

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED DETAILS AND COMPONENTS	12/13/2023	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 6063–T5.

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 INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

14. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16” 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.

15. FOR ANCHORING INTO METAL STRUCTURE USE #10 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 3,000 PSI.

17.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C–90, WITH Fm= 2,000 PSI.

17.4. METAL STRUCTURE: STEEL 18GA (.048”), 33KSI OR ALUMINUM 6063–T5 .125” THICK MINIMUM

SIGNED: 12/15/2023

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SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI7000 G2 INTERNATIONAL HOPPER
PROJECT-IN-TOP WINDOW IMPACT
NOTES

DRAWN:
N.G.

DWG NO.
08–02920

REV
C

SCALE NTS

DATE 06/08/16

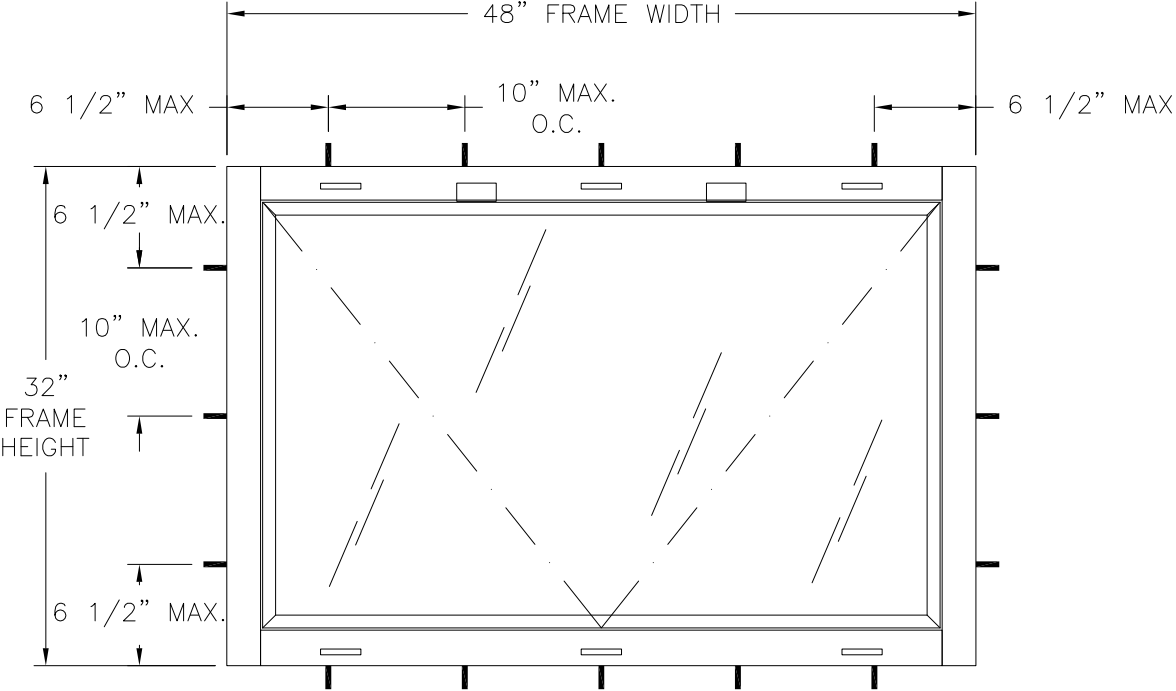
SHEET 1 OF 6

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P.E.
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

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SERIES SI7000 G2 INTERNATIONAL HOPPER WINDOW
EXTERIOR VIEW

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

MISSILE LEVEL D, WIND ZONE 4
SEE CHART #1, THIS SHEET
48" X 32" UNIT SHOWN. OTHER SIZES APPROVED AS LONG AS
FRAME AREA DOES NOT EXCEED 10.66 FT²

- NOTES:
- VENT SIZE: 46 1/8" X 30"
 - D.L.O.: 41 3/4" X 25 6/8"
 - 1 3/8" X 1/4" WEEPHOLE WITH PLASTIC WEEP COVER AT 6" FROM EACH END AND MIDSPAN OF HEAD AND SILL.

