

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.

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
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: ALUMINUM 6063-T5 AND 6063-T6.
11. UNITS MUST BE GLAZED PER ASTM E1300.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.

13. 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.
14. 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.
15. 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.
16. ALL FASTENERS TO BE CORROSION RESISTANT.
17. 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:
 - 17.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 17.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 17.3. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 17.4. METAL STRUCTURE: STEEL 18GA (.048") FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 FU=30KSI .125" THICK MINIMUM

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION
3 - 8	INSTALLATION DETAILS
9	COMPONENTS

BOYD ALUMINUM MANUFACTURING
3248 EAST DIVISION
SPRINGFIELD, MO 65801

3500 SERIES DOUBLE HUNG WINDOW
NON-IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08-03604

REV
A

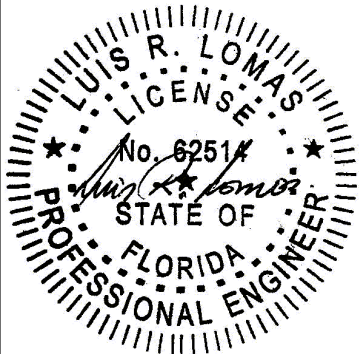
SCALE NTS

DATE 08/24/2020

SHEET 1 OF 9

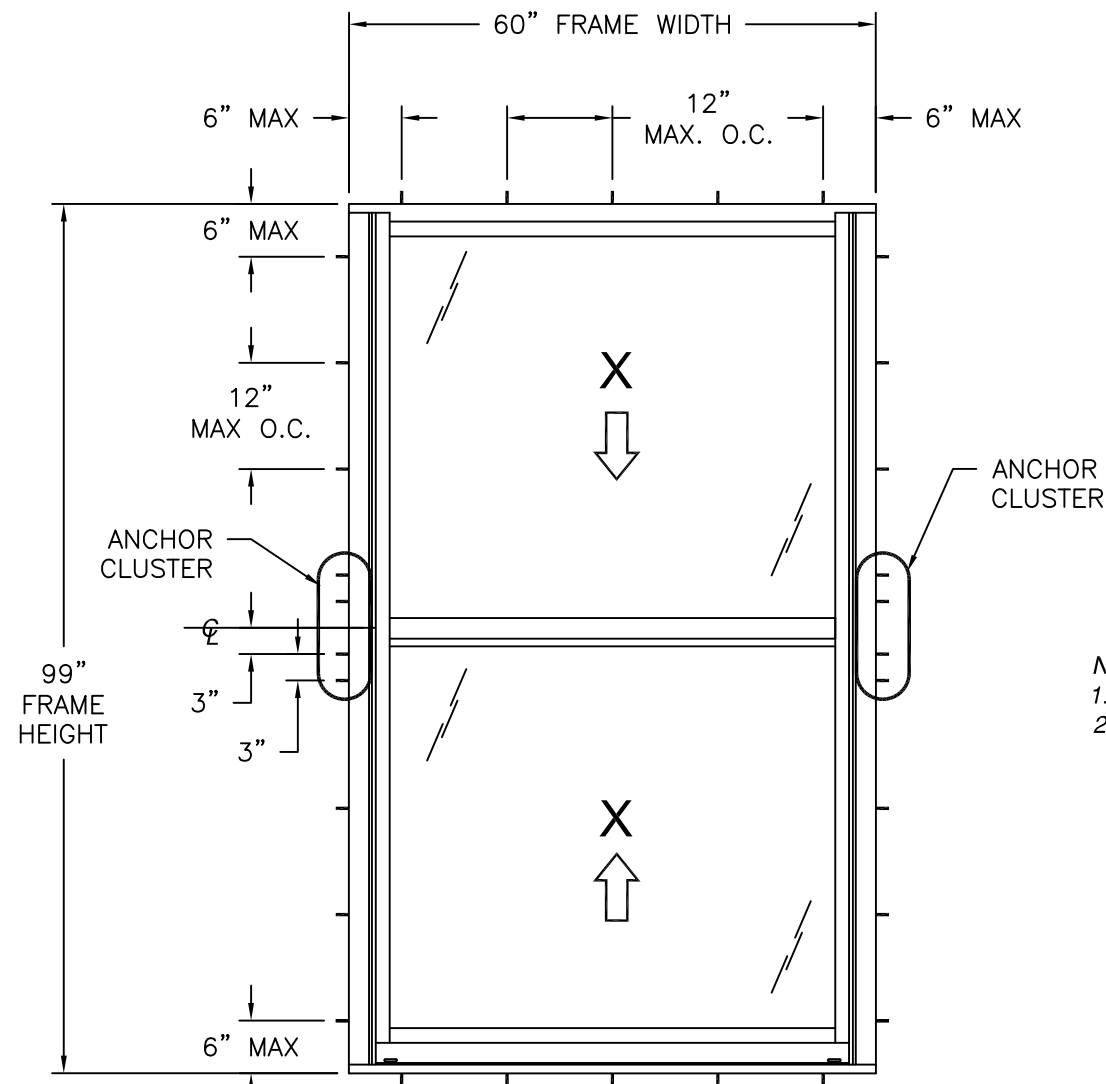
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 07/21/2026



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.



- NOTES:
1. SASH SIZE: 55 1/2" X 48 3/16"
 2. D.L.O.: 50 3/4" X 43 7/16"

DESIGN PRESSURE RATING	IMPACT RATING
+80.0/-85.0PSF	NONE

WHERE WATER PENETRATION RESISTANCE IS REQUIRED

DESIGN PRESSURE RATING	IMPACT RATING
±85.0PSF	NONE

WHERE WATER PENETRATION RESISTANCE IS NOT REQUIRED

60" X 99" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 41.25 FT²

HARDWARE SCHEDULE	
A.	(2) SWEEP TYPE LATCH AT 13" FROM EACH JAMB
B.	(1) ULTRA-LIFT BALANCES AT EACH SASH STILE
C.	(1) BALANCE SHOW AT BOTTOM OF EACH SASH STILE

BOYD ALUMINUM MANUFACTURING

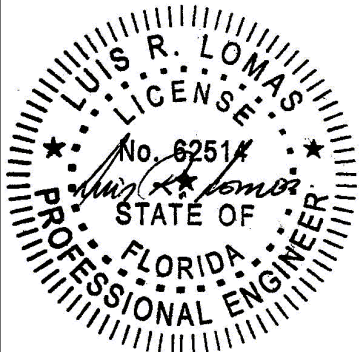
3248 EAST DIVISION
SPRINGFIELD, MO 65801

3500 SERIES DOUBLE HUNG WINDOW
NON-IMPACT
ELEVATION

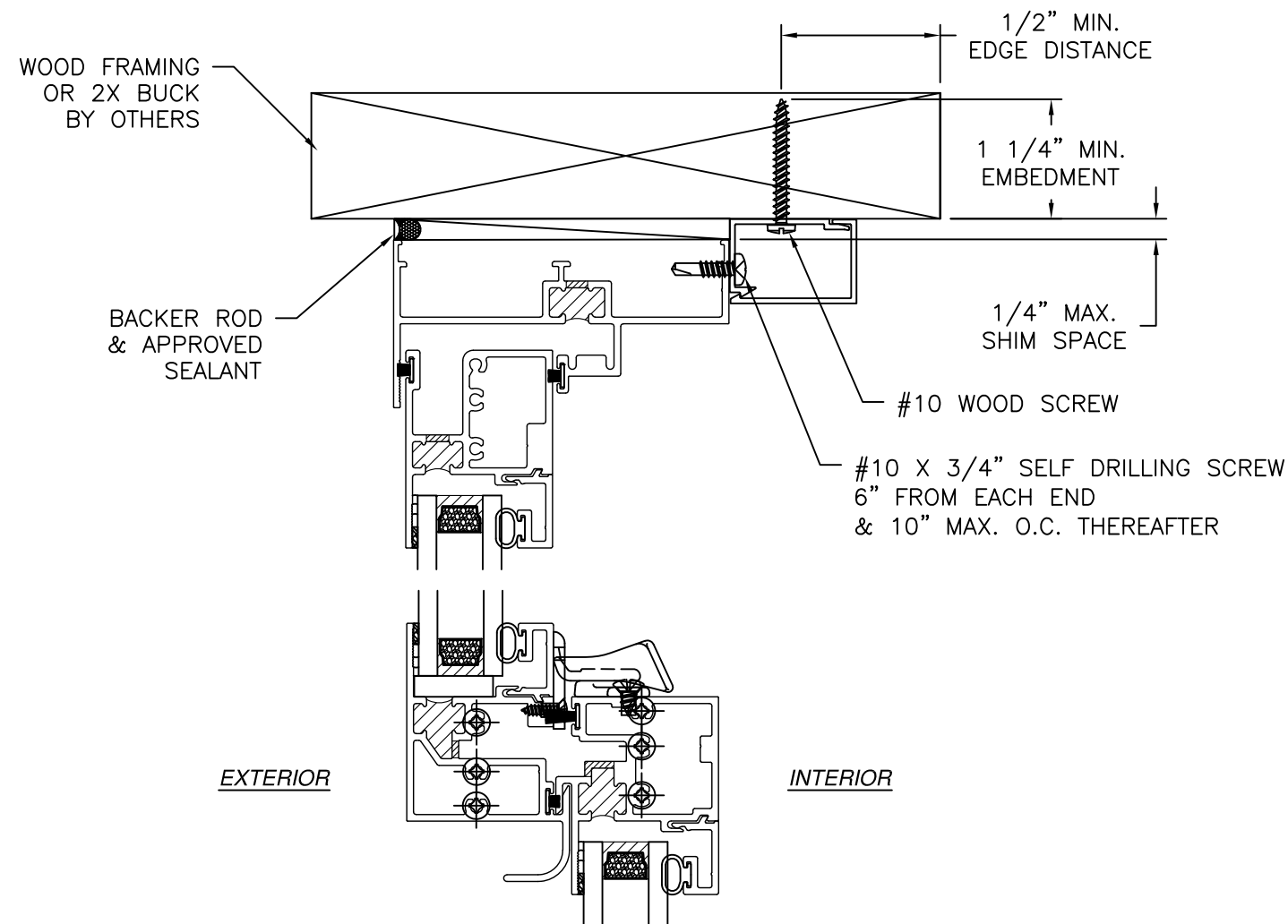
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 2 OF 9

