MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

CGI Windows and Doors, Inc.
10100 NW 25 Street
Miami, Fl. 33172

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" Outswing Aluminum Casement Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. **CA238NOA1** Rev **C**, titled "Series-238 Aluminum Casement Window (L.M.I.)", sheets 1 through 9 of 9 dated 05-15-20 and last revised on 07/08/24, prepared by manufacturer, 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 & replaces NOA No. 23-0906.02** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4, E-5, E-6, E-7 and E-8, as well as approval document mentioned above.
The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

MIAMI-DADE COUNTY APPROVED

Ishaq I. Chanda

CGI Windows and Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.

2. Drawing No. **W98-100**, titled "Series-238 Alum Outswing Casement Wdw. (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 6 and 7 of 7, dated 12/04/98, with revision **J** 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) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked–up drawings and installation diagram of a series 318 outswing aluminum casement window, prepared by Certified Testing Laboratories, Test Report No. **CTL-3009WB**, dated 03/24/14, signed and sealed by Ramesh C. Patel, P.E.
(Submitted under NOA # 14-0506.01)

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

B. TESTS (CONTINUED)

5. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked–up drawings and installation diagram of an aluminum casement window, prepared by American Test Lab of South Florida, Inc., Test Report No. **ATLSF-1109.01-12**, dated 11/20/12, signed and sealed by Henry Hattem, P.E.
(Submitted under NOA # 12-1220.14)

6. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked–up drawings and installation diagram of an aluminum casement window, prepared by Hurricane Testing Lab., Inc., Test Reports No. **HTL-0080-0301–07** for specimen **A** and **B,** and **HTL-0080-0905-07** for specimen **B** and **C**, dated 09/21/07 and 10/12/06, both signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA # 08-1010.02)

along with marked-up drawings and installation diagram of an aluminum casement window, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-1003** and **FTL-1041**, dated 10/14/94, both signed and sealed by Yamil Kuri, P.E.
(Submitted under NOA # 96-0417.03)

7. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum outswing casement window, prepared by Hurricane Engineering & Testing, Inc., Test Reports No. **HETI-08-2143**, **HETI-08-2144**, **HETI-08-4287** and **HETI-07-4298**, dated 06/27/08 and 07/17/08, all signed and sealed by Candido F. Font, P.E
(Submitted under NOA # 08-1010.02)

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 03/06/96 and 11/10/98, both signed and sealed by Timothy S. Marshall, P.E.
(Submitted under NOA's # 96-0417.03 and # 01-1002.03)

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC-2010**, dated 4/24/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. ***(Submitted under NOA # 14-0506.01)***
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**" dated 06/25/15, expiring on 07/04/18.
2. 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.
3. 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.
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.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC- 5th Edition (2014)**, dated April 11, 2014, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E. ***(Submitted under previous NOA # 14-0506.01)***
2. Proposal No. **13-1098** issued by the Product Control Section, dated October 02, 2013 and revised on February 24, 2014, signed by Manuel Perez, P.E. ***(Submitted under previous NOA # 14-0506.01)***
3. Laboratory compliance letters for Test Reports No. **HTL-0080-0301-07** for specimen A and B and **HTL-0080-0905-07** for specimen B and C, issued by Hurricane Test Laboratory, Inc., dated 09/21/07 and 10/12/06, both signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA # 08-1010.02)***
4. Laboratory compliances letters for Test Reports No. **HETI-08-2143**, **HETI–08–2144**, **HETI-08-4287** and **HETI-07-4298**, issued by Hurricane Engineering & Testing, Inc., dated 06/27/08 and 07/17/08, all signed and sealed by Candido F. Font, P.E. ***(Submitted under NOA # 08-1010.02)***
5. Laboratory compliance letters for Test Reports No. **HTL-0080-0303-96** and **HTL-0080-1107-98**, issued by Hurricane Test Laboratory, Inc., dated 03/06/96 and 11/10/98, both signed and sealed by Timothy S. Marshall, P.E. ***(Submitted under NOA # 96-0417.03 and 01-1002.03)***

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

6. Laboratory compliance letters for Test Reports No. **FTL-1003** and **FTL-1041**, issued by Fenestration Testing Laboratory, Inc., dated 10/14/94, both signed and sealed by Yamil Kuri, P.E.
(Submitted under NOA # 96-0417.03)

7. 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. **14-0506.01**, issued to CGI Windows & Doors, Inc. for their Series "238" Outswing Aluminum Casement Window - L.M.I., approved on 06/26/14 and expiring on 10/26/18.

2. EVIDENCE SUBMITTED In PREVIOS SUBMITTAL

A. DRAWINGS

1. Drawing No. **W98-100**, titled "Series-238 Alum Outswing Casement Wdw. (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 6 and 7 of 7, dated 12/04/98, with revision **K** dated 08/30/17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

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**" dated 06/25/15, expiring on 07/04/18.

2. Notice of Acceptance No. **16–1117.01** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Interlayers**" dated 01/19/17, expiring on 07/08/19**.**

3. 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.

4. Notice of Acceptance No. **17-0712.05** issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers**" dated 09/07/17, expiring on 05/21/21.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, of complying with **FBC 5th Edition (2014)**, with **FBC 6th 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. **15-0512.19**, issued to CGI Windows and Doors, Inc. for their Series "238" Outswing Aluminum Casement Window - L.M.I., approved on 09/17/15 and expiring on 10/26/18.

3 Evidence submitted under previous approval

A. **DRAWINGS**

1. Drawing No. **CA238NOA1** Rev **A** (former **W98-100 Rev K**), titled "Series-238 Aluminum Casement Window (L.M.I.)", sheets 1 through 9 of 9 dated 05-22-20, prepared by manufacturer, signed and sealed by 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.:

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.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 7th Edition (2020)**, dated 05/22/20, prepared by manufacturer, signed and sealed by Anthony 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.** for their **"SentryGlas® (Clear and White) Glass Interlayers**", expiring on 07/04/23.

F. STATEMENTS

1. Statement letters of conformance to FBC 2020(**7th** Edition), dated 04/20/20, prepared, signed & 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 NOA #17-0918.11** and updates to FBC 2020, expiring 10/26/23.
2. RER Test proposals #**19-1155** dated 01/10/20 approved by Ishaq I. Chanda, P.E.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

4. Evidence submitted under previous approval

A. DRAWINGS

1. Drawing No. **CA238NOA1** Rev **B**, titled "Series-238 Aluminum Casement Window (L.M.I.)", sheets 1 through 9 of 9 dated 05-22-20 and last revised on 08/31/23, prepared by manufacturer, signed and sealed by Lynn Miller, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **22-1116.01** issued to **Kuraray America, Inc.** for their **"SentryGlas® (Clear and White) Glass Interlayers**", expiring on 07/04/28.
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. **23-0713.18** issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers**", expiring on 05/21/26.

F. STATEMENTS

1. Statement letter of conformance to FBC 2023 (**8th** Edition), issued by manufacturer, dated 08/30/23, signed and sealed by Lynn Miller, P. E.

G. OTHER

1. This NOA **revises NOA No. 20-0528.04** and updates to FBC 2023**,** expiring 10/31/28.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
Approval Date: July 25, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. New Evidence submitted

A. DRAWINGS

1. Drawing No. **CA238NOA1** Rev **C**, titled "Series-238 Aluminum Casement Window (L.M.I.)", sheets 1 through 9 of 9 dated 05-15-20 and last revised on 07/08/24, prepared by manufacturer, signed and sealed by Lynn Miller, P.E.

Note: This consists of revision of tables 3 in sheet 4 of 9.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **22-1116.01** issued to **Kuraray America, Inc.** for their **"SentryGlas® (Clear and White) Glass Interlayers**", expiring on 07/04/28.
2. Notice of Acceptance No. **24-0205.08** 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 07/08/29.
3. Notice of Acceptance No. **24-0312.10** 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 12/11/28.
4. Notice of Acceptance No. **23-0713.18** issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers**", expiring on 05/21/26.

F. STATEMENTS

1. Statement letter of conformance to FBC 2023 (**8th** Edition) and "No financial interest", issued by manufacturer, dated 06/21/24, signed and sealed by Lynn Miller, P. E.

G. OTHER

1. This NOA **revises & replaces NOA No. 23-0906.02,** expiring 10/31/28.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0624.04
Expiration Date: October 26, 2028
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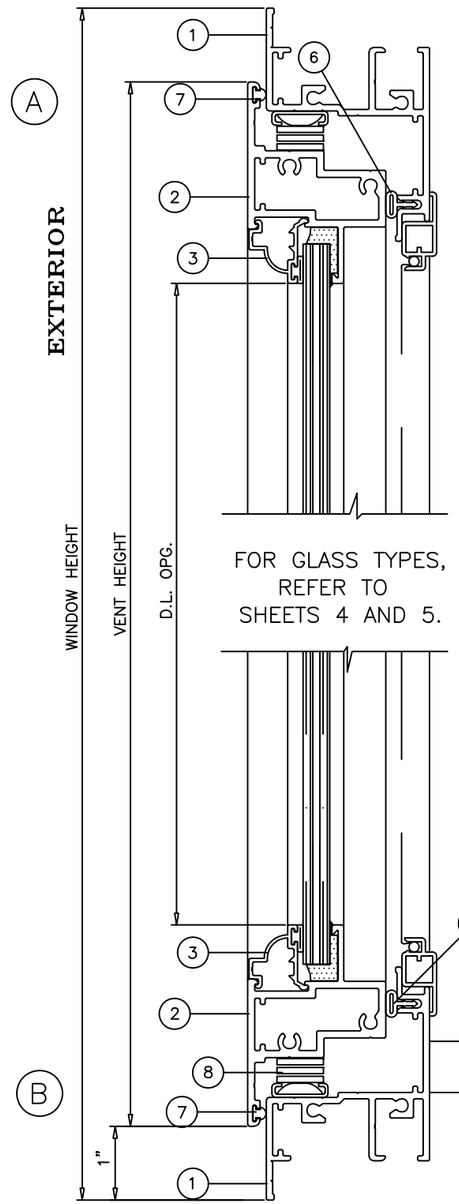
THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.