HARDWARE SCHEDULE	
A.	SINGLE HANDLE CAM-TYPE LOCK AT MIDSPAN OF TOP RAIL
B.	SINGLE HANDLE /SINGLE-POINT LOCK AT 4 3/8" FROM TOP OF LOCK STILES
C.	METAL KEEPER AT LOCK LOCATION ON HEAD
D.	METAL SNUBBER AT 6" FROM EACH END AND MIDSPAN OF BOTTOM RAIL
E.	(5) BAR HINGE AT JAMBS/STILES

CHART #1
Maximum design pressure capacity chart (psf)

Frame Height (in)	Frame width (in)													
	24.0		30.0		36.0		42.0		46.1		48.0		54.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
30.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-
36.0	65.0	65.0	65.0	65.0	65.0	65.0	-	-	-	-	-	-	-	-
42.0	65.0	65.0	65.0	65.0	-	-	-	-	-	-	-	-	-	-
48.0	65.0	65.0	-	-	-	-	-	-	-	-	-	-	-	-
54.0	65.0	65.0	-	-	-	-	-	-	-	-	-	-	-	-

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SOLAR INNOVATIONS, INC.

31 ROBERTS RD
PINE GROVE, PA 17963

SERIES SI7000 G2 INTERNATIONAL HOPPER
PROJECT-IN-TOP WINDOW IMPACT
ELEVATION AND DESIGN PRESSURE CHART

DRAWN:
N.G.

DWG NO.
08-02920

REV
C

SCALE
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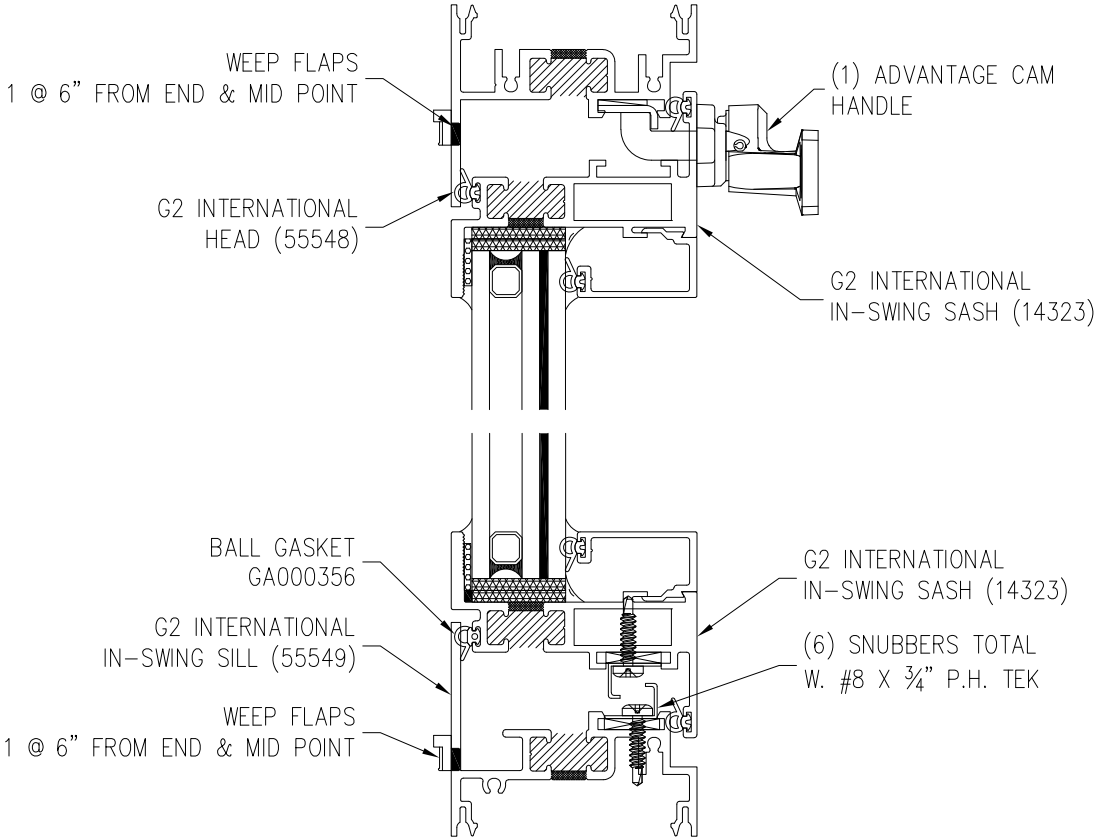
DATE
06/08/16

