

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	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:

A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42

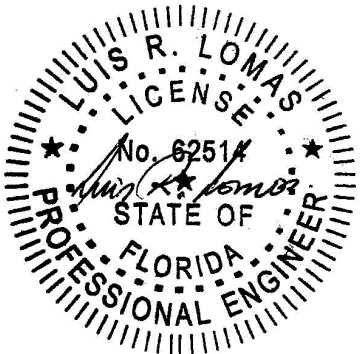
B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

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

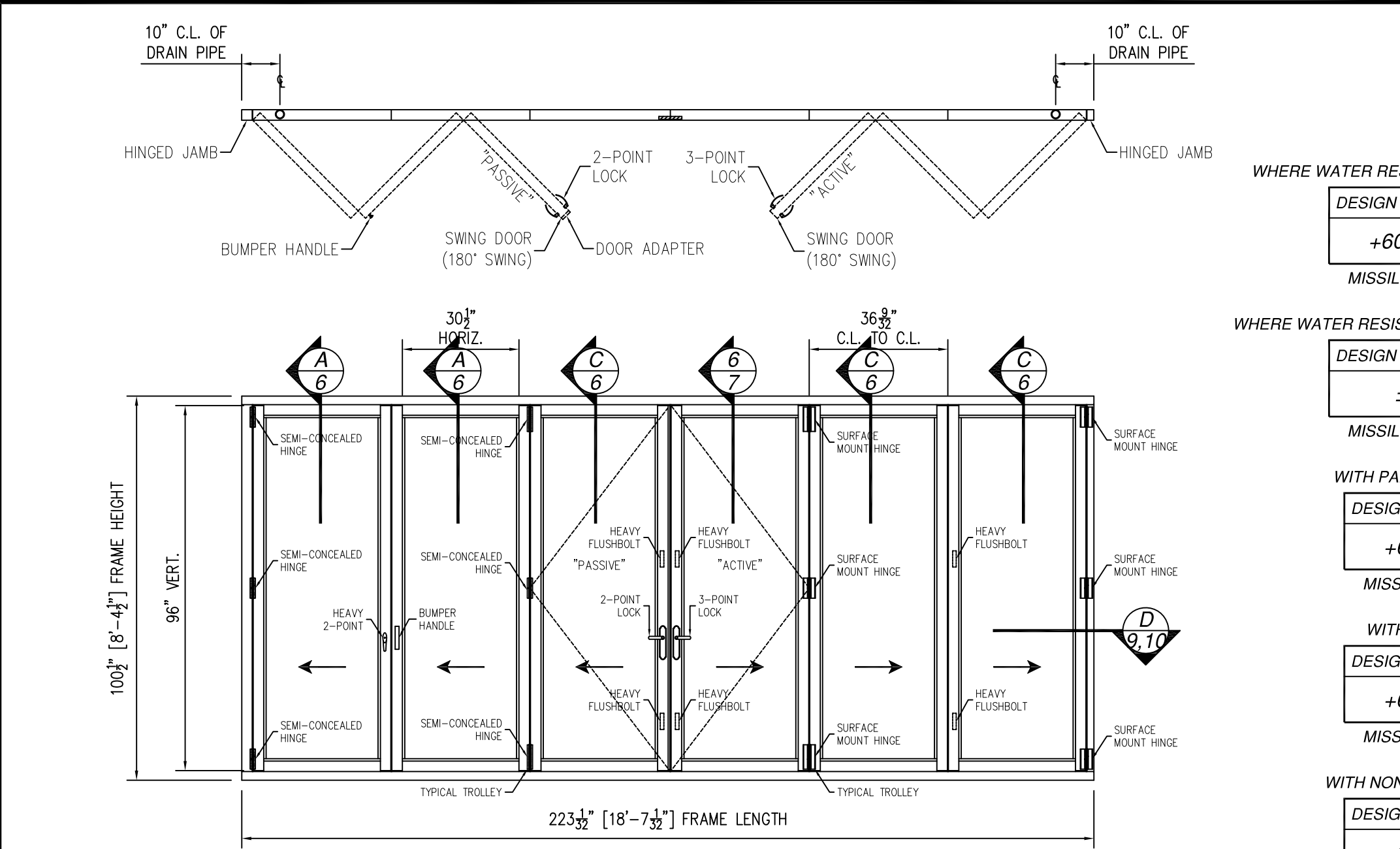
D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .125" THICK MINIMUM

SIGNED: 04/29/2026

TABLE OF CONTENTS		SOLAR INNOVATIONS, INC.		
SHEET NO.	DESCRIPTION	31 ROBERTS RD PINE GROVE, PA 17963		
1	NOTES	SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALUMINUM REINFORCED – IMPACT – HVHZ NOTES		
2 – 3	ELEVATIONS			
4	ANCHORING LAYOUT AND DESIGN PRESSURE CHARTS	DRAWN: R.L. DWG NO. 08-01793 REV G		
5	B.O.M.			
6 – 12	CROSS SECTIONS	SCALE NTS DATE 09/19/12 SHEET 1 OF 18		
13 – 16	INSTALLATION DETAILS			
17	WEEP DETAILS	L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		
18	COMPONENTS			



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



SERIES SI3000 FGW 3X8 PANEL OUTFOLD FGW

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
F	PANIC BAR BY SOLAR INNOVATIONS (OPTIONAL)

REVISIONS			
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WHERE WATER RESISTANCE IS REQUIRED, SEE CHART #1 SHEET 4

DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-80.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WHERE WATER RESISTANCE IS NOT REQUIRED, SEE CHART #2 SHEET 4

DESIGN PRESSURE RATING	IMPACT RATING
±80.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH PANIC BAR OPTION, SEE CHART #3 SHEET 4

DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-65.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH FLUSH SILL, SEE CHART #4 SHEET 4

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

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH NON-THERMAL PANEL, SEE CHART #4 SHEET 4

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

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

SIGNED: 04/29/2026

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
ELEVATION

DRAWN:
R.L.

DWG NO.
08-01793

REV
G

SCALE
NTS

DATE
09/19/12

SHEET
2 OF 18

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

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DESIGN PRESSURE RATING	IMPACT RATING
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MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WHERE WATER RESISTANCE IS NOT REQUIRED, SEE CHART #2 SHEET 4

DESIGN PRESSURE RATING	IMPACT RATING
±80.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH PANIC BAR OPTION, SEE CHART #3 SHEET 4

DESIGN PRESSURE RATING	IMPACT RATING
+60.0/-65.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH FLUSH SILL, SEE CHART #4 SHEET 4

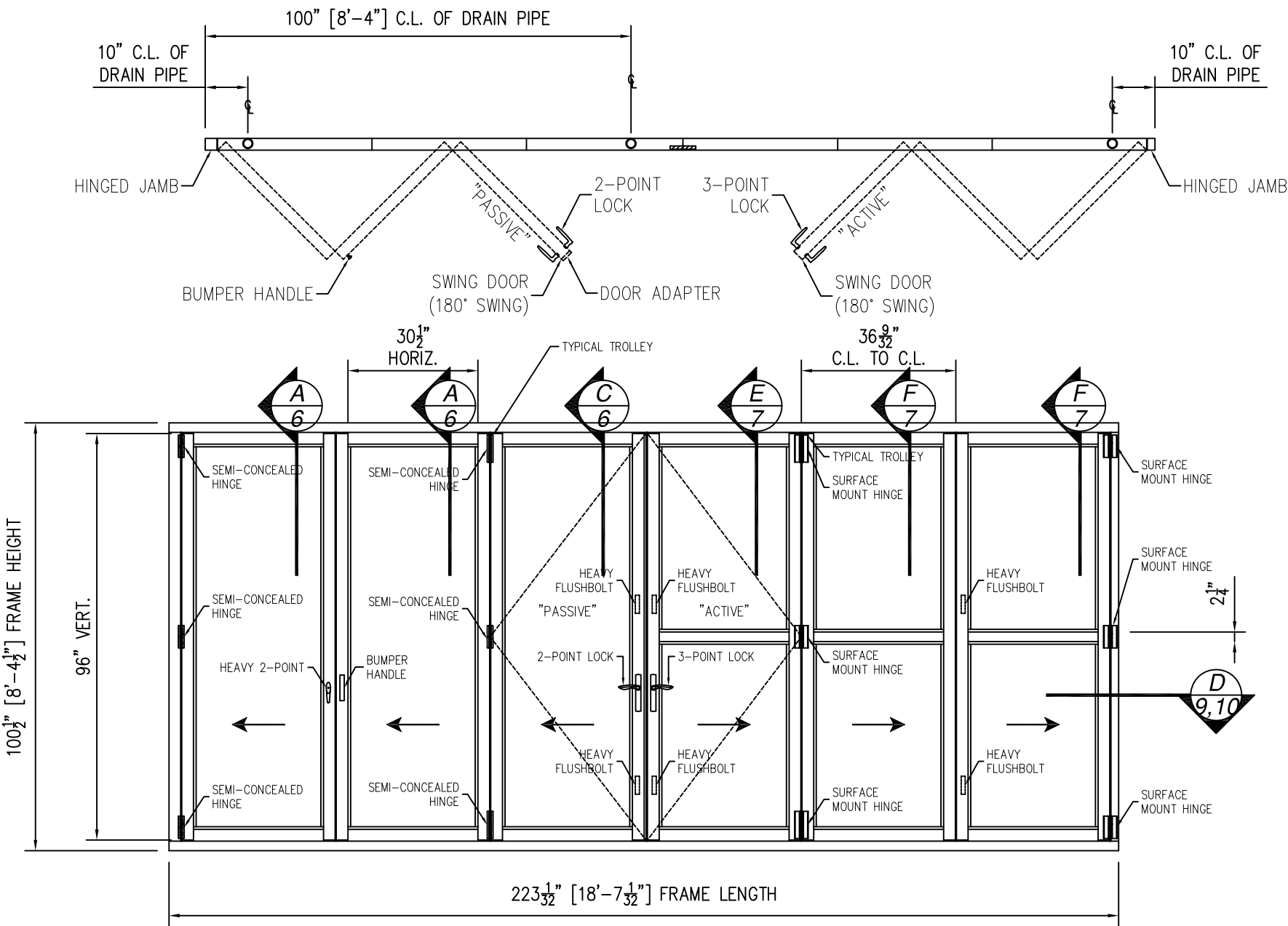
DESIGN PRESSURE RATING	IMPACT RATING
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MISSILE LEVEL D, WIND ZONE 4 AND HVHZ

WITH NON-THERMAL PANEL, SEE CHART #4 SHEET 4

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

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ



SERIES SI3000 FGW 3X8 PANEL OUTFOLD FGW

EXTERIOR VIEW

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HARDWARE SCHEDULE

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F PANIC BAR BY SOLAR INNOVATIONS (OPTIONAL)

SOLAR INNOVATIONS, INC.

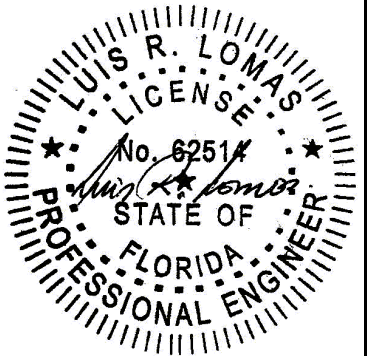
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED - IMPACT - HVHZ
ELEVATION

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 3 OF 18

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

SIGNED: 04/29/2026



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
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Chart #1

Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		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	80.0	60.0	80.0
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	80.0	-	-	-	-
96.0	60.0	80.0	60.0	80.0	60.0	80.0	-	-	-	-
102.0	60.0	80.0	60.0	78.8	-	-	-	-	-	-
108.0	60.0	80.0	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		42.0000		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	80.0	80.0	80.0	80.0
84.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-	-	-
90.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-	-	-
96.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-	-	-
102.0	80.0	80.0	78.8	78.8	-	-	-	-	-	-
108.0	80.0	80.0	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		42.0000		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	60.0	65.0	60.0	65.0	60.0	65.0	60.0	65.0	60.0	65.0
84.0	60.0	65.0	60.0	65.0	60.0	65.0	-	-	-	-
90.0	60.0	65.0	60.0	65.0	60.0	65.0	-	-	-	-
96.0	60.0	65.0	60.0	65.0	60.0	65.0	-	-	-	-
102.0	60.0	65.0	60.0	64.0	-	-	-	-	-	-
108.0	60.0	65.0	53.7	53.7	-	-	-	-	-	-
114.0	56.4	56.4	45.6	45.6	-	-	-	-	-	-
120.0	48.2	48.2	-	-	-	-	-	-	-	-
126.0	41.6	41.6	-	-	-	-	-	-	-	-
132.0	36.1	36.1	-	-	-	-	-	-	-	-
138.0	31.6	31.6	-	-	-	-	-	-	-	-
144.0	27.8	27.8	-	-	-	-	-	-	-	-

Chart #4

Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		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	-	-	-	-	-	-	-	-

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
ANCHORING LAYOUT AND DESIGN PRESSURE CHARTS

DRAWN:

R.L.