FOR GLASS TYPES, REFER TO SHEETS 4 AND 5.

NOTES:

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING THE 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 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.

FRAME FLANGES MAY BE TRIMMED IN–FIELD AS NEEDED. THE EXPOSED ALUMINUM EDGE MUST BE PAINTED TO PROTECT AGAINST CORROSION.

INSTRUCTIONS: USE CHARTS AS FOLLOWS.

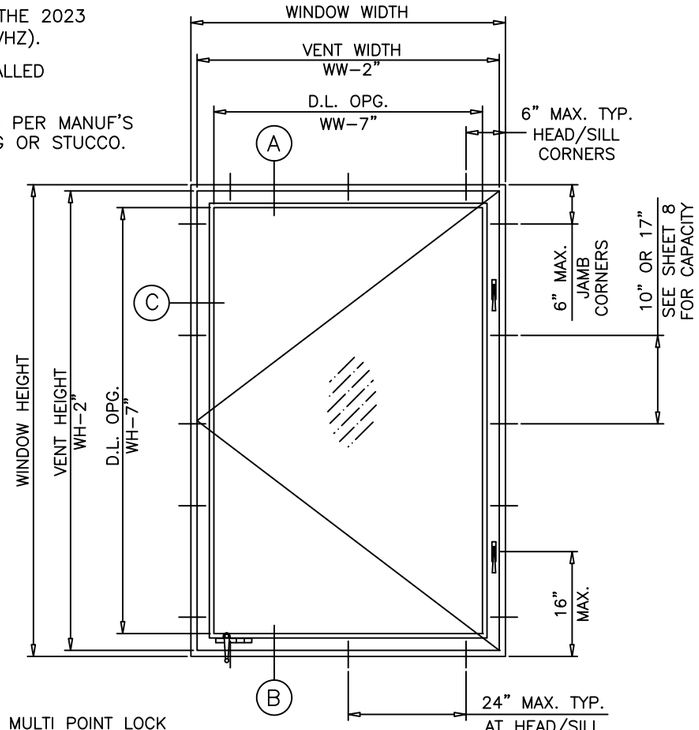
STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 SEE CHARTS ON SHEETS 4 AND 5 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE/TYPE.

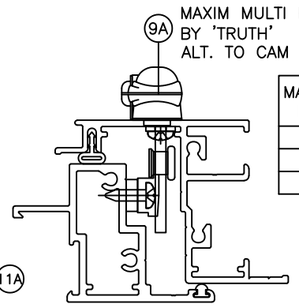
STEP 3 USING CHART ON SHEET 8 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

STEP 4 IF ALUMINUM BUCK SYSTEM IS USED USE CHART ON SHEET 9 TO DETERMINE CAPACITY.

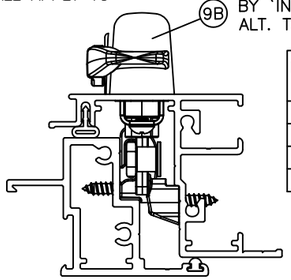
STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.



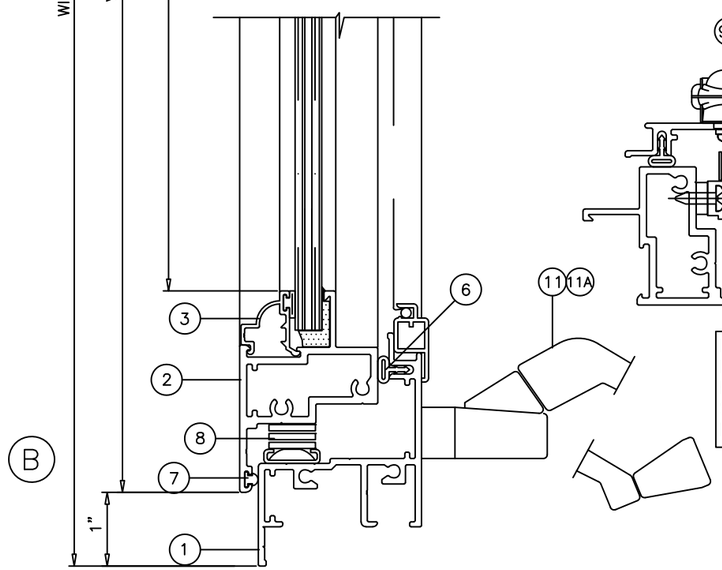
TYPICAL ELEVATION
(FLANGE FRAME)



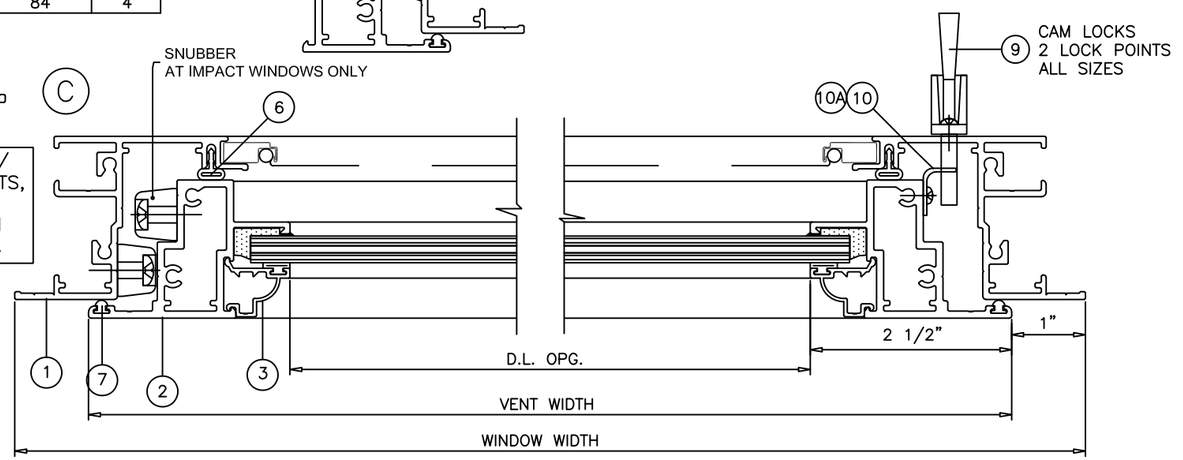
MAX. WDW. HEIGHT	LOCK POINTS
42"	2
63"	3
84"	4



MAX. WDW. HEIGHT	LOCK POINTS
38"	2
56"	3
74"	4
84"	5



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



GENERAL WINDOW SECTIONS
FLANGE FRAME

EXTERIOR

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami–Dade Product Control

Revision: CORRECTED TABLES, SHEET 4 LMY - 7/8/24

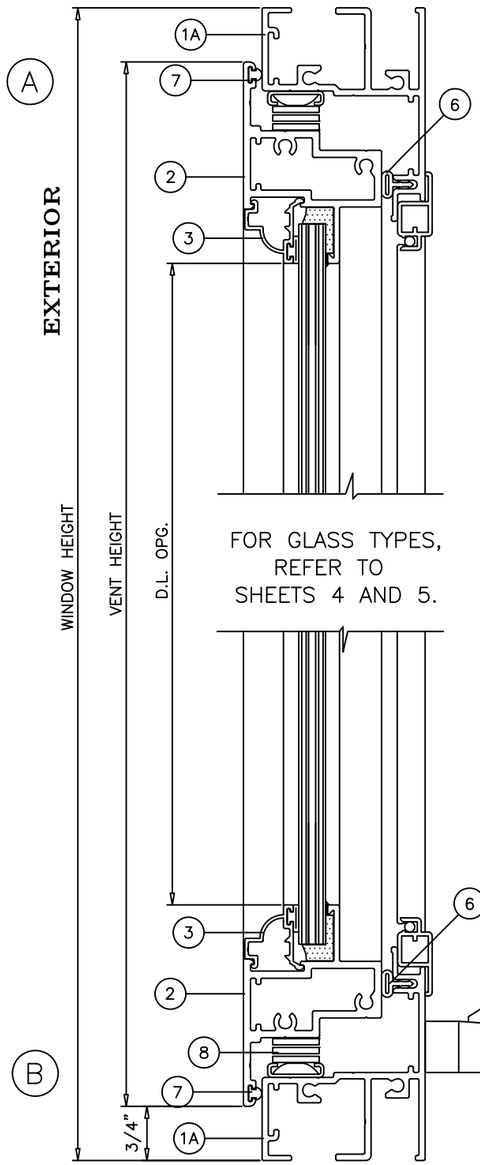
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

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

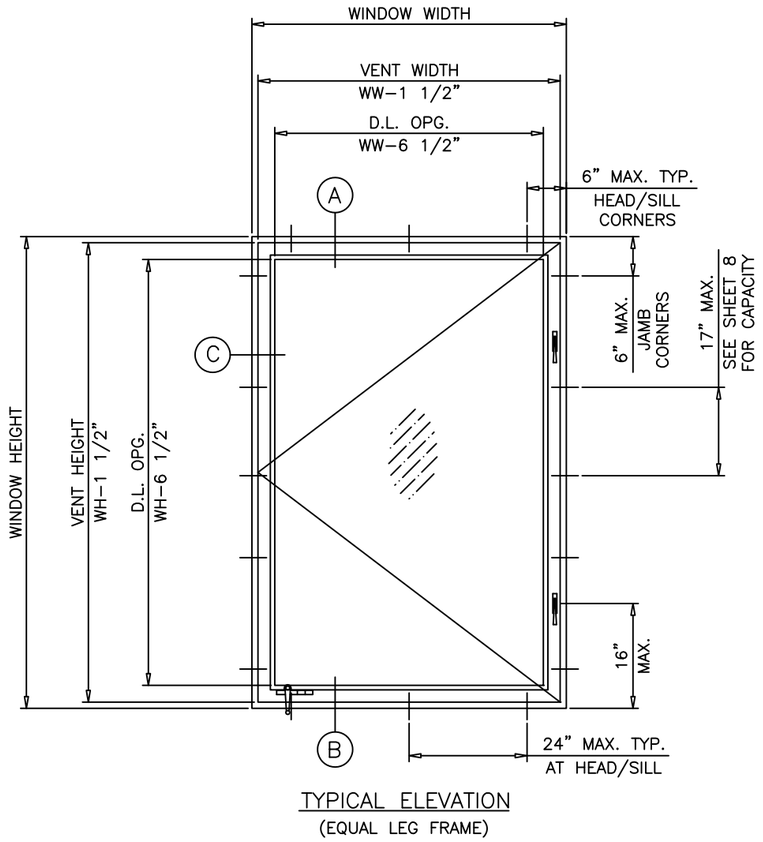
Title	Desc.	Series	Sheet	Scale	DWG No.	Drawn By	Date	Rev.
SERIES 238 CASEMENT WINDOW - LMI	GEN. NOTES, ELEV. & FL. X-SECTIONS	CA238	1 OF 9	NTS	CA238NOA-1	J ROSOWSKI	05/15/20	C