SHEET
2 OF 6

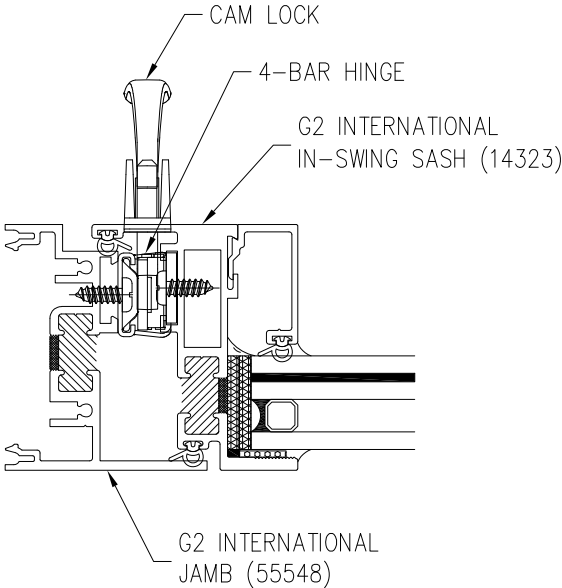
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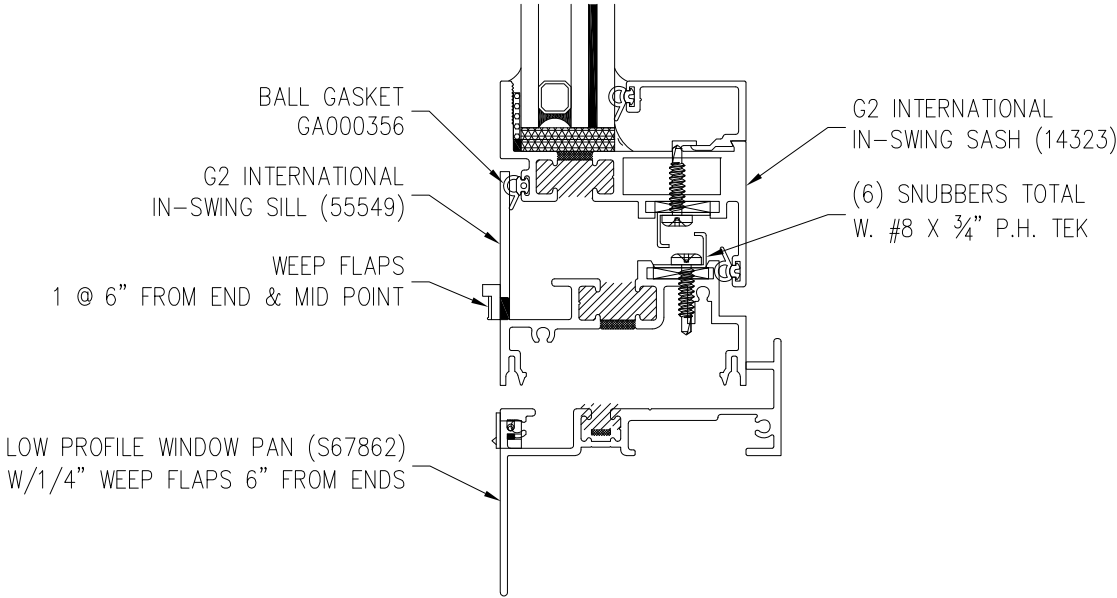
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VERTICAL CROSS SECTION