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

SIGNED: 07/21/2026

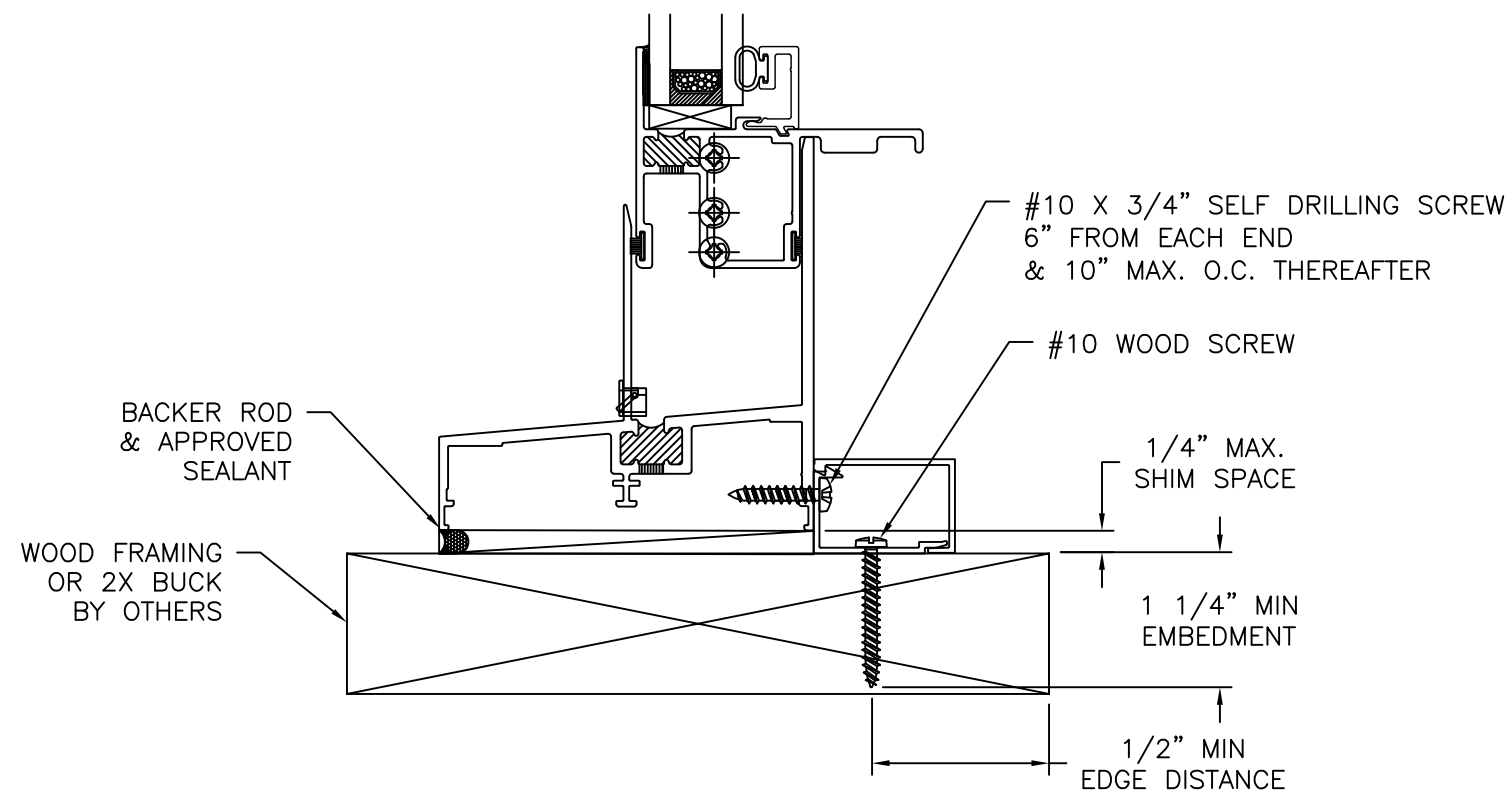


Luis R. Lomas P.E.
FL No.: 62514

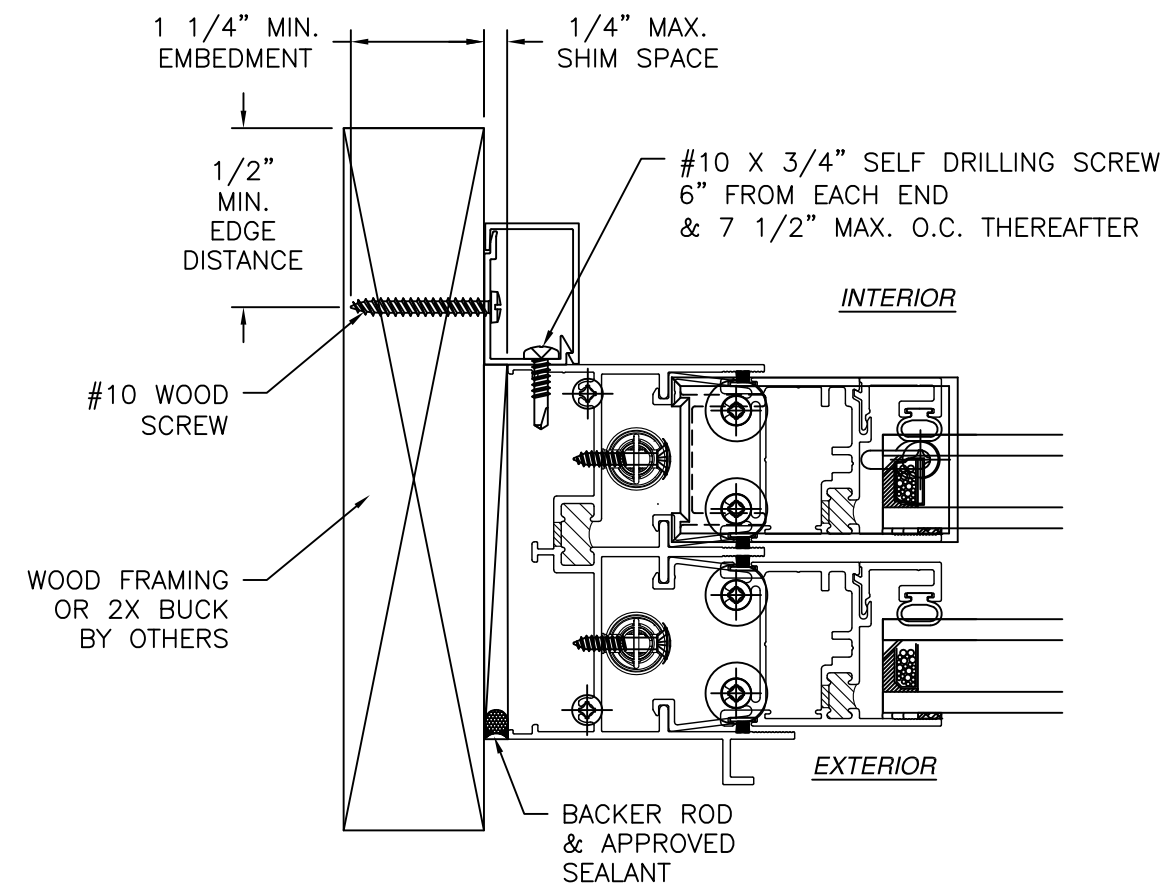


EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

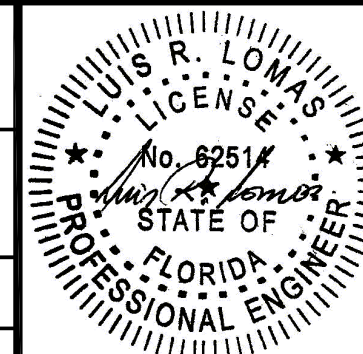
NOTES:

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

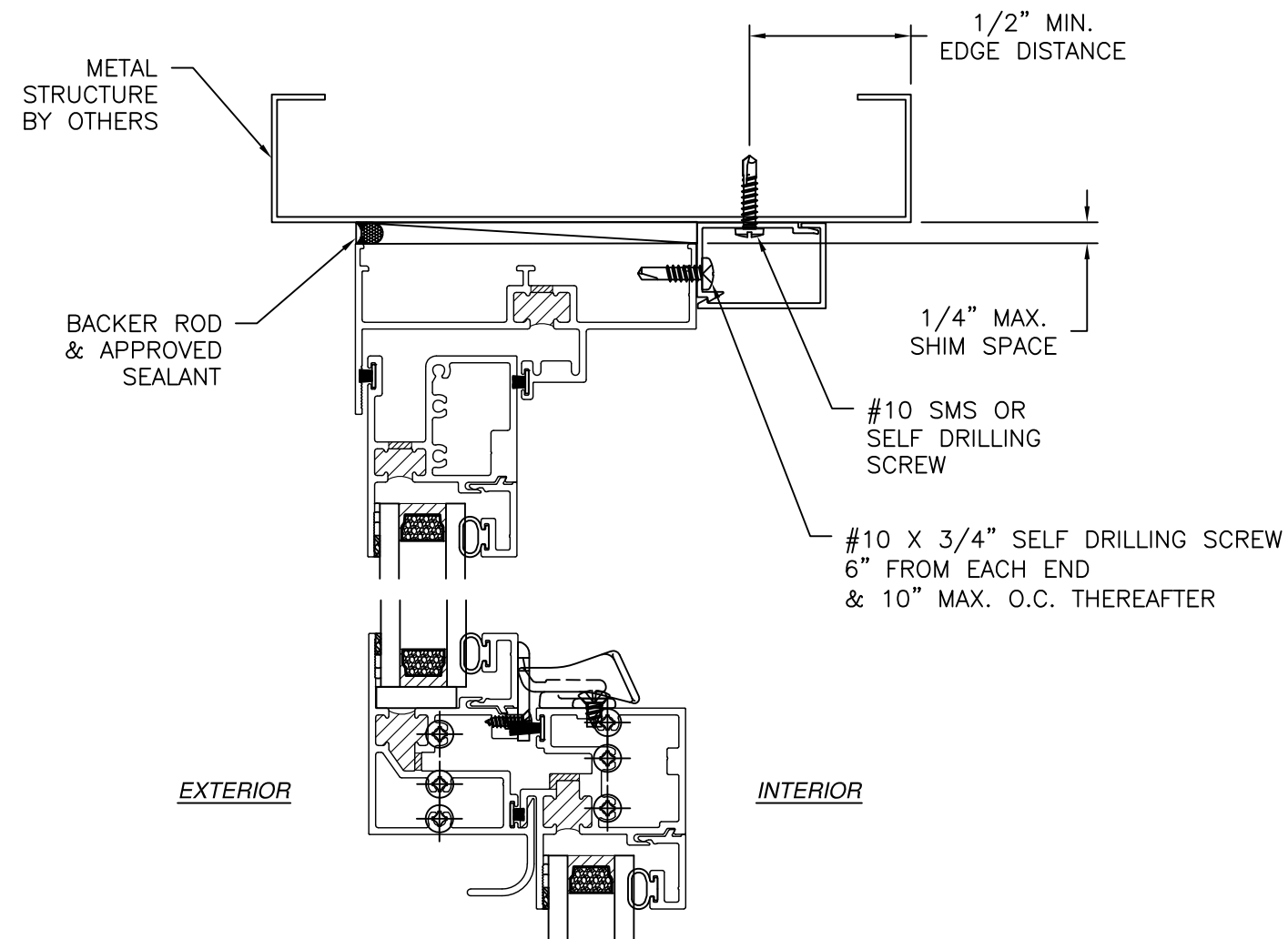
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.

