



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) 375-2908

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode.com

Construction Glass Industries Corporation
10100 N.W. 25th Street
Miami, FL 33172

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed 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 7 of 7, dated 12/27/2001, revision A, dated 04/30/2007, prepared by Al-Farooq Corporation, signed, sealed and dated 05/08/2007, by Humayoun Farooq, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control 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 **revises and renews** NOA # **02-0122.05** 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 **Jaime D. Gascon, P.E.**



J. Gascon
5/22/07

NOA No. 07-0312.01
Expiration Date: October 20, 2008
Approval Date: June 14, 2007
Page 1

Construction Glass Industries Corporation

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 7 of 7, dated 12/27/2001, revision A, dated 04/30/2007, prepared by Al-Farooq Corporation, signed, sealed and dated 05/08/2007, by Humayoun Farooq, P.E.

B. TESTS

1. 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
along 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 NOA#02-0122.05)
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-202-94
along 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 NOA#02-0122.05)
3. 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 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 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-203-94
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)



Jaime D. Gascon, P.E.
Chief, Product Control Division
NOA No. 07-0312.01
Expiration Date: October 20, 2008
Approval Date: June 14, 2007

Construction Glass Industries Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

5. 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 NOA#02-0122.05)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, prepared by Al-Farooq Corporation, dated 1/15/01, 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

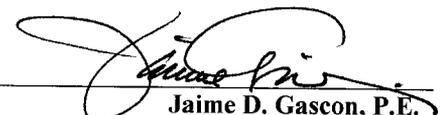
1. Notice of Acceptance No. **06-1205.10** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass ® Plus**" dated 02/15/07, expiring on 01/14/08.
2. Notice of Acceptance No. **06-0216.08** issued to Solutia Inc. for their "**Saflex III G Clear or Colored interlayer**" dated 05/04/2006, expiring on 05/21/2011.
04/14/08.

F. STATEMENTS

1. Statement letter of conformance, dated May 02, 2007, signed and sealed by Humayoun Farooq, P.E.
2. Statement letter from manufacturer stating that the product has not changed and requesting a One-Year Renewal to allow the time to perform a verification test, dated March 6, 2007, signed by Jorge Santaella.
3. Letter from laboratory confirming manufacturer has contracted and scheduled verification tests, issued by Hurricane Test Laboratory, LLC, dated March 06, 2007, signed by Monica Reum.

G. OTHER

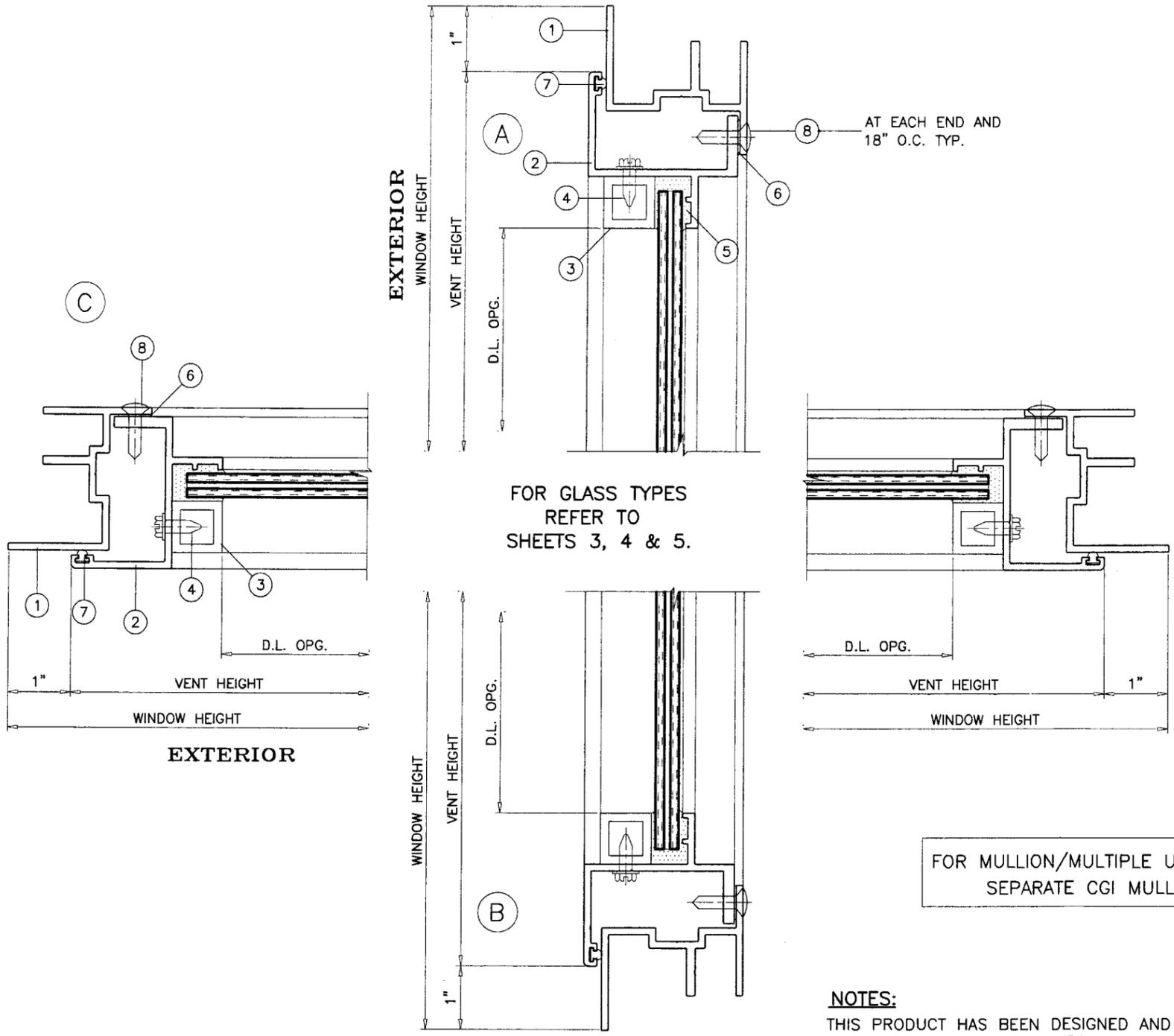
1. None.



