

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/building

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

NOTICE OF ACCEPTANCE (NOA)

Tecnoglass, LLC 3550 NW 49 Street

Miami, FL 33142

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 "HP-3070" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W03-115**, titled "HP 3070 Alum. Window Wall System (L.M.I.)", sheets 1, 2, 2.1, 3 and 4 through 7, dated 12/19/03, with revision **N** dated 11/20/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, 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 and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, **Barranquilla**, **Colombia S.A.**, 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 No. 18-0821.04 and consists of this page 1, evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY
APPROVED

NOA No. 21-0317.08 Expiration Date: March 15, 2024 Approval Date: May 13, 2021

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA No. 03-1224.03)
- 2. Drawing No. **W03-115**, titled "HP3070 Alum. Window Wall System (L.M.I.)", sheets 1, 2, 2.1, 3 and 4 through 7 of 7, dated 12/19/03, with revision **M** dated 10/03/17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (Submitted under NOA No. 17-0505.06)

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Safety Performance Test, (class A) per ANSI Z97.1 Class A

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-6123, dated 03/17/10, signed and sealed by Jorge A. Causo, P.E.

(Submitted under NOA No. 10-0525.04)

- 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) Safety Performance Test, (class A) per ANSI Z97.1 Class A

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.

FTL-5934 & **FTL-5935**, dated 04/22/09, signed and sealed by Carlos S. Rionda, P.E. *(Submitted under NOA No. 10-0525.04)*

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Safety Performance Test, (class A) per ANSI Z97.1 Class A

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-5319, dated 07/05/07, signed and sealed by Carlos S. Rionda, P.E.

(Submitted under NOA No. 08-1217.01)

Manuel Perez, P.E. Product Control Examiner NOA No. 21-0317.08

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- B. TESTS (CONTINUED)
 - 4. 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) Safety Performance Test, (class A) per ANSI Z97.1 Class A

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.:

FTL-3956, dated 11/14/03 and FTL-3182, dated 12/12/01, both signed and sealed by Edmundo Largaespada, P.E. (Submitted under NOA No. 03-1224.03)

- 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) Safety Performance Test, (class A) per ANSI Z97.1 Class A

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Engineering and Testing, Inc., Test Reports No. **HETI-02-1265**, dated 2/27/03 and **HETI-03-1781**, dated 11/15/02, both signed and sealed by Rafael E. Droz-Seda, P.E. *(Submitted under NOA No. 03-1224.03*

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 5th Edition (2014), dated 05/12/16 and updated on 09/22/17 to comply with FBC 6th Edition (2017), prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (Submitted under NOA No. 17-0505.06)
- 2. Glazing complies with ASTM E 1300-09
- D. QUALITY ASSURANCE
 - 1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. for their "SentryGlas® (Clear and White) Glass Interlayer" dated 12/28/17, expiring on 07/04/23.
- 2. Notice of Acceptance No. 17-0712.03 issued to Eastman Chemical Company (MA) for their "Saflex CP Saflex and Saflex HP Composite Glass Interlayers with PET Core" dated 09/07/17, expiring on 12/11/18.

Manuel Perez, P.E. Product Control Examiner NOA No. 21-0317.08

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- F. STATEMENTS
 - 1. Statement letter of conformance, complying with FBC 5th Edition (2014), with FBC 6th Edition (2017), and of no financial interest, dated September 22, 2017, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (Submitted under NOA No. 17-0505.06)
 - 2. Asset purchase agreement dated 06/19/14, signed by Mr. Raul Casares, for and on behalf of R.C. Aluminum Industries, Inc. and Mr. José M. Daes, for and on behalf of Tecnoglass, LLC. (Submitted under NOA No. 14-0807.11)
 - 3. Statement letter dated 07/15/14, issued by R.C. Aluminum Industries, Inc. of sales of asset and relinquishing of all rights of NOA No. 12-0330.14, signed by Raul Casares, for and on behalf of R.C. Aluminum Industries, Inc. (Submitted under NOA No. 14-0807.11)
 - 4. Department of State Certification of **TECNOGLASS**, **LLC** as a limited liability company, active and organized under the laws of the State of Florida, dated 03/03/14 and signed by Ken Detzner, Secretary of State. (Submitted under NOA No. 14-0807.11)
 - **5.** Laboratory compliance letters prepared by Fenestration Testing Laboratory, Inc., for the following Test Reports No.:
 - **I.** FTL-6123, dated 03/17/10, signed and sealed by Jorge A. Causo, P.E. (Submitted under NOA No. 10-0525.04)
 - II. FTL-5935 dated 04/22/09, FTL-5934 dated 04/22/09 and FTL-5319 dated 07/05/07, all signed and sealed by Carlos S. Rionda, P.E. (Submitted under NOA No. 10-0525.04 and 08-1217.01)
 - III. FTL-3956 dated 11/14/03 and FTL-3182 dated 12/12/01, both signed and sealed by Edmundo Largaespada, P. E. (Submitted under NOA No. 03-1224.03)
 - 6. Proposal of Safety Glazing Performance Test, per ANSI Z 97.1-04 Class A issued by Product Control, dated 10/24/06, signed by Jaime D. Gascon, P.E. (Submitted under NOA No. 08-1217.01)
 - 7. Proposal No. **04-0199** issued by Product Control, dated 05/14/04, signed by Manuel Perez, P.E. (*Submitted under NOA No. 05-0815.02*)
 - 8. Laboratory compliance letters prepared by Hurricane Engineering and Testing, Inc., for the following Test Reports No. **HETI-02-1265** dated 2/27/03 and **HETI-03-1781** dated 11/15/02, both signed and sealed by Rafael E. Droz-Seda, P.`E. (Submitted under NOA No. 03-1224.03)

F. OTHERS

1. Notice of Acceptance No. **17-0505.06**, issued to Tecnoglass, LLC, for their Series "HP-3070" Aluminum Window Wall System – L.M.I., approved on 01/25/18 and expiring on 03/15/19.

