



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

ESR Impact System LLC
12400 SW 134th Street, Suite 8
Miami, FL 33186

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section 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 "2000/2050" Aluminum Horizontal Sliding Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **24-90D**, titled "Series-2000/2050 Alum. Horiz. Sliding Wdw. (L.M.I.)", sheets 1, 1.1, 2 and 3 through 9 of 9, dated 12/02/24, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, 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 Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, **Barranquilla, Colombia**, model/series, 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.

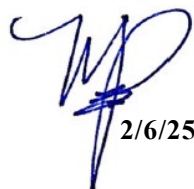
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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 No. 24-1101.01** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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




2/6/25

NOA No. 24-1219.06
Expiration Date: November 06, 2029
Approval Date: February 13, 2025
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

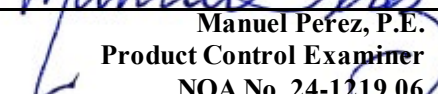
1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 03-0910.02)
2. Drawing No. **W03-75**, titled "Series-2000/2500 Alum. Horiz. Sliding Wdw. (L.M.I.)", sheets 1, 1.1, 2 and 3 through 9 of 9, dated 08/27/03, with revision **K** dated 07/07/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 23-0901.06)

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of series ES-2000 XO horizontal sliding window, prepared by IFET, Inc., Test Report No. **IFET-LAF-05**, dated 10/31/24, signed and sealed by Arshad Viqar, P.E.
2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, 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 horizontal sliding window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5811**, dated 02/16/09, signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 09-1008.06)
3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, 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 horizontal sliding window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-5338** and **FTL-5475**, dated 01/17/08 and 12/20/07 respectively, signed and sealed by Carlos S. Rionda, P.E.
(Submitted in NOA's No. 08-0527.13 and 07-0928.13)



Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1219.06
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

B. TESTS (CONTINUED)

4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, 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 horizontal sliding window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-3809** and **FTL-3804**, dated 06/16/03 and 05/15/03 respectively, signed and sealed by Joseph C. Chang, P.E.
(Submitted under NOA No. 03-0910.02)

C. CALCULATIONS


1. Anchor verification calculations and structural analysis, complying with FBC 8th Edition (2023), dated 10/23/24, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 24-1101.01)
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **23-0717.30** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 08/31/23, expiring on 07/04/28.
2. Notice of Acceptance No. **23-0717.28** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 08/24/23, expiring on 07/08/24.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1219.06
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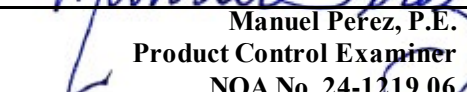
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)
F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 8th Edition (2023)**, and of no financial interest, dated October 31, 2024, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 24-1101.01)
2. Proposal No. **24-0633** issued by Product Control, dated 06/14/24, signed by Manuel Perez, P.E.
(Submitted under NOA No. 24-1101.01)
3. Letter from consultant Al-Farooq Corporation, on behalf of **E.S. Windows, LLC**, requesting a 1-year extension to allow time to perform verification test, dated 08/29/23, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 23-0901.06)
4. Testing agreement letter, dated 08/28/23 between QAI Laboratories and **E.S. Windows, LLC**, issued by QAI Laboratories and signed by Lusinda Delgado, Technical Report Writer.
(Submitted under NOA No. 23-0901.06)
5. Distributor Agreement, dated 10/20/10, signed by Carla Garcia Torrente and by Andres Chamorro.
(Submitted under NOA No. 12-0223.46)
6. Laboratory compliance letter for Test Report No. **FTL-5811**, issued by Fenestration Testing Laboratory, Inc., dated 08/13/09, signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 09-1008.06)
7. Proposal No. **09-1583** issued by Product Control, dated 11/23/09, signed by Jaime D. Gascon, P. E.
(Submitted under NOA No. 09-1008.06)
8. Laboratory compliance letter for Test Reports No. **FTL-5338** and **FTL-5475**, issued by Fenestration Testing Laboratory, Inc., dated 01/17/08 and 12/20/07, signed and sealed by Carlos S. Rionda, P.E.
(Submitted under NOA's No. 08-0527.13 and 07-0928.13)
9. Laboratory compliance letter for Test Reports No.'s **FTL-3809** and **FTL-3804**, issued by Fenestration Testing Laboratory, Inc., dated 06/16/03 and 05/15/03, revised & reissued by Fenestration Testing Laboratory dated 08/10/06, all signed and sealed by Joseph C. Chan, P.E.
(Submitted under NOA No. 03-0910.02)

G. OTHERS

1. Notice of Acceptance No. **23-0901.06**, issued to E.S. Windows, LLC, for their Series "2000/2050" Aluminum Horizontal Sliding Window—L.M.I., approved on 10/19/23 and expiring on 11/06/24.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1219.06
Expiration Date: November 06, 2029
Approval Date: February 13, 2025

ESR Impact System LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **24-90D**, titled “Series-2000/2500 Alum. Horiz. Sliding Wdw. (L.M.I.)”, sheets 1, 1.1, 2 and 3 through 9 of 9, dated 12/02/24, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS


1. Notice of Acceptance No. **23-0717.30** issued to **Kuraray America, Inc.** for their “**SentryGlas® (Clear and White) Glass Interlayers**” dated 08/31/23, expiring on 07/04/28.
2. Notice of Acceptance No. **24-0205.08** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 03/21/24, expiring on 07/08/29.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 8th Edition (2023)** and of no financial interest, dated November 26, 2024, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
2. Distributor Agreement between Energia Solar, S.A., Barranquilla, Columbia, S.A. and ESR Impact System LLC, Miami, Florida, dated 01/22/25, signed by Ms. Adrea Zanbrano, General Counsel and Raul Losada, President, respectively on behalf of the companies.
3. Private Labeling Agreement document in conformance to Product Control guidelines.

G. OTHERS

1. Notice of Acceptance No. **24-1101.01**, issued to E.S. Windows, LLC, for their Series “2000/2050” Aluminum Horizontal Sliding Window – L.M.I., approved on 11/21/24 and expiring on 11/06/29.



Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1219.06
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THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.

SERIES-2000/2050 ALUM HORIZ. SLIDING WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON SHEETS 2 & 3.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS
OF H.R./H.R. OR H.R. WITH OTHER WINDOW TYPES IN MODULES OF
TWO OR MORE WINDOWS USING MIAMI-DADE COUNTY APPROVED
MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL
APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2023 (8TH EDITION) FLORIDA BUILDING CODE
INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE
DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT
LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS
AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE
MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

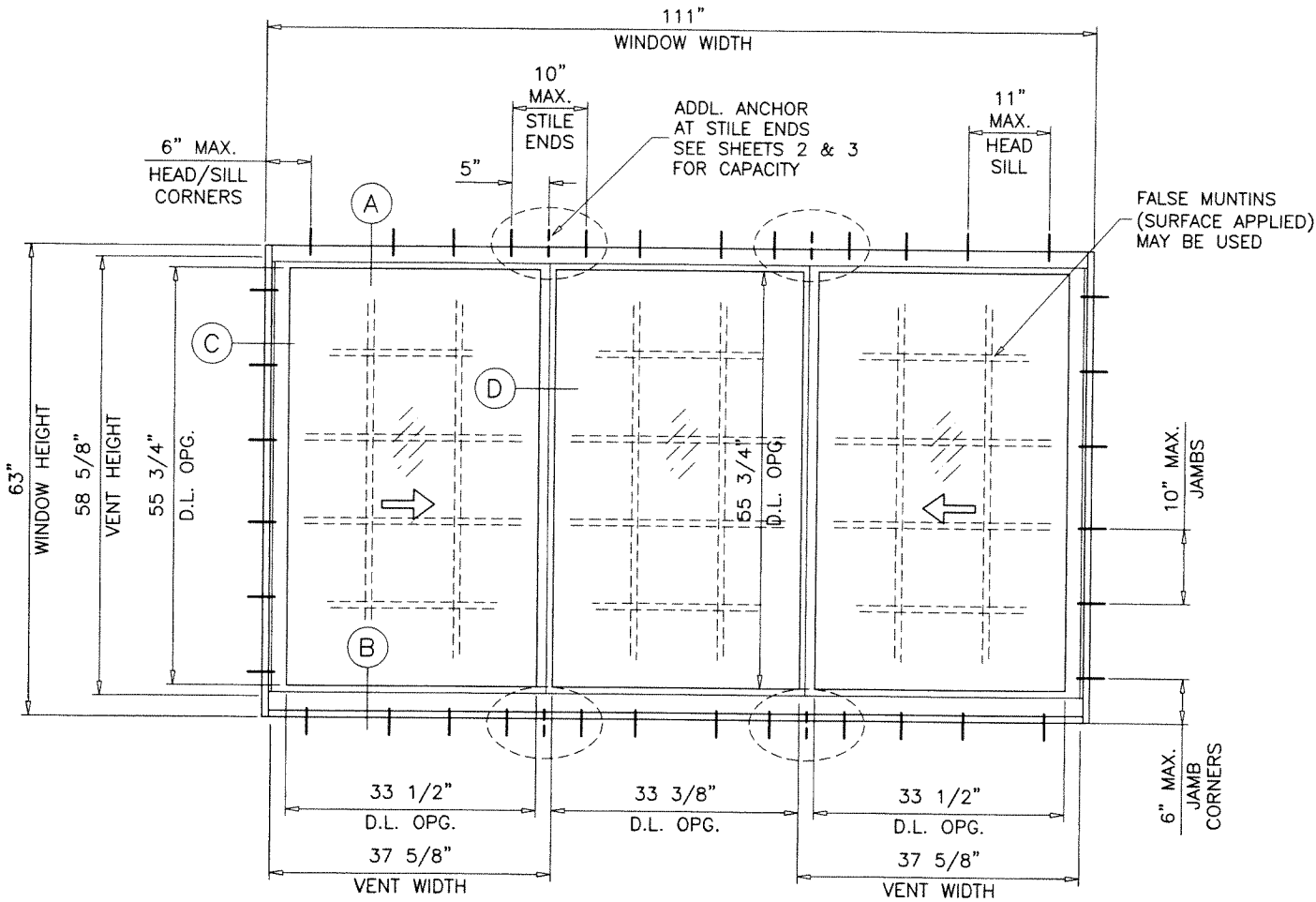
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,
AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

