



MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/building](http://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 "500-Y" Aluminum Single Hung Window – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **W03-96**, titled "Series 500Y Alum. Single Hung Window (L.M.I.)", sheets 1 through 8 of 8, dated 10/24/03, with revision **J** 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.

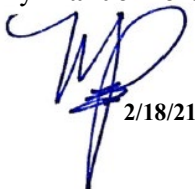
**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**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. 20-0310.17** and consists of this page 1, evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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



  
2/18/21

NOA No. 20-1202.08  
Expiration Date: June 23, 2025  
Approval Date: February 25, 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's No. 07-0706.02 and 05-0519.02)*
2. Drawing No. **W03-96**, titled "Series 500Y Alum. Single Hung Window (L.M.I.)", sheets 1 through 8 of 8, dated 10/24/03, with revision **I** dated 02/22/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.  
*(Submitted under NOA No. 18-0725.08)*

**B. TESTS**

1. Test reports on: 1) Drop Load Test, per CPSC 16 CFR 1201 (ANSI Z97.1) (400 foot pounds) along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Fenestration Testing Laboratories, Inc., Test Report No. **FTL-5321**, dated 07/05/07, signed and sealed by Carlos S. Rionda, P.E.  
*(Submitted under NOA No. 07-0706.02)*
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 single hung window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4521**, dated 02/18/05, signed and sealed by Edmundo J. Largaespada, P.E.  
*(Submitted under NOA No. 05-0519.02)*
3. 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 single hung window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-4353**, dated 01/18/05, signed and sealed by Edmundo J. Largaespada, P.E.  
*(Submitted under NOA No. 05-0519.02)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, dated 04/07/15 and updated on 02/16/18, to comply with **FBC 6<sup>th</sup> Edition (2017)**, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.  
*(Submitted under NOA No. 18-0725.08)*
2. Glazing complies with **ASTM E 1300-09**

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 20-1202.08  
Expiration Date: June 23, 2025  
Approval Date: February 25, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)**

**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® Xtra™ (SGX™) Clear Glass Interlayer**" dated 05/23/19, expiring on 05/23/24.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)**, and of no financial interest, dated February 20, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.  
*(Submitted under NOA No. 20-0310.17)*
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. 14-0923.05)*
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. **12-0330.07**, signed by Raul Casares, for and on behalf of R.C. Aluminum Industries, Inc.  
*(Submitted under NOA No. 14-0923.05)*
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. 14-0923.05)*
5. Laboratory compliance letter for Test Report No. **FTL-5321**, dated 07/05/07, issued by Fenestration Testing Laboratories, Inc., signed and sealed by Carlos S. Rionda, P.E.  
*(Submitted under NOA No. 07-0706.02)*
6. Laboratory compliance letters for Test Reports No. **FTL-4521**, dated 01/18/05 and **FTL-4353**, dated 02/18/05, both issued by Fenestration Testing Laboratories, Inc., signed and sealed by Edmundo J. Largaespada, P.E.  
*(Submitted under NOA No. 05-0519.02)*

**G. OTHERS**

1. Notice of Acceptance No. **18-0725.08**, issued to Tecnoglass, LLC, for their Series "500-Y" Aluminum Single Hung Window – L.M.I., approved on 10/18/18 and expiring on 06/23/20.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 20-1202.08  
Expiration Date: June 23, 2025  
Approval Date: February 25, 2021

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **W03-96**, titled “Series 500Y Alum. Single Hung Window (L.M.I.)”, sheets 1 through 8 of 8, dated 10/24/03, with revision **J** 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, dated 04/07/15 and updated on 02/16/18, to comply with **FBC 6<sup>th</sup> Edition (2017)**, and updated on 11/20/20 to comply with **FBC 7<sup>th</sup> 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® Xtra™ (SGX™) Clear Glass Interlayer**” dated 05/23/19, expiring on 05/23/24.

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 6<sup>th</sup> Edition (2017)**, with **FBC 7<sup>th</sup> Edition (2020)** and of no financial interest, dated November 20, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

**G. OTHERS**

1. Notice of Acceptance No. **20-0310.17**, issued to Tecnoglass, LLC, for their Series “500-Y” Aluminum Single Hung Window – L.M.I., approved on 05/07/20 and expiring on 06/23/25.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 20-1202.08  
Expiration Date: June 23, 2025  
Approval Date: February 25, 2021

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

### SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

SEE SHEET 2 FOR DESIGN LOAD CAPACITY OF SINGLE HUNG WINDOW.

FOR SINGLE HUNG OVER FIXED WINDOW CHECK WINDOWALL CAPACITY  
FROM CHART ON SHEET 5 AND S.H. CAPACITY FROM CHART ON SHEET 2  
LOWER VALUES FROM TWO CHARTS WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE  
REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH 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.

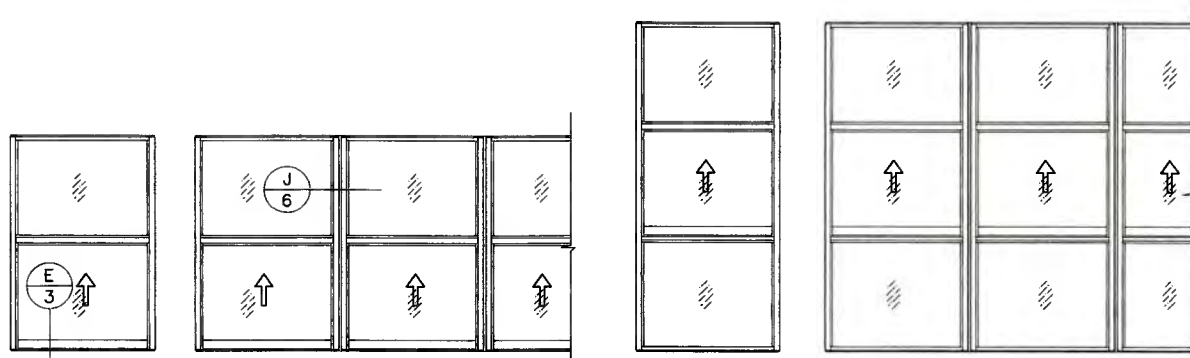
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT  
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE  
REQUIREMENTS OF THE 2017/2020 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)'.

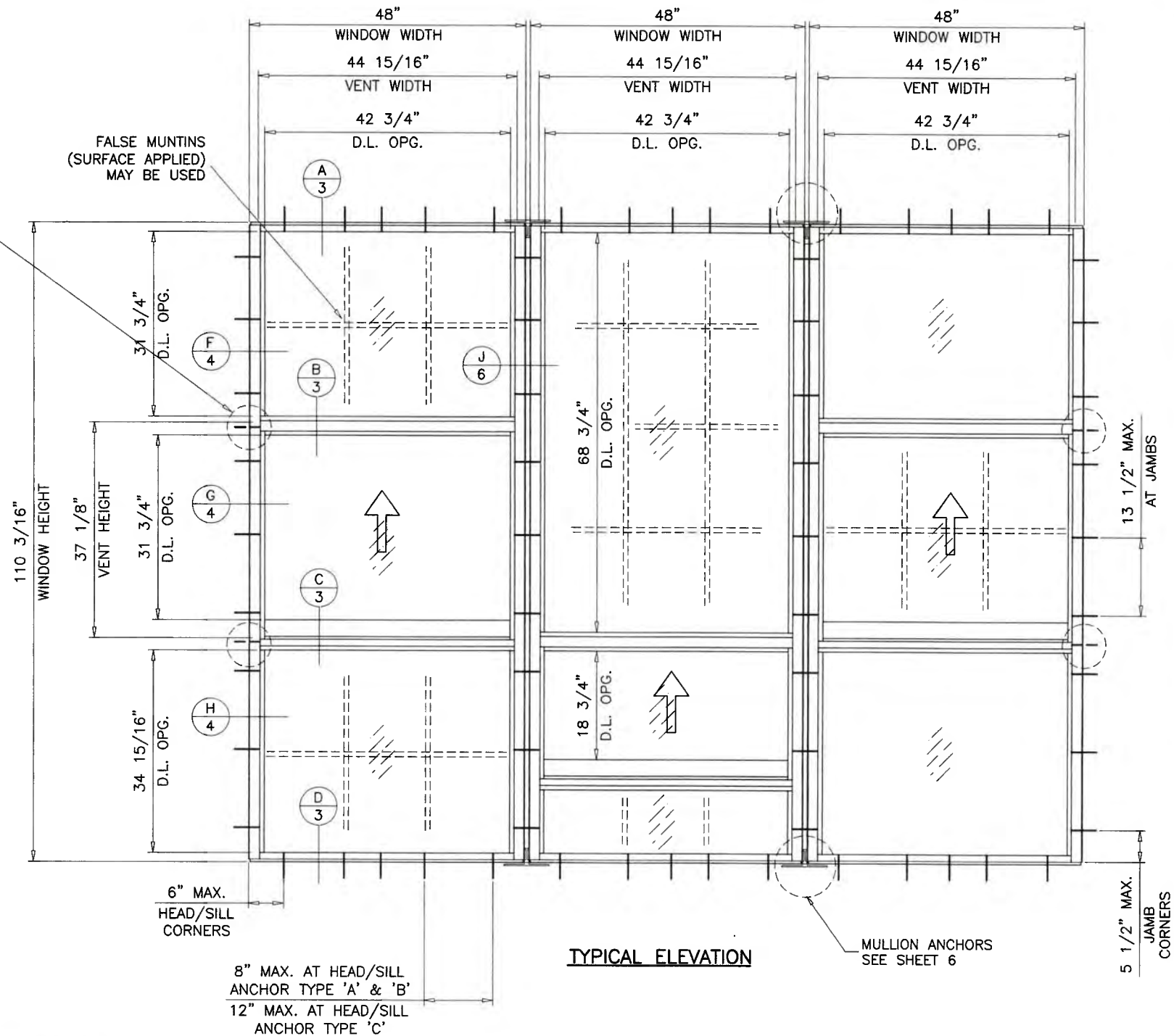


### APPROVED CONFIGURATIONS

APPROVAL APPLIES TO INDIVIDUAL UNITS OF SINGLE HUNG WINDOWS OR SINGLE HUNG OVER FIXED WINDOWS.  
ALSO SIDE BY SIDE COMBINATIONS OF S.H. TO S.H. OR S.H./FIX. TO S.H./FIX. IN MODULES OF TWO OR  
MORE UNITS USING MULLIONS.