DWG NO.

08-01793

REV

G

SCALE NTS

DATE

09/19/12

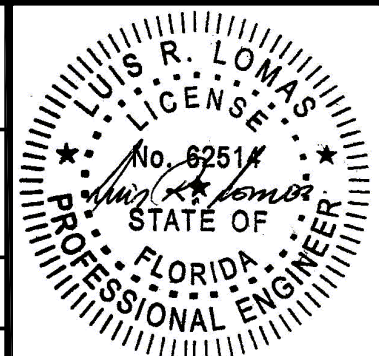
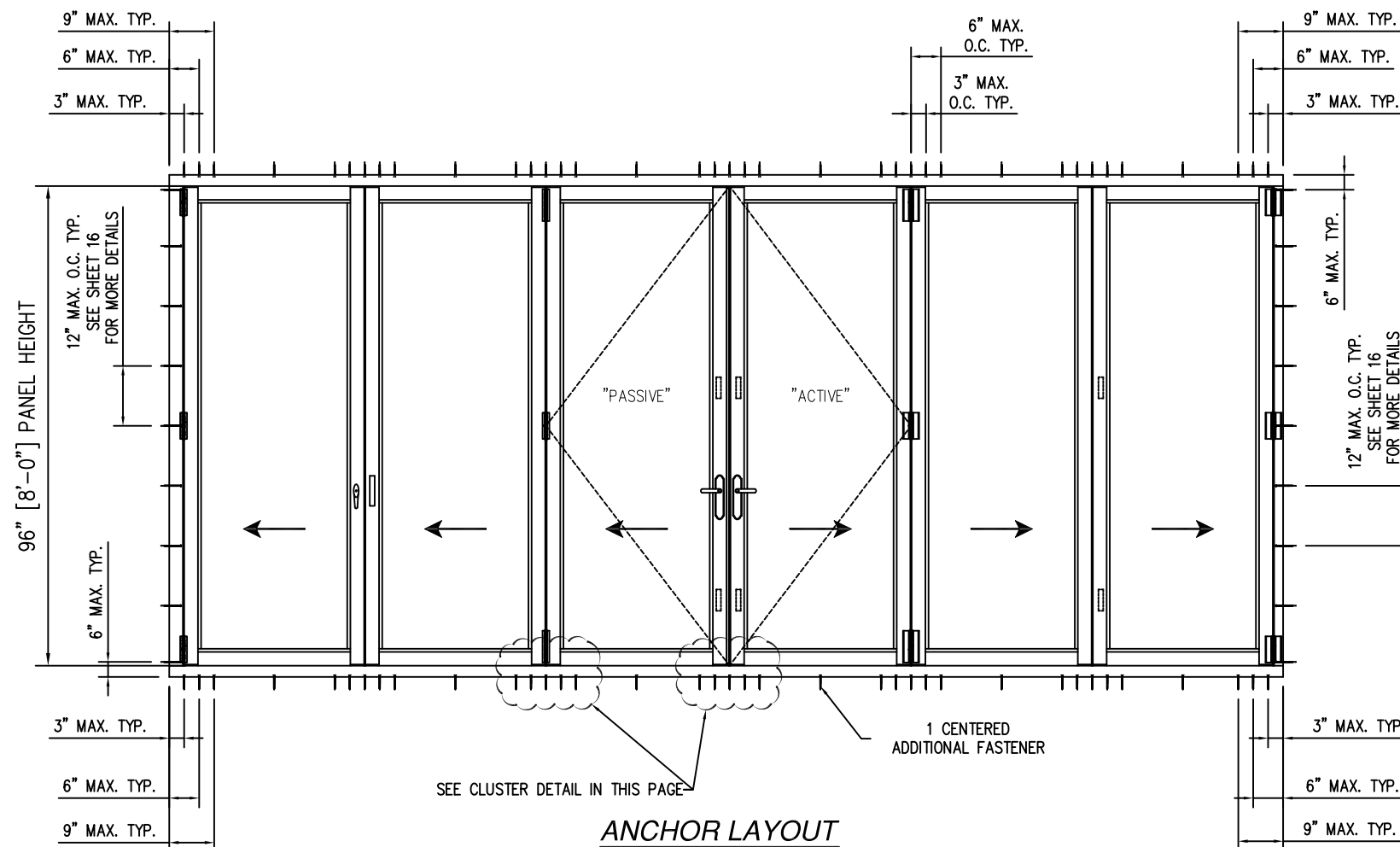
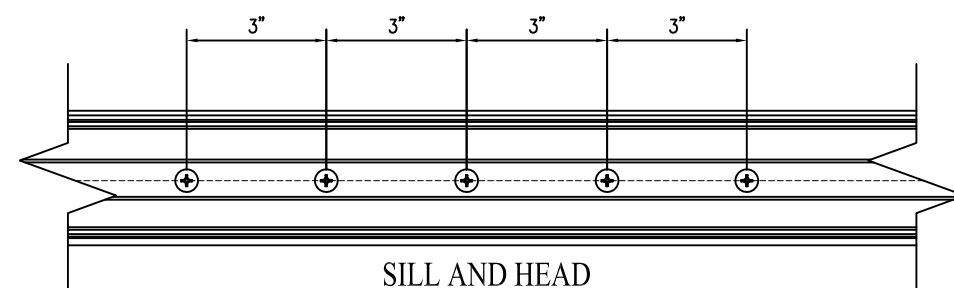
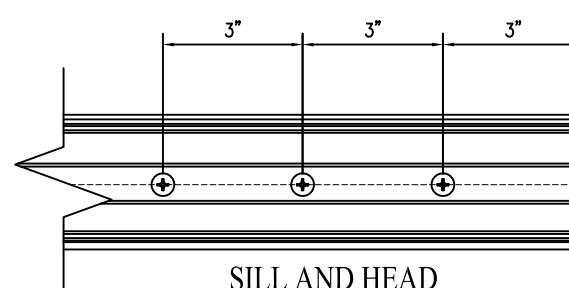
SHEET

4 OF 18

L. ROBERTO LOMAS P.E.

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

SIGNED: 04/29/2026

Luis R. Lomas P.E.
FL No.: 62514ANCHOR LAYOUT
APPLICABLE TO ALL CONFIGURATIONS.SILL AND HEAD
CLUSTER DETAILSILL AND HEAD
END DETAIL

PARTS LIST			
NO.	PART NUMBER	DESCRIPTION	MATERIAL
1	EA012497	DUAL WHEEL HEAD/SILL ASSY	ALUMINUM 6063-T6
2	S45004	REGULAR THERMAL FRAME	ALUMINUM 6063-T6
3	S54168	FRAME CAP	ALUMINUM 6063-T6
4	H07559	FRAME LUG	ALUMINUM 6063-T5
6	S47086	HANDLE – LOW PROFILE	ALUMINUM 6063-T5
7	S45995	HANDLE – RECESSED/FLUSH	ALUMINUM 6063-T52
8	S34713	GLASS STOP 1”	ALUMINUM 6063-T6
9	S34715	GLASS STOP 9/16”	ALUMINUM 6063-T6
11	H11722	HINGE EXTENSION – HEAVY	ALUMINUM 6005A-T4
12	S50311	TROLLEY BODY	ALUMINUM 6005A-T5
13	S34717	IDLER BODY	ALUMINUM 6063-T5
14	H07606	HINGE	ALUMINUM 6063-T5
15	S34841	HINGE COVER	ALUMINUM 6063-T5
17	H10684	HINGE SEMI CONCEALED	ALUMINUM 6105-T5
18	S47543	FRAME LOW PROFILE	ALUMINUM 6063-T6
19	GA000012	MULTFIN GASKET	EPDM 70 SHORE A
20	FA000447	#10-32 X 5/8” FH SS SCREW	
22	CN001129	1/8” SETTING BLOCK	
25	S59568	TROLLEY COVER	ALUMINUM 6063-T5
26	FA001037	#8-32 X 1/4” CS MS	
27	GA000017	ARROW SHIM	
28		1/8” HARD SHIM	
29		SILPRUF	
30		TROLLEY ASSY BOTTOM LOAD	ALUMINUM 6063-T5

ITEMS 5, 10, 16, 21, 23, 24, 31, 32 ARE NOT USED

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.

PARTS LIST			
NO.	PART NUMBER	DESCRIPTION	MATERIAL
33	FA000512	#12 X 1 FH SELF DRILLING SCREW	
34	GA000418-00-02	GASKET	
35		2 POINT LOCK	
36	FA000448	#10-32 X 1” CS MS	
37	S52262	SLIDE-IN DOOR STOP	ALUMINUM 6063-T5
38	GA000022-00-02	BULB GASKET	
39	S40921	DOOR ADAPTER	ALUMINUM 6063-T6
40		FLUSH BOLT	
41	GA000384	DOOR SWEEP GASKET	
42		2POINT LOCK	
43	S44793	MULLION	ALUMINUM 6063-T6
44		SURFACE MOUNT HINGE	ALUMINUM 6063-T5
45	FA001010	#10-32 X 3/8 FH SMS	
46		3 POINT LOCK	
47	S49375	REGULAR RAIL INSERT	ALUMINUM 6063-T5
48	H12497/H13486	FLUSH SILL	ALUMINUM 6063-T5
49	H12862	NON-THERMAL FRAME	ALUMINUM 6063-T5

SOLAR INNOVATIONS, INC.
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PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
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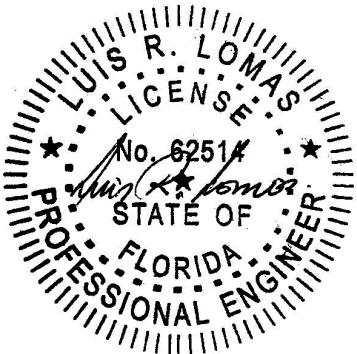
SCALE NTS

