

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
J	REVISED HARDWARE SCHEDULE	09/11/26	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 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.
4. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
5. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
6. FRAME MATERIAL: WOOD WITH G=.46 MINIMUM SPECIFIC GRAVITY, OR COMPOSITE, OR FRAMESAVER, OR FUSION FRAME.
DOOR SKIN MATERIAL: STEEL .033” THICK (MINIMUM), FIBERGLASS .085” THICK (MINIMUM).
7. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.
8. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16” OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4”.

9. FOR ANCHORING 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.
10. FOR ANCHORING 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.
11. FOR ANCHORING 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.
12. ALL FASTENERS TO BE CORROSION RESISTANT.
13. 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:

13.1. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42

13.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.

13.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

13.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .048” THICK MINIMUM

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

STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR
W/TRANSOM – IMPACT
NOTES

DRAWN:
V.L.

DWG NO.
08-02039

REV
J

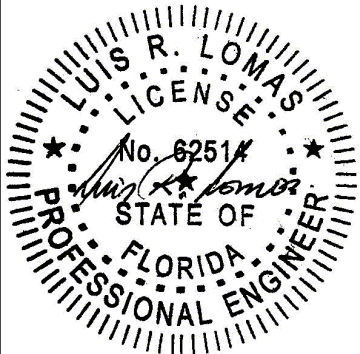
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DATE 05/23/13

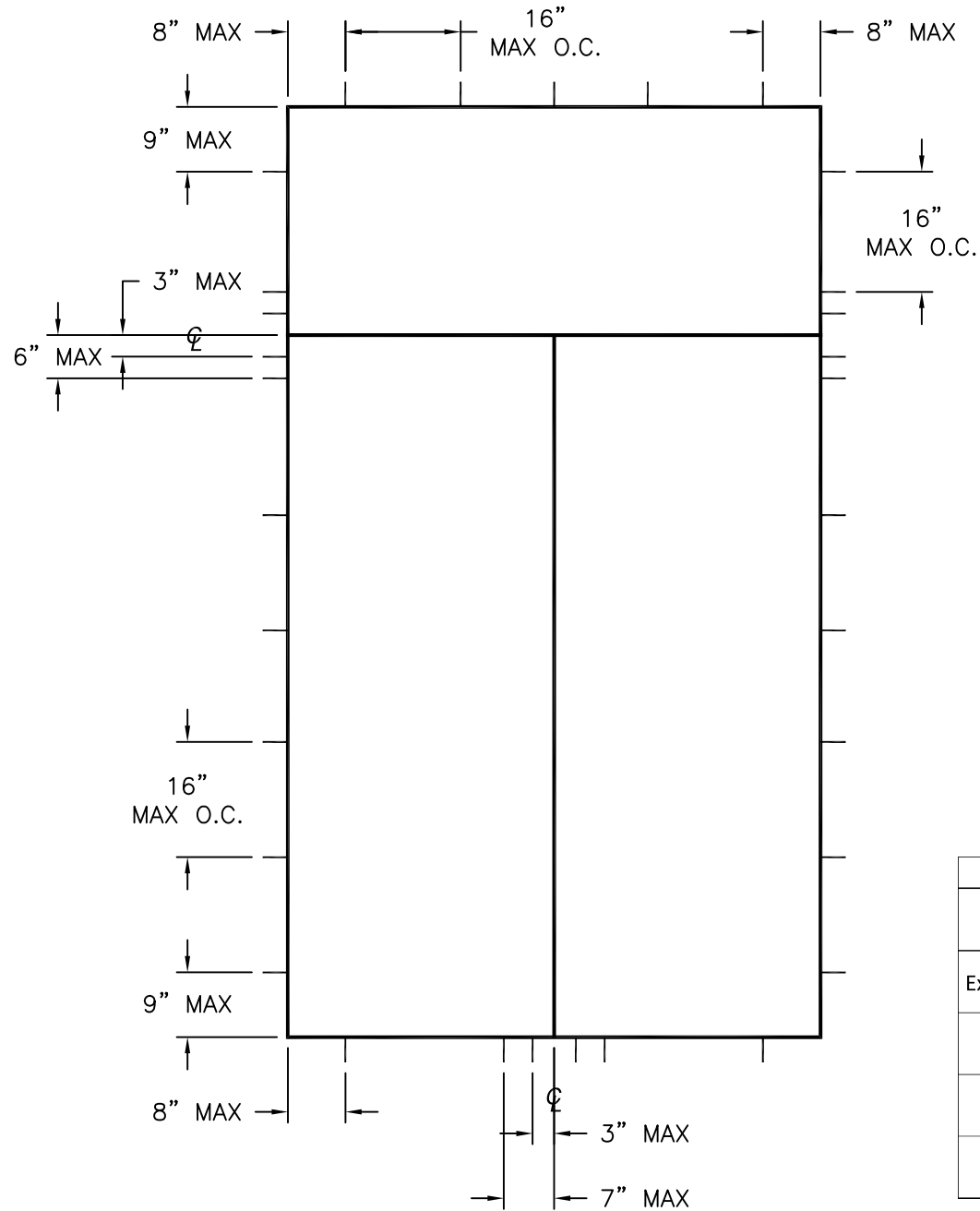
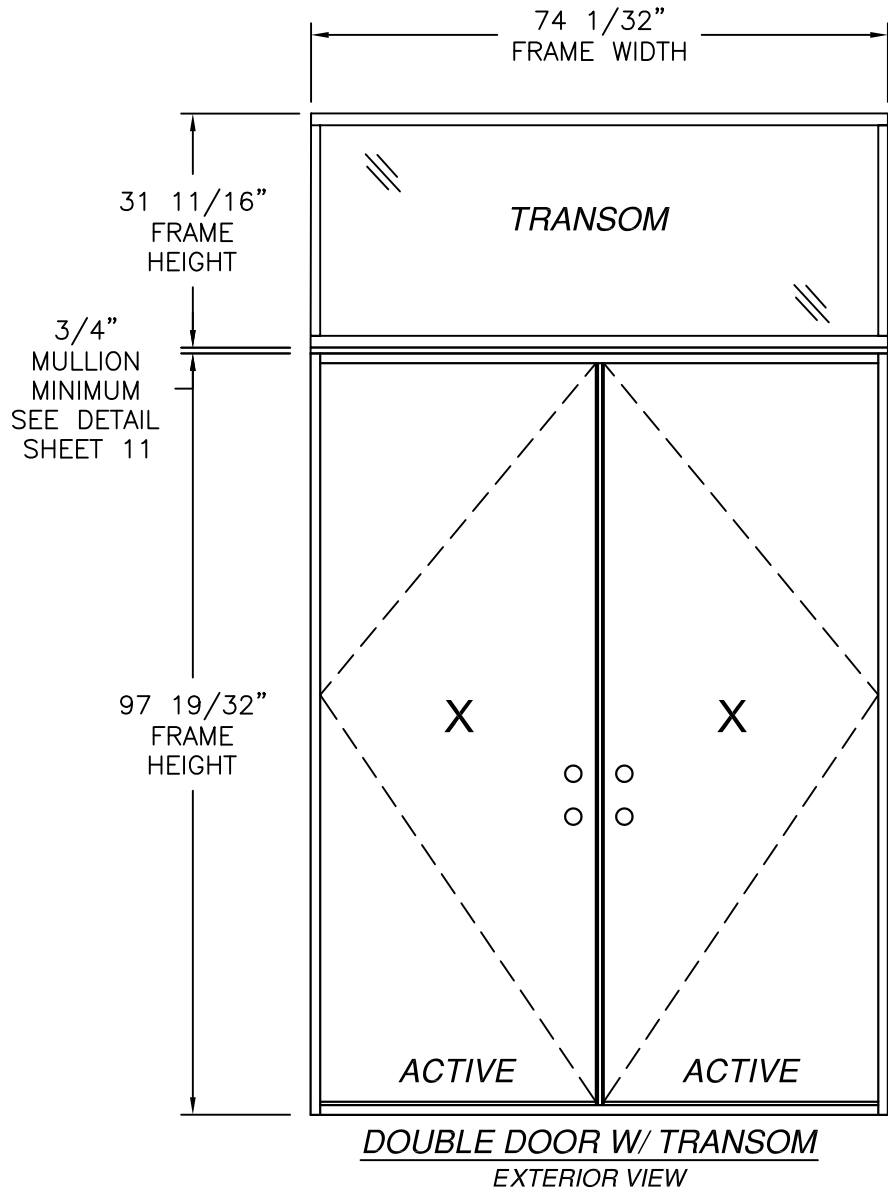
SHEET 1 OF 12

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

SIGNED: 09/11/2026



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



ANCHOR LAYOUT

REVISIONS			
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DESIGN PRESSURE RATING	IMPACT RATING
±55.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 3

WITH PANOLOCK MULTI-POINT	
DESIGN PRESSURE RATING	IMPACT RATING
±50.0PSF	LARGE MISSILE IMPACT

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

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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 SCHLAGE
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.	(3) 4" X 4" BALL BEARING HINGES BY PENROD
H.	(3) 4" X 4" SPRING BOMMER HINGES BY PENROD (ALTERNATE)

