

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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

www.miamidade.gov/economy

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

NOTICE OF ACCEPTANCE (NOA)

Labrador & Fundora Corporation dba V & V Windows 2355 W 4th Ave Hialeah, FL 33010-1454

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 "400" Outswing Aluminum Casement Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W14–28**, titled "Series-400 Alum P.O. Casement Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 08/20/14, with Revision A dated 07/14/17, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami–Dade County Product Control Section Revision stamp with the Notice of Acceptance number and expiration date by the Miami–Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, 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 NOA# 14-0909.17 and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Jorge M. Plasencia, P.E.

MIAMIDADE COUNTY
APPROVED

11/08/17

NOA No. 17-0808.01 Expiration Date: December 24, 2019

Approval Date: November 16, 2017

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 14-0909.17

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. W14–28, titled "Series-400 Alum P.O. Casement Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 08/20/14, 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

along with marked-up drawings and installation diagram of mulled aluminum fixed and fixed casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HETI-14-5009**, dated 04/23/14, signed and sealed by Rafael E. Droz-Seda, P.E.

- 2. Test reports on: 1) Large 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 mulled aluminum fixed and fixed casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HETI-14-5010**, dated 04/23/14, signed and sealed by Rafael E. Droz-Seda, P.E.
- 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) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202–94

along with marked-up drawings and installation diagram of mulled aluminum operable casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No.

HETI-14-5011, dated 04/23/14, signed and sealed by Rafael E. Droz-Seda, P.E.

- 4. Test reports on: 1) Large 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 mulled aluminum operable casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. Report No. HETI-14-5012, dated 04/23/14, signed and sealed by Rafael E. Droz—Seda, P.E.

Jorge M. Plasencia, P.E.

Product Control Unit Supervisor NOA No. 17-0808.01

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) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202–94 along with marked-up drawings and installation diagram of mulled aluminum operable casement and fixed casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HETI-14-5013**, dated 04/23/14, signed and sealed by Rafael E. Droz–Seda, P.E.
- 6. Test reports on: 1) Large 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 mulled aluminum operable casement and fixed casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HETI-14-5014**, dated 04/23/14, signed and sealed by Rafael E. Droz-Seda, P.E.
- 7. Test reports on: 1) Large 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 fixed window, prepared by Hurricane Test Laboratory, Inc., Test Report No.
 HETI-14-5015, dated 04/23/14, signed and sealed by Rafael E. Droz—Seda, P.E.
- 8. Test reports on: 1) Large 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 operable casement window, prepared by Hurricane Test Laboratory, Inc., Test Report No.
 HETI-14-5016, dated 04/23/14, signed and sealed by Rafael E. Droz–Seda, P.E.
- 9. Test reports on: 1) Large 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 mulled aluminum operable casement and fixed windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. HETI-14-5017, dated 04/23/14, signed and sealed by Rafael E. Droz-Seda, P.E.
- 10. Test reports on: 1) Large 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 mulled aluminum operable casement and fixed windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. HETI-14-5018, dated 06/11/14, signed and sealed by Rafael E. Droz–Seda, P.E.

Jorge M. Plasencia, P.E. Product Control Unit Supervisor NOA No. 17-0808.01

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

- 11. 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 operable casement window, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HETI-14-5019**, dated 04/23/14, signed and sealed by Rafael E. Droz–Seda, P.E.
- 12. Test reports on: 1) Large 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 mulled aluminum operable casement and fixed windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. HETI-14-5052, dated 10/21/14, signed and sealed by Rafael E. Droz—Seda. P.E.

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-5th Edition (2014), dated 08/09/14, 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. 14–0423.17 issued to Eastman Chemical Company (MA) for their "Saflex Clear and Color Glass Interlayers" dated 0619/14, expiring on 05/21/16.
- 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-5**th **Edition (2014)**, and of no financial interest, dated August 13, 2014, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
- 2. Proposal issued by the Product Control Section, dated August 27, 2013, signed by Jaime D. Gascon, P.E., Product Control Supervisor.

G. OTHERS

1. None.

Jorge M. Plasencia, P.E. Product Control Unit Supervisor NOA No. 17-0808.01

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. W14–28, titled "Series-400 Alum P.O. Casement Wdw. (L.M.I.)", sheets 1 through 6 of 6, dated 08/20/14, with Revision A dated 07/14/17, prepared by Al-Faroog Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. None.

