MIAMI-DADE COUNTY
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
Miami, Florida 33175–2474
T (786) 315–2590 F (786) 315–2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Tecnoglass, LLC
5220 NW 72nd Avenue, Bay No. 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 "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 01 through 07 of 08 (including Sheet 2.1), prepared by AL–Farooq Corporation, with latest revised "K" dated 08/01/14, signed and sealed by Javad Ahmad, P. E., bearing the Miami–Dade County Product Control Renewal 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.

REVISION 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 No. 12–0330.14** and consists of this page 01, evidence pages E–1, E–2 and E–3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**

MIAMI-DADE COUNTY APPROVED

J. Watson 8/28/14

NOA No. 14–0807.11
Expiration Date: March 15, 2019
Approval Date: September 04, 2014

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
   (Submitted under previous NOA's No.'s 10–0525.04, 08–1217.01 and 03–1224.03)
2. Drawing No. **W03–115,** titled "HP–3070 Alum. Window Wall System (L.M.I.)", sheets 01 through 07 of 08 (including Sheet 2.1), prepared by AL–Farooq Corporation, with latest revised "**K**" dated 08/01/14, 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) Cyclic Wind Pressure Loading per FBC, TAS 203–94
   6) Safety Glazing Performance Test, per FBC, ANSI Z 97.1–04 Class A and CPSC 16 CFR 1201, Category II

   along with marked–up drawings and installation diagram of an aluminum window wall system, prepared by the following testing laboratories:
   a) Fenestration Testing Laboratory, Inc., Test Reports No.'s:
      I. **FTL–6123**, dated 03/17/10, signed and sealed by Jorge A. Causo, P. E. (See above items B.1.1 thru B.1.6).
      (Submitted under previous NOA No. 10–0525.04)
      II. **FTL–5934**, dated 04/22/09, **FTL–5935**, dated 04/22/09 and **FTL–5319**, dated 07/05/07, all signed and sealed by Carlos S. Rionda, P. E. (See above item B.1.6).
      (Submitted under previous NOA's No.'s 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. (See above items B.1.1 thru B.1.5).
      (Submitted under previous NOA No. 03–1224.03)
   b) Hurricane Engineering and Testing, Inc., Test Report 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. (See above items B.1.1 through B.1.3).
   (Submitted under previous NOA No. 03–1224.03)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC–2010**, prepared by AL–Farooq Corporation, dated 04/19/10, signed and sealed by Javad Ahmad, P. E.
   (Submitted under previous NOA No. 10–0525.04)
2. **Glazing complies with ASTM E 1300–04**

Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 14–0807.11
Expiration Date: March 15, 2019
Approval Date: September 04, 2014

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11–0624.02** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass® Interlayer**" dated 08/25/11, expiring on 01/14/17.
2. Notice of Acceptance No. **14–0423.15** issued to **Eastman Chemical Company (MA)** for their "**Saflex CP – Saflex and Saflex HP Composite Glass Interlayers with PET Core**" dated 06/19/14, expiring on 12/11/18.

F. STATEMENTS

1. Statement letter of no financial interest, conformance and compliance with the **FBC–2010**, dated 08/05/14, signed and sealed by Javad Ahmad, P. E.
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.
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.
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.
5. Statement letter of no financial interest, conformance and compliance with the **FBC–2007** and **FBC–2010**, dated 03/05/12, signed and sealed by Javad Ahmad, P. E. ***(Submitted under previous NOA No. 12–0330.14)***
6. Laboratory compliance letters prepared by Fenestration Testing Laboratory, Inc., for the following Test Reports No.'s:
   I. **FTL–6123**, dated 03/17/10, signed and sealed by Jorge A. Causo, P. E. ***(Submitted under previous 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 previous NOA's No.'s 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 previous NOA No. 03–1224.03)***
7. Proposal of Safety Glazing Performance Test, per ANSI Z 97.1–04 Class A and CPSC 16 CFR 1201, Category II issued by Product Control, dated 10/24/06, signed by Jaime D. Gascon, P. E. ***(Submitted under previous NOA No. 08–1217.01)***

Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 14–0807.11
Expiration Date: March 15, 2019
Approval Date: September 04, 2014

