



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 "1100WW" Aluminum Single Hung Window – S. M. I.

APPROVAL DOCUMENT: Drawing No. **W12-41**, titled "Series-1100WW Alum. Single Hung Window (S.M.I)", sheets 1 through 11 of 11, dated 07/20/12, with revision B dated 12/05/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, 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 Section.

MISSILE IMPACT RATING: 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 consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



MP
12/06/12

NOA No. 12-0907.02
Expiration Date: December 13, 2017
Approval Date: December 13, 2012
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **W12-41**, titled "Series-1100WW Alum Single Hung Window (S.M.I.)" sheets 1 through 11 of 11, dated 07/20/12, with revision A dated 08/29/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

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) Small Missile Impact Test per FBC, TAS 201-94
 - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 7) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
 - 8) Safety Performance Test, (class A) per ANSI Z97.1

along with marked-up drawings and installation diagram of aluminum single hung window over fixed window, single and mulled units, prepared by Fenestration Testing Lab, Inc., Test Report No. **FTL-6800**, dated 05/18/12, signed and sealed by Marlin D. Brinson, P.E.

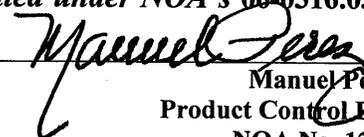
2. Test reports on:
 - 1.) Air Infiltration Test, per FBC, TAS 202-94
 - 2.) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3.) Water Resistance Test, per FBC, TAS 202-94
 - 4.) Large Missile Impact Test per FBC, TAS 201-94
 - 5.) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6.) Forced Entry Test, Test per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of an Aluminum single hung window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.'s **FTL-5337** dated 01/25/08 and **FTL-5815** dated 02/13/09, both signed and sealed by Michael R. Wenzel, P.E.

(For Reference Only - Submitted under NOA's No. 07-0928.14 and 09-1008.05)

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) Small 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 an aluminum Single Hung window, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-05-1432** dated 01/28/05 & **HETI-05-1945**, dated 03/28/05, signed and sealed by Ivonne Ghia, P.E. *(For Reference Only - Submitted under NOA's 06-0316.03No. 07-0928.14 and 09-1008.05)*


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0907.02

Expiration Date: December 13, 2017
Approval Date: December 13, 2012

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C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated 06/28/12 and 11/28/12, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0624.01** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont Butacite® PVB Interlayer**" dated 09/08/11, expiring on 12/11/16.
2. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.

F. STATEMENTS

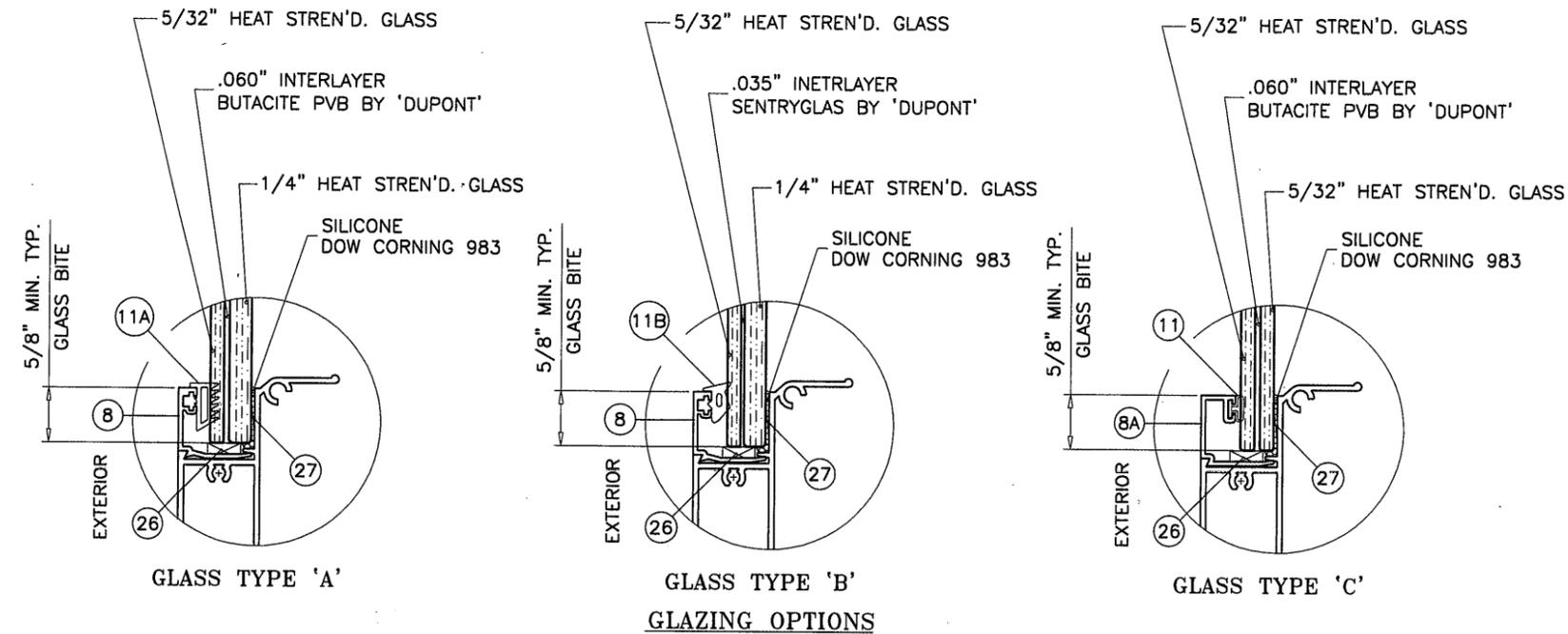
1. Statement letter of conformance, complying with FBC-2010, and of no financial interest, dated July 09, 2012, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Proposal issued by Product Control Section, dated 12/12/11, signed by Jaime Gascon, P.E.

G. OTHER

1. Notice of Acceptance No. **12-0410.04**, issued to E.S. Windows, LLC, for their "Series 1100 Aluminum Single Hung Window – S.M.I.", approved on 06/07/12 and expiring on 08/11/15.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0907.02

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GLASS TYPES 'A' & 'B'
 MAXIMUM DESIGN LOAD RATING = + 100.0 PSF
 - 140.0 PSF

GLASS TYPE 'C'
 MAXIMUM DESIGN LOAD RATING = + 80.0 PSF
 - 120.0 PSF

SERIES-1100WW ALUMINUM SINGLE HUNG WINDOW

THESE WINDOWS CAN BE INSTALLED AS SINGLE UNITS OR SIDE BY SIDE COMBINATION OF TWO OR MORE UNITS USING MULLIONS IN BETWEEN. FOR SINGLE HUNG WINDOW CAPACITY SEE SHEET 2. FOR SINGLE HUNG OVER FIXED WINDOW CAPACITY SEE SHEET 3. FOR SIDE BY SIDE UNITS SEE SHEET 4 FOR WINDOW MULLION CAPACITY. LOWER DESIGN PRESSURES FROM CHARTS ABOVE 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.

THESE WINDOWS ARE RATED FOR SMALL MISSILE IMPACT. MIAMI-DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

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. 3538
 DEC 05 2012

Approved as complying with the Florida Building Code
 Date Dec. 13, 2012
 NOA# 12-0907.02
 Miami Dade Product Control
 By Manuel Perez

SERIES-1100WW ALUM SINGLE HUNG WINDOW (S.M.I.)
E.S. WINDOWS, LLC
 5220 N.W. 72 AVE. BAY #4
 MIAMI, FL. 33166
 TEL. (305) 624-7775 FAX. (305) 624-7777

no	date	description
A	08.29.12	NO CHANGE THIS SHEET
B	12.05.12	NO CHANGE THIS SHEET

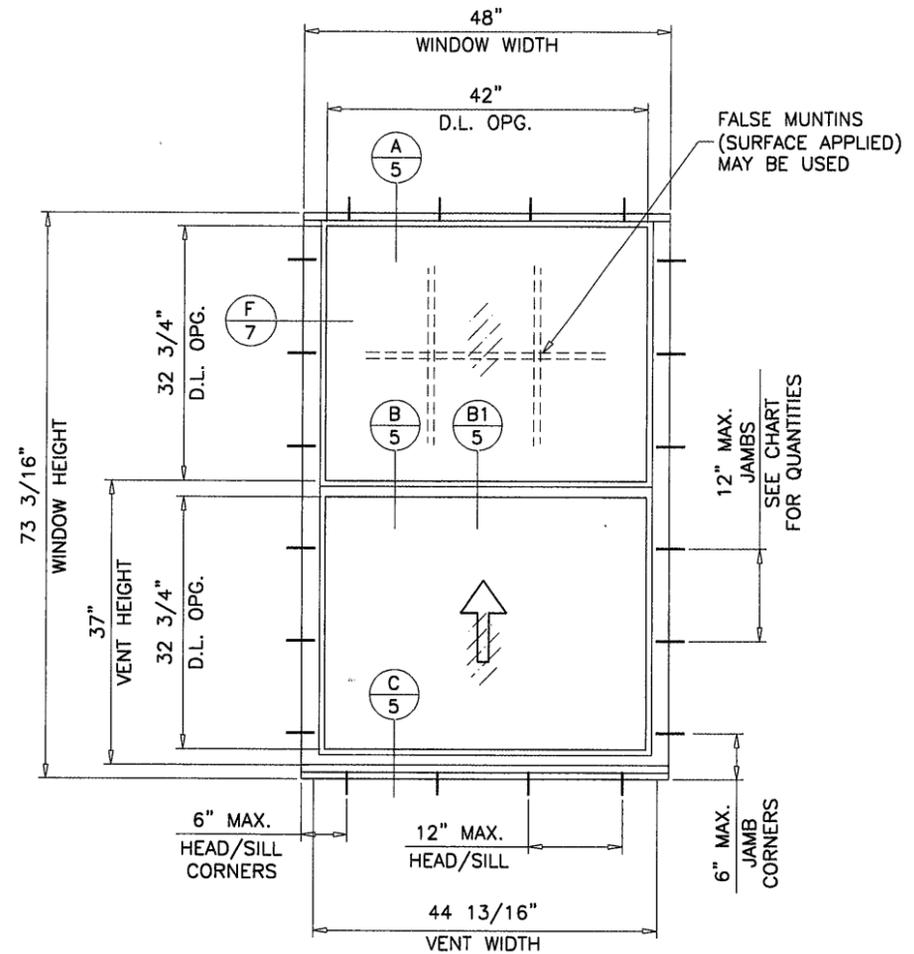
date: 07-20-12
 scale: 1/2"=1'-0"
 dr. by: HAMID
 chk. by:

drawing no.
W12-41
 sheet 1 of 11

INSTRUCTIONS:
 SEE SHEET 1 FOR GLASS TYPES AND DESIGN LOAD CAPACITY.
 SEE CHART BELOW FOR SINGLE HUNG WINDOW ANCHOR CAPACITY.
 LOWER VALUES FROM THESE CHARTS WILL APPLY TO ENTIRE SYSTEM.