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-5th Edition (2014) and FBC-6th Edition (2017) dated 07/10/17, 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. 17-0712.05 issued to Eastman Chemical Company (MA) for their "Saflex Clear and Color Glass Interlayers" dated 09/07/17, expiring on 05/21/21.
- 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

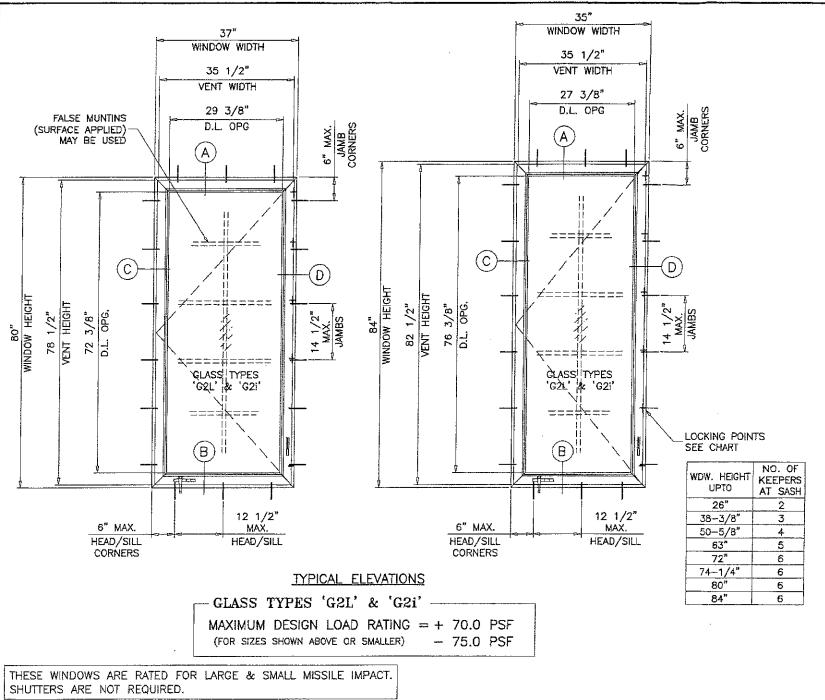
1. Statement letter of conformance to FBC-5th Edition (2014) and FBC-6th Edition (2017) and of no financial interest, dated 07/10/17, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHERS

1. This NOA revises NOA #14-0909.17, expiring on 12/24/19.

Jorge M. Plasencia, P.E.

Product Control Unit Supervisor NOA No. 17-0808.01



29 3/8' FALSE MUNTINS D.L. OPG (SURFACE APPLIED) MAY BE USED (A)(c)82 1/2" VENT HEIGHT 3/8" OPG. 76 D.L. GLASS!!TYPES 'G]L' & 'G1i' 12 1/2" 6" MAX. MAX. HEAD/SILL HEAD/SILL CORNERS TYPICAL ELEVATION GLASS TYPES 'G1L' & 'G1i' (FOR SIZE SHOWN ABOVE OR SMALLER) NOTE:

MAXIMUM DESIGN LOAD RATING = + 85.0 PSF - 85.0 PSF

37"

HTDIW WOONW

35 1/2"

VENT WIDTH

SERIES-400

ALUMINUM PROJECT-OUT CASEMENT WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF CASMT./CASMT. OR CASEMENT 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 2014 (5TH EDITION)/2017 (6TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

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

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

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

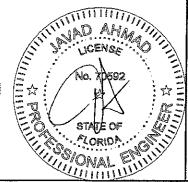
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2014/2017 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY. AND TO BE REVIEWED BY BUILDING OFFICIAL

Miami-Dade Product Control



6 POINT LOCK

LOCKING POINTS

SEE CHART

(C.A.N. 3538) 105) 262-6978 AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 334,73 (C.A.N. 3638)
TEL (305) 264-8100 FAX. (305) 262-6978

CASEMENT Corp. & Fundora V Windows t 4th Ave. 1. 33010 888-4151 P.0. Labrador & dba-y & V 2355 West Hialeah, Fi.

