

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED COMPONENTS	12/18/2023	R.L.

- NOTES:
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
 2. WOOD FRAMING, METAL 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” 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 3/8”.
 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 ALUMINUM 6105–T5 AND 6063–T5.
 11. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 5 FOR GLASS DETAILS.
 12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.

13. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE 1/4” OR 3/8” LAG SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/2” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 1/4” OR 5/16” ELCO ULTRACON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4” 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 1/4” OR 3/8” 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.A. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 17.B. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 17.C. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 17.D. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR ALUMINUM 6063–T5 FU=30KSI .125” THICK MINIMUM

TABLE OF CONTENTS	
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10	COMPONENTS

SOLAR INNOVATIONS, INC.
31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
NOTES

DRAWN:
A.R.

DWG NO.
08–03747

REV
A

SCALE NTS

DATE 07/21/2021

SHEET 1 OF 10

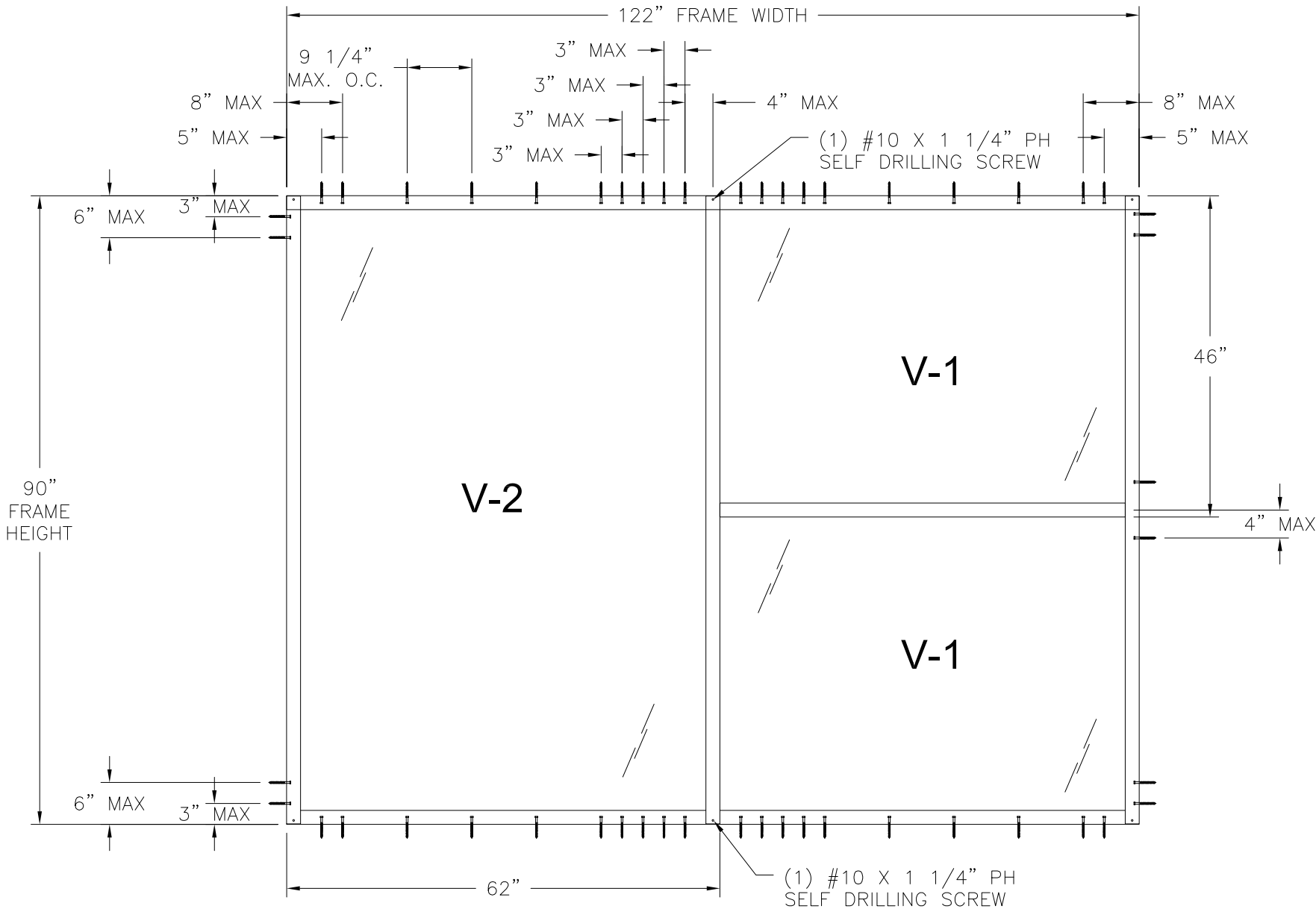
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/18/2023



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED COMPONENTS	12/18/2023	R.L.



- NOTES:
- V-1 D.L.O.: 58" X 42"
 - V-2 D.L.O.: 58" X 86"

SI5008 ALUMINUM FIXED CURTAIN WALL
WITH 1/4" LAG SCREWS, 1/4" SMS OR SELF DRILLING SCREWS AND 1/4" ELCO ULTRACON
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±65.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4
2 PANELS SHOWN, MULTIPLE PANELS ARE APPROVED AS LONG AS
INDIVIDUAL PANEL FRAME AREA DOES NOT EXCEED 38.75 FT²

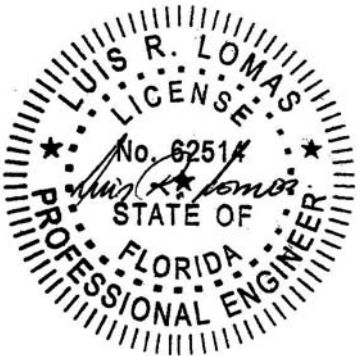
SOLAR INNOVATIONS, INC.
31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
ELEVATION

