

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED PER NEW REQUIREMENTS	12/05/2023	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING, METAL STRUCTURE 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 SHIM OR BUCK THICKNESS IS LESS THAN 1–1/2” WINDOW UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
4. WHERE WOOD BUCK THICKNESS IS 1–1/2” OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. WINDOW UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS.
5. 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.
6. BUCKS SHALL EXTEND BEYOND WINDOW INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
7. SHIM AS REQUIRED AT EACH ANCHOR LOCATION WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16” OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 3/8”.
8. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
9. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
10. FRAME MATERIAL: EXTRUDED ALUMINUM.
11. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 8 FOR GLASS DETAILS.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
13. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 7/16” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE 1/4” TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2” MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. FOR ANCHORING THROUGH FRAME 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.
16. ALL FASTENERS TO BE CORROSION RESISTANT.
17. 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:

17.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

17.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.

17.3. MASONRY: GROUT/FILLED BLOCK PER ASTM C90 WITH Fm=3,000PSI MINIMUM.

17.4. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR ALUMINUM 6063–T5 FU=30KSI .125” THICK MINIMUM

SIGNED: 12/05/2023

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SOLAR INNOVATIONS, INC.

31 ROBERTS ROAD
PINE GROVE, PA 17963

SERIES SI3000 G3 – 3’X10’ OUTSWING
ALUMINUM FOLDING GLASS WALL IMPACT
NOTES

DRAWN:
R.L.

DWG NO.
08–03112

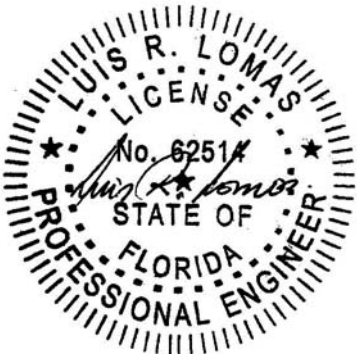
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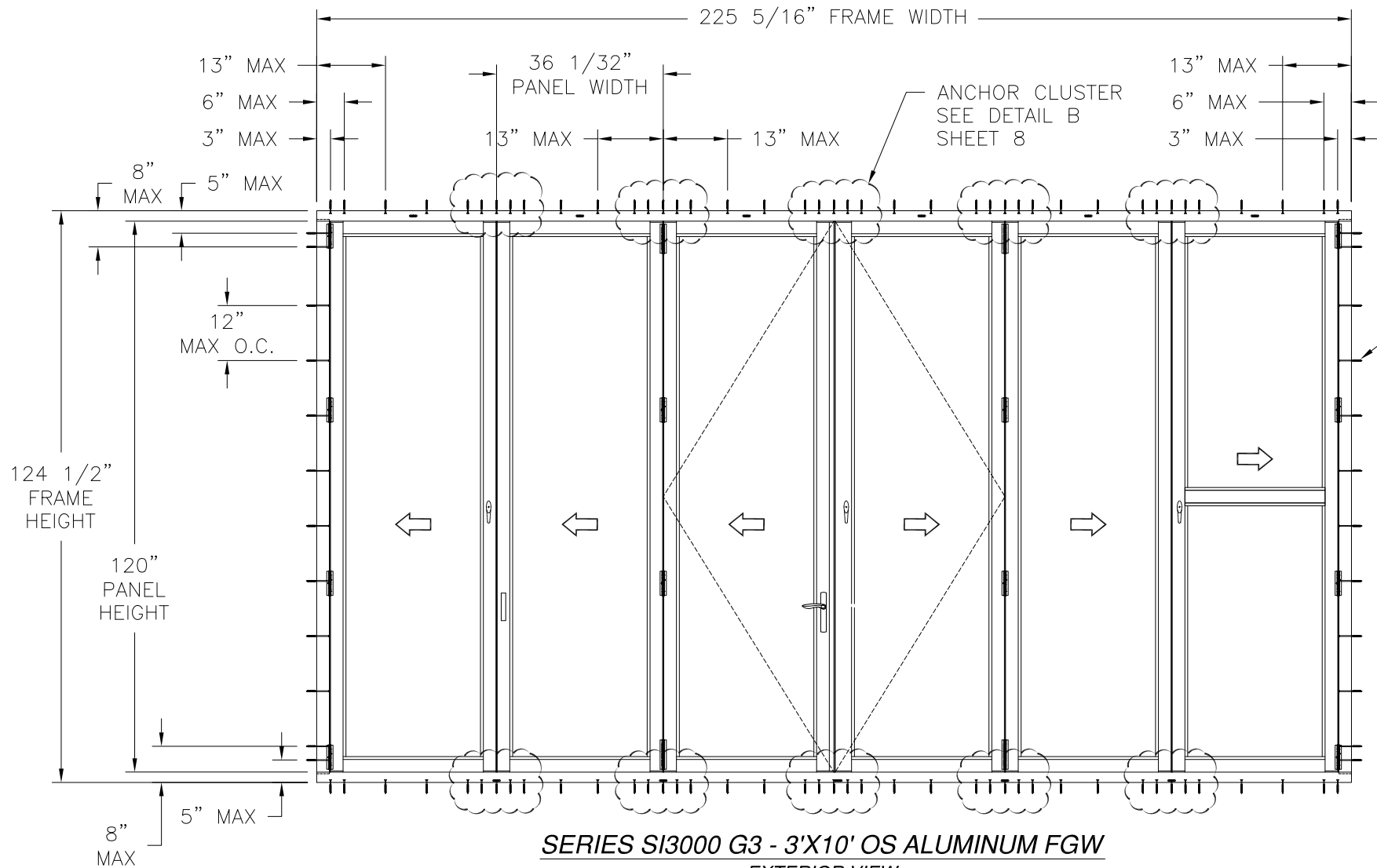
DATE 05/31/17

SHEET 1 OF 9

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



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



SERIES SI3000 G3 - 3'X10' OS ALUMINUM FGW

EXTERIOR VIEW

6 PANELS SHOWN. UNLIMITED NUMBER OF PANELS IN UNLIMITED CONFIGURATIONS IS APPLICABLE AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 30.02 FT² AND USES VERTICAL CONDITIONS AS SHOWN HEREIN.

STANDARD SILL

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

MISSILE LEVEL D, WIND ZONE 4
FOR ADDITIONAL SIZES SEE CHART #1

FLUSH SILL

DESIGN PRESSURE RATING	IMPACT RATING
±53.6PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4
FOR ADDITIONAL SIZES SEE CHART #2

- NOTES:
- PANEL SIZE: 36 1/32" x 120"
 - D.L.O.: 29 1/4" x 113 1/4"

HARDWARE SCHEDULE

A.	(2) SINGLE POINT HANDLE THROW BOLT 60 1/8" FROM BOTTOM OF PANEL 1, 4 AND 6 LOCK STILES
B.	(5) MULTI POINT LOCK/ LOCK HANDLE 34 5/8" FROM BOTTOM OF LOCK STILE
C.	BUTT-TYPE HINGE 3 1/4" & 41 1/4" FROM EACH END OF HINGE STILES
D.	(1) EXTRUDED ALUMINUM PULL HANDLE 43 1/2" FROM BOTTOM OF PANEL 2 AND PANEL 5 INTERMEDIATE STILES
E.	(1) TROLLEY SYSTEM (BOTTOM LOAD) AT PANEL 2/3 AND 4/5
F.	(1) TROLLEY SYSTEM (TOP LOAD) AT PANEL 2/3 AND 4/5
G.	(1) ALUMINUM MULTI-POINT LOCK STIFFNER AT LOCK STILE

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Chart #1 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.03125		42.0		48.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
78.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
84.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
90.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
96.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	-	-
102.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	-	-
108.0	70.0	70.0	70.0	70.0	70.0	70.0	-	-	-	-
114.0	70.0	70.0	70.0	70.0	70.0	70.0	-	-	-	-
120.0	70.0	70.0	70.0	70.0	70.0	70.0	-	-	-	-
126.0	70.0	70.0	70.0	70.0	-	-	-	-	-	-
132.0	70.0	70.0	62.2	62.2	-	-	-	-	-	-
138.0	67.4	67.4	54.3	54.3	-	-	-	-	-	-
144.0	59.3	59.3	47.7	47.7	-	-	-	-	-	-
150.0	52.4	52.4	-	-	-	-	-	-	-	-
156.0	46.6	46.6	-	-	-	-	-	-	-	-

Chart #2 Maximum Design pressure (psf)										
Panel Height (in)	Single Panel Width (in)									
	24.0		30.0		36.0		42.0		48.0	
	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	70.5
84.0	60.0	80.0	60.0	80.0	60.0	80.0	60.0	74.8	60.0	65.5
90.0	60.0	80.0	60.0	80.0	60.0	80.0	60.0	69.8	60.0	61.1
96.0	60.0	80.0	60.0	80.0	60.0	76.4	60.0	65.5	57.3	57.3
102.0	60.0	80.0	60.0	80.0	60.0	71.0	60.0	61.6	-	-
108.0	60.0	80.0	60.0	77.0	60.0	66.3	58.2	58.2	-	-
114.0	60.0	80.0	60.0	72.3	60.0	62.1	54.6	54.6	-	-
120.0	60.0	78.8	60.0	63.6	53.6	53.6	-	-	-	-
126.0	60.0	67.9	54.8	54.8	46.1	46.1	-	-	-	-
132.0	59.0	59.0	47.6	47.6	40.0	40.0	-	-	-	-
138.0	51.6	51.6	41.5	41.5	-	-	-	-	-	-
144.0	45.4	45.4	36.5	36.5	-	-	-	-	-	-
150.0	40.1	40.1	32.3	32.3	-	-	-	-	-	-
156.0	35.6	35.6	28.6	28.6	-	-	-	-	-	-

SOLAR INNOVATIONS, INC.

