



**MIAMI-DADE COUNTY**  
**BUILDING CODE COMPLIANCE OFFICE (BCCO)**  
**PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA**  
**METRO-DADE FLAGLER BUILDING**  
**140 WEST FLAGLER STREET, SUITE 1603**  
**MIAMI, FLORIDA 33130-1563**  
**(305) 375-2901 FAX (305) 372-6339**

**NOTICE OF ACCEPTANCE (NOA)**

[www.maimidade.gov/buildingcode](http://www.maimidade.gov/buildingcode)

**CGI Windows & Doors**  
**10100 NW 25 St.**  
**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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 "Series-238 Aluminum Designer Fixed Window", sheets 1 through 8 of 8, dated 12/27/01, with revision B, dated 05/16/08, prepared by Al-Farooq Corporation, by Humayoun Farooq, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

**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 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 **renews NOA # 08-0529.01** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



**NOA No. 09-0303.01**  
**Expiration Date: October 20, 2013**  
**Approval Date: March 25, 2009**

**CGI Windows & Doors**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No. **W01-83**, titled "Series-238 Aluminum Designer Fixed Window", sheets 1 through 8 of 8, dated 12/27/01, with revision B, dated 05/16/08, prepared by Al-Farooq Corporation, signed, sealed by Humayoun Farooq, 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 FBC 2411 3.2.1, TAS 202-94along with marked-up drawings and installation diagram of aluminum fixed window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0105-08**, dated 01/08/08, signed and sealed by Vinu J. Abraham, P.E.
2. Test reports on:
  - 1) Air Infiltration Test, per FBC, PA-202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC PA-202-94
  - 3) Water Resistance Test, per FBC, PA-202-94along with marked-up drawings and installation diagram of an aluminum fixed window with 3/16" ann. glass, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-1018**, dated 09/26/94, signed and sealed by Yamil Kuri, P.E. **(Submitted under previous NOA#02-0122.05)**
3. Test reports on:
  - 1) Air Infiltration Test, per FBC, PA-202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC PA-202-94
  - 3) Water Resistance Test, per FBC, PA-202-94along with marked-up drawings and installation diagram of an aluminum fixed window with 3/16" temp. glass, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-1024**, dated 09/26/94, signed and sealed by Yamil Kuri, P.E. **(Submitted under previous NOA#02-0122.05)**
4. Test reports on:
  - 1) Large Missile Impact Test per FBC, PA-201-94
  - 2) Cyclic Wind Pressure Loading per FBC, PA-203-94along with marked-up drawings and installation diagram of an aluminum fixed window with 1/8" ann. Glass w/DuPont Sentryglas R-457, prepared by American Test Lab of South Florida, Test Report No. **ATLSF-1209.01-94**, dated 12/9-14/94, signed and sealed by Gerard B. Sullivan, P.E. **(Submitted under previous NOA#02-0122.05)**

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 09-0303.01  
Expiration Date: October 20, 2013  
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**CGI Windows & Doors**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

5. Test reports on: 1) Large Missile Impact Test per FBC, PA-201-94  
2) Cyclic Wind Pressure Loading per FBC, PA-203-94  
along with installation diagram of a 48" wide x 72" high Series 238 alum. fixed window (Tombstone) glazed with 5/16" laminated glass w/ Saflex interlayer, prepared by Hurricane Test Laboratory, Test Report No. **HTL-0080-0303-96**, dated 03/05/96, signed and sealed by Timothy S. Marshall, P.E. (*Submitted under NOA#02-0122.05*)
6. Test reports on: 1) Air Infiltration Test, per FBC, PA 202-94  
2) Uniform Static Air Pressure Test, Loading per FBC PA-202-94  
3) Water Resistance Test, per FBC, PA-202-94  
4) Large Missile Impact Test per FBC, PA-201-94  
5) Cyclic Wind Pressure Loading per FBC, PA-203-94  
along with installation diagram of a 48" wide x 72" high Series 238 alum. fixed window (Tombstone) glazed with 3/16" tempered glass, prepared by Hurricane Test Laboratory, Test Report No. **HTL-0080-0502-97**, dated 05/1&2/97, signed and sealed by Timothy S. Marshall, P.E. (*Submitted under previous NOA#02-0122.05*)

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2004 and 2007, prepared by Al-Farooq Corporation, dated 5/15/08, signed and sealed by Humayoun Farooq, P.E. **Complies with ASTM E1300-98/02**

**D. QUALITY ASSURANCE**

1. Miami Dade Building Code Compliance Office (BCCO).

**E. MATERIAL CERTIFICATIONS**

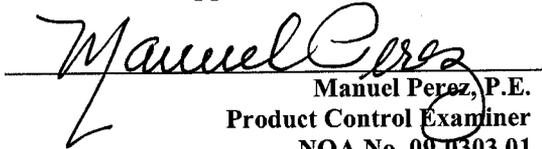
1. Notice of Acceptance No. **06-0216.06** issued to Solutia Inc. for their "Saflex III G Clear or colored interlayer" dated May 04, 2006, expiring on May 21, 2011.

