



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

MIAMI-DADE COUNTY, FLORIDA  
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208  
T (786) 315-2590 F (786) 315-2599

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**Tecnoglass, LLC**  
5220 NW 72 Ave, Bay #4  
Miami, FL 33166

**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 "HC-200" Outswing Aluminum Casement Window - L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. W05-13, titled "Series HC 200 Aluminum Casement Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 03/15/05, prepared by Al-Farooq Corporation, with latest revised "F" dated 03/03/16, signed and sealed by Javad Ahmad, P. E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and Expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large 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 revises and renews NOA# 12-0410.26 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 **Jorge M. Plasencia, P.E.**



*JP*  
3/14/16

NOA No. 15-0715.02  
Expiration Date: June 30, 2020  
Approval Date: March 10, 2016  
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Drawing No. **W05-13**, titled "Series HC 200 Aluminum Casement Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 03/15/05, prepared by Al-Farooq Corporation, with latest revised "F" dated 03/03/16, 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) Small Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94along with marked-up drawings and installation diagram of aluminum outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4889**, dated 04/04/07, witnessed by Michael Wenzel, P. E.  
*(Submitted under previous NOA No. 07-1019.03)*
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) Small Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94along with marked-up drawings and installation diagram of aluminum outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4897**, dated 07/18/06, witnessed by Edmundo J. Largaespada, P. E.  
*(Submitted under previous NOA No. 07-1019.03)*
3. Test reports on:
  - 1) Large Missile Impact Test per FBC, TAS 201-94
  - 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up and die drawings of aluminum outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4887**, dated 12/18/06, signed and sealed by Michael Wenzel, P. E.  
*(Submitted under previous NOA No. 07-1019.03)*
4. Test reports on:
  - 1) Large Missile Impact Test per FBC, TAS 201-94
  - 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of aluminum outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.'s **FTL-4896**, **FTL-4504** and **FTL-4570**, dated 10/02/06, 02/02/05 and 03/18/05, all signed and sealed by Edmundo J. Largaespada, P. E.  
*(Submitted under previous NOA's No.'s 07-1019.03 and 05-0427.02)*

  
Jorge M. Plasencia, P. E.  
Product Control Unit Supervisor  
NOA No. 15-0715.02  
Expiration Date: June 30, 2020  
Approval Date: March 10, 2016

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS (continued)**

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

along with marked-up drawings and installation diagram of an aluminum Outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.'s **FTL-4417, FTL-4416, FTL-4371**, dated 12/09/04 and 02/09/05, all signed and sealed by Edmundo J. Largaespada, P. E.

*(Submitted under previous NOA No. 05-0427.02)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC-2014**, dated 07/13/15 and 02/25/16 prepared by Al-Farooq Corporation, signed and sealed, by Javad Ahmad, P. E.
2. Glazing complies with **ASTM E1300-09**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **14-0916.10** issued to **Kuraray America, Inc.** for their "**Butacite® PVB Glass Interlayer**" dated 04/25/15, expiring on 12/11/16.
2. Notice of Acceptance No. **14-0916.11** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 06/25/15, expiring on 07/04/18.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC-5<sup>th</sup> Edition (2014)**, and of no financial interest, dated January 16, 2015, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letter for Test Reports No.'s **FTL-4889** and **FTL-4887**, issued by Fenestration Testing Laboratory, Inc., dated 04/04/07 and 12/18/06, all signed and sealed by Michael Wenzel, P. E.

*(Submitted under previous NOA No. 07-1019.03)*

  
\_\_\_\_\_  
Jorge M. Plasencia, P. E.  
Product Control Unit Supervisor  
NOA No. 15-0715.02  
Expiration Date: June 30, 2020  
Approval Date: March 10, 2016

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**C. STATEMENTS (continued)**

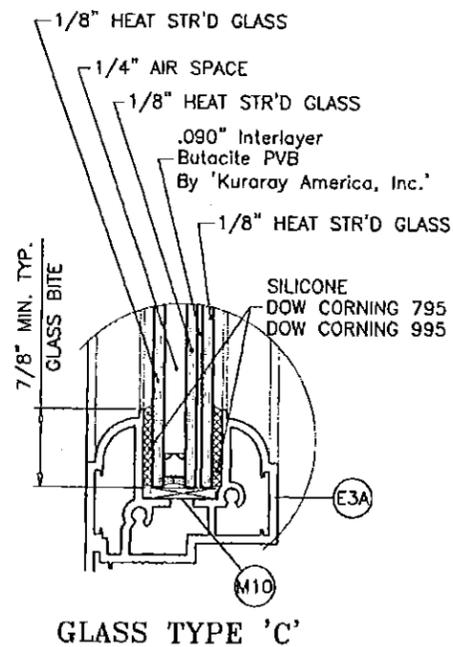
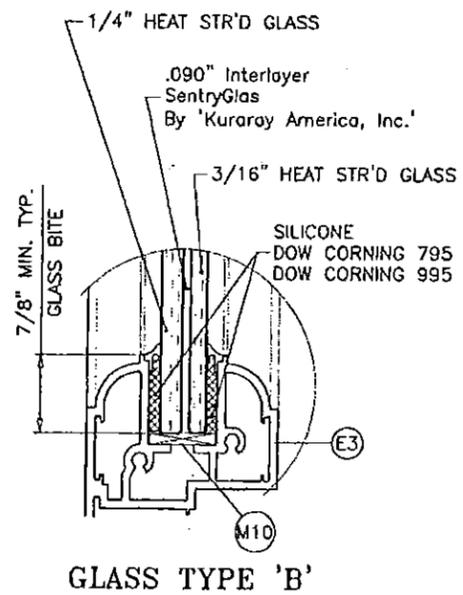
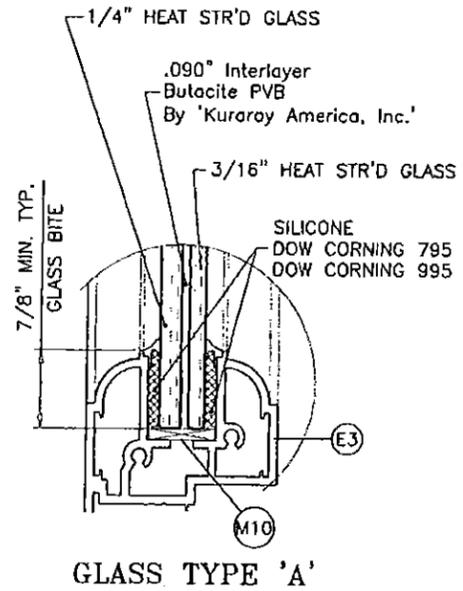
3. Laboratory compliance letter for Test Reports No.'s, **FTL-4897, FTL-4896, FTL-4417, FTL-4416, FTL-4371, FTL-4504** and **FTL-4570**, issued by Fenestration Testing Laboratory, Inc., dated 12/09/04, 02/09/05, 02/02/05, 03/18/05, 07/18/06 and 10/02/06, all signed and sealed by Edmundo J. Largaespada, P. E.  
*(Submitted under previous NOA's No's. 07-1019.03 and 05-0427.02)*
4. Laboratory letter dated 07/15/14, issued by R.C. Aluminum Industries, Inc. of sales of asset and relinquishing of all rights of NOA No. **12-0410.26**, signed by Raul Casares, for and on behalf of R.C. Aluminum Industries, Inc.
5. Asset purchase agreement dated 06/19/14, signed by Mr. Raul Casares, for and on behalf of R.C. Aluminum Industries, Inc.

