



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

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 "450" Clipped Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. MD-450MULL, titled "450 Clipped Mullion", sheets 1 through 9 of 9, dated 06/03/2020, 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 and renews NOA#18-0926.14** 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. 20-0610.16
Expiration Date: October 05, 2026
Approval Date: October 28, 2020
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections (*See NOA#20-0610.09*)
2. Drawing No. MD-450MULL, titled "450 Clipped Mullion", sheets 1 through 9 of 9, dated 06/03/2020, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS (*See NOA #20-0610.09*)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC-6th Edition (2017)** and **FBC-7th (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 6th Edition (2017)** and with **FBC 7th 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.

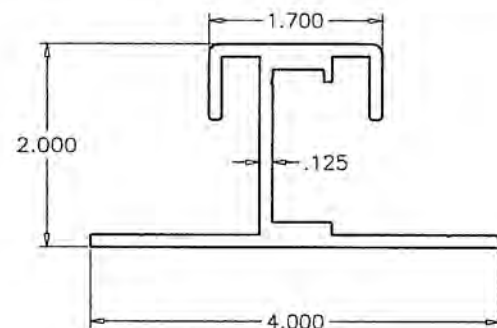
D. OTHERS

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#18-0926.14)
2. Notice of Acceptance No. **18-0926.14**, issued to WinDoor for their Series Clipped, Extruded Aluminum Tube Mullion with #373 Framing Member – L.M.I., approved on 11/29/18 and expiring on 11/05/2021/21
3. NOA No. **20-0610.09** issued to CGI Windows & Doors for their Series "450" Clipped Mullion - L.M.I. approved on 09/24/20 and expiring on 10/05/26.



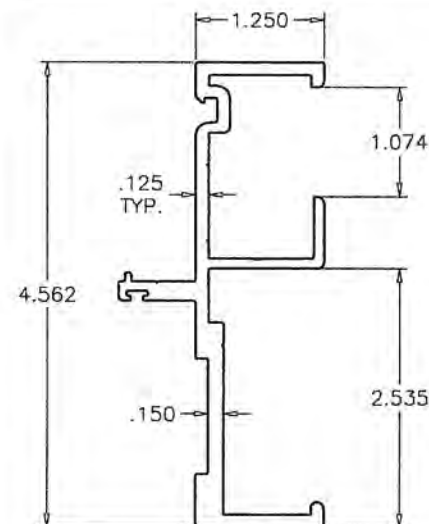
Sifang Zhao, P.E.
Product Control Examiner
NOA No. 20-0610.16

Expiration Date: October 05, 2026
Approval Date: October 28, 2020



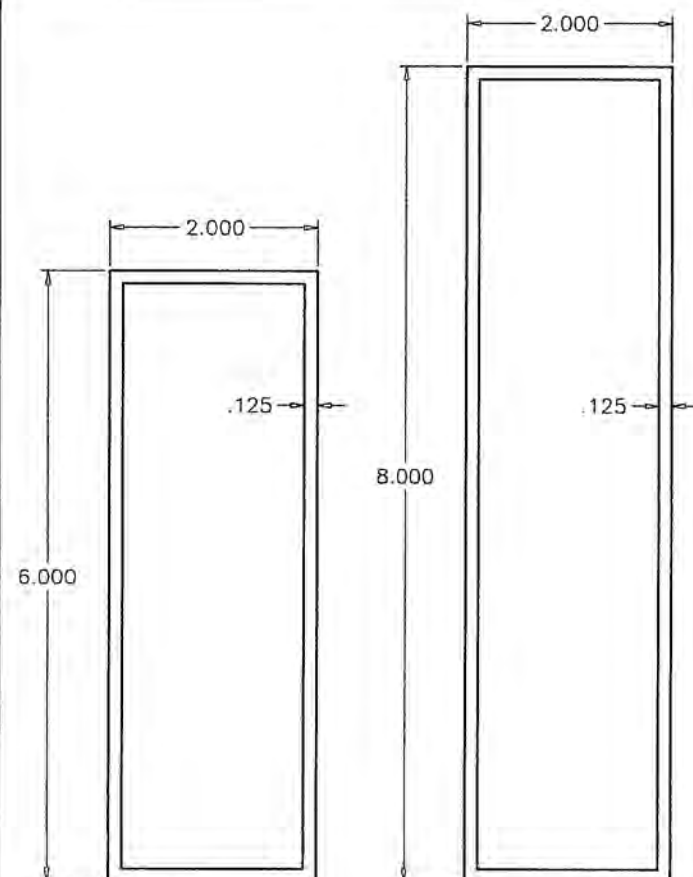
MULLION CLIP

CGI-395
6063-T6



DOOR JAMB

CGI-509
6063-T6



MULLION TUBES

6063-T6

INSTRUCTIONS:

USE MULLION/ANCHOR CHART AS FOLLOWS.

- STEP 1** DETERMINE DESIGN LOAD REQUIRED PER ASCE 7 FOR PARTICULAR OPENING.
- STEP 2** USE CONNECTION TO MULLION AS PER THIS PRODUCT APPROVAL.
- STEP 3** USING CHART SELECT ANCHORS WITH DESIGN RATING MORE THAN THE DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** CAPACITY OF SELECTED WINDOOR'S DOORS/SIDELITE/TRANSOM AND MULLION MUST EQUAL OR EXCEED REQUIRED LOADS.

THIS MULLION APPROVAL TO BE USED FOR MULLION AS SHOWN ON SHEET 5 AND MUST CONTAIN WINDOOR'S SWING DOORS, SIDELITES AND TRANSOMS AS DEPICTED.

THESE MULLIONS ARE RATED FOR LARGE & SMALL MISSILE IMPACT

**SERIES '450' VERTICAL ALUMINUM TUBE MULLION
DOOR FRAME MEMBER INCLUDED IN PROPERTIES**

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.

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 2017/2020 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.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**

