

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	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 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: EXTRUDED RIGID PVC.
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 #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.
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 #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.
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 1/8" THICK MINIMUM

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

MI WINDOWS AND DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
STEEL REINFORCED – NON-IMPACT 52" X 84"
NOTES

DRAWN:
V.L.

DWG NO.
08-01514

REV
D

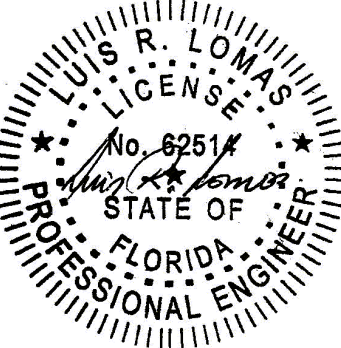
SCALE NTS

DATE 04/09/12

SHEET 1 OF 9

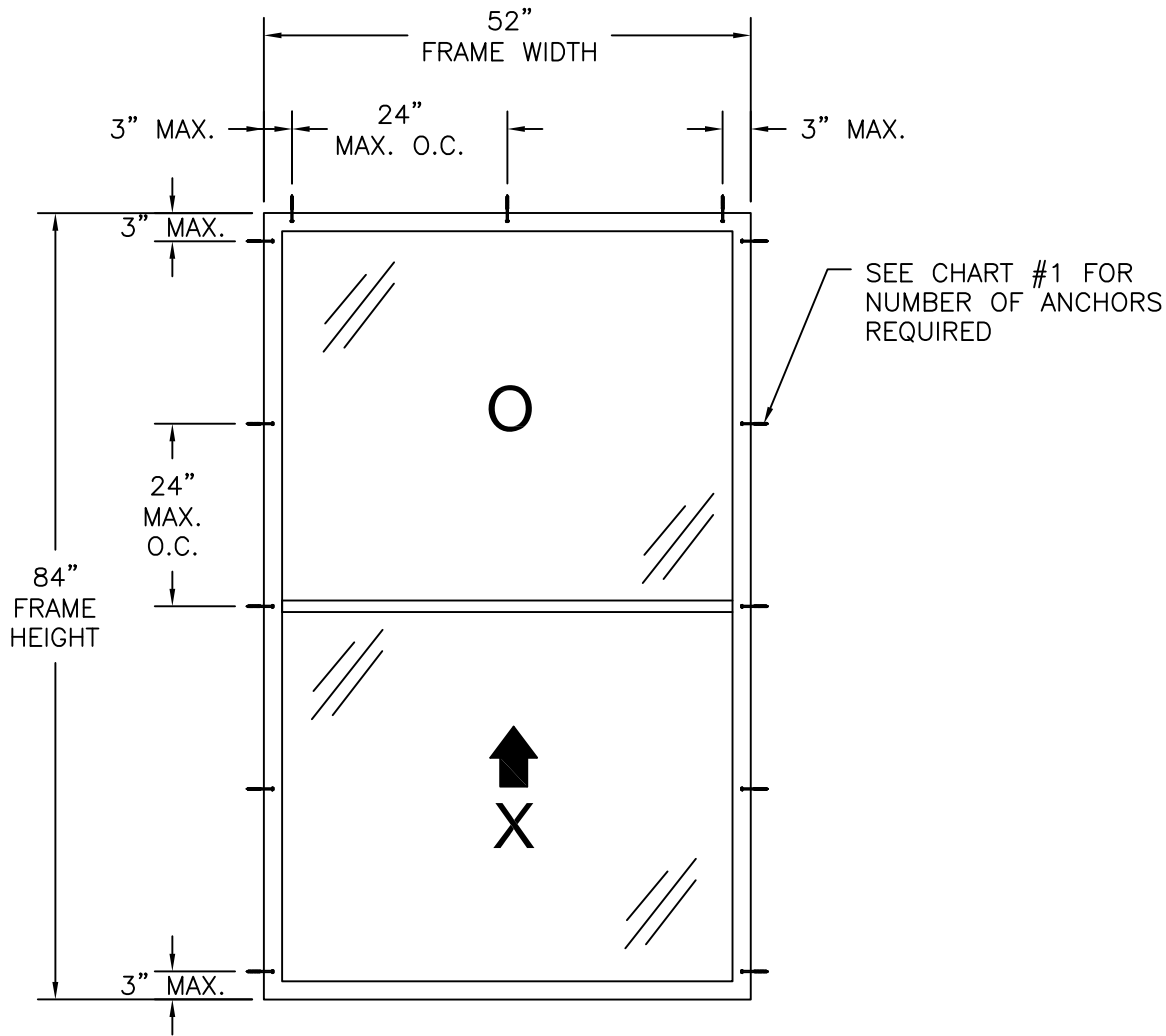
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 03/14/2024



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.



SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±25PSF	NONE

52" X 84" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 30.3 FT²

CHART #1

Number of anchor locations required												
Frame Height (in)	Frame Width (in)											
	24.00		30.00		36.00		42.00		48.00		52.125	
	Head	Jamb	Head	Jamb	Head	Jamb	Head	Jamb	Head	Jamb	Head	Jamb
24.00	2	2	2	2	3	2	3	2	3	2	3	2
30.00	2	2	2	2	3	2	3	2	3	2	3	2
36.00	2	3	2	3	3	3	3	3	3	3	3	3
42.00	2	3	2	3	3	3	3	3	3	3	3	3
48.00	2	3	2	3	3	3	3	3	3	3	3	3
54.00	2	3	2	3	3	3	3	3	3	3	3	3
60.00	2	4	2	4	3	4	3	4	3	4	3	4
66.00	2	4	2	4	3	4	3	4	3	4	3	4
72.00	2	4	2	4	3	4	3	4	3	4	3	4
78.00	2	4	2	4	3	4	3	4	3	4	3	4
84.00	2	5	2	5	3	5	3	5	3	5	3	5

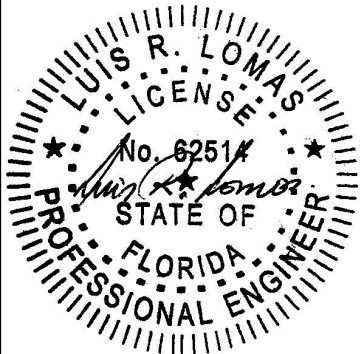
SIGNED: 03/14/2024

MI WINDOWS AND DOORS, LLC.

