

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	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. 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, SEE SHEET 8 FOR GLASS DETAILS.

8. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT 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

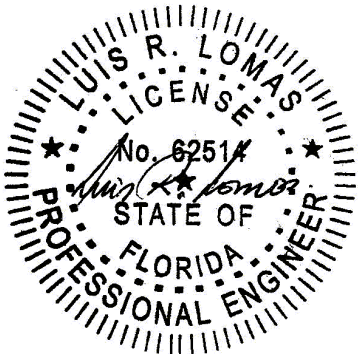
14.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

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

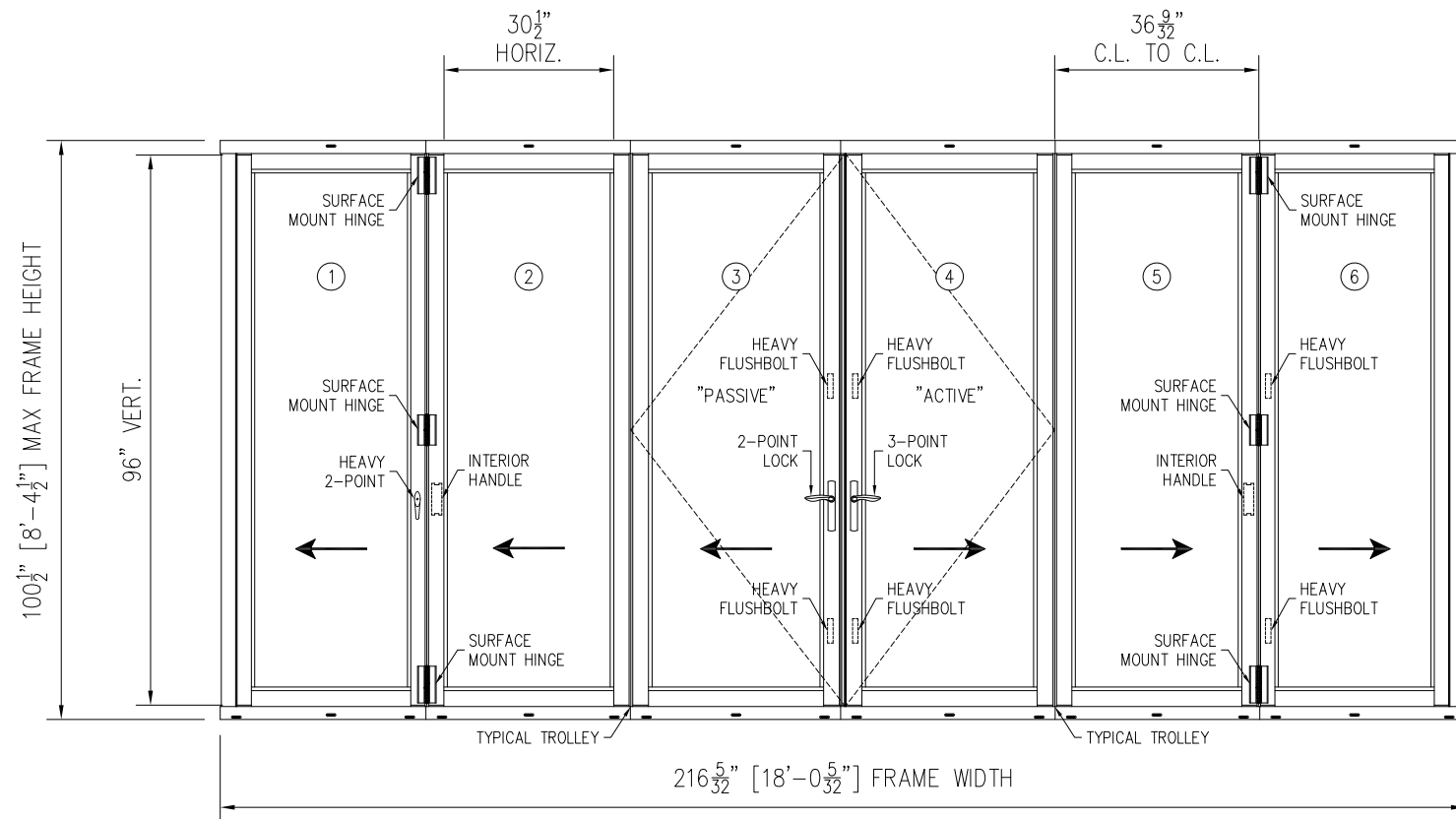
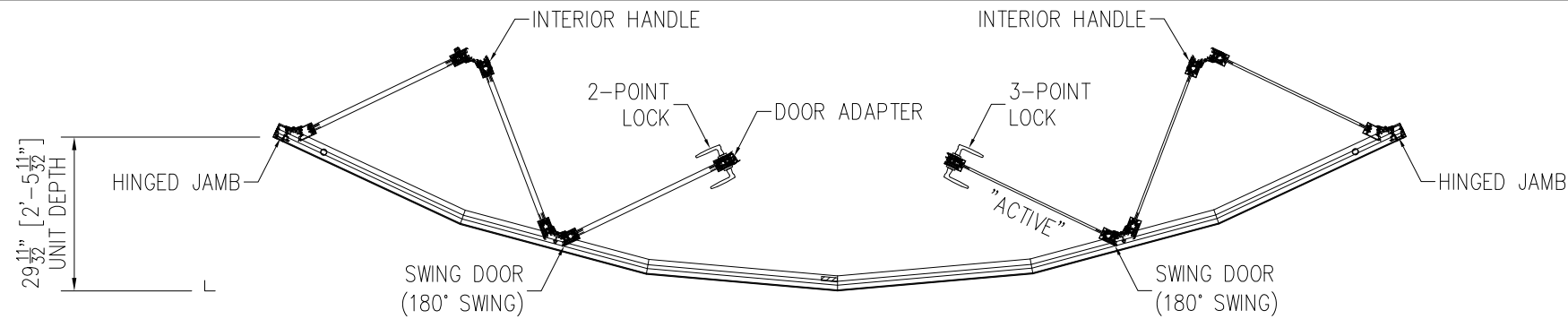
14.4. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .125" THICK MINIMUM

SIGNED: 12/12/2023

TABLE OF CONTENTS		SOLAR INNOVATIONS, INC.		
SHEET NO.	DESCRIPTION	31 ROBERTS RD PINE GROVE, PA 17963		
1	NOTES	SERIES SI3000 IMPACT FGW 3X8 PANEL RADIUS WALL NOTES		
2	ELEVATION AND DESIGN PRESSURE CHARTS	DRAWN:	DWG NO.	REV
3	ANCHORING LAYOUT	V.L.	08-01877	D
4 – 7	CROSS SECTIONS	SCALE	DATE	SHEET
8	GLAZING DETAILS	NTS	12/20/12	1 OF 13
9 – 11	INSTALLATION DETAILS	L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		
12	WEEP DETAILS			
13	COMPONENTS			



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



SERIES SI3000 IMPACT FGW 3X8 PANEL RADIUS WALL

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.

DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-70.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
WHERE WATER RESISTANCE IS REQUIRED, SEE CHART #1

DESIGN PRESSURE RATING	IMPACT RATING
±70.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
WHERE WATER RESISTANCE IS NOT REQUIRED, SEE CHART #2

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.

Chart # 1

Maximum Design pressure (psf)

Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.28		42.0000		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	80.0	60.0	80.0	60.0	80.0	60.0	74.4	60.0	71.0
84.0	60.0	80.0	60.0	80.0	60.0	80.0	-	-	-	-
90.0	60.0	80.0	60.0	80.0	60.0	74.7	-	-	-	-
96.0	60.0	80.0	60.0	80.0	60.0	70.0	-	-	-	-
102.0	60.0	80.0	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 # 2

Maximum Design pressure (psf)

Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.28		42.0000		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	80.0	80.0	80.0	80.0	80.0	80.0	74.4	74.4	71.0	71.0
84.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-	-	-
90.0	80.0	80.0	80.0	80.0	74.7	74.7	-	-	-	-
96.0	80.0	80.0	80.0	80.0	70.0	70.0	-	-	-	-
102.0	80.0	80.0	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	-	-	-	-	-	-	-	-

SIGNED: 12/12/2023

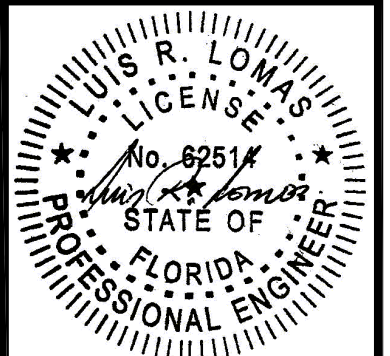
SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
ELEVATION AND DESIGN PRESSURE CHARTS