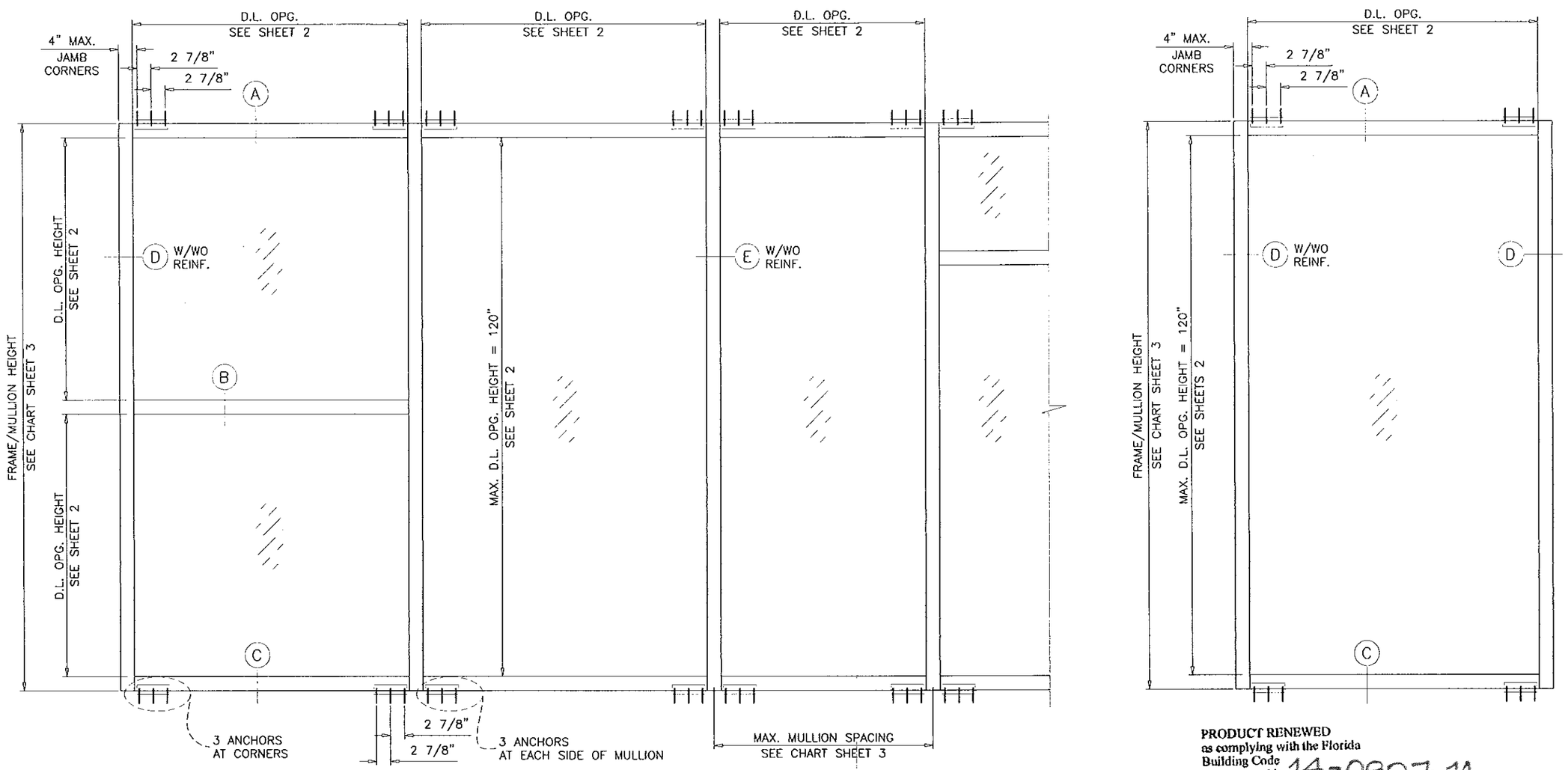
F. STATEMENTS (CONTINUED)

8. 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)
9. Laboratory compliance letters prepared by Hurricane Engineering and Testing, Inc., for the following Test Reports No.'s **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 previous NOA No. 03–1224.03)

G. OTHERS

1. Notice of Acceptance No. **12–0330.14**, issued to R. C. Aluminum Industries, Inc., for their Series "**HP–3070 Aluminum Window Wall System – L.M.I.**", approved on 06/21/12 and expiring on 03/15/14.

Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 14–0807.11
Expiration Date: March 15, 2019
Approval Date: September 04, 2014



TYPICAL ELEVATIONS

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

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

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH MIAMI-DADE COUNTY APPR'D LARGE MISSILE IMPACT RESISTANT DOORS.
FOR CONNECTION DETAILS TO MULLION SEE SEPARATE DOOR NOA.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

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

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.

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.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

STEP 1 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.

STEP 3 CHECK MULLION AND JAMB CAPACITY FOR A GIVEN 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.

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03/15/2019
By
Miami Dade Product Control

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.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
AUG 27 2014

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

STORE \W03-115RC

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

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

revisions:

no	date	by	description
G	09.28.09		REV. PER BCCO COMMENTS
H	04.21.10		GLASS TYPE 'B' ADDED
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		UPDATED TO 2010 FBC
K	08.01.14		MANUF. NAME REV.

date: 12-19-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-115

sheet 1 of 7

GLASS DESIGN LOAD CAPACITY – PSF

NOMINAL DIMS		GLASS TYPE 'A'	GLASS TYPE 'A1'	GLASS TYPE 'B'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+)	INT. (–)
24"	60"	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"		160.0	110.0	74.0	117.0
48"		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
63"		150.0	110.0	74.0	117.0
66"		150.0	110.0	74.0	117.0
69"		150.0	110.0	74.0	117.0
72"		150.0	–	–	–
24"	66"	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"		150.0	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
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"	72"	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"		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	–	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

NOMINAL DIMS		GLASS TYPE 'A'	GLASS TYPE 'A1'	GLASS TYPE 'B'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+)	INT. (–)
24"	78"	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"		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	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	–	74.0	117.0
60"		145.0	–	74.0	117.0
63"		141.0	–	74.0	117.0
24"	84"	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"		150.0	110.0	74.0	117.0
39"		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	110.0	74.0	117.0
51"		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"	90"	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"		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"	96"	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"		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

NOMINAL DIMS		GLASS TYPE 'A'	GLASS TYPE 'A1'	GLASS TYPE 'B'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (–)	EXT. (+) INT. (–)	EXT. (+)	INT. (–)
24"	102"	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"		150.0	110.0	74.0	117.0
39"		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"		–	–	74.0	117.0
24"	108"	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"		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"	114"	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"		150.0	110.0	74.0	117.0
36"		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"	120"	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"		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 E1300–04 (3 SEC. GUSTS).

