

| REVISIONS | | | |
|-----------|------------------------------|------------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| A | REVISED PER NEW REQUIREMENTS | 11/05/2020 | R.L. |

NOTES:

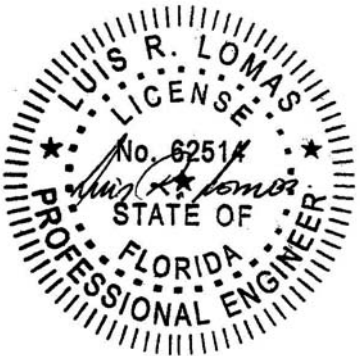
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL.
4. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1-1/2" WINDOW UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
5. WHERE WOOD BUCK THICKNESS IS 1-1/2" OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. WINDOW UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
6. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
7. BUCKS SHALL EXTEND BEYOND WINDOW INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
8. SHIM AS REQUIRED AT EACH ANCHOR LOCATION WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
9. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
10. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
11. FRAME MATERIAL: EXTRUDED RIGID PVC.
12. UNITS MUST BE GLAZED PER ASTM E1300, WITH SAFETY GLAZING.
13. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
14. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

15. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
16. FOR ANCHORING THROUGH FRAME INTO METAL STRUCTURE USE #10 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
17. ALL FASTENERS TO BE CORROSION RESISTANT.
18. 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. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - D. METAL STRUCTURE: STEEL 18GA (.048") FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 FU=30KSI .125" THICK MINIMUM
19. APPROVED CONFIGURATIONS: XO, OX, X.

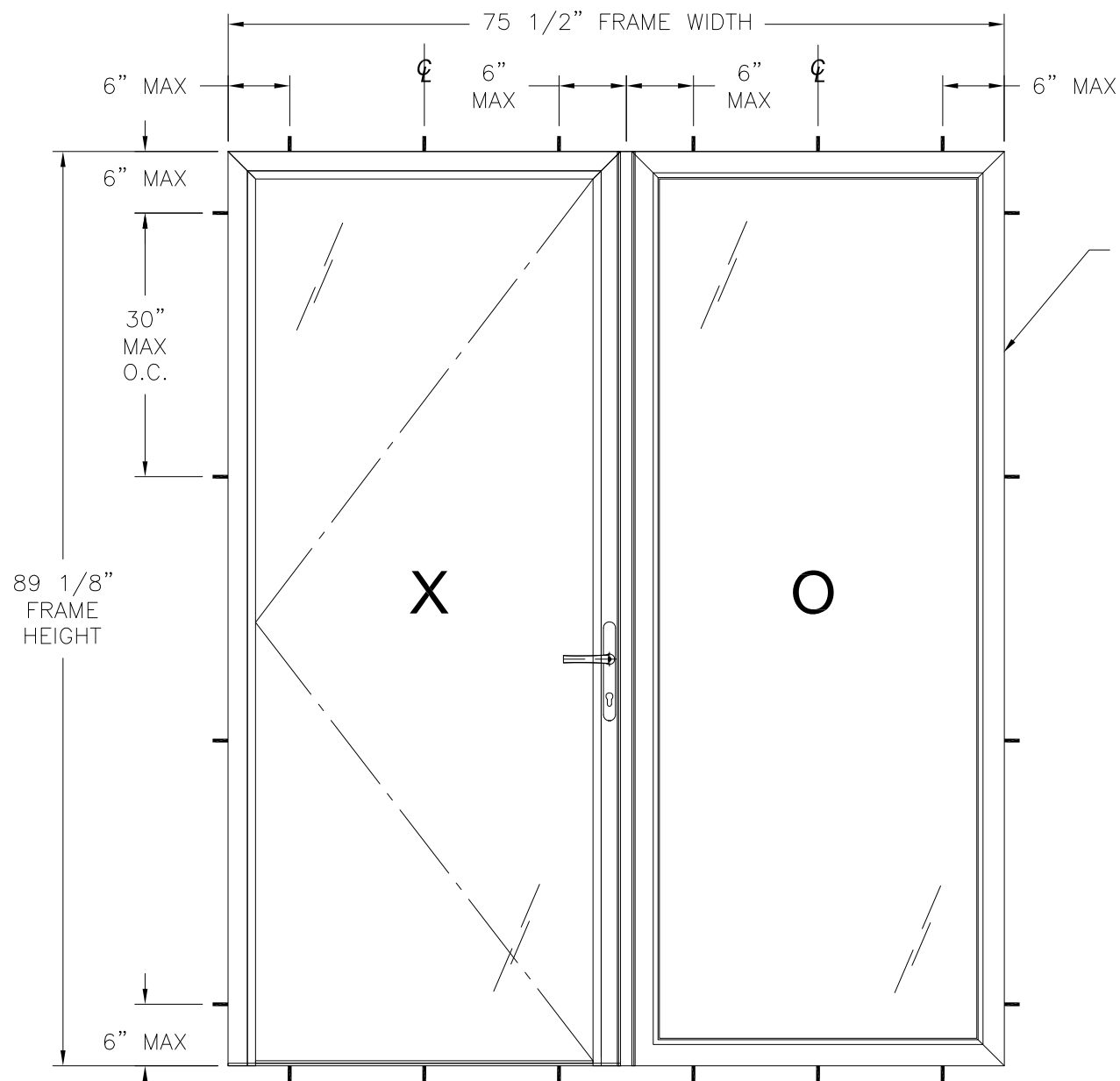
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| SOLAR INNOVATIONS, INC. 31 ROBERTS ROAD PINE GROVE, PA 17963 | | |
| SERIES "SI4500" VINYL OUTSWING TERRACE DOOR W/FIXED WINDOW NON-IMPACT NOTES | | |
| DRAWN: A.R. | DWG NO. 08-03142 | REV A |
| SCALE NTS | DATE 07/13/17 | SHEET 1 OF 9 |
| L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com | | |



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



SERIES "SI4500" VINYL OUTSWING TERRACE DOOR W/FIXED WINDOW
EXTERIOR VIEW

| DESIGN PRESSURE RATING | IMPACT RATING |
|------------------------|---------------|
| ±50.0PSF | NONE |

SEE CHART #1, THIS SHEET
75 1/2" X 89 1/8" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
PANEL AREA DOES NOT EXCEED 21.24 FT²

HARDWARE SCHEDULE

| | |
|----|--|
| A. | (1) SINGLE HANDLE (6)-POINT INTEGRATED LOCK SYSTEM WITH KEEPERS, 39 1/2" FROM BOTTOM OF LOCK STILE |
| B. | (1) DEADBOLT WITH KEEPER, 38" FROM BOTTOM OF LOCK STILE |
| C. | (1) PIN-TYPE HINGE 8" AND, 31 3/4" FROM EACH END OF HINGE STILE/HINGE JAMB |
| D. | C-SHAPED GALVANIZED STEEL REINFORCEMENT AT MULLION |
| E. | TUBE-SHAPED GALVANIZED STEEL REINFORCEMENT AT ALL LEAF MEMBERS |
| F. | TUBE-SHAPED GALVANIZED STEEL REINFORCEMENT AT LOCK JAMB AND FIXED JAMB AT MULLION |
| G. | U-SHAPED GALVANIZED STEEL REINFORCEMENT AT HEAD, HINGE JAMB AND FIXED HEAD, JAMB AND SILL |
| H. | U-SHAPED GALVANIZED STEEL REINFORCEMENT AT LOCK AND FIXED JAMB |

