

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	ADDED MZ1 MULLION	08/28/2024	R.L.

NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
- 2. WOOD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.
- 5. DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 6. WINDOWS AND DOORS TO BE MULLED TOGETHER INCLUDE AND ARE NOT LIMITED TO REILLY ARCHITECTURAL MAHOGANY IMPACT AND NON-IMPACT APPROVED PRODUCTS.
- 7. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW OR DOOR UNIT.
- 8. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
- 9. MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.

ANCHORING NOTES:

- 1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 3.
- 2. FOR ANCHORING INTO CONCRETE USE 1/4" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT WITH 2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
- 3. FOR ANCHORING INTO METAL STRUCTURE USE #14 SMS OR SELF DRILLING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4. FOR ATTACHING WINDOW UNITS TO MULLION USE #10 SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS IN ACCORDANCE WITH WINDOW ANCHORING SCHEDULE AS SHOWN IN WINDOW SEPARATE APPROVAL.
- 5. ALL FASTENERS TO BE CORROSION RESISTANT.
- 6. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
 - 6.1. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 6.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
 - 6.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - 6.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .125" THICK MINIMUM.

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REILLY ARCHITECTURAL
901 BURMAN BLVD. BUILDING 701
CALVERTON, NY 11933

M1, M2, M3 AND M4 VERTICAL MULLIONS
IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08-03737

REV
B

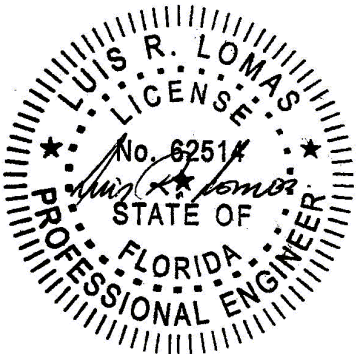
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DATE 05/20/2021

SHEET 1 OF 8

L. ROBERTO LOMAS P.E.
208 7th AVENUE, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

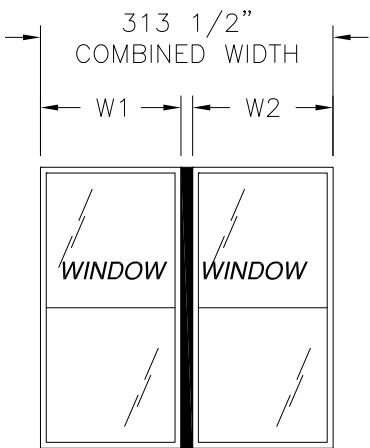
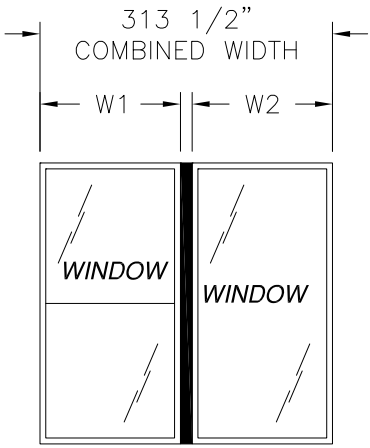
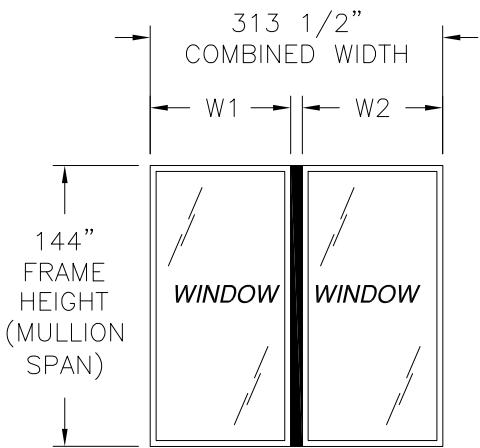
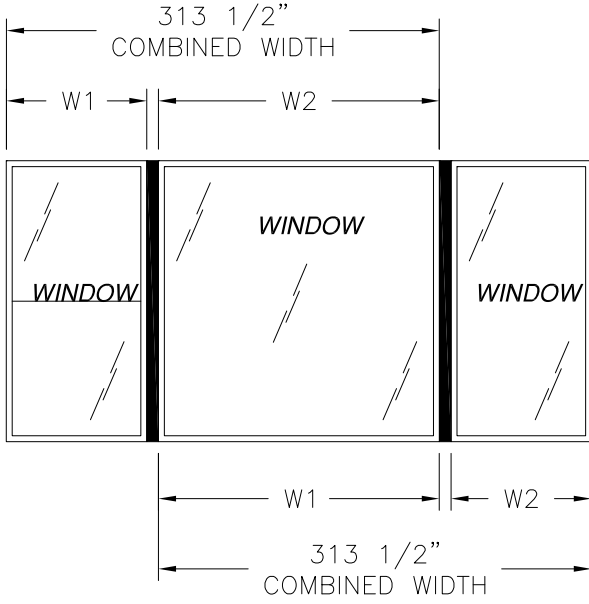
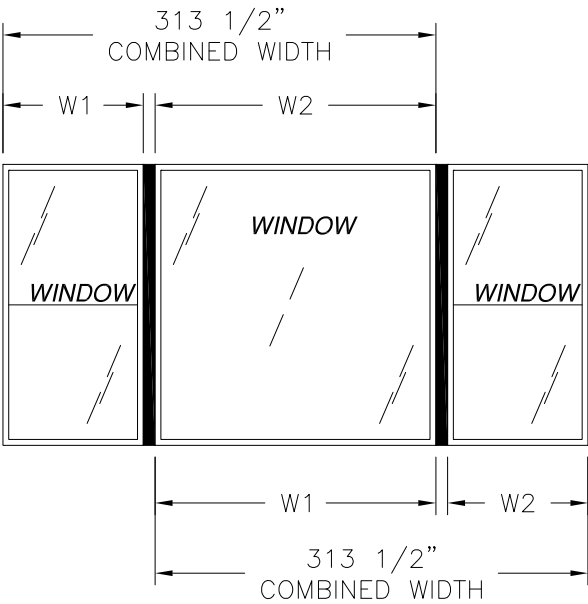
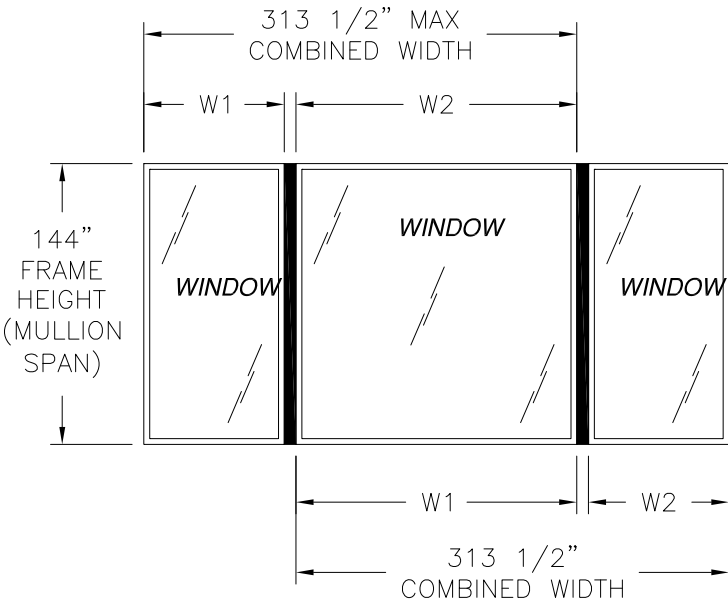
SIGNED: 08/28/2023



