



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

E.S. Windows, Inc.
10653 NE Quabridge 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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series 2100 Aluminum Horizontal Sliding Window- S.M.I.

APPROVAL DOCUMENT: Drawing No. **W04-101**, titled "Series 2100 Alum. Horiz. Sliding Window (S.M.I)", sheets 1 through 5 of 5, prepared by AL-Farooq Corporation, dated 11/26/04 with revision "A" on 01/08/05, signed and sealed by Humayoun Farooq, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Herminio F. Gonzalez, P.E., Director, BCCO**



NOA No 04-1208.02
Expiration Date: February 10, 2010
Approval Date: February 10, 2005
Page 1

E.S. Windows

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **W04-101**, titled "Series-2100 Alum. Horiz. Sliding Window (S.M.I)" Sheets 1 through 5 of 5, prepared by AL-Farooq Corporation, dated 11/26/04 with revision "A" on 01/08/05, signed and sealed by Humayoun Farooq, P.E.

B. TESTS

1. Test reports on 1) Small Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, prepared by Hurricane Engineering & Testing Inc. Test Report No. **HETI-04-1921**, dated 10/15/04, signed and sealed by Ivonne Ghia, 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) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, prepared by Hurricane Engineering & Testing Inc. Test Report No. **HETI-04-1412**, dated 10/13/04, signed and sealed by Ivonne Ghia, P.E.

C. CALCULATIONS

1. Anchor Calculations, ASTM- E1300, and structural analysis, prepared by AL-Farooq Corporation, dated 11/26/04, signed and sealed by Humayoun Farooq, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

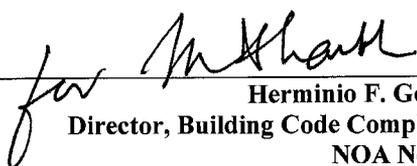
1. Notice of Acceptance No. **02-0828.15**, issued to E.I. DuPont DeNemours for their "Dupont Butacite ® PVB", approved on 11/21/02 and expiring on 12/11/05.

F. STATEMENTS

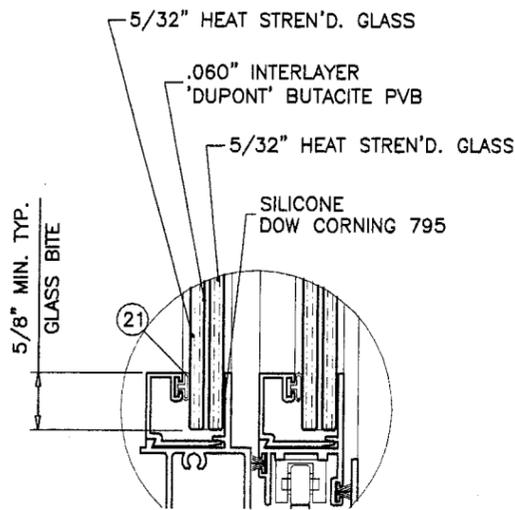
1. Statement letter of conformance, dated 11/26/04, signed and sealed by Humayoun Farooq, P.E.
2. Statement letter of no financial interest, dated 11/26/04, signed and sealed by Humayoun Farooq, P.E.

G. OTHER

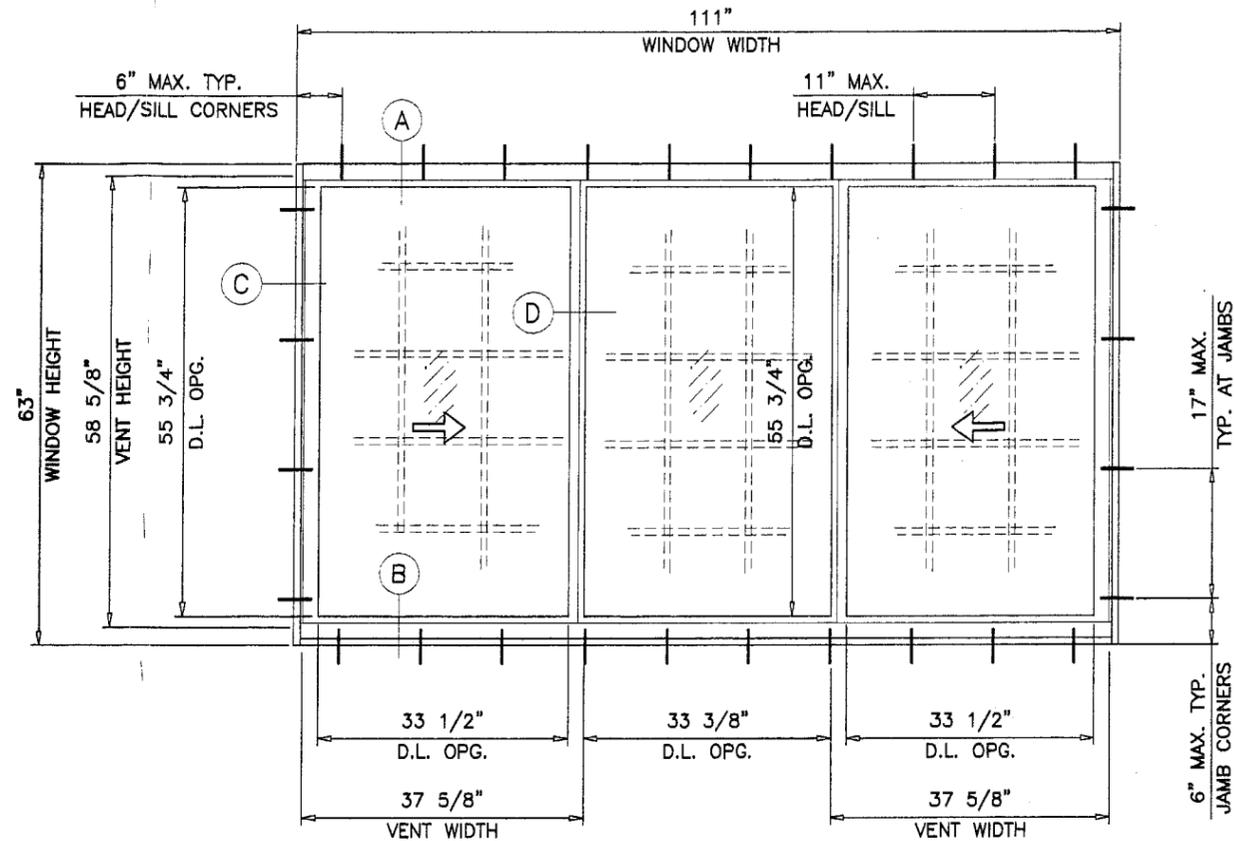
1. Letter from the consultant stating that the product is compliance with the Florida Building Code (FBC).



