



**BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)
BOARD AND CODE ADMINISTRATION DIVISION**

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/building/

CGI Windows & Doors
10100 NW 25 Street
Miami, FL 33172

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Section 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 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. BORA 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 "Sentinel" Unclipped Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W10-01**, titled "Series Sentinel Unclipped Alum Mullions", sheets 1 through 7 of 7, dated 04/02/10, prepared by Al-Farooq Corporation, signed, and sealed by Javad Ahmad, 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 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 # **10-0510.14** 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. 11-0202.01
Expiration Date: September 22, 2015
Approval Date: March 10, 2011
Page 1

CGI Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **W10-01**, titled "Series Sentinel Unclipped Alum Mullions", sheets 1 through 7 of 7, dated 04/02/10, prepared by Al-Farooq Corporation, signed, sealed by Javad Ahmad, 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 203-94along with marked-up drawings and installation diagram of mullion, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0301-10**, dated March 30, 2010, signed and sealed by Vinu J. Abraham, P. E.
(Submitted under previous NOA #10-0510.14)

C. CALCULATIONS

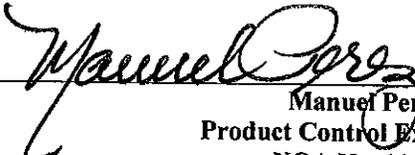
1. Anchor verification calculations and structural analysis, complying with FBC-2007, prepared by Al-Farooq Corporation, dated 05/06/10, signed and sealed by Javad Ahmad, P. E.
2. Glazing complies with ASTM EI300-04

D. QUALITY ASSURANCE

1. Miami-Dade Building and Neighborhood Compliance Department (BNC).

E. MATERIAL CERTIFICATIONS

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 11-0202.01
Expiration Date: September 22, 2015
Approval Date: March 10, 2011

CGI Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, no financial interest and compliance with the FBC-2007, dated April 30, 2010, signed and sealed by Javad Ahmad, P. E.
2. Laboratory compliance letter for Test Report No. **HTL-0080-0301-10**, issued by Hurricane Test Laboratory, LLC, dated March 30, 2010, signed and sealed by Vinu J. Abraham, P. E.
3. Proposal No. **09-1492** issued by BCCO, dated November 05, 2009, signed by Manuel Perez, P. E.
4. Testing agreement letter, dated 01/31/2011 between Hurricane Test Laboratory LLC (HTL) and CGI Windows & Doors, issued by HTL and signed by Robert Baird, Sr. Product Engineer, CGI Windows & Doors.

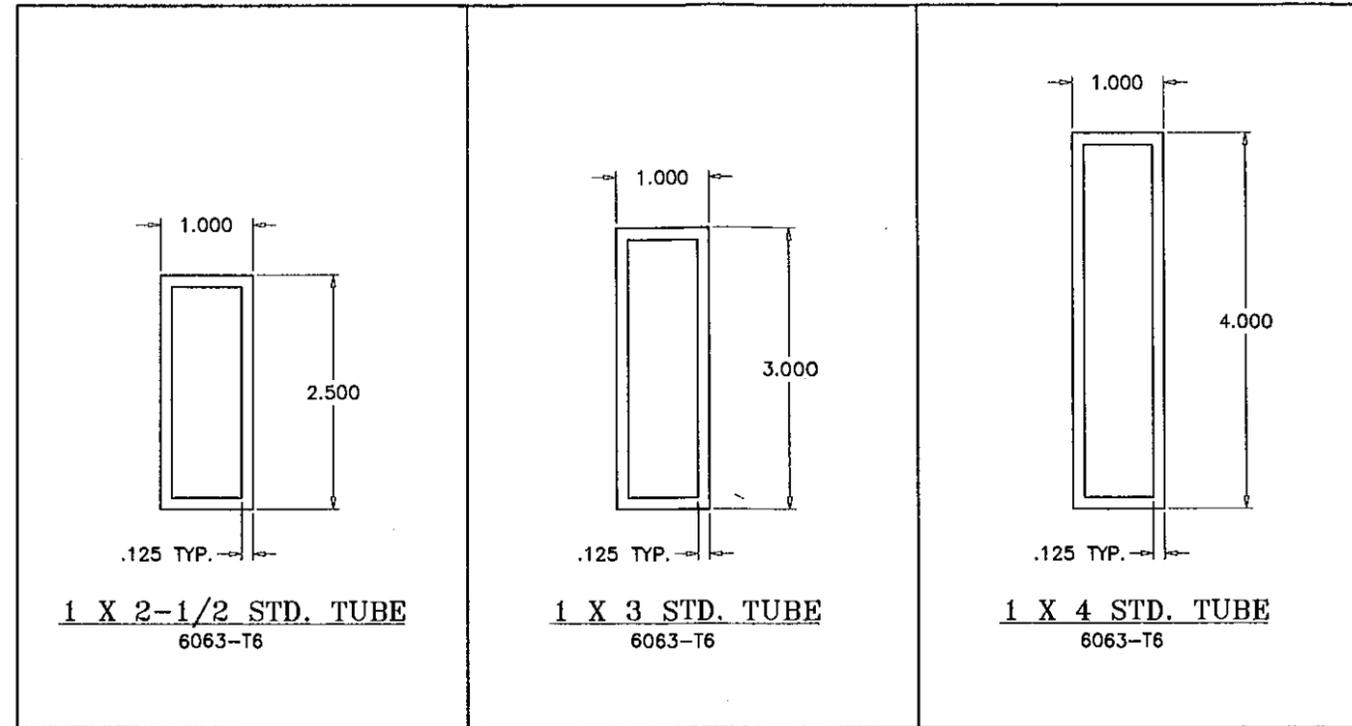
G. OTHERS

1. Notice of Acceptance No. **10-0510.14**, issued to CGI Windows & Doors for their Series "Sentinel" Aluminum Unclipped Mullion - L.M.I., approved on 09/22/10 and expiring on 09/22/15.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 11-0202.01

Expiration Date: September 22, 2015

Approval Date: March 10, 2011



**SERIES SENTINEL UNCLIPPED ALUMINUM MULLIONS
WINDOW FRAME MEMBER INCLUDED IN PROPERTIES**

THESE MULLIONS TO BE USED WITH
 SERIES 130 SENTINEL FIXED WINDOW
 SERIES 110 SENTINEL SINGLE HUNG WINDOW
 SERIES 120 SENTINEL HORIZ. SLIDING WINDOW
 FOR WINDOWS IMPACT AND LOAD RATINGS SEE
 CORRESPONDING NOA'S.
 LOWER DESIGN PRESSURE FROM WINDOW APPROVALS
 OR MULLION CHARTS WILL APPLY TO ENTIRE SYSTEM.

NOTES:

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2007 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE APPLICABLE BUILDING CODE REQUIREMENTS I.E: WIND LOAD, WATER INFILTRATION, FORCED ENTRY RESISTANCE, SAFEGUARDS ETC.

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL COVERING (STUCCO, TILE ETC.).

ANCHORING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHDRS 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 2007 FLORIDA BLDG. CODE SECTION 2003.8.4.

THESE MULLIONS ARE RATED FOR LARGE & SMALL MISSILE IMPACT

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN LOAD REQUIRED PER ASCE 7 FOR PARTICULAR OPENING.
- STEP 2** USE CONNECTION OF WINDOWS TO MULLION AS PER PRODUCT APPROVAL.
- STEP 3** USING CHARTS ON SHEETS 3 THRU 5 SELECT MULLION TYPE AND ANCHOR QUANTITIES WITH DESIGN RATING MORE THAN THE DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** CAPACITY OF SELECTED CGI'S WINDOWS AND MULLION MUST EQUAL OR EXCEED REQUIRED LOADS.

