



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
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/building

CGI Windows and Doors, Inc.
3780 W 104th 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 Designer" Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W01-83**, titled "238 Designer Fixed Window", sheets 1 through 8 of 8, dated 04/27/20, with revision **A** dated 04/24/20, prepared by manufacturer, signed and sealed by Anthony 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.

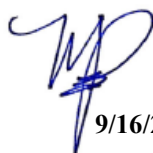
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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# 17-0926.17** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4, E-5 and E-6, as well as approval document mentioned above.

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




9/16/20

NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020
age 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

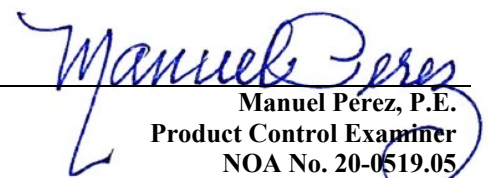
1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No.09-0127.17)
2. Drawing No. **W01-83**, titled "Series-238 Designer Fixed Window", sheets 1 through 8 of 8, dated 12/27/01, with revision **G** dated 09/15/17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No.17-0926.17)

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.
(Submitted under NOA No.15-0512.15)
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.
(Submitted under NOA No.15-0512.15)
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.
(Submitted under NOA No.15-0512.15)

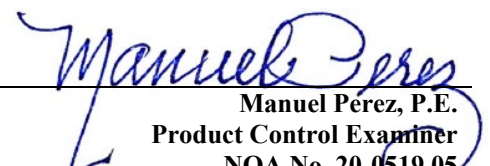

Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

B. TESTS (CONTINUED)

4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
5) Large Missile Impact Test per FBC, TAS 201-94
6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum fixed windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0080-0105-08**, dated 01/08/08, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA No. 09-0303.01)
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
along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Hurricane Test Laboratory, Inc., Test Reports No. **HTL-0080-0303-96** and **HTL-0080-0502-97**, dated 03/05/96 and 05/02/97, both signed and sealed by Timothy S. Marshall, P.E.
(Submitted under NOA No 96-0603.07)
6. Test reports on: 1) Large Missile Impact Test per SFBC, PA 201-94,
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum casement, project-out and fixed windows, prepared by American Test Lab of South Florida, Inc., Test Report No. **ATLSF-1209.01-94**, dated 12/09/94 to 12/14/94, signed and sealed by Gerard B. Sullivan, P.E.
(Submitted under NOA No. 96-0603.07)
7. Test reports on: 1) Large Missile Impact Test, per SFBC, PA 202-94
2) Cyclic Wind Pressure Loading, per SFBC, PA 202-94
along with marked-up drawings and installation diagram of an aluminum project – out window, prepared by Fenestration Testing Laboratory, Inc. Report No. **FTL-1018**, dated 09/26/94, signed and sealed by Yamil Kurí, P.E.
(Submitted under NOA No. 96-0603.07)


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 07/16/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 14-0903.07)
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

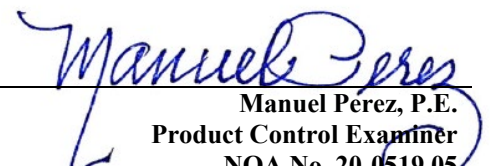
1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **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.
2. 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.

F. STATEMENTS

1. Statement letter of conformance, of complying with **FBC 5th Edition (2014)**, and **FBC 6th Edition (2017)** and of no financial interest, dated August 29, 2017, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 17-0926.17)
2. Laboratory compliance letters for Test Report No. **HTL-0080-0105-08**, issued by Hurricane Test Laboratory, Inc., dated 01/08/08, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA No. 09-0303.01)
3. Laboratory compliance letters for Test Reports No. **HTL-0080-0303-96** and **HTL-0080-0502-97**, issued by Hurricane Test Laboratory, Inc., dated 03/05/96 and 05/02/97, both signed and sealed by Timothy S. Marshall, P.E.
(Submitted under NOA No. 96-0603.07)
4. Laboratory compliance letters for Test Report No. **ATLSF-1209.01-94**, issued by American Test Lab of South Florida, Inc., dated 12/09/94 to 12/14/94, signed and sealed by Gerard B. Sullivan, P.E.
(Submitted under NOA No. 96-0603.07)


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

CGI Windows and Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED


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

F. STATEMENTS (CONTINUED)

5. Test Proposal for the qualification of ***Butacite®*** PVB glass interlayer by DuPont 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.
(Submitted under NOA No.15-0512.15)

G. OTHERS

1. Notice of Acceptance No. **15-0512.15**, issued to CGI Windows and Doors, Inc. for their Series "238 Designer" Aluminum Fixed Window - L.M.I., approved on 09/10/15 and expiring on 10/20/18.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

CGI Windows and Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **MD-PW238D**, titled “238 Designer Fixed Window”, sheets 1 through 8 of 8, dated 04/27/20, with revision **A** dated 04/24/20, prepared by manufacturer, 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
6) Forced Entry Test, per ASTM F588 and TAS 202-94

along with marked-up drawings and installation diagram of all PGT Industries, Inc. CGI Windows and Doors, 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.:

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.

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.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 07/16/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., updated to comply with **FBC 7th Edition (2020)**, on 05/11/20 by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

CGI Windows and Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED (CONTINUED)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS


1. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 05/09/19, expiring on 07/08/24.
2. 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.

F. STATEMENTS

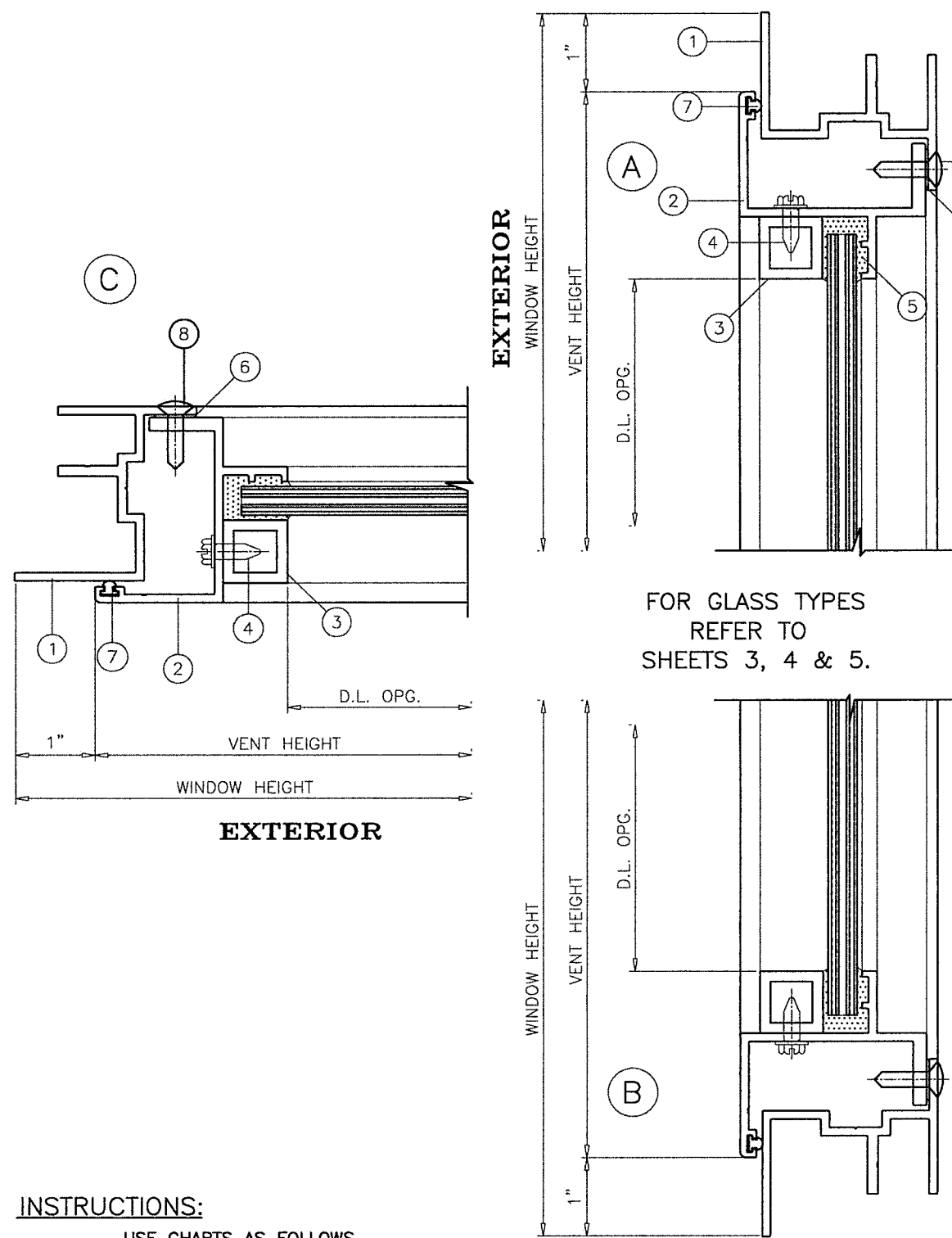
1. Statement letter of conformance, of complying with **FBC 6th Edition (2017)**, and **FBC 7th Edition (2020)** dated April 27, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
2. Statement letter of no financial interest dated April 27, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
3. Notification of Successor Engineer for manufacturer’s NOA document per **Section 61G15-27.001** of the **Florida Administrative Code**, notifying original engineer that the successor engineer is assuming full professional and legal responsibility for all engineering documents pertaining to this NOA, dated May 11, 2020, signed and sealed by Anthony Lynn Miller, P.E.
4. Proposal No. **19-1155 TP** issued by the Product Control Section, dated January 10, 2020, signed by Ishaq Chanda, P.E.