ADDL ANCHOR  
AT MTG. STLE ENDS  
REQD. FOR SHIMS  
EXCEEDING 1/4"

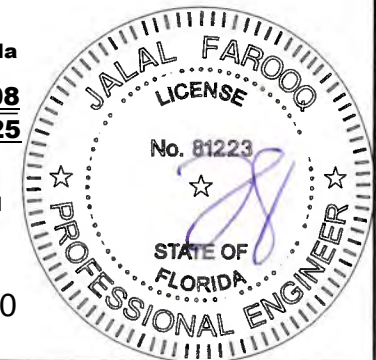
FALSE MUNTINS  
(SURFACE APPLIED)  
MAY BE USED



### TYPICAL ELEVATION

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

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **20-1202.08**  
Expiration Date: **06/23/2025**  
By: *Manuel Perez*  
Miami-Dade Product Control



Sealed: 11/25/2020

**afC**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W03-96RC

SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)  
**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

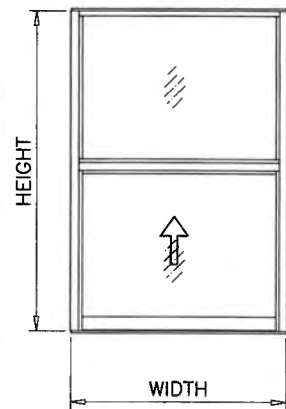
no	date	by	description
F	11.24.09	REV. PER BCCO COMMENTS	
G	03.13.12	UPDATED TO 2010 FBC	
H	04.08.15	UPDATED TO 2014 FBC	
I	02.22.18	UPDATED TO 2017 FBC	
J	11.20.20	UPDATED TO 2020 FBC	

date: 10-24-03  
scale: 1/2"=1'-0"  
dr. by: TARIQ  
chk. by:

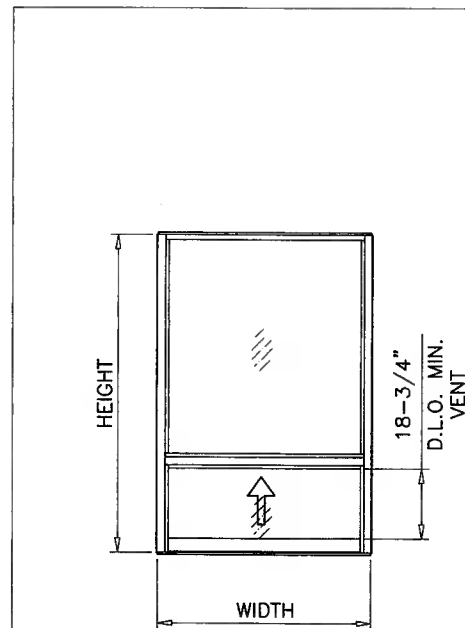
drawing no.  
**W03-96**  
sheet 1 of 8

EQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		3/8" MAX. SHIMS	
		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
36"	36"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		89.7	116.6
66"		67.0	87.1
72"		51.3	66.7
36"	42"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		77.9	101.3
66"		58.0	75.4
72"		44.4	57.7
36"	48"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		96.5	125.5
60"		69.2	90.0
66"		51.4	66.9
72"		39.3	51.1
36"	54"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		87.7	114.0
60"		62.7	81.5
66"		46.4	60.3
72"		35.3	45.9
36"	60"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		81.0	105.3
60"		57.6	74.8
66"		42.4	55.2
72"			
36"	66"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		75.8	98.5
60"		53.5	69.6
72"			
78"			
36"	72"	100.0	130.0
42"		100.0	130.0
48"		100.0	129.4
54"		71.7	93.2
60"			
72"			
78"			
36"	78"	100.0	130.0
42"		100.0	130.0
48"		100.0	126.7
54"		68.5	89.1
60"			
72"			
78"			

EQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		3/8" MAX. SHIMS	
		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
36"	84"	100.0	130.0
42"		100.0	130.0
48"		100.0	125.1
36"	89-1/4"	100.0	130.0
42"		100.0	130.0
48"		100.0	124.7
36"	90"	100.0	130.0
42"		100.0	130.0
36"	96"	100.0	130.0
42"		100.0	130.0

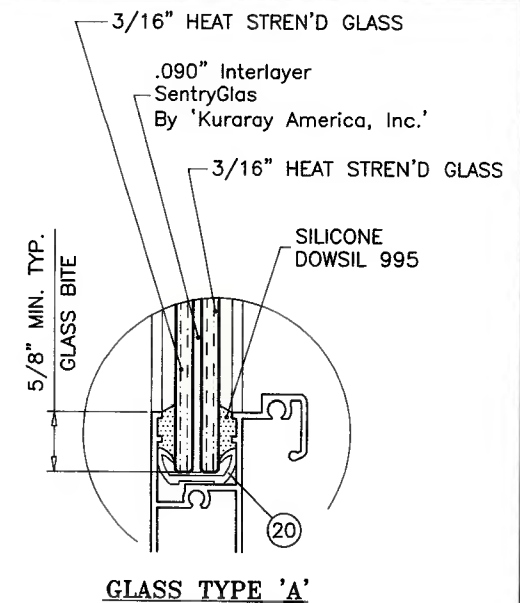


EQUAL LITES  
SINGLE HUNG WINDOWS

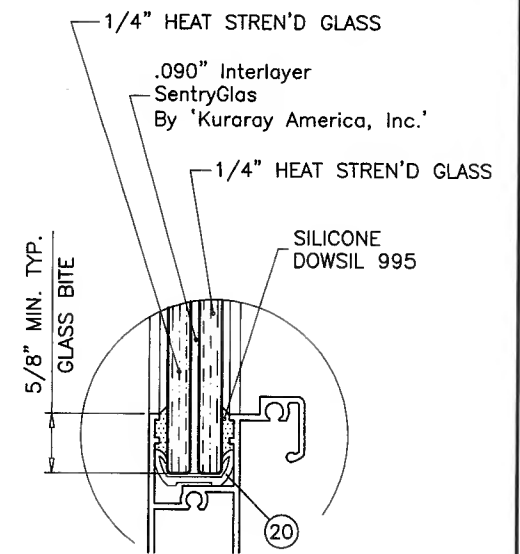


UNEQUAL LITES (ORIEL)  
SINGLE HUNG WINDOWS

UNEQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF											
WINDOW DIMS.		3/8" MAX. SHIMS				1/4" MAX. SHIMS					
		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'A'		GLASS TYPE 'B'			
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	48"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
54"		81.9	110.5	81.9	110.5	-	-	-	-	-	-
60"		58.7	79.3	58.7	79.3	-	-	-	-	-	-
66"		43.6	58.9	43.6	58.9	-	-	-	-	-	-
72"		33.3	45.0	33.3	45.0	-	-	-	-	-	-
36"	54"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
54"		74.9	101.1	74.9	101.1	-	-	-	-	-	-
60"		53.4	72.1	53.4	72.1	-	-	-	-	-	-
66"		39.5	53.3	39.5	53.3	-	-	-	-	-	-
72"		30.1	40.6	30.1	40.6	-	-	-	-	-	-
36"	60"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	103.1	139.2	-	-	-	-	-	-
54"		70.1	94.7	70.1	94.7	-	-	-	-	-	-
60"		49.6	67.0	49.6	67.0	-	-	-	-	-	-
66"		36.5	49.3	36.5	49.3	-	-	-	-	-	-
72"		27.7	37.3	27.7	37.3	-	-	-	-	-	-
36"	66"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	100.6	135.9	-	-	-	-	-	-
54"		67.1	90.5	67.1	90.5	-	-	-	-	-	-
60"		47.0	63.5	47.0	63.5	-	-	-	-	-	-
66"		34.3	46.3	34.3	46.3	-	-	-	-	-	-
72"		25.9	34.9	25.9	34.9	-	-	-	-	-	-
36"	72"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	100.0	135.0	-	-	-	-	-	-
54"		65.4	88.2	65.4	88.2	-	-	-	-	-	-
60"		45.3	61.1	45.3	61.1	-	-	-	-	-	-
66"		-	-	32.8	44.2	-	-	-	-	-	-
72"		-	-	-	-	-	-	-	-	-	-
36"	78"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	128.4	100.0	128.4	100.0	130.0	100.0	135.0	-	-
54"		64.9	87.6	64.9	87.6	-	-	-	-	-	-
60"		-	-	44.3	59.8	-	-	-	-	-	-
72"		-	-	-	-	-	-	-	-	-	-
78"		-	-	-	-	-	-	-	-	-	-
36"	84"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
48"		100.0	130.0	100.0	130.8	-	-	100.0	135.0	-	-
54"		-	-	64.9	87.6	-	-	-	-	-	-
60"		-	-	-	-	-	-	-	-	-	-
72"		-	-	-	-	-	-	-	-	-	-
84"		-	-	-	-	-	-	-	-	-	-
36"	89-1/4"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	134.3	-	-	106.7	140.0	-	-
48"		100.0	130.0	100.0	120.8	-	-	100.0	131.4	-	-
54"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
60"		100.0	130.0	106.7	132.9	-	-	106.7	140.0	-	-
66"		-	-	100.0	119.5	-	-	100.0	130.0	-	-
72"		100.0	130.0	106.7	140.0	-	-	-	-	-	-
36"	96"	100.0	130.0	106.7	140.0	-	-	-	-	-	-
42"		100.0	130.0	106.7	136.2	-	-	106.7	140.0	-	-
48"		-	-	100.0	122.1	-	-	100.0	135.0	-	-



GLASS TYPE 'A'

