

NOTES:

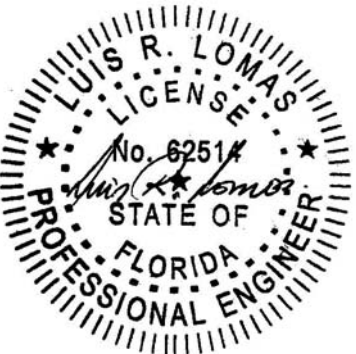
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. 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. 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.
5. FRAME MATERIAL: EXTRUDED ALUMINUM 6063-T5.
6. UNITS MUST BE GLAZED PER ASTM E1300-04/09, WITH SAFETY GLASS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
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. DOOR ASSEMBLIES INSTALLED WHERE OVERHANG RATIO IS EQUAL OR GREATER THAN 1.0 DO NOT REQUIRE WATER INFILTRATION RESISTANCE.
OVERHANG RATIO = OVERHANG LENGTH/OVERHANG HEIGHT
10. 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.
11. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
12. 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.
13. ALL FASTENERS TO BE CORROSION RESISTANT.
14. 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 3,192 PSI.
 - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .048" THICK MINIMUM
15. APPROVED CONFIGURATIONS: OX, XO, XX, XP, PX, XIP, PIX.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED CHARTS	03/05/12	R.L.
B	REVISED PER NEW TESTING	10/29/13	R.L.
C	ADDED FLANGE AND FIN INSTALLATIONS	12/06/13	R.L.
D	REVISED INSTALLATION DETAILS	07/30/15	R.L.
E	REVISED INSTALLATION DETAILS	06/20/17	R.L.

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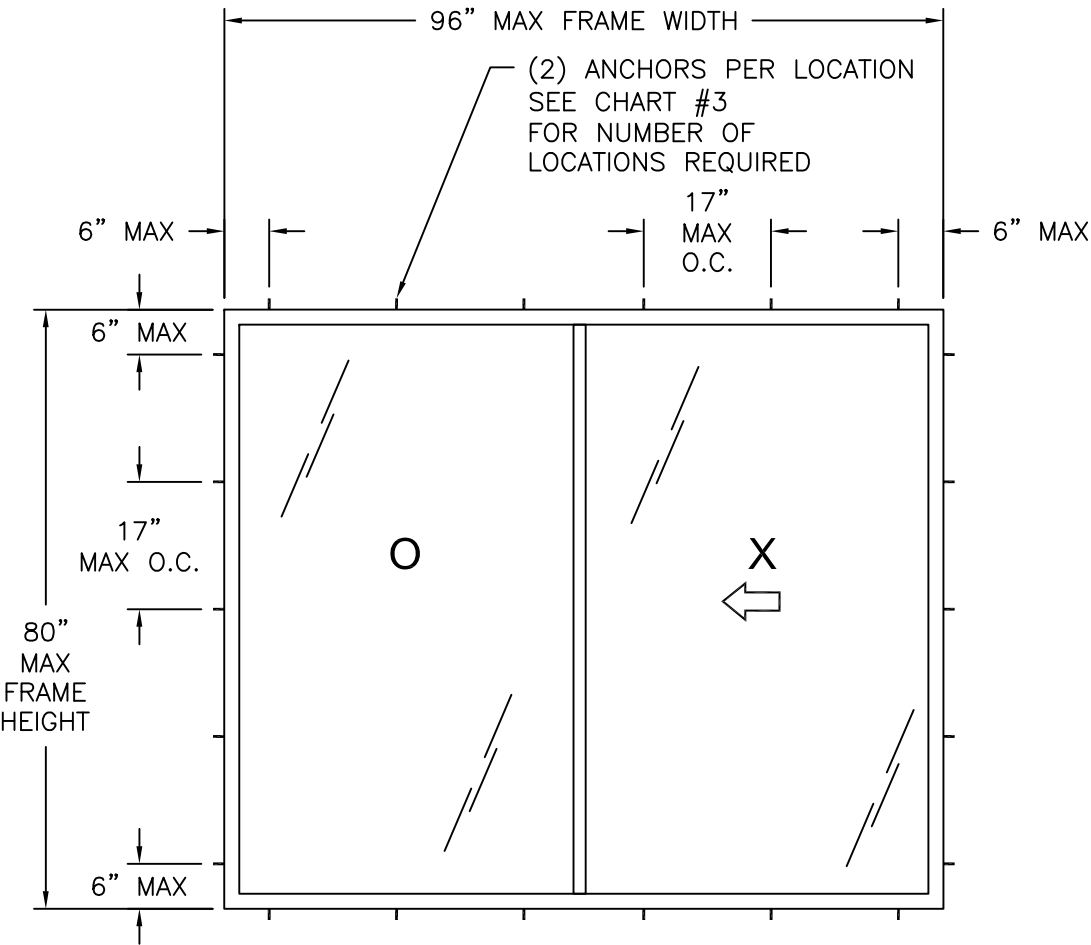
MI WINDOWS AND DOORS LLC 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 420 SGD 96" X 80" NON-REINFORCED NOTES		
DRAWN: F.A.	DWG NO. 08-00498	REV E
SCALE NTS	DATE 02/23/09	SHEET 1 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 06/20/2017



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
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SERIES 420 SGD
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
$\pm 40.0\text{PSF}$	NONE

SEE CHARTS #1 AND #2 FOR OTHER UNITS RATINGS

- NOTES:
1. MAXIMUM PANEL SIZE: 48 1/2" x 79"
 2. MAXIMUM D.L.O.: 44 5/8" x 74 5/8"

CHART #1
WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.
SEE NOTE 9 SHEET 1

Design pressure chart (psf)									
Frame Height (in)	Single Panel and Total Frame Width (in)								
	30.0		36.0		42.0		48.0		
	60.00		72.00		84.00		96.00		
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	
80.0	40.0	55.1	40.0	48.2	40.0	43.4	40.0	40.0	

CHART #2
WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.
SEE NOTE 9 SHEET 1

Design pressure chart (psf)								
Frame Height (in)	Single Panel and Total Frame Width (in)							
	30.0		36.0		42.0		48.0	
	60.00		72.00		84.00		96.00	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
80.0	55.1	55.1	48.2	48.2	43.4	43.4	40.0	40.0

CHART #3

Number of anchor locations required								
Frame Height (in)	Single Panel and Total Frame Width (in)							
	30.0		36.0		42.0		48.0	
	60.0		72.0		84.0		96.0	
	H&S	Jamb	H&S	Jamb	H&S	Jamb	H&S	Jamb
80.0	4	5	5	5	6	5	6	5

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MI WINDOWS AND DOORS LLC 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 420 SGD 96" X 80" NON-REINFORCED ELEVATION		
DRAWN: F.A.	DWG NO. 08-00498	REV E
SCALE NTS	DATE 02/23/09	SHEET 2 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		



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

HARDWARE SCHEDULE	
A.	(1) FLAT MOUNTED HANDLE SET (PART #99-04-145) LOCATED 38 3/4" ON CENTER FROM PANEL BOTTOM
B.	(1) METALLIC TANDEM ROLLERS (PART #99-17-195) AT EACH END OF PANEL BOTTOM RAILS

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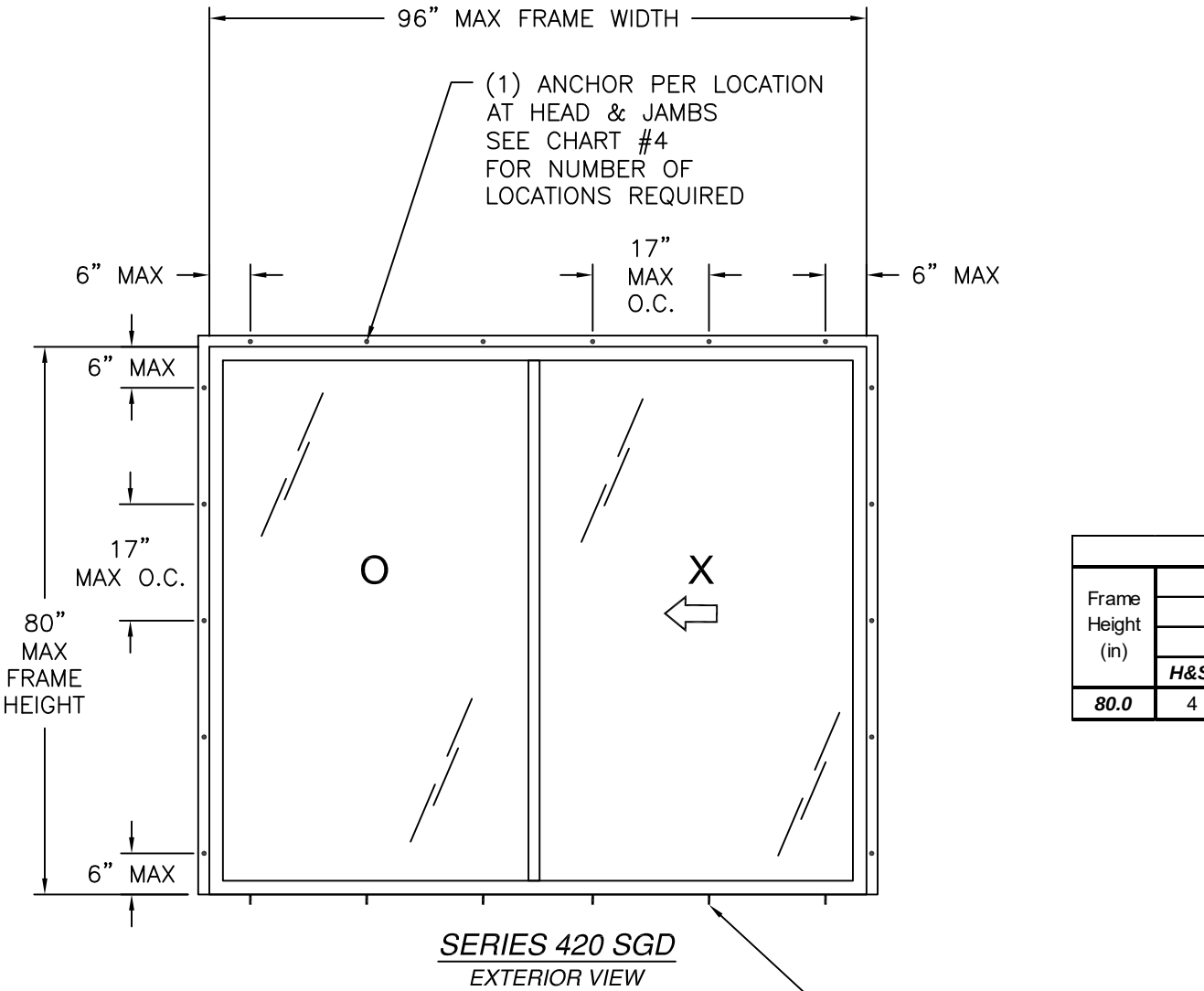


