REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
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. 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.
4. 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.
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 WINDOW INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
7. FOR FIN INSTALLATION SHIM AS NEEDED. FOR 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".
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, SEE SHEET 3 FOR GLASS DETAILS.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
13. FOR ANCHORING FIN 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 INTO WOOD FRAMING OR 2X BUCK USE #10 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 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.
16. 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.
17. ALL FASTENERS TO BE CORROSION RESISTANT.
18. 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:
    - 18.1. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
    - 18.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
    - 18.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C–90, GRADE N, TYPE 1 (OR GREATER).
    - 18.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063–T5 .048" THICK MINIMUM

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATIONS
3	CROSS SECTIONS, GLAZING DETAIL AND B.O.M.
4 – 8	INSTALLATION DETAILS
9	COMPONENTS

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
NOTES

DRAWN:	DWG NO.	REV
J.L.	08–02277	B

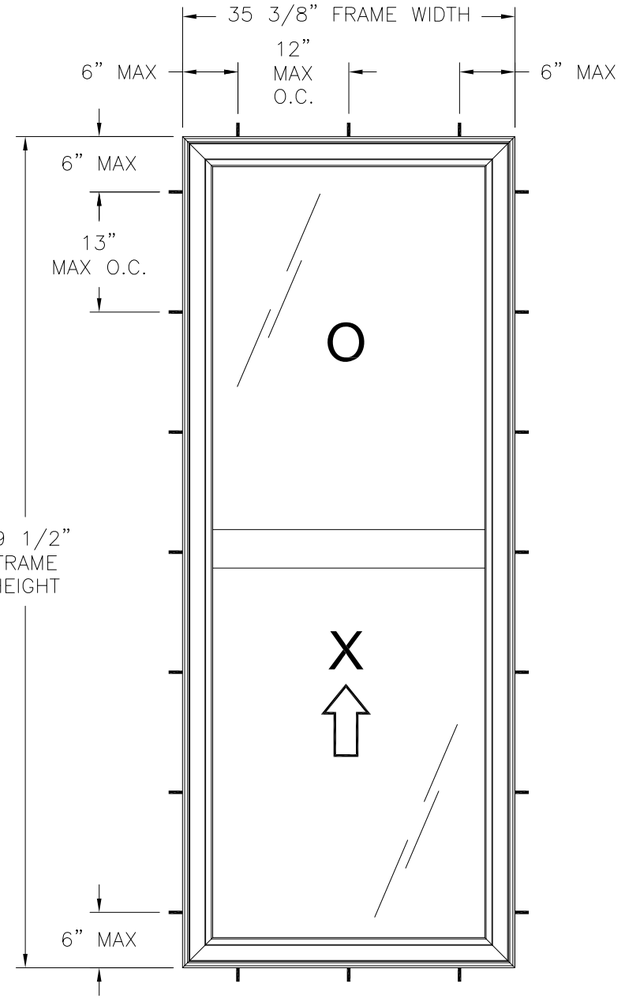
SCALE	DATE	SHEET
NTS	02/04/14	1 OF 9

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

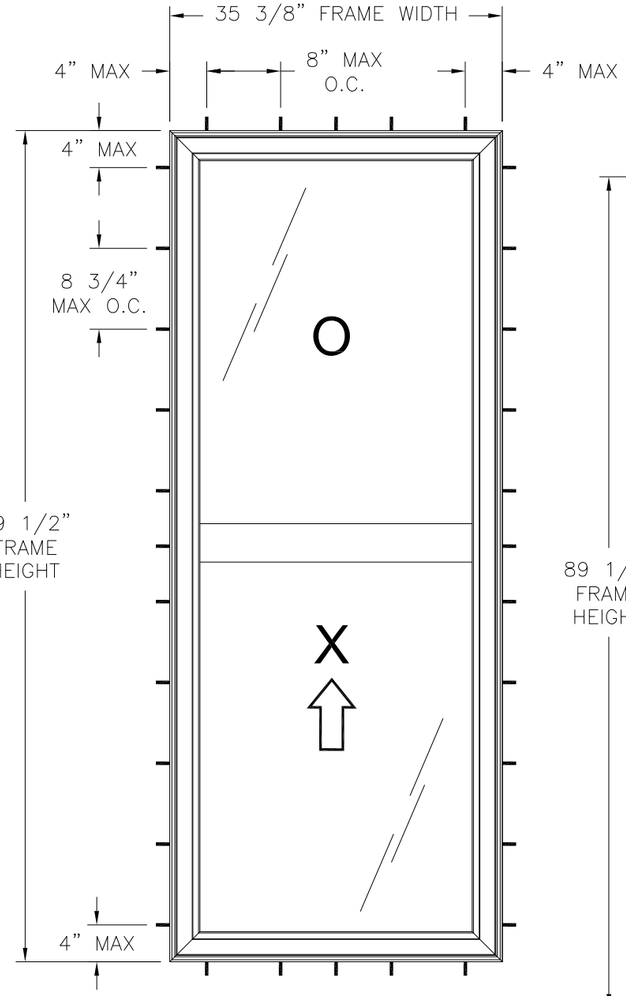
LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



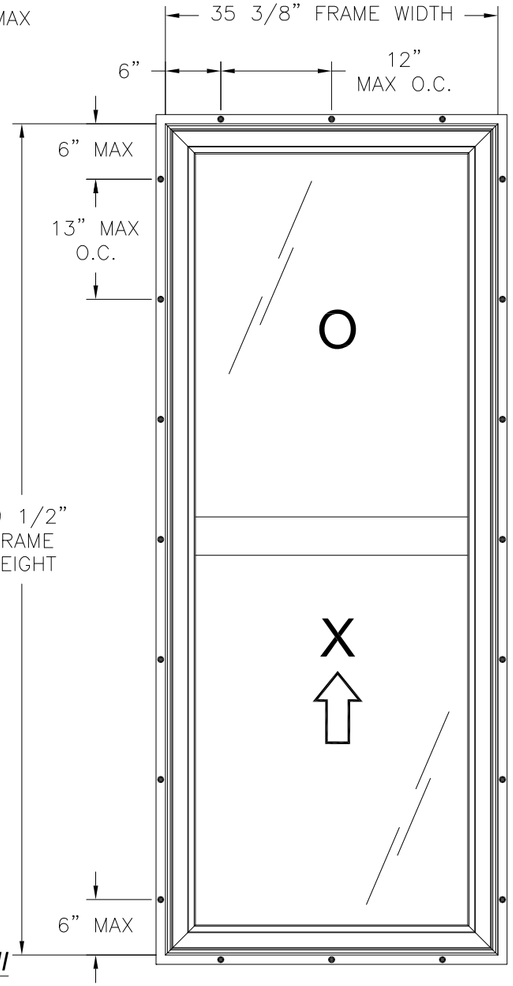
4200 SINGLE HUNG WINDOW WEATHERGARD III
EXTERIOR VIEW FRAME INSTALLATION



4200 SINGLE HUNG WINDOW WEATHERGARD III
EXTERIOR VIEW STRAP INSTALLATION

DESIGN PRESSURE RATING	*IMPACT RATING*
±70PSF	*LARGE AND SMALL MISSILE IMPACT*

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ



4200 SINGLE HUNG WINDOW WEATHERGARD III
EXTERIOR VIEW FIN INSTALLATION

NOTES:
1. *SASH SIZE: 32 7/8" x 44 1/4"*
2. *D.L.O.: 30 5/8" x 41 1/4"*
3. *1/2" x 3/16" WEEP HOLES LOCATED 1 1/2" FROM EACH END OF INTERIOR SILL TRACK*
4. *5/8" x 1/8" WEEP HOLES LOCATED 3 1/4" FROM EACH END OF SCREEN RETAINER AND 3" FROM EACH END OF EXTERIOR MEETING RAIL AND BOTTOM RAIL.*
5. *1" x 1/4" WEEP HOLE WITH WEEP COVER LOCATED 4" FROM EACH END OF EXTERIOR SILL FACE.*
6. *7/8" x 1/8" WEEP HOLES LOCATED 1" FROM EACH END OF EXTERIOR SILL FACE.*

