

REINFORCED IMPACT UP TO WIND ZONE 3

Maximum design pressure chart (psf) Design Pressures Are Positive And Negative

| | 200g.1.10000.1007.110.1109uu10 | | | | | | | | | | |
|-----------|--------------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Mullion | Tributary | Tributary width (in) | | | | | | | | | |
| span (in) | Height (in) | 24.00 | 28.00 | 32.00 | 36.00 | 40.00 | 44.00 | 48.00 | 52.00 | 54.00 | 60.00 |
| 48.00 | 24.00 | 135.3 | 121.8 | 110.7 | 101.5 | 93.7 | 87.0 | 81.2 | 76.1 | 73.8 | 67.7 |
| 56.00 | 28.00 | 110.7 | 99.4 | 90.8 | 83.5 | 77.3 | 72.0 | 67.4 | 63.3 | 61.4 | 56.4 |
| 64.00 | 32.00 | 93.7 | 83.5 | 76.1 | 70.3 | 65.3 | 60.9 | 57.1 | 53.7 | 52.2 | 48.1 |
| 72.00 | 36.00 | 81.2 | 72.0 | 65.3 | 60.1 | 56.0 | 52.4 | 49.2 | 46.4 | 45.1 | 41.6 |
| 80.00 | 40.00 | 71.6 | 63.3 | 56.9 | 51.3 | 46.9 | 43.3 | 40.2 | 37.5 | 36.2 | 33.0 |
| 88.00 | 44.00 | 54.8 | 47.6 | 42.3 | 38.1 | 34.8 | 32.1 | 29.8 | 27.8 | 26.9 | 24.5 |
| 96.00 | 48.00 | 42.0 | 36.4 | 32.3 | 29.0 | 26.5 | 24.4 | 22.6 | 21.1 | 20.5 | 18.7 |
| 104.00 | 52.00 | 32.8 | 28.4 | 25.2 | 22.6 | 20.6 | 19.0 | 17.6 | 16.4 | 15.9 | - |
| 112.00 | 56.00 | 26.1 | 22.6 | 20.0 | 18.0 | 16.4 | 15.0 | - | - | - | - |
| 120.00 | 60.00 | 21.2 | 18.3 | 16.2 | 1 | - | 1 | - | - | - | - |
| 128.00 | 64.00 | 17.4 | 15.0 | - | - | - | - | - | - | - | - |

| REVISIONS | | | | | | |
|-----------|------------------------------|----------|----------|--|--|--|
| REV | DESCRIPTION | DATE | APPROVED | | | |
| В | REVISED PER NEW REQUIREMENTS | 01/04/18 | R.L. | | | |

NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
- 2. WOOD 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
- 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 &
 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. UNITS MAY BE MULLED INDEFINITELY.

DESIGN PRESSURE TABLE INSTRUCTIONS:

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

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

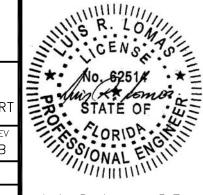
SIGNED: 01/08/2018

STERGIS WINDOWS & DOORS, INC.

79 WALTON ST
ATTLEBORO, MA 02703

10300085 ALUMINUM X MULLION
REINFORCED IMPACT
ELEVATION, NOTES AND DESIGN PRESSURE CHART

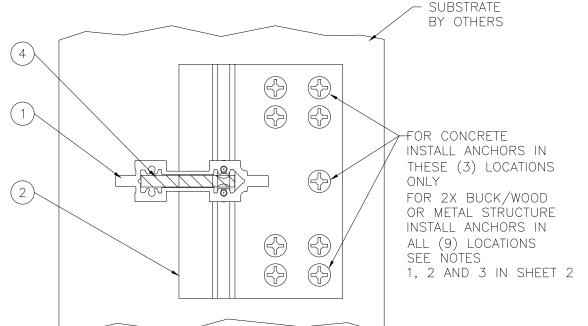
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|-----------|--|--|---------|----------|--------------|--------|
| | TABLE OF CONTENTS | DRAWN: | | DWG NO. | | REV |
| SHEET NO. | DESCRIPTION | TJH | | 08-01241 | | В |
| 1 | ELEVATION, NOTES AND DESIGN PRESSURE CHART | SCALE NTS | DATE 04 | 4/26/11 | SHEET 1 OF 4 | |
| 2, 3 | INSTALLATION DETAILS AND BILL OF MATERIALS | L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com | | | | |
| 4 | COMPONENTS | | | | | |



