



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

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

www.miamidade.gov/building

Labrador & Fundora Corp. dba V & V Windows
14150 NW 56th Court, Suite 600
Opa-Locka, FL 33054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Clipped, Extruded Aluminum Tube Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **22-13D**, titled "Extruded Aluminum Clipped Mullions", sheets 1 through 10 of 10, dated 04/22/22, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, 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 Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

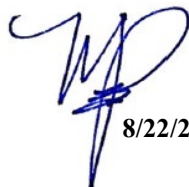
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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




8/22/23

No. 23-0731.04
Expiration Date: August 31, 2028
Approval Date: August 31, 2023
Page 1

Labrador & Fundora Corp. dba V & V Windows

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 23-0731.04)
2. Drawing No. **22-13D**, titled "Extruded Aluminum Clipped Mullions", sheets 1 through 10 of 10, dated 04/22/22, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of windows mulled together, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-23-8036**, dated 06/28/23, signed and sealed by Ram N. Tewari, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 7th Edition (2020)** and **FBC 8th Edition (2023)**, dated 07/25/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS


1. None.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 7th Edition (2020)**, with **FBC 8th Edition (2023)**, and of no financial interest, dated July 21, 2023, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

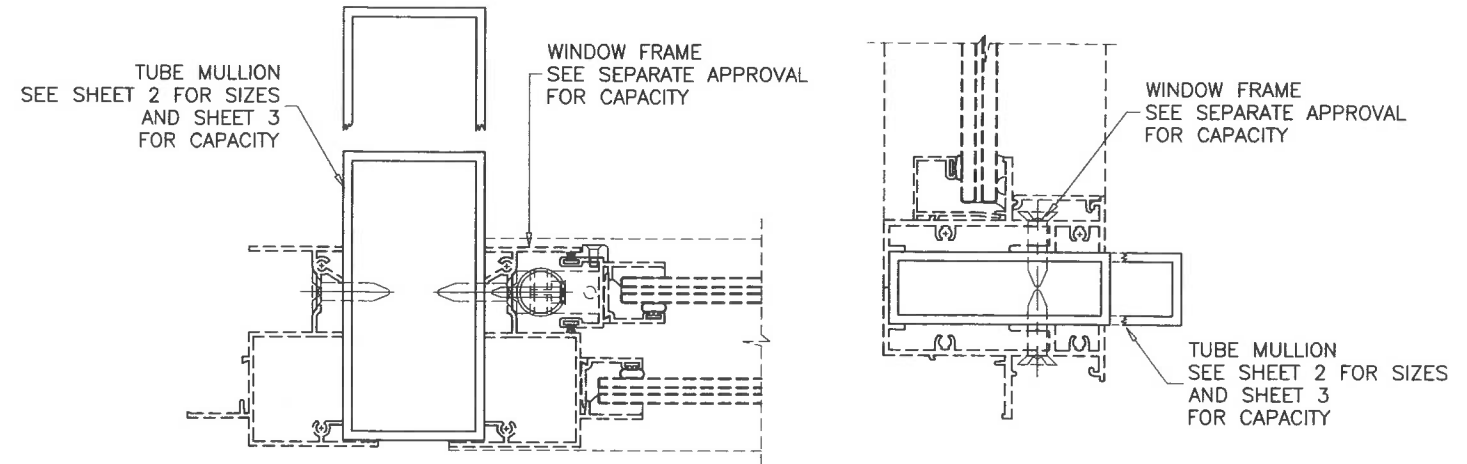
1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-0731.04
Expiration Date: August 31, 2028
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INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN LOAD REQUIRED PER ASCE 7 FOR PARTICULAR OPENING.
- STEP 2** USE MIAMI-DADE COUNTY APPROVED GLAZING PRODUCTS MEETING ABOVE LOAD REQUIREMENTS.
- STEP 3** USE GLAZING PRODUCT CONNECTION TO MULLION AS AS PER PRODUCT APPROVAL.
- STEP 4** USING CHARTS ON SHEET 3 SELECT MULLION SIZE WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** USING ANCHOR TYPES AND ANCHOR CAPACITY CHARTS ON SHEETS 4 THRU 10, SELECT ANCHOR TYPE WITH DESIGN RATING MORE THAN THE DESIGN LOADS SPECIFIED IN STEP 1 ABOVE.



**MULLIONS CONTAINING TYPICAL GLAZING PRODUCTS
HORIZONTAL OR VERTICAL**

SEE WINDOW OR DOOR NOA'S FOR FASTENERS SIZES AND SPACING

**EXTRUDED ALUMINUM CLIPPED MULLIONS
USING MULLION PROPERTIES ONLY**

MULLION SYSTEM IS RATED FOR LARGE MISSILE IMPACT.
SEE SEPARATE NOA'S FOR WINDOWS/DOORS IMPACT AND LOAD RATINGS.
LOWER VALUES FROM MULLION APPROVAL OR WINDOW/DOOR APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA
BUILDING CODE 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.

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE
DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS
TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS
AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE
MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

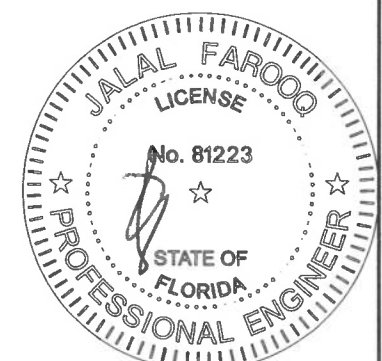
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

PRODUCT APPROVED
As complying with the Florida
Building Code
NOA-No. **23-0731.04**
Approval Date: **08/31/2023**
By: *Manuel Fern*
Miami-Dade Product Control

JUL 26 2023



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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538

