

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED DETAILS AND COMPONENTS	12/07/2023	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.

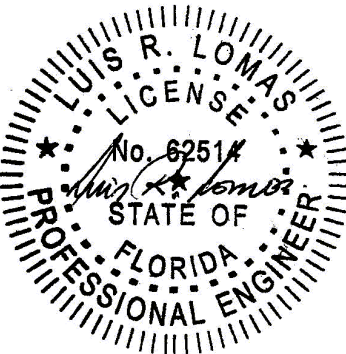
14.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

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

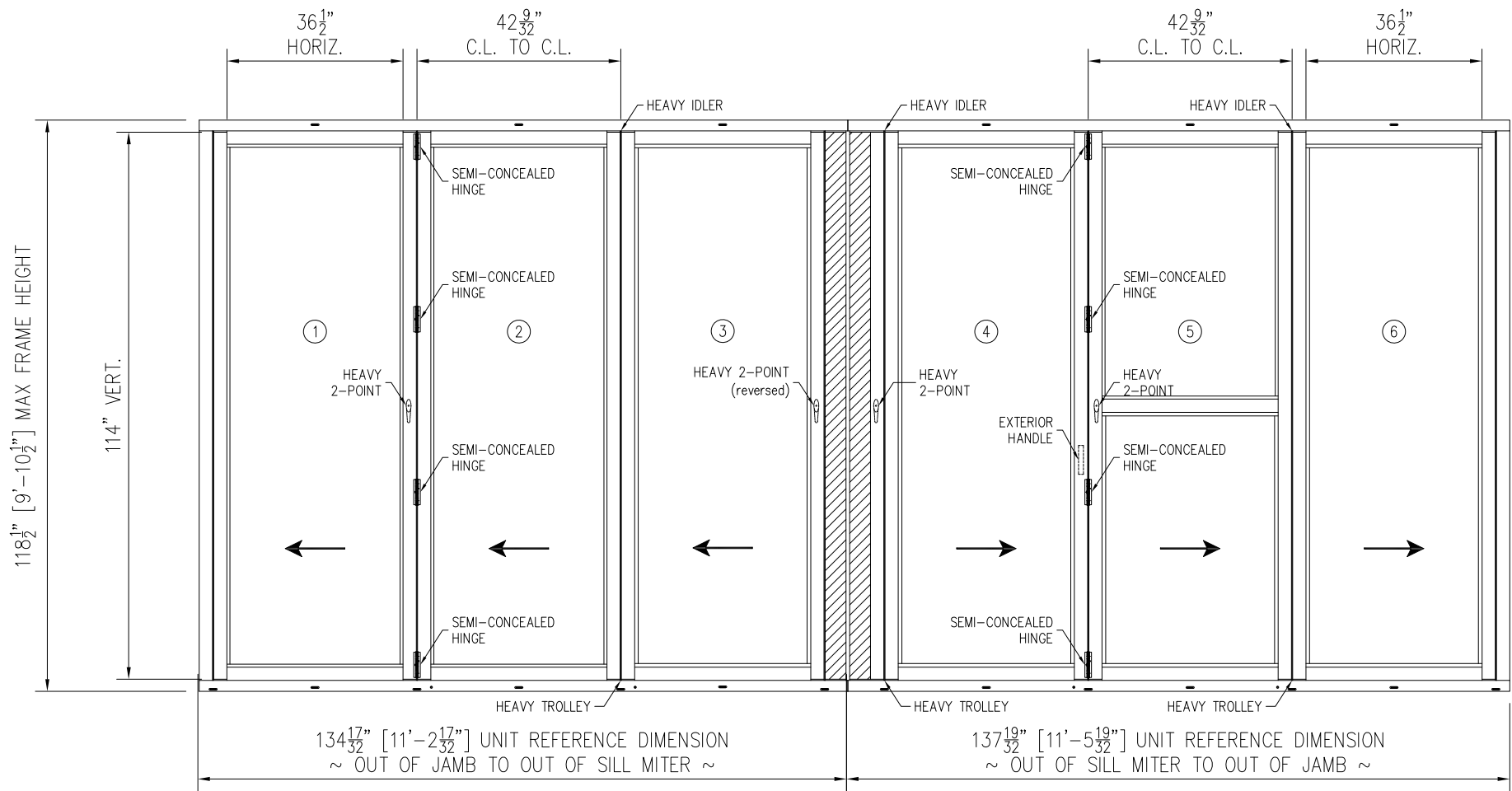
SIGNED: 12/13/2023

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10	WEEP DETAILS
11	COMPONENTS

SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER NO POST STANDARD SILL NON-IMPACT NOTES		
DRAWN: V.L.	DWG NO. 08-01963	REV D
SCALE NTS	DATE 04/22/13	SHEET 1 OF 11
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 3.5X9.5 PANEL 90° CORNER NO-POST - STANDARD SILL

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.

DESIGN PRESSURE RATING	IMPACT RATING
+90.0/-80.0PSF	NONE

WHERE WATER RESISTANCE IS NOT REQUIRED
SEE CHART #1, SHEET 3

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

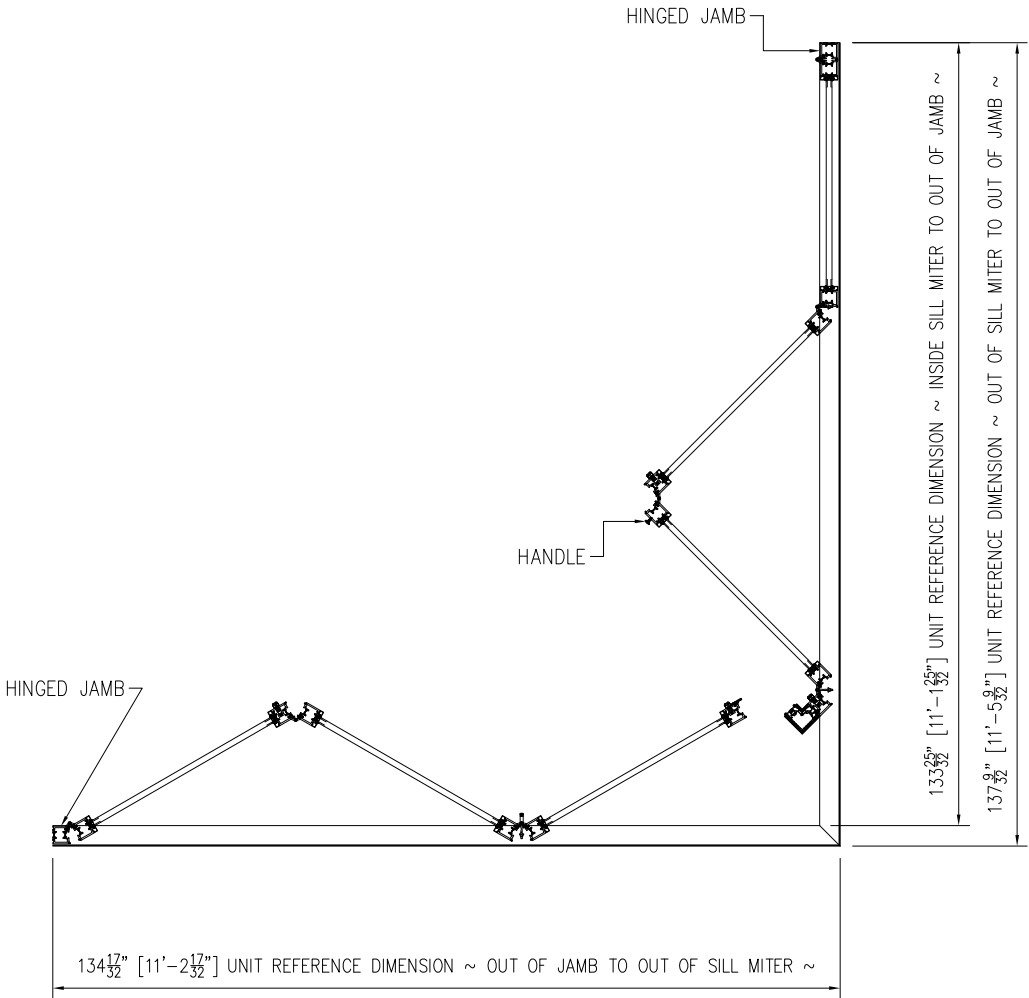
WHERE WATER RESISTANCE IS REQUIRED
SEE CHART #2, SHEET 3

- NOTES:
- PANEL SIZE: 42 9/32" x 114"
 - D.L.O. SIZE: 36 1/2" x 107 1/4"

HARDWARE SCHEDULE

- A. SEMI-CONCEALED HINGE BY SOLAR INNOVATIONS
- B 2 POINT HANDLE & LOCK MS000487-XX BY SOLAR INNOVATIONS

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SERIES SI3000 FGW 3.5X9.5 PANEL 90° CORNER NO-POST - STANDARD SILL

PLAN VIEW

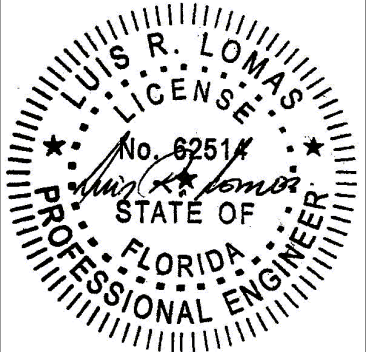
SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER
NO POST STANDARD SILL NON-IMPACT
ELEVATIONS