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

| PARTS LIST | | | | | | |
|------------|-------------|-----------------------------|--------------|------------------|--|--|
| NO. | PART NUMBER | DESCRIPTION | MANUFACTURER | MATERIAL | | |
| 1 | 10300085 | ALUMINUM VERTICAL MULLION | DECEUNINCK | ALUMINUM 6005-T5 | | |
| 2 | 10203000 | 15GA. STEEL MULLION BRACKET | DECEUNINCK | GALVANIZED STEEL | | |
| 3 | 10300093 | MULL CLIP | DECEUNINCK | ALUMINUM 6005-T5 | | |
| 4 | | MULLION REINFORCEMENT | | STEEL | | |

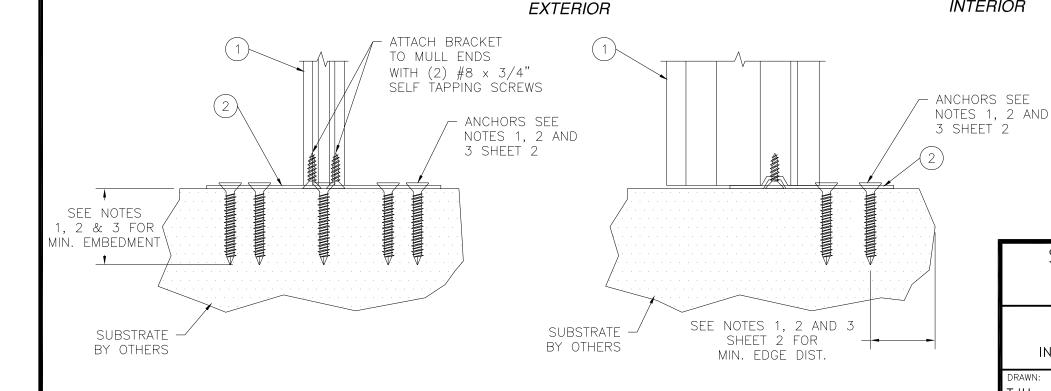
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INTERIOR

ANCHORING NOTES:

- 1) FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO MASONRY/CONCRETE USE 3/16" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. WITH 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO 16GA. MINIMUM METAL FRAMING USE #10 SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST SUBSTRATE. WITH 3/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4) FOR WINDOW UNIT ANCHORING TO VERTICAL MULLION SEE INDIVIDUAL WINDOW APPROVAL INSTALLATION INSTRUCTIONS.
- 5) FOR WINDOW UNIT ANCHORING SCHEDULE TO SUBSTRATE REFER TO INDIVIDUAL WINDOW APPROVAL INSTALLATION INSTRUCTIONS.
- 6) ALL FASTENERS TO BE CORROSION RESISTANT.
- 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 2,000 PSI.
 - C) METAL FRAMING 16GA. MINIMUM.



STEEL MULION BRACKET 10203000

INSTALLATION DETAILS

SILL, SHOWN, HEAD AND JAMBS SIMILAR.