SINGLE HUNG WINDOW ANCHOR LOAD CAPACITY - PSF											
WINDOW DIMS.		ANCHORS TYPE 'A'						ANCHORS TYPE 'C'			
		1/4" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
19-1/8"	38-3/8" (4)	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
26-1/2"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
30"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
37"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
48"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	
19-1/8"	50-5/8" (5)	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
26-1/2"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
30"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
37"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
48"	100.0	140.0	100.0	140.0	100.0	126.0	100.0	140.0	100.0	140.0	
19-1/8"	63" (6)	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
26-1/2"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
30"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
37"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
48"	100.0	140.0	100.0	140.0	100.0	112.5	100.0	140.0	100.0	133.2	
19-1/8"	72" (6)	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
26-1/2"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
30"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
37"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	137.2	100.0	140.0	100.0	140.0
48"	100.0	140.0	100.0	133.9	100.0	107.1	100.0	140.0	100.0	126.8	

* NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.



TYPICAL ELEVATION

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

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

THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/2" MIN. EMBED INTO CONC. OR MASONRY

DIRECTLY INTO CONCRETE OR MASONRY
 1-1/2" MIN. EMBED INTO CONCRETE
 1-1/4" MIN. EMBED INTO MASONRY

TYPE 'C'- #14 SELF DRILLING SCREWS (GRADE 5 CRS)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = 1/8")
 INTO METAL STRUCTURES
 STEEL : 12 GA. 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.

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
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Approved as complying with the
 Florida Building Code
 Date DEC 13 2012
 NOA# 12-0907-02
 Miami Dade Product Control
 By: *Manuel Perez*

afc

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

SERIES-1100W ALUM SINGLE HUNG WINDOW (S.M.I.)
 E.S. WINDOWS, LLC
 5220 N.W. 72 AVE. BAY #4
 MIAMI, FL. 33166
 TEL. (305) 624-7775 FAX. (305) 624-7777

no	date	description
A	08.29.12	LATCH OPTION ADDED
B	12.05.12	JAMB ANCHOR QUANTITY REV.

date: 07-20-12
 scale: 1/2"=1'-0"
 dr. by: HAMID
 chk. by:

drawing no.
 W12-41

sheet 2 of 11

COMP-ANL\W12-41ESW

SINGLE HUNG OVER FIXED WINDOW ANCHOR LOAD CAPACITY - PSF

WINDOW DIMS.		ANCHORS TYPE 'A'						ANCHORS TYPE 'C'			
		1/4" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM		3/8" MAX. SHIM		1/2" MAX. SHIM	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
36"	60"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
45" (5)		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
36"	72"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	128.6	100.0	140.0	100.0	140.0
45" (6)		100.0	140.0	100.0	140.0	100.0	121.1	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	140.0	100.0	114.3	100.0	140.0	100.0	140.0
36"	84"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
45" (7)		100.0	140.0	100.0	140.0	100.0	132.5	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	140.0	100.0	119.1	100.0	140.0	100.0	140.0
36"	90"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
45" (8)		100.0	140.0	100.0	140.0	100.0	128.5	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	140.0	100.0	115.0	100.0	140.0	100.0	140.0
36"	96"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	138.9	100.0	140.0	100.0	140.0
45" (8)		100.0	140.0	100.0	140.0	100.0	125.4	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	137.7	100.0	111.7	100.0	140.0	100.0	140.0
36"	102"	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	129.4	100.0	140.0	100.0	140.0
45" (9)		100.0	140.0	100.0	140.0	100.0	122.2	100.0	140.0	100.0	140.0
48"		100.0	140.0	100.0	136.0	100.0	109.1	100.0	140.0	100.0	137.0
36"	108"	100.0	140.0	100.0	140.0	100.0	137.2	100.0	140.0	100.0	140.0
42"		100.0	140.0	100.0	140.0	100.0	121.0	100.0	140.0	100.0	140.0
45" (9)		100.0	140.0	100.0	140.0	100.0	114.3	100.0	140.0	100.0	135.4
48"		100.0	140.0	100.0	133.9	100.0	107.1	100.0	140.0	100.0	126.8

* NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/2" MIN. EMBED INTO CONC. OR MASONRY

DIRECTLY INTO CONCRETE OR MASONRY
 1-1/2" MIN. EMBED INTO CONCRETE
 1-1/4" MIN. EMBED INTO MASONRY

TYPE 'C' - #14 SELF DRILLING SCREWS (GRADE 5 CRS)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = 1/8")
 INTO METAL STRUCTURES

STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
 ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

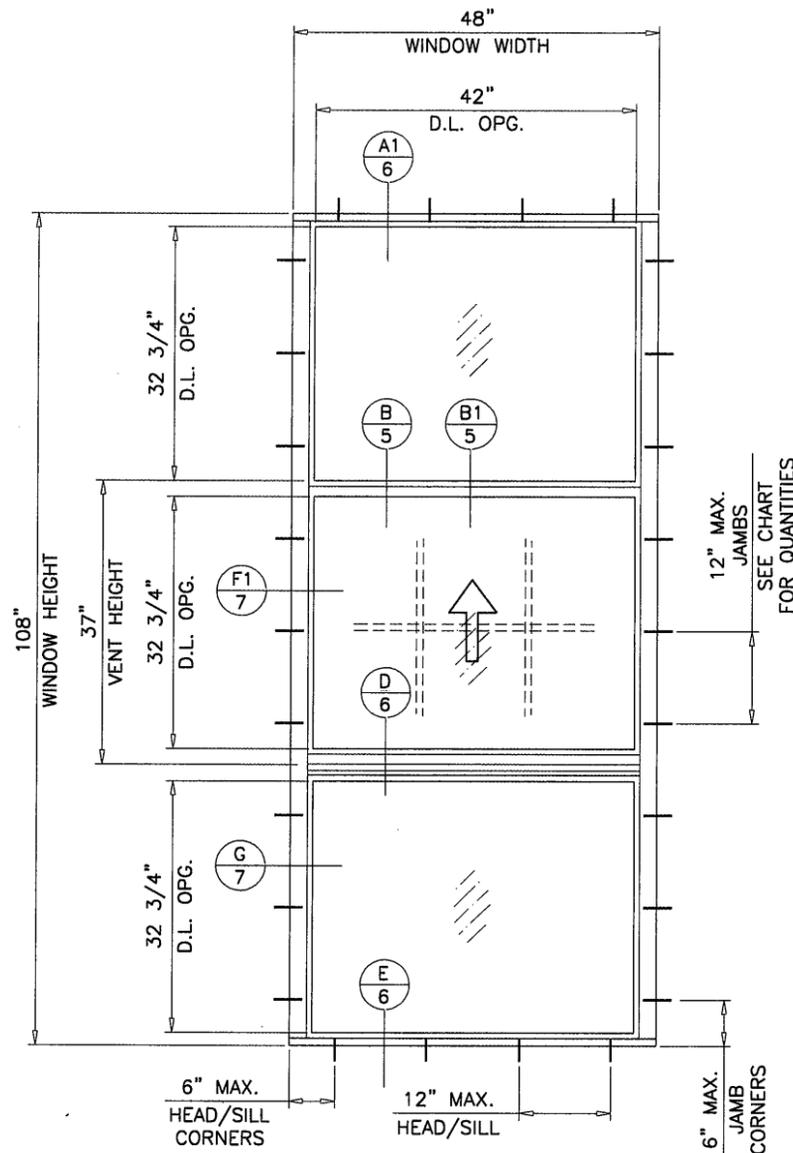
Ed = ANCHOR EDGE DISTANCE

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.

INSTRUCTIONS:

SEE SHEET 1 FOR GLASS TYPES AND DESIGN LOAD CAPACITY.
 SEE CHART BELOW FOR S.H. OVER FIXED WINDOW ANCHOR CAPACITY.
 LOWER VALUES FROM THESE CHARTS WILL APPLY TO ENTIRE SYSTEM.



TYPICAL ELEVATION

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.
 WITH MINIMUM SILL HEIGHT OF 36 IN. ABOVE WALKING SURFACE.

af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W12-41ESW

SERIES-1100W ALUM SINGLE HUNG WINDOW (S.M.I.)
E.S. WINDOWS, LLC
 5220 N.W. 72 AVE. BAY #4
 MIAMI, FL. 33166
 TEL. (305) 624-7775 FAX. (305) 624-7777

no	date	description
A	08.29.12	LATCH OPTION ADDED
B	12.05.12	JAMB ANCHOR QUANTITY REV.

date: 07-20-12
 scale: 1/2"=1'-0"
 dr. by: HAMID
 chk. by:

drawing no.
W12-41
 sheet 3 of 11

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
 DEC 05 2012

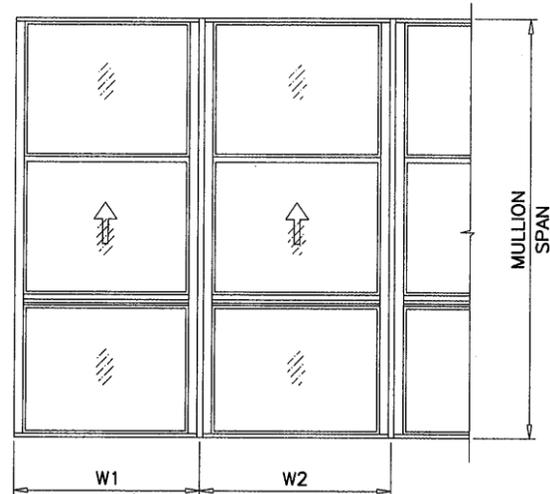
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 Miami Dade Product Control
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**MULLION LOAD CAPACITY - PSF
SINGLE HUNG OVER FIXED WINDOW**

