

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

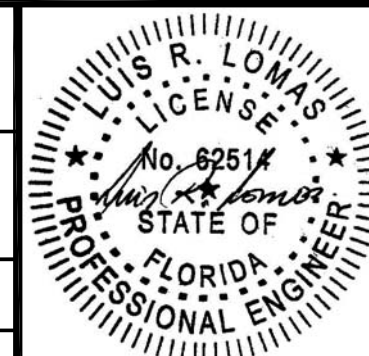
NOTES:

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. 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.
4. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. FRAME MATERIAL: ALUMINUM 6063-T6
6. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 4 FOR GLASS DETAILS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
8. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
9. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" ELCO ULTRACON OR 1/4" 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.
11. 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.
12. ALL FASTENERS TO BE CORROSION RESISTANT.
13. 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 3,000 PSI.
  - C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
  - D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .125" THICK MINIMUM

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2	ELEVATION
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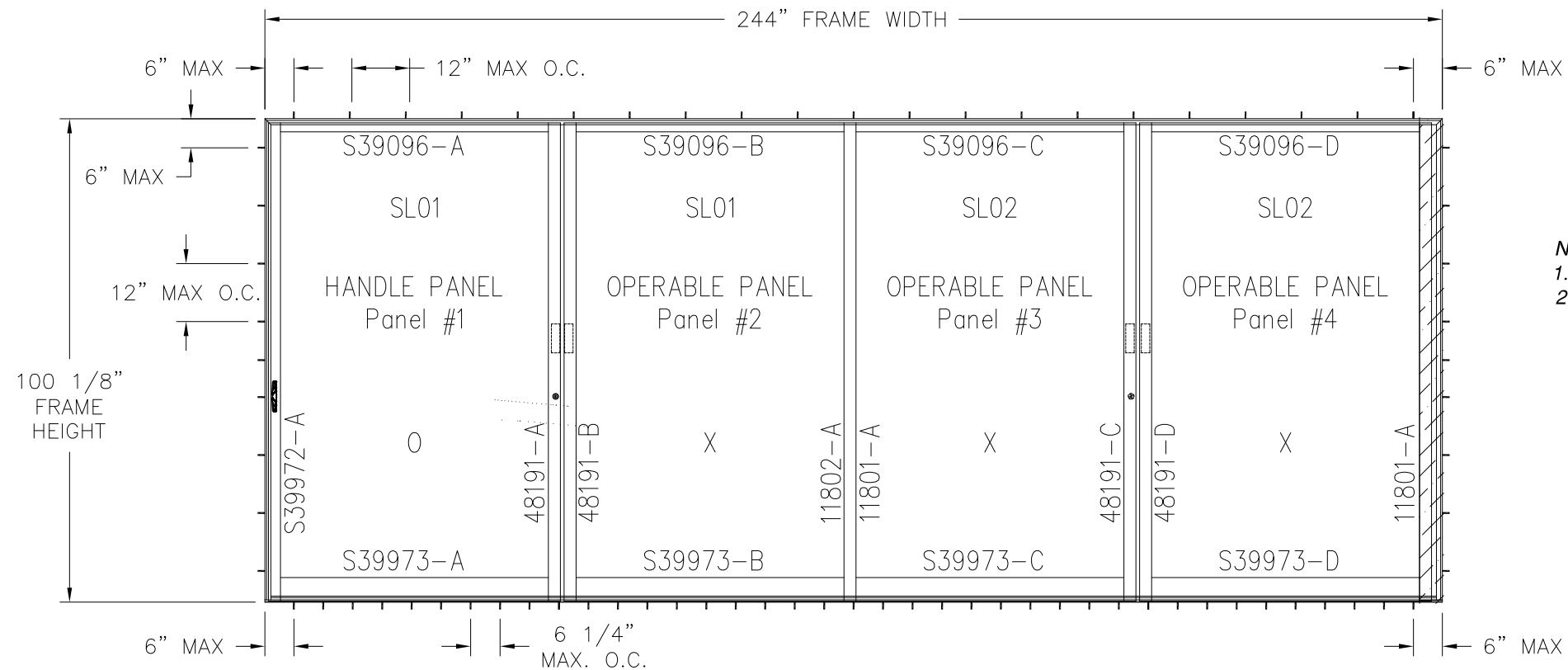
<b>SOLAR INNOVATIONS, INC.</b> 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL NON-HVHZ NOTES		
DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 1 OF 9
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

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

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- NOTES:**
- PANEL SIZE: 60 1/2" x 99"
  - D.L.O.: 55 1/2" x 92 5/16"

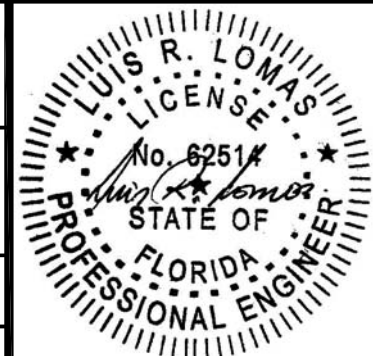
**SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL**  
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±65.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4  
4 PANELS UNIT SHOWN, UNLIMITED NUMBER OF PANELS ARE APPROVED AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 41.59 FT<sup>2</sup>

SIGNED: 11/30/2020

<b>SOLAR INNOVATIONS, INC.</b> 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL NON-HVHZ ELEVATIONS		
DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 2 OF 9
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		



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**HARDWARE SCHEDULE**

A.	(2) POINT METAL LOCK WITH KEEPERS, 42" FROM BOTTOM OF LOCK STILE
B.	DUAL STAINLESS STEEL ROLLERS AT EACH END OF BOTTOM RAILS
C.	ALUMINUM REINFORCEMENT PANEL ADAPTER AT MEETING STILE IN PANELS 1 & 2

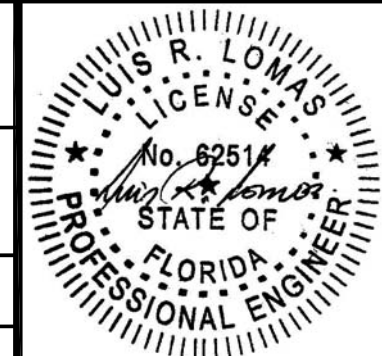
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Maximum Design pressure (psf) with glass A																	
Panel Height (in)	Single Panel Width (in)																
	24.0		30.0		36.0		42.0		48.0		54.0		60.5		66.0		
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	
78.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	64.5	64.5	
84.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	74.9	74.9	59.4	59.4
90.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	75.1	75.1	69.7	69.7	56.1	56.1
96.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	75.6	75.6	69.2	69.2	64.2	64.2	-	-
99.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	67.7	67.7	60.3	60.3	56.5	56.5	53.8	53.8	-	-
102.0	80.0	80.0	80.0	80.0	79.1	79.1	65.9	65.9	58.5	58.5	54.9	54.9	-	-	-	-	
108.0	80.0	80.0	80.0	80.0	75.4	75.4	63.2	63.2	56.4	56.4	51.8	51.8	-	-	-	-	
114.0	80.0	80.0	75.6	75.6	63.8	63.8	55.5	55.5	49.4	49.4	-	-	-	-	-	-	
120.0	80.0	80.0	64.6	64.6	54.5	54.5	47.3	47.3	42.0	42.0	-	-	-	-	-	-	
126.0	69.0	69.0	55.7	55.7	46.9	46.9	40.7	40.7	-	-	-	-	-	-	-	-	
132.0	60.0	60.0	48.3	48.3	40.7	40.7	35.2	35.2	-	-	-	-	-	-	-	-	
138.0	52.4	52.4	42.2	42.2	35.5	35.5	30.7	30.7	-	-	-	-	-	-	-	-	
144.0	46.1	46.1	37.1	37.1	31.2	31.2	-	-	-	-	-	-	-	-	-	-	
150.0	40.7	40.7	32.8	32.8	27.5	27.5	-	-	-	-	-	-	-	-	-	-	
156.0	36.2	36.2	29.1	29.1	24.4	24.4	-	-	-	-	-	-	-	-	-	-	

