

Mullion rating chart, Single with transom (psf) 1 x 3-3/8 Horizontal mullion with bull nose clip

		Unit width (in)								
		24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
	24.0	120.0	120.0	120.0	120.0	113.4	97.2	85.0	75.6	68.0
Tributary Height	30.0	120.0	120.0	120.0	120.0	99.0	83.7	72.6	64.0	57.3
	36.0	120.0	120.0	120.0	113.4	90.7	75.6	64.8	56.7	50.4
	42.0	120.0	120.0	120.0	111.1	86.4	70.7	59.8	51.8	45.7
	48.0	120.0	120.0	120.0	111.1	85.0	68.0	56.7	48.6	42.5
	54.0	120.0	120.0	120.0	111.1	85.0	67.2	55.0	46.5	40.3
	60.0	120.0	120.0	120.0	111.1	85.0	67.2	54.4	45.4	38.9
	66.0	120.0	120.0	120.0	111.1	85.0	67.2	54.4	45.0	38.1
	72.0	120.0	120.0	120.0	111.1	85.0	67.2	54.4	45.0	37.8
	78.0	120.0	120.0	120.0	111.1	85.0	67.2	54.4	45.0	37.8
	84.0	120.0	120.0	120.0	111.1	85.0	67.2	54.4	45.0	37.8

Design pressures are positive and negative Large and Small Missile 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 HEIGHT AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY HEIGHT.
- 3. LOCATE MULLION SPAN (UNIT WIDTH) AND TRIBUTARY HEIGHT. AT THE INTERSECTION OF COLUMN AND ROW 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 HEIGHT=

STERGIS WINDOW & DOORS 79 WALTON STREET

> 1 X 3 3/8 HORIZONTAL STRUCTURAL TUBING MULLION - LMI & SMI COMPONENTS

> > DWG NO.

DATE 01/24/23

ATTLEBORO, MA 02703

TABLE OF CONTENTS DRAWN: R.L. SHEET NO. DESCRIPTION SCALE NTS 1, 2 ELEVATION, NOTES AND DESIGN PRESSURE CHARTS 3 INSTALLATION DETAILS AND B.OM. 4 COMPONENTS

L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com

08-03874

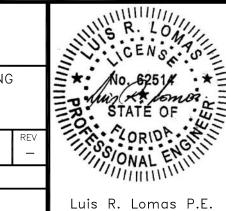
SHEET 3 OF 4

REVISIONS REV DESCRIPTION DATE **APPROVED**

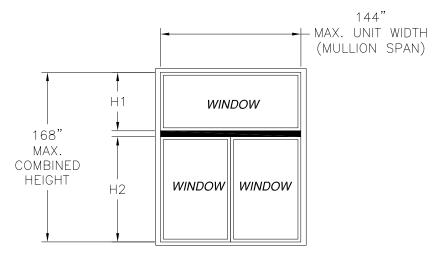
NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
- 2. WOOD FRAMING, METAL FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING 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 THE MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 6. SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE UNITS TO BE MULLED TOGETHER MUST BE MANUFACTURED BY STERGIS WINDOWS AND DOORS.
- 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
- 9. FOR ADDITIONAL APPROVED CONFIGURATIONS SEE SHEET 2.

SIGNED: 01/24/2023



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



Mullion rating chart, Twin with transom (psf)