**F. STATEMENTS**

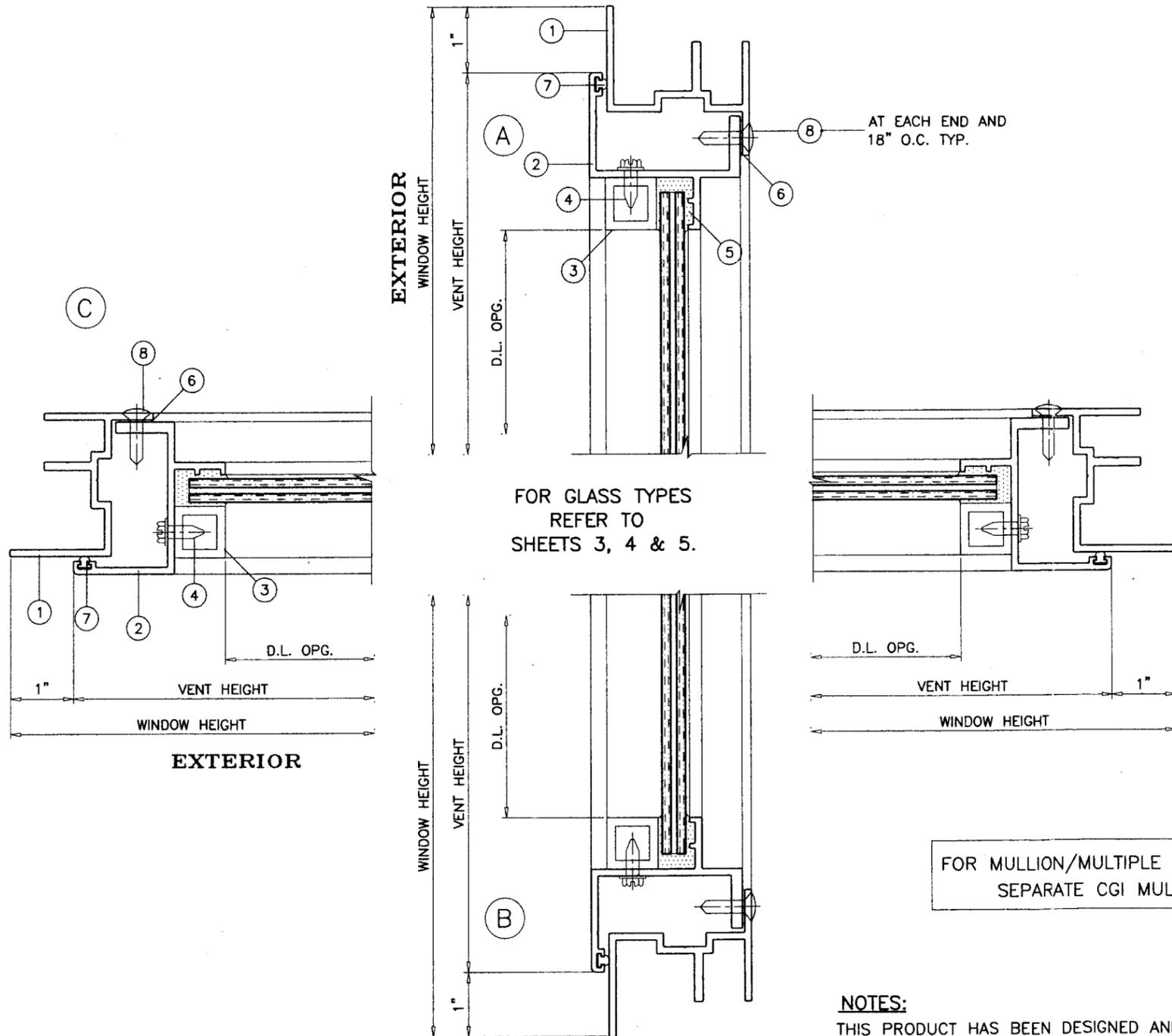
1. Statement letter of conformance, dated May 13, 2008, signed and sealed by Humayoun Farooq, P.E.  
2. Statement letter of no financial interest, dated May 13, 2008, signed and sealed by Humayoun Farooq, P.E.  
3. Laboratory compliance letter for Test Report No. **HTL-0080-0105-08**, issued by Hurricane Test Laboratory, Inc., dated February 27, 2008, signed and sealed by Vinu J. Abraham, P.E.

**G. OTHER**

1. Notice of Acceptance No. **08-0529.01**, issued to CGI Windows & Doors for their Series "238 Designer" Aluminum Fixed Window – L.M.I., approved on 11/20/08 and expiring on 10/20/09.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 09-0303.01  
Expiration Date: October 20, 2013  
Approval Date: March 25, 2009

**GENERAL WINDOW SECTIONS**



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

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

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

**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 FLORIDA BUILDING CODE 2004/2007 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BLDG. CODE SECTION 2003.8.4.

Engr. DR. HUSAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 16557  
C.A.N. 3538

MAY 21 2008

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 09-0303.01  
Expiration Date 10/20/2013

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 08-08529.01  
Expiration Date 10/20/2009

**afC**

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W01-83CG

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SERIES-238 DESIGNER FIXED WINDOW

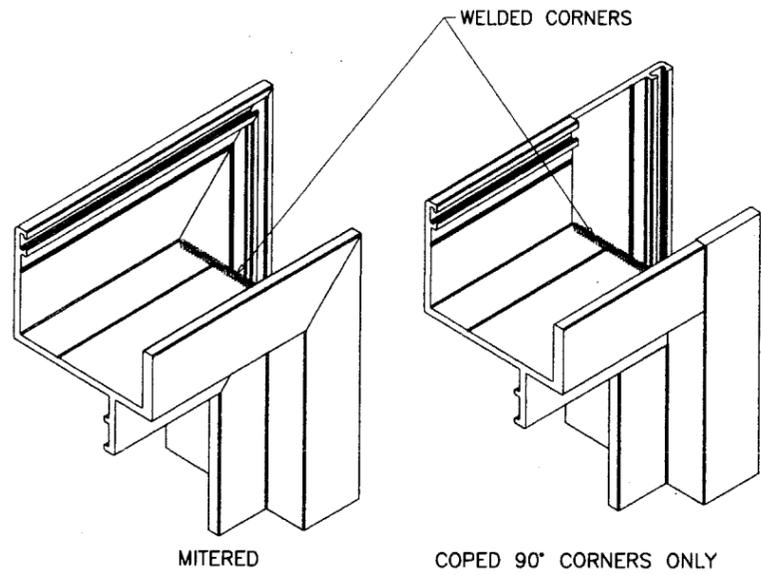
**CGI WINDOWS & DOORS**  
10100 N.W. 25TH STREET  
MIAMI, FL. 33172  
TEL. (305) 593-6590 FAX. (305) 593-6592

no	date	description
A	04.30.07	REV. PER BCCO COMMENTS
B	05.16.08	NOTE REV.

revisions:

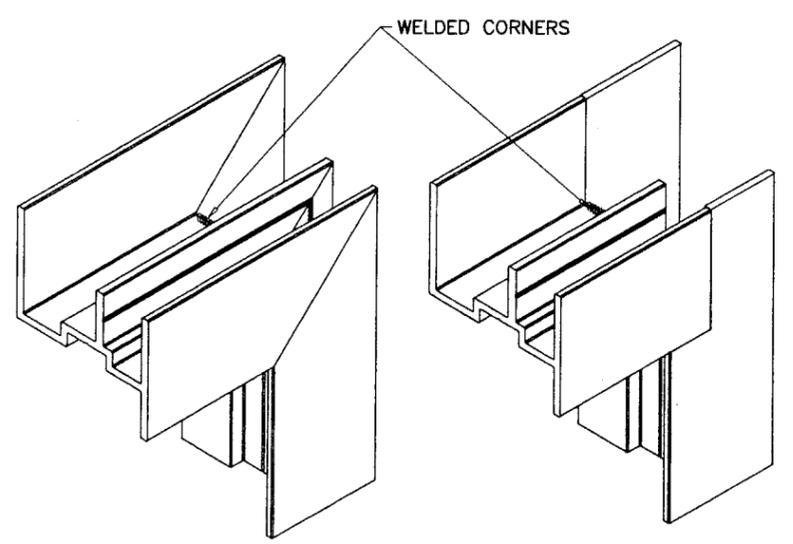
date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**W01-83**  
sheet 1 of 8