Maximum Design pressure (psf) with glass B																	
Panel Height (in)	Single Panel Width (in)																
	24.0		30.0		36.0		42.0		48.0		54.0		60.5		66.0		
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	
78.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	77.3	77.3	71.4	71.4	57.0	57.0
84.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	76.9	76.9	72.1	72.1	66.2	66.2	52.6	52.6
90.0	80.0	80.0	80.0	80.0	80.0	80.0	79.9	79.9	71.8	71.8	66.5	66.5	61.7	61.7	49.7	49.7	
96.0	80.0	80.0	80.0	80.0	80.0	80.0	75.8	75.8	66.9	66.9	61.2	61.2	56.8	56.8	-	-	
99.0	80.0	80.0	80.0	80.0	71.3	71.3	59.9	59.9	53.3	53.3	50.0	50.0	47.6	47.6	-	-	
102.0	80.0	80.0	80.0	80.0	70.0	70.0	58.3	58.3	51.8	51.8	48.6	48.6	-	-	-	-	
108.0	80.0	80.0	80.0	80.0	67.6	67.6	55.9	55.9	49.9	49.9	45.9	45.9	-	-	-	-	
114.0	80.0	80.0	75.6	75.6	63.8	63.8	54.1	54.1	48.1	48.1	-	-	-	-	-	-	
120.0	80.0	80.0	64.6	64.6	54.5	54.5	47.3	47.3	42.0	42.0	-	-	-	-	-	-	
126.0	69.0	69.0	55.7	55.7	46.9	46.9	40.7	40.7	-	-	-	-	-	-	-	-	
132.0	60.0	60.0	48.3	48.3	40.7	40.7	35.2	35.2	-	-	-	-	-	-	-	-	
138.0	52.4	52.4	42.2	42.2	35.5	35.5	30.7	30.7	-	-	-	-	-	-	-	-	
144.0	46.1	46.1	37.1	37.1	31.2	31.2	-	-	-	-	-	-	-	-	-	-	
150.0	40.7	40.7	32.8	32.8	27.5	27.5	-	-	-	-	-	-	-	-	-	-	
156.0	36.2	36.2	29.1	29.1	24.4	24.4	-	-	-	-	-	-	-	-	-	-	

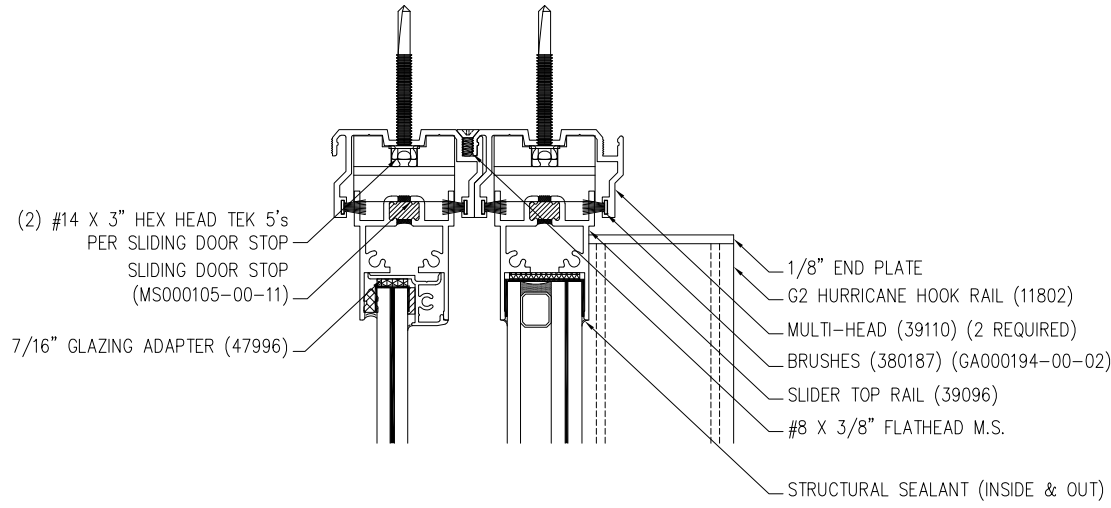
SIGNED: 11/30/2020

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL NON-HVHZ DESIGN PRESSURE CHARTS		
DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 3 OF 9
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		