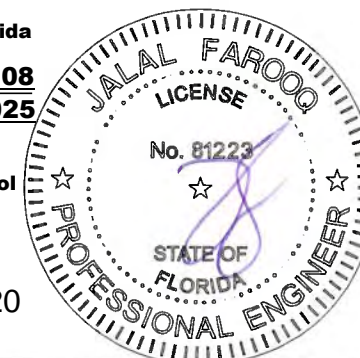


GLASS TYPE 'B'

GLAZING OPTIONS

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. **20-1202.08**  
Expiration Date: **06/23/2025**  
By: *Manuel Perez*  
Miami-Dade Product Control



Sealed: 11/25/2020

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 262-6978 FAX. (305) 262-6978  
COMP-ANL\W03-96RC

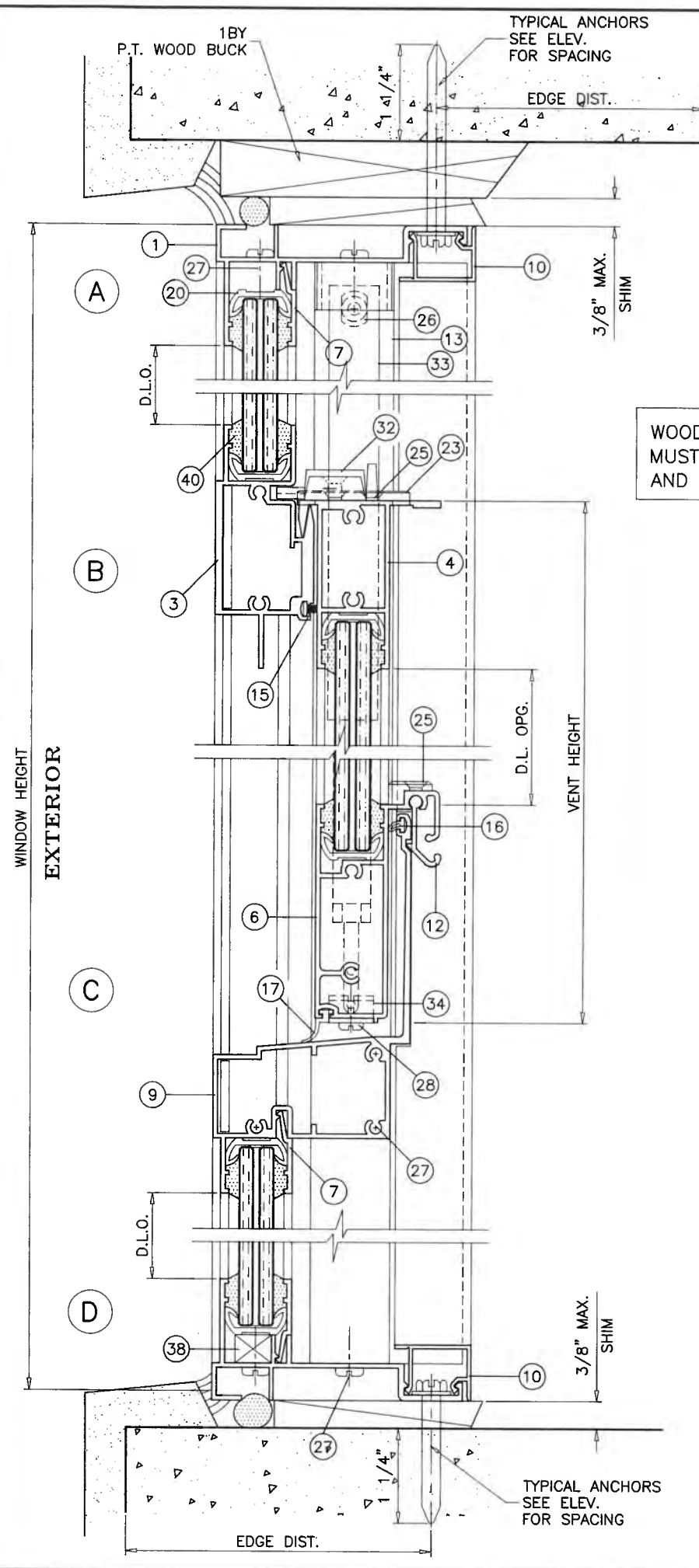
SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

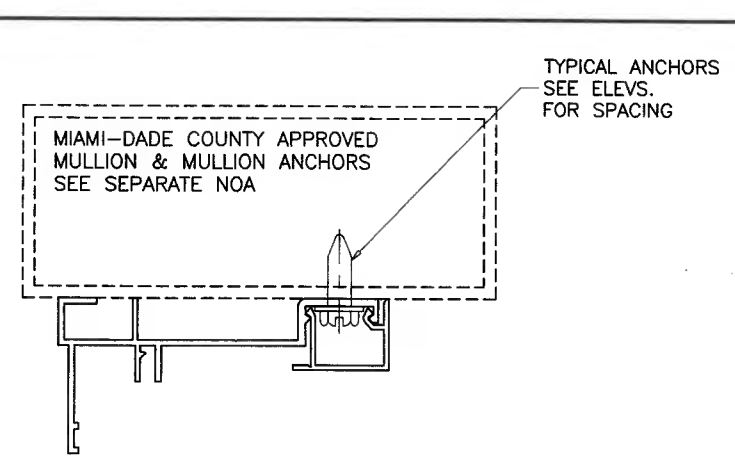
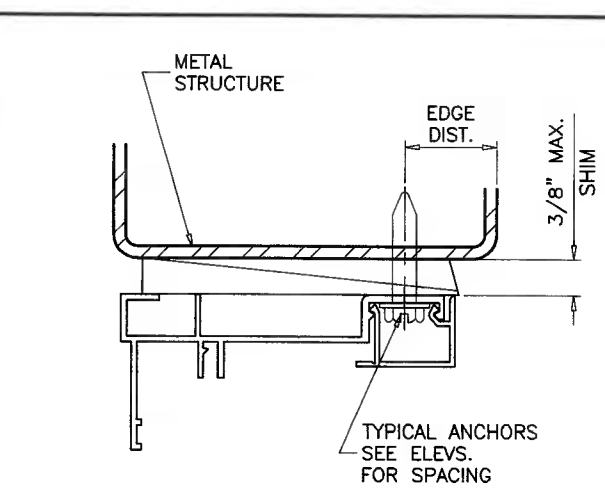
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G	03.13.12	UPDATED TO 2010 FBC
H	04.08.15	UPDATED TO 2014 FBC
I	02.22.18	UPDATED TO 2017 FBC
J	11.20.20	UPDATED TO 2020 FBC

date: 10-24-03  
scale: 1/2"=1'-0"  
dr. by: TARIQ  
chk. by:

drawing no.  
**W03-96**  
sheet 2 of 8



WOOD BUCKS AND METAL STRUCTURE NOT BY 'TECNOGLASS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



**TYPICAL ANCHORS:** SEE ELEV. FOR SPACING

**TYPE 'A' -** 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)  
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY BUCKS INTO CONC. OR BLOCKS  
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

**TYPE 'B' -** 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)  
 DIRECTLY INTO CONCRETE OR BLOCKS  
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 1-3/4" MIN. EMBED INTO GROUT-FILLED BLOCKS (JAMBS)

**TYPE 'C' -** 1/4" DIA. KWIK-FLEX SELF DRILLING SCREWS BY 'HILTI' (Fu=120 KSI, Fy=92 KSI)  
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS  
 OR  
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS  
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)  
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

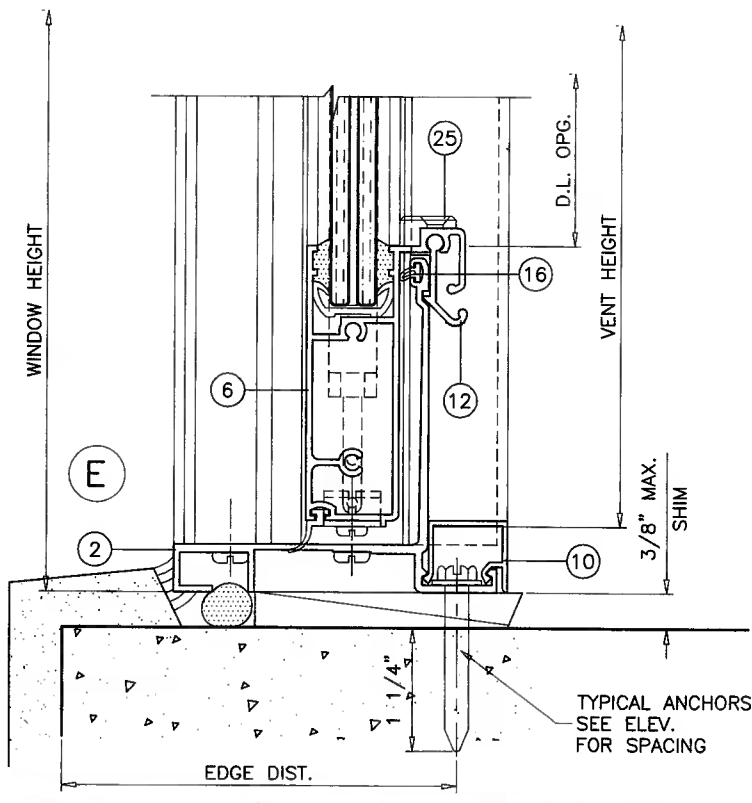
**CRITICAL EDGE DISTANCE**

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

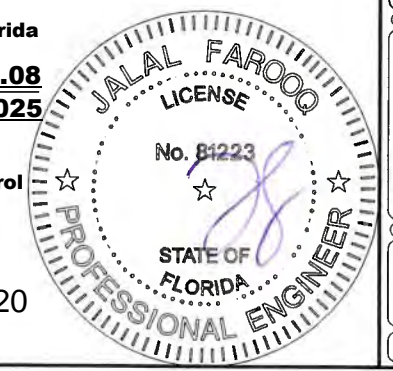
WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.  
 CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.  
 C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 1500 PSI MIN.

**SEALANT:**

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH DOWSIL 795 SEALANT.



