

| REVISIONS |                              |            |          |
|-----------|------------------------------|------------|----------|
| REV       | DESCRIPTION                  | DATE       | APPROVED |
| A         | REVISED PER NEW REQUIREMENTS | 02/10/2026 | R.L.     |

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
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. 2X BUCK OVER MASONRY/CONCRETE TO BE PROPERLY SECURED TO BUILDING STRUCTURE. DESIGN AND ANCHORING OF 2X BUCK IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. 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.
5. JAMB EXTENSION MATERIAL: WOOD SPECIFIC GRAVITY G=0.59 MINIMUM (INCLUDES BUT IS NOT LIMITED TO: LARCH, SIPO, MERANTI, MAHOGANY, WHITE OAK, WALNUT)
6. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
7. DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
8. WINDOWS OR DOORS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. WINDOWS MUST BE MANUFACTURED BY BILDAU & BUSSMANN GMBH.
9. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW OR DOOR UNIT.
10. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.

ANCHORING NOTES:

1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK THROUGH INSTALLATION CLIP USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 2” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
2. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK THROUGH FRAME USE #12 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
3. FOR ATTACHING INTO METAL STRUCTURE USE #12 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE SCREWS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
4. ALL FASTENERS TO BE CORROSION RESISTANT.
5. 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. METAL STRUCTURE: STEEL 16GA, 33KSI OR ALUMINUM 6063-T5 1/8” THICK MINIMUM

SIGNED: 02/11/2026

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BILDAU & BUSSMANN GMBH

GERICHTSTRASSE 23

DE 13347 BERLIN, GERMANY

DOUBLE TIMBER VERTICAL MULLION

IMPACT 120” SPAN

NOTES

DRAWN: R.L.

DWG NO. 08-01851A

REV A

SCALE NTS

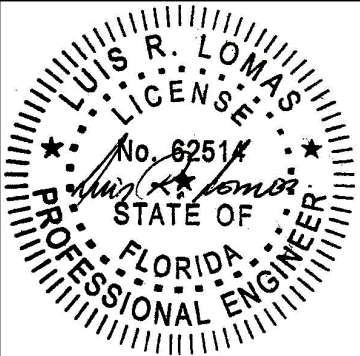
DATE 07/24/12

SHEET 1 OF 7

L. ROBERTO LOMAS P.E.

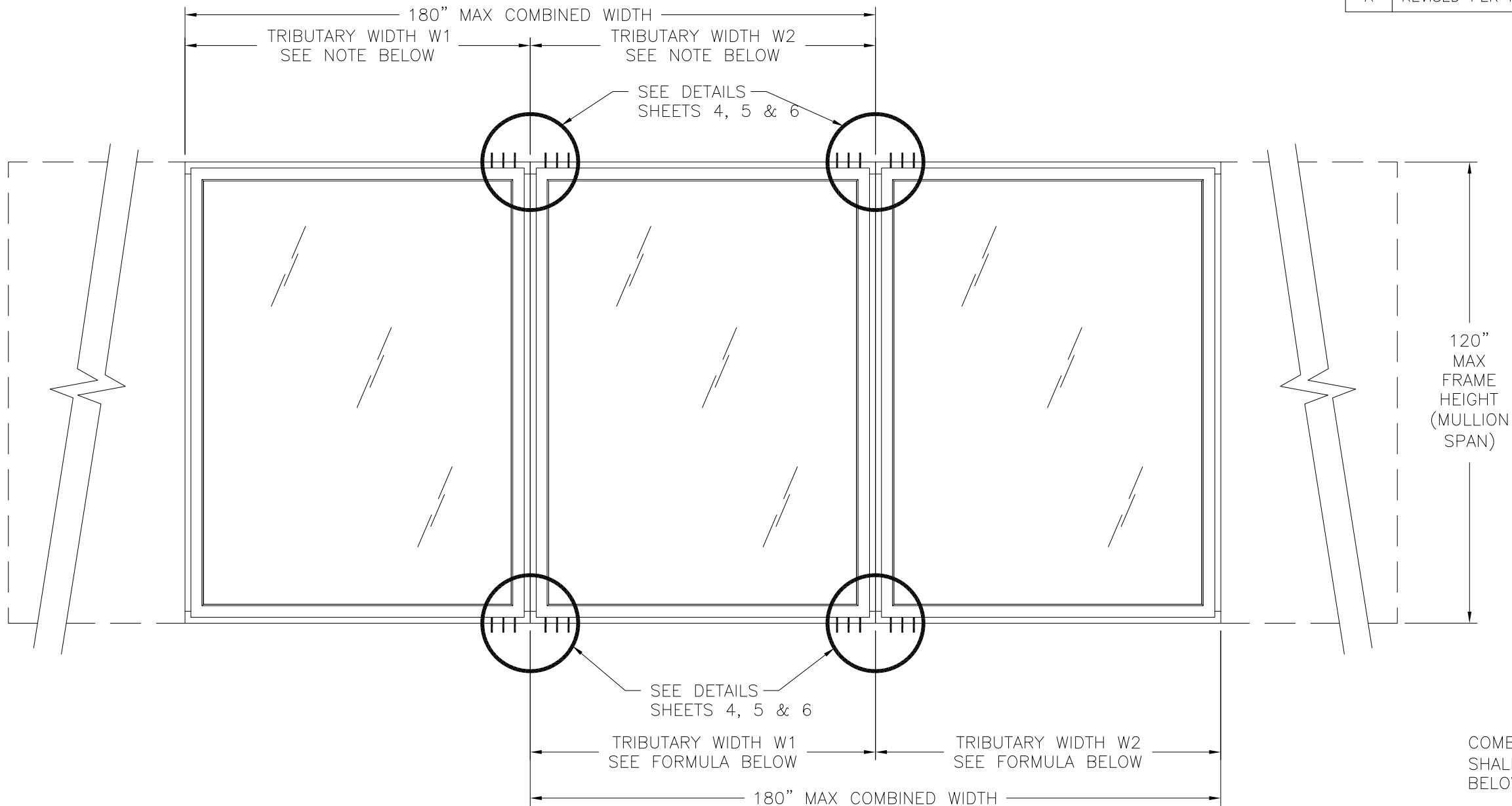
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$$\text{COMBINED WIDTH} = W1 + W2 \leq 180$$