HORIZONTAL CROSS SECTION



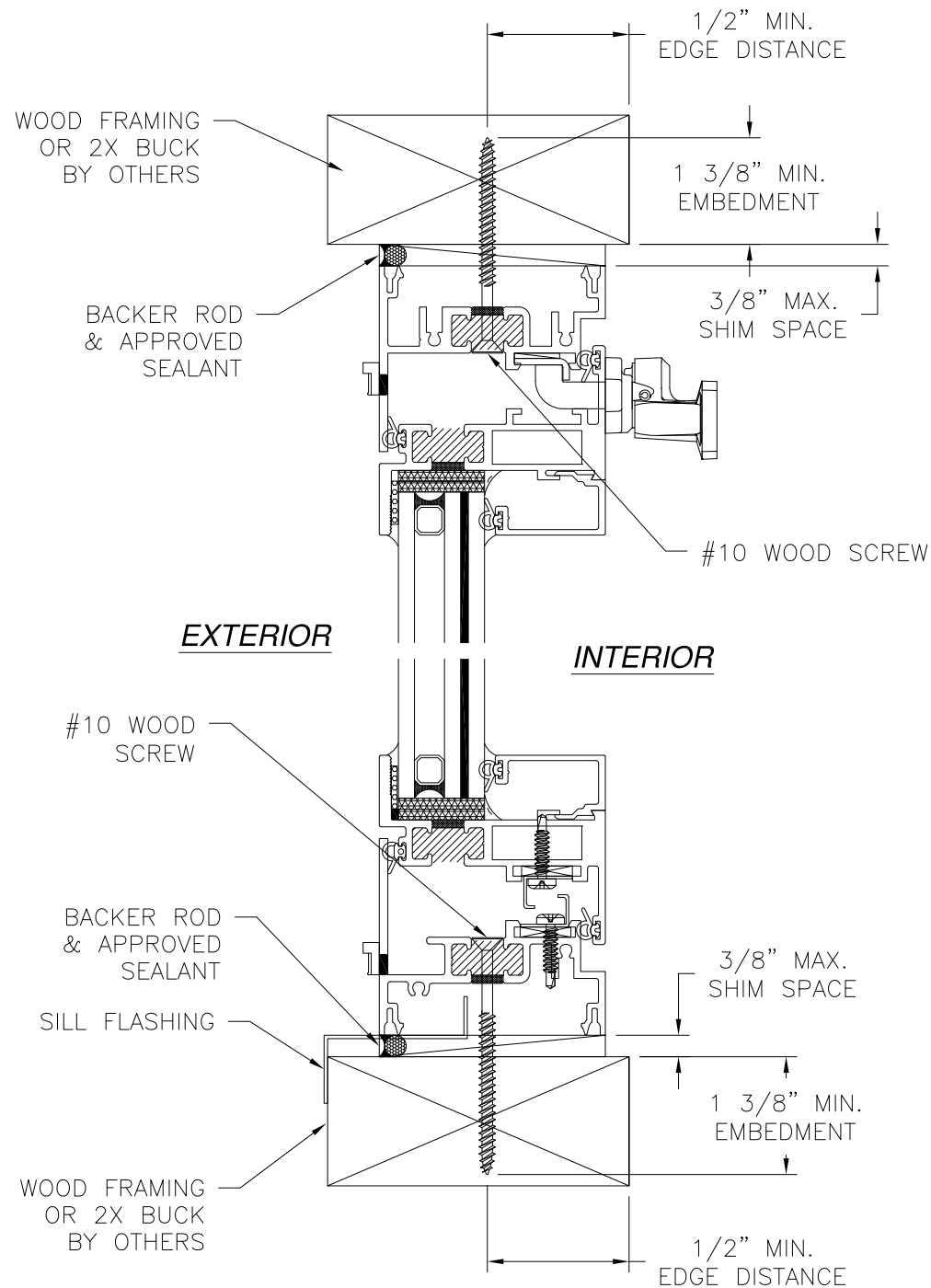
ADDITIONAL SILL DETAIL

SIGNED: 12/15/2023

SOLAR INNOVATIONS, INC. 31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI7000 G2 INTERNATIONAL HOPPER PROJECT-IN-TOP WINDOW IMPACT CROSS SECTIONS		
DRAWN: N.G.	DWG NO. 08-02920	REV C
SCALE NTS	DATE 06/08/16	SHEET 3 OF 6
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



