

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED DETAILS AND COMPONENTS	12/11/2023	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.

2. WOOD FRAMING 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 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. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.

5. 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.

6. FRAME MATERIAL: ALUMINUM 6063-T6 AND 6005A-T5.

7. UNITS MUST BE GLAZED PER ASTM E1300, WITH SAFETY GLAZING.

8. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.

9. 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 3/8".
10. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

11. FOR ANCHORING INTO MASONRY/CONCRETE USE 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.

12. FOR ANCHORING INTO METAL STRUCTURE USE #14 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.

13. ALL FASTENERS TO BE CORROSION RESISTANT.

14. 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:

14.1. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42

14.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

14.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

14.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .125" THICK MINIMUM

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11	COMPONENTS

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
NOTES

DRAWN:
V.L.

DWG NO.
08-01960

REV
C

SCALE NTS

DATE 04/22/13

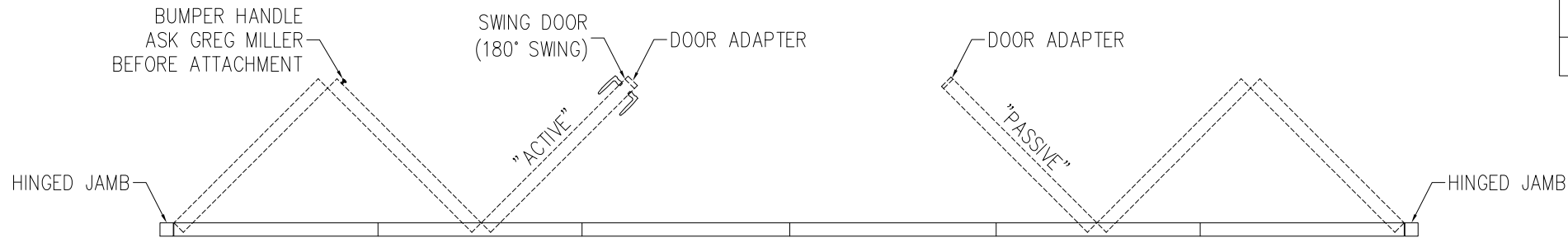
SHEET 1 OF 11

L. ROBERTO LOMAS P.E.
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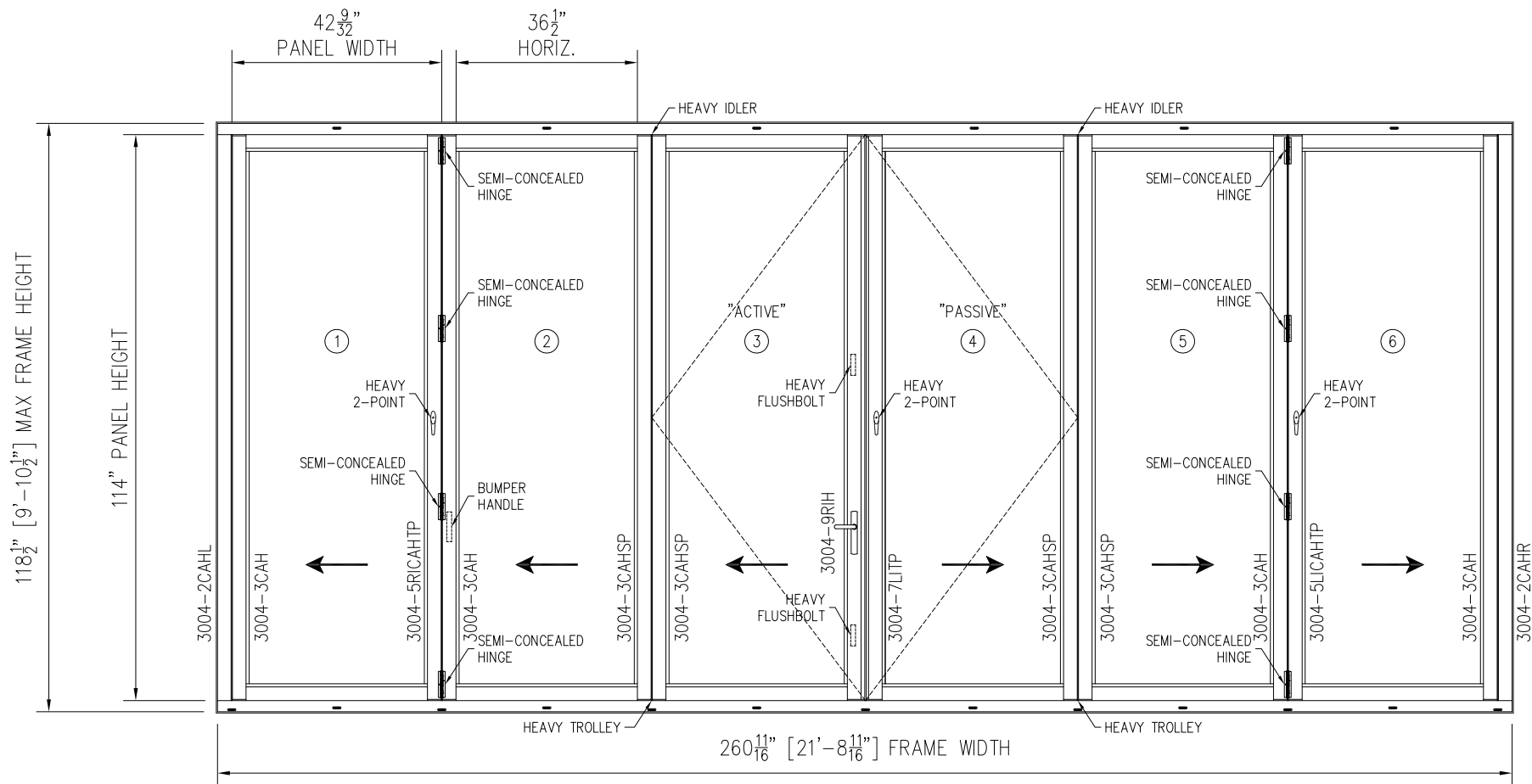
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Luis R. Lomas P.E.
FL No.: 62514



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DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-70.0psf	NONE

WHERE WATER RESISTANCE IS REQUIRED
SEE CHART #1, SHEET 3

DESIGN PRESSURE RATING	IMPACT RATING
±70.0psf	NONE

WHERE WATER RESISTANCE IS NOT REQUIRED
SEE CHART #2, SHEET 3

DESIGN PRESSURE RATING	IMPACT RATING
±55.0PSF	NONE

UNITS WITH FLUSH SILL
SEE CHART #3, SHEET 3

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW NON-IMPACT
EXTERIOR VIEW

UNLIMITED NUMBER OF PANELS IN UNLIMITED CONFIGURATION ARE APPROVED
AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 33.32 FT² AND USES VERTICAL CONDITIONS AS SHOWN.

- NOTES:
- PANEL SIZE: 42 9/32" x 114"
 - D.L.O. SIZE: 35 9/32" x 107 1/4"

HARDWARE SCHEDULE
A. SEMI-CONCEALED HINGE BY SOLAR INNOVATIONS
B 2 POINT HANDLE & LOCK MS000487-XX BY SOLAR INNOVATIONS
C 3 POINT HANDLE & LOCK BY SOLAR INNOVATIONS
D HEAVY FLUSH BOLTS MS000442-00-XX BY SOLAR INNOVATIONS
E SURFACE MOUNT HINGE BY SOLAR INNOVATIONS

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

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
ELEVATION

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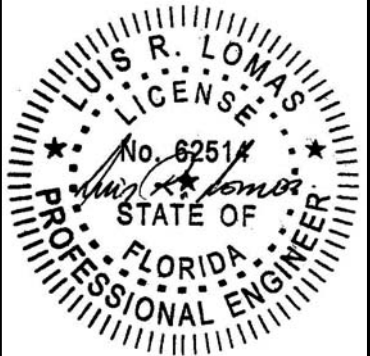
SCALE
NTS

DATE
04/22/13

SHEET
2 OF 11

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Chart #1

Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.0		42.28		48.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	105.0	60.0	105.0	60.0	105.0	60.0	102.3	60.0	90.1
84.0	60.0	105.0	60.0	105.0	60.0	105.0	60.0	95.0	60.0	83.7
90.0	60.0	105.0	60.0	105.0	60.0	104.1	60.0	88.7	60.0	78.1
96.0	60.0	105.0	60.0	105.0	60.0	97.6	60.0	83.1	60.0	73.2
102.0	60.0	105.0	60.0	105.0	60.0	90.9	60.0	78.2	-	-
108.0	60.0	105.0	60.0	98.5	60.0	84.8	60.0	73.9	-	-
114.0	60.0	105.0	60.0	92.5	60.0	79.5	60.0	70.0	-	-
120.0	60.0	101.6	60.0	82.0	60.0	69.1	-	-	-	-
126.0	60.0	87.6	60.0	70.7	59.5	59.5	-	-	-	-
132.0	60.0	76.1	60.0	61.4	51.6	51.6	-	-	-	-
138.0	60.0	66.6	53.6	53.6	-	-	-	-	-	-
144.0	58.5	58.5	47.1	47.1	-	-	-	-	-	-
150.0	51.7	51.7	41.6	41.6	-	-	-	-	-	-
156.0	45.9	45.9	37.0	37.0	-	-	-	-	-	-