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03.15.2019
By
Miami Dade Product Control

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

AUG 27 2014

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

STORE\W03-115RC

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

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

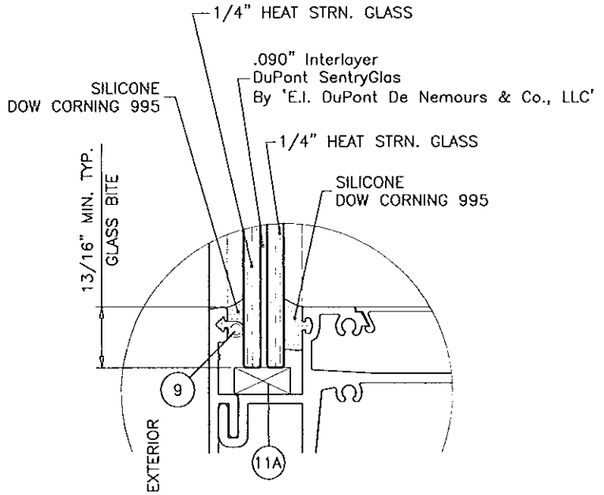
revisions:

no.	date	by	description
G	09.28.09		NO CHANGE THIS SHEET
H	04.21.10		CLASS TYPE 'B' ADDED
I	08.04.10		REV. PER BCCO COMMENTS
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

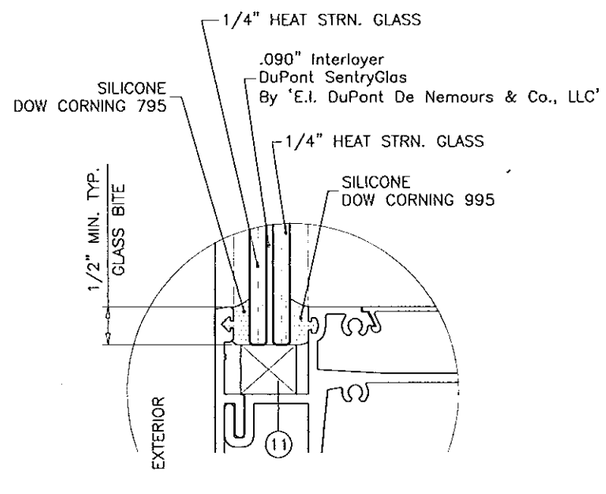
date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115

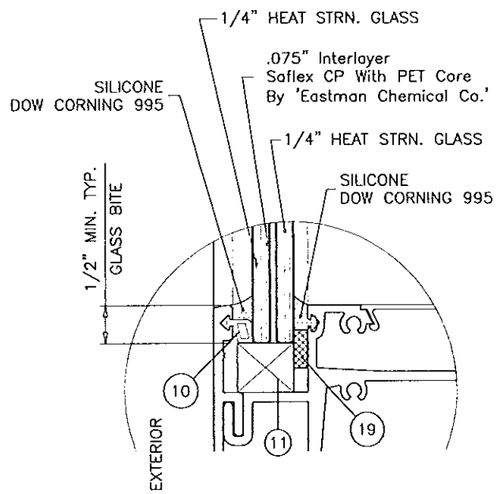
sheet 2 of 7



GLASS TYPE 'A'



GLASS TYPE 'A1'



GLASS TYPE 'B'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03/15/2019
By
Miami Dade Product Control

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

AUG 27 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-115RC

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

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

revisions:			
no	date	by	description
H	04.21.10		GLASS TYPE 'B' ADDED
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		UPDATED TO 2010 FBC
K	08.01.14		MANUF. NAME REV.

date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115

sheet 2.1 of 7

MULLION/JAMB DESIGN LOAD CAPACITY – PSF

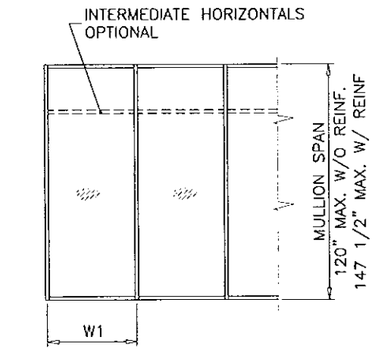
NOMINAL DIMS.		W/O REINF. JAMB 'J1' JAMB 'J3' MULLION 'M1'		WITH REINF. JAMB 'J2' MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	66"	150.0	160.0	150.0	160.0
36"		150.0	160.0	150.0	160.0
42"		150.0	160.0	150.0	160.0
45"		150.0	160.0	150.0	160.0
48"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		150.0	160.0	150.0	160.0
66"		150.0	160.0	150.0	160.0
72"		150.0	160.0	150.0	160.0
30"	72"	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"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		150.0	160.0	150.0	160.0
66"		150.0	160.0	150.0	160.0
72"		150.0	160.0	150.0	160.0
30"	78"	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"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		150.0	160.0	150.0	160.0
66"		150.0	160.0	150.0	160.0
72"		–	–	100.0	138.0
30"	84"	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"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		150.0	160.0	150.0	160.0
66"		150.0	150.0	150.0	150.0
72"		–	–	100.0	138.0
30"	90"	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"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		150.0	150.0	150.0	150.0
66"		–	–	100.0	138.0
72"		–	–	90.0	117.0

