

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, METAL STRUCTURE 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” 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.
4. 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.
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 WINDOW 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, WITH SAFETY GLAZING.
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 3/8” 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 3/4” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/2” 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:

17.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

17.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.

17.3. MASONRY: GROUT/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.

17.4. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR ALUMINUM 6063–T5 FU=30KSI 1/8” THICK MINIMUM
18. SYSTEM WAS NOT TESTED FOR WATER PENETRATION RESISTANCE AND MUST INSTALLED IN LOCATIONS WHERE WATER PENETRATION RESISTANCE IS NOT REQUIRED.

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION, DP CHART AND CLUSTER DETAILS
3 – 6	INSTALLATION DETAILS
7	COMPONENTS



LANAI DOORS
941 NORTH ELM STREET, SUITE C
ORANGE, CA 92867

THERMALLY BROKEN ALUMINUM INSWING
BI-FOLD DOOR, NON-IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08-04005

REV
-

SCALE NTS

DATE 02/01/2024

SHEET 1 OF 7

L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

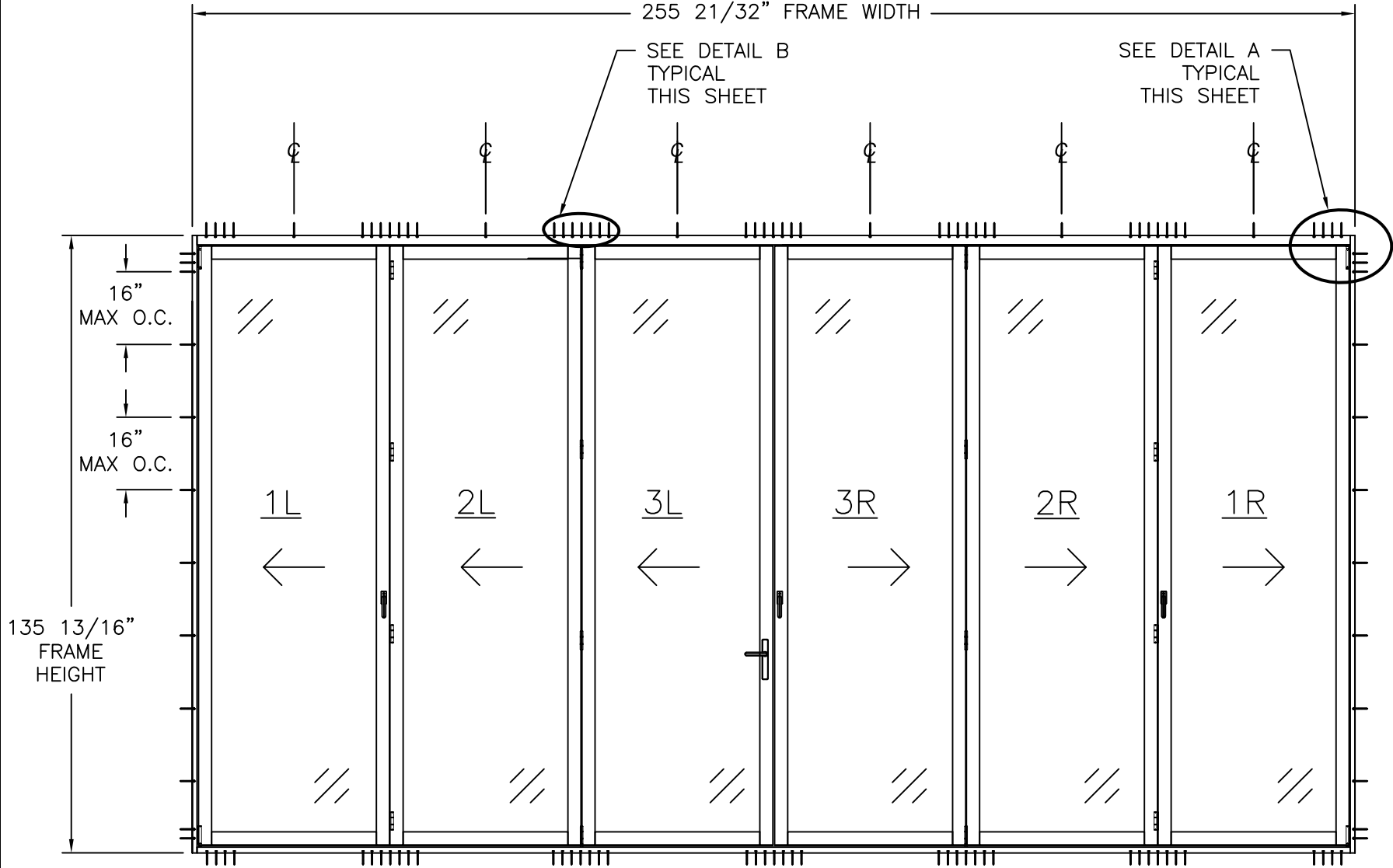
SIGNED: 03/06/2024

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

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CHART #1, WHERE WATER RESISTANCE IS NOT REQUIRED

Panel Height (in)	Maximum Design pressure (psf)													
	Single Panel Width (in)													
	24.0		30.0		36.0		42.0		48.0		54.0		60.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	67.5	60.0	67.5	60.0	67.5	60.0	67.5	59.2	66.6	52.6	59.2	47.4	53.3
84.0	60.0	67.5	60.0	67.5	60.0	67.5	60.0	67.5	55.0	61.9	48.9	55.0	44.0	49.5
90.0	60.0	67.5	60.0	67.5	60.0	67.5	58.7	66.0	51.3	57.8	45.6	51.3	41.1	46.2
96.0	60.0	67.5	60.0	67.5	60.0	67.5	55.0	61.9	48.1	54.1	42.8	48.1	-	-
102.0	60.0	67.5	60.0	67.5	60.0	67.5	51.8	58.2	45.3	51.0	40.3	45.3	-	-
108.0	60.0	67.5	60.0	67.5	57.0	64.2	48.9	55.0	42.8	48.1	-	-	-	-
114.0	60.0	67.5	60.0	67.5	54.0	60.7	46.3	52.1	40.5	45.6	-	-	-	-
120.0	60.0	67.5	59.2	66.6	50.8	57.1	44.0	49.5	-	-	-	-	-	-
126.0	60.0	67.5	56.0	63.0	48.0	54.0	41.9	47.1	-	-	-	-	-	-
132.0	60.0	67.5	53.1	59.8	45.4	51.1	40.0	45.0	-	-	-	-	-	-
138.0	59.5	67.0	47.9	53.9	40.3	45.3	-	-	-	-	-	-	-	-
144.0	52.3	58.9	42.1	47.4	35.4	39.8	-	-	-	-	-	-	-	-



LANAI DOORS THERMALLY BROKEN ALUMINUM INSWING
EXTERIOR VIEW
UNLIMITED NUMBER OF PANELS IN UNLIMITED CONFIGURATIONS ARE APPROVED AS LONG AS INDIVIDUAL
PANEL AREA DOES NOT EXCEED 38.5 FT² AND USES VERTICAL CONDITIONS AS SHOWN IN APPROVAL DRAWING.

