

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. 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 ALUMINUM 6063-T5.
12. UNITS MUST BE GLAZED PER ASTM E1300-04/09, SEE GLAZING DETAIL SHEET 2.
13. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT 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 1/2" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. FOR ANCHORING THROUGH FIN INTO METAL STRUCTURE USE #6 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. 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.
17. 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.
18. 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.
19. ALL FASTENERS TO BE CORROSION RESISTANT.
20. 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

SIGNED: 02/07/2019

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10	COMPONENTS

MI WINDOW AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 185 ALUMINUM SINGLE HUNG WINDOW
52" X 62" - IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08-03379

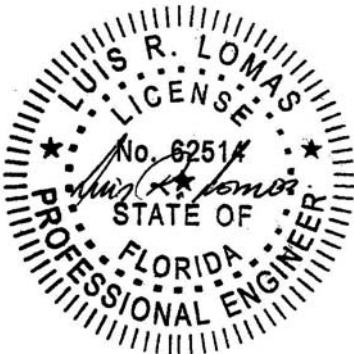
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SCALE NTS

DATE 01/15/19

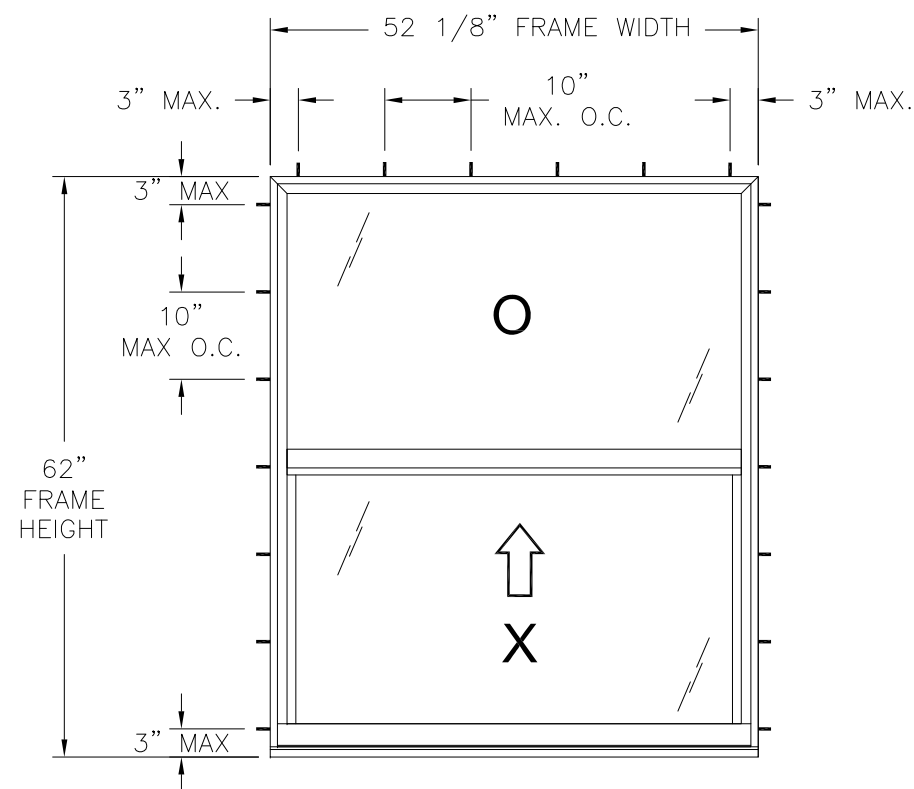
SHEET 1 OF 10

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

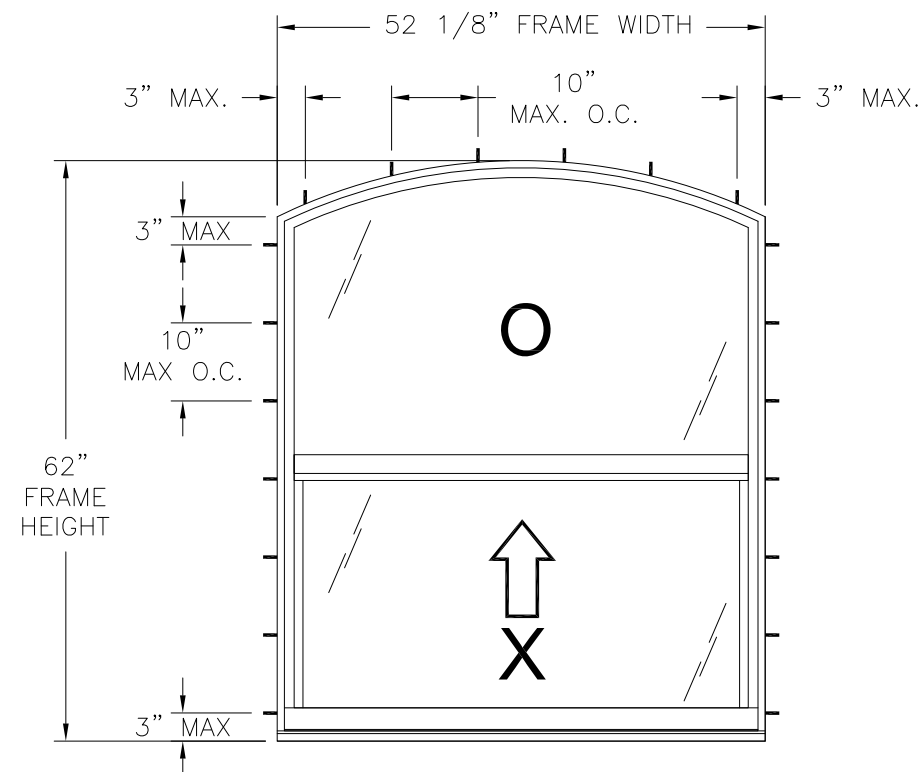


Luis R. Lomas P.E.
FL No.: 62514

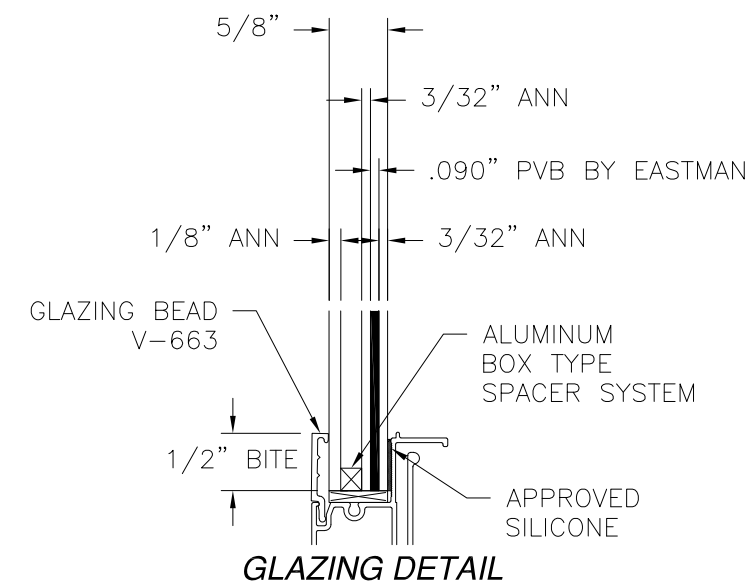
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185 ALUMINUM SINGLE HUNG WINDOW
EXTERIOR VIEW
FLANGE & FINLESS INSTALLATION



185 ALUMINUM SINGLE HUNG WINDOW DESIGNER
EXTERIOR VIEW
FLANGE & FINLESS INSTALLATION



DESIGN PRESSURE RATING	IMPACT RATING
+50.0/-63.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 3

52 1/8" X 62" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 22.44 FT²

NOTES:

1. SASH SIZE: 50 1/2" X 31 3/16"
2. D.L.O.: 49 5/16" X 27 9/16"

HARDWARE SCHEDULE	
A.	(2) METAL SWEEP LOCKS AT LOCK RAIL, 8" FROM EACH END
B.	(2) BLOCK AND TACKLE BALANCES AT JAMBS

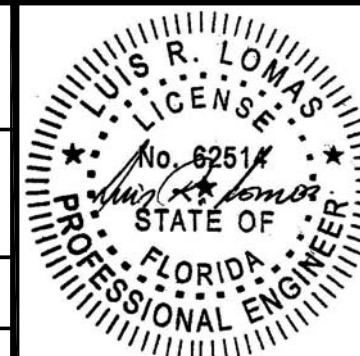
MI WINDOW AND DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 185 ALUMINUM SINGLE HUNG WINDOW
52" X 62" – IMPACT
FLANGE & FINLESS ELEVATIONS

DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 2 OF 10

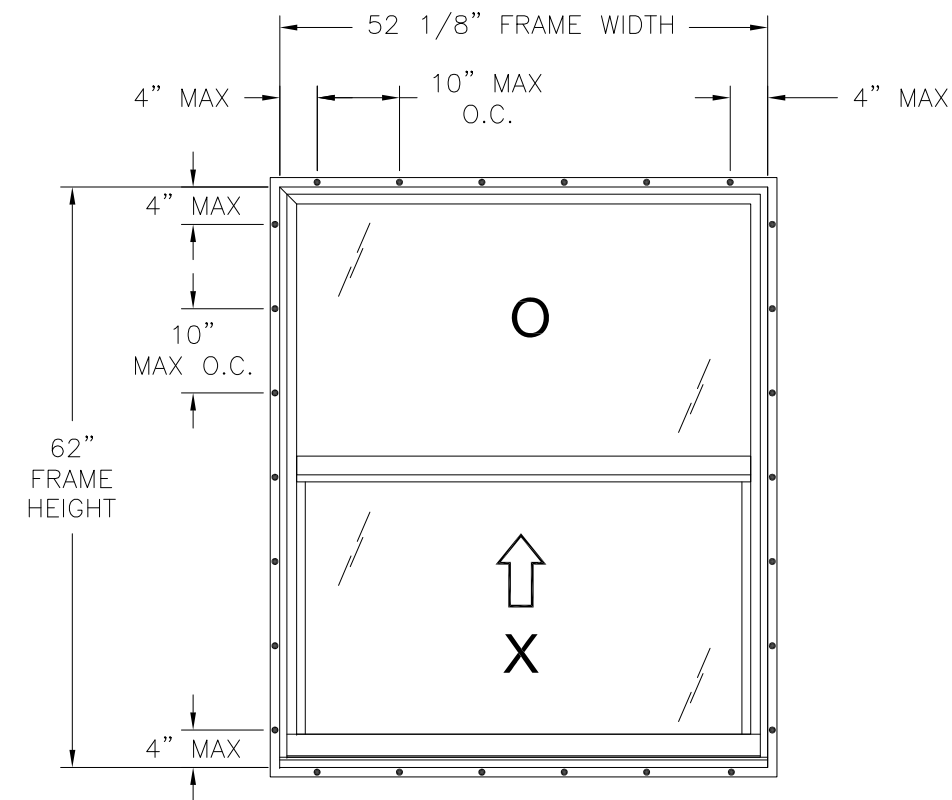
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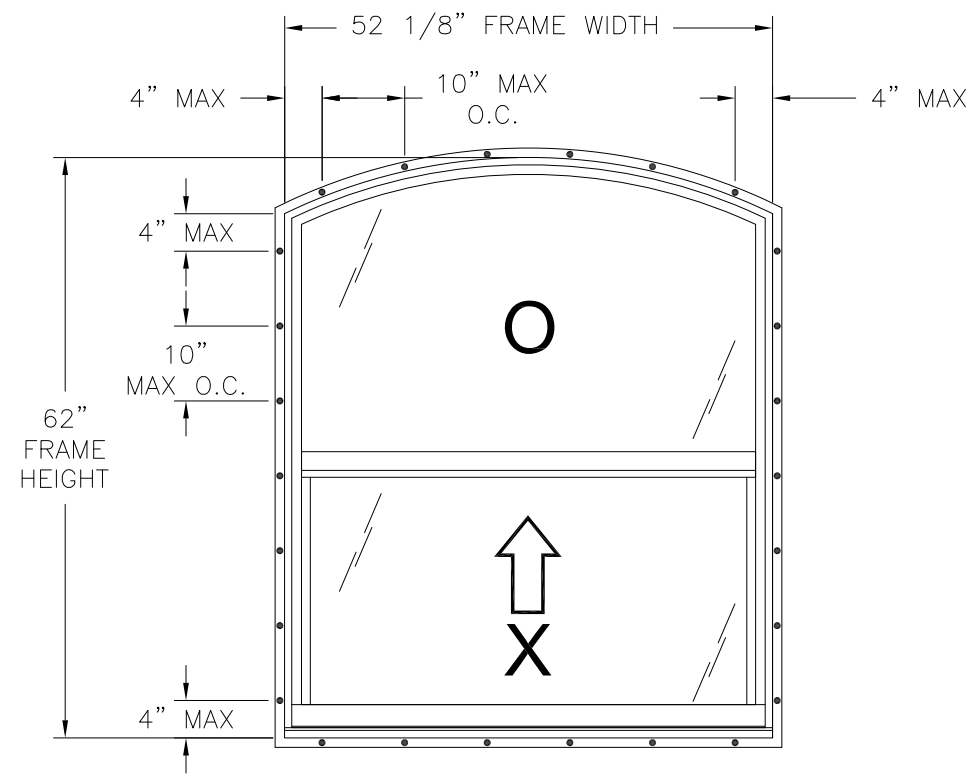


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FL No.: 62514

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185 ALUMINUM SINGLE HUNG WINDOW
EXTERIOR VIEW
FIN INSTALLATION



185 ALUMINUM SINGLE HUNG WINDOW DESIGNER
EXTERIOR VIEW
FIN INSTALLATION

DESIGN PRESSURE RATING	IMPACT RATING
+50.0/-63.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 3

52 1/8" X 62" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 22.44 FT²

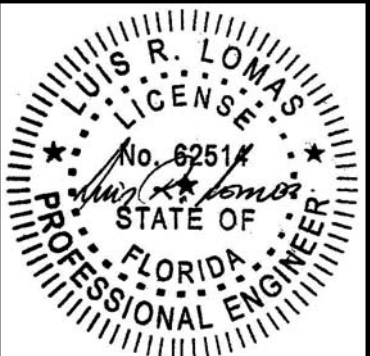
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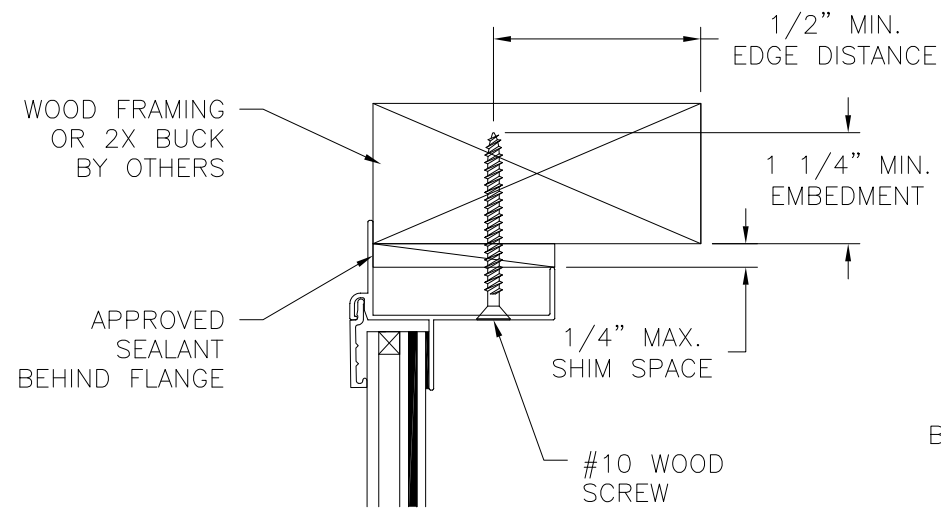
HARDWARE SCHEDULE	
A.	(2) METAL SWEEP LOCKS AT LOCK RAIL, 8" FROM EACH END
B.	(2) BLOCK AND TACKLE BALANCES AT JAMBS

MI WINDOW AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 185 ALUMINUM SINGLE HUNG WINDOW 52" X 62" – IMPACT FIN ELEVATIONS		
DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 3 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

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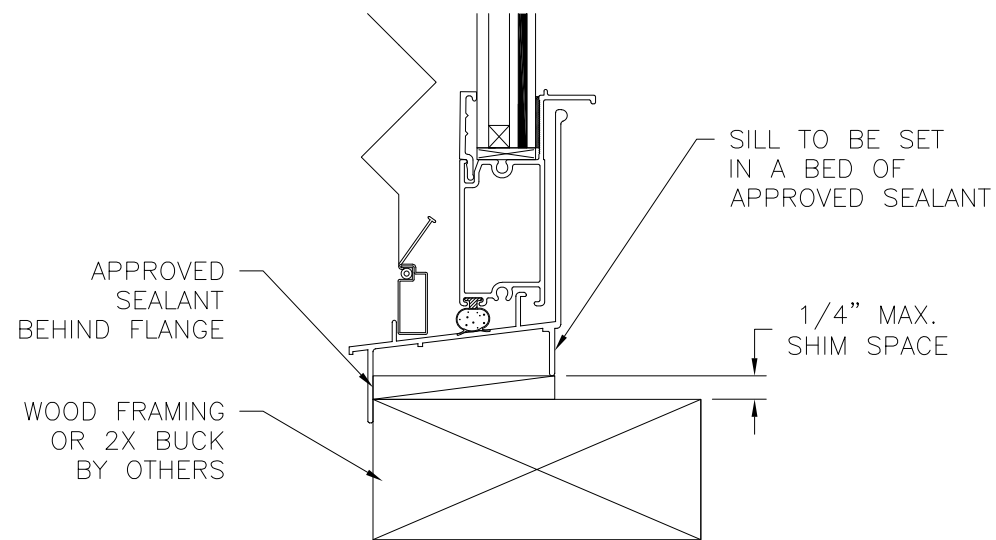