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| Chart #1 Maximum Design pressure (psf) | | | | | | |
|---|-------------------------|------|------|------|------|------|
| Panel Height (in) | Single Panel Width (in) | | | | | |
| | 24.0 | | 30.0 | | 36.0 | |
| | Pos | Neg | Pos | Neg | Pos | Neg |
| 78.0 | 53.3 | 75.0 | 53.3 | 64.7 | 53.3 | 54.5 |
| 84.0 | 53.3 | 70.7 | 53.3 | 59.0 | 50.6 | 50.6 |
| 90.0 | 53.3 | 64.1 | 52.2 | 52.2 | - | - |
| 96.0 | 52.7 | 52.7 | 42.7 | 42.7 | - | - |
| 102.0 | 43.8 | 43.8 | - | - | - | - |
| 108.0 | 36.8 | 36.8 | - | - | - | - |
| 114.0 | 31.2 | 31.2 | - | - | - | - |
| 120.0 | 26.7 | 26.7 | - | - | - | - |
| 126.0 | 23.0 | 23.0 | - | - | - | - |

- NOTES:
- PANEL SIZE: 35 1/16" x 87 1/4"
 - D.L.O.: 31" x 83 13/16"
 - 1 1/16" X 3/16" WEEP SLOT AT 7 3/4" AND 28 1/2" FROM FIXED JAMB ON EXTERIOR FACE OF HEAD FRAME.
 - 1 1/4" X 1/4" WEEP SLOT WITH WEEP COVER 6 3/4" AND 30" FROM FIXED JAMB ON EXTERIOR OF SILL FACE.
 - 1 1/16" X 3/16" WEEP SLOT 6 3/8" FROM EACH END OF BOTTOM RAIL.

SOLAR INNOVATIONS, INC.
31 ROBERTS ROAD
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SERIES "SI4500" VINYL OUTSWING TERRACE DOOR
W/FIXED WINDOW NON-IMPACT
ELEVATION

| | | |
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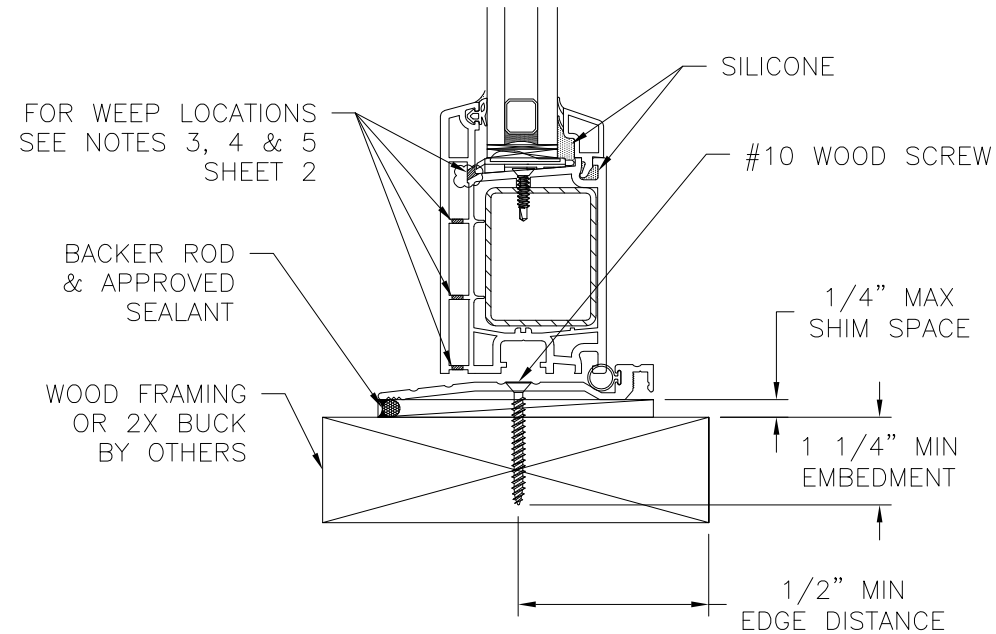
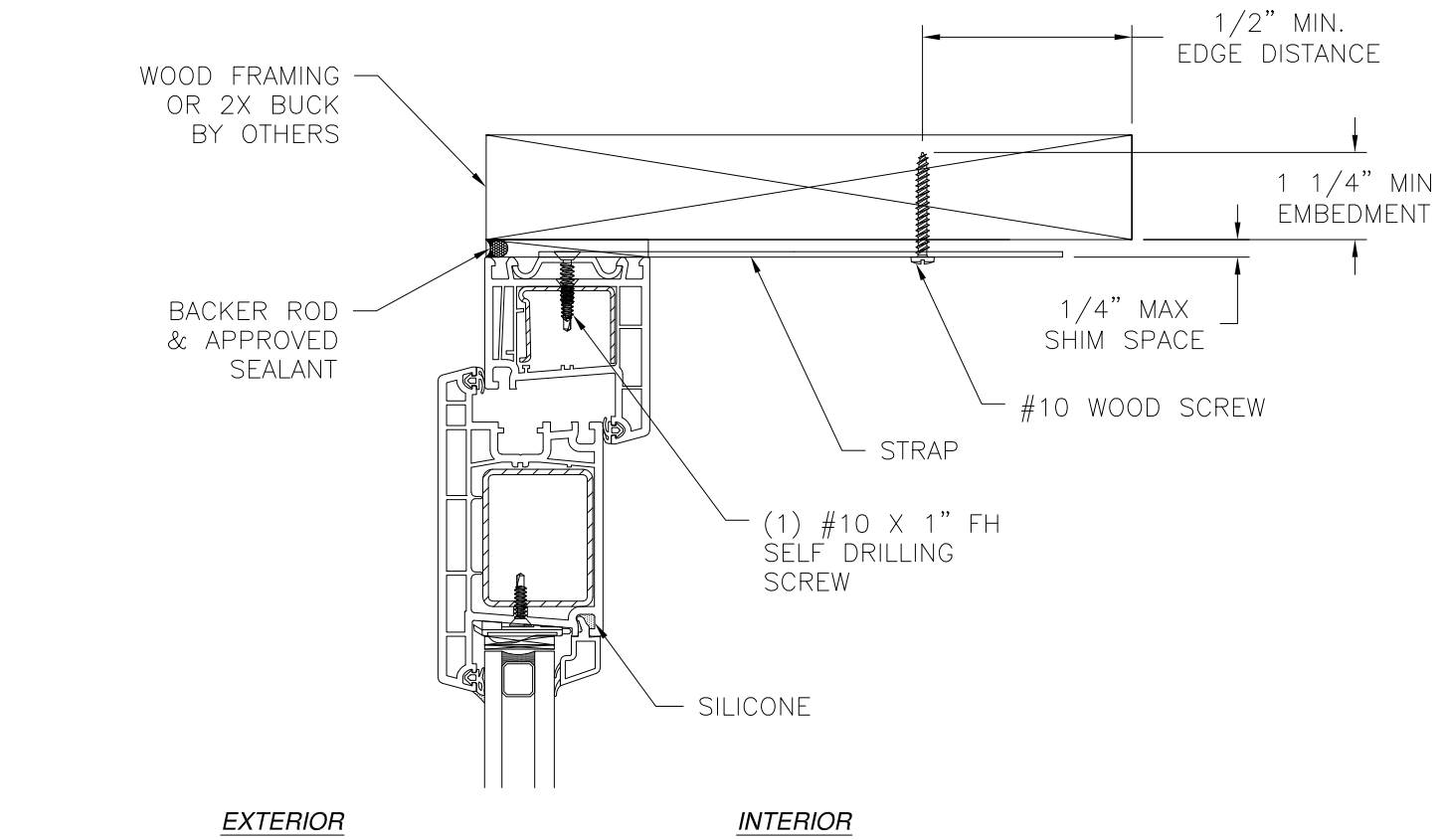
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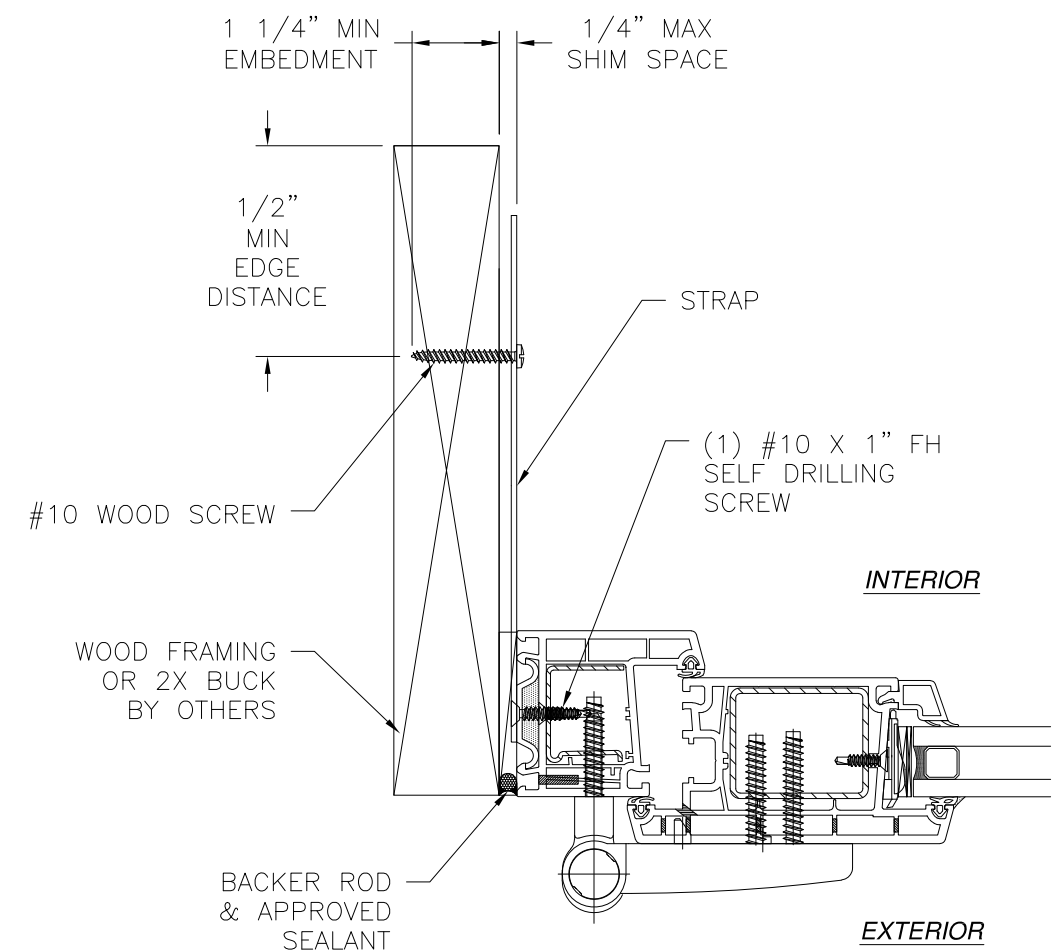