G. OTHERS

1. Notice of Acceptance No. **17-0926.17**, issued to CGI Windows and Doors, Inc. for their Series “238 Designer” Aluminum Fixed Window - L.M.I., approved on 01/25/18 and expiring on 10/20/23.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 20-0519.05
Expiration Date: October 20, 2023
Approval Date: September 24, 2020

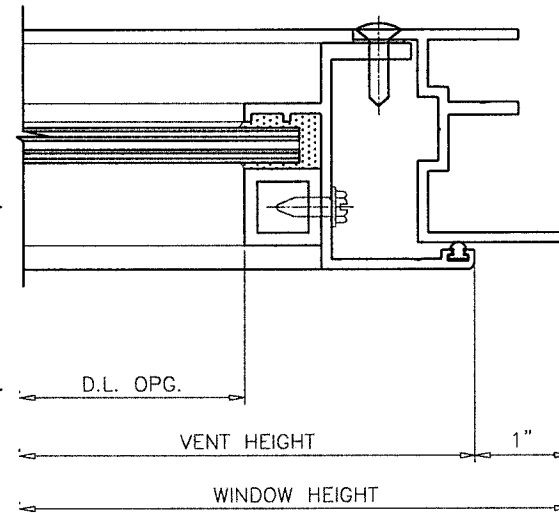
GENERAL WINDOW SECTIONS



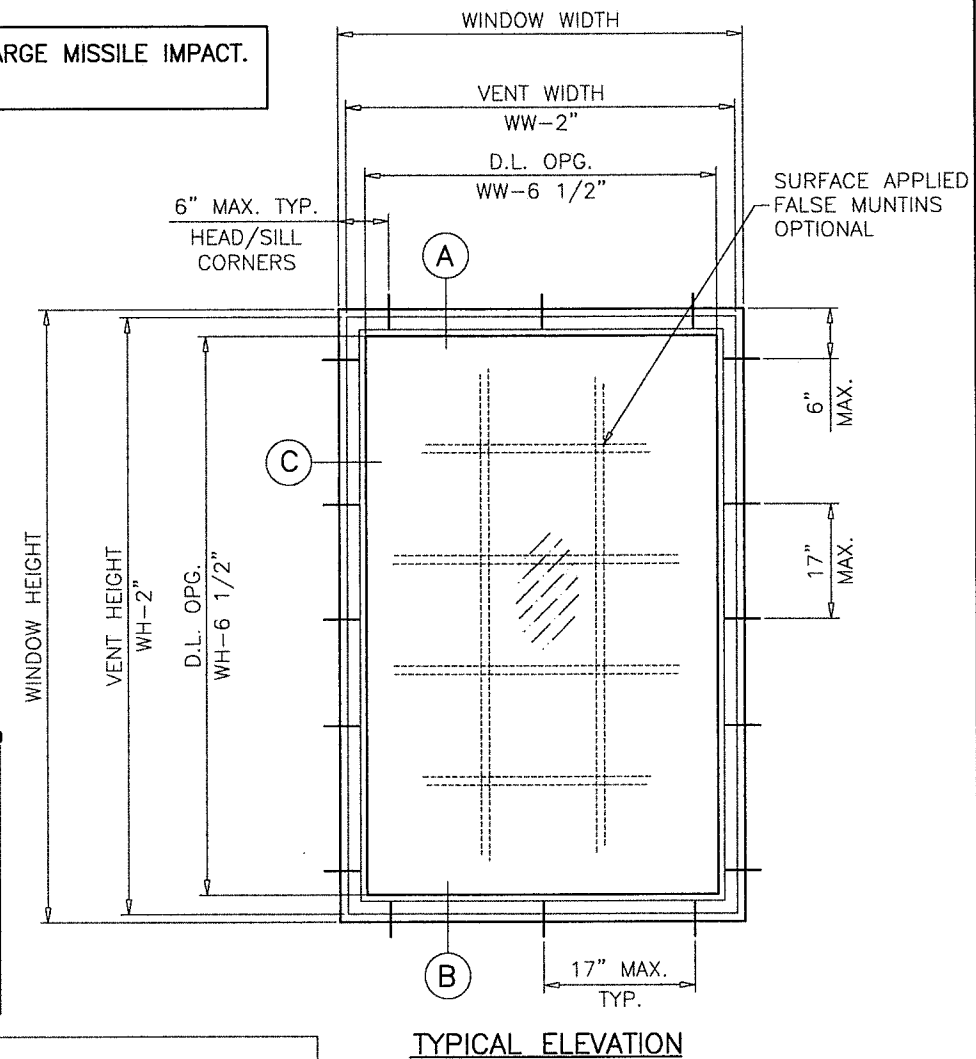
FOR GLASS TYPES
REFER TO
SHEETS 3, 4 & 5.

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

AT EACH END AND
18" O.C. TYP.



FOR MULLION/MULTIPLE UNITS, REFER TO
SEPARATE MULLION N.O.A.



TYPICAL ELEVATION

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 3 THRU 5 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE BASED ON APPLICABLE WIND DURATION.
- STEP 3** USING CHART ON SHEET 7 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** THE LOWEST VALUE RESULTING FROM STEPS 2 AND 3 SHALL APPLY TO ENTIRE SYSTEM.

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.

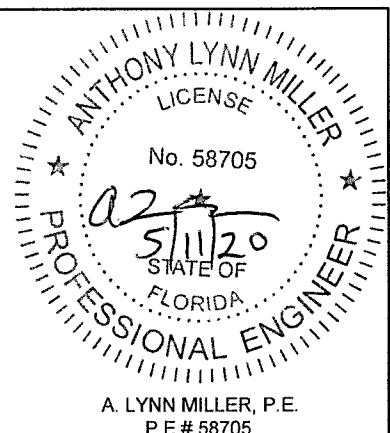
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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

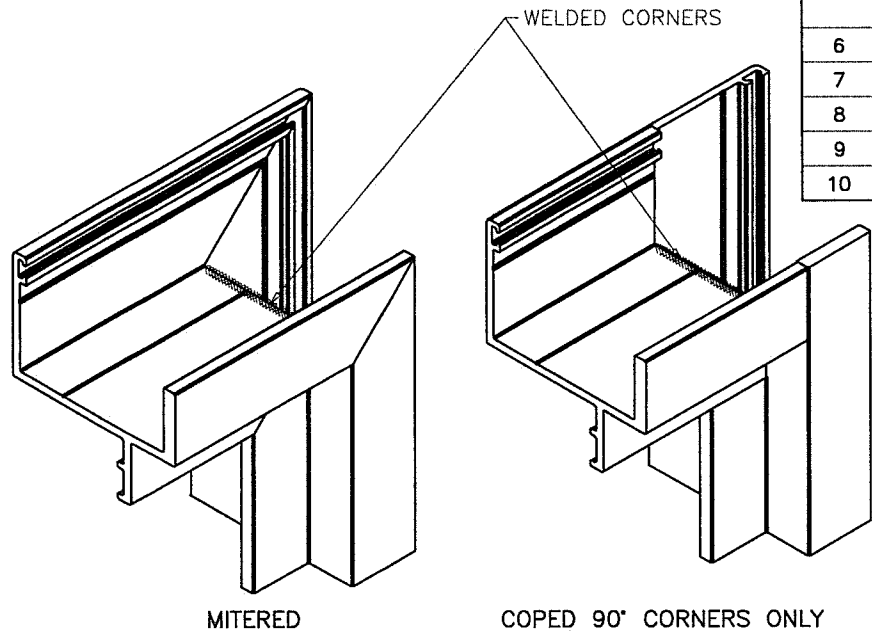
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

Revision: A) UPDATED TO FBC 2020.
AK - 04/24/20

 Impact Resistant Windows & Doors WERE STRONGER™				PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600				REGISTRATION #29296			
CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6690				ELEVATION, INSTRUCTIONS, NOTES				Date		04/27/20	
				238 DESIGNER FIXED WINDOW				Dawn By		AGK	
Series		PW238D		Scale		NTS		Sheet		1 OF 8	
DWG		No.		MD-PW238D		Rev.		A			

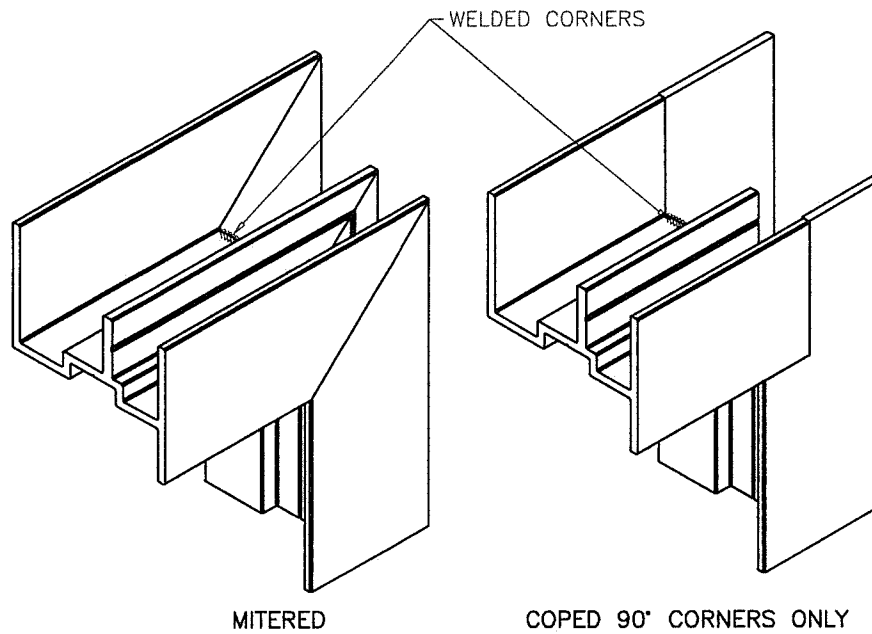


ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	CGI-386	4	FRAME	6063-T6	INDALEX OR EQUIV.
2	CGI-387	4	VENT	6063-T6	INDALEX OR EQUIV.
2A	CGI-387IG	4	VENT (INSUL GLASS)	6063-T6	INDALEX OR EQUIV.
3	CGI-	4	GLAZING BEAD	6063-T5	INDALEX OR EQUIV.
4	-	AS REQD.	GLAZING BEAD SCREWS @ 6" FROM ENDS & 20" O.C. MAX.	-	#12 X 5/8" SMS
5	-	-	GLAZING COMPOUND	SILICONE	GE-1200 DOW 791, DOW 983
6	-	4	1/2" X .090" SINGLE FACED GLAZING TAPE	FOAM	-
7	Q200 X190	AS REQD.	VENT WEATHERSTRIPPING	-	SCHLEGEL Q-LON
8	-	AS REQD.	VENT SCREWS @ 17" O.C. TYP.	-	#10 X 1" SS SMS
9	-	2/ CORNER	FRAME AND VENT ASSEMBLY SCREWS	-	#10 X 1-1/4" SS SMS
10	-	2/ LITE	SETTING BLOCK	EPDM	DUROMETER 80±5 SHORE A

