

**10300085 ALUMINUM VERTICAL MULLION - REINFORCED LMI WIND ZONE 3**

| <b>Maximum design pressure capacity (psf)</b>                           |                      |       |       |       |       |       |       |       |       |
|---|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| <i>Limited either by mullion, anchor screws or anchor clip capacity</i> |                      |       |       |       |       |       |       |       |       |
| Mullion span (in)   | Tributary width (in) |       |       |       |       |       |       |       |       |
|   | 24.00                | 30.00 | 36.00 | 42.00 | 48.00 | 54.00 | 60.00 | 66.00 | 72.00 |
| 24.00   | 150.0                | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 |
| 30.00   | 150.0                | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 |
| 36.00   | 150.0                | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 |
| 42.00   | 150.0                | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 | 150.0 |
| 48.00   | 150.0                | 141.4 | 129.6 | 123.4 | 121.5 | 121.5 | 121.5 | 121.5 | 121.5 |
| 54.00   | 138.9                | 119.6 | 108.0 | 101.0 | 97.2  | 96.0  | 96.0  | 96.0  | 96.0  |
| 60.00   | 121.5                | 103.7 | 92.6  | 85.5  | 81.0  | 78.5  | 77.8  | 77.8  | 77.8  |
| 66.00   | 108.0                | 91.5  | 81.0  | 74.1  | 69.4  | 66.5  | 64.8  | 64.3  | 64.3  |
| 72.00   | 97.2                 | 81.9  | 72.0  | 65.3  | 60.8  | 57.6  | 55.5  | 54.1  | 53.6  |
| 78.00   | 84.1                 | 68.8  | 58.9  | 52.1  | 47.4  | 44.0  | 41.7  | 40.1  | 39.2  |
| 84.00   | 67.0                 | 54.6  | 46.6  | 41.0  | 37.1  | 34.2  | 32.2  | 30.7  | 29.7  |
| 90.00   | 54.2                 | 44.1  | 37.5  | 32.9  | 29.6  | 27.2  | 25.4  | 24.1  | 23.1  |
| 96.00   | 44.5                 | 36.1  | 30.7  | 26.8  | 24.1  | 22.0  | 20.4  | 19.3  | 18.4  |
| 102.00  | 37.0                 | 30.0  | 25.4  | 22.2  | 19.8  | 18.1  | 16.7  | 15.7  | 14.9  |
| 108.00  | 31.1                 | 25.2  | 21.3  | 18.5  | 16.5  | 15.0  | 13.9  | 13.0  | 12.2  |
| 114.00  | 26.4                 | 21.3  | 18.0  | 15.7  | 13.9  | 12.6  | 11.6  | 10.8  | 10.2  |
| 120.00  | 22.6                 | 18.2  | 15.4  | 13.4  | 11.9  | 10.7  | -     | -     | -     |

| 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 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 WINDOW MART
- 7) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 8) UNITS MAYBE MULLED VERTICALLY OR HORIZONTALLY.
- 9) UNITS MAYBE MULLED INDEFINITELY

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.

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

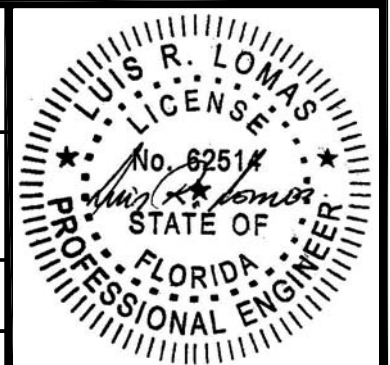
SIGNED: 02/11/2013

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| SHEET NO.         | DESCRIPTION                                 |
| 1                 | ELEVATIONS, NOTES AND DESIGN PRESSURE CHART |
| 2, 3              | INSTALLATION DETAILS AND BILL OF MATERIALS  |
| 4                 | COMPONENTS                                  |