Chart #2

Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.0		42.28		48.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	105.0	105.0	105.0	105.0	105.0	105.0	102.3	102.3	90.1	90.1
84.0	105.0	105.0	105.0	105.0	105.0	105.0	95.0	95.0	83.7	83.7
90.0	105.0	105.0	105.0	105.0	104.1	104.1	88.7	88.7	78.1	78.1
96.0	105.0	105.0	105.0	105.0	97.6	97.6	83.1	83.1	73.2	73.2
102.0	105.0	105.0	105.0	105.0	90.9	90.9	78.2	78.2	-	-
108.0	105.0	105.0	98.5	98.5	84.8	84.8	73.9	73.9	-	-
114.0	105.0	105.0	92.5	92.5	79.5	79.5	70.0	70.0	-	-
120.0	101.6	101.6	82.0	82.0	69.1	69.1	-	-	-	-
126.0	87.6	87.6	70.7	70.7	59.5	59.5	-	-	-	-
132.0	76.1	76.1	61.4	61.4	51.6	51.6	-	-	-	-
138.0	66.6	66.6	53.6	53.6	-	-	-	-	-	-
144.0	58.5	58.5	47.1	47.1	-	-	-	-	-	-
150.0	51.7	51.7	41.6	41.6	-	-	-	-	-	-
156.0	45.9	45.9	37.0	37.0	-	-	-	-	-	-

Chart #3

Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.0		42.28		48.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	82.5	60.0	82.5	60.0	82.5	60.0	80.4	60.0	70.8
84.0	60.0	82.5	60.0	82.5	60.0	82.5	60.0	74.6	60.0	65.7
90.0	60.0	82.5	60.0	82.5	60.0	81.8	60.0	69.7	60.0	61.4
96.0	60.0	82.5	60.0	82.5	60.0	76.7	60.0	65.3	57.5	57.5
102.0	60.0	82.5	60.0	82.5	60.0	71.4	60.0	61.5	-	-
108.0	60.0	82.5	60.0	77.4	60.0	66.6	58.1	58.1	-	-
114.0	60.0	82.5	60.0	72.7	60.0	62.5	55.0	55.0	-	-
120.0	60.0	79.8	60.0	64.5	54.3	54.3	-	-	-	-
126.0	60.0	68.9	55.5	55.5	46.8	46.8	-	-	-	-
132.0	59.8	59.8	48.2	48.2	40.5	40.5	-	-	-	-
138.0	52.3	52.3	42.1	42.1	-	-	-	-	-	-
144.0	46.0	46.0	37.0	37.0	-	-	-	-	-	-
150.0	40.6	40.6	32.7	32.7	-	-	-	-	-	-
156.0	36.1	36.1	29.0	29.0	-	-	-	-	-	-

SIILL AND HEAD
END DETAILS

SIILL AND HEAD
CLUSTER DETAILS

ANCHOR LAYOUT
APPLICABLE TO ALL CONFIGURATION

SIGNED: 12/13/2023

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
ANCHORING LAYOUT AND DESIGN PRESSURE CHARTS

DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 3 OF 11

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Luis R. Lomas P.E.
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(1) WEEP THRU HOLES LOCATED
SPACED EVENLY ON EACH PANEL

DUAL WHEEL TROLLEY COVER
WITH #8-32 X $\frac{3}{8}$ " C.S.M.S.
COVER 5 $\frac{1}{2}$ " ON ENDS

DOOR SWEEP GASKET
GA000384

PANEL FRAME (49070)

EXTERIOR

GEN. 3 DUAL WHEEL HEAD
(12495 & 12496) WITH MEDIUM
BULB GASKET (GA000032-00-02)

5 $\frac{1}{4}$ " GEN. 2 SEMI-CONCEALED HINGE

#10-32 X $\frac{5}{8}$ " S.S. C.S.
M.S. (ATTACH HINGES)

INTERIOR

SEE GLAZING DETAILS
SHEET 6

PANEL FRAME (49070)

#10-32 X $\frac{1}{2}$ " S.S. C.S.
M.S. (ATTACH HINGES)

5 $\frac{1}{4}$ " GEN. 2
SEMI-CONCEALED HINGE

GEN. 3 DUAL WHEEL SILL
(12495 & 12496) WITH MEDIUM
BULB GASKET (GA000032-00-02)

REFER TO SHEET #10 FOR
WEEP HOLE LOCATIONS

VERTICAL CROSS SECTION
STANDARD

(1) WEEP THRU HOLES LOCATED
SPACED EVENLY ON EACH PANEL

GEN. 3 DUAL WHEEL HEAD
(12495 & 12496) WITH MEDIUM
BULB GASKET (GA000032-00-02)

#10-32 X $\frac{5}{8}$ " S.S. C.S.
M.S. (ATTACH HINGES)

5 $\frac{1}{4}$ " GEN. 2
SEMI-CONCEALED HINGE

EXTERIOR

GEN. 3 DUAL WHEEL TROLLEY
CARRIAGE ASSEMBLY UPPER
(TOP LOAD)

PANEL FRAME (49070)

INTERIOR

SEE GLAZING DETAILS
SHEET 6

PANEL FRAME (49070)

#10-32 X $\frac{1}{2}$ " S.S. C.S.
M.S. (ATTACH HINGES)

5 $\frac{1}{4}$ " GEN. 2
SEMI-CONCEALED HINGE

GEN. 3 DUAL WHEEL SILL
(12495 & 12496) WITH MEDIUM
BULB GASKET (GA000032-00-02)

REFER TO SHEET #10 FOR
WEEP HOLE LOCATIONS

VERTICAL CROSS SECTION
TOP LOAD

SOLAR INNOVATIONS, INC.

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NON-IMPACT
CROSS SECTIONS

DRAWN:
V.L.

DWG NO.
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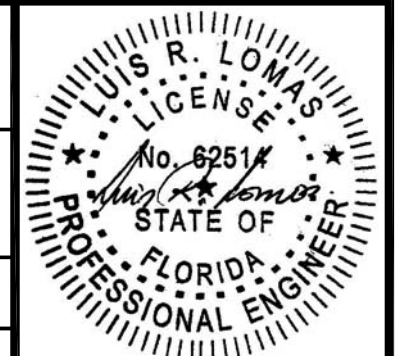
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DATE 04/22/13