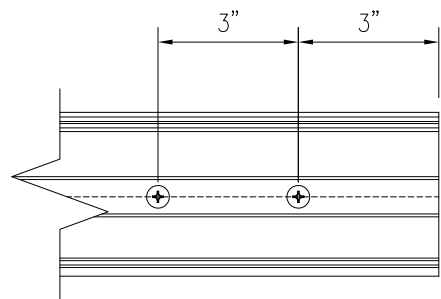
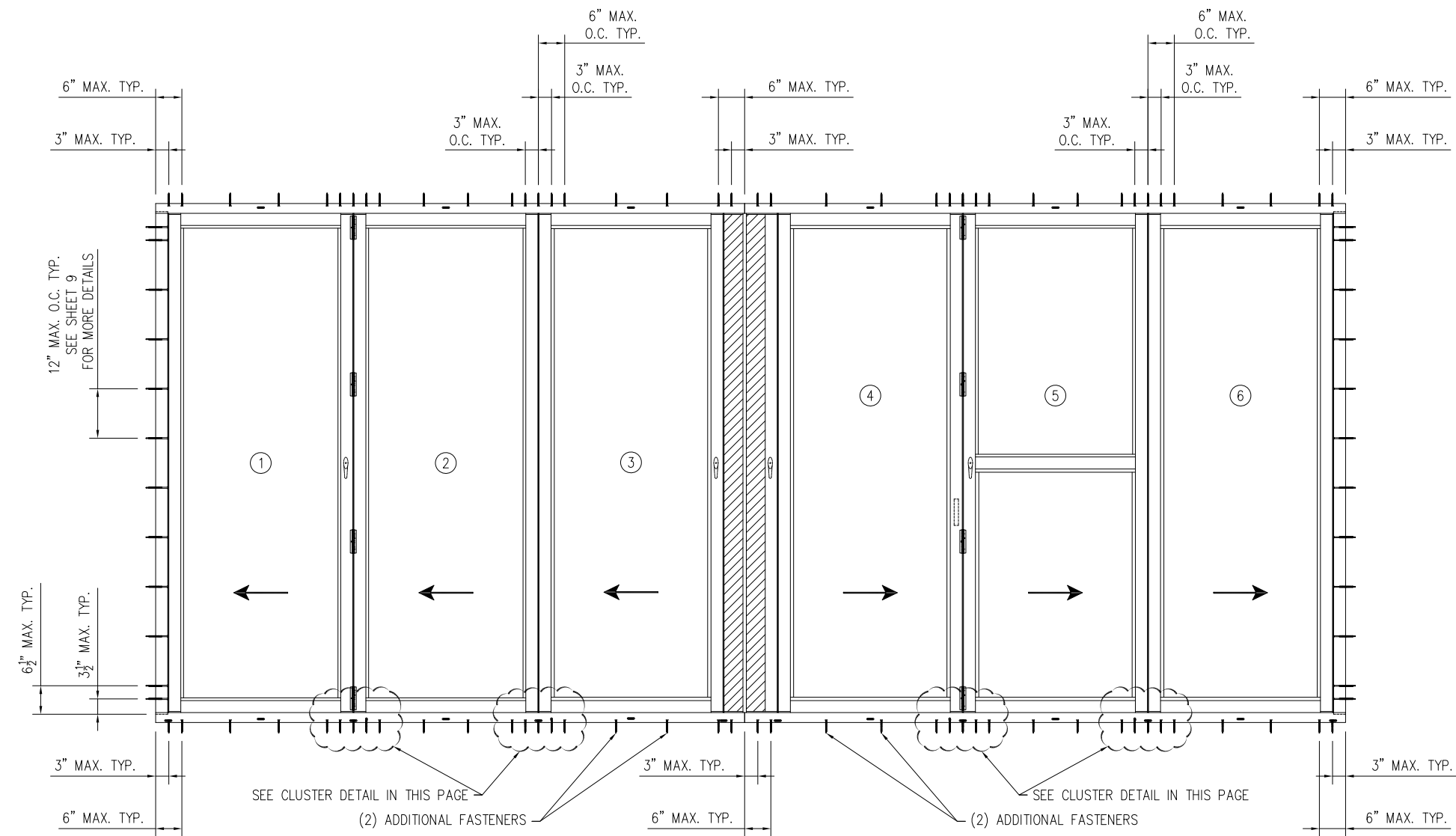
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SCALE NTS	DATE 04/22/13	SHEET 2 OF 11
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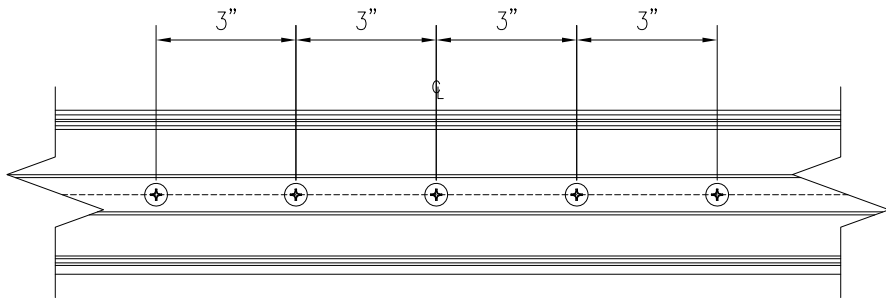


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SILL AND HEAD
END DETAIL



SILL AND HEAD
CLUSTER DETAIL

ANCHOR LAYOUT
APPLICABLE TO ALL CONFIGURATIONS.

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	135.0	120.0	135.0	120.0	135.0	120.0	131.5	116.9	115.9	103.0
84.0	135.0	120.0	135.0	120.0	135.0	120.0	122.1	108.6	107.6	95.6
90.0	135.0	120.0	135.0	120.0	133.9	119.0	114.0	101.3	100.4	89.3
96.0	135.0	120.0	135.0	120.0	125.5	111.6	106.9	95.0	94.1	83.7
102.0	135.0	120.0	135.0	120.0	116.9	103.9	100.6	89.4	-	-
108.0	135.0	120.0	126.7	112.6	109.1	96.9	95.0	84.4	-	-
114.0	135.0	120.0	119.0	105.8	102.2	90.9	90.0	80.0	-	-
120.0	130.6	116.1	105.5	93.8	88.9	79.0	-	-	-	-
126.0	112.7	100.2	90.9	80.8	76.5	68.0	-	-	-	-
132.0	97.9	87.0	78.9	70.1	66.4	59.0	-	-	-	-
138.0	85.6	76.1	68.9	61.3	-	-	-	-	-	-
144.0	75.2	66.9	60.6	53.8	-	-	-	-	-	-
150.0	66.5	59.1	53.5	47.6	-	-	-	-	-	-
156.0	59.1	52.5	47.5	42.2	-	-	-	-	-	-

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	60.0	120.0	60.0	120.0	60.0	120.0	60.0	116.9	60.0	103.0
84.0	60.0	120.0	60.0	120.0	60.0	120.0	60.0	108.6	60.0	95.6
90.0	60.0	120.0	60.0	120.0	60.0	119.0	60.0	101.3	60.0	89.3
96.0	60.0	120.0	60.0	120.0	60.0	111.6	60.0	95.0	60.0	83.7
102.0	60.0	120.0	60.0	120.0	60.0	103.9	60.0	89.4	-	-
108.0	60.0	120.0	60.0	112.6	60.0	96.9	60.0	84.4	-	-
114.0	60.0	120.0	60.0	105.8	60.0	90.9	60.0	80.0	-	-
120.0	60.0	116.1	60.0	93.8	60.0	79.0	-	-	-	-
126.0	60.0	100.2	60.0	80.8	60.0	68.0	-	-	-	-
132.0	60.0	87.0	60.0	70.1	60.0	59.0	-	-	-	-
138.0	60.0	76.1	60.0	61.3	-	-	-	-	-	-
144.0	60.0	66.9	60.0	53.8	-	-	-	-	-	-
150.0	60.0	59.1	53.5	47.6	-	-	-	-	-	-
156.0	59.1	52.5	47.5	42.2	-	-	-	-	-	-

SOLAR INNOVATIONS, INC.

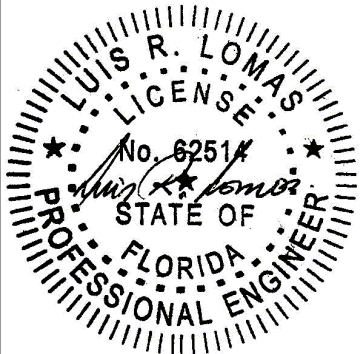
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER
NO POST STANDARD SILL NON-IMPACT
ANCHOR LAYOUT AND DESIGN PRESSURE CHARTS