31 ROBERTS ROAD
PINE GROVE, PA 17963

SERIES SI3000 G3 - 3'X10' OUTSWING
ALUMINUM FOLDING GLASS WALL IMPACT
ELEVATION

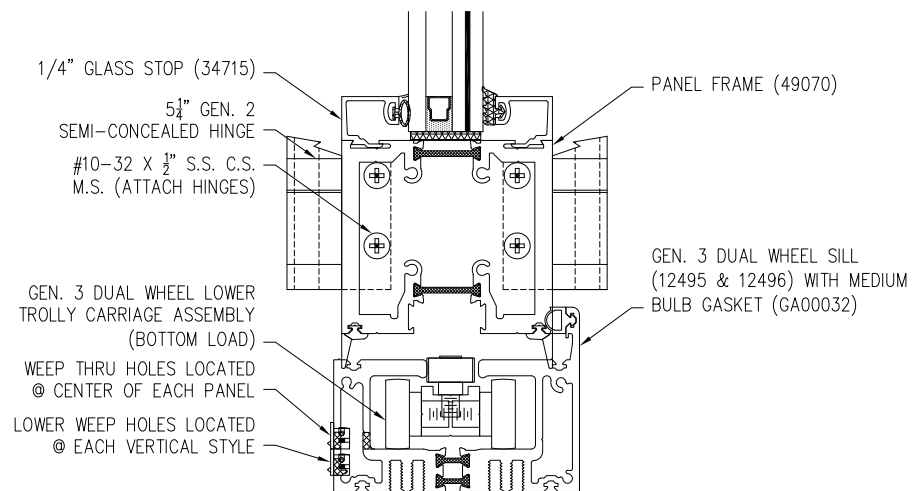
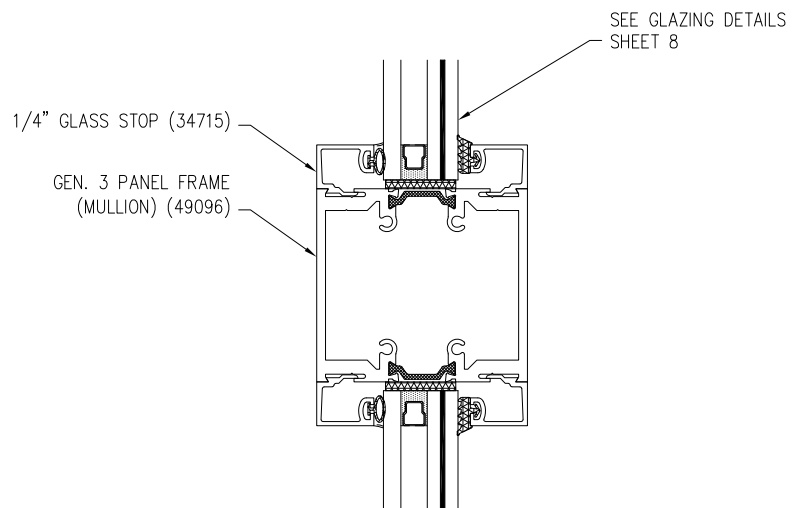
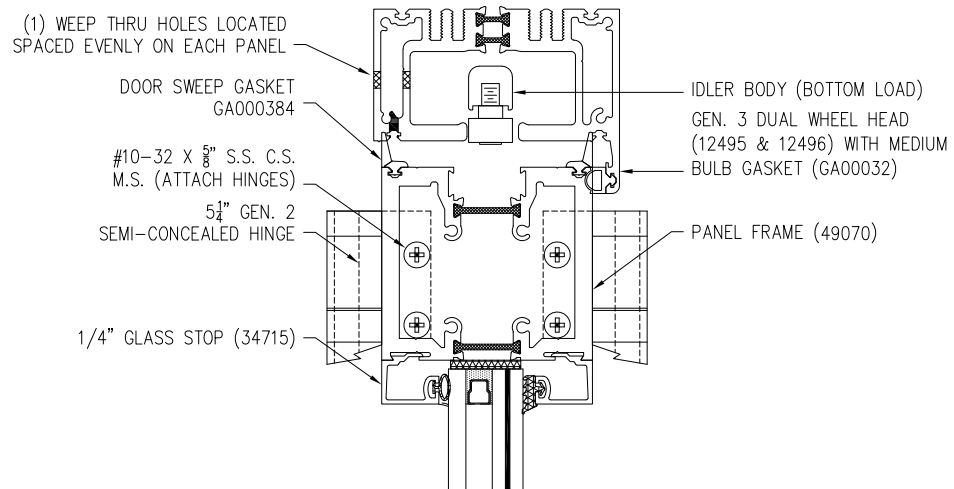
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SCALE NTS	DATE 05/31/17	SHEET 2 OF 9

L. ROBERTO LOMAS P.E.
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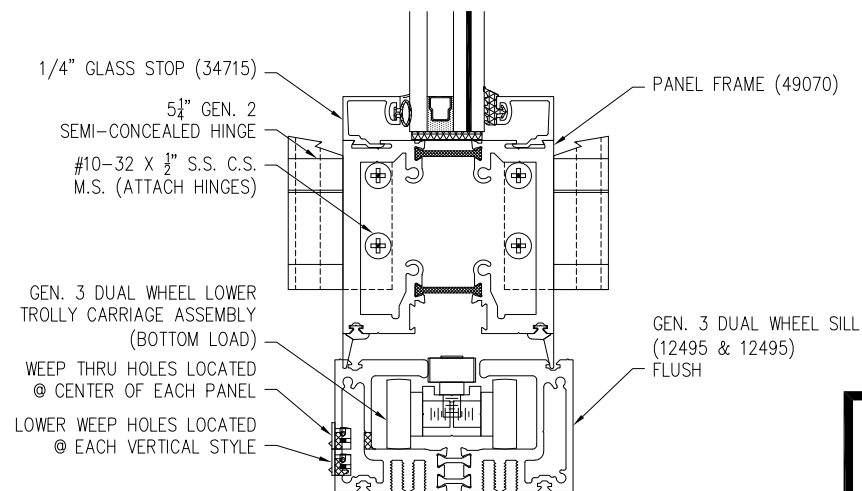
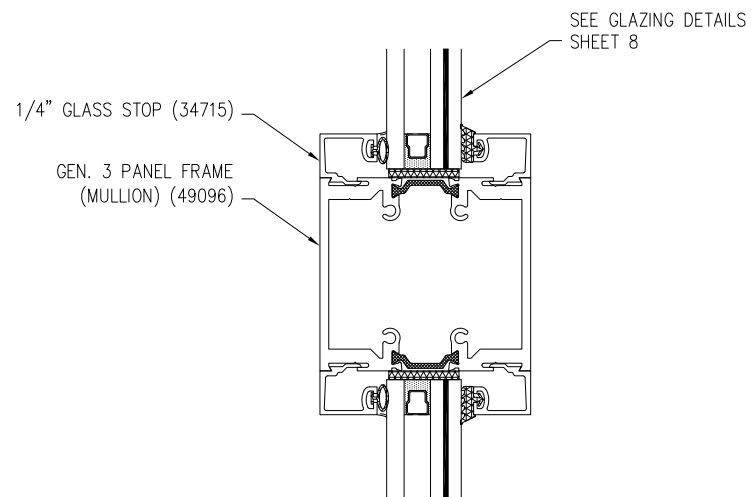
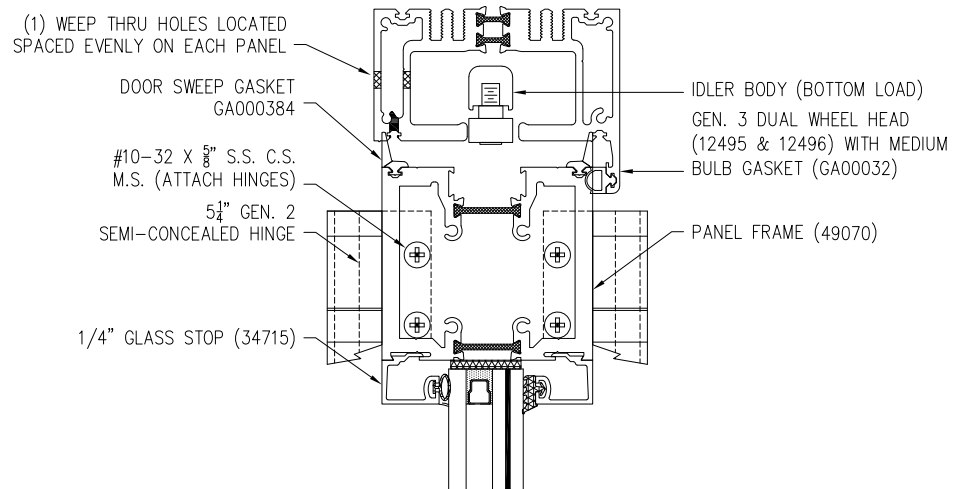
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VERTICAL CROSS SECTION
STANDARD SILL