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538

[Signature]
 FEB 01 2011

PRODUCT REVISED
 Complying with the Florida
 Building Code
 Acceptance No. 11-0202.01
 Expiration Date SEPT. 22, 2015

By *[Signature]*
 Miami/Dade Product Control

afc

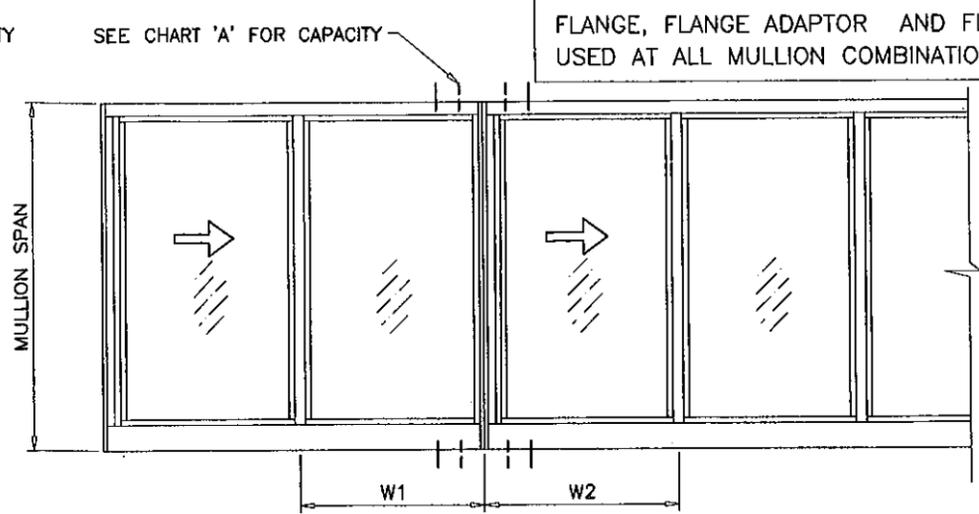
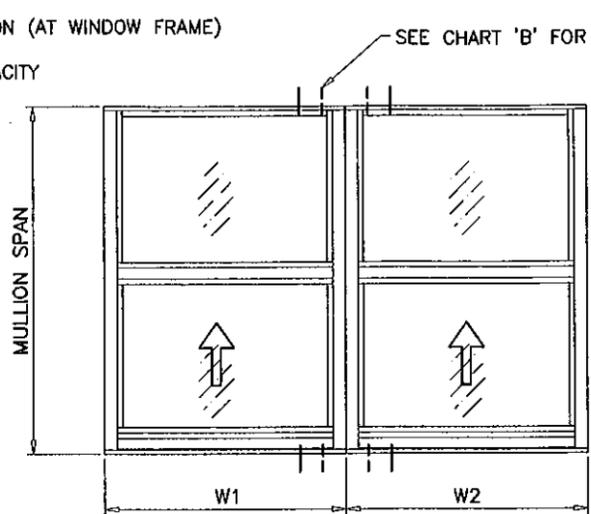
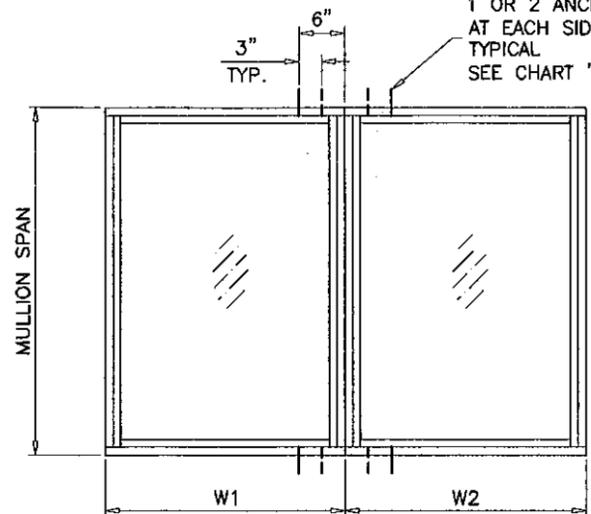
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 MULLION M10-01CGI

SERIES SENTINEL UNCLIPPED ALUM MULLIONS

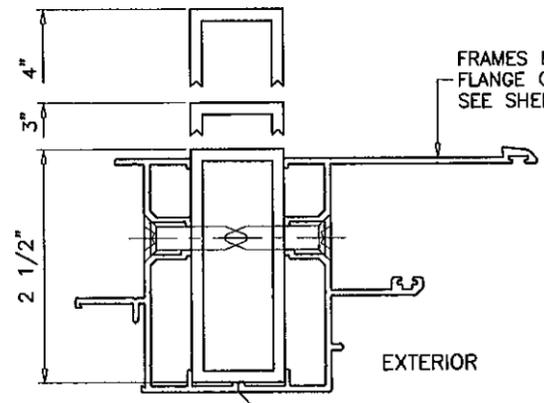
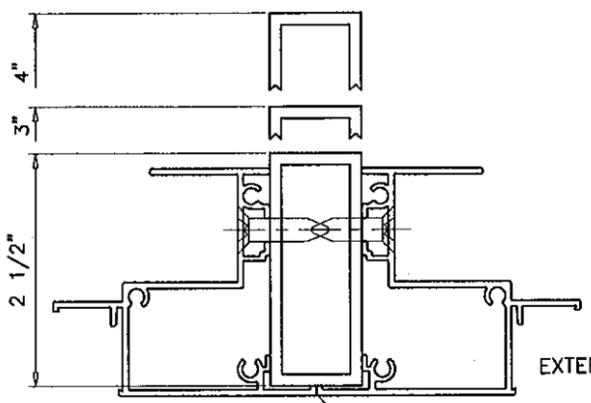
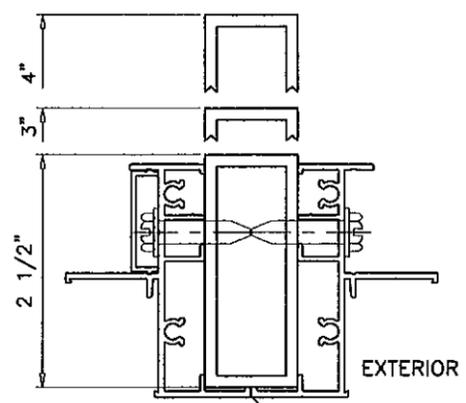
CGI WINDOWS & DOORS
 10100 N.W. 25TH STREET
 MIAMI, FL. 33172
 TEL. (305) 593-6590 FAX. (305) 593-6592