**PRODUCT REVISED**  
 as complying with the Florida  
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 Miami-Dade Product Control



Sealed: 11/25/2020

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

**af c**

---

SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

**TECNOGLASS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

COMP-ANL W03-96RC

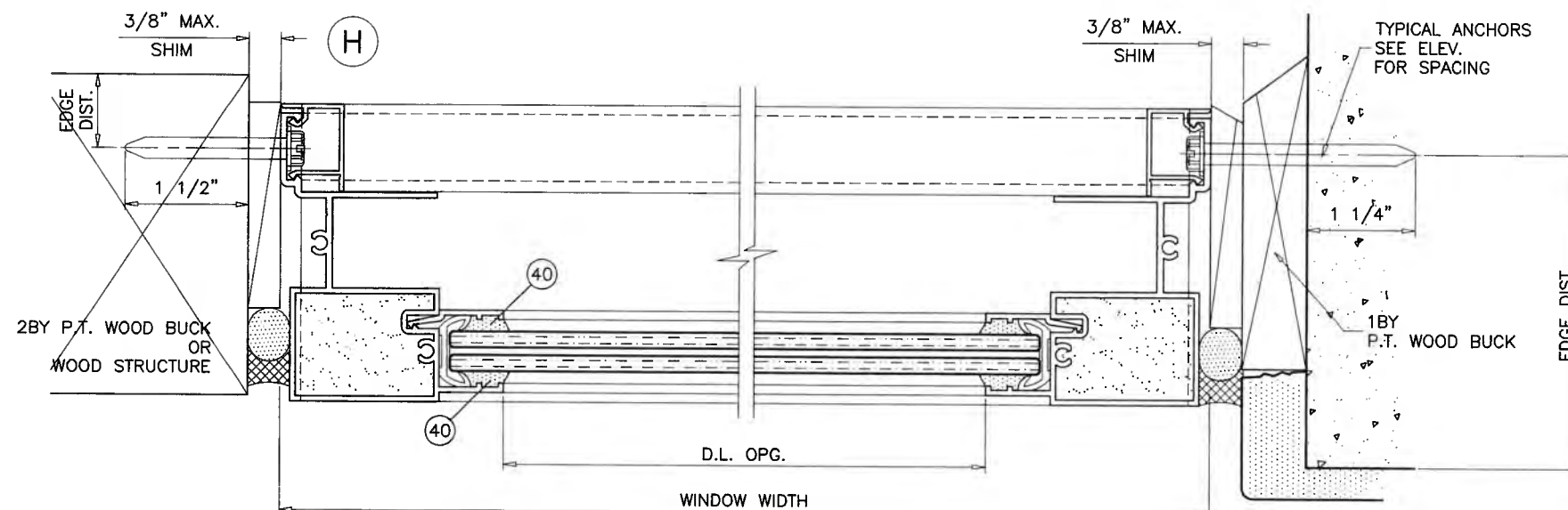
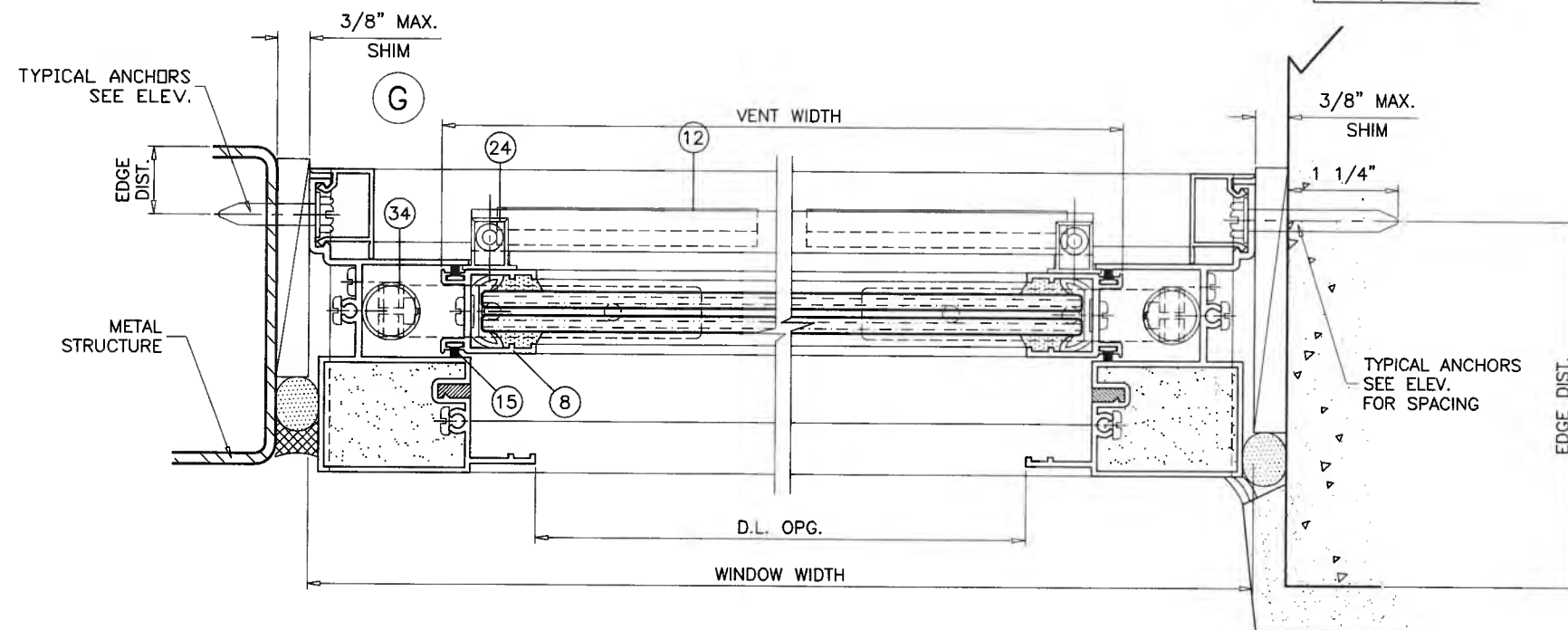
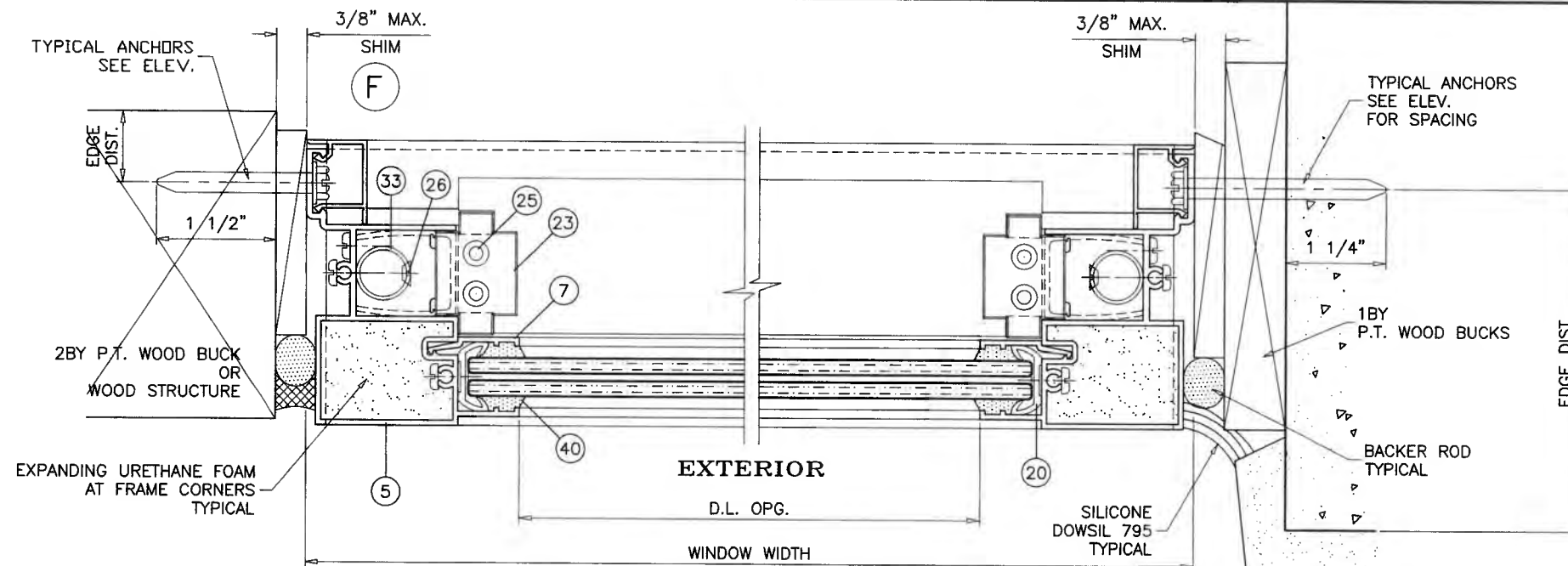
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no	date	by	description
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G	03.13.12	NO	CHANGE THIS SHEET
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I	02.22.18	UPDATED	TO 2017 FBC
J	11.20.20	UPDATED	TO 2020 FBC

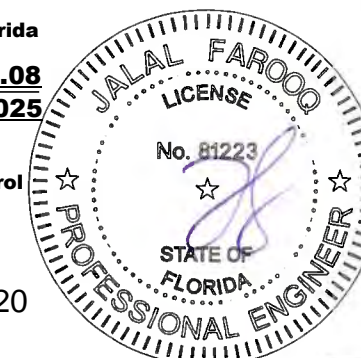
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date: 10-24-03  
 scale: 1/2" = 1"  
 dr. by: TARIQ  
 chk. by:

drawing no.  
**W03-96**  
 sheet 3 of 8



**PRODUCT REVISED**  
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Expiration Date: **06/23/2025**  
By: *Manuel Fern*  
Miami-Dade Product Control