VERTICAL CROSS SECTION
FLUSH SILL

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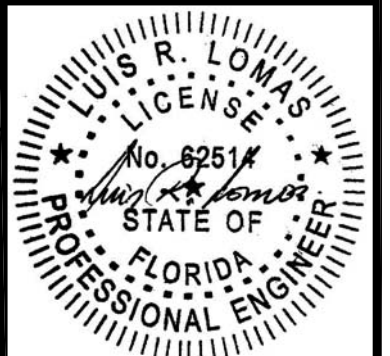
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ALUMINUM FOLDING GLASS WALL IMPACT
VERTICAL CROSS SECTION

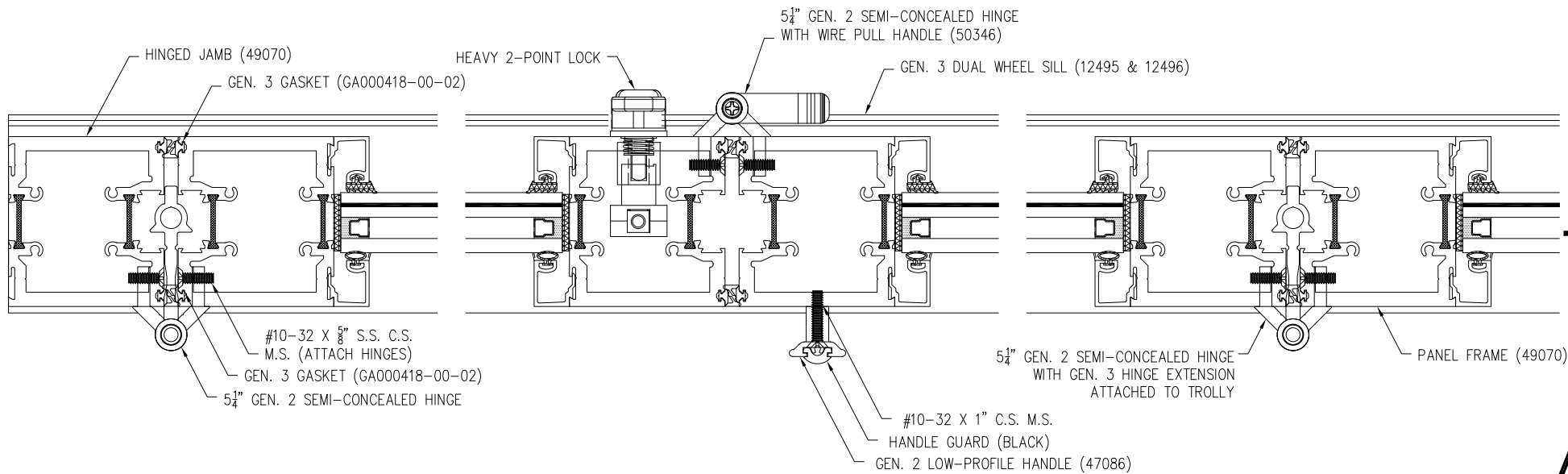
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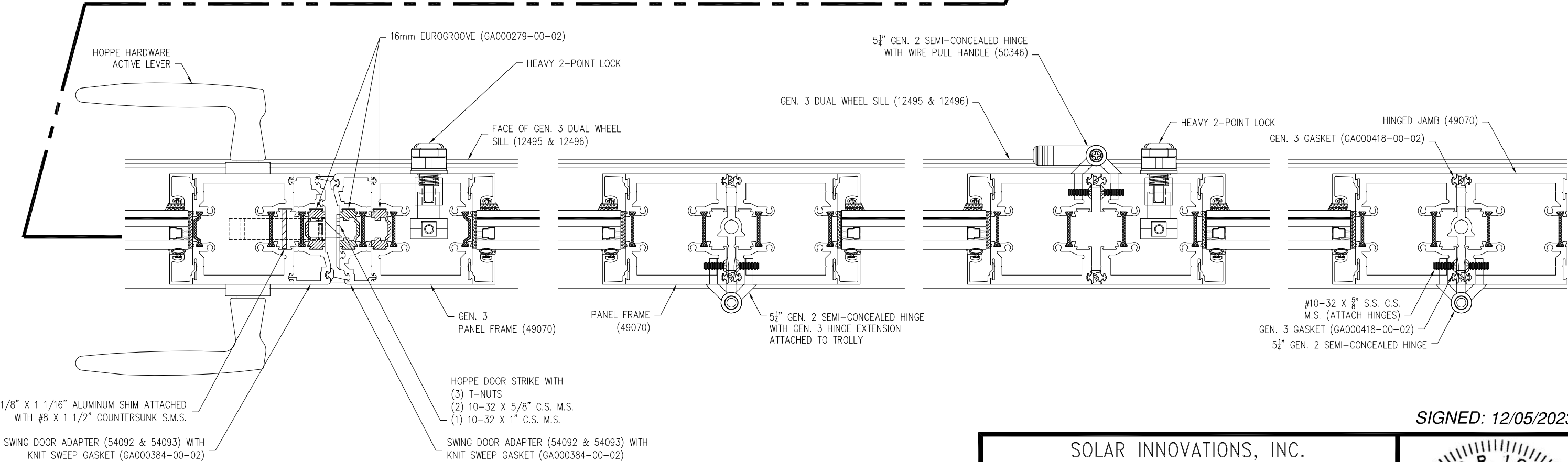
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HORIZONTAL CROSS SECTION

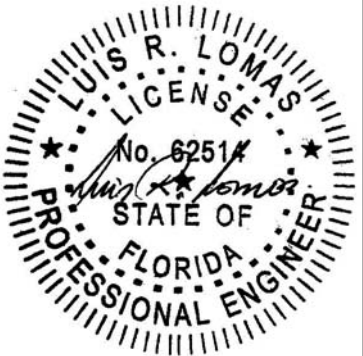
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HORIZONTAL CROSS SECTION

