

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING, METAL STRUCTURE AND MASONRY OPENING 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. SINGLE WINDOWS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. WINDOWS MUST BE MANUFACTURED BY VIWINCO INC.
7. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW 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 #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8” MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 3.
2. FOR ANCHORING INTO CONCRETE USE 1/4” ELCO CRETE-FLEX TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4” MINIMUM EMBEDMENT WITH 2 1/2” MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
3. FOR ANCHORING INTO METAL STRUCTURE USE #12 SMS OR SELF DRILLING SCREWS 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 #8 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:
A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
D. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR
ALUMINUM 6063-T5 FU=30KSI 1/8” THICK MINIMUM
7. TO ATTACH CLIP TO MULLION USE (2) #8 x 3/4” SELF DRILLING SCREWS PER CLIP.
8. ATTACH MULLION TO WINDOW FRAME USING #8 X 3/4” SELF DRILLING SCREWS LOCATED 1” FROM EACH END AND 8” MAX. O.C. THEREAFTER.

SIGNED: 12/26/2023

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2 – 3	APPROVED CONFIGURATIONS AND CHARTS
4 – 6	INSTALLATION DETAILS
7	COMPONENTS

VIWINCO, INC.
MORGANTOWN BUSINESS PARK P.O. BOX 499
MORGANTOWN, PA 19543

SS-CAMBRIDGE ALUMINUM VERTICAL MULLION
IMPACT
NOTES

DRAWN:
R.L.

DWG NO.
08-02806

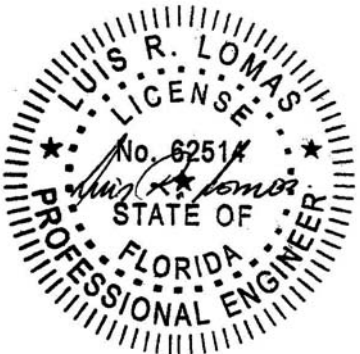
REV
B

SCALE
NTS

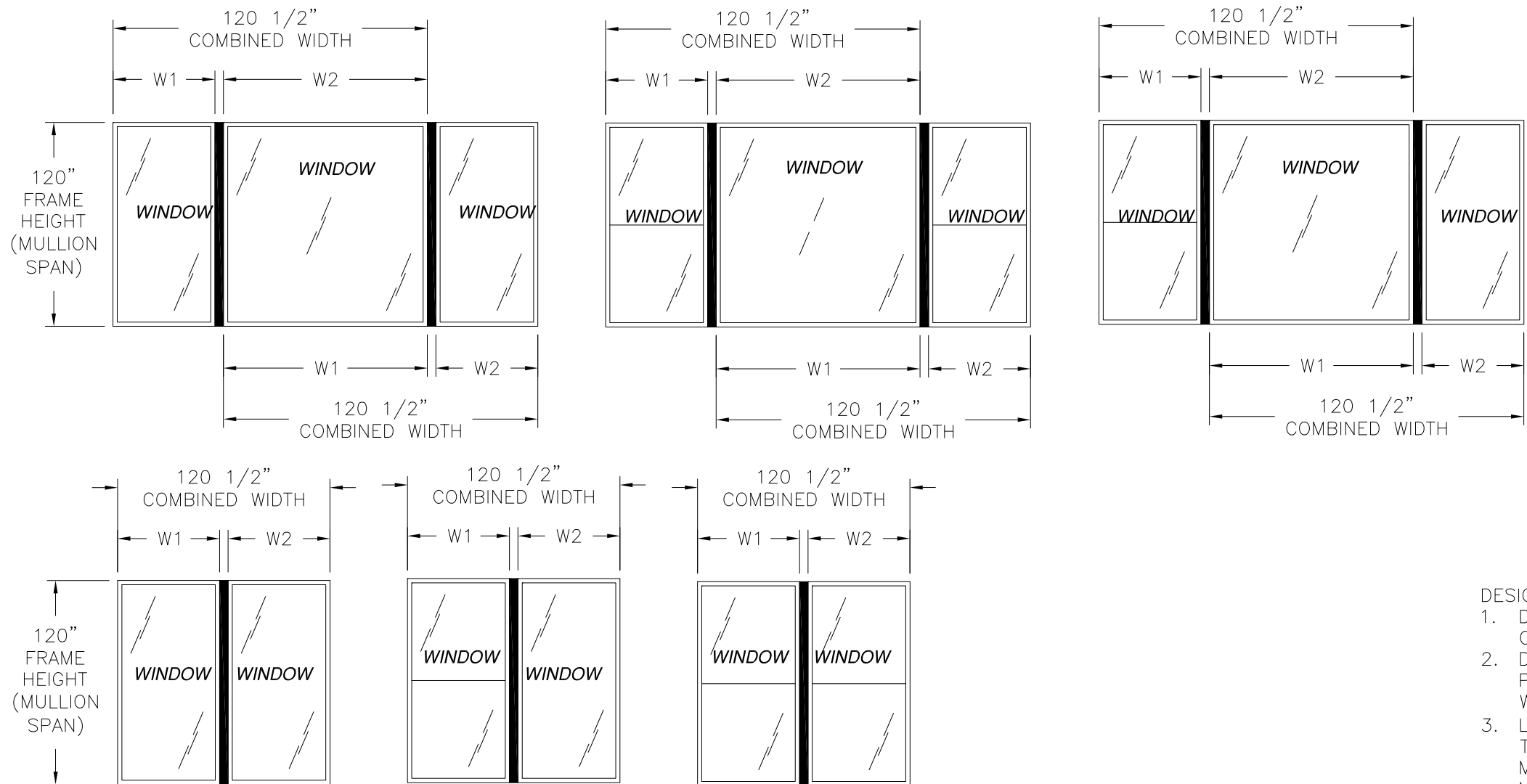
DATE
08/23/2015

SHEET
1 OF 7

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



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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.