SIGNED: 10/26/2023

HARDWARE SCHEDULE	
A.	(1) SPRING-LOADED SNAP-TYPE, 8" FROM EACH END OF ACTIVE MEETING RAIL
B.	(1) INTERLOCKING METAL TILT-LATCH AT EACH END OF ACTIVE MEETING RAIL
C.	(1) INTERLOCKING TILT-LATCH KEEPER AT INTERIOR JAMB TRACK
D.	(2) COILED SPRINGS BALANCE AT INTERIOR JAMB TRACK
E.	(1) DIE-CAST L-SHAPED BAR AT EACH END OF BOTTOM RAIL
F.	EXTRUDED ALUMINUM REINFORCEMENT CONTOUR-SHAPED AT ALL SASH MEMBERS
G.	EXTRUDED ALUMINUM REINFORCEMENT RECTANGULAR-SHAPED TUBE AT FIXED MEETING RAIL

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
ELEVATIONS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B
SCALE NTS	DATE 02/04/14	SHEET 2 OF 9

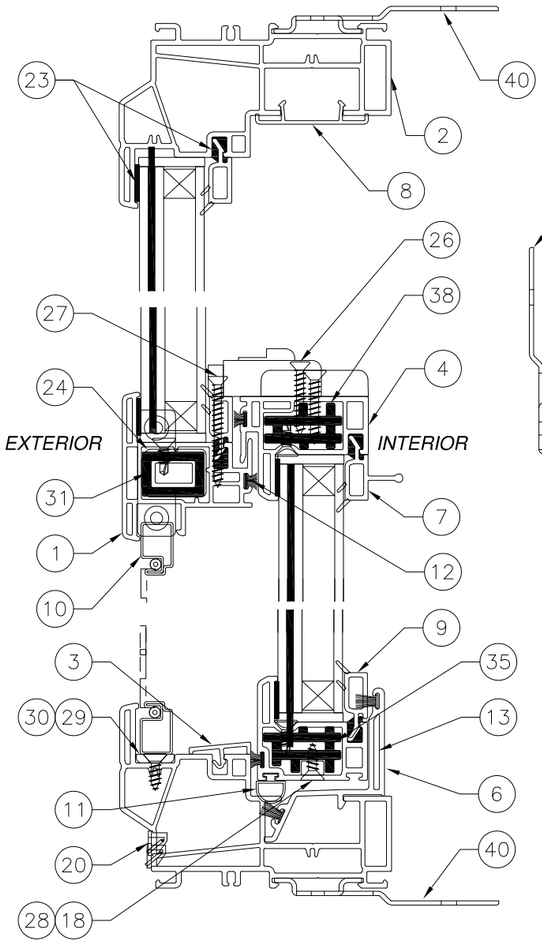
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

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

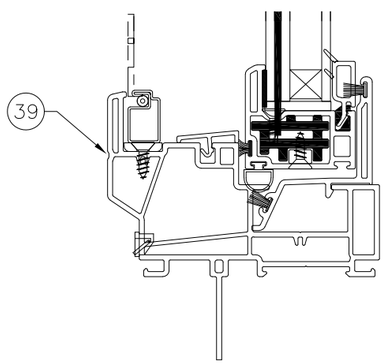
Luis R. Lomas P.E.
FL No.: 62514

PARTS LIST

NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	4254	MULLION	ENERGI FEN. SOLN.	WHITE PVC
2	4202	FRAME	ENERGI FE. SOLN.	WHITE PVC
3	4008	EXTERIOR SILL	ENERGI FE. SOLN.	WHITE PVC
4	4084A	SASH INTERLOCK	ENERGI FEN. SOLN.	WHITE PVC
5	4027A	SASH FRAME	ENERGI FEN. SOLN.	WHITE PVC
6	4219	SILL ADAPTER	ENERGI FEN. SOLN.	WHITE PVC
7	4022	7/8" GLAZING BEAD	ENERGI FEN. SOLN.	WHITE PVC
8	4010	SASH STOP	ENERGI FEN. SOLN.	WHITE PVC
9	4013	7/8" GLAZING BEAD	ENERGI FEN. SOLN.	WHITE PVC
10		7/16" SCREEN FRAME		
11	LDB-100109T	WHEATHERSTRIP	SCHLEGEL	
12	HF-7320-187	WHEATHERSTRIP	SCHLEGEL	
13	PB-8830-187	WHEATHERSTRIP	SCHLEGEL	
14	19X25.4X3.2mm	SETTING BLOCK		80 DUROMETER
15	090101	BALANCE	FERCO	
16	090151	BALANCE SUPPORT	FERCO	
17	090155	TILT SHOE	FERCO	
18	M090161	PIVOT	FERCO	
19		TILT LATCH	FASCO	
20	97-03-00-00	VALVE	GEARMOLD	
21	SL047500	LOCK	ROTO	
22	SL047550	KEEPER	ROTO	
23	995	STRUCTURAL SEALANT	DOW CORNING	
24	4052	MULLION CONNECTOR		
25		BALANCE SCREWS PH #8 X 1"		
26		LOCK SCREWS FH #6 X 1"		
27		KEEPER SCREWS FH #6 X 1 1/2"		
28		PIVOT SCREWS FH #8 X 1/2"		
29		SCREEN SUPPORT FH #8 X 1/2"		
30	4053	SCREEN SUPPORT		
31	A112	MULLION REINFORCEMENT		ALUMINUM 6063-T5
32		RECEPTACLE SCREWS FH #10 X 2"		
33		RECEPTACLE	FASCO	
34		TILT LATCH SCREWS FH #8 X 1"		
35	A110	SASH REINFORCEMENT		ALUMINUM 6063-T5
36		REINFORCEMENT SCREWS #8 X 1/2"		
37		MULLION SCREWS PH #10 X 3"		
38	A111	MEETING RAIL REINFORCEMENT		ALUMINUM 6063-T5
39	4202E	FRAME, NAILING FIN	ENERGI FEN. SOLN.	WHITE PVC
40	4560	INSTALLATION STRIP		STEEL G60