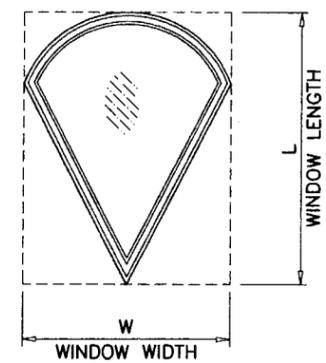
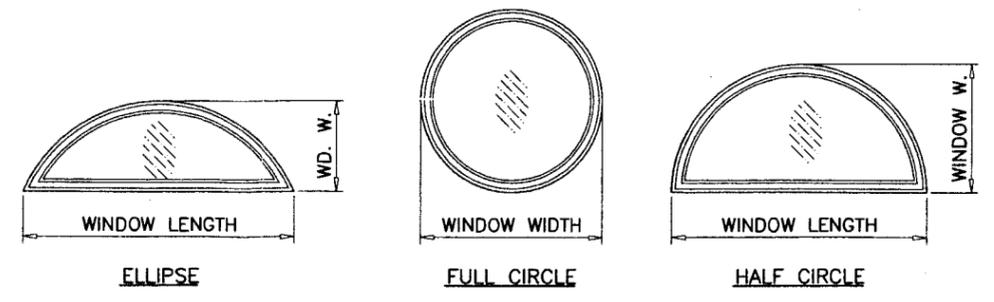
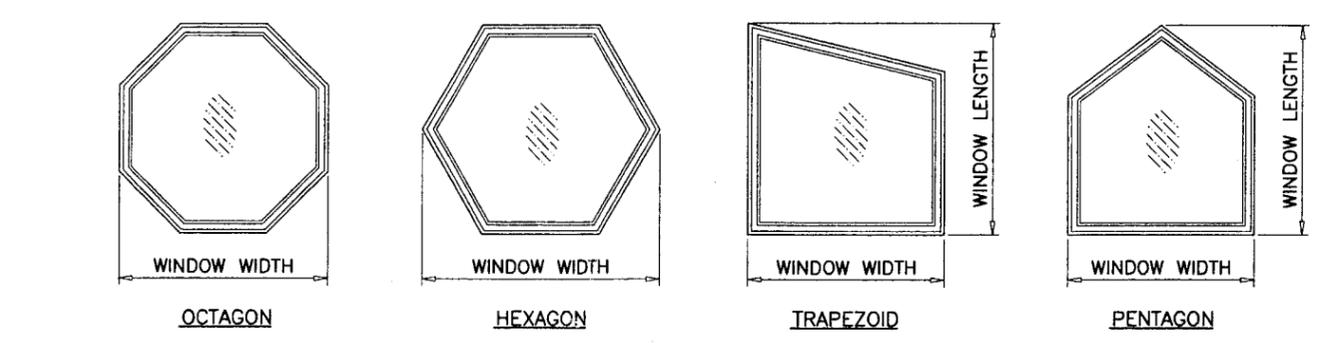
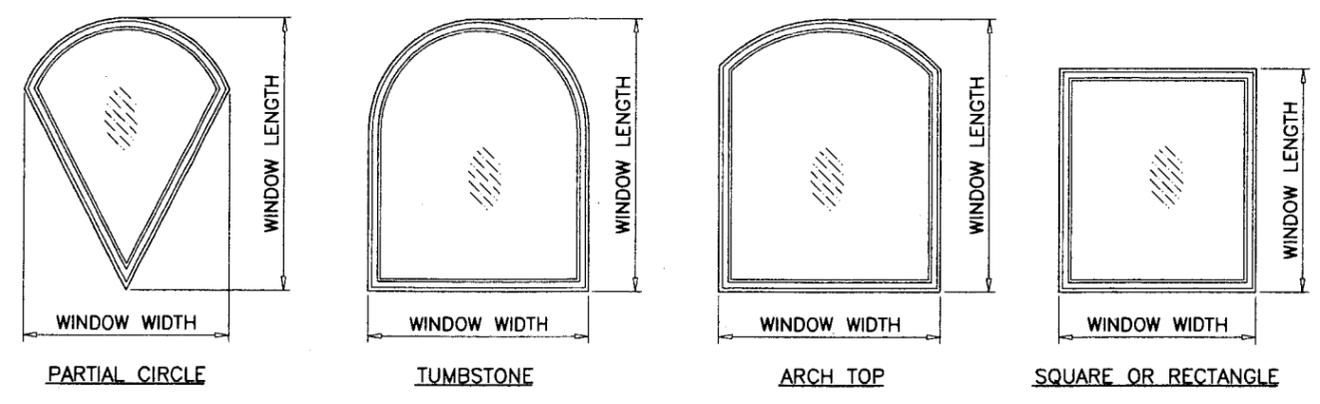
VENT CORNER

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

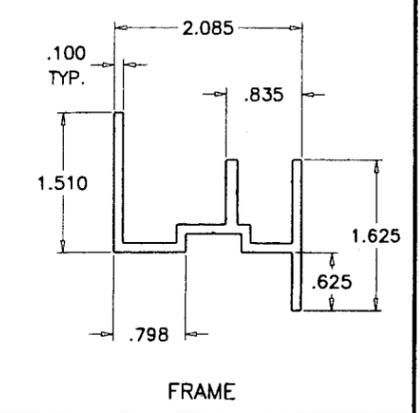


FRAME CORNER

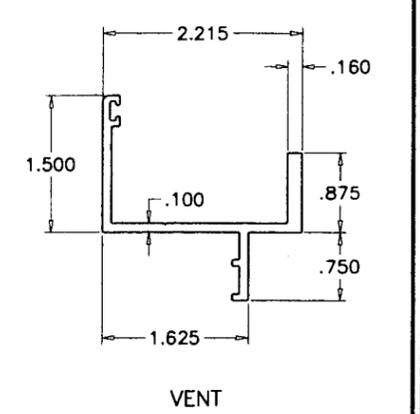
ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	CGI-386	4	FRAME	6063-T6	INDALEX OR EQUIV.
2	CGI-387	4	VENT	6063-T6	INDALEX OR EQUIV.
2A	CGI-387IG	4	VENT (INSUL GLASS)	6063-T6	INDALEX OR EQUIV.
3	CGI-	4	GLAZING BEAD	6063-T5	INDALEX OR EQUIV.
4	-	AS REQD.	GLAZING BEAD SCREWS • 6" FROM ENDS & 20" O.C. MAX.	-	#12 X 5/8" SMS
5	-	-	GLAZING COMPOUND	SILICONE	GE-1000 (NON-IMPACT)
5A	-	-	GLAZING COMPOUND	SILICONE	GE-1200 (IMPACT)
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