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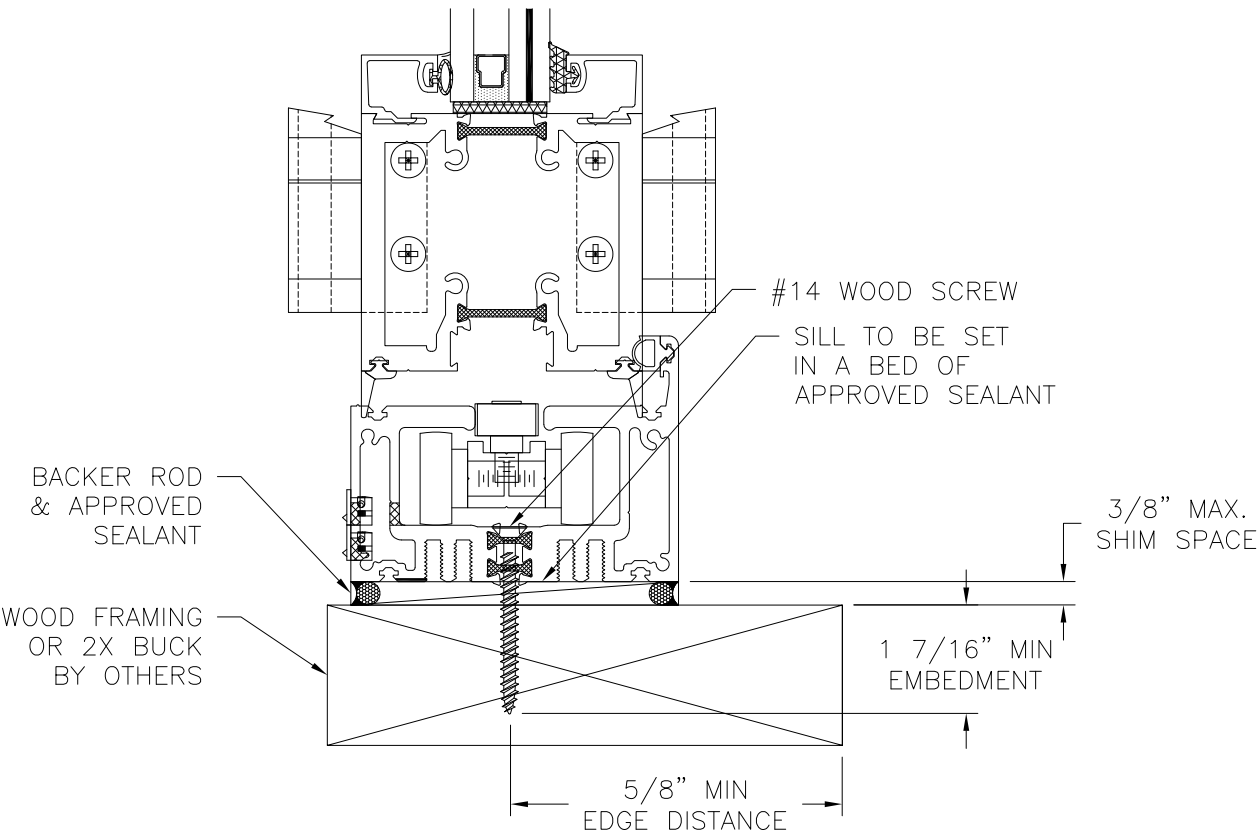
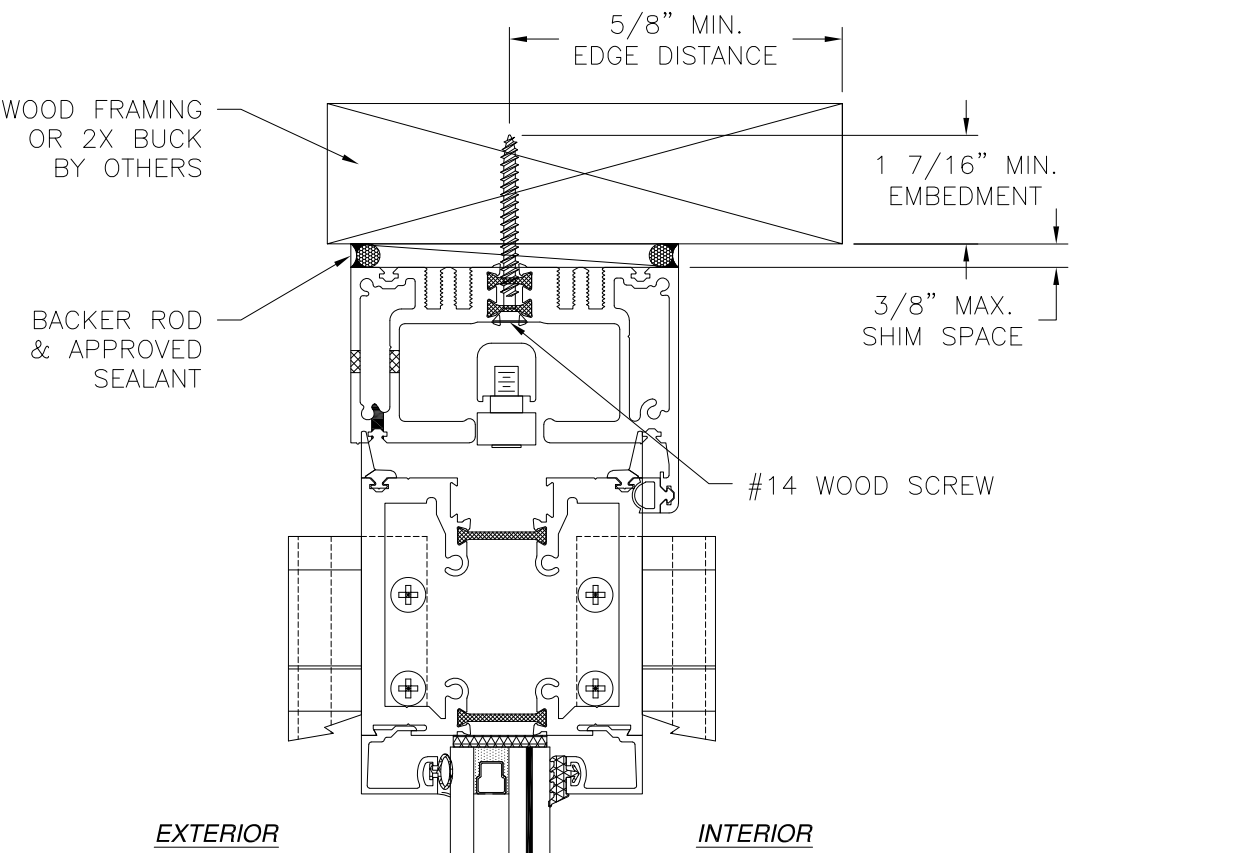
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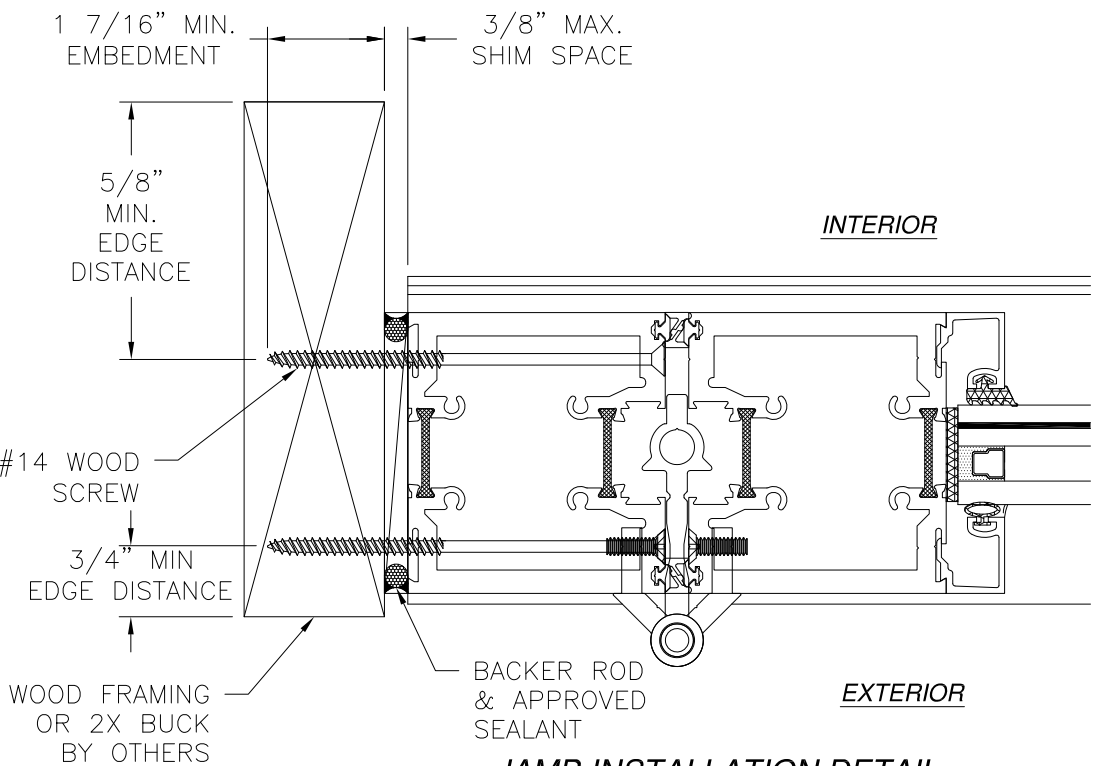


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VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
STANDARD SILL SHOWN, FLUSH SILL SIMILAR



JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK 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

