

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED SEALS AND ANCHORS	11/30/2023	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 6 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.

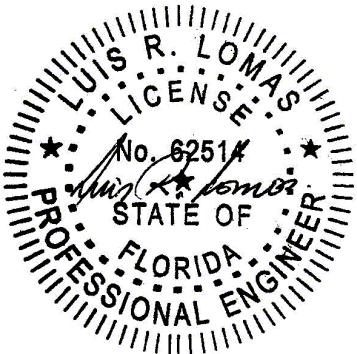
14.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

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

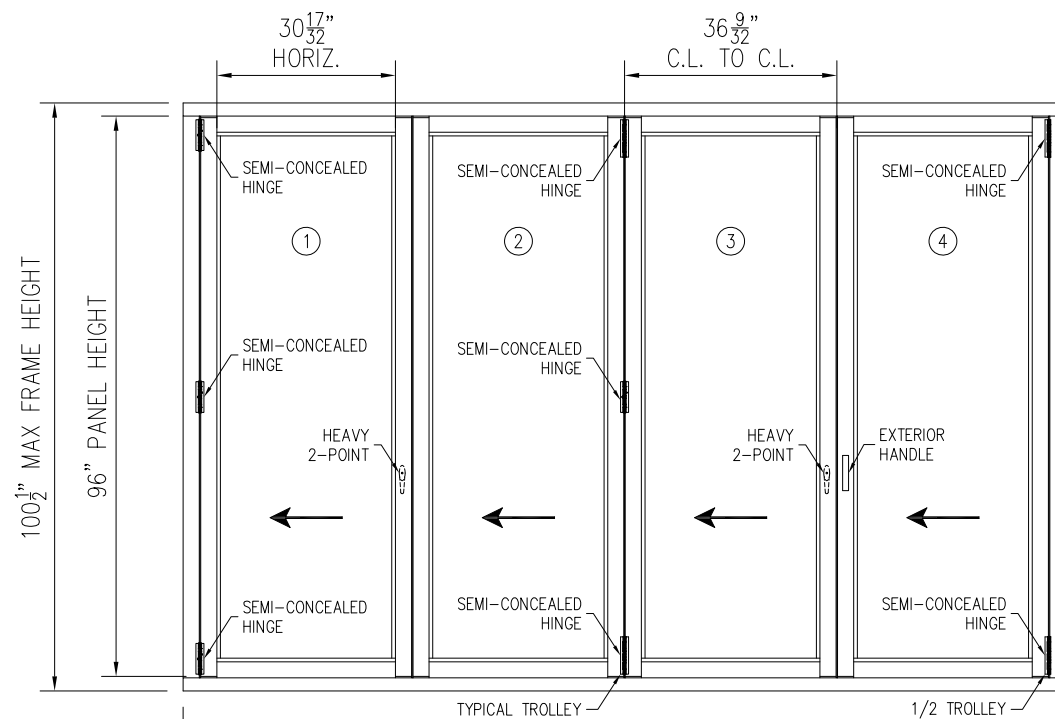
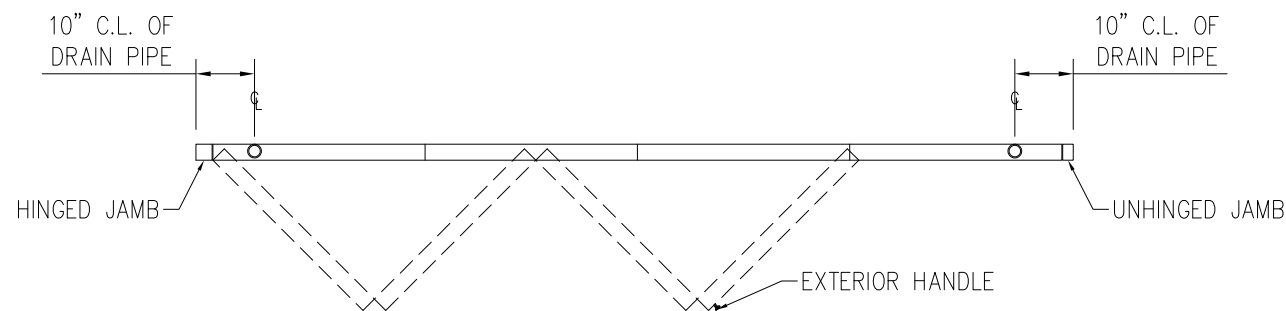
SIGNED: 12/12/2023

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12	WEEP DETAILS
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SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL IMPACT – HVHZ NOTES		
DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 1 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



SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL 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.

HARDWARE SCHEDULE

- A. PANIC BAR BY SOLAR INNOVATIONS (OPTIONAL)
- B. SEMI-CONCEALED HINGE BY SOLAR INNOVATIONS
- C. HEAVY 2-POINT BY SOLAR INNOVATIONS

REVISIONS			
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DESIGN PRESSURE RATING	IMPACT RATING
<i>±80.0PSF</i>	<i>LARGE AND SMALL MISSILE IMPACT</i>

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
SEE CHART #1 SHEET 3

DESIGN PRESSURE RATING	IMPACT RATING
<i>±65.0PSF</i>	<i>LARGE AND SMALL MISSILE IMPACT</i>

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
WITH PANIC BAR OPTION, SEE CHART #2 SHEET 3

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

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
WITH FLUSH SILL, SEE CHART #3 SHEET 3

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

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
WITH NON-THERMAL RAILS, SEE CHART #3 SHEET 3

SIGNED: 12/12/2023

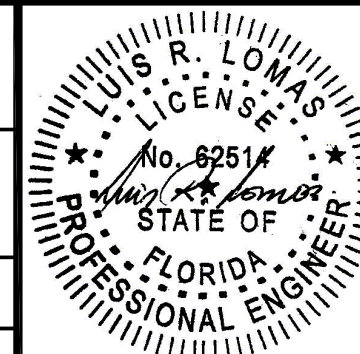
SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

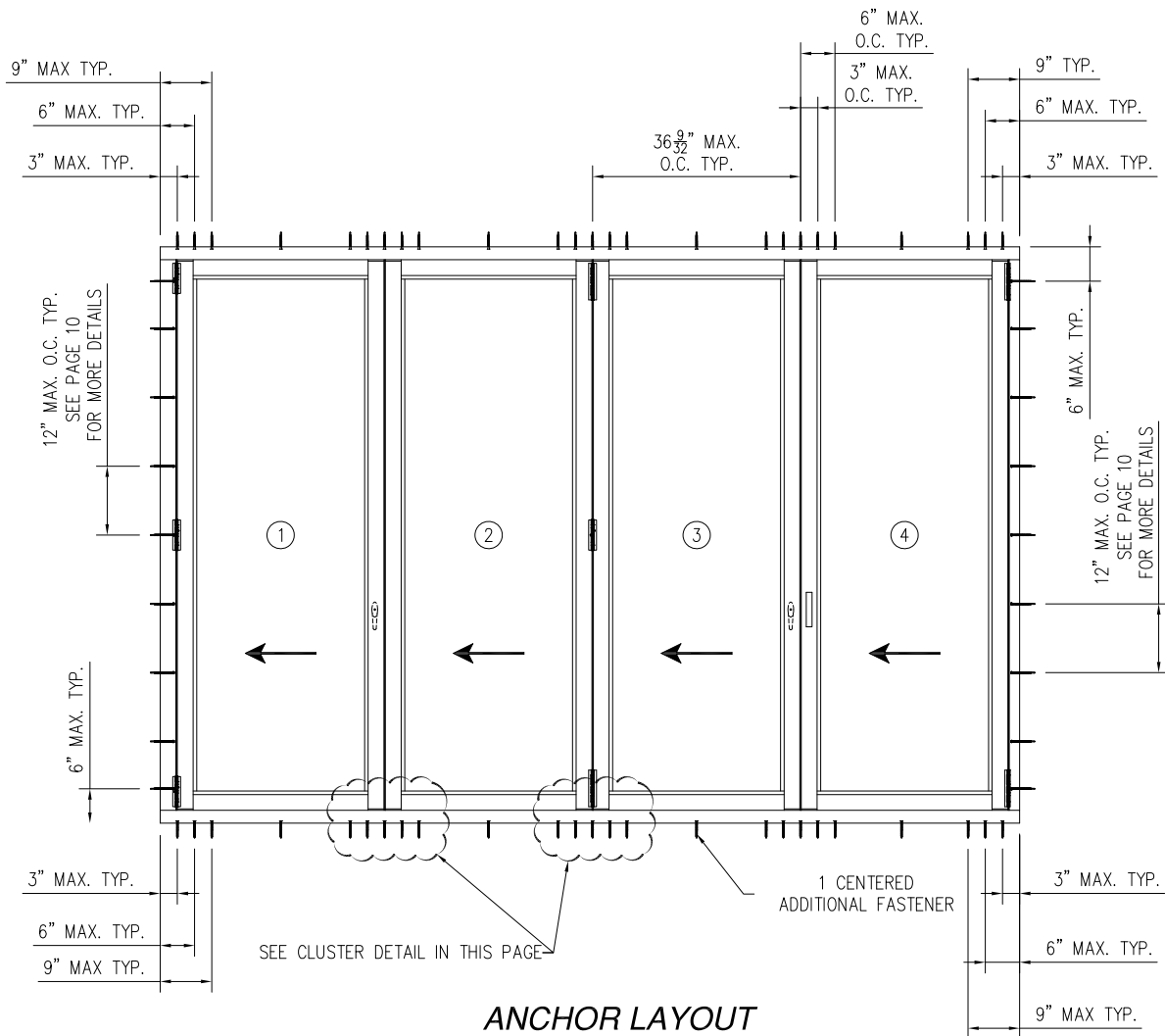
SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
ELEVATION

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 2 OF 13

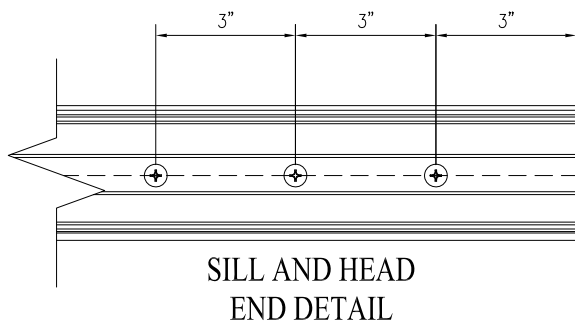
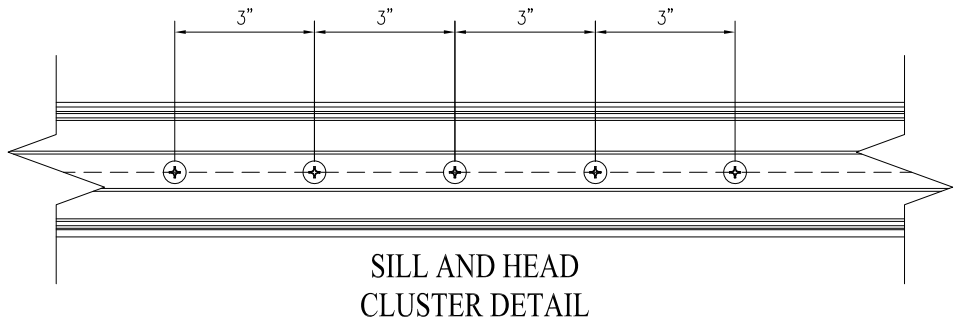
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ANCHOR LAYOUT
APPLICABLE TO ALL CONFIGURATIONS.



REVISIONS			
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Chart #1 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.0		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 #2 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.0		44.000	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
84.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
90.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
96.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
102.0	65.0	65.0	64.0	64.0	-	-	-	-	-	-
108.0	65.0	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 #3 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.281		42.0		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.

