MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

ES Windows, LLC
10653 N.E. Quaybridge Ct.
Miami, FL 33138

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. **W03-75**, titled "Series–2000/2050 Alum. Horiz. Sliding Wdw. (L.M.I)", sheets 1, 1.1, 2 and 3 through 9 of 9, dated 08/27/03, with revision **G** dated 05/15/12, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami–Dade County Product Control Renewal 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, city, state, 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 **renews NOA# 12-0223.46** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY APPROVED

9/9/13

NOA No. 13-0617.28
Expiration Date: November 06, 2018
Approval Date: September 19, 2013

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
   (Submitted under NOA No. 03–0910.02)
2. Drawing No. **W03–75**, titled "Series–2000/2050 Alum. Horiz. Sliding Wdw. (L.M.I)", sheets 1, 1.1, 2 and 3 through 9 of 9, dated 08/27/03, with revision **G** dated 05/15/12, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
   (Submitted under previous NOA No. 12–0223.46)

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
   6) Forced Entry Test, per ASTM F 588–04/ 07 and per FBC 2411 3.2.1, 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)
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 ASTM F 588–04/ 07 and per FBC 2411 3.2.1, 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 under previous NOA No. 08–0527.13 and 07–0928.13)

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-0617.28
Expiration Date: November 06, 2018
Approval Date: September 19, 2013

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

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 ASTM F 588–04/ 07 and per FBC 2411 3.2.1, TAS 202–94
along with marked–up drawings and installation diagram of 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, revised & reissued on 08/10/06, all signed and sealed by Joseph C. Chan, P.E.
(Submitted under NOA No. 03-0910.02)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC–2010**, prepared by Al–Farooq Corporation, dated 05/03/12, signed and sealed by Javad Ahmad, P.E.
(Submitted under previous NOA No. 12–0223.42)

2. Glazing complies with **ASTM E1300–98/04**

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11–0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont Sentry Glass® Interlayer**" dated 05/26/10, expiring on 01/14/17.

2. Notice of Acceptance No. **13–0129.27** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont Butacite® PVB Interlayer**" dated 04/11/13, expiring on 12/11/16.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC-2010**, and of no financial interest, dated 12/08/11 and 06/05/13, signed and sealed by Javad Ahmad, P.E.
(Submitted partially under previous NOA No. 12–0223.46)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-0617.28
Expiration Date: November 06, 2018
Approval Date: September 19, 2013

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

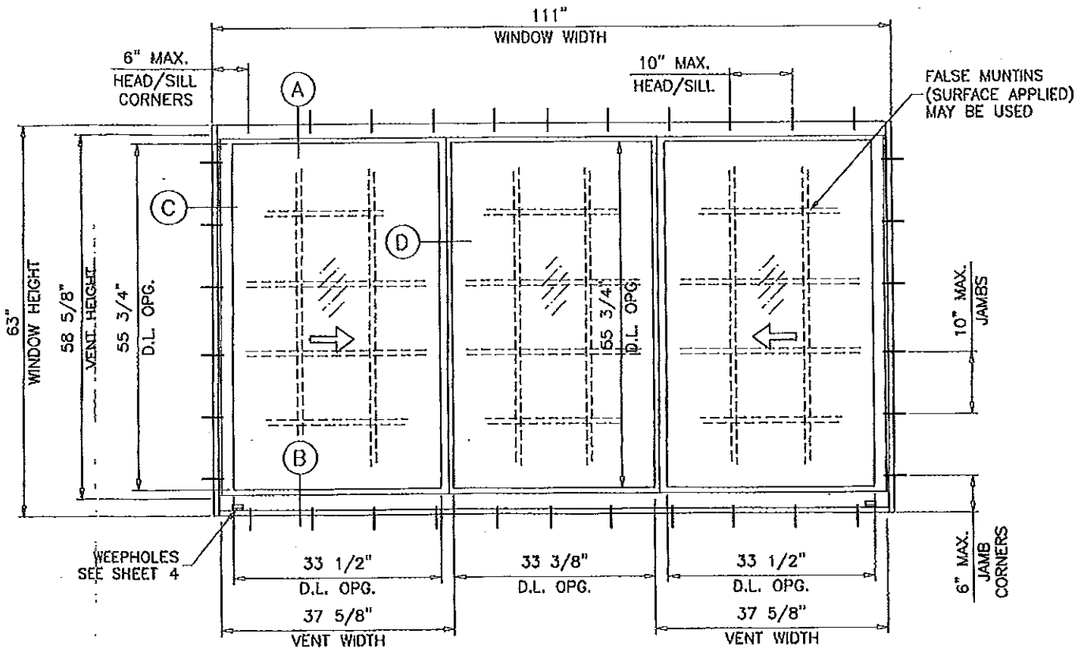
F. STATEMENTS (CONTINUED)

2. Distributor Agreement, dated 10/20/10, signed by Carla Garcia Torrente and by Andres Chamorro.
   (Submitted partially under previous NOA No. 12–0223.46)
3. 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)
4. 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)
5. Laboratory compliance letter for Test Reports No.'s **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.'s 08–0527.13 and 07–0928.13)
6. 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. **12–0223.46**, issued to ES Windows, LLC, for their Series "2000/2050" Aluminum Horizontal Sliding Window – L.M.I., approved on 05/24/12 and expiring on 11/06/13.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-0617.28
Expiration Date: November 06, 2018
Approval Date: September 19, 2013



TYPICAL ELEVATION

SERIES 2000

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 FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

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

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE SECTION 2003.8.4.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0223.46
Expiration Date 11/06/2013
By
Miami Dade Product Control

LAMINATED GLASS
LARGE MISSILE IMPACT

Engr: JAVAD, AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

MAY 14 2012

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 13-0617.28
Expiration Date Nov. 6, 2018
By
Miami Dade Product Control

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W03-75ES

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

E.S. WINDOWS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

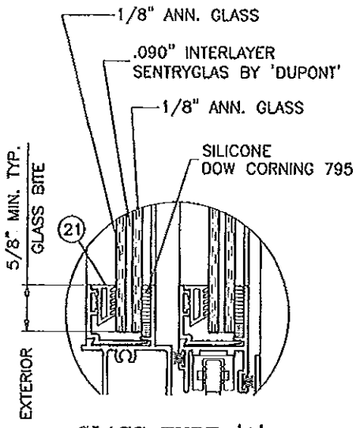
revisions:

no	date	by	description
C	09.21.07		GLASS TYPE "D" ADDED
D	05.12.08		GENERAL REVISION
E	06.25.09		GENERAL REVISION
F	12.09.11		ALT. GLAZING OPTION ADDED
G	05.15.12		REV. PER PERA COMMENTS

date: 08-27-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-75

sheet 1 of 9



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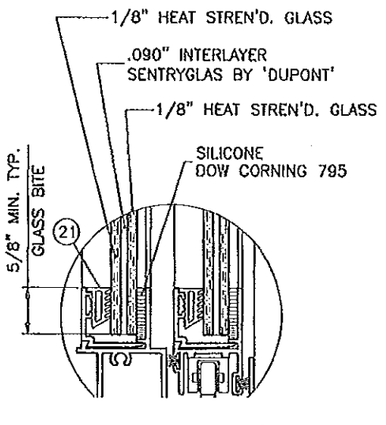