- 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.

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

APPROVED CONFIGURATIONS

Design pressure rating (psf)							
Design Pressures are positive and negative							
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	140.0	132.7	128.7	127.4
66.00	150.0	149.9	132.7	121.3	113.7	108.9	106.2
72.00	150.0	134.1	117.9	107.0	99.5	94.4	91.0
78.00	144.8	121.3	106.2	95.8	88.5	83.3	79.6
84.00	132.7	110.8	96.5	86.7	79.6	74.5	70.8
90.00	122.5	101.9	88.5	79.1	72.4	67.4	63.7
96.00	113.7	94.4	81.7	72.8	66.3	61.5	57.9
102.00	106.2	87.8	75.8	67.4	61.2	56.6	53.1
108.00	99.5	82.2	70.8	62.7	56.9	52.4	49.0
114.00	93.7	77.2	66.3	58.7	53.1	48.8	45.5
120.00	88.5	72.1	60.8	52.8	46.9	42.4	38.9

IMPACT RATED UP TO WIND ZONE 3

VIWINCO, INC.
MORGANTOWN BUSINESS PARK P.O. BOX 499
MORGANTOWN, PA 19543

SS-CAMBRIDGE ALUMINUM VERTICAL MULLION
IMPACT
APPROVED CONFIGURATIONS

DRAWN:
R.L.

DWG NO.
08-02806

REV
B

SCALE
NTS

DATE
08/23/2015

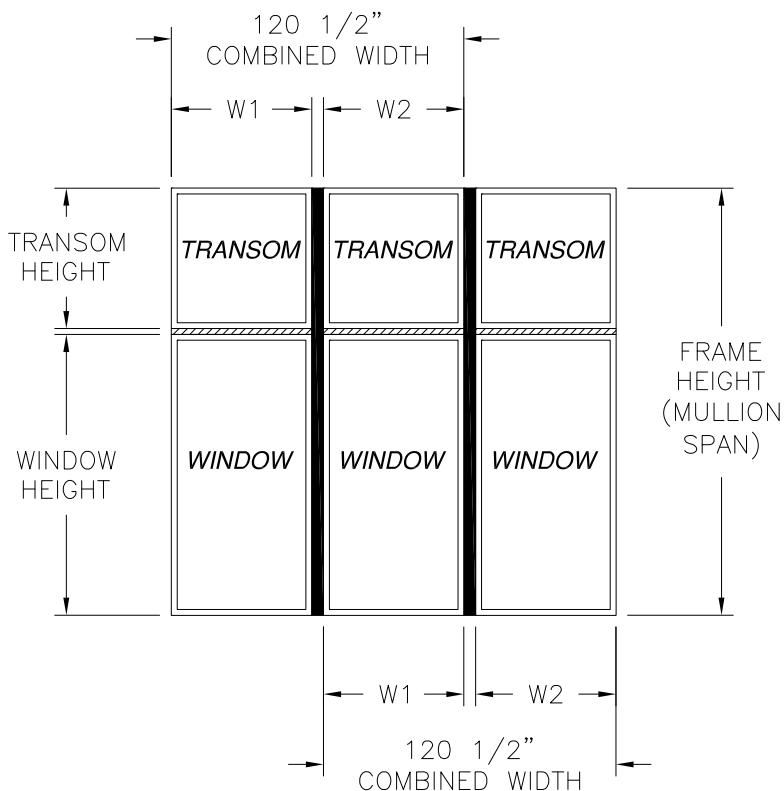
SHEET
2 OF 7

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

SIGNED: 12/26/2023



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



VX CONFIGURATION

Maximum design pressure chart (psf) Design pressures are positive and negative								
Window Height (in)	Transom Height (in)	Tributary width (in)						
		24.00	30.00	36.00	42.00	48.00	54.00	60.00
36.00	18.00	120.0	120.0	120.0	120.0	120.0	120.0	113.2
42.00	18.00	120.0	120.0	120.0	120.0	116.9	107.0	98.7
48.00	18.00	120.0	120.0	120.0	112.7	102.3	94.0	87.0
54.00	18.00	120.0	120.0	113.2	100.3	90.7	83.3	77.2
60.00	18.00	120.0	119.0	102.3	90.3	81.4	74.5	69.0
66.00	18.00	120.0	108.9	93.3	82.2	73.8	67.4	62.3
72.00	18.00	120.0	100.3	85.8	75.4	67.6	61.5	56.7
78.00	18.00	113.2	93.0	79.4	69.6	62.3	56.6	52.1
80.00	18.00	110.6	90.8	77.4	67.9	60.7	55.1	50.7

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure chart (psf) Design pressures are positive and negative								
Window Height (in)	Transom Height (in)	Tributary width (in)						
		24.00	30.00	36.00	42.00	48.00	54.00	60.00
36.00	24.00	120.0	120.0	120.0	120.0	120.0	109.8	101.1
42.00	24.00	120.0	120.0	120.0	116.3	105.7	96.9	89.4
48.00	24.00	120.0	120.0	115.8	103.1	93.7	86.1	79.6
54.00	24.00	120.0	120.0	104.4	92.6	83.8	77.0	71.4
60.00	24.00	120.0	110.3	95.1	84.1	75.8	69.4	64.3
66.00	24.00	120.0	101.5	87.2	77.0	69.2	63.2	58.4
72.00	24.00	113.7	94.0	80.6	71.0	63.7	58.0	53.5
78.00	24.00	106.2	87.5	74.9	65.8	59.0	53.6	49.4
80.00	24.00	103.8	85.6	73.2	64.3	57.6	52.3	48.1