Jaime D. Gascon, P.E.
Chief, Product Control Division
NOA No. 07-0312.01

Expiration Date: October 20, 2008
Approval Date: June 14, 2007

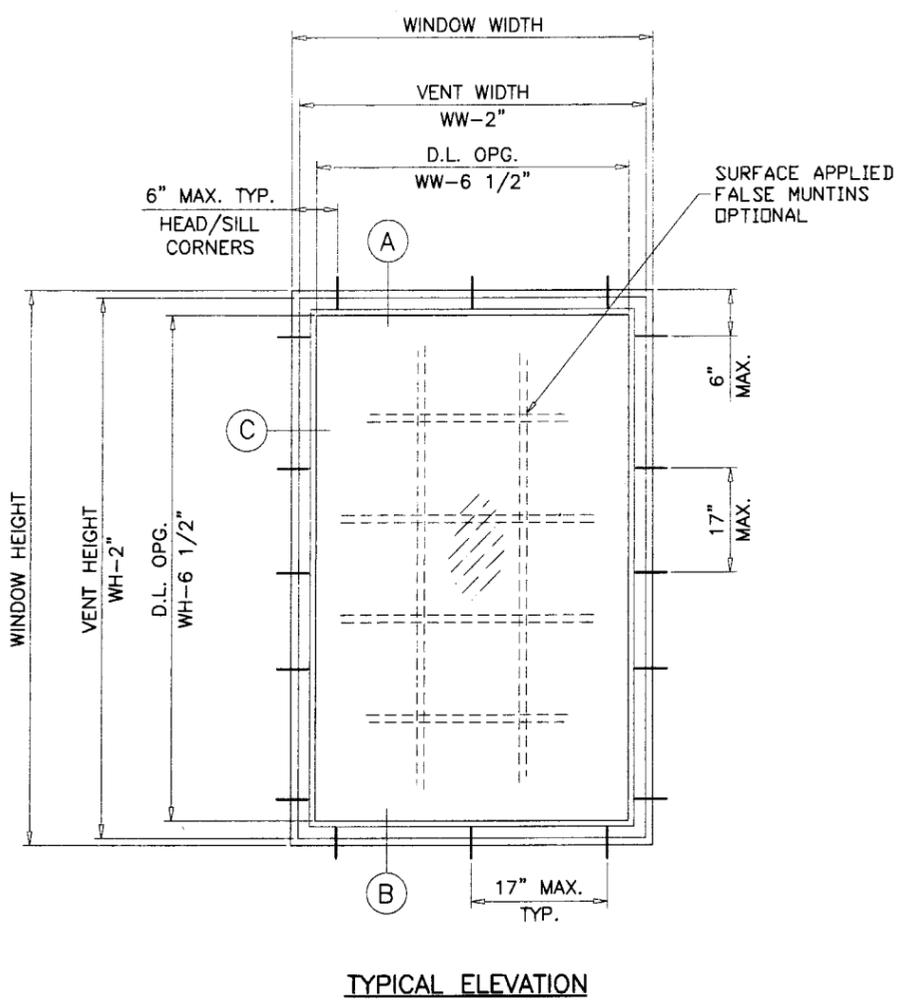
GENERAL WINDOW SECTIONS



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

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

NOTES:
 THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004 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.