Manuel Perez, P.E. Product Control Examiner NOA No. 21-0317.08

Tecnoglass, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. W03-115, titled "HP3070 Alum. Window Wall System (L.M.I.)", sheets 1, 2, 2.1, 3 and 4 through 7 of 7, dated 12/19/03, with revision N dated 11/20/20, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 5th Edition (2014), dated 05/12/16, updated on 09/22/17 to comply with FBC 6th Edition (2017) and updated on 02/12/21 to comply with FBC 7th Edition (2020), prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
- 2. Glazing complies with **ASTM E 1300-09**

D. **QUALITY ASSURANCE**

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

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 18-0725.11 issued to Kuraray America, Inc. for their "Kuraray SentryGlas[®] XtraTM (SGXTM) Clear Glass Interlayer" dated 05/23/19, expiring on 05/23/24.
- 2. Notice of Acceptance No. 20-0622.03 issued to Eastman Chemical Company (MA) for their "Saflex Storm Saflex and Saflex HP Composite Glass Interlayers with PET Core" dated 08/06/20, expiring on 12/11/23.

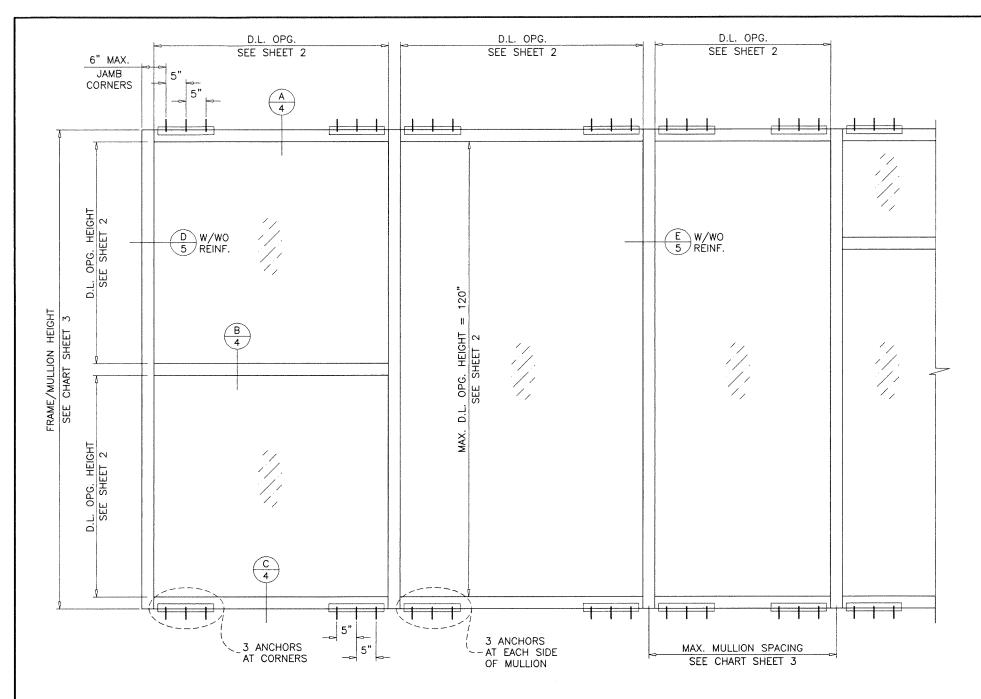
F. STATEMENTS

1. Statement letter of conformance, complying with **FBC** 7th **Edition (2020)**, and of no financial interest, dated February 12, 2021, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

1. Notice of Acceptance No. **18-0821.04**, issued to Tecnoglass, LLC., for their Series "HP-3070" Aluminum Window Wall System – L.M.I.", approved on 09/27/18 and expiring on 03/15/24.

Manuel Perez, P.E. Product Control Examiner NOA No. 21-0317.08



TYPICAL ELEVATIONS

HP3070 ALUM. WINDOW WALL SYSTEM (L.M.I.)

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

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.

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 2020 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.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.

CHECK MULLION AND JAMB CAPACITY FOR A GIVEN STEP 3 SPACING AND HEIGHT USING CHARTS ON SHEET 3. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

STEP 4 THE LOWEST VALUE RESULTING FROM STEPS 2 AND 3 SHALL APPLY TO ENTIRE SYSTEM.

DAYLITE OPENINGS: D.L.O. HEIGHT = FRAME HEIGHT - 6"

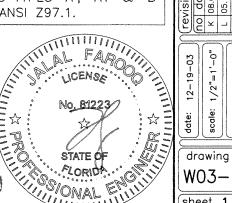
D.L.O. WIDTH = FRAME WIDTH -6"

WINDOW WALL SYSTEM WITH GLASS TYPES 'A', 'A1' & 'B' COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

PRODUCT REVISED as complying with the Florida **Building Code 21-031**7.08 NOA-No.

Expiration Date: 03/15/2024

By: Manuel Peres Miami-Dade Product Control



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sheet 1 of 7

HP3070 ALUM. WINDOW WALL C 4

D.L. OPG.

SEE SHEET 2

 $\begin{pmatrix} A \\ 4 \end{pmatrix}$

6" MAX.

JAMB

CORNERS

SEE SHEETS 2

D.L.

FRAME/MULLION HEI

5"

D W/WO 5 REINF.

(L.M.I.)

SYSTEM

TECNOGLASS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX

(C.A.N. 3538) FAX. (305) 262-6978

 AL-FAROOQ CORPORATION

 ENGINEERS & PRODUCT DEVELOPMENT

 9360 SUNSET DRIVE, SUITE 220

 MIAMI, FLORIDA 33173
 (C.A.N. 3538)

 TEL. (305) 264 8100
 FAX. (305) 262-6978

by description

MANUF. NAME REV.