CHART #4								
Number of anchor locations required								
Frame Height (in)	Single Panel and Total Unit Width (in)							
	30.0		36.0		42.0		48.0	
	60.0		72.0		84.0		96.0	
	H&S	Jamb	H&S	Jamb	H&S	Jamb	H&S	Jamb
80.0	4	5	5	5	6	5	6	5

- NOTES:
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650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 420 SGD
96" X 80" NON-REINFORCED
FIN ELEVATION

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02/23/09

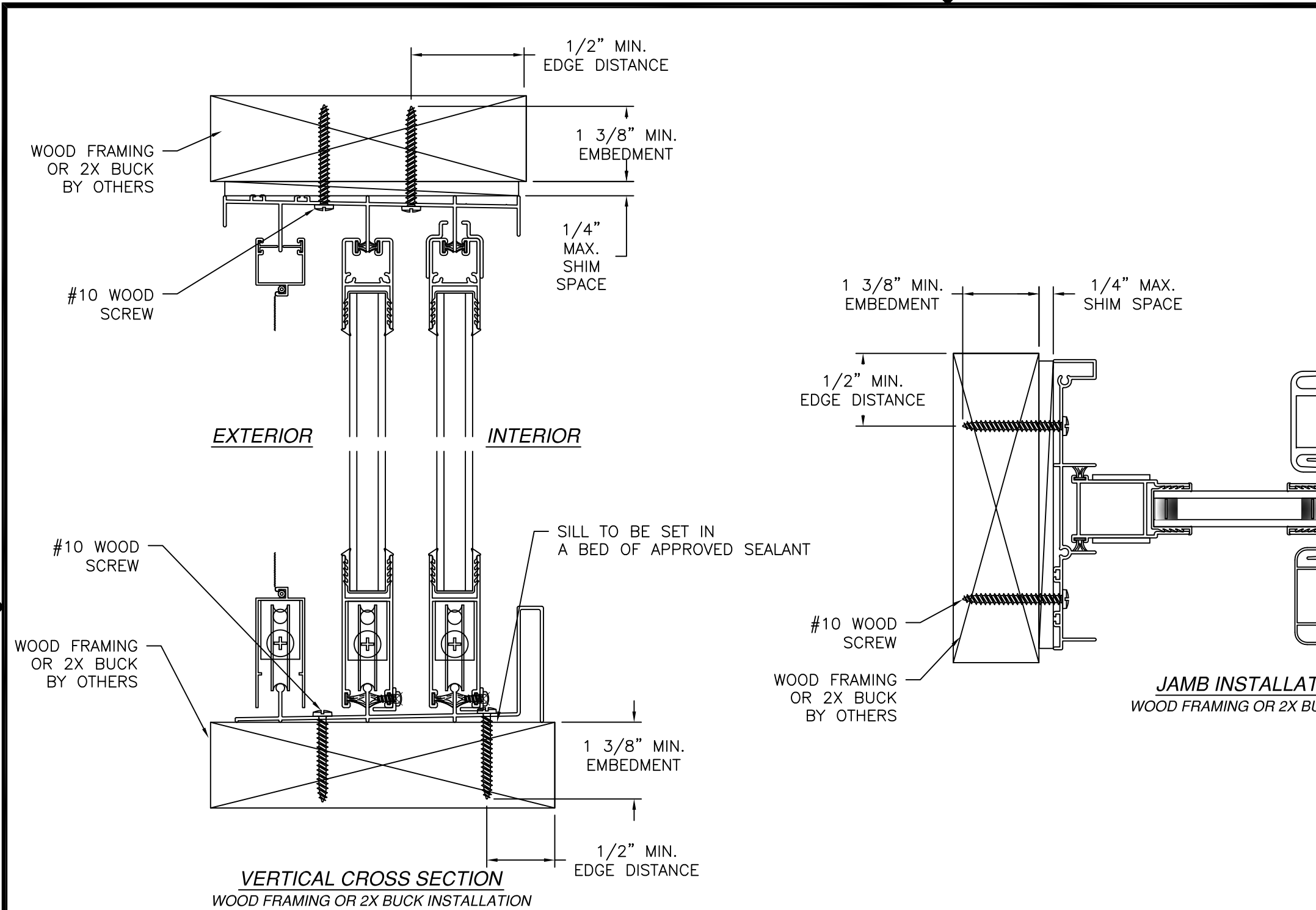
SHEET
3 OF 10

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SIGNED: 06/20/2017

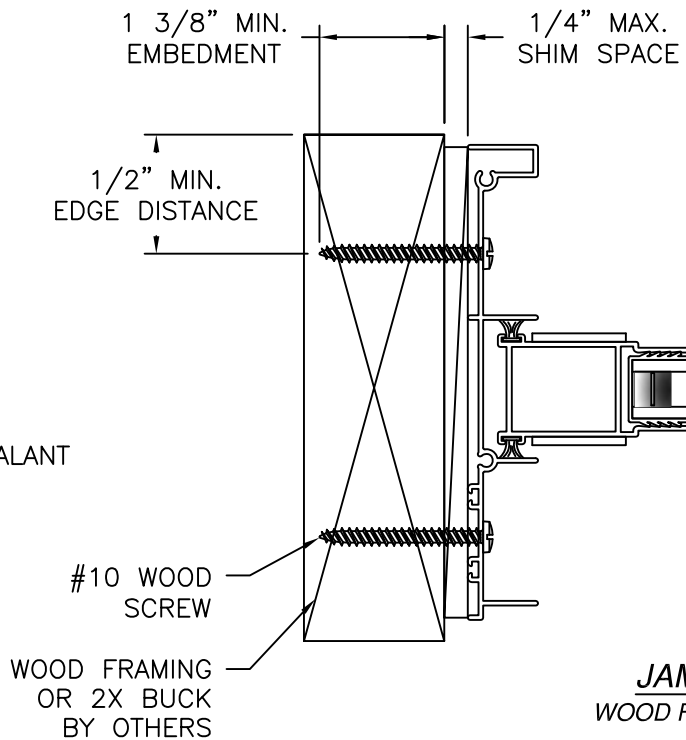


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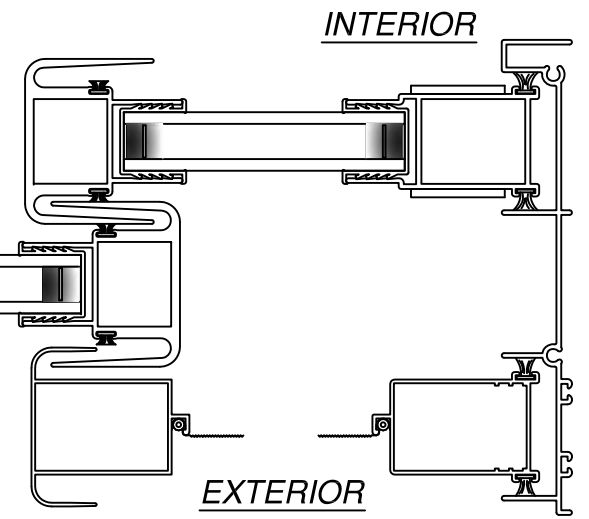
VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

NOTES:
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2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112



JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

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SIGNED: 06/20/2017

MI WINDOWS AND DOORS LLC
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 420 SGD
96" X 80" NON-REINFORCED
FRAME INSTALLATION DETAILS

DRAWN:
F.A.