### VERTICAL MULLION

FIXED WINDOWS SHOWN, SEE SHEET 3 FOR ADDITIONAL APPROVED CONFIGURATIONS  
UNLIMITED NUMBER OF PANELS IS APPLICABLE AS LONG AS INDIVIDUAL PANEL SIZE DOES  
NOT EXCEED MAXIMUM PANEL SIZE AND ARE ANCHORED AS SHOWN.

| DESIGN PRESSURE RATING | IMPACT RATING                     |
|------------------------|-----------------------------------|
| $\pm 70\text{PSF}$     | LARGE AND SMALL<br>MISSILE IMPACT |

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ

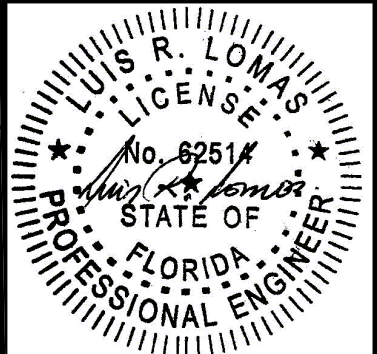
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BILDAU & BUSSMANN GMBH

GERICHTSTRASSE 23  
DE 13347 BERLIN, GERMANY

DOUBLE TIMBER VERTICAL MULLION  
IMPACT 120" SPAN  
ELEVATION

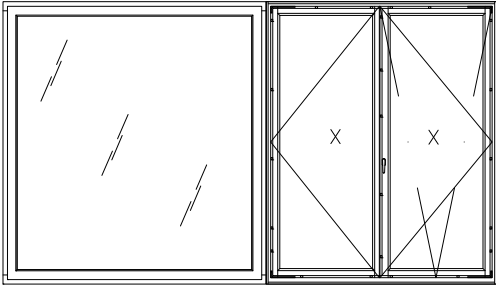
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|---------------------------------------------------------------------------------------------------|----------------------|--------------|
| DRAWN:<br>R.L.                                                                                    | DWG NO.<br>08-01851A | REV<br>A     |
| SCALE NTS                                                                                         | DATE 07/24/12        | SHEET 2 OF 7 |
| L. ROBERTO LOMAS P.E.<br>208 7th Ave, INDIALANTIC, FL 32903<br>434-688-0609 rllomas@lrlomaspe.com |                      |              |



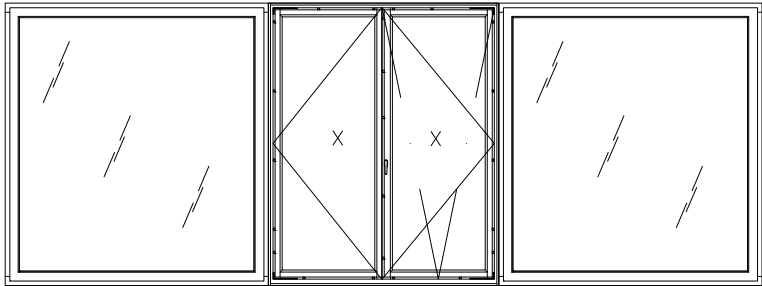
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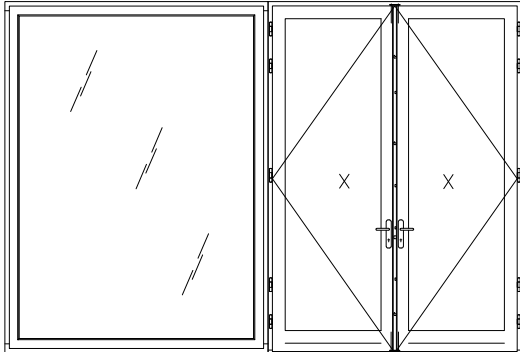
APPROVED CONFIGURATIONS