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure chart (psf) Design pressures are positive and negative								
Window Height (in)	Transom Height (in)	Tributary width (in)						
		24.00	30.00	36.00	42.00	48.00	54.00	60.00
36.00	30.00	120.0	120.0	120.0	118.5	107.5	98.4	90.7
42.00	30.00	120.0	120.0	117.4	105.3	95.8	87.8	81.1
48.00	30.00	120.0	120.0	105.7	94.4	85.8	78.9	73.0
54.00	30.00	120.0	110.8	96.1	85.5	77.4	71.2	66.0
60.00	30.00	120.0	101.9	88.2	78.1	70.6	64.7	59.9
66.00	30.00	113.7	94.4	81.4	72.0	64.8	59.2	54.8
72.00	30.00	106.2	87.8	75.6	66.7	59.9	54.7	50.4
78.00	30.00	99.5	82.2	70.6	61.9	55.4	50.4	46.4
80.00	30.00	97.1	79.5	67.7	59.4	53.1	48.3	44.5

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure chart (psf) Design pressures are positive and negative								
Window Height (in)	Transom Height (in)	Tributary width (in)						
		24.00	30.00	36.00	42.00	48.00	54.00	60.00
36.00	36.00	120.0	120.0	117.9	106.2	96.5	88.5	81.7
42.00	36.00	120.0	120.0	106.2	95.4	87.0	79.9	73.8
48.00	36.00	120.0	110.8	96.5	86.4	78.6	72.4	67.0
54.00	36.00	120.0	101.9	88.5	78.9	71.6	65.8	61.1
60.00	36.00	113.7	94.4	81.7	72.6	65.7	60.2	55.9
66.00	36.00	106.2	87.8	75.8	67.2	60.7	55.5	51.4
72.00	36.00	99.5	82.2	70.8	62.6	56.4	51.3	47.2
78.00	36.00	91.9	75.0	63.9	55.9	50.0	45.3	41.7
80.00	36.00	88.4	72.2	61.4	53.8	48.0	43.6	40.0

IMPACT RATED UP TO WIND ZONE 3

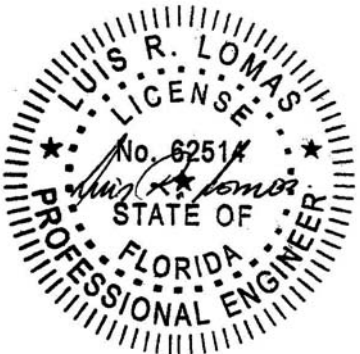
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.

- 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.

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

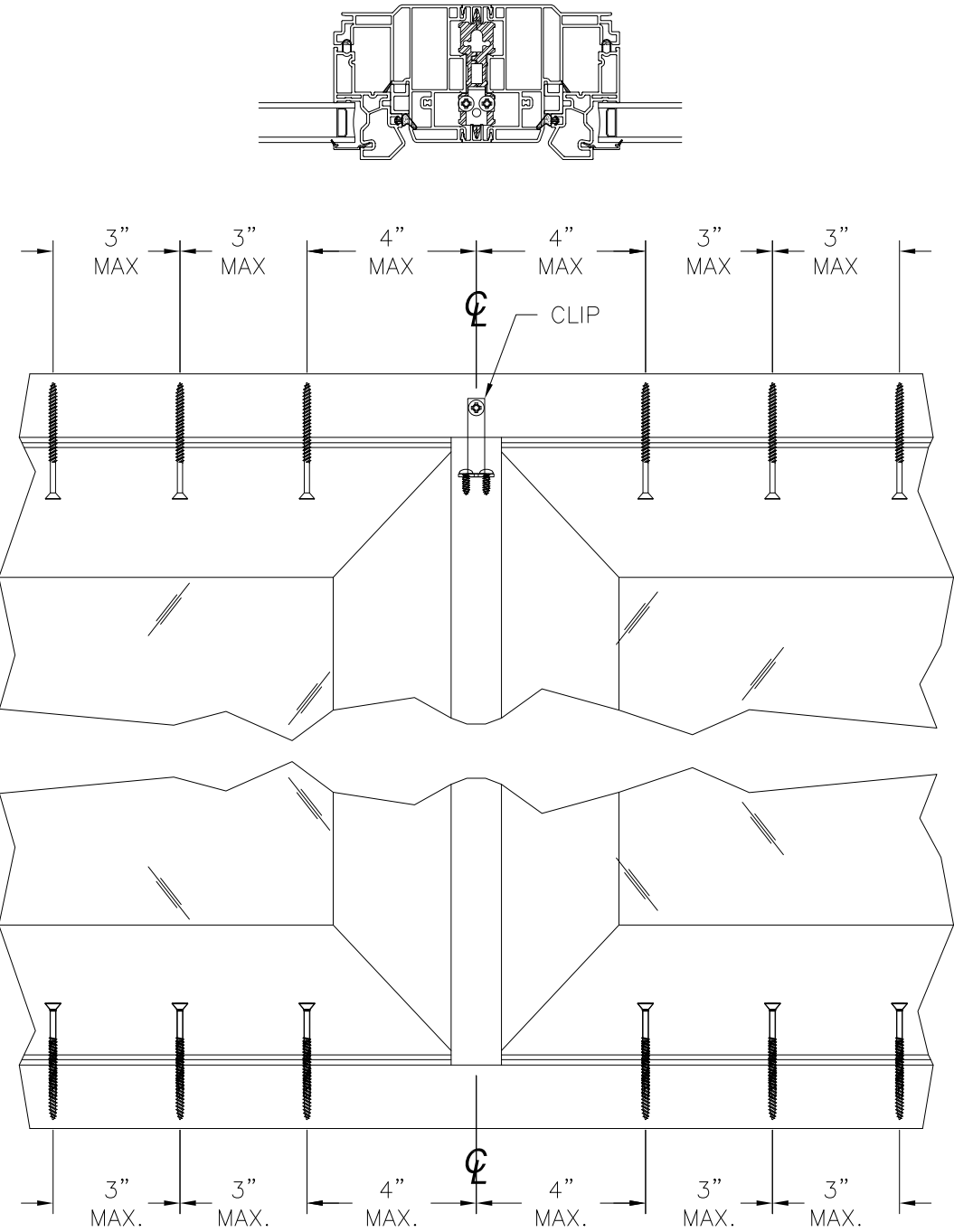
SIGNED: 12/26/2023

VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
SS-CAMBRIDGE ALUMINUM VERTICAL MULLION IMPACT APPROVED CONFIGURATIONS		
DRAWN: R.L.	DWG NO. 08-02806	REV B
SCALE NTS	DATE 08/23/2015	SHEET 3 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		

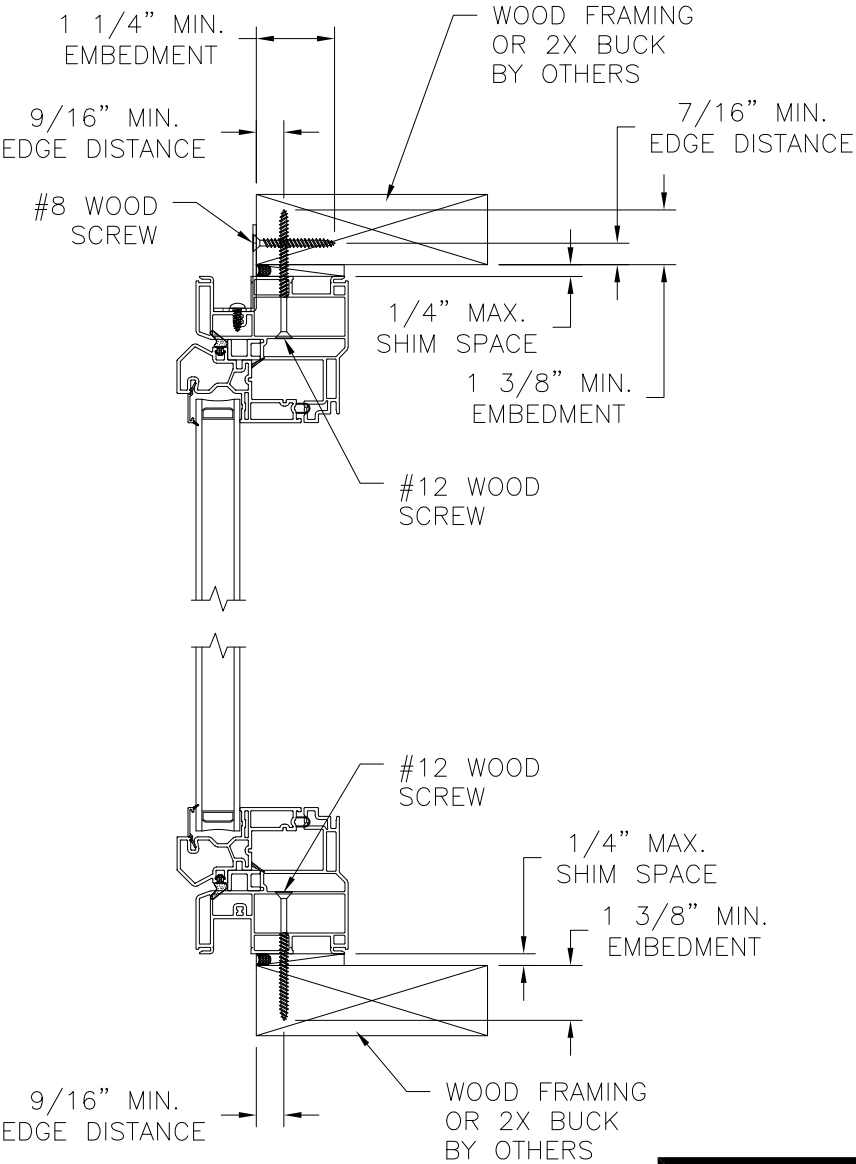


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.



MULLION INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK SUBSTRATE



VIWINCO, INC.
MORGANTOWN BUSINESS PARK P.O. BOX 499
MORGANTOWN, PA 19543

SS-CAMBRIDGE ALUMINUM VERTICAL MULLION
IMPACT
INSTALLATION DETAILS

DRAWN: R.L.	DWG NO. 08-02806	REV B
SCALE NTS	DATE 08/23/2015	SHEET 4 OF 7

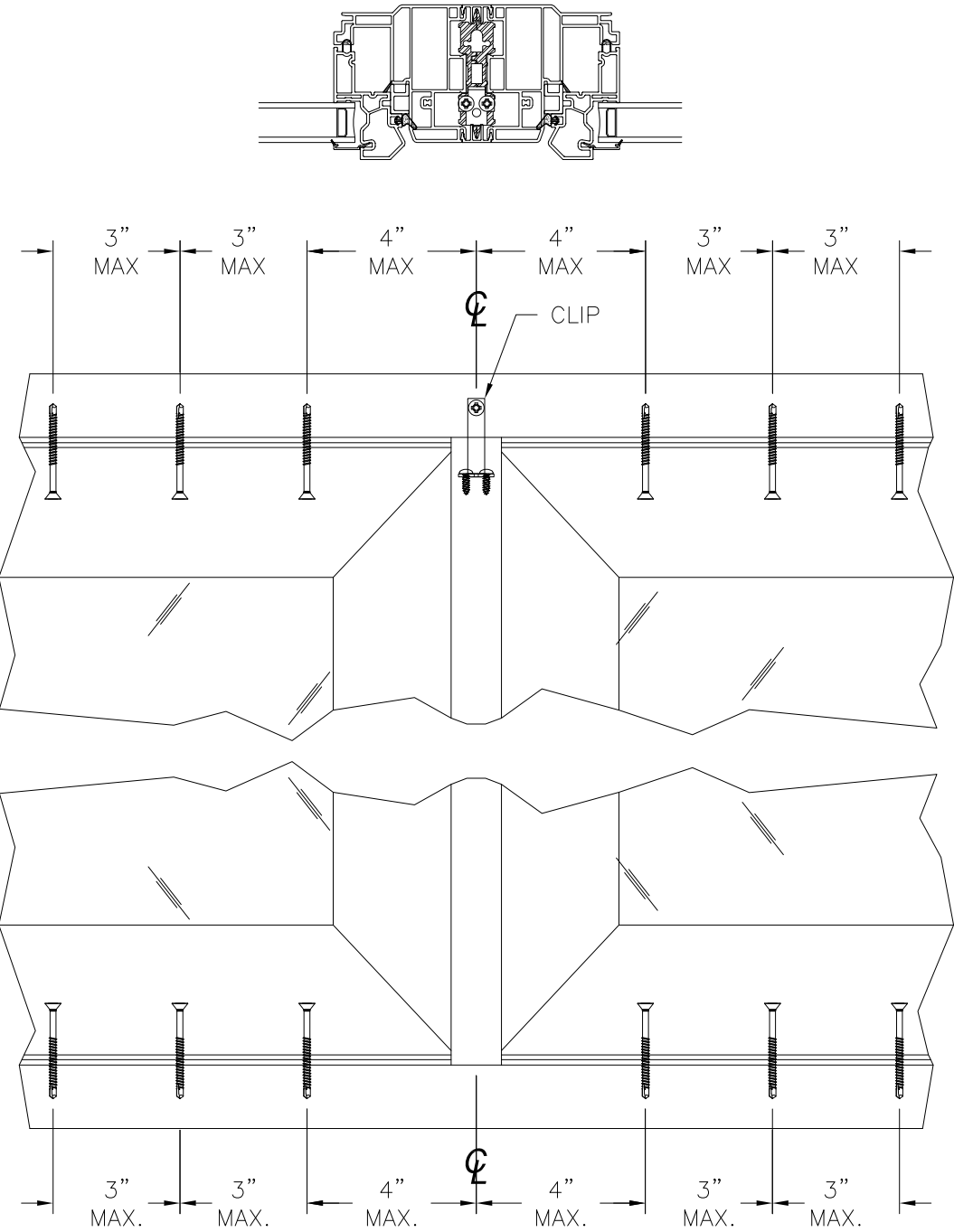
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/26/2023

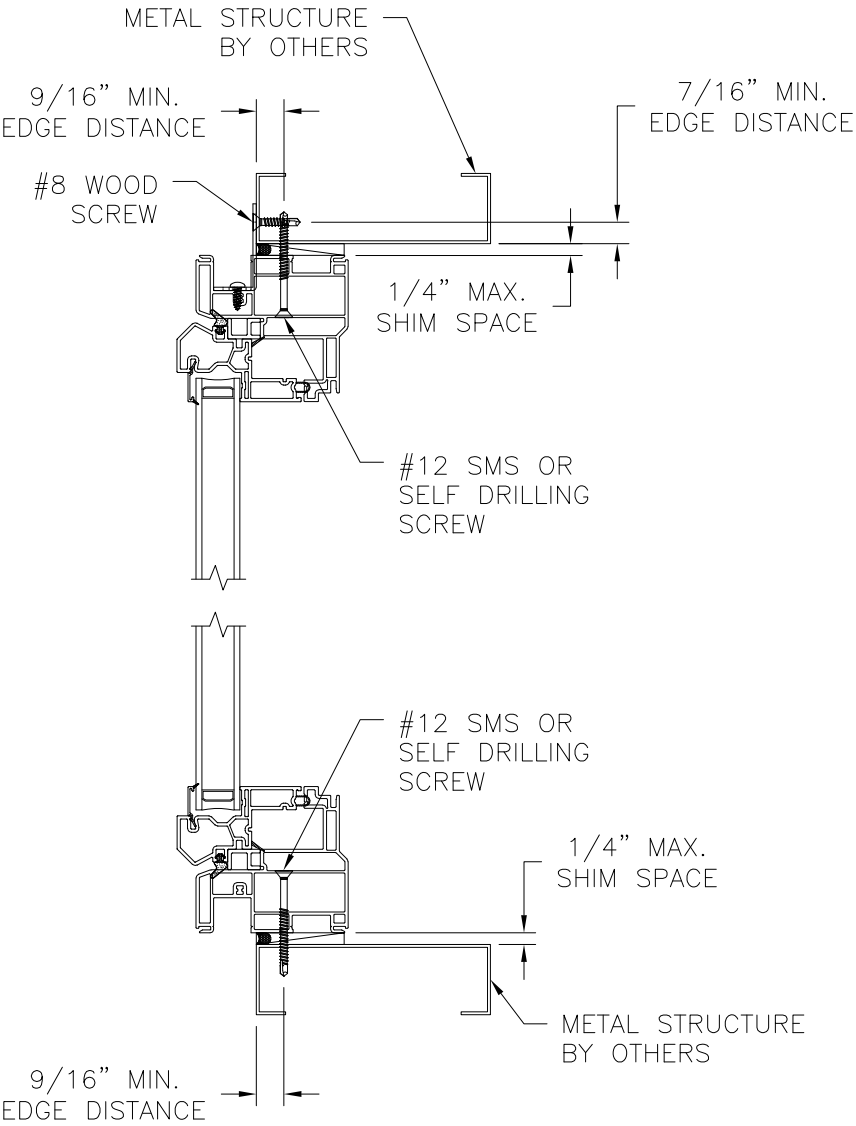


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.

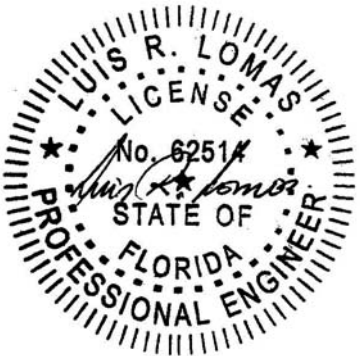


MULLION INSTALLATION DETAIL
METAL STRUCTURE



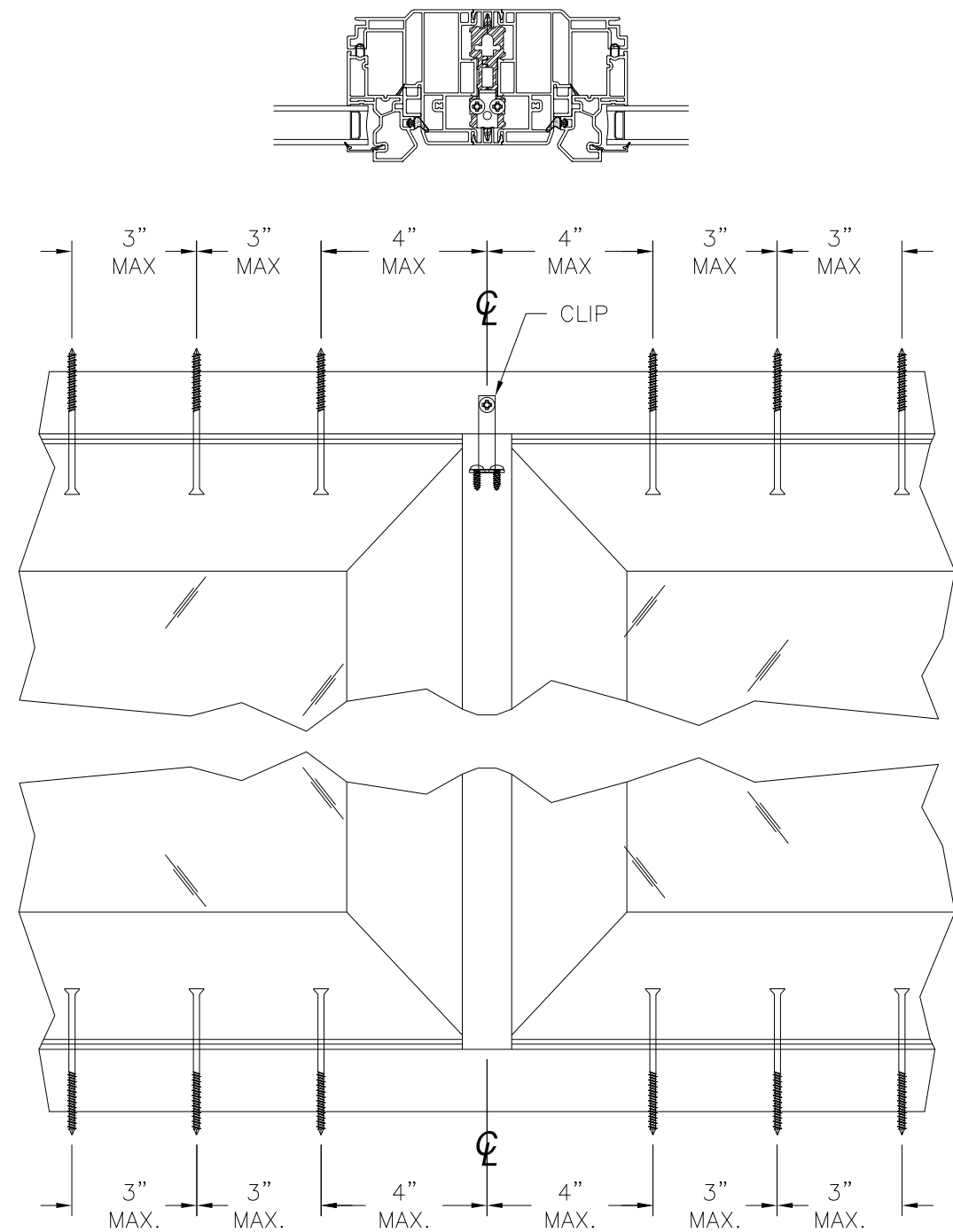
SIGNED: 12/26/2023

VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
SS-CAMBRIDGE ALUMINUM VERTICAL MULLION IMPACT INSTALLATION DETAILS		
DRAWN: R.L.	DWG NO. 08-02806	REV B
SCALE NTS	DATE 08/23/2015	SHEET 5 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

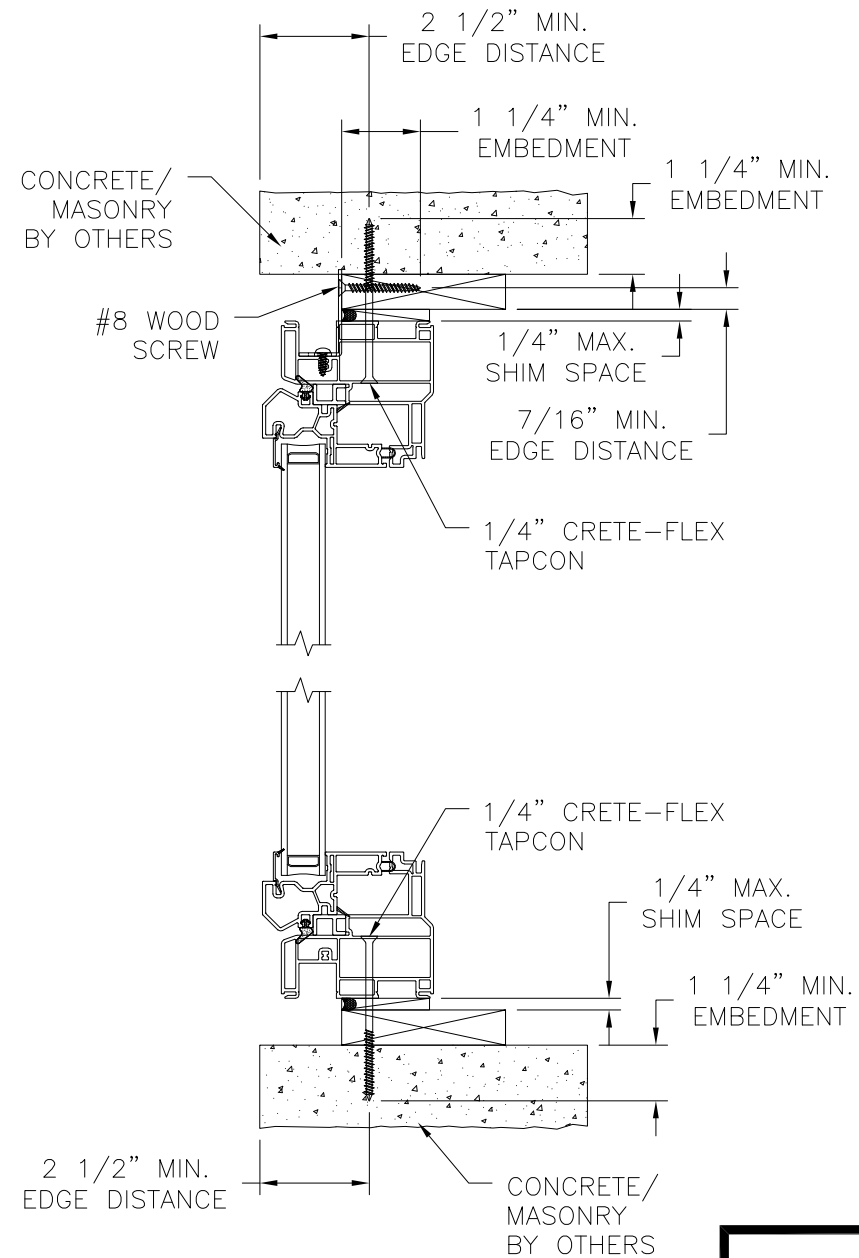


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.



MULLION INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION



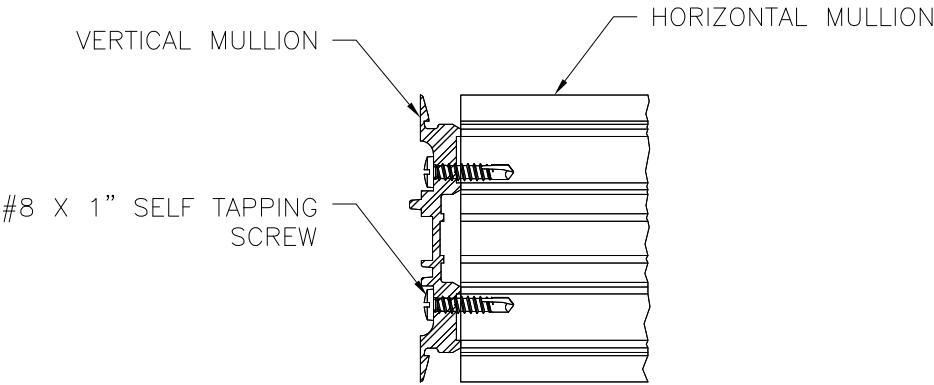
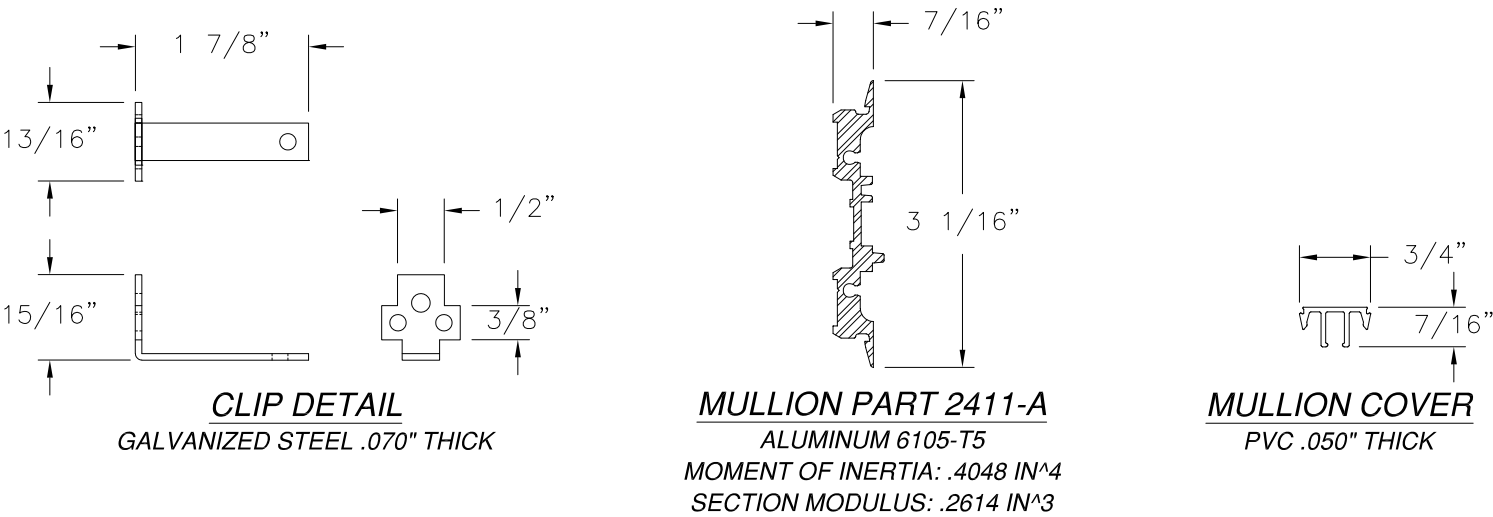
SIGNED: 12/26/2023

VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
SS-CAMBRIDGE ALUMINUM VERTICAL MULLION IMPACT INSTALLATION DETAILS		
DRAWN: R.L.	DWG NO. 08-02806	REV B
SCALE NTS	DATE 08/23/2015	SHEET 6 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

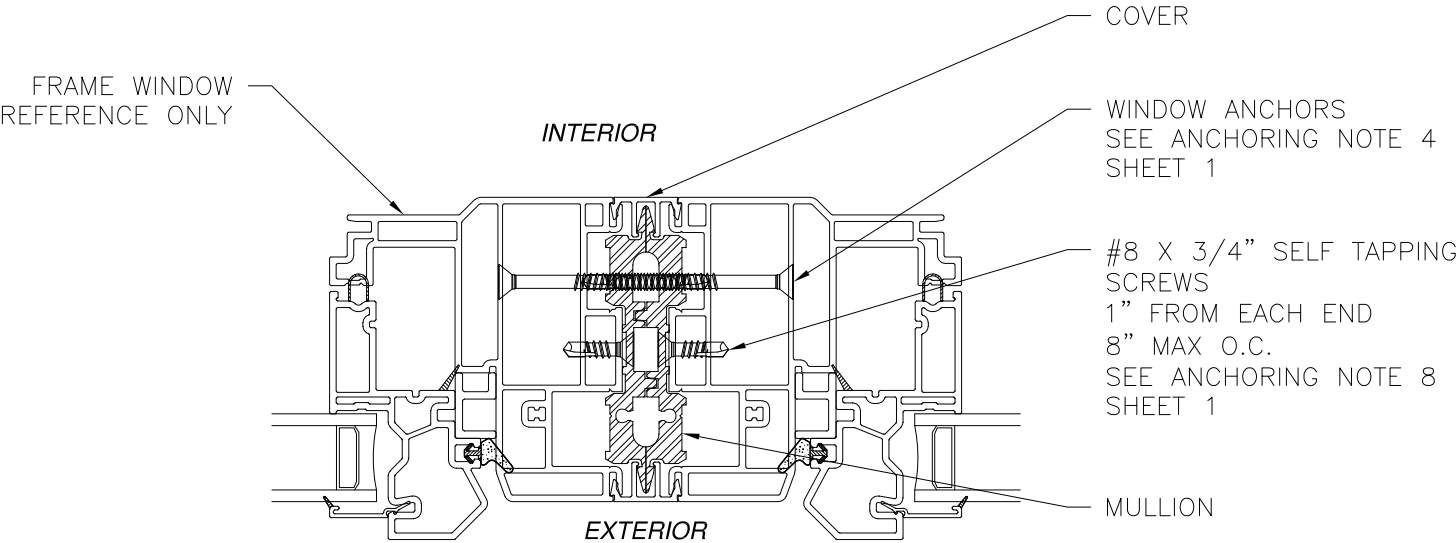


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	12/21/2023	R.L.



**VERTICAL TO HORIZONTAL MULLION
CONNECTION DETAIL**



**WINDOW TO MULLION ATTACHMENT
DETAIL**

SIGNED: 12/26/2023

VIWINCO, INC.
MORGANTOWN BUSINESS PARK P.O. BOX 499
MORGANTOWN, PA 19543

SS-CAMBRIDGE ALUMINUM VERTICAL MULLION
IMPACT
COMPONENTS

DRAWN:
R.L.

DWG NO.
08-02806

REV
B

SCALE
NTS

DATE
08/23/2015

SHEET
7 OF 7

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



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