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W/TRANSOM – IMPACT
ELEVATION AND ANCHOR LAYOUT

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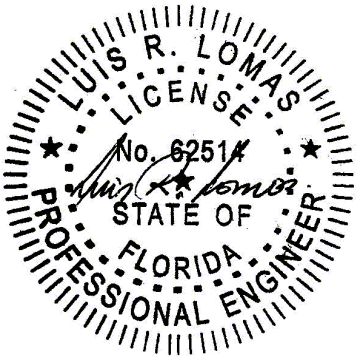
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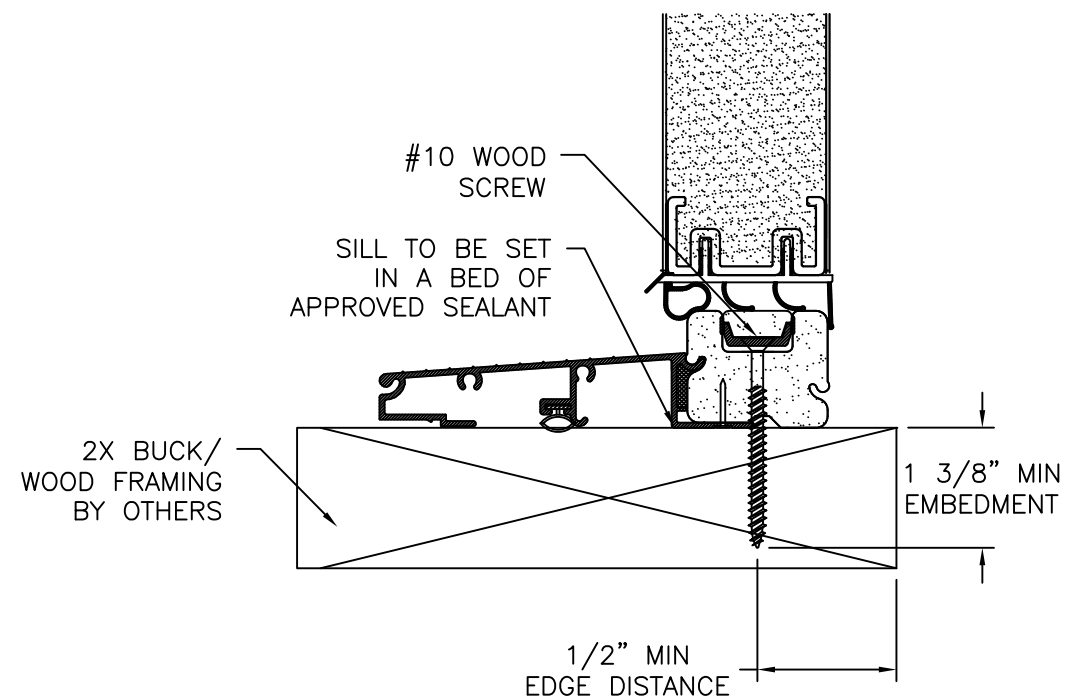
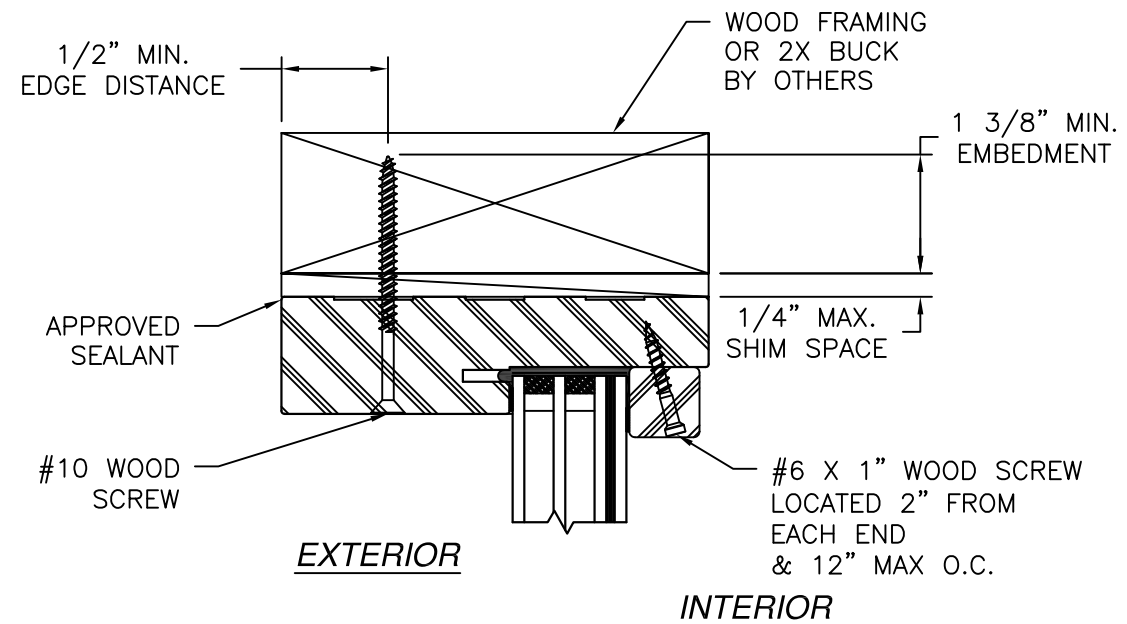
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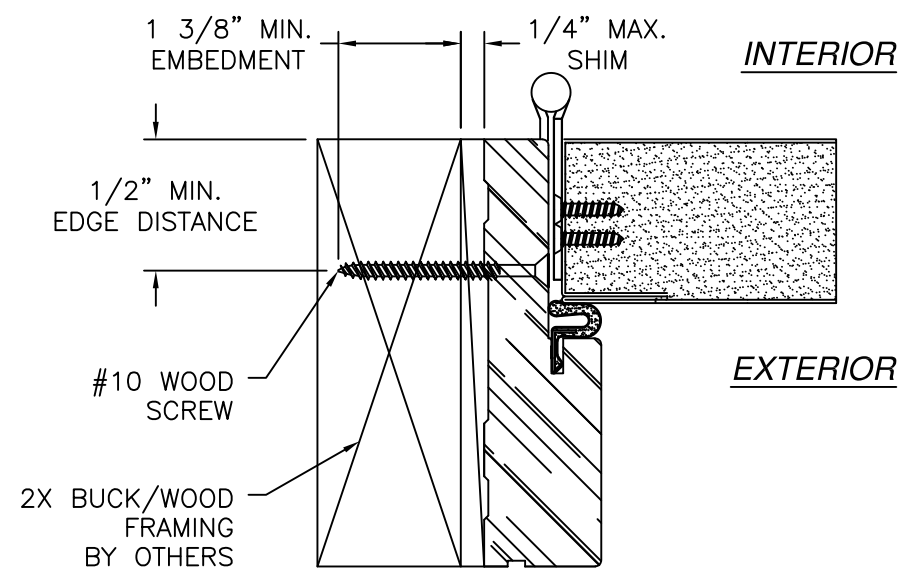


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VERTICAL CROSS SECTION
 DOOR AND TRANSOM INSTALLATION - 2X BUCK/WOOD FRAMING
 TRANSOM HEAD SHOWN
 TRANSOM JAMB SIMILAR