MULLION 22-13D-W

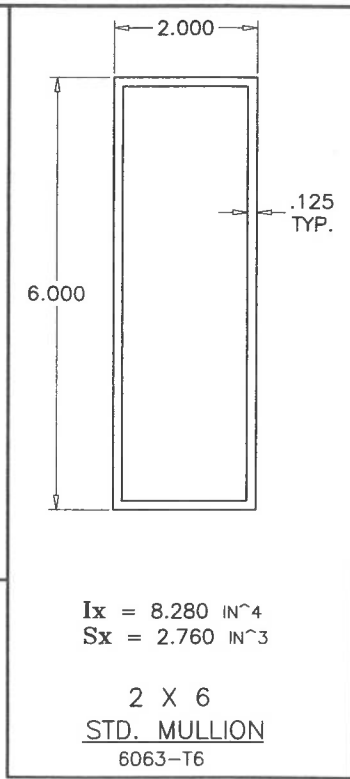
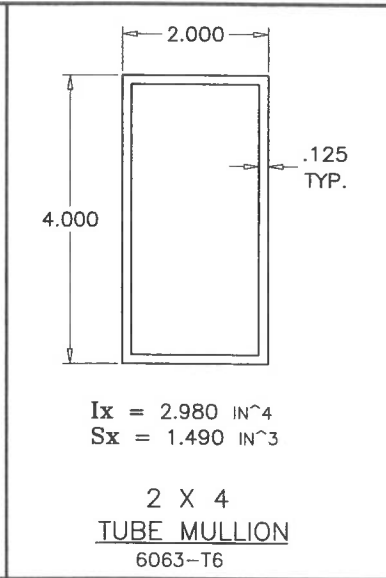
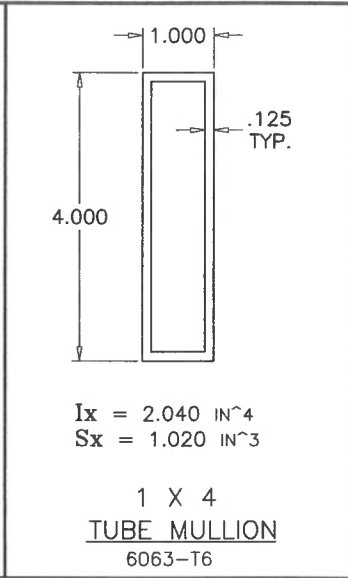
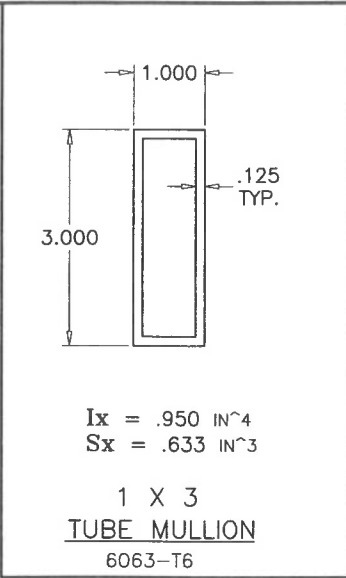
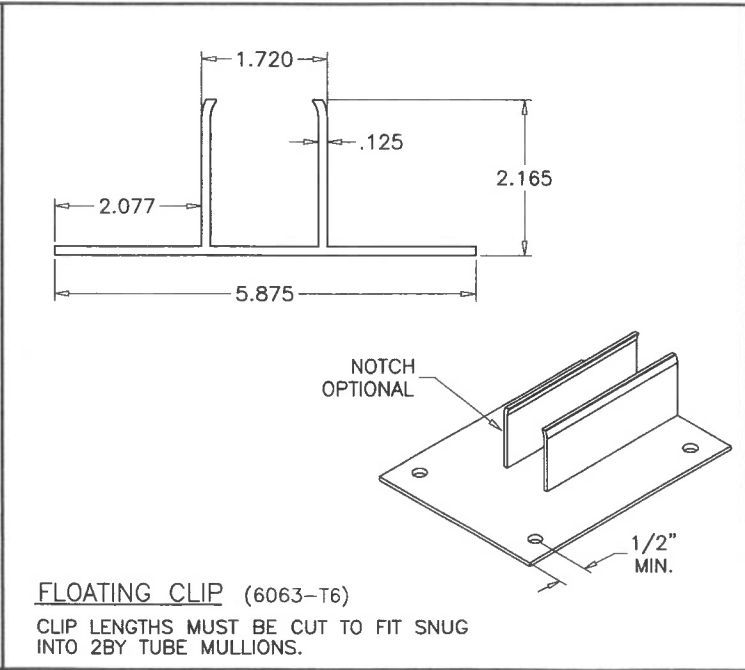
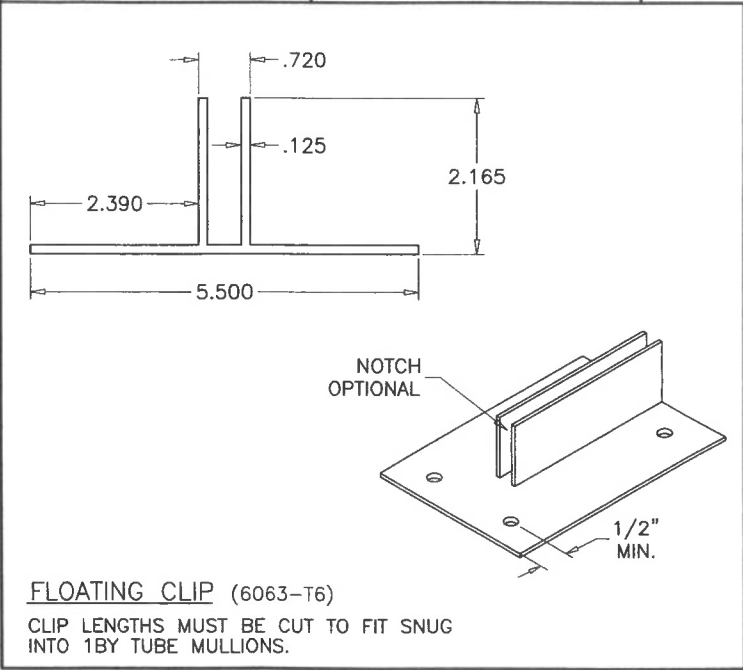
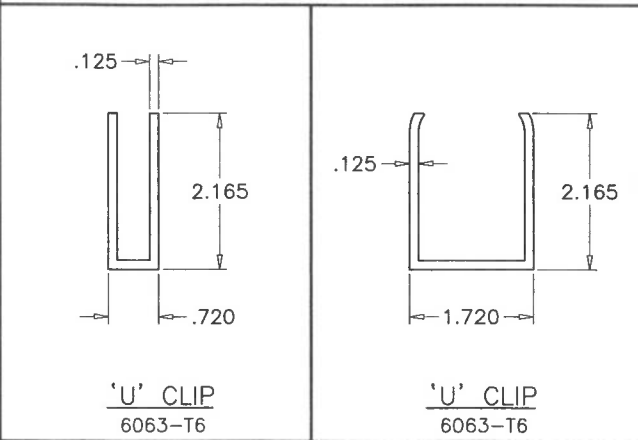
EXTRUDED ALUMINUM CLIPPED MULLIONS

Labrador & Fundora Corp.
dba-V & V Windows
14150 N.W. 56th Court, Suite 600
Opa-Locka, FL. 33054
Tel. (305) 888-4151
www.vvwindows.com

revisions:		no		date		by		description	

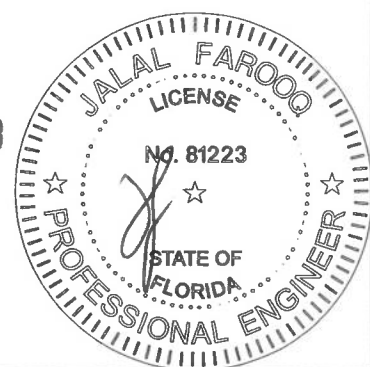
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chk. by:

drawing no.
22-13D
sheet 1 of 10



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Miami-Dade Product Control

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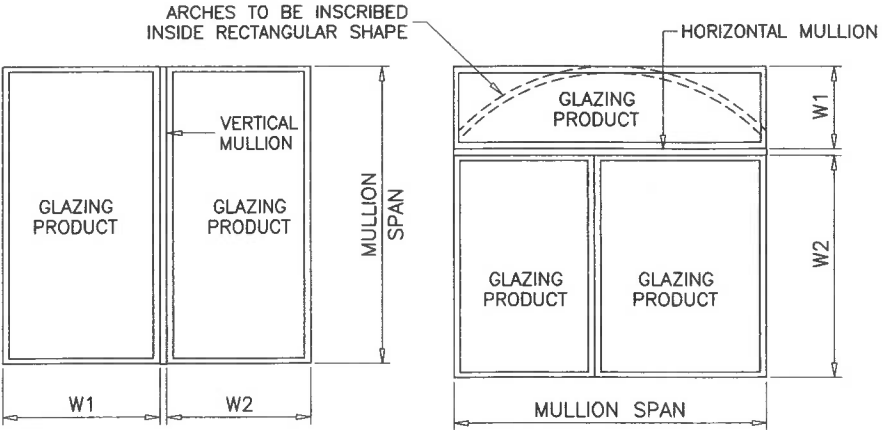
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drawing no.			
22-13D			
sheet 2 of 10			