TYPICAL ELEVATION

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.

Engr. DR. HUMAYOON FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538
 MAY 08 2007

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 07-0312.01
 Expiration Date 10/20/2008
 By: *[Signature]*
 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

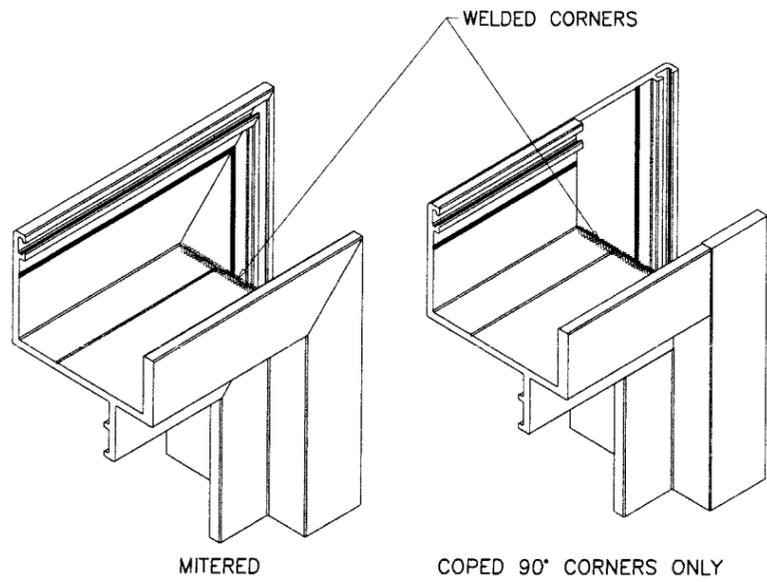
SERIES-238 DESIGNER FIXED WINDOW

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

no	date	by	description
A	04.30.07	REV. PER BCCO COMMENTS	

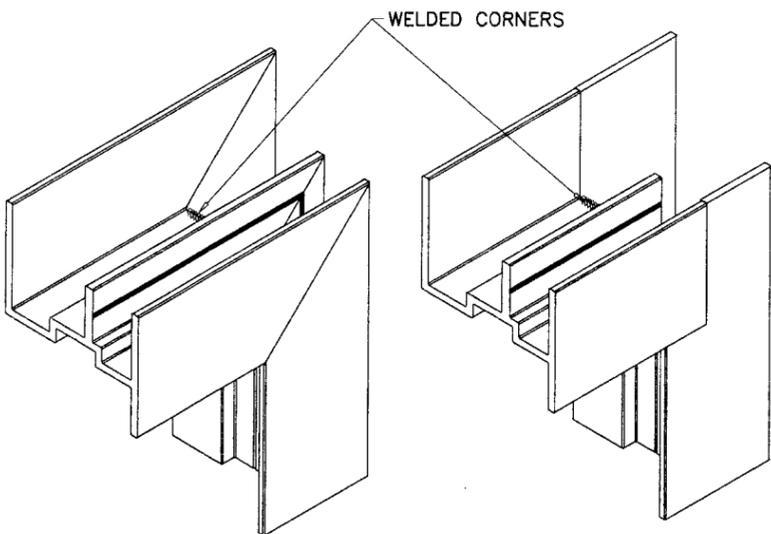
date: 12-27-01
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no. **W01-83**
 sheet 1 of 7