STERGIS WINDOWS & DOORS, INC. 79 WALTON ST ATTLEBORO, MA 02703

10300085 ALUMINUM X MULLION REINFORCED IMPACT INSTALLATION DETAILS AND BILL OF MATERIALS

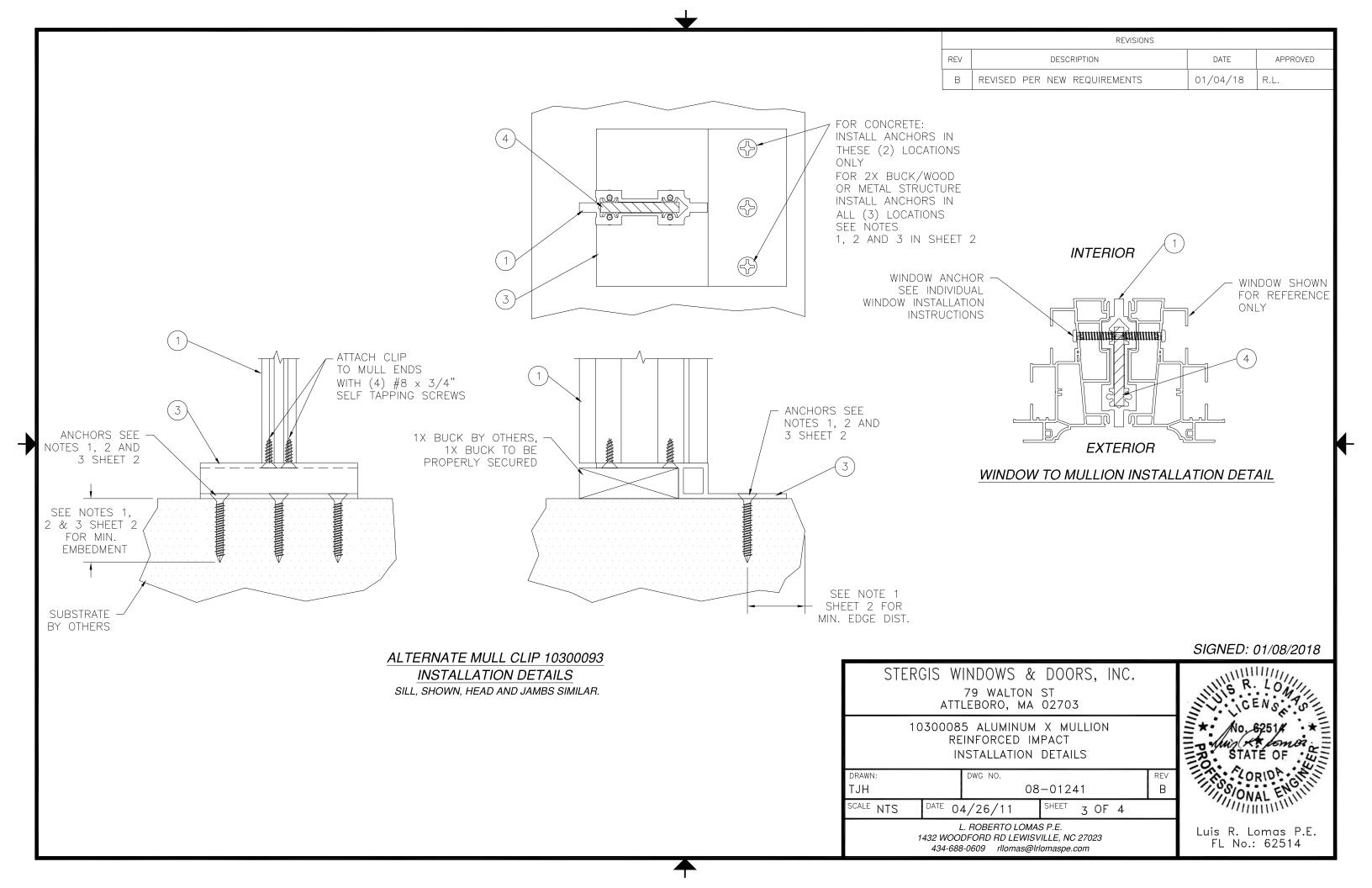
DRAWN: TJH 08-01241 В SCALE NTS DATE 04/26/11 SHEET 2 OF 4

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

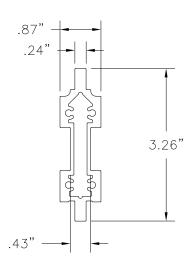


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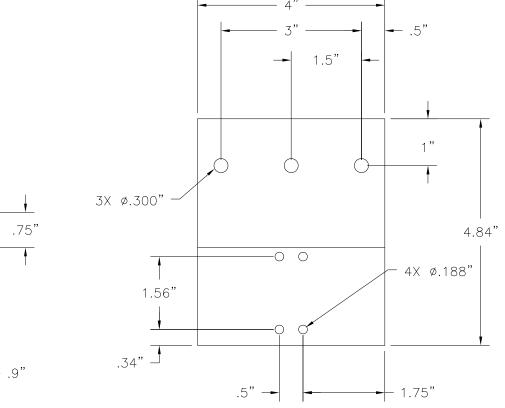
Luis R. Lomas P.E. FL No.: 62514



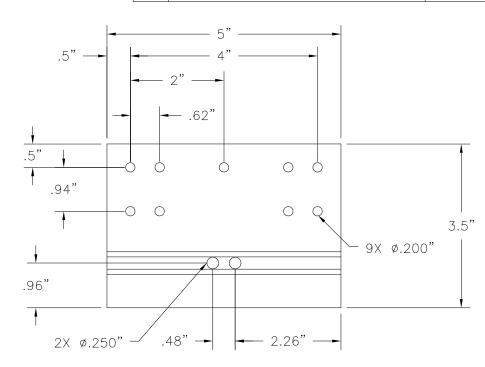
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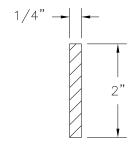
10300085 ALUMINUM VERTICAL MULLION ALUMINUM 6005-T5 .075" THICK MINIMUM



MULL CLIP ALUMINUM 6005-T5 .125" THICK



STEEL MULLION BRACKET 15GA. GALVANIZED STEEL



MULLION REINFORCEMENT STEEL 1/4" THICK

STERGIS WINDOWS & DOORS, INC.

79 WALTON ST ATTLEBORO, MA 02703 10300085 ALUMINUM X MULLION

COMPONENTS DRAWN: DWG NO. TJH 08-01241

434-688-0609 rllomas@lrlomaspe.com

REINFORCED IMPACT

SCALE NTS DATE 04/26/11 SHEET 4 OF 4 L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023

REV STAIL ST

SIGNED: 01/08/2018

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