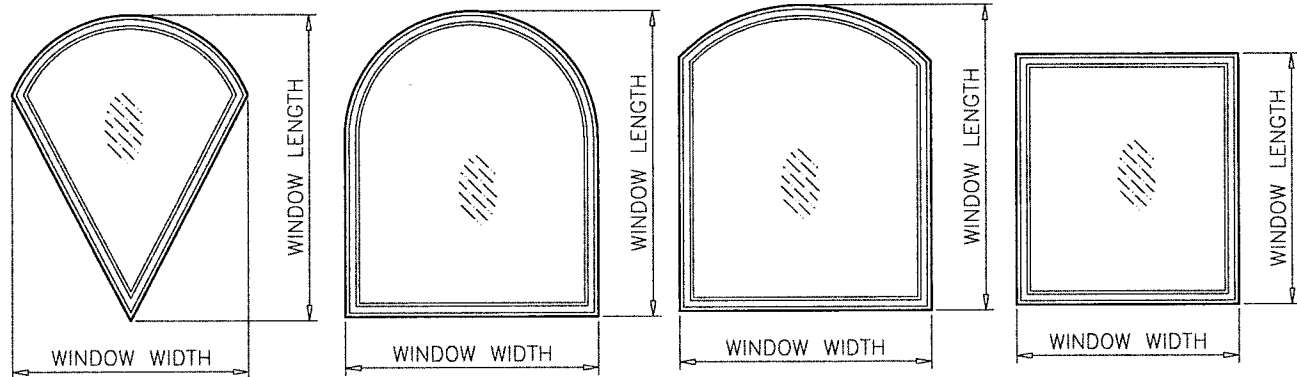


VENT CORNER

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



FRAME CORNER

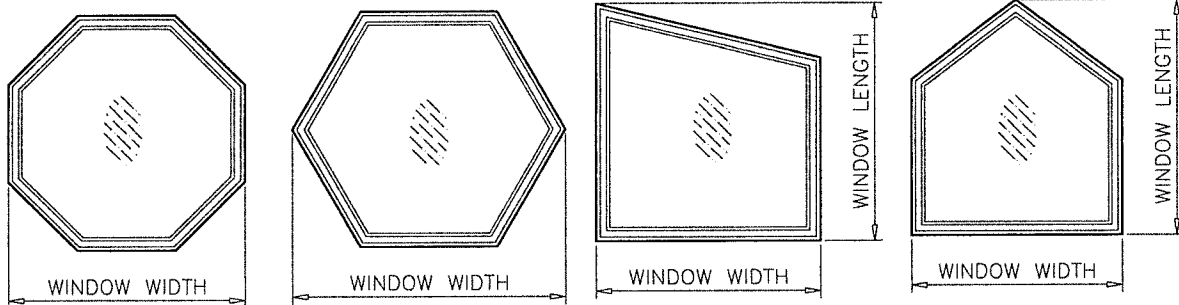


PARTIAL CIRCLE

TUMBSTONE

ARCH TOP

SQUARE OR RECTANGLE

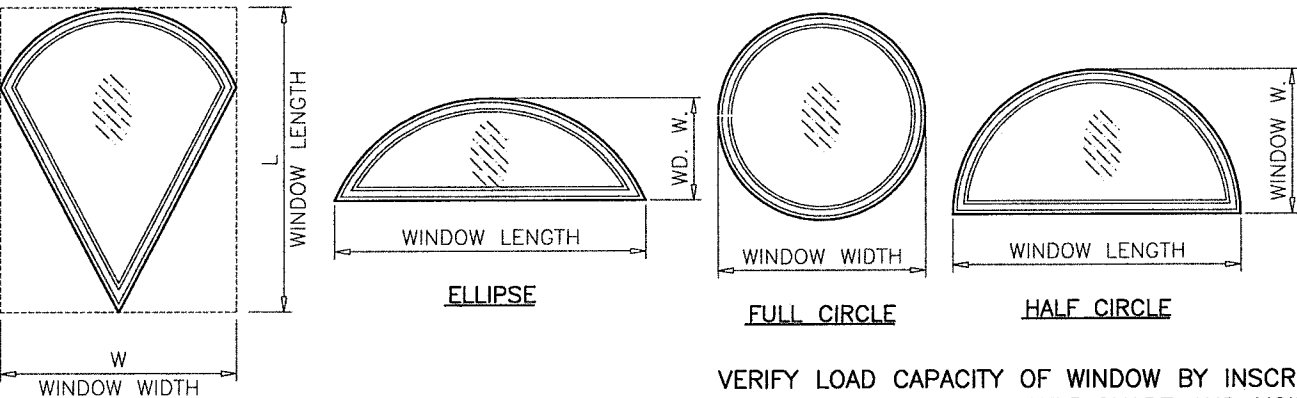


OCTAGON

HEXAGON

TRAPEZOID

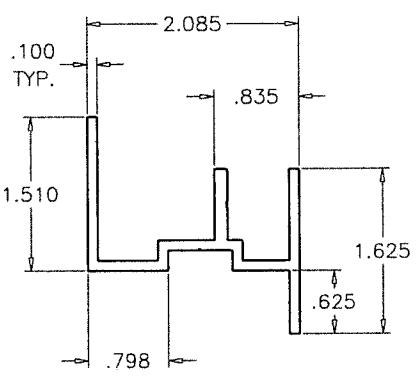
PENTAGON



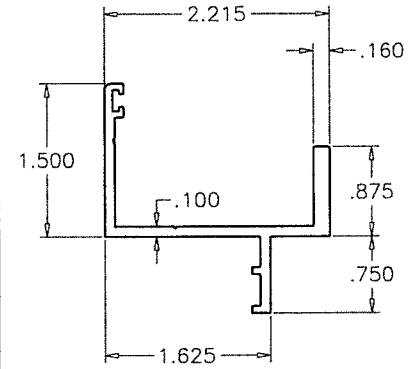
ELLIPSE

FULL CIRCLE

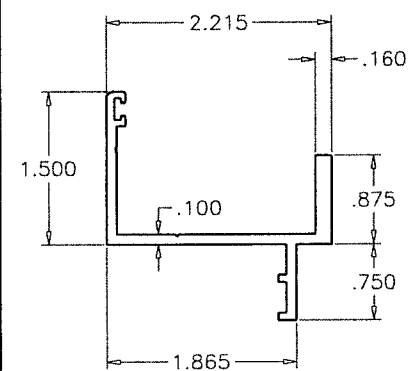
HALF CIRCLE



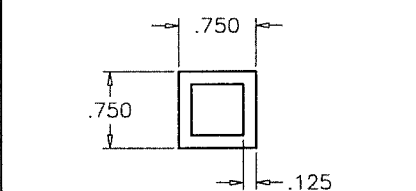
FRAME



VENT



VENT (INSUL GLASS)




GLAZING STOP

VERIFY LOAD CAPACITY OF WINDOW BY INSCRIBING SHAPE OF WINDOW WITHIN A RECTANGULAR OR SQUARE SHAPE AND USING THOSE DIMENSIONS TO CONSULT CHARTS ON SHEETS 3, 4 & 5 FOR GLASS AND SHEET 7 FOR ANCHORS AS ON SAMPLE ABOVE.

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 20-0519.05
Expiration Date: 10/20/2023
By: *Manuel Perez*
Miami-Dade Product Control

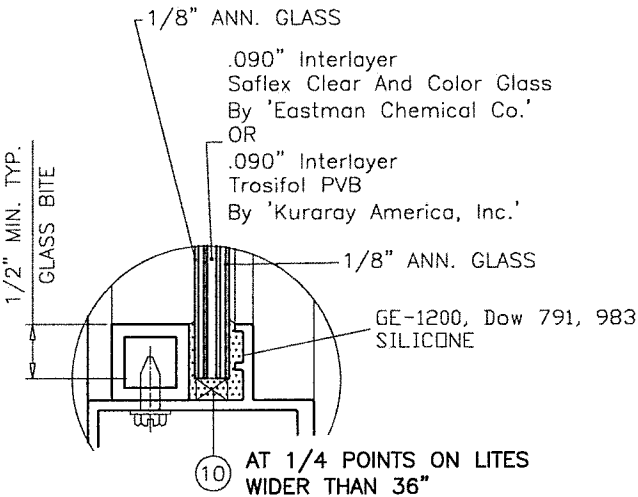
Revision: A) ADDED BACKBEDDING.
AK -04/24/20

				IMPACT RESISTANT Windows & Doors WE'RE STRONGER™			
CGI WINDOWS AND DOORS, 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			
Title		CONFIGURATIONS, BOM, CORNERS		Date	04/27/20		
Description		238 DESIGNER FIXED WINDOW		Drawn By	AGK		
Series	PW238D	Code	NTS	Sheet	2 OF 8		No. WC
Part							MD-PW238D
Rev.							A

