



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1107
MIAMI, FLORIDA 33130-1563
(305) 375-2902 FAX (305) 372-6339**

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode

CGI WINDOWS AND DOORS, INC.

**10100 NW 25 Street
Miami, FL 33172**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed 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 "Sentinel" Aluminum Unclipped Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. **W10-01**, titled Series "**Sentinel Aluminum Unclipped Mullion**", sheets 1 through 7 of 7, dated 04/02/10, prepared by Al-Farooq Corporation, signed, sealed and dated 07/29/10 by Javad Ahmad, P. E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and Approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LIMITATIONS: The maximum positive exterior design pressure shall be + 40.00 psf where water infiltration requirement is needed.

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 consists of this page 1, evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



*J Gascon
9/20/10*

NOA No. 10-0510.14

Expiration Date: September 22, 2015

Approval Date: September 22, 2010

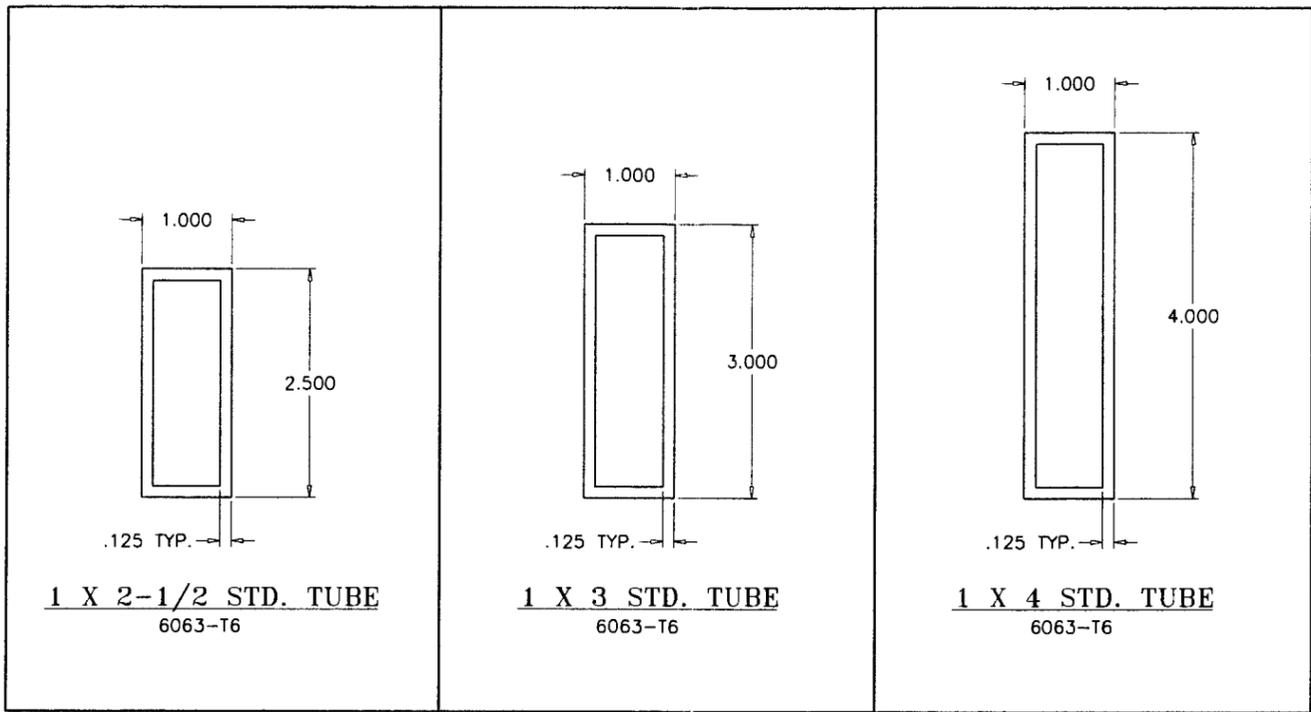
CGI WINDOWS AND DOORS, INC.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- A. DRAWINGS**
1. Manufacturer's die drawings and sections.
 2. Drawing No **W10-01**, titled Series "**Sentinel Aluminum Unclipped Mullion**", sheets 1 through 7 of 7, dated 04/02/10, prepared by Al-Farooq Corporation, signed, sealed and dated 07/29/10 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 203-94
along 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.
- 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.
- D. QUALITY ASSURANCE**
1. Miami-Dade Building Code Compliance Office (BCCO).
- E. MATERIAL CERTIFICATIONS**
1. None.
- 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.
- G. OTHERS**
1. None.



Jaime D. Gascon, P. E.
Chief, Product Control Division
NOA No. 10-0510.14
Expiration Date: September 22, 2015
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**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 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 2007 FLORIDA BLDG. CODE SECTION 2003.8.4.