650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
STEEL REINFORCED – NON-IMPACT 52" X 84"
ELEVATION

DRAWN: V.L.	DWG NO. 08-01514	REV D
SCALE NTS	DATE 04/09/12	SHEET 2 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

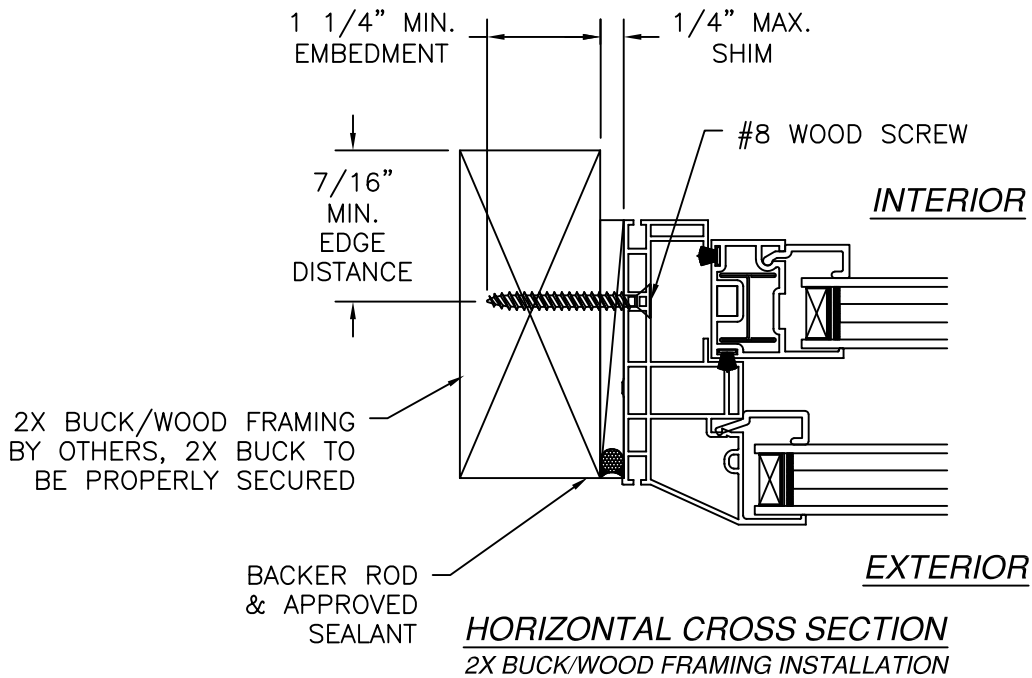
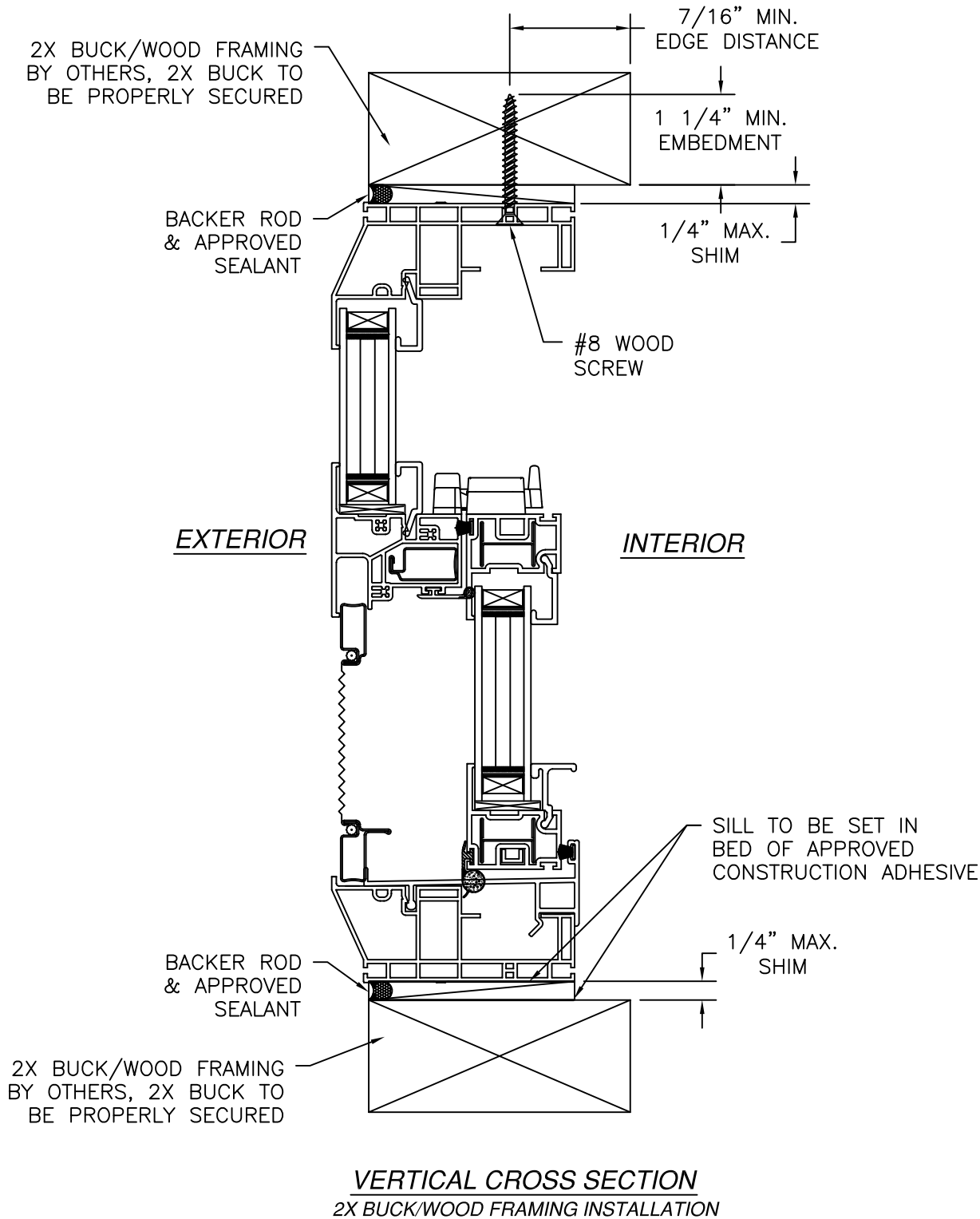


Luis R. Lomas P.E.
FL No.: 62514

HARDWARE SCHEDULE

A.	(2) METAL CAM LOCK WITH KEEPERS AT INTERIOR MEETING RAIL, 7" FROM EACH END.
B.	(2) PVC SURFACE MOUNT TILT LATCHES AT INTERIOR MEETING RAIL ENDS
C.	(2) METAL PIVOT BARS AT BOTTOM RAIL ENDS
D.	(2) COIL BALANCES AT EACH JAMB
E.	STEEL REINFORCEMENT (GVL-451-020) AT SASH RAILS AND STILES
F.	STEEL REINFORCEMENT (RF-104S-020) AT FIXED MEETING RAIL

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.



