

[illegible]

**2" x 5" LVL WOOD MULLION**

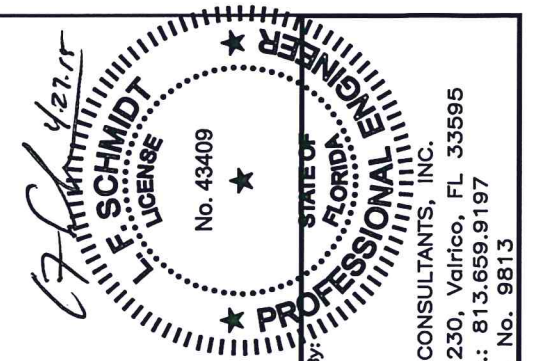
GENERAL NOTES:

1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone".
2. When used in areas requiring wind borne debris protection this product complies with Section 1609.1.2 of the FBC and does not require an impact resistant covering. This product meets missile level "D" and excludes Wind Zone 4 as defined in ASTM E 1996 and Section 1609.1.2.2 of the FBC.
3. Wood bucks by others, must be anchored properly to transfer loads to the structure and be reviewed by the Building Official.
4. Mullion anchor embedment to base material shall be beyond wall dressing or stucco.
5. Separate product approvals for each glazing product used with these mullions must be submitted along with this mullion product approval.
6. Anchoring of each glazing product to the mullion shall be as shown in each individual glazing product approval.
7. Any conditions not covered in this evaluation are subject to separate Engineering evaluation.
8. Mullion design pressure rating, see load rating table sheets 2 - 6 of this drawing.
9. The design pressure rating of the assembly shall be the lesser of the load capacity of the mullion as determined using this approval or the design pressure rating of the individual glazing products used.

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| 9                 | Mullion Anchor Plate: Anchoring Details                 |



## TYPICAL MULLION CONFIGURATIONS

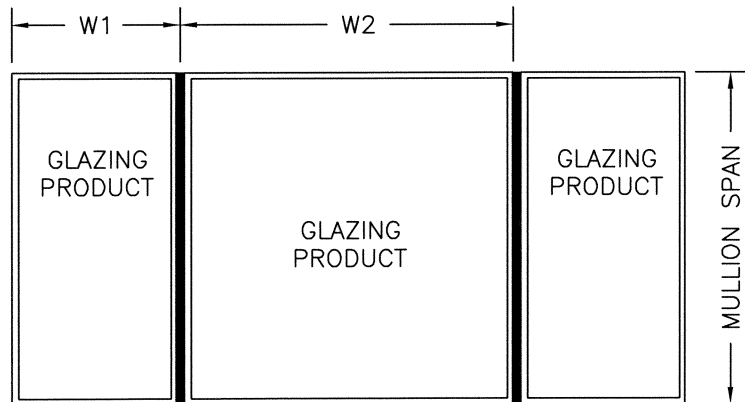


Documents Prepared By  
Lyndon F. Schmidt  
P.E. No. 43409

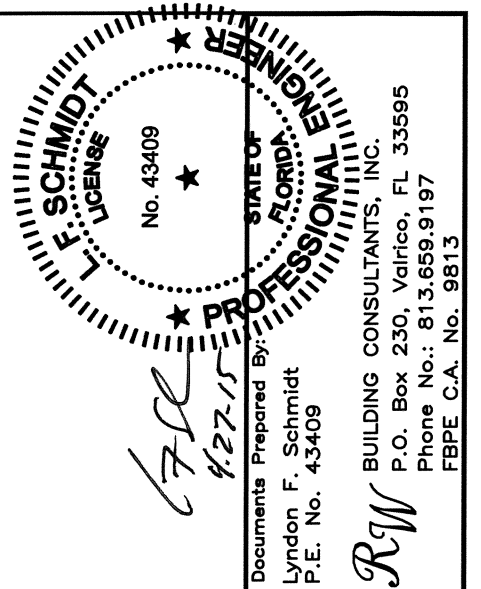
**RW**  
BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 333  
Phone No.: 813.659.9197  
FBPE C.A. No. 9813

[illegible]

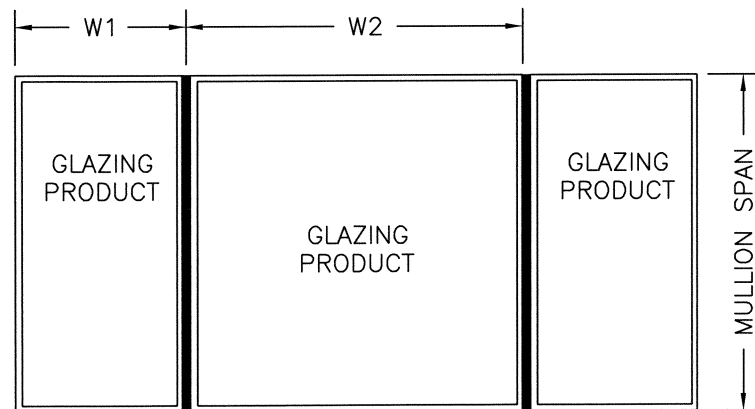
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[illegible]