Herminio F. Gonzalez, P.E.
Director, Building Code Compliance Office
NOA No 04-1208.02
Expiration Date: February 10, 2010
Approval Date: February 10, 2005



GLAZING DETAIL



TYPICAL ELEVATION
TESTED UNIT

SERIES-2100 ALUM HORIZ. SLIDING WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEET 2.

WINDOWS GLAZED WITH LAMINATED GLASS ARE RATED FOR SMALL MISSILE IMPACT AND REQUIRE MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. IN THE HVHZ. INSTALLATION OF THIS SYSTEM OUTSIDE THE HVHZ AREA SHALL MEET THE APPLICABLE REQUIREMENTS FOR WIND BORNE DEBRIS PROTECTION.

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 APPROVED MULLIONS.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE.

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

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHOR 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 33% INCREASE IN ALLOWABLE STRESS WAS USED IN DESIGN OF ANCHORS.

Approved as complying with the
Florida Building Code
Date 02/10/05
NOAH 08-120802
Division Miami Dade Product Control
By M. Shark

LAMINATED GLASS
SMALL MISSILE IMPACT

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557

H
JAN 11 2005

afc

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W04-101ES

SERIES-2100 ALUM HORIZ. SLIDING WDW. (S.M.I.)

E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

no	date	description
A	01.08.05	by description NO CHANGE THIS SHEET

revisions:

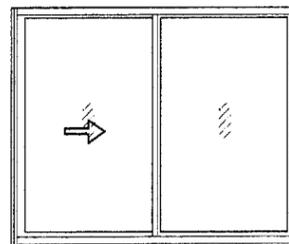
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scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W04-101

sheet 1 of 5

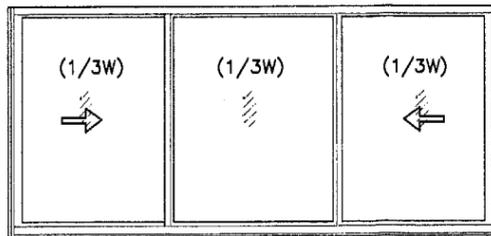
DESIGN LOAD CAPACITY - PSF (XO OR OX SIZES)					
WINDOW DIMS.		A	3/8" LAM. GLASS		
WIDTH	HEIGHT		EXT.(+)	INT.(-)	
26-1/2"	26"	3	82.0	82.0	
37"		4	82.0	82.0	
53-1/8"		(2)	5	82.0	82.0
74"		7	82.0	82.0	
26-1/2"	38-3/8"	3	82.0	82.0	
37"		(3)	4	82.0	82.0
53-1/8"		(3)	5	82.0	82.0
74"		7	82.0	82.0	
26-1/2"	50-5/8"	3	82.0	82.0	
37"		(4)	4	82.0	82.0
53-1/8"		(4)	5	82.0	82.0
74"		7	82.0	82.0	
26-1/2"	63"	3	82.0	82.0	
37"		(4)	4	82.0	82.0
53-1/8"		(4)	5	82.0	82.0
74"		7	82.0	82.0	
24"	24"	3	82.0	82.0	
36"		(2)	4	82.0	82.0
48"		(2)	5	82.0	82.0
60"		(2)	6	82.0	82.0
66"		(2)	6	82.0	82.0
72"		(2)	7	82.0	82.0
24"	36"	3	82.0	82.0	
36"		(3)	4	82.0	82.0
48"		(3)	5	82.0	82.0
60"		(3)	6	82.0	82.0
66"		(3)	6	82.0	82.0
72"		(3)	7	82.0	82.0
24"	48"	3	82.0	82.0	
36"		(4)	4	82.0	82.0
48"		(4)	5	82.0	82.0
60"		(4)	6	82.0	82.0
66"		(4)	6	82.0	82.0
72"		(4)	7	82.0	82.0
24"	60"	3	82.0	82.0	
36"		(4)	4	82.0	82.0
48"		(4)	5	82.0	82.0
60"		(4)	6	82.0	82.0
66"		(4)	6	82.0	82.0
72"		(4)	7	82.0	82.0
24"	66"	3	82.0	82.0	
36"		(5)	4	82.0	82.0
48"		(5)	5	82.0	82.0
60"		(5)	6	82.0	82.0
66"		(5)	6	82.0	82.0
66"		(5)	6	76.7	82.0

