

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. 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 MI WINDOWS AND DOORS, INC.
7. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
8. VERTICAL MULLIONS ARE NOT PART OF THIS APPROVAL. VERTICAL MULLIONS USED TO MULL UNITS SIDE BY SIDE MUST HAVE SEPARATE APPROVAL.
9. FOR ADDITIONAL APPROVED CONFIGURATIONS SEE SHEET 2.

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.
2. FOR ANCHORING INTO CONCRETE USE 1/4" ELCO ULTRACON TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT WITH 1" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
3. FOR ANCHORING THROUGH FRAME 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. 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:
 - A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 4,200 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

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MI WINDOWS AND DOORS, LLC

650 WEST MARKET STREET
GRATZ, PA 17030-0370

M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
NOTES

DRAWN:
N.G.

DWG NO.
08-02834

REV
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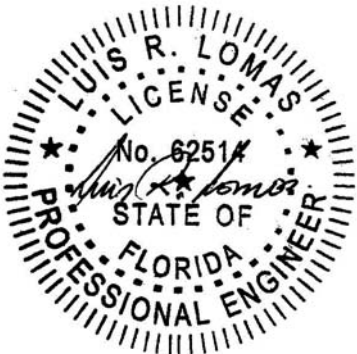
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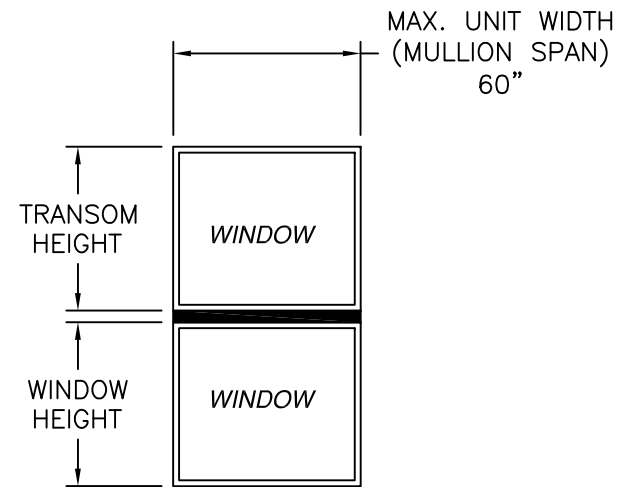
SHEET
1 OF 7

L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LEWISVILLE, NC 27023
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 10/19/2017



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



Maximum design pressure capacity chart (psf)
Units with a transom height of: 18"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3
36.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	106.7
42.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	118.0	101.4
48.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	115.2	98.0
54.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	96.0
60.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
66.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
72.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
78.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
84.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with a transom height of: 24"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5
30.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	119.0	103.6
36.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5	97.3
42.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	108.3	92.9
48.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.9	90.0
54.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	88.3
60.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
66.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
72.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
78.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
84.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8

IMPACT RATED UP TO WIND ZONE 3

MULLIONS INSTALLED WITH MT000022 CLIP

Maximum design pressure capacity chart (psf)

Units with a transom height of: 36"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5	97.3
30.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	90.6
36.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	100.0	85.7
42.0	36.0	120.0	120.0	120.0	120.0	120.0	117.1	96.6	82.3
48.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.7	80.0
54.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.7
60.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
66.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
72.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
78.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
84.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)

Units with a transom height of: 48"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	48.0	120.0	120.0	120.0	120.0	120.0	120.0	105.9	90.0
30.0	48.0	120.0	120.0	120.0	120.0	120.0	120.0	99.3	84.2
36.0	48.0	120.0	120.0	120.0	120.0	120.0	116.1	94.7	80.0
42.0	48.0	120.0	120.0	120.0	120.0	120.0	113.4	91.7	77.0
48.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	90.0	75.0
54.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.8
60.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
66.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
72.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
78.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
84.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5

IMPACT RATED UP TO WIND ZONE 3

DESIGN PRESSURE TABLE INSTRUCTIONS:

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

SIGNED: 10/19/2017

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M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
ELEVATION AND CHARTS

DRAWN:
N.G.

DWG NO.

08-02834

REV
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SCALE NTS

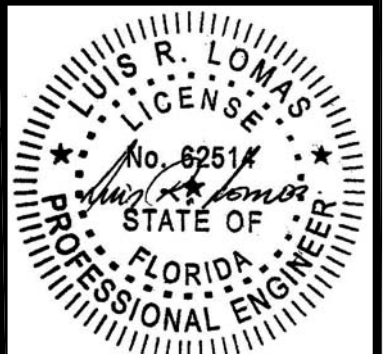
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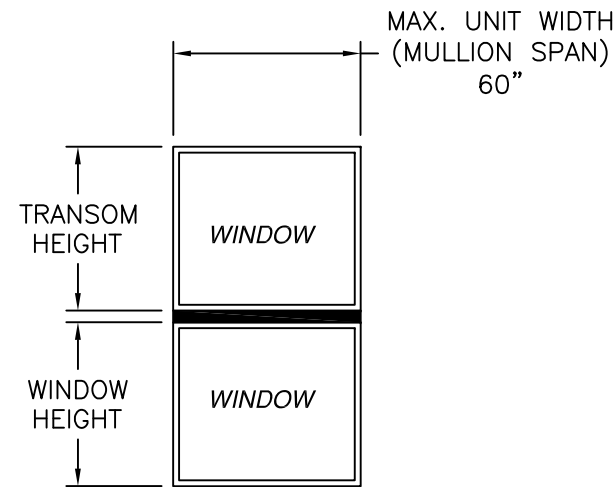
SHEET