**G. OTHERS**

1. Notice of Acceptance No. **12-0410.26**, issued to R. C. Aluminum Industries, Inc., for their Series "**HC-200 Aluminum Casement Window - L.M.I.**", approved on 07/05/12 and expiring on 06/30/15.

  
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Jorge M. Plasencia, P. E.  
Product Control Unit Supervisor  
NOA No. 15-0715.02  
Expiration Date: June 30, 2020  
Approval Date: March 10, 2016

EXTERIOR



GLAZING OPTIONS

1/4" AIR SPACE CONSISTING OF:

SPACER:  
'HELIMA' LOW PROFILE ALUMINUM SPACER BY 'LINGERMANN GMBH' AROUND THE PERIMETER OF THE GLASS.  
PERIMETER SEALANT:  
SILICONE  
DOW CORNING 791  
GE 2000

SERIES HC200 ALUMINUM CASEMENT WINDOW

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

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF CASEMENT/CASEMENT OR CASEMENT WITH OTHER MIAMI-DADE COUNTY APPR'D 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 2014 (5TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

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

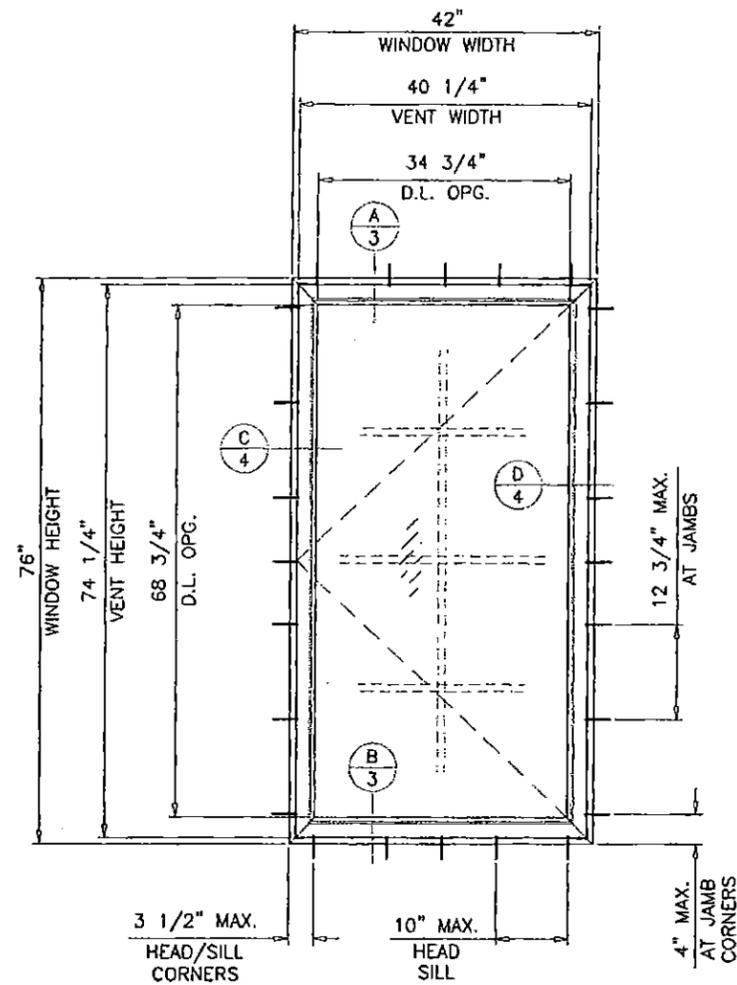
ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

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.

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

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE.

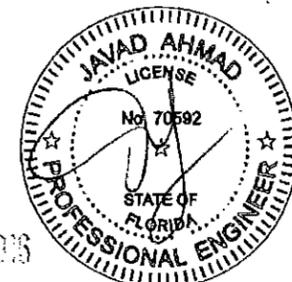


THESE WINDOWS ARE RATED FOR LARGE MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **15-0715.02**  
Expiration Date **06/30/2020**

By   
Miami-Dade Product Control

MAR 03 2015



**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)  
MIAMI, FLORIDA 33173 TEL. (305) 262-6978 FAX. (305) 264-8100  
COMP-ANL W05-13RC

SERIES HC200 ALUMINUM CASEMENT WDW. (L.M.I.)  
**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

NO.	DATE	BY	DESCRIPTION
C	06.23.09		UPDATED FOR 2007 FBC
D	03.19.12		UPDATED TO 2010 FBC
E	01.20.15		UPDATED TO 2014 FBC
F	12.21.15		REV. PER RER COMMENTS

Revisions:

date: 03-15-05  
scale: 1/2"=1'-0"  
dr. by: HAMID  
chk. by:

drawing no. **W05-13**  
sheet 1 of 6

DESIGN LOAD CAPACITY - PSF FOR ( X ) SIZES							
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
20"	36"	130.0	180.0	150.0	210.0	100.0	100.0
24"		130.0	180.0	150.0	210.0	100.0	100.0
28"		130.0	180.0	150.0	210.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	165.0	130.0	150.0	100.0	100.0
40"		130.0	165.0	130.0	150.0	100.0	100.0
42"		130.0	165.0	130.0	150.0	100.0	100.0
20"	42"	130.0	180.0	150.0	210.0	100.0	100.0
24"		130.0	180.0	150.0	210.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	165.0	130.0	150.0	100.0	100.0
40"		130.0	151.7	130.0	150.0	100.0	100.0
42"		130.0	144.5	130.0	144.5	100.0	100.0
20"	48"	130.0	180.0	150.0	210.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	165.0	130.0	150.0	100.0	100.0
40"		130.0	165.0	130.0	150.0	100.0	100.0
42"		130.0	165.0	130.0	150.0	100.0	100.0
20"	54"	130.0	165.0	130.0	150.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	165.0	130.0	150.0	100.0	100.0
40"		130.0	157.3	130.0	150.0	100.0	100.0
42"		130.0	149.8	130.0	149.8	100.0	100.0
20"	60"	130.0	165.0	130.0	150.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	165.0	130.0	150.0	100.0	100.0
40"		130.0	130.0	130.0	150.0	-	-
42"		130.0	130.0	130.0	150.0	-	-
20"	66"	130.0	165.0	130.0	150.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	130.0	130.0	150.0	-	-
40"		130.0	130.0	130.0	150.0	-	-
42"		130.0	130.0	130.0	150.0	-	-
20"	72"	130.0	165.0	130.0	150.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	165.0	130.0	150.0	100.0	100.0
36"		130.0	130.0	130.0	150.0	-	-
40"		130.0	130.0	130.0	147.5	-	-
42"		130.0	130.0	130.0	140.5	-	-

DESIGN LOAD CAPACITY - PSF FOR ( X ) SIZES							
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
20"	78"	130.0	165.0	130.0	150.0	100.0	100.0
24"		130.0	165.0	130.0	150.0	100.0	100.0
28"		130.0	165.0	130.0	150.0	100.0	100.0
32"		130.0	130.0	130.0	150.0	-	-
36"		130.0	130.0	130.0	150.0	-	-
40"		124.0	130.0	124.0	143.0	-	-
20"		84"	130.0	165.0	130.0	150.0	100.0
24"	130.0		165.0	130.0	150.0	100.0	100.0
28"	130.0		130.0	130.0	150.0	-	-
32"	118.0		130.0	118.0	136.2	-	-
36"	106.6		123.0	106.6	123.0	-	-

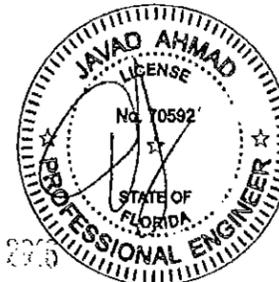
DESIGN LOAD CAPACITY - PSF FOR ( X ) SIZES							
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	26"	130.0	180.0	130.0	210.0	100.0	100.0
26-1/2"		130.0	180.0	130.0	210.0	100.0	100.0
37"		130.0	180.0	130.0	210.0	100.0	100.0
42"		130.0	165.0	130.0	150.0	100.0	100.0
19-1/8"	38-3/8"	130.0	180.0	130.0	210.0	100.0	100.0
26-1/2"		130.0	180.0	130.0	210.0	100.0	100.0
37"		130.0	165.0	130.0	150.0	100.0	100.0
42"	130.0	158.1	130.0	150.0	100.0	100.0	
19-1/8"	50-5/8"	130.0	180.0	130.0	210.0	100.0	100.0
26-1/2"		130.0	165.0	130.0	150.0	100.0	100.0
37"		130.0	165.0	130.0	150.0	100.0	100.0
42"		130.0	159.8	130.0	150.0	100.0	100.0
19-1/8"	63"	130.0	165.0	130.0	150.0	100.0	100.0
26-1/2"		130.0	165.0	130.0	150.0	100.0	100.0
37"		130.0	165.0	130.0	150.0	100.0	100.0
42"		130.0	130.0	130.0	150.0	-	-
19-1/8"	76"	130.0	165.0	130.0	150.0	100.0	100.0
26-1/2"		130.0	165.0	130.0	150.0	100.0	100.0
37"		130.0	130.0	130.0	150.0	-	-
42"		130.0	130.0	130.0	133.1	-	-