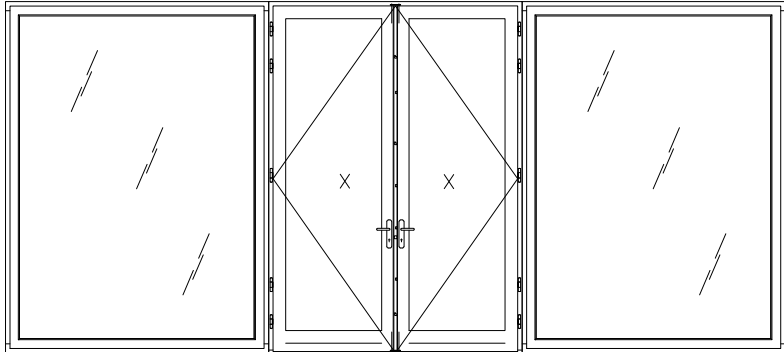
DOUBLE CASEMENT WITH FIXED WINDOW



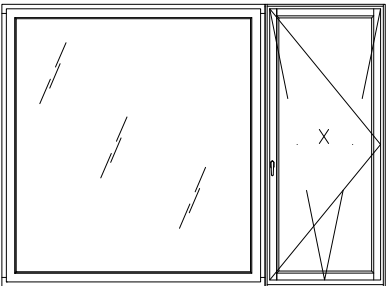
DOUBLE CASEMENT WITH FIXED WINDOWS



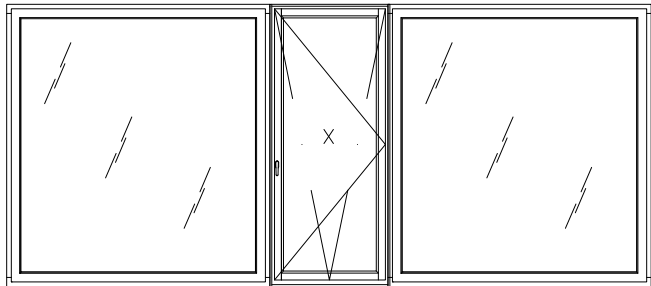
DOUBLE DOOR WITH FIXED WINDOW



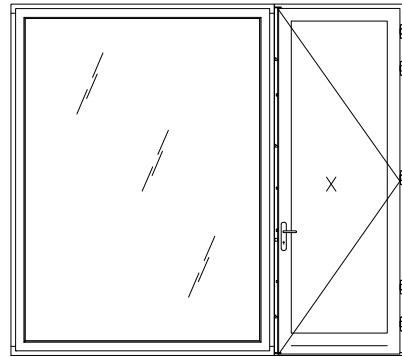
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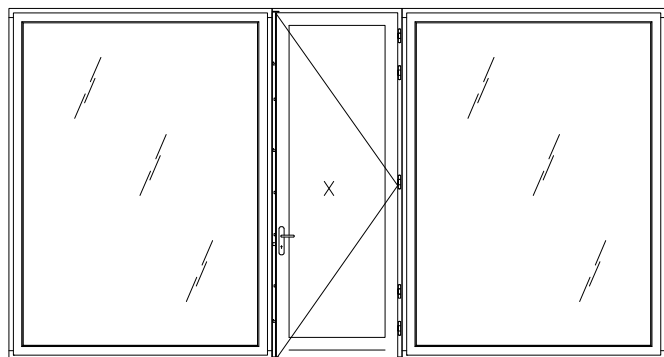
SINGLE CASEMENT WITH FIXED WINDOW



SINGLE CASEMENT WITH FIXED WINDOWS



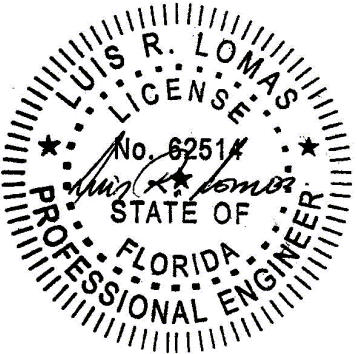
SINGLE DOOR WITH FIXED WINDOW



SINGLE DOOR WITH FIXED WINDOWS

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|                                                                                                   |                      |                 |
|---------------------------------------------------------------------------------------------------|----------------------|-----------------|
| BILDAU & BUSSMANN GMBH<br>GERICHTSTRASSE 23<br>DE 13347 BERLIN, GERMANY                           |                      |                 |
| DOUBLE TIMBER VERTICAL MULLION<br>IMPACT 120" SPAN<br>APPROVED CONFIGURATIONS                     |                      |                 |
| DRAWN:<br>R.L.                                                                                    | DWG NO.<br>08-01851A | REV<br>A        |
| SCALE<br>NTS                                                                                      | DATE<br>07/24/12     | SHEET<br>3 OF 7 |
| L. ROBERTO LOMAS P.E.<br>208 7th Ave, INDIALANTIC, FL 32903<br>434-688-0609 rllomas@lrlomaspe.com |                      |                 |

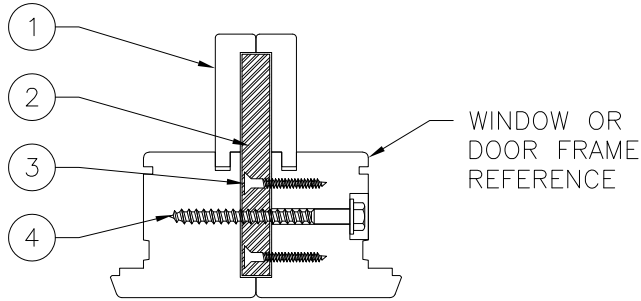


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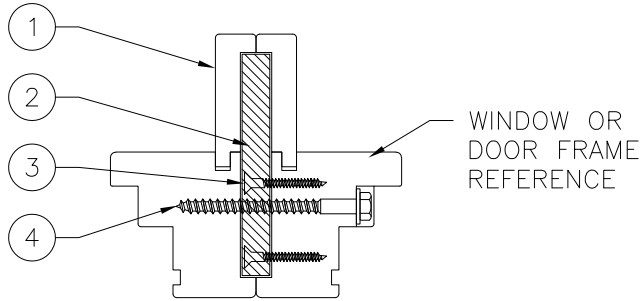
| PARTS LIST |             |                        |              |                  |
|------------|-------------|------------------------|--------------|------------------|
| NO.        | PART NUMBER | DESCRIPTION            | MANUFACTURER | MATERIAL         |
| 1          |             | JAMB EXTENSION         | B&B          | WOOD SEE NOTE 5  |
| 2          |             | REINFORCEMENT          | B&B          | STEEL A36        |
| 3          |             | #12 X 2" FH WOOD SCREW |              | STEEL            |
| 4          |             | 5/16" X 4" LAG SCREW   |              | STEEL            |
| 5          |             | CLIP                   |              | GALVANIZED STEEL |
| 6          | A33         | CLIP (ALTERNATE)       | STRONG TIE   | GALVANIZED STEEL |
| 7          | HL33        | CLIP (ALTERNATE)       | STRONG TIE   | GALVANIZED STEEL |
| 8          | M24         | CLIP (ALTERNATE)       | STRONG TIE   | GALVANIZED STEEL |

- FRAME TO MULLION ANCHORING NOTES:
1. FOR ANCHORING MULLION TO FRAME USE #12X2" WOOD SCREWS, ITEM 3. LOCATE ANCHORS 7" FROM EACH CORNER AND 18" MAX. O.C. THEREAFTER.
  2. FOR ANCHORING FRAME TO FRAME USE 5/16"X4" LAG SCREW, ITEM 4. LOCATE ANCHORS 6" FROM EACH CORNER AND 18" MAX. O.C. THEREAFTER.