Expiration Date **10/05/2026**

By 
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

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

EXTRUSIONS, INSTRUCTIONS, NOTES

Date 06/03/20

By AGK

No. MD-450MULL

DWG. A

1 OF 9

Sheet

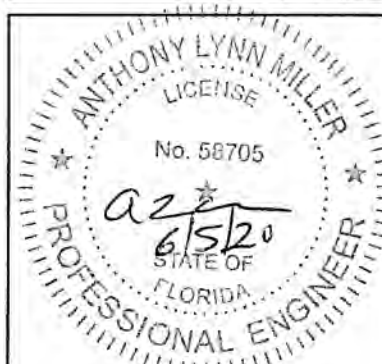
NTS

Scale

450MULL

450 CLIPPED MULLION

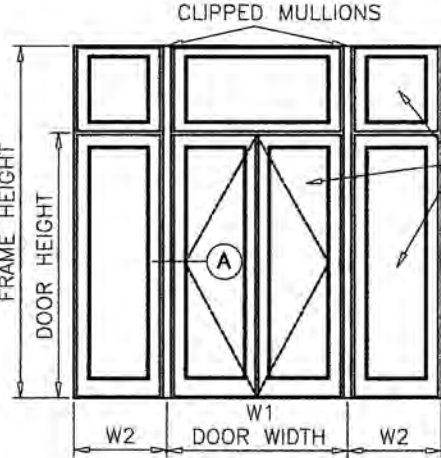
Series



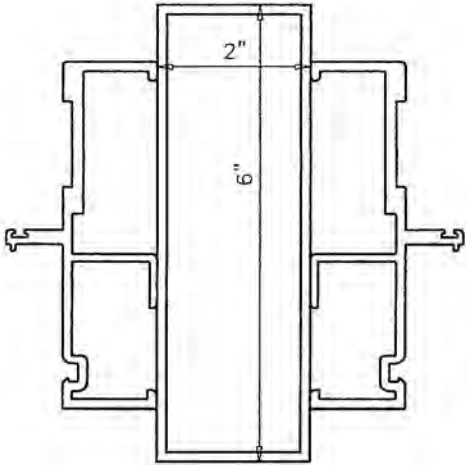
A. LYNN MILLER, P.E.
P.E.# 58705

DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	96	84	110.0	110.0	110.0	110.0
	30			108.5	108.5	110.0	110.0
	36			101.5	101.5	110.0	110.0
	42			95.3	95.3	106.3	106.3
72	24			102.3	102.3	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			90.4	90.4	100.9	100.9
	42			85.5	85.5	95.3	95.3
84	24			91.1	91.1	101.6	101.6
	30			86.1	86.1	96.0	96.0
	36			81.6	81.6	91.0	91.0
	42			77.5	77.5	86.5	86.5
60	24	102	84	110.0	110.0	110.0	110.0
	30			104.0	104.0	110.0	110.0
	36			97.1	97.1	108.3	108.3
	42			91.1	91.1	101.6	101.6
72	24			98.3	98.3	109.6	109.6
	30			92.1	92.1	102.7	102.7
	36			86.7	86.7	96.7	96.7
	42			81.8	81.8	91.3	91.3
84	24			87.6	87.6	97.7	97.7
	30			82.6	82.5	92.2	92.2
	36			78.2	78.2	87.3	87.3
	42			74.3	74.3	82.9	82.9
60	24	108	84	107.6	107.6	110.0	110.0
	30			99.8	99.8	110.0	110.0
	36			93.1	93.1	103.9	103.9
	42			87.3	87.3	97.3	97.3
72	24			94.5	94.5	105.5	105.5
	30			88.5	88.5	98.7	98.7
	36			83.2	83.2	92.8	92.8
	42			78.5	78.5	87.5	87.5
84	24			84.3	84.3	94.1	94.1
	30			79.5	79.5	88.7	88.7
	36			75.2	75.2	83.9	83.9
	42			71.3	71.3	79.5	79.5
60	24	114	84	103.6	103.6	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			89.5	89.5	99.8	99.8
	42			83.8	83.8	93.4	93.4
72	24			91.1	91.1	101.6	101.6
	30			85.2	85.2	95.0	95.0
	36			80.0	80.0	89.2	89.2
	42			75.4	75.4	84.1	84.1
84	24			81.3	81.3	90.7	90.7
	30			76.6	76.6	85.4	85.4
	36			72.3	72.3	80.7	80.7
	42			68.6	68.6	76.5	76.5
60	24	120	84	99.8	99.8	110.0	110.0
	30			92.4	92.4	103.1	103.1
	36			86.1	86.1	96.0	96.0
	42			80.5	80.5	89.8	89.8
72	24			87.9	87.9	98.0	98.0
	30			82.1	82.1	91.6	91.6
	36			77.0	77.0	85.9	85.9
	42			72.6	72.6	80.9	80.9
84	24			78.5	78.5	87.5	87.5
	30			73.8	73.8	82.4	82.4
	36			69.7	69.7	77.8	77.8
	42			66.0	66.0	73.7	73.7

DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	126	84	96.4	96.4	106.5	106.5
	30			89.1	89.1	99.1	99.1
	36			82.9	82.9	92.5	92.5
	42			77.5	77.5	86.5	86.5
72	24			84.9	84.9	93.4	93.4
	30			79.2	79.2	87.7	87.7
	36			74.3	74.3	82.6	82.6
	42			69.9	69.9	78.0	78.0
84	24			75.9	75.9	83.1	83.1
	30			71.3	71.5	78.6	78.6
	36			67.3	67.3	74.5	74.5
	42			63.7	63.7	70.8	70.8
60	24	132	84	93.1	93.1	95.7	95.7
	30			86.1	86.1	89.2	89.2
	36			80.0	80.0	83.5	83.5
	42			74.7	74.7	78.5	78.5
72	24			82.1	82.1	93.9	93.9
	30			76.6	76.6	78.8	78.8
	36			71.7	71.7	74.3	74.3
	42			67.5	67.5	70.3	70.3
84	24			73.4	73.4	74.6	74.6
	30			69.0	69.0	70.6	70.6
	36			65.0	65.0	67.0	67.0
	42			61.5	61.5	63.7	63.7
60	24	138	84	86.7	86.7	86.7	86.7
	30			80.9	80.9	80.9	80.9
	36			75.7	75.7	75.7	75.7
	42			71.2	71.2	71.2	71.2
72	24			76.0	76.0	76.0	76.0
	30			71.4	71.4	71.4	71.4
	36			67.4	67.4	67.4	67.4
	42			63.8	63.8	63.8	63.8
84	24			67.6	67.6	67.6	67.6
	30			63.9	63.9	63.9	63.9
	36			60.7	60.7	60.7	60.7
	42			57.8	57.8	57.8	57.8
60	24	144	84	76.9	76.9	76.9	76.9
	30			71.3	71.3	71.3	71.3
	36			66.5	66.5	66.5	66.5
	42			62.3	62.3	62.3	62.3
72	24			67.6	67.6	67.5	67.6
	30			63.2	63.2	63.2	63.2
	36			59.4	59.4	59.4	59.4
	42			56.0	56.0	56.0	56.0
84	24			60.3	60.3	60.3	60.3
	30			56.8	56.8	56.8	56.8
	36			53.7	53.7	53.7	53.7
	42			50.9	50.9	50.9	50.9



REFER TO SEPARATE 'WINDOOR' N.O.A. FOR SERIES 450 DOORS, SIDELITES AND TRANSOMS



TOTAL PROPERTIES
Ix = 14.183 IN^4
Sx = 4.728 IN^3

LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**
Expiration Date **10/05/2026**
By
Miami-Dade Product Control

Revisions:
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	MD-450MULL	A
WINDOOR® INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MULLION LOAD CHARTS	450 CLIPPED MULLION	450MULL	2 OF 9	NTS
	Series	Title	Desc.	Scale	Sheet

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

MULLION LOAD CHARTS

450 CLIPPED MULLION

450MULL

2 OF 9

NTS

Series

Title

Desc.

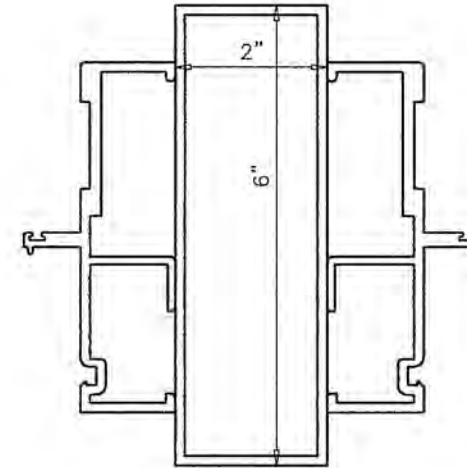
Scale

Sheet

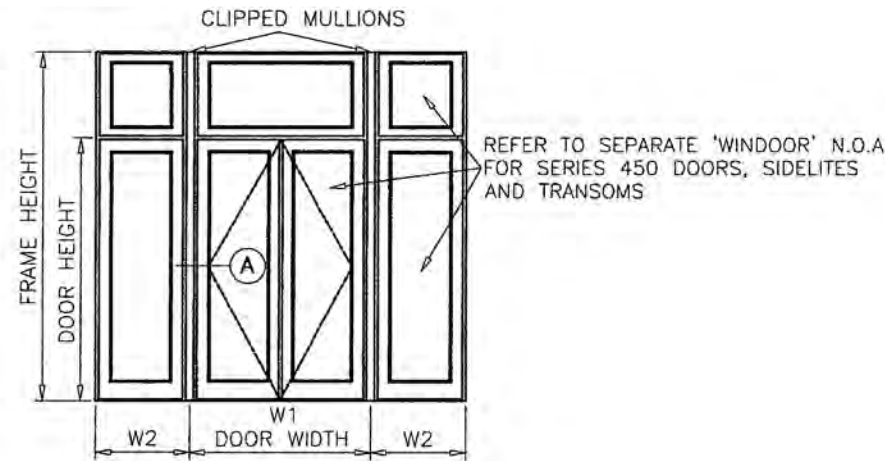
PROFESSIONAL ENGINEER
ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
P.E.# 58705

DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	108	96	103.1	103.1	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			89.8	89.8	100.1	100.1
	42			84.3	84.3	94.1	94.1
72	24			90.4	90.4	100.9	100.9
	30			84.9	84.9	94.7	94.7
	36			80.0	80.0	89.2	89.2
	42			75.6	75.6	84.4	84.4
84	24			80.5	80.5	89.8	89.8
	30			76.1	76.1	84.9	84.9
	36			72.1	72.1	80.5	80.5
	42			68.6	68.6	76.5	76.5
60	24	114	96	99.4	99.4	110.0	110.0
	30			92.4	92.4	103.1	103.1
	36			86.4	86.4	96.3	96.3
	42			81.0	81.0	90.4	90.4
72	24			87.3	87.3	97.3	97.3
	30			81.8	81.8	91.3	91.3
	36			77.0	77.0	85.9	85.9
	42			72.8	72.8	81.2	81.2
84	24			77.8	77.8	86.7	86.7
	30			73.4	73.4	81.9	81.9
	36			69.5	69.5	77.5	77.5
	42			66.0	66.0	73.7	73.7
60	24	120	96	96.0	96.0	107.1	107.1
	30			89.1	89.1	99.4	99.4
	36			83.2	83.2	92.8	92.8
	42			78.0	78.0	87.0	87.0
72	24			84.3	84.3	94.1	94.1
	30			79.0	79.0	88.1	88.1
	36			74.3	74.3	82.9	82.9
	42			70.1	70.1	78.2	78.2
84	24			75.2	75.2	83.9	83.9
	30			70.9	70.9	79.1	79.1
	36			67.1	67.1	74.8	74.8
	42			63.7	63.7	71.0	71.0
60	24	126	96	92.8	92.8	103.5	103.5
	30			86.1	86.1	96.0	96.0
	36			80.3	80.3	89.5	89.5
	42			75.2	75.2	83.9	83.9
72	24			81.6	81.6	91.0	91.0
	30			76.3	76.3	85.1	85.1
	36			71.7	71.7	80.0	80.0
	42			67.6	67.6	75.4	75.4
84	24			72.8	72.8	81.2	81.2
	30			68.6	68.6	76.5	76.5
	36			64.8	64.8	72.3	72.3
	42			61.5	61.5	68.6	68.6
60	24	132	96	89.8	89.8	99.2	99.2
	30			83.2	83.2	92.1	92.1
	36			77.5	77.5	85.9	85.9
	42			72.6	72.6	80.5	80.5
72	24			79.0	79.0	87.1	87.1
	30			73.8	73.8	81.6	81.6
	36			69.3	69.3	76.7	76.7
	42			65.3	65.3	72.4	72.4
84	24			70.5	70.5	77.7	77.7
	30			66.4	66.4	73.2	73.2
	36			62.7	62.7	69.3	69.3
	42			59.4	59.4	65.8	65.8

DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	138	96	87.0	87.0	88.9	88.9
	30			80.5	80.5	82.6	82.6
	36			75.0	75.0	77.2	77.2
	42			70.1	70.1	72.5	72.5
72	24			76.6	76.6	78.0	78.0
	30			71.5	71.5	73.2	73.2
	36			67.1	67.1	68.9	68.9
	42			63.2	63.2	65.1	65.1
84	24			68.4	68.4	69.5	69.5
	30			64.3	64.3	65.6	65.6
	36			60.7	60.7	62.2	62.2
	42			57.5	57.5	59.0	59.0
60	24	144	96	80.4	80.4	80.4	80.4
	30			74.7	74.7	74.7	74.7
	36			69.4	69.4	69.4	69.4
	42			64.8	64.8	64.8	64.8
72	24			70.5	70.5	70.5	70.5
	30			66.1	66.1	66.1	66.1
	36			62.2	62.2	62.2	62.2
	42			58.5	58.5	58.5	58.5
84	24			62.7	62.7	62.7	62.7
	30			59.3	59.3	59.3	59.3
	36			56.2	56.2	56.2	56.2
	42			53.3	53.3	53.3	53.3



TOTAL PROPERTIES
 $I_x = 14.183 \text{ IN}^4$
 $S_x = 4.728 \text{ IN}^3$

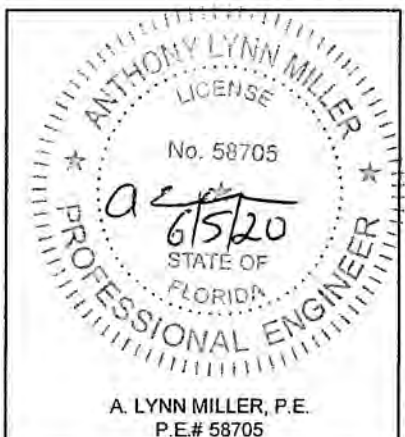


LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**
Expiration Date **10/05/2026**
By
Miami-Dade Product Control

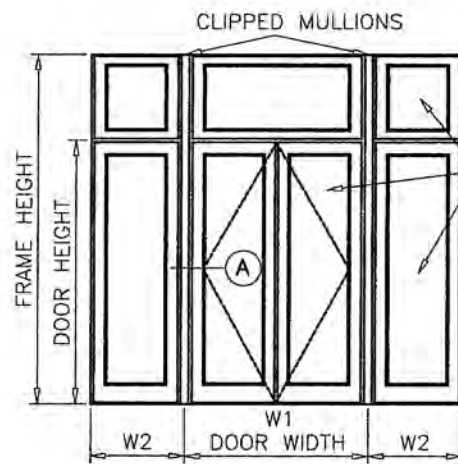
Revision: A) NO CHANGES THIS SHEET.
AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	06/03/20	AGK	Rev.	A
				No.	MD-450MULL
				DWG	3 OF 9
				Scale	NTS
WINDOOR® INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MULLION LOAD CHARTS	450 CLIPPED MULLION	450MULL	Sheet	NTS
				Title	450 CLIPPED MULLION
				Series	450MULL
				Desc.	450MULL

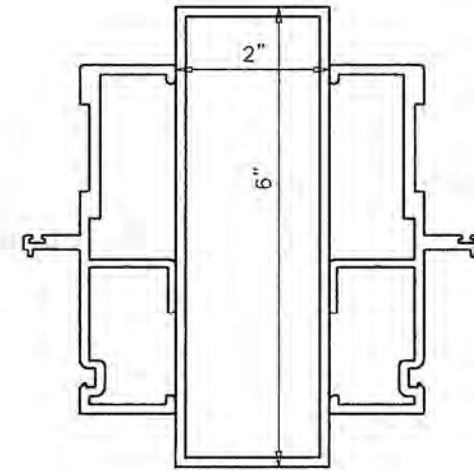


DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS			
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	120	108	92.4	92.4	103.1	103.1
	30			86.1	86.1	96.0	96.0
	36			80.5	80.5	89.8	89.8
	42			75.6	75.6	84.4	84.4
72	24			81.0	81.0	90.4	90.4
	30			76.1	76.1	84.9	84.9
	36			71.7	71.7	80.0	80.0
	42			67.8	67.8	75.7	75.7
84	24			72.1	72.1	80.5	80.5
	30			68.2	68.2	76.1	76.1
	36			64.7	64.7	72.1	72.1
	42			61.5	61.5	68.6	68.6
60	24	126	108	89.5	89.5	99.8	99.8
	30			83.2	83.2	92.8	92.8
	36			77.8	77.8	86.7	86.7
	42			73.0	73.0	81.4	81.4
72	24			78.5	78.5	87.5	87.5
	30			73.6	73.6	82.1	82.1
	36			69.3	69.3	77.3	77.3
	42			65.5	65.5	73.1	73.1
84	24			69.9	69.9	78.0	78.0
	30			66.0	66.0	73.7	73.7
	36			62.6	62.6	69.8	69.8
	42			59.4	59.4	66.3	66.3
60	24	132	108	86.7	86.7	96.7	96.7
	30			80.5	80.5	89.8	89.8
	36			75.2	75.2	83.9	83.9
	42			70.5	70.5	78.6	78.6
72	24			76.1	76.1	84.9	84.9
	30			71.3	71.3	79.5	79.5
	36			67.1	67.1	74.8	74.8
	42			63.4	63.4	70.7	70.7
84	24			67.8	67.8	75.7	75.7
	30			64.0	64.0	71.4	71.4
	36			60.6	60.6	67.6	67.6
	42			57.5	57.5	64.1	64.1
60	24	138	108	84.0	84.0	93.5	93.5
	30			78.0	78.0	86.6	86.6
	36			72.8	72.8	80.6	80.6
	42			68.2	68.2	75.3	75.3
72	24			73.8	73.8	82.4	82.4
	30			69.1	69.1	75.9	76.9
	36			65.0	65.0	72.1	72.1
	42			61.3	61.3	67.9	67.9
84	24			65.9	65.9	73.5	73.5
	30			62.1	62.1	69.2	69.2
	36			58.7	58.7	65.3	65.3
	42			55.7	55.7	61.8	61.8
60	24	144	108	81.6	81.6	83.6	83.6
	30			75.6	75.6	77.5	77.5
	36			70.5	70.5	72.2	72.2
	42			66.0	66.0	67.7	67.7
72	24			71.7	71.7	73.5	73.5
	30			67.1	67.1	68.7	68.7
	36			63.0	63.0	64.6	64.6
	42			59.4	59.4	60.9	60.9
84	24			64.0	64.0	65.6	65.6
	30			60.3	60.3	61.8	61.8
	36			57.0	57.0	58.4	58.4
	42			54.0	54.0	55.4	55.4

