

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

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. FENESTRATION UNITS MUST BE APPROVED UNDER SEPARATE APPROVAL.
6. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
7. FENESTRATION UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. FENESTRATION UNITS MUST BE MANUFACTURED BY FENESTAR USA.
8. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL FENESTRATION UNIT.
9. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
10. 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 7/16" MINIMUM EMBEDMENT WITH 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
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.
3. FOR ANCHORING INTO METAL STRUCTURE USE #14 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL AND 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
4. ALL FASTENERS TO BE CORROSION RESISTANT.
5. 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:
 - 5.1. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 5.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
 - 5.3. MASONRY – GROUT/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 5.4. METAL STRUCTURE: STEEL 18GA (.048") FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 125" THICK MINIMUM
6. FENESTRATION UNITS ATTACHED TO MULLION MUST BE ANCHORED IN ACCORDANCE WITH THE FENESTRATION MANUFACTURER'S INSTALLATION INSTRUCTIONS AND FENESTRATION APPROVAL DOCUMENTATION.

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FENESTAR USA
110 JABEZ ST. SUITE 309
NEWARK, NJ 07105

STEEL VERTICAL MULLION ASSEMBLY
IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08-04093

REV
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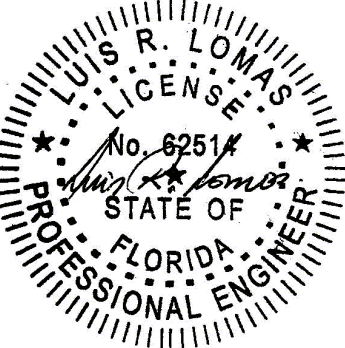
SCALE NTS

DATE 09/09/2024

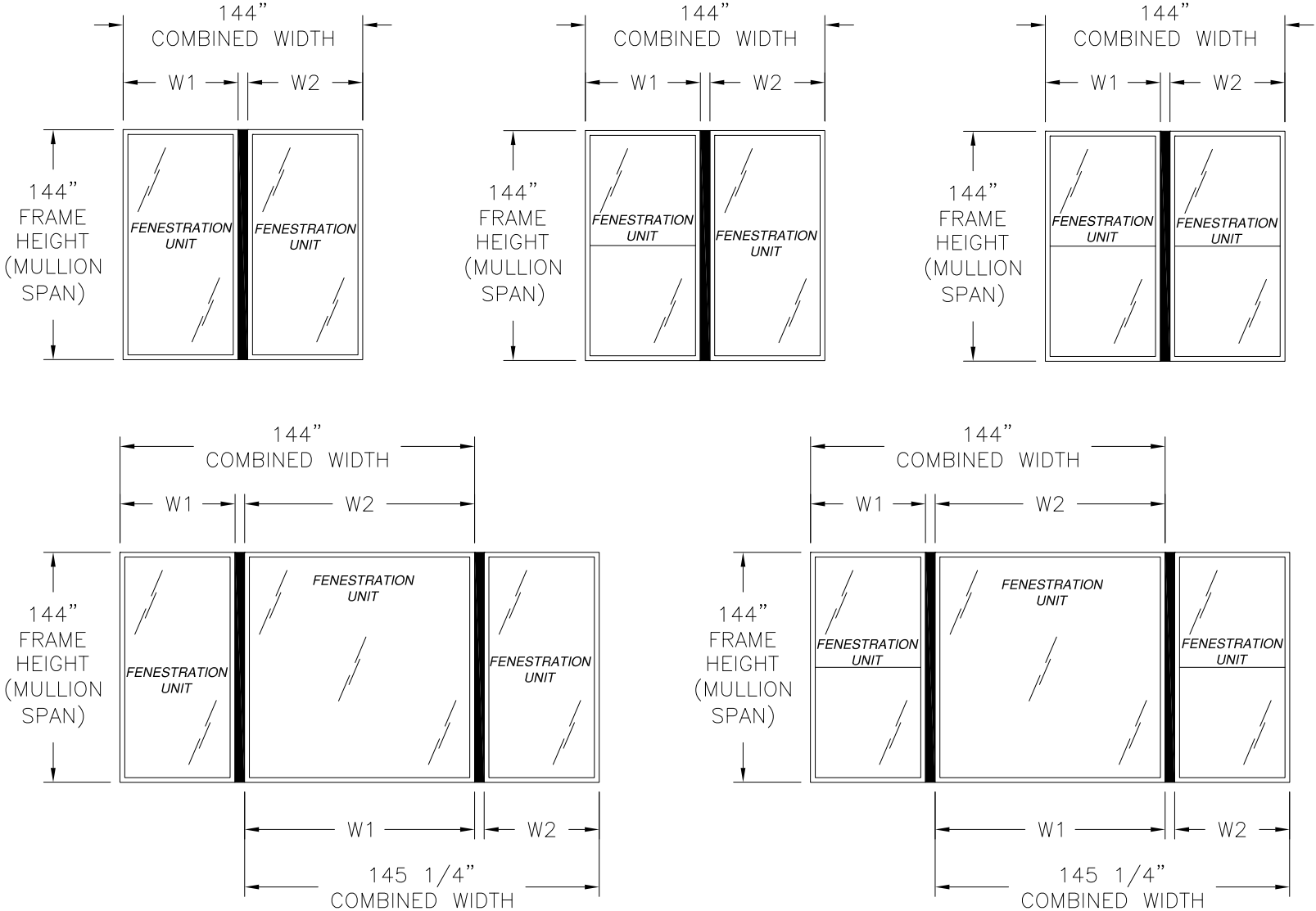
SHEET 1 OF 7

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434-688-0609 rllomas@rlomaspe.com