UPDATED TO 2014 FBC

REV. PER RER COMMENTS

UPDATED TO 2020 FBC

§ S × N ≥ Z

drawing no. W03-115

	GL	ASS DESIGN I	LOAD CAPAC	ITY - PSF			
			GLASS TYPE	GLASS TYPE	GLASS	TYPE	
	NOMINA	AL DIMS	'A'	'A1'	'1	3'	
	D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+)	INT. (-)	
	24"		160.0	110.0	74.0	117.0	
	27"		160.0	110.0	74.0	117.0	
	30"		160.0	110.0	74.0	117.0	
	33"		160.0	110.0	74.0	117.0	
	36"		160.0	110.0	74.0	117.0	
	39"		160.0	110.0	74.0	117.0	
	42"		160.0	110.0	74.0	117.0	
	45"	nanda proposala de la companya del companya de la companya del companya de la com	160.0	110.0	74.0	117.0	
	48"	60"	160.0	110.0	74.0	117.0	
	51"		150.0	110.0	74.0	117.0	
	54"		150.0	110.0	74.0	117.0	
	57"		150.0	110.0	74.0	117.0	
	60"		150.0	110.0	74.0	117.0	
	60"		150.0	110.0	74.0	117.0	
	65"		150.0	110.0	74.0	117.0	
				110.0	74.0		
	69"		150.0	110.0	74.0	117.0	
	72"		-	110.0		117.0	
	24"		160.0	110.0	74.0	117.0	
	27"		160.0	110.0	74.0	117.0	
	30"		160.0	110.0	74.0	117.0	
	33"		160.0	110.0	74.0	117.0	
	36"		160.0	110.0	74.0	117.0	
	39"		160.0	110.0	74.0	117.0	
	42"		160.0	110.0	74.0	117.0	
	45"		150.0	110.0	74.0	117.0	
	48"	66"	150.0	110.0	74.0	117.0	
	51"	A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	150.0	110.0	74.0	117.0	
	54"		150.0	110.0	74.0	117.0	
	57"		150.0	110.0	74.0	117.0	
	60"		150.0	110.0	74.0	117.0	
	63"		150.0	110.0	74.0	117.0	
	66"		150.0	-	74.0	117.0	
	69"		150.0	_	74.0	117.0	
	72"		147.0	_	_	_	
	24"		160.0	110.0	74.0	117.0	
	27"		160.0	110.0	74.0	117.0	
	30"		160.0	110.0	74.0	117.0	
	33"		160.0	110.0	74.0	117.0	
	36"		160.0	110.0	74.0	117.0	
	39"		160.0	110.0	74.0	117.0	
	42"		150.0	110.0	74.0	117.0	
	45"		150.0	110.0	74.0	117.0	
	48"		150.0	110.0	74.0	117.0	
	51"	72"	150.0	110.0	74.0	117.0	
	54"		150.0	110.0	74.0	117.0	
	5 4 57"		150.0	110.0	74.0	117.0	
				110.0			
	60"		150.0		74.0	117.0	
	63"		150.0		74.0	117.0	
	66"		147.0	_	74.0	117.0	
	69"				74.0	117.0	

GLASS DESIGN LOAD CAPACITY - PSF						
		GLASS TYPE	GLASS TYPE GLASS TYPE		TYPE	
NOMINAL DIMS D.L.O. WIDTH D.L.O. HEIGHT		'A'	'A1'	'1	3'	
		EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+)	INT. (-)	
24"	27" 30" 33" 36" 39" 42" 45"		110.0	74.0	117.0	
27"			110.0	74.0	117.0	
30"			110.0	74.0	117.0	
33"			110.0	74.0	117.0	
36"			110.0	74.0	117.0	
39"			110.0	74.0	117.0	
42"			110.0	74.0	117.0	
45"			110.0	74.0	117.0	
48"	78"	150.0	110.0	74.0	117.0	
51"		150.0	110.0	74.0	117.0	
54" 57"		150.0	110.0	74.0	117.0	
		150.0	-	74.0	117.0	
60"		145.0	-	74.0	117.0	
63"				74.0	117.0	
24"			110.0	74.0	117.0	
27"		160.0	110.0	74.0	117.0	
30"		160.0	110.0	74.0	117.0	
33"			110.0	74.0	117.0	
36"	150.0	110.0	74.0	117.0		
39"	42"	150.0	110.0	74.0	117.0	
42"		150.0	110.0	74.0	117.0	
45" 84" 48" 51"	150.0	110.0	74.0	117.0		
	150.0	110.0	74.0	117.0		
	150.0	-	74.0	117.0		
54"		147.0		74.0	117.0	
57"		141.0	_	74.0	117.0	
60"			_	74.0	117.0	
63"			_	74.0	117.0	
24"		160.0	110.0	74.0	117.0	
27"		160.0	110.0	74.0	117.0	
30"		160.0	110.0	74.0	117.0	
33"		150.0	110.0	74.0	117.0	
36"		150.0	110.0	74.0	117.0	
39"	90"	150.0	110.0	74.0	117.0	
42"		150.0	110.0	74.0	117.0	
45"		150.0	110.0	74.0	117.0	
48"		150.0		74.0	117.0	
51"		143.0		74.0	117.0	
54"		137.0		74.0	117.0	
57"		_	-	74.0	117.0	
24"		160.0	110.0	74.0	117.0	
27"		160.0	110.0	74.0	117.0	
30"		160.0	110.0	74.0	117.0	
33"		150.0	110.0	74.0	117.0	
36"	0.0"	150.0	110.0	74.0	117.0	
39"	96"	150.0	110.0	74.0	117.0	
42"		150.0	110.0	74.0	117.0	
45"		150.0	-	74.0	117.0	
48"		142.0	-	74.0	117.0	
51"		135.0		74.0	117.0	
54"			_	74.0	117.0	

