

Mullion rating chart, Single with transom (psf)

1 x 3 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
	30.0	120.0	120.0	120.0	120.0	99.0	83.7	72.6	64.0	57.3
Tributary Height	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

SHEET NO.

1, 2

3

4

DESIGN PRESSURE TABLE INSTRUCTIONS:

- 1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16. DETERMINE TRIBUTARY HEIGHT AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY HEIGHT.
- 2. 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= $\frac{H1 + H2}{2}$

TABLE OF CONTENTS

ELEVATION, NOTES AND DESIGN PRESSURE CHARTS

INSTALLATION DETAILS AND B.OM.

COMPONENTS

DESCRIPTION

STERGIS WINDOW & DOORS

79 WALTON STREET ATTLEBORO, MA 02703

1 X 3 HORIZONTAL STRUCTURAL TUBING
MULLION — LMI & SMI
ELEVATIONS, NOTES AND DESGIN PRESSURE CHART

DRAWN: R.L. DWG NO. 08-03875 REV
SCALE NTS DATE 01/24/23 SHEET 1 OF 4

L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com * No. 62514 * STATE OF WILLIAM STATE OF

SIGNED: 01/24/2023

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

NOTES:

REV

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.

DESCRIPTION

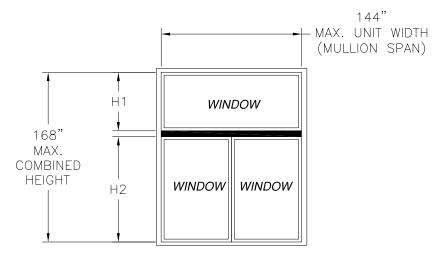
REVISIONS

DATE

APPROVED

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

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Mullion rating chart, Twin with transom (psf)

1 x 3 Horizontal mullion with bull nose clip

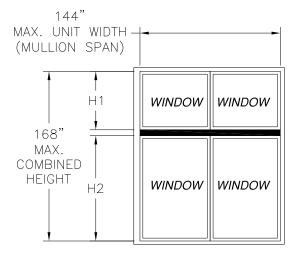
		Single Window width and Total Unit width (in)									
		24.00	30.00	36.00	42.00	48.00	54.00	60.00	66.00		
		48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00		
	24.00	113.4	85.0	68.0	56.7	48.6	33.9	24.5	18.3		
	30.00	98.1	72.6	57.3	47.3	39.9	27.7	20.0	-		
<u> </u>	36.00	87.8	64.4	50.4	41.2	34.1	23.6	17.0	-		
Height	42.00	80.6	58.5	45.5	37.0	30.0	20.7	-	-		
He	48.00	75.6	54.2	41.9	33.9	26.9	18.5	-	-		
	54.00	72.1	50.9	39.0	31.5	24.6	16.8	-	-		
L ta	60.00	69.8	48.4	36.8	29.5	22.7	15.5	-	-		
Tributary	66.00	68.5	46.5	35.0	27.9	21.1	-	-	-		
 	72.00	68.0	45.2	33.6	26.6	19.9	-	-	-		
	78.00	68.5	44.2	32.5	25.6	18.8	-	-	-		
	84.00	69.8	43.7	31.6	24.7	17.9	-	-	-		

Design pressures are positive and negative

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

REVISIONS

REV DESCRIPTION DATE APPROVED



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

		Single Unit width and Total Unit width (in)								
		24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	
		48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	
	24.0	113.4	85.0	68.0	56.7	46.8	32.7	23.7	17.7	
	30.0	97.2	72.6	57.3	47.3	37.9	26.4	19.2	-	
14	36.0	85.0	64.0	50.4	41.2	32.0	22.3	16.1	-	
Height	42.0	75.6	57.3	45.4	37.0	27.8	19.3	-	-	
He	48.0	68.0	51.8	41.2	33.8	24.7	17.1	-	-	
	54.0	61.8	47.3	37.8	31.1	22.2	15.4	-	-	
uta	60.0	56.7	43.5	34.9	28.8	20.2	-	-	-	
Tributary	66.0	52.3	40.3	32.4	26.8	18.5	-	-	-	
-	72.0	48.6	37.5	30.2	25.1	17.1	-	-	-	
	78.0	45.4	35.1	28.3	23.6	15.9	-	-	-	
	84.0	42.5	33.0	26.7	22.2	-	-	-	-	