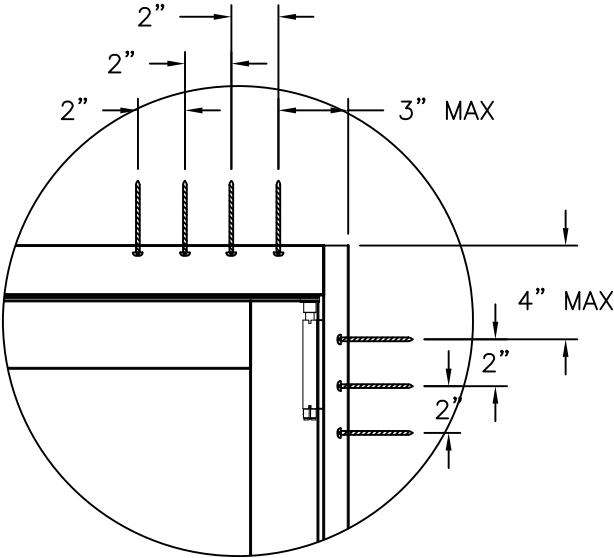
DESIGN PRESSURE RATING	IMPACT RATING
+40.0/-45.0PSF	NONE
THIS SYSTEM WAS NOT TESTED FOR WATER INFILTRATION AND MUST BE INSTALLED ONLY WHERE WATER RESISTANCE IS NOT REQUIRED	

SEE CHART #1, THIS SHEET

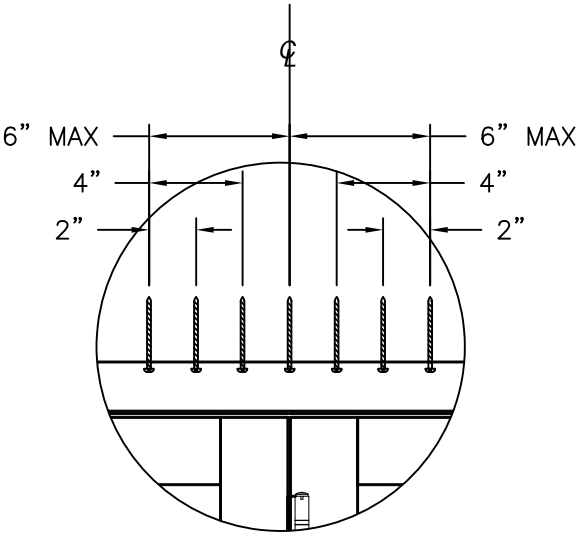
- NOTES:
- PANEL SIZE: 42" x 132"
 - D.L.O.: 36 3/16" x 126"

HARDWARE SCHEDULE

A.	(8) HINGES AT LEFT AND RIGHT INTERMEDIATE PANELS JOINING TO ADJACENT PANELS
B.	(4) PIVOTS AT TOP AND BOTTOM OF LATERAL PANELS AND EXTENDED TO FRAME HEAD AND THRESHOLD
C.	(2) ROLLER CARRIAGE AND HINGE ASSEMBLY AT TOP OF INTERMEDIATE PANELS
D.	(2) GUIDE ROLLER AND HINGE ASSEMBLY AT BOTTOM OF INTERMEDIATE PANELS
E.	(3) TWIN BOLT LOCK AT LEFT AND RIGHT STILE OF RIGHT AND LEFT OUTER PANEL, LEFT STILE OF RIGHT/CENTER PANEL
F.	(1) INTERLOCK LCL LOCK AT RIGHT STILE OF LEFT/CENTER PANEL
G.	(3) SHOOT-BOLT CUPS AT THRESHOLD, 41" FROM ENDS AND CENTER.



