

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
Q	REVISE TO ADD ODL KEYSTONE TRIM	08/21/2024	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD AND METAL 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: WOOD G=.46 MINIMUM SPECIFIC GRAVITY OF FRAME SAVER OR FUSION FRAME.
11. DOOR PANEL MATERIAL: 20GA. STEEL WITH 17GA. STEEL OR .0938” FIBERGLASS TOP AND BOTTOM RAIL. SEE SHEET 10 FOR PANEL OPTIONS.
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 3/8” 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 3/4” 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:

18.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

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

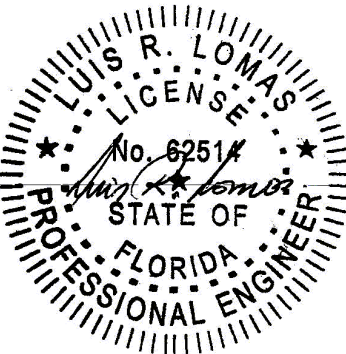
18.3. MASONRY: GROUT FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.

18.4. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI
19. MAXIMUM DOOR PANEL AND SIDELITE SASH SIZE = 35 3/4” X 78 15/16”
20. UNITS MAY BE INSTALLED WITH EITHER SCHALGE F–SERIES DOOR KNOB AND B–SERIES OR F–SERIES DEADBOLT OR EMTEK RESIDENTIAL GRADE DOOR HANDLE ASSEMBLY OR MULTI=POINT LOCK HANDLE ASSEMBLY BY TRILENNIUM, SEE HARDWARE SCHEDULE SHEET 3 FOR APPROVED HARDWARE.

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4 – 5	ANCHORING LAYOUTS
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10 – 12	COMPONENTS AND DETAILS

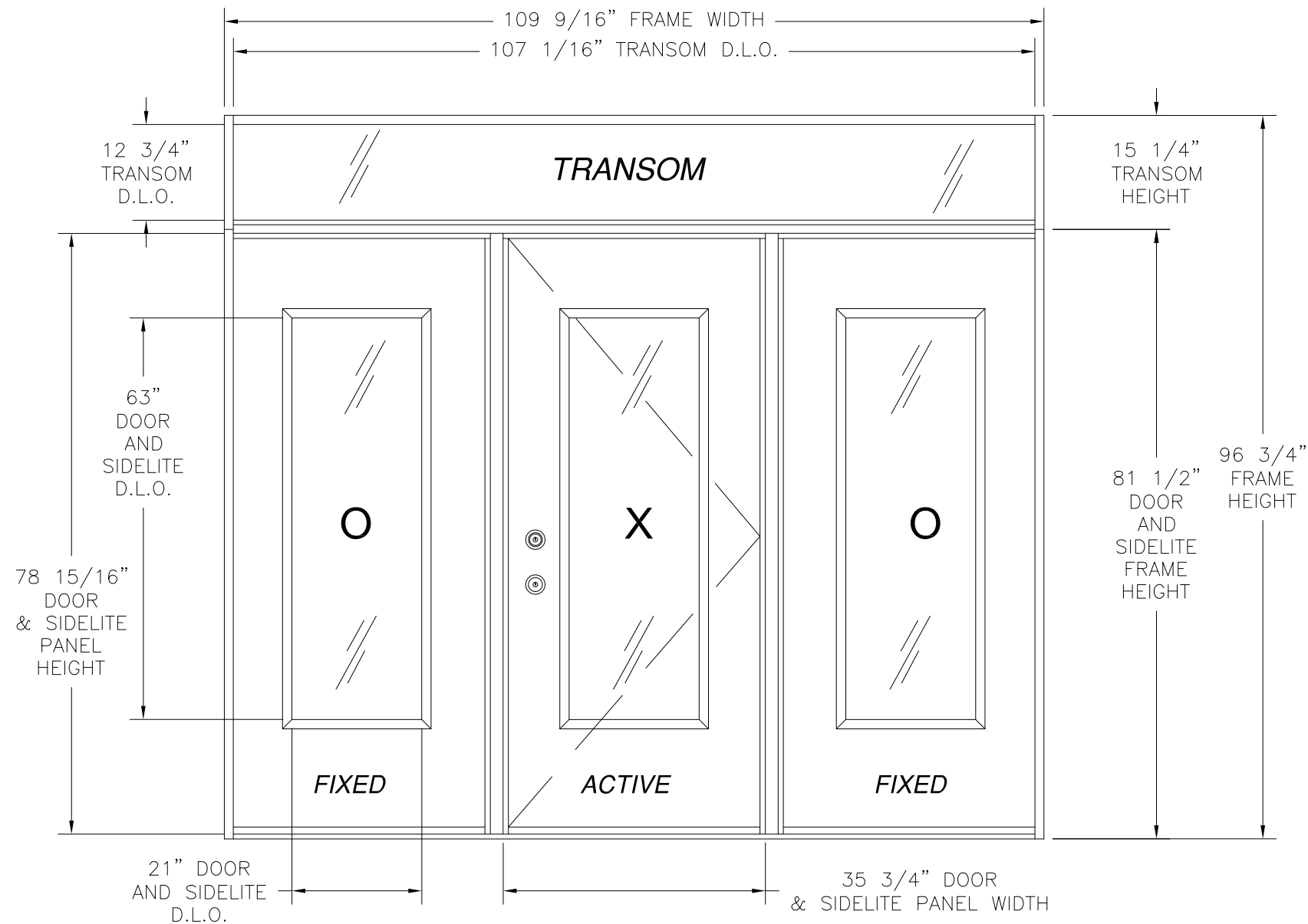
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20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM NOTES		
DRAWN: TJH	DWG NO. 08–00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 1 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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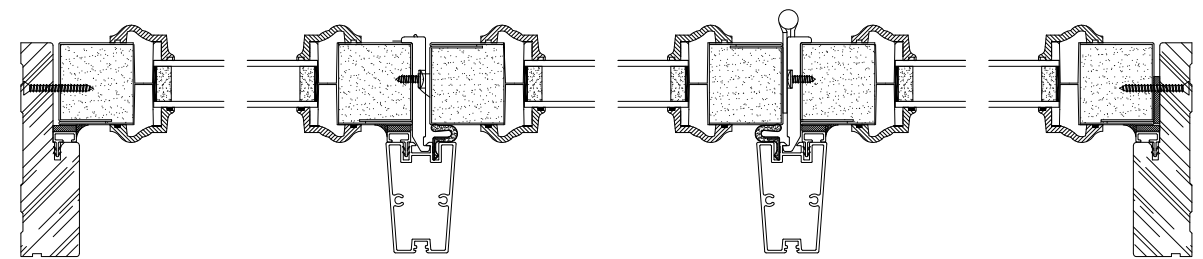
Luis R. Lomas P.E.
FL No.: 62514

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20GA STEEL IS SINGLE PATIO DOOR W/SIDELITES AND TRANSOM
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
+45PSF / -50PSF	NONE
THIS SYSTEM WAS NOT TESTED FOR WATER INFILTRATION AND IS TO BE INSTALLED ONLY WHERE THE WATER REQUIREMENT IS NOT NEEDED	



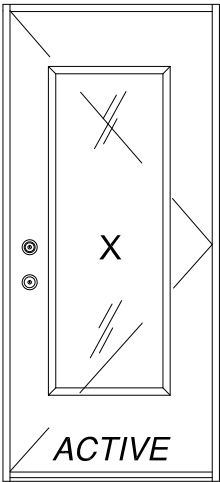
HORIZONTAL CROSS SECTION

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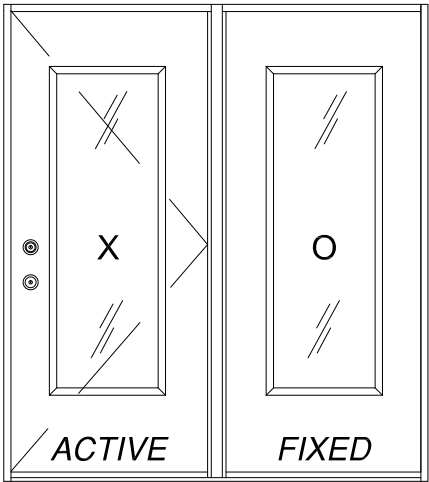
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20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM INSWING ELEVATION		
DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 2 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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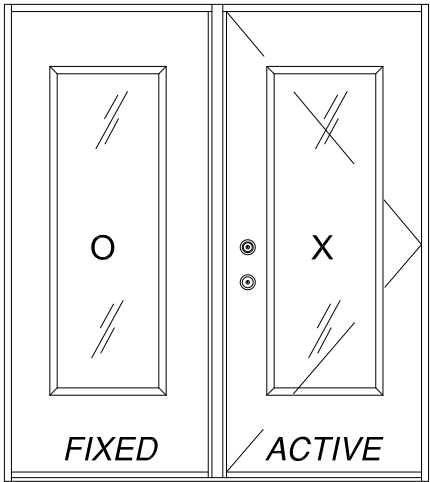
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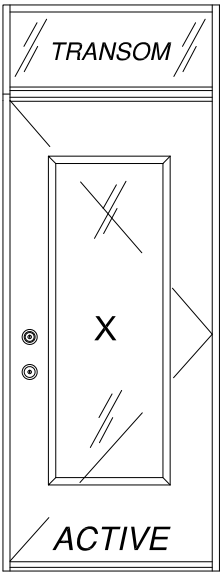
SINGLE
EXTERIOR VIEW



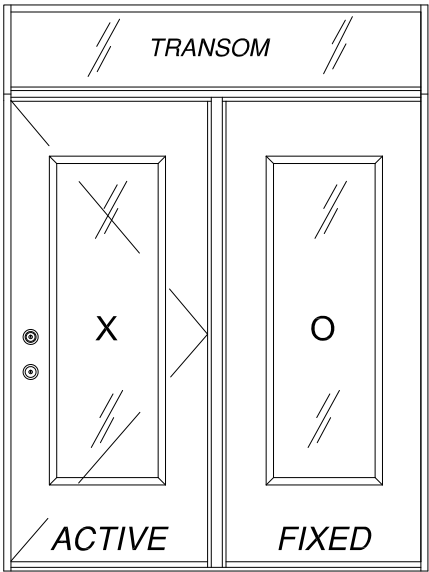
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EXTERIOR VIEW



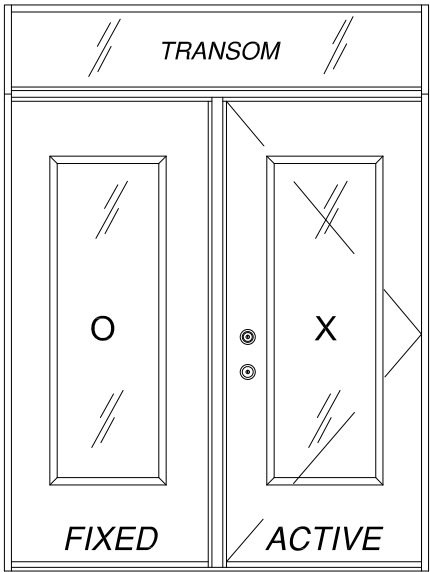
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EXTERIOR VIEW



SINGLE W/TRANSOM
EXTERIOR VIEW

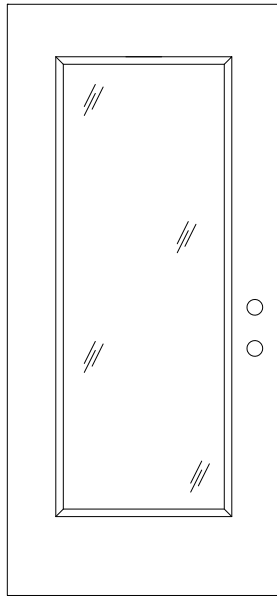


SINGLE W/SIDELITE & TRANSOM
EXTERIOR VIEW

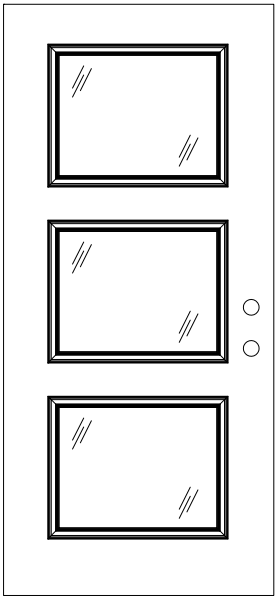


SINGLE W/SIDELITE & TRANSOM
EXTERIOR VIEW

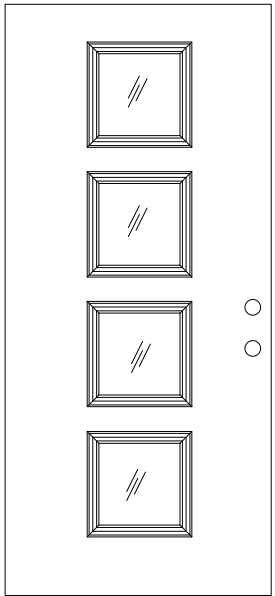
APPROVED LITE CONFIGURATIONS



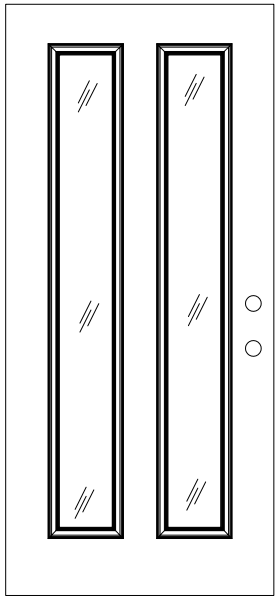
FULL LITE



3 LITE



4 LITE

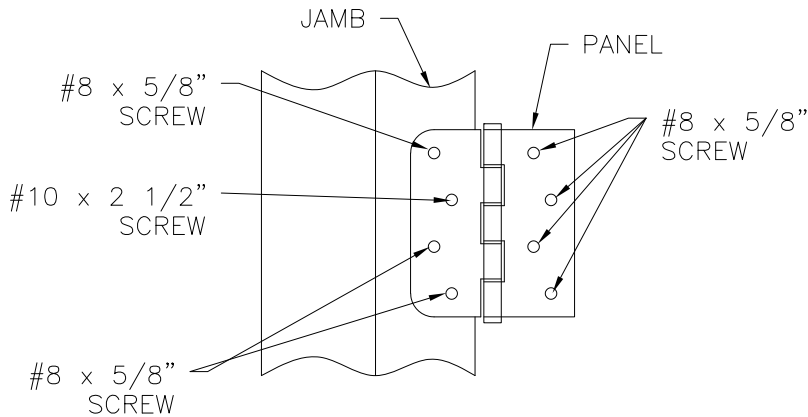


2 LITE

LITE CONFIGURATIONS SHOWN ARE FOR REFERENCE ONLY. MULTIPLE LITE CONFIGURATIONS ARE APPROVED AS LONG AS LITE SIZE DOES NOT EXCEED 9.2 FT²

NOTE:
ALL APPROVED CONFIGURATIONS ARE SHOWN
AS RIGHT HAND ACTIVE, LEFT HAND ACTIVE
IS ALSO APPROVED.