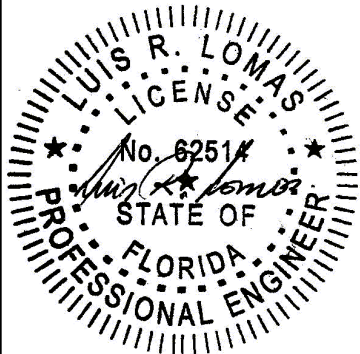
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
ANCHORING LAYOUT & DESIGN PRESSURE CHARTS

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 3 OF 13

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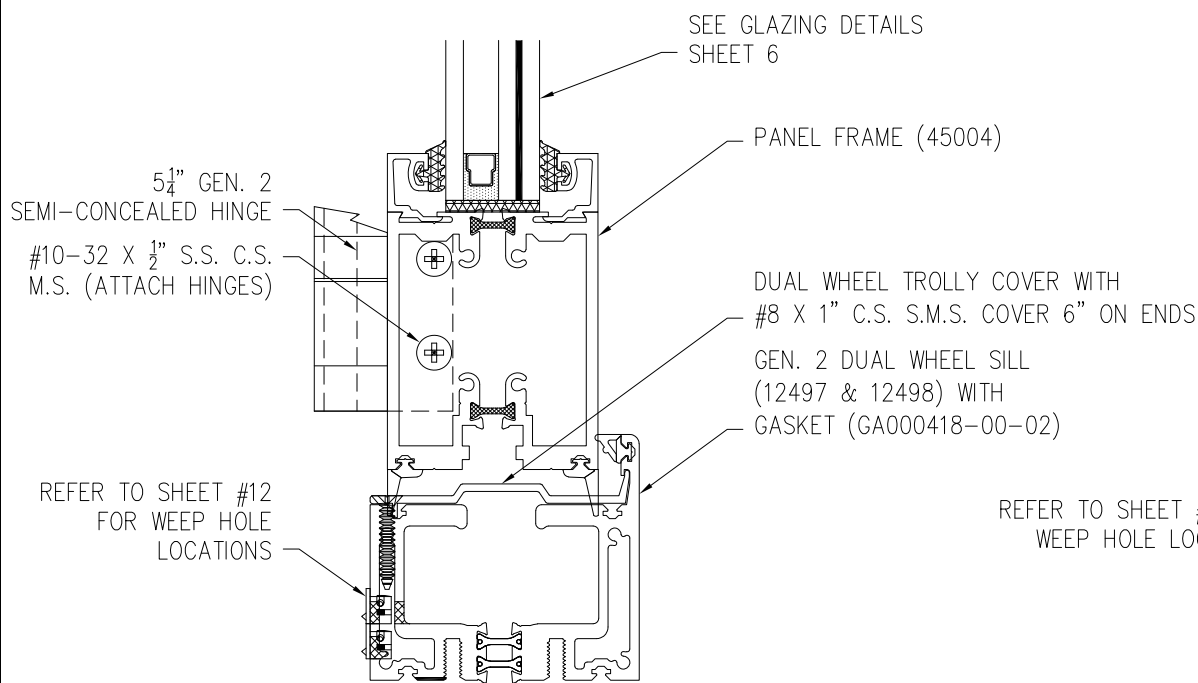
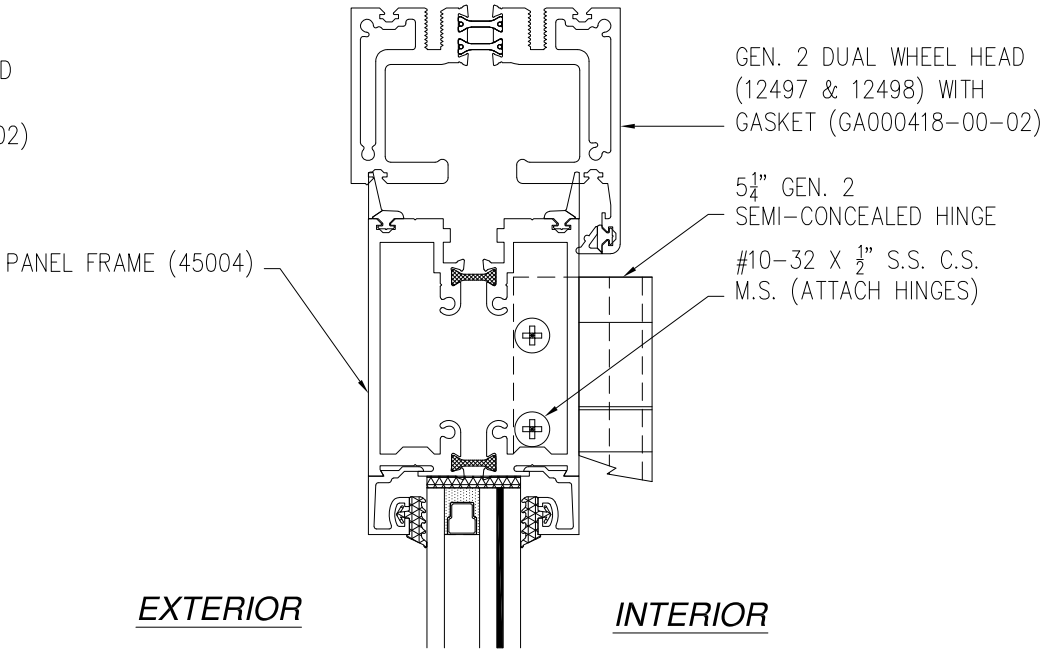
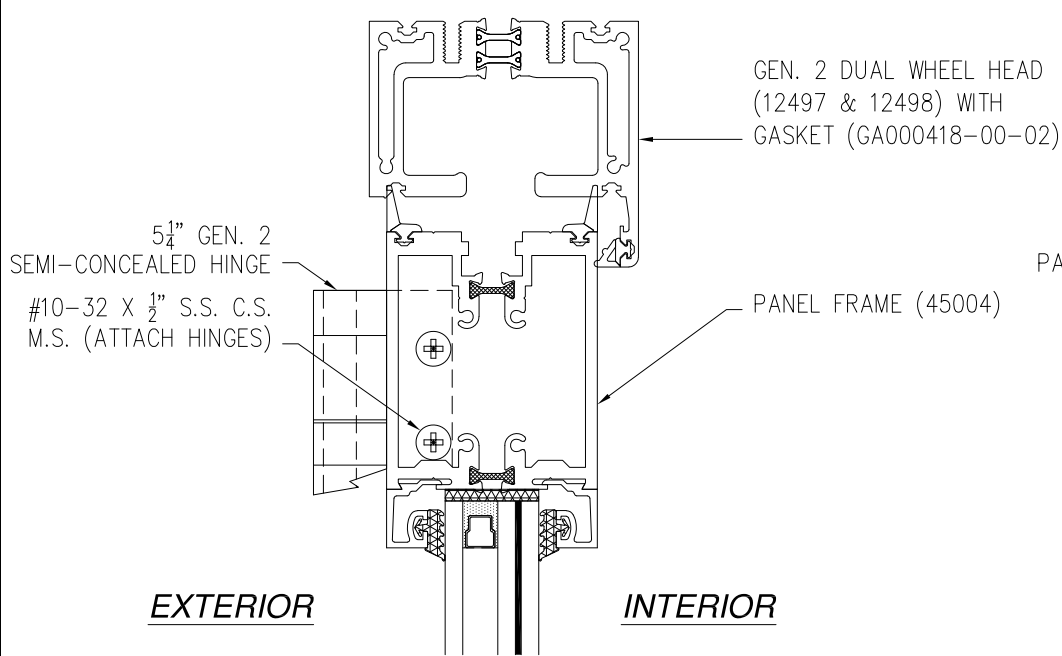
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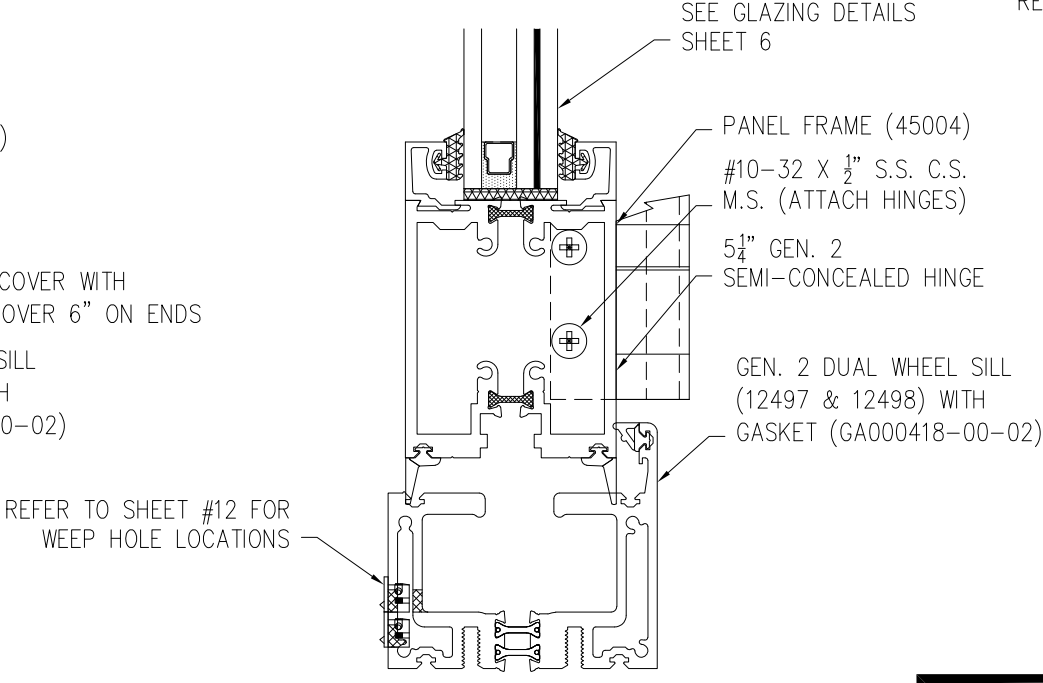
Luis R. Lomas P.E.
FL No.: 62514

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FOR INSTALLATION DETAILS REFER TO SHEETS 9 - 11

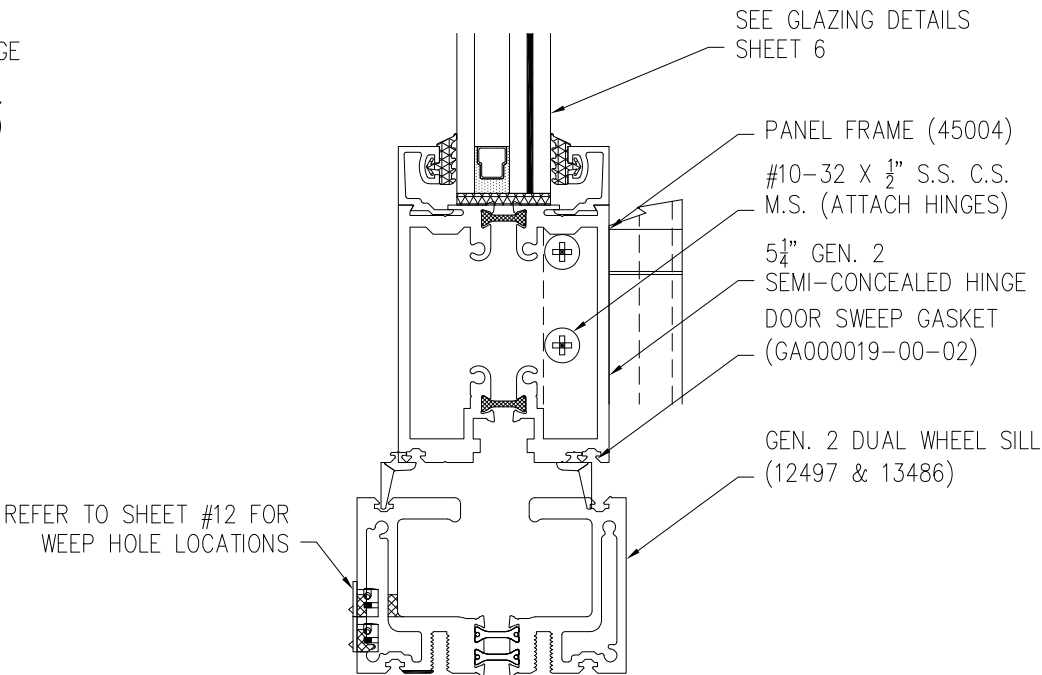
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G	REVISED SEALS AND ANCHORS	11/30/2023	R.L.