THESE MULLIONS ARE RATED FOR LARGE & SMALL MISSILE IMPACT

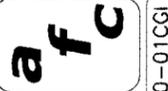
INSTRUCTIONS:

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
 FLORIDA # 70592
 P.E. # 3538
 JUL 29 2010

Approved as complying with the
 Florida Building Code
 Date 09/22/2010
 NOA# 16-0510.14
 Miami-Dade Product Control
 Division
 By *[Signature]*



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

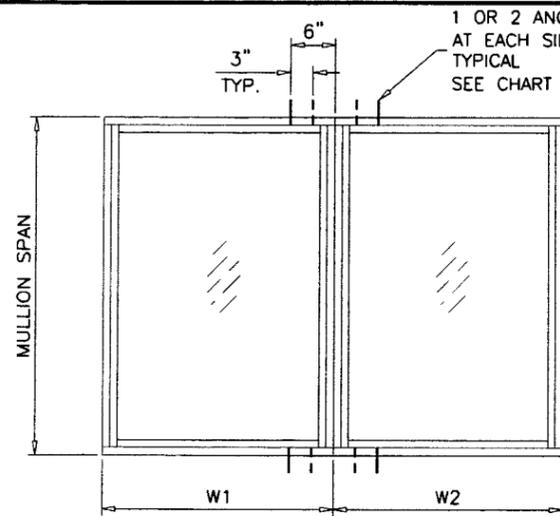
CGI WINDOWS & DOORS
 10100 N.W. 25TH STREET
 MIAMI, FL. 33172
 TEL. (305) 593-6590 FAX. (305) 593-6592

revisions:
 no date by description

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

drawing no.
M10-01

sheet 1 of 7

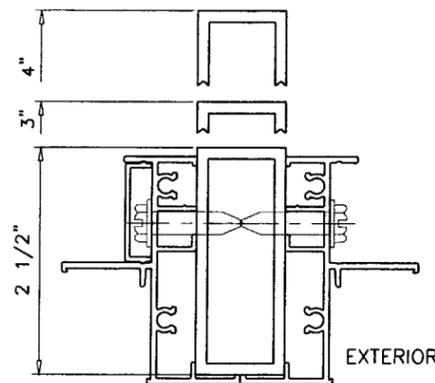


1 OR 2 ANCHORS
AT EACH SIDE OF MULLION (AT WINDOW FRAME)
TYPICAL
SEE CHART 'A' FOR CAPACITY

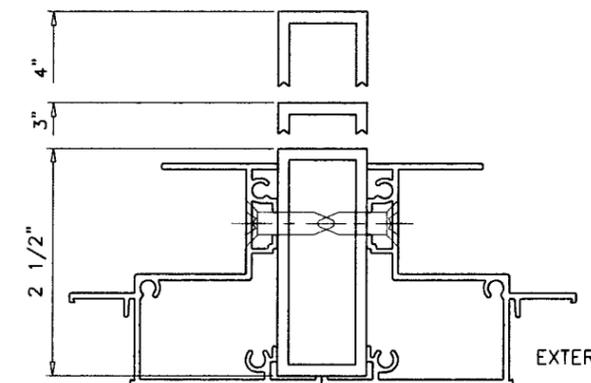
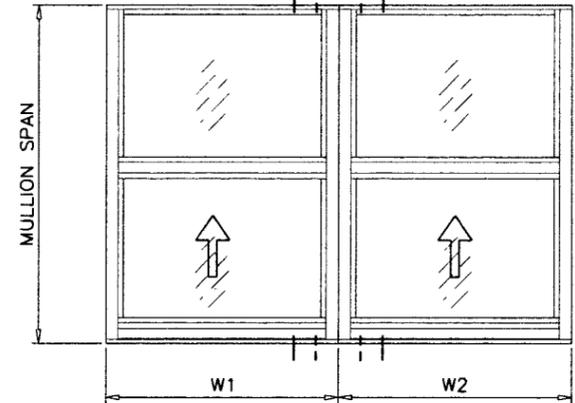
SEE CHART 'B' FOR CAPACITY

SEE CHART 'A' FOR CAPACITY

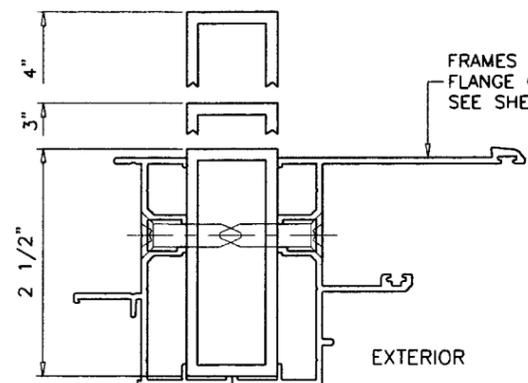
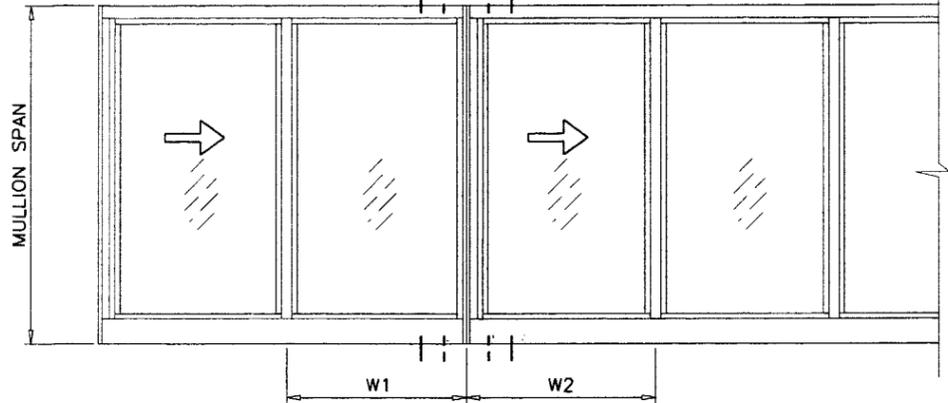
FLANGE, FLANGE ADAPTOR AND FLUSH FRAMES CAN BE
USED AT ALL MULLION COMBINATIONS.