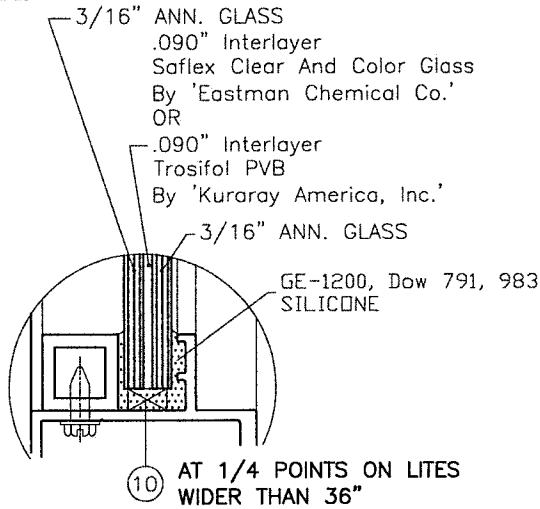
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	36"	110.0	180.0	110.0	180.0
30"		110.0	144.0	110.0	144.0
36"		110.0	120.0	110.0	120.0
42"		110.0	120.0	110.0	120.0
48"		101.4	101.4	110.0	120.0
54"		84.8	84.8	110.0	120.0
60"		74.7	74.7	110.0	114.3
24"	42"	110.0	166.4	110.0	168.0
30"		110.0	142.5	110.0	144.0
36"		110.0	120.0	110.0	120.0
42"		102.9	102.9	102.9	102.9
48"		85.0	85.0	102.9	102.9
54"		75.1	75.1	102.9	102.9
60"		66.4	66.4	90.0	90.0
24"	48"	110.0	153.1	110.0	160.0
30"		110.0	117.6	110.0	120.0
36"		101.4	101.4	110.0	120.0
42"		85.0	85.0	102.9	102.9
48"		75.5	75.5	90.0	90.0
54"		68.4	68.4	90.0	90.0
60"		63.6	63.6	90.0	90.0
24"	54"	110.0	134.8	110.0	154.3
30"		99.4	99.4	110.0	120.0
36"		84.8	84.8	110.0	120.0
42"		75.1	75.1	102.9	102.9
48"		68.4	68.4	90.0	90.0
54"		65.8	65.8	80.0	80.0
60"		59.0	59.0	80.0	80.0
24"	60"	110.0	119.4	110.0	120.0
30"		87.8	87.8	110.0	120.0
36"		74.7	74.7	110.0	114.3
42"		66.4	66.4	90.0	90.0
48"		63.6	63.6	90.0	90.0
54"		59.0	59.0	80.0	80.0
24"	66"	110.0	112.5	110.0	120.0
30"		82.1	82.1	110.0	120.0
36"		66.6	66.6	90.0	90.0
42"		58.1	58.1	90.0	90.0
48"		56.1	56.1	90.0	90.0
24"	72"	105.4	105.4	110.0	120.0
30"		74.0	74.0	110.0	120.0
36"		59.2	59.2	90.0	90.0
42"		51.2	51.2	90.0	90.0
48"		49.8	49.8	83.9	83.9

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	78"	97.5	97.5	110.0	120.0
30"		67.2	67.2	90.0	90.0
36"		50.8	50.8	90.0	90.0
42"		46.1	46.1	86.1	86.1
24"	84"	103.0	103.0	110.0	120.0
30"		63.0	63.0	90.0	90.0
36"		47.3	47.3	90.0	90.0
24"	96"	87.5	87.5	110.0	120.0
30"		56.3	56.3	90.0	90.0
36"		41.6	41.6	90.0	90.0
24"	108"	69.6	69.6	90.0	90.0
30"		53.5	53.5	90.0	90.0
24"	120"	58.8	58.8	90.0	90.0

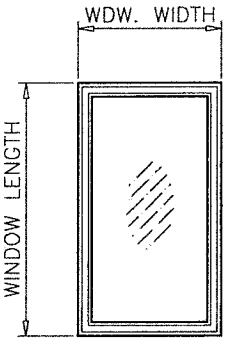
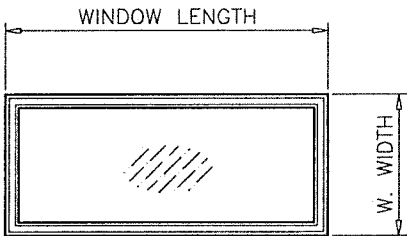
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
19-1/8"	26"	110.0	210.0	110.0	210.0
26-1/2"		110.0	166.2	110.0	166.2
37"		110.0	166.2	110.0	166.2
53-1/8"		110.0	120.0	110.0	120.0
19-1/8"	38-3/8"	110.0	200.6	110.0	200.6
26-1/2"		110.0	163.0	110.0	163.0
37"		110.0	116.8	110.0	116.8
53-1/8"		81.9	81.9	110.0	112.6
19-1/8"	50-5/8"	110.0	185.7	110.0	185.7
26-1/2"		110.0	125.2	110.0	147.2
37"		92.1	92.1	110.0	116.8
53-1/8"		66.6	66.6	85.3	85.3
19-1/8"	63"	110.0	177.5	110.0	177.5
26-1/2"		98.1	98.1	110.0	120.0
37"		68.6	68.6	110.0	110.2
53-1/8"		56.6	56.6	81.3	81.3
19-1/8"	74-1/4"	110.0	120.0	110.0	120.0
26-1/2"		85.2	85.2	110.0	120.0
37"		55.4	55.4	90.0	90.0



5/16" NOMINAL
GLASS TYPE '2'



7/16" NOMINAL
GLASS TYPE '3'



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

NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.
AK - 03/27/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	04/27/20	AGK	MD-PW238D	A
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	DESIGN PRESSURE TABLES	238	DESIGNER FIXED WINDOW	PW238D	3 OF 8
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	DESIGN PRESSURE TABLES	238	DESIGNER FIXED WINDOW	PW238D	3 OF 8

ANTHONY LYNN MILLER
LICENSE
No. 58705
5/11/20
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

PERFORMANCE VALUES
OF IMPACT RESISTANT WINDOWS
NO SHUTTERS REQUIRED
REFER TO SHEETS 6 AND 7
FOR INSTALLATION DETAILS

WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	36"	110.0	195.8
30"		110.0	156.6
36"		110.0	130.5
42"		110.0	120.0
48"		110.0	120.0
54"		110.0	120.0
60"		110.0	120.0
24"	42"	110.0	193.6
30"		110.0	156.6
36"		110.0	120.0
42"		96.9	111.9
48"		96.9	111.9
54"		96.9	111.9
60"		90.0	90.0
24"	48"	110.0	184.4
30"		110.0	120.0
36"		110.0	120.0
42"		96.9	111.9
48"		84.8	97.9
54"		90.0	90.0
60"		90.0	90.0
24"	54"	110.0	177.8
30"		110.0	120.0
36"		110.0	120.0
42"		96.9	111.9
48"		90.0	90.0
54"		80.0	80.0
60"		80.0	80.0
24"	60"	110.0	120.0
30"		110.0	120.0
36"		110.0	120.0
42"		90.0	90.0
48"		90.0	90.0
54"		80.0	80.0
60"		70.0	70.0
63"		70.0	70.0
66"		70.0	70.0
69"		70.0	70.0
72"		70.0	70.0
75"		70.0	70.0
78"		70.0	70.0
81"		50.0	50.0
84"		50.0	50.0
87"		50.0	50.0

PERFORMANCE VALUES
OF IMPACT RESISTANT WINDOWS
NO SHUTTERS REQUIRED
REFER TO SHEETS 6 AND 7
FOR INSTALLATION DETAILS

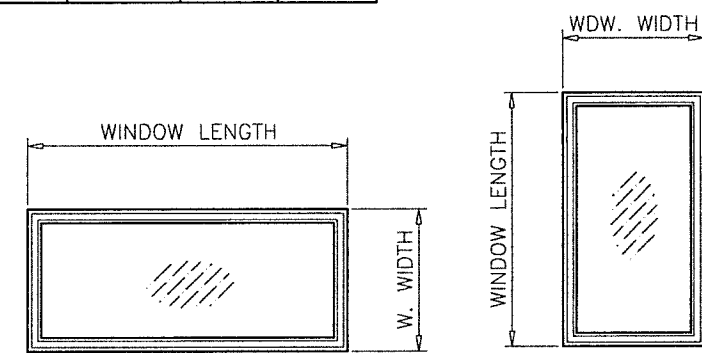
WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	66"	110.0	120.0
30"		110.0	120.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		70.0	70.0
60"		70.0	70.0
63"		68.6	68.6
66"		65.5	65.5
69"		65.5	65.5
72"		65.5	65.5
75"		50.0	50.0
78"		50.0	50.0
81"		50.0	50.0
84"		50.0	50.0
87"		50.0	50.0
24"	72"	110.0	120.0
30"		110.0	120.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
51"		70.0	70.0
54"		70.0	70.0
57"		70.0	70.0
60"		70.0	70.0
63"		68.6	68.6
66"		65.5	65.5
69"		50.0	50.0
72"		50.0	50.0
75"		50.0	50.0
78"		50.0	50.0
81"		50.0	50.0
84"		50.0	50.0
87"		50.0	50.0
24"	78"	110.0	120.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
45"		70.0	70.0
48"		70.0	70.0
51"		70.0	70.0
54"		70.0	70.0
57"		70.0	70.0
60"		70.0	70.0
63"		50.0	50.0
66"		50.0	50.0
69"		50.0	50.0
72"		50.0	50.0
75"		50.0	50.0
78"		50.0	50.0
81"		50.0	50.0

PERFORMANCE VALUES
OF IMPACT RESISTANT WINDOWS
NO SHUTTERS REQUIRED
REFER TO SHEETS 6 AND 7
FOR INSTALLATION DETAILS

WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	84"	110.0	120.0
30"		90.0	90.0
36"		90.0	90.0
42"		70.0	70.0
45"		70.0	70.0
48"		70.0	70.0
51"		70.0	70.0
54"		70.0	70.0
57"		70.0	70.0
60"		50.0	50.0
63"		50.0	50.0
66"		50.0	50.0
69"		50.0	50.0
72"		50.0	50.0
75"		50.0	50.0
24"	96"	110.0	120.0
30"		90.0	90.0
36"		90.0	90.0
42"		70.0	70.0
45"		70.0	70.0
48"		70.0	70.0
51"		70.0	70.0
54"		50.0	50.0
57"		50.0	50.0
60"		50.0	50.0
63"		50.0	50.0
66"		50.0	50.0
69"		90.0	90.0
72"		90.0	90.0
75"		70.0	70.0
78"		70.0	70.0
81"		70.0	70.0
84"		70.0	70.0
87"		70.0	70.0
24"	108"	90.0	90.0
30"		90.0	90.0
36"		70.0	70.0
42"		70.0	70.0
45"		70.0	70.0
48"		50.0	50.0
51"		50.0	50.0
54"		50.0	50.0
57"		50.0	50.0
60"		50.0	50.0
24"	120"	90.0	90.0
30"		70.0	70.0
36"		70.0	70.0
42"		70.0	70.0
45"		50.0	50.0
48"		50.0	50.0
51"		50.0	50.0
54"		50.0	50.0