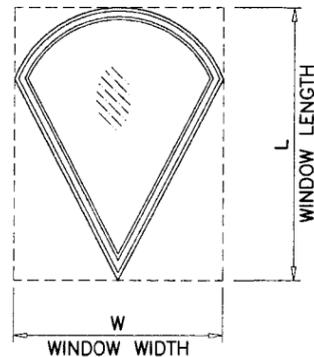


VENT CORNER

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

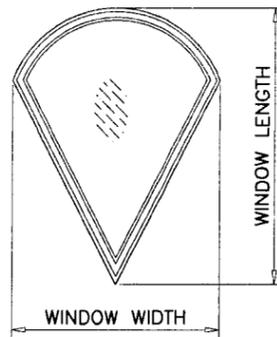


FRAME CORNER

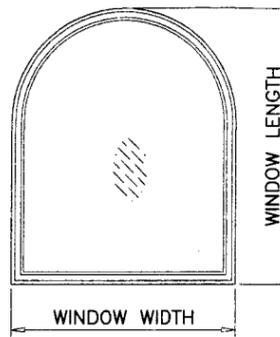


VERIFY LOAD CAPACITY OF WINDOW BY INSCRIBING SHAPE OF WINDOW WITHIN A RECTANGULAR OR SQUARE SHAPE AND USING THOSE DIMENSIONS TO CONSULT CHARTS ON SHEETS 3, 4 & 5 FOR GLASS AND SHEET 7 FOR ANCHORS AS ON SAMPLE ABOVE.

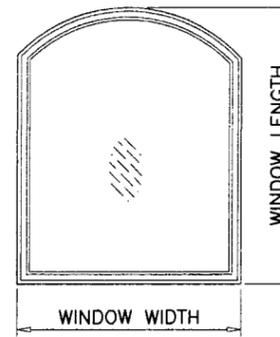
ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	CGI-386	4	FRAME	6063-T6	INDALEX OR EQUIV.
2	CGI-387	4	VENT	6063-T6	INDALEX OR EQUIV.
2A	CGI-387IG	4	VENT (INSUL GLASS)	6063-T6	INDALEX OR EQUIV.
3	CGI-	4	GLAZING BEAD	6063-T5	INDALEX OR EQUIV.
4	-	AS REQD.	GLAZING BEAD SCREWS @ 6" FROM 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