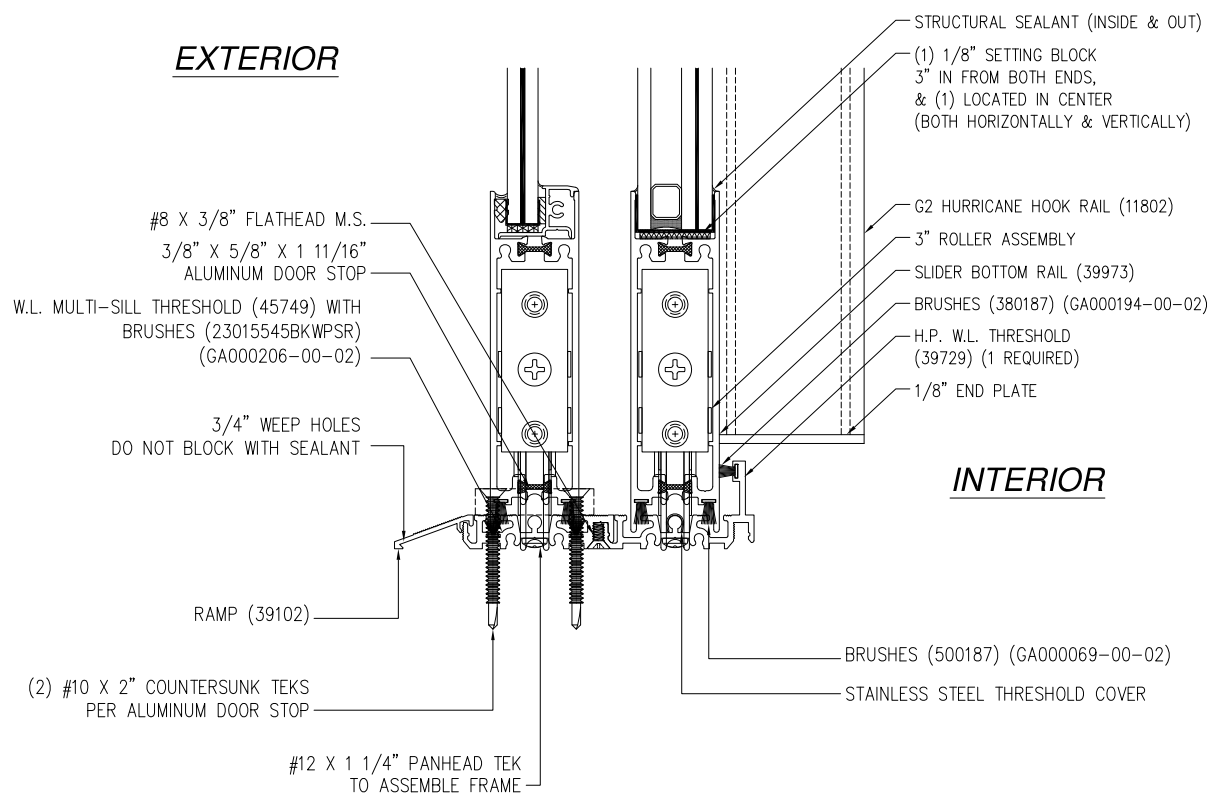


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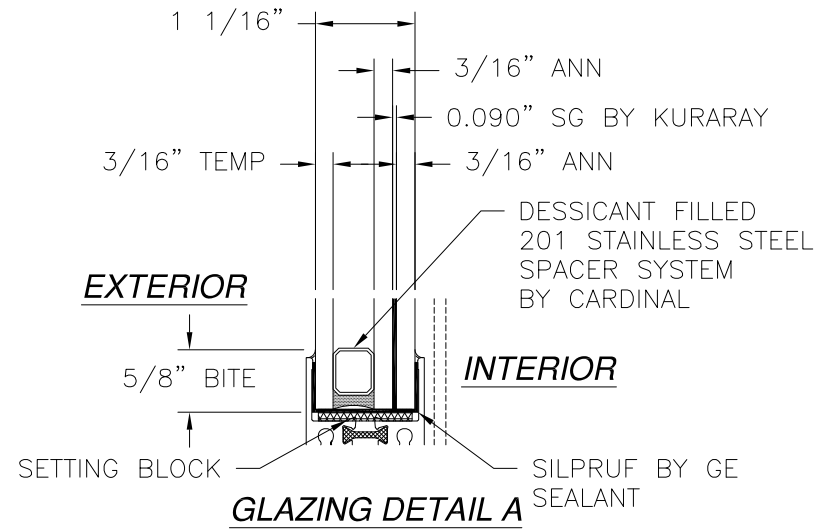


**EXTERIOR**

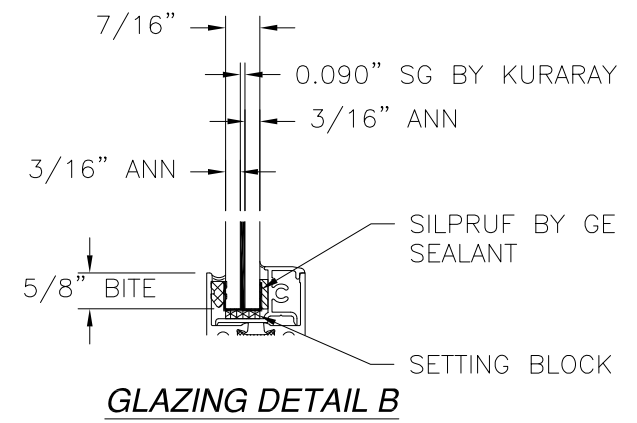


**INTERIOR**

**VERTICAL CROSS SECTION**



**GLAZING DETAIL A**



**GLAZING DETAIL B**

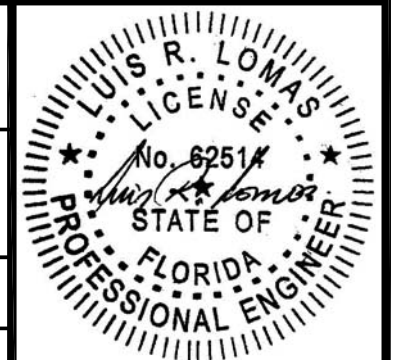
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SOLAR INNOVATIONS, INC.  
31 ROBERTS RD  
PINE GROVE, PA 17963