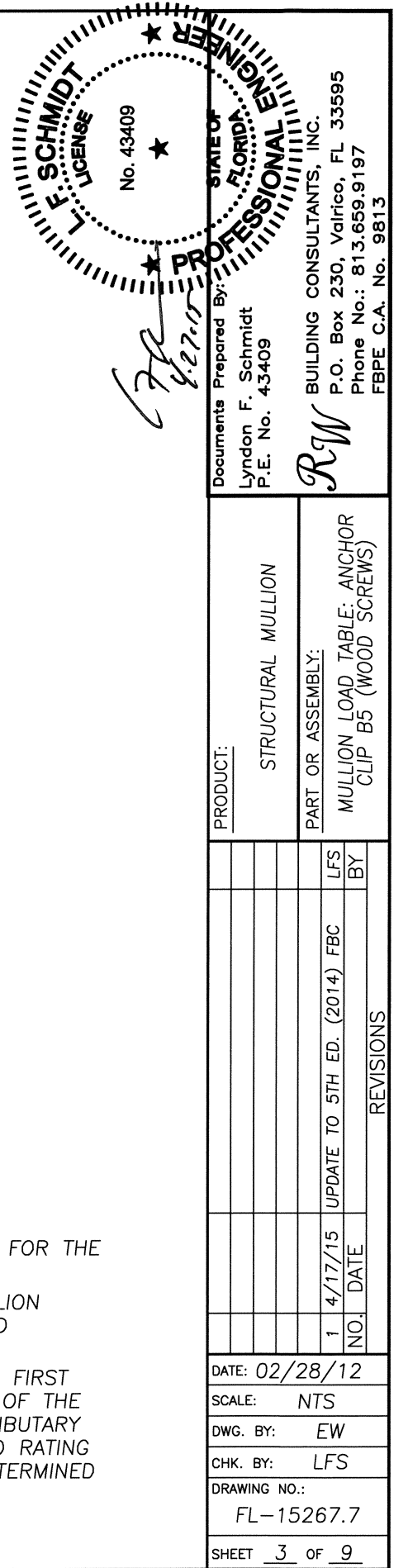
1. DETERMINE THE DESIGN LOAD REQUIREMENT PER CHAPTER 16 OF THE FBC FOR THE PARTICULAR OPENING.
2. FOR THE PARTICULAR OPENING, DETERMINE THE TRIBUTARY WIDTH AND MULLION SPAN. REFERENCE THE SKETCHES ON THIS SHEET FOR MULLION SPAN AND TRIBUTARY WIDTH DETERMINATION.
3. IN THE FIRST COLUMN OF THE TABLE, LOCATE THE MULLION SPAN. IN THE FIRST ROW OF THE TABLE, LOCATE THE TRIBUTARY WIDTH. AT THE INTERSECTION OF THE ROW CONTAINING THE MULLION SPAN AND THE COLUMN CONTAINING THE TRIBUTARY WIDTH, READ THE MULLION LOAD RATING GIVEN IN PSF. THE MULLION LOAD RATING MUST BE EQUAL TO OR GREATER THAN THE DESIGN LOAD REQUIREMENT DETERMINED IN STEP 1 ABOVE.

[illegible]

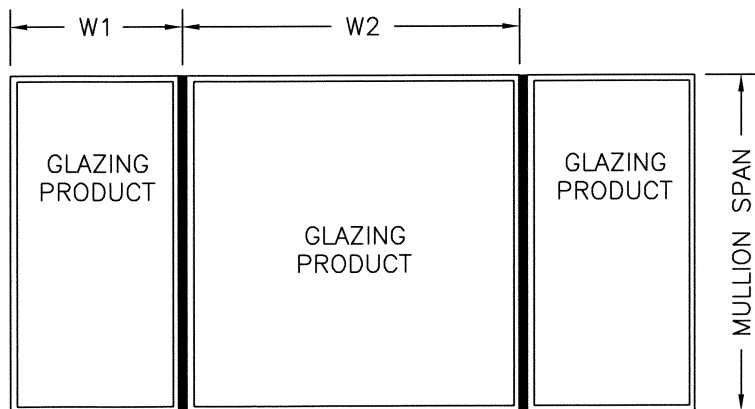
$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

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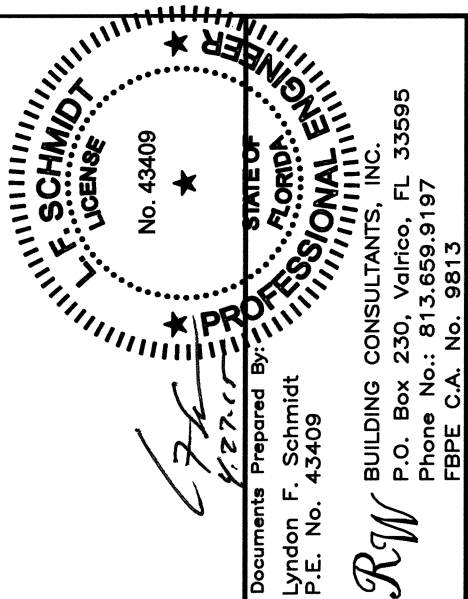
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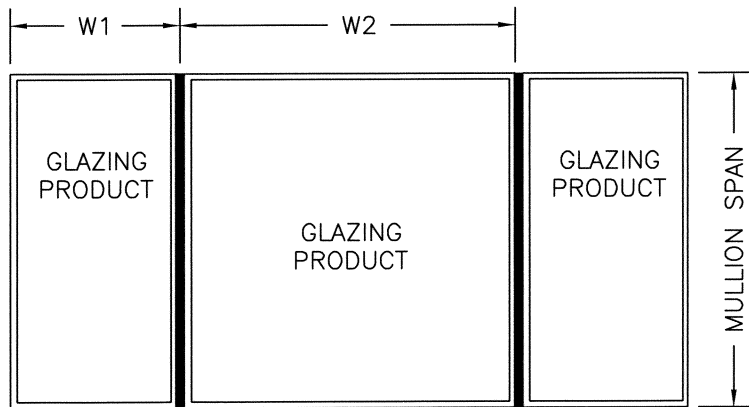
$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

[illegible]