DESIGN LOAD CAPACITY - PSF. (2 X 6 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS			
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	132	120	83.8	83.8	93.4	93.4
	30			78.0	78.0	87.0	87.0
	36			73.0	73.0	81.4	81.4
	42			68.6	68.6	76.5	76.5
72	24			73.4	73.4	81.8	81.9
	30			69.0	69.0	76.9	76.9
	36			65.0	65.0	72.5	72.5
	42			61.5	61.5	68.6	68.6
84	24			65.3	65.3	72.9	72.9
	30			61.8	61.8	68.9	68.9
	36			58.6	58.6	65.4	65.4
	42			55.7	55.7	62.1	62.1
60	24	138	120	81.3	81.3	90.7	90.7
	30			75.6	75.6	84.4	84.4
	36			70.7	70.7	78.9	78.9
	42			66.4	66.4	74.0	74.0
72	24			71.3	71.3	79.5	79.5
	30			66.9	66.9	74.6	74.6
	36			63.0	63.0	70.3	70.3
	42			59.6	59.6	66.4	66.4
84	24			63.5	63.5	70.8	70.8
	30			60.0	60.0	66.9	66.9
	36			56.9	56.9	63.4	63.4
	42			54.0	54.0	60.3	60.3
60	24	144	120	79.0	79.0	88.1	88.1
	30			73.4	73.4	81.9	81.9
	36			68.6	68.6	76.3	76.3
	42			64.3	64.3	71.1	71.1
72	24			69.3	69.3	77.3	77.3
	30			65.0	65.0	72.5	72.5
	36			61.2	61.2	68.2	68.2
	42			57.8	57.8	64.4	64.4
84	24			61.8	61.8	68.9	68.9
	30			56.3	56.3	65.0	65.0
	36			55.2	55.2	61.6	61.6
	42			52.4	52.4	58.5	58.5




REFER TO SEPARATE 'WINDOOR' N.O.A.
FOR SERIES 450 DOORS, SIDELITES
AND TRANSOMS



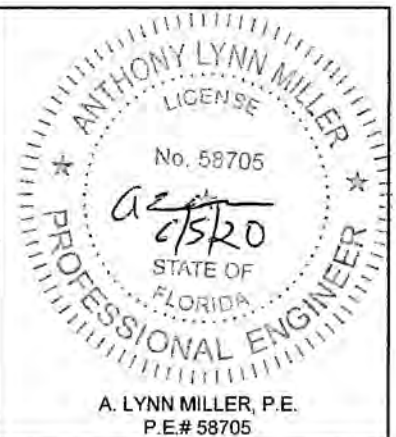
TOTAL PROPERTIES
Ix = 14.183 IN⁴
Sx = 4.728 IN³

LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**
Expiration Date **10/05/2026**
By 
Miami-Dade Product Control

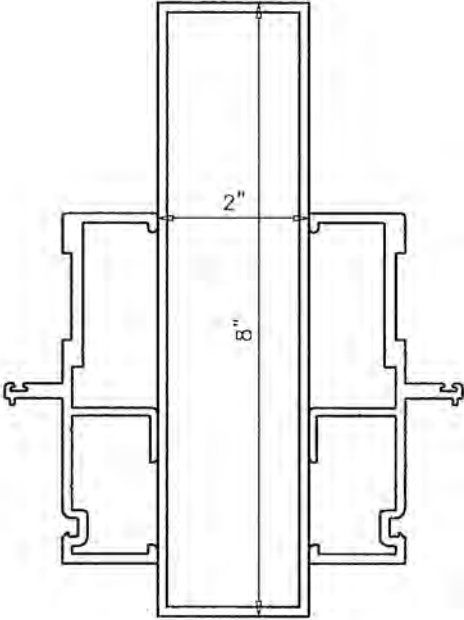
Revision: A) NO CHANGES THIS SHEET.
AK - 06/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	06/03/20	AGK	Rev.	A
				By	MD-450MULL
				DWG	No.
				Sheet	4 OF 9
WinDoor® INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MULLION LOAD CHARTS	450 CLIPPED MULLION	450MULL	Scale	NTS
				Series	Desc.
				Title	

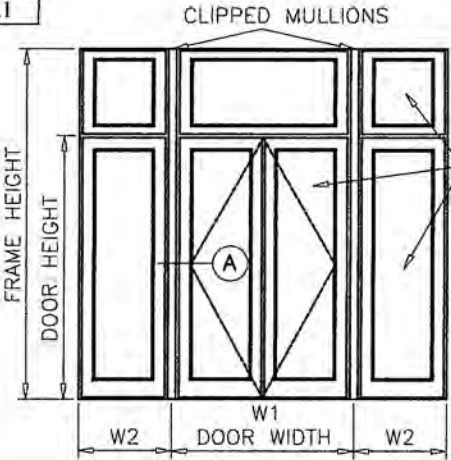


DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	96	84	110.0	110.0	110.0	110.0
	30			108.5	108.5	110.0	110.0
	36			101.5	101.5	110.0	110.0
	42			95.3	95.3	106.3	106.3
72	24			102.3	102.3	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			90.4	90.4	100.9	100.9
	42			85.5	85.5	95.3	95.3
84	24			91.1	91.1	101.6	101.6
	30			86.1	86.1	96.0	96.0
	36			81.6	81.6	91.0	91.0
	42			77.5	77.5	86.5	86.5
60	24	102	84	110.0	110.0	110.0	110.0
	30			104.0	104.0	110.0	110.0
	36			97.1	97.1	108.3	108.3
	42			91.1	91.1	101.6	101.6
72	24			98.3	98.3	109.6	109.6
	30			92.1	92.1	102.7	102.7
	36			86.7	86.7	96.7	96.7
	42			81.8	81.8	91.3	91.3
84	24			87.6	87.6	97.7	97.7
	30			82.6	82.6	92.2	92.2
	36			78.2	78.2	87.3	87.3
	42			74.3	74.3	82.9	82.9
60	24	108	84	107.6	107.6	110.0	110.0
	30			99.8	99.8	110.0	110.0
	36			93.1	93.1	103.9	103.9
	42			87.3	87.3	97.3	97.3
72	24			94.5	94.5	105.5	105.5
	30			88.5	88.5	98.7	98.7
	36			83.2	83.2	92.8	92.8
	42			78.5	78.5	87.5	87.5
84	24			84.3	84.3	94.1	94.1
	30			79.5	79.5	88.7	88.7
	36			75.2	75.2	83.9	83.9
	42			71.3	71.3	79.5	79.5
60	24	114	84	103.6	103.6	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			89.5	89.5	99.8	99.8
	42			83.8	83.8	93.4	93.4
72	24			91.1	91.1	101.6	101.6
	30			85.2	85.2	95.0	95.0
	36			80.0	80.0	89.2	89.2
	42			75.4	75.4	84.1	84.1
84	24			81.3	81.3	90.7	90.7
	30			76.6	76.6	85.4	85.4
	36			72.3	72.3	80.7	80.7
	42			68.6	68.6	76.5	76.5
60	24	120	84	99.8	99.8	110.0	110.0
	30			92.4	92.4	103.1	103.1
	36			86.1	86.1	96.0	96.0
	42			80.5	80.5	89.8	89.8
72	24			87.9	87.9	98.0	98.0
	30			82.1	82.1	91.6	91.6
	36			77.0	77.0	85.9	85.9
	42			72.6	72.6	80.9	80.9
84	24			78.5	78.5	87.5	87.5
	30			73.8	73.8	82.4	82.4
	36			69.7	69.7	77.8	77.8
	42			66.0	66.0	73.7	73.7

DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS	
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	126	84	96.4	95.4	107.5	107.5
	30			89.1	89.1	99.4	99.4
	36			82.9	82.9	92.5	92.5
	42			77.5	77.5	85.5	85.5
72	24			84.9	84.9	94.7	94.7
	30			79.2	79.2	88.4	88.4
	36			74.3	74.3	82.9	82.9
	42			69.9	59.9	78.0	78.0
84	24			75.9	75.9	84.5	84.6
	30			71.3	71.3	79.5	79.5
	36			67.3	67.3	75.0	75.0
	42			63.7	63.7	71.0	71.0
60	24	132	84	93.1	93.1	103.9	103.9
	30			86.1	86.1	96.0	96.0
	36			80.0	80.0	89.2	89.2
	42			74.7	74.7	83.4	83.4
72	24			82.1	82.1	91.6	91.6
	30			76.6	76.6	85.4	85.4
	36			71.7	71.7	80.0	80.0
	42			67.5	67.5	75.2	75.2
84	24			73.4	73.4	81.9	81.9
	30			69.0	69.0	76.9	76.9
	36			65.0	65.0	72.5	72.5
	42			61.5	61.5	68.6	68.6
60	24	138	84	90.1	90.1	100.5	100.5
	30			83.2	83.2	92.8	92.8
	36			77.3	77.3	86.2	86.2
	42			72.1	72.1	80.5	80.5
72	24			79.5	79.5	88.7	88.7
	30			74.1	74.1	82.6	82.6
	36			69.3	69.3	77.3	77.3
	42			65.2	65.2	72.7	72.7
84	24			71.1	71.1	79.3	79.3
	30			66.7	66.7	74.4	74.4
	36			62.9	62.9	70.1	70.1
	42			59.4	59.4	66.3	66.3
60	24	144	84	87.3	87.3	96.5	96.5
	30			80.5	80.5	89.8	89.8
	36			74.7	74.7	83.4	83.4
	42			69.7	69.7	77.8	77.8
72	24			77.0	77.0	84.5	84.5
	30			71.7	71.7	79.5	79.5
	36			67.1	67.1	74.8	74.8
	42			63.0	63.0	70.3	70.3
84	24			69.0	69.0	75.1	75.1
	30			64.7	64.7	71.1	71.1
	36			60.9	60.9	67.6	67.6
	42			57.5	57.5	64.1	64.1



