

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.

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” 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: WOOD G=.46 MINIMUM SPECIFIC GRAVITY, OR COMPOSITE, OR FRAMESAVER OR FUSION FRAME.
DOOR SKIN MATERIAL: STEEL .033” THICK (MINIMUM), FIBERGLASS .085” THICK (MINIMUM)
SIDELITE SKIN MATERIAL: STEEL .022” THICK (MINIMUM)
11. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 2 FOR GLASS DETAIL.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.

13. 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.
14. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 3/16” TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/8” MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. FOR ANCHORING THROUGH FRAME INTO METAL STRUCTURE USE #8 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: HOLLOW/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. APPROVED CONFIGURATIONS: X, OX, XO, XX, OXO, XOO, OOX.

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION AND GLAZING DETAILS
3	APPROVED CONFIGURATIONS
4	APPROVED SLABS AND TRIMS
5 – 7	INSTALLATION DETAILS
8	COMPONENTS

PROVIA, LLC.
2150 STATE ROUTE 39 WEST
SUGARCREEK, OHIO 44681

FIBERGLASS PATIO DOOR
IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08–03753

REV
C

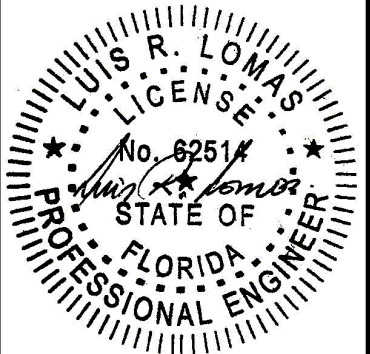
SCALE NTS

DATE 08/18/2021

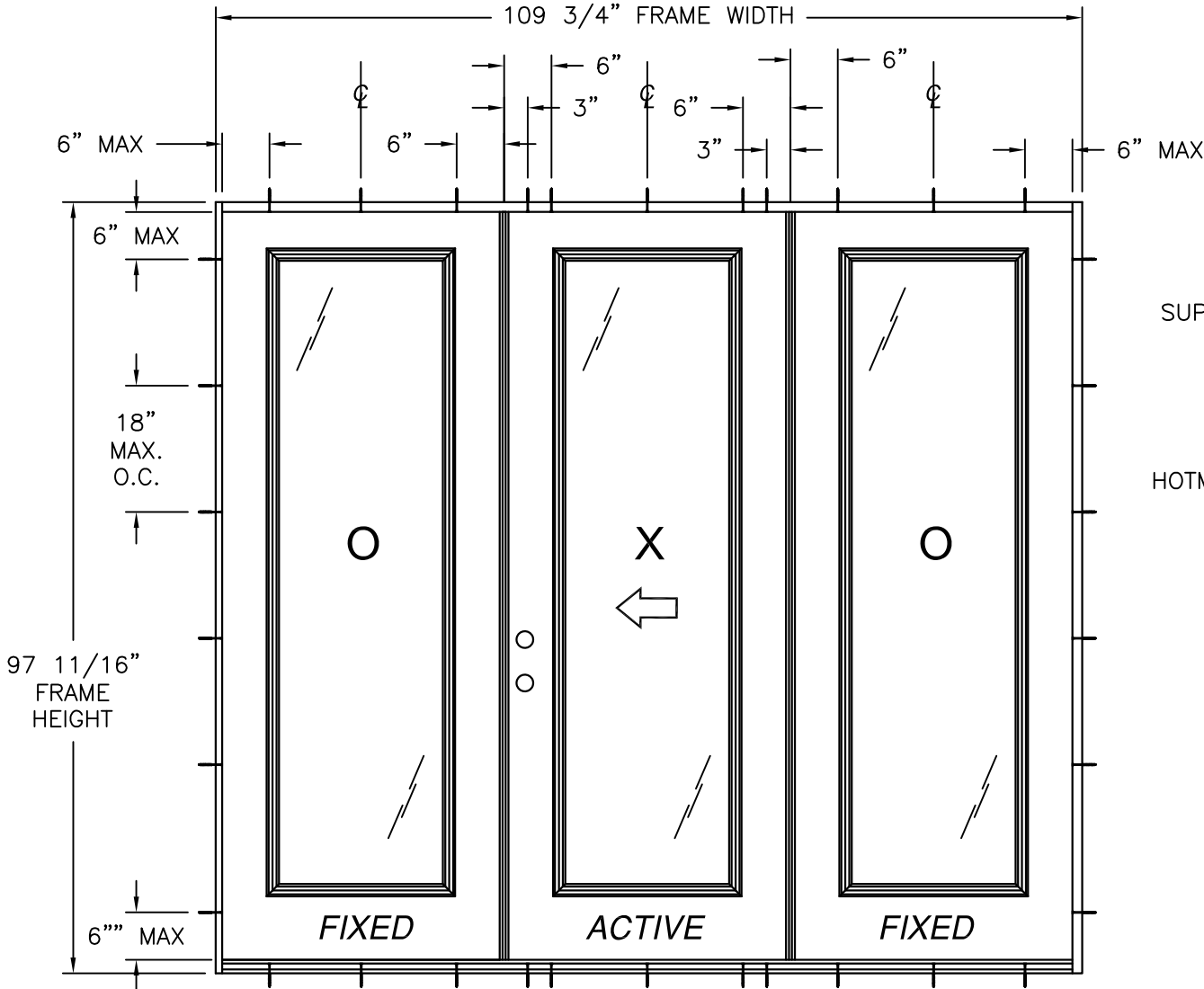
SHEET 1 OF 8

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

SIGNED: 09/14/2026



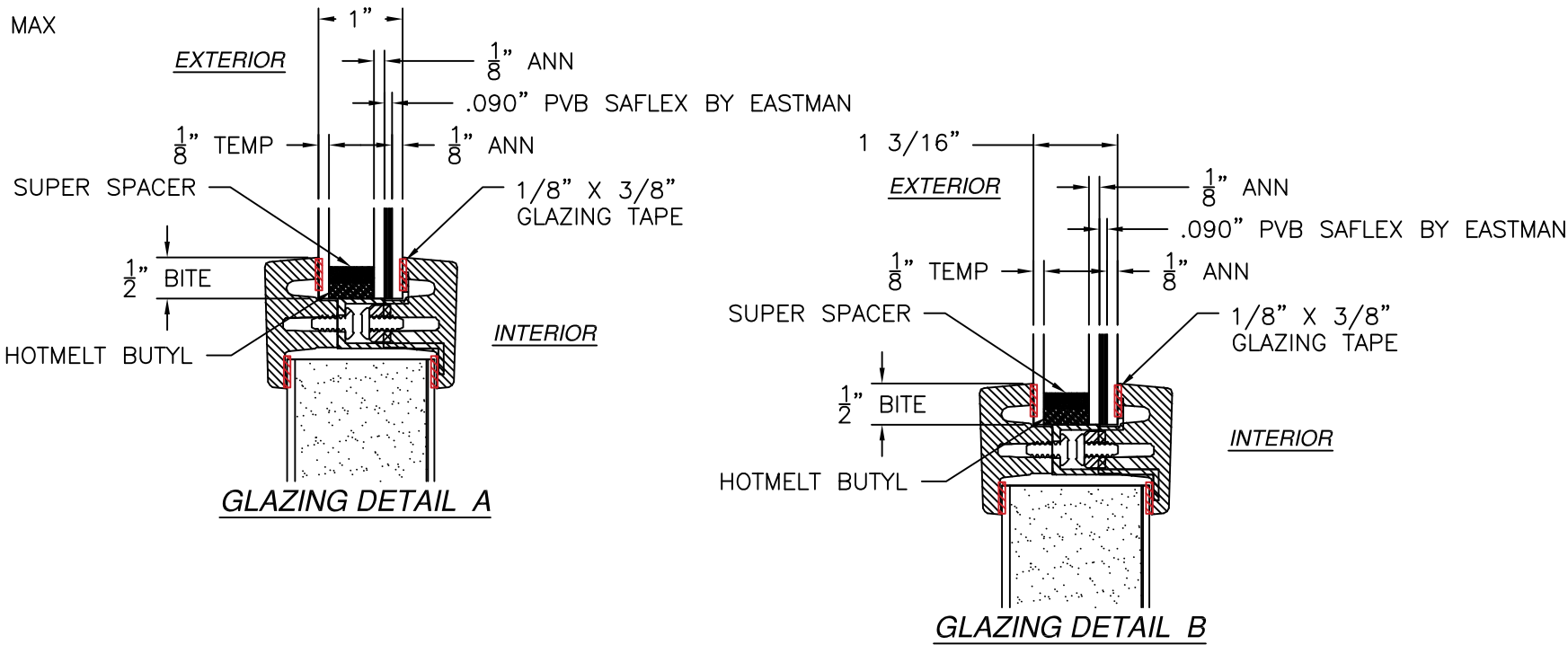
Luis R. Lomas P.E.
FL No.: 62514



FIBERGLASS PATIO DOOR OXO
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±50.0PSF	LARGE AND SMALL MISSILE IMPACT
THIS SYSTEM WAS NOT TESTED FOR WATER INFILTRATION AND IS TO BE INSTALLED ONLY WHERE THE WATER REQUIREMENT IS NOT NEEDED	