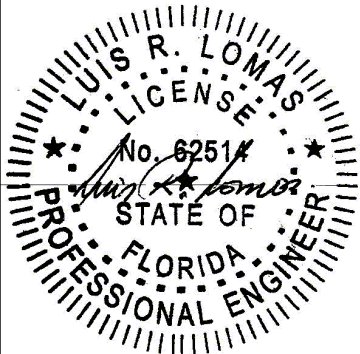
<u>HARDWARE SCHEDULE</u>
A. F-SERIES LOCK ASSEMBLY DOOR KNOB BY SCHLAGE.
B. B-SERIES DEADBOLT ASSEMBLY BY SCHLAGE.
C. F-SERIES DEADBOLT ASSEMBLY BY SCHLAGE.
D. RESIDENTIAL GRADE DOOR HANDLE ASSEMBLY BY EMTEK (ALTERNATE).
E. MULTI-POINT LOCK HANDLE ASSEMBLY BY TRILENNIUM (ALTERNATE).
F. (3) 4" x 4" BALL BEARING HINGES BY PENROD.
G. (3) 4" x 4" SPRING BOMMER HINGES BY PENROD.
H. (2) EXTRUDED ALUMINUM MULLION BY PROVIA DOOR, INC.



HINGE INSTALLATION DETAIL

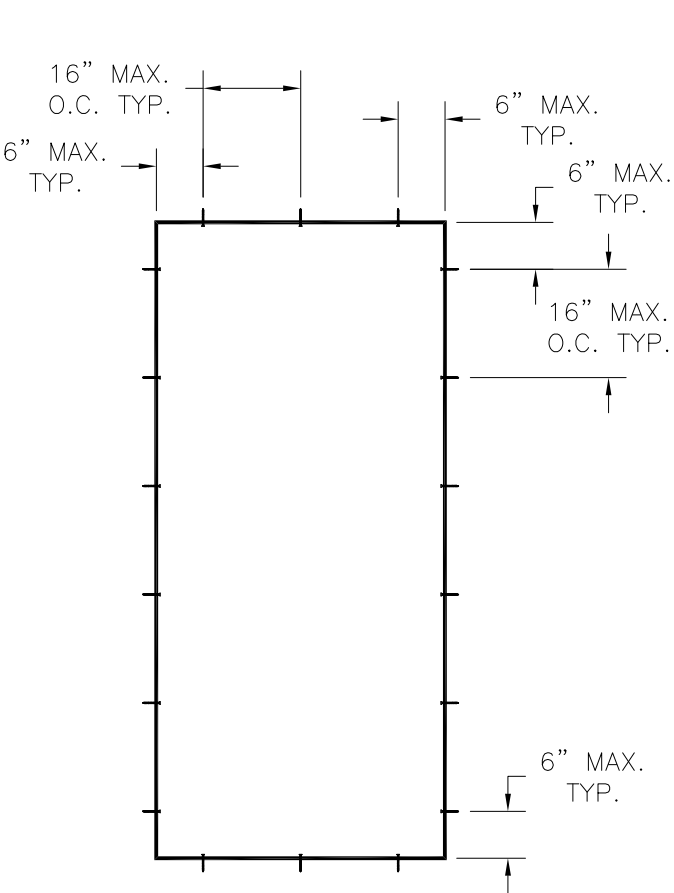
PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OH 44681		
20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM ADDITIONAL CONFIGURATIONS & HARDWARE		
DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 3 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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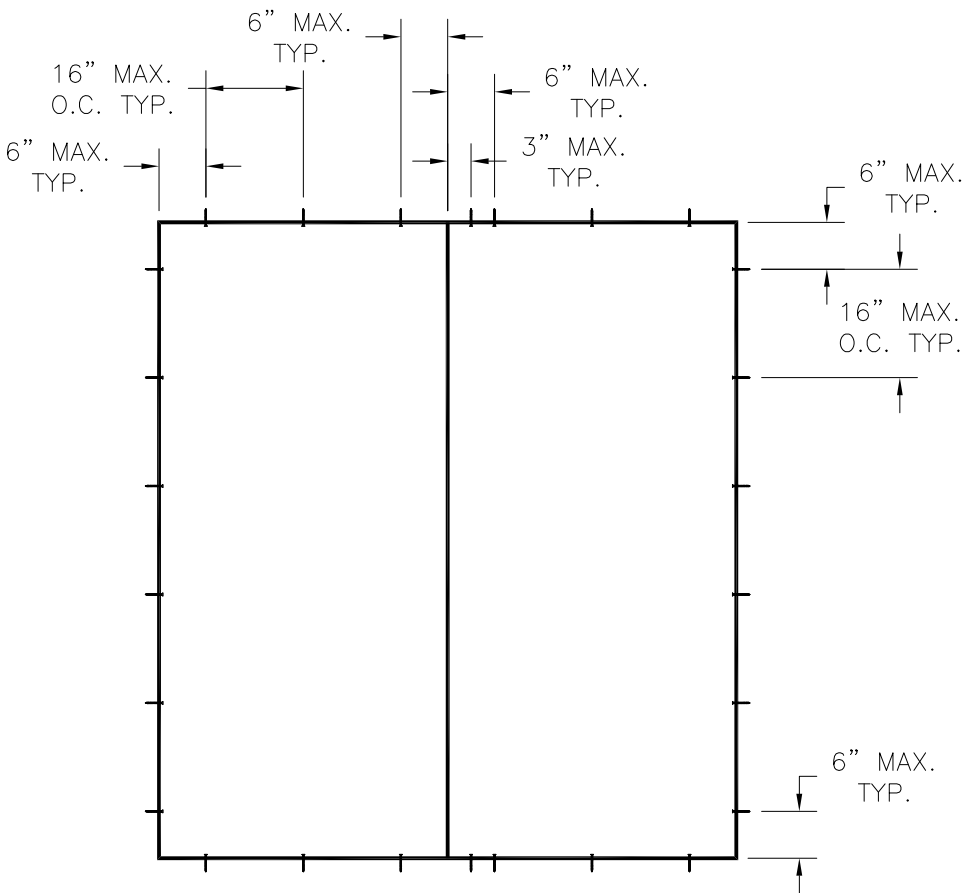


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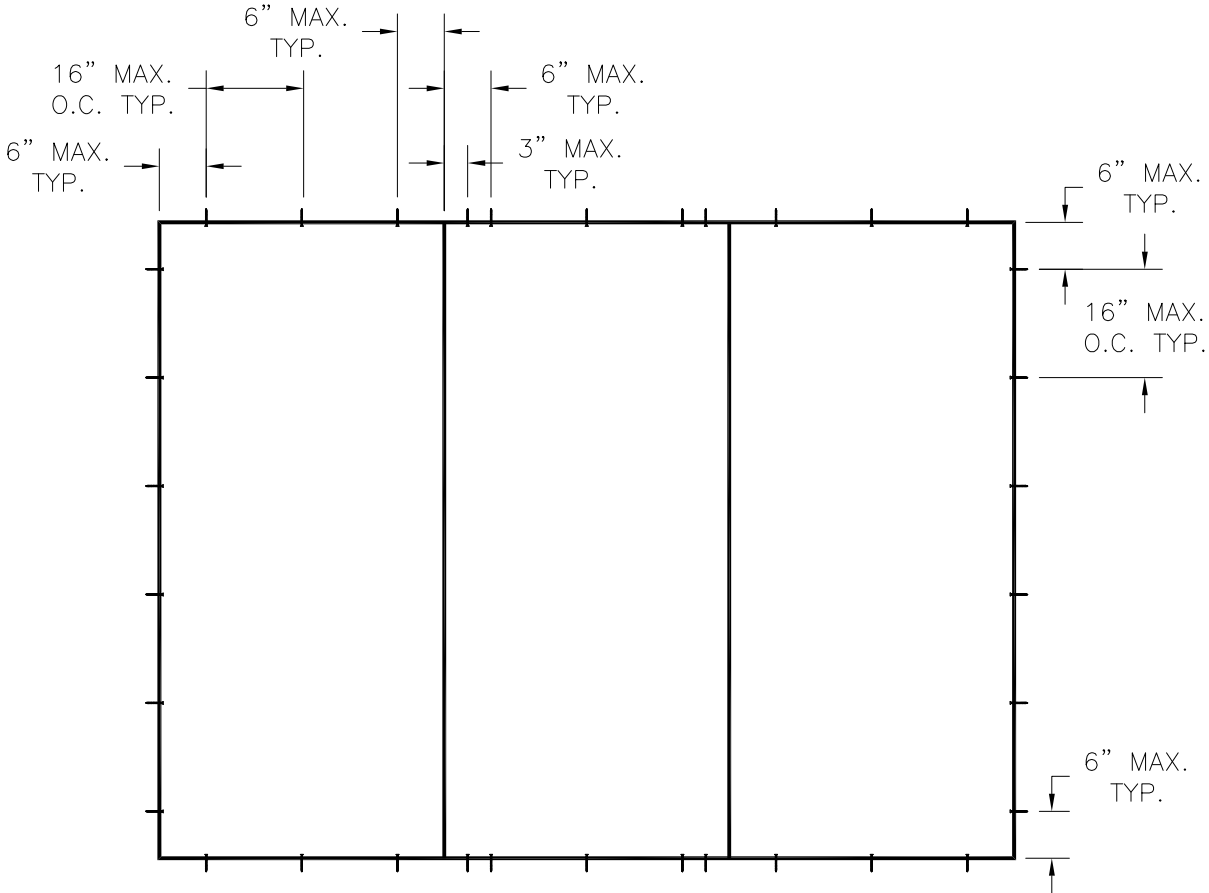
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SINGLE