**WINDOW MART**  
5760 ALBERT PIKE  
ROYAL, AR 71968

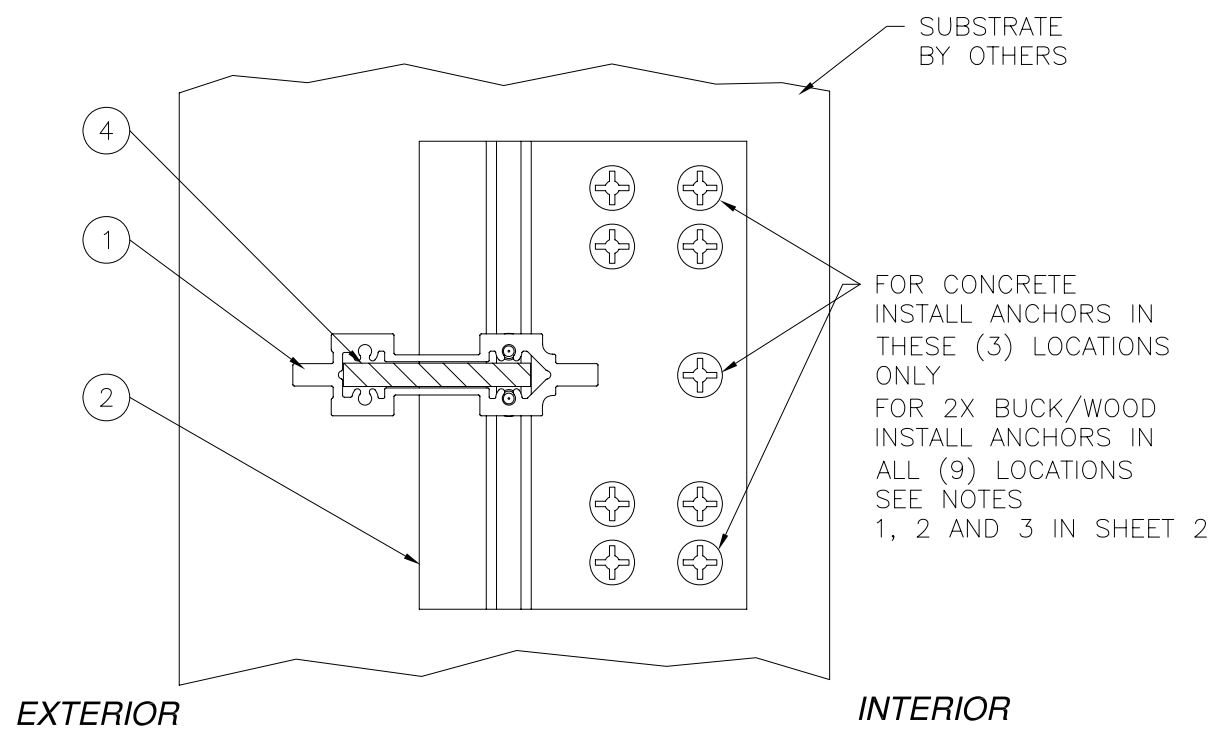
10300085 ALUMINUM VERTICAL MULLION  
REINFORCED LMI WIND ZONE 3  
ELEVATIONS, NOTES AND DESIGN PRESSURE CHART

|                |                     |              |
|----------------|---------------------|--------------|
| DRAWN:<br>A.P. | DWG NO.<br>08-01917 | REV<br>-     |
| SCALE NTS      | DATE 02/11/13       | SHEET 1 OF 4 |