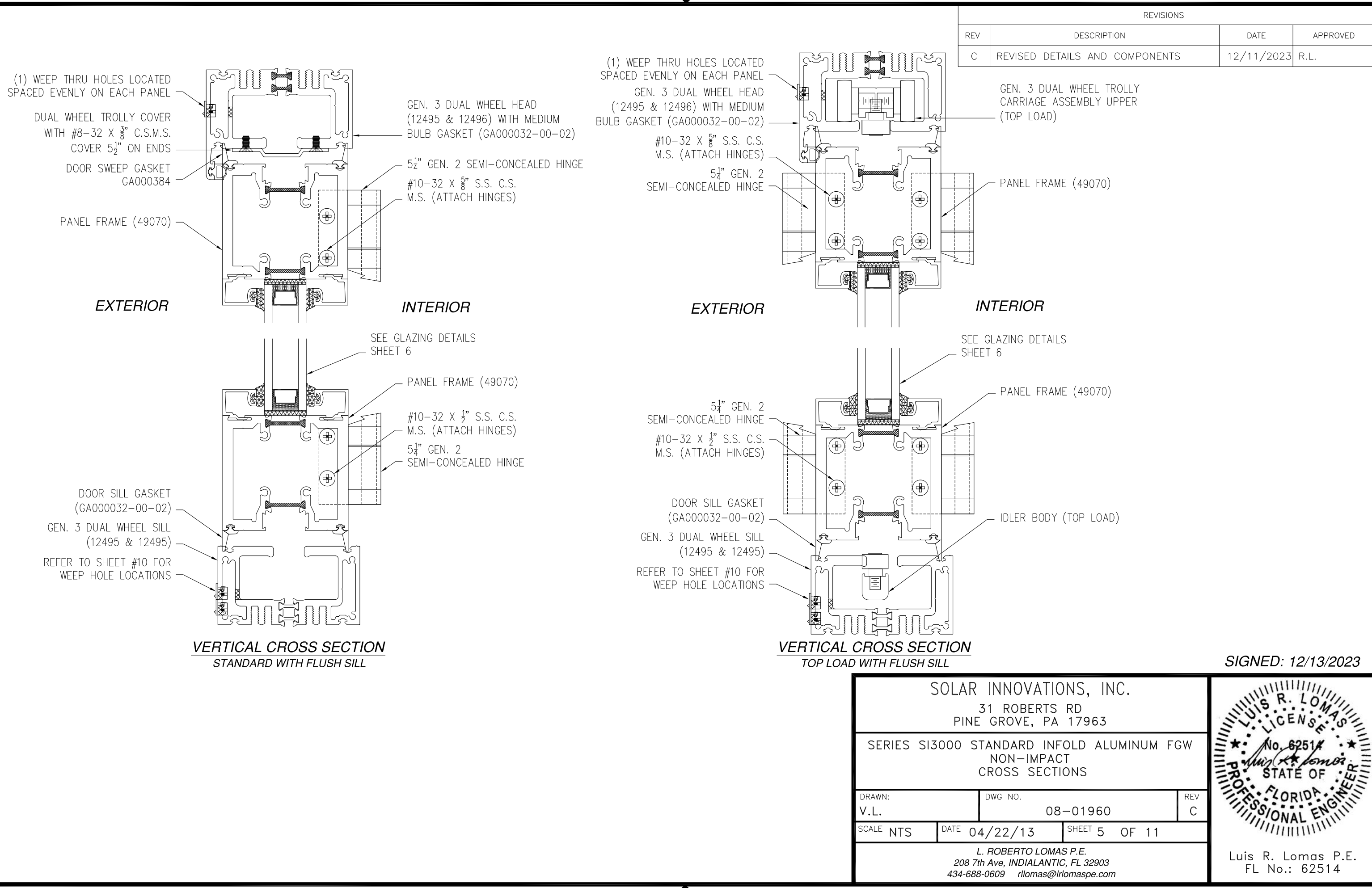
SHEET 4 OF 11

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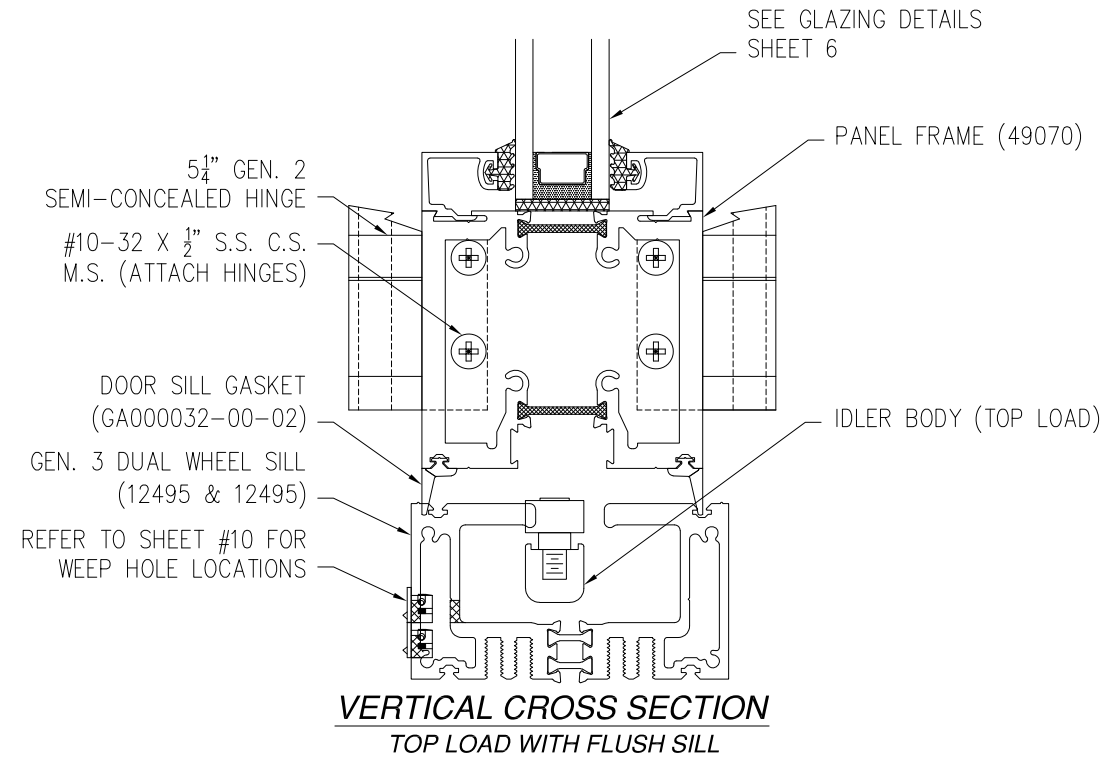
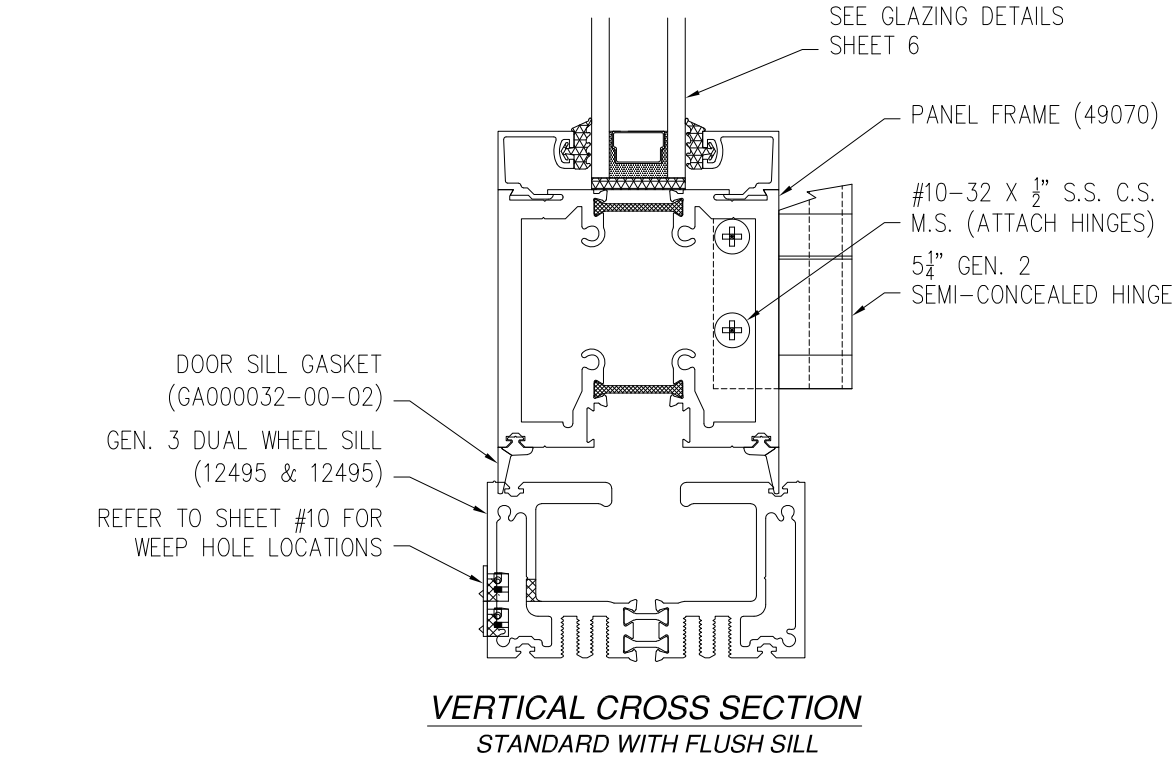
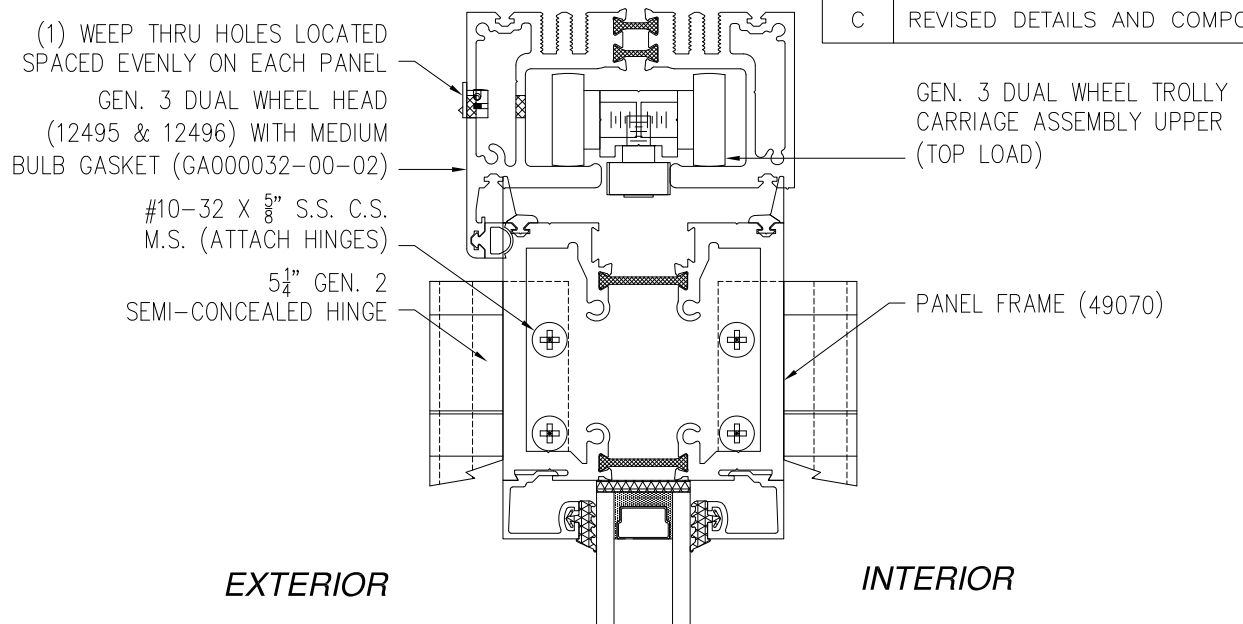
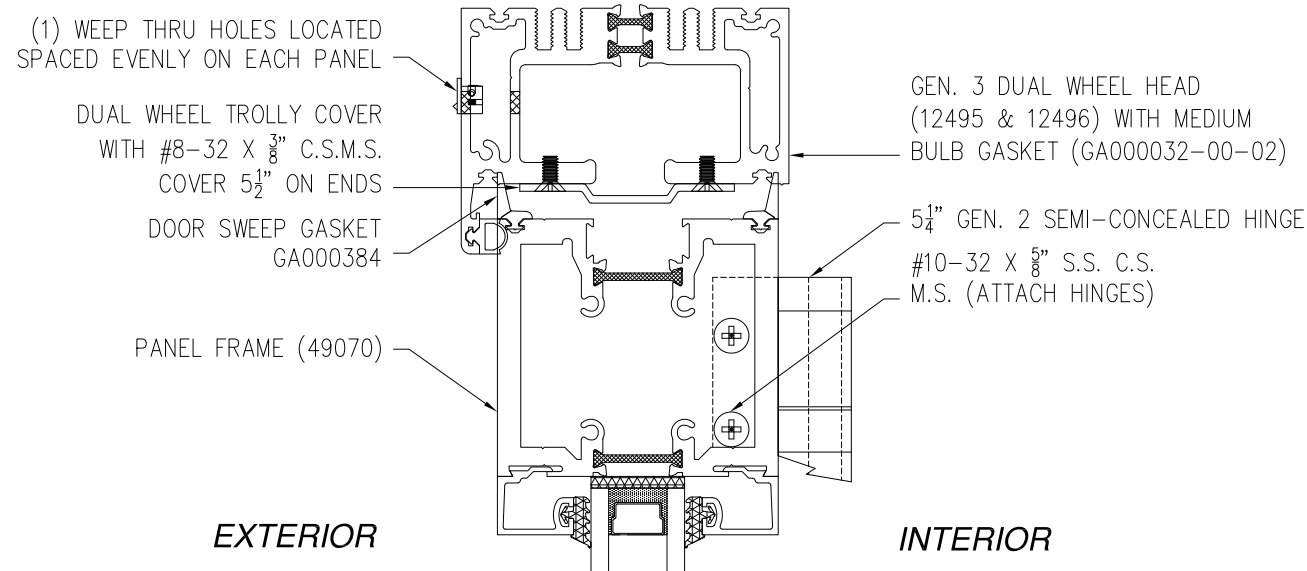
SIGNED: 12/13/2023