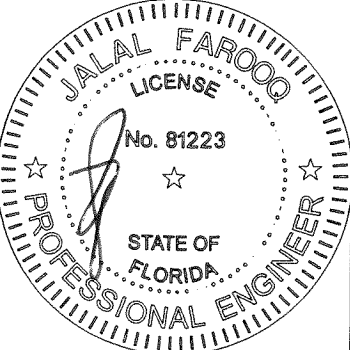


TYPICAL ELEVATION

LAMINATED GLASS
LARGE MISSILE IMPACT

DEC 05 2024

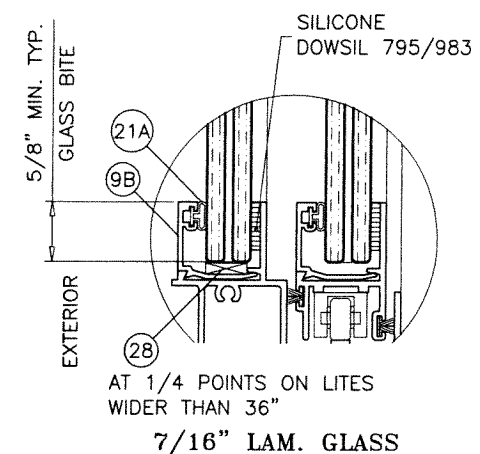
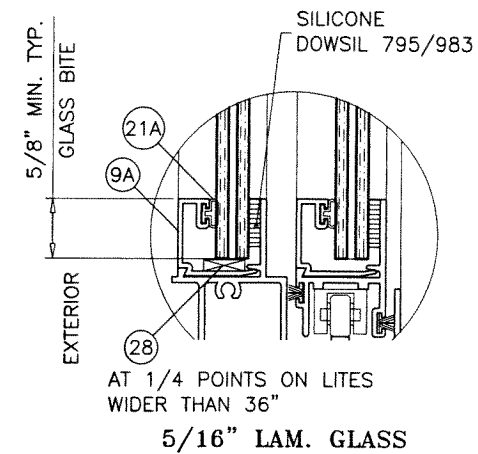
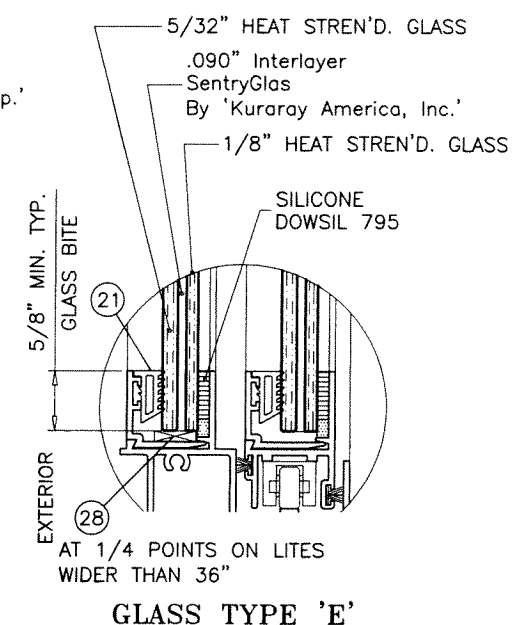
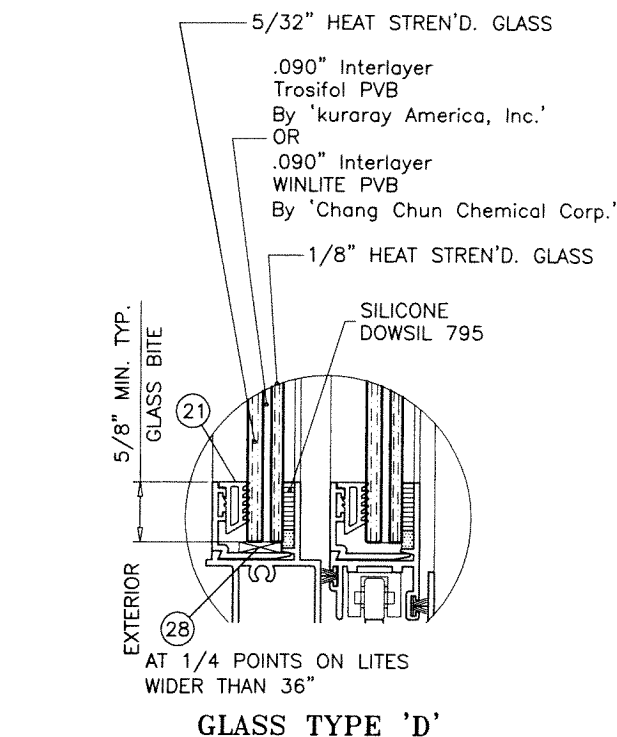
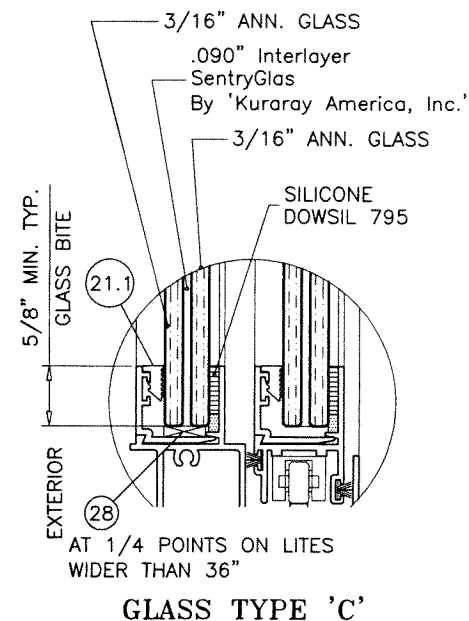
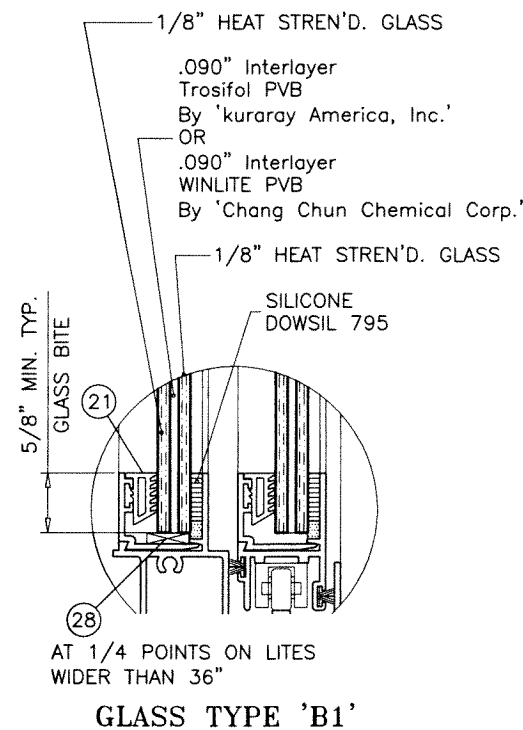
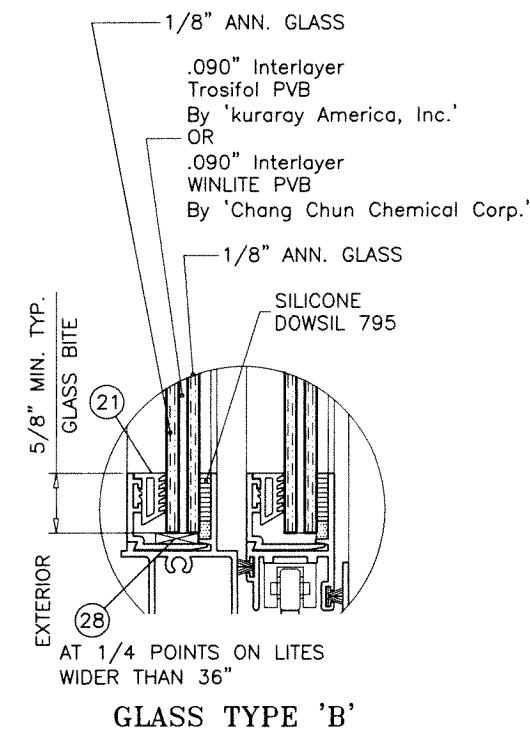
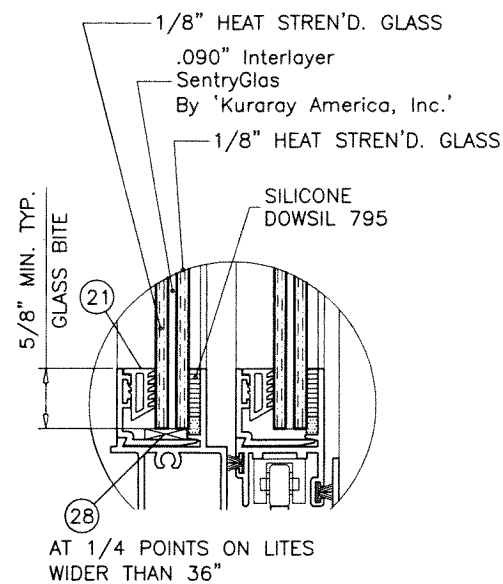
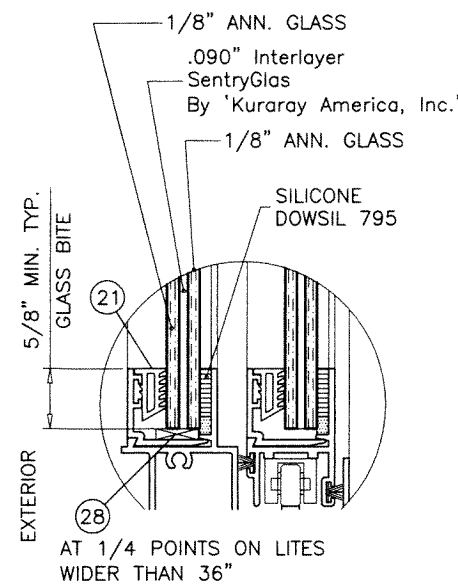
PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **24-1219.06**
Expiration Date: **11/06/2029**
By: *Manuel Perez*
Miami-Dade Product Control



SERIES-2000/2050 ALUM HORIZ. SLIDING WDW. (L.M.I.)
ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL. 33186
Phone: (305) 489-1608
www.---

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #9538
COMP-ANL\24-90D-ESR

revisions:		no		date		by		description	
date:	12-02-24	scale:	1/2"=1'-0"	dr. by:	TARIQ	chk. by:		drawing no.	24-90D
								sheet 1 of 9	

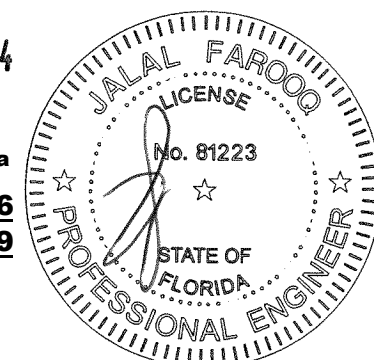


ALT. GLAZING OPTIONS

SQUARE GLAZING STOP CAN BE USED WITH ALL
GLASS TYPES SHOWN ON THIS SHEET.