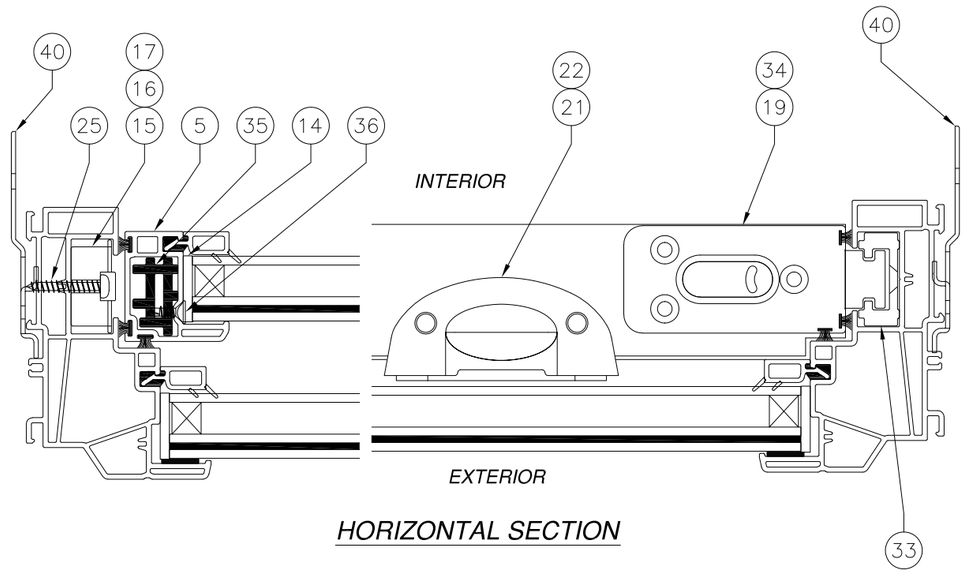


VERTICAL SECTION

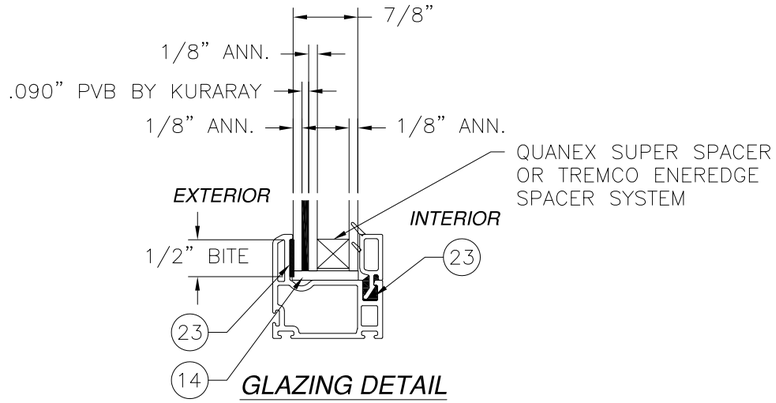


OPTIONAL FIN FRAME

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



HORIZONTAL SECTION



GLAZING DETAIL

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
CROSS SECTIONS, GLAZING DETAIL AND B.O.M.

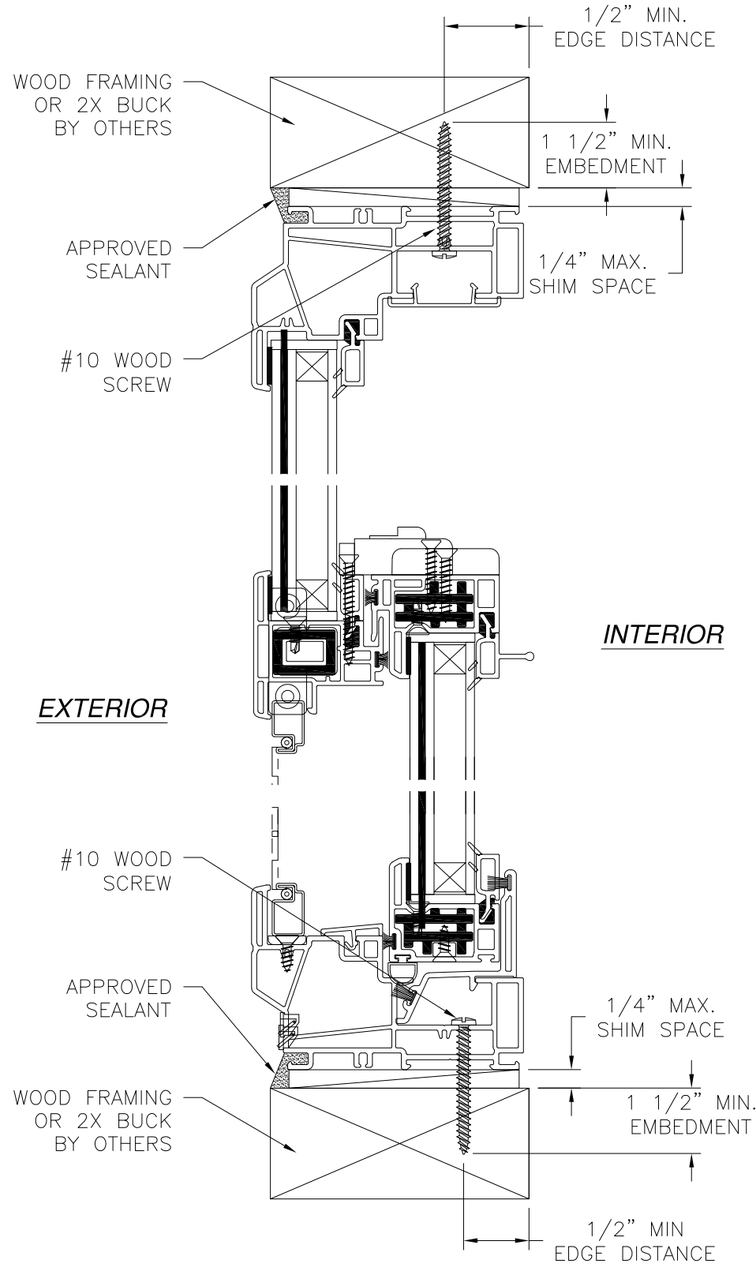
DRAWN:	DWG NO.	REV
J.L.	08-02277	B
SCALE NTS	DATE 02/04/14	SHEET 3 OF 9

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

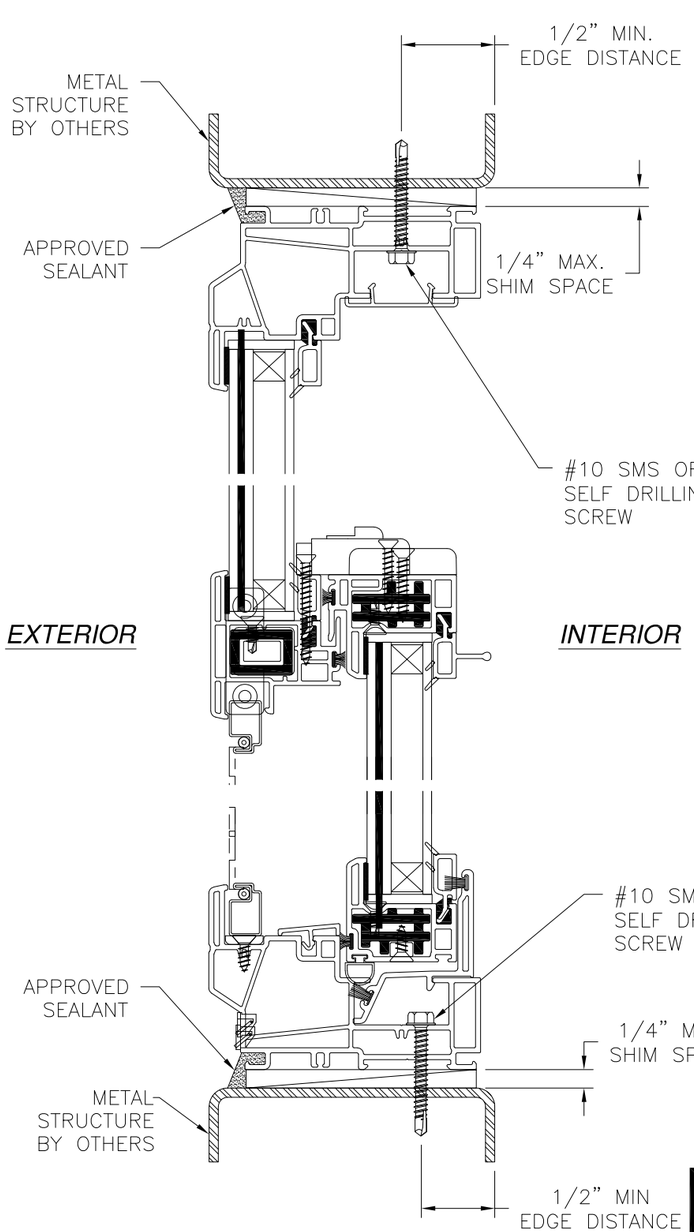
LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