DRAWN: A.R.	DWG NO. 08-03747	REV A
SCALE NTS	DATE 07/21/2021	SHEET 2 OF 10

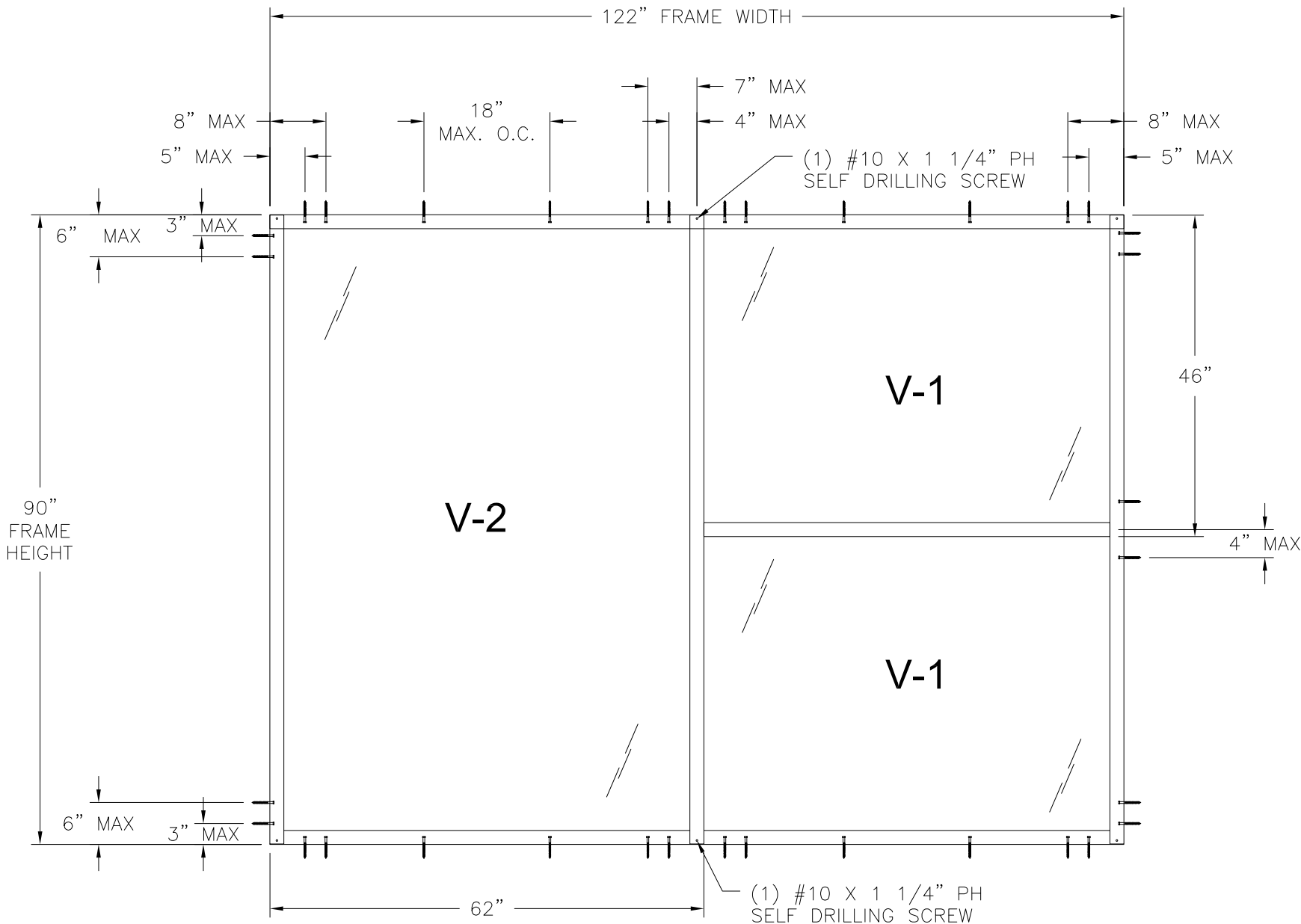
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- NOTES:
- V-1 D.L.O.: 58" X 42"
 - V-2 D.L.O.: 58" X 86"

SI5008 ALUMINUM FIXED CURTAIN WALL
WITH 3/8" LAG SCREWS, 3/8" SMS OR SELF DRILLING SCREW AND 5/16" ELCO ULTRACON
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
$\pm 65.0 \text{ PSF}$	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4
2 PANELS SHOWN, MULTIPLE PANELS ARE APPROVED AS LONG AS
INDIVIDUAL PANEL FRAME AREA DOES NOT EXCEED 38.75 FT²

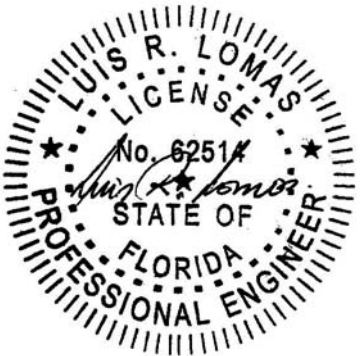
SOLAR INNOVATIONS, INC.
31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
ELEVATION

DRAWN: A.R.	DWG NO. 08-03747	REV A
SCALE NTS	DATE 07/21/2021	SHEET 3 OF 10

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CHART #1
Single panel rating (psf)

Frame Height (in)	Frame width (in)											
	48.0		54.0		60.0		62.0		66.0		72.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
48.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
54.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
60.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
66.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
72.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
78.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-
84.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-
90.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
96.0	65.0	65.0	65.0	65.0	-	-	-	-	-	-	-	-
102.0	65.0	65.0	65.0	65.0	-	-	-	-	-	-	-	-
108.0	65.0	65.0	-	-	-	-	-	-	-	-	-	-
114.0	65.0	65.0	-	-	-	-	-	-	-	-	-	-

CHART #2
Rating of units with 2 or more panels mulled together (psf)

Panel Height (in)	Single Panel Width (in)											
	48.0		54.0		60.0		62.0		66.0		72.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
48.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
54.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
60.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
66.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
72.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
78.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-
84.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
90.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-	-	-
96.0	62.2	62.2	56.9	56.9	-	-	-	-	-	-	-	-
102.0	51.2	51.2	-	-	-	-	-	-	-	-	-	-
108.0	42.7	42.7	-	-	-	-	-	-	-	-	-	-
114.0	36.0	36.0	-	-	-	-	-	-	-	-	-	-

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SOLAR INNOVATIONS, INC.
31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
DESIGN PRESSURE CHARTS

DRAWN:
A.R.