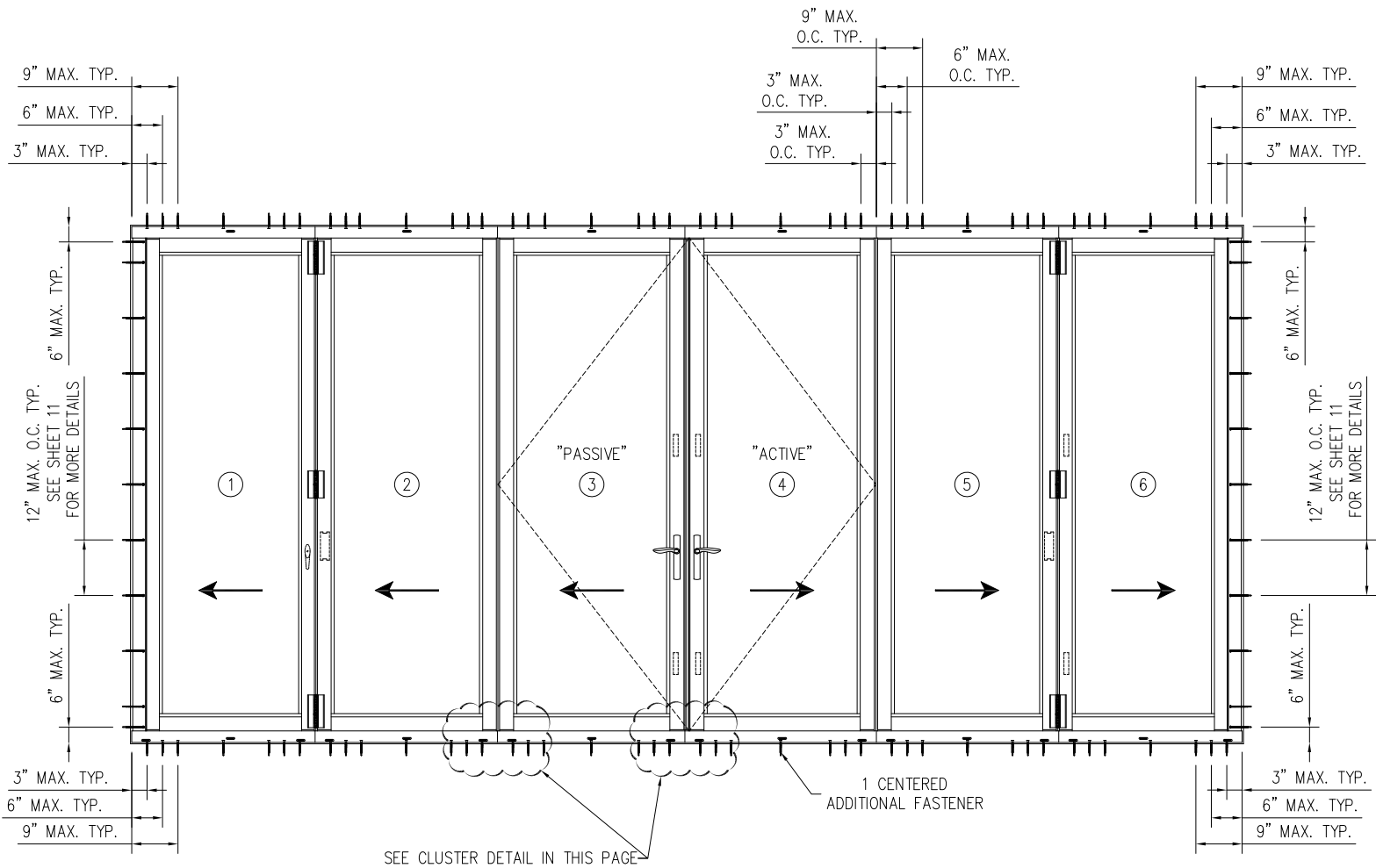
DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 2 OF 13

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

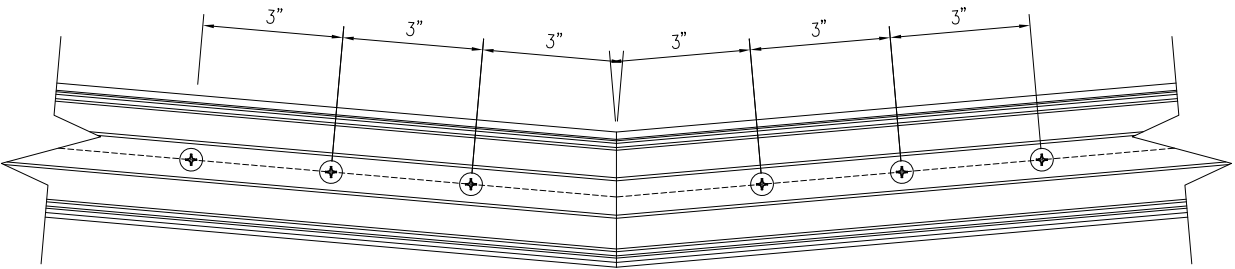


Luis R. Lomas P.E.
FL No.: 62514

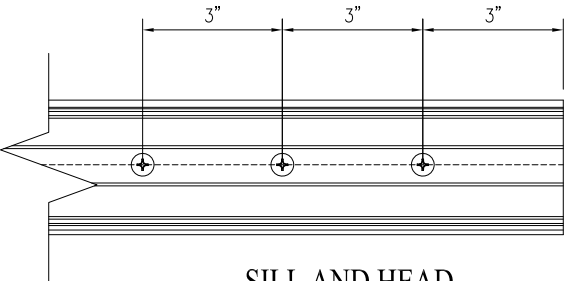
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



ANCHOR LAYOUT
APPLIES TO ALL CONFIGURATIONS



**SILL AND HEAD
CLUSTER DETAIL**



**SILL AND HEAD
END DETAIL**

SIGNED: 12/12/2023

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

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
ANCHORING LAYOUT

DRAWN:
V.L.

DWG NO.
08-01877

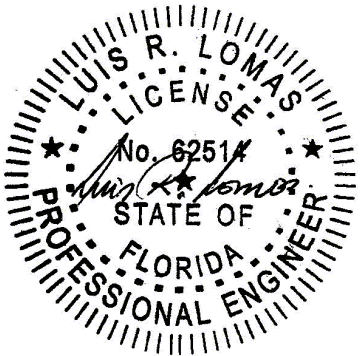
REV
D

SCALE
NTS

DATE
12/20/12

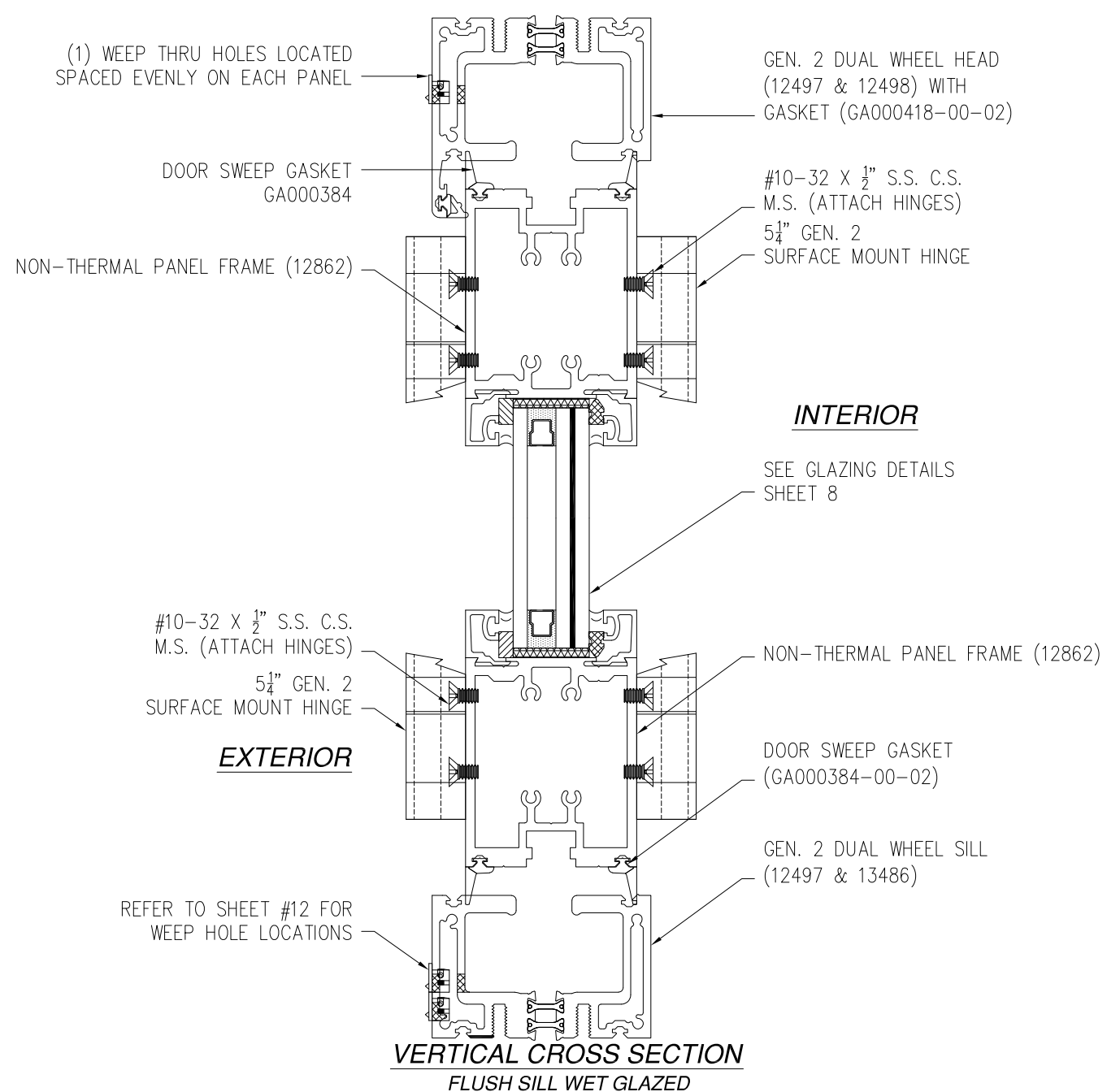
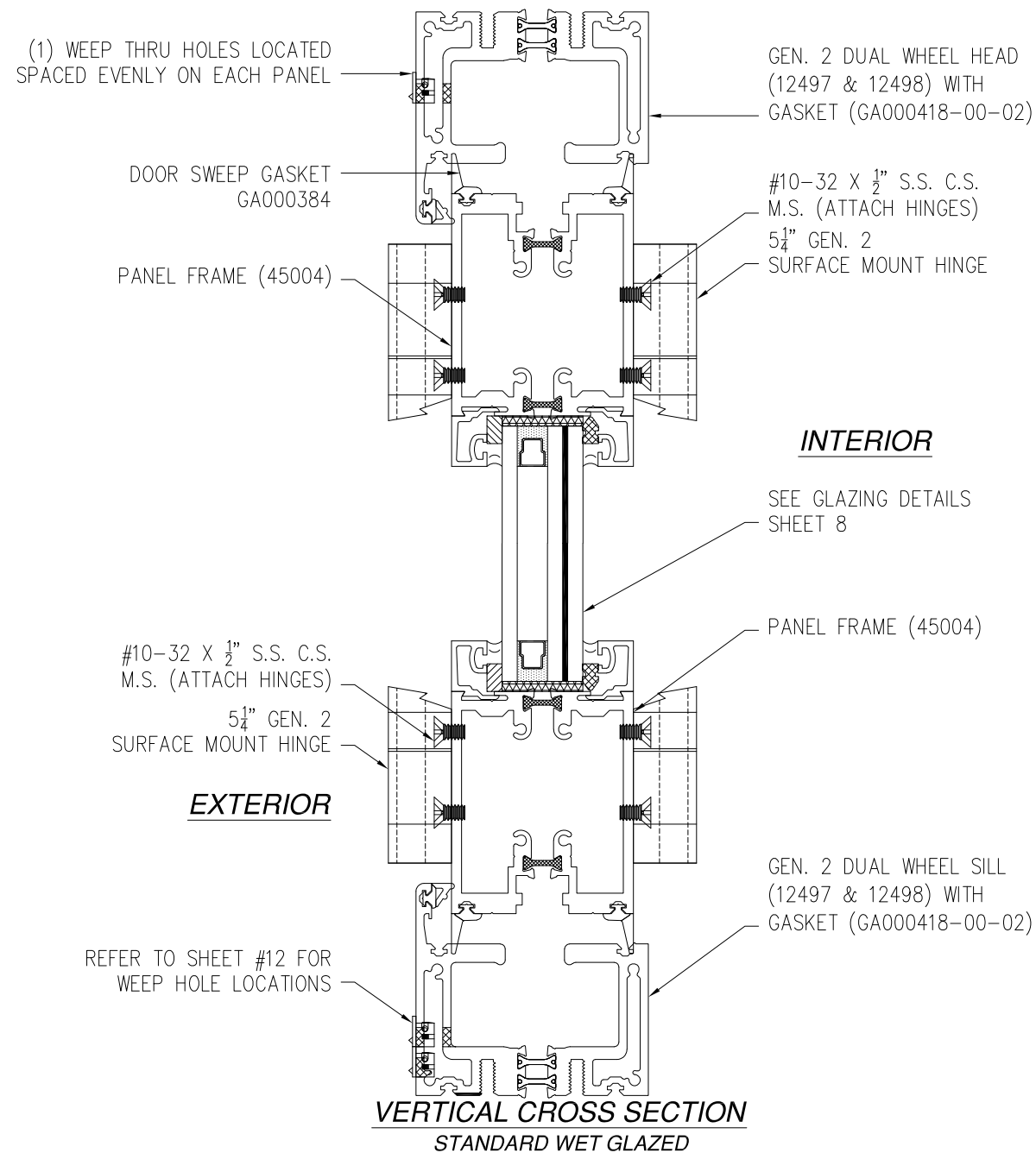
SHEET
3 OF 13