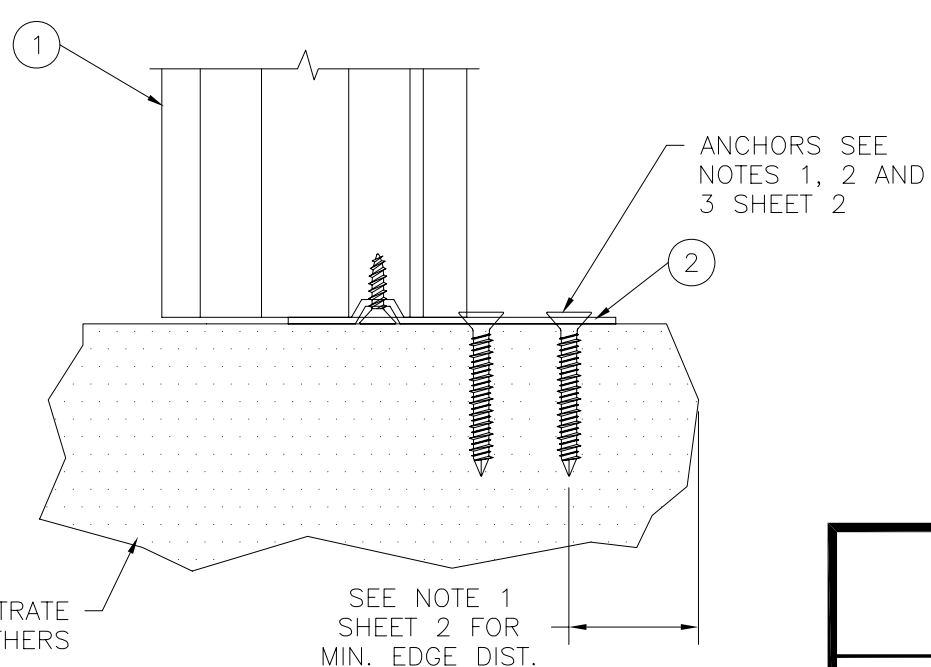
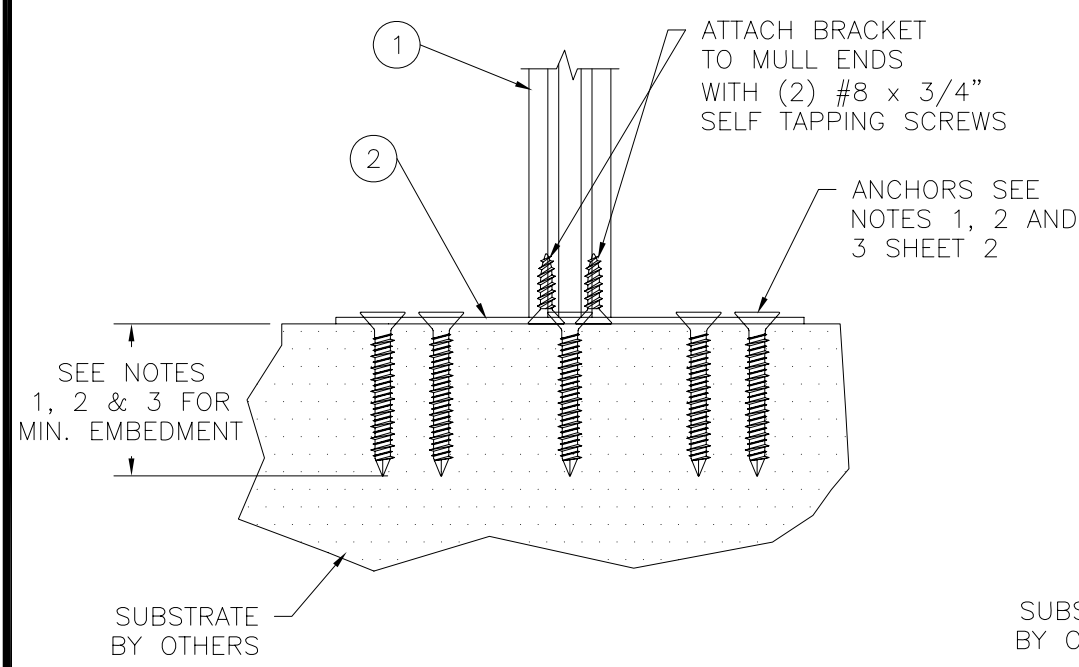


| PARTS LIST |             |                             |              |                  |
|------------|-------------|-----------------------------|--------------|------------------|
| NO.        | PART NUMBER | DESCRIPTION                 | MANUFACTURER | MATERIAL         |
| 1          | 10300085    | 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            |

| REVISIONS |             |      |          |
|-----------|-------------|------|----------|
| REV       | DESCRIPTION | DATE | APPROVED |
|           |             |      |          |