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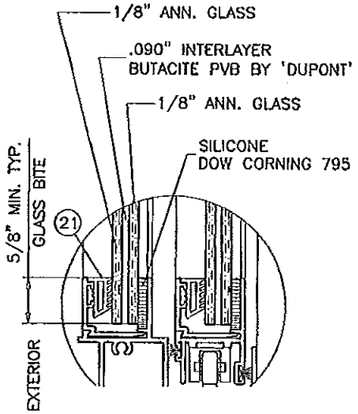

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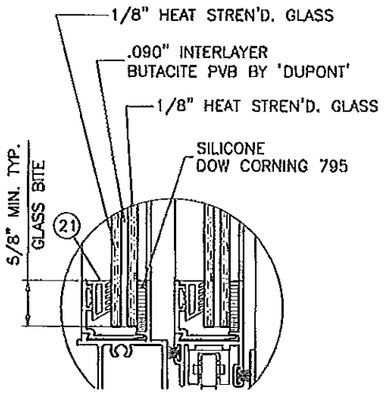

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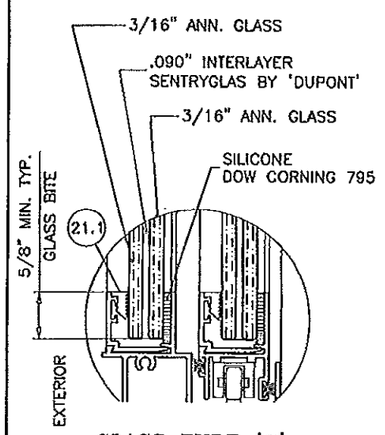

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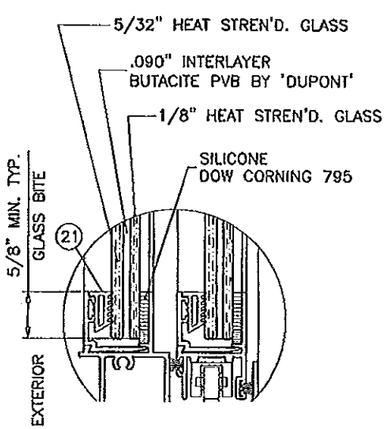

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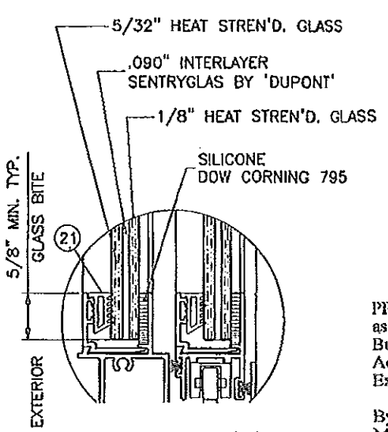

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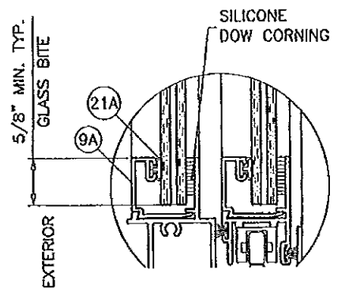
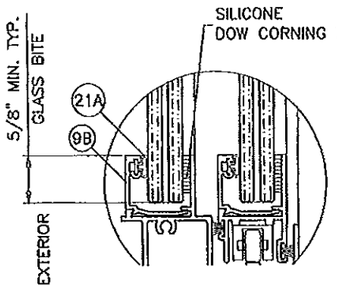


5/16" LAM. GLASS



7/16" LAM. GLASS

ALT. GLAZING OPTIONS

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

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0223.46
Expiration Date 11/06/2013
By
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
MAY 17 2012

PRODUCT RENEWED
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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TEL. (305) 264-3100 FAX. (305) 262-6978
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SERIES-2000/2050 ALUM HORIZ. SLIDING WDW. (L.M.I.)

E.S. WINDOWS, LLC
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MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

revisions:			
no	date	by	description
F	12.09.11		ALT. GLAZING OPTION ADDED
G	05.15.12		NO CHANGE THIS SHEET

date: 08-27-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-75

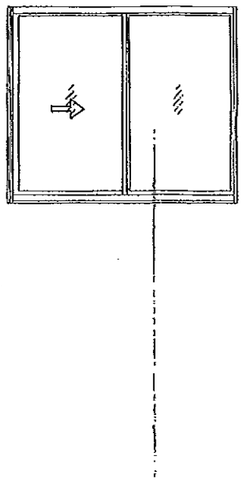
sheet 1.1 of 9

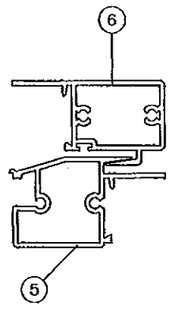
DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES) SERIES 2000/2050

WINDOW DIMS. WIDTH	WINDOW DIMS. HEIGHT	A	STD. MTG. RAIL (FRAME SILL *1, 2, 3 & 4) SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS — GLASS TYPE 'A' GLASS TYPE 'B' EXT.(+)	GLASS TYPE 'A' GLASS TYPE 'B' INT.(–)	GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C' EXT.(+)	GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C' INT.(–)	GLASS TYPE 'D' EXT.(+)	GLASS TYPE 'D' INT.(–)	H.D. MTG. RAIL (SILL *3 & 4)** GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E' EXT.(+)	H.D. MTG. RAIL (SILL *3 & 4)** GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E' 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"		5	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
74"		7	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"		5	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
74"		7	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"		5	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
74"		7	–	–	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"		5	42.6	48.7	70.0	86.6	70.0	80.0	80.0	90.0
74"		7	–	–	–	–	–	–	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"		5	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"		7	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"		5	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"		7	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"		5	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"		7	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"		5	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"		7	–	–	70.0	78.7	70.0	78.7	80.0	90.0