FIXED TO FIXED



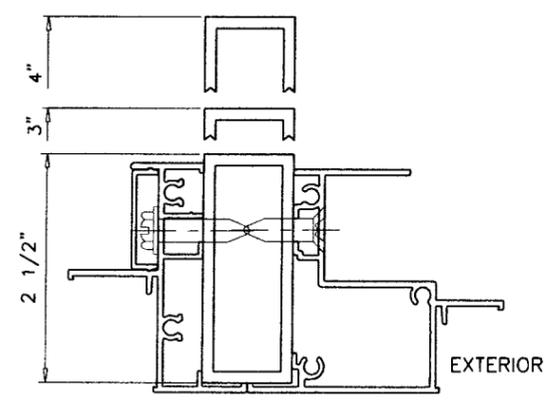
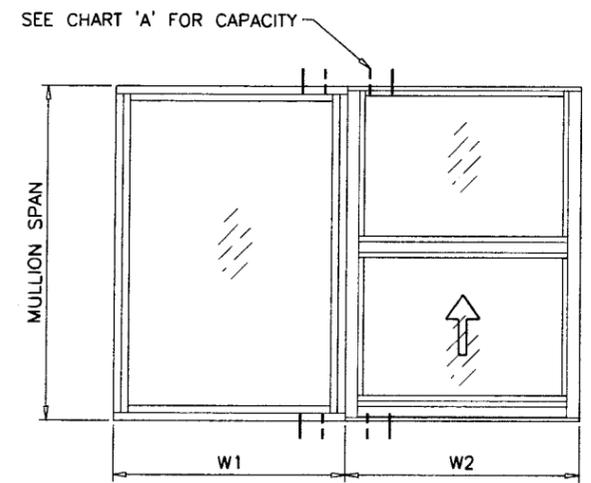
S.H. TO S.H.



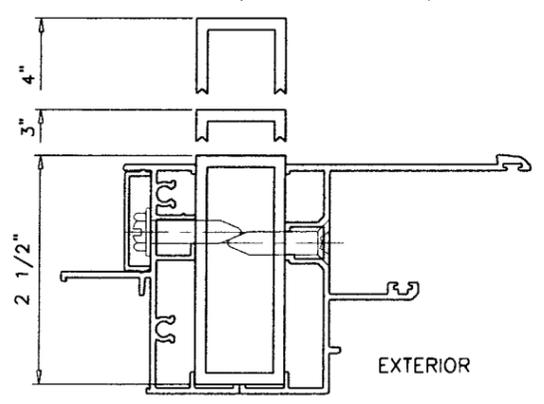
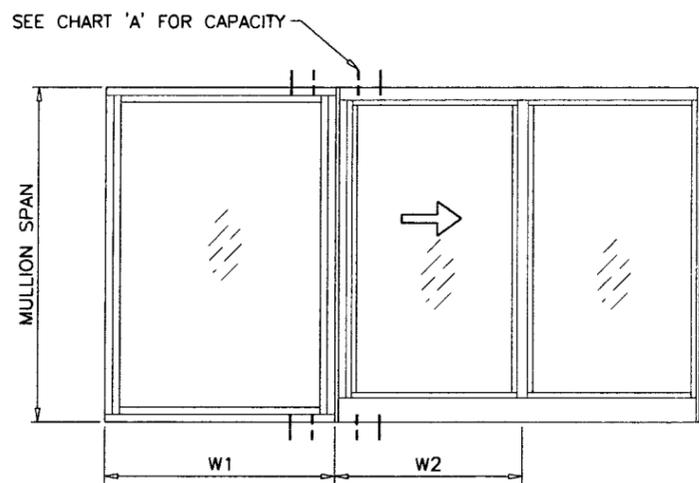
H.R. TO H.R.

FRAMES MAY BE
FLANGE OR EQUAL LEG TYPE
SEE SHEET 7 FOR FRAME DETAILS

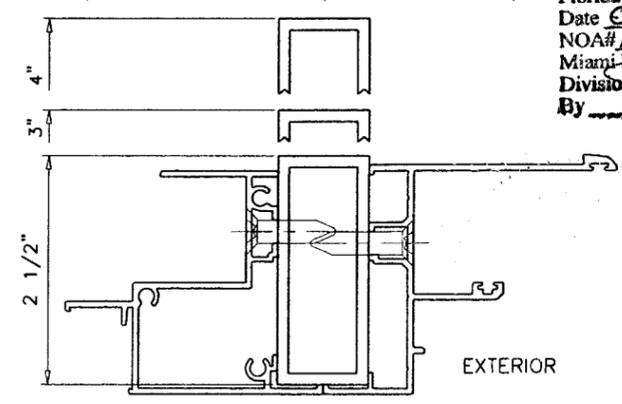
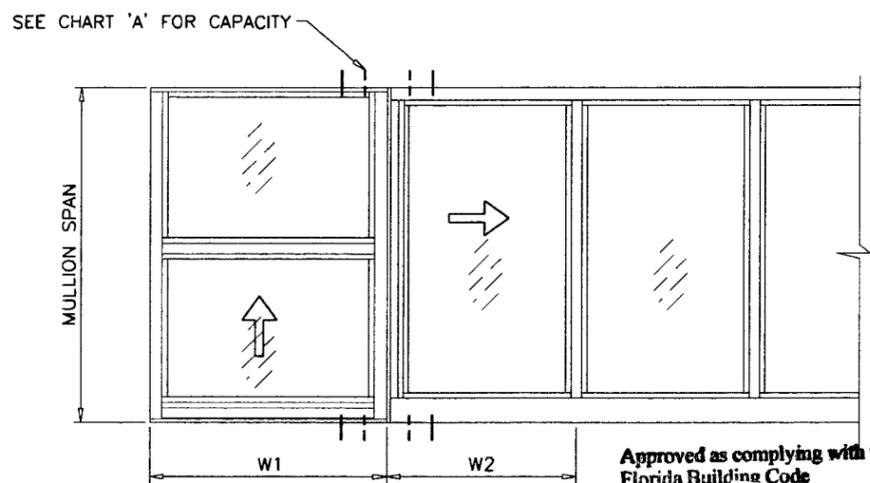
$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