2 OF 7

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Maximum design pressure capacity chart (psf)
Units with a transom height of: 18"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3
36.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	106.7
42.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	118.0	101.4
48.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	115.2	98.0
54.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	96.0
60.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
66.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
72.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
78.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4
84.0	18.0	120.0	120.0	120.0	120.0	120.0	120.0	114.3	95.4

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with a transom height of: 24"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5
30.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	119.0	103.6
36.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5	97.3
42.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	108.3	92.9
48.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.9	90.0
54.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	88.3
60.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
66.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
72.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
78.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8
84.0	24.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	87.8

IMPACT RATED UP TO WIND ZONE 3

MULLIONS INSTALLED WITH SECT5768 CLIP

Maximum design pressure capacity chart (psf)

Units with a transom height of: 36"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	112.5	97.3
30.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	105.1	90.6
36.0	36.0	120.0	120.0	120.0	120.0	120.0	120.0	100.0	85.7
42.0	36.0	120.0	120.0	120.0	120.0	120.0	117.1	96.6	82.3
48.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.7	80.0
54.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.7
60.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
66.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
72.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
78.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3
84.0	36.0	120.0	120.0	120.0	120.0	120.0	116.1	94.1	78.3

IMPACT RATED UP TO WIND ZONE 3

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Units with a transom height of: 48"

Design pressures are positive and negative

Height (in)		Unit width (in)							
Window	Transom	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
24.0	48.0	120.0	120.0	120.0	120.0	120.0	120.0	105.9	90.0
30.0	48.0	120.0	120.0	120.0	120.0	120.0	120.0	99.3	84.2
36.0	48.0	120.0	120.0	120.0	120.0	120.0	116.1	94.7	80.0
42.0	48.0	120.0	120.0	120.0	120.0	120.0	113.4	91.7	77.0
48.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	90.0	75.0
54.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.8
60.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
66.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
72.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
78.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5
84.0	48.0	120.0	120.0	120.0	120.0	120.0	112.5	89.4	73.5

IMPACT RATED UP TO WIND ZONE 3

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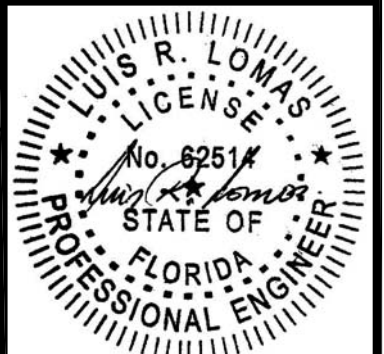
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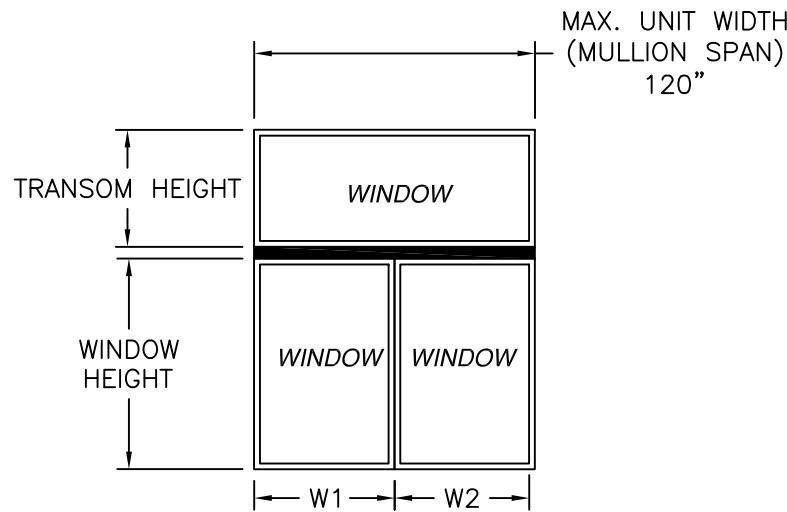
SHEET

3 OF 7

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Maximum design pressure capacity chart (psf)
Units with transom height of: 18 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	18.00	120.0	120.0	100.7	84.2	72.4	63.4	56.5
30.00	18.00	120.0	114.3	91.1	75.8	64.9	56.7	50.3
36.00	18.00	120.0	105.9	84.2	69.6	59.3	51.6	45.7
42.00	18.00	120.0	98.6	78.7	64.9	55.0	47.7	42.1
48.00	18.00	120.0	92.3	73.8	61.0	51.6	44.6	39.2
54.00	18.00	113.4	86.7	69.6	57.6	48.8	42.1	36.9
60.00	18.00	106.7	81.8	65.8	54.5	46.3	40.0	35.0
66.00	18.00	100.7	77.4	62.3	51.8	44.0	38.1	33.4
72.00	18.00	95.4	73.5	59.3	49.3	42.0	36.4	31.9
78.00	18.00	90.6	69.9	56.5	47.1	40.1	34.8	30.6
84.00	18.00	86.2	66.7	53.9	45.0	38.4	33.3	29.3
90.00	18.00	82.3	63.7	51.6	43.1	36.8	32.0	28.2
96.00	18.00	78.7	61.0	49.5	41.4	35.4	30.8	27.1