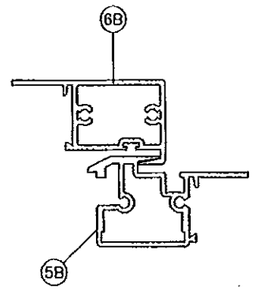
A = NO. OF ANCHORS PER HEAD & SILL
( ) = NO. OF ANCHORS PER JAMB

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

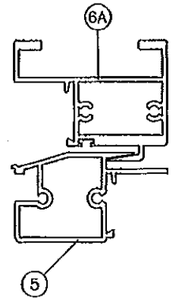




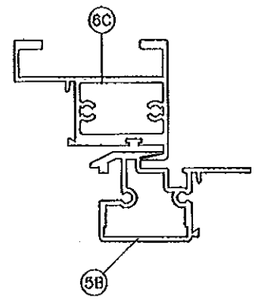
STD. MTG. RAIL
S-2000



STD. MTG. RAIL
S-2050



H.D. MTG. RAIL
S-2000



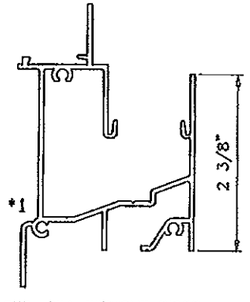
H.D. MTG. RAIL
S-2050

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0223.46
Expiration Date 11/06/2013
By
Miami Dade Product Control

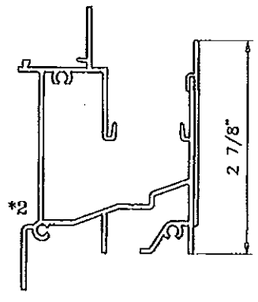
NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-04 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 35381
MAY 17 2012

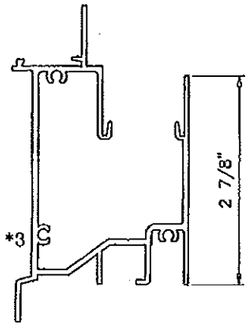
PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 13-0617.28
Expiration Date NOV. 6, 2018
By
Miami Dade Product Control



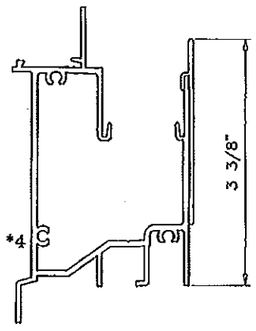
STD. SILL WITHOUT RISER
LIMIT EXT.(+) LOADS TO 53.3 PSF



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

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-3100 FAX. (305) 262-6978
COMP-ANL\W03-75ES

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

E.S. WINDOWS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

revisions:

no	date	by	description
C	09.21.07		GLASS TYPE 'D' ADDED
D	05.12.08		GENERAL REVISION
E	06.25.09		GENERAL REVISION
F	12.09.11		NO CHANGE THIS SHEET
G	05.15.12		REV. PER PERA COMMENTS

date: 08-27-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

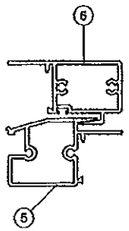
drawing no.
W03-75

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SERIES 2000/2050

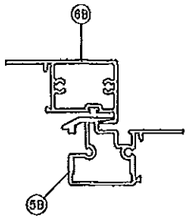
WINDOW DIMS.		A	STD. MTG. RAIL (FRAME SILL *1, 2, 3 & 4) SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS						H.D. MTG. RAIL (SILL *3 & 4)**	
			GLASS TYPE 'A' GLASS TYPE 'B'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'C'		GLASS TYPE 'D'		GLASS TYPE 'A1' GLASS TYPE 'B1' GLASS TYPE 'D' GLASS TYPE 'E'	
WIDTH	HEIGHT		EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
74"	26" (3)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
106–1/4"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
111"		10	–	–	–	–	–	–	80.0	90.0
74"	38–3/8" (3)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
106–1/4"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
111"		10	–	–	–	–	–	–	80.0	90.0
74"	50–5/8" (4)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
106–1/4"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
111"		10	–	–	–	–	–	–	80.0	90.0
74"	63" (5)	7	45.4	51.9	70.0	90.0	70.0	80.0	80.0	90.0
106–1/4"		10	–	–	–	–	–	–	80.0	90.0
111"		10	–	–	–	–	–	–	80.0	90.0
72"	24" (2)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
108"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
72"	36" (3)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
108"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
72"	48" (4)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
108"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
72"	60" (5)	7	54.2	61.9	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	47.6	54.4	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	–	–	70.0	83.9	70.0	80.0	80.0	90.0
108"		10	–	–	70.0	78.7	70.0	78.7	80.0	90.0

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

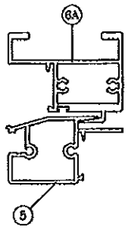
** SEE DETAILS BELOW FOR EXT(+) LOAD LIMITATIONS



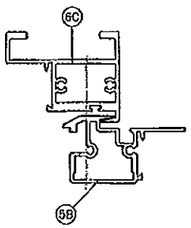
STD. MTG. RAIL S-2000



STD. MTG. RAIL S-2050



H.D. MTG. RAIL S-2000



H.D. MTG. RAIL S-2050

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SERIES 2000/2050

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.(–)
74"	26" (3)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
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111"		10	–	–	–	–	–	–	80.0	90.0
74"	38–3/8" (3)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
106–1/4"		10	–	–	70.0	90.0	70.0	80.0	80.0	90.0
111"		10	–	–	–	–	–	–	80.0	90.0
74"	50–5/8" (4)	7	–	–	70.0	90.0	70.0	80.0	80.0	90.0
74"	63" (5)	7	–	–	–	–	–	–	80.0	90.0
72"	24" (2)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
108"		10	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
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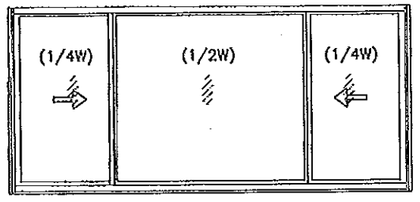
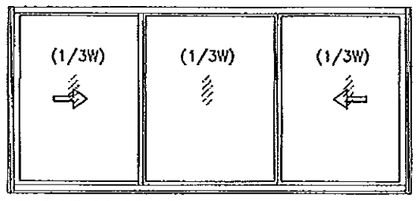
96"		9	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
108"		10	–	–	70.0	90.0	70.0	80.0	80.0	90.0
72"	48" (4)	7	70.0	80.0	70.0	90.0	70.0	80.0	80.0	90.0
84"		8	–	–	70.0	90.0	70.0	80.0	80.0	90.0
96"		9	–	–	–	–	–	–	80.0	90.0
72"	60" (5)	7	–	–	70.0	90.0	70.0	80.0	80.0	90.0

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



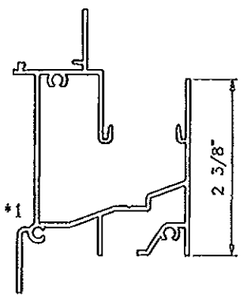
OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH



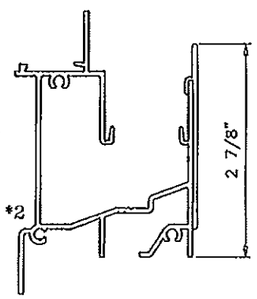
OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0223.46
Expiration Date 11/06/2013
By
Miami Dade Product Control