GLASS DESIGN LOAD CAPACITY - PSF							
NOMINA	AL DIMS	GLASS TYPE GLASS TYPE 'A' 'A1'		GLASS TYPE 'B'			
D.L.O. WIDTH			EXT. (+) INT. (-)	EXT. (+)	INT. (-)		
24"			110.0	74.0	117.0		
27"		160.0	110.0	74.0	117.0		
30"		150.0	110.0	74.0	117.0		
33"		150.0	110.0	74.0	117.0		
36"		150.0	110.0	74.0	117.0		
39"	102"	150.0	110.0	74.0	117.0		
42"		150.0		74.0	117.0		
45"		143.0	_	74.0	117.0		
48"		134.0	_	74.0	117.0		
51"	l i			74.0	117.0		
24"		160.0	110.0	74.0	117.0		
27"		160.0	110.0	74.0	117.0		
30"		150.0	110.0	74.0	117.0		
33"		150.0	110.0	74.0	117.0		
36"	108"	150.0	110.0	74.0	117.0		
39"		150.0	110.0	74.0	117.0		
42"		147.0	-	74.0	117.0		
45"		136.0		74.0	117.0		
48"		***		74.0	117.0		
24"		160.0	110.0	74.0	117.0		
27"		150.0	110.0	74.0	117.0		
30"		150.0	110.0	74.0	117.0		
33"	4.4.19	150.0	110.0	74.0	117.0		
36"	114"	150.0	110.0	74.0	117.0		
39"		150.0	-	74.0	117.0		
42"		141.0	_	74.0	117.0		
45"			_	74.0	117.0		
24"		160.0	110.0	74.0	117.0		
27"		150.0	110.0	74.0	117.0		
30"	400"	150.0	110.0	74.0	117.0		
33"	120"	150.0	110.0	74.0	117.0		
36"		150.0		74.0	117.0		
39"		150.0		74.0	117.0		
42"			-	74.0	117.0		

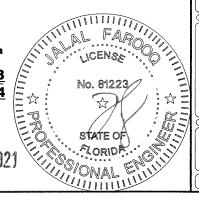
NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

> PRODUCT REVISED
> as complying with the Florida
> Building Code NOA-No. 21-0317.08

Expiration Date: 03/15/2024

By: Manuel Product Control

MAR 1 1 2021



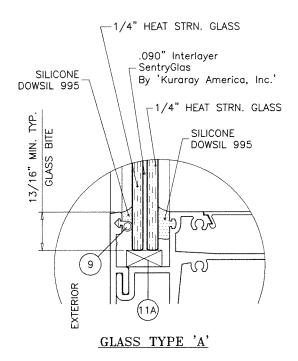
12-19-03 :: 1/2" = 1" y: TARIQ	M 10.03.17	by description MANUF. NAME REV. UPDATED TO 2014 FBC NO CHANGE THIS SHEET UPDATED TO 2020 FBC
by:		

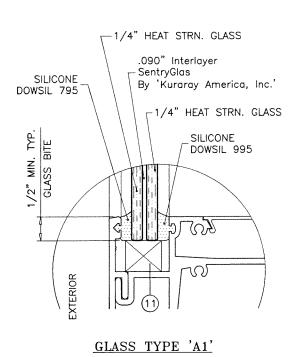
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

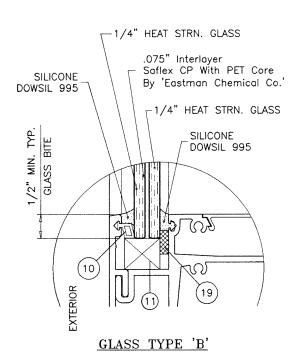
| HP3070 ALUM. WINDOW WALL SYSTEM (L.M.I.) | TECNOGLASS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 | TEL. (305) 638–5158 |

drawing

W03-115 sheet 2 of 7







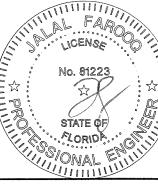
PRODUCT REVISED as complying with the Florida Building Code NOA-No._ 21-0317.08

Expiration Date: 03/15/2024

By: Manuel Pres

Miami-Dade Product Control

MAR 1 1 2021



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		by description	MANUF. NAME REV.	UPDATED TO 2014 FBC	NO CHANGE THIS SHEET	UPDATED TO 2020 FBC	
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AL-FAROOQ CORPORATION
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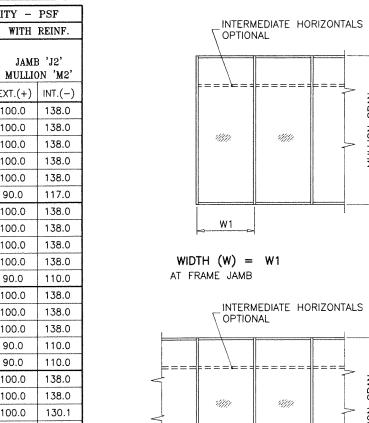
W03-115