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with transom height of: 24 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	24.00	120.0	112.5	90.0	75.0	64.3	56.3	50.0
30.00	24.00	120.0	103.6	82.3	68.2	58.3	50.9	45.1
36.00	24.00	120.0	96.6	76.6	63.2	53.7	46.8	41.4
42.00	24.00	120.0	90.6	72.0	59.3	50.2	43.5	38.4
48.00	24.00	112.5	85.2	67.9	56.0	47.4	40.9	36.0
54.00	24.00	105.9	80.4	64.3	53.1	45.0	38.8	34.0
60.00	24.00	100.0	76.2	61.0	50.5	42.9	37.0	32.4
66.00	24.00	94.7	72.4	58.1	48.2	40.9	35.4	31.0
72.00	24.00	90.0	68.9	55.4	46.0	39.1	33.9	29.8
78.00	24.00	85.7	65.8	52.9	44.0	37.5	32.5	28.6
84.00	24.00	81.8	62.9	50.7	42.2	36.0	31.2	27.5
90.00	24.00	78.3	60.3	48.6	40.6	34.6	30.1	26.5
96.00	24.00	75.0	57.8	46.8	39.0	33.3	29.0	25.5

IMPACT RATED UP TO WIND ZONE 3

MULLIONS INSTALLED WITH MT000022 CLIP

Maximum design pressure capacity chart (psf)
Units with transom height of: 36 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	36.00	120.0	97.3	76.6	63.2	53.7	46.8	41.4
30.00	36.00	120.0	90.6	70.9	58.3	49.5	43.0	38.0
36.00	36.00	116.1	85.2	66.7	54.5	46.2	40.0	35.3
42.00	36.00	109.1	80.4	63.2	51.6	43.5	37.6	33.1
48.00	36.00	102.9	76.2	60.0	49.1	41.4	35.6	31.3
54.00	36.00	97.3	72.4	57.1	46.9	39.6	34.0	29.8
60.00	36.00	92.3	68.9	54.5	44.9	37.9	32.7	28.6
66.00	36.00	87.8	65.8	52.2	43.0	36.4	31.4	27.5
72.00	36.00	83.7	62.9	50.0	41.3	35.0	30.2	26.5
78.00	36.00	80.0	60.3	48.0	39.7	33.6	29.1	25.5
84.00	36.00	76.6	57.8	46.2	38.2	32.4	28.1	24.7
90.00	36.00	73.5	55.6	44.4	36.8	31.3	27.1	23.8
96.00	36.00	70.6	53.5	42.9	35.6	30.3	26.2	23.1

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with transom height of: 48 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	48.00	120.0	90.0	69.2	56.3	47.4	40.9	36.0
30.00	48.00	120.0	84.2	64.6	52.4	44.0	38.0	33.4
36.00	48.00	112.5	79.6	61.0	49.3	41.4	35.6	31.3
42.00	48.00	105.9	75.4	58.1	46.9	39.2	33.7	29.6
48.00	48.00	100.0	71.6	55.4	44.9	37.5	32.1	28.1
54.00	48.00	94.7	68.2	52.9	43.0	36.0	30.8	26.9
60.00	48.00	90.0	65.2	50.7	41.3	34.6	29.7	25.9
66.00	48.00	85.7	62.3	48.6	39.7	33.3	28.6	25.0
72.00	48.00	81.8	59.8	46.8	38.2	32.1	27.6	24.2
78.00	48.00	78.3	57.4	45.0	36.8	31.0	26.7	23.4
84.00	48.00	75.0	55.2	43.4	35.6	30.0	25.9	22.6
90.00	48.00	72.0	53.1	41.9	34.4	29.0	25.0	22.0
96.00	48.00	69.2	51.2	40.4	33.3	28.1	24.3	21.3

IMPACT RATED UP TO WIND ZONE 3

- DESIGN PRESSURE TABLE INSTRUCTIONS:
1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
 2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
 3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
 4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
 5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
 6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.

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

SIGNED: 10/19/2017

MI WINDOWS AND DOORS, LLC

650 WEST MARKET STREET
GRATZ, PA 17030-0370

M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
ELEVATION AND CHARTS

DRAWN:
N.G.

