO	25	2	SPP4	#6-18x1" PL PH SMS	
12	1	3280	FIXED MEETING RAIL (2.875 X 1.53 X 0.125 O/ALL)	EFCO	26	1	HSR5	THUMB TURN	
13	1	3518	FIXED SASH SIDE RAIL (2.31 X 1.53 X 0.125 O/ALL)	EFCO	27	2	MFM1	#8-32x3/4" PL TH MS	
14	2	7584	WEEP BAFFLE RETAINER	EFCO	28A	1	HSP7	DEAD LOCK (MS 1847-09)	ADAMS RITE
					28B	1	HSS6	LOCK ASSEMBLY	SASH CONTROL
					29	AS REQD		D.C. 795 SILICONE	DOW CORNING
					30A	1	HSR1	STRIKE PLATE & SHIMS	ADAMS RITE
					30B	1	HST1	LOCK KEEPER	SASH CONTROL
					31	1	STK0	#8-18x3/4" PL PH SMS TEK/2	
					32	4	RAP5	BAFFLE RETAINER DRIVE-NUT	
					33	2	HCW6	30 PPI FOAM BAFFLE	
					34	AS REQD	LB32	SASH GLIDES	CENTRAL PLASTICS
					35	1 SET	H064	FRAME GASKET (HEAD)	REED RUBBER
					36	1 SET	H063	FRAME GASKET (SILL)	REED RUBBER
					37	1	3923	SUBSILL (4.87 X 0.67 X 0.125 O/ALL)	EFCO
					38	1	HV02	SASH STOP	CENTRAL PLASTICS
					39	AS REQD		GE #1200 SILICONE	GE
					40	AS REQD	H904 H905	GLAZING BLOCKS	REED RUBBER
					41	AS REQD		LAG SCREWS - ANCHORS	
					42	3	STT6	#8-18x9/16" PL PH SMS TEK/2	
					43	3	HBB1	JAM CAM	
					44	1	SLQ3	#8-18x1 1/4" PL PH SMS	
					45	1	STV3	#10-16x1 1/4" HWH SMS	
					46	AS REQD	STSO	#12-14x3/4" PL PH SMS TEK/3	
					48	1	1283	COVER	EFCO

HR33 ROLLERS LOCATED ON OPERABLE PANEL AT BOTTOM OF VERTICAL STILES

ALLOWABLE DESIGN PRESSURE
SEE GLAZING DETAIL & PRESSURE TABLE ON SHEET 5



NOTE: FRAME AND DOOR MATERIAL ARE ALUMINUM 6063-T6

FRAME CORNER ASSEMBLY - MILLED AND MECHANICALLY ASSEMBLED.

SASH CORNER ASSEMBLY - MILLED AND MECHANICALLY ASSEMBLED.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 03-1113.04
Expiration Date 10/02/05
By *Warren W. Schaefer*
Miami Dade Product Control Division

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=1.5		DATE: 02/13/01	
NO.	REVISION DESCRIPTION	BY	DATE
A1	ADDED ITEMS 28B & 30B	KPS	10/22/03
A2	REVISED PRESSURE TABLE	KPS	10/22/03
A3	ADDED GLAZING DETAIL & GLASS TYPES "B"-"E"	KPS	10/22/03

