

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)

BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

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

MIAMI-DADE COUNTY

Lawson Industries, Inc. 8501 NW 90 Street

Medley, FL 33166

SCOPE:

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

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

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

DESCRIPTION: Clipped, Extruded Aluminum Tube Mullion w/ and w/o Steel Reinforcement – L.M.I.

APPROVAL DOCUMENT: Drawing No. **LAW-ML-1001**, titled "Aluminum Tube Mullions" sheets 1 through 10 of 10, dated 04/27/10, with revision **G** dated 10/13/23, prepared by manufacturer, signed and sealed by Thomas J. Sotos, 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, 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 No. 23-0404.01 and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY
APPROVED

11/8/23

NOA No. 23-1017.11 Expiration Date: May 30, 2028 Approval Date: November 16, 2023 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA's No. 02-0501.05 and 95-1212.09)
- 2. Drawing No. LAW-ML-1001, titled "Aluminum Tube Mullions", sheets 1 through 10 of 10, dated 04/27/10, with revision F dated 08/10/20, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E. (Submitted under NOA No. 20-0814.10)

B. TESTS

1. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of 108-1/2" span aluminum 2" x 4"tube mullion with no reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-18-6036**, dated 05/04/18, signed and sealed by Rafael E. Droz-Seda, P.E.

(Submitted under NOA No. 18-0529.03)

- 2. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94.

 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 along with marked-up drawings and installation diagram of 108-1/2" span aluminum 2" x 4" tube mullions with no reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. HETI-18-6037, dated 05/04/18, signed and sealed by
 - (Submitted under NOA No. 18-0529.03)

Rafael E. Droz-Seda, P.E.

- 3. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of 120" horizontal span and 74" vertical span, 2" x 6" aluminum tube mullions with C4 x 4.5 steel channel reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. HETI-18-6038, dated 05/22/18, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 18-0529.03)
- 4. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94.
 - 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of 120" horizontal span and 74" vertical span, 2" x 6" aluminum tube mullions with C4 x 4.5 steel channel reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-18-6040**, dated 05/22/18, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 18-0529.03)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1017.11
Expiration Date: May 30, 2028

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- B. TESTS (CONTINUED)
 - 5. Tensile Test report on 0.10" thick wall aluminum tube mullion, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-02-T071**, dated 09/16/02, tested per **ASTM E8**, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 02-0501.05)
 - 6. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of 120" span aluminum tube mullions with C4 x 4.5 steel channel reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. **HETI-02-1714**, dated 08/27/02, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 02-0501.05)
 - 7. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94.

 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 along with marked-up drawings and installation diagram of 120" span aluminum tube mullion with C4 x 4.5 steel channel reinforcement, prepared by Hurricane Engineering & Testing, Inc., Test Report No. HETI-02-1716, dated 8/27/02, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 02-0501.05)
 - 8. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94.

 2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 along with marked-up drawings and installation diagram of an aluminum sliding glass door, prepared by Hurricane Engineering & Testing, Inc., Test Report No.
 HETI-02-1718, dated 8/27/02, signed and sealed by Rafael E. Droz-Seda, P.E.
 (Submitted under NOA No. 02-0501.05)
 - 9. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of an aluminum sliding glass door, prepared by Hurricane Engineering & Testing, Inc., Test Report No. HETI-02-1717, dated 08/27/02, signed and sealed by Rafael E. Droz-Seda, P.E. (Submitted under NOA No. 02-0501.05)
 - 10. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of an aluminum sliding glass door, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-1376, dated 01/31/96, signed and sealed by Gilbert Diamond, P.E. (Submitted under NOA No. 95-1212.09)
 - 11. Test report on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94 along with marked-up drawings and installation diagram of two aluminum horizontal sliding windows mulled at top with a 90" span mullion and a 45" high fixed window on top, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-1383, dated 02/13/96, signed and sealed by Gilbert Diamond, P.E.

(Submitted under NOA No. 95-1212.09)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1017.11
Expiration Date: May 30, 2028

Lawson Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC 6th Edition (2017), prepared by manufacturer, dated 05/24/18, signed and sealed by Thomas J. Sotos, P.E.

(Submitted under NOA No. 18-0529.03)

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)**, dated March 30, 2023, issued by manufacturer, signed and sealed by Thomas J. Sotos, P.E. (Submitted under NOA No. 23-0404.01)
- 2. Laboratory compliance letter for Test Reports No.: FTL-3619, FTL-3620, FTL-3621, FTL-3622, FTL-3623, FTL-3624, FTL-3625, FTL-3626, FTL-3627, all dated 11/27/02, issued by Fenestration Testing Laboratory, Inc., and signed and sealed by Joseph C. Chan, P.E.
 - (Submitted under NOA No. 03-0128.06)
- 3. Laboratory compliance letter for Test Reports No. HETI-02-1714, HETI-02-1716, HETI-02-1717, HETI-02-1718, dated 8/27/02 and HETI-02-T071, dated 09/16/02, all issued by Hurricane Engineering & Testing, Inc., signed and sealed by Rafael E. Droz-Seda, P.E.
 - (Submitted under NOA No. 02-0501.05)
- 4. Laboratory compliance letter for Test Reports No. FTL-1376, dated 01/31/96, and FTL-1383, dated 02/13/96, both issued by Fenestration Testing Laboratory, Inc., signed and sealed by Gilbert Diamond, P.E. (Submitted under NOA No. 02-0501.05)

G. OTHERS

1. Notice of Acceptance No. **20-0814.10** issued to Lawson Industries, Inc. for their Clipped, Extruded Aluminum Tube Mullion w/ and w/o Steel Reinforcement – L.M.I., approved on 10/15/20 and expiring on 05/30/23.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1017.11
Expiration Date: May 30, 2028

Lawson Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. LAW-ML-1001, titled "Aluminum Tube Mullions", sheets 1 through 10 of 10, dated 04/27/10, with revision G dated 10/13/23, prepared by manufacturer, signed and sealed by Thomas J. Sotos, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

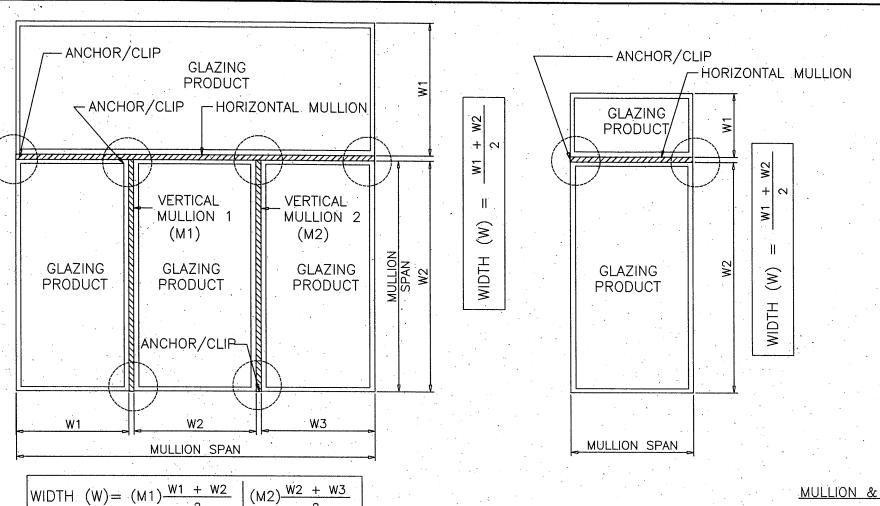
F. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC 8th Edition (2023)**, dated October 16, 2023, issued by manufacturer, signed and sealed by Thomas J. Sotos, P.E.
- 2. Statement letter of no financial interest, dated October 16, 2023, issued by the manufacturer, signed and sealed by Thomas J. Sotos, P.E.