MULLION/JAMB DESIGN LOAD CAPACITY – PSF

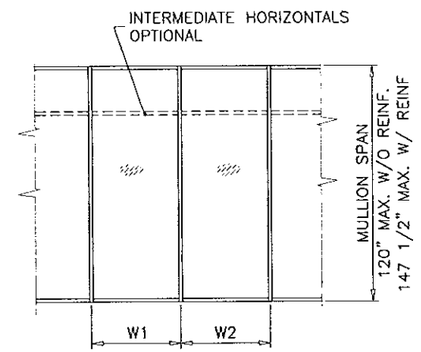
NOMINAL DIMS.		W/O REINF. JAMB 'J1' JAMB 'J3' MULLION 'M1'		WITH REINF. JAMB 'J2' MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	96"	150.0	160.0	150.0	160.0
36"		150.0	160.0	150.0	160.0
42"		150.0	160.0	150.0	160.0
45"		150.0	160.0	150.0	160.0
48"		150.0	160.0	150.0	160.0
54"		150.0	160.0	150.0	160.0
60"		–	–	100.0	138.0
66"		–	–	90.0	117.0
72"		–	–	90.0	117.0
30"	102"	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"		150.0	160.0	150.0	160.0
54"		150.0	150.0	150.0	150.0
60"		–	–	100.0	138.0
66"		–	–	90.0	117.0
30"	108"	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"		150.0	160.0	150.0	160.0
54"		–	–	100.0	138.0
60"		–	–	90.0	117.0
30"	114"	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"		150.0	150.0	150.0	150.0
54"		–	–	90.0	117.0
60"		–	–	90.0	117.0
30"	120"	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	150.0	150.0	150.0
48"		–	–	100.0	138.0
54"		–	–	90.0	117.0

MULLION/JAMB DESIGN LOAD CAPACITY – PSF

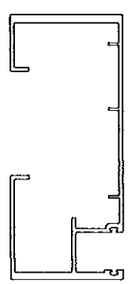
NOMINAL DIMS.		W/O REINF. JAMB 'J1' JAMB 'J3' MULLION 'M1'		WITH REINF. JAMB 'J2' MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	126"	–	–	100.0	138.0
36"		–	–	100.0	138.0
42"		–	–	100.0	138.0
45"		–	–	100.0	138.0
48"		–	–	100.0	138.0
54"		–	–	90.0	117.0
30"	132"	–	–	100.0	138.0
36"		–	–	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"	144"	–	–	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"	147-1/2"	–	–	90.0	110.0
36"		–	–	90.0	110.0
42"		–	–	90.0	110.0
45"		–	–	90.0	110.0
47-1/2"		–	–	90.0	110.0



WIDTH (W) = W1
AT FRAME JAMB

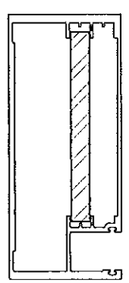


WIDTH (W) = $\frac{W1 + W2}{2}$
AT FRAME MULLION



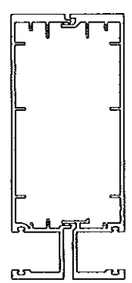
JAMB 'J1'

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



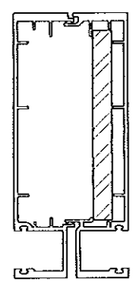
JAMB 'J3'

J3	ALUM
Ix IN^4	22.7838
Sx IN^3	6.4247



MULLION 'M1'

M1	ALUM
Ix IN^4	21.4964
Sx IN^3	6.0405



JAMB 'J2'
MULLION 'M2'

J2/M2	ALUM	STEEL
Ix IN^4	21.4964	5.2083
Sx IN^3	6.0498	2.0833

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03/15/2019
By
Miami Dade Product Control