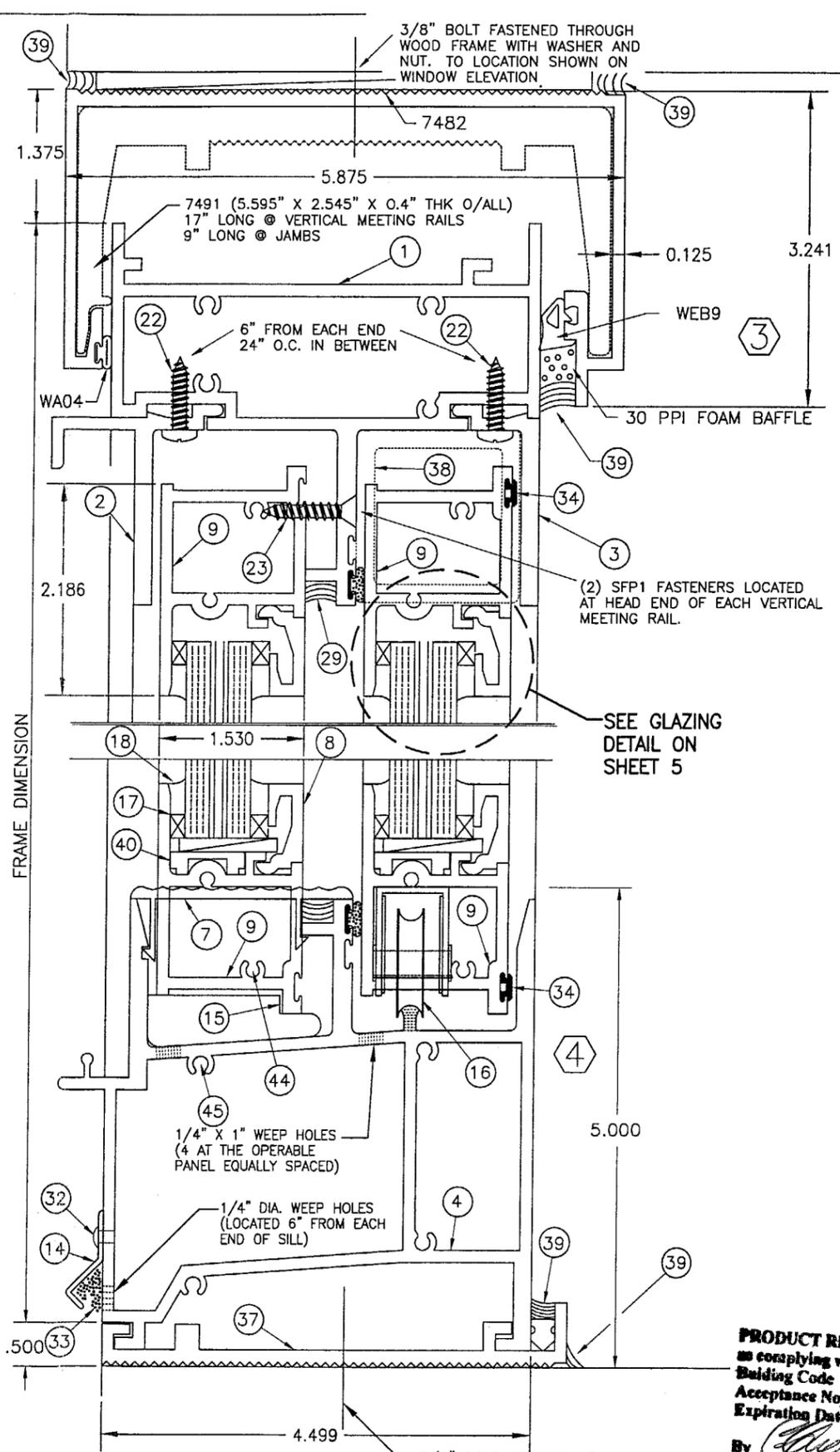
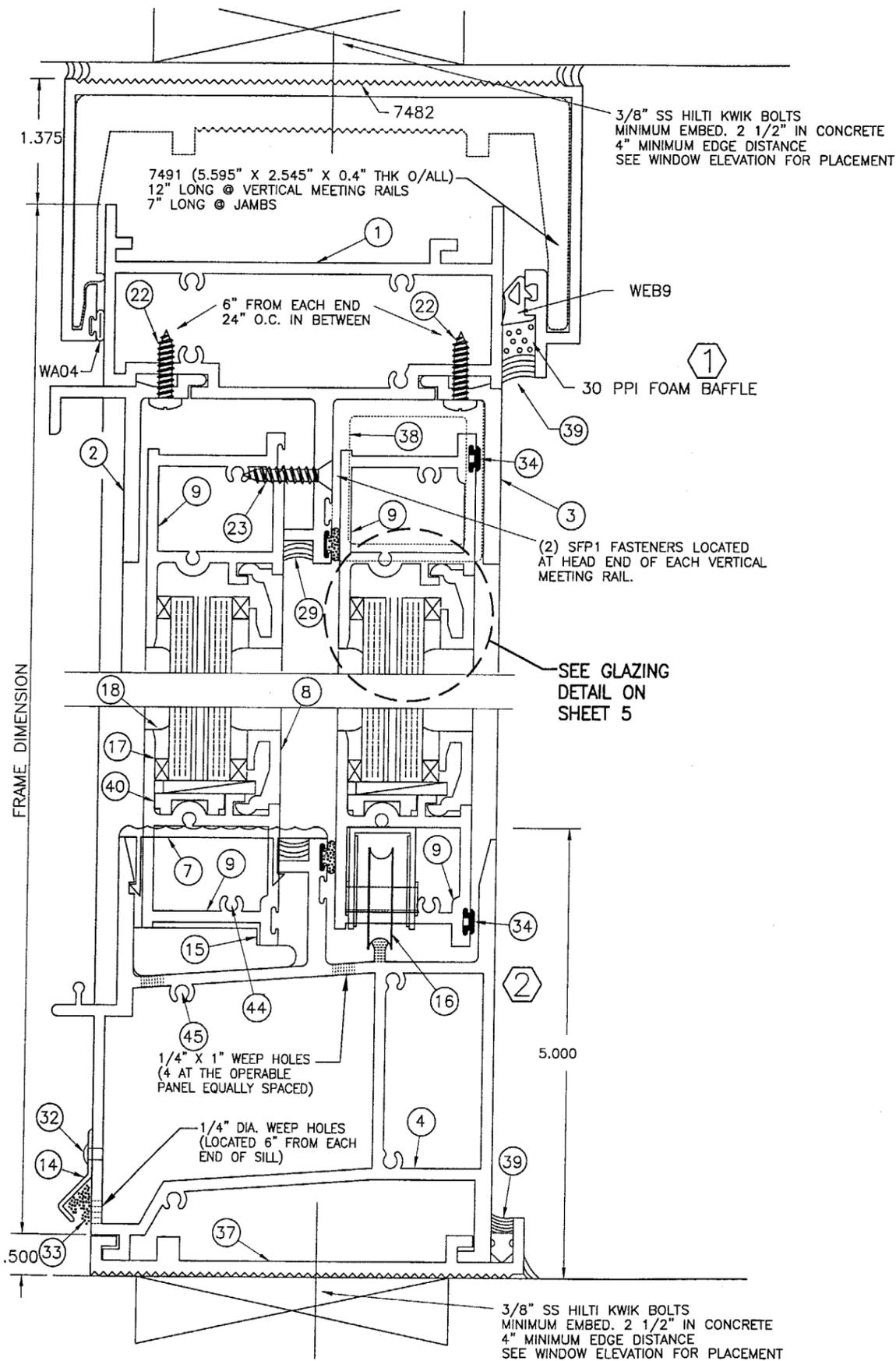
DRAWING TITLE: S-3005 SLIDING GLASS DOOR (LARGE MISSILE IMPACT)