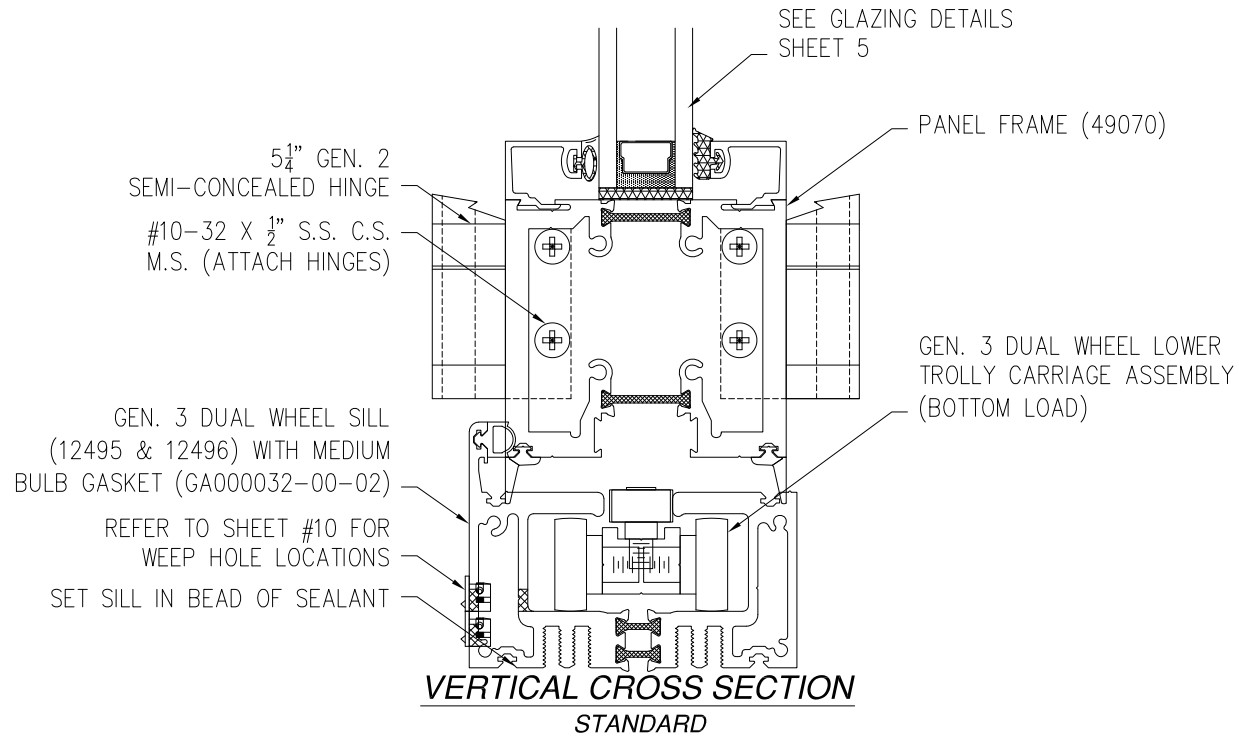
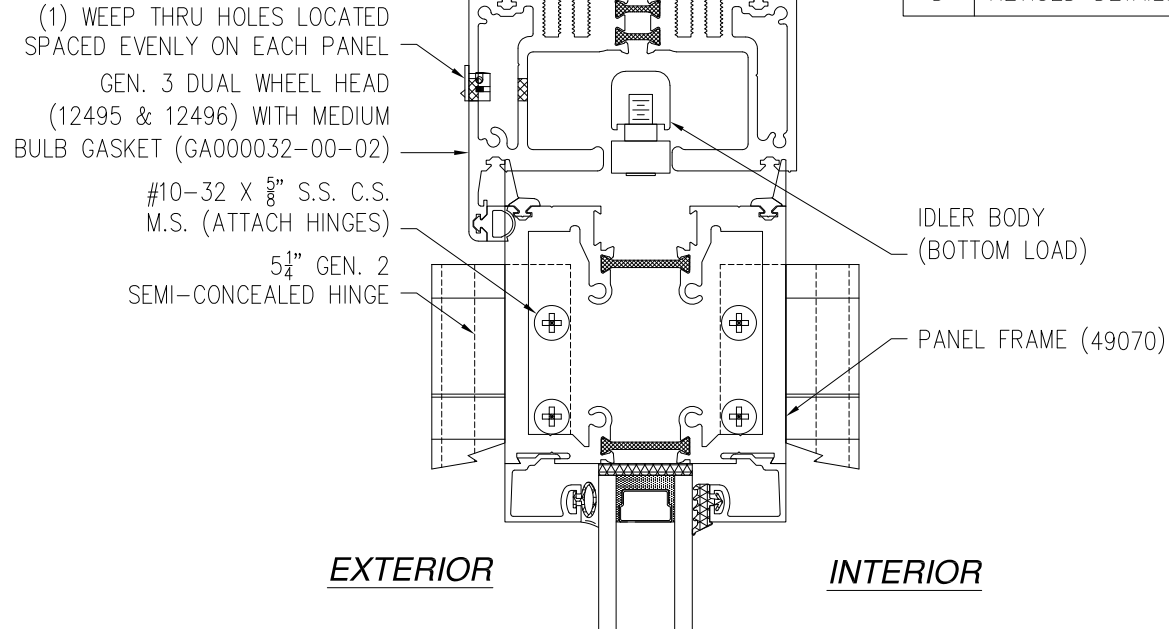
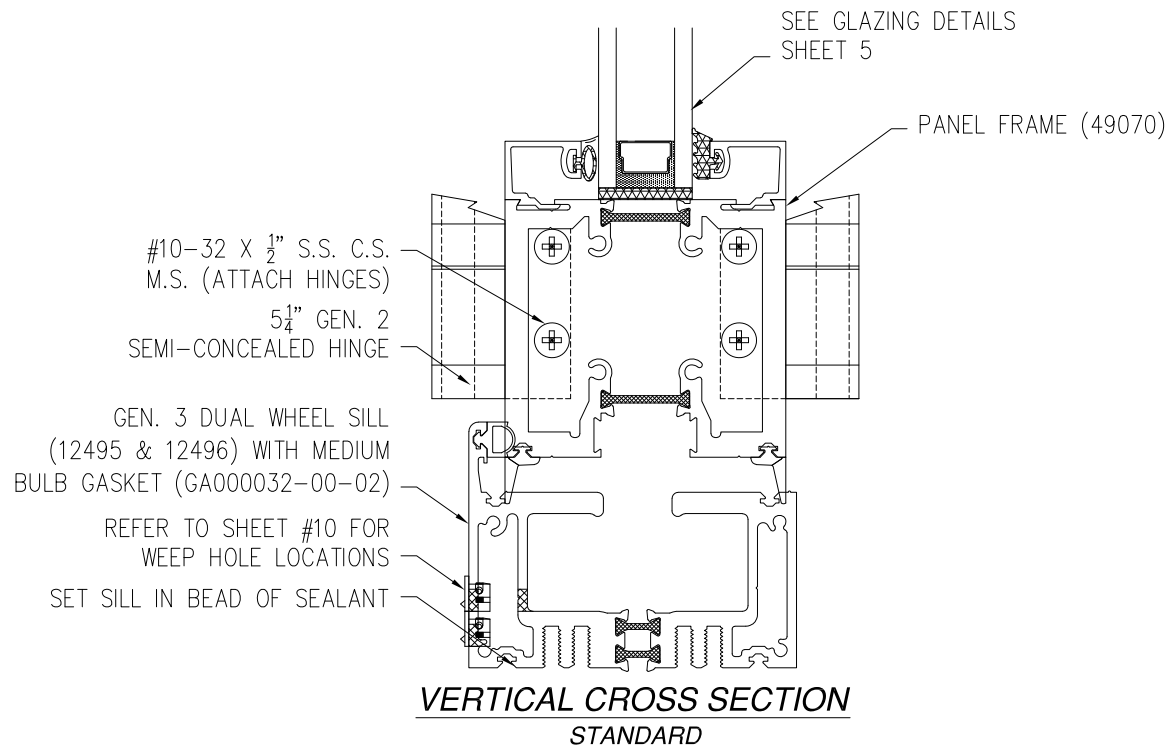
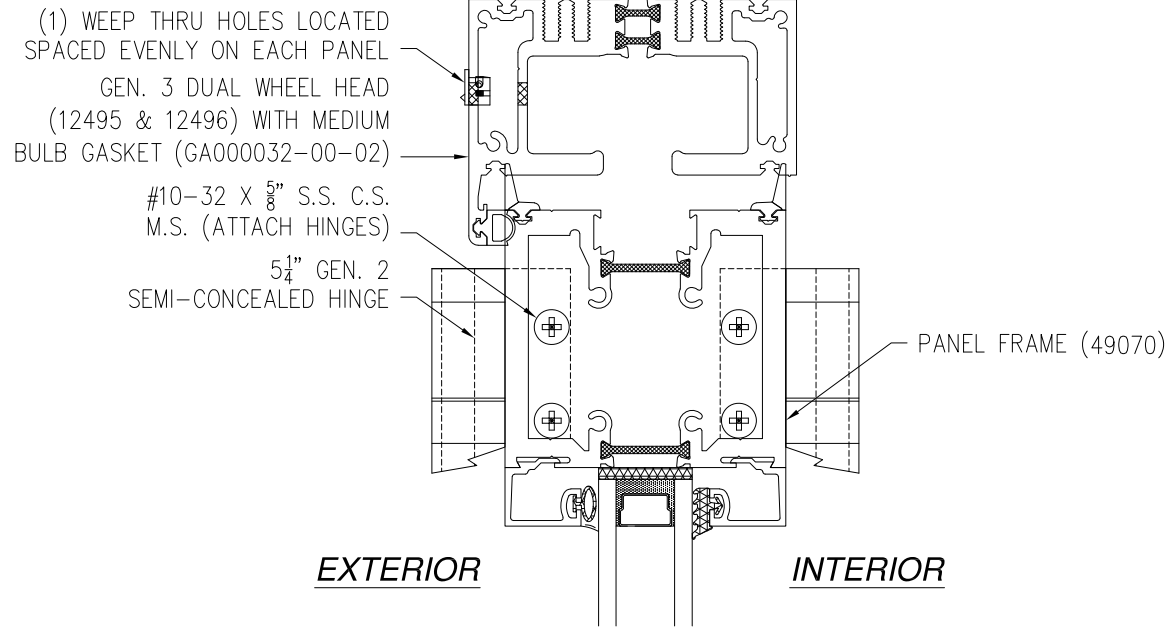
DRAWN: V.L.	DWG NO. 08-01963	REV D
SCALE NTS	DATE 04/22/13	SHEET 3 OF 11