- 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: 03/14/2024

MI WINDOWS AND DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
STEEL REINFORCED – NON-IMPACT 52" X 84"
INSTALLATION DETAILS

DRAWN:
V.L.

DWG NO.
08-01514

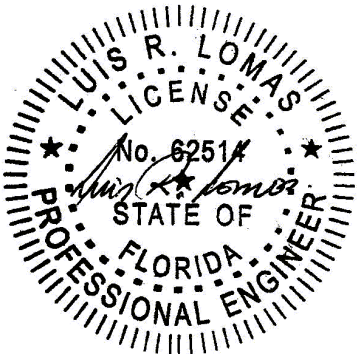
REV
D

SCALE NTS

DATE 04/09/12

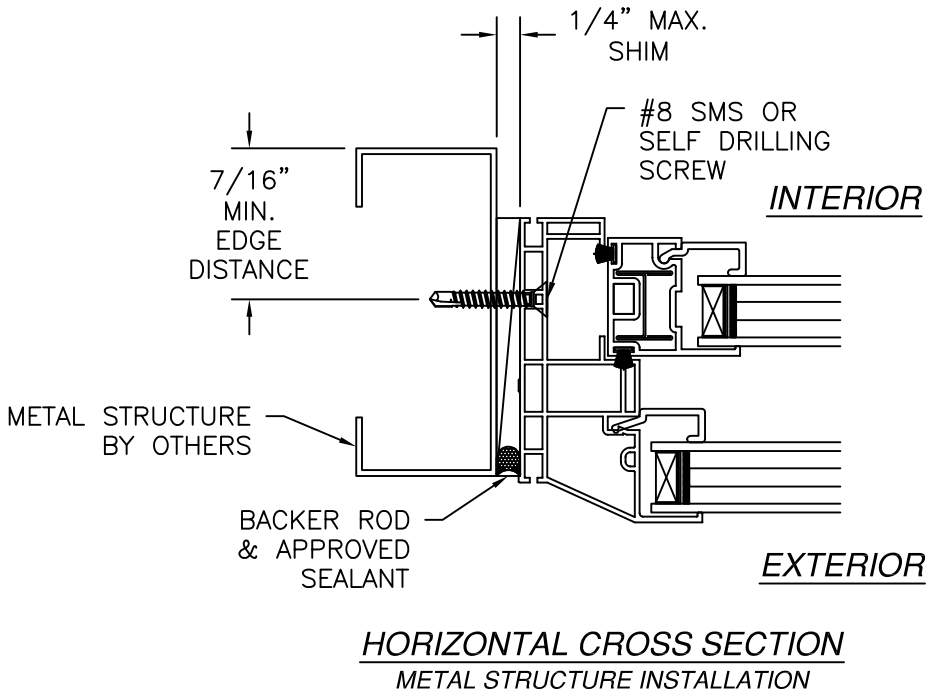
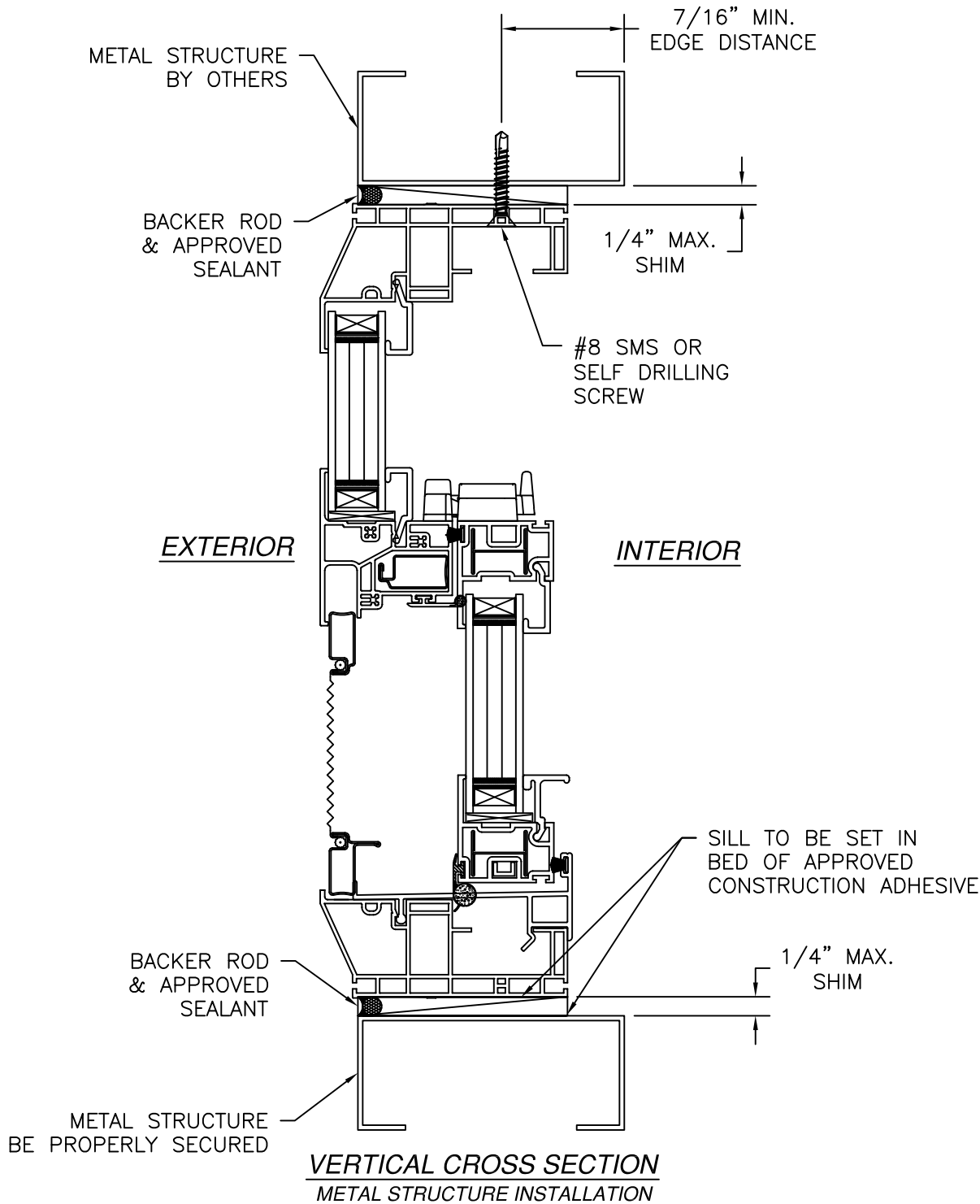
SHEET 3 OF 9

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



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.



