



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 (Rectangular or Bay) Mullion – L.M.I.

APPROVAL DOCUMENT: Drawing No. **22-130**, Rev A titled "Extruded Aluminum Clipped Mullions", sheets 1 through 10 of 10, dated 04/22/22 and last revised on NOV 11, 2024, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Revision 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

Limitations:

1. Bay Mullion can only be used as Vertically oriented, see sheet 3 for the charts and sheet 10 for installation. Two pieces Bay mullion to be secured together with #10 screws at 18" OC.
2. 1X or 2X bucks to be engineered and secured to transfer load to the Substrates. See the note on sheet 3.

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 **revises #23-0731.04** consists of this page 1 and evidence page E-1 and E-2, as well as the approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

Ishaq I. Chanda



NOA No. 24-0819.02
Expiration Date: August 31, 2028
Approval Date: November 27, 2024
Page 1

Labrador & Fundora Corp. dba V & V Windows

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous approval
- A. **DRAWINGS**
 1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 23-0731.04)
 2. Drawing No. **22-130**, 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.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0819.02
Expiration Date: August 31, 2028
Approval Date: November 27, 2024

Labrador & Fundora Corp. dba V & V Windows

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. New Evidence submitted under previous approval
- A. **DRAWINGS**
 1. Drawing No. **22-130**, Rev **A** titled “Extruded Aluminum Clipped Mullions”, sheets 1 through 10 of 10, dated 04/22/22 and last revised on NOV 11, 2024, 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-24-8182**, dated 06/26/24 and last revised on 10/18/24, signed and sealed by Ram N. Tewari, P.E.
- C. **CALCULATIONS**
 1. Anchor verification calculations and structural analysis, complying with **FBC 8th Edition (2023)**, dated 08/25/24, 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 8th Edition (2023)**, and of no financial interest, dated 08/15/24, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
- G. **OTHERS**
 1. This NOA **revises #23-0731.04**, expiring 08/31/28.
 2. RER test proposal # **24-0224**, dated March 22, 2024.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0819.02
Expiration Date: August 31, 2028
Approval Date: November 27, 2024

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** **FOR RECTANGULAR TUBE MULLIONS:** USE ANCHOR TYPES AND ANCHOR CAPACITY CHARTS ON SHEETS 4 THRU 9.1
FOR BAY MULLIONS: USE ANCHORS ON SHEET 10, SELECT ANCHOR TYPE WITH DESIGN RATING MORE THAN THE DESIGN LOADS SPECIFIED IN STEP 1 ABOVE.

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 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.

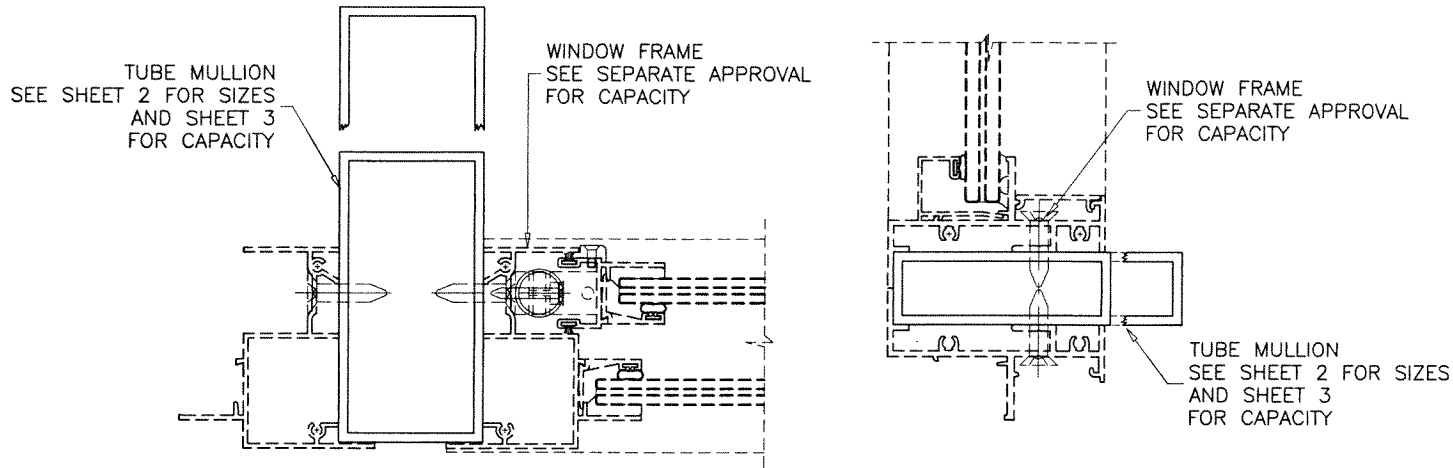
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

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 2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

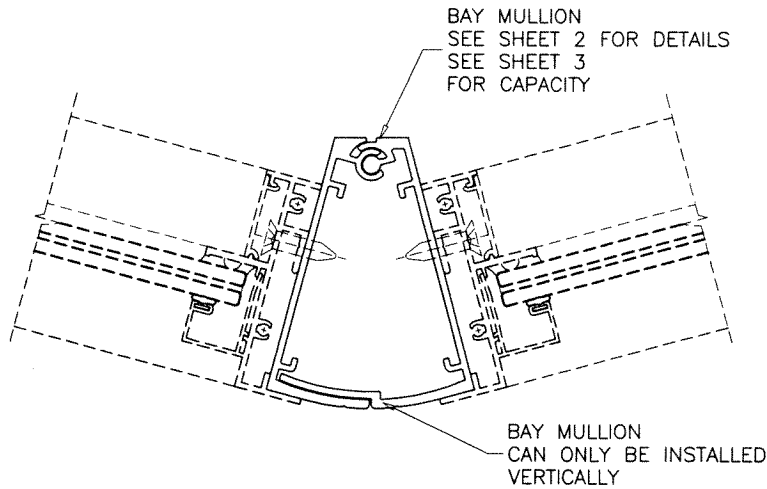
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, I.E. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,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

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



RECTANGULAR MULLIONS CONTAINING TYPICAL GLAZING PRODUCTS
HORIZONTAL OR VERTICAL

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

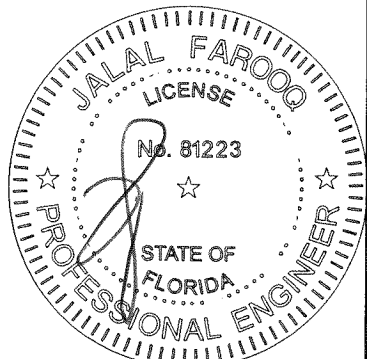


TWO PIECE BAY MULLIONS CONTAINING TYPICAL GLAZING PRODUCTS
VERTICAL ORIENTATION ONLY

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0819.02
Expiration Date 08/31/2028
By Ishag I. Chanda
Miami-Dade Product Control