MISSILE LEVEL D, WIND ZONE 3



Anchors and anchor connectors corrosion resistance chart		
Exposure	Distance from coastal shoreline	
	0' up to 300'	>300' up to 3000'
Exterior - partially sheltered	304 or A305 or 306 Stainless steel per ASTM A240	Galvanized per ASTM A153 class D or ASTM A641 class 3S
Exterior - open exposed	304 or A305 or 306 Stainless steel per ASTM A240	Galvanized per ASTM A153 class D or ASTM A641 class 3S
Unconditioned interior-vented enclosed	Galvanized per ASTM A153 class D or ASTM A641 class 3S	Galvanized per ASTM A153 class D or ASTM A641 class 3S
Unconditioned interior-unvented enclosed	Galvanized per ASTM A153 class D or ASTM A641 class 3S	Galvanized per ASTM A153 class D or ASTM A641 class 3S

HARDWARE SCHEDULE	
A.	F-SERIES & FC-SERIES LOCK ASSEMBLY DOOR KNOB BY SCHLAGE
B.	B-SERIES DEADBOLT ASSEMBLY BY SCHLAGE
C.	F-SERIES & FC-SERIES DEADBOLT ASSEMBLY BY SCHAGE
D.	RESIDENTIAL GRADE DOOR HANDLE ASSEMBLY BY EMTEK (ALTERNATE)
E.	MULTI-POINT HANDLE ASSEMBLY BY TRILENNIUM (ALTERNATE)
F.	PANOLOCK MULTI-POINT LOCK ASSEMBLY (ALTERNATE)
G.	INSWING HURRICANE ASTRAGAL BY ENDURA
H.	(3) 4" X 4" BALL BEARING HINGES BY PENROD
I.	(3) 4" X 4" SPRING BOMMER HINGES BY PENROD (ALTERNATE)

- NOTES:
- PANEL SIZE: 35 3/4" X 94 15/16"
 - D.L.O.: 21 1/8" X 79 1/4"

PROVIA, LLC.
2150 STATE ROUTE 39 WEST
SUGARCREEK, OHIO 44681

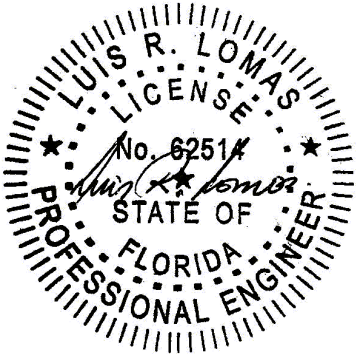
FIBERGLASS PATIO DOOR
IMPACT
ELEVATION AND GLAZING DETAILS

DRAWN: A.R. DWG NO. 08-03753 REV C

SCALE NTS DATE 08/18/2021 SHEET 2 OF 8

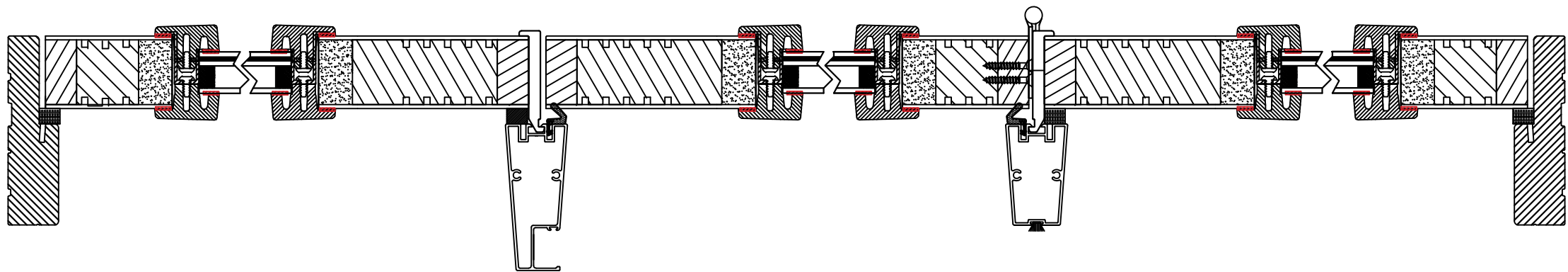
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@rlomaspe.com

SIGNED: 09/14/2026

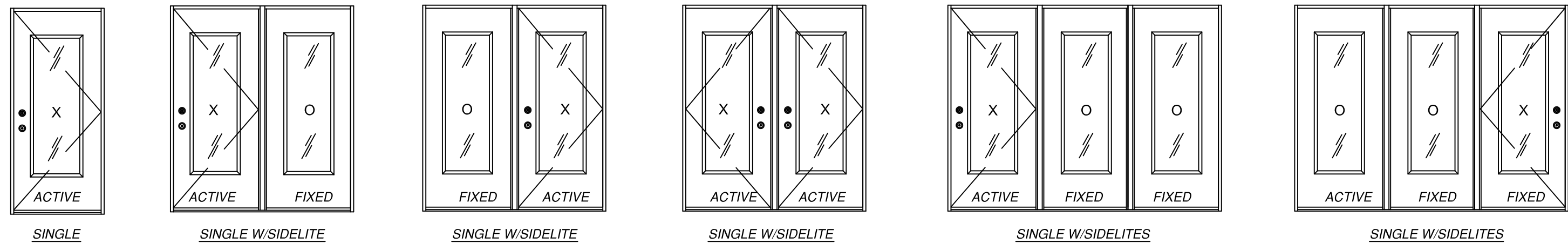


Luis R. Lomas P.E.
FL No.: 62514

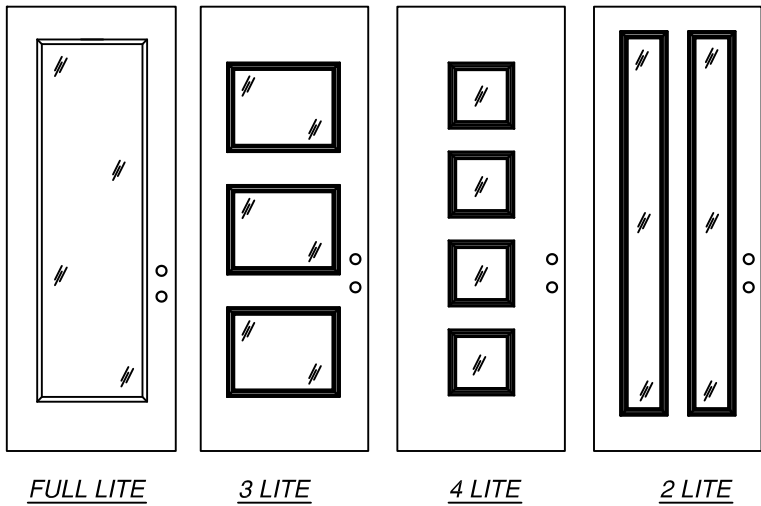
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