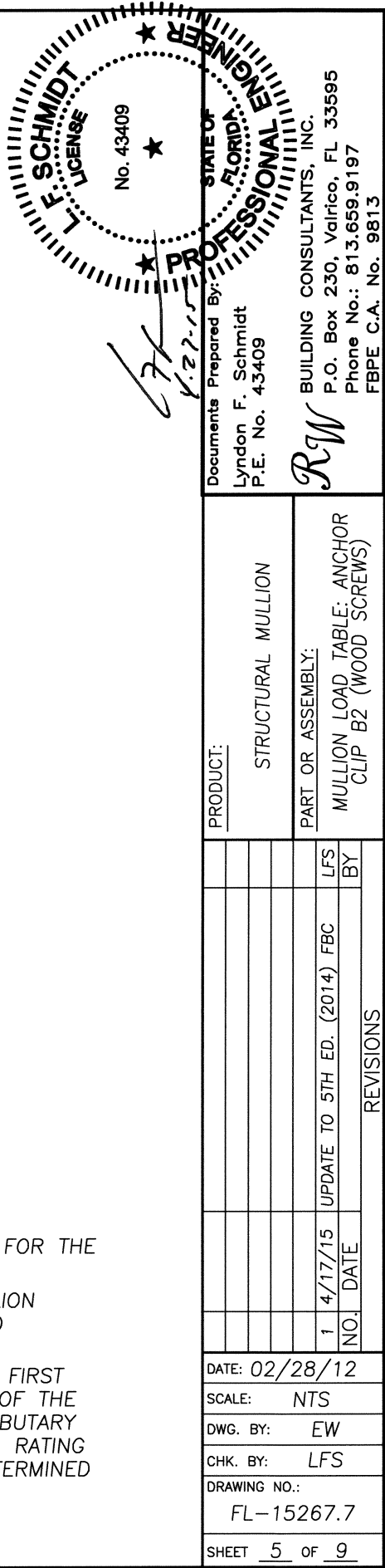
- INSTRUCTIONS FOR USE OF THE MULLION LOAD TABLE:
1. DETERMINE THE DESIGN LOAD REQUIREMENT PER CHAPTER 16 OF THE FBC FOR THE PARTICULAR OPENING.
  2. FOR THE PARTICULAR OPENING, DETERMINE THE TRIBUTARY WIDTH AND MULLION SPAN. REFERENCE THE SKETCHES ON THIS SHEET FOR MULLION SPAN AND TRIBUTARY WIDTH DETERMINATION.
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[illegible]

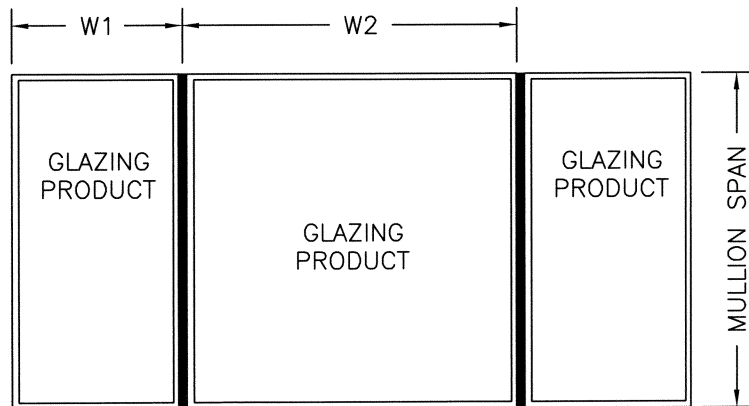
$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

[illegible]

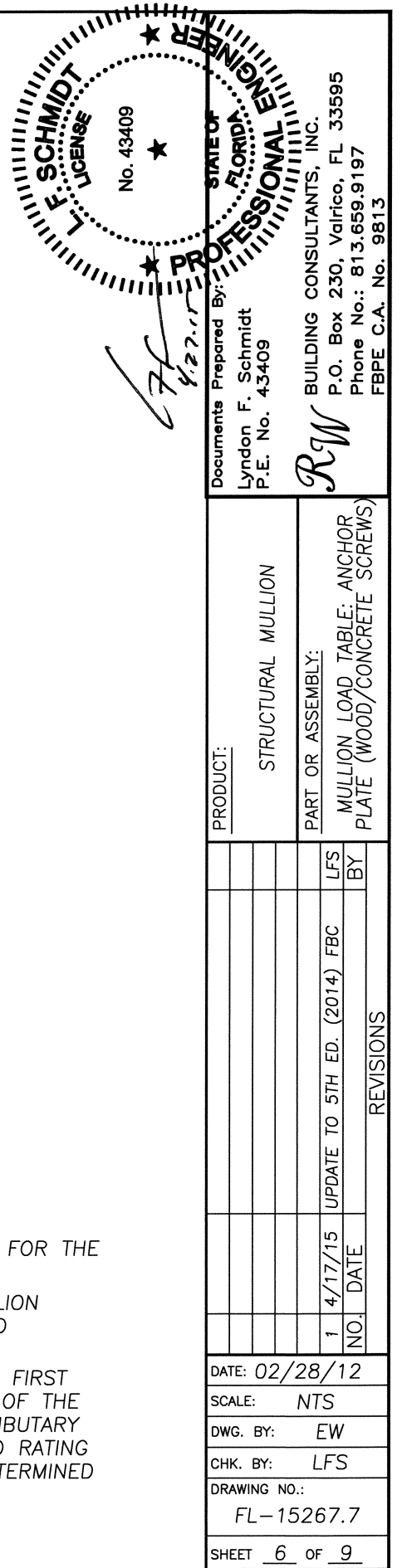
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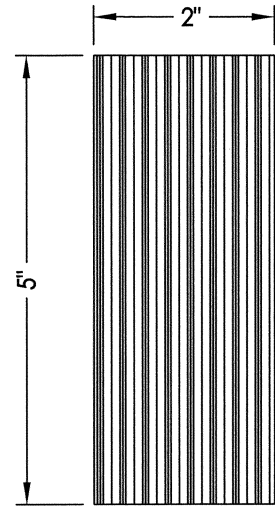


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[illegible]