DATE 09/19/12

SHEET 5 OF 18

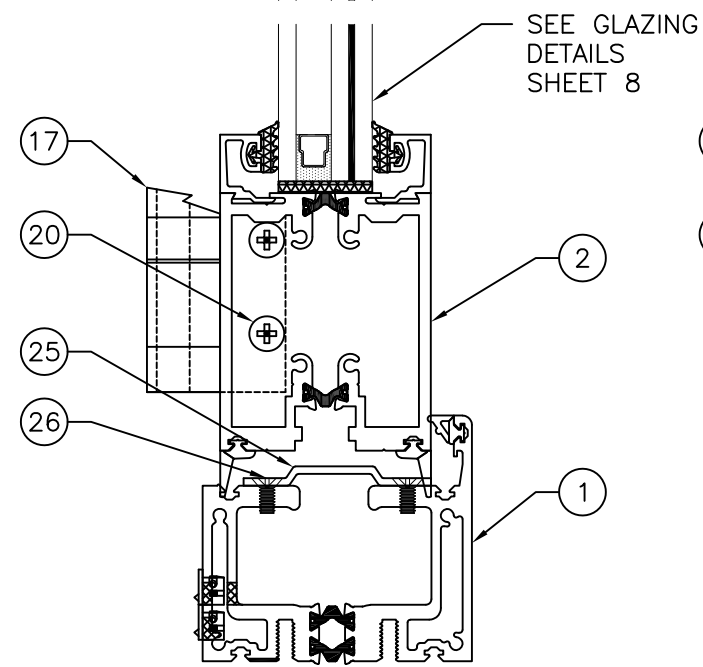
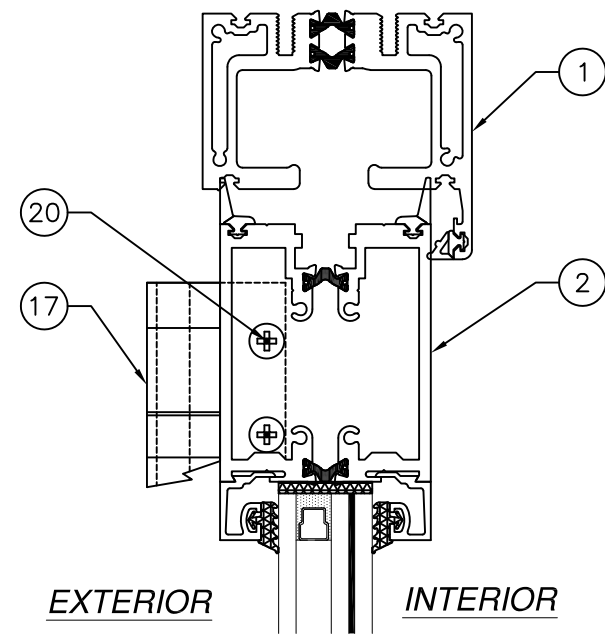
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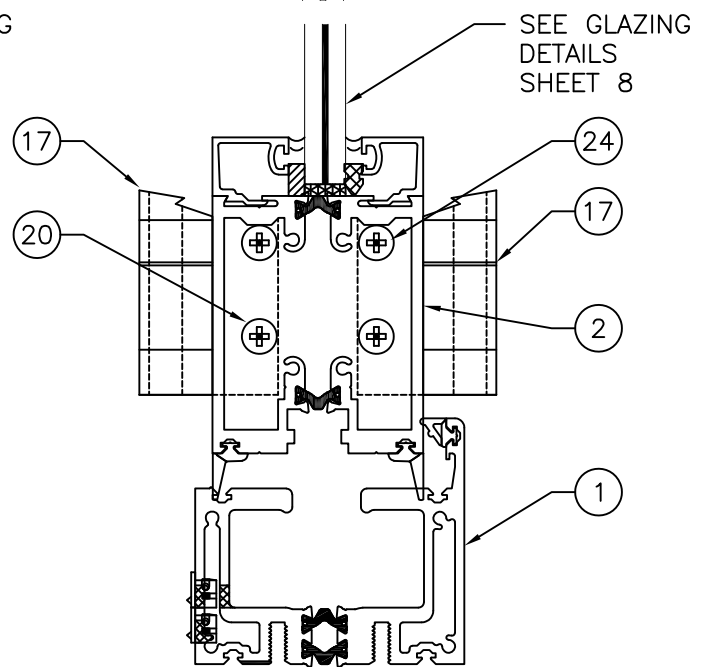
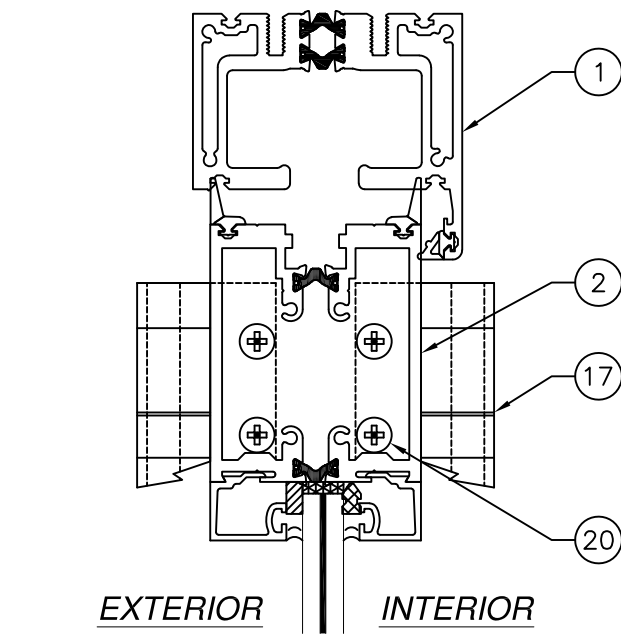


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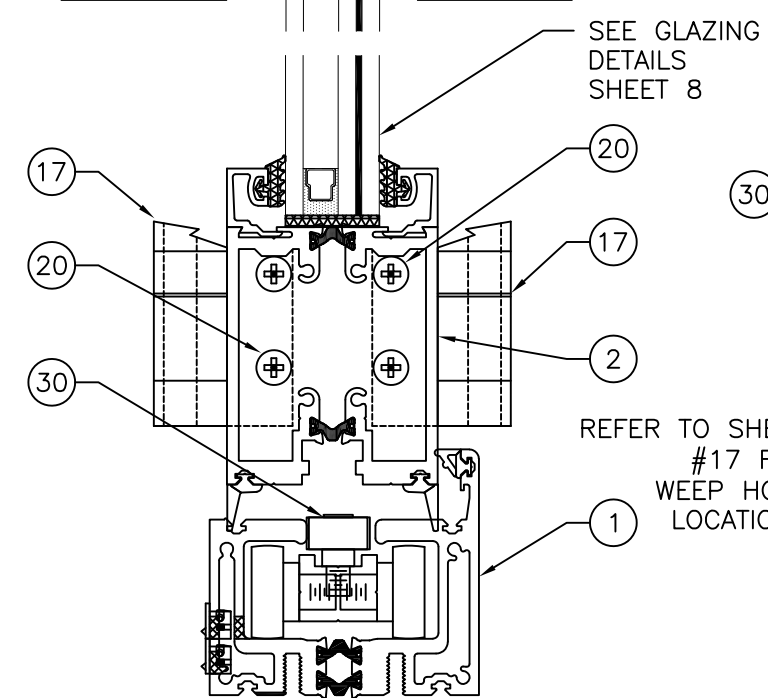
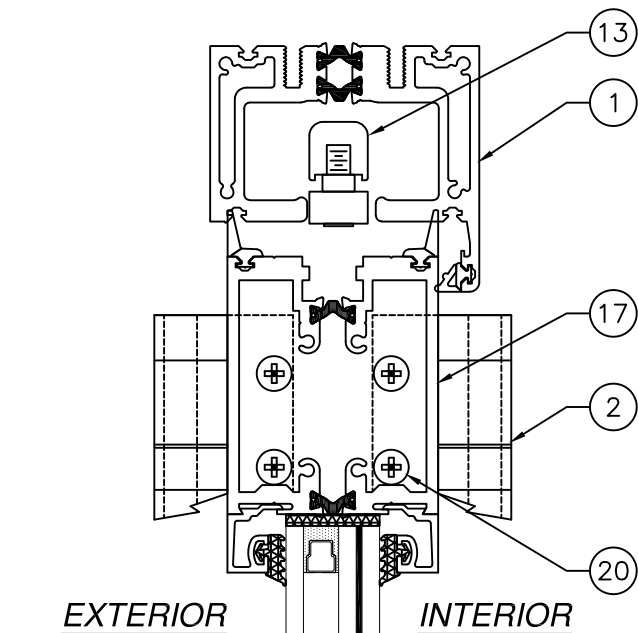
FOR ILLUSTRATION PURPOSES ONLY
FOR INSTALLATION DETAILS REFER TO SHEETS 13 -15



A
6 VERTICAL CROSS SECTION

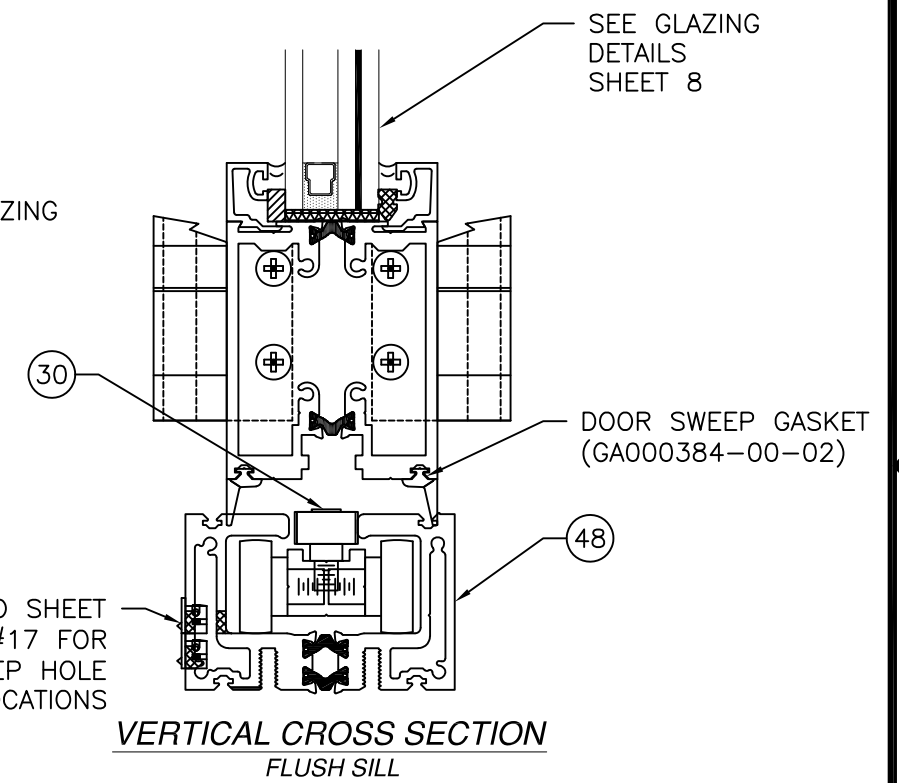


B
6 VERTICAL CROSS SECTION



C
6 VERTICAL CROSS SECTION
BOTTOM LOAD

REVISIONS			
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VERTICAL CROSS SECTION
FLUSH SILL

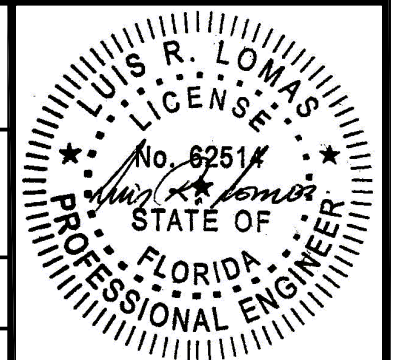
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED - IMPACT - HVHZ
VERTICAL CROSS SECTIONS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 6 OF 18

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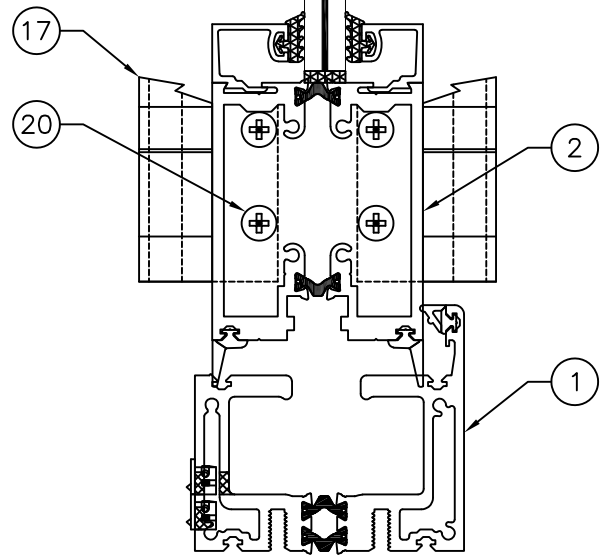
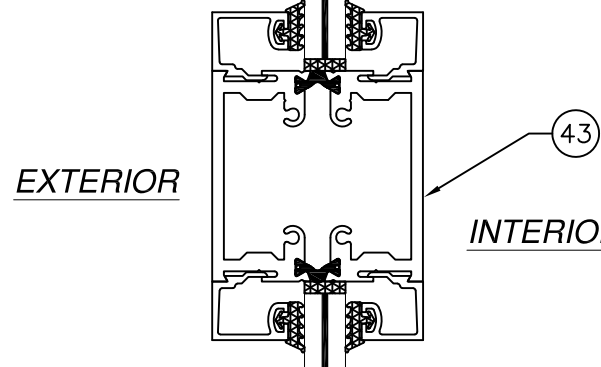
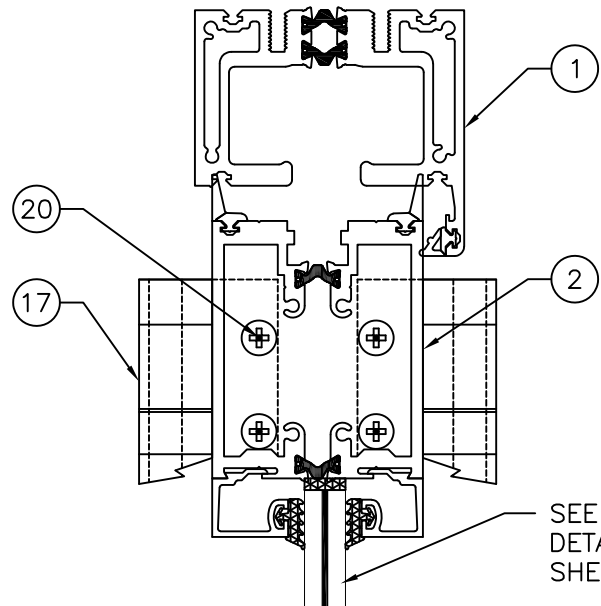
SIGNED: 04/29/2026