FIXED TO S.H.



FIXED TO H.R.



S.H. TO H.R.

Approved as complying with the
Florida Building Code
Date 09/22/2010
NOA# 10-0510-14
Miami-Dade Product Control
Division
By *[Signature]*

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 7592
C.A.N. 2008

[Signature]

afC
AL-FAROOQ CORPORATION
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1235 S.W. 87 AVE
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MULLION\M10-01CGI

SERIES SENTINEL UNCLIPPED ALUM MULLIONS
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sheet 2 of 7

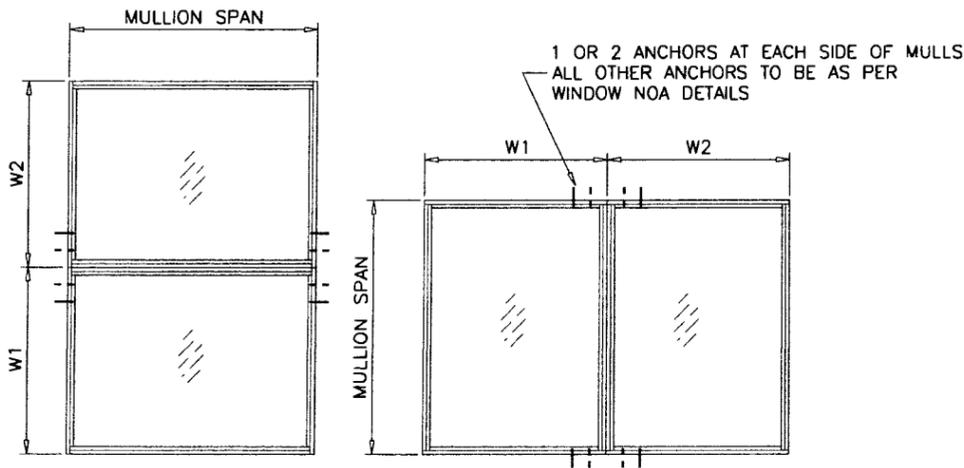
CHART 'A' DESIGN LOAD CAPACITY - PSF
 MULLION WITH ANY COMBINATION OF SERIES SENTINEL
 FIXED, HORIZONTAL SLIDING OR SINGLE HUNG WINDOWS

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)

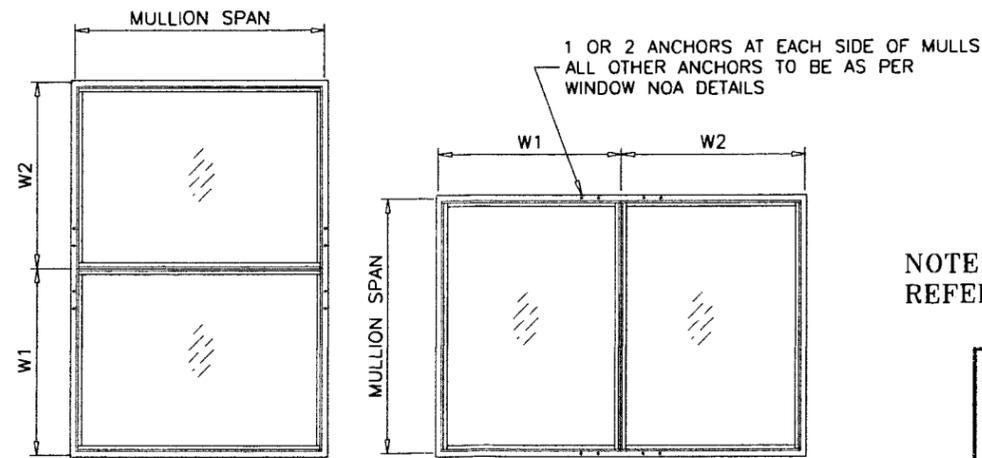
CHART 'A' DESIGN LOAD CAPACITY - PSF
 MULLION WITH ANY COMBINATION OF SERIES SENTINEL
 FIXED, HORIZONTAL SLIDING OR SINGLE HUNG WINDOWS

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"		23.9	31.9	34.5	23.9	31.9	54.0
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
 JUL 29 2010