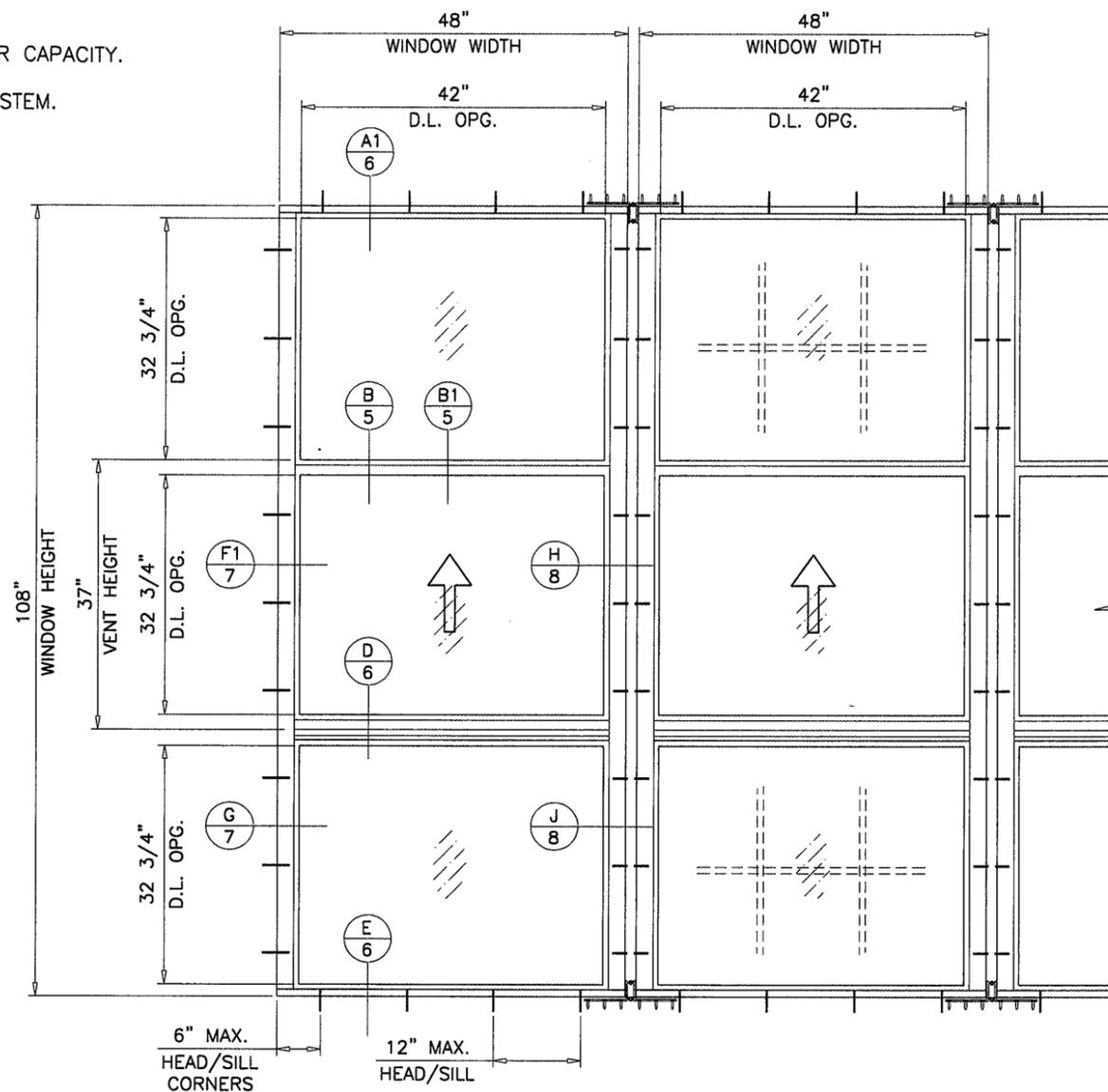
WINDOW DIMS.		6 ANCHORS @ MULL END	
WIDTH (W)	MULL SPAN	EXT. (+) INT. (-)	
24"	60"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	72"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	84"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	90"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	96"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	102"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		140.0	
24"	108"	140.0	
30"		140.0	
36"		140.0	
42"		140.0	
48"		125.0	
48"	108"	140.0	WITH MULL STIFFENER

INSTRUCTIONS:

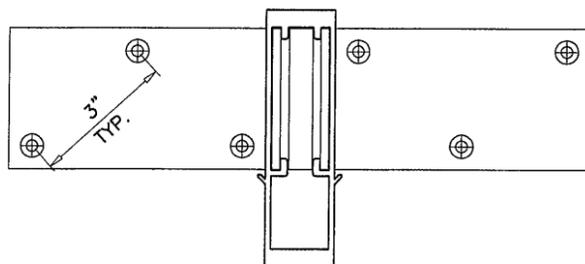
SEE SHEET 1 FOR GLASS TYPES AND DESIGN LOAD CAPACITY.
SEE CHART ON SHEET 3 FOR S.H. OVER FIXED WINDOW ANCHOR CAPACITY.
SEE CHARTS BELOW FOR WINDOW MULLION CAPACITY.
LOWER VALUES FROM THESE CHARTS WILL APPLY TO ENTIRE SYSTEM.



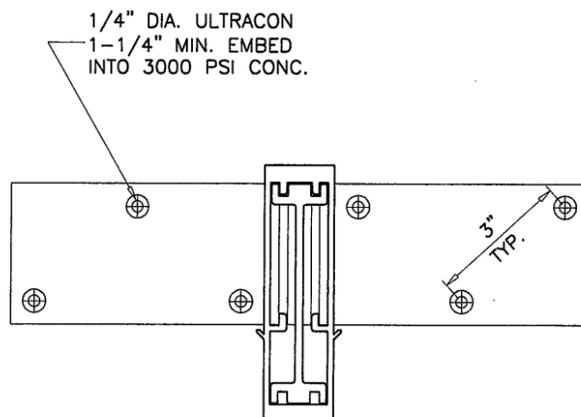
$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



TYPICAL ELEVATION
SIDE BY SIDE UNITS



MULLION WITHOUT STIFFENER



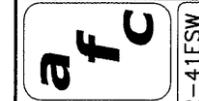
MULLION WITH STIFFENER

INSTALL CLIP ANGLES DIRECTLY TO CONC. WITHOUT SHIM SPACE
NOTCH WOOD BUCKS TO ACCOMMODATE CLIP ANGLES

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

[Signature]
DEC 05 2012

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NOA# 12-0907.02
Miami Dade Product Control
By *[Signature]*



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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TEL. (305) 264-8100 FAX. (305) 262-6978

SERIES-1100WW ALUM SINGLE HUNG WINDOW (S.M.I.)

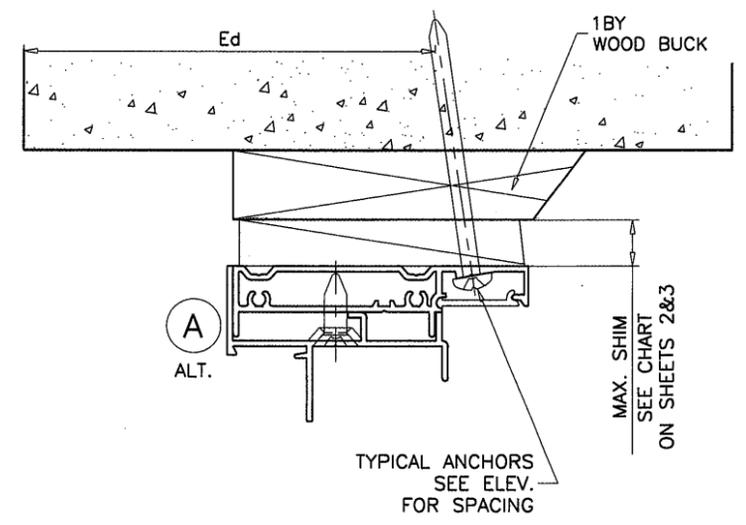
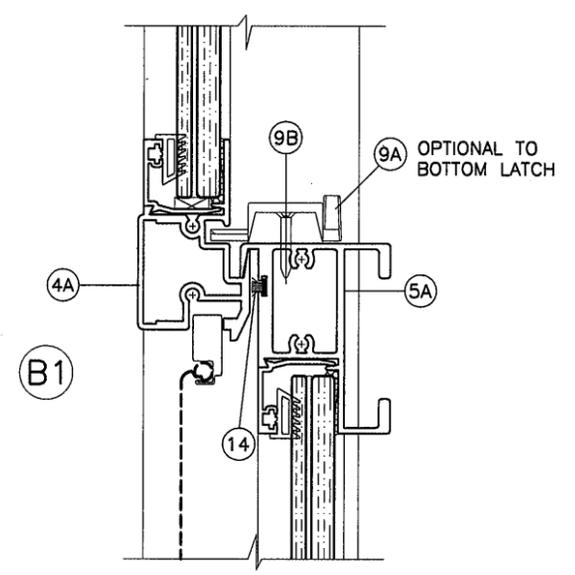
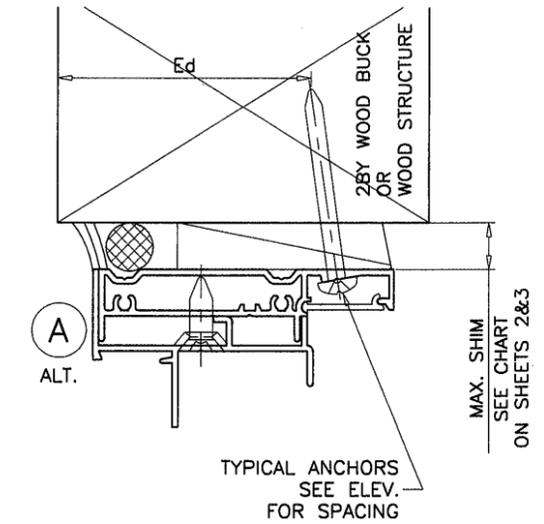
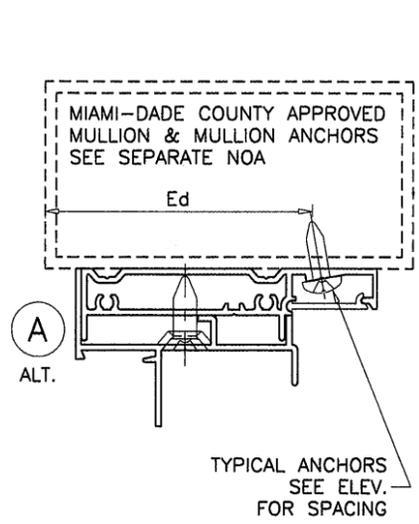
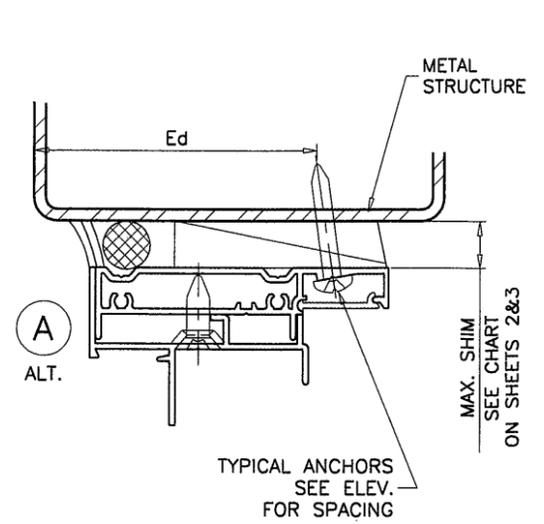
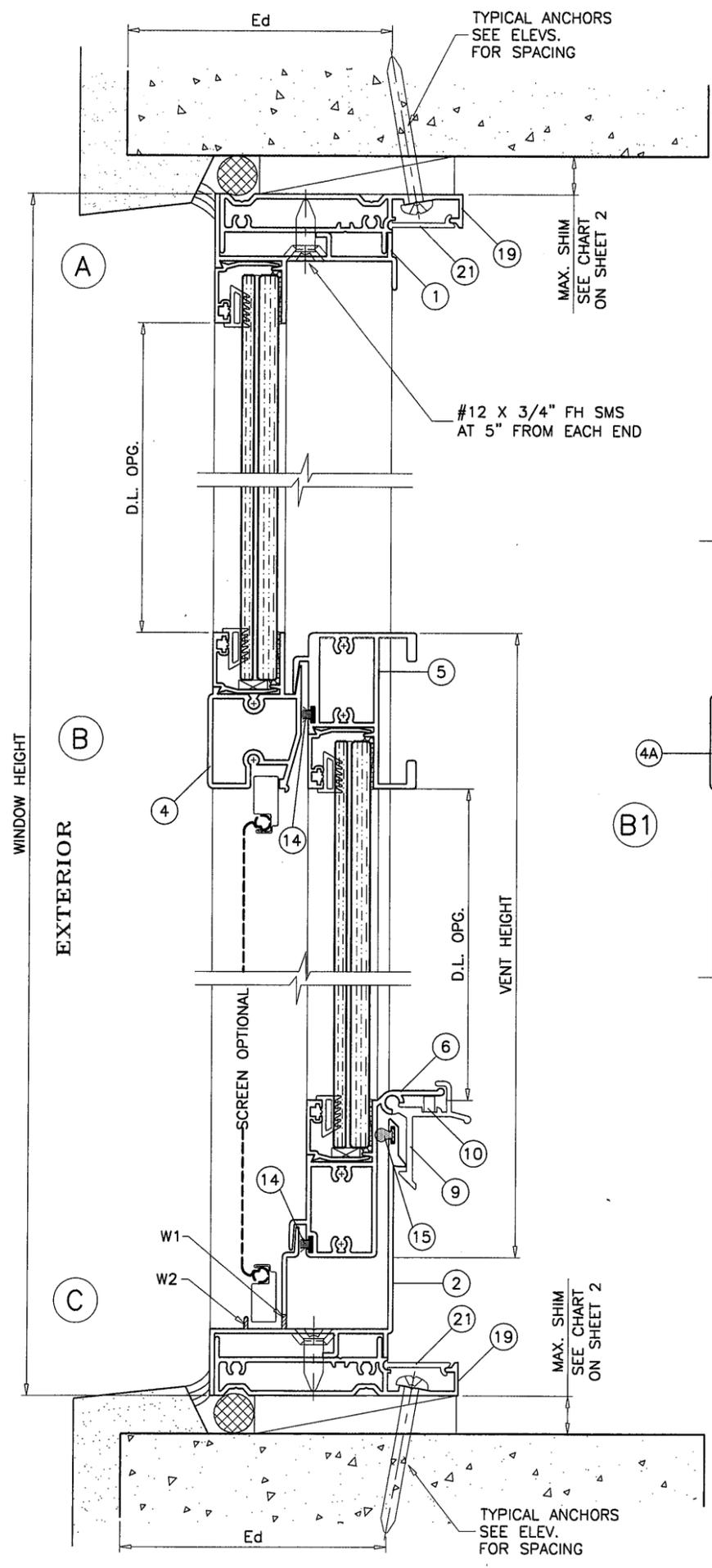
E.S. WINDOWS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

