

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	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.

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

S-SERIES/CAMBRIDGE ALUMINUM
H/T MULLION
NOTES

DRAWN:
R.L.

DWG NO.
08-02803

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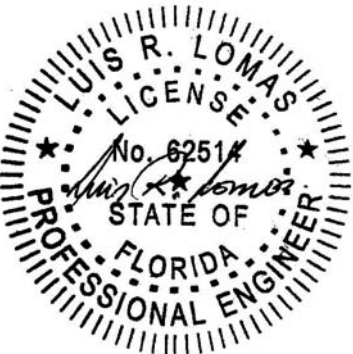
SCALE NTS

DATE 08/23/15

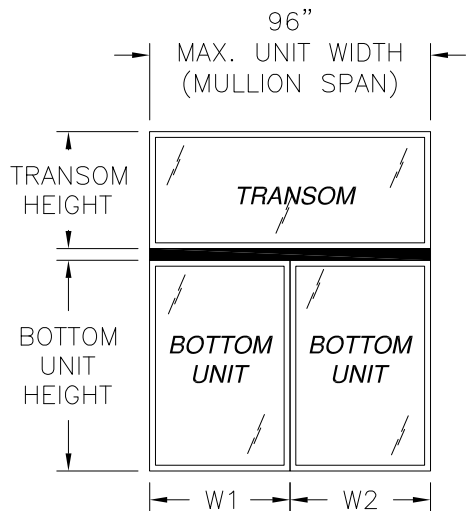
SHEET 1 OF 7

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



TWIN WITH TRANSOM CONFIGURATION

Design pressure rating (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		24.00	36.00	48.00	60.00	72.00	84.00	96.00
Window	Transom	12.00	18.00	24.00	30.00	36.00	42.00	48.00
24.00	18.00	150.0	150.0	150.0	150.0	150.0	149.0	124.2
30.00	18.00	150.0	150.0	150.0	150.0	150.0	134.1	109.7
36.00	18.00	150.0	150.0	150.0	150.0	149.0	123.1	98.7
42.00	18.00	150.0	150.0	150.0	150.0	139.2	114.8	90.0
48.00	18.00	150.0	150.0	150.0	150.0	130.6	108.0	83.0
54.00	18.00	150.0	150.0	150.0	150.0	123.1	101.9	77.2
60.00	18.00	150.0	150.0	150.0	144.8	116.3	96.1	72.1
66.00	18.00	150.0	150.0	150.0	137.0	110.3	89.2	67.6
72.00	18.00	150.0	150.0	150.0	130.0	104.8	83.3	63.7
78.00	18.00	150.0	150.0	150.0	123.7	99.9	78.0	59.7
80.00	18.00	150.0	150.0	150.0	121.7	98.4	76.4	58.5

IMPACT RATED UP TO WIND ZONE 3

Design pressure rating (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		24.00	36.00	48.00	60.00	72.00	84.00	96.00
Window	Transom	12.00	18.00	24.00	30.00	36.00	42.00	48.00
24.00	24.00	150.0	150.0	150.0	150.0	150.0	132.7	109.6
30.00	24.00	150.0	150.0	150.0	150.0	145.6	120.7	98.1
36.00	24.00	150.0	150.0	150.0	150.0	135.5	111.7	89.2
42.00	24.00	150.0	150.0	150.0	150.0	127.4	104.8	82.1
48.00	24.00	150.0	150.0	150.0	150.0	120.2	99.1	76.2
54.00	24.00	150.0	150.0	150.0	142.3	113.7	94.0	71.3
60.00	24.00	150.0	150.0	150.0	134.8	108.0	89.4	66.9
66.00	24.00	150.0	150.0	150.0	128.0	102.7	83.6	63.1
72.00	24.00	150.0	150.0	150.0	121.9	98.0	78.3	59.6
78.00	24.00	150.0	150.0	150.0	116.3	93.7	73.7	56.3
80.00	24.00	150.0	150.0	149.3	114.6	92.3	72.3	55.3

IMPACT RATED UP TO WIND ZONE 3

Design pressure rating (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		24.00	36.00	48.00	60.00	72.00	84.00	96.00
Window	Transom	12.00	18.00	24.00	30.00	36.00	42.00	48.00
24.00	30.00	150.0	150.0	150.0	150.0	145.6	120.7	98.4
30.00	30.00	150.0	150.0	150.0	150.0	134.1	110.8	89.1
36.00	30.00	150.0	150.0	150.0	150.0	125.5	103.1	81.7
42.00	30.00	150.0	150.0	150.0	149.9	118.5	97.2	75.6
48.00	30.00	150.0	150.0	150.0	141.5	112.2	92.3	70.7
54.00	30.00	150.0	150.0	150.0	134.1	106.6	87.8	66.4
60.00	30.00	150.0	150.0	150.0	127.4	101.5	83.8	62.6
66.00	30.00	150.0	150.0	150.0	121.3	96.9	78.9	59.2
72.00	30.00	150.0	150.0	150.0	115.8	92.6	74.2	56.2
78.00	30.00	150.0	150.0	145.6	110.8	88.8	70.0	53.4
80.00	30.00	150.0	150.0	143.4	109.2	87.5	68.7	52.5

