

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 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. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL.
4. 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.
5. 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.
6. 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.
7. BUCKS SHALL EXTEND BEYOND WINDOW INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
8. FOR FIN INSTALLATION SHIM AS NEEDED. FOR FINLESS FRAME INSTALLATION 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”.
9. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
10. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
11. FRAME MATERIAL: EXTRUDED RIGID PVC.
12. UNITS MUST BE GLAZED PER ASTM E1300–04/09.
13. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
14. FOR ANCHORING THROUGH FIN INTO WOOD FRAMING OR 2X BUCK USE #6 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

15. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE #8 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
16. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 3/16” 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.
17. 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.
18. ALL FASTENERS TO BE CORROSION RESISTANT.
19. 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 .048” THICK MINIMUM

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MI WINDOWS AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 1650 DH PVC DOUBLE HUNG
38” X 77” NON – IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08–03291

REV
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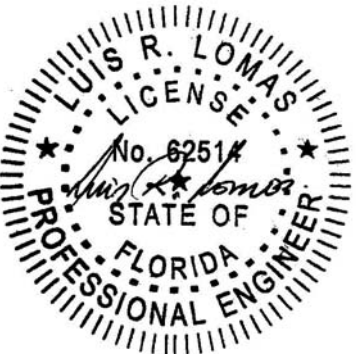
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DATE 08/06/18

SHEET 1 OF 7

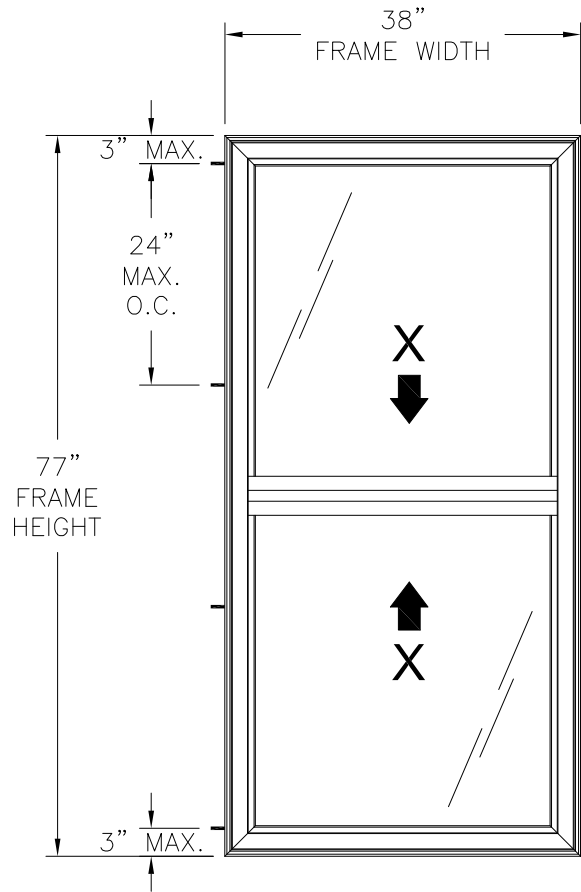
L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LEWISVILLE, NC 27023
434-688-0609 rllomas@lrlomaspe.com

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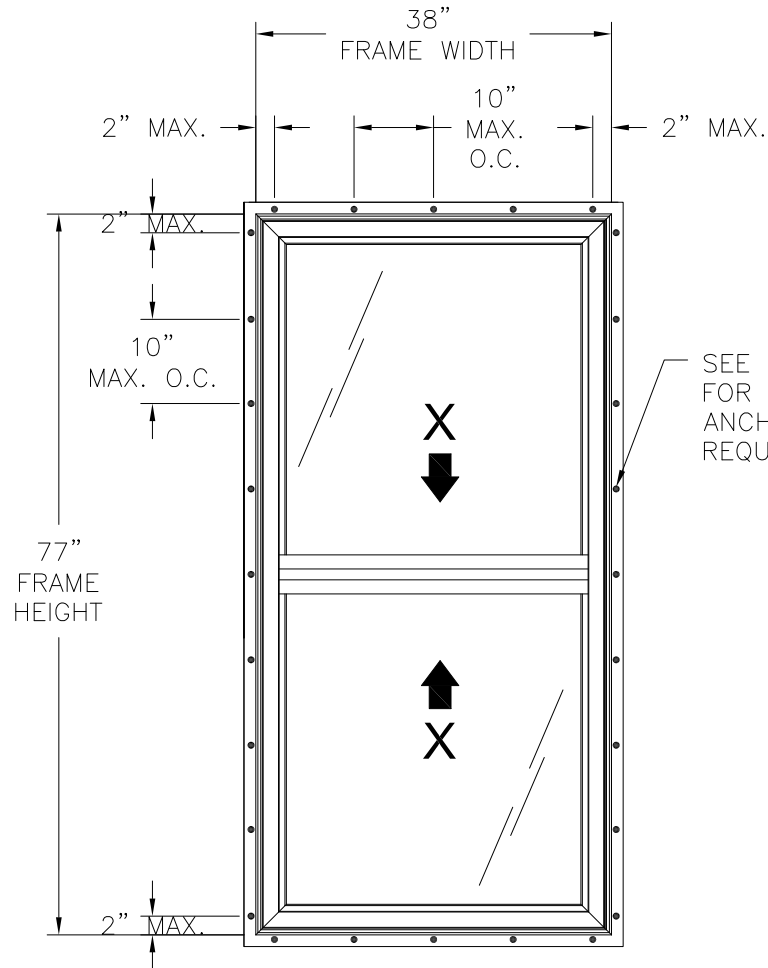


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
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SERIES 1650 DH DOUBLE HUNG WINDOW
FRAME INSTALLATION