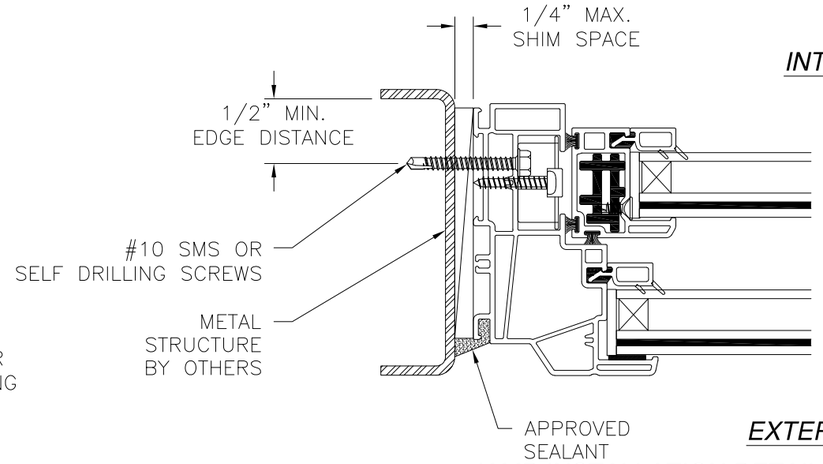
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



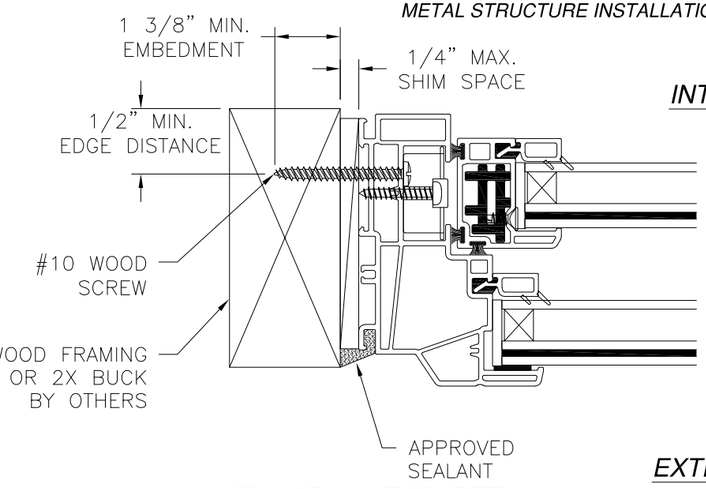
VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION



JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION



JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

SIGNED: 10/26/2023

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

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
FRAME INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B