DWG NO.
08-00498

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SCALE NTS

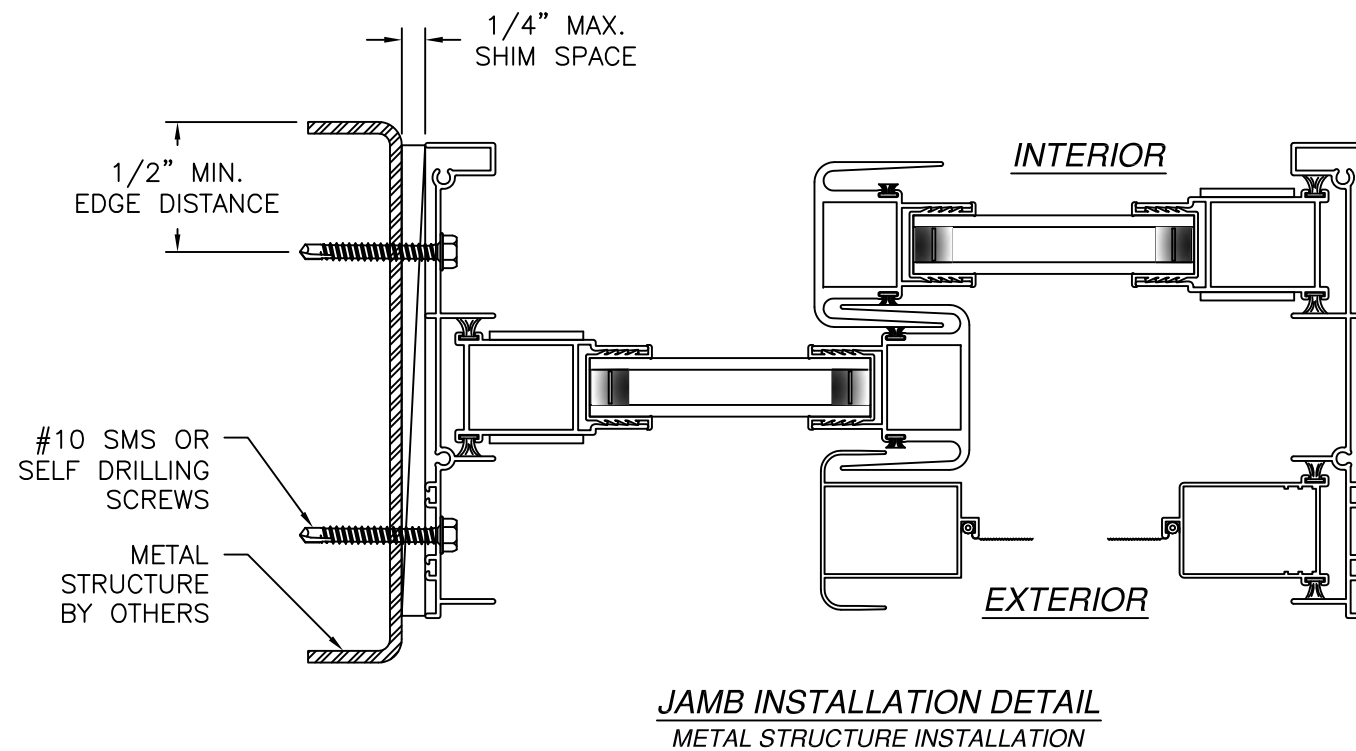
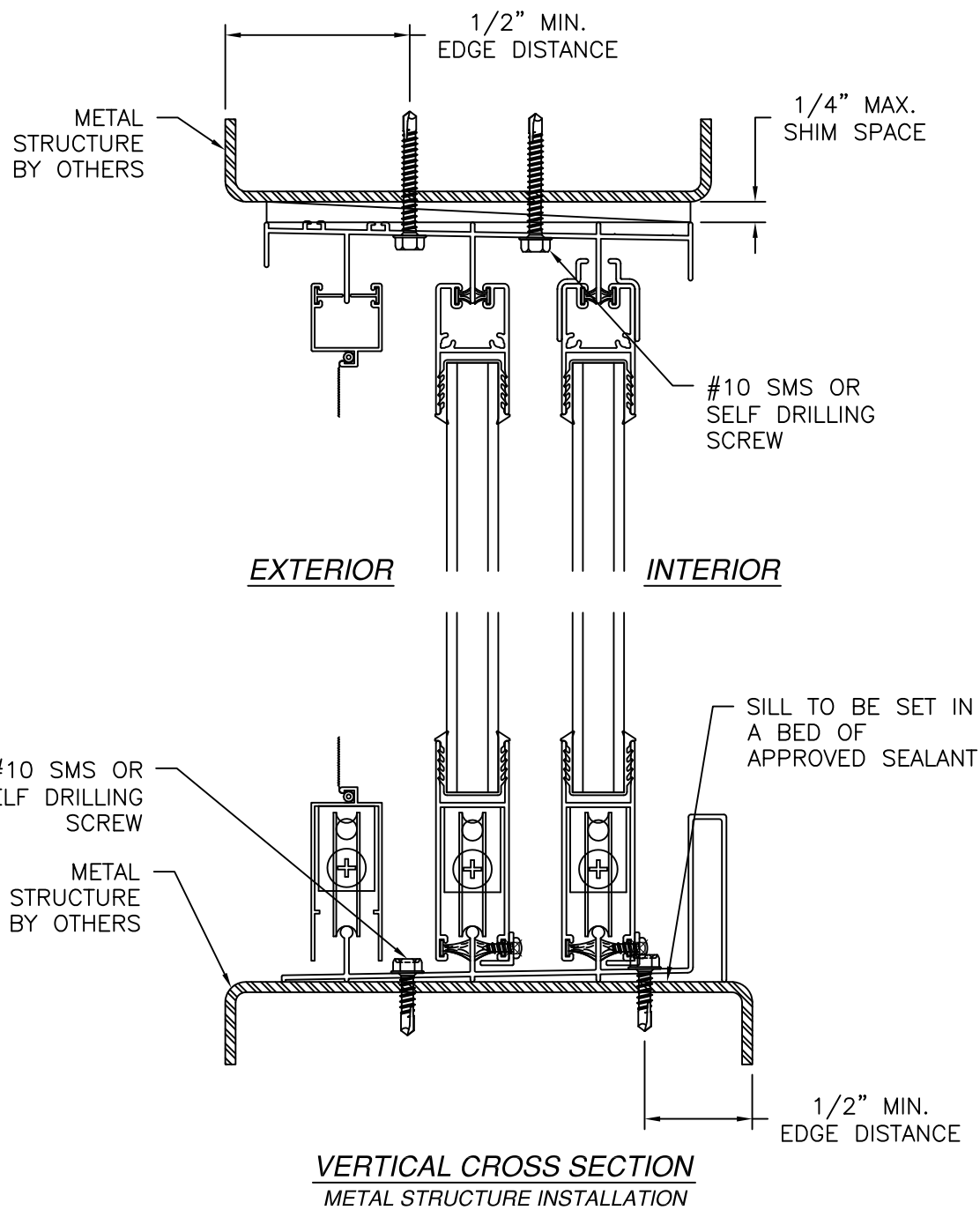
DATE 02/23/09

SHEET 4 OF 10

L. ROBERTO LOMAS P.E.
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Luis R. Lomas
Professional Engineer
State of Florida
No. 62514