- ANCHORING NOTES:
- 1) FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO MASONRY/CONCRETE USE 1/4" 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 #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 9/16" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
  - 3) FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO 16GA. MINIMUM METAL FRAMING USE #10 TEK SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST SUBSTRATE. 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.
  - 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:  
 A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42  
 B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.  
 C) METAL FRAMING - 16GA. MINIMUM.

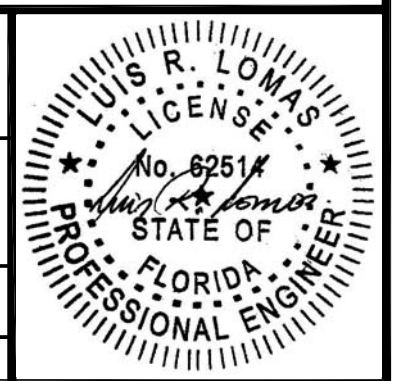


**STEEL MULLION BRACKET 10203000**  
**INSTALLATION DETAILS**  
 SILL AND HEAD TYP.

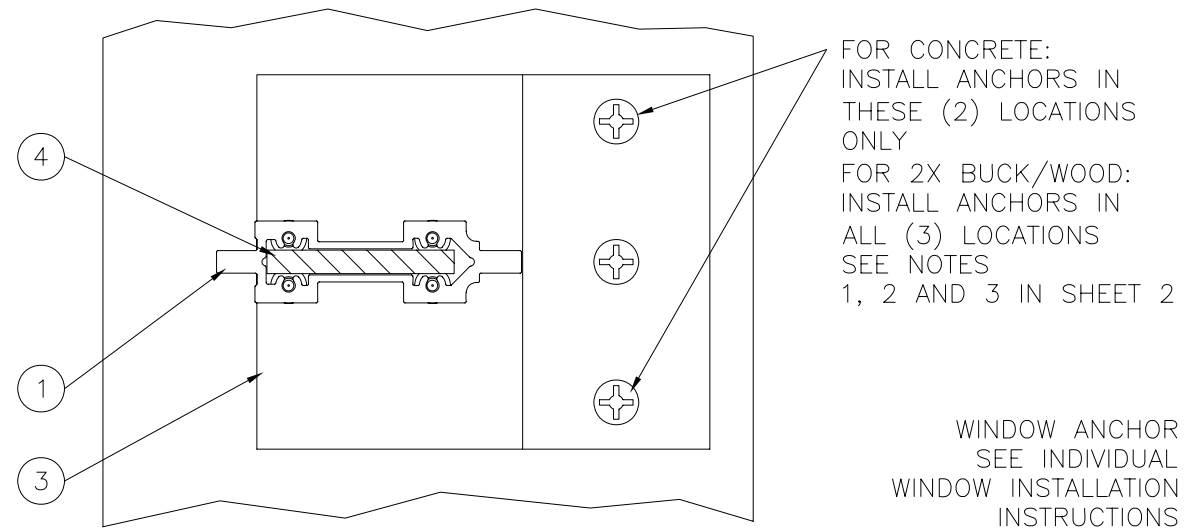
**WINDOW MART**  
 5760 ALBERT PIKE  
 ROYAL, AR 71968