no	date	description
A	08.29.12	LATCH OPTION ADDED
B	12.05.12	NO CHANGE THIS SHEET

date: 07-20-12
scale: -
dr. by: HAMID
chk. by:

drawing no.
W12-41
sheet 4 of 11

COMP-ANL\W12-41ESW



WOOD BUCKS AND METAL STRUCTURE NOT BY E.S. WINDOWS
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
AND TRANSFER THEM TO THE BUILDING STRUCTURE.

WEEPHOLES:

W1 = 1-1/2" X 3/16" WEEPHOLES AT 4" FROM EACH END
W2 = 1-5/16" NOTCH AT EACH END

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

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Miami Dade Product Control
By *Manuel Lopez*

af c
AL-FAROOQ CORPORATION
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MIAMI, FLORIDA 33174
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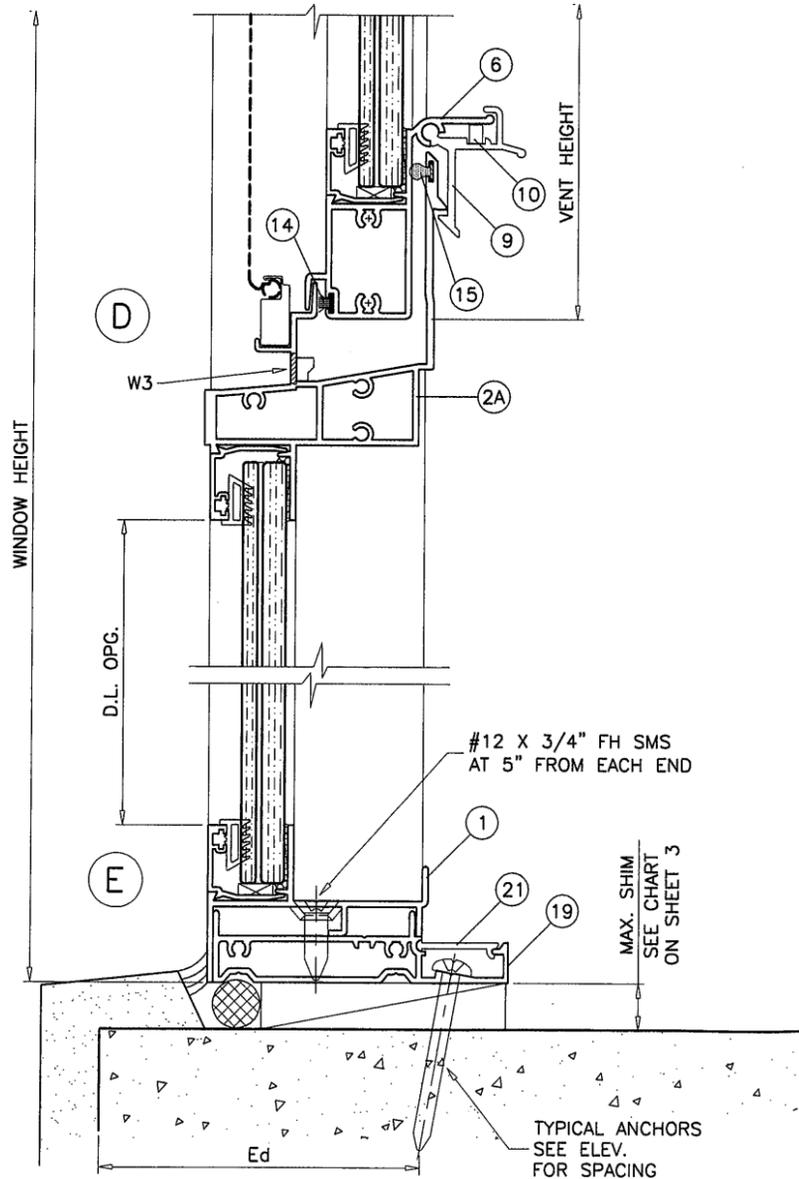
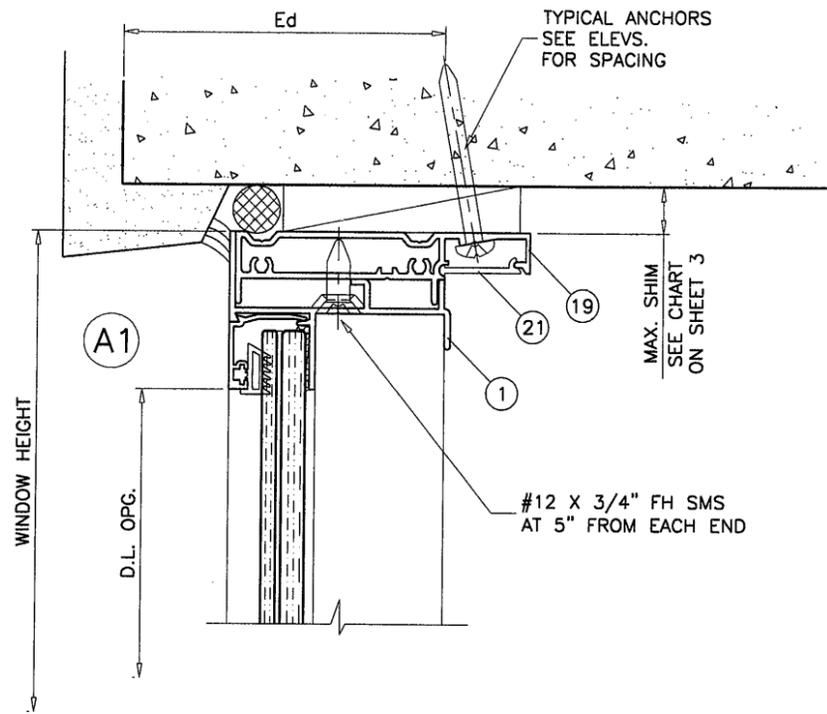
SERIES-1100WW ALUM SINGLE HUNG WINDOW (S.M.I.)
E.S. WINDOWS, LLC
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revisions:

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dr. by: HAMID
chk. by:

drawing no.
W12-41
sheet 5 of 11



WEEPHOLES:

W3 = 5/16" WEEPHOLES AT 6" FROM EACH END WITH PLASTIC BAFFLE

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

[Signature]