- 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: 03/14/2024

MI WINDOWS AND DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
STEEL REINFORCED – NON-IMPACT 52" X 84"
INSTALLATION DETAILS

DRAWN:
V.L.

DWG NO.
08-01514

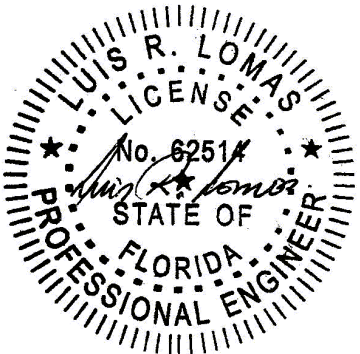
REV
D

SCALE NTS

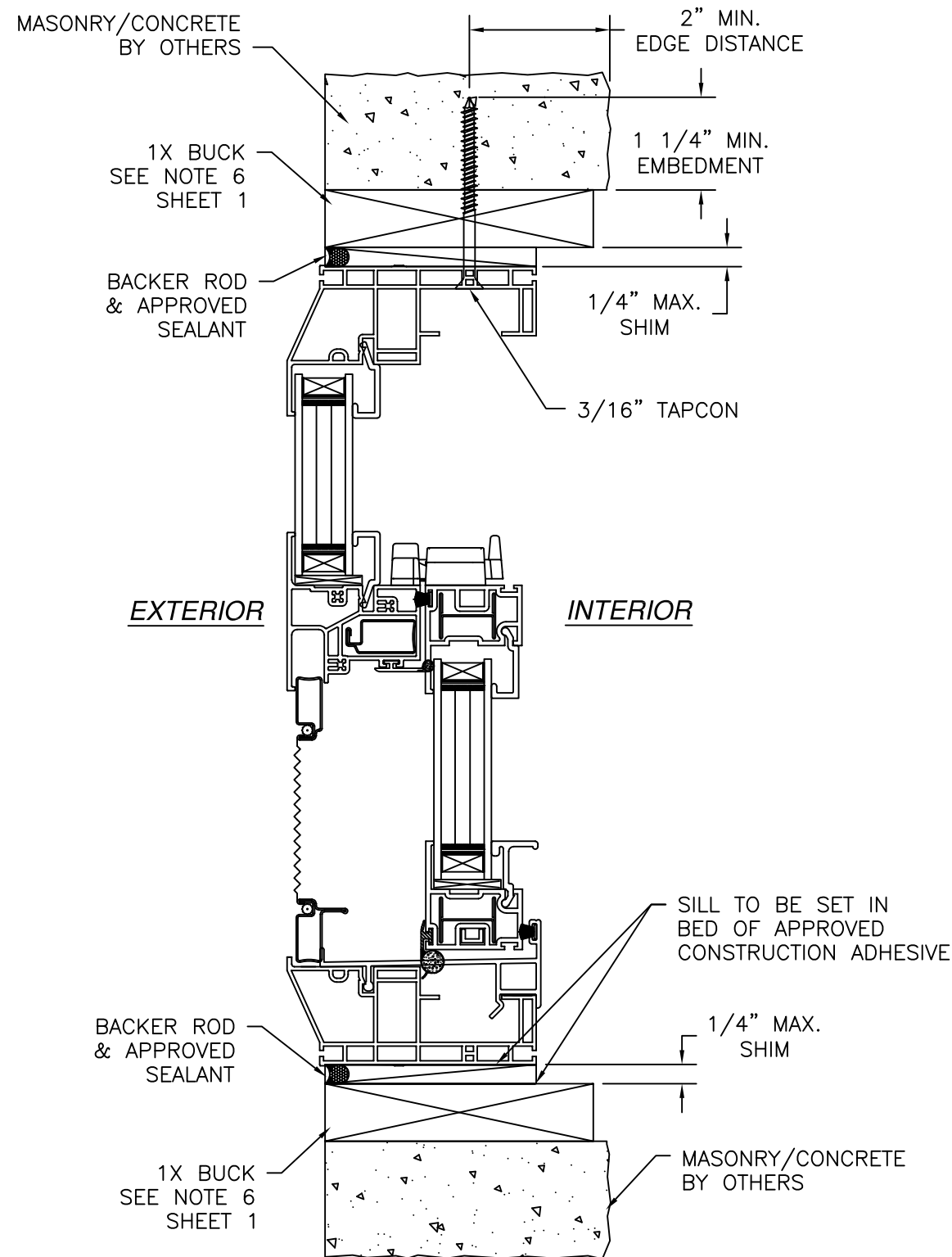
DATE 04/09/12

SHEET 4 OF 9

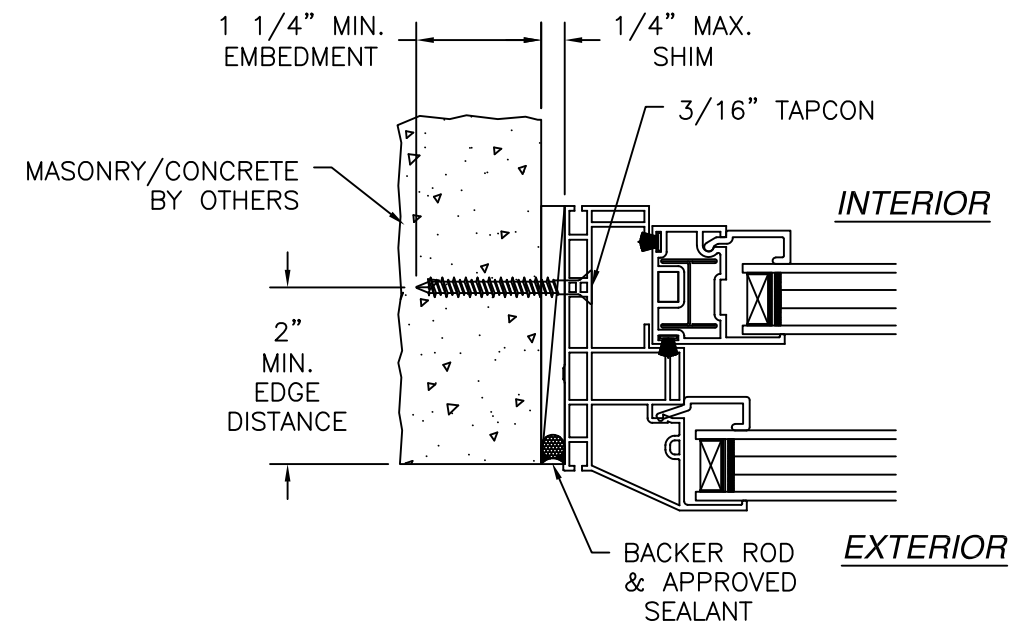
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com