VERTICAL CROSS SECTION
DRY GLAZED



VERTICAL CROSS SECTION
DRY GLAZED



VERTICAL CROSS SECTION
FLUSH SILL

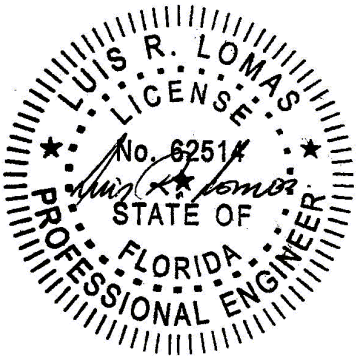
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT - HVHZ
VERTICAL CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 4 OF 13

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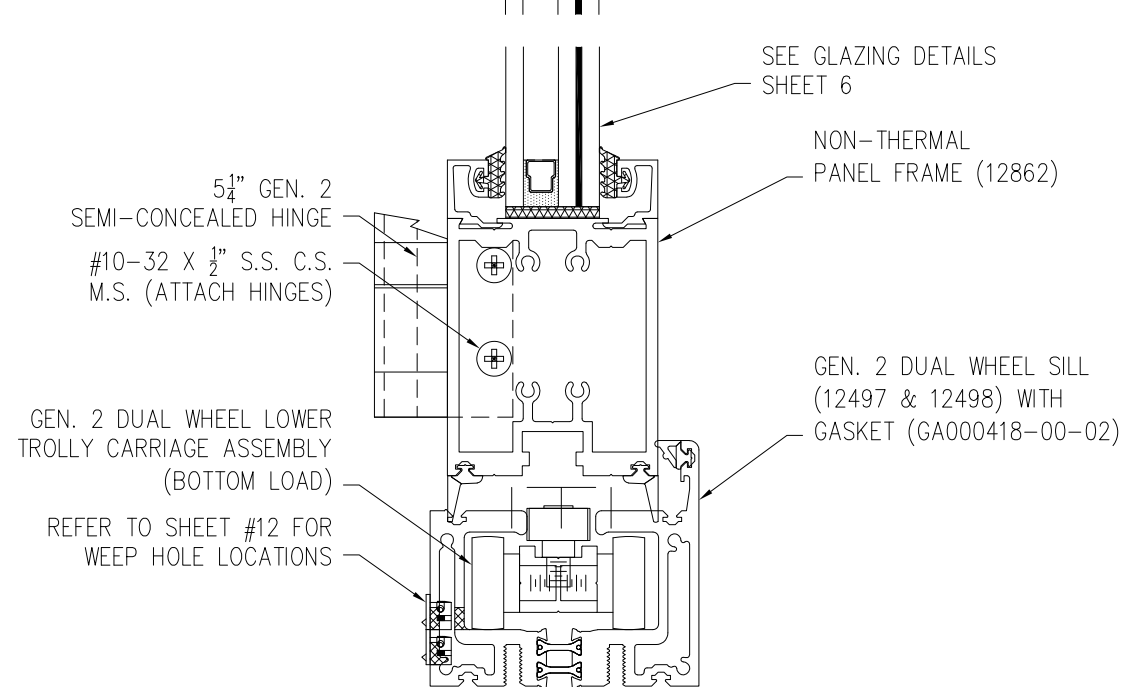
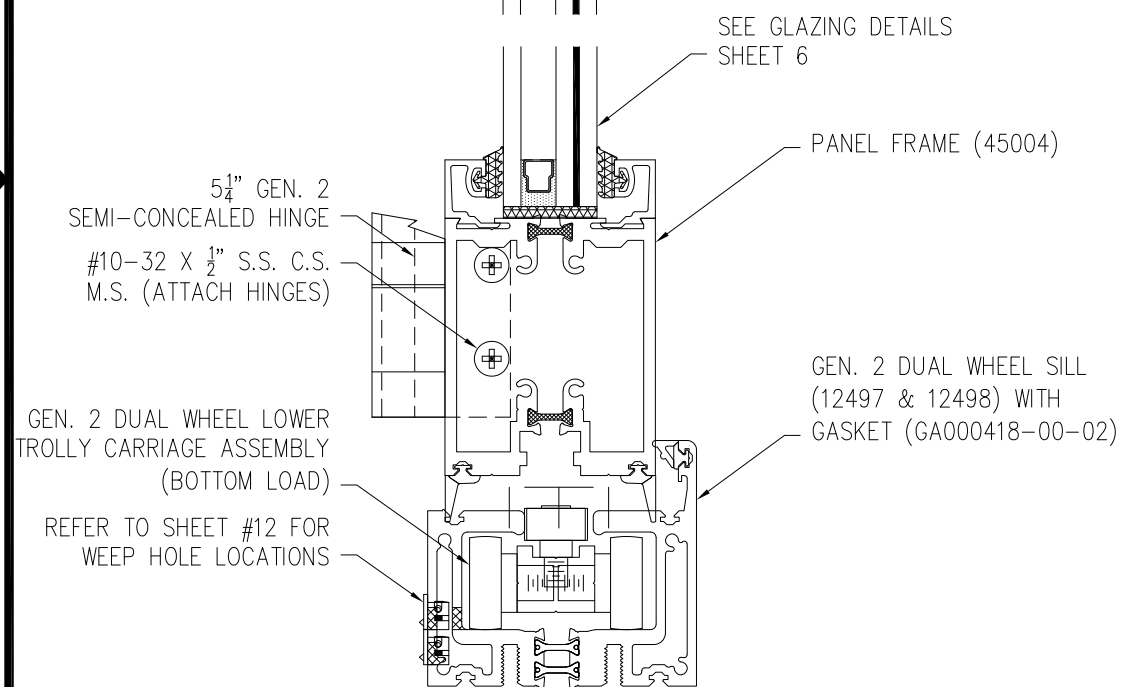
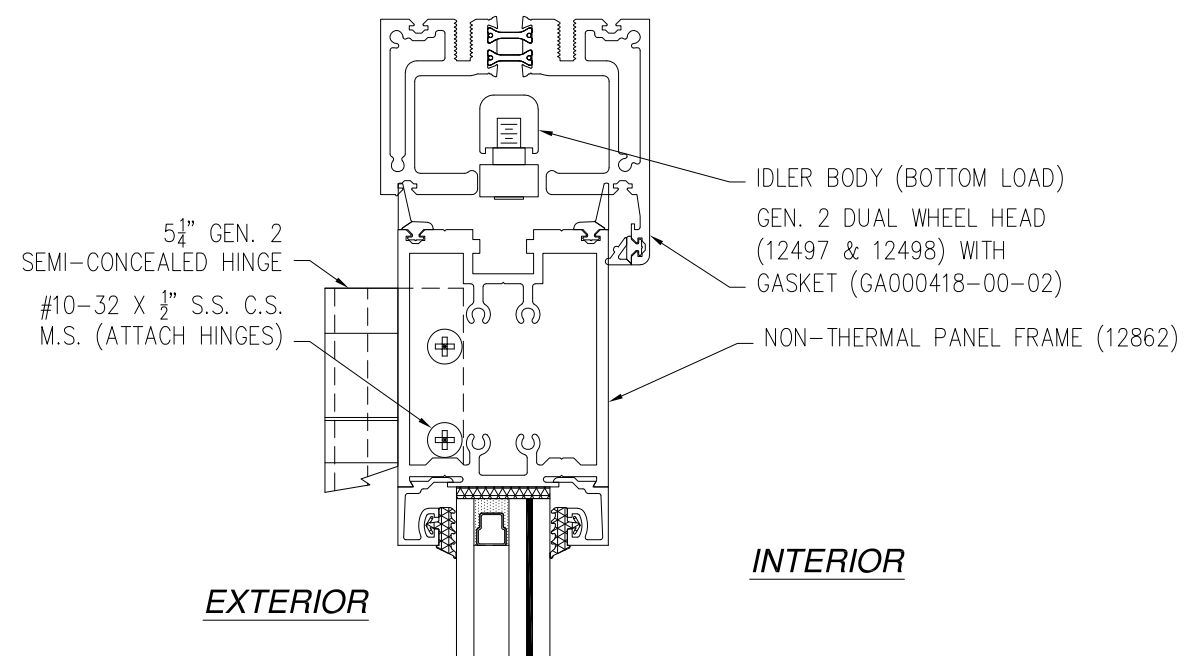
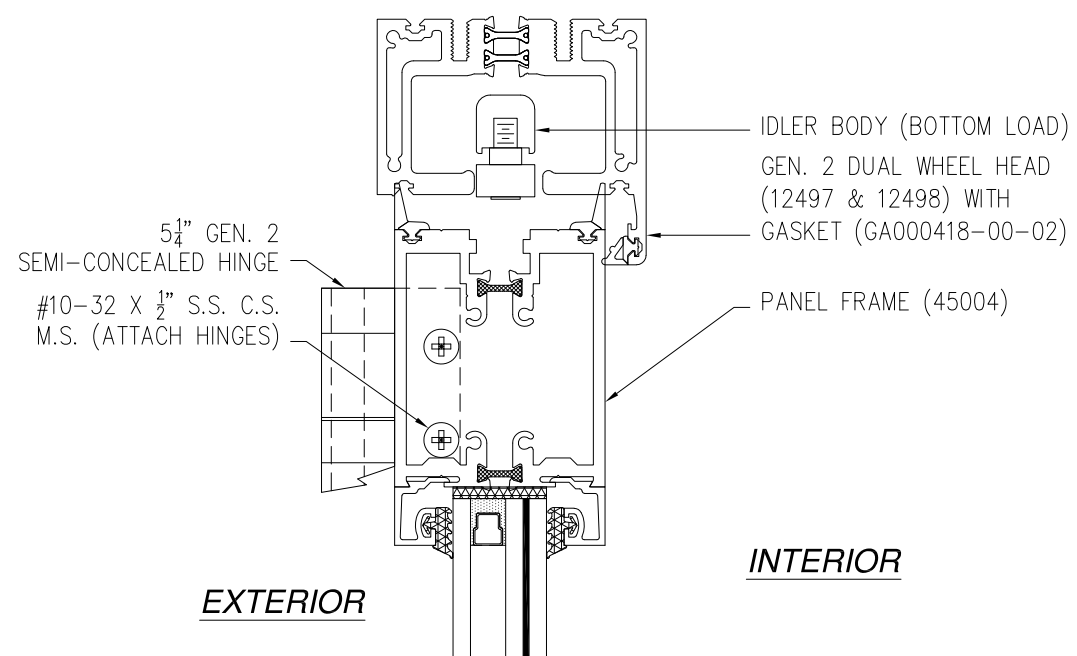
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VERTICAL CROSS SECTION
DRY GLAZED BOTTOM LOAD

VERTICAL CROSS SECTION
WITH NON-THERMAL RAILS

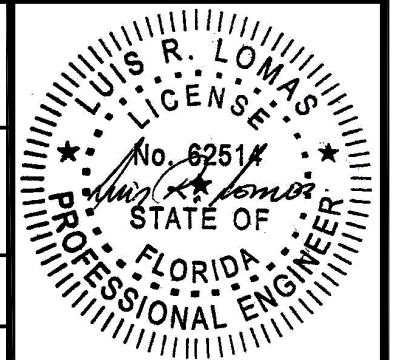
SOLAR INNOVATIONS, INC.
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT - HVHZ
VERTICAL CROSS SECTION