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By: *[Signature]*

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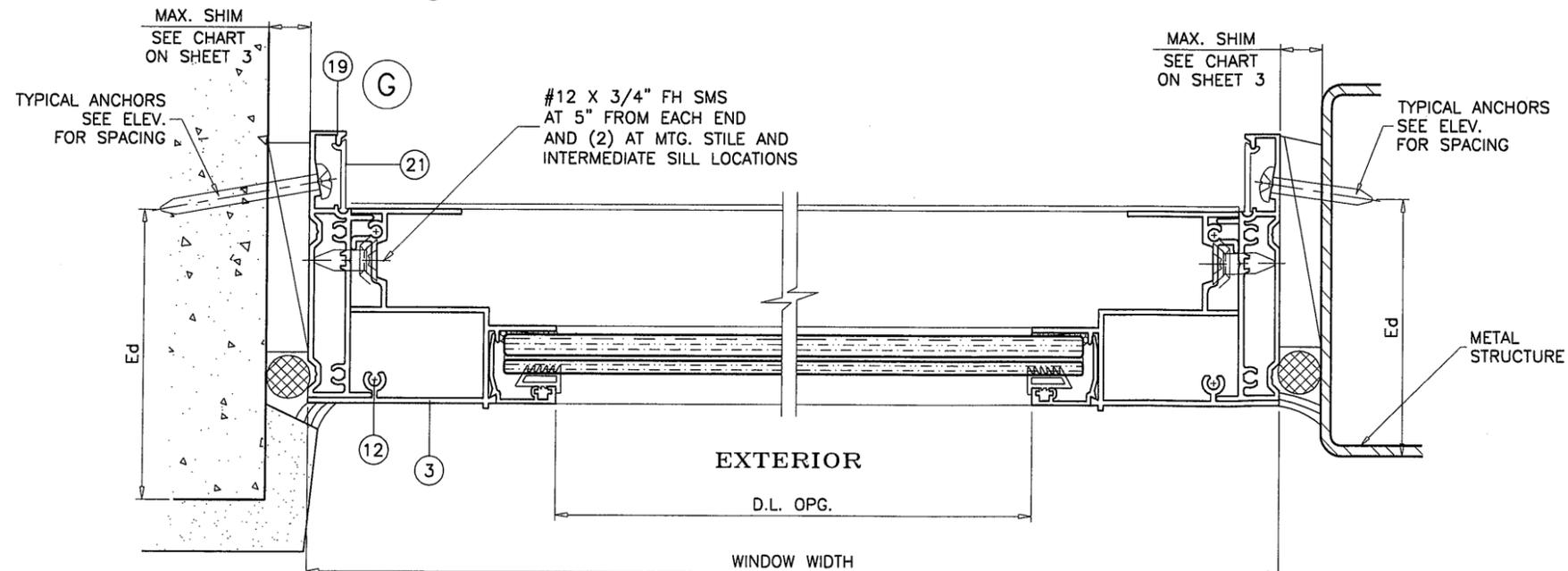
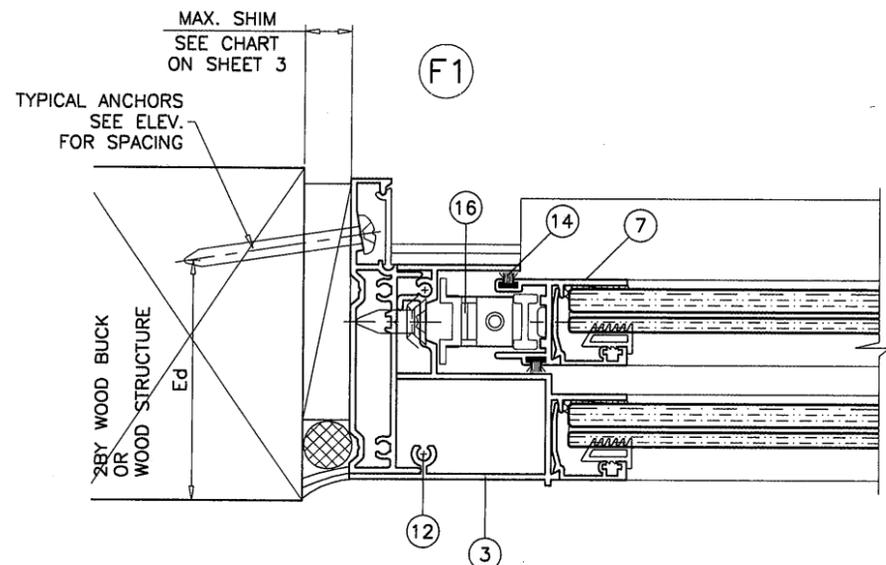
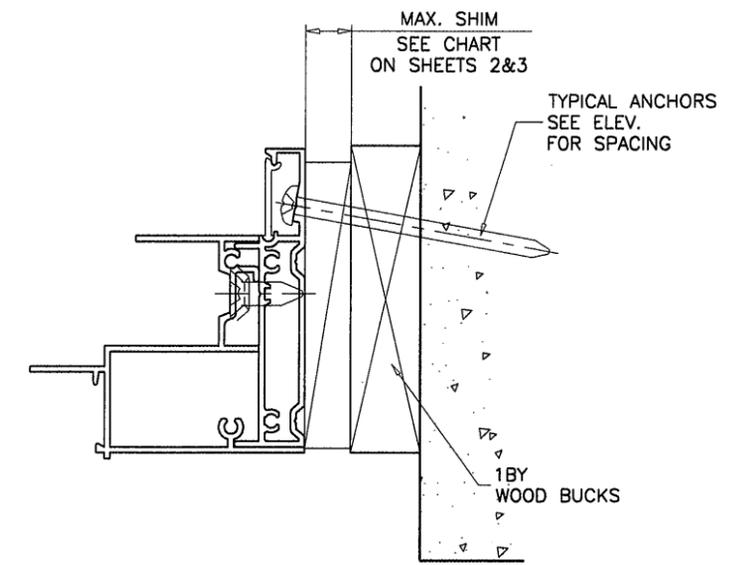
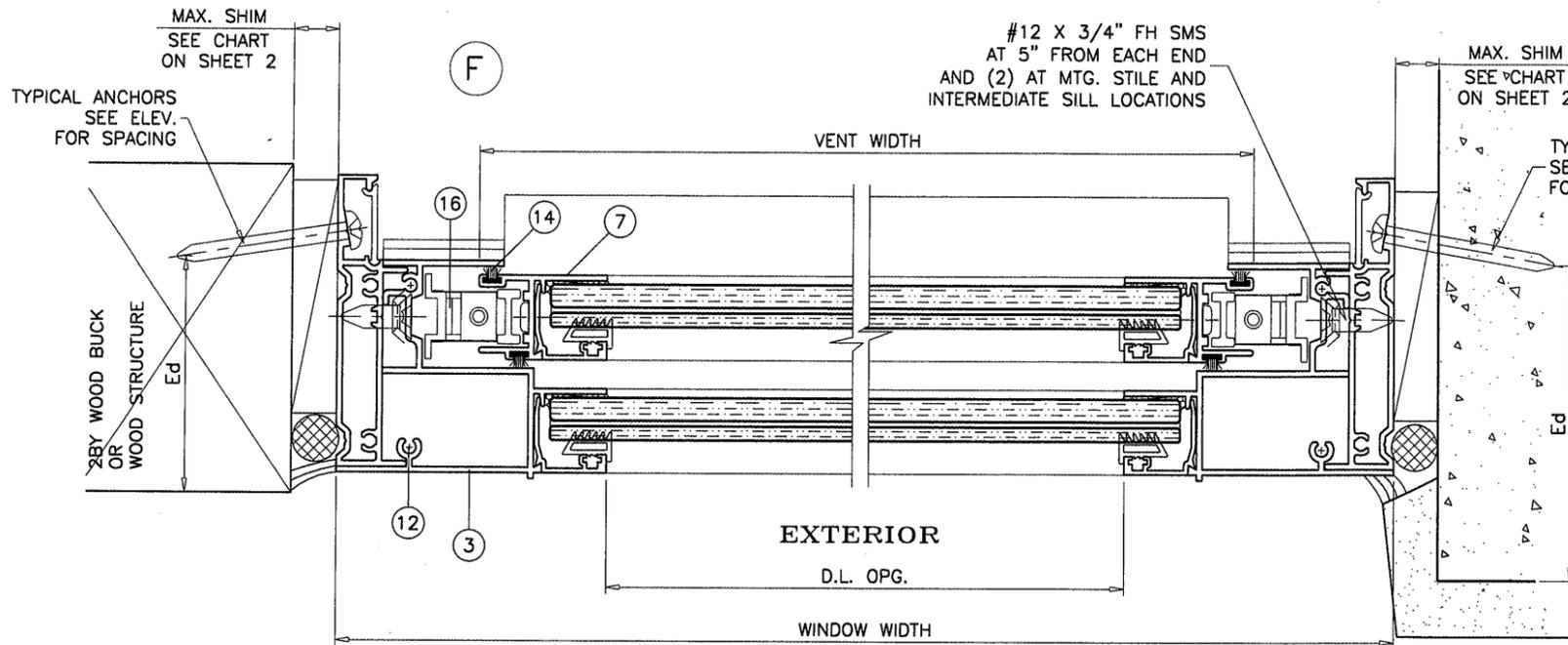
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sheet 6 of 11



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

Javad Ahmad
 DEC 05 2012

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 Miami Dade Product Control
 By *Manuel Perez*