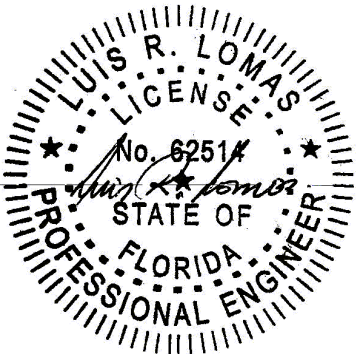
SINGLE W/SIDELITE



SINGLE W/SIDELITES

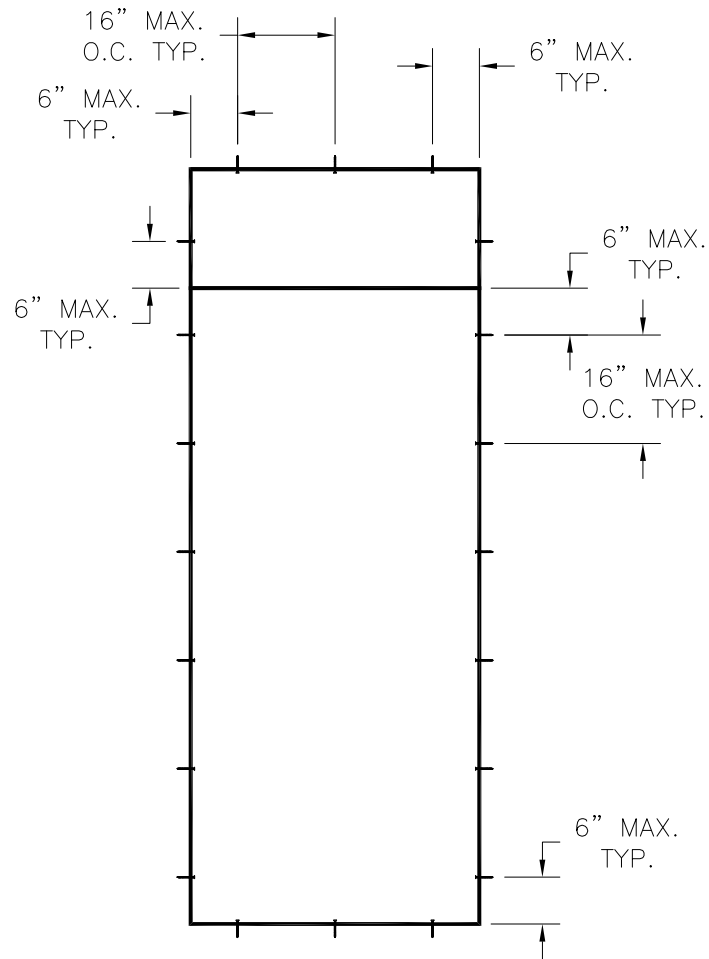
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PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OH 44681		
20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM ANCHORING LAYOUT WITHOUT TRANSOMS		
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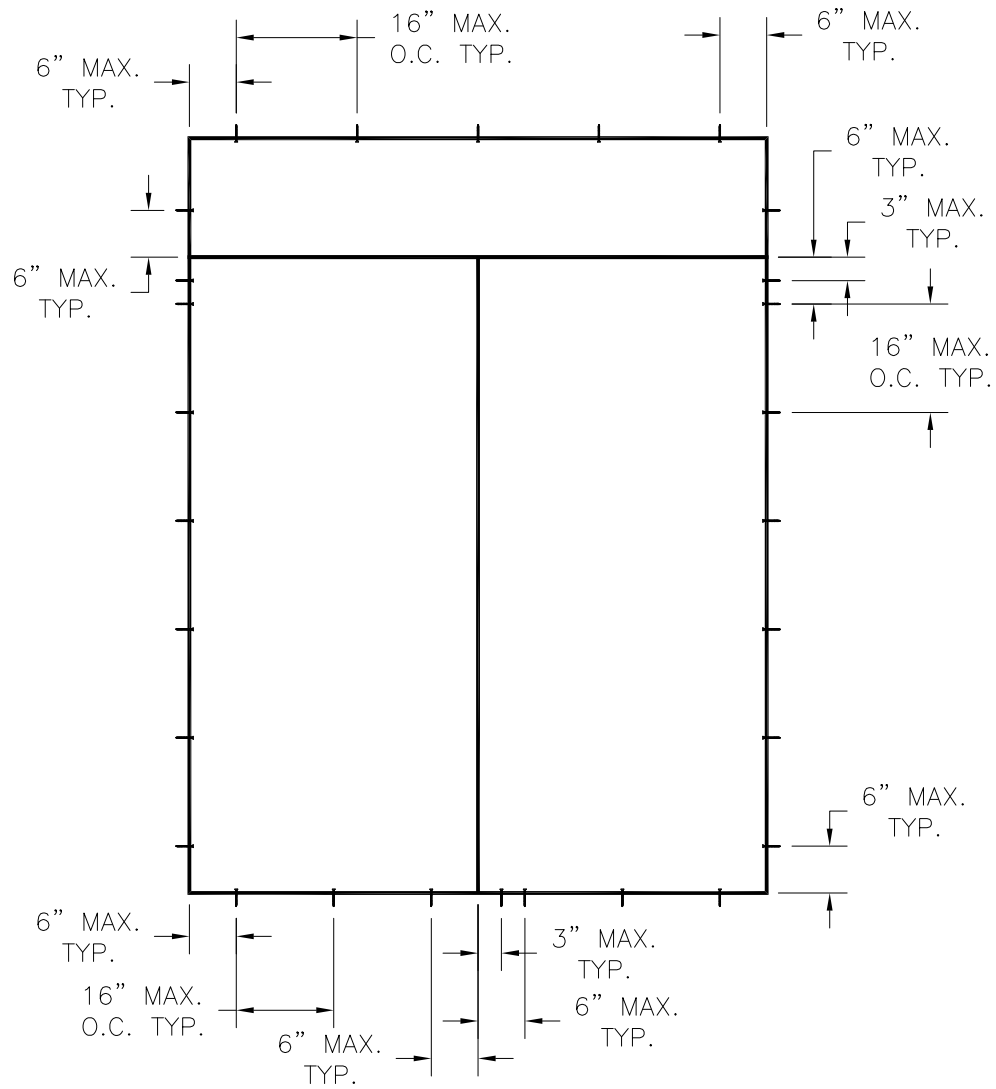


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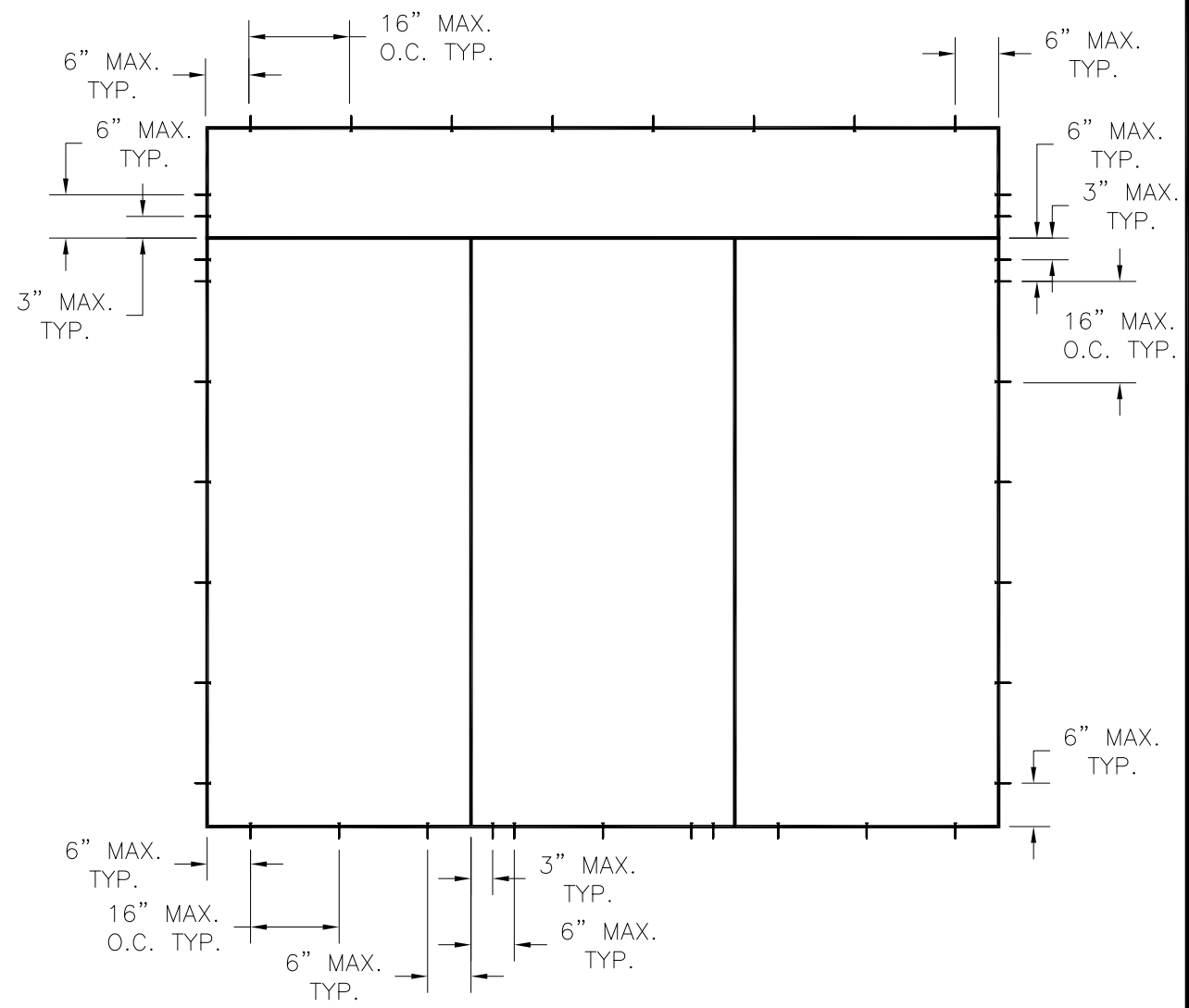
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SINGLE WITH TRANSOM



SINGLE W/SIDELITE & TRANSOM



SINGLE W/SIDELITES & TRANSOM

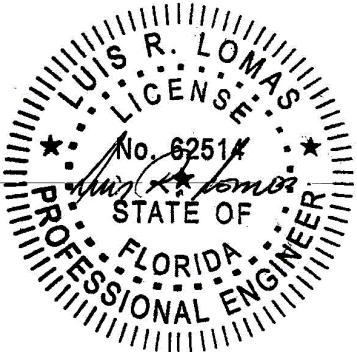
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2150 STATE ROUTE 39 WEST
SUGARCREEK, OH 44681

20GA. STEEL IS PATIO DOOR
W/ OR WITHOUT SIDELITES AND TRANSOM
ANCHORING LAYOUTS WITH TRANSOMS

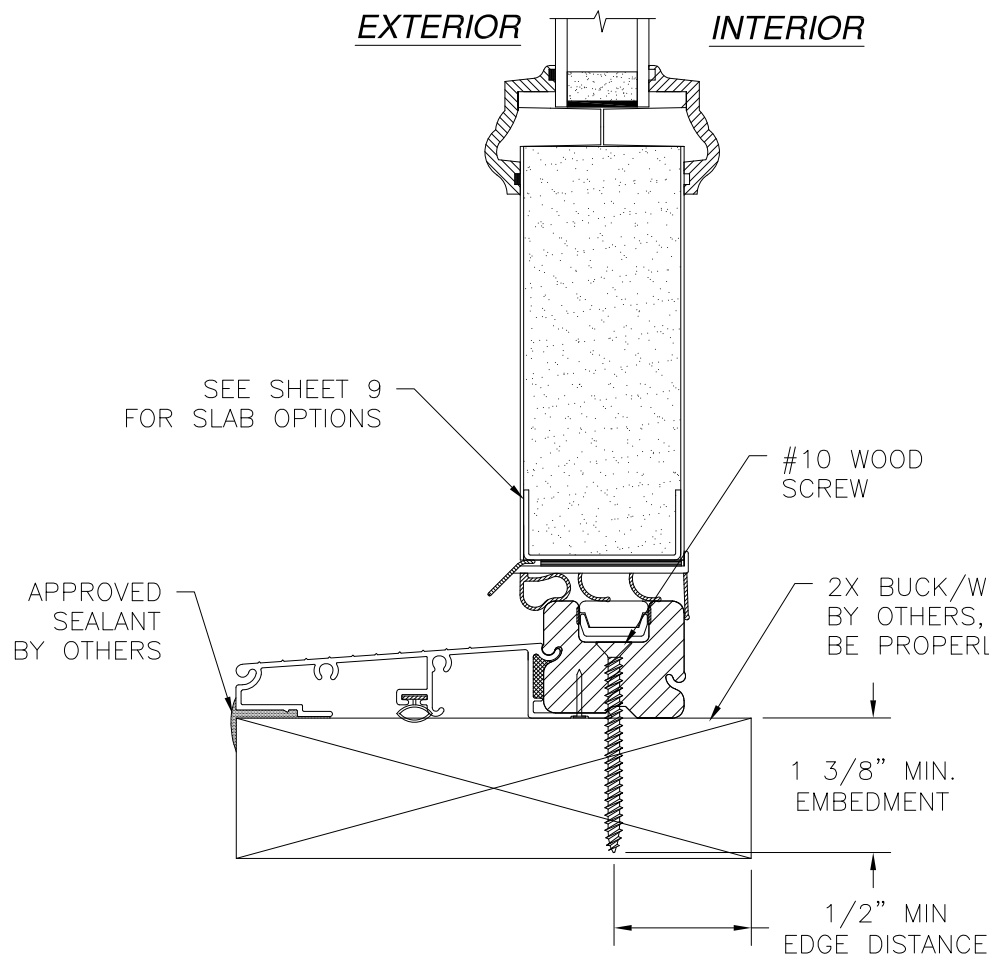
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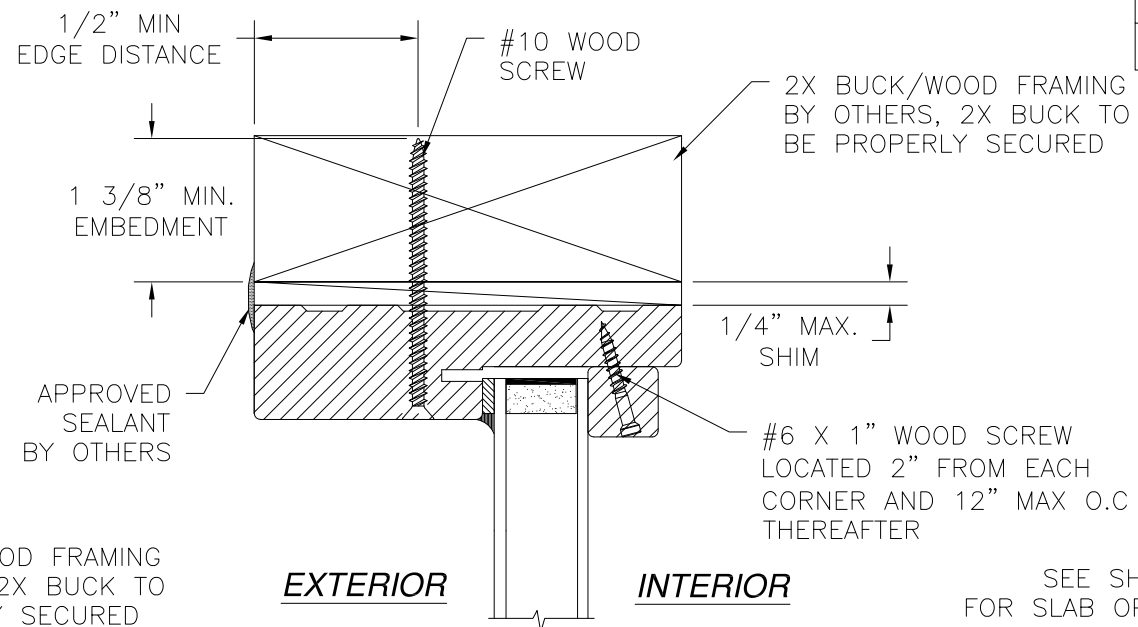