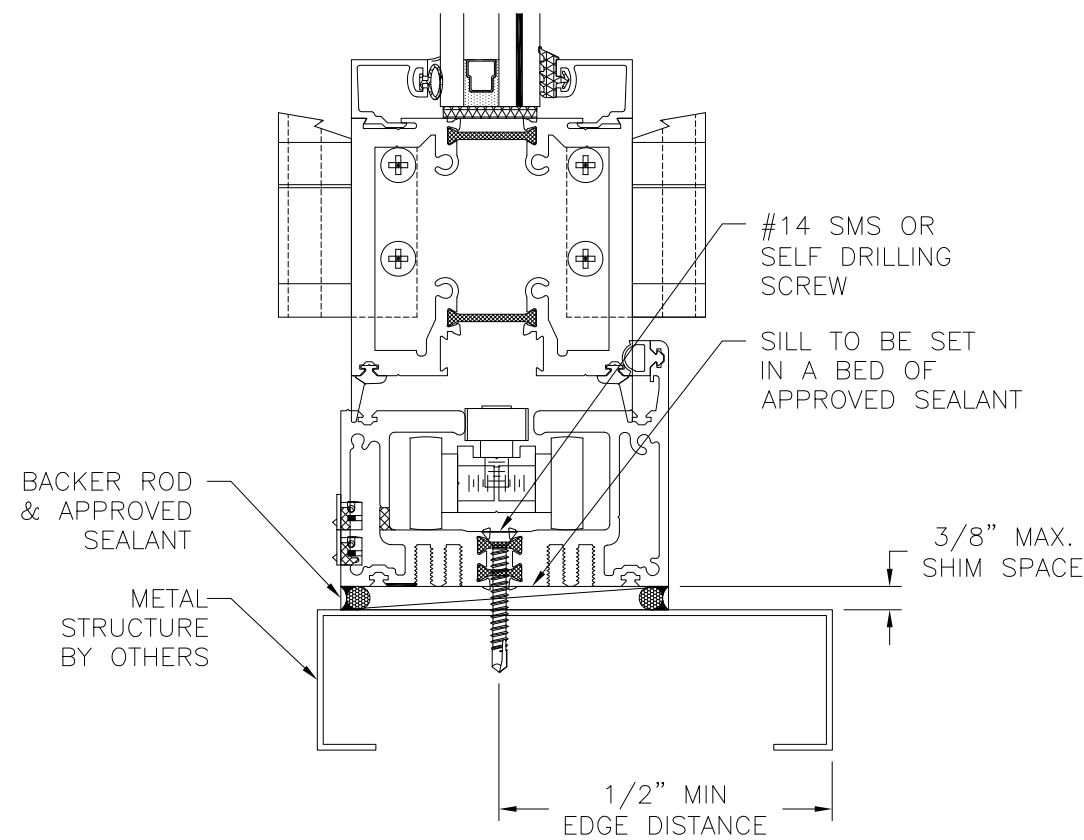
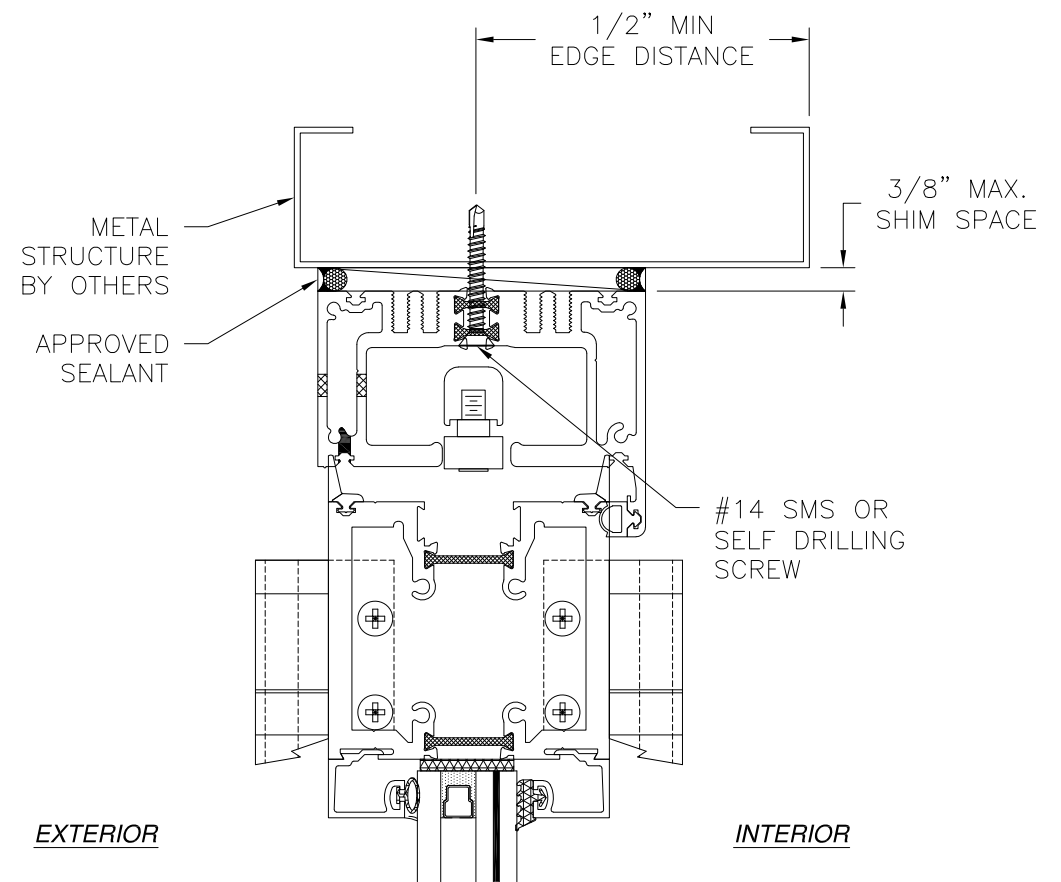
SOLAR INNOVATIONS, INC. 31 ROBERTS ROAD PINE GROVE, PA 17963		
SERIES SI3000 G3 – 3'X10' OUTSWING ALUMINUM FOLDING GLASS WALL IMPACT INSTALLATION DETAILS		
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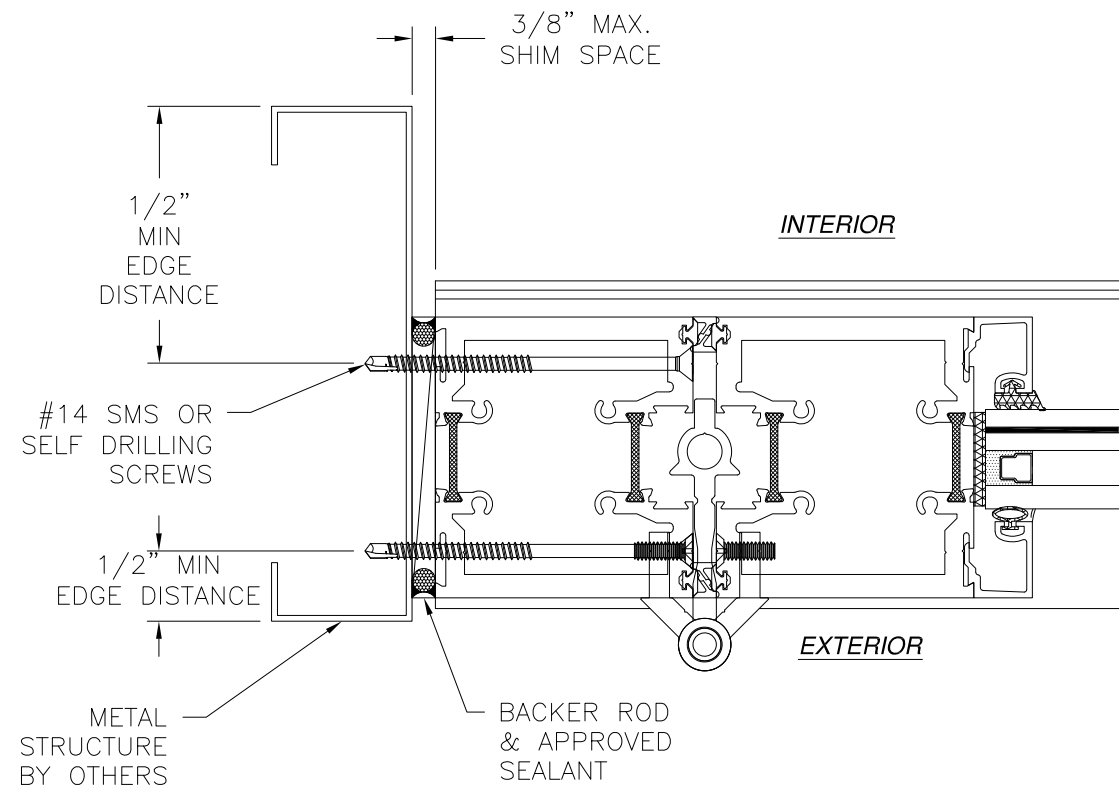


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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION
STANDARD SILL SHOWN, FLUSH SILL SIMILAR



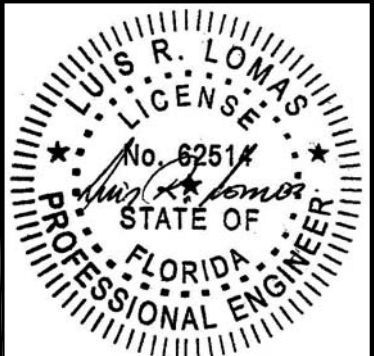
JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

NOTES:

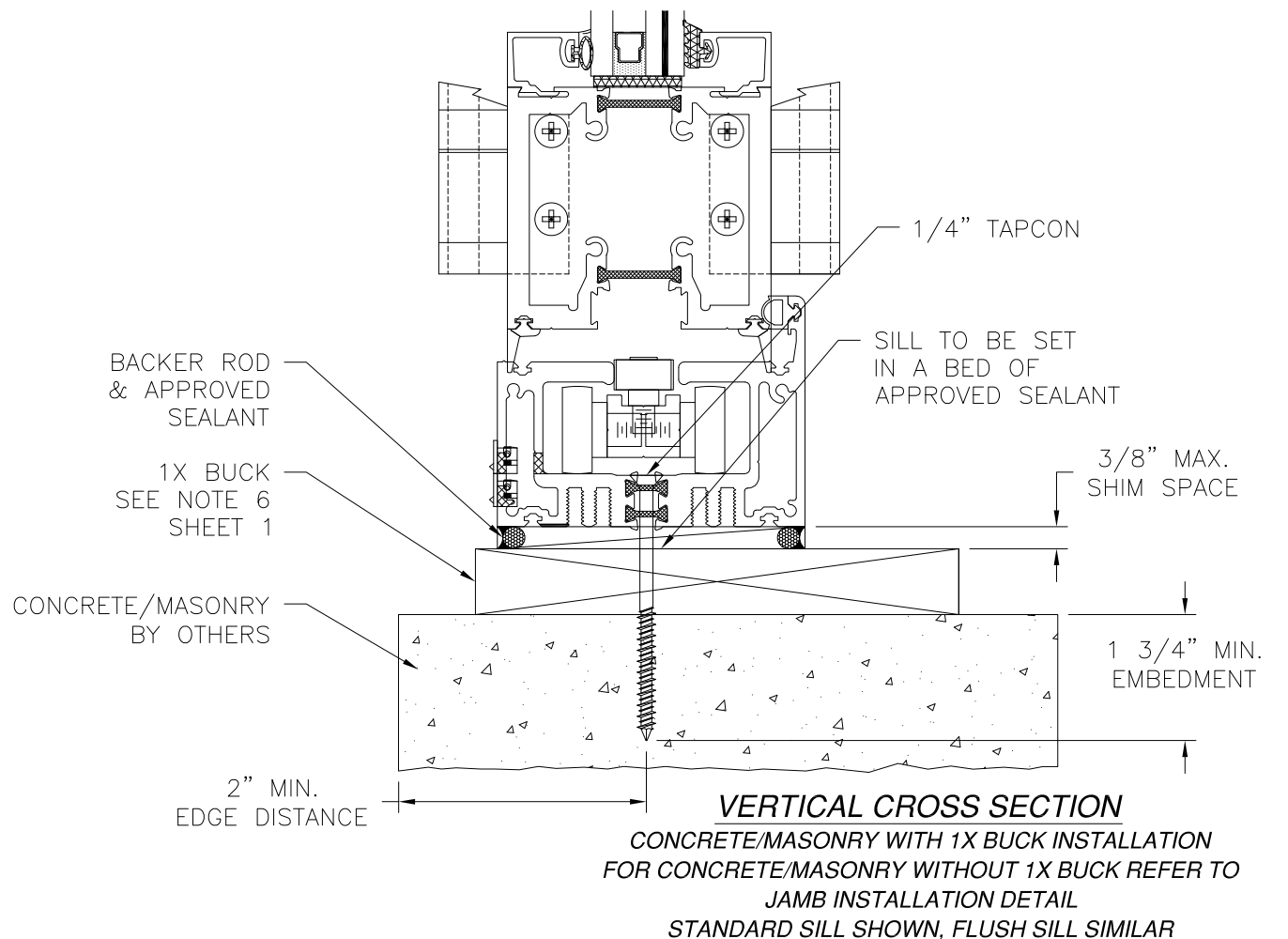
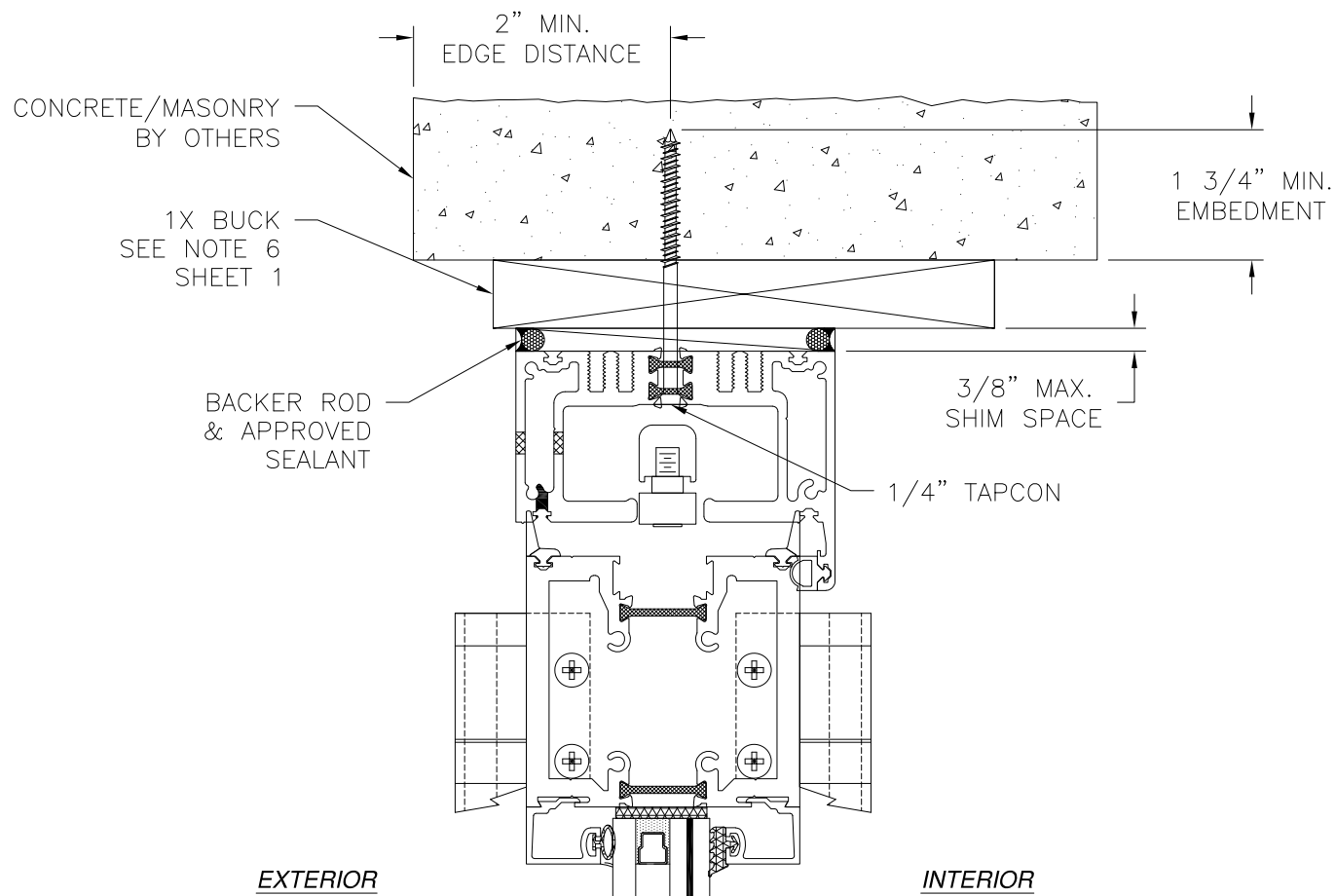
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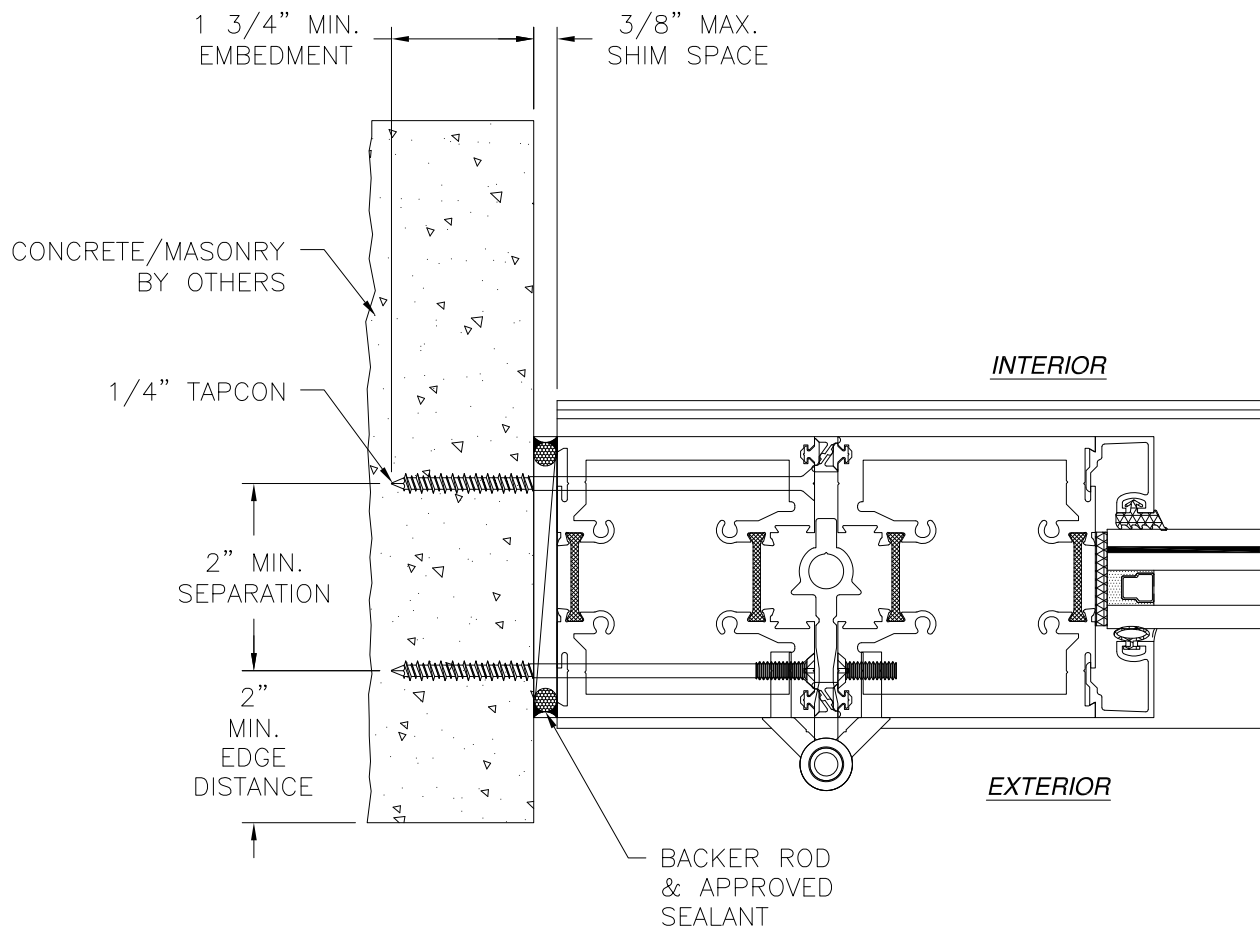
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JAMB INSTALLATION DETAIL
CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY INSTALLATION WITH 1X BUCK REFER TO
HEAD AND SILL INSTALLATION DETAILS

