



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

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

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

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

**CGI Windows and Doors, Inc.**

**3780 W. 103<sup>rd</sup> Street  
Hialeah, FL 33018**

### 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 "238" Aluminum Project Out Window - L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **AW238 NOA-1 Rev A** (former **W99-04 Rev K**), titled "Series-238 Aluminum Awning Windows", sheets 1 through 9 of 9, dated 05/22/20, signed and sealed by Lynn Miller, 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, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

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

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA No. 17-0918.06** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 and E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**



*Ishaq I. Chanda*

**NOA No. 20-0528.03**  
**Expiration Date: October 31, 2023**  
**Approval Date: November 12, 2020**  
**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. 96-0717.04 and 99-0329.02)*
2. Drawing No. **W99-04**, titled "Series-238 Alum. Project Out Window", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 6 and 7 of 7, dated 01/21/99, with revision I dated 04/10/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

**B. TESTS**

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of a series 7500 PVC fixed window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA-3056 WA**, dated 03/03/15, signed and sealed by Ramesh C. Patel, P.E.
2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of a series 7400 PVC project out window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA-3056 WB**, dated 03/03/15, signed and sealed by Ramesh C. Patel, P.E.
3. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of a series 238 aluminum fixed window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA-3056 WC**, dated 04/16/15, signed and sealed by Ramesh C. Patel, P.E.
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) Forced Entry Test, per FBC 2411.3.2.1, TAS 202-94  
along with marked-up drawings and installation diagram of aluminum casement, project-out and fixed windows, prepared by Hurricane Test Laboratory, Inc., Test Reports No. **HTL-0080-0301-07** and **HTL-0080-0905-07**, dated 08/08/08, all signed and sealed by Vinu J. Abraham, P.E. *(Submitted under NOA No. 08-1010.03).*
5. 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 project-out window, prepared by Hurricane Engineering & Testing, Inc. Reports No. **HETI-08-2143**, **HETI-08-2144**, **HETI-07-4298** and **HETI-07-4287**, dated 06/27/08 and 07/17/08, all signed and sealed by Candido F. Font, P.E. *(NOA No. 08-1010.03).*

- Ishag I. Chanda  
Ishag I. Chanda, P.E.

Product Control Unit Supervisor  
NOA No. 20-0528.03

Expiration Date: October 31, 2023  
Approval Date: November 12, 2020

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS (CONTINUED)**

6. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94,  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of an aluminum project-out window, prepared by Hurricane Engineering & Testing, Inc. Reports No. **HETI-08-2143, HETI-08-2144, HETI-07-4298 and HETI-07-4287**, dated 06/27/08 and 07/17/08, all signed and sealed by Candido F. Font, P.E.  
**(Submitted under NOA No. 08-1010.03)**
7. Test reports on: 1) Air Infiltration Test, per SFBC, PA 202-94  
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94  
4) Forced Entry Test, per FBC 2411.3.2.1, TAS 202-94  
along with marked-up drawings and installation diagram of aluminum casement, project-out and fixed windows, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-1055 and FTL-1019**, dated 10/18/94, signed and sealed by Yamil Kuri, P.E. **(Submitted under NOA No. 96-0717.04)**
8. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94,  
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of an aluminum casement window, prepared by Hurricane Test Laboratory, Inc., Test Reports No. **HTL-0080-0303-96 and HTL-0080-1107-98**, dated 09/08/96 and 12/23/98 respectively, all signed and sealed by Timothy S. Marshall, P.E.  
**(Submitted under NOA's No. 96-0717.04 and 99-0329.02)**

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 5<sup>th</sup> Edition (2014)**, dated 09/03/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. **(Submitted under NOA No. 14-0915.08)**
2. Glazing complies with **ASTM E1300-09**

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **14-0916.11** issued to **Kuraray America, Inc.** for their **"SentryGlas® (Clear and White) Glass Interlayers"**, expiring on 07/04/18.
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.
3. Notice of Acceptance No. **14-0916.10** issued to **Kuraray America, Inc.** for their **"Butacite® PVB Glass Interlayer"** dated 04/25/15, expiring on 12/11/16.
4. Notice of Acceptance No. **14-0423.17** issued to **Eastman Chemical Company (MA)** for their **"Saflex Clear and Color Glass Interlayers"** dated 06/19/14, expiring on 05/21/16.

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 20-0528.03**  
**Expiration Date: October 31, 2023**  
**Approval Date: November 12, 2020**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**F. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 5<sup>th</sup> Edition (2014)**, and of no financial interest, dated 09/03/14, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. (*Submitted under NOA No. 14-0915.08*)
2. Laboratory compliance letters for Test Reports No. **CTLA-3056 WA**, dated 03/03/15, **CTLA-3056 WB**, dated 03/03/15 and **CTLA-3056 WC**, dated 04/16/15, issued by Certified Test Laboratories, Inc., dated 08/08/08, all signed and sealed by Ramesh C. Patel, P.E.
3. Laboratory compliance letters for Test Reports No. **HTL-0080-0301-07** and **HTL-0080-0905-07**, issued by Hurricane Test Laboratory, Inc., dated 08/08/08, all signed and sealed by Vinu J. Abraham, P.E. (*Submitted under NOA No.08-1010.03*)
4. Test Proposal for the qualification of **Butacite®** PVB glass interlayer by Kuraray America, Inc., as well as **Duraseal®** and **Super Spacer® Standard** warm-edge flexible insulating glass spacers, dated December 16, 2014, issued by RER, Product Control Section, signed by Jaime Gascon, P.E., Supervisor, Product Control Section.

**G. OTHERS**

1. Notice of Acceptance No. **14-0915.08**, issued to CGI Windows & Doors for their Series “238” Aluminum Project-Out Window - L.M.I. approved on 02/05/15 and expiring on 10/31/18.

**2. EVIDENCE SUBMITTED UNDER PREVIOUS NOA(s)**

**A. DRAWINGS**

1. Drawing No. **W99-04**, titled “Series-238 Alum. Project Out Window”, sheets 1, 1.1, 2, 3, 4, 5, 5.1, 6 and 7 of 7, dated 01/21/99, with revision **K** dated 01/05/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 6<sup>th</sup> Edition (2017)**, dated January 8, 2018, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. **Glazing complies with ASTM E1300-09/12ae.**

**D. QUALITY ASSURANCE**

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

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 20-0528.03**  
**Expiration Date: October 31, 2023**  
**Approval Date: November 12, 2020**

**CGI Windows and Doors, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. EVIDENCE SUBMITTED UNDER PREVIOUS NOA(s) continue:**

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **17-0808.02** issued to **Kuraray America, Inc.** for their “**SentryGlas® (Clear and White) Glass Interlayers**” 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.
3. Notice of Acceptance No. **16-1117.01** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Interlayers**”, expiring on 07/08/19.
4. Notice of Acceptance No. **17-0712.05** issued to **Eastman Chemical Company (MA)** for their “**Saflex Clear and Color Glass Interlayers**”, expiring on 05/21/21.

**F. STATEMENTS**

1. Statement letter of conformance, of complying with **FBC 5<sup>th</sup> Edition (2014)**, with **FBC 6<sup>th</sup> Edition (2017)** and of no financial interest, dated August 30, 2017, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

**G. OTHERS**

1. Notice of Acceptance No. **15-0512.21**, issued to CGI Windows and Doors, Inc. for their Series “238” Aluminum Project Out Window - L.M.I. approved on 09/17/15 and expiring on 10/31/18.

**4. New Evidence submitted**

**A. DRAWINGS**

1. Drawing No. **AW238 NOA-1 Rev A** (former **W99-04 Rev K**), titled “Series-238 Aluminum Awning Windows”, sheets 1 through 9 of 9, dated 05/22/20, signed and sealed by Anthony Lynn Miller, 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

along with marked-up drawings and installation diagram of all CGI Windows and Doors, Inc. and PGT Industries, Inc., representative units listed below and tested to qualify **Dowsil 791** and **Dowsil 983** silicones, per Proposal #**19-1155TP**, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.:

*Ishaq I. Chanda*

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**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 20-0528.03**  
**Expiration Date: October 31, 2023**  
**Approval Date: November 12, 2020**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS (continue):**

**CGI Windows and Doors Inc. test specimens:**

**FTL-20-2108.1**, CGI SH360 Aluminum Single Hung Window (unit 1 in proposal) **FTL-20-2108.2**, CGI CA238 Alum. Outswing Casement Window (unit 2 in proposal) **FTL-20-2108.3**, CGI SGD560 Aluminum Sliding Glass Door (unit 3 in proposal) **FTL-20-2108.4**, CGI PW410 Aluminum Fixed Window (unit 4 in proposal) and **FTL-20-2108.5**, CGI SH360 Aluminum Single Hung Window (unit 5 in proposal) all dated 08/24/20 and signed and sealed by Idalmis Ortega, P.E.

**PGT Industries, Inc. test specimens:**

**FTL-7897**, PGT PW5520 PVC Fixed Window (unit 6 in proposal), dated 09/03/14 **FTL-20-2107.1**, PGT SGD780 Aluminum Sliding Glass Door (unit 7 in proposal) **FTL-20-2107.2**, PGT CA740 Alum. Outswing Casement Window (unit 8 in proposal) **FTL-20-2107.3**, PGT PW7620A Aluminum Fixed Window (unit 9 in proposal) and **FTL-20-2107.4**, PGT PW7620A Aluminum Fixed Window (unit 10 in proposal) all dated 07/13/20 and signed and sealed by Idalmis Ortega, P.E.

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 2020, 7<sup>th</sup> Edition**, prepared by Mfr., dtd 05/22/20, signed and sealed by A. Lynn Miller, P. E.
2. Glazing complies with ASTM E1300-04, -09, -12 and -16.

**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. (former E.I. DuPont DE Nemours & Co., Inc.) for the “**Sentry Glass ® Interlayer**”, expiring on 07/4/23.
2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** (Former E.I. DuPont DE Nemours & Co., Inc. for the “Kuraray Trofosil Ultra clear and color PVB Interlayer (Former Kuraray **Butacite ® PVB interlayer**)”, expiring on 07/08/24.
3. Notice of Acceptance No. **18-0301.06** issued to Eastman Chemical Company (MA) (Former Solutia, Inc.) for the “**Saflex CP - Saflex and Saflex HP Composite Glass Interlayers w/ PET Core**”, expiring on 12/11/23.
4. Notice of Acceptance No. **17-0712.05** issued to **Eastman Chemical Company (MA)** for their “**Saflex Clear and Color Glass Interlayers**”, expiring on 05/21/21.

**F. STATEMENTS**

1. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), issued by manufacturer, dated 07/14/20, signed and sealed by Lynn Miller, P. E.
2. Notification of Successor Engineer per the Florida Administrative Code Section 61G15-27.001, notifying original engineer that the successor engineer is assuming full professional and legal responsibility for all engineering documents pertaining to this NOA, dated 06/12/20, signed and sealed by A. Lynn Miller, P.E.

**G. OTHER**

1. This NOA **revises 17-0918.06** and updates to FBC 2020, expiring 10/31/23. *Ishaq I. Chanda*
2. RER Test proposals #**19-1155** dated 01/10/20 approved by Ishaq I. Chanda, P.E.

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No. 20-0528.03**  
**Expiration Date: October 31, 2023**  
**Approval Date: November 12, 2020**

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

#### NOTES:

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 BUILDING CODE & ADOPTED STANDARDS.

