

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	CHANGE MANUFACTURER'S NAME	03/25/2023	R.L.

NOTES:

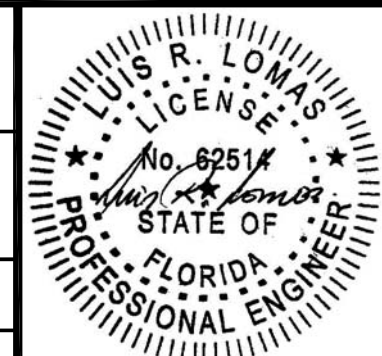
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1-1/2" 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.
4. WHERE WOOD BUCK THICKNESS IS 1-1/2" OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
5. 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.
6. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
7. 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".
8. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
9. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
10. FRAME MATERIAL: EXTRUDED ALUMINUM 6063-T5.
11. UNITS MUST BE GLAZED PER ASTM E1300.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
13. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

14. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 1/4" 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.
15. FOR ANCHORING THROUGH FRAME INTO METAL STRUCTURE USE #12 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.
16. ALL FASTENERS TO BE CORROSION RESISTANT.
17. 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 1/8" THICK MINIMUM

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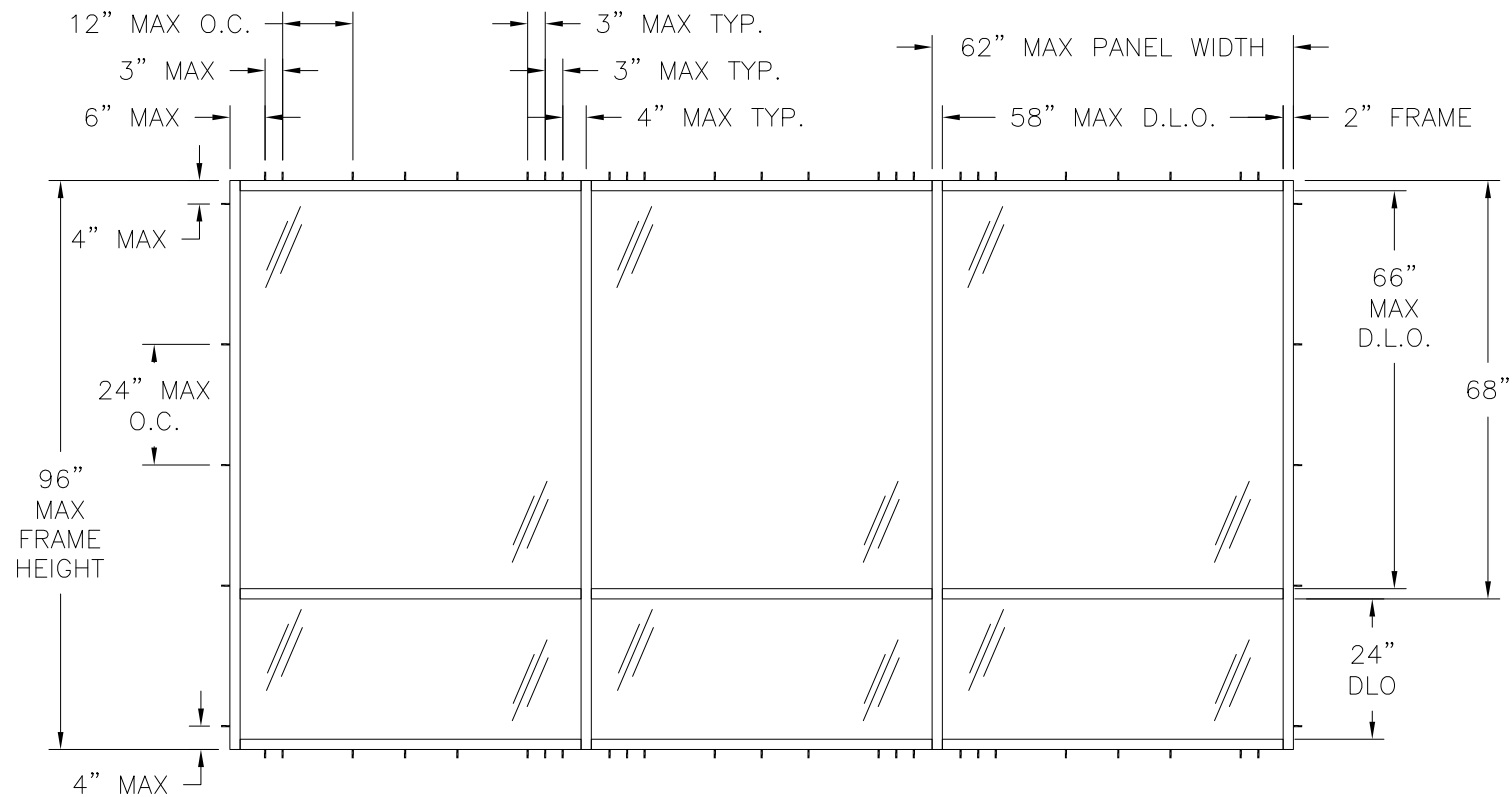
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<b>US ALUMINUM</b> 950 SOLON RD. WAXAHACHIE, TX 75165		
SERIES 450 CENTER GLAZE STORE FRONT NOTES		
DRAWN: V.L.	DWG NO. 08-01816	REV B
SCALE NTS	DATE 10/09/12	SHEET 1 OF 6
L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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