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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

- NOTES:**
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 11/19/2020

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31 ROBERTS ROAD
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DOOR INSTALLATION DETAILS

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08-03142

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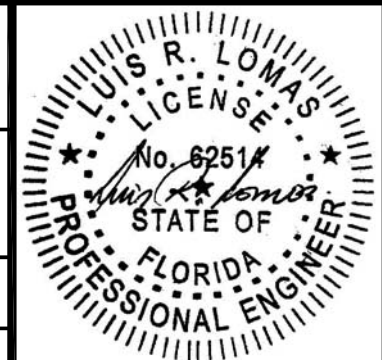
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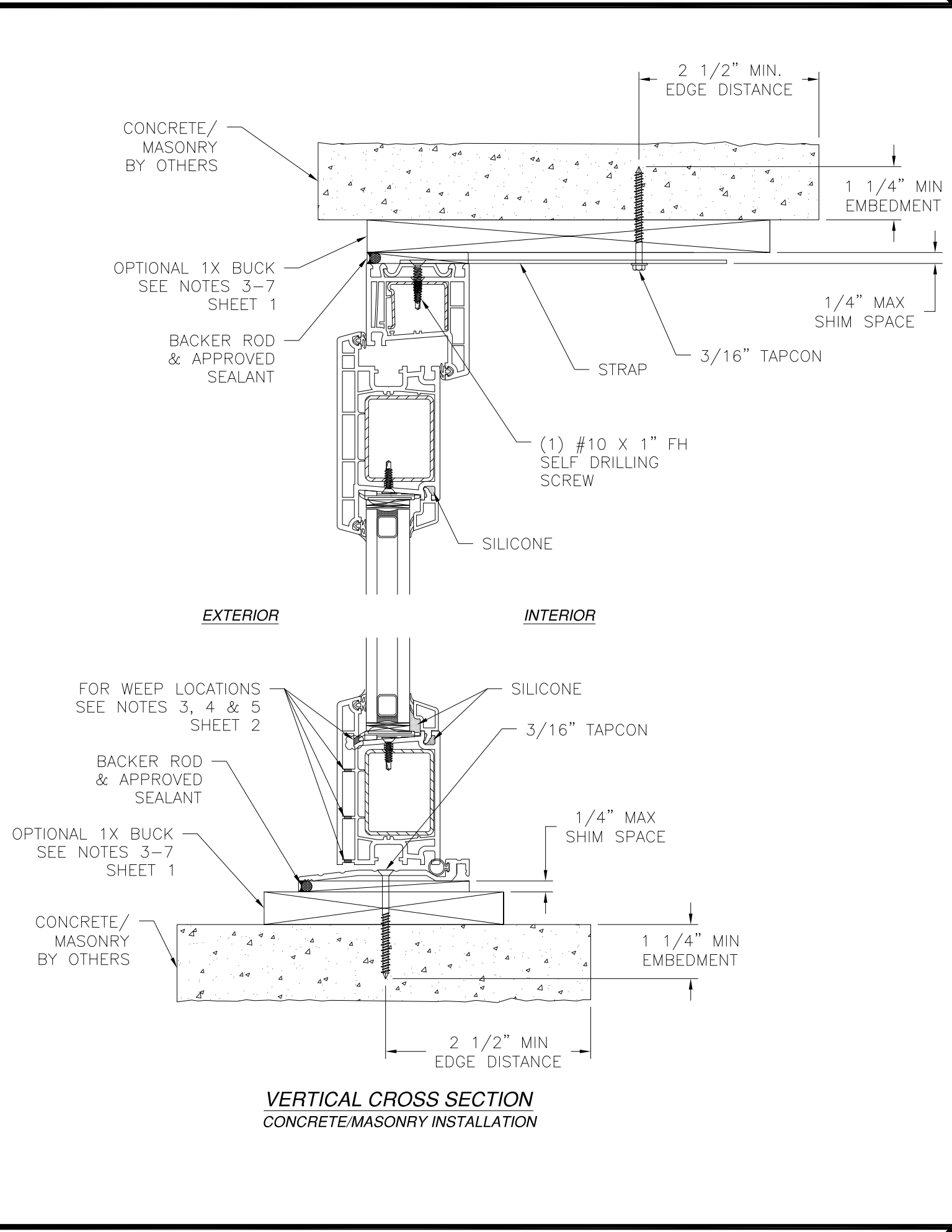
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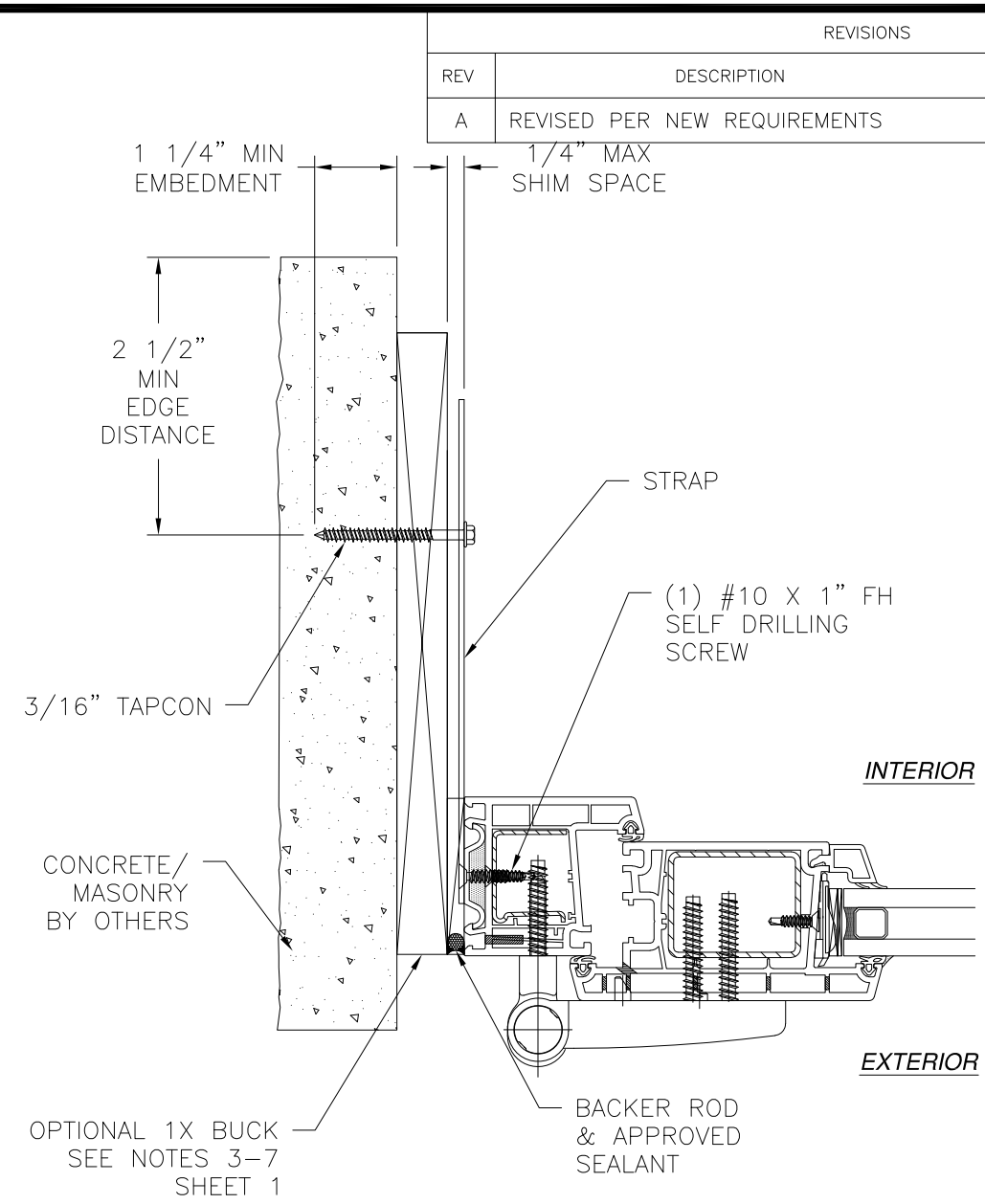
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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION



JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

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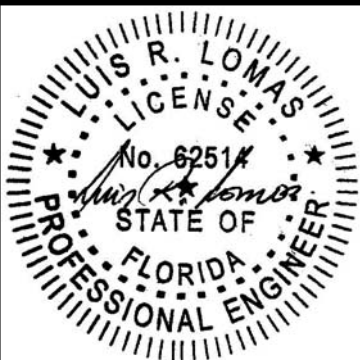
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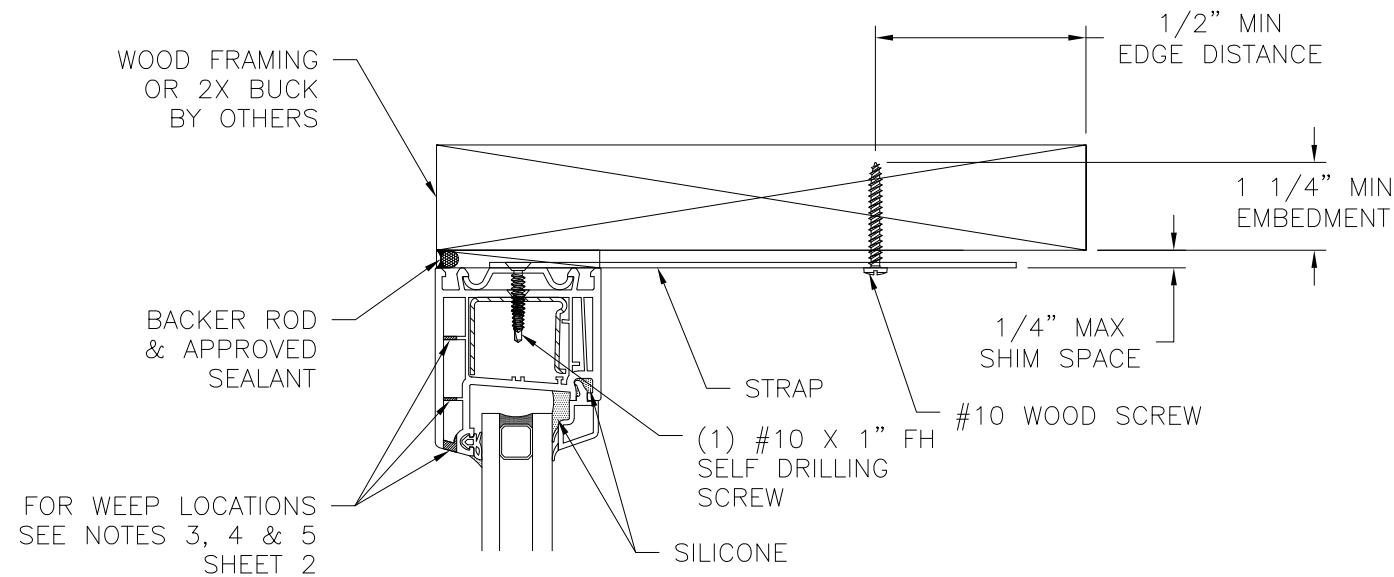
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EXTERIOR