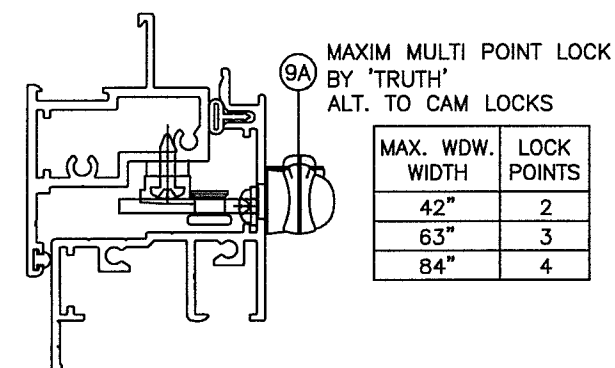
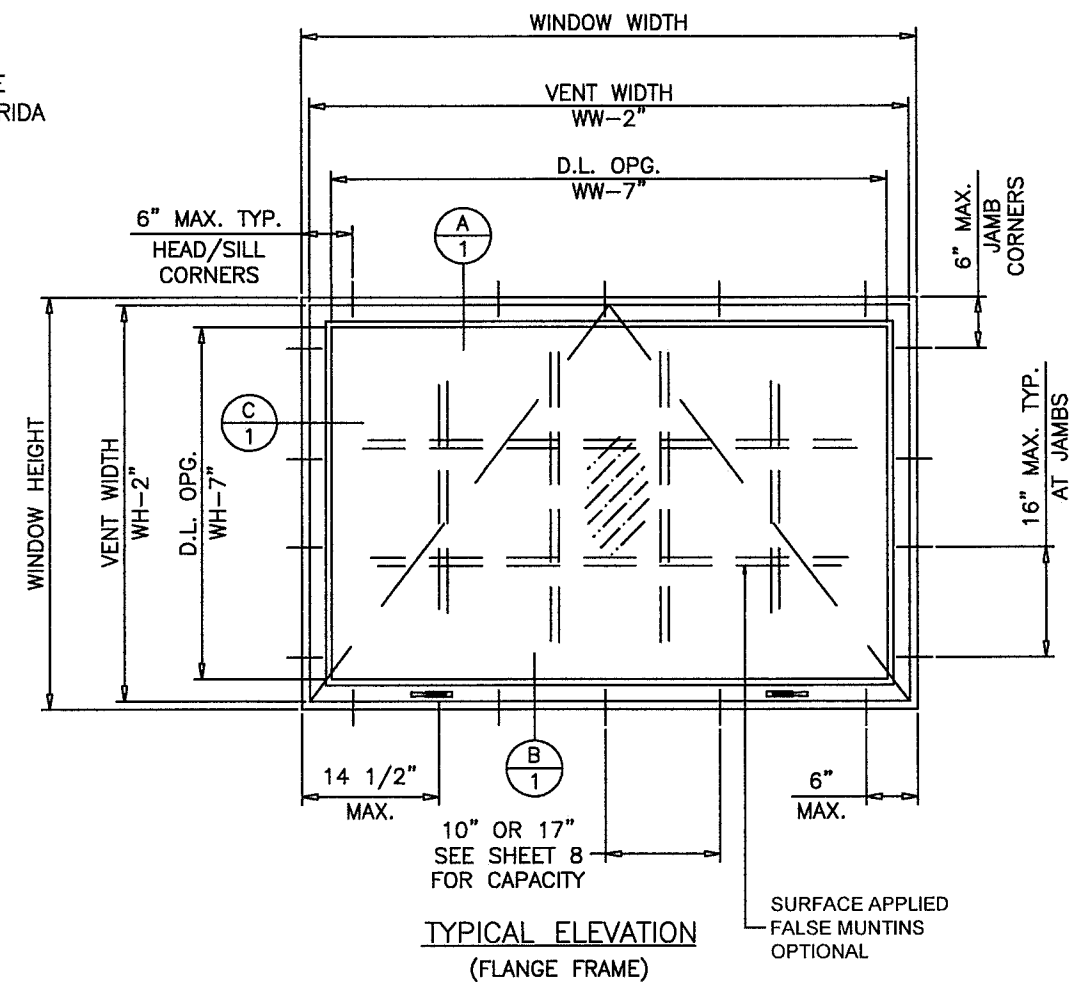
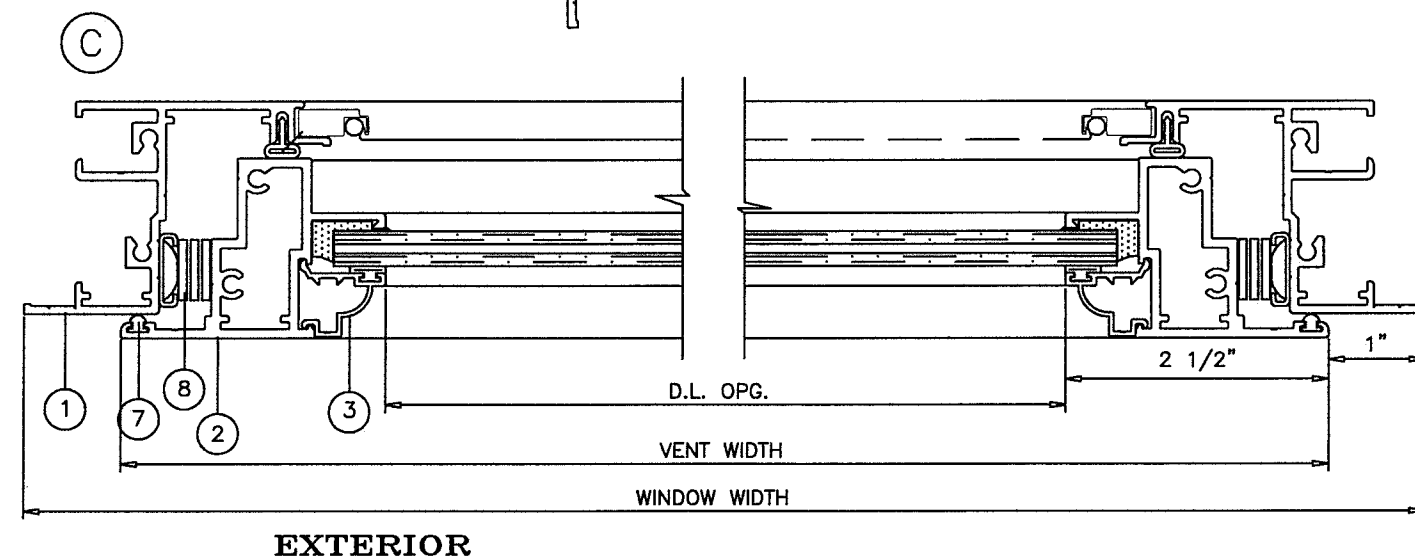
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

#### 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 SHEETS 4 AND 5 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE/TYPE.
- STEP 3** USING CHART ON SHEET 8 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** IF ALUMINUM BUCK SYSTEM IS USED USE CHART ON SHEET 9 TO DETERMINE CAPACITY.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

FOR MULLION/  
MULTIPLE UNITS,  
REFER TO  
SEPARATE CGI  
MULLION NOA.

#### GENERAL WINDOW SECTIONS FLANGE FRAME



#### PRODUCT REVISED as complying with the Florida Building Code

NOA-No. 20-0528.03

Expiration Date 10/31/2023

By Ishag I. Chande  
Miami-Dade Product Control

REVISION: REVISED FOR 2020 FBC,  
ADDED ANCHOR TYPE &  
REFORMATTED. - JR -  
5/15/20

PREPARED BY A. LYNN MILLER  
1070 TECHNOLOGY DRIVE  
N. VENICE, FL 34275  
(941) 480-1600

REGISTRATION #29296

05/15/20

J ROSOWSKI

Rev. A

Impact Resistant  
Windows & Doors  
WE'RE STRONGER™

CGI DOORS AND WINDOWS, INC.  
3780 W 104TH STREET  
HIALEAH, FL 33018  
(305) 593-6590

SERIES 238 AWNING WINDOW - LMI

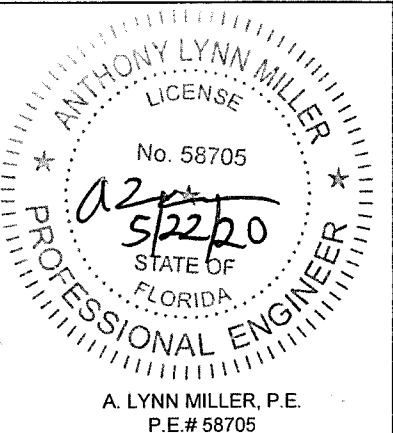
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Sheet 1 OF 9

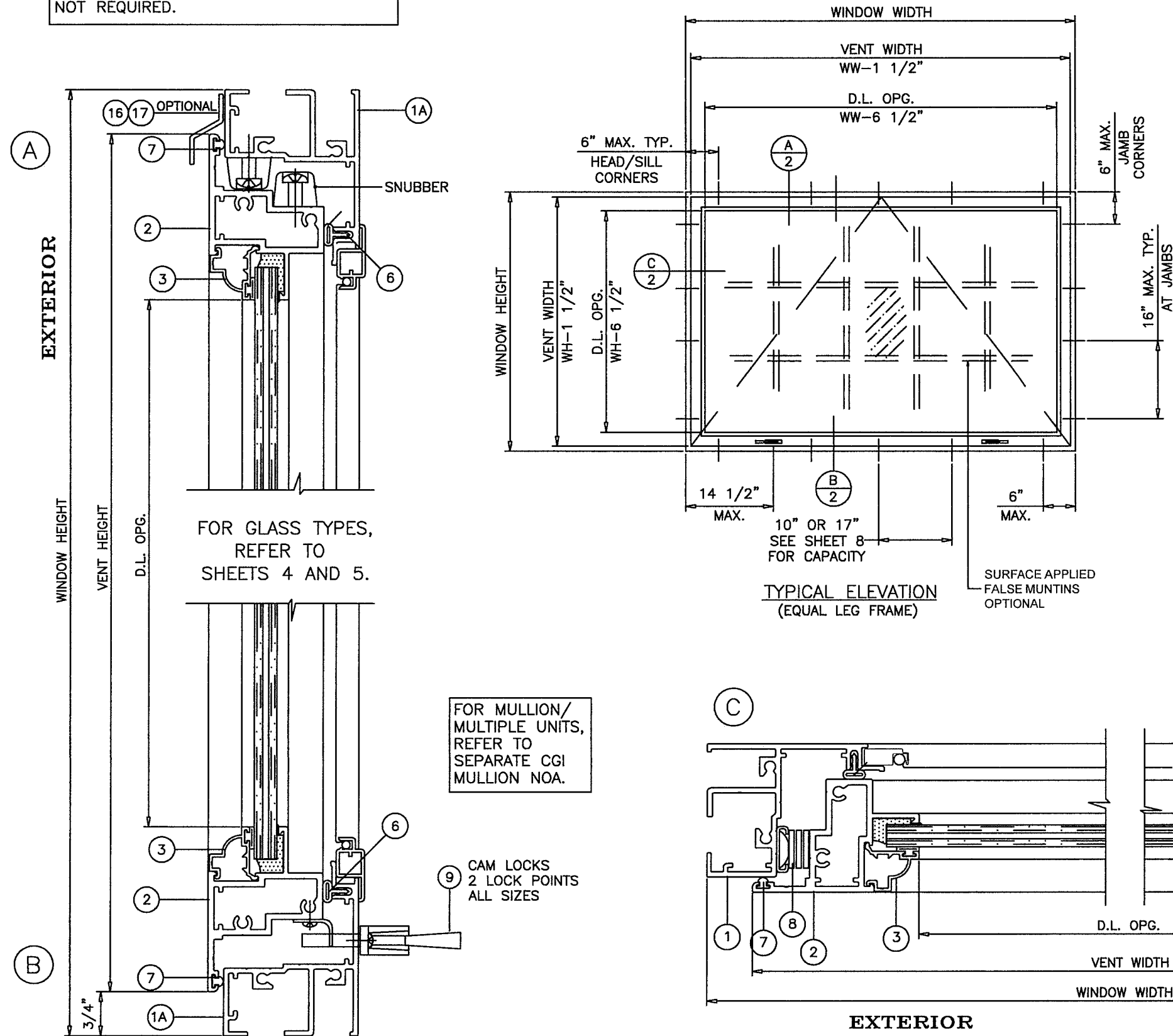
NTS

Scale

AV238



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

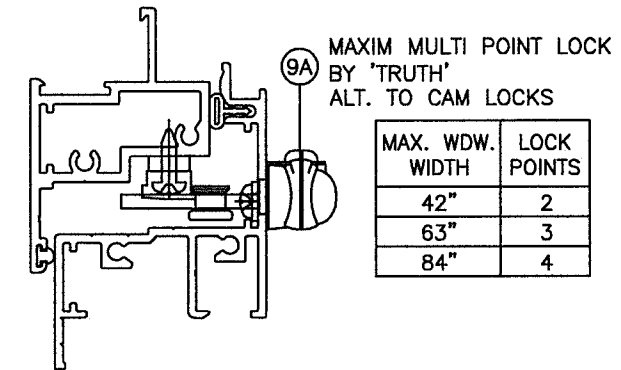


**GENERAL WINDOW SECTIONS  
EQUAL LEG FRAME**


**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03

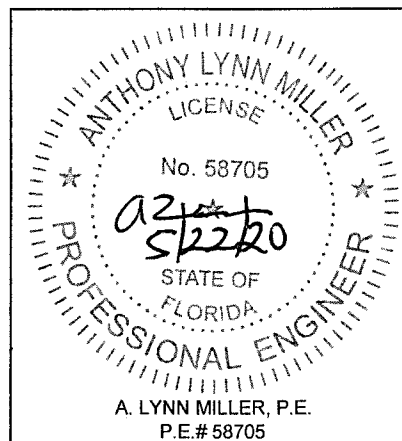
Expiration Date 10/31/2023

By Ishag I. Chande  
Miami-Dade Product Control

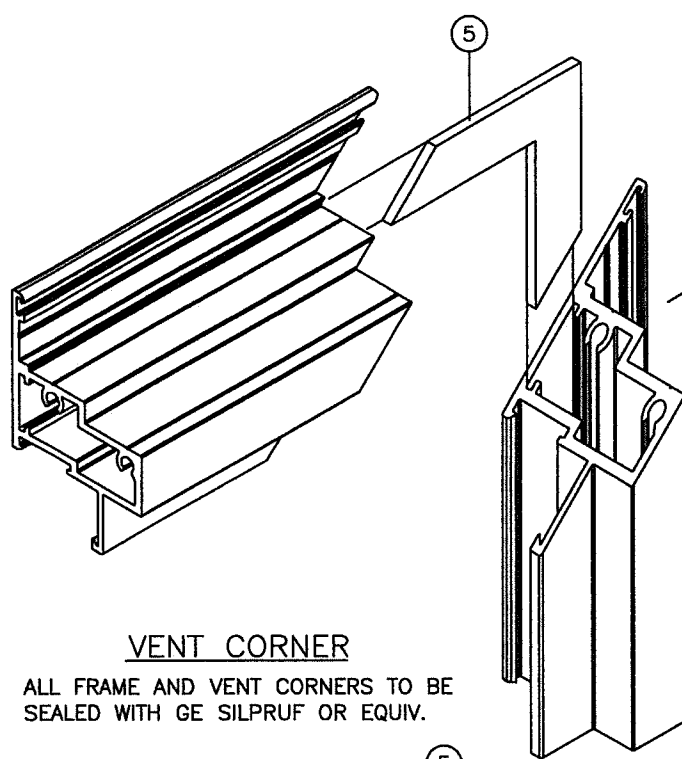


Revision: REFORMATED & ADDED  
ANCHOR TYPE

 <b>Impact Resistant Windows &amp; Doors</b> <b>WE'RE STRONGER™</b> CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600			REGISTRATION #29296					
	SERIES 238 AWNING WINDOW - LMI			Date	05/15/20				
	ELEV. & EL. X-SECTIONS			Drawn By	J ROSOWSKI				
Series	AW238	Scale	NTS	Sheet	2 OF 9	DWG No.	AW238NOA-1	Rev.	A