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

AUG 27 2014

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE\W03-115RC

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

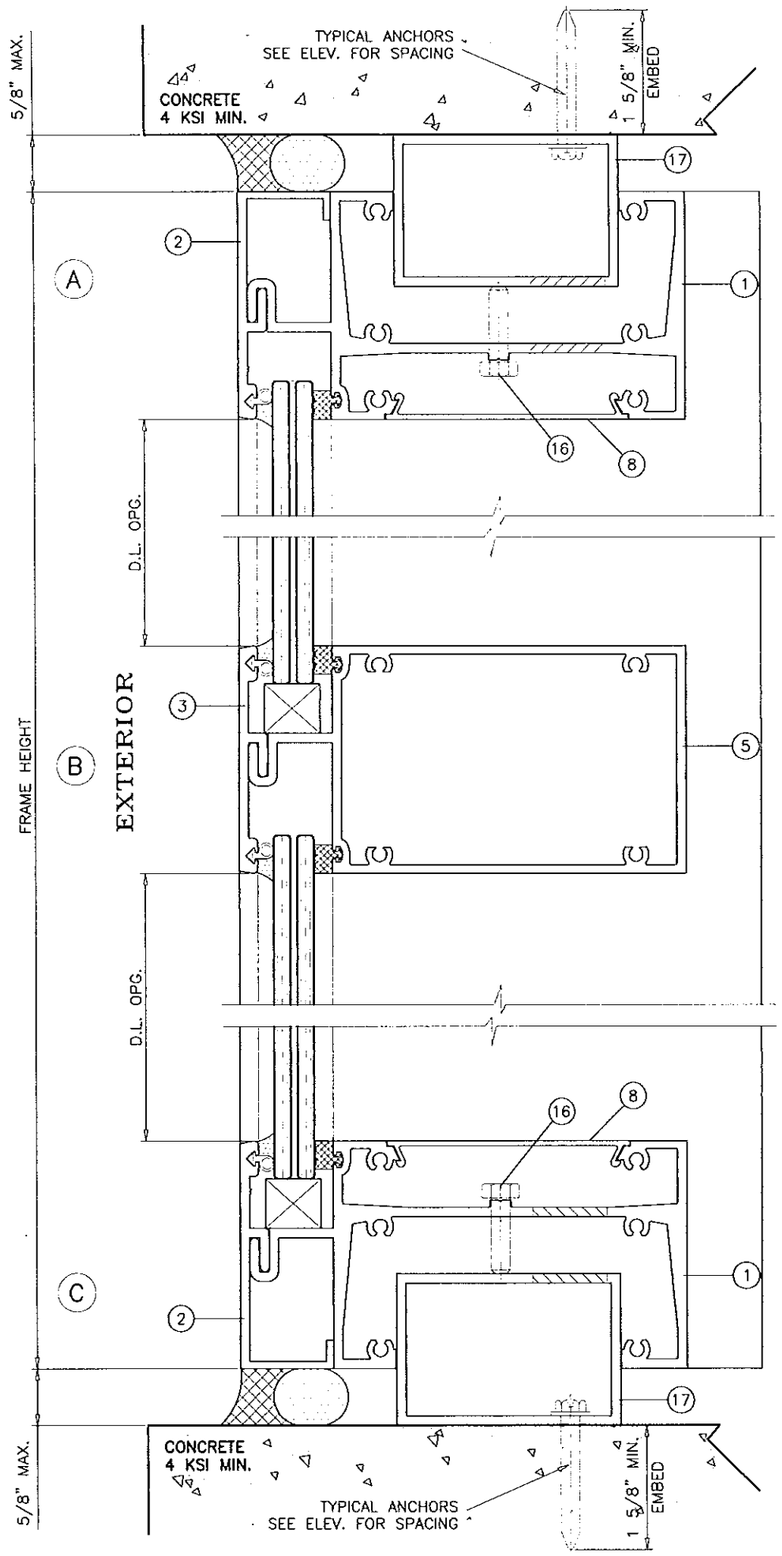
TECNOGLASS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

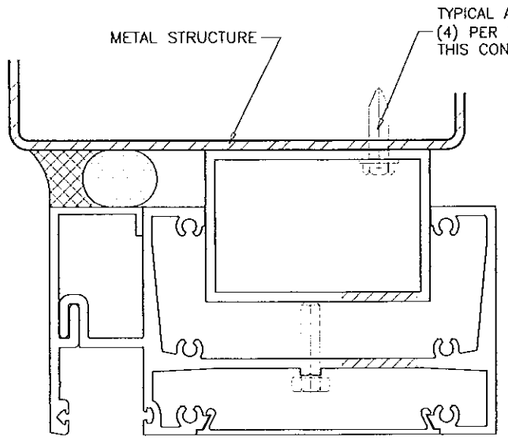
revisions:			
no.	date	by	description
G	09.28.09		REV. PER BCCO COMMENTS
H	04.21.10		CHART REV.
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

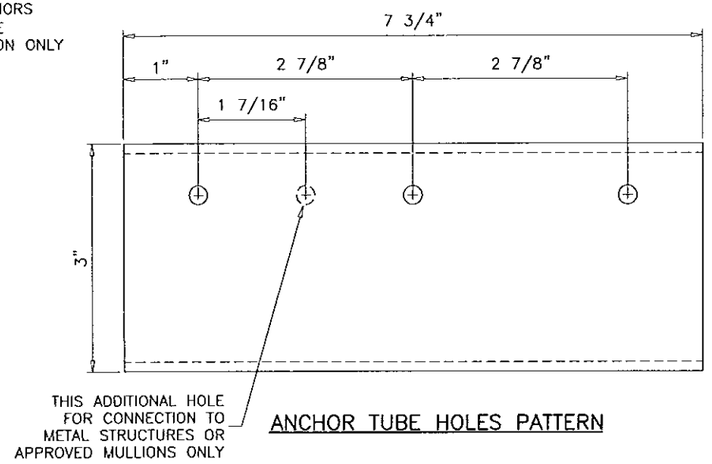
date: 12-19-03
scale: –
dr. by: HAMID
chk. by:

drawing no.
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

1/4" HILTI KWIK-CON II (Fu=163 KSI, Fy=157 KSI)

DIRECTLY INTO CONCRETE (4000 PSI MIN)
1-5/8" MIN. EMBED INTO CONCRETE

1/4" HILTI KWIK-FLEX SELF DRILLING SCREWS (Fu=92 KSI, Fy=120 KSI)

INTO METAL STRUCTURES

STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T6 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

INTO CONCRETE = 2-1/2" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE f'c = 4000 PSI MIN.

SEALANTS:

ALL FRAME CORNERS AND MULLION SEAMS SEALED
WITH SILICONE.