DWG NO.
08-03747

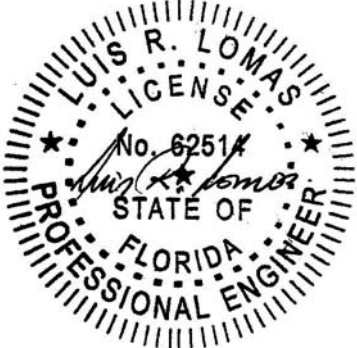
REV
A

SCALE NTS

DATE 07/21/2021

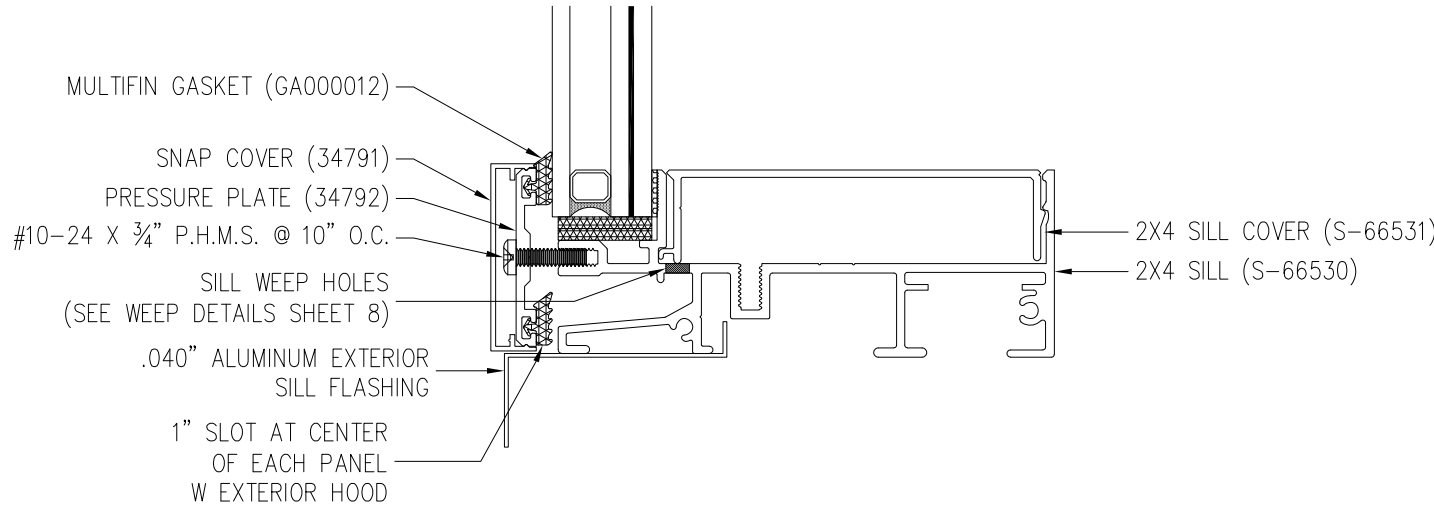
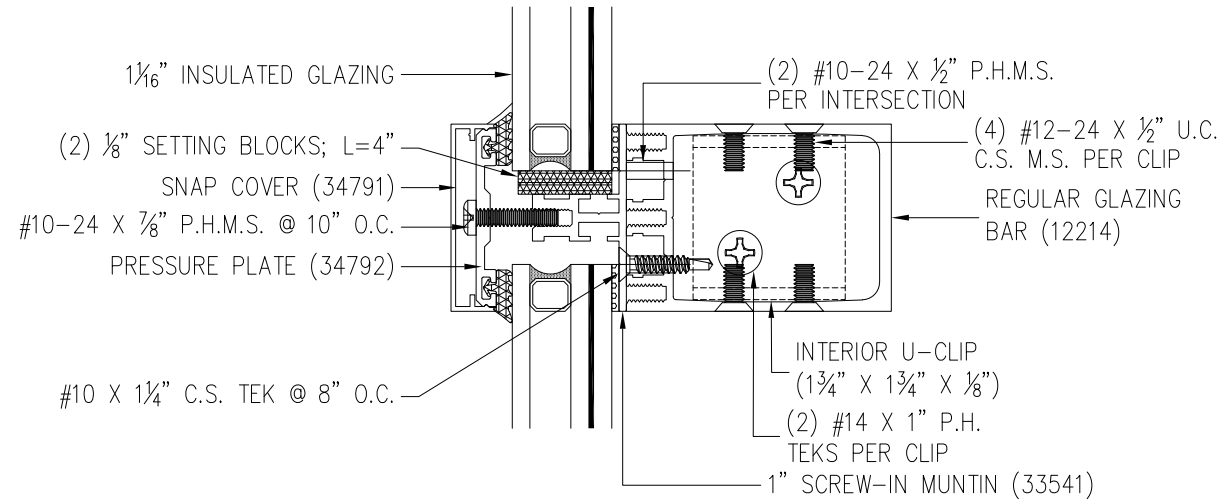
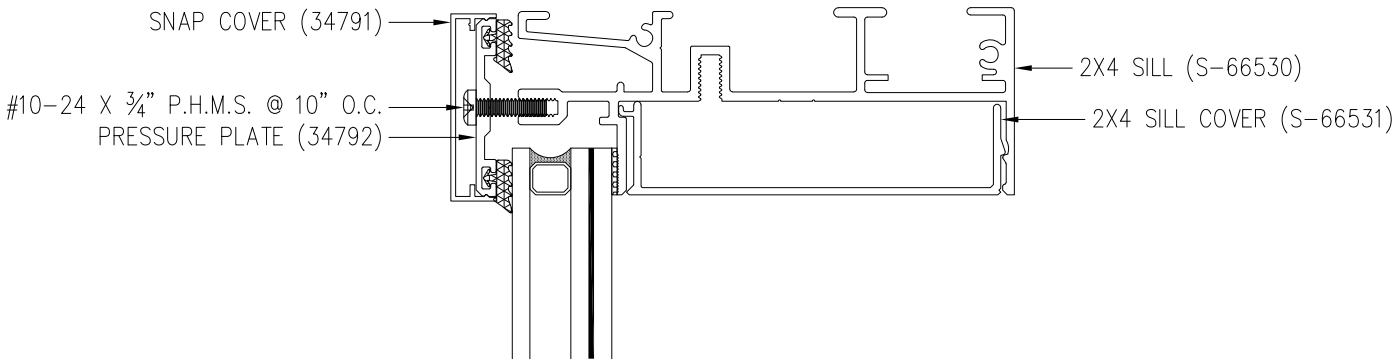
SHEET 4 OF 10

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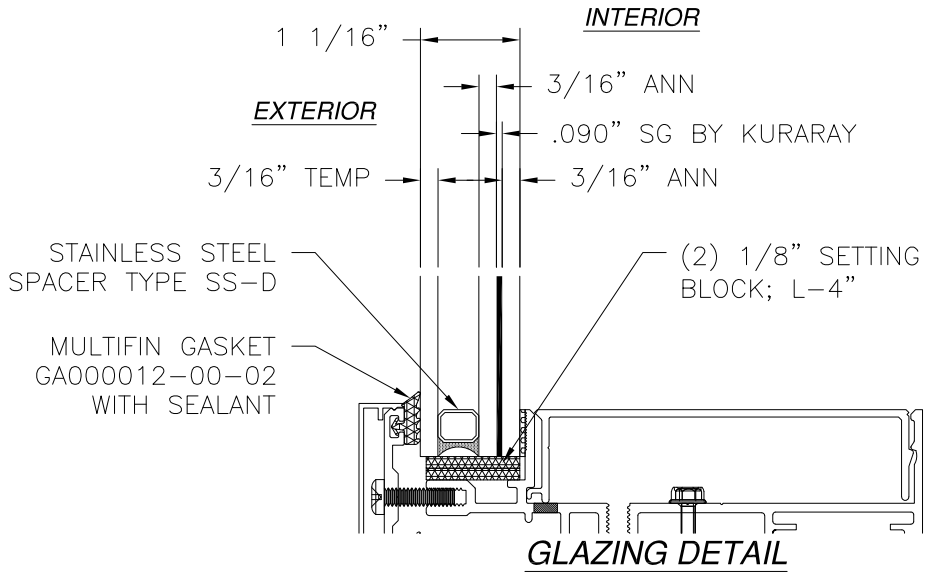


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VERTICAL CROSS SECTION



SIGNED: 12/18/2023

SOLAR INNOVATIONS, INC.

31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT

VERTICAL CROSS SECTION & GLAZING DETAIL

DRAWN: A.R.