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 5 OF 13

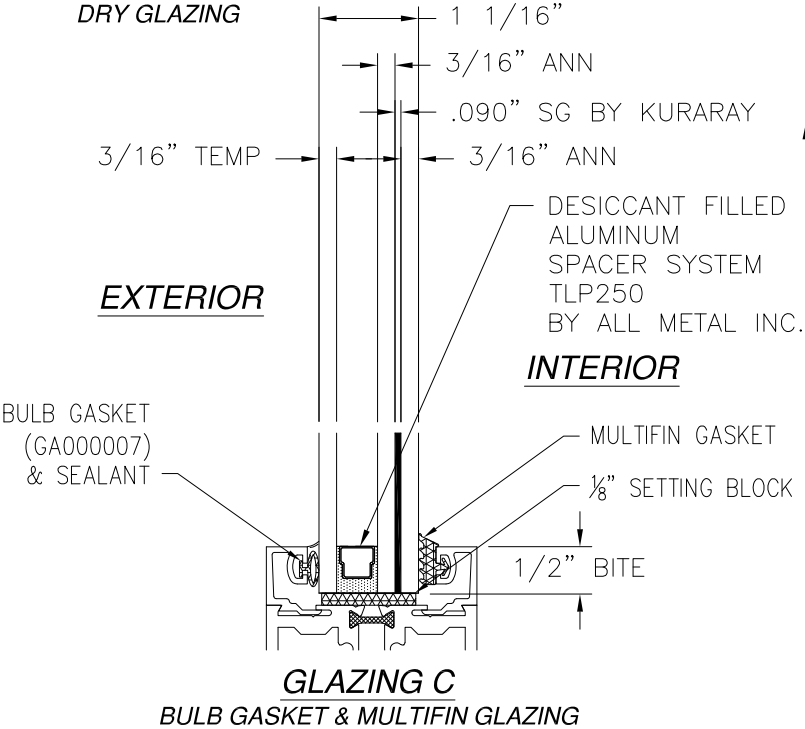
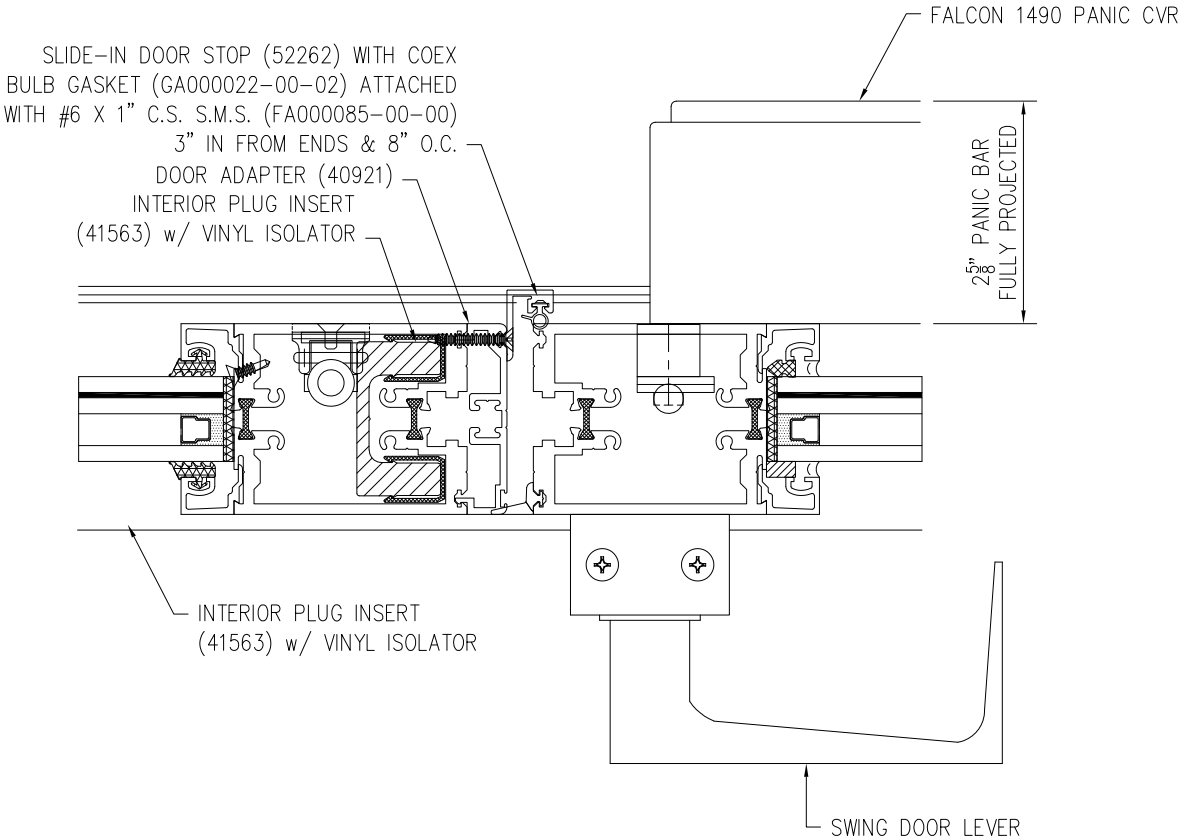
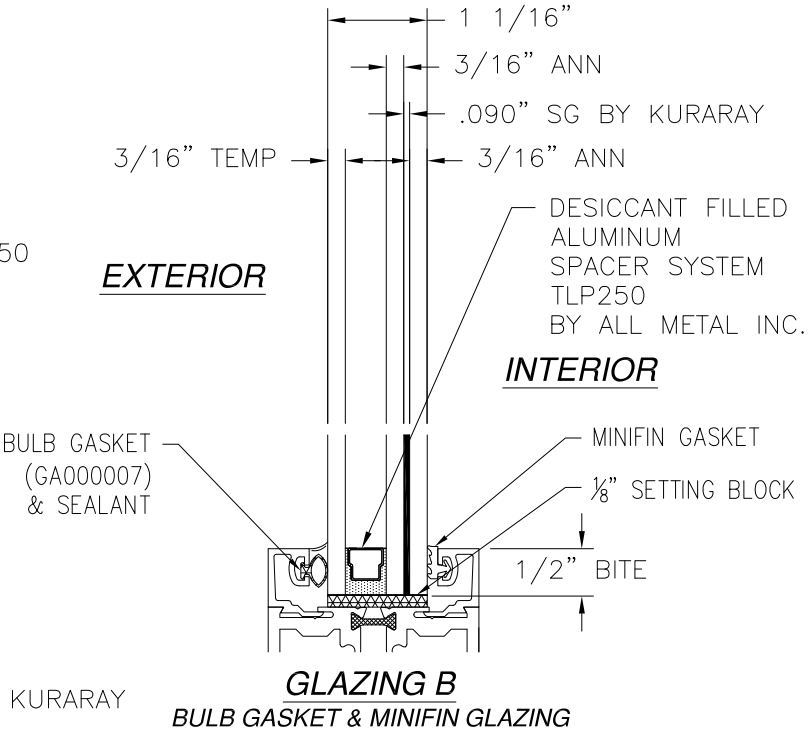
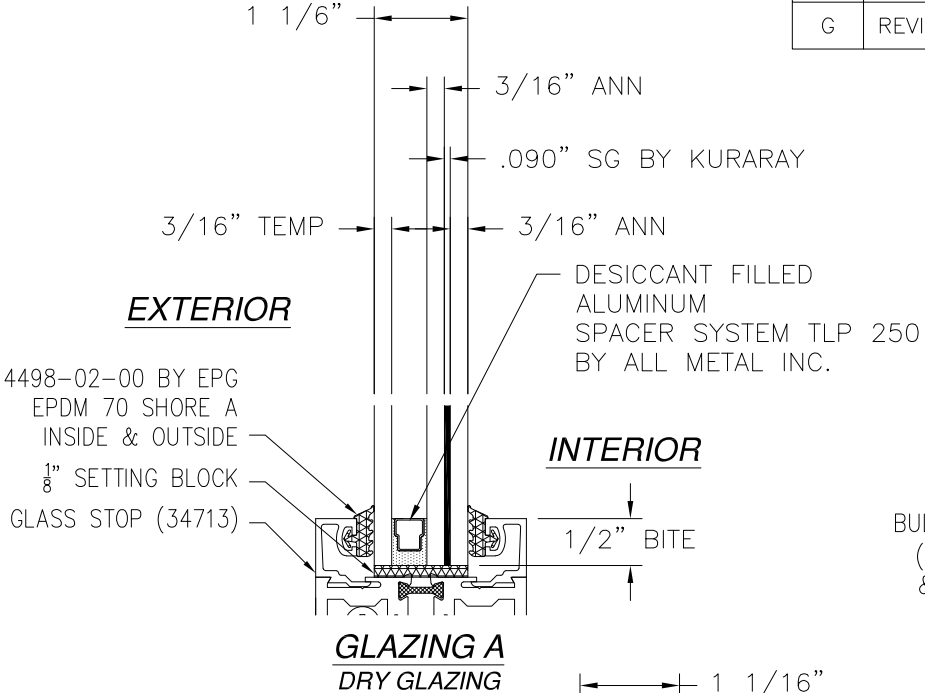
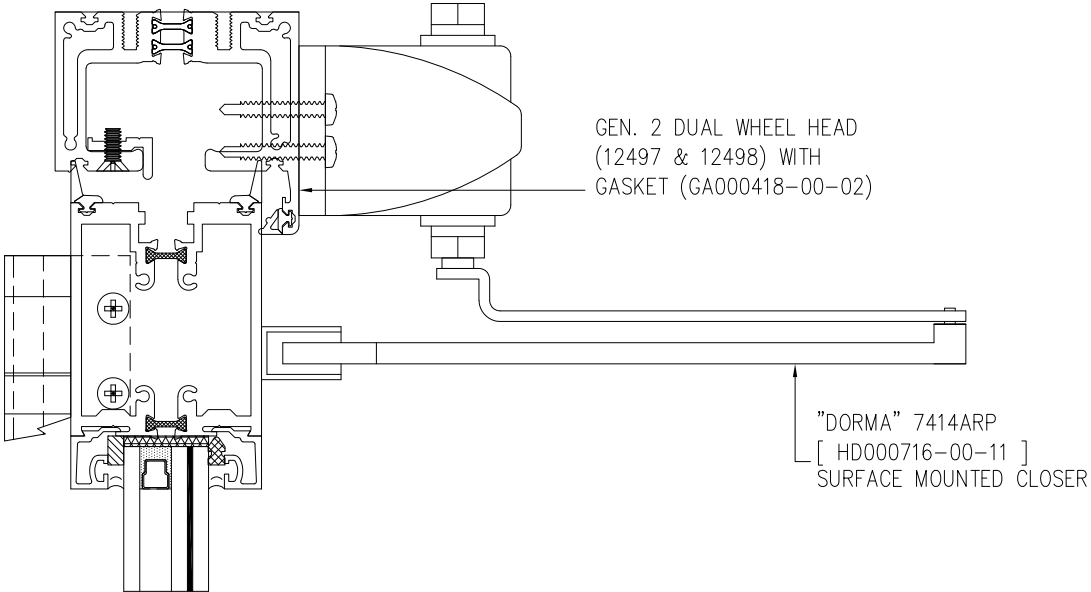
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PANIC BAR DETAILS

SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
PANIC BAR & GLAZING DETAILS

DRAWN: V.L.

