

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW REQUIREMENTS	12/04/2023	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, 6063-T5 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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SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
NOTES

DRAWN:
V.L.

DWG NO.
08-01962

REV
C

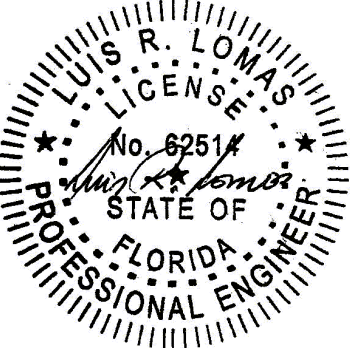
SCALE NTS

DATE 12/20/12

SHEET 1 OF 13

L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023



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

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DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-80.0PSF	NONE

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

DESIGN PRESSURE RATING	IMPACT RATING
±80.0PSF	NONE

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

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

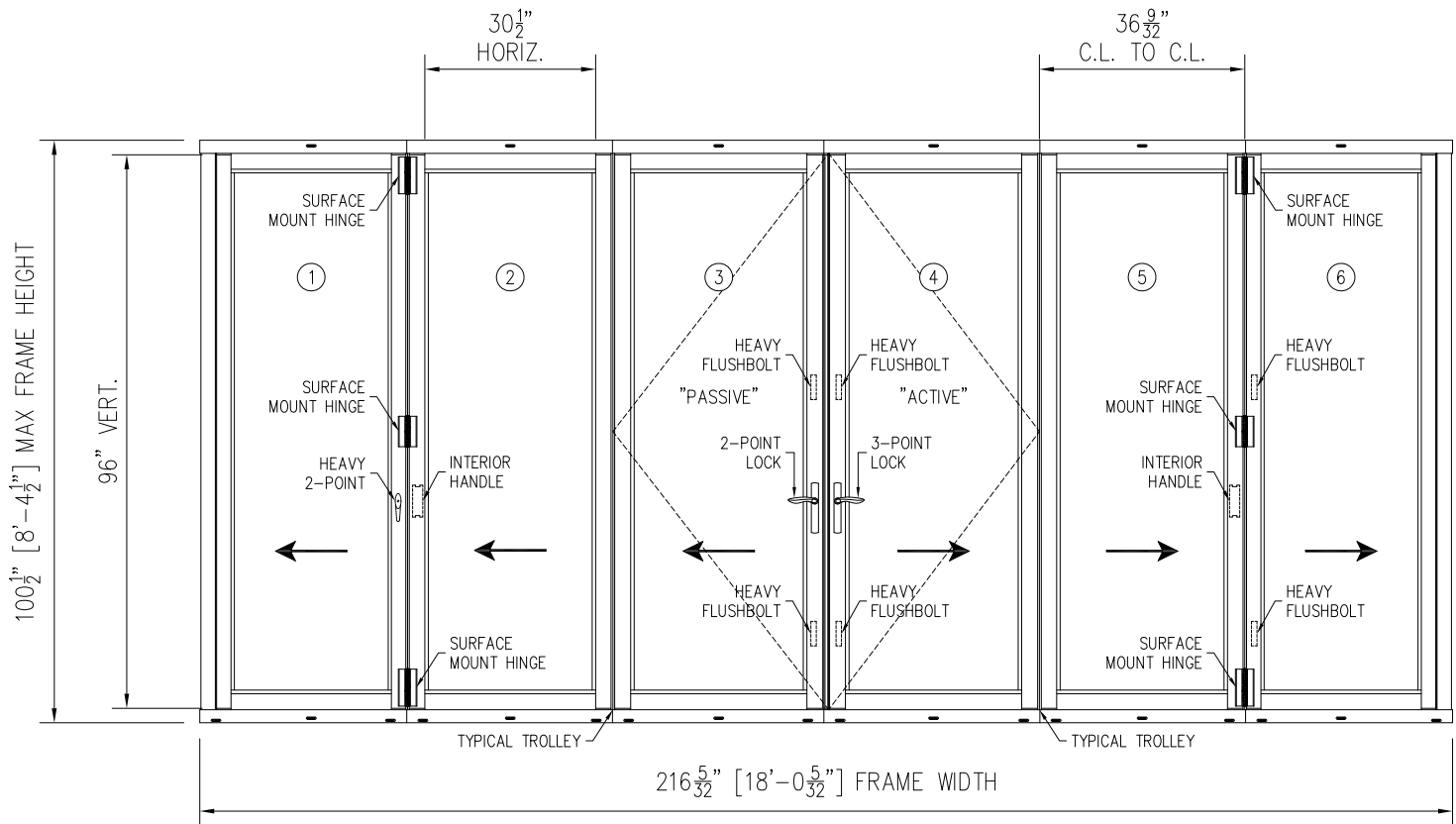
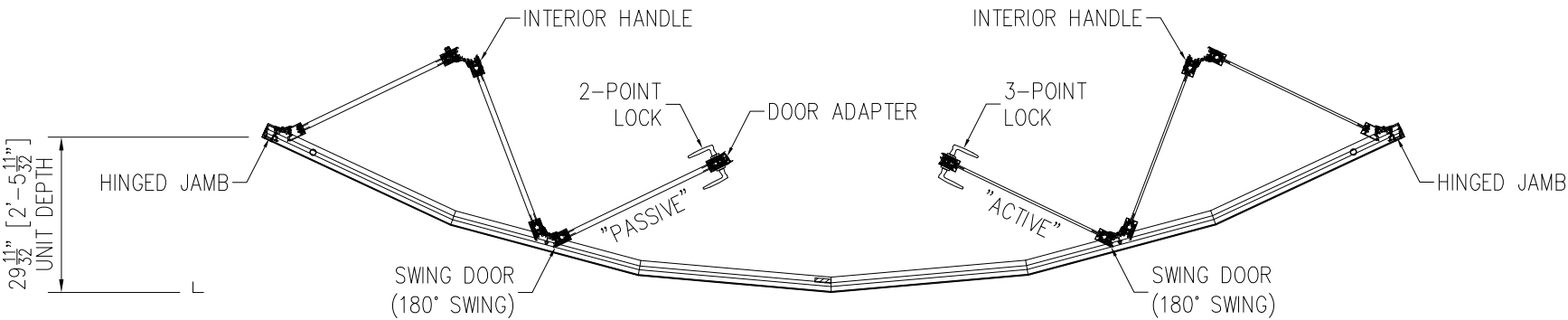
WHERE WATER RESISTANCE IS REQUIRED
AND FLUSH SILL, SEE CHART #3 SHEET 3

DESIGN PRESSURE RATING	IMPACT RATING
±70.0PSF	NONE

WHERE WATER RESISTANCE IS NOT REQUIRED
AND FLUSH SILL, SEE CHART #4 SHEET 3

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

WITH NON-THERMAL RAILS
SEE CHART #3 SHEET 3



SERIES SI3000 FGW 3x8 PANEL RADIUS WALL REINFORCED NON-IMPACT
EXTERIOR VIEW

UNLIMITED NUMBER OF PANELS IN UNLIMITED CONFIGURATION ARE APPROVED
AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 24.06 FT² AND USES VERTICAL CONDITIONS AS SHOWN.

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.

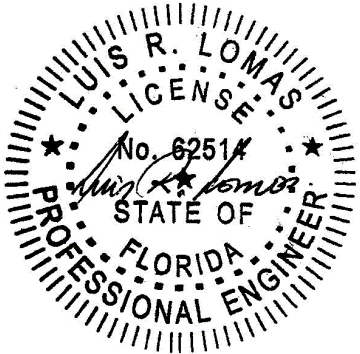
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
ELEVATION

DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 2 OF 13

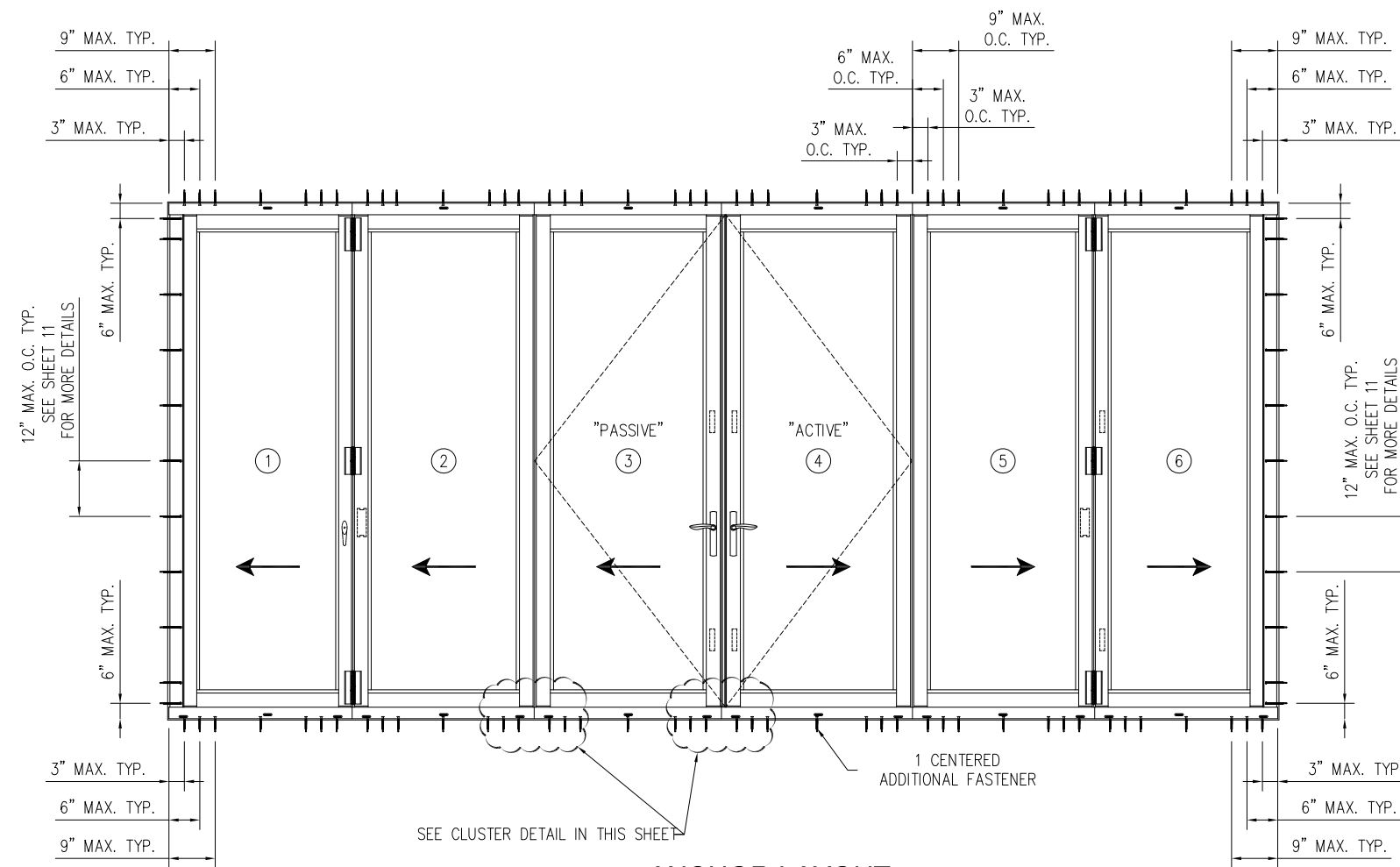
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ANCHOR LAYOUT
APPLIES TO ALL CONFIGURATIONS