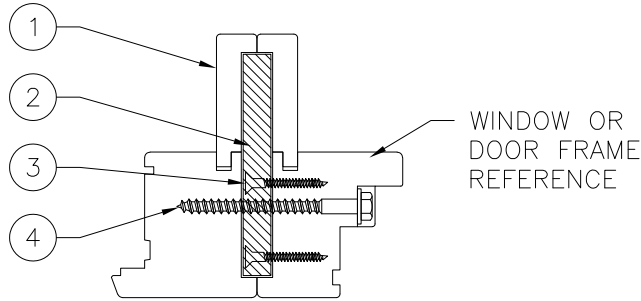
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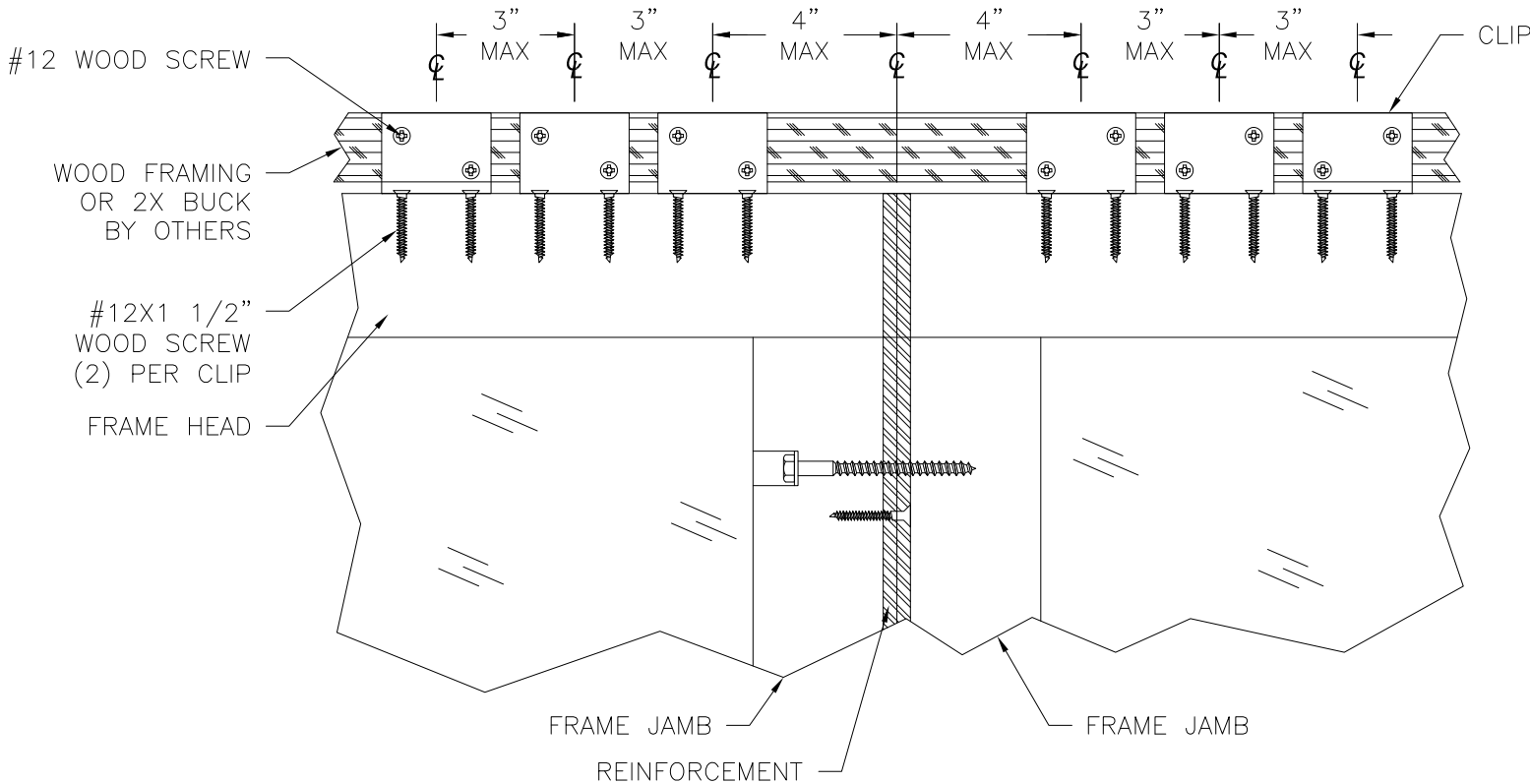
MULLION CROSS SECTION



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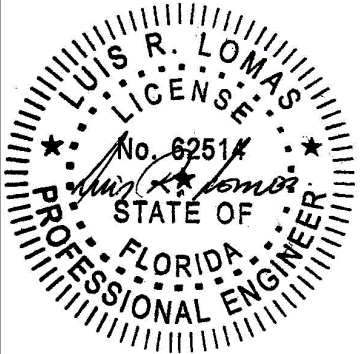
MULLION INSTALLATION