HORIZONTAL CROSS SECTION OXO



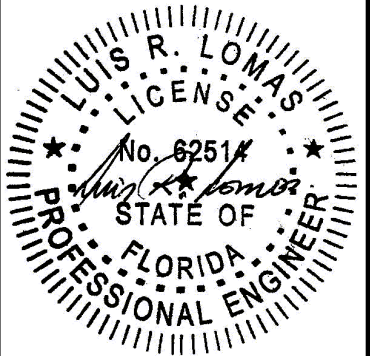
APPROVED LITE CONFIGURATIONS



LITE CONFIGURATIONS SHOWN ARE FOR REFERENCE ONLY. MULTIPLE LITE CONFIGURATIONS ARE APPROVED AS LONG AS LITE SIZE DOES NOT EXCEED 11.62 FT²

PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OHIO 44681		
FIBERGLASS PATIO DOOR IMPACT APPROVED CONFIGURATIONS, SLABS & TRIMS		
DRAWN: A.R.	DWG NO. 08-03753	REV C
SCALE NTS	DATE 08/18/2021	SHEET 3 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

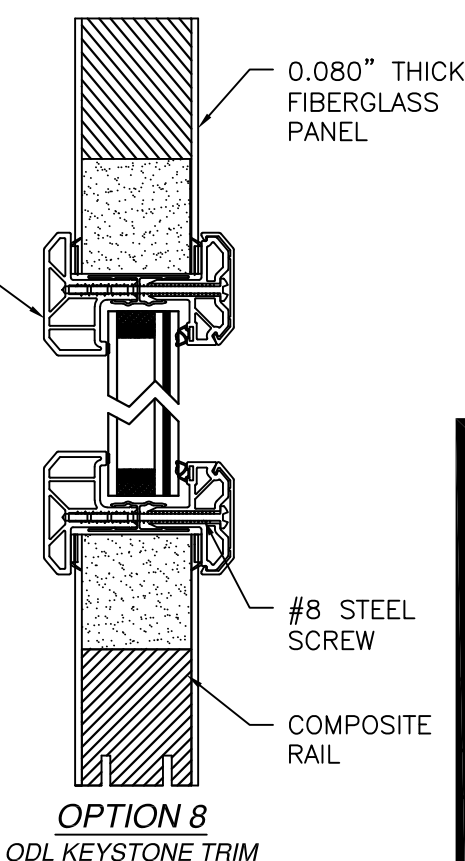
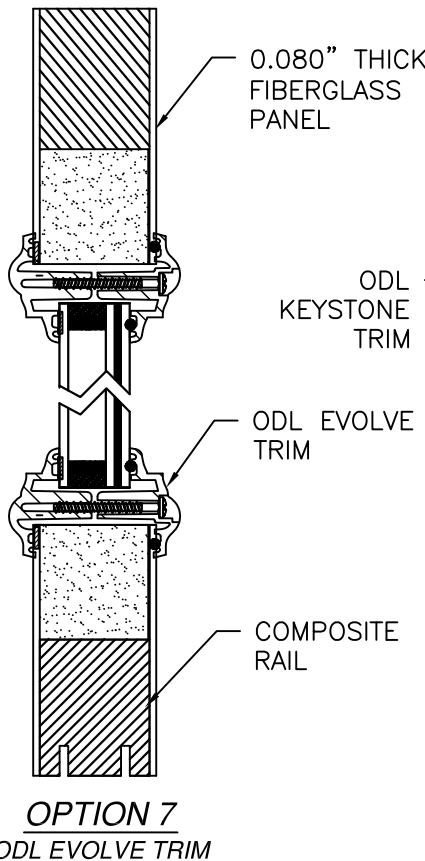