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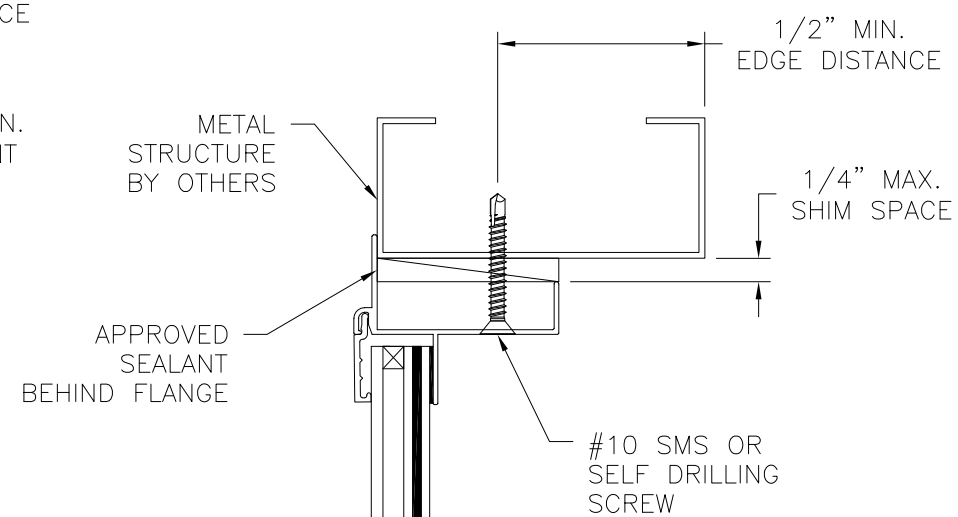


EXTERIOR

INTERIOR

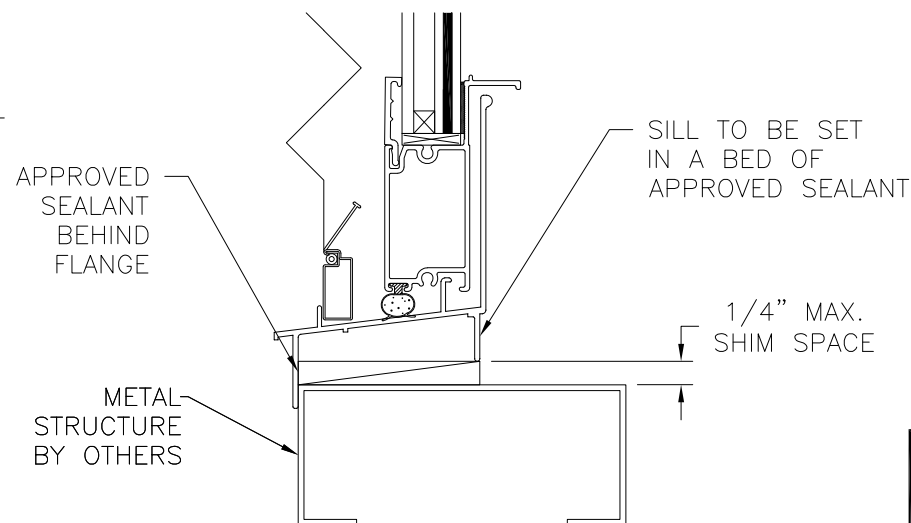


VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



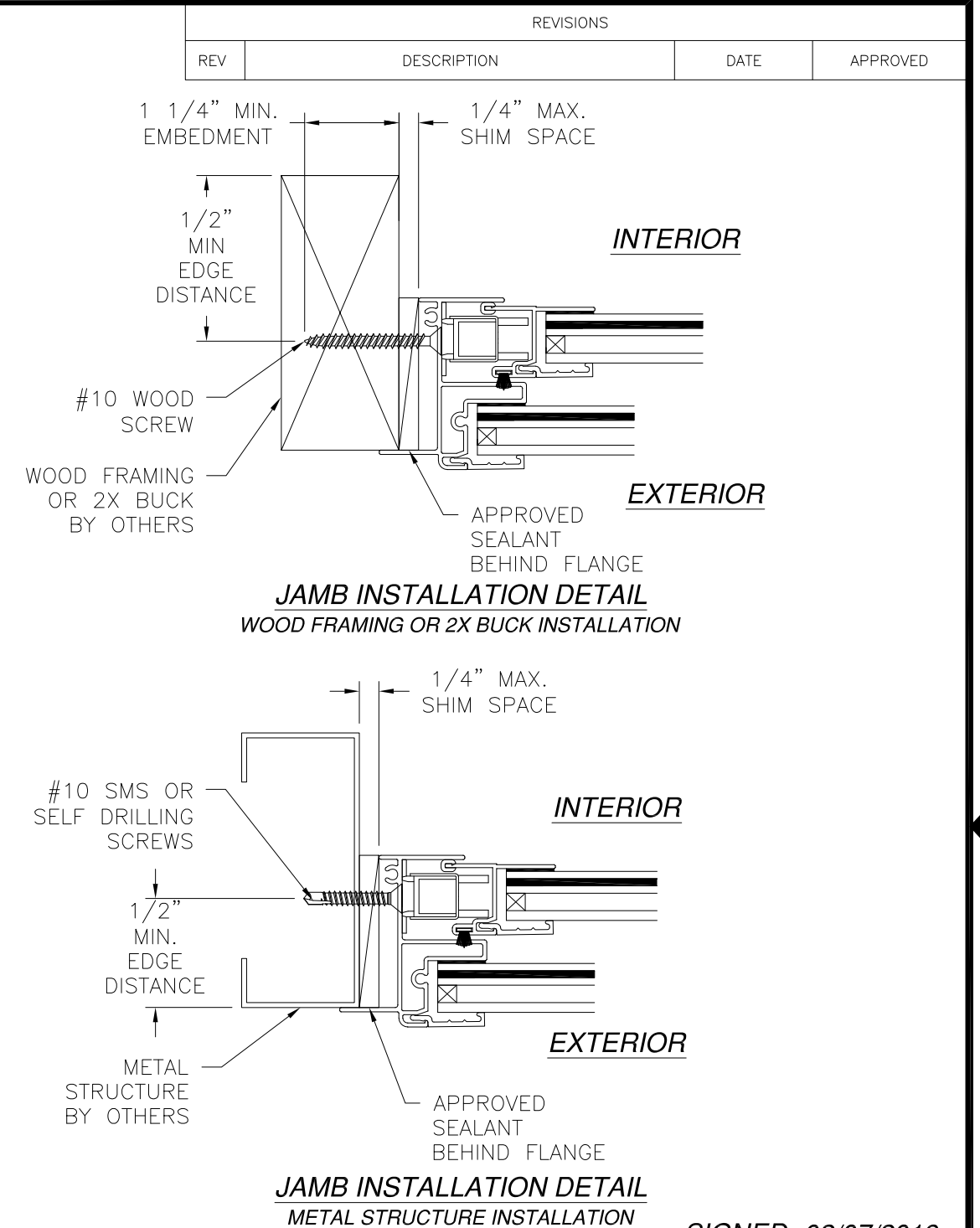
EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
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



SIGNED: 02/07/2019

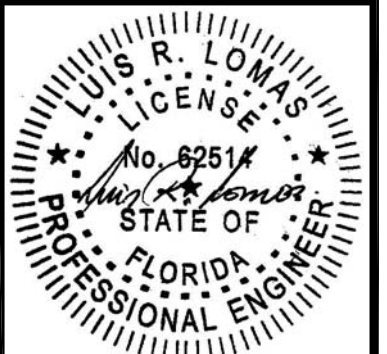
MI WINDOW AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030