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

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **15-0715.02**

Expiration Date **06/30/2020**

By   
Miami-Dade Product Control



MAR 03 2019

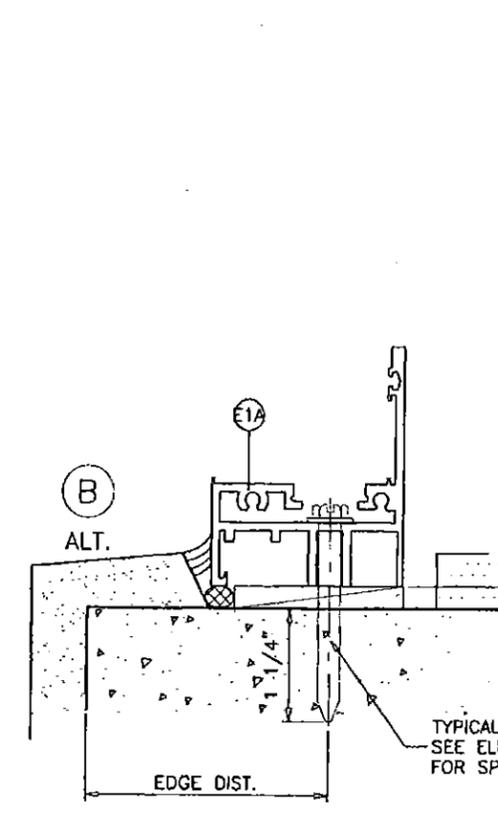
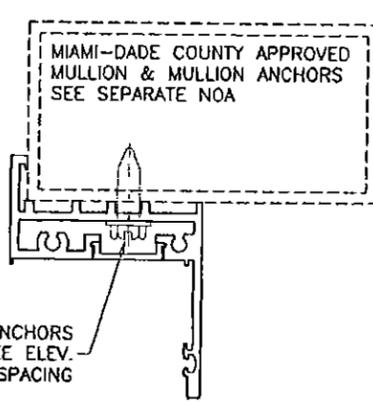
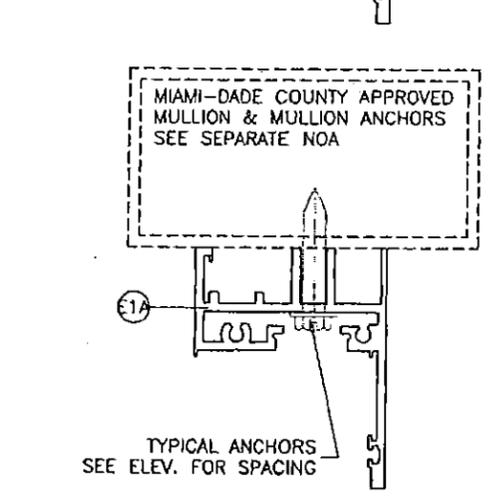
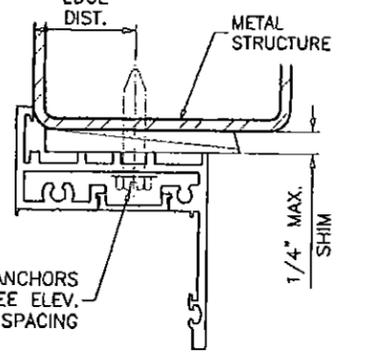
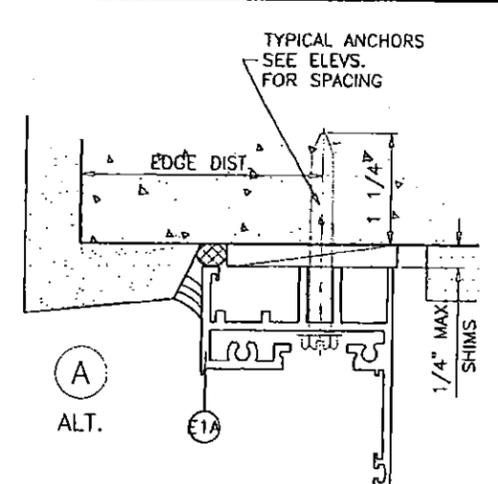
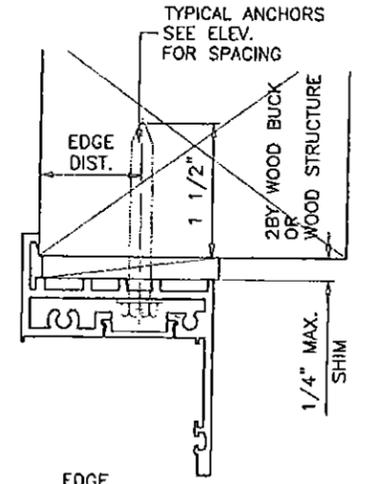
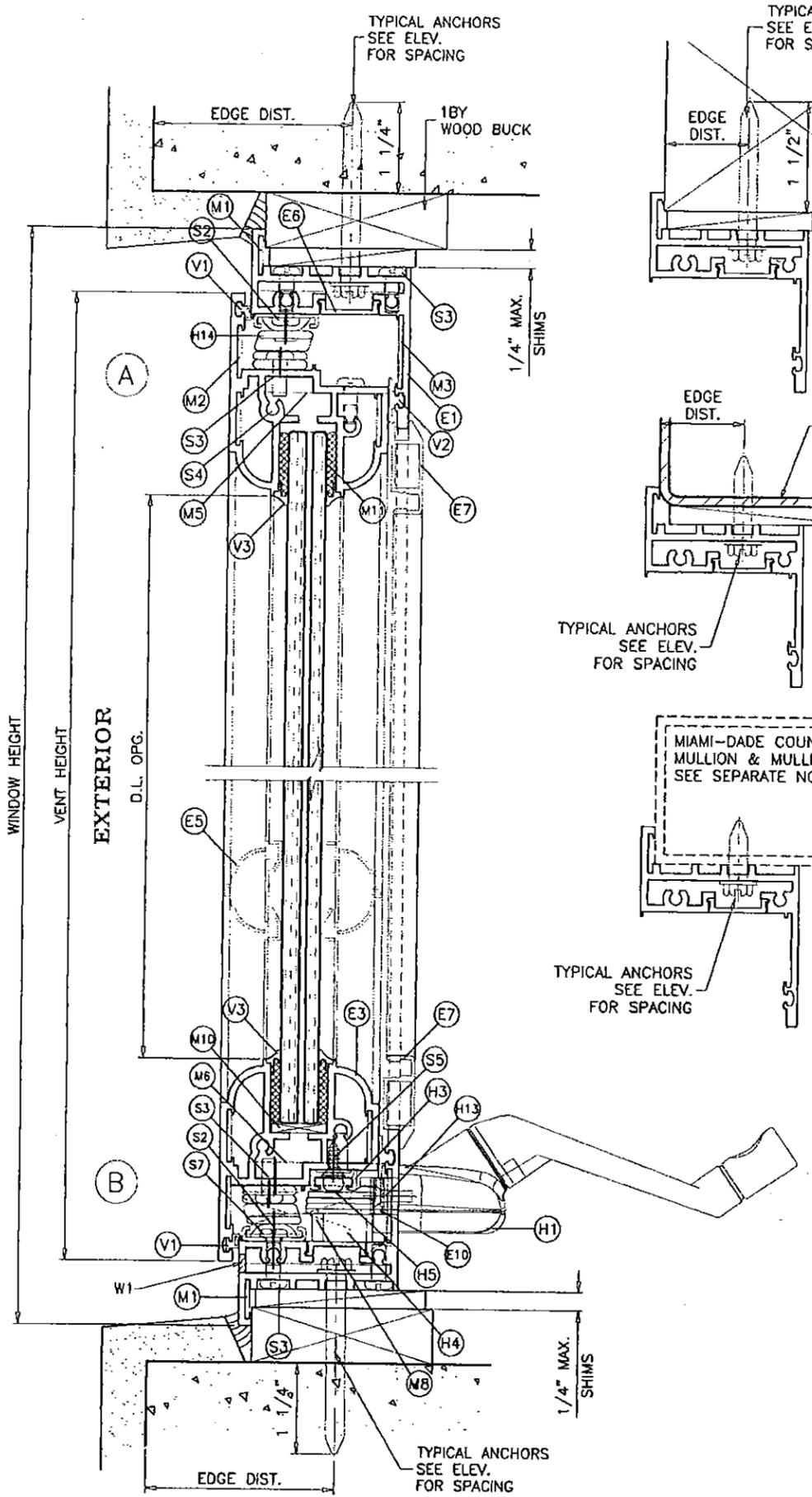
**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)  
MIAMI, FLORIDA 33173  
TEL (305) 264-8100 FAX (305) 262-6978  
COMP-ANI\W05-13RC

SERIES HC200 ALUMINUM CASEMENT WDW. (L.M.I.)  
**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

NO	DATE	DESCRIPTION
C	05.23.09	DESCRIPTION FOR 2007 FBC
D	03.19.12	UPDATED TO 2010 FBC
E	01.20.15	UPDATED TO 2014 FBC
F	12.21.15	NO CHANGE THIS SHEET

date: 03-15-05	scale: 1/2" = 1"
dr. by: HAMID	chk. by:

drawing no.  
**W05-13**  
sheet 2 of 6



WOOD BUCKS AND METAL STRUCTURE NOT BY TECHNOGLASS 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  
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY BUCKS INTO CONC. OR MASONRY  
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)  
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY (JAMBS)  
 DIRECTLY INTO CONC. OR MASONRY  
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)  
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY (JAMBS)

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

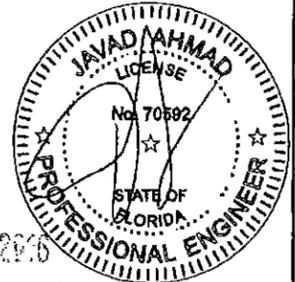
**TYPICAL EDGE DISTANCE**  
 INTO CONCRETE AND MASONRY = 2-3/4" MIN.  
 INTO WOOD STRUCTURE = 1" MIN.  
 INTO METAL STRUCTURE = 3/4" MIN.