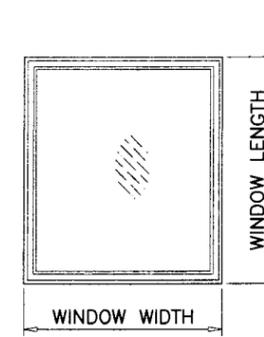
PARTIAL CIRCLE



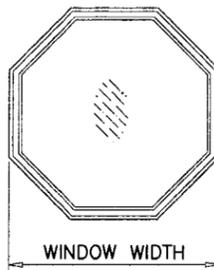
TUMBSTONE



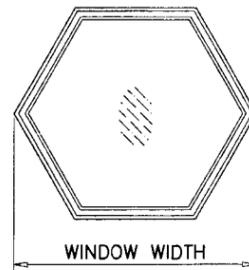
ARCH TOP



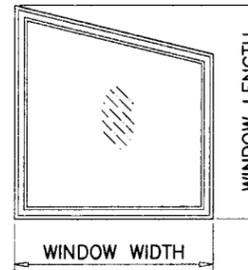
SQUARE OR RECTANGLE



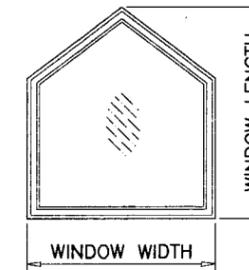
OCTAGON



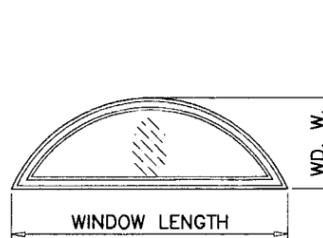
HEXAGON



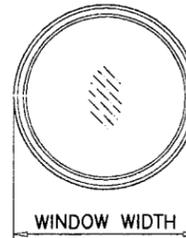
TRAPEZOID



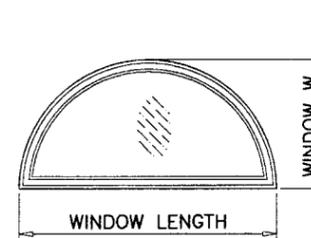
PENTAGON



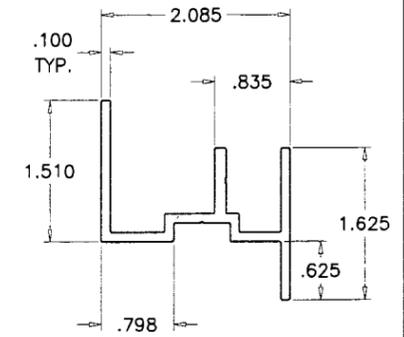
ELLIPSE



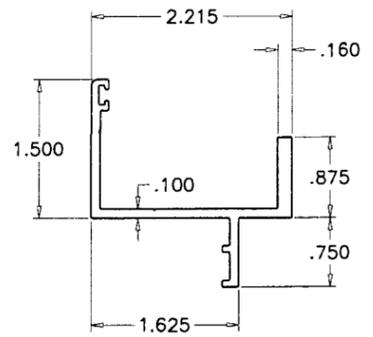
FULL CIRCLE



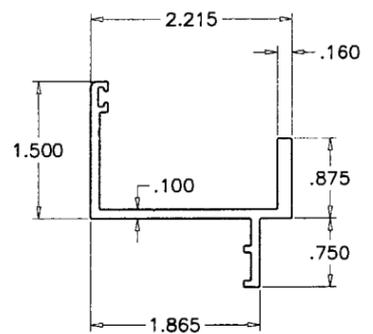
HALF CIRCLE



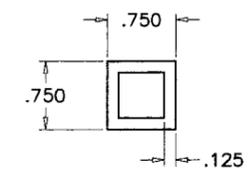
FRAME



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\W01-83CC

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

revisions:	no	date	by	description

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

[Signature]
 MAY 08 2007

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 07-0312.01
 Expiration Date 10/20/2008
 By *[Signature]*
 Miami Dade Product Control
 Division

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

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

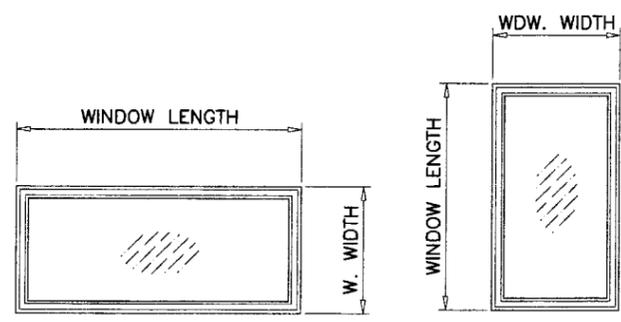
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	36"	110.0	180.0	110.0	180.0
30"		110.0	144.0	110.0	144.0
36"		110.0	120.0	110.0	120.0
42"		110.0	120.0	110.0	120.0
48"		101.4	101.4	110.0	120.0
54"		84.8	84.8	110.0	120.0
60"	74.7	74.7	110.0	114.3	
24"	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

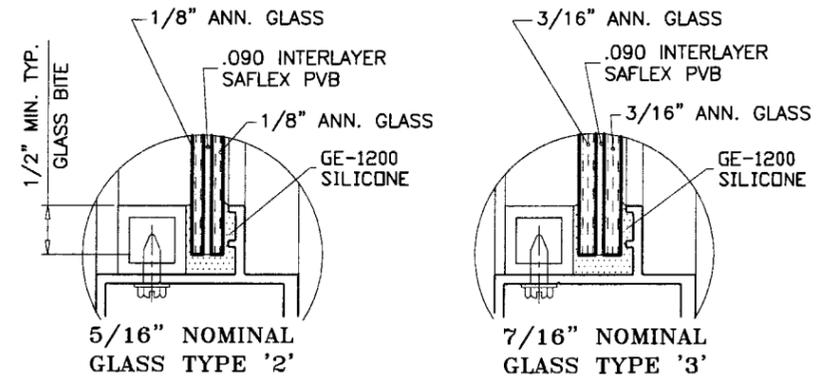
WINDOW DIMS.		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
24"	78"	97.5	97.5	110.0	120.0
30"		67.2	67.2	90.0	90.0
36"		50.8	50.8	90.0	90.0
42"		46.1	46.1	86.1	86.1
24"	84"	103.0	103.0	110.0	120.0
30"		63.0	63.0	90.0	90.0
36"		47.3	47.3	90.0	90.0
24"		96"	87.5	87.5	110.0
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
30"		53.5	53.5	90.0	90.0
24"		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



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



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

Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538
MAY 08 2007

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-0312.01
Expiration Date 10/20/2008
By: *[Signature]*
Miami Code Product Control
Division

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 NW 25 STREET
MIAMI, FL. 33172
TEL. (305) 593-6590 FAX. (305) 593-6592

revisions:	no	date	by	description

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

drawing no.
W01-83
sheet 3 of 7

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
57"		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