DESIGN LOAD CAPACITY - PSF (TUBE MULLIONS)					
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	2 X 6
WIDTH (W)	MULL SPAN	TUBE	TUBE	TUBE	STD.
19-1/8"	38-3/8"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0
48"		120.0	120.0	120.0	120.0
54"		120.0	120.0	120.0	120.0
60"		112.5	120.0	120.0	120.0
66"		102.2	120.0	120.0	120.0
72"		93.7	120.0	120.0	120.0
19-1/8"	50-5/8"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		103.0	120.0	120.0	120.0
42"		90.8	120.0	120.0	120.0
48"		79.4	120.0	120.0	120.0
54"		70.6	112.5	120.0	120.0
60"		63.5	101.3	120.0	120.0
66"		57.8	92.1	120.0	120.0
72"		53.0	84.4	120.0	120.0
19-1/8"	63"	120.0	120.0	120.0	120.0
26-1/2"		89.0	120.0	120.0	120.0
30"		78.6	120.0	120.0	120.0
37"		63.7	104.3	120.0	120.0
42"		56.1	91.9	120.0	120.0
48"		49.1	80.4	120.0	120.0
54"		43.7	71.5	111.5	120.0
60"		39.3	64.3	100.3	120.0
66"		35.7	58.5	91.2	120.0
72"		32.7	53.6	83.6	120.0
19-1/8"	74-1/4"	75.3	120.0	120.0	120.0
26-1/2"		54.4	103.4	120.0	120.0
30"		48.0	91.3	120.0	120.0
37"		38.9	74.0	116.3	120.0
42"		34.3	65.2	102.4	120.0
48"		30.0	57.1	89.6	120.0
54"		26.7	50.7	79.7	120.0
60"		24.0	45.7	71.7	120.0
66"		21.8	41.5	65.2	119.7
72"		20.0	38.0	59.7	109.7
19-1/8"	76"	70.2	120.0	120.0	120.0
26-1/2"		50.7	98.5	120.0	120.0
30"		44.8	87.0	120.0	120.0
37"		36.3	70.5	110.8	120.0
42"		32.0	62.1	97.6	120.0
48"		28.0	54.4	85.4	120.0
54"		24.9	48.3	75.9	120.0
60"		22.4	43.5	68.4	120.0
66"		20.3	39.5	62.1	114.1
72"		-	36.2	57.0	104.6

DESIGN LOAD CAPACITY - PSF (TUBE MULLIONS)					
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	2 X 6
WIDTH (W)	MULL SPAN	TUBE	TUBE	TUBE	STD.
19-1/8"	84"	52.0	110.6	120.0	120.0
26-1/2"		37.5	79.8	117.7	120.0
30"		33.2	70.5	104.0	120.0
37"		26.9	57.2	84.3	120.0
42"		23.7	50.4	74.3	120.0
48"		20.7	44.1	65.0	120.0
54"		-	39.2	57.8	113.5
60"		-	35.3	52.0	102.2
66"		-	32.1	47.3	92.9
72"		-	29.4	43.3	85.2
19-1/8"	96"	34.8	74.8	109.3	120.0
26-1/2"		25.1	54.0	78.9	120.0
30"		22.2	47.7	69.7	120.0
37"		-	38.7	56.5	120.0
42"		-	34.1	49.8	110.9
48"		-	29.8	43.5	97.0
54"		-	26.5	38.7	86.2
60"		-	23.8	34.8	77.6
66"		-	21.7	31.7	70.6
72"		-	-	29.0	64.7
19-1/8"	108"	24.5	52.5	76.8	120.0
26-1/2"		-	37.9	55.4	120.0
30"		-	33.5	48.9	120.0
37"		-	27.2	39.7	98.7
42"		-	23.9	35.0	87.0
48"		-	20.9	30.6	76.1
54"		-	-	27.2	67.6
60"		-	-	24.5	60.9
19-1/8"	120"	-	38.3	56.0	120.0
26-1/2"		-	27.6	40.4	110.9
30"		-	24.4	35.7	97.9
37"		-	-	28.9	79.4
42"		-	-	25.5	69.9
48"		-	-	22.3	61.2
54"		-	-	-	54.4
57"		-	-	-	51.5
19-1/8"	132"	-	28.8	42.0	116.8
26-1/2"		-	20.8	30.3	84.3
30"		-	-	26.8	74.5
37"		-	-	21.7	60.4
42"		-	-	-	53.2
48"		-	-	-	46.5
52"		-	-	-	43.0
19-1/8"	144"	-	22.2	32.4	90.0
26-1/2"		-	-	23.4	64.9
30"		-	-	20.6	57.4
37"		-	-	-	46.5
42"		-	-	-	41.0
48"		-	-	-	35.8

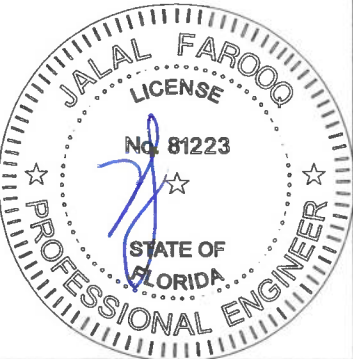


TYPICAL MULLION ARRANGEMENTS

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

NOTE:
MULLIONS RATED IN THESE CHARTS MAY BE ORIENTED
VERTICALLY OR HORIZONTALLY.
(INTERPOLATION BETWEEN WIDTHS ALLOWED)

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By: *Manuel Fern*
Miami-Dade Product Control



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EXTRUDED ALUMINUM CLIPPED MULLIONS

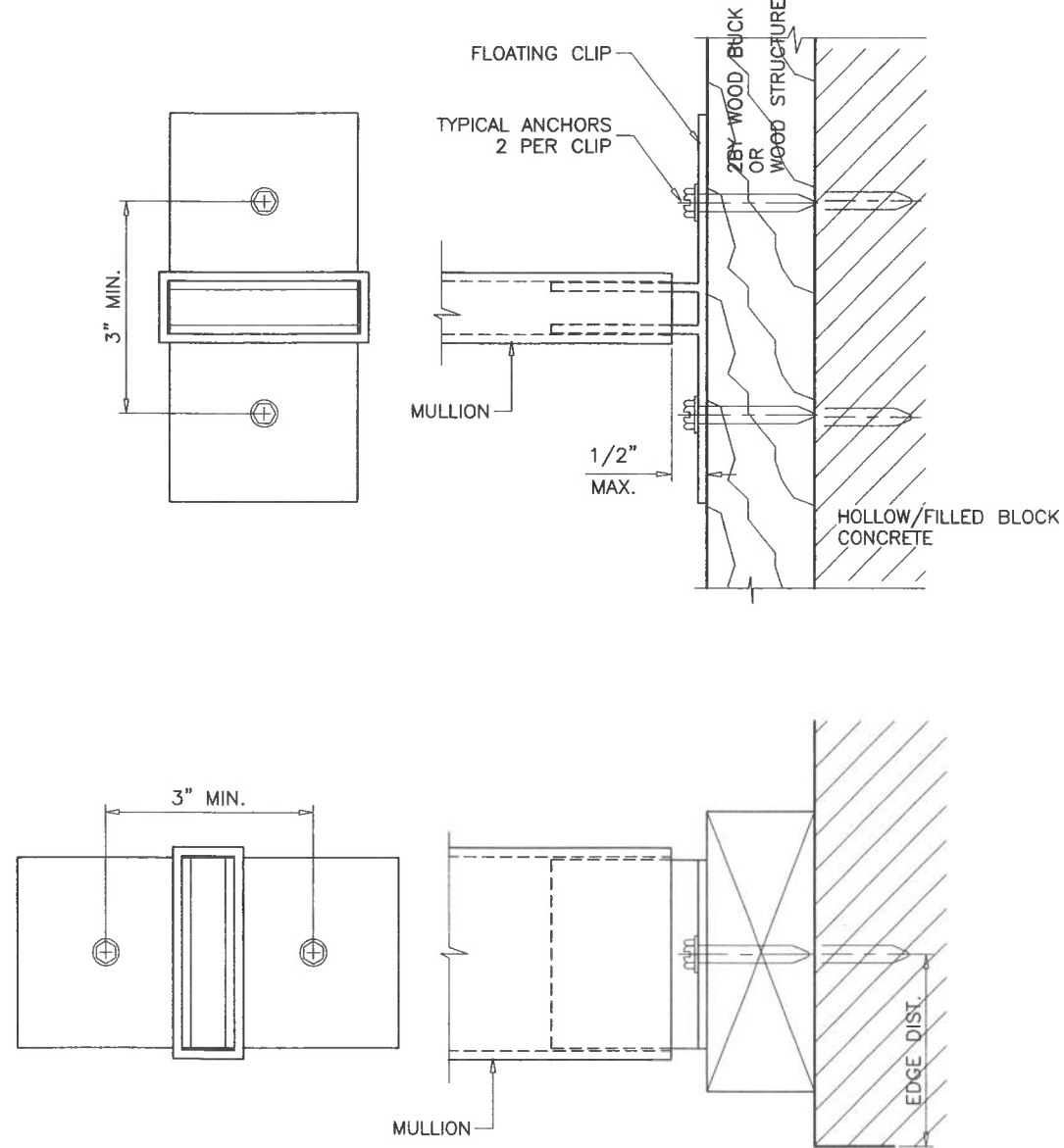
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drawing no.
22-13D
sheet 3 of 10