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
07/08/24
A. LYNN MILLER, P.E.
P.E.# 58705

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

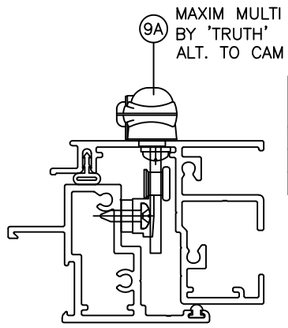


GENERAL WINDOW SECTIONS
EQUAL LEG FRAME

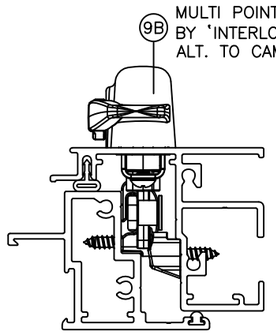


TYPICAL ELEVATION
(EQUAL LEG FRAME)

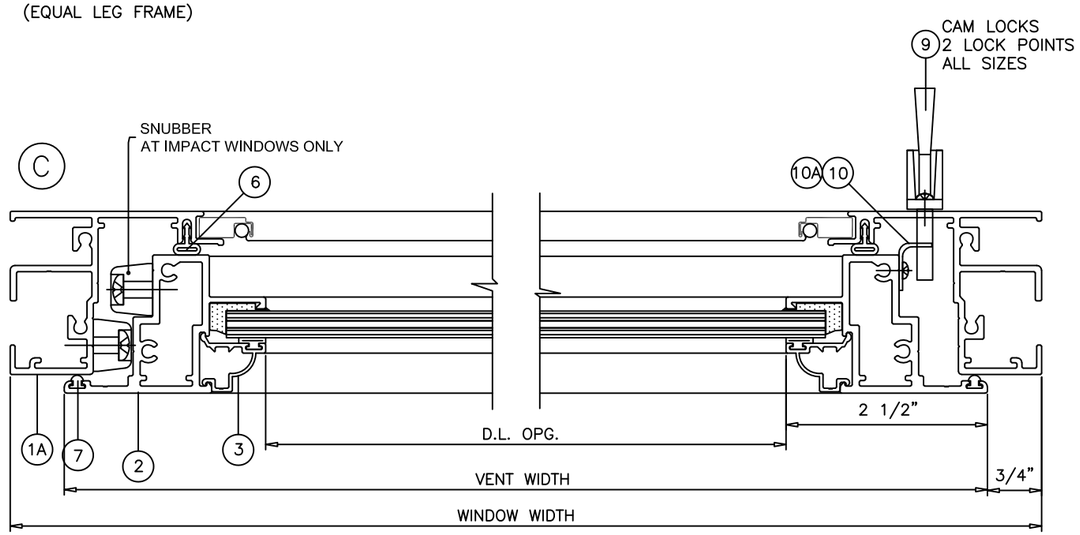
FOR MULLION/ MULTIPLE UNITS, REFER TO SEPARATE CGI MULLION NOA.



MAX. WDW. HEIGHT	LOCK POINTS
42"	2
63"	3
84"	4



MAX. WDW. HEIGHT	LOCK POINTS
38"	2
56"	3
74"	4
84"	5



EXTERIOR

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami–Dade Product Control

Revision:
NO CHANGES THIS SHEET.
LMY - 7/8/24

PREPARED BY A. LYNN MILLER
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REGISTRATION #29296

Impact Resistant Windows & Doors
CGI DOORS AND WINDOWS, INC.
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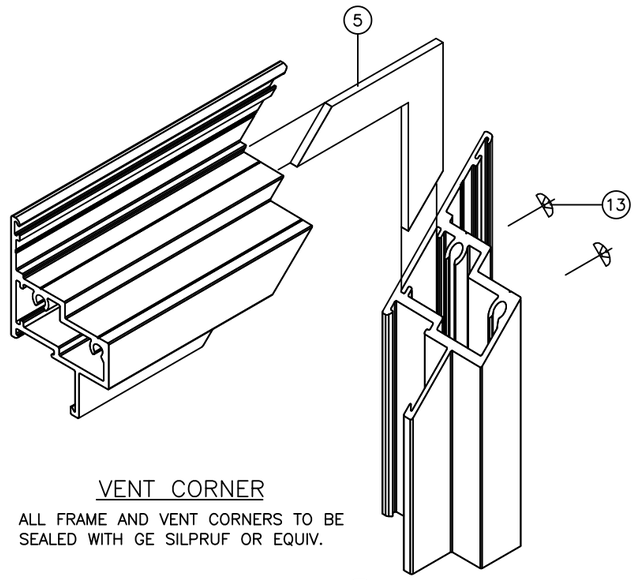
HIALEAH, FL 33018
(305) 593-6590

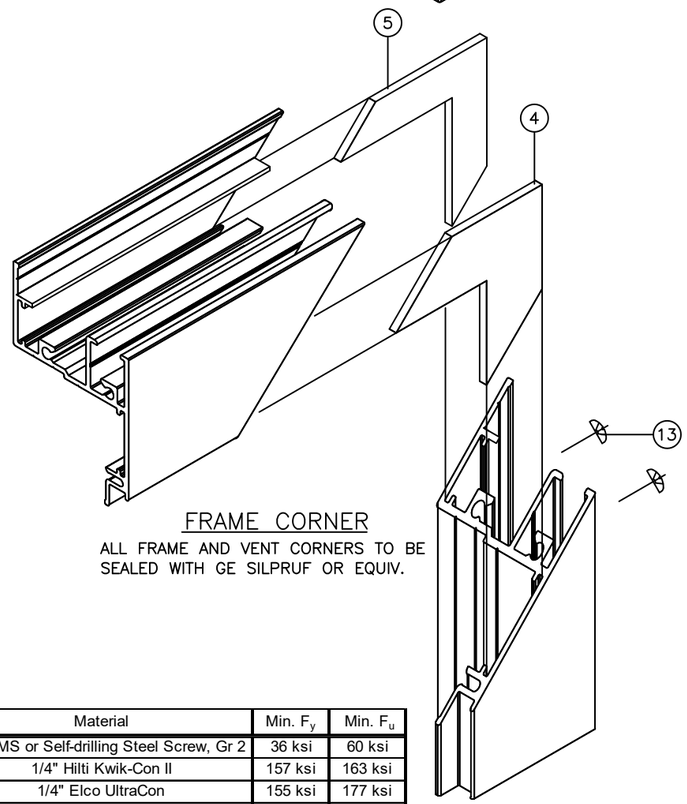
Title	Desc.	Series	Scale	Sheet	DWG No.	Drawn By	Date	Rev.
SERIES 238 CASEMENT WINDOW - LMI	ELEV. & EL. X-SECTIONS	CA238	NTS	2 OF 9	E 9	J ROSOWSKI	05/15/20	C

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
07/08/24
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705



VENT CORNER

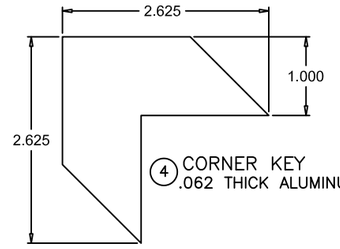
ALL FRAME AND VENT CORNERS TO BE SEALED WITH GE SILPRUF OR EQUIV.



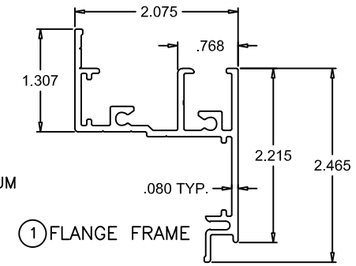
FRAME CORNER

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

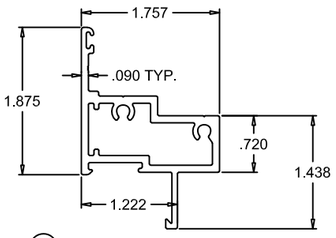
Material	Min. F_y	Min. F_u
#14 SMS or Self-drilling Steel Screw, Gr 2	36 ksi	60 ksi
1/4" Hilti Kwik-Con II	157 ksi	163 ksi
1/4" Elco UltraCon	155 ksi	177 ksi
1/4" DeWalt UltraCon+	148 ksi	164 ksi
6063-T5 Aluminum	16 ksi	22 ksi
A36 Steel	36 ksi	58 ksi
Gr. 33 Steel Stud	33 ksi	45 ksi



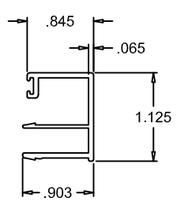
4 CORNER KEY .062 THICK ALUMINUM



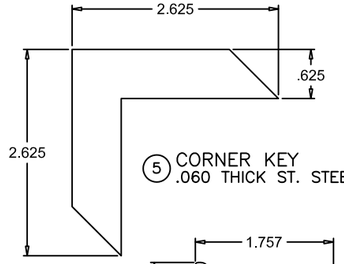
1 FLANGE FRAME



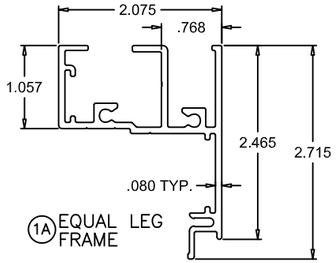
2 VENT (5/16" LAM. GLASS)