DWG NO. 08-01795

REV G

SCALE NTS

DATE 10/12/2012

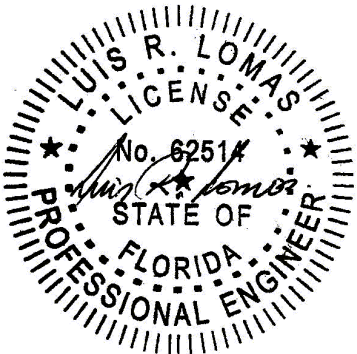
SHEET 6 OF 13

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

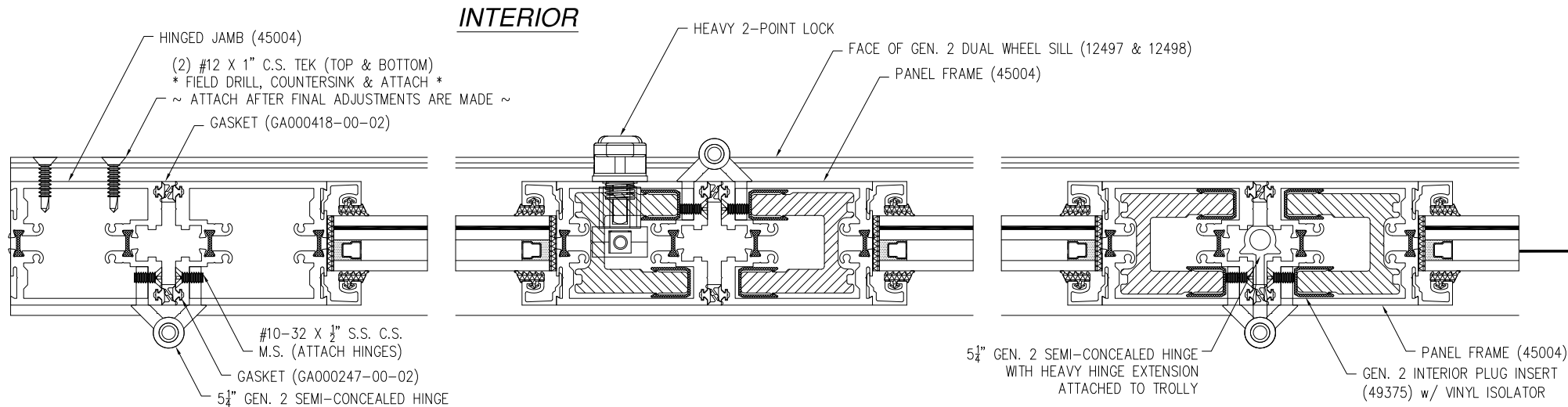
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023

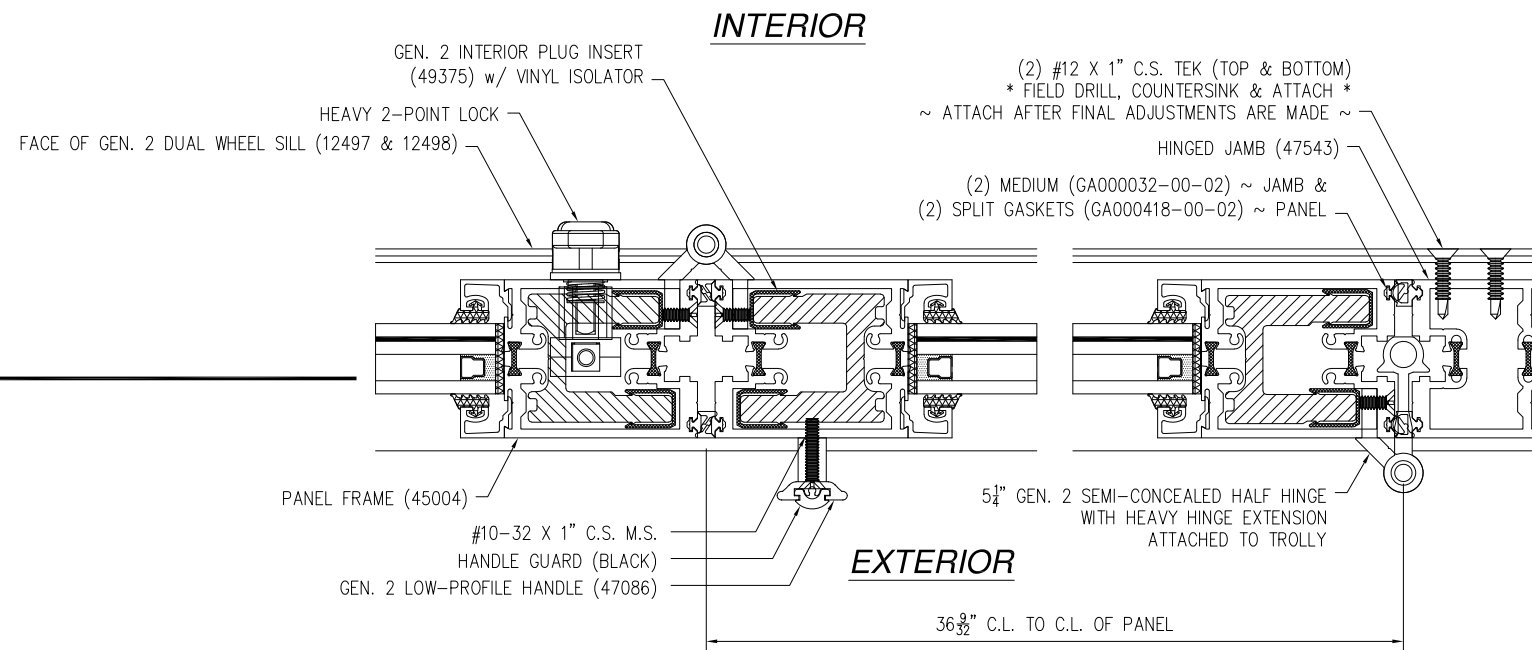


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EXTERIOR



HORIZONTAL CROSS SECTION

**FOR ILLUSTRATION PURPOSES ONLY
FOR INSTALLATION DETAILS
REFER TO SHEETS 9 - 11**

SOLAR INNOVATIONS, INC.

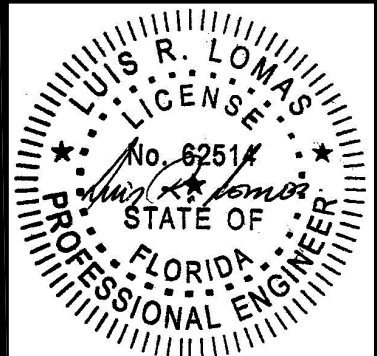
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT - HVHZ
HORIZONTAL CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 7 OF 13

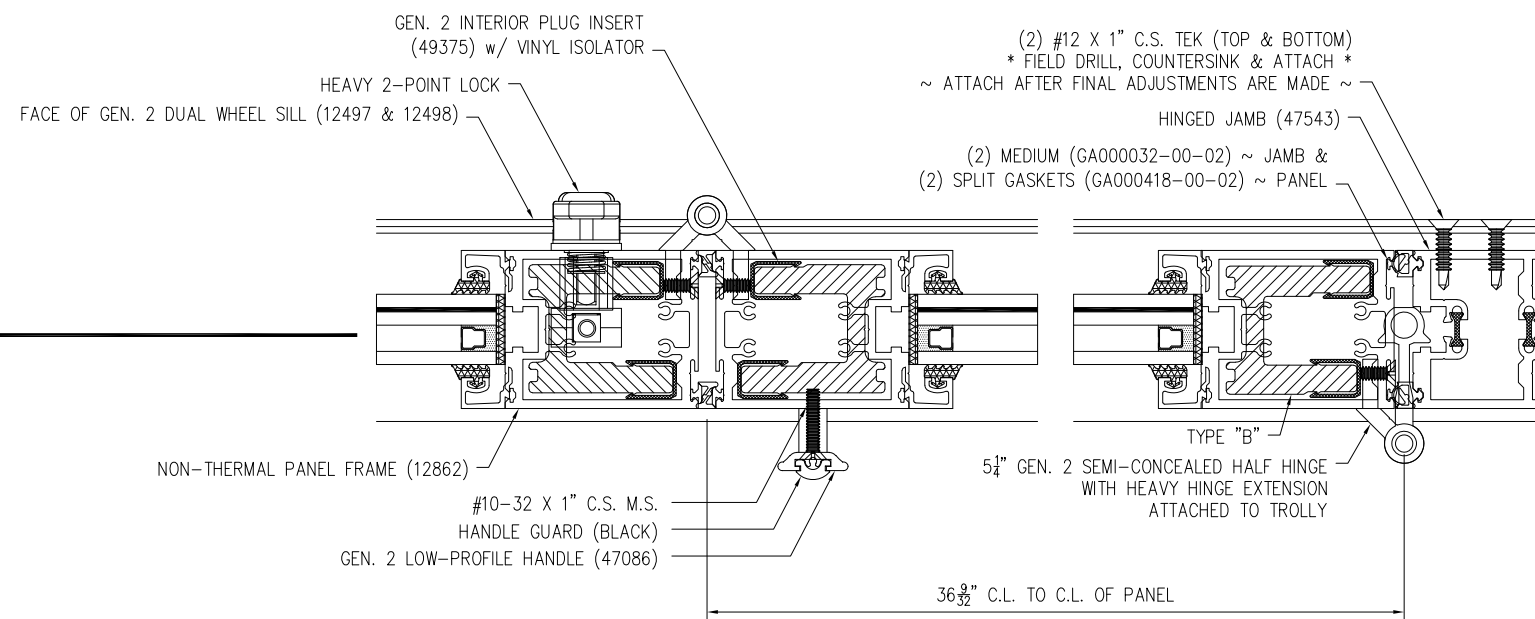
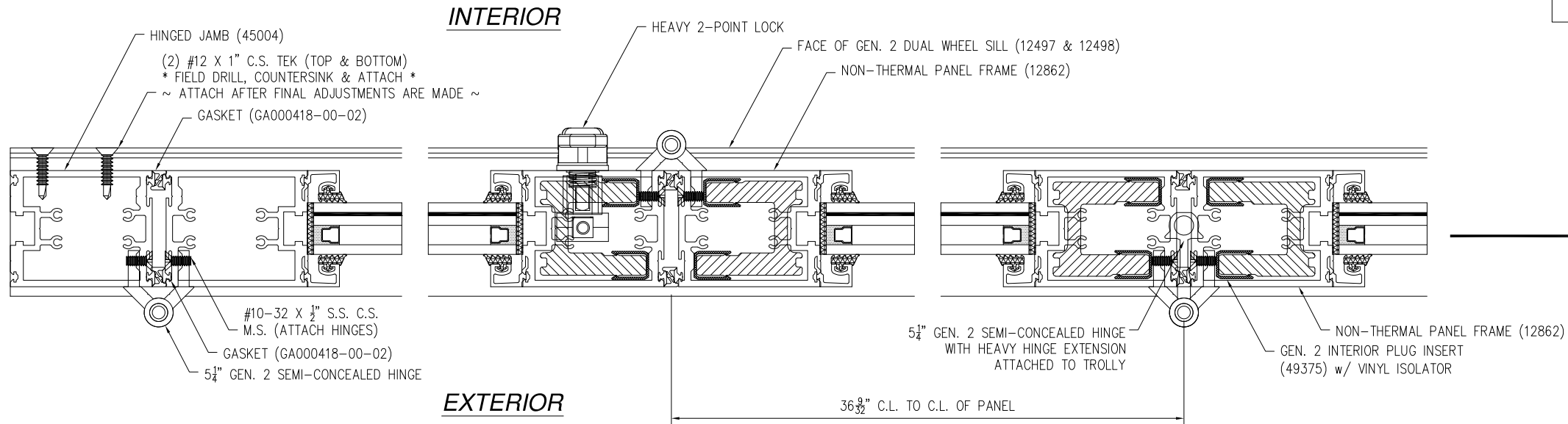
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**HORIZONTAL CROSS SECTION
WITH NON-THERMAL RAILS**

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FOR INSTALLATION DETAILS
REFER TO SHEETS 9 - 11**

SOLAR INNOVATIONS, INC.