Approved as complying with the
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 Date 09/22/2010
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 Miami Dade Product Control
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 By *[Signature]*

af c

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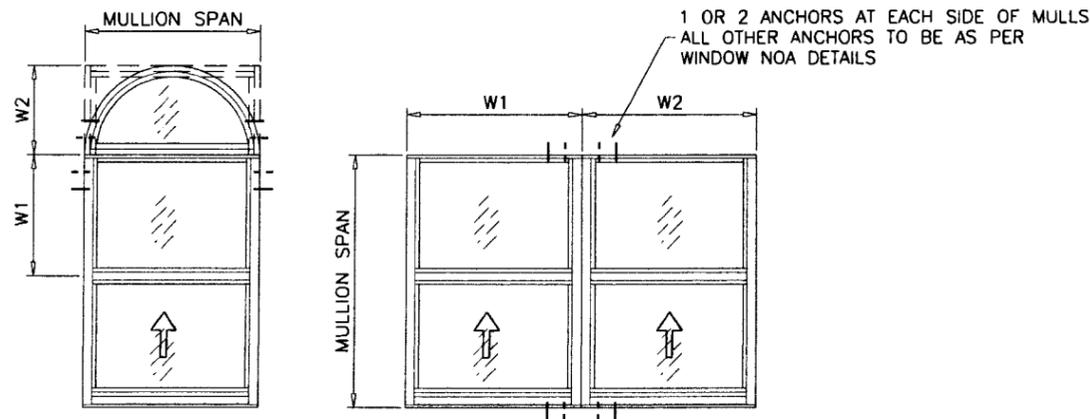
drawing no.
M10-01

sheet 3 of 7

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	33.9	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

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
60"		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

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



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

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

J.A.
JUL 29 2010

Approved as complying with the
Florida Building Code
Date 09/22/2010
NOA# 10-0510.14
Miami Dade Product Control
Division
By *[Signature]*

af c
AL-FAROOQ CORPORATION
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MULLION M10-01CGI

SERIES SENTINEL UNCLIPPED ALUM MULLIONS
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revisions:	no	date	by	description

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

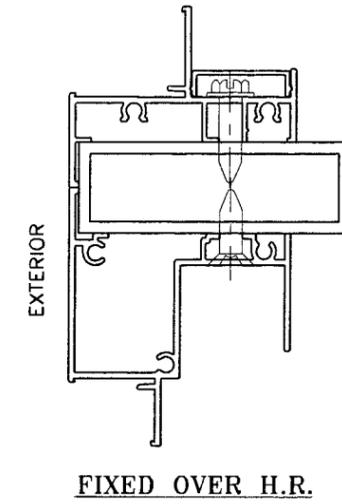
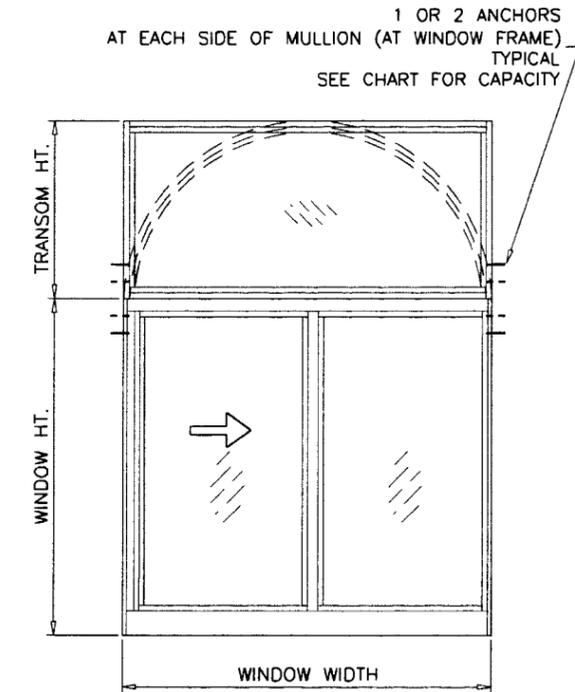
drawing no.
M10-01
sheet 4 of 7

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"	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"	82.1	82.1	82.1	90.0	90.0
		36"	75.3	75.3	75.3	90.0	90.0
		42"	70.3	70.3	70.3	90.0	90.0
		48"	66.7	66.7	66.7	86.9	90.0
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"	37-3/8"	12"	90.0	90.0	90.0	90.0	90.0
		18"	85.9	86.5	86.5	90.0	90.0
		24"	77.0	77.0	77.0	90.0	90.0
		30"	70.1	70.1	70.1	90.0	90.0
		36"	65.1	65.1	65.1	83.4	90.0
		42"	61.3	61.4	61.4	78.4	90.0
		48"	58.3	58.6	58.6	74.6	90.0
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
		48"	90.0	90.0	90.0	90.0	90.0
52-1/8"	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"	76.3	86.3	86.3	90.0	90.0
		42"	83.7	83.7	83.7	90.0	90.0
		48"	82.4	82.4	82.4	90.0	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"	62"	12"	90.0	90.0	90.0	90.0	90.0
		18"	90.0	90.0	90.0	90.0	90.0
		24"	84.4	84.4	84.4	90.0	90.0
		30"	79.8	79.8	79.8	90.0	90.0
		36"	76.5	76.5	76.5	90.0	90.0
		42"	74.5	74.5	74.5	90.0	90.0
		48"	73.4	73.4	73.4	90.0	90.0
73"	62"	12"	66.3	71.0	71.0	84.8	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



afC
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
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 MIAMI, FLORIDA 33174
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 MULLION/M10-01CGI