Luis R. Lomas P.E.
FL No.: 62514

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APPROVED CONFIGURATIONS



- DESIGN PRESSURE TABLE INSTRUCTIONS:
1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
 2. DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
 3. LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

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

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M1, M2, M3 AND M4 VERTICAL MULLIONS
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APPROVED CONFIGURATIONS

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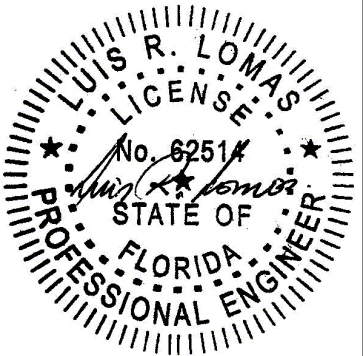
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SHEET
2 OF 8

L. ROBERTO LOMAS P.E.
208 7th AVENUE, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com



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FL No.: 62514

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Design pressure rating (psf), M1 Mullion

Mullion span (in)	Tributary width (in)						
	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	140.1	134.2	132.3
66.00	150.0	150.0	134.9	120.4	110.6	104.3	100.6
72.00	150.0	130.0	111.4	98.7	89.9	83.8	79.7
78.00	134.7	109.8	93.6	82.5	74.7	69.0	65.0
84.00	115.6	94.0	79.9	70.1	63.1	58.0	54.2
90.00	100.4	81.4	69.0	60.4	54.1	49.5	46.0
96.00	88.0	71.2	60.2	52.6	47.0	42.8	39.6
102.00	77.7	62.8	53.1	46.2	41.2	37.4	34.5
108.00	69.2	55.9	47.1	41.0	36.4	33.0	30.3
114.00	62.0	50.0	42.1	36.6	32.5	29.3	26.9
120.00	55.9	45.0	37.9	32.8	29.1	26.3	24.1

Design pressure rating (psf), M2 Mullion

Mullion span (in)	Tributary width (in)						
	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	145.5	139.3	135.8
72.00	150.0	150.0	150.0	137.0	127.4	120.8	116.4
78.00	150.0	150.0	135.8	122.6	113.2	106.5	101.9
84.00	150.0	141.8	123.5	110.9	101.9	95.3	90.6
90.00	150.0	130.4	113.2	101.3	92.6	86.2	80.1
96.00	145.5	120.8	104.5	91.5	81.8	74.5	69.0
102.00	135.3	109.4	92.4	80.5	71.7	65.1	60.1
108.00	120.5	97.3	82.0	71.3	63.4	57.4	52.8
114.00	107.9	87.1	73.3	63.6	56.5	51.1	46.9
120.00	97.3	78.4	66.0	57.2	50.7	45.7	41.9

Design pressure rating (psf), M3 Mullion

Mullion span (in)	Tributary width (in)					
	60.00	72.00	84.00	96.00	108.00	120.00
36.00	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	150.0	150.0
72.00	150.0	150.0	150.0	150.0	150.0	150.0
78.00	150.0	145.5	144.7	144.7	144.7	144.7
84.00	135.8	127.4	124.8	124.8	124.8	124.8
90.00	122.3	113.2	109.2	108.7	108.7	108.7
96.00	111.1	101.9	97.0	95.5	95.5	95.5
102.00	101.9	92.6	87.3	84.9	84.6	84.6
108.00	94.0	84.9	79.4	76.4	75.5	75.5
114.00	87.3	78.4	72.8	69.5	67.9	67.7
120.00	81.5	72.8	67.2	63.7	61.7	61.1
126.00	76.4	67.9	62.4	58.8	56.6	55.6
132.00	71.9	63.7	58.2	54.2	51.1	49.3

Design pressure rating (psf), M4 Mullion

Mullion span (in)	Tributary width (in)						
	84.00	96.00	108.00	120.00	132.00	144.00	156.00
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
78.00	144.7	144.7	144.7	144.7	144.7	144.7	144.7
84.00	124.8	124.8	124.8	124.8	124.8	124.8	124.8
90.00	109.2	108.7	108.7	108.7	108.7	108.7	108.7
96.00	97.0	95.5	95.5	95.5	95.5	95.5	95.5
102.00	87.3	84.9	84.6	84.6	84.6	84.6	84.6
108.00	79.4	76.4	75.5	75.5	75.5	75.5	75.5
114.00	72.8	69.5	67.9	67.7	67.7	67.7	67.7
120.00	67.2	63.7	61.7	61.1	61.1	61.1	61.1
126.00	62.4	58.8	56.6	55.6	55.4	55.4	55.4
132.00	58.2	54.6	52.2	50.9	50.5	50.5	50.5
138.00	54.6	50.9	48.5	47.0	46.3	46.2	46.2
144.00	51.4	47.8	45.3	43.7	42.7	42.5	42.5

Design pressure rating (psf), MZ1 Mullion

Mullion span (in)	Tributary width (in)						
	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	145.5	139.3	135.8
72.00	150.0	150.0	150.0	134.3	122.3	114.0	108.4
78.00	150.0	149.4	127.4	112.3	101.6	93.9	88.5
84.00	150.0	127.9	108.7	95.4	85.9	78.9	73.8
90.00	136.6	110.8	93.9	82.2	73.7	67.3	62.6
96.00	115.2	93.5	79.3	69.4	62.3	56.9	52.9
102.00	95.8	77.6	65.7	57.4	51.3	46.7	43.3
108.00	80.5	65.1	55.0	48.0	42.8	38.9	35.9
114.00	68.3	55.2	46.6	40.5	36.1	32.7	30.1
120.00	58.5	47.2	39.8	34.6	30.7	27.8	25.5

REILLY ARCHITECTURAL
901 BURMAN BLVD. BUILDING 701
CALVERTON, NY 11933

M1, M2, M3 AND M4 VERTICAL MULLIONS
IMPACT
DESIGN PRESSURE CHARTS

DRAWN:
A.R.