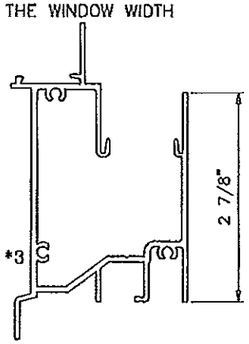
NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–04 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219



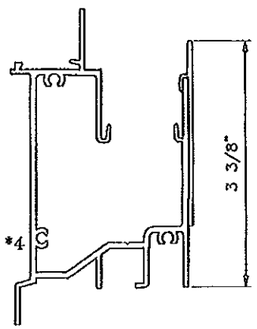
STD. SILL WITHOUT RISER
LIMIT EXT.(+) LOADS TO 53.3 PSF



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



HI–RISE SILL WITHOUT RISER
LIMIT EXT.(+) LOADS TO 66.7 PSF



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

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
MAY 14 2012

PRODUCT RENEWED
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Building Code
Acceptance No 12-0617.28
Expiration Date Nov. 6, 2018
By
Miami Dade Product Control

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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COMP-ANL\W03-75ES

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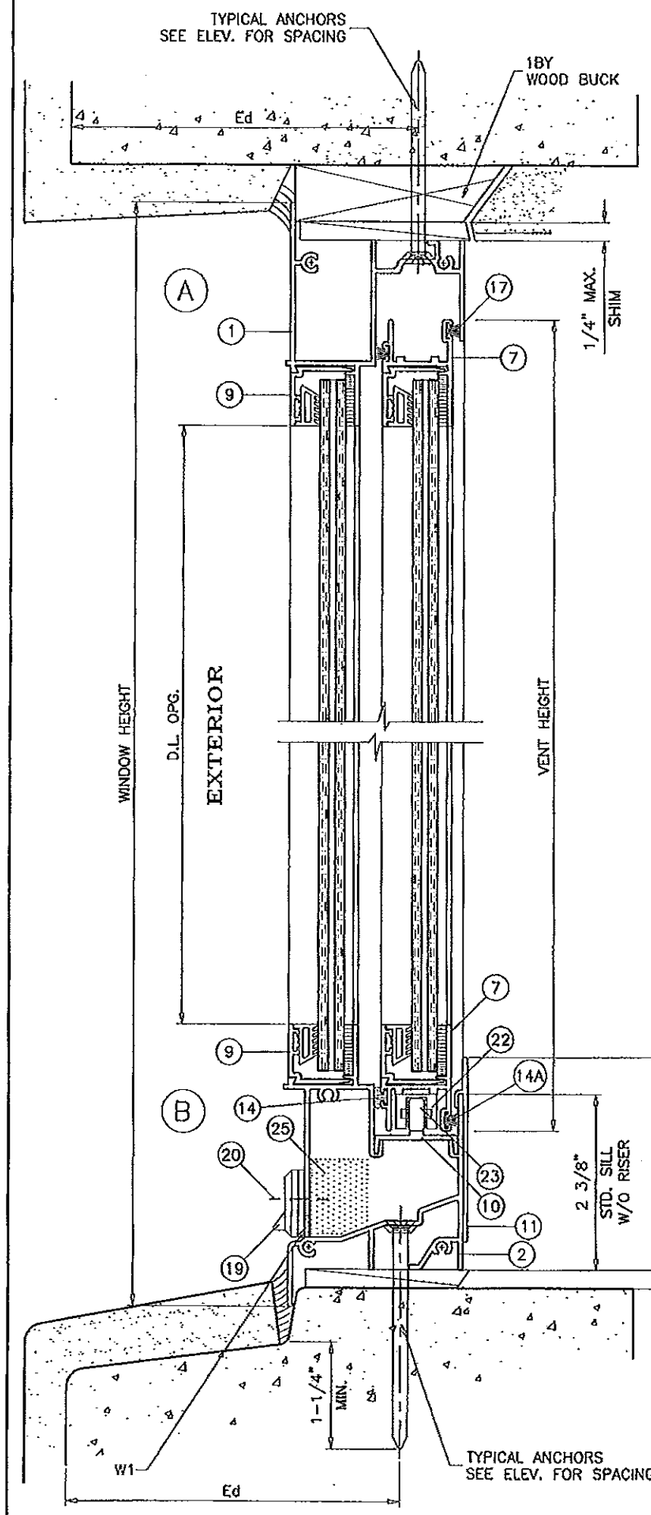
SERIES-2000/2050 ALUM. HORIZ. SLIDING WDW. (L.M.I.)

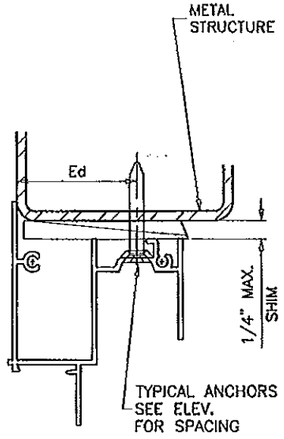
revisions: no	date	by	description
C	09.21.07		GLASS TYPE "D" ADDED
D	05.12.08		GENERAL REVISION
E	06.25.09		GENERAL REVISION
F	12.09.11		NO CHANGE THIS SHEET
G	05.15.12		REV. PER PERA COMMENTS

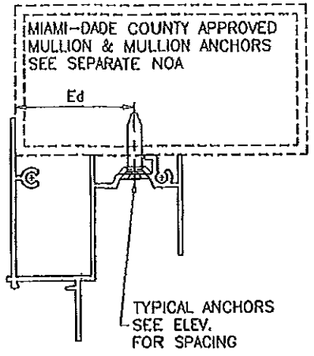
date: 08–27–03
scale: 1/2"=1'–0"
dr. by: HAMID
chk. by:

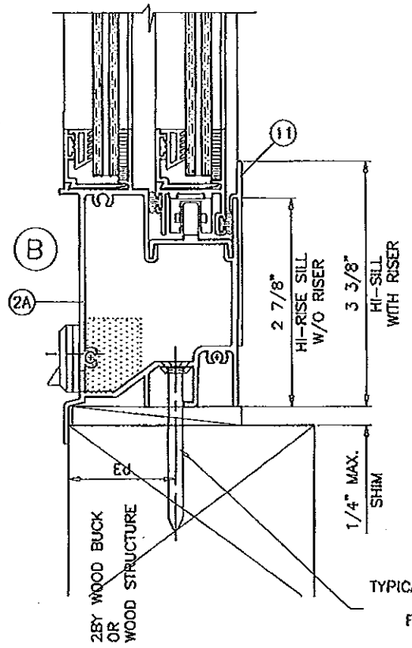
drawing no.
W03–75

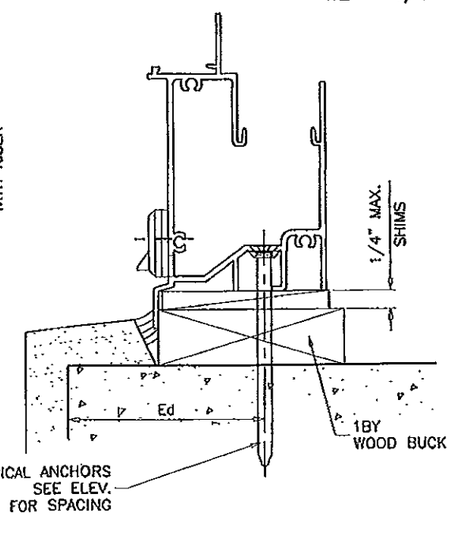
sheet 3 of 9











WOOD BUCKS AND METAL STRUCTURE NOT BY E.S. WINDOWS 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 'ELCO' (Fu=177 KSI, Fy=155 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-3/8" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