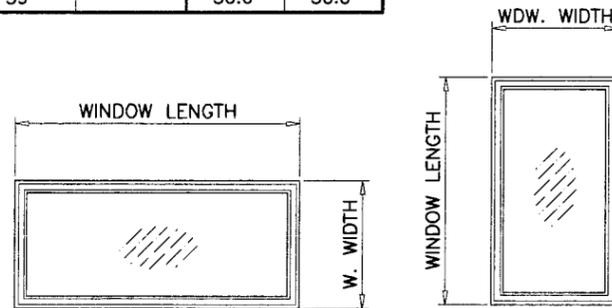
WINDOW DIMS.		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
24"	84"	110.0	120.0
30"		90.0	90.0
36"		90.0	90.0
42"		70.0	70.0
45"		70.0	70.0
48"		70.0	70.0
51"		70.0	70.0
54"		70.0	70.0
57"		70.0	70.0
60"		50.0	50.0
63"		50.0	50.0
66"		50.0	50.0
69"		50.0	50.0
72"		50.0	50.0
75"		50.0	50.0
24"	96"	110.0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

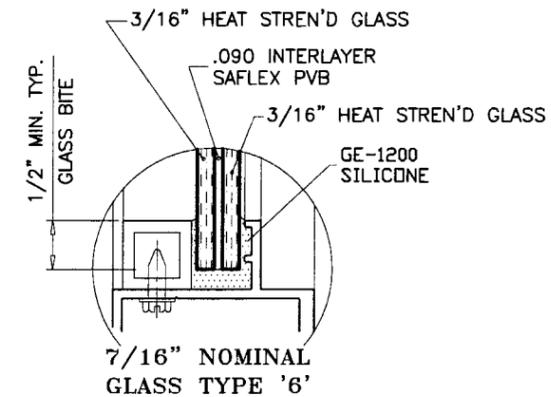
WINDOW DIMS.		GLASS TYPE '6'		
WIDTH	HEIGHT	EXT. (+)	INT. (-)	
24"	132"	70.0	70.0	
30"		70.0	70.0	
33"		70.0	70.0	
36"		70.0	70.0	
39"		50.0	50.0	
42"		50.0	50.0	
45"		50.0	50.0	
48"		50.0	50.0	
24"		144"	70.0	70.0
30"			70.0	70.0
33"	70.0		70.0	
36"	50.0		50.0	
39"	50.0		50.0	
42"	50.0		50.0	
45"	50.0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

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



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



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

MAY 08 2007

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 07-0312.01
Expiration Date 10/20/2008
By: *[Signature]*
Miami Dade Product Control Division

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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COMP - ANI \ W01 - 83CG

SERIES-238 DESIGNER FIXED WINDOW
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revisions:	no	date	description

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

drawing no. **W01-83**
sheet 4 of 7

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS

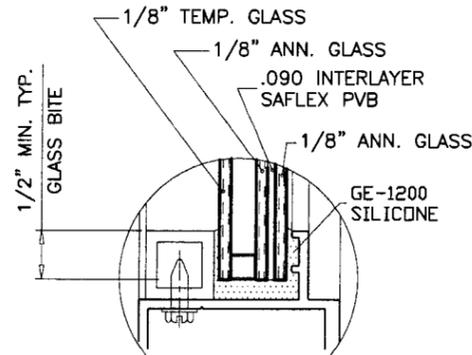
NO SHUTTERS REQUIRED
REFER TO SHEETS 6 AND 7 FOR INSTALLATION DETAILS

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
60"		52.9	52.9	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

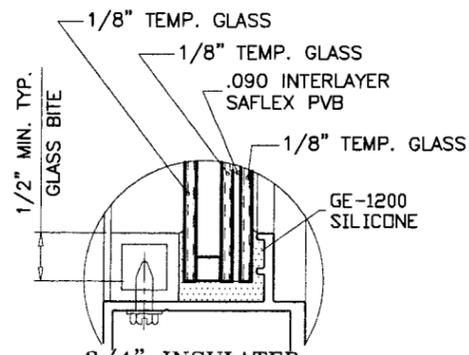
PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS

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
42"		74.0	74.0	90.0	90.0
30"	108"	56.8	56.8	90.0	90.0
24"		62.5	62.5	90.0	90.0



3/4" INSULATED GLASS TYPE '2A'



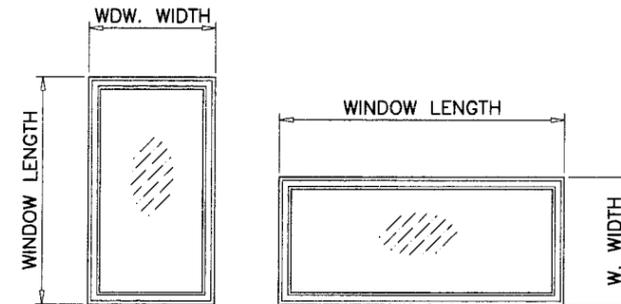
3/4" INSULATED GLASS TYPE '3A'

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

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.