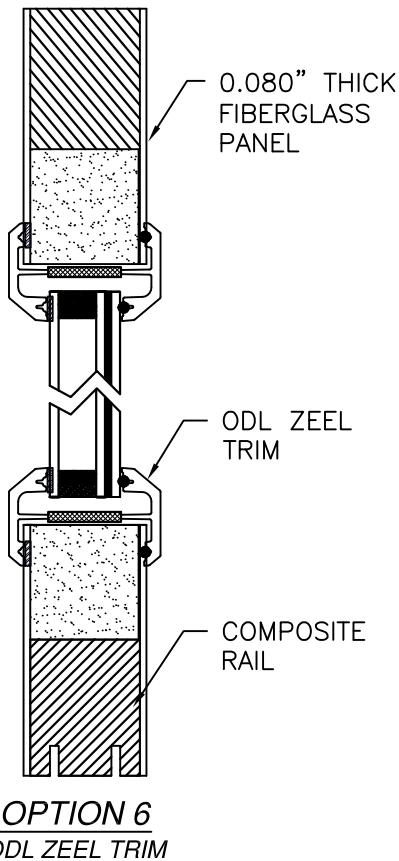
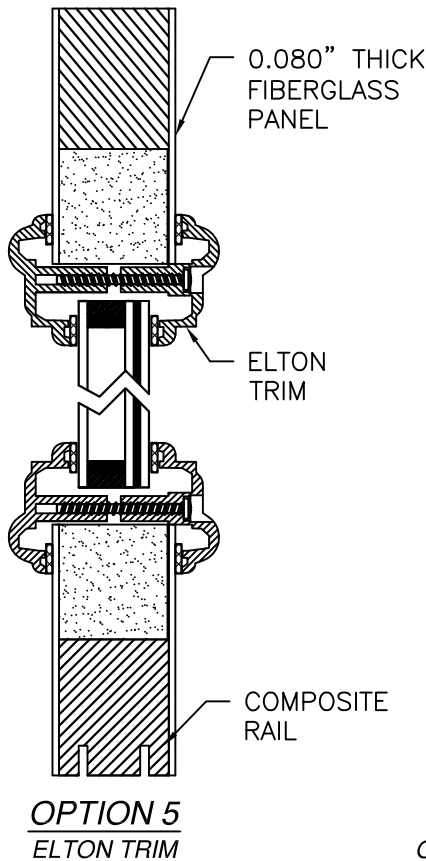
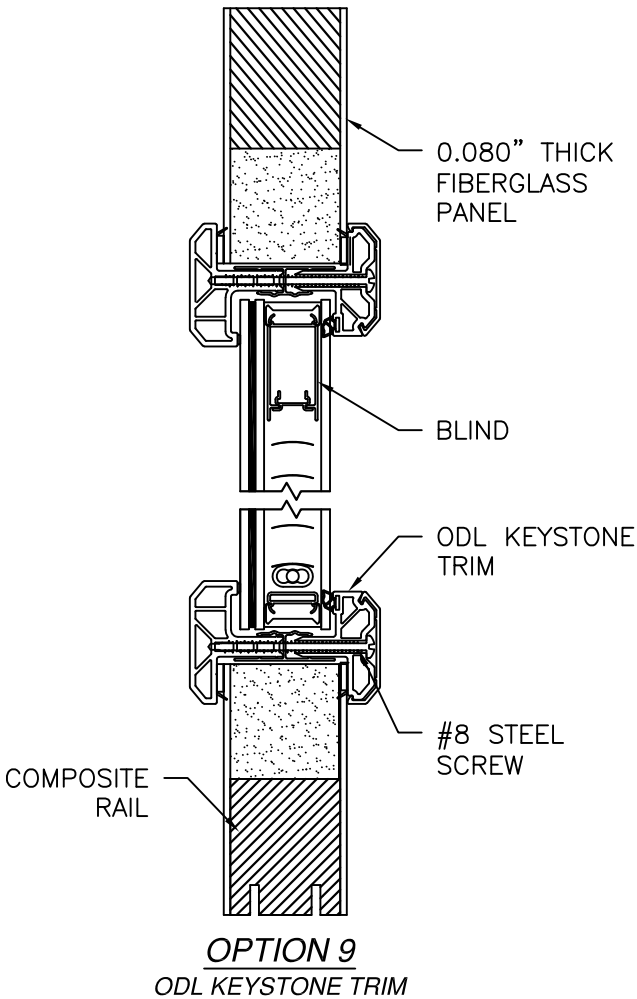
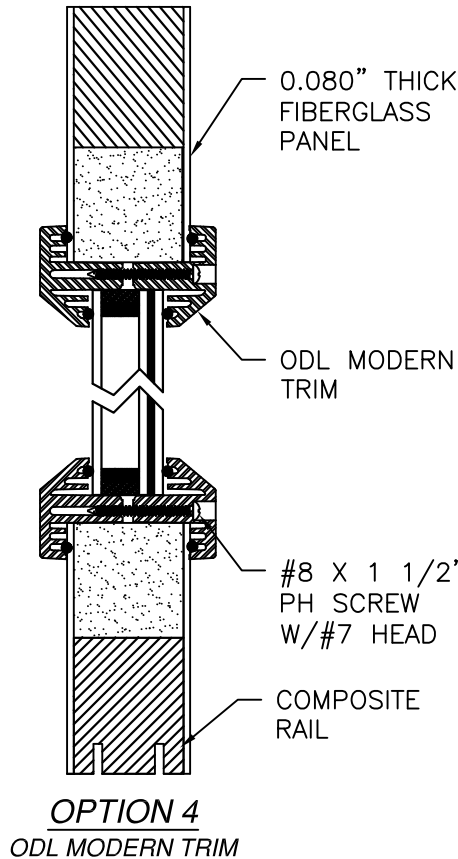
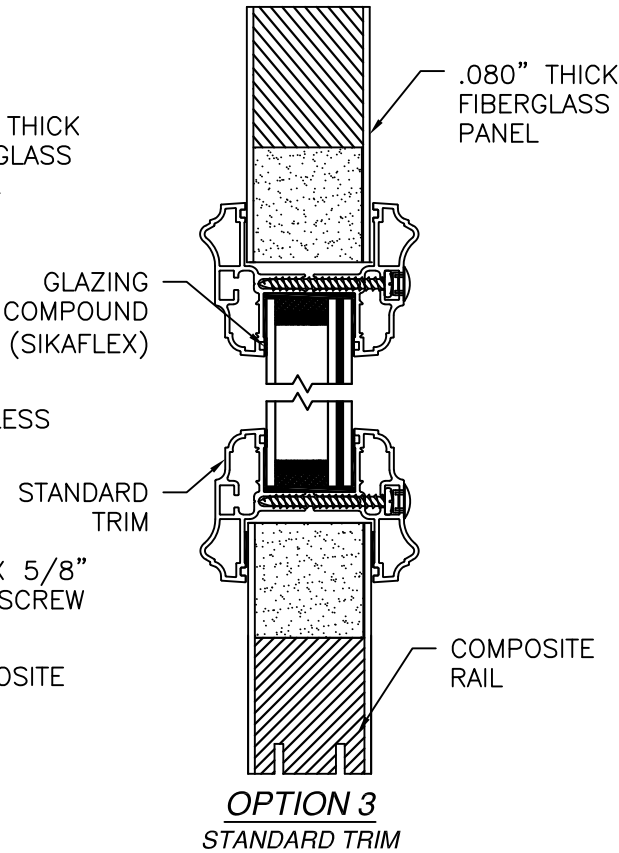
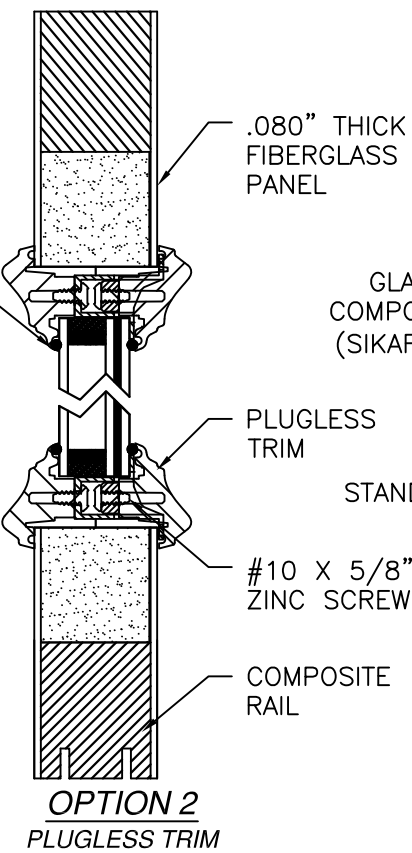
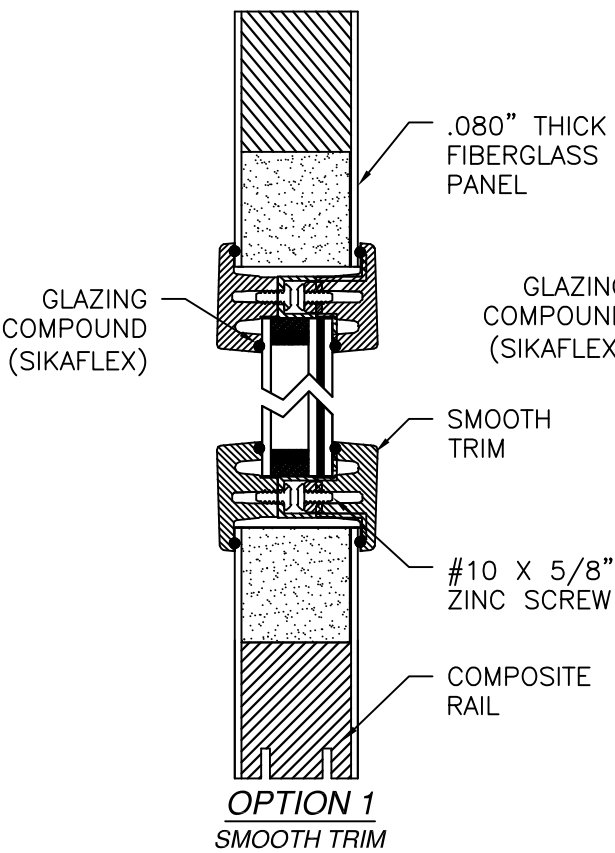
SIGNED: 09/14/2026



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

APPROVED SLABS AND TRIMS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



SIGNED: 09/14/2026

PROVIA, LLC.
2150 STATE ROUTE 39 WEST
SUGARCREEK, OHIO 44681

FIBERGLASS PATIO DOOR
IMPACT
APPROVED CONFIGURATIONS, SLABS & TRIMS

DRAWN:
A.R.