Sealed: 11/25/2020

**af c**  
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ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
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revisions:		no	date	by	description
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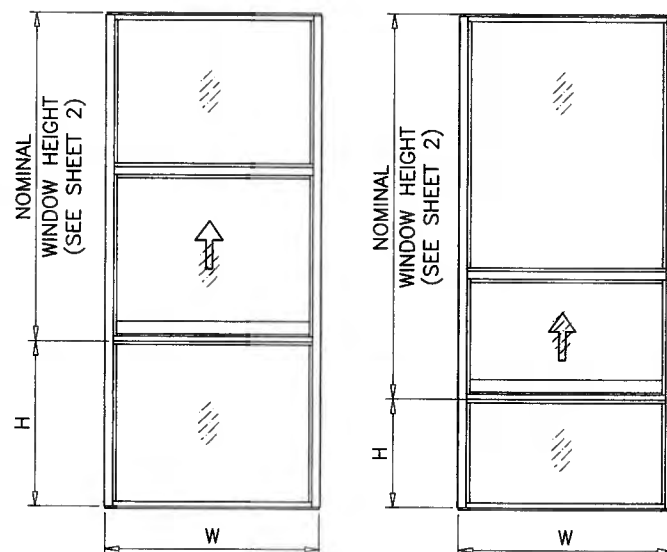
  

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scale:	1/2" = 1"
dr. by:	TARIQ
chk. by:	

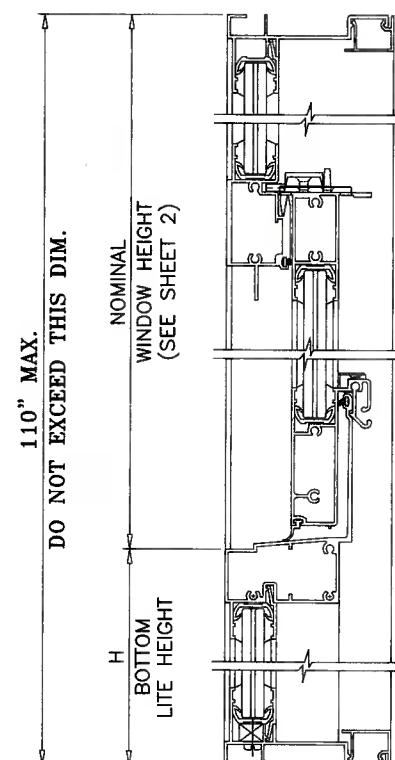
  

drawing no.	W03-96
sheet	4 of 8

WINDOWALL BOTTOM LITE CAPACITY			
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
24"	38-3/8"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
24"	42"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
42"		91.5	119.0
24"	48"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
42"		100.0	130.0



SINGLE HUNG OVER  
FIXED WINDOWS



REFER TO SHEET 2 TO OBTAIN CAPACITY OF WINDOW  
PORTION FOR CONFIGURATION/GLASS USED.

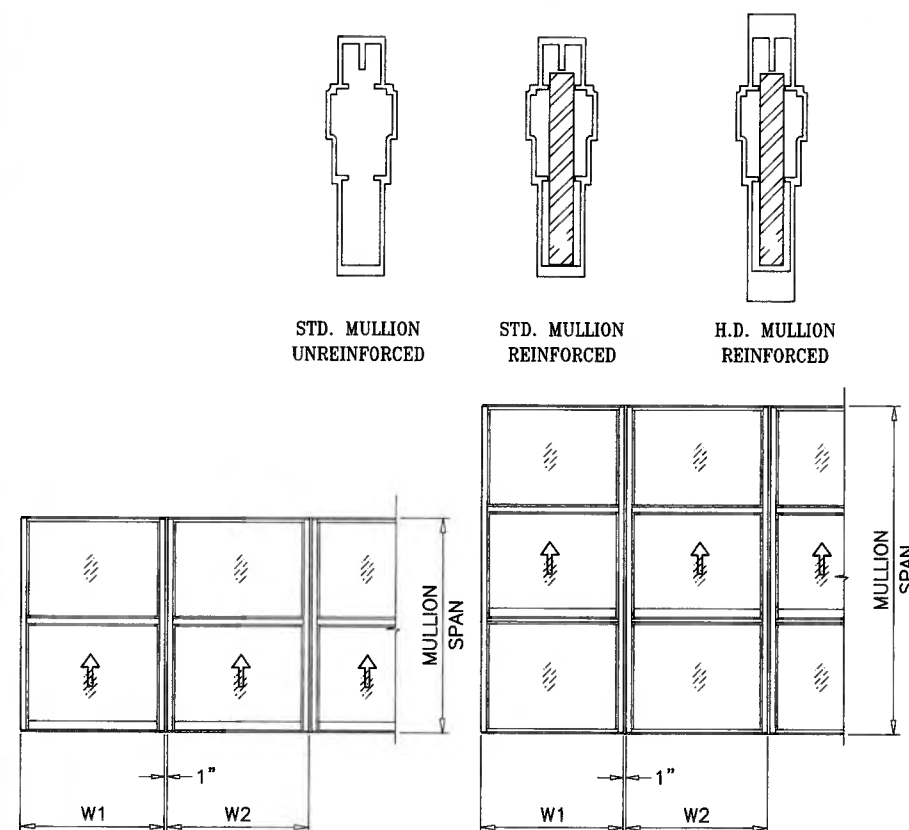
REFER TO CHART ABOVE TO OBTAIN CAPACITY OF  
BOTTOM LITE OF WINDOWALL.

REFER TO CHARTS AT RIGHT OF THIS PAGE TO OBTAIN  
MULLION CAPACITY.

USE LOWEST VALUES OF OPTIONS CONSULTED.

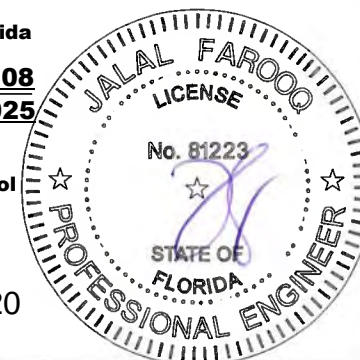
MULLION CAPACITY CHART - PSF			
WINDOW DIMS.		STD. MULLION UNREINFORCED	
WIDTH (W)	MULL SPAN	EXT.(+)	INT.(-)
36"	48"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		100.0	130.0
66"		100.0	130.0
72"		100.0	130.0
36"	54"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"	60"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
36"	66"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
36"	72"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0

MULLION CAPACITY CHART - PSF					
WINDOW DIMS.		STD. MULLION REINFORCED		H.D. MULLION REINFORCED	
WIDTH (W)	MULL SPAN	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	66"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	72"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	78"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	84"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	90"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	96"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	116.6	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	108"	100.0	130.0	100.0	130.0
42"		100.0	118.4	100.0	130.0
48"		100.0	103.6	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	110"	100.0	130.0	100.0	130.0
42"		100.0	114.1	100.0	130.0
48"		99.9	99.9	100.0	130.0



$$\text{WIDTH (W)} = \frac{W1 + W2}{2} + 3/4"$$

**PRODUCT REVISED**  
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NOA-No. **20-1202.08**  
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By: *Manuel Perez*  
Miami-Dade Product Control



Sealed: 11/25/2020

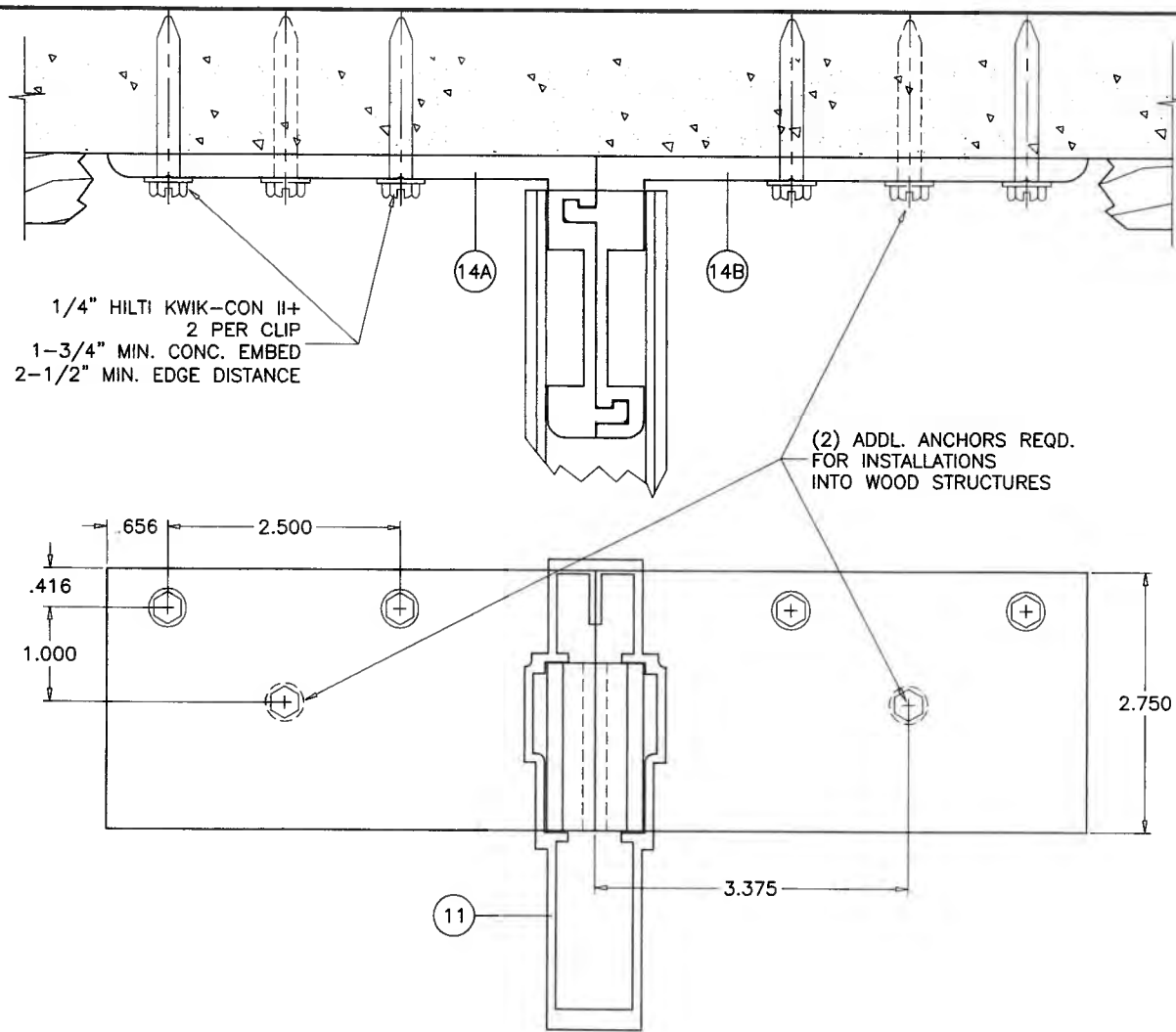
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL W03-96RC