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.
8895 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION: OCT 28 2003
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 97-0227-02	REV. A
SHEET NO. 1 OF 5	

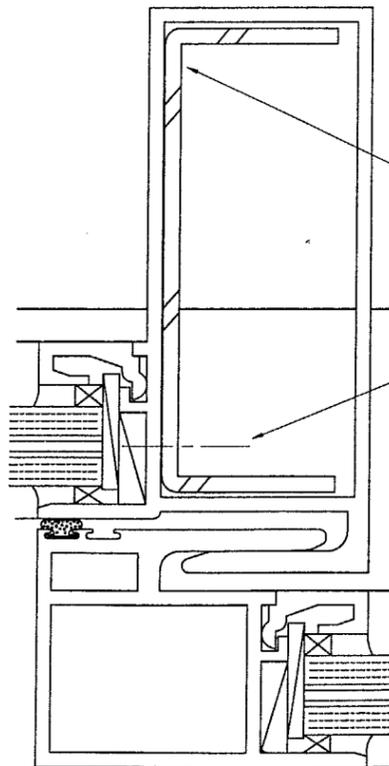
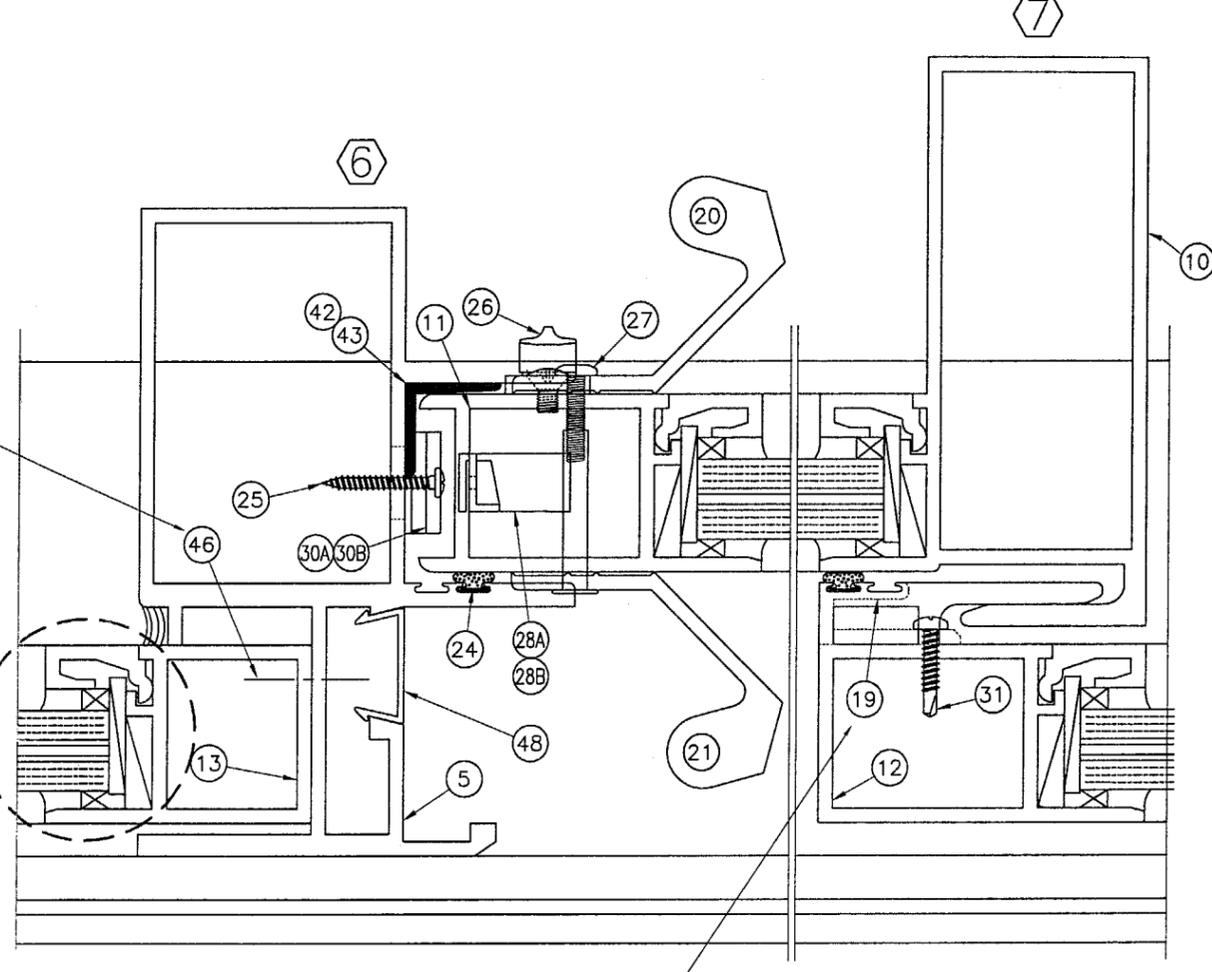
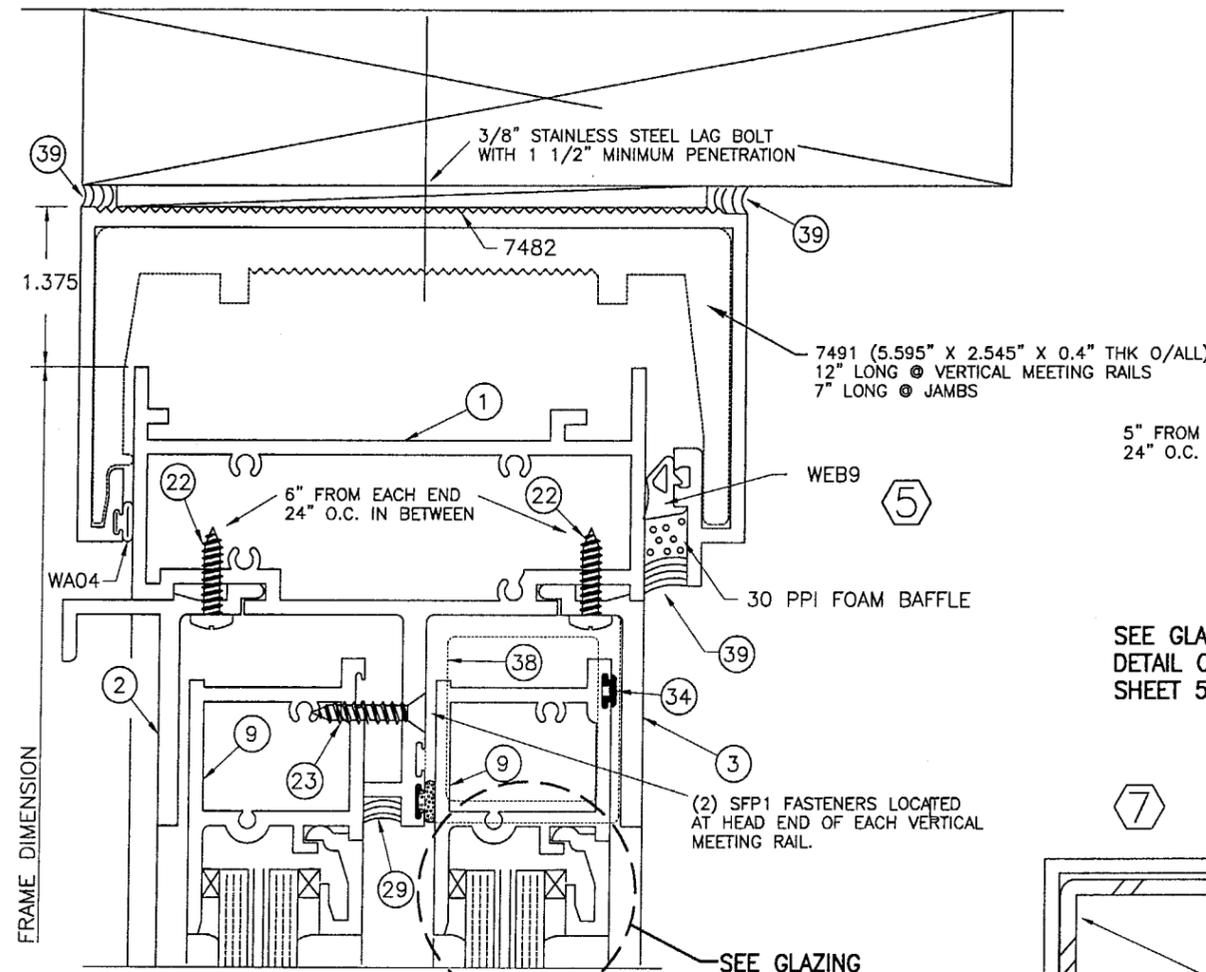