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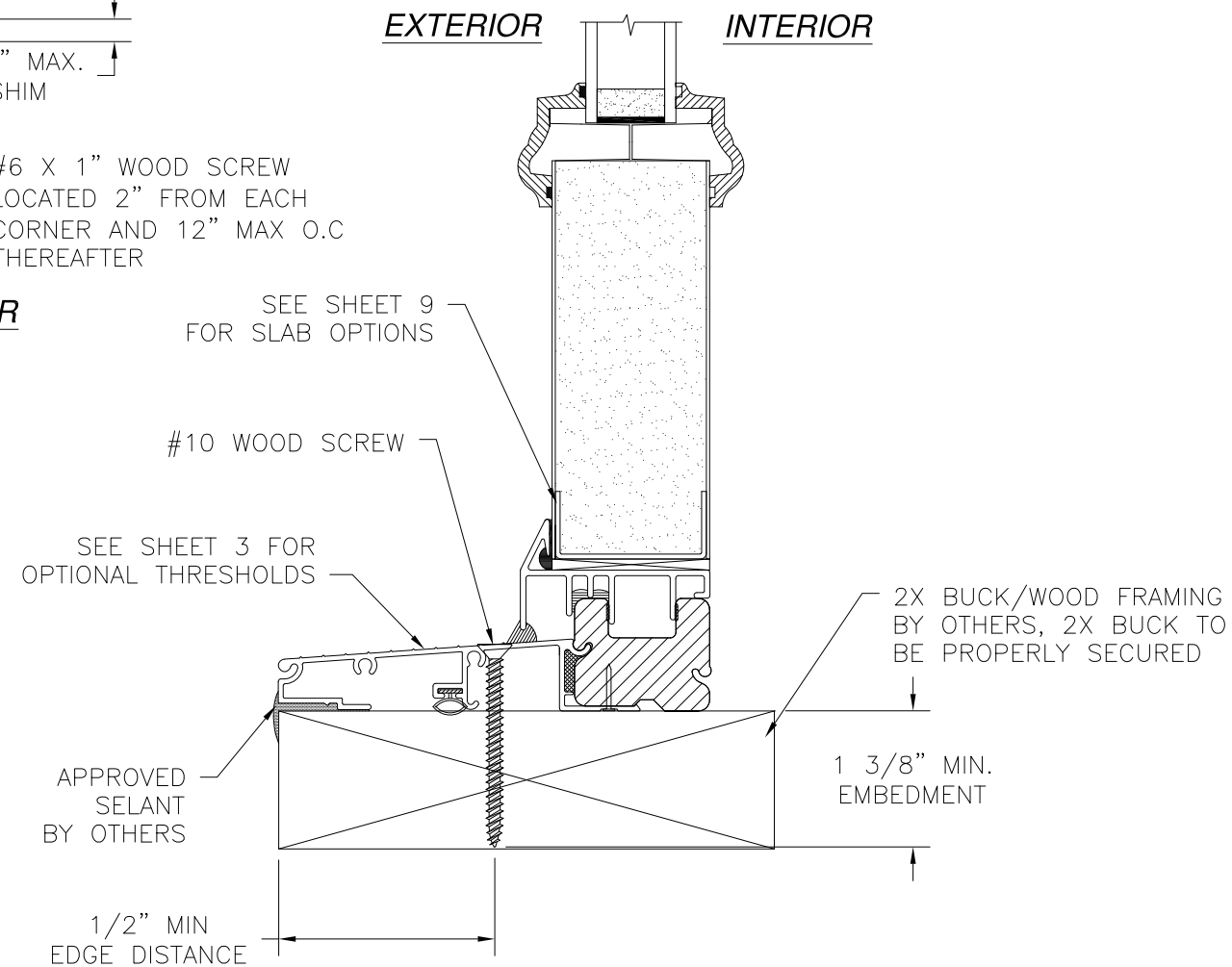
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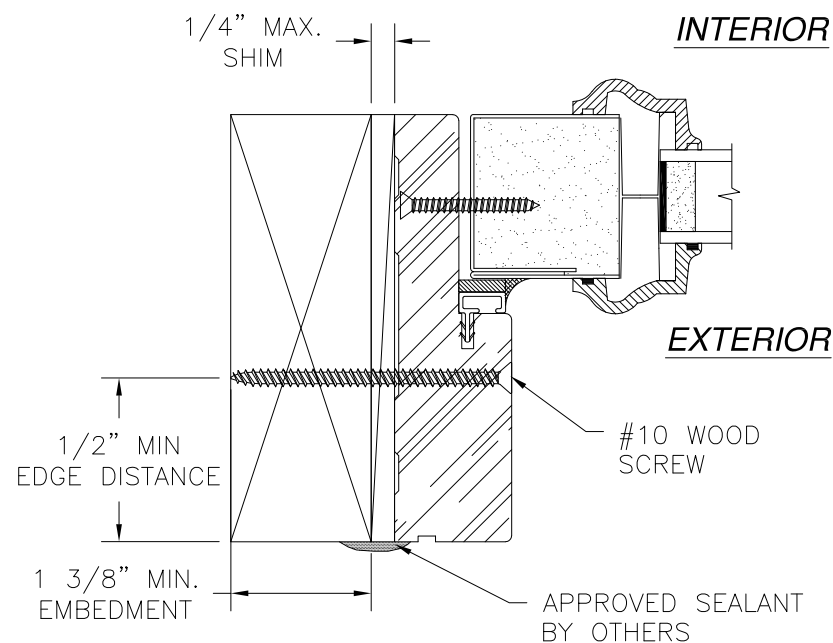
DOOR SILL DETAIL
INSWING
2X BUCK/WOOD FRAMING INSTALLATION



TRANSOM DETAIL
INSWING
2X BUCK/WOOD FRAMING INSTALLATION
HEAD SHOWN JAMB SIMILAR



SIDELITE SILL DETAIL
INSWING
2X BUCK/WOOD FRAMING INSTALLATION

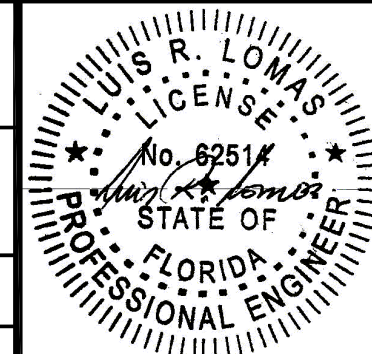


JAMB DETAIL INSWING
2X BUCK/WOOD FRAMING INSTALLATION
SIDELITE JAMB SHOWN, HINGE AND STRIKE
JAMB AND HEAD SIMILAR

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

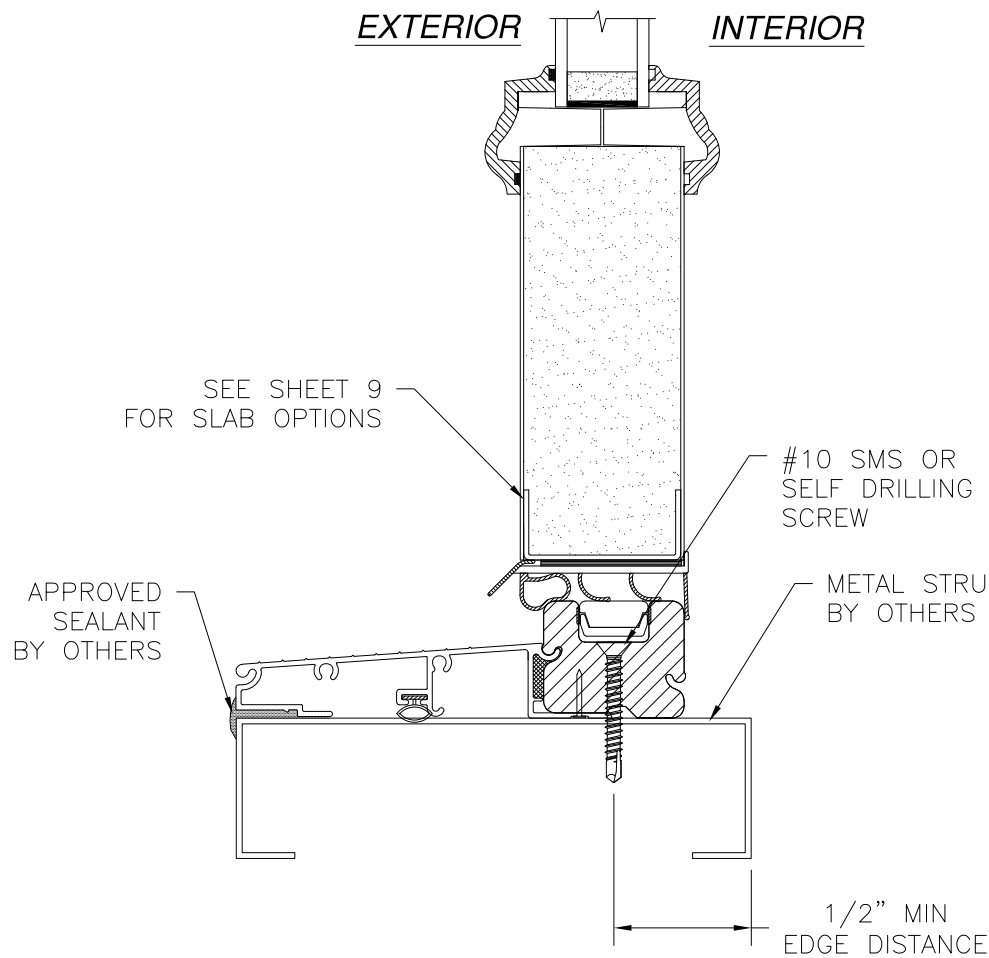
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20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM INSTALLATION DETAILS		
DRAWN: TJH	DWG NO. 08-00709	REV Q
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L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