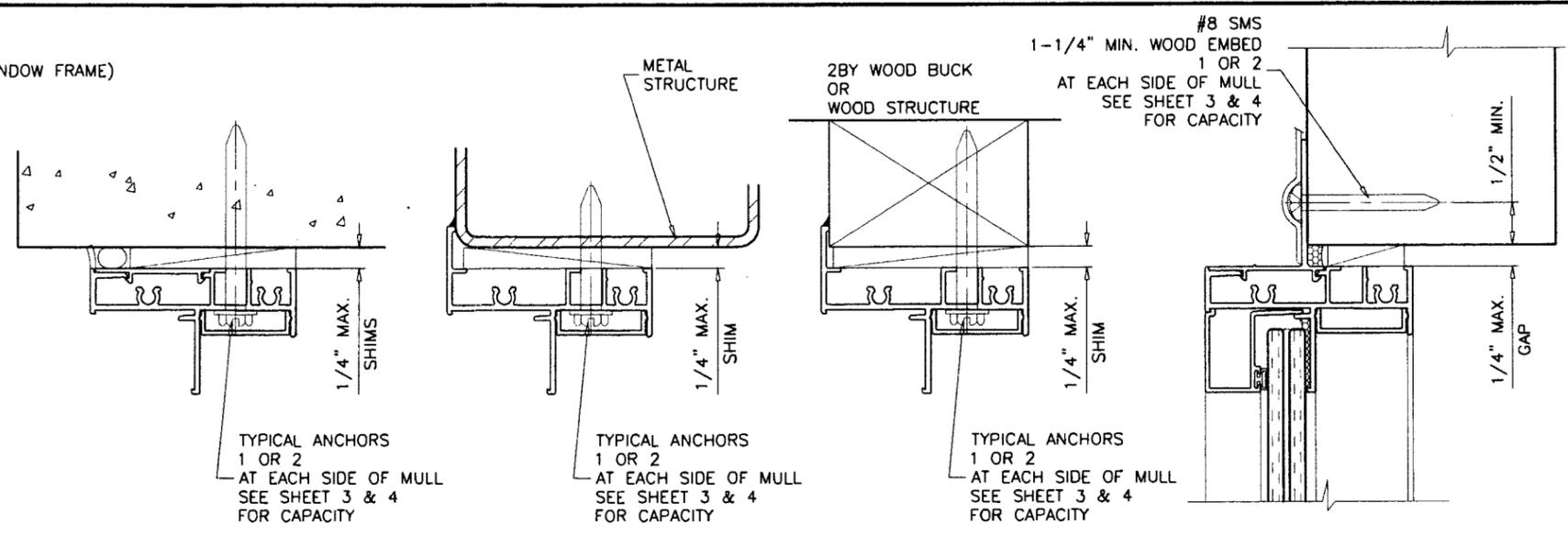
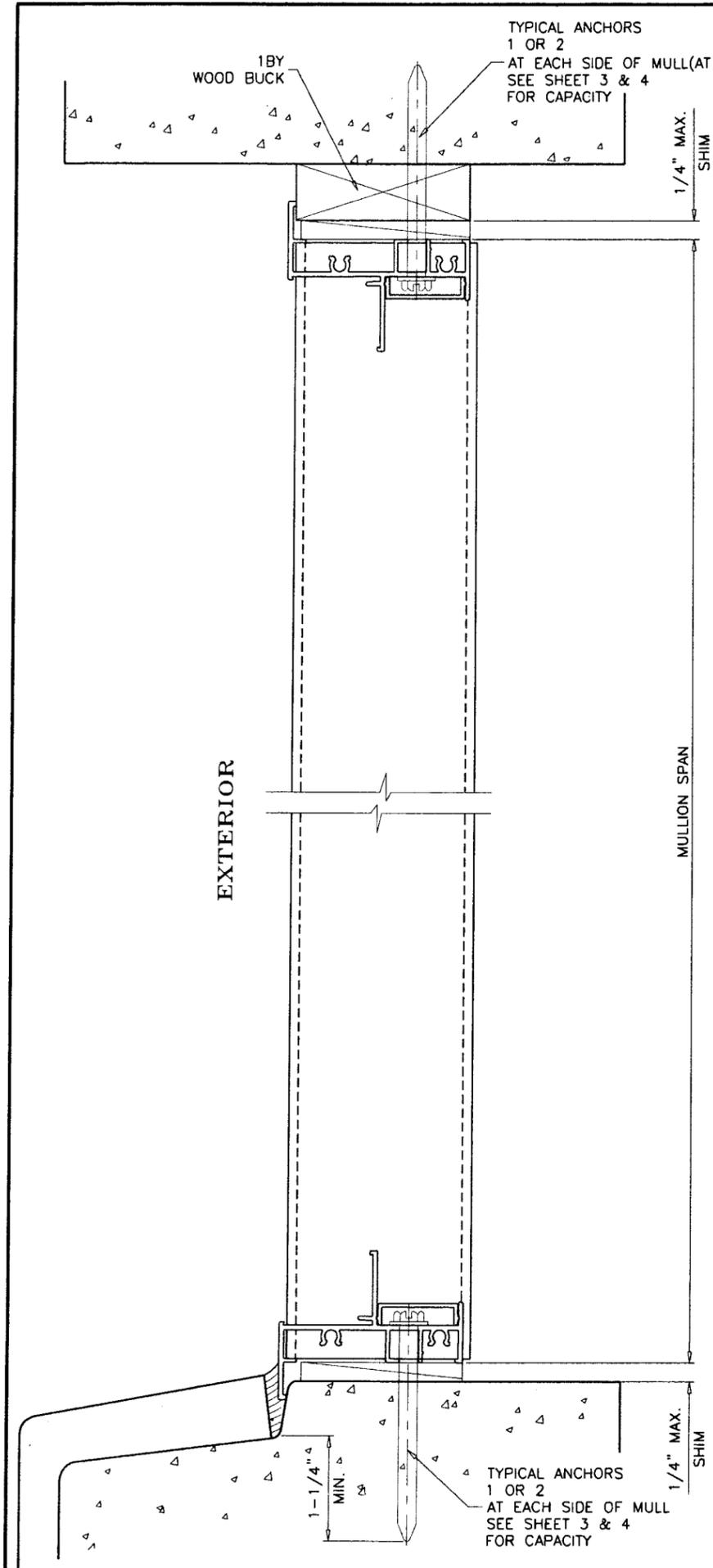
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revisions:	no	date	by	description