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

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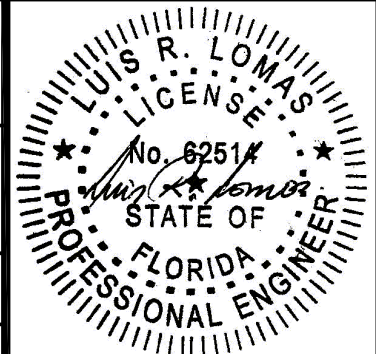
31 ROBERTS RD
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CROSS SECTIONS

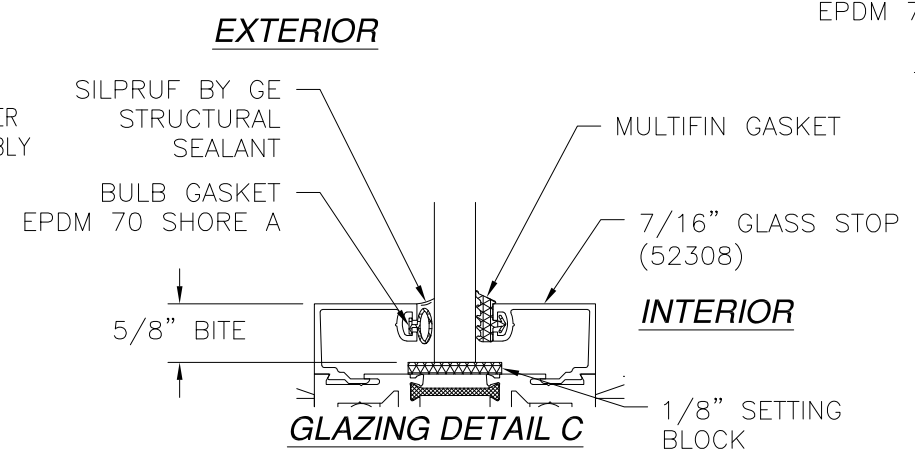
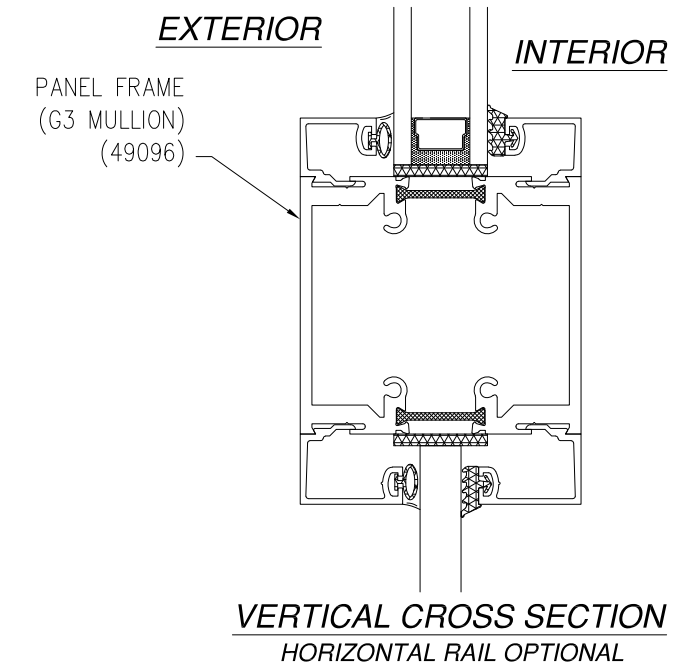
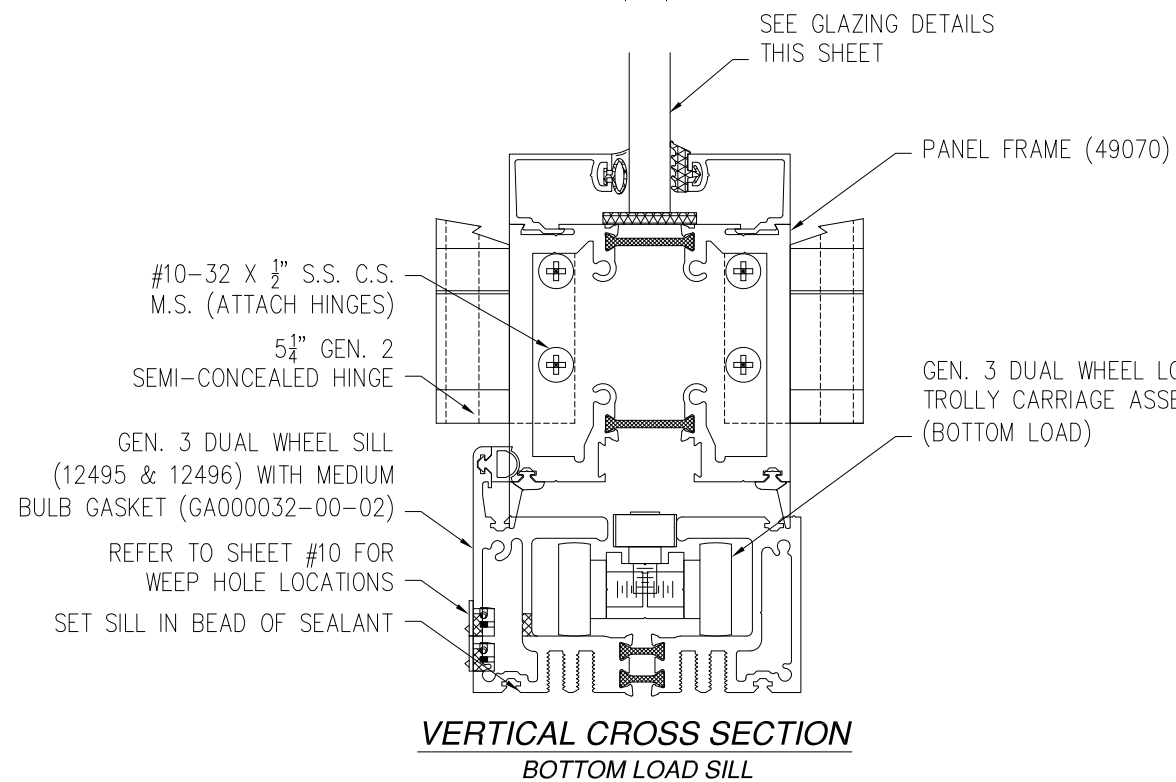
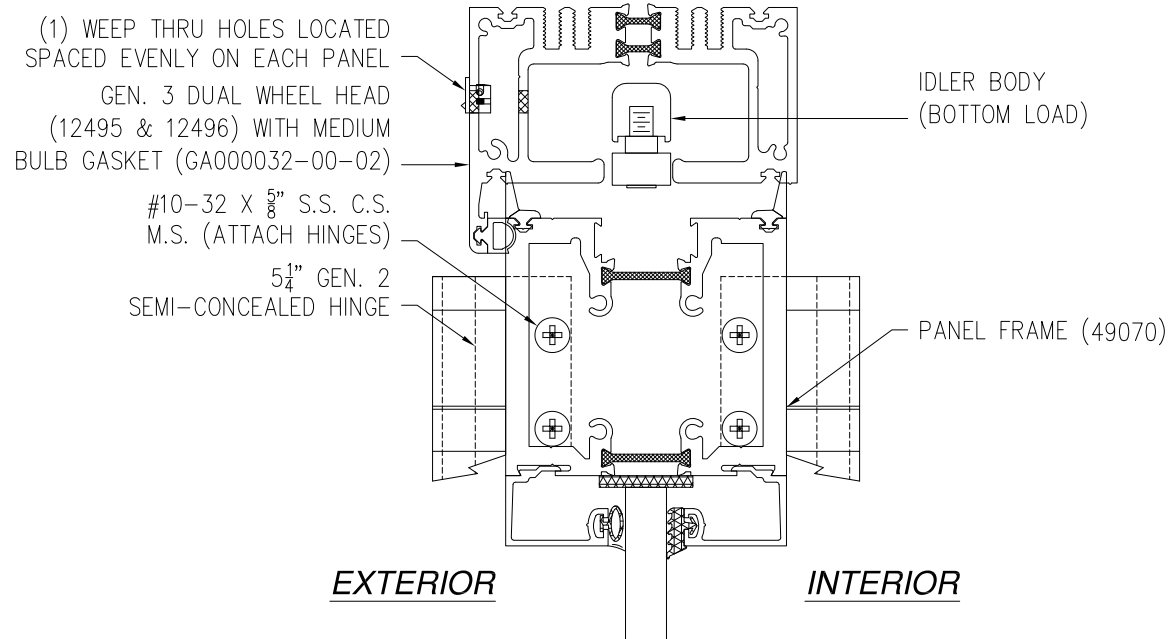
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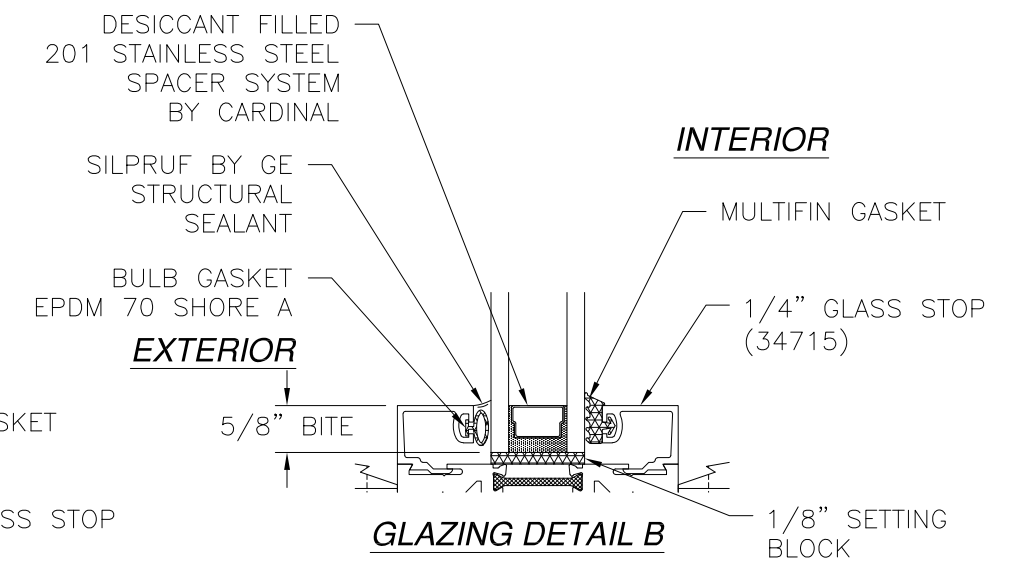
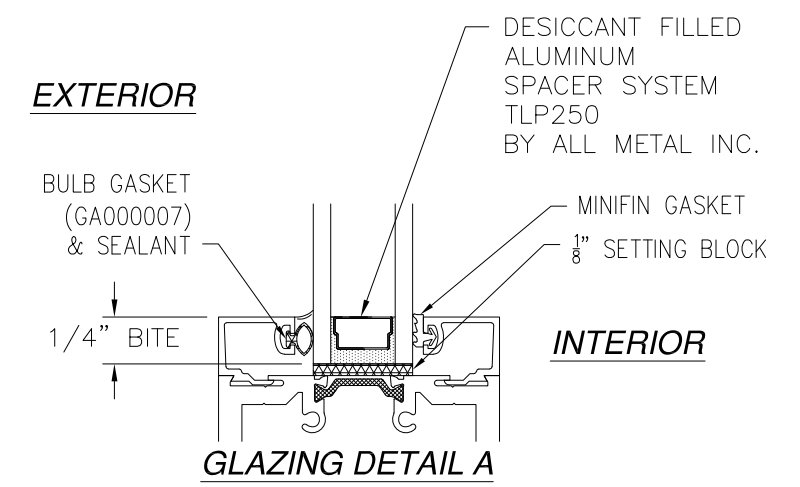
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NOTE:
GLASS FOR ALL CONFIGURATIONS MUST BE
SAFETY GLASS