DWG NO. 08-03747

REV A

SCALE NTS

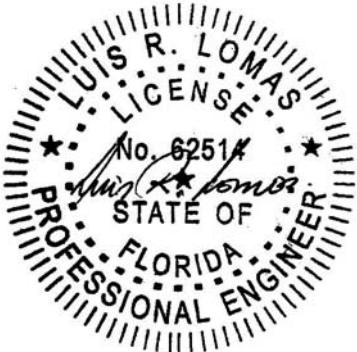
DATE 07/21/2021

SHEET 5 OF 10

L. ROBERTO LOMAS P.E.

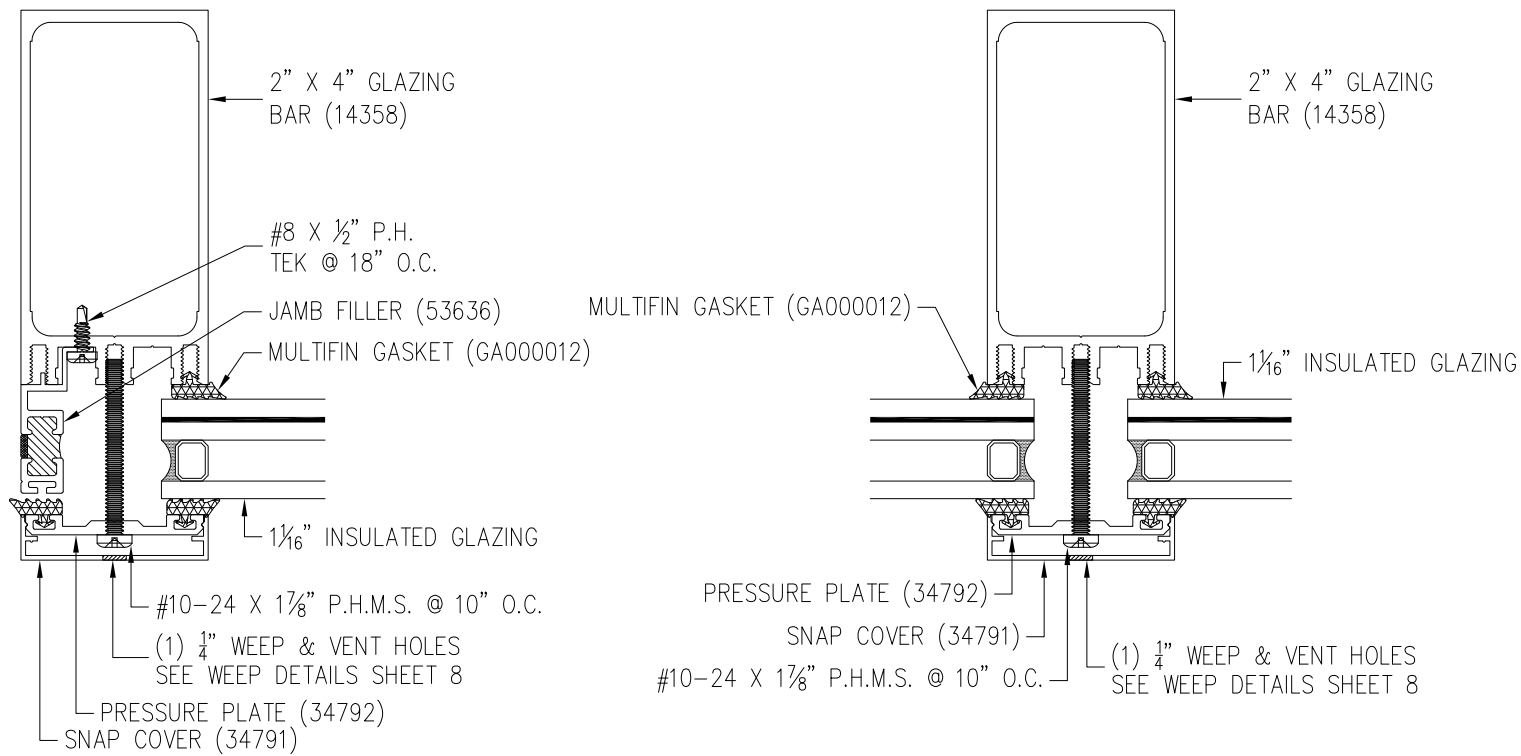
208 7th Ave, INDIALANTIC, FL 32903

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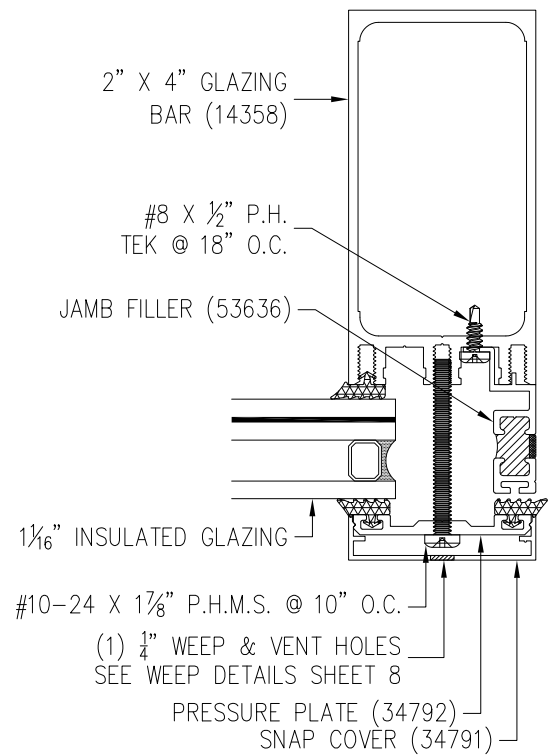


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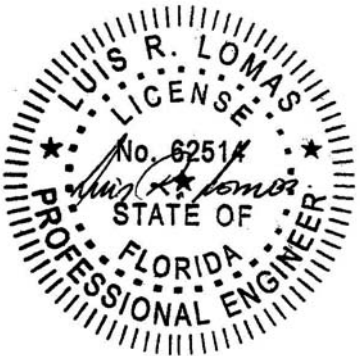