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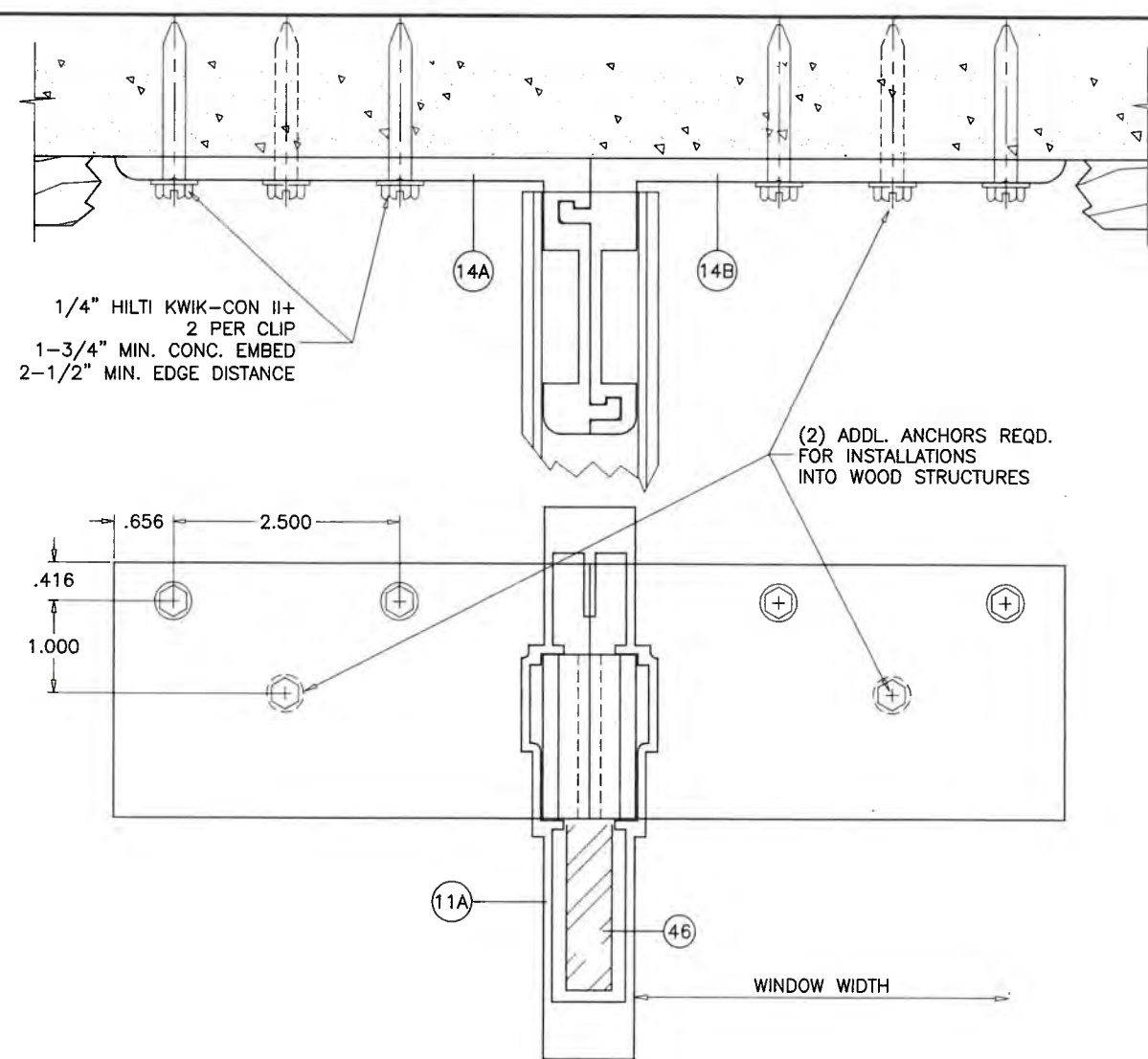
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H	04.08.15	UPDATED TO 2014 FBC	
I	02.22.18	UPDATED TO 2017 FBC	
J	11.20.20	UPDATED TO 2020 FBC	

date: 10-24-03  
scale: 1/2" = 1"  
dr. by: TARIQ  
chk. by:

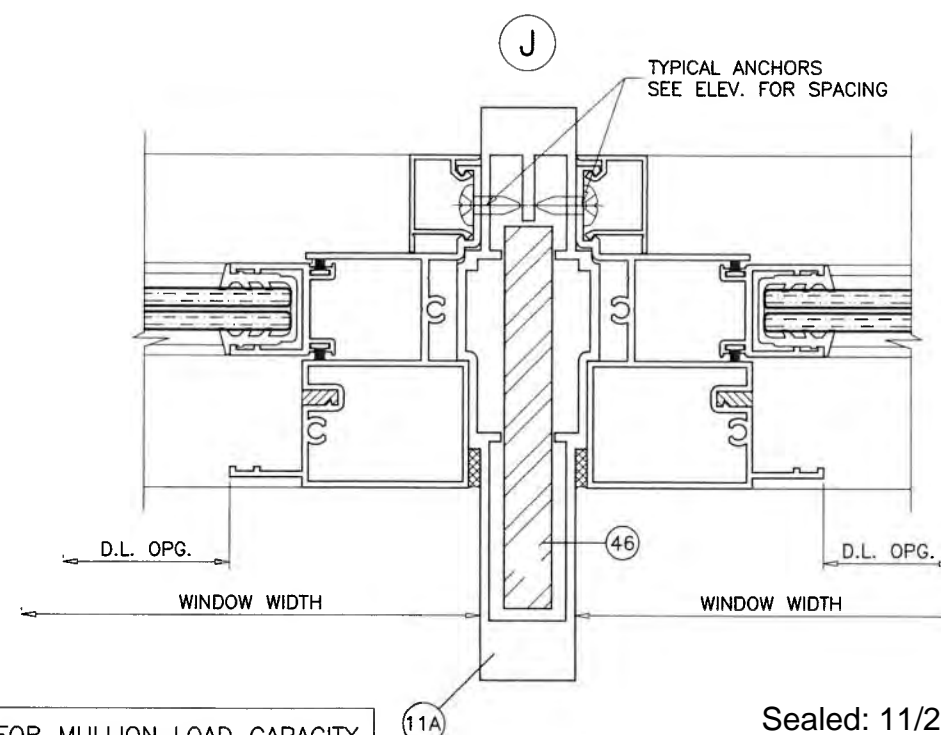
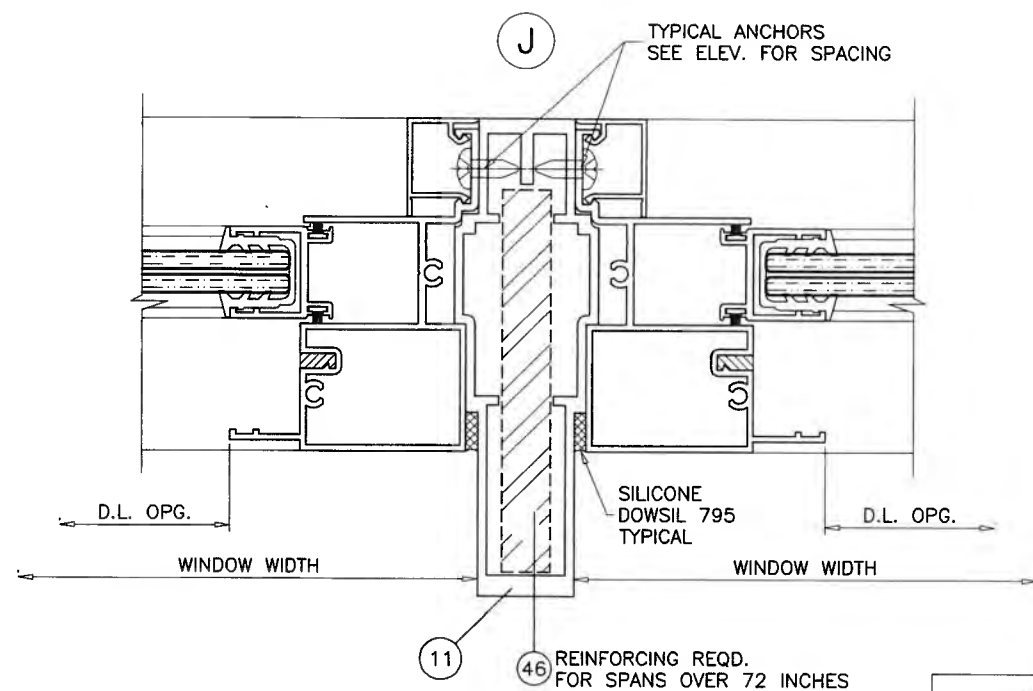
drawing no.  
**W03-96**  
sheet 5 of 8



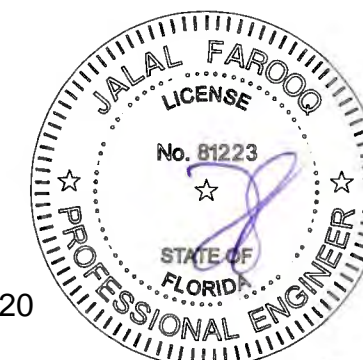
**MULLION CONNECTION AT HEAD & SILL  
OPTION 1**



**MULLION CONNECTION AT HEAD & SILL  
OPTION 2**



**PRODUCT REVISED**  
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By: *Manuel Perez*  
Miami-Dade Product Control



SEE CHARTS ON SHEET 5 FOR MULLION LOAD CAPACITY

Sealed: 11/25/2020

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ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
C.A.N. 353B