10300085 ALUMINUM VERTICAL MULLION  
 REINFORCED LMI WIND ZONE 3  
 INSTALLATION DETAILS AND BILL OF MATERIALS

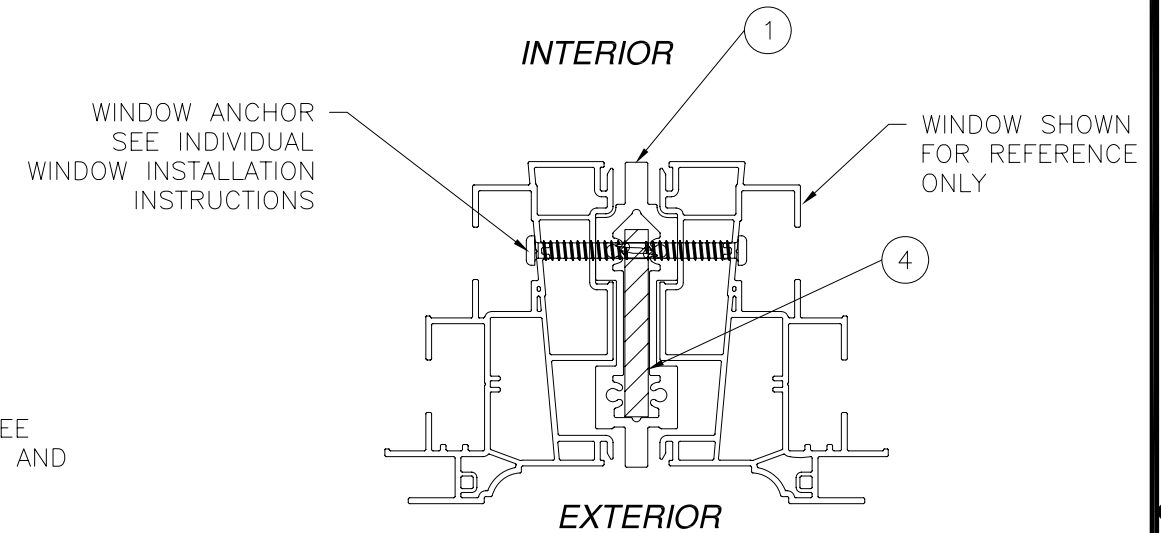
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| SCALE NTS      | DATE 02/11/13       | SHEET 2 OF 4 |



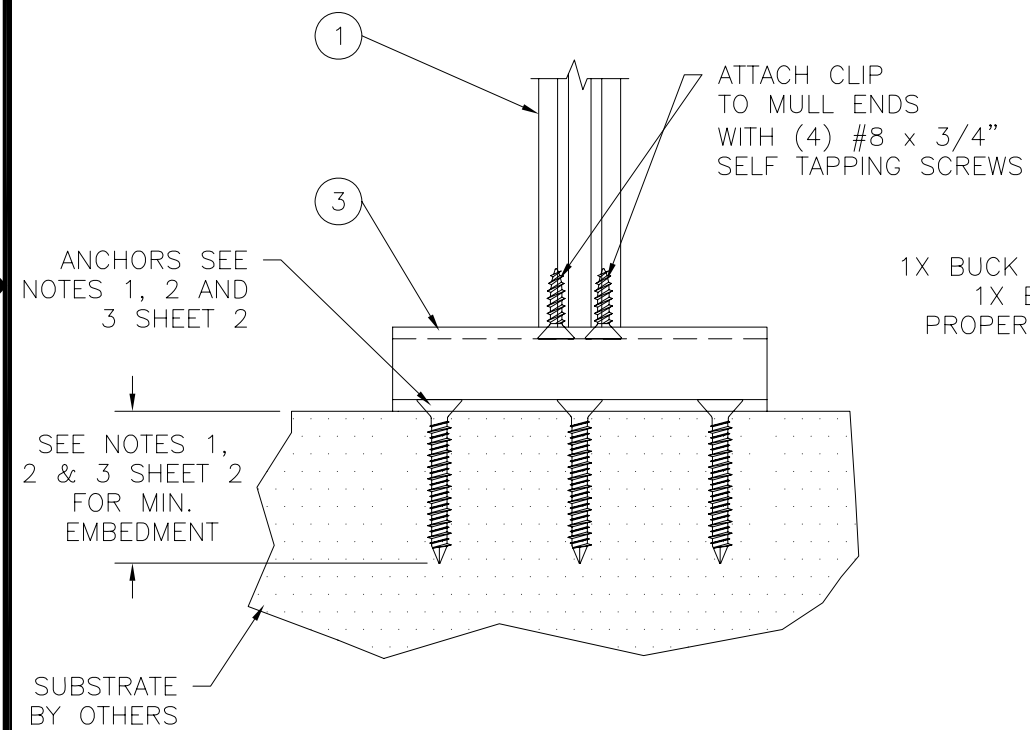
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|-----------|-------------|------|----------|
| REV       | DESCRIPTION | DATE | APPROVED |
|           |             |      |          |