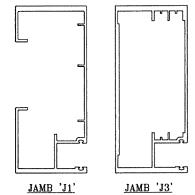
sheet 2.1 of 7

•	REINF.		REINF.		MULLION/JAMB DES					
	JAMB 'J2' MULLION 'M2'		JAMB 'J1' JAMB 'J3' MULLION 'M1'		NOMINAL DIMS.					
-	INT.(-)	EXT.(+)	INT.(-)		FRAME HEIGHT	WIDTH (W)				
•	160.0	150.0	160.0	150.0		30"				
	160.0	150.0	160.0	150.0		36"				
-	160.0	150.0	160.0	150.0		42"				
-	160.0	150.0	160.0	150.0		45"				
-	160.0	150.0	160.0	150.0	66"	48"				
_	160.0	150.0	160.0	150.0		54"				
-	160.0	150.0	160.0	150.0		60"				
-	160.0	150.0	160.0	150.0		66"				
-	160.0	150.0	160.0	150.0		72"				
-	160.0	150.0	160.0	150.0		30"				
-	160.0	150.0	160.0	150.0		36"				
-	160.0	150.0	160.0	150.0		42"				
-	160.0	150.0	160.0	150.0		45"				
-	160.0	150.0	160.0	150.0	72"	48"				
-	160.0	150.0	160.0	150.0		54"				
-	160.0	150.0	160.0	150.0		60"				
-	160.0	150.0	160.0	150.0		66"				
-	160.0	150.0	160.0	150.0		72"				
•	160.0	150.0	160.0	150.0		30"				
•	160.0	150.0	160.0	150.0		36"				
-	160.0	150.0	160.0	150.0		42"				
-	160.0	150.0	160.0	150.0		45"				
-	160.0	150.0	160.0	150.0	78"	48"				
-	160.0	150.0	160.0	150.0	70	54"				
-	160.0	150.0	160.0	150.0		60"				
-	160.0	150.0	160.0	150.0		66"				
	138.0	100.0	-			72"				
	160.0	150.0	160.0	150.0		30"				
-	160.0	150.0	160.0	150.0		36"				
-	160.0	150.0	160.0	150.0		42"				
-	160.0	150.0	160.0	150.0		42 45"				
-	160.0	150.0	160.0	150.0	84"	45 48"				
_	160.0	150.0	160.0	150.0	04	46 54"				
-	160.0	150.0	160.0	150.0		60"				
^	150.0	150.0	150.0	150.0		66"				
-	138.0	100.0				72"				
-	160.0	150.0	160.0	150.0		30"				
-	160.0	150.0	160.0	150.0		36"				
-	160.0	150.0	160.0	150.0		36 42"				
-	160.0	150.0	160.0	150.0		45"				
-	160.0	150.0	160.0	150.0	90"	45 48"				
-	160.0	150.0	160.0	150.0	90	40 54"				
-	150.0	150.0	150.0	150.0		60"				
-	138.0	100.0	-			66"				
_	117.0	90.0				72"				

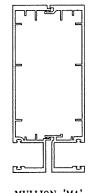
MULLION/JAMB DESIGN LOAD CAPACITY - PSF W/O REINF. WITH REINF							
	ļ		WITH REINF.				
NOMINAL DIMS.		JAMI	3 'J1' 3 'J3' N 'M1'	JAMB 'J2' MULLION 'M2'			
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)		
30"		150.0	160.0	150.0	160.0		
36"		150.0	160.0	150.0	160.0		
42"		150.0	160.0	150.0	160.0		
45"		150.0	160.0	150.0	160.0		
48"	96"	150.0	160.0	150.0	160.0		
54"		150.0	155.9	150.0	160.0		
60"			_	100.0	138.0		
66"		***	-	90.0	117.0		
72"		_	_	90.0	117.0		
30"		150.0	160.0	150.0	160.0		
36"		150.0	160.0	150.0	160.0		
42"		150.0	160.0	150.0	160.0		
45"	102"	150.0	160.0	150.0	160.0		
48"	102	150.0	153.6	150.0	160.0		
54"	136.5	136.5	150.0	150.0			
60"	71		_	100.0	138.0		
66"		_		90.0	117.0		
30"		150.0	160.0	150.0	160.0		
36"		150.0	160.0	150.0	160.0		
42"		150.0	154.9	150.0	160.0		
45"	108"	144.5	144.5	150.0	160.0		
48"	106	135.5	135.5	150.0	160.0		
54"		_	_	100.0	138.0		
60"		-	-	90.0	117.0		
30"		150.0	160.0	150.0	160.0		
36"		150.0	160.0	150.0	160.0		
42"		137.5	137.5	150.0	160.0		
45"	114"	128.3	128.3	150.0	160.0		
48"		120.3	120.3	150.0	150.0		
54"			_	90.0	117.0		
60"		-	_	90.0	117.0		
30"		150.0	160.0	150.0	160.0		
36"		143.3	143.3	150.0	160.0		
42"	120"	122.8	122.8	150.0	160.0		
45"		114.6	114.6	150.0	150.0		
48"			_	100.0	138.0		
54"		_		90.0	117.0		

	MULLIO	N/JAMB DE	SIGN LOAD CAPACITY - PSF				
			W/0	REINF.	WITH REINF.		
	NOMINAL DIMS.		JAMI	3 'J1' 3 'J3' 0N 'M1'	JAMB 'J2' MULLION 'M2'		
	WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	
	30"		_	_	100.0	138.0	
	36"	126"	-	_	100.0	138.0	
	42"			_	100.0	138.0	
	45"		-		100.0	138.0	
	48"			_	100.0	138.0	
	54"		_		90.0	117.0	
	30"		_		100.0	138.0	
	36"	132"	_	-	100.0	138.0	
	42"				100.0	138.0	
	45"		-	_	100.0	138.0	
	48"		_	_	90.0	110.0	
	30"	138"	-	_	100.0	138.0	
	36"		_	_	100.0	138.0	
	42"		_	-	100.0	138.0	
	45"		_	_	90.0	110.0	
	48"				90.0	110.0	
	30"		494	-	100.0	138.0	
	36"	-		_	100.0	138.0	
	42"	144"		-	100.0	130.1	
	45"			_	90.0	110.0	
	48"			_	90.0	110.0	
	30"			_	90.0	110.0	
	36"		_	_	90.0	110.0	
	42"	147-1/2"	_	_	90.0	110.0	
	45"		_	-	90.0	110.0	
	47-1/2"		_		90.0	110.0	



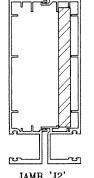


J1 ALUM Ix IN^4 19.9014 Sx IN^3 5.5626



MULLION 'M1'

N	11	ALUM		
Ix	IN^4	21.4964		
Sx	IN ³	6.0405		



JAMB 'J2' MULLION 'M2'

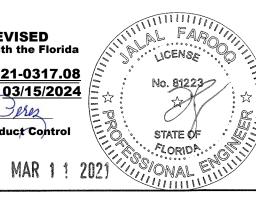
	Ix IN^4	Sx IN^3
ALUMINUM	21.4964	6.0498
STEEL	5.2083	2.0833
TOTAL	36.5996	