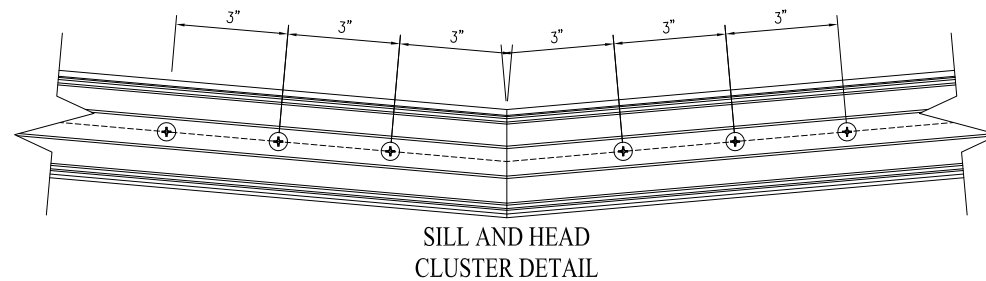
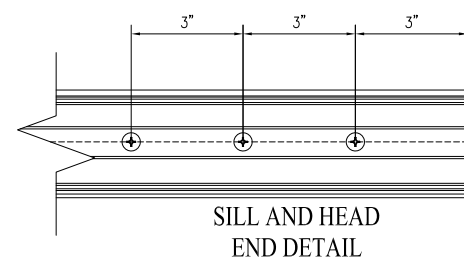


Chart #1 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.00		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	120.0	60.0	119.1	60.0	98.5	60.0	85.1	60.0	81.2
84.0	60.0	120.0	60.0	109.2	60.0	91.4	-	-	-	-
90.0	60.0	120.0	60.0	100.4	60.0	85.3	-	-	-	-
96.0	60.0	112.1	60.0	93.0	60.0	80.0	-	-	-	-
102.0	60.0	97.3	60.0	78.8	-	-	-	-	-	-
108.0	60.0	81.8	60.0	66.1	-	-	-	-	-	-
114.0	60.0	69.4	56.1	56.1	-	-	-	-	-	-
120.0	59.4	59.4	-	-	-	-	-	-	-	-
126.0	51.2	51.2	-	-	-	-	-	-	-	-
132.0	44.5	44.5	-	-	-	-	-	-	-	-
138.0	38.9	38.9	-	-	-	-	-	-	-	-
144.0	34.2	34.2	-	-	-	-	-	-	-	-

Chart #2 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.00		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	120.0	120.0	119.1	119.1	98.5	98.5	85.1	85.1	81.2	81.2
84.0	120.0	120.0	109.2	109.2	91.4	91.4	-	-	-	-
90.0	120.0	120.0	100.4	100.4	85.3	85.3	-	-	-	-
96.0	112.1	112.1	93.0	93.0	80.0	80.0	-	-	-	-
102.0	97.3	97.3	78.8	78.8	-	-	-	-	-	-
108.0	81.8	81.8	66.1	66.1	-	-	-	-	-	-
114.0	69.4	69.4	56.1	56.1	-	-	-	-	-	-
120.0	59.4	59.4	-	-	-	-	-	-	-	-
126.0	51.2	51.2	-	-	-	-	-	-	-	-
132.0	44.5	44.5	-	-	-	-	-	-	-	-
138.0	38.9	38.9	-	-	-	-	-	-	-	-
144.0	34.2	34.2	-	-	-	-	-	-	-	-

Chart #3 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.00		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	105.0	60.0	104.2	60.0	86.2	60.0	74.4	60.0	71.0
84.0	60.0	105.0	60.0	95.5	60.0	80.0	-	-	-	-
90.0	60.0	105.0	60.0	87.9	60.0	74.7	-	-	-	-
96.0	60.0	98.1	60.0	81.4	60.0	70.0	-	-	-	-
102.0	60.0	85.1	60.0	69.0	-	-	-	-	-	-
108.0	60.0	71.5	57.9	57.9	-	-	-	-	-	-
114.0	60.0	60.7	49.1	49.1	-	-	-	-	-	-
120.0	52.0	52.0	-	-	-	-	-	-	-	-
126.0	44.8	44.8	-	-	-	-	-	-	-	-
132.0	38.9	38.9	-	-	-	-	-	-	-	-
138.0	34.0	34.0	-	-	-	-	-	-	-	-
144.0	29.9	29.9	-	-	-	-	-	-	-	-

Chart #4 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.00		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	105.0	105.0	104.2	104.2	86.2	86.2	74.4	74.4	71.0	71.0
84.0	105.0	105.0	95.5	95.5	80.0	80.0	-	-	-	-
90.0	105.0	105.0	87.9	87.9	74.7	74.7	-	-	-	-
96.0	98.1	98.1	81.4	81.4	70.0	70.0	-	-	-	-
102.0	85.1	85.1	69.0	69.0	-	-	-	-	-	-
108.0	71.5	71.5	57.9	57.9	-	-	-	-	-	-
114.0	60.7	60.7	49.1	49.1	-	-	-	-	-	-
120.0	52.0	52.0	-	-	-	-	-	-	-	-
126.0	44.8	44.8	-	-	-	-	-	-	-	-
132.0	38.9	38.9	-	-	-	-	-	-	-	-
138.0	34.0	34.0	-	-	-	-	-	-	-	-
144.0	29.9	29.9	-	-	-	-	-	-	-	-

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

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
ANCHORING LAYOUT & DESIGN PRESSURE CHARTS