12 de

Ä 뉴

drawing

W14 - 28sheet 1 of 6

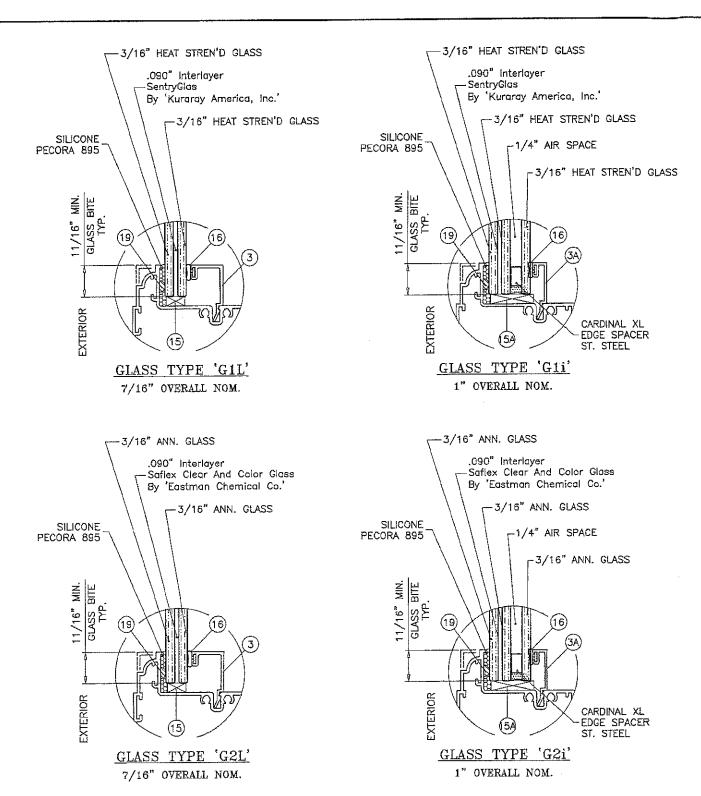
PRODUCT REVISED as complying with the Florida Building Code 17-0808.01 NOA-No.

Expiration Date 12/24/2019

GLASS CAPACITIES ON THIS SHEET ARE

AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

BASED ON ASTM E1300-09 (3 SEC. GUSTS)

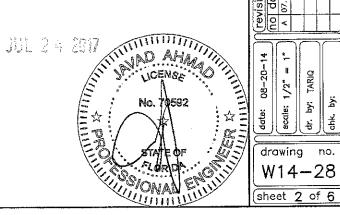


GLAZING OPTIONS

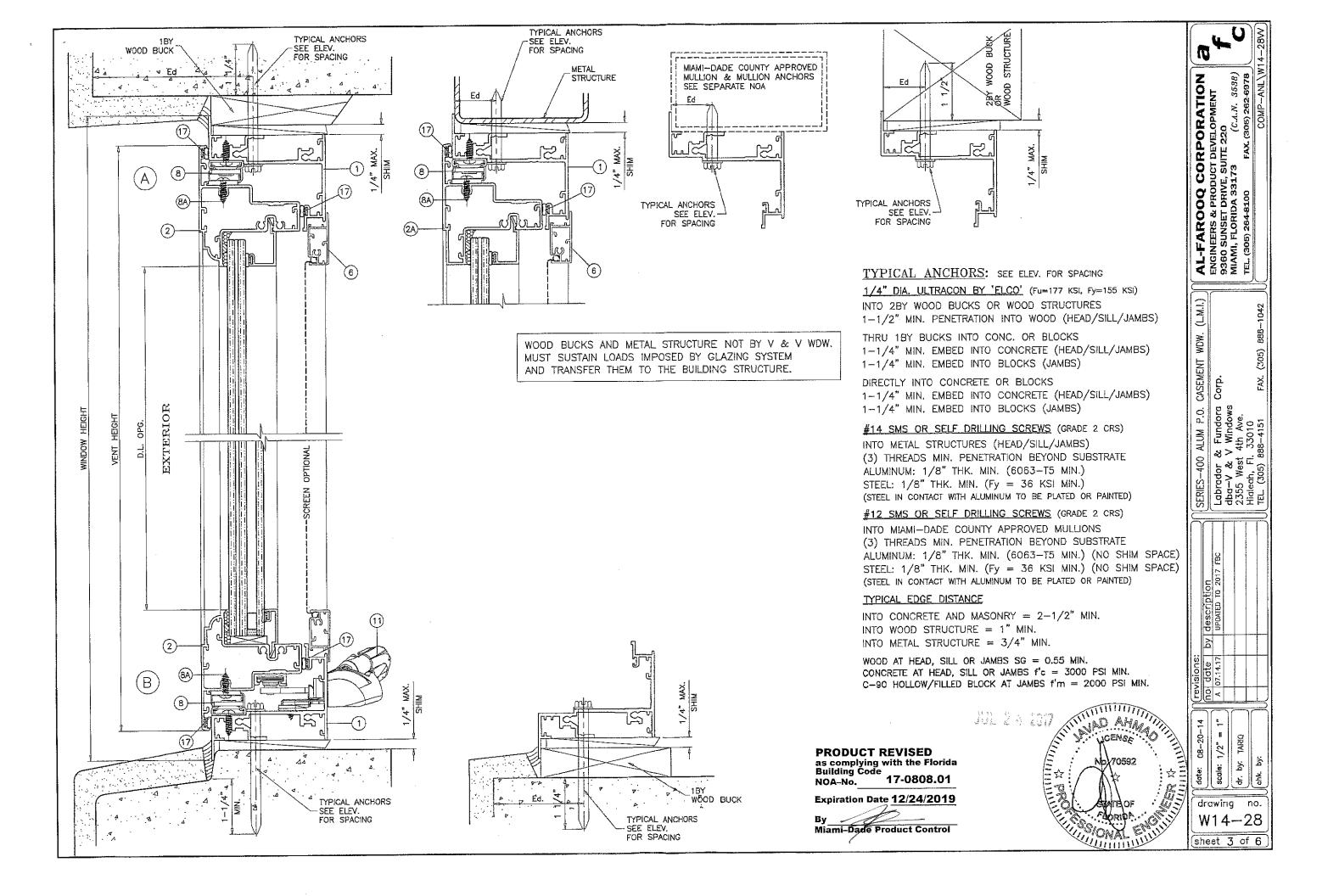
PRODUCT REVISED as complying with the Florida Building Code 17-0808.01 NOA-No.