HORIZONTAL CROSS SECTION



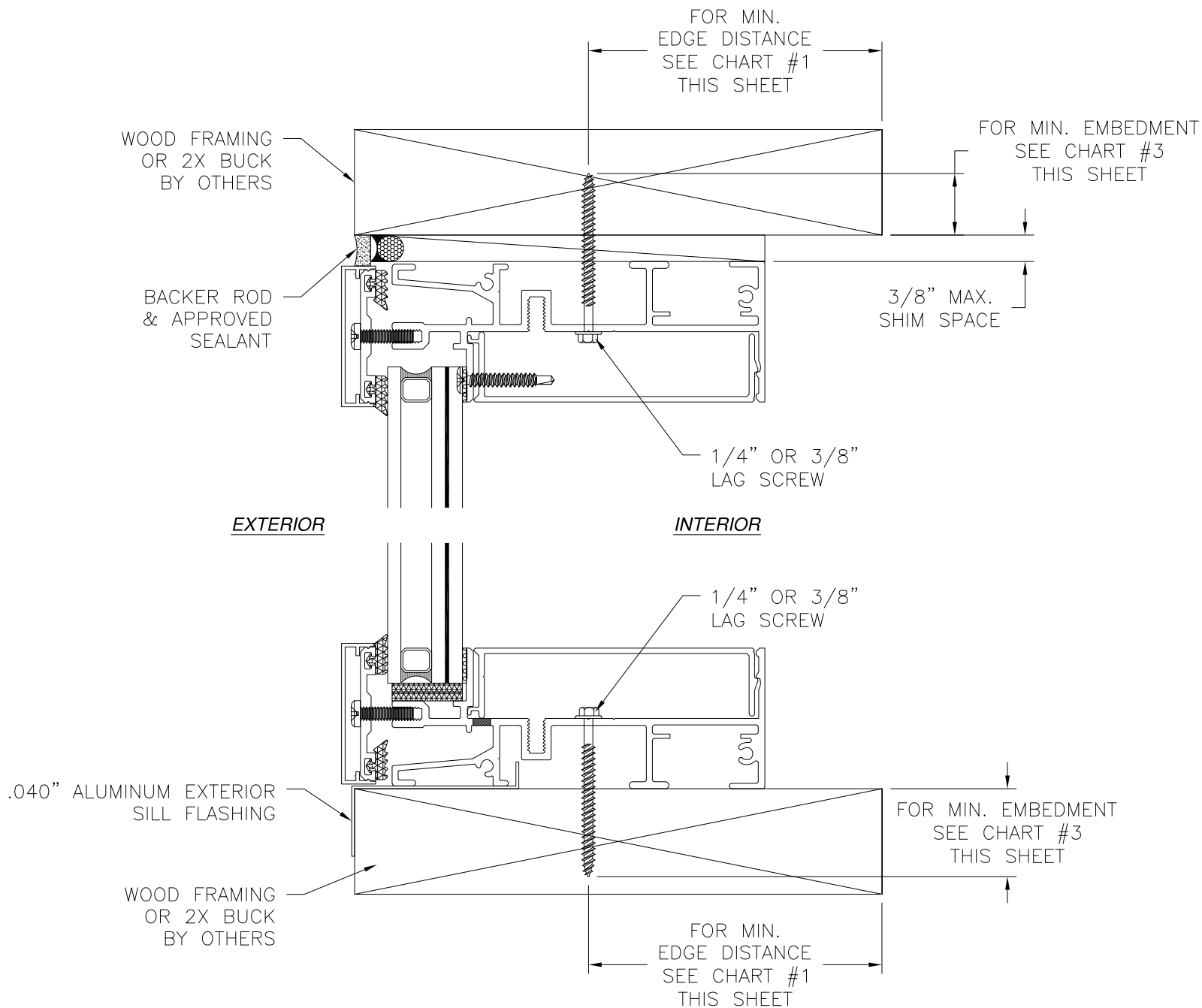
SIGNED: 12/18/2023

SOLAR INNOVATIONS, INC.		
31 ROBERTS RD. PINE GROVE, PA 17963		
SERIES SI5008 ALUMINUM FIXED 2X4 CURTAIN WALL - IMPACT HORIZONTAL CROSS SECTION		
DRAWN: A.R.	DWG NO. 08-03747	REV A
SCALE NTS	DATE 07/21/2021	SHEET 6 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



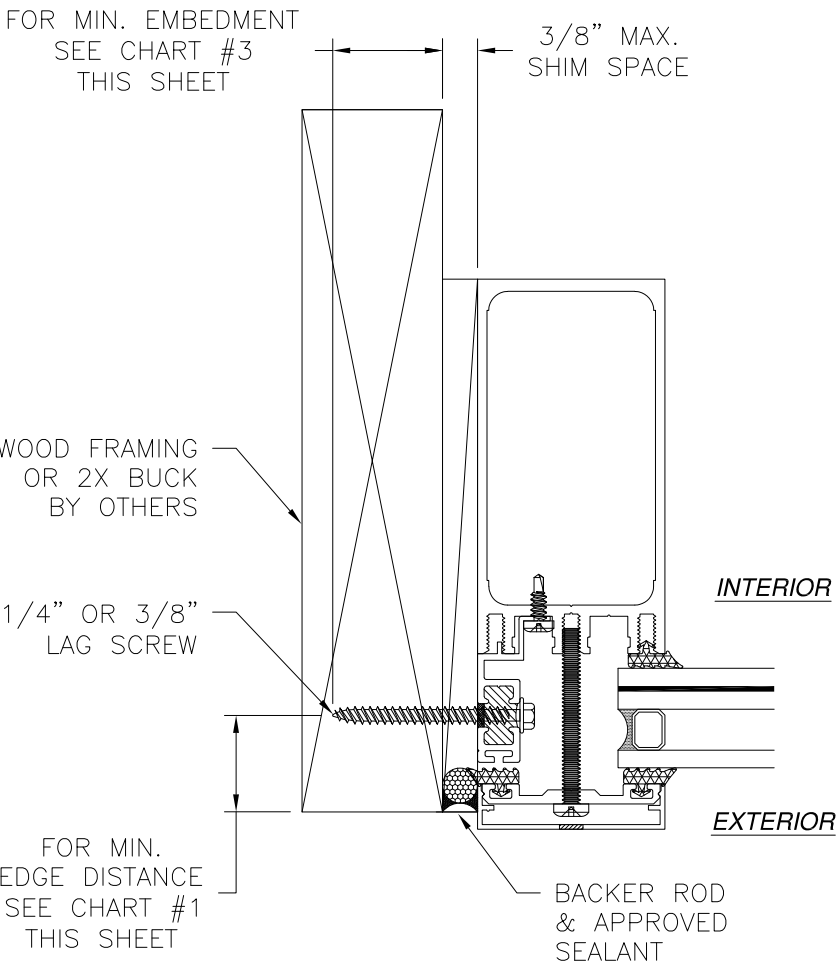
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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

CHART #3		
ANCHOR TYPE	MIN. EDGE DISTANCE (in)	MIN. EMBEDMENT (in)
3/8" LAG SCREW	1 1/2"	1 1/2"
1/4" LAG SCREW	1"	1 1/2"



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: 12/18/2023

SOLAR INNOVATIONS, INC.

31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
INSTALLATION DETAILS

DRAWN: A.R.