IMPACT RATED UP TO WIND ZONE 3

Design pressure rating (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		24.00	36.00	48.00	60.00	72.00	84.00	96.00
Window	Transom	12.00	18.00	24.00	30.00	36.00	42.00	48.00
24.00	36.00	150.0	150.0	150.0	150.0	135.5	111.7	89.7
30.00	36.00	150.0	150.0	150.0	150.0	125.5	103.1	81.9
36.00	36.00	150.0	150.0	150.0	150.0	117.9	96.5	75.6
42.00	36.00	150.0	150.0	150.0	142.3	111.7	91.3	70.4
48.00	36.00	150.0	150.0	150.0	134.8	106.2	87.0	66.1
54.00	36.00	150.0	150.0	150.0	128.0	101.1	83.0	62.3
60.00	36.00	150.0	150.0	150.0	121.9	96.5	79.4	59.0
66.00	36.00	150.0	150.0	150.0	116.3	92.3	74.8	55.9
72.00	36.00	150.0	150.0	148.1	111.3	88.5	70.6	53.2
78.00	36.00	150.0	150.0	141.5	106.6	84.9	66.8	50.8
80.00	36.00	150.0	150.0	139.5	105.1	83.8	65.6	50.0

IMPACT RATED UP TO WIND ZONE 3

- 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 = $\frac{W1 + W2}{2}$

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

S-SERIES/CAMBRIDGE ALUMINUM
H/T MULLION
APPROVED CONFIGURATIONS AND DP CHARTS

DRAWN:
R.L.

DWG NO.
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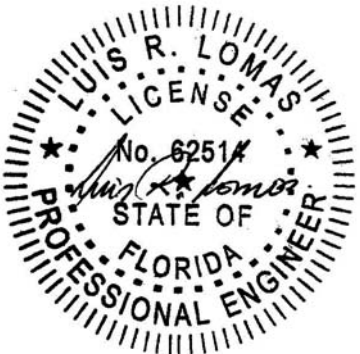
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SHEET
2 OF 7

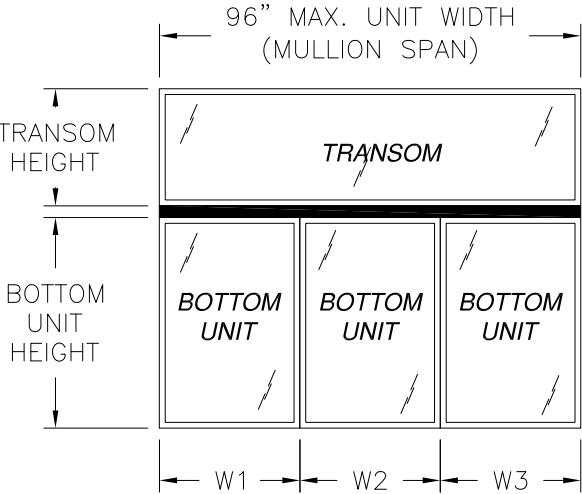
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TRIPLE WITH TRANSOM CONFIGURATION

Design pressure ratings (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
Bottom unit	Transom	45.00	54.00	63.00	72.00	81.00	90.00	96.00
		15.00	18.00	21.00	24.00	27.00	30.00	32.00
24.00	18.00	150.0	150.0	150.0	150.0	150.0	137.7	128.0
30.00	18.00	150.0	150.0	150.0	150.0	139.8	123.7	113.6
36.00	18.00	150.0	150.0	150.0	145.6	127.2	112.7	102.2
42.00	18.00	150.0	150.0	150.0	133.4	116.7	103.6	92.9
48.00	18.00	150.0	150.0	142.9	123.1	107.8	95.8	85.2
54.00	18.00	150.0	150.0	132.5	114.2	100.2	89.1	78.6
60.00	18.00	150.0	146.4	123.5	106.6	93.6	83.3	73.0
66.00	18.00	150.0	137.0	115.7	99.9	87.8	77.8	68.2
72.00	18.00	150.0	128.7	108.8	94.0	82.6	72.9	63.9
78.00	18.00	147.9	121.3	102.6	88.8	78.1	68.6	60.1
80.00	18.00	145.1	119.0	100.7	87.1	76.7	67.3	58.9

IMPACT RATED UP TO WIND ZONE 3

Design pressure ratings (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
Bottom unit	Transom	45.00	54.00	63.00	72.00	81.00	90.00	96.00
		15.00	18.00	21.00	24.00	27.00	30.00	32.00
24.00	24.00	150.0	150.0	150.0	150.0	138.5	122.5	113.2
30.00	24.00	150.0	150.0	150.0	144.8	126.0	111.3	101.5
36.00	24.00	150.0	150.0	150.0	132.7	115.7	102.3	92.3
42.00	24.00	150.0	150.0	142.9	122.5	106.9	94.7	84.7
48.00	24.00	150.0	150.0	132.5	113.7	99.4	88.2	78.2
54.00	24.00	150.0	147.3	123.5	106.2	92.9	82.4	72.7
60.00	24.00	150.0	137.7	115.7	99.5	87.2	77.4	67.8
66.00	24.00	150.0	129.3	108.8	93.7	82.1	72.6	63.6
72.00	24.00	149.6	121.9	102.6	88.5	77.6	68.4	59.9
78.00	24.00	141.3	115.3	97.1	83.8	73.6	64.6	56.5
80.00	24.00	138.8	113.2	95.4	82.4	72.3	63.4	55.5

IMPACT RATED UP TO WIND ZONE 3

Design pressure ratings (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
Bottom unit	Transom	45.00	54.00	63.00	72.00	81.00	90.00	96.00
		15.00	18.00	21.00	24.00	27.00	30.00	32.00
24.00	30.00	150.0	150.0	150.0	145.6	126.1	111.3	101.6
30.00	30.00	150.0	150.0	150.0	133.4	115.7	101.9	92.1
36.00	30.00	150.0	150.0	144.5	123.1	106.9	94.4	84.4
42.00	30.00	150.0	150.0	133.9	114.2	99.4	87.8	78.0
48.00	30.00	150.0	149.9	124.7	106.6	92.9	82.2	72.5
54.00	30.00	150.0	140.0	116.7	99.9	87.2	77.2	67.7
60.00	30.00	150.0	131.3	109.7	94.0	82.1	72.5	63.5
66.00	30.00	150.0	123.7	103.5	88.8	77.6	68.3	59.8
72.00	30.00	144.5	116.9	97.9	84.1	73.6	64.5	56.5
78.00	30.00	136.8	110.8	92.9	79.9	69.9	61.1	53.5
80.00	30.00	134.4	108.9	91.3	78.6	68.8	60.0	52.6