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

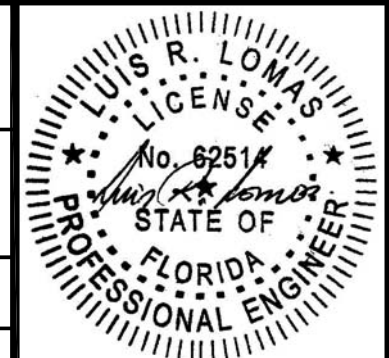


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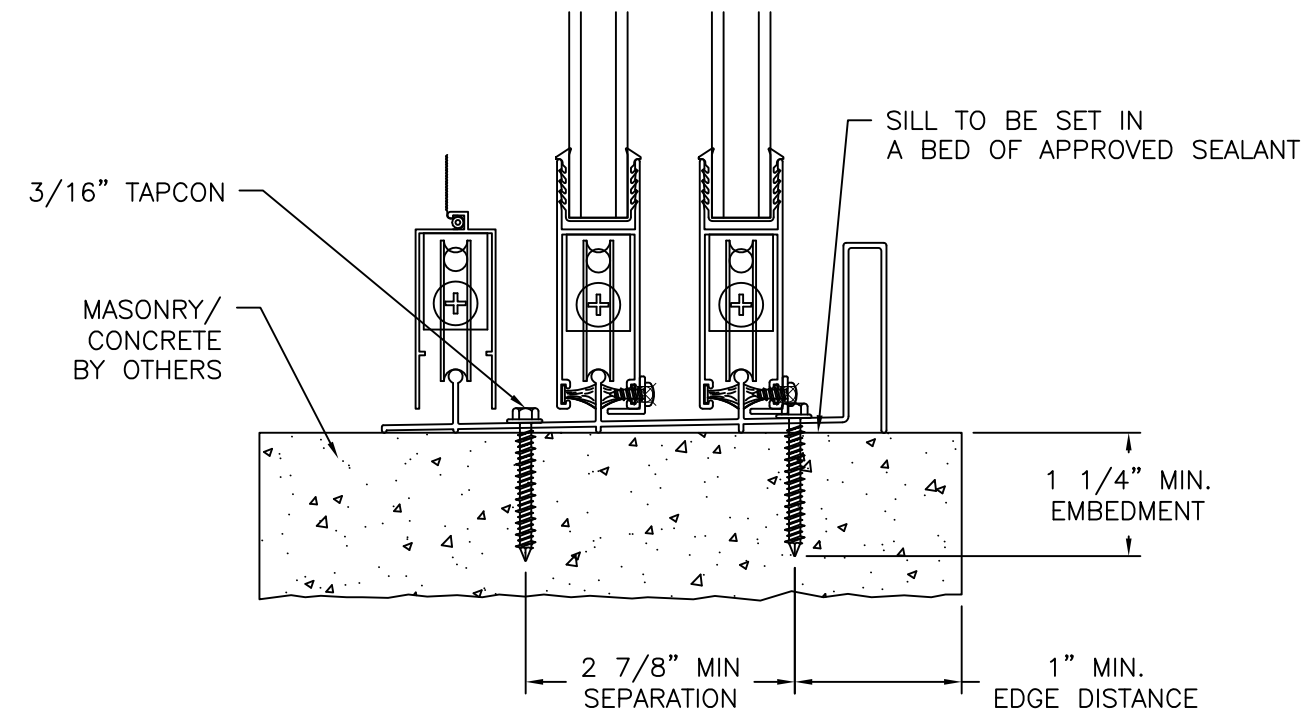
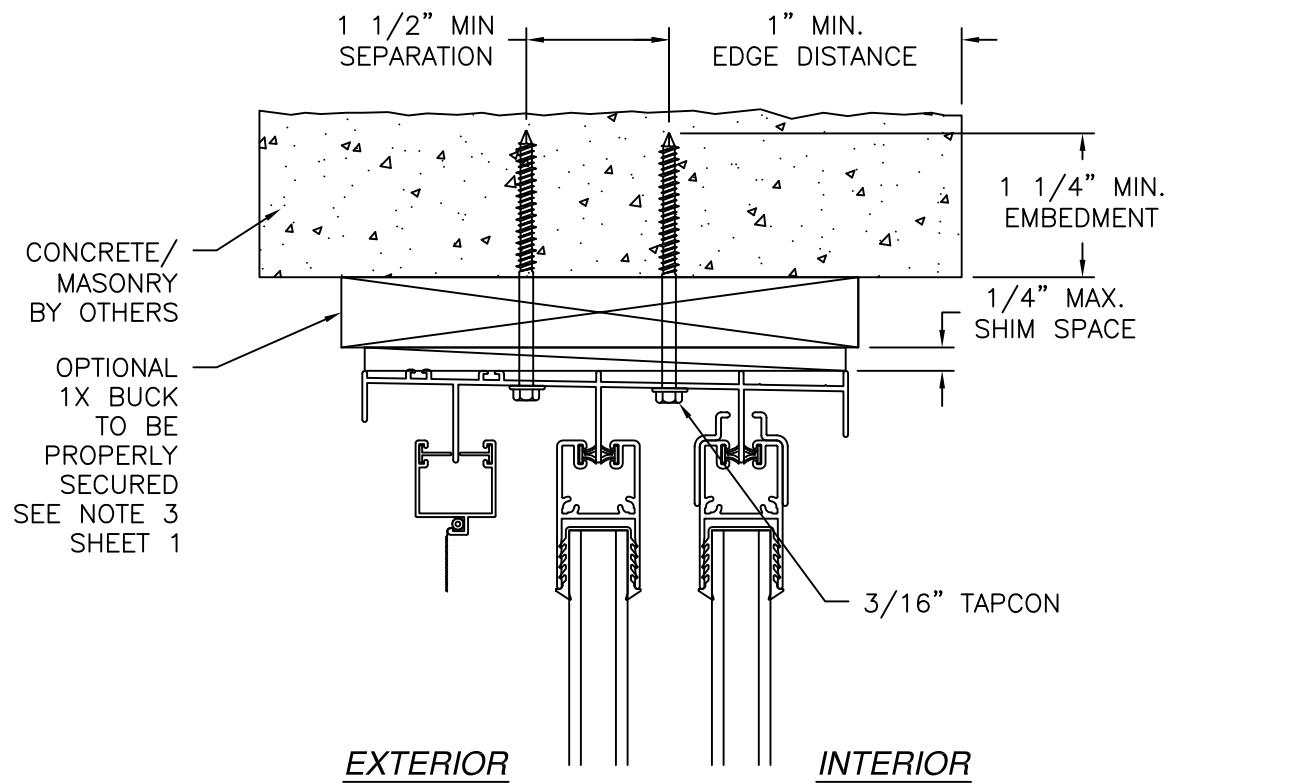
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MI WINDOWS AND DOORS LLC 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 420 SGD 96" X 80" NON-REINFORCED FRAME INSTALLATION DETAILS		
DRAWN: F.A.	DWG NO. 08-00498	REV E
SCALE NTS	DATE 02/23/09	SHEET 5 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

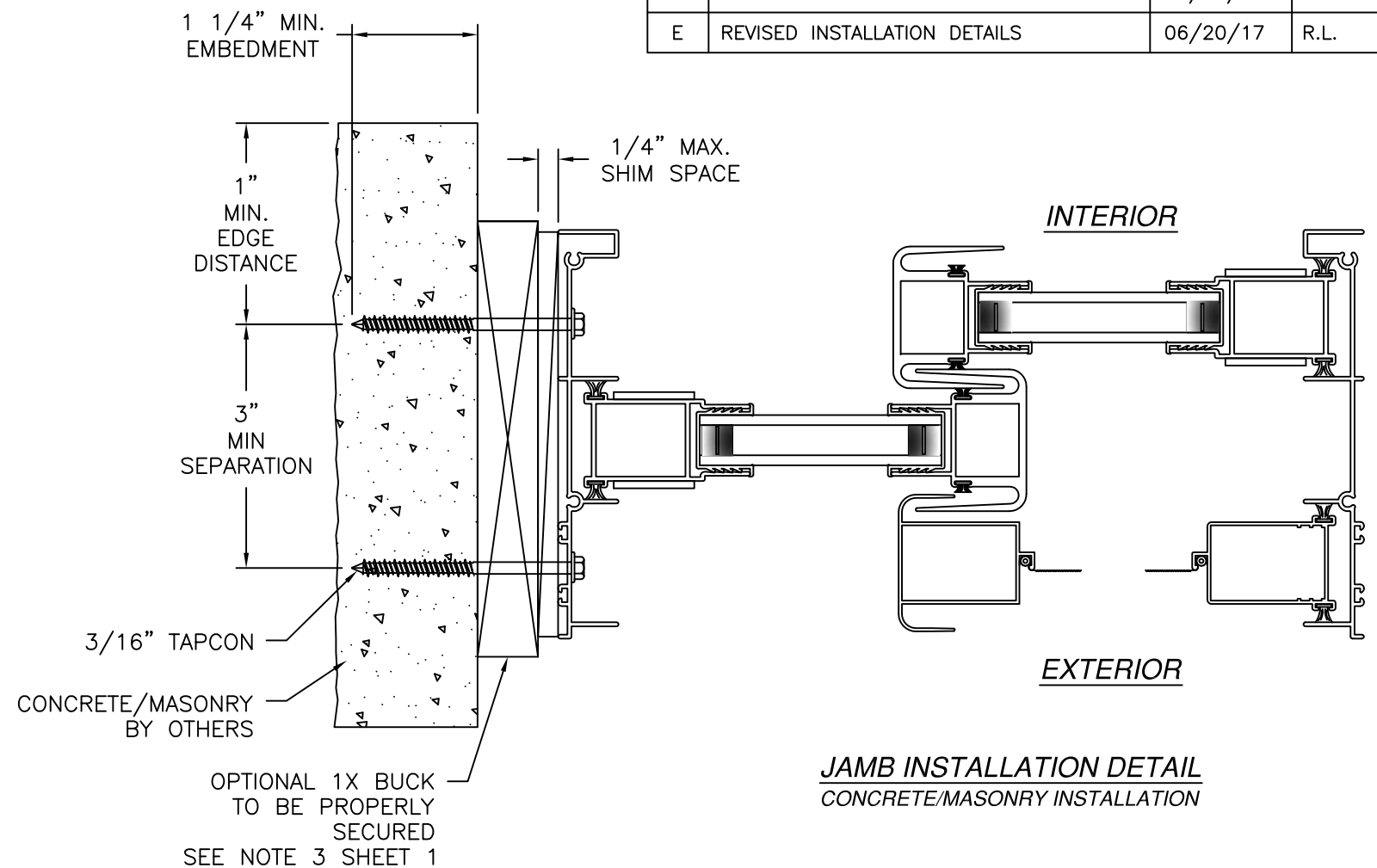
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Luis R. Lomas P.E.
 FL No.: 62514



VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION



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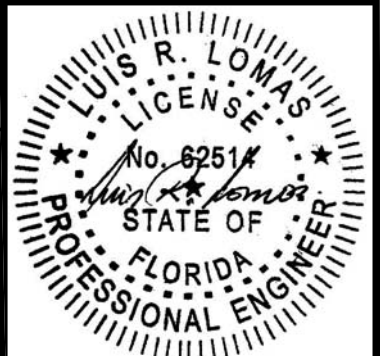
SIGNED: 06/20/2017

MI WINDOWS AND DOORS LLC
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 420 SGD
96" X 80" NON-REINFORCED
FRAME INSTALLATION DETAILS