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



VERTICAL CROSS SECTION
 CONCRETE/MASONRY WITH 1X BUCK INSTALLATION
 FOR CONCRETE/MASONRY WITHOUT 1X BUCK REFER TO
 JAMB INSTALLATION DETAIL

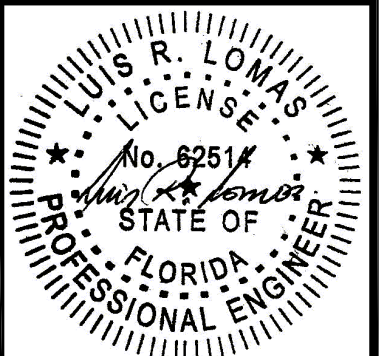


HORIZONTAL INSTALLATION DETAIL
 CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
 FOR CONCRETE/MASONRY WITH 1X BUCK REFER TO
 HEAD AND SILL INSTALLATION DETAILS

- 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: 03/14/2024

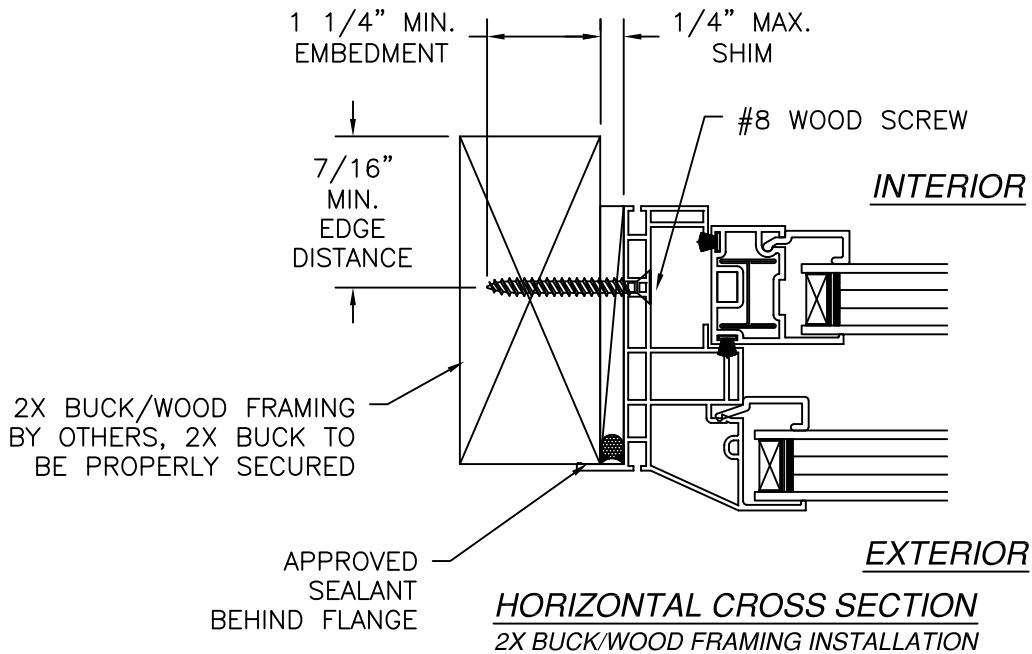
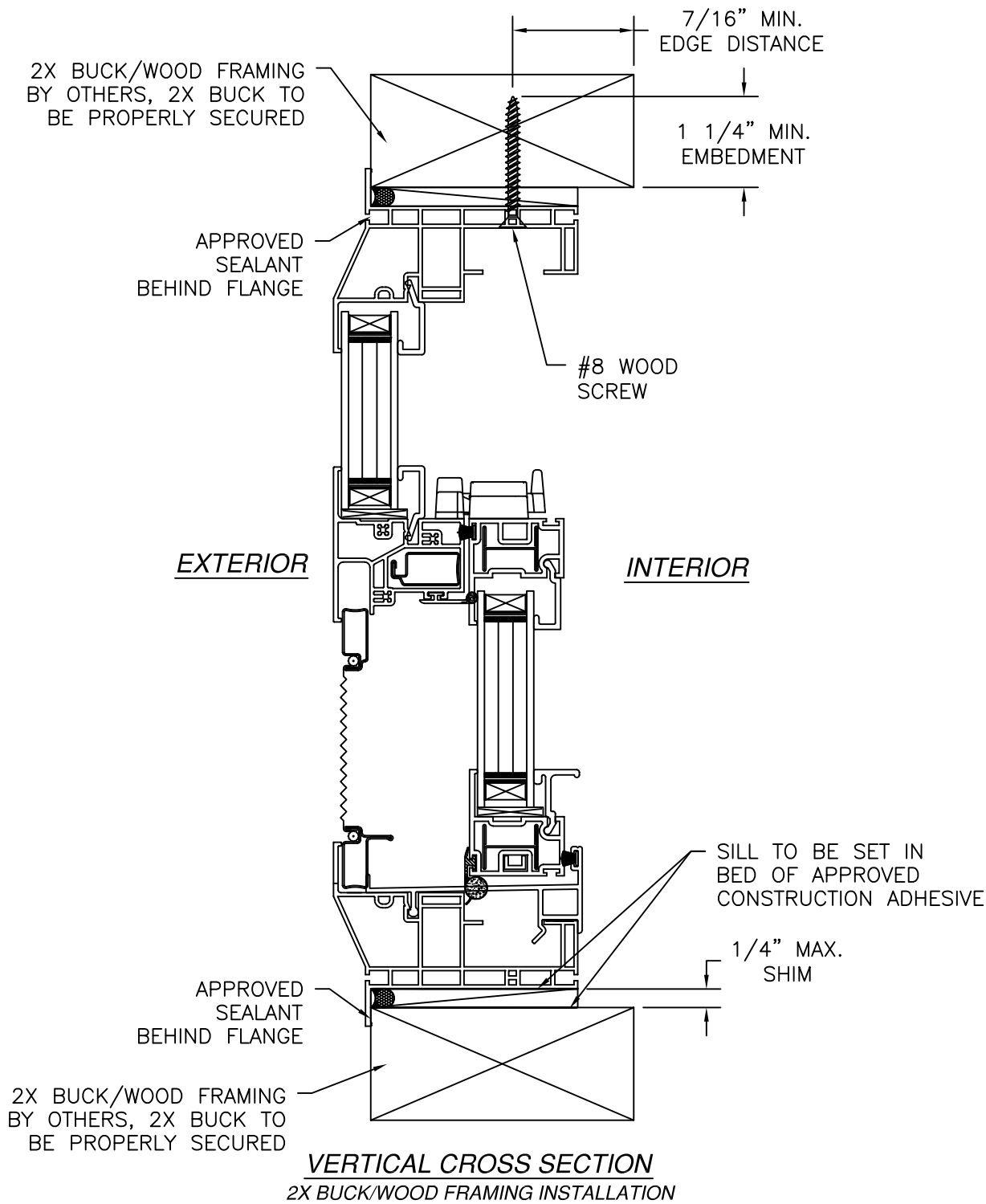
MI WINDOWS AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030-0370		
SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW STEEL REINFORCED – NON-IMPACT 52" X 84" INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01514	REV D
SCALE NTS	DATE 04/09/12	SHEET 5 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.