no.	date	description

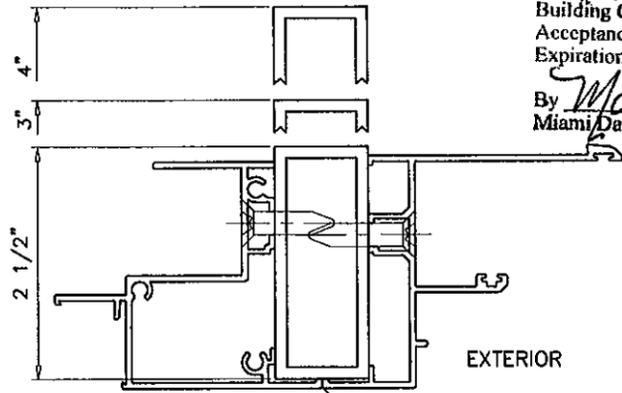
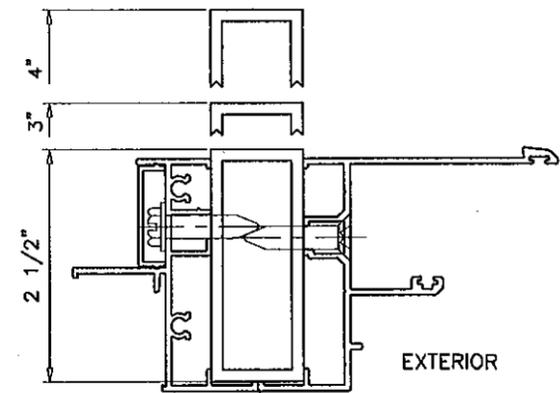
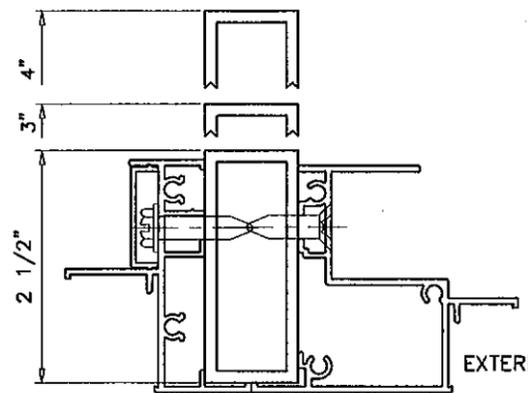
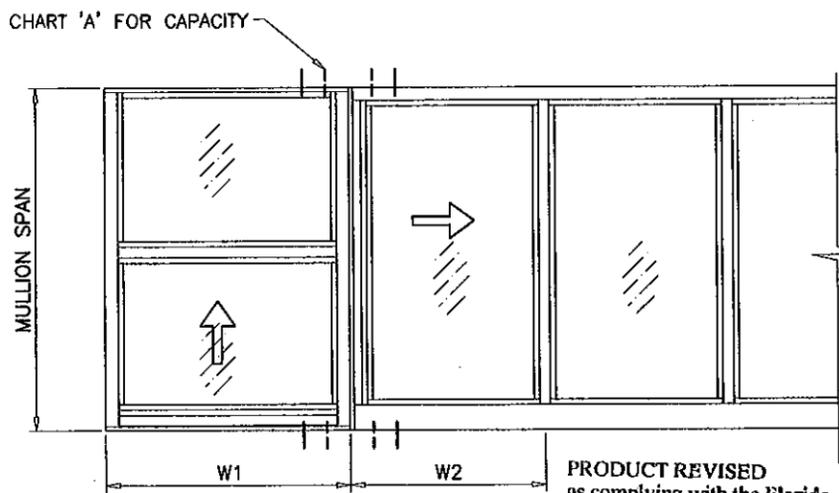
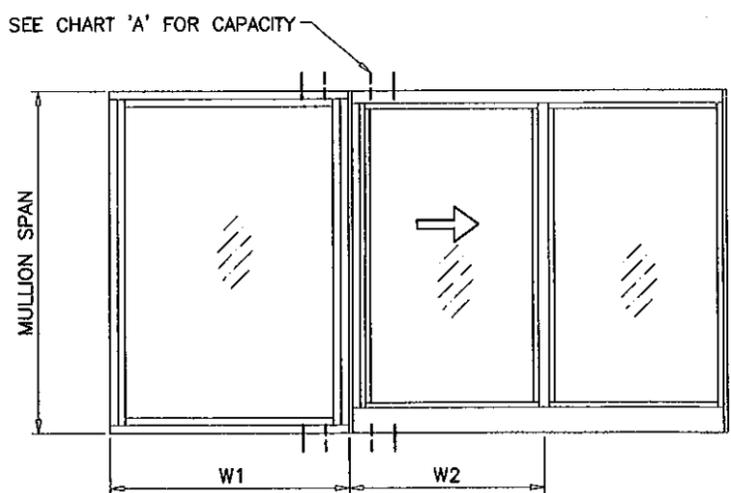
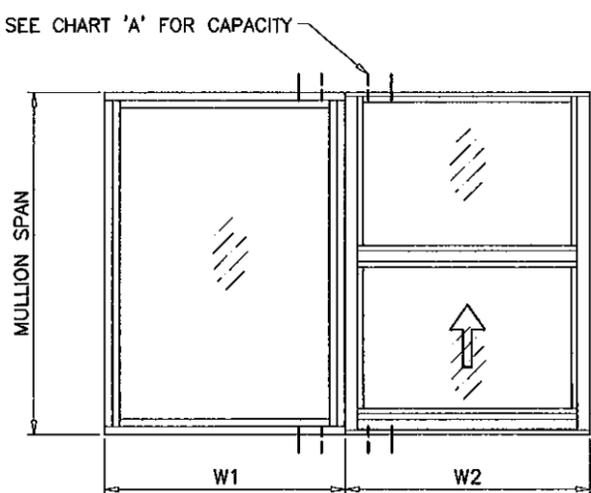
date: 04-02-10
 scale: 1/2" = 1"
 dr. by:
 chk. by:
 drawing no. M10-01
 sheet 1 of 7



FLANGE, FLANGE ADAPTOR AND FLUSH FRAMES CAN BE USED AT ALL MULLION COMBINATIONS.



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No. 11-0202.01
 Expiration Date SEPT. 22, 2015
 By *Maurel Perry*
 Miami Dade Product Control

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 79592
 C.A.N. 3538
 FEB 01 2011

al-farooq
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 MULLION\M10-01CGI

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

no	date	description
A	2.1.11	SEALANT NOTE ADDED

revisions:
 date: 04-02-10
 scale: 1/2" = 1"
 dr. by:
 chk. by:
 drawing no.
M10-01
 sheet 2 of 7

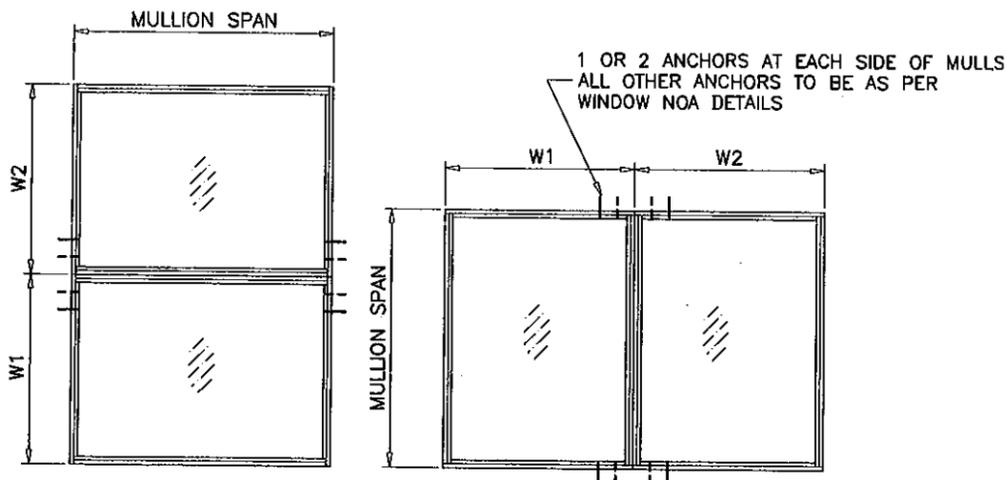
CHART 'A' DESIGN LOAD CAPACITY - PSF
MULLION WITH ANY COMBINATION OF SERIES SENTINEL
FIXED, HORIZONTAL SLIDING OR SINGLE HUNG WINDOWS