DEC 05 2024

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 24-1219.06
Expiration Date: 11/06/2029
By: Manuel Perez
Miami-Dade Product Control



SERIES-2000/2050 ALUM HORIZ. SLIDING WDW. (L.M.I.)

ESR Impact System LLC.

Low Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL 33186
Phone: (305) 489-1608 www.impact-system.com

no	date	by	description
revisions:			

date: 12-02-24
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

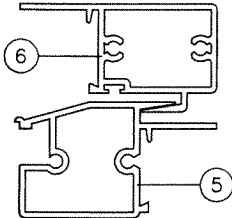
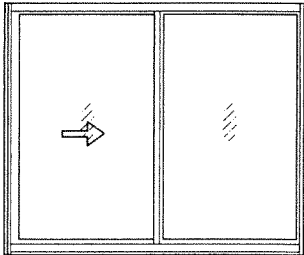
drawing no.
24-90D
sheet 1.1 of 9

AL-FAROOQ CORPORATION
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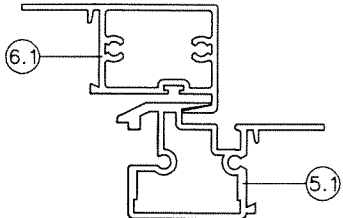
COMP-ANI\24-90D-ESB

DESIGN LOAD CAPACITY - PSF (XO OR OX SIZES) SERIES 2000/2050												
WINDOW DIMS.		A	STD. ANCHOR SPACING						ADDL. ANCHOR			
			STD. MTG. RAIL (FRAME SILL *1, 2, 3 & 4) SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS				H.D. MTG. RAIL (SILL *3 & 4) **		H.D. MTG. RAIL (SILL *3 & 4) **			
			GLASS TYPE 'A' GLASS TYPE 'B'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C'		GLASS TYPE 'D'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'	
WIDTH	HEIGHT		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
26-1/2"	26" (3)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
37"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
53-1/8"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
74"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
26-1/2"	38-3/8" (3)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
37"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
53-1/8"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
74"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
26-1/2"	50-5/8" (4)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
37"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
53-1/8"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
74"		8	-	-	70.0	90.0	70.0	80.0	80.0	90.0	-	-
26-1/2"	63" (5)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
37"		4	58.9	67.3	70.0	90.0	70.0	80.0	80.0	90.0	-	-
53-1/8"		6	42.6	48.7	70.0	86.6	70.0	80.0	80.0	90.0	-	-
74"		8	-	-	-	-	-	-	75.3	75.3	80.0	90.0
24"	24" (2)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
36"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
48"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
60"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
72"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
24"	36" (3)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
36"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
48"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
60"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
72"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
24"	48" (4)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
36"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
48"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
60"		6	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
72"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
24"	60" (5)	3	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
36"		4	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	-	-
48"		6	54.2	61.9	70.0	90.0	70.0	80.0	80.0	90.0	-	-
60"		6	45.1	51.5	70.0	87.3	70.0	80.0	80.0	90.0	-	-
72"		8	-	-	70.0	78.7	70.0	78.7	80.0	82.7	80.0	90.0

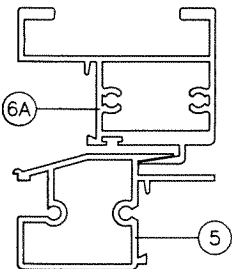
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SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS



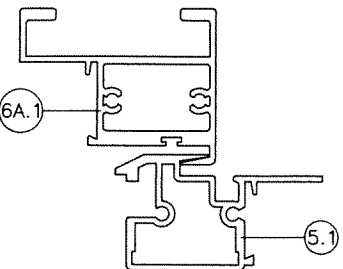
STD. MTG. RAILS
S-2000



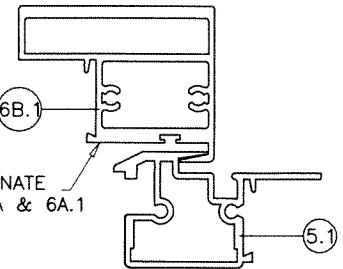
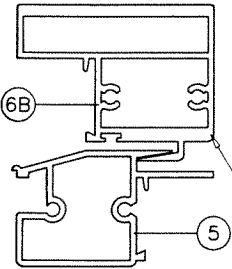
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S-2050



H.D. MTG. RAILS
S-2000



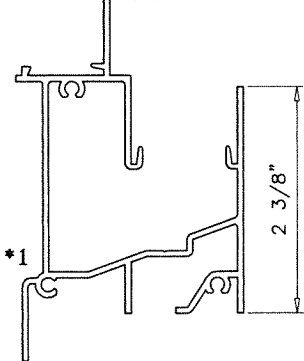
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S-2050



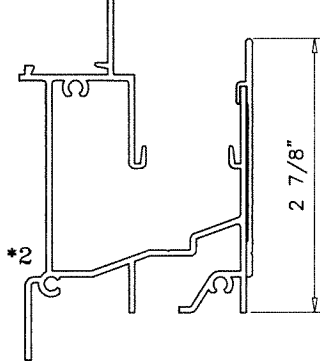
ALTERNATE
TO 6A & 6A.1

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

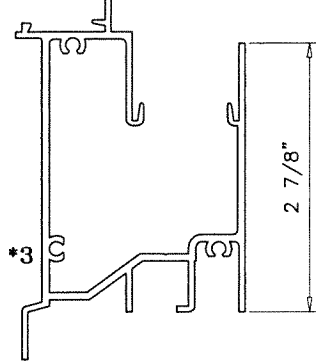
A = NO. OF ANCHORS PER HEAD & SILL
() = NO. OF ANCHORS PER JAMB



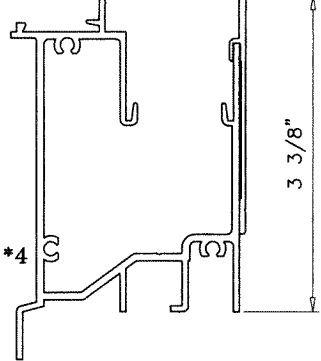
STD. SILL WITHOUT RISER
LIMIT EXT.(+) LOADS TO 53.3 PSF



STD. SILL WITH RISER
LIMIT EXT.(+) LOADS TO 70.0 PSF



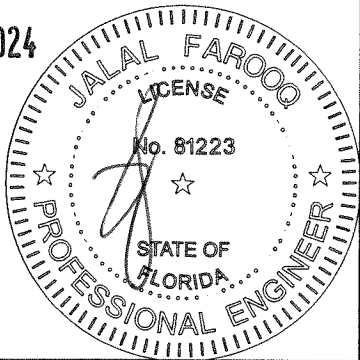
HI-RISE SILL WITHOUT RISER
LIMIT EXT.(+) LOADS TO 67.5 PSF



HI-RISE SILL WITH RISER
LIMIT EXT.(+) LOADS TO 80.0 PSF

DEC 05 2024

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **24-1219.06**
Expiration Date: **11/06/2029**
By: *Manuel Perez*
Miami-Dade Product Control



revisions: no. date by description

date: 12-02-24

scale: 1/2" = 1"

dr. by: TARIQ

chk. by:

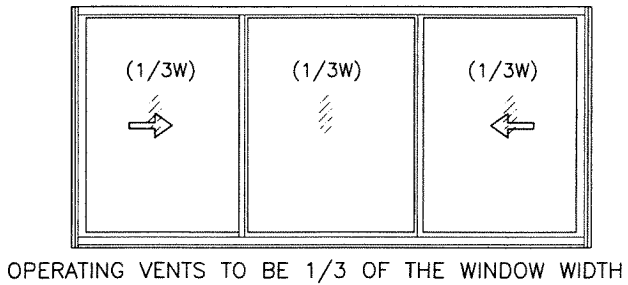
drawing no.
24-90D
sheet 2 of 9

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL (305) 264-8100
WWW.AFCENG.COM
FBPE #3538

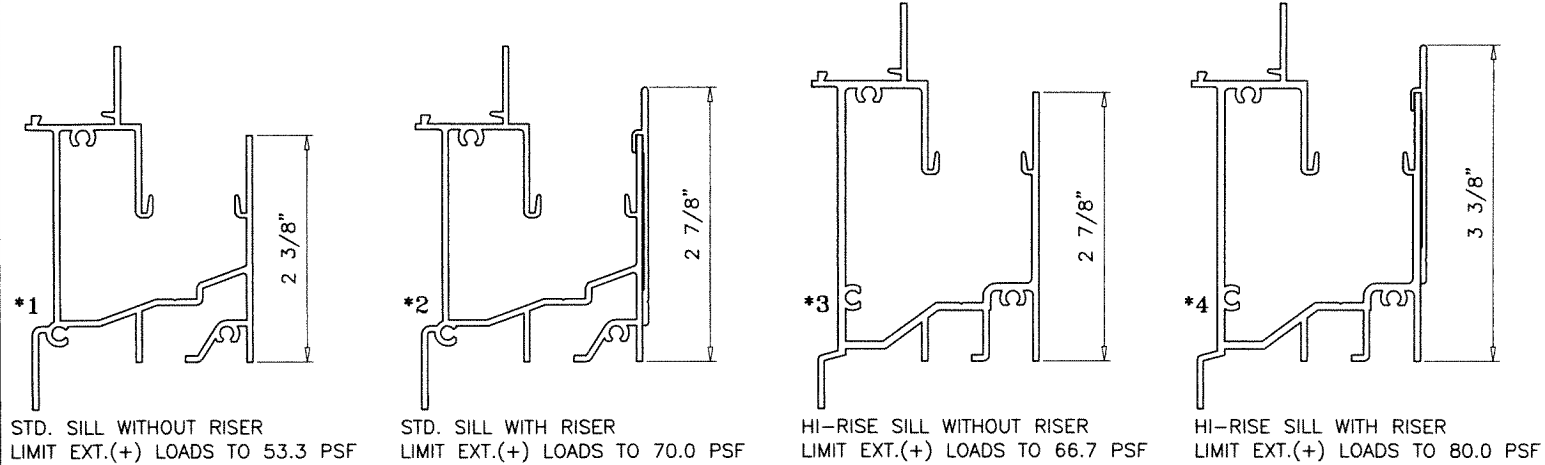
SERIES-2000/2050 ALUM. HORIZ. SLIDING WDW. (L.M.I.)
ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL. 33186
Phone: (305) 489-1608
www.---