1 x 3-3/8 Horizontal mullion with bull nose clip

		Single Window width and Total Unit width (in)										
		24.00	30.00	36.00	42.00	48.00	54.00	60.00	66.00	72.00		
		48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00	144.00		
	24.00	113.4	85.0	68.0	56.7	48.6	42.5	34.3	25.6	19.6		
	30.00	98.1	72.6	57.3	47.3	40.3	35.1	28.0	20.8	15.9		
Ŧ	36.00	87.8	64.4	50.4	41.2	34.9	30.2	23.8	17.7	-		
Height	42.00	80.6	58.5	45.5	37.0	31.1	26.8	20.8	15.4	-		
Ŧ	48.00	75.6	54.2	41.9	33.9	28.3	24.3	18.5	-	-		
	54.00	72.1	50.9	39.0	31.5	26.2	22.4	16.8	-	-		
uta	60.00	69.8	48.4	36.8	29.5	24.5	20.9	15.5	-	-		
Tributary	66.00	68.5	46.5	35.0	27.9	23.1	19.6	1	-	-		
H	72.00	68.0	45.2	33.6	26.6	21.9	18.6	-	-	-		
	78.00	68.5	44.2	32.5	25.6	21.0	17.7	-	-	-		
	84.00	69.8	43.7	31.6	24.7	20.2	17.0	-	-	-		

Design pressures are positive and negative

Large and Small Missile Impact rated, up to Wind Zone 3

MAX. UNIT WIDTH
(MULLION SPAN)

H1

H1

WINDOW
WINDOW
HEIGHT
H2

WINDOW
WINDOW

Mullion rating chart, Twin with Twin transom (psf) 1 x 3-3/8 Horizontal mullion with bull nose clip

REV

		Single Unit width and Total Unit width (in)								
		24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
		48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0
	24.0	113.4	85.0	68.0	56.7	48.6	42.5	33.2	24.9	19.1
	30.0	97.2	72.6	57.3	47.3	40.3	35.1	26.9	20.1	15.4
ı,	36.0	85.0	64.0	50.4	41.2	34.9	30.2	22.6	16.9	-
Height	42.0	75.6	57.3	45.4	37.0	31.1	26.8	19.6	-	-
He	48.0	68.0	51.8	41.2	33.8	28.3	24.0	17.3	ı	ı
	54.0	61.8	47.3	37.8	31.1	26.2	21.6	15.6	-	-
uta	60.0	56.7	43.5	34.9	28.8	24.3	19.7	-	-	-
Tributary	66.0	52.3	40.3	32.4	26.8	22.7	18.0	-	-	-
7	72.0	48.6	37.5	30.2	25.1	21.3	16.7	-	-	-
	78.0	45.4	35.1	28.3	23.6	20.0	15.5	-	-	-
	84.0	42.5	33.0	26.7	22.2	18.9	-	-	-	-

Design pressures are positive and negative

Large and Small Missile 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 HEIGHT.
- 3. LOCATE MULLION SPAN (UNIT WIDTH) AND TRIBUTARY HEIGHT. AT THE INTERSECTION OF COLUMN AND ROW 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 HEIGHT = $\frac{H1 + H2}{2}$

STERGIS WINDOW & DOORS 79 WALTON STREET ATTLEBORO, MA 02703 1 X 3 3/8 HORIZONTAL STRUCTURAL TUBING MULLION - LMI & SMI COMPONENTS DRAWN: DWG NO. ONAL ENT R.L. 08-03874 SCALE NTS DATE 01/24/23 SHEET 3 OF 4 L. ROBERTO LOMAS P.E. Luis R. Lomas P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 FL No.: 62514 434-688-0609 rllomas@lrlomaspe.com

REVISIONS

DATE

SIGNED: 01/24/2023

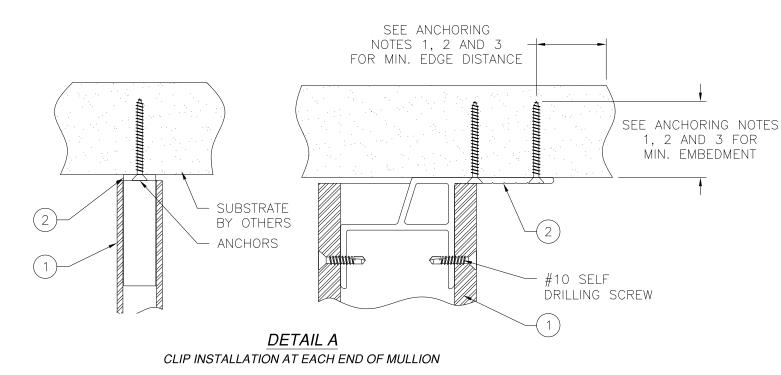
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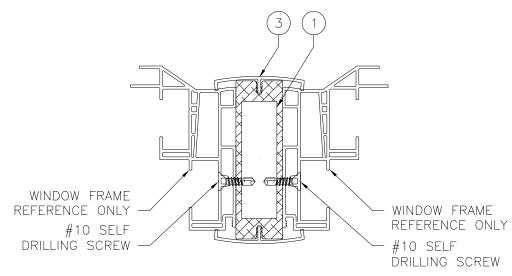
DESCRIPTION