DWG NO.
08-03753

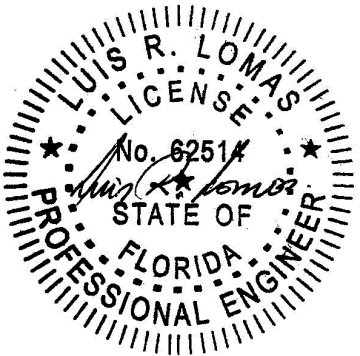
REV
C

SCALE
NTS

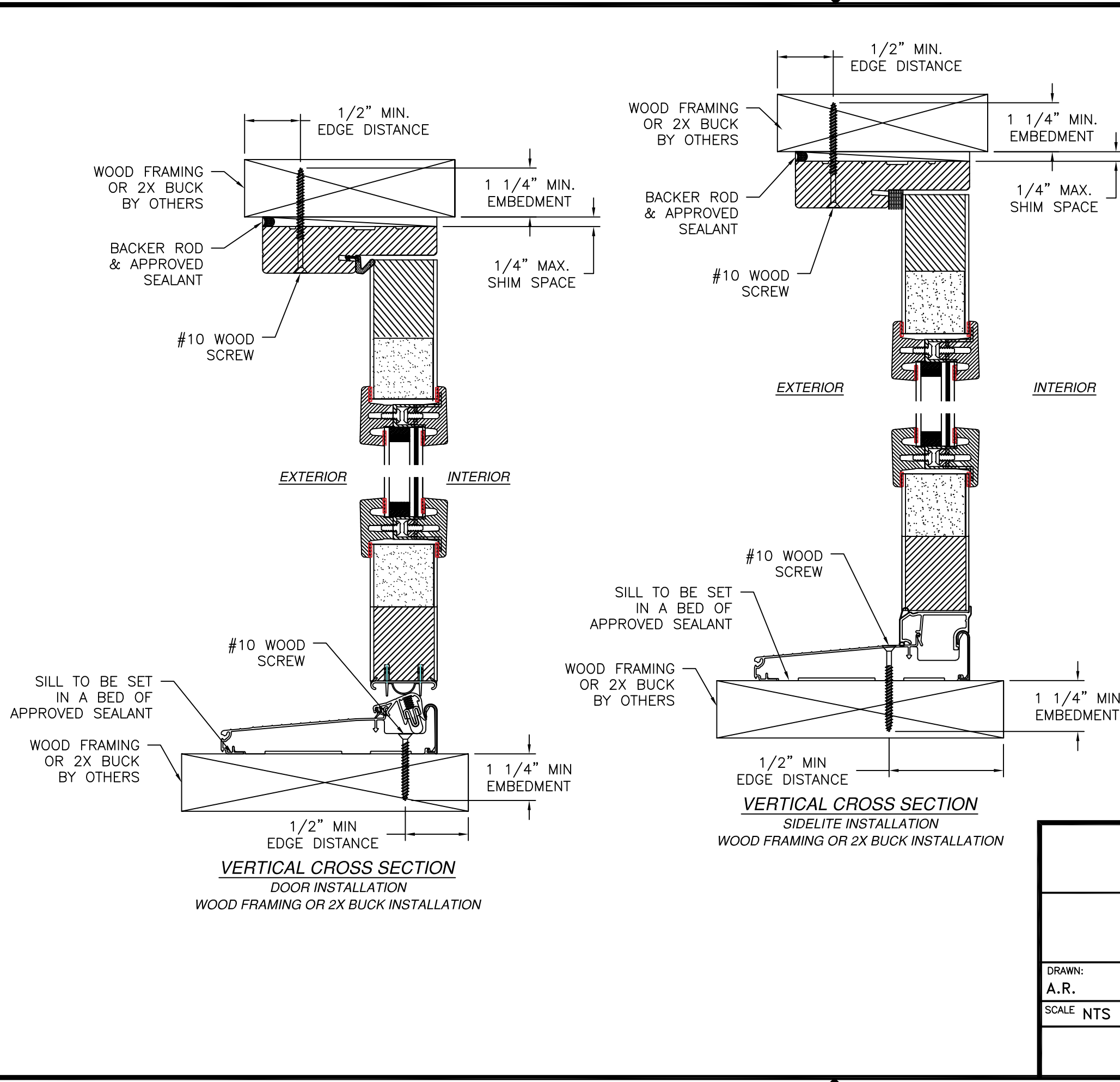
DATE
08/18/2021

SHEET
4 OF 8

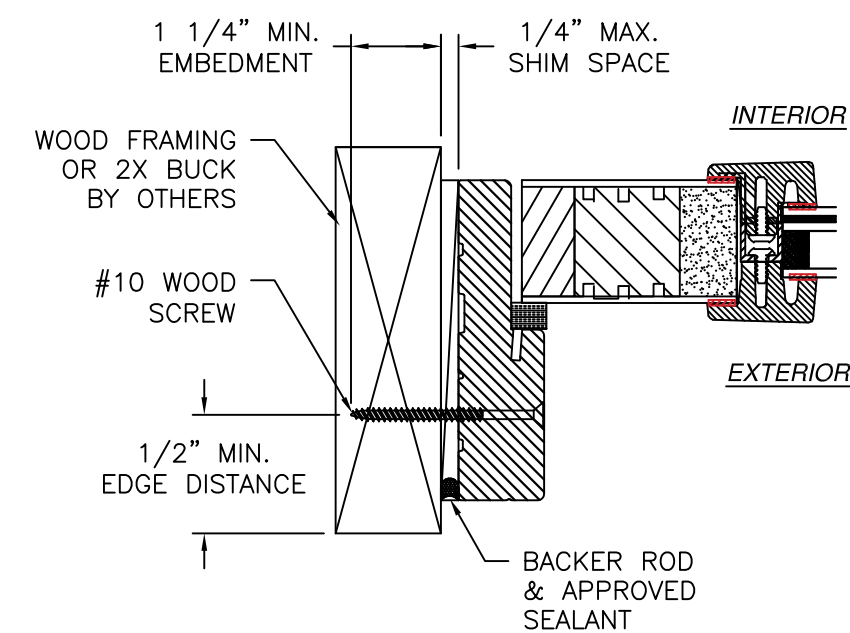
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com



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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



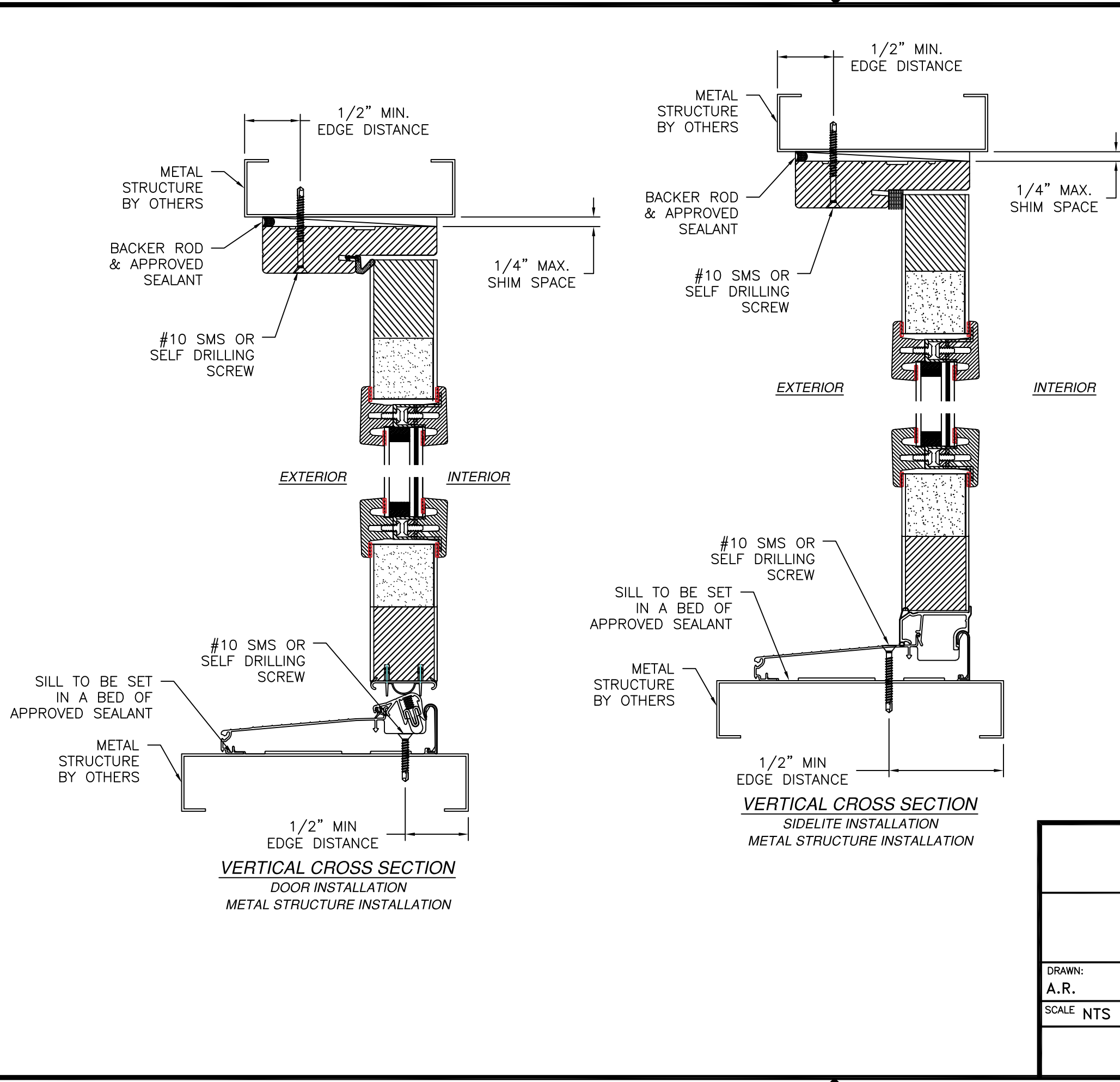
JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