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SERIES 2000/2050												
WINDOW DIMS.		A	STD. ANCHOR SPACING								ADDL. ANCHOR	
			STD. MTG. RAIL (FRAME SILL *1, 2, 3 & 4) SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS						H.D. MTG. RAIL (SILL *3 & 4)**		H.D. MTG. RAIL** (SILL *3 & 4)	
			GLASS TYPE 'A' GLASS TYPE 'B'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C'		GLASS TYPE 'D'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'	
			EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
WIDTH	HEIGHT											
74” 106–1/4” 111”	26” (3)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	–	–	–	–	–	–	80.0	90.0	–	–
74” 106–1/4” 111”	38–3/8” (3)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	–	–	–	–	–	–	80.0	90.0	–	–
74” 106–1/4” 111”	50–5/8” (4)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	–	–	–	–	–	–	80.0	90.0	–	–
74” 106–1/4” 111”	63” (5)	9	45.4	51.9	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	–	–	–	–	–	–	77.1	77.1	80.0	90.0
		12	–	–	–	–	–	–	75.3	75.3	80.0	90.0
72” 84” 96” 108”	24” (2)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
72” 84” 96” 108”	36” (3)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
72” 84” 96” 108”	48” (4)	9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		12	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	–	–
72” 84” 96” 108”	60” (5)	9	54.2	61.9	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	47.6	54.4	70.0	90.0	70.0	80.0	80.0	90.0	–	–
		9	–	–	70.0	83.9	70.0	80.0	80.0	88.2	80.0	90.0
		12	–	–	70.0	78.7	70.0	78.7	80.0	82.7	80.0	90.0

A = NO. OF ANCHORS PER HEAD & SILL
() = NO. OF ANCHORS PER JAMB



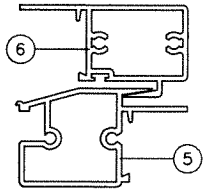
OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH



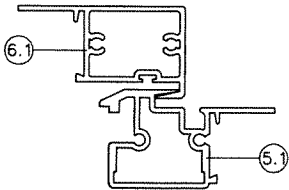
**
SEE DETAILS BELOW
FOR EXT(+) LOAD LIMITATIONS

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SERIES 2000/2050											
STD. ANCHOR SPACING											
WINDOW DIMS.		A	STD. MTG. RAIL (FRAME SILL *1, 2, 3 & 4) SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS						H.D. MTG. RAIL (SILL *3 & 4) **		
			GLASS TYPE 'A' GLASS TYPE 'B'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C'		GLASS TYPE 'D'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'		
WIDTH	HEIGHT		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	
106-1/4" 111"	26" (3)	8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		11	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		12	–	–	–	–	–	–	80.0	90.0	
106-1/4" 111"	38-3/8" (3)	8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		11	–	–	70.0	90.0	70.0	80.0	80.0	90.0	
		12	–	–	–	–	–	–	80.0	90.0	
74"	50-5/8" (4)	8	–	–	70.0	90.0	70.0	80.0	80.0	90.0	
74"	63" (5)	8	–	–	–	–	–	–	80.0	90.0	
72" 84" 96" 108"	24" (2)	8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		11	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
72" 84" 96" 108"	36" (3)	8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		11	–	–	70.0	90.0	70.0	80.0	80.0	90.0	
72" 84" 96"	48" (4)	8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0	
		8	–	–	70.0	90.0	70.0	80.0	80.0	90.0	
		9	–	–	–	–	–	–	80.0	90.0	
72"	60" (5)	8	–	–	70.0	90.0	70.0	80.0	80.0	90.0	

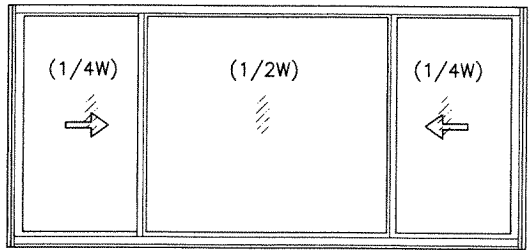
A = NO. OF ANCHORS PER HEAD & SILL
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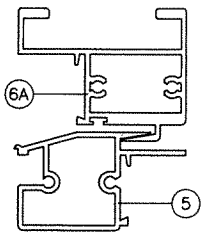
STD. MTG. RAILS
S-2000



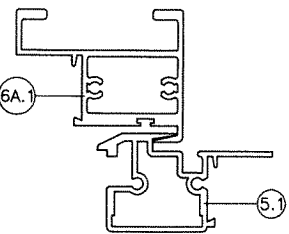
STD. MTG. RAILS
S-2050



OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH



H.D. MTG. RAILS
S-2000

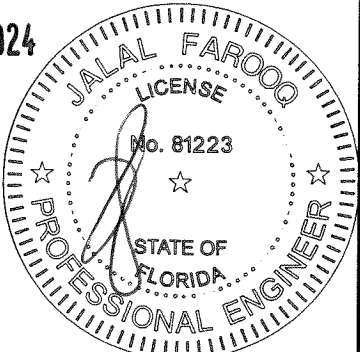


H.D. MTG. RAILS
S-2050

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

DEC 05 2024

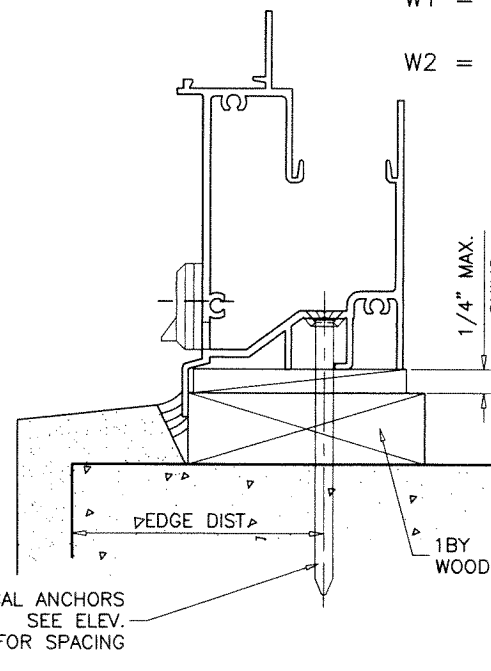
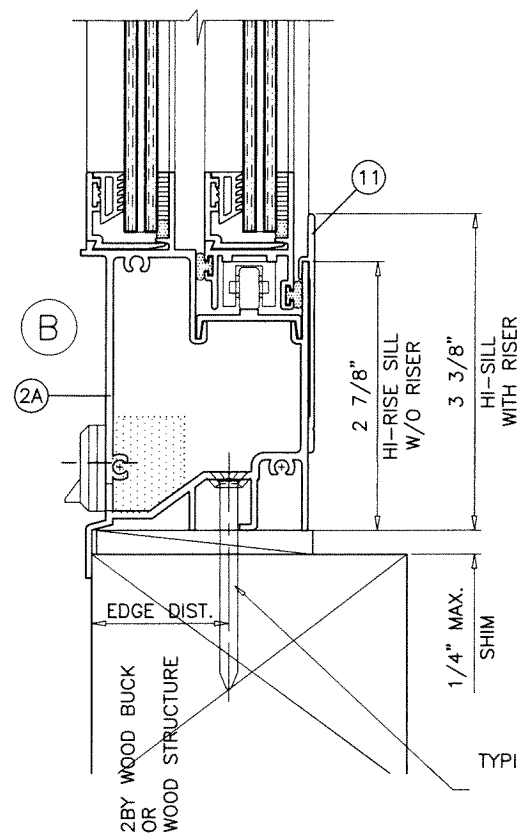
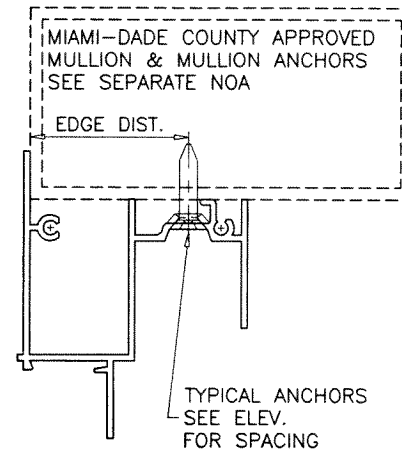
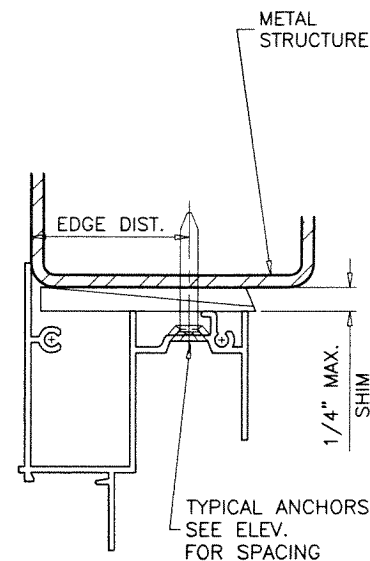
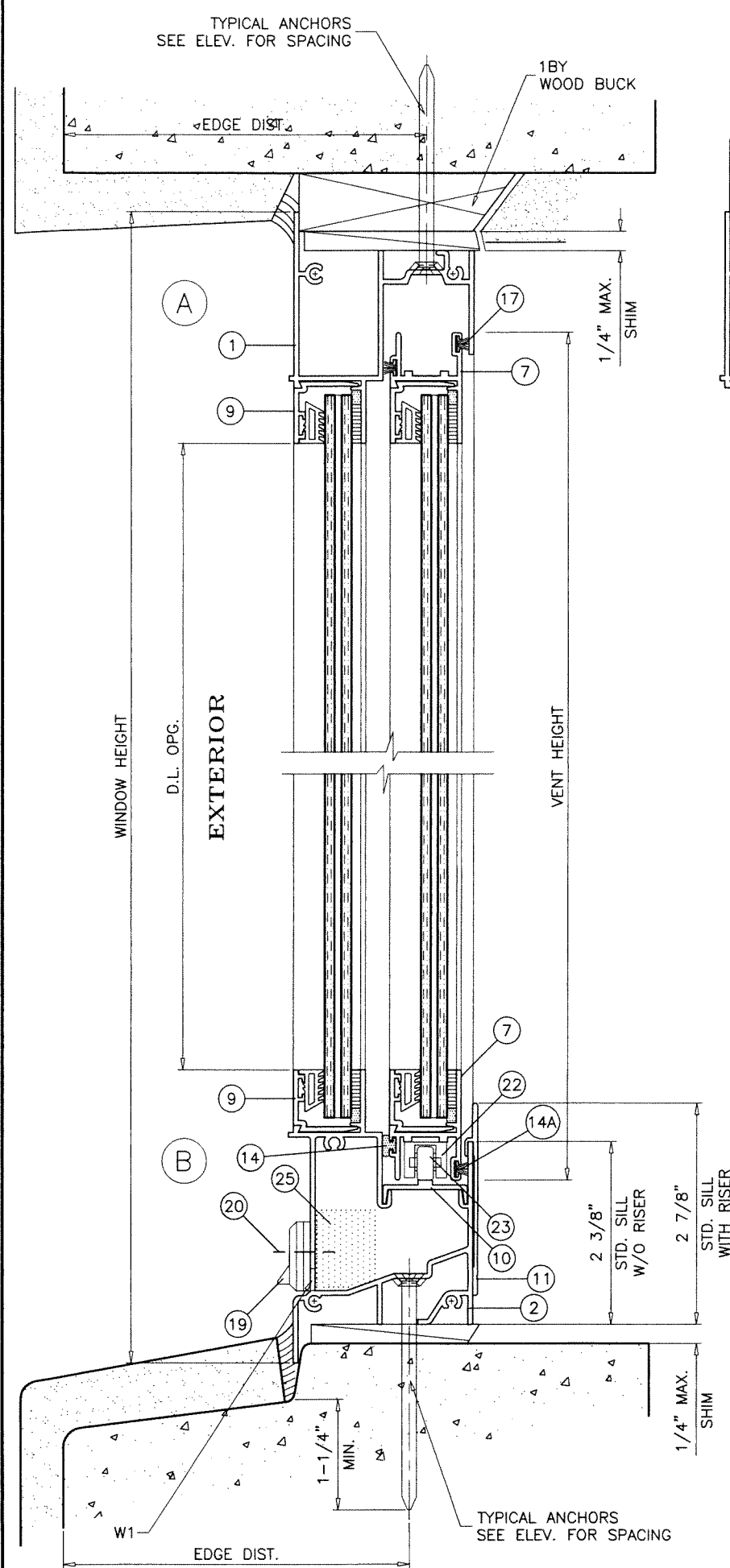
PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **24-1219.06**
Expiration Date: **11/06/2029**
By: *Manuel Perez*
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
FBPE #3538