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date ~~03/15~~ 2019
By
Miami Dade Product Control

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

AUG 27 2014

afc
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL (305) 264-8100 FAX. (305) 262-6978
STORE\W03-115RC

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

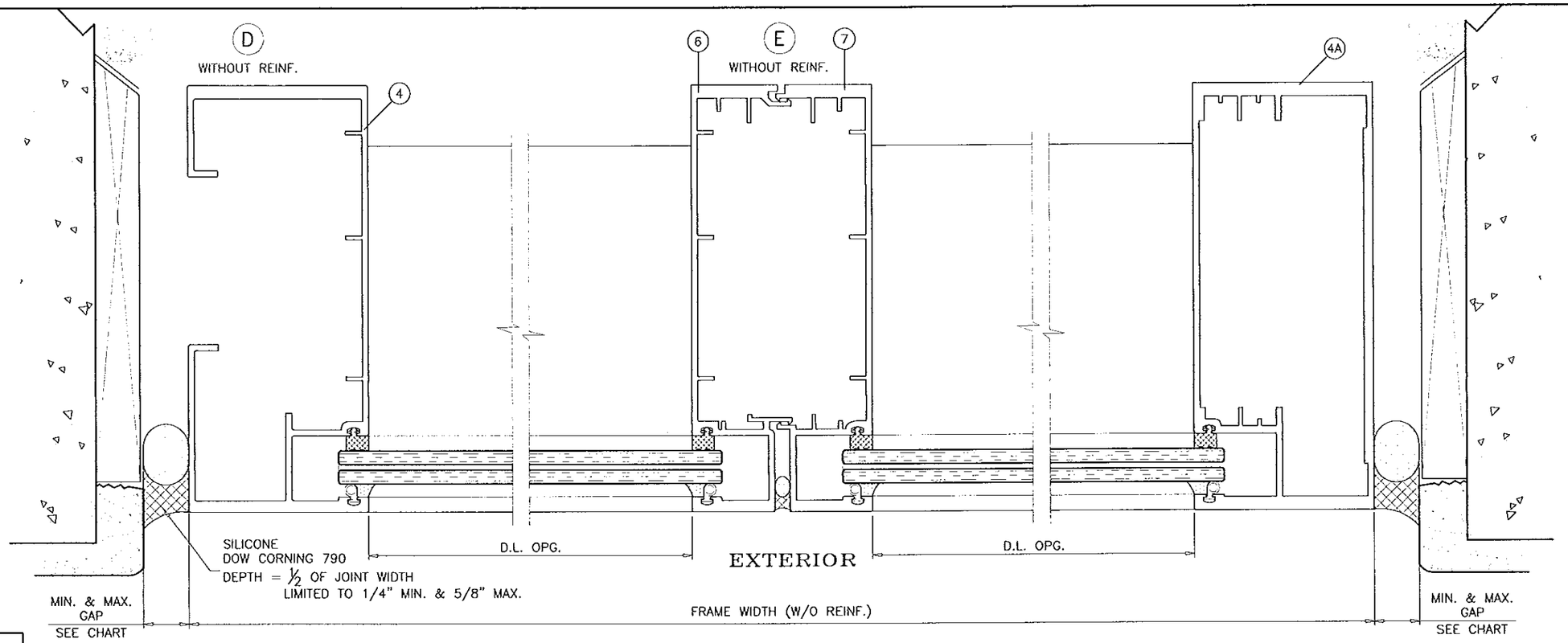
TECNOGLASS, LLC
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 624-7775 FAX. (305) 624-7777

revisions:

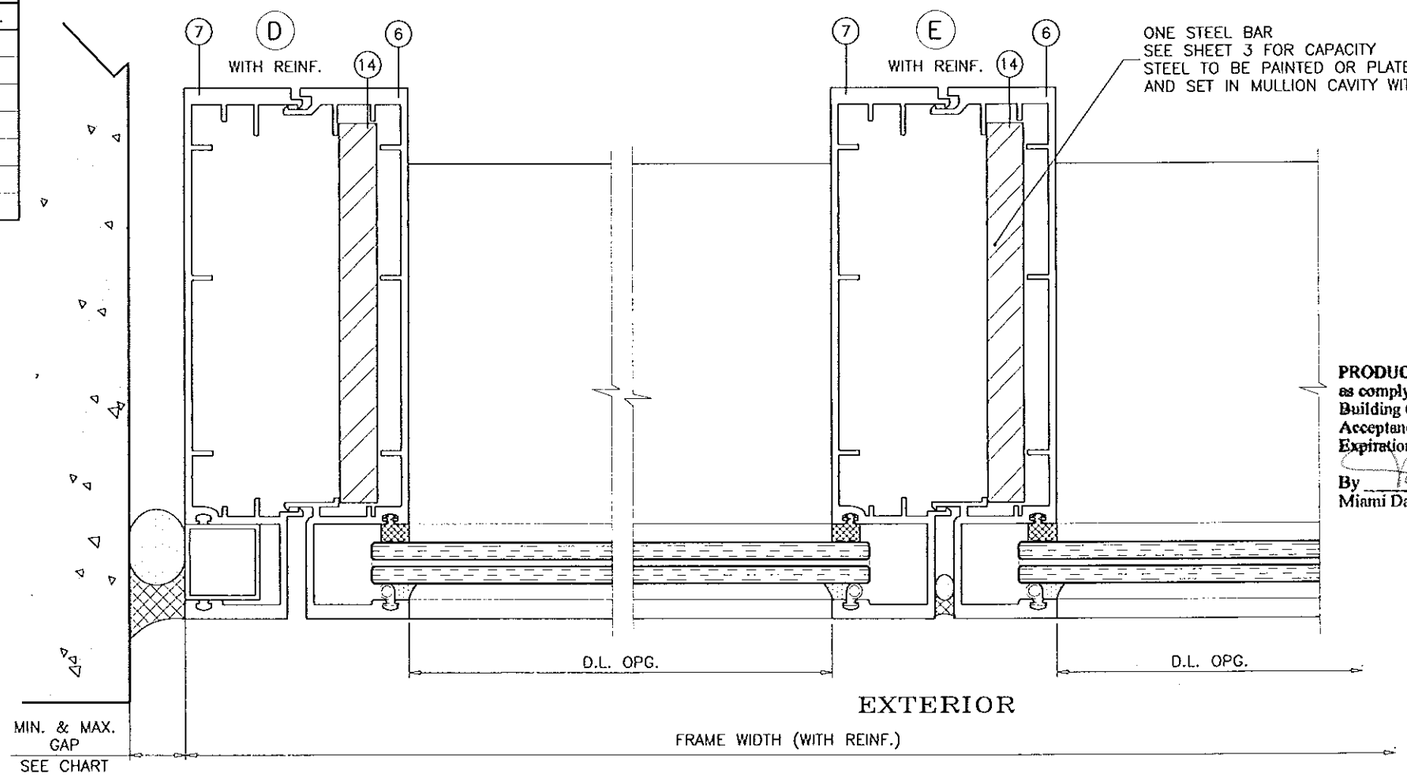
no	date	by	description
G	09.28.09		REV. PER BCCO COMMENTS
H	04.21.10		TUBE LENGTH REV.
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115



MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
72"	1/4"	1"
84"	3/8"	1"
96"	3/8"	1"
108"	3/8"	1"
120"	1/2"	1"
132"	1/2"	1"
147 1/2"	1/2"	1"



PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03/15/2019
By _____
Miami Dade Product Control

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

AUG 27 2014

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

STORE\W03-115RC

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

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

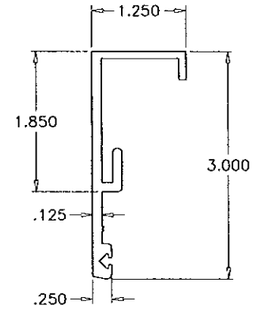
revisions:

no	date	by	description
G	09.28.09		REV. PER BCCO COMMENTS
H	04.21.10		SILICONE GAP REV.
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

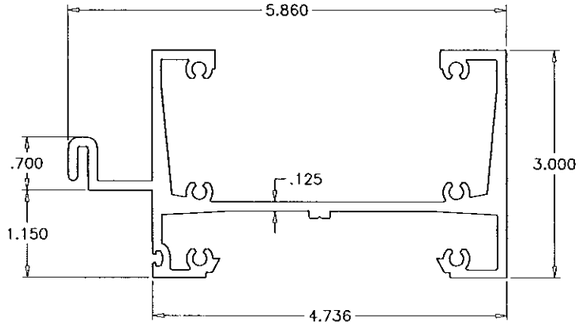
date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115