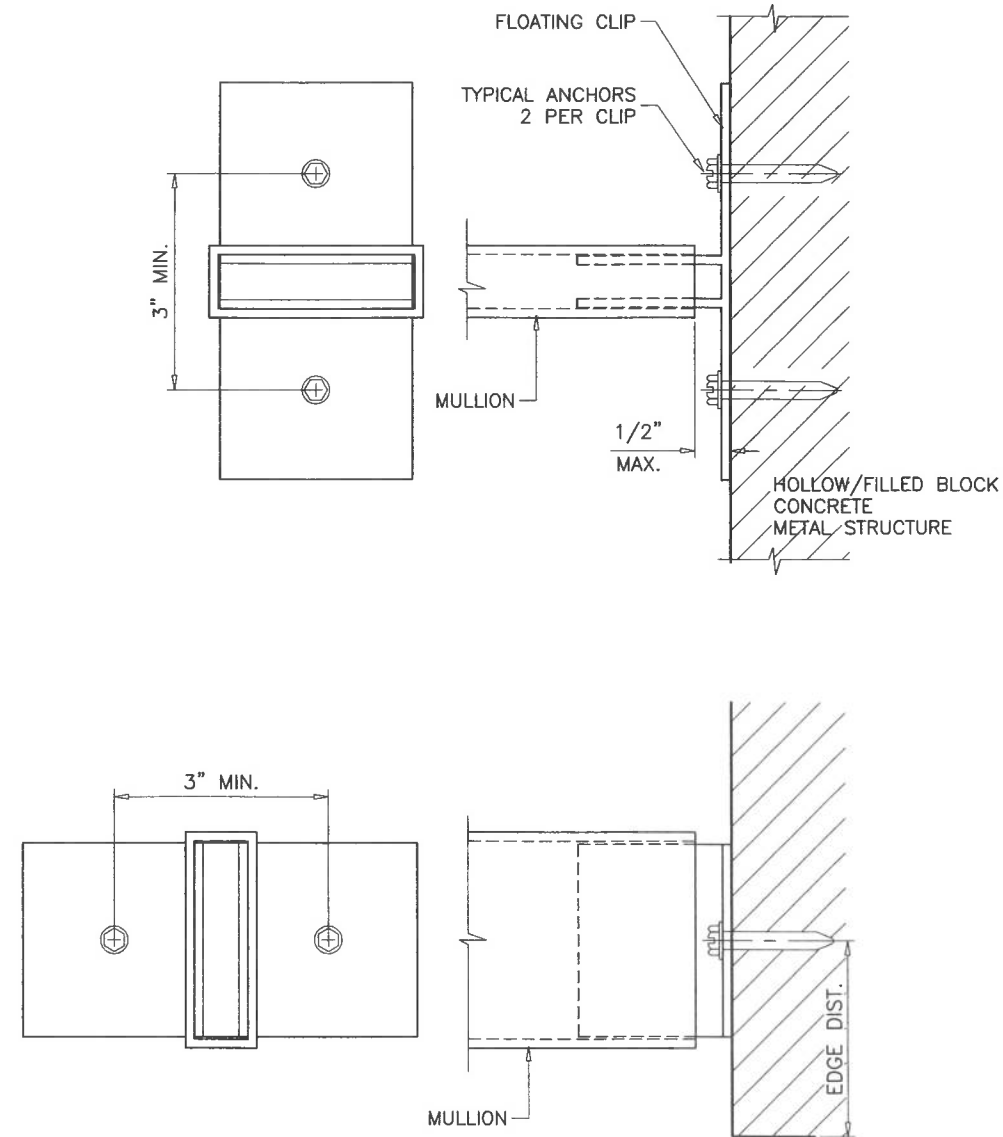
ALL LOADS ARE EXT.(+)/INT.(-).



TYPICAL ANCHORS TYPE 'W2'

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES (W2)
THRU 1BY BUCKS INTO CONC. OR MASONRY (W2)

SEE SHEET 5 FOR ANCHOR CAPACITIES

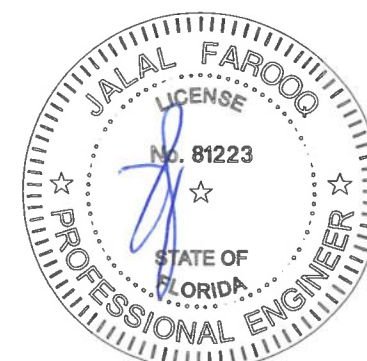


TYPICAL ANCHORS TYPE 'B2', 'C2', 'M2'

DIRECTLY INTO HOLLOW/FILLED BLOCK (B2)
DIRECTLY INTO CONCRETE (C2)
INTO METAL STRUCTURES (M2)