SERIES-2000/2050 ALUM. HORIZ. SLIDING WDW. (L.M.I.)
ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL. 33186
Phone: (305) 489-1608
www.---

revisions:		no date by description	
date:	12-02-24	scale:	1/2" = 1"
dr. by:	TARIQ	chk. by:	
drawing no.	24-90D	sheet	3 of 9



WOOD BUCKS AND METAL STRUCTURE NOT BY 'ESR IMPACT SYS.'
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING
1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)
DIRECTLY INTO CONCRETE OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. ($F_y = 36$ KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS $f'_c = 3000$ PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS $f'_m = 2000$ PSI MIN.

SEALANTS:

FRAME AND VENT CORNERS AND INSTALLATION SCREWS AT SILL
SEALED WITH WHITE/ALUMINUM COLORED SILICONE.

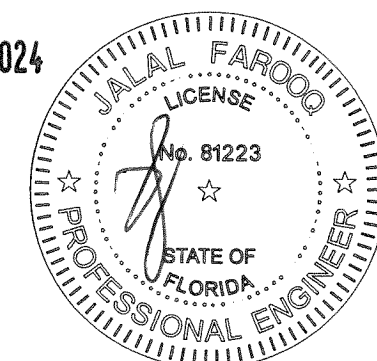
WEEPHOLES:

W1 = 1-13/16" X 1/4" WEEPHOLES AT 3" FROM EACH END
WITH PLASTIC BAFFLE
W2 = 1/4" WEEPHOLE AT TOP & BOTTOM RAIL 1" FROM EACH END

SERIES-2000
SERIES-2050

DEC 05 2024

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **24-1219.06**
Expiration Date: **11/06/2029**
By: *Manuel Fern*
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538
COMP-ANL 24-90D-ESR

SERIES-2000/2050 ALUM. HORIZ. SLIDING WDW. (L.M.I.)

ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL 33186
Phone: (305) 489-1608
WWW.-

revisions:
no date by description

date: 12-02-24
scale: 1/2" = 1"

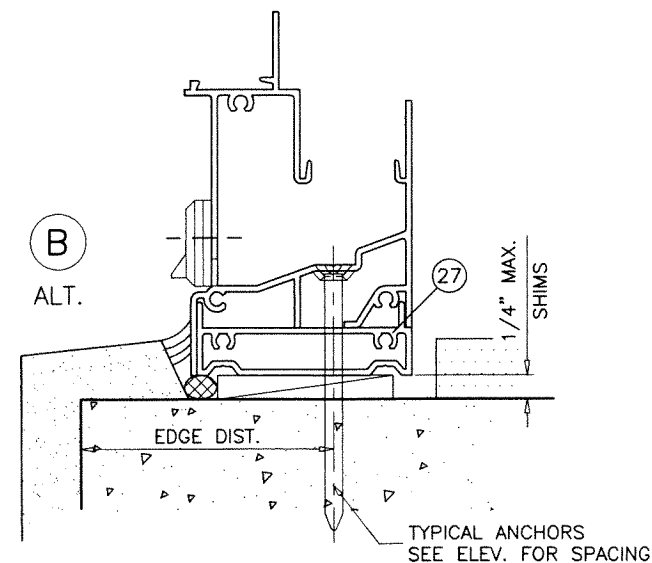
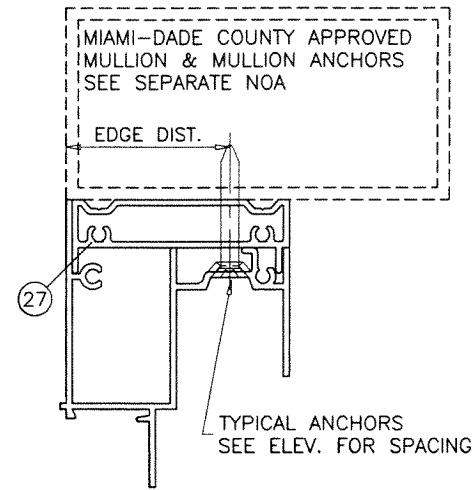
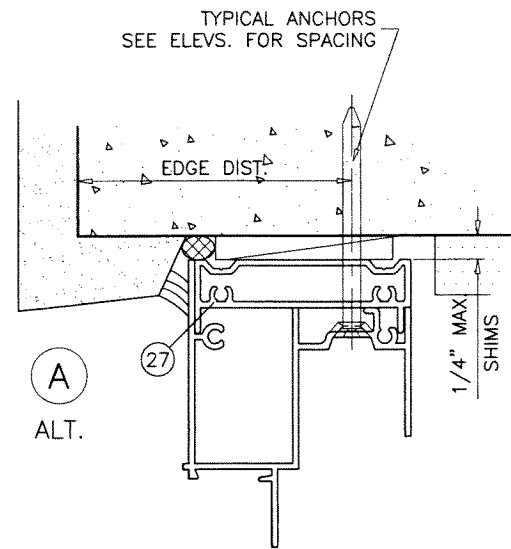
dr. by: TARIQ

chk. by:

drawing no.

24-90D

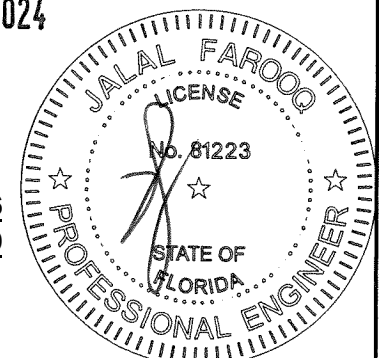
sheet 4 of 9



ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES1003	1	FRAME HEAD	6063-T6	-
2	ES2001	1	STD. FRAME SILL	6063-T6	-
2A	ES2012	1	HI-RISE FRAME SILL	6063-T6	-
3	ES2003	1	FRAME JAMB	6063-T6	-
5	ES1005	1/ VENT	FIXED RAIL (S-2000)	6063-T6	-
5.1	ES1051	1/ VENT	FIXED RAIL (S-2050)	6063-T6	-
6	ES1004	1/ VENT	STD. VENT MEETING RAIL (S-2000)	6063-T6	-
6A	ES2004	1/ VENT	H.D. VENT MEETING RAIL (S-2000)	6063-T6	-
6.1	ES1052	1/ VENT	STD. VENT MEETING RAIL (S-2050)	6063-T6	-
6A.1	ES1053	1/ VENT	H.D. VENT MEETING RAIL (S-2050)	6063-T6	-
6B	ES-2004A	1/ VENT	H.D. VENT MEETING RAIL (S-2050)	6063-T6	ALTERNATE TO 6A
6B.1	ES-1053A	1/ VENT	H.D. VENT MEETING RAIL (S-2050)	6063-T6	ALTERNATE TO 6A.1
7	ES1007	2/ VENT	TOP AND BOTTOM RAIL	6063-T6	-
8	ES1006	1/ VENT	JAMB STILE	6063-T6	-
9	ES1008	AS REQD.	GLAZING BEAD	6063-T5	-
9A	ES1103	AS REQD.	SQUARE GLAZING BEAD (5/16" GLASS)	6063-T5	-
9B	ES1017	AS REQD.	SQUARE GLAZING BEAD (7/16" GLASS)	6063-T5	-
10	ES2002	1	SILL TRACK INSERT	6063-T6	-
11	ES2011	AS REQD.	STD. SILL RISER	6063-T6	-
12	ES1009	2/ VENT	SPRING LOADED VENT LATCH	6063-T6	AT 8" FROM ENDS
12A	SL203	2/ VENT	SWEEP LATCH	ZAMAK	AT 11" FROM ENDS, BY INTERLOCK
12B	#8 X 1"	2/ LATCH	LATCH INSTALLATION SCREWS	GRADE 2 CRS	FH SMS
13	ES1012	1/ LATCH	VENT LATCH SPRING	ST. STEEL	-
14	C1B251N	AS REQD.	FOAM FILLED FABRIC W'STRIPPING	-	SCHLEGEL
15	#8 X 1"	AS REQD.	FRAME/VENT ASSEMBLY SCREWS	CRS	P.H. SMS
16	#8 X 3"	2/ VENT	FIX. RAIL SILL SCREWS (STD. SILL END)	CRS	P.H. SMS
16A	#10 X 4"	2/ VENT	FIX. RAIL SILL SCREWS (HI-RISE SILL END)	CRS	P.H. SMS
17	W23211NG	AS REQD.	VENT & FIX. RAIL W'STRIPPING	-	ULTRAFAB
18	W23291NG	AS REQD.	FRAME JAMB W'STRIPPING	-	ULTRAFAB
19	WPHL-100	2	BAFFLE, AT 3" FROM EACH END	-	M & M PLASTICS
20	#6 X 1/2"	2/ BAFFLE	BAFFLE SCREW	-	F.H. SMS
21	ES1010	AS REQD.	GLAZING WEDGE	SOFT PVC	DUROMETER 70 SHORE 'A'
21.1	ES4013	AS REQD.	GLAZING WEDGE	SOFT PVC	DUROMETER 70 SHORE 'A'
21A	27-425	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 60 SHORE 'A'
22	ES2007	4/ VENT	ROLLER HOUSING & GUIDE	PLASTIC	-
23	TAR-14029P-HK-A	2/ VENT	ROLLER	-	PABOSE
24	ES2005	2/ VENT	ROLLER PIN	ST. STEEL	-
25	-	1/ WEEP	OPEN CELL FOAM PAD	-	1" X 3/4" X 1" LONG
26	-	1/ VENT	5/16" BOX SCREEN	-	OPTIONAL
27	ES1505	-	FLUSH FRAME ADAPTER	6063-T5	OPTIONAL
28	27-372	2/ LITE	SETTING BLOCK, 7/16" X 3/16" X 3-1/2" LONG	EPDM	DUROMETER 75±5 SHORE A