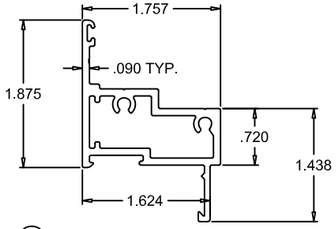
15 OPT. ALUM BUCK COVER



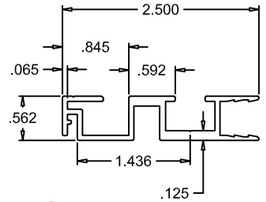
5 CORNER KEY .060 THICK ST. STEEL



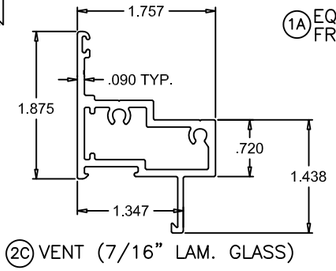
1A EQUAL LEG FRAME



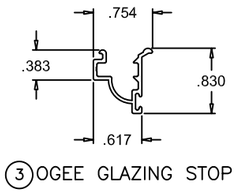
2B VENT (INSUL. LAM. GLASS)



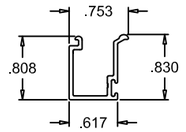
14 ALUMINUM BUCK



2C VENT (7/16" LAM. GLASS)



3 OGEE GLAZING STOP



3A SQUARE GLAZING STOP

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	Q250-K-190	AS REQD.	VENT WEATHERSTRIPPING	–	SCHLEGEL Q-LON
8	35-10-00-101	2/ VENT	4 BAR HINGE, AT TOP AND BOTTOM	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" SS SMS
9A	–	1/ VENT	MULTI POINT LOCK	–	TRUTH
9B	–	1/ VENT	MULTI POINT LOCK	–	INTERLOCK
10	–	2/ VENT	.110 THICK LOCK KEEPER, AT FRAME JAMB FACING LOCK	STEEL	CGI, ATTACHED W/ (2) #10 X 3/8" SS SMS
11	–	1	OPERATOR (OPTIONAL)	STEEL	TRUTH, ATTACHED W/ (2) #8 X 3/8" SS SMS
11A	–	1	OPERATOR (OPTIONAL)	STEEL	INTERLOCK
12	30175	1	OPERATOR TRACK	STEEL	TRUTH, ATTACHED W/ (2) #8 X 3/8" SS SMS
13	–	2/ CORNER	FRAME AND VENT ASSEMBLY SCREWS	–	#10 X 1-1/4" SS SMS
14	–	–	ALUMINUM BUCK	6063-T6	INDALEX OR EQUIV.
15	–	–	OPTIONAL ALUMINUM BUCK COVER	6063-T6	INDALEX OR EQUIV.

PRODUCT REVISED
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NOA-No. 24-0624.04
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LMY - 7/8/24

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

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

Title	Desc.	Series
SERIES 238 CASEMENT WINDOW - LMI	BOM & EXTRUSIONS	CA238

Date	Drawn By	Rev.
05/15/20	J ROSOWSKI	C

DWG No.	Scale	Sheet
CA238NOA-1	NTS	3 OF 9

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
07/08/24
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

TABLE 1:

Window Design Pressure, (+/- psf)														Use this table for Glass Type:	2
Window Dimensions	Height (in)														
	26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	77	78	84
Width (in) 19-1/8	+110/-195	+110/-194.3	+110/-190.6	+110/-166.5	+110/-145.7	+110/-144.5	+110/-129.5	+98.8/-112.6	+96.7/-104.2	+/-86.7	+/-66.4	+/-63	+/-52	+/-52	+/-52	+/-41.5
20	+110/-195	+110/-194.3	+110/-166.5	+110/-166.5	+110/-145.7	+110/-129.5	+110/-129.5	+98.8/-112.6	+/-86.7	+/-86.7	+/-66.4	+/-52	+/-52	+/-52	+/-52	+/-41.5
24	+110/-195	+110/-161.9	+110/-138.8	+110/-138.8	+110/-121.4	+99.7/-107.9	+98/-107.9	+85.8/-95.4	+74.9/-77.9	+/-73.4	+/-56.1	+/-46.6	+/-43.8	+/-43.8	+/-43.8	+/-34.9
26-1/2	+110/-195	+110/-138.8	+110/-137.5	+110/-118.9	+103.8/-104.3	+99.7/-104.3	+88.2/-92.5	+76.7/-83.3	+74.9/-77.9	+/-64.2	+/-48.9	+/-46.6	+/-38.1	+/-38.1	+/-38.1	
28	+110/-145.4	+110/-138.8	+110/-118.9	+110/-118.9	+103.8/-104.1	+88.2/-92.5	+88.2/-92.5	+76.7/-83.3	+/-64.2	+/-64.2	+/-48.9	+/-38.1	+/-38.1	+/-38.1	+/-38.1	
30	+110/-145.4	+110/-129.5	+110/-111	+110/-111	+/-97.1	+84.4/-86.3	+84.4/-86.3	+73.2/-77.7	+/-60.6	+/-60.6	+/-46					
32	+110/-145.4	+110/-121.4	+/-104.1	+/-104.1	+/-91.1	+/-80.9	+/-80.9	+70.2/-72.8	+/-60	+/-57.5	+/-43.6					
36	+110/-145.4	+/-107.9	+/-98.5	+/-92.5	+/-80.9	+/-74.7	+/-71.9	+/-64.8	+/-60							
37	+110/-145.4	+/-98.5	+/-98.5	+/-83.3	+/-74.7	+/-74.7	+/-64.8	+/-60	+/-60							
40	+110/-128.1	+/-97.1	+/-86.8	+/-83.3	+/-72.8	+/-65.8	+/-64.8									
42	+110/-128.1	+/-92.5	+/-86.8	+/-79.3	+/-69.4	+/-65.8	+/-61.7									

TABLE 2:

Window Design Pressure, (+/- psf)														Use this table for Glass Type:	3
Window Dimensions	Height (in)														
	26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	77	78	84
Width (in) 19-1/8	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120
20	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
24	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
26-1/2	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
28	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-51.2
30	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-48.3
32	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60	
36	+110/-195	+110/-195	+110/-194.5	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60	+/-56.3		
37	+110/-195	+110/-195	+110/-194.5	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-59.8	+/-59.8	+/-56.3	+/-56.3**		
40	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60						
42	+110/-195*	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60							

TABLE 3:

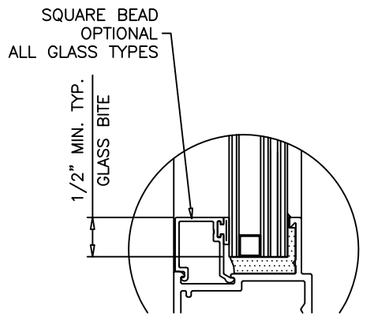
Window Design Pressure, (+/- psf)														Use this table for Glass Type:	6
Window Dimensions	Height (in)														
	26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	77	78	84
Width (in) 19-1/8	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
20	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
24	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120
26-1/2	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-54.5
28	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-54.5
30	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60	+/-51.2
32	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60	+/-48.3
36	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60	+/-56.3		
37	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-59.8	+/-59.8	+/-56.3	+/-56.3**		
40	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60	+/-60						
42	+110/-195*	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-60	+/-60	+/-60							

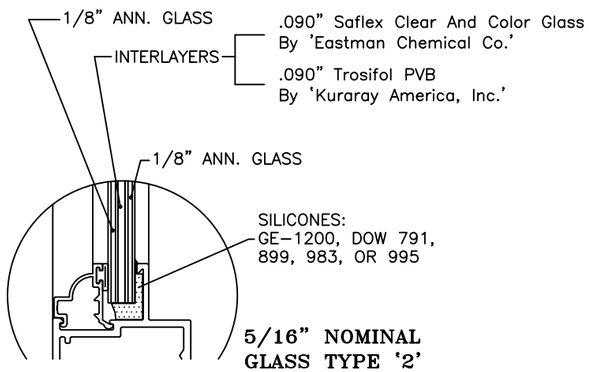
NOTES:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

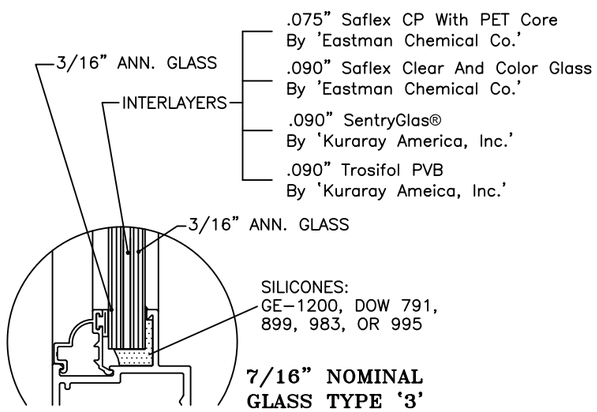
LOAD/AREA LIMITS
FOR +110.0, -120.0 PSF = 16.34 SQ. FT.
FOR +110.0, -195.0 PSF = 10.00 SQ. FT.

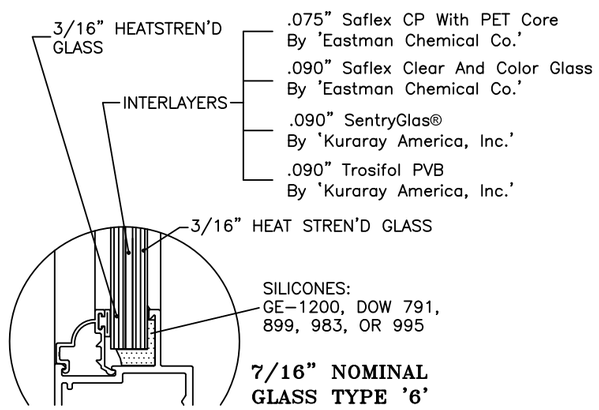
*LIMIT MAX. LOADS TO 171.0 PSF WHEN MULTI POINT LOCK BY 'INTERLOCK' (9B) IS USED.