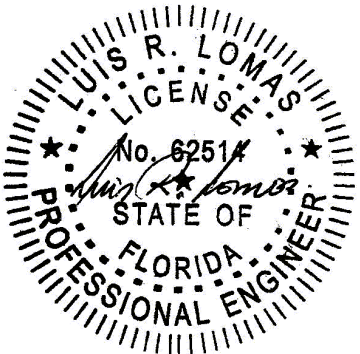
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.



- 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

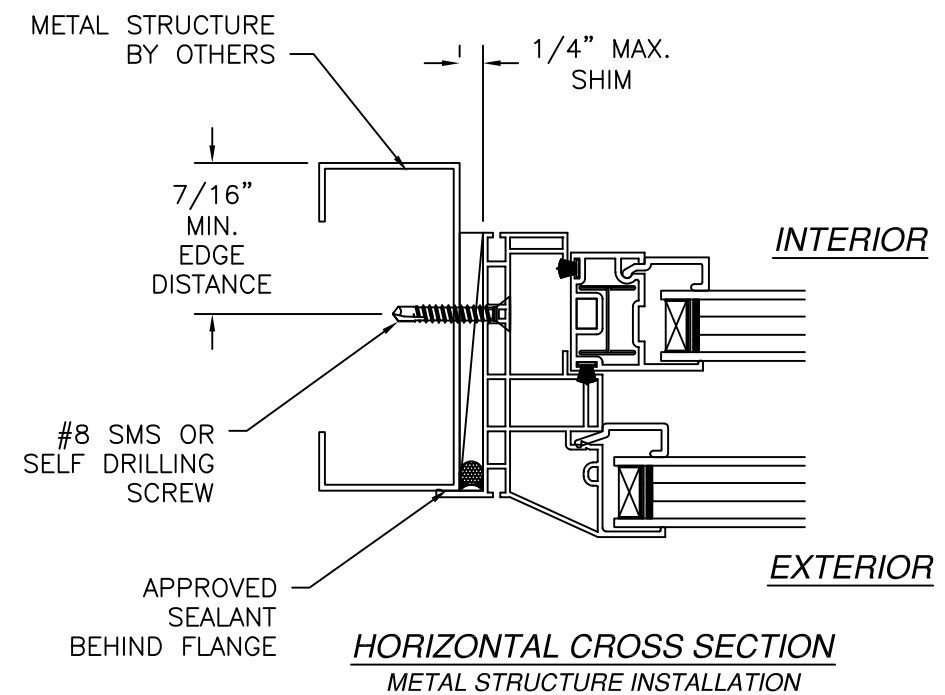
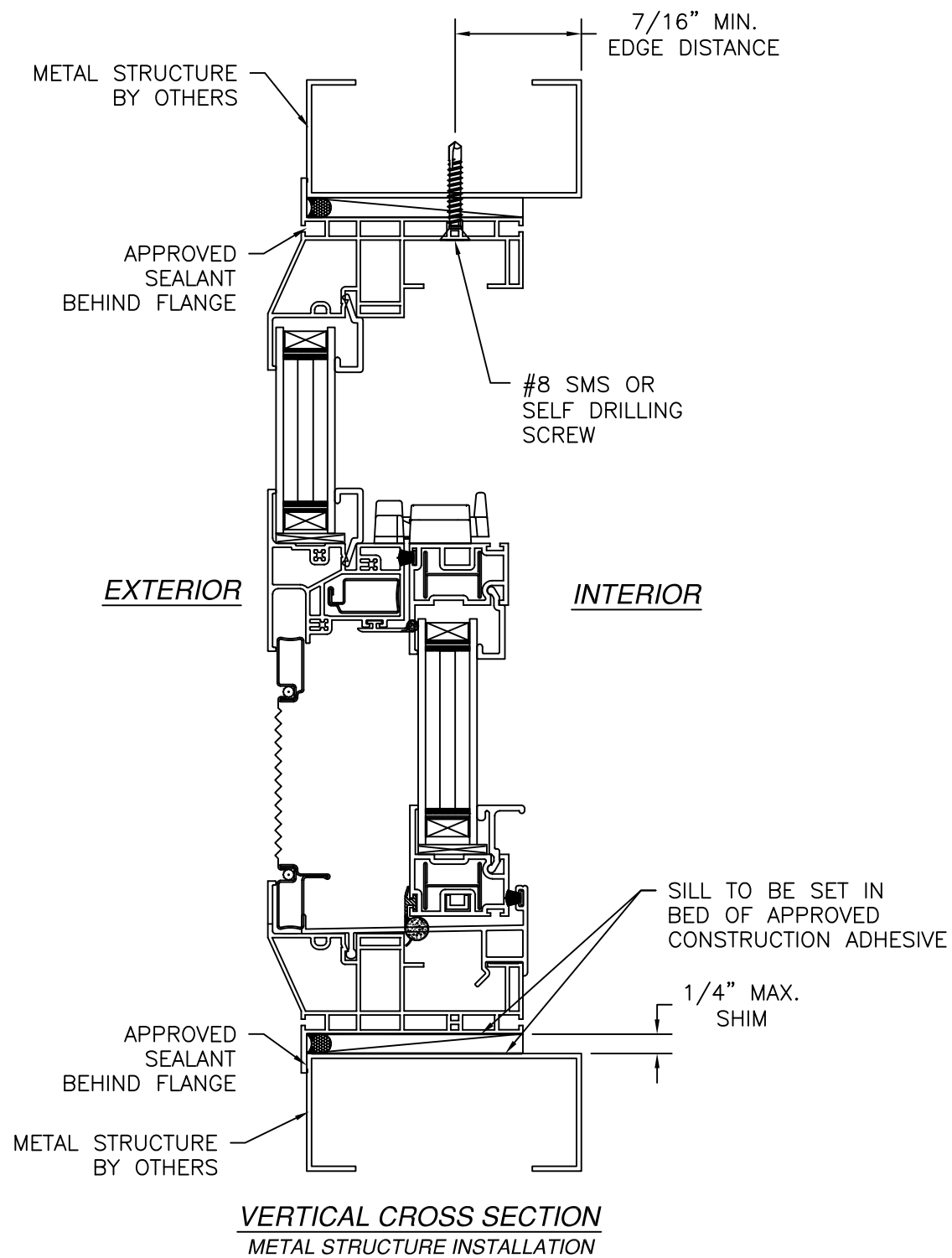
SIGNED: 03/14/2024

MI WINDOWS AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030-0370		
SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW STEEL REINFORCED – NON-IMPACT 52" X 84" FLANGE INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01514	REV D
SCALE NTS	DATE 04/09/12	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
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.