G. OTHERS

1. Notice of Acceptance No. **23-0404.01** issued to Lawson Industries, Inc. for their Clipped, Extruded Aluminum Tube Mullion w/ and w/o Steel Reinforcement – L.M.I., approved on 05/11/23 and expiring on 05/30/28.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1017.11
Expiration Date: May 30, 2028



THESE MULLIONS ARE RATED FOR LARGE MISSILE IMPACT AND CAN BE USED WITH ALL LAWSON'S MIAMI-DADE COUNTY APPROVED IMPACT AND NON-IMPACT PRODUCTS.

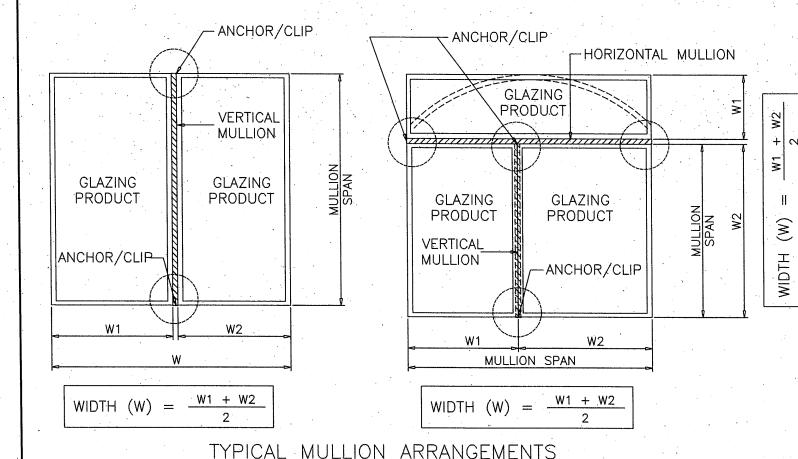
RECTANGULAR ALUMINUM TUBE MULLIONS USING MULLION PROPERTIES ONLY

GENERAL NOTES:

- 1. THIS PRODUCT HAS BEEN DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (2020-7th Edition & 2023-8th Edition) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2. ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE APPLICABLE FLORIDA BLDG. CODE REQUIREMENTS I.E. WIND LOAD, WATER INFILTRATION, FORCED ENTRY RESISTANCE. SAFEGUARDS ETC.
- 3. MULLIONS ARE APPROVED FOR IMPACT AND NON-IMPACT APPLICATIONS, INCLUDING WINDOWS, DOORS OR COMBINATIONS MAY BE MULLED.
- 4. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- 5. ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- 6: ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- 7. A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF WOOD ANCHORS ONLY.
- 8. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL OR METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE. SECTION 2003.8.4.

MULLION & CLIP NOTES:

- 1. FOR MULLIONS WITHOUT REINFORCEMENT REFER TO SHEET 2 OF 10 FOR DETAILS AND NOTES.
 - * REFER TO SHEET 3 OF 10 FOR MAX. MULL DESIGN PRESSURE CHARTS
- 2. FOR MULLIONS WITH STEEL REINFORCEMENT REFER TO SHEET 4 OF 10 FOR DETAILS AND NOTES.
 - * REFER TO SHEET 5 OF 10 FOR MAX. MULL DESIGN PRESSURE CHARTS
- 3. FOR CLIP TYPES AND ANCHOR CONDITIONS REFER TO SHEETS 6, 7, 8, & 9 OF 10 FOR DETAILS AND NOTES.
 - * REFER TO SHEET 10 OF 10 FOR MAX. ANCHOR DESIGN PRESSURE CHARTS



PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-1017.11

Expiration Date: 05/30/2028

By: Manuel Pers

Miami-Dade Product Control

Review Note:

Re

90 ST. LORIDA 33166 (05) 696–8660

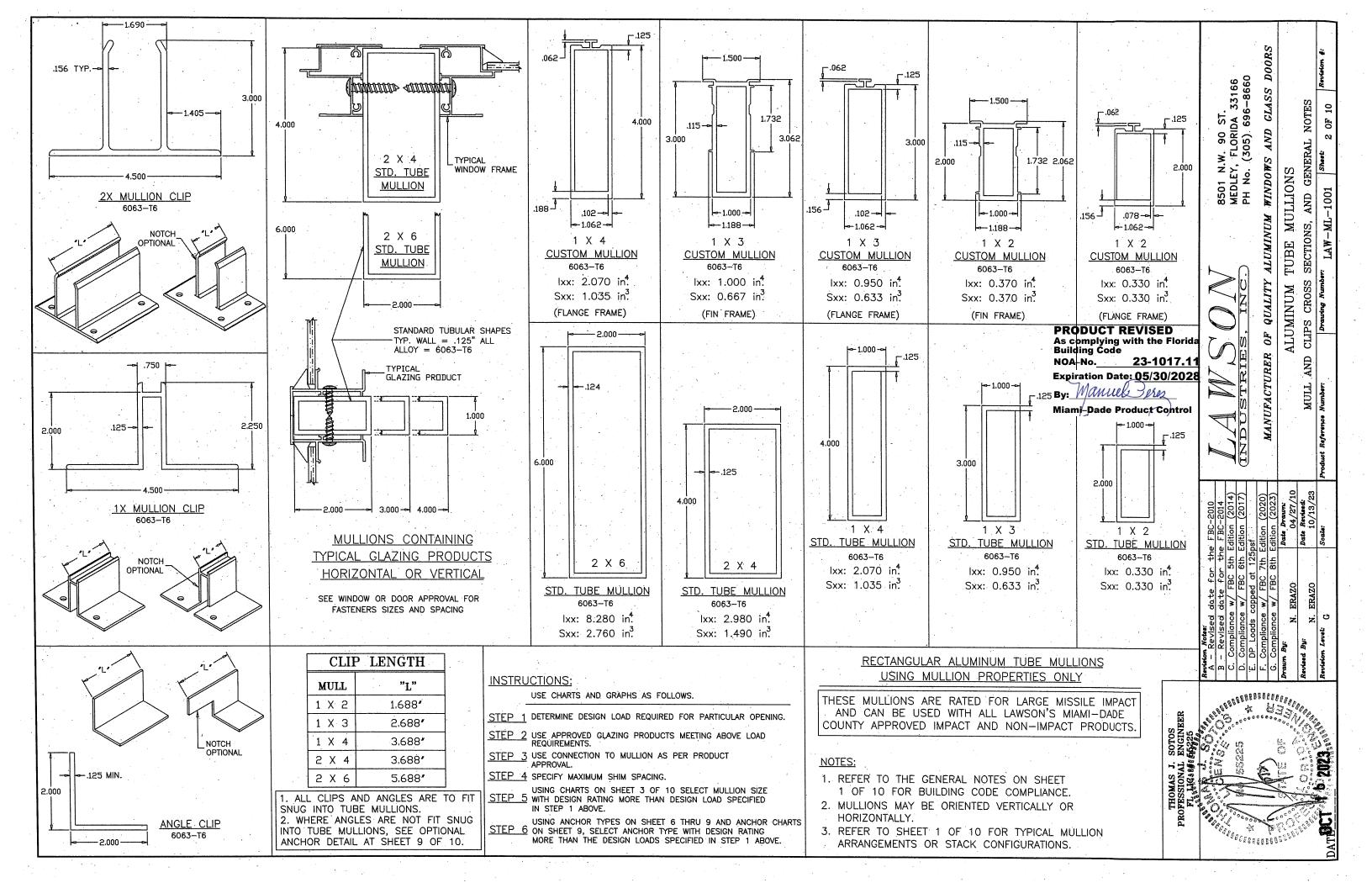
GLASS

AND

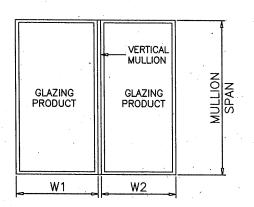
MULLIONS

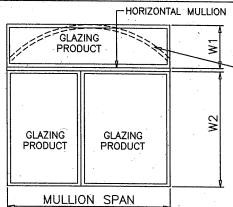
TUBE

ALUMINUM



			TUE	E MULLIC	ONS					TUI	BE MULLIC	ONS				TUBE MULLIONS						
Width (w)	MULL SPAN	SPAN 1X2 1X3 1X4 2X4 2X6				Width (w)	MULL SPAN	1X2 1X3 1X4			2 X 4	2 X 6	Width (w)	ARILL ODAN	4 7 6		1.	T	T			
18		125.0	125.0	125.0	125.0	125.0	18		28.3	81.5	125.0	125.0	125.0	18	MULL SPAN	1 X 2	1 X 3	1 X 4	2 X 4	2 X 6		
24		125.0	125.0	125.0	125.0	125.0	24		21.2	61.1	133.2	125.0	125.0	24	-	-	19.3	42.1	60.5	125.0		
30		123.0	125.0	125.0	125.0	125.0	30		17.0	48.9	106.5	125.0	125.0	30	-	-		31.5	45.4	126.2		
36		102.5	125.0	125.0	125.0	125.0	36	,	-	40.7	88.8	127.8	125.0	36				25.2 21.0	36.3	100.9		
42		87.9	125.0	125.0	125.0	125.0	42			34.9	76.1	109.5	125.0	42				18.0	30.3 25.9	84.1		
48	38- 3/8"	76.9	125.0	125.0	125.0	125.0	48	74-1/4"	-	30.6	66.6	95.8	125.0	48	120"	_	<u> </u>	15.8	22.7	72.1 63.1		
54		68.3	137.6	125.0	125.0	125.0	54			27.2	59.2	85.2	125.0	54				10.0	20.2	56.1		
60		61.5	123.9	125.0	125.0	125.0	60		1	24.4	53.3	76.7	144.2	60		-			18.2	50.5		
66		55.9	112.6	125.0	125.0	125.0	66			22.2	48.4	69.7	131.1	66		·	_		16.5	45.9		
72 78		51.3	103.2	125.0	125.0	125.0	72			20.4	44.4	63.9	.120.2	72			-		15.1	42.1		
		47.3	95.3	125.0	125.0	125.0	78		-	18.8	41.0	59.0	110.9	78			·= · ,		-	38.8		
18 24		89.3 67.0	125.0	125.0	125.0	125.0	18		-	56.3	122.6	125.0	125.0	18			-	31.6	45.5	126.4		
30		53.6	125.0 142.3	125.0	125.0	125.0	24			42.2	92.0	132.4	125.0	24		_	-	23.7	34.1	94.8		
36		44.6	142.3	125.0 125.0	125.0 125.0	125.0	30	٠.	-	33.8	73.6	105.9	125.0	30			· -	19.0	27.3	75.8		
42		38.3	101.7	125.0	125.0	125.0	36			28.1	61.3	88.3	125.0	36		· <u> </u>	_	15.8	22.7	63.2		
48	50-5/8"	33.5	89.0	145.4	125.0	125.0 125.0	42	0.411	· -	24.1	52.6	75.7	125.0	42		_	-		19.5	54.2		
54	000,0	29.8	79.1	129.2	125.0	125.0	48	84"		21.1	46.0	66.2	140.8	48	132"	_	-	-	17.1	47.4		
60		26.8	71.2	116.3	125.0	125.0	54	,	. -	18.8	40.9	58.8	125.2	54				-	15.2	42.1		
66		24.4	64.7	105.7	125.0	125.0	60 66			16.9	36.8	53.0	112.7	60		·	_	-	_	37.9		
72		22.3	59.3	96.9	139.5	125.0	72		-	15.3	33.4	48.1	102.4	66		_	-		_	34.5		
78		20.6	54.7	89.5	128.8	125.0	78		-	<u>.</u> -	30.7	44.1	93.9	72				-	_	31.6		
18		62.6	125.0	125.0	125.0	125.0	18		-	37.7	28.3	40.7	86.7	78		-	-	-	-	29.2		
24		46.9	135.1	125.0	125.0	125.0	24		<u>-</u>	28.3	82.1 61.6	118.3	125.0	18		-		24.3	35.0	97.4		
30		37.5	108.1	125.0	125.0	125.0	30			22.6	49.3	88.7 71.0	125.0	24		7		18.3	26.3	73.0		
36		31.3	90.1	125.0	125.0	125.0	36			18.8	41.1	59.1	125.0	30				-	21.0	58.4		
42		26.8	77.2	131.1	125.0	125.0	42			16.2	35.2	50.7	143.8 123.2	36			· <u>-</u> ·		17.5	48.7		
48	57"	23.5	67.5	114.7	125.0	125.0	48	96"		10.2	30.8	44.3	107.8	42	44411			-	15.0	41.7		
54		20.9	60.0	101.9	146.8	125.0	54				27.4	39.4	95.8	48	144"	-	-		-	36.5		
60		18.8	54.0	91.7	132.1	125.0	60	. :	·		24.6	35.5	86.3	54 60	1	· -		-	-	32.5		
66		17.1	49.1	83.4	120.1	125.0	66		-	_	22.4	32.3	78.4	66		-	-	-	_	29.2		
72		15.6	45.0	76.5	110.1	125.0	72		-	_	20.5	29.6	71.9	72	· · ·			_	-	26.6		
78		-	41.6	70.6	101.6	125.0	78		-	- .	19.0	27.3	66.3	78	 		. -		`. <u>-</u>	24.3		
18		46.3	133.4	125.0	125.0	125.0	18		-	26.5	57.7	83.1	125.0	18			-	-	- 24.0	22.5		
24		34.8	100.0	125.0	125.0	125.0	24		- ·	19.9	43.3	62.3	125.0	24	•			<u>-</u>	31.0	86.1		
30		27.8	80.0	125.0	125.0	125.0	30		-	15.9	34.6	49.8	136.3	30				-	23.3	64.6		
36		23.2	66.7	125.2	125.0	125.0	36		-	_	28.8	41.5	113.6	36	*			-	18.6	51.7		
42		19.9	57.2	107.3	125.0	125.0	42		- ' '	-	24.7	35.6	97.4	42				·	15.5	43.1		
48	63"	17.4	50.0	93.9	135.1	125.0	48	108"	- '	**	21.6	31.1	85.2	48	150"			-	-	36.9		
54	_	15.4	44.5	83.4	120.1	125.0	54				19.2	27.7	75.7	54			_	_	-	32.3		
60		-	40.0	75.1	108.1	125.0	60			-	17.3	24.9	68.1	60	• •	_				28.7 25.8		
66			36.4	68.3	98.3	125.0	66		-	- :	15.7	22.7	62.0	66	ŀ	_	-			25.8 23.5		
72		·	33.3	62.6	90.1	125.0	72	•	-		_	20.8	56.8	72	ľ					21.5		
78	<u></u>		30.8	57.8	83.2	125.0	78				-	19.2	52.4	78	ŀ			_		19.9		
							ADIZONITAL : MIII													10.0		





TYPICAL MULLION ARRANGEMENTS

ARCHES TO BE INSCRIBED INSIDE RECTANGULAR SHAPE

NOTE:

MULLIONS RATED IN THESE CHARTS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.

