



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  
T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**WinDoor, Inc.**  
**7500 Amsterdam Drive**  
**Orlando, FL 32832**

**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: Series "238 Flange Frame Clipped Mullion -L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. MD-MUL238, titled "238 Flange Frame Clipped Mullion", sheets 1 thru 7 of 7, dated 05/14/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, 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 **NOA# 18-1001.20** and consists of this page 1 and evidence pages E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Sifang Zhao, P.E.**



*S.Z.*  
06/25/2021

NOA No. 20-0610.15  
Expiration Date: April 26, 2022  
Approval Date: October 28, 2020  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections (*See NOA#20-0610.08*)
2. Drawing No. MD-MUL238, titled "238 Flange Frame Clipped Mullion", sheets 1 thru 7 of 7, dated 05/14/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**B. TESTS (*See NOA #20-0610.08*)**

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC-6<sup>th</sup> Edition (2017)** and **FBC-7<sup>th</sup> (2020)** dated 06/05/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, 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 6<sup>th</sup> Edition (2017)** and with **FBC 7<sup>th</sup> Edition (2020)**, and of no financial interest, dated 05/22/2020, signed and sealed by Anthony Lynn Miller, P.E.
2. Statement letter of successor engineer per 61G15-27.001 Florida Administrative Code.

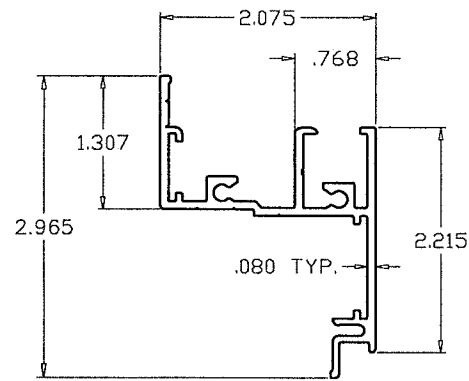
**G. OTHERS**

1. Private labeling agreement between WinDoor, Inc. and CGI Windows and Doors, Inc. document in conformance of RER guideline dated 09/12/2018. (*Submitted under NOA#18-1001.20*)
2. Notice of Acceptance No. **18-1001.20**, issued to WinDoor for their Series Clipped, Extruded Aluminum Tube Mullion with #373 Framing Member – L.M.I., approved on 12/13/18 and expiring on 04/26/22.
3. Notice of Acceptance No. **20-0610.08**, issued to CGI Windows & Doors for their Series "238 Flange Frame Clipped Mullion -L.M.I., approved on 09/24/20 and expiring on 04/26/22.

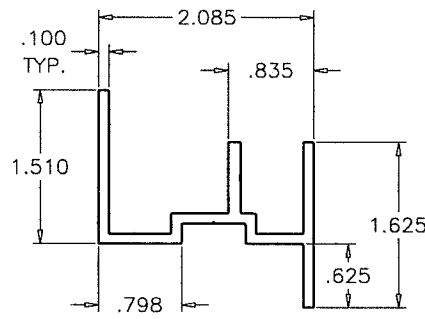


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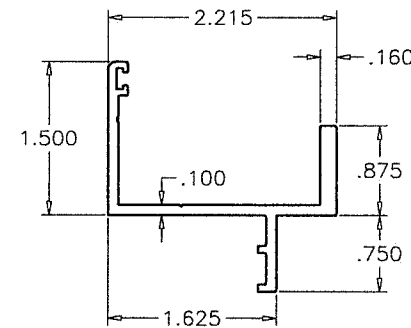
Sifang Zhao, P.E.  
Product Control Examiner  
NOA No. 20-0610.15  
Expiration Date: April 26, 2022  
Approval Date: October 28, 2020



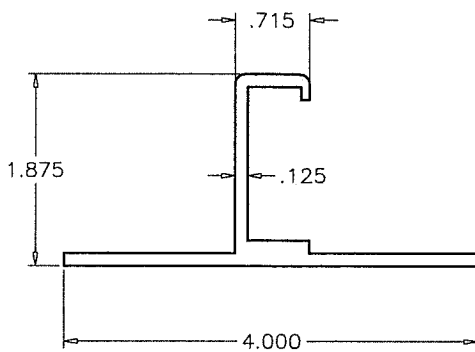
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CGI-373  
6063-T6



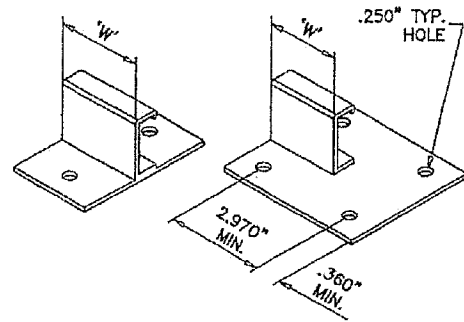
**FRAME**  
CGI-386  
6063-T6



**VENT**  
CGI-387  
6063-T6



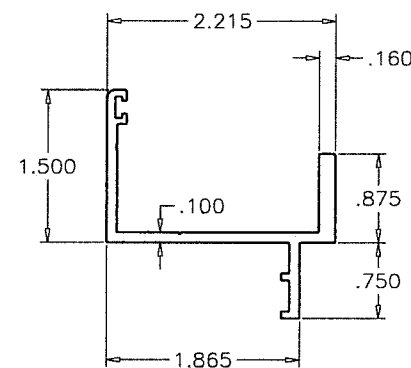
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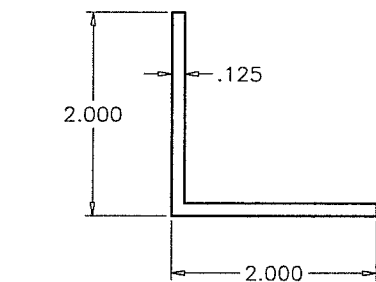
'W' DIMENSION

MULLION	'W' - IN.
2"	1.688
3"	2.688
4"	3.688

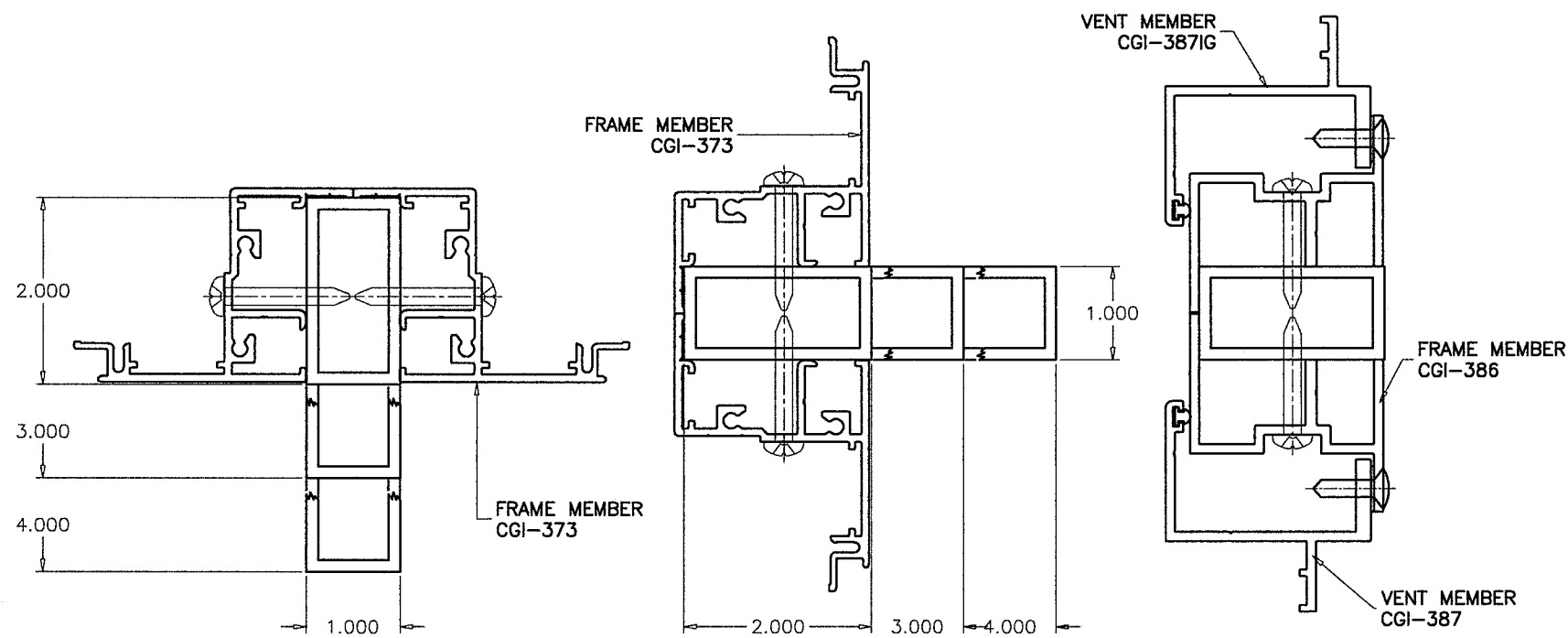
**MULLION CLIP**  
CGI-383  
6063-T6



**MULLION CLIP**  
6063-T6



THESE MULLIONS ARE RATED FOR LARGE & SMALL MISSILE IMPACT



ALL MULLIONS: 6063-T6 ALLOY, 1/8" TYP. WALL THICKNESS  
MULLIONS CONTAINING WINDOW FRAME MEMBERS AT EACH SIDE  
HORIZONTAL OR VERTICAL

SEE WINDOW OR DOOR APPROVAL FOR FASTENERS SIZES AND SPACING

**ALUMINUM TUBE MULLION WINDOW FRAME MEMBER INCLUDED IN PROPERTIES**

- USE WITH:
- 1- FRAMING MEMBER #373
  - 2- FRAMING MEMBER #386 + 387
  - 3- FRAMING MEMBER #386 + 387IG
- ALSO ANY COMBINATIONS OF ABOVE.

NOTES:  
THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

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

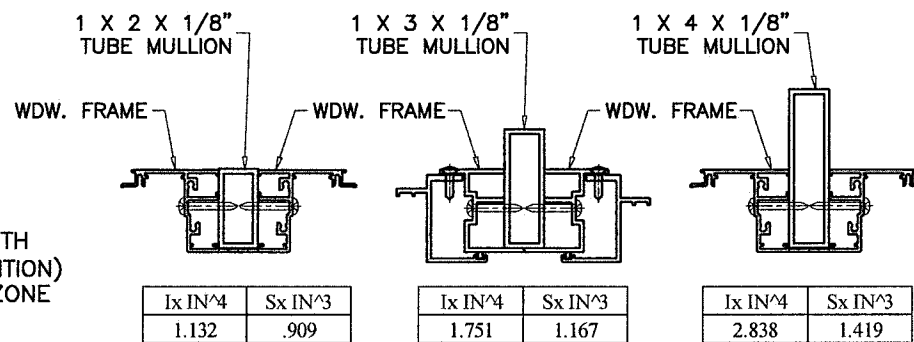
WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE LISTED, SPACED AS SHOWN ON THE 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 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 THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.