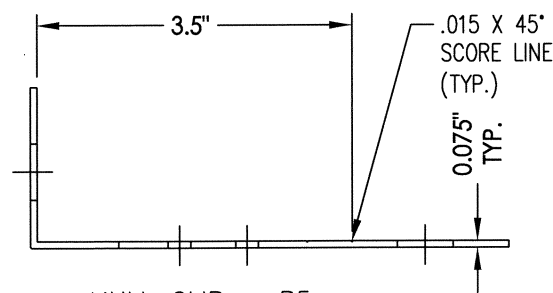
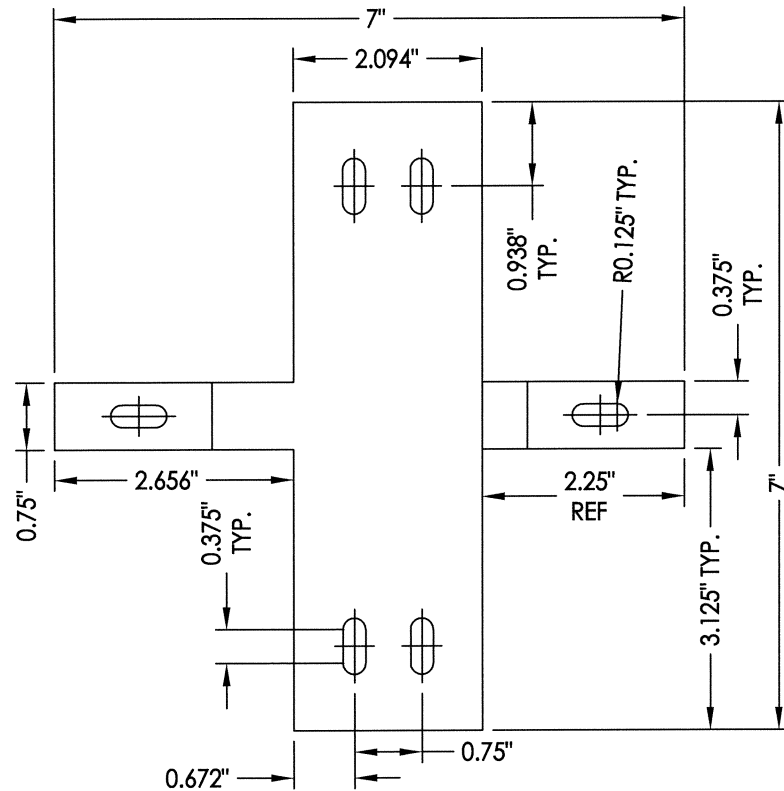
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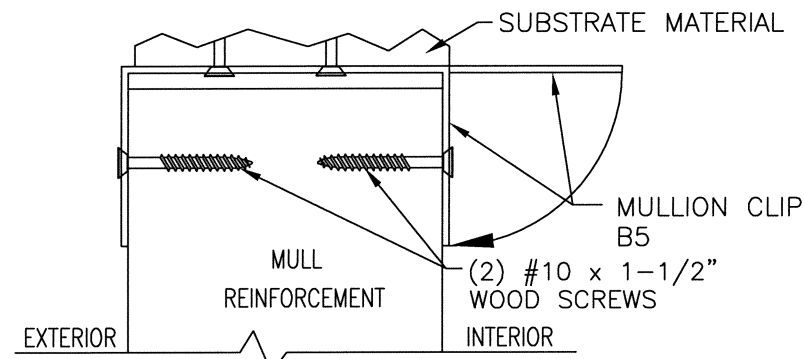
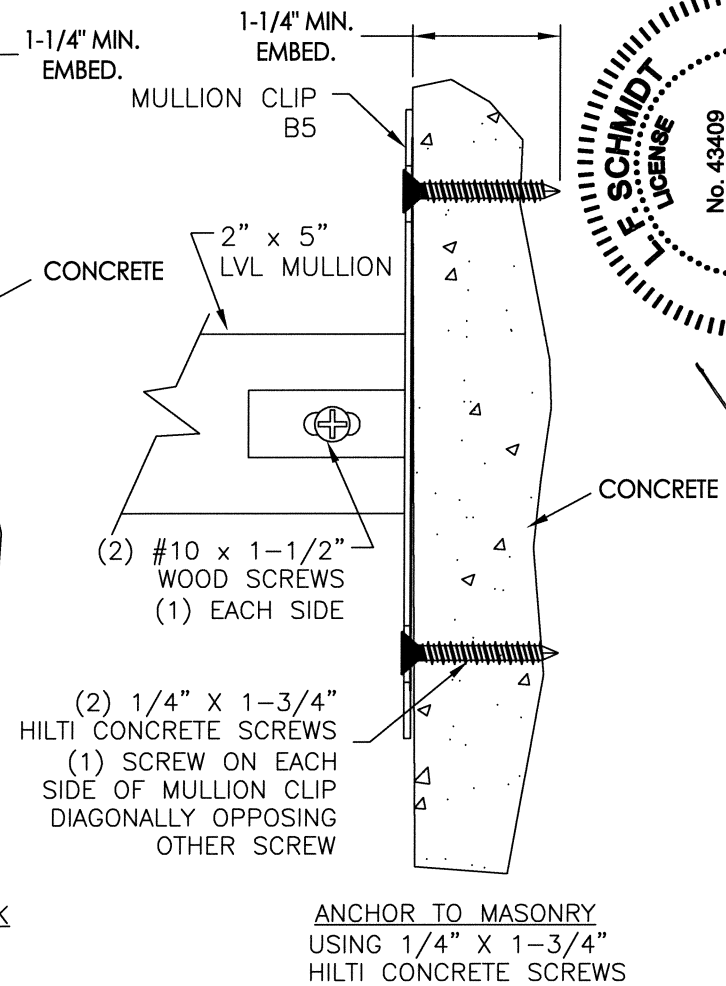
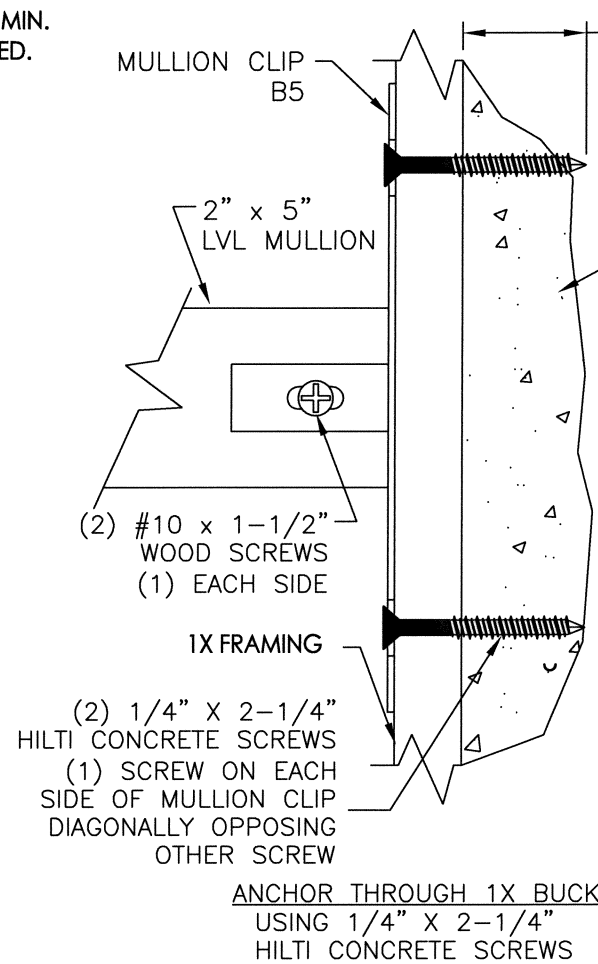
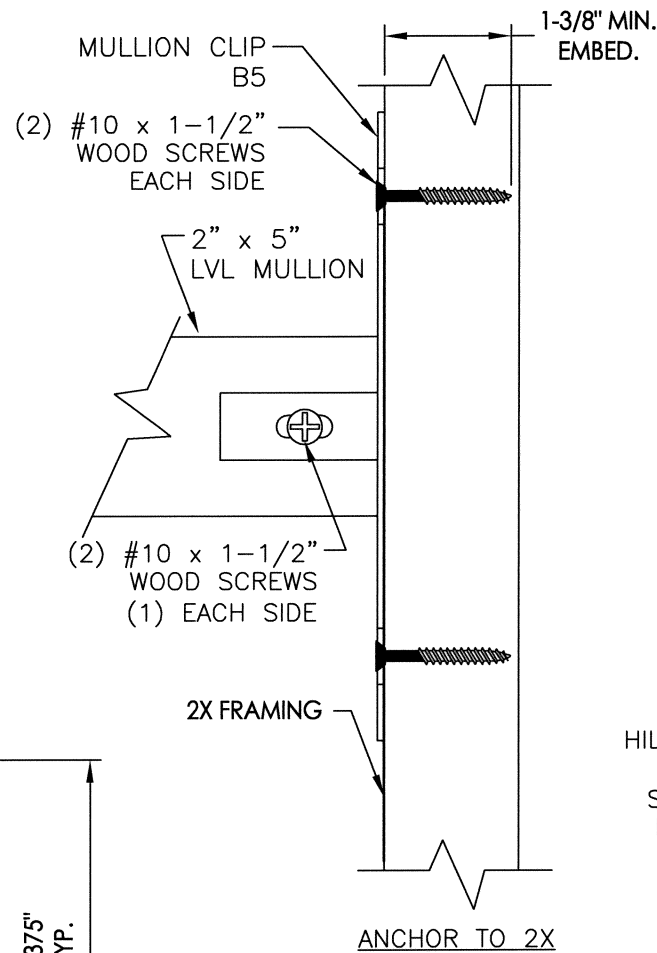