DIRECTLY INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = .090")

INTO METAL STRUCTURES
STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

Ed = ANCHOR EDGE DISTANCE

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

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0223.46
Expiration Date 11/06/2013
By
Miami Dade Product Control

SERIES-2000
SERIES-2050

Engr: JAVAD AHMAD
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MAY 17 2012

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

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revisions:			
no	date	by	description
C	09.21.07		NO CHANGE THIS SHEET
D	05.12.08		GENERAL REVISION
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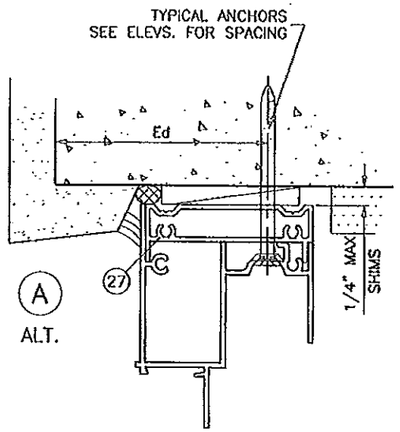

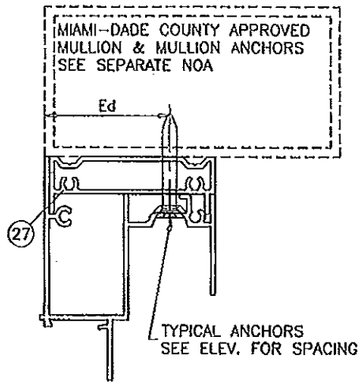

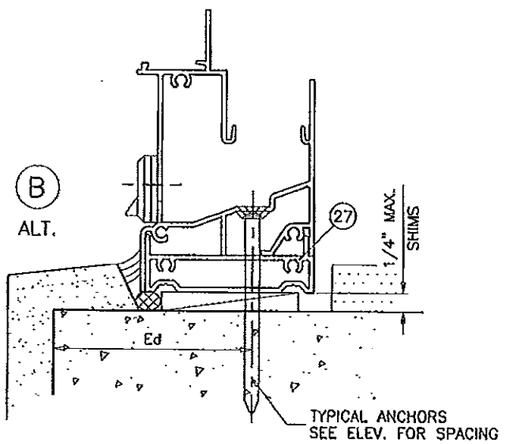

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES1003	1	FRAME HEAD	6063-T6	-
2	ES2001	1	STD. FRAME SILL	6063-T6	-
2A	ES2012	1	HI-RISE FRAME SILL	6063-T6	-
3	ES2003	1	FRAME JAMB	6063-T6	-
5	ES1005	1/ VENT	FIXED RAIL (S-2000)	6063-T6	-
5B	ES1051	1/ VENT	FIXED RAIL (S-2050)	6063-T6	-
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	-
6B	ES1052	1/ VENT	STD. VENT MEETING RAIL (S-2050)	6063-T6	-
6C	ES1053	1/ VENT	H.D. VENT MEETING RAIL (S-2050)	6063-T6	-
7	ES1007	2/ VENT	TOP AND BOTTOM RAIL	6063-T5	-
8	ES1006	1/ VENT	JAMB STILE	6063-T5	-
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-T5	-
11	ES2011	AS REQD.	STD. SILL RISER	6063-T5	-
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	ES2006	2/ VENT	ROLLER	BRASS/ST. ST.	-
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

PRODUCT REVISED
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Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
MAY 17 2012

PRODUCT RENEWED
as complying with the Florida
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Acceptance No 13-0417.28
Expiration Date Nov. 6, 2018
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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COMP-ANL\W03-75ES

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

E.S. WINDOWS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
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revisions:

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E	06.25.09		GENERAL REVISION
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G	05.15.12		REV. PER PEGA COMMENTS

date: 08-27-03
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dr. by: HAMID
chk. by:

drowing no.
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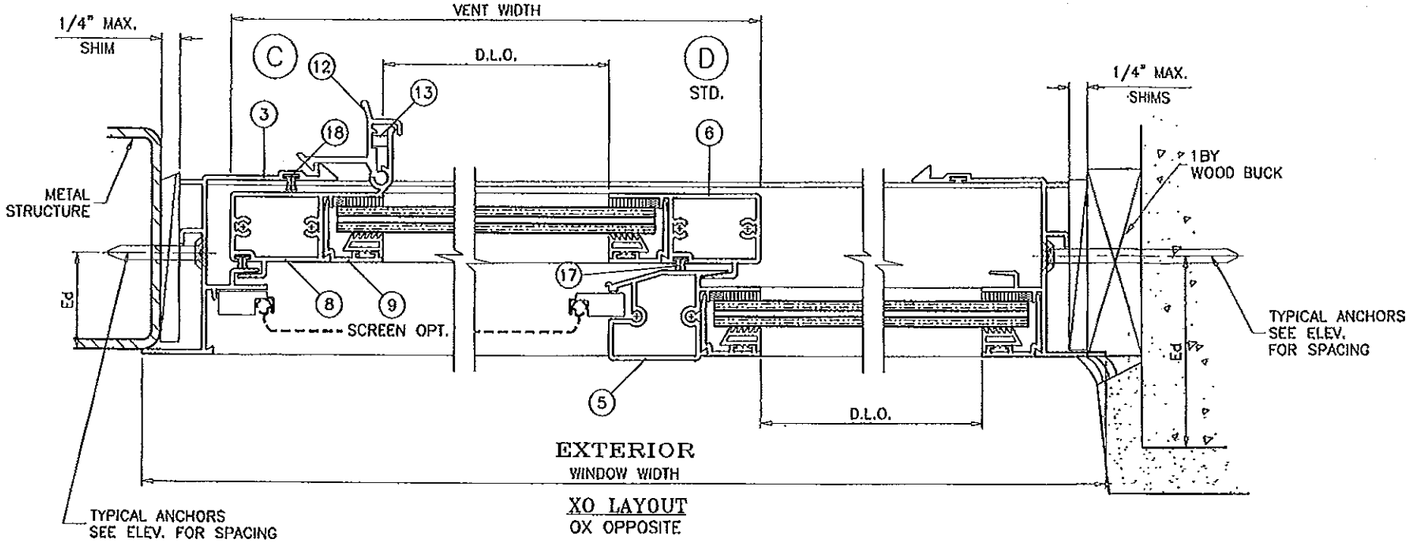