DETAIL A

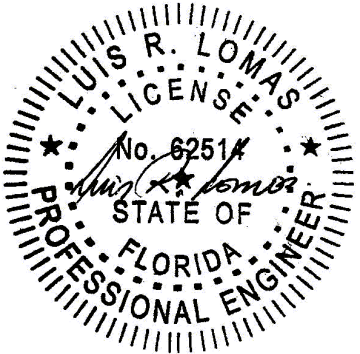


DETAIL B

SIGNED: 03/06/2024

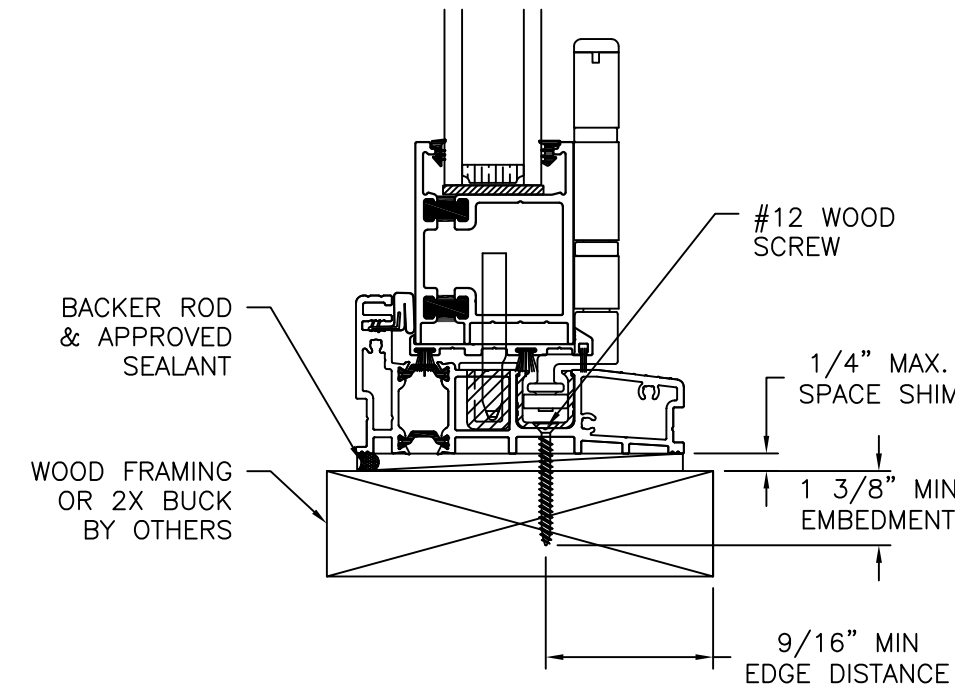
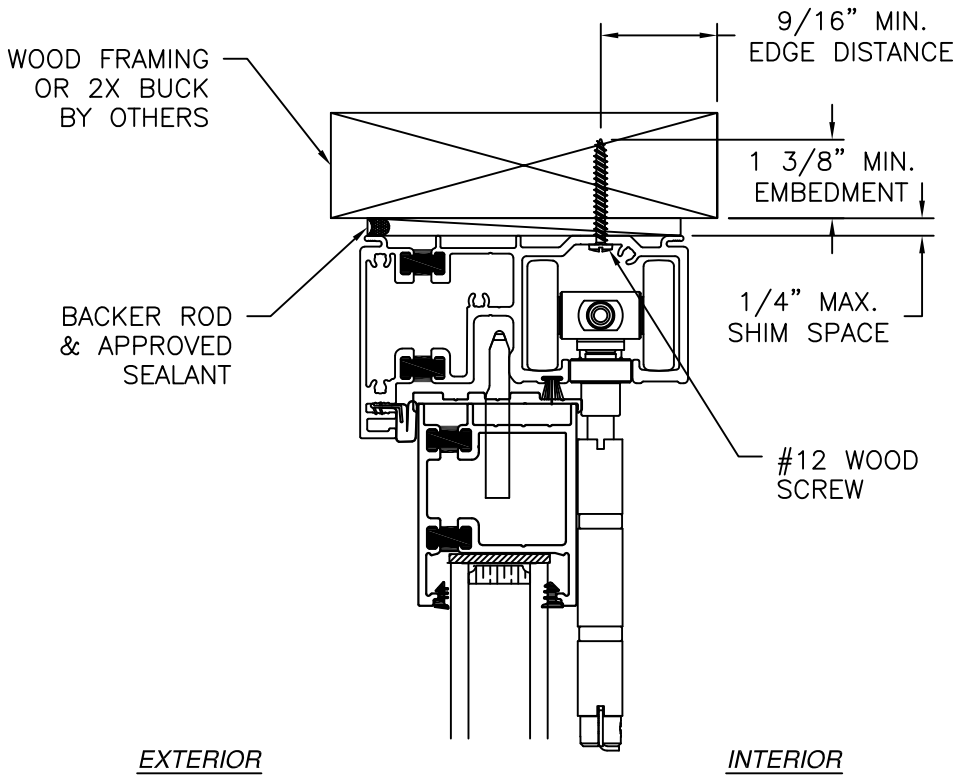


LANAI DOORS 941 NORTH ELM STREET, SUITE C ORANGE, CA 92867		
THERMALLY BROKEN ALUMINUM INSWING BI-FOLD DOOR, NON-IMPACT ELEVATION, DP CHART AND CLUSTER DETAILS		
DRAWN: A.R.	DWG NO. 08-04005	REV -
SCALE NTS	DATE 02/01/2024	SHEET 2 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

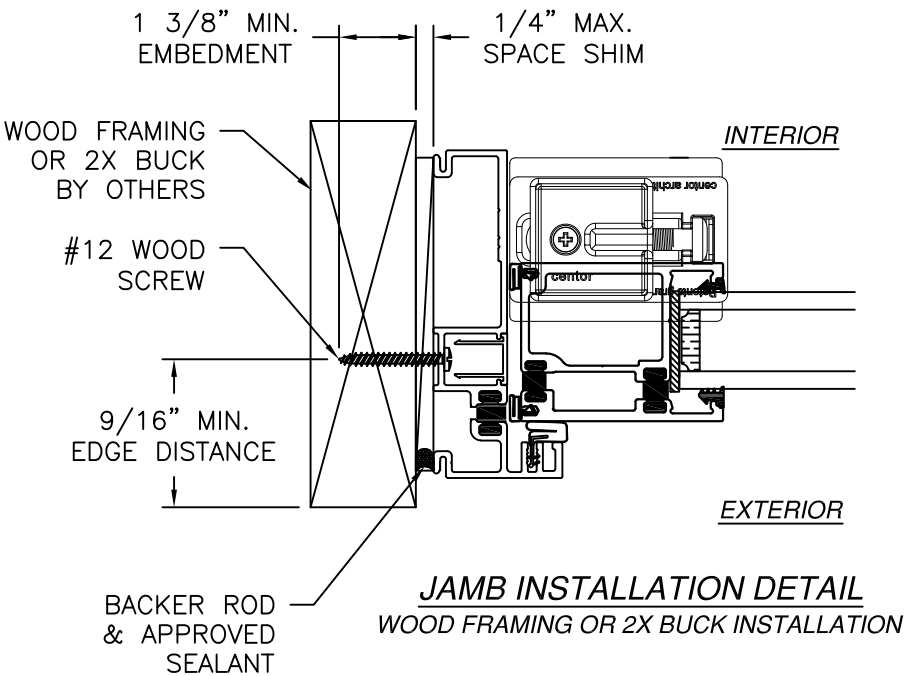


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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
STANDARD THRESHOLD SHOWN
SEE SHEET 7 FOR OTHER THRESHOLDS INSTALLATION



- 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



LANAI DOORS

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THERMALLY BROKEN ALUMINUM INSWING
BI-FOLD DOOR, NON-IMPACT
INSTALLATION DETAILS