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**Maximum design pressure capacity chart (psf)**

Frame Height (in)	Single Panel Width (in)															
	24.00		30.00		36.00		42.00		48.00		54.00		60.00		62.00	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
30.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
36.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
42.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
48.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
54.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
60.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
66.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0	53.3	60.0
72.00	53.3	60.0	53.3	60.0	53.3	60.0	53.3	56.4	52.5	52.5	49.8	49.8	48.0	48.0	47.6	47.6
78.00	53.3	60.0	53.3	60.0	53.3	56.0	50.5	50.5	46.6	46.6	43.9	43.9	42.0	42.0	41.5	41.5
84.00	53.3	60.0	53.3	58.4	50.9	50.9	45.7	45.7	42.0	42.0	39.3	39.3	37.3	37.3	36.8	36.8
90.00	53.3	60.0	53.3	53.7	46.6	46.6	41.7	41.7	38.2	38.2	35.5	35.5	33.6	33.6	33.1	33.1
96.00	53.3	60.0	49.8	49.8	43.1	43.1	38.4	38.4	35.0	35.0	32.4	32.4	30.5	30.5	30.0	30.0

**451 CENTER GLAZE ALUMINUM STORE FRONT**

EXTERIOR VIEW

UNLIMITED NUMBER OF PANELS IN UNLIMITED CONFIGURATION ARE APPROVED  
AS LONG AS INDIVIDUAL PANEL SIZE DOES NOT EXCEED MAXIMUM PANEL SIZE AND USES VERTICAL  
CONDITIONS AS SHOWN.