TOTAL PROPERTIES
 $I_x = 23.357 \text{ IN}^4$
 $S_x = 5.839 \text{ IN}^3$



REFER TO SEPARATE 'WINDOOR' N.O.A.
 FOR SERIES 450 DOORS, SIDELITES
 AND TRANSOMS

LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION
 RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER
 INFILTRATION RESISTANCE IS NOT REQUIRED.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **20-0610.16**
 Expiration Date **10/05/2026**
 By
 Miami-Dade Product Control

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

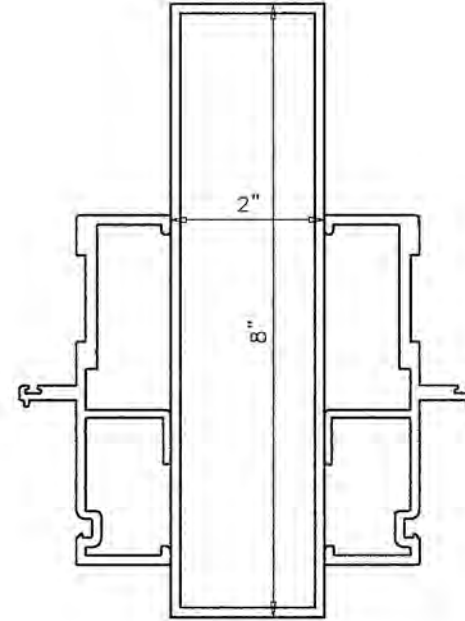
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296	
MULLION LOAD CHARTS		Date	06/03/20
450 CLIPPED MULLION		By	AGK
450MULL		DWC	MD-450MULL
5 OF 9		No.	Rev.
NTS		Sheet	A
Scale			
Series		Title	
Desc.			



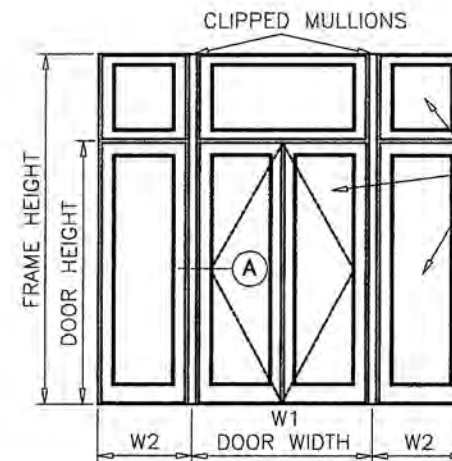
A. LYNN MILLER, P.E.
 P.E.# 58705

DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS			
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	108	96	103.1	103.1	110.0	110.0
	30			96.0	96.0	107.1	107.1
	36			89.8	89.8	100.1	100.1
	42			84.3	84.3	94.1	94.1
72	24			90.4	90.4	100.9	100.9
	30			84.9	84.9	94.7	94.7
	36			80.0	80.0	89.2	89.2
	42			75.6	75.6	84.4	84.4
84	24			80.5	80.5	89.8	89.8
	30			76.1	76.1	84.9	84.9
	36			72.1	72.1	80.5	80.5
	42			68.6	68.6	76.5	76.5
60	24	114	96	99.4	99.4	110.0	110.0
	30			92.4	92.4	103.1	103.1
	36			86.4	86.4	96.3	96.3
	42			81.0	81.0	90.4	90.4
72	24			87.3	87.3	97.3	97.3
	30			81.8	81.8	91.3	91.3
	36			77.0	77.0	85.9	85.9
	42			72.8	72.8	81.2	81.2
84	24			77.8	77.8	86.7	86.7
	30			73.4	73.4	81.9	81.9
	36			69.5	69.5	77.5	77.5
	42			66.0	66.0	73.7	73.7
60	24	120	96	96.0	96.0	107.1	107.1
	30			89.1	89.1	99.4	99.4
	36			83.2	83.2	92.8	92.8
	42			78.0	78.0	87.0	87.0
72	24			84.3	84.3	94.1	94.1
	30			79.0	79.0	88.1	88.1
	36			74.3	74.3	82.9	82.9
	42			70.1	70.1	78.2	78.2
84	24			75.2	75.2	83.9	83.9
	30			70.9	70.9	79.1	79.1
	36			67.1	67.1	74.6	74.6
	42			63.7	63.7	71.0	71.0
60	24	126	96	92.8	92.8	103.5	103.5
	30			86.1	86.1	96.0	96.0
	36			80.3	80.3	89.5	89.5
	42			75.2	75.2	83.9	83.9
72	24			81.6	81.6	91.0	91.0
	30			76.3	76.1	85.1	85.1
	36			71.7	71.7	80.0	80.0
	42			67.6	67.6	75.4	75.4
84	24			72.8	72.8	81.2	81.2
	30			68.6	68.6	76.5	76.5
	36			64.8	64.8	72.3	72.3
	42			61.5	61.5	68.6	68.6
60	24	132	96	89.8	89.8	100.1	100.1
	30			83.2	83.2	92.8	92.8
	36			77.5	77.5	86.5	86.5
	42			72.6	72.6	80.9	80.9
72	24			79.0	79.0	88.1	88.1
	30			73.8	73.8	82.4	82.4
	36			69.3	69.3	77.3	77.3
	42			65.3	65.3	72.9	72.9
84	24			70.5	70.5	78.6	78.6
	30			66.4	66.4	74.0	74.0
	36			62.7	62.7	69.9	69.9
	42			59.4	59.4	66.3	66.3

DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")							
NOMINAL DIMS.				1/4" ANCHORS			
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60	24	138	96	87.0	87.0	97.0	97.0
	30			80.5	80.5	89.8	89.8
	36			75.0	75.0	83.6	83.6
	42			70.1	70.1	78.2	78.2
72	24			76.6	76.6	85.4	85.4
	30			71.5	71.5	79.8	79.8
	36			67.1	67.1	74.8	74.8
	42			63.2	63.2	70.5	70.5
84	24			68.4	68.4	76.3	76.3
	30			64.3	64.3	71.8	71.8
	36			60.7	60.7	67.7	67.7
	42			57.5	57.5	64.1	64.1
60	24	144	96	84.3	84.3	94.1	94.1
	30			78.0	78.0	87.0	87.0
	36			72.6	72.6	80.9	80.9
	42			67.8	67.8	75.7	75.7
72	24			74.3	74.3	82.9	82.9
	30			69.3	69.3	77.3	77.3
	36			65.0	65.0	72.5	72.5
	42			61.2	61.2	68.2	68.2
84	24			66.4	66.4	74.0	74.0
	30			62.4	62.4	69.6	69.6
	36			58.9	58.9	65.7	65.7
	42			55.7	55.7	62.1	62.1



TOTAL PROPERTIES
 $I_x = 23.357 \text{ IN}^4$
 $S_x = 5.839 \text{ IN}^3$



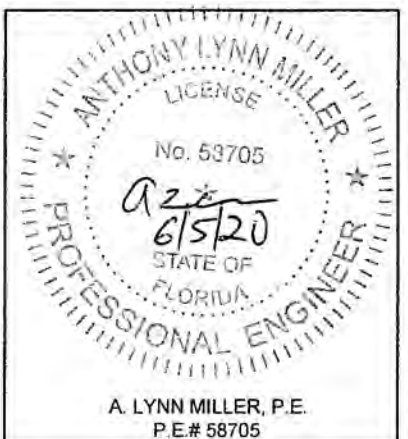
REFER TO SEPARATE 'WINDOOR' N.O.A.
 FOR SERIES 450 DOORS, SIDELITES
 AND TRANSOMS

LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION
 RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER
 INFILTRATION RESISTANCE IS NOT REQUIRED.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **20-0610.16**
 Expiration Date **10/05/2026**
 By
 Miami-Dade Product Control