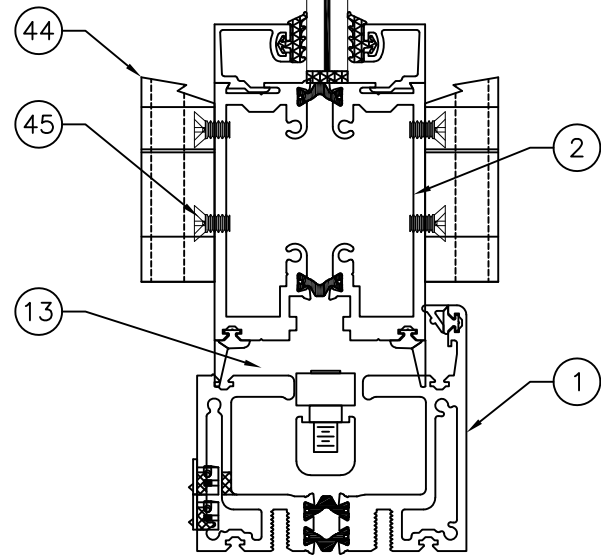
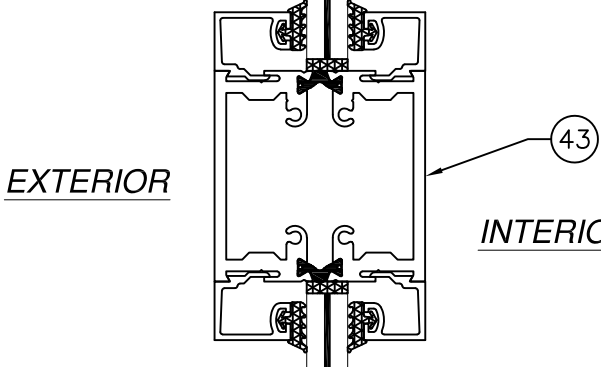
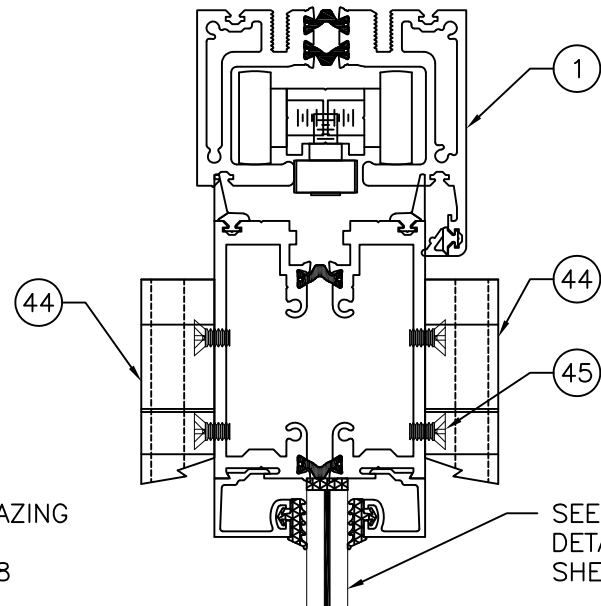
Luis R. Lomas P.E.
FL No.: 62514

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FOR INSTALLATION DETAILS REFER TO SHEETS 13 -15

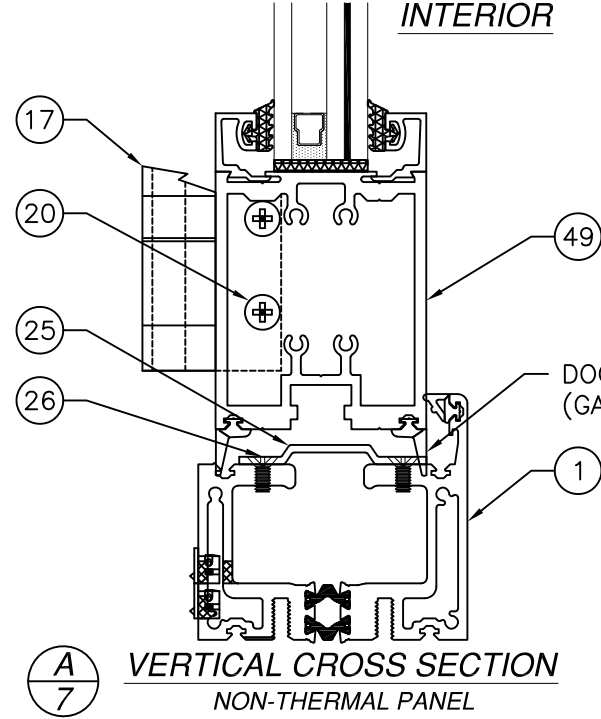
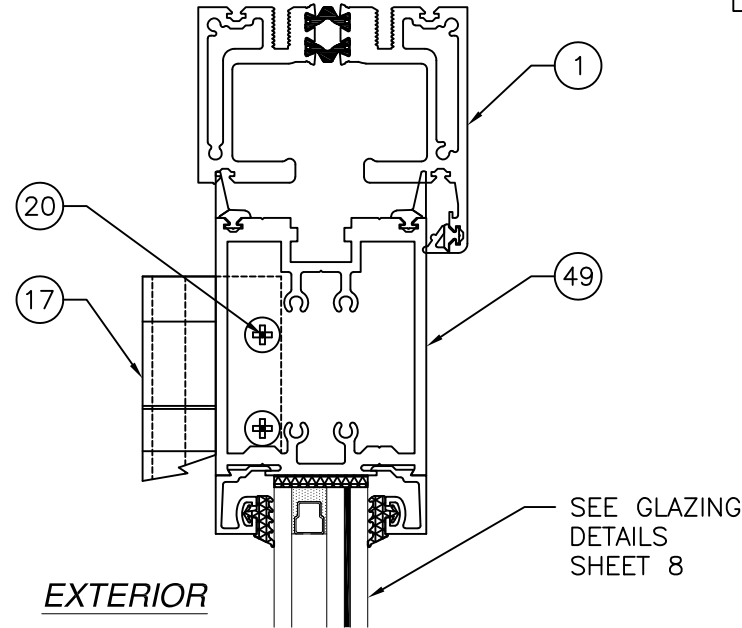
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



E
7
VERTICAL CROSS SECTION



F
7
VERTICAL CROSS SECTION
TOP LOAD



A
7
VERTICAL CROSS SECTION
NON-THERMAL PANEL

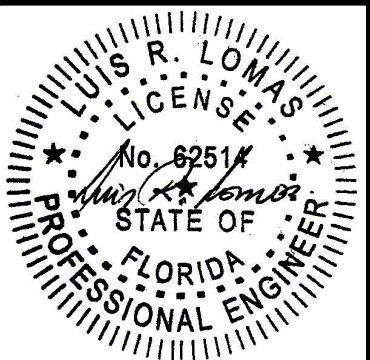
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED - IMPACT - HVHZ
VERTICAL CROSS SECTIONS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 7 OF 18