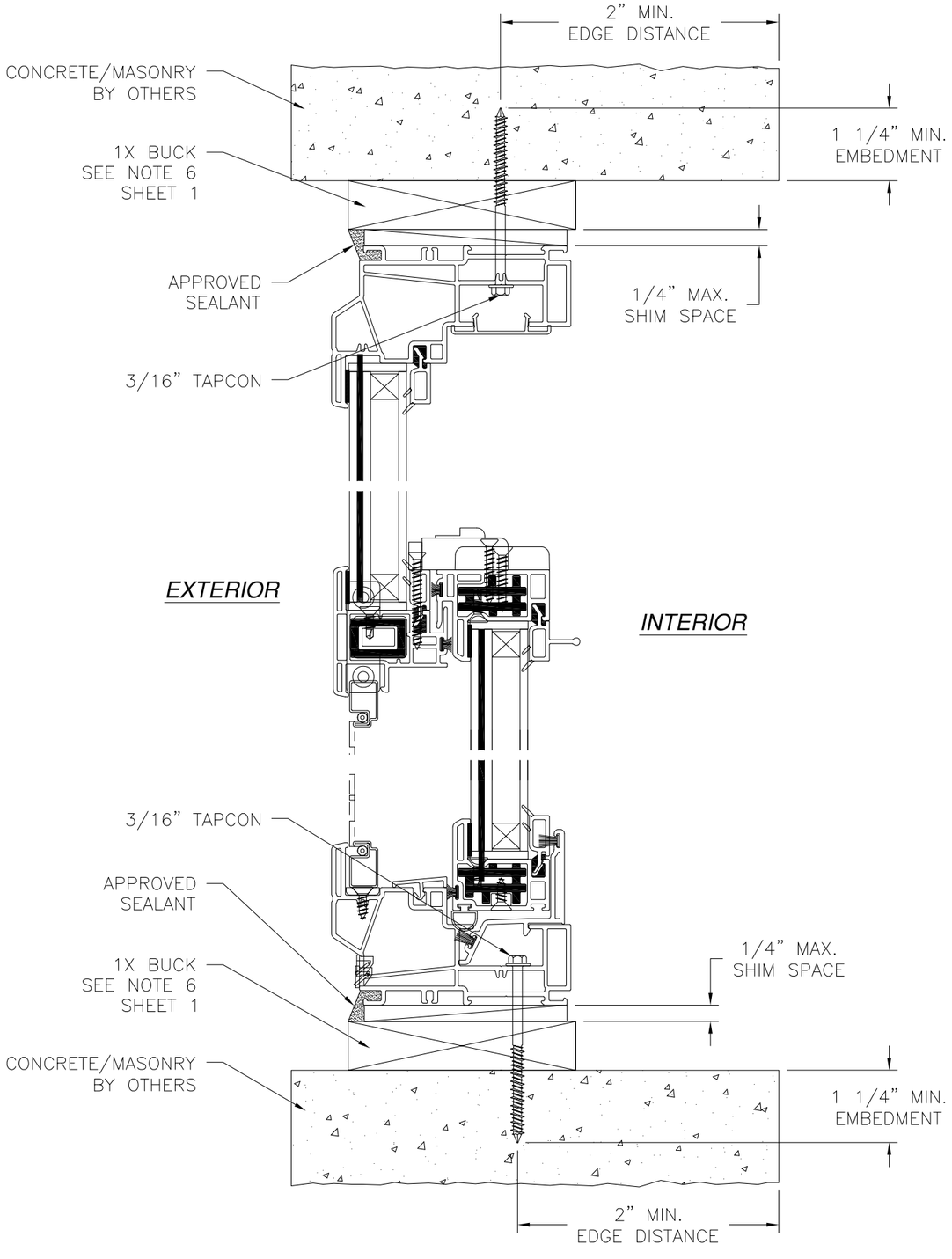
SCALE	DATE	SHEET
NTS	02/04/14	4 OF 9

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

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

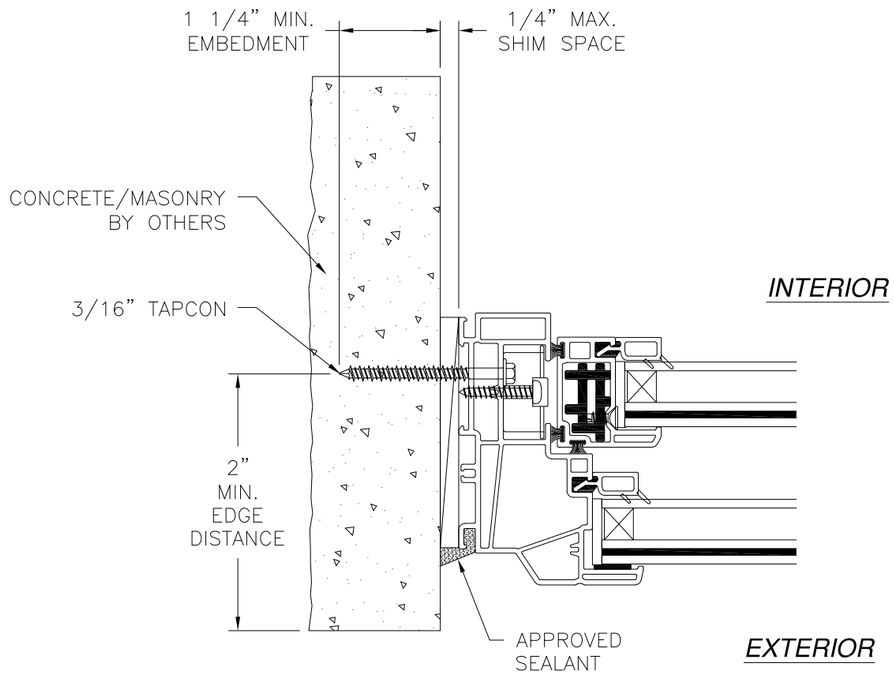
Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



VERTICAL CROSS SECTION

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



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: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
FRAME INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B