DRAWN: V.L. DWG NO. 08-01962 REV C

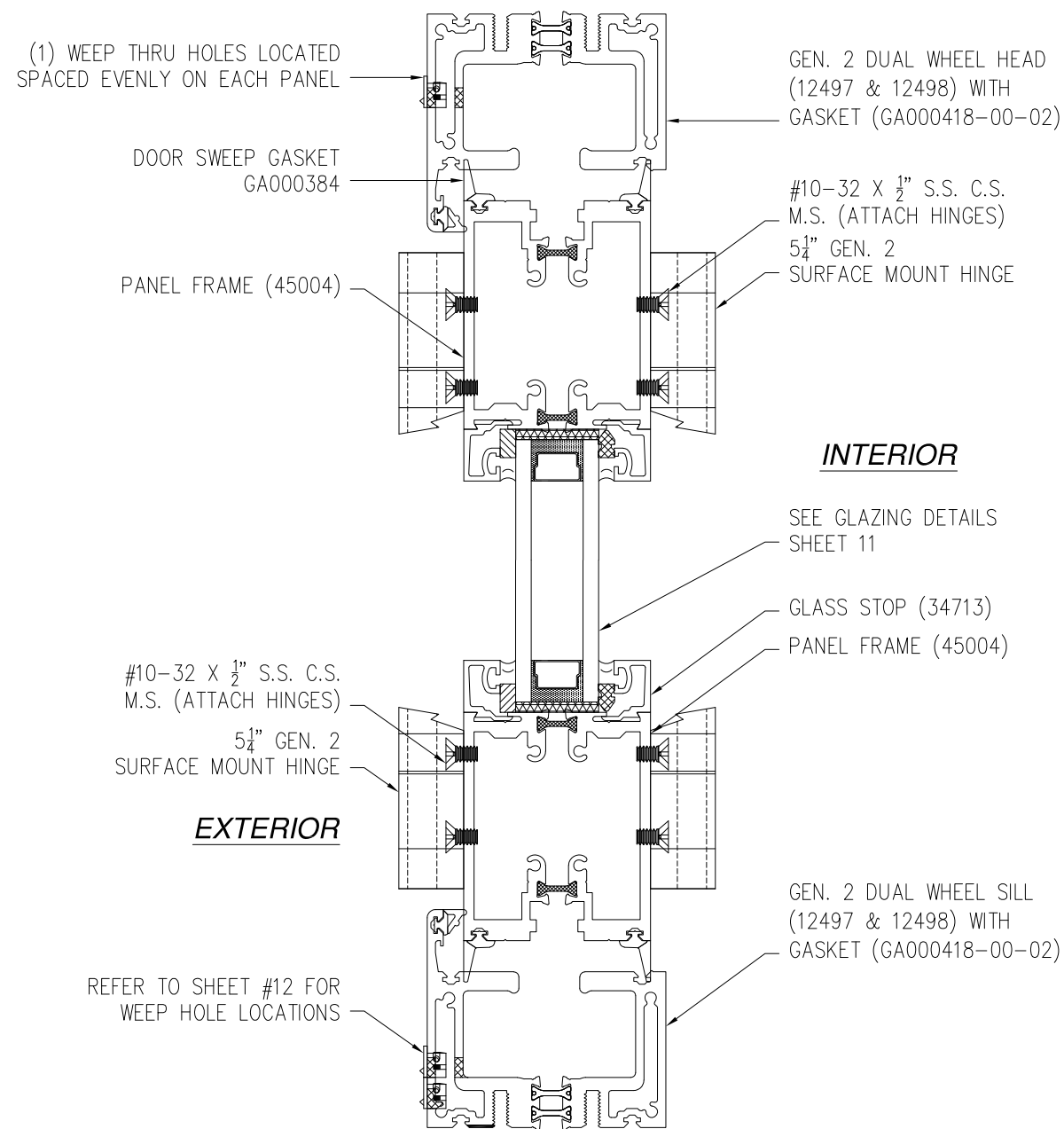
SCALE NTS DATE 12/20/12 SHEET 3 OF 13

L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

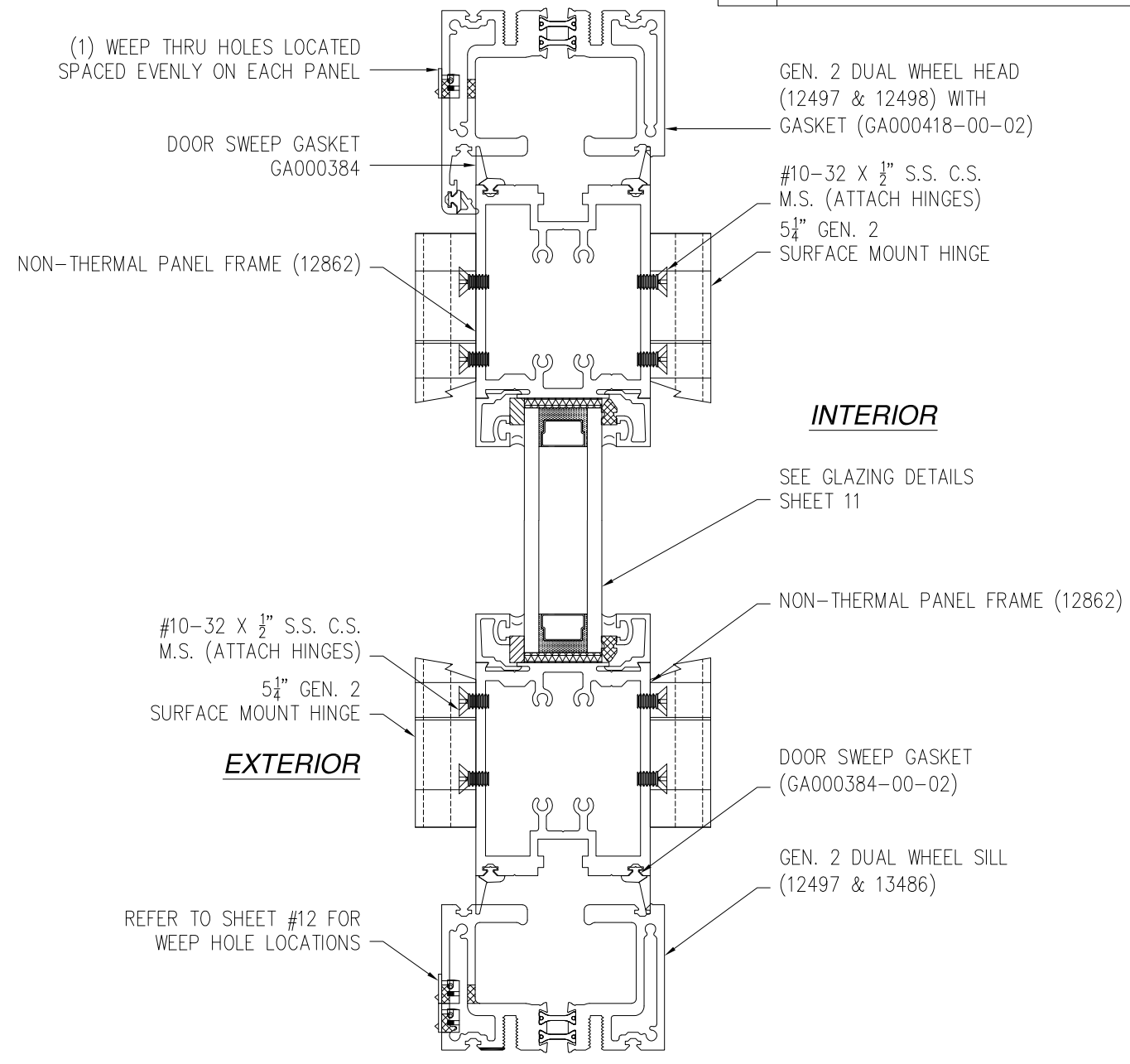
SIGNED: 12/12/2023

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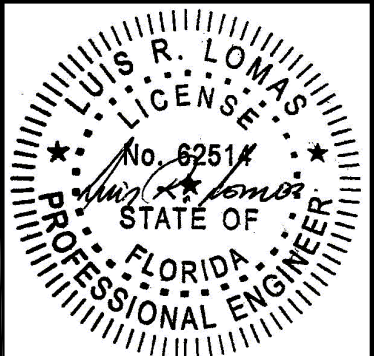
VERTICAL CROSS SECTION
STANDARD WET GLAZED



VERTICAL CROSS SECTION
FLUSH SILL WET GLAZED

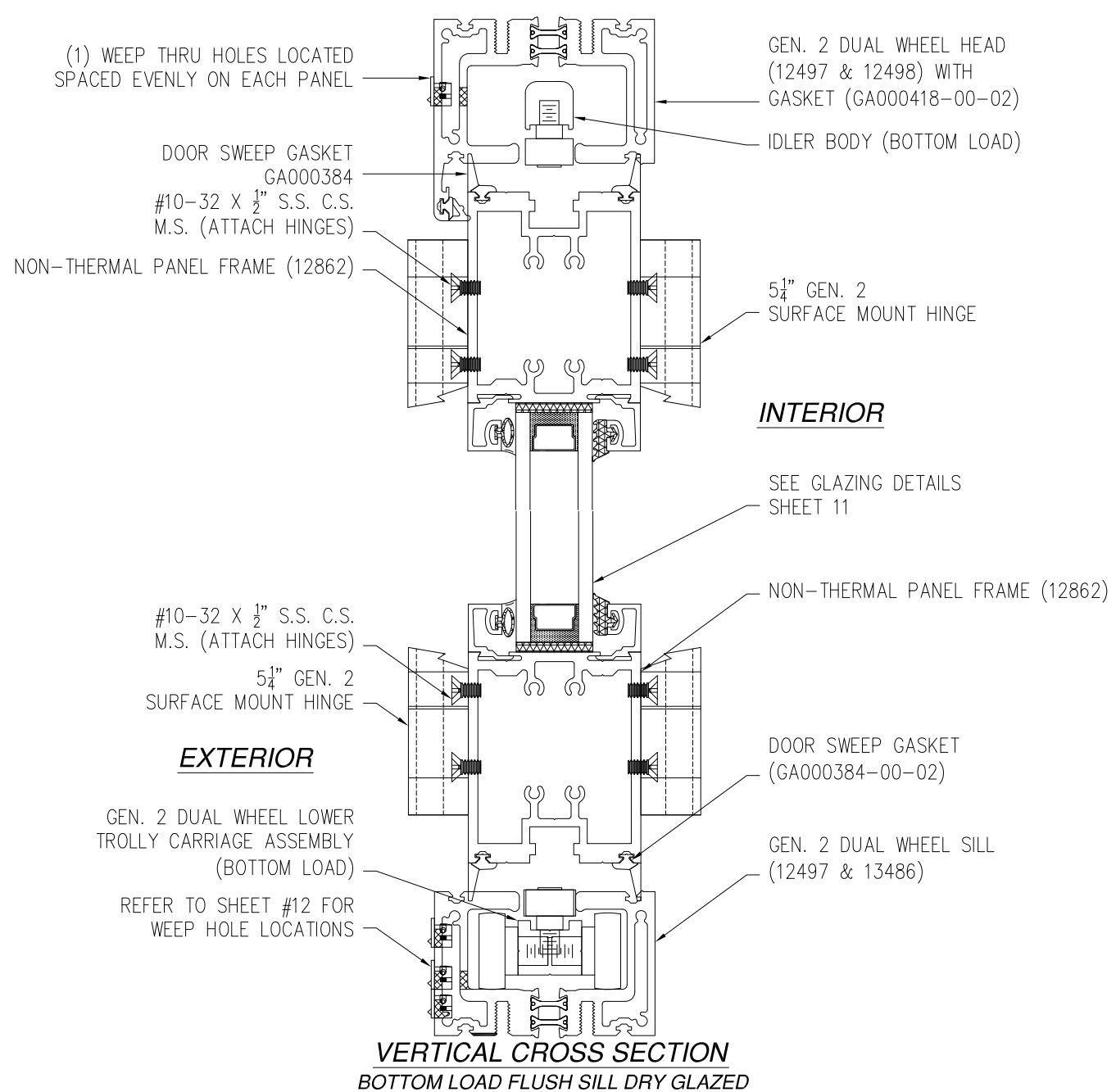
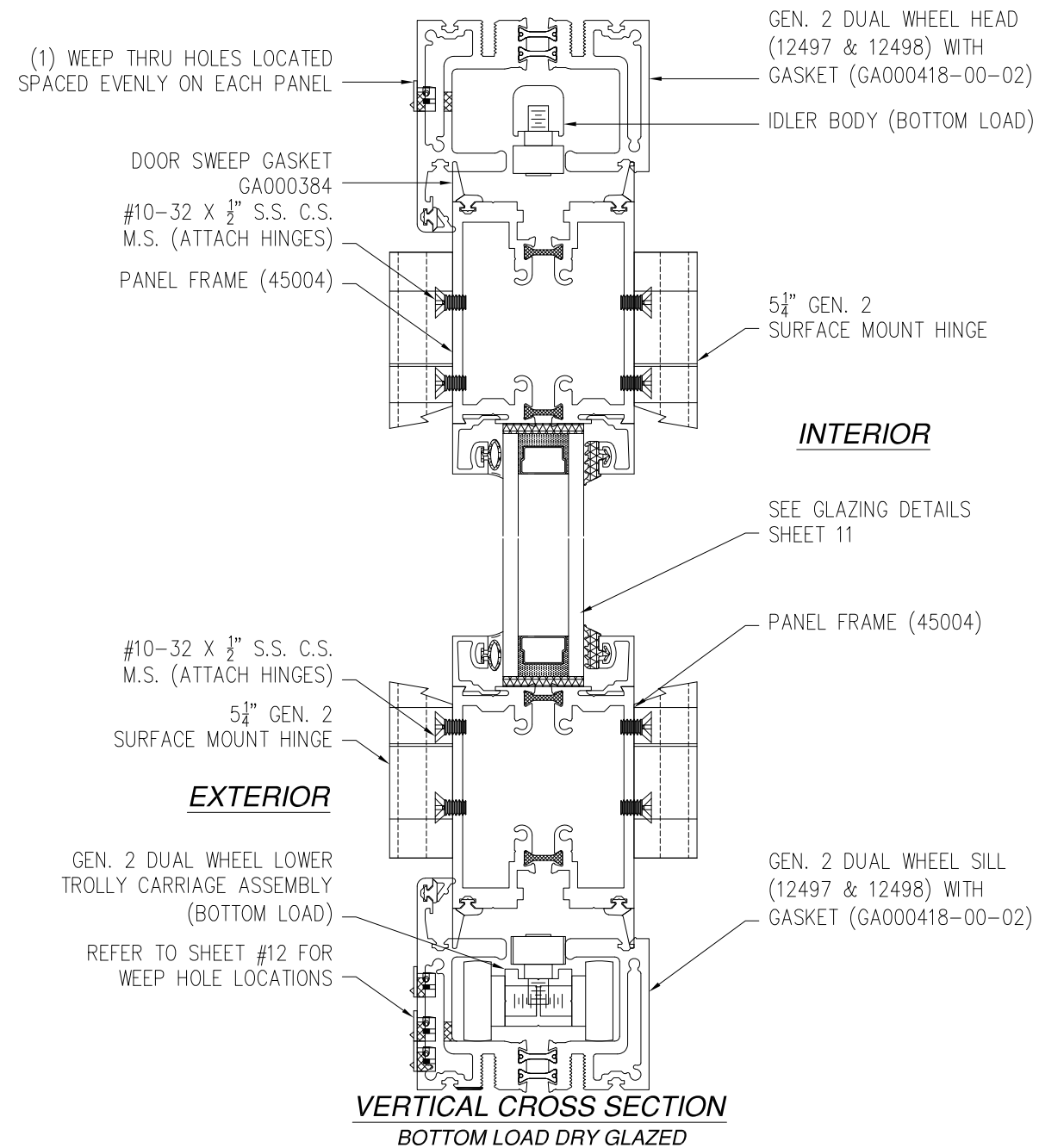
SIGNED: 12/12/2023

SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL RADIUS WALL REINFORCED NON-IMPACT VERTICAL CROSS SECTIONS		
DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 4 OF 13
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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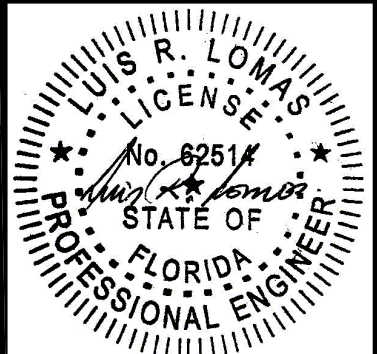
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
VERTICAL CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 5 OF 13

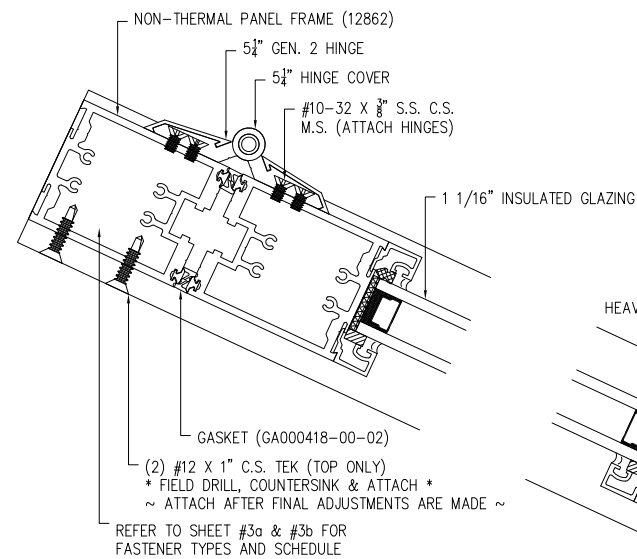
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208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@rlomaspe.com

SIGNED: 12/12/2023

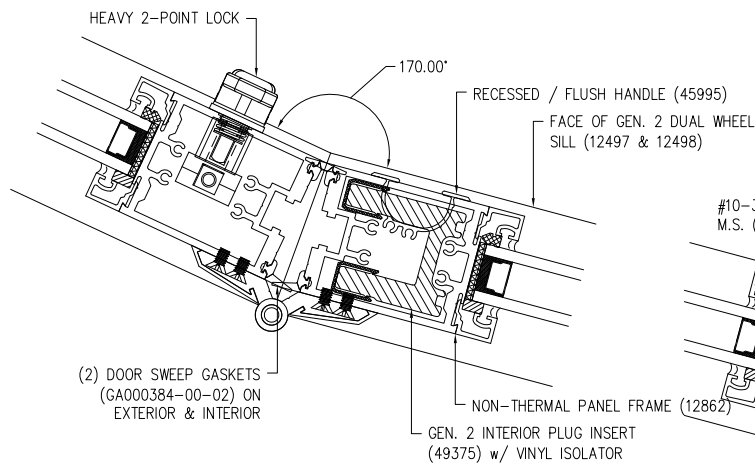


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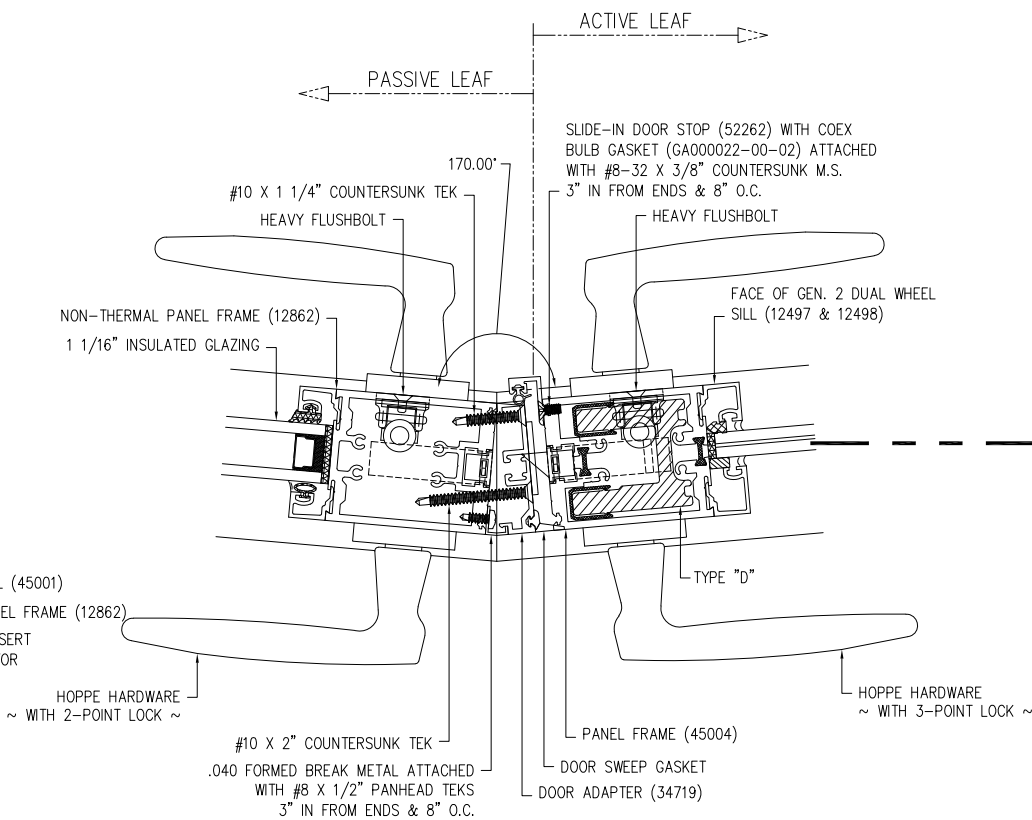


INTERIOR



EXTERIOR

HORIZONTAL CROSS SECTION



CONTINUED
IN SHEET 7

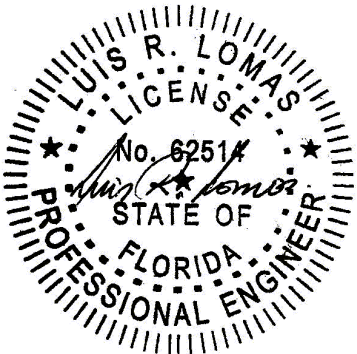
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SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

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RADIUS WALL REINFORCED NON-IMPACT
HORIZONTAL CROSS SECTION

DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 6 OF 13

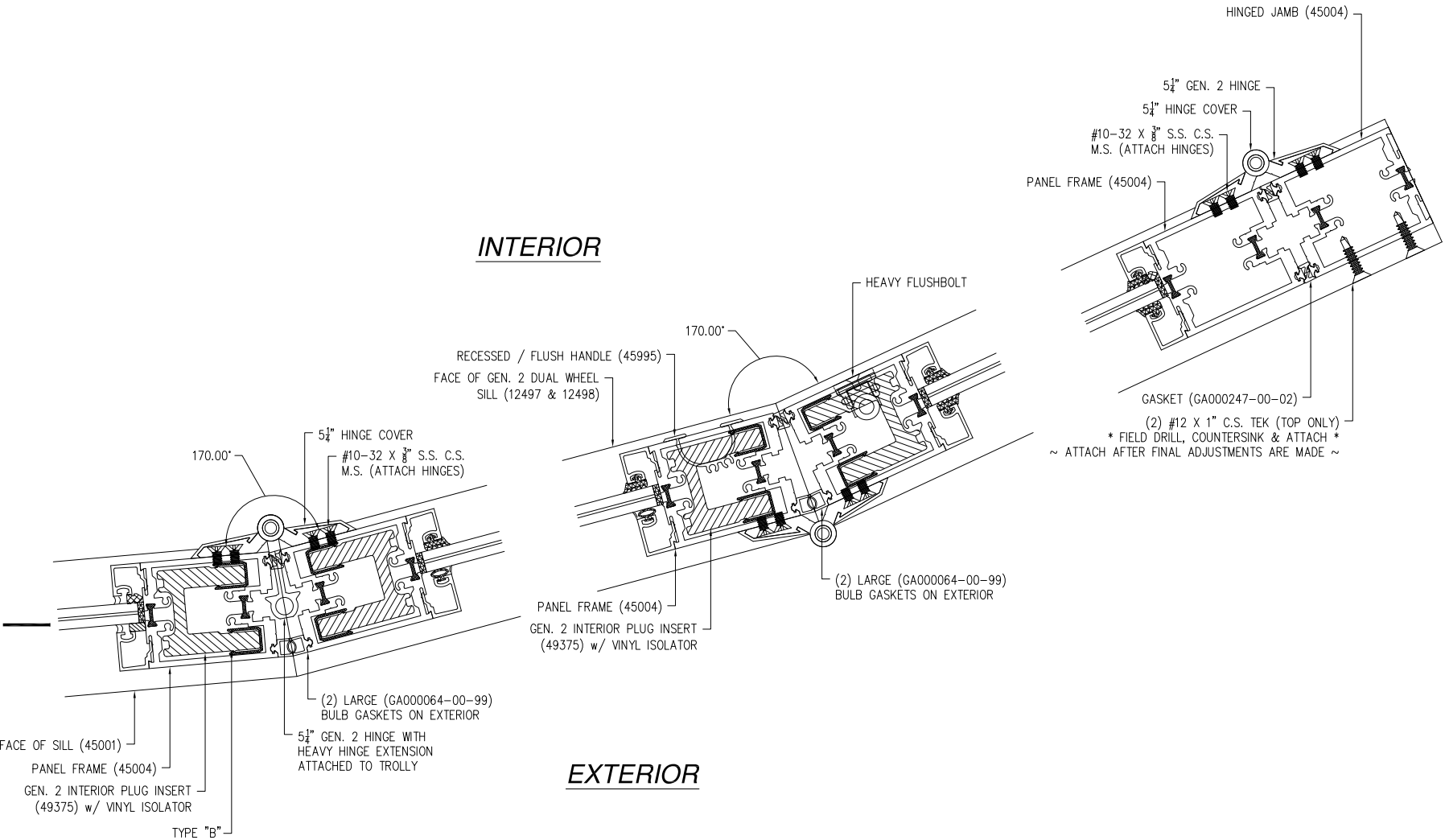
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CONTINUED
FROM SHEET 6