HORIZONTAL CROSS SECTION
 DOOR INSTALLATION - 2X BUCK/WOOD FRAMING

- 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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STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR
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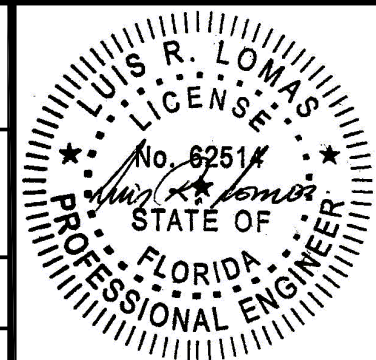
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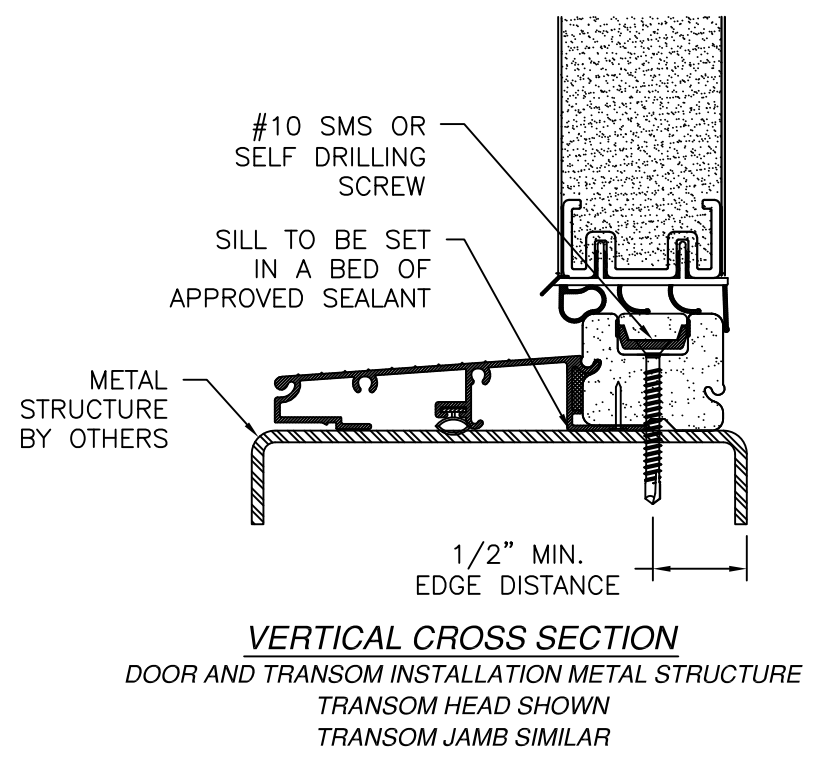
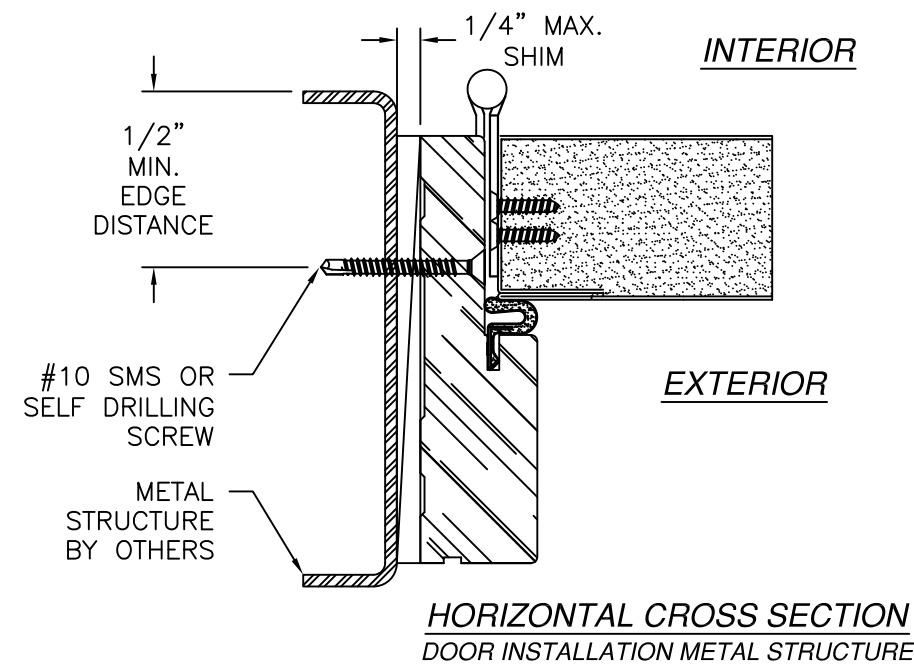
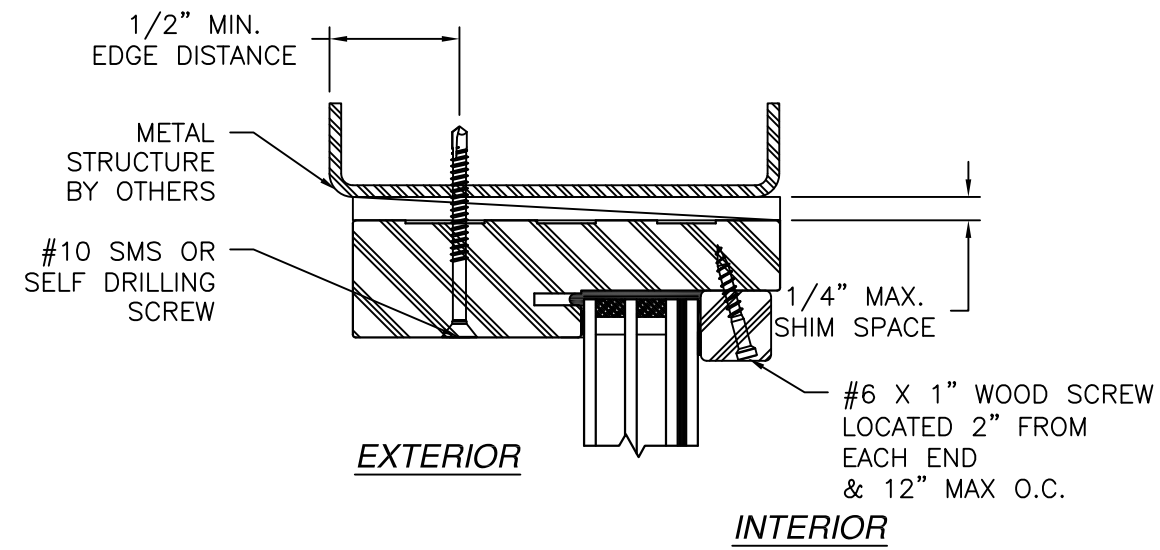
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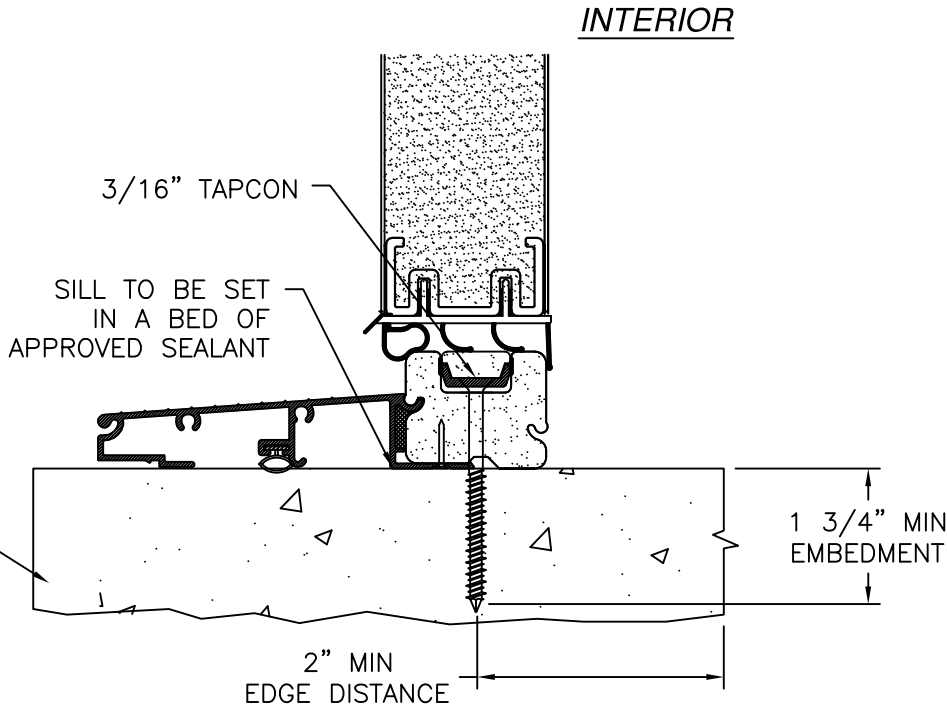
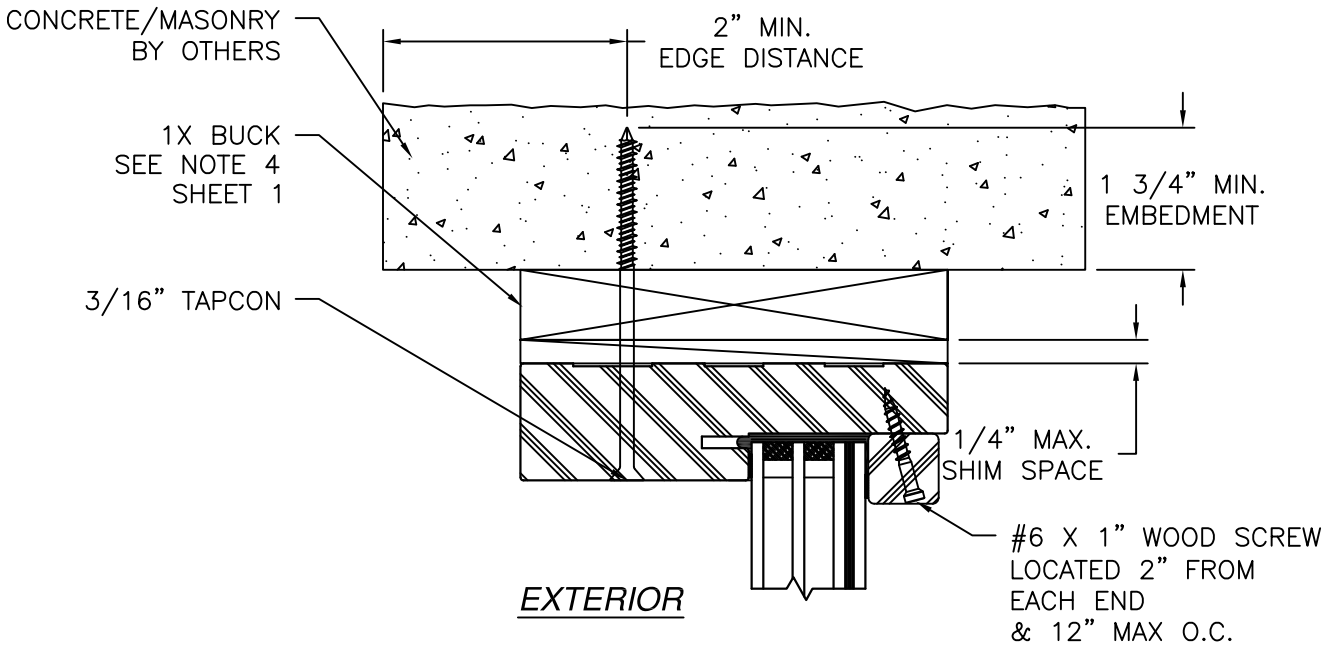
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VERTICAL CROSS SECTION
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TRANSOM HEAD SHOWN
TRANSOM JAMB SIMILAR

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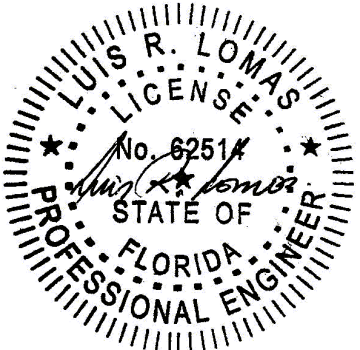
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W/TRANSOM – IMPACT
INSTALLATION DETAILS