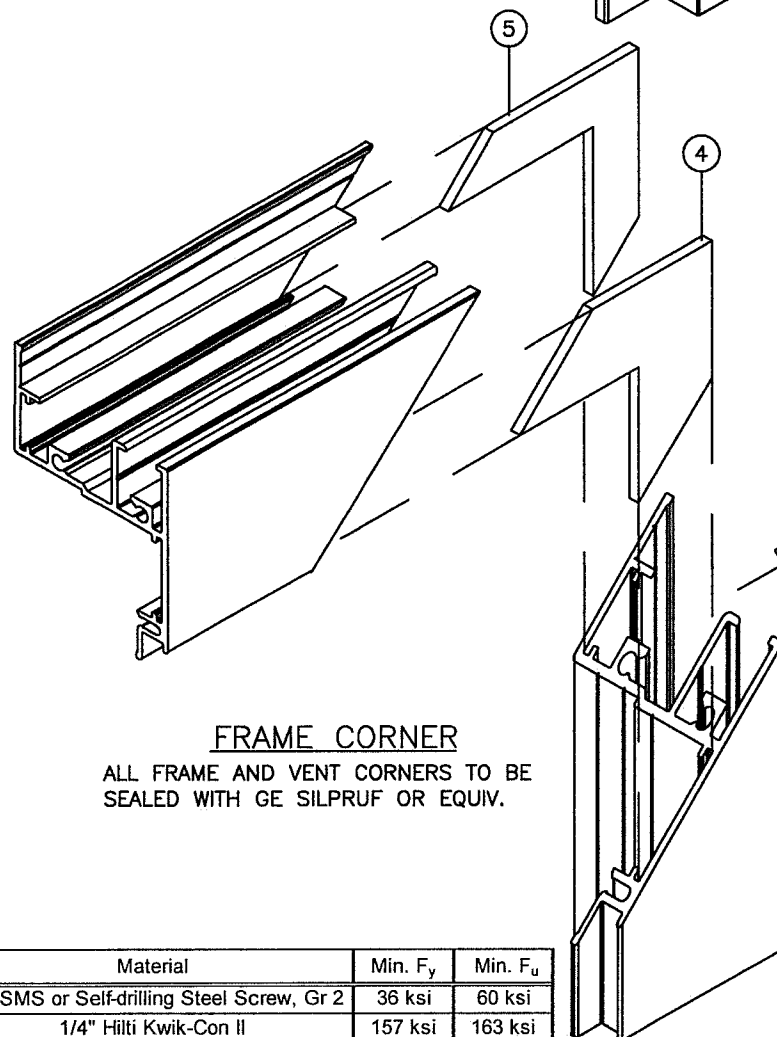






### VENT CORNER

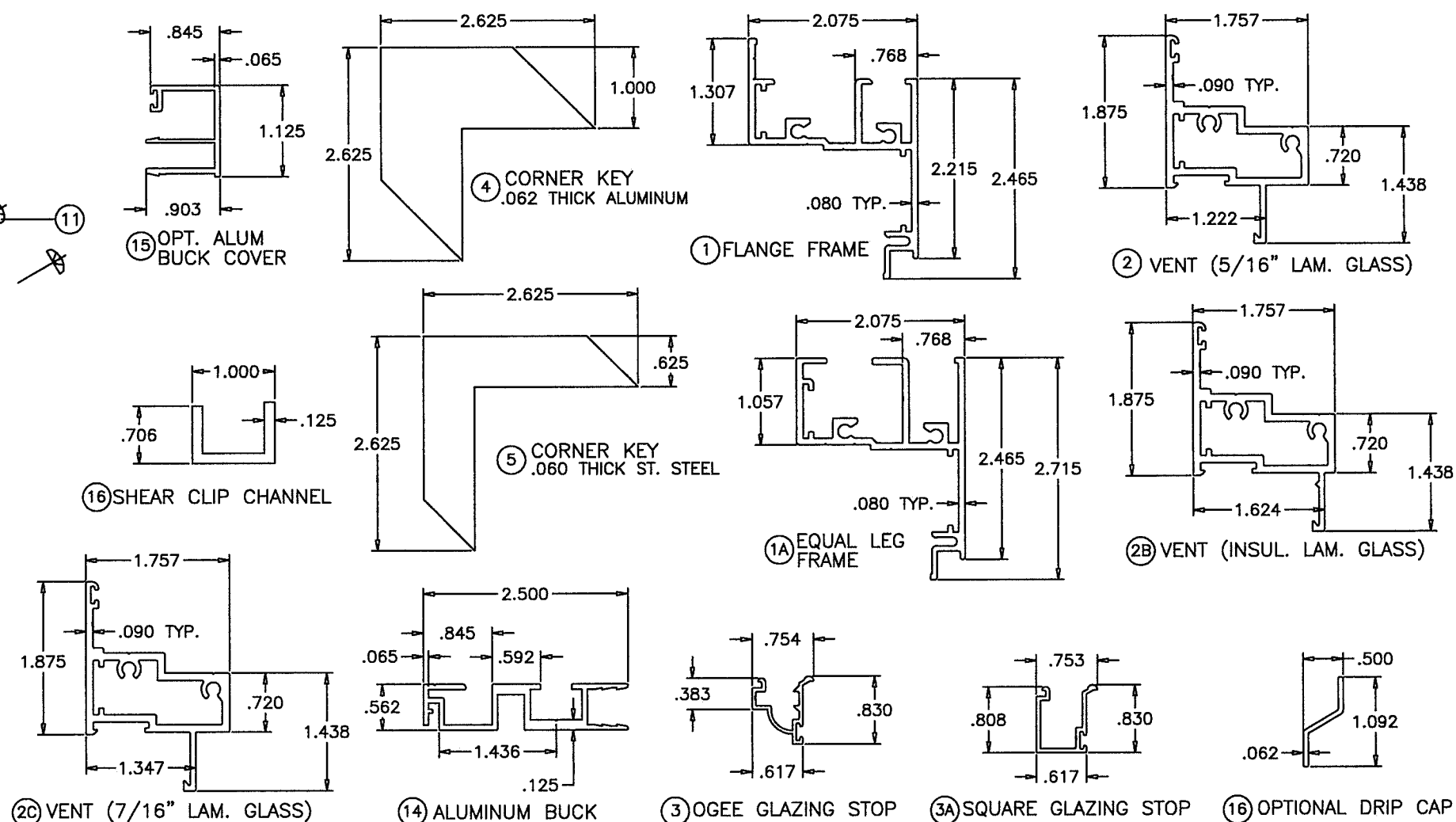
ALL FRAME AND VENT CORNERS TO BE SEALED WITH GE SILPRUF OR EQUIV.



### FRAME CORNER

ALL FRAME AND VENT CORNERS TO BE SEALED WITH GE SILPRUF OR EQUIV.

Material	Min. F <sub>y</sub>	Min. F <sub>u</sub>
#14 SMS or Self-drilling Steel Screw, Gr 2	36 ksi	60 ksi
1/4" Hilti Kwik-Con II	157 ksi	163 ksi
1/4" Elco UltraCon	155 ksi	177 ksi
1/4" DeWalt UltraCon+	148 ksi	164 ksi
6063-T5 Aluminum	16 ksi	22 ksi
A36 Steel	36 ksi	58 ksi
Gr. 33 Steel Stud	33 ksi	45 ksi



ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	CGI-373	4	FLANGE FRAME	6063-T6	INDALEX OR EQUIV.
1A	CGI-397	4	EQUAL LEG FRAME	6063-T6	INDALEX OR EQUIV.
2	CGI-378	4	VENT (5/16" LAM. GLASS)	6063-T6	INDALEX OR EQUIV.
2B	CGI-381	4	VENT (INSUL. LAM. GLASS)	6063-T6	INDALEX OR EQUIV.
2C	CGI-385	4	VENT (7/16" LAM. GLASS)	6063-T6	INDALEX OR EQUIV.
3	CGI-375	4	OGEE GLAZING BEAD	6063-T5	INDALEX OR EQUIV.
3A	CGI-396	4	SQUARE GLAZING BEAD	6063-T5	INDALEX OR EQUIV.
4	-	4	.060 THICK CORNER KEY	ALUMINUM	-
5	-	8	.060 THICK CORNER KEY	ST. STEEL	-
6	AP-425	AS REQD.	FRAME WEATHERSTRIPPING	-	SCHLEGEL APTUS
7	Q200 X190	AS REQD.	VENT WEATHERSTRIPPING	-	SCHLEGEL Q-LON
8	35-10-00-101	2/ VENT	4 BAR HINGE, AT JAMBS	STEEL	TRUTH, ATTACHED W/ (6) #8 X 3/8" SS SMS
9	24-13-00-202	2/ VENT	FACE MOUNT LOCK	STEEL	TRUTH, ATTACHED W/ (2) #8 X 3/8" SMS
9A	-	2/ VENT	MULTI POINT LOCK	-	-
10	-	2/ VENT	.110 THICK LOCK KEEPER, AT FRAME JAMB FACING LOCK	STEEL	CGI, ATTACHED W/ (2) #10 X 3/8" SS SMS
11	-	2/ CORNER	FRAME AND VENT ASSEMBLY SCREWS	-	#10 X 1-1/4" SS SMS
12	-	2/ LITE	SETTING BLOCKS	EPDM	DUROMETER 80±5 SHORE A
14	-	-	ALUMINUM BUCK	6063-T6	INDALEX OR EQUIV.
15	-	-	OPTIONAL ALUMINUM BUCK COVER	6063-T6	INDALEX OR EQUIV.
16	AL-1225	-	OPTIONAL DRIP CAP	6063-T6	INDALEX OR EQUIV.
17	-	-	DOUBLE-SIDED FOAM TAPE FOR OPTIONAL DRIP CAP	-	-

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03

Expiration Date 10/31/2023

By *Isaac L. Chank*  
Miami-Dade Product Control

REFORMATED & ADDED  
PARTS 16 & 17.