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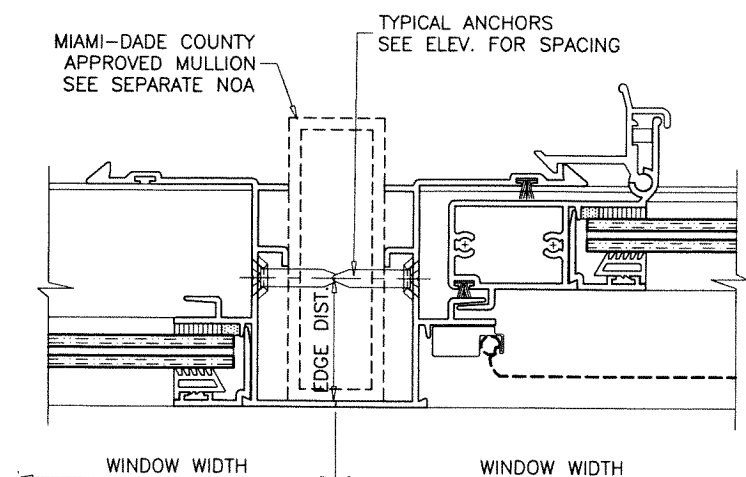
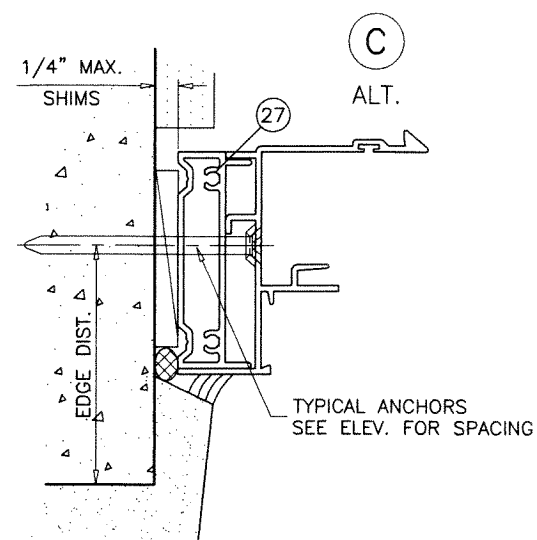
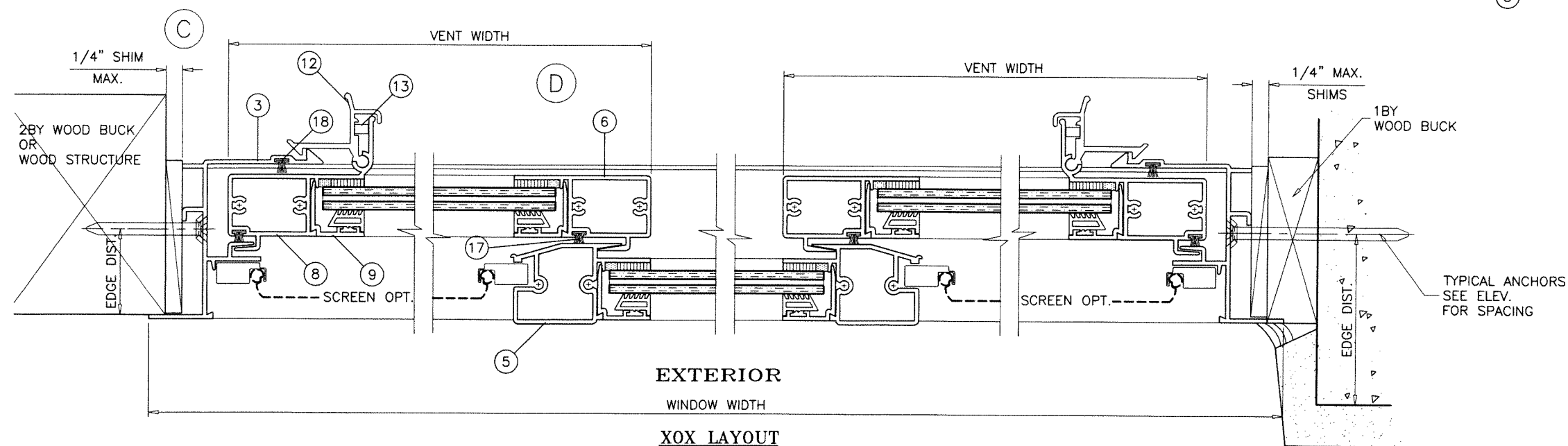
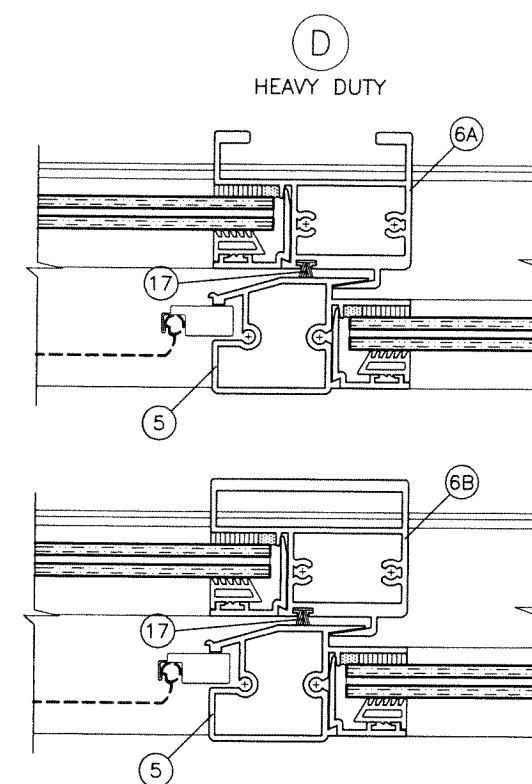
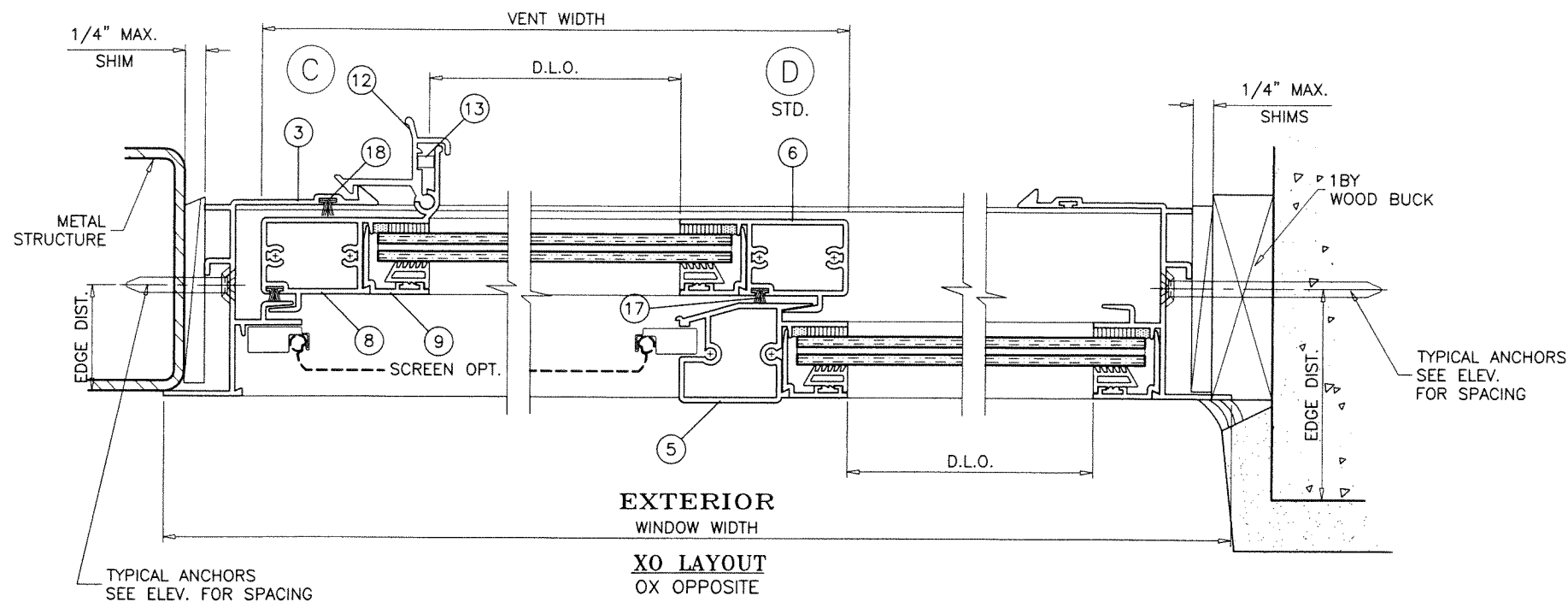
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
FBPE #3538

ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL 33186
Phone: (305) 489-1608
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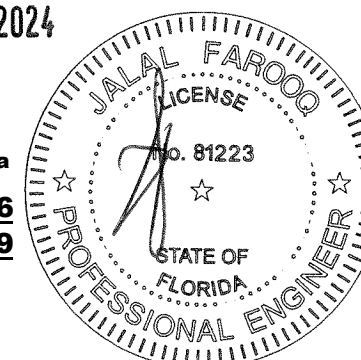
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24-90D
sheet 5 of 9