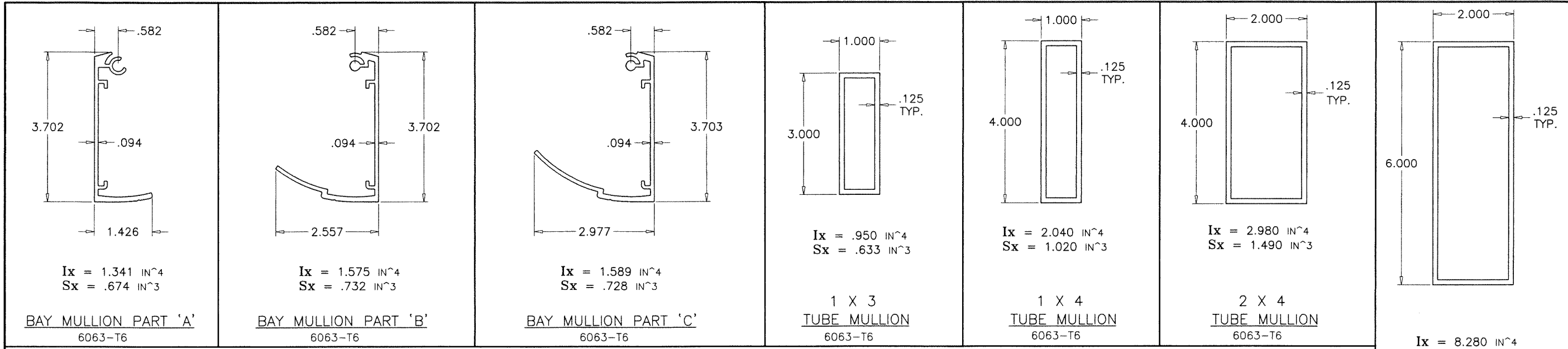
NOV 11 2024



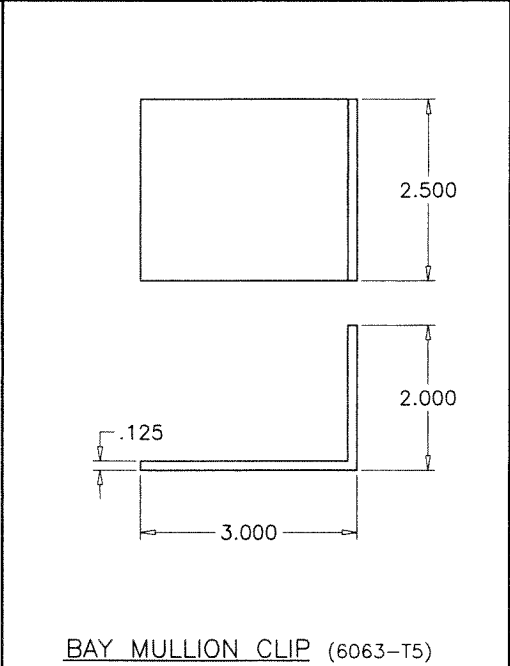
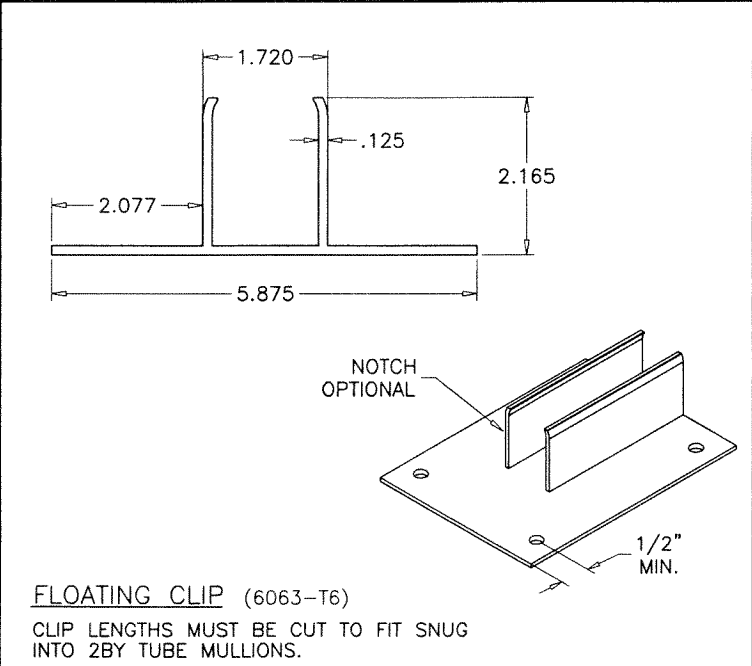
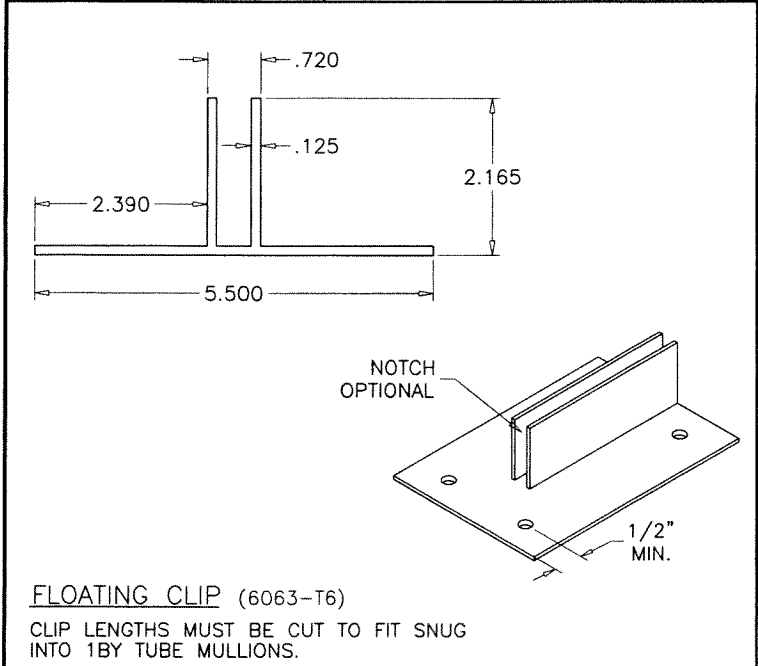
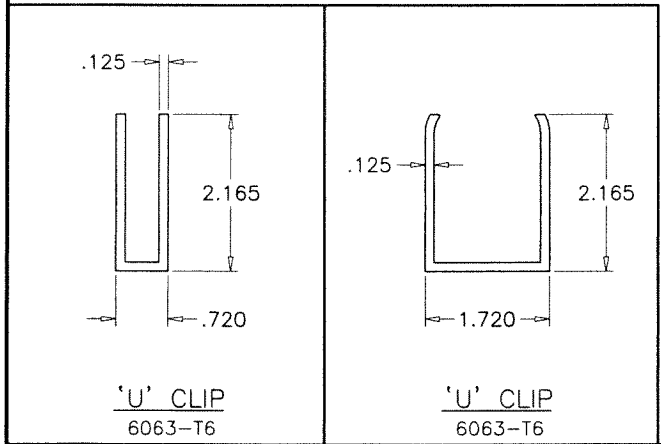
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538

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

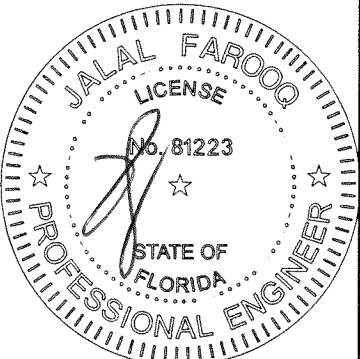
revisions:
no. date by description
A 07.24.24 BAY MULLION ADDED
date: 04-22-22
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no.
22-13D
sheet 1 of 10



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0819.02
Expiration Date 08/31/2028
By Ishaq I. Chandra
Miami-Dade Product Control



NOV 11 2024



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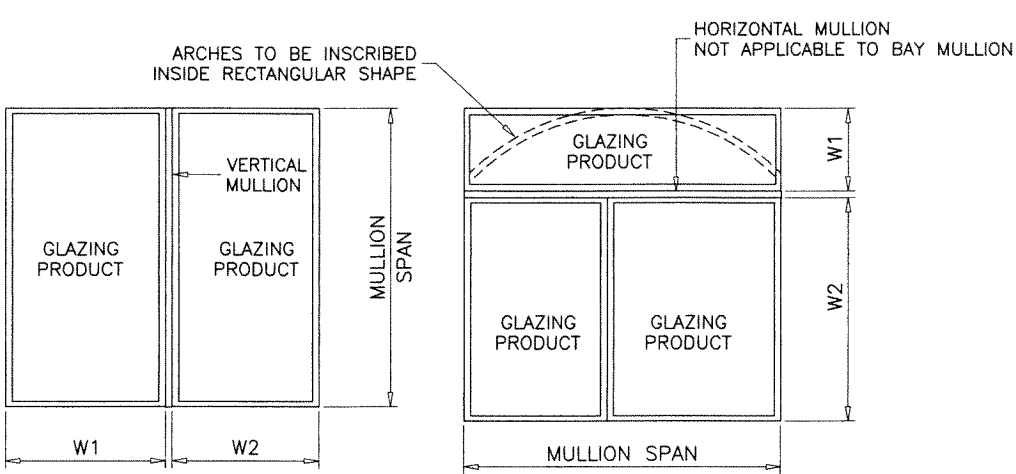
revisions:	no	date	by	description
	A	07/24/24		BAY MULLION ADDED

date: 04-22-22
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
22-13D
sheet 2 of 10

DESIGN LOAD CAPACITY - PSF						
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	2 X 6	BAY
WIDTH (W)	MULL SPAN	TUBE	TUBE	TUBE	STD.	MULLION
19-1/8"	38-3/8"	120.0	120.0	120.0	120.0	70.0
26-1/2"		120.0	120.0	120.0	120.0	70.0
30"		120.0	120.0	120.0	120.0	70.0
37"		120.0	120.0	120.0	120.0	70.0
42"		120.0	120.0	120.0	120.0	70.0
48"		120.0	120.0	120.0	120.0	70.0
54"		120.0	120.0	120.0	120.0	70.0
60"		112.5	120.0	120.0	120.0	70.0
66"	50-5/8"	102.2	120.0	120.0	120.0	70.0
72"		93.7	120.0	120.0	120.0	70.0
19-1/8"		120.0	120.0	120.0	120.0	70.0
26-1/2"		120.0	120.0	120.0	120.0	70.0
30"		120.0	120.0	120.0	120.0	70.0
37"		103.0	120.0	120.0	120.0	70.0
42"		90.8	120.0	120.0	120.0	70.0
48"		79.4	120.0	120.0	120.0	70.0
54"	63"	70.6	112.5	120.0	120.0	70.0
60"		63.5	101.3	120.0	120.0	70.0
66"		57.8	92.1	120.0	120.0	70.0
72"		53.0	84.4	120.0	120.0	70.0
19-1/8"		120.0	120.0	120.0	120.0	70.0
26-1/2"		89.0	120.0	120.0	120.0	70.0
30"		78.6	120.0	120.0	120.0	70.0
37"		63.7	104.3	120.0	120.0	70.0
42"	74-1/4"	56.1	91.9	120.0	120.0	70.0
48"		49.1	80.4	120.0	120.0	70.0
54"		43.7	71.5	111.5	120.0	70.0
60"		39.3	64.3	100.3	120.0	70.0
66"		35.7	58.5	91.2	120.0	-
72"		32.7	53.6	83.6	120.0	-
19-1/8"		75.3	120.0	120.0	120.0	70.0
26-1/2"		54.4	103.4	120.0	120.0	70.0
30"	76"	48.0	91.3	120.0	120.0	70.0
37"		38.9	74.0	116.3	120.0	70.0
42"		34.3	65.2	102.4	120.0	70.0
48"		30.0	57.1	89.6	120.0	70.0
54"		26.7	50.7	79.7	120.0	70.0
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"	84"	70.2	120.0	120.0	120.0	70.0
26-1/2"		50.7	98.5	120.0	120.0	70.0
30"		44.8	87.0	120.0	120.0	70.0
37"		36.3	70.5	110.8	120.0	70.0
42"		32.0	62.1	97.6	120.0	70.0
48"		28.0	54.4	85.4	120.0	70.0
54"		24.9	48.3	75.9	120.0	-
60"		22.4	43.5	68.4	120.0	-
66"	96"	20.3	39.5	62.1	114.1	-
72"		-	36.2	57.0	104.6	-
19-1/8"		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"	108"	-	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"		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"	120"	-	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"		-	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"	132"	-	-	25.5	69.9	-
48"		-	-	22.3	61.2	-
54"		-	-	-	54.4	-
60"		-	-	-	51.5	-
19-1/8"		-	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"	144"	-	-	-	53.2	-
48"		-	-	-	46.5	-
52"		-	-	-	43.0	-
19-1/8"		-	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	-