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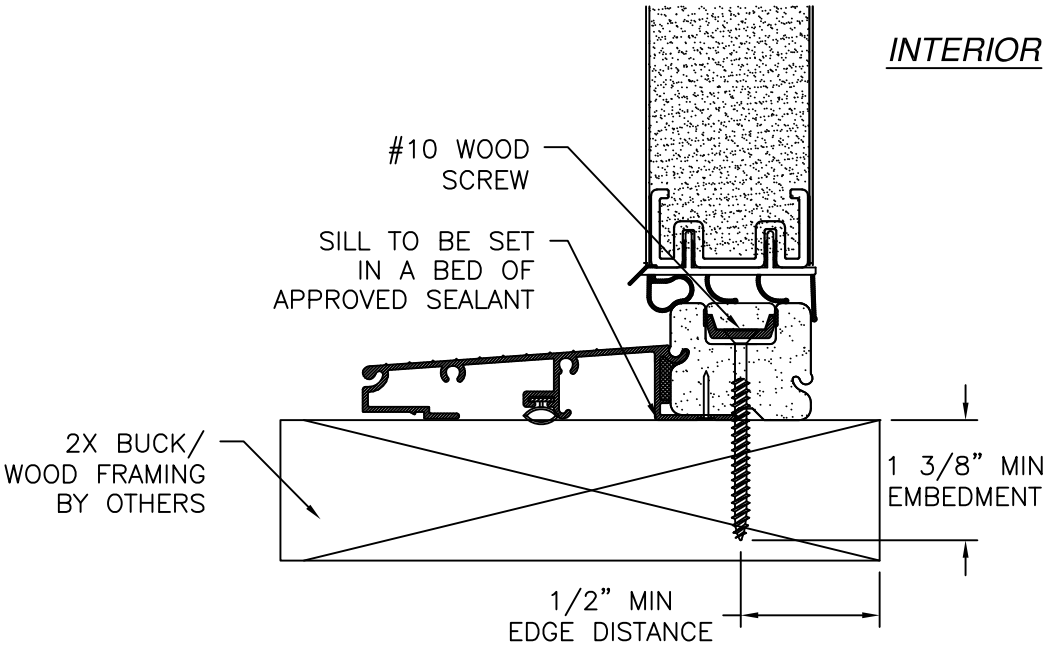
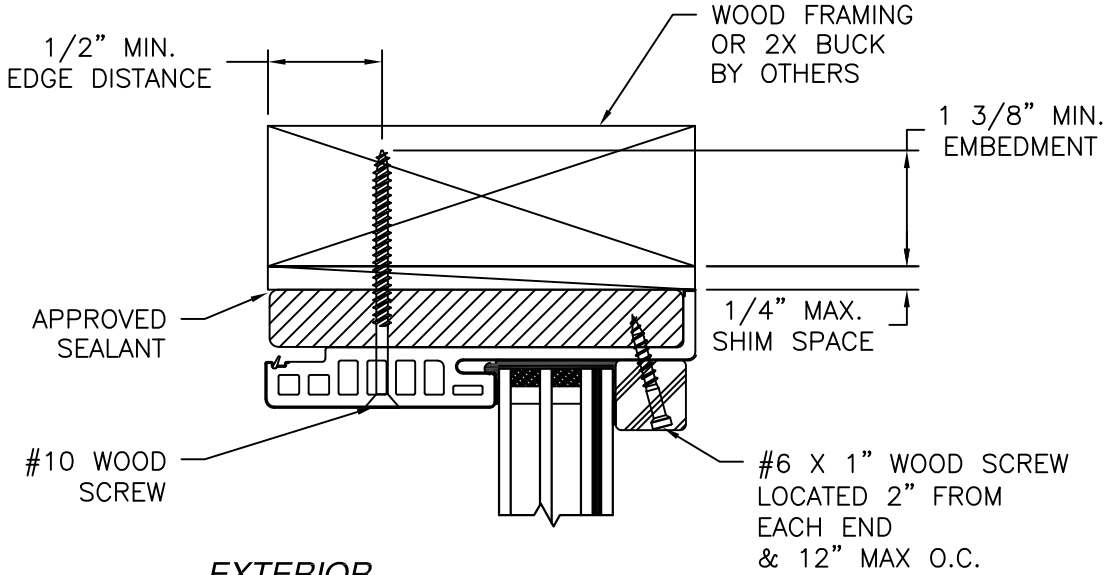
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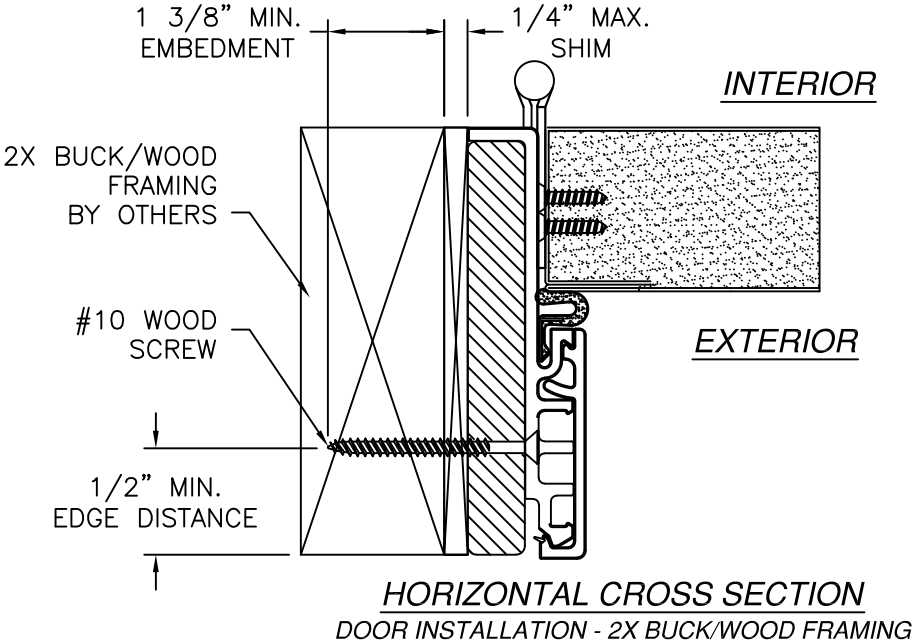


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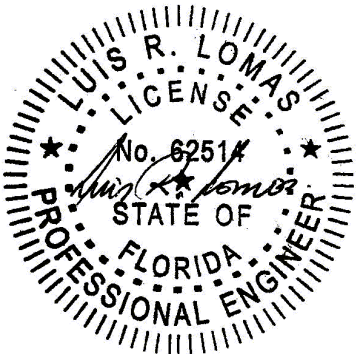
SHEET 6 OF 12

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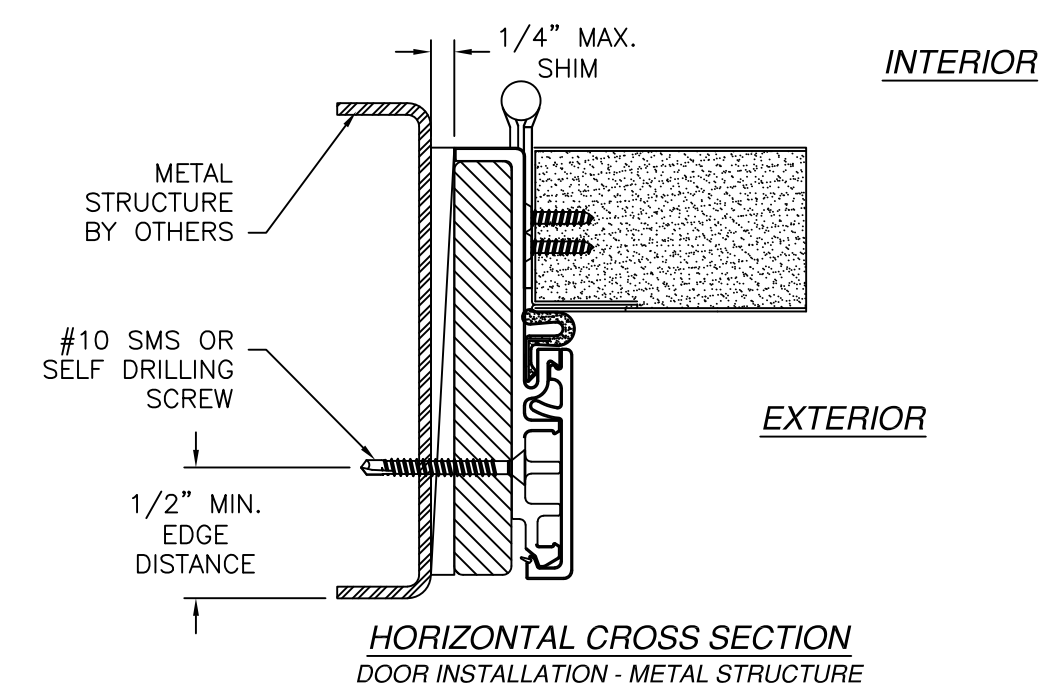
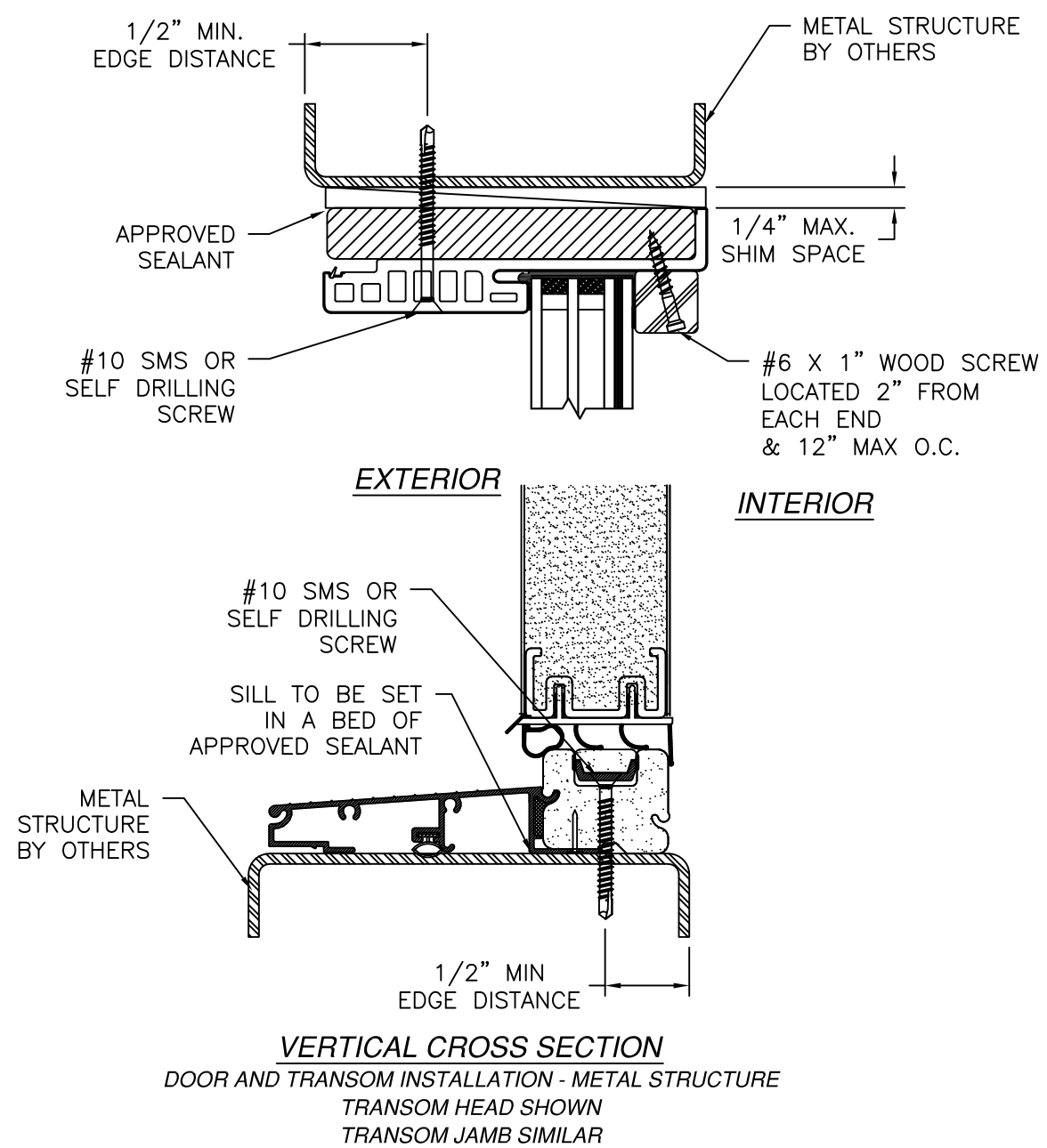
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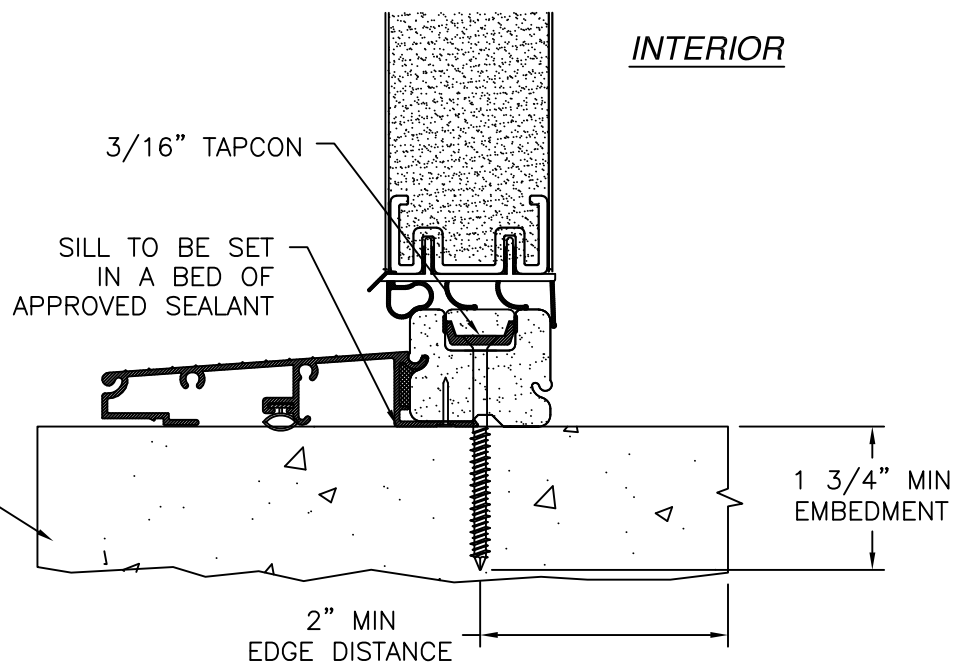
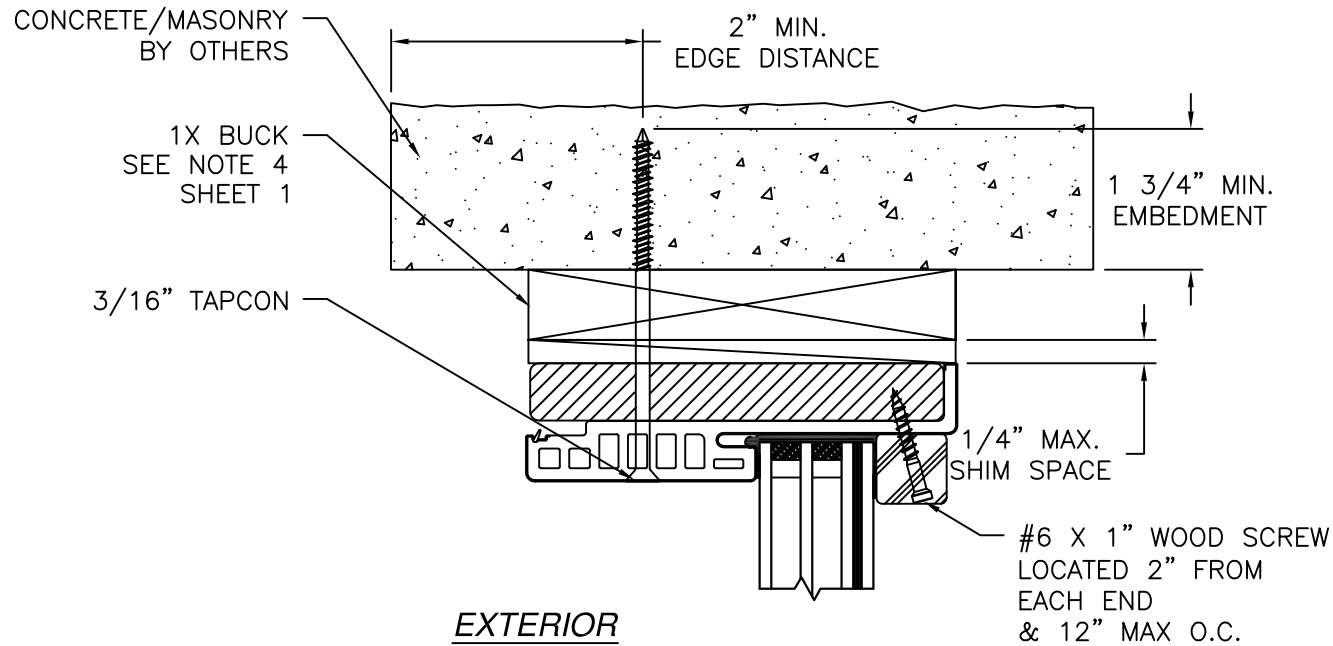
STATE OF FLORIDA

