

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED PER NEW REQUIREMENTS	11/03/2020	R.L.

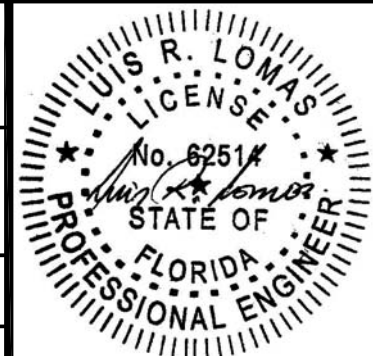
NOTES:

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. 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 3/4" 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. GROUT FILLED 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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SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION
3	DESIGN PRESSURE CHARTS
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9	COMPONENTS

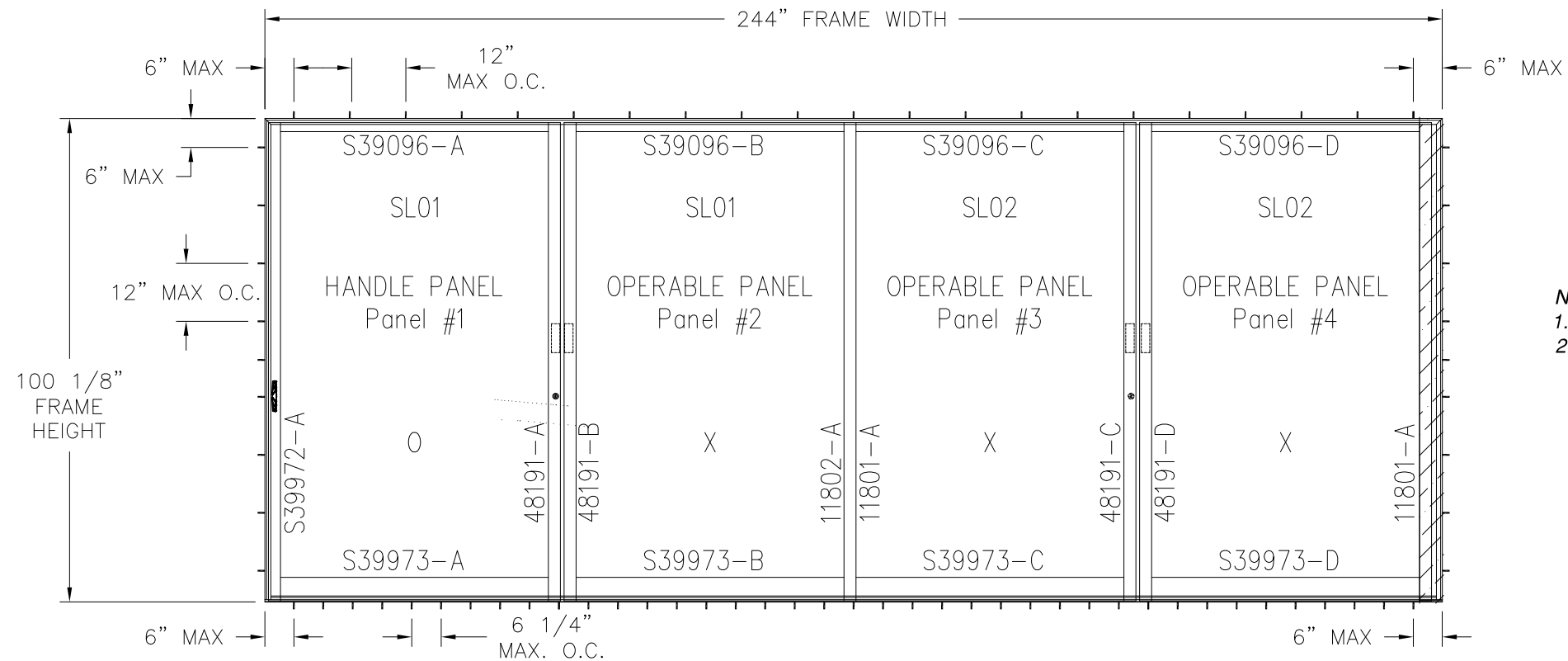
<b>SOLAR INNOVATIONS, INC.</b> 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL NOTES		
DRAWN: V.L.	DWG NO. 08-01821	REV D
SCALE NTS	DATE 10/12/12	SHEET 1 OF 9
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 11/19/2020



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

FOR OTHER SIZES SEE CHARTS IN SHEET 3

DESIGN PRESSURE RATING	IMPACT RATING
±65.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

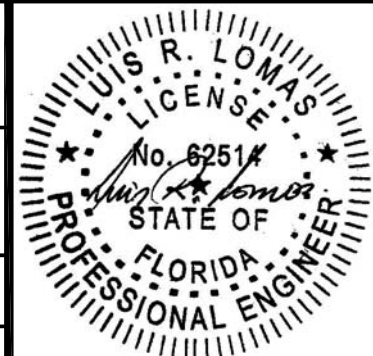
UNITS WITH 4 PANELS MAXIMUM IN UNLIMITED CONFIGURATIONS ARE APPROVED AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 41.59 FT<sup>2</sup> AND FRAME AREA DOES NOT EXCEED 254.48 FT<sup>2</sup> AND USES VERTICAL CONDITIONS AS SHOWN.

**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

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL ELEVATION		
DRAWN: V.L.	DWG NO. 08-01821	REV D
SCALE NTS	DATE 10/12/12	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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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	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	-	-	-	-	-	-	-	-	-	-	-

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

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SERIES SI8100 SLIDING GLASS DOOR  
5x8 PANEL  
DESIGN PRESSURE CHARTS

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DRAWN: V.L.	DWG NO. 08-01821	REV D
SCALE NTS	DATE 10/12/12	SHEET 3 OF 9

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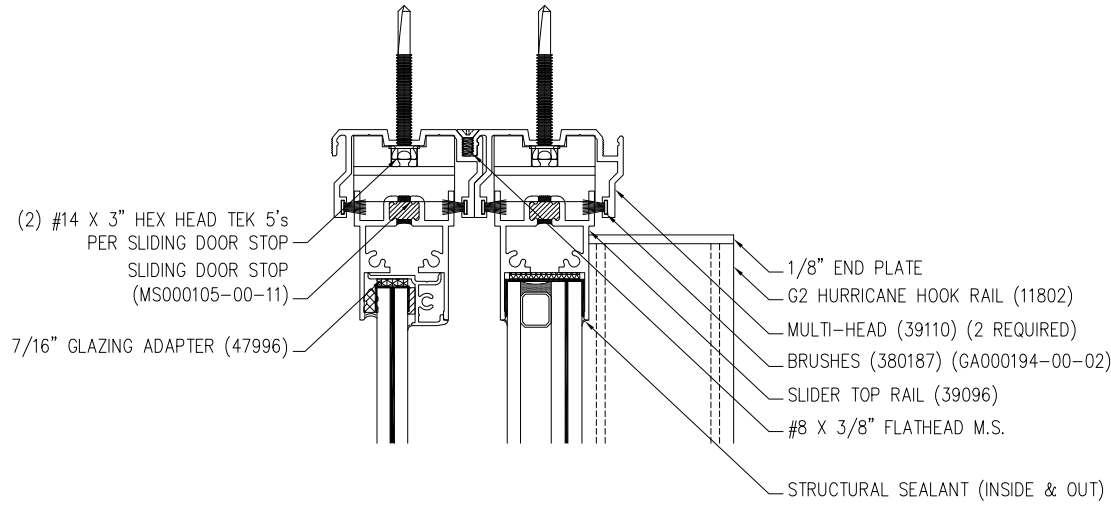
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434-688-0609 rllomas@lrlomaspe.com