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



REVISIONS			
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C	REVISED DETAILS AND COMPONENTS	12/11/2023	R.L.



SIGNED: 12/13/2023

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

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
CROSS SECTIONS

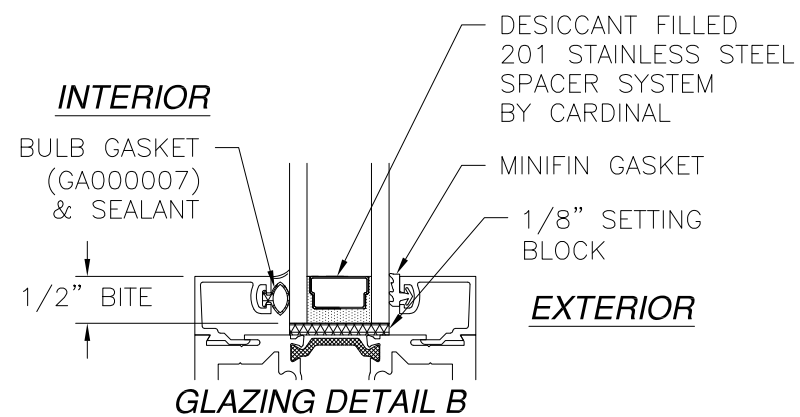
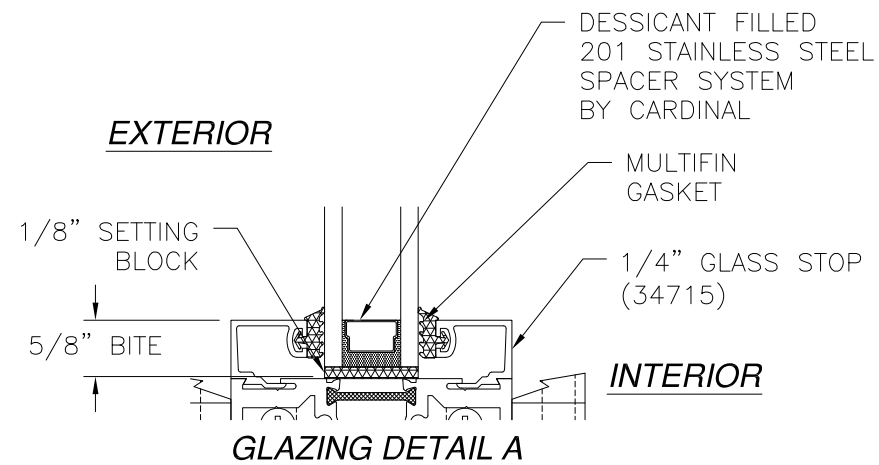
DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 5 OF 11

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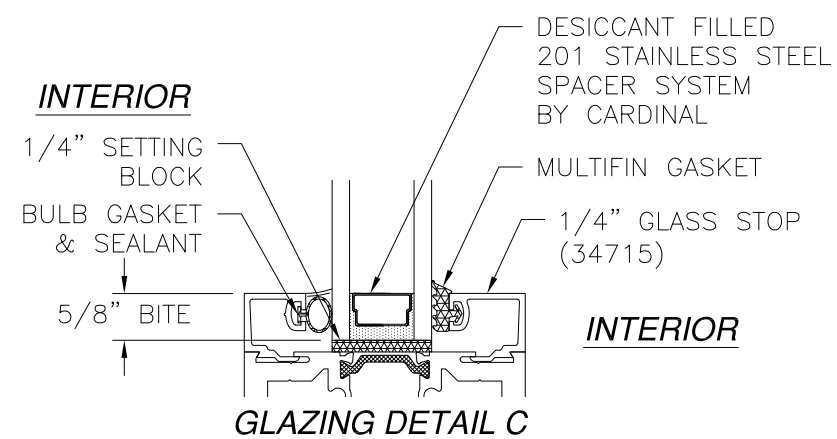
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P.E.
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

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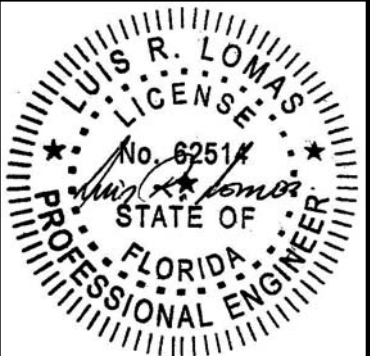