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



DESIGN LOAD CAPACITY - PSF (XOX SIZES)					
WINDOW DIMS.		A	3/8" LAM. GLASS		
WIDTH	HEIGHT		EXT.(+)	INT.(-)	
74"	26"	7	82.0	82.0	
106-1/4"		(2)	10	82.0	82.0
111"		(2)	10	82.0	82.0
74"	38-3/8"	7	82.0	82.0	
106-1/4"		(3)	10	82.0	82.0
111"		(3)	10	82.0	82.0
74"	50-5/8"	7	82.0	82.0	
106-1/4"		(4)	10	82.0	82.0
111"		(4)	10	82.0	82.0
74"	63"	7	82.0	82.0	
106-1/4"		(4)	10	82.0	82.0
111"		(4)	10	82.0	82.0
72"	24"	7	82.0	82.0	
84"		(2)	8	82.0	82.0
96"		(2)	9	82.0	82.0
108"		(2)	10	82.0	82.0
72"	36"	7	82.0	82.0	
84"		(3)	8	82.0	82.0
96"		(3)	9	82.0	82.0
108"		(3)	10	82.0	82.0
72"	48"	7	82.0	82.0	
84"		(4)	8	82.0	82.0
96"		(4)	9	82.0	82.0
108"		(4)	10	82.0	82.0
72"	60"	7	82.0	82.0	
84"		(4)	8	82.0	82.0
96"		(4)	9	82.0	82.0
108"		(4)	10	82.0	82.0
72"	66"	7	82.0	82.0	
84"		(5)	8	82.0	82.0
96"		(5)	9	78.6	82.0
96"		(5)	9	78.6	82.0

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

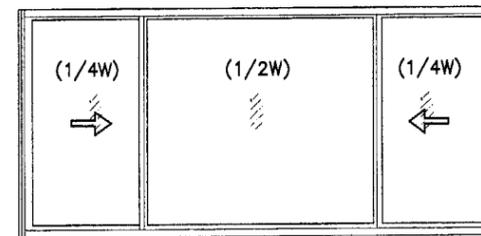


OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH

ALL EXTERIOR(+) LOADS SHOWN ON THIS SHEET ARE FOR WINDOWS WITH APPLIED RISER AT FRAME SILL FOR STD. SILL (NO RISER) LIMIT EXTERIOR(+) LOADS TO 73.3 PSF SEE SCT. 'B' ON SHEET 3.

DESIGN LOAD CAPACITY - PSF (XOX SIZES)					
WINDOW DIMS.		A	3/8" LAM. GLASS		
WIDTH	HEIGHT		EXT.(+)	INT.(-)	
74"	26"	7	82.0	82.0	
106-1/4"		(2)	10	82.0	82.0
111"		(2)	10	82.0	82.0
74"	38-3/8"	7	82.0	82.0	
106-1/4"		(3)	10	82.0	82.0
111"		(3)	10	82.0	82.0
74"	50-5/8"	7	82.0	82.0	
106-1/4"		(4)	10	82.0	82.0
111"		(4)	10	82.0	82.0
74"	63"	7	82.0	82.0	
106-1/4"		(4)	10	82.0	82.0
111"		(4)	10	82.0	82.0
72"	24"	7	82.0	82.0	
84"		(2)	8	82.0	82.0
96"		(2)	9	82.0	82.0
108"		(2)	10	82.0	82.0
72"	36"	7	82.0	82.0	
84"		(3)	8	82.0	82.0
96"		(3)	9	82.0	82.0
108"		(3)	10	82.0	82.0
72"	48"	7	82.0	82.0	
84"		(4)	8	82.0	82.0
96"		(4)	9	82.0	82.0
96"		(4)	9	82.0	82.0
72"	60"	7	82.0	82.0	
84"		(4)	8	82.0	82.0
96"		(4)	9	82.0	82.0
96"		(4)	9	82.0	82.0

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

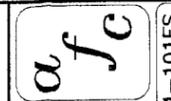


OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH

Approved as complying with the Florida Building Code
Date 02/10/05
NOAH 02-1208-02
Miami Dade Product Control
Division
By *M. Thack*