IMPACT RATED UP TO WIND ZONE 3

Design pressure ratings (psf)
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
Bottom unit	Transom	45.00	54.00	63.00	72.00	81.00	90.00	96.00
		15.00	18.00	21.00	24.00	27.00	30.00	32.00
24.00	36.00	150.0	150.0	150.0	135.5	116.9	102.7	92.5
30.00	36.00	150.0	150.0	147.9	124.9	107.8	94.7	84.5
36.00	36.00	150.0	150.0	136.8	115.8	100.2	88.2	78.0
42.00	36.00	150.0	150.0	127.2	108.0	93.6	82.4	72.5
48.00	36.00	150.0	143.9	118.9	101.1	87.8	77.4	67.7
54.00	36.00	150.0	134.8	111.6	95.1	82.6	72.6	63.5
60.00	36.00	150.0	126.7	105.2	89.7	78.1	68.4	59.8
66.00	36.00	149.6	119.6	99.4	84.9	74.0	64.6	56.5
72.00	36.00	141.3	113.2	94.3	80.6	70.3	61.2	53.5
78.00	36.00	133.9	107.5	89.6	76.7	67.0	58.1	50.9
80.00	36.00	131.6	105.7	88.2	75.5	66.0	57.2	50.0

IMPACT RATED UP TO WIND ZONE 3

- 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 = $\frac{W1 + W2 + W3}{3}$

SIGNED: 12/26/2023

VIWINCO, INC.
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MORGANTOWN, PA 19543