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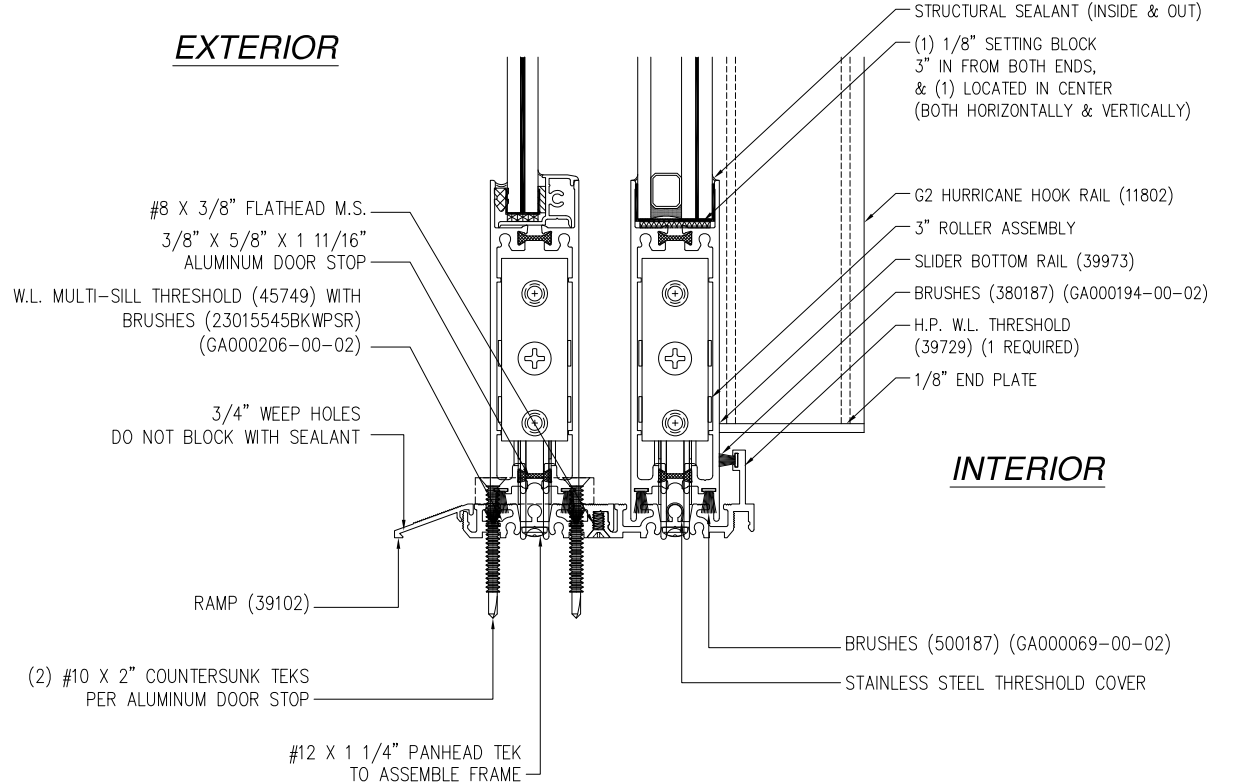


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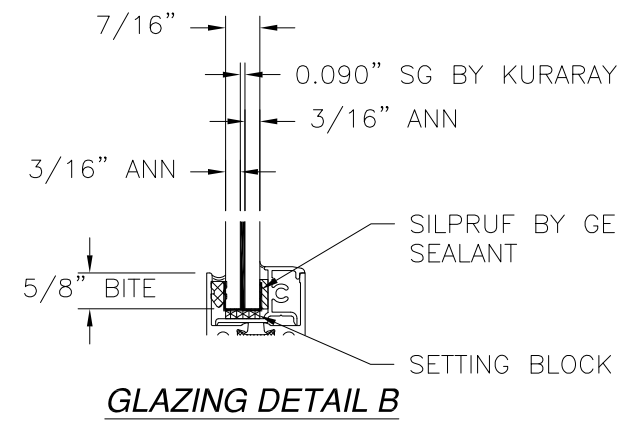
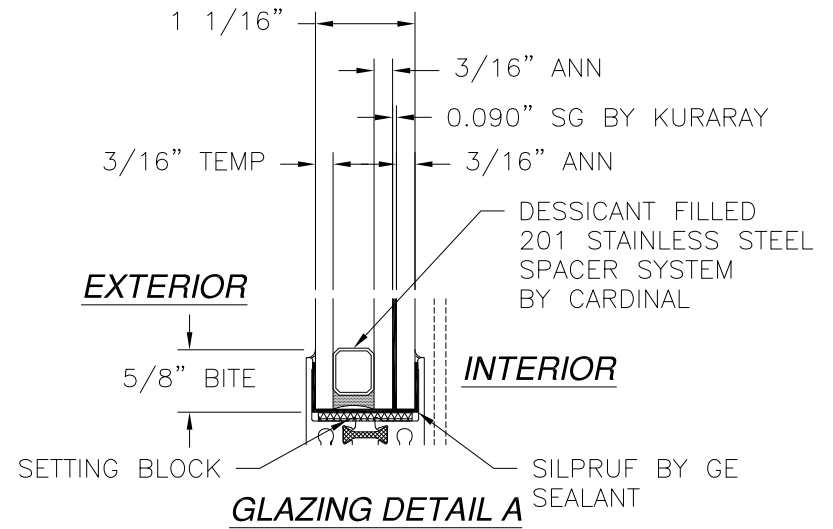