DESIGN LOAD CAPACITY - PSF						
WINDOW DIMS.		1 X 3	1 X 4	2 X 4	2 X 6	BAY
WIDTH (W)	MULL SPAN	TUBE	TUBE	TUBE	STD.	MULLION
19-1/8"	84"	52.0	110.6	120.0	120.0	70.0
26-1/2"		37.5	79.8	117.7	120.0	70.0
30"		33.2	70.5	104.0	120.0	70.0
37"		26.9	57.2	84.3	120.0	70.0
42"		23.7	50.4	74.3	120.0	69.4
48"		20.7	44.1	65.0	120.0	61.3
54"		-	39.2	57.8	113.5	-
60"		-	35.3	52.0	102.2	-
66"	96"	-	32.1	47.3	92.9	-
72"		-	29.4	43.3	85.2	-
19-1/8"		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"	108"	-	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"		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"	120"	-	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"		-	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"	132"	-	-	25.5	69.9	-
48"		-	-	22.3	61.2	-
54"		-	-	-	54.4	-
60"		-	-	-	51.5	-
19-1/8"		-	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"	144"	-	-	-	53.2	-
48"		-	-	-	46.5	-
52"		-	-	-	43.0	-
19-1/8"		-	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

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

NOTE:
RECTANGULAR TUBE MULLIONS RATED IN THESE CHARTS MAY
BE ORIENTED VERTICALLY OR HORIZONTALLY.
(INTERPOLATION BETWEEN WIDTHS ALLOWED)
BAY MULLION ONLY VERTICAL INSTALLATIONS

BAY MULLIONS MAY BE ORIENTED VERTICALLY ONLY.

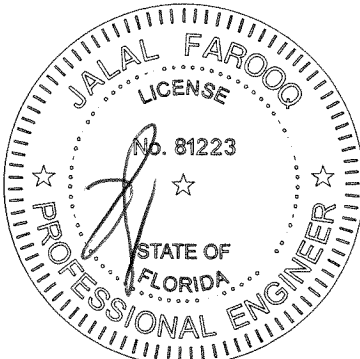
PRODUCT REVISED
as complying with the Florida
Building Code

NOA-No. 24-0819.02

Expiration Date 08/31/2028

By Ishag I. Chande
Miami-Dade Product Control

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



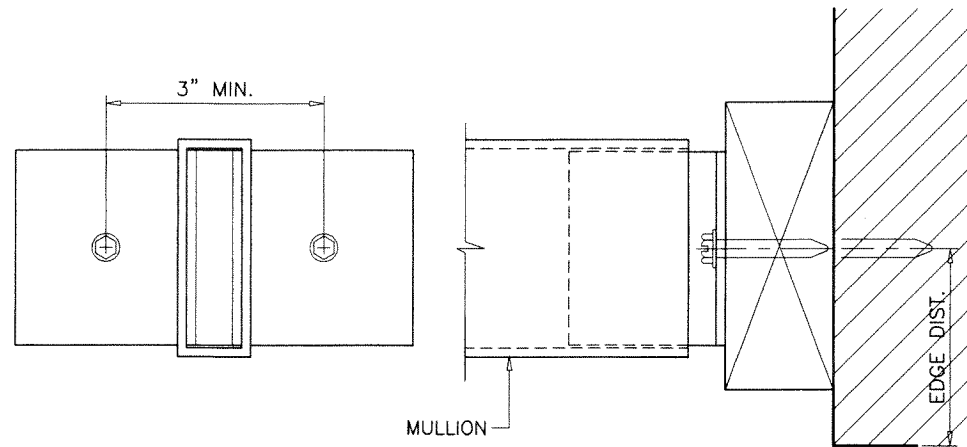
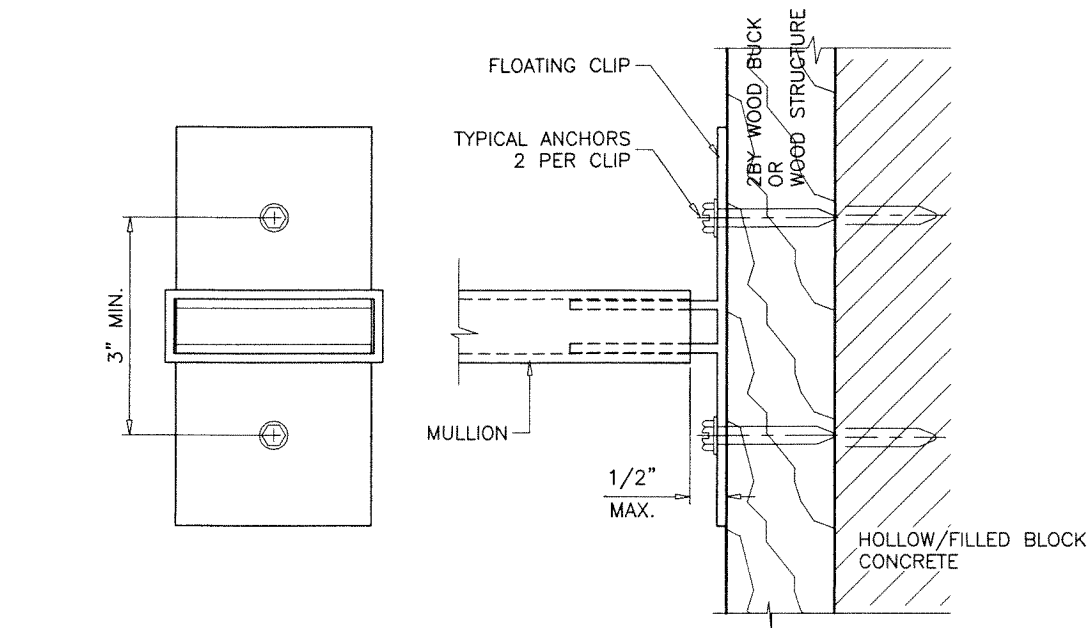
NOV 11 2024

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

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
	A	07.24.24		BAY MULLION ADDED
date:	04-22-22			
scale:	-			
dr. by:	TARIQ			
chk. by:				
drawing no.	22-13D			
sheet	3 of 10			

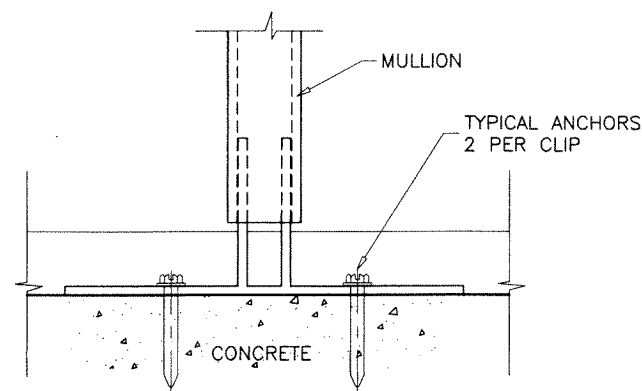
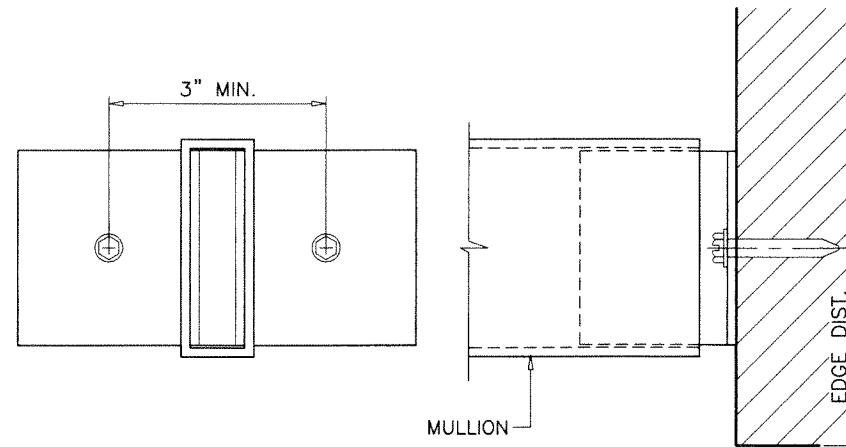
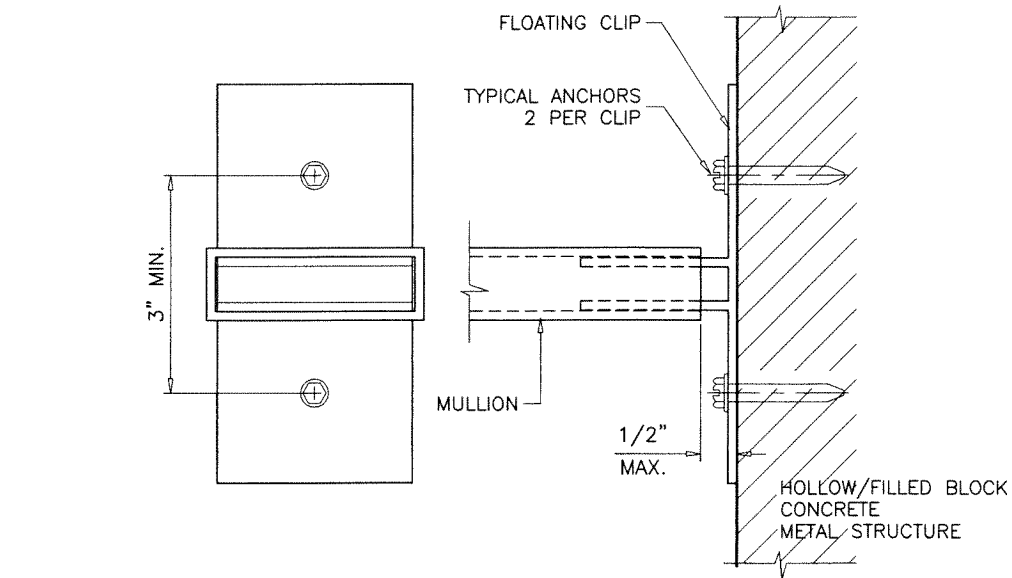