FRONT VIEW

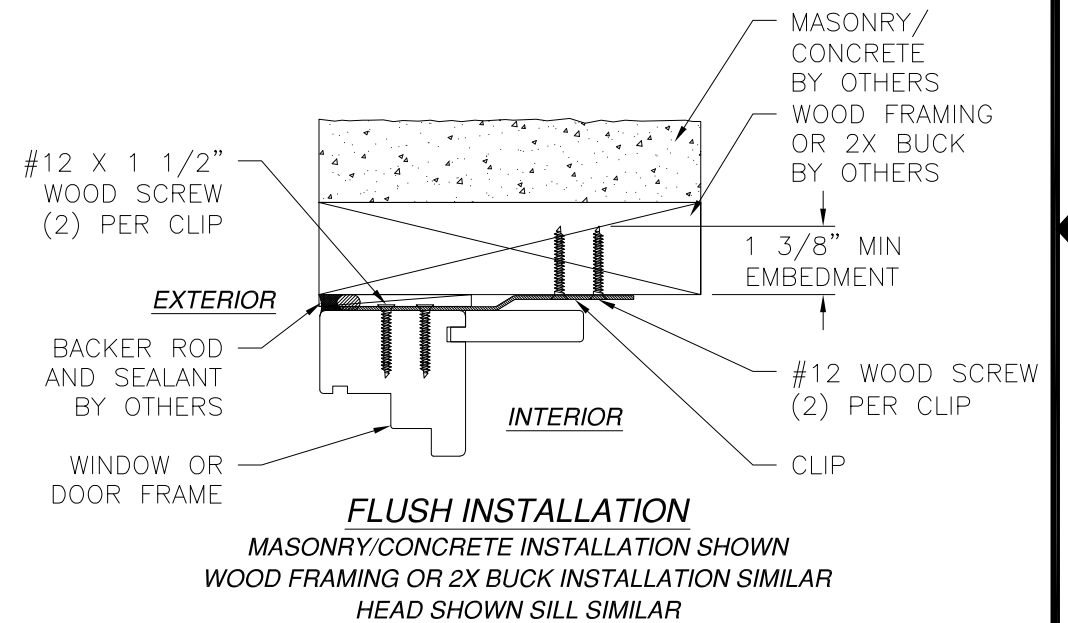
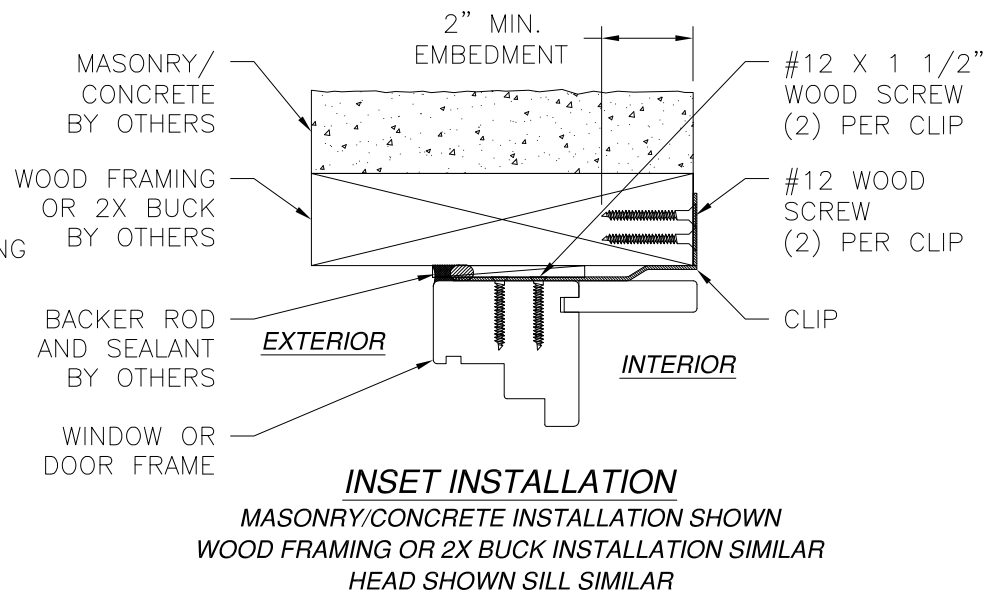
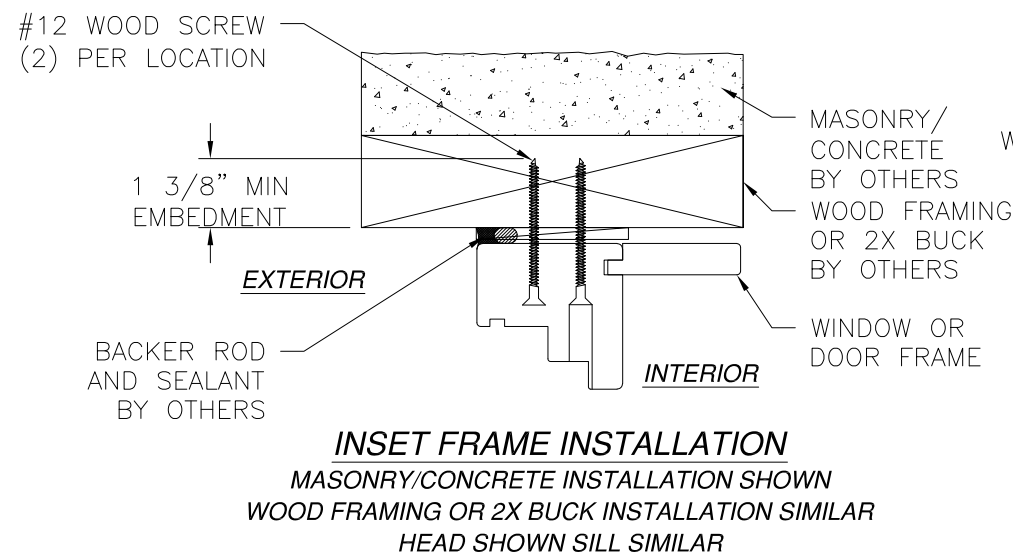
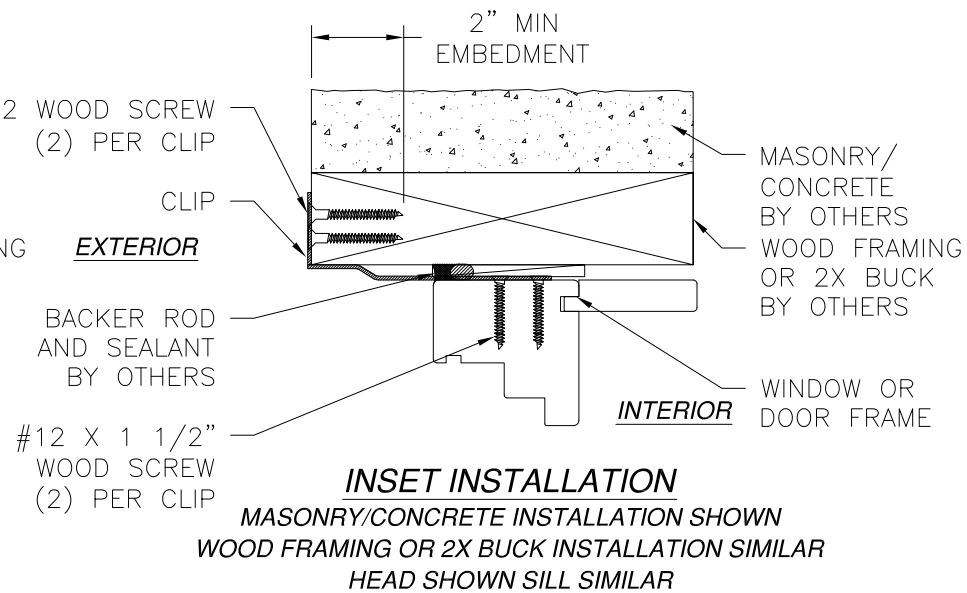
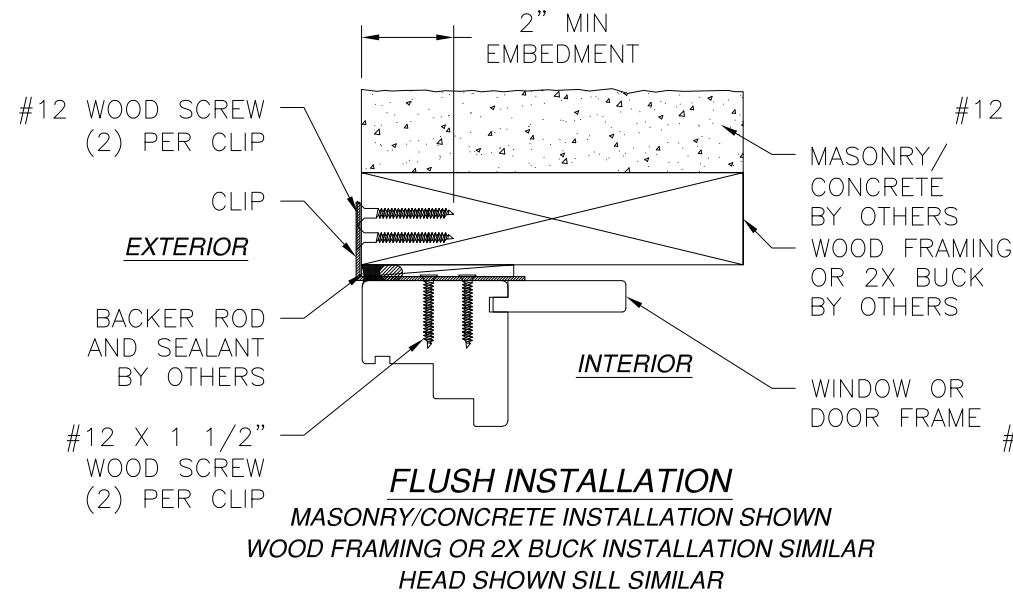
REFER TO SHEETS 5 & 6 FOR  
ADDITIONAL INSTALLATION DETAILS