DESIGN PRESSURE RATING	IMPACT RATING
±30PSF	NONE

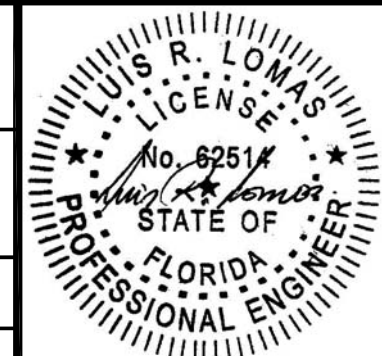
SIGNED: 03/25/2023

**US ALUMINUM**  
950 SOLON RD.  
WAXAHACHIE, TX 75165

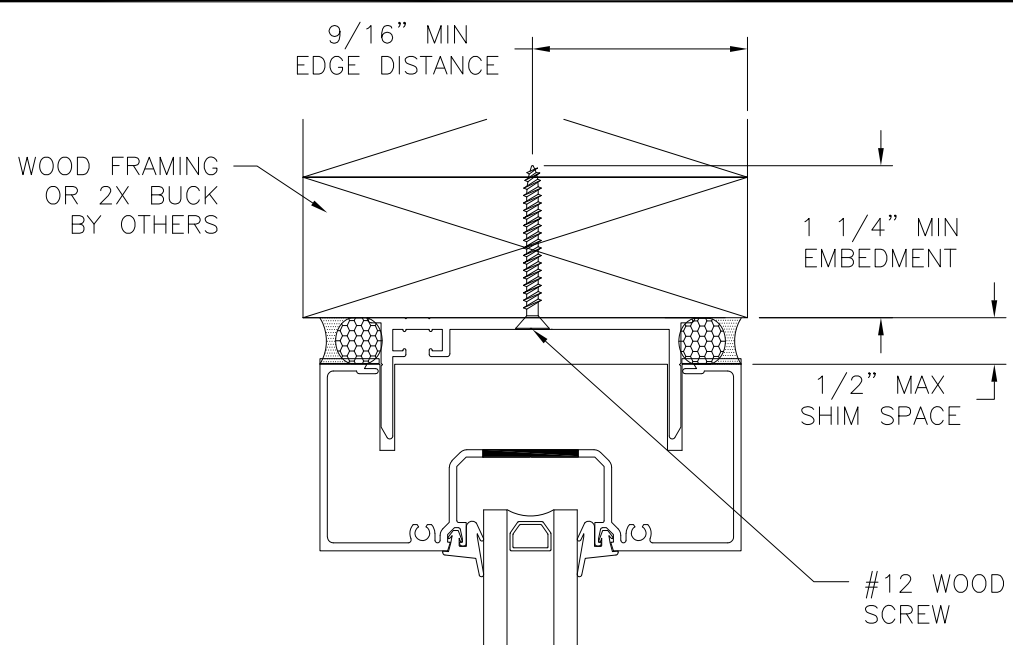
SERIES 450 CENTER GLAZE  
STORE FRONT  
ELEVATION AND DESIGN PRESSURE CHART

DRAWN: V.L.	DWG NO. 08-01816	REV B
SCALE NTS	DATE 10/09/12	SHEET 2 OF 6

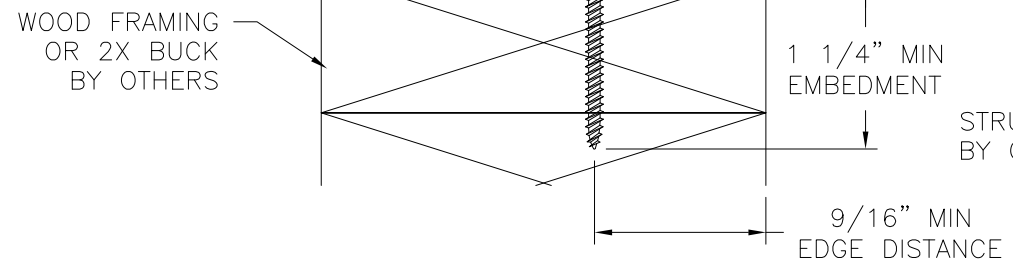
L. ROBERTO LOMAS P.E.  
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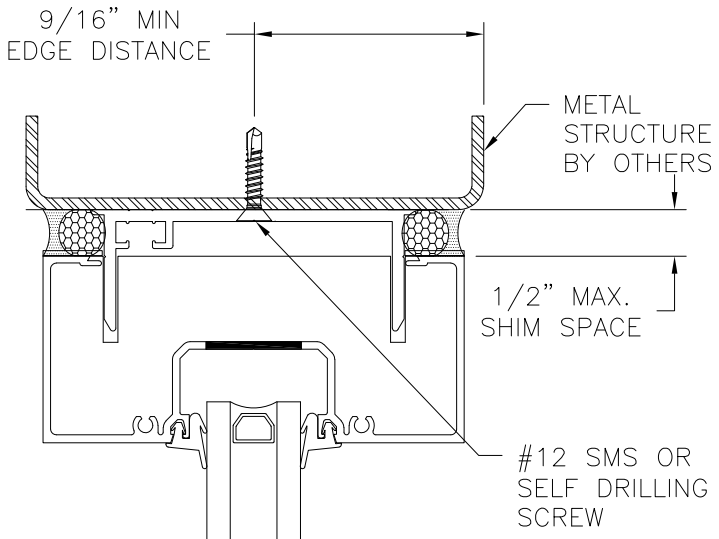
Luis R. Lomas P.E.  
FL No.: 62514