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PINE GROVE, PA 17963

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CROSS SECTIONS

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SCALE NTS	DATE 04/22/13	SHEET 5 OF 11

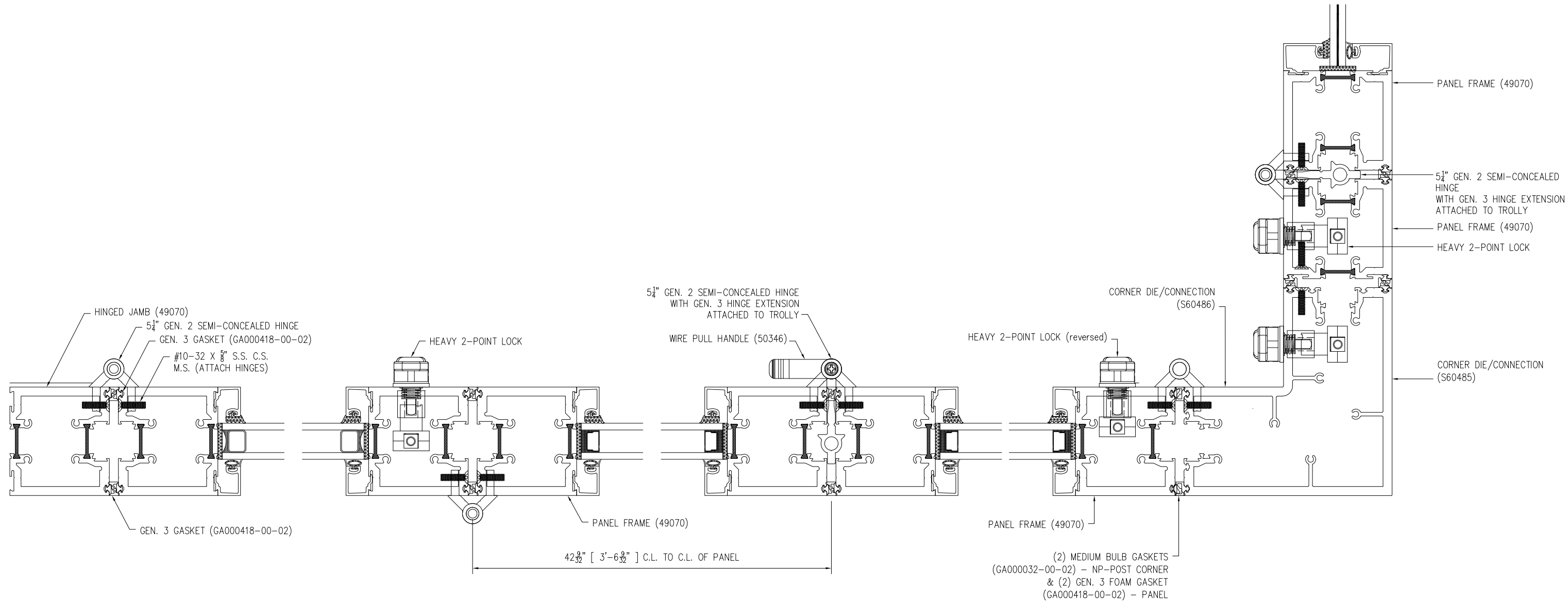
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

LUIS R. LOMAS
LICENSED PROFESSIONAL ENGINEER
No. 62514
STATE OF FLORIDA

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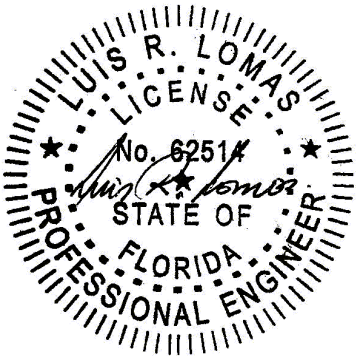
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HORIZONTAL CROSS SECTION

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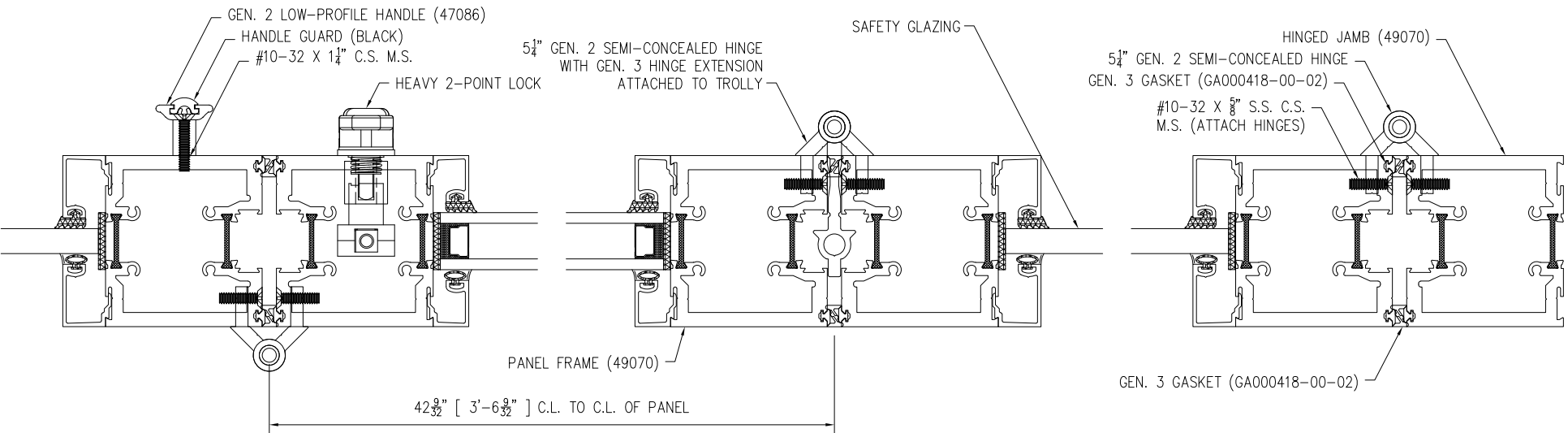
SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER NO POST STANDARD SILL NON-IMPACT CROSS SECTIONS		
DRAWN: V.L.	DWG NO. 08-01963	REV D
SCALE NTS	DATE 04/22/13	SHEET 6 OF 11
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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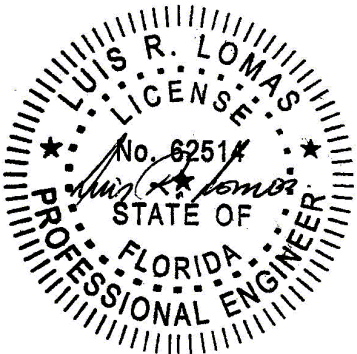
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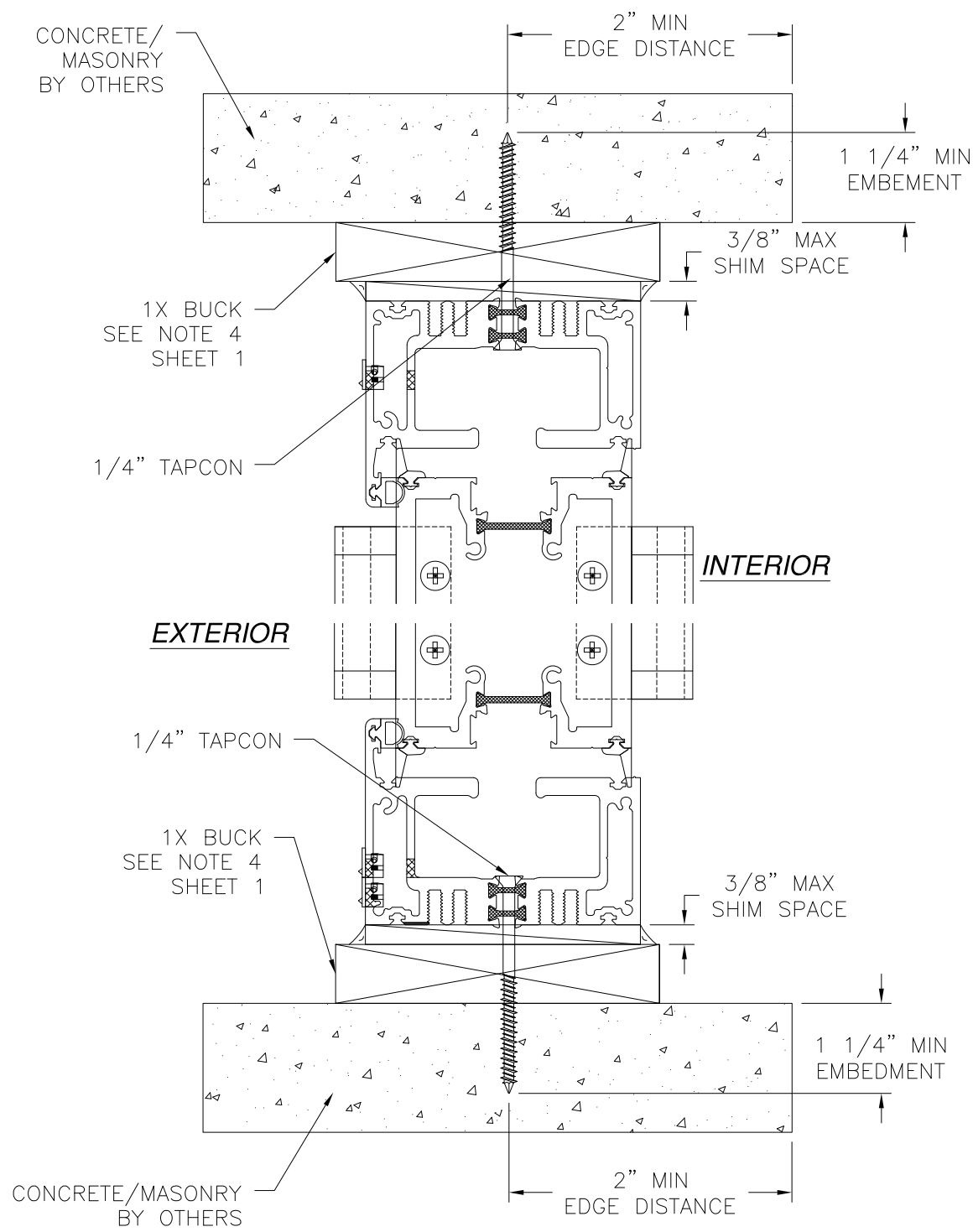
HORIZONTAL CROSS SECTION