DWG NO. 08-03747

REV A

SCALE NTS

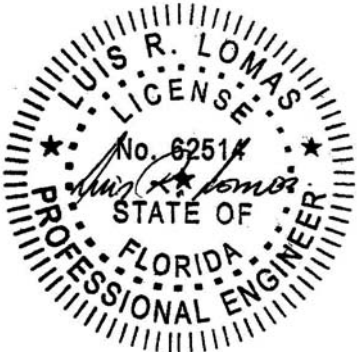
DATE 07/21/2021

SHEET 7 OF 10

L. ROBERTO LOMAS P.E.

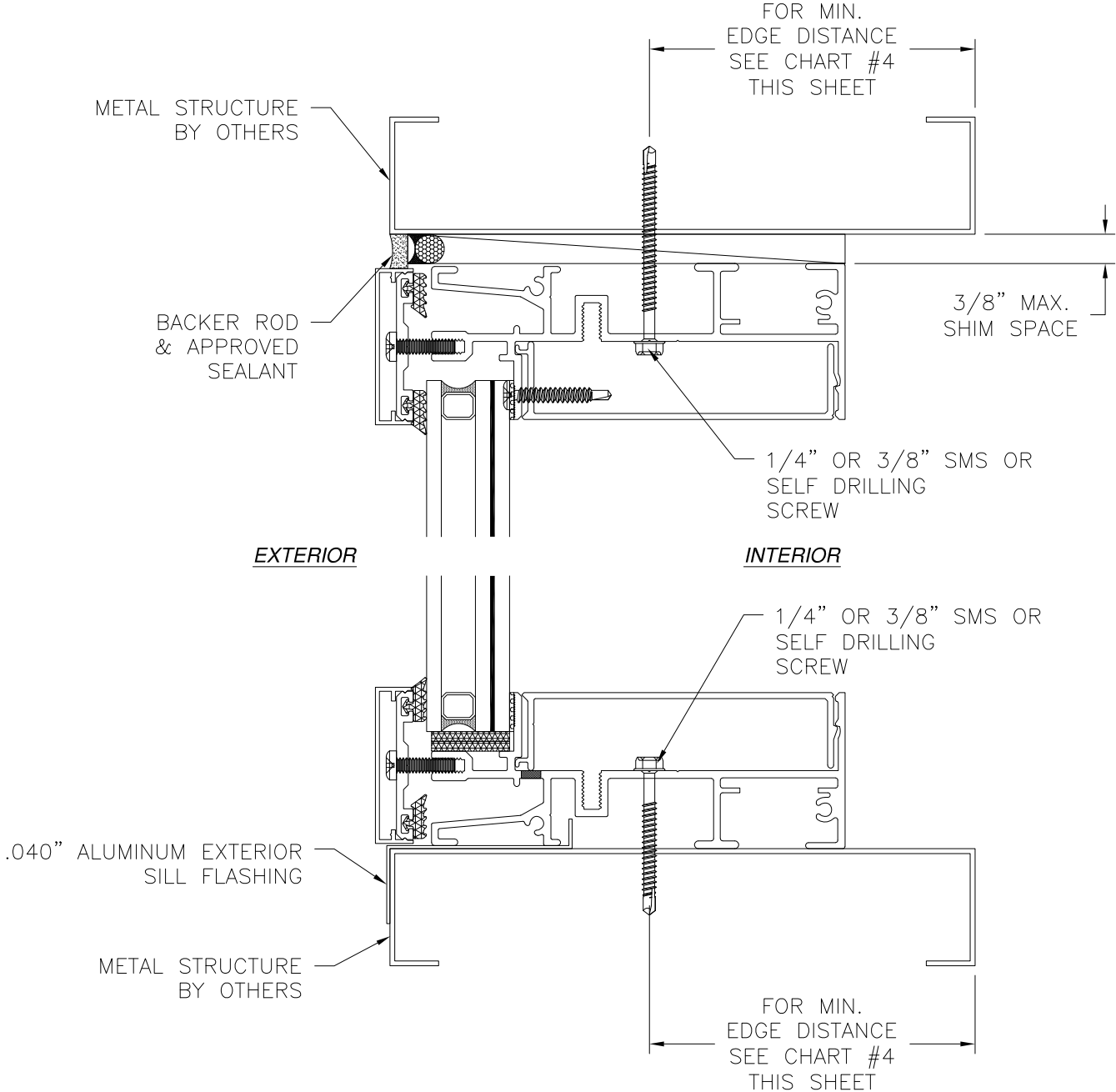
208 7th Ave, INDIALANTIC, FL 32903

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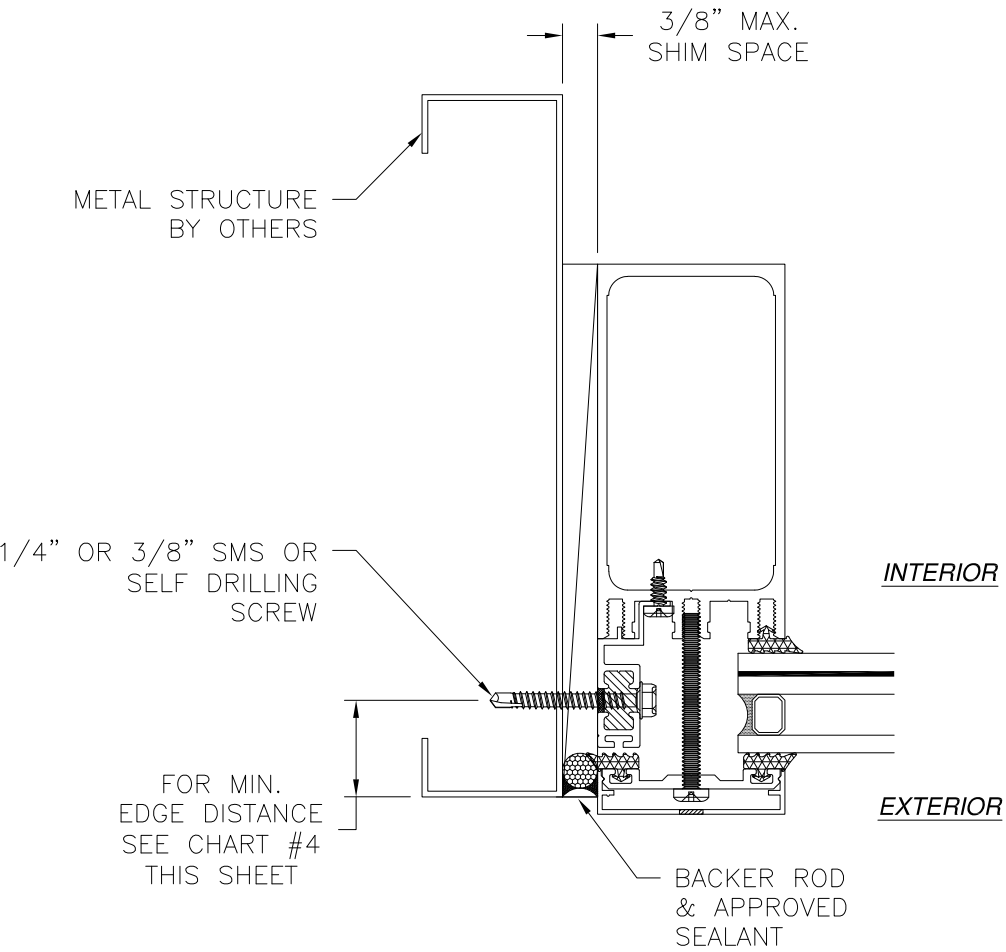
Luis R. Lomas P.E.
FL No.: 62514

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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION

CHART #4	
ANCHOR TYPE	MIN. EDGE DISTANCE (in)
3/8" SMS OR SELF DRILLING SCREW	1 1/2"
1/4" SMS OR SELF DRILLING SCREW	1"



JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

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

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SOLAR INNOVATIONS, INC.

31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4 CURTAIN WALL – IMPACT INSTALLATION DETAILS

DRAWN: A.R.

DWG NO. 08-03747

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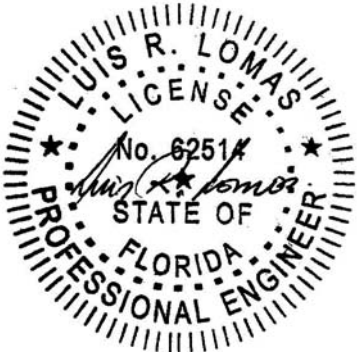
DATE 07/21/2021