HORIZONTAL CROSS SECTION

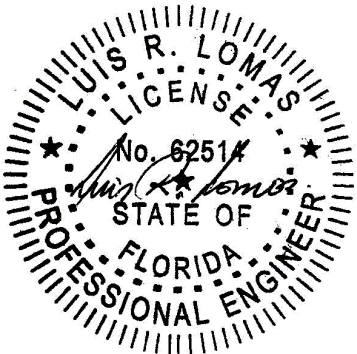
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31 ROBERTS RD
PINE GROVE, PA 17963

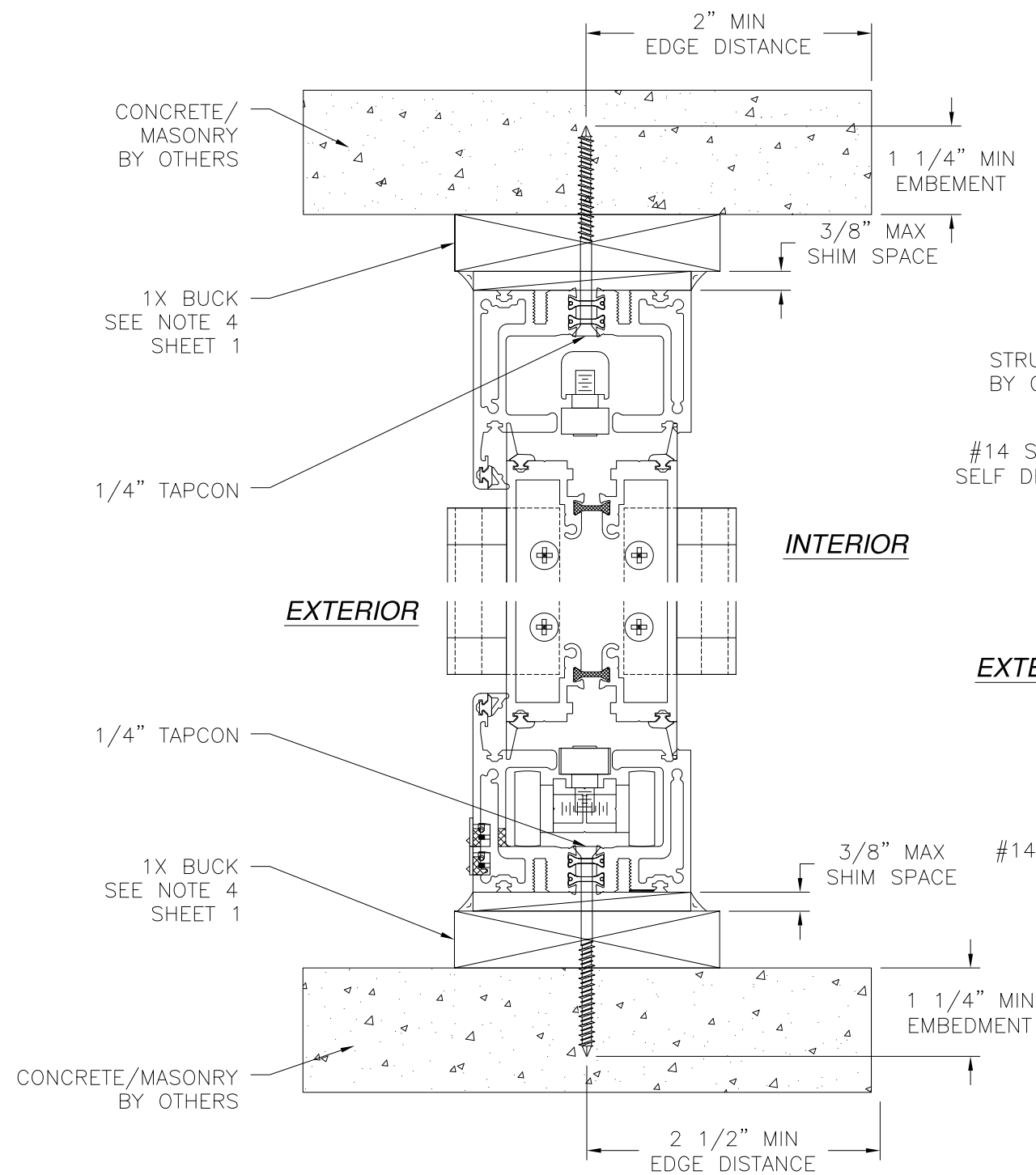
SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
HORIZONTAL CROSS SECTION

DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 7 OF 13

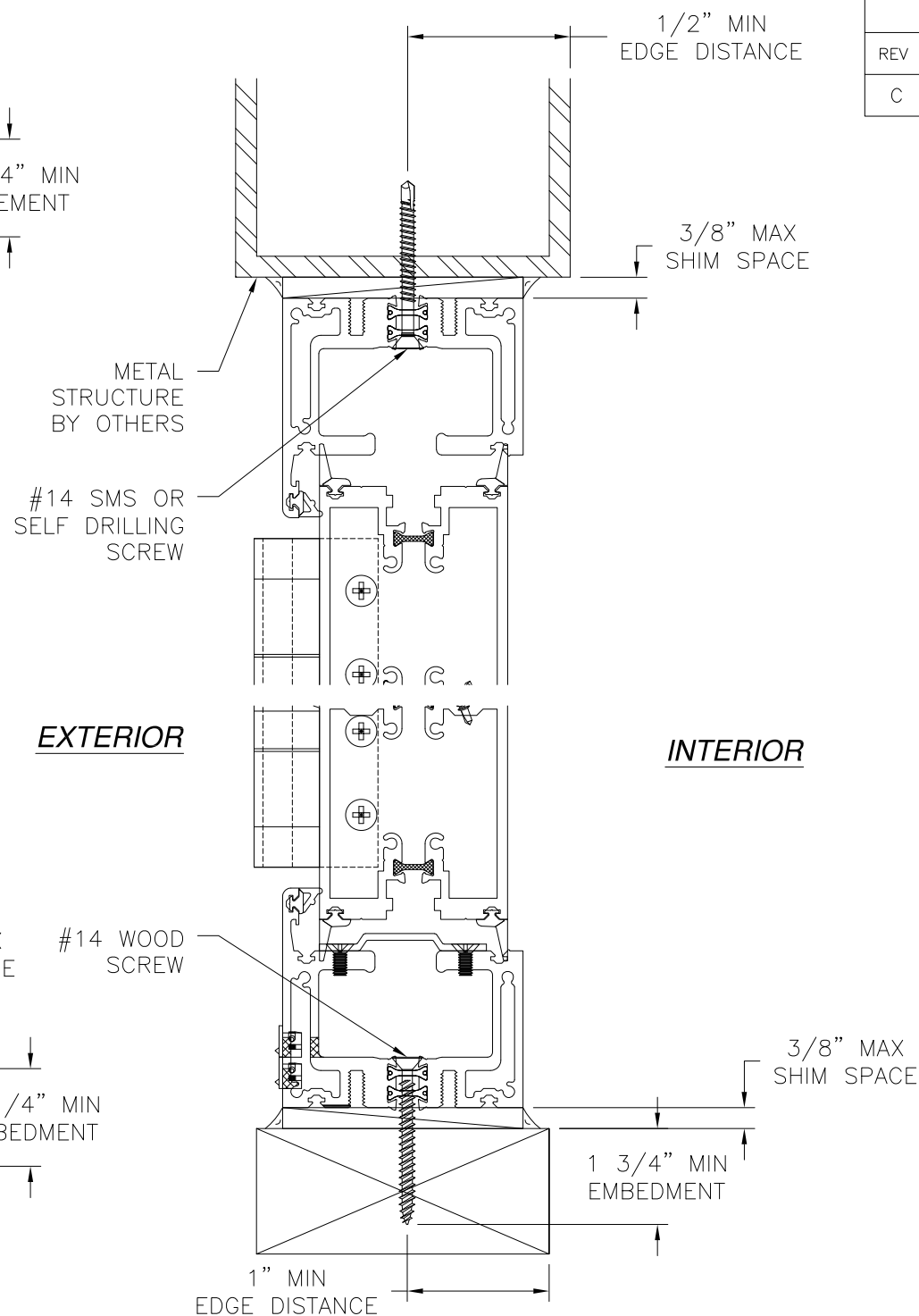
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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION



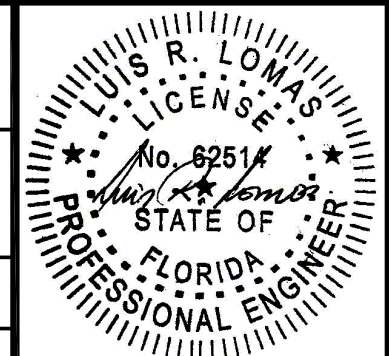
VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK
OR METAL STRUCTURE INSTALLATION

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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