NOTE:
GLASS FOR ALL CONFIGURATIONS MUST BE SAFETY GLASS

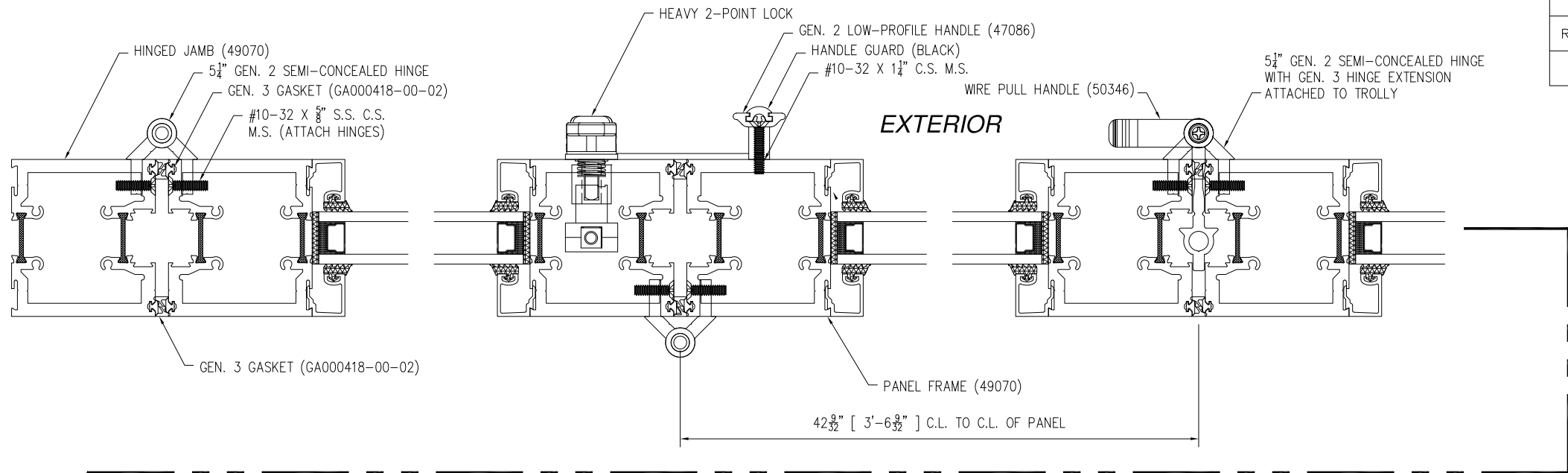


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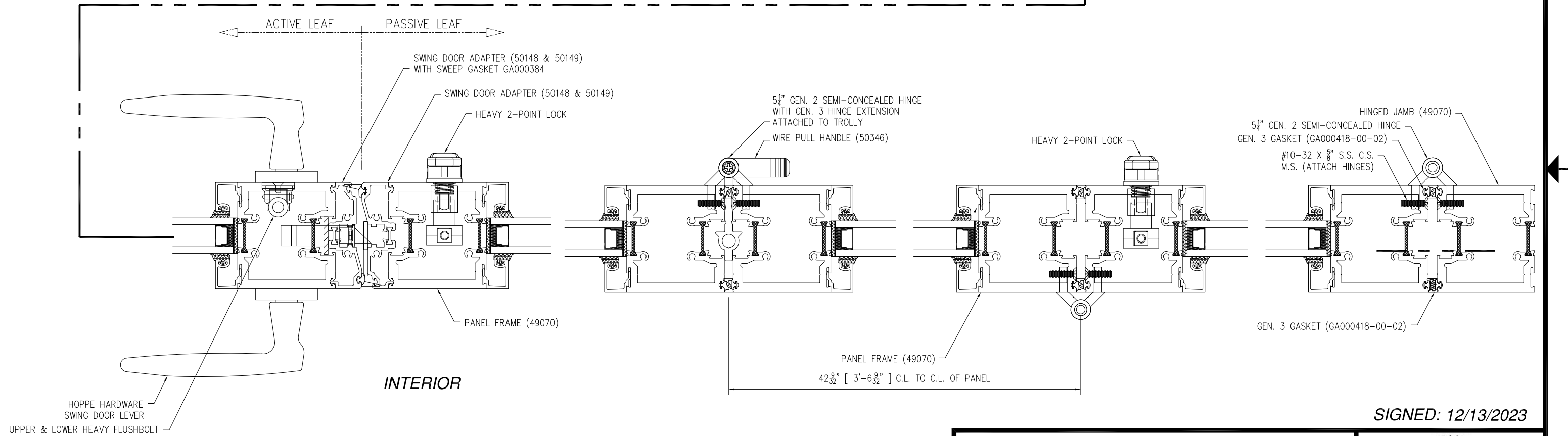
SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 STANDARD INFOLD ALUMINUM FGW NON-IMPACT GLAZING DETAILS		
DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 6 OF 11
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HORIZONTAL CROSS SECTION

SOLAR INNOVATIONS, INC.

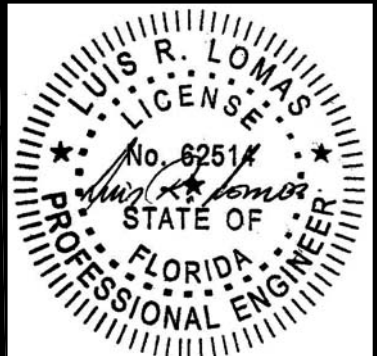
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SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 7 OF 11