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557

JAN 11 2005



AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX (305) 262-6978

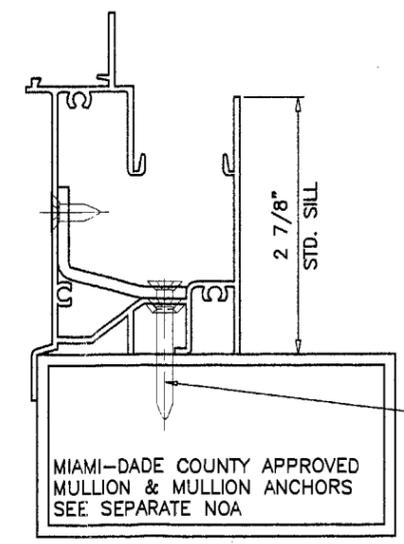
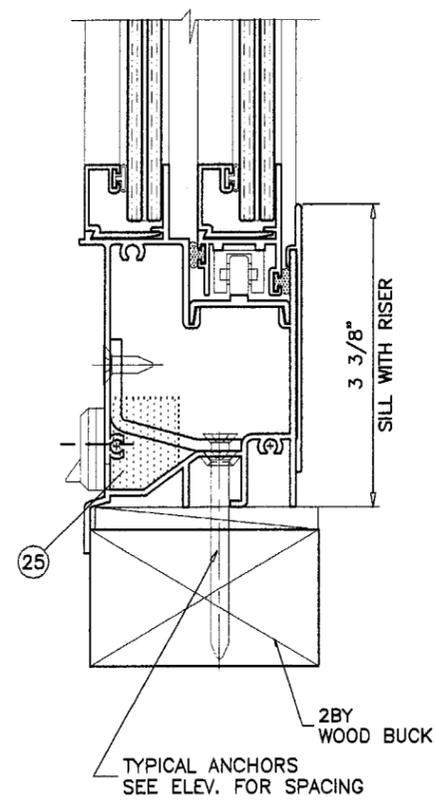
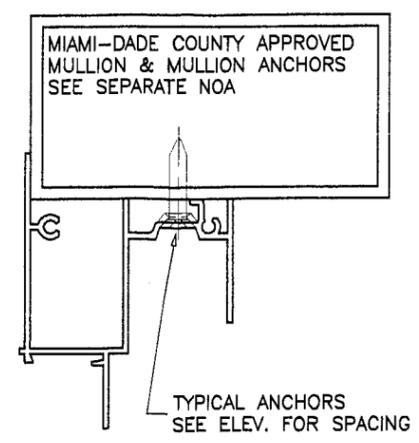
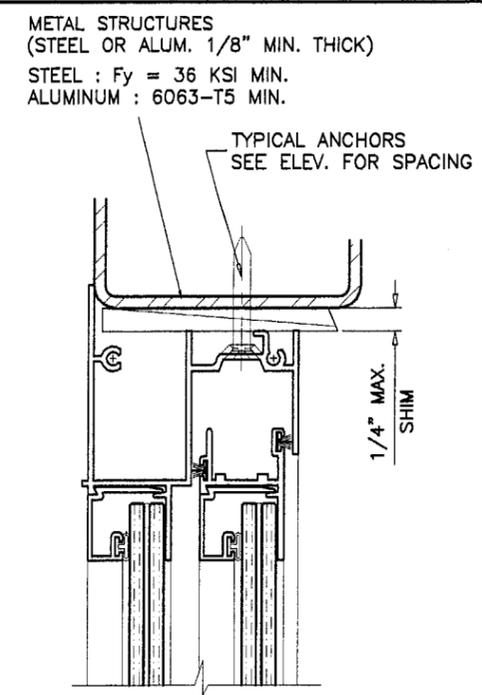
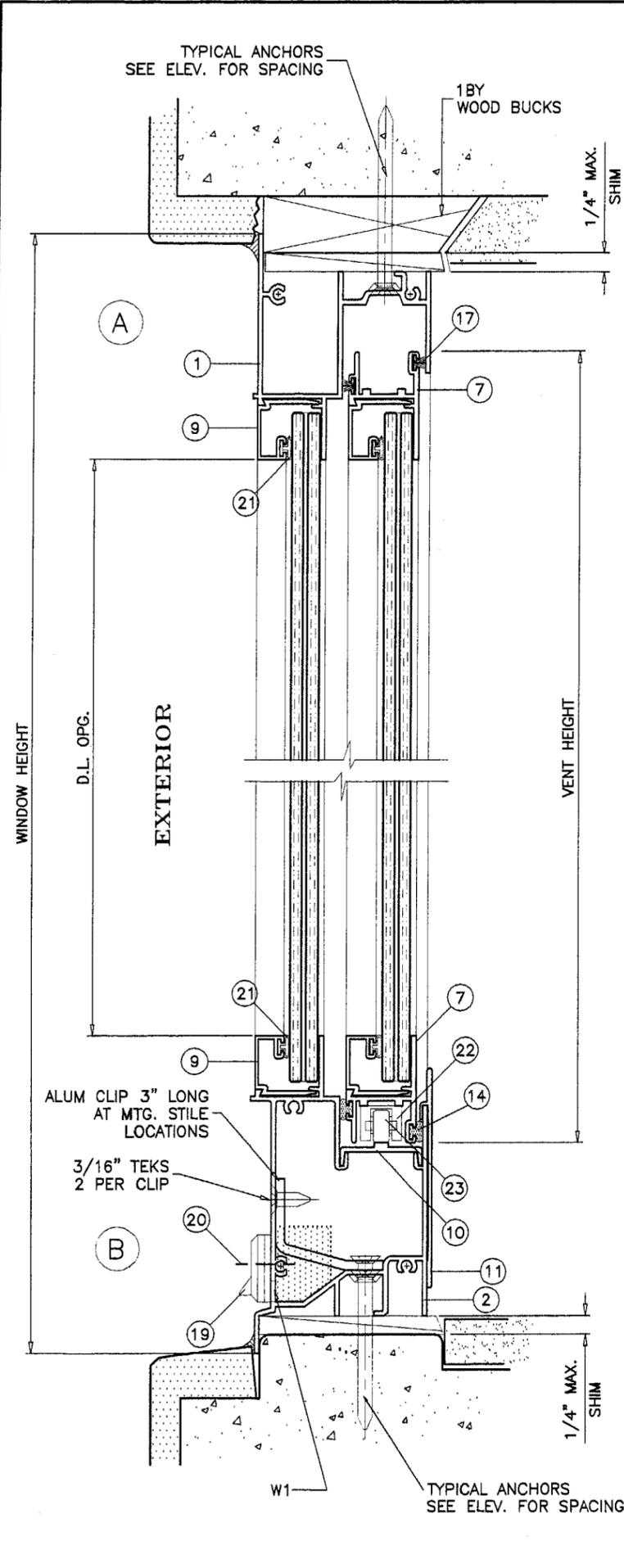
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TEL (305) 640-9857 FAX (305) 593-2074

no	date	description
A	01.08.05	NO CHANGE THIS SHEET

date: 11-26-04
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W04-101
sheet 2 of 5