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

MAY 08 2007

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 07-0312.01
Expiration Date 10/20/2008
By *[Signature]*
Miami Dade Product Control
Division

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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COMP-ANI\W01-83CG

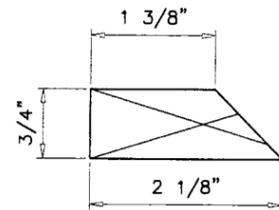
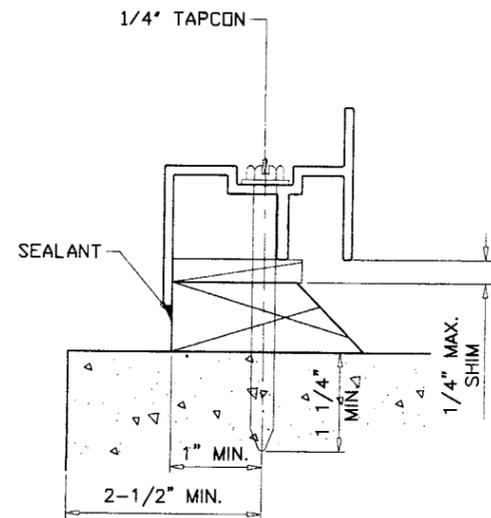
SERIES-238 DESIGNER FIXED WINDOW
CGI WINDOWS & DOORS.
10100 NW 25 STREET
MIAMI, FL. 33172
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revisions:	no	date	description

date: 12-27-01
scale: 1/2" = 1"
dr. by: HAMID
chk. by:
drawing no.
W01-83
sheet 5 of 7

INSTALLATION CONDITIONS (APPLIES TO ALL FOUR SIDES)

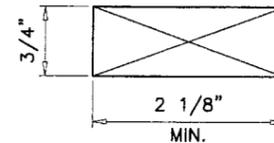
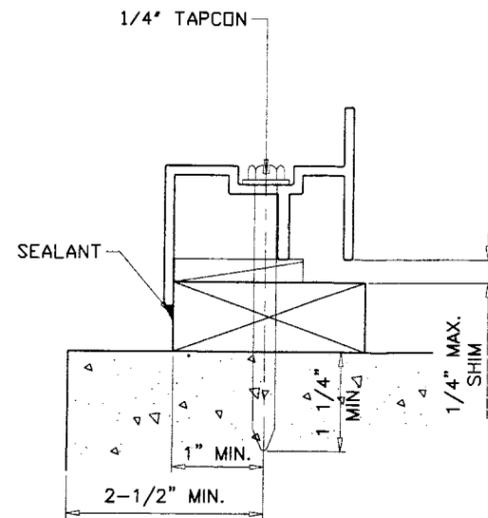
FOR ANCHOR PERFORMANCE VALUES SEE SHEET 6



INSTALLATION TYPE '1'

WOOD BUCK TYPE '1'
MATERIAL: PRESSURE TREATED

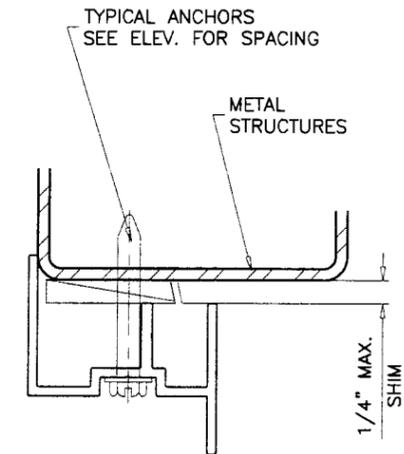
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