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









PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami-Dade Product Control

Revision: CORRECTED TYPO, TABLE 2 & AVAILABLE SIZES, TABLE 3. LMY - 7/8/24

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

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

Series	Desc.	Title
CA238	SERIES 238 CASEMENT WINDOW - LMI	GLASS & WINDOW DP 1

Scale	Sheet	DWG No.	Drawn By	Date	Rev.
NTS	4 OF 9	CA238NOA-1	J ROSOWSKI	05/15/20	C

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
A. Lynn Miller 07/08/24
A. LYNN MILLER, P.E.
P.E.# 58705

TABLE 4:

Window Dimensions		Window Design Pressure, (+/- psf) — Height (in)																Use this table for Glass Type:	2A
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	77	78	84		
Width (in)	19-1/8	+110/-195	+110/-194.3	+110/-190.6	+110/-166.5	+110/-145.7	+110/-144.5	+110/-129.5	+98.8/-112.6	+96.7/-104.2	+/-86.7	+/-66.4	+/-63	+/-60	+/-60	+/-60	+/-54.5		
	20	+110/-195	+110/-194.3	+110/-166.5	+110/-166.5	+110/-145.7	+110/-129.5	+110/-129.5	+98.8/-112.6	+/-86.7	+/-86.7	+/-66.4	+/-60	+/-60	+/-60	+/-60	+/-54.5		
	24	+110/-195	+110/-161.9	+110/-138.8	+110/-138.8	+110/-121.4	+99.7/-107.9	+98/-107.9	+85.8/-95.4	+74.9/-77.9	+/-73.4	+/-60	+/-60	+/-60	+/-60	+/-60	+/-54.5		
	26-1/2	+110/-195	+110/-138.8	+110/-137.5	+110/-118.9	+104.1/-104.3	+99.7/-104.3	+/-92.5	+76.7/-83.3	+74.9/-77.9	+/-64.2	+/-60	+/-60	+/-60	+/-60	+/-60	+/-54.5		
	28	+110/-145.4	+110/-138.8	+110/-118.9	+110/-118.9	+/-104.1	+/-92.5	+/-92.5	+76.7/-83.3	+/-64.2	+/-64.2	+/-60	+/-60	+/-60	+/-60	+/-60	+/-54.5		
	30	+110/-145.4	+110/-129.5	+110/-111	+110/-111	+/-97.1	+84.4/-86.3	+84.4/-86.3	+73.2/-77.7	+/-60.6	+/-60.6	+/-60	+/-60	+/-60	+/-60	+/-60	+/-51.2		
	32	+110/-145.4	+110/-121.4	+/-104.1	+/-104.1	+/-91.1	+/-80.9	+/-80.9	+70.2/-72.8	+/-60	+/-60	+/-60	+/-60	+/-60	+/-60	+/-60	+/-48.3		
	36	+110/-145.4	+/-107.9	+/-98.5	+/-92.5	+/-80.9	+/-74.7	+/-71.9	+/-64.8	+/-60	+/-60	+/-60	+/-60	+/-60	+/-56.3				
	37	+110/-145.4	+/-98.5	+/-98.5	+/-83.3	+/-74.7	+/-74.7	+/-64.8	+/-60	+/-60	+/-60	+/-59.8	+/-59.8	+/-56.3	+/-56.3**				
	40	+110/-128.1	+/-97.1	+/-86.8	+/-83.3	+/-72.8	+/-65.8	+/-64.8	+/-60	+/-60	+/-60								
	42	+110/-128.1	+/-92.5	+/-86.8	+/-79.3	+/-69.4	+/-65.8	+/-61.7	+/-60	+/-60									

TABLE 5:

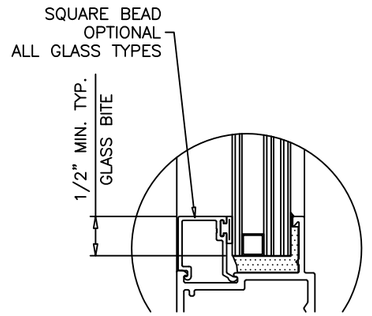
Window Dimensions		Window Design Pressure, (+/- psf) — Height (in)																Use this table for Glass Type:	3A
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	77	78	84		
Width (in)	19-1/8	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-169	+110/-120	+110/-120	+/-101.3	+/-101.3	+/-101.3	+/-80.8		
	20	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-169	+110/-169	+110/-120	+/-101.3	+/-101.3	+/-101.3	+/-101.3	+/-80.8		
	24	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+/-109.3	+/-90.9	+/-85.4	+/-85.4	+/-85.4	+/-68		
	26-1/2	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+/-95.3	+/-74.3	+/-74.3	+/-74.3	+/-74.3			
	28	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+/-95.3	+/-74.3	+/-74.3	+/-74.3	+/-74.3			
	30	+110/-195	+110/-195	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-118.2	+110/-118.2	+/-89.8							
	32	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-112.2	+110/-112.2	+/-85							
	36	+110/-195	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-117									
	37	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-117	+110/-117									
	40	+110/-195	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120											
	42	+110/-195*	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120	+110/-120											

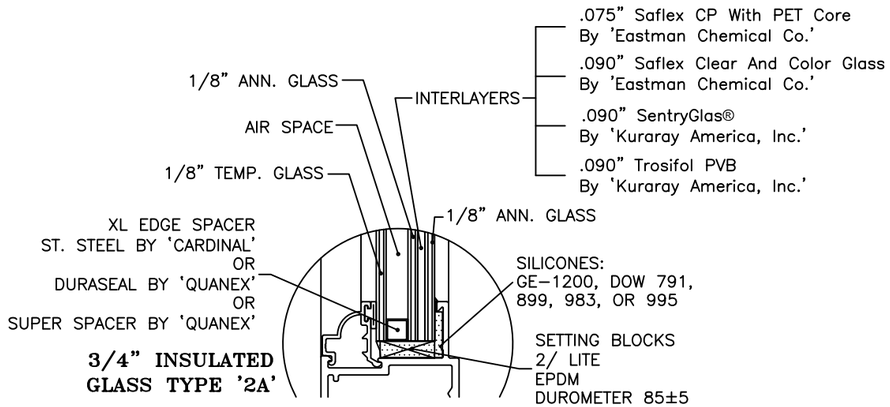
NOTES:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

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

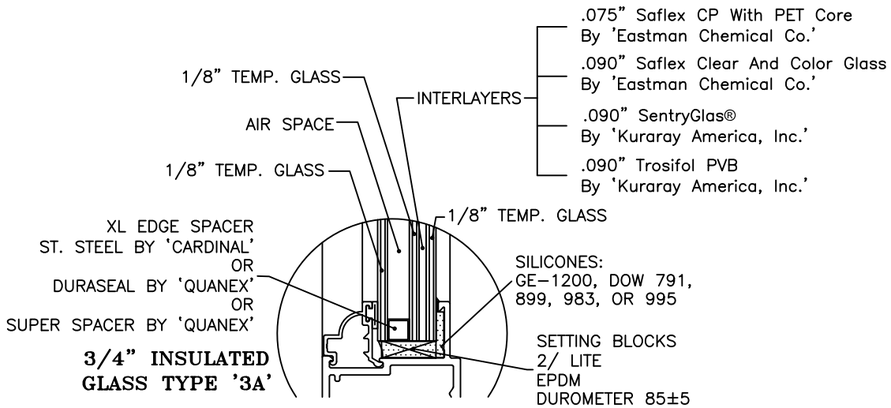
*LIMIT MAX. LOADS TO 171.0 PSF WHEN MULTI POINT LOCK BY 'INTERLOCK' (9B) IS USED.

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





3/4" INSULATED GLASS TYPE '2A'



3/4" INSULATED GLASS TYPE '3A'

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami–Dade Product Control

Revision:
NO CHANGES THIS SHEET.
LMY - 7/8/24

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

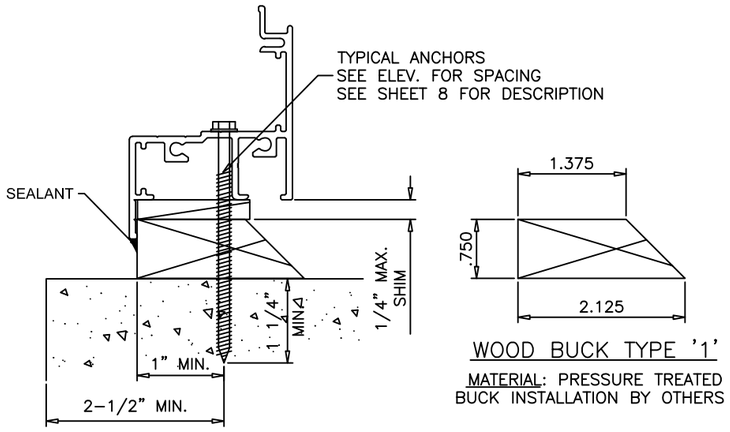
Impact Resistant Windows & Doors
CGI DOORS AND WINDOWS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Series	Desc.	Title	Scale	Sheet	DWG No.	Drawn By	Date	Rev.
CA238	GLASS & WINDOW DP 2	SERIES 238 CASEMENT WINDOW - LMI	NTS	5 OF 9	CA238NOA-1	J ROSOWSKI	05/15/20	C

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
07/08/24
A. LYNN MILLER, P.E.
P.E.# 58705

INSTALLATION CONDITIONS FLANGE FRAME (APPLIES TO ALL FOUR SIDES)

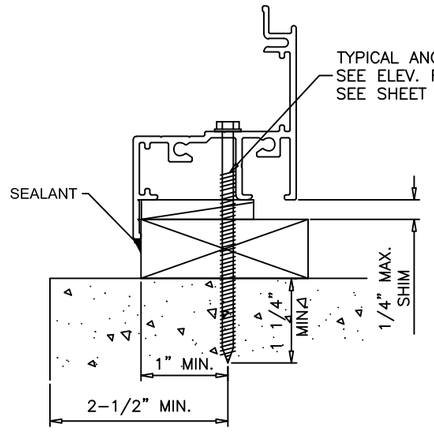
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 8