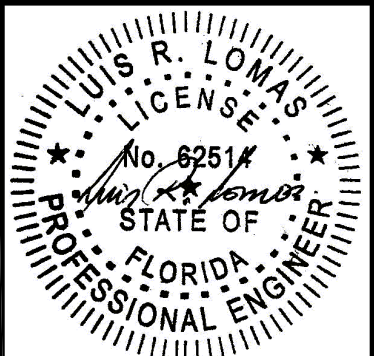
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT - HVHZ
HORIZON CROSS SECTIONS (NON-THERMAL PANELS)

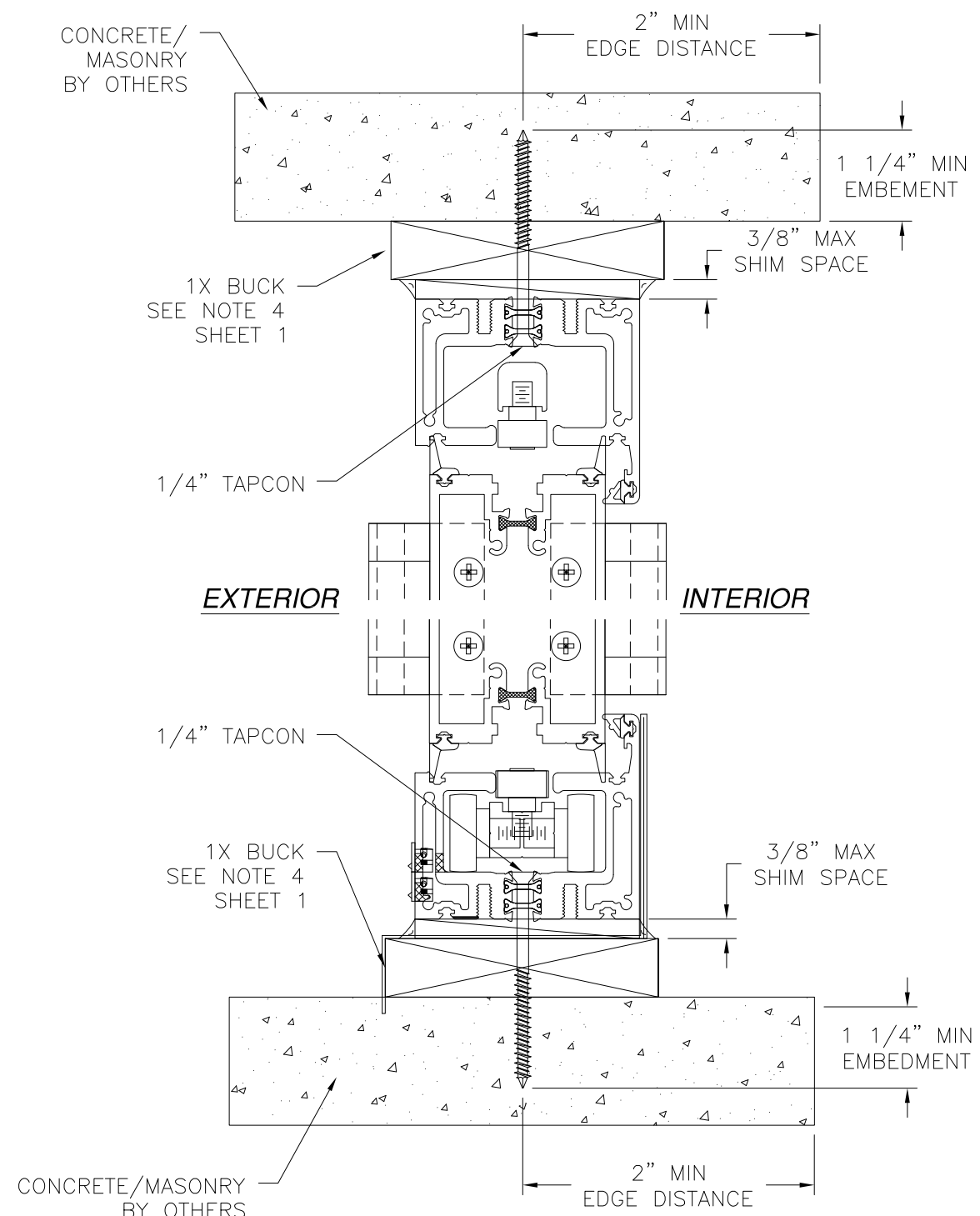
DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 8 OF 13

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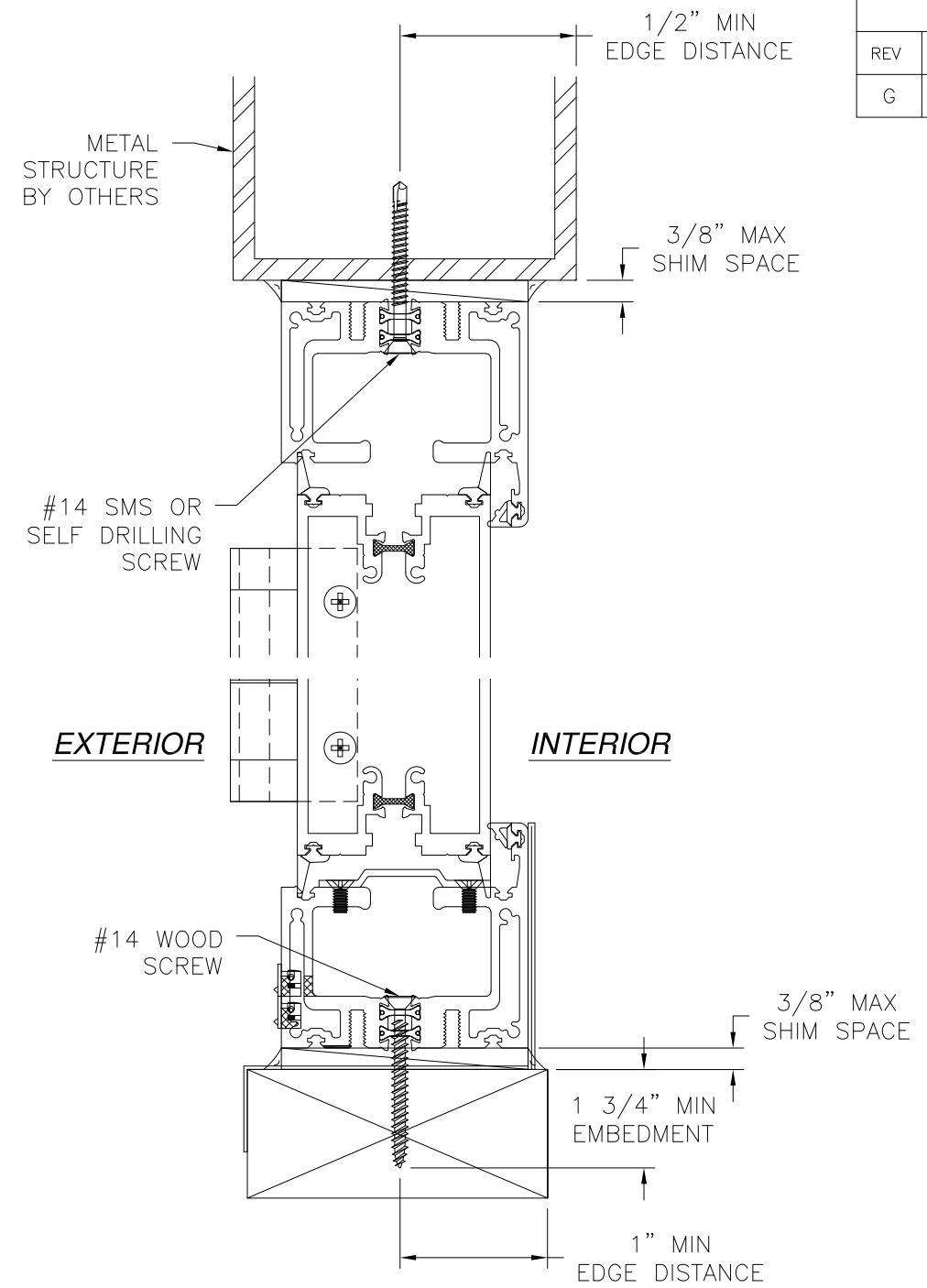


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FL No.: 62514



VERTICAL CROSS SECTION
CONCRETE/MASONRY 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



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

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

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 9 OF 13

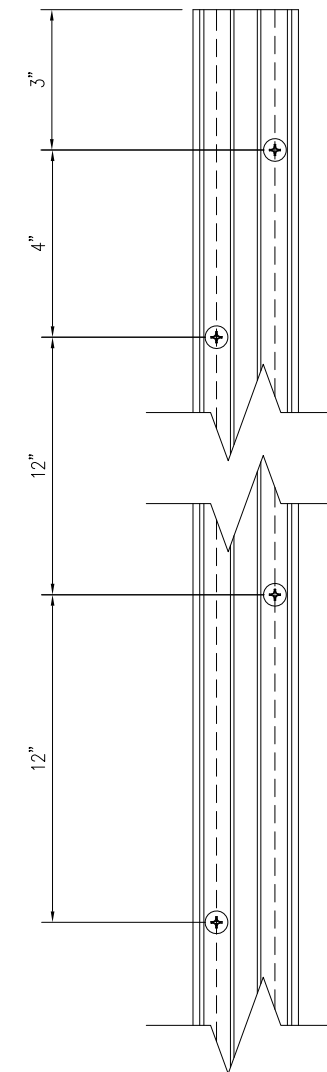
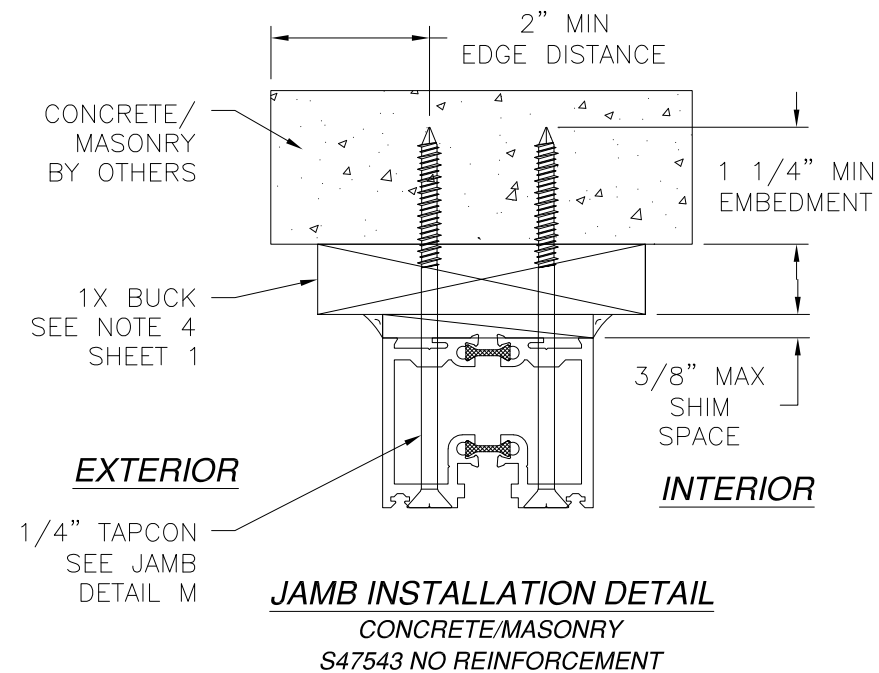
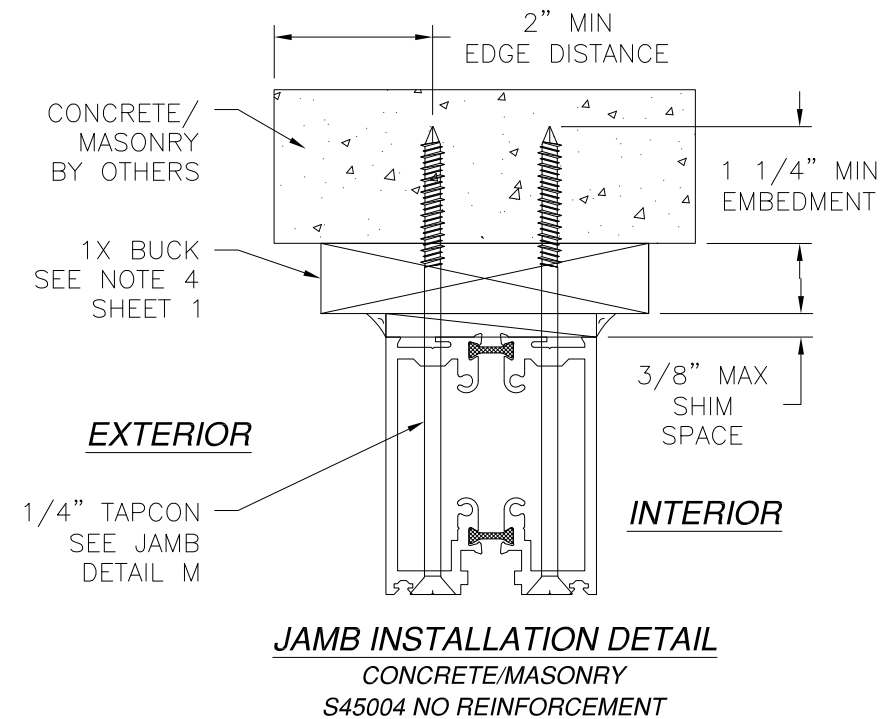
L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

SIGNED: 12/12/2023

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

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED SEALS AND ANCHORS	11/30/2023	R.L.