SEE SHEET 5 FOR ANCHOR CAPACITIES

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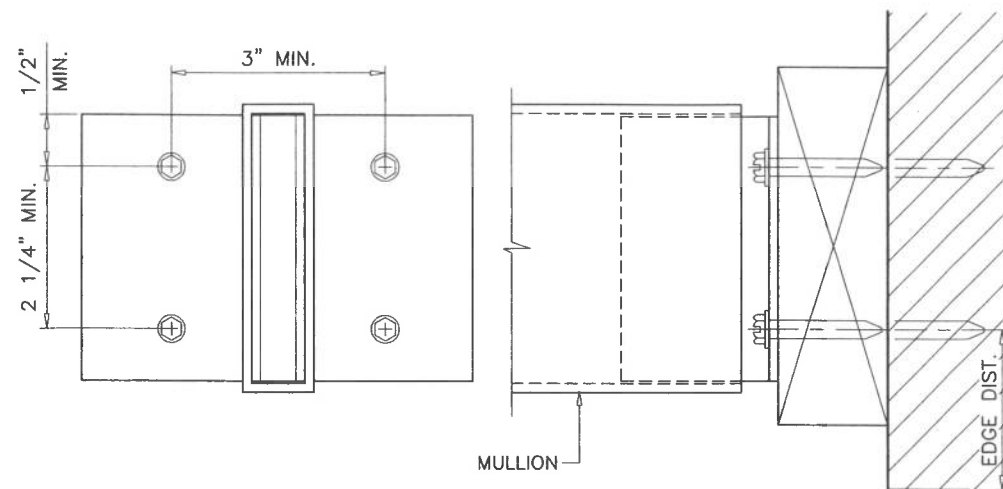
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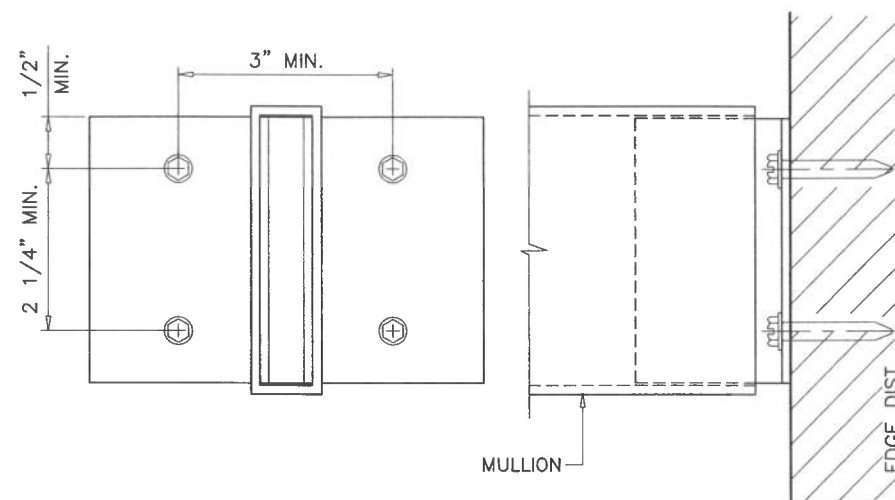
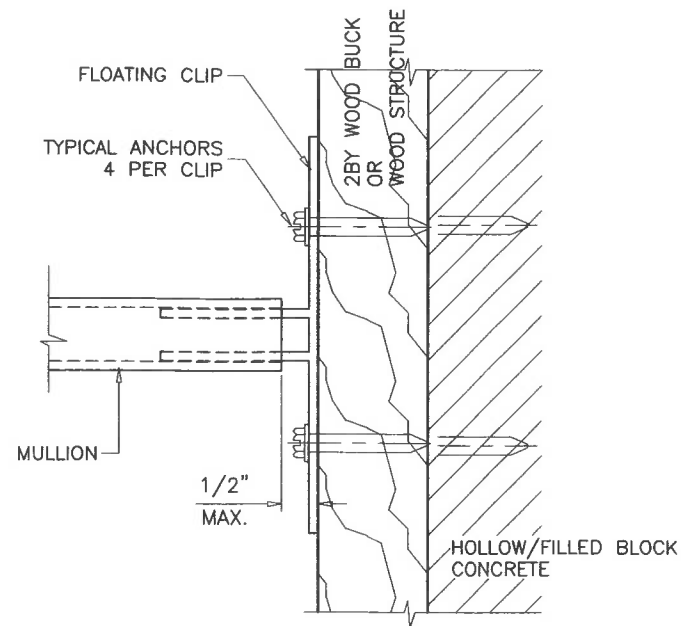
sheet 4 of 10



TYPICAL ANCHORS TYPE 'W4'

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES (W4)
THRU 1BY BUCKS INTO CONC. OR MASONRY (W4)

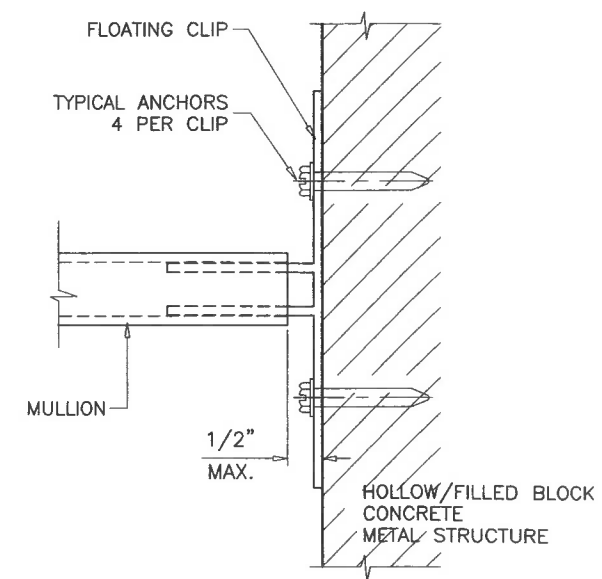
SEE SHEET 7 FOR ANCHOR CAPACITIES



TYPICAL ANCHORS TYPE 'B4', 'C4', 'M4'

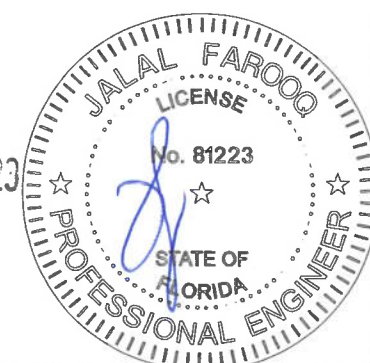
DIRECTLY INTO HOLLOW/FILLED BLOCK (B4)
DIRECTLY INTO CONCRETE (C4)
INTO METAL STRUCTURES (M4)

SEE SHEET 7 FOR ANCHOR CAPACITIES



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date:	04-22-22				
scale:	3/8" = 1"				
dr. by:	TARIQ				
chk. by:					
drawing no.	22-13D				
sheet	6 of 10				

MULLION 22-13D-W

DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		ANCHORS TYPE			
WIDTH (W)	MULL SPAN	W4	B4	C4	M4
19-1/8"	38-3/8"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0
48"		120.0	120.0	120.0	120.0
54"		120.0	120.0	120.0	120.0
60"		120.0	120.0	120.0	120.0
66"		120.0	120.0	120.0	120.0
72"		110.1	110.5	120.0	120.0
19-1/8"	50-5/8"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0
48"		120.0	120.0	120.0	120.0
54"		111.2	111.7	120.0	120.0
60"		100.1	100.5	114.5	120.0
66"		91.0	91.4	104.1	120.0
72"		83.4	83.8	95.4	120.0
19-1/8"	63"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		120.0	120.0	120.0	120.0
42"		114.9	115.4	120.0	120.0
48"		100.6	101.0	115.0	120.0
54"		89.4	89.7	102.3	120.0
60"		80.5	80.8	92.0	119.2
66"		73.1	73.4	83.7	108.3
72"		67.0	67.3	76.7	99.3
19-1/8"	74-1/4"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		110.7	111.1	120.0	120.0
42"		97.5	97.9	111.6	120.0
48"		85.3	85.7	97.6	120.0
54"		75.9	76.1	86.8	112.3
60"		68.3	68.5	78.1	101.1
66"		62.1	62.3	71.0	91.9
72"		56.9	57.1	65.1	84.3
19-1/8"	76"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		108.2	108.6	120.0	120.0
42"		95.3	95.6	109.0	120.0
48"		83.4	83.7	95.4	120.0
54"		74.1	74.4	84.8	109.8
60"		66.7	66.9	76.3	98.8
66"		60.6	60.9	69.4	89.8
72"		55.6	55.8	63.6	82.3

DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		ANCHORS TYPE			
WIDTH (W)	MULL SPAN	W4	B4	C4	M4
19-1/8"	84"	120.0	120.0	120.0	120.0
26-1/2"		120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0
37"		97.9	98.2	111.9	120.0
42"		86.2	86.5	98.6	120.0
48"		75.4	75.7	86.3	111.7
54"		67.0	67.3	76.7	99.3
60"		60.3	60.6	69.0	89.4
66"		54.9	55.1	62.8	81.2
72"		50.3	50.5	57.5	74.5
19-1/8"	96"	120.0	120.0	120.0	120.0
26-1/2"		119.5	120.0	120.0	120.0
30"		105.6	106.0	120.0	120.0
37"		85.6	85.9	97.9	120.0
42"		75.4	75.7	86.3	111.7
48"		66.0	66.3	75.5	97.8
54"		58.7	58.9	67.1	86.9
60"		52.8	53.0	60.4	78.2
66"		48.0	48.2	54.9	71.1
72"		44.0	44.2	50.3	65.2
19-1/8"	108"	120.0	120.0	120.0	120.0
26-1/2"		106.3	106.7	120.0	120.0
30"		93.9	94.2	107.4	120.0
37"		76.1	76.4	87.1	112.7
42"		67.0	67.3	76.7	99.3
48"		58.7	58.9	67.1	86.9
54"		52.1	52.3	59.7	77.2
60"		46.9	47.1	53.7	69.5
19-1/8"	120"	120.0	120.0	120.0	120.0
26-1/2"		95.6	96.0	109.4	120.0
30"		84.5	84.8	96.6	120.0
37"		68.5	68.8	78.4	101.4
42"		60.3	60.6	69.0	89.4
48"		52.8	53.0	60.4	78.2
54"		46.9	47.1	53.7	69.5
57"		44.5	44.6	50.9	65.9
19-1/8"	132"	120.0	120.0	120.0	120.0
26-1/2"		86.9	87.3	99.5	120.0
30"		76.8	77.1	87.9	113.7
37"		62.3	62.5	71.2	92.2
42"		54.9	55.1	62.8	81.2
48"		48.0	48.2	54.9	71.1
52"		44.3	44.5	50.7	65.6
19-1/8"	144"	110.4	110.8	120.0	120.0
26-1/2"		79.7	80.0	91.2	118.0
30"		70.4	70.7	80.5	104.3
37"		57.1	57.3	65.3	84.5
42"		50.3	50.5	57.5	74.5
48"		44.0	44.2	50.3	65.2