PERFORMANCE VALUES
OF IMPACT RESISTANT WINDOWS
NO SHUTTERS REQUIRED
REFER TO SHEETS 6 AND 7
FOR INSTALLATION DETAILS

WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	132"	70.0	70.0
30"		70.0	70.0
33"		70.0	70.0
36"		70.0	70.0
39"		50.0	50.0
42"		50.0	50.0
45"		50.0	50.0
48"		50.0	50.0
24"	144"	70.0	70.0
30"		70.0	70.0
33"		70.0	70.0
36"		50.0	50.0
39"		50.0	50.0
42"		50.0	50.0
45"		50.0	50.0
24"	156"	70.0	70.0
30"		70.0	70.0
33"		50.0	50.0
36"		50.0	50.0
39"		50.0	50.0

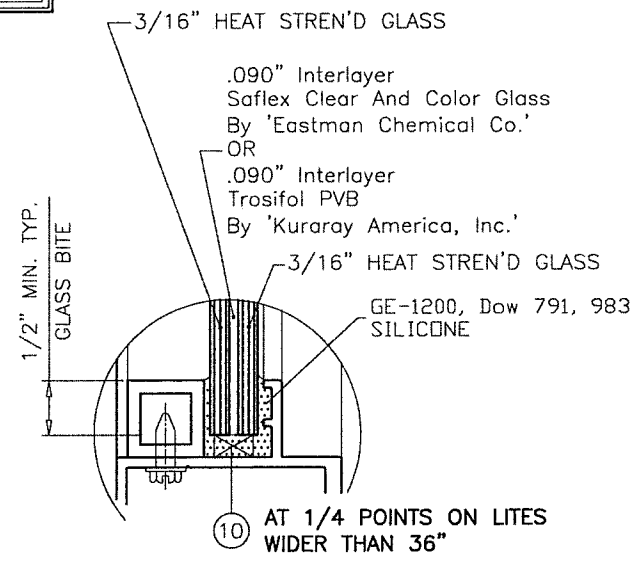


NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN.

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

PERFORMANCE VALUES
OF IMPACT RESISTANT WINDOWS
NO SHUTTERS REQUIRED
REFER TO SHEETS 5 AND 6
FOR INSTALLATION DETAILS

WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
19-1/8"	26"	110.0	210.0
26-1/2"		110.0	180.7
37"		110.0	180.7
53-1/8"		110.0	120.0
19-1/8"	38-3/8"	110.0	210.0
26-1/2"		110.0	177.3
37"		110.0	120.0
53-1/8"		110.0	120.0
19-1/8"	50-5/8"	110.0	210.0
26-1/2"		110.0	169.7
37"		110.0	120.0
53-1/8"		85.3	85.3
19-1/8"	63"	110.0	204.6
26-1/2"		110.0	120.0
37"		110.0	120.0
53-1/8"		81.3	81.3
19-1/8"	74-1/4"	110.0	120.0
26-1/2"		110.0	120.0
37"		90.0	90.0
53-1/8"		70.0	70.0



7/16" NOMINAL
GLASS TYPE '6'

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.
AK - 03/27/20

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

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

REGISTRATION #29296

04/27/20

AGK

MD-PW238D

4 OF 8

NTS

PW238D

238 DESIGNER FIXED WINDOW

DESIGN PRESSURE TABLES

DATE

BY

DRAWN

NO.

DMG

SHEET

SCALE

SERIES

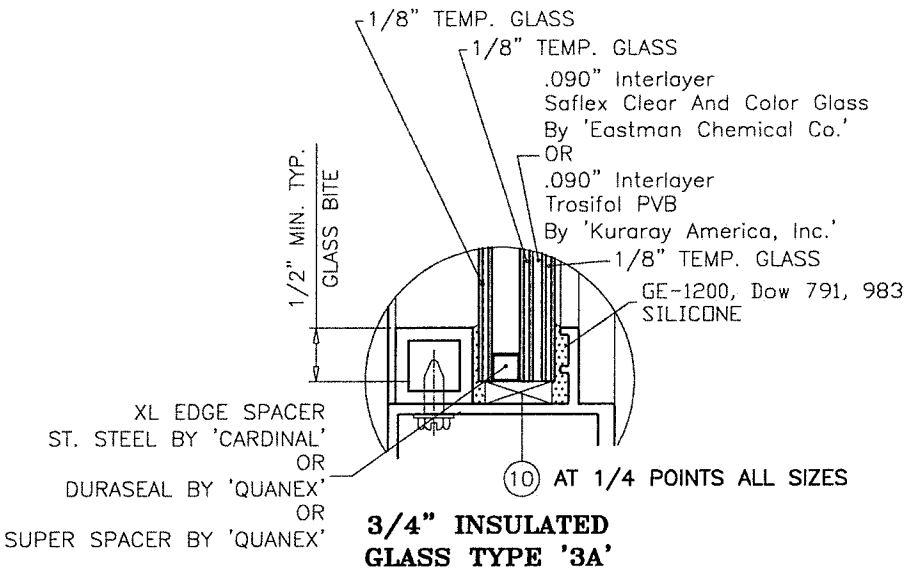
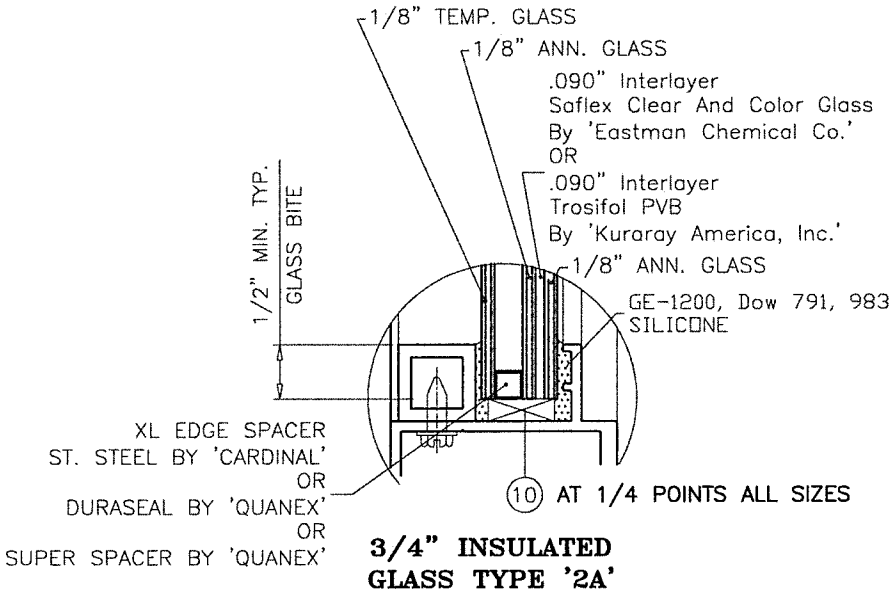
TITLE

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. LYNN MILLER, P.E.
P.E.# 58705

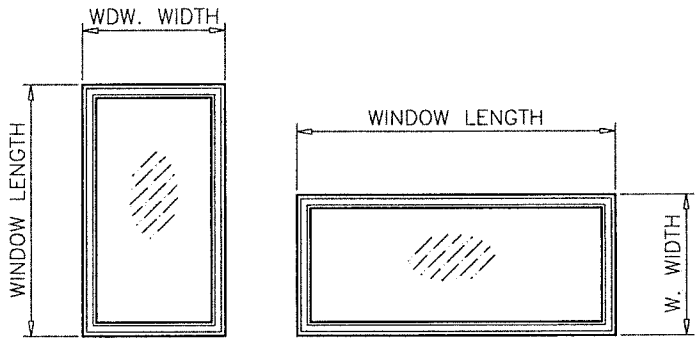
PROFESSIONAL ENGINEER
STATE OF FLORIDA

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	36"	110.0	180.0	110.0	195.8
30"		110.0	144.0	110.0	156.6
36"		110.0	120.0	110.0	130.5
42"		110.0	120.0	110.0	120.0
48"		107.7	107.7	110.0	120.0
54"		90.1	90.1	110.0	120.0
60"		79.3	79.3	110.0	120.0
24"	42"	110.0	168.0	110.0	193.6
30"		110.0	144.0	110.0	156.6
36"		110.0	120.0	110.0	120.0
42"		102.9	102.9	96.9	111.9
48"		90.3	90.3	96.9	111.9
54"		79.8	79.8	96.9	111.9
60"		70.5	70.5	90.0	90.0
24"	48"	110.0	160.0	110.0	184.4
30"		110.0	120.0	110.0	120.0
36"		107.7	107.7	110.0	120.0
42"		90.3	90.3	96.9	111.9
48"		80.2	80.2	84.8	97.9
54"		72.7	72.7	90.0	90.0
60"		67.6	67.6	90.0	90.0
24"	54"	110.0	143.3	110.0	177.8
30"		105.6	105.6	110.0	120.0
36"		90.1	90.1	110.0	120.0
42"		79.8	79.8	96.9	111.9
48"		72.7	72.7	90.0	90.0
54"		69.9	69.9	80.0	80.0
60"		62.7	62.7	80.0	80.0
24"	60"	110.0	120.0	110.0	120.0
30"		93.3	93.3	110.0	120.0
36"		79.3	79.3	110.0	120.0
42"		70.5	70.5	90.0	90.0
48"		67.6	67.6	90.0	90.0
54"		62.7	62.7	80.0	80.0
24"	66"	110.0	119.5	110.0	120.0
30"		87.2	87.2	110.0	120.0
36"		70.7	70.7	90.0	90.0
42"		61.7	61.7	90.0	90.0
48"		59.6	59.6	90.0	90.0
54"		62.7	62.7	80.0	80.0
24"	72"	110.0	111.9	110.0	120.0
30"		78.6	78.6	110.0	120.0
36"		62.9	62.9	90.0	90.0
42"		54.4	54.4	90.0	90.0
48"		52.9	52.9	90.0	90.0
54"		52.9	52.9	90.0	90.0