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

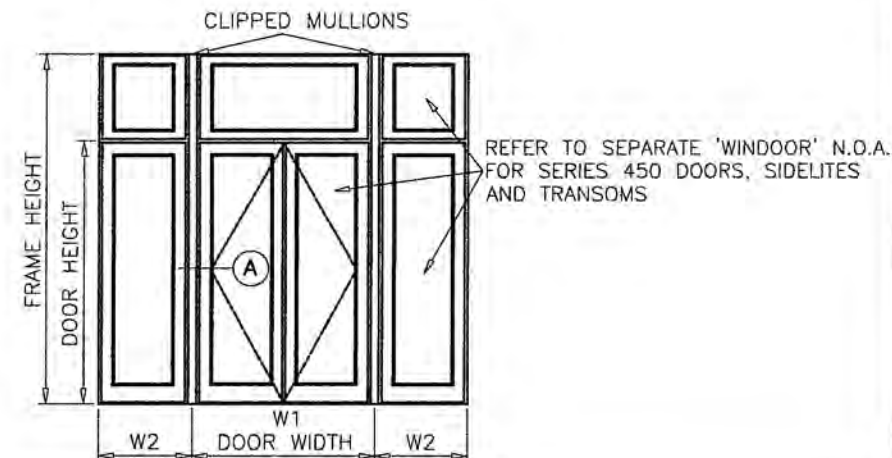
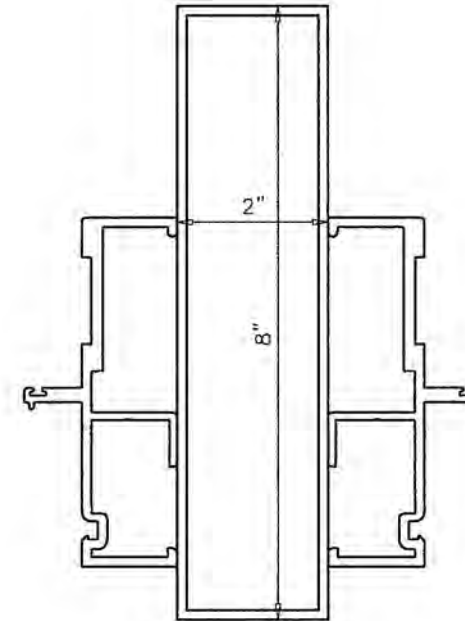
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600				REGISTRATION #29296		06/03/20		AGK		MD-450MULL		A	
WINDOOR® INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400				MULLION LOAD CHARTS		450 CLIPPED MULLION		450MULL		6 OF 9		NTS	
MULLION LOAD CHARTS				450 CLIPPED MULLION		450MULL		6 OF 9		NTS		A	



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

DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")								DESIGN LOAD CAPACITY - PSF. (2 X 8 X 1/8")																	
NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS		NOMINAL DIMS.				1/4" ANCHORS		5/16" ANCHORS											
WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	WIDTH (W1)	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)										
60	24	120	108	92.4	92.4	103.1	103.1	60	24	132	120	83.8	83.8	93.4	93.4										
	30			86.1	86.1	96.0	96.0		30			78.0	78.0	87.0	87.0										
	36			80.5	80.5	89.8	89.8		36			73.0	73.0	81.4	81.4										
	42			75.6	75.6	84.4	84.4		42			68.6	68.6	76.5	76.5										
72	24			81.0	81.0	90.4	90.4	72	24			73.4	73.4	81.9	81.9										
	30			76.1	76.1	84.9	84.9		30			69.0	69.0	76.9	76.9										
	36			71.7	71.7	80.0	80.0		36			65.0	65.0	72.5	72.5										
	42			67.8	67.8	75.7	75.7		42			61.5	61.5	68.6	68.6										
84	24			72.1	72.1	80.5	80.5	84	24			65.3	65.3	72.9	72.9										
	30			68.2	68.2	76.1	76.1		30			61.8	61.8	68.9	68.9										
	36			64.7	64.7	72.1	72.1		36			58.6	58.6	65.4	65.4										
	42			61.5	61.5	68.6	68.6		42			55.7	55.7	62.1	62.1										
60	24			126	108	89.5	89.5	99.8	99.8			60	24	138	120	81.3	81.3	90.7	90.7						
	30					83.2	83.2	92.8	92.8				30			75.6	75.6	84.4	84.4						
	36					77.8	77.8	86.7	86.7				36			70.7	70.7	78.9	78.9						
	42					73.0	73.0	81.4	81.4				42			66.4	66.4	74.0	74.0						
72	24	78.5	78.5			87.5	87.5	72	24	71.3	71.3	79.5	79.5												
	30	73.5	73.6			82.1	82.1		30	66.9	66.9	74.6	74.6												
	36	69.3	69.3			77.3	77.3		36	63.0	63.0	70.3	70.3												
	42	65.5	65.5			73.1	73.1		42	59.6	59.6	66.4	66.4												
84	24	69.9	69.9			78.0	78.0	84	24	63.5	63.5	70.8	70.8												
	30	66.0	66.0			73.7	73.7		30	60.0	60.0	66.9	66.9												
	36	62.6	62.6			69.8	69.8		36	56.9	56.9	63.4	63.4												
	42	59.4	59.4			66.3	66.3		42	54.0	54.0	60.3	60.3												
60	24	132	108			86.7	86.7	96.7	96.7	60	24	144	120			79.0	79.0	88.1	88.1						
	30					80.5	80.5	89.8	89.8		30					73.4	73.4	81.9	81.9						
	36					75.2	75.2	83.9	83.9		36					68.6	68.6	76.5	76.5						
	42					70.5	70.5	78.6	78.6		42					64.3	64.3	71.8	71.8						
72	24			76.1	76.1	84.9	84.9	72	24	69.3	69.3			77.3	77.3										
	30			71.3	71.3	79.5	79.5		30	65.0	65.0			72.5	72.5										
	36			67.1	67.1	74.8	74.8		36	61.2	61.2			68.2	68.2										
	42			63.4	63.4	70.7	70.7		42	57.8	57.8			64.4	64.4										
84	24			67.8	67.8	75.7	75.7	84	24	61.8	61.8			68.9	68.9										
	30			64.0	64.0	71.4	71.4		30	58.3	58.3			65.0	65.0										
	36			60.6	60.6	67.6	67.6		36	55.2	55.2			61.6	61.6										
	42			57.5	57.5	64.1	64.1		42	52.4	52.4			58.5	58.5										
60	24			138	108	84.0	84.0	93.7	93.7																
	30					78.0	78.0	87.0	87.0																
	36					72.8	72.8	81.2	81.2																
	42					68.2	68.2	76.1	76.1																
72	24	73.8	73.8			82.4	82.4																		
	30	69.1	69.1			77.1	77.1																		
	36	65.0	65.0			72.5	72.5																		
	42	61.3	61.3			68.4	68.4																		
84	24	65.9	65.9			73.5	73.5																		
	30	62.1	62.1			69.3	69.3																		
	36	58.7	58.7			65.5	65.5																		
	42	55.7	55.7			62.1	62.1																		
60	24	144	108			81.6	81.6	91.0	91.0																
	30					75.6	75.6	84.4	84.4																
	36					70.5	70.5	78.6	78.6																
	42					66.0	66.0	73.7	73.7																
72	24			71.7	71.7	80.0	80.0																		
	30			67.1	67.1	74.8	74.8																		
	36			63.0	63.0	70.3	70.3																		
	42			59.4	59.4	66.3	66.3																		
84	24			64.0	64.0	71.4	71.4																		
	30			60.3	60.3	67.2	67.2																		
	36			57.0	57.0	63.6	63.6																		
	42			54.0	54.0	60.3	60.3																		

FRAME HEIGHT



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0610.16
Expiration Date 10/05/2026
By 
Miami-Dade Product Control

<h1>WinDoor®</h1> <h2>INCORPORATED</h2> <p>104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400</p>		<p>PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600</p>	
<p>MULLION LOAD CHARTS</p>		<p>REGISTRATION #29296</p>	
<p>450 CLIPPED MULLION</p>		<p>By</p>	<p>Date</p>
<p>450MULL</p>		<p>AGK</p>	<p>06/03/20</p>
<p>Series</p>	<p>Scale</p>	<p>NTS</p>	<p>Sheet</p>
<p>7 OF 9</p>	<p>DWG</p>	<p>No.</p>	<p>MD-450MULL</p>
<p>Rev.</p>	<p>A</p>		<p>Rev.</p>