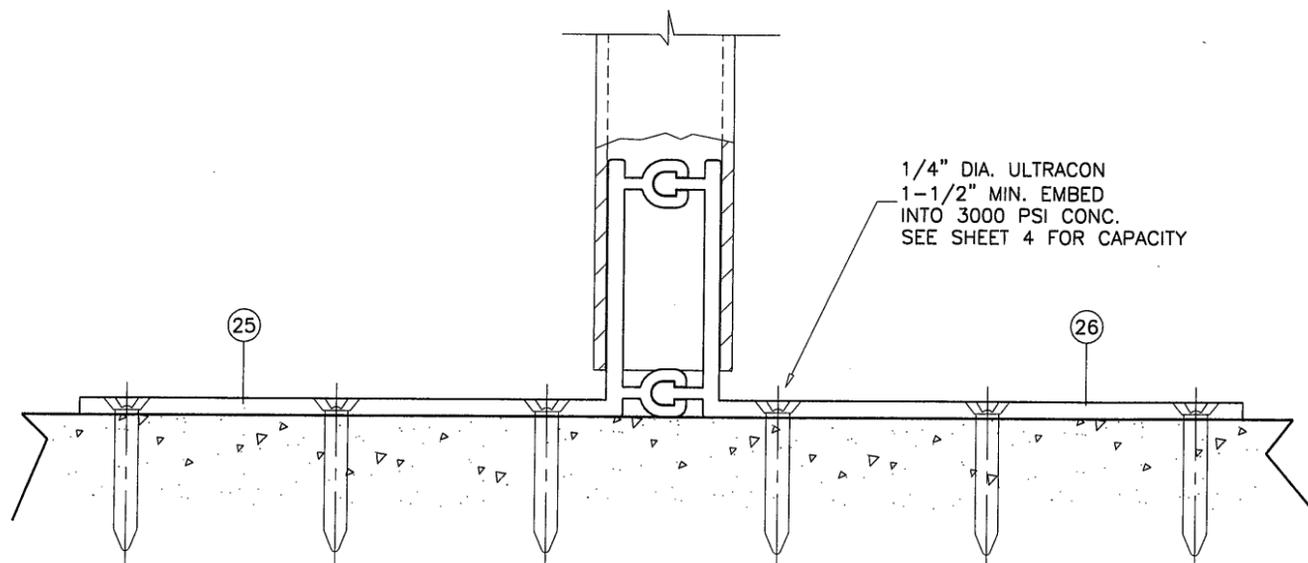
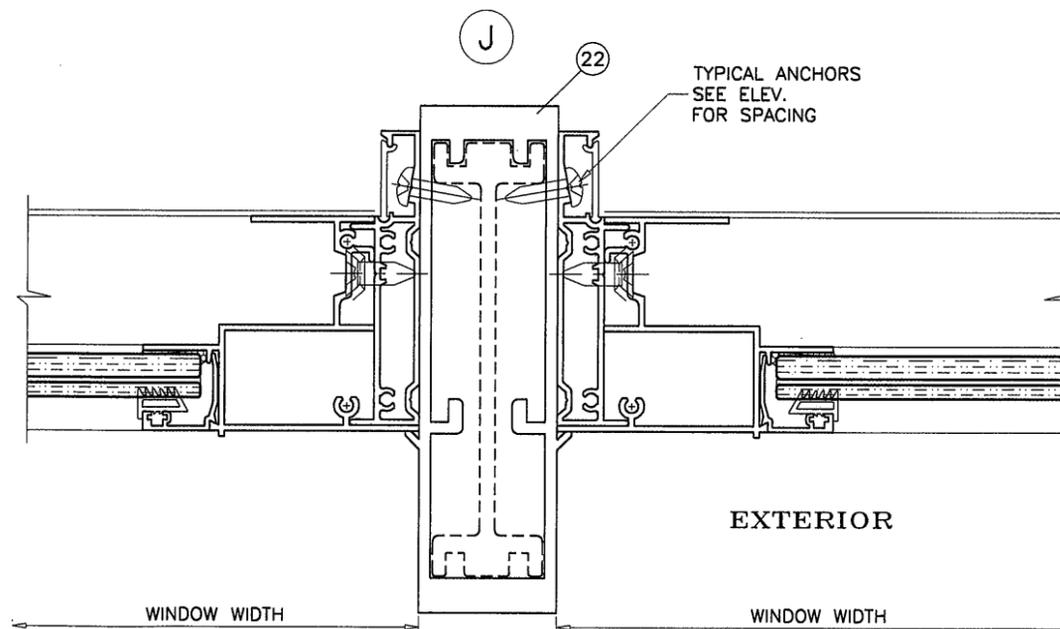
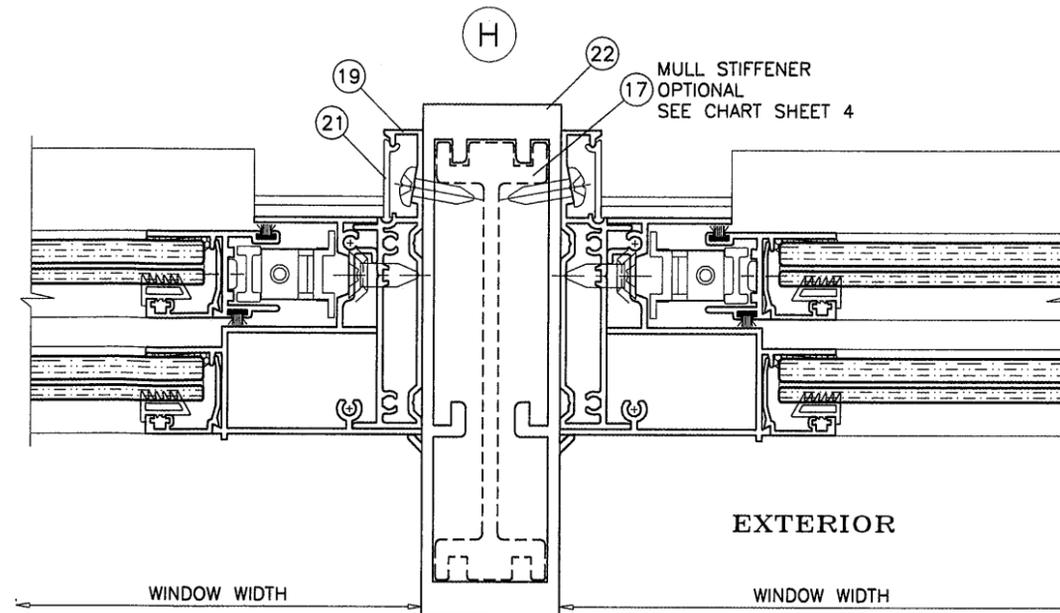
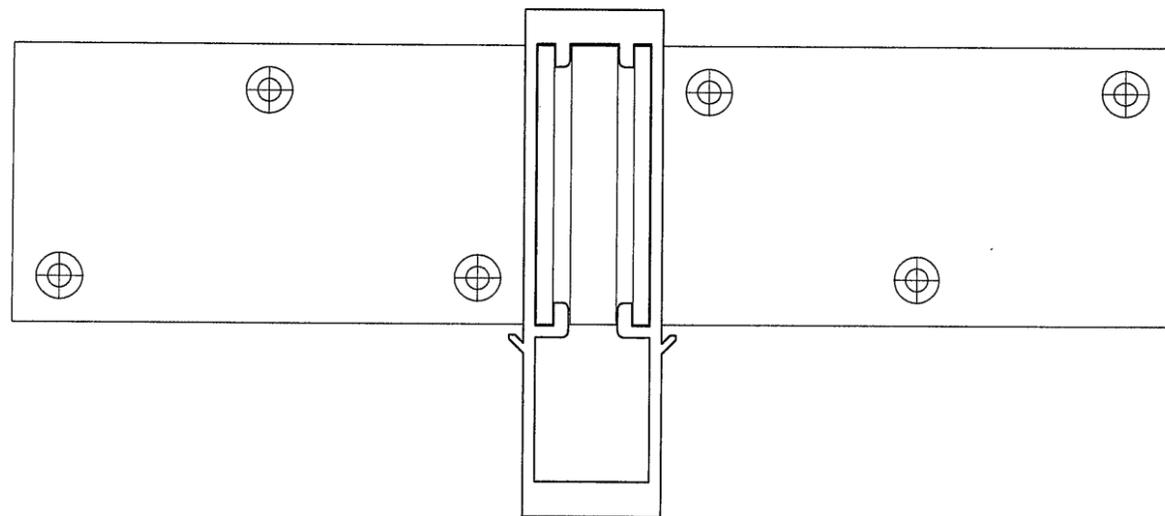
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AL-FAROOQ CORPORATION
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 chk. by:

drawing no.
W12-41
 sheet 7 of 11



Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
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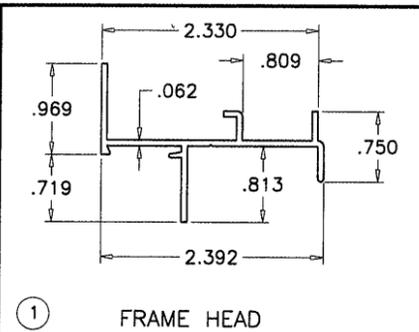
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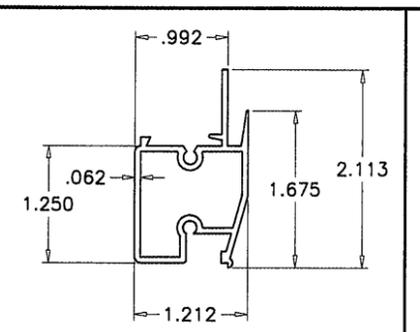
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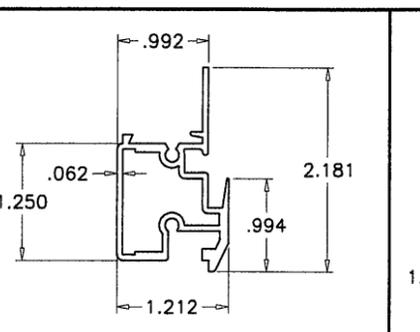
drawing no.
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 sheet 8 of 11