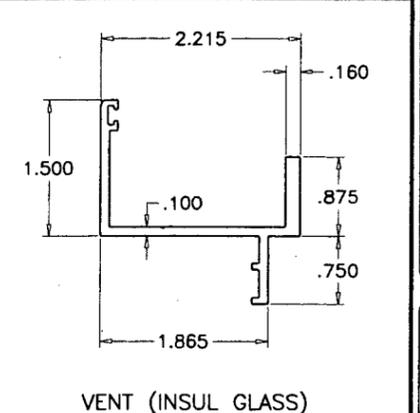
VERIFY LOAD CAPACITY OF WINDOW BY INSCRIBING SHAPE OF WINDOW WITHIN A RECTANGULAR OR SQUARE SHAPE AND USING THOSE DIMENSIONS TO CONSULT CHARTS ON SHEETS 3, 4 & 5 FOR GLASS AND SHEET 7 FOR ANCHORS AS ON SAMPLE ABOVE.



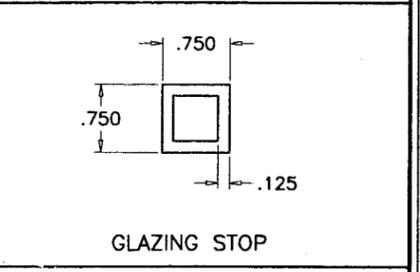
FRAME



VENT



VENT (INSUL GLASS)



GLAZING STOP

**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1235 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW  
**CGI WINDOWS & DOORS**  
 10100 N.W. 25TH STREET  
 MIAMI, FL. 33172  
 TEL. (305) 593-6590 FAX. (305) 593-6592

no	date	description
B	05.16.08	NO CHANGE THIS SHEET

date:	12-27-01
scale:	1/2" = 1"
dr. by:	HAMID
chk. by:	

drawing no.  
**W01-83**  
 sheet 2 of 8

PRODUCT REVIEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 09-0303.01  
 Expiration Date OCT. 20, 2013  
 By *Manuel Ortiz*  
 Miami, Florida Product Control  
 Division

Engr: DR. HUMAYOON FAROOQ  
 STRUCTURES  
 FLA. PE # 16557  
 C.A.N. 3538  
 MAY 21 2008

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 08-08529.0  
 Expiration Date 01/20/2009  
 By *Manuel Ortiz*  
 Miami, Florida Product Control  
 Division

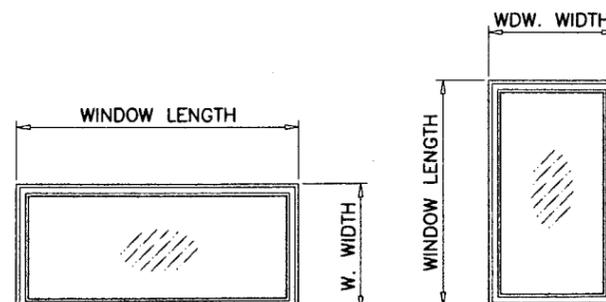
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS  
NO SHUTTERS REQUIRED  
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS

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
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

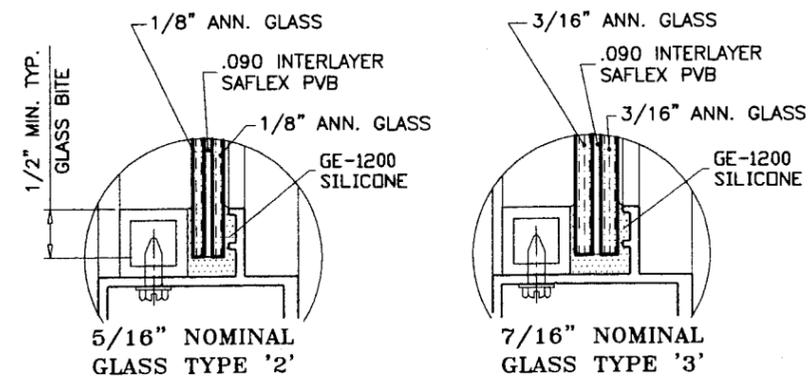
22.75  
24  
22.5  
20 FT



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

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



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 08-08529-01  
Expiration Date 10/20/2009  
09-0303.01  
OCT. 20, 2013  
Manuel Perez

Engr. DP. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 16557  
C.A.N. 3538  
MAY 21 2008

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 08-08529-01  
Expiration Date 10/20/2009  
By Manuel Perez  
Miami Dade Product Control  
Division

NOTE:  
GLASS CAPACITIES ON THIS SHEET ARE  
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS)

**afC**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 262-6978  
FAX. (305) 264-8100  
COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW  
**CGI WINDOWS & DOORS**  
10100 N.W. 25TH STREET  
MIAMI, FL. 33172  
TEL. (305) 593-6590  
FAX. (305) 593-6592

no	date	description	NOTE REV.
B	05.16.08		

date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**W01-83**  
sheet 3 of 8

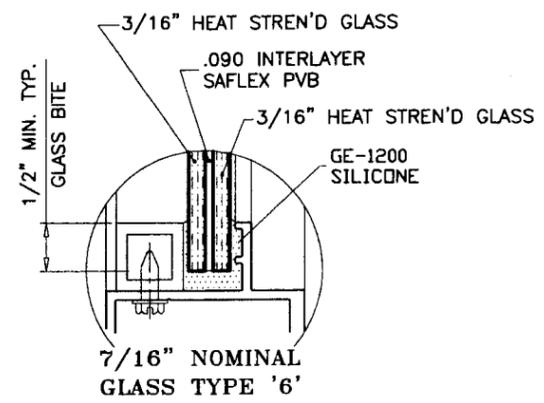
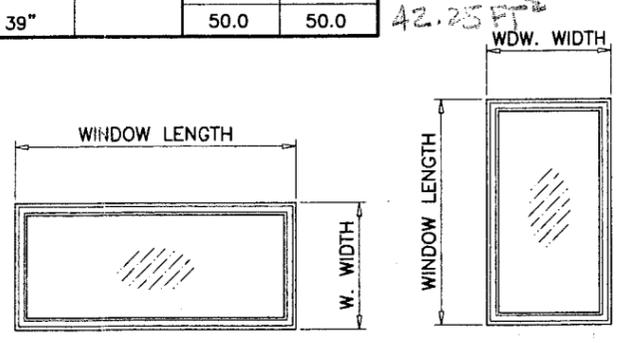
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS NO SHUTTERS REQUIRED REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS			
WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	36"	110.0	195.8
30"		110.0	156.6
36"		110.0	130.5
42"		110.0	120.0
48"		110.0	120.0
54"		110.0	120.0
60"	110.0	120.0	
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"		70.0	70.0
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
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"	50.0	50.0		
24"	108"	90.0	90.0	
30"		90.0	90.0	
33"		70.0	70.0	
36"		70.0	70.0	
39"		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
33"	70.0		70.0	
36"	70.0		70.0	
39"	70.0		70.0	
42"	50.0		50.0	
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
48"		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
42"		50.0	50.0