PREPARED BY A. LYNN MILLER  
1070 TECHNOLOGY DRIVE  
N. VENICE, FL 34275  
(941) 480-1600

REGISTRATION #29296

Date 05/15/20

By J ROSOWSKI  
Drawn

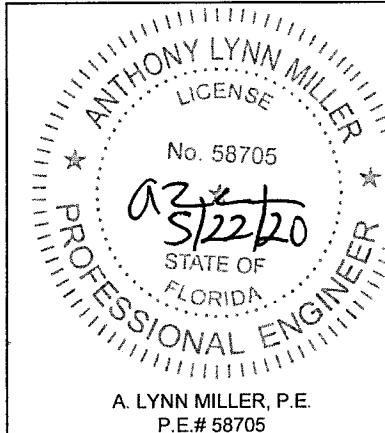
Rev. A  
AW238NOA-1

Impact Resistant  
Windows & Doors  
WE'RE STRONGER™  
CGI DOORS AND WINDOWS, INC.  
3780 W 104TH STREET  
HIALEAH, FL 33018  
(305) 593-6590

SERIES 238 AWNING WINDOW - LMI

BOM & EXTRUSIONS

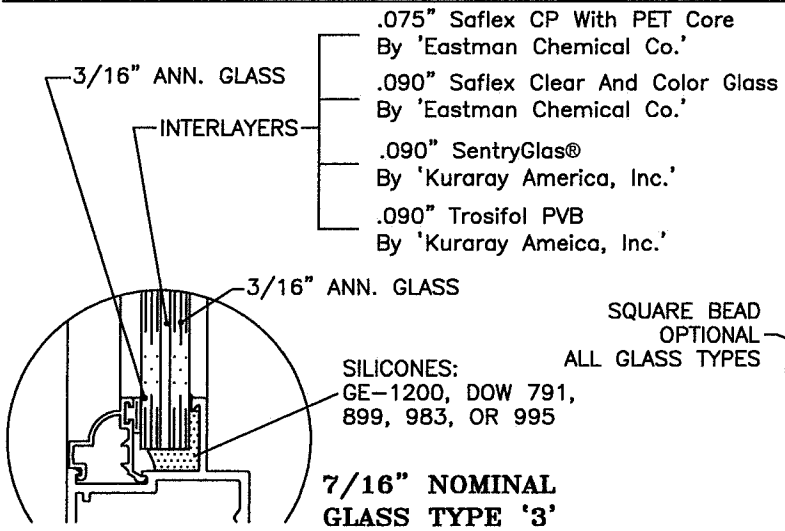
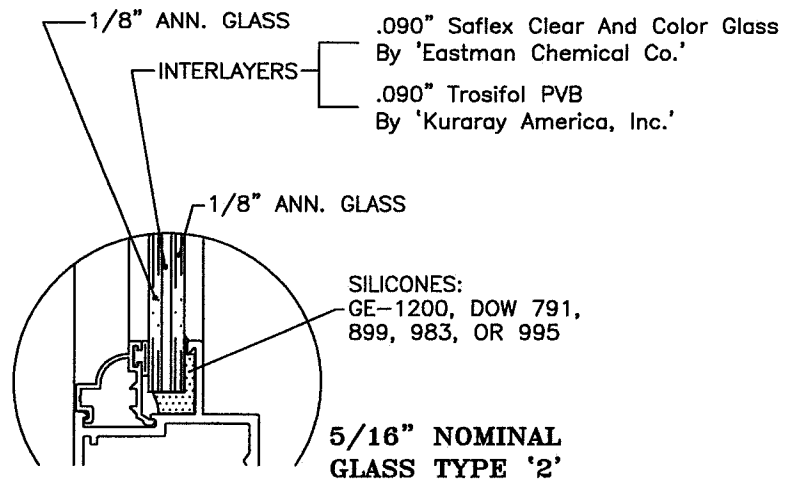
3 OF 9  
Sheet  
NTS  
Scale  
AW238



PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS							
NO SHUTTERS REQUIRED							
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS							
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	24"	110.0	195.0	110.0	195.0	110.0	195.0
	28"	110.0	195.0	110.0	195.0	110.0	195.0
	30"	110.0	194.3	110.0	195.0	110.0	195.0
	36"	110.0	161.9	110.0	195.0	110.0	195.0
	42"	110.0	138.8	110.0	195.0	110.0	195.0
	48"	110.0	121.4	110.0	195.0	110.0	195.0
	54"	107.9	107.9	110.0	195.0	110.0	195.0
	60"	95.4	95.4	110.0	195.0	110.0	120.0
	66"	73.4	73.4	110.0	120.0	110.0	120.0
	72"	56.1	56.1	110.0	120.0	110.0	120.0
30"	24"	110.0	194.3	110.0	195.0	110.0	195.0
	28"	110.0	166.5	110.0	195.0	110.0	195.0
	30"	110.0	155.4	110.0	195.0	110.0	195.0
	36"	110.0	129.5	110.0	195.0	110.0	195.0
	42"	110.0	111.0	110.0	195.0	110.0	195.0
	48"	97.1	97.1	110.0	195.0	110.0	120.0
	54"	86.3	86.3	110.0	120.0	110.0	120.0
	60"	77.7	77.7	110.0	120.0	110.0	120.0
	66"	60.6	60.6	110.0	120.0	110.0	120.0
	72"	46.0	46.0	110.0	120.0	110.0	120.0
36"	24"	110.0	161.9	110.0	195.0	110.0	195.0
	28"	110.0	138.8	110.0	195.0	110.0	195.0
	30"	110.0	129.5	110.0	195.0	110.0	195.0
	36"	107.9	107.9	110.0	195.0	110.0	195.0
	42"	92.5	92.5	110.0	120.0	110.0	120.0
	48"	80.9	80.9	110.0	120.0	110.0	120.0
	54"	71.9	71.9	110.0	120.0	110.0	120.0
	60"	64.8	64.8	110.0	120.0	110.0	120.0
	66"	56.1	56.1	110.0	120.0	110.0	120.0
	72"	43.8	43.8	110.0	120.0	110.0	120.0

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS							
NO SHUTTERS REQUIRED							
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS							
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
42"	24"	110.0	138.8	110.0	195.0	110.0	195.0
	28"	110.0	118.9	110.0	195.0	110.0	195.0
	30"	110.0	111.0	110.0	195.0	110.0	195.0
	36"	92.5	92.5	110.0	120.0	110.0	120.0
	42"	79.3	79.3	110.0	120.0	110.0	120.0
	48"	69.4	69.4	110.0	120.0	110.0	120.0
	54"	61.7	61.7	110.0	120.0	110.0	120.0
	60"	56.1	56.1	110.0	120.0	110.0	120.0
	66"	43.8	43.8	110.0	120.0	110.0	120.0
	72"	34.9	34.9	110.0	120.0	110.0	120.0
48"	24"	110.0	121.4	110.0	195.0	110.0	195.0
	28"	104.1	104.1	110.0	195.0	110.0	120.0
	30"	97.1	97.1	110.0	195.0	110.0	120.0
	36"	80.9	80.9	110.0	120.0	110.0	120.0
	42"	69.4	69.4	110.0	120.0	110.0	120.0
	48"	60.7	60.7	110.0	120.0	110.0	120.0
	54"	54.1	54.1	110.0	120.0	110.0	120.0
	60"	46.0	46.0	110.0	120.0	110.0	120.0
	66"	38.1	38.1	110.0	120.0	110.0	120.0
	72"	30.1	30.1	110.0	120.0	110.0	120.0
54"	24"	107.9	107.9	110.0	195.0	110.0	195.0
	28"	92.5	92.5	110.0	120.0	110.0	120.0
	30"	86.3	86.3	110.0	120.0	110.0	120.0
	36"	71.9	71.9	110.0	120.0	110.0	120.0
	42"	61.7	61.7	110.0	120.0	110.0	120.0
	48"	54.1	54.1	110.0	120.0	110.0	120.0
	54"	46.0	46.0	110.0	120.0	110.0	120.0
	60"	38.1	38.1	110.0	120.0	110.0	120.0
	66"	30.1	30.1	110.0	120.0	110.0	120.0
	72"	22.1	22.1	110.0	120.0	110.0	120.0
60"	24"	95.4	95.4	110.0	195.0	110.0	120.0
	28"	83.3	83.3	110.0	120.0	110.0	120.0
	30"	77.7	77.7	110.0	120.0	110.0	120.0
	36"	64.8	64.8	110.0	120.0	110.0	120.0
	42"	56.1	56.1	110.0	120.0	110.0	120.0
	48"	48.9	48.9	110.0	120.0	110.0	120.0
	54"	40.9	40.9	110.0	120.0	110.0	120.0
	60"	32.9	32.9	110.0	120.0	110.0	120.0
	66"	24.9	24.9	110.0	120.0	110.0	120.0
	72"	16.9	16.9	110.0	120.0	110.0	120.0
66"	24"	73.4	73.4	110.0	120.0	110.0	120.0
	28"	64.2	64.2	110.0	120.0	110.0	120.0
	30"	60.6	60.6	110.0	120.0	110.0	120.0
	36"	56.1	56.1	110.0	120.0	110.0	120.0
	42"	48.9	48.9	110.0	120.0	110.0	120.0
	48"	40.9	40.9	110.0	120.0	110.0	120.0
	54"	32.9	32.9	110.0	120.0	110.0	120.0
	60"	24.9	24.9	110.0	120.0	110.0	120.0
	66"	16.9	16.9	110.0	120.0	110.0	120.0
	72"	8.9	8.9	110.0	120.0	110.0	120.0
72"	24"	56.1	56.1	110.0	120.0	110.0	120.0
	28"	48.9	48.9	110.0	120.0	110.0	120.0
	30"	46.0	46.0	110.0	120.0	110.0	120.0
	36"	40.9	40.9	110.0	120.0	110.0	120.0
	42"	32.9	32.9	110.0	120.0	110.0	120.0
	48"	24.9	24.9	110.0	120.0	110.0	120.0
	54"	16.9	16.9	110.0	120.0	110.0	120.0
	60"	8.9	8.9	110.0	120.0	110.0	120.0
	66"	0.9	0.9	110.0	120.0	110.0	120.0
	72"	0.9	0.9	110.0	120.0	110.0	120.0
78"	24"	43.8	43.8	110.0	120.0	110.0	120.0
	28"	38.1	38.1	110.0	120.0	110.0	120.0
	30"	34.9	34.9	110.0	120.0	110.0	120.0
	36"	30.1	30.1	110.0	120.0	110.0	120.0
	42"	24.9	24.9	110.0	120.0	110.0	120.0
	48"	16.9	16.9	110.0	120.0	110.0	120.0
	54"	8.9	8.9	110.0	120.0	110.0	120.0
	60"	0.9	0.9	110.0	120.0	110.0	120.0
	66"	0.9	0.9	110.0	120.0	110.0	120.0
	72"	0.9	0.9	110.0	120.0	110.0	120.0
84"	24"	34.9	34.9	110.0	120.0	110.0	120.0
	28"	30.1	30.1	110.0	120.0	110.0	120.0
	30"	26.1	26.1	110.0	120.0	110.0	120.0
	36"	22.1	22.1	110.0	120.0	110.0	120.0
	42"	16.9	16.9	110.0	120.0	110.0	120.0
	48"	10.9	10.9	110.0	120.0	110.0	120.0
	54"	4.9	4.9	110.0	120.0	110.0	120.0
	60"	0.9	0.9	110.0	120.0	110.0	120.0
	66"	0.9	0.9	110.0	120.0	110.0	120.0
	72"	0.9	0.9	110.0	120.0	110.0	120.0

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS							
NO SHUTTERS REQUIRED							
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS							
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
19-1/8"	26"	110.0	195.0	110.0	195.0	110.0	195.0
	38-3/8"	110.0	190.6	110.0	195.0	110.0	195.0
	50-5/8"	110.0	144.5	110.0	195.0	110.0	195.0
	63"	104.2	104.2	110.0	195.0	110.0	195.0
	74-1/4"	63.0	63.0	110.0	195.0	110.0	120.0
26-1/2"	26"	110.0	195.0	110.0	195.0	110.0	195.0
	38-3/8"	110.0	137.5	110.0	195.0	110.0	195.0
	50-5/8"	104.3	104.3	110.0	195.0	110.0	195.0
	63"	77.9	77.9	110.0	120.0	110.0	120.0
	74-1/4"	46.6	46.6	110.0	120.0	110.0	120.0
37"	26"	110.0	145.4	110.0	195.0	110.0	195.0
	38-3/8"	98.5	98.5	110.0	194.5	110.0	120.0
	50-5/8"	74.7	74.7	110.0	120.0	110.0	120.0
	63"	60.0	60.0	110.0	120.0	110.0	120.0
	74-1/4"	46.6	46.6	110.0	120.0	110.0	120.0
42"	26"	110.0	128.1	110.0	195.0	110.0	195.0
	38-3/8"	86.8	86.8	110.0	120.0	110.0	120.0
	50-5/8"	65.8	65.8	110.0	120.0	110.0	120.0
	63"	60.0	60.0	110.0	120.0	110.0	120.0
	74-1/4"	46.6	46.6	110.0	120.0	110.0	120.0
53-1/8"	26"	101.3	101.3	110.0	195.0	110.0	120.0
	38-3/8"	68.6	68.6	110.0	120.0	110.0	120.0
	50-5/8"	65.8	65.8	110.0	120.0	110.0	120.0
	63"	60.0	60.0	110.0	120.0	110.0	120.0
	74-1/4"	46.6	46.6	110.0	120.0	110.0	120.0