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



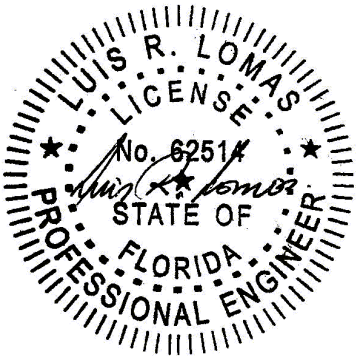
Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



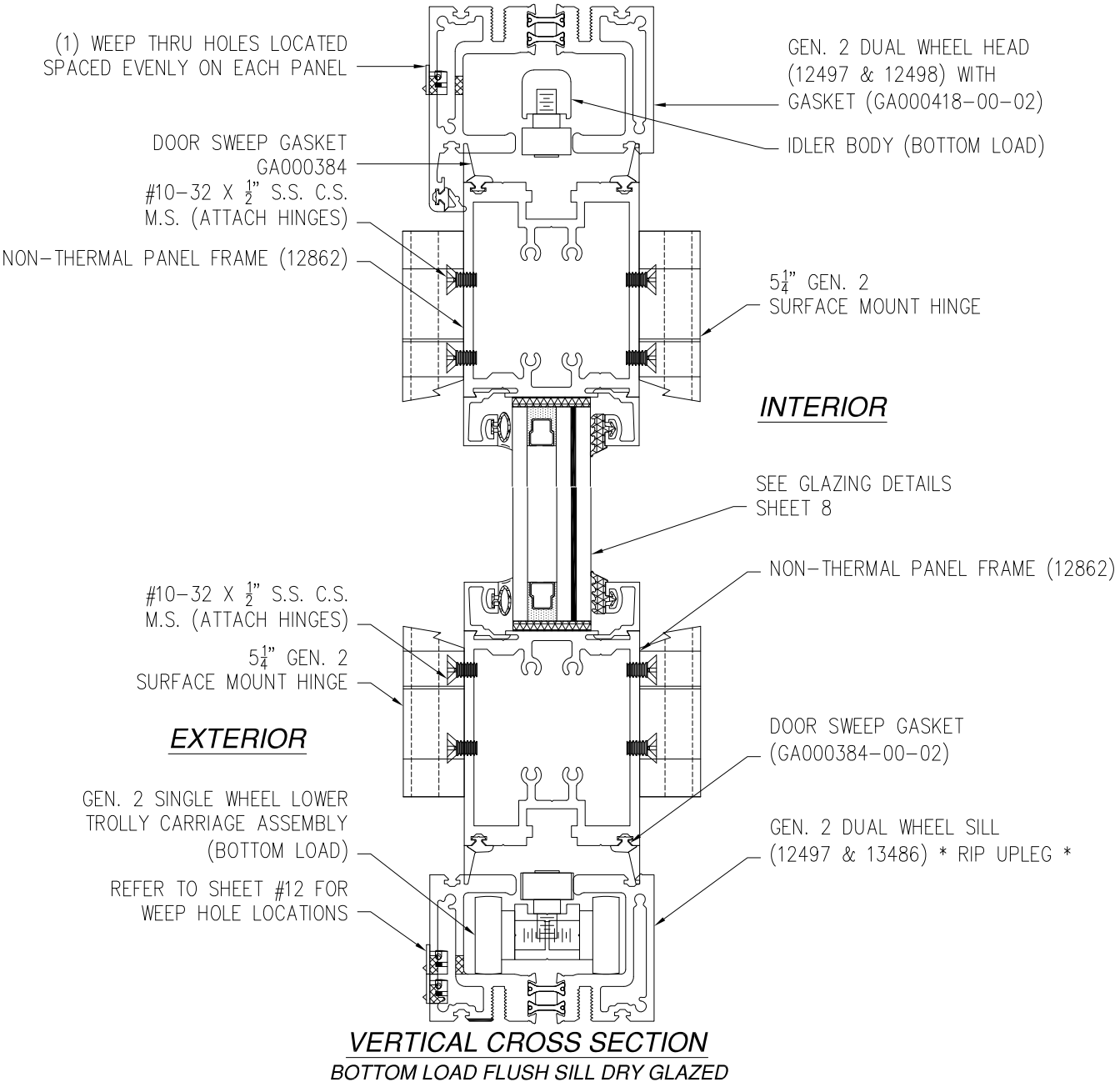
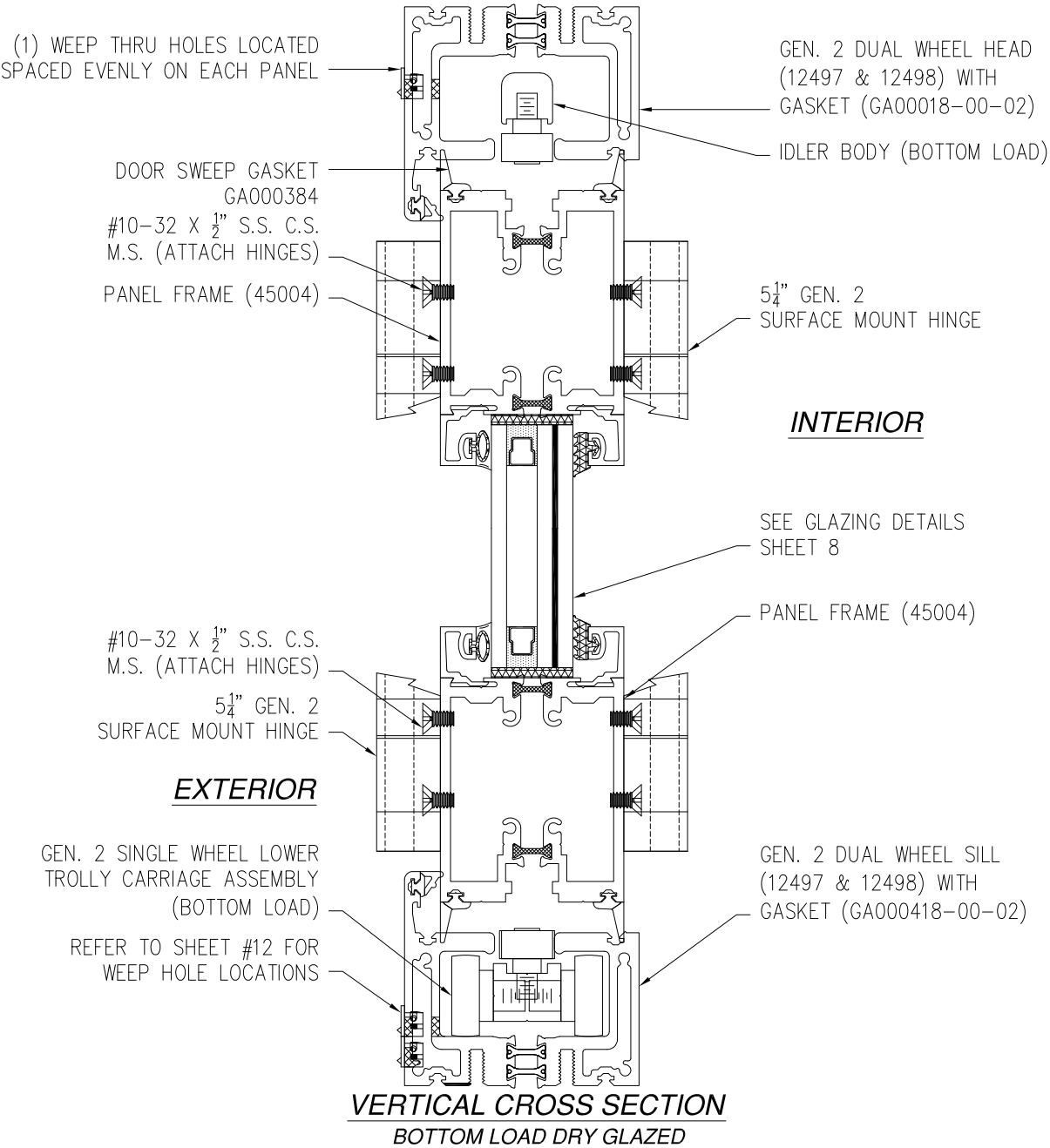
SIGNED: 12/12/2023

SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 IMPACT FGW 3X8 PANEL RADIUS WALL VERTICAL CROSS SECTIONS		
DRAWN: V.L.	DWG NO. 08-01877	REV D
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		



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



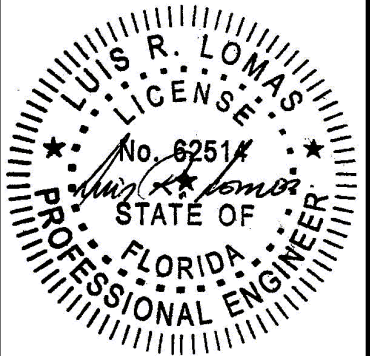
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

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

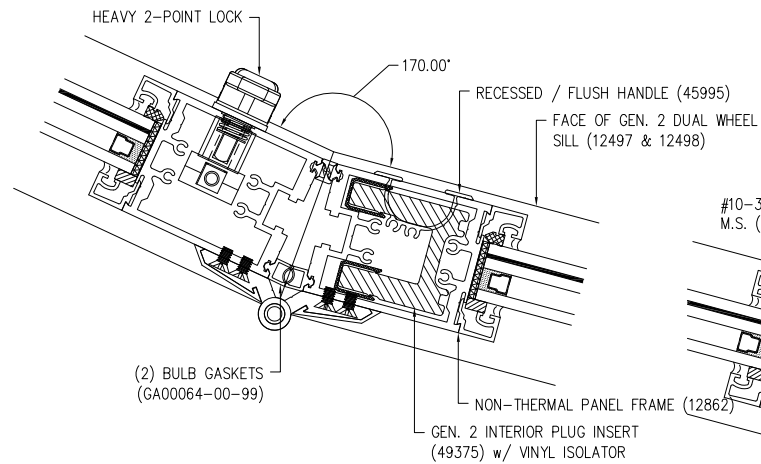
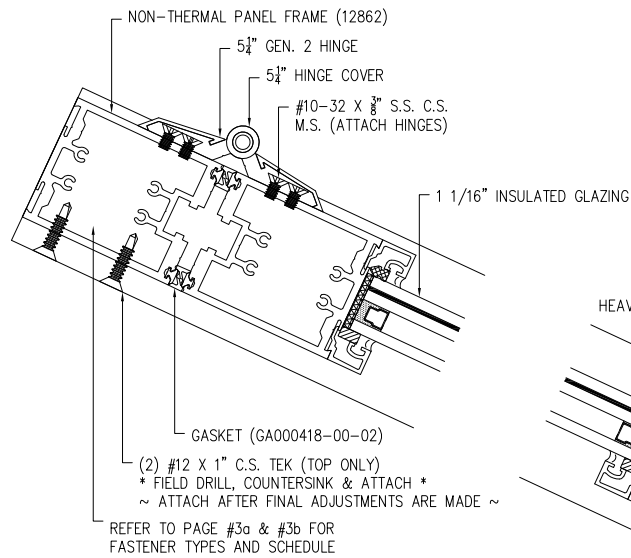
DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 5 OF 13

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

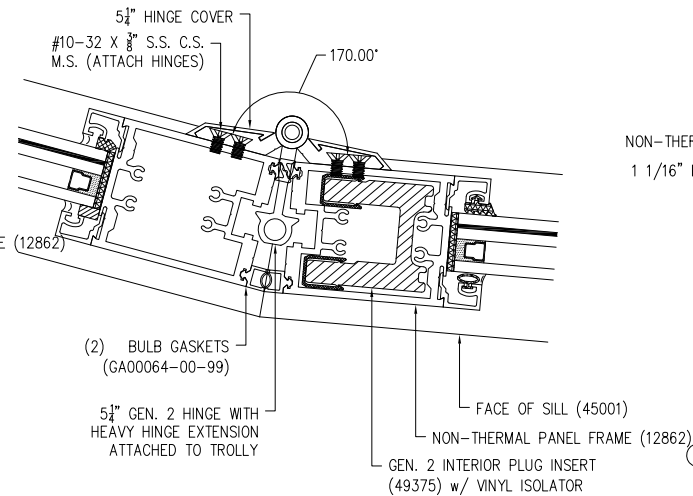
SIGNED: 12/12/2023



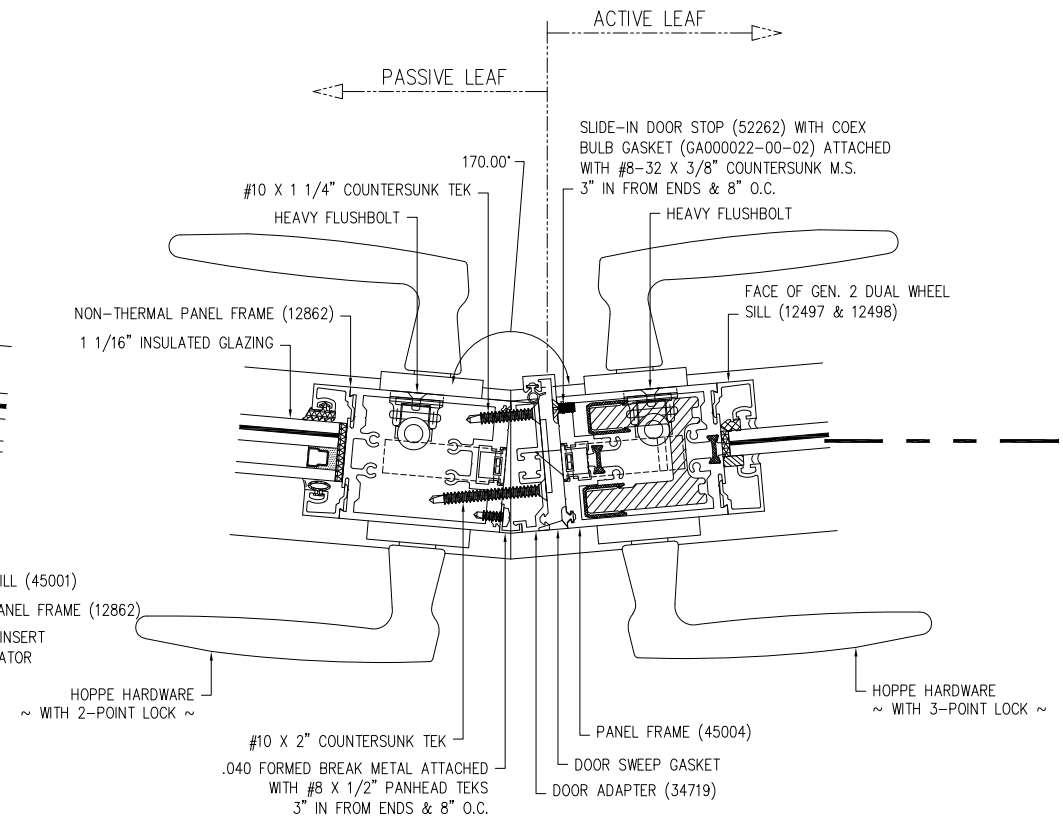
Luis R. Lomas P.E.
FL No.: 62514



EXTERIOR



HORIZONTAL CROSS SECTION



CONTINUED
IN SHEET 7

SOLAR INNOVATIONS, INC.

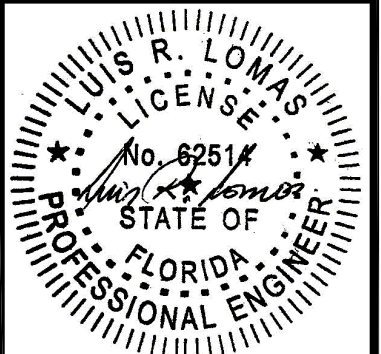
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
HORIZONTAL CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 6 OF 13