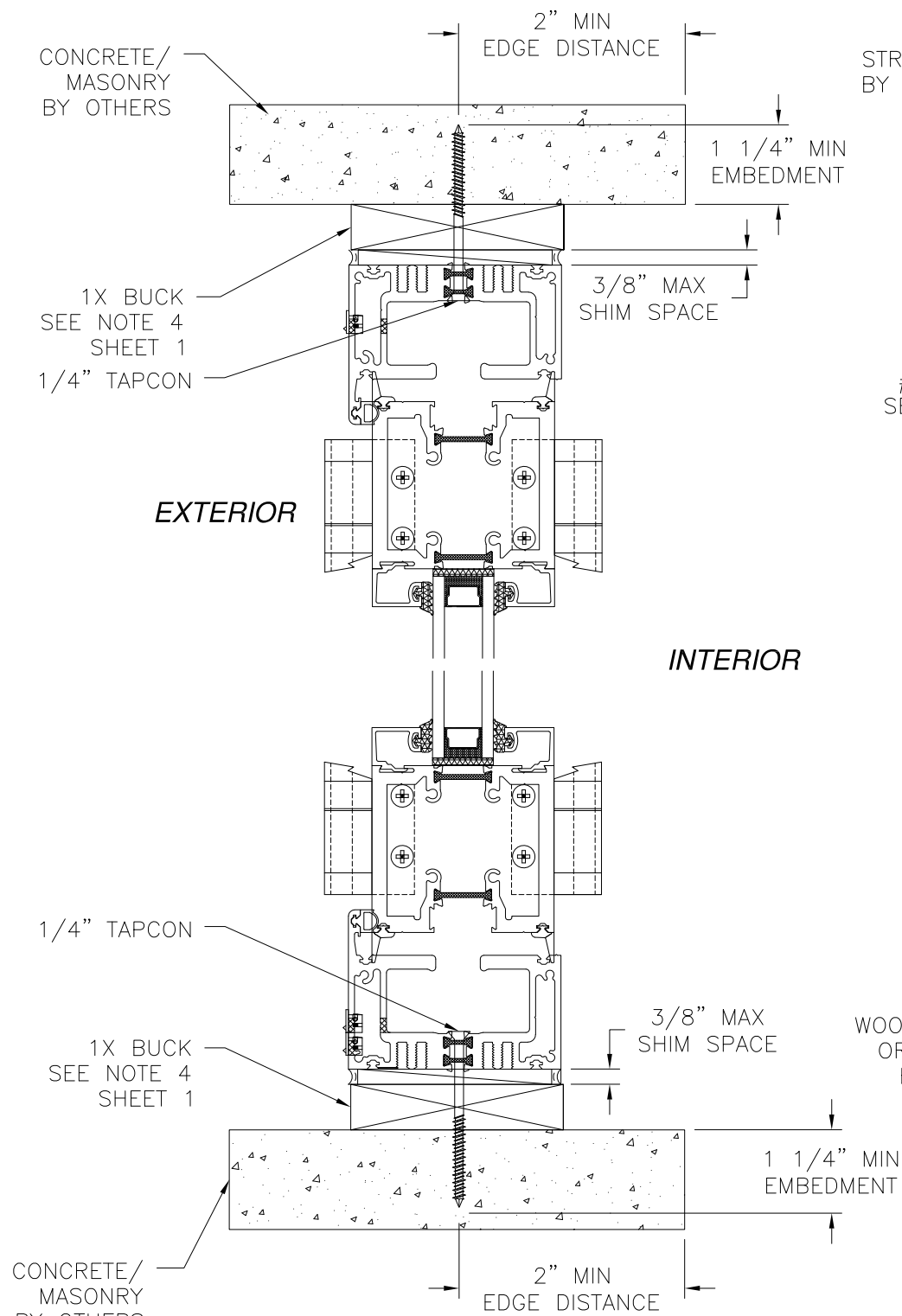
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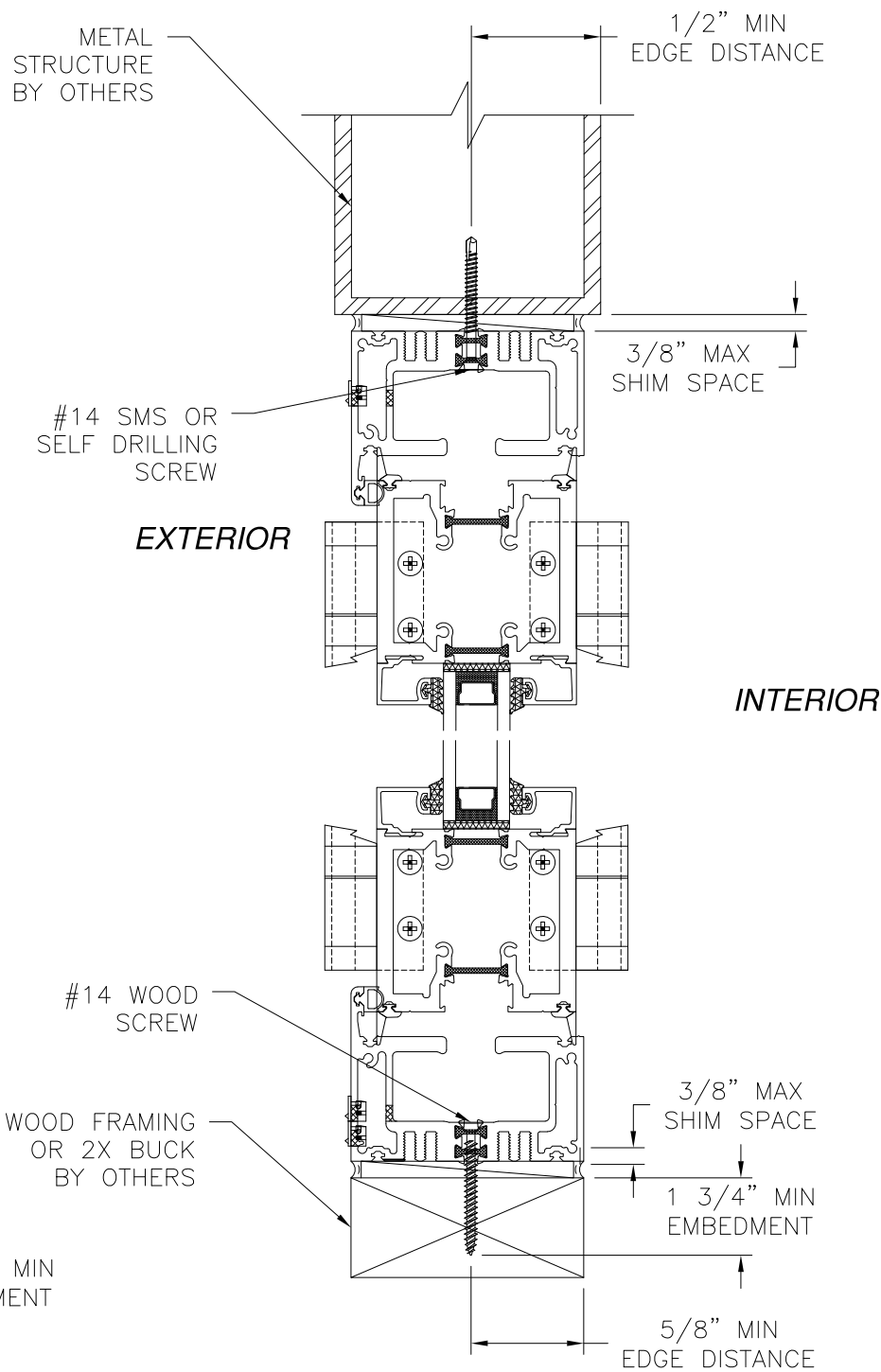
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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

- 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



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK
OR METAL STRUCTURE INSTALLATION

SOLAR INNOVATIONS, INC.

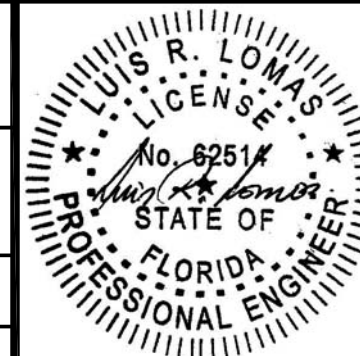
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PINE GROVE, PA 17963

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 8 OF 11

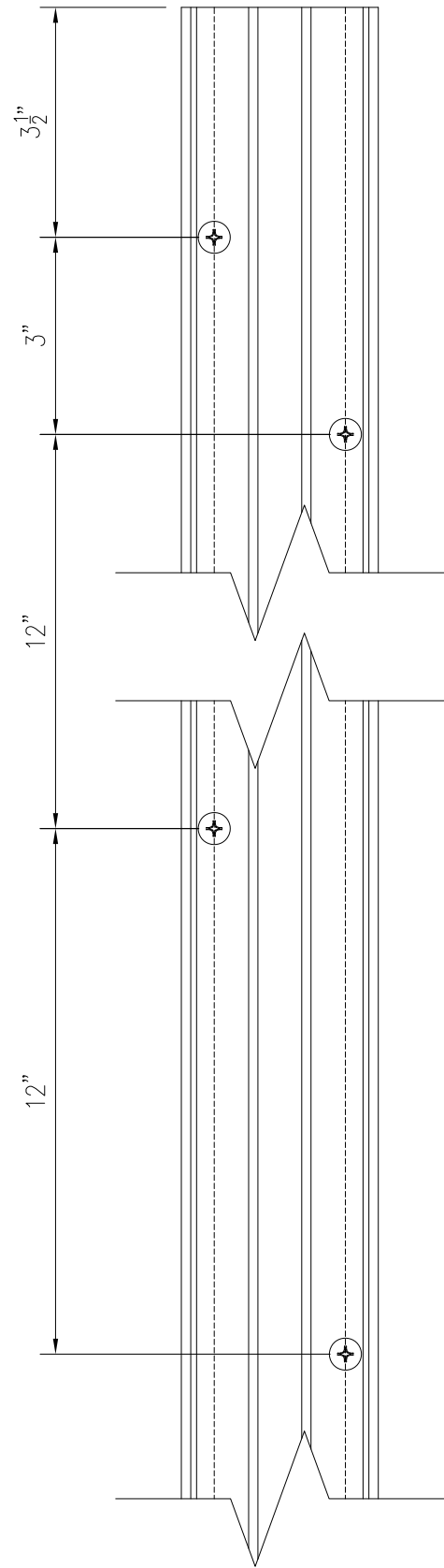
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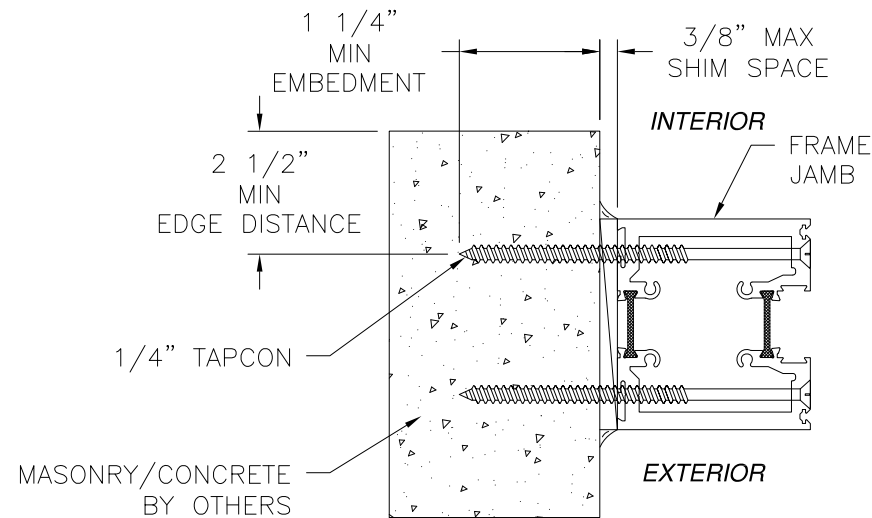