WINDOW DIMS.		1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION		
WIDTH (W)	MULL SPAN	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4
19-1/8"	50-5/8"	90.0	90.0	90.0	90.0	90.0	90.0
26-1/2"		90.0	90.0	90.0	90.0	90.0	90.0
37"		90.0	90.0	90.0	90.0	90.0	90.0
49"		85.0	85.0	85.0	90.0	90.0	90.0
53-1/8"		85.0	85.0	85.0	90.0	90.0	90.0
19-1/8"	63"	90.0	90.0	90.0	90.0	90.0	90.0
26-1/2"		82.6	82.6	82.6	90.0	90.0	90.0
37"		66.1	66.1	66.1	82.5	90.0	90.0
49"		57.7	57.7	57.7	70.0	90.0	90.0
53-1/8"	56.2	56.2	56.2	67.8	90.0	90.0	
19-1/8"	76"	80.7	85.7	85.7	80.7	90.0	90.0
26-1/2"		59.6	65.5	65.5	59.6	79.5	90.0
37"		44.8	51.2	51.2	44.8	59.8	90.0
49"		36.6	43.1	43.1	36.6	48.8	85.8
53-1/8"		34.9	41.5	41.5	34.9	46.5	81.7
19-1/8"	85"	57.4	75.5	75.5	57.4	76.5	90.0
26-1/2"		42.2	56.3	57.3	42.2	56.3	90.0
37"		31.4	41.9	44.2	31.4	41.9	73.6
49"		25.2	33.6	36.7	25.2	33.6	59.1
53-1/8"		23.9	31.8	35.1	23.9	31.8	55.9
19-1/8"	90"	48.2	64.3	70.8	48.2	64.3	90.0
26-1/2"		35.4	47.2	53.5	35.4	47.2	82.9
37"		26.2	35.0	41.2	26.2	35.0	61.4
49"	20.9	27.9	33.9	20.9	27.9	49.0	
19-1/8"	96"	39.6	52.9	65.9	39.6	52.9	90.0
26-1/2"		29.0	38.7	49.6	29.0	38.7	68.0
37"		21.4	28.6	38.0	21.4	28.6	50.2

NOTE:
MULLIONS RATED IN THESE CHARTS WITH ANY COMBINATION
OF FIXED, SINGLE HUNG OR HORIZ. SLIDING WINDOWS
MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.
(INTERPOLATION BETWEEN WIDTHS ALLOWED)

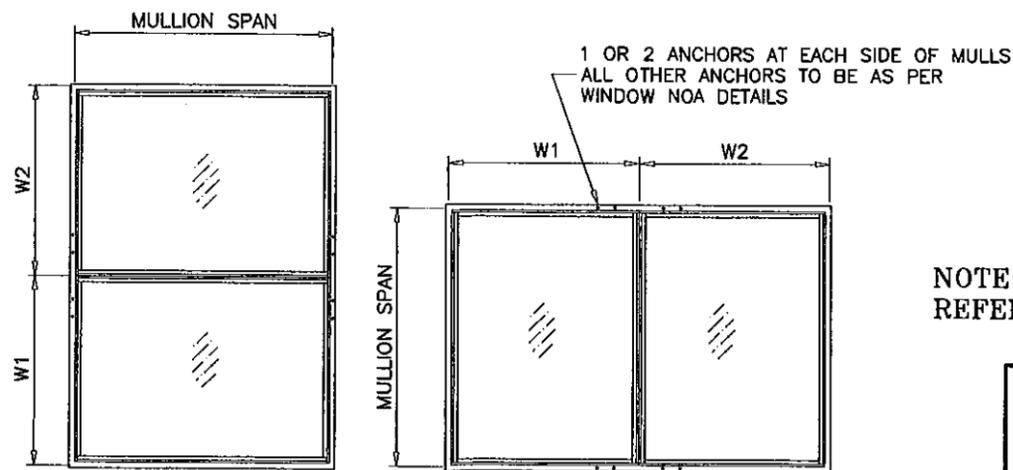
CHART 'A' DESIGN LOAD CAPACITY - PSF
MULLION WITH ANY COMBINATION OF SERIES SENTINEL
FIXED, HORIZONTAL SLIDING OR SINGLE HUNG WINDOWS

WINDOW DIMS.		1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION		
WIDTH (W)	MULL SPAN	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4
24"	48"	90.0	90.0	90.0	90.0	90.0	90.0
30"		90.0	90.0	90.0	90.0	90.0	90.0
36"		90.0	90.0	90.0	90.0	90.0	90.0
42"		90.0	90.0	90.0	90.0	90.0	90.0
48"		90.0	90.0	90.0	90.0	90.0	90.0
54"		90.0	90.0	90.0	90.0	90.0	90.0
60"		90.0	90.0	90.0	90.0	90.0	90.0
24"	60"	90.0	90.0	90.0	90.0	90.0	90.0
30"		80.6	80.6	80.6	90.0	90.0	90.0
36"		72.0	72.0	72.0	90.0	90.0	90.0
42"		66.5	66.5	66.5	89.7	90.0	90.0
48"		63.0	63.0	63.0	84.1	90.0	90.0
54"		61.1	61.1	61.1	80.9	90.0	90.0
60"		60.5	60.5	60.5	79.8	90.0	90.0
24"	72"	75.6	75.6	75.6	77.1	90.0	90.0
30"		63.3	63.7	63.7	63.3	84.4	90.0
36"		54.5	56.0	56.0	54.5	72.7	90.0
42"		48.6	50.8	50.8	48.6	64.8	90.0
48"		44.5	47.3	47.3	44.5	59.4	90.0
54"		41.7	44.8	44.8	41.7	55.7	90.0
60"		39.9	43.2	43.2	39.9	53.3	90.0
24"	84"	47.9	63.0	63.0	47.9	64.0	90.0
30"		39.1	52.1	52.6	39.1	52.1	90.0
36"		33.3	44.5	45.8	33.3	44.5	78.1
42"		29.4	39.2	41.1	29.4	39.2	68.9
48"		26.6	35.5	37.8	26.6	35.5	62.3
54"		24.6	32.8	35.4	24.6	32.8	57.6
60"		23.0	31.5	34.1	23.0	31.5	52.9
24"	96"	31.9	42.5	54.0	31.9	42.5	74.7
30"		25.9	34.5	44.8	25.9	34.5	60.6
36"		21.9	29.3	38.8	21.9	29.3	51.4
42"		-	25.6	34.6	-	25.6	45.0
48"		-	23.0	31.5	-	23.0	40.4



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

FLANGE OR FLUSH FRAMES



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

FIN FRAMES

NOTE:
REFER TO PAGE 2 FOR OTHER COMBINATIONS.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

JA

FEB 01 2011

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0202.01
Expiration Date SEPT. 22, 2015