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DATE 02/01/2024

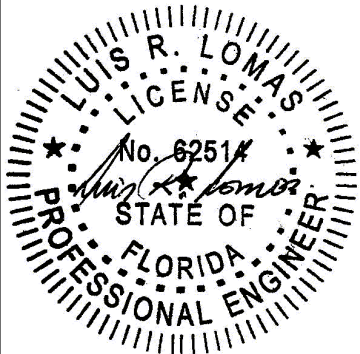
SHEET 3 OF 7

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

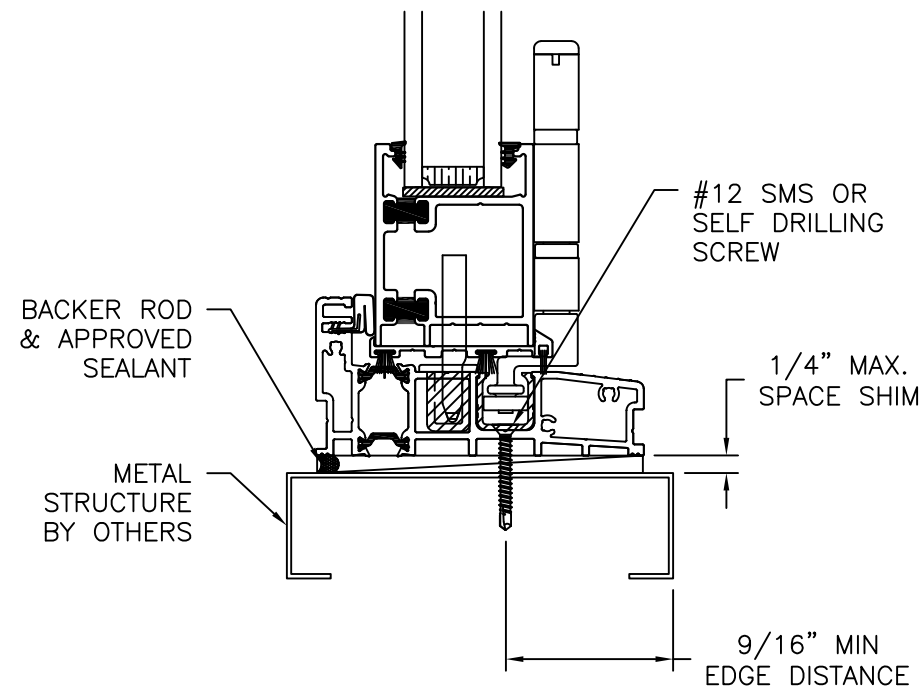
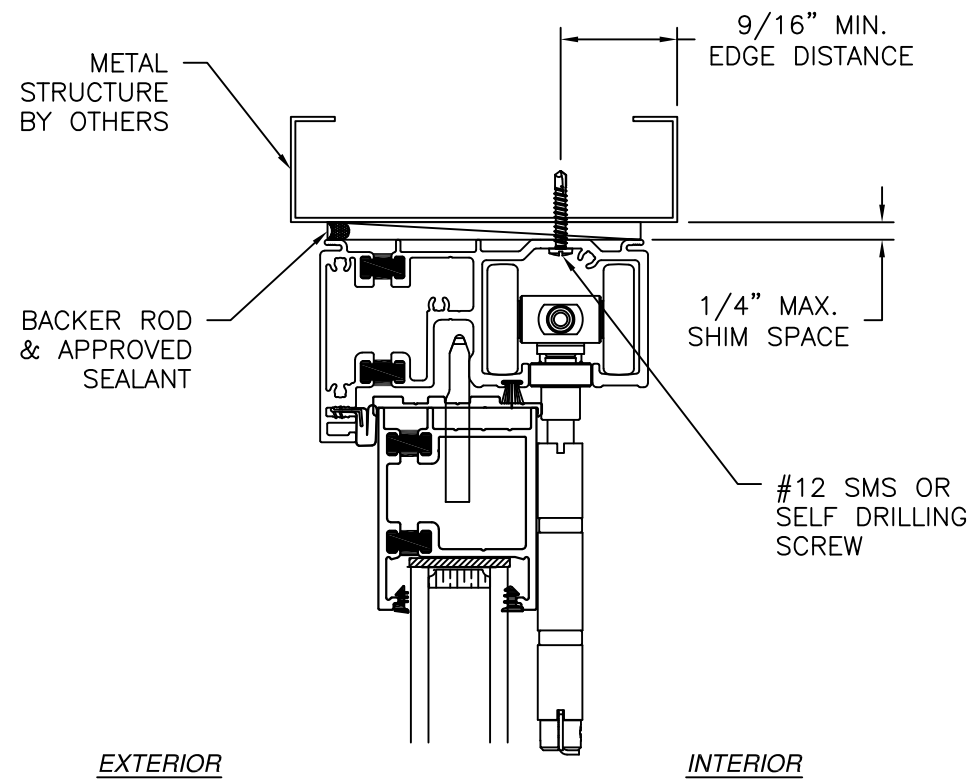
434-688-0609 rllomas@lrlomaspe.com

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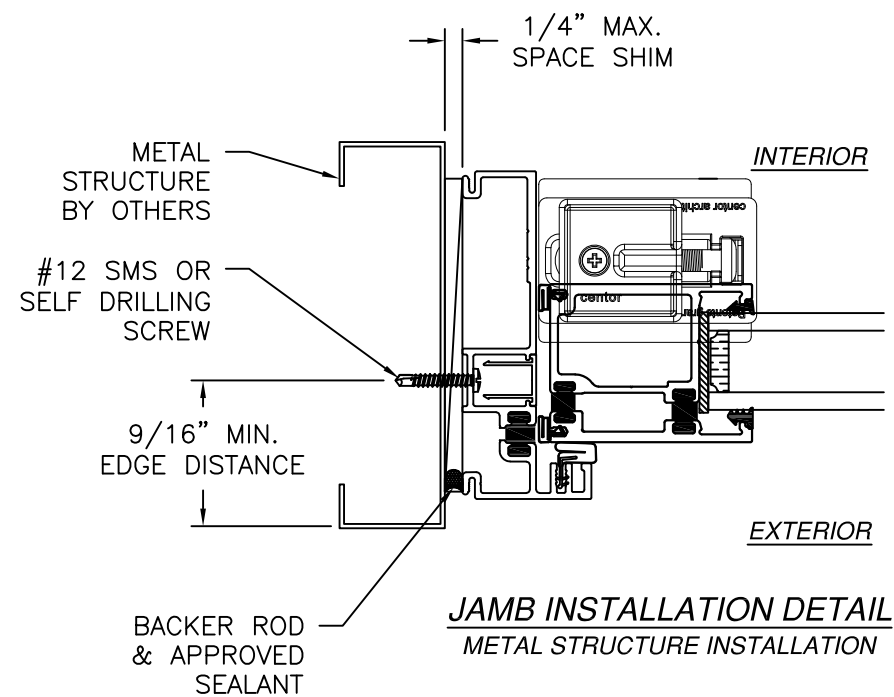


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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION
STANDARD THRESHOLD SHOWN
SEE SHEET 7 FOR OTHER THRESHOLDS INSTALLATION