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

**SEALANTS:**  
 ALL FRAME AND VENT CORNERS SEALED WITH SILICONE.

**WEEP HOLES:**  
 W1 = 1/4" X 1/2" WEEP SLOT AT 4" FROM EACH END

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**afC**

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 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173  
 TEL (305) 262-8100 FAX (305) 262-8978  
 (C.A.N. 9588)  
 COMP-ANL W05-13RC

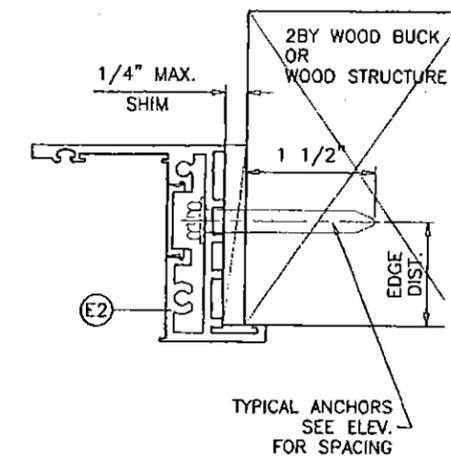
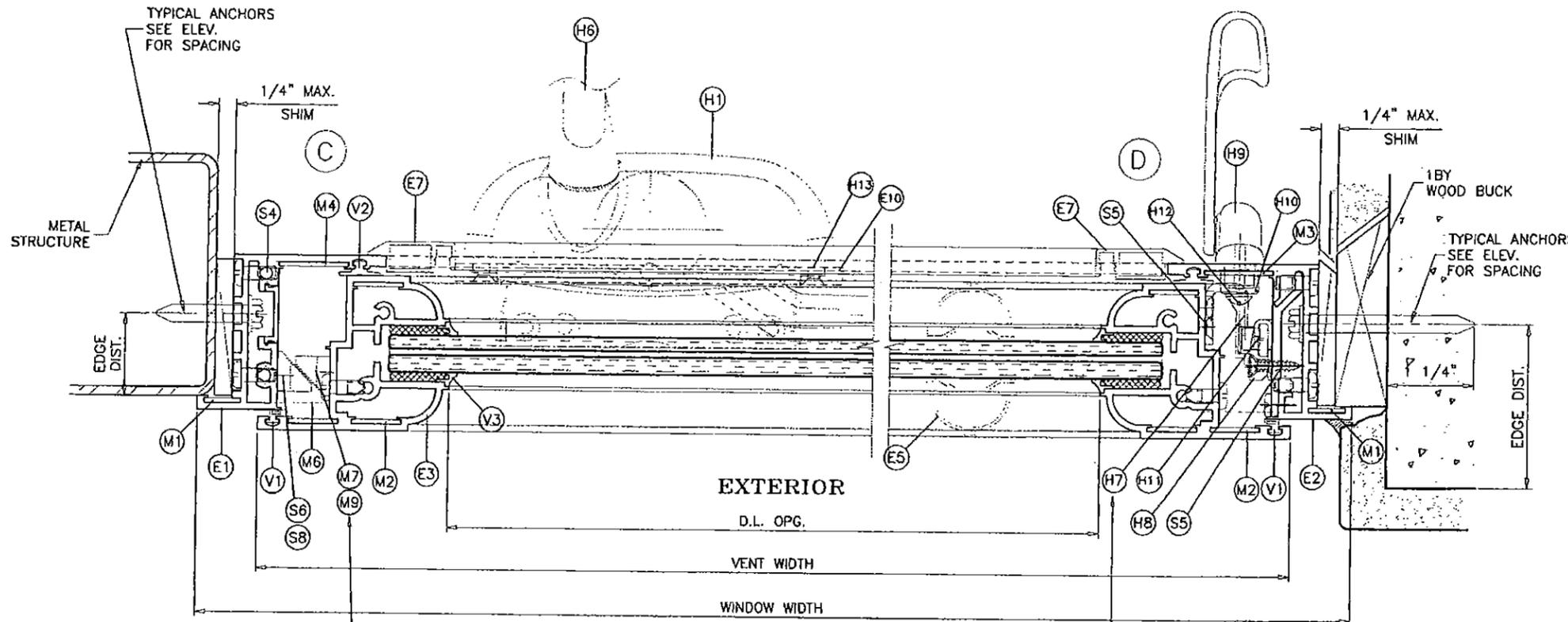
SERIES HC200 ALUMINUM CASEMENT WDW. (L.M.I.)  
**TECNOGLASS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	by	description
	C	06.23.09		UPDATED FOR 2007 FBC
	D	03.19.12		NO CHANGE THIS SHEET
	E	01.20.15		UPDATED TO 2014 FBC
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 chk. by:

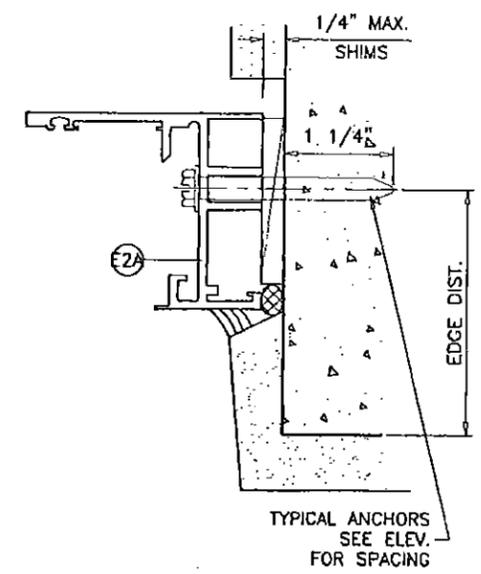
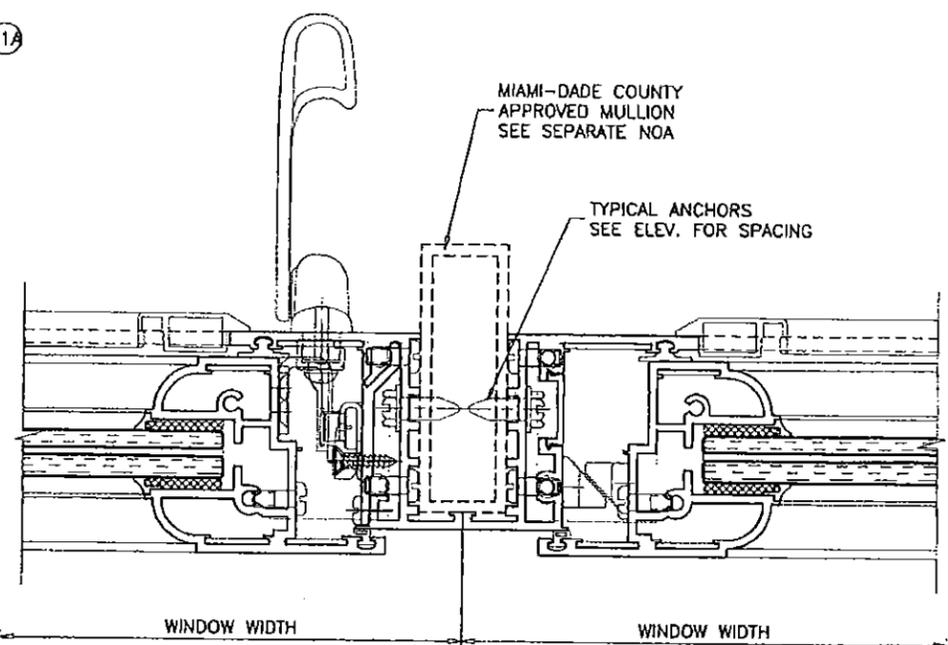
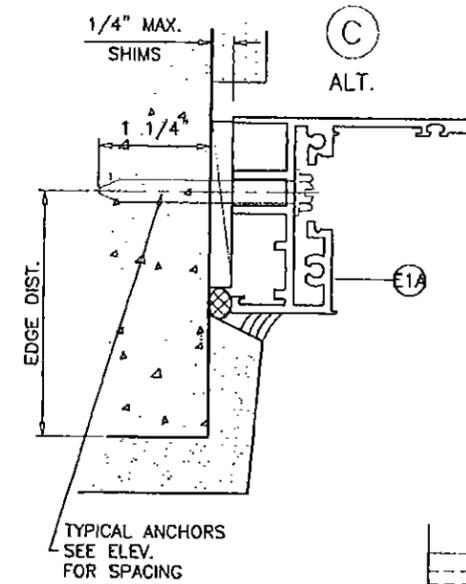
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**W05-13**  
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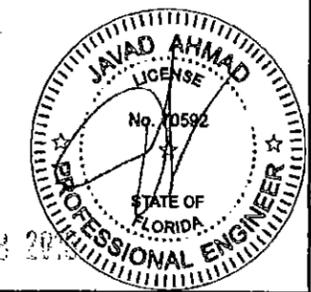


**SNUBBERS**  
 3 PLASTIC SNUBBERS UP TO 38-3/8" WDW. HTS.  
 2 ALUM + 2 PLASTIC SNUBBERS UP TO 60" WDW. HTS.  
 3 ALUM + 2 PLASTIC SNUBBERS OVER 60" WDW. HTS.

**LATCH KEEPER**  
 3 PER JAMB UP TO 38-3/8" WDW. HTS.  
 4 PER JAMB UP TO 63" WDW. HTS.  
 5 PER JAMB OVER 63" WDW. HTS.