1x IN^4	Sx IN^3
1.132	.909

1x IN^4	Sx IN^3
1.751	1.167

1x IN^4	Sx IN^3
2.838	1.419

**INSTRUCTIONS:**

USE CHARTS AND GRAPHS 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 GRAPHS ON SHEET 2 & 4 SELECT MULLION SIZE WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** USING GRAPHS ON SHEET 3 & 5 VERIFY ANCHOR CAPACITY WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** CAPACITY OF WINDOOR GLAZING PRODUCTS AND MULLION MUST EQUAL OR EXCEED REQUIRED LOADS.

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. 20-0610.15  
Expiration Date 04/26/2022  
By *[Signature]*  
Miami-Dade Product Control

Revision: A) UPDATED TO FBC 2020.  
AK - 06/03/20

PREPARED BY A. LYNN MILLER  
1070 TECHNOLOGY DRIVE  
N. VENICE, FL 34275  
(941) 480-1600

REGISTRATION #29296

Date 06/03/20

Drawn By AGK

MD-MUL238

DWG No.

1 OF 7

Sheet

NTS

Scale

MUL238

Series

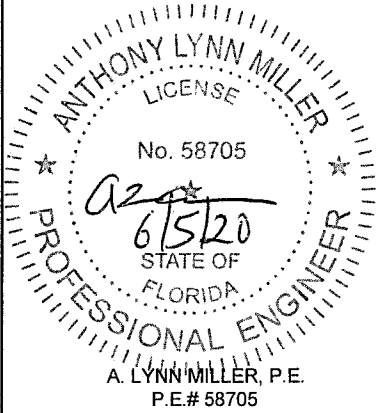
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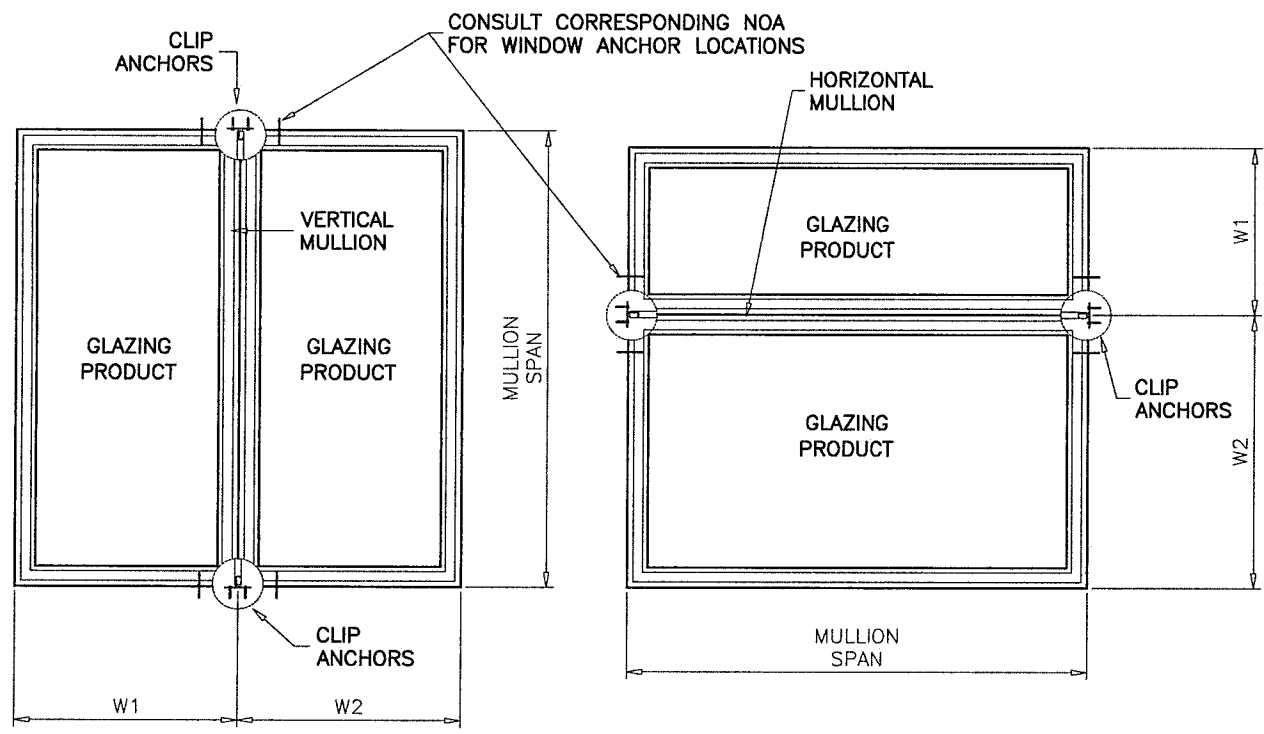
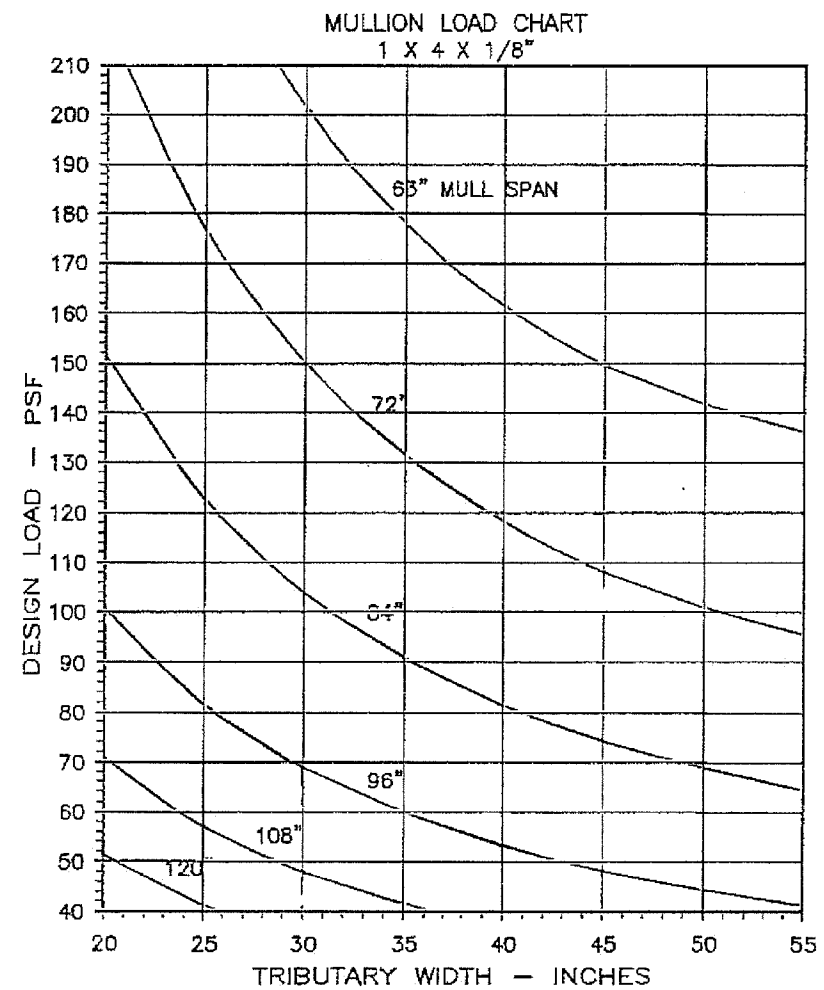
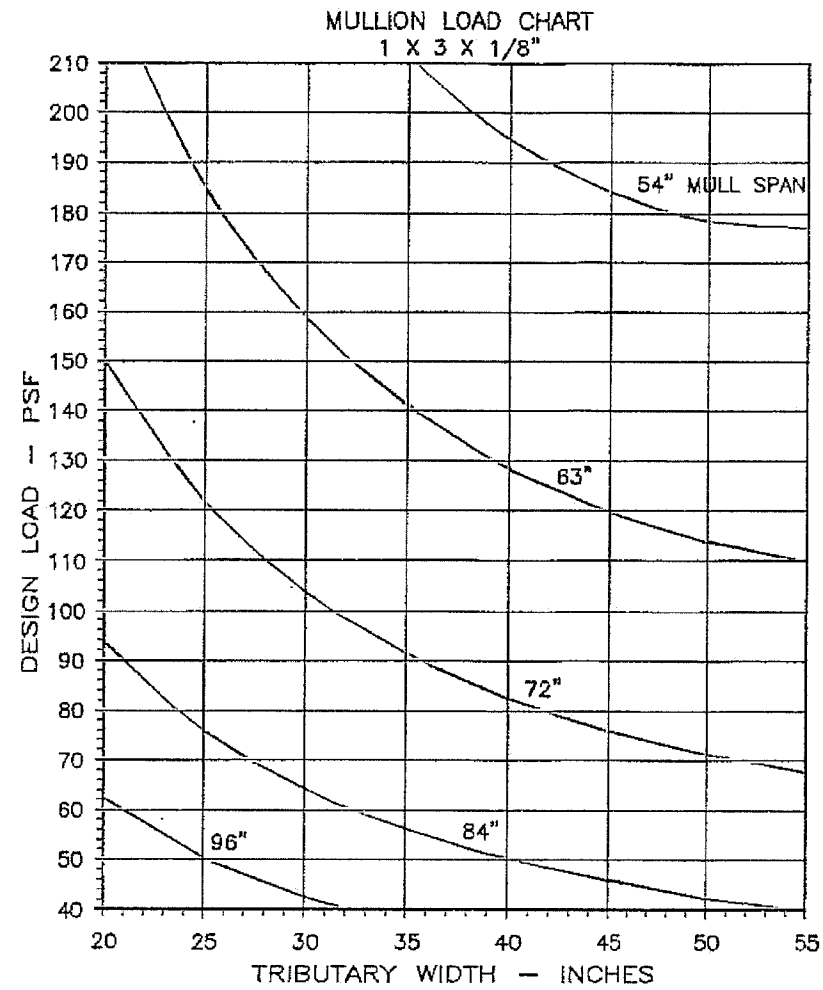
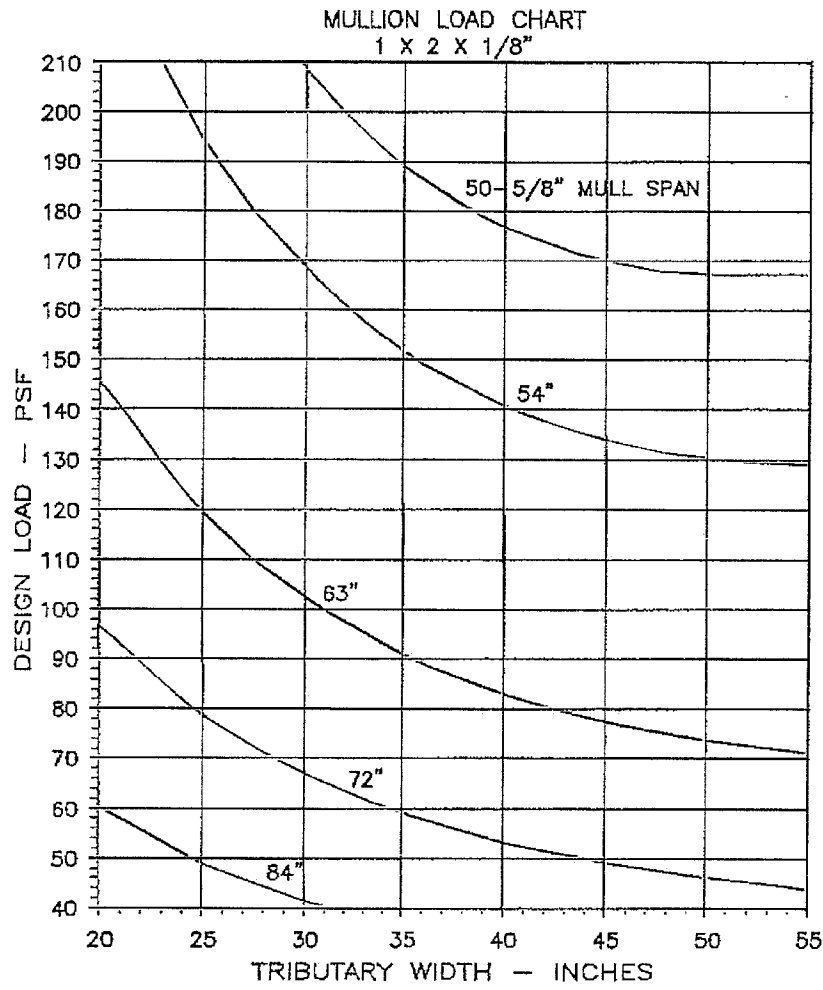
Desc