(INTERPOLATION BETWEEN WIDTHS ALLOWED)

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

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-1017.11

Expiration Date: 05/30/2028

By: Manuel Perez

Miami-Dade Product Control



AND GENERAL NOTES

JM TUBE MULLIONS DESIGN PRESSURE CHARTS

LAW-ML-1001

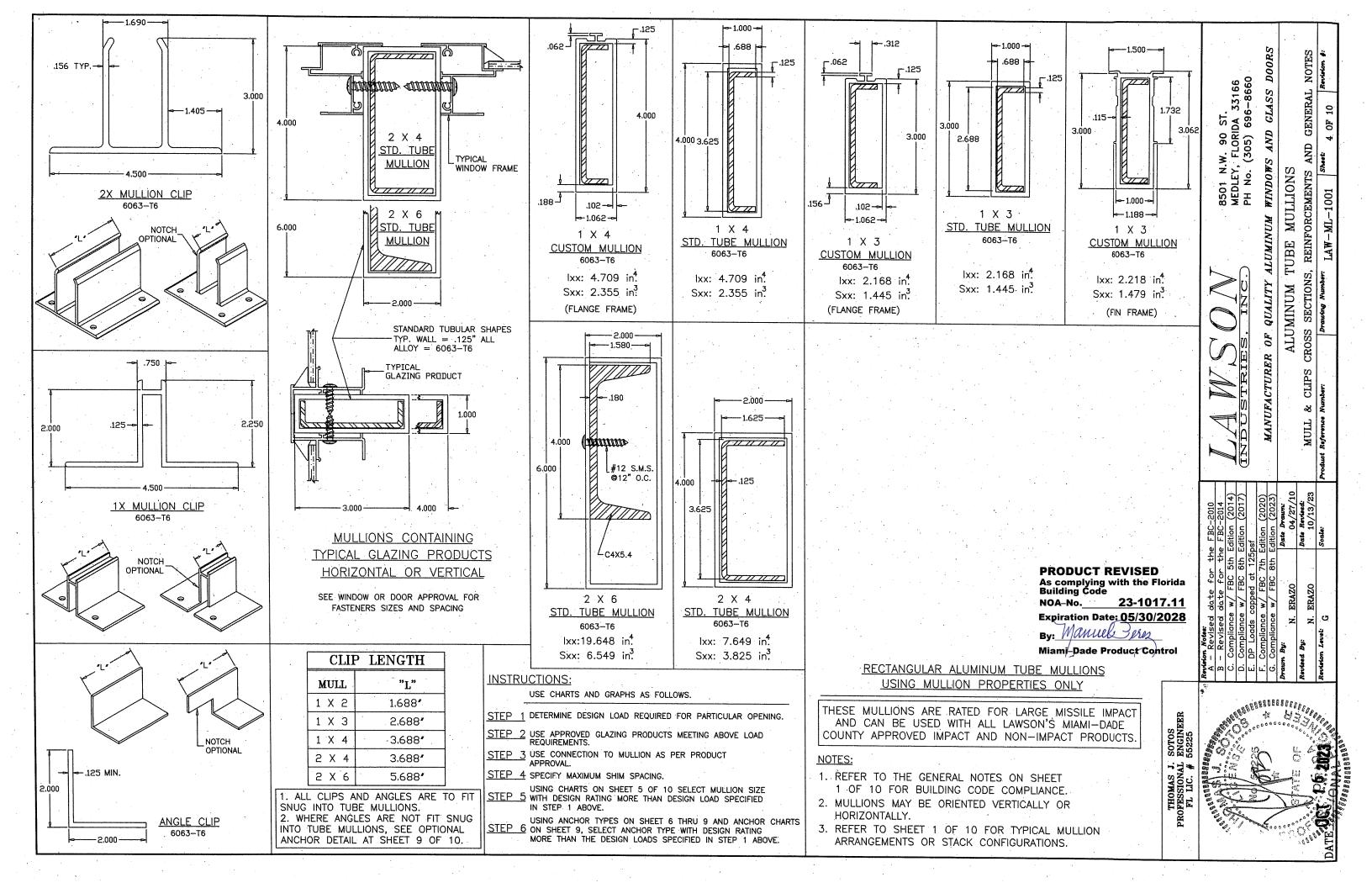
3 OF 10

8501 N.W. 90 ST. MEDLEY, FLORIDA 33166 PH No. (305) 696-8660

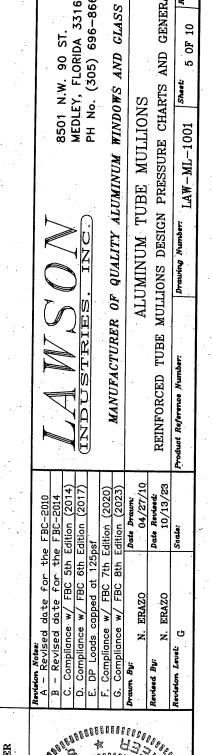
WINDOWS AND GLASS

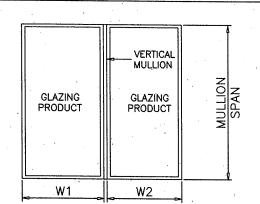
MANUFACTURER OF QUALITY ALUMINUM

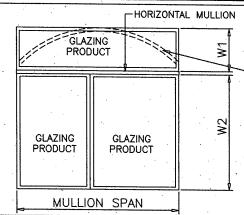
ALUMINUM



										<u> </u>							
.	I		REINFORCE	T	ULLIONS			STEEL	REINFORCE	D TUBE M	ULLIONS		1	STEEL F	REINFORCE	D TUBE M	ULLIONS
Width (w)	MULL SPAN	1 X 3	1 X 4	2 X 4	2 X 6	Width (w)	MULL SPAN	1 X 3	1 X 4	2 X 4	2 X 6	Width (w)	MULL SPAN	1 X 3	1 X 4	2 X 4	2 X 6
18		125.0	125.0	125.0	125.0	18		125.0	125.0	125.0	125.0	18		44.0	95.7	125.0	125.0
24		125.0	125.0	125.0	125.0	24	1	139.5	125.0	125.0	125.0	24		33.0	71.8	116.6	125.0
30		125.0	125.0	125.0	125.0	30		111.6	125.0	125.0	125.0	30		26.4	57.4	93.2	125.0
36 42		125.0	125.0	125.0	125.0	36		93.0	125.0	125.0	125.0	36		22.0	47.8	77.7	125.0
48	38- 3/8"	125.0	125.0	125.0	125.0	42		79.7	125.0	125.0	125.0	42		18.9	41.0	66.6	125.0
54	30- 3/0	125.0	125.0	125.0	125.0	48	74-1/4"	69.7	125.0	125.0	125.0	48	120"	16.5	35.9	58.3	149.7
60		125.0	125.0	125.0	125.0	54	•	62.0	134.6	125.0	125.0	54		: -	31.9	51.8	133.1
66		125.0	125.0	125.0	125.0	60		55.8	121.2	125.0	125.0	60	*. 1		28.7	46.6	119.8
72		125.0	125.0	125.0	125.0	66	." .	50.7	110.1	125.0	125.0	66		_	26.1	42.4	108.9
78		125.0 125.0	125.0	125.0	125.0	72		46.5	101.0	125.0	125.0	72		_	23.9	38.9	99.8
18			125.0	125.0	125.0	78		42.9	93.2	125.0	125.0	78	٠,	-	22.1	35.9	92.1
24		125.0	125.0	125.0	125.0	18		128.4	125.0	125.0	125.0	18		33.1	71.9	116.8	125.0
30	· .	125.0	125.0	125.0	125.0	24		96.3	125.0	125.0	125.0	24		24.8	53.9	87.6	125.0
36	11	125.0	125.0	125.0	125.0	30		77.1	125.0	125.0	125.0	30	_	19.9	43.1	70.1	125.0
42		125.0	125.0	125.0	125.0	36		64.2	139.5	125.0	125.0	36		16.5	35.9	58.4	125.0
48	50-5/8"	125.0	125.0	125.0	125.0	42		55.0	119.5	125.0	125.0	42		- '	30.8	50.0	128.5
	30-3/6	125.0	125.0	125.0	125.0	48	84"	48.2	104.6	125.0	125.0	48	132"	-	27.0	43.8	112.5
54 60		125.0	125.0	125.0	125.0	54		42.8	93.0	125.0	125.0	54	,	-	24.0	38.9	100.0
66		125.0	125.0	125.0	125.0	60		38.5	83.7	135.9	125.0	60		_	21.6	35.0	90.0
		147.7	125.0	125.0	125.0	66		35.0	76.1	123.6	125.0	66		_	19.6	31.8	81.8
72 78		135.3	125.0	125.0	125.0	72		32.1	69.7	113.3	125.0	72			18.0	29.2	75.0
18		124.9	125.0	125.0	125.0	78		29.6	64.4	104.6	125.0	78		_	16.6	26.9	69.2
24		125.0	125.0	125.0	125.0	18		86.0	125.0	125.0	125.0	18		25.5	55.4	89.9	125.0
30	~	125.0	125.0	125.0	125.0	24		64.5	140.1	125.0	125.0	24		19.1	41.5	67.5	125.0
36		125.0	125.0	125.0	125.0	30		51.6	112.1	125.0	125.0	30		15.3	33.2	54.0	138.6
42		125.0	125.0	125.0	125.0	36		43.0	93.4	125.0	125.0	36		-	27.7	45.0	115.5
48	57"	125.0	125.0	125.0	125.0	42		36.9	80.1	130.1	125.0	42		_	23.7	38.5	99.0
	51	125.0	125.0	125.0	125.0	48	96"	32.3	70.1	113.8	125.0	48	144"	-	20.8	33.7	86.6
54 60		137.0	125.0	125.0	125.0	54		28.7	62.3	101.2	125.0	54		_	18.5	30.0	77.0
66		123.3	125.0	125.0	125.0	60		25.8	56.1	91.1	125.0	60			16.6	27.0	69.3
72		112.1	125.0	125.0	125.0	66		23.5	51.0	82.8	125.0	66		-	15.1	24.5	63.0
78		102.8 94.8	125.0	125.0	125.0	72		21.5	46.7	75.9	125.0	72		_	-	22.5	57.8
			125.0	125.0	125.0	78		19.9	43.1	70.0	125.0	78		ند	-	20.8	53.3
18 24		125.0	125.0	125.0	125.0	18		60.4	131.2	125.0	125.0	18		22.6	49.0	79.6	125.0
30		125.0	125.0	125.0	125.0	24		45.3	98.4	125.0	125.0	24		16.9	36.7	59.7	125.0
36		125.0	125.0	125.0	125.0	30		36.3	78.7	127.9	125.0	30			29.4	47.7	122.6
42	1	125.0	125.0	125.0	125.0	36		30.2	65.6	106.6	125.0	36		-	24.5	39.8	102.2
I	63"	130.5	125.0	125.0	125.0	42		25.9	56.2	91.4	125.0	42			21.0	34.1	87.6
48	7 63	114.2	125.0	125.0	125.0	48	108"	22.7	49.2	79.9	125.0	48	150"		18.4	29.8	76.6
54		101.5	125.0	125.0	125.0	54		20.1	43.7	71.1	125.0	54	ĺ	- 1.1	16.3	26.5	68.1
60		91.3	125.0	125.0	125.0	60		18.1	39.4	64.0	125.0	60			_	23.9	61.3
66		83.0	125.0	125.0	125.0	66		16.5	35.8	58.1	147.0	66		-	_	21.7	55.7
72 78		76.1	142.4	125.0	125.0	72		15.1	32.8	53.3	134.8	72	14.	-	-	19.9	51.1
10		70.2	131.4	125.0	125.0	78			30.3	49.2	124.4	78		_	-	18.4	47.2