DWG NO.
08-03737

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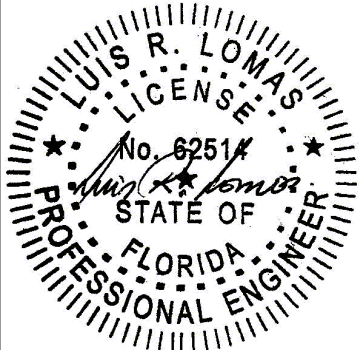
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DATE 05/20/2021

SHEET 3 OF 8

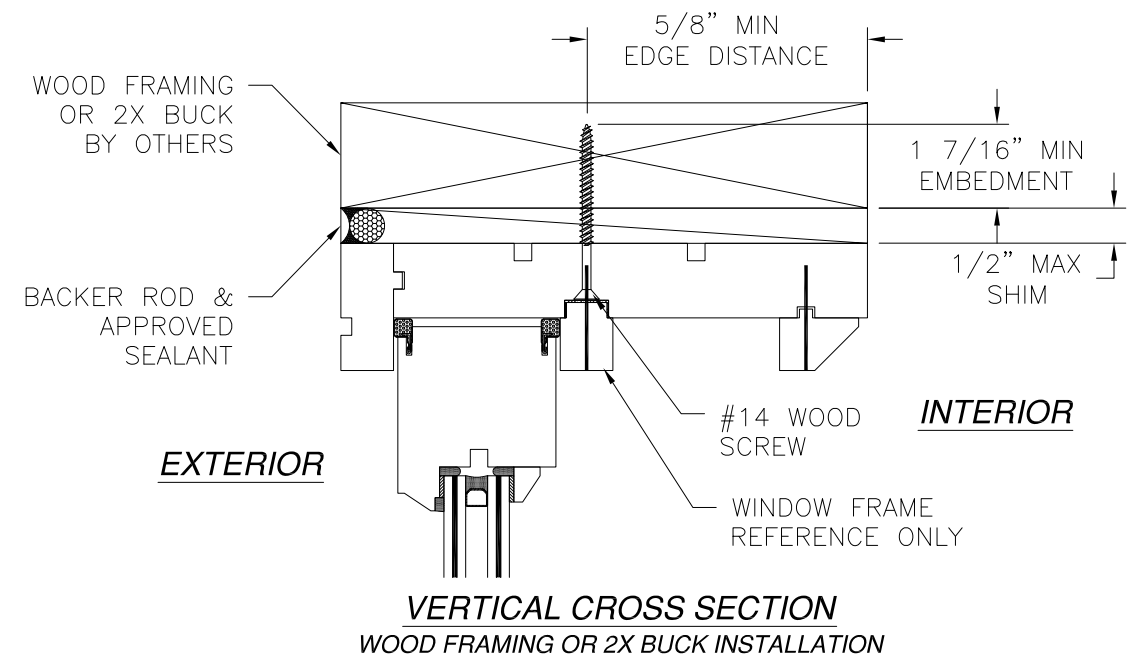
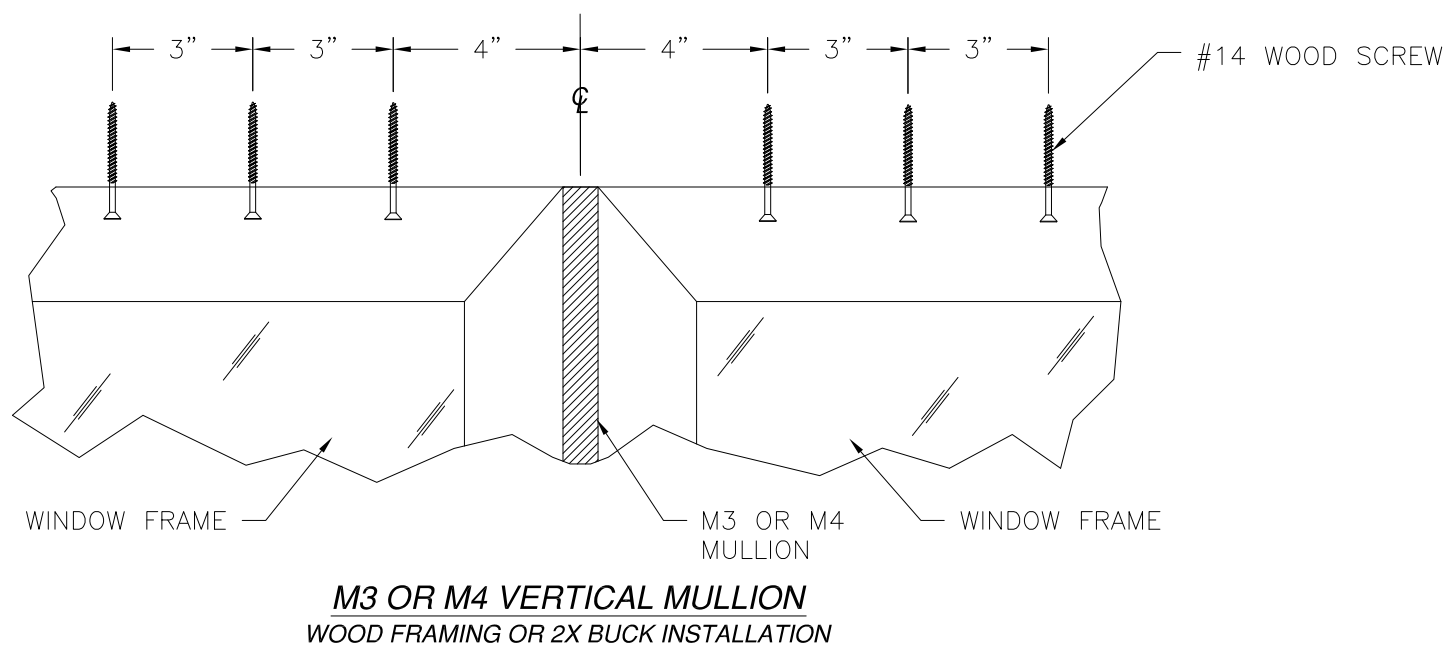
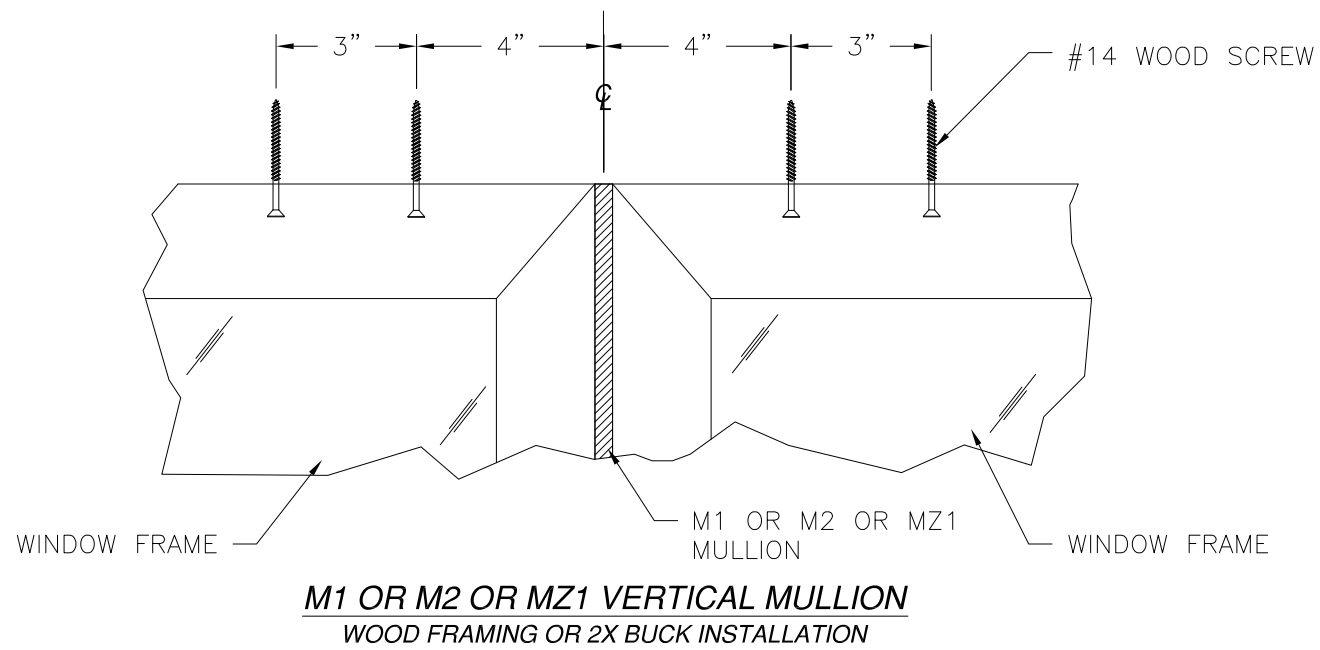
L. ROBERTO LOMAS P.E.
208 7th AVENUE, INDIALANTIC, FL 32903
434-688-0609 rllomas@rlomaspe.com