SHEET 8 OF 10

L. ROBERTO LOMAS P.E.

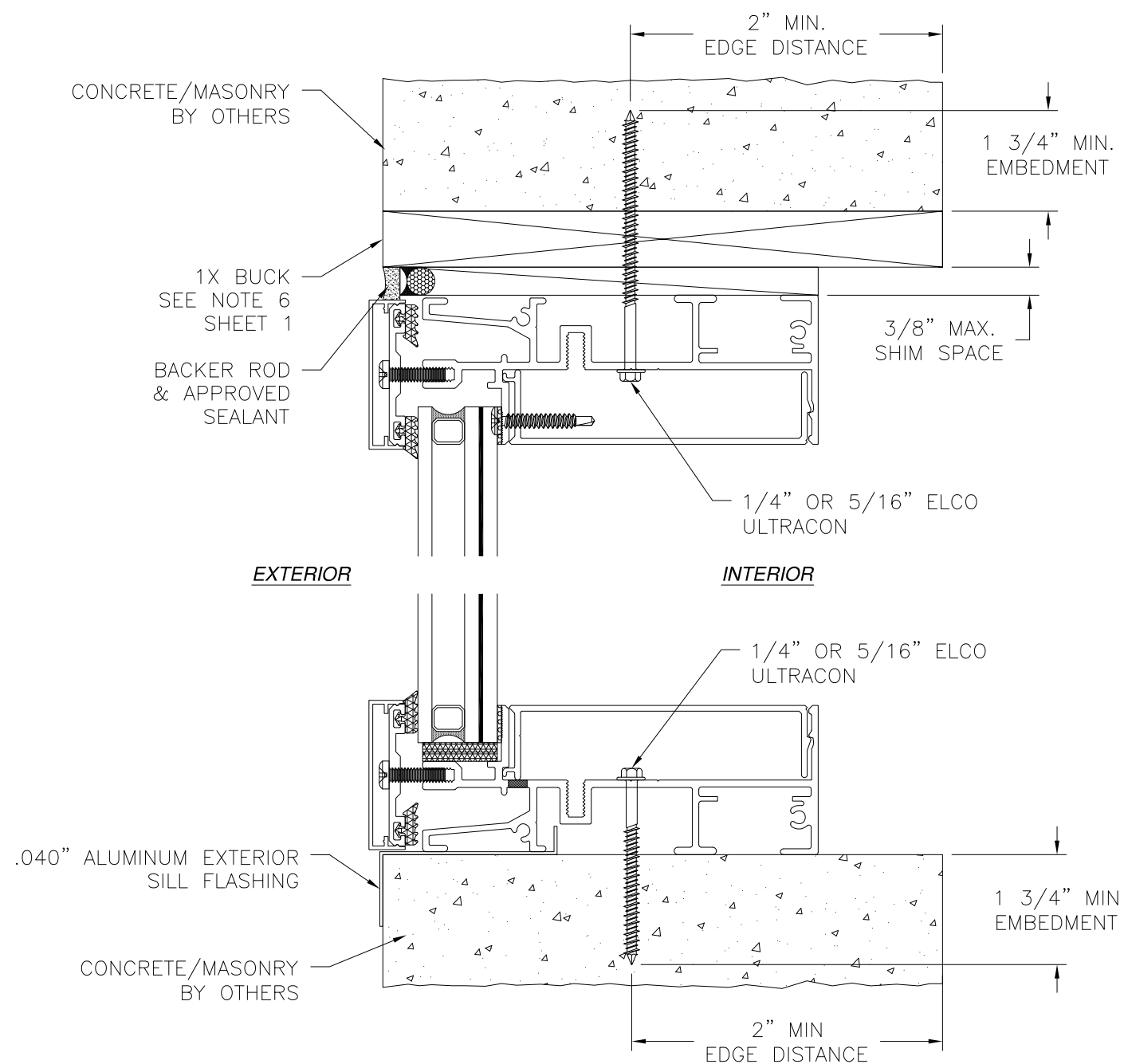
208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

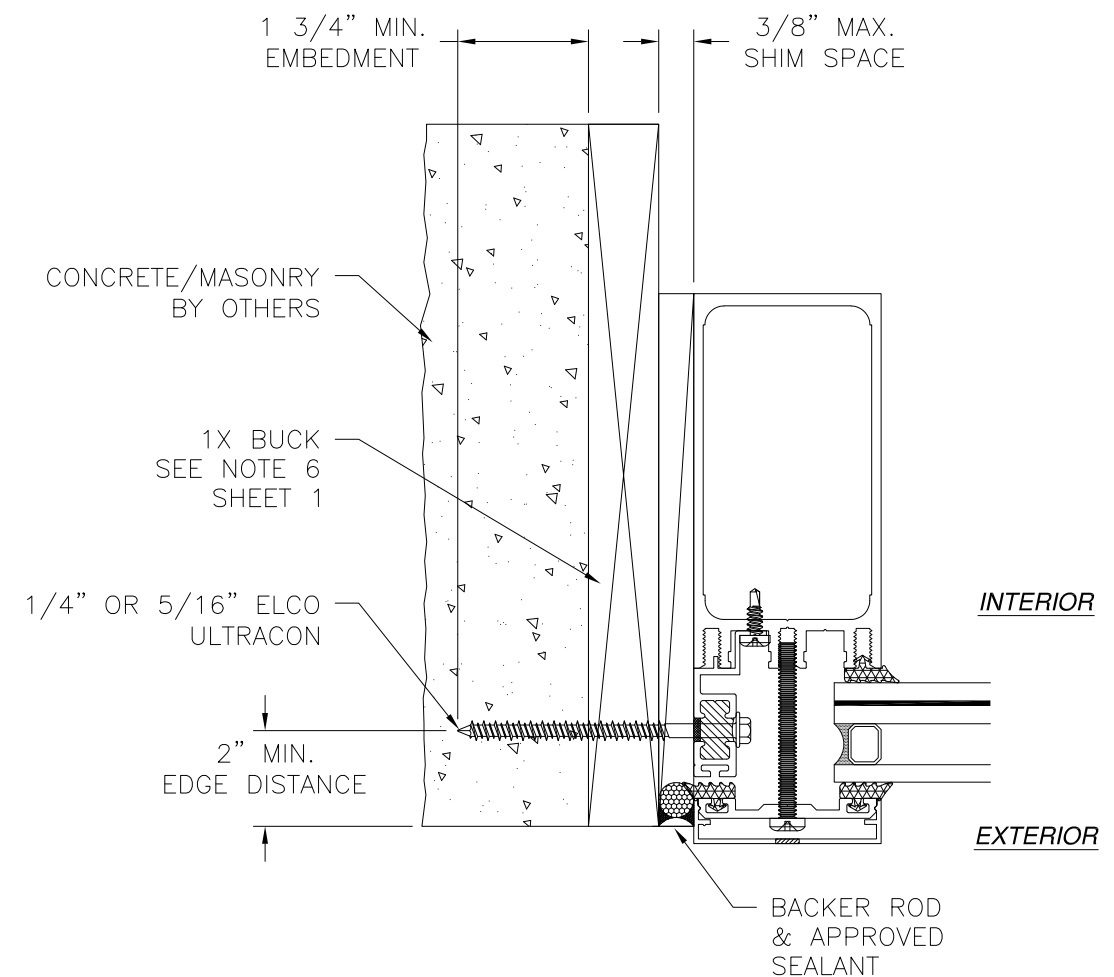


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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