COMP-ANL\W04-101ES



WOOD BUCKS 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" TAPCONS
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
 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

1/4" TEKS OR SELF DRILLING SCREWS OR SMS
 INTO METAL STRUCTURES (1/8" MIN. THICKNESS)
 (1/4" MAX. SHIM SPACE)

#10 SMS OR SELF DRILLING SCREWS
 INTO DADE COUNTY APPROVED MULLIONS
 (NO SHIM SPACE)

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

Approved as complying with the
 Florida Building Code
 Date 02/10/05
 NOA# 04-1203.02
 Miami Dade Product Control
 Division
 By [Signature]

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 [Signature]
 JAN 11 2005

afc

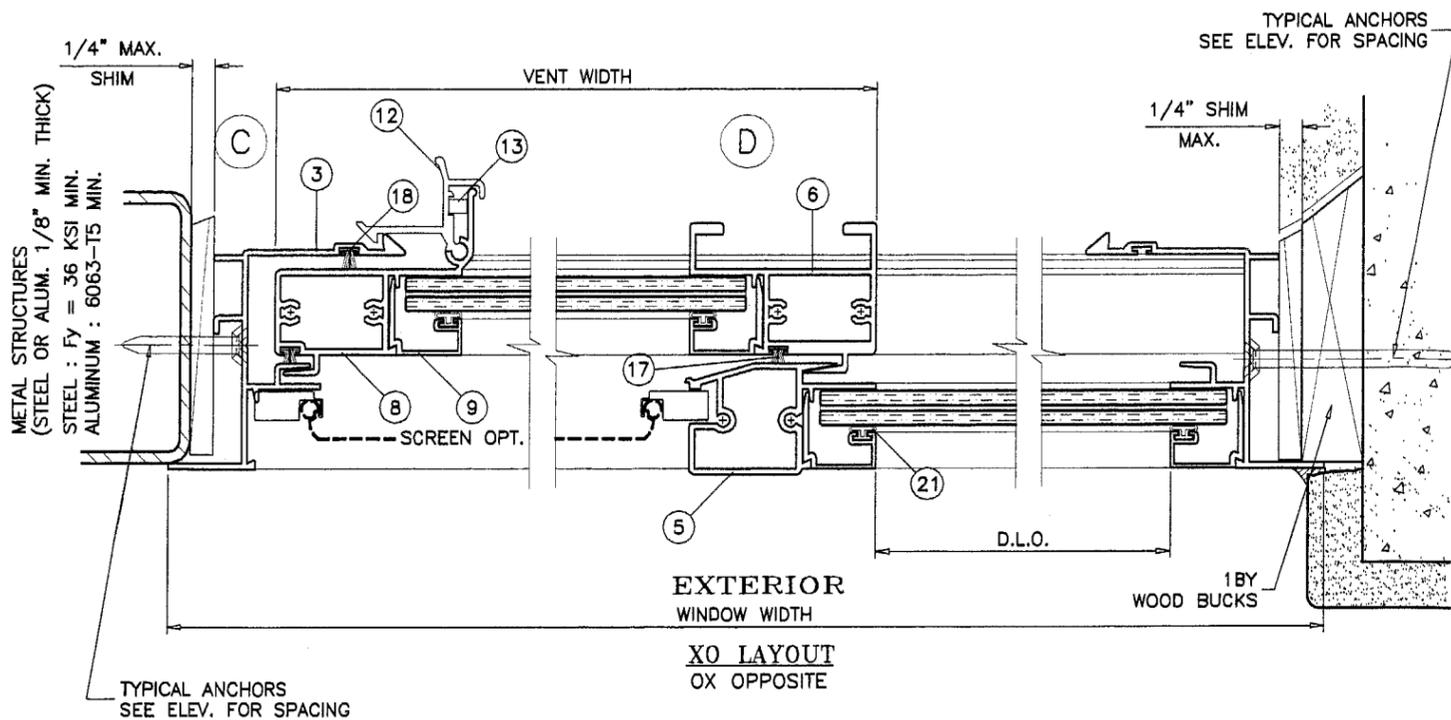
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 COMP-ANL\W04-101ES