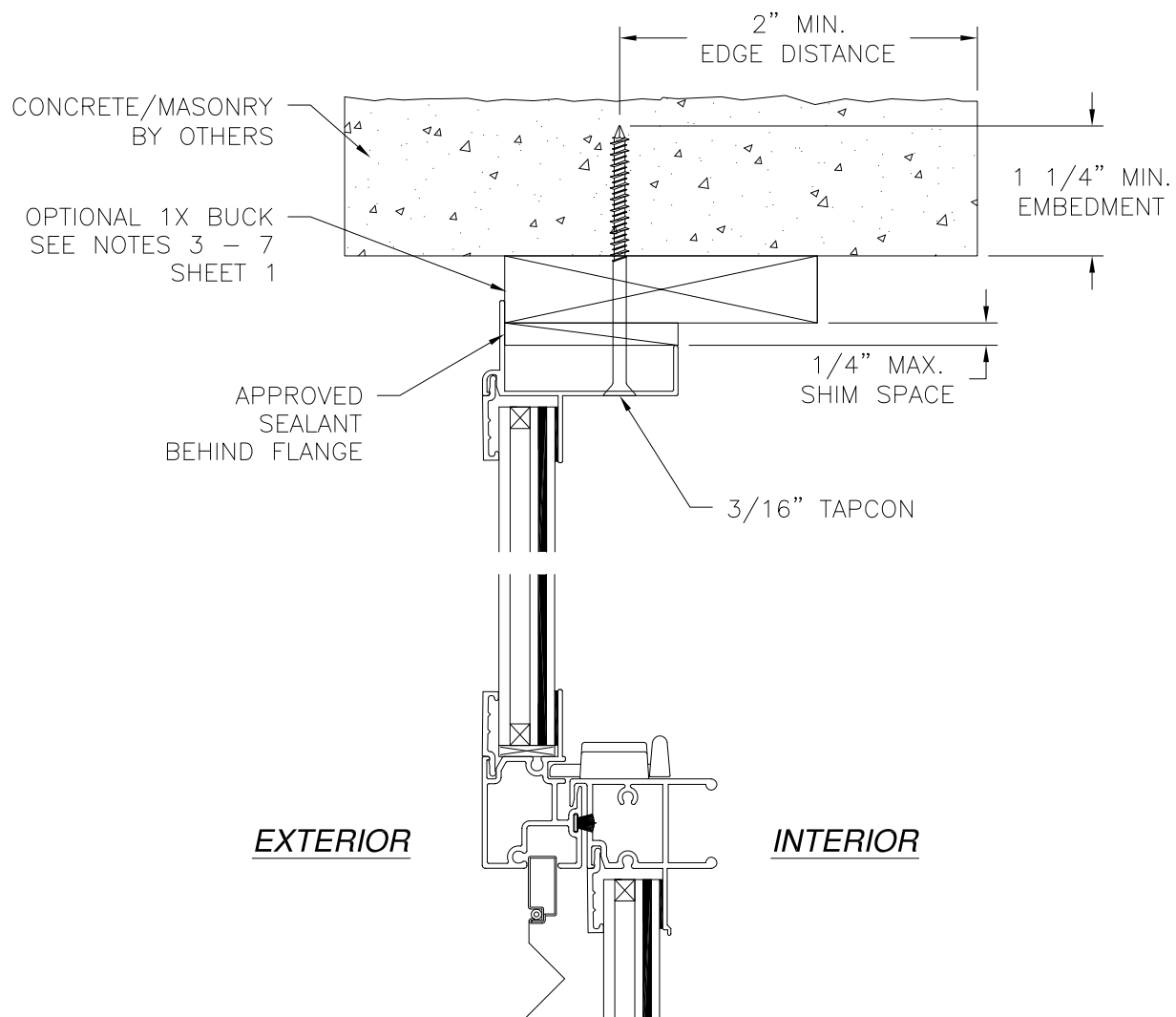
SERIES 185 ALUMINUM SINGLE HUNG WINDOW
52" X 62" - IMPACT
FLANGE INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 4 OF 10

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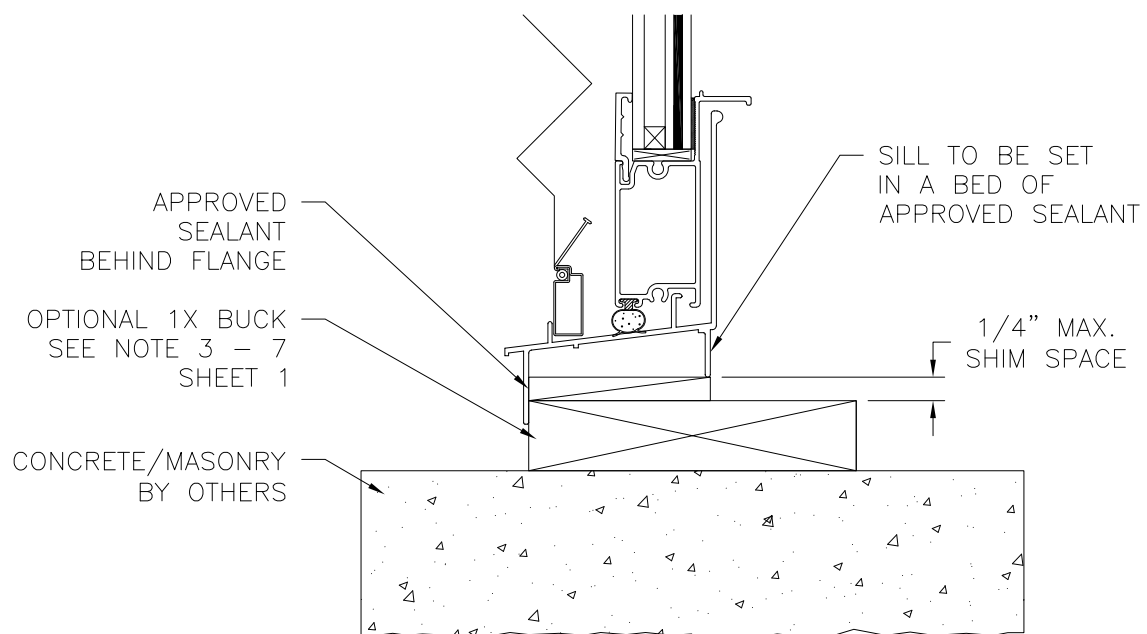


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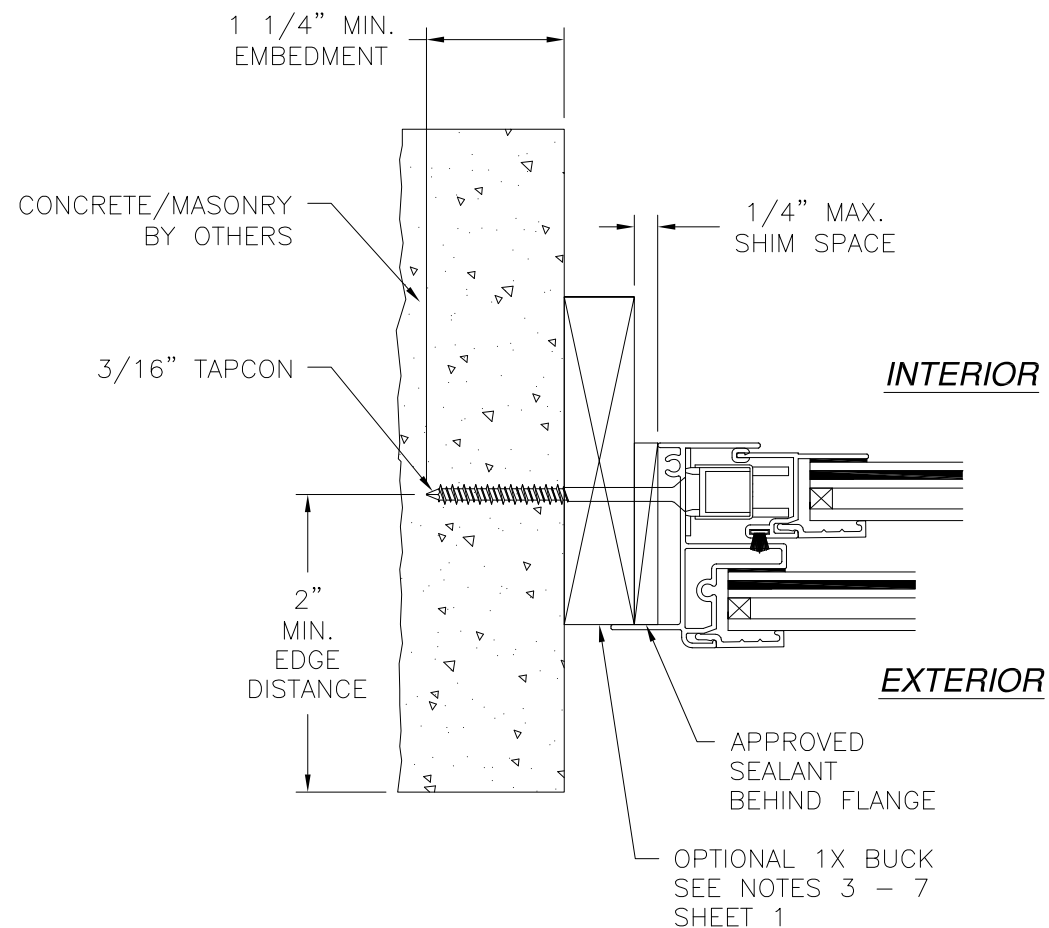
EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

REVISIONS			
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INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

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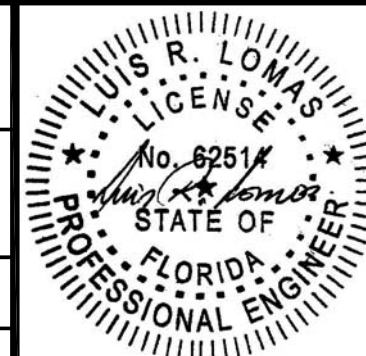
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GRATZ, PA 17030