SERIES-2000
VENTS WITH SPRING LOADED LATCHES

DEC 05 2024

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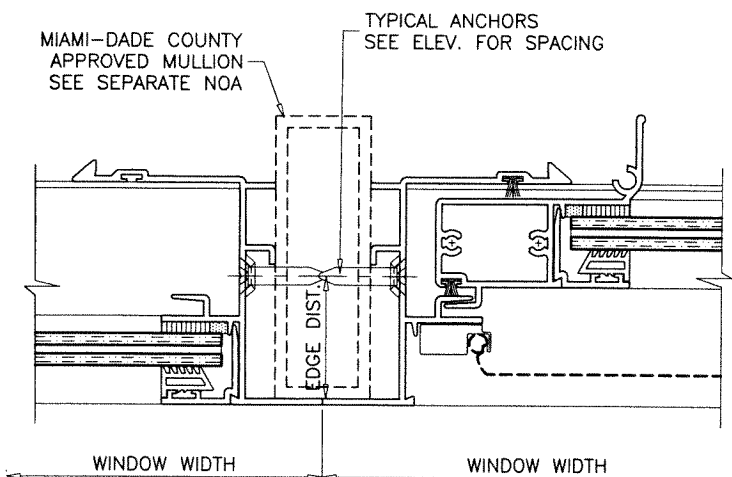
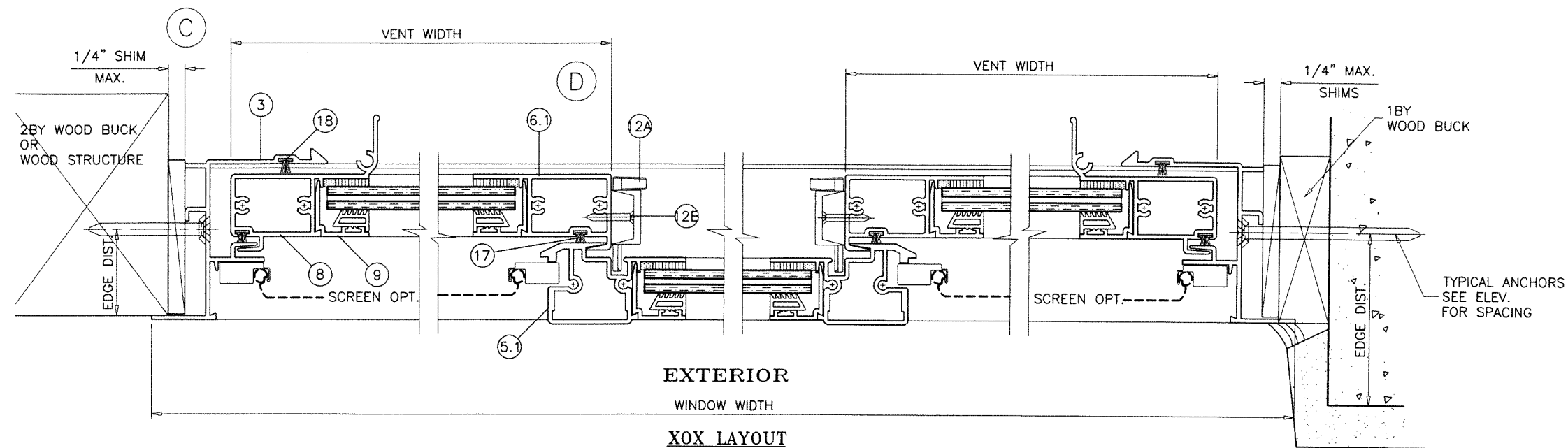
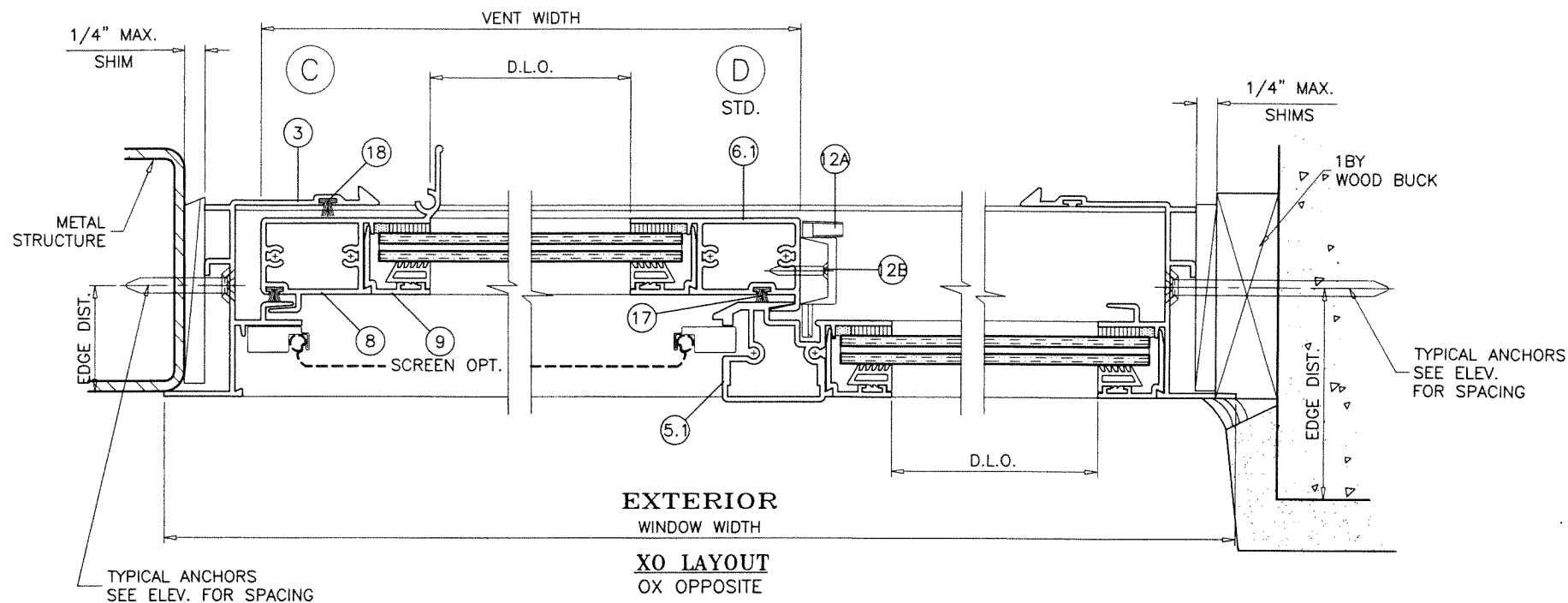


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MIAMI, FLORIDA 33173
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WWW.AFCENG.COM
FBPE #3538
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ESR Impact System LLC.
12400 S.W. 134th Court, Suite 8
Miami, FL. 33186
Phone: (305) 489-1608
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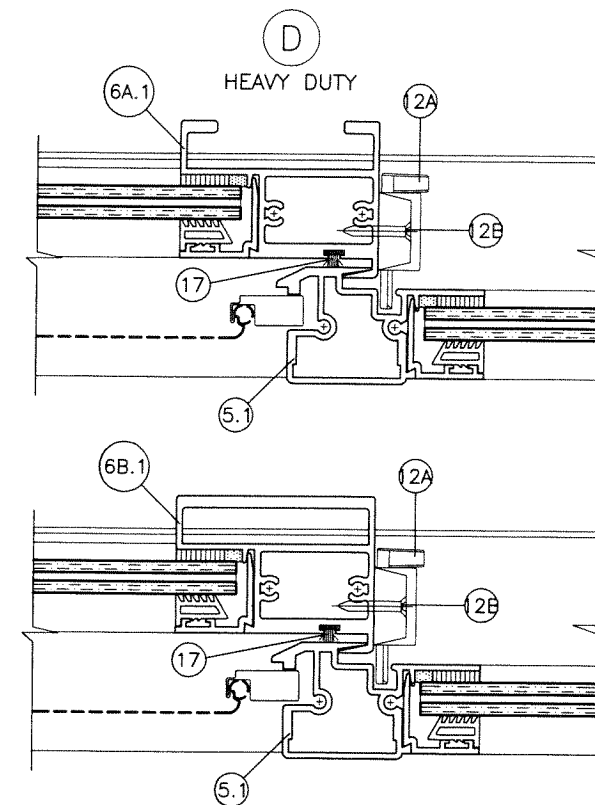
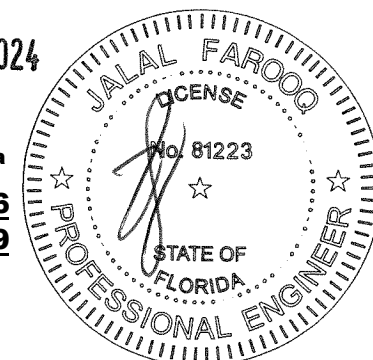
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24-90D
sheet 6 of 9