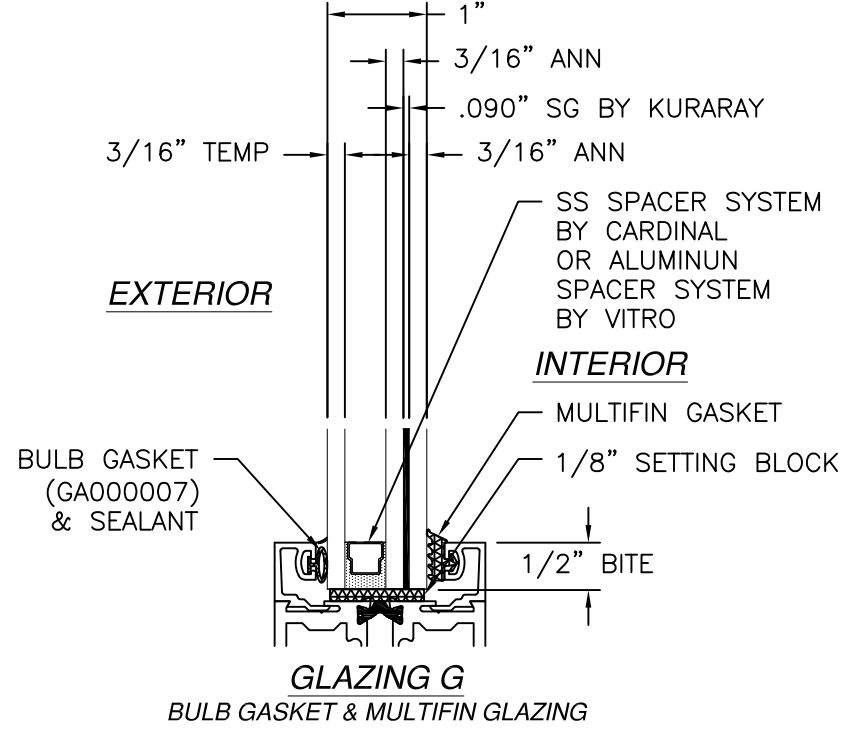
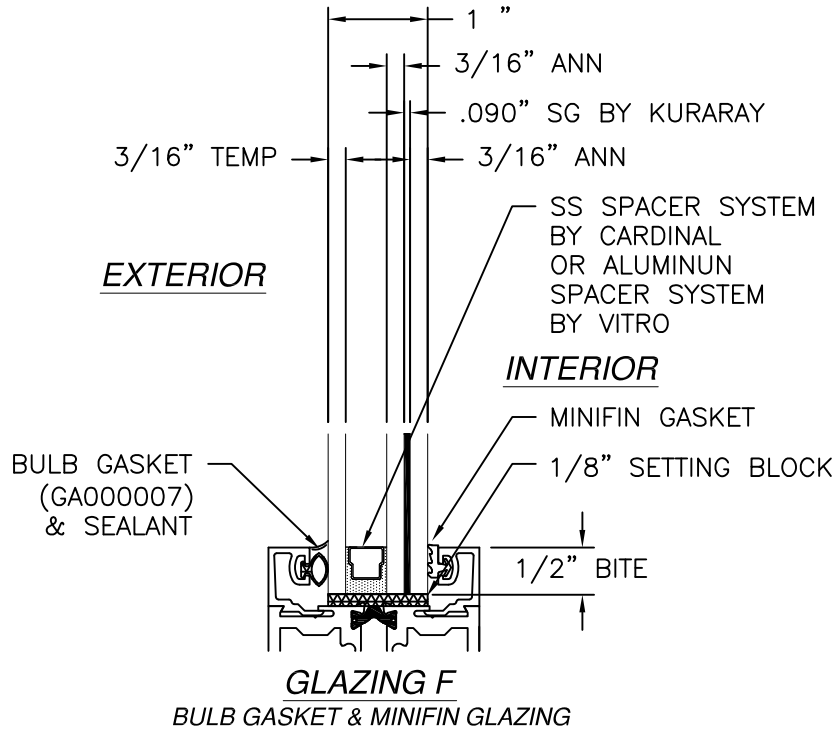
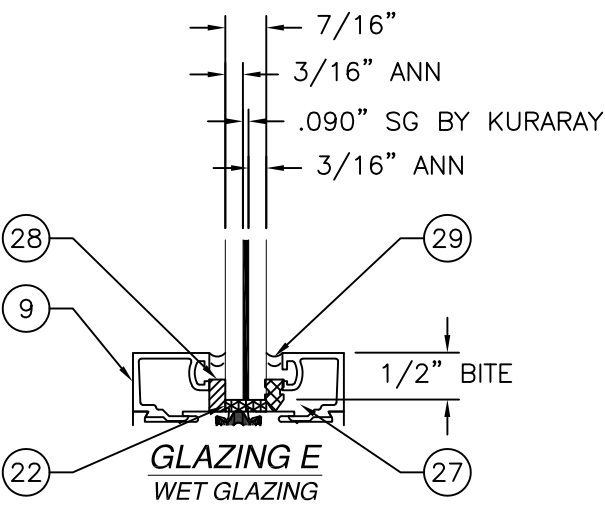
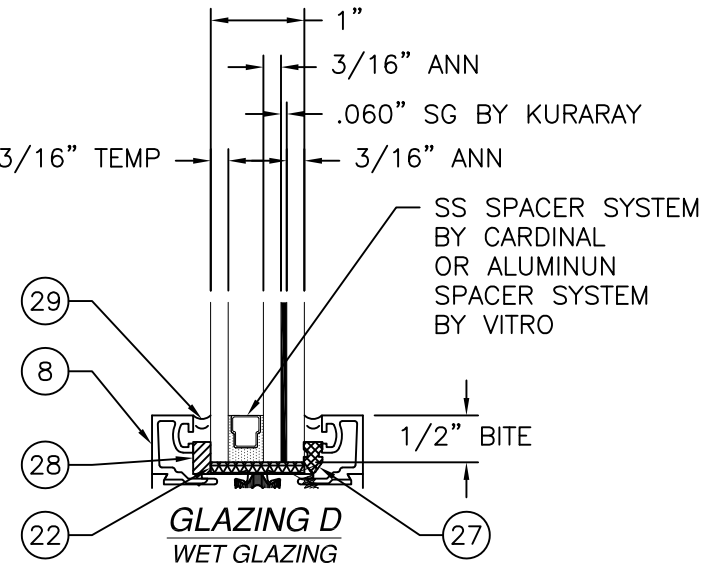
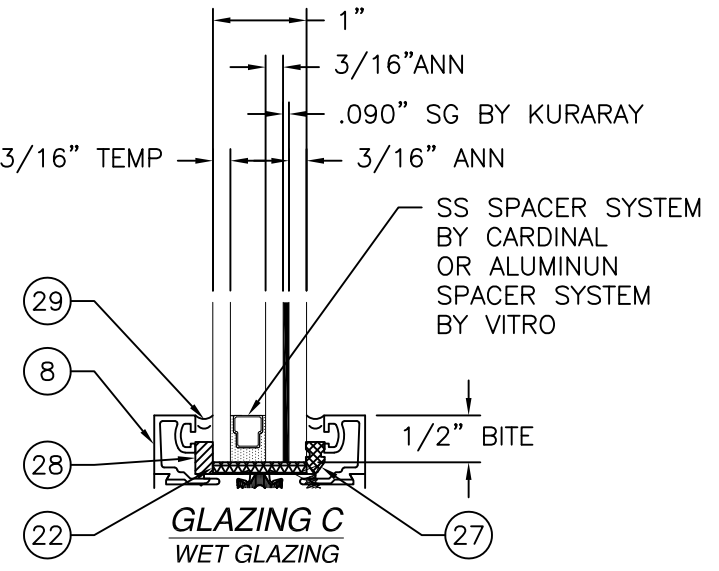
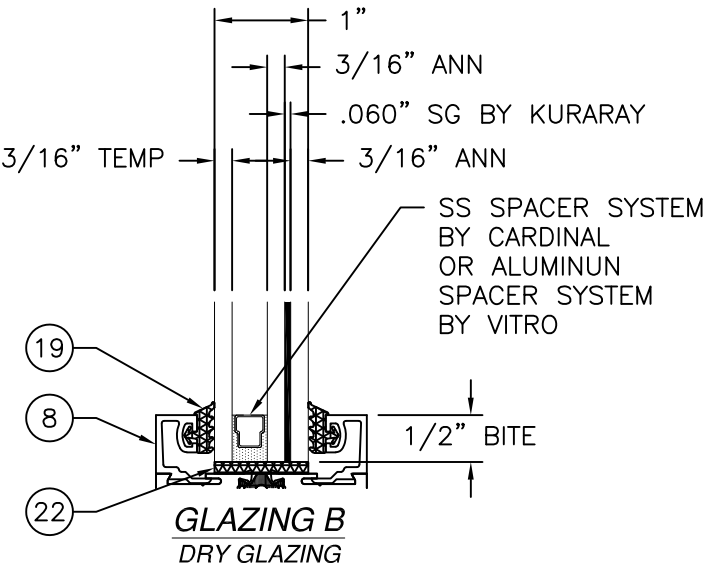
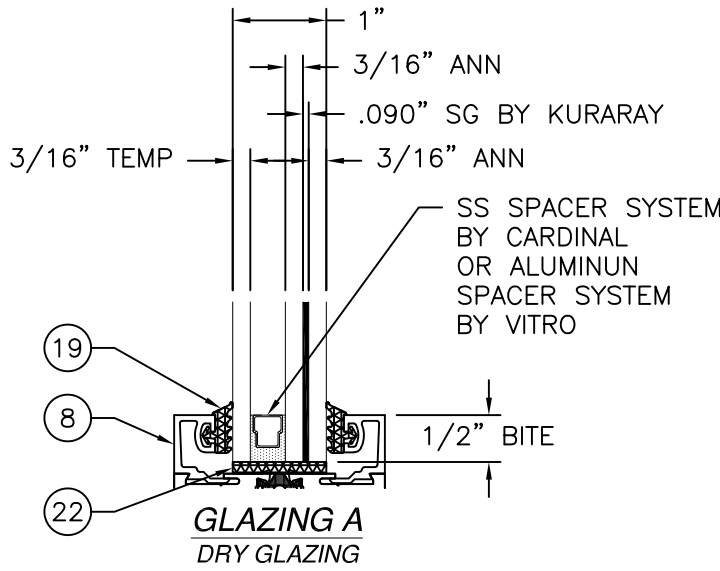
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 04/29/2026



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



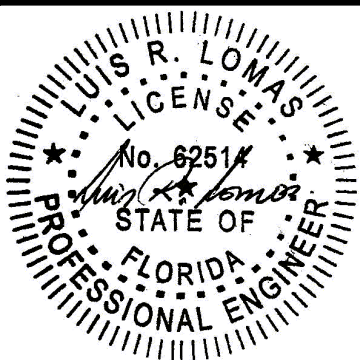
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
GLAZING DETAILS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 8 OF 18

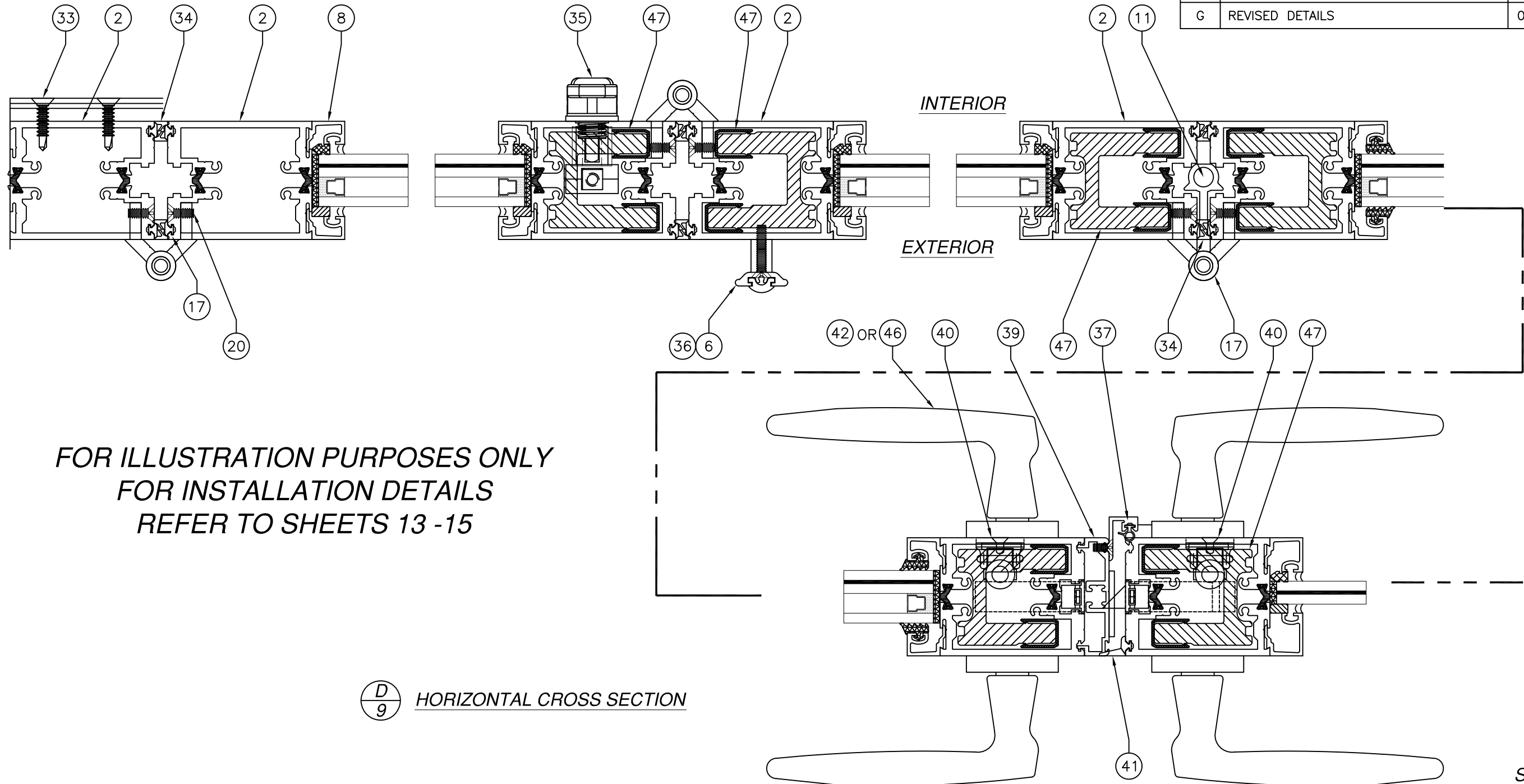
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 04/29/2026



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



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FOR INSTALLATION DETAILS
REFER TO SHEETS 13 -15

CONTINUED
IN SHEET 10

$\frac{D}{9}$ HORIZONTAL CROSS SECTION

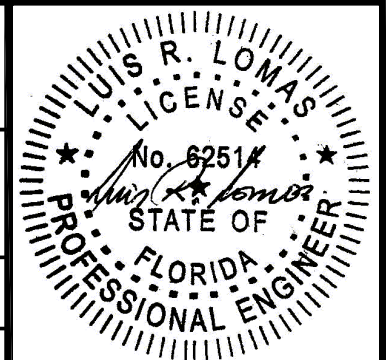
SIGNED: 04/29/2026

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

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
HORIZONTAL CROSS SECTIONS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 9 OF 18

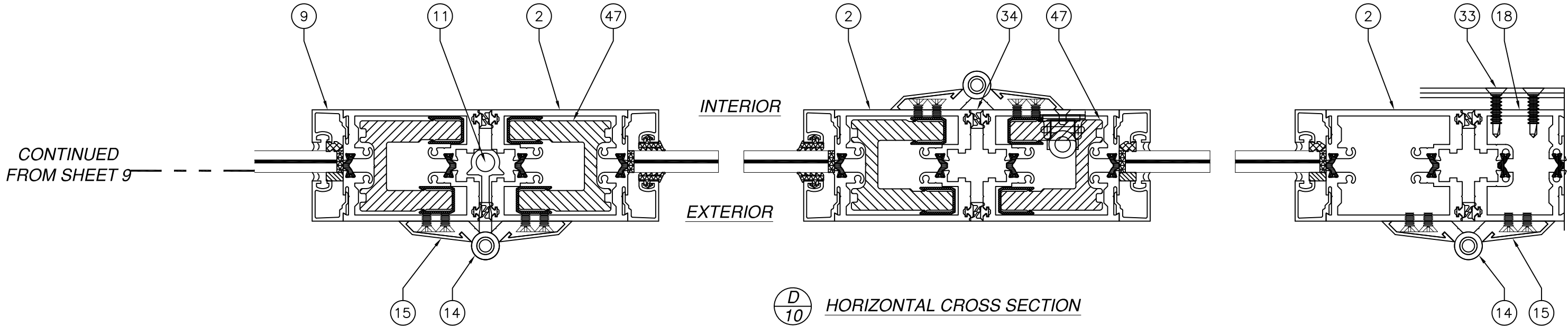
L. ROBERTO LOMAS P.E.
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Luis R. Lomas P.E.
FL No.: 62514

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FOR INSTALLATION DETAILS REFER TO SHEETS 13 - 15