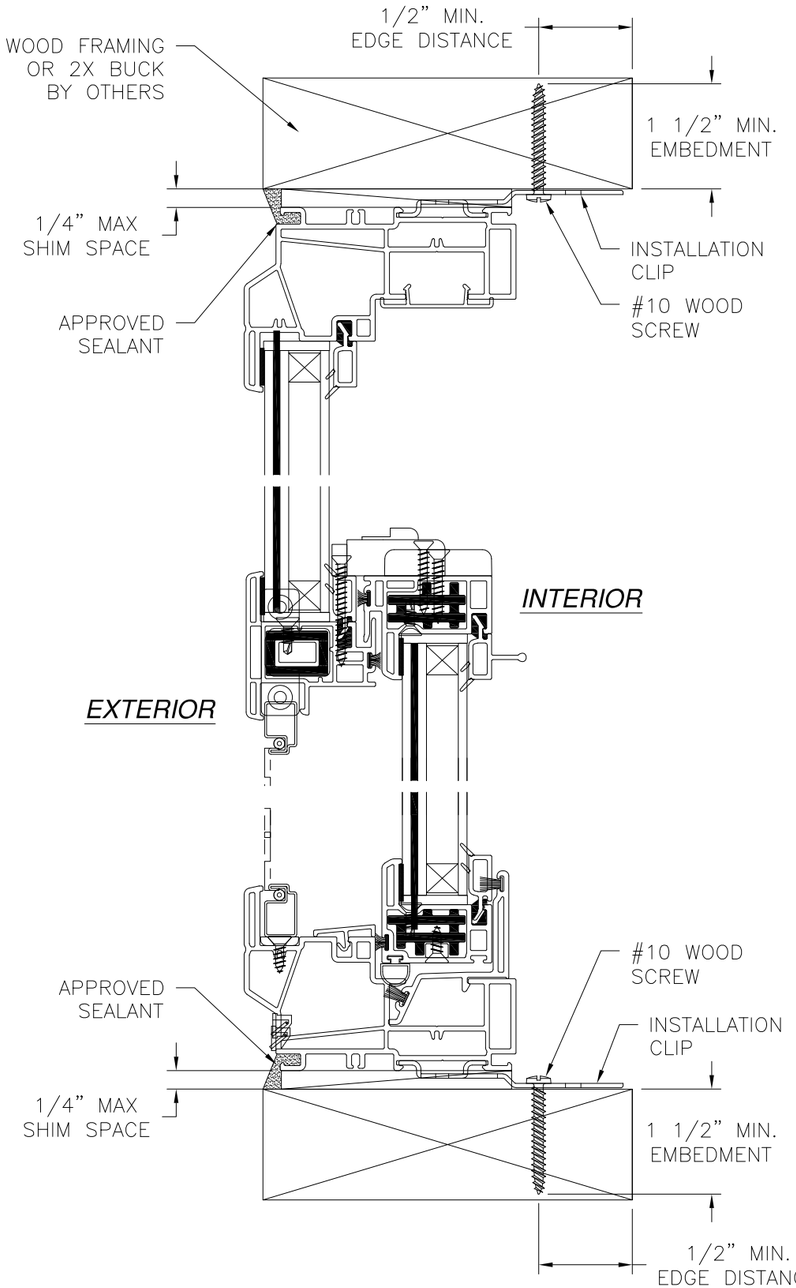
SCALE	DATE	SHEET
NTS	02/04/14	5 OF 9

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

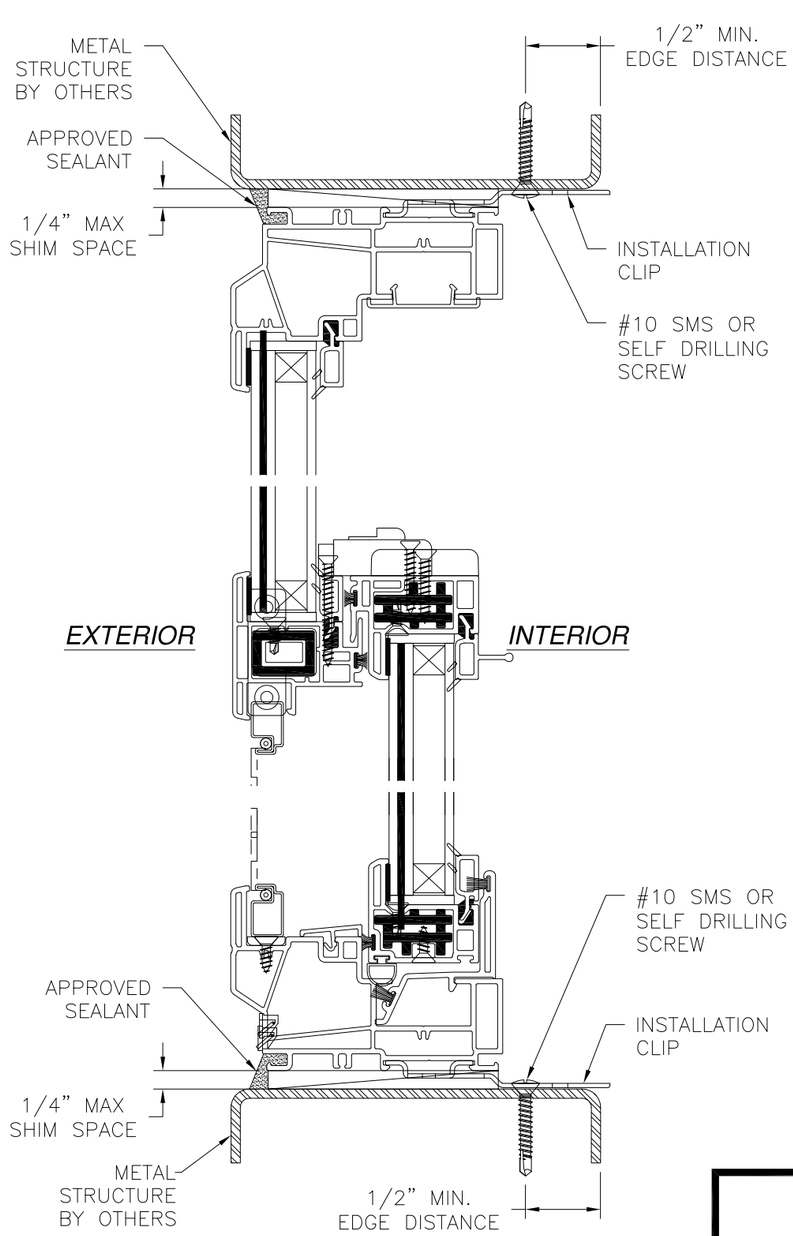
LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

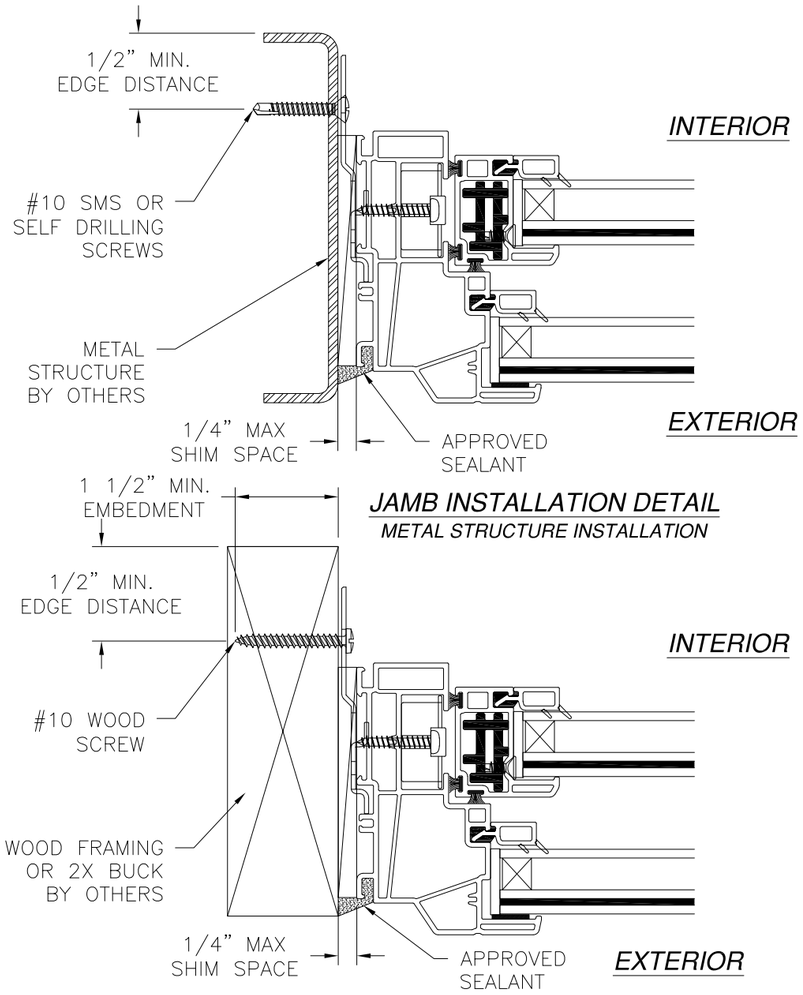
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION



JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

SIGNED: 10/26/2023

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

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
STRAP INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B