SERIES SI8100 SLIDING GLASS DOOR  
5x8 PANEL NON-HVHZ  
CROSS SECTIONS AND GLAZING DETAILS

DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 4 OF 9

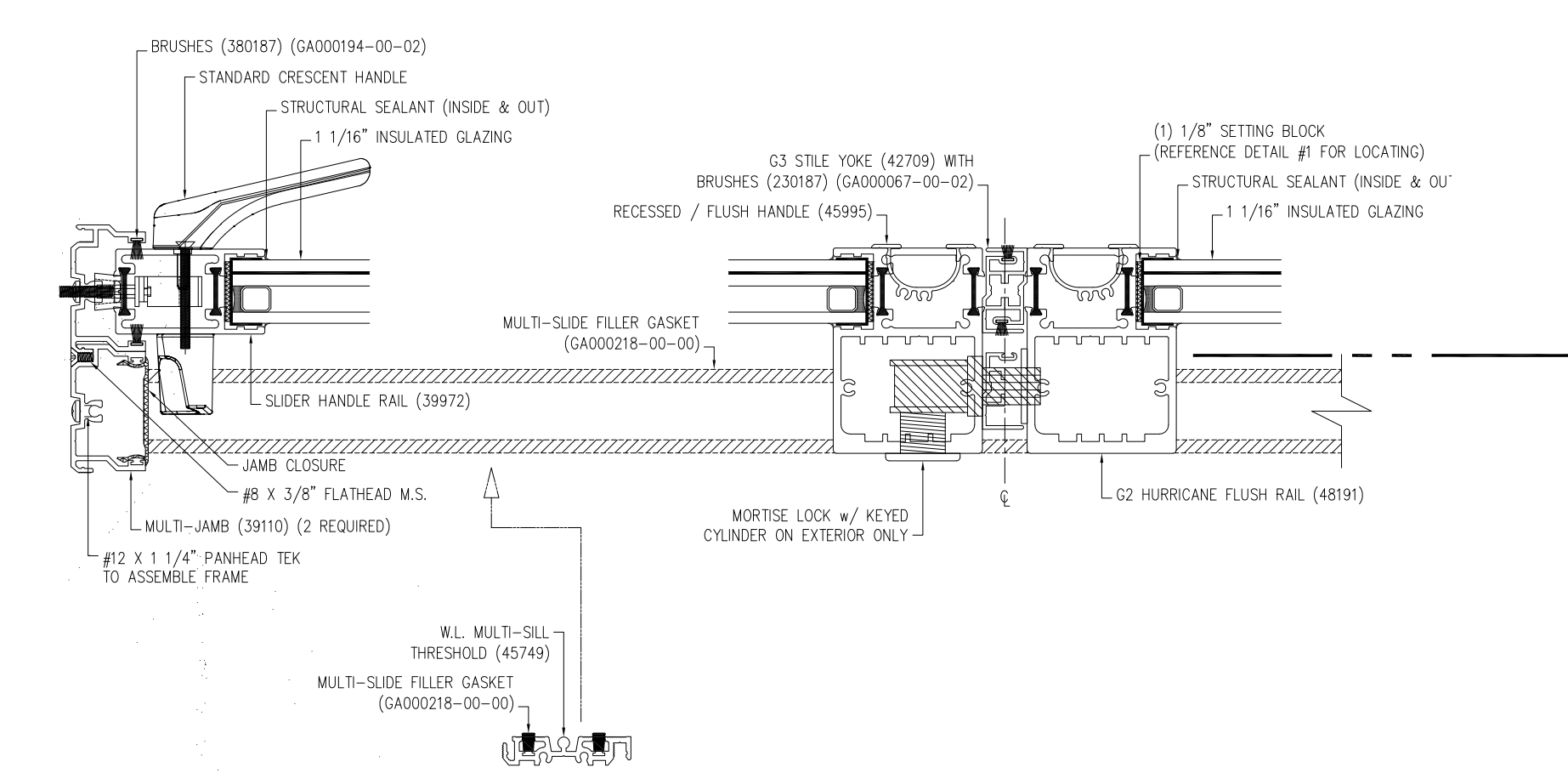
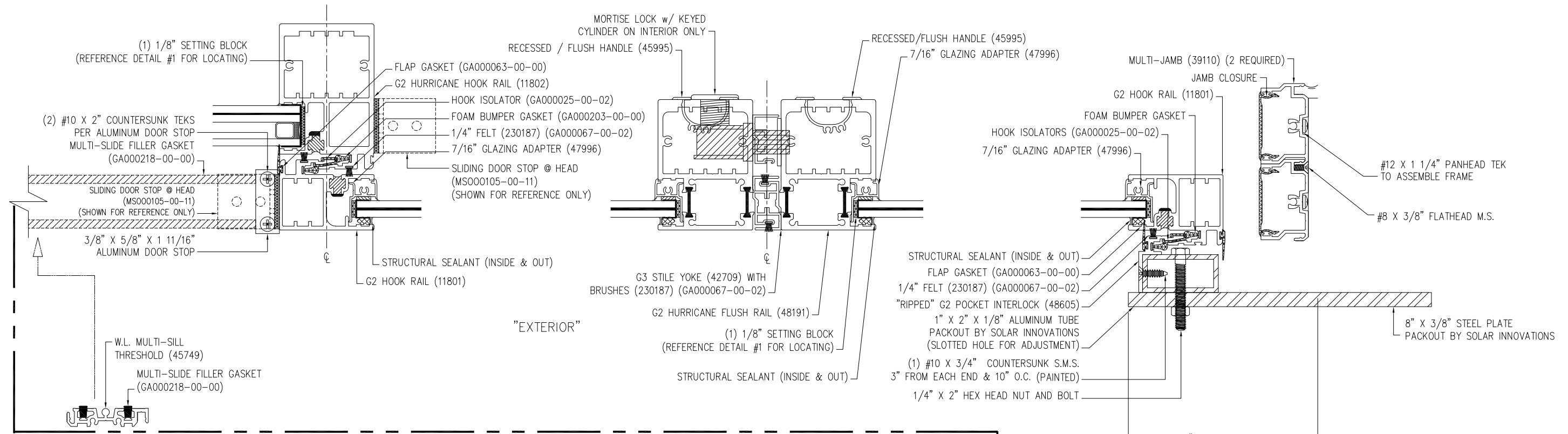
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### HORIZONTAL CROSS SECTION



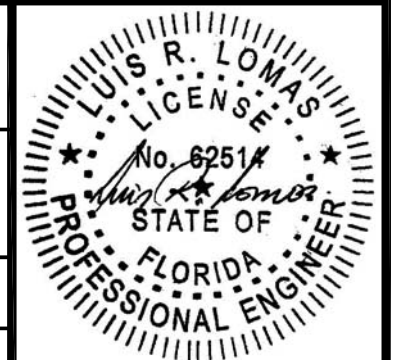
**SOLAR INNOVATIONS, INC.**  
 31 ROBERTS RD  
 PINE GROVE, PA 17963

**SERIES SI8100 SLIDING GLASS DOOR**  
 5x8 PANEL NON-HVHZ  
 CROSS SECTIONS

DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 5 OF 9

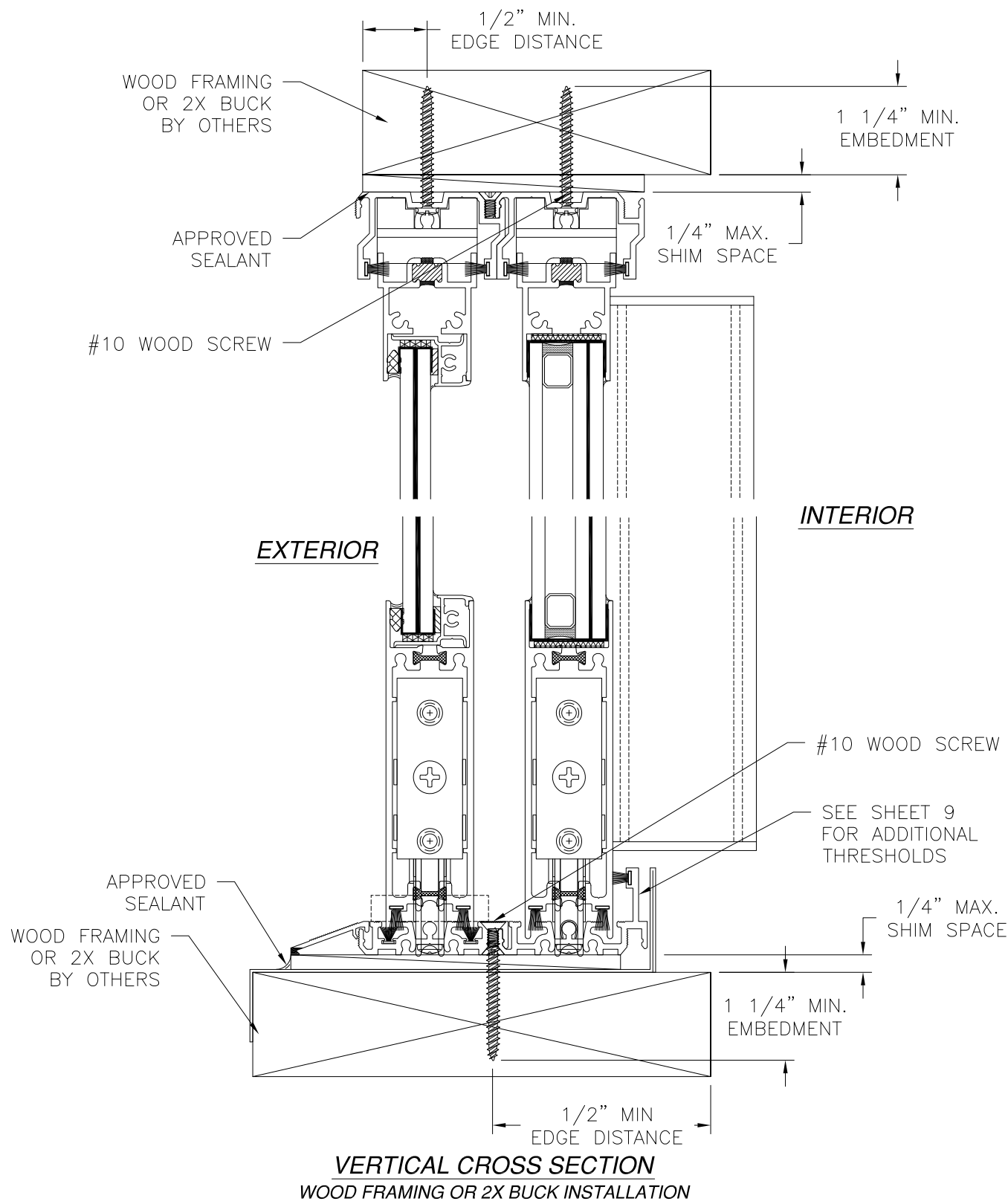
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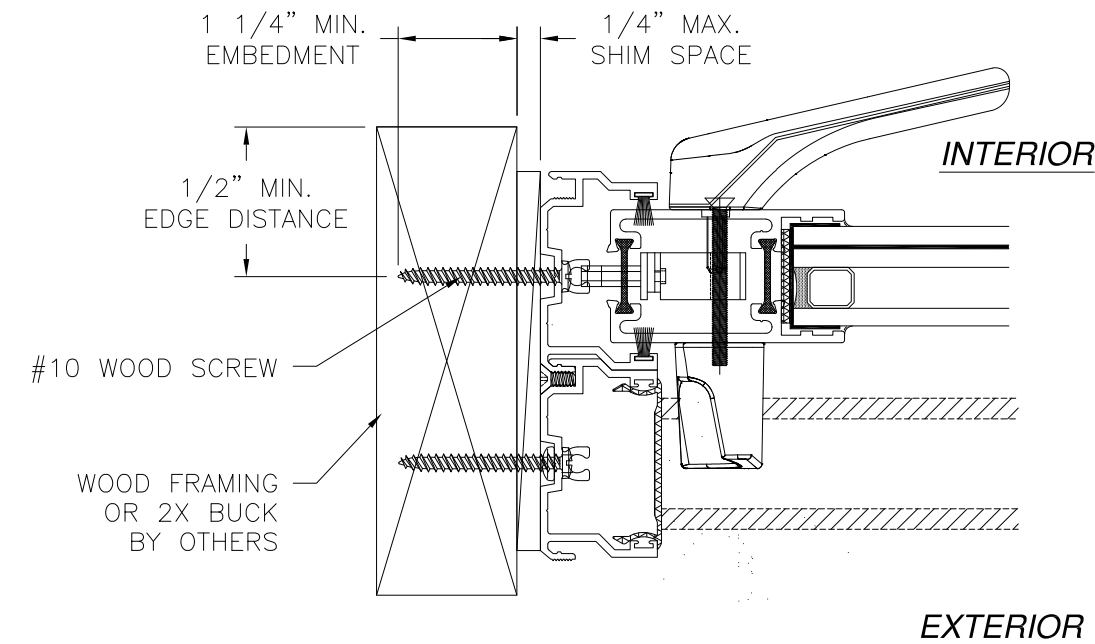