**VERTICAL CROSS SECTION**  
WOOD FRAMING OR 2X BUCK INSTALLATION

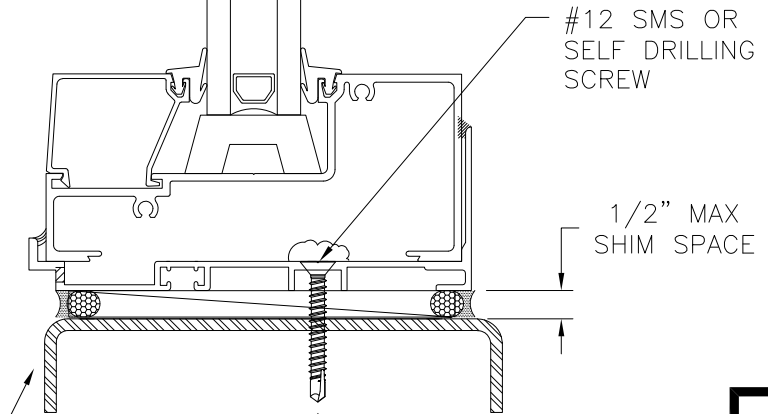


**VERTICAL CROSS SECTION**  
METAL STRUCTURE INSTALLATION

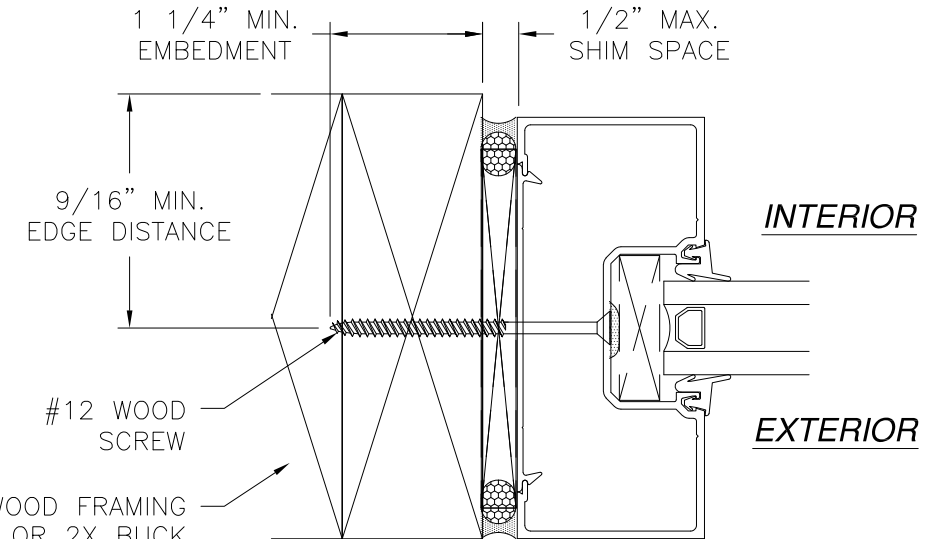


**EXTERIOR**

**INTERIOR**

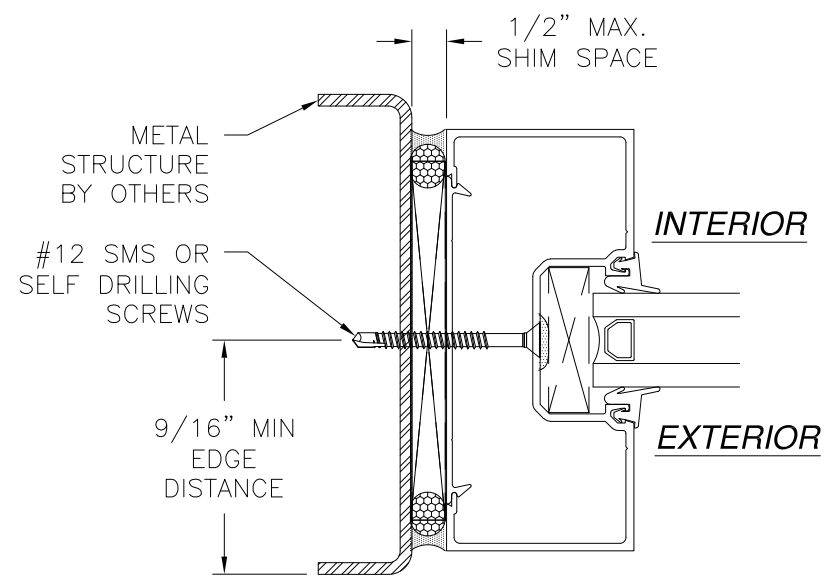


**JAMB INSTALLATION DETAIL**  
WOOD FRAMING OR 2X BUCK INSTALLATION



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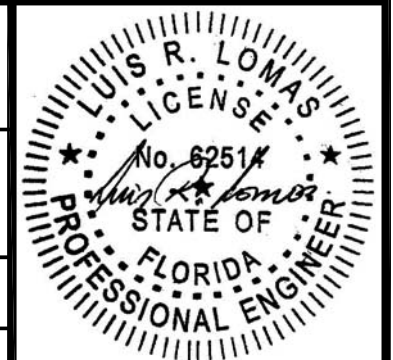
**JAMB INSTALLATION DETAIL**  
METAL STRUCTURE INSTALLATION

**US ALUMINUM**  
950 SOLON RD.  
WAXAHACHIE, TX 75165

SERIES 450 CENTER GLAZE  
STORE FRONT  
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-01816	REV B
SCALE NTS	DATE 10/09/12	SHEET 3 OF 6