By *Manuel Perez*
Miami Dade Product Control

afc

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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TEL (305) 593-6590 FAX (305) 593-6592

no	date	by	description

date: 04-02-10
scale: 1/2" = 1"
dr. by:
chk. by:

drawing no.
M10-01

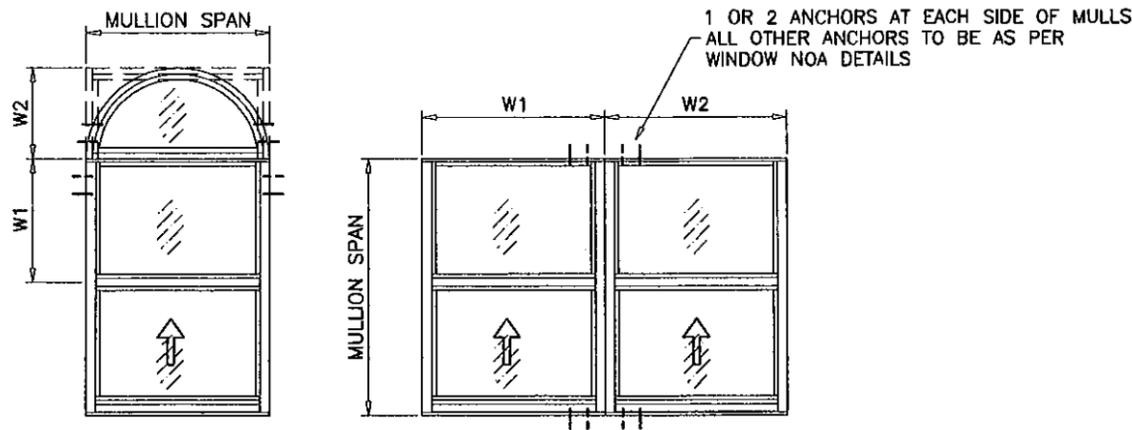
sheet 3 of 7

MULLION\M10-01CGI

CHART 'B' DESIGN LOAD CAPACITY - PSF
MULLION WITH COMBINATION OF SERIES SENTINEL
SINGLE HUNG WINDOWS OR FIXED TRANSOM

WINDOW DIMS.		1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION		
WIDTH (W)	MULL SPAN	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4
19-1/8"	50-5/8"	90.0	90.0	90.0	90.0	90.0	90.0
26-1/2"		90.0	90.0	90.0	90.0	90.0	90.0
37"		90.0	90.0	90.0	90.0	90.0	90.0
49"		85.0	85.0	85.0	90.0	90.0	90.0
53-1/8"		85.0	85.0	85.0	90.0	90.0	90.0
19-1/8"	63"	90.0	90.0	90.0	90.0	90.0	90.0
26-1/2"		82.6	82.6	82.6	90.0	90.0	90.0
37"		66.1	66.1	66.1	90.0	90.0	90.0
49"		57.7	57.7	57.7	90.0	90.0	90.0
53-1/8"	56.2	56.2	56.2	88.5	90.0	90.0	
19-1/8"	76"	85.7	85.7	85.7	90.0	90.0	90.0
26-1/2"		65.5	65.5	65.5	77.7	90.0	90.0
37"		51.2	51.2	51.2	58.5	73.4	90.0
49"		43.1	43.1	43.1	47.7	60.0	86.3
53-1/8"		41.5	41.5	41.5	45.5	57.2	82.9
19-1/8"	85"	74.8	75.5	75.5	74.8	90.0	90.0
26-1/2"		55.0	57.3	57.3	55.0	69.1	90.0
37"		40.9	44.2	44.2	40.9	51.4	83.1
49"		32.9	36.7	36.7	32.9	41.3	66.8
53-1/8"		31.1	35.1	35.1	31.1	39.1	63.2
19-1/8"	90"	62.9	70.8	70.8	62.9	79.0	90.0
26-1/2"		46.2	53.5	53.5	46.2	58.0	90.0
37"		34.2	41.2	41.2	34.2	43.0	69.4
49"		27.3	33.8	33.9	27.3	34.3	55.4
19-1/8"	96"	51.7	65.0	65.9	51.7	65.0	90.0
26-1/2"		37.9	47.6	49.6	37.9	47.6	76.9
37"		27.9	35.1	38.0	27.9	35.1	56.7

NOTE:
MULLIONS RATED IN THESE CHARTS WITH SINGLE HUNG FRAMES
MAY BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN BELOW.
(INTERPOLATION BETWEEN WIDTHS ALLOWED)



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

CHART 'B' DESIGN LOAD CAPACITY - PSF
MULLION WITH COMBINATION OF SERIES SENTINEL
SINGLE HUNG WINDOWS OR FIXED TRANSOM

WINDOW DIMS.		1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION		
WIDTH (W)	MULL SPAN	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4
24"	48"	90.0	90.0	90.0	90.0	90.0	90.0
30"		90.0	90.0	90.0	90.0	90.0	90.0
36"		90.0	90.0	90.0	90.0	90.0	90.0
42"		90.0	90.0	90.0	90.0	90.0	90.0
48"		90.0	90.0	90.0	90.0	90.0	90.0
54"		90.0	90.0	90.0	90.0	90.0	90.0
60"		90.0	90.0	90.0	90.0	90.0	90.0
24"	60"	90.0	90.0	90.0	90.0	90.0	90.0
30"		80.6	80.6	80.6	90.0	90.0	90.0
36"		72.0	72.0	72.0	90.0	90.0	90.0
42"		66.5	66.5	66.5	90.0	90.0	90.0
48"		63.0	63.0	63.0	90.0	90.0	90.0
54"		61.1	61.1	61.1	90.0	90.0	90.0
60"	60.5	60.5	60.5	90.0	90.0	90.0	
24"	72"	75.6	75.6	75.6	90.0	90.0	90.0
30"		63.7	63.7	63.7	82.5	90.0	90.0
36"		56.0	56.0	56.0	71.1	89.3	90.0
42"		50.8	50.8	50.8	63.4	79.6	90.0
48"		47.3	47.3	47.3	58.1	72.9	90.0
54"		44.8	44.8	44.8	54.4	68.4	89.6
60"	43.2	43.2	43.2	52.1	65.4	86.4	
24"	84"	62.6	63.0	63.0	62.6	78.6	90.0
30"		51.0	52.6	52.6	51.0	64.1	90.0
36"		43.5	45.8	45.8	43.5	54.6	88.3
42"		38.4	41.1	41.1	38.4	48.2	77.9
48"		34.7	37.8	37.8	34.7	43.6	70.4
54"	32.1	35.4	35.4	32.1	40.3	65.1	
24"	96"	41.6	52.2	54.0	41.6	52.2	84.4
30"		33.7	42.4	44.8	33.7	42.4	68.5
36"		28.6	36.0	38.8	28.6	36.0	58.1
42"		25.1	31.5	34.6	25.1	31.5	50.9
48"		22.5	28.2	31.5	22.5	28.2	45.6