TYPICAL ANCHORS:

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

W4: INTO 2BY WOOD BUCKS OR WOOD STRUCTURES

1-1/2" MIN. PENETRATION INTO WOOD

W4: THRU 1BY BUCKS INTO CONCRETE

1-1/4" MIN. EMBED INTO CONCRETE

B4: THRU 1BY BUCKS INTO BLOCKS OR DIRECTLY INTO BLOCKS

1-1/4" MIN. EMBED INTO BLOCK

C4: DIRECTLY INTO CONCRETE

1-1/4" MIN. EMBED INTO CONCRETE

#14 SMS OR SELF-DRILLING SCREWS (GRADE 2 CRS)

M4: INTO METAL STRUCTURES

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

INTO WOOD STRUCTURE = 1" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.

C-90 HOLLOW/FILLED NORMAL WEIGHT BLOCK AT JAMBS f'm = 2000 PSI MIN.

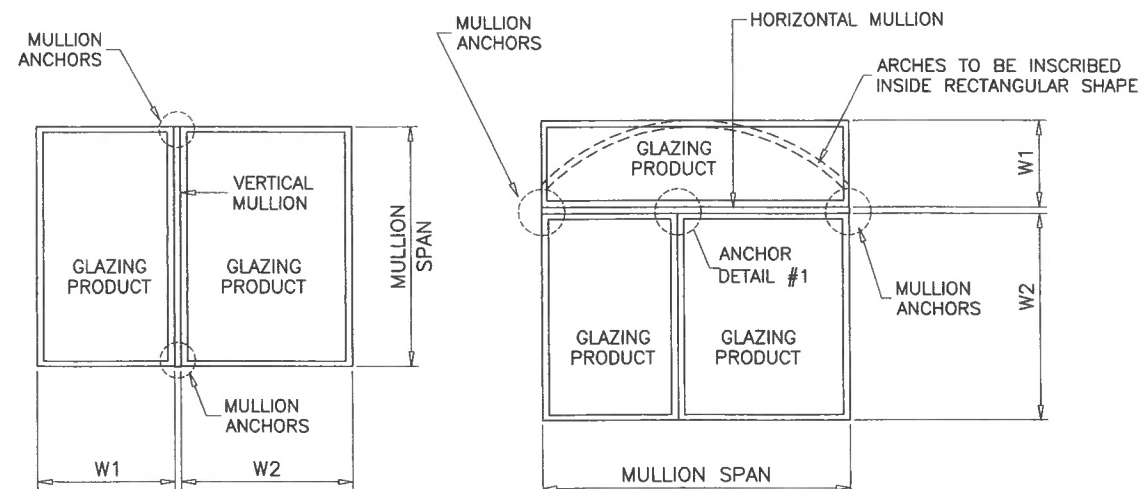
ANCHORS MAY BE HEX OR FLAT HEAD

NOTE:

ANY ANCHOR CONDITION SHOWN HEREIN MAY COVER LOCATIONS AT HEAD, SILL OR JAMB ENDS.

SEE SHEETS 6 FOR ANCHOR DETAILS.

(INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED)



TYPICAL MULLION ARRANGEMENTS

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

ALL LOADS ARE EXT.(+)/INT.(-).

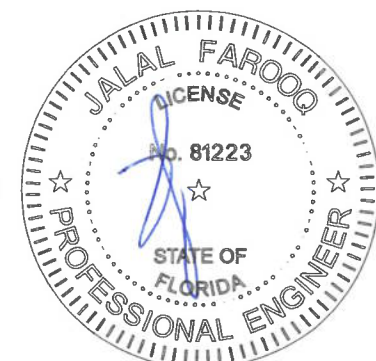
JUL 26 2023

PRODUCT APPROVED
As complying with the Florida
Building Code

NOA-No. **23-0731.04**

Approval Date: **08/31/2023**

By: *Manuel Fern*
Miami-Dade Product Control



EXTRUDED ALUMINUM CLIPPED MULLIONS

Labrador & Fundora Corp.

dba-V & V Windows

14150 N.W. 56th Court, Suite 600

Opa-Locka, FL 33054

Tel. (305) 888-4151

www.vvwindows.com

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL (305) 264-8100
FBPE #3538

MULLION 22-13D-V

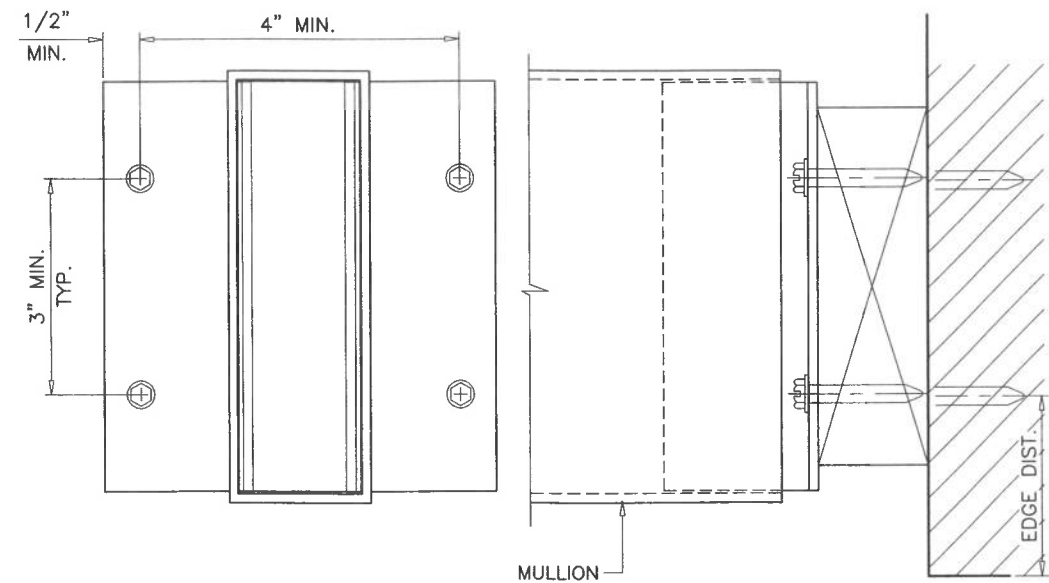
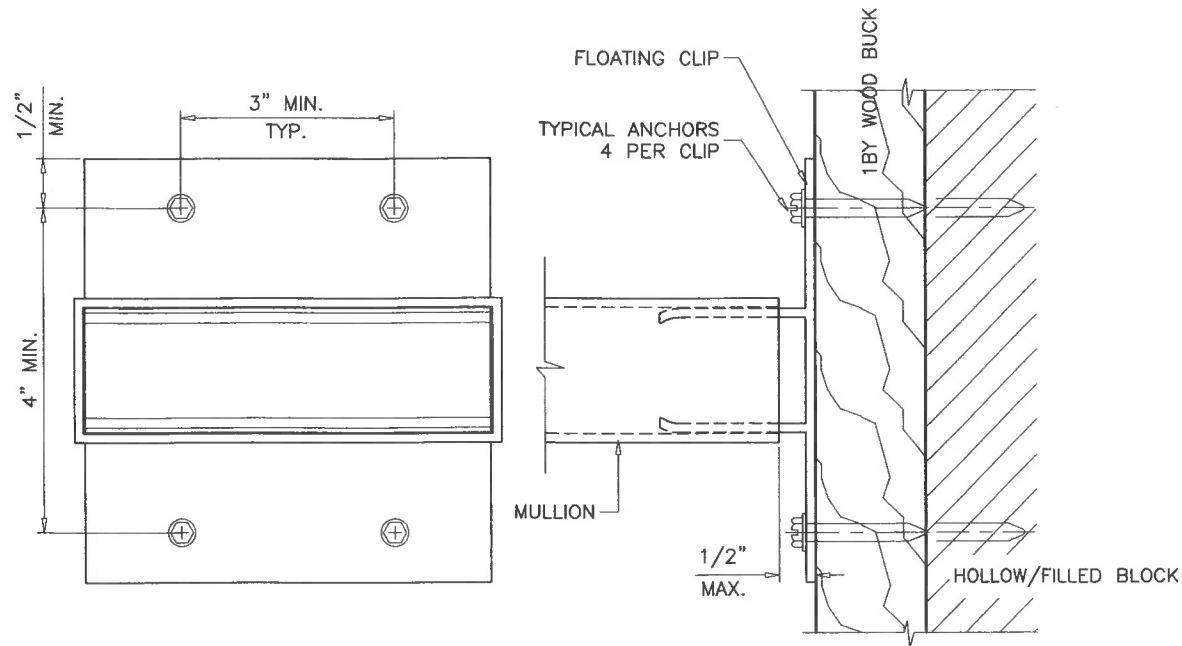
revisions:
no date by description