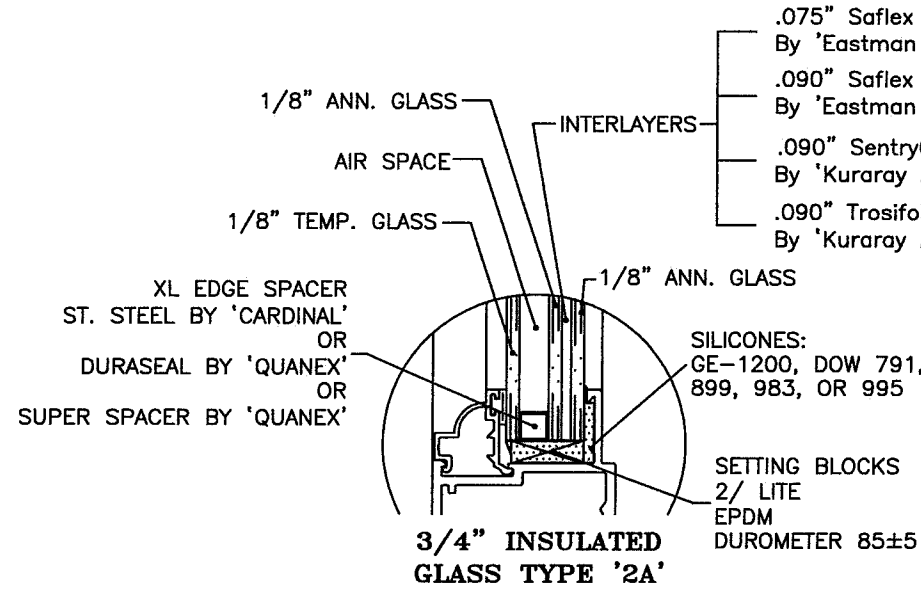
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	1NT. (-)	EXT. (+)	1NT. (-)
24"	24"	110.0	195.0	110.0	195.0
	28"	110.0	195.0	110.0	195.0
	30"	110.0	194.3	110.0	195.0
	36"	110.0	161.9	110.0	195.0
	42"	110.0	138.8	110.0	195.0
	48"	110.0	121.4	110.0	195.0
	54"	107.9	107.9	110.0	195.0
	60"	95.4	95.4	110.0	120.0
	66"	73.4	73.4	110.0	120.0
	72"	56.1	56.1	109.3	109.3
30"	24"	110.0	194.3	110.0	195.0
	28"	110.0	166.5	110.0	195.0
	30"	110.0	155.4	110.0	195.0
	36"	110.0	129.5	110.0	195.0
	42"	110.0	111.0	110.0	195.0
	48"	97.1	97.1	110.0	120.0
	54"	86.3	86.3	110.0	120.0
	60"	77.7	77.7	110.0	120.0
	66"	60.6	60.6	110.0	118.2
	72"	46.0	46.0	89.8	89.8
36"	24"	110.0	161.9	110.0	195.0
	28"	110.0	138.8	110.0	195.0
	30"	110.0	129.5	110.0	195.0
	36"	107.9	107.9	110.0	195.0
	42"	92.5	92.5	110.0	120.0
	48"	80.9	80.9	110.0	120.0
	54"	71.9	71.9	110.0	120.0
	60"	64.8	64.8	110.0	120.0
	66"	64.8	64.8	110.0	120.0
	72"	64.8	64.8	110.0	120.0

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	1NT. (-)	EXT. (+)	1NT. (-)
42"	24"	110.0	138.8	110.0	195.0
	28"	110.0	118.9	110.0	195.0
	30"	110.0	111.0	110.0	195.0
	36"	92.5	92.5	110.0	120.0
	42"	79.3	79.3	110.0	120.0
	48"	69.4	69.4	110.0	120.0
	54"	61.7	61.7	110.0	120.0
	60"	61.7	61.7	110.0	120.0
	66"	61.7	61.7	110.0	120.0
	72"	61.7	61.7	110.0	120.0
48"	24"	110.0	121.4	110.0	195.0
	28"	104.1	104.1	110.0	120.0
	30"	97.1	97.1	110.0	120.0
	36"	80.9	80.9	110.0	120.0
	42"	69.4	69.4	110.0	120.0
	48"	60.7	60.7	110.0	118.4
	54"	60.7	60.7	110.0	118.4
	60"	60.7	60.7	110.0	118.4
	66"	60.7	60.7	110.0	118.4
	72"	60.7	60.7	110.0	118.4
54"	24"	107.9	107.9	110.0	195.0
	28"	92.5	92.5	110.0	120.0
	30"	86.3	86.3	110.0	120.0
	36"	71.9	71.9	110.0	120.0
	42"	61.7	61.7	110.0	120.0
	48"	61.7	61.7	110.0	120.0
	54"	61.7	61.7	110.0	120.0
	60"	61.7	61.7	110.0	120.0
	66"	61.7	61.7	110.0	120.0
	72"	61.7	61.7	110.0	120.0
60"	24"	95.4	95.4	110.0	120.0
	28"	83.3	83.3	110.0	120.0
	30"	77.7	77.7	110.0	120.0
	36"	64.8	64.8	110.0	120.0
	42"	64.8	64.8	110.0	120.0
	48"	64.8	64.8	110.0	120.0
	54"	64.8	64.8	110.0	120.0
	60"	64.8	64.8	110.0	120.0
	66"	64.8	64.8	110.0	120.0
	72"	64.8	64.8	110.0	120.0
66"	24"	73.4	73.4	110.0	120.0
	28"	64.2	64.2	110.0	120.0
	30"	60.6	60.6	110.0	118.2
	36"	60.6	60.6	110.0	118.2
	42"	60.6	60.6	110.0	118.2
	48"	60.6	60.6	110.0	118.2
	54"	60.6	60.6	110.0	118.2
	60"	60.6	60.6	110.0	118.2
	66"	60.6	60.6	110.0	118.2
	72"	60.6	60.6	110.0	118.2
72"	24"	56.1	56.1	109.3	109.3
	28"	48.9	48.9	95.3	95.3
	30"	46.0	46.0	89.8	89.8
	36"	46.0	46.0	89.8	89.8
	42"	46.0	46.0	89.8	89.8
	48"	46.0	46.0	89.8	89.8
	54"	46.0	46.0	89.8	89.8
	60"	46.0	46.0	89.8	89.8
	66"	46.0	46.0	89.8	89.8
	72"	46.0	46.0	89.8	89.8
78"	24"	43.8	43.8	85.4	85.4
	28"	38.1	38.1	74.3	74.3
	30"	38.1	38.1	74.3	74.3
	36"	38.1	38.1	74.3	74.3
	42"	38.1	38.1	74.3	74.3
	48"	38.1	38.1	74.3	74.3
	54"	38.1	38.1	74.3	74.3
	60"	38.1	38.1	74.3	74.3
	66"	38.1	38.1	74.3	74.3
	72"	38.1	38.1	74.3	74.3
84"	24"	34.9	34.9	68.0	68.0
	28"	34.9	34.9	68.0	68.0
	30"	34.9	34.9	68.0	68.0
	36"	34.9	34.9	68.0	68.0
	42"	34.9	34.9	68.0	68.0
	48"	34.9	34.9	68.0	68.0
	54"	34.9	34.9	68.0	68.0
	60"	34.9	34.9	68.0	68.0
	66"	34.9	34.9	68.0	68.0
	72"	34.9	34.9	68.0	68.0

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 THRU 9 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	1NT. (-)	EXT. (+)	1NT. (-)
19-1/8"	26"	110.0	195.0	110.0	195.0
	38-3/8"	110.0	190.6	110.0	195.0
	50-5/8"	110.0	144.5	110.0	195.0
	63"	104.2	104.2	110.0	195.0
	74-1/4"	63.0	63.0	110.0	120.0
26-1/2"	26"	110.0	195.0	110.0	195.0
	38-3/8"	110.0	137.5	110.0	195.0
	50-5/8"	104.3	104.3	110.0	195.0
	63"	77.9	77.9	110.0	120.0
	74-1/4"	46.6	46.6	90.9	90.9
37"	26"	110.0	145.4	110.0	195.0
	38-3/8"	98.5	98.5	110.0	120.0
	50-5/8"	74.7	74.7	110.0	120.0
	63"	60.0	60.0	110.0	117.0
	74-1/4"	46.6	46.6	90.9	90.9
42"	26"	110.0	128.1	110.0	195.0
	38-3/8"	86.8	86.8	110.0	120.0
	50-5/8"	65.8	65.8	110.0	120.0
	63"	60.0	60.0	110.0	117.0
	74-1/4"	46.6	46.6	90.9	90.9
53-1/8"	26"	101.3	101.3	110.0	120.0
	38-3/8"	68.6	68.6	110.0	120.0
	50-5/8"	68.6	68.6	110.0	120.0
	63"	68.6	68.6	110.0	120.0
	74-1/4"	68.6	68.6	110.0	120.0

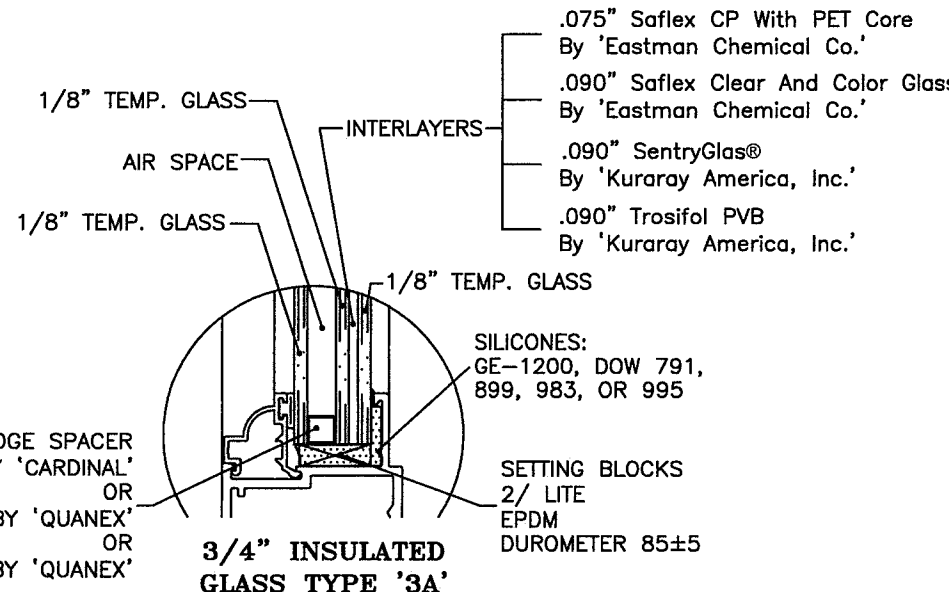
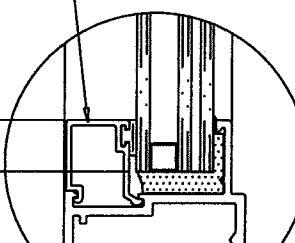
\*LIMIT MAX. LOADS TO 171.0 PSF WHEN MULTI POINT LOCK BY 'INTERLOCK' 9B IS USED.

\*\*SIZE 37" X 77" APPLICABLE TO FLANGE FRAMES ONLY SEE SHEET 1.



SQUARE BEAD  
OPTIONAL  
ALL GLASS TYPES

1/2" MIN. TYP.  
GLASS BITE



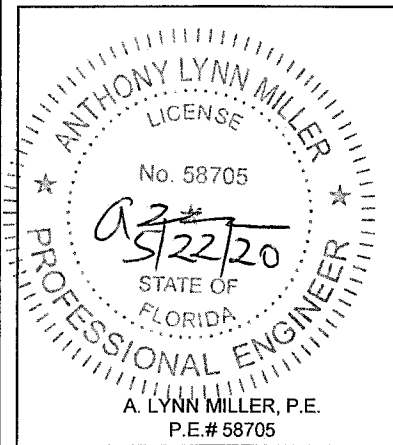
NOTES:  
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

LOAD/AREA LIMITS  
FOR +110.0, -120.0 PSF = 16.34 SQ. FT.  
FOR +110.0, -195.0 PSF = 10.00 SQ. FT.