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**VERTICAL CROSS SECTION**  
WOOD FRAMING OR 2X BUCK INSTALLATION



**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

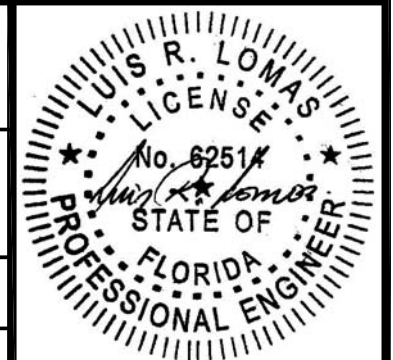
SOLAR INNOVATIONS, INC.  
31 ROBERTS RD  
PINE GROVE, PA 17963

SERIES SI8100 SLIDING GLASS DOOR  
5x8 PANEL NON-HVHZ  
INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 6 OF 9

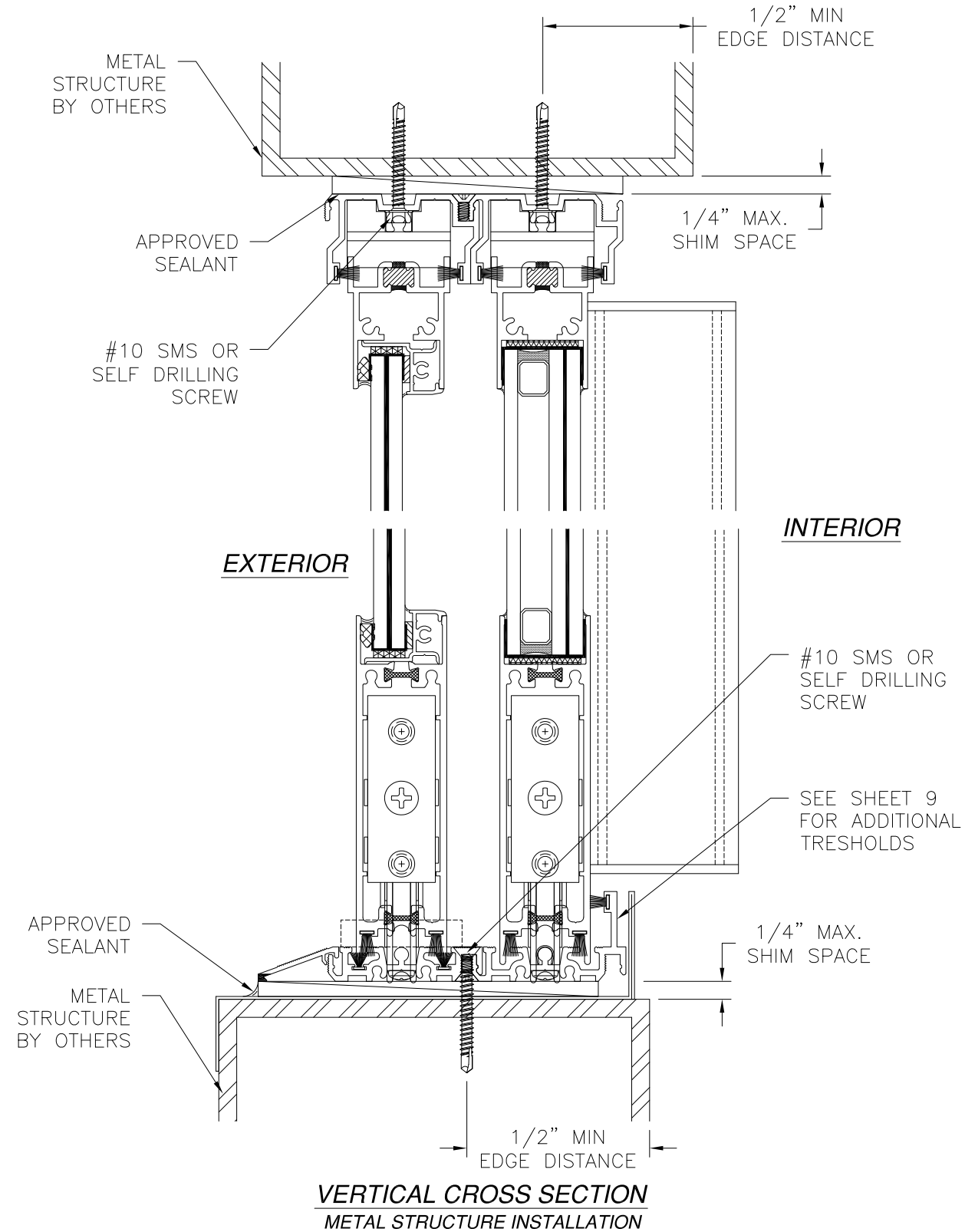
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1432 WOODFORD RD LEWISVILLE, NC 27023  
434-688-0609 rllomas@lrlomaspe.com