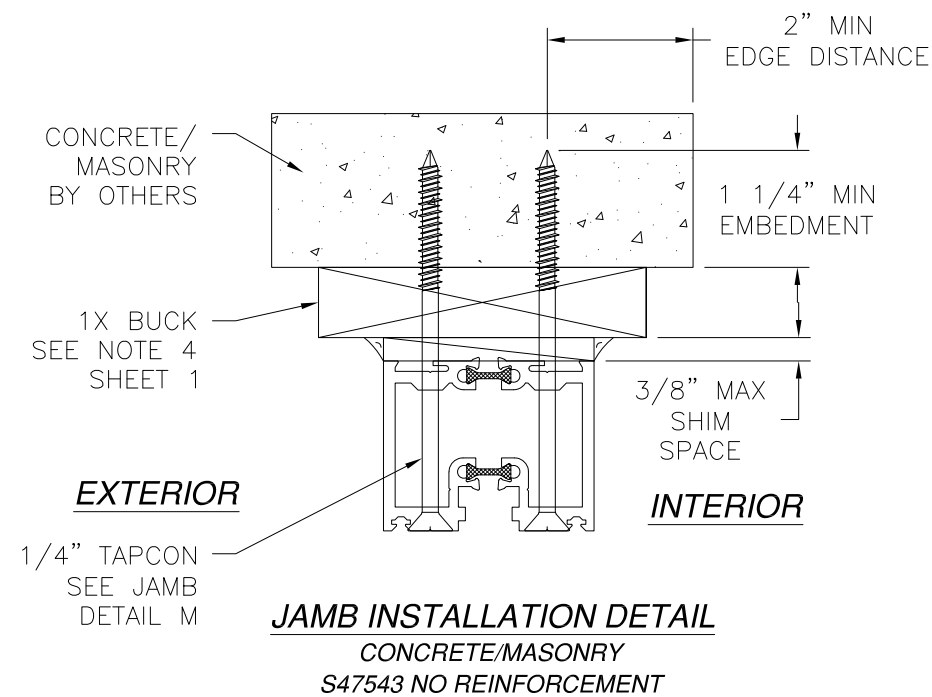
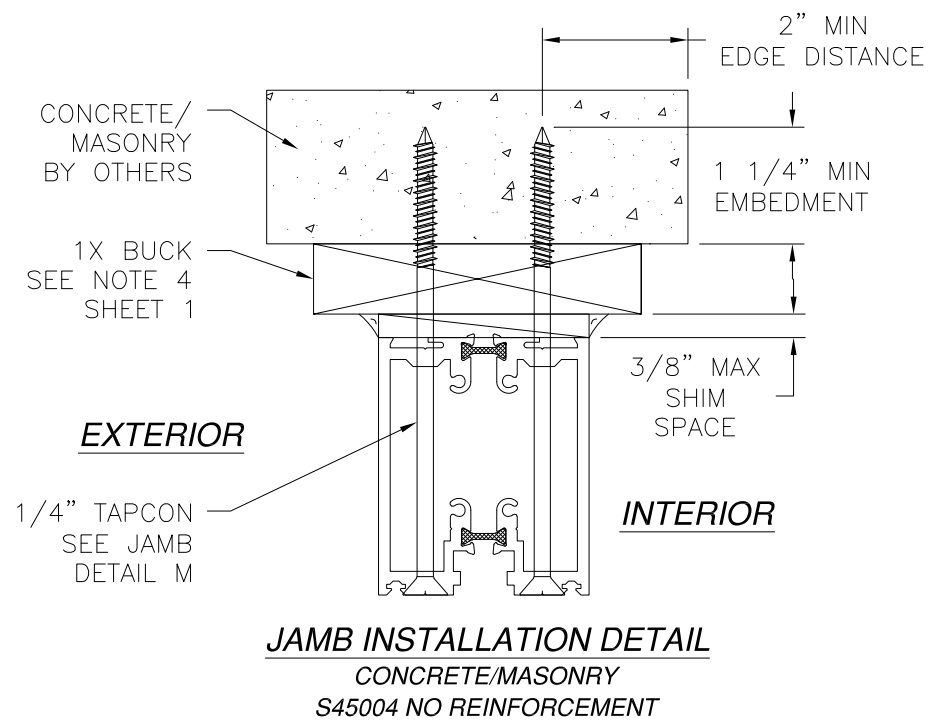
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SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL RADIUS WALL REINFORCED NON-IMPACT INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 8 OF 13
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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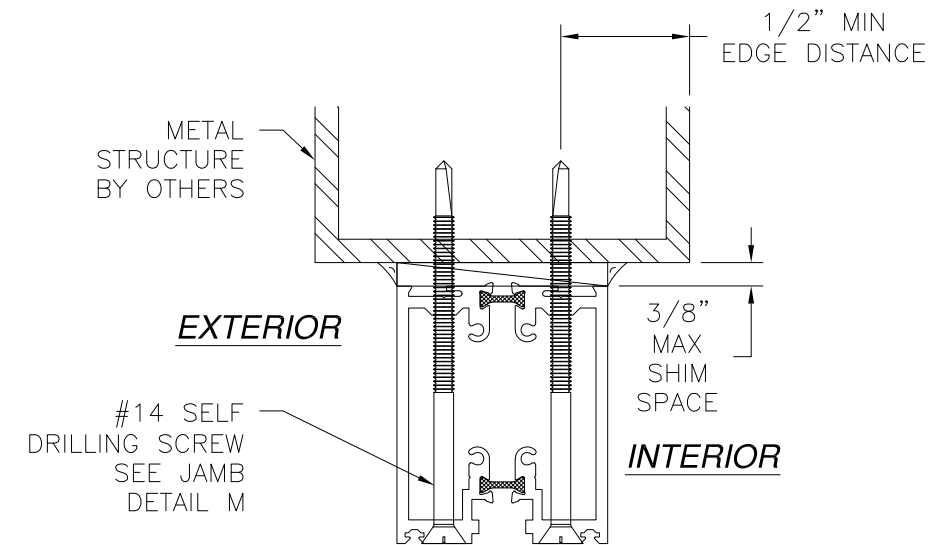
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

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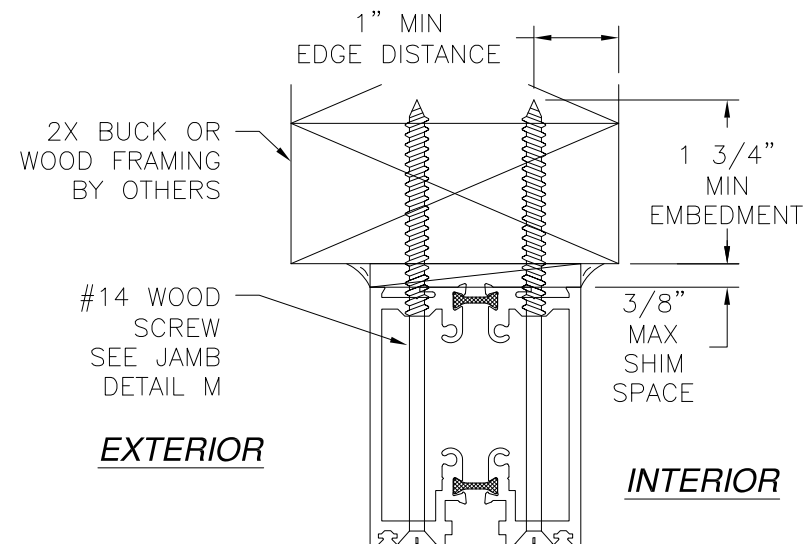
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL RADIUS WALL REINFORCED NON-IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 12/20/12	SHEET 9 OF 13
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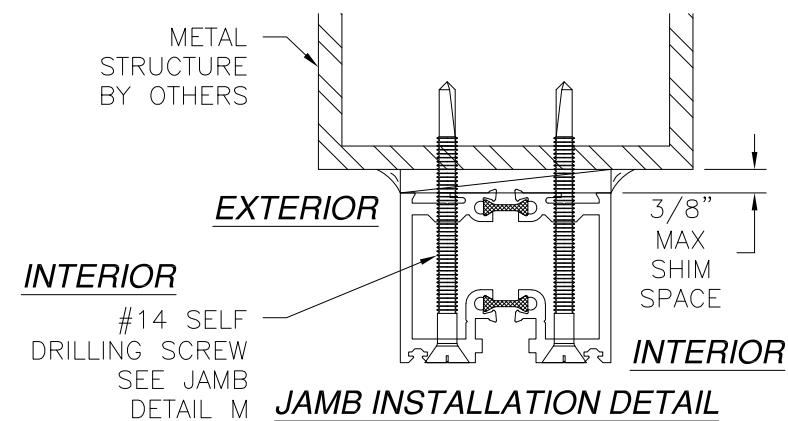
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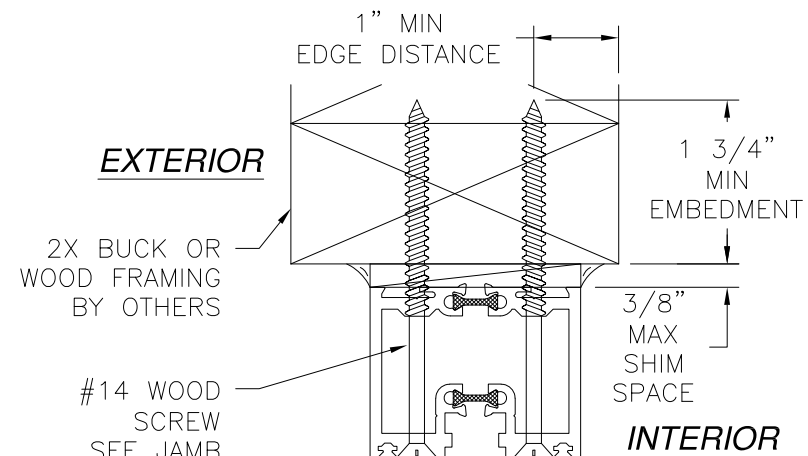
JAMB INSTALLATION DETAIL
METAL STRUCTURE
S45004 NO REINFORCEMENT



JAMB INSTALLATION DETAIL
2X BUCK OR WOOD FRAMING
S45004 NO REINFORCEMENT



JAMB INSTALLATION DETAIL
METAL STRUCTURE
S47543 NO REINFORCEMENT



JAMB INSTALLATION DETAIL
2X BUCK OR WOOD FRAMING
S47543 NO REINFORCEMENT

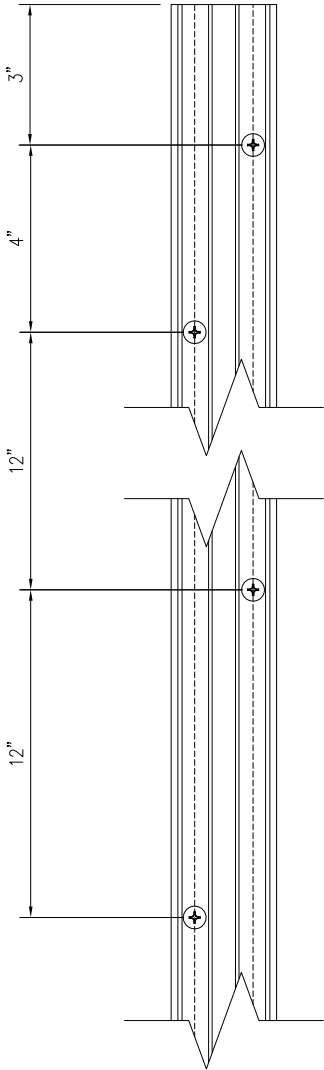
NOTES:
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS,
NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE
DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 12/12/2023