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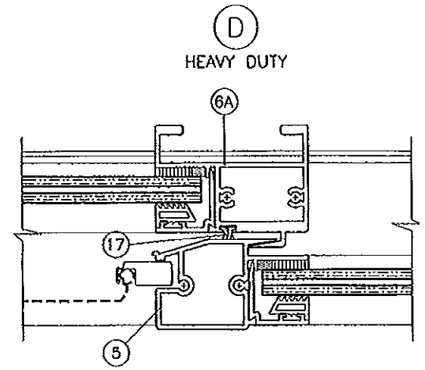

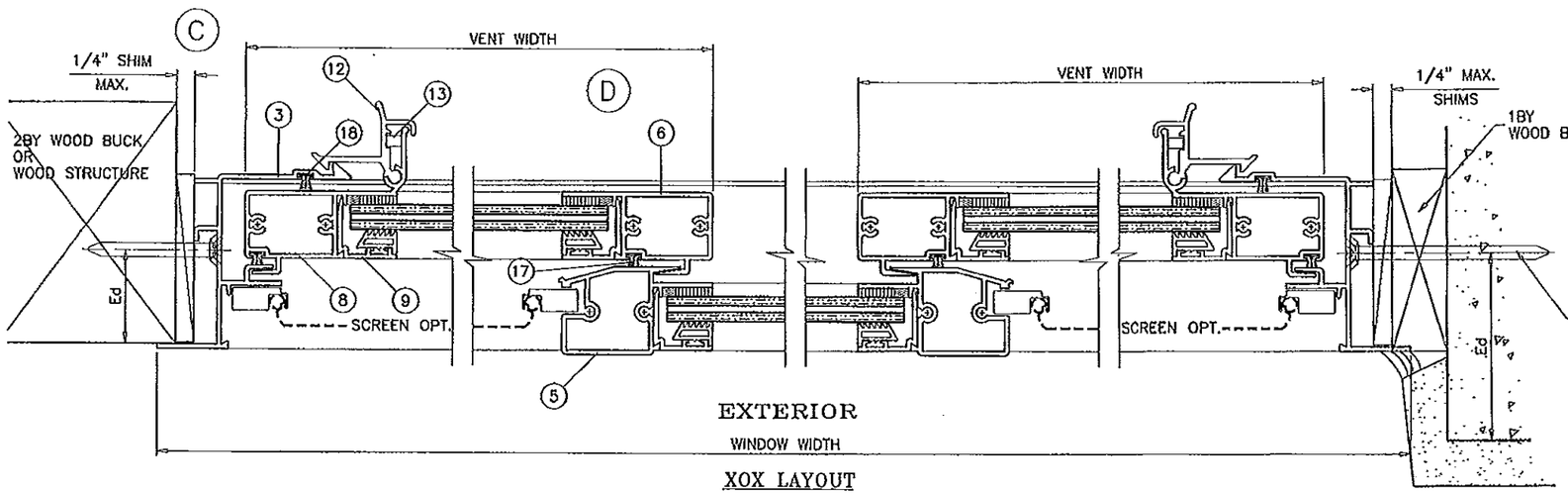

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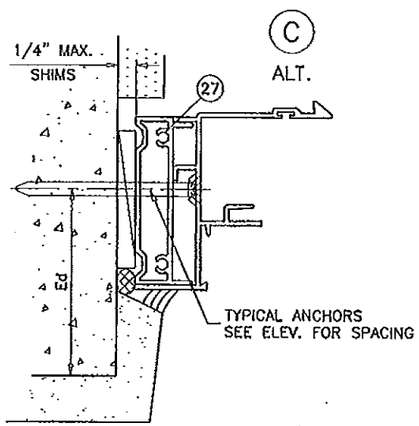

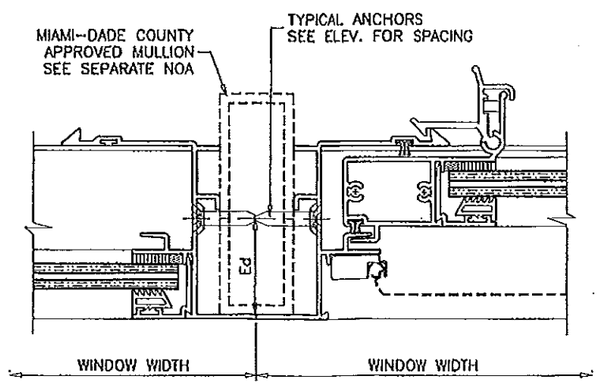

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Miami Dade Product Control

SERIES-2000
VENTS WITH SPRING LOADED LATCHES

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
MAY 14 2012

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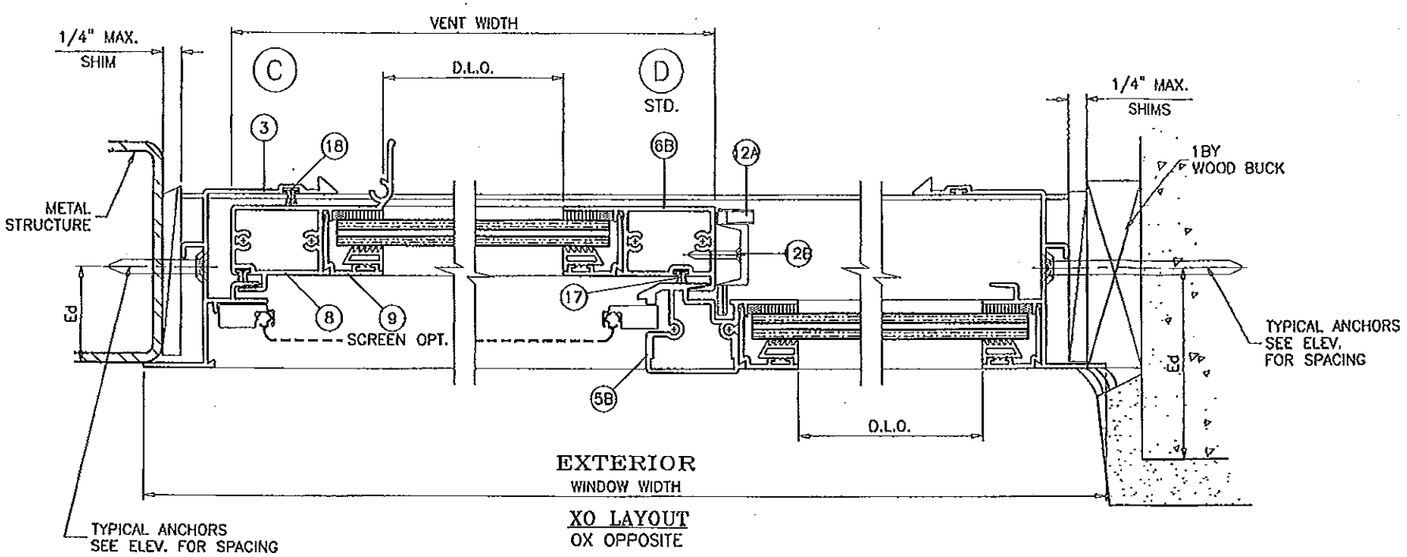
sheet 6 of 9