PROFESSIONAL ENGINEER

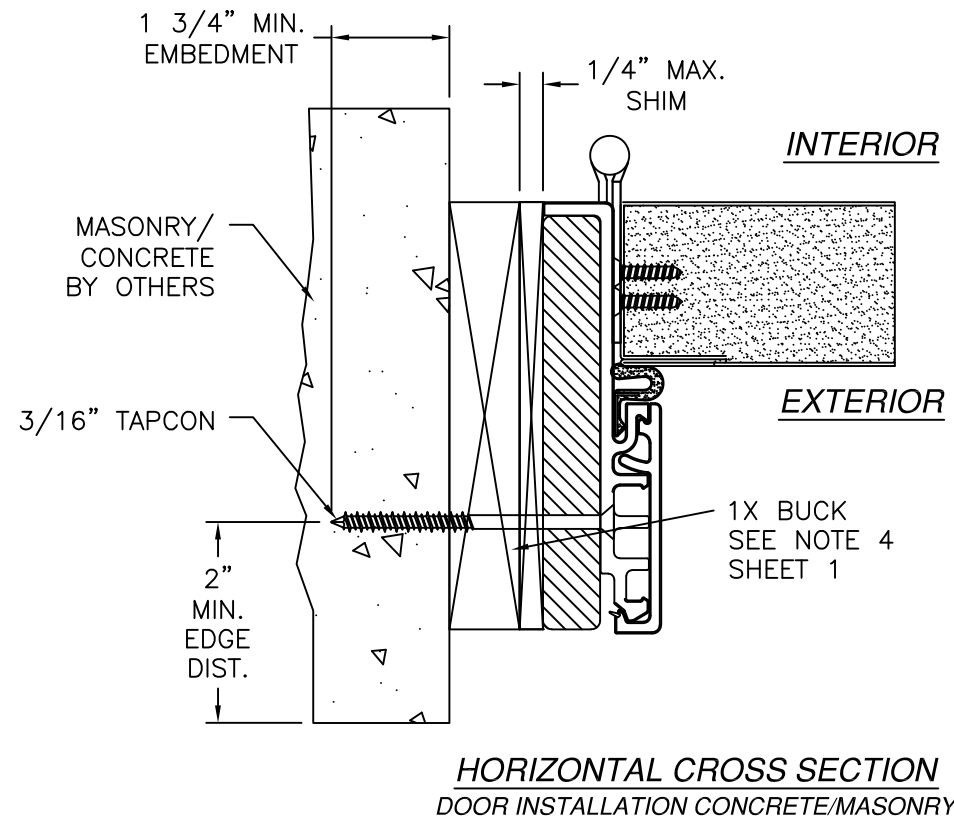
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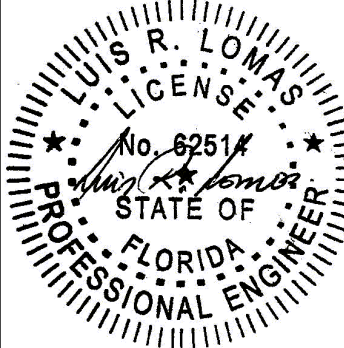
VERTICAL CROSS SECTION
DOOR AND TRANSOM INSTALLATION MASONRY/CONCRETE
TRANSOM HEAD SHOWN
TRANSOM JAMB SIMILAR