TYPICAL MULLION ARRANGEMENTS

ARCHES TO BE INSCRIBED INSIDE RECTANGULAR SHAPE

NOTE:

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

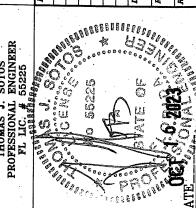
WIDTH (W) =

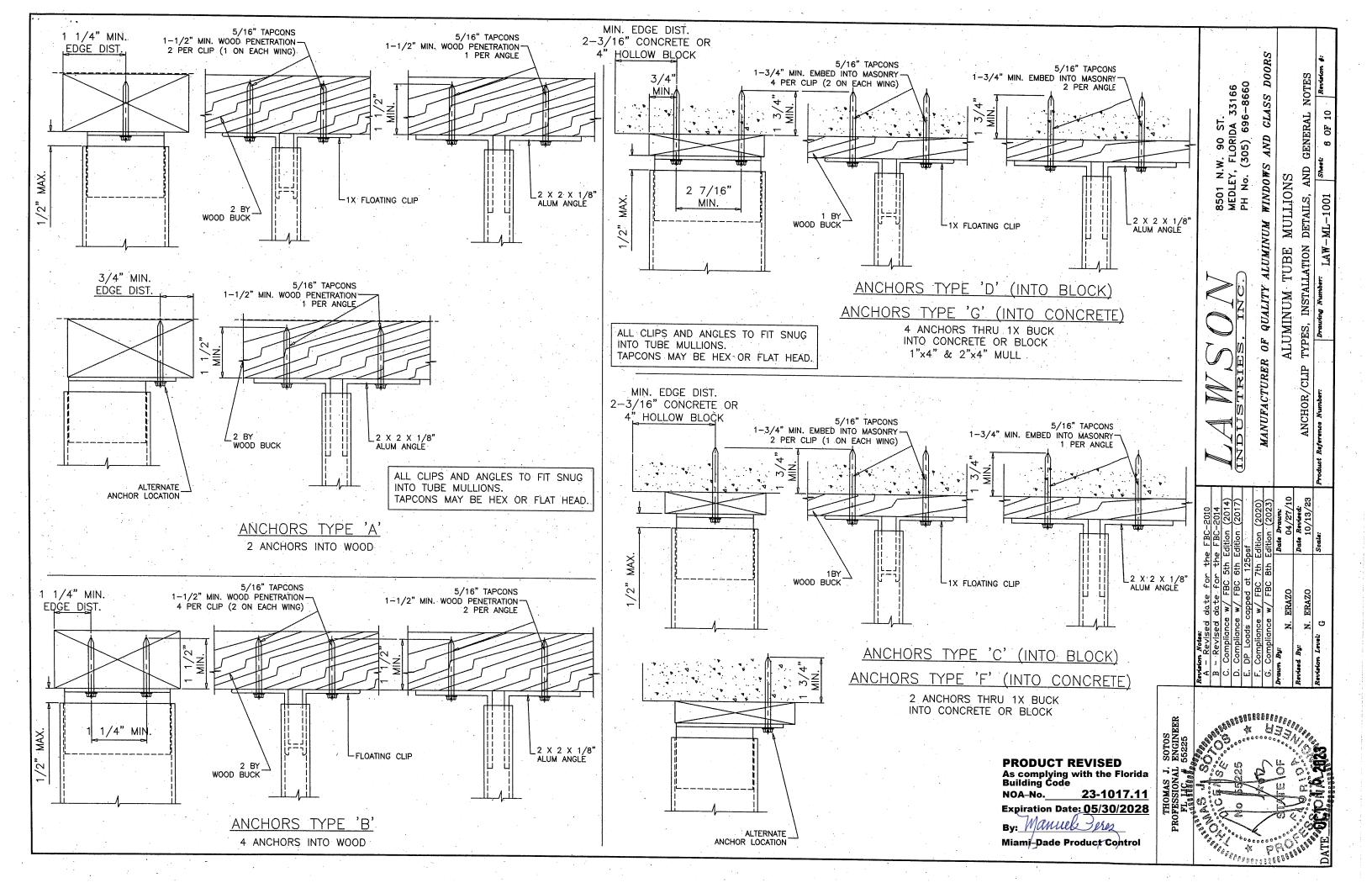
PRODUCT REVISED
As complying with the Florida
Building Code