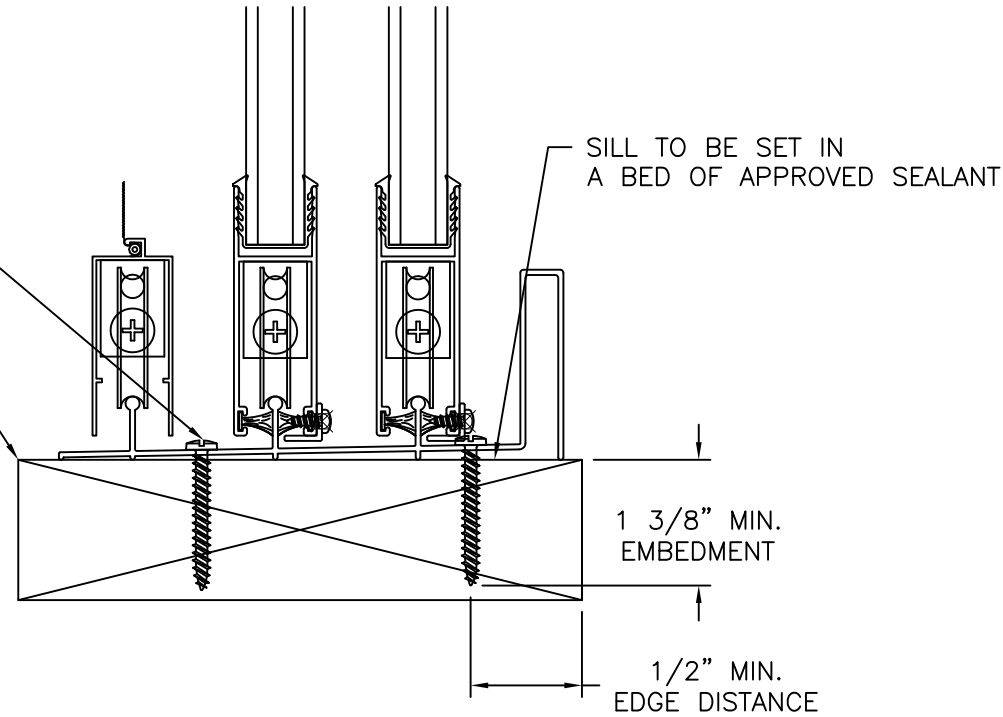
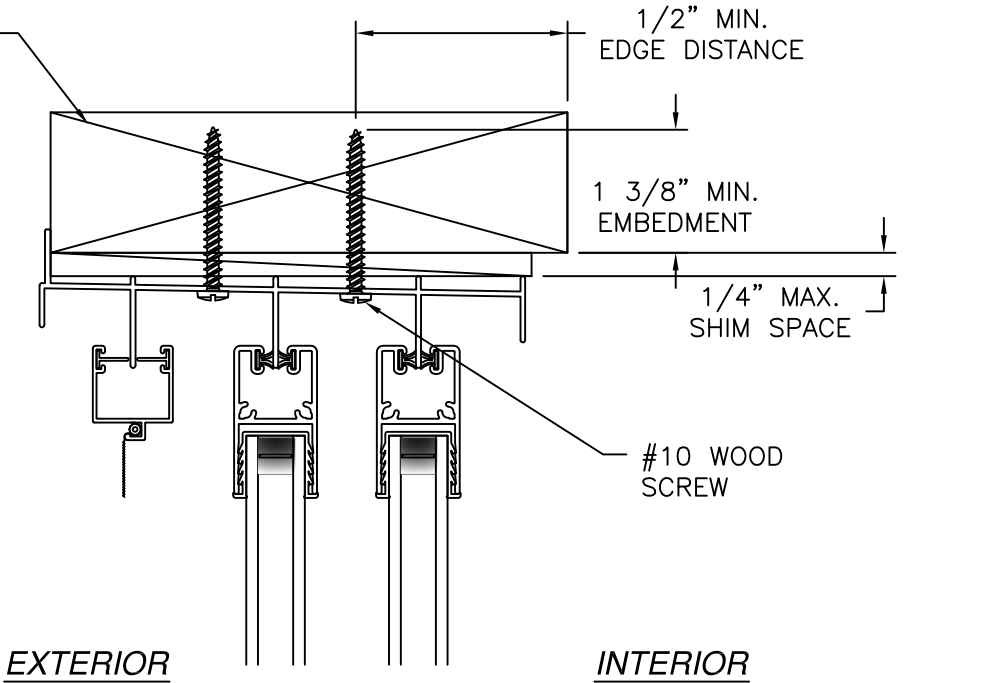
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DATE 02/23/09
SHEET 6 OF 10

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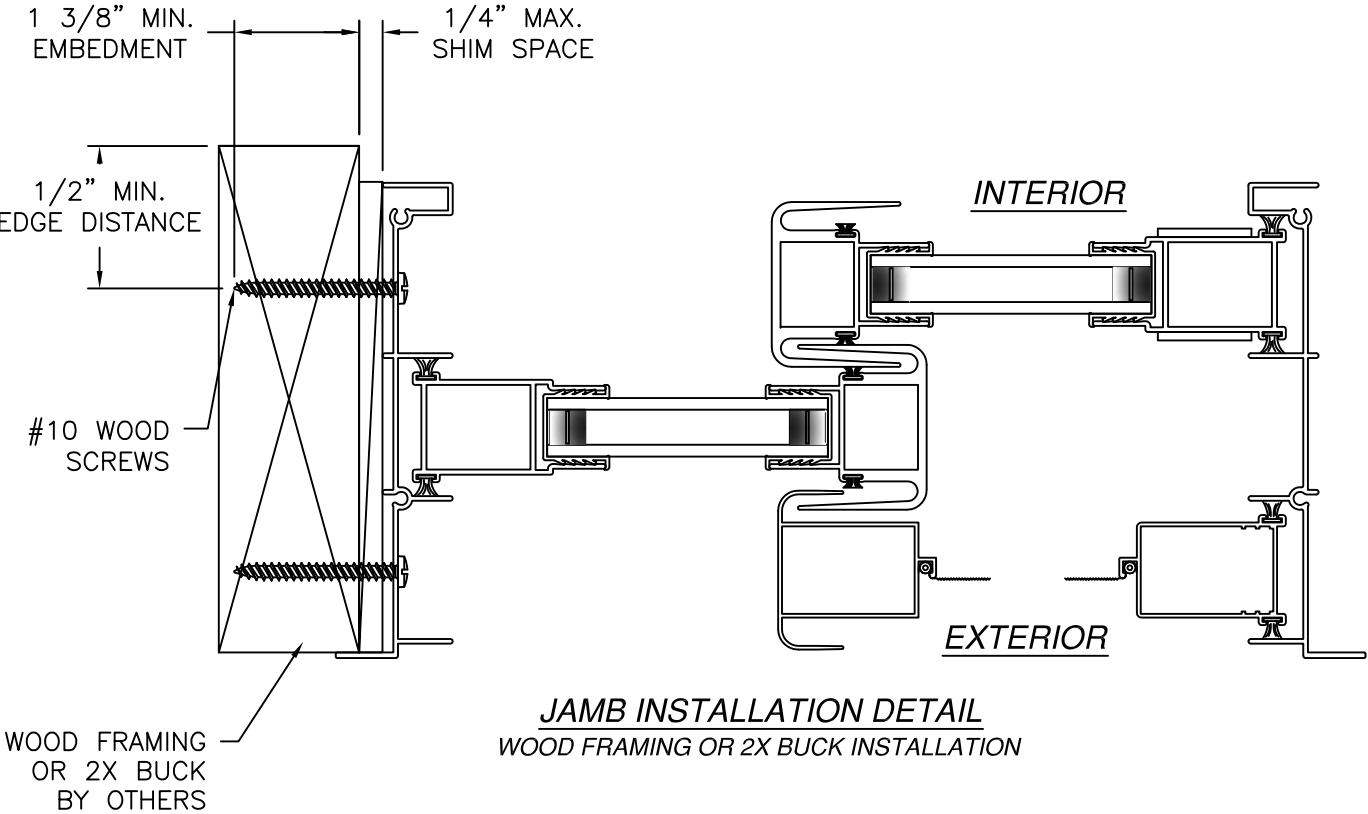
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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

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JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

MI WINDOWS AND DOORS LLC
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 420 SGD
96" X 80" NON-REINFORCED
FLANGE INSTALLATION DETAILS

DRAWN:
F.A.