HORIZONTAL CROSS SECTION
DOOR INSTALLATION CONCRETE/MASONRY

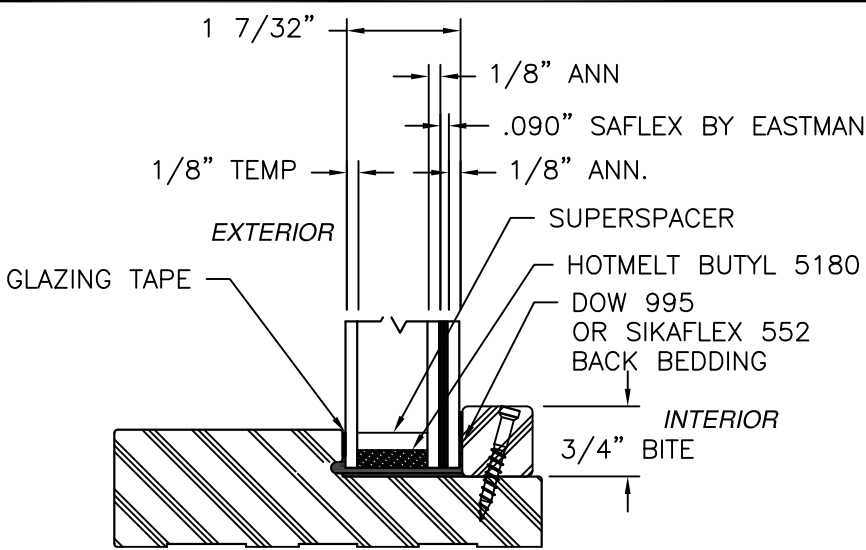
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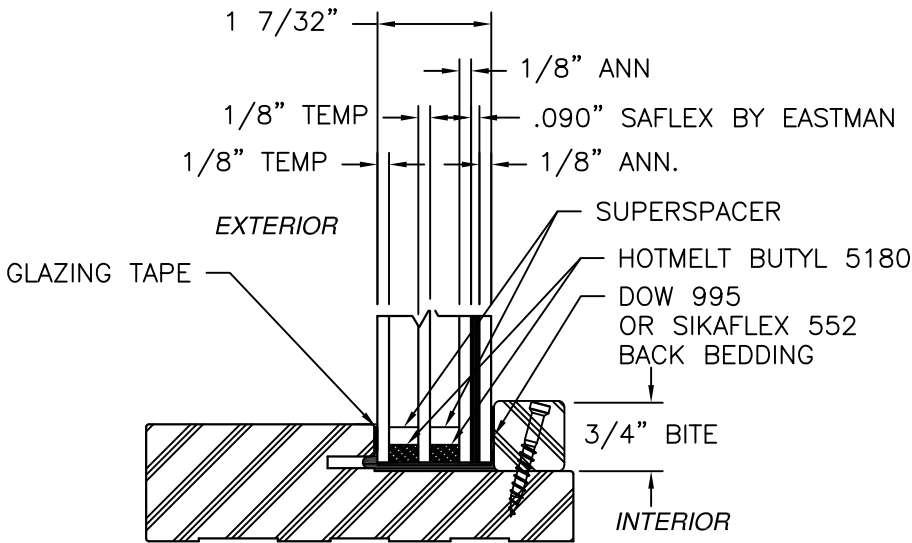
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STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR W/TRANSOM - IMPACT INSTALLATION DETAILS W/FUSION FRAME			
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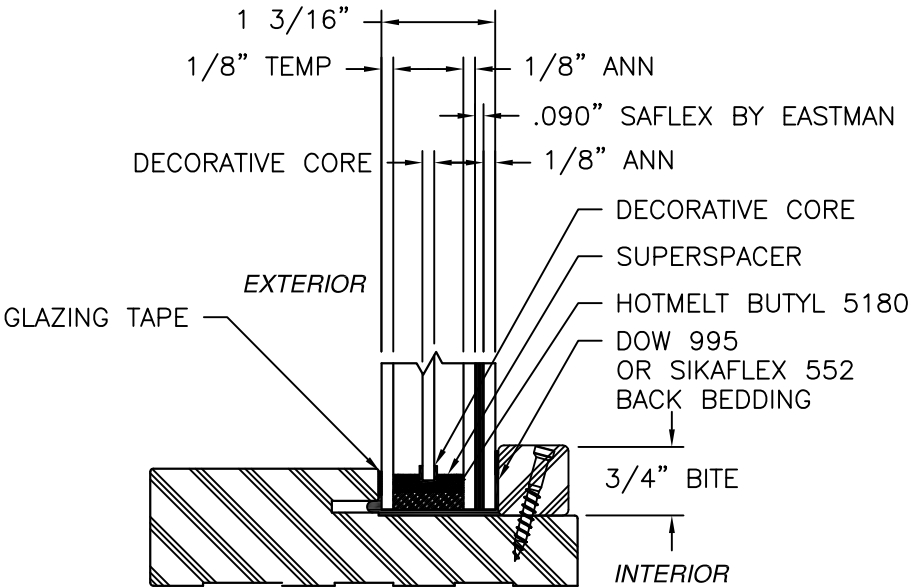
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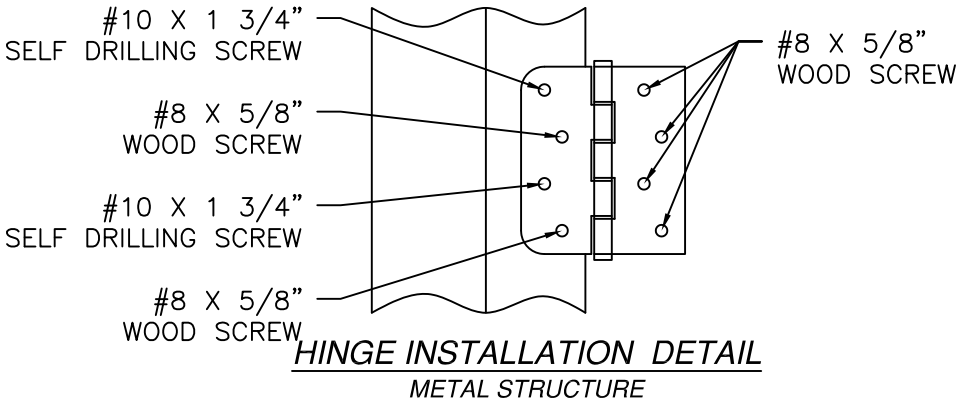
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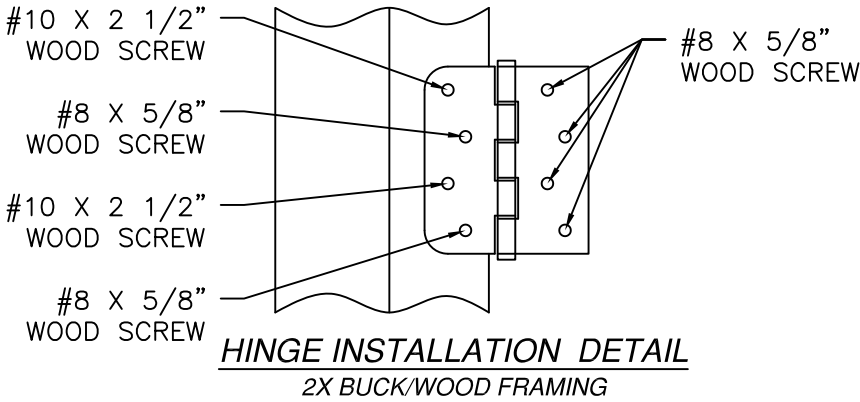
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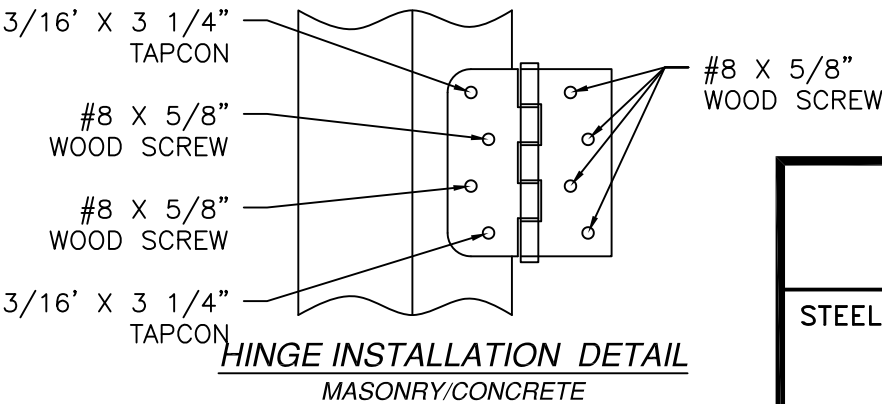
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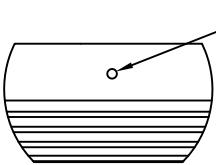
HINGE INSTALLATION DETAIL
METAL STRUCTURE