**EXTERIOR**



**INTERIOR**

**VERTICAL CROSS SECTION**



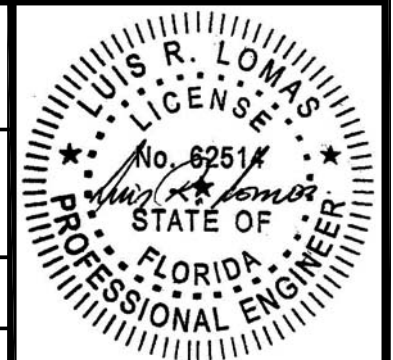
SOLAR INNOVATIONS, INC.  
31 ROBERTS RD  
PINE GROVE, PA 17963

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

DRAWN: V.L.	DWG NO. 08-01821	REV D
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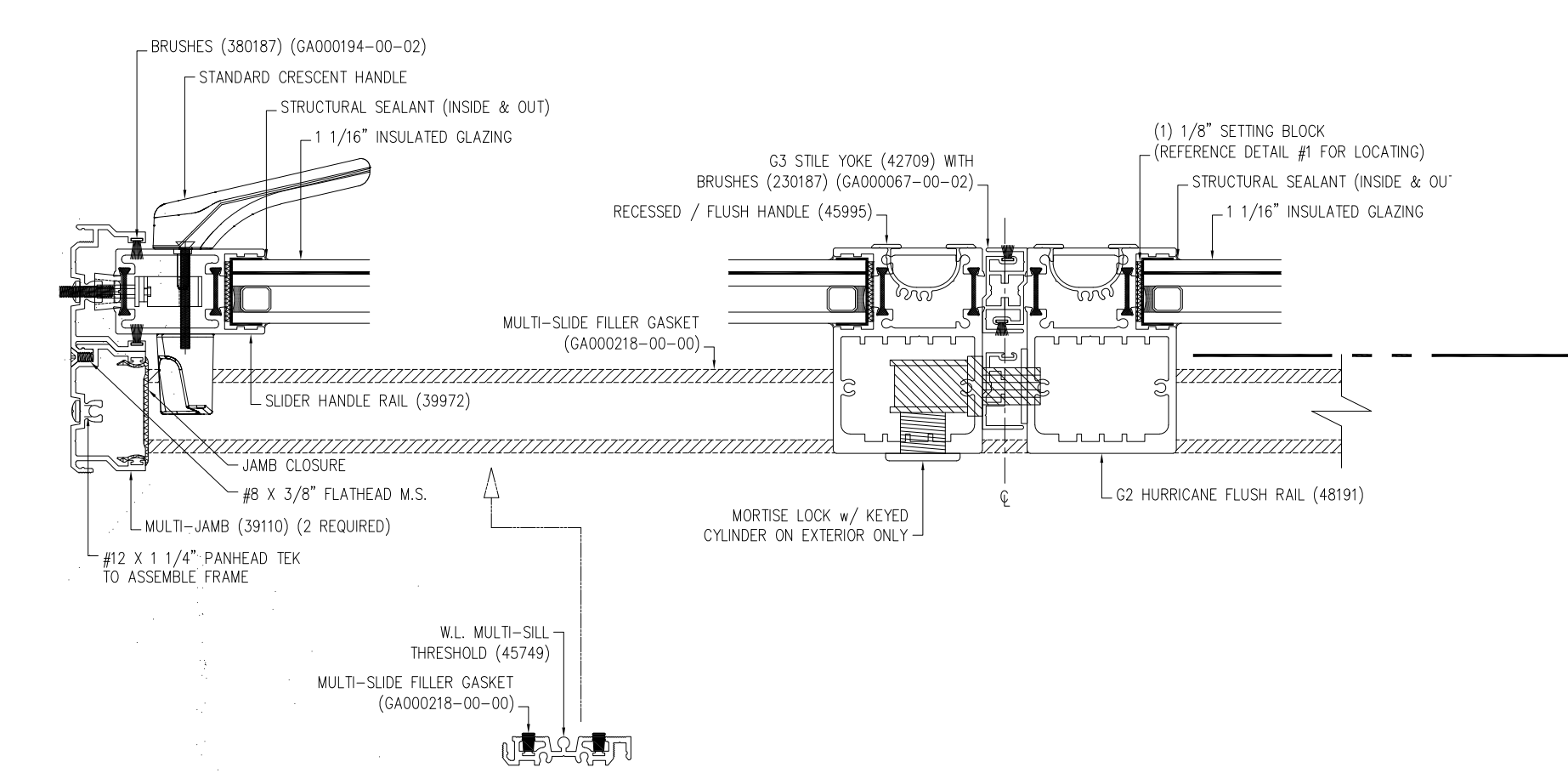
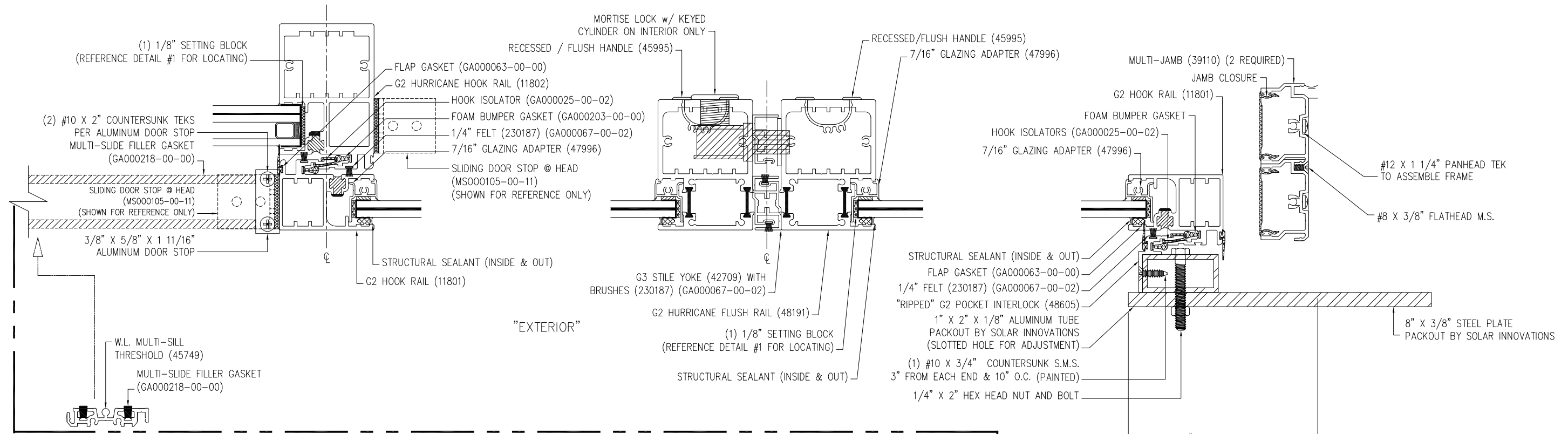
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### HORIZONTAL CROSS SECTION