INTERIOR

FOR WEEP LOCATIONS
SEE NOTES 3, 4 & 5
SHEET 2

BACKER ROD
& APPROVED
SEALANT

WOOD FRAMING
OR 2X BUCK
BY OTHERS

SILICONE

(1) #10 X 1" FH
SELF DRILLING
SCREW

STRAP

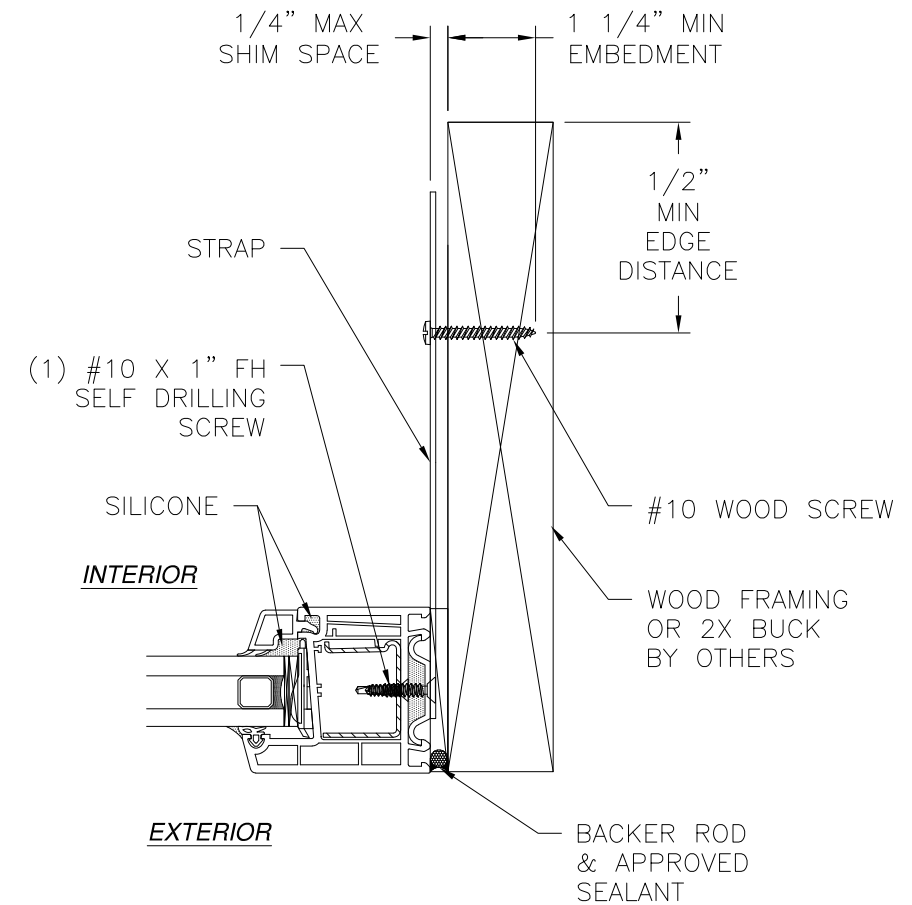
#10 WOOD
SCREW

1/4" MAX
SHIM SPACE

1 1/4" MIN
EMBEDMENT

1/2" MIN
EDGE DISTANCE

VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

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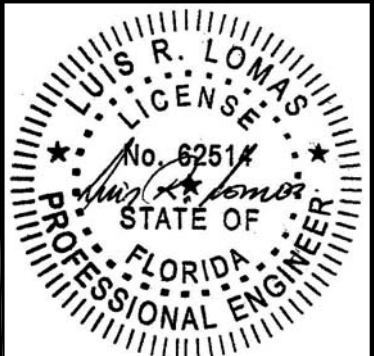
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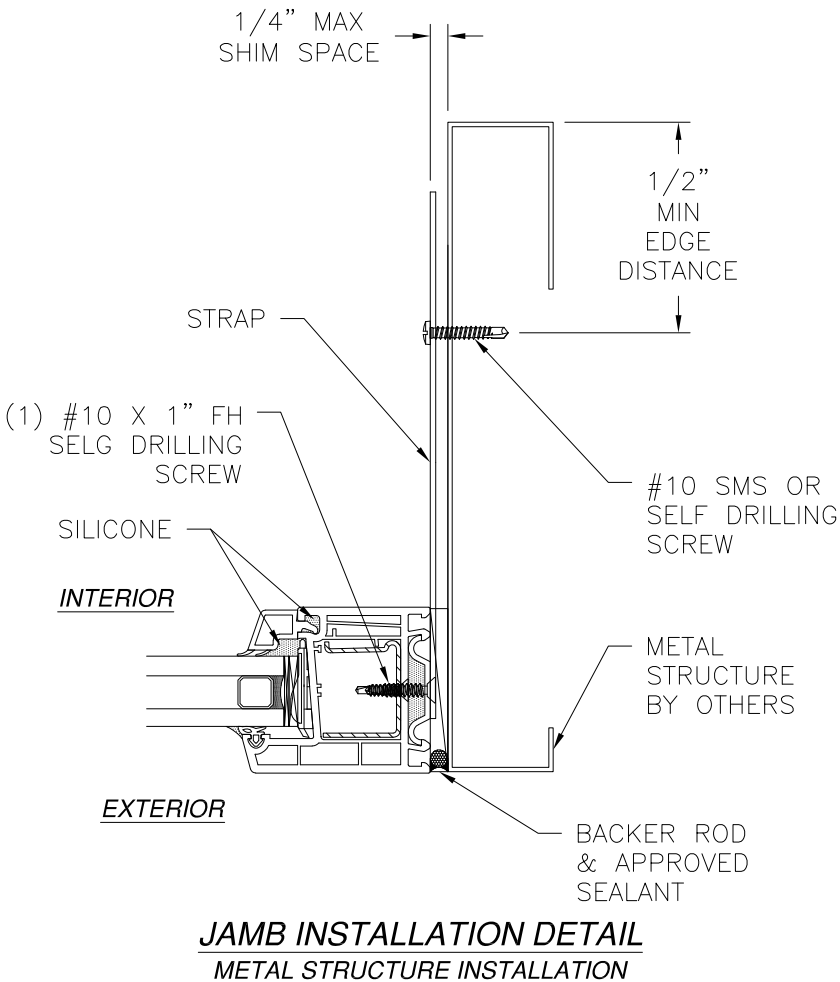
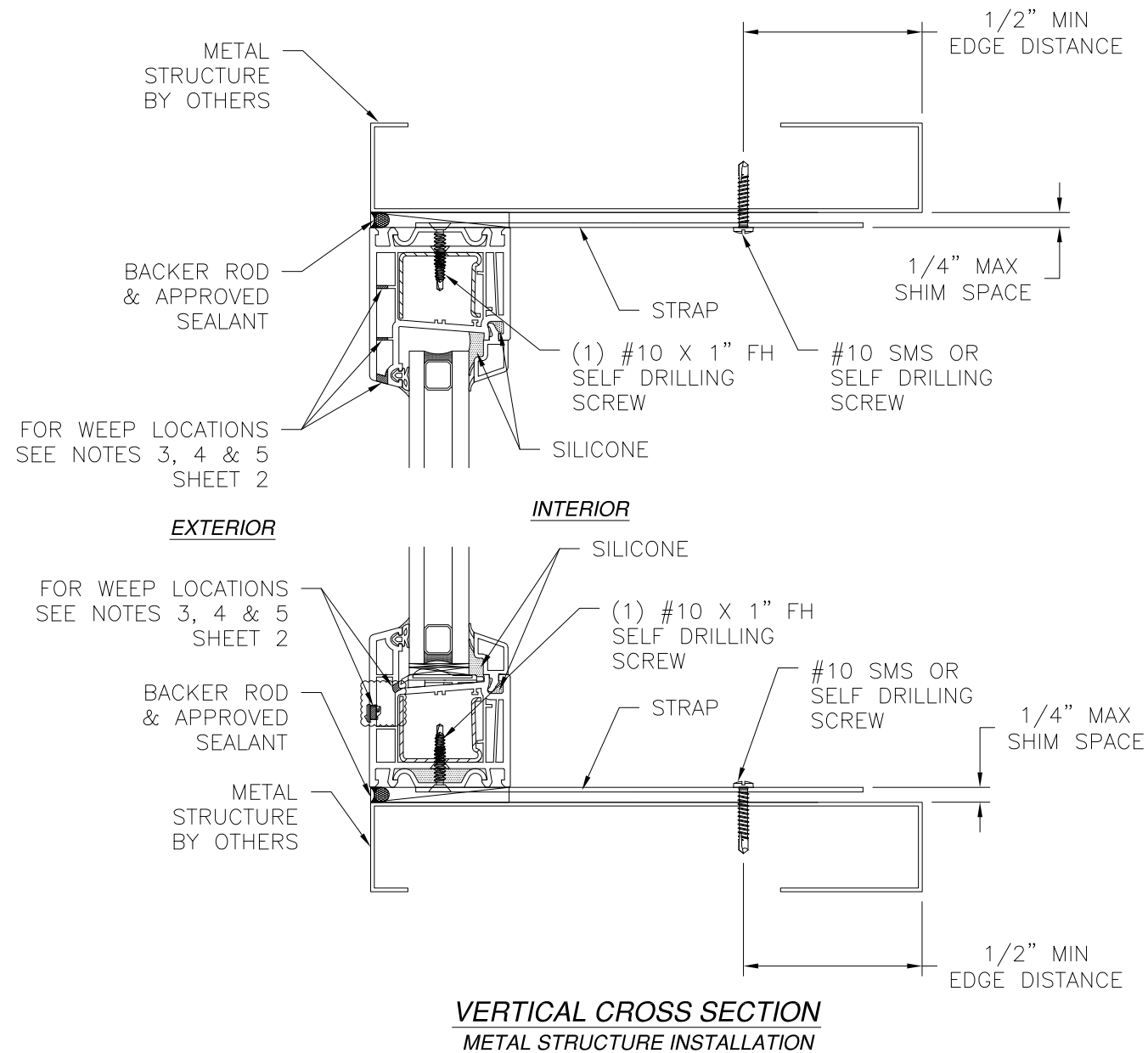