HINGE INSTALLATION DETAIL
2X BUCK/WOOD FRAMING

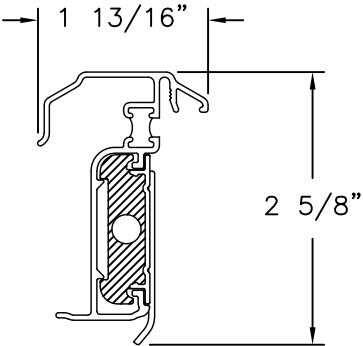


HINGE INSTALLATION DETAIL
MASONRY/CONCRETE

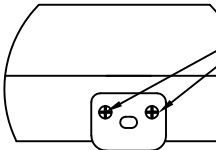


ASTRAGAL BOLT HOLE MUST
BE DRILLED THROUGH SILL
AND INTO SUBSTRATE DEEP
ENOUGH TO ACHIEVE 1 3/8"
THROW

ASTRAGAL SILL DETAIL



HURRICANE ASTRAGAL DETAIL



#10 x 1 1/2"
WOOD SCREW

ASTRAGAL HEAD STRIKE DETAIL
2X BUCK/WOOD FRAMING

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W/TRANSOM – IMPACT
COMPONENTS AND GLAZING DETAILS

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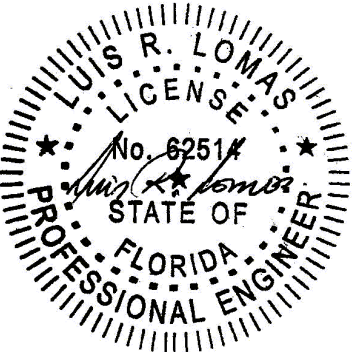
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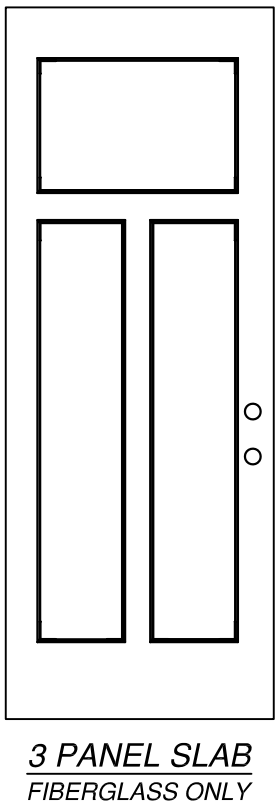
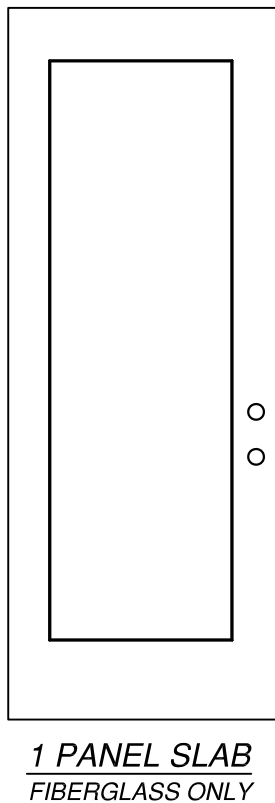
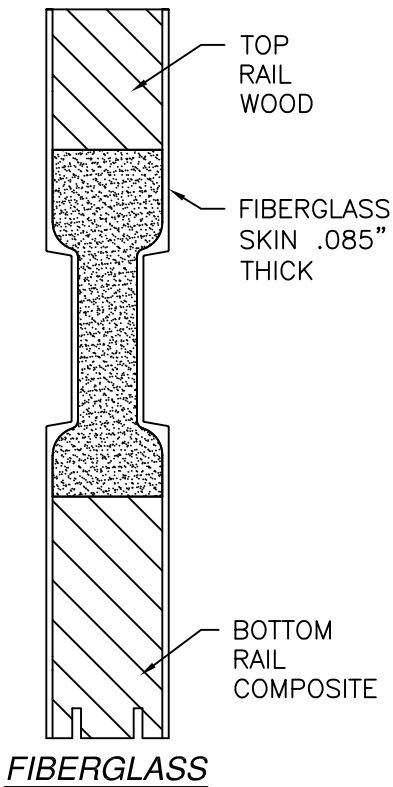
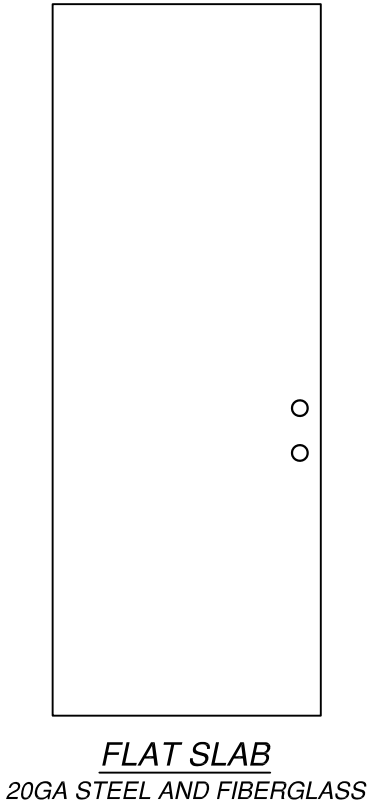
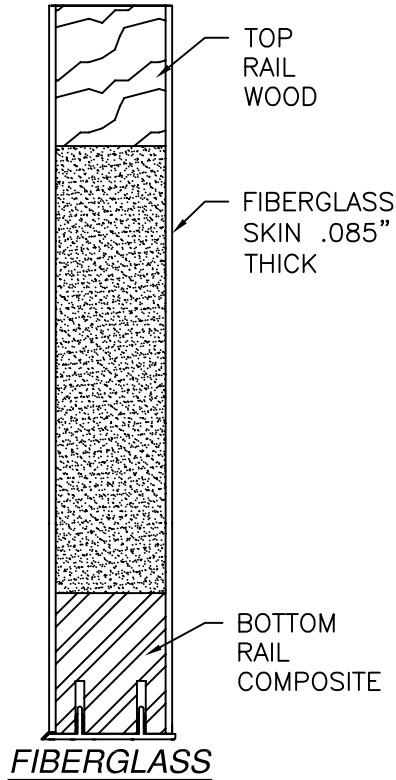
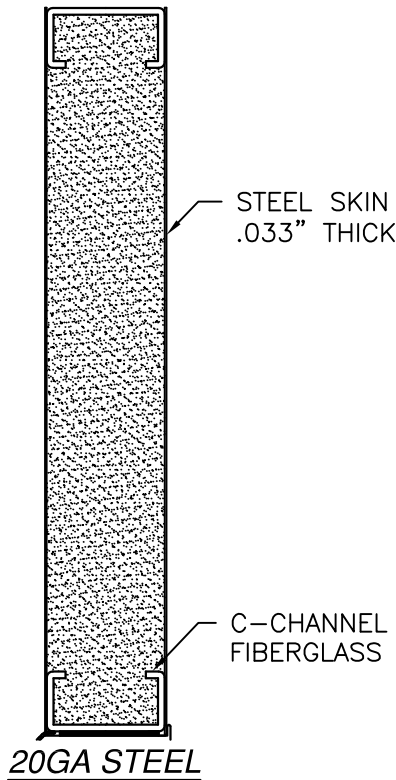
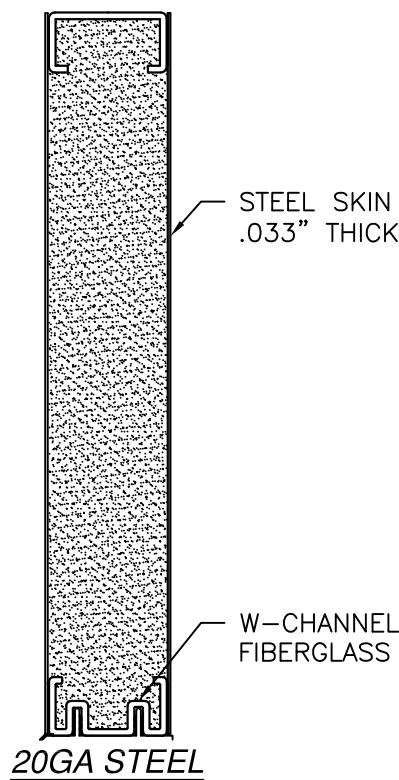
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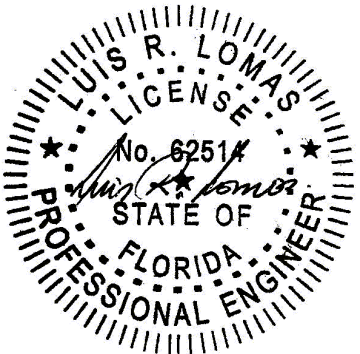
APPROVED SLABS AND CROSS SECTIONS

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REV	DESCRIPTION	DATE	APPROVED
J	REVISED HARDWARE SCHEDULE	09/11/26	R.L.



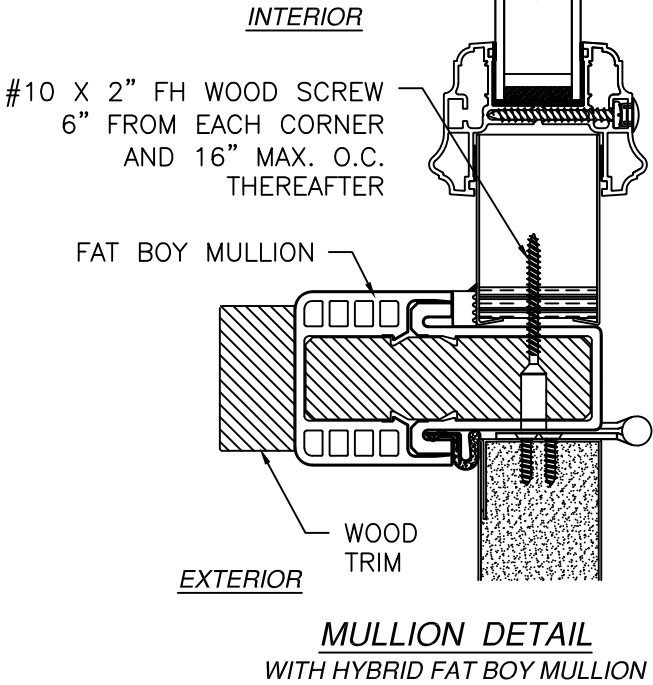
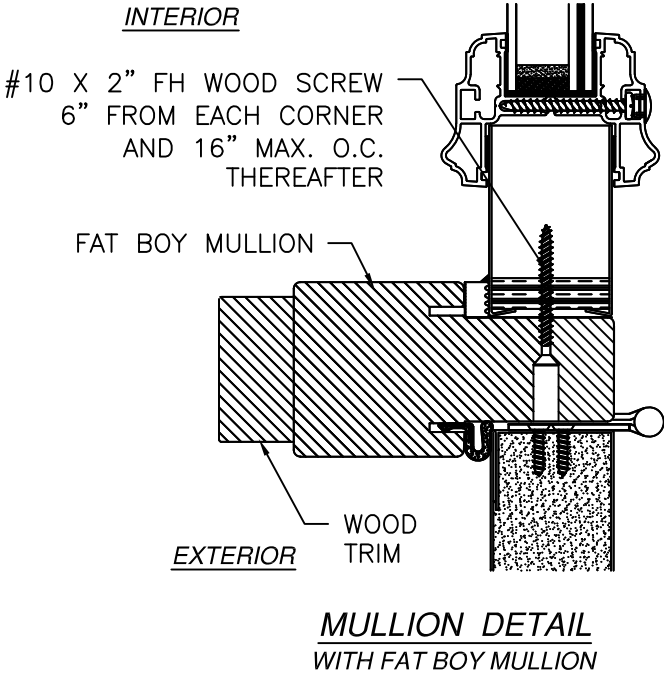
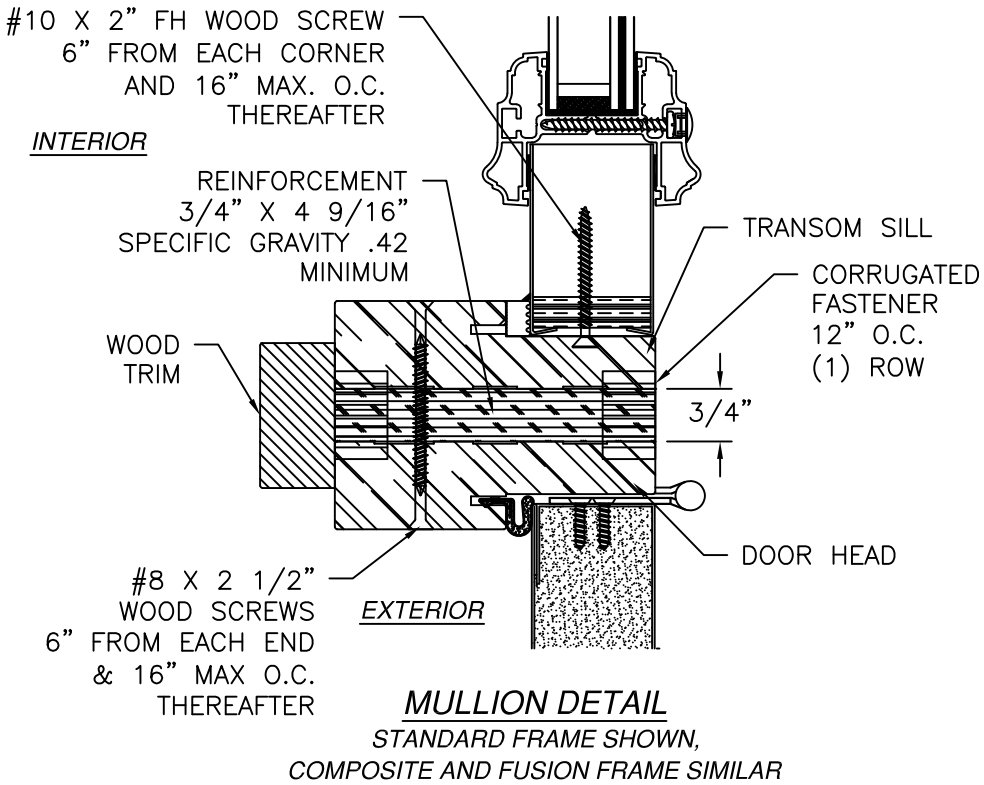
SIGNED: 09/11/2026

PROVIA, LLC. 2150 STATE ROUTE 39 WEST SUGARCREEK, OH 44681		
STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR W/TRANSOM - IMPACT COMPONENTS, APPROVED SLABS		
DRAWN: V.L.	DWG NO. 08-02039	REV J
SCALE NTS	DATE 05/23/13	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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
J	REVISED HARDWARE SCHEDULE	09/11/26	R.L.