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

**SERIES SI8100 SLIDING GLASS DOOR**  
 5x8 PANEL  
 CROSS SECTIONS

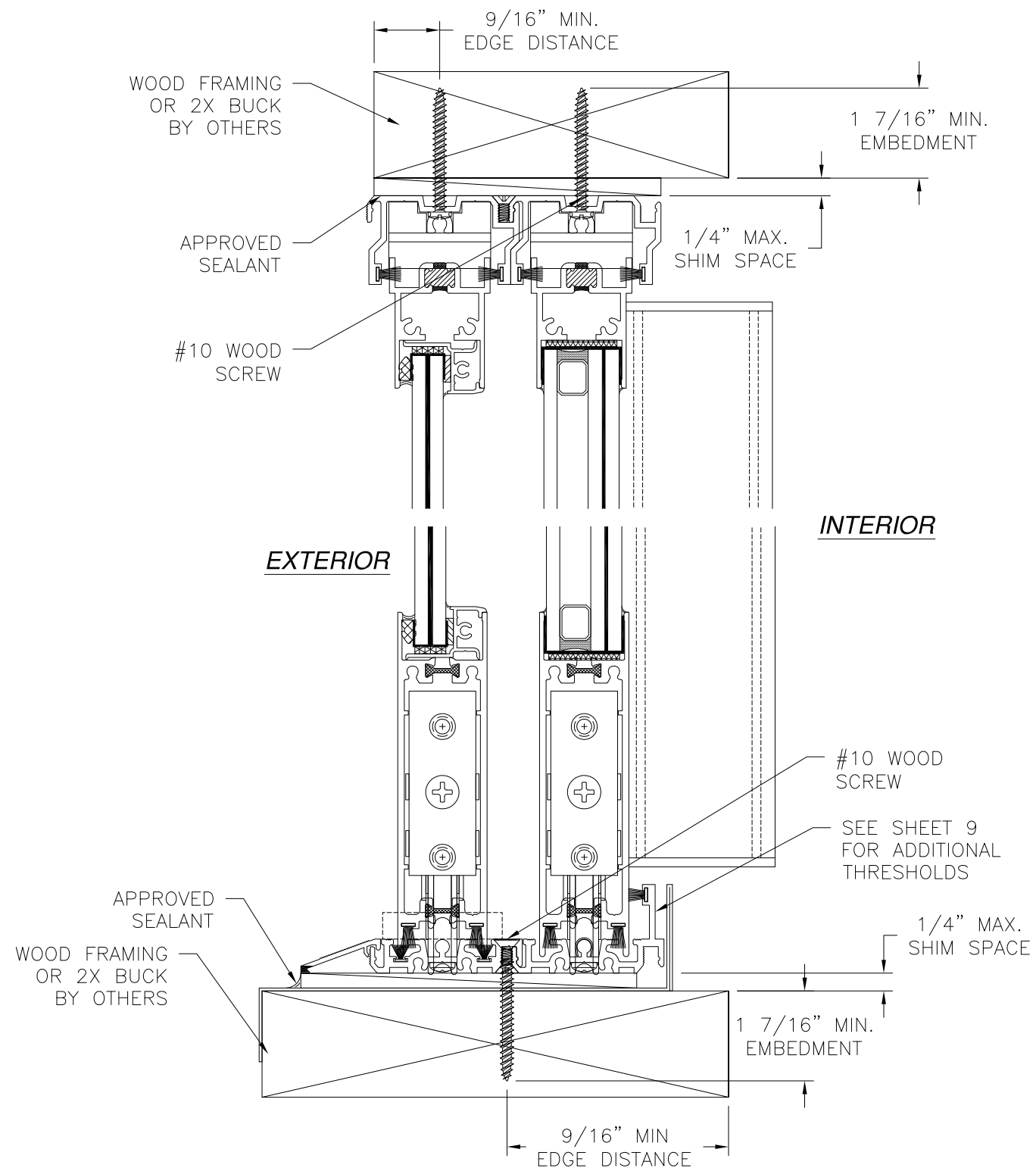
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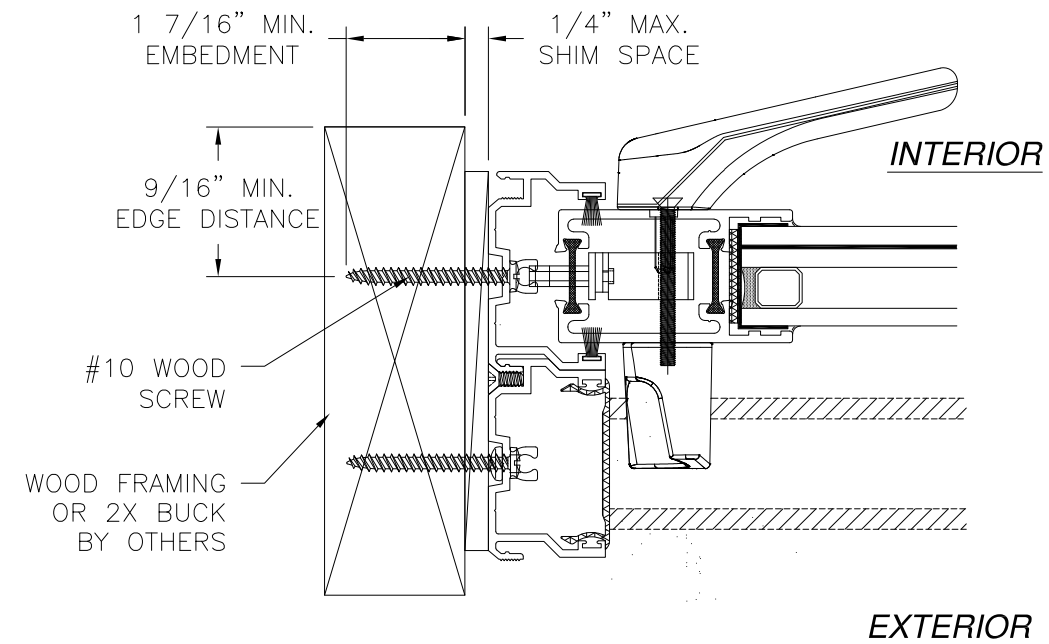
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**VERTICAL CROSS SECTION**  
WOOD FRAMING OR 2X BUCK INSTALLATION