**WINDOOR**  
INCORPORATED  
104 TRIPLE DIAMOND BLVD  
NORTH VENICE, FL 34275  
(407) 481-8400

EXTRUSIONS, INSTRUCTIONS, NOTES

238 FLANGE FRAME CLIPPED MULLION





$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

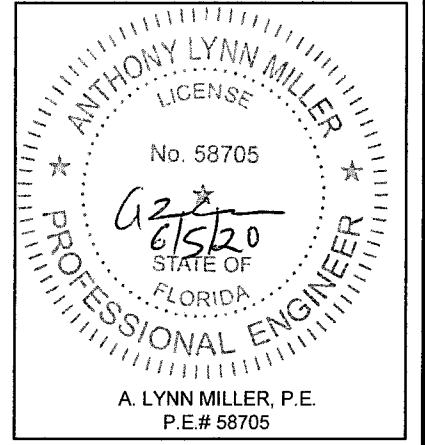
TYPICAL MULLION ARRANGEMENTS

MULLION CHARTS  
ON THIS SHEET APPLY TO  
MULLION CONDITIONS SHOWN ON  
ELEVATIONS AT LEFT ONLY.

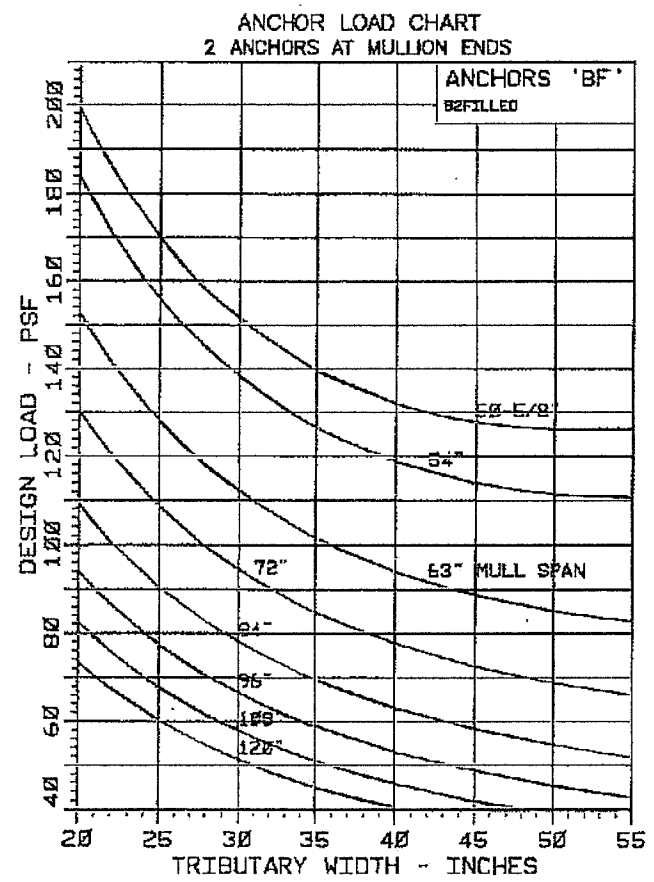
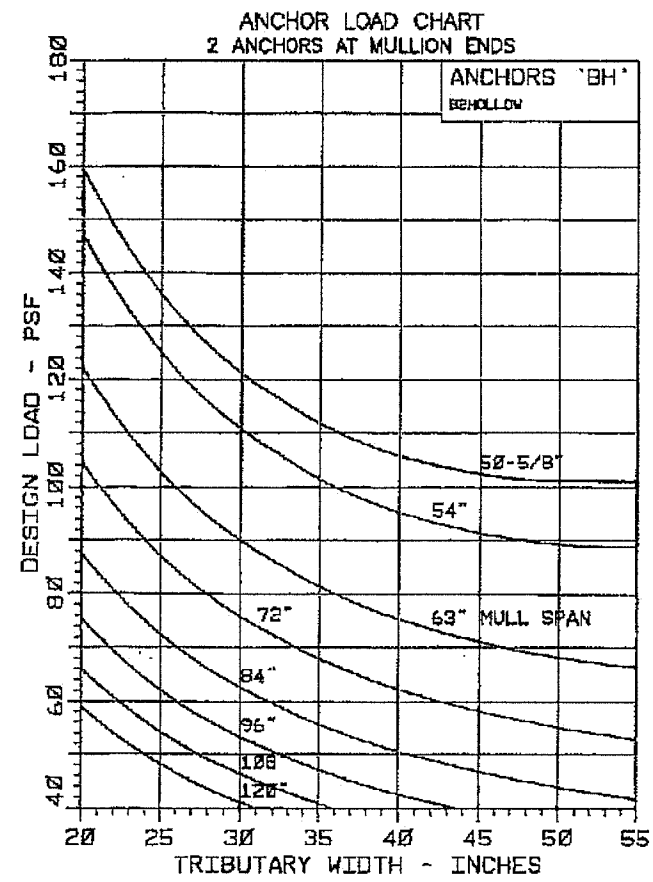
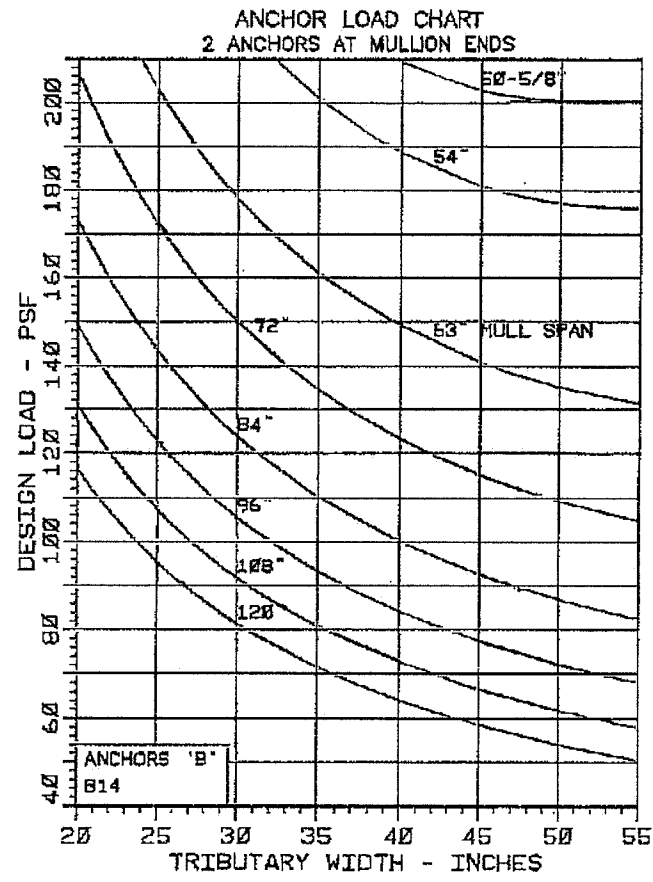
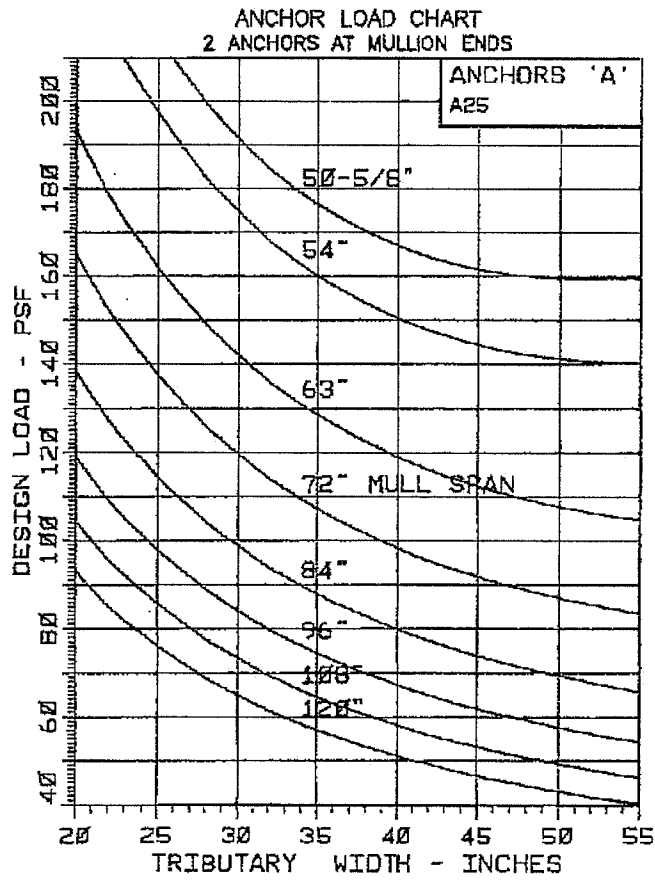
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Building Code  
NOA-No. 20-0610.15  
Expiration Date 04/26/2022  
By *[Signature]*  
Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.  
AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	DATE	06/03/20	BY	AGK	REV	A
	MULLION LOAD CHARTS	238 FLANGE FRAME CLIPPED MULLION		MD-MUL238		2 OF 7	
WINDOOR <sup>®</sup> INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MULLION LOAD CHARTS	238 FLANGE FRAME CLIPPED MULLION		MUL238		2 OF 7	
MULLION LOAD CHARTS		238 FLANGE FRAME CLIPPED MULLION		MUL238		2 OF 7	
MULLION LOAD CHARTS		238 FLANGE FRAME CLIPPED MULLION		MUL238		2 OF 7	