date: 04-22-22
scale: -
dr. by: TARIQ
chk. by:

drawing no.

22-13D

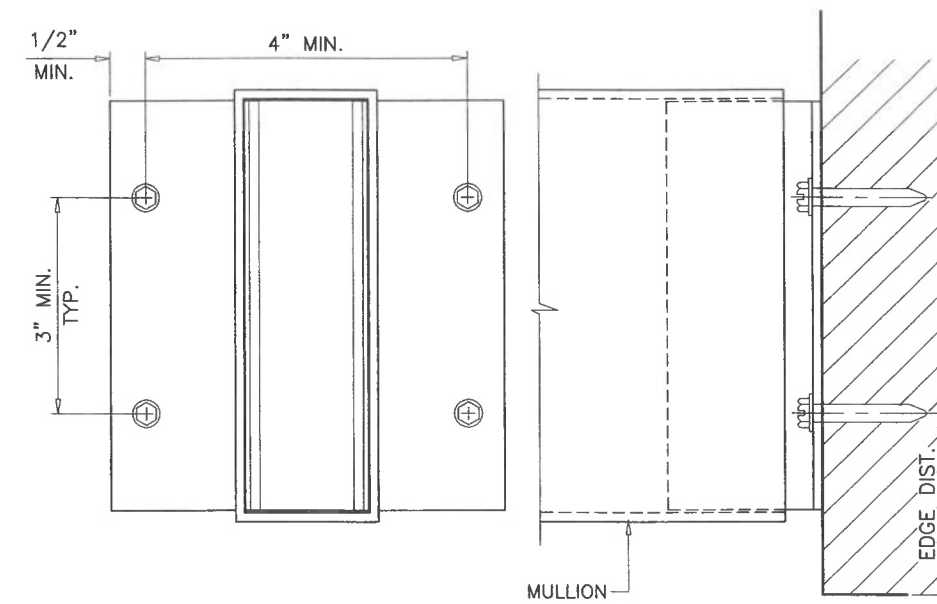
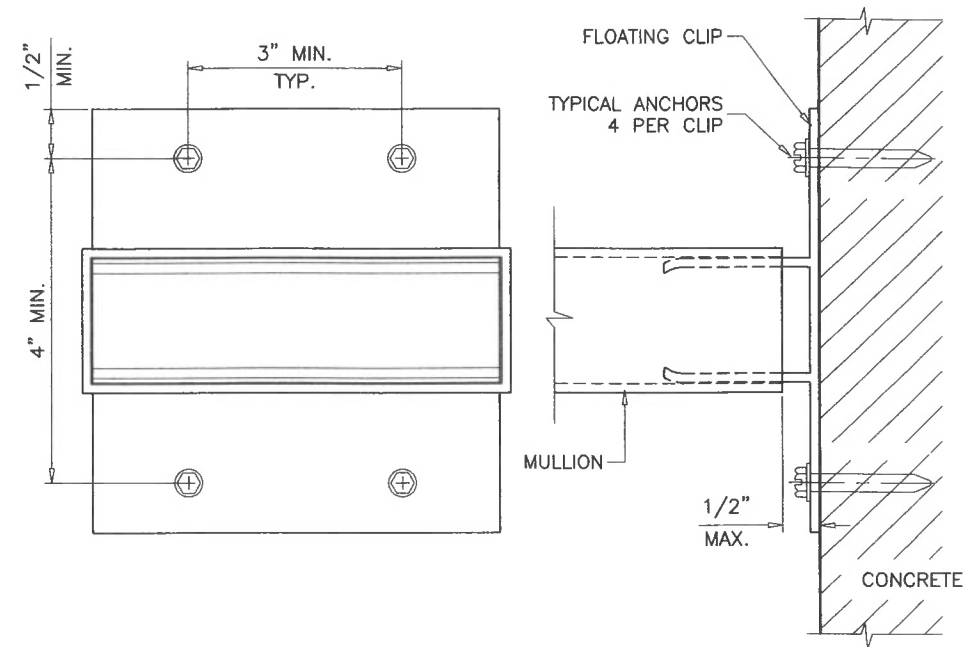
sheet 7 of 10



TYPICAL ANCHORS TYPE 'B4A'

THRU 1BY BUCKS INTO BLOCKS OR DIRECTLY INTO BLOCKS

SEE SHEET 9 FOR ANCHOR CAPACITIES



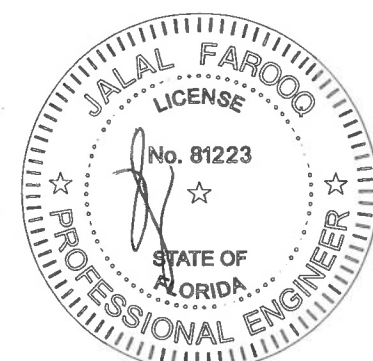
TYPICAL ANCHORS TYPE 'C4A'

DIRECTLY INTO CONCRETE

SEE SHEET 9 FOR ANCHOR CAPACITIES

PRODUCT APPROVED
As complying with the Florida
Building Code
NOA-No. **23-0731.04**
Approval Date: **08/31/2023**
By: *Manuel Fern*
Miami-Dade Product Control