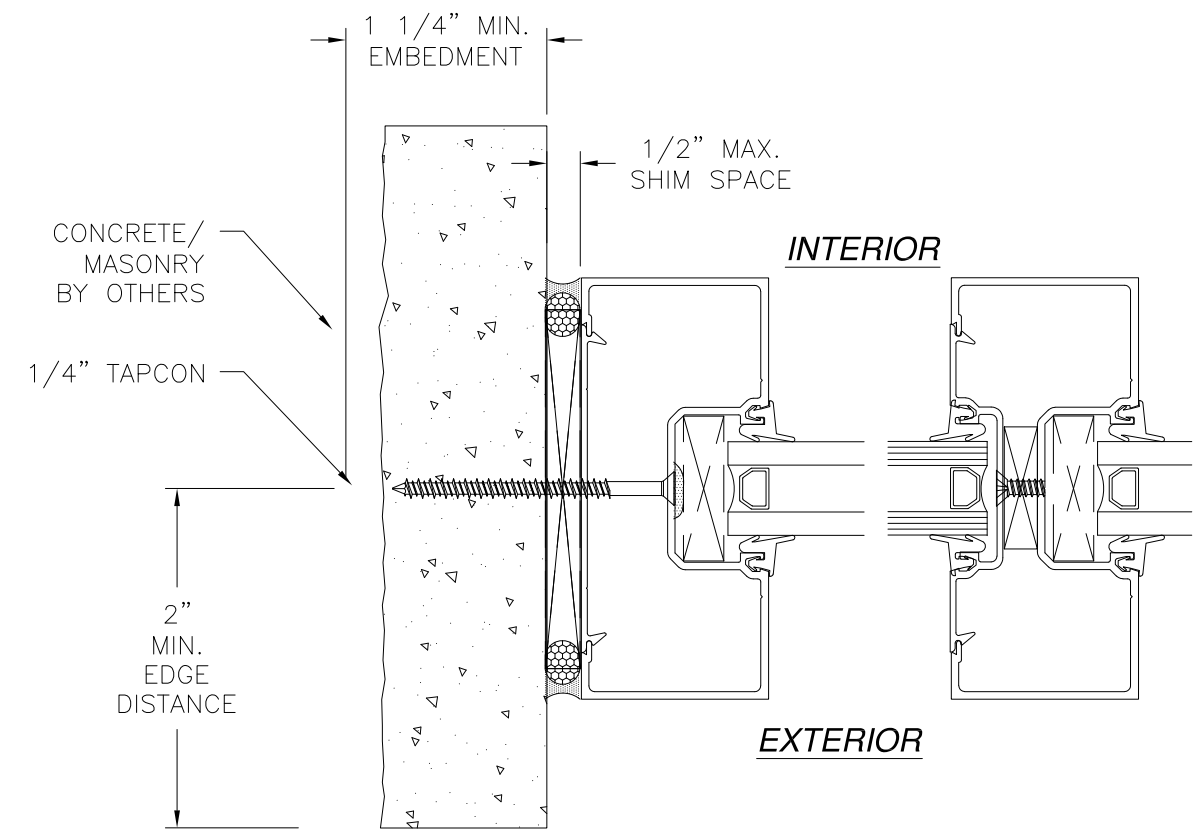
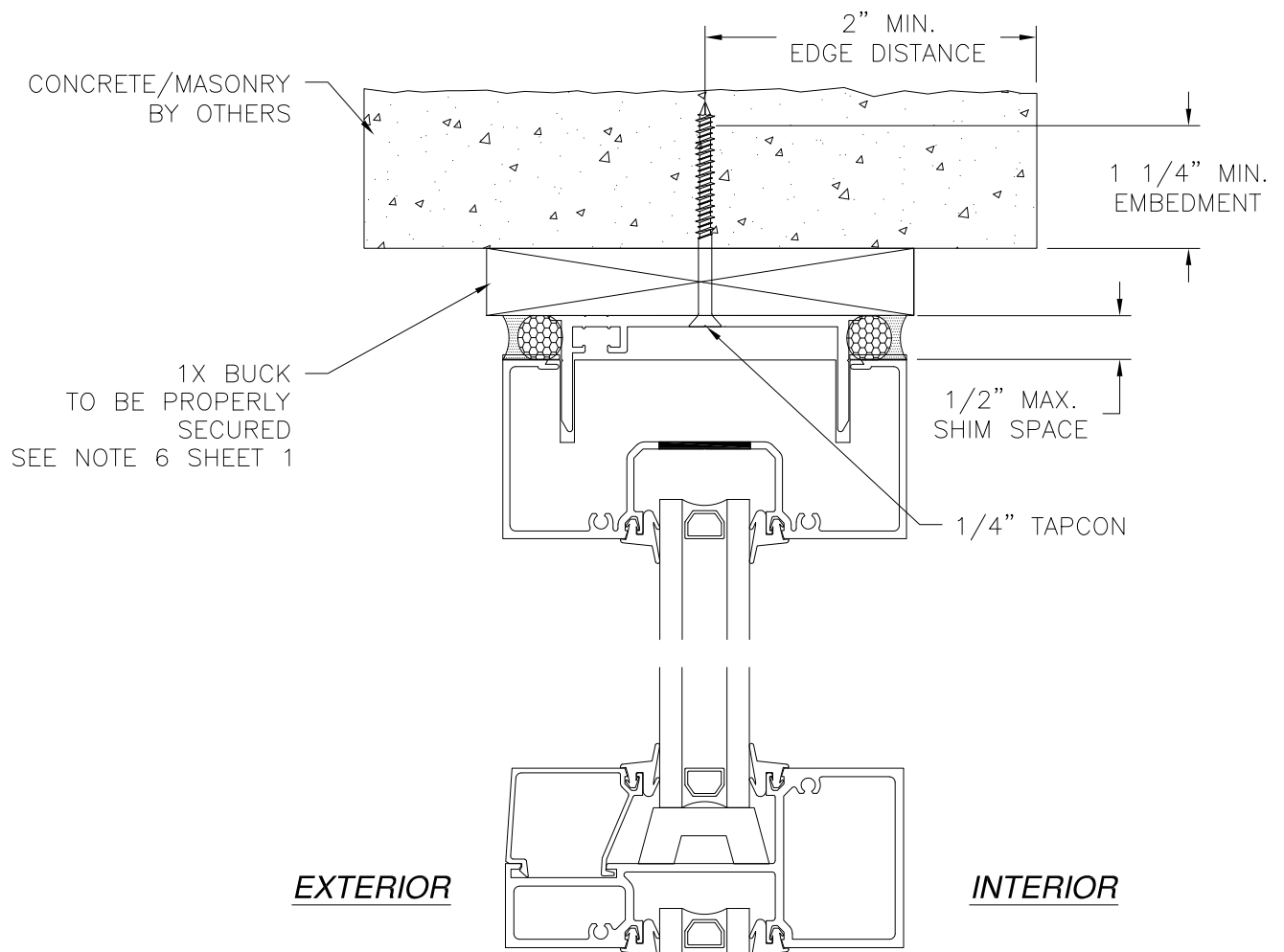
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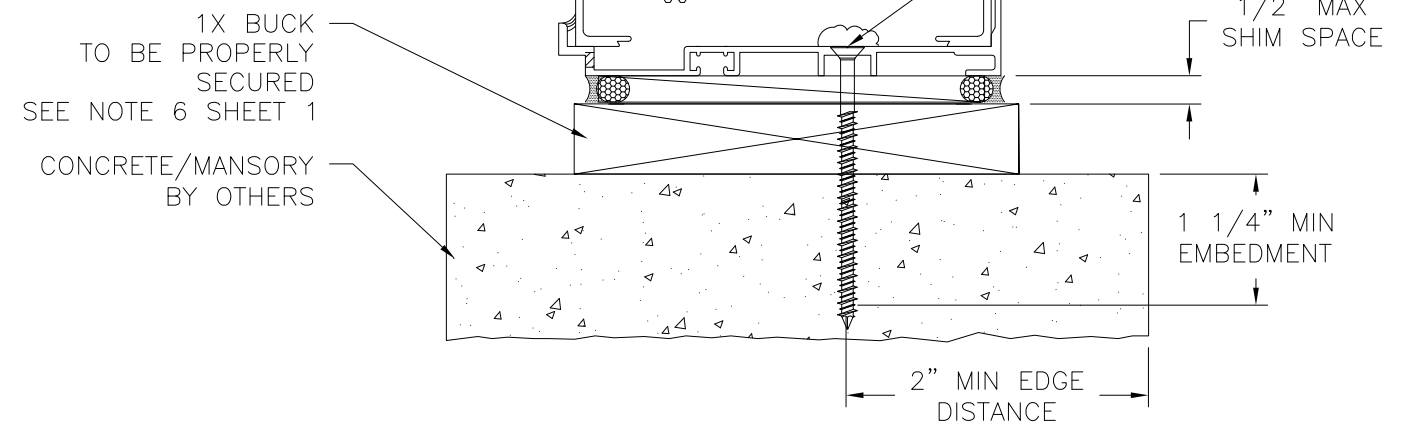
**NOTES:**  
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.  
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