W.W. SCHAEFER JOB NO. 1040

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 03-1113.04
 Expiration Date 10/02/05
 By *Warren Schaefer*
 Miami Dade Product Control
 Division

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DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-1.5	DATE: 02/13/01
NO.	DATE
BY	
REVISION DESCRIPTION	
DRAWING TITLE: S-3005 SLIDING GLASS DOOR (LARGE MISSILE IMPACT) 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. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION OCT 28 2003	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 97-0227-02	REV. A
SHEET NO. 2 OF 5	



FRAME DIMENSION

SEE GLAZING
DETAIL ON
SHEET 5

SEE GLAZING
DETAIL ON
SHEET 5

10 GAUGE
1.500 x 4.000 x 1.500
STEEL REINFORCEMENT
LENGTH= 86.625
ATTACHED WITH #10-24 M.S.
3" FROM EACH END AND ONE AT MID-POINT
(3 FASTENERS TOTAL)

3894 WEATHERSTRIP BLOCK IS 3/4" LONG
FASTENED ABOVE INTERLOCK WITH #8x3/4" TEK SCREW

DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1=1.5	DATE:	02/13/01
NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE
S-3005 SLIDING GLASS DOOR (LARGE MISSILE IMPACT)

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.
8895 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
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

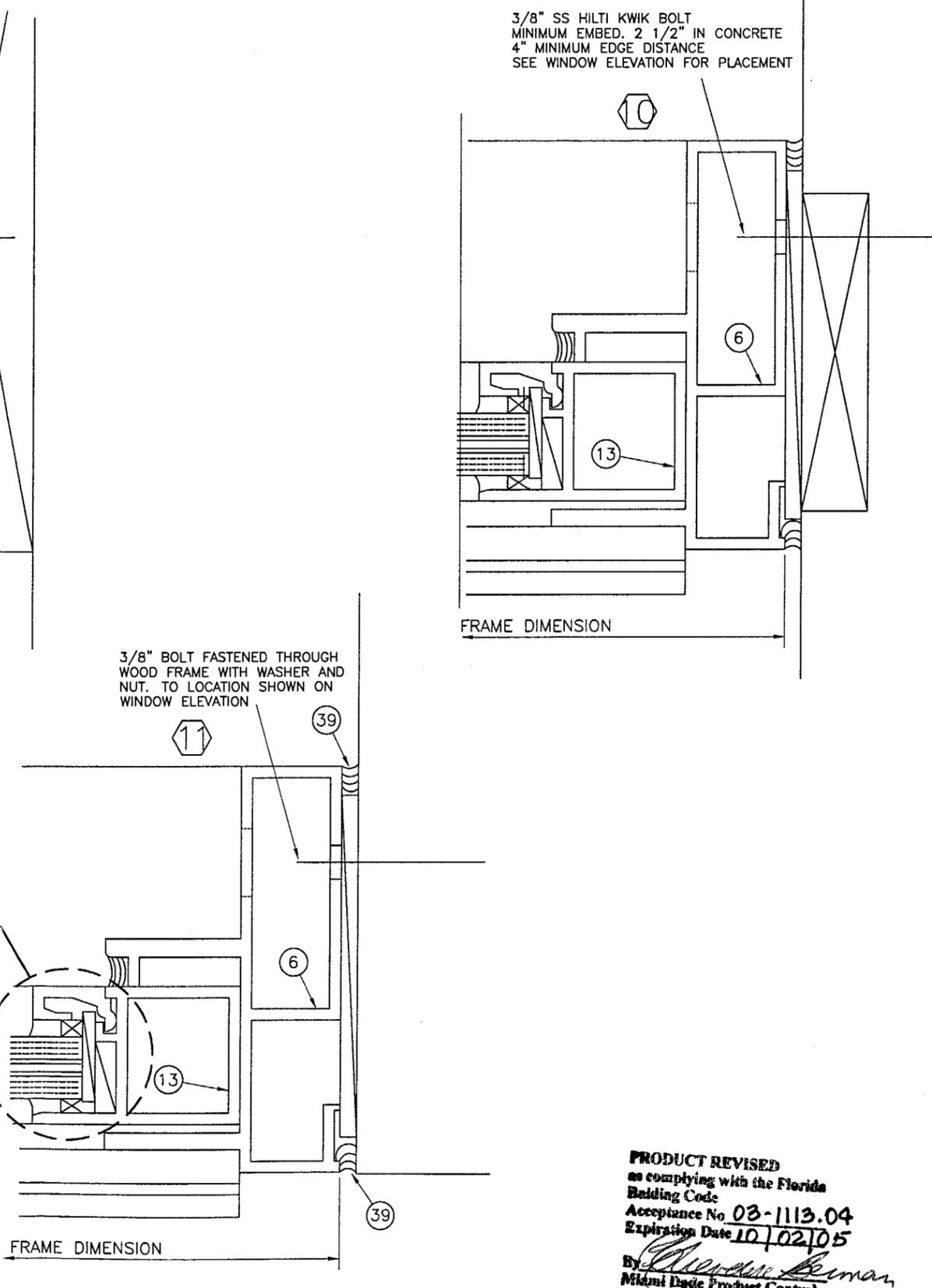
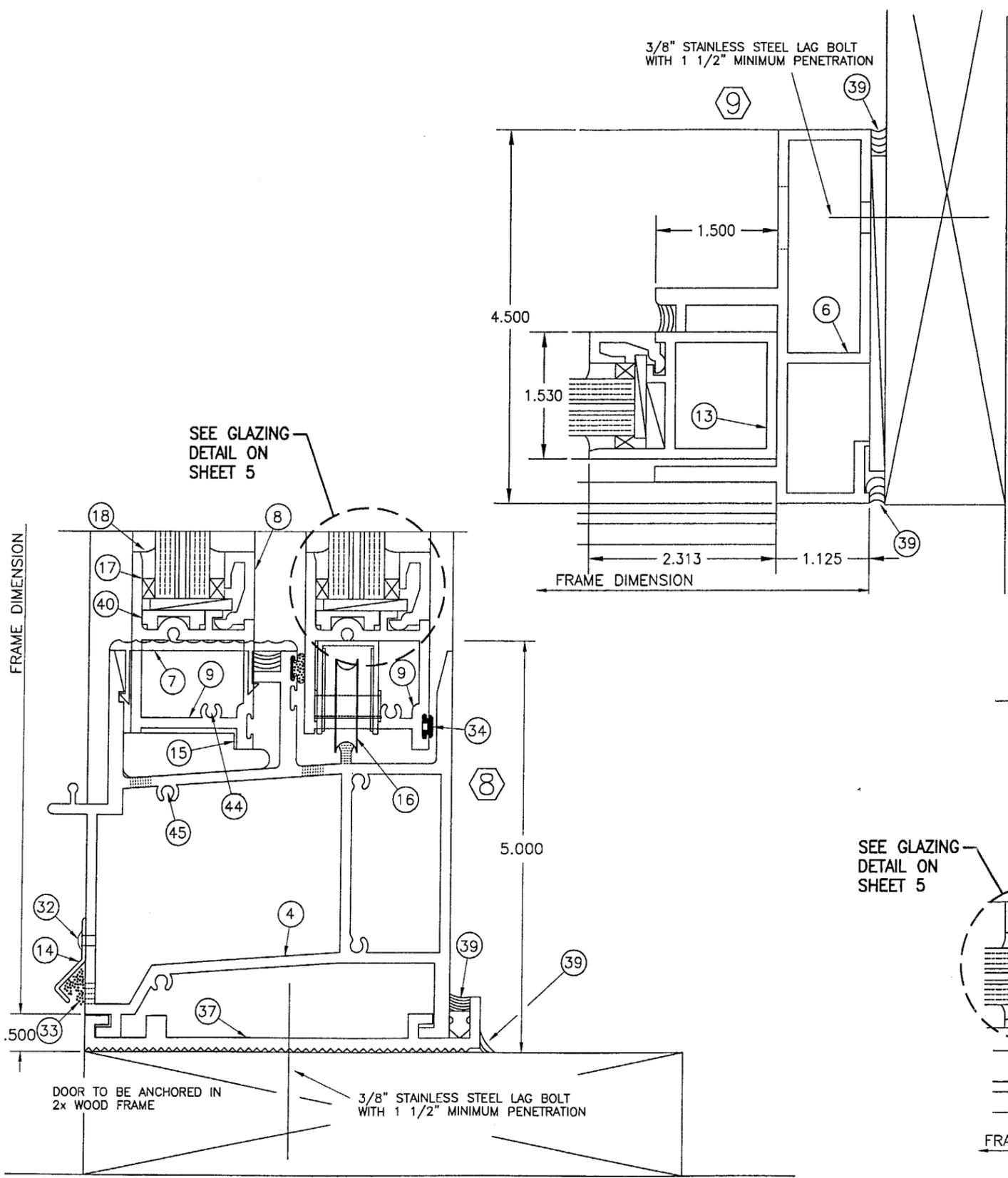
CERTIFICATION
OCT 28 2003