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	78"	103.6	103.6	110.0	120.0
30"		71.4	71.4	90.0	90.0
36"		54.0	54.0	90.0	90.0
42"		48.9	48.9	90.0	90.0
24"	84"	109.4	109.4	110.0	120.0
30"		67.0	67.0	90.0	90.0
36"		50.2	50.2	90.0	90.0
42"		44.2	44.2	90.0	90.0
24"	96"	92.9	92.9	110.0	120.0
30"		59.8	59.8	90.0	90.0
36"		44.2	44.2	90.0	90.0
42"		37.0	37.0	90.0	90.0
24"	108"	74.0	74.0	90.0	90.0
30"		56.8	56.8	90.0	90.0
36"		44.2	44.2	90.0	90.0
42"		37.0	37.0	90.0	90.0
24"	120"	62.5	62.5	90.0	90.0



PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS					
NO SHUTTERS REQUIRED					
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS					
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
19-1/8"	26"	110.0	210.0	110.0	210.0
26-1/2"		110.0	166.2	110.0	180.7
37"		110.0	166.2	110.0	180.7
53-1/8"		110.0	120.0	110.0	120.0
19-1/8"	38-3/8"	110.0	200.6	110.0	210.0
26-1/2"		110.0	163.0	110.0	177.3
37"		110.0	116.8	110.0	120.0
53-1/8"		87.0	87.0	110.0	120.0
19-1/8"	50-5/8"	110.0	185.7	110.0	210.0
26-1/2"		110.0	133.0	110.0	169.7
37"		97.9	97.9	110.0	120.0
53-1/8"		70.8	70.8	85.3	85.3
19-1/8"	63"	110.0	177.5	110.0	204.6
26-1/2"		104.3	104.3	110.0	120.0
37"		72.9	72.9	110.0	120.0
53-1/8"		60.1	60.1	81.3	81.3
19-1/8"	74-1/4"	110.0	120.0	110.0	120.0
26-1/2"		90.5	90.5	110.0	120.0
37"		58.8	58.8	90.0	90.0
53-1/8"		58.8	58.8	90.0	90.0



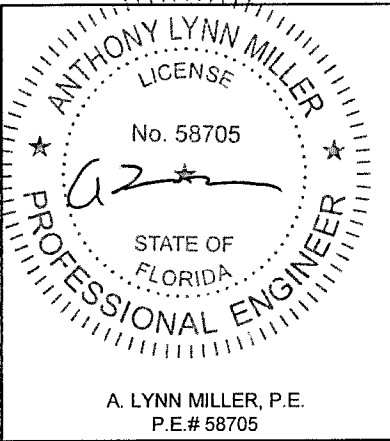
NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

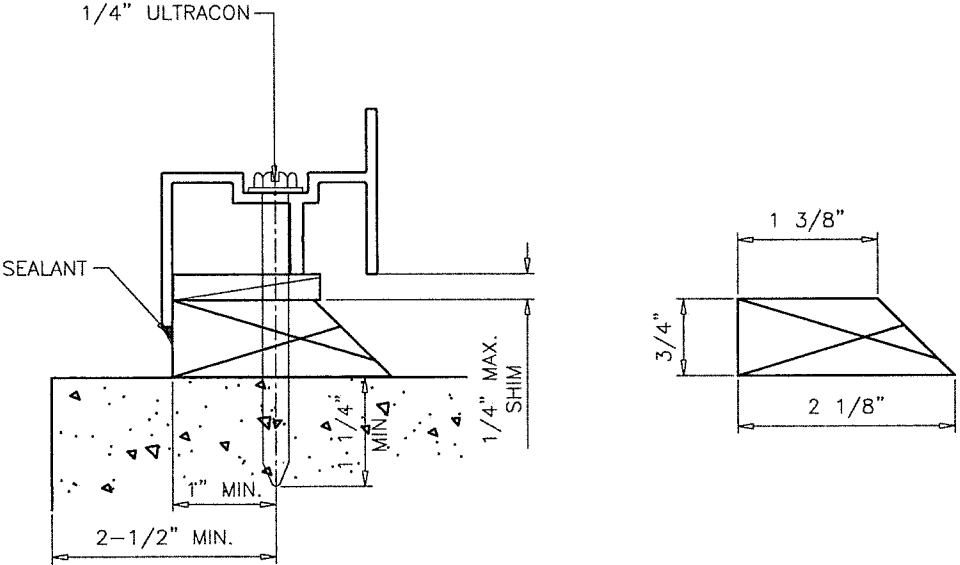
Revision: A) NO CHANGES THIS SHEET.
AK - 03/27/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	04/27/20	AGK	MD-PW238D	A
Impact Resistant Windows & Doors WERE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	DESIGN PRESSURE TABLES	PW238D	238 DESIGNER FIXED WINDOW	NTS	5 OF 8
A. LYNN MILLER, P.E. No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER	PW238D	NTS	5 OF 8	MD-PW238D	A



INSTALLATION CONDITIONS (APPLIES TO ALL FOUR SIDES)

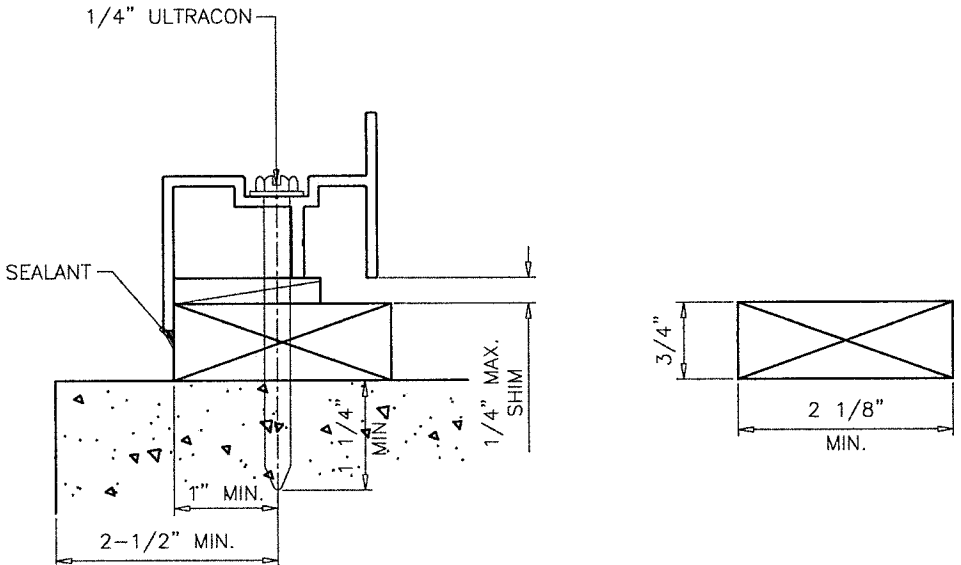
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 6



INSTALLATION TYPE '1'

WOOD BUCK TYPE '1'
MATERIAL: PRESSURE TREATED

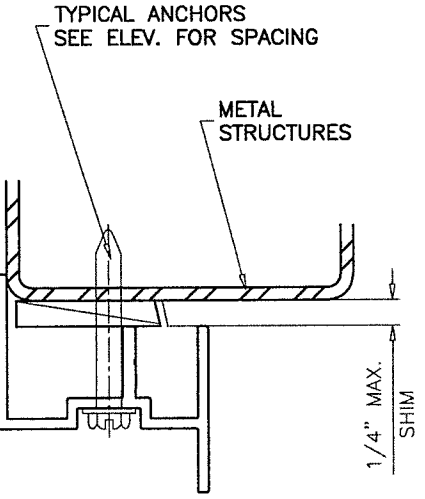
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



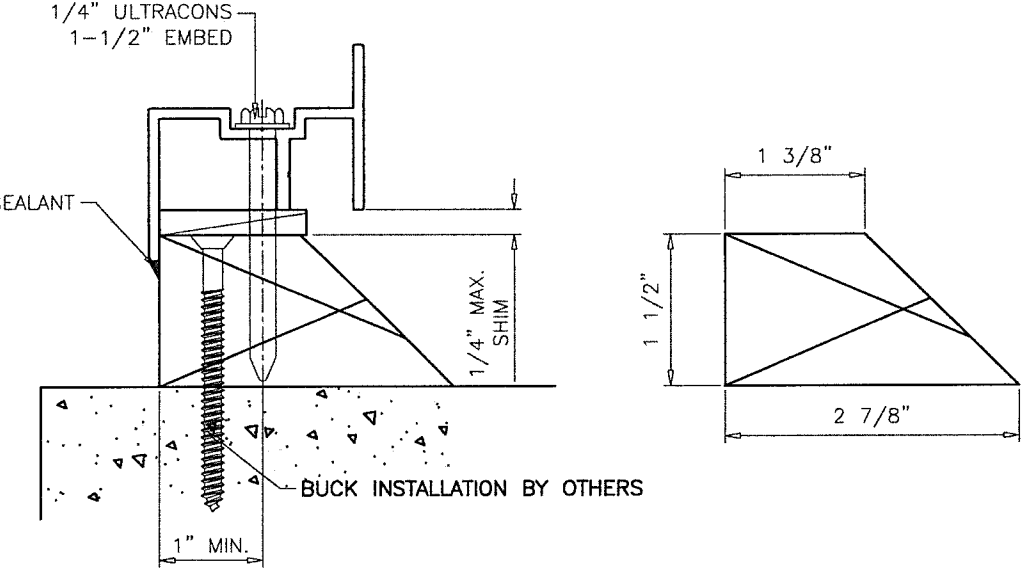
INSTALLATION TYPE '2'