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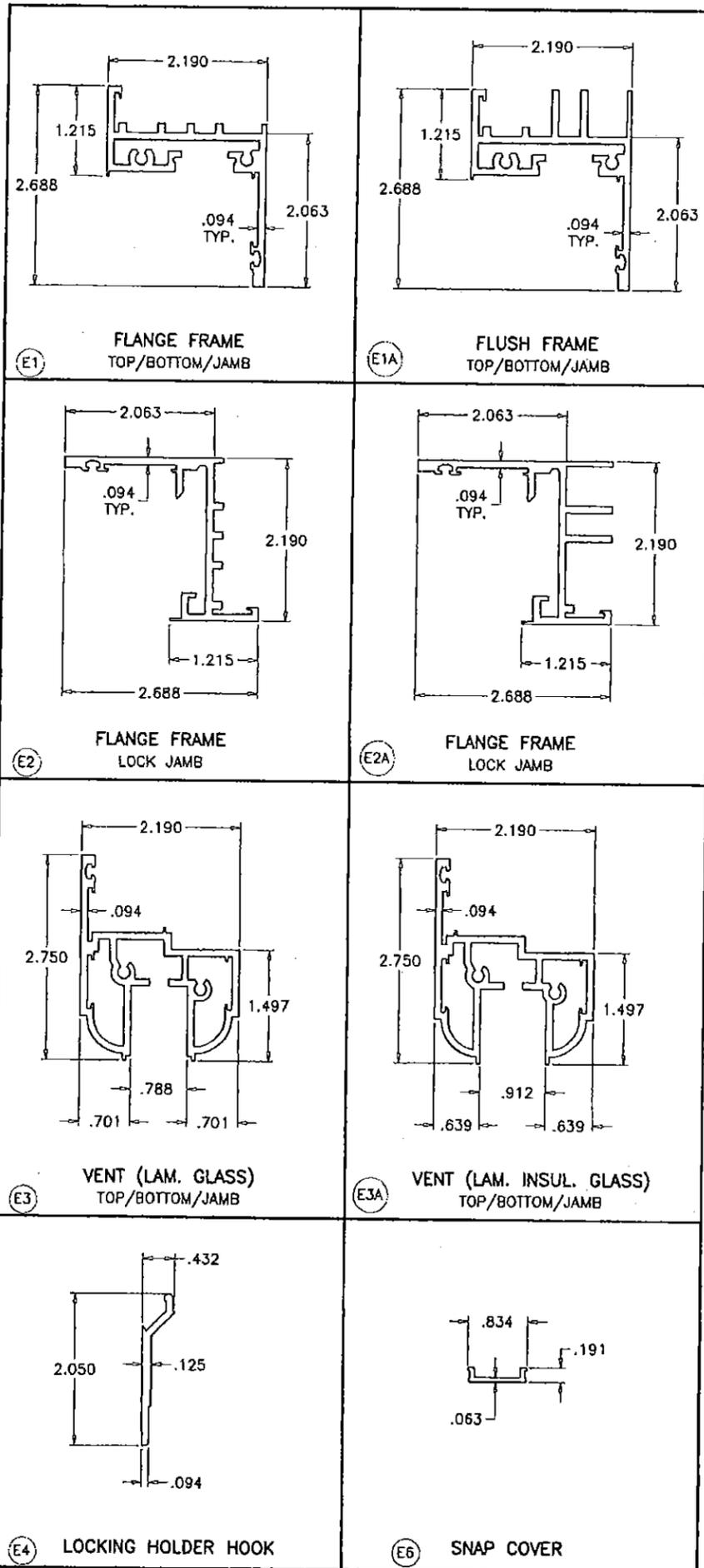
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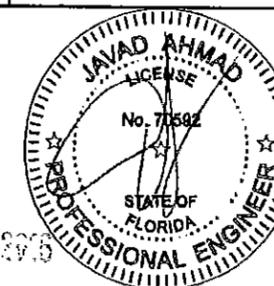
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ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	HC200-001	3/ WDW.	FLANGE FRAME TOP , BOTTOM & JAMB (NON LOCK)	6063-T6	-
E1A	HC200-008	3/ WDW.	FLUSH FRAME TOP , BOTTOM & JAMB (NON LOCK)	6063-T6	-
E2	HC200-002	1/ WDW.	FLANGE FRAME LOCK JAMB	6063-T6	-
E2A	HC200-009	1/ WDW.	FLUSH FRAME LOCK JAMB	6063-T6	-
E3	HC200-003	4/ WDW.	VENT TOP , BOTTOM & JAMBS (LAM. GLASS)	6063-T6	-
E3A	HC200-006	4/ WDW.	VENT TOP , BOTTOM & JAMBS (LAM. INSUL. GLASS)	6063-T6	-
E4	HC200-004	1/ WDW.	LOCKING HOLDER HOOK	6063-T6	-
E5	HC200-005	AS REQD.	OPTIONAL MUNTIN	ALUMINUM	-
E6	BD4500-015	4/ WDW.	SNAP COVER (OPTIONAL)	ALUMINUM	-
E7	1/ WDW.	-	SCREEN (OPTIONAL)	ALUMINUM	-
E10	CM100-022	-	ANCHOR ARM FOR ROTO OPERATOR	-	-
V1	V-059	AS REQD.	EXTERIOR W/STP. VINYL	PVC	-
V2	V-033A	AS REQD.	TR-5804N COMPRESSION GASKET (INSIDE)	NEOPRENE	TREMCO
V3	P-021 (OPTIONAL)	AS REQD.	COSMETIC COVER SEAL MELTPPOINT	-	-
M1	HC200-M01	1/ CORNER	FRAME SMALL CORNER LOCK	ST. STEEL	16 GA.
M2	HC200-M02	3/ CORNER	VENT CORNER LOCK	ST. STEEL	16 GA.
M3	HC200-M03	1/ CORNER	FRAME LARGE CORNER LOCK	ST. STEEL	16 GA.
M4	HC200-M04	1	FRAME LARGE CORNER LOCK (AT ROTO OPERATOR ONLY)	ST. STEEL	16 GA.
M5	HC200-M05	1/ CORNER	LEFT HAND FRAME CORNER LOCK	6063-T6	-
M6	HC200-M06	1/ CORNER	RIGHT HAND FRAME CORNER LOCK	6063-T6	-
M7	HC200-M07	-	ALUMINUM SNUBBER	-	-
M8	P-030	-	NYLON CAM	-	-
M9	P#12206	-	NYLON SNUBBERS	-	-
M10		2/ LITE	1/8" X 3/4" SETTING BLOCK, AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
M12	HC200-M08	-	GUIDE HOUSING	ALUMINUM	-
M13	P-031	-	SHIM ANTI FRICTION	PLASTIC	-
H1	CD25	-	9.5° SINGLE ARM OPERATOR	ST/ST	ROTO HARDWARE
H3	CB304	1/ WDW.	SURFACE MOUNT OPERATOR	-	ROTO HARDWARE
H4	CB253	1	8.5 MM. OPERATOR BOTTOM SPACER	-	ROTO HARDWARE
H5	CB201	1	OPERATOR TOP SPACER	-	ROTO HARDWARE
H7	L1305-2111	3	KEEPERS	ST/ST	ROTO HARDWARE
H8	GT553	-	GUIDE HOUSING	-	ROTO HARDWARE
H9	LH088-7510	-	WHITE HANDLE	-	ROTO HARDWARE
H10	G2-HND-LPLT-02	-	HANDLE FASTENER PLATE	-	ROTO HARDWARE
H11	LB06	1	LOCK POINT STAINLESS STEEL	-	ROTO HARDWARE
H12	GT990	-	#10-32X 3/8" LG. PH. MACHINE SCREW (LOCKING HANDLE)	ST/ST	-
H13	M1000	-	#8-32X 3/4" LG. PHL. FH. THREAD CUTTING (ANCHOR ARM)	ST/ST	-
H14		2	4 BAR HINGE	-	TRUTH OR BRONZE CRAFT
S2		-	#10 X 3/8" LG. PH. PHL. SMS. (ARM-FRAME)	ST/ST	-
S3		-	#10 X 1/2" LG. PH. PHL. SMS. (ARM-VENT)	ST/ST	-
S4		-	#10 X 1-1/2" LG. PH. PHL. SMS. (ASSEMBLY)	ST/ST	-
S5		-	#8-32 X 1/2" LG. FH. PHL. (GUIDES-SURFACE MOUNT)	ST/ST	-
S6		-	#6 X 1/2" LG. FH. PHL. SMS. (SNUBBERS)	ST/ST	-
S7		-	#10 X 1/2" LG. PHL. FH. SMS.	ST/ST	-
S8		-	#6 X 1/2" LG. PH. SMS. ST/ST AT ALUM. SNUBBER	-	-