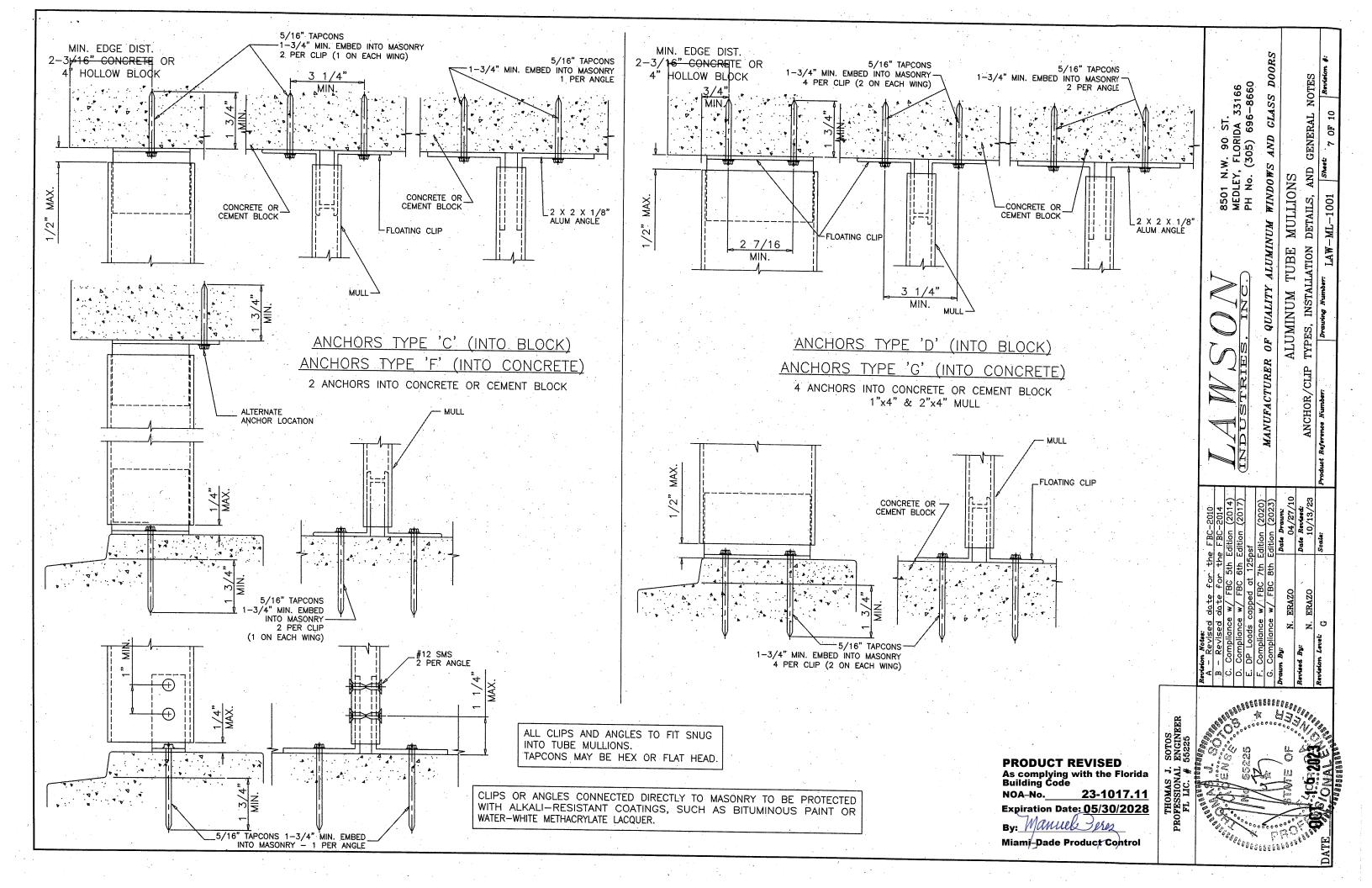
NOA-No._ 23-1017.11

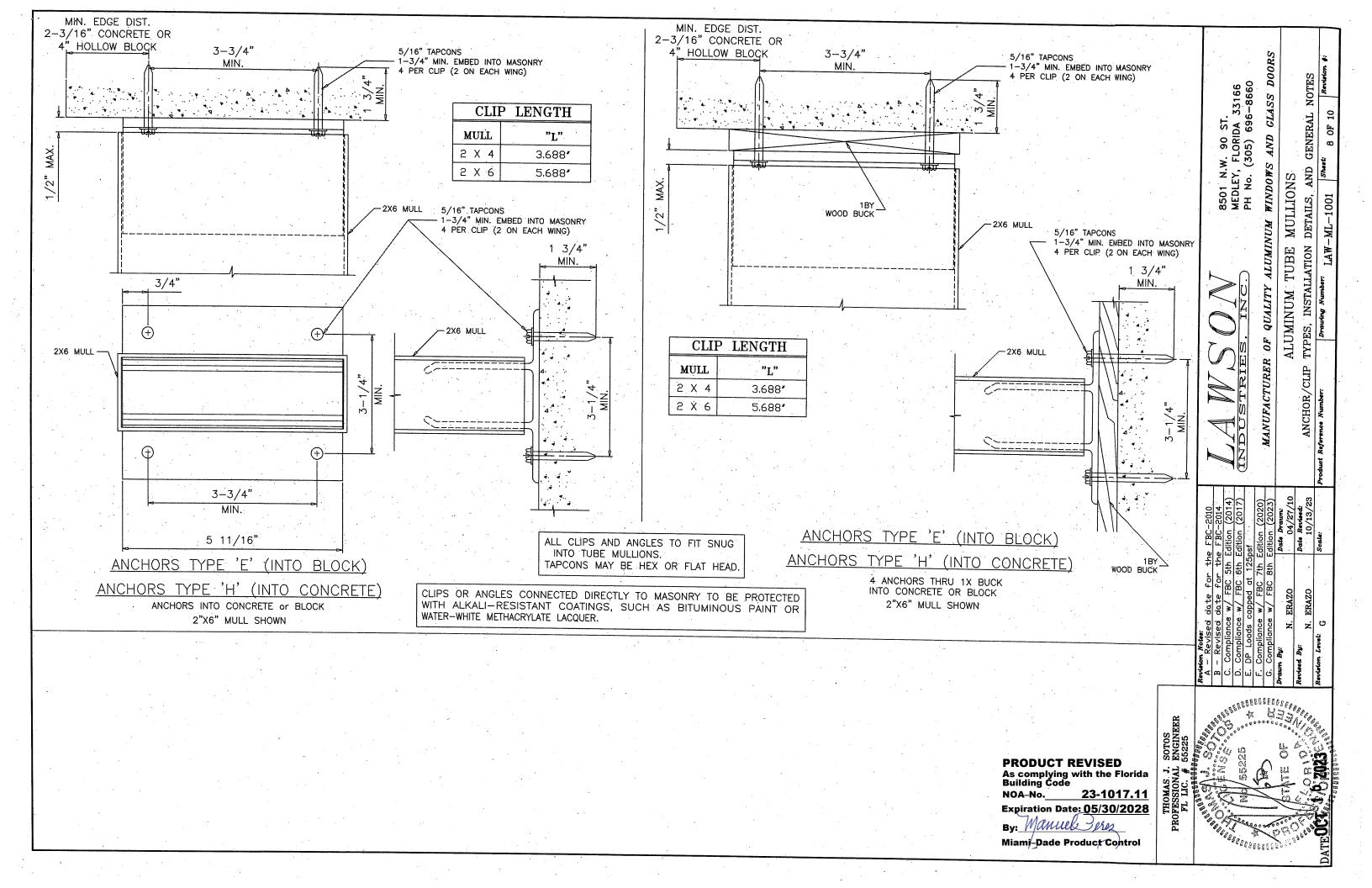
Expiration Date: <u>05/30/2028</u>

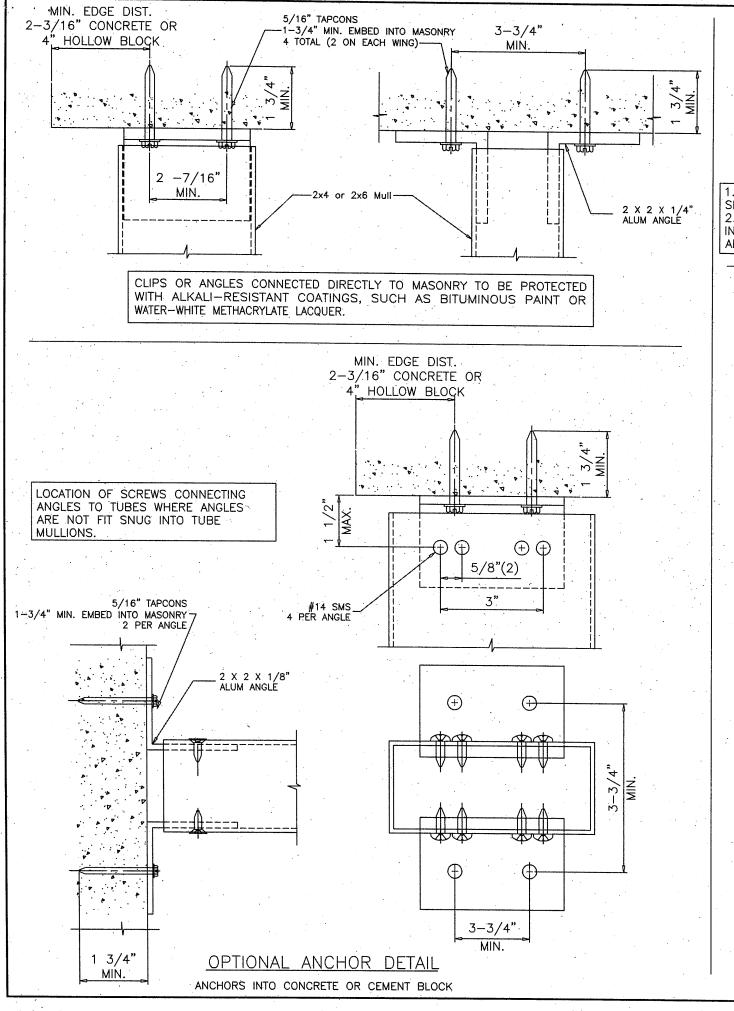
By: Manuel Perez Miami-Dade Product Control





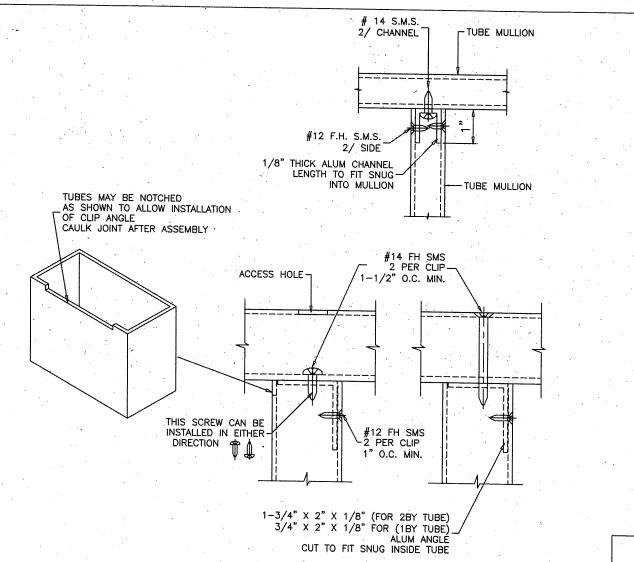






CLI	P LENGTH
MULL	"L"
1 X 2	1.688*
1 X 3	2.688*
1 X 4	3.688*
2 X 4	3.688*
2 X 6	5.688*

1. ALL CLIPS AND ANGLES ARE TO FIT SNUG INTO TUBE MULLIONS.
2. WHERE ANGLES ARE NOT FIT SNUG INTO TUBE MULLIONS, SEE OPTIONAL ANCHOR DETAIL AT SHEET 9 OF 10.



ANCHORS TYPE 'I'

METAL TO METAL CONNECTION

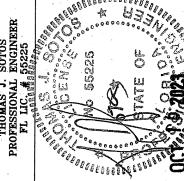
USE CHARTS FOR ANCHOR TYPE 'I' TO VERIFY CAPACITY OF CONNECTION

ALL CLIPS AND ANGLES TO FIT SNUG INTO TUBE MULLIONS. TAPCONS MAY BE HEX OR FLAT HEAD. PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-1017.11