2" x 5" LVL MULLION

Pacific Wood Laminates Douglas-Fir LVL (PacWorks Series)  
Minimum Design Properties: F = 2400 psi, E = 1.8 x 10<sup>6</sup> psi



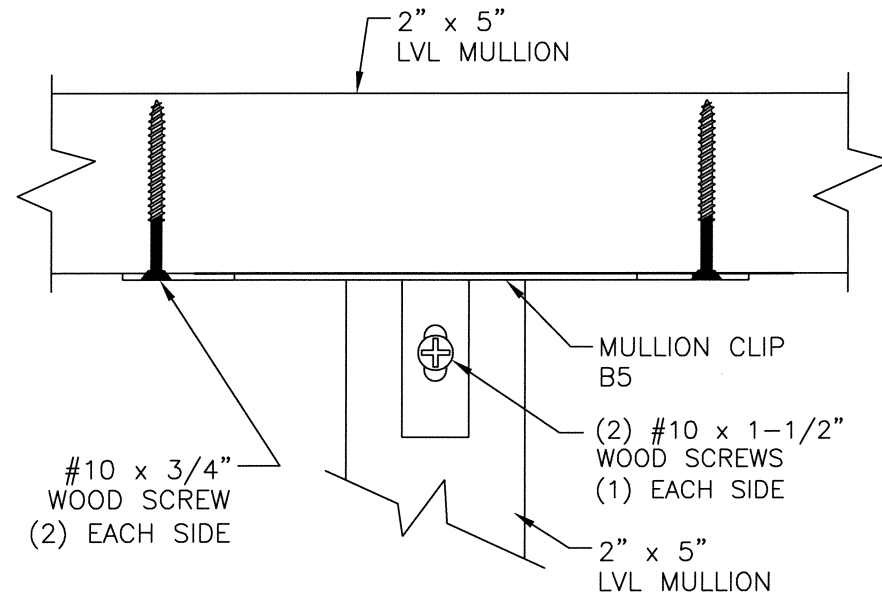
MULL CLIP - B5  
ALUMINUM (6063-T6)



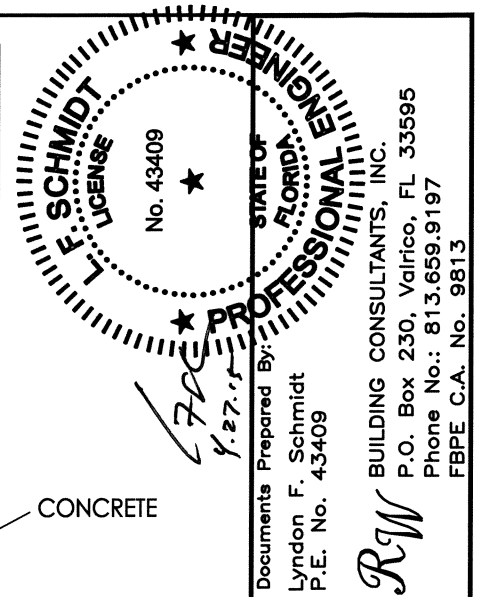
INSTALLATION PROCEDURE  
SEE 2X, 1X TO MASONRY & MASONRY ANCHORING ABOVE

| MULLION ANCHOR BRACKET ANCHOR SCHEDULE |              |                  |                      |                                 |
|----------------------------------------|--------------|------------------|----------------------|---------------------------------|
| ANCHOR                                 | SUBSTRATE    | EMBEDMENT (MIN.) | EDGE DISTANCE (MIN.) | CENTER-TO-CENTER SPACING (MIN.) |
| #10 PFH WOOD SCREW                     | WOOD         | 1-3/8"           | 1"                   | 1"                              |
| 1/4" Ø PFH HILTI KWIK-CON II+          | HOLLOW BLOCK | 1-1/4"           | 2-1/2"               | 3"                              |
|                                        | CONCRETE     | 1-1/4"           | 2-1/2"               | 3"                              |