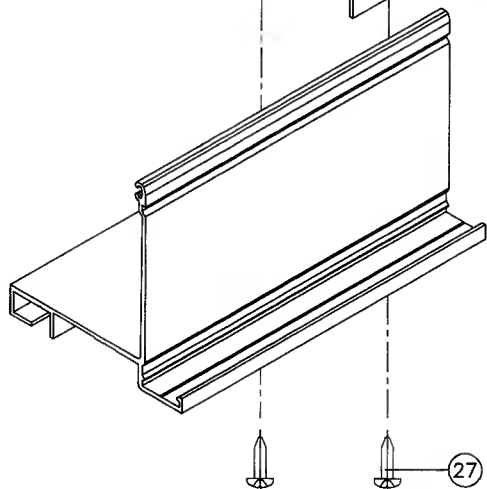
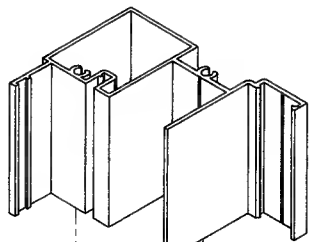
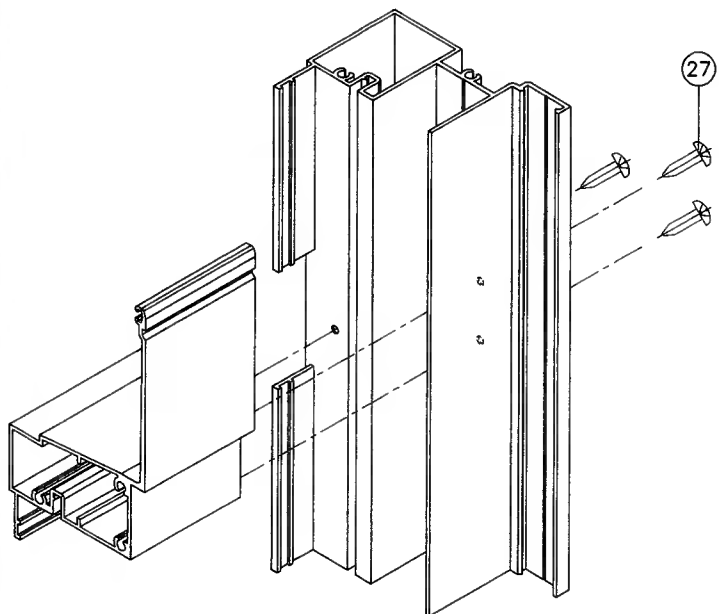
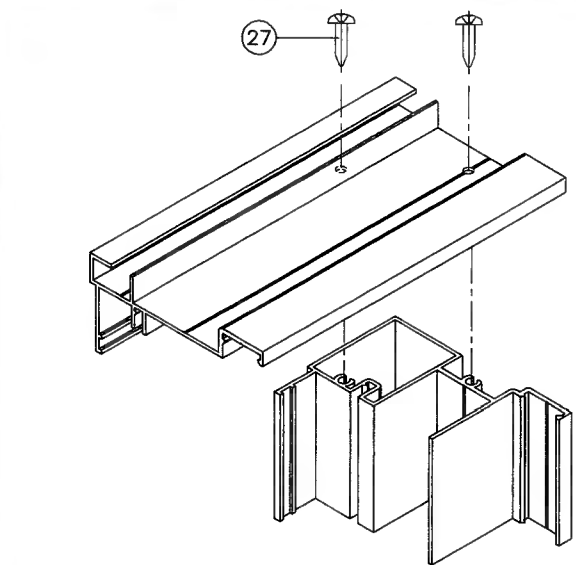
SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)  
**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
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revisions:	no	date	by	description
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	I	02.22.16	UPDATED	TO 2017 FBC
	J	11.20.20	UPDATED	TO 2020 FBC

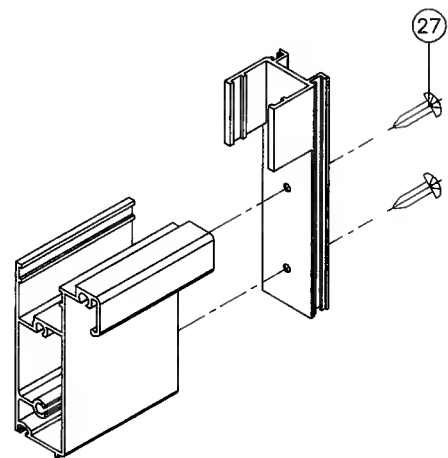
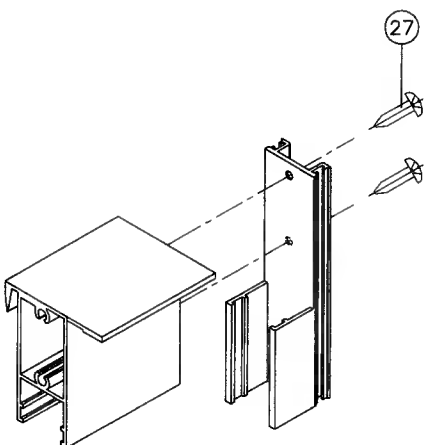
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dr. by: TARIQ  
chk. by:

drawing no.  
**W03-96**  
sheet 6 of 8

COMP-ANL\W03-96RC



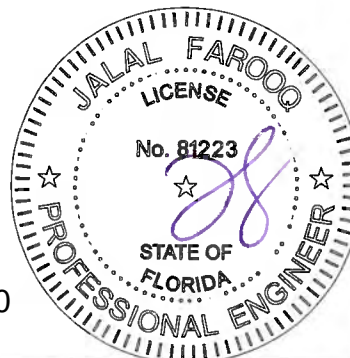
FRAME CORNERS DETAIL



VENT CORNER DETAIL

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	500Y-001	AS REQD.	HEAD & FIXED SILL	6063-T6	AT FRAME
2	500Y-002	AS REQD.	FRAME SILL	6063-T6	AT FRAME
3	500Y-003	1	MEETING RAIL	6005-T5	AT FRAME
4	500Y-004	1	VENT TOP	6005-T5	SASH VENT
5	500Y-005	2	JAMB	6063-T6	AT FRAME
6	500Y-006	1	VENT BOTTOM	6063-T6	SASH VENT
7	500Y-007	AS REQD.	GLAZING BEAD	6063-T6	AT FIXED GLASS
8	500Y-008	2	VENT SIDE	6063-T6	SASH VENT
9	500Y-009	AS REQD.	SILL MEETING RAIL	6005-T5	AT FRAME
10	500Y-010	AS REQD.	TRACK COVER (OPTIONAL)	6063-T6	AT FRAME
11	500Y-023	AS REQD.	STD. MULLION	6063-T6	AT FRAME
11A	500Y-029	AS REQD.	H.D. MULLION	6063-T6	AT FRAME
12	500Y-012	2/VENT	HANDICAP FINGER LOCK	6063-T6	SASH VENT
13	500Y-013	1	VENT STOP	6063-T6	AT TOP OF FRAME
14A	500Y-024	AS REQD.	FEMALE ANCHOR CLIP	6063-T6	TOP & BOTTOM OF MULL
14B	500Y-025	AS REQD.	MALE ANCHOR CLIP	6063-T6	TOP & BOTTOM OF MULL
15	W33261NK	AS REQD.	WEATHERSTRIPPING PILE	-	AT VENT SIDE MEETING RAIL
16	WV-3189	AS REQD.	WEATHERSTRIPPING GASKET	VINYL	SILL & SILL MEETING RAIL
17	V-048	AS REQD.	WEATHERSTRIPPING GASKET	NEOPRENE	BOTTOM OF SASH VENT
20	V-051	AS REQD.	MARINE GLAZED GASKET	TPE	MELTPOINT, DUROMETER 75±5 SHORE A
23	P-012	2/ VENT	VENT TOP GUIDE PLASTIC M&M	NYLON	TOP OF SASH VENT
24	P-013	2/ VENT	VENT BOTTOM GUIDE PLASTIC M&M	NYLON	BOTTOM OF SASH VENT
25	-	AS REQD.	#8 X 3/8" LG. FH. SMS. ST/ST PHILLIPS	-	AT P-012, P-013 & PD-203
26	-	2	#8 X 1" LG. FH. SMS. ST/ST PHILLIPS	-	AT TOP OF BALANCE
27	-	AS REQD.	#10 X 1" LG. PH. SMS. ST/ST PHILLIPS	-	ASSEMBLY SCREWS
28	-	6	#10 X 3/4" LG. PH. SMS. ST/ST PHILLIPS	-	AT BALANCE CLIP
32	PD-203	2/ WDW	SASH LOCK	-	AT TOP OF SASH
33	-	2/ WDW	ULTRA-LIFT BALANCE #30	-	AT FRAME
34	-	2/ WDW	ULTRA-LIFT NON TILT BRACKET	-	-
38	-	-	3/8" X 1/2" X 4" LG.SETTING BLOCK3	NEOPRENE	-
40	DC-995	-	GLAZING COMPOUND	SILICONE	-
46	-	AS REQD.	1/2" X 4" X 104" LG. STEEL.	-	AT MULLION

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **20-1202.08**  
Expiration Date: **06/23/2025**  
By: *Manuel Perez*  
Miami-Dade Product Control



Sealed: 11/25/2020

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

SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

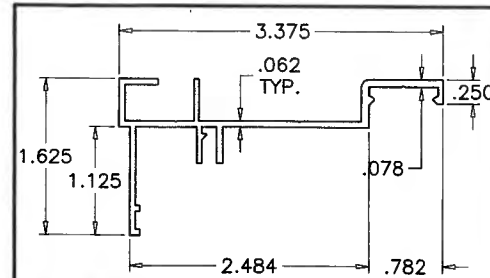
**TECNOGLASS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
F	11.24.09	REV.	PER BCCO COMMENTS
G	03.13.12	NO	CHANGE THIS SHEET
H	04.08.15	UPDATED	TO 2014 FBC
I	02.22.18	UPDATED	TO 2017 FBC
J	11.20.20	UPDATED	TO 2020 FBC