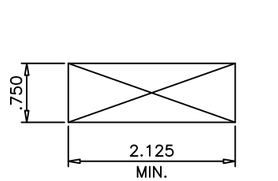
INSTALLATION TYPE '1'
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD

WOOD BUCK TYPE '1'

MATERIAL: PRESSURE TREATED
BUCK INSTALLATION BY OTHERS

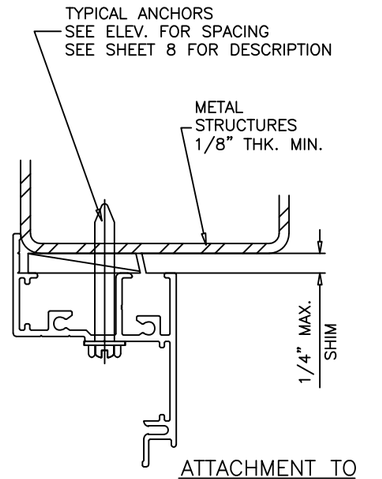


INSTALLATION TYPE '2'
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD

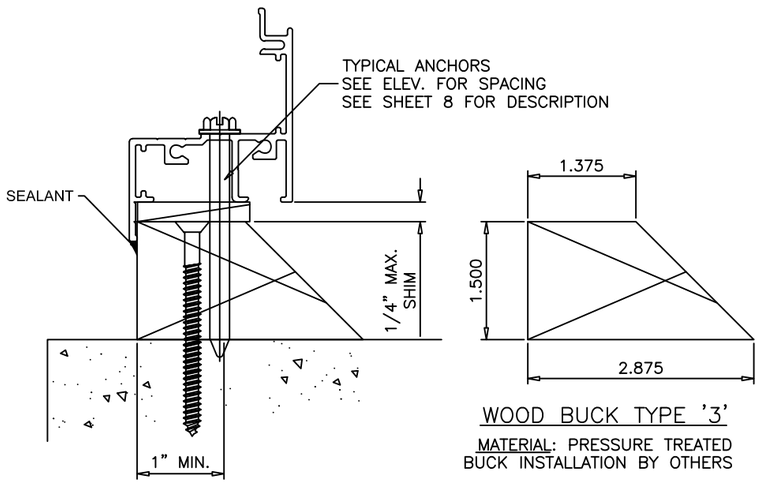


WOOD BUCK TYPE '2'

MATERIAL: PRESSURE TREATED
BUCK INSTALLATION BY OTHERS



ATTACHMENT TO
METAL STRUCTURES

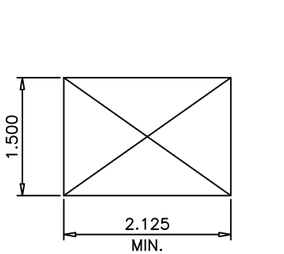


INSTALLATION TYPE '3'
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD

WOOD BUCK TYPE '3'

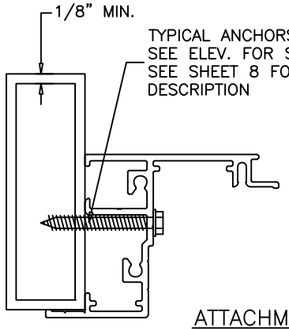
MATERIAL: PRESSURE TREATED
BUCK INSTALLATION BY OTHERS

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

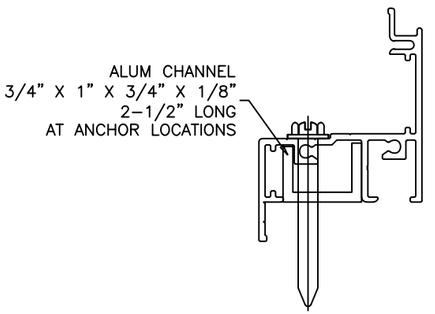


WOOD BUCK TYPE '4'

MATERIAL: PRESSURE TREATED
BUCK INSTALLATION BY OTHERS



ATTACHMENT TO
APPROVED MULLIONS



ALT. ANCHOR LOCATION
WITH SHEAR CLIP

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. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.
LMY - 7/8/24

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

REGISTRATION #29296

Impact Resistant Windows & Doors

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

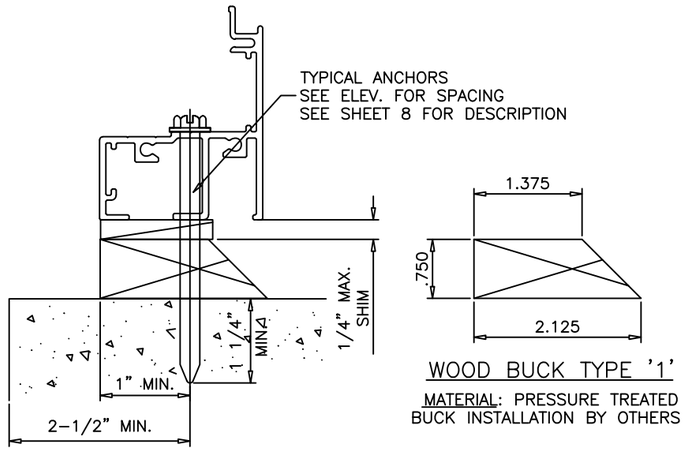
Series	Title
CA238	SERIES 238 CASEMENT WINDOW - LMI
Scale	Desc.
NTS	INSTALLATION CONDITIONS, FL.
Sheet	
6 OF 9	
DWG No.	
CA238NOA-1	
Rev.	Drawn By
C	J ROSOWSKI
	Date
	05/15/20

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
07/08/24

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

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

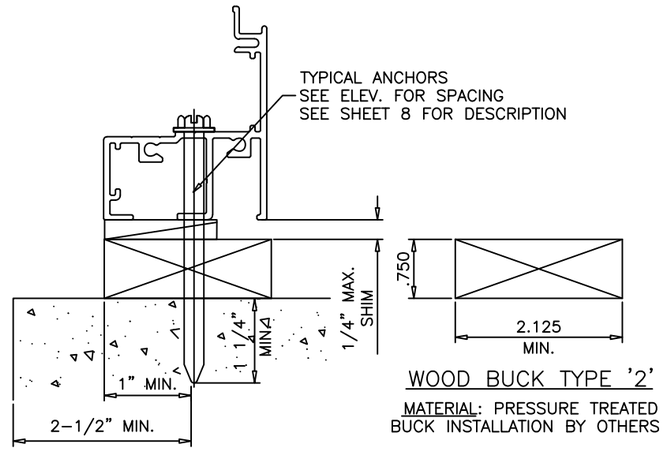
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 8



WOOD BUCK TYPE '1'

MATERIAL: PRESSURE TREATED BUCK INSTALLATION BY OTHERS

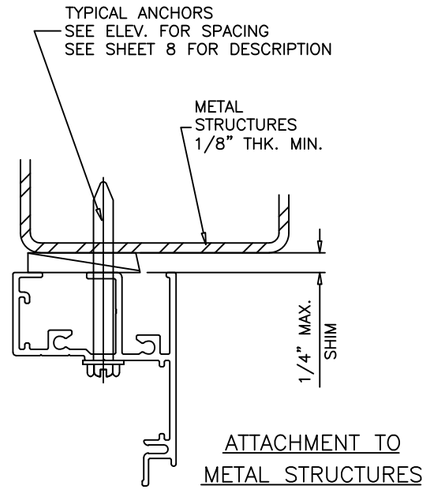
INSTALLATION TYPE '1'
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



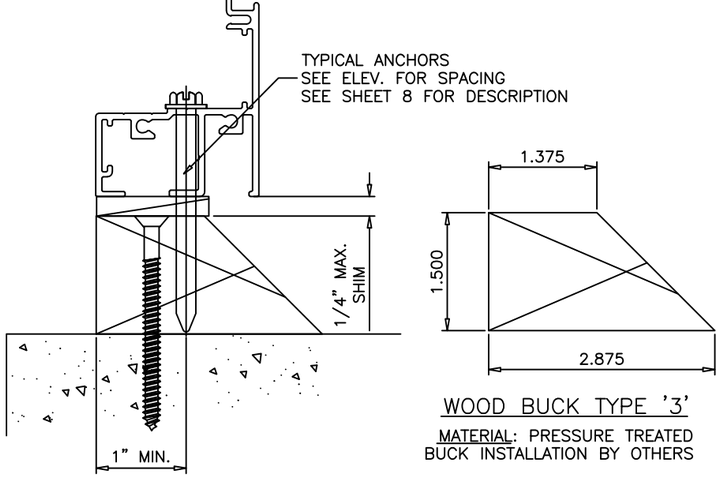
WOOD BUCK TYPE '2'

MATERIAL: PRESSURE TREATED BUCK INSTALLATION BY OTHERS

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



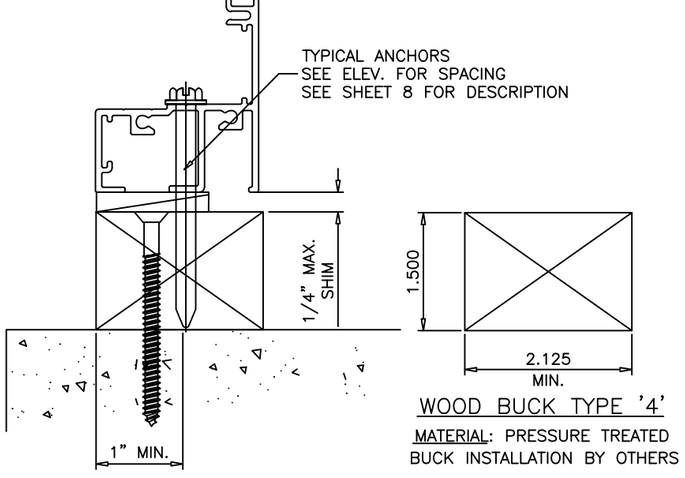
ATTACHMENT TO
METAL STRUCTURES



WOOD BUCK TYPE '3'