SERIES 1650 DH DOUBLE HUNG WINDOW
FRAME INSTALLATION

DESIGN PRESSURE RATING	IMPACT RATING
+25.0/-30.0PSF	NONE

FOR AREAS WHERE WATER INFILTRATION
RESISTANCE IS REQUIRED

DESIGN PRESSURE RATING	IMPACT RATING
±30.0PSF	NONE

FOR AREAS WHERE WATER INFILTRATION
RESISTANCE IS NOT REQUIRED

38" X 77" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 20.31 FT²

CHART #1

Number of anchors required at each jamb				
Height (in)	Panel width (in)			
	24.0	30.0	36.0	38.0
24.0	2	2	2	2
30.0	2	2	2	2
36.0	3	3	3	3
42.0	3	3	3	3
48.0	3	3	3	3
54.0	3	3	3	3
60.0	4	4	4	4
66.0	4	4	4	4
72.0	4	4	4	4
77.0	4	4	4	4

CHART #2

Number of anchor locations required								
Frame Height (in)	Frame Width (in)							
	24.00		30.00		36.00		38.00	
	H & S	Jamb	H & S	Jamb	H & S	Jamb	H & S	Jamb
24.00	3	3	4	3	5	3	5	3
30.00	3	4	4	4	5	4	5	4
36.00	3	5	4	5	5	5	5	5
42.00	3	5	4	5	5	5	5	5
48.00	3	6	4	6	5	6	5	6
54.00	3	6	4	6	5	6	5	6
60.00	3	7	4	7	5	7	5	7
66.00	3	8	4	8	5	8	5	8
72.00	3	8	4	8	5	8	5	8
77.00	3	9	4	9	5	9	5	9

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MI WINDOWS AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 1650 DH PVC DOUBLE HUNG
38" X 77" NON - IMPACT
ELEVATIONS AND CHARTS

DRAWN: A.R.	DWG NO. 08-03291	REV -
SCALE NTS	DATE 08/06/18	SHEET 2 OF 7
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