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0819.02
Expiration Date 08/31/2028
By *Ishag I. Chande*
Miami-Dade Product Control

RECTANGULAR TUBE MULLIONS 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

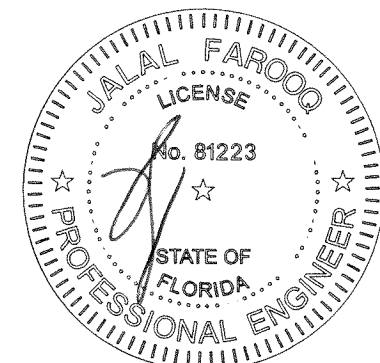


RECTANGULAR TUBE MULLIONS TYPICAL ANCHORS TYPE 'B2', 'C2', 'M2'

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

SEE SHEET 5 FOR ANCHOR CAPACITIES

NOTE:
FOR BAY MULLION ANCHORS,
SEE SHEET 10



NOV 11 2024

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FBPE #3538
MULLION 22-13D-W

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Labrador & Fundora Corp.
dba-V & V Windows
14150 N.W. 56th Court, Suite 600
Opa-Locka, FL 33054
Tel. (305) 888-4151
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revisions:	no	date	by	description
	A	07/24/24		NO CHANGE THIS SHEET
date:	04-22-22			
scale:	3/8" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	22-13D			
sheet	4 of 10			

DESIGN LOAD CAPACITY – PSF					
WINDOW DIMS.		ANCHORS TYPE			
WIDTH (W)	MULL SPAN	W2	B2	C2	M2
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"		107.1	117.6	120.0	120.0
42"		94.3	103.6	109.0	120.0
48"		82.6	90.7	95.4	120.0
54"		73.4	80.6	84.8	108.7
60"		66.0	72.5	76.3	97.8
66"	50-5/8"	60.0	66.0	69.4	88.9
72"		55.0	60.5	63.6	81.5
19-1/8"		120.0	120.0	120.0	120.0
26-1/2"		113.3	120.0	120.0	120.0
30"		100.1	110.0	115.7	120.0
37"		81.2	89.2	93.8	120.0
42"		71.5	78.6	82.6	105.9
48"		62.6	68.7	72.3	92.7
54"	63"	55.6	61.1	64.3	82.4
60"		50.1	55.0	57.8	74.1
66"		45.5	50.0	52.6	67.4
72"		41.7	45.8	48.2	61.8
19-1/8"		120.0	120.0	120.0	120.0
26-1/2"		91.1	100.1	105.2	120.0
30"		80.5	88.4	93.0	119.2
37"		65.2	71.7	75.4	96.6
42"	74-1/4"	57.5	63.1	66.4	85.1
48"		50.3	55.2	58.1	74.5
54"		44.7	49.1	51.6	66.2
60"		40.2	44.2	46.5	59.6
66"		36.6	40.2	42.3	54.2
72"		33.5	36.8	38.7	49.7
19-1/8"		107.1	117.6	120.0	120.0
26-1/2"		77.3	84.9	89.3	114.5
30"	76"	68.3	75.0	78.9	101.1
37"		55.4	60.8	63.9	82.0
42"		48.8	53.6	56.3	72.2
48"		42.7	46.9	49.3	63.2
54"		37.9	41.7	43.8	56.2
60"		34.1	37.5	39.4	50.6
66"		31.0	34.1	35.8	46.0
72"		28.4	31.2	32.9	42.1
19-1/8"	76"	104.6	114.9	120.0	120.0
26-1/2"		75.5	82.9	87.2	111.8
30"		66.7	73.3	77.1	98.8
37"		54.1	59.4	62.5	80.1
42"		47.6	52.3	55.0	70.6
48"		41.7	45.8	48.2	61.7
54"		37.1	40.7	42.8	54.9
60"		33.3	36.6	38.5	49.4
66"	76"	30.3	33.3	35.0	44.9
72"		27.8	30.5	32.1	41.2

DESIGN LOAD CAPACITY – PSF					
WINDOW DIMS.		ANCHORS TYPE			
WIDTH (W)	MULL SPAN	W2	B2	C2	M2
19-1/8"	84"	94.7	104.0	109.4	120.0
26-1/2"		68.3	75.0	78.9	101.2
30"		60.3	66.3	69.7	89.4
37"		48.9	53.7	56.5	72.5
42"		43.1	47.3	49.8	63.8
48"		37.7	41.4	43.6	55.9
54"		33.5	36.8	38.7	49.7
60"		30.2	33.1	34.9	44.7
66"	96"	27.4	30.1	31.7	40.6
72"		25.1	27.6	29.0	37.2
19-1/8"		82.8	91.0	95.7	120.0
26-1/2"		59.8	65.7	69.1	88.5
30"		52.8	58.0	61.0	78.2
37"		42.8	47.0	49.5	63.4
42"		37.7	41.4	43.6	55.9
48"		33.0	36.3	38.1	48.9
54"	108"	29.3	32.2	33.9	43.4
60"		26.4	29.0	30.5	39.1
66"		24.0	26.4	27.7	35.5
72"		22.0	24.2	25.4	32.6
19-1/8"		73.6	80.9	85.1	109.0
26-1/2"		53.1	58.4	61.4	78.7
30"		46.9	51.6	54.2	69.5
37"		38.1	41.8	44.0	56.4
42"	120"	33.5	36.8	38.7	49.7
48"		29.3	32.2	33.9	43.4
54"		26.1	28.6	30.1	38.6
60"		23.5	25.8	27.1	34.8
19-1/8"		66.3	72.8	76.5	98.1
26-1/2"		47.8	52.5	55.2	70.8
30"		42.2	46.4	48.8	62.6
37"		34.2	37.6	39.6	50.7
42"	132"	30.2	33.1	34.9	44.7
48"		26.4	29.0	30.5	39.1
54"		23.5	25.8	27.1	34.8
57"		22.2	24.4	25.7	32.9
19-1/8"		60.2	66.2	69.6	89.2
26-1/2"		43.5	47.8	50.2	64.4
30"		38.4	42.2	44.4	56.9
37"		31.1	34.2	36.0	46.1
42"	144"	27.4	30.1	31.7	40.6
48"		24.0	26.4	27.7	35.5
52"		22.2	24.3	25.6	32.8
19-1/8"		55.2	60.7	63.8	81.8
26-1/2"		39.8	43.8	46.0	59.0
30"		35.2	38.7	40.7	52.1
37"		28.5	31.4	33.0	42.3
42"		25.1	27.6	29.0	37.2
48"		22.0	24.2	25.4	32.6

TYPICAL ANCHORS:

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

W2: INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD

W2: THRU 1BY BUCKS INTO CONCRETE
1-1/4" MIN. EMBED INTO CONCRETE

B2: THRU 1BY BUCKS INTO BLOCKS OR DIRECTLY INTO BLOCKS
1-1/4" MIN. EMBED INTO BLOCKS

C2: DIRECTLY INTO CONCRETE
1-1/4" MIN. EMBED INTO CONCRETE

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

M2: 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

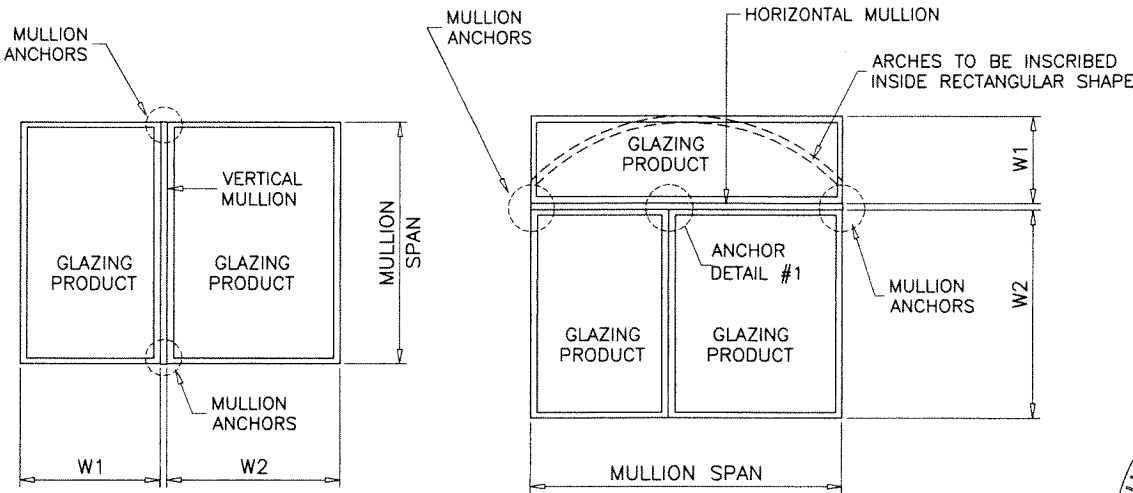
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

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 4 FOR ANCHOR DETAILS.