A. LYNN MILLER, P.E.  
P.E.# 58705

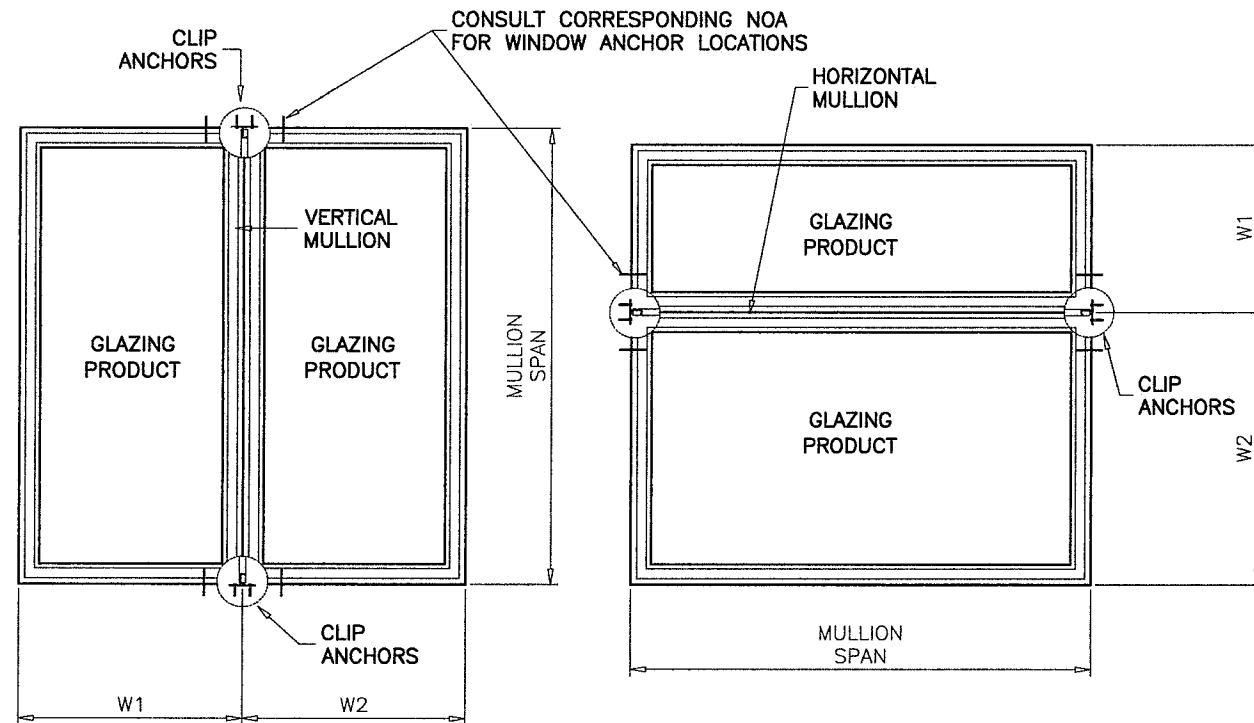


**ANCHORS 'A'**  
APPLICABLE TO ANCHORS INTO OR THRU WOOD BUCKS

**ANCHORS 'B'**  
APPLICABLE TO ANCHORS INTO CONCRETE OR METAL

**ANCHORS 'BH'**  
APPLICABLE TO ANCHORS DIRECTLY TO HOLLOW BLOCK

**ANCHORS 'BF'**  
APPLICABLE TO ANCHORS DIRECTLY TO GROUT FILLED BLOCKS



$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

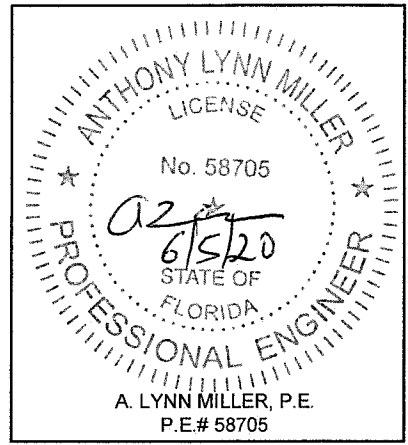
TYPICAL MULLION ARRANGEMENTS

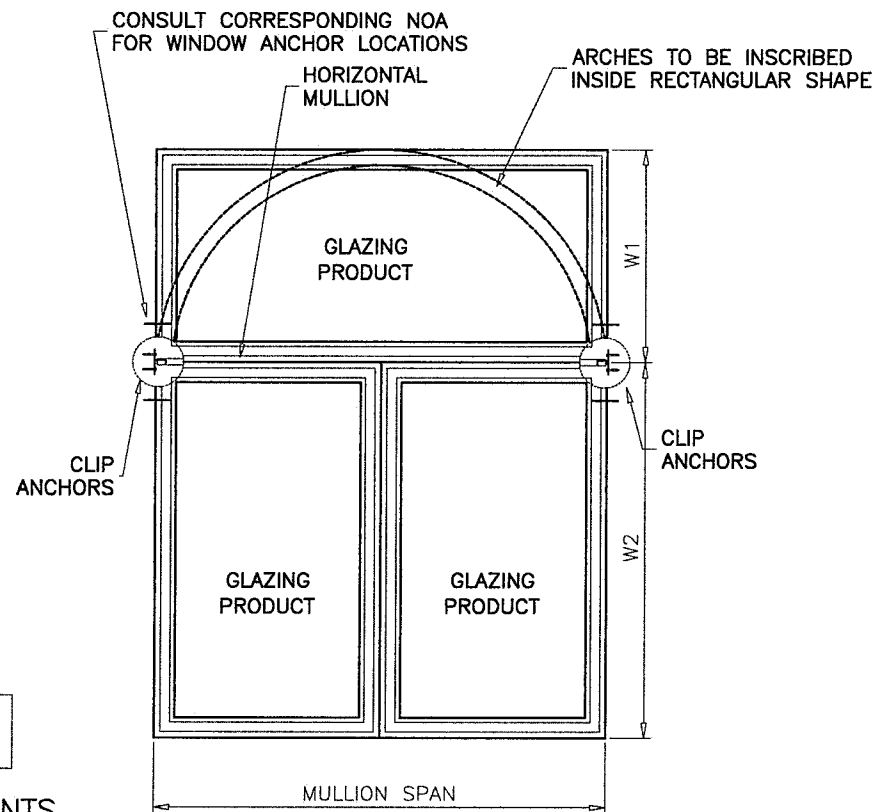
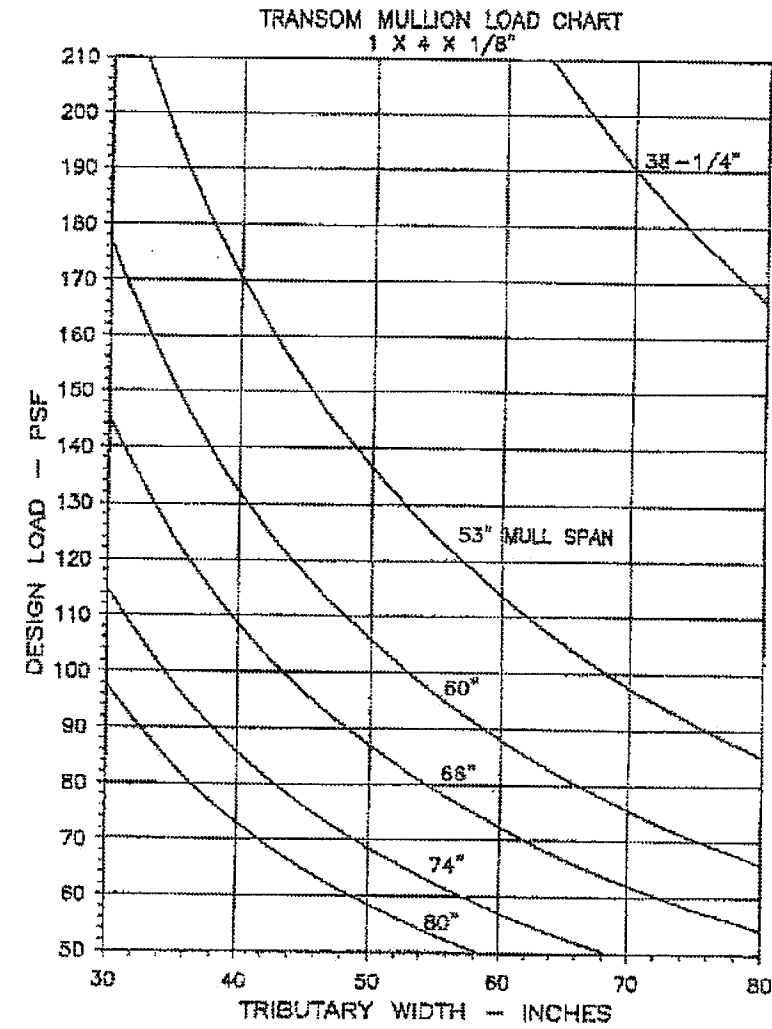
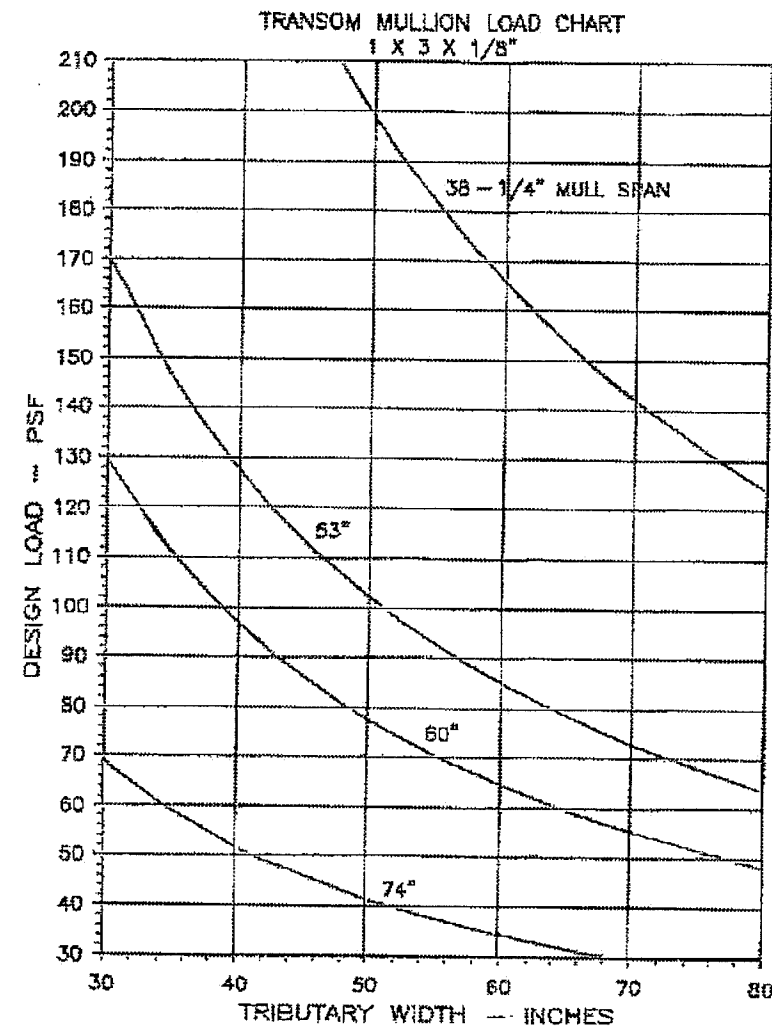
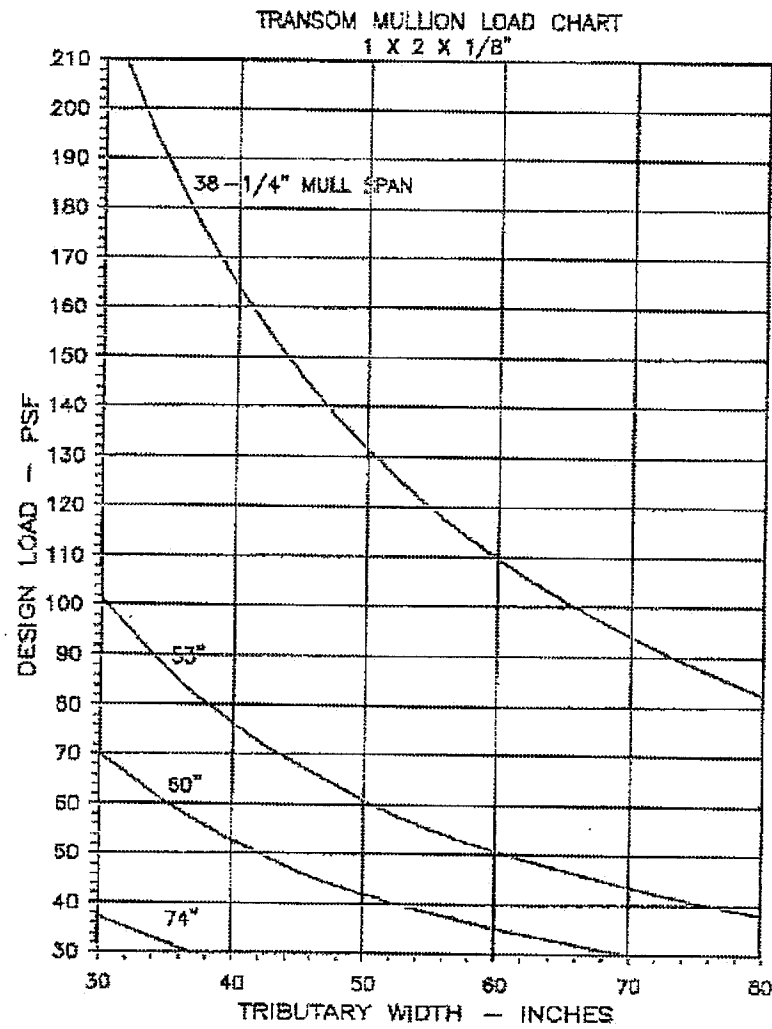
MULLION CHARTS  
ON THIS SHEET APPLY TO  
MULLION CONDITIONS SHOWN ON  
ELEVATIONS AT LEFT ONLY.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 20-0610.15  
Expiration Date 04/26/2022  
By *[Signature]*  
Miami-Dade Product Control