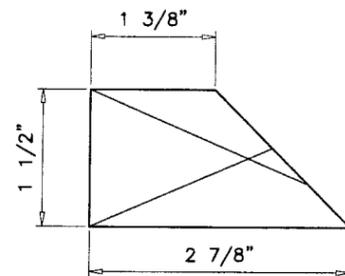
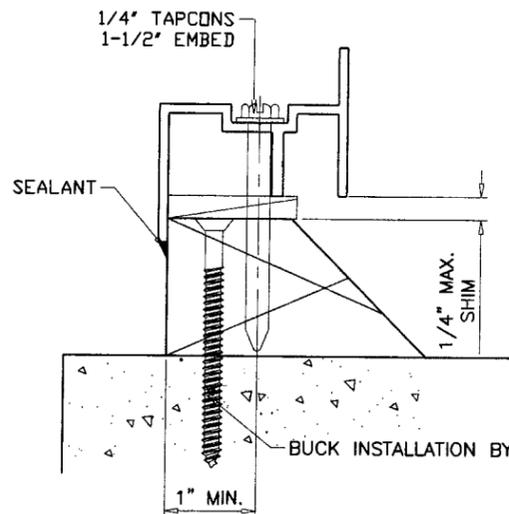
INSTALLATION TYPE '2'

WOOD BUCK TYPE '2'
MATERIAL: PRESSURE TREATED

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



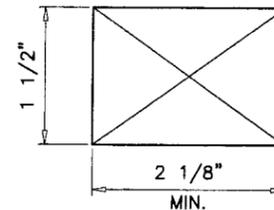
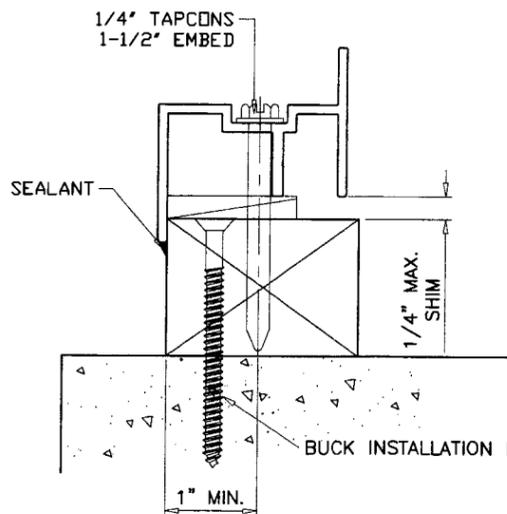
ATTACHMENT TO
METAL STRUCTURES



INSTALLATION TYPE '3'

WOOD BUCK TYPE '3'
MATERIAL: PRESSURE TREATED

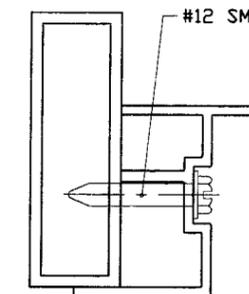
TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



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.

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

MAY 08 2007

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 07-031201
Expiration Date 10/20/2008

By *[Signature]*
Miami Code Product Control
Division

revisions:	no	date	description

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

drawing no.
W01-83

sheet 6 of 7

SERIES-238 DESIGNER FIXED WINDOW

CGI WINDOWS & DOORS.

10100 NW 25 STREET
MIAMI, FL. 33172

TEL. (305) 593-6590 FAX. (305) 593-6592

AL-FAROOQ CORPORATION

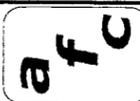
ENGINEERS & PRODUCT DEVELOPMENT

1235 S.W. 87 AVE
MIAMI, FLORIDA 33174

TEL. (305) 264-8100

FAX. (305) 262-6978

COMP-ANL\W01-83CG



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

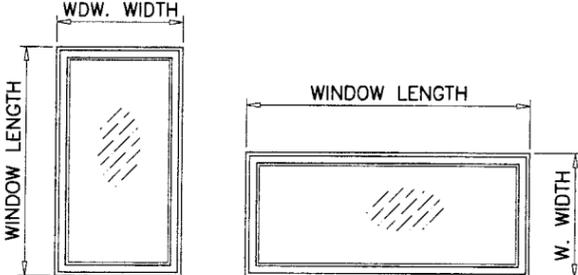
WINDOW DIMS.		EXT. (+) INT. (-)
WIDTH	HEIGHT	
24"	60"	210.0
30"		207.4
36"		185.1
42"		170.9
48"		162.0
54"		157.1
60"		155.5
66"		162.0
72"		138.9
78"		121.5
84"	129.6	
90"	116.6	
24"	66"	210.0
30"		210.0
36"		202.5
42"		185.1
48"		173.6
54"		166.2
60"		162.0
66"		160.7
72"		135.9
78"		117.8
84"	124.7	
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 APPROVED MULLIONS (MIN. THK. = 1/8")
(NO SHIM SPACE)

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

MAY 08 2007

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-0312-01
Expiration Date 10/20/2008

By: *[Signature]*
Miami-Dade Product Control
Division

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

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

revisions:	no	date	description

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

drawing no. **W01-83**
sheet 7 of 7