DWG NO.
08-02834

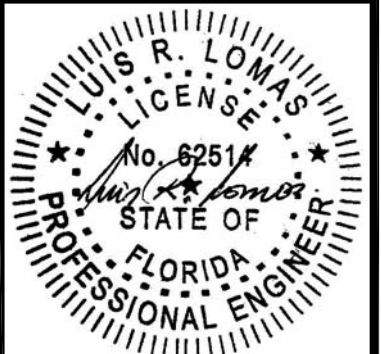
REV
-

SCALE NTS

DATE 10/20/15

SHEET 4 OF 7

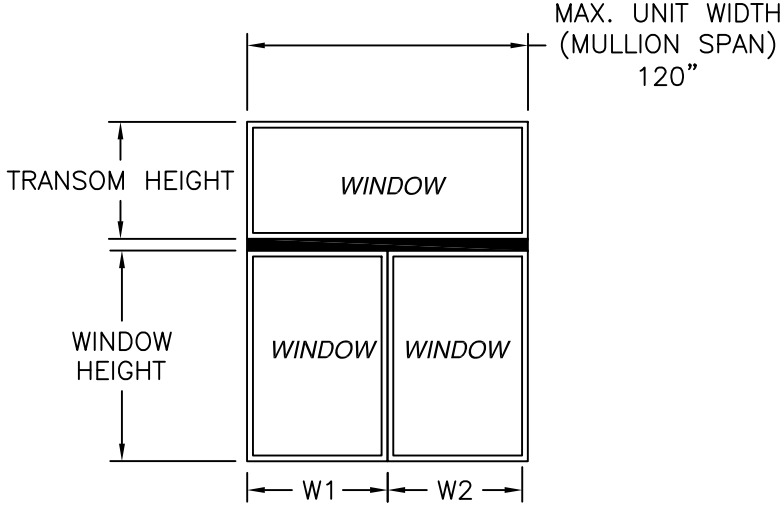
L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LEWISVILLE, NC 27023
434-688-0609 rllomas@rlomaspe.com



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



MULLIONS INSTALLED WITH SECT5768 CLIP



Maximum design pressure capacity chart (psf)
Units with transom height of: 18 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	18.00	120.0	120.0	100.7	84.2	72.4	63.4	56.5
30.00	18.00	120.0	114.3	91.1	75.8	64.9	56.7	50.3
36.00	18.00	120.0	105.9	84.2	69.6	59.3	51.6	45.7
42.00	18.00	120.0	98.6	78.7	64.9	55.0	47.7	42.1
48.00	18.00	120.0	92.3	73.8	61.0	51.6	44.6	39.2
54.00	18.00	113.4	86.7	69.6	57.6	48.8	42.1	36.9
60.00	18.00	106.7	81.8	65.8	54.5	46.3	40.0	35.0
66.00	18.00	100.7	77.4	62.3	51.8	44.0	38.1	33.4
72.00	18.00	95.4	73.5	59.3	49.3	42.0	36.4	31.9
78.00	18.00	90.6	69.9	56.5	47.1	40.1	34.8	30.6
84.00	18.00	86.2	66.7	53.9	45.0	38.4	33.3	29.3
90.00	18.00	82.3	63.7	51.6	43.1	36.8	32.0	28.2
96.00	18.00	78.7	61.0	49.5	41.4	35.4	30.8	27.1

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with transom height of: 24 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	24.00	120.0	112.5	90.0	75.0	64.3	56.3	50.0
30.00	24.00	120.0	103.6	82.3	68.2	58.3	50.9	45.1
36.00	24.00	120.0	96.6	76.6	63.2	53.7	46.8	41.4
42.00	24.00	120.0	90.6	72.0	59.3	50.2	43.5	38.4
48.00	24.00	112.5	85.2	67.9	56.0	47.4	40.9	36.0
54.00	24.00	105.9	80.4	64.3	53.1	45.0	38.8	34.0
60.00	24.00	100.0	76.2	61.0	50.5	42.9	37.0	32.4
66.00	24.00	94.7	72.4	58.1	48.2	40.9	35.4	31.0
72.00	24.00	90.0	68.9	55.4	46.0	39.1	33.9	29.8
78.00	24.00	85.7	65.8	52.9	44.0	37.5	32.5	28.6
84.00	24.00	81.8	62.9	50.7	42.2	36.0	31.2	27.5
90.00	24.00	78.3	60.3	48.6	40.6	34.6	30.1	26.5
96.00	24.00	75.0	57.8	46.8	39.0	33.3	29.0	25.5

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with transom height of: 36 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	36.00	120.0	97.3	76.6	63.2	53.7	46.8	41.4
30.00	36.00	120.0	90.6	70.9	58.3	49.5	43.0	38.0
36.00	36.00	116.1	85.2	66.7	54.5	46.2	40.0	35.3
42.00	36.00	109.1	80.4	63.2	51.6	43.5	37.6	33.1
48.00	36.00	102.9	76.2	60.0	49.1	41.4	35.6	31.3
54.00	36.00	97.3	72.4	57.1	46.9	39.6	34.0	29.8
60.00	36.00	92.3	68.9	54.5	44.9	37.9	32.7	28.6
66.00	36.00	87.8	65.8	52.2	43.0	36.4	31.4	27.5
72.00	36.00	83.7	62.9	50.0	41.3	35.0	30.2	26.5
78.00	36.00	80.0	60.3	48.0	39.7	33.6	29.1	25.5
84.00	36.00	76.6	57.8	46.2	38.2	32.4	28.1	24.7
90.00	36.00	73.5	55.6	44.4	36.8	31.3	27.1	23.8
96.00	36.00	70.6	53.5	42.9	35.6	30.3	26.2	23.1

IMPACT RATED UP TO WIND ZONE 3

Maximum design pressure capacity chart (psf)
Units with transom height of: 48 in
Design pressures are positive and negative