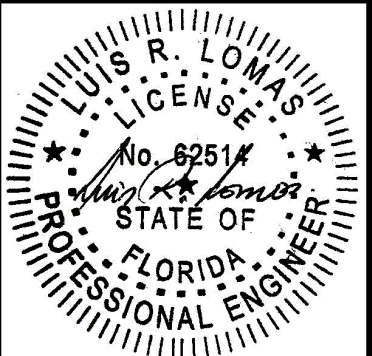


NOTES:

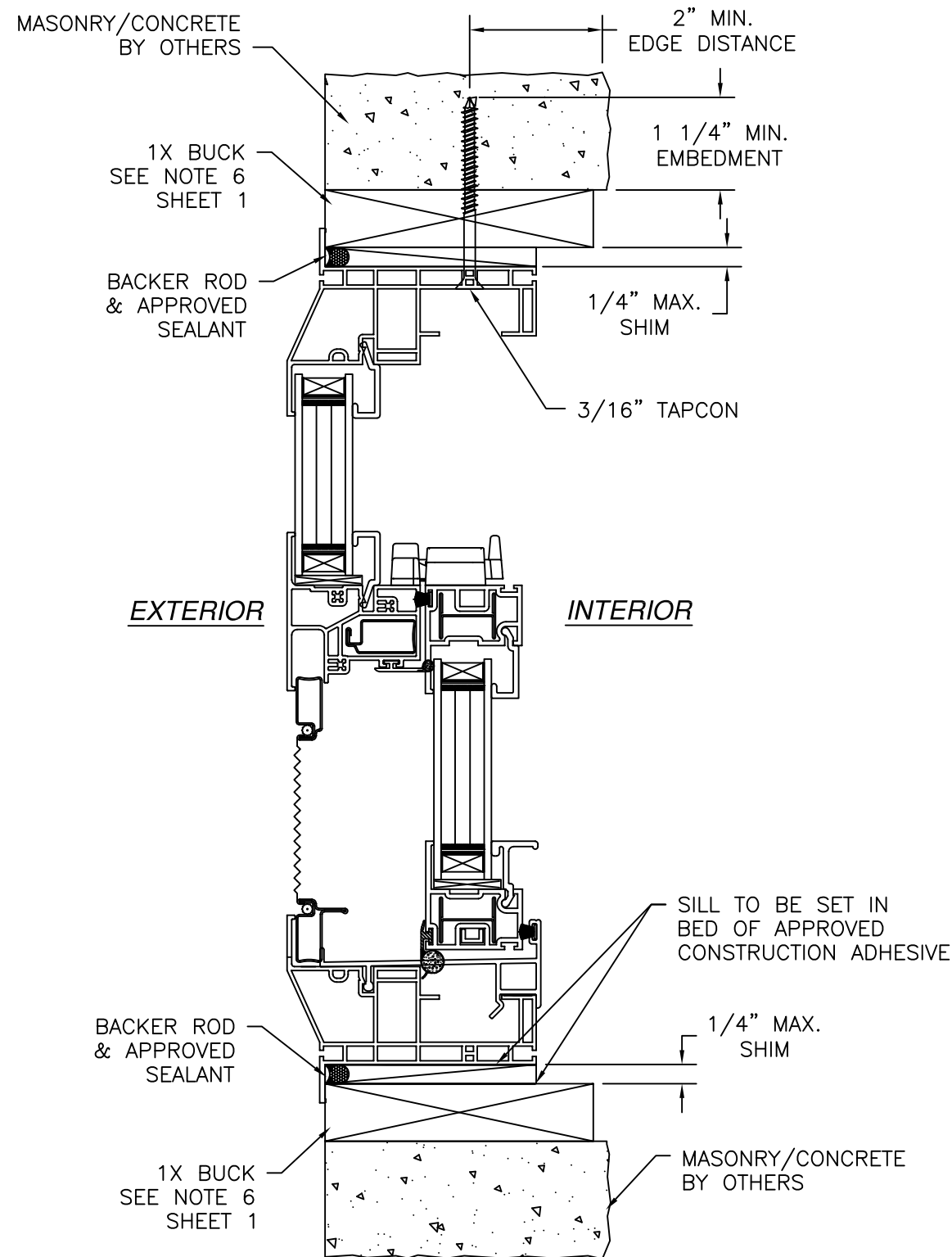
- INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
- PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 03/14/2024

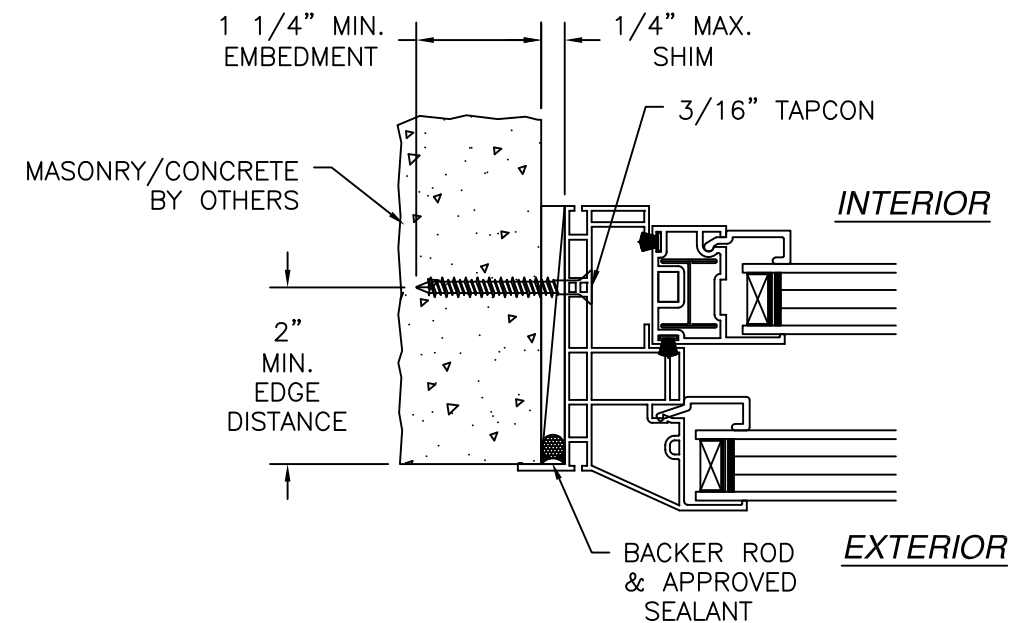
MI WINDOWS AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030-0370		
SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW STEEL REINFORCED - NON-IMPACT 52" X 84" FLANGE INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01514	REV D
SCALE NTS	DATE 04/09/12	SHEET 7 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		