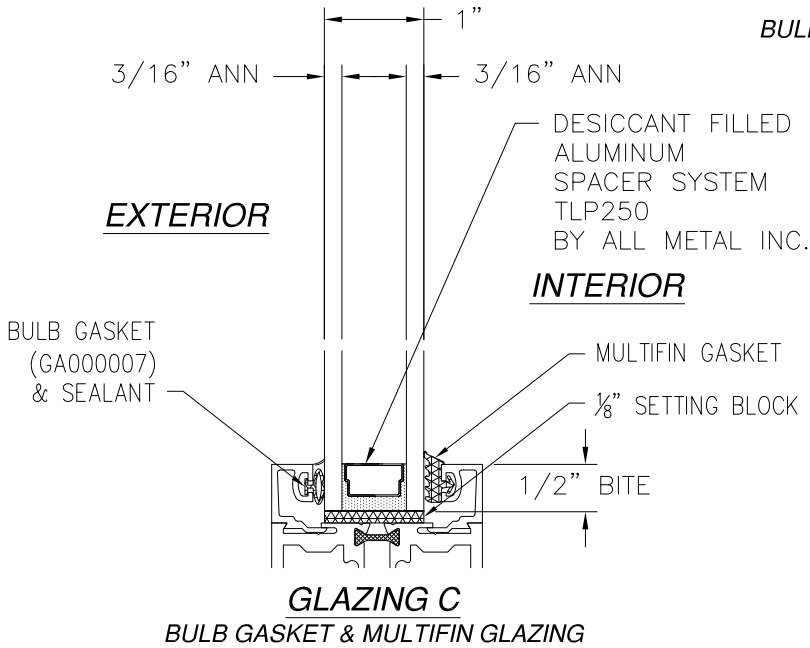
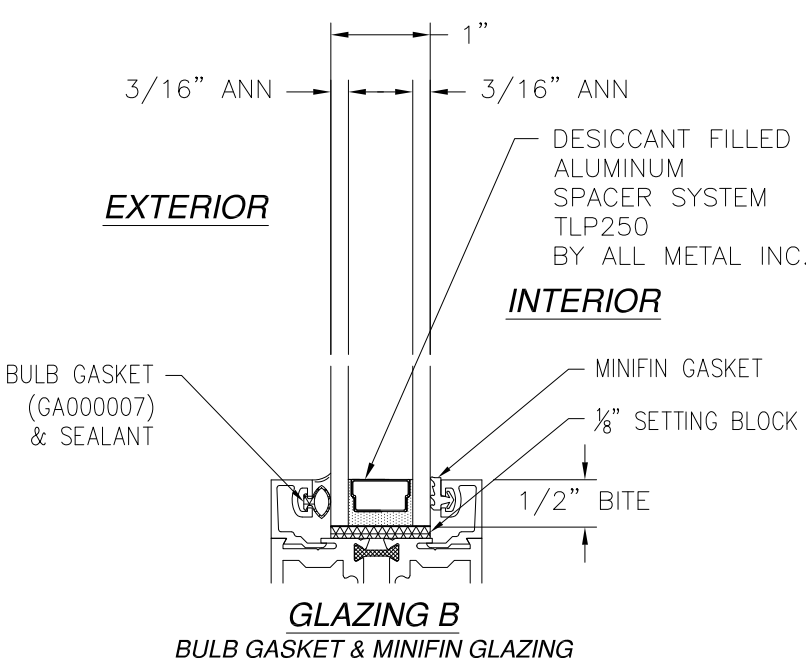
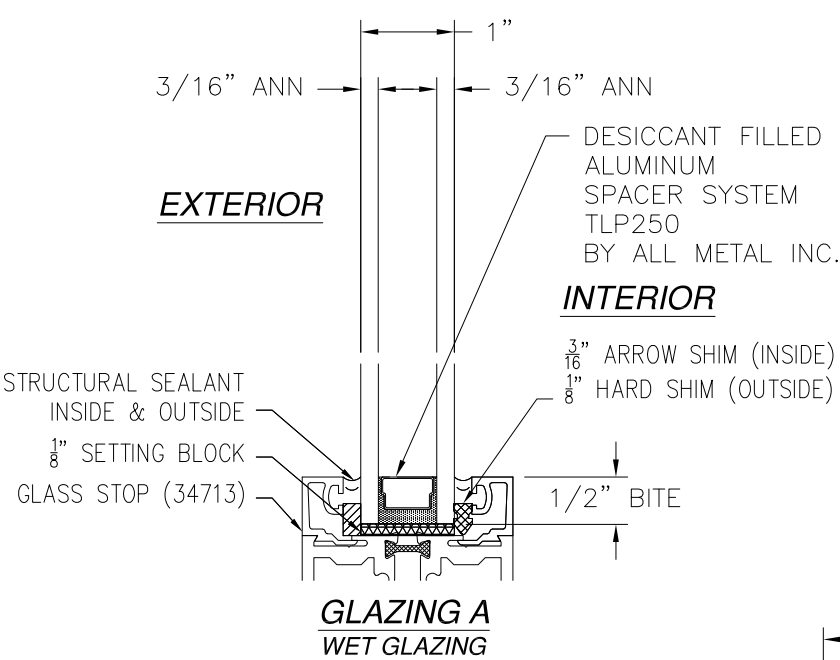
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL RADIUS WALL REINFORCED NON-IMPACT INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 10 OF 13
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW REQUIREMENTS	12/04/2023	R.L.



JAMB INSTALLATION DETAIL M
JAMB WITHOUT REINFORCEMENT



SIGNED: 12/12/2023

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL

RADIUS WALL REINFORCED NON-IMPACT

INSTALLATION DETAILS & GLAZING DETAILS

DRAWN: V.L.

DWG NO. 08-01962

REV C

SCALE NTS

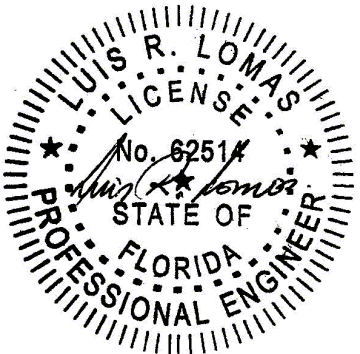
DATE 12/20/12

SHEET 11 OF 13

L. ROBERTO LOMAS P.E.

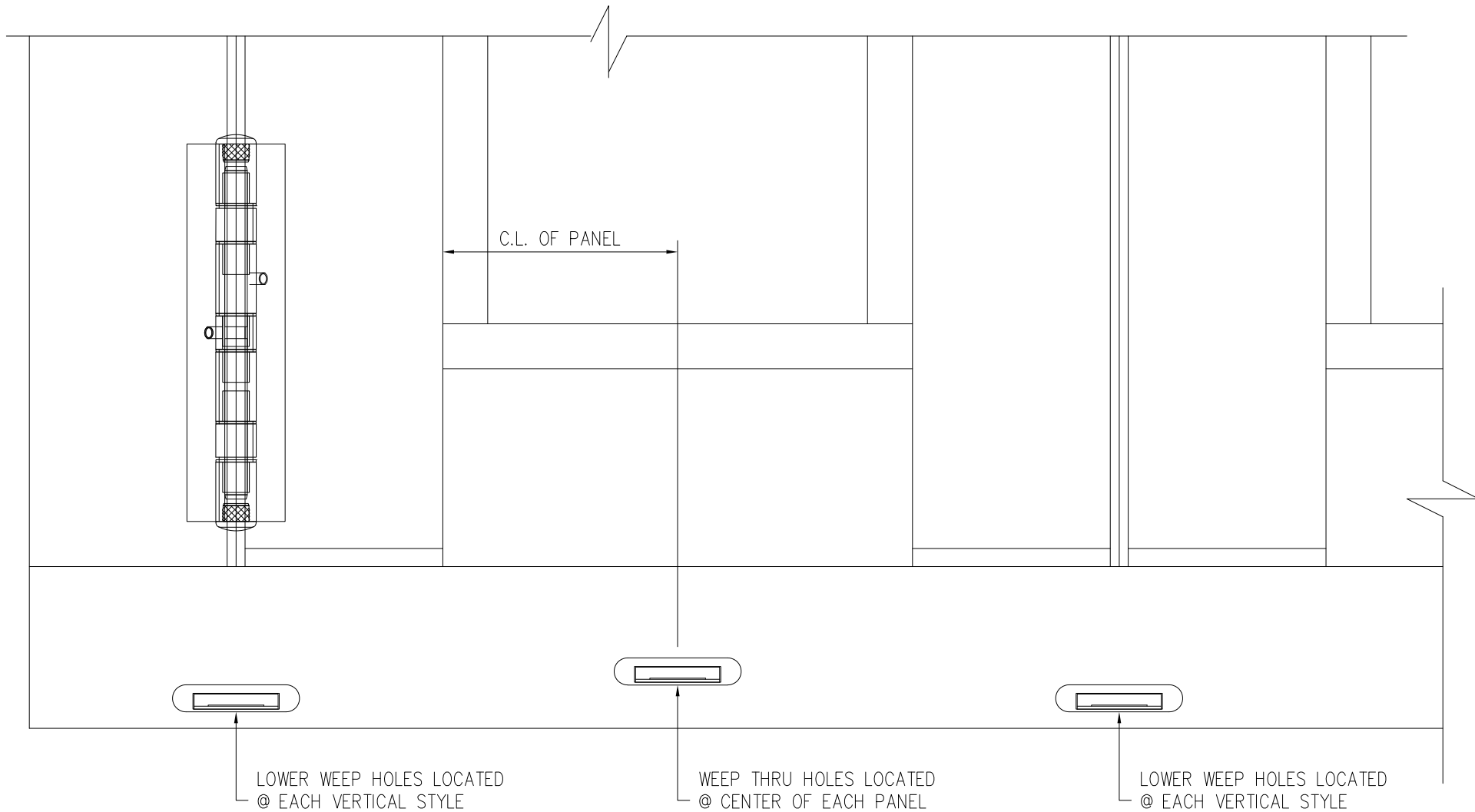
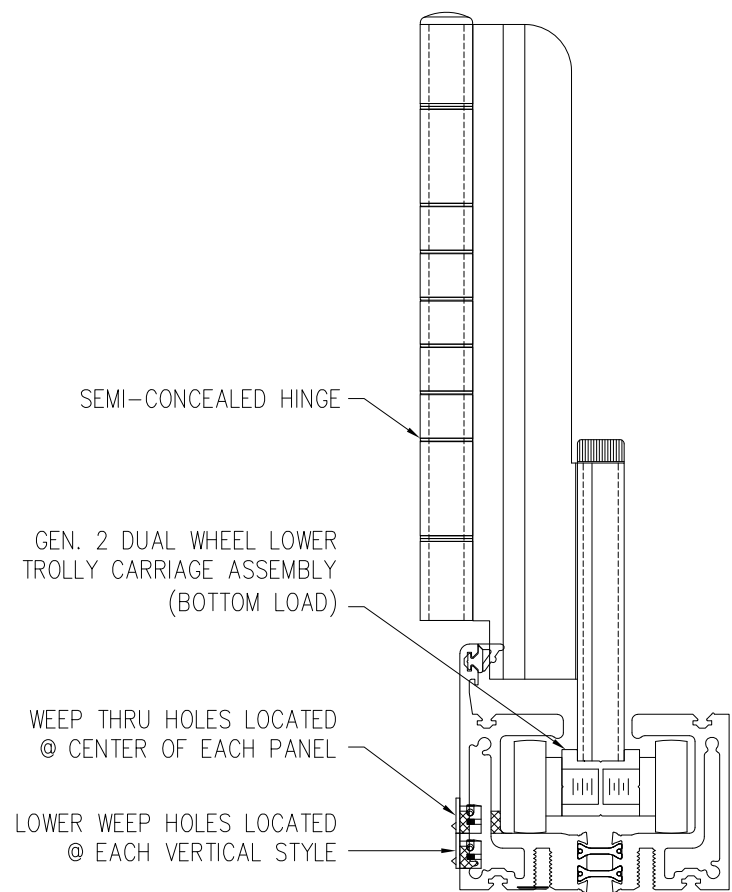
208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