- 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



**JAMB INSTALLATION DETAIL**  
WOOD FRAMING OR 2X BUCK INSTALLATION

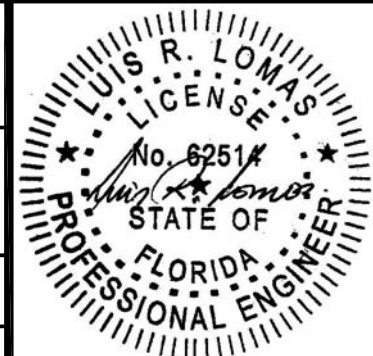
SOLAR INNOVATIONS, INC.  
31 ROBERTS RD  
PINE GROVE, PA 17963

SERIES SI8100 SLIDING GLASS DOOR  
5x8 PANEL  
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-01821	REV D
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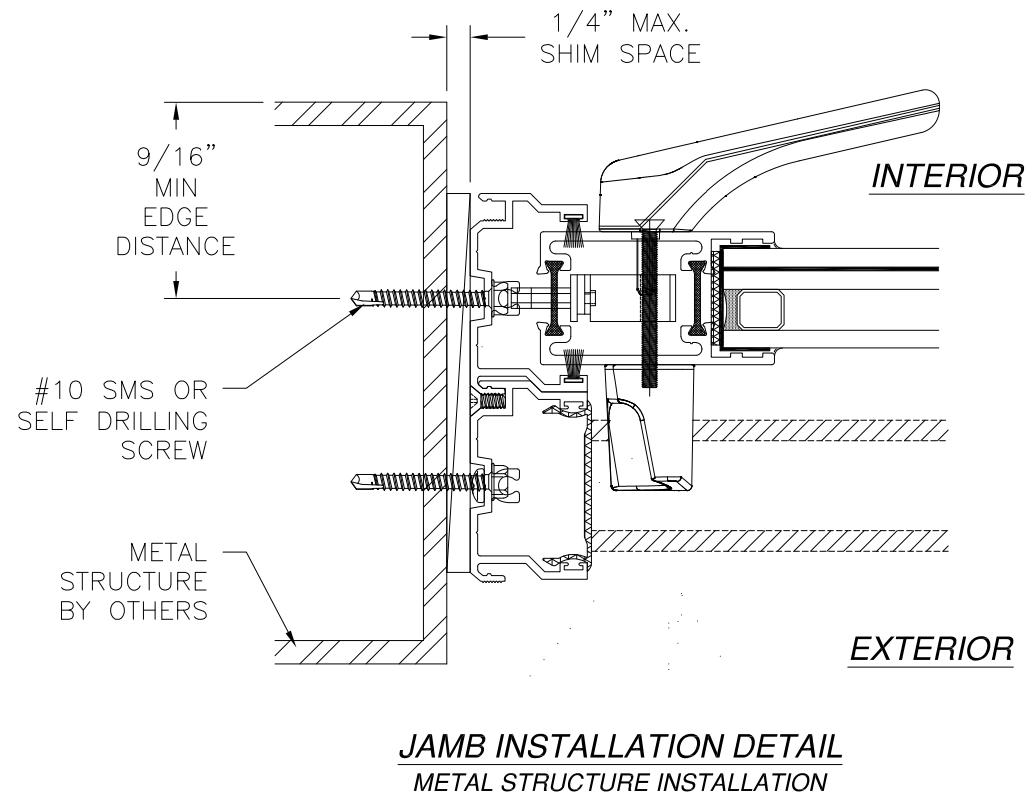