|                                                                                                       |                      |              |
|-------------------------------------------------------------------------------------------------------|----------------------|--------------|
| BILDAU & BUSSMANN GMBH<br>GERICHTSTRASSE 23<br>DE 13347 BERLIN, GERMANY                               |                      |              |
| DOUBLE TIMBER VERTICAL MULLION<br>IMPACT 120" SPAN<br>CROSS SECTIONS, B.O.M. AND INSTALLATION DETAILS |                      |              |
| DRAWN:<br>R.L.                                                                                        | DWG NO.<br>08-01851A | REV<br>A     |
| SCALE NTS                                                                                             | DATE 07/24/12        | SHEET 4 OF 7 |
| L. ROBERTO LOMAS P.E.<br>208 7th Ave, INDIALANTIC, FL 32903<br>434-688-0609 rllomas@lrlomaspe.com     |                      |              |

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**NOTE:**  
INTERIOR AND EXTERIOR TRIM, BY OTHERS, NOT SHOWN FOR CLARITY.  
WHEN INSTALLING INTO MASONRY OR CONCRETE 2X BUCK TO BE USED. 2X BUCK TO BE PROPERLY SECURED TO STRUCTURE

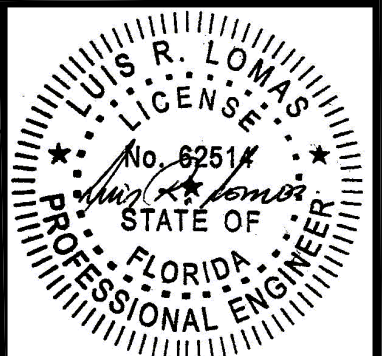
BILDAU & BUSSMANN GMBH  
GERICHTSTRASSE 23  
DE 13347 BERLIN, GERMANY

DOUBLE TIMBER VERTICAL MULLION  
IMPACT 120" SPAN  
INSTALLATION DETAILS

|                |                      |                 |
|----------------|----------------------|-----------------|
| DRAWN:<br>R.L. | DWG NO.<br>08-01851A | REV<br>A        |
| SCALE<br>NTS   | DATE<br>07/24/12     | SHEET<br>5 OF 7 |