SERIES-2100 ALUM HORIZ. SLIDING WDW. (S.M.I.)
E.S. WINDOWS
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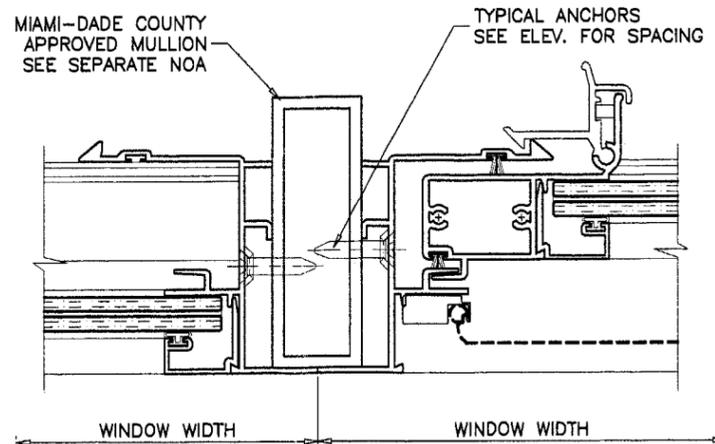
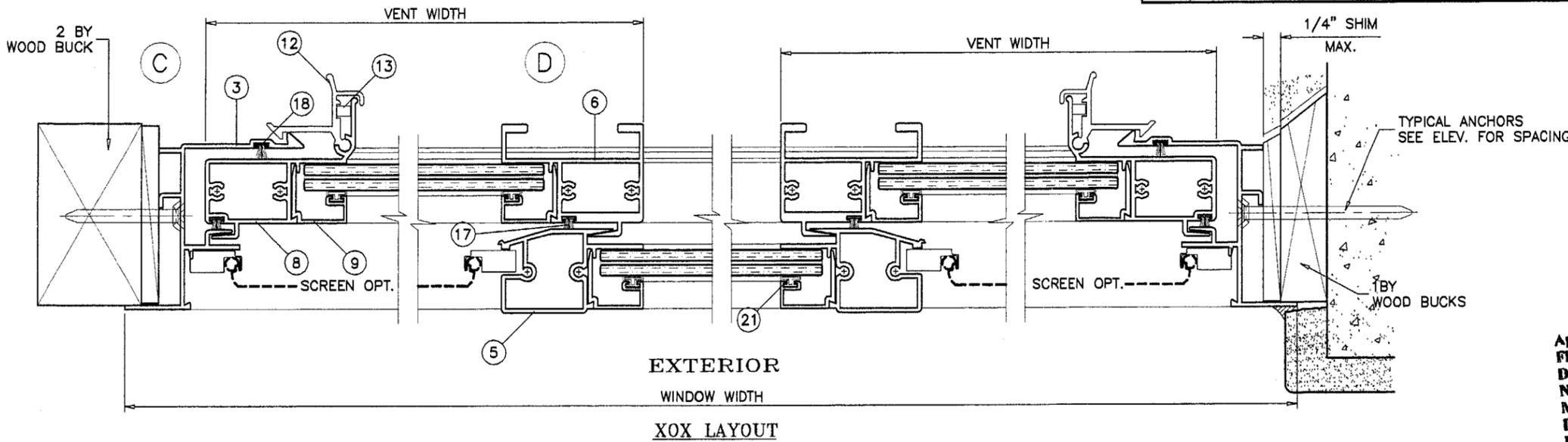
no	date	by	description
A	01.08.05		NO CHANGE THIS SHEET

date: 11-26-04
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no.
W04-101
 sheet 3 of 5



ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES1003	1	FRAME HEAD	6063-T5	-
2	ES2012	1	FRAME SILL	6063-T5	-
3	ES2003	1	FRAME JAMB VENT	6063-T5	-
4	-	-	-	-	-
5	ES1005	1/ VENT	FIXED RAIL	6063-T6	-
6	ES1004	1/ VENT	VENT MEETING RAIL	6063-T6	-
7	ES1007	2/ VENT	TOP AND BOTTOM RAIL	6063-T5	-
8	ES1006	1/ VENT	JAMB STILE	6063-T6	-
9	ES1103	AS REQD.	GLAZING BEAD	6063-T6	-
10	ES2002	1	SILL TRACK INSERT	6063-T5	-
11	ES2011	AS REQD.	SILL RISER	6063-T5	-
12	ES1009	2/ VENT	VENT LATCH	6063-T6	AT 8" FROM ENDS
13	ES1012	1/ LATCH	VENT LATCH SPRING	ST. STEEL	-
14	-	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 (SILL END)	CRS	P.H. SMS
17	W23211NG	AS REQD.	VENT & FIX. RAIL W'STRIPPING	-	ULTRAFAB OR EQUIV.
18	W23291NG	AS REQD.	FRAME JAMB W'STRIPPING	-	ULTRAFAB OR EQUIV.
19	WPHL-100	2	BAFFLE	-	M & M PLASTICS
20	#6 X 3/8"	2/ BAFFLE	BAFFLE SCREW	-	P.H. SMS
21	ES1104	AS REQD.	GLAZING GASKET	NEOPRENE	-
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



Approved as complying with the
 Florida Building Code
 Date 02/10/05
 NOA# 04-1208.02
 Miami Dade Product Control
 Division
 By *M. Khan*

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557

H

JAN 11 2005

afsc

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 ENGINEERS, PLANNERS & PRODUCT DESIGN
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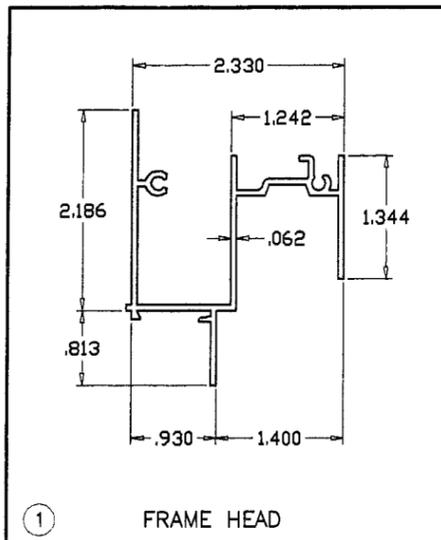
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 MIAMI, FL. 33166
 TEL (305) 640-9857 FAX. (305) 593-2074