BOYD ALUMINUM MANUFACTURING		
3248 EAST DIVISION SPRINGFIELD, MO 65801		
3500 SERIES DOUBLE HUNG WINDOW NON-IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 3 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 07/21/2026

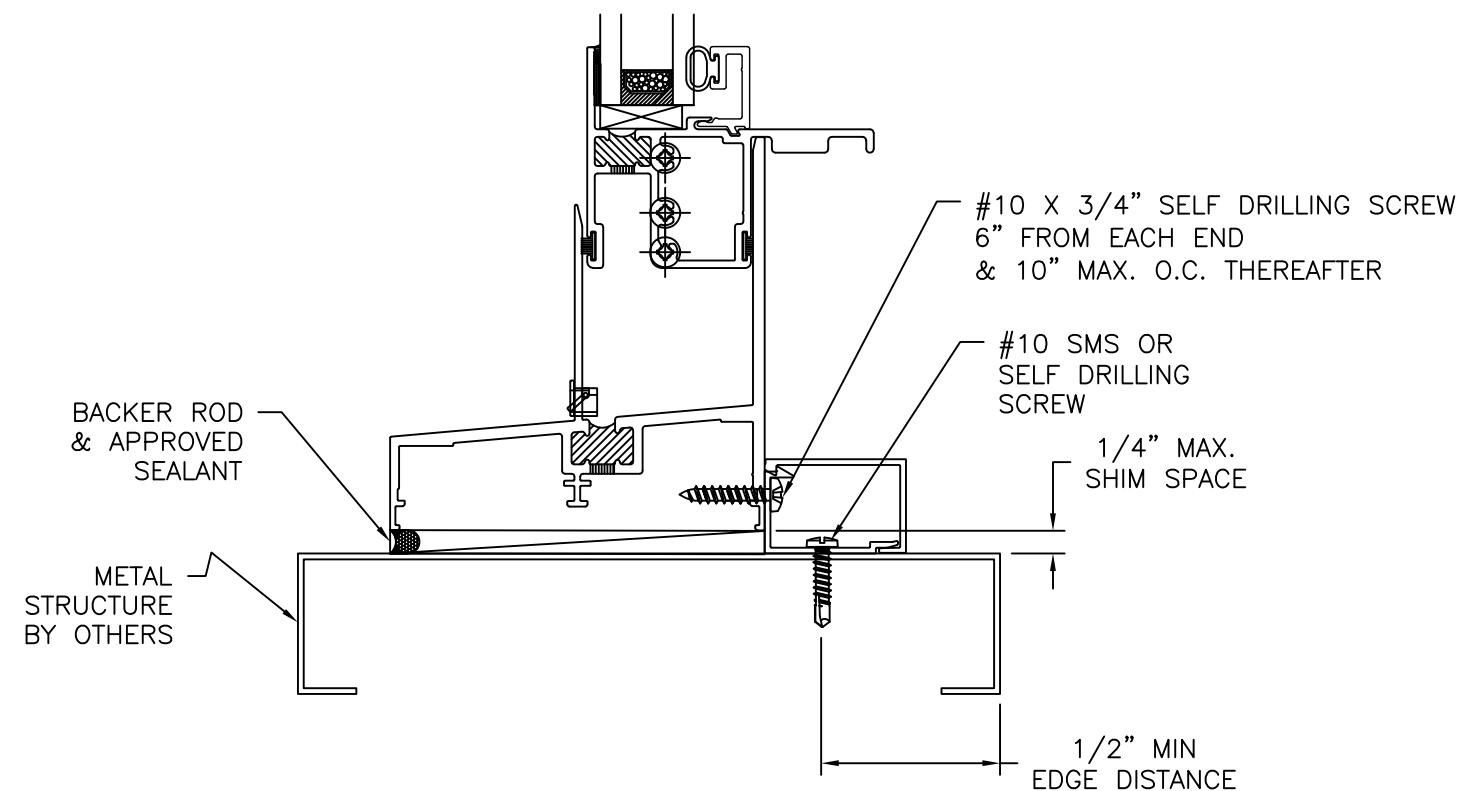


Luis R. Lomas P.E.
FL No.: 62514



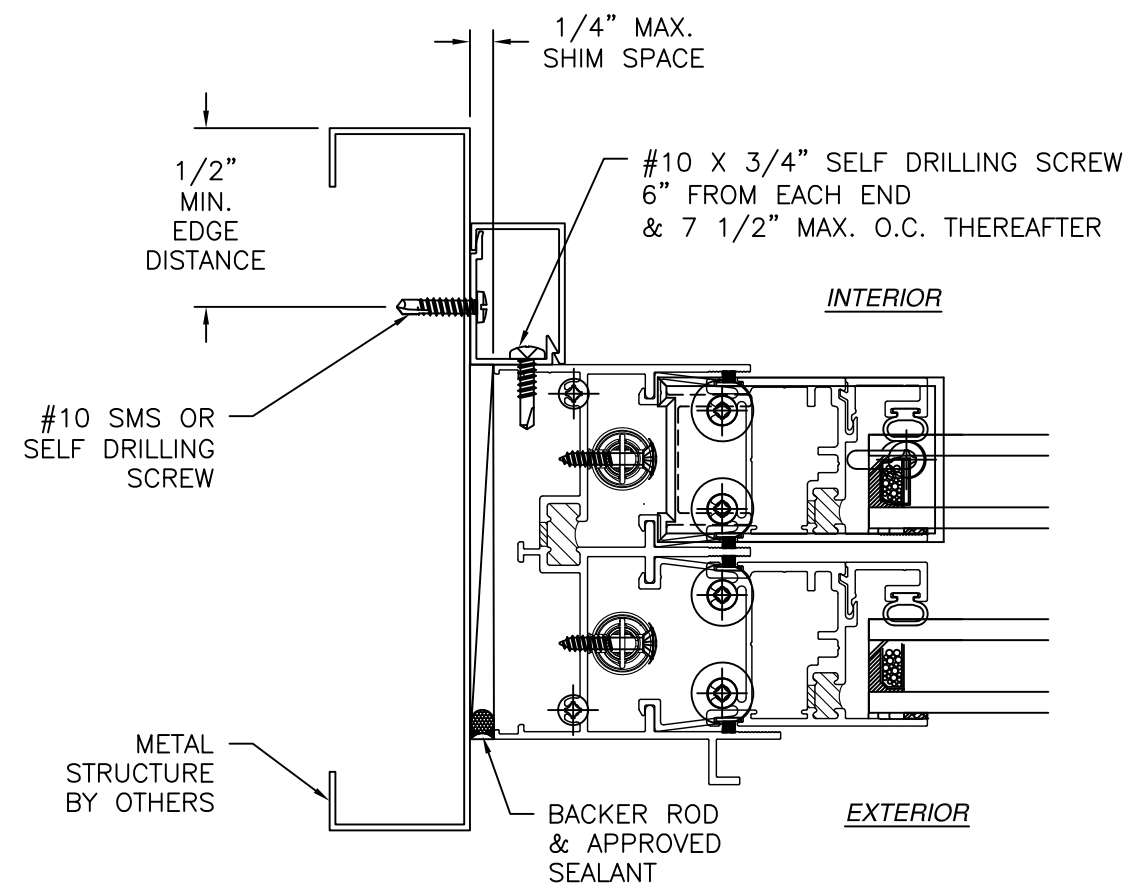
EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.



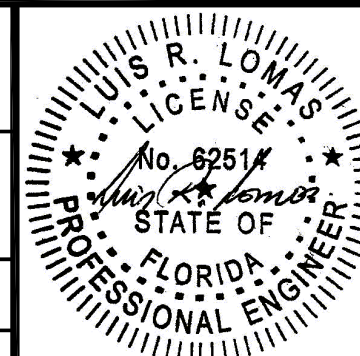
JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

NOTES:

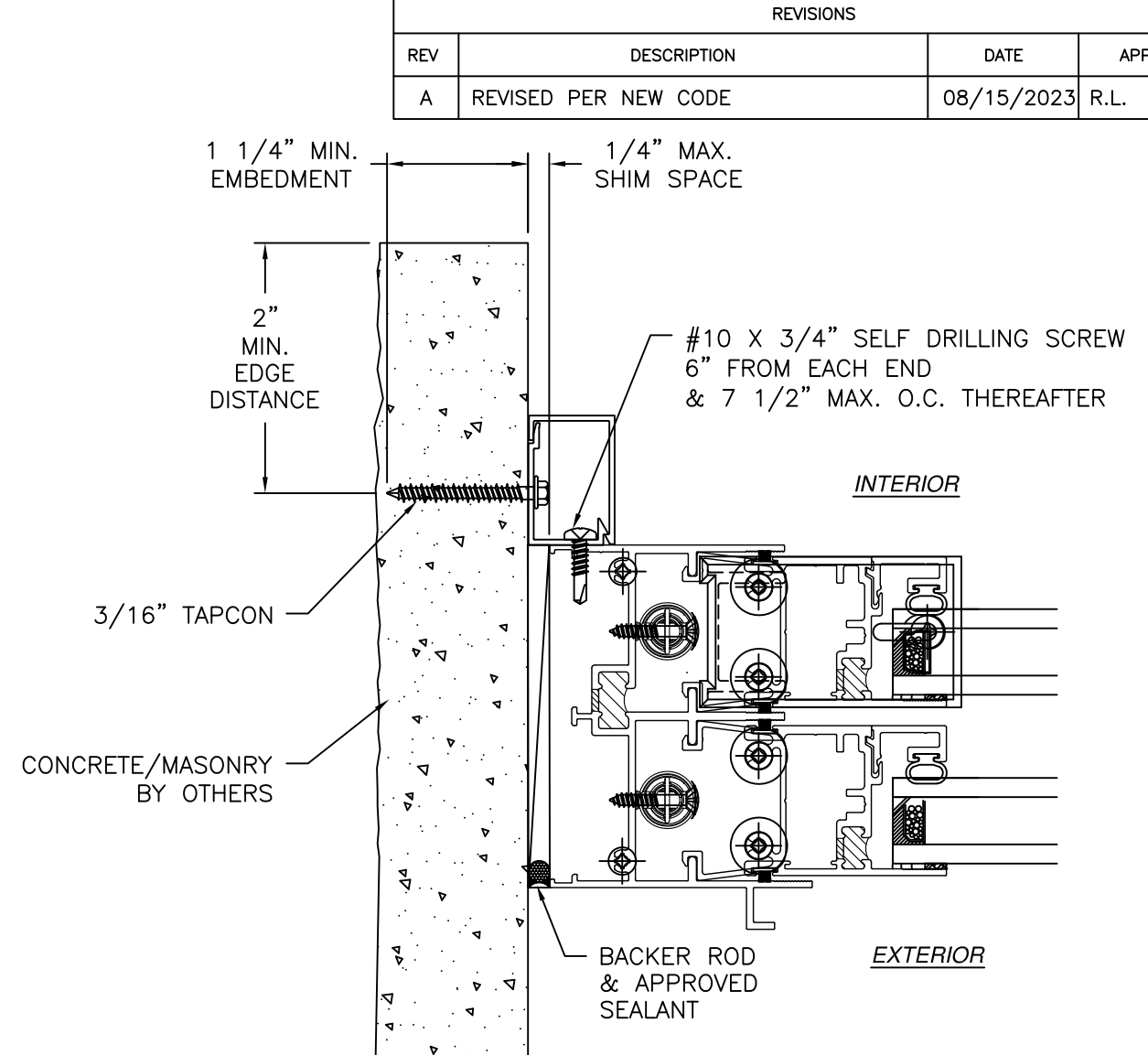
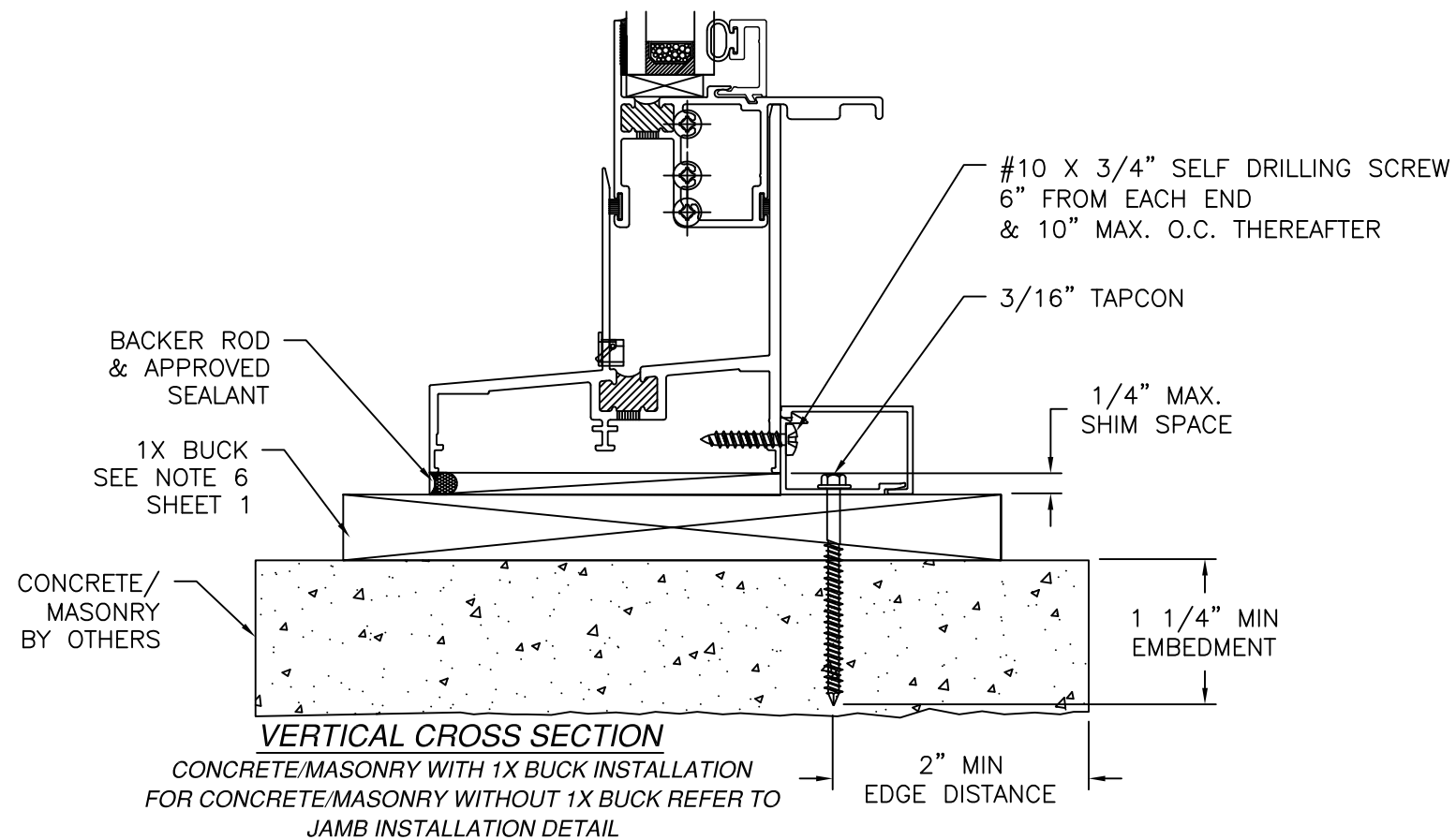
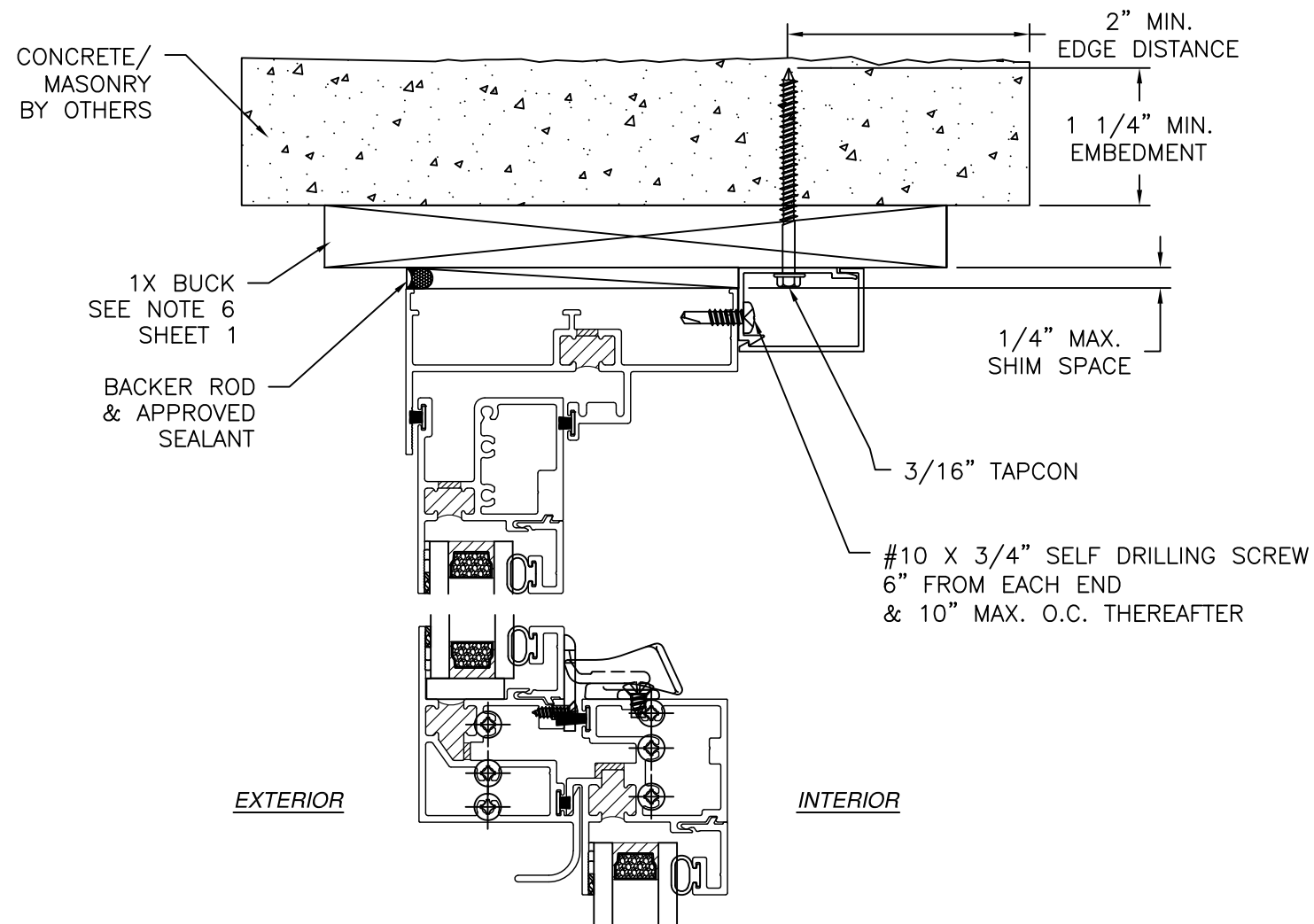
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 07/21/2026

BOYD ALUMINUM MANUFACTURING 3248 EAST DIVISION SPRINGFIELD, MO 65801		
3500 SERIES DOUBLE HUNG WINDOW NON-IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 4 OF 9
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