- 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
 3. INSTALLATION DETAILS WITH GLAZING TAPE SHOWN, GLAZING SEALANT SIMILAR

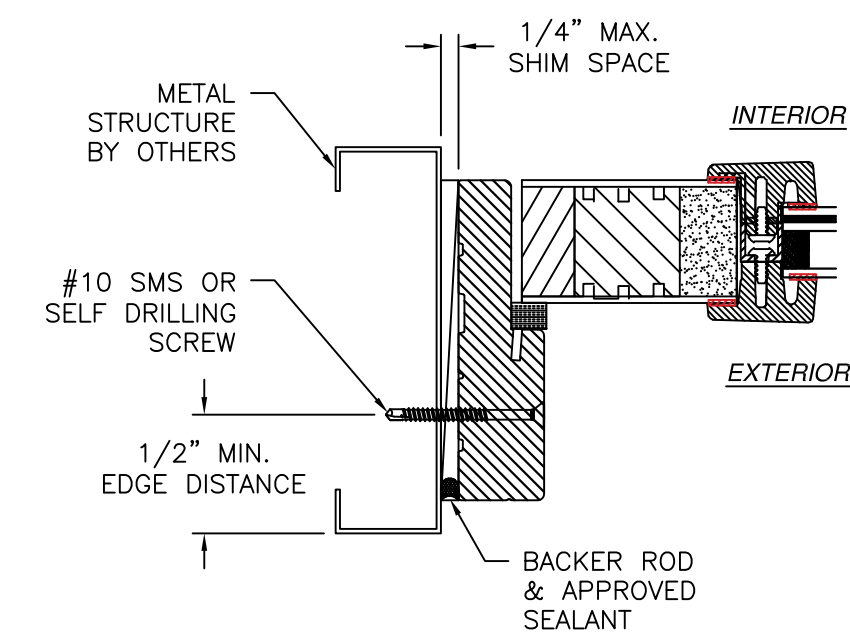
SIGNED: 09/14/2026

PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OHIO 44681		
FIBERGLASS PATIO DOOR IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03753	REV C
SCALE NTS	DATE 08/18/2021	SHEET 5 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



JAMB INSTALLATION DETAIL
METAL STRUCTURE 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
 3. INSTALLATION DETAILS WITH GLAZING TAPE SHOWN, GLAZING SEALANT SIMILAR