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



Engr: DR. HUMAYOUNI FAROOQ  
STRUCTURES  
FLA. PE # 16557  
C.A.N. 3538

MAY 21 2008

PRODUCT REVISIED  
as complying with the Florida  
Building Code  
Approval No. 09-0303.01  
Expiration Date OCT. 20, 2013

By: *Manuel Perez*

PRODUCT REVISIED  
as complying with the Florida  
Building Code  
Approval No. 08-08529.01  
Expiration Date 10/20/2009

By: *Manuel Perez*

**afC**

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW

**CGI WINDOWS & DOORS**  
10100 N.W. 25TH STREET  
MIAMI, FL. 33172  
TEL. (305) 593-6590 FAX. (305) 593-6592

no	date	by	description	NOTE	REV.
B	05.16.08				

date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no. **W01-83**  
sheet 4 of 8

**PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS**

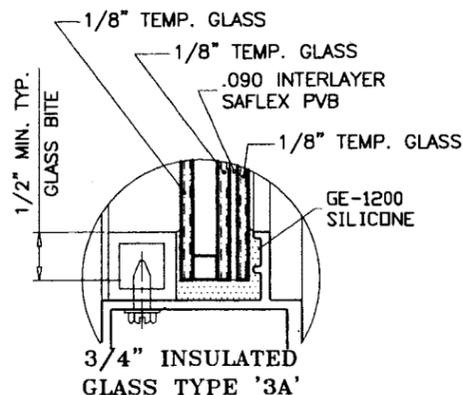
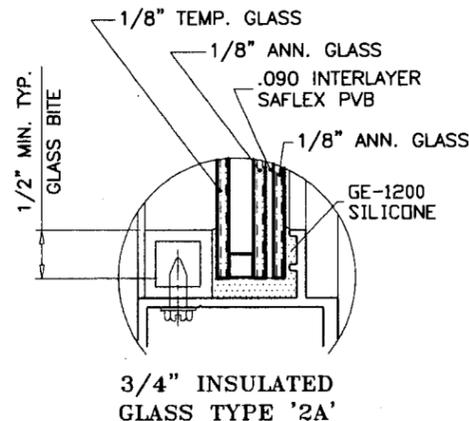
NO SHUTTERS REQUIRED  
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS

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	
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	

**PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS**

NO SHUTTERS REQUIRED  
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS

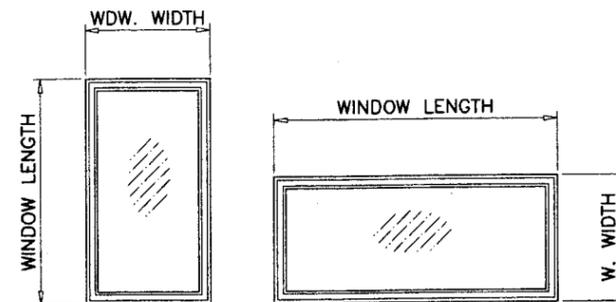
WINDOW DIMS.		GLASS TYPE '2A'		GLASS TYPE '3A'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	78"	103.6	103.6	110.0	120.0
30"		71.4	71.4	90.0	90.0
36"		54.0	54.0	90.0	90.0
42"		48.9	48.9	90.0	90.0
24"	84"	109.4	109.4	110.0	120.0
30"		67.0	67.0	90.0	90.0
36"		50.2	50.2	90.0	90.0
24"	96"	92.9	92.9	110.0	120.0
30"		59.8	59.8	90.0	90.0
36"		44.2	44.2	90.0	90.0
24"		108"	74.0	74.0	90.0
30"	56.8		56.8	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



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

PRODUCT REVISIONED  
as complying with the Florida  
Building Code  
09-0303.01  
OCT. 20, 2013  
Manuel Perez

Engr. DR. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 16557  
C.A.N. 3538

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 08-08529.01  
Expiration Date 10/20/2009  
By Manuel Perez  
Miami, Fla's Product Control  
Division

MAY 21 2008

NOTE:  
GLASS CAPACITIES ON THIS SHEET ARE  
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS)

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW  
**CGI WINDOWS & DOORS**  
10100 N.W. 25TH STREET  
MIAMI, FL. 33172  
TEL. (305) 593-6590 FAX. (305) 593-6592

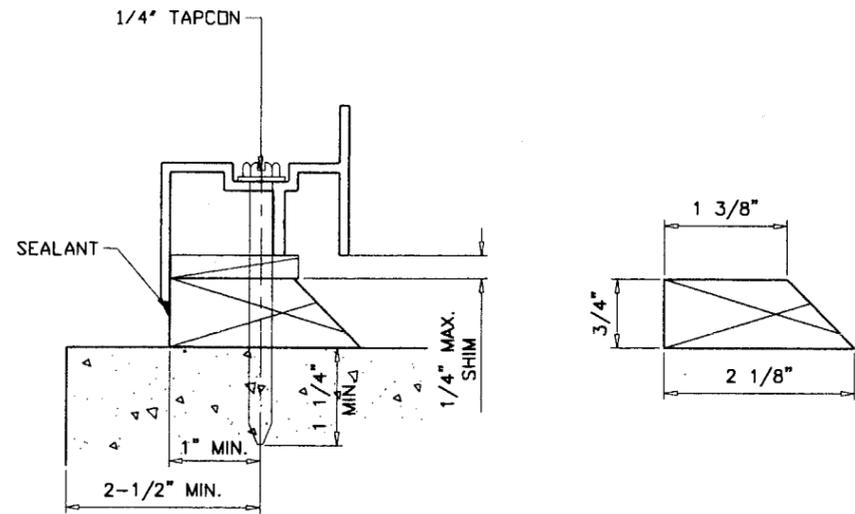
revisions:	no	date	by	description
	B	05.16.08		NOTE REV.

date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**W01-83**  
sheet 5 of 8

INSTALLATION CONDITIONS (APPLIES TO ALL FOUR SIDES)