Expiration Date: <u>05/30/2028</u>

By: Manuel Peres

Miami-Dade Product Control



NOTES

GENERAL

GLASS

WINDOWS

QUALITY

OF

MANUFACTURER

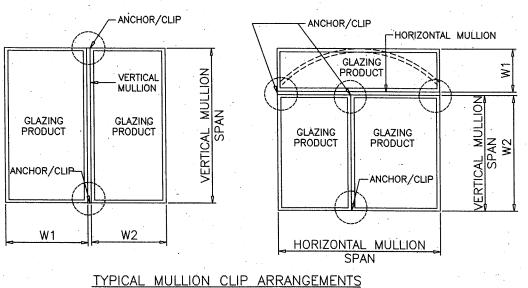
MULLIONS

TUBE

ALUMINUM

8501 N. MEDLEY, PH No.

ANCHOR TYPES								ANCHOR TYPES													T																		
Width (w)	MULL SPAN							Width (w)	MULL SPAN						F	G	Н	1	Width (w)	MULL SPAN		В	С		HOR TY				j.										
18		125.00	125.00	125.00	125.00	125.0	00 125.00	125.00	125.00 125.00	18		90.72		125.00	125.00	125.00				125.00	18	MULL SPAN	56.13	112.27	129.07	125.00	_E	F	G 125.00	10E 00	105.00	ıl							
24		131.65	125.00	125.00	125.00	125.0	00 125.00	125.00	125.00 125.00	24		68.04	136.08	125.00	125.00	125.00		125.00		125.00	24		42.10	84.20	96.80	145.60	125.00				115.70	d .							
30		105.32			125.00	-		125.00	125.00 125.00	30		54.43	108.86	125,16	125.00	125.00	139.89	125.00	125.00	149.59	30		33.68	67.36	77.44	116.48				125.00									
36		87.77			125.00	125.0		125.00	125.00 125.00	36	36 4	45.36	90.72	104.30	125.00	125.00	116.58	125.00	125.00	124.66	36		28,07	56.13	64.53	97.07	129.00		 										
42		75.23		·				125.00		42		38.88	77.76	89.40	134.46	125.00	99.92	125.00	125.00	106.85	42		24.06	48.11	55.31	83.20		61.83		123.60									
48	38 3/8	65.82	58.51 117.02 134.53						125,00 125.00		74 1/4	34.02	68.04	78.22	117.66	125.00	87.43	131.56	125.00	93.49	48	120	21.05	42.10	48.40	72.80	96.75	54.10		108.15		ľ							
54	-	58.51			125.00	125.0			125.00 125.00			30.24	60.48	69.53	104.58	138.99	77.72	116.94	125.00	83.11	54		18.71	37.42	43.02	64.71	86.00	48.09	72.36	96.13	51.42								
60		52.66			125.00			125.00		60		27.22	54.43	62.58	94.13	125.09	69.95	105.24	139.83	74.80	60		16.84	33.68	38.72	58.24	77.40	43.28	++	86.52	46.28	1							
66		47.87							125.00 131.56	66		24.74	49.48	56.89	85.57	113.72	63.59	95.68	127.12	68.00	66		15.31	30.62	35.20	52.95	 	59.20	78.65	42.07									
72		43.88	87.77	100,90	125:00	125.0			125.00 120.60	72		22.68	45.36	52.15	78.44		58.29	87.70	116.53	62.33	72		14.03	28.07	32.27	48.53	64.50	36.07	54.27	72.10	38.57								
78		40.51	· · · · · · · · · · · · · · · · · · ·	93.14	140.09	125.0				78	,	20.94	41.87	48.14	72.40	96.22	53.81	80.96			78		12.95	25.91	29.78	44.80	59.54	33:29	50.09	66.55	35.60	. .							
18		133.06			125.00	125.0		125.00	125.00 125.00	18		80.19	125.00		125.00	125.00	125.00	125.00	125.00	125.00	18		51.03	102.06	117.33	125.00	125.00	131.15	125.00	125.00	140.24	١.							
24	·	99.79			125.00	+			125.00 125.00	24		60.14	120.29	138.29	125.00		125.00	125.00		125.00	24		38,27	76.55	88.00	132.36	125.00	98.36	148.00	125.00	105.18								
30 36		79.83		125.00	125.00	125.0			125.00 125.00	30		48.11	96.23	110.63	125.00	125.00	123.66	125.00		132.23	30		30.62	61.24	70.40	105.89	140.73	78.69	118.40	125.00	84.15								
42		66.53 57.02					·		125.00 125.00	36		40.10	80.19	92.19		125.00	103.05	125.00		110.19	36		25.52	51.03	58.67	88.24	117.27	65.58	98.67	131.09	70.12								
48	50 5/8	49.90		114.73	125.00			125.00		42		-34.37	68.73	79.02	118.86	125.00	88.33	132.90		94.45	42	132	21.87	43.74	50.29	75.64	100.52	56.21	84.57	112.36	60.10	1							
54	30 3/6	44.35	88.70	101.98	125.00	125.0		125.00	1 1 1 1 1 1 1 1 1 1	48 84	84	30.07	60.14	69.14	104.00		77.29	116.29	125.00	82.64	48		19.14	38.27	44.00	66.18		49.18	74.00	98.32	52.59								
60		39.92		91.78				125.00	in-	54		26.73	53.46	61.46	92.44	122.86	68.70			73.46	54		17.01	34.02	39.11	58.83		43.72	65.78		46.75	1							
66		36.29	72.58	83.44	125.50				125.00 109.70	60 66		24.06	48.11	55.31	83.20	110.57	61.83	93.03	123.60	66.11	60		15.31	30.62	35.20	52.95		39.35	59.20		42.07	١							
72		33.26	66.53	76.48	115.04				125.00 99.73	72		21.87	43.74 40.10	50.29 46.10	75.64	100.52	56.21	84.57	112.36	60.10	66		13.92	27.83	32.00	48.13		35.77	53.82		38.25	'							
78		30.71	61.41	70.60	106.19				125.00 84.39	78	·	18.51	37.01	42.55	69.33 64.00	92.14 85.05	51.52	77.52	103.00	55.10	72		12.76	25.52	29.33	44.12		32.79	 		35.06	17							
18		118.18				+		125.00	·	18		70.17	140.33	125.00	125.00		47.56 125.00	71.56	95.08	50.86	78		11.78	23.55	27.08						32.36	۱ ۱							
24		88.63			125.00	· · · · · · · · · · · · · · · · · · ·			125.00 125.00	24	4 D	52.63	105.25	121.00	125.00			125.00		125.00	18		46.78	93.56	107.56	· · · · · · · · · · · · · · · · · · ·		120.22	+			1,							
30		70.91	141.81	125.00	125.00	125.0			125.00 125.00	30									42.10	84.20	96.80	145.60		135.25 108.20	125.00	125.00 125.00	144.63	24		35.08	70.17	80.67		125.00					1 (
36		59.09	118.18	135.86	125.00			125.00		36		35.08	70.17	80.67	121.33	125.00		~~			30		28.07	56.13	64.53	+		72.13	 	144.20	77.13	1							
42		50.65	101.29	116.45	125.00	125.0	00 130.17		 	42		30.07	60.14	69.14	104.00		+	116.29		82.64	42		23.39	46.78	53.78	+		60.11											
48	57	44.32	88.63	101.89	125.00	125.0				48		26.31	52.63	60.50	91.00	120.94		101.75	135.19	72.31	48	144	20.05 17.54	40.10 35.08	46.10	69.33		51.52			55.10								
54		39.39	78.78	90.57	136.23	125.0	00 101.24	125.00		54	1	23.39	46.78	53.78	80.89	107.50	60.11	90.44	120.17	64.28	54		15.59	31.19	40.33 35.85	60.67 53.93		45.08			48.21								
60		35.45	70.91	81.52	122.61	125.0	00 91.12	137.09	125.00 97.43	60		21.05	42.10	48.40	72.80	96.75	54.10	81.40	108.15	57.85	60		14.03	28.07	32.27			40.07 36.07	+		42.85	Ι,							
66		32.23	64.46	74.11	111.46	148.1	13 82.83	124.63	125.00 88.57	66		19.14	38.27	44.00	66.18	87.95	49.18	74.00	98:32	52.59	66		12.76	25.52	29.33	+		32.79	+		38.57	ľ							
72	· .	29.54	59.09	67.93	102.18	135.7	79 75.93	114.25	125.00 81.19	- 72		17.54	35.08	40.33	60.67	80.63	45.08	67.83	90.13	48.21	72		11.69	23.39	26.89	40.44		30.06	 ` 		35.06 32.14	ľ,							
78		27.27	54.54	62.70	94.32	125.3	34 70.09	105,46	140.11 74.95	78		16.19	32.38	37.23	56.00	74.42	41.62	62.62	83.19	44.50	78		10.79	21.59	24.82	37.33	49.62	27.74			29.67)							
18		106.92	125.00	125.00	125.00	125.0	00 125.00	125.00	125.00 125.00	18		62.37	124.74	143.41	125.00	125.00	125.00	125.00	125.00	125.00	18		44.91			 		115.41			123.41	1							
24		80.19	125.00	125.00	125.00	125.0	00 125.00	125.00	125.00 125.00	24		46.78	93.56	107.56	125.00	125.00	120.22	125.00	125.00	128.56	24		33.68	67.36	77.44	 	125.00					Ŀ							
30	ş. S	64.15	128.30	147.50	125.00	125.0	00 125.00	125.00	125.00 125.00	30		37.42	74.84.	86.04				144.71	125.00	102.84	30		26.94	53.89	61.95	93.18						ı							
36		53.46	106.92	122.92					125.00 146.92	36]	31.19	62.37	71.70	107.85	143.33	80.15	120.59	125.00	85.70	36		22.45		51.63	77.65	103.20	57.71		115.36		9							
42									125.00 125.93	42] .	26.73	53.46	61.46	92.44	122.86	68.70	103.37	137.33	73.46	42					66.56						6							
48	63								125.00 110.19	48	108		46.78								48	150	16.84	33.68	38.72	58.24	77.40	43 28	65.12	86.52	46.28	ا ا							
54									125.00 97.95	54	<u> </u>		41.58								54	= 7,7 .	14.97	29.94	34.42	51.77	68.80	38.47	57.88	76.91	41.14	[
60									125.00 88.15	60		18.71	37.42	43.02	64.71	86.00	48.09	72.36	96.13	51.42	60		13.47	26.94	30.98	46.59	61.92	34.62	52.10	69.22	37.02								
66									149.82 80.14	66		17.01	34.02	39.11	58.83	78.18	43.72	65.78	87.39	46.75	66		12.25	24.49	28.16	42.36	56.29	31.48	47.36	62.92	33.66								
72	2								137.33 73.46	72		15.59	31.19	35.85	53.93	71.67	40.07	60.30	80.11	42.85	72		11.23	22.45	25.81	38.83	51.60	28.85	43.41	57:68	30.85	ا ا							
78	<u> </u>	24.67	49.35	56.73	85.33	113.4	41 63.41	95.41	126.77 67.81	78	·	14.39	28.79	33.09	49.78	66.15	36.99	55.66	73.95	39.56	78		10.36	20.73	23.83	35,84	47.63	26.63	40.07	53,24	28.48	4							
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ANCHOR CLIP NOTES:

- 1. FOR CLIP TYPES AND ANCHOR CONDITIONS REFER TO SHEETS 6, 7, 8, & 9 FOR DETAILS AND NOTES.
- 2. REFER TO CHARTS ABOVE FOR MAX. DESIGN PRESSURE
- 3. SELECT ANCHOR TYPE WITH DESIGN RATING MORE THAN THE DESIGN LOADS REQUIRED FOR PARTICULAR OPENING.
- 4. ANY ANCHOR CONDITION SHOWN HEREIN MAY COVER LOCATIONS AT HEAD, SILL OR JAMB ENDS.
- 5. INTERPOLATION BETWEEN WIDTHS OR SPANS ALLOWED.

NOA-No._

Expiration Date: <u>05/30/2028</u>

Miami-Dade Product Control

PRODUCT REVISED As complying with the Florida Building Code 23-1017.11

By: Manuel Perez