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MULLION M10-01CGI

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

no	date	description

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
J.A.
FEB 01 2011

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0202-01
Expiration Date SEPT 22, 2015
By *Manuel Perez*
Miami Dade Product Control

date: 04-02-10
scale: 1/2" = 1"
dr. by:
chk. by:
drawing no.
M10-01
sheet 4 of 7

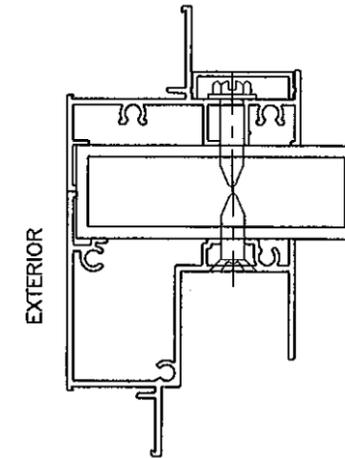
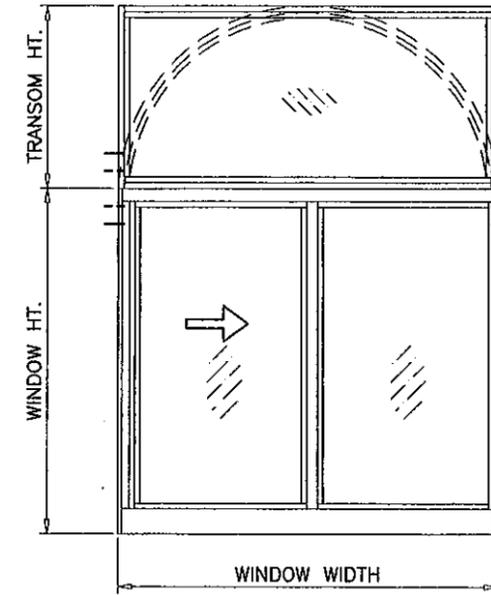
CHART 'C' DESIGN LOAD CAPACITY - PSF
 HORIZONTAL MULLION WITH COMBINATION OF SERIES SENTINEL
 FIXED OVER HORIZ. SLIDING WINDOW

WINDOW DIMS.			1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION	
WINDOW WIDTH	WINDOW HEIGHT	TRANSOM HEIGHT	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 3	MULL TUBE 1 X 4
52-1/8"	25"	12"	90.0	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	90.0
		24"	90.0	90.0	90.0	90.0	90.0
		30"	90.0	90.0	90.0	90.0	90.0
		36"	90.0	90.0	90.0	90.0	90.0
		42"	90.0	90.0	90.0	90.0	90.0
		48"	90.0	90.0	90.0	90.0	90.0
		73"	12"	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	
		24"	90.0	90.0	90.0	90.0	
		30"	82.1	82.1	82.1	90.0	
		36"	75.3	75.3	75.3	90.0	
		42"	70.3	70.3	70.3	90.0	
		48"	66.7	66.7	66.7	86.9	
52-1/8"	37-3/8"	12"	90.0	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	90.0
		24"	90.0	90.0	90.0	90.0	90.0
		30"	90.0	90.0	90.0	90.0	90.0
		36"	90.0	90.0	90.0	90.0	90.0
		42"	90.0	90.0	90.0	90.0	90.0
		48"	90.0	90.0	90.0	90.0	90.0
		73"	12"	90.0	90.0	90.0	90.0
		18"	85.9	86.5	86.5	90.0	
		24"	77.0	77.0	77.0	90.0	
		30"	70.1	70.1	70.1	90.0	
		36"	65.1	65.1	65.1	83.4	
		42"	61.3	61.4	61.4	78.4	
		48"	58.3	58.6	58.6	74.6	
36"	49-5/8"	12"	90.0	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	90.0
		24"	90.0	90.0	90.0	90.0	90.0
		30"	90.0	90.0	90.0	90.0	90.0
		36"	90.0	90.0	90.0	90.0	90.0
		42"	90.0	90.0	90.0	90.0	90.0
		46"	90.0	90.0	90.0	90.0	90.0
		52-1/8"	12"	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	
		24"	90.0	90.0	90.0	90.0	
		30"	90.0	90.0	90.0	90.0	
		36"	76.3	86.3	86.3	90.0	
		42"	83.7	83.7	83.7	90.0	
		48"	82.4	82.4	82.4	90.0	
73"	49-5/8"	12"	79.1	83.3	83.3	90.0	90.0
		18"	71.2	73.5	73.5	90.0	90.0
		24"	65.0	66.5	66.5	83.2	90.0
		30"	60.2	61.3	61.3	77.0	90.0
		36"	56.4	57.4	57.4	72.1	90.0
		42"	53.4	54.5	54.5	68.3	90.0
		48"	51.2	52.3	52.3	65.4	90.0

CHART 'C' DESIGN LOAD CAPACITY - PSF
 HORIZONTAL MULLION WITH COMBINATION OF SERIES SENTINEL
 FIXED OVER HORIZ. SLIDING WINDOW

WINDOW DIMS.			1 ANCHOR AT EACH SIDE OF MULLION			2 ANCHORS AT EACH SIDE OF MULLION	
WINDOW WIDTH	WINDOW HEIGHT	TRANSOM HEIGHT	MULL TUBE 1 X 2-1/2	MULL TUBE 1 X 3	MULL TUBE 1 X 4	MULL TUBE 1 X 3	MULL TUBE 1 X 4
36"	62"	12"	90.0	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	90.0
		24"	90.0	90.0	90.0	90.0	90.0
		30"	90.0	90.0	90.0	90.0	90.0
		36"	90.0	90.0	90.0	90.0	90.0
		42"	90.0	90.0	90.0	90.0	90.0
		48"	90.0	90.0	90.0	90.0	90.0
		52-1/8"	12"	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	
		24"	84.4	84.4	84.4	90.0	
		30"	79.8	79.8	79.8	90.0	
		36"	76.5	76.5	76.5	90.0	
		42"	74.5	74.5	74.5	90.0	
		48"	73.4	73.4	73.4	90.0	
73"	62"	12"	66.3	71.0	71.0	84.6	90.0
		18"	60.7	63.8	63.8	77.6	90.0
		24"	56.2	58.4	58.4	71.8	90.0
		30"	52.5	54.4	54.4	67.2	90.0
		36"	49.6	51.3	51.3	63.4	90.0
		42"	47.3	49.0	49.0	60.5	89.3
		48"	45.5	47.2	47.2	58.2	86.1

1 OR 2 ANCHORS
 AT EACH SIDE OF MULLION (AT WINDOW FRAME)
 TYPICAL
 SEE CHART FOR CAPACITY



FIXED OVER H.R.