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



VERTICAL CROSS SECTION
 CONCRETE/MASONRY WITH 1X BUCK INSTALLATION
 FOR CONCRETE/MASONRY WITHOUT 1X BUCK REFER TO
 JAMB INSTALLATION DETAIL

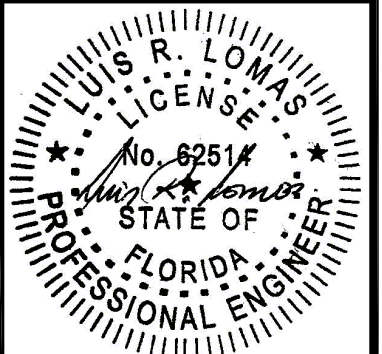


HORIZONTAL INSTALLATION DETAIL
 CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
 FOR CONCRETE/MASONRY WITH 1X BUCK REFER TO
 HEAD AND SILL INSTALLATION DETAILS

- 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: 03/14/2024

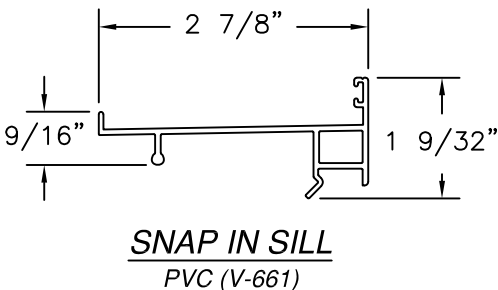
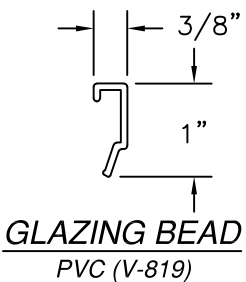
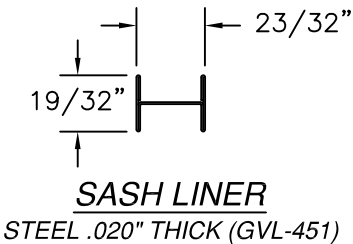
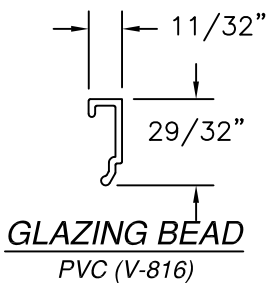
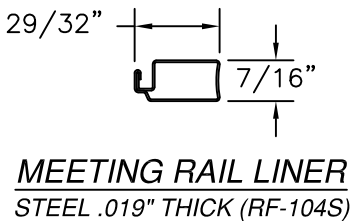
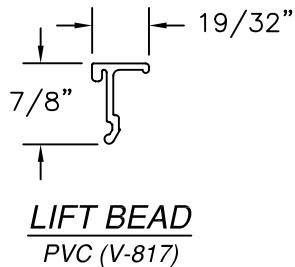
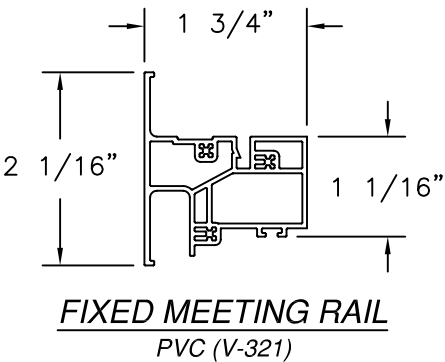
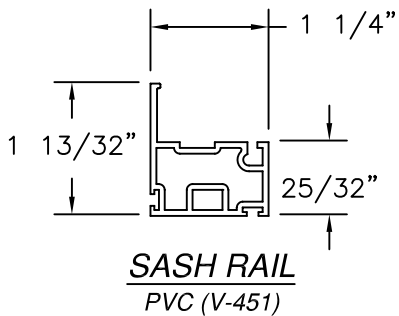
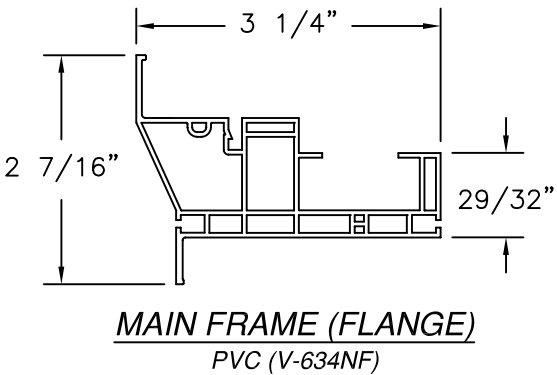
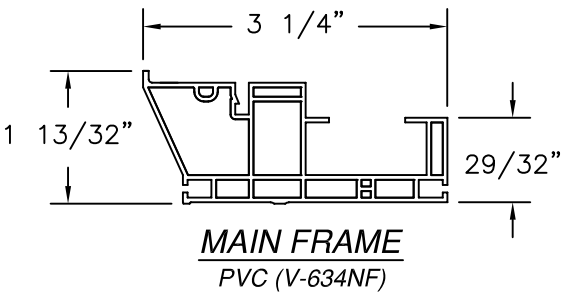
MI WINDOWS AND DOORS, LLC. 650 WEST MARKET STREET GRATZ, PA 17030-0370		
SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW STEEL REINFORCED – NON-IMPACT 52" X 84" FLANGE INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01514	REV D
SCALE NTS	DATE 04/09/12	SHEET 8 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED ANCHORING DETAILS	03/12/2024	R.L.



MI WINDOWS AND DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3540 FINLESS PVC SINGLE HUNG WINDOW
STEEL REINFORCED – NON-IMPACT 52" X 84"
COMPONENTS

DRAWN:
V.L.

DWG NO.
08-01514

REV
D

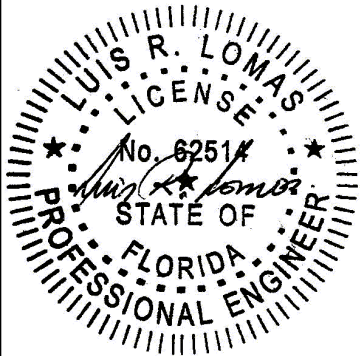
SCALE
NTS

DATE
04/09/12

SHEET
9 OF 9

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

SIGNED: 03/14/2024



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