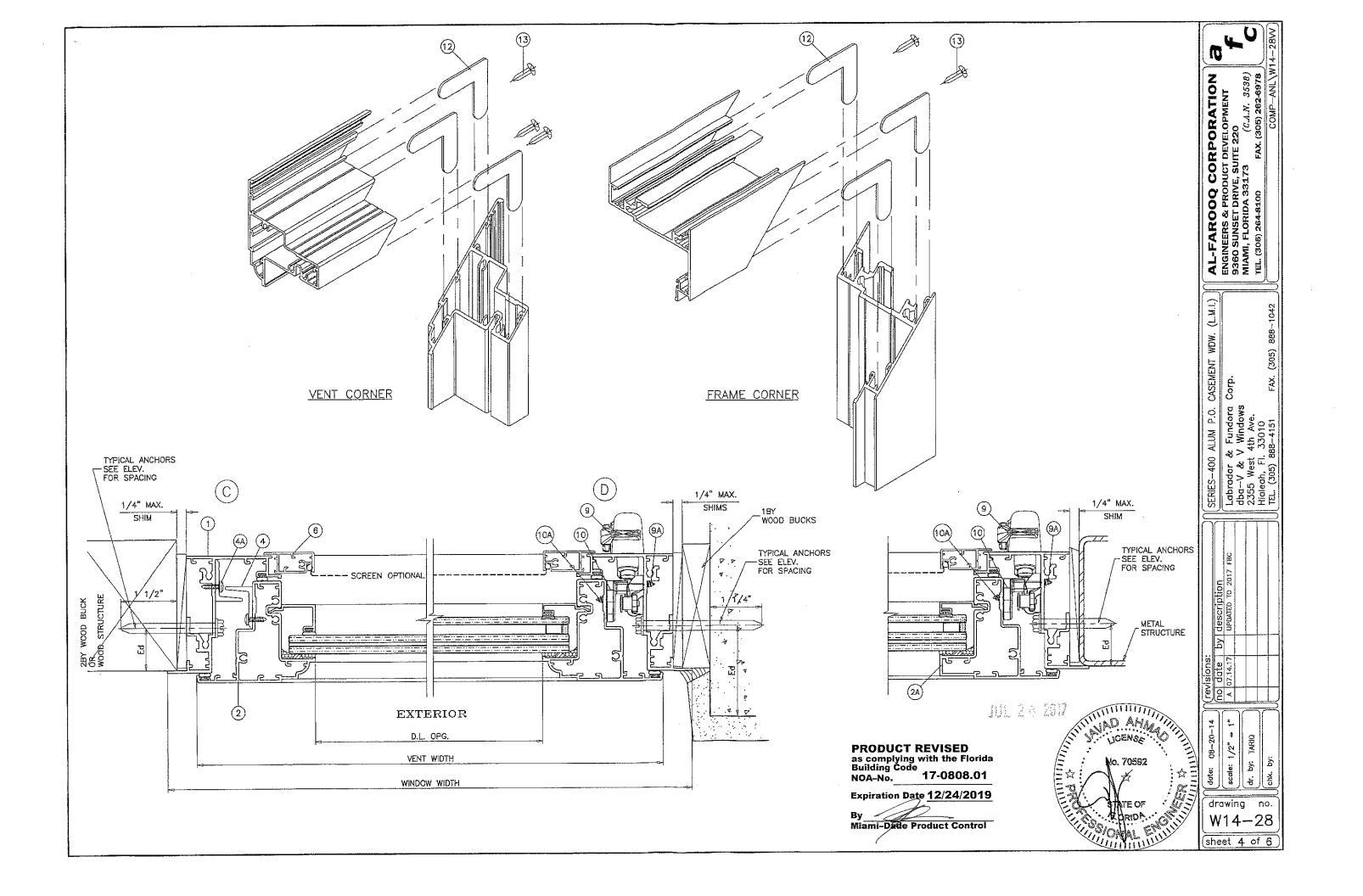
Expiration Date 12/24/2019

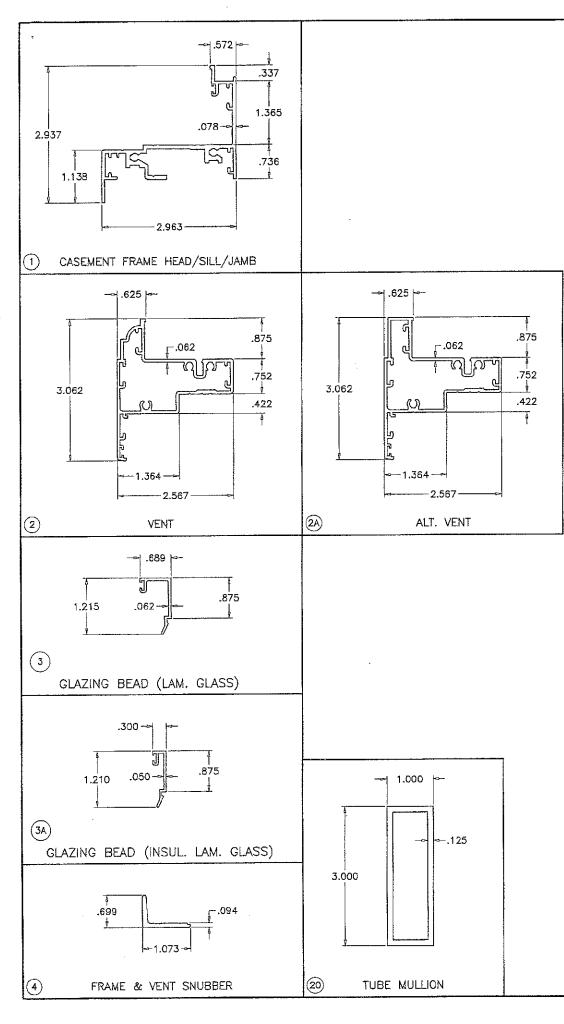
Miami-Dade Product Control



drawing no.