Revision:  
A) NO CHANGES THIS SHEET.  
AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	06/03/20	AGK	A
	ANCHOR LOAD CHARTS 238 FLANGE FRAME CLIPPED MULLION	Date By Drawn	No. DMC 3 OF 7	Rev.
				MD-MUL238
				AGK
<b>WINDOOR</b> INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	Series	Title	Desc.	MUL238





$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

TYPICAL MULLION ARRANGEMENTS

MULLION AND ANCHOR CHARTS ON THIS SHEET APPLY TO HORIZONTAL MULLION AND ITS END ANCHORS ONLY.

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. 20-0610.15  
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By *[Signature]*  
Miami-Dade Product Control

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PREPARED BY A. LYNN MILLER  
1070 TECHNOLOGY DRIVE  
N. VENICE, FL 34275  
(941) 480-1600

REGISTRATION #29296

Date 06/03/20

Drawn By AGK

Rev. A

MD-MUL238

No.

DWG

4 OF 7

Sheet

NTS

Scale

MUL238

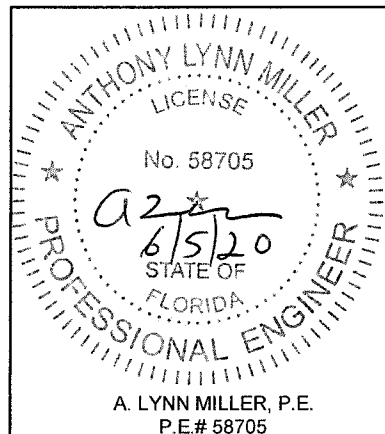
Series

Title Desc.