MATERIAL: PRESSURE TREATED BUCK INSTALLATION BY OTHERS

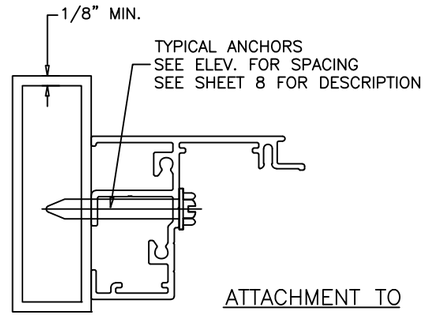
INSTALLATION TYPE '3'
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



WOOD BUCK TYPE '4'

MATERIAL: PRESSURE TREATED BUCK INSTALLATION BY OTHERS

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



ATTACHMENT TO
APPROVED MULLIONS

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. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami-Dade Product Control

Revision:
NO CHANGES THIS SHEET.
LMY - 7/8/24

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

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

Series	Desc.	Scale	Sheet	DWG No.	Rev.
CA238	SERIES 238 CASEMENT WINDOW - LMI	NTS	7 OF 9	CA238NOA-1	C

Title: INSTALLATION CONDITIONS, EL.
Drawn By: J ROSOWSKI
Date: 05/15/20

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
07/08/24
A. LYNN MILLER, P.E.
P.E.# 58705

TABLE 6:

Performance Values of Installation Anchors, (+/- psf)		Use this table for Anchors:	Without Shear Clip, @ 17" O.C.													
Window Dimensions		Height (in)														
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	78	84
Width (in)	19-1/8	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	20	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	24	+/-195	+/-195	+/-191.2	+/-192.5	+/-195	+/-193.2	+/-195	+/-180	+/-155.3	+/-195	+/-187.5	+/-164.7	+/-133.2	+/-173.1	+/-195
	26-1/2	+/-195	+/-192.9	+/-191.2	+/-165.3	+/-192.9	+/-193.2	+/-171.4	+/-154.3	+/-155.3	+/-175.3	+/-160.7	+/-164.7	+/-133.2	+/-148.4	+/-165.3
	28	+/-195	+/-192.9	+/-136.9	+/-165.3	+/-192.9	+/-138.4	+/-171.4	+/-154.3	+/-111.2	+/-175.3	+/-160.7	+/-117.9	+/-133.2	+/-148.4	+/-165.3
	30	+/-195	+/-180	+/-136.9	+/-154.3	+/-180	+/-138.4	+/-160	+/-144	+/-111.2	+/-163.6	+/-150	+/-117.9	+/-133.2	+/-138.5	+/-154.3
	32	+/-195	+/-168.8	+/-136.9	+/-144.6	+/-168.8	+/-138.4	+/-150	+/-135	+/-111.2	+/-153.4	+/-140.6	+/-117.9	+/-133.2	+/-129.8	+/-154.3
	36	+/-195	+/-150	+/-136.9	+/-128.6	+/-150	+/-138.4	+/-133.3	+/-120	+/-111.2	+/-136.4	+/-125	+/-117.9	+/-118.4		
	37	+/-195	+/-135	+/-136.9	+/-115.7	+/-135	+/-138.4	+/-120	+/-108	+/-111.2	+/-122.7	+/-117.9	+/-117.9			
	40	+/-135	+/-135	+/-115.7	+/-115.7	+/-135	+/-120	+/-120	+/-108	+/-98	+/-122.7					
	42	+/-128.6	+/-128.6	+/-110.2	+/-110.2	+/-128.6	+/-114.3	+/-114.3	+/-102.9	+/-98						

TABLE 7:

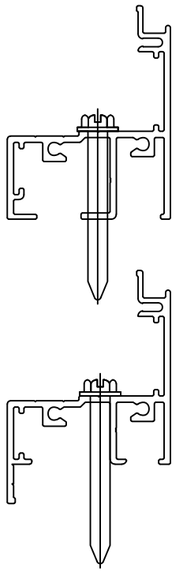
Performance Values of Installation Anchors, (+/- psf)		Use this table for Anchors:	Without Shear Clip, @ 10" O.C.													
Window Dimensions		Height (in)														
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	78	84
Width (in)	19-1/8	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	20	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	24	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	26-1/2	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195	+/-195
	28	+/-195	+/-195	+/-182.6	+/-195	+/-195	+/-173	+/-195	+/-195	+/-194.6	+/-195	+/-195	+/-188.6	+/-195	+/-195	+/-195
	30	+/-195	+/-195	+/-182.6	+/-195	+/-195	+/-173	+/-195	+/-195	+/-194.6	+/-195	+/-195	+/-188.6	+/-195	+/-195	+/-195
	32	+/-195	+/-195	+/-182.6	+/-192.9	+/-195	+/-173	+/-195	+/-195	+/-194.6	+/-195	+/-195	+/-188.6	+/-195	+/-195	+/-195
	36	+/-195	+/-195	+/-182.6	+/-171.4	+/-187.5	+/-173	+/-195	+/-180	+/-194.6	+/-190.9	+/-175	+/-188.6	+/-189.5		
	37	+/-195	+/-180	+/-182.6	+/-154.3	+/-168.8	+/-173	+/-180	+/-162	+/-194.6	+/-171.8	+/-188.6	+/-188.6			
	40	+/-180	+/-180	+/-154.3	+/-154.3	+/-168.8	+/-180	+/-180	+/-162	+/-171.4	+/-171.8					
	42	+/-171.4	+/-171.4	+/-146.9	+/-146.9	+/-160.7	+/-171.4	+/-171.4	+/-154.3	+/-171.4						

TABLE 8:

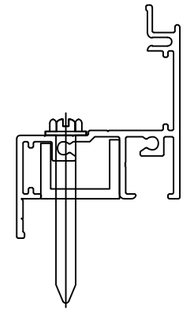
Performance Values of Installation Anchors, (+/- psf)		Use this table for Anchors:	With Shear Clip, @ 17" O.C.													
Window Dimensions		Height (in)														
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	78	84
Width (in)	19-1/8	+/-149.4	+/-154.8	+/-151.9	+/-132.7	+/-154.8	+/-153.5	+/-137.6	+/-123.8	+/-123.3	+/-140.7	+/-129	+/-130.8	+/-76.4	+/-119.1	+/-132.7
	20	+/-107.8	+/-154.8	+/-109.6	+/-132.7	+/-154.8	+/-110.8	+/-137.6	+/-123.8	+/-89	+/-140.7	+/-129	+/-94.4	+/-76.4	+/-119.1	+/-132.7
	24	+/-107.8	+/-129	+/-109.6	+/-110.6	+/-129	+/-110.8	+/-114.7	+/-103.2	+/-89	+/-117.3	+/-107.5	+/-94.4	+/-76.4	+/-99.2	+/-110.6
	26-1/2	+/-107.8	+/-110.6	+/-109.6	+/-94.8	+/-110.6	+/-110.8	+/-98.3	+/-88.5	+/-89	+/-100.5	+/-92.1	+/-94.4	+/-76.4	+/-85.1	+/-94.8
	28	+/-77.2	+/-110.6	+/-78.5	+/-94.8	+/-110.6	+/-79.3	+/-98.3	+/-88.5	+/-63.8	+/-100.5	+/-92.1	+/-67.6	+/-76.4	+/-85.1	+/-94.8
	30	+/-77.2	+/-103.2	+/-78.5	+/-88.5	+/-103.2	+/-79.3	+/-91.7	+/-82.6	+/-63.8	+/-93.8	+/-86	+/-67.6	+/-76.4	+/-79.4	+/-88.5
	32	+/-77.2	+/-96.8	+/-78.5	+/-82.9	+/-96.8	+/-79.3	+/-86	+/-77.4	+/-63.8	+/-88	+/-80.6	+/-67.6	+/-76.4	+/-74.4	+/-88.5
	36	+/-77.2	+/-86	+/-78.5	+/-73.7	+/-86	+/-79.3	+/-76.4	+/-68.8	+/-63.8	+/-78.2	+/-71.7	+/-67.6	+/-67.9		
	37	+/-77.2	+/-77.4	+/-78.5	+/-66.3	+/-77.4	+/-79.3	+/-68.8	+/-61.9	+/-63.8	+/-70.4	+/-67.6	+/-67.6			
	40	+/-77.4	+/-77.4	+/-66.3	+/-66.3	+/-77.4	+/-68.8	+/-68.8	+/-61.9	+/-56.2	+/-70.4					
	42	+/-73.7	+/-73.7	+/-63.2	+/-63.2	+/-73.7	+/-65.5	+/-65.5	+/-59	+/-56.2						

TABLE 9:

Performance Values of Installation Anchors, (+/- psf)		Use this table for Anchors:	With Shear Clip, @ 10" O.C.													
Window Dimensions		Height (in)														
		26	36	38-3/8	42	48	50-5/8	54	60	63	66	72	74-1/4	76	78	84
Width (in)	19-1/8	+/-195	+/-195	+/-195	+/-176.9	+/-193.5	+/-191.9	+/-195	+/-185.8	+/-195	+/-195	+/-180.6	+/-195	+/-122.2	+/-190.5	+/-195
	20	+/-161.8	+/-195	+/-146.1	+/-176.9	+/-193.5	+/-138.5	+/-195	+/-185.8	+/-155.8	+/-195	+/-180.6	+/-151.1	+/-122.2	+/-190.5	+/-195
	24	+/-161.8	+/-172	+/-146.1	+/-147.4	+/-161.3	+/-138.5	+/-172	+/-154.8	+/-155.8	+/-164.2	+/-150.5	+/-151.1	+/-122.2	+/-158.8	+/-165.9
	26-1/2	+/-161.8	+/-147.4	+/-146.1	+/-126.4	+/-138.2	+/-138.5	+/-147.4	+/-132.7	+/-155.8	+/-140.7	+/-129	+/-151.1	+/-122.2	+/-136.1	+/-142.2
	28	+/-115.9	+/-147.4	+/-104.7	+/-126.4	+/-138.2	+/-99.2	+/-147.4	+/-132.7	+/-111.6	+/-140.7	+/-129	+/-108.1	+/-122.2	+/-136.1	+/-142.2
	30	+/-115.9	+/-137.6	+/-104.7	+/-117.9	+/-129	+/-99.2	+/-137.6	+/-123.8	+/-111.6	+/-131.3	+/-120.4	+/-108.1	+/-122.2	+/-127	+/-132.7
	32	+/-115.9	+/-129	+/-104.7	+/-110.6	+/-120.9	+/-99.2	+/-129	+/-116.1	+/-111.6	+/-123.1	+/-112.9	+/-108.1	+/-122.2	+/-119.1	+/-132.7
	36	+/-115.9	+/-114.7	+/-104.7	+/-98.3	+/-107.5	+/-99.2	+/-114.7	+/-103.2	+/-111.6	+/-109.5	+/-100.3	+/-108.1	+/-108.6		
	37	+/-115.9	+/-103.2	+/-104.7	+/-88.5	+/-96.8	+/-99.2	+/-103.2	+/-92.9	+/-111.6	+/-98.5	+/-108.1	+/-108.1			
	40	+/-103.2	+/-103.2	+/-88.5	+/-88.5	+/-96.8	+/-103.2	+/-103.2	+/-92.9	+/-98.3	+/-98.5					
	42	+/-98.3	+/-98.3	+/-84.2	+/-84.2	+/-92.1	+/-98.3	+/-98.3	+/-88.5	+/-98.3						