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. 20-0528.03  
Expiration Date 10/31/2023  
By Ishaq I. Chande  
Miami-Dade Product Control

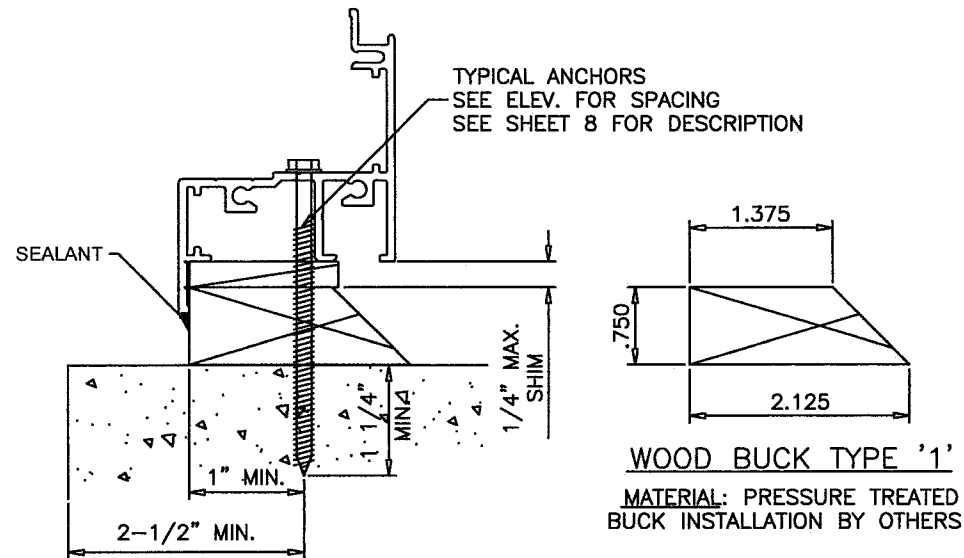
REFORMATED & ADDED BACKBEDDING - JR - 5/15/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	05/15/20	J ROSOWSKI	A
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	SERIES 238 AWNING WINDOW - LMI	GLASS & WINDOW DP 2	5 OF 9	AW238NOA-1
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	SERIES 238 AWNING WINDOW - LMI	GLASS & WINDOW DP 2	5 OF 9	AW238

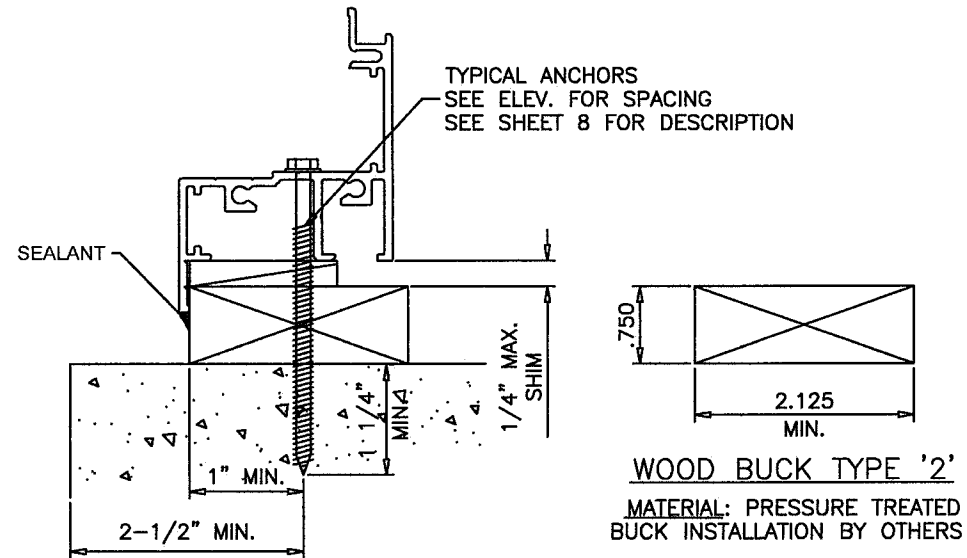


# **INSTALLATION CONDITIONS FLANGE FRAME (APPLIES TO ALL FOUR SIDES)**

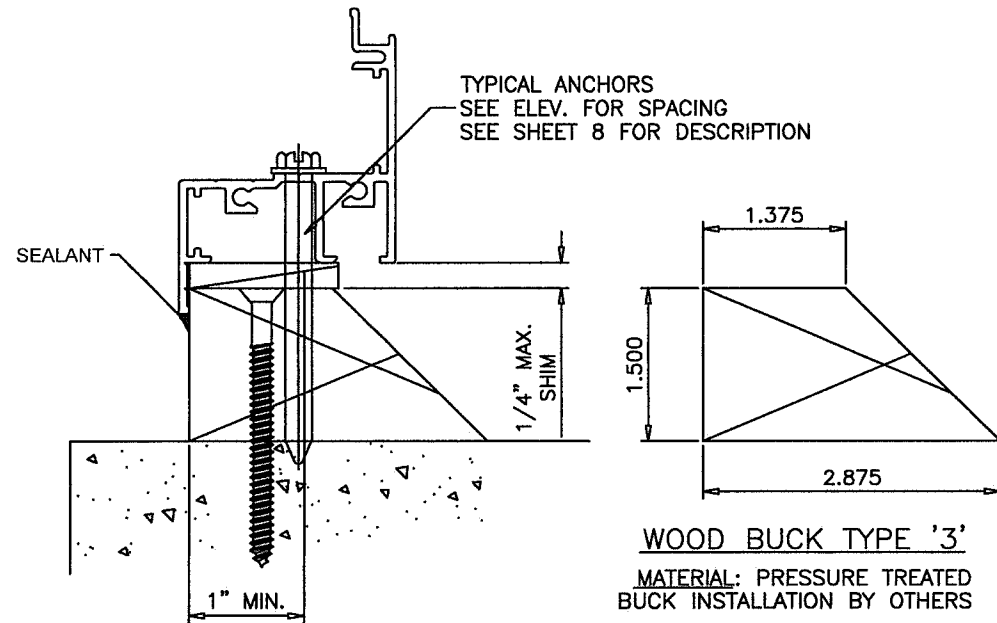
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 8



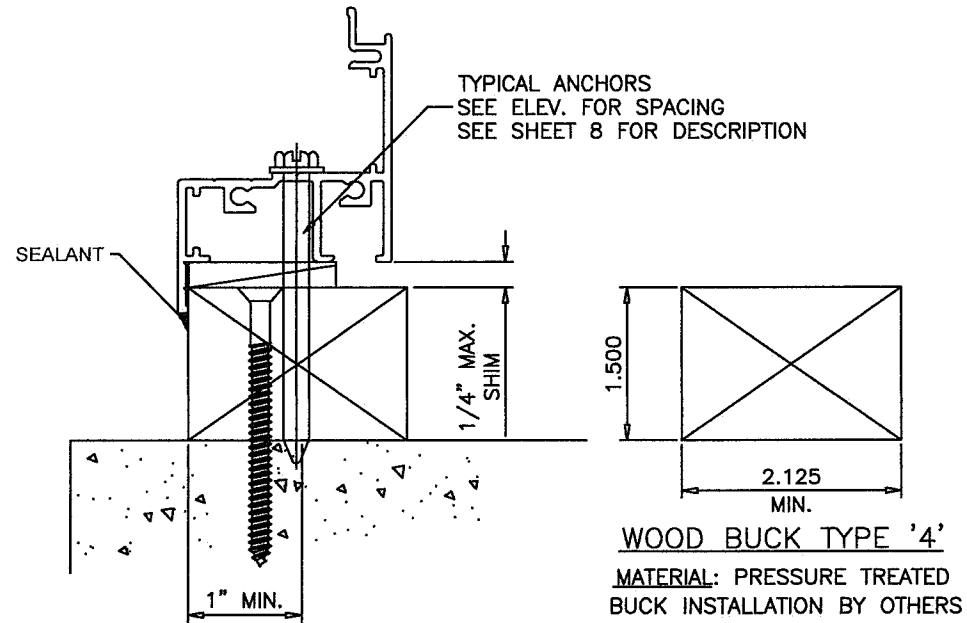
**INSTALLATION TYPE '1'**  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



**INSTALLATION TYPE '2'**  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD

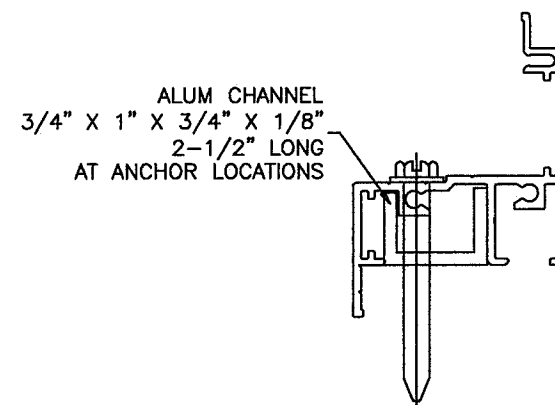
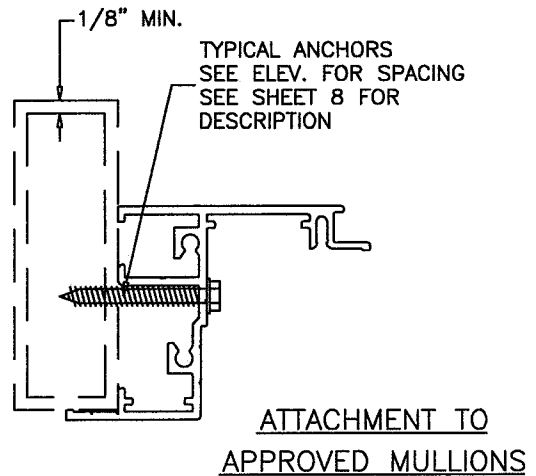
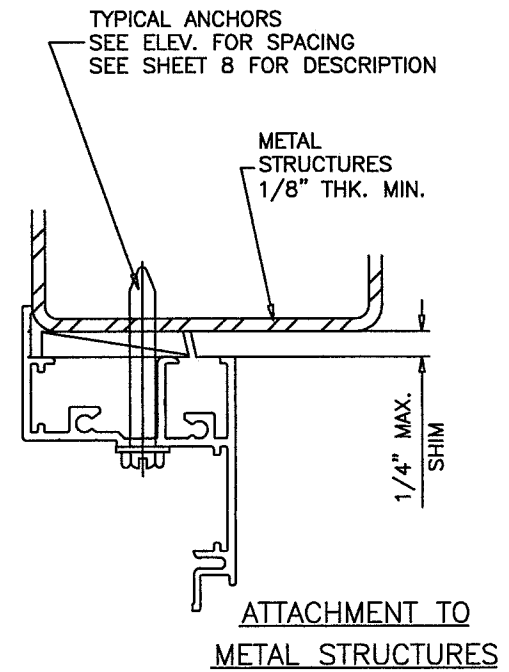


**INSTALLATION TYPE '3'**  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



**INSTALLATION TYPE '4'**  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD

WOOD BUCKS NOT BY CGI CORP., MUST SUSTAIN  
LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER  
THEM TO THE BUILDING STRUCTURE.



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03  
Expiration Date 10/31/2023  
By *Isaac I. Chank*  
Miami-Dade Product Control

Revision:

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	Date	05/15/20	By	J ROSOWSKI	Rev.	A
		No.	AW238NOA-1	DWG	6 OF 9	Sheet	NTS
		Scale	AW238	Series	Desc.	Installation Conditions, FL.	
		SERIES 238 AWNING WINDOW - LMI					

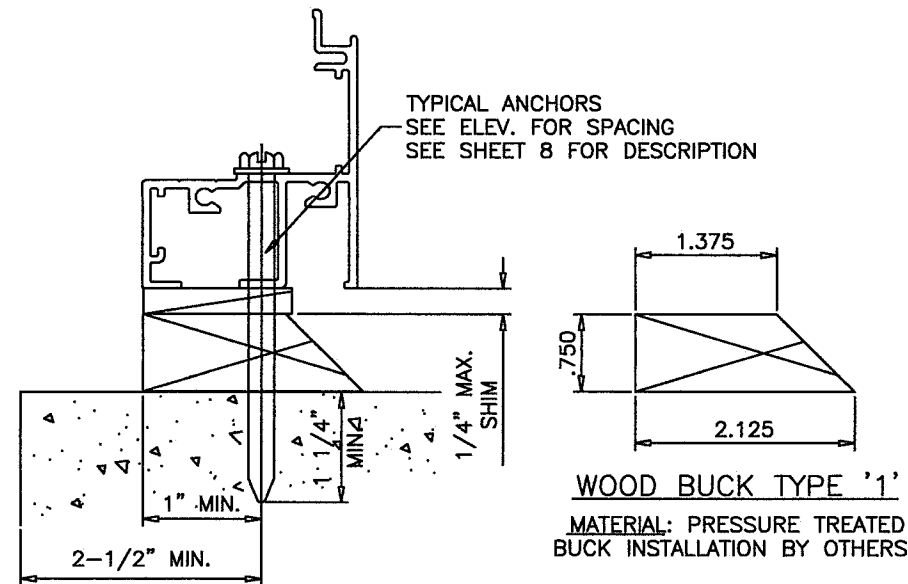
**Impact Resistant  
Windows & Doors**  
WE'RE STRONGER™  
CGI DOORS AND WINDOWS, INC.  
3780 W 104TH STREET  
HIALEAH, FL 33018  
(305) 593-6590

ANTHONY LYNN MILLER  
LICENSE  
No. 58705  
5/22/20  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
A. LYNN MILLER, P.E.  
P.E.# 58705