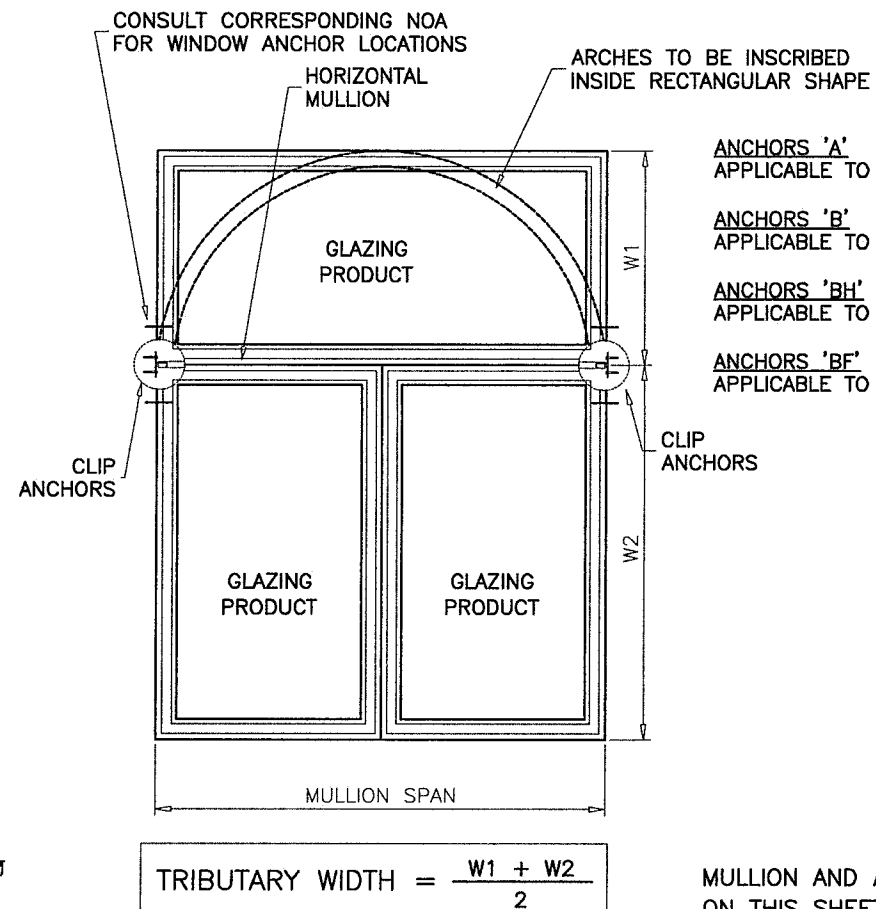
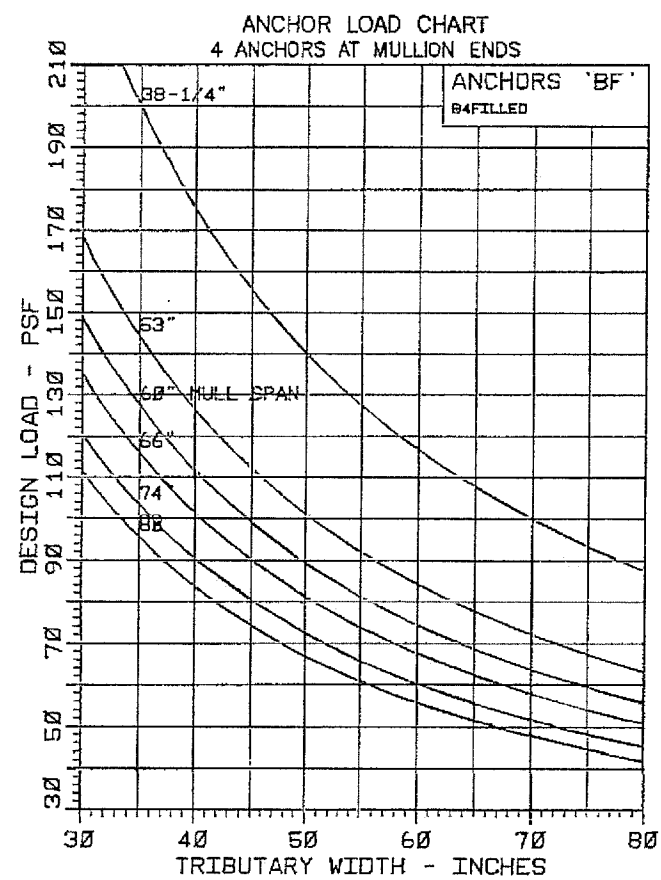
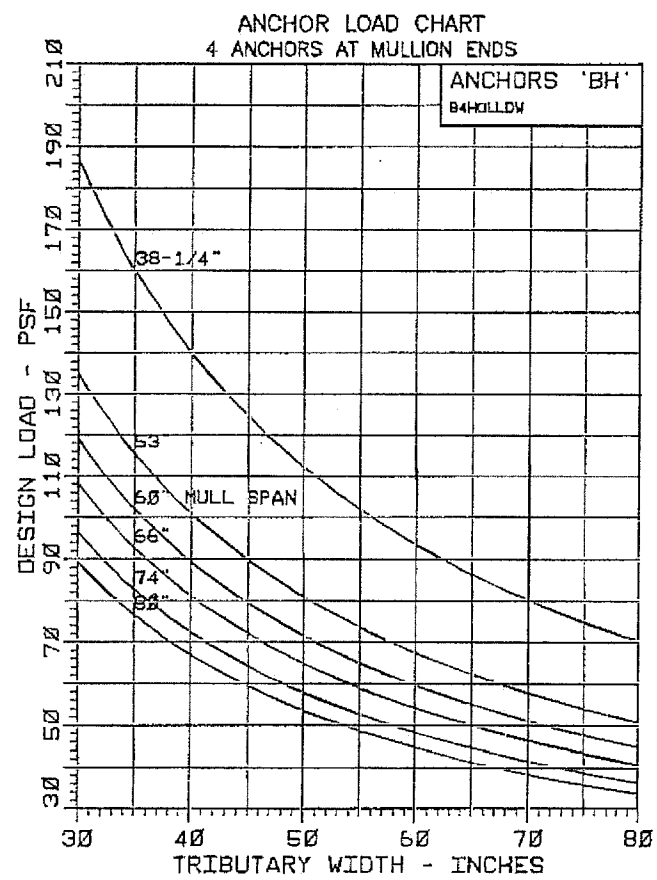
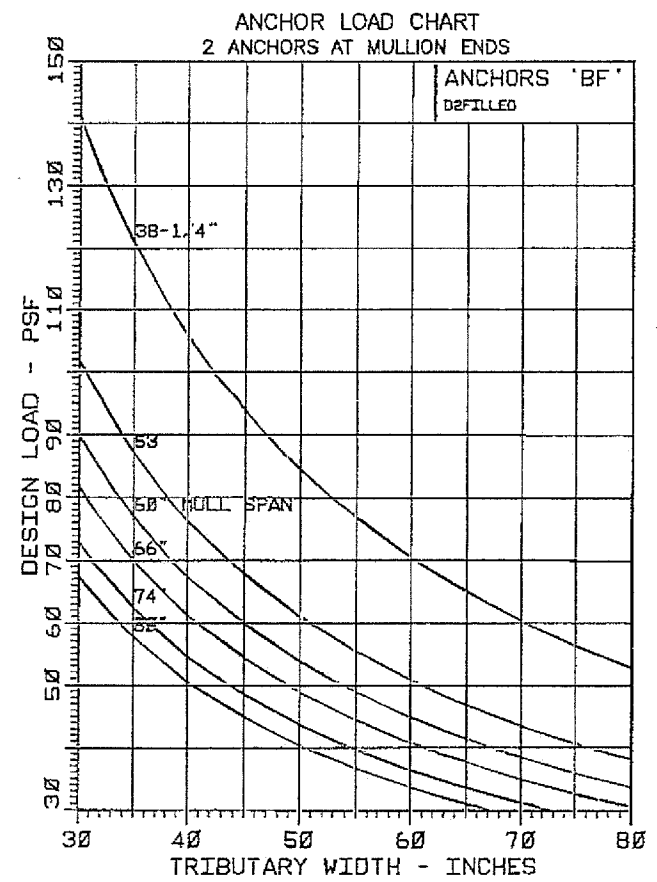
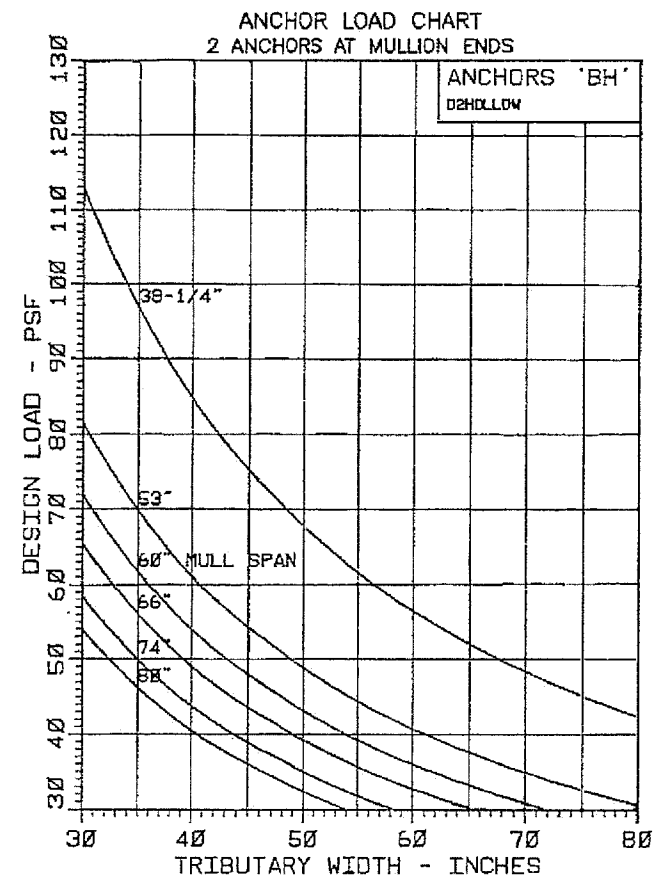
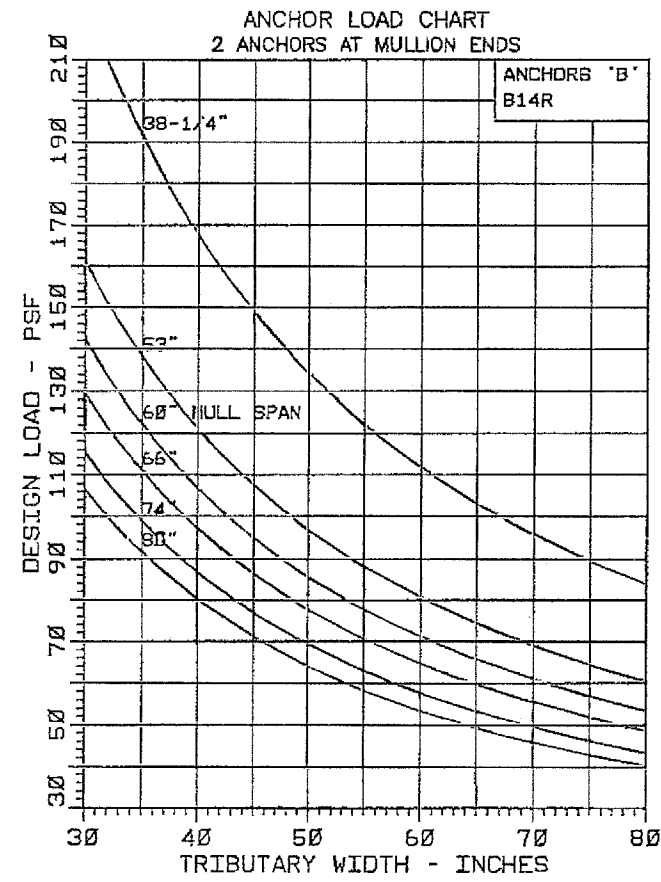
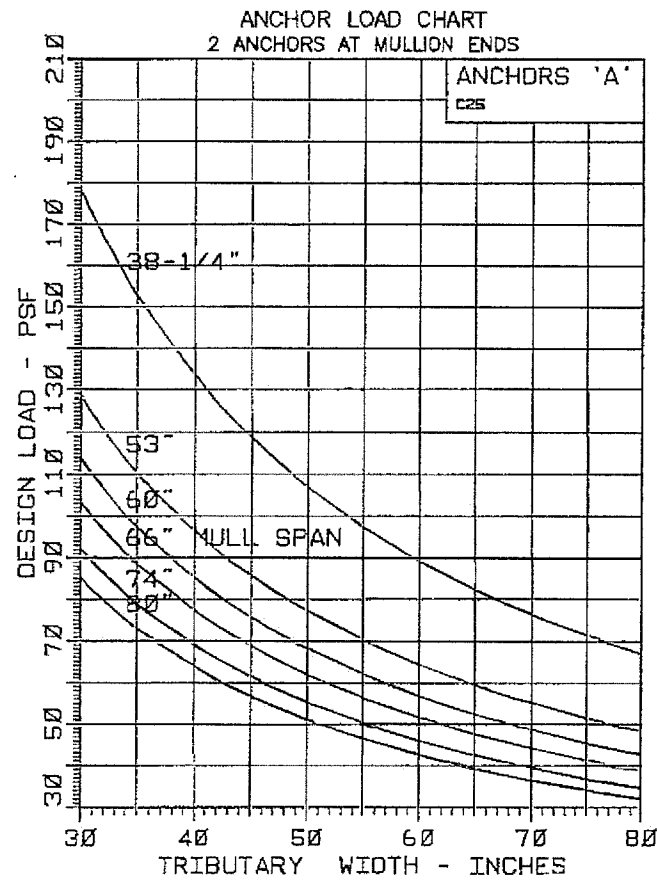
**WINDOOR**  
INCORPORATED  
104 TRIPLE DIAMOND BLVD  
NORTH VENICE, FL 34275  
(407) 481-8400