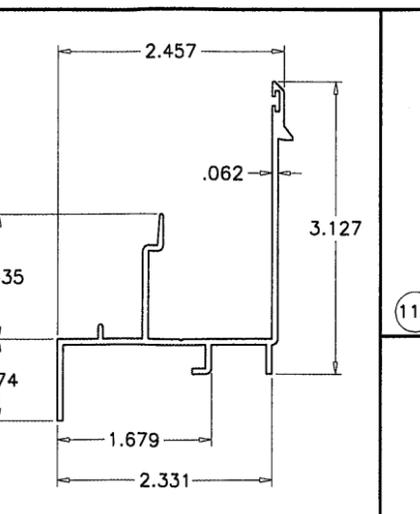
① FRAME HEAD



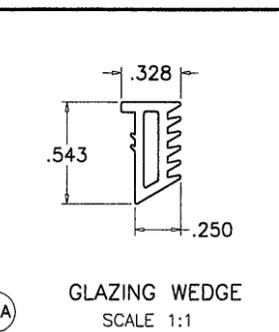
④ MEETING RAIL FOR SPRING LATCH



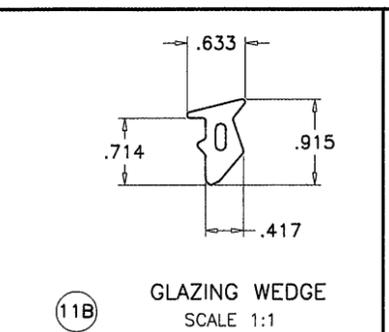
④A MEETING RAIL FOR SWEEP LATCH



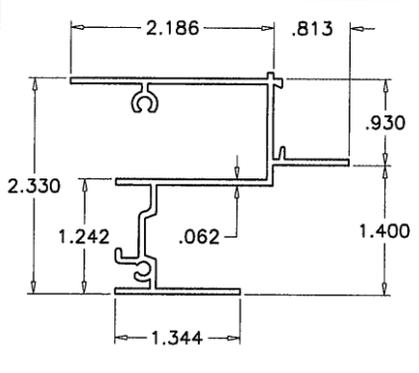
② FRAME SILL



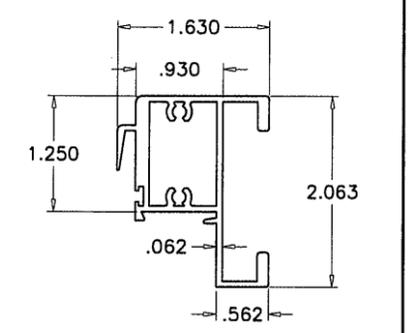
①1A GLAZING WEDGE SCALE 1:1



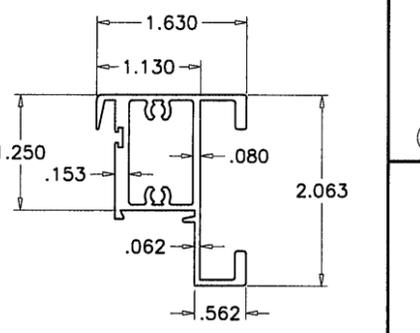
①1B GLAZING WEDGE SCALE 1:1



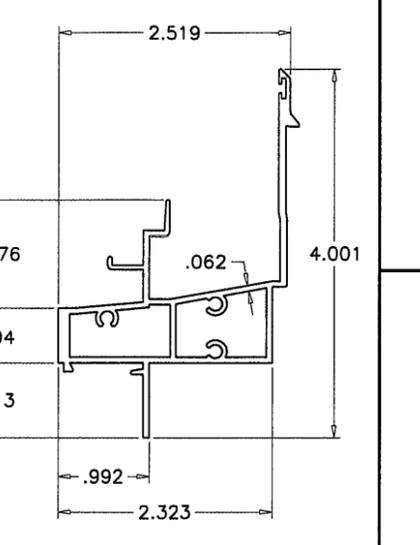
③ FRAME JAMB



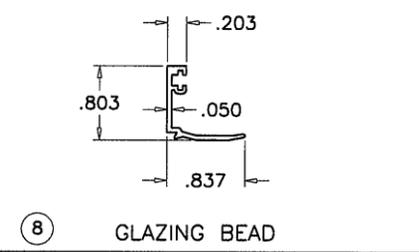
⑤ VENT TOP RAIL FOR SPRING LATCH



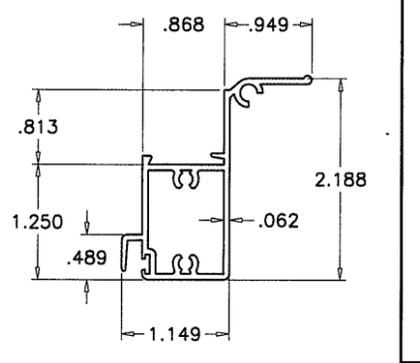
⑤A VENT TOP RAIL FOR SWEEP LATCH



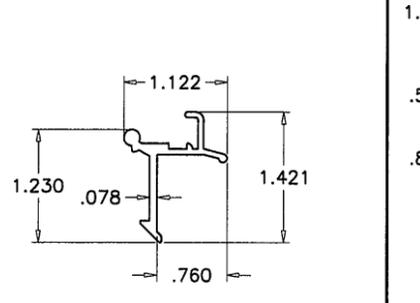
②A FRAME SILL (INTERMEDIATE)



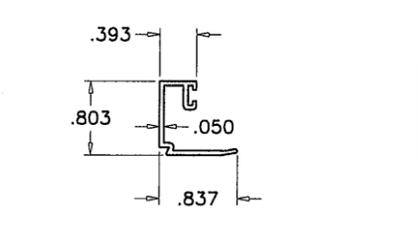
⑧ GLAZING BEAD



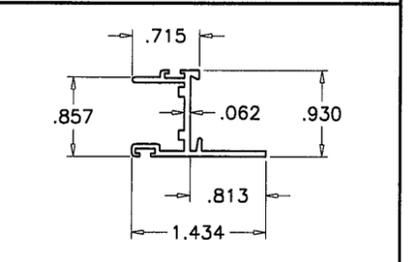
⑥ VENT BOTTOM RAIL



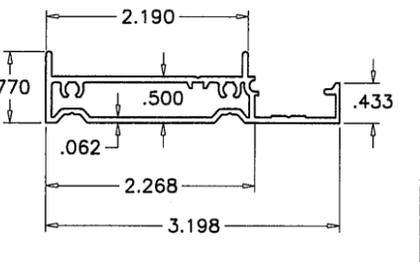
⑨ VENT LATCH



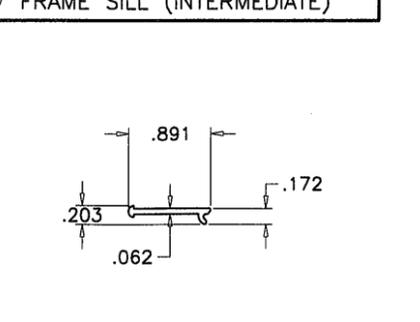
⑧A GLAZING BEAD



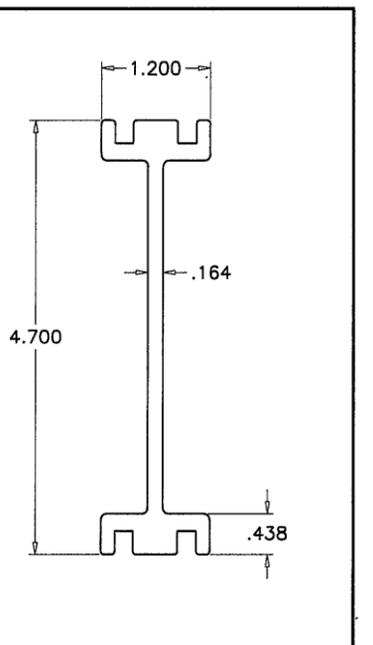
⑦ VENT SIDE RAIL



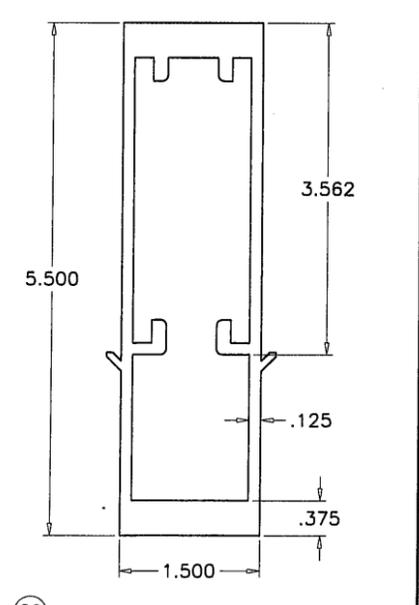
①9 FLUSH FRAME ADAPTER



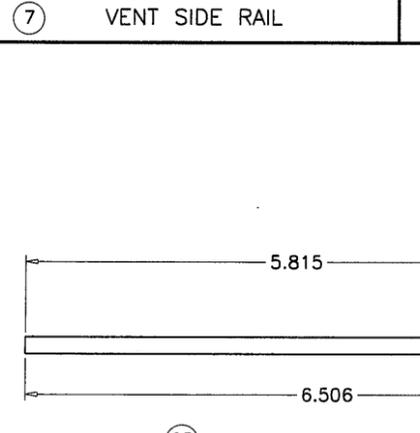
②1 ADAPTER COVER



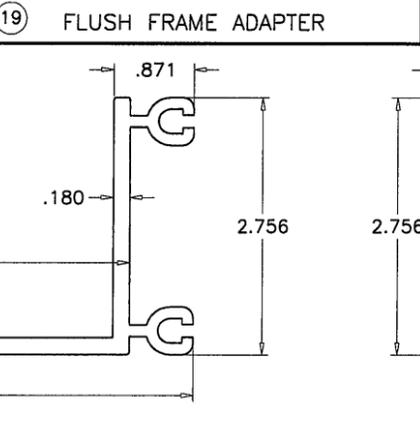
①7 MULLION STIFFENER



②2 MULLION



②5 MULLION CLIP (FEMALE)



②4 MULLION CLIP (MALE)

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Miami Dade Product Control
By: *Manuel Lopez*

af c
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dr. by: HAMID
chk. by:

drawing no.
W12-41
sheet 9 of 11

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES1001	1	FRAME HEAD	6063-T6	-
2	ES1101	1	FRAME SILL	6063-T6	-
2A	ES1055	1	FRAME SILL (INTERMEDIATE)	6063-T6	-
3	ES1003	2	FRAME JAMB	6063-T6	-
4	ES1005	1	FIXED MTG. RAIL (FOR SPRING LATCH)	6063-T6	-
4A	ES1051	1	FIXED MTG. RAIL (FOR SWEEP LATCH)	6063-T6	-
5	ES2004	1	VENT TOP RAIL (FOR SPRING LATCH)	6063-T6	-
5A	ES1053	1	VENT TOP RAIL (FOR SWEEP LATCH)	6063-T6	-
6	ES1006	1	VENT BOTTOM RAIL	6063-T6	-
7	ES1007	2	VENT SIDE RAIL	6063-T5	-
8	ES1017	AS REQD.	GLAZING BEAD	6063-T5	-
8A	ES1102	AS REQD.	GLAZING BEAD	6063-T5	-
9	ES1009	2/VENT	SPRING LOADED VENT LATCH	6063-T5	AT 6" FROM ENDS
9A	-	2/VENT	SWEEP LATCH	ZAMAK	AT 6" FROM ENDS
9B	#8 X 1"	2/LATCH	LATCH INSTALLATION SCREWS	-	FH SMS
10	ES1012	1/LATCH	LATCH SPRING	ST. STEEL	-
11	27-425	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 60±5 SHORE 'A'
11A	ES1010	AS REQD.	GLAZING WEDGE	SOFT PVC	DUROMETER 65±5 SHORE 'A'
11B	NP-200-G02	AS REQD.	GLAZING WEDGE	EPDM	DUROMETER 65±5 SHORE 'A'
12	#8 X 1"	20	FRAME & VENT ASSEMBLY SCREWS	CRS	PH SMS
13	ES1011	2/VENT	SASH CAM	CELCON	-
14	23211NG	AS REQD.	PILE W'STRIPPING WITH PLASTIC FIN	POLY PROPYLENE	-
15	Q300X190	AS REQD.	FRAME SILL W'STRIPPING	-	Q-LON2
16	SERIES 86	2/ VENT	BLOCK & TACKLE BALANCE	-	CALDWELL
17	ES1058	AS REQD.	MULLION STIFFENER	6063-T6	-
18	ES1013	2	SASH STOP	-	-
19	ES1056	AS REQD.	FLUSH FRAME ADAPTER	6063-T6	-
20	-	1	5/16" BOX SCREEN	-	OPTIONAL
21	ES5016	AS REQD.	ADAPTER COVER	6063-T5	-
22	ES1057	AS REQD.	MULLION	6063-T6	-
23	-	-	-	-	-
24	ES1059	AS REQD.	MULLION CLIP (MALE)	6063-T6	-
25	ES1060	AS REQD.	MULLION CLIP (FEMALE)	6063-T6	-
26	27-372	2/ LITE	SETTING BLOCK, 7/16" X 3/16" X 3-1/2" LONG	EPDM	DUROMETER 75±5 SHORE A
27	80-394	8/ LITE	SPACER, 1/32" X 1/2" X 4" LONG	EPDM	AT 6" FROM GLASS ENDS

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SCHNEE MOREHEAD SEAM SEALER SM5504.