S-SERIES/CAMBRIDGE ALUMINUM
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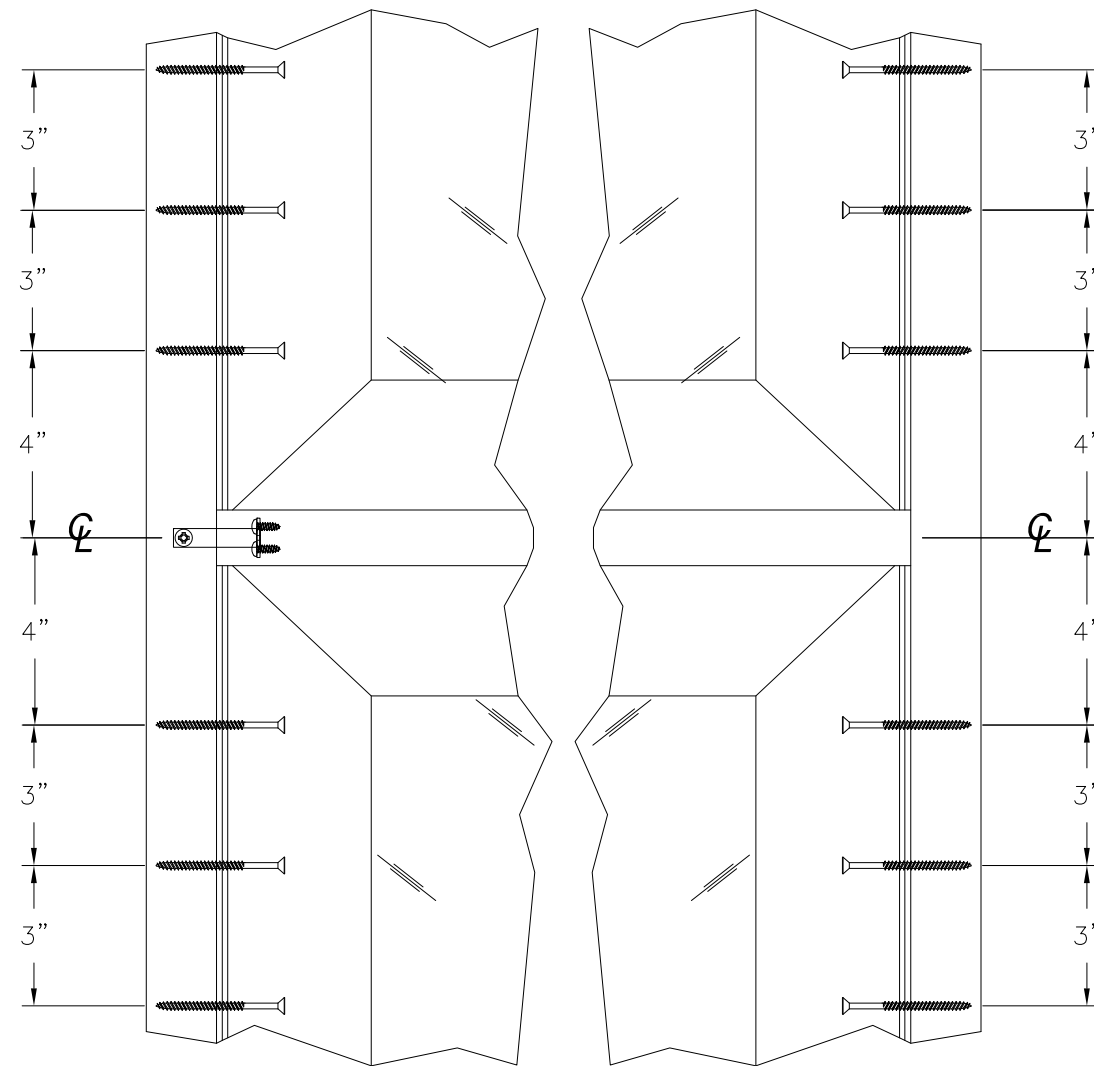
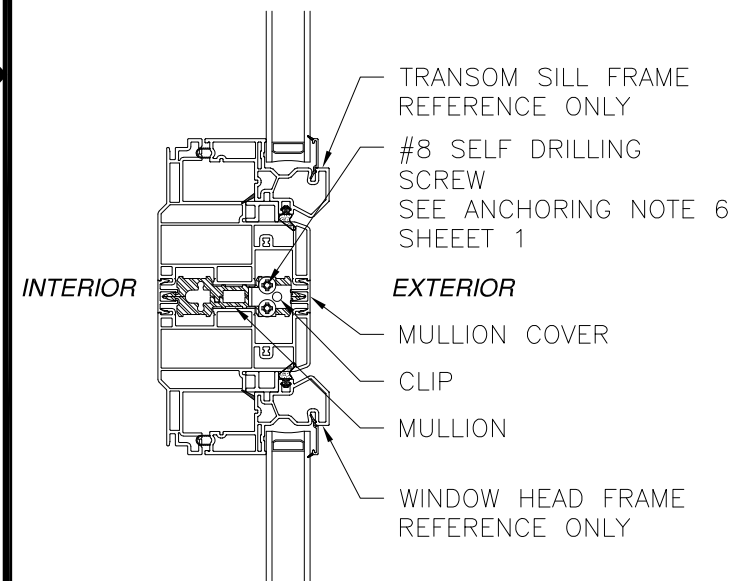
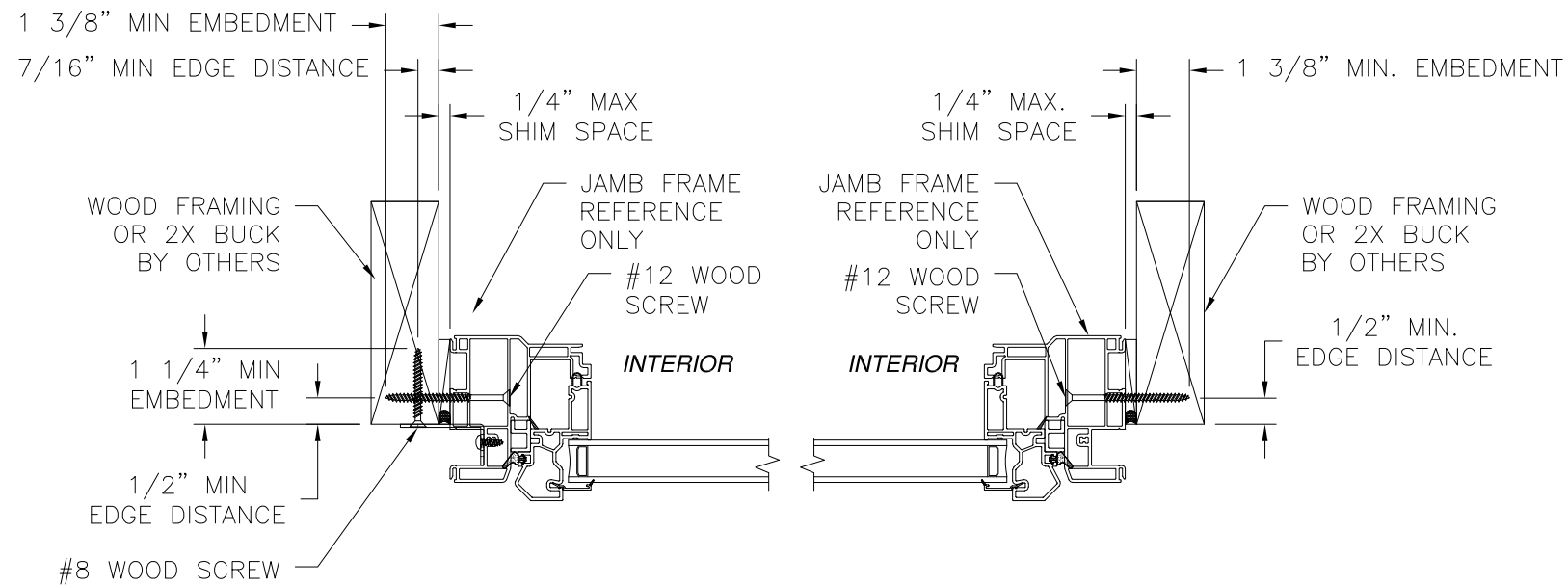
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SHEET
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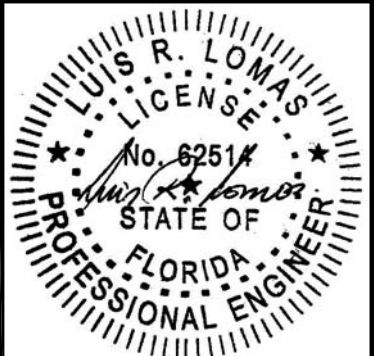
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MULLION INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK SUBSTRATE