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
 JUL 21 2010

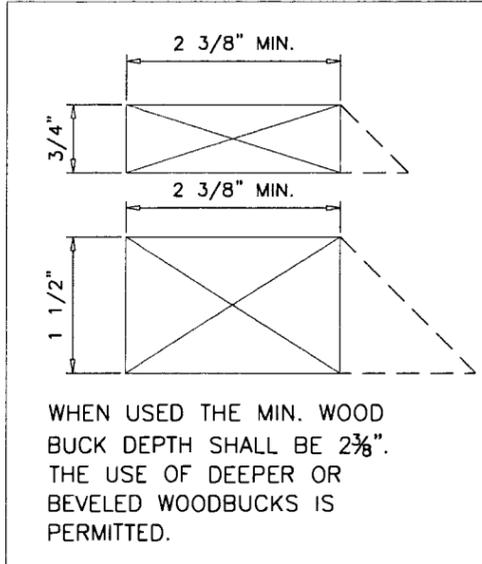
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 Florida Building Code
 Date 09/22/2010
 NOA#10-0510.14
 Miami Dade Product Control
 Division
 By *[Signature]*

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.



WHEN USED THE MIN. WOOD BUCK DEPTH SHALL BE 2 3/8". THE USE OF DEEPER OR BEVELED WOODBUCKS IS PERMITTED.

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
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
 9 AUG 2010

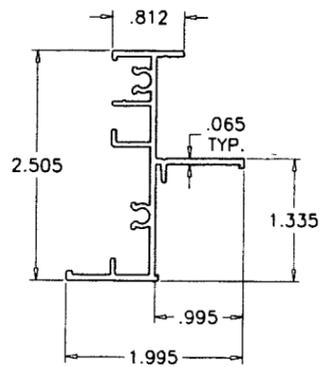
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 Miami Dade Product Control Division
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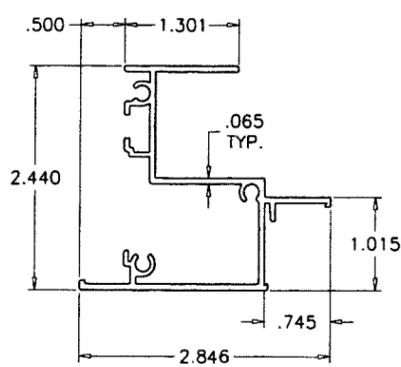
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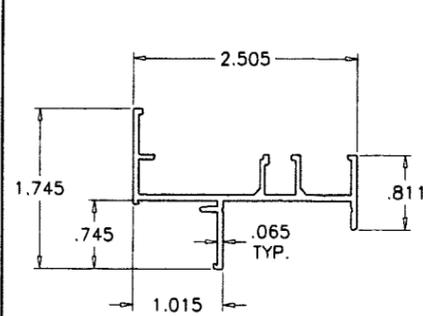
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 chk. by:
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M10-01
 sheet 6 of 7



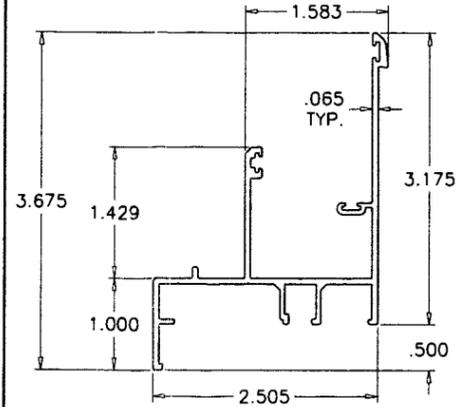
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FIX. WDW. FLANGE FRAME
CGI-118