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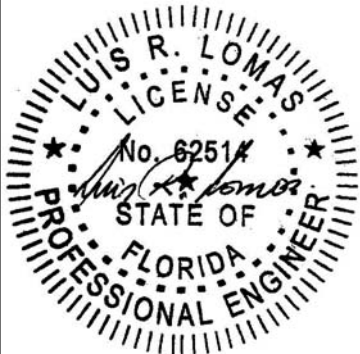
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SOLAR INNOVATIONS, INC.
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PINE GROVE, PA 17963

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ALUMINUM FOLDING GLASS WALL IMPACT
INSTALLATION DETAILS

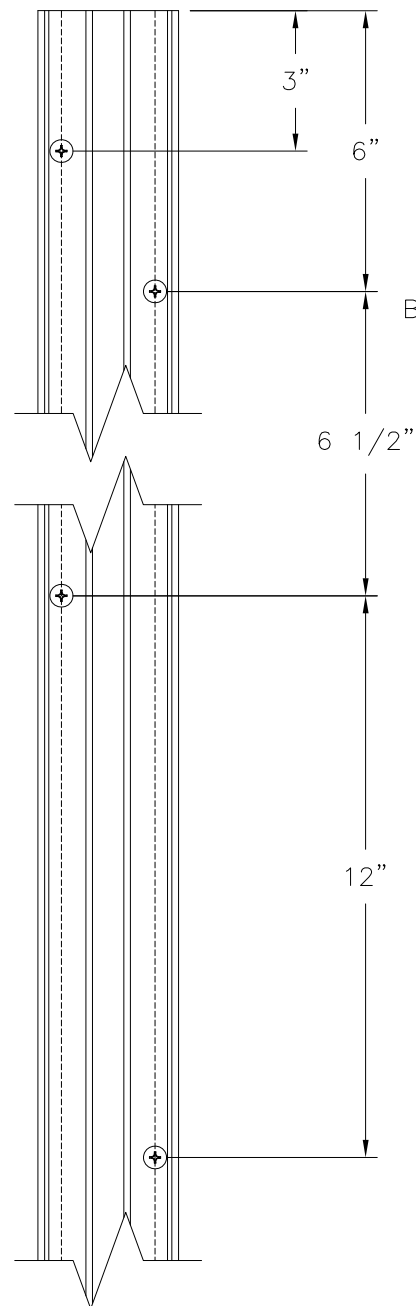
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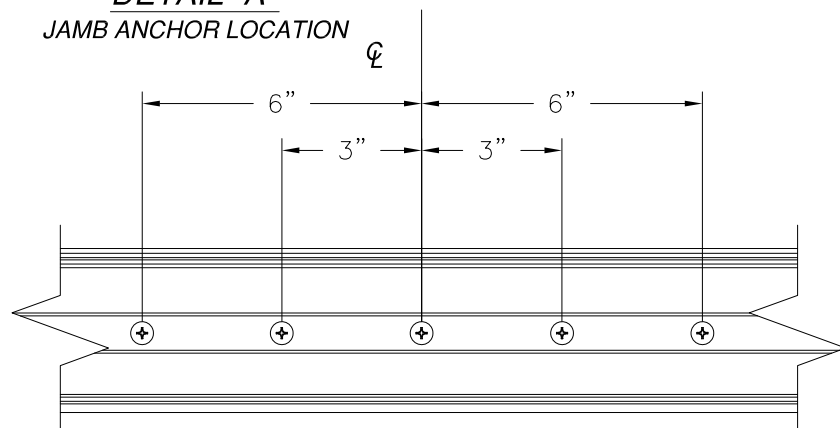


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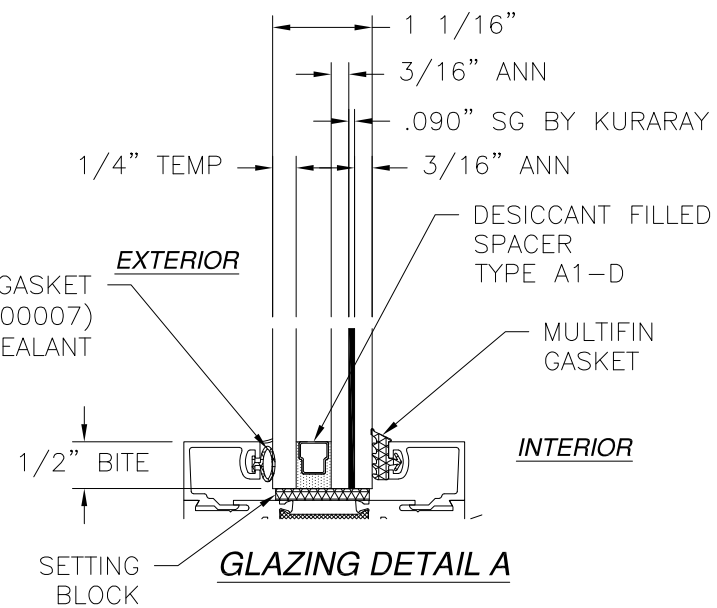
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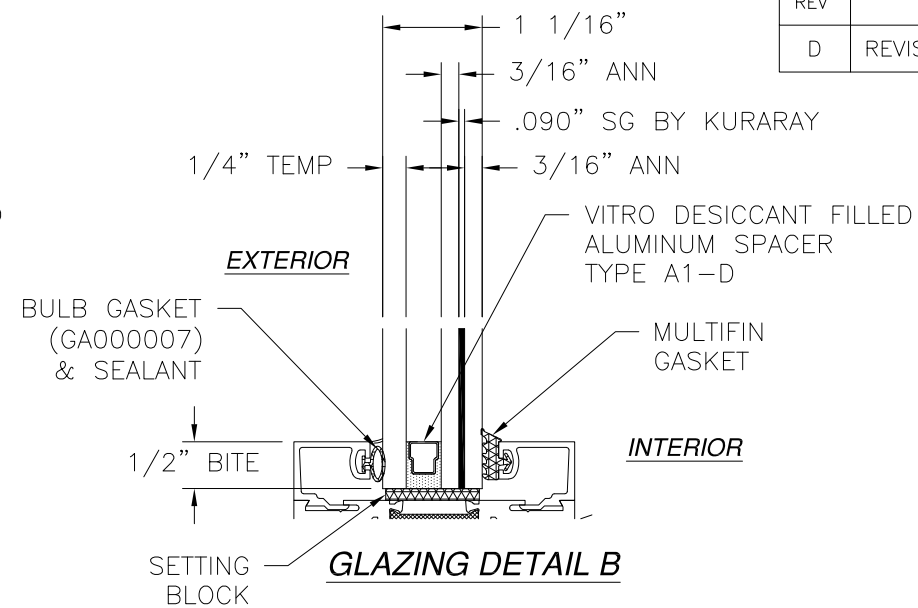
DETAIL "A"
JAMB ANCHOR LOCATION