FOR CONCRETE:  
INSTALL ANCHORS IN  
THESE (2) LOCATIONS  
ONLY  
FOR 2X BUCK/WOOD:  
INSTALL ANCHORS IN  
ALL (3) LOCATIONS  
SEE NOTES  
1, 2 AND 3 IN SHEET 2



**WINDOW TO MULLION INSTALLATION DETAIL**



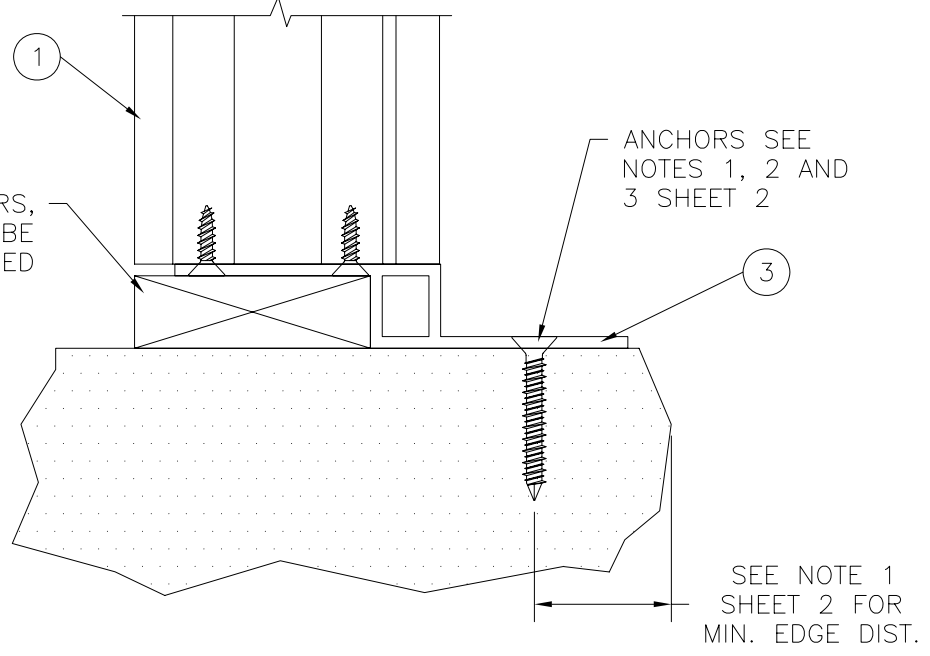
ATTACH CLIP  
TO MULL ENDS  
WITH (4) #8 x 3/4"  
SELF TAPPING SCREWS

ANCHORS SEE  
NOTES 1, 2 AND  
3 SHEET 2

SEE NOTES 1,  
2 & 3 SHEET 2  
FOR MIN.  
EMBEDMENT

SUBSTRATE  
BY OTHERS

1X BUCK BY OTHERS,  
1X BUCK TO BE  
PROPERLY SECURED

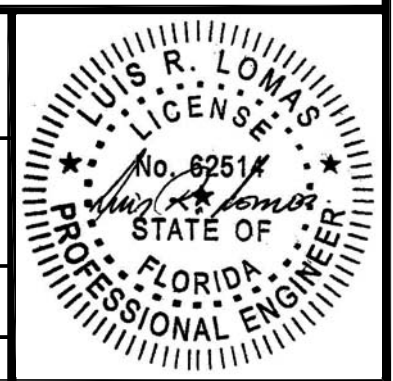


ANCHORS SEE  
NOTES 1, 2 AND  
3 SHEET 2

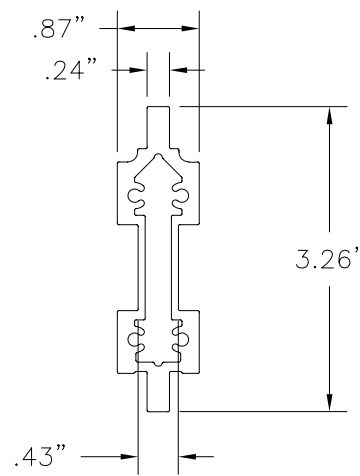