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**JAMB INSTALLATION DETAIL**  
 CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION  
 FOR CONCRETE/MASONRY INSTALLATION WITH 1X BUCK REFER  
 TO HEAD AND SILL INSTALLATION DETAILS

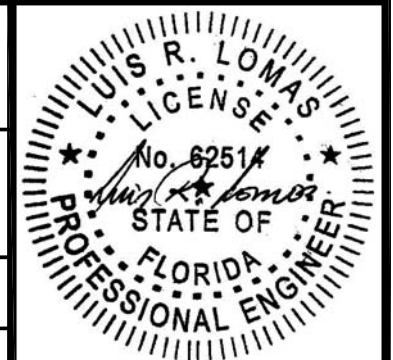
- NOTES:**
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**VERTICAL CROSS SECTION**  
 CONCRETE/MASONRY INSTALLATION WITH 1X BUCK INSTALLATION  
 FOR CONCRETE/MASONRY WITHOUT 1X BUCK REFER TO JAMB  
 INSTALLATION DETAILS

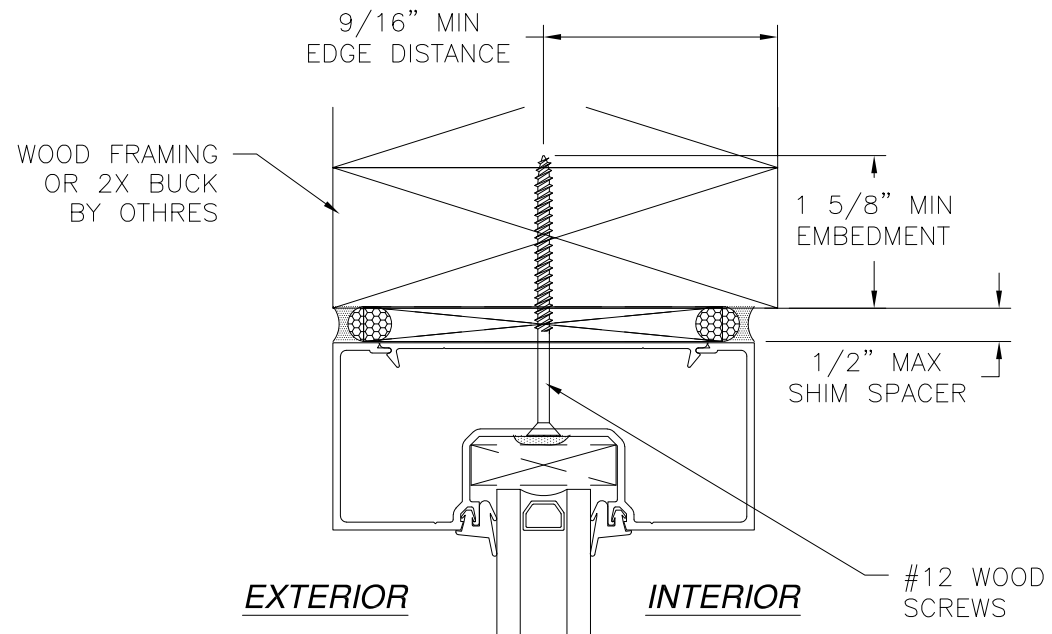
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<b>US ALUMINUM</b> 950 SOLON RD. WAXAHACHIE, TX 75165		
SERIES 450 CENTER GLAZE STORE FRONT INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01816	REV B
SCALE NTS	DATE 10/09/12	SHEET 4 OF 6
L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		