WOOD BUCK TYPE '2'
MATERIAL: PRESSURE TREATED

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



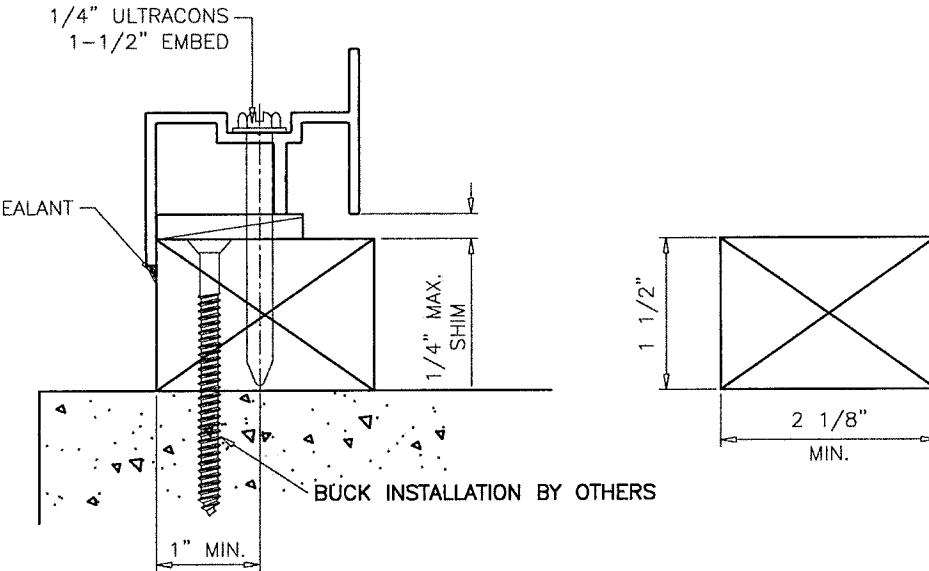
ATTACHMENT TO
METAL STRUCTURES



INSTALLATION TYPE '3'

WOOD BUCK TYPE '3'
MATERIAL: PRESSURE TREATED

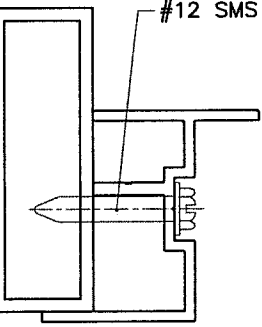
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



INSTALLATION TYPE '4'

WOOD BUCK TYPE '4'
MATERIAL: PRESSURE TREATED

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



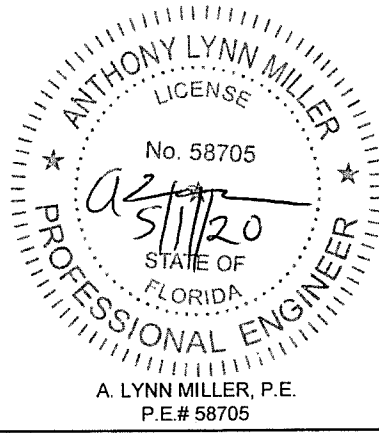
ATTACHMENT TO
APPROVED MULLIONS

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

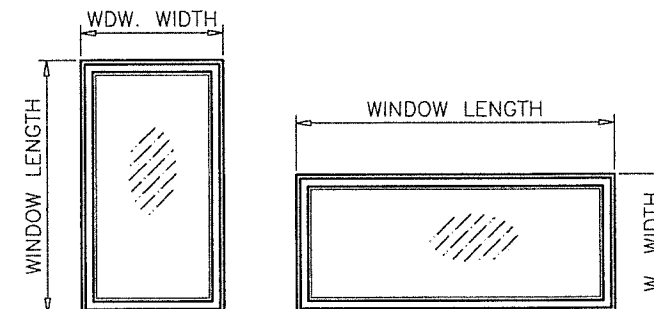
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.
AK - 03/27/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	04/27/20	AGK	MD-PW238D	A
Impact Resistant Windows & Doors WERE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	INSTALLATION DETAILS	238 DESIGNER FIXED WINDOW	PW238D	6 OF 8	NTS



PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS			PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS			PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS			PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS					
WINDOW DIMS.		EXT. (+) INT. (-)	WINDOW DIMS.		EXT. (+) INT. (-)	WINDOW DIMS.		EXT. (+) INT. (-)	WINDOW DIMS.		EXT. (+) INT. (-)			
WIDTH	HEIGHT		WIDTH	HEIGHT		WIDTH	HEIGHT		WIDTH	HEIGHT				
24"	36"	210.0	24"	54"	210.0	24"	72"	210.0	24"	108"	210.0			
30"		210.0	30"		210.0	30"		210.0	30"		180.6			
36"		210.0	36"		210.0	36"		185.2	36"		155.6			
42"		210.0	42"		207.8	42"		168.1	42"		137.9			
48"		210.0	48"		200.0	48"		156.3	48"		125.0			
54"		210.0	54"		197.5	54"		148.1	54"		115.2			
60"		190.5	60"		161.6	60"		142.9	60"	107.7				
63"		177.8	63"		148.1	63"		141.1	63"	104.6				
66"		208.3	66"		170.9	66"		139.9	24"	210.0				
69"		196.1	69"		158.7	69"		139.1	30"	182.9				
72"		185.2	72"		148.1	72"		138.9	36"	156.9				
75"		175.4	75"		138.9	75"		128.2	42"	138.5				
78"	166.7	78"	130.7	78"	119.0	48"	125.0							
81"	190.5	81"	148.1	81"	133.3	54"	114.7							
84"	181.8	84"	140.4	84"	125.0	24"	210.0							
87"	173.9	87"	133.3	87"	117.6	30"	184.6							
90"	166.7	90"	127.0	90"	111.1	36"	157.9							
24"	42"	210.0	24"	60"	210.0	24"	78"	210.0	42"	132"	139.0			
30"		210.0	30"		210.0	30"		190.5	48"		125.0			
36"		210.0	36"		190.5	36"		166.7	24"		204.5			
42"		210.0	42"		175.8	42"		150.4	30"		167.4			
48"		210.0	48"		166.7	48"		138.9	36"		142.9			
54"		207.8	54"		161.6	54"		130.7	42"		125.4			
60"		175.8	60"		160.0	60"		125.0	48"	112.5				
63"		163.3	63"		145.5	63"		122.9	24"	208.3				
66"		190.5	66"		160.0	66"		121.2	30"	170.2				
69"		178.6	69"		153.8	69"		119.9	36"	144.9				
72"		168.1	72"		142.9	72"		119.0	42"	127.0				
75"		158.7	75"		133.3	75"		118.5	PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS					
78"	150.4	78"	125.0	78"	118.3									
81"	171.4	81"	141.2	81"	118.3									
84"	163.3	84"	133.3	84"	118.3									
87"	155.8	87"	126.3	87"	115.4									
90"	149.1	90"	120.0	24"	210.0									
24"	48"	210.0	24"	66"	210.0	30"	208.7							
30"		210.0	30"		210.0	36"	181.8							
36"		210.0	36"		208.3	42"	163.3							
42"		210.0	42"		190.5	48"	150.0							
48"		210.0	48"		178.6	54"	140.4							
54"		200.0	54"		170.9	60"	133.3							
60"		166.7	60"		160.0	63"	130.6							
63"		153.8	63"		145.1	66"	128.3							
66"		178.6	66"		165.3	69"	126.5							
69"		166.7	69"		151.5	72"	125.0							
72"		156.3	72"		139.9	75"	123.9							
75"		147.1	75"		129.9	78"	118.3							
78"	138.9	78"	121.2	81"	122.6									
81"	48"	157.9	81"	66"	136.4	24"	96"	210.0						
84"		150.0	84"		128.3	30"		177.8						
87"		142.9	87"		121.2	36"		153.8						
90"		136.4	90"		114.8	42"		137.1						
						48"		125.0						
						54"		115.9						
						60"		109.1						
						63"		106.3						
						66"		103.9						
						69"		101.8						
						72"	100.0							
PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS												WINDOW DIMS.		EXT. (+) INT. (-)
												WIDTH	HEIGHT	
												19-1/8"	26"	210.0
												26-1/2"		210.0
												37"		210.0
												53-1/8"		210.0
												19-1/8"	38-3/8"	210.0
												26-1/2"		210.0
												37"		210.0
												53-1/8"		210.0
19-1/8"	50-5/8"	210.0												
26-1/2"		210.0												
37"		210.0												
53-1/8"		204.5												
19-1/8"	63"	210.0												
26-1/2"		210.0												
37"		174.9												
53-1/8"		148.8												
19-1/8"	74-1/4"	210.0												
26-1/2"		210.0												
37"		174.5												
53-1/8"		142.1												



NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

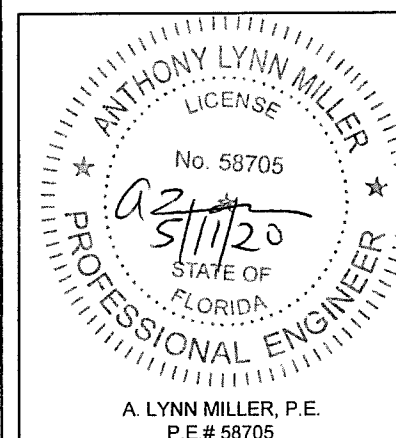
1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD
 THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY
 DIRECTLY INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY
 1/4" DIA. ULTRACON+ 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
 #14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
 INTO METAL STRUCTURES
 STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
 ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
 #12 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = 1/8")
 (NO SHIM SPACE)
 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 BLOCK AT JAMBS f'm = 2000 PSI MIN.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **20-0519.05**
 Expiration Date: **10/20/2023**
 By: *Manuel Perez*
 Miami-Dade Product Control

Revision: A) ADDED ULTRACON+.
 AK - 03/27/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	04/27/20	AGK	MD-PW238D	A
Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	ANCHOR TABLES	238 DESIGNER FIXED WINDOW	PW238D	7 OF 8	NTS



PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	36"	207.8	210.0
30"		189.9	210.0
36"		184.7	210.0
42"		138.5	184.7
48"		147.7	184.7
54"		123.1	184.7
60"		105.5	158.3
63"		98.5	172.4
66"		115.4	161.6
69"		108.6	152.1
72"		102.6	143.6
75"		97.2	155.5
78"	54"	92.3	147.7
81"		105.5	140.7
84"		100.7	151.1
87"		96.3	144.5
90"		92.3	138.5
24"	42"	166.2	210.0
30"		147.7	197.0
36"		138.5	184.7
42"		135.7	180.9
48"		135.7	175.9
54"		115.1	172.7
60"		97.4	146.1
63"		90.4	158.3
66"		105.5	147.7
69"		98.9	138.5
72"		93.1	130.4
75"		87.9	140.7
78"	60"	83.3	133.3
81"		95.0	126.6
84"		90.4	135.7
87"		86.3	129.5
90"		82.6	123.9
24"	48"	184.7	210.0
30"		161.2	201.5
36"		147.7	184.7
42"		135.7	175.9
48"		138.5	173.1
54"		110.8	166.2
60"		92.3	138.5
63"		85.2	149.2
66"		98.9	138.5
69"		92.3	129.3
72"		86.6	121.2
75"		81.5	130.4
78"	66"	76.9	123.1
81"		87.5	116.6
84"		83.1	124.7
87"		79.1	118.7
90"		75.5	113.3

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	54"	158.3	210.0
30"		136.4	204.6
36"		123.1	184.7
42"		115.1	172.7
48"		110.8	166.2
54"		109.4	164.1
60"		89.5	134.3
63"		82.1	143.6
66"		94.7	132.6
69"		87.9	123.1
72"		82.1	114.9
75"		76.9	123.1
78"	72"	72.4	115.9
81"		82.1	109.4
84"		77.8	116.6
87"		73.9	110.8
90"		70.3	105.5
24"	60"	138.5	207.8
30"		118.2	177.3
36"		105.5	158.3
42"		97.4	146.1
48"		92.3	138.5
54"		89.5	134.3
60"		88.6	133.0
63"		80.6	133.0
66"		88.6	129.3
69"		85.2	119.3
72"		79.1	110.8
75"		73.9	118.2
78"	78"	69.3	110.8
81"		78.2	104.3
84"		73.9	110.8
87"		70.0	105.0
90"		66.5	99.7
24"	66"	153.9	210.0
30"		130.4	182.5
36"		115.4	161.6
42"		105.5	147.7
48"		98.9	138.5
54"		94.7	132.6
60"		88.6	129.3
63"		80.4	128.5
66"		91.6	128.2
69"		83.9	117.5
72"		77.5	108.5
75"		71.9	115.1
78"	84"	67.2	107.4
81"		75.5	100.7
84"		71.1	106.7
87"		67.2	100.7
90"		63.6	95.4

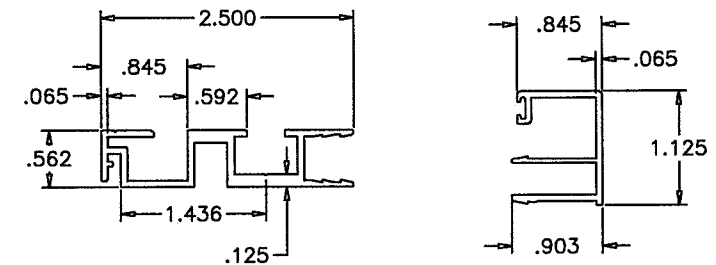
PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	72"	138.5	193.9
30"		116.6	163.3
36"		102.6	143.6
42"		93.1	130.4
48"		86.6	121.2
54"		82.1	114.9
60"		79.1	110.8
63"		78.2	109.4
66"		77.5	108.5
69"		77.1	107.9
72"		76.9	107.7
75"		71.0	107.7
78"	84"	66.0	105.5
81"		73.9	98.5
84"		69.3	103.9
87"		65.2	97.8
90"		61.6	92.3
24"	84"	125.9	201.5
30"		105.5	168.8
36"		92.3	147.7
42"		83.3	133.3
48"		76.9	123.1
54"		72.4	115.9
60"		69.3	110.8
63"		68.1	108.9
66"		67.2	107.4
69"		66.4	106.3
72"		66.0	105.5
75"		65.7	105.1
78"	96"	65.6	104.9
81"		65.6	97.4
84"		65.6	102.3
87"		63.9	95.9
90"		63.9	95.9
24"	96"	138.5	207.8
30"		115.6	173.4
36"		100.7	151.1
42"		90.4	135.7
48"		83.1	124.7
54"		77.8	116.6
60"		73.9	110.8
63"		72.4	108.5
66"		71.1	106.7
69"		70.1	105.1
72"		69.3	103.9
75"		68.6	102.9
78"	96"	65.6	102.3
81"		67.9	97.3
84"		118.7	197.9
87"		98.5	164.1
90"		85.2	142.1
24"	96"	76.0	126.6
30"		69.3	115.4
36"		64.2	107.1
42"		60.4	100.7
48"		58.9	98.2
54"		57.6	95.9
60"		56.4	94.0
63"		55.4	92.3
66"		55.4	92.3
69"		55.4	92.3
72"		55.4	92.3

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	108"	121.2	190.4
30"		100.1	157.3
36"		86.2	135.4
42"		76.4	120.1
48"		69.3	108.8
54"		63.8	100.3
60"	120"	59.7	93.8
63"		57.9	91.0
24"	132"	123.1	184.7
30"		101.3	152.0
36"		86.9	130.4
42"		76.7	115.1
48"		69.3	103.9
54"		63.5	95.3
24"	144"	124.7	180.1
30"		102.3	147.7
36"		87.5	126.4
42"		77.0	111.2
48"		69.3	100.0
54"		63.5	95.3
24"	156"	115.4	184.7
30"		94.3	150.9
36"		80.3	128.5
42"		70.3	112.6

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
19-1/8"	26"	210.0	210.0
26-1/2"		210.0	210.0
37"		191.8	210.0
53-1/8"	38-3/8"	152.9	210.0
19-1/8"		210.0	210.0
26-1/2"		179.7	210.0
37"	50-5/8"	162.7	210.0
53-1/8"		122.5	183.8
19-1/8"		203.2	210.0
26-1/2"	63"	161.1	201.4
37"		134.2	167.8
53-1/8"		113.3	155.6
19-1/8"	74-1/4"	156.1	210.0
26-1/2"		121.0	210.0
37"		96.9	169.6
53-1/8"	74-1/4"	82.4	144.2
19-1/8"		161.2	210.0
26-1/2"		123.4	197.4
37"	74-1/4"	96.7	154.7
53-1/8"		78.7	126.0

ALUMINUM BUCK FRAMING DETAILS

REFER TO SHEETS 3 THRU 6 FOR WINDOW CAPACITIES
USE LOWER APPLICABLE VALUES.

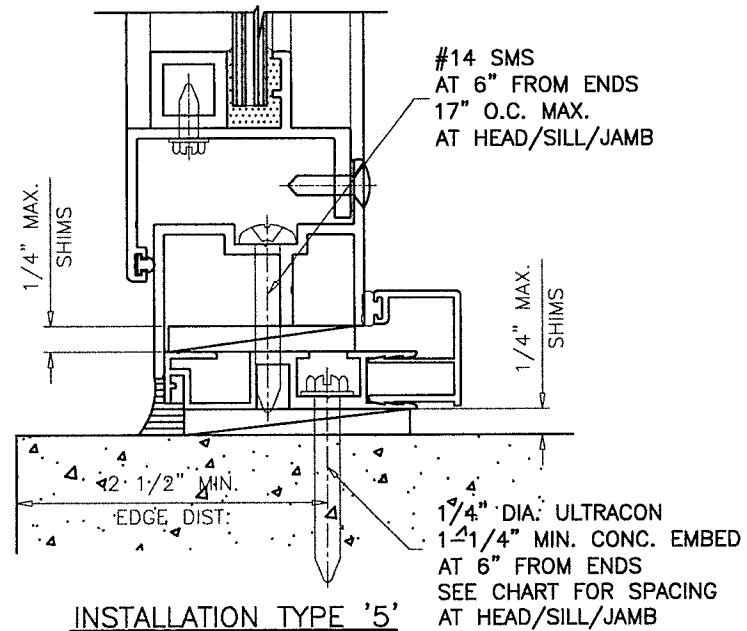


ALUMINUM BUCK

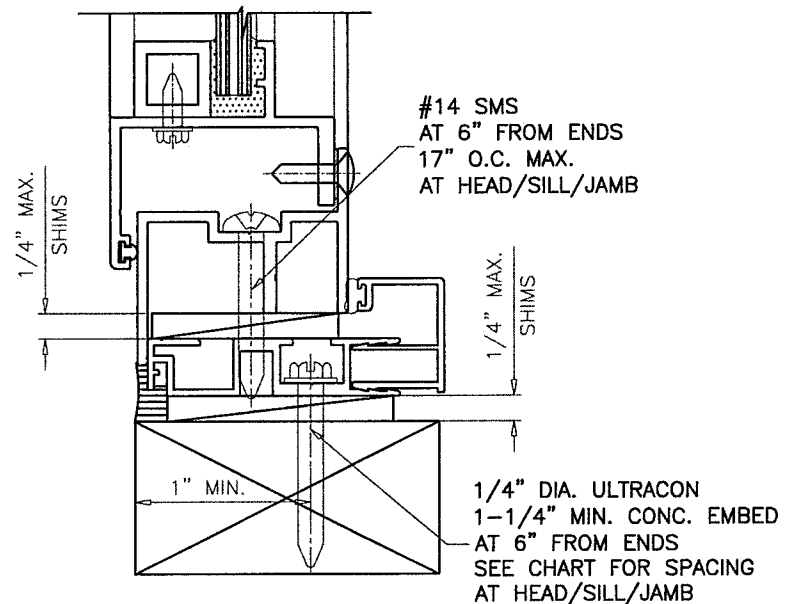
6063-T6

OPTIONAL COVER

6063-T6



INSTALLATION TYPE '5'



INSTALLATION TYPE '6'

2BY WOOD BUCK OR WOOD STRUCTURES

TYPICAL INSTALLATION DETAIL

ON ALL FOUR SIDES/USING ALUMINUM BUCK SYSTEM

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0519.05**
Expiration Date: **10/20/2023**
By: *Manuel Perez*
Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.
AK - 03/27/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	Date 04/27/20	By AGK	Drawn MD-PW238D	Rev. A
Impact Resistant Windows & Doors WERE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	ALUMINUM BUCK	238 DESIGNER FIXED WINDOW	PW238D	8 OF 8	NTS