ANCHORS W/O SHEAR CLIP



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

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

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

DIRECTLY INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

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

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = .090")
INTO METAL STRUCTURES

STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 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.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

ALL ANCHOR HEAD TYPES ARE ACCEPTABLE

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami-Dade Product Control

Revision: NO CHANGES THIS SHEET.
LMY - 7/8/24

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

REGISTRATION #29296

Impact Resistant Windows & Doors

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

SERIES 238 CASEMENT WINDOW - LMI

ANCHORS & DP

Series	Desc. / Title	Scale	Sheet	DWG No.	Rev.
CA238		NTS	8 OF 9	CA238NOA-1	C

Drawn By: J ROSOWSKI
Date: 05/15/20

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
07/08/24
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

TABLE 10:

Window Dimensions		Performance Values of Aluminum Buck Installation Anchors, (+/- psf)										
		Width (in)										
		19-1/8	20	24	26-1/2	28	30	32	36	37	40	42
Height (in)	26	+110/-195	+110/-195	+110/-195	+110/-195	+110/-186.5	+110/-184.2	+110/-184.2	+110/-184.2	+110/-184.2	+110/-152.4	+110/-152.4
	36	+110/-195	+110/-195	+110/-195	+110/-186.5	+110/-186.5	+110/-182.4	+110/-179.5	+110/-177.3	+110/-156.3	+105.8/-145.1	+97/-120
	38-3/8	+110/-195	+110/-179.5	+110/-172.6	+110/-172.6	+110/-156.3	+110/-156.3	+110/-156.3	+110/-156.3	+110/-156.3	+95.7/-120	+95.7/-120
	42	+110/-195	+110/-179.5	+110/-159.6	+110/-160.9	+106.9/-146.6	+103.5/-141.9	+100.7/-138.1	+99.8/-120	+99.8/-120	+95.2/-120	+95/-120
	48	+110/-195	+110/-195	+110/-177.3	+110/-160.9	+110/-160.9	+110/-154.8	+109.1/-120	+103.5/-120	+99.8/-120	+99.8/-120	+85/-120
	50-5/8	+110/-195	+110/-174.1	+110/-154.7	+110/-154.7	+99.8/-120	+95.5/-120	+94/-120	+94/-120	+94/-120	+89.8/-120	+89.8/-120
	54	+110/-174.1	+110/-174.1	+110/-152	+99.8/-120	+99.8/-120	+95.5/-120	+91.9/-120	+86.2/-118.2	+82.2/-112.7	+82.2/-112.7	+80.6/-110.5
	60	+110/-171	+110/-153.2	+97/-133	+86.8/-119	+86.8/-119	+91.3/-120	+87.3/-119.7	+73.9/-101.3	+67.9/-93.1	+/-60	+/-60
	63	+110/-171	+110/-171	+107.8/-120	+84.8/-116.2	+95.9/-120	+91.3/-120	+87.3/-119.7	+67.9/-93.1	+67.9/-93.1	+/-60	+/-60
	66	+110/-171	+110/-171	+107.8/-120	+95.9/-120	+95.9/-120	+91.3/-120	+87.3/-119.7	+/-60	+/-60	+/-60	
	72	+110/-154.8	+110/-154.5	+97/-120	+86.4/-120	+86/-117.9	+81.7/-112	+77.9/-106.9	+/-60	+/-60		
	74-1/4	+110/-154.8	+105.8/-120	+90.9/-120	+86.4/-120	+80.5/-110.3	+76.3/-104.7	+/-60	+/-60	+/-60		
	76	+109.9/-120	+105.8/-120	+90.9/-120	+85.5/-120	+80.5/-110.3	+76.3/-104.7	+/-60	+/-60	+/-60		
	77	+108.3/-120	+102.7/-120	+88.2/-120	+85.5/-120	+77.9/-120	+73.9/-101.3	+/-60	+/-60	+/-60		
	78	+110/-120	+102.7/-120	+88.2/-120	+85.5/-120	+77.9/-120	+73.9/-101.3	+/-60				
	84	+110/-120	+110/-120	+97/-120	+85.5/-117.3	+85.5/-117.3	+/-60	+/-60				

(Fu=163 KSI, Fy=157 KSI)

TYPICAL ANCHORS:

SEE ELEV. FOR SPACING

A – 1/4" DIA. KWIK–CON II BY 'HILTI'

DIRECTLY INTO CONC. OR MASONRY
1–1/4" MIN. EMBED INTO CONC. OR MASONRY

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

DIRECTLY INTO CONC. OR FILLED BLOCK
1" MIN. EMBED INTO CONCRETE
2–1/4" MIN. EMBED INTO GROUT FILLED BLOCKS

C – #14 SMS (GRADE 2 CRS)

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

TYPICAL EDGE DISTANCE

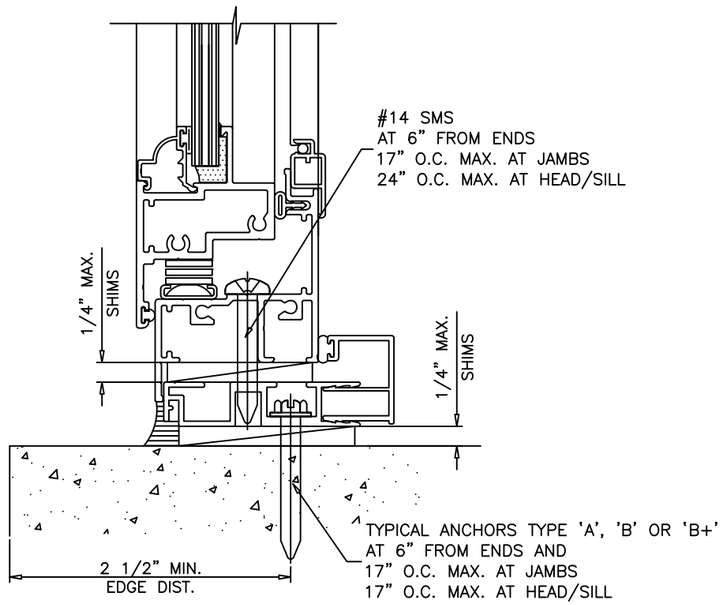
INTO CONCRETE AND MASONRY BLOCK = 2–1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C–90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

ALL ANCHOR HEAD TYPES ARE ACCEPTABLE

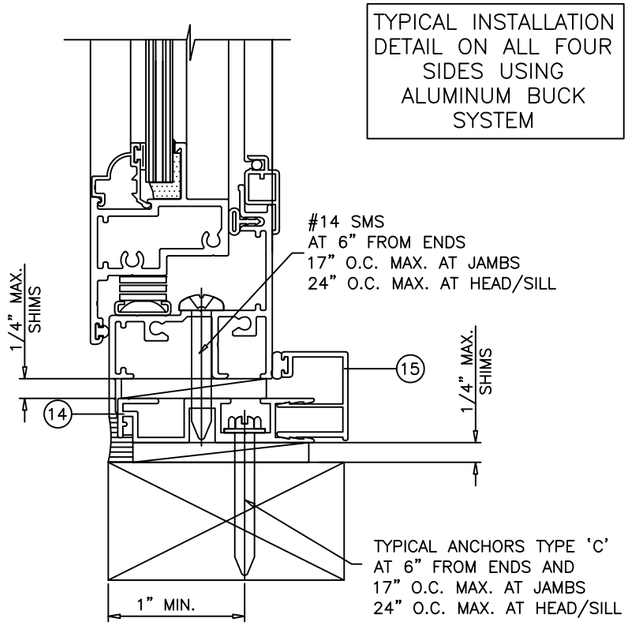
ALUMINUM BUCK FRAMING DETAILS

REFER TO SHEETS 4 THRU 8 FOR WINDOW CAPACITIES
USE LOWER APPLICABLE VALUES.



INSTALLATION TYPE '5'

TYPICAL INSTALLATION DETAIL ON ALL FOUR SIDES USING ALUMINUM BUCK SYSTEM



INSTALLATION TYPE '6'

2BY WOOD BUCK OR WOOD STRUCTURES

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 24-0624.04
Expiration Date 10/26/2028
By Ishaq I. Chanda
Miami–Dade Product Control

Revision: CORRECTED TABLE NUMBER AND WIDTH/HEIGHT ORIENTATION LMY - 7/8/24

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

Impact Resistant Windows & Doors
CGI DOORS AND WINDOWS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
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Series	Desc. / Title	Scale	Sheet	DWG No.	Drawn By	Date	Rev.
CA238	SERIES 238 CASEMENT WINDOW - LMI ANCHORS & DP, ALUM. BUCK INSTALL. - LMI	NTS	9 OF 9	CA238NOA-1	J ROSOWSKI	05/15/20	C

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
07/08/24
A. LYNN MILLER, P.E.
P.E.# 58705