SEE NOTE 1  
SHEET 2 FOR  
MIN. EDGE DIST.

**ALTERNATE MULL CLIP 10300093  
INSTALLATION DETAILS  
SILL AND HEAD TYP.**

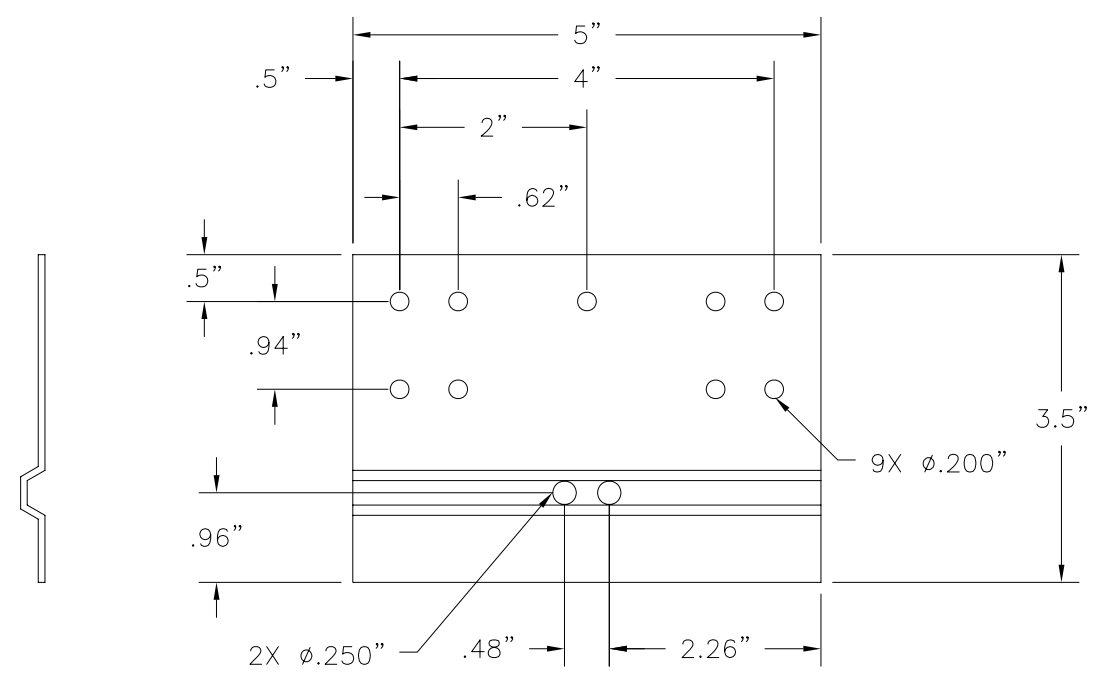
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| <b>WINDOW MART</b><br>5760 ALBERT PIKE<br>ROYAL, AR 71968                                |                     |              |
| 10300085 ALUMINUM VERTICAL MULLION<br>REINFORCED LMI WIND ZONE 3<br>INSTALLATION DETAILS |                     |              |
| DRAWN:<br>A.P.   | DWG NO.<br>08-01917 | REV<br>-     |
| SCALE NTS  | DATE 02/11/13       | SHEET 3 OF 4 |