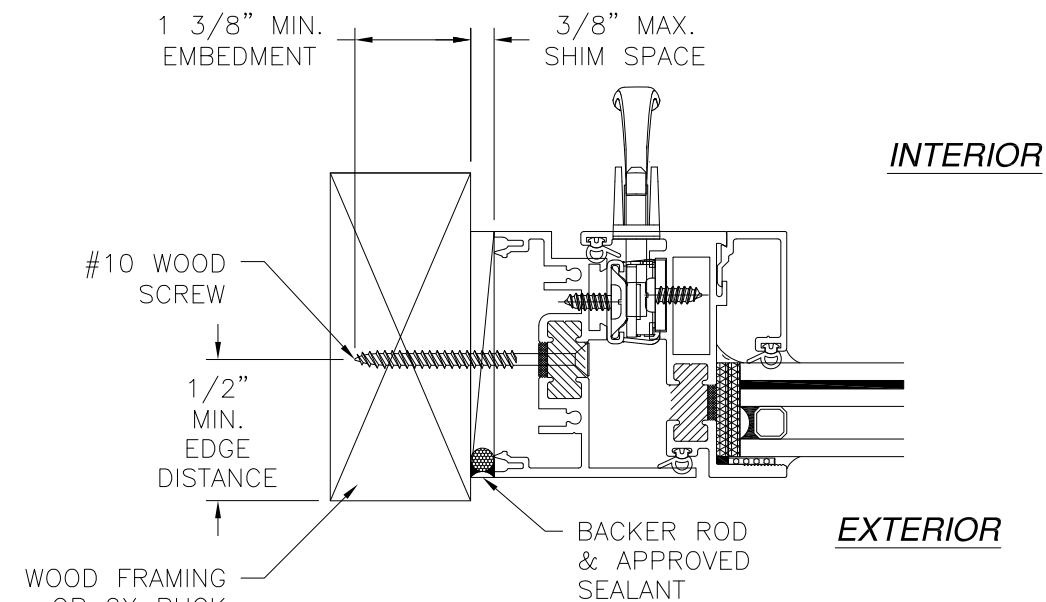
Luis R. Lomas P.E.
FL No.: 62514



VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
FOR ADDITIONAL SILL DETAIL, SEE SHEET 7

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

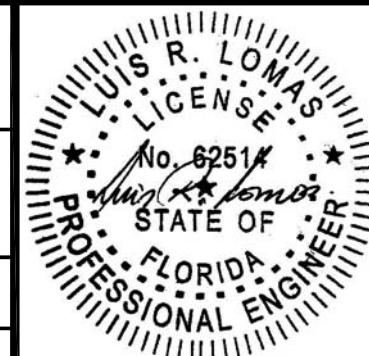
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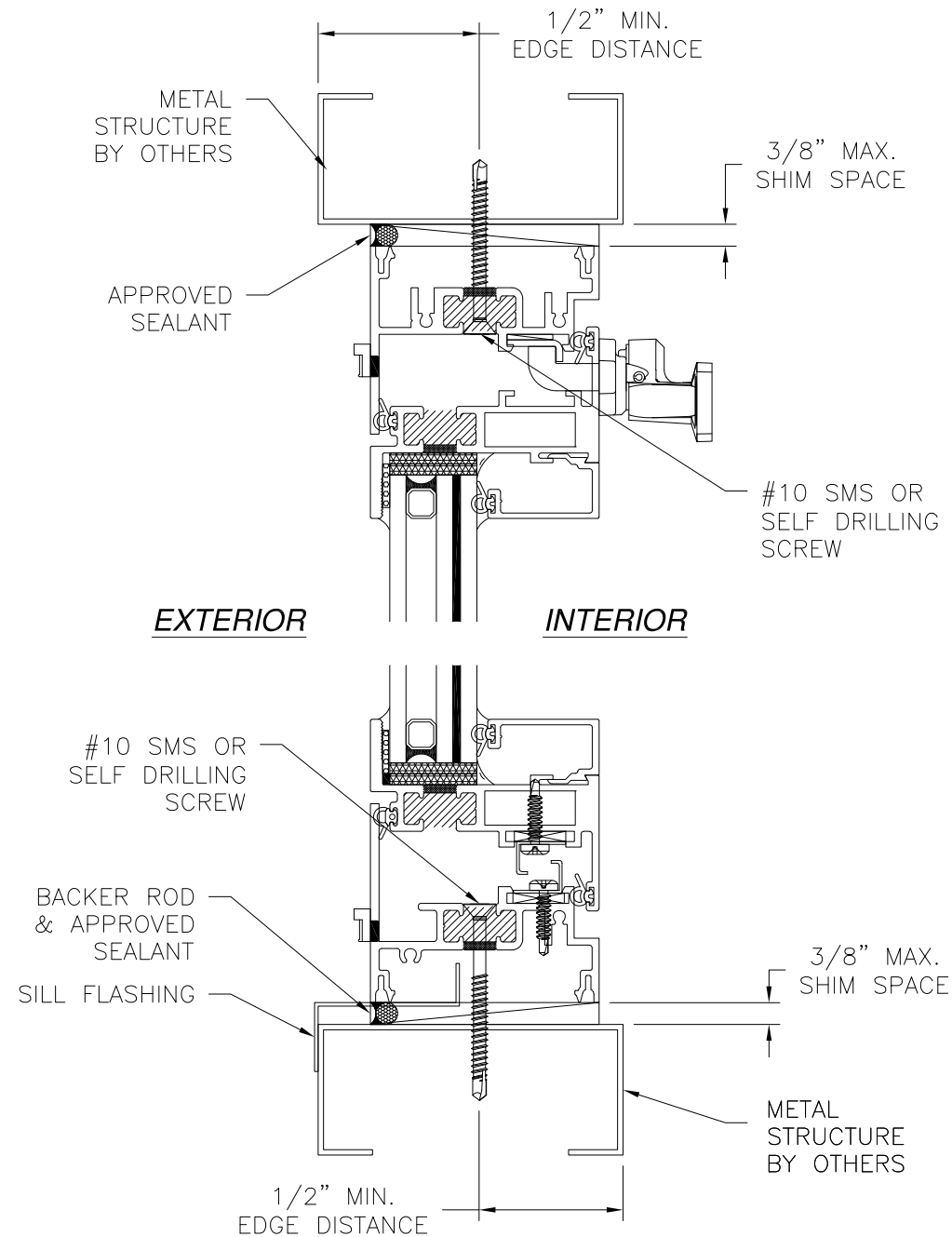
JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