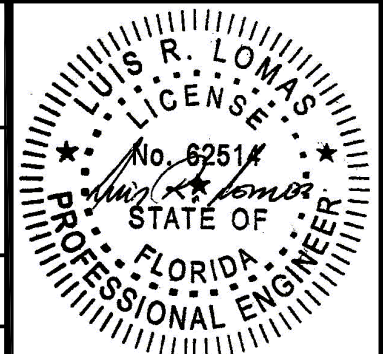


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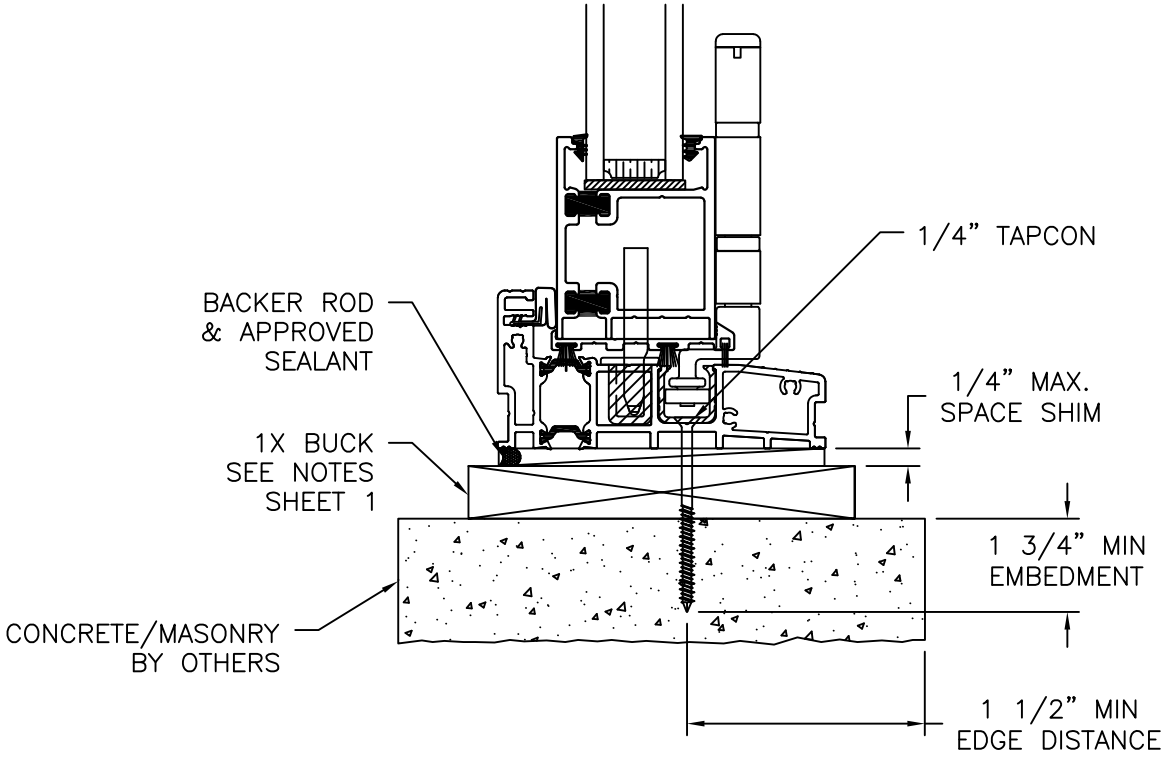
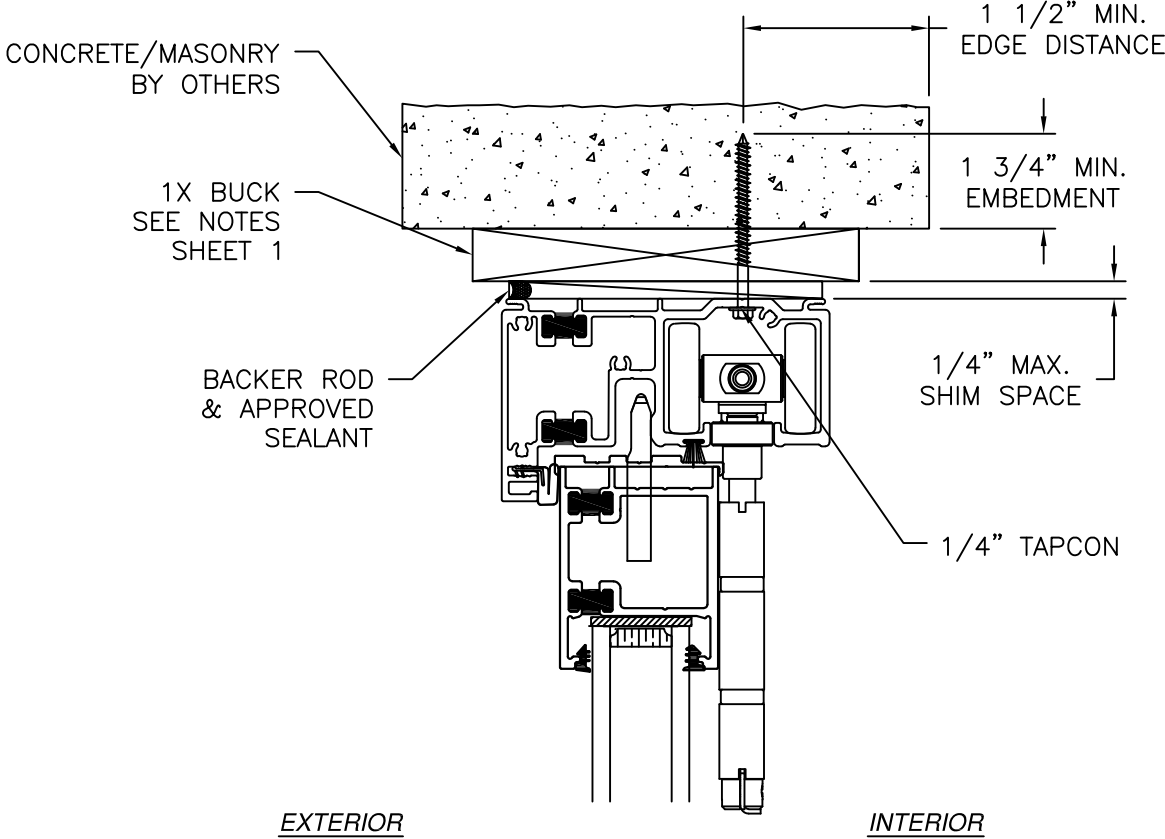
LANAI DOORS 941 NORTH ELM STREET, SUITE C ORANGE, CA 92867		
THERMALLY BROKEN ALUMINUM INSWING BI-FOLD DOOR, NON-IMPACT INSTALLATION DETAILS		
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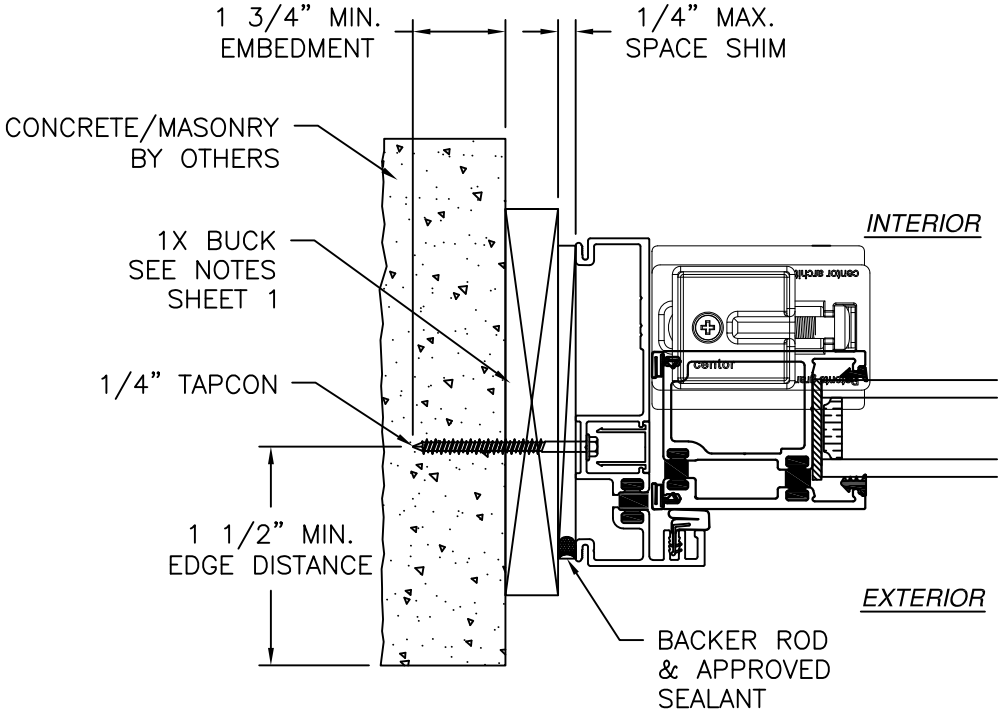