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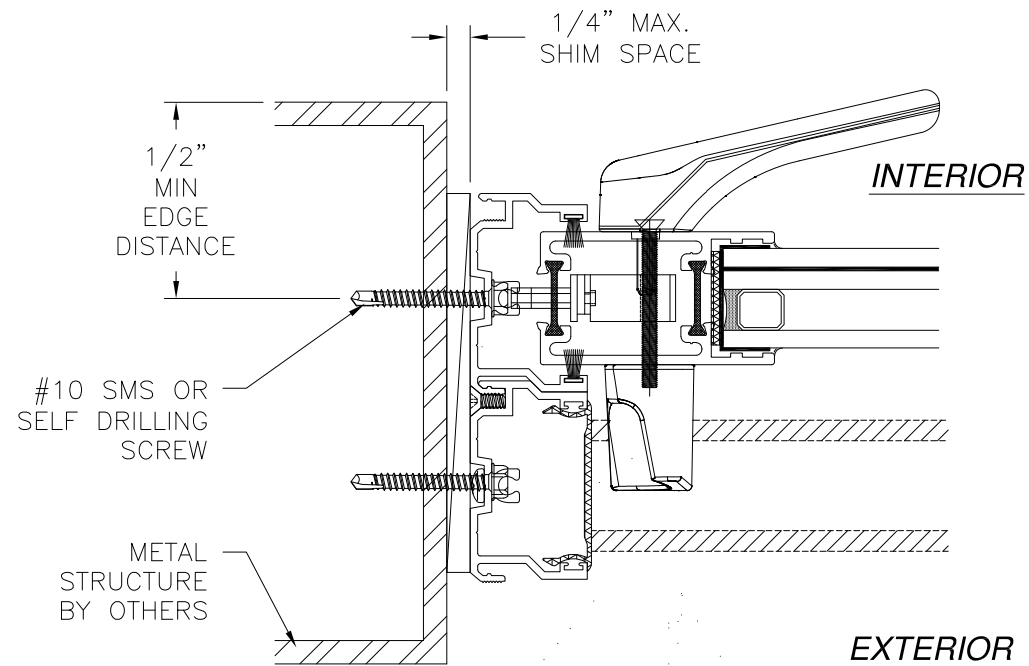


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**VERTICAL CROSS SECTION**  
METAL STRUCTURE INSTALLATION



**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

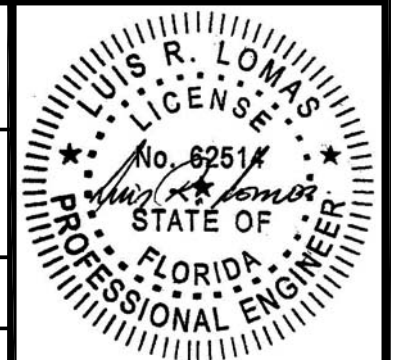
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PINE GROVE, PA 17963

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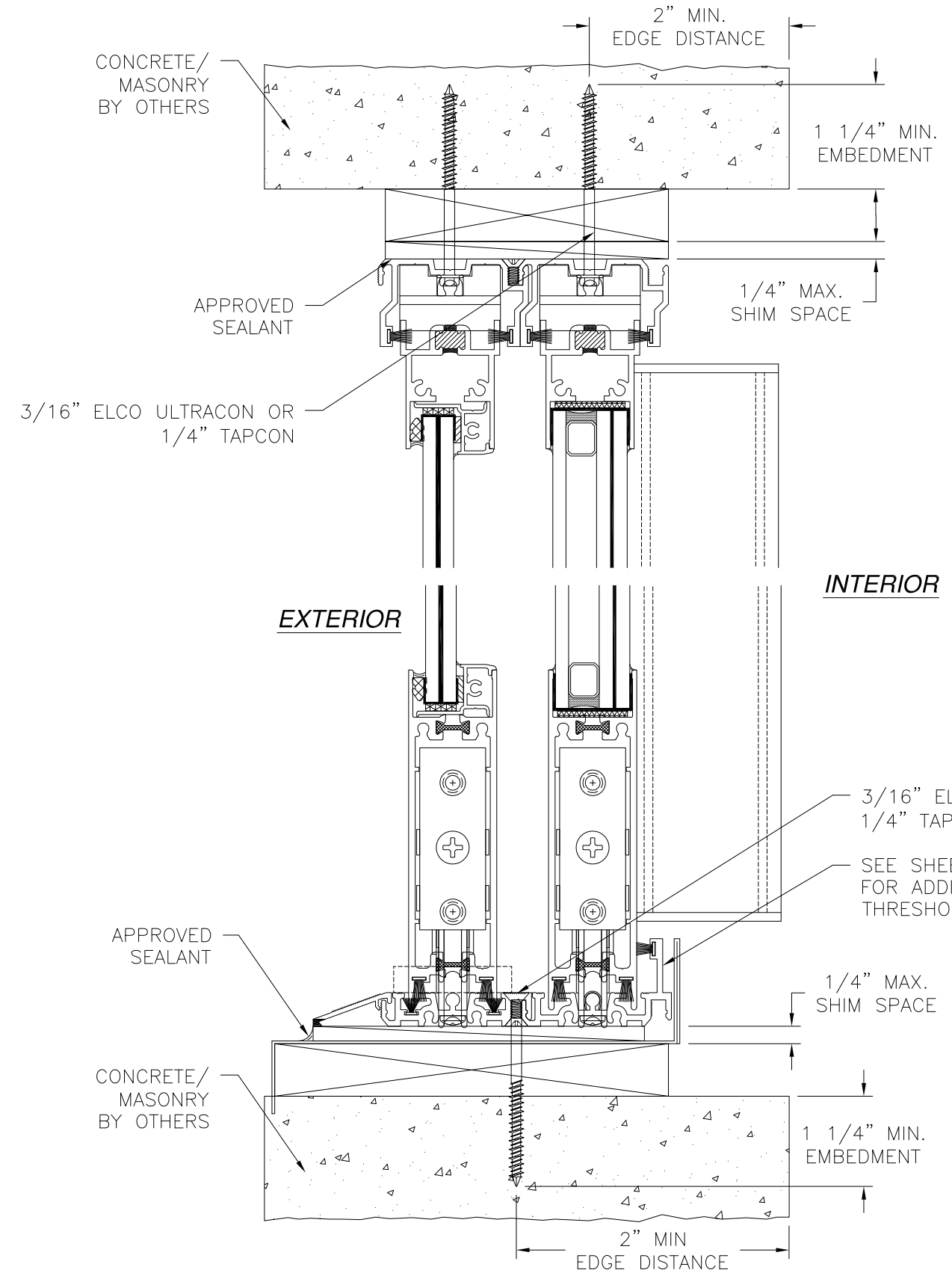
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434-688-0609 rllomas@rlomaspe.com