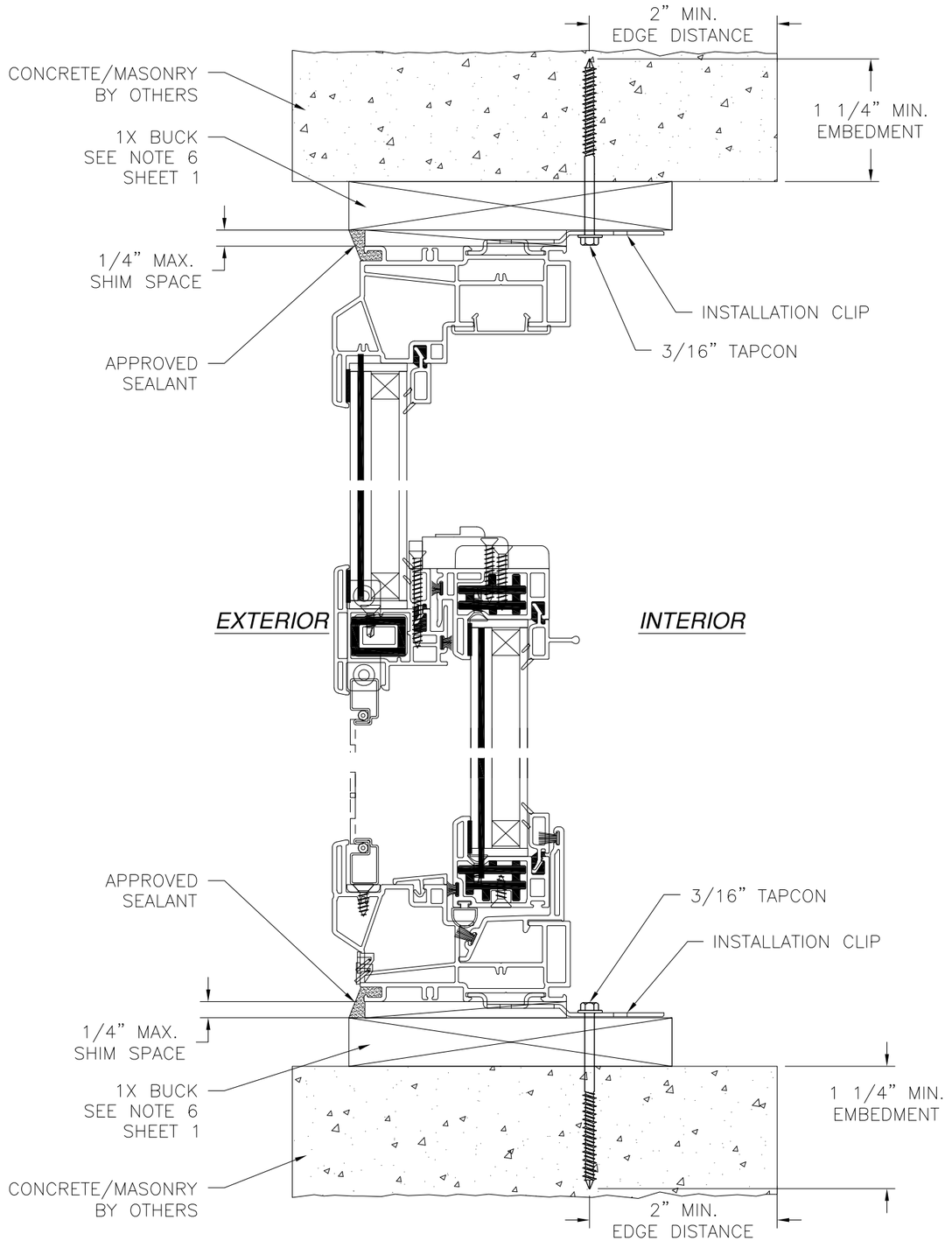
SCALE	DATE	SHEET
NTS	02/04/14	6 OF 9

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

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

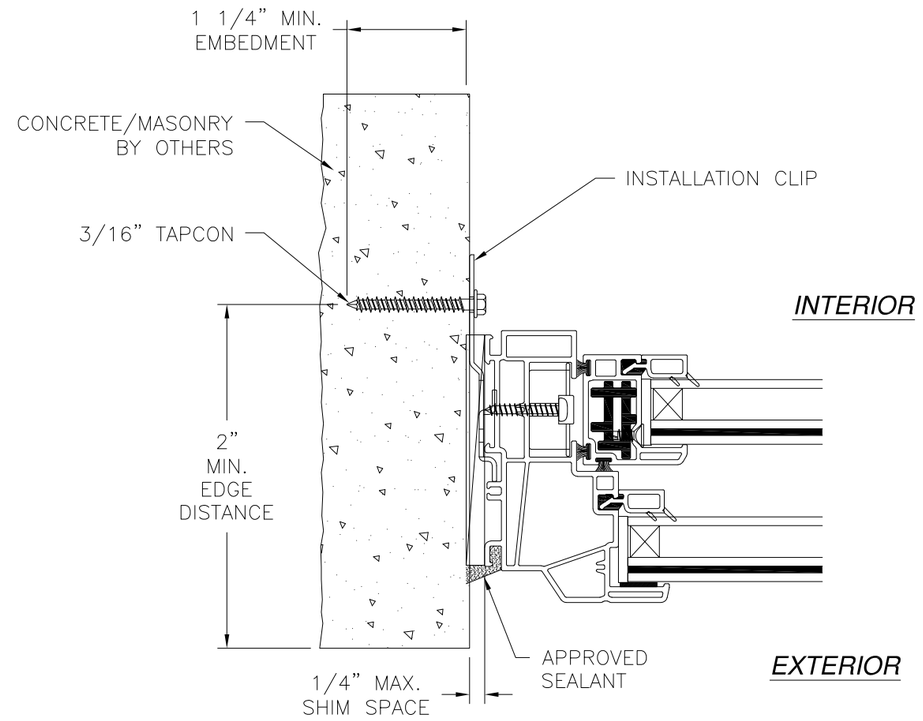
Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



VERTICAL CROSS SECTION

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



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: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
STRAP INSTALLATION DETAILS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B

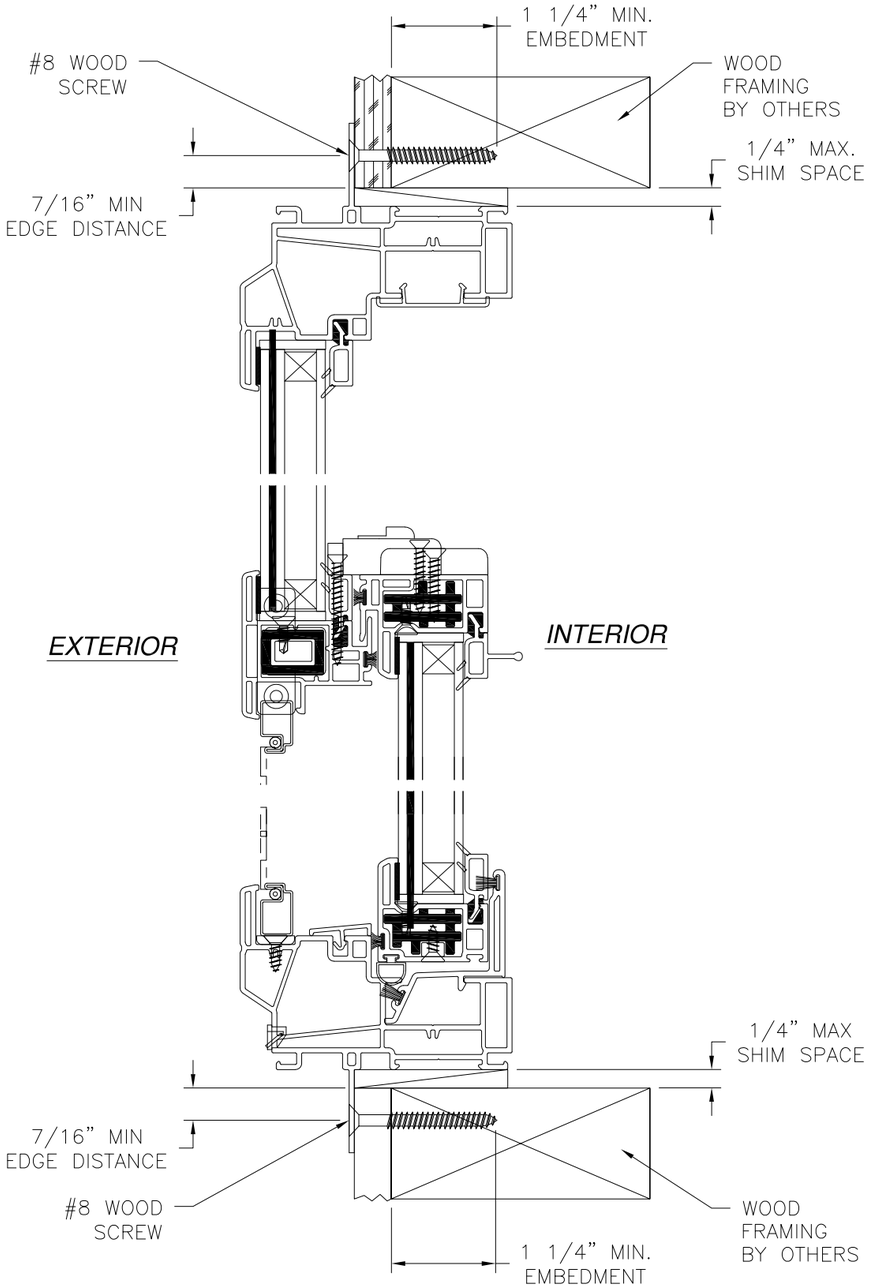
SCALE	DATE	SHEET
NTS	02/04/14	7 OF 9

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

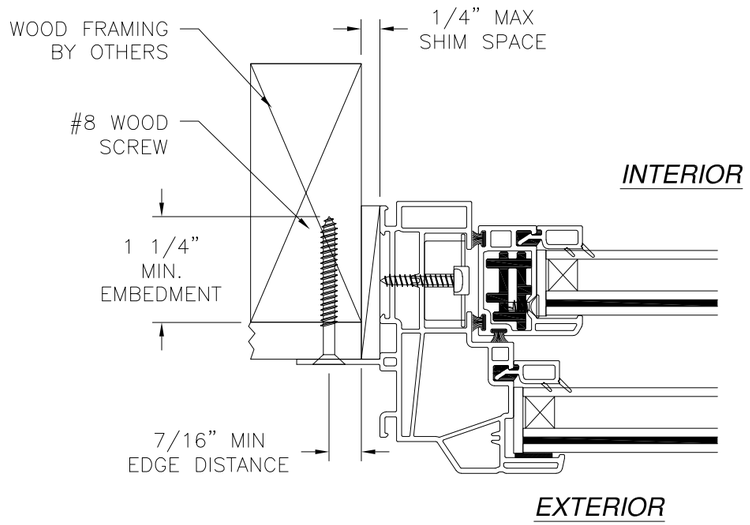
LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