Height (in)		Span and Tributary width (in)						
		48.00	60.00	72.00	84.00	96.00	108.00	120.00
Window	Transom	24.00	30.00	36.00	42.00	48.00	54.00	60.00
24.00	48.00	120.0	90.0	69.2	56.3	47.4	40.9	36.0
30.00	48.00	120.0	84.2	64.6	52.4	44.0	38.0	33.4
36.00	48.00	112.5	79.6	61.0	49.3	41.4	35.6	31.3
42.00	48.00	105.9	75.4	58.1	46.9	39.2	33.7	29.6
48.00	48.00	100.0	71.6	55.4	44.9	37.5	32.1	28.1
54.00	48.00	94.7	68.2	52.9	43.0	36.0	30.8	26.9
60.00	48.00	90.0	65.2	50.7	41.3	34.6	29.7	25.9
66.00	48.00	85.7	62.3	48.6	39.7	33.3	28.6	25.0
72.00	48.00	81.8	59.8	46.8	38.2	32.1	27.6	24.2
78.00	48.00	78.3	57.4	45.0	36.8	31.0	26.7	23.4
84.00	48.00	75.0	55.2	43.4	35.6	30.0	25.9	22.6
90.00	48.00	72.0	53.1	41.9	34.4	29.0	25.0	22.0
96.00	48.00	69.2	51.2	40.4	33.3	28.1	24.3	21.3

IMPACT RATED UP TO WIND ZONE 3

- DESIGN PRESSURE TABLE INSTRUCTIONS:
1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
 2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
 3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
 4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
 5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
 6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.

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

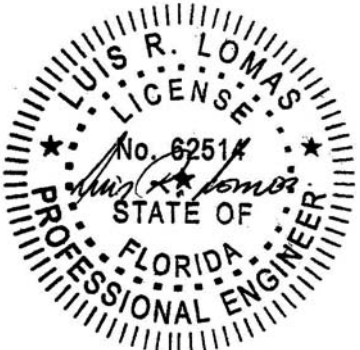
SIGNED: 10/19/2017

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030-0370

M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
ELEVATION AND CHARTS

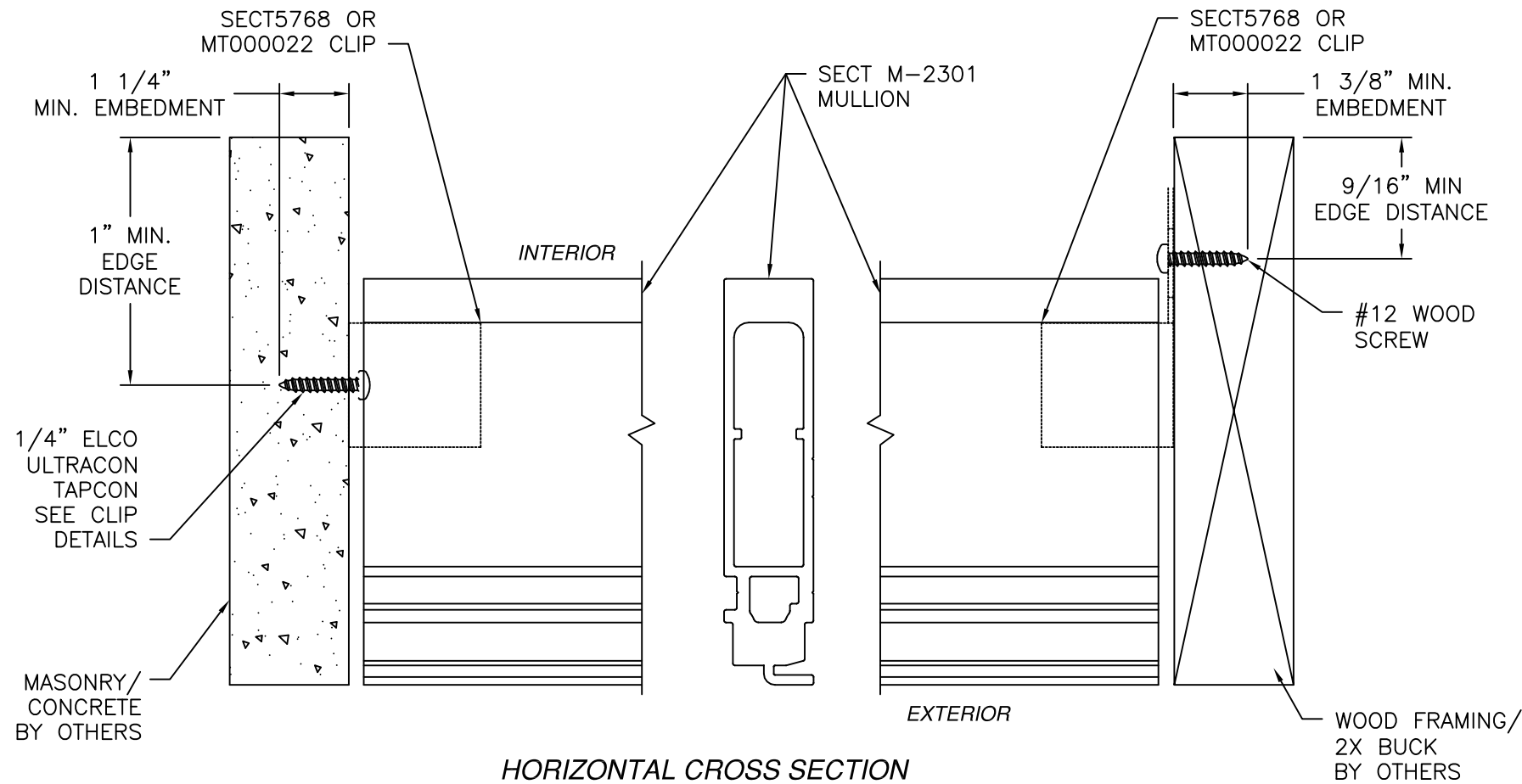
DRAWN: N.G.	DWG NO. 08-02834	REV -
SCALE NTS	DATE 10/20/15	SHEET 5 OF 7