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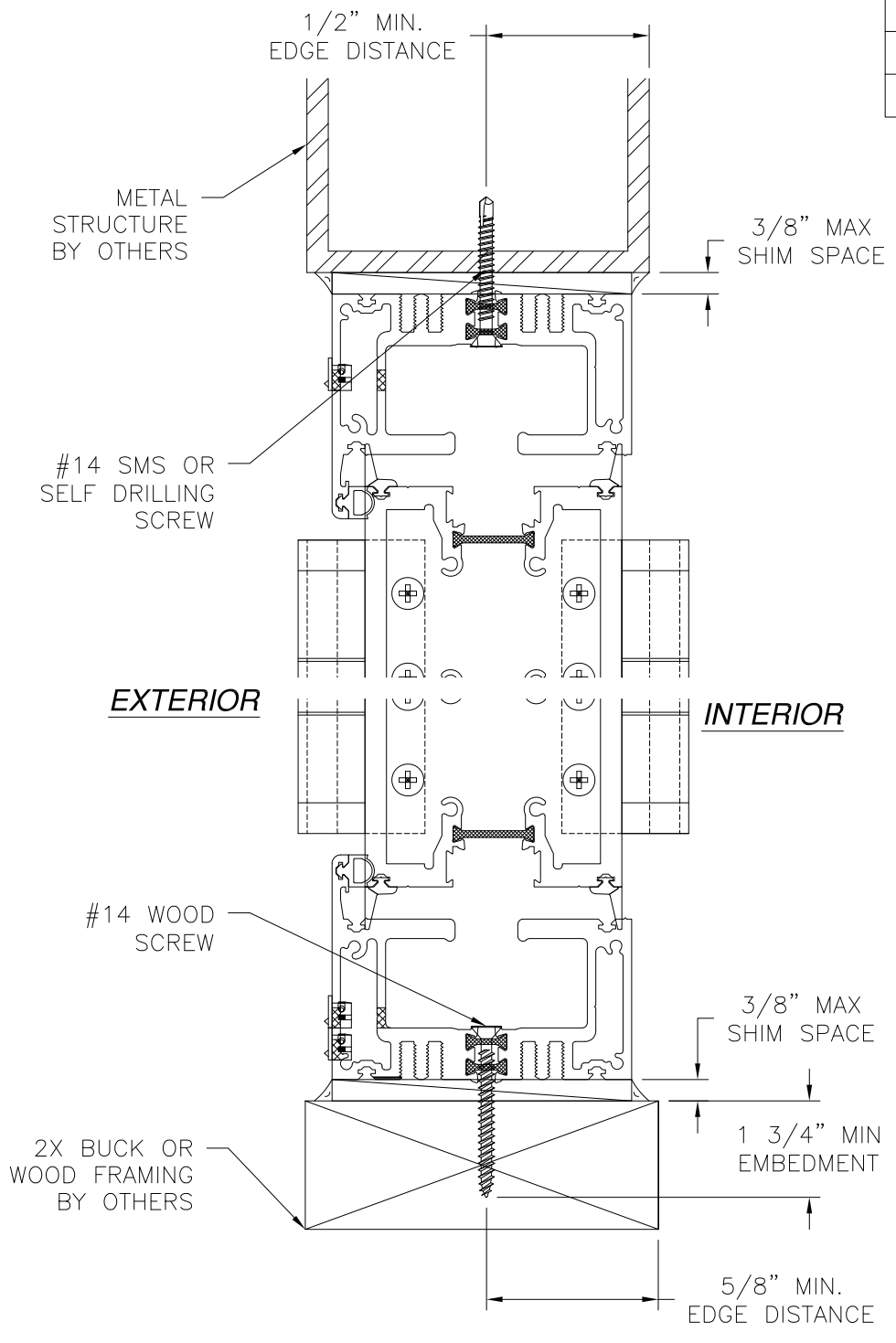


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VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

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

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REV
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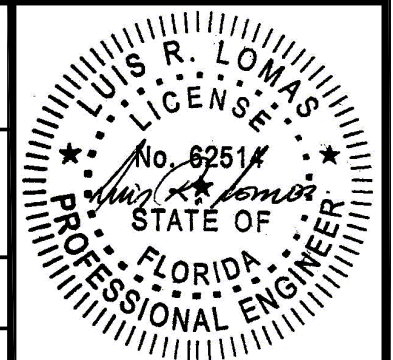
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04/22/13