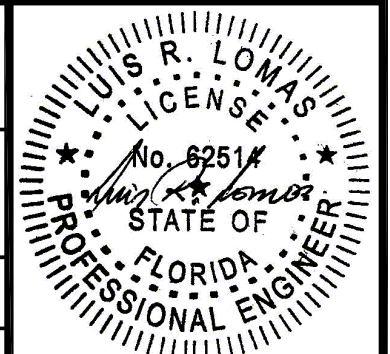


JAMB INSTALLATION DETAIL
CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY INSTALLATION WITH 1X BUCK REFER TO
HEAD AND SILL INSTALLATION DETAILS

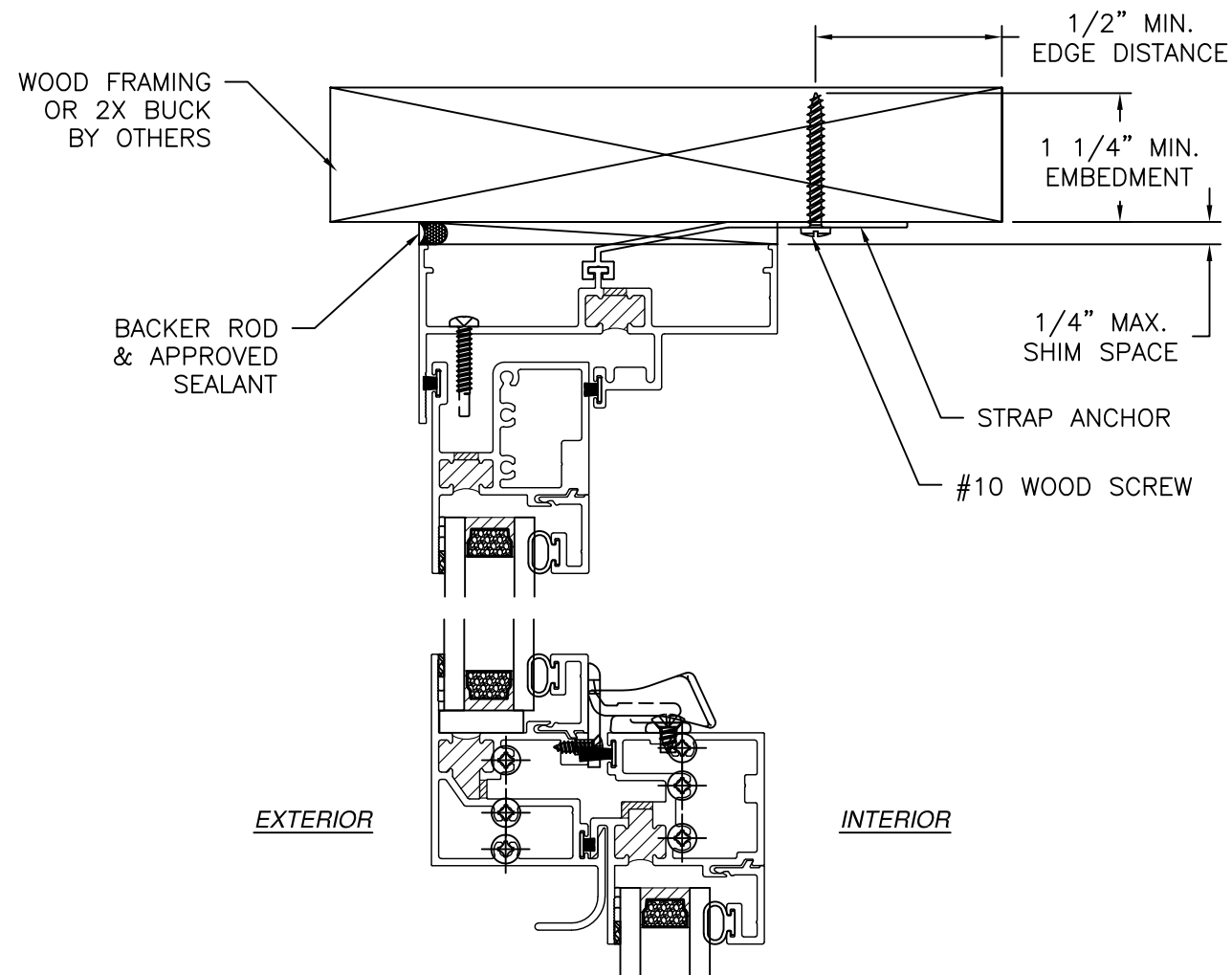
- NOTES:
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 07/21/2026

BOYD ALUMINUM MANUFACTURING		
3248 EAST DIVISION SPRINGFIELD, MO 65801		
3500 SERIES DOUBLE HUNG WINDOW NON-IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 5 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

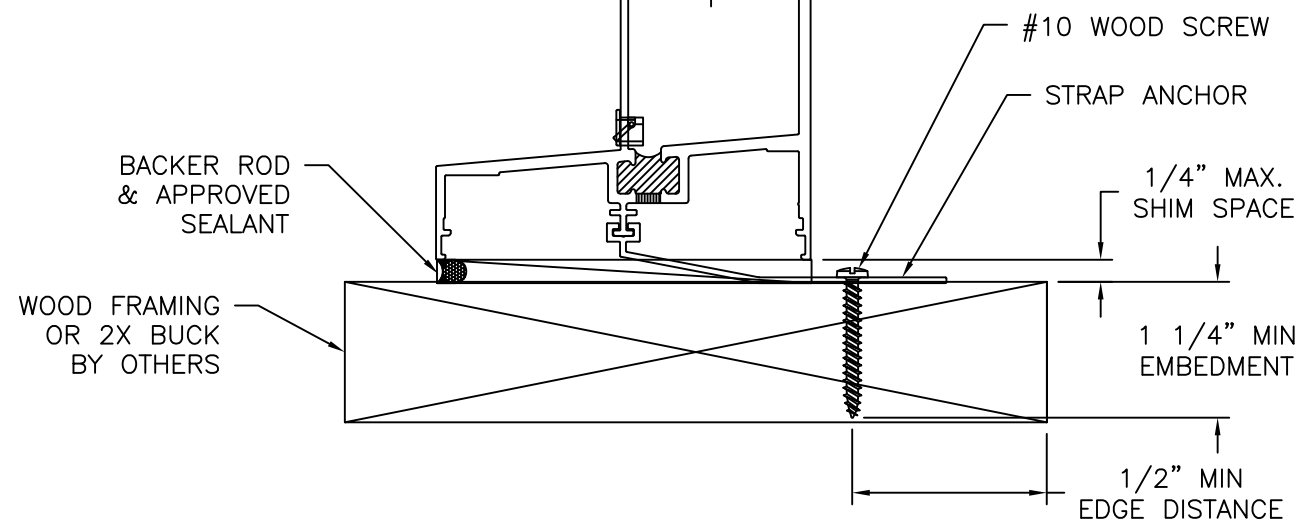


Luis R. Lomas P.E.
FL No.: 62514



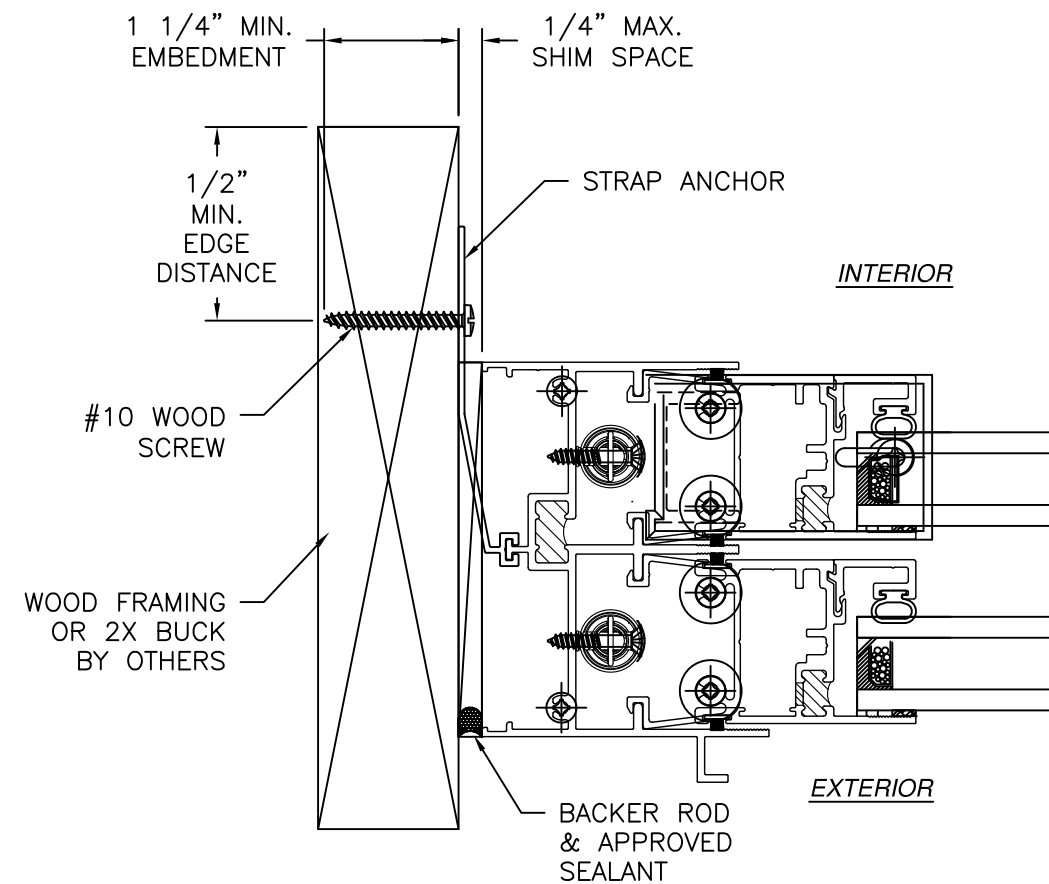
EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.