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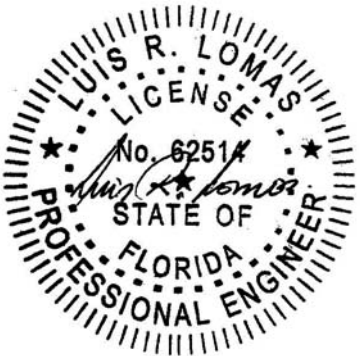
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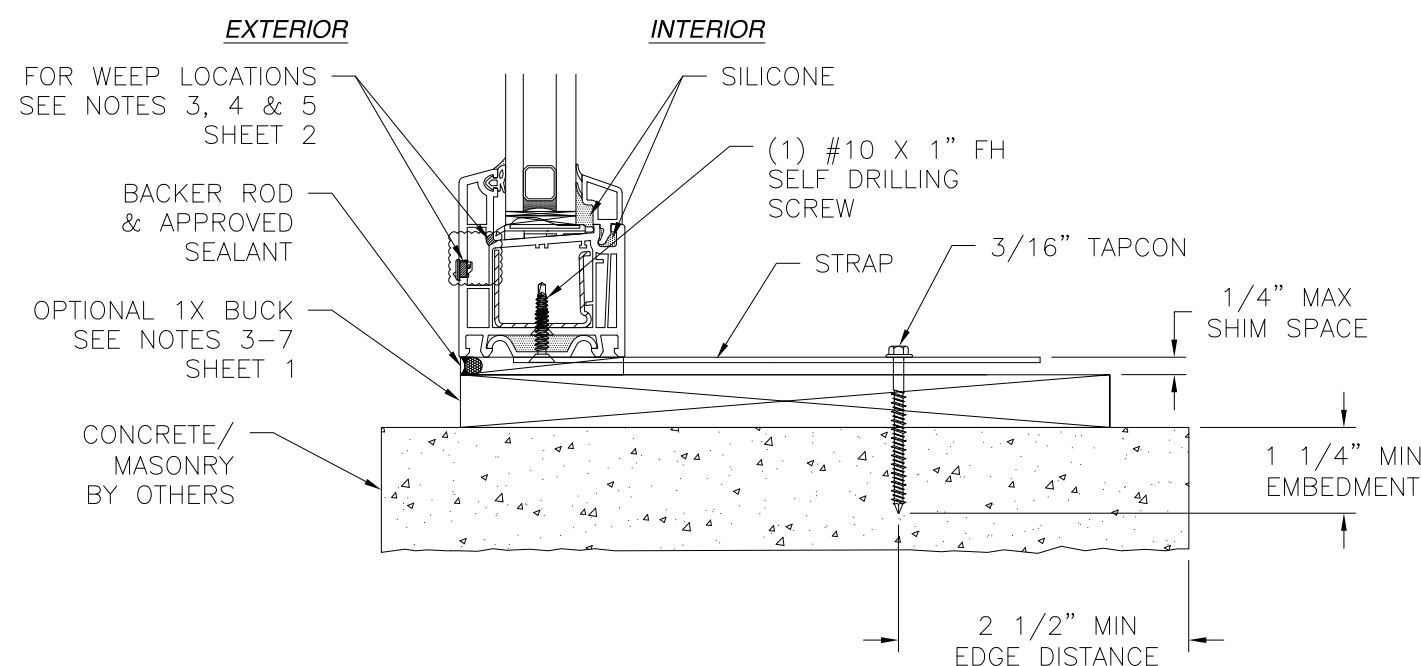
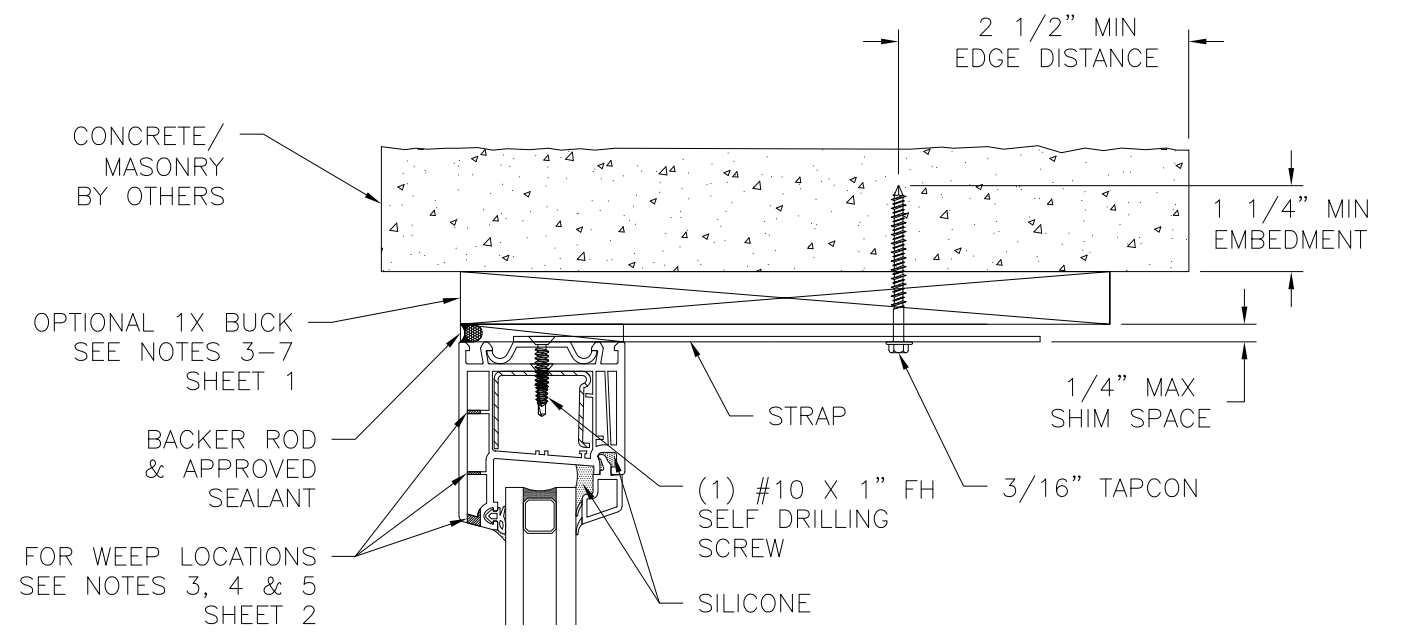
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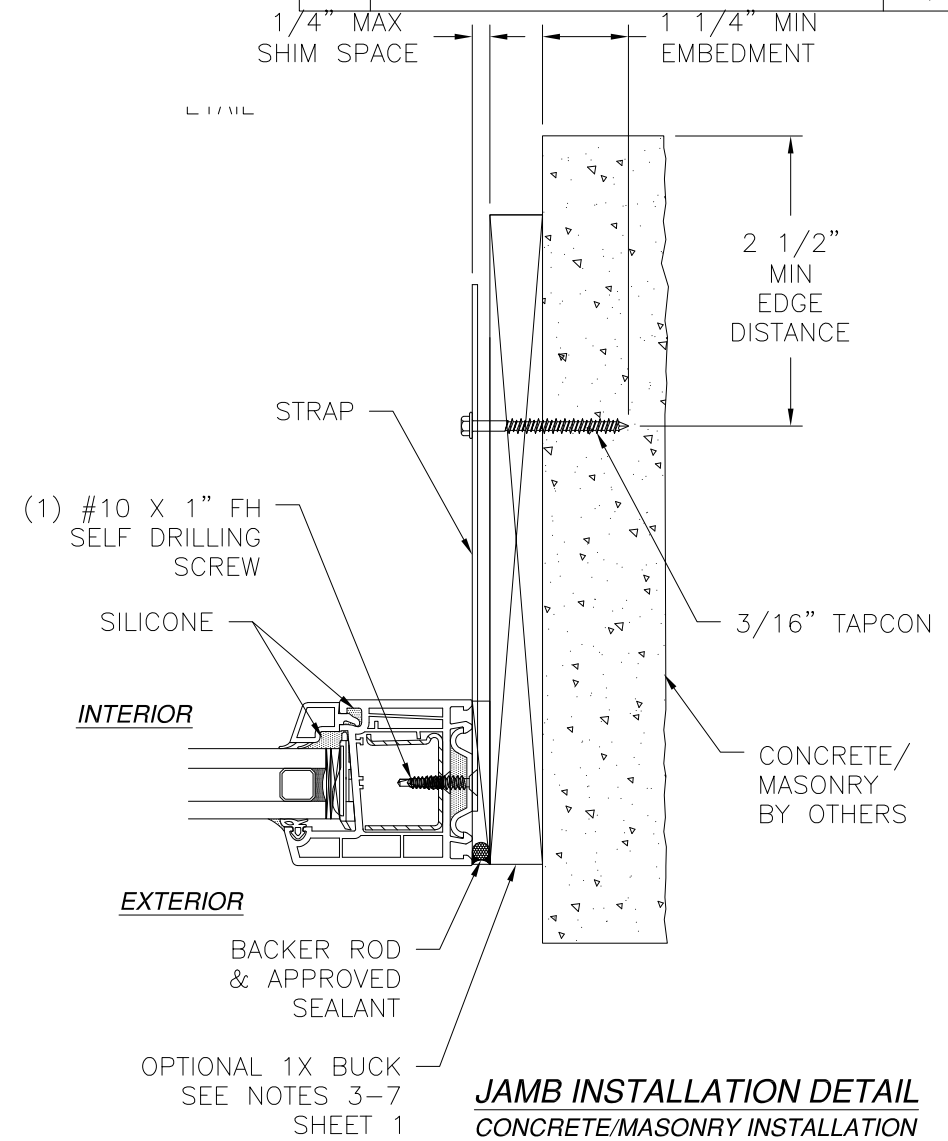