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VERTICAL CROSS SECTION
 CONCRETE/MASONRY INSTALLATION
 STANDARD THRESHOLD SHOWN
 SEE SHEET 7 FOR OTHER THRESHOLDS INSTALLATION



JAMB INSTALLATION DETAIL
 CONCRETE MASONRY INSTALLATION

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BI-FOLD DOOR, NON-IMPACT
INSTALLATION DETAILS

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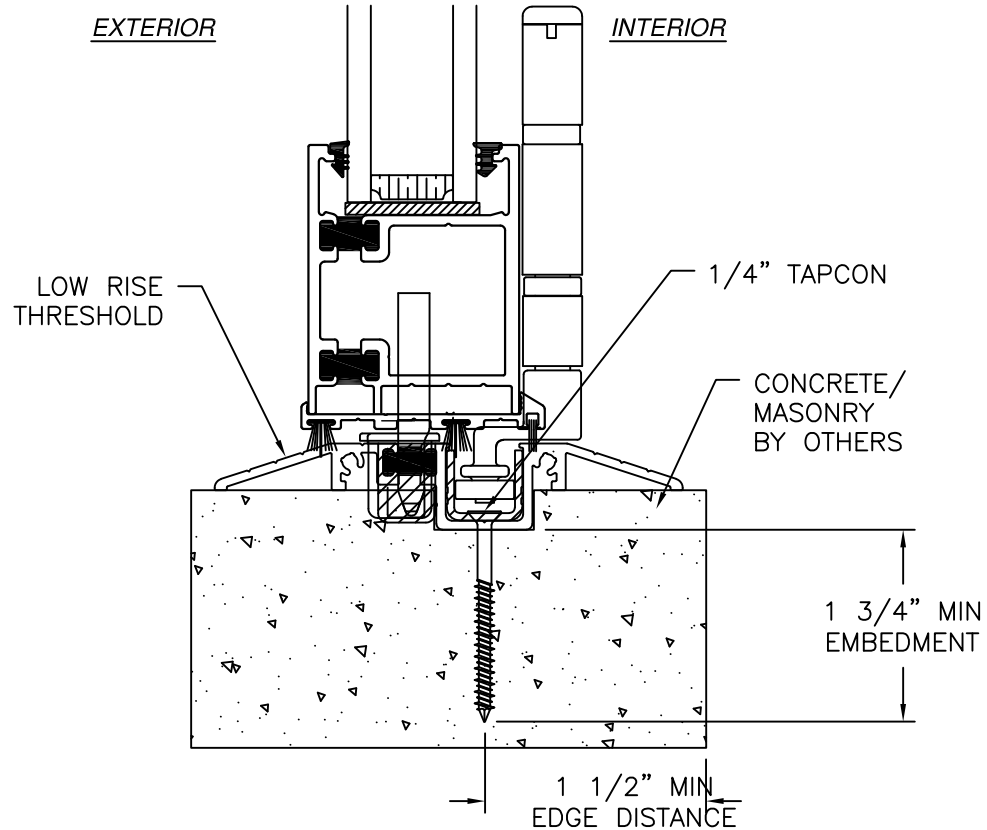
SHEET 5 OF 7