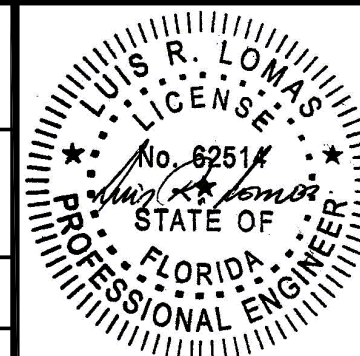
JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

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

SIGNED: 07/21/2026

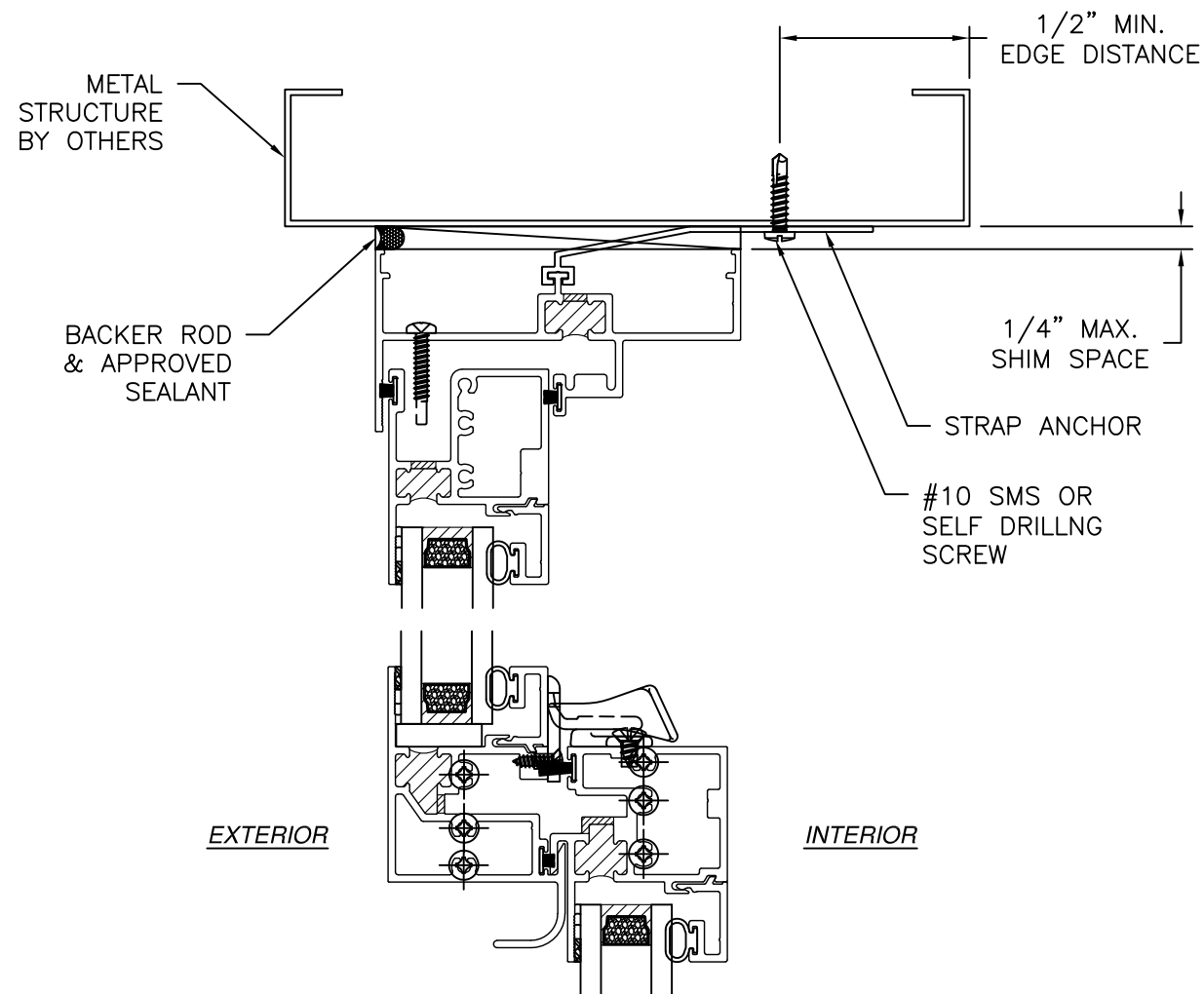
BOYD ALUMINUM MANUFACTURING 3248 EAST DIVISION SPRINGFIELD, MO 65801		
3500 SERIES DOUBLE HUNG WINDOW NON-IMPACT INSTALLATION DETAILS W/STRAP ANCHOR		
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 6 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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

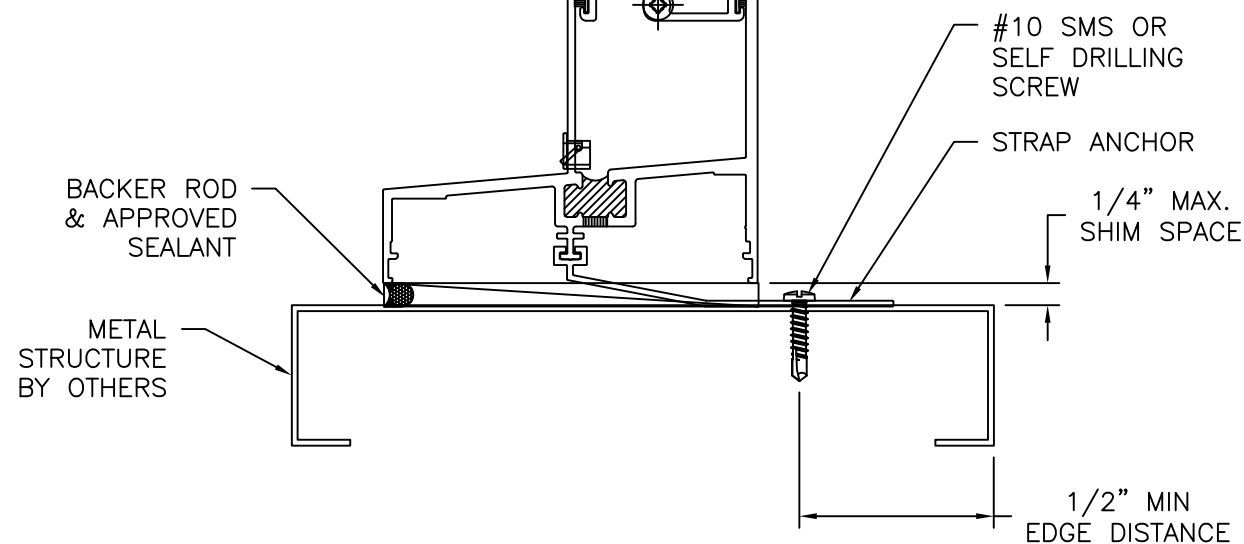
REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.

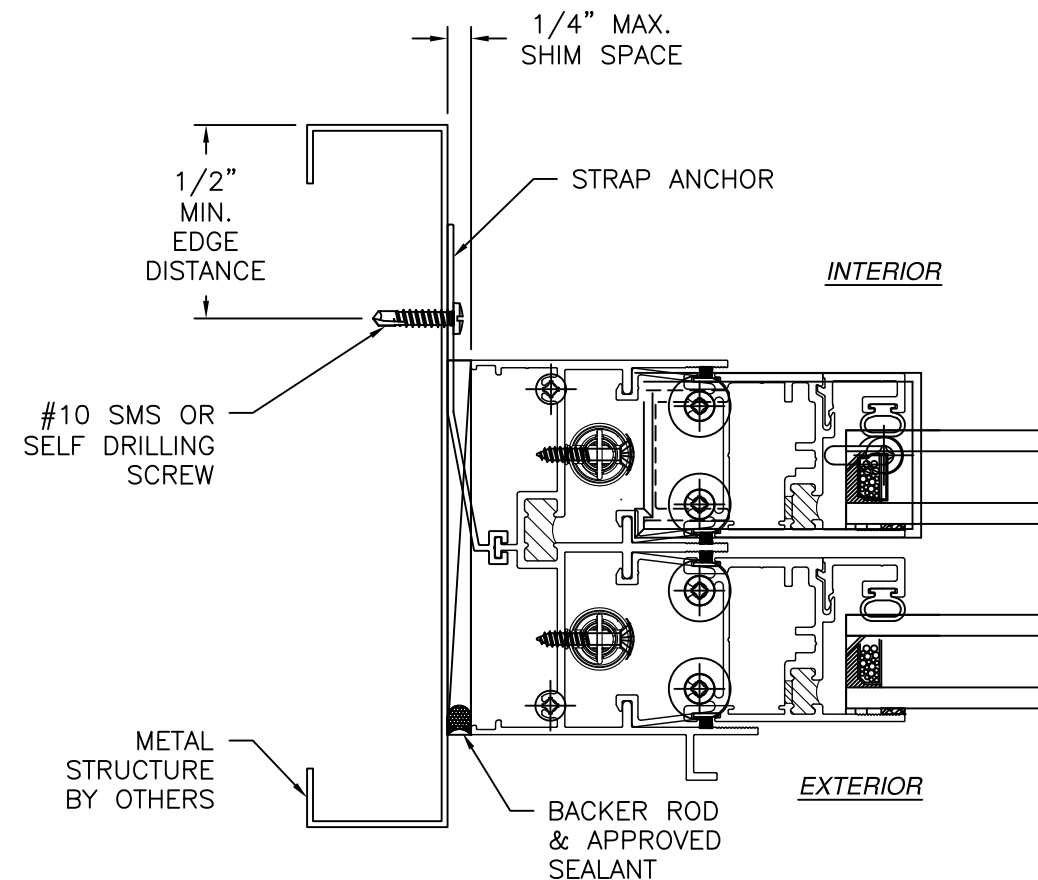


EXTERIOR

INTERIOR



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION



INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
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: 07/21/2026