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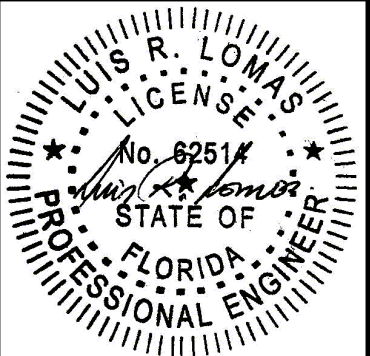
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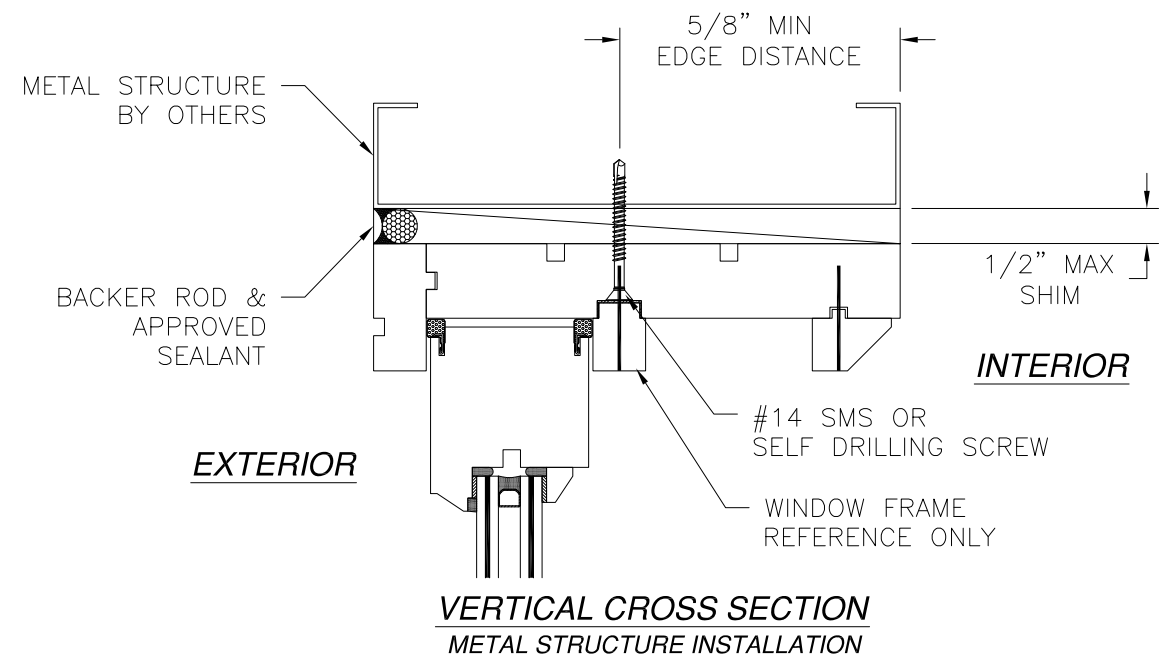
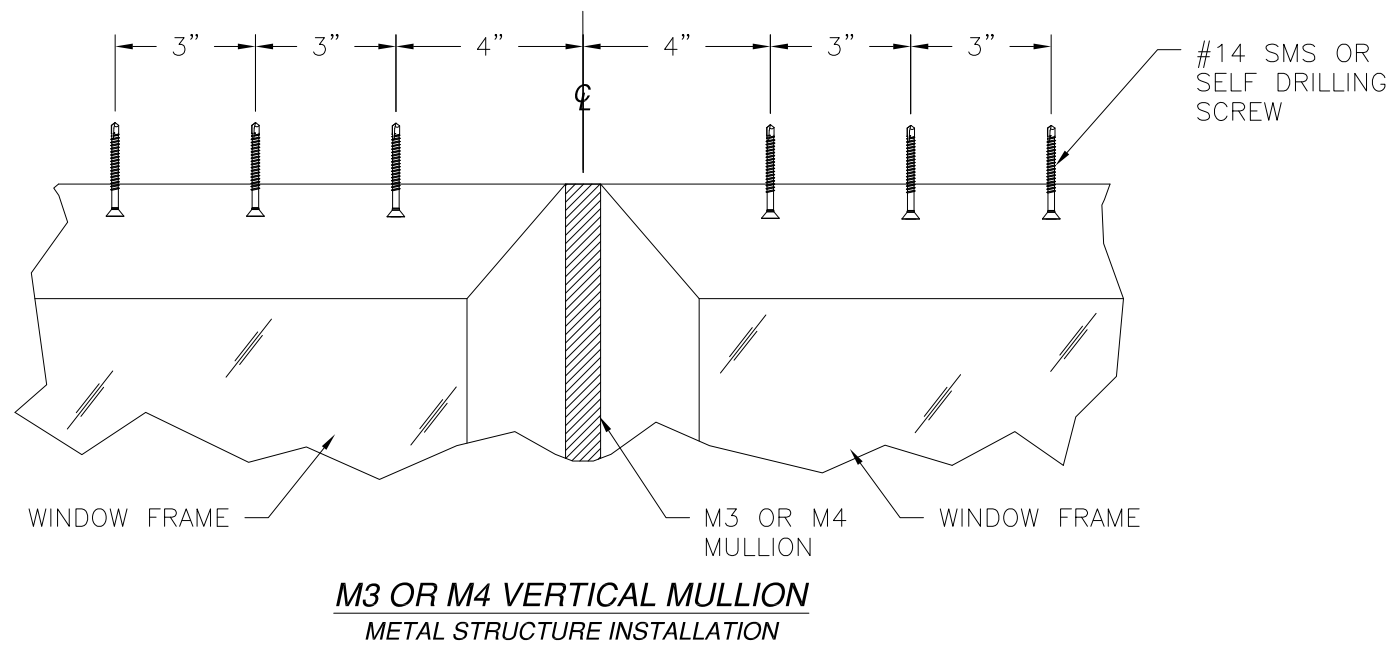
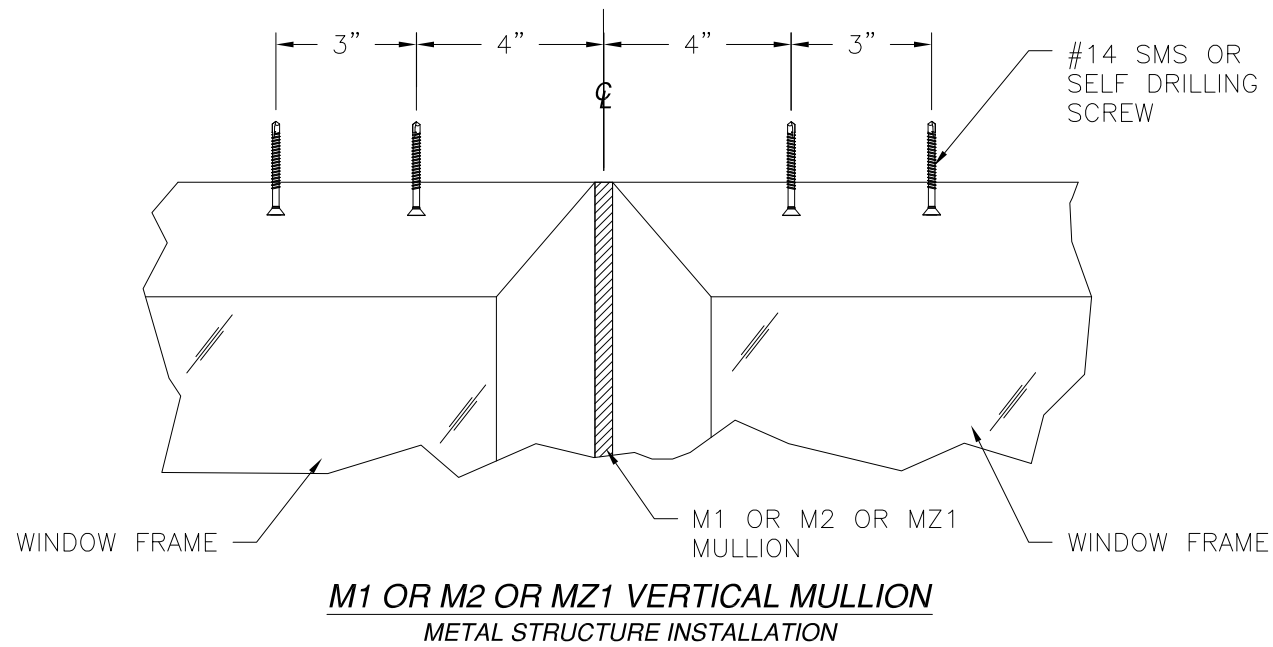
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REILLY ARCHITECTURAL 901 BURMAN BLVD. BUILDING 701 CALVERTON, NY 11933		
M1, M2, M3 AND M4 VERTICAL MULLIONS IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03737	REV B
SCALE NTS	DATE 05/20/2021	SHEET 4 OF 8
L. ROBERTO LOMAS P.E. 208 7th AVENUE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