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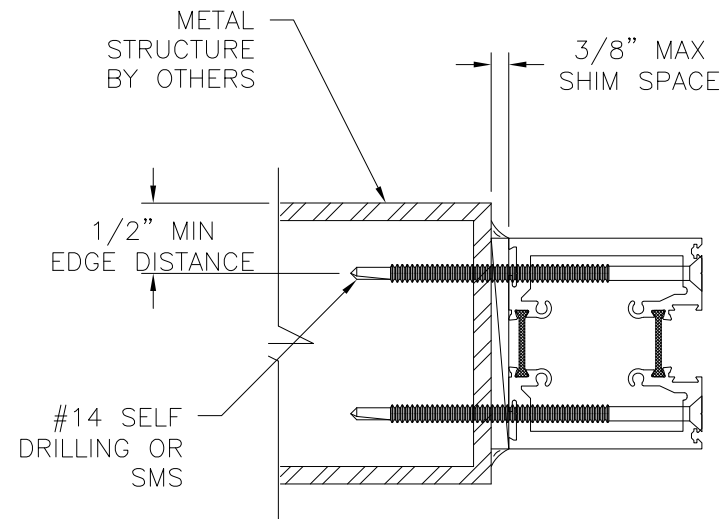
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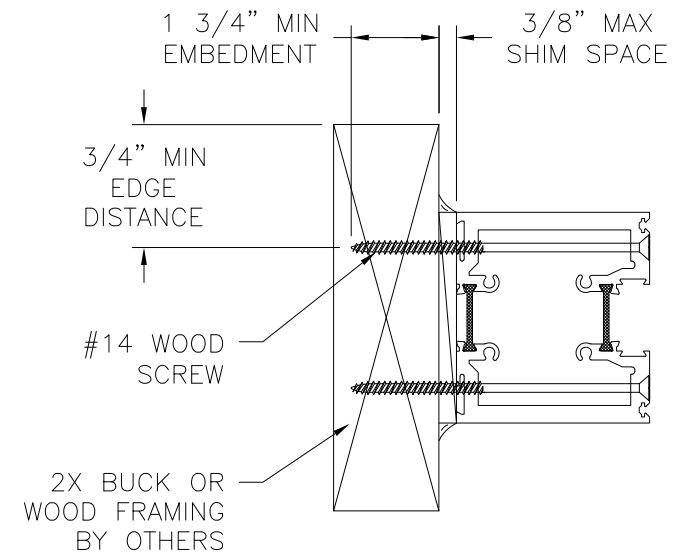
JAMB ANCHOR LOCATIONS
DETAIL



JAMB INSTALLATION DETAIL
MASONRY/CONCRETE



JAMB INSTALLATION DETAIL
METAL STRUCTURE



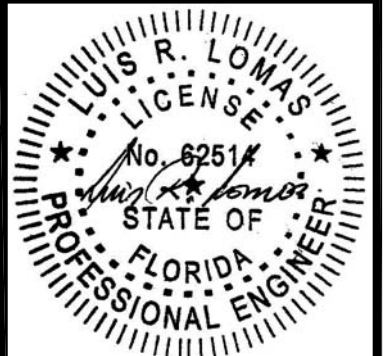
JAMB INSTALLATION DETAIL
2X BUCK OR WOOD FRAMING

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

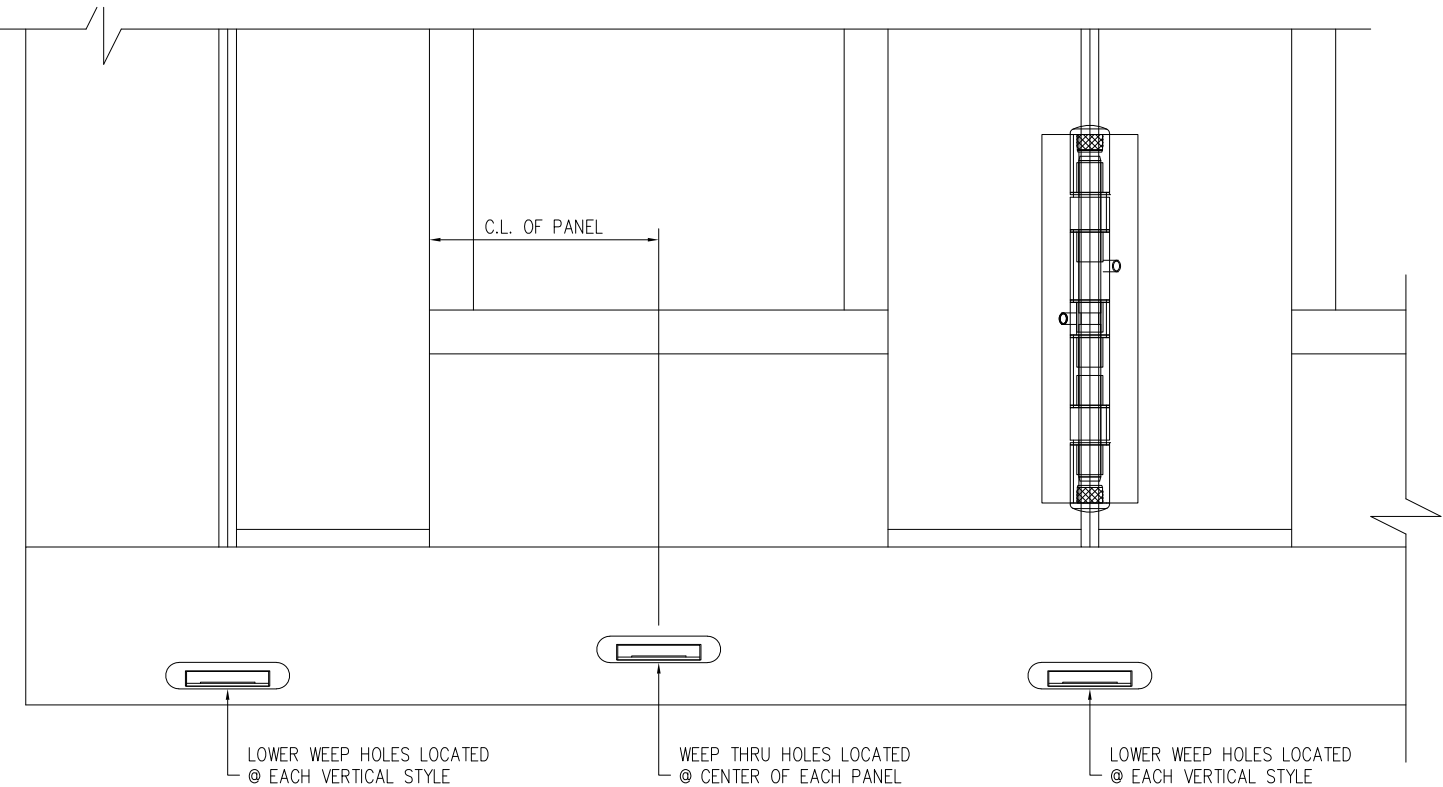
SIGNED: 12/13/2023

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 STANDARD INFOLD ALUMINUM FGW NON-IMPACT INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01960	REV C
SCALE NTS	DATE 04/22/13	SHEET 9 OF 11
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