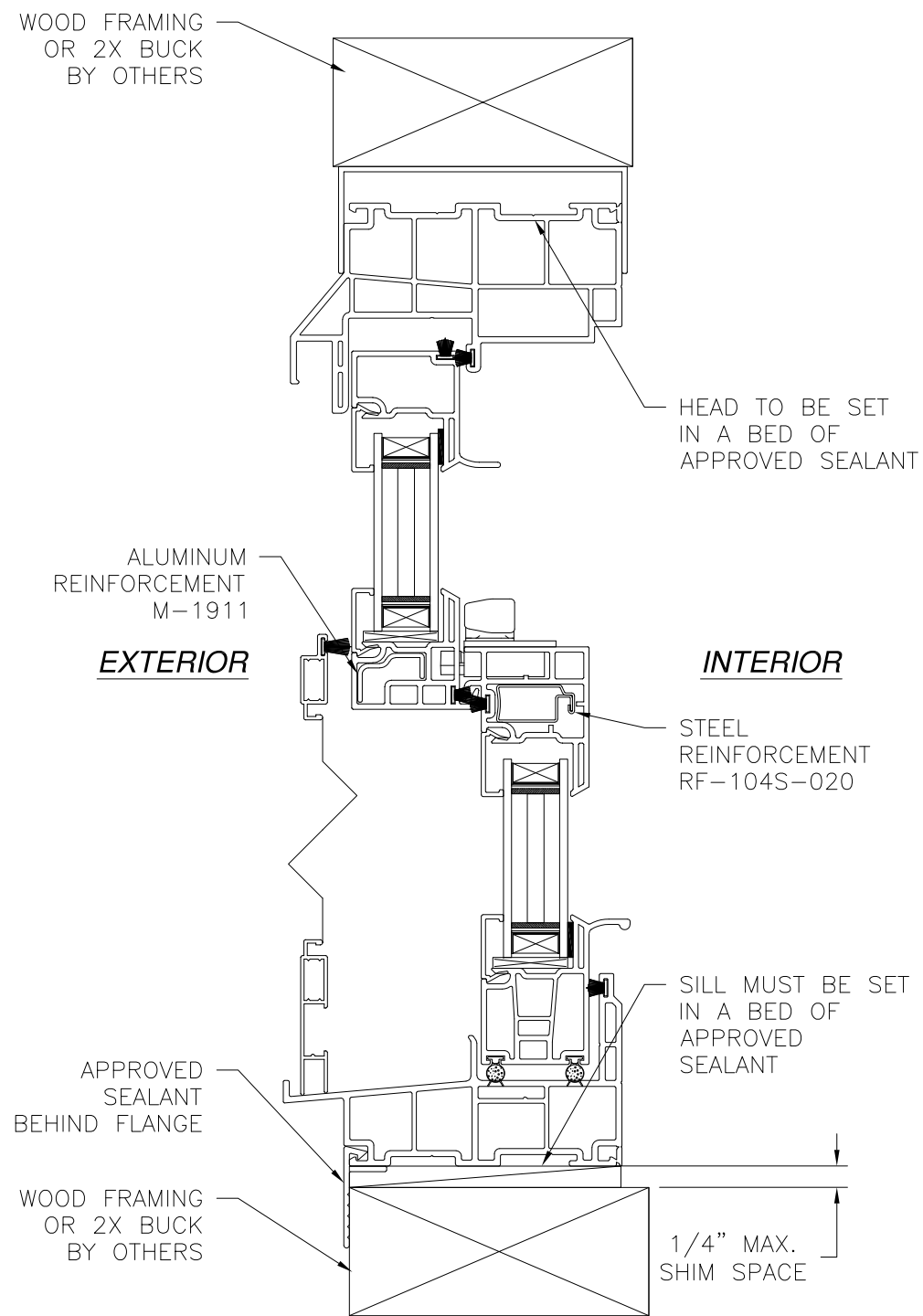


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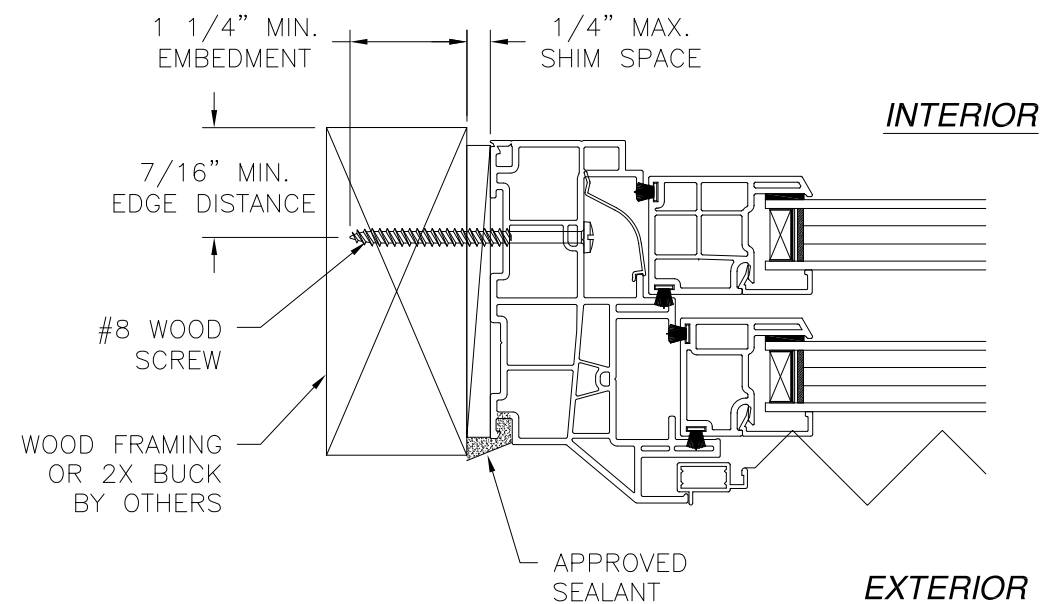
HARDWARE SCHEDULE

A.	(4) PLASTIC TILT LATCHES (RECESSED) AT ENDS OF TOP RAIL AND INTERIOR MEETING RAIL
B.	(4) CONSTANT FORCE BALANCE, TWO PER JAMB
C.	(4) METAL TILT PINS AT ENDS OF BOTTOM RAIL AND EXTERIOR MEETING RAIL
D.	(2) METAL LOCK WITH ADJACENT KEEPER AT 7" FROM THE ENDS OF INTERIOR MEETING RAIL
E.	ALUMINUM REINFORCEMENT (M-1911) AT EXTERIOR MEETING RAIL
F.	ROLL-FORMED STEEL REINFORCEMENT (RF-104S-020) AT INTERIOR MEETING RAIL
G.	ROLL-FORMED STEEL REINFORCEMENT (GVL-450) AT BOTTOM RAIL

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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

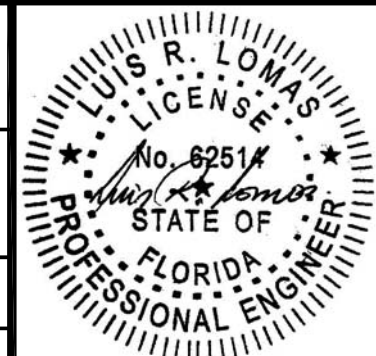


JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

- 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

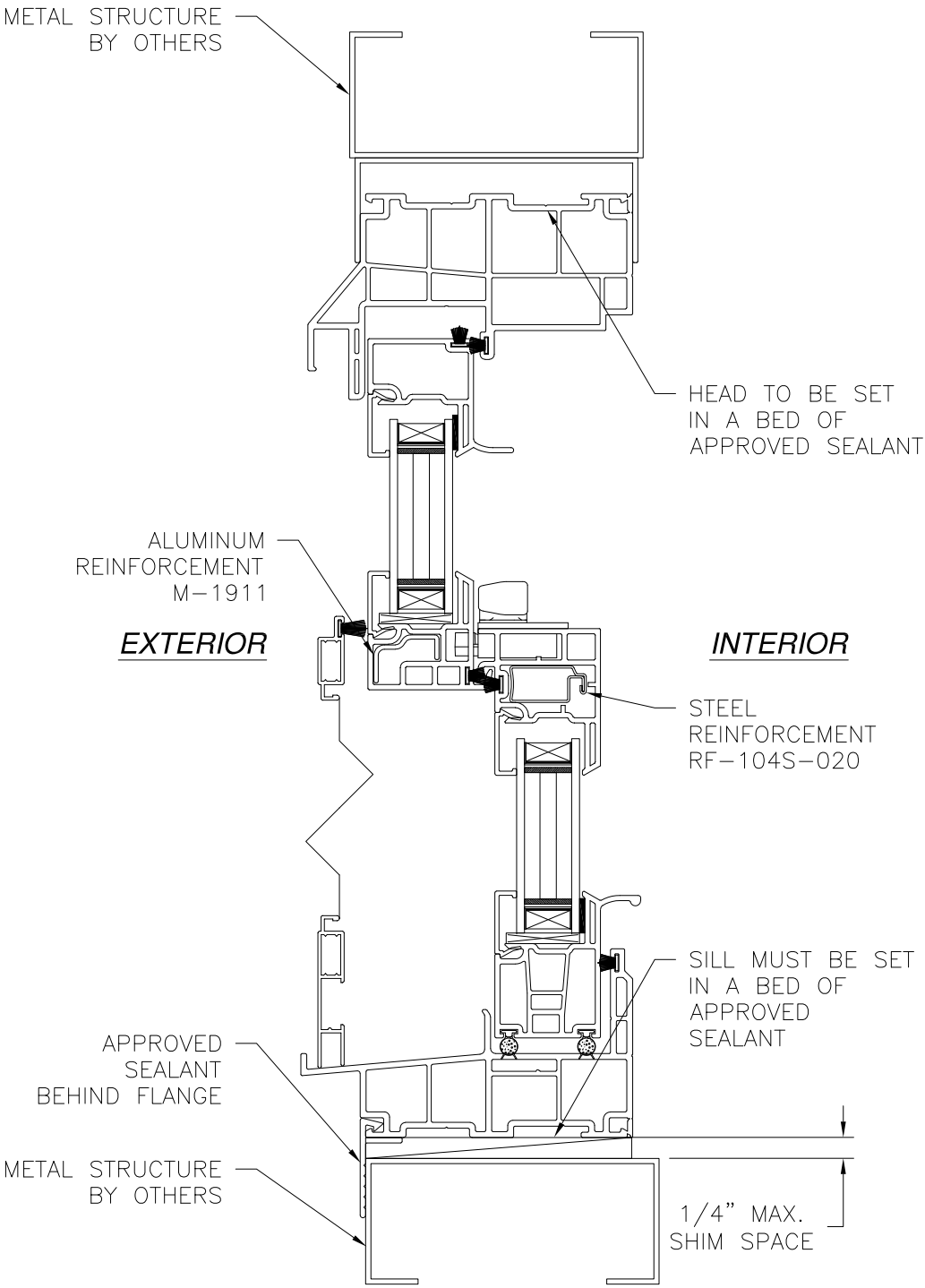
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SERIES 1650 DH PVC DOUBLE HUNG 38" X 77" NON - IMPACT INSTALLATION DETAILS		
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L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