af c
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 MULLION M10-01CGI

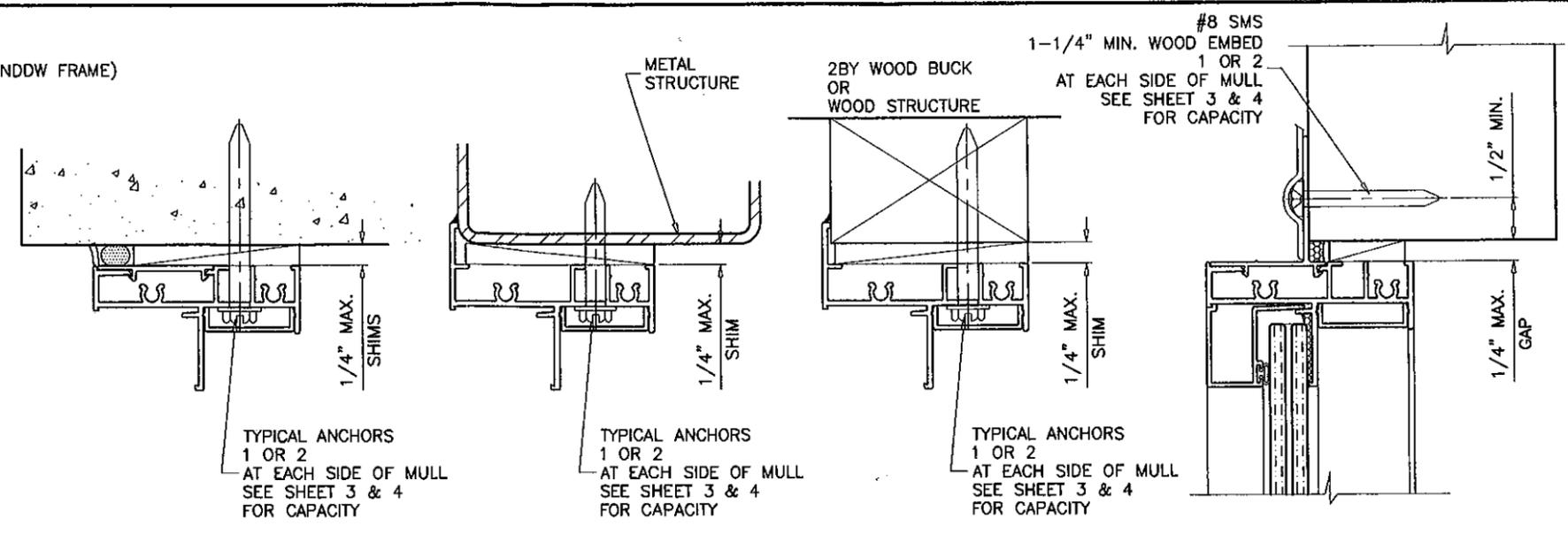
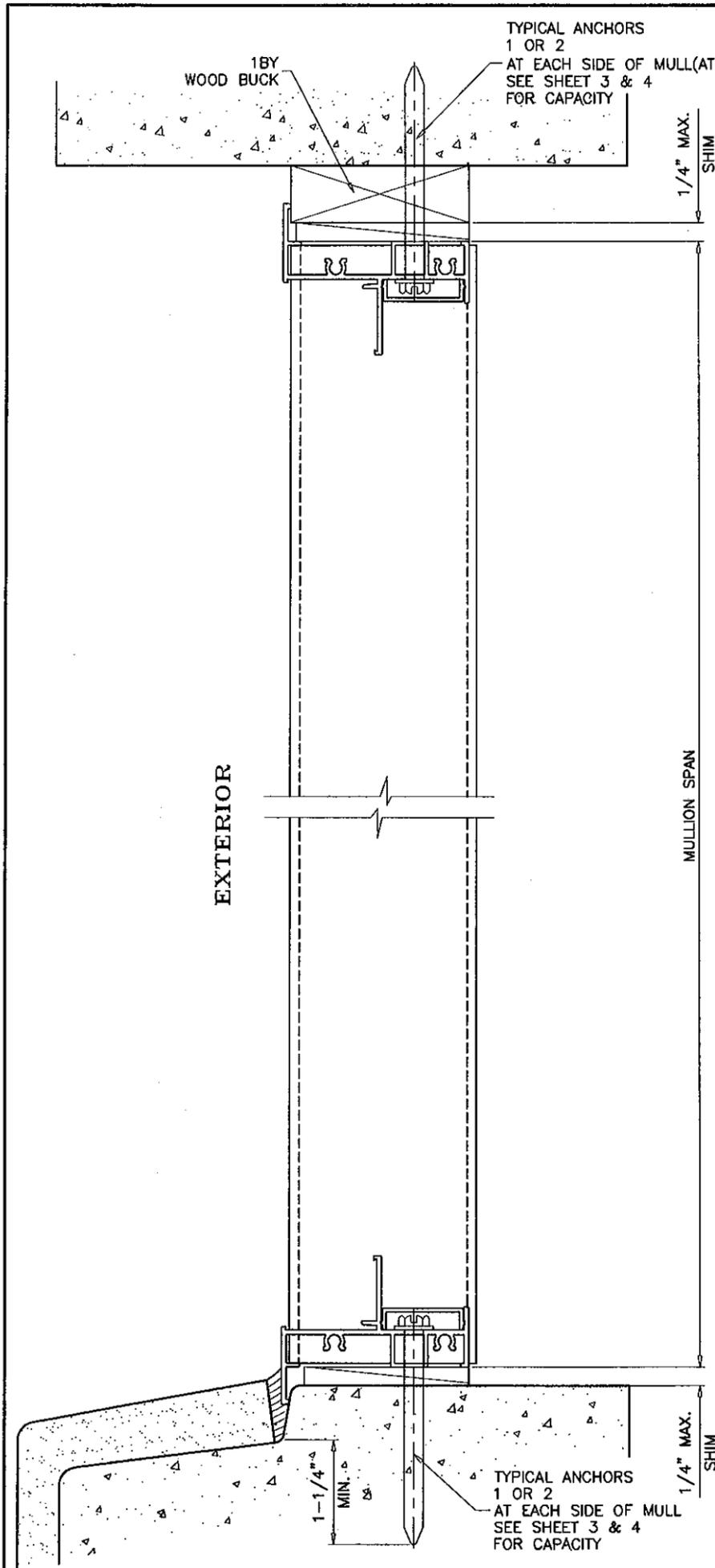
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no	date	by	description

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
 FEB 01 2011

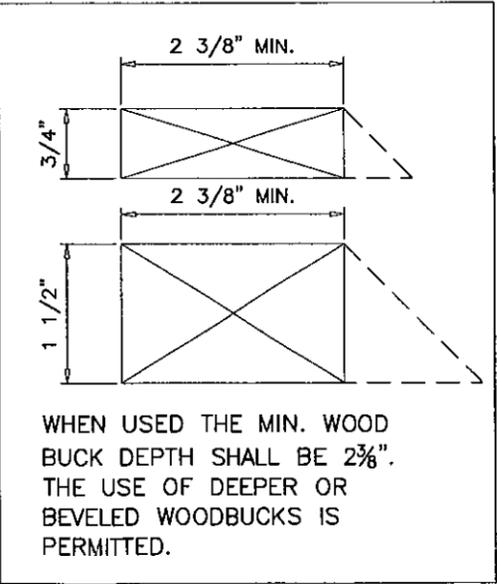
PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 11-0202.01
 Expiration Date 5/27/2015
 By *Manuel Perez*
 Miami Dade Product Control

date: 04-02-10
 scale: 1/2" = 1"
 dr. by:
 chk. by:
 drawing no.
M10-01
 sheet 5 of 7



FLANGE, FLANGE ADAPTOR AND FLUSH FRAMES CAN BE USED AT ALL ANCHORAGE CONDITIONS.

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



TYPICAL ANCHORS: SEE ELEV. FOR SPACING
 1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-3/8" 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)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.

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

FIXED WINDOW ANCHOR INSTALLATION DETAILS SHOWN. ALSO APPLICABLE TO SINGLE HUNG AND HORIZONTAL SLIDING WINDOW FRAMES IN FLANGE, EQUAL LEG OR FIN FRAME CONFIGURATIONS.