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

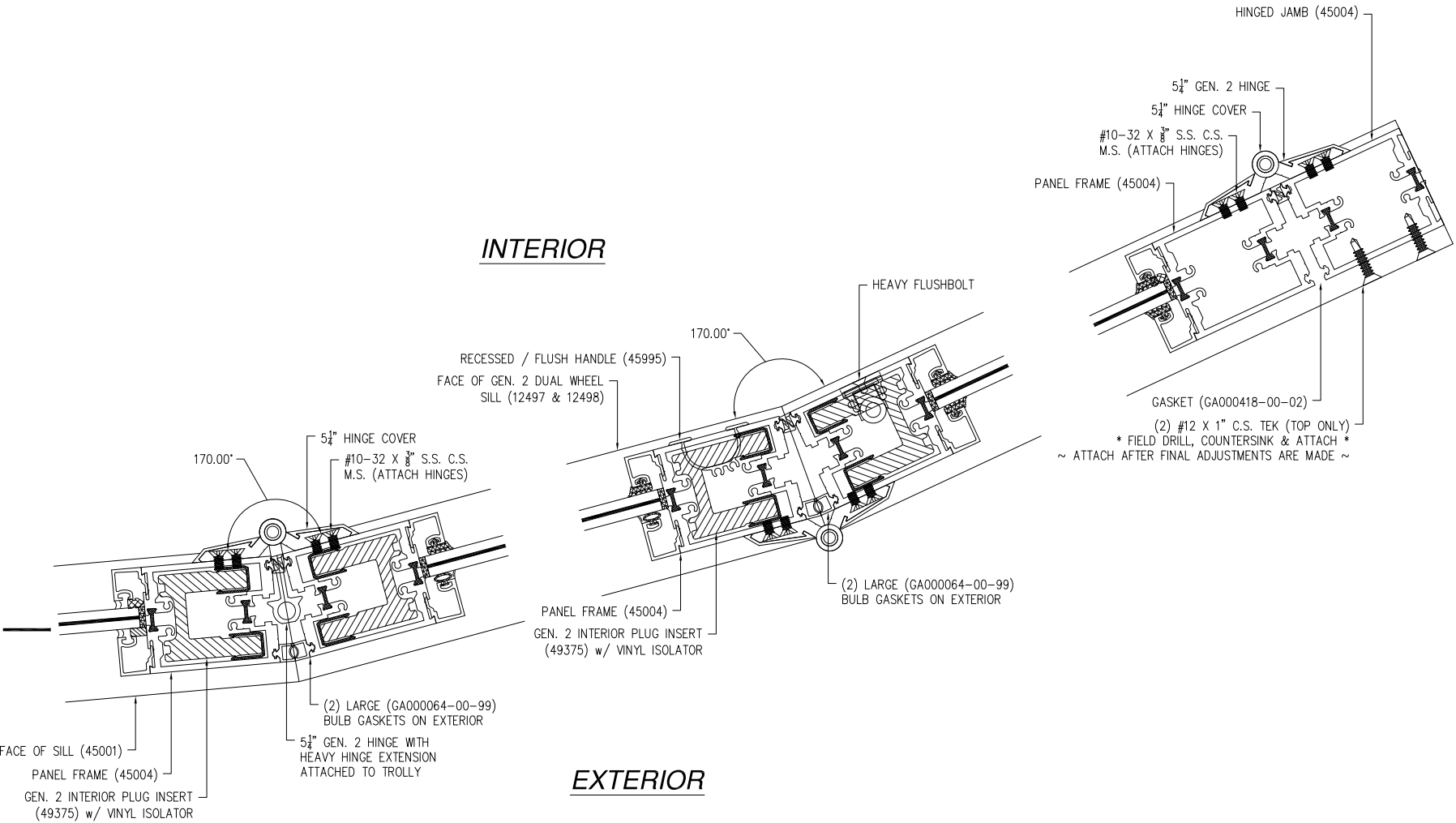
SIGNED: 12/12/2023



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.

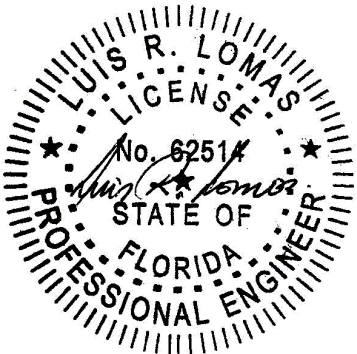
CONTINUED
FROM SHEET 6



HORIZONTAL CROSS SECTION

SIGNED: 12/12/2023

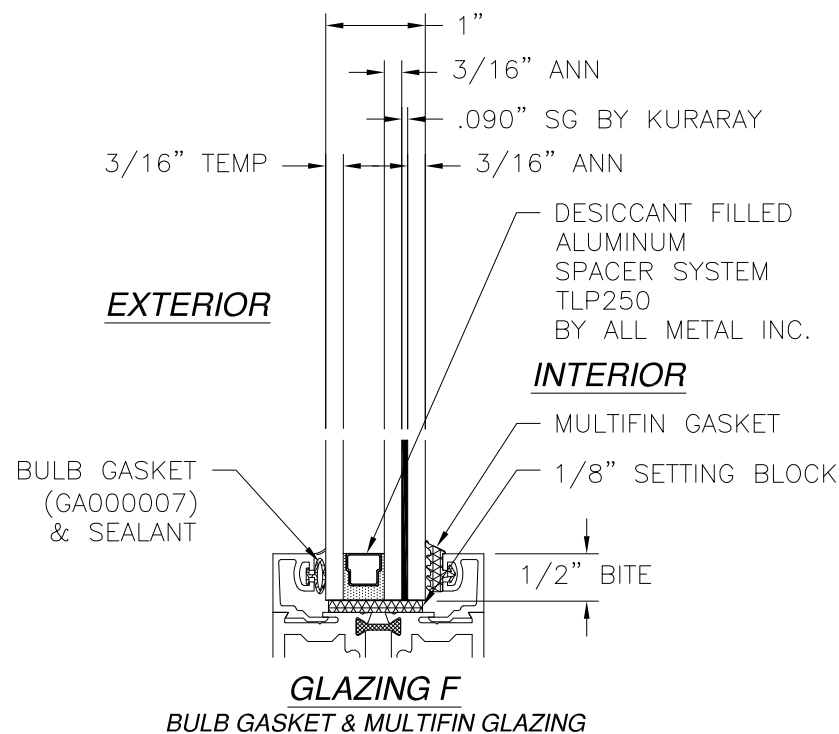
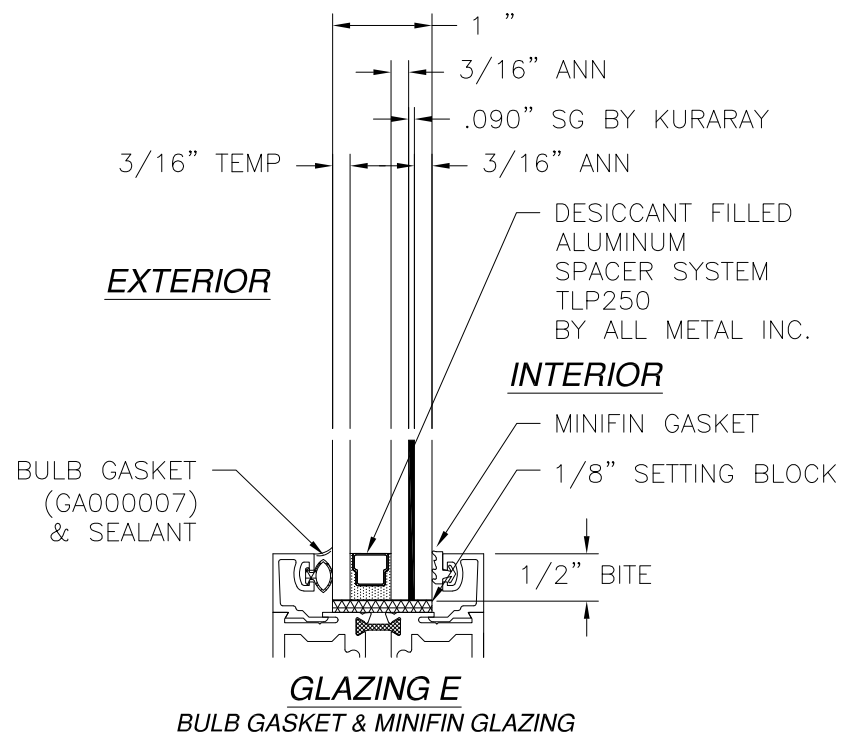
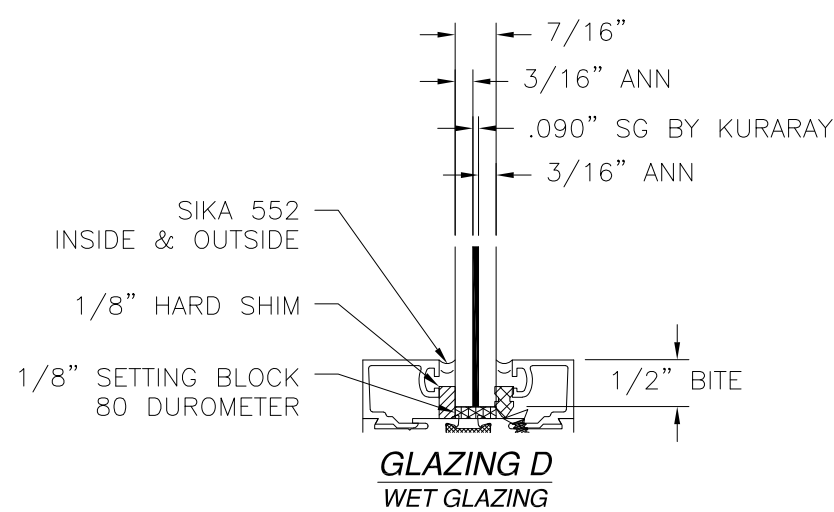
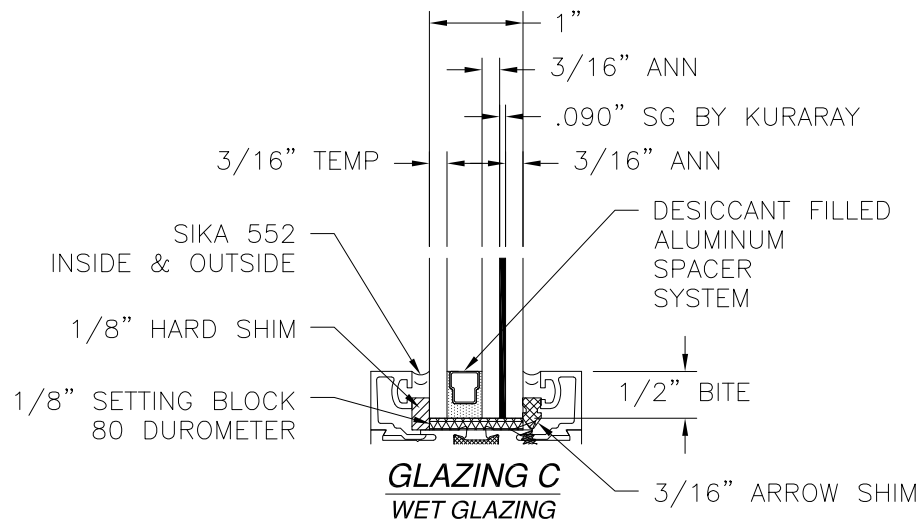
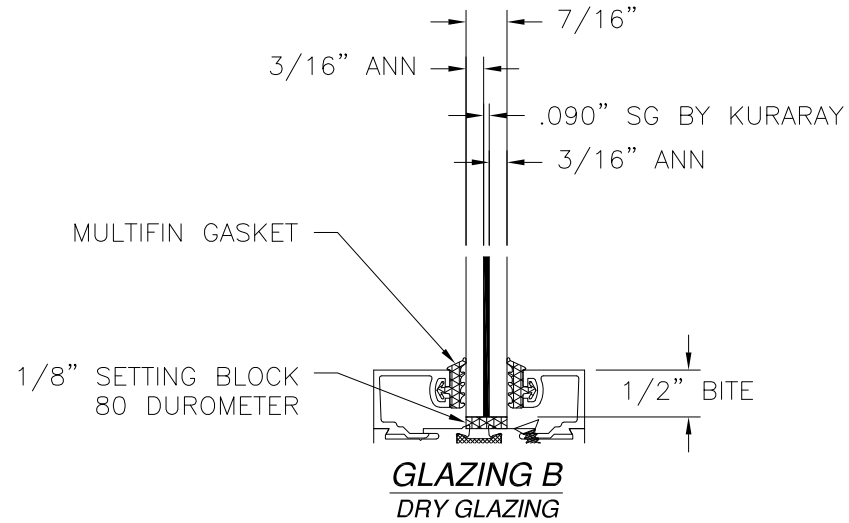
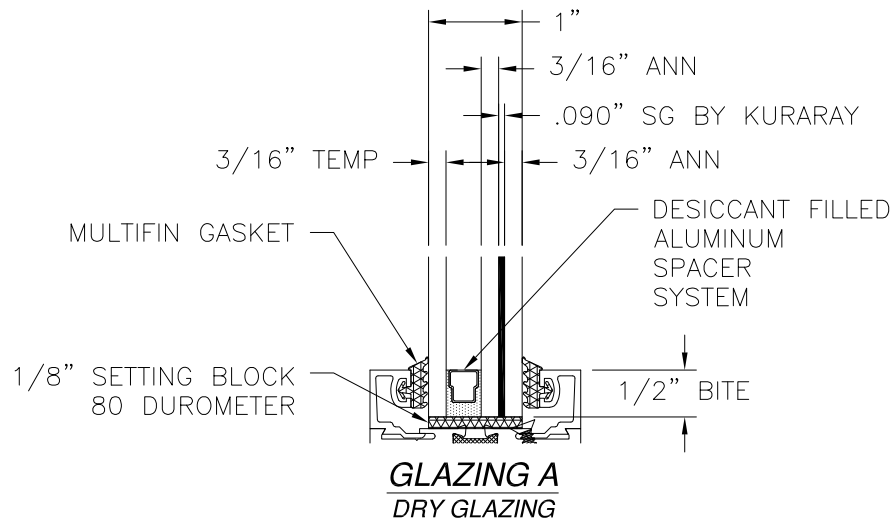
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 IMPACT FGW 3X8 PANEL RADIUS WALL HORIZONTAL CROSS SECTIONS		
DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 7 OF 13
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
GLAZING DETAILS