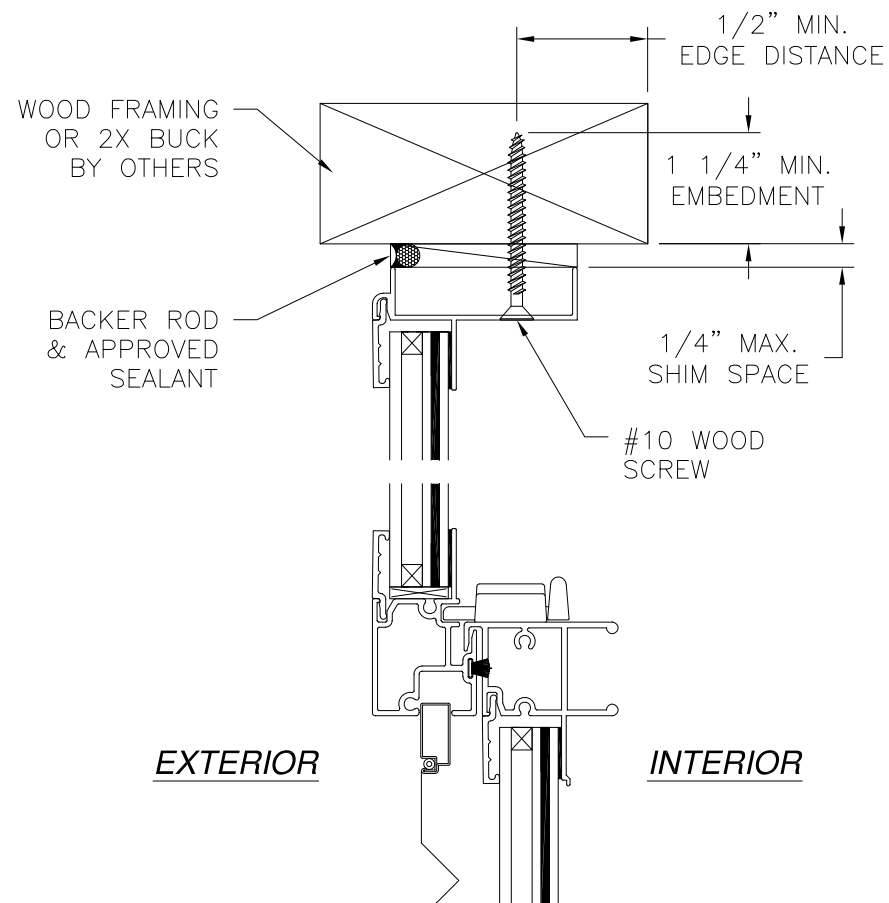
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52" X 62" – IMPACT
FLANGE INSTALLATION DETAILS

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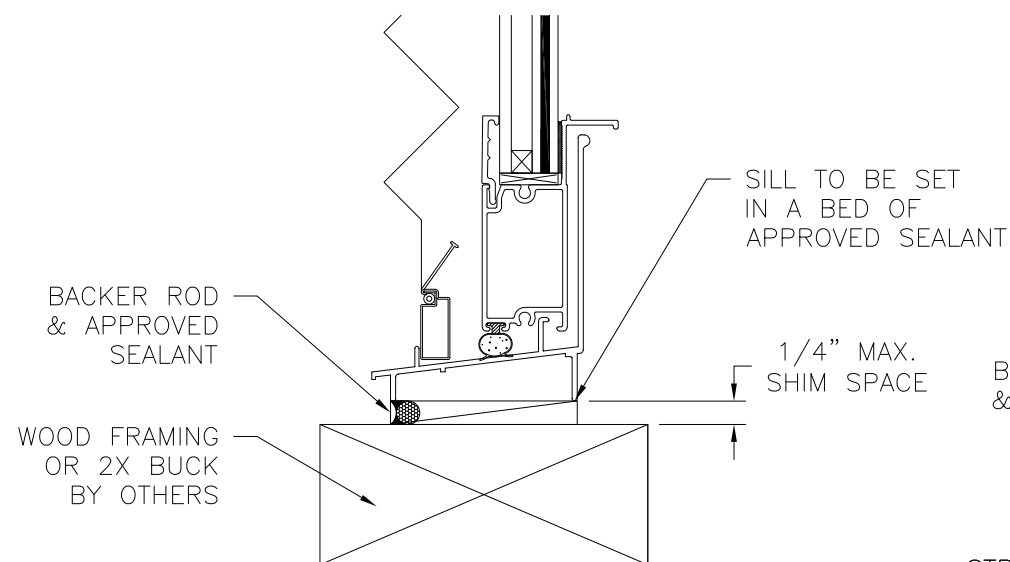


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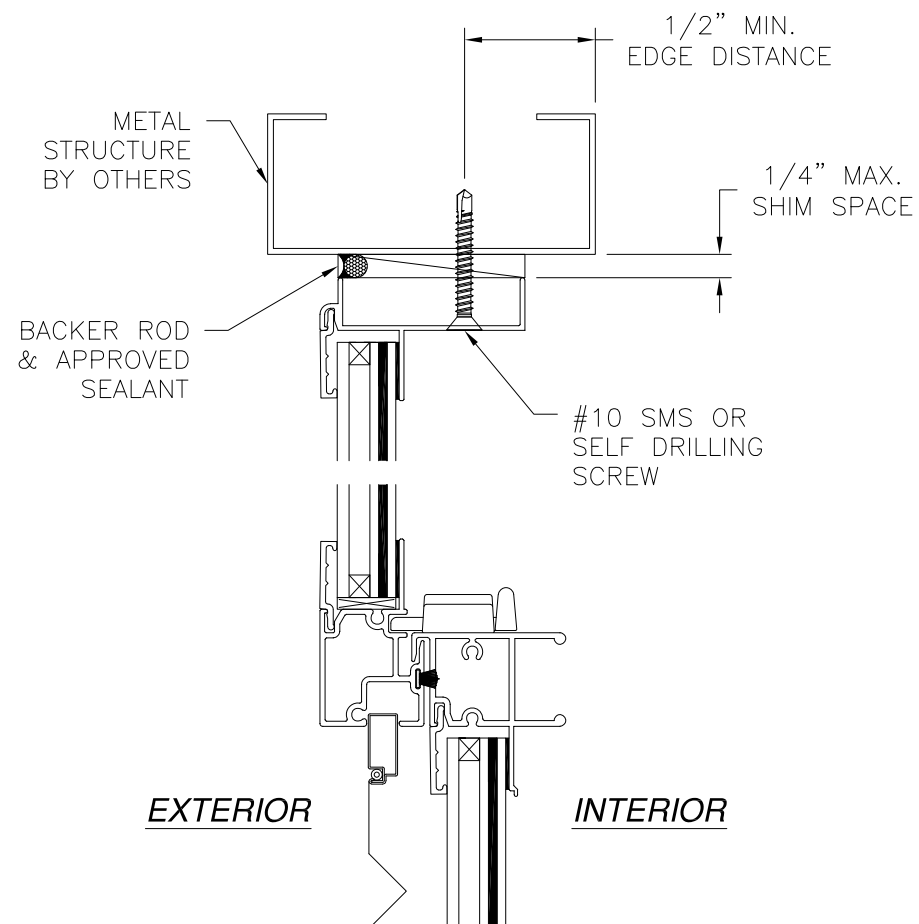


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INTERIOR

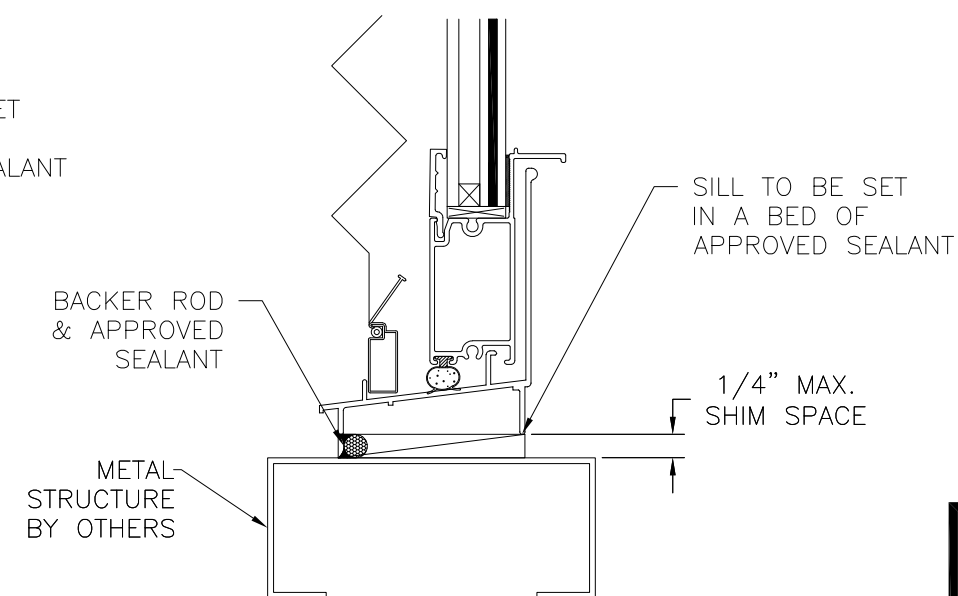


VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



EXTERIOR

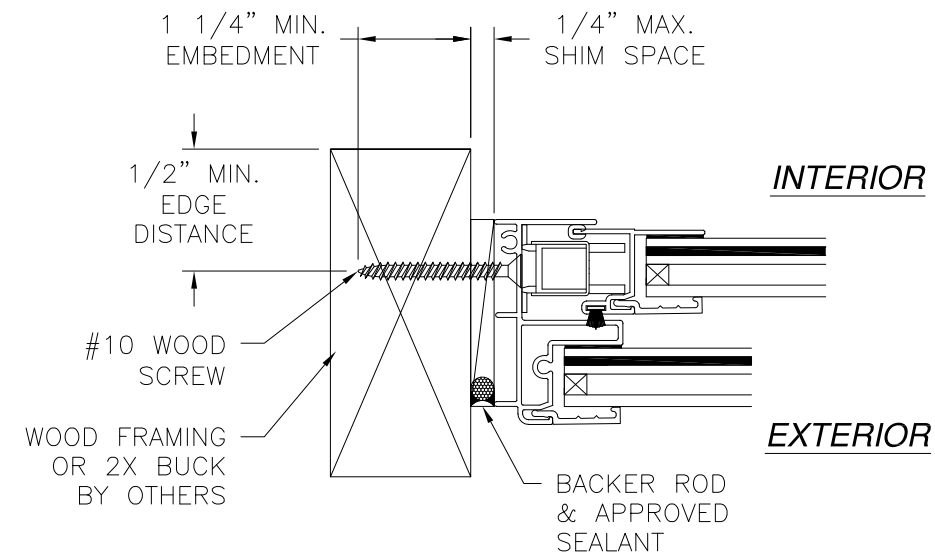
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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION

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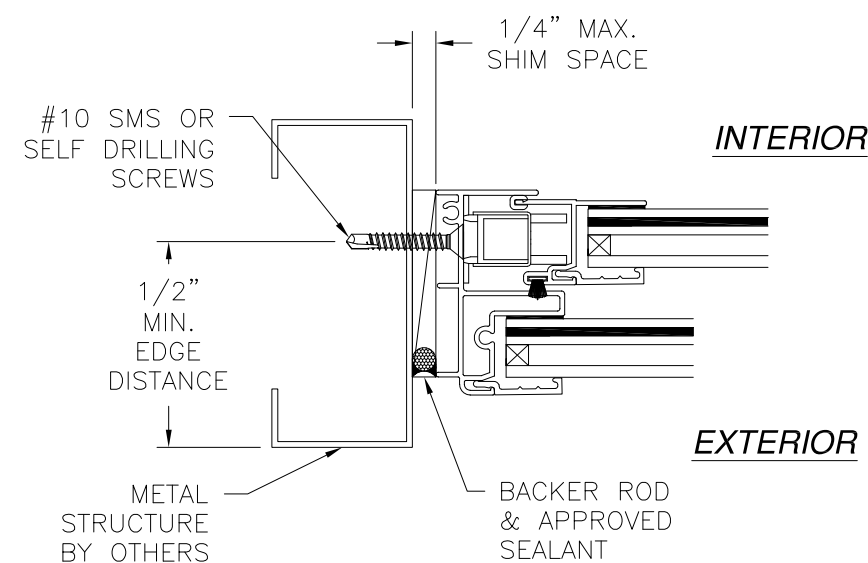
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INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION



INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

SIGNED: 02/07/2019

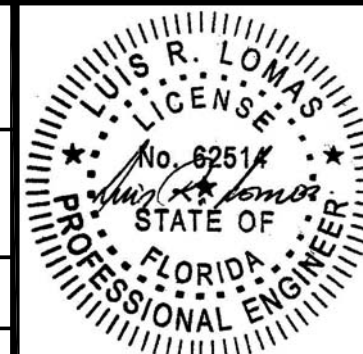
MI WINDOW AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030

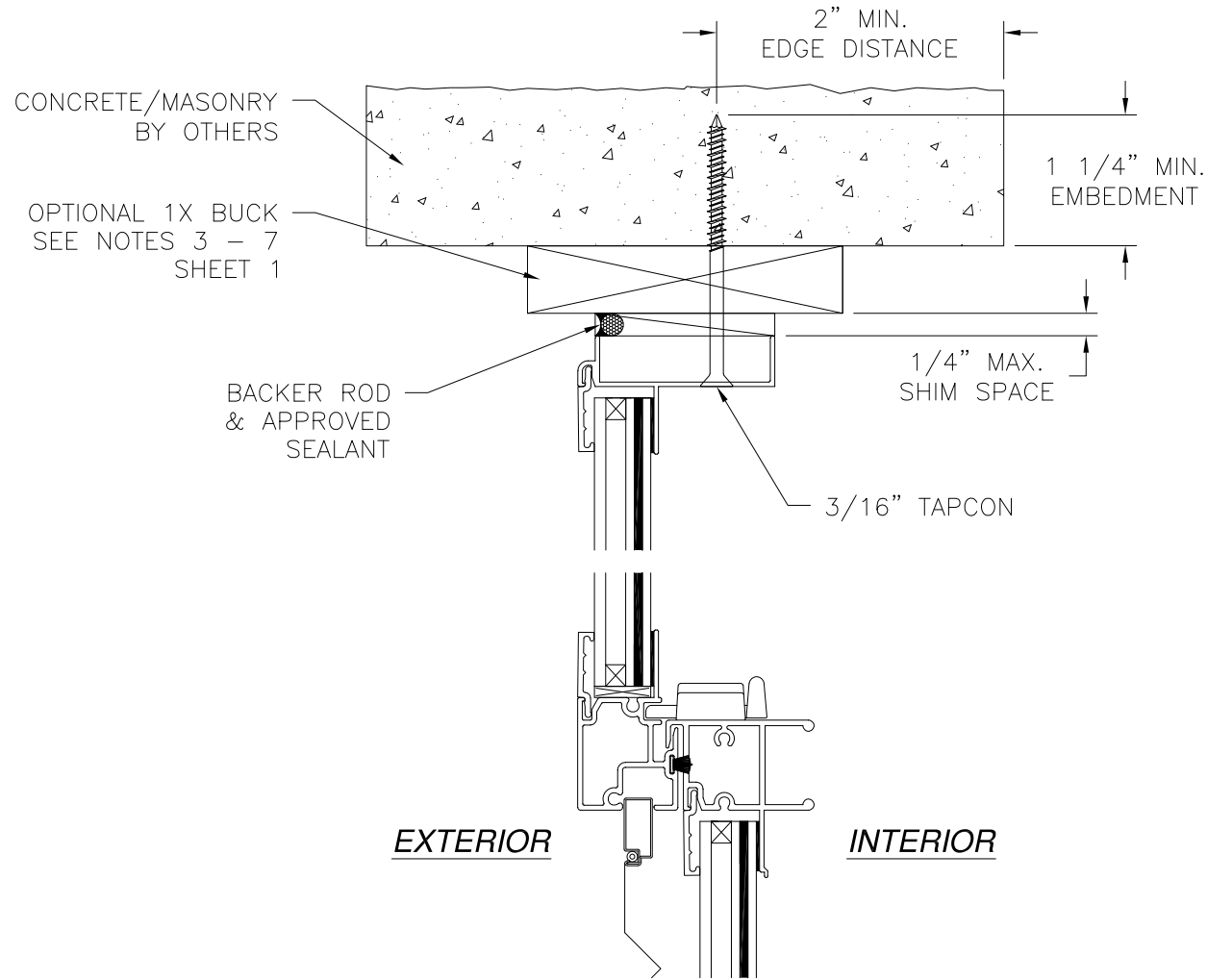
SERIES 185 ALUMINUM SINGLE HUNG WINDOW
52" X 62" – IMPACT
FINLESS INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 6 OF 10