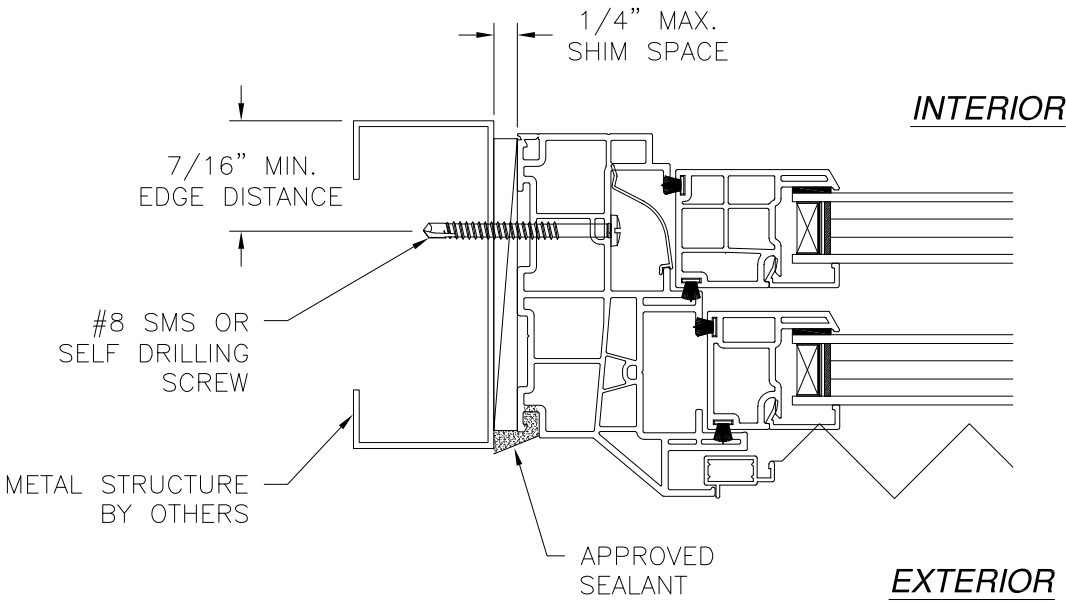


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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION



JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

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 - PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

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650 WEST MARKET STREET
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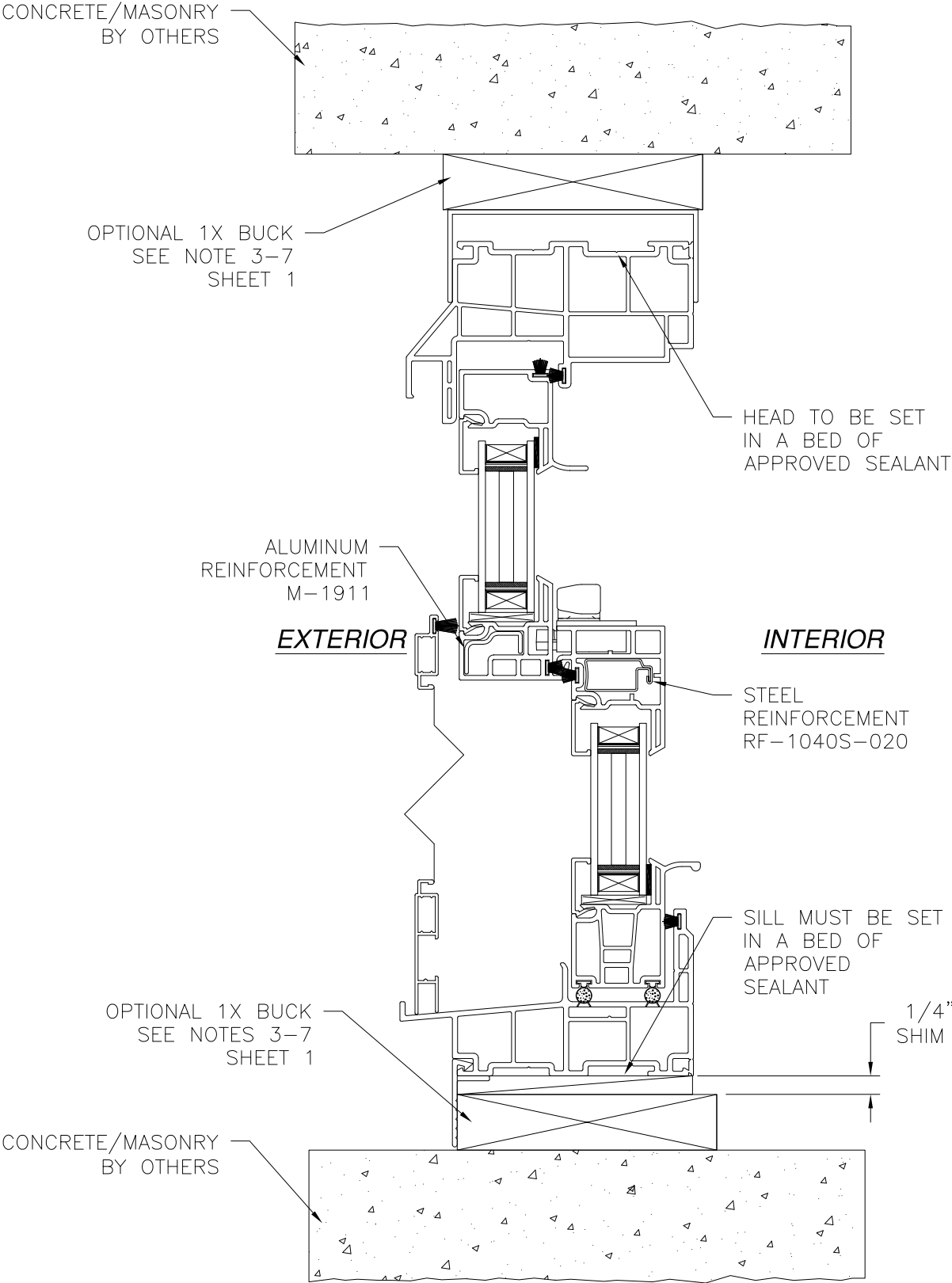
SHEET 4 OF 7