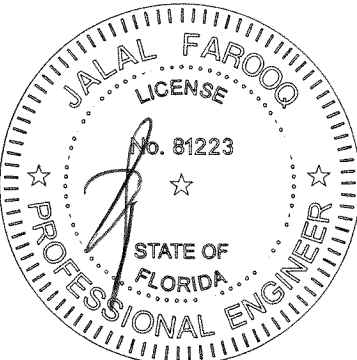
(INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED)



TYPICAL MULLION ARRANGEMENTS

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

PRODUCT REVISED
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NOA-No. 24-0819.02
Expiration Date 08/31/2028
By Ishaq I. Chandra
Miami-Dade Product Control



af c
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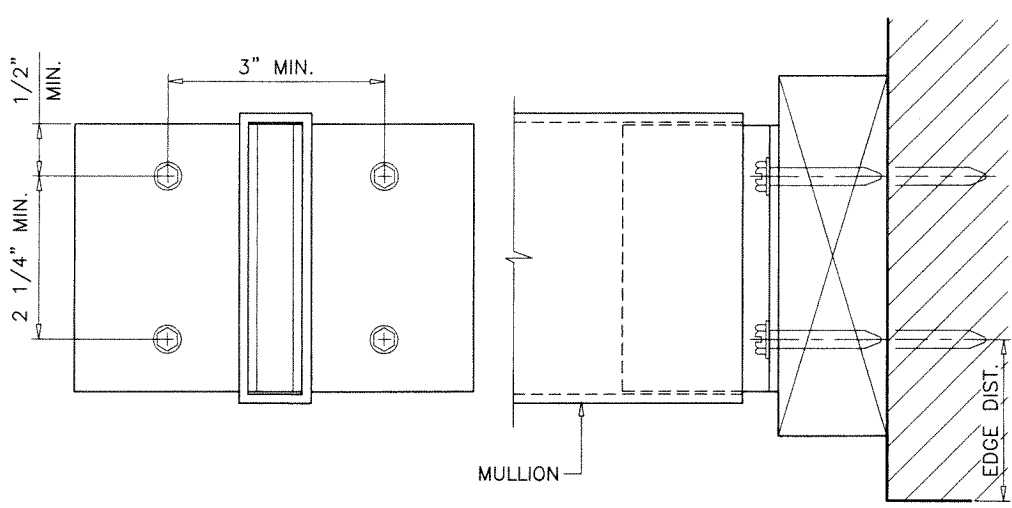
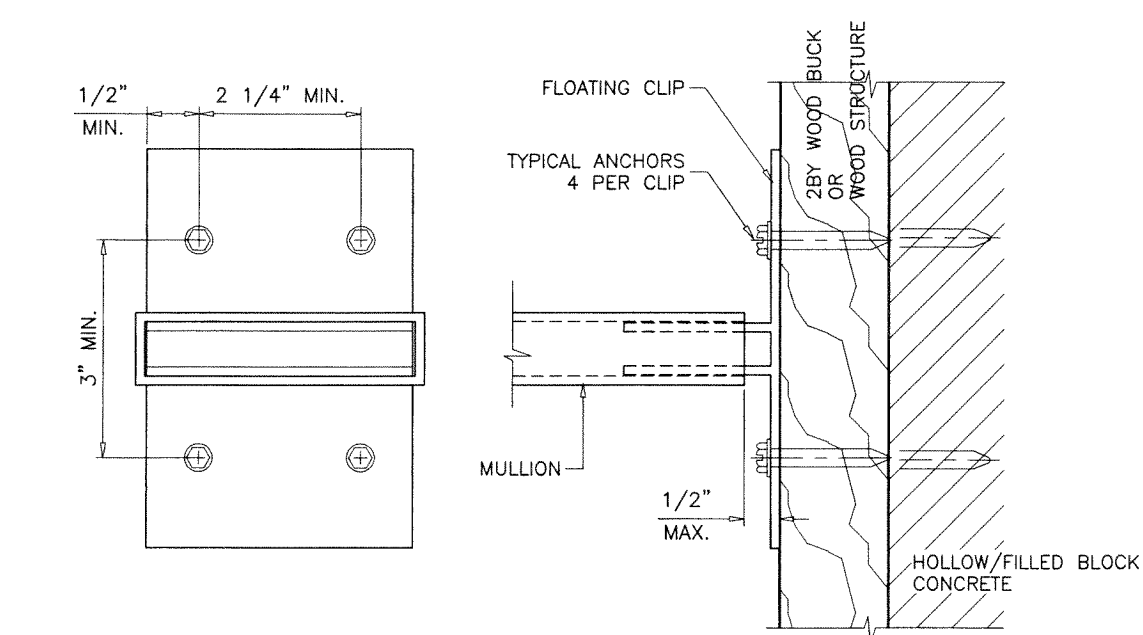
EXTRUDED ALUMINUM CLIPPED MULLIONS
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revisions:		no	date	by	description
		A	07.24.24		NO CHANGE THIS SHEET
date:	04-22-22	scale:	-	dr. by:	TARIQ
chk. by:		drawing no.	22-13D	sheet	5 of 10

NOTE:
ANCHOR CHARTS FOR RECTANGULAR TUBE MULLIONS ONLY.

NOV 11 2024

MULLION\22-13D-W

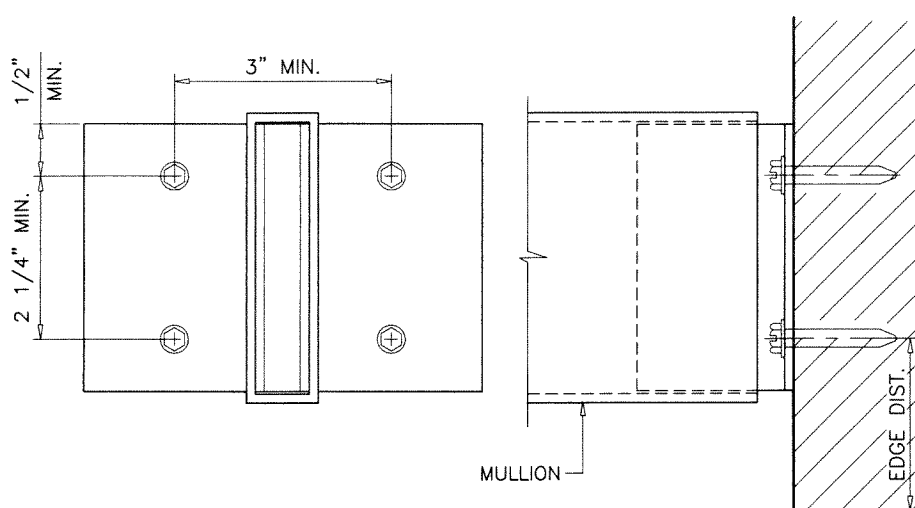
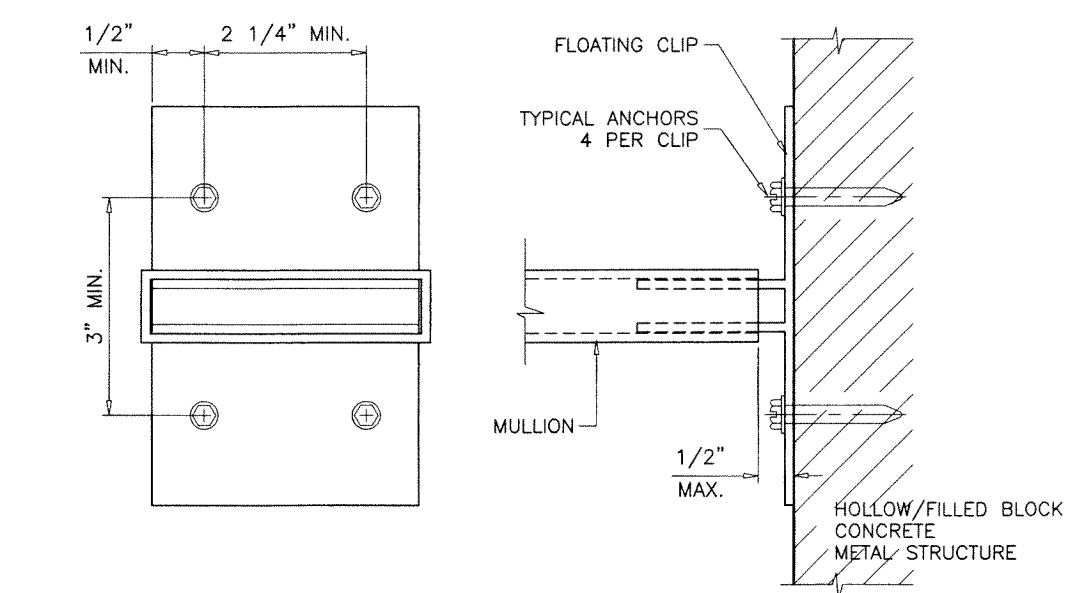