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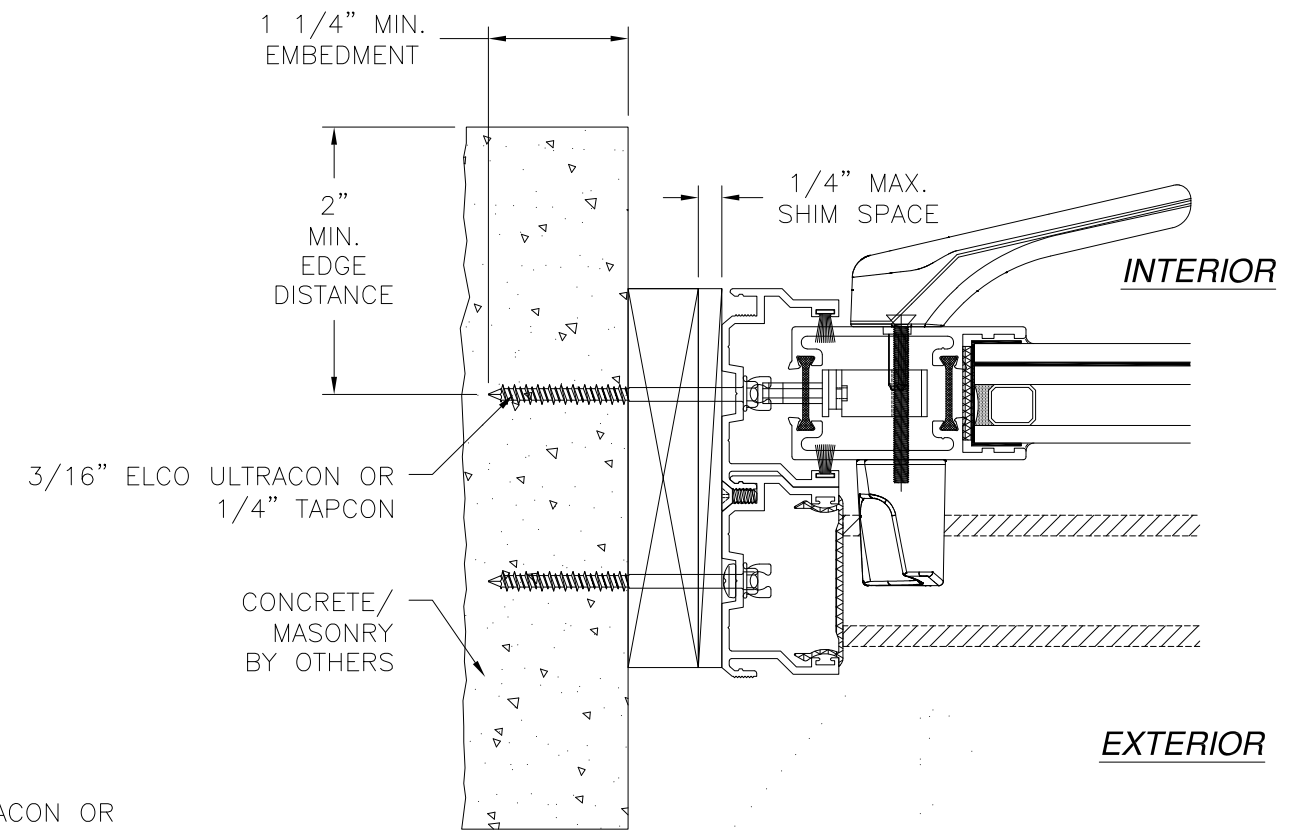


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**VERTICAL CROSS SECTION**  
CONCRETE/MASONRY INSTALLATION



**JAMB INSTALLATION DETAIL**  
CONCRETE/MASONRY INSTALLATION

- NOTES:**
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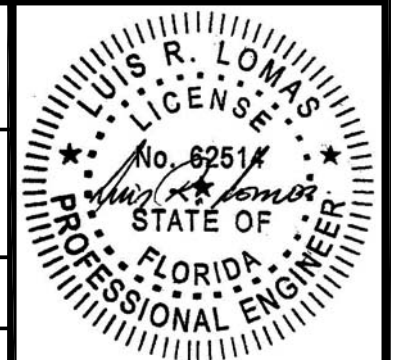
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31 ROBERTS RD  
PINE GROVE, PA 17963