TOTAL	71.170	CT - NUMBER	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS	
ITEM		QUANTITY			MANY./ SUFFICEN/ REMARKS	
1	V401	4/ WDW.	FRAME HEAD/SILL/JAMB	6063-T6	_	
2	V402	4/ WDW.	VENT	6063-T6		
2A	V411	4/ WDW.	ALT. VENT	6063-T6	_	
3	V405	4/ WDW.	GLAZING BEAD (LAM. GLASS)	6063-T5	_	
3A	V406	4/ WDW.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T5		
4	V407	AS REQD.	VENT AND FRAME SNUBBERS	6063-T6	LENGTH = FRAME HEIGHT - 18"	
4A	#8 X 1/2"	AS REQD.	SNUBBER MOUNTING SCREWS	ST. STEEL	PPH SMS, AT 1-1/4" FROM ENDS & 10-1/2" O.C.	
6	V409	AS REQD.	SCREEN	6063-T5	OPTIONAL	
8	_	2	4 BAR HINGE AT TOP & BOTTOM	ST. STEEL	SULLIVAN & ASSOC.	
8A	#10 X 1/2"	2/ HINGE	HINGE INSTALLATION SCREWS	ST. STEEL	PPH STS	
9	_	1	FACE MOUNT MULTI POINT LOCK	ST. STEEL	INTERLOCK	
9A	#8 X 1/2"	2/ LOCK	LOCK INSTALLATION SCREWS	ST. STEEL	THREAD FORMING SCREWS	
10	_	1	LOCK KEEPER FACING LOCK		INTERLOCK	
10A	#8 X 1/2"	2/ KEEPER	KEEPER INSTALLATION SCREWS	ST. STEEL	THREAD FORMING SCREWS	
11	-	1	VENT OPERATOR	_	INTERLOCK	
11A	#10 X 1/2"	6/ OPERATOR	OPERATOR INSTALLATION SCREWS	ST. STEEL	FH MS	
11B	#10 X 1/2"	3/ TRACK	OPERATOR TRACK INSTALLATION SCREWS	ST. STEEL	FH MS	
12	PJ540-SS	AS REQD.	CORNER KEY	ST. STEEL	SULLIVAN & ASSOC.	
13	#10 X 1-1/4"	AS REQD.	FRAME AND VENT ASSEMBLY SCREWS	CRS	PH SMS	
15	_	AS REQD.	SETTING BLOCK	EPDM	ULTRAFAB, DUROMETER 80±5 SHORE A	
15A	_	AS REQD.	SETTING BLOCK	EPDM	ULTRAFAB, DUROMETER 80±5 SHORE A	
16	_	AS REQD.	GLAZING GASKET	VINYL	CENTRAL PLASTICS, DUROMETER 65±5 SHORE A	
17	9146	AS REQD.	FRAME & VENT W'STRIPPING	VINYL	CENTRAL PLASTICS, DUROMETER 65±5 SHORE A	
19	_	AS REQD.	GLASS SPACER	SILICONE	FRANK LOWE, DUROMETER 65±5 SHORE A	
20	_	AS REQD.	TUBE MULLION	6063-T6	_	

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH 'PECORA 1215' SEAM SEALER.

PARIMETER CAULKING 'DYMONIC FC POLYURETHANE' ON EXTERIOR ONLY.

LOCKS:

MULTIPOINT LOCK SYSTEM #CLO2 BY 'INTERLOCK'
AT FRAME JAMB
LOCK OPERATOR #CLO2-0600 AT 10" FROM SILL
FASTENED TO JAMBS WITH (2) #10 X 1/2" PPH SELF TAPPING SCREWS
LOCK BAR SECURED TO JAMB WITH LOCK GUIDES #CLO2-2035-00E
SPACED AT 6" O.C. MAX.
EACH GUIDE FASTENED WITH (2) #8 X 1/2" PFH SELF TAPPING SCREWS

PLASTIC KEEPERS #CL02-2046-030 AT VENT EACH FASTENED WITH (4) #8 X 1/2" PFH SELF TAPPING SCREWS SEE CHART ON SHEET 1 FOR QUANTITIES

HINGES:

4 BAR ST/ST HINGES #304CJ200-16AE BY 'SULLIVAN & ASSOC.' LOCATED AT TOP AND BOTTOM CORNERS FASTENED WITH (2) #10 X 1/2" PPH SELF TAPPING SCREWS

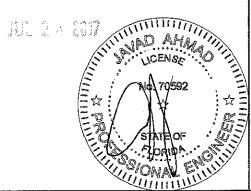
OPERATOR:

SINGLE ARM ROTO OPERATOR #C011-152-02 BY 'SULLIVAN & ASSOC.' LOCATED AT SILL END FASTENED WITH (6) #10 X 1/2" PFH SELF TAPPING SCREWS OPERATOR TRACK #C011-0705 AT BOTTOM RAIL FASTENED WITH (3) #10 X 1/2" PFH SELF TAPPING SCREWS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 17-0808.01

Expiration Date <u>12/24/2019</u>

By Miami-Dade Product Control



ns:

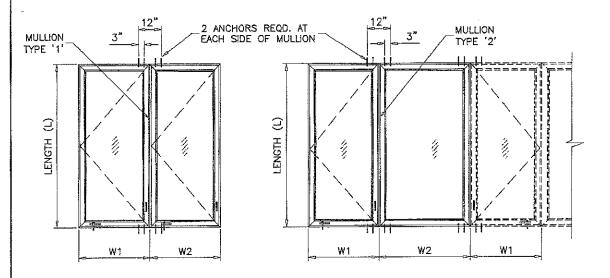
By description

1.17 UPDATED TO 2017 FBG

CASEMENT Corp.

drawing no. W14-28

sheet 5 of 6



TYPICAL ELEVATIONS SIDE BY SIDE WINDOWS

SIDE BY SIDE APPLIES TO TWO OR MORE WINDOWS

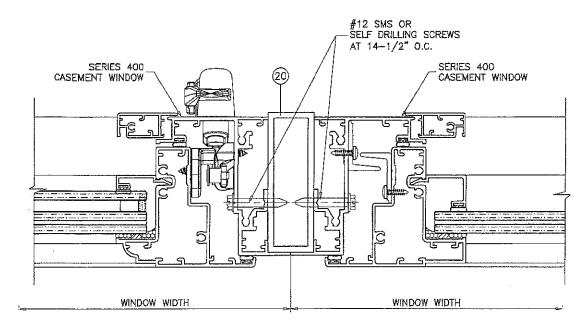
$$WIDTH (W) = \frac{W1 + W2}{2}$$

MULLION LOAD CAPACITY - PSF								
WINDO	y dims.	MULLION TYPE						
WIDTH (W)	LENGTH	(L)	EXT.(+)	NT.(-)				
19-1/8"	80"		85.0	85.0				
26 - 1/2"			85.0	85.0				
37 *			85,0	85.0				
19~1/8"	84°		85.0	85.0				
26-1/2"			85.0	85.0				
37"			83.3	83.3				
18"			85.0	85.0				
24"	84"		85.0	85.0				
30"			85.0	85.0				
36"			85.0	85.0				

MULLION LOAD CAPACITY - PSF									
VOUNIW	V DIMS.	MULLION TYPE '2'							
WIDTH (W)	LENGTH	(L)	EXT.(+)	INT.(-)					
31-3/4"			85.0	85.0					
37"	84"		85.0	85.0					
45-1/16"	04		85.0	85.0					
48-1/2"			85.0	85.0					
36"			85.0	85.0					
39"	84*		85.0	85.0					
42"			85.0	85.0					
45"			85.0	85.0					
48"			85.0	85.0					

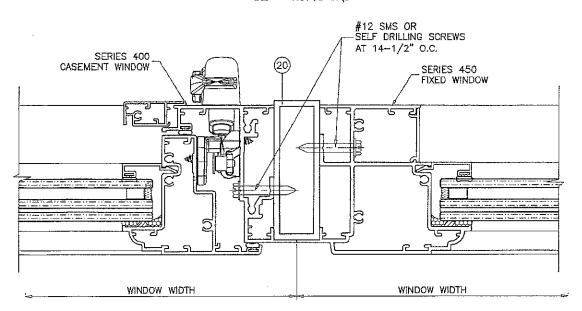
NOTES:

- USE CHART ON THIS SHEET FOR SIDE BY SIDE CONNECTION CAPACITY OF WINDOW MULLION.
- 2. FOR CASEMENT WINDOW CAPACITY SEE SHEET 1.
- 3. FOR FIXED WINDOWS CAPACITY SEE SEPARATE NOA.
- 4. LOWER VALUES FROM STEPS 1, 2 OR 3 WILL APPLY TO ENTIRE SYSTEM.



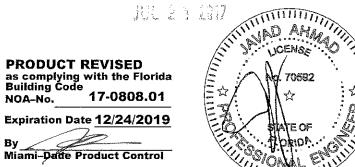
MULLION TYPE '1'

TOTAL PRPERTIES Ix = 2.7522 IN A Sx = 1.5718 IN A



MULLION TYPE '2'

TOTAL PRPERTIES Ix = 3.4700 in 4 Sx = 1.9209 in 3



| Marie | Mari

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 2648100
FAX (305) 262-6978
COMP-ANL\W14

CASEMENT Corp.

P.0.