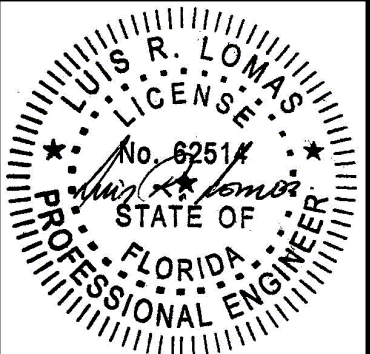
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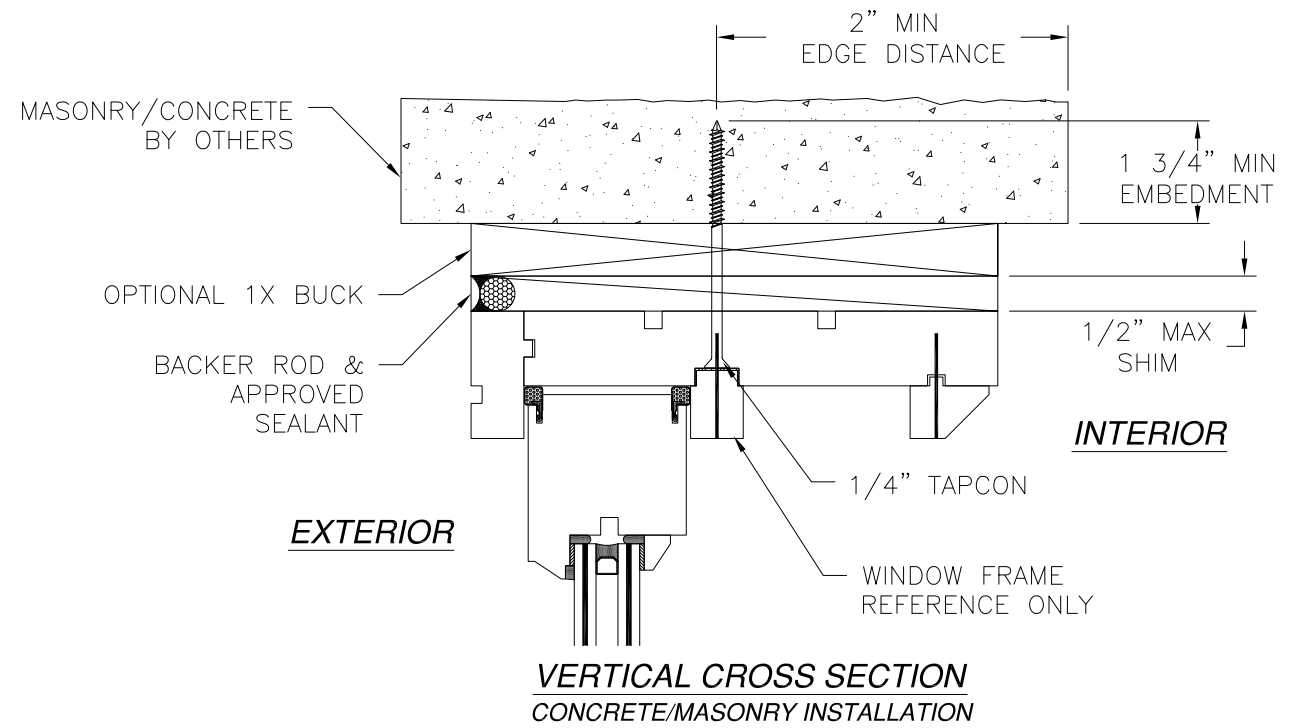
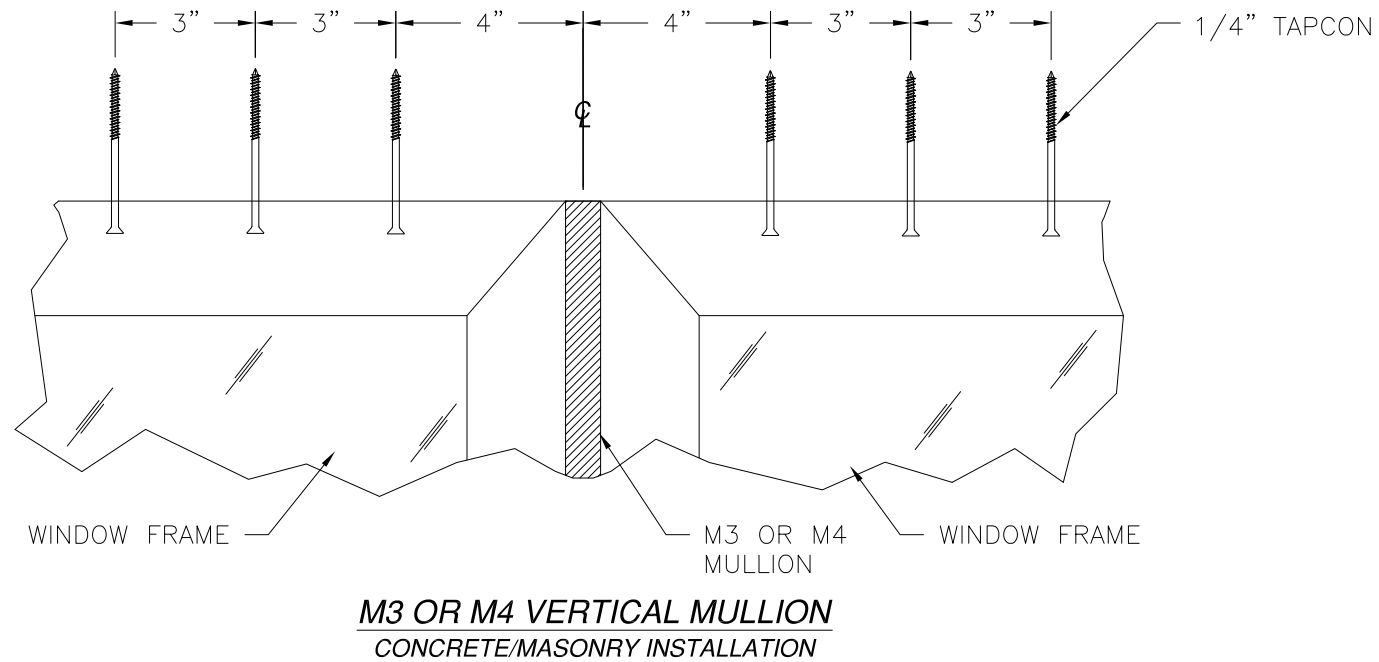
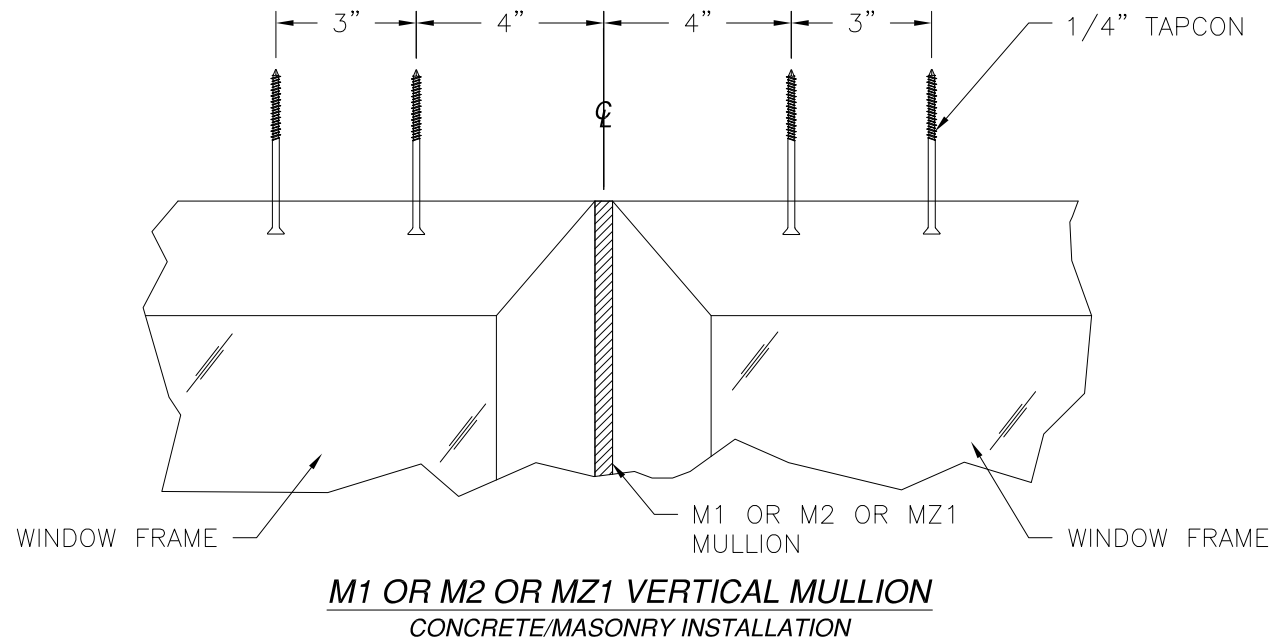