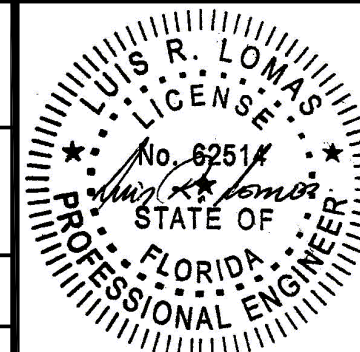
BOYD ALUMINUM MANUFACTURING

3248 EAST DIVISION
SPRINGFIELD, MO 65801

3500 SERIES DOUBLE HUNG WINDOW
NON-IMPACT
INSTALLATION DETAILS W/STRAP ANCHOR

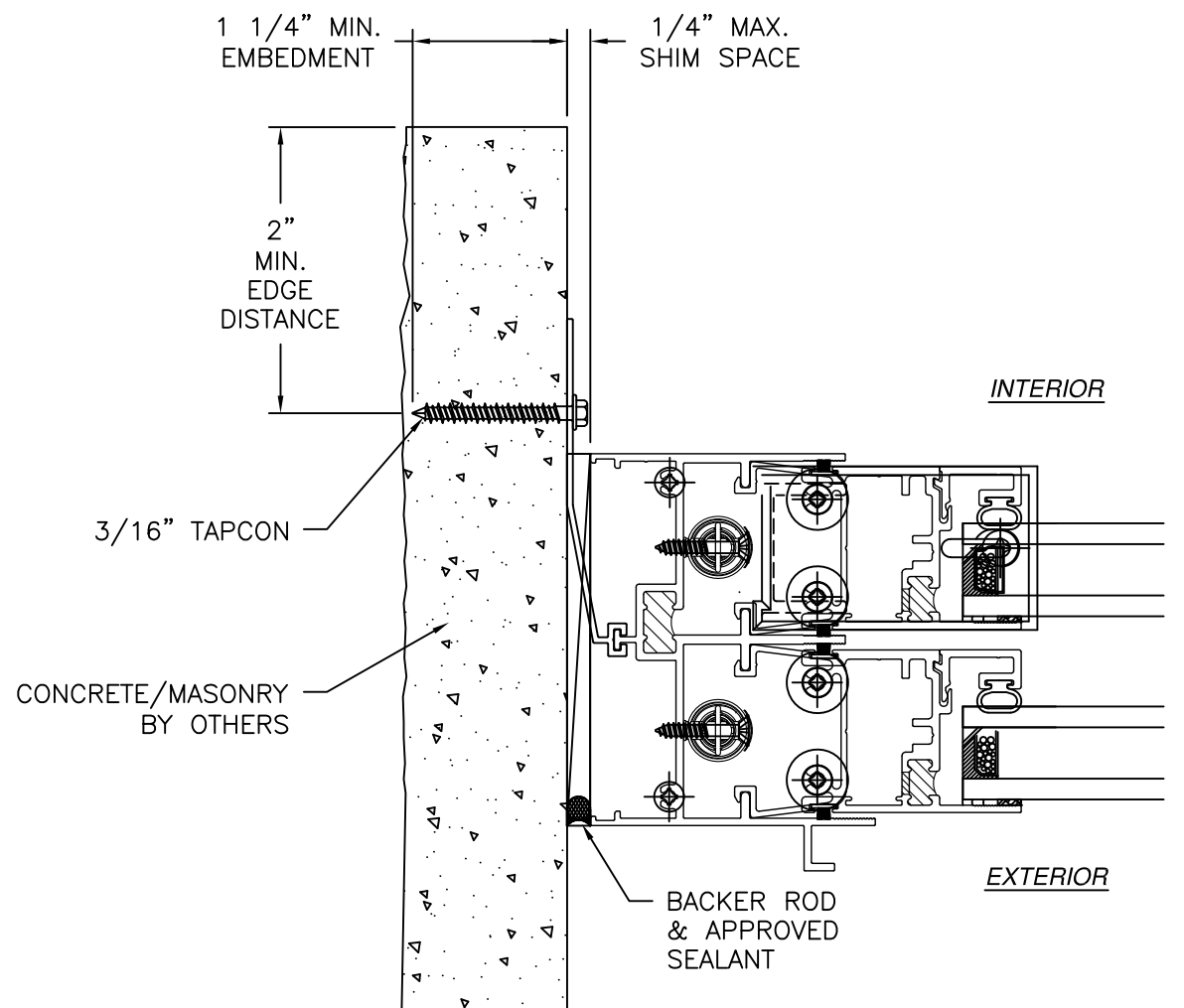
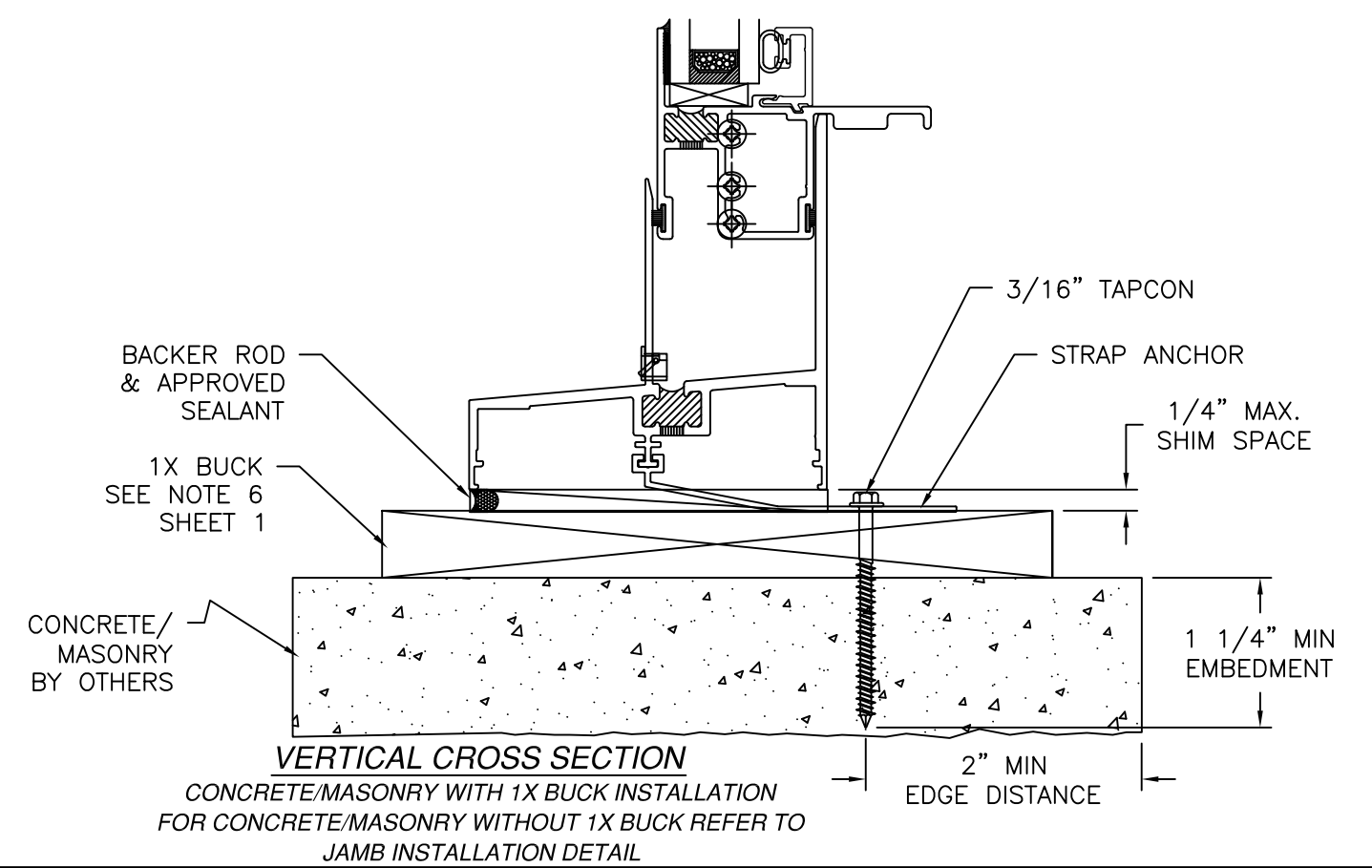
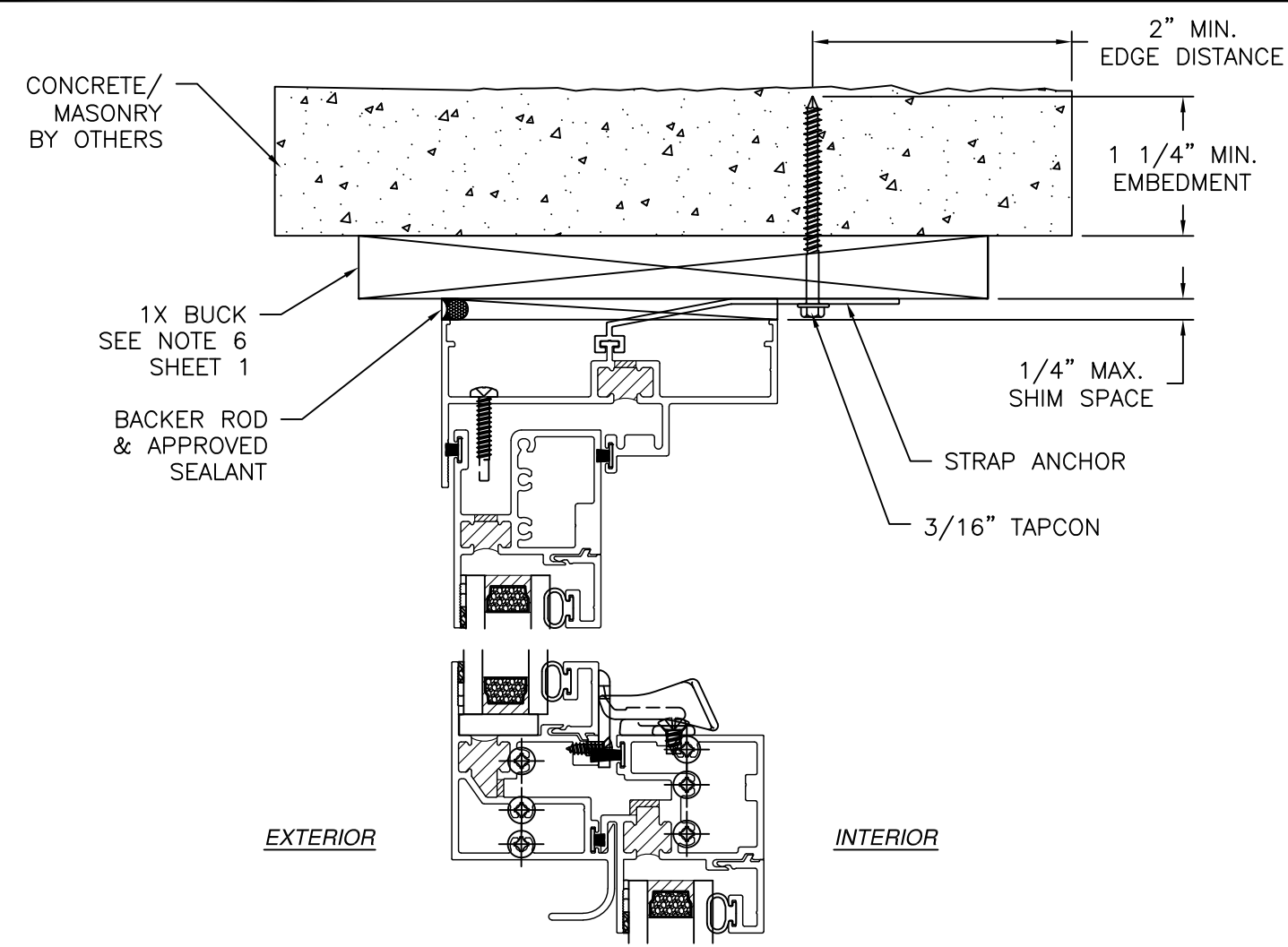
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 7 OF 9

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
A	REVISED PER NEW CODE	08/15/2023	R.L.