RECTANGULAR TUBE MULLIONS
TYPICAL ANCHORS TYPE 'W4'

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

SEE SHEET 7 FOR ANCHOR CAPACITIES

NOTE:
 FOR BAY MULLION ANCHORS,
 SEE SHEET 10



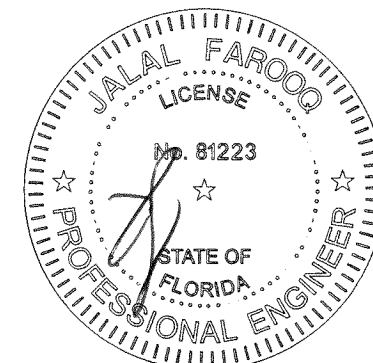
RECTANGULAR TUBE MULLIONS
TYPICAL ANCHORS TYPE 'B4', 'C4', 'M4'

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

SEE SHEET 7 FOR ANCHOR CAPACITIES

PRODUCT REVISED
 as complying with the Florida
 Building Code
NOA-No. 24-0819.02
Expiration Date 08/31/2028
 By *Ishaq I. Chande*
Miami-Dade Product Control

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 FBPE #3538

MULLION 22-13D-W

EXTRUDED ALUMINUM CLIPPED MULLIONS

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 dba-V & V Windows
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revisions:		no	date	by	description
		A	07.24.24		NO CHANGE THIS SHEET

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

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"	132"	46.9	47.1	53.7	69.5
57"		44.5	44.6	50.9	65.9
19-1/8"	144"	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"	144"	44.3	44.5	50.7	65.6
19-1/8"		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

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

ANCHOR CHARTS FOR RECTANGULAR TUBE MULLIONS ONLY.

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

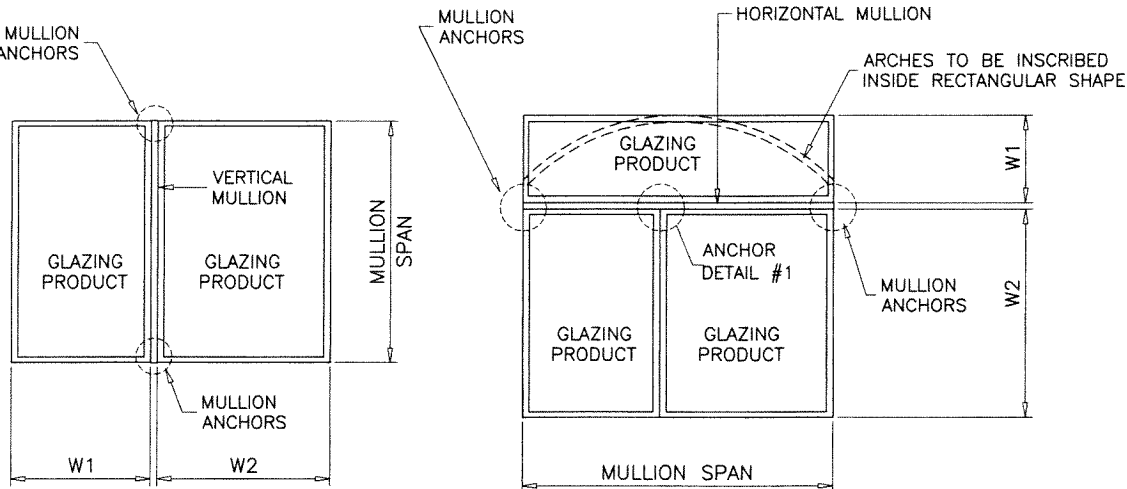
NOTE:

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

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

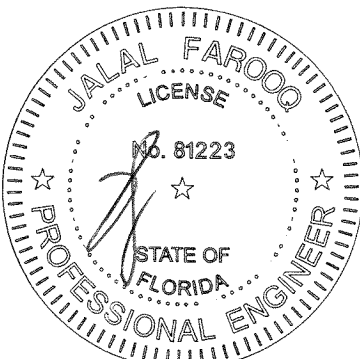
PRODUCT REVISED
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Building Code

NOA-No. 24-0819.02

Expiration Date 08/31/2028

By Ishag I. Chande

Miami-Dade Product Control



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9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
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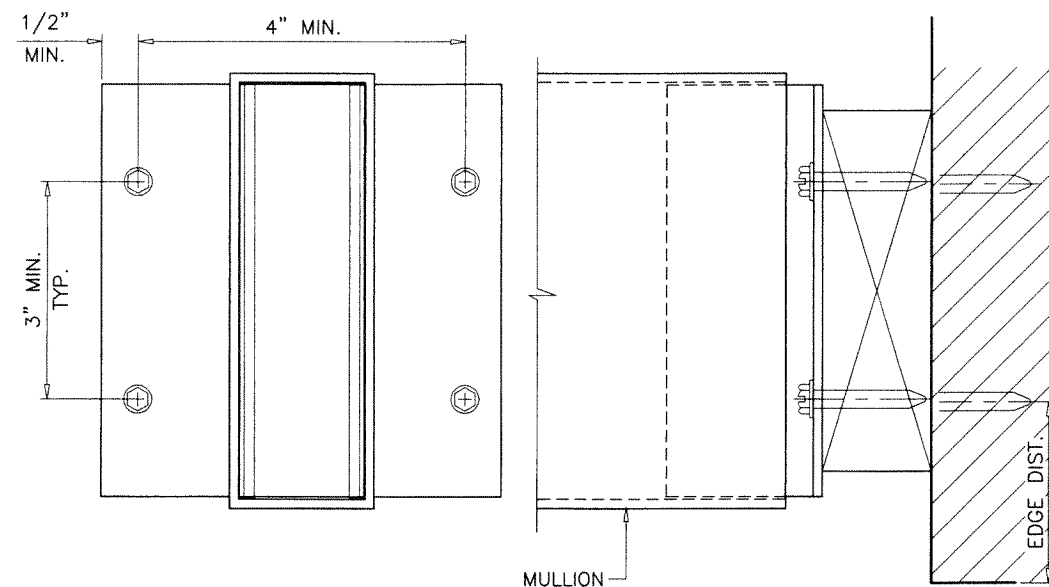
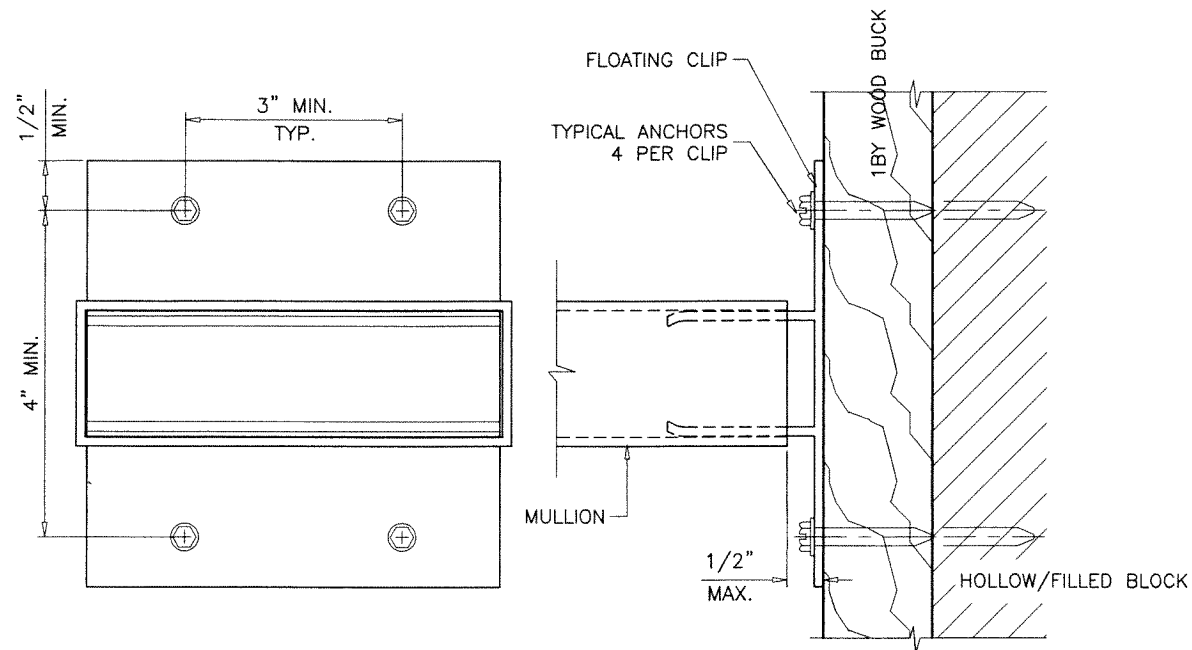
EXTRUDED ALUMINUM CLIPPED MULLIONS