MULLION LOAD CHARTS

238 FLANGE FRAME CLIPPED MULLION



A. LYNN MILLER, P.E.  
P.E.# 58705



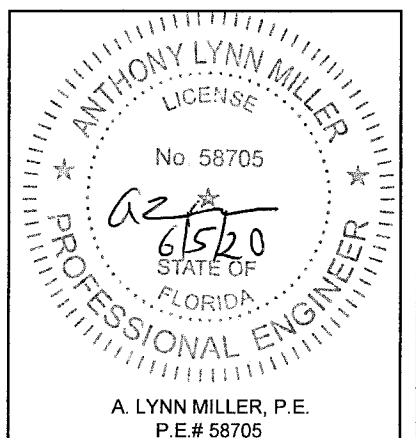
TYPICAL MULLION ARRANGEMENTS

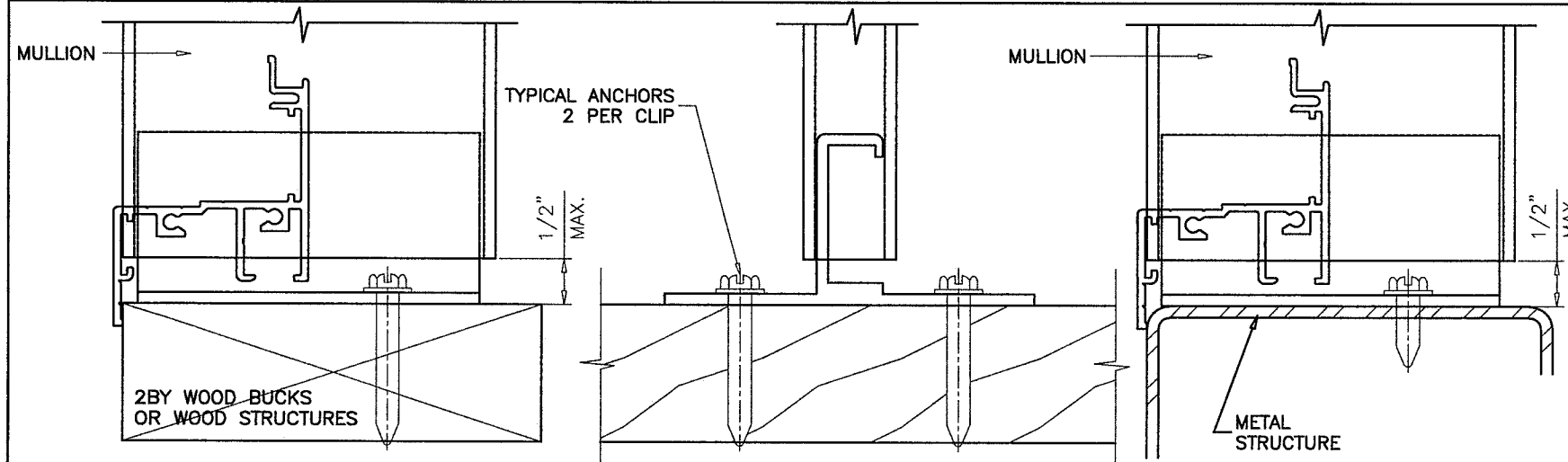
MULLION AND ANCHOR CHARTS ON THIS SHEET APPLY TO HORIZONTAL MULLION AND IT'S END ANCHORS ONLY.

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PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	Date	06/03/20	Rev	A
	ANCHOR LOAD CHARTS	Drawn By	AGK	DWG No.	MD-MUL238
<b>WINDOOR</b> INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	238 FLANGE FRAME CLIPPED MULLION	Scale	NTS	Sheet	5 OF 7
	MUL238	Series	MUL238		





INTO 2BY WOOD BUCKS OR WOOD STRUCTURES

INTO METAL STRUCTURES

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

**TYPICAL ANCHORS:** SEE ELEV. FOR SPACING

TYPE 'A' - 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)  
 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)  
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
 1-1/2" MIN. PENETRATION INTO WOOD  
 THRU 1BY BUCKS INTO CONC. OR MASONRY  
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'B' - 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)  
 DIRECTLY INTO CONCRETE  
 1-1/2" MIN. EMBED INTO CONCRETE  
 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)  
 DIRECTLY INTO CONCRETE  
 1-3/4" MIN. EMBED INTO CONCRETE

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)  
 INTO METAL STRUCTURES  
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
 ALUMINUM : 1/8" THK. MIN. (6063-T6 MIN.)  
 STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)  
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

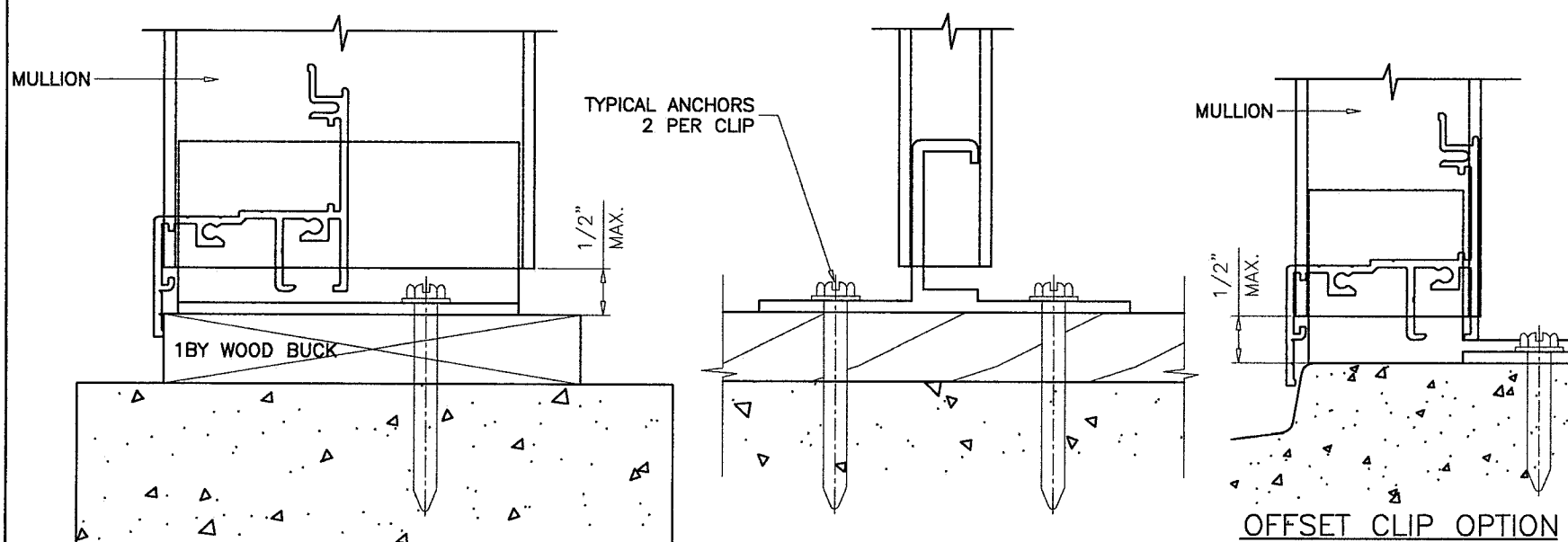
TYPE 'BH' - 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)  
 DIRECTLY INTO HOLLOW OR GROUT FILLED BLOCKS  
 1-1/4" MIN. EMBED INTO BLOCKS  
 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)  
 DIRECTLY INTO HOLLOW OR GROUT FILLED BLOCKS  
 1-1/4" MIN. EMBED INTO BLOCKS  
 (MAY BE USED WITH 1" MIN. EDGE DISTANCE)

TYPE 'BF' - 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)  
 DIRECTLY INTO FILLED BLOCKS  
 1-3/4" MIN. EMBED INTO GROUT FILLED BLOCKS  
 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)  
 DIRECTLY INTO HOLLOW OR GROUT FILLED BLOCKS  
 1-1/4" MIN. EMBED INTO BLOCKS

TYPICAL EDGE DISTANCE (UNLESS OTHERWISE NOTED)  
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.  
 INTO WOOD STRUCTURE = 1" MIN.  
 INTO METAL STRUCTURE = 1/2" MIN.

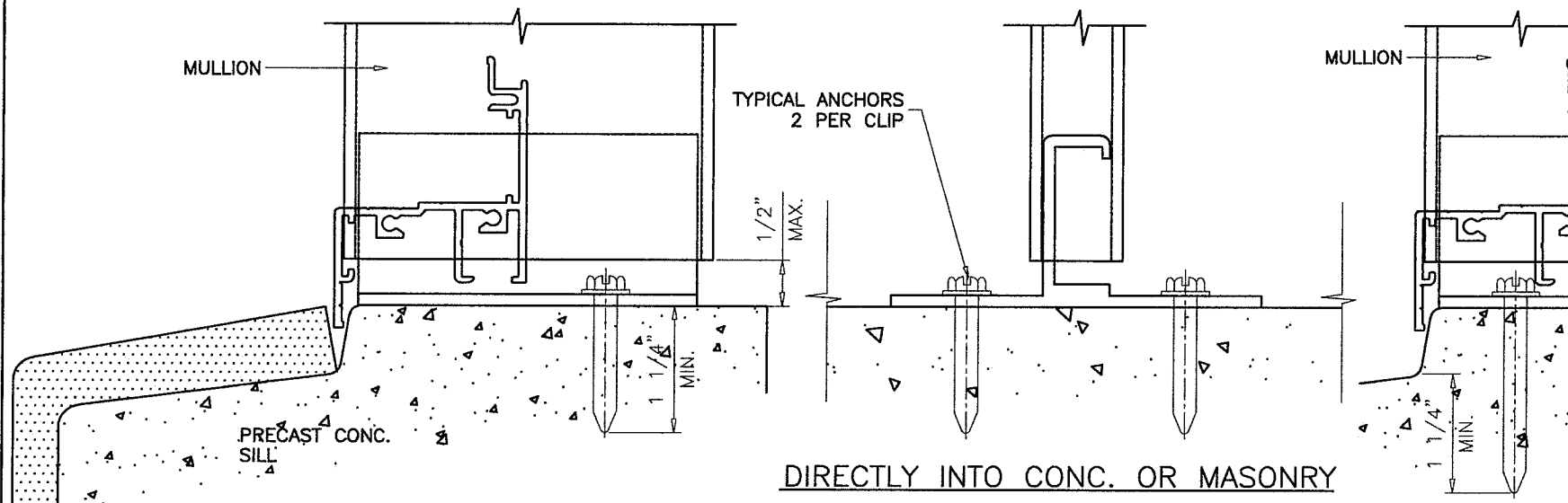
WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.  
 CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.  
 C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

REFER TO SHEET 1 FOR CLIP DETAILS WITH 4 ANCHORS PER CLIP



THRU 1BY BUCKS INTO CONC. OR MASONRY

OFFSET CLIP OPTION

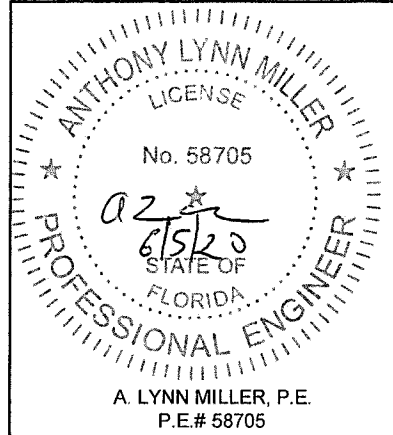


DIRECTLY INTO CONC. OR MASONRY

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 NOA-No. 20-0610.15  
 Expiration Date 04/26/2022  
 By *[Signature]*  
 Miami-Dade Product Control