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



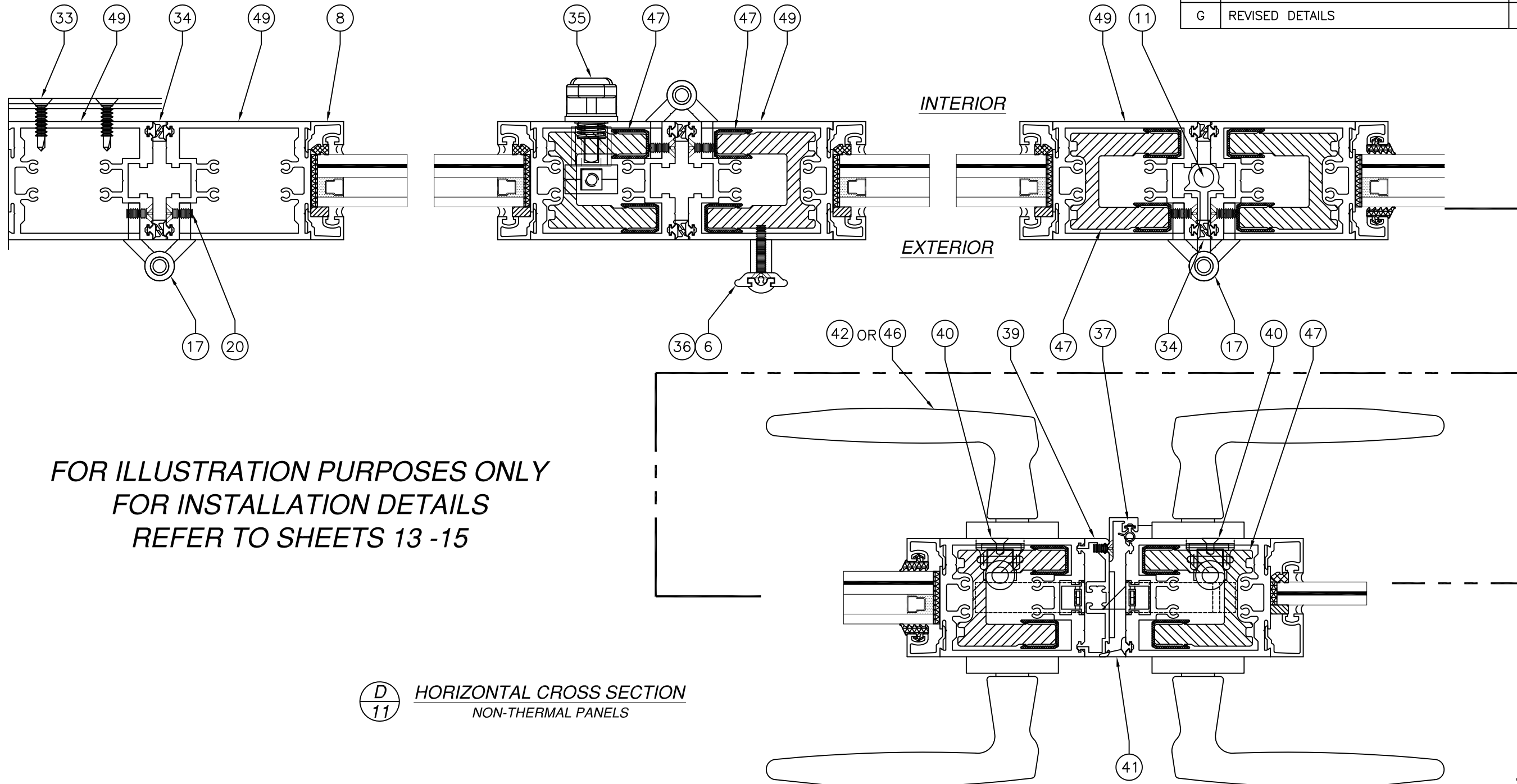
SIGNED: 04/29/2026

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALUMINUM REINFORCED - IMPACT - HVHZ HORIZONTAL CROSS SECTIONS		
DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 10 OF 18
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
G	REVISED DETAILS	04/15/26	R.L.



FOR ILLUSTRATION PURPOSES ONLY
FOR INSTALLATION DETAILS
REFER TO SHEETS 13 -15

D
11 HORIZONTAL CROSS SECTION
NON-THERMAL PANELS

CONTINUED
IN SHEET 12

SIGNED: 04/29/2026

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD

ALUMINUM REINFORCED – IMPACT – HVHZ

HORIZONTAL CROSS SECTIONS

DRAWN:
R.L.

DWG NO.
08-01793

REV
G

SCALE
NTS

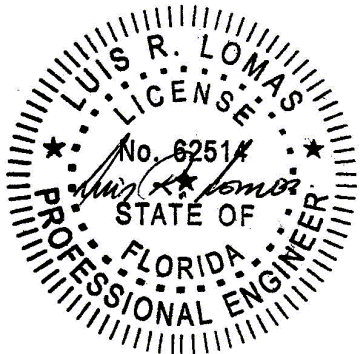
DATE
09/19/12

SHEET
11 OF 18

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

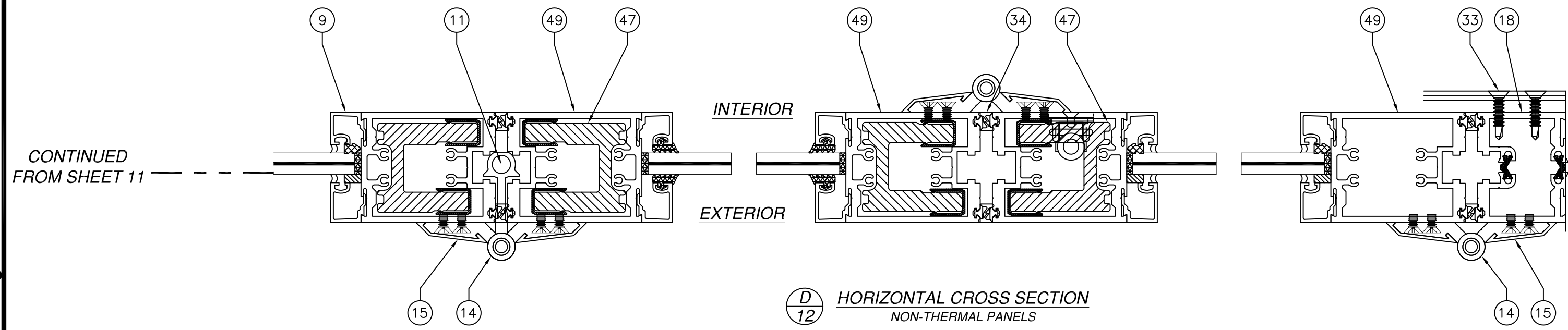
434-688-0609 rllomas@lrlomaspe.com



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

FOR ILLUSTRATION PURPOSES ONLY
FOR INSTALLATION DETAILS REFER TO SHEETS 13 -15

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



SIGNED: 04/29/2026

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

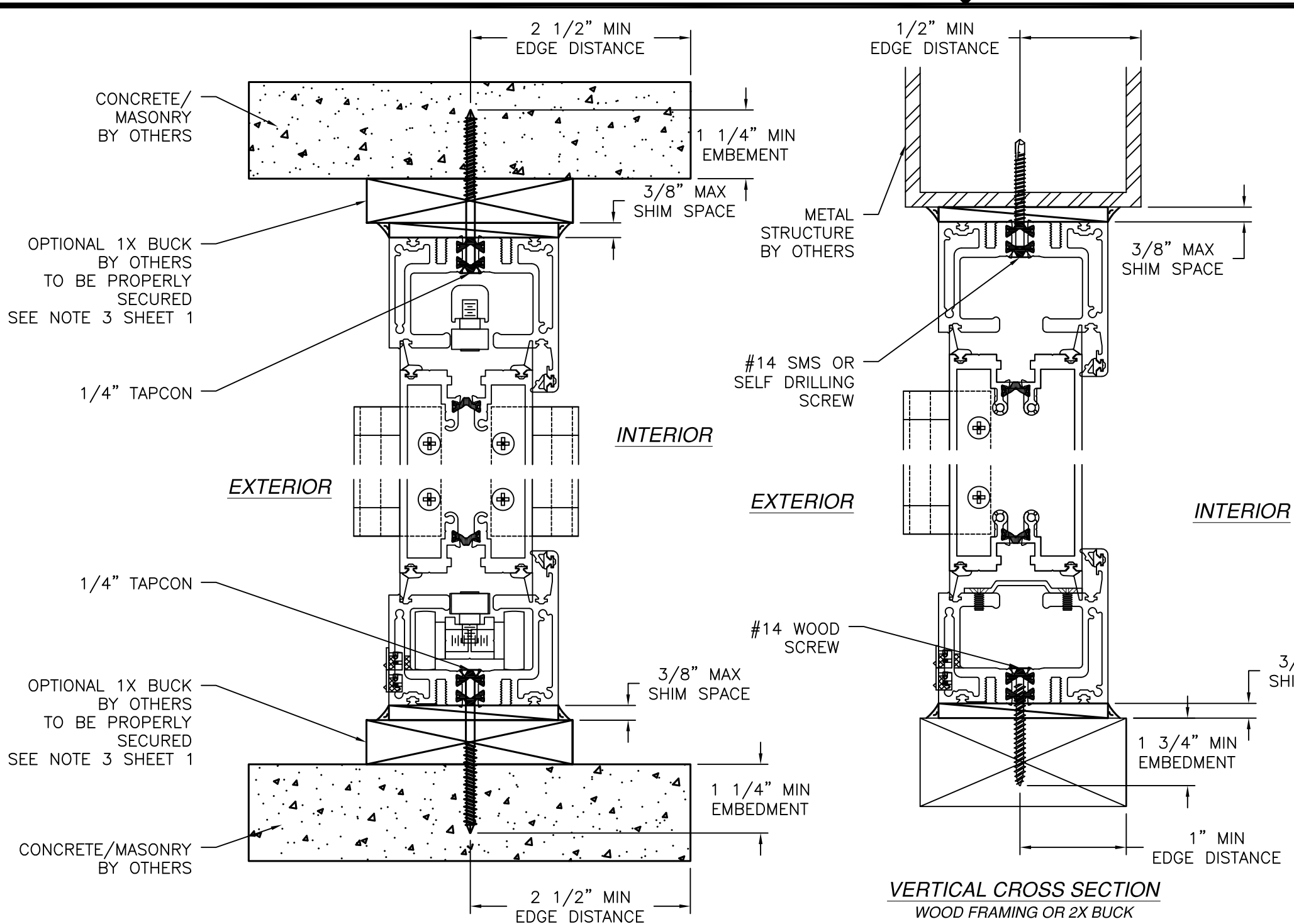
SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
HORIZONTAL CROSS SECTIONS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 12 OF 18

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

Professional Engineer Seal for Luis R. Lomas, State of Florida, License No. 62514.

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



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.

VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION
STANDARD SILL SHOWN FLUSH SILL SIMILAR

VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK
OR METAL STRUCTURE INSTALLATION
STANDARD SILL SHOWN FLUSH SILL SIMILAR

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 SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
INSTALLATION DETAILS

DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 13 OF 18

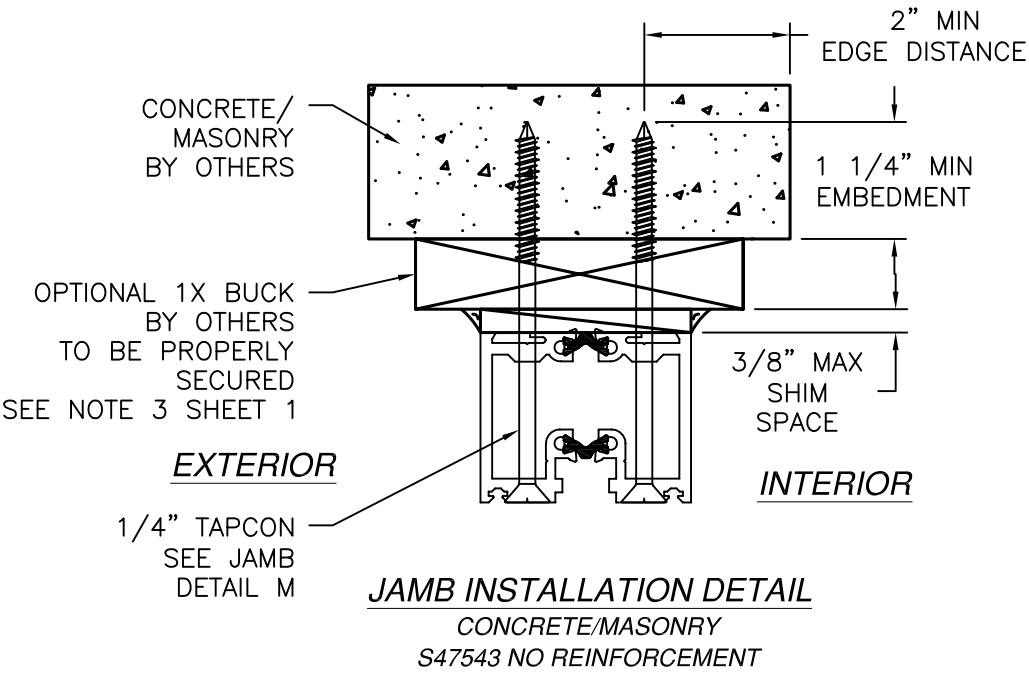
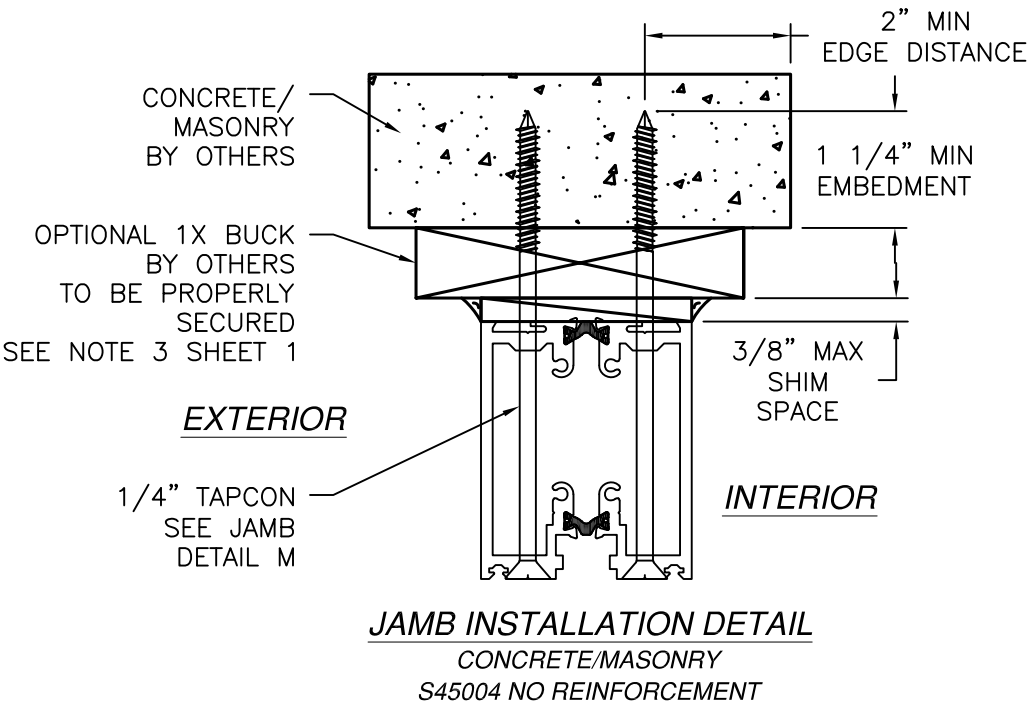
L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

SIGNED: 04/29/2026

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
G	REVISED DETAILS	04/15/26	R.L.



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DESIGNED IN ACCORDANCE WITH ASTM E2112

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
INSTALLATION DETAILS

DRAWN:

R.L.

DWG NO.

08-01793

REV

G

SCALE

NTS

DATE

09/19/12

SHEET

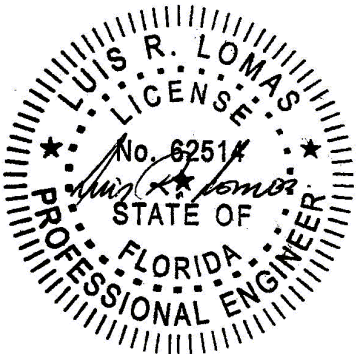
14 OF 18

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

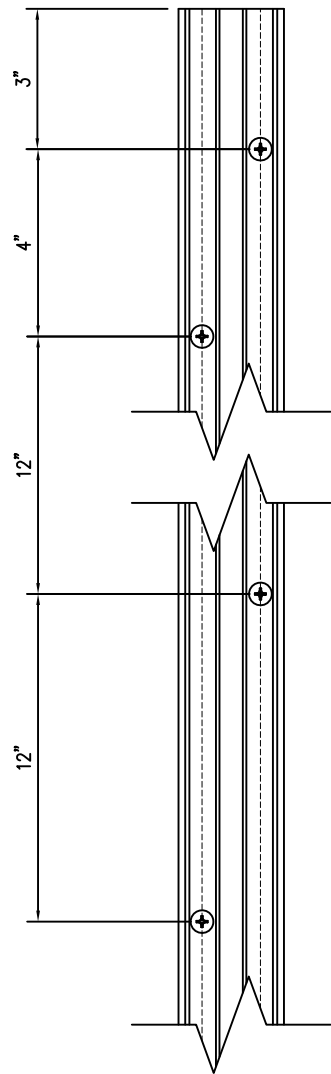
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 04/29/2026

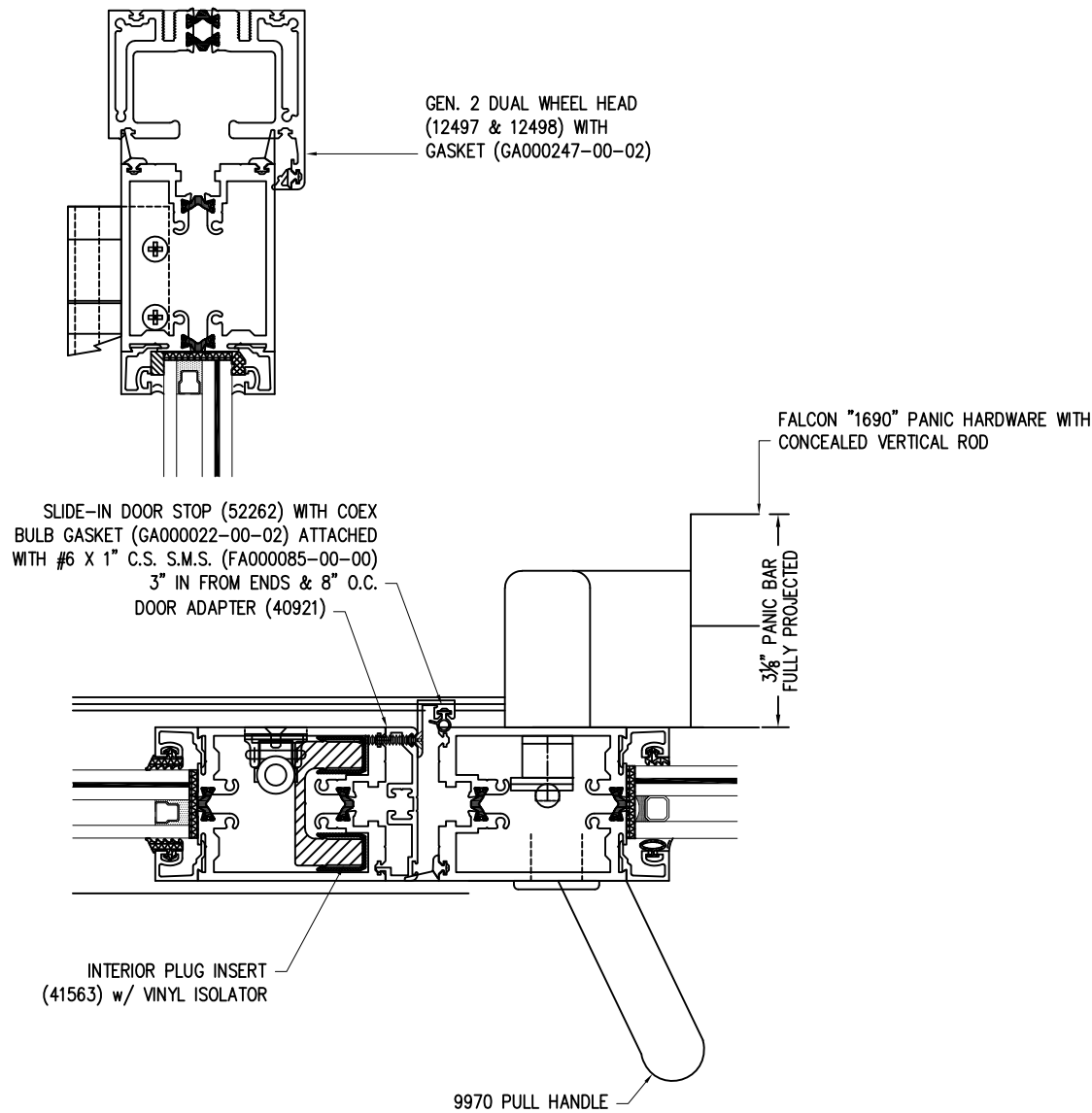


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



JAMB INSTALLATION DETAIL M
JAMB WITHOUT REINFORCEMENT



PANIC BAR DETAILS

SIGNED: 04/29/2026

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
INSTALLATION DETAILS

DRAWN:
R.L.

DWG NO.
08-01793

REV
G

SCALE
NTS

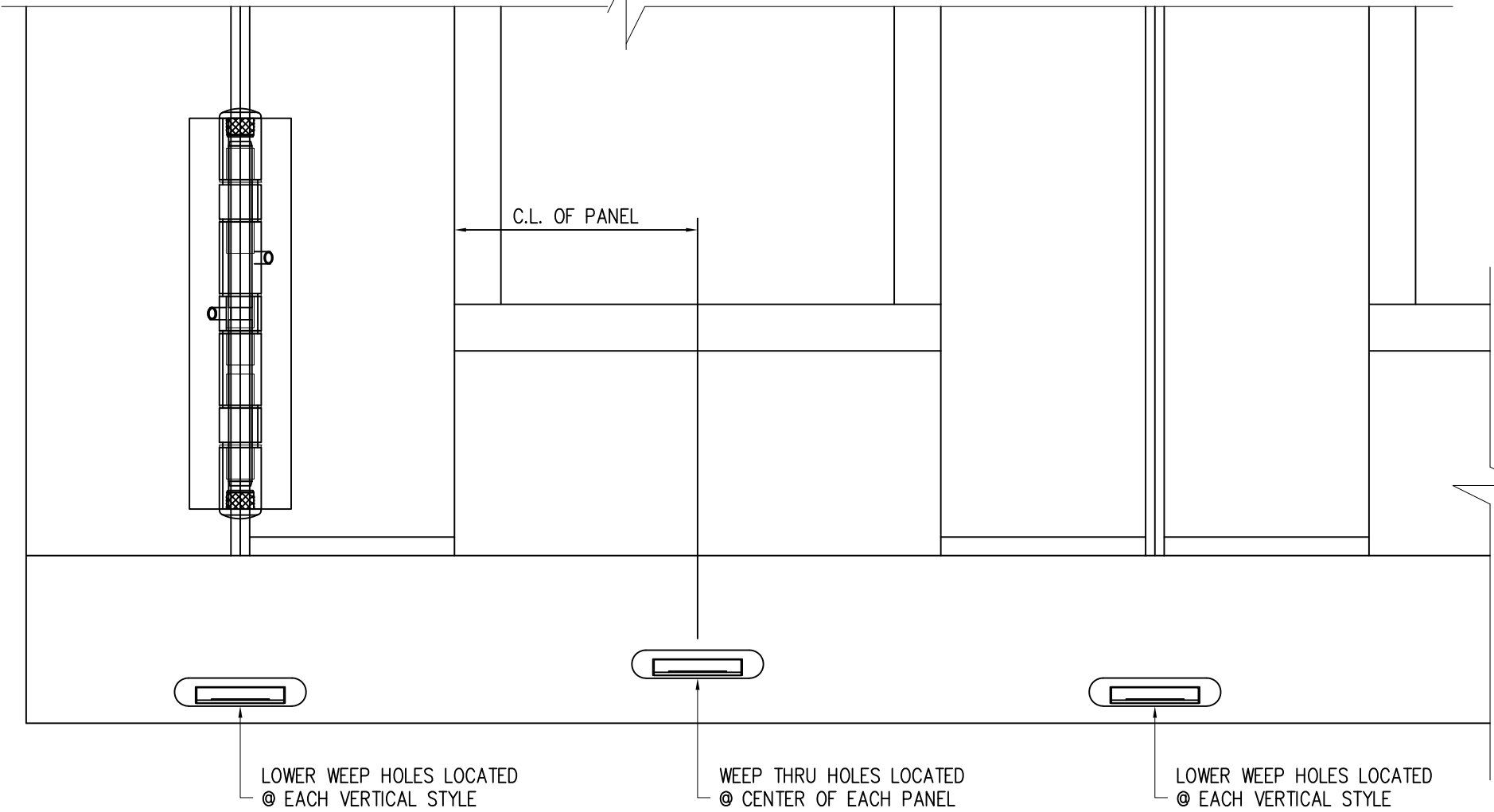
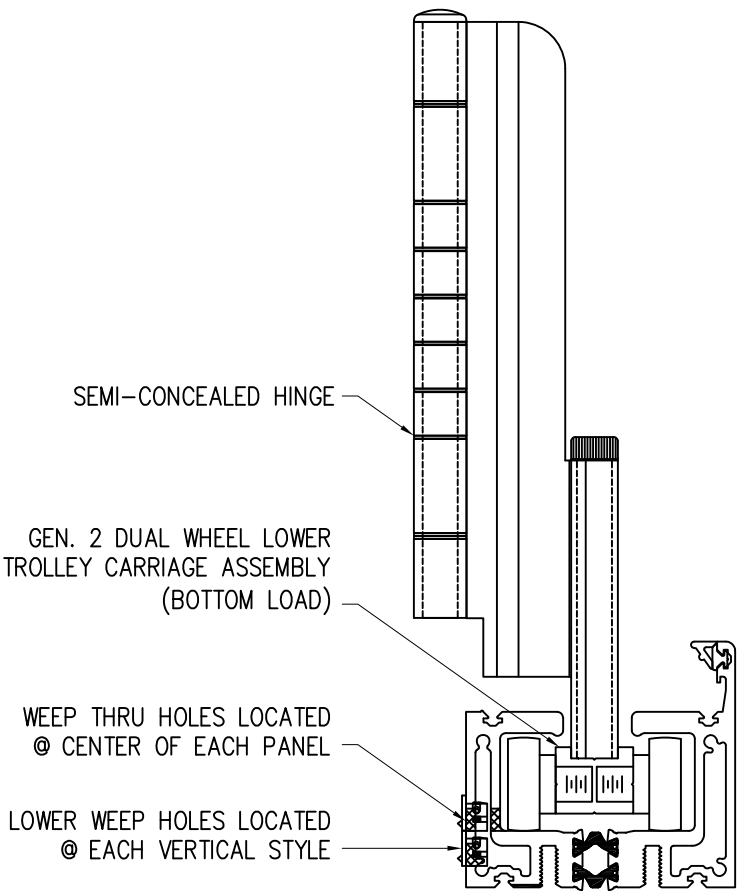
DATE
09/19/12