L. ROBERTO LOMAS P.E.

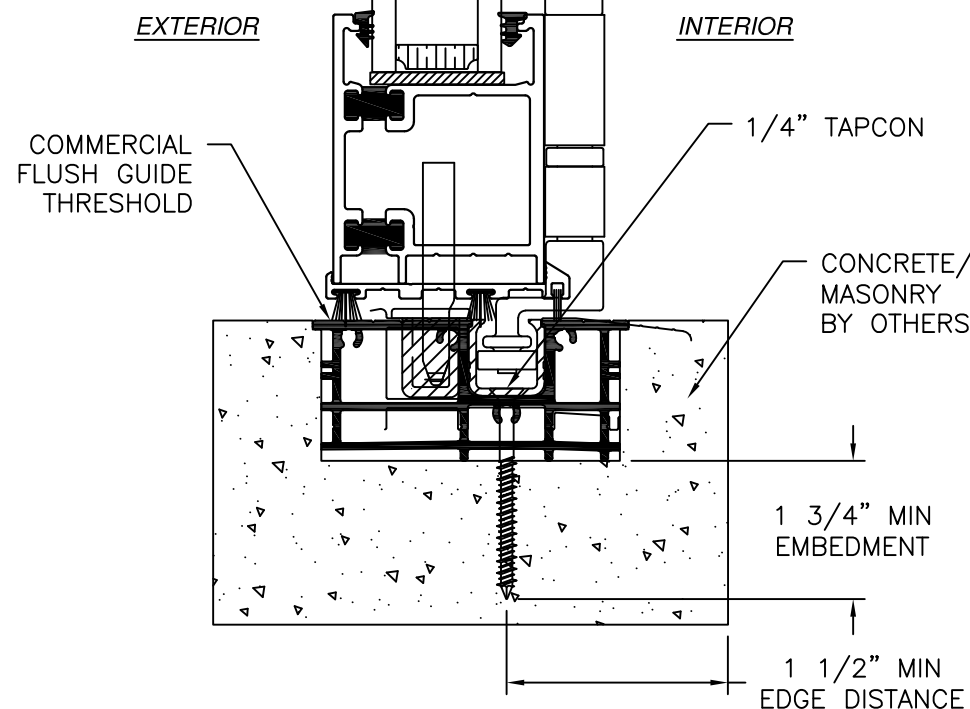
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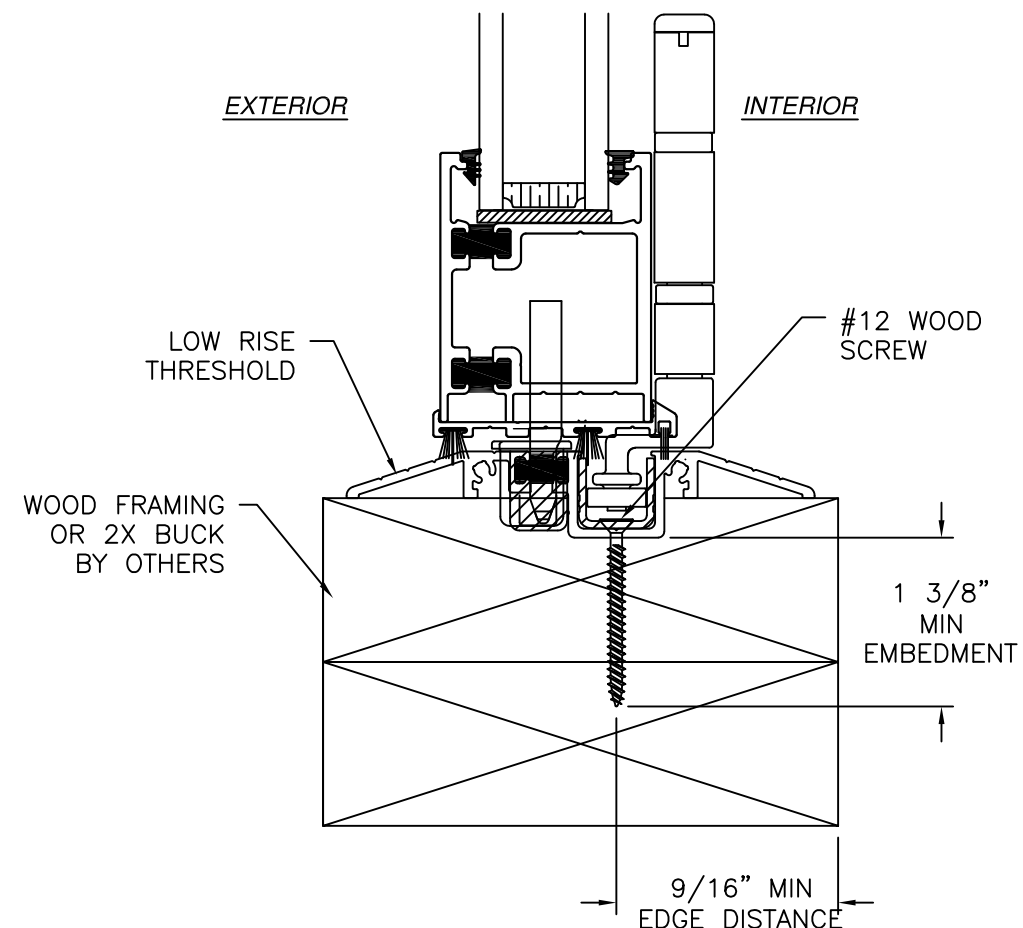
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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION
LOW RISE THRESHOLD

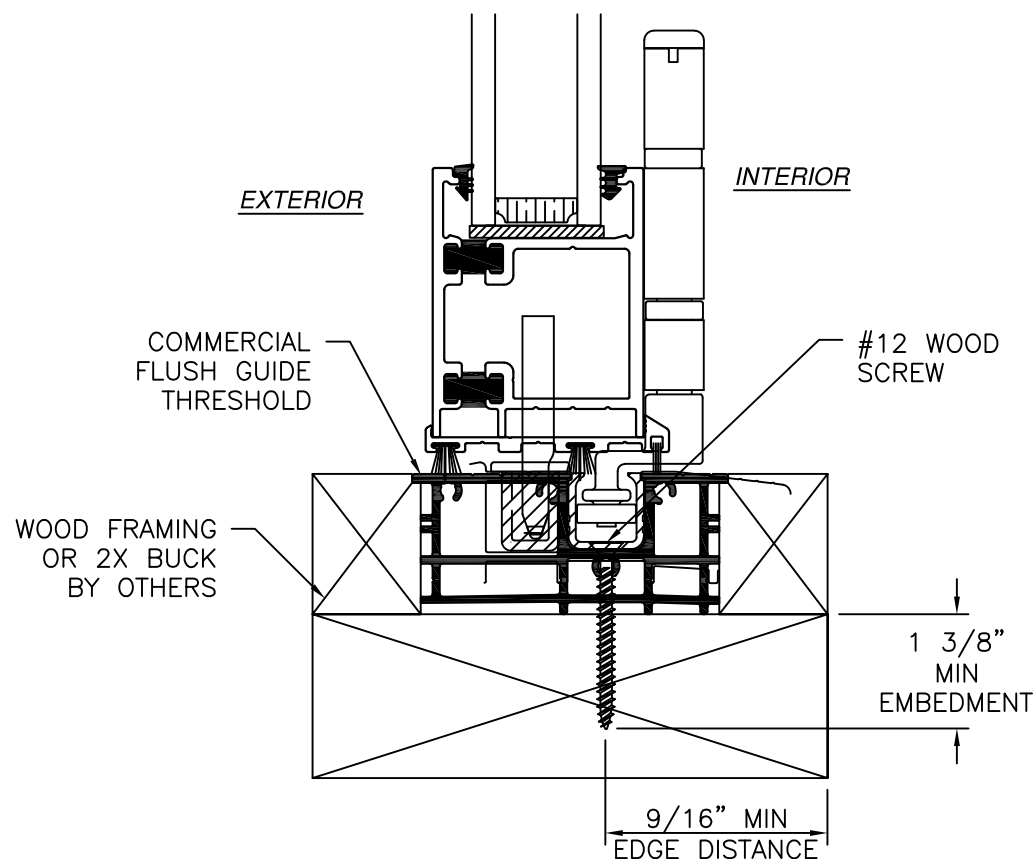


VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION
COMMERCIAL FLUSH GUIDE THRESHOLD



VERTICAL CROSS SECTION
WOOD FRAMING INSTALLATION
LOW RISE THRESHOLD

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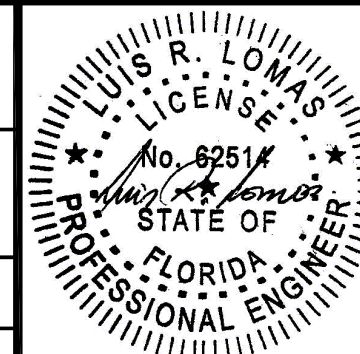