DWG NO.
08-00498

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SCALE
NTS

DATE
02/23/09

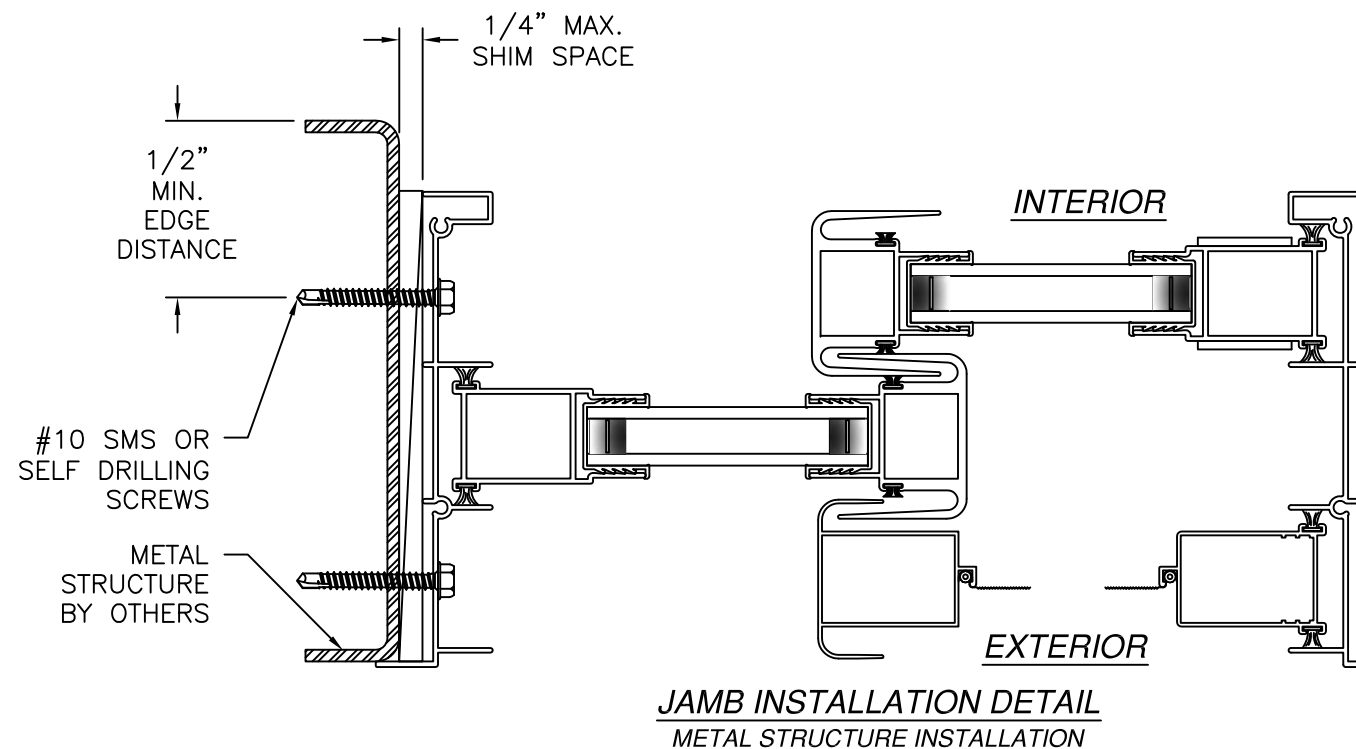
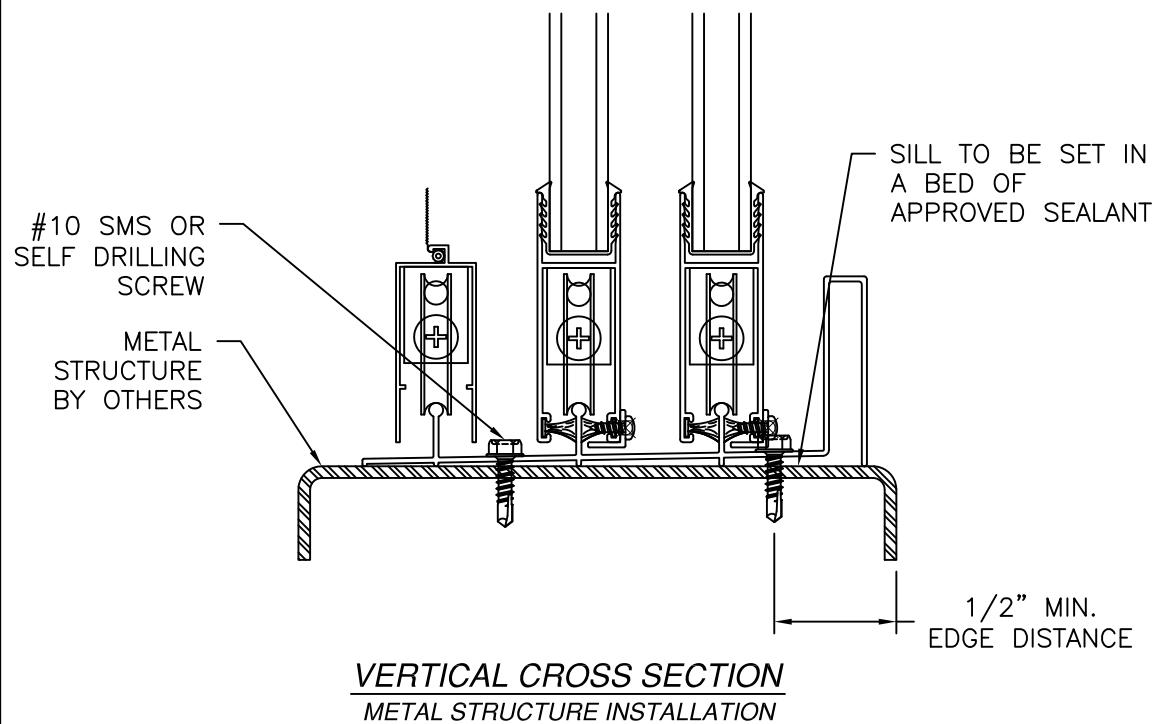
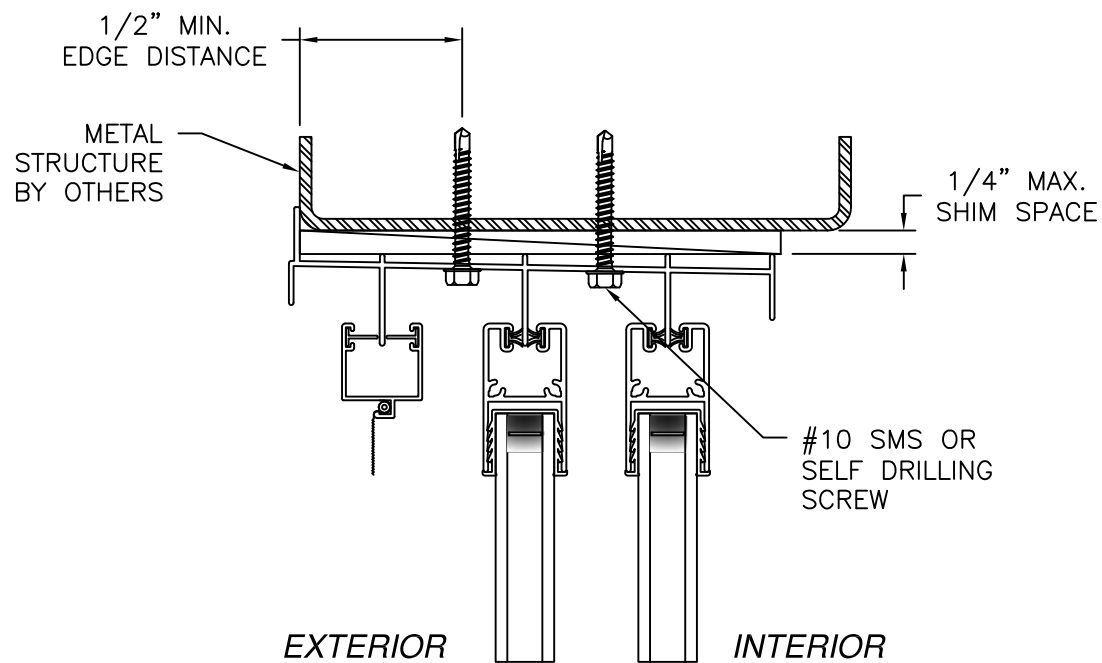
SHEET
7 OF 10

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434-688-0609 rllomas@lrlomaspe.com

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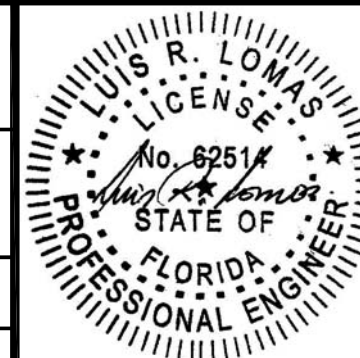