Engr: JAVAD AHMAD
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PRODUCT REVISED
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 Expiration Date SEPT. 22, 2015
 By
 Miami/Dade Product Control

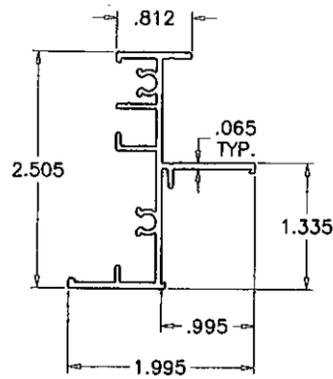
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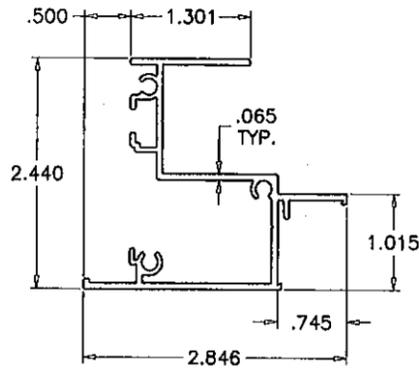
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 chk. by:

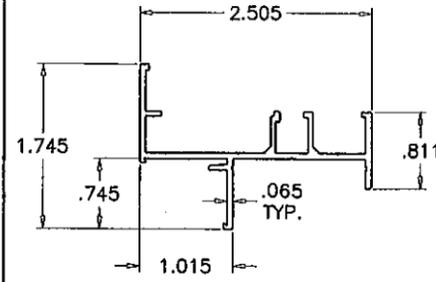
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M10-01
 sheet 6 of 7



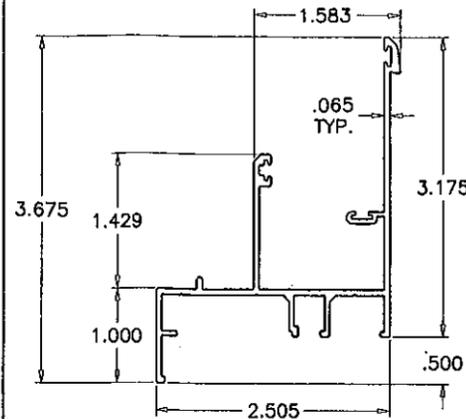
SERIES 130 SENTINEL
FIX. WDW. FLANGE FRAME
CGI-118



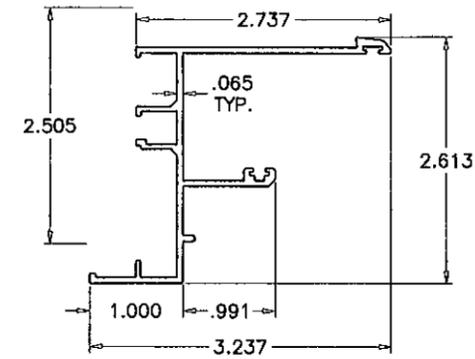
H.R. WDW. FLANGE FRAME HEAD
S.H. WDW. FLANGE FRAME JAMB
CGI-136



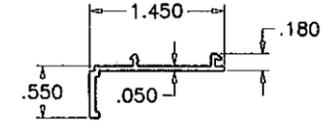
H.R. WDW. FLANGE FRAME JAMB
S.H. WDW. FLANGE FRAME HEAD
CGI-135



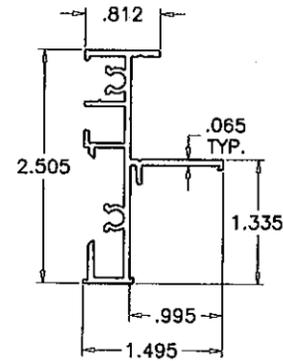
SERIES 110 SENTINEL
S.H. WDW. FLANGE FRAME SILL
CGI-137



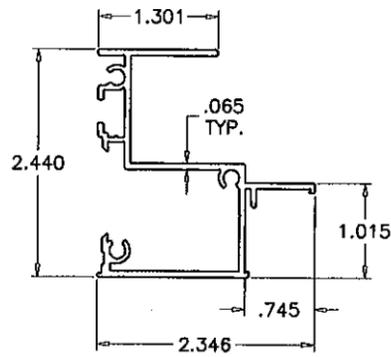
SERIES 120 SENTINEL
H.R. WDW. FLANGE FRAME JAMB
CGI-139



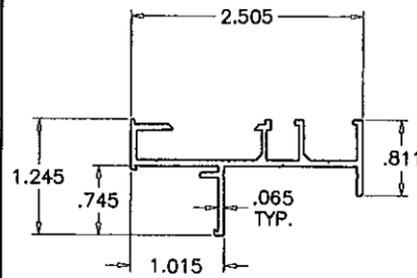
FLANGE ADAPTOR
CGI-109



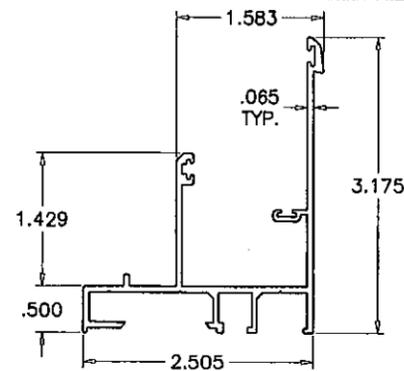
SERIES 130 SENTINEL
FIX. WDW. FLUSH FRAME
CGI-119



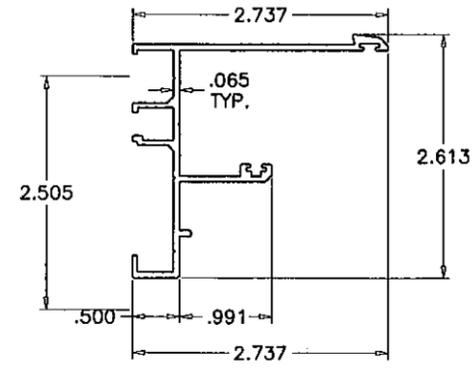
H.R. WDW. FLUSH FRAME HEAD
S.H. WDW. FLUSH FRAME JAMB
CGI-102



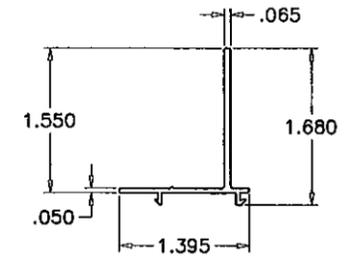
H.R. WDW. FLUSH FRAME JAMB
S.H. WDW. FLUSH FRAME HEAD
CGI-100



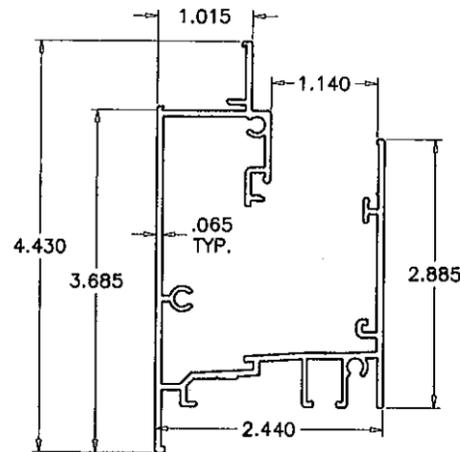
SERIES 110 SENTINEL
S.H. WDW. FLUSH FRAME SILL
CGI-101



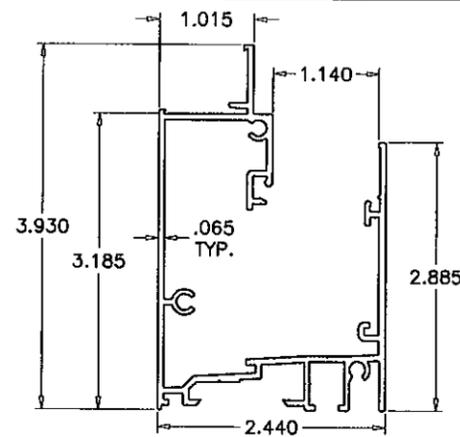
SERIES 120 SENTINEL
H.R. WDW. FLUSH FRAME JAMB
CGI-116



FIN ADAPTOR
CGI-110



SERIES 120 SENTINEL
H.R. WDW. FLANGE FRAME SILL
CGI-138



SERIES 120 SENTINEL
H.R. WDW. FLUSH FRAME SILL
CGI-113

af c
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revisions:	no	date	by	description

Engr: JAWAD AHMAD
CIVIL
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sheet 7 of 7