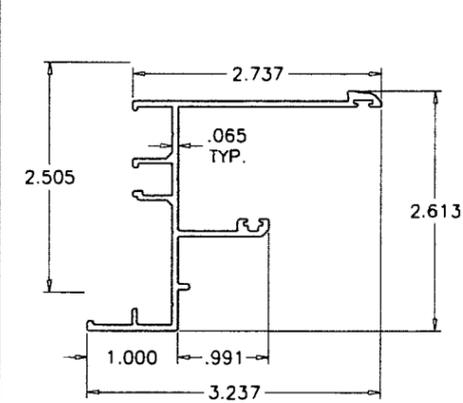
H.R. WDW. FLANGE FRAME HEAD
S.H. WDW. FLANGE FRAME JAMB
CGI-136



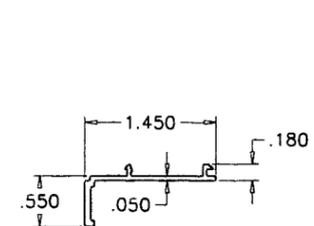
H.R. WDW. FLANGE FRAME JAMB
S.H. WDW. FLANGE FRAME HEAD
CGI-135



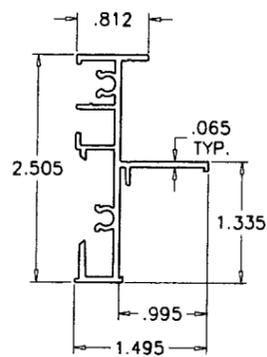
SERIES 110 SENTINEL
S.H. WDW. FLANGE FRAME SILL
CGI-137



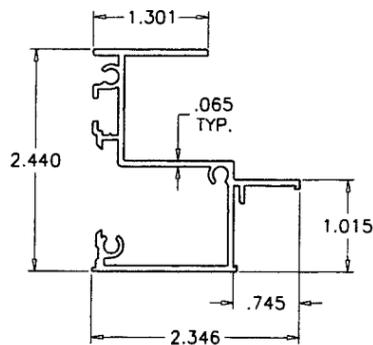
SERIES 120 SENTINEL
H.R. WDW. FLANGE FRAME JAMB
CGI-139



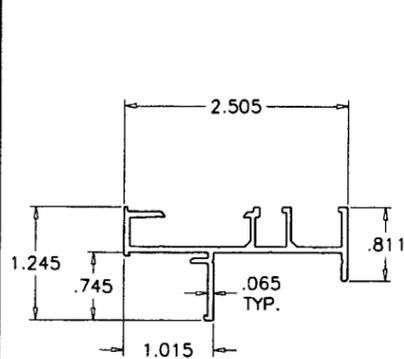
FLANGE ADAPTOR
CGI-109



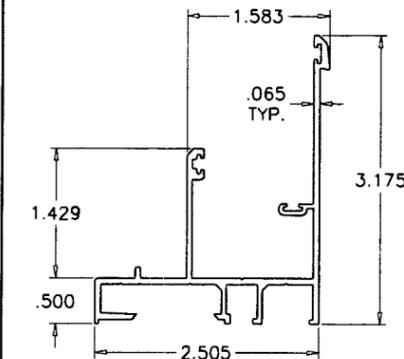
SERIES 130 SENTINEL
FIX. WDW. FLUSH FRAME
CGI-119



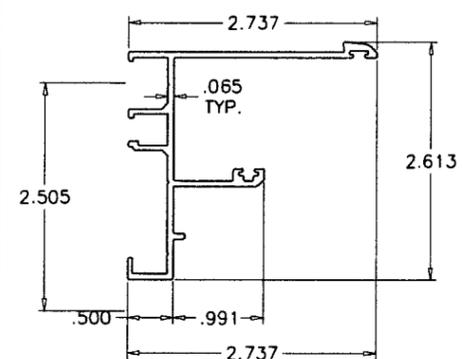
H.R. WDW. FLUSH FRAME HEAD
S.H. WDW. FLUSH FRAME JAMB
CGI-102



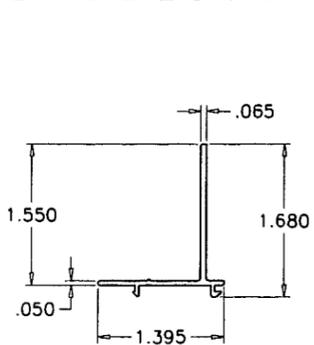
H.R. WDW. FLUSH FRAME JAMB
S.H. WDW. FLUSH FRAME HEAD
CGI-100



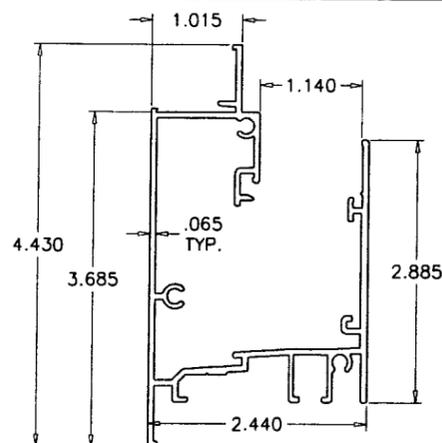
SERIES 110 SENTINEL
S.H. WDW. FLUSH FRAME SILL
CGI-101



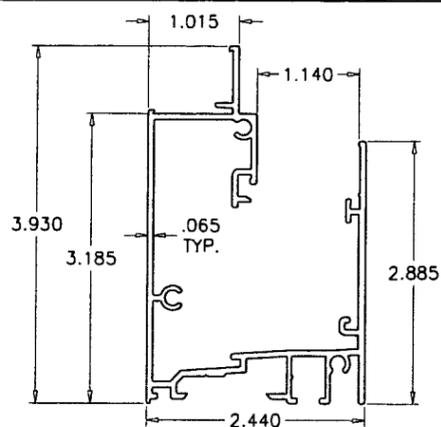
SERIES 120 SENTINEL
H.R. WDW. FLUSH FRAME JAMB
CGI-116



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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Engr: JAVAD AHMAD
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 By: *Javad Ahmad*

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 sheet 7 of 7