CONCRETE CONFORMING TO ACI 301 (3,000 PSI MIN.) OR HOLLOW BLOCK CONFORMING TO ASTM C90  
WOOD FRAMING (S.G. >= 0.42)



MULLION TO MULLION ANCHORING



Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

RW BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE C.A. No. 9813

| PRODUCT:                |         | STRUCTURAL MULLION                  |     |
|-------------------------|---------|-------------------------------------|-----|
| PART OR ASSEMBLY:       |         | ANCHORING CLIP B5 ANCHORING DETAILS |     |
| NO.                     | DATE    | REVISIONS                           | BY  |
| 1                       | 4/17/15 | UPDATE TO 5TH ED. (2014) FBC        | LFS |
| DATE: 02/28/12          |         | SCALE: NTS                          |     |
| DWG. BY: EW             |         | CHK. BY: LFS                        |     |
| DRAWING NO.: FL-15267.7 |         | SHEET 7 OF 9                        |     |

R:\Clients\Eagle Window and Door PERMANENT\Florida Product Approvals\FL-15267 - Windows - Mullions\C - Drawings\FL 15267 (2014)\FL-15267.7.dwg, 7.8

2" x 5" LVL MULLION

Pacific Wood Laminates Douglas-Fir LVL (PacWorks Series)  
Minimum Design Properties: F = 2400 psi, E = 1.8 x 10<sup>6</sup> psi

7.5"  
2.594"  
0.938" TYP.  
1.75"  
0.375" TYP.  
2.656"  
0.875" TYP.  
0.844" TYP.  
3.125" TYP.  
0.438" TYP.  
8"  
2.25" REF.

4"  
0.075" TYP.  
.015 x 45° SCORE LINE (TYP.)

MULL CLIP - B2  
ALUMINUM (6063-T6)

MULLION CLIP B2

2" x 5" LVL MULLION

(4) #10 x 1-1/2" WOOD SCREWS (2) EACH SIDE

2X FRAMING

ANCHOR TO 2X

MULLION CLIP B2

2" x 5" LVL MULLION

(4) #10 x 1-1/2" WOOD SCREWS (2) EACH SIDE

1X FRAMING

(2) 1/4" x 2-1/4" HILTI CONCRETE SCREWS (1) SCREW ON EACH SIDE OF MULLION CLIP DIAGONALLY OPPOSING OTHER SCREW

ANCHOR THROUGH 1X BUCK USING 1/4" x 2-1/4" HILTI CONCRETE SCREWS

MULLION CLIP B2

2" x 5" LVL MULLION

(4) #10 x 1-1/2" WOOD SCREWS (2) EACH SIDE

(2) 1/4" x 1-3/4" HILTI CONCRETE SCREWS (1) SCREW ON EACH SIDE OF MULLION CLIP DIAGONALLY OPPOSING OTHER SCREW

ANCHOR TO MASONRY USING 1/4" x 1-3/4" HILTI CONCRETE SCREWS

EXTERIOR

INTERIOR

SUBSTRATE MATERIAL

MULLION CLIP B2

(2) #10 x 1-1/2" WOOD SCREWS

MULL REINFORCEMENT

INSTALLATION PROCEDURE  
SEE 2X, 1X TO MASONRY & MASONRY ANCHORING ABOVE

| MULLION ANCHOR BRACKET ANCHOR SCHEDULE |              |                  |                      |                                 |
|----------------------------------------|--------------|------------------|----------------------|---------------------------------|
| ANCHOR                                 | SUBSTRATE    | EMBEDMENT (MIN.) | EDGE DISTANCE (MIN.) | CENTER-TO-CENTER SPACING (MIN.) |
| #10 PFH WOOD SCREW                     | WOOD         | 1-3/8"           | 1"                   | 1"                              |
| 1/4" Ø PFH HILTI KWIK-CON II+          | HOLLOW BLOCK | 1-1/4"           | 2-1/2"               | 3"                              |
|                                        | CONCRETE     | 1-1/4"           | 2-1/2"               | 3"                              |

CONCRETE CONFORMING TO ACI 301 (3,000 PSI MIN.) OR HOLLOW BLOCK CONFORMING TO ASTM C90 WOOD FRAMING (S.G. >= 0.42)

#10 x 3/4" WOOD SCREW (2) EACH SIDE

MULLION CLIP B2

(4) #10 x 1-1/2" WOOD SCREWS (2) EACH SIDE

2" x 5" LVL MULLION

MULLION TO MULLION ANCHORING

F. SCHMIDT  
LICENSE  
No. 43409  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

Documents Prepared By: Lyndon F. Schmidt  
P.E. No. 43409

RW BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE C.A. No. 9813

| PRODUCT:                            |         |
|-------------------------------------|---------|
| STRUCTURAL MULLION                  |         |
| PART OR ASSEMBLY:                   |         |
| ANCHORING CLIP B2 ANCHORING DETAILS |         |
| NO.                                 | DATE    |
| 1                                   | 4/17/15 |
| UPDATE TO 5TH ED. (2014) FBC        |         |
| REVISIONS                           |         |