JAMB INSTALLATION DETAIL
CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY INSTALLATION WITH 1X BUCK REFER TO
HEAD AND SILL INSTALLATION DETAILS

- 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: 07/21/2026

BOYD ALUMINUM MANUFACTURING
3248 EAST DIVISION
SPRINGFIELD, MO 65801

3500 SERIES DOUBLE HUNG WINDOW
NON-IMPACT
INSTALLATION DETAILS W/STRAP ANCHOR

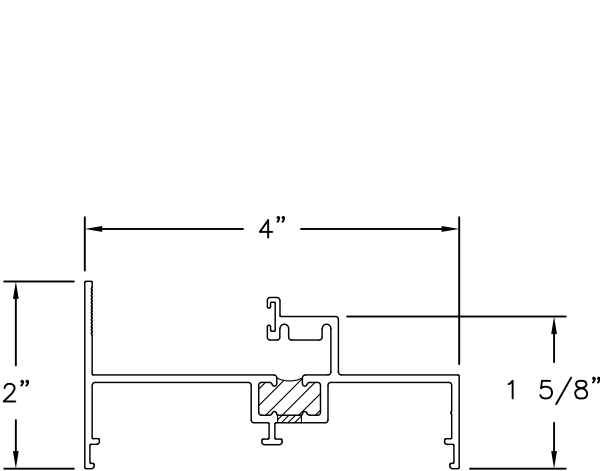
DRAWN: A.R.	DWG NO. 08-03604	REV A
SCALE NTS	DATE 08/24/2020	SHEET 8 OF 9

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

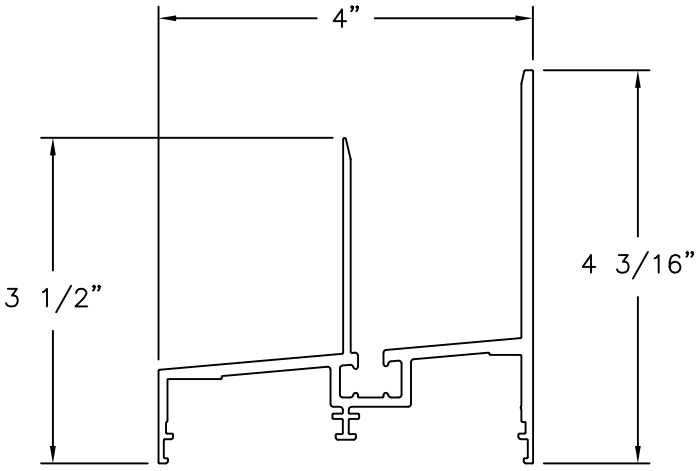
LUIS R. LOMAS
LICENSED PROFESSIONAL ENGINEER
No. 62514
STATE OF FLORIDA

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

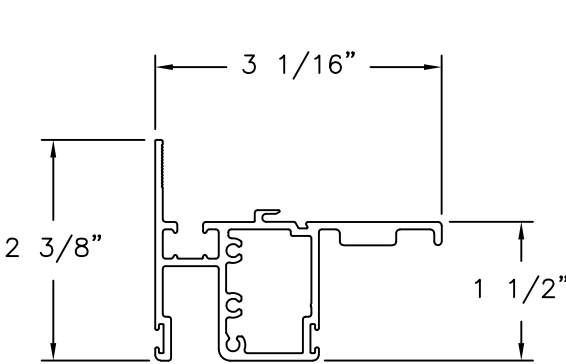
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW CODE	08/15/2023	R.L.



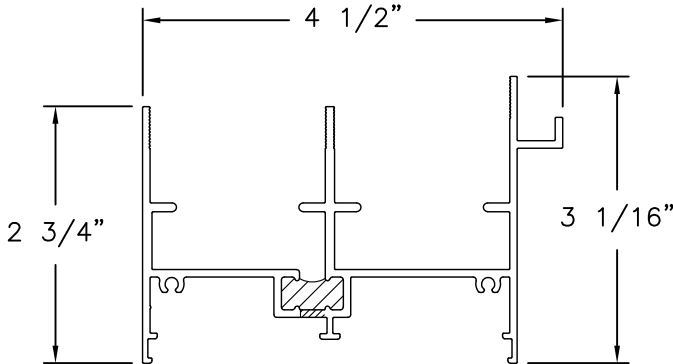
HEAD (BAM-1000)
ALUMINUM 6063-T6



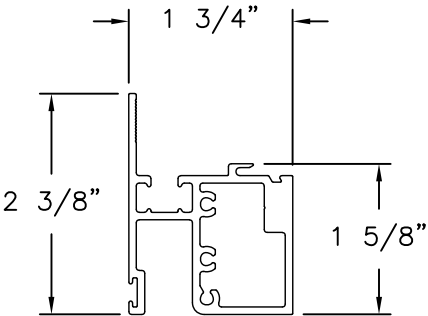
SILL (BAM-1002)
ALUMINUM 6063-T6



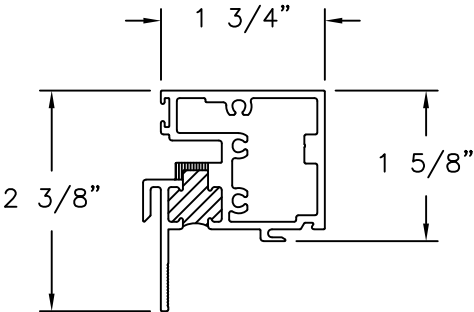
BOTTOM RAIL (BAM-1008)
ALUMINUM 6063-T6



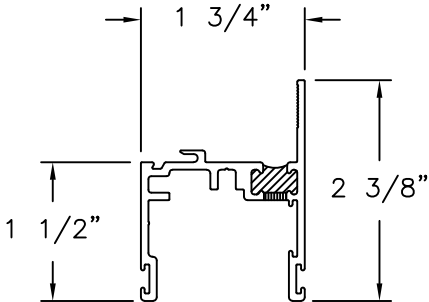
JAMB (BAM-1004)
ALUMINUM 6063-T6



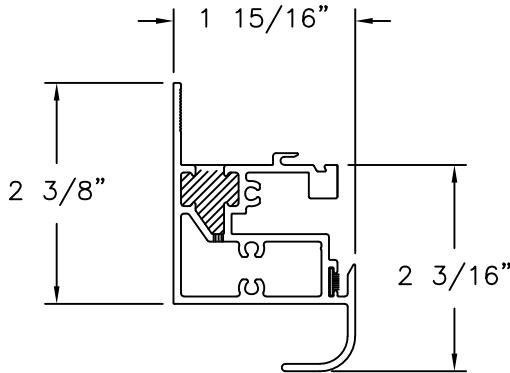
TOP RAIL (BAM-1005)
ALUMINUM 6063-T6



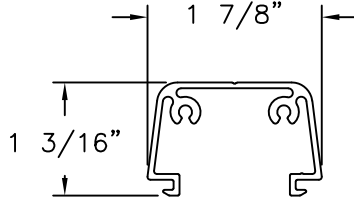
LOCK RAIL (BAM-1007)
ALUMINUM 6063-T6



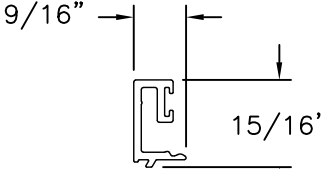
STILE (BAM-1009)
ALUMINUM 6063-T6



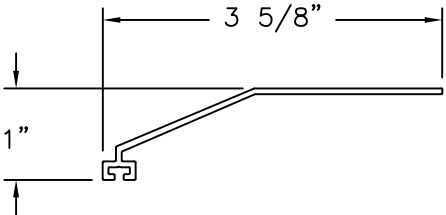
KEEPER RAIL (BAM-1006)
ALUMINUM 6063-T6



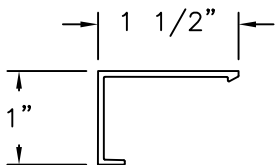
SASH STOP (BAM-1018)
ALUMINUM 6063-T6



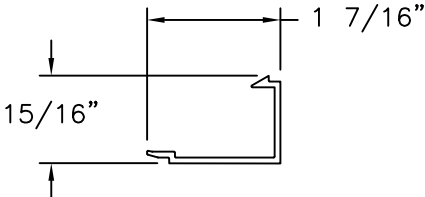
GLAZING BEAD (BAM-1020)
ALUMINUM 6063-T6



STRAP ANCHOR (BAM-857)
ALUMINUM 6063-T5



TRIM COVER (WLB-2004)
ALUMINUM 6063-T5



TRIM BASE (WLB-2005)
ALUMINUM 6063-T5

BOYD ALUMINUM MANUFACTURING

3248 EAST DIVISION
SPRINGFIELD, MO 65801

3500 SERIES DOUBLE HUNG WINDOW
NON-IMPACT
COMPONENTS

DRAWN: A.R.

DWG NO. 08-03604

REV A

SCALE NTS

DATE 08/24/2020

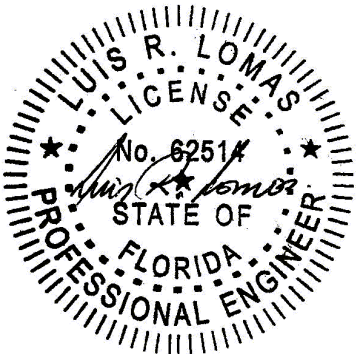
SHEET 9 OF 9

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

SIGNED: 07/21/2026



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