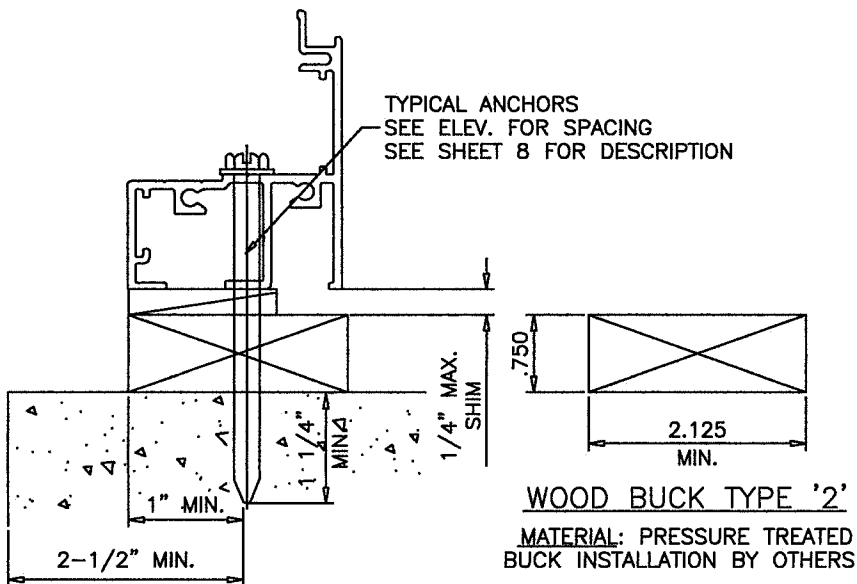


INSTALLATION CONDITIONS EQUAL LEG FRAME (APPLIES TO ALL FOUR SIDES)

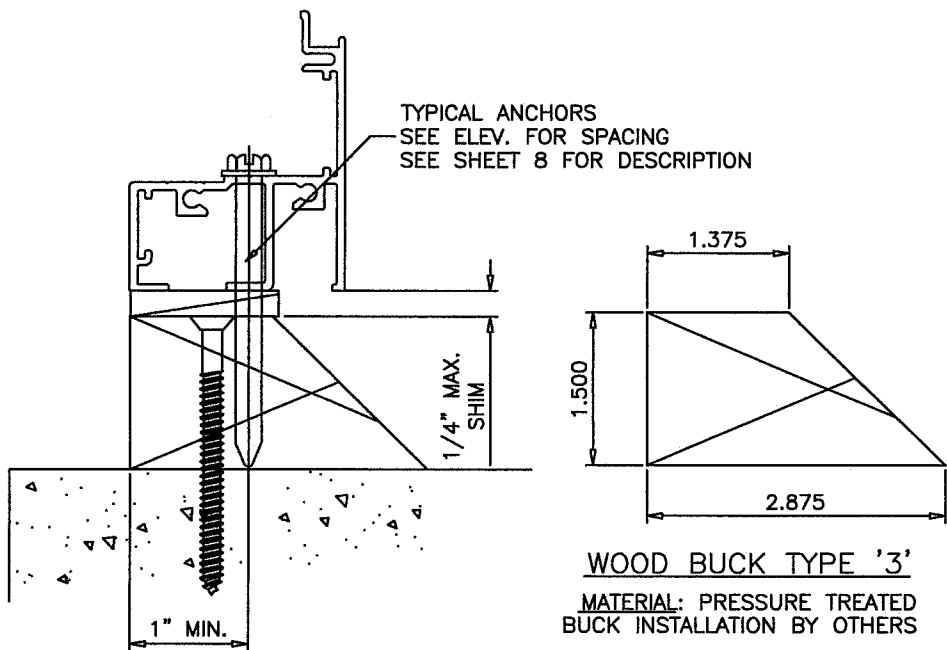
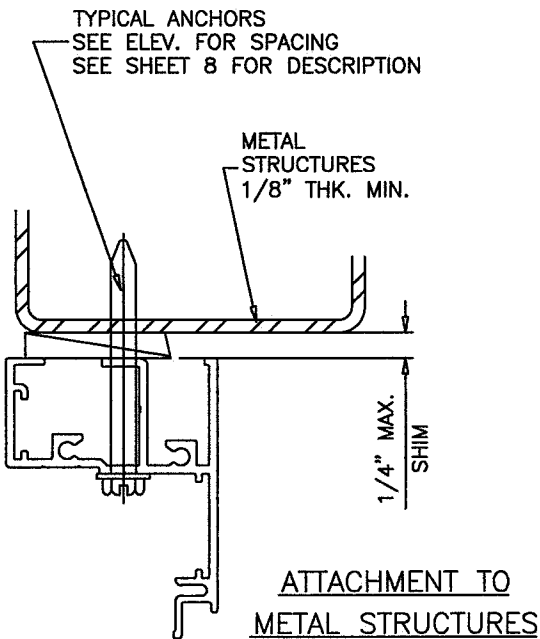
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 8



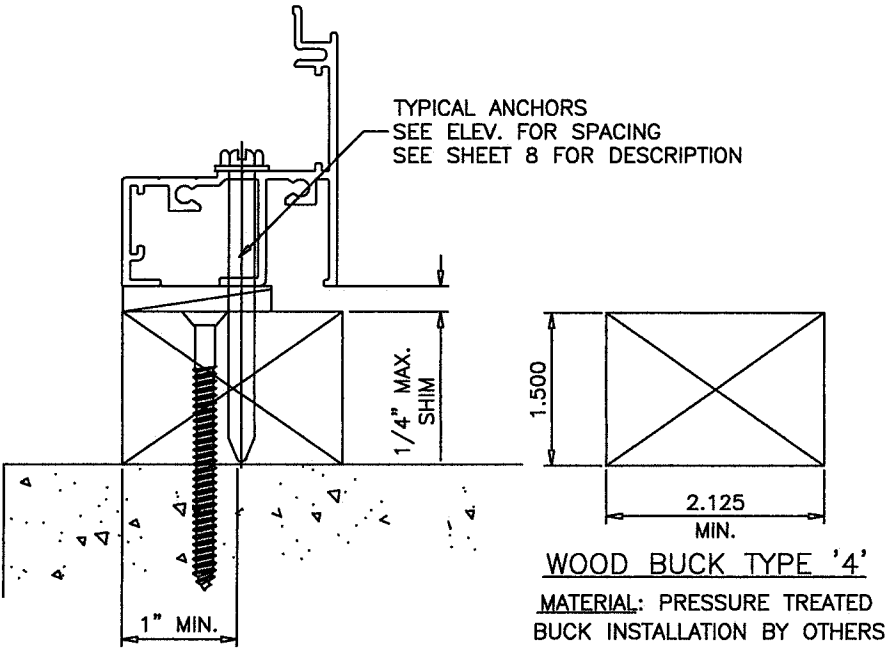
INSTALLATION TYPE '1'  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



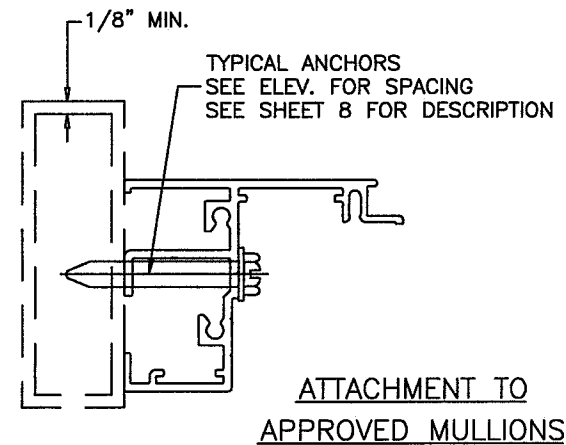
INSTALLATION TYPE '2'  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



INSTALLATION TYPE '3'  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD




INSTALLATION TYPE '4'  
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



WOOD BUCKS NOT BY CGI CORP., MUST SUSTAIN  
LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER  
THEM TO THE BUILDING STRUCTURE.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03  
Expiration Date 10/31/2023  
By *Isaac L. Chandra*  
Miami-Dade Product Control

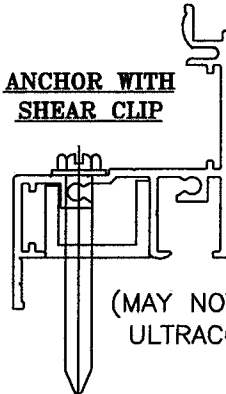
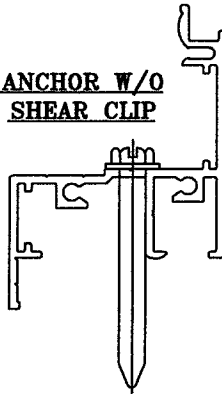
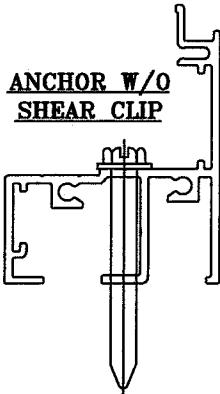
Revision:

		<b>Impact Resistant Windows &amp; Doors</b> <b>WE'RE STRONGER™</b>		CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600				REGISTRATION #29296	
Title		SERIES 238 AWNING WINDOW - LMI		Date	05/15/20
Series		INSTALLATION CONDITIONS, EL.		By Drawn	J ROSOWSKI
Scale		NTS		Sheet	7 OF 9
AW238		DWC		No.	AW238NOA-1
Rev.		A			

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 6 & 7 FOR DETAILS							
WINDOW DIMS.		ANCHORS TYPE 'A' & 'C'				ANCHORS TYPE 'B'	
		W/O SHEAR CLIP		WITH SHEAR CLIP		WITH OR W/O SHEAR CLIP	
WIDTH	HEIGHT	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.
24"	24"	195.0	195.0	129.0	193.5	195.0	195.0
	28"	195.0	195.0	110.6	165.9	195.0	195.0
	30"	195.0	195.0	154.8	154.8	195.0	195.0
	36"	195.0	195.0	129.0	172.0	195.0	195.0
	42"	195.0	195.0	110.6	147.4	195.0	195.0
	48"	195.0	195.0	129.0	161.3	195.0	195.0
	54"	195.0	195.0	114.7	172.0	195.0	195.0
	60"	193.6	195.0	103.2	154.8	195.0	195.0
	66"	195.0	195.0	117.3	164.2	195.0	195.0
	72"	195.0	195.0	107.5	150.5	195.0	195.0
30"	24"	186.2	195.0	99.2	158.8	195.0	195.0
	28"	195.0	195.0	110.6	165.9	195.0	195.0
	30"	195.0	195.0	154.8	154.8	195.0	195.0
	36"	195.0	195.0	132.7	132.7	195.0	195.0
	42"	195.0	195.0	123.8	123.8	195.0	195.0
	48"	193.6	195.0	103.2	137.6	195.0	195.0
	54"	165.9	195.0	88.5	117.9	195.0	195.0
	60"	193.6	195.0	103.2	129.0	195.0	195.0
	66"	172.1	195.0	91.7	137.6	195.0	195.0
	72"	154.9	195.0	82.6	123.8	195.0	195.0
36"	24"	176.0	195.0	93.8	131.3	195.0	195.0
	28"	161.3	195.0	86.0	120.4	195.0	195.0
	30"	148.9	195.0	79.4	127.0	195.0	195.0
	36"	195.0	195.0	129.0	172.0	195.0	195.0
	42"	195.0	195.0	110.6	147.4	195.0	195.0
	48"	193.6	195.0	103.2	137.6	195.0	195.0
	54"	161.3	195.0	86.0	114.7	195.0	195.0
	60"	143.4	195.0	76.4	114.7	195.0	195.0
	66"	129.1	193.6	68.8	103.2	195.0	195.0
	72"	195.0	195.0	110.6	147.4	195.0	195.0
42"	24"	177.8	195.0	94.8	126.4	195.0	195.0
	28"	165.9	195.0	88.5	117.9	195.0	195.0
	30"	138.3	184.4	73.7	98.3	195.0	195.0
	36"	118.5	158.0	63.2	84.2	179.8	195.0
	42"	138.3	172.9	73.7	92.1	195.0	195.0
	48"	122.9	184.4	65.5	98.3	186.4	195.0
	54"	195.0	195.0	129.0	161.3	195.0	195.0
	60"	195.0	195.0	110.6	138.2	195.0	195.0
	66"	193.6	195.0	103.2	129.0	195.0	195.0
	72"	161.3	195.0	86.0	107.5	195.0	195.0
48"	24"	138.3	172.9	73.7	92.1	195.0	195.0
	28"	121.0	151.3	64.5	80.6	183.5	195.0
	30"	195.0	195.0	129.0	172.0	195.0	195.0
	36"	184.4	195.0	98.3	147.4	195.0	195.0
	42"	172.1	195.0	91.7	137.6	195.0	195.0
	48"	143.4	195.0	76.4	114.7	195.0	195.0
	54"	122.9	184.4	65.5	98.3	186.4	195.0
	60"	195.0	195.0	129.0	161.3	195.0	195.0
	66"	195.0	195.0	110.6	138.2	195.0	195.0
	72"	193.6	195.0	103.2	129.0	195.0	195.0