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31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI7000 G2 INTERNATIONAL HOPPER PROJECT-IN-TOP WINDOW IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 06/08/16	SHEET 4 OF 6
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

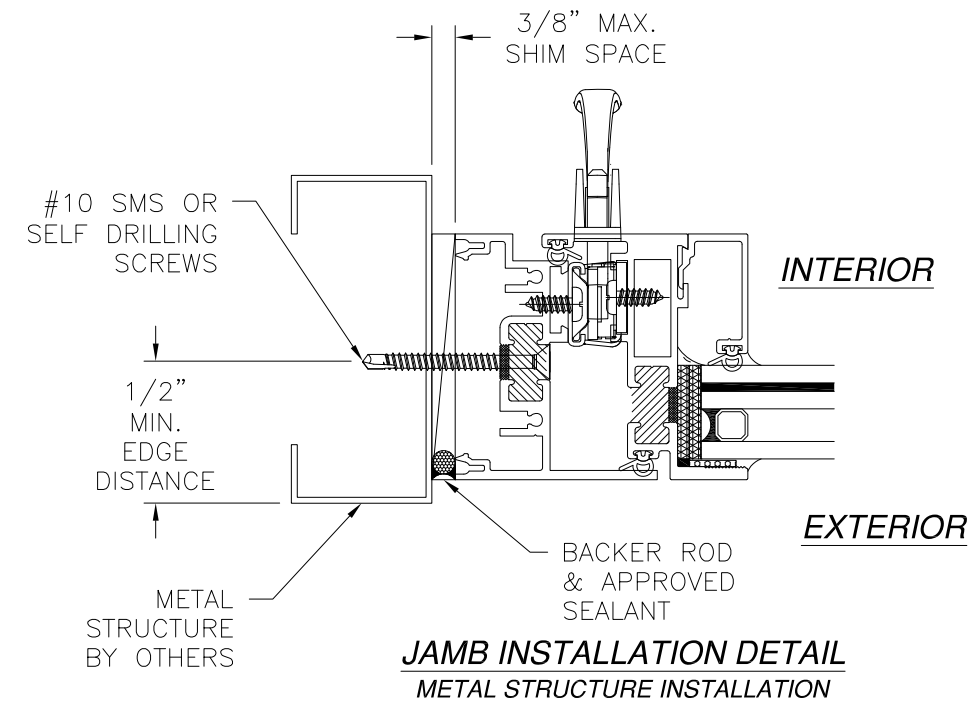
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VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION
 FOR ADDITIONAL SILL DETAIL, SEE SHEET 7

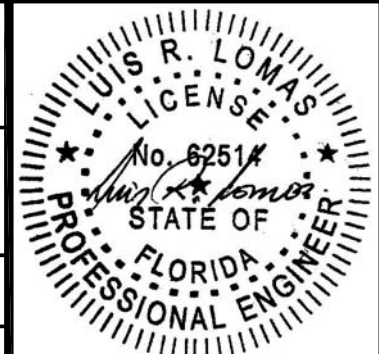


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