L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LEWISVILLE, NC 27023
434-688-0609 rllomas@rlomaspe.com

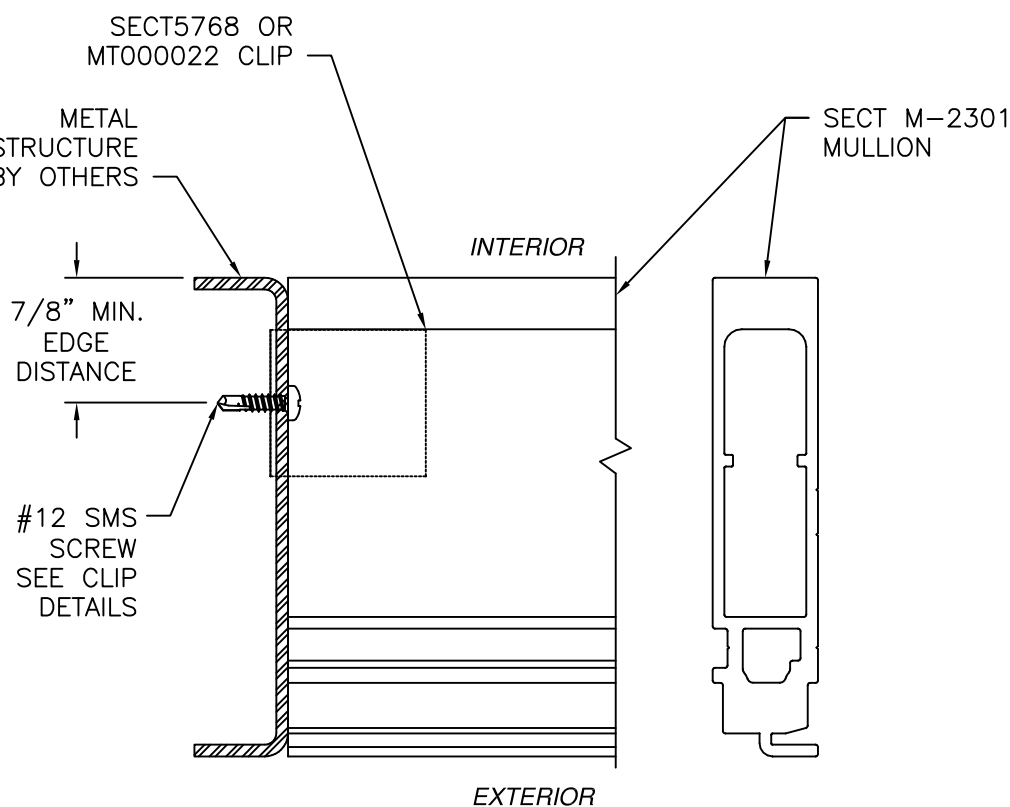


Luis R. Lomas P.E.
FL No.: 62514

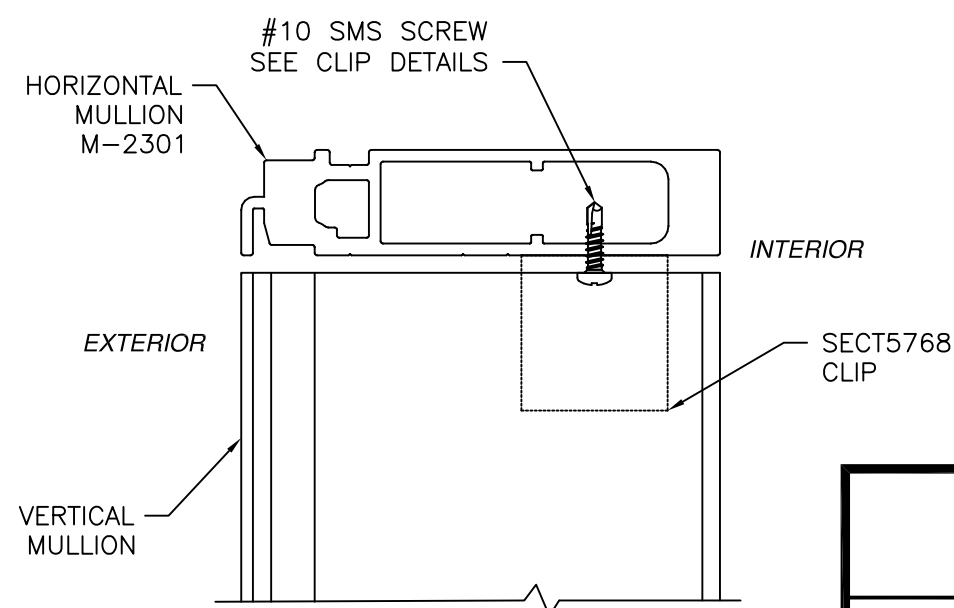




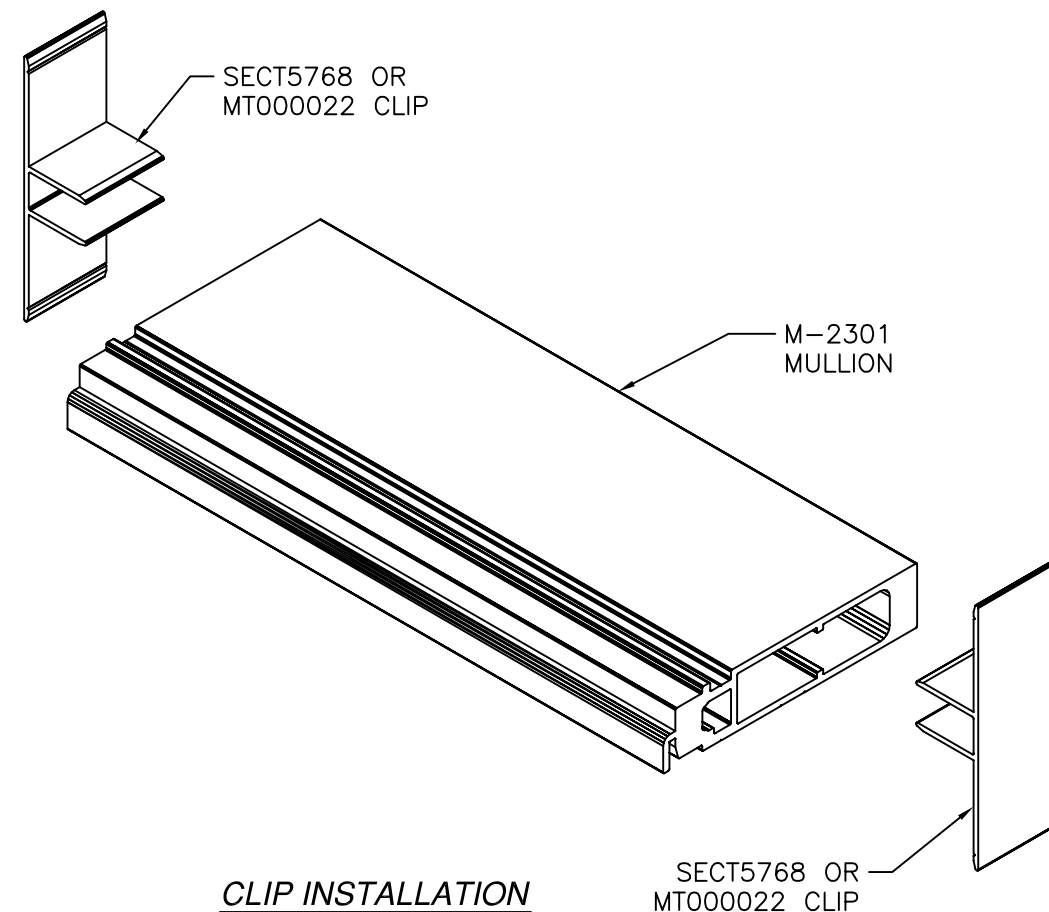
HORIZONTAL CROSS SECTION
MASONRY/CONCRETE AND WOOD FRAMING
INSTALLATION



HORIZONTAL CROSS SECTION
METAL INSTALLATION



MULLION CONNECTION