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
	A	07.24.24		NO CHANGE THIS SHEET
date:	04-22-22			
scale:	-			
dr. by:	TARIQ			
chk. by:				
drawing no.	22-13D			
sheet	7 of 10			

NOV 11 2024

MULLION 22-13D-W



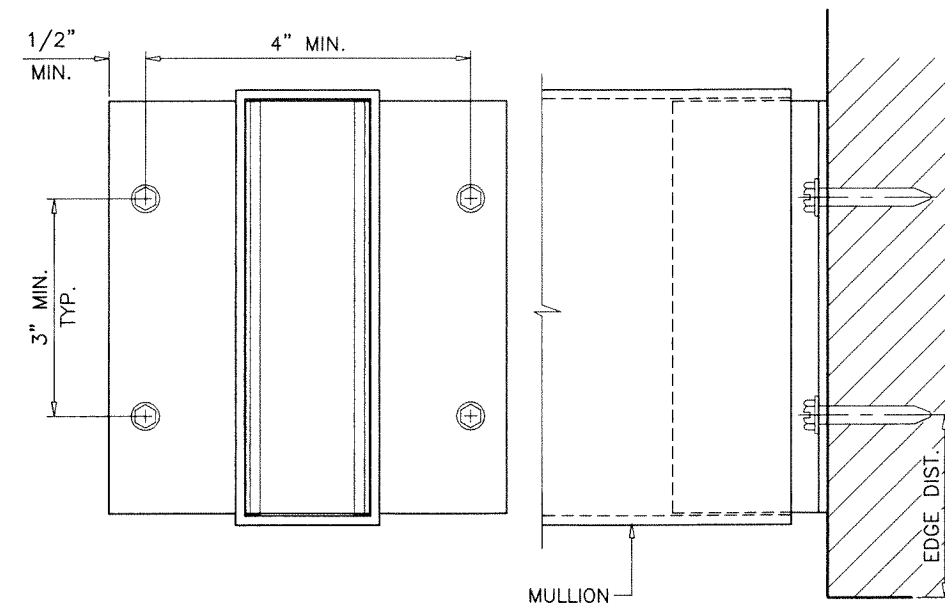
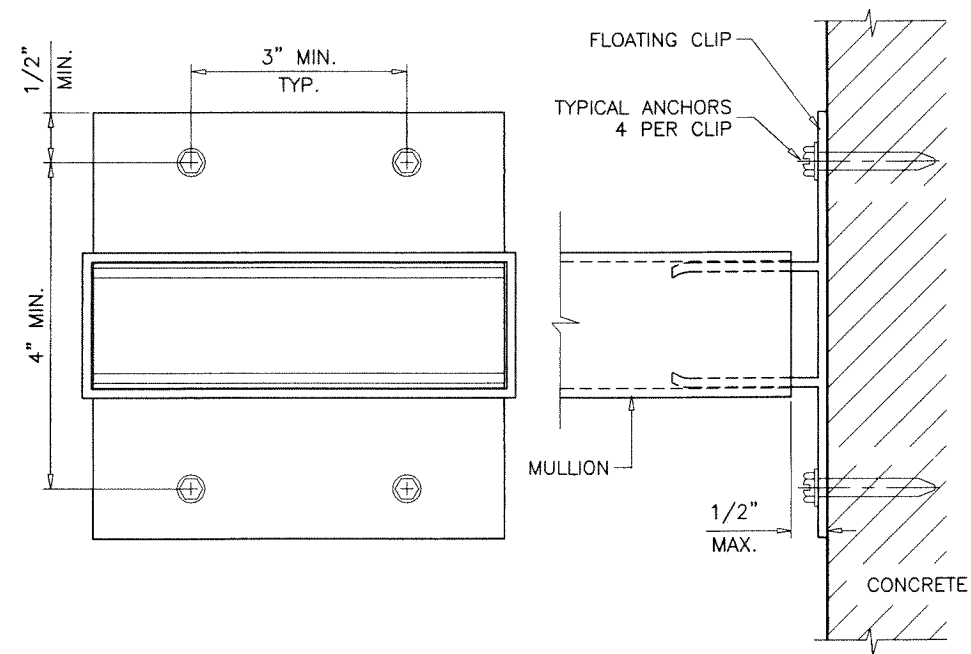
RECTANGULAR TUBE MULLIONS **TYPICAL ANCHORS TYPE 'B4A'**

THRU 1BY BUCKS INTO BLOCKS OR DIRECTLY INTO BLOCKS

SEE SHEET 9 FOR ANCHOR CAPACITIES

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Expiration Date 08/31/2028
By *Ishaq I. Chandra*
Miami-Dade Product Control

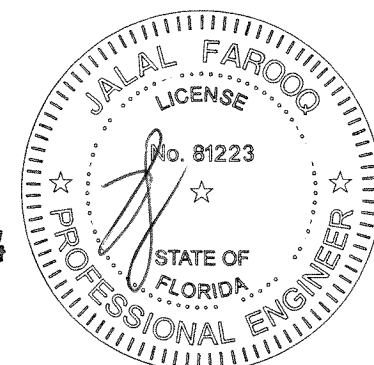
NOTE:
FOR BAY MULLION ANCHORS,
SEE SHEET 10



RECTANGULAR TUBE MULLIONS **TYPICAL ANCHORS TYPE 'C4A'**

DIRECTLY INTO CONCRETE

SEE SHEET 9 FOR ANCHOR CAPACITIES



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WWW.AFCENG.COM
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MULLION 22-13D-W

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revisions:	
no	description
A	07.24.24 NO CHANGE THIS SHEET

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

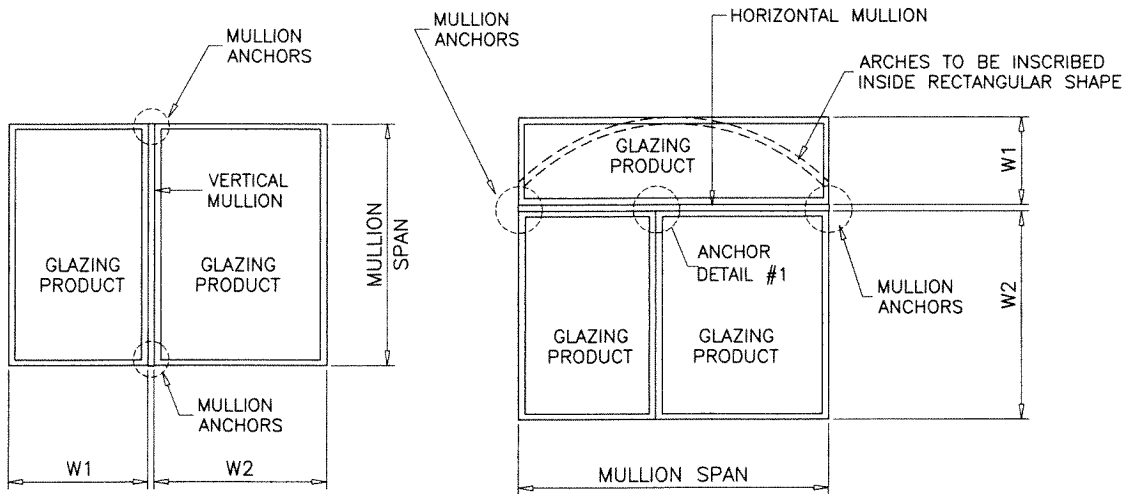
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		ANCHORS TYPE	
WIDTH (W)	MULL SPAN	B4A	C4A
19-1/8"	38-3/8"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		120.0	120.0
42"		120.0	120.0
48"		120.0	120.0
54"		120.0	120.0
60"		120.0	120.0
66"		120.0	120.0
72"		120.0	120.0
19-1/8"	50-5/8"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		120.0	120.0
42"		120.0	120.0
48"		120.0	120.0
54"		120.0	120.0
60"		110.0	115.7
66"		100.0	105.2
72"		91.7	96.4
19-1/8"	63"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		120.0	120.0
42"		120.0	120.0
48"		110.5	116.2
54"		98.2	103.3
60"		88.4	93.0
66"		80.3	84.5
72"		73.7	77.5
19-1/8"	74-1/4"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		120.0	120.0
42"		107.1	112.7
48"		93.7	98.6
54"		83.3	87.6
60"		75.0	78.9
66"		68.2	71.7
72"		62.5	65.7
19-1/8"	76"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		118.8	120.0
42"		104.7	110.1
48"		91.6	96.3
54"		81.4	85.6
60"		73.3	77.1
66"		66.6	70.0
72"		61.1	64.2

DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		ANCHORS TYPE	
WIDTH (W)	MULL SPAN	B4A	C4A
19-1/8"	84"	120.0	120.0
26-1/2"		120.0	120.0
30"		120.0	120.0
37"		107.5	113.1
42"		94.7	99.6
48"		82.9	87.1
54"		73.7	77.5
60"		66.3	69.7
66"		60.3	63.4
72"		55.2	58.1
19-1/8"	96"	120.0	120.0
26-1/2"		120.0	120.0
30"		116.0	120.0
37"		94.1	98.9
42"		82.9	87.1
48"		72.5	76.3
54"		64.4	67.8
60"		58.0	61.0
66"		52.7	55.5
72"		48.3	50.8
19-1/8"	108"	120.0	120.0
26-1/2"		116.7	120.0
30"		103.1	108.4
37"		83.6	87.9
42"		73.7	77.5
48"		64.4	67.8
54"		57.3	60.2
60"		51.6	54.2
19-1/8"	120"	120.0	120.0
26-1/2"		105.1	110.5
30"		92.8	97.6
37"		75.2	79.1
42"		66.3	69.7
48"		58.0	61.0
54"		51.6	54.2
57"		48.8	51.4
19-1/8"	132"	120.0	120.0
26-1/2"		95.5	100.4
30"		84.4	88.7
37"		68.4	71.9
42"		60.3	63.4
48"		52.7	55.5
52"		48.7	51.2
19-1/8"	144"	120.0	120.0
26-1/2"		87.5	92.1
30"		77.3	81.3
37"		62.7	65.9
42"		55.2	58.1
48"		48.3	50.8

NOTE:
ANCHOR CHARTS FOR RECTANGULAR TUBE MULLIONS ONLY.