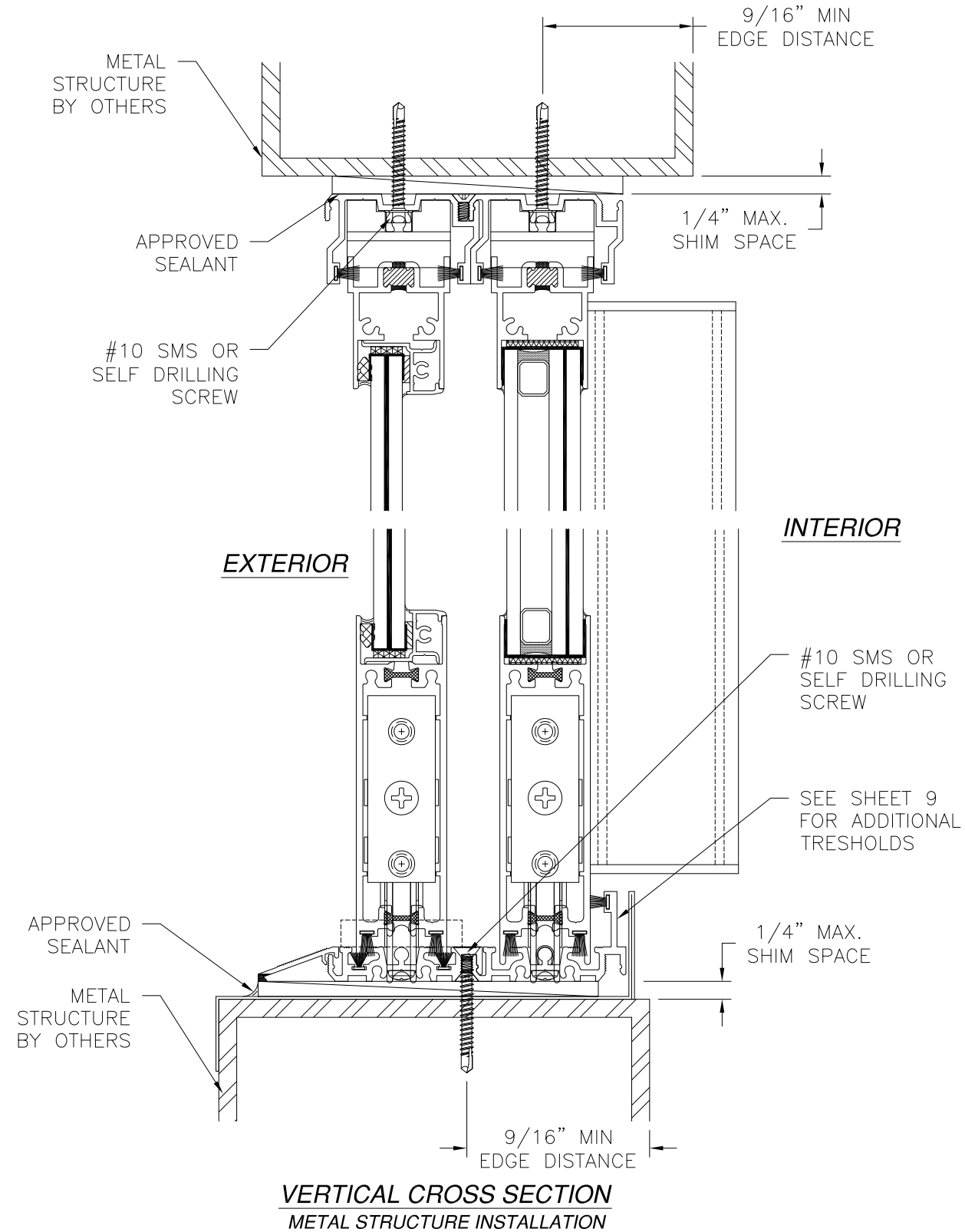
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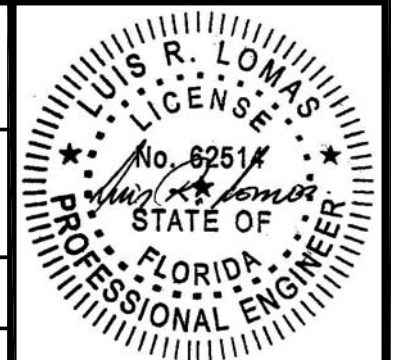
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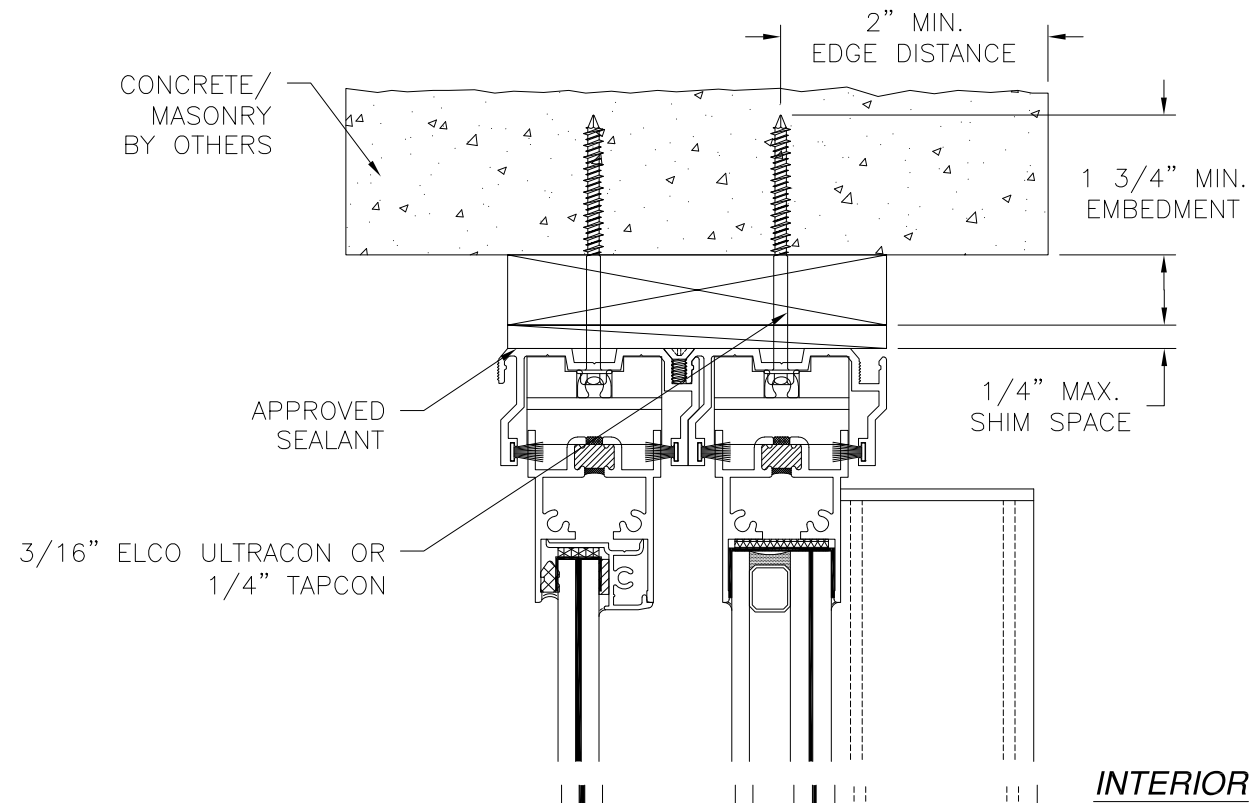
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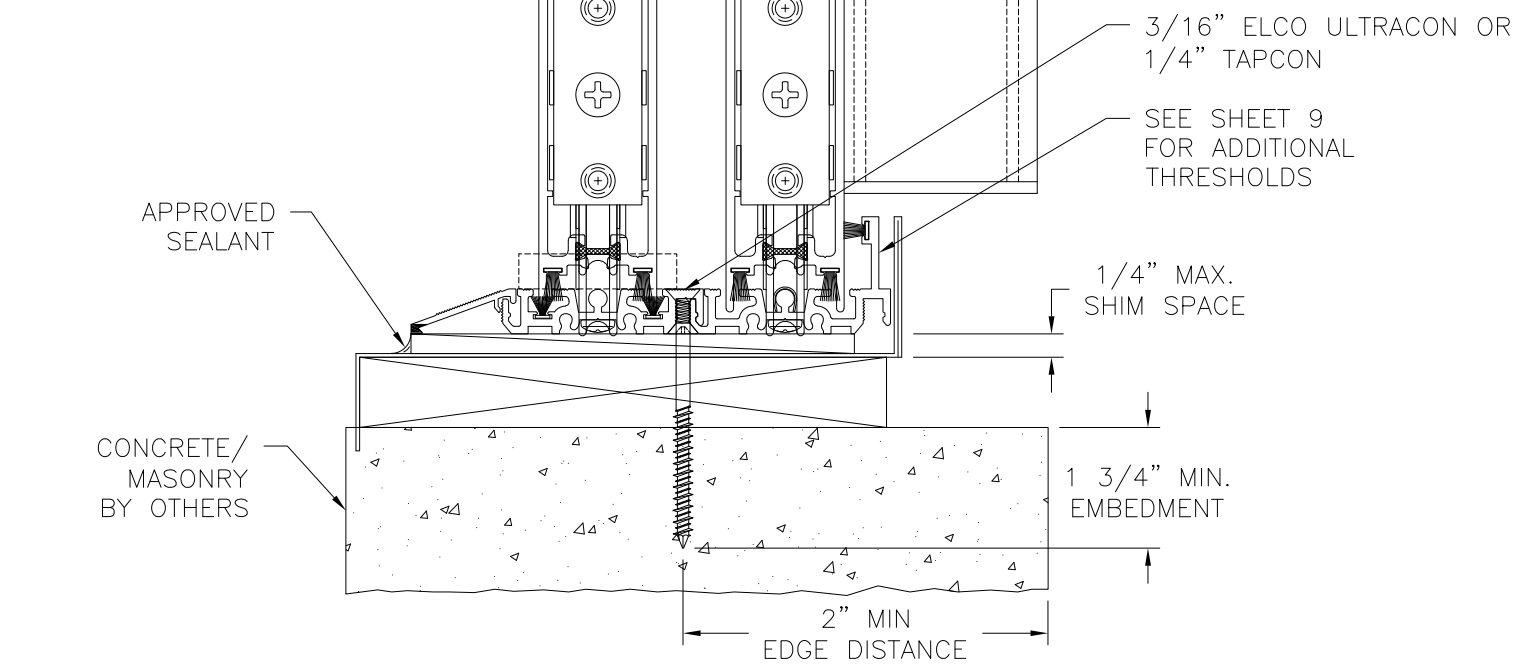
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**EXTERIOR**