L. ROBERTO LOMAS P.E.
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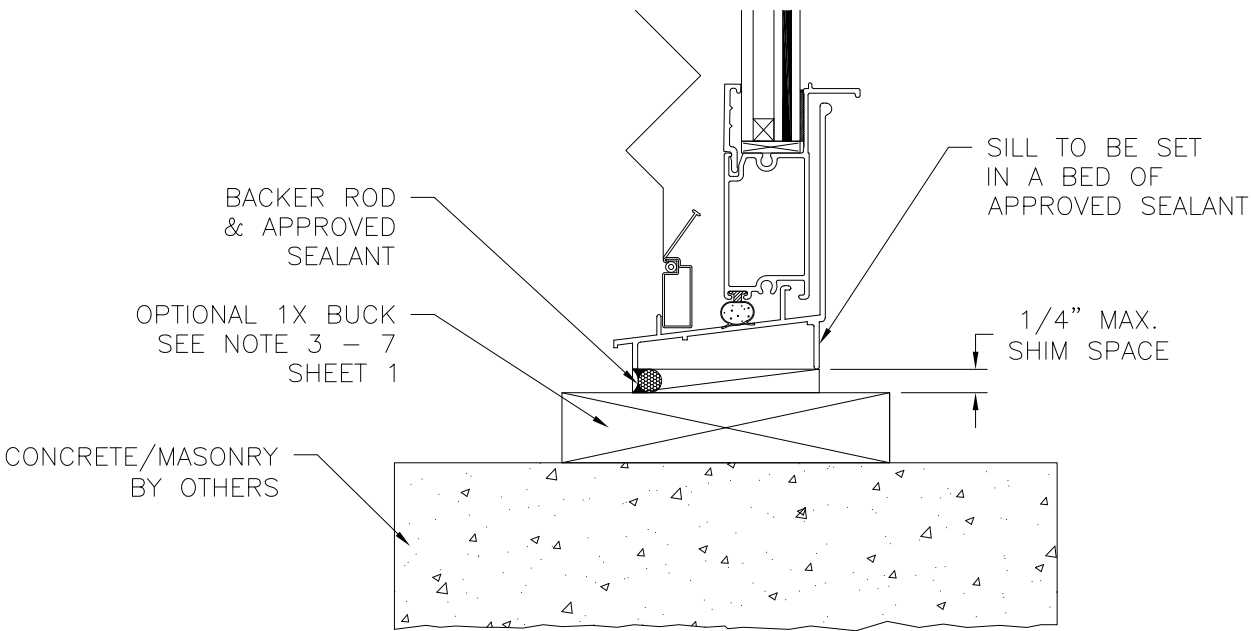


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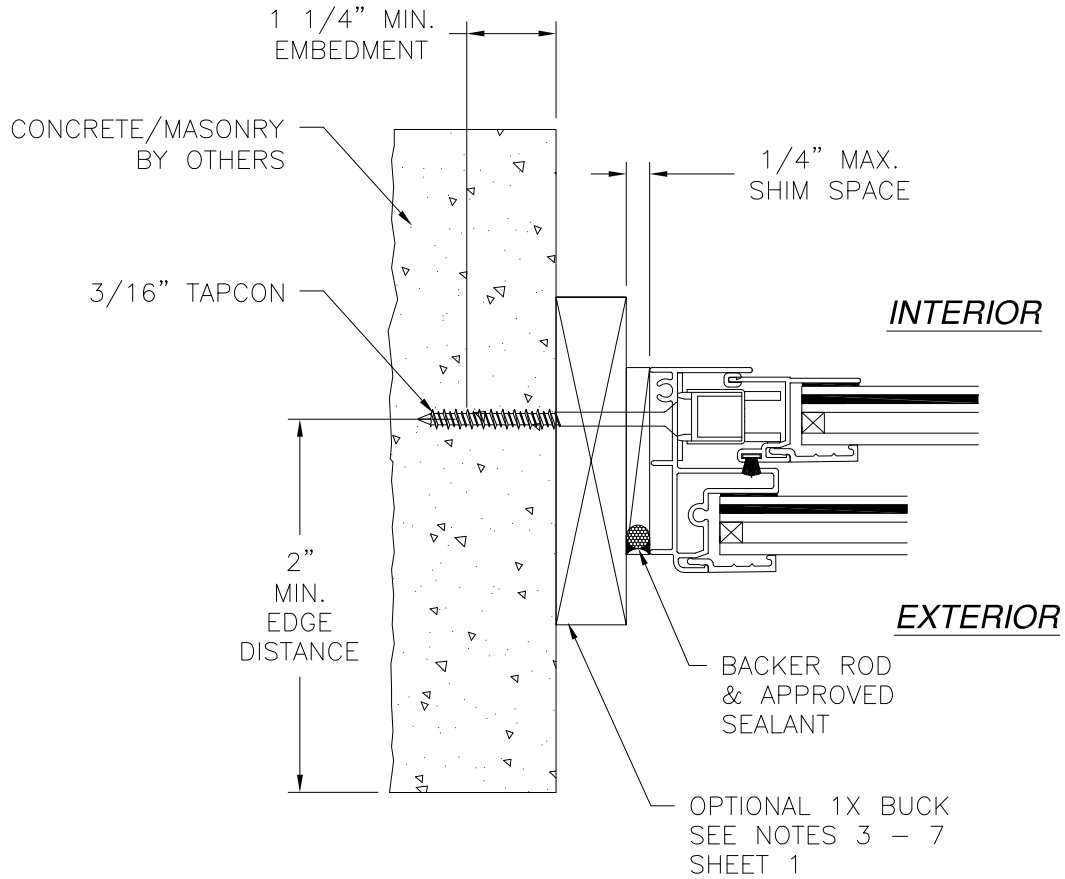
EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

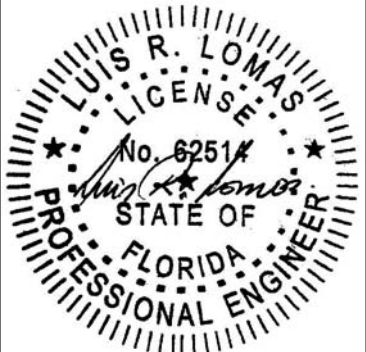


JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

NOTES:
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SIGNED: 02/07/2019

MI WINDOW AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 185 ALUMINUM SINGLE HUNG WINDOW 52" X 62" – IMPACT FINLESS INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 7 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		



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APPROVED SEALANT BEHIND FIN

#6 WOOD SCREW

3/8" MIN EDGE DISTANCE

1 1/2" MIN. EMBEDMENT

WOOD FRAMING BY OTHERS

1/4" MAX. SHIM SPACE

EXTERIOR

INTERIOR

WOOD FRAMING BY OTHERS

1 1/2" MIN. EMBEDMENT

#6 WOOD SCREW

APPROVED SEALANT BEHIND FIN

1/4" MAX SHIM SPACE

3/8" MIN EDGE DISTANCE

INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

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3/8" MIN EDGE DISTANCE

#6 WOOD SCREW

APPROVED SEALANT BEHIND FIN

1/4" MAX SHIM SPACE

1 1/2" MIN. EMBEDMENT

WOOD FRAMING BY OTHERS

VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

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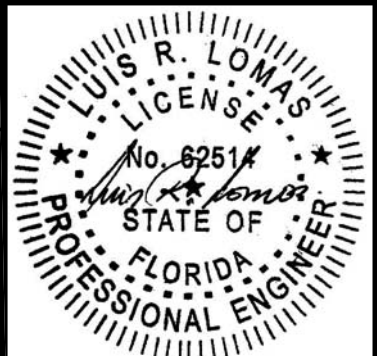
650 WEST MARKET STREET
GRATZ, PA 17030

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52" X 62" - IMPACT
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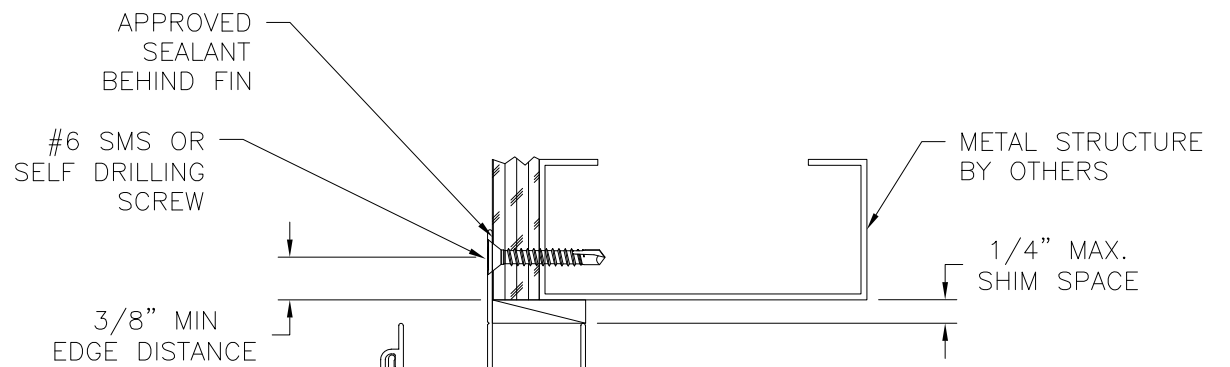
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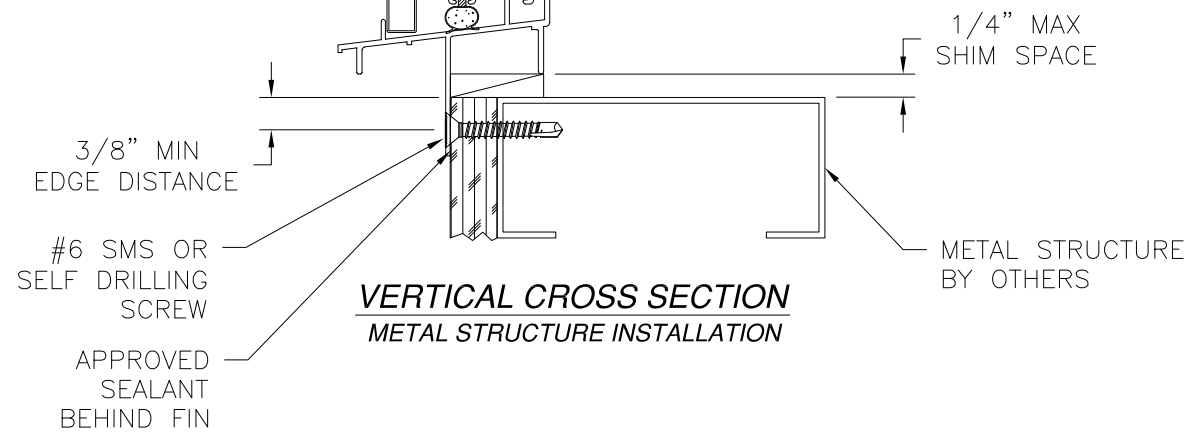