SERIES-2050
VENTS WITH SWEEP LATCHES

DEC 05 2024

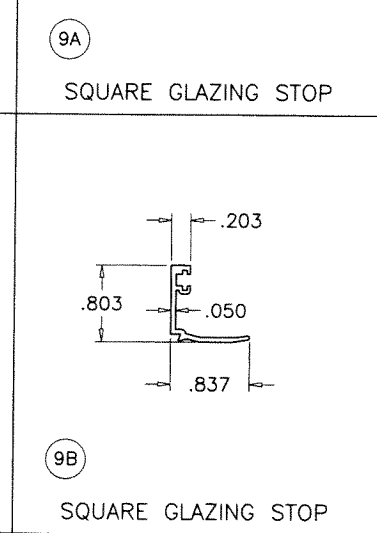
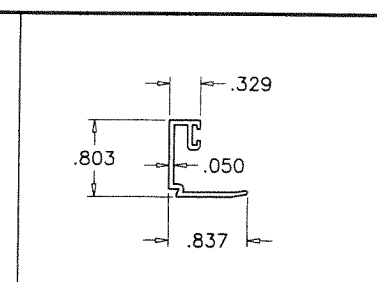
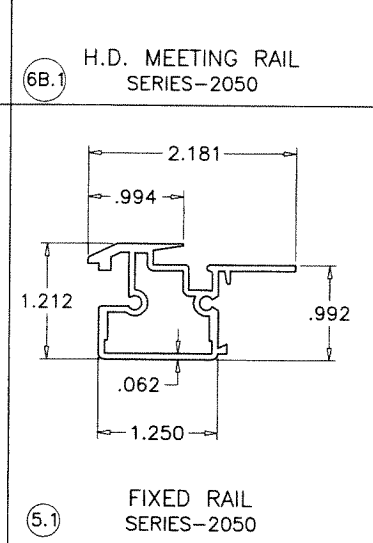
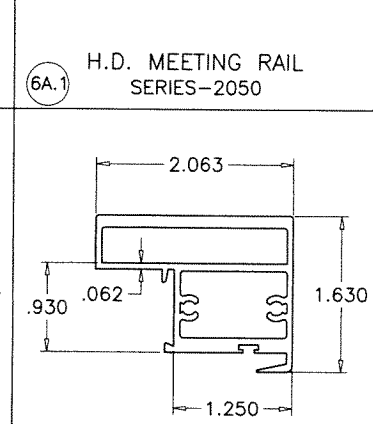
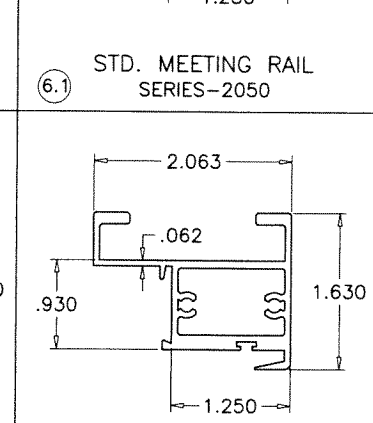
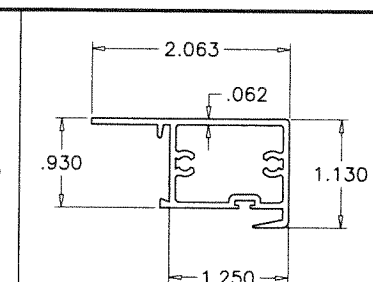
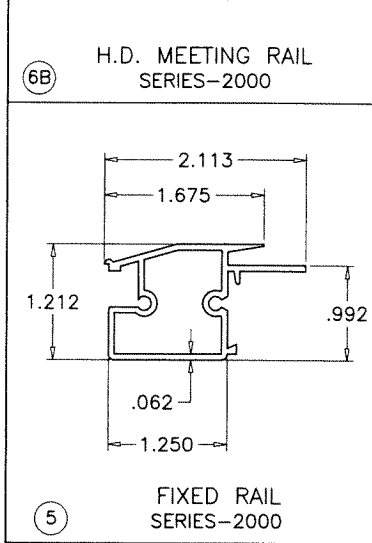
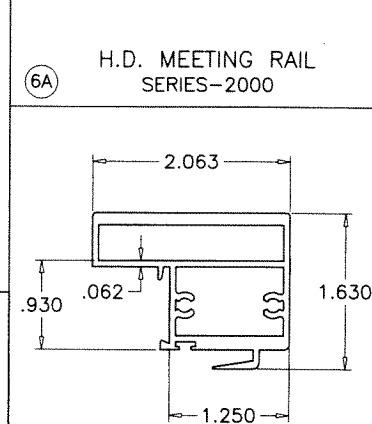
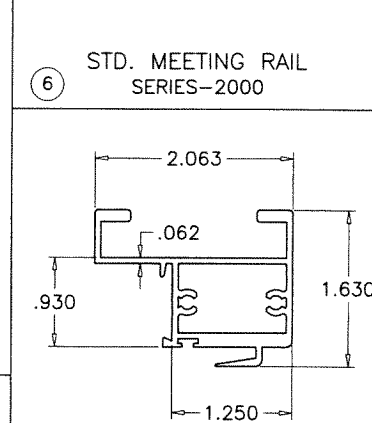
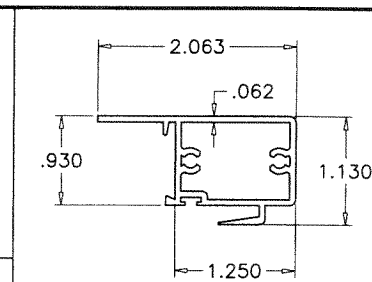
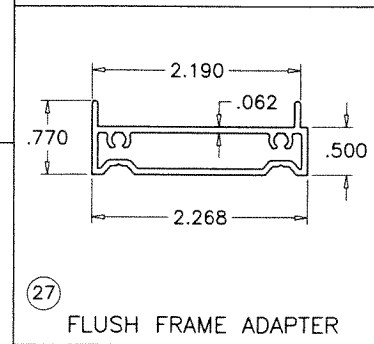
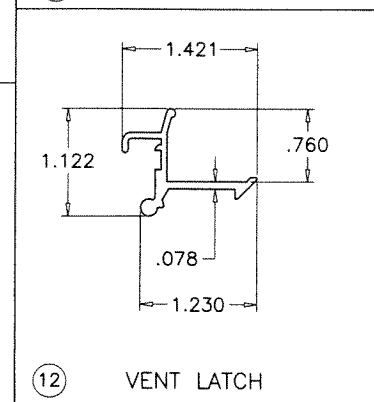
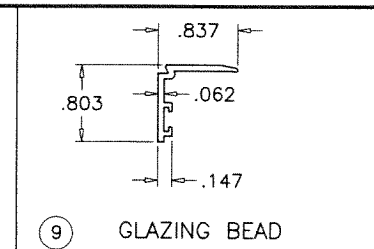
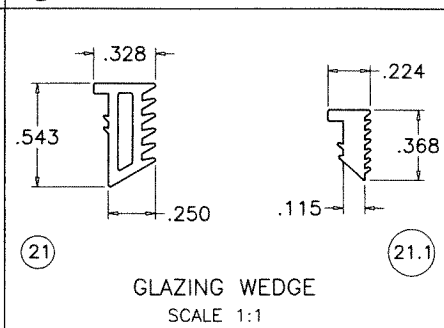
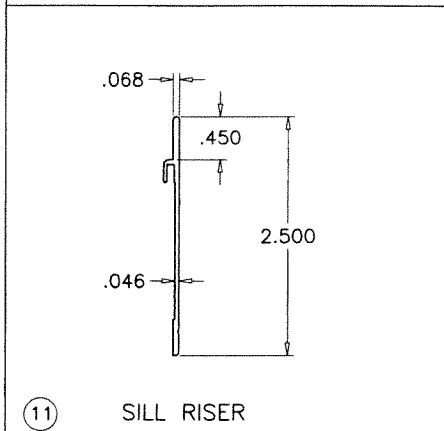
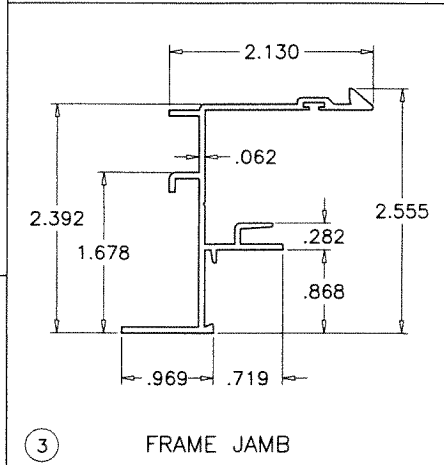
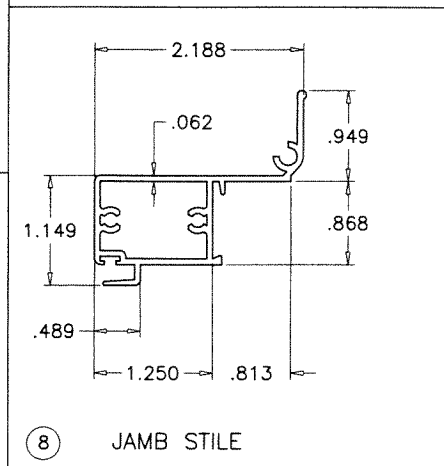
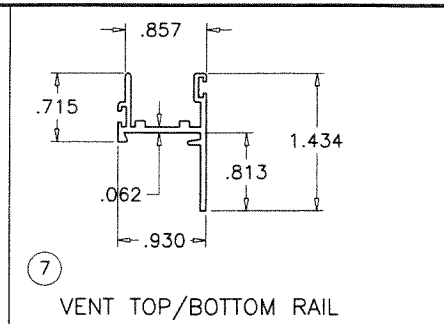
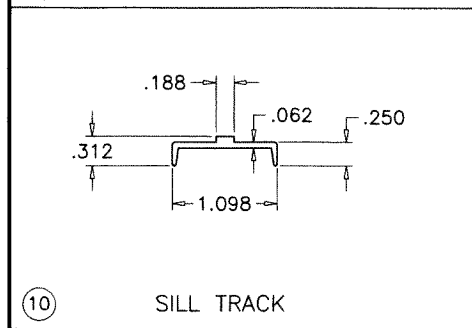
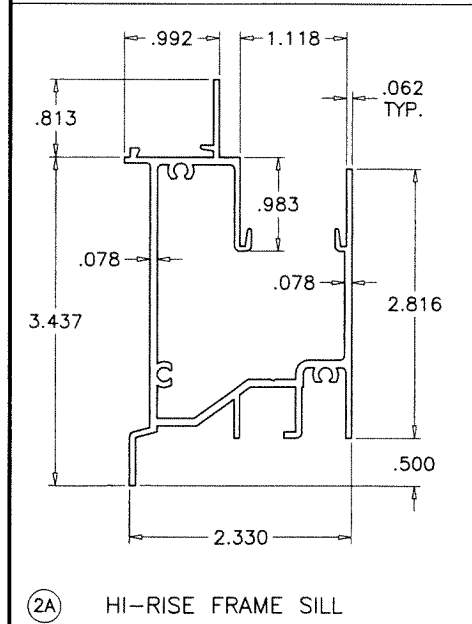
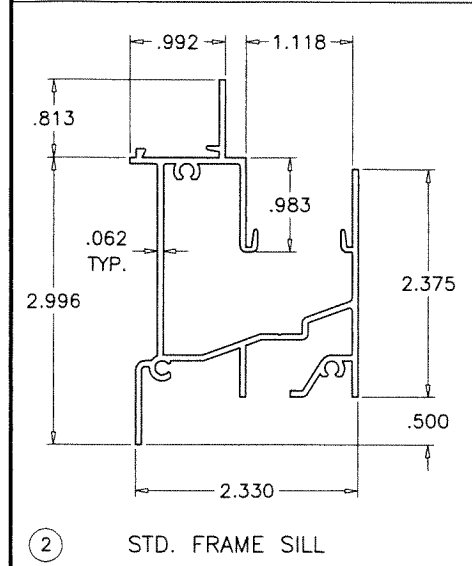
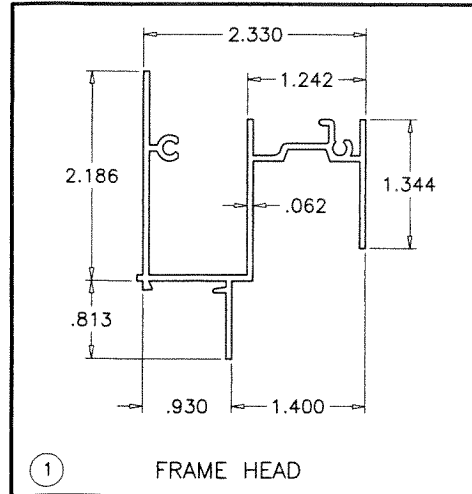
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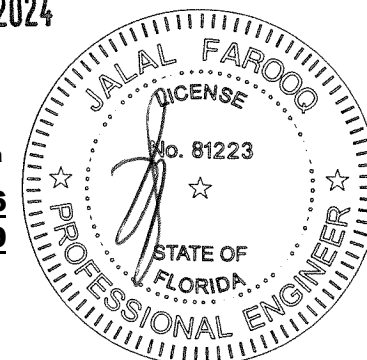
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