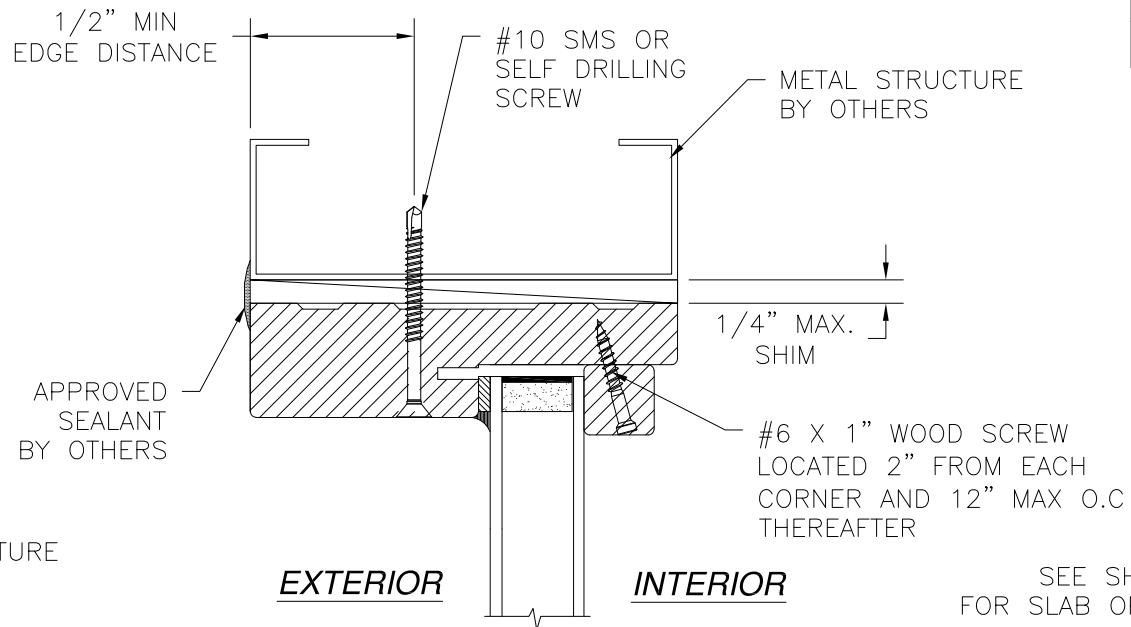


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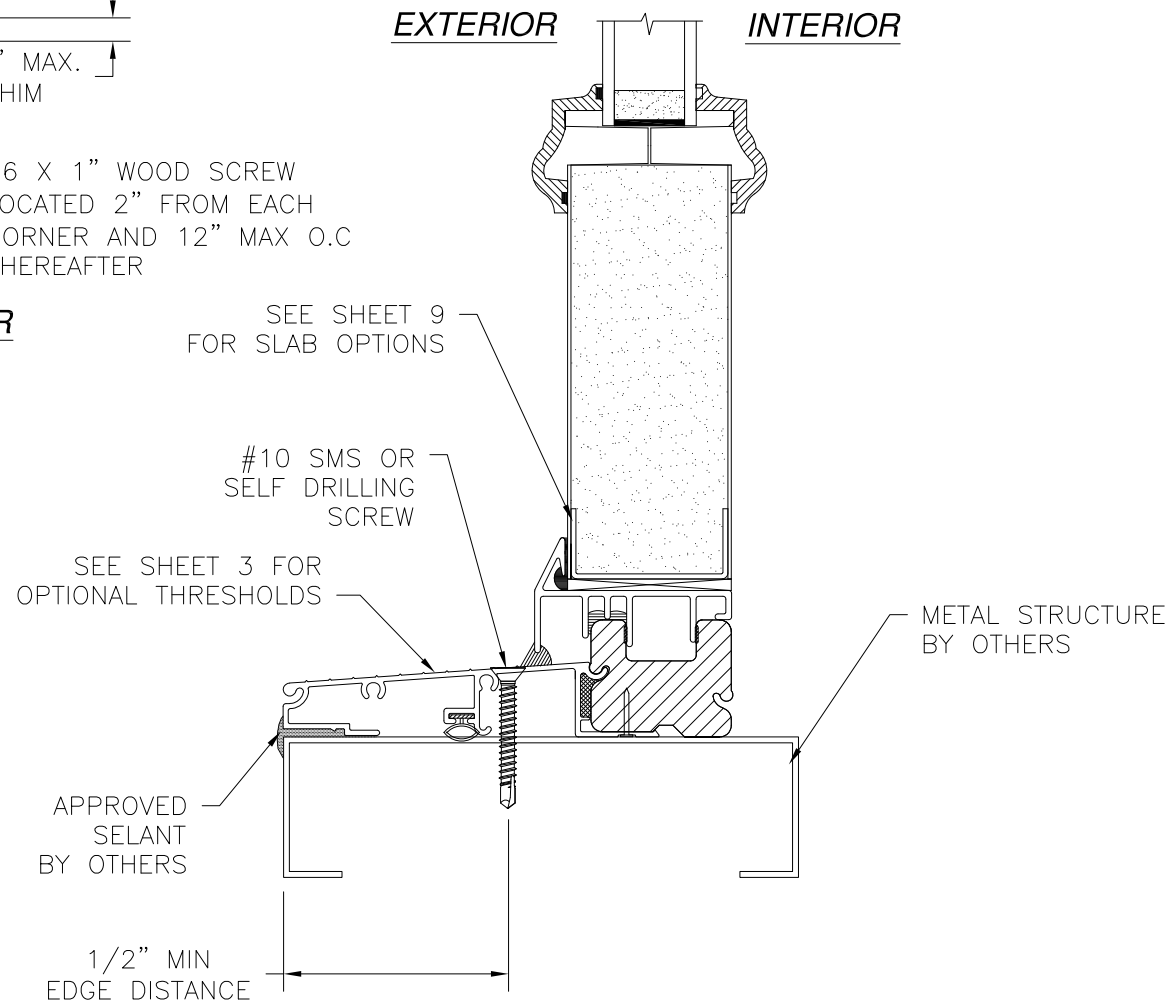
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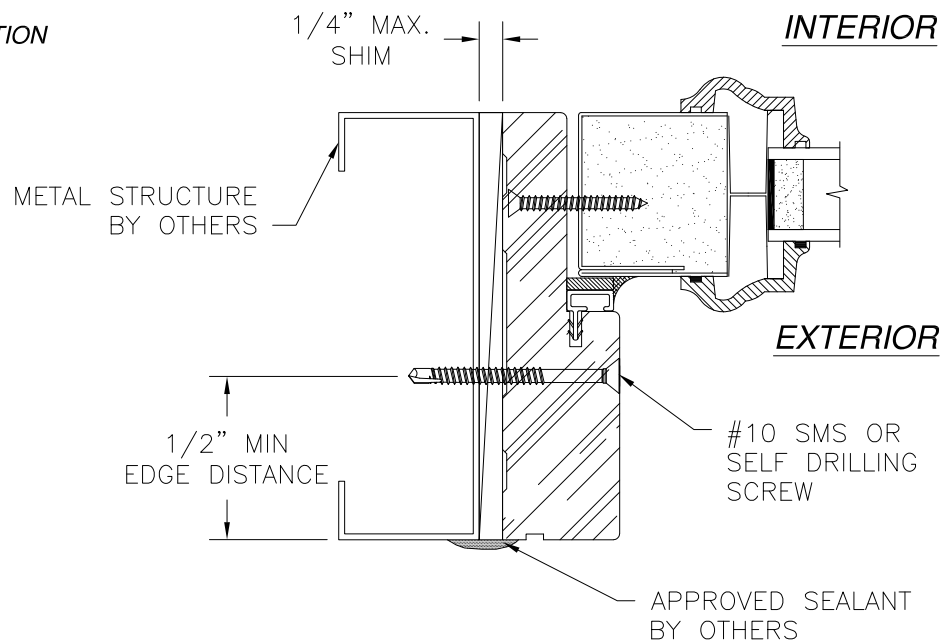
DOOR SILL DETAIL
INSWING
METAL STRUCTURE INSTALLATION



TRANSOM DETAIL
INSWING
METAL STRUCTURE INSTALLATION
HEAD SHOWN JAMB SIMILAR



SIDELITE SILL DETAIL
INSWING
METAL STRUCTURE INSTALLATION

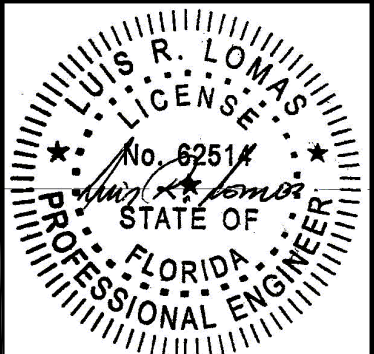


JAMB DETAIL INSWING
METAL STRUCTURE INSTALLATION
SIDELITE JAMB SHOWN, HINGE AND STRIKE
JAMB AND HEAD SIMILAR

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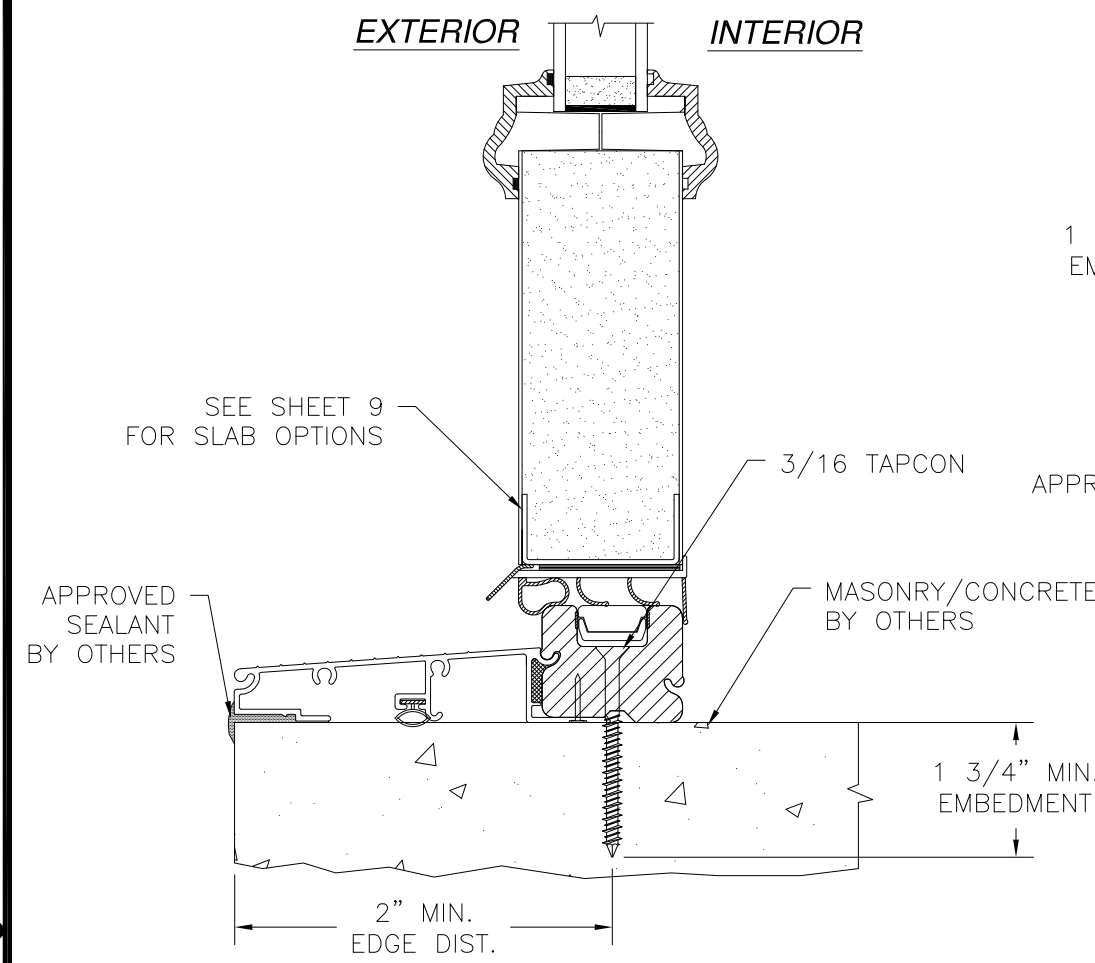
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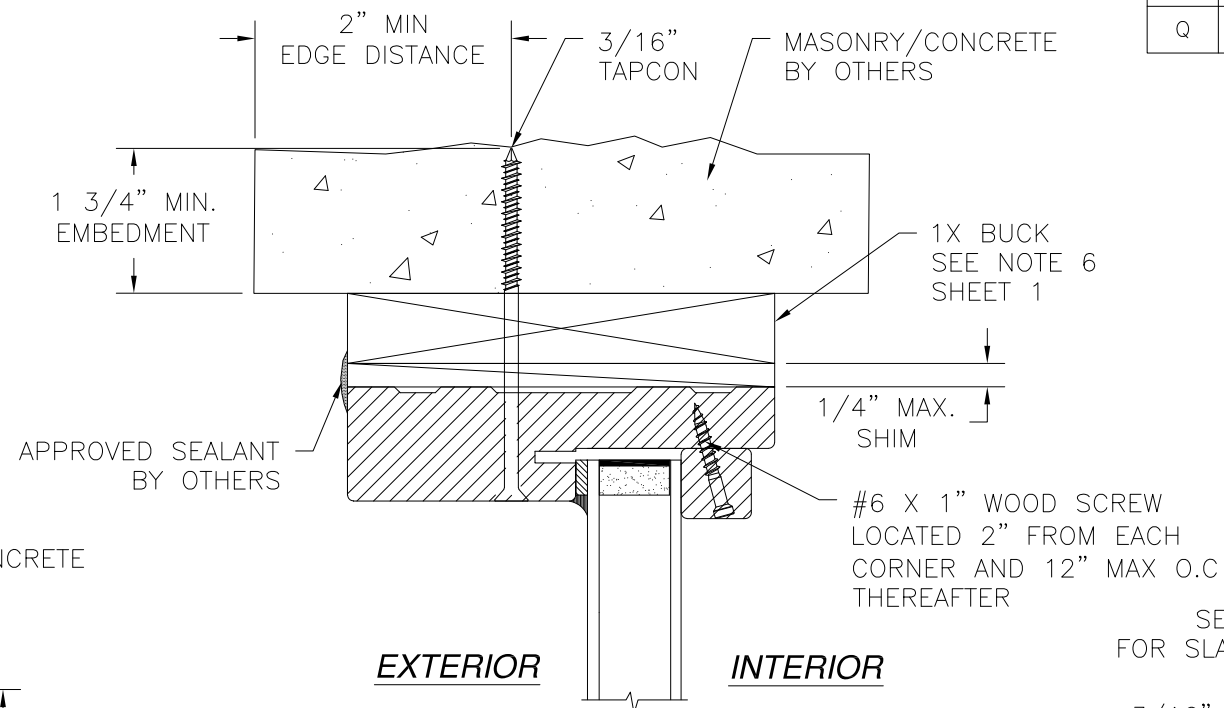


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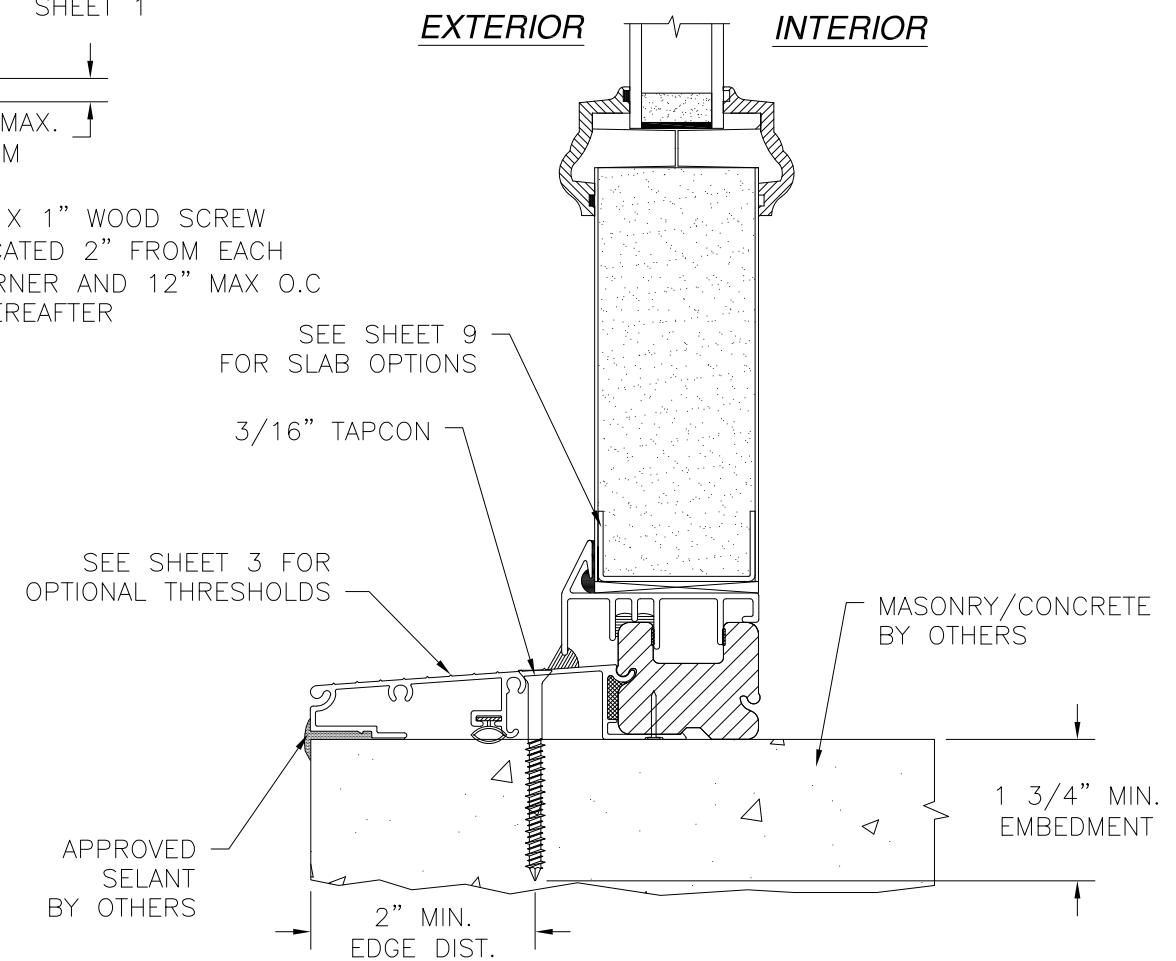
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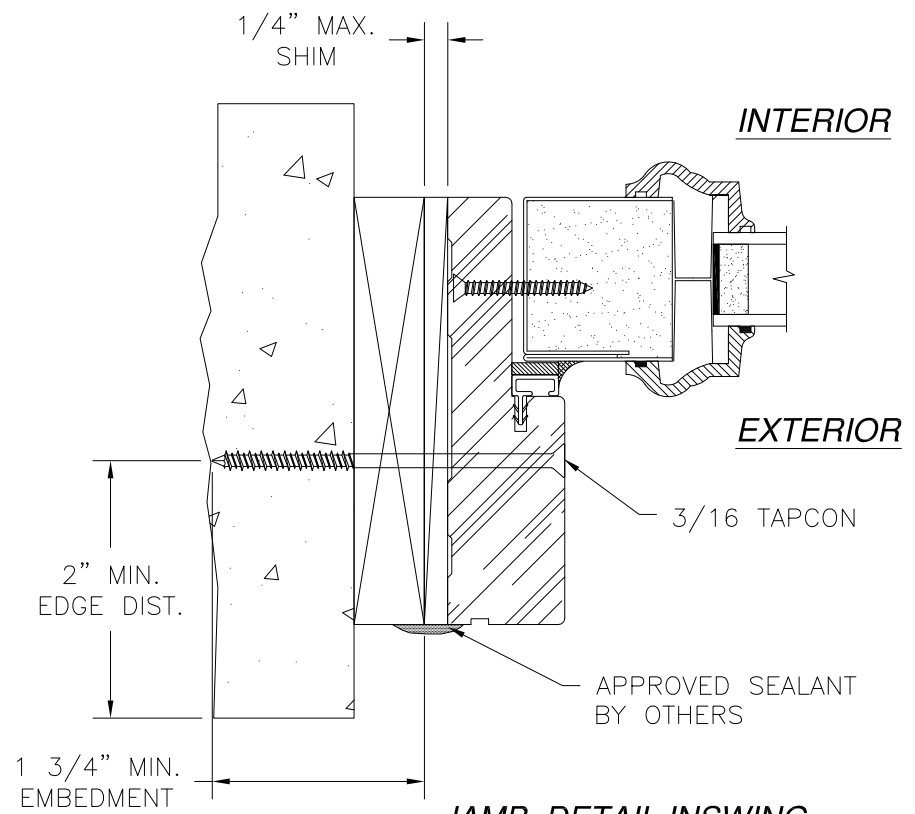
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INSWING
MASONRY/CONCRETE INSTALLATION