By: *Warren W. Schaefer*
Missile Basic Product Control
Division

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

DRAWING NO.	REV.
97-0227-02	A
SHEET NO.	
3	OF 5

DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1=1.5	DATE:	02/13/01
NO.		REVISION DESCRIPTION	
BY		DATE	



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. **03-1113.04**
 Expiration Date **10/02/05**
 By *Warren W. Schaefer*
 Miami Dade Product Control
 Division

DRAWING TITLE: **S-3005 SLIDING GLASS DOOR (LARGE MISSILE IMPACT)**

CONSULTANTS:
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 8895 N. MILITARY TRAIL, SUITE C-204
 PALM BEACH GARDENS, FL 33410
 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
OCT 28 2003
Warren W. Schaefer
 WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

DRAWING NO.	97-0227-02	REV.	A
SHEET NO.	4	OF	5

W.W. SCHAEFER JOB NO. 1040

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=1.5	DATE: 02/13/01
DATE	
BY	
REVISION DESCRIPTION	
NO.	

S-3005 SLIDING GLASS DOOR (LARGE MISSILE IMPACT)

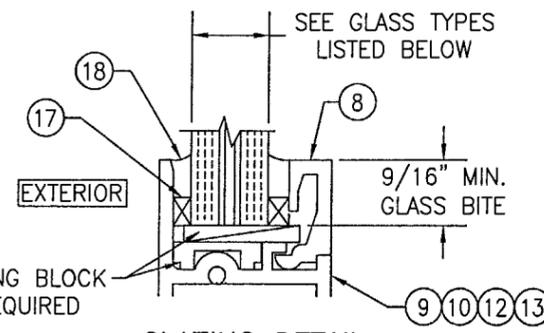
MANUFACTURER
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W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
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CERTIFICATION
OCT 28 2003

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

DRAWING NO. 97-0227-02	REV. A
SHEET NO. 5 OF 5	



GLAZING DETAIL

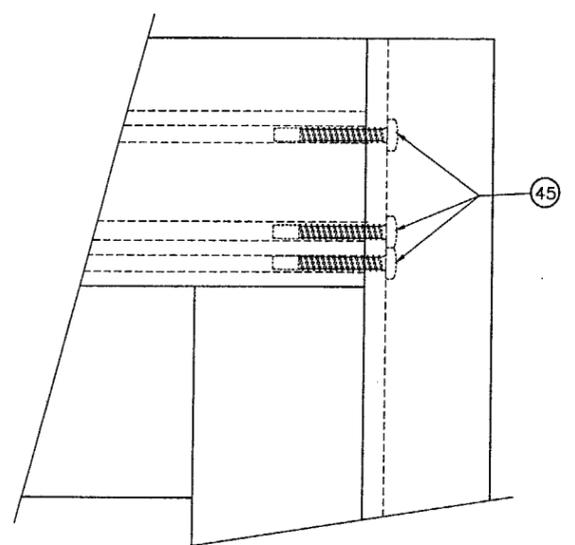
- GLASS "A" 5/8" HEAT STRENGTHENED VIRACON HRG-2 LAMINATED GLASS (1/4" HT. ST./0.05" POLYURETHANE/0.08" POLYCARBONATE/0.05" POLYURETHANE/1/4" HT. ST.)
- GLASS "B" 9/16" ANNEALED SECURITY "SAF-GLAS" LAMINATED GLASS (1/4" A.N./0.015" ALIPHATIC URETHANE/0.070" POLYCARBONATE/0.015" ALIPHATIC URETHANE/1/4" A.N.)
- GLASS "C" 9/16" HEAT STRENGTHENED SECURITY "SAF-GLAS" LAMINATED GLASS (1/4" HT. ST./0.015" ALIPHATIC URETHANE/0.070" POLYCARBONATE/0.015" ALIPHATIC URETHANE/1/4" HT. ST.)
- GLASS "D" 9/16" VIRACON STORMGUARD LAMINATED GLASS (1/4" HT. ST./0.100" SOLUTIA SAFLEX HP INTERLAYER/1/4" HT. ST.)
- GLASS "E" 9/16" "SENTURY GLAS PLUS" HEAT STRENGTHENED LAMINATED GLASS (1/4" HT. ST./0.090" DUPONT SGP/1/4" HT. ST.)