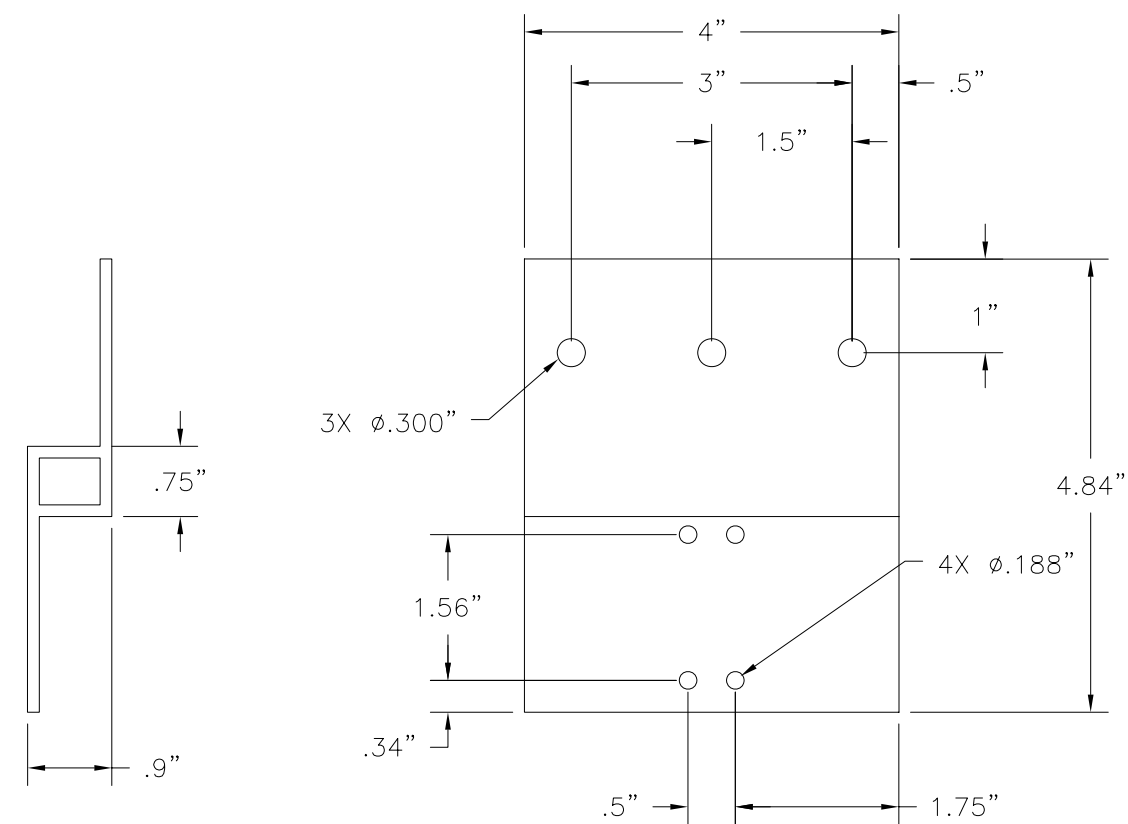
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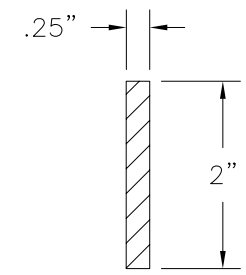
① **10300085 ALUMINUM VERTICAL MULLION**  
ALUMINUM 6005-T5 .075" THICK MINIMUM



② **STEEL MULLION BRACKET**  
15GA. GALVANIZED STEEL



③ **MULL CLIP**  
ALUMINUM 6005-T5 .125" THICK



④ **MULLION REINFORCEMENT**  
STEEL 1/4" THICK

**WINDOW MART**  
5760 ALBERT PIKE  
ROYAL, AR 71968

10300085 ALUMINUM VERTICAL MULLION  
REINFORCED LMI WIND ZONE 3  
COMPONENTS

|                |                     |              |
|----------------|---------------------|--------------|
| DRAWN:<br>A.P. | DWG NO.<br>08-01917 | REV<br>-     |
| SCALE NTS      | DATE 02/11/13       | SHEET 4 OF 4 |