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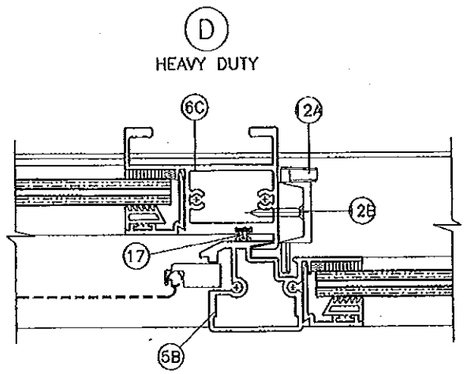

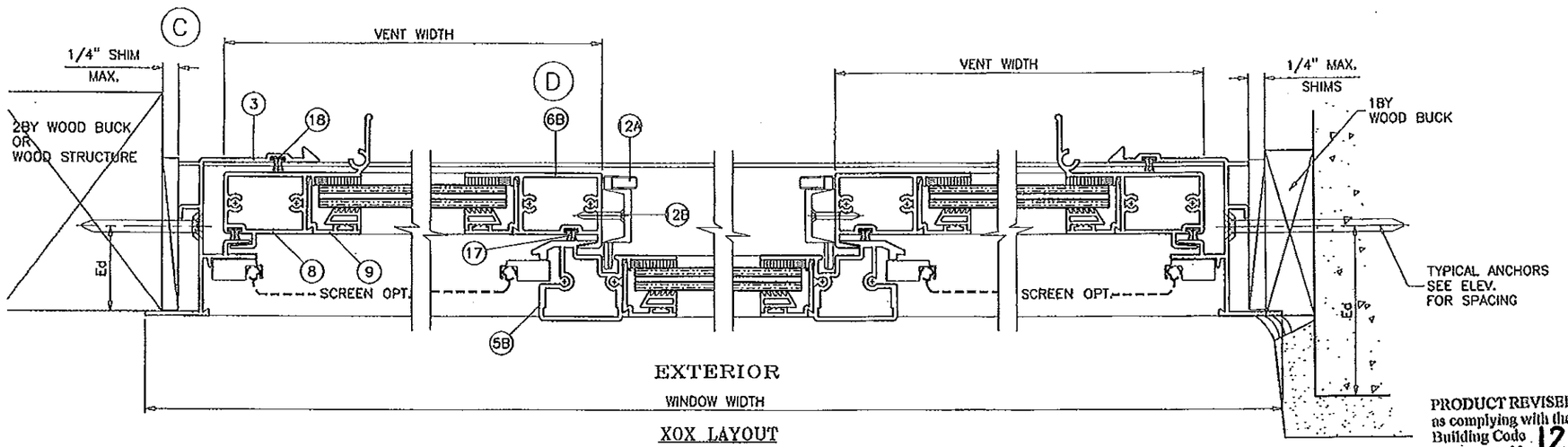

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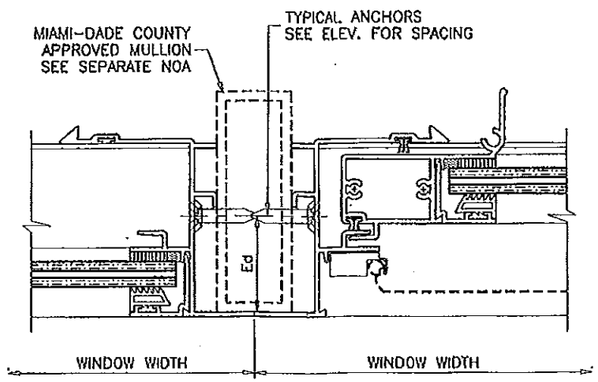

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SERIES-2050
VENTS WITH SWEEP LATCHES

Engr.: JAVAD AHMAD
CIVIL
FLA. PE # 70582
C.A.N. 3539
MAY 17 2012

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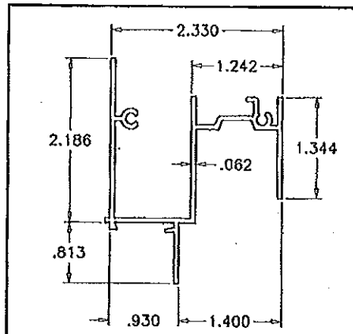
sheet 7 of 9



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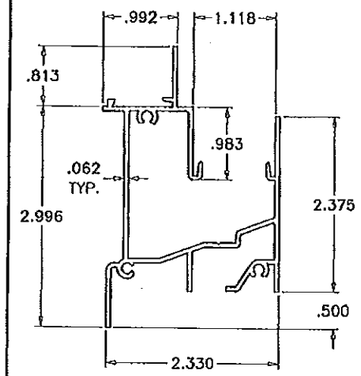
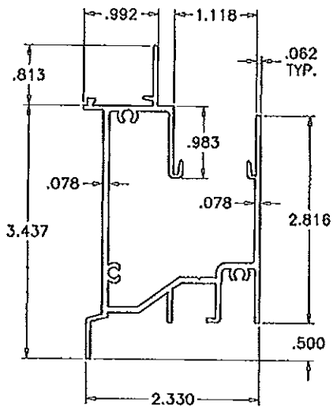


(2) STD. FRAME SILL



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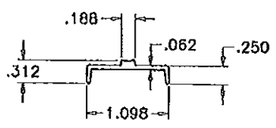

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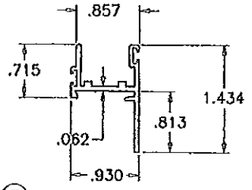

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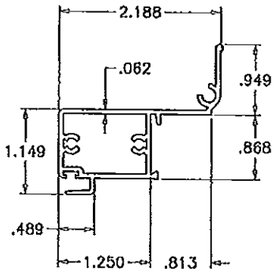

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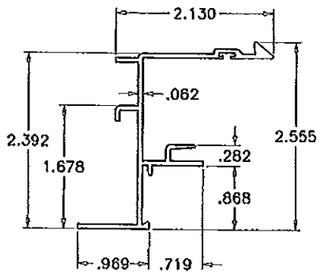