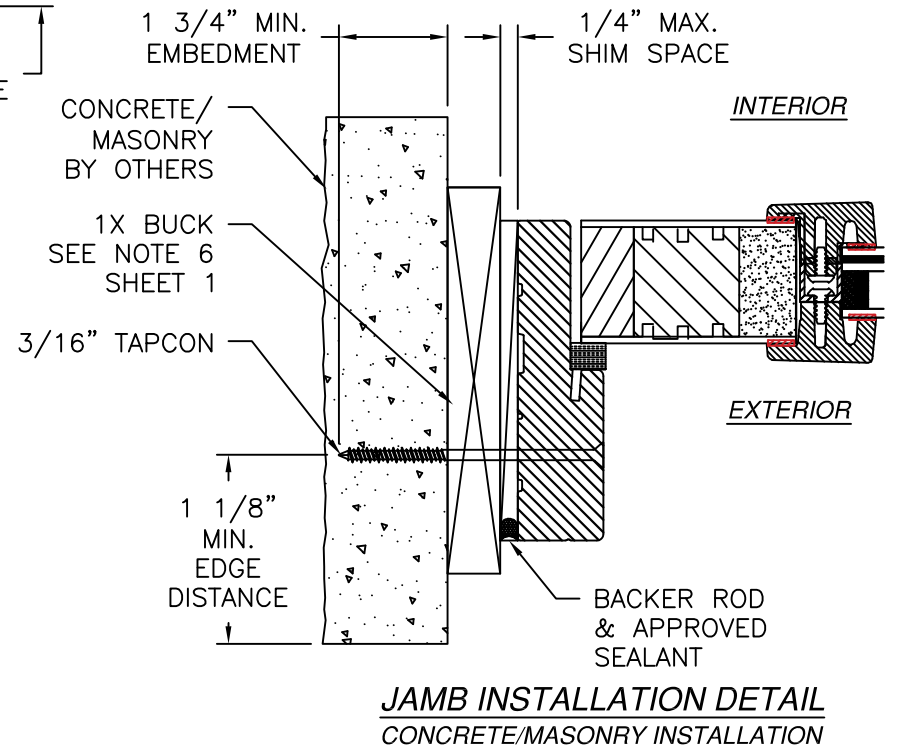
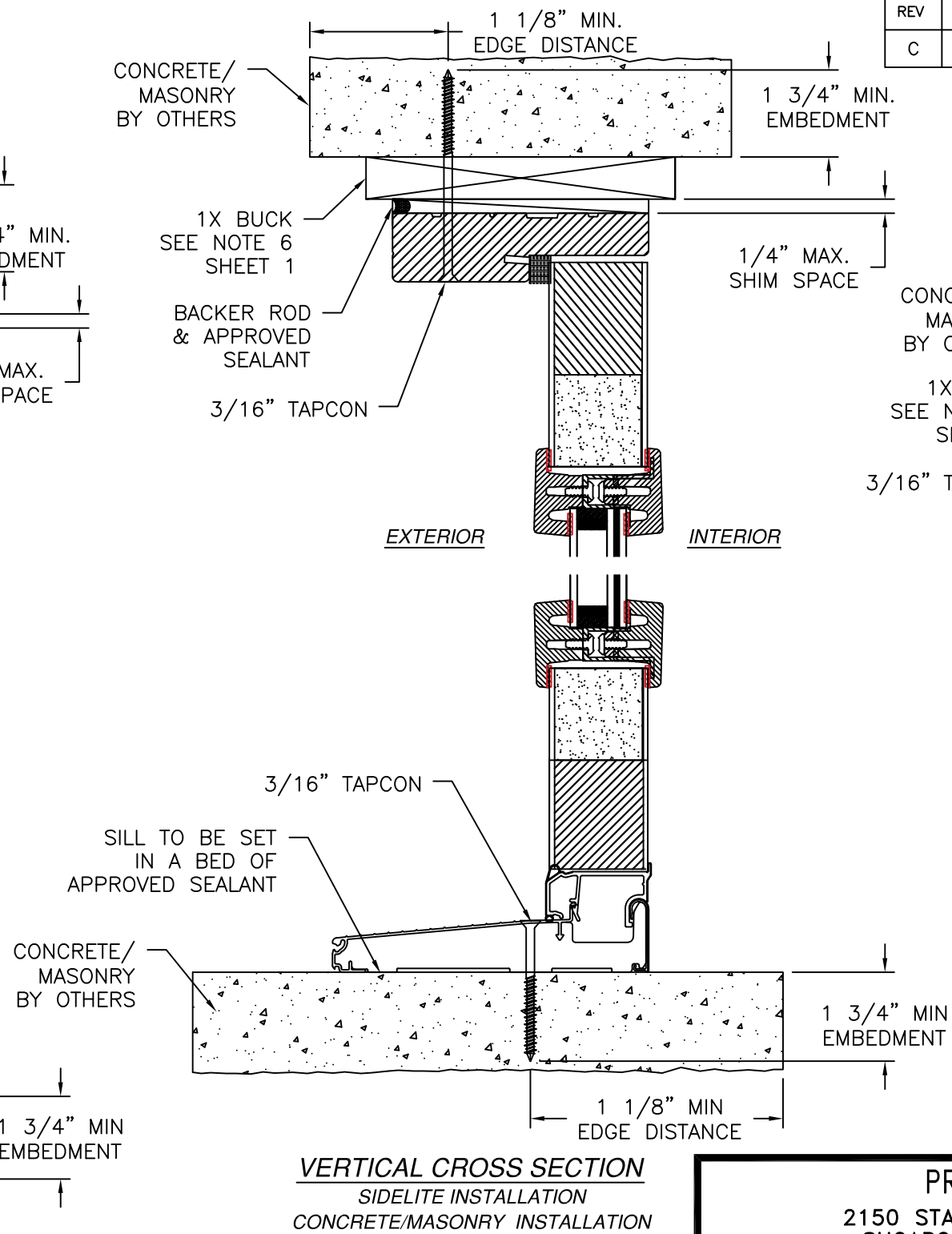
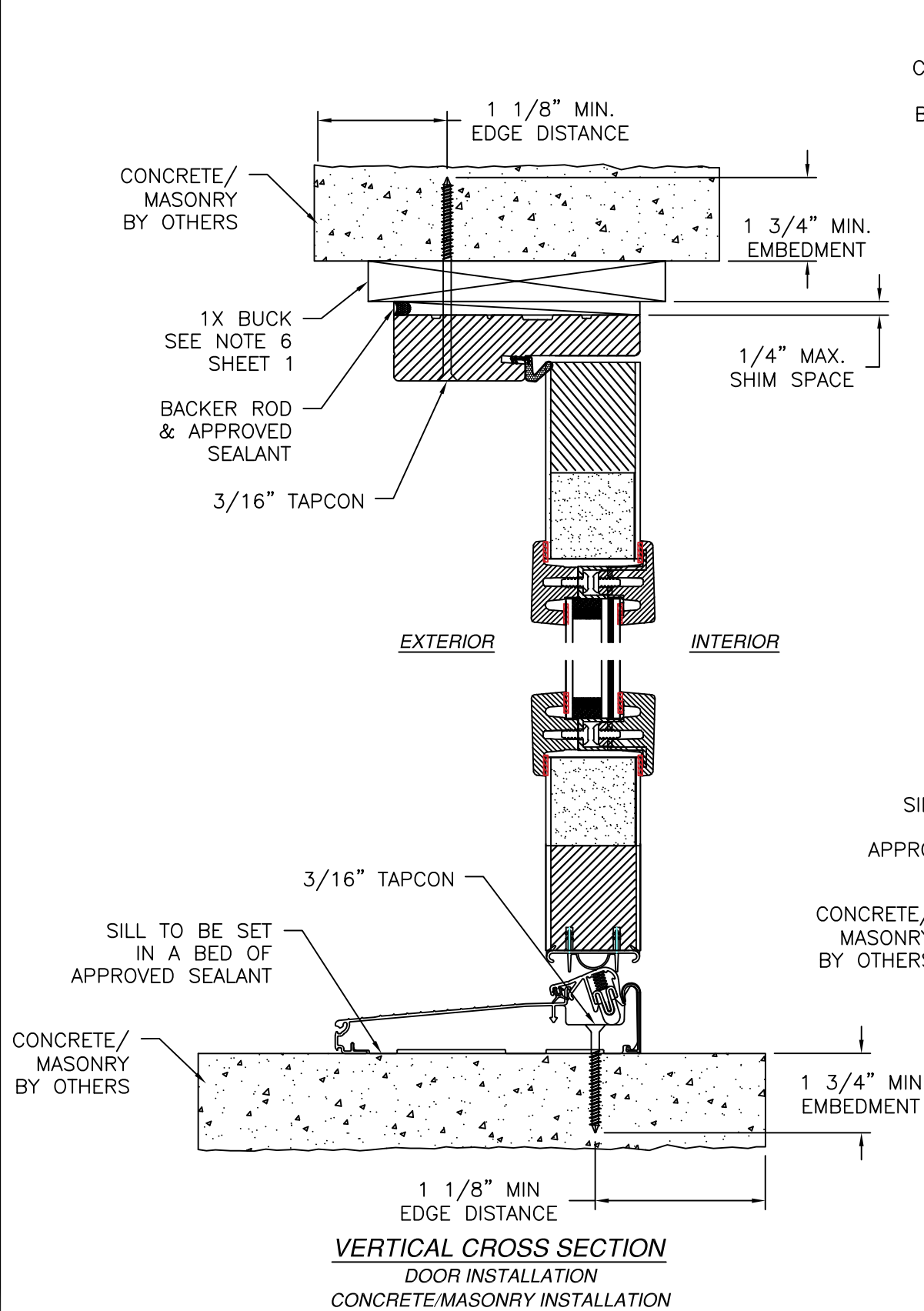
SIGNED: 09/14/2026

PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OHIO 44681		
FIBERGLASS PATIO DOOR IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03753	REV C
SCALE NTS	DATE 08/18/2021	SHEET 6 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

Professional Engineer Seal for Luis R. Lomas, No. 62514, State of Florida.

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

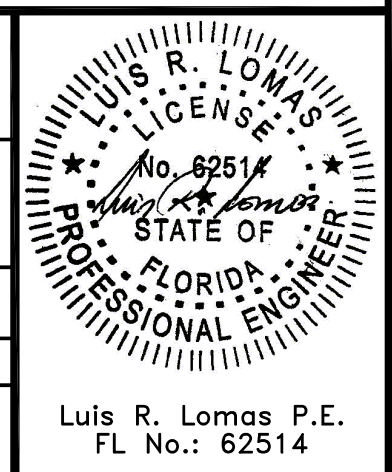
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



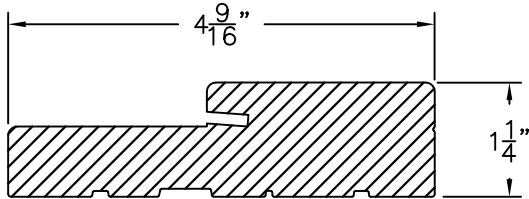
- NOTES:
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112
 3. INSTALLATION DETAILS WITH GLAZING TAPE SHOWN, GLAZING SEALANT SIMILAR

SIGNED: 09/14/2026

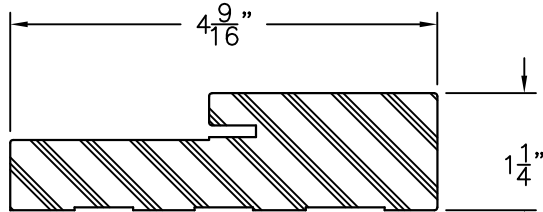
PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OHIO 44681		
FIBERGLASS PATIO DOOR IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03753	REV C
SCALE NTS	DATE 08/18/2021	SHEET 7 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



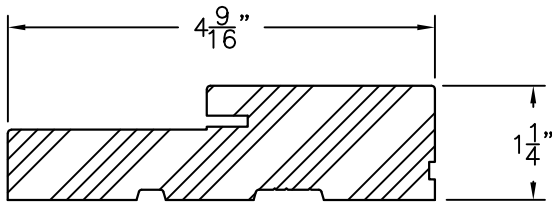
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED HARDWARE SCHEDULE	09/14/26	R.L.