JAMB INSTALLATION DETAIL M
JAMB WITHOUT REINFORCEMENT

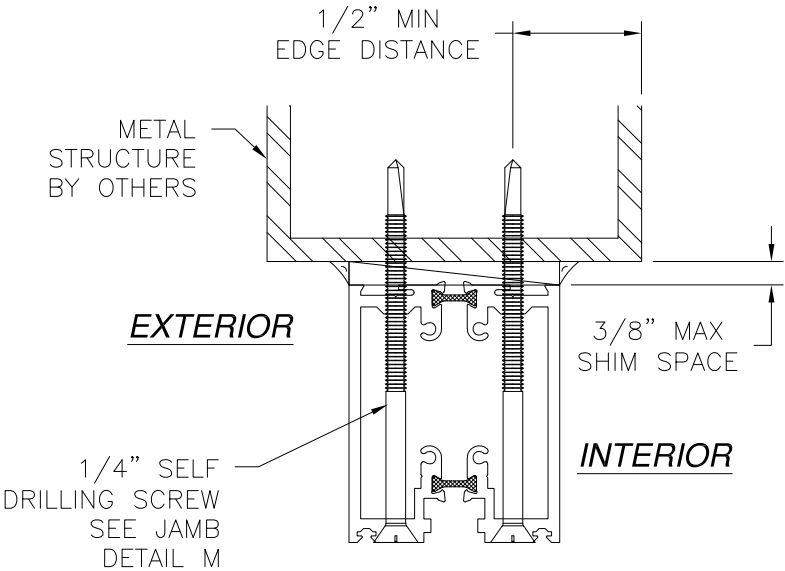
NOTES:
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS,
NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE
DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 12/12/2023

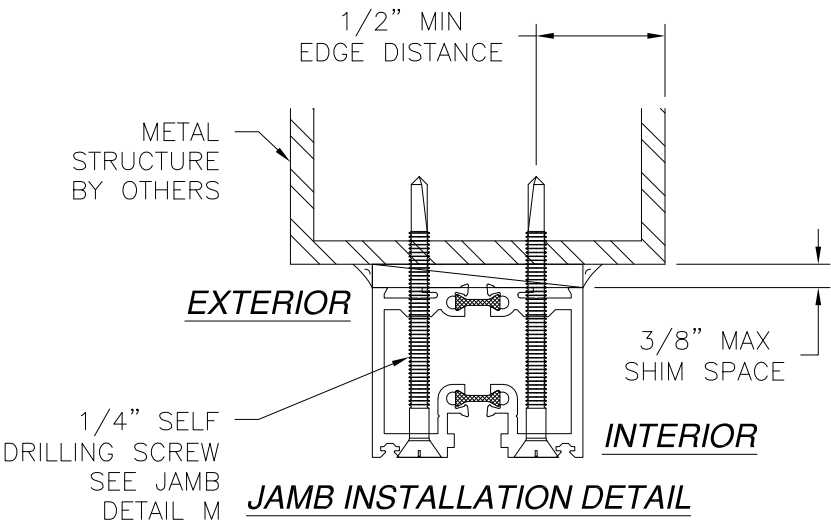
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL IMPACT - HVHZ INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 10 OF 13
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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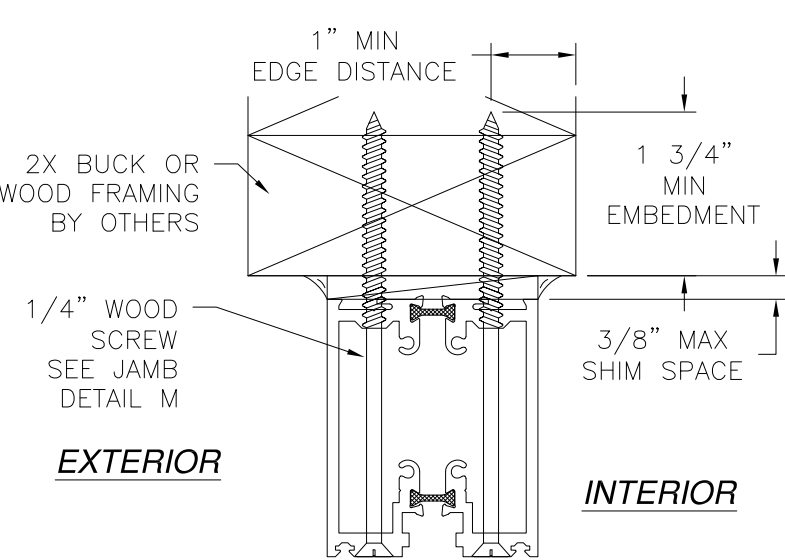
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED SEALS AND ANCHORS	11/30/2023	R.L.



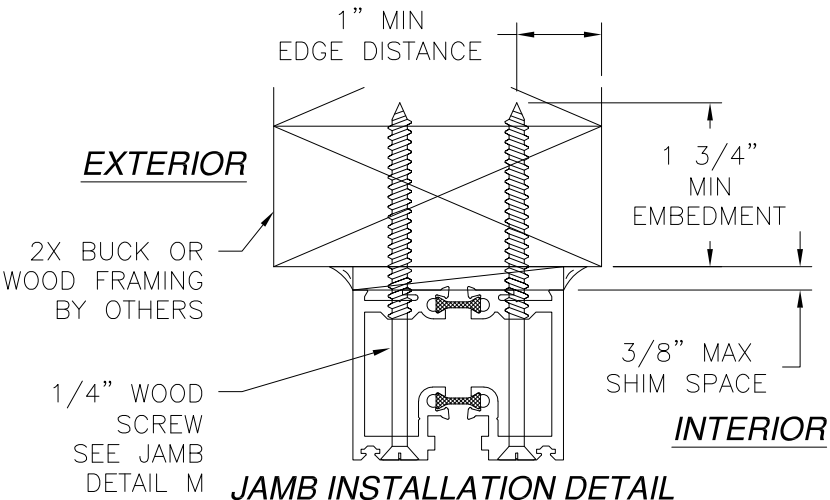
JAMB INSTALLATION DETAIL
METAL STRUCTURE
S45004 NO REINFORCEMENT



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

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

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
INSTALLATION DETAILS

DRAWN:
V.L.

DWG NO.
08-01795

REV
G

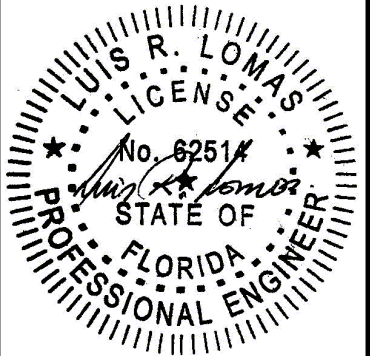
SCALE
NTS

DATE
10/12/2012

SHEET
11 OF 13

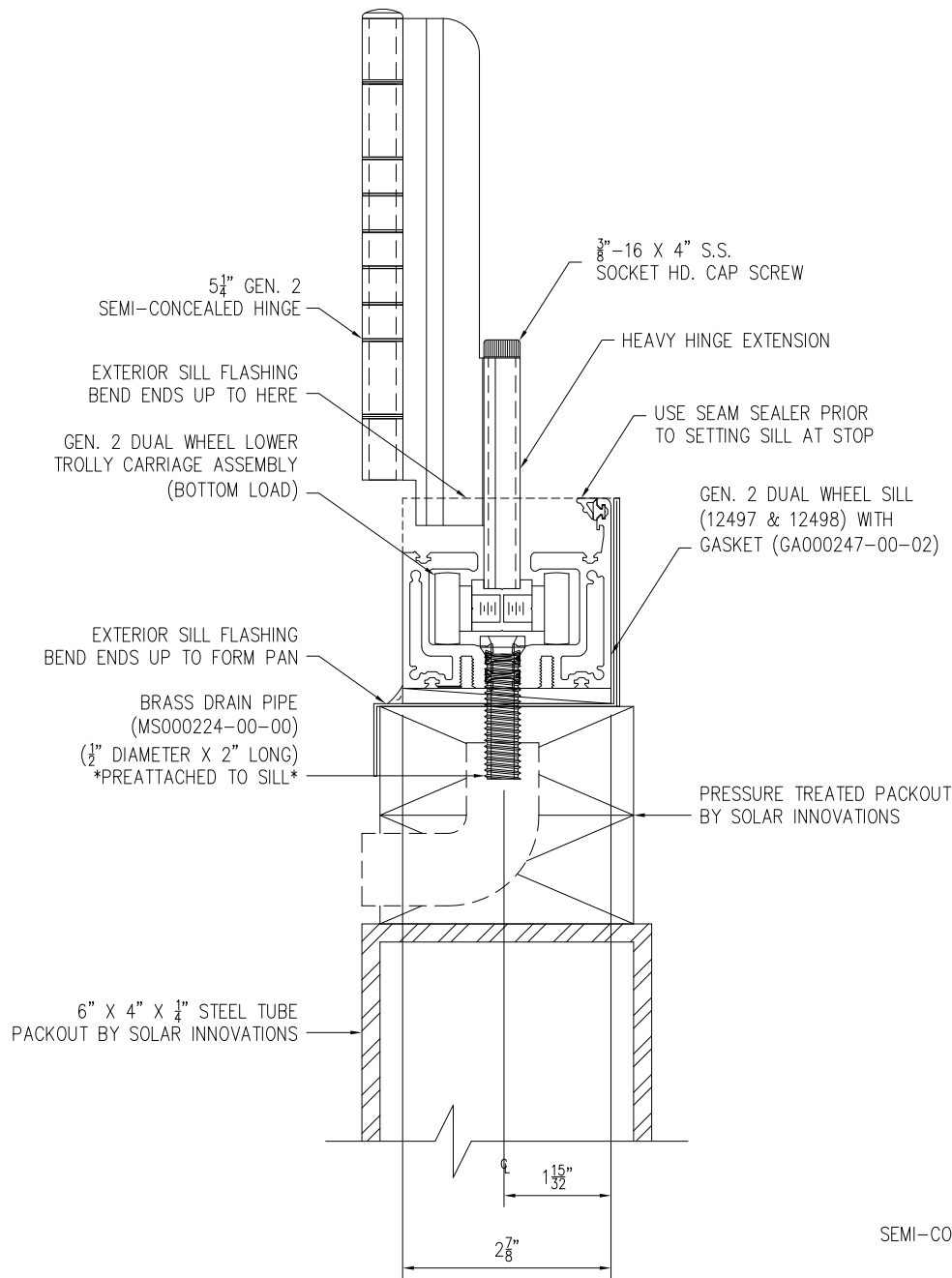
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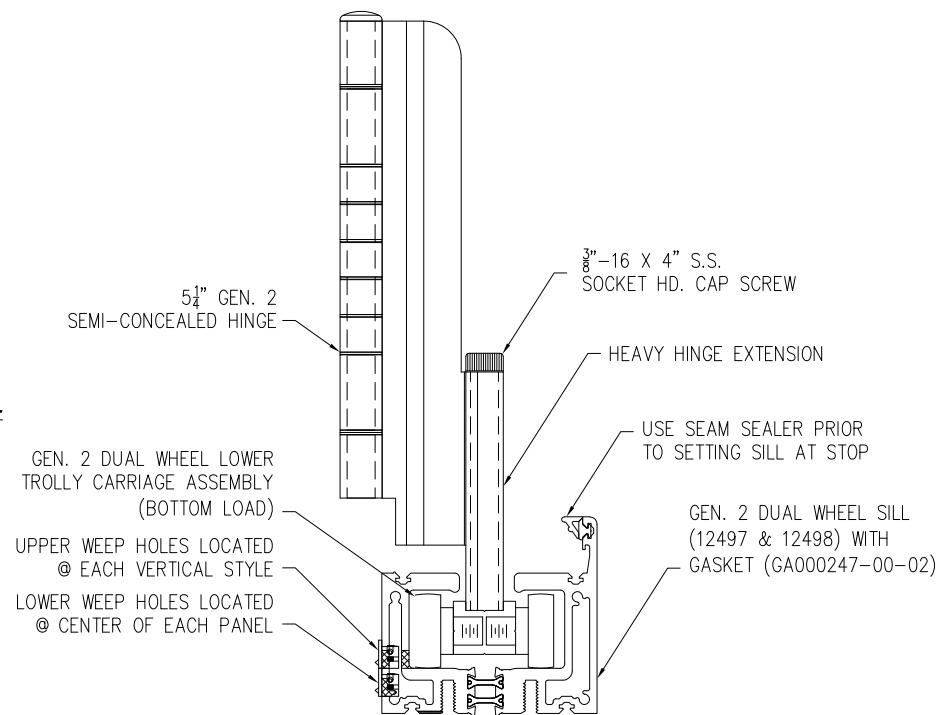