JUL 26 2023



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
FBPE #3598

22-13D-W

EXTRUDED ALUMINUM CLIPPED MULLIONS

Lobrador & Fundora Corp.
dba-V & V Windows
14150 N.W. 56th Court, Suite 600
Opa-Locka, FL 33054
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revisions:	
no	date by description

date: 04-22-22

scale: 3/8" = 1"

dr. by: TARIQ

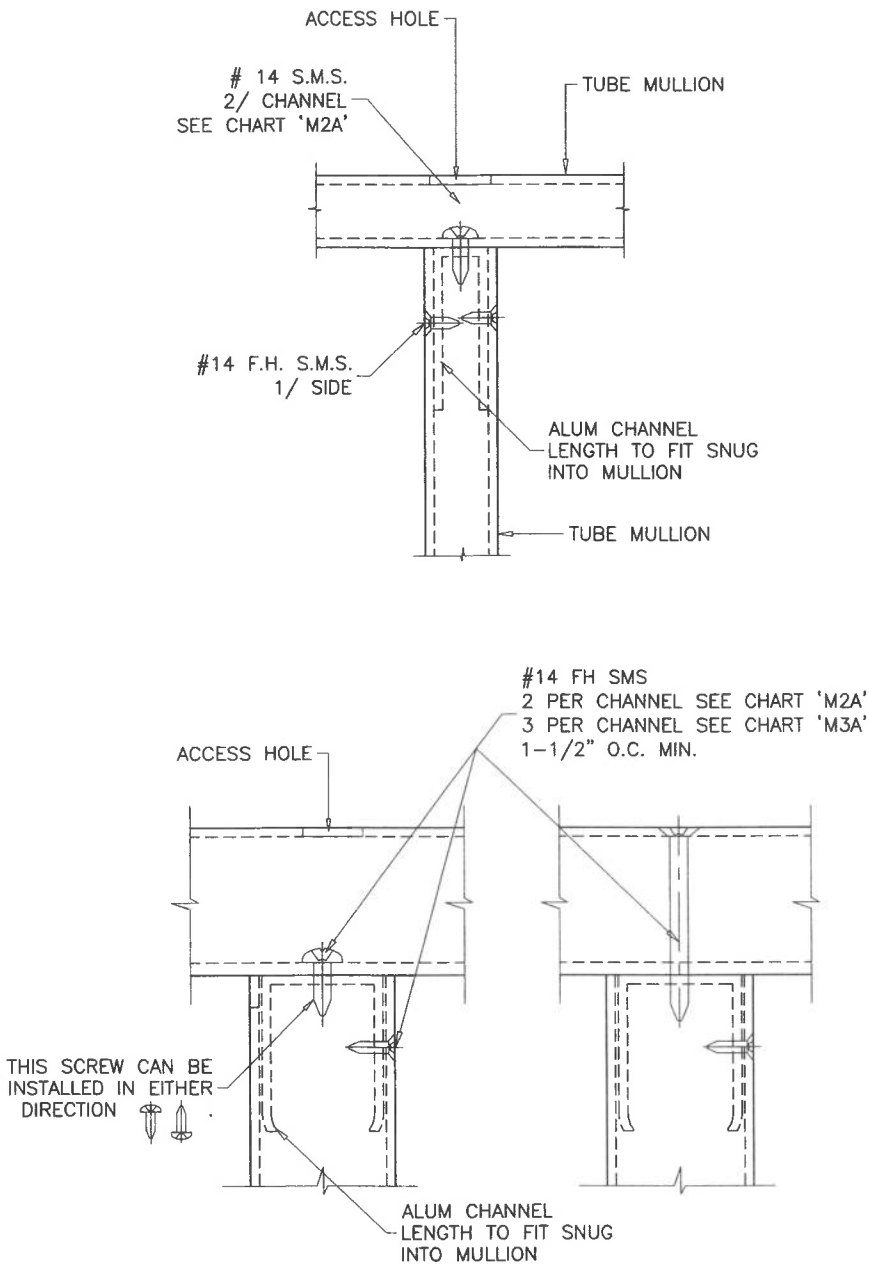
chk. by:

drawing no.

22-13D

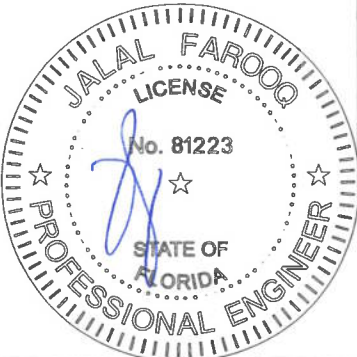
sheet 8 of 10

DESIGN LOAD CAPACITY - PSF				DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		ANCHORS TYPE		WINDOW DIMS.		ANCHORS TYPE	
WIDTH (W)	MULL SPAN	M2A	M3A	WIDTH (W)	MULL SPAN	M2A	M3A
19-1/8"	38-3/8"	120.0	120.0	19-1/8"	84"	120.0	120.0
26-1/2"		120.0	120.0	26-1/2"		115.9	120.0
30"		120.0	120.0	30"		102.4	120.0
37"		120.0	120.0	37"		83.0	120.0
42"		120.0	120.0	42"		73.1	109.7
48"		120.0	120.0	48"		64.0	96.0
54"		120.0	120.0	54"		56.9	85.3
60"		112.1	120.0	60"		51.2	76.8
66"	50-5/8"	101.9	120.0	66"	96"	46.5	69.8
72"		93.4	120.0	72"		42.7	64.0
19-1/8"		120.0	120.0	19-1/8"		120.0	120.0
26-1/2"		120.0	120.0	26-1/2"		101.4	120.0
30"		120.0	120.0	30"		89.6	120.0
37"		120.0	120.0	37"		72.6	109.0
42"		120.0	120.0	42"		64.0	96.0
48"		106.2	120.0	48"		56.0	84.0
54"	63"	94.4	120.0	54"	108"	49.8	74.7
60"		85.0	120.0	60"		44.8	67.2
66"		77.2	115.8	66"		40.7	61.1
72"		70.8	106.2	72"		37.3	56.0
19-1/8"		120.0	120.0	19-1/8"	120"	120.0	120.0
26-1/2"		120.0	120.0	26-1/2"		90.2	120.0
30"		120.0	120.0	30"		79.6	119.5
37"		110.7	120.0	37"		64.6	96.9
42"		97.5	120.0	42"		56.9	85.3
48"		85.3	120.0	48"		49.8	74.7
54"		75.9	113.8	54"		44.2	66.4
60"	74-1/4"	68.3	102.4	60"		39.8	59.7
66"		62.1	93.1	19-1/8"	132"	112.4	120.0
72"		56.9	85.3	26-1/2"		81.1	120.0
19-1/8"		120.0	120.0	30"		71.7	107.5
26-1/2"		120.0	120.0	37"		58.1	87.2
30"		115.8	120.0	42"		51.2	76.8
37"		93.9	120.0	48"		44.8	67.2
42"	76"	82.7	120.0	54"		39.8	59.7
48"		72.4	108.6	57"		37.7	56.6
54"		64.4	96.5	19-1/8"	144"	102.2	120.0
60"		57.9	86.9	26-1/2"		73.8	110.7
66"		52.7	79.0	30"		65.2	97.7
72"		48.3	72.4	37"		52.8	79.3
19-1/8"	76"	120.0	120.0	42"		46.5	69.8
26-1/2"		120.0	120.0	48"		40.7	61.1
30"		113.2	120.0	52"		37.6	56.4
37"		91.8	120.0	19-1/8"		93.7	120.0
42"		80.8	120.0	26-1/2"		67.6	101.4
48"		70.7	106.1	30"		59.7	89.6
54"		62.9	94.3	37"		48.4	72.6
60"		56.6	84.9	42"		42.7	64.0
66"		51.4	77.2	48"		37.3	56.0
72"		47.2	70.7				



ANCHOR DETAIL #1
METAL TO METAL CONNECTION

PRODUCT APPROVED
As complying with the Florida Building Code
NOA-No. **23-0731.04**
Approval Date: **08/31/2023**
By: *Manuel Fern*
Miami-Dade Product Control



JUL 26 2023

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revisions:		date:		scale:		drawing no.	
no	by description	date	by	scale	by	no.	
				3/8" = 1"	dr. by: TARIQ	22-13D	
					chk. by:	sheet 10 of 10	