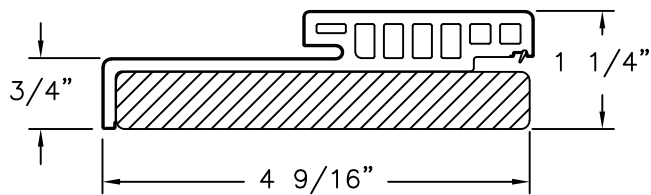
FRAMESAVER
COMPOSITE



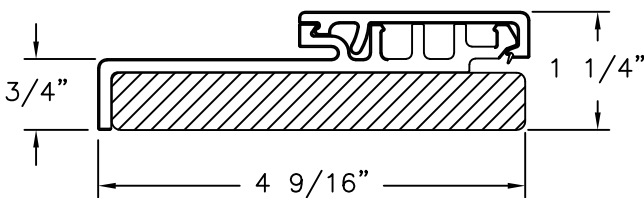
FRAME
COMPOSITE



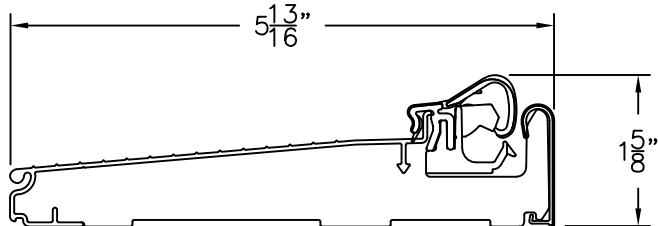
FRAME
WOOD G.46 MIN.



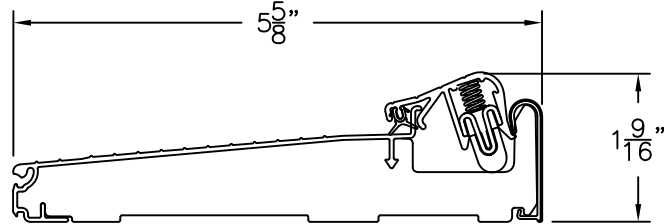
HYBRID HEAD
WOOD/COMPOSITE



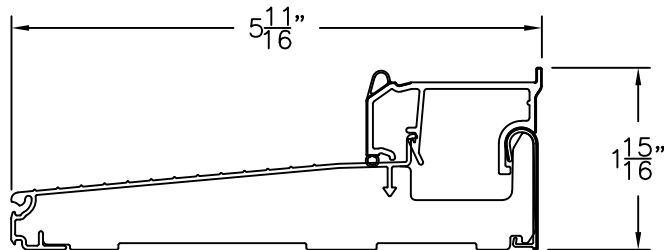
HYBRID JAMB
WOOD/COMPOSITE



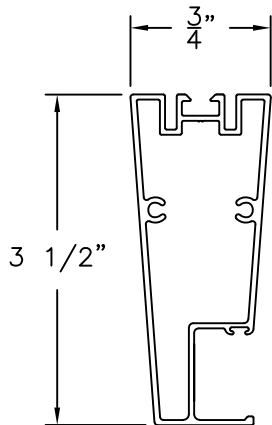
ENDURA ZAC THRESHOLD W/
ARTICULATING CAP



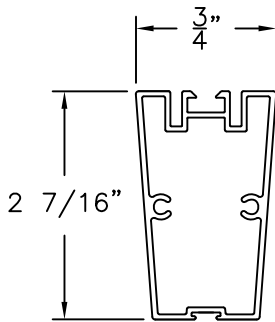
ZAC THRESHOLD W/
ARTICULATING CAP



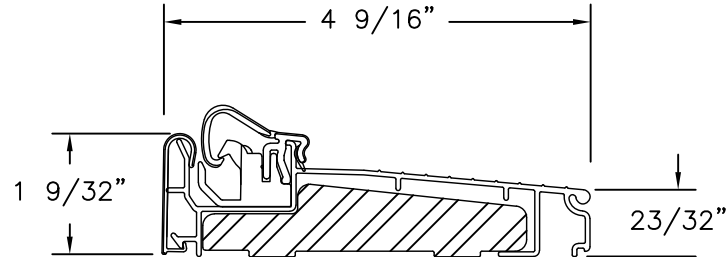
ZAC THRESHOLD W/90 SERIES
I/S SIDELITE SILL CAP



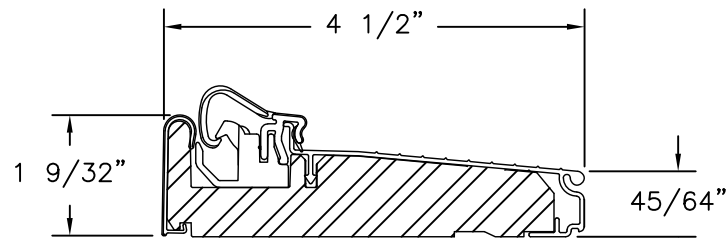
MULLION
ALUMINUM



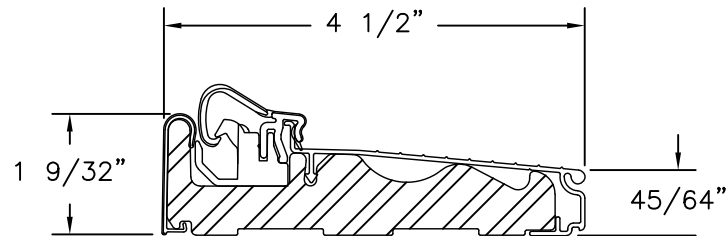
MULLION
ALUMINUM



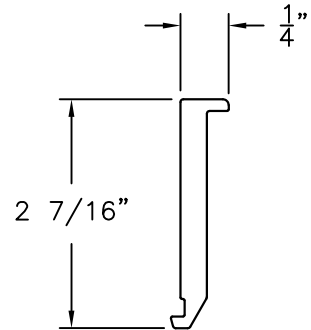
INSWING SILL ZACL4565



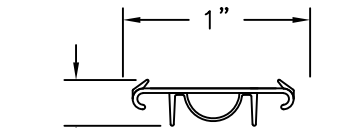
INSWING SILL ZAC4565F



INSWING SILL ZACLH4565



MULLION SPACER
PVC



ENDURA ZAC SWEP
WOOD G.46 MIN.

SIGNED: 09/14/2026

PROVIA, LLC.

2150 STATE ROUTE 39 WEST
SUGARCREEK, OHIO 44681

FIBERGLASS PATIO DOOR
IMPACT
COMPONENTS

DRAWN:
A.R.

DWG NO.
08-03753

REV
C

SCALE
NTS

DATE
08/18/2021

SHEET
8 OF 8

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

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