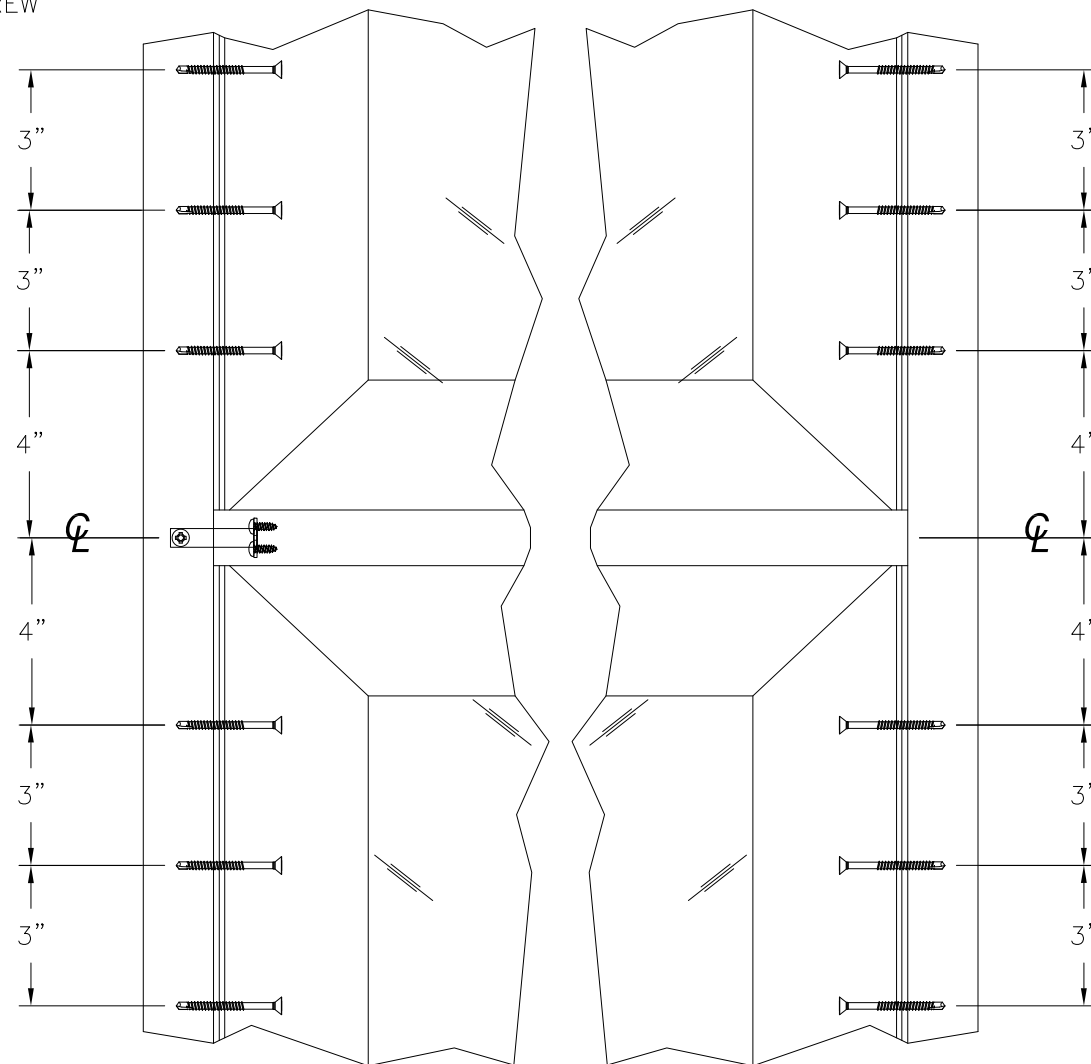
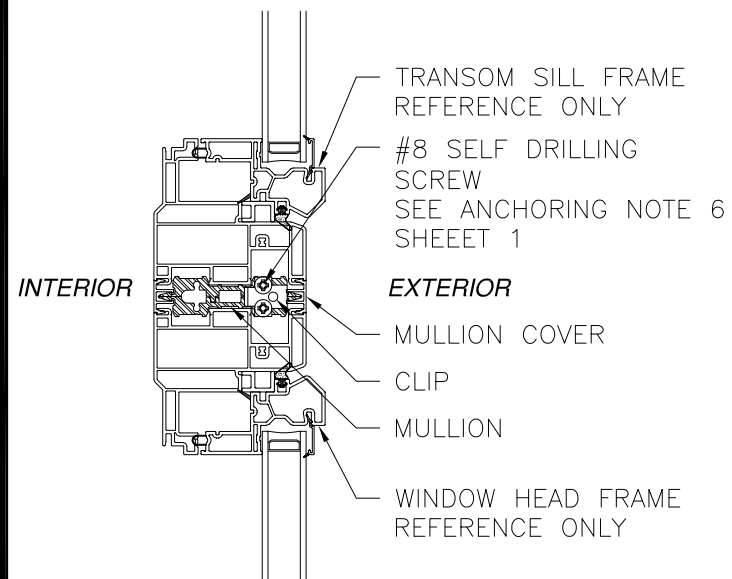
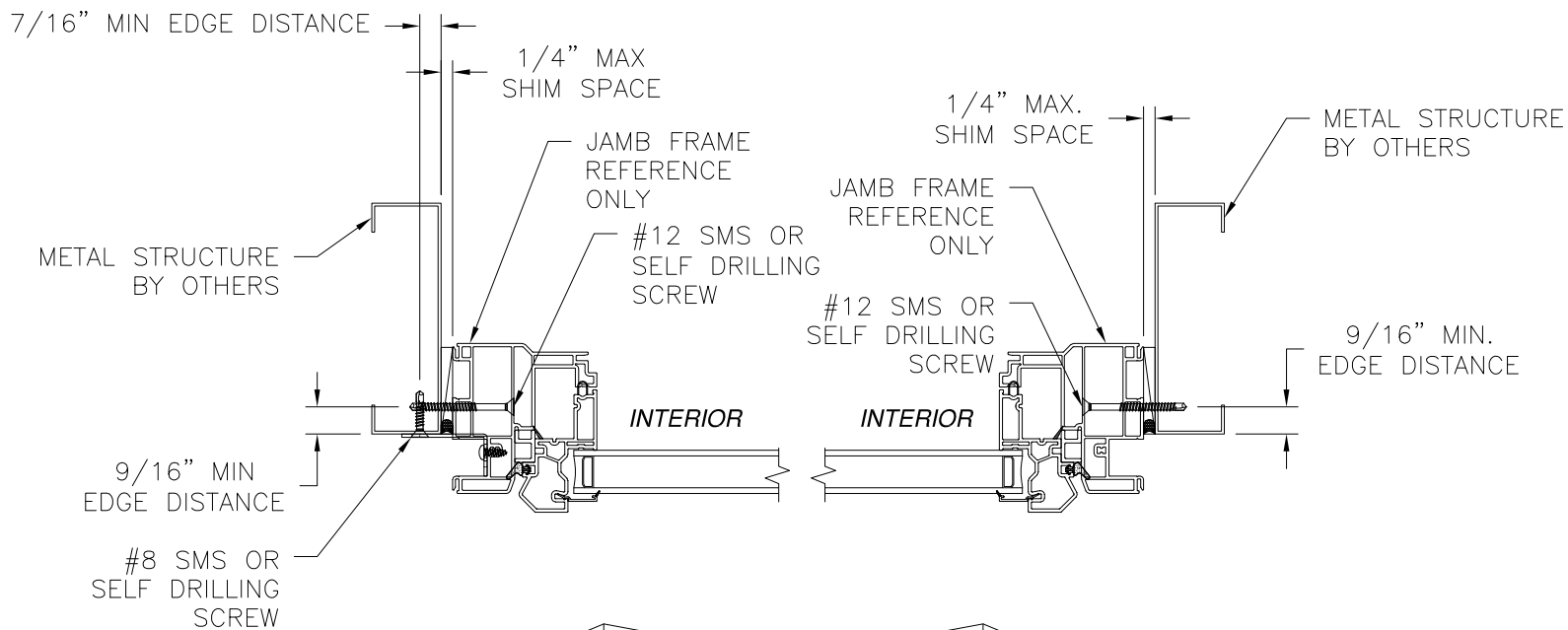
VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
S-SERIES/CAMBRIDGE ALUMINUM H/T MULLION INSTALLATION DETAILS		