CLIP INSTALLATION

NOTES:

1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

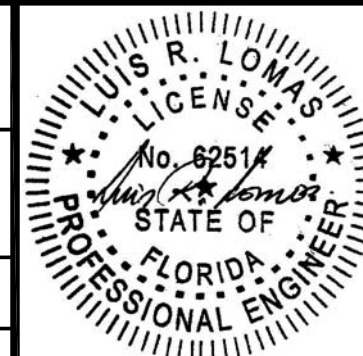
SIGNED: 10/19/2017

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030-0370

M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
INSTALLATION DETAILS

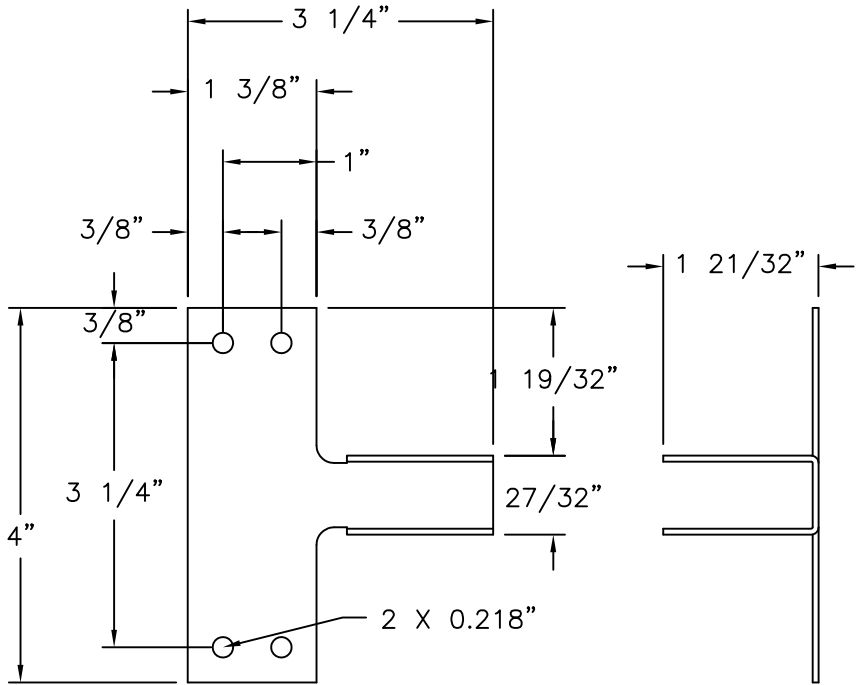
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SCALE NTS	DATE 10/20/15	SHEET 6 OF 7