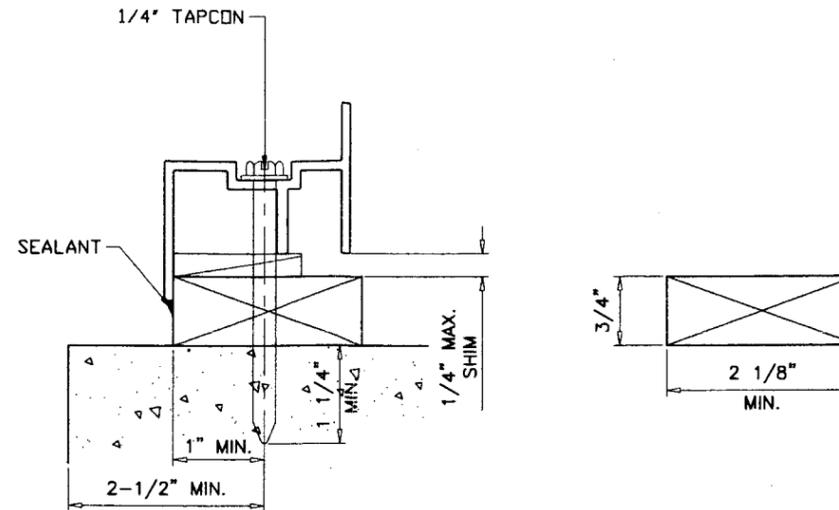
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 6



INSTALLATION TYPE '1'

WOOD BUCK TYPE '1'  
MATERIAL: PRESSURE TREATED

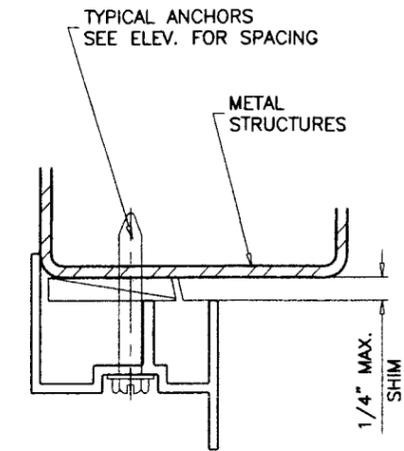
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



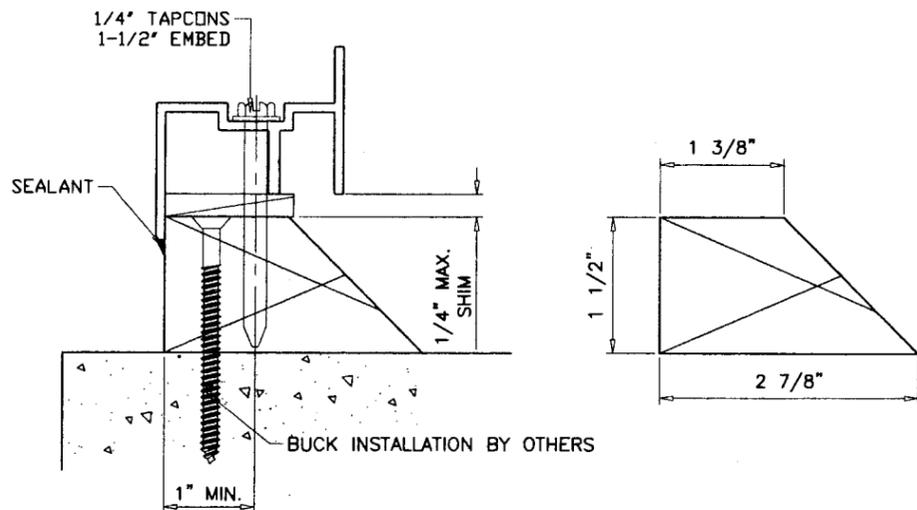
INSTALLATION TYPE '2'

WOOD BUCK TYPE '2'  
MATERIAL: PRESSURE TREATED

TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



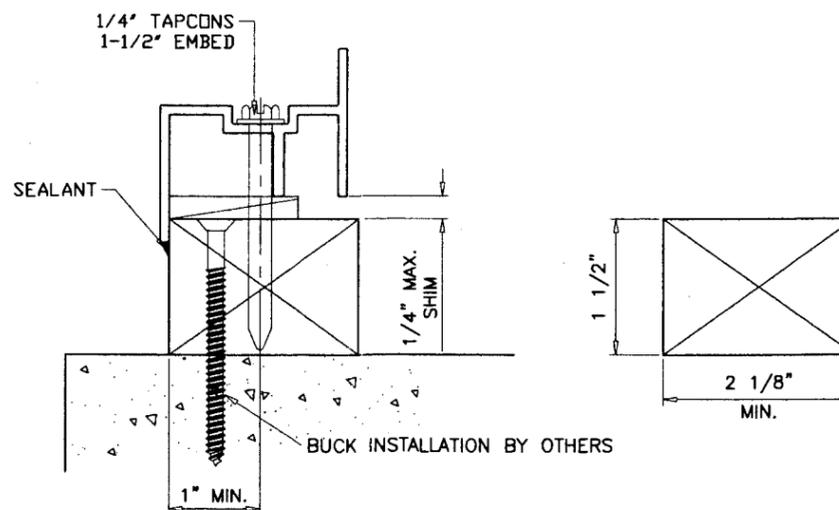
ATTACHMENT TO  
METAL STRUCTURES



INSTALLATION TYPE '3'

WOOD BUCK TYPE '3'  
MATERIAL: PRESSURE TREATED

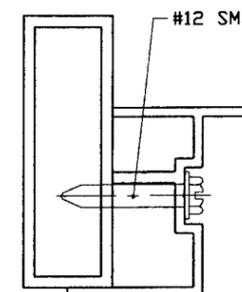
TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



INSTALLATION TYPE '4'

WOOD BUCK TYPE '4'  
MATERIAL: PRESSURE TREATED

TYPICAL INSTALLATION DETAIL  
ON ALL FOUR SIDES/USING WOOD



ATTACHMENT TO  
APPROVED MULLIONS

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 09-0303.01  
Expiration Date OCT. 20, 2013  
By *Manuel Perez*  
Miami Ledge Product Control  
Division

Engr. DR. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 18557  
C.A.N. 3538

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 08-08529.01  
Expiration Date 10/20/2009  
By *Manuel Perez*  
Miami Ledge Product Control  
Division