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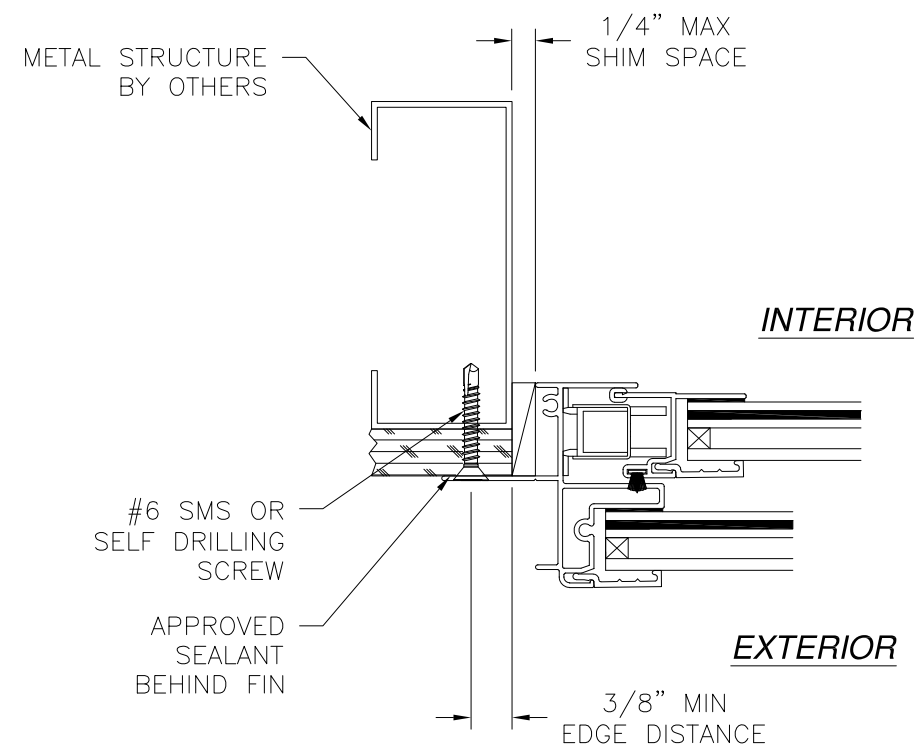


EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION



JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

- NOTES:**
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MI WINDOW AND DOORS, LLC.

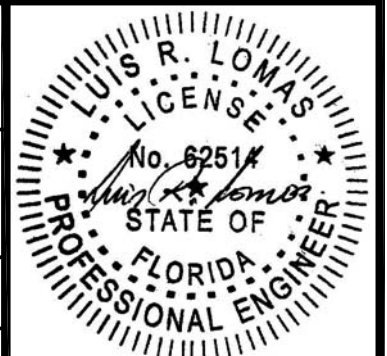
650 WEST MARKET STREET
GRATZ, PA 17030

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52" X 62" – IMPACT
FIN INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03379	REV -
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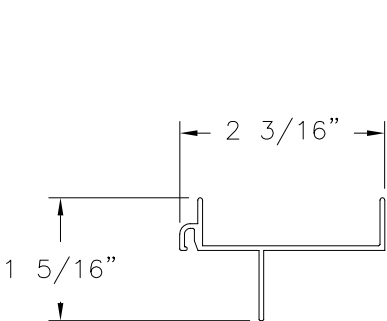
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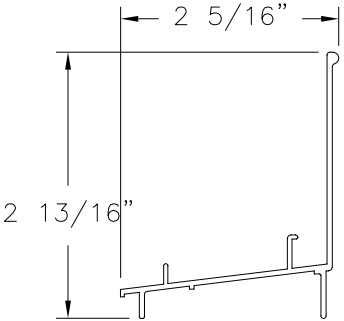


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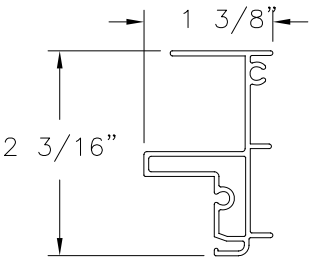
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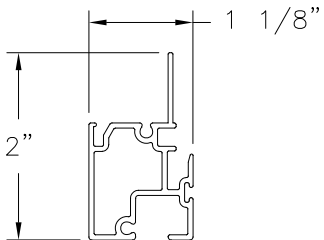
FINLESS FRAME HEAD
 CM-18553
 ALUMINUM 6063-T5 .050" THICK



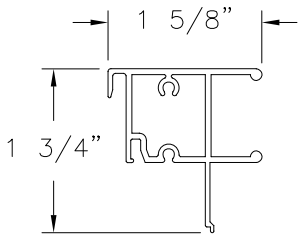
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 CM-18554
 ALUMINUM 6063-T5 .055" THICK



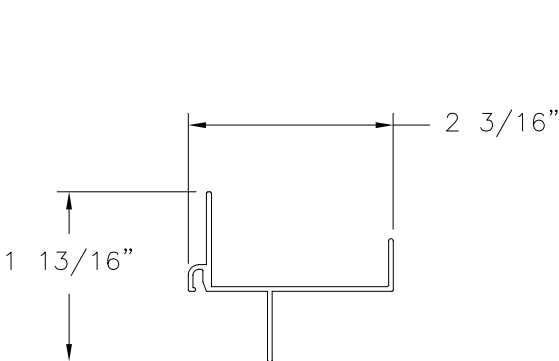
FINLESS FRAME JAMB
 CM-18513
 ALUMINUM 6063-T5 .050" THICK



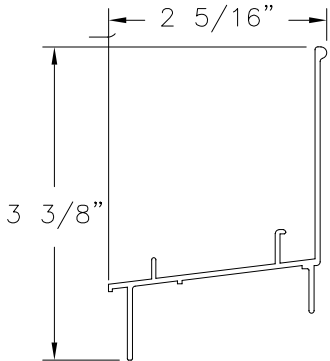
MEETING RAIL
 CM-18504
 ALUMINUM 6063-T5 .055" THICK



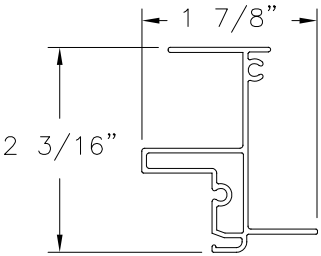
LOCK RAIL/STILE
 CM-18505
 ALUMINUM 6063-T5 .062" THICK



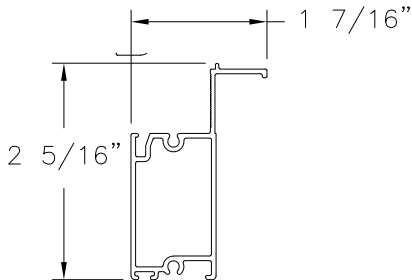
FLANGE FRAME HEAD
 CM-18501
 ALUMINUM 6063-T5 .050" THICK



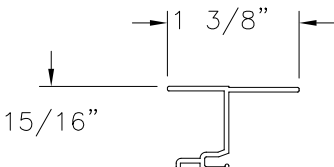
FLANGE FRAME SILL
 CM-18502
 ALUMINUM 6063-T5 .055" THICK



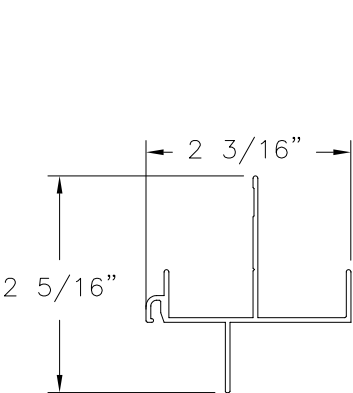
FLANGE FRAME JAMB
 CM-18503
 ALUMINUM 6063-T5 .050" THICK



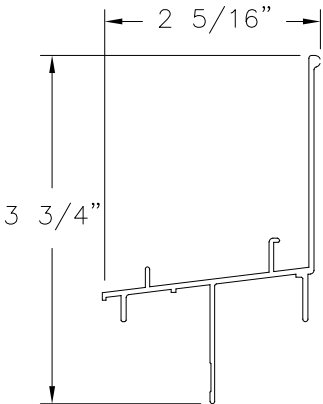
SASH BOTTOM RAIL
 CM-18555
 ALUMINUM 6063-T5 .050" THICK



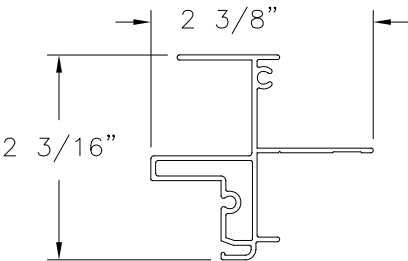
SASH STILE
 CM-18507
 ALUMINUM 6063-T5 .050" THICK



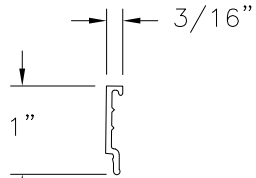
FIN FRAME HEAD
 CM-18508
 ALUMINUM 6063-T5 .050" THICK



FIN FRAME SILL
 CM-18509
 ALUMINUM 6063-T5 .055" THICK



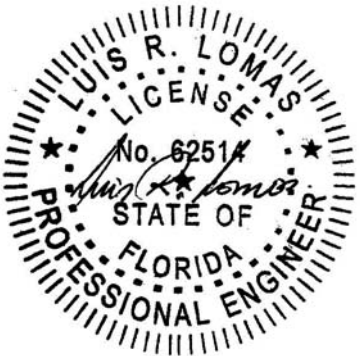
FIN FRAME JAMB
 CM-18510
 ALUMINUM 6063-T5 .050" THICK



GLAZING BEAD
 V-663
 RIGID PVC .070" THICK

MI WINDOW AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030		
SERIES 185 ALUMINUM SINGLE HUNG WINDOW 52" X 62" – IMPACT COMPONENTS		
DRAWN: A.R.	DWG NO. 08-03379	REV -
SCALE NTS	DATE 01/15/19	SHEET 10 OF 10
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 02/07/2019



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