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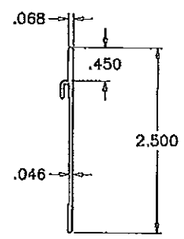

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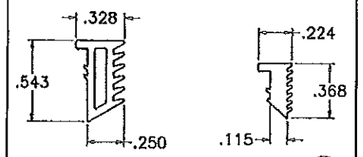

(21) (21.1) GLAZING WEDGE
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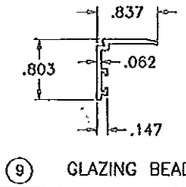

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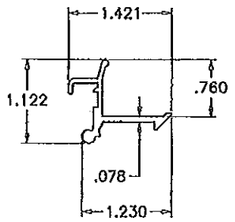

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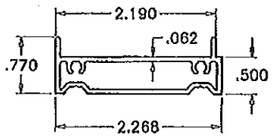

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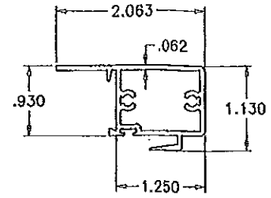
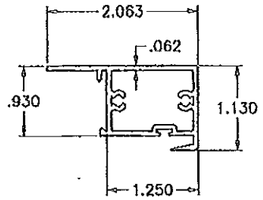


(6) STD. MEETING RAIL SERIES-2000



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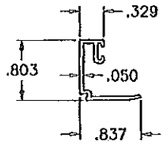

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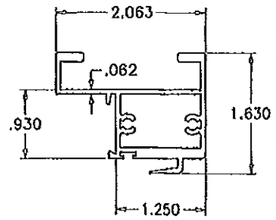
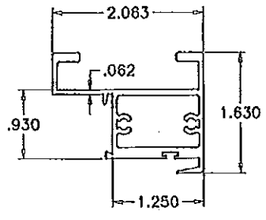


(6A) H.D. MEETING RAIL SERIES-2000



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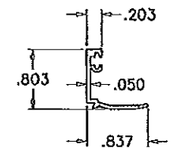

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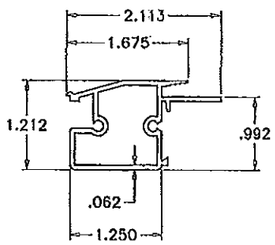
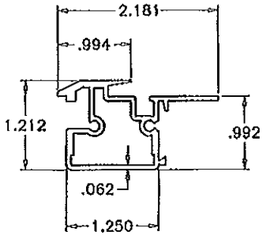


(5) FIXED RAIL SERIES-2000



(5B) FIXED RAIL SERIES-2050

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COMP-ANL\W03-75ES

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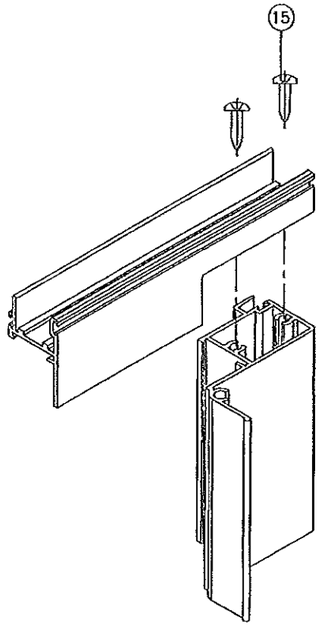
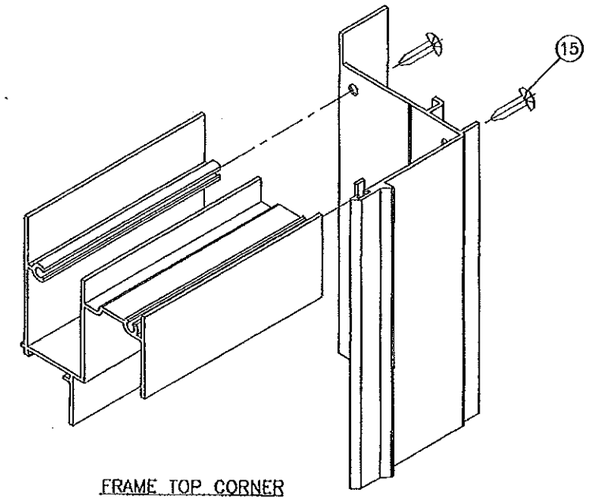


VENT TOP/BOTTOM CORNERS



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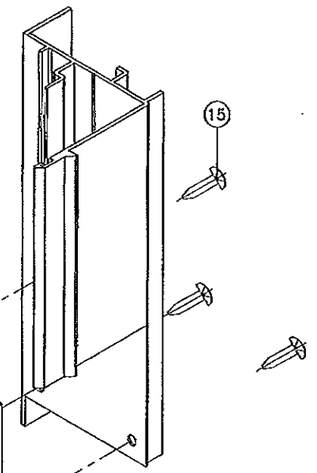
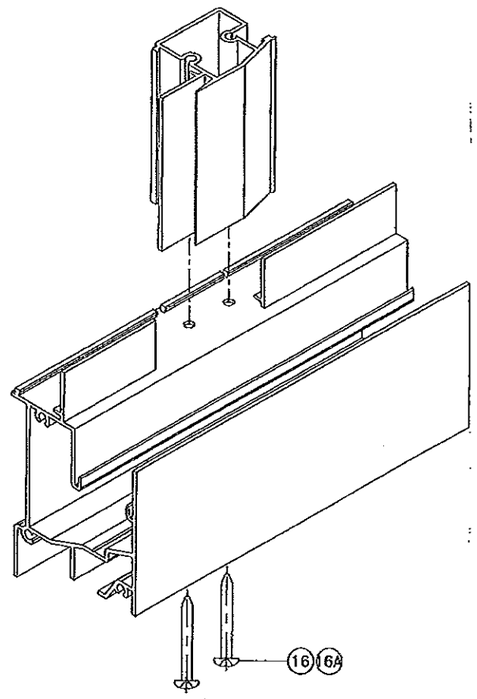
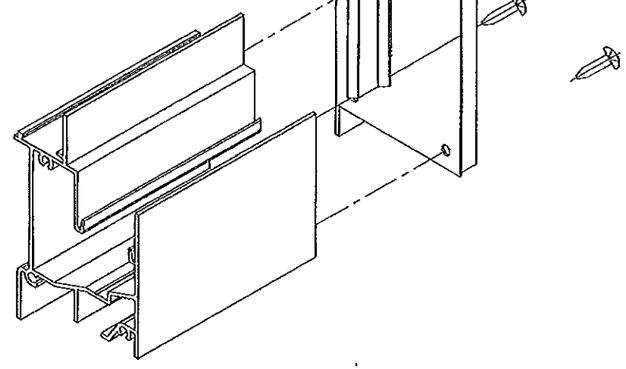




FIXED MTG. RAIL CORNER



FRAME BOTTOM CORNER

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