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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

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JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

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PINE GROVE, PA 17963

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W/FIXED WINDOW NON-IMPACT
WINDOW INSTALLATION DETAILS

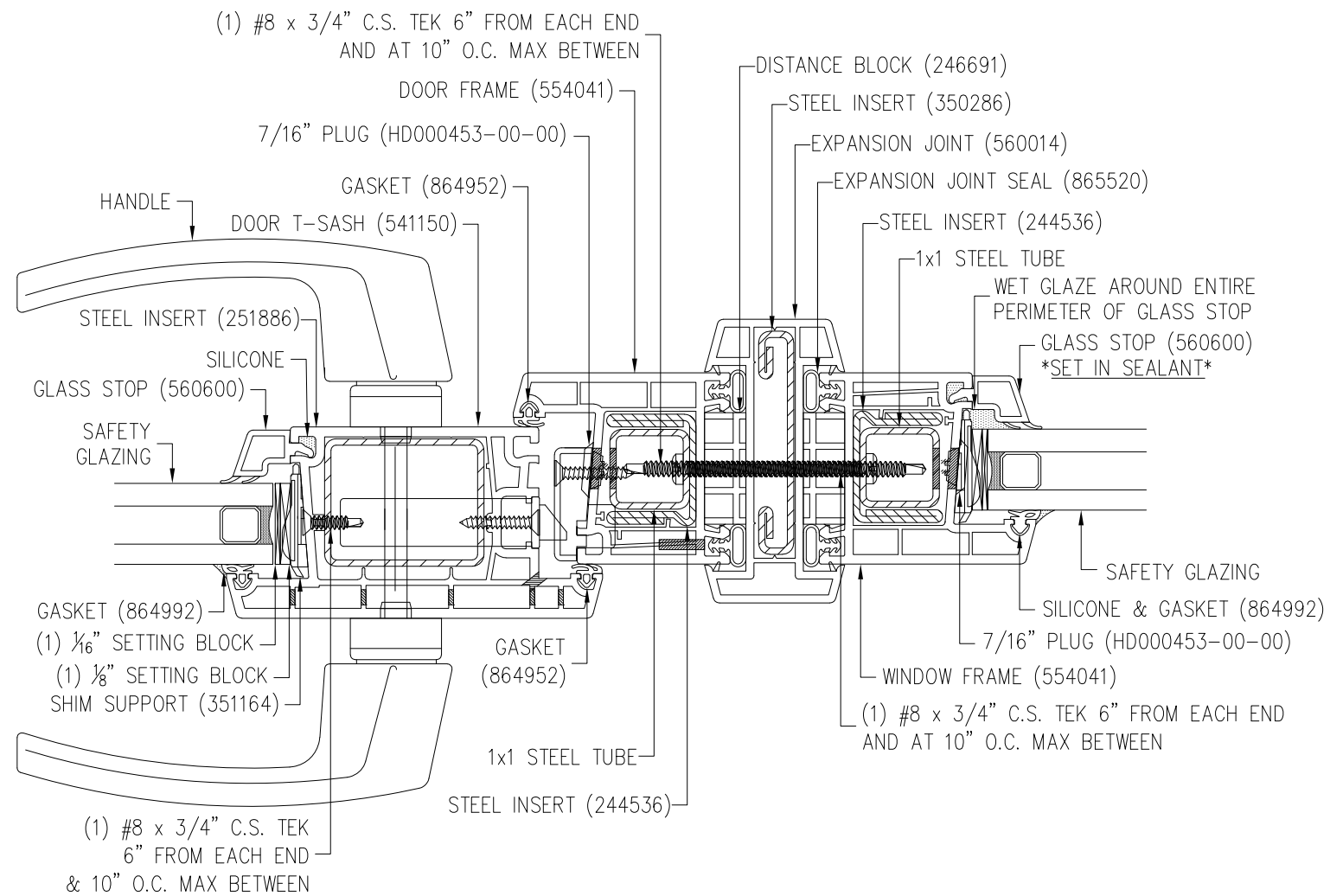
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SHEET 8 OF 9

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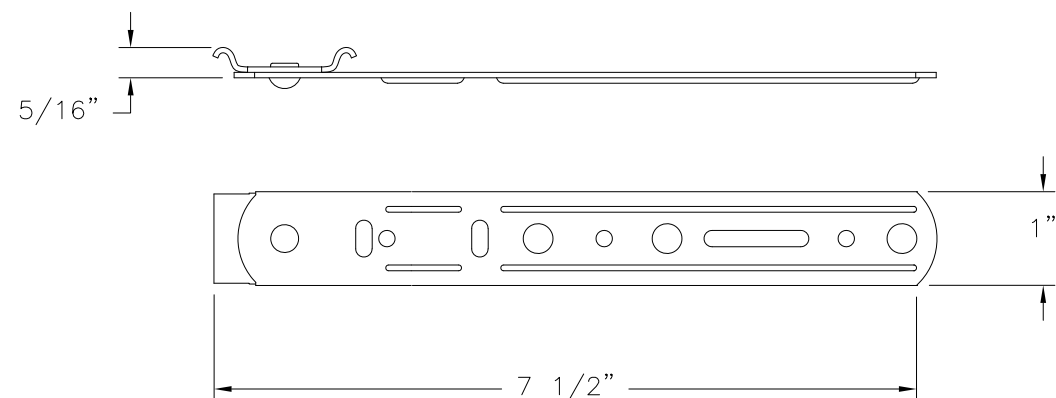
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PROFESSIONAL ENGINEER

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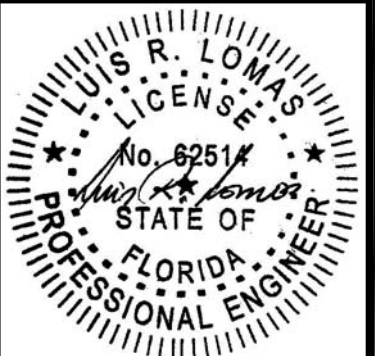
MULLION INSTALLATION DETAIL



ANCHOR CLIP
G90 GALVANIZED STEEL .058" THICK

| | | |
|--|---------------------|--------------|
| SOLAR INNOVATIONS, INC. 31 ROBERTS ROAD PINE GROVE, PA 17963 | | |
| SERIES "SI4500" VINYL OUTSWING TERRACE DOOR W/FIXED WINDOW NON-IMPACT COMPONENTS | | |
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