VERTICAL CROSS SECTION
WOOD FRAMING INSTALLATION
COMMERCIAL FLUSH GUIDE THRESHOLD



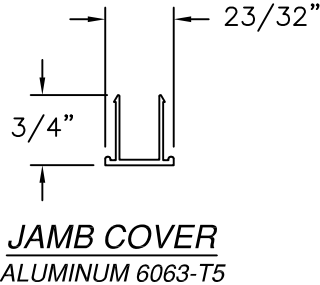
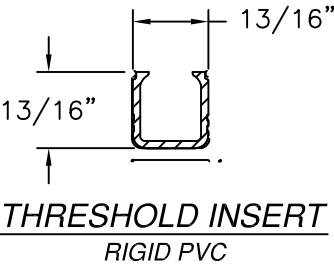
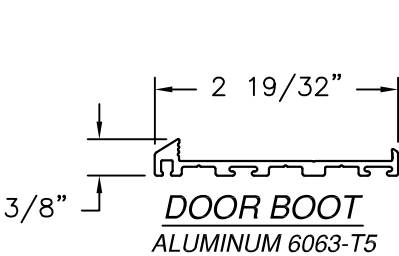
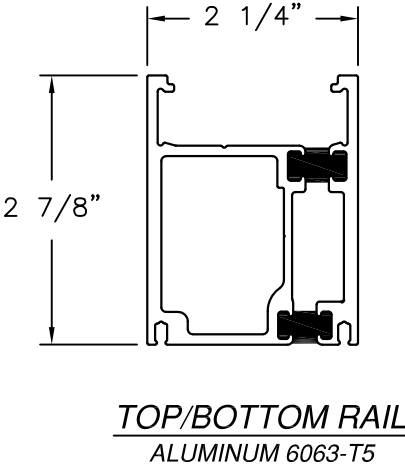
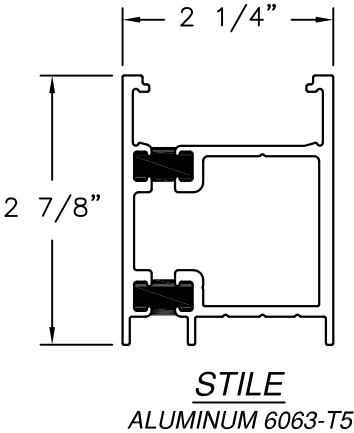
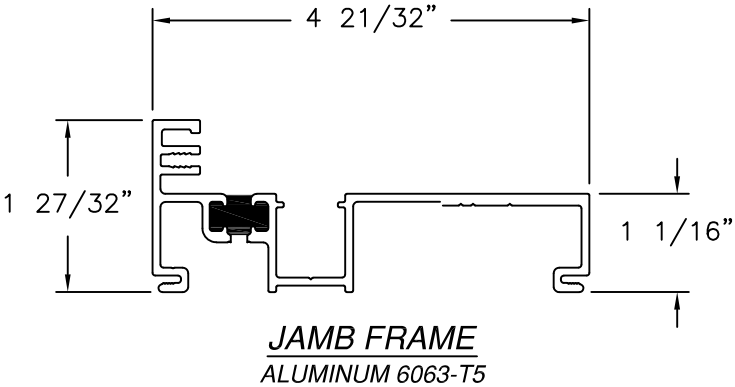
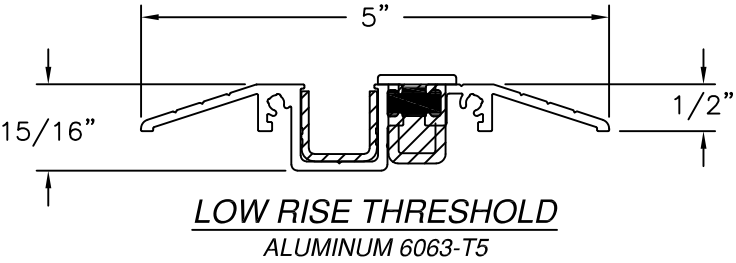
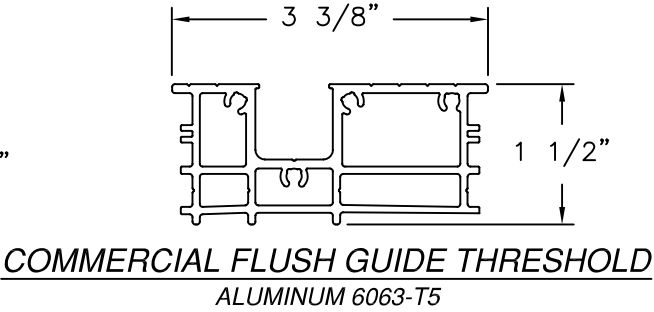
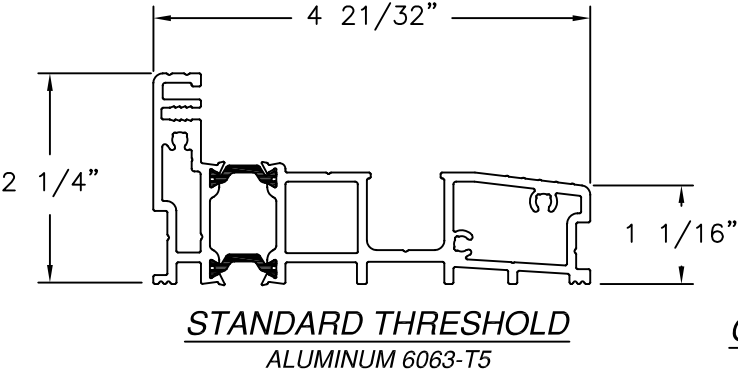
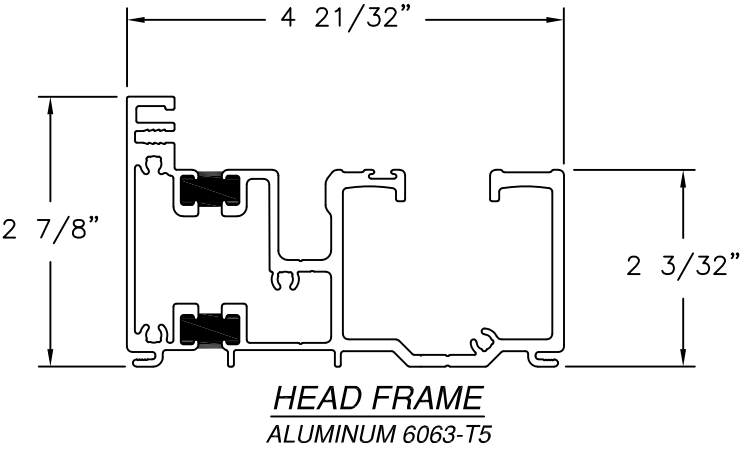
LANAI DOORS 941 NORTH ELM STREET, SUITE C ORANGE, CA 92867		
THERMALLY BROKEN ALUMINUM INSWING BI-FOLD DOOR, NON-IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-04005	REV -
SCALE NTS	DATE 02/01/2024	SHEET 6 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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