L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LEWISVILLE, NC 27023
434-688-0609 rllomas@rlomaspe.com

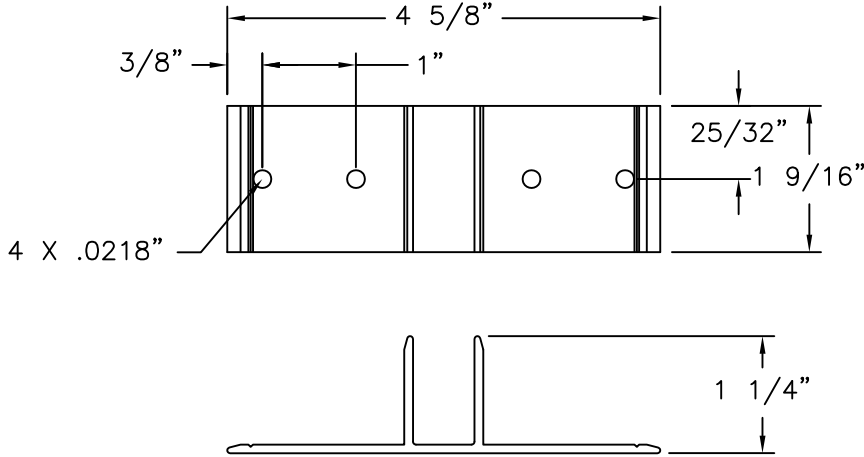


Luis R. Lomas P.E.
FL No.: 62514

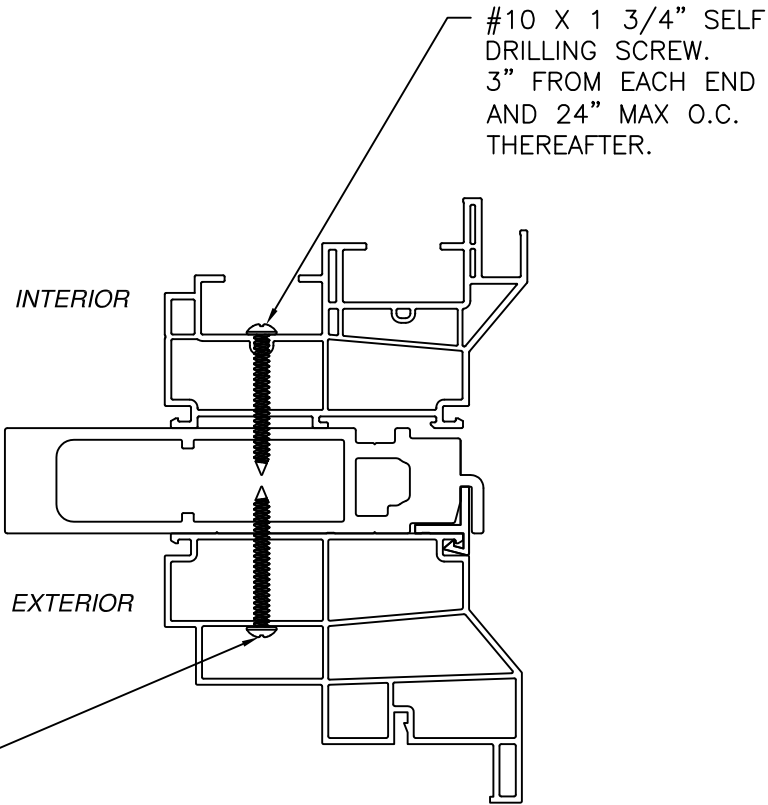
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



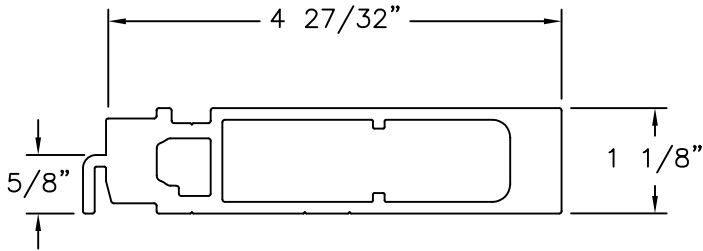
MT000022 CLIP
 16GA (.063") GALVANIZED STEEL
 FOR CONCRETE INSTALLATION
 USE OUTER HOLES ONLY



SECT5768 CLIP
 FOR WOOD FRAMING INSTALLATION
 ALUMINUM 6063-T5 .125" THICK
 FOR CONCRETE INSTALLATION
 USE OUTER HOLES ONLY



WINDOW & MULLION ASSEMBLY



SECT M-2301 MULLION
 ALUMINUM 6005-T5 .125" THICK

MI WINDOWS AND DOORS, LLC

650 WEST MARKET STREET
GRATZ, PA 17030-0370

M2301 HORIZONTAL MULLION
SINGLE AND TWIN WITH TRANSOM
COMPONENTS

DRAWN: N.G.

DWG NO. 08-02834

REV -

SCALE NTS

DATE 10/20/15

SHEET 7 OF 7

L. ROBERTO LOMAS P.E.

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