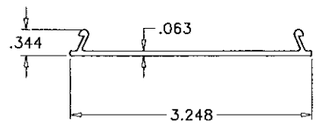
sheet 5 of 7



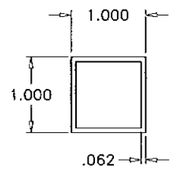
② GLAZING RETAINER HEAD/SILL



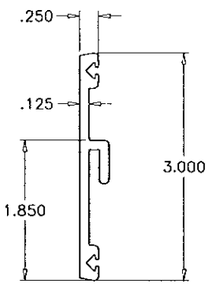
① FRAME HEAD/SILL



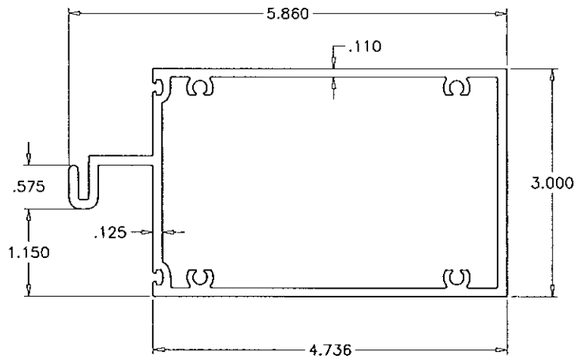
⑧ COVER HEAD/SILL



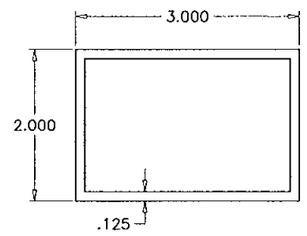
⑱ FILLER TUBE



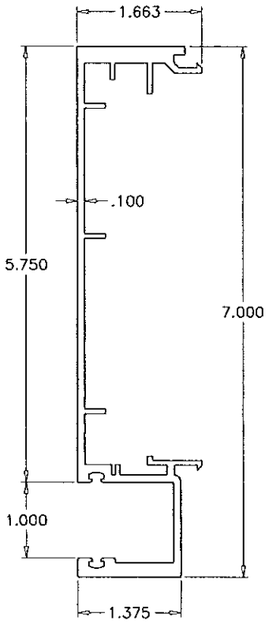
③ GLAZING RETAINER HORIZONTAL



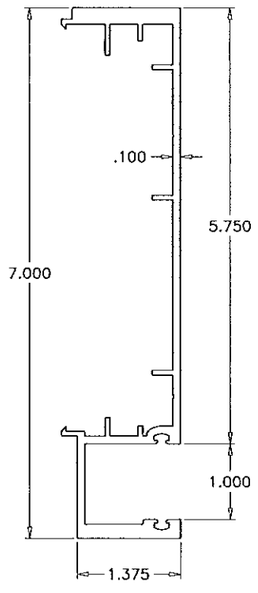
⑤ HORIZONTAL



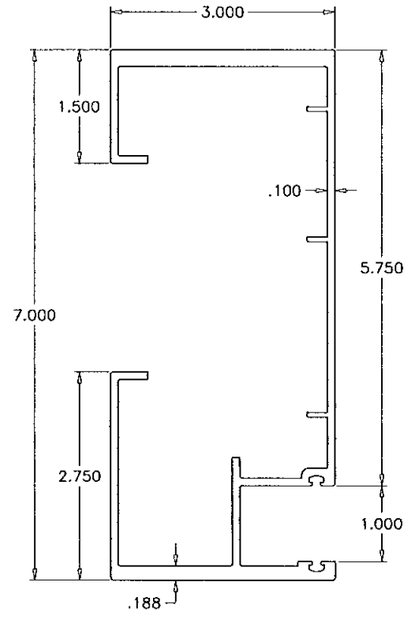
⑰ ANCHOR TUBE



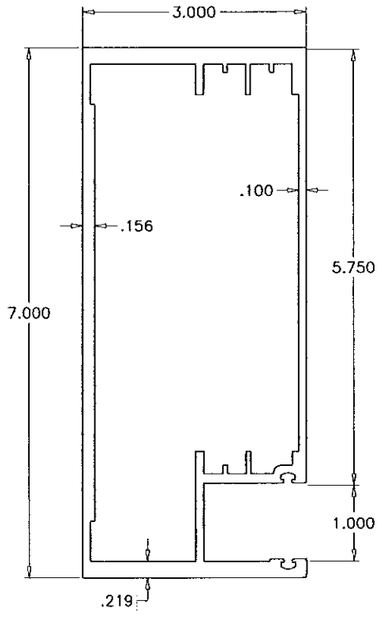
⑦ MALE MULLION



⑥ FEMALE MULLION



④ FRAME JAMB



④A CLOSED FRAME JAMB

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date ~~03/15~~ 2019
By
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
AUG 27 2014

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

STORE\W03-115RC

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

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

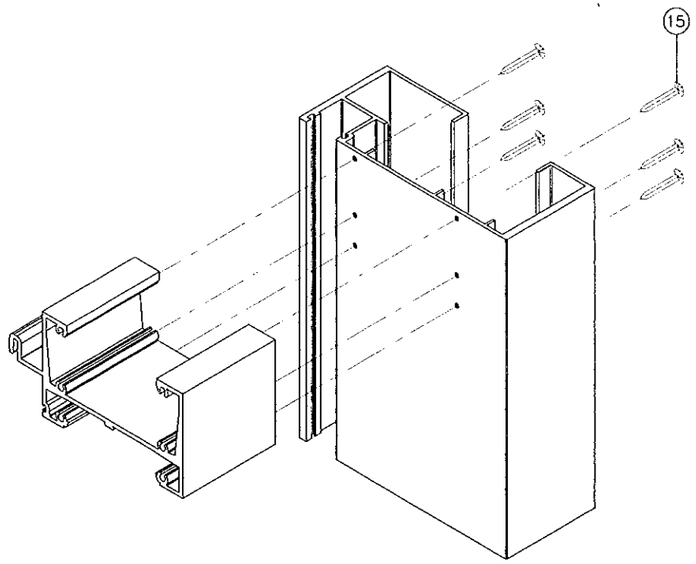
revisions:

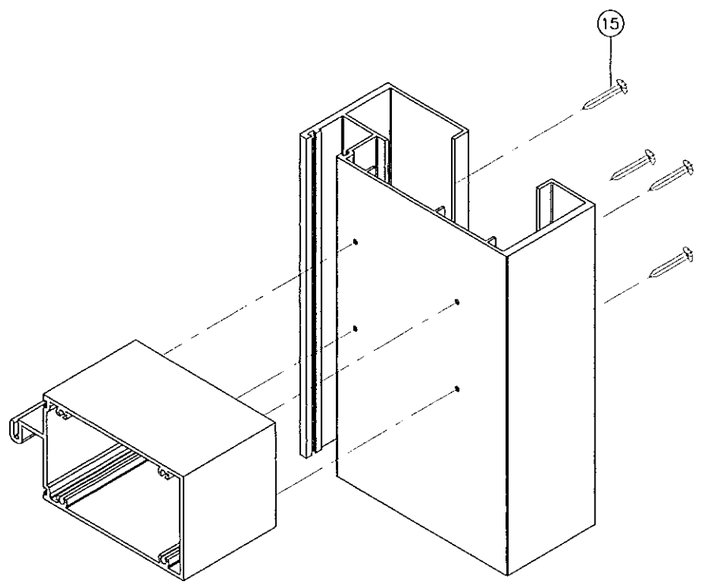
no	date	by	description
G	09.28.09		NO CHANGE THIS SHEET
H	04.21.10		NO CHANGE THIS SHEET
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115

sheet 6 of 7





FRAME CORNER

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")	-	7-3/4" LONG
18	-	AS REQD.	FILLER TUBE	6063-T5	-
19	-	AS REQD.	3/16" X 1/2" NORTON SINGLE FACE TAPE	-	V2100 SERIES

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 14-0807.11
Expiration Date 03/15/2019
By
Miami Dade Product C

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

AUG 27 2014

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

STORE\W03-115RC

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

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

revisions:

no.	date	by	description
G	09.28.09		REV. PER BCCO COMMENTS
H	04.21.10		GLASS TYPE 'B' ADDED
I	08.04.10		NO CHANGE THIS SHEET
J	03.08.12		NO CHANGE THIS SHEET
K	08.01.14		MANUF. NAME REV.

date: 12-19-03
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-115

sheet 7 of 7