PRODUCT REVISED
as complying with the Florida
Building Code NOA-No. 21-0317.08

Expiration Date: 03/15/2024

By: Manuel Pres

Miami-Dade Product Control



		by description	MANUF. NAME REV.	UPDATED TO 2014 FBC	REV. PER RER COMMENTS	UPDATED TO 2020 FBC	
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	revisions:	no date	K 08.01.14	L 05.13.16	M 10.03.17	N 11.20.20	
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

| HP3070 ALUM. WINDOW WALL SYSTEM (L.M.I.) | TECNOGLASS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 | TEL. (305) 638–5151 FAX. (305) 638–5158

MULLION SPAN 120" MAX. W/O REINF. 147 1/2" MAX. W/ REINF

MULLION SPAN 120" MAX. W/O REINF. 147 1/2" MAX. W/ REINF

W2

W1 + W2

2

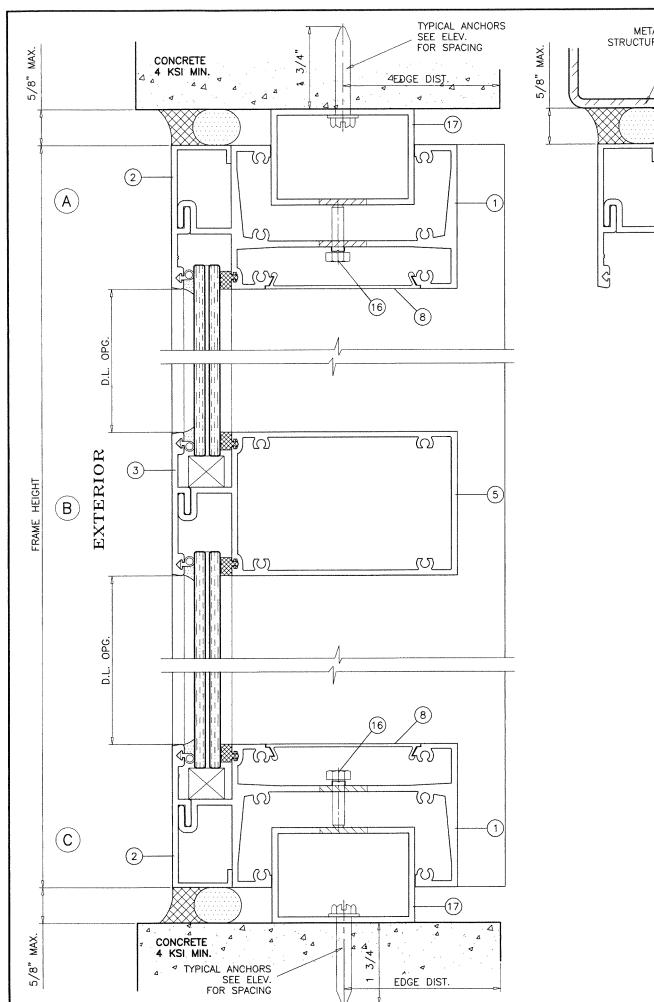
W1

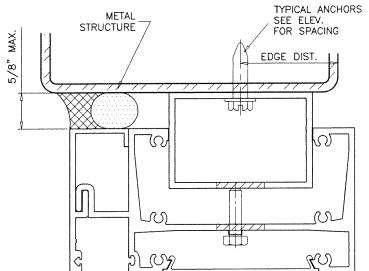
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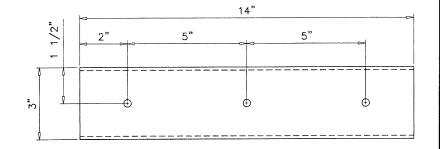
AT FRAME MULLION

W03 - 115

sheet 3 of 7







ANCHOR TUBE HOLES PATTERN

METAL STRUCTURES NOT BY 'TECNOGLASS' MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)

DIRECTLY INTO CONCRETE

1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)

5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)

INTO METAL STRUCTURES (HEAD/SILL) (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE ALUMINUM: 3/16" THK. MIN. (6063-T6 MIN.) STEEL: 3/16" THK. MIN. (Fy = 36 KSI MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE = 3-1/8" MIN. INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE AT HEAD OR SILL f'c = 4000 PSI MIN.

SEALANTS:

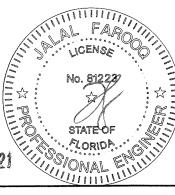
ALL FRAME CORNERS AND MULLION SEAMS SEALED WITH SILICONE.

> **PRODUCT REVISED** as complying with the Florida Building Code 21-0317.08 NOA-No.

Expiration Date: <u>03/15/2024</u> By: Manuel Peres

Miami-Dade Product Control

MAR 1 ! 2021



(C.A.N. 3538) FAX. (305) 262-6978

 AL-FAROOQ CORPORATION

 ENGINEERS & PRODUCT DEVELOPMENT

 9360 SUNSET DRIVE, SUITE 220

 MIAMI, FLORIDA 33173
 (C.A.N. 3538)

 TEL. (305) 264-8100
 FAX. (305) 262-6978

(L.M.I.)