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

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
FIN INSTALLATION DETAILS

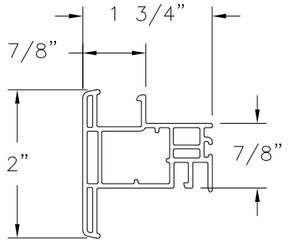
DRAWN:	DWG NO.	REV
J.L.	08-02277	B
SCALE NTS	DATE 02/04/14	SHEET 8 OF 9

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

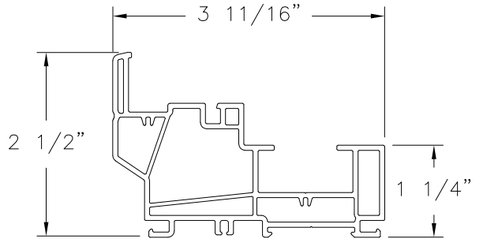
LUIS R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

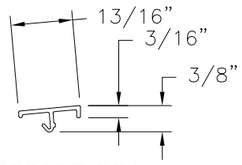
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	08/16/2023	R.L.



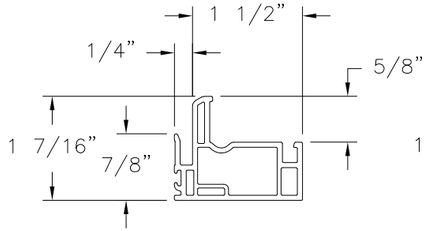
1 **MULLION**
VINYL PVC .059 THICK



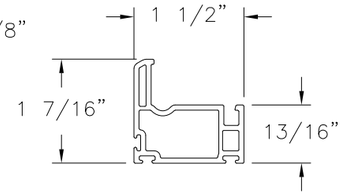
2 **FRAME**
VINYL PVC .069 THICK



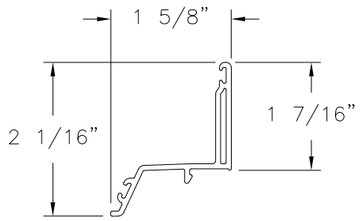
3 **EXTERIOR SILL**
VINYL PVC .051 THICK



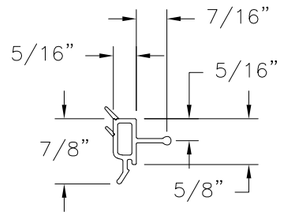
4 **SASH INTERLOCK**
VINYL PVC .069 THICK



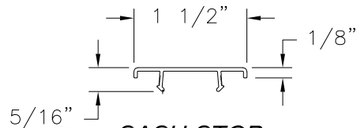
5 **SASH FRAME**
VINYL PVC .069 THICK



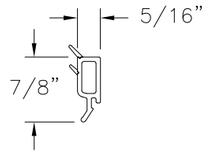
6 **SILL ADAPTER**
VINYL PVC .069 THICK



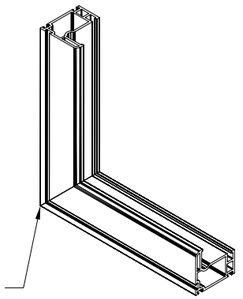
7 **7/8" GLAZING BEAD**
VINYL PVC .059 THICK



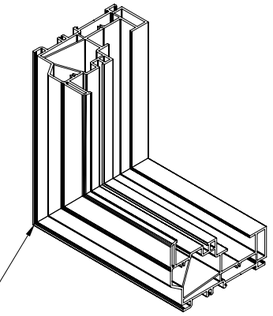
8 **SASH STOP**
VINYL PVC .047 THICK



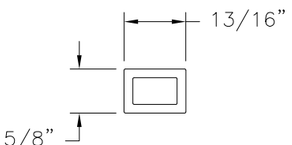
9 **7/8" GLAZING BEAD**
VINYL PVC .059 THICK



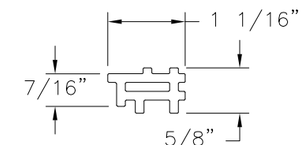
SASH CORNER CONSTRUCTION



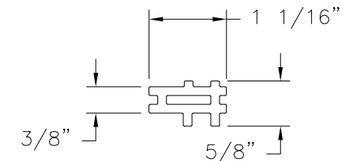
FRAME CORNER CONSTRUCTION



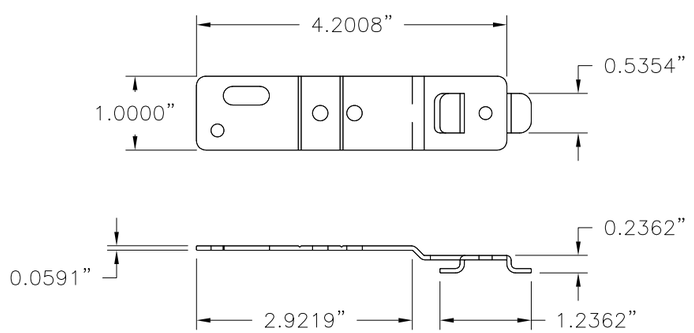
31 **MULLION REINFORCEMENT**
AL 6063-T5 .118 THICK



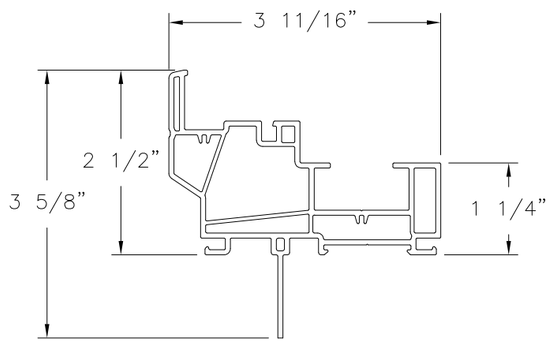
35 **SASH REINFORCEMENT**
AL 6063-T5 .118 THICK



38 **RAIL REINFORCEMENT**
AL 6063-T5 .118 THICK



40 **INSTALLATION STRIP**
GALVANIZED STEEL G60



39 **FIN FRAME**
VINYL PVC .069 THICK

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

4200 SINGLE HUNG WINDOW WEATHERGARD III
VINYL WINDOW 36" X 90" IMPACT HVHZ
COMPONENTS

DRAWN:	DWG NO.	REV
J.L.	08-02277	B
SCALE NTS	DATE 02/04/14	SHEET 9 OF 9

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

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

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