SHEET
8 OF 11

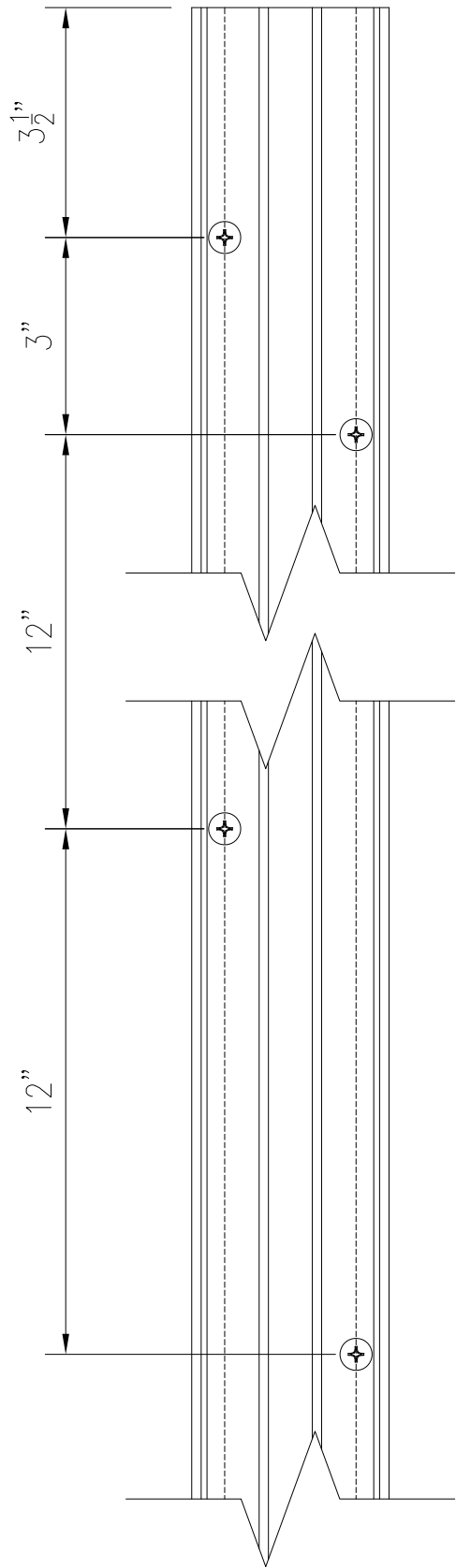
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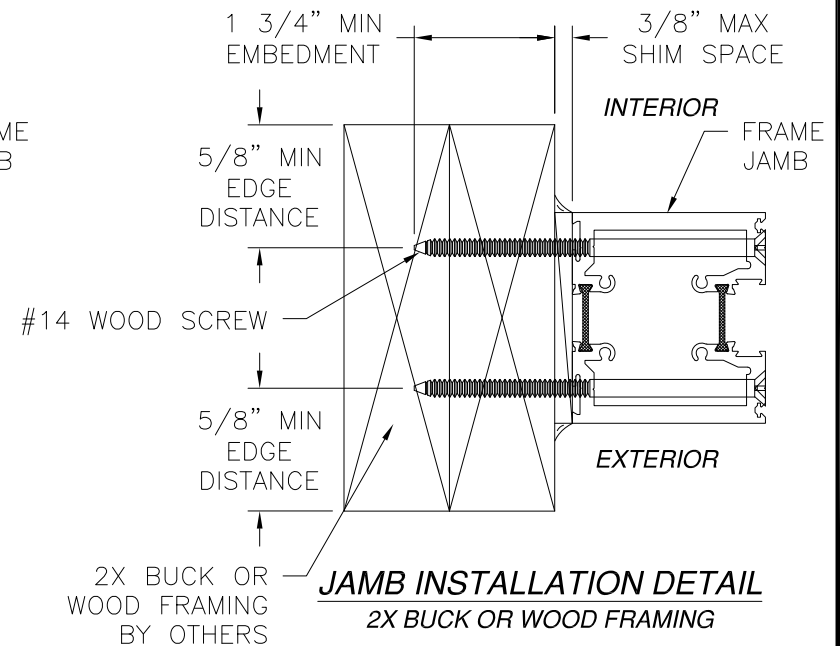
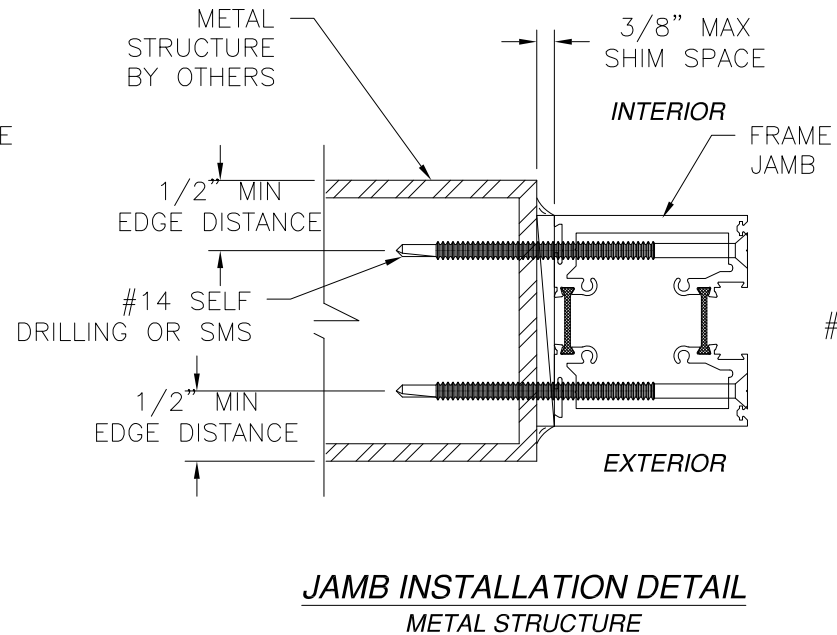
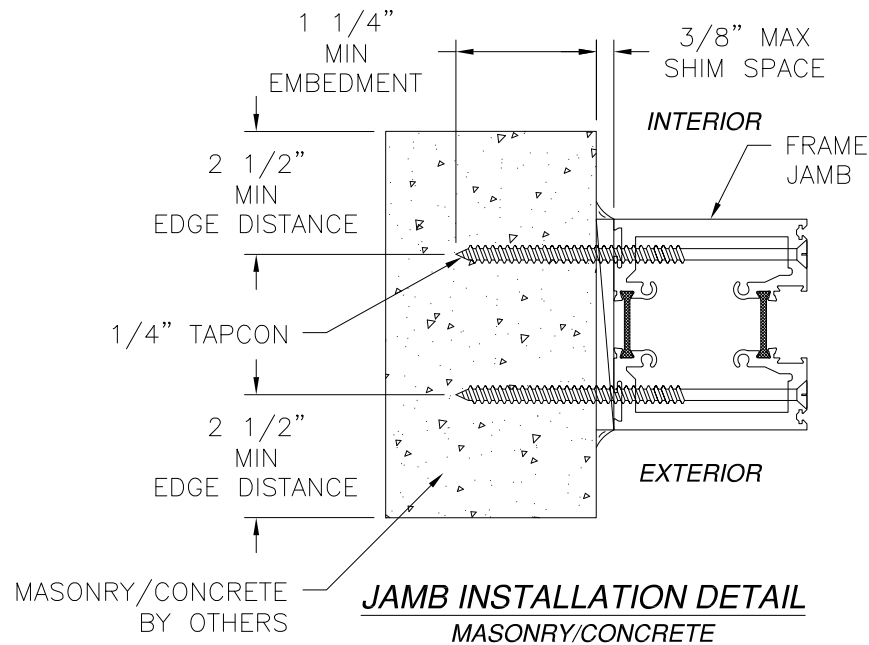


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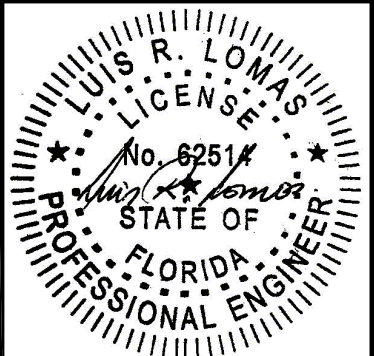
JAMB ANCHOR LOCATIONS
DETAIL



- 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

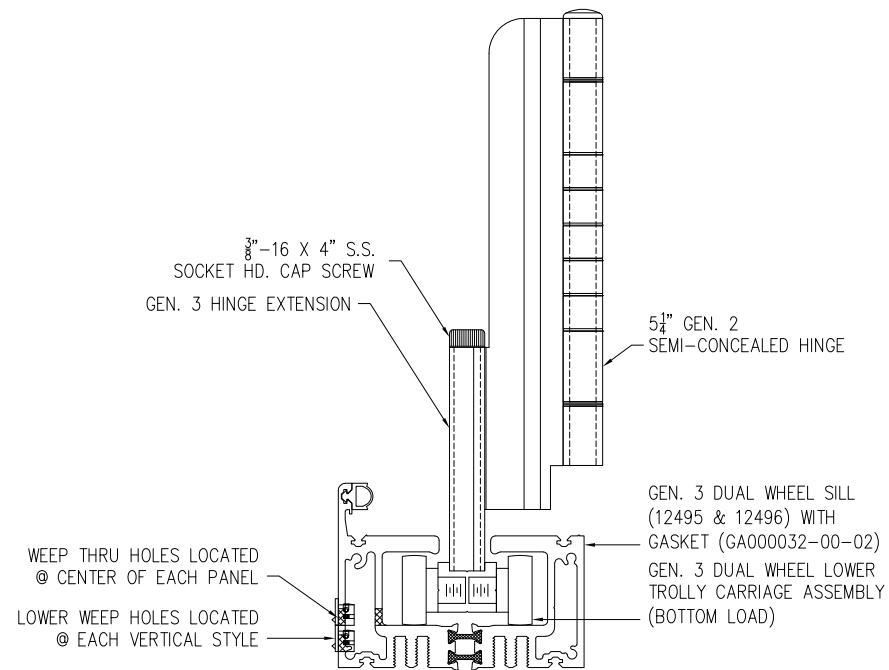
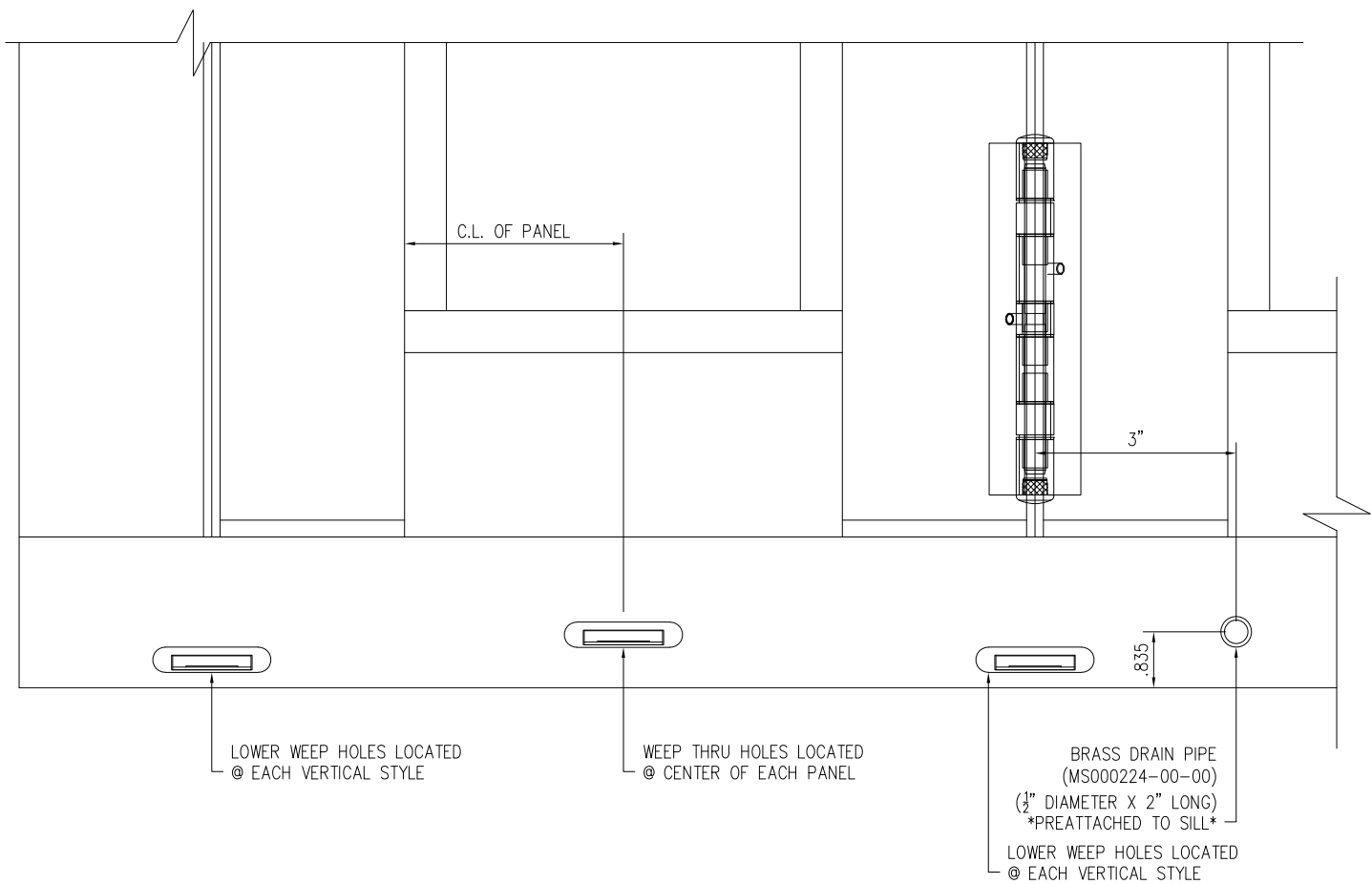
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SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
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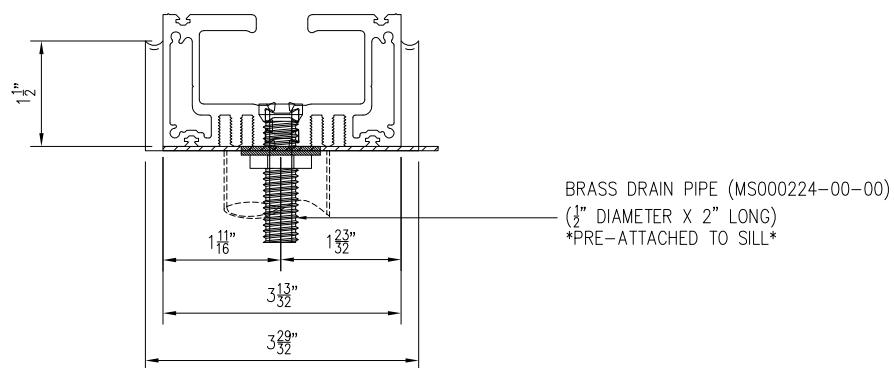