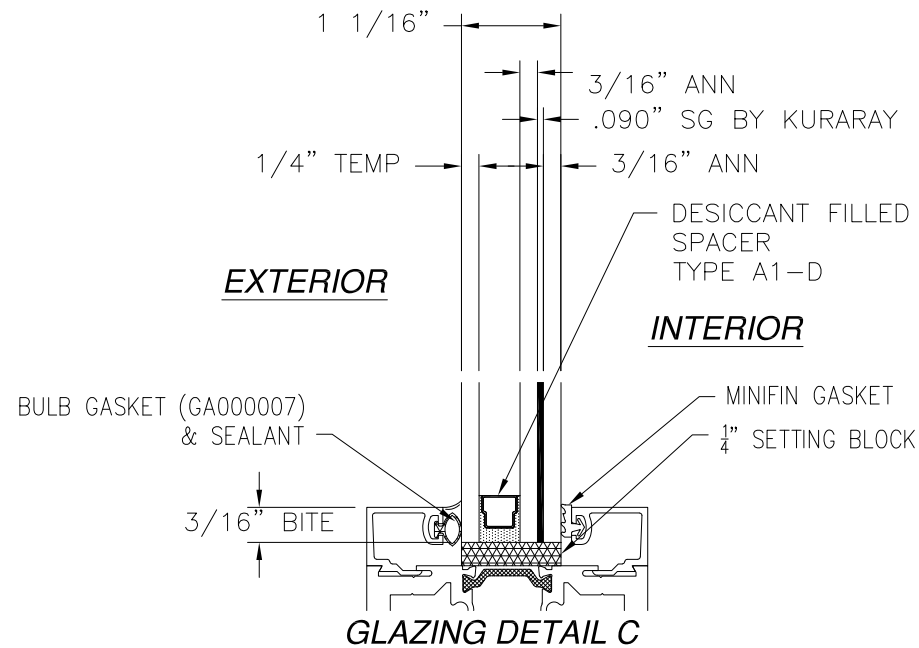
DETAIL "B"
HEAD AND SILL ANCHOR CLUSTER



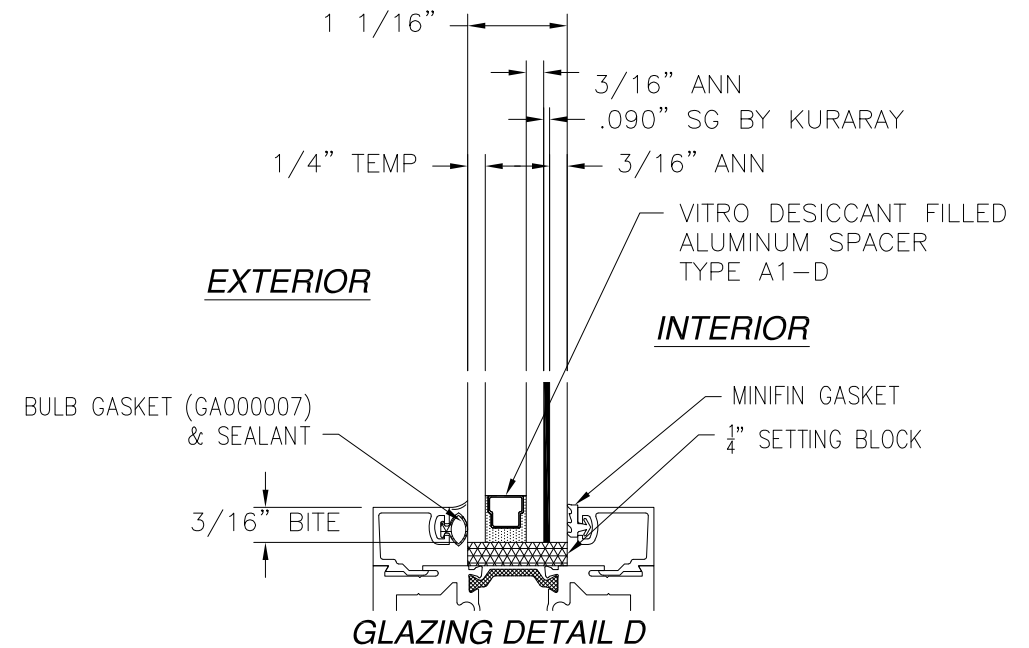
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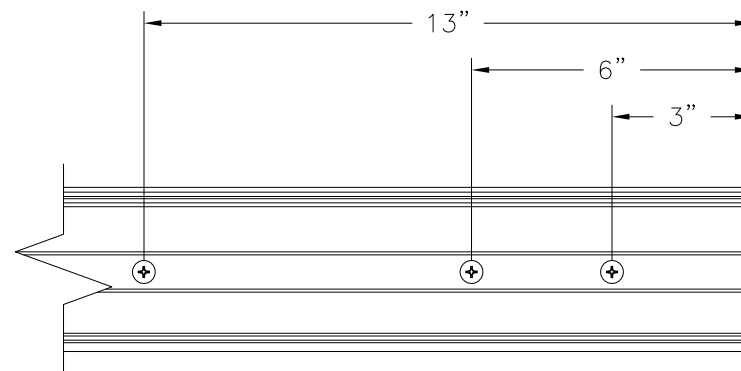
GLAZING DETAIL B



GLAZING DETAIL C



GLAZING DETAIL D



DETAIL "C"
HEAD AND SILL END

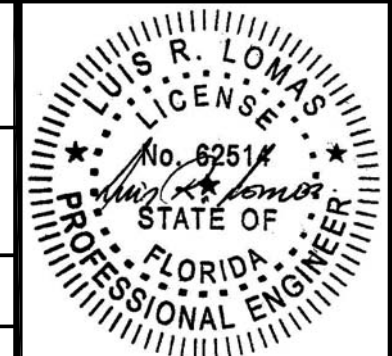
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PINE GROVE, PA 17963

SERIES SI3000 G3 - 3'X10' OUTSWING
ALUMINUM FOLDING GLASS WALL IMPACT
VERTICAL CROSS SECTION

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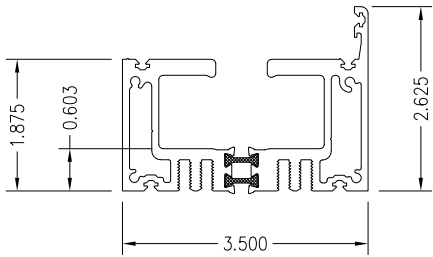
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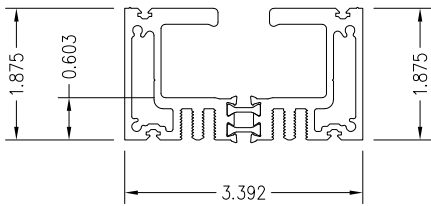


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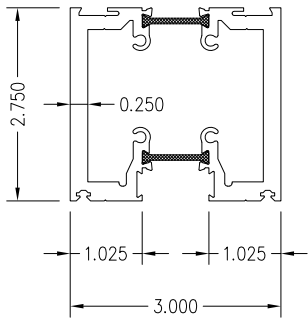
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REV	DESCRIPTION	DATE	APPROVED
D	REVISED PER NEW REQUIREMENTS	12/05/2023	R.L.



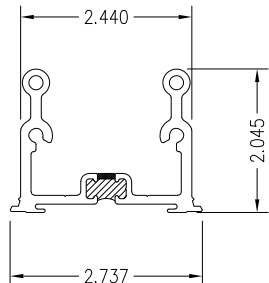
DUAL WHEEL
HEAD / SILL



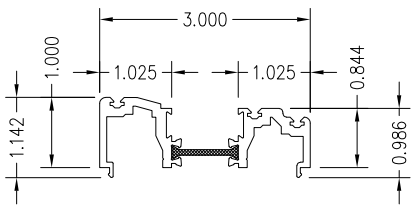
FLUSH
SILL



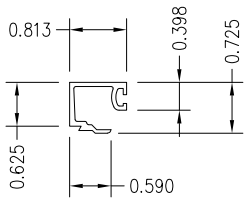
REGULAR THERMAL
FRAME



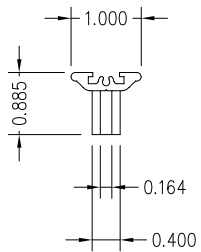
FRAME
LUG



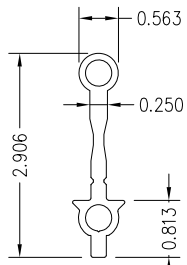
3rd GENERATION
DOOR ADAPTOR



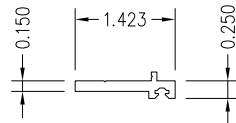
1/4" GLASS
STOP



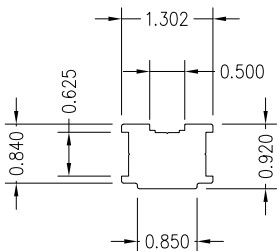
2nd GENERATION
HANDLE



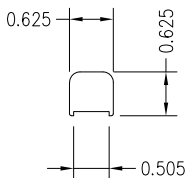
HINGE
EXTENSION



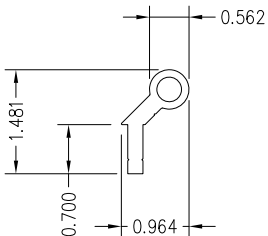
FRAME
CAP



TROLLEY
BODY



IDLER
BODY



5 1/4" SEMI-
CONCEALED HINGE

SOLAR INNOVATIONS, INC.

31 ROBERTS ROAD
PINE GROVE, PA 17963

SERIES SI3000 G3 - 3'X10' OUTSWING
ALUMINUM FOLDING GLASS WALL IMPACT
COMPONENTS

DRAWN:

R.L.

DWG NO.

08-03112

REV

D

SCALE NTS

DATE

05/31/17

SHEET 9

OF 9

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

SIGNED: 12/05/2023



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