SIGNED: 09/26/2024



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



APPROVED CONFIGURATIONS

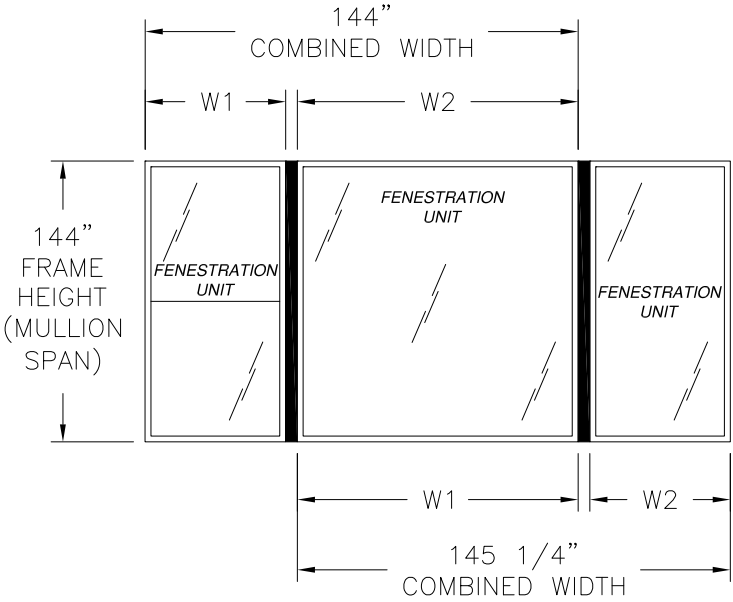
TWIN AND TRIPLE UNITS ARE SHOWN UNLIMITED NUMBER OF UNITS MAY BE MULLED TOGETHER AS LONG AS UNIT SIZES DO NOT EXCEED SIZES SHOWN HEREIN AND MULLION IS ANCHORED AS SHOWN IN INSTALLATION DETAILS

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.

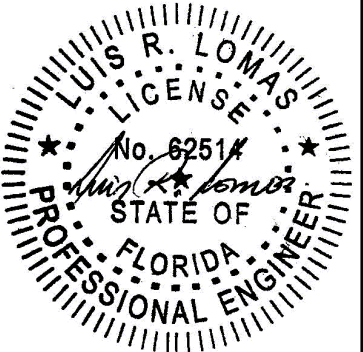
$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

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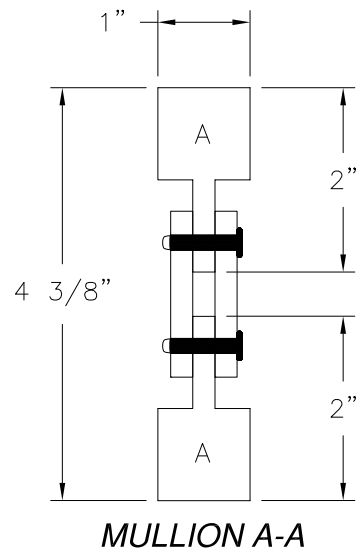


FENESTAR USA 110 JABEZ ST. SUITE 309 NEWARK, NJ 07105		
STEEL VERTICAL MULLION ASSEMBLY IMPACT APPROVED CONFIGURATIONS		
DRAWN: A.R.	DWG NO. 08-04093	REV -
SCALE NTS	DATE 09/09/2024	SHEET 2 OF 7
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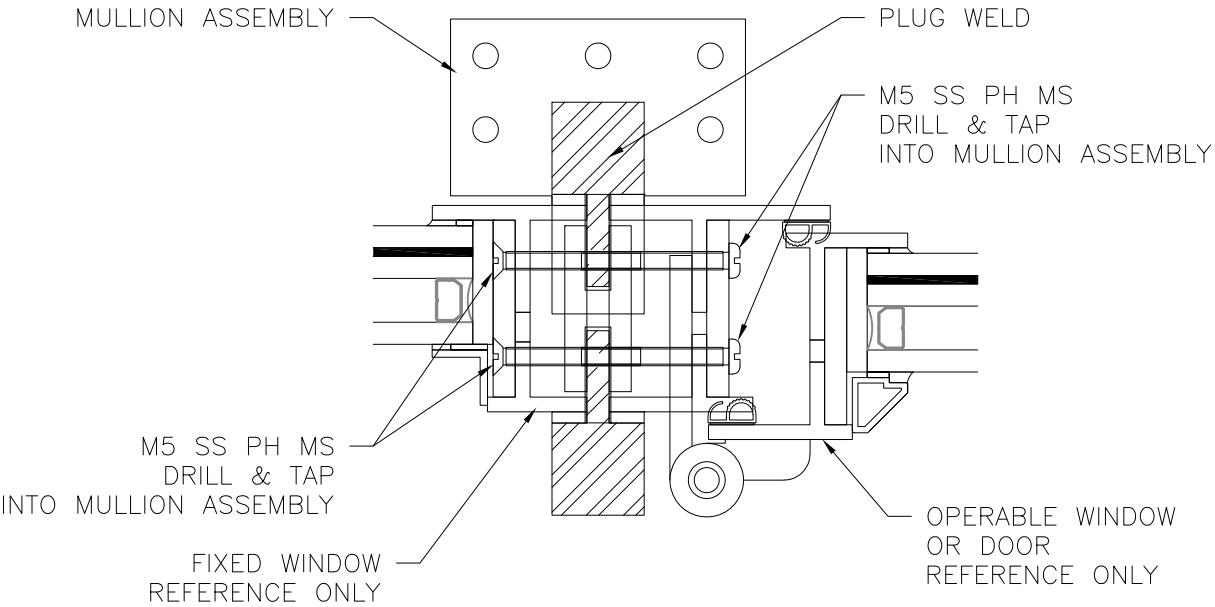
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Design pressure rating (psf)
positive and negative

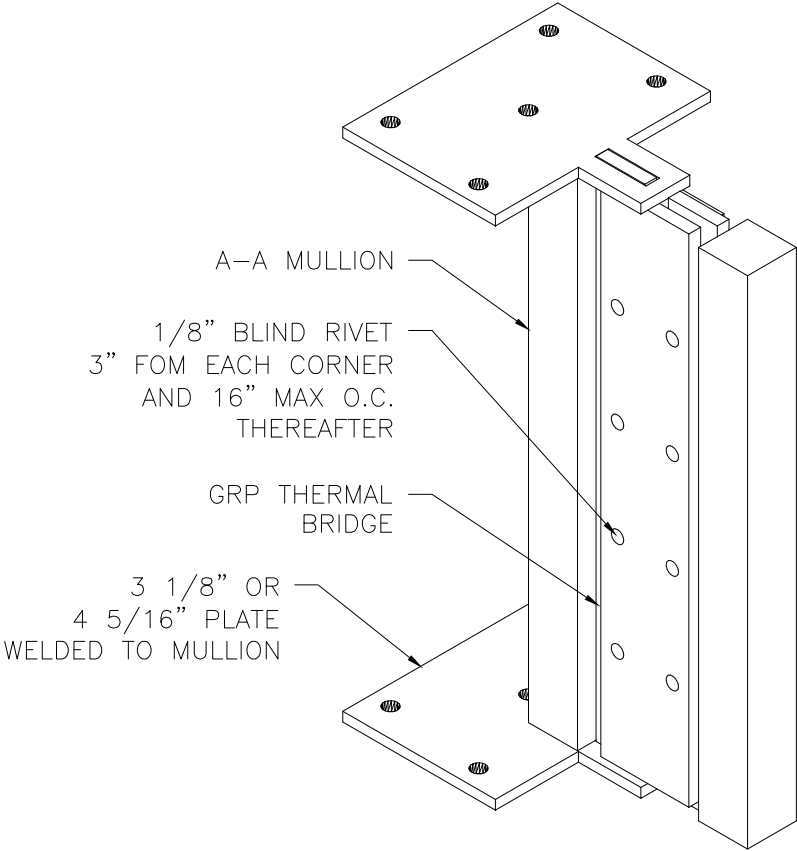
Mullion span (in)	Tributary width (in)									
	24.00	30.00	36.00	42.00	48.00	54.00	60.00	66.00	72.00	
36.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
54.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
66.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
72.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
78.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
84.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
90.00	120.0	120.0	120.0	120.0	120.0	120.0	120.0	116.6	112.8	
96.00	120.0	120.0	120.0	120.0	120.0	117.7	110.8	105.5	101.5	
102.00	120.0	120.0	120.0	120.0	117.1	108.3	101.5	96.3	92.3	
108.00	120.0	120.0	120.0	120.0	108.8	100.3	93.7	88.6	84.6	
114.00	120.0	120.0	120.0	112.3	101.5	93.4	87.0	82.0	78.1	
120.00	120.0	120.0	119.4	105.5	95.2	87.3	81.2	76.4	72.5	
126.00	120.0	120.0	112.8	99.5	89.6	82.0	76.1	71.5	67.7	
132.00	120.0	120.0	106.9	94.1	84.6	77.4	71.0	65.6	61.1	
138.00	120.0	118.9	101.5	89.1	78.8	70.8	64.5	59.5	55.4	
144.00	120.0	112.7	94.5	81.7	72.1	64.7	59.0	54.3	50.5	

IMPACT RATED UP TO WIND ZONE 3



WINDOW/DOOR TO MULLION ASSEMBLY
CONNECTION DETAIL

3 1/8" X 3 1/8" X 3/16" STAINLESS STEEL PLATE SHOWN
4 5/16" X 4 5/16" X 3/16" STEEL PLATE SIMILAR



MULLION ASSEMBLY

FENESTAR USA
110 JABEZ ST. SUITE 309
NEWARK, NJ 07105

STEEL VERTICAL MULLION ASSEMBLY
IMPACT
MULLION AND DESIGN PRESSURE CHART

DRAWN:
A.R.

DWG NO.
08-04093

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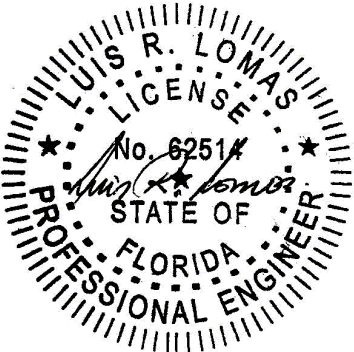
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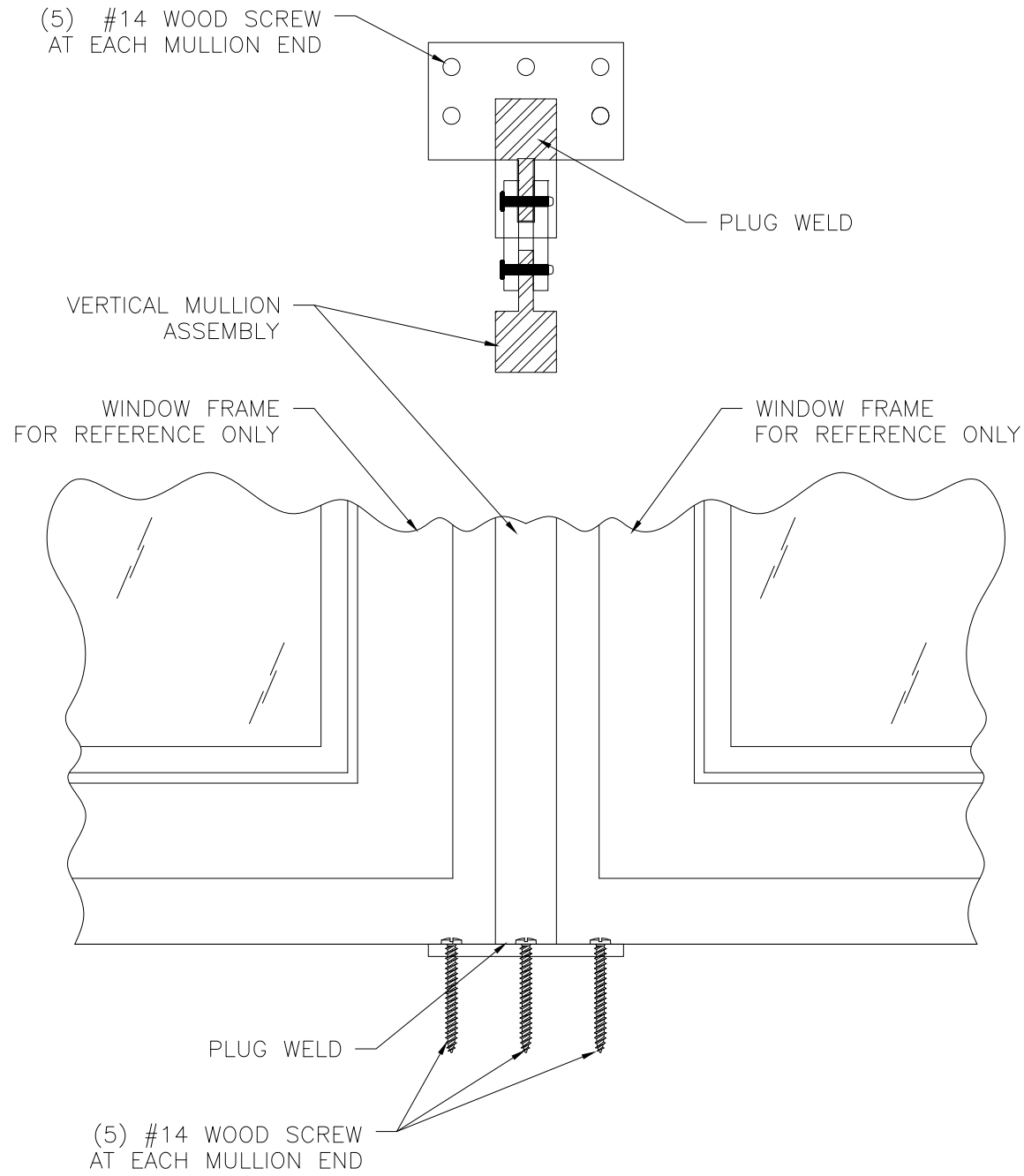
SHEET
3 OF 7

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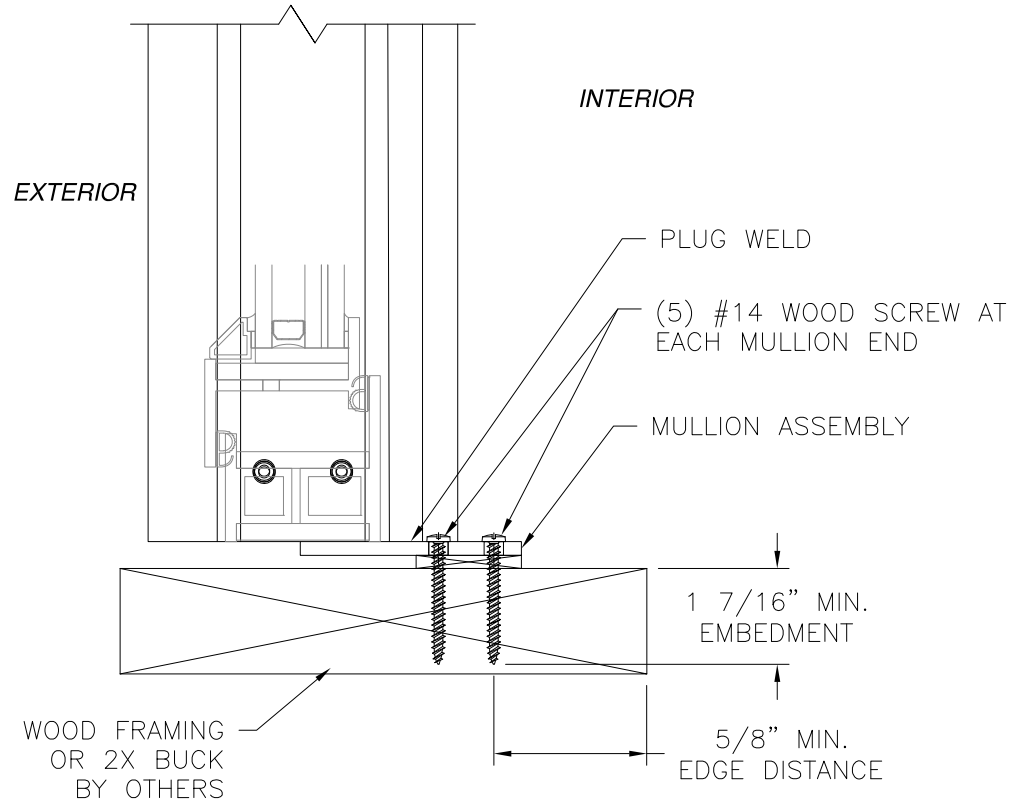
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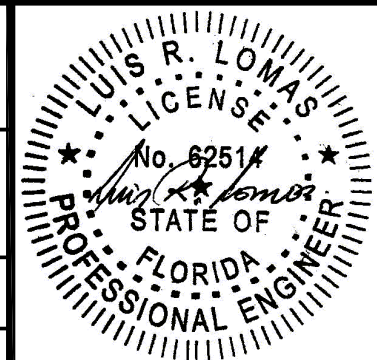
VERTICAL INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK
SILL SHOWN, HEAD SIMILAR



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STEEL VERTICAL MULLION ASSEMBLY IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-04093	REV -
SCALE NTS	DATE 09/09/2024	SHEET 4 OF 7
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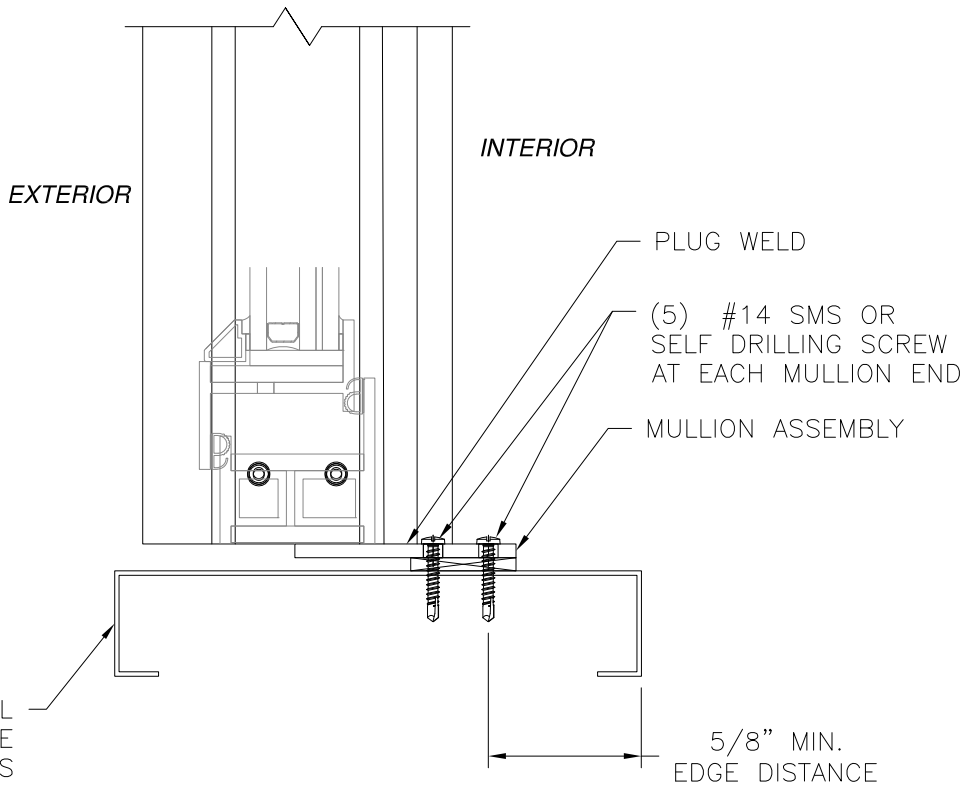
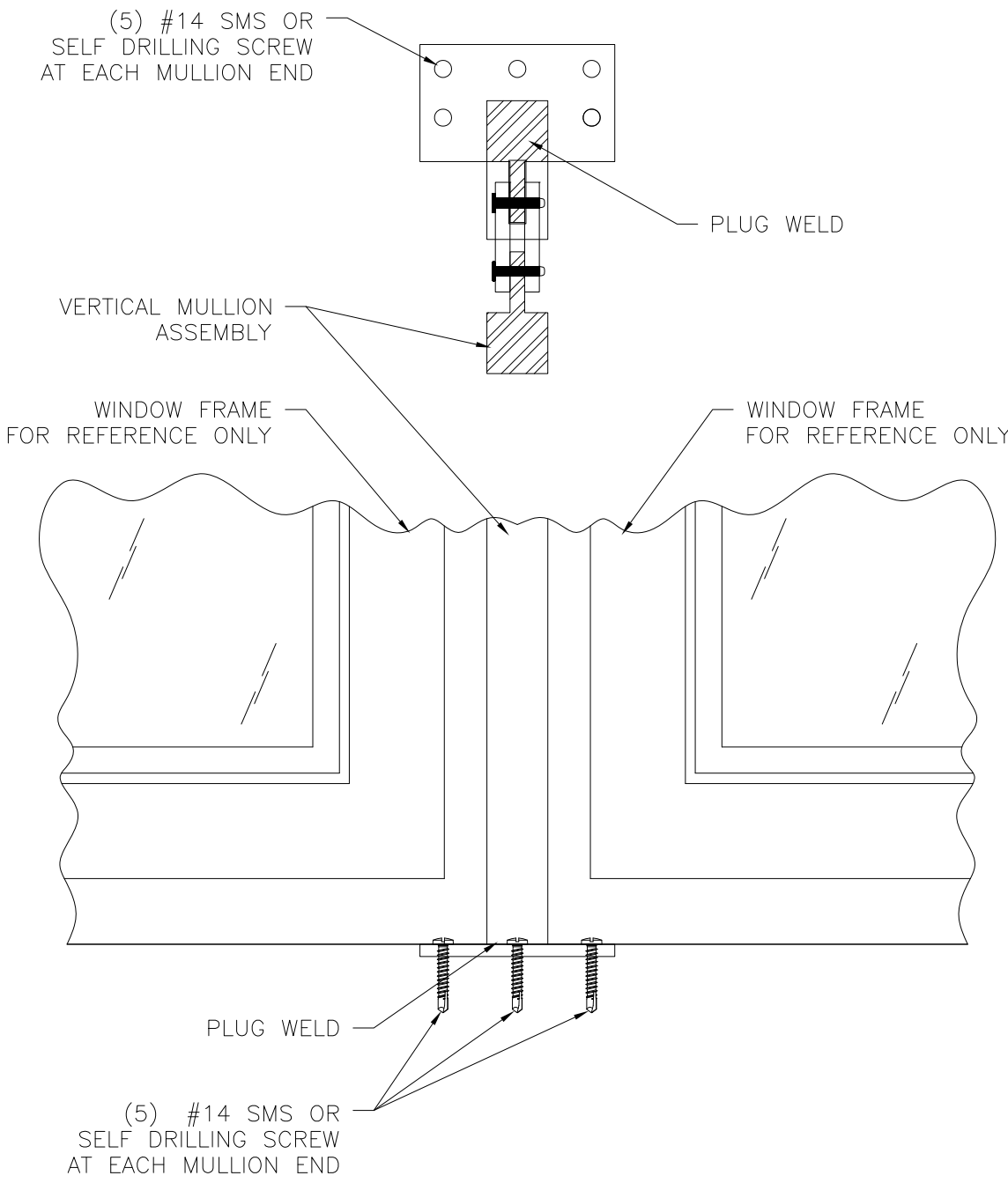
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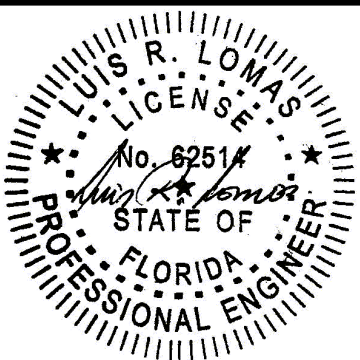
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VERTICAL INSTALLATION DETAIL
METAL STRUCTURE
SILL SHOWN, HEAD SIMILAR

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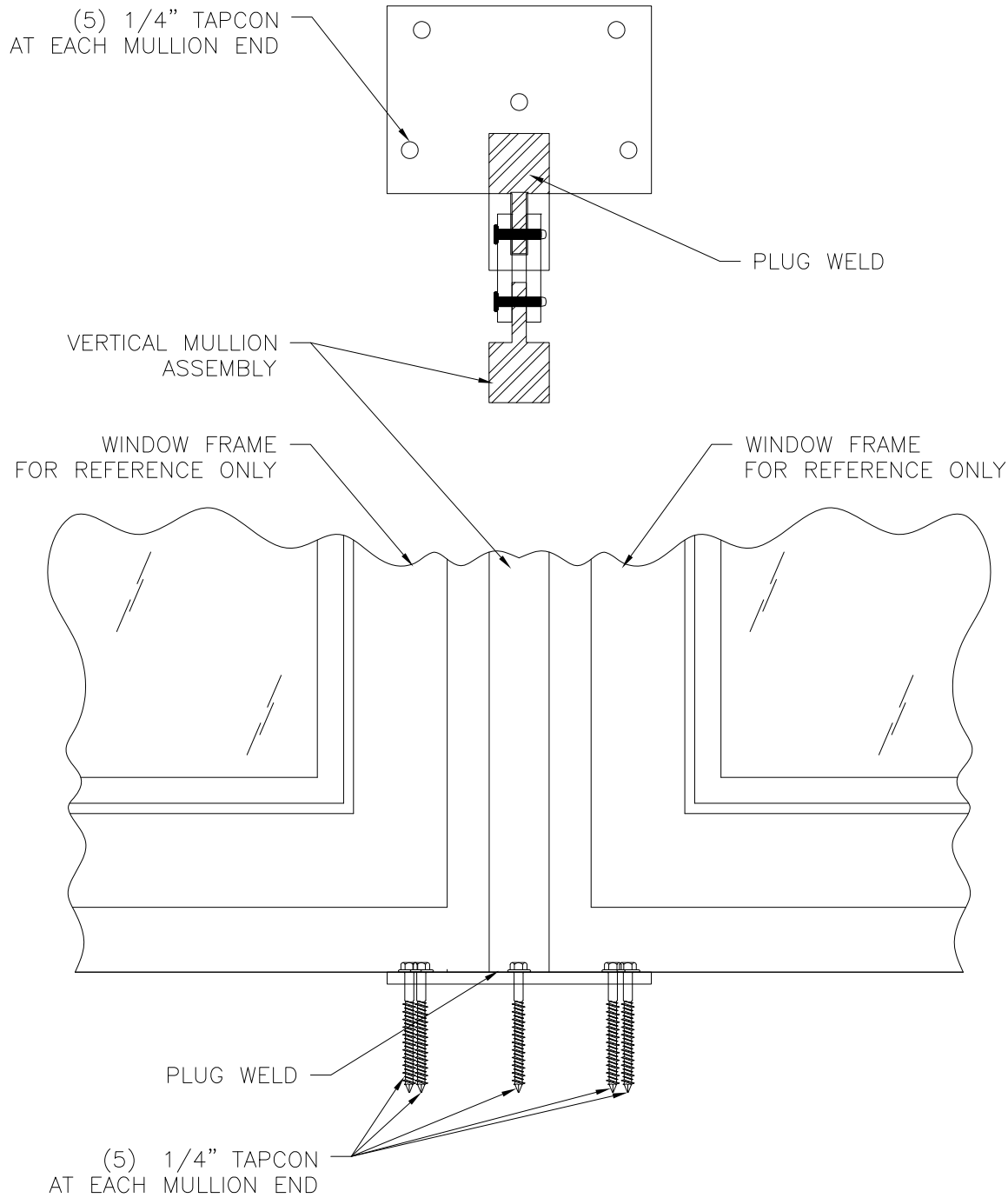
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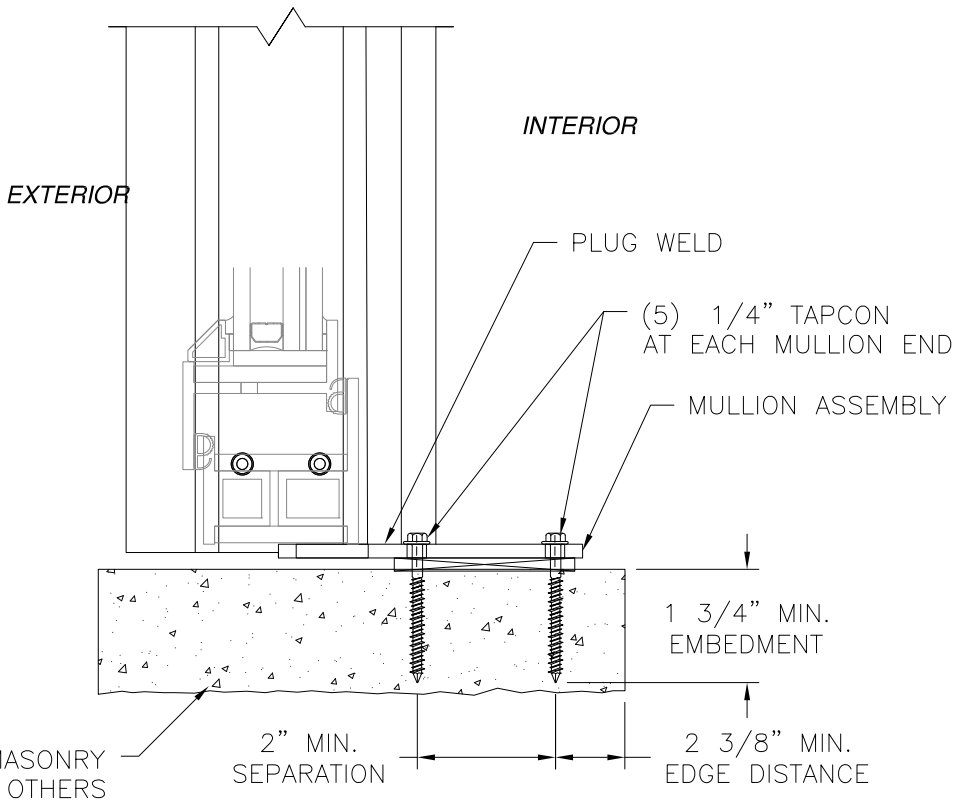
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VERTICAL INSTALLATION DETAIL
 CONCRETE/MASONRY
 SILL SHOWN, HEAD SIMILAR



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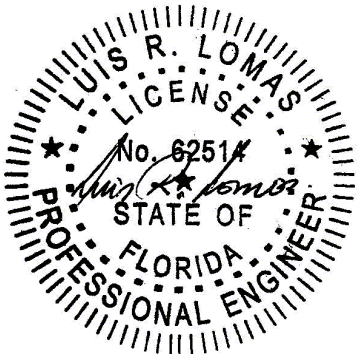
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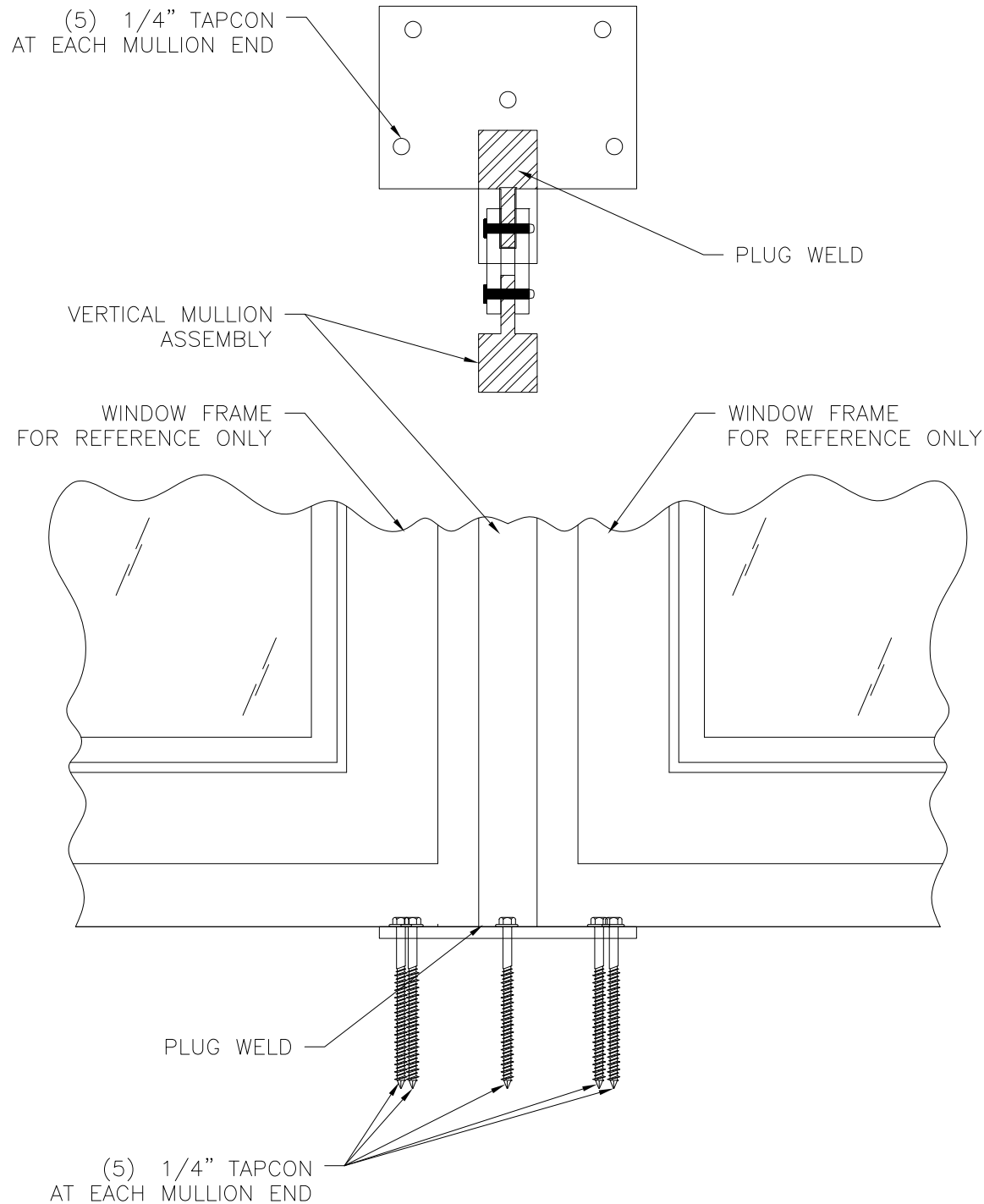
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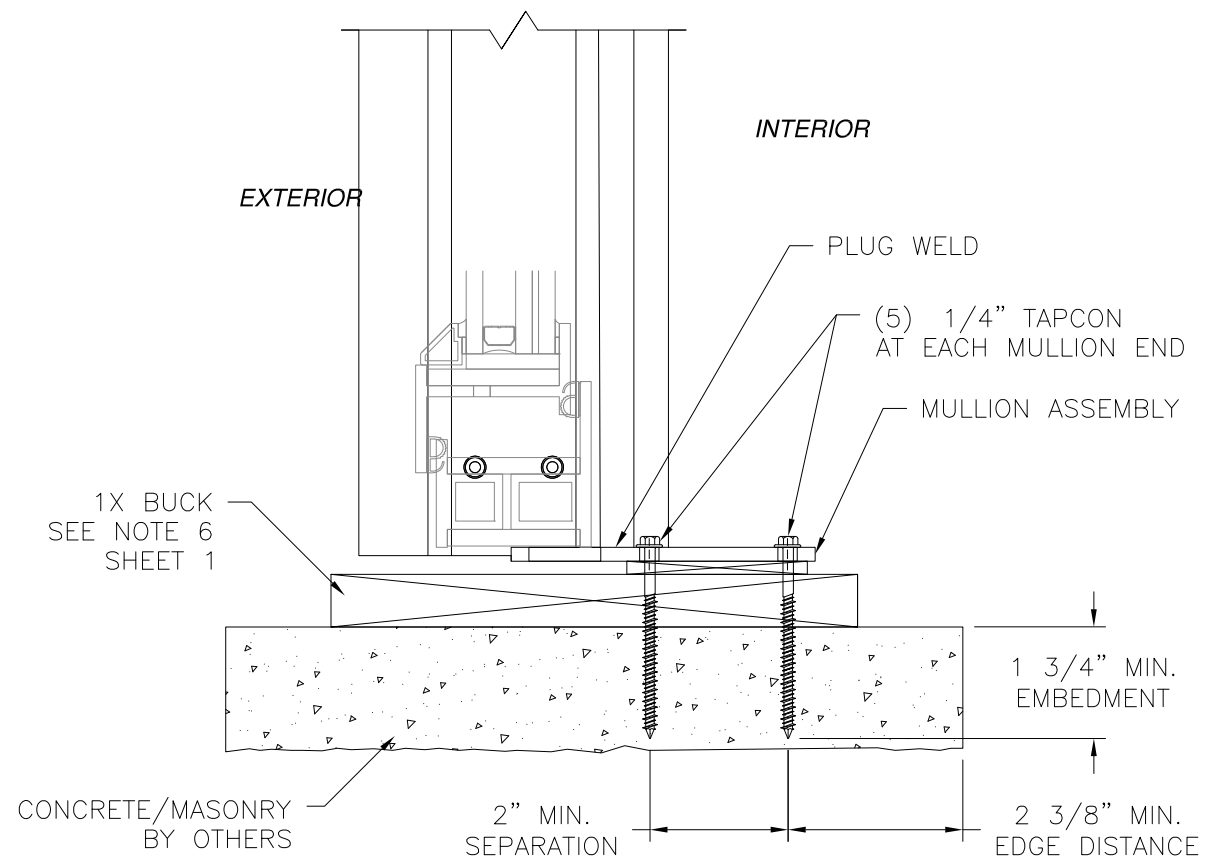
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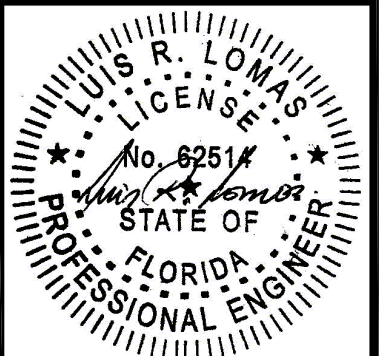
VERTICAL INSTALLATION DETAIL
CONCRETE/MASONRY W/1X BUCK
SILL SHOWN, HEAD SIMILAR



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