TRANSOM DETAIL
INSWING
MASONRY/CONCRETE INSTALLATION
HEAD SHOWN JAMB SIMILAR



SIDELITE SILL DETAIL
INSWING
MASONRY/CONCRETE INSTALLATION



JAMB DETAIL INSWING
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SIDELITE JAMB SHOWN, HINGE AND STRIKE
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SUGARCREEK, OH 44681

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INSTALLATION DETAILS

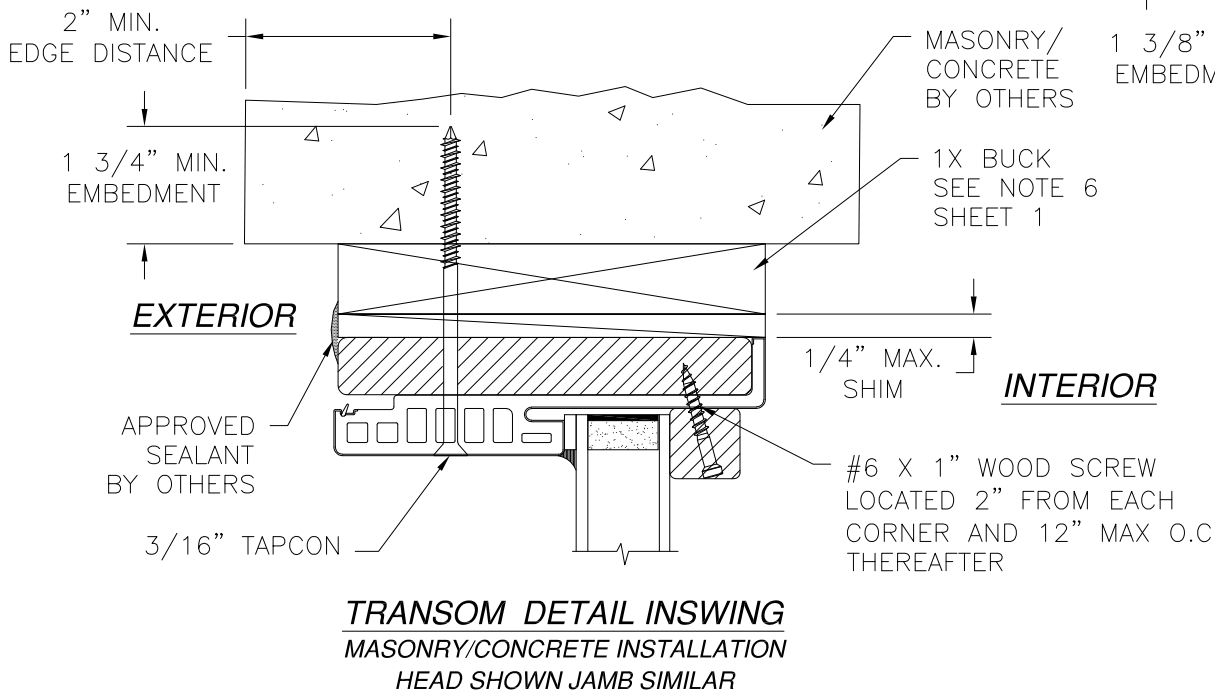
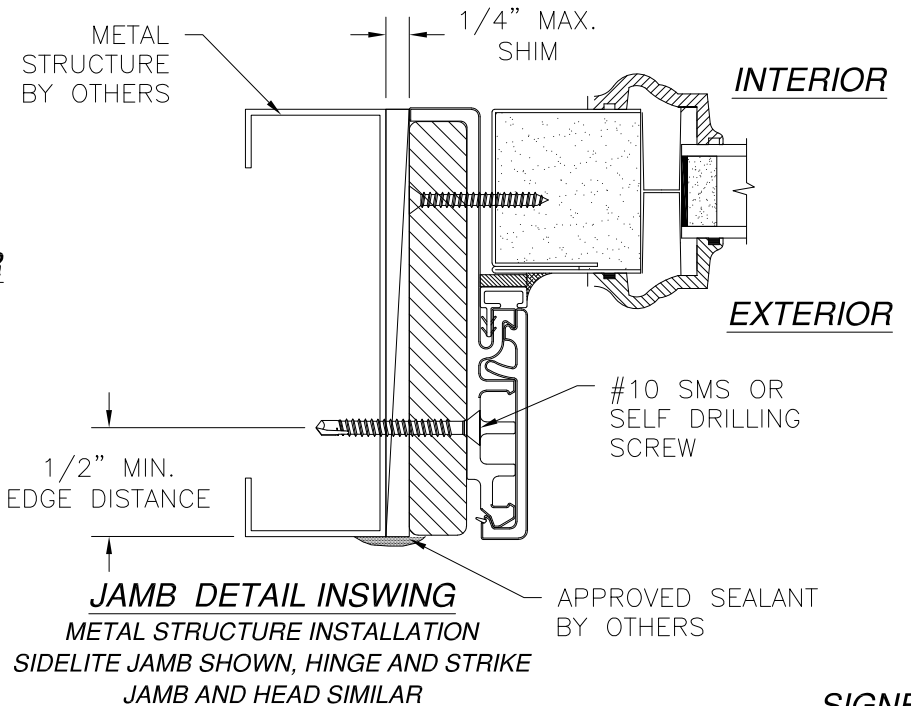
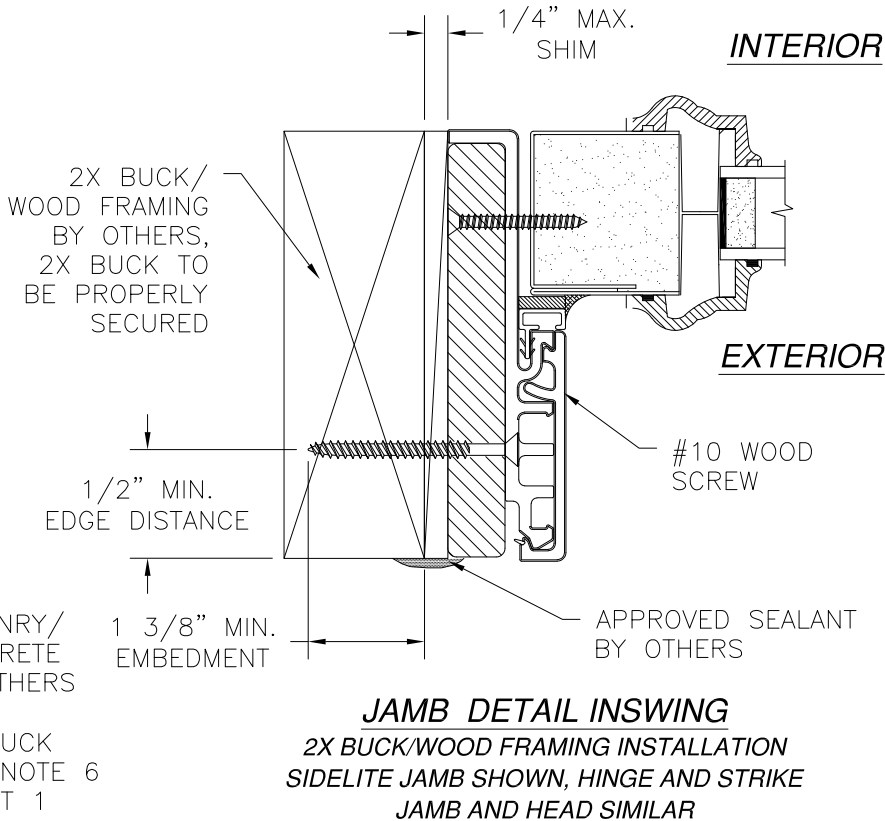
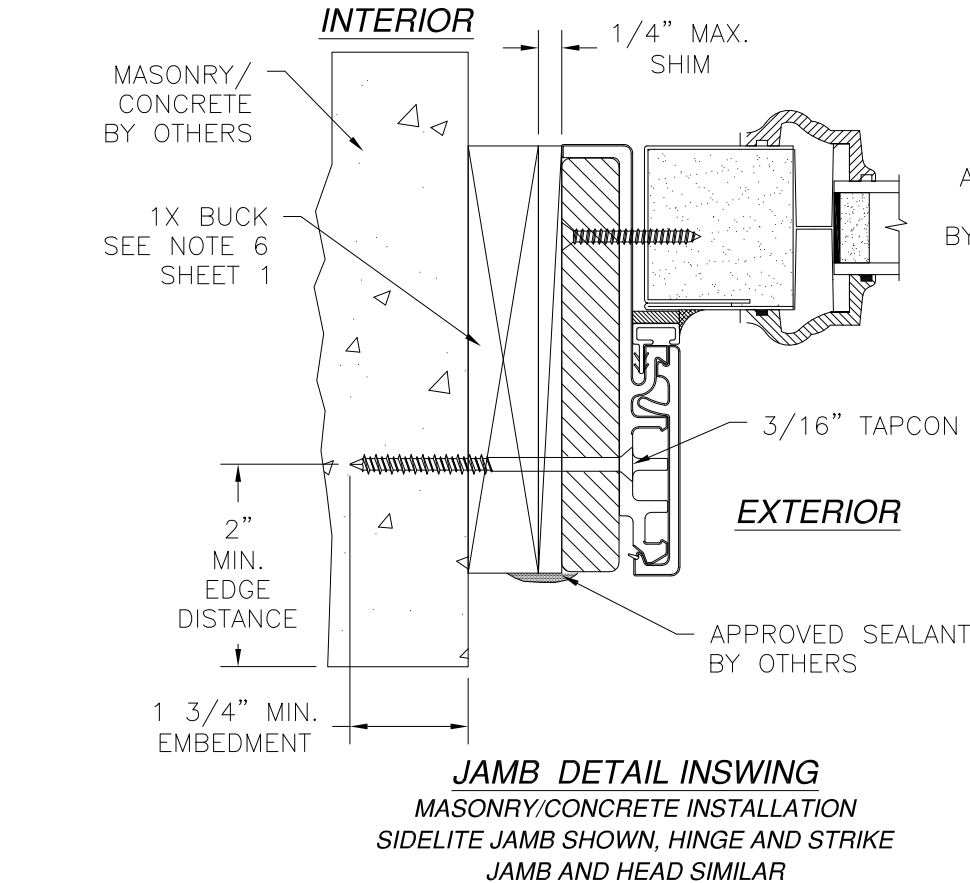
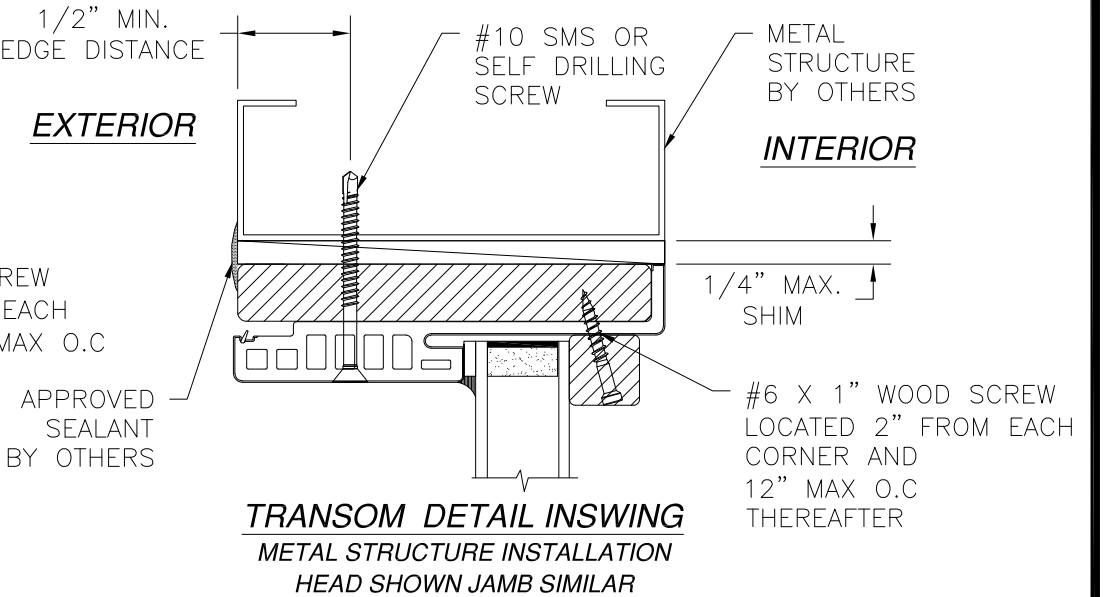
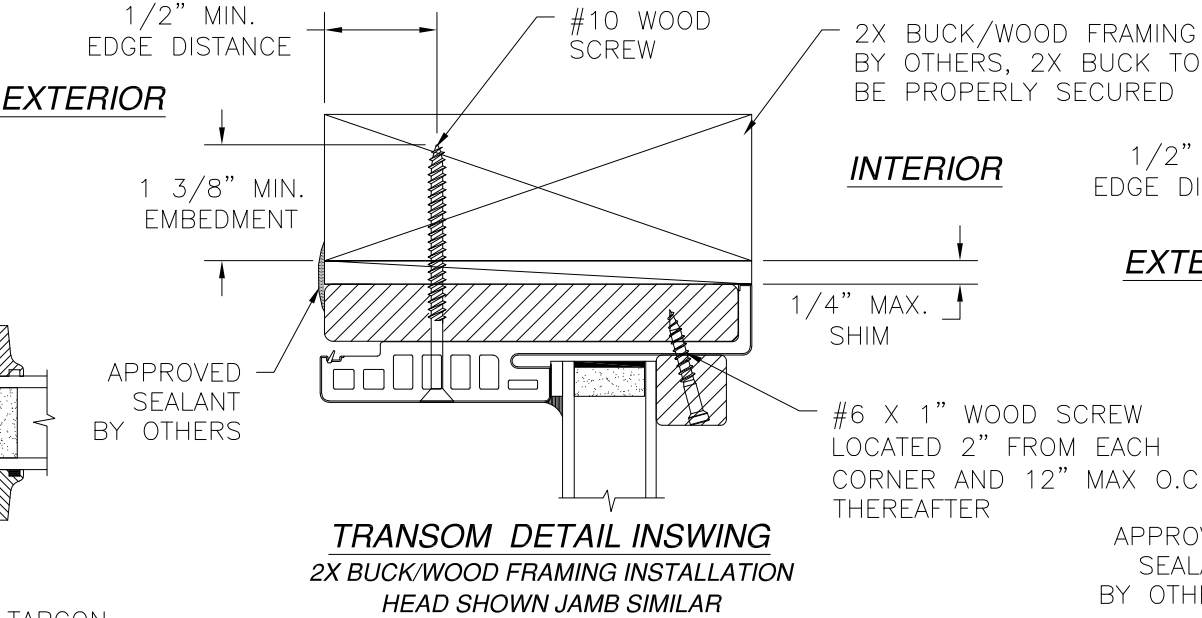
DRAWN: TJH	DWG NO. 08-00709	REV Q
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LUIS R. LOMAS
LICENSED PROFESSIONAL ENGINEER
No. 62514
STATE OF FLORIDA