SERIES SI8100 SLIDING GLASS DOOR  
5x8 PANEL NON-HVHZ  
INSTALLATION DETAILS

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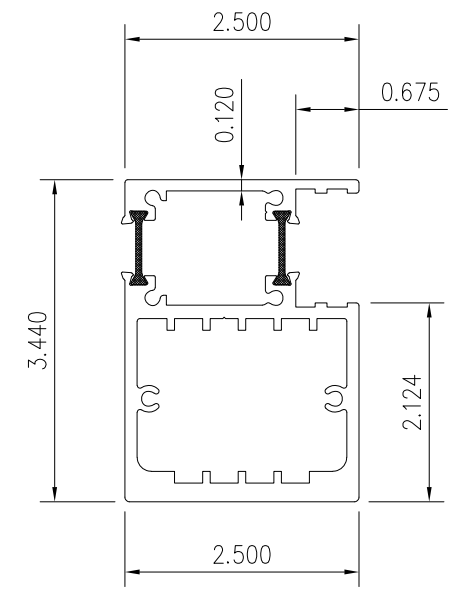
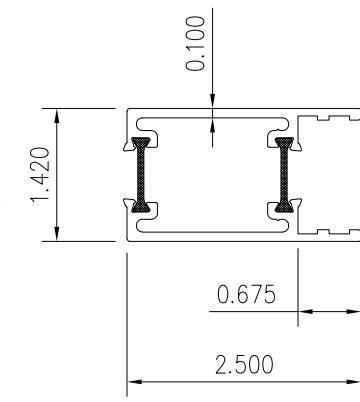
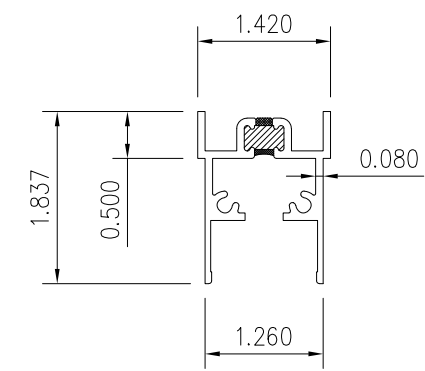
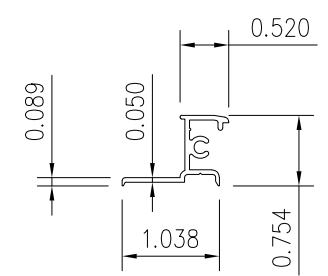
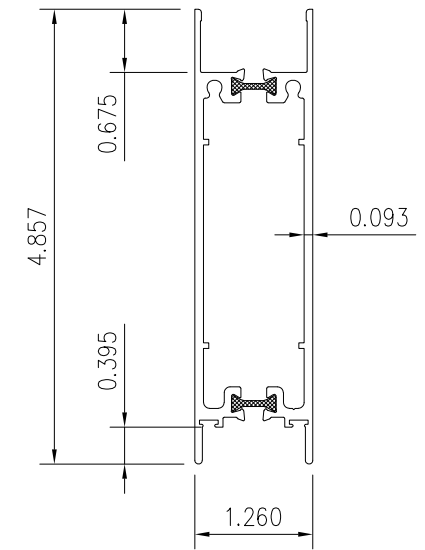
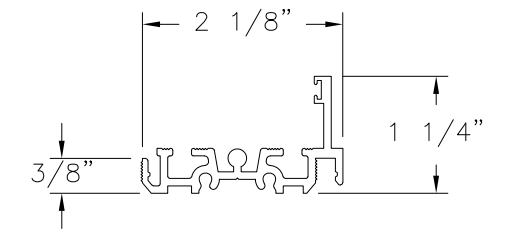
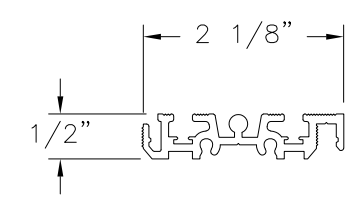
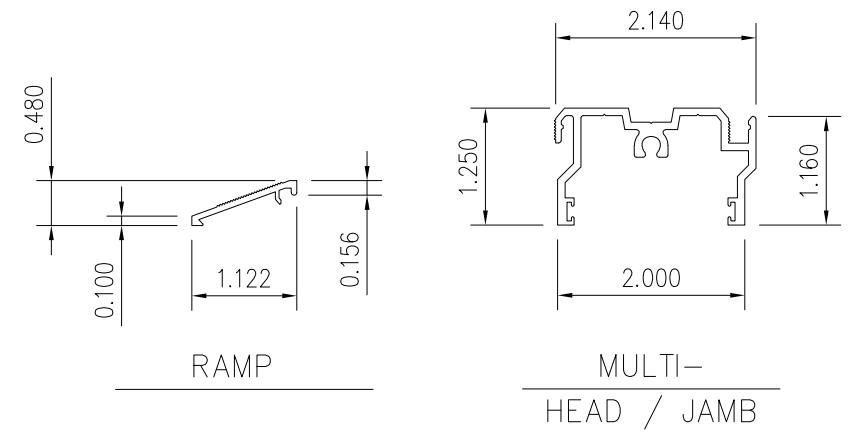
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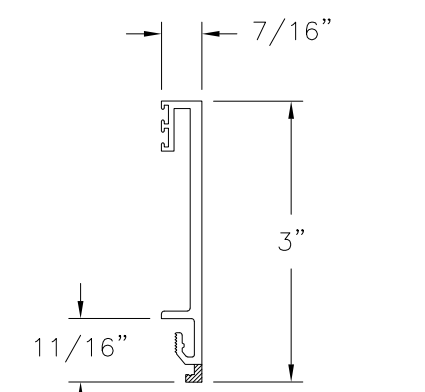
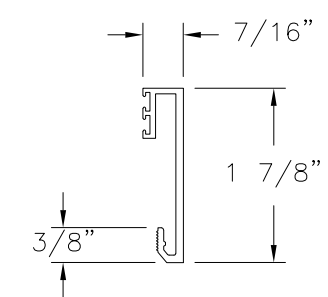


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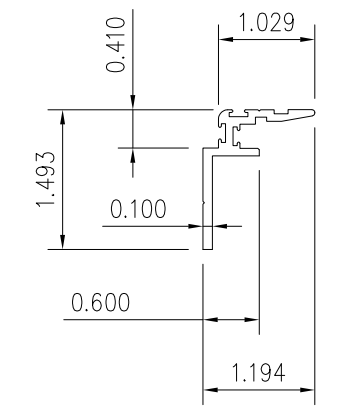
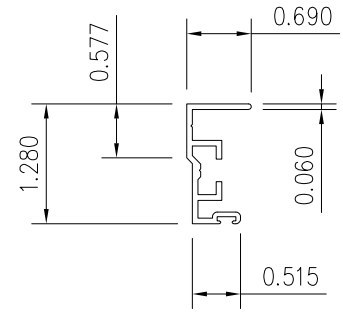
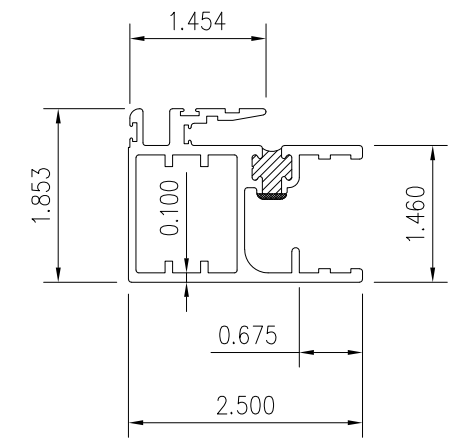
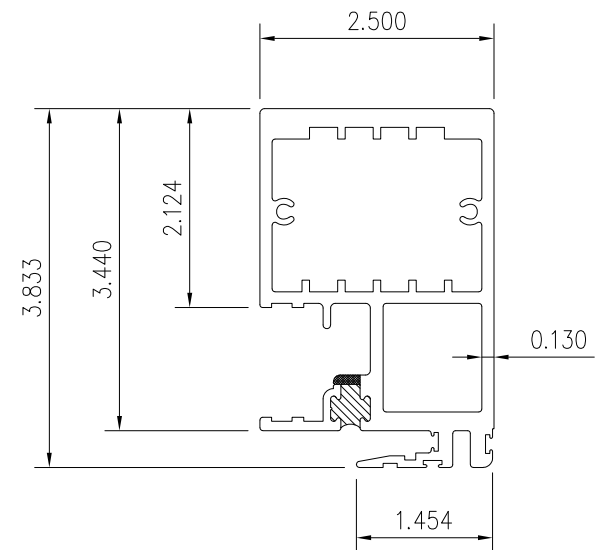
**LOW PERFORMANCE WIND LOAD THRESHOLD (S45749)**

**1 1/4" HIGH PERFORMANCE WIND LOAD THRESHOLD (S39729)**



**1 7/8" HIGH PERFORMANCE THRESHOLD LEG (S62643)**

**3" HIGH PERFORMANCE THRESHOLD LEG (S64145)**



**HURRICANE HOOK RAIL**

**HOOK RAIL**

**STILE YOKE**

**POCKET INTERLOCK**

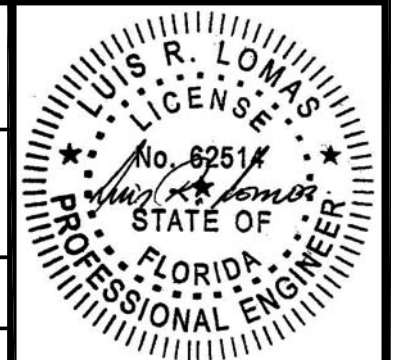
**SOLAR INNOVATIONS, INC.**  
 31 ROBERTS RD  
 PINE GROVE, PA 17963

**SERIES SI8100 SLIDING GLASS DOOR**  
 5x8 PANEL NON-HVHZ COMPONENTS

DRAWN: A.R.	DWG NO. 08-03654	REV -
SCALE NTS	DATE 11/12/2020	SHEET 9 OF 9

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SIGNED: 11/30/2020



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