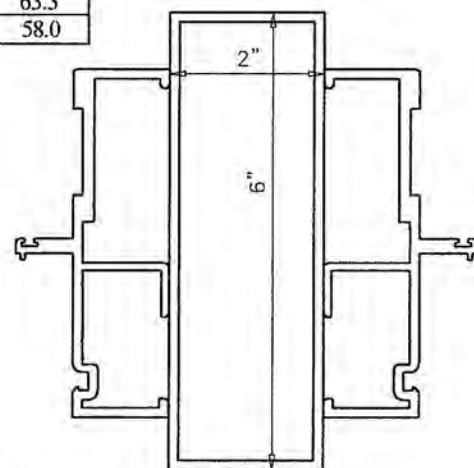
DESIGN LOAD CAPACITY - PSF

L IN.	AVG. WIDTH IN.	2 X 6 X 1/8"				2 X 8 X 1/8"			
		1/4" DIA. ULTRACON		5/16" DIA. ULTRACON		1/4" DIA. ULTRACON		5/16" DIA. ULTRACON	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
84	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	36	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	42	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	48	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	54	99.0	99.0	110.0	110.0	99.0	99.0	110.0	110.0
	60	89.1	89.1	99.4	99.4	89.1	89.1	99.4	99.4
	66	81.0	81.0	90.4	90.4	81.0	81.0	90.4	90.4
	72	74.3	74.3	82.9	82.9	74.3	74.3	82.9	82.9
	78	68.6	68.6	76.5	76.5	68.6	68.6	76.5	76.5
96	84	63.7	63.7	71.0	71.0	63.7	63.7	71.0	71.0
	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	36	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	42	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	48	97.5	97.5	108.8	108.8	97.5	97.5	108.8	108.8
	54	86.7	86.7	96.7	95.7	86.7	86.7	96.7	96.7
	60	78.0	78.0	87.0	87.0	78.0	76.0	87.0	87.0
	66	70.9	70.9	79.1	79.1	70.9	70.9	79.1	79.1
	72	65.0	65.0	72.5	72.5	65.0	65.0	72.5	72.5
108	78	60.0	60.0	66.9	66.9	60.0	60.0	66.9	66.9
	84	55.7	55.7	62.1	62.1	55.7	55.7	62.1	62.1
	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	36	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	42	99.0	99.0	110.0	110.0	99.0	99.0	110.0	110.0
	48	86.7	86.7	96.7	96.7	86.7	86.7	96.7	96.7
	54	77.0	77.0	85.9	85.9	77.0	77.0	85.9	85.9
	60	69.3	69.3	77.3	77.3	69.3	69.3	77.3	77.3
	66	63.0	63.0	70.3	70.3	63.0	63.0	70.3	70.3
120	72	57.8	57.8	64.4	64.4	57.8	57.8	64.4	64.4
	78	53.3	53.3	59.5	59.5	53.3	53.3	59.5	59.5
	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	36	104.0	104.0	110.0	110.0	104.0	104.0	110.0	110.0
	42	89.1	89.1	99.4	99.4	89.1	89.1	99.4	99.4
	4a	78.0	78.0	87.0	87.0	78.0	78.0	87.0	87.0
	54	69.3	69.3	77.3	77.3	69.3	69.3	77.3	77.3
	60	62.4	62.4	69.6	69.6	62.4	62.4	69.6	69.6
	66	56.7	56.7	63.3	63.3	56.7	56.7	63.3	63.3
	72	52.0	52.0	58.0	58.0	52.0	52.0	58.0	58.0

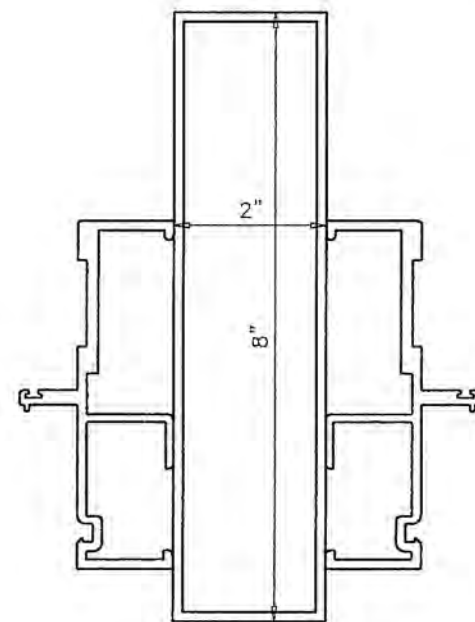
LIMIT EXTERIOR LOADS TO +100 PSF FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. SEE CHART ABOVE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.

DESIGN LOAD CAPACITY - PSF

L IN.	AVG. WIDTH IN.	2 X 6 X 1/8"				2 X 8 X 1/8"			
		1/4" DIA. ULTRACON		5/16" DIA. ULTRACON		1/4" DIA. ULTRACON		5/16" DIA. ULTRACON	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
132	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	36	94.5	94.5	102.9	102.9	94.5	94.5	105.5	105.5
	42	81.0	81.0	88.2	88.2	81.0	81.0	90.4	90.4
	48	70.9	70.9	77.2	77.2	70.9	70.9	79.1	79.1
	54	63.0	63.0	68.6	68.6	63.0	63.0	70.3	70.3
	60	56.7	56.7	61.8	61.8	56.7	56.7	63.3	63.3
	24	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
	30	98.2	98.2	98.2	98.2	104.0	104.0	110.0	110.0
	36	81.9	81.9	81.9	81.9	86.7	86.7	96.7	96.7
144	42	70.2	70.2	70.2	70.2	74.3	74.3	82.9	82.9
	48	61.4	61.4	61.4	61.4	65.0	65.0	72.5	72.5
	54	54.6	54.6	54.6	54.6	57.8	57.8	64.4	64.4
	60	49.1	49.1	49.1	49.1	52.0	52.0	58.0	58.0

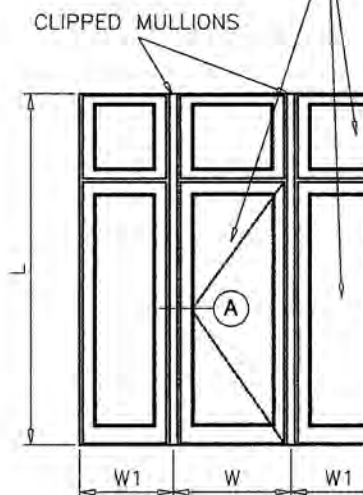


TOTAL PROPERTIES
I_x = 14.183 IN⁴
S_x = 4.728 IN³

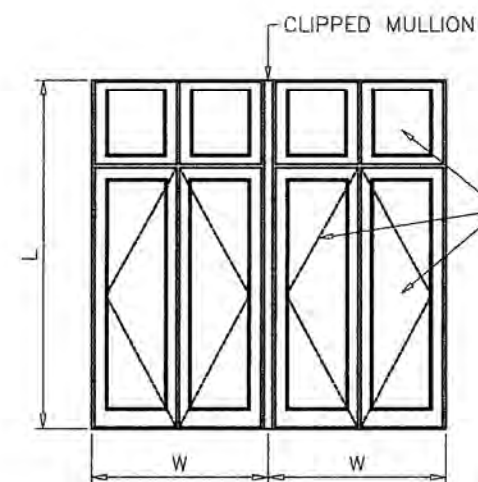


TOTAL PROPERTIES
I_x = 23.357 IN⁴
S_x = 5.839 IN³

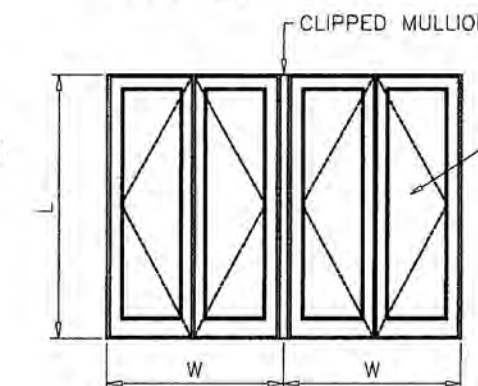
FOR TRANSOM LITES,
SIDELITES AND DOORS
SEE CORRESPONDING
WINDOOR PRODUCT APPROVAL



$$\text{AVG. WIDTH} = \frac{W + W1}{2}$$



$$\text{AVG. WIDTH} = W$$



$$\text{AVG. WIDTH} = \frac{W}{2}$$

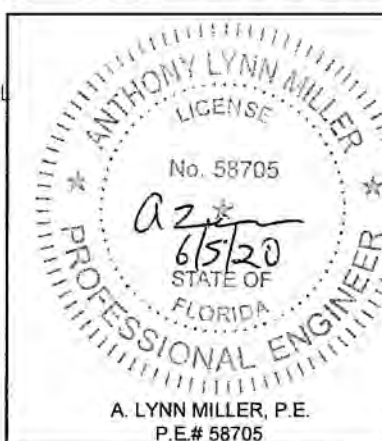
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**