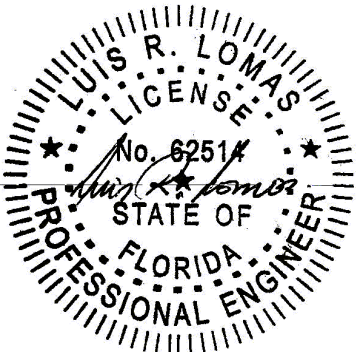
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1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112



PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OH 44681		
20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM INSTALLATION DETAILS W/FUSION FRAME		
DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 9 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

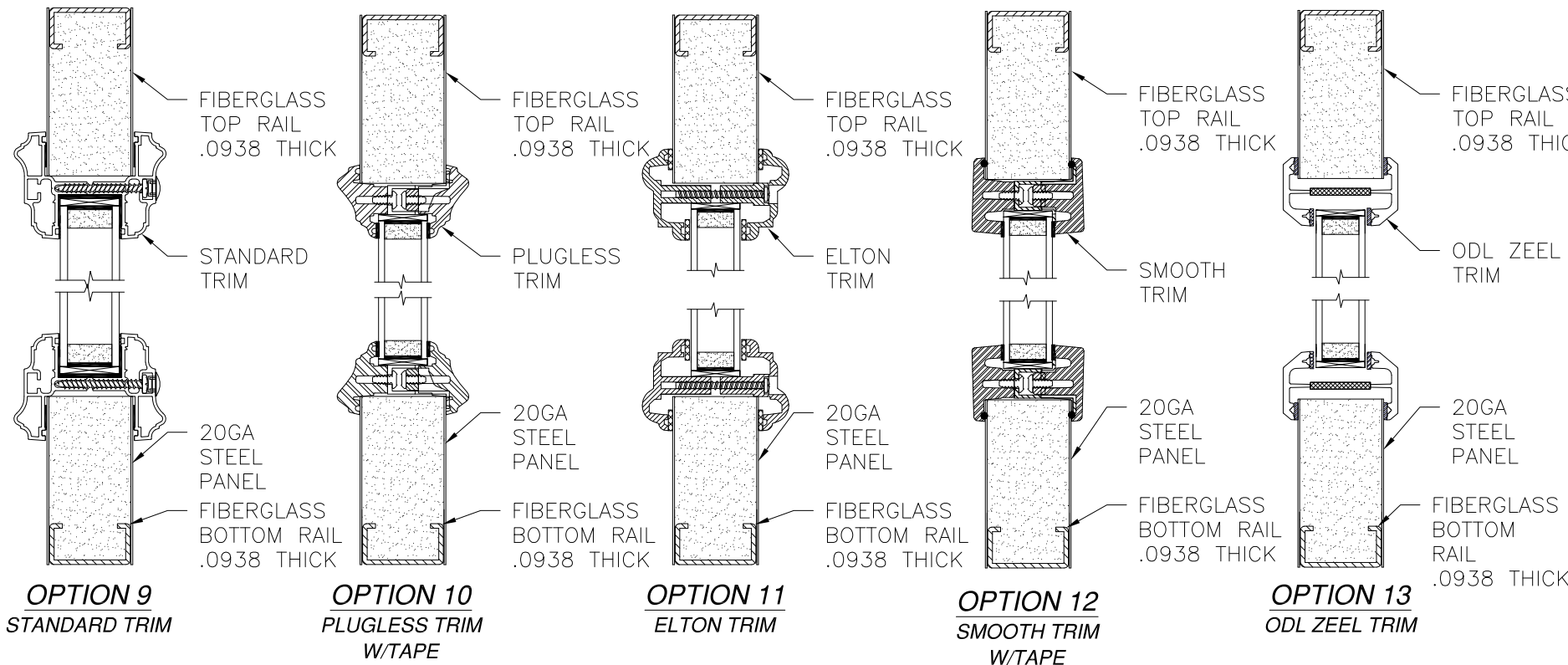
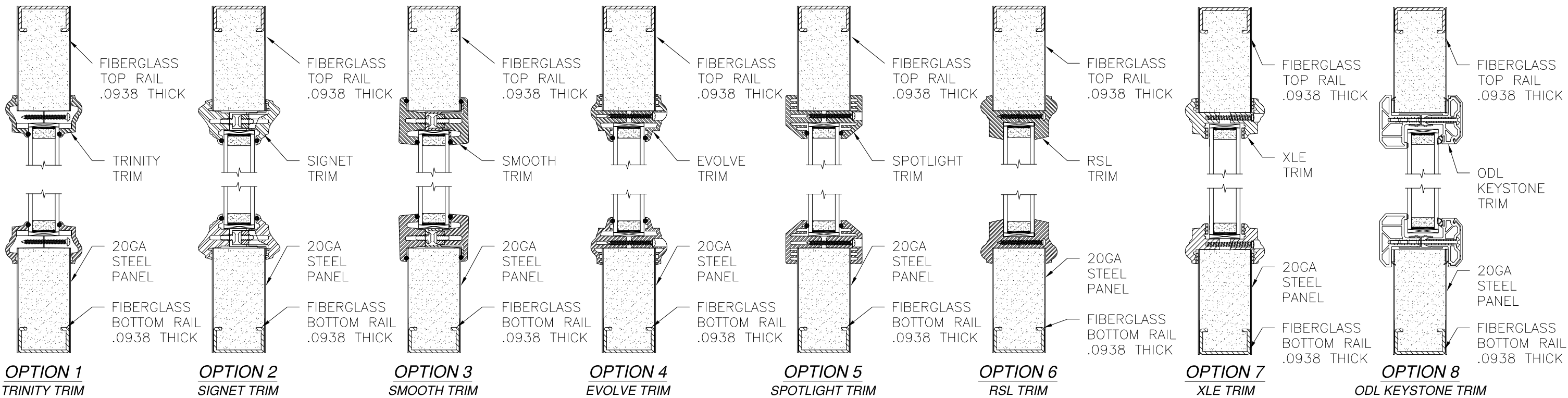
SIGNED: 08/21/2024



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

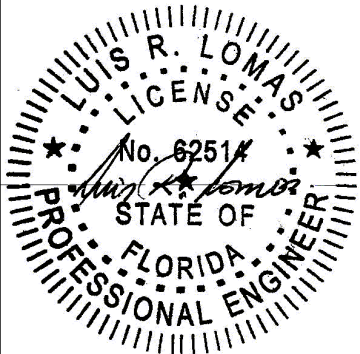
APPROVED SLABS AND TRIMS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
Q	REVISE TO ADD ODL KEYSTONE TRIM	08/21/2024	R.L.



SIGNED: 08/21/2024

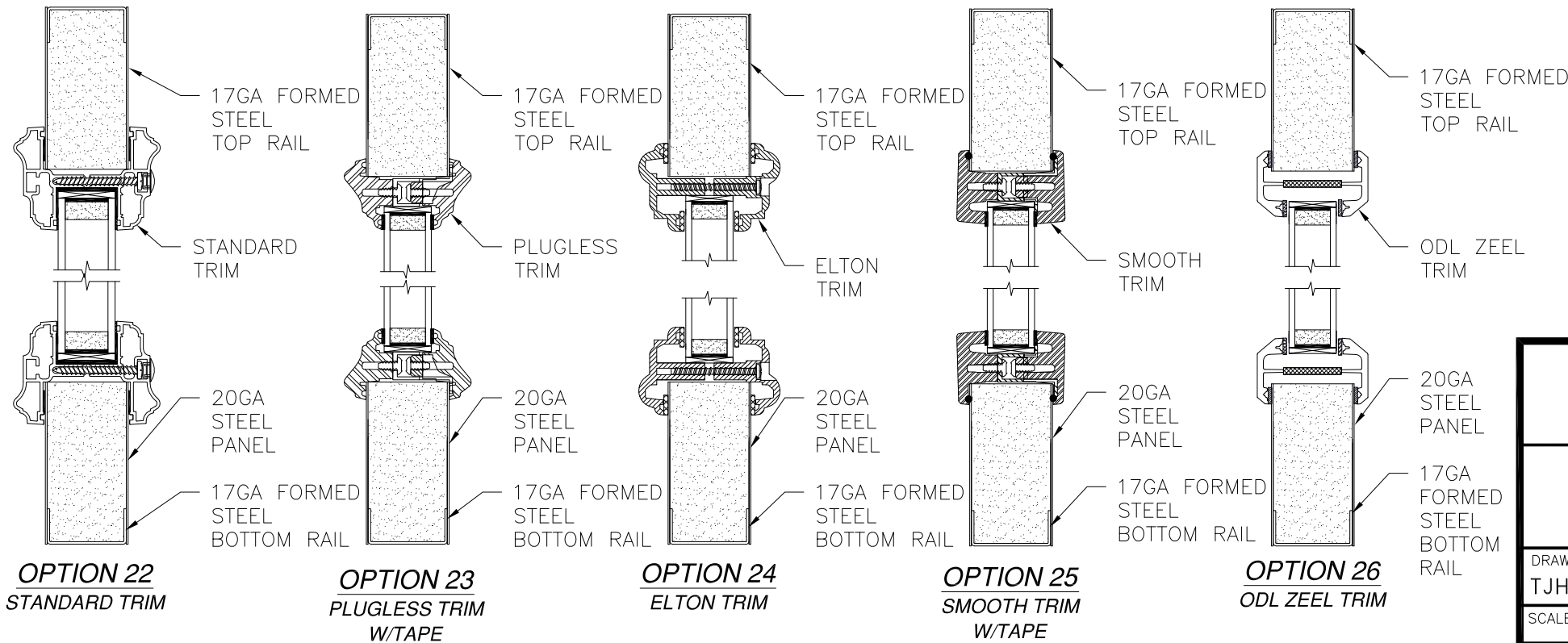
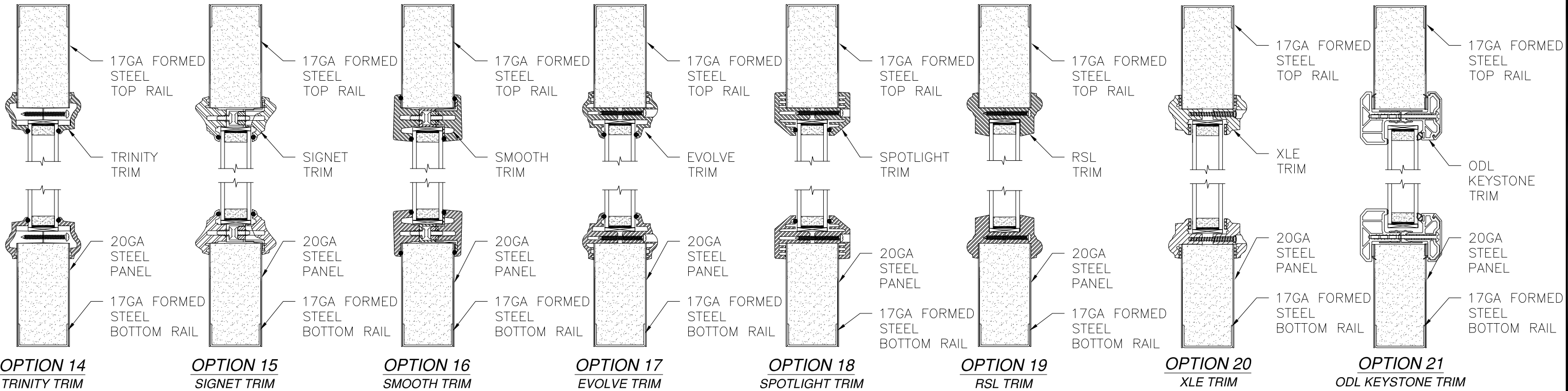
PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OH 44681		
20GA. STEEL IS PATIO DOOR W/ OR WITHOUT SIDELITES AND TRANSOM APPROVED SLABS AND TRIMS		
DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 10 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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

APPROVED SLABS AND TRIMS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
Q	REVISE TO ADD ODL KEYSTONE TRIM	08/21/2024	R.L.