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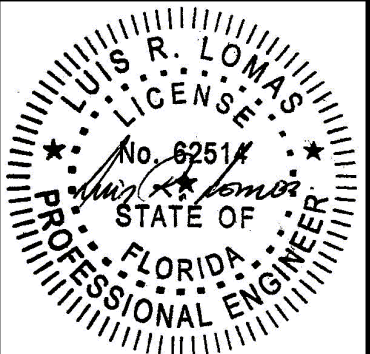
WEEP HOLES LOCATION DETAILS



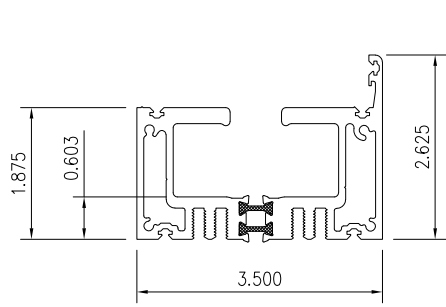
DRAIN PIPE DETAIL

SIGNED: 12/13/2023

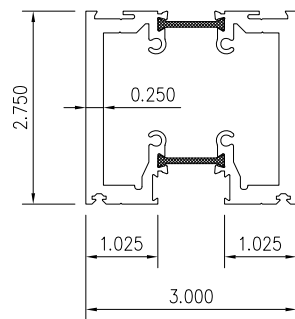
SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER NO POST STANDARD SILL NON-IMPACT WEEP HOLES DETAILS		
DRAWN: V.L.	DWG NO. 08-01963	REV D
SCALE NTS	DATE 04/22/13	SHEET 10 OF 11
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



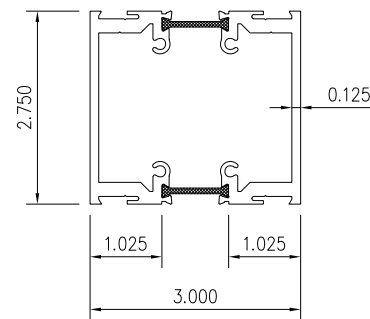
Luis R. Lomas P.E.
FL No.: 62514



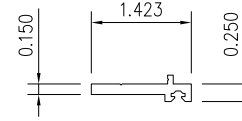
DUAL WHEEL
HEAD / SILL



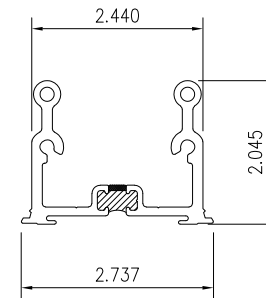
REGULAR THERMAL
FRAME



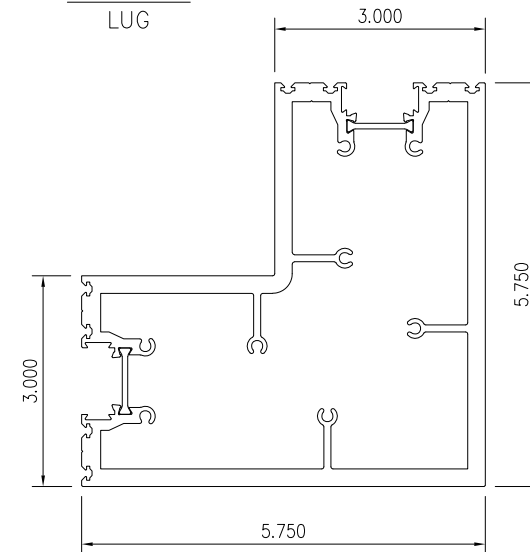
HORIZONTAL
MULLION



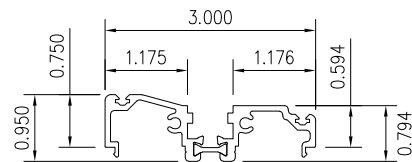
FRAME
CAP



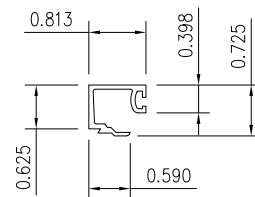
FRAME
LUG



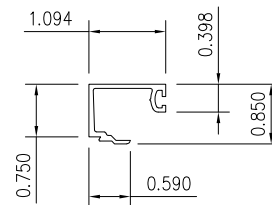
KNUCKLE
JAMB



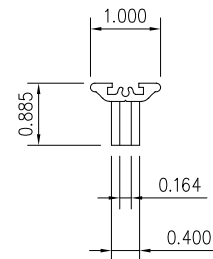
3rd GENERATION
DOOR ADAPTOR



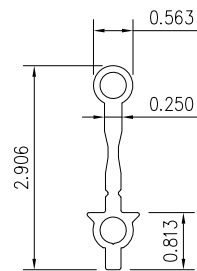
1/4" GLASS
STOP



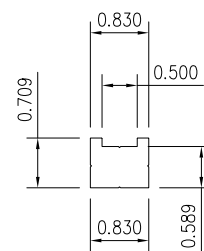
7/16" GLASS
STOP



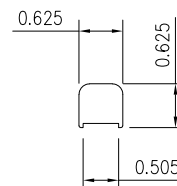
2nd GENERATION
HANDLE



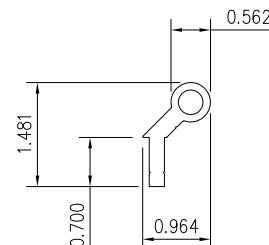
HINGE
EXTENSION



TROLLEY
BODY



IDLER
BODY



5 1/4" SEMI-
CONCEALED HINGE

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED DETAILS AND COMPONENTS	12/07/2023	R.L.

SOLAR INNOVATIONS, INC.

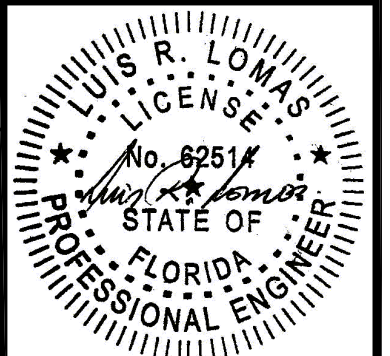
31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI3000 G3 FGW 3.5x9.5 PANEL 90° CORNER
NO POST STANDARD SILL NON-IMPACT
COMPONENTS

DRAWN: V.L.	DWG NO. 08-01963	REV D
SCALE NTS	DATE 04/22/13	SHEET 11 OF 11

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SIGNED: 12/13/2023



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FL No.: 62514