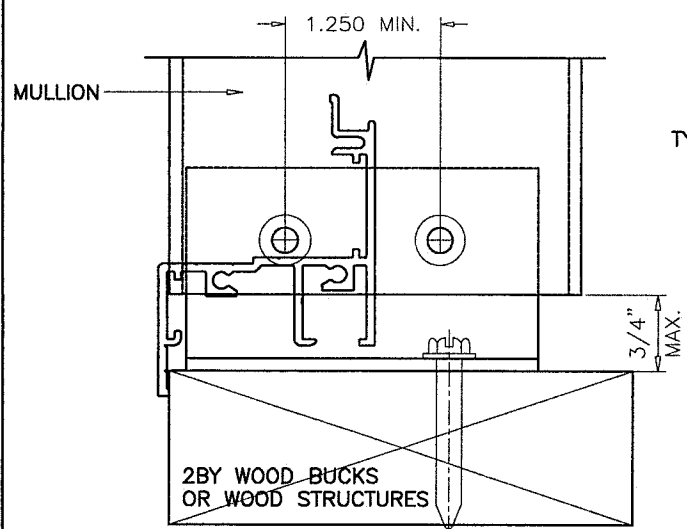
Revision:  
 A) ADDED ULTRACON+ ANCHORS.  
 AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	06/03/20	AGK	A
	INSTALLATION DETAILS, ANCHORS	Date	By	Rev.
<b>WINDOOR</b> INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	238 FLANGE FRAME CLIPPED MULLION	6 OF 7	NTS	MD-MUL238
				MUL238
Series	Title	Scale	NTS	Sheet

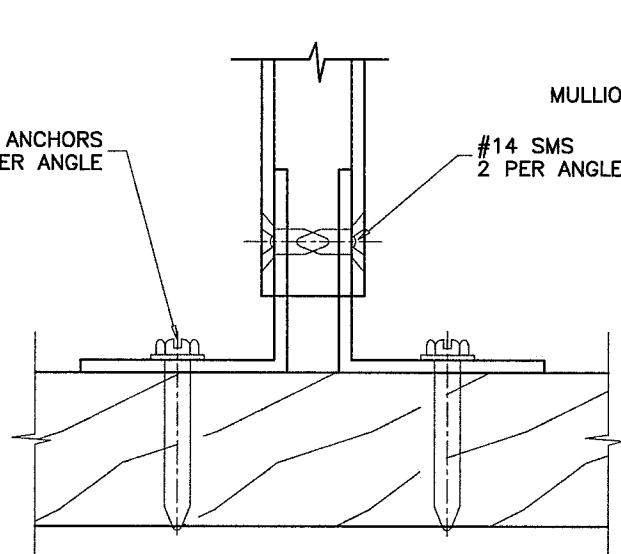


A. LYNN MILLER, P.E.  
 P.E.# 58705

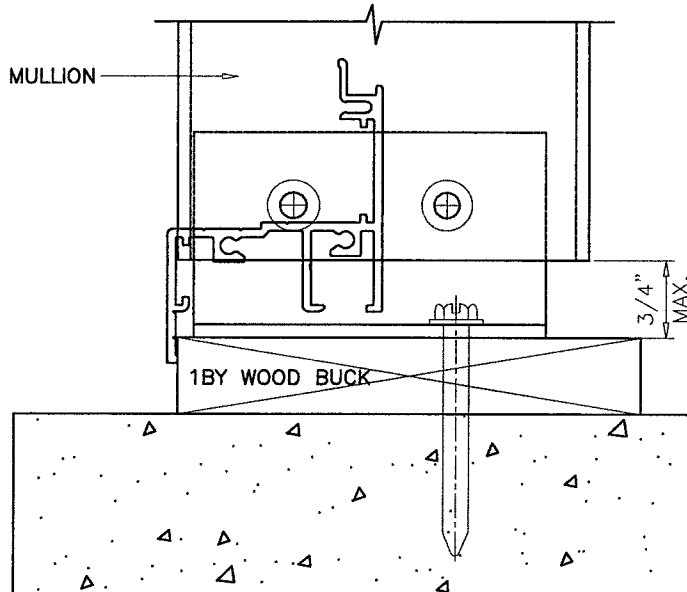




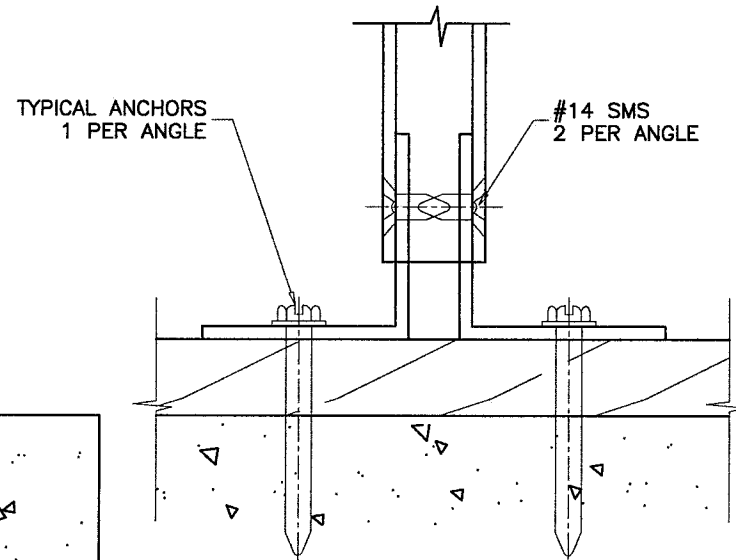
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES



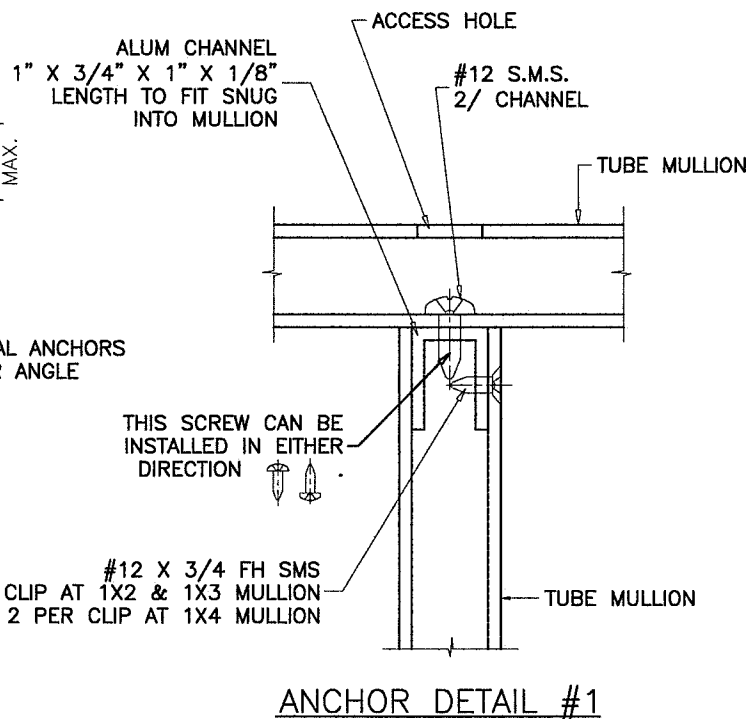
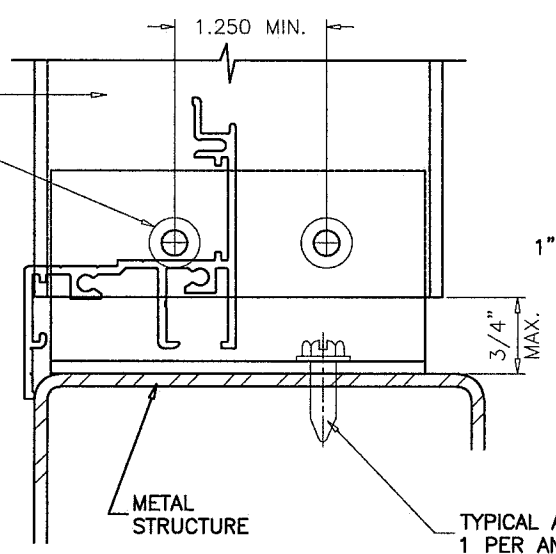
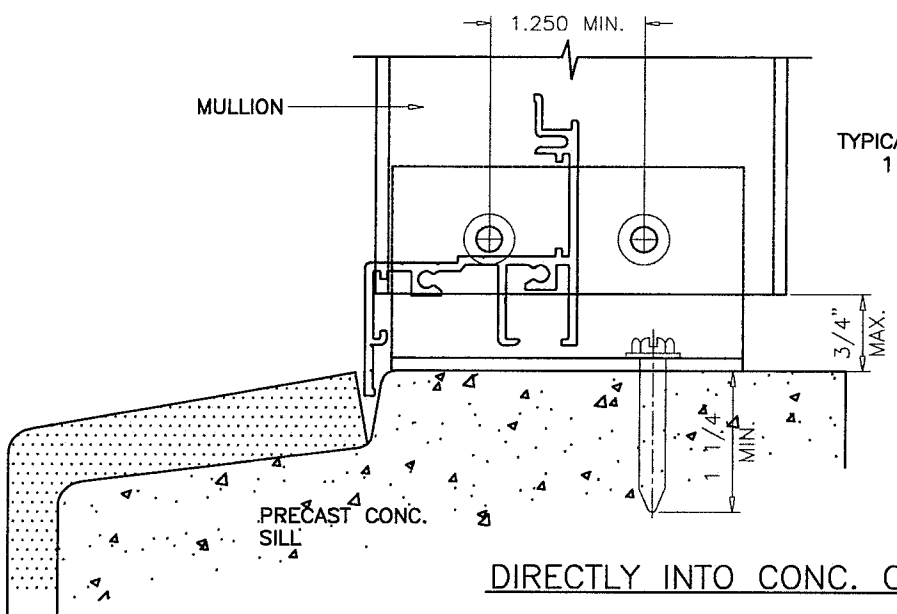
INTO METAL STRUCTURES



THRU 1BY BUCKS INTO CONC. OR MASONRY



DIRECTLY INTO CONC. OR MASONRY



**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 NOA-No. 20-0610.15  
 Expiration Date 04/26/2022  
 By *[Signature]*  
 Miami-Dade Product Control

Revision: A) NO CHANGES THIS SHEET.  
 AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	06/03/20	AGK	A
	INSTALLATION DETAILS			
WINDOOR® INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MUL238	7 OF 7	MD-MUL238	
	238 FLANGE FRAME CLIPPED MULLION			