**INTERIOR**



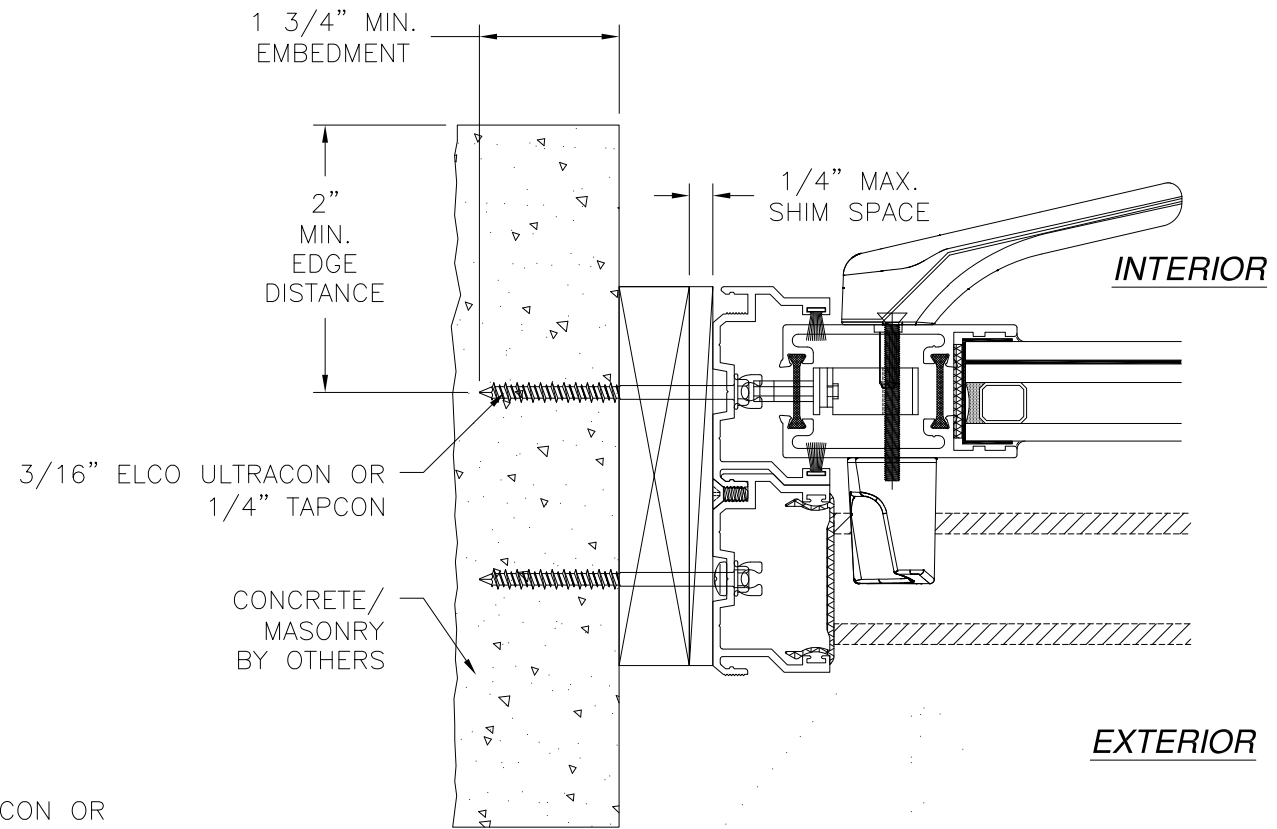
APPROVED SEALANT

1/4" MAX. SHIM SPACE

1 3/4" MIN. EMBEDMENT

2" MIN. EDGE DISTANCE

**VERTICAL CROSS SECTION  
CONCRETE/MASONRY INSTALLATION**



1 3/4" MIN. EMBEDMENT

2" MIN. EDGE DISTANCE

3/16" ELCO ULTRACON OR 1/4" TAPCON

CONCRETE/MASONRY BY OTHERS

1/4" MAX. SHIM SPACE

**INTERIOR**

**EXTERIOR**

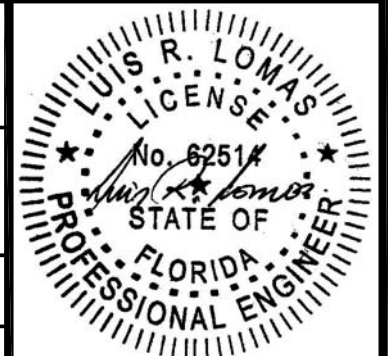
**JAMB INSTALLATION DETAIL  
CONCRETE/MASONRY INSTALLATION**

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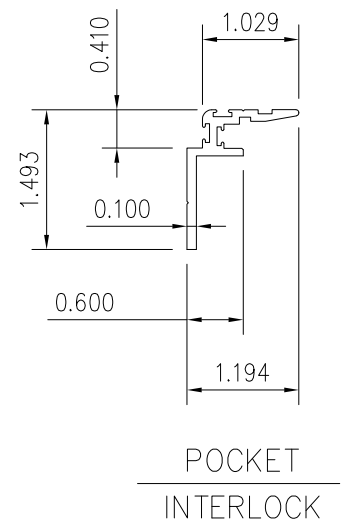
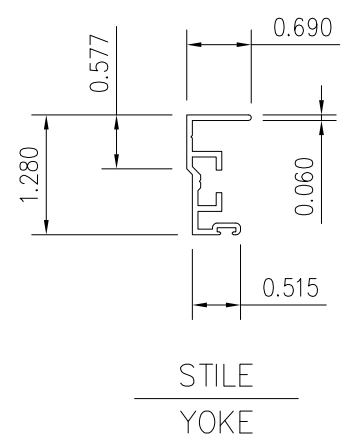
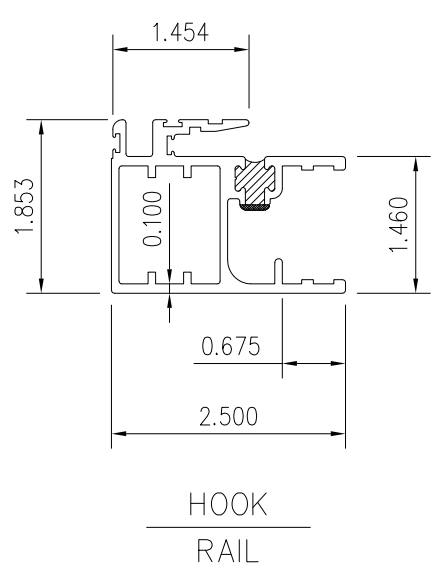
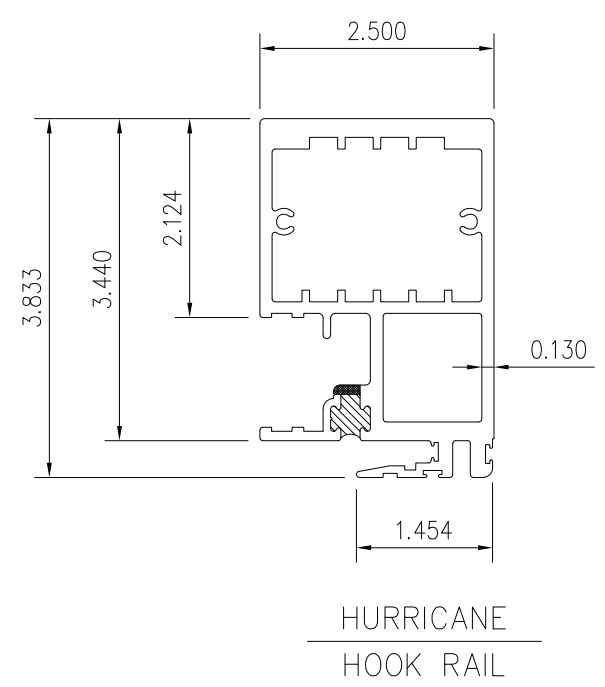
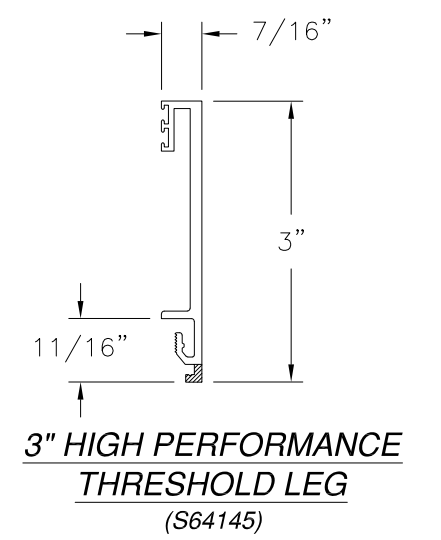
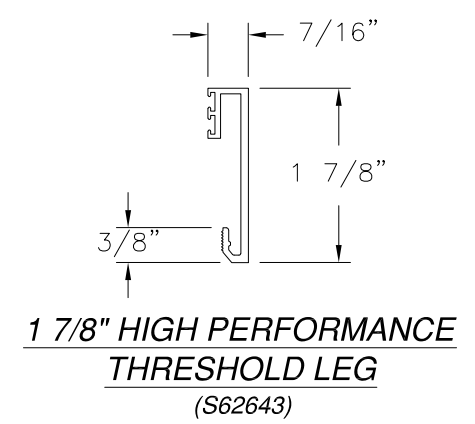
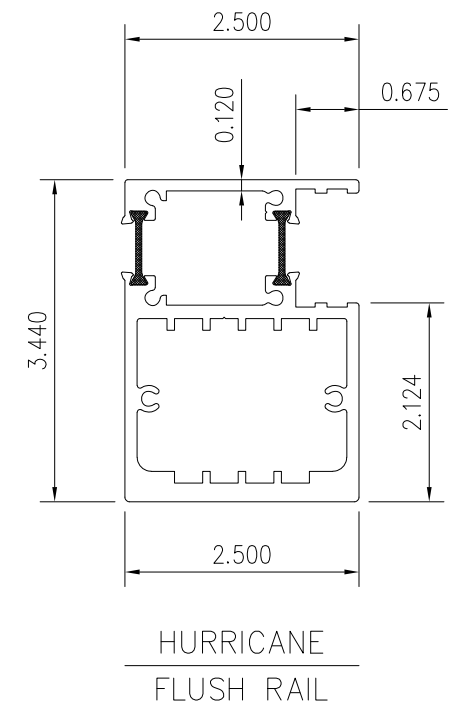
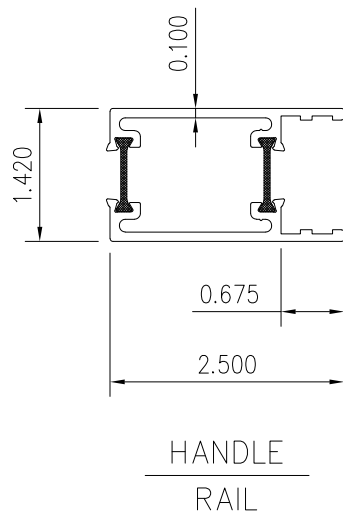
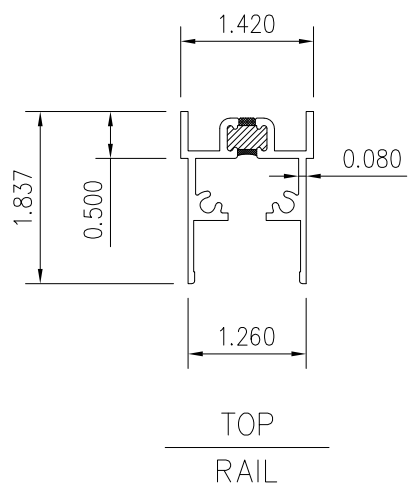
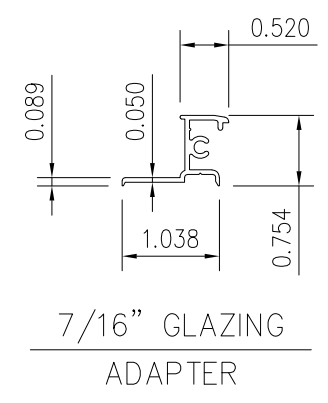