TYPICAL ANCHORS:
1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
B4A: THRU 1BY BUCKS INTO BLOCKS OR DIRECTLY INTO BLOCKS
1-1/4" MIN. EMBED INTO BLOCK
C4A: DIRECTLY INTO CONCRETE
1-1/4" MIN. EMBED INTO CONCRETE
TYPICAL EDGE DISTANCE
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" 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 8 FOR ANCHOR DETAILS.
(INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED)

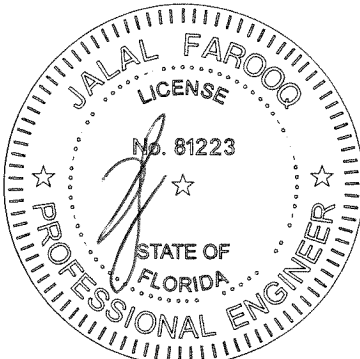
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TYPICAL MULLION ARRANGEMENTS

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

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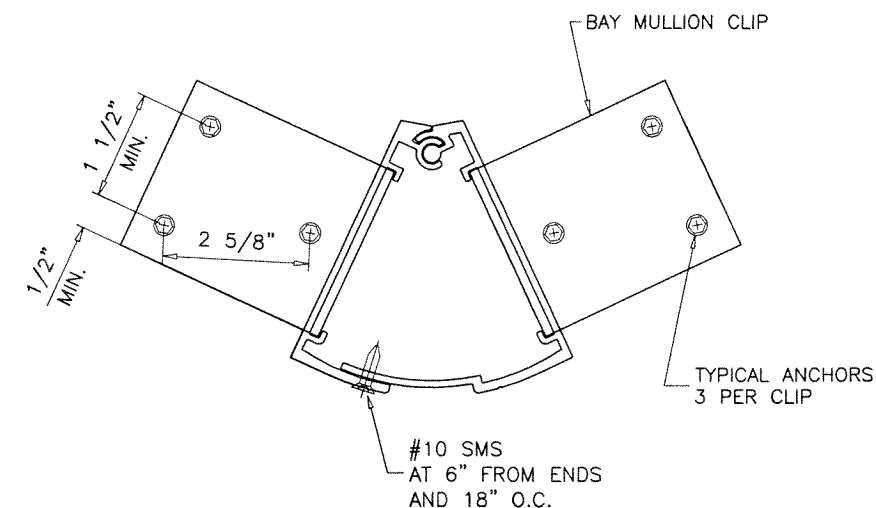
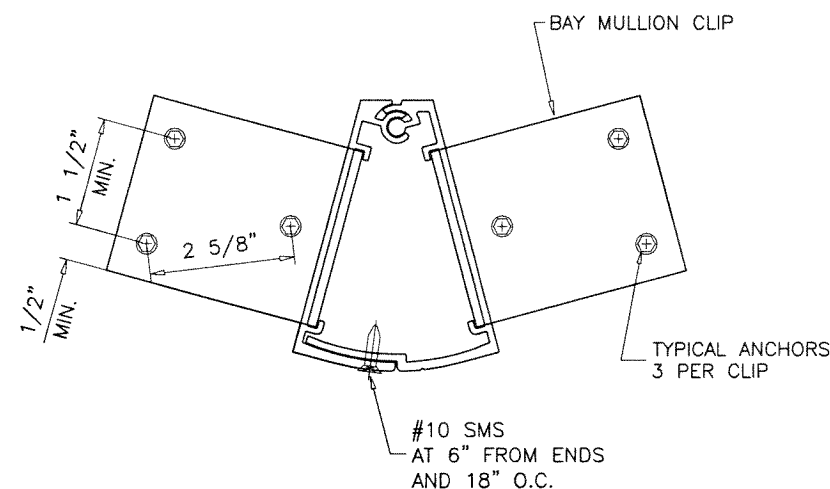
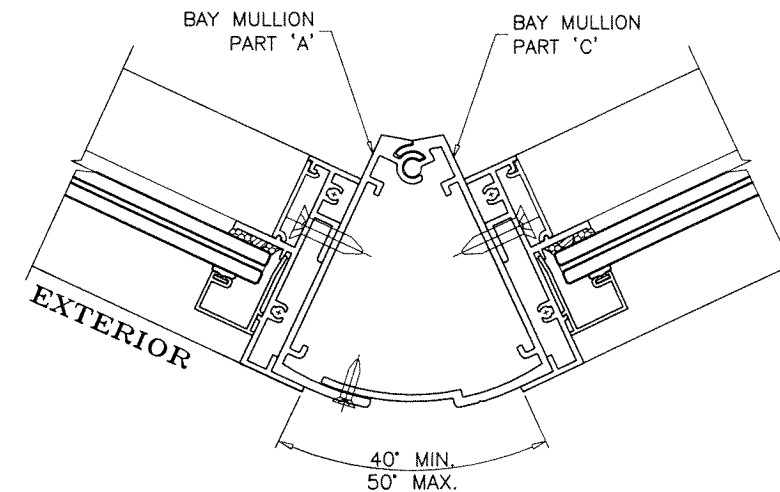
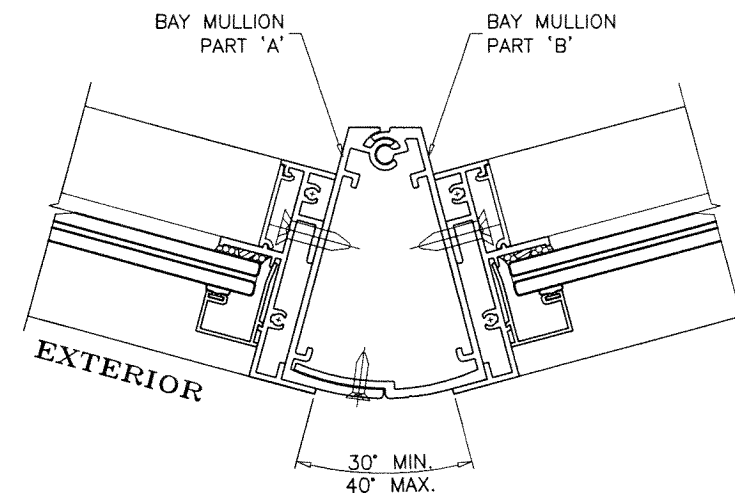
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date: 04-22-22
scale: -
dr. by: TARIQ
chk. by:

drawing no.
22-13D
sheet 9 of 10



TOTAL PROPERTIES
 $I_x = 2.923 \text{ IN}^4$
 $S_x = 1.461 \text{ IN}^3$

ANCHOR LOAD CAPACITY = $\pm 70.0 \text{ PSF}$
 FOR ALL BAY MULLION SIZES LISTED ON SHEET 3.

TYPICAL ANCHORS:

1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164 \text{ KSI}$, $F_y=148 \text{ KSI}$)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONCRETE
 1-1/4" MIN. EMBED INTO CONCRETE

DIRECTLY INTO CONCRETE
 1-1/4" MIN. EMBED INTO CONCRETE

TYPICAL EDGE DISTANCE

INTO CONCRETE = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.

WOOD AT HEAD OR SILL SG = 0.55 MIN.
 CONCRETE AT HEAD OR SILL $f'_c = 3000 \text{ PSI}$ MIN.

ANCHORS MAY BE HEX OR FLAT HEAD

NOTE:
 ANY ANCHOR CONDITION SHOWN HEREIN MAY COVER LOCATIONS
 AT HEAD OR SILL ENDS.

(INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED)

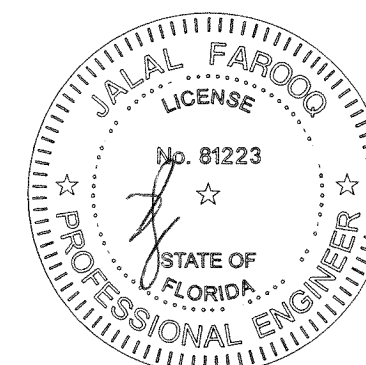
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By Ishag I. Chahine
 Miami-Dade Product Control

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revisions:	no	date	by	description
	A	07/24/24		BAY MULLION ADDED
date:	04-22-22			
scale:	3/8" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	22-13D			
sheet	10 of 10			