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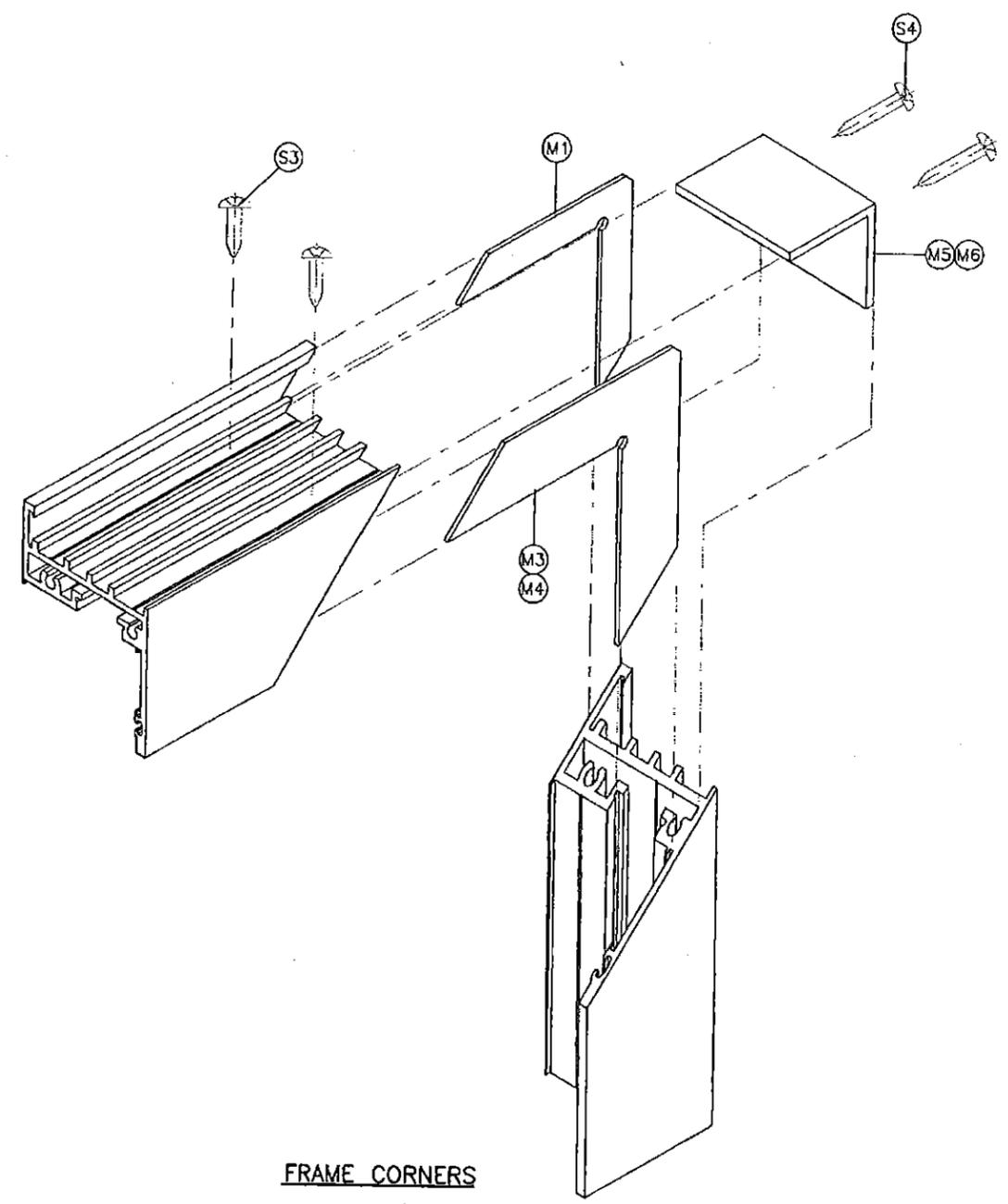
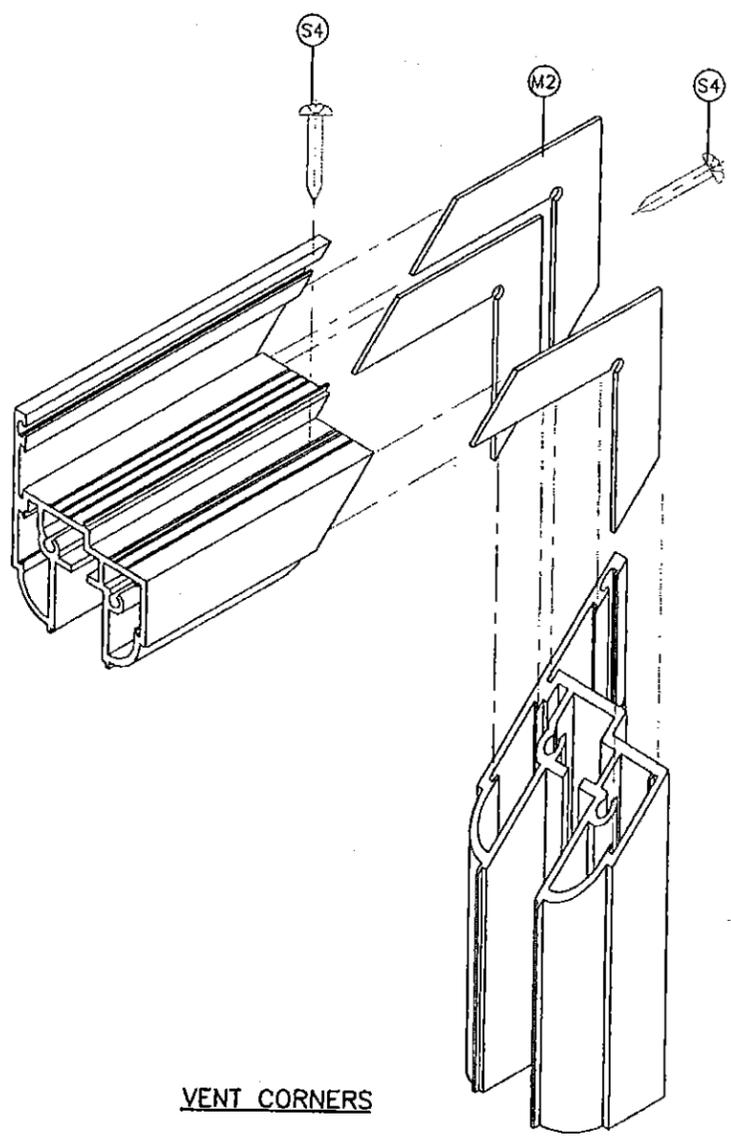
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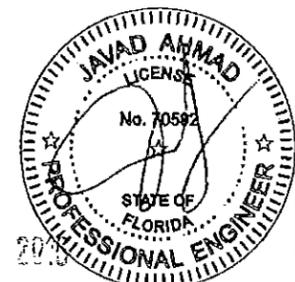
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MAR 03 2019

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