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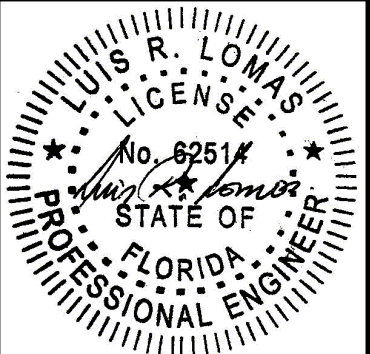
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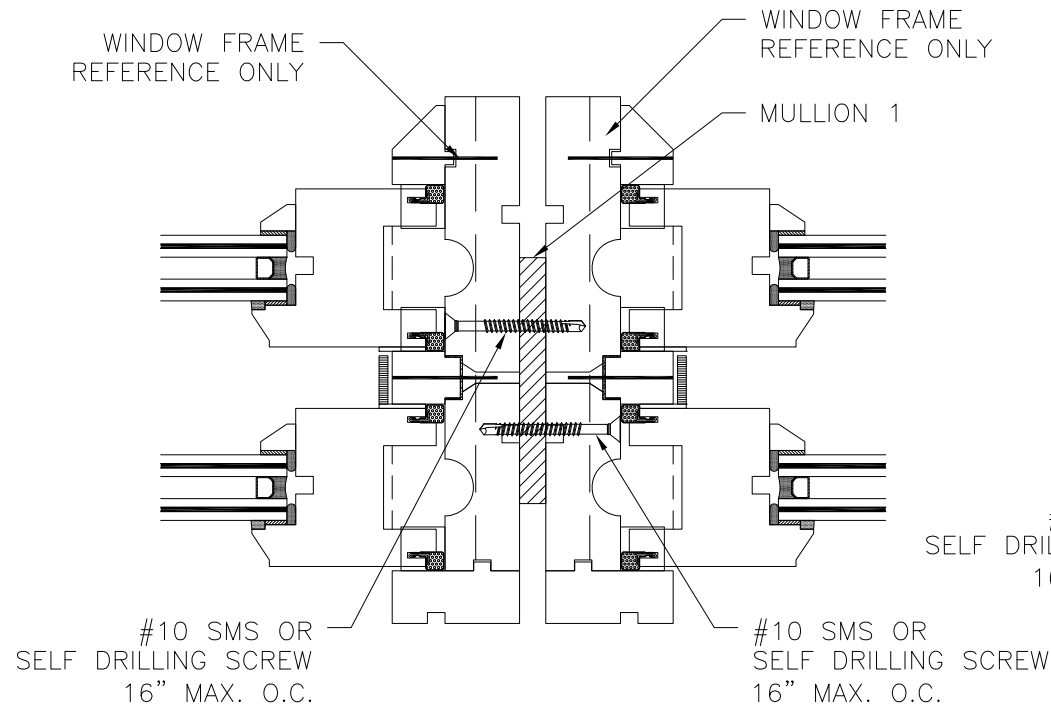