DATE: 02/28/12

SCALE: NTS

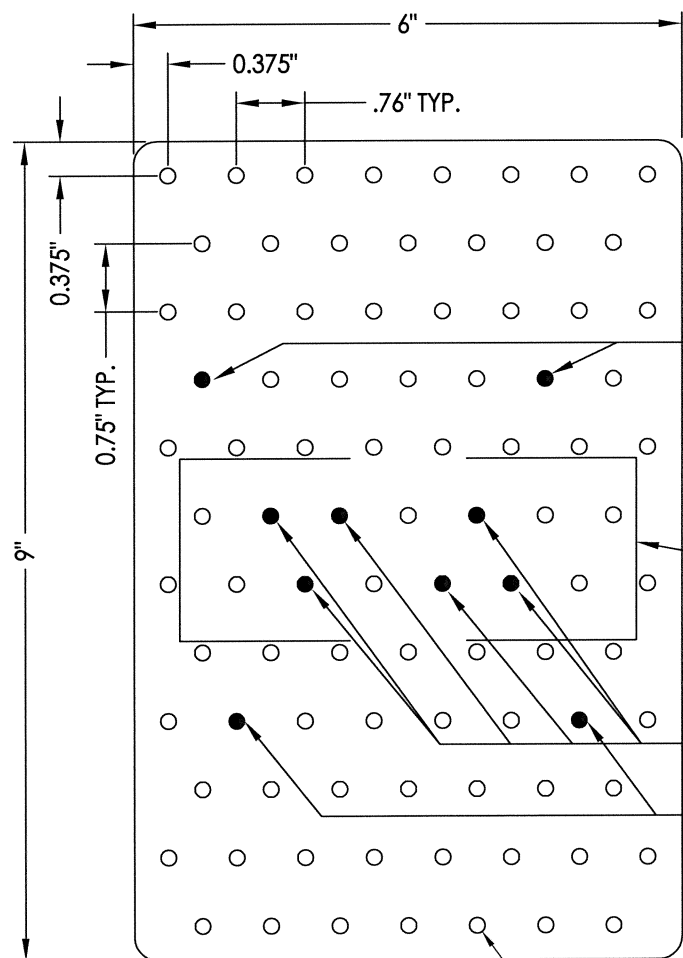
DWG. BY: EW

CHK. BY: LFS

DRAWING NO.: FL-15267.7

SHEET 8 OF 9

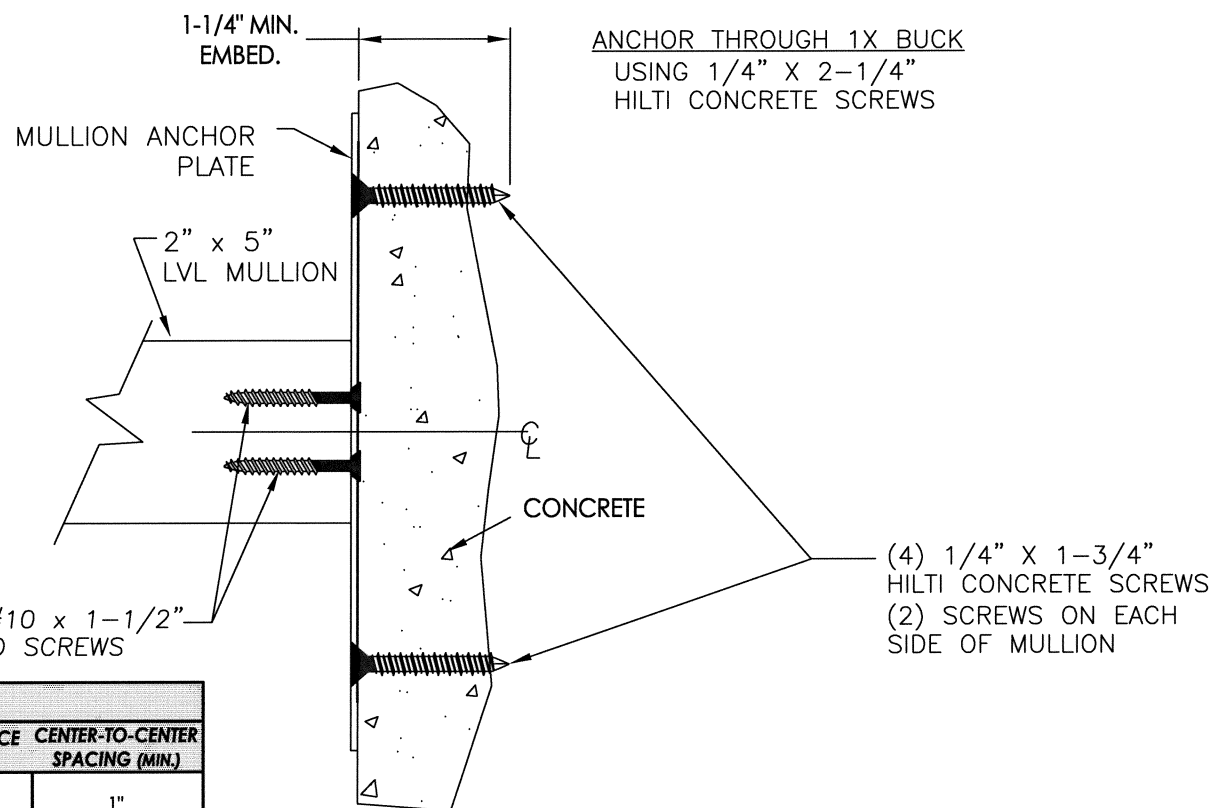
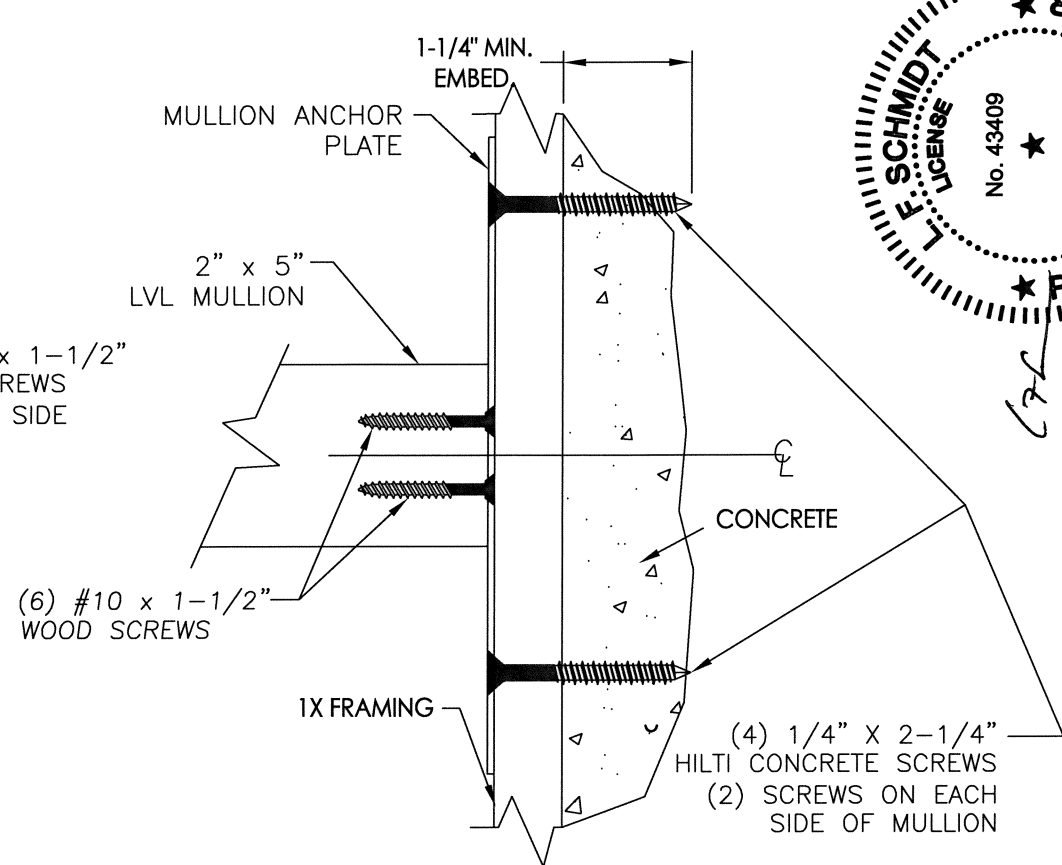
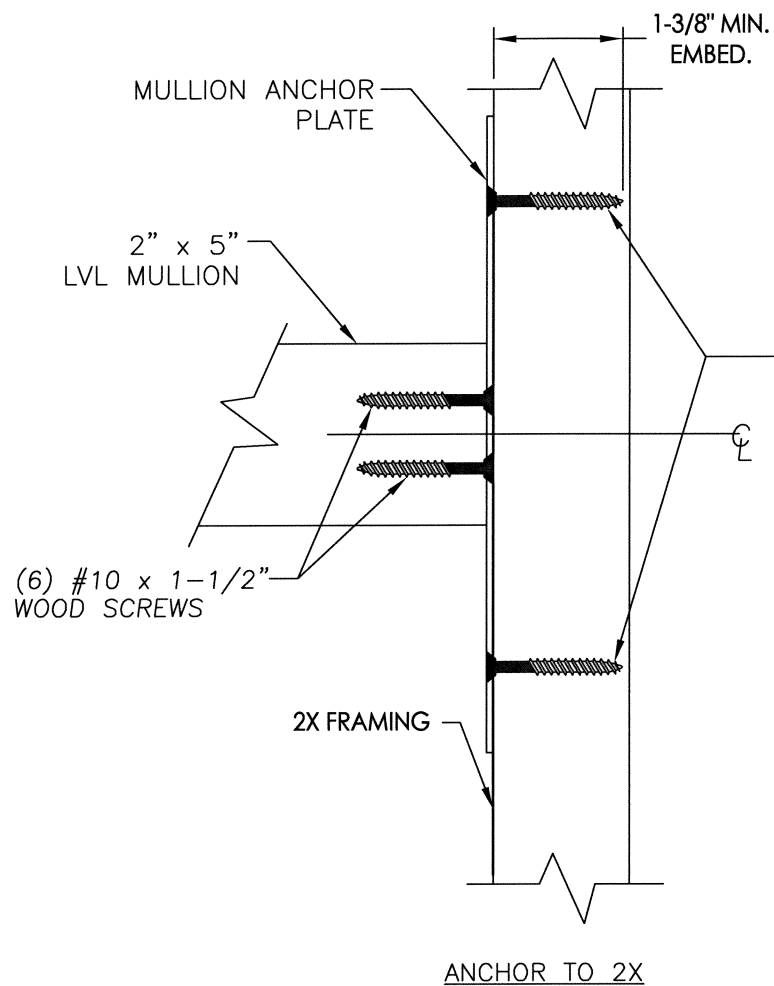
Pacific Wood Laminates Douglas-Fir LVL (PacWorks Series)  
Minimum Design Properties: F = 2400 psi, E = 1.8 x 10<sup>6</sup> psi