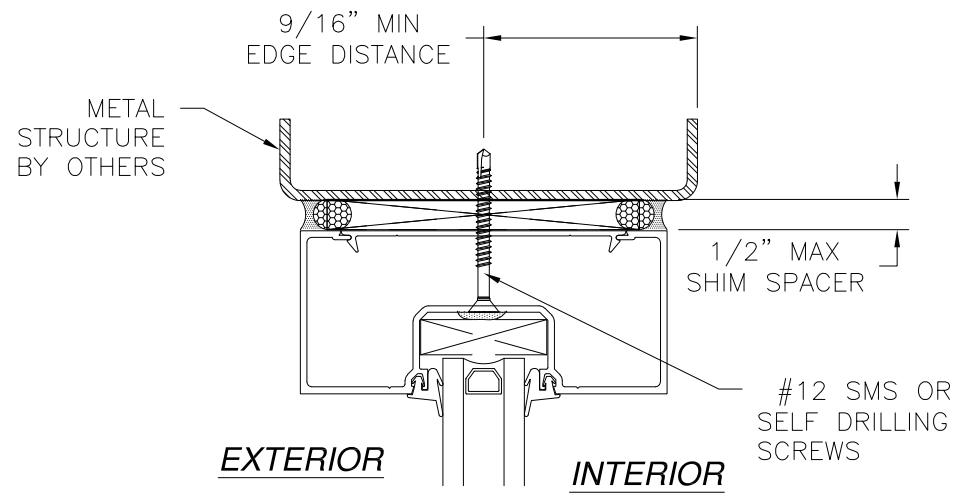


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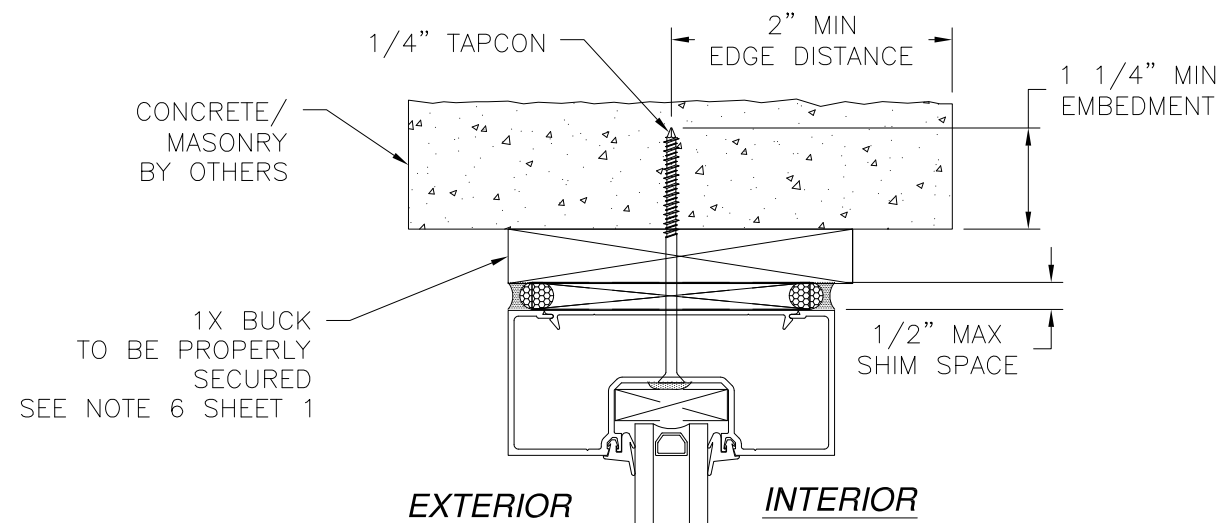
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**VERTICAL CROSS SECTION**  
WOOD FRAMING OR 2X BUCK INSTALLATION  
OPTIONAL HEAD CONFIGURATION



**VERTICAL CROSS SECTION**  
METAL STRUCTURE INSTALLATION  
OPTIONAL HEAD CONFIGURATION

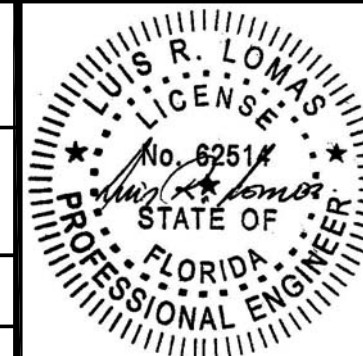


**VERTICAL CROSS SECTION**  
CONCRETE/MASONRY INSTALLATION  
OPTIONAL HEAD CONFIGURATION

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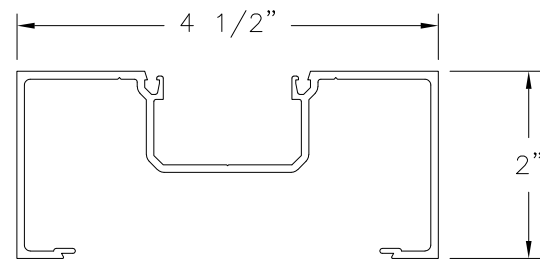
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L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