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PARTS LIST									
NO.	PART NUMBER	DESCRIPTION							
1		1X3 3/8 STRUCTURAL TUBING MULLION 6063-T6							
2		BULL NOSE CLIP 1X3, ALUMINUM 6063-T6							
3	AM72	COVER, PVC							





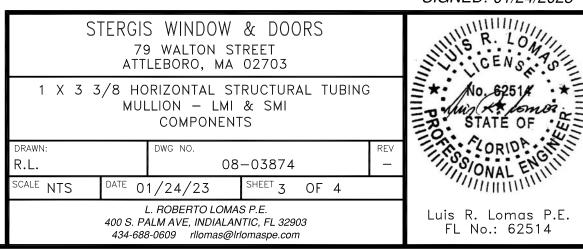


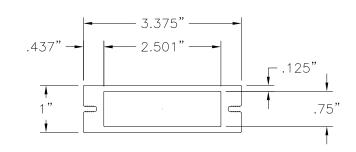
SECTION B-B
WINDOW TO MULLION INSTALLATION

ANCHORING NOTES:

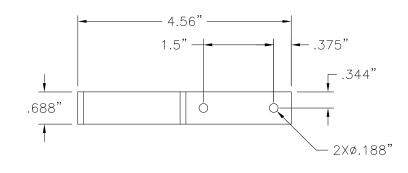
- 1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE AND 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/2" MINIMUM EDGE DISTANCE AND 1 1/2" MINIMUM SPACING BETWEEN ANCHORS. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3. FOR ANCHORING INTO METAL STRUCTURE USE #10 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL AND 3/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4. FOR ATTACHING WINDOW UNITS TO MULLION USE #10 SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF 3 THREADS PAST THE MULLION WALL. LOCATE SCREWS 6" FROM EACH MULLION END AND 8" MAX O.C. THEREAFTER STAGGER SCREWS AT EACH WINDOW.
- 5. FOR WINDOW UNITS ANCHORING SCHEDULE REFER TO WINDOW APPROVED INSTALLATON INSTRUCTIONS.
- 6. ALL FASTENERS TO BE CORROSION RESISTANT.
- 7. 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:
- 7.1. WOOD MINIMUM SPECIFIC GRAVITY OF G=0.42
- 7.2. CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
- 7.3. MASONRY GROUT FILLED STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
- 7.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 1/8" THICK MINIMUM

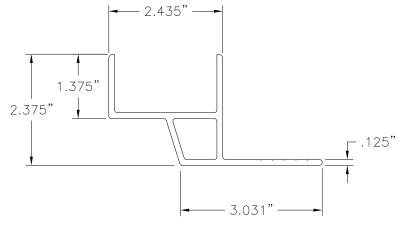
SIGNED: 01/24/2023





1 1X3 3/8 STRUCTURAL TUBING MULLION 6063-T6 ALUMINUM





2 BULL NOSE CLIP (1X3 3/8) 6063-T6 ALUMINUM



REVISIONS

REV DESCRIPTION DATE APPROVED

SIGNED: 01/24/2023

STERGIS 79 ATT	IN CENSON TO				
1 X 3 3/8 HC MUI	No. 62514 *=				
DRAWN:	DWG NO.			REV	ORIDA
R.L.	_	MONAL ENGLI			
SCALE NTS DATE 0	Millimin				
400 S. P. 434-68	Luis R. Lomas P.E. FL No.: 62514				