*Manuel Perez*  
MAY 21 2008

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

**afc**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW  
**CGI WINDOWS & DOORS**  
10100 N.W. 25TH STREET  
MIAMI, FL. 33172  
TEL. (305) 593-6590 FAX. (305) 593-6592

no	date	by	description
B	05.16.08		NO CHANGE THIS SHEET

revisions:  
date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

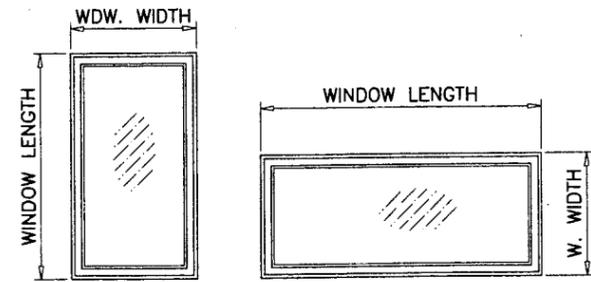
drawing no.  
**W01-83**  
sheet 6 of 8

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS		
WINDOW DIMS.		EXT. (+) INT. (-)
WIDTH	HEIGHT	
24"	36"	210.0
30"		210.0
36"		210.0
42"		210.0
48"		210.0
54"		210.0
60"		185.1
66"		202.5
72"		180.0
78"		162.0
84"	176.7	
90"	162.0	
24"	42"	210.0
30"		210.0
36"		210.0
42"		210.0
48"		210.0
54"		202.0
60"		170.9
66"		185.1
72"		163.4
78"		146.2
84"	158.7	
90"	144.9	
24"	48"	210.0
30"		210.0
36"		210.0
42"		210.0
48"		210.0
54"		194.4
60"		162.0
66"		173.6
72"		151.9
78"		135.0
84"	145.8	
90"	132.5	
24"	54"	210.0
30"		210.0
36"		210.0
42"		202.0
48"		194.4
54"		192.0
60"		157.1
66"		166.2
72"		144.0
78"		127.1
84"	136.4	
90"	123.4	

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS		
WINDOW DIMS.		EXT. (+) INT. (-)
WIDTH	HEIGHT	
24"	60"	210.0
30"		207.4
36"		185.1
42"		170.9
48"		162.0
54"		157.1
60"		155.5
66"		162.0
72"		138.9
78"		121.5
84"	129.6	
90"	116.6	
24"	66"	210.0
30"		210.0
36"		202.5
42"		185.1
48"		173.6
54"		166.2
60"		162.0
66"		160.7
72"		135.9
78"		117.8
84"	124.7	
90"	111.6	
24"	72"	210.0
30"		204.6
36"		180.0
42"		163.4
48"		151.9
54"		144.0
60"		138.9
66"		135.9
72"		135.0
78"		115.7
84"	121.5	
90"	108.0	
24"	78"	210.0
30"		185.1
36"		162.0
42"		146.2
48"		135.0
54"		127.1
60"		121.5
66"		117.8
72"		115.7
78"		115.0
84"	119.6	

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEET 6 FOR DETAILS			
WINDOW DIMS.		EXT. (+) INT. (-)	
WIDTH	HEIGHT		
24"	84"	210.0	
30"		202.9	
36"		176.7	
42"		158.7	
48"		145.8	
54"		136.4	
60"		129.6	
66"		124.7	
72"		121.5	
78"		119.6	
24"	96"	208.3	
30"		172.8	
36"		149.5	
42"		133.3	
48"		121.5	
54"		112.7	
60"		106.0	
66"		101.0	
72"		97.2	
24"		108"	210.0
30"	175.6		
36"	151.2		
42"	134.1		
48"	121.5		
54"	112.0		
60"	104.7		
24"	120"		210.0
30"			177.7
36"			152.5
42"		134.6	
48"		121.5	
54"		111.5	
24"		132"	210.0
30"			179.4
36"			153.5
42"			135.1
48"	121.5		
24"	144"		198.8
30"			162.8
36"			138.9
42"			121.9
48"			109.4
24"		156"	202.5
30"			165.4
36"			140.9
42"			123.4

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"		198.8
19-1/8"	63"	210.0
26-1/2"		210.0
37"		170.0
53-1/8"		144.6
19-1/8"	74-1/4"	210.0
26-1/2"		210.0
37"		169.6
53-1/8"		138.1



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

**TYPICAL ANCHORS:** SEE ELEV. FOR SPACING  
**1/4" TAPCONS**  
 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**  
 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**  
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = 1/8")  
 (NO SHIM SPACE)

Engr: DR. HUMAYOUN FAROOQ  
 STRUCTURES  
 FLA. PE # 16557  
 C.A.N. 3538  
 11 MAY 21 2008

PRODUCT RENEWED  
 as complying with the Florida Building Code  
 Acceptance No. 09-0303.01  
 Expiration Date OCT. 20, 2013  
 By: *Manuel Perez*  
 Miami Dade Product Control Division

**afC**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1235 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\W01-83CG

SERIES-238 DESIGNER FIXED WINDOW  
**CGI WINDOWS & DOORS**  
 10100 N.W. 25TH STREET  
 MIAMI, FL. 33172  
 TEL. (305) 593-6590 FAX. (305) 593-6592

no.	date	description
B	05.16.08	NO CHANGE THIS SHEET

date: 12-27-01  
 scale: 1/2" = 1"  
 dr. by: HAMID  
 chk. by:  
 drawing no.  
**W01-83**  
 sheet 7 of 8

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS		
WINDOW DIMS.		EXT. (+)
WIDTH	HEIGHT	INT. (-)
24"	36"	210.0
30"		210.0
36"		210.0
42"		169.0
48"		180.3
54"		150.2
60"		128.8
66"		140.8
72"		125.2
78"		112.7
84"	122.9	
90"	112.7	
24"	42"	202.8
30"		180.3
36"		169.0
42"		165.6
48"		171.7
54"		140.5
60"		118.9
66"		128.8
72"		113.6
78"		101.7
84"	110.4	
90"	100.8	
24"	48"	210.0
30"		196.7
36"		180.3
42"		171.7
48"		169.0
54"		135.2
60"		112.7
66"		120.7
72"		105.6
78"		93.9
84"	101.4	
90"	92.2	
24"	54"	193.1
30"		166.4
36"		150.2
42"		140.5
48"		135.2
54"		133.5
60"		109.3
66"		115.6
72"		100.1
78"		88.4
84"	94.9	
90"	85.8	