SHEET
16 OF 18

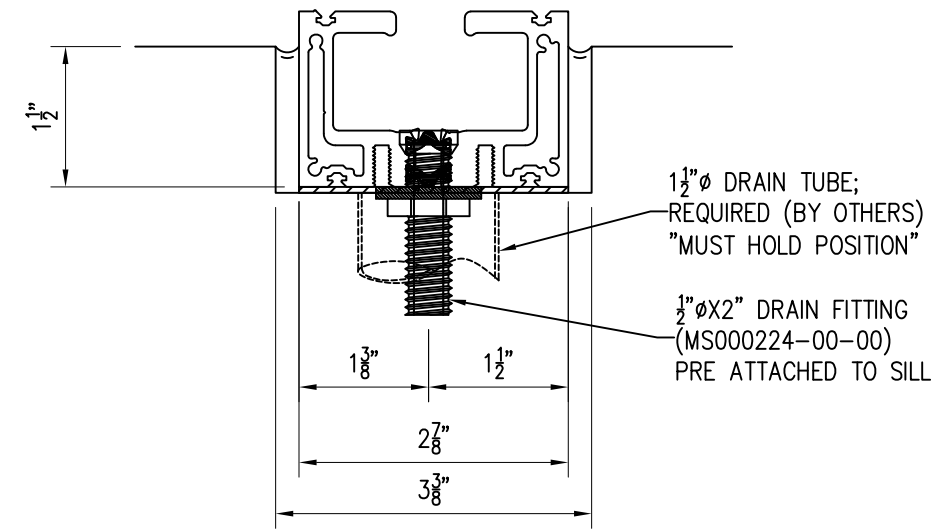
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



WEEP LOCATIONS



DRAIN PIPE DETAIL

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD
ALUMINUM REINFORCED – IMPACT – HVHZ
WEEP LOCATIONS

DRAWN: R.L.

DWG NO. 08-01793

REV G

SCALE NTS

DATE 09/19/12

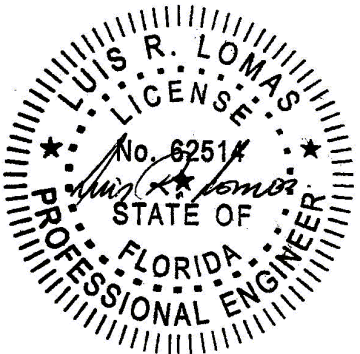
SHEET 17 OF 18

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

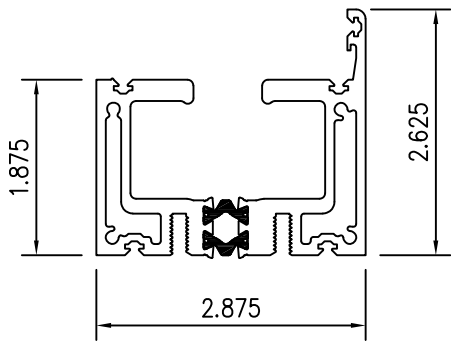
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 04/29/2026

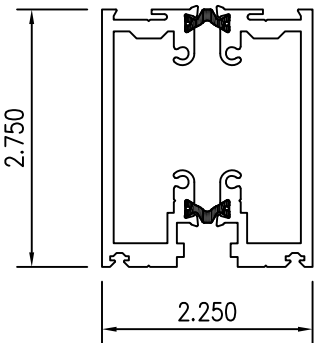


Luis R. Lomas P.E.
FL No.: 62514

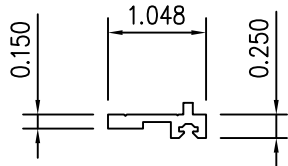
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED DETAILS	04/15/26	R.L.



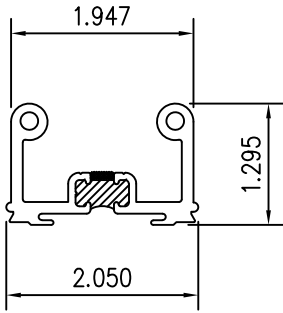
1 DUAL WHEEL
HEAD / SILL



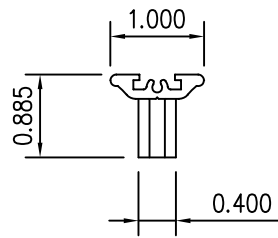
2 REGULAR THERMAL
FRAME



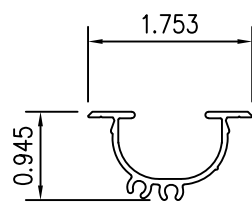
3 FRAME
CAP



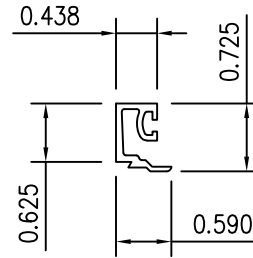
4 FRAME
LUG



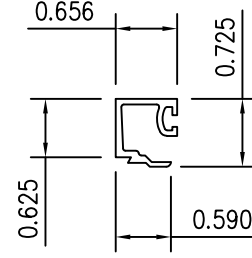
6 LOW-PROFILE
HANDLE



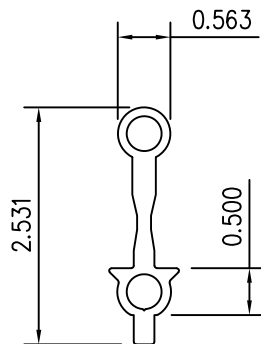
7 RECESSED / FLUSH
HANDLE



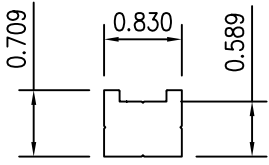
8 1" GLASS
STOP



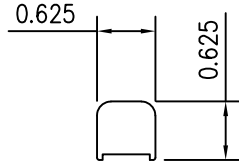
9 9/16" GLASS
STOP



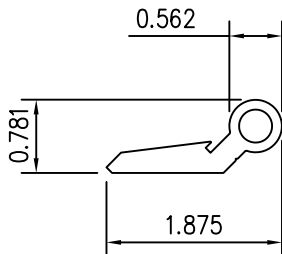
11 HEAVY HINGE
EXTENSION



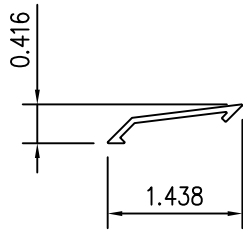
12 TROLLEY
BODY



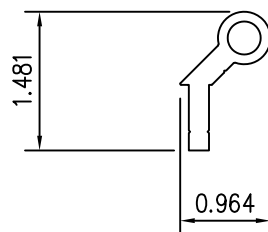
13 IDLER
BODY



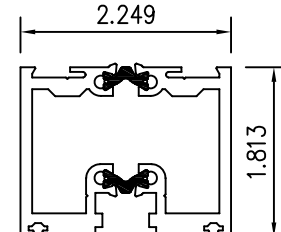
14 5 1/4"
HINGE



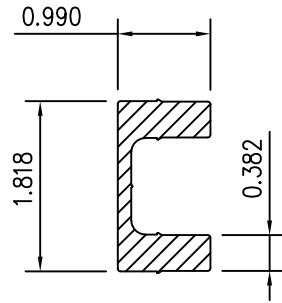
15 5 1/4"
HINGE COVER



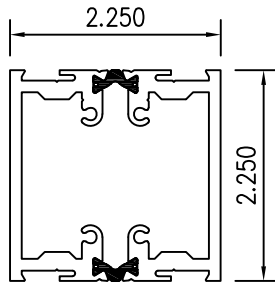
17 5 1/4" SEMI-
CONCEALED HINGE



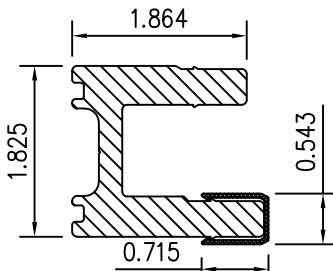
18 FRAME
NARROW



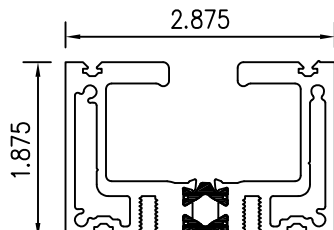
PANIC BAR
ALUMINUM INSERT



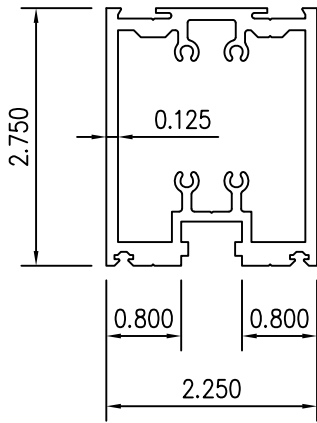
43 MULLION
FRAME



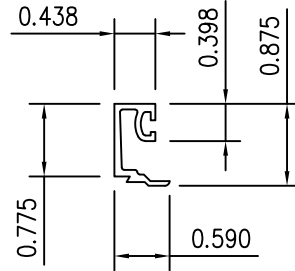
47 REGULAR
RAIL INSERT



48 FLUSH SILL



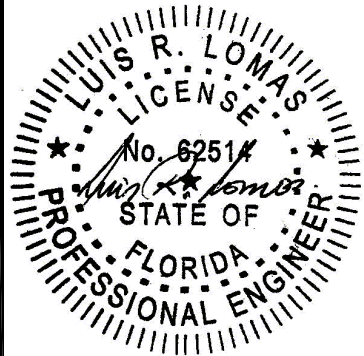
49 REGULAR NON-THERMAL
FRAME



1/2" GLASS
STOP

SIGNED: 04/29/2026

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALUMINUM REINFORCED - IMPACT - HVHZ COMPONENTS		
DRAWN: R.L.	DWG NO. 08-01793	REV G
SCALE NTS	DATE 09/19/12	SHEET 18 OF 18
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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