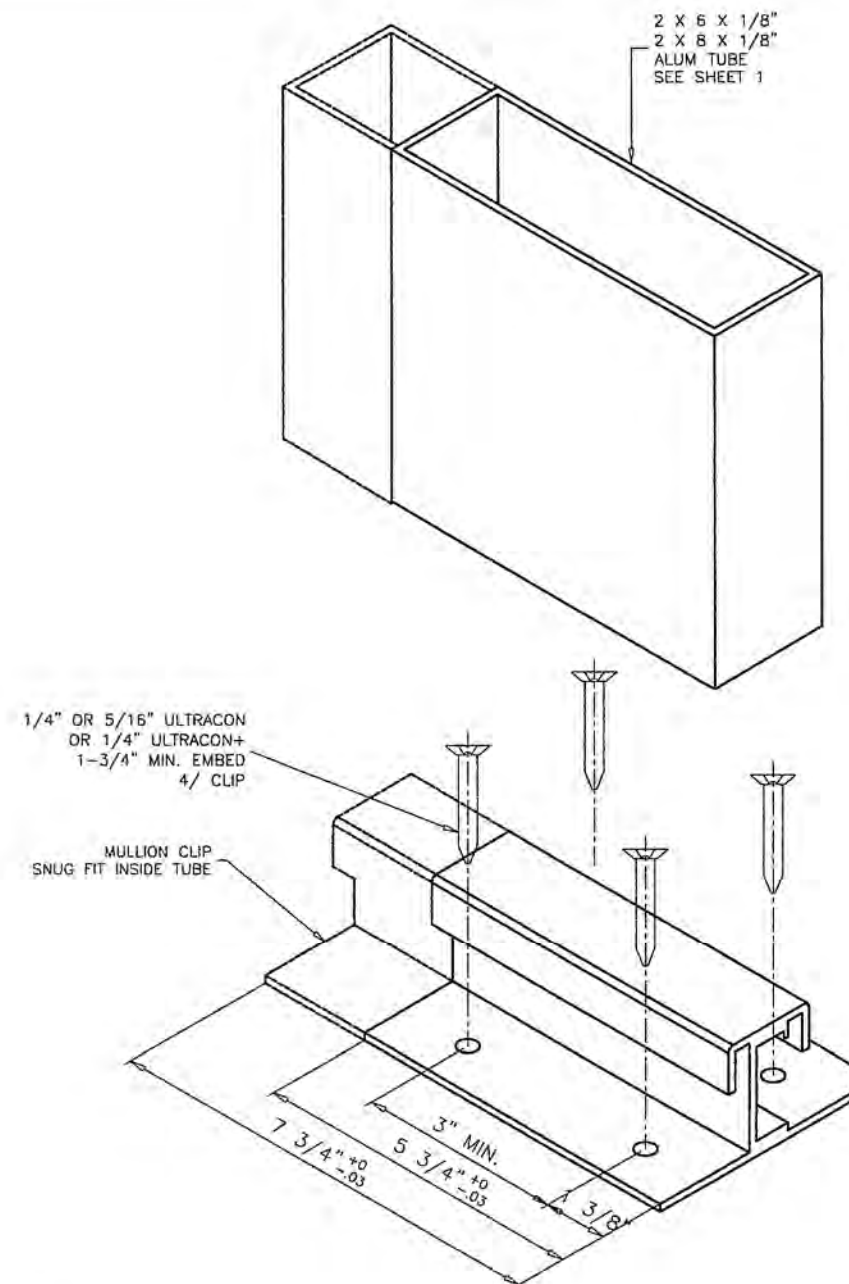
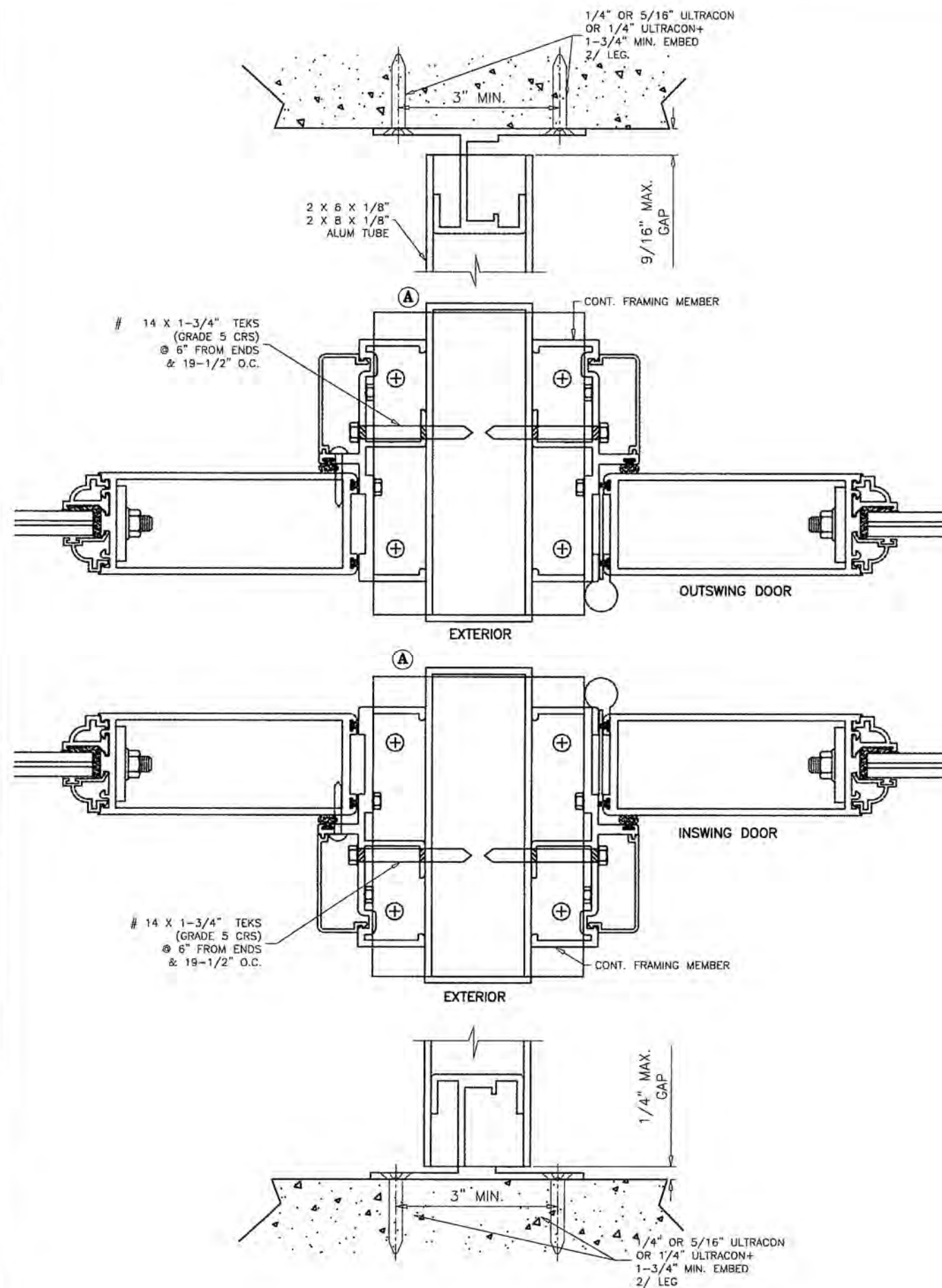
Expiration Date **10/05/2026**

By
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	AGK	MD-450MULL	Rev.	A
		By					
		No.					
		DWG					
WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400	MULLION LOAD CHARTS	8 OF 9		450MULL	NTS	Scale	Sheet
		450 CLIPPED MULLION					
		450MULL					
		Series					





- NOTES:**
- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
2-1/2" MIN. EDGE DISTANCE
 - 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
2-1/2" MIN. EDGE DISTANCE
 - 5/16" DIA. ULTRACON BY 'ELCO/DEWALT' (Fu=177 KSI, Fy=155 KSI)
3-1/4" MIN. EDGE DISTANCE
 - CONCRETE f'c = 3000 PSI MIN.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0610.16**
Expiration Date **10/05/2026**
By
Miami-Dade Product Control

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

WINDOOR [®]		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296		06/03/20		Rev.		A	
INCORPORATED		104 TRIPLE DIAMOND BLVD NORTH VENICE, FL 34275 (407) 481-8400		INSTALLATION DETAILS, ANCHORS		Date		By		AGK	
450 CLIPPED MULLION								Drown		MD-450MULL	
450MULL		9 OF 9		9 OF 9		9 OF 9		9 OF 9		9 OF 9	
NTS		NTS		NTS		NTS		NTS		NTS	
sheet		sheet		sheet		sheet		sheet		sheet	
coil		coil		coil		coil		coil		coil	
title		title		title		title		title		title	
Desc.		Desc.		Desc.		Desc.		Desc.		Desc.	