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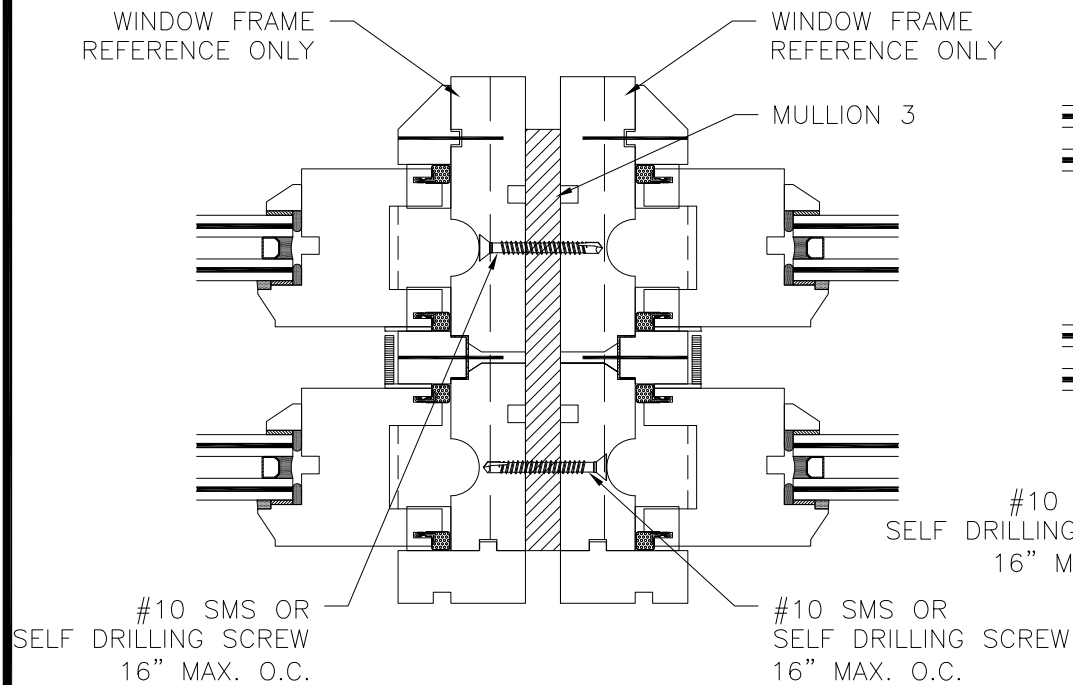
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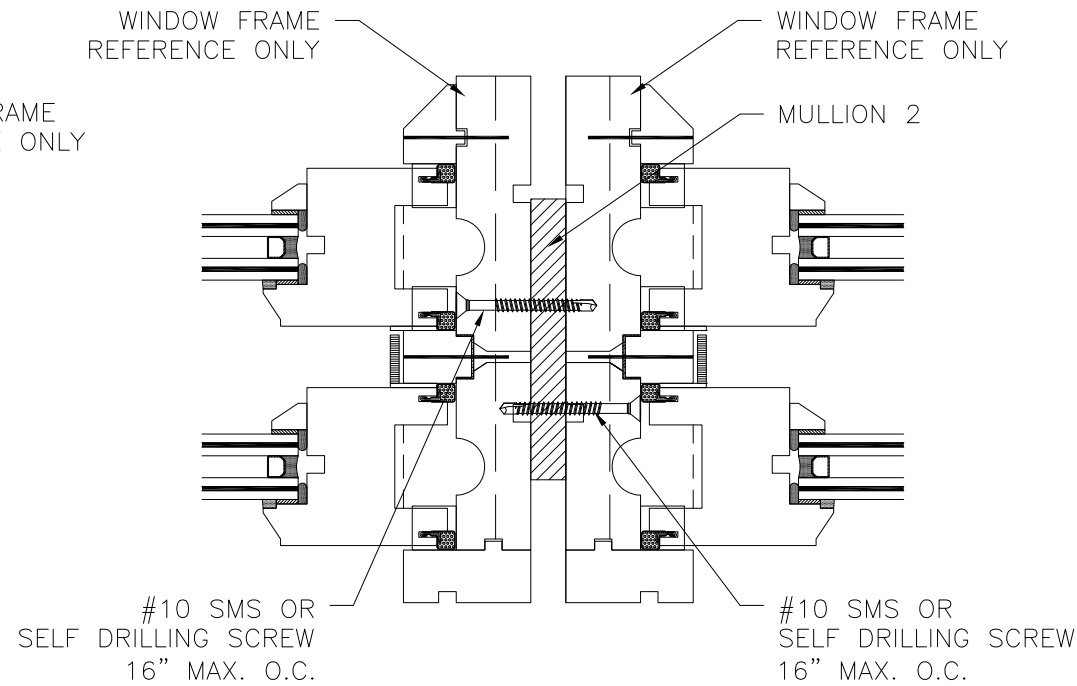
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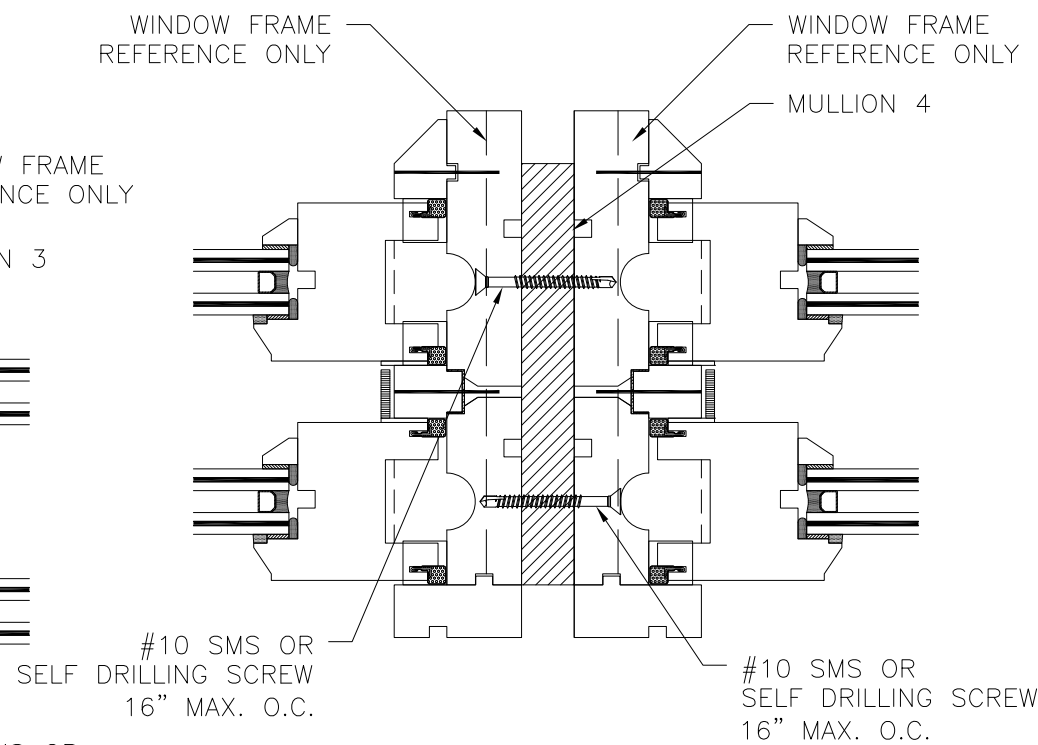
**M1 MULLION TO WINDOW FRAME
NSTALLATION DETAIL**