DRAWN:
V.L.

DWG NO.
08-01877

REV
D

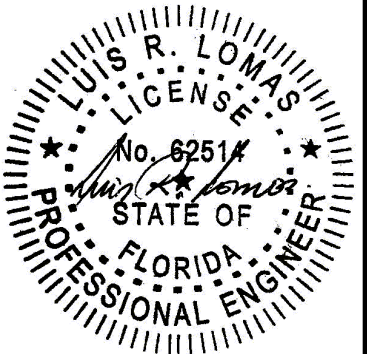
SCALE
NTS

DATE
12/20/12

SHEET
8 OF 13

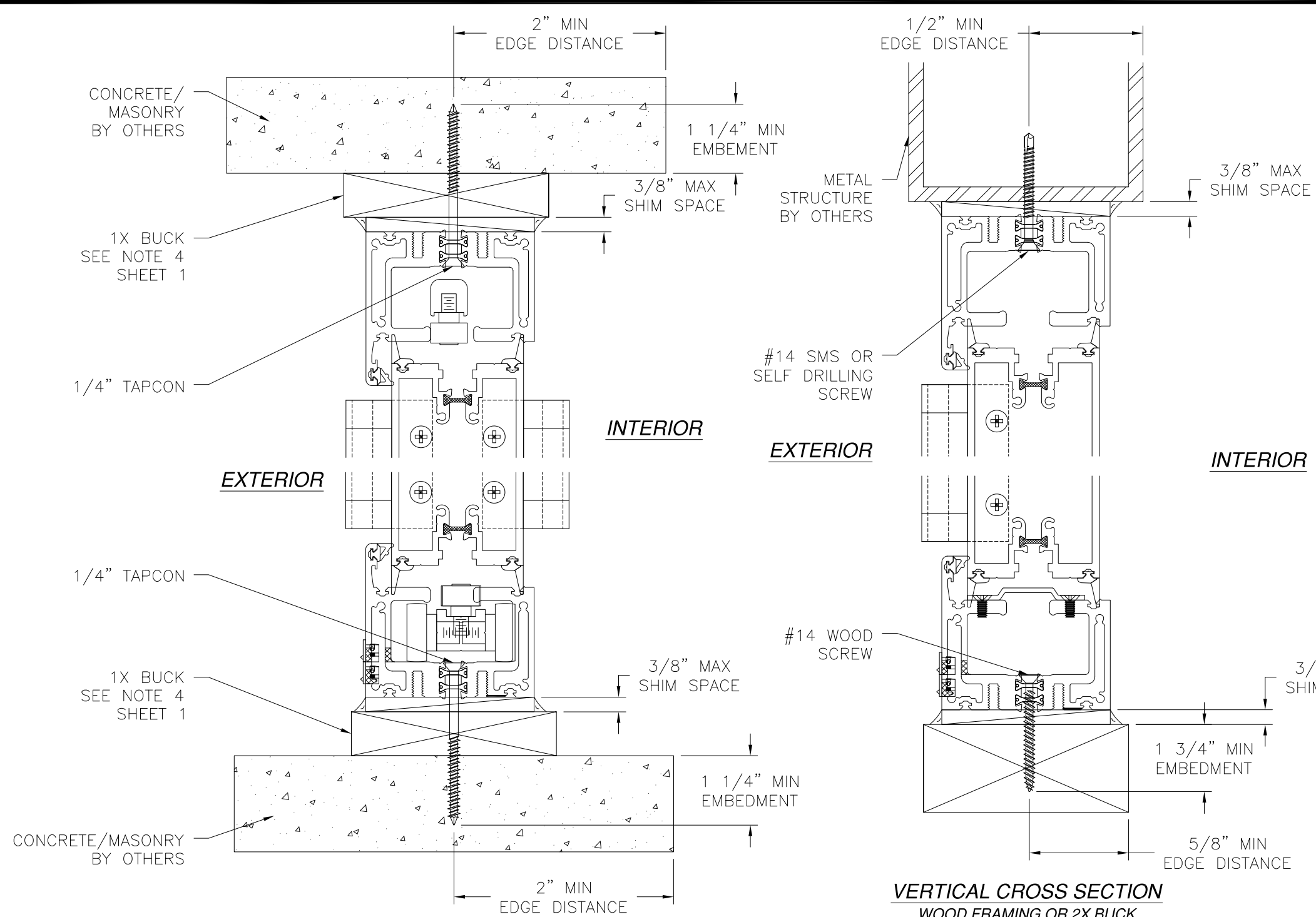
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023



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





REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.

- 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
CONCRETE/MASONRY INSTALLATION

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

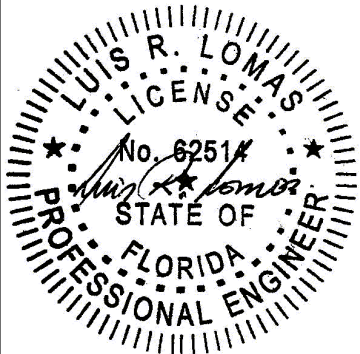
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 9 OF 13

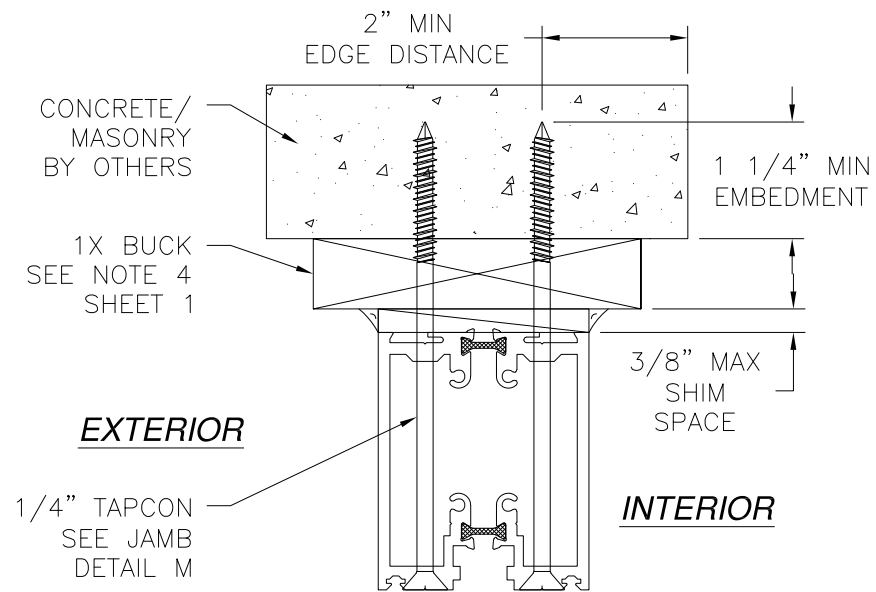
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023