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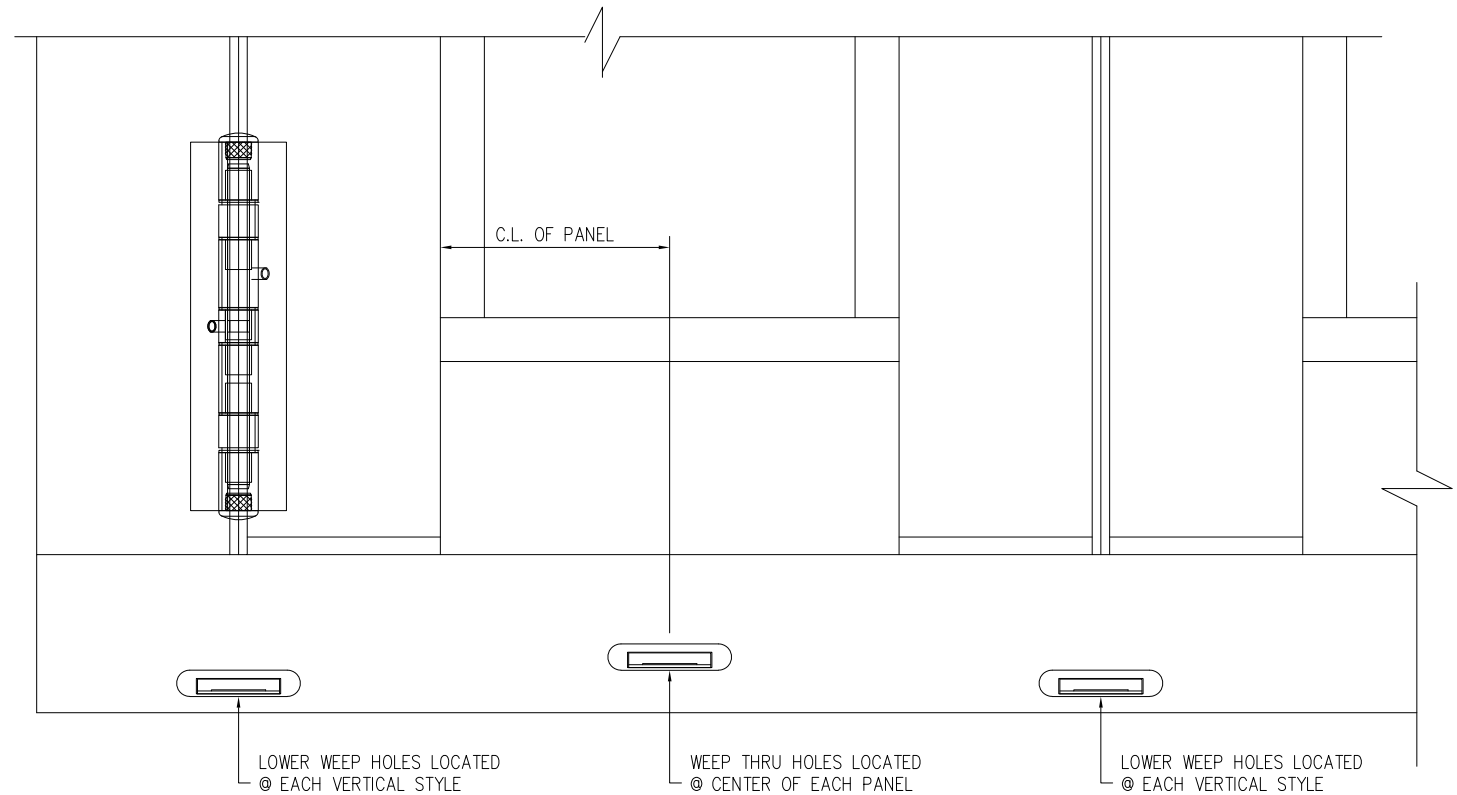
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
G	REVISED SEALS AND ANCHORS	11/30/2023	R.L.



DRAIN PIPE AND HINGE EXTENSION DETAIL



WEEP HOLE AND HINGE EXTENSION DETAIL



SOLAR INNOVATIONS, INC.

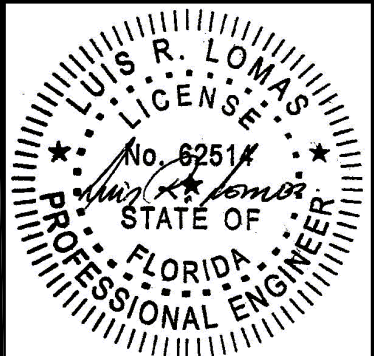
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT - HVHZ
WEEP DETAILS

DRAWN: V.L.	DWG NO. 08-01795	REV G
SCALE NTS	DATE 10/12/2012	SHEET 12 OF 13

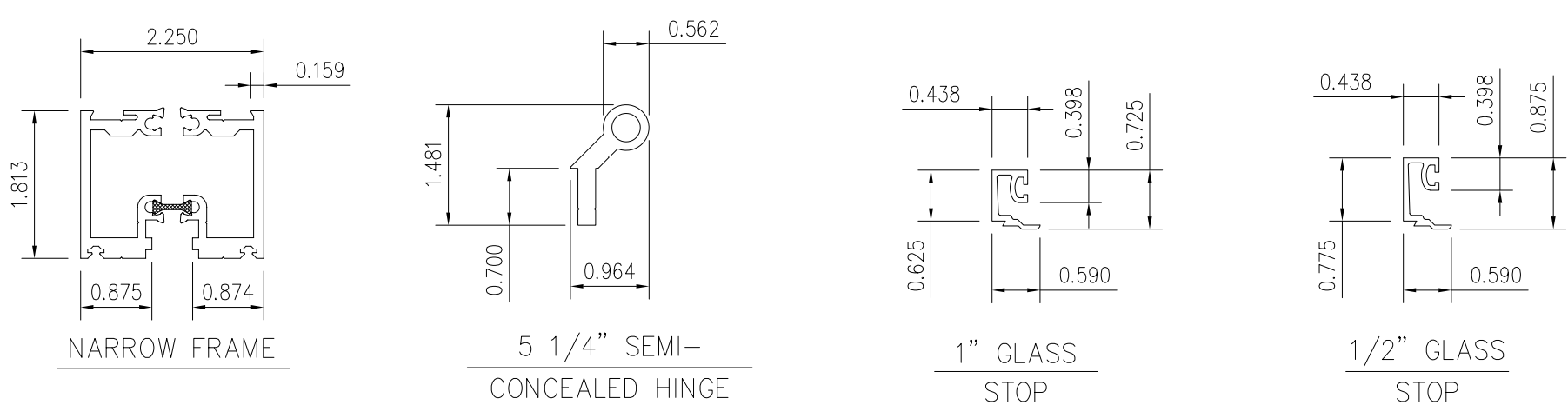
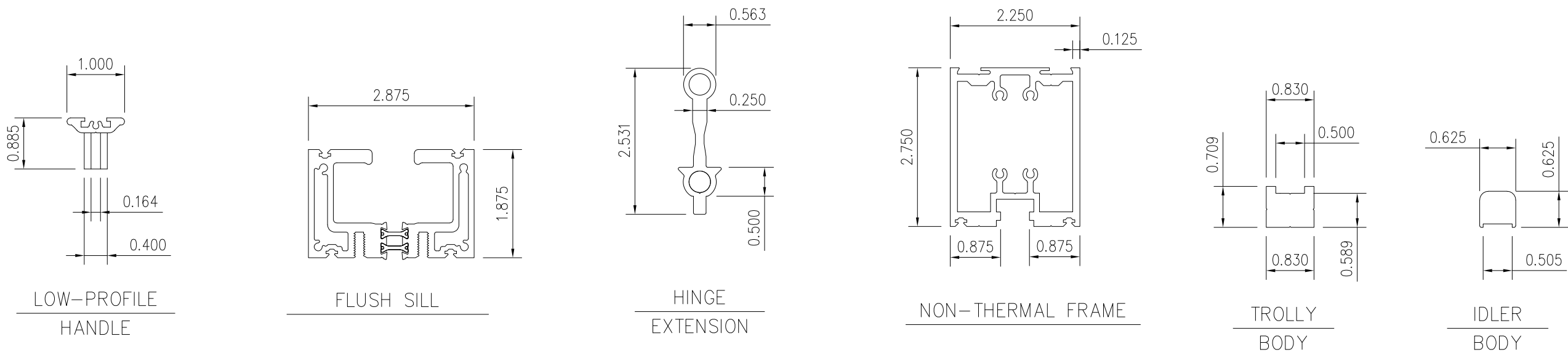
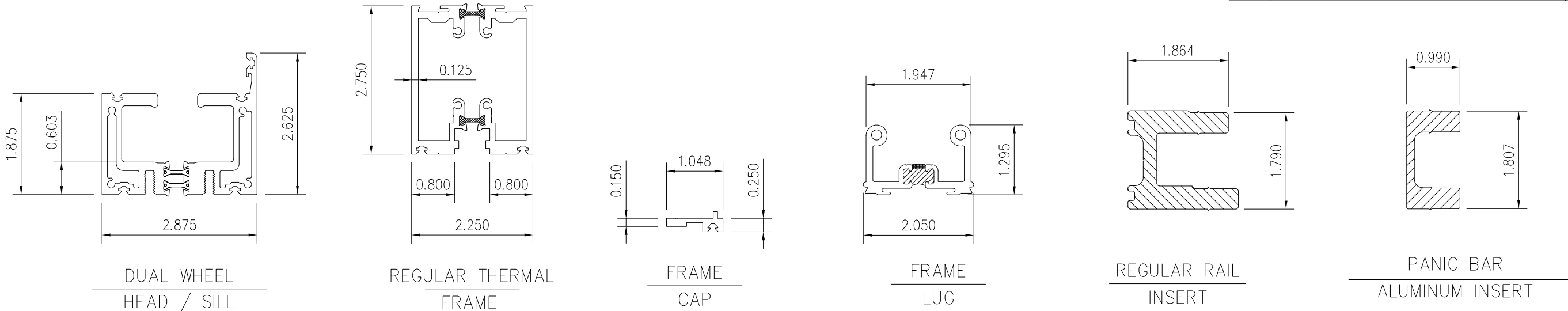
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REVISIONS			
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G	REVISED SEALS AND ANCHORS	11/30/2023	R.L.



SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 FGW 3X8 PANEL OUTFOLD ALL WALL
IMPACT – HVHZ
COMPONENTS

DRAWN:
V.L.

DWG NO.
08-01795

REV
G

SCALE
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DATE
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SHEET
13 OF 13

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