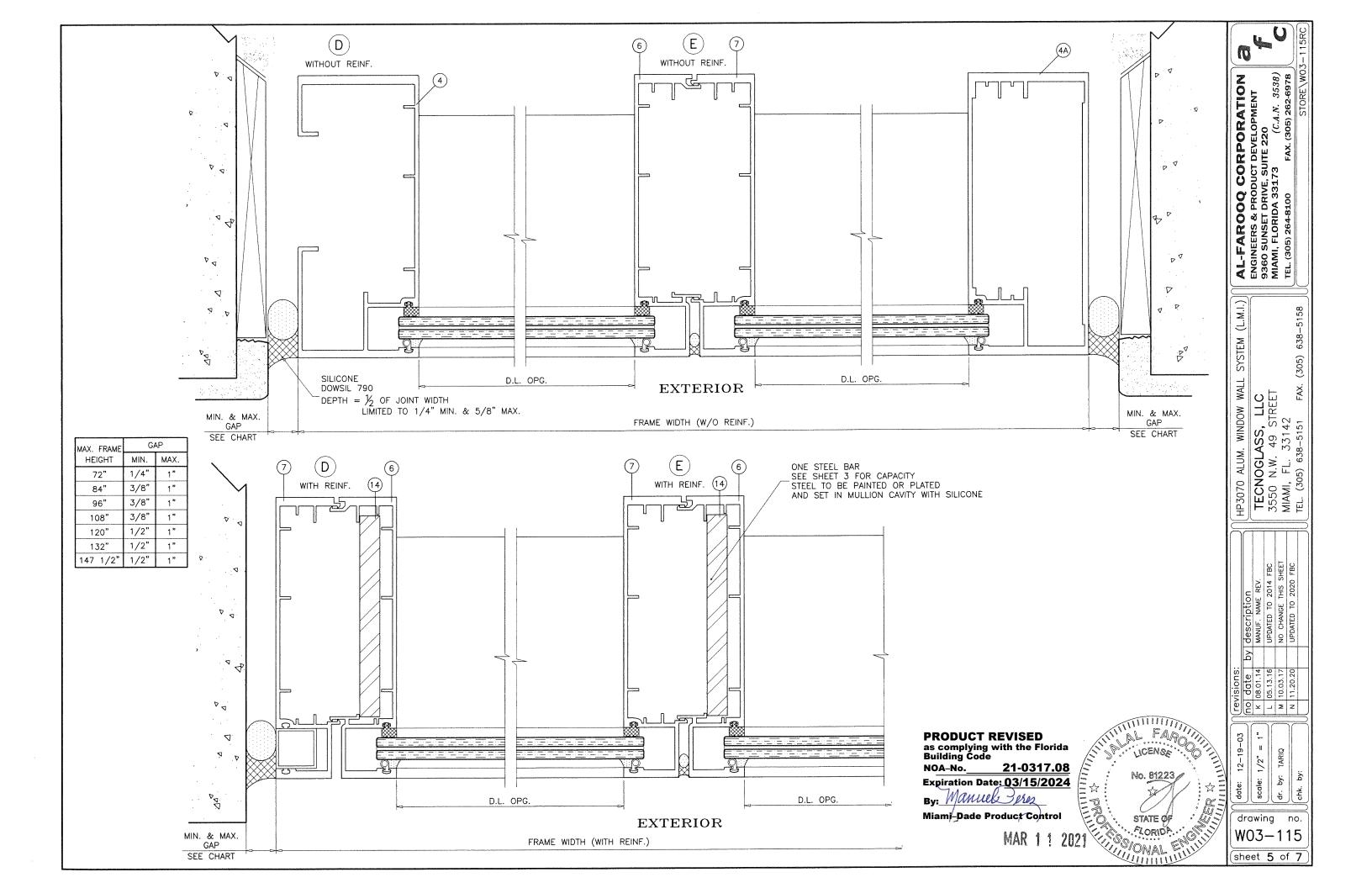
HP3070 ALUM. WINDOW WALL SYSTEM TECNOGLASS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638–5151 FAX.