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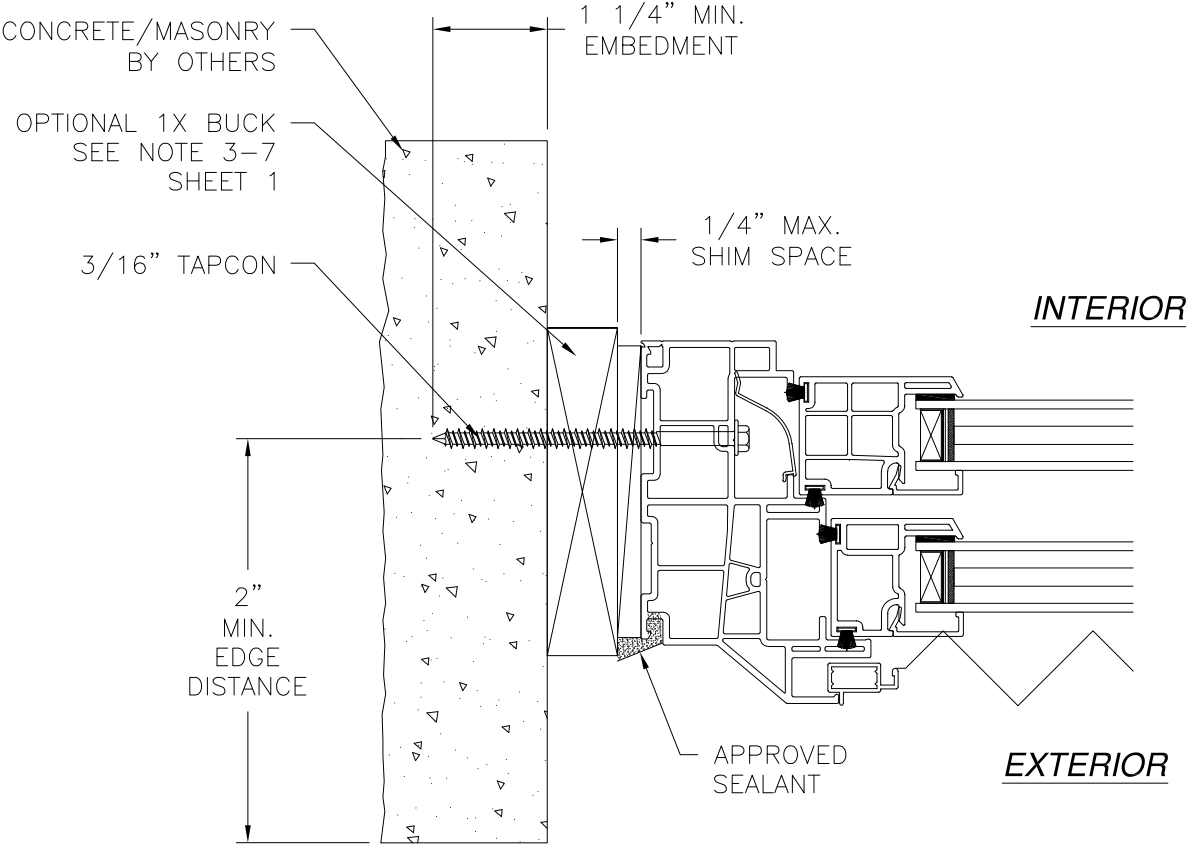


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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION



JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

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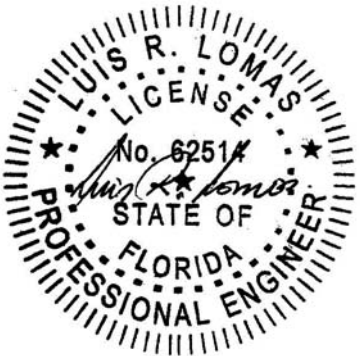
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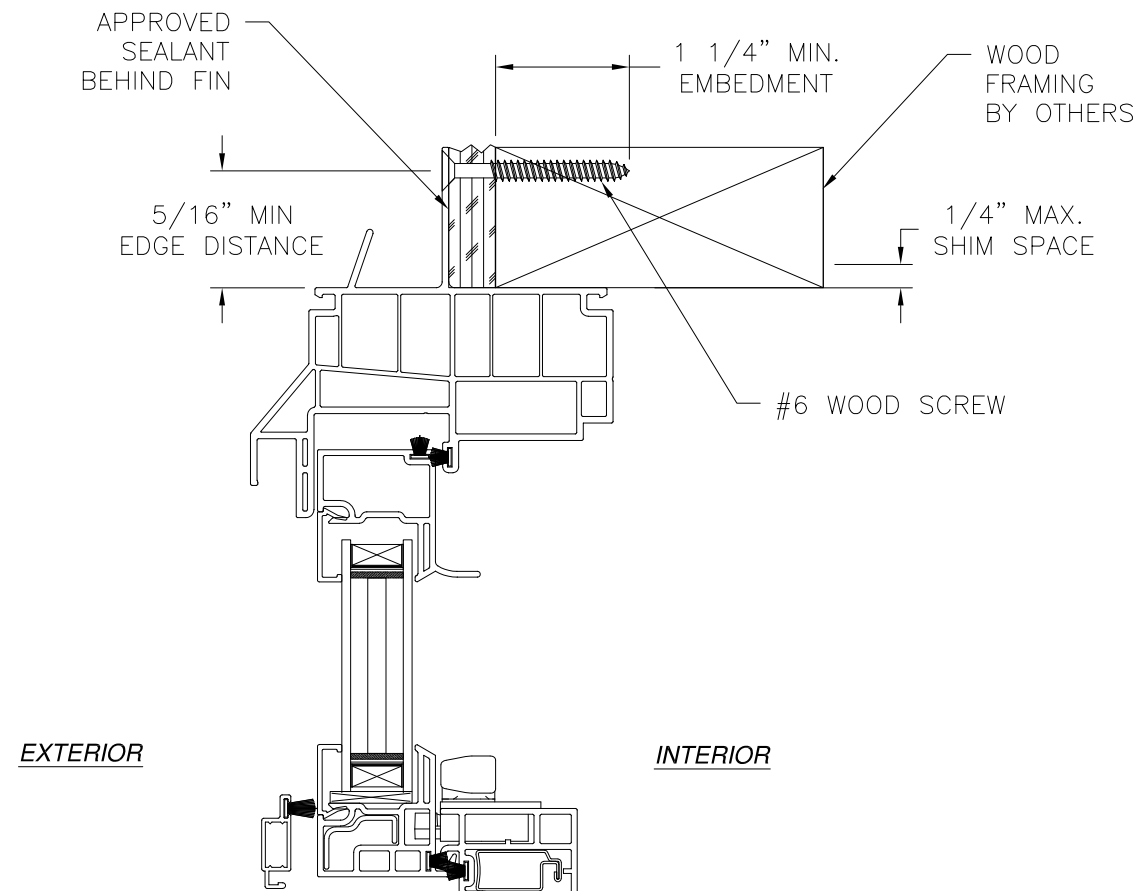
SHEET
5 OF 7

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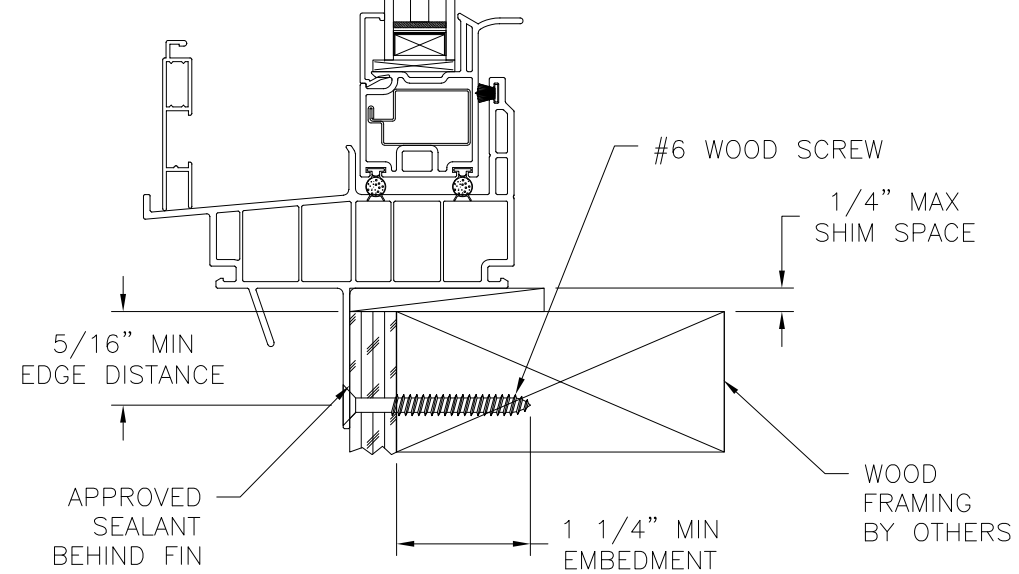
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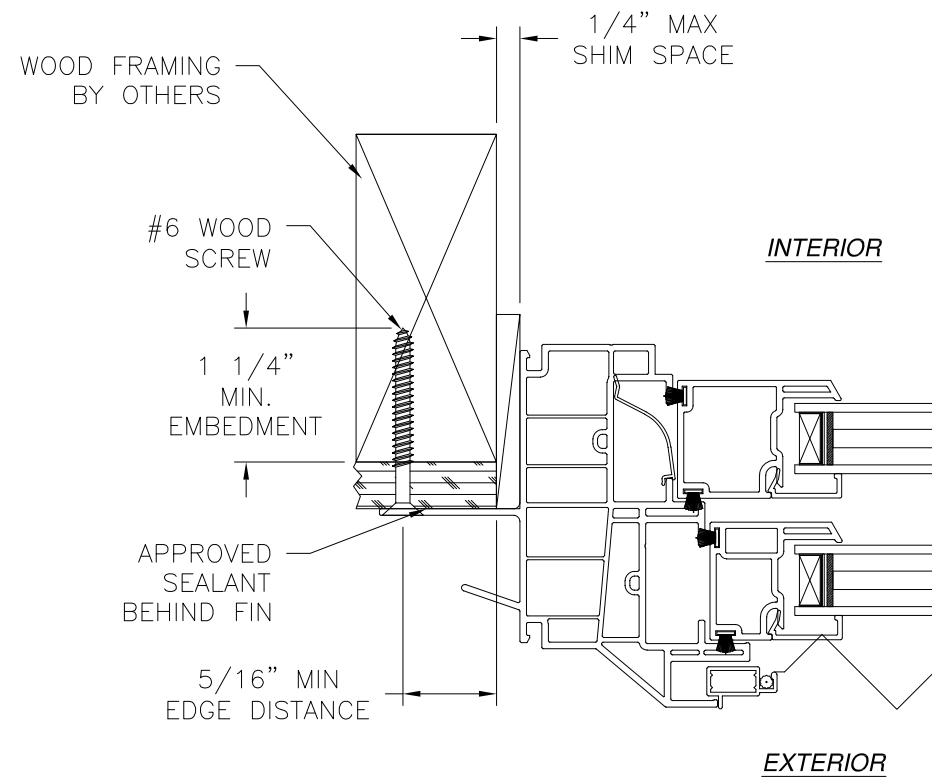


EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



INTERIOR

EXTERIOR

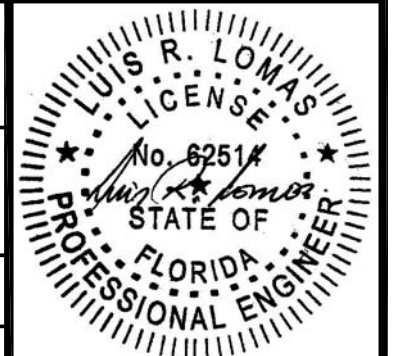
JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

NOTES:

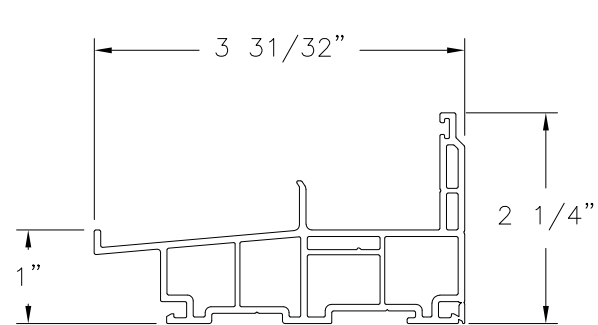
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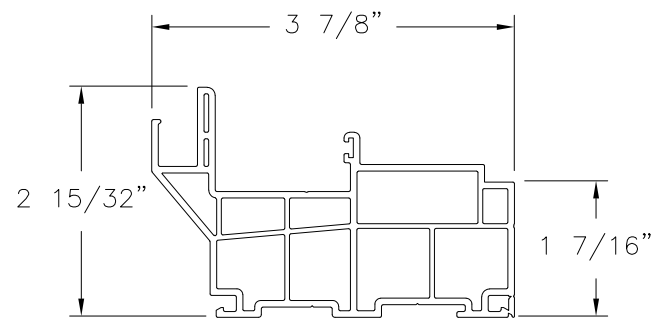
MI WINDOWS AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 1650 DH PVC DOUBLE HUNG 38" X 77" NON - IMPACT J FIN FRAME INSTALLATION DETAILS		
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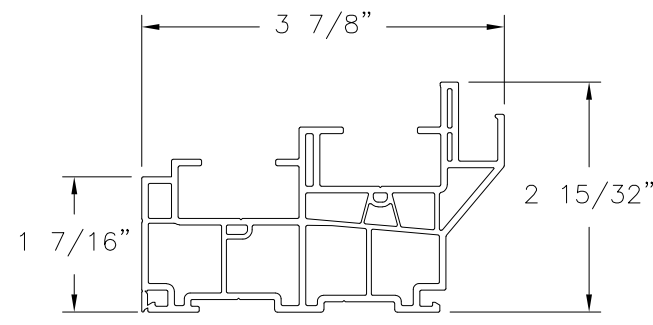
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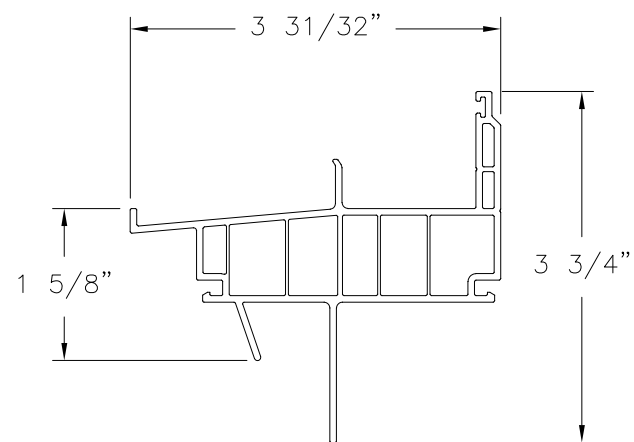
SILL FRAME
RIGID PVC (V-1039)