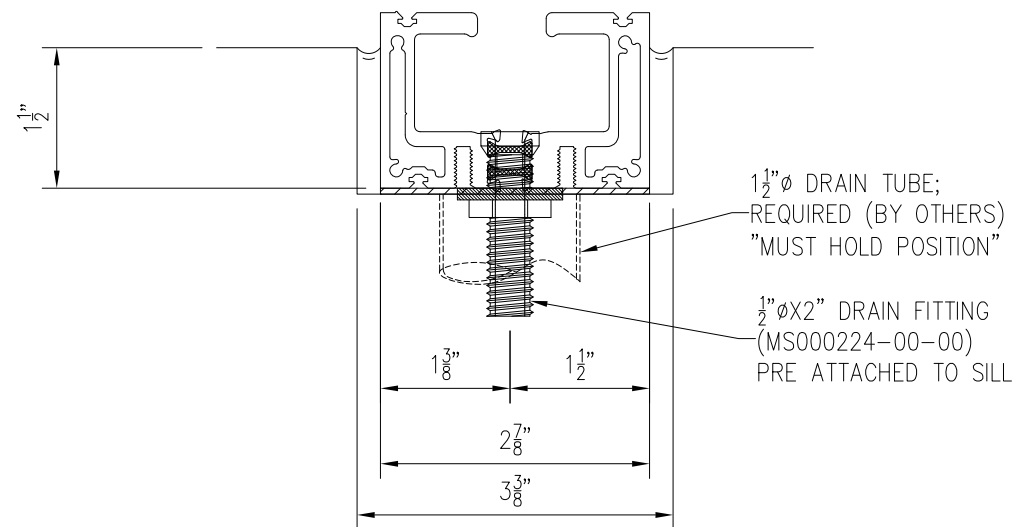


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FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW REQUIREMENTS	12/04/2023	R.L.



WEEP LOCATIONS



DRAIN PIPE DETAIL

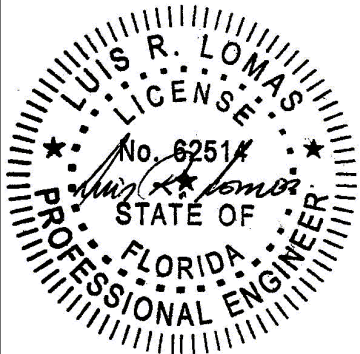
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
WEEP LOCATIONS

DRAWN: V.L.	DWG NO. 08-01962	REV C
SCALE NTS	DATE 12/20/12	SHEET 12 OF 13

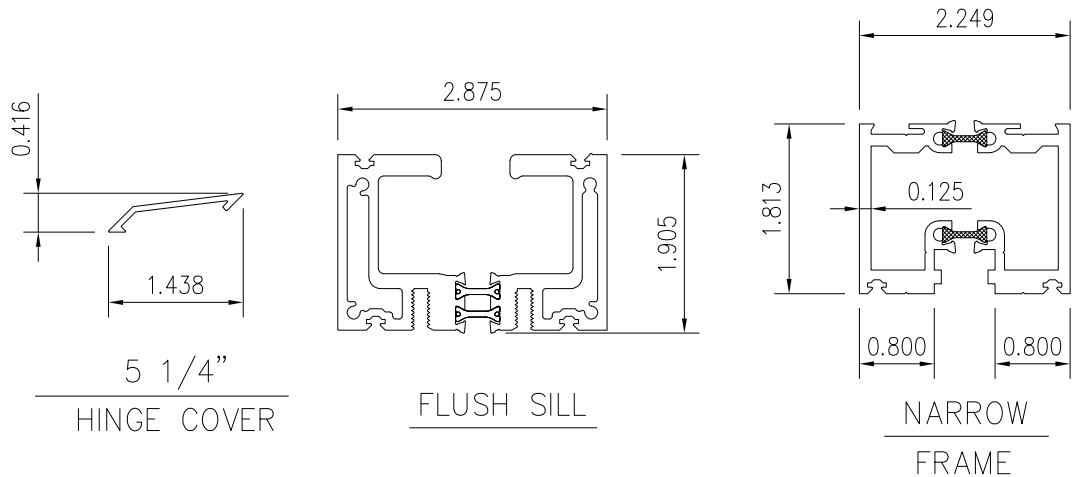
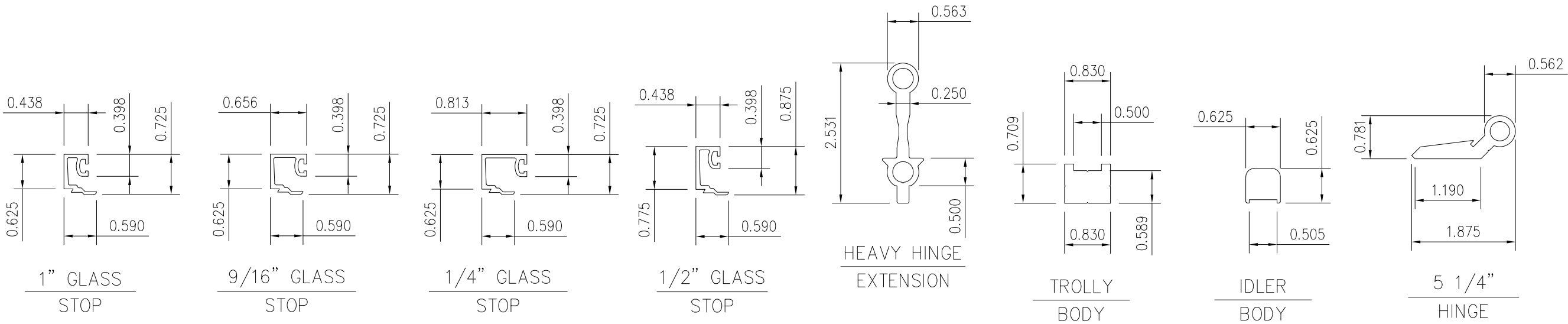
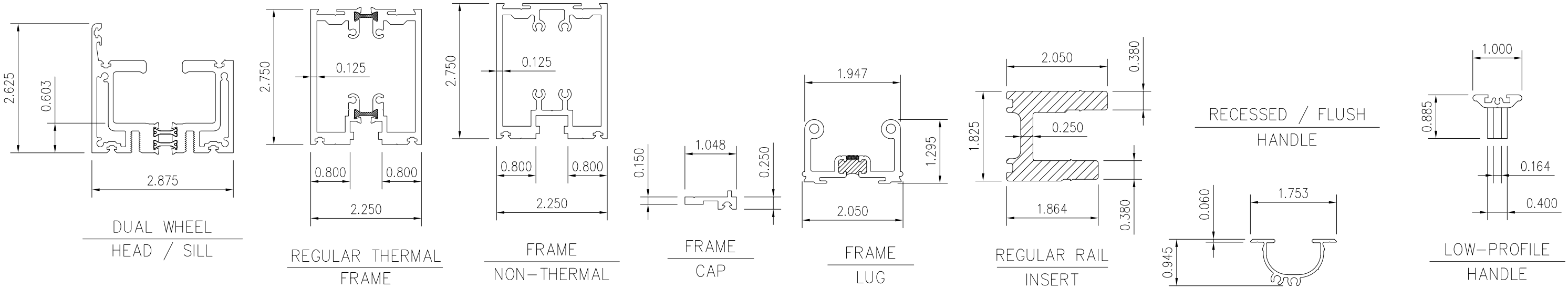
L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023



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REVISIONS			
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C	REVISED PER NEW REQUIREMENTS	12/04/2023	R.L.



SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL
RADIUS WALL REINFORCED NON-IMPACT
COMPONENTS

DRAWN: V.L.

DWG NO. 08-01962

REV C

SCALE NTS

DATE 12/20/12

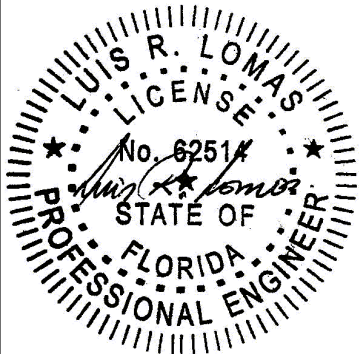
SHEET 13 OF 13

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