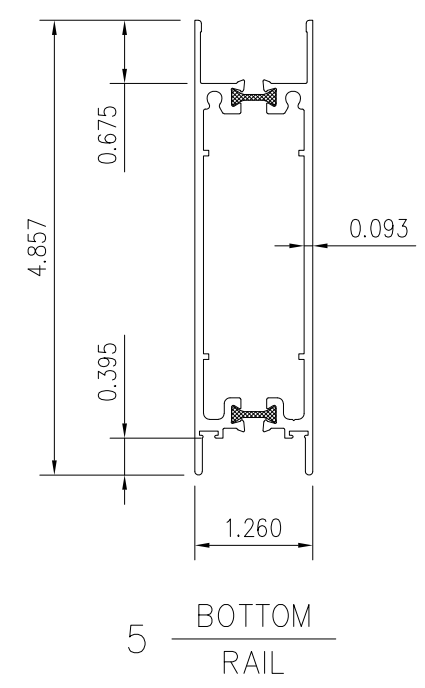
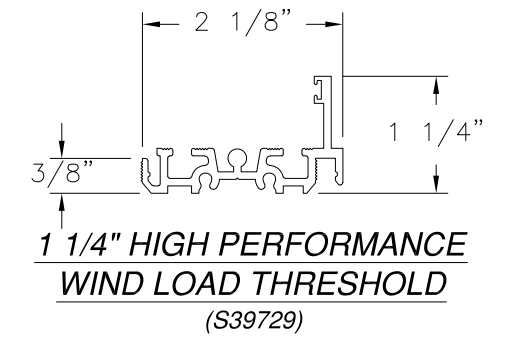
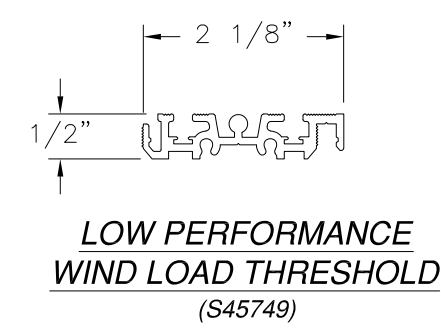
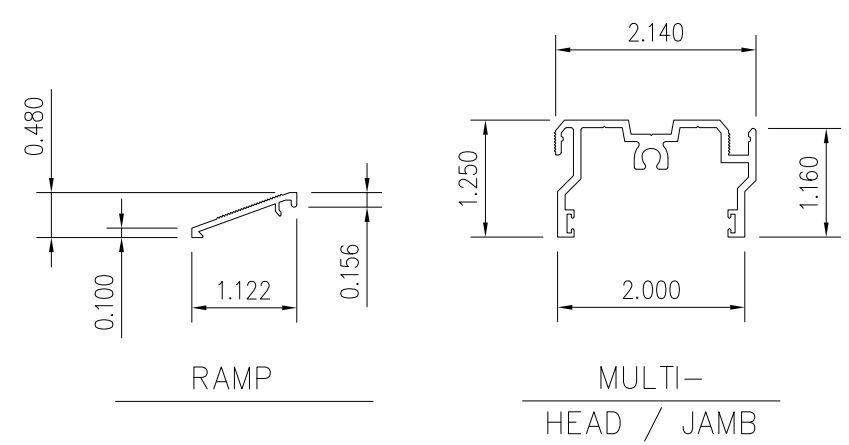
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI8100 SLIDING GLASS DOOR 5x8 PANEL INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01821	REV D
SCALE NTS	DATE 10/12/12	SHEET 8 OF 9
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		



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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED PER NEW REQUIREMENTS	11/03/2020	R.L.



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

**SERIES SI8100 SLIDING GLASS DOOR  
 5x8 PANEL  
 COMPONENTS**

DRAWN: V.L.	DWG NO. 08-01821	REV D
SCALE NTS	DATE 10/12/12	SHEET 9 OF 9

L. ROBERTO LOMAS P.E.  
 1432 WOODFORD RD LEWISVILLE, NC 27023  
 434-688-0609 rllomas@rlomaspe.com

SIGNED: 11/19/2020

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