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 = $\frac{H1 + H2}{2}$

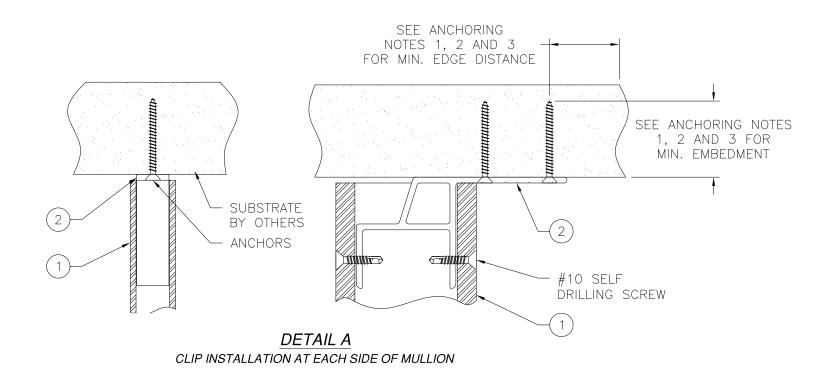
STERGIS WINDOW & DOORS 79 WALTON STREET ATTLEBORO, MA 02703 1 X 3 HORIZONTAL STRUCTURAL TUBING MULLION - LMI & SMI ELEVATIONS, NOTES AND DESIGN PRESSURE CHARTS DRAWN: DWG NO. ONAL ENT R.L. 08-03875 SCALE NTS SHEET 2 OF 4 DATE 01/24/23 L. ROBERTO LOMAS P.E. Luis R. Lomas P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 FL No.: 62514 434-688-0609 rllomas@lrlomaspe.com

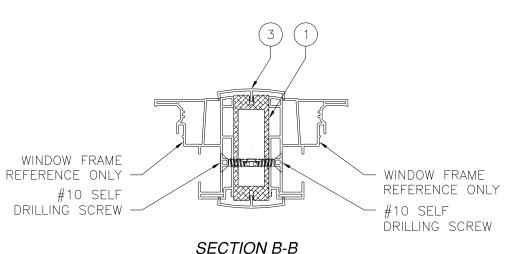
SIGNED: 01/24/2023

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







WINDOW TO MULLION INSTALLATION

ANCHORING NOTES:

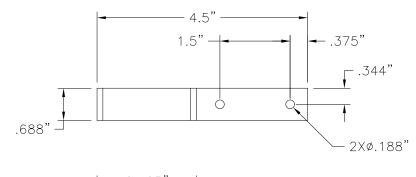
- 1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE AND 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/2" MINIMUM EDGE DISTANCE AND 1 1/2" MINIMUM DISTANCE 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

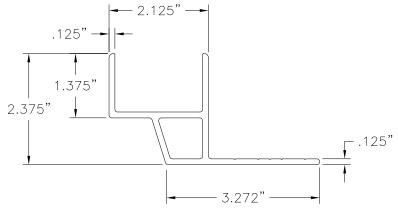
SIGNED: 01/24/2023

STERGIS WINDOW & DOORS 79 WALTON STREET ATTLEBORO, MA 02703 1 X 3 HORIZONTAL STRUCTURAL TUBING MULLION - LMI & SMI INSTALLATION DETAILS AND B.O.M. DRAWN: DWG NO. 08-03875 R.L. 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

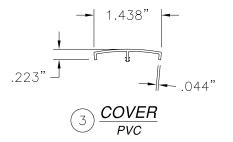
3" — 2.186" — 125" 1" — .75"

1X3 STRUCTURAL TUBING MULLION 6063-T6 ALUMINUM





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



REVISIONS

REV DESCRIPTION DATE APPROVED

SIGNED: 01/24/2023

ST	ERGIS 79 ATTL	ILLUS R. LONG				
1 X 3	HORIZ MULI	No. 6251# * No. 6251# * No. 6251# STATE OF				
DRAWN:		DWG NO.			REV	ORIDA
R.L.		_	MONAL ENGLIS			
SCALE NTS	DATE 01	/24/23	SHEET 4	OF 4		William Control
	L. 400 S. PAI 434-688-	Luis R. Lomas P.E. FL No.: 62514				