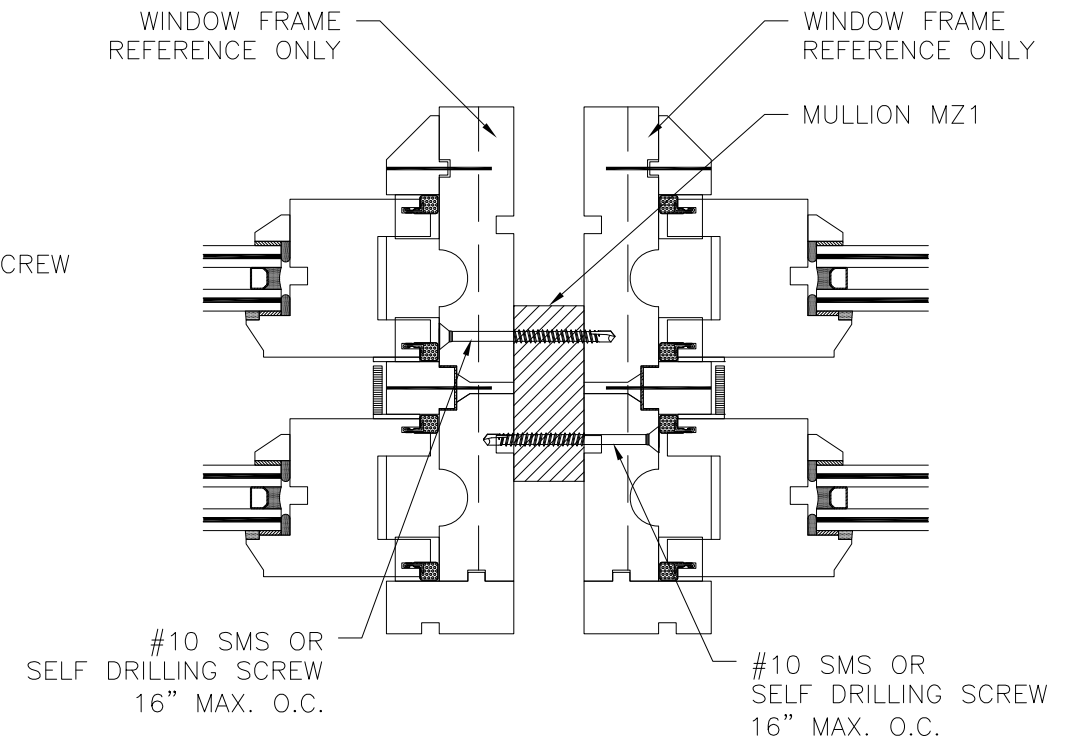
**M3 MULLION TO WINDOW FRAME
NSTALLATION DETAIL**



**M2 MULLION TO WINDOW FRAME
NSTALLATION DETAIL**



**M4 MULLION TO WINDOW FRAME
NSTALLATION DETAIL**



**MZ1 MULLION TO WINDOW FRAME
NSTALLATION DETAIL**

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REV
B

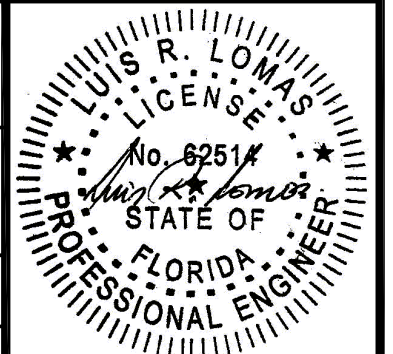
SCALE
NTS

DATE
05/20/2021

SHEET
7 OF 8

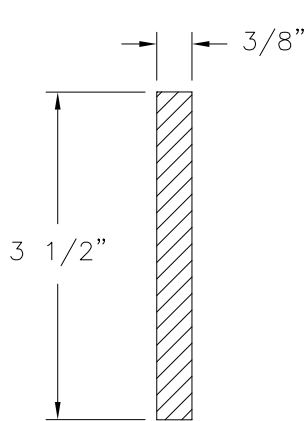
L. ROBERTO LOMAS P.E.
208 7th AVENUE, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 08/28/2023

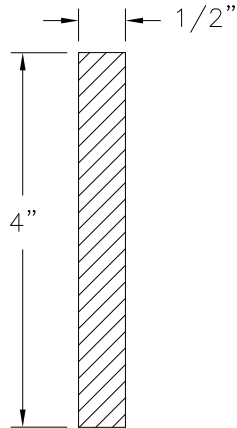


Luis R. Lomas P.E.
FL No.: 62514

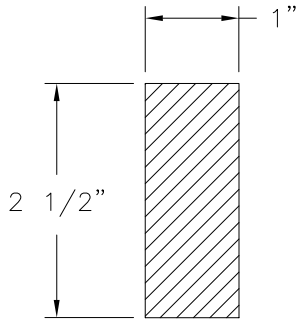
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	ADDED MZ1 MULLION	08/28/2024	R.L.



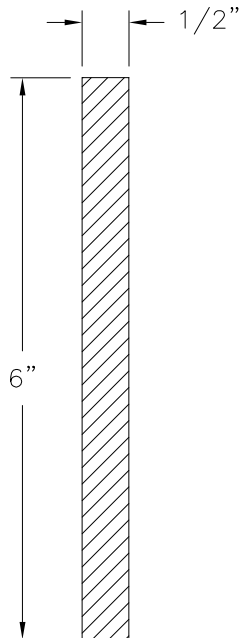
M1 MULLION
STEEL



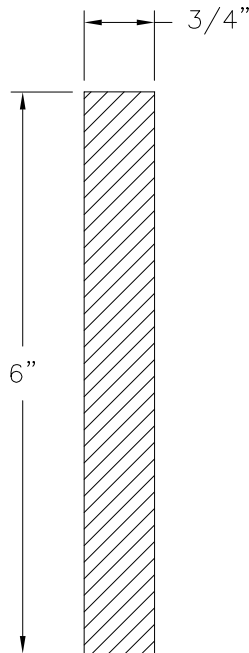
M2 MULLION
STEEL



MZ1 MULLION
STEEL



M3 MULLION
STEEL



M4 MULLION
STEEL

SIGNED: 08/28/2023

REILLY ARCHITECTURAL 901 BURMAN BLVD. BUILDING 701 CALVERTON, NY 11933			
M1, M2, M3 AND M4 VERTICAL MULLIONS IMPACT COMPONENTS			
DRAWN: A.R.	DWG NO. 08-03737	REV B	
SCALE NTS	DATE 05/20/2021	SHEET 8 OF 8	
L. ROBERTO LOMAS P.E. 208 7th AVENUE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com			Luis R. Lomas P.E. FL No.: 62514