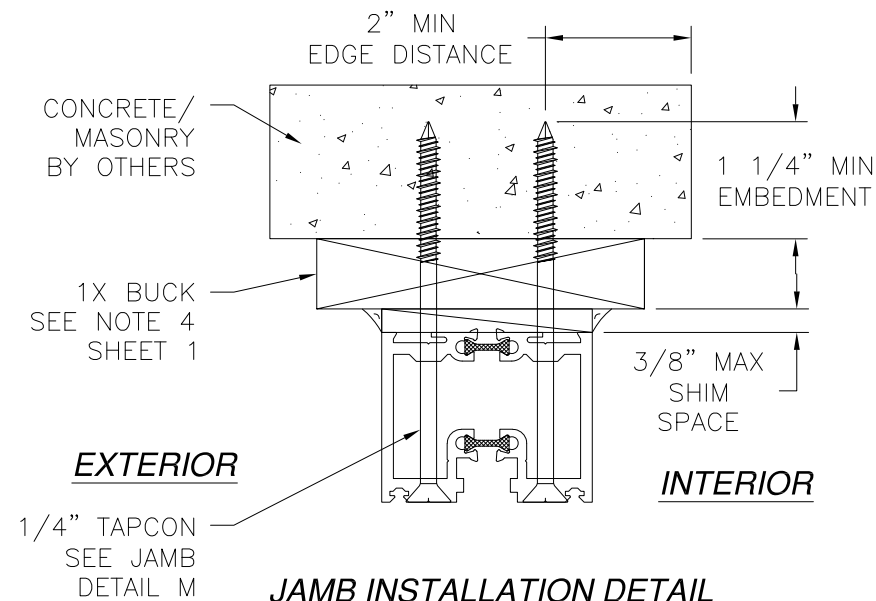


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



JAMB INSTALLATION DETAIL
CONCRETE/MASONRY
S45004 NO REINFORCEMENT



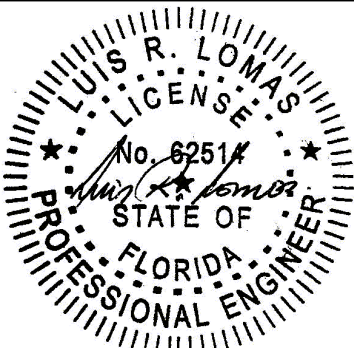
JAMB INSTALLATION DETAIL
CONCRETE/MASONRY
S47543 NO REINFORCEMENT

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

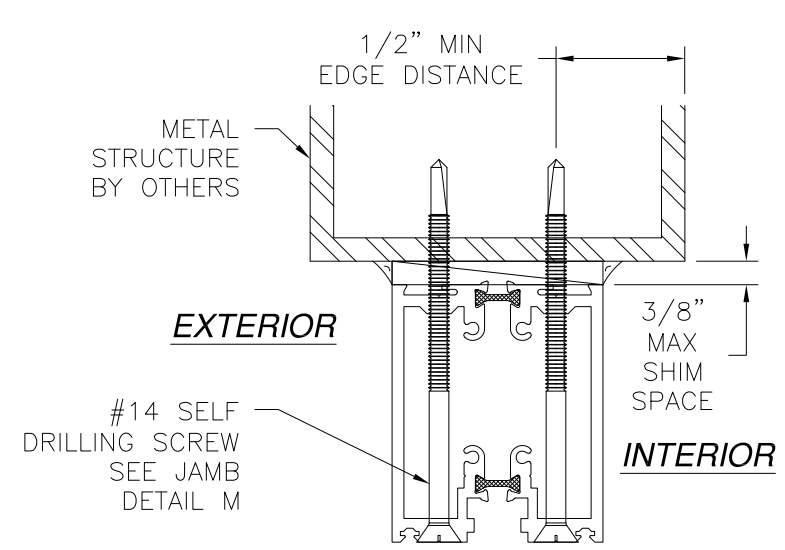
SIGNED: 12/12/2023

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963			
SERIES SI3000 IMPACT FGW 3X8 PANEL RADIUS WALL INSTALLATION DETAILS			
DRAWN: V.L.		DWG NO. 08-01877	
SCALE NTS		REV D	
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			

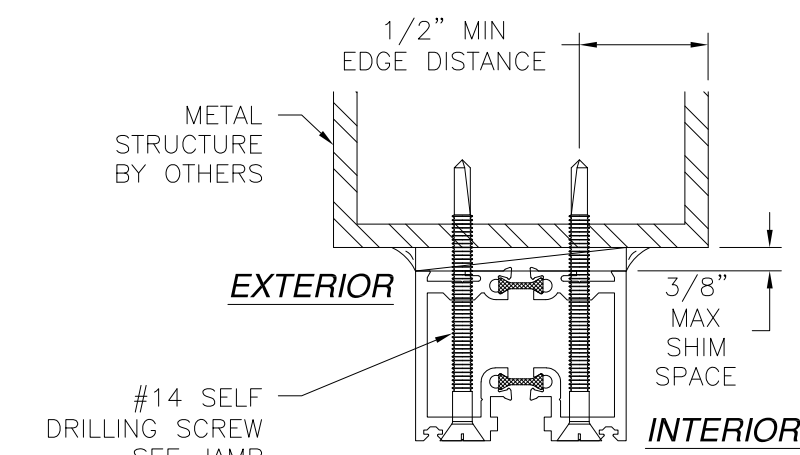


Luis R. Lomas P.E.
FL No.: 62514

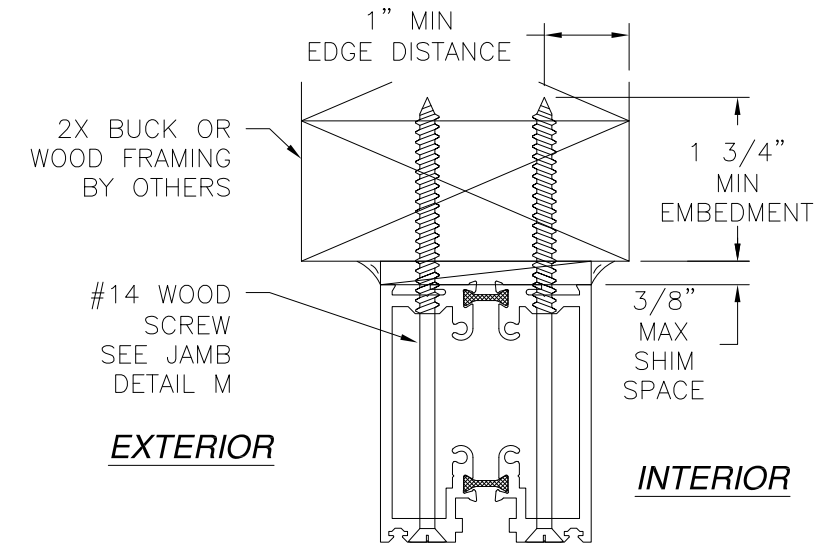
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