no	date	description	REV. PER	COMMENTS
A	01.08.05			

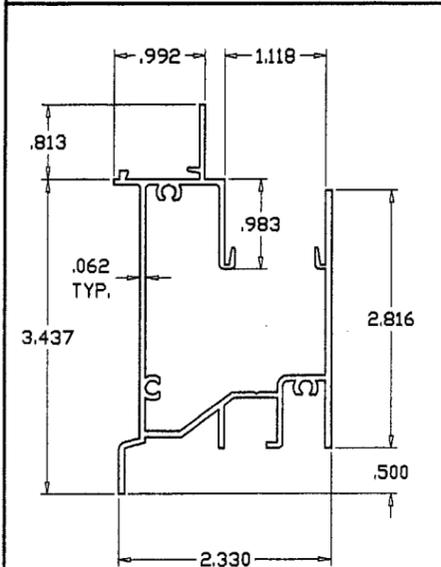
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 chk. by:

drawing no.
W04-101

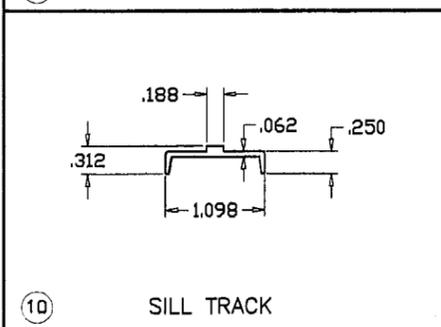
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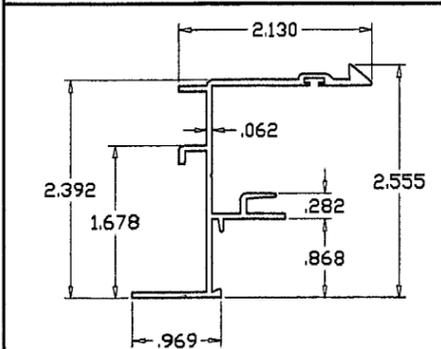
1 FRAME HEAD