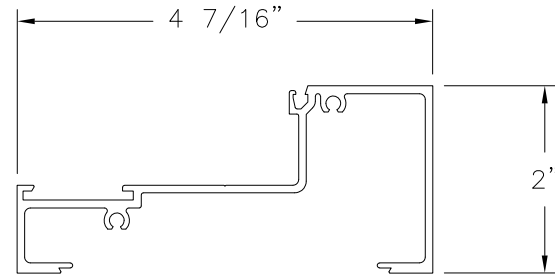


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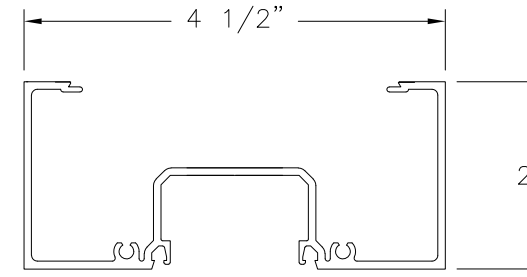
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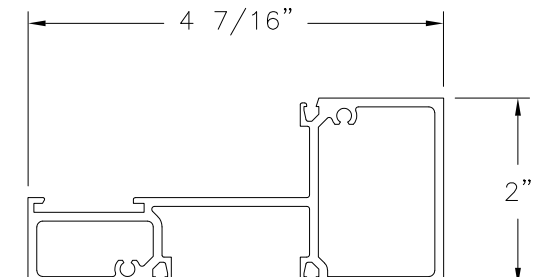
**HEAD**  
ALUMINUM 6063-T5 (IS452)



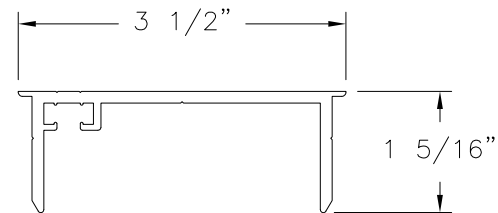
**SILL**  
ALUMINUM 6063-T5 (IS463)



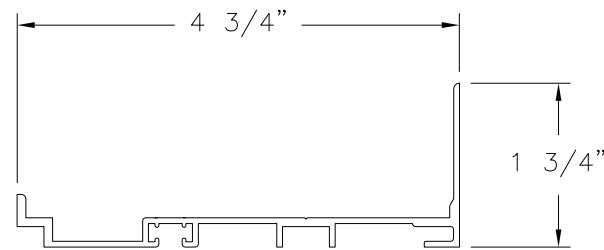
**JAMB**  
ALUMINUM 6063-T5 (I-452)



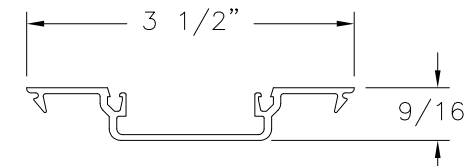
**HORIZONTAL MULLION**  
ALUMINUM 6063-T5 (IH463)



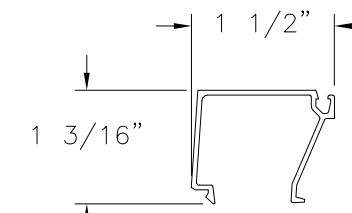
**HEAD CHANNEL**  
ALUMINUM 6063-T6 (HC251)



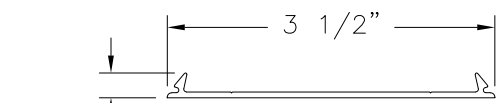
**SUB-SILL**  
ALUMINUM 6063-T5 (FT400)



**INT. VERT. FILLER**  
ALUMINUM 6063-T5 (IS200)



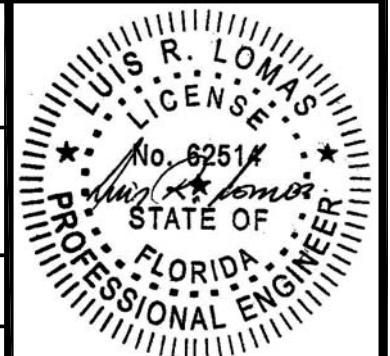
**GLASS STOP**  
ALUMINUM 6063-T5 (IM-453)



**FLAT SNAP IN COVER**  
ALUMINUM 6063-T5 (PS100)

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<b>US ALUMINUM</b> 950 SOLON RD. WAXAHACHIE, TX 75165		
SERIES 450 CENTER GLAZE STORE FRONT COMPONENTS		
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SCALE NTS	DATE 10/09/12	SHEET 6 OF 6
L. ROBERTO LOMAS P.E. 400 S. PALM AVE, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		



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