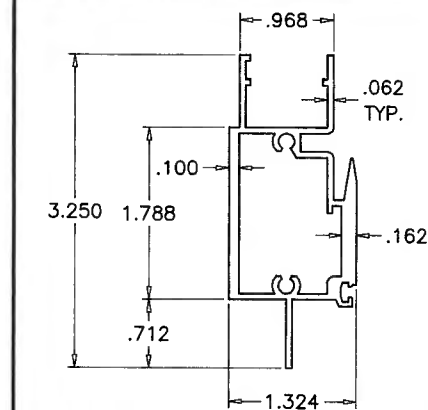
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dr. by: TARIQ  
chk. by:

drawing no.  
**W03-96**  
sheet 7 of 8

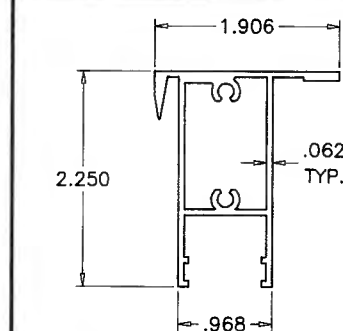
COMP-ANL\W03-96RC



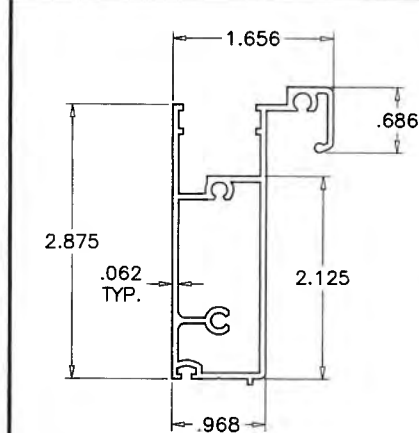
1 FRAME HEAD/FIXED SILL



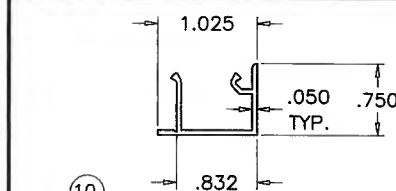
3 MEETING RAIL



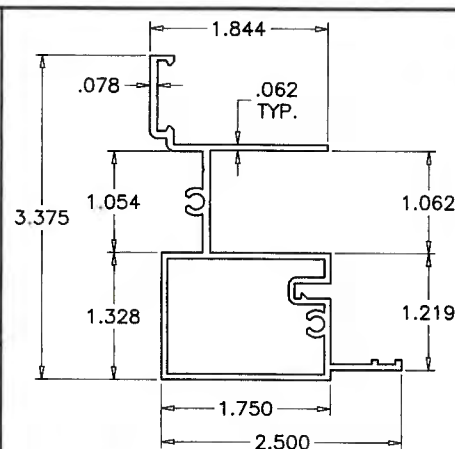
4 VENT TOP RAIL



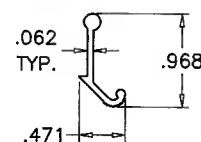
6 VENT BOTTOM RAIL



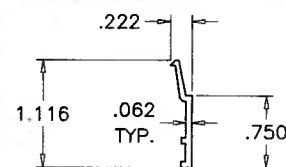
10 INSTALLATION TRACK COVER



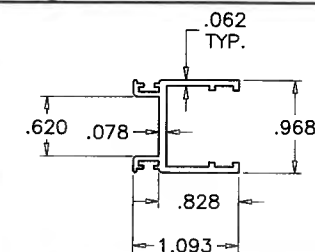
5 FRAME JAMB



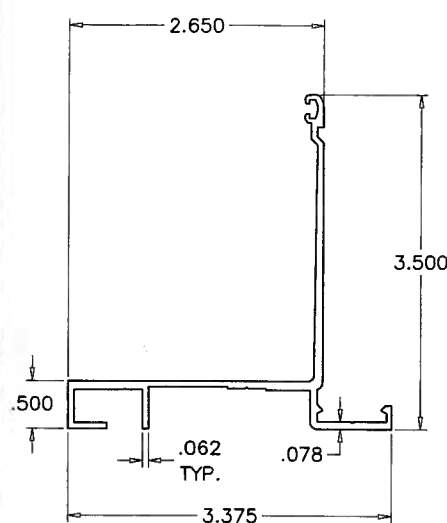
12 VENT LATCH



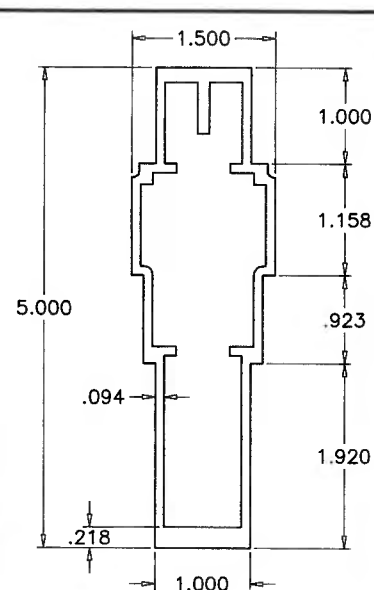
7 GLAZING BEAD



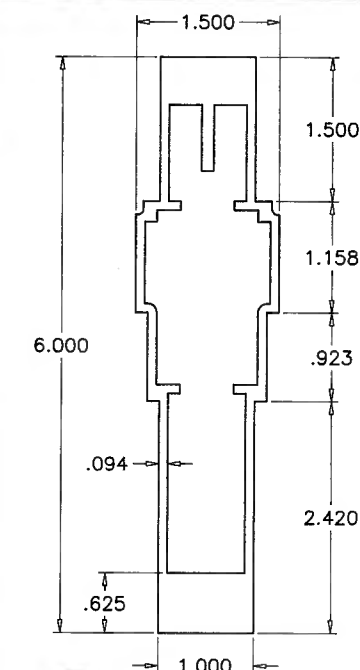
8 VENT SIDE RAIL



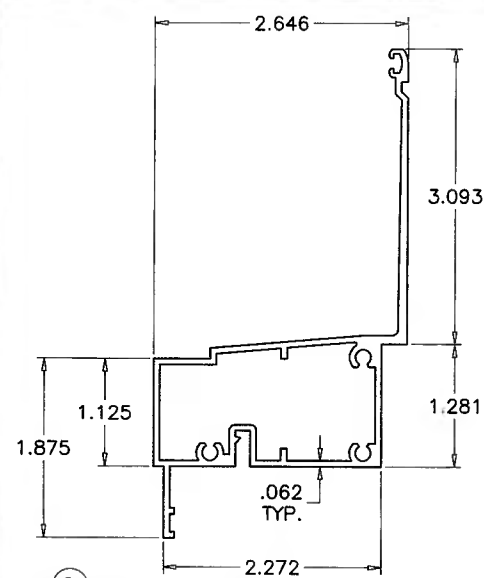
2 FRAME SILL



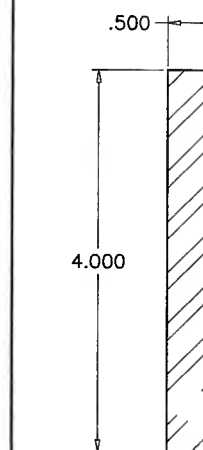
11 STD. MULLION



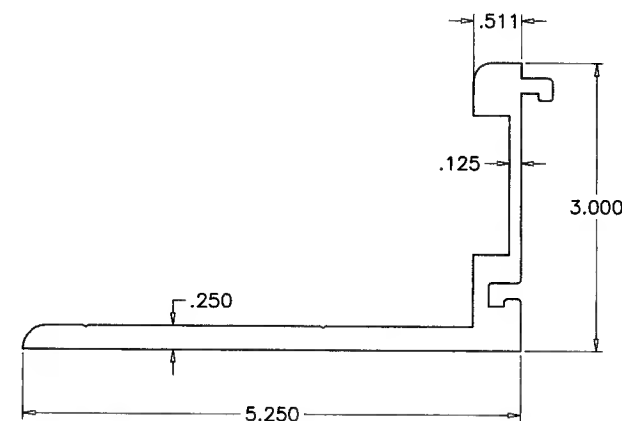
11A H.D. MULLION



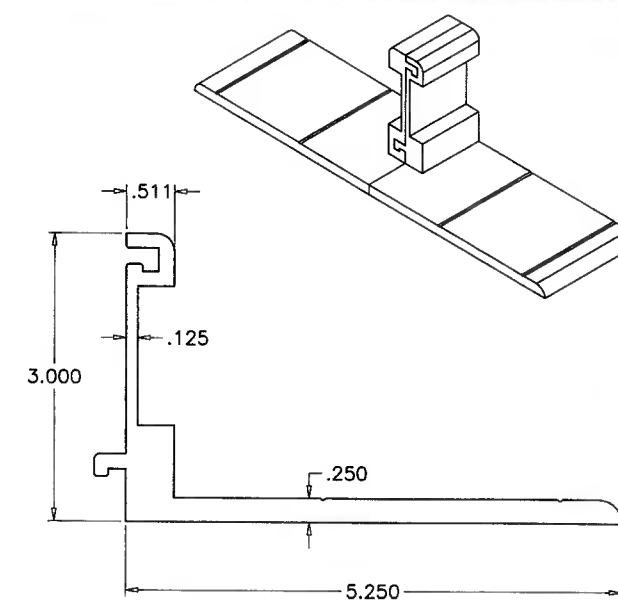
9 SILL MTG. RAIL W/ FIXED BOTTOM



46 MULLION REINF.

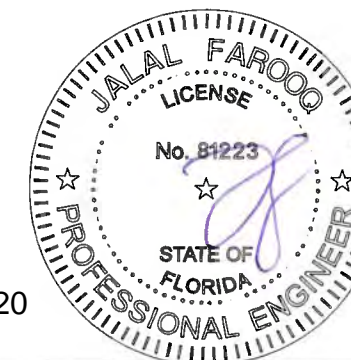


14A FEMALE ANCHOR CLIP



14B MALE ANCHOR CLIP

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**W03-96**  
sheet 8 of 8