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 6 & 7 FOR DETAILS							
WINDOW DIMS.		ANCHORS TYPE 'A' & 'C'				ANCHORS TYPE 'B'	
		W/O SHEAR CLIP		WITH SHEAR CLIP		WITH OR W/O SHEAR CLIP	
WIDTH	HEIGHT	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.
60"	24"	193.6	195.0	103.2	154.8	195.0	195.0
	28"	165.9	195.0	88.5	132.7	195.0	195.0
	30"	154.9	195.0	82.6	123.8	195.0	195.0
	36"	129.1	193.6	68.8	103.2	195.0	195.0
66"	24"	195.0	195.0	117.3	164.2	195.0	195.0
	28"	188.6	195.0	100.5	14.7	195.0	195.0
72"	30"	176.0	195.0	93.8	131.3	195.0	195.0
	24"	195.0	195.0	107.5	150.5	195.0	195.0
78"	28"	172.9	195.0	92.1	129.0	195.0	195.0
	30"	161.3	195.0	86.0	120.4	195.0	195.0
84"	24"	186.2	195.0	99.2	158.8	195.0	195.0
	28"	159.6	195.0	85.1	136.1	195.0	195.0
	30"	148.9	195.0	79.4	127.0	195.0	195.0
	24"	195.0	195.0	110.6	165.9	195.0	195.0
	28"	177.8	195.0	94.8	142.2	195.0	195.0

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 6 & 7 FOR DETAILS							
WINDOW DIMS.		ANCHORS TYPE 'A' & 'C'				ANCHORS TYPE 'B'	
		W/O SHEAR CLIP		WITH SHEAR CLIP		WITH OR W/O SHEAR CLIP	
WIDTH	HEIGHT	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.	AT 17" O.C.	AT 10" O.C.
19-1/8"	26"	195.0	195.0	149.4	195.0	195.0	195.0
	38-3/8"	195.0	195.0	151.9	195.0	195.0	195.0
	50-5/8"	195.0	195.0	153.5	191.9	195.0	195.0
	63"	195.0	195.0	123.3	195.0	195.0	195.0
26-1/2"	74-1/4"	195.0	195.0	130.8	195.0	195.0	195.0
	26"	195.0	195.0	107.8	161.8	195.0	195.0
	38-3/8"	195.0	195.0	109.6	146.1	195.0	195.0
	50-5/8"	195.0	195.0	110.8	138.5	195.0	195.0
37"	63"	167.0	195.0	89.0	155.8	195.0	195.0
	74-1/4"	177.1	195.0	94.4	151.1	195.0	195.0
	26"	195.0	195.0	115.9	154.5	195.0	195.0
	38-3/8"	147.3	195.0	78.5	104.7	195.0	195.0
42"	50-5/8"	148.8	186.0	79.3	99.2	195.0	195.0
	63"	119.6	195.0	63.8	111.6	181.4	195.0
	26"	191.5	195.0	102.1	136.1	195.0	195.0
	38-3/8"	129.7	173.0	69.2	92.2	195.0	195.0
53-1/8"	50-5/8"	131.1	163.9	69.9	87.4	195.0	195.0
	26"	195.0	195.0	107.6	161.4	195.0	195.0
	38-3/8"	136.7	195.0	72.9	109.3	195.0	195.0



(MAY NOT BE USED WITH  
ULTRACON+ ANCHORS)

### TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'—

1/4" DIA. KWIK—CON II BY 'HILTI'  
(Fu=163 KSI, Fy=157 KSI)

1/4" DIA. ULTRACON BY 'ELCO'  
(Fu=177 KSI, Fy=155 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT'  
(Fu=164 KSI, Fy=148 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
1-1/2" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR MASONRY  
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

(ULTRACON+ ANCHORS MAY NOT BE  
USED WITH THE SHEAR CLIP)

TYPE 'B'—

1/4" DIA. KWIK—CON II BY 'HILTI'  
(Fu=163 KSI, Fy=157 KSI)

1/4" DIA. ULTRACON BY 'ELCO'  
(Fu=177 KSI, Fy=155 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT'  
(Fu=164 KSI, Fy=148 KSI)

DIRECTLY INTO CONCRETE  
1-3/4" MIN. EMBED INTO CONCRETE

(ULTRACON+ ANCHORS MAY NOT BE  
USED WITH THE SHEAR CLIP)

TYPE 'C'—

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)  
INTO MIAMI—DADE COUNTY APPROVED MULLIONS  
OR  
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
(3) THREADS MIN. 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)

### TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 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 NORMAL WEIGHT  
BLOCK AT JAMBS f'm = 2000 PSI MIN.

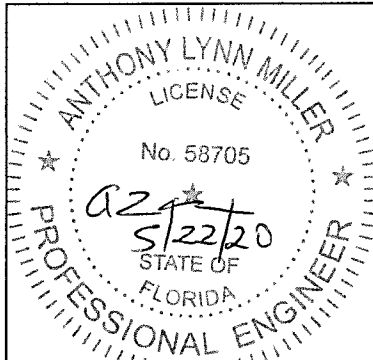
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03

Expiration Date 10/31/2023

By Ishag I. Chank  
Miami-Dade Product Control

REFORMATED & ADDED  
ANCHOR TYPE - JR -  
5/15/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	05/15/20	J ROSOWSKI	Rev.	A
				Date	AW238NOA-1
				By	
				DWG	
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	SERIES 238 AWNING WINDOW - LMI	ANCHORS & DP	AW238	No.	8 OF 9
				Sheet	NTS
				Scale	
				Series	AW238

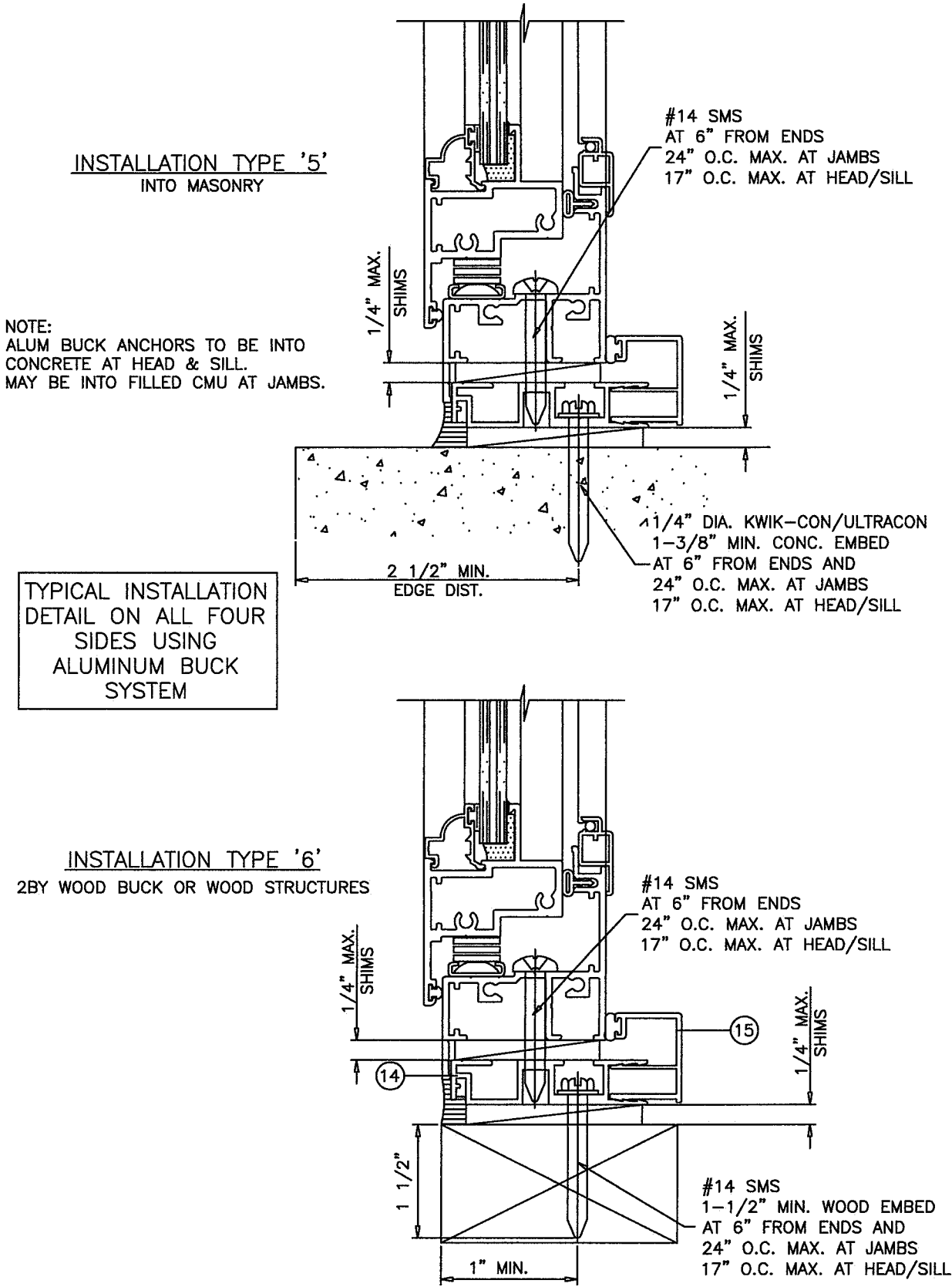


A. LYNN MILLER, P.E.  
P.E.# 58705

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		1/4" ANCHORS INTO MASONRY	#14 ANCHORS INTO WOOD
WIDTH	HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
24"	24"	195.0	195.0
	28"	195.0	195.0
	30"	195.0	195.0
	36"	195.0	195.0
	42"	195.0	169.1
	48"	195.0	148.0
	54"	195.0	131.6
	60"	177.6	118.4
	66"	161.5	107.6
	72"	148.0	98.7
28"	78"	136.6	91.1
	84"	126.9	84.6
	24"	195.0	195.0
	28"	195.0	195.0
	30"	195.0	195.0
	36"	195.0	169.1
	42"	195.0	145.0
	48"	190.3	126.9
	54"	169.1	112.8
	60"	152.2	101.5
30"	66"	138.4	92.3
	72"	126.9	84.6
	78"	117.1	78.1
	84"	108.7	72.5
	24"	195.0	195.0
	28"	195.0	195.0
	30"	195.0	189.4
	36"	195.0	157.9
	42"	195.0	135.3
	48"	195.0	118.4
36"	54"	195.0	105.2
	60"	177.6	94.7
	66"	161.5	86.1
	72"	148.0	78.9
	78"	136.6	72.9
	24"	195.0	195.0
	28"	195.0	169.1
	30"	195.0	157.9
	36"	195.0	131.6
	42"	195.0	112.8

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		1/4" ANCHORS INTO MASONRY	#14 ANCHORS INTO WOOD
WIDTH	HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
42"	24"	190.3	169.1
	28"	163.1	145.0
	30"	152.2	135.3
	36"	126.9	112.8
	42"	108.7	96.7
	48"	95.1	84.6
48"	54"	84.6	75.2
	24"	195.0	148.0
	28"	190.3	126.9
	30"	177.6	118.4
	36"	148.0	98.7
	42"	126.9	84.6
54"	48"	111.0	74.0
	24"	195.0	131.6
	28"	169.1	112.8
	30"	157.9	105.2
	36"	131.6	87.7
	42"	112.8	75.2
60"	24"	177.6	118.4
	28"	152.2	101.5
	30"	142.1	94.7
	36"	118.4	78.9
66"	24"	195.0	134.5
	28"	173.0	115.3
	30"	161.5	107.6
72"	24"	185.0	123.3
	28"	158.6	105.7
	30"	148.0	98.7
78"	24"	170.8	113.8
	28"	146.4	97.6
	30"	136.6	91.1
84"	24"	190.3	126.9
	28"	163.1	108.7
19-1/8"	26"	195.0	195.0
	38-3/8"	195.0	195.0
	50-5/8"	195.0	176.1
	63"	195.0	141.5
	74-1/4"	180.1	120.1
26-1/2"	26"	195.0	195.0
	38-3/8"	195.0	167.7
	50-5/8"	190.6	127.1
	63"	153.2	102.1
	74-1/4"	130.0	86.7
37"	26"	195.0	177.2
	38-3/8"	135.1	120.1
	50-5/8"	102.4	91.0
	63"	82.3	73.1
53-1/8"	26"	185.2	123.4
	38-3/8"	125.4	83.6

ALUMINUM BUCK FRAMING DETAILS  
REFER TO SHEETS 4 THRU 8 FOR WINDOW CAPACITIES. USE LOWER APPLICABLE VALUES.



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0528.03  
Expiration Date 10/31/2023  
By *Ishag I. Chande*  
Miami-Dade Product Control

Revision:  
REFORMATED & ADDED  
ANCHOR TYPE - JR -  
5/15/20

PREPARED BY A. LYNN MILLER  
1070 TECHNOLOGY DRIVE  
N. VENICE, FL 34275  
(941) 480-1600  
REGISTRATION #29296

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SERIES 238 AWNING WINDOW - LMI  
ANCHORS & DP, ALUM. BUCK INSTALL. J ROSOWSKI

AW238NOA-1  
9 OF 9  
NTS  
AW238

05/15/20  
Date  
By  
Drawn  
Scale  
Title

ANTHONY LYNN MILLER  
LICENSE  
No. 58705  
5/22/20  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
A. LYNN MILLER, P.E.  
P.E.# 58705