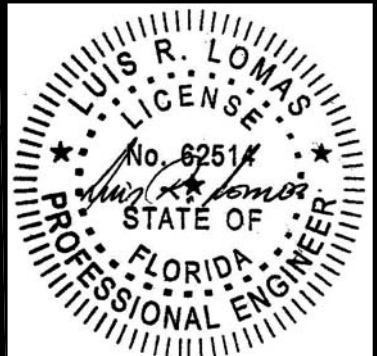


JAMB INSTALLATION DETAIL
CONCRETE/MASONRY INSTALLATION

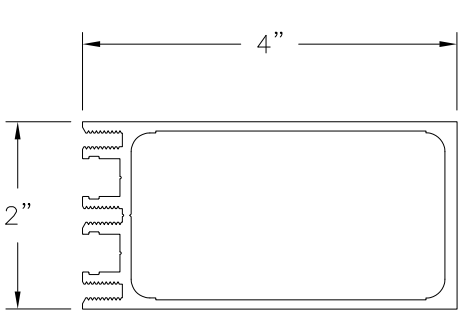
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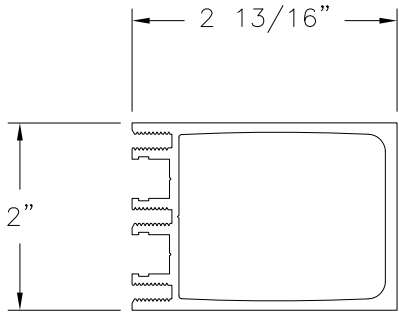
SOLAR INNOVATIONS, INC. 31 ROBERTS RD. PINE GROVE, PA 17963		
SERIES SI5008 ALUMINUM FIXED 2X4 CURTAIN WALL – IMPACT INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03747	REV A
SCALE NTS	DATE 07/21/2021	SHEET 9 OF 10
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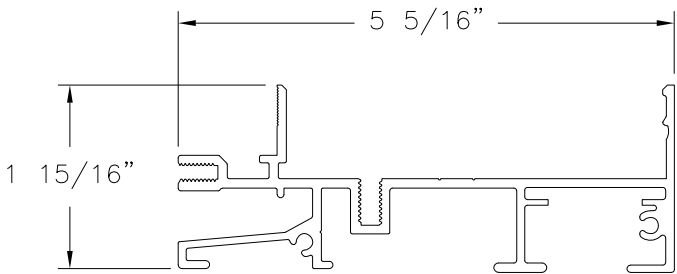
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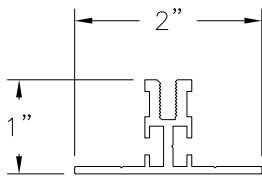
2" X 4" GLAZING BAR
ALUMINUM (H14358)



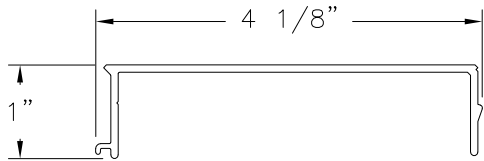
G2 REGULAR GLAZING BAR
ALUMINUM (H12214)



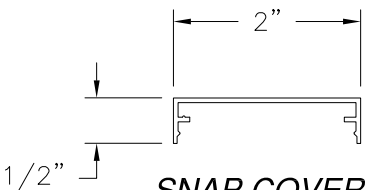
STRUCTURE HEAD & SILL
ALUMINUM (S66530)



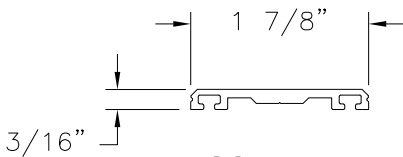
1" MUNTIN
ALUMINUM (S33541)



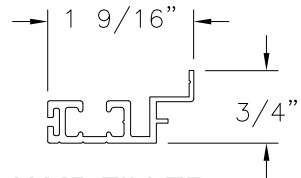
STRUCTURE SILL FILL
ALUMINUM (S66531)



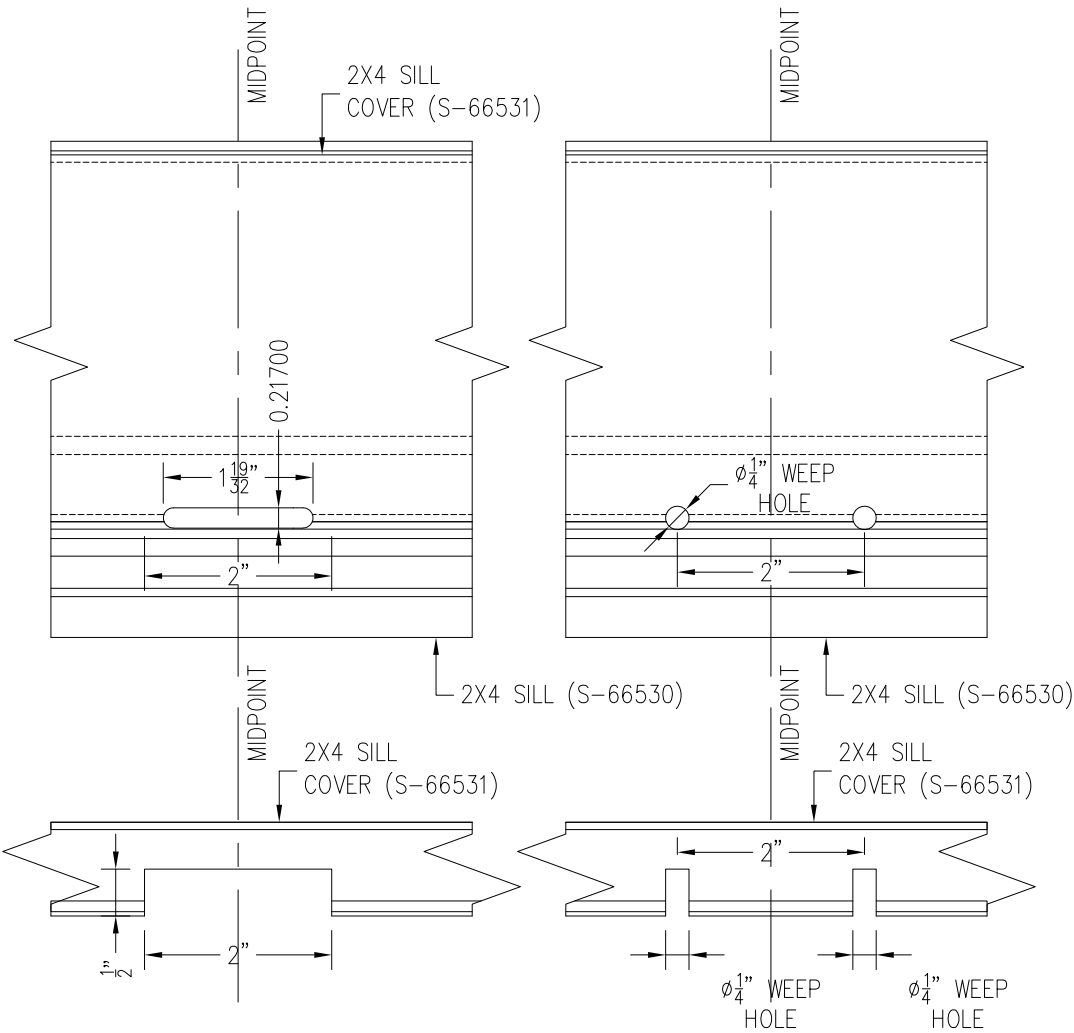
SNAP COVER
ALUMINUM (S34791)



PRESSURE PLATE
ALUMINUM (S34792)



JAMB FILLER
ALUMINUM (S53636)



WEEP HOLE DETAIL
@ CENTER OF BAY

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED COMPONENTS	12/18/2023	R.L.

SOLAR INNOVATIONS, INC.

31 ROBERTS RD.
PINE GROVE, PA 17963

SERIES SI5008 ALUMINUM FIXED 2X4
CURTAIN WALL – IMPACT
COMPONENTS

DRAWN: A.R.	DWG NO. 08-03747	REV A
SCALE NTS	DATE 07/21/2021	SHEET 10 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 12/18/2023



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