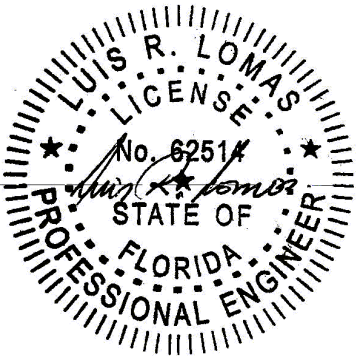
SIGNED: 08/21/2024

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

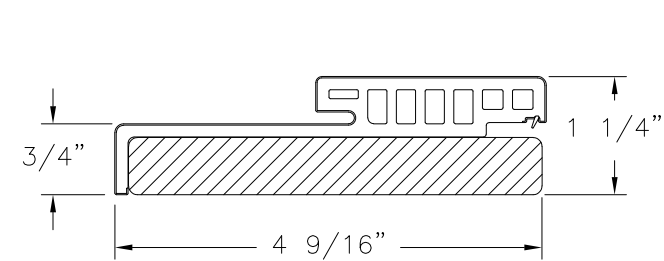
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W/ OR WITHOUT SIDELITES AND TRANSOM
APPROVED SLABS AND TRIMS

DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 11 OF 12

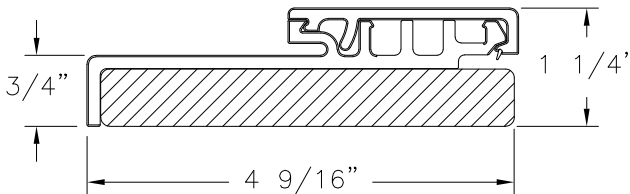
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com



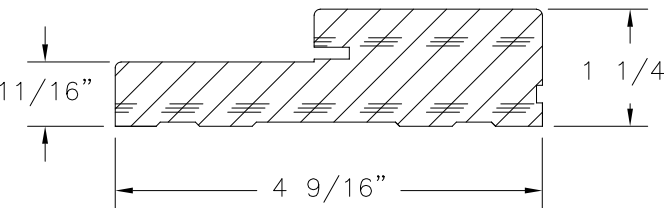
Luis R. Lomas P.E.
FL No.: 62514



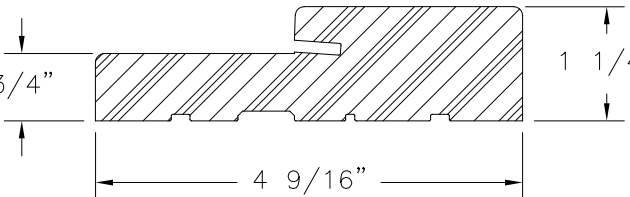
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WOOD/COMPOSITE



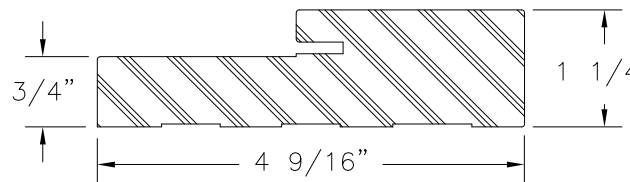
HYBRID JAMB
WOOD/COMPOSITE



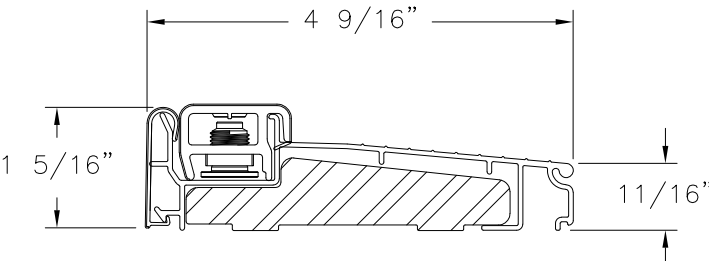
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WOOD G.46 MIN.



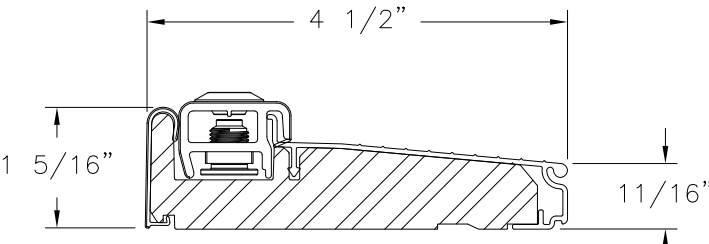
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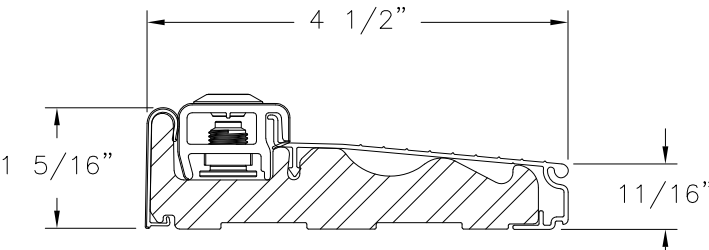
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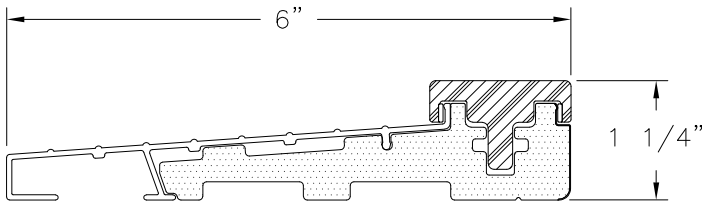
INSWING SILL ZAIL4565



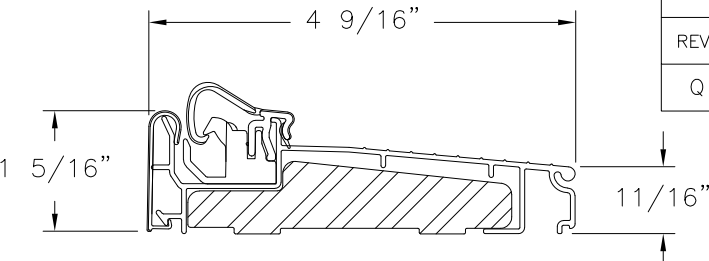
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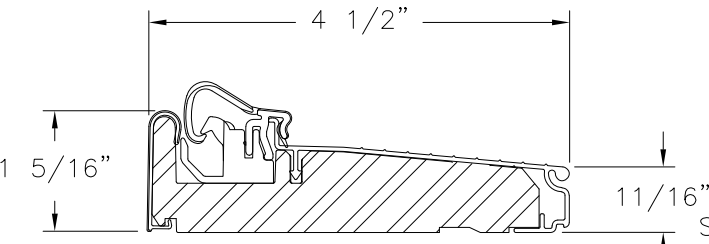
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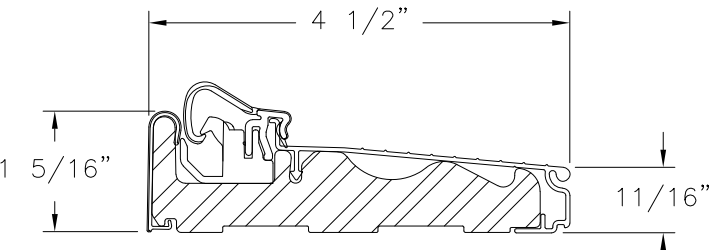
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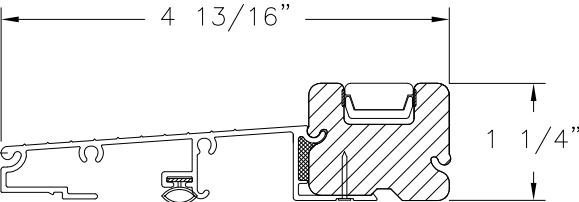
INSWING SILL ZACL4565



INSWING SILL ZAC4565F

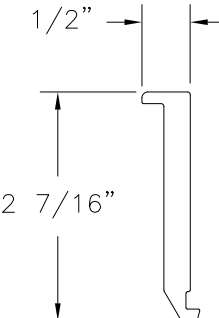
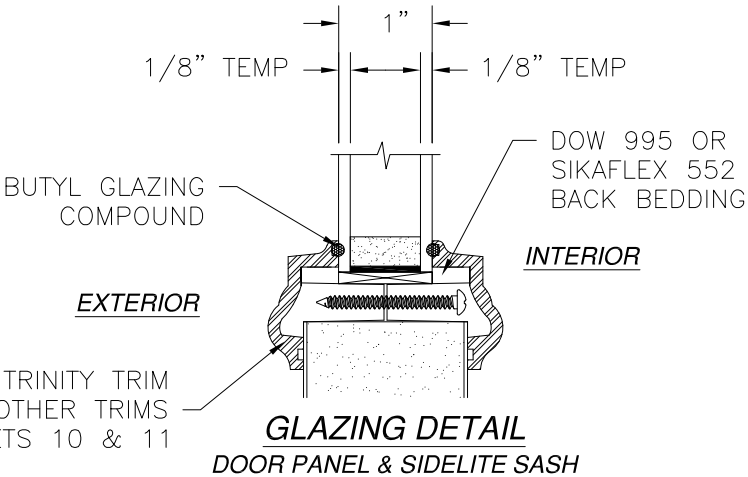


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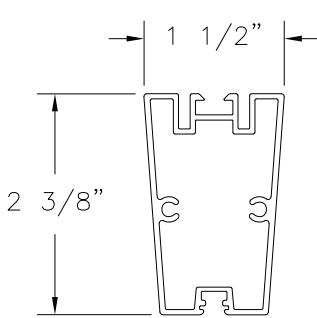


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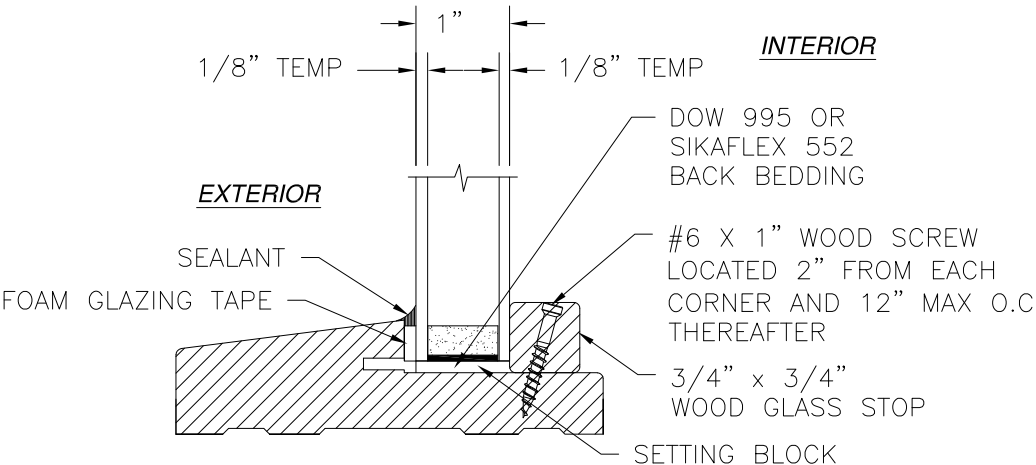
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
Q	REVISE TO ADD ODL KEYSTONE TRIM	08/21/2024	R.L.



PVC MULLION SPACER



ALUMINUM MULLION



GLAZING DETAIL TRANSOM

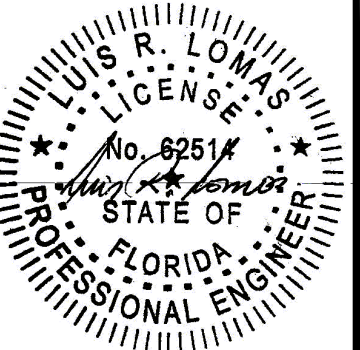
PROVIA, LLC.
2150 STATE ROUTE 39 WEST
SUGARCREEK, OH 44681

20GA. STEEL IS PATIO DOOR
W/ OR WITHOUT SIDELITES AND TRANSOM
COMPONENTS

DRAWN: TJH	DWG NO. 08-00709	REV Q
SCALE NTS	DATE 03/17/09	SHEET 12 OF 12

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434-688-0609 rllomas@lrlomaspe.com

SIGNED: 08/21/2024



Luis R. Lomas P.E.
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