GLASS TYPE	ALLOWABLE PRESSURE		
	(1) POSITIVE (PSF)		NEGATIVE (PSF)
	WITH WATER RESISTANCE	WITHOUT WATER RESISTANCE	
WITHOUT REINFORCEMENT			
A	100	115	115
B	N/A	N/A	N/A
C	N/A	N/A	N/A
D	N/A	N/A	N/A
E	N/A	N/A	N/A
(2) WITH REINFORCEMENT			
A	100	180	180
B	73.5	73.5	73.5
C	100	130	130
D	90	90	90
E	90	90	90

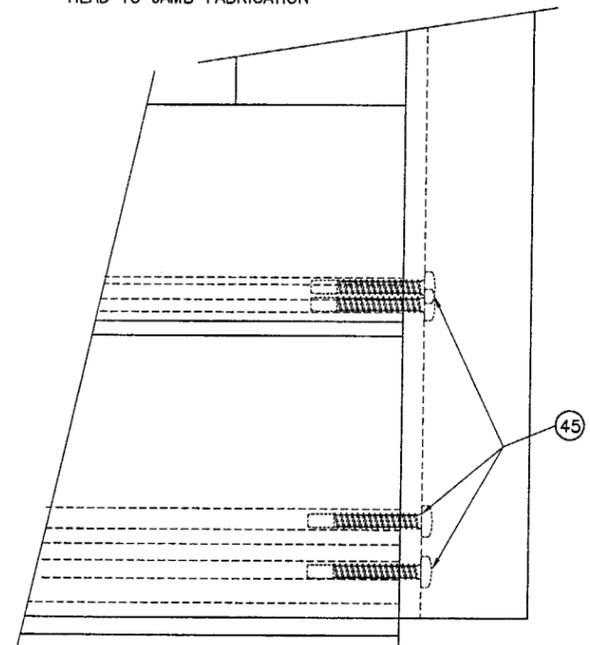
PRODUCT REVISED
in complying with the Florida Building Code
Acceptance No **03-1113.04**
Expiration Date **10/02/05**
By *Warren W. Schaefer*
Miami Dade Product Control Division

(1) WATER RESISTANCE IS NOT REQUIRED FOR THE DOORS IF DOORS ARE INSTALLED IN NON-HABITABLE AREAS WHERE THE DOORS & THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION OR WHEN THEY ARE PROTECTED BY A CANOPY OR OVERHANG SUCH THAT THE ANGLE BETWEEN THE EDGE OF THE CANOPY OR OVERHANG TO SILL IS LESS THAN 45 DEGREES.

(2) REINFORCEMENT CONSISTS OF MEETING RAIL REINFORCEMENT AS SHOWN IN SECTION 7 ON SHEET 3.

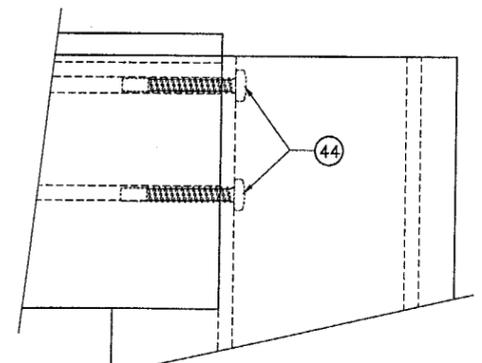


HEAD TO JAMB FABRICATION



SILL TO JAMB FABRICATION

FRAME CORNER ASSEMBLY - MILLED AND MECHANICALLY ASSEMBLED.



SASH CORNER ASSEMBLY - MILLED AND MECHANICALLY ASSEMBLED.