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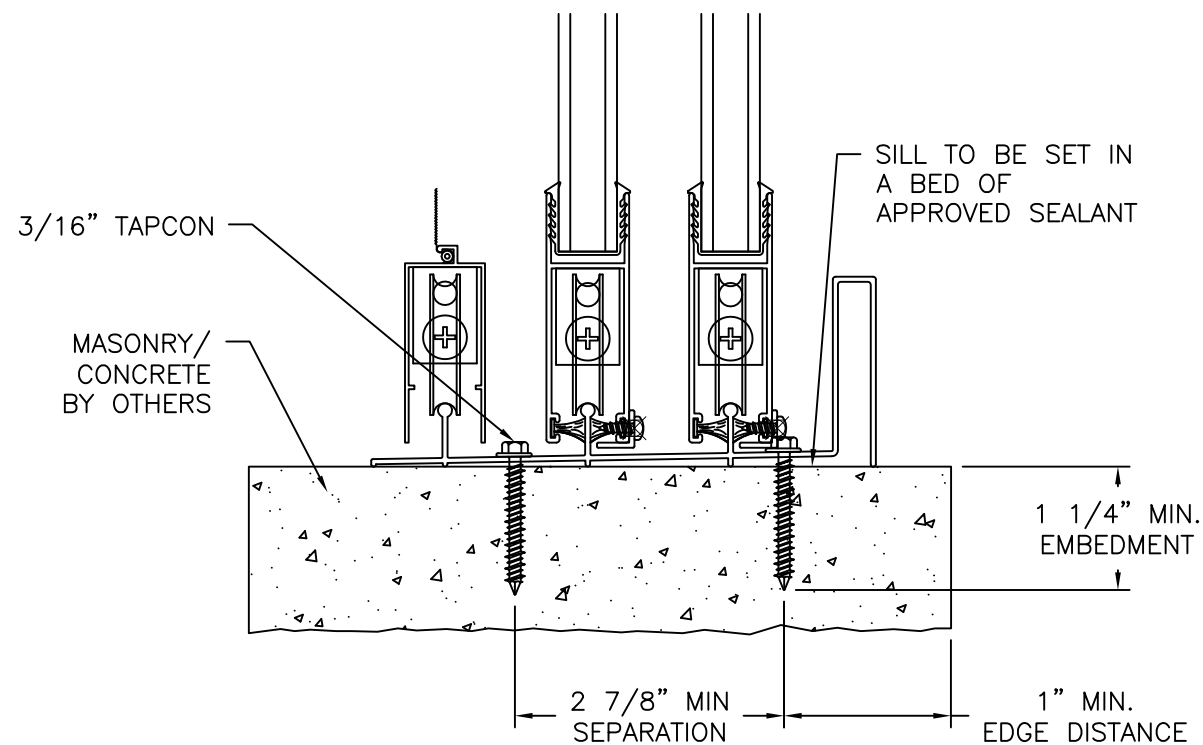
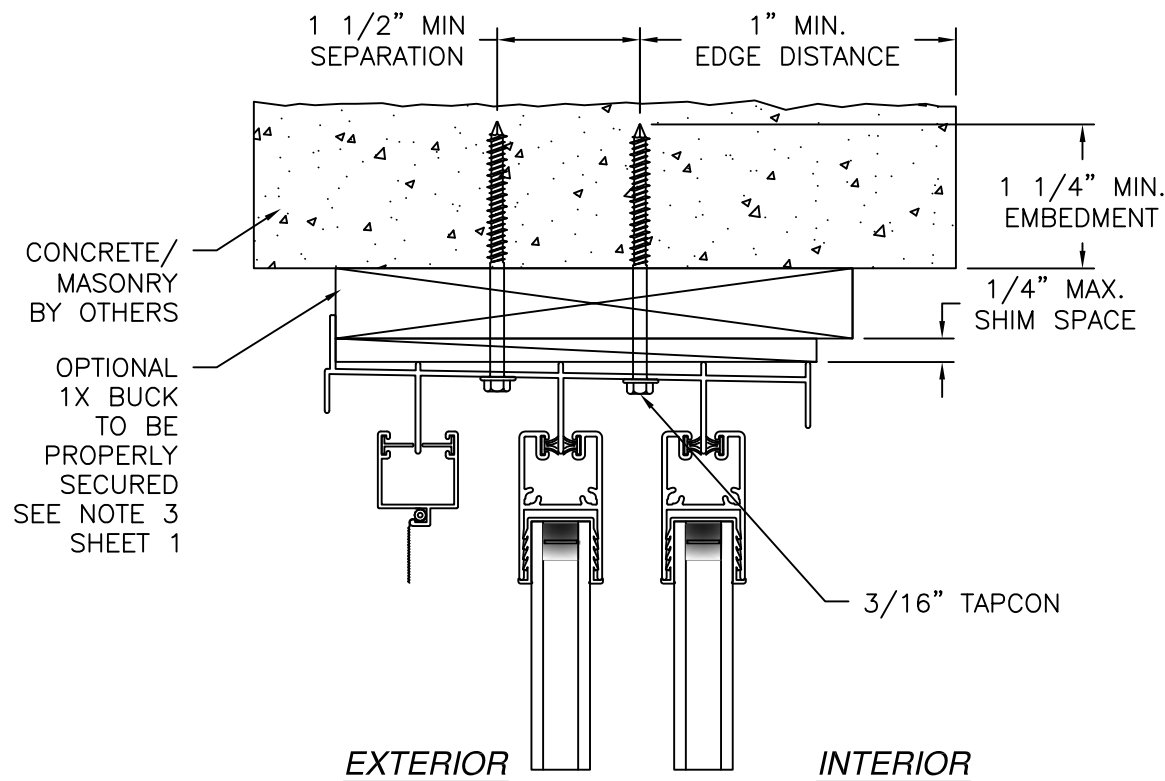
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MI WINDOWS AND DOORS LLC 650 WEST MARKET STREET GRATZ, PA 17030		
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DRAWN: F.A.	DWG NO. 08-00498	REV E
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L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

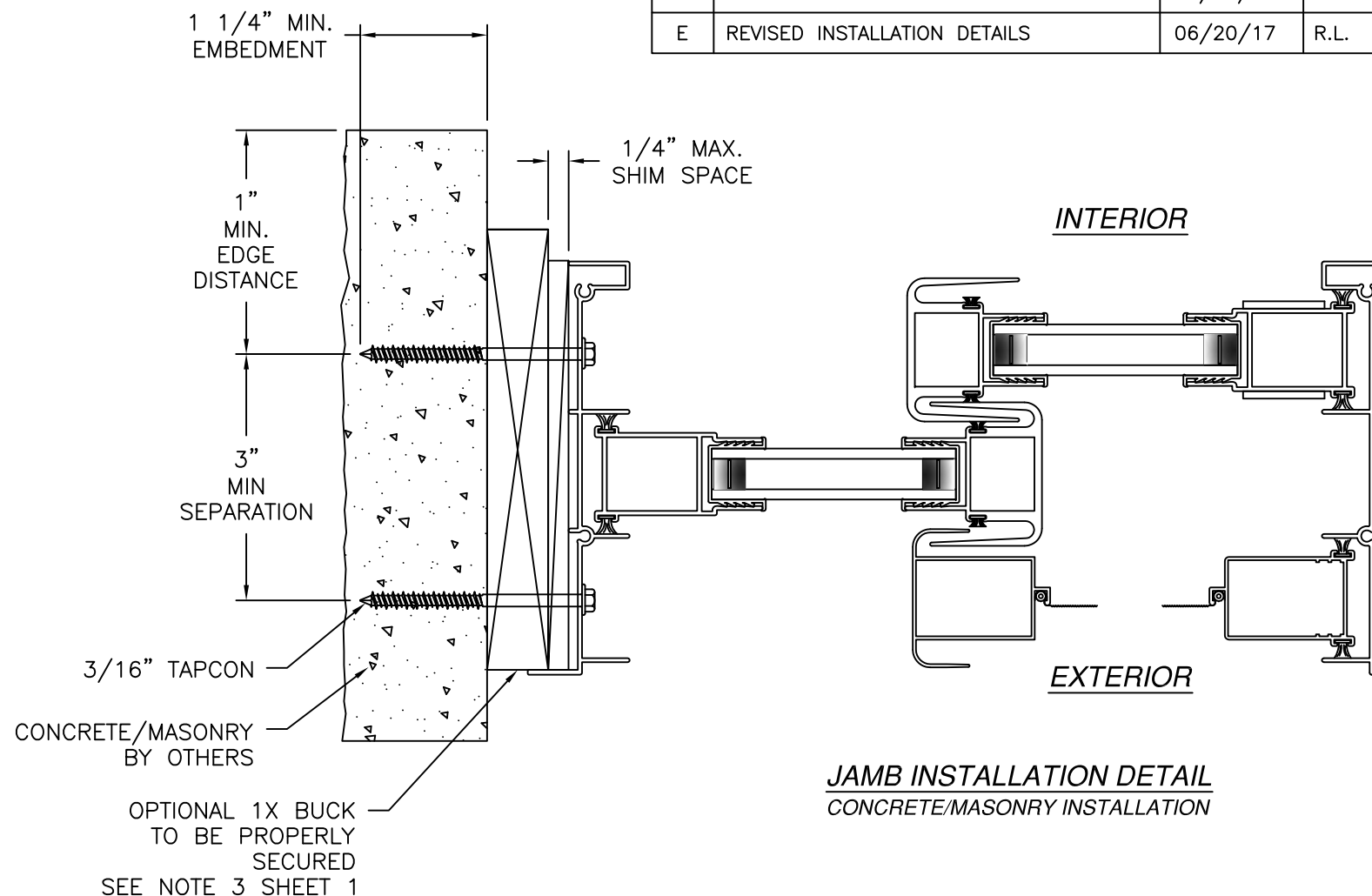
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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