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SCALE NTS	DATE 08/23/15	SHEET 4 OF 7
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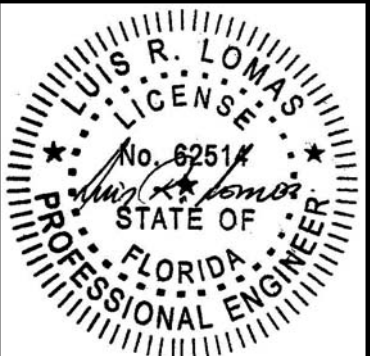
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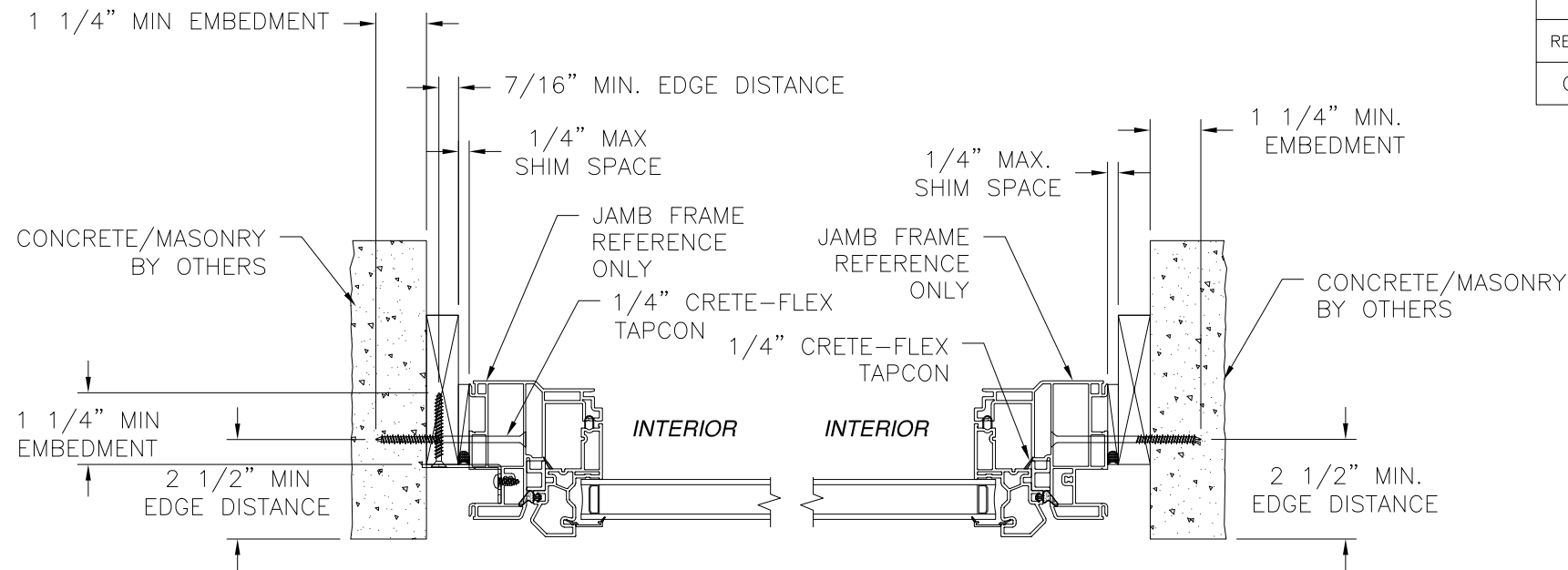
MULLION INSTALLATION DETAIL
METAL STRUCTURE

VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
S-SERIES/CAMBRIDGE ALUMINUM H/T MULLION INSTALLATION DETAILS		
DRAWN: R.L.	DWG NO. 08-02803	REV C
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L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

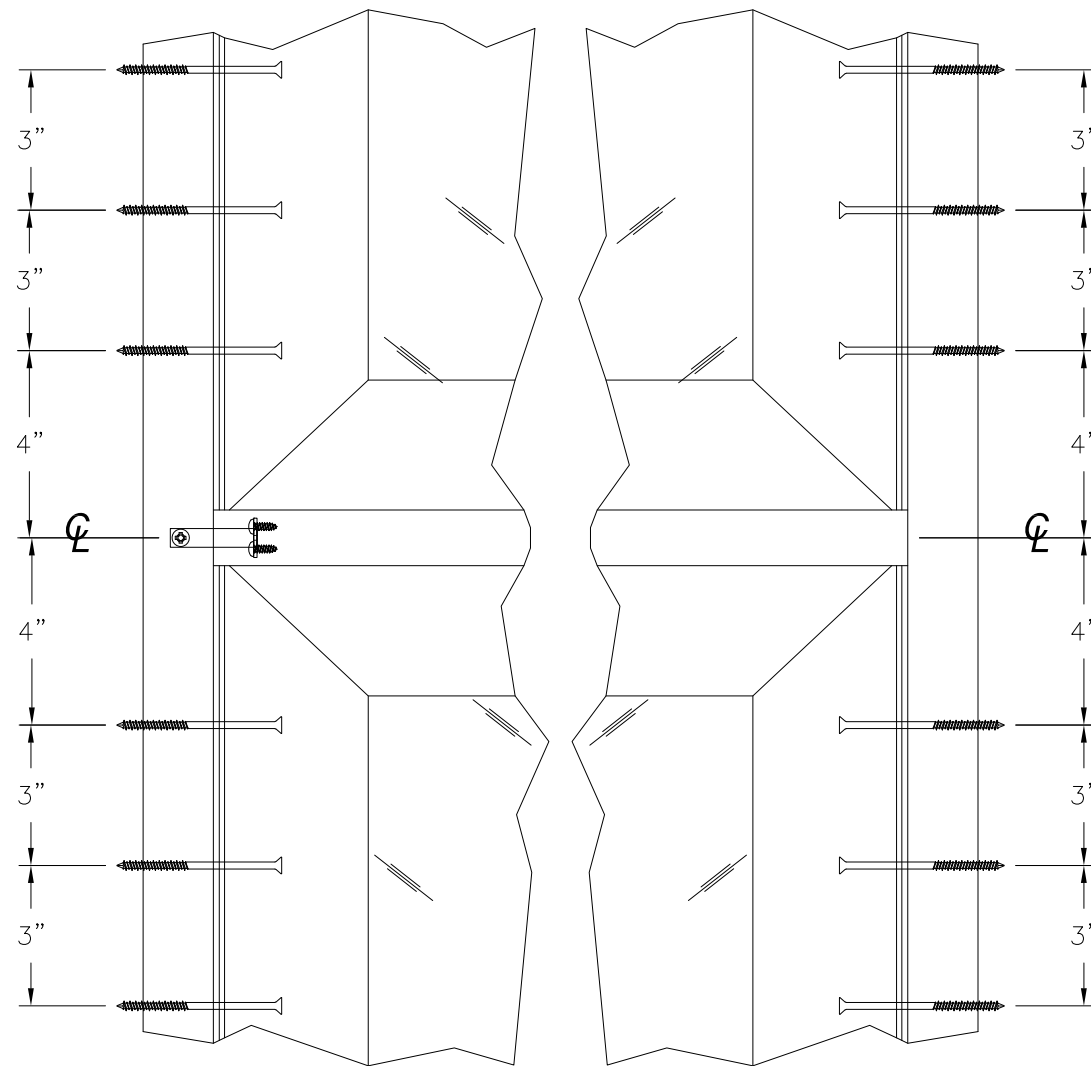
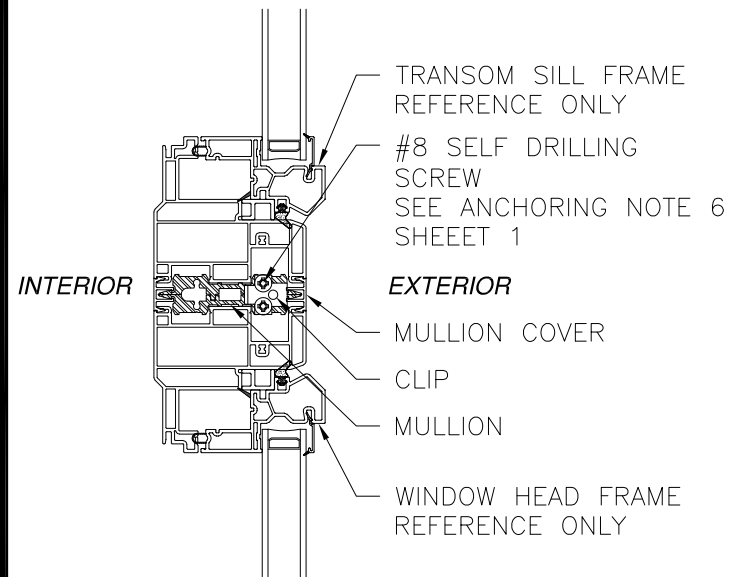
SIGNED: 12/26/2023



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



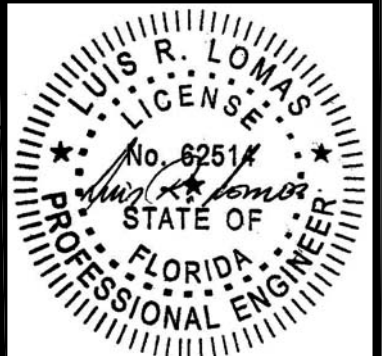
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW CODE	12/21/2023	R.L.