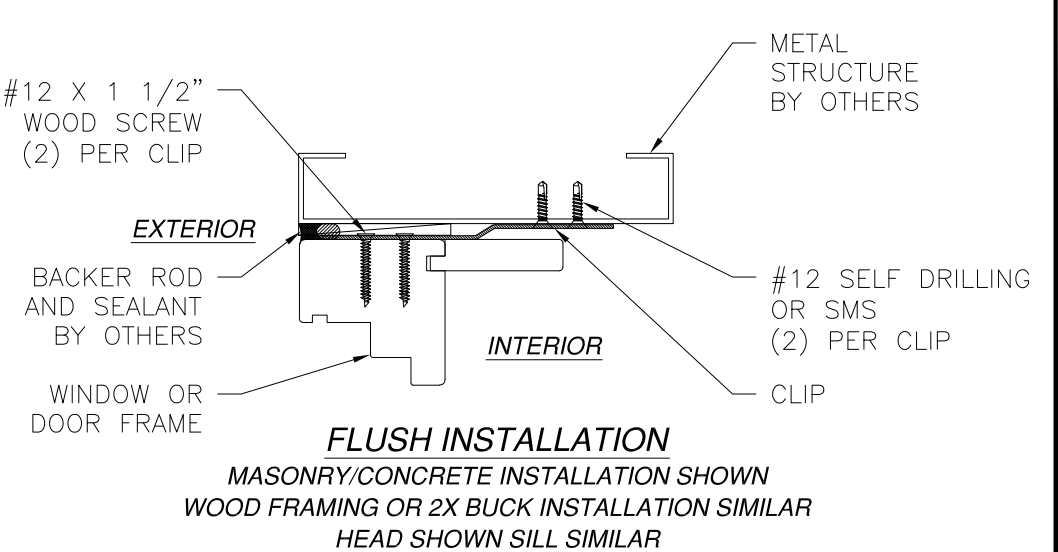
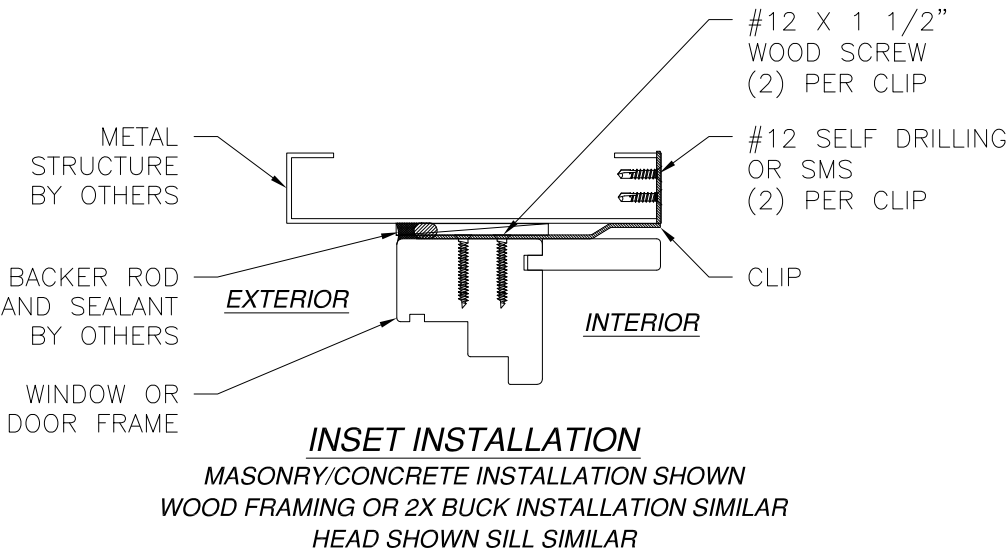
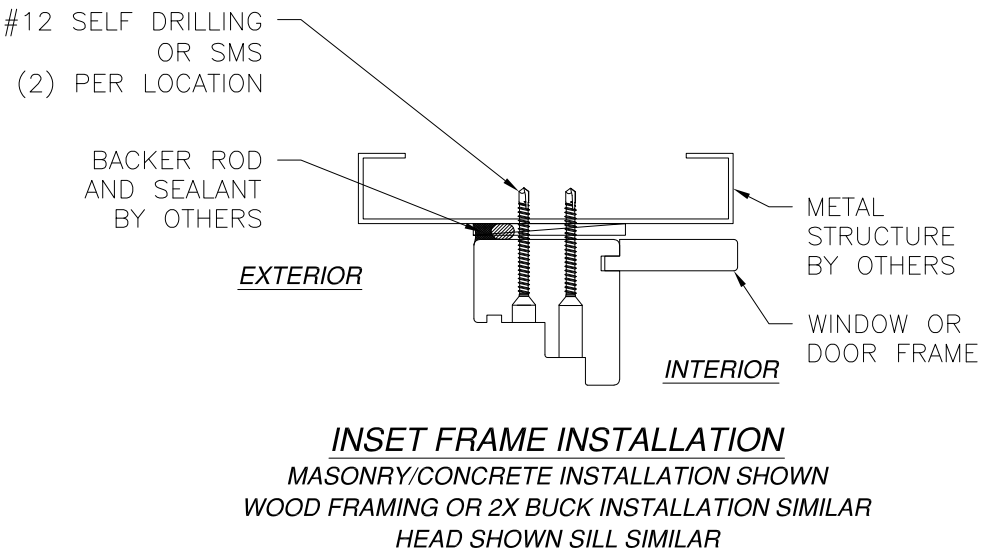
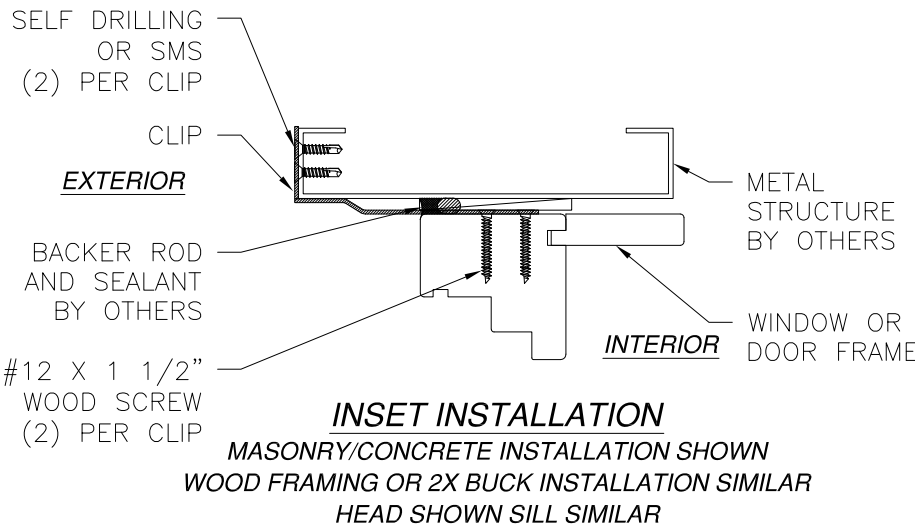
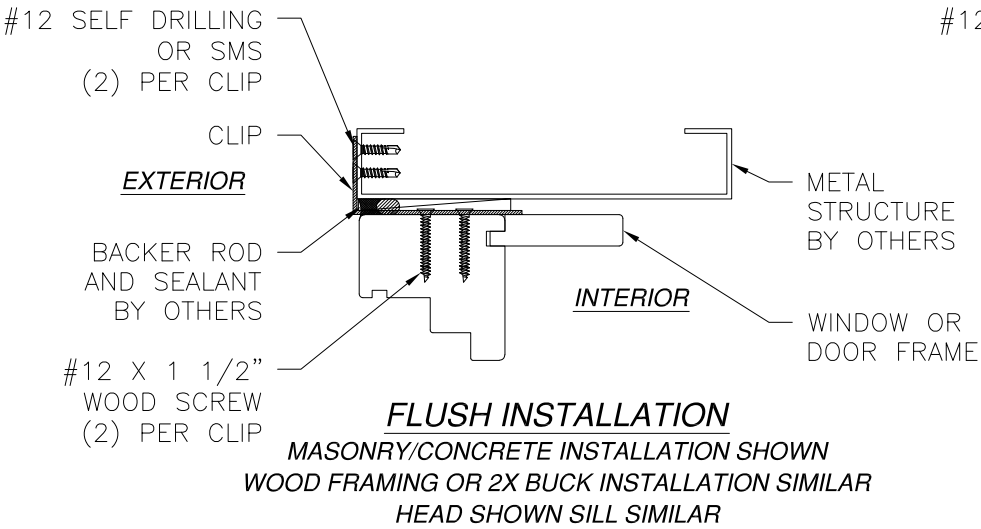
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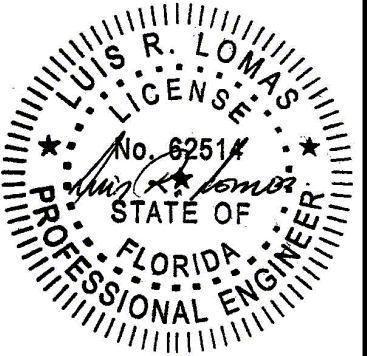
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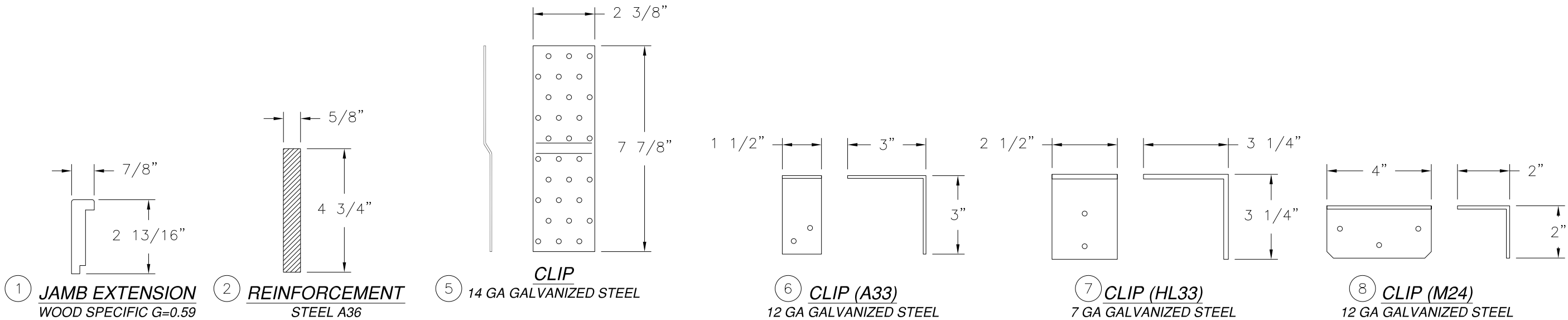
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| BILDAU & BUSSMANN GMBH<br>GERICHTSTRASSE 23<br>DE 13347 BERLIN, GERMANY                           |                      |              |
| DOUBLE TIMBER VERTICAL MULLION<br>IMPACT 120" SPAN<br>INSTALLATION DETAILS                        |                      |              |
| DRAWN:<br>R.L.                                                                                    | DWG NO.<br>08-01851A | REV<br>A     |
| SCALE NTS                                                                                         | DATE 07/24/12        | SHEET 6 OF 7 |
| L. ROBERTO LOMAS P.E.<br>208 7th Ave, INDIALANTIC, FL 32903<br>434-688-0609 rllomas@lrlomaspe.com |                      |              |



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BILDAU & BUSSMANN GMBH  
GERICHTSTRASSE 23  
DE 13347 BERLIN, GERMANY

DOUBLE TIMBER VERTICAL MULLION  
IMPACT 120" SPAN  
COMPONENTS

DRAWN:  
R.L.

DWG NO.  
08-01851A

REV  
A

SCALE NTS

DATE 07/24/12

SHEET 7 OF 7

L. ROBERTO LOMAS P.E.  
208 7th Ave, INDIALANTIC, FL 32903  
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LUIS R. LOMAS  
LICENSE  
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STATE OF  
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PROFESSIONAL ENGINEER

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