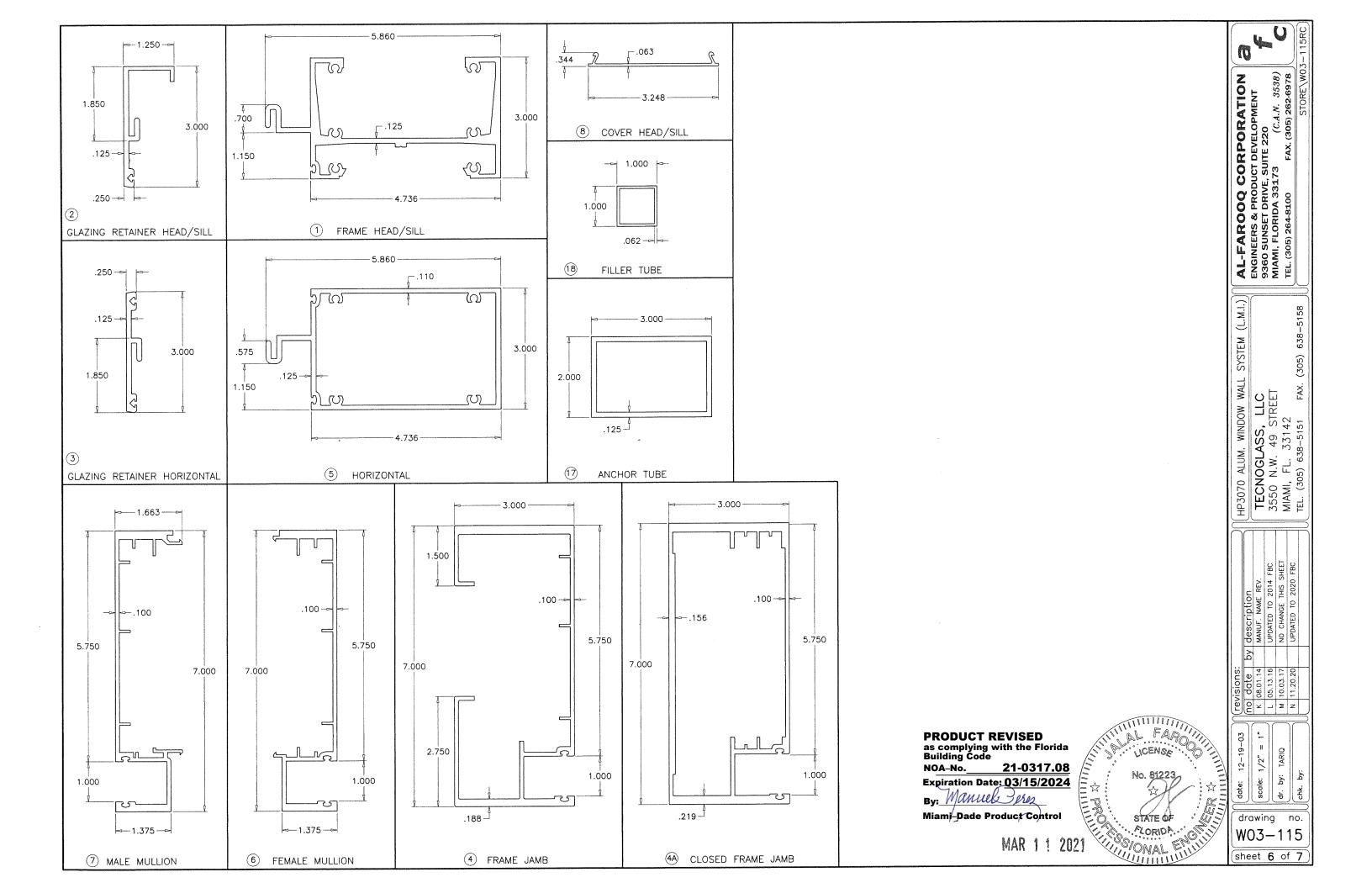
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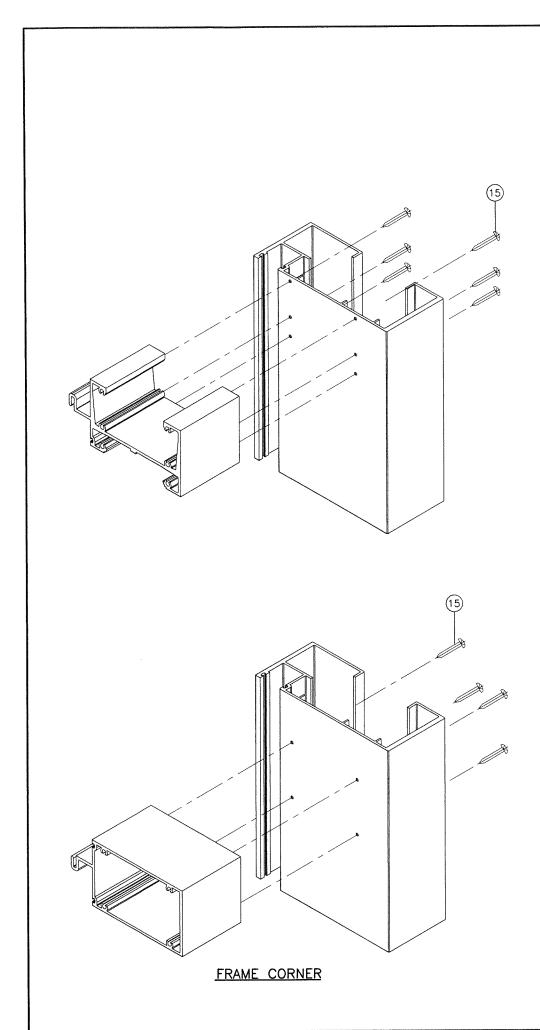
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drawing no.

W03-115 sheet 4 of 7





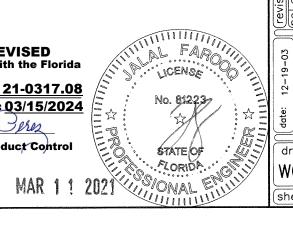


MATERIALS LIST					
ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	HP3060-051	AS REQD.	FRAME HEAD/SILL	6005-T6	_
2	FX345-006	AS REQD.	GLAZING RETAINER (HEAD/SILL)	6063-T6	 -
3	FX345-005	AS REQD.	GLAZING RETAINER (HORIZONTAL)	6063-T6	_
4	HP3060-044	AS REQD.	FRAME JAMB	6063-T6	
4A	HP3060-066	AS REQD.	CLOSED FRAME JAMB	6005-T6	
5	HP3060-041	AS REQD.	HORIZONTAL	6063-T6	_
6	HP3060-042	AS REQD.	FEMALE MULLION	6063-T6	_
7	HP3060-043	AS REQD.	MALE MULLION	6063-T6	_
8	HP3060-011	AS REQD.	SNAP-IN COVER HEAD/SILL	6063-T6	
9	WV-3289	AS REQD.	BULB GASKET	VINYL	WIBORG
10	V-088	AS REQD.	OFFSET GASKET	TPE	MELTPOINT, DUROMETER 75±5 SHORE A
11	_	2/ LITE	SETTING BLOCKS (3/4" X 5/8" X 3-1/4")	EPDM	LOWE, DUROMETER 80±5 SHORE A
11A	-	2/ LITE	SETTING BLOCKS (1/2" X 1/4" X 4")	EPDM	LOWE, DUROMETER 80±5 SHORE A
12	_		SEALANT DOW CORNING 995	SILICONE	
13			SEALANT DOW CORNING 795	SILICONE	_
14	A-36	AS REQD.	REINFORCING BAR (1/2" X 5"), FULL LENGTH	STEEL	SILICONED IN PLACE
15		AS REQD.	FRAME ASSEMBLY SCREWS	_	# 12 X 1-1/4" PH SMS
16	****	AS REQD.	LEVELING SCREWS	_	1/4-20 X 3/4" HH MS
17		AS REQD.	ANCHOR TUBE (2 X 3 X 1/8")	_	14" LONG
18	-	AS REQD.	FILLER TUBE	6063-T5	-
19		AS REQD.	3/16" X 1/2" NORTON SINGLE FACE TAPE	_	V2100 SERIES

PRODUCT REVISED
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Expiration Date: 03/15/2024

By: Manuel Product Control



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by description
MANUF. NAME REV.
UPDATED TO 2014 FF
NO CHANGE THIS SHI
UPDATED TO 2020 F

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

drawing no. W03-115 sheet 7 of 7