SIGNED: 09/11/2026

PROVIA, LLC.

2150 STATE ROUTE 39 WEST
SUGARCREEK, OH 44681

STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR
W/TRANSOM – IMPACT
MULLION DETAILS

DRAWN:
V.L.

DWG NO.
08-02039

REV
J

SCALE NTS

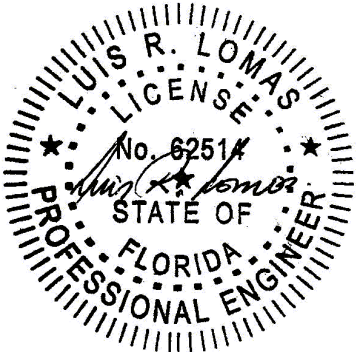
DATE 05/23/13

SHEET 11 OF 12

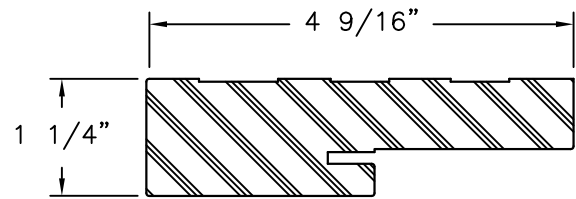
L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

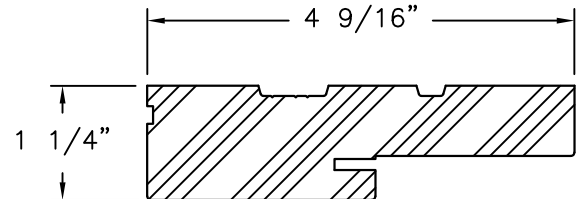
434-688-0609 rllomas@lrlomaspe.com



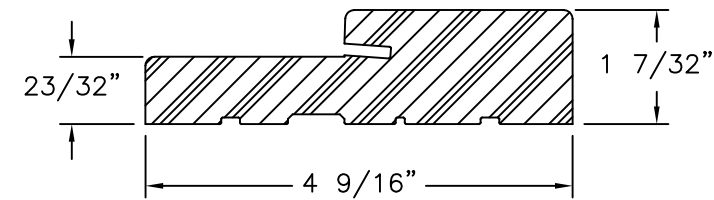
Luis R. Lomas P.E.
FL No.: 62514



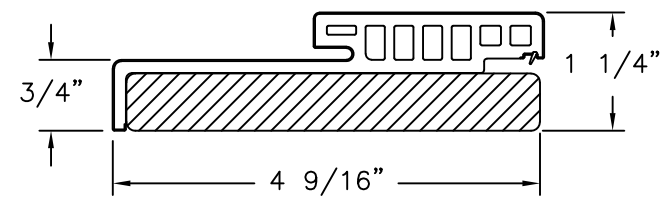
COMPOSITE FRAME PROFILE



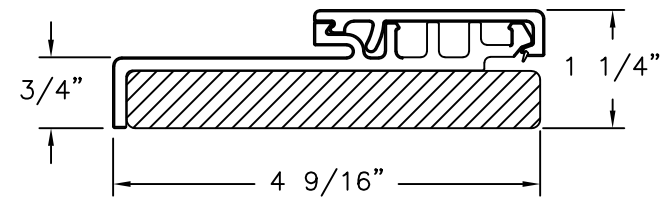
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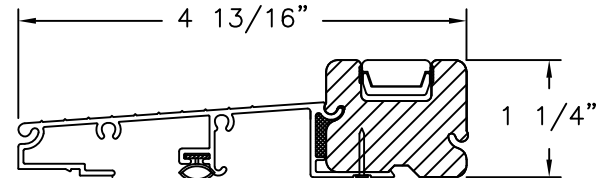
FRAMESAVER
COMPOSITE



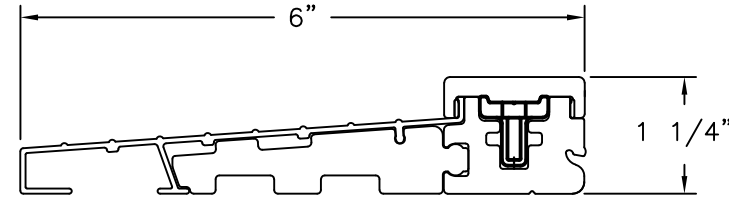
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WOOD/COMPOSITE



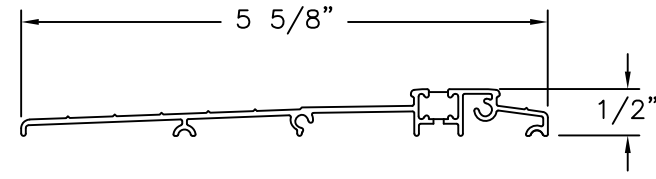
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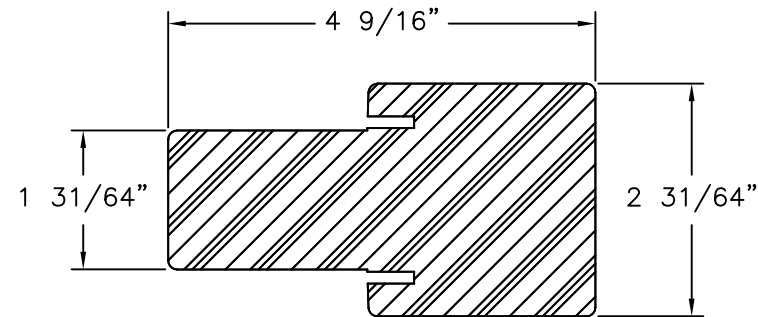
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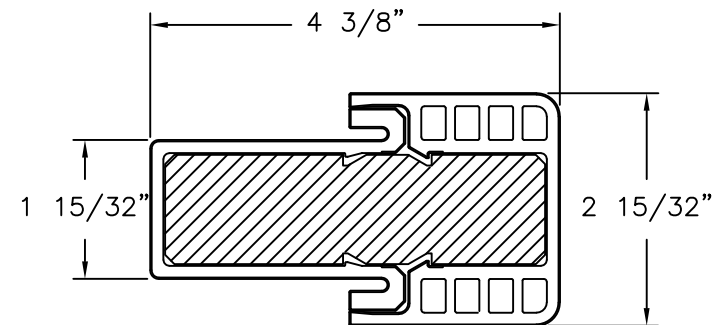
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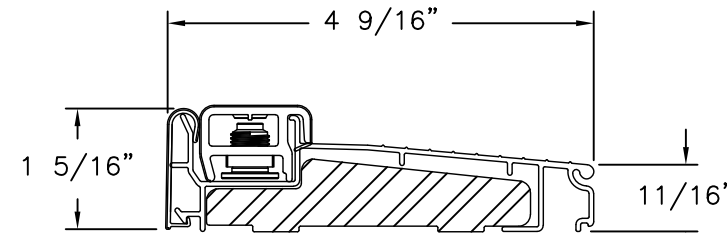
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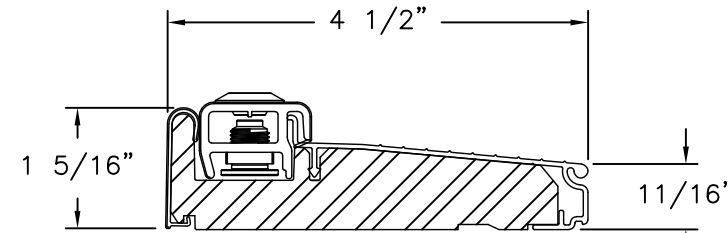
FAT BOY MULLION
COMPOSITE



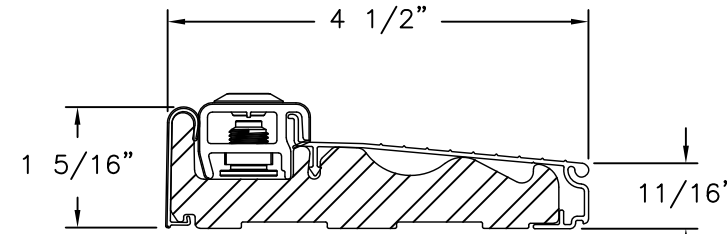
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COMPOSITE



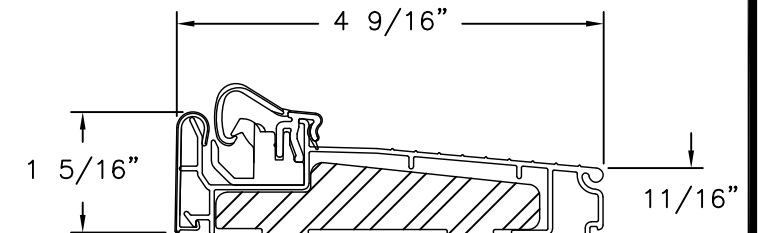
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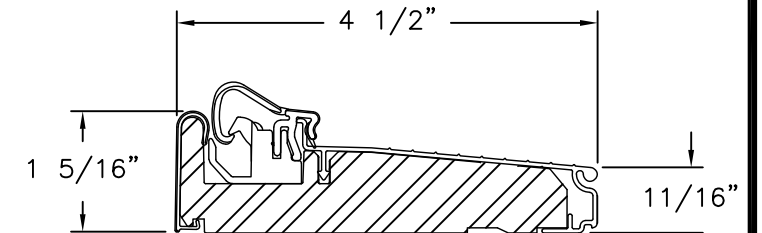
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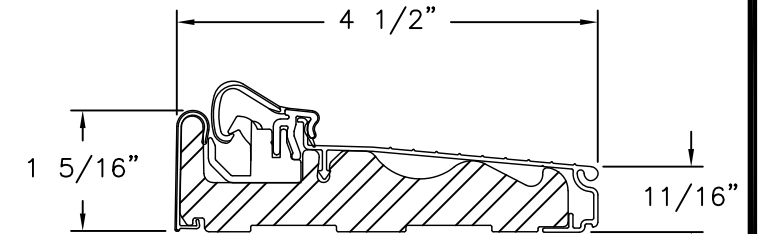
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INSWING SILL ZACL4565



INSWING SILL ZAC4565F



INSWING SILL ZACLH4565

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2150 STATE ROUTE 39 WEST
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STEEL/FIBERGLASS INSWING OPAQUE DOUBLE DOOR
W/TRANSOM - IMPACT
COMPONENTS

DRAWN:
V.L.

DWG NO.
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REV
J

SCALE
NTS

DATE
05/23/13

SHEET
12 OF 12

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