063" L R.250 TYP.

— Ø.172 TYP.

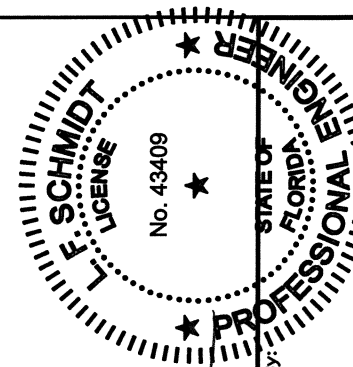
MULLION ANCHOR PLATE  
STAINLESS STEEL



| MULLION ANCHOR BRACKET ANCHOR SCHEDULE                                                                                   |              |                     |                         |                                    |
|--------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|-------------------------|------------------------------------|
| ANCHOR                                                                                                                   | SUBSTRATE    | EMBEDMENT<br>(MIN.) | EDGE DISTANCE<br>(MIN.) | CENTER-TO-CENTER<br>SPACING (MIN.) |
| #10 PFH WOOD SCREW<br>               | WOOD         | 1-3/8"              | 1"                      | 1"                                 |
| 1/4" Ø PFH<br>HILTI KWIK-CON II+<br> | HOLLOW BLOCK | 1-1/4"              | 2-1/2"                  | 3"                                 |
|                                                                                                                          | CONCRETE     | 1-1/4"              | 2-1/2"                  | 3"                                 |

CONCRETE CONFORMING TO ACI 301 (3,000 PSI MIN.) OR HOLLOW BLOCK CONFORMING TO ASTM C90  
WOOD FRAMING (S.G.  $\geq 0.42$ )

ANCHOR TO MASONRY  
USING 1/4" X 1-3/4"  
HILTI CONCRETE SCREWS



Documents Prepared By  
Lyndon F. Schmidt  
P.E. No. 43409

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BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33330

Phone No.: 813.659.  
FBPE C.A. No. 9813

CT: STRUCTURAL MULLION

**OR ASSEMBLY:**

[illegible]

DATE: 02/28/12

SCALE: *NTS*

DWG. BY: EW

CHK. BY: LFS

DRAWING NO.:  
FL-15267.7

SHEET 9 OF 9