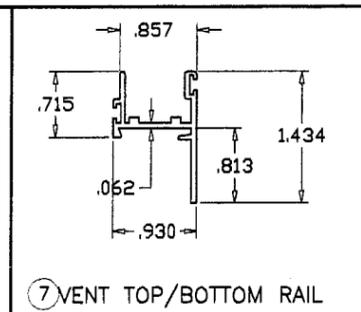
2 FRAME SILL



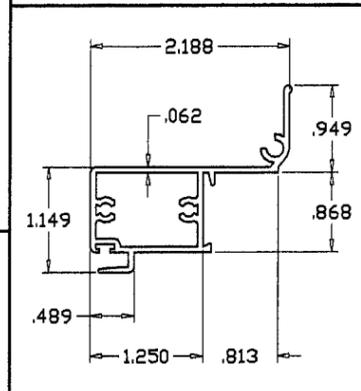
10 SILL TRACK



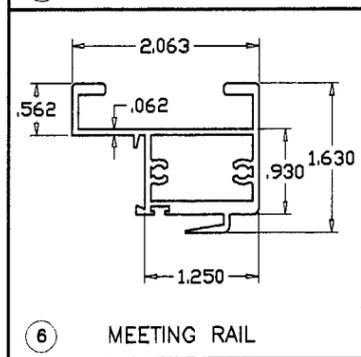
3 FRAME JAMB



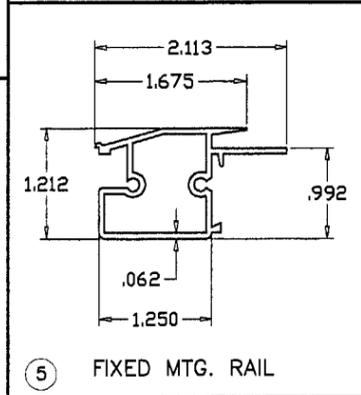
7 VENT TOP/BOTTOM RAIL



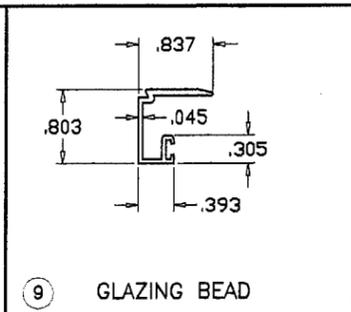
8 JAMB STILE



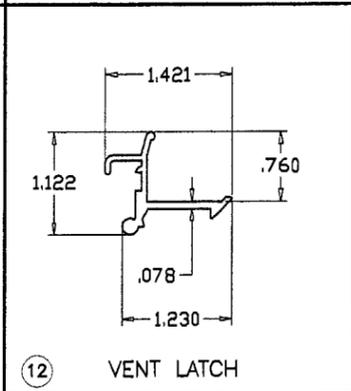
6 MEETING RAIL



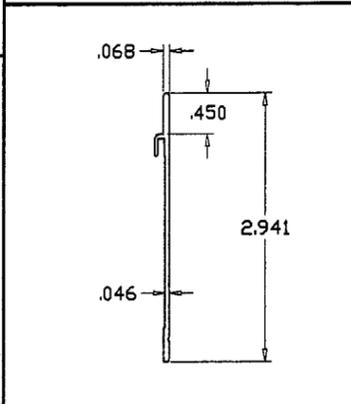
5 FIXED MTG. RAIL



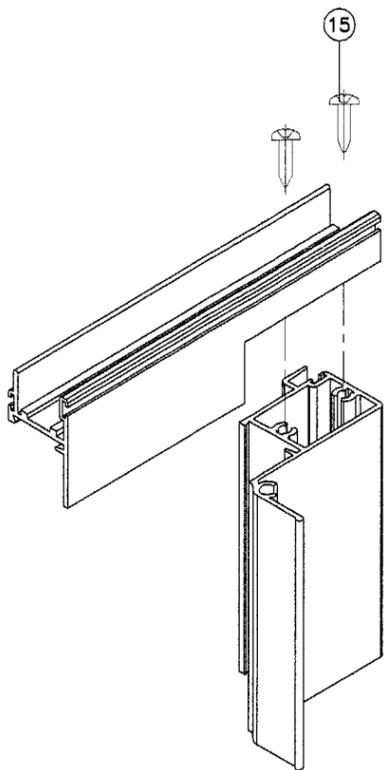
9 GLAZING BEAD



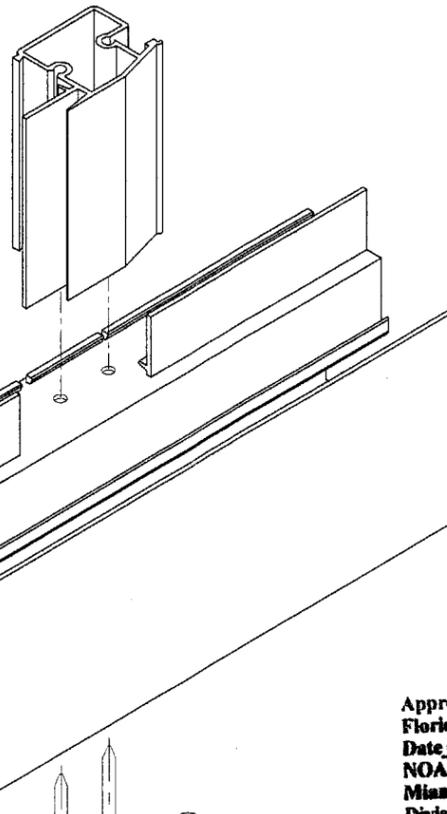
12 VENT LATCH



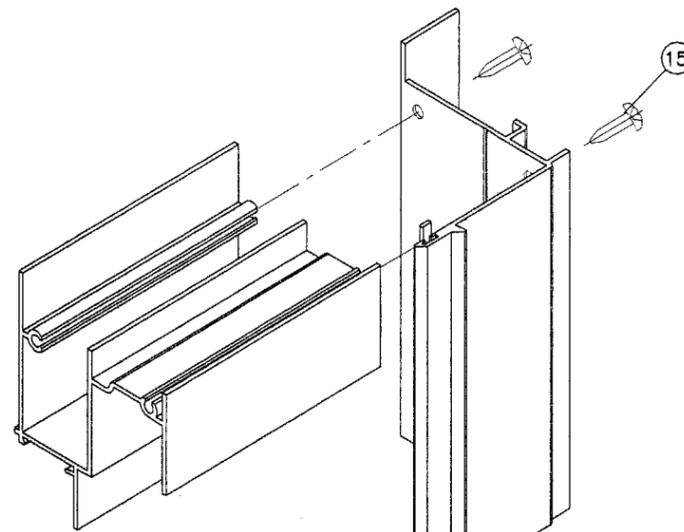
11 SILL RISER



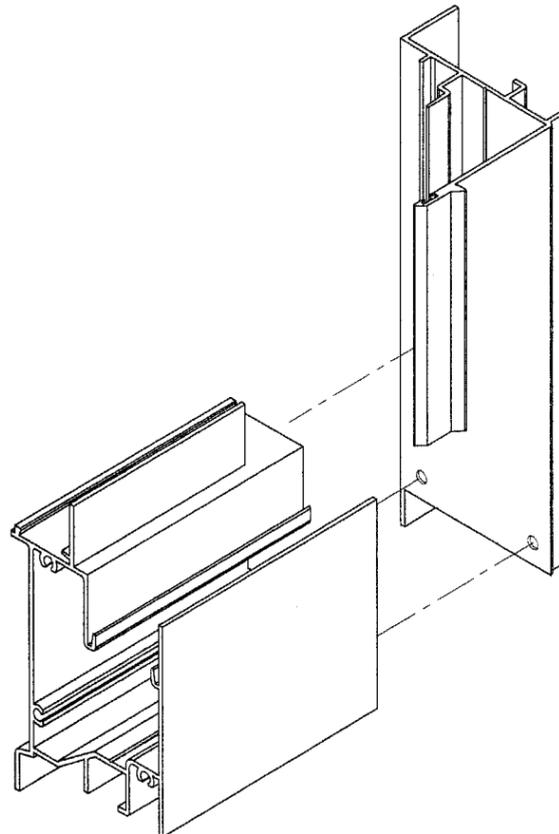
VENT TOP/BOTTOM CORNERS



FIXED MTG. RAIL CORNER



FRAME TOP CORNER



FRAME BOTTOM CORNER

Approved as complying with the
Florida Building Code
Date 02/10/05
NOA# 04-1208-02
Miami Dade Product Control
Division
By [Signature]

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557

JAN 11 2005

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

SERIES-2100 ALUM HORIZ. SLIDING WDW. (S.M.I.)
E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

no	date	description
A	01.08.05	NO CHANGE THIS SHEET

date: 11-28-04
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W04-101
sheet 5 of 5

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