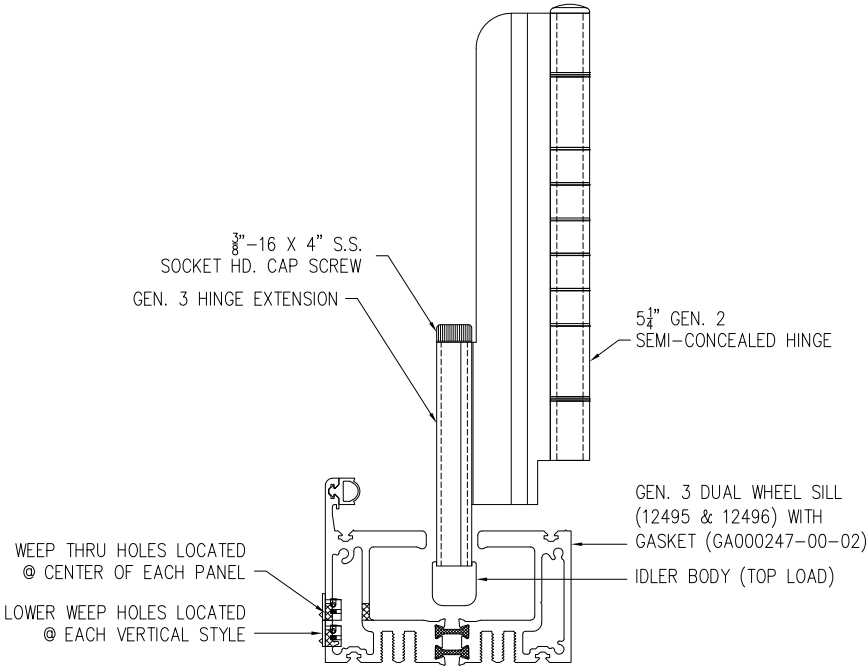


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FL No.: 62514

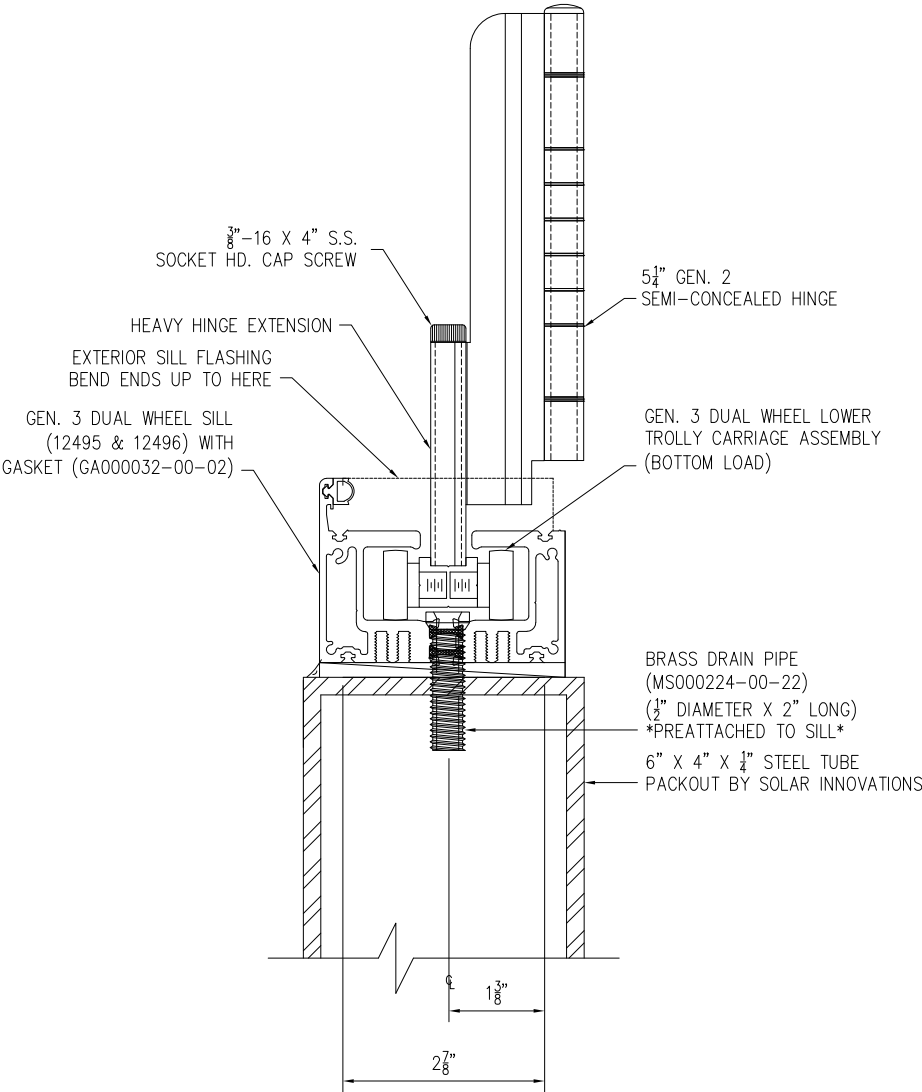
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED DETAILS AND COMPONENTS	12/11/2023	R.L.



WEEP HOLES DETAILS



**WEEP HOLES AND HINGE EXTENSION
DETAIL**



**DRAIN PIPE AND HINGE EXTENSION
DETAIL**

SIGNED: 12/13/2023

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

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
WEEP DETAILS

DRAWN:
V.L.

DWG NO.
08-01960

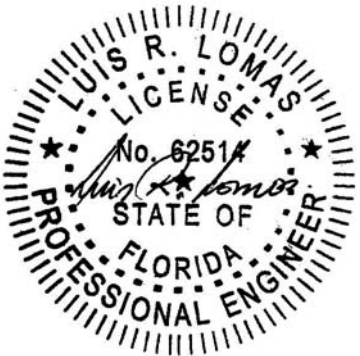
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SCALE
NTS

DATE
04/22/13

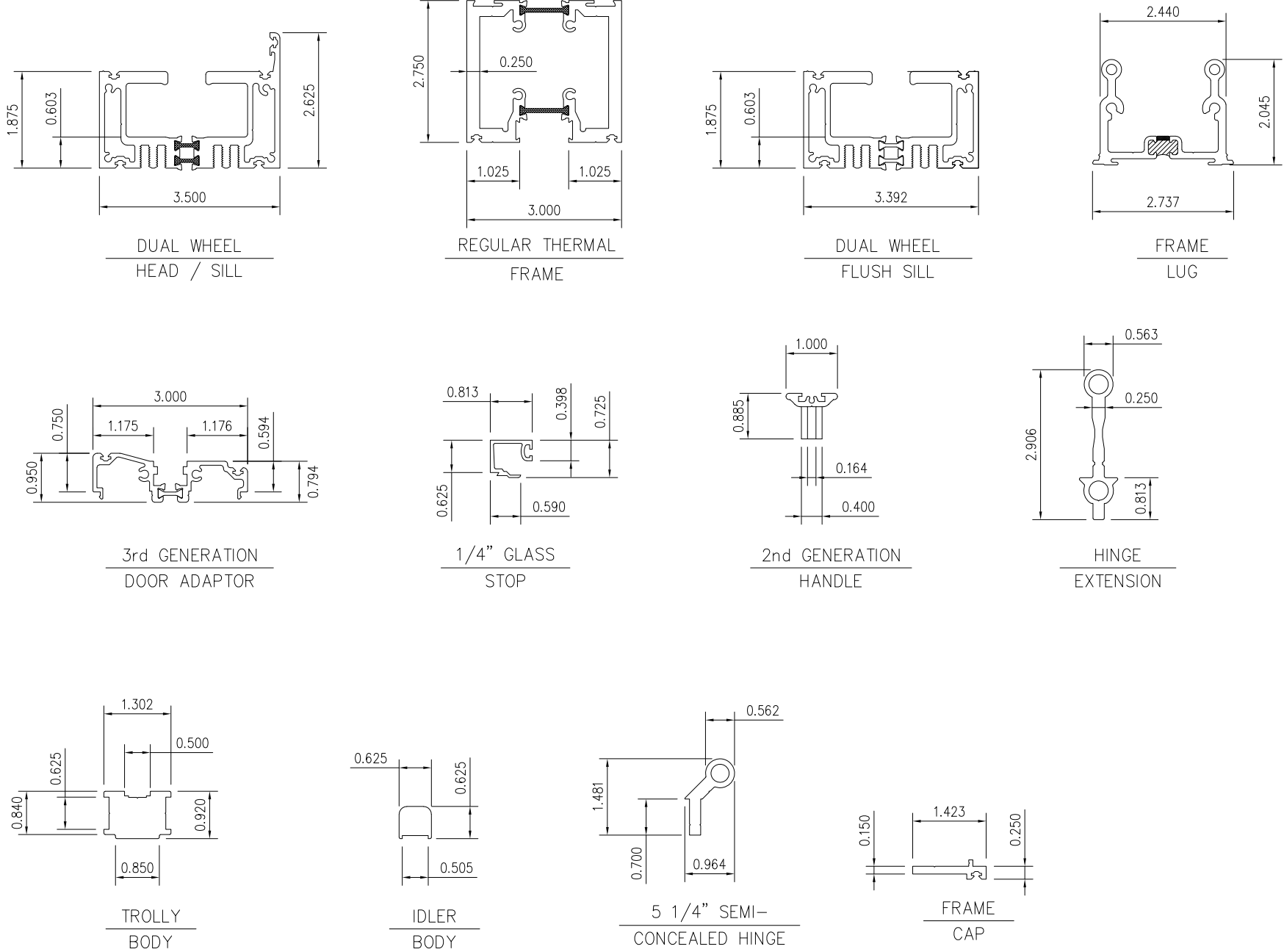
SHEET
10 OF 11

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REVISIONS			
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SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 STANDARD INFOLD ALUMINUM FGW
NON-IMPACT
COMPONENTS

DRAWN:
V.L.

DWG NO.
08-01960

REV
C

SCALE NTS

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SHEET 11 OF 11

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