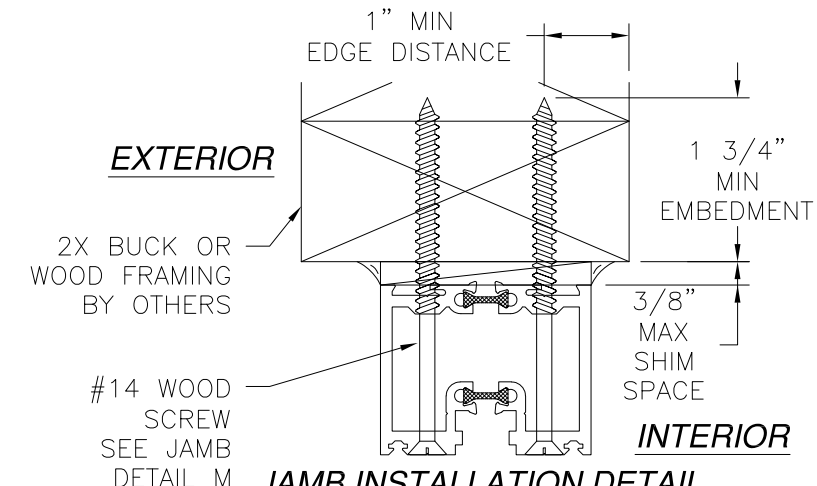
JAMB INSTALLATION DETAIL
METAL STRUCTURE
S45004 NO REINFORCEMENT



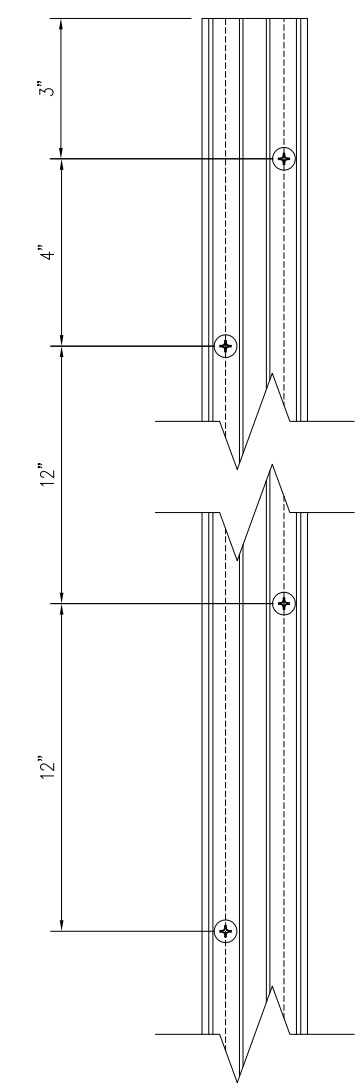
JAMB INSTALLATION DETAIL
METAL STRUCTURE
S47543 NO REINFORCEMENT



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



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



JAMB INSTALLATION DETAIL M
JAMB WITHOUT REINFORCEMENT

- 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

SIGNED: 12/12/2023

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

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
INSTALLATION DETAILS

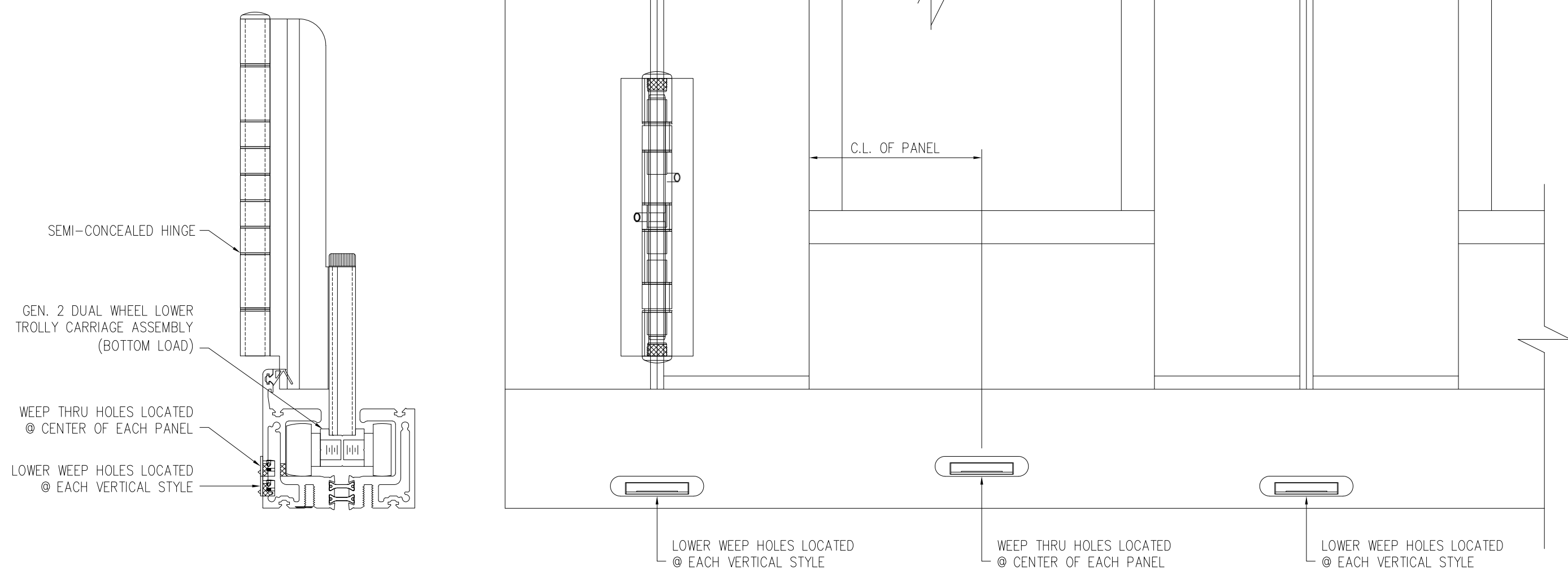
DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 11 OF 13

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

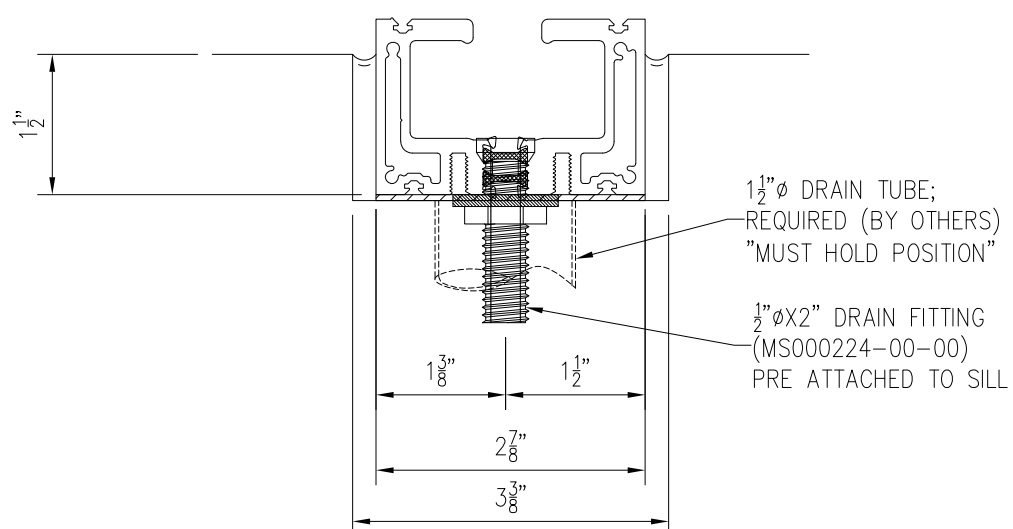
LUIS R. LOMAS
P.E.
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



WEEP LOCATIONS



DRAIN PIPE DETAIL

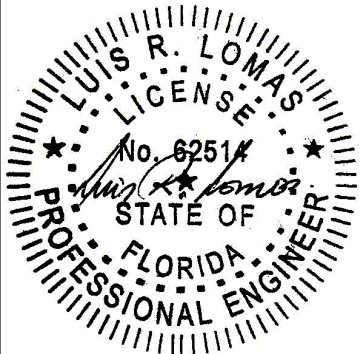
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
WEEP LOCATIONS

DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 12 OF 13

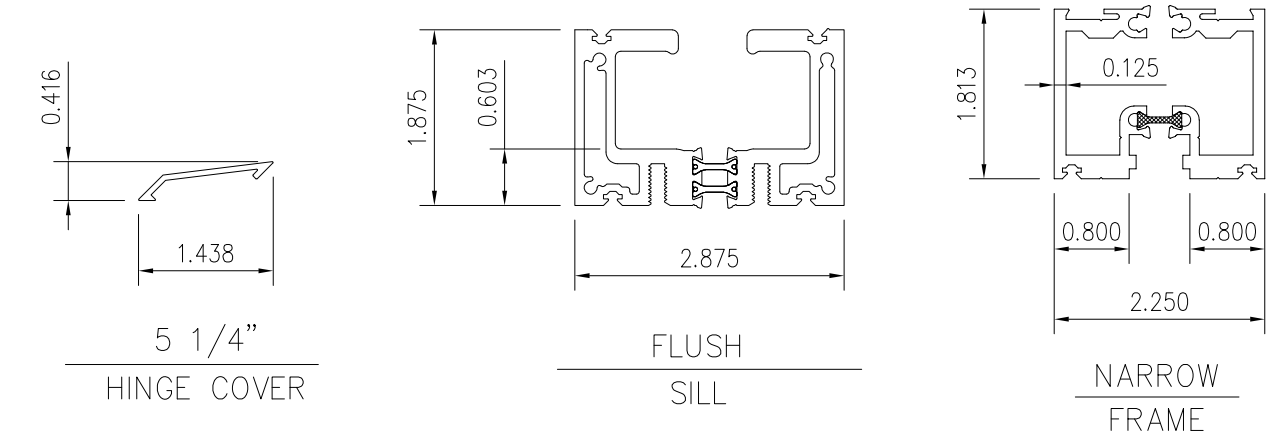
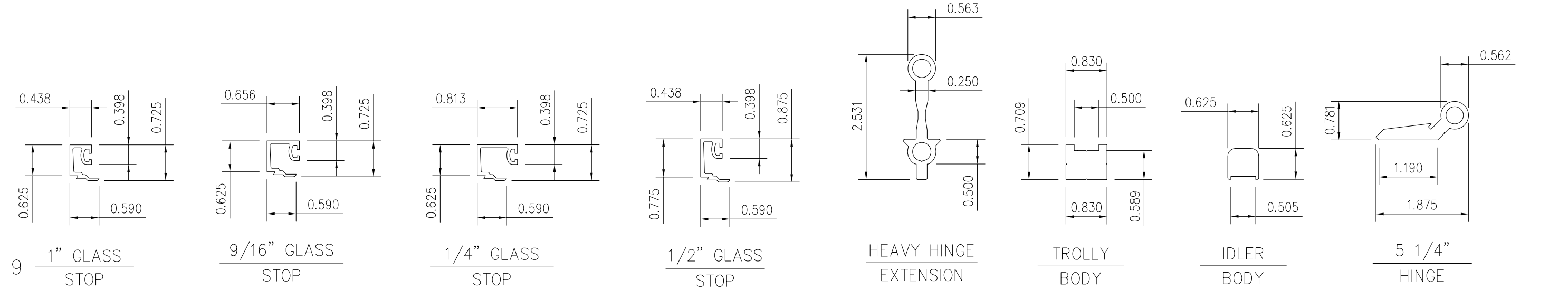
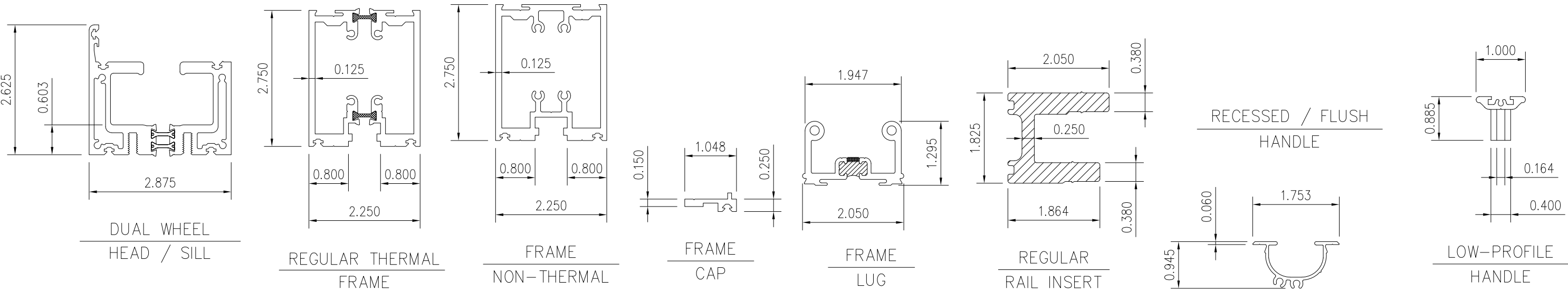
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED SEALS AND ANCHORS	12/01/2023	R.L.



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

SERIES SI3000 IMPACT FGW 3X8 PANEL
RADIUS WALL
COMPONENTS

DRAWN: V.L.	DWG NO. 08-01877	REV D
SCALE NTS	DATE 12/20/12	SHEET 13 OF 13

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

SIGNED: 12/12/2023

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