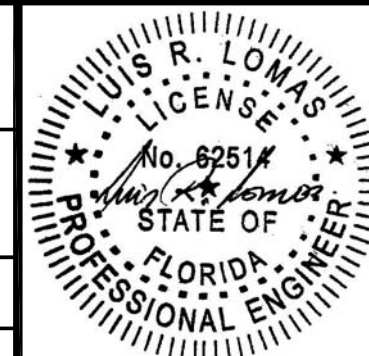


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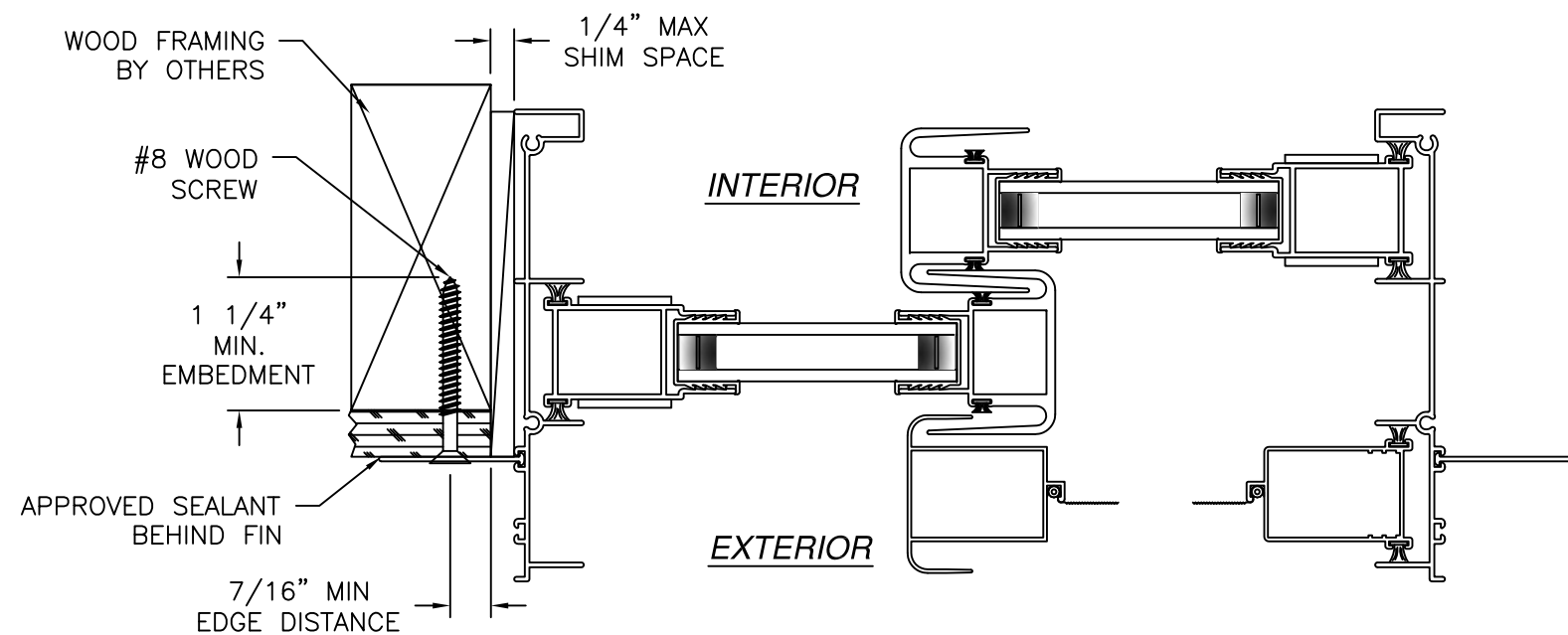
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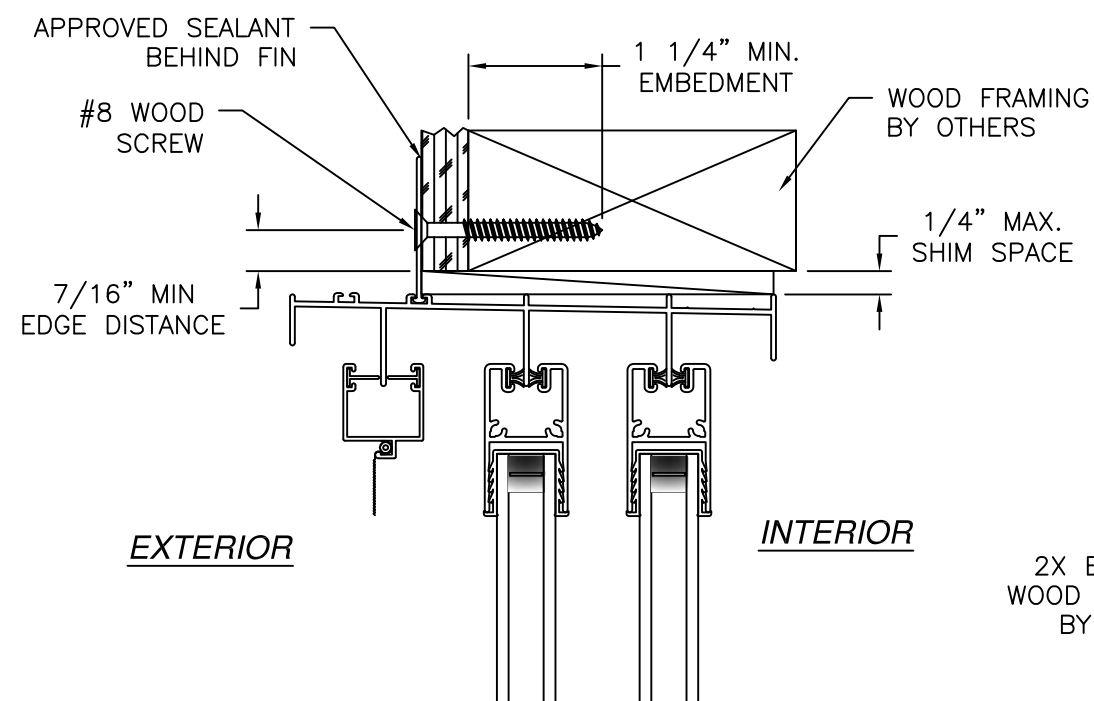
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L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		



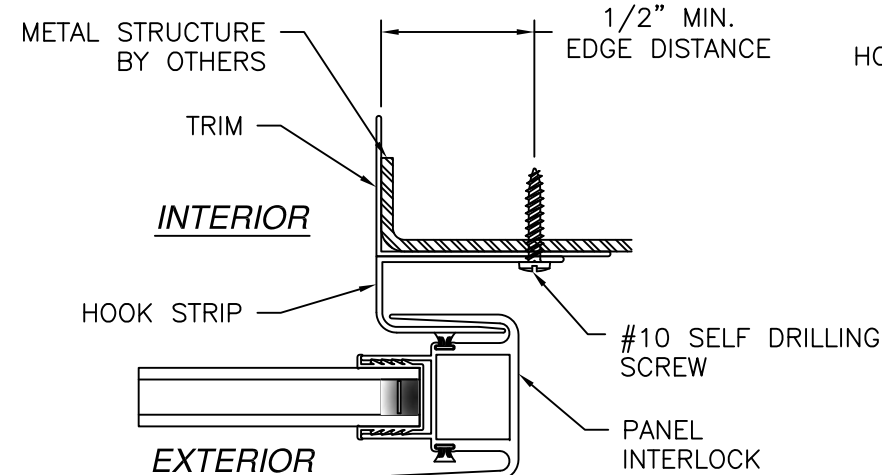
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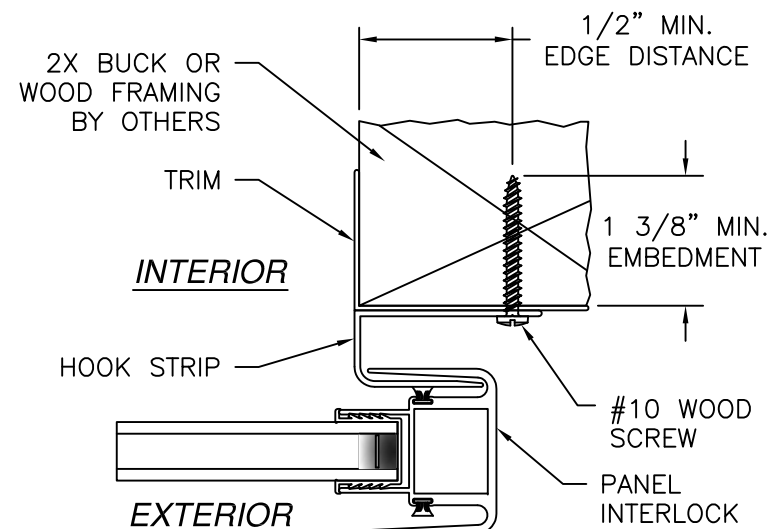
JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
FOR SILL INSTALLATION SEE SHEETS 4-9.

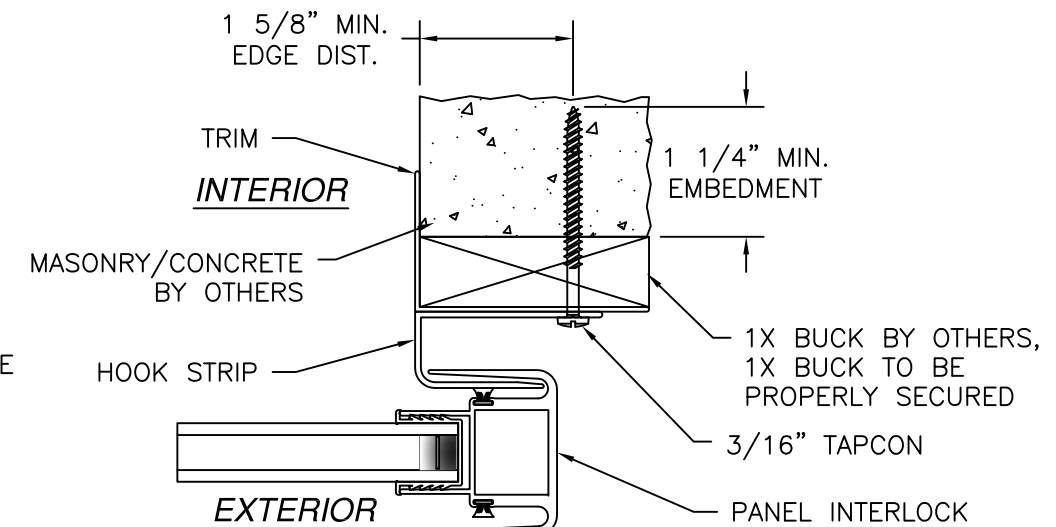


HOOK STRIP INSTALLATION
METAL STRUCTURE



HOOK STRIP INSTALLATION
2X BUCK/WOOD FRAMING

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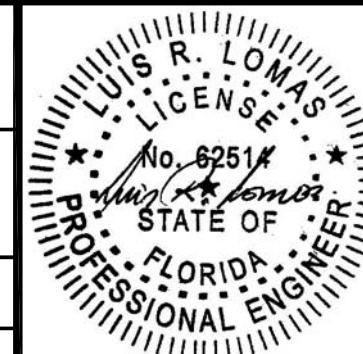


HOOK STRIP INSTALLATION
MASONRY/CONCRETE

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

MI WINDOWS AND DOORS LLC 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 420 SGD 96" X 80" NON-REINFORCED FIN AND HOOK INSTALLATION DETAILS		
DRAWN: F.A.	DWG NO. 08-00498	REV E
SCALE NTS	DATE 02/23/09	SHEET 10 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		

SIGNED: 06/20/2017



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