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

[Signature]
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By *[Signature]*

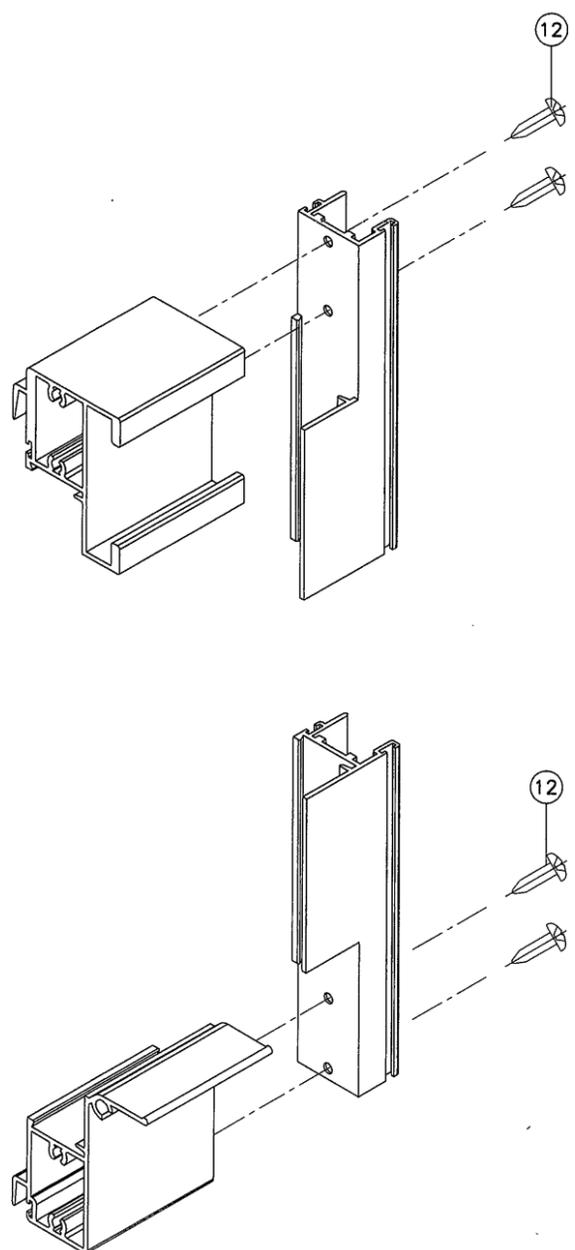
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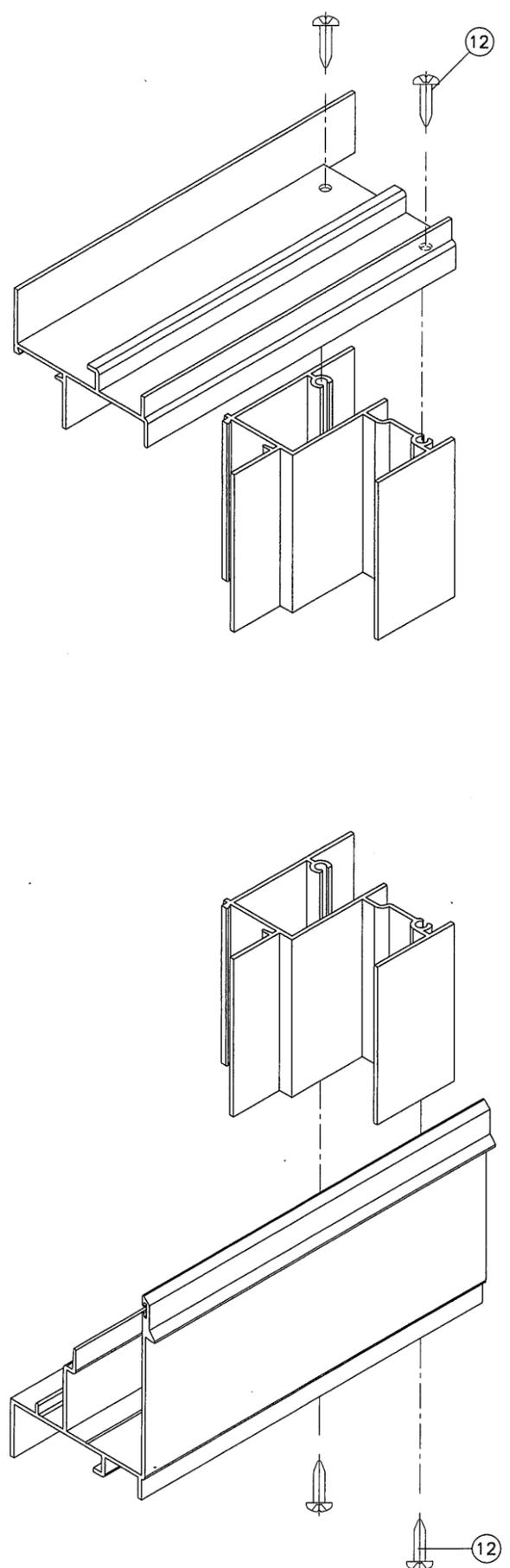
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 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

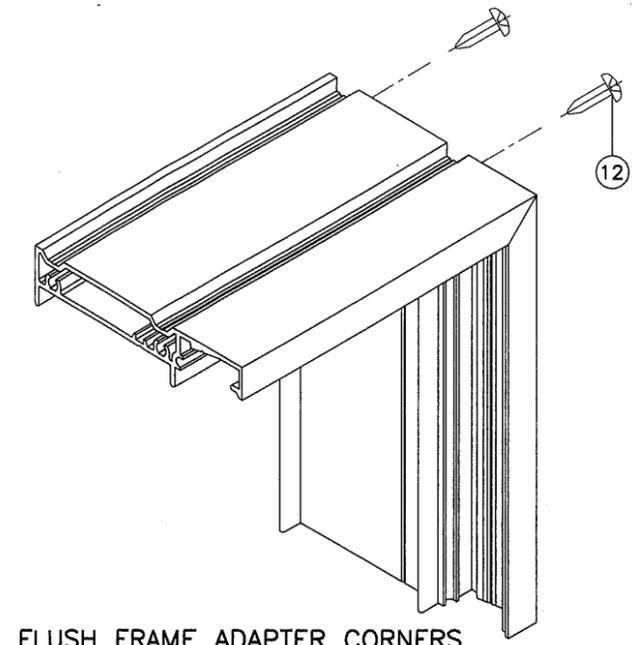
drawing no.
W12-41
 sheet 10 of 11



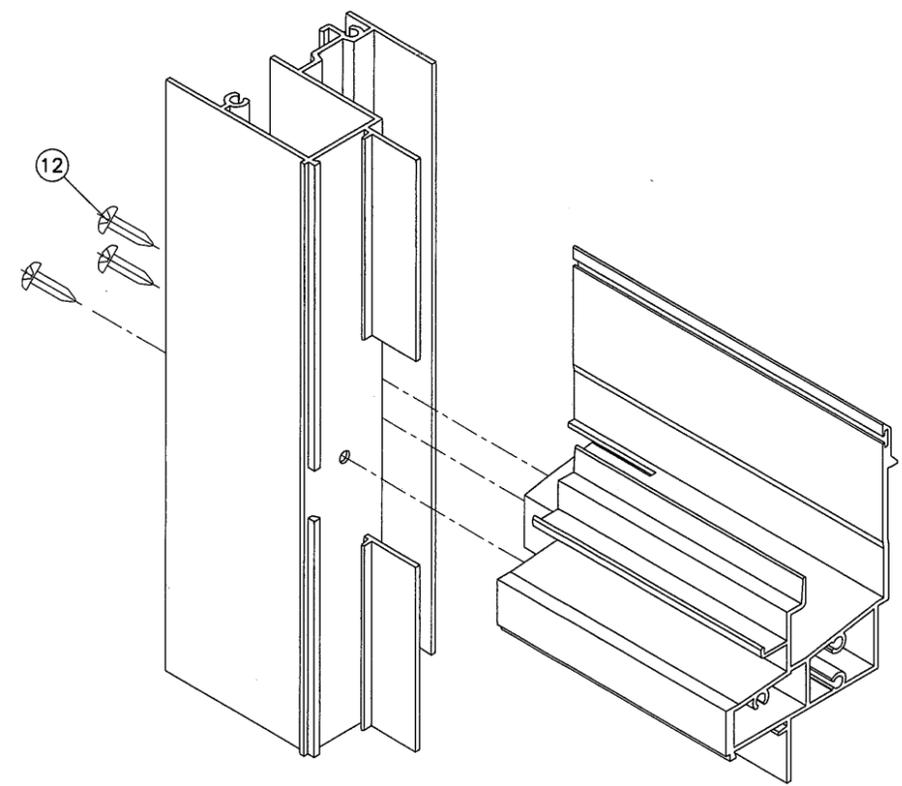
VENT TOP & BOTTOM CORNER



FRAME TOP & BOTTOM CORNERS



FLUSH FRAME ADAPTER CORNERS



INTERMEDIATE SILL CORNER

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

DEC 05 2012

Approved as complying with the
 Florida Building Code
 Date DEC 13, 2012
 NOA# 12-D907.02
 Miami Dade Product Control

By: *Manuel Arz*

af c

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W12-41ESW

SERIES-1100WW ALUM SINGLE HUNG WINDOW (S.M.I.)

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

no	date	by	description
A	08.29.12		NO CHANGE THIS SHEET
B	12.05.12		NO CHANGE THIS SHEET

date:	07-20-12
scale:	1/2" = 1"
dr. by:	HAMID
chk. by:	

drawing no.	W12-41
sheet	11 of 11