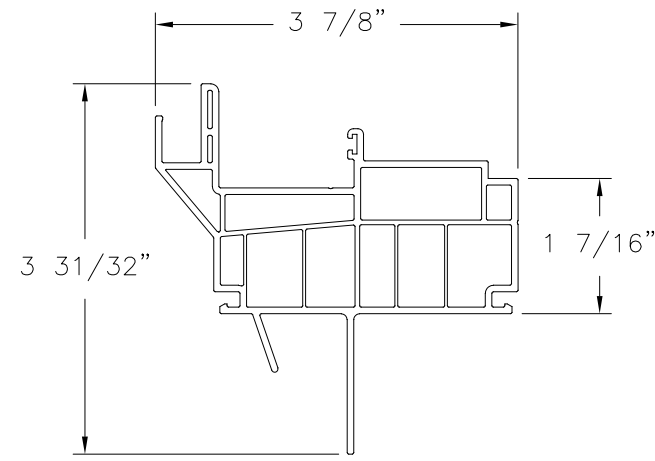
HEAD FRAME
RIGID PVC (V-1029)



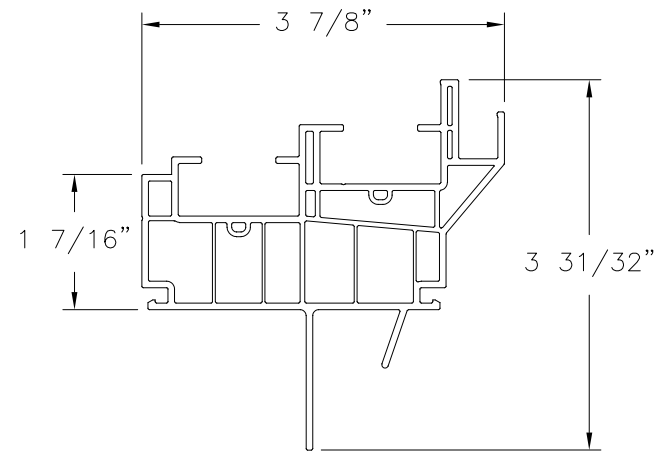
JAMB FRAME
RIGID PVC (V-1034)



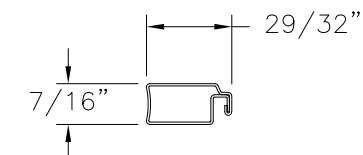
**SILL FRAME WITH J-CHANNEL
FIN INSTALLATION**
RIGID PVC (V-809)



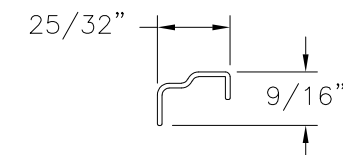
**HEAD FRAME WITH J-CHANNEL
FIN INSTALLATION**
RIGID PVC (V-810)



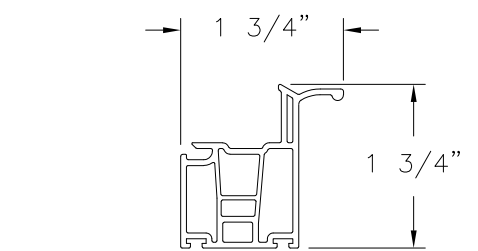
**JAMB FRAME WITH J-CHANNEL
FIN INSTALLATION**
RIGID PVC (V-811)



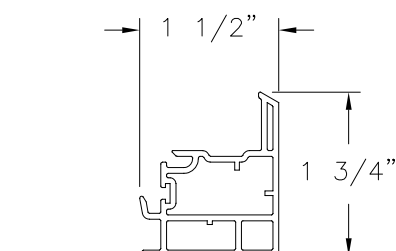
MEETING RAIL LINER
STEEL, THICKNESS .019" (RF-104S-020)



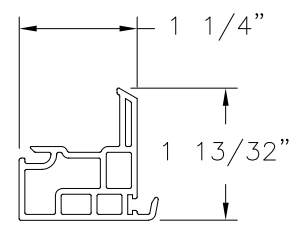
KEEPER RAIL LINER
ALUMINUM 6063-T5 (M-1911)



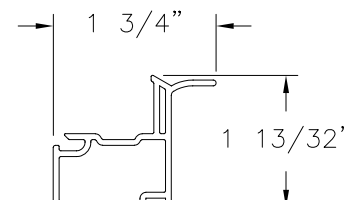
BOTTOM SASH BOTTOM RAIL
RIGID PVC (V-1005)



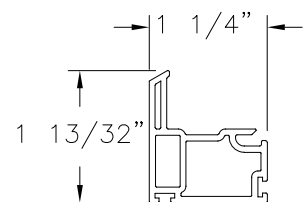
BOTTOM SASH TOP RAIL
RIGID PVC (V-675)



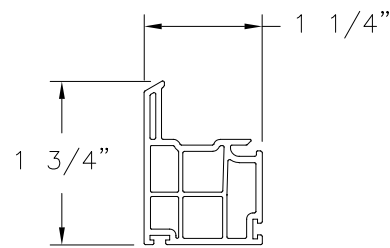
TOP SASH BOTTOM RAIL
RIGID PVC (V-674)



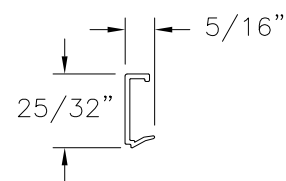
TOP SASH TOP RAIL
RIGID PVC (V-673)



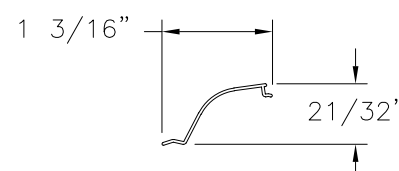
TOP SASH STILE
RIGID PVC (V-671)



BOTTOM SASH STILE
RIGID PVC (V-1004)



GLAZING BEAD
RIGID PVC (V-904)



BALANCE COVER
(6979)

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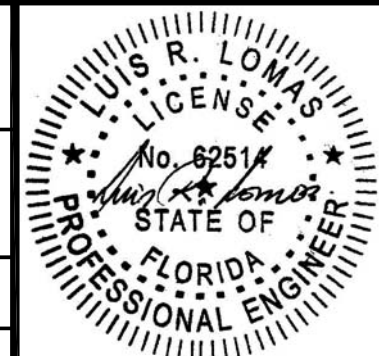
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