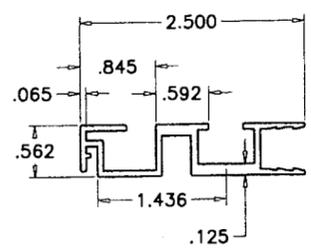
PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS		
WINDOW DIMS.		EXT. (+)
WIDTH	HEIGHT	INT. (-)
24"	60"	169.0
30"		144.2
36"		128.8
42"		118.9
48"		112.7
54"		109.3
60"		108.2
66"		112.7
72"		96.6
78"		84.5
84"	90.1	
90"	81.1	
24"	66"	187.8
30"		159.1
36"		140.8
42"		128.8
48"		120.7
54"		115.6
60"		112.7
66"		111.7
72"		94.5
78"		81.9
84"	86.8	
90"	77.6	
24"	72"	169.0
30"		142.3
36"		125.2
42"		113.6
48"		105.6
54"		100.1
60"		96.6
66"		94.5
72"		93.9
78"		80.5
84"	84.5	
90"	75.1	
24"	78"	153.6
30"		128.8
36"		112.7
42"		101.7
48"		93.9
54"		88.4
60"		84.5
66"		81.9
72"		80.5
78"		80.0
84"	83.2	

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS			
WINDOW DIMS.		EXT. (+)	
WIDTH	HEIGHT	INT. (-)	
24"	84"	169.0	
30"		141.1	
36"		122.9	
42"		110.4	
48"		101.4	
54"		94.9	
60"		90.1	
66"		86.8	
72"		84.5	
78"		83.2	
24"	96"	144.9	
30"		120.2	
36"		104.0	
42"		92.7	
48"		84.5	
54"		78.4	
60"		73.7	
66"		70.2	
72"		67.6	
24"		108"	147.9
30"	122.1		
36"	105.2		
42"	93.2		
48"	84.5		
54"	77.9		
24"	120"		150.2
30"			123.6
36"			106.0
42"			93.6
48"		84.5	
54"		77.5	
24"		132"	152.1
30"			124.8
36"			106.7
42"			94.0
48"	84.5		
24"	144"		138.3
30"			113.2
36"			96.6
42"			84.8
48"			76.1
24"		156"	140.8
30"			115.1
36"			98.0
42"			85.8

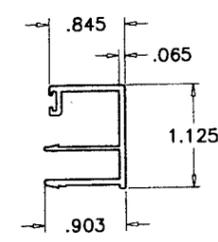
PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS		
WINDOW DIMS.		EXT. (+)
WIDTH	HEIGHT	INT. (-)
19-1/8"	26"	210.0
26-1/2"		210.0
37"		210.0
53-1/8"		186.6
19-1/8"	38-3/8"	210.0
26-1/2"		210.0
37"		198.6
53-1/8"		149.5
19-1/8"	50-5/8"	210.0
26-1/2"		196.6
37"		163.8
53-1/8"		138.3
19-1/8"	63"	210.0
26-1/2"		177.5
37"		141.4
53-1/8"		119.2
19-1/8"	74-1/4"	196.7
26-1/2"		150.5
37"		118.0
53-1/8"		96.1

**ALUMINUM BUCK FRAMING DETAILS**

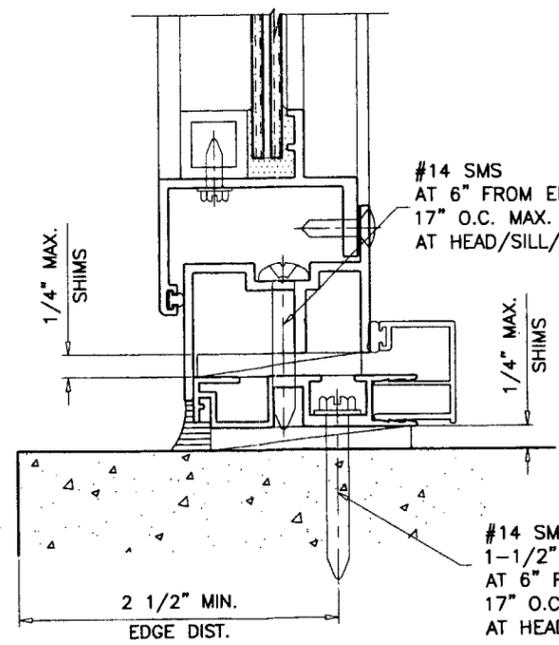
REFER TO SHEETS 3 THRU 6 FOR WINDOW CAPACITIES  
USE LOWER APPLICABLE VALUES.



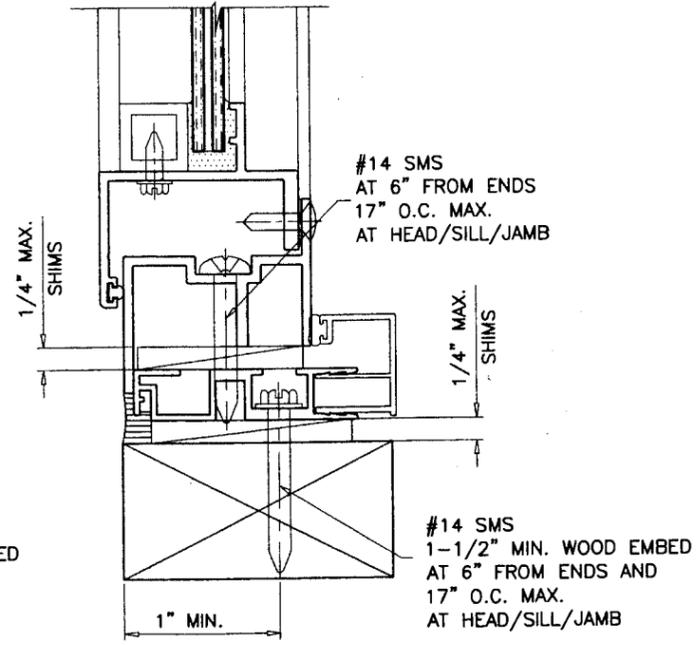
**ALUMINUM BUCK**  
6063-T6



**OPTIONAL COVER**  
6063-T6



**INSTALLATION TYPE '5'**  
**TYPICAL INSTALLATION DETAIL**  
**ON ALL FOUR SIDES/USING ALUMINUM BUCK SYSTEM**



**INSTALLATION TYPE '6'**  
2BY WOOD BUCK OR WOOD STRUCTURES

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
09-0303.01  
OCT. 20, 2013  
Manuel Perez

Engr: DR. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. P.E. # 16557  
C.A.N. 3538

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 08-0529.01  
Expiration Date 10/20/2009  
By: Manuel Perez  
Miami Dade Product Control  
Division

MAY 21 2008

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP - ANL \ W01 - 83CG

SERIES-238 DESIGNER FIXED WINDOW  
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MIAMI, FL. 33172  
TEL. (305) 583-6590 FAX. (305) 593-6592

no	date	by	description
B	05.16.08		ALUM BUCK ADDED

date: 12-27-01  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**W01-83**  
sheet 8 of 8