MULLION INSTALLATION DETAIL
MASONRY/CONCRETE

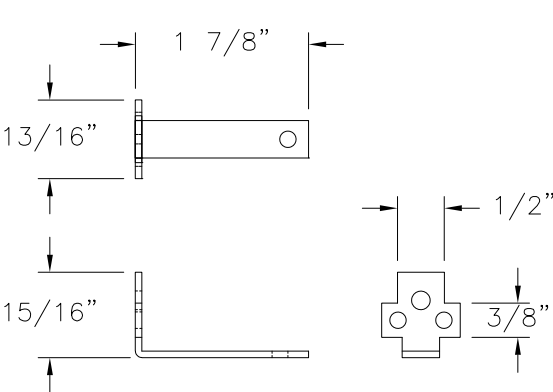
VIWINCO, INC. MORGANTOWN BUSINESS PARK P.O. BOX 499 MORGANTOWN, PA 19543		
S-SERIES/CAMBRIDGE ALUMINUM H/T MULLION INSTALLATION DETAILS		
DRAWN: R.L.	DWG NO. 08-02803	REV C
SCALE NTS	DATE 08/23/15	SHEET 6 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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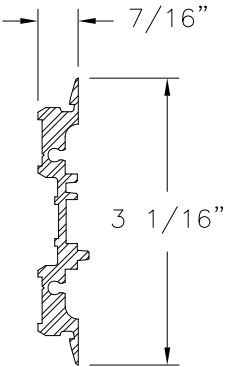


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FL No.: 62514

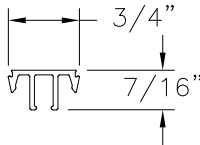
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW CODE	12/21/2023	R.L.



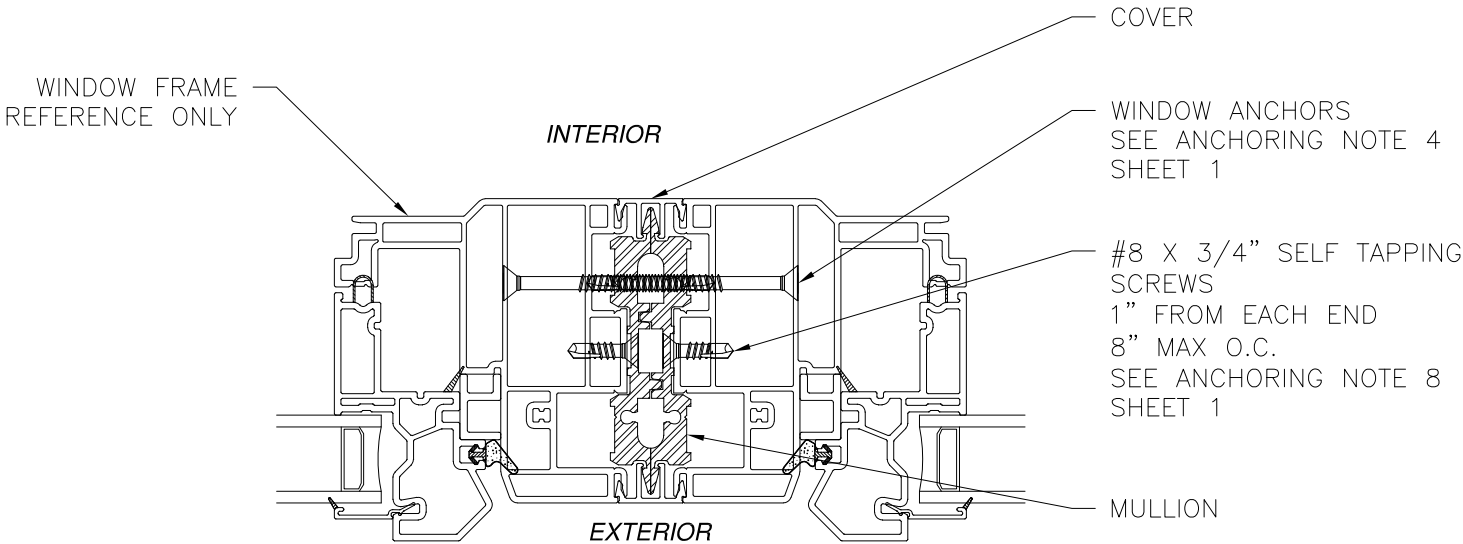
CLIP DETAIL
GALVANIZED STEEL .070" THICK



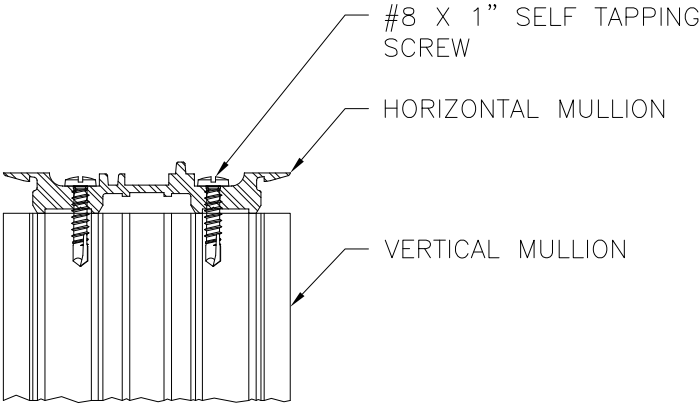
MULLION PART 2411-A
ALUMINUM 6105-T5
MOMENT OF INERTIA: .4048 IN⁴
SECTION MODULUS: .2614 IN³



MULLION COVER
PVC .050" THICK



**WINDOW TO MULLION ATTACHMENT
DETAIL**



**HORIZONTAL TO VERTICAL MULLION
CONNECTION DETAIL**

SIGNED: 12/26/2023

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

S-SERIES/CAMBRIDGE ALUMINUM
H/T MULLION
COMPONENTS

DRAWN:
R.L.

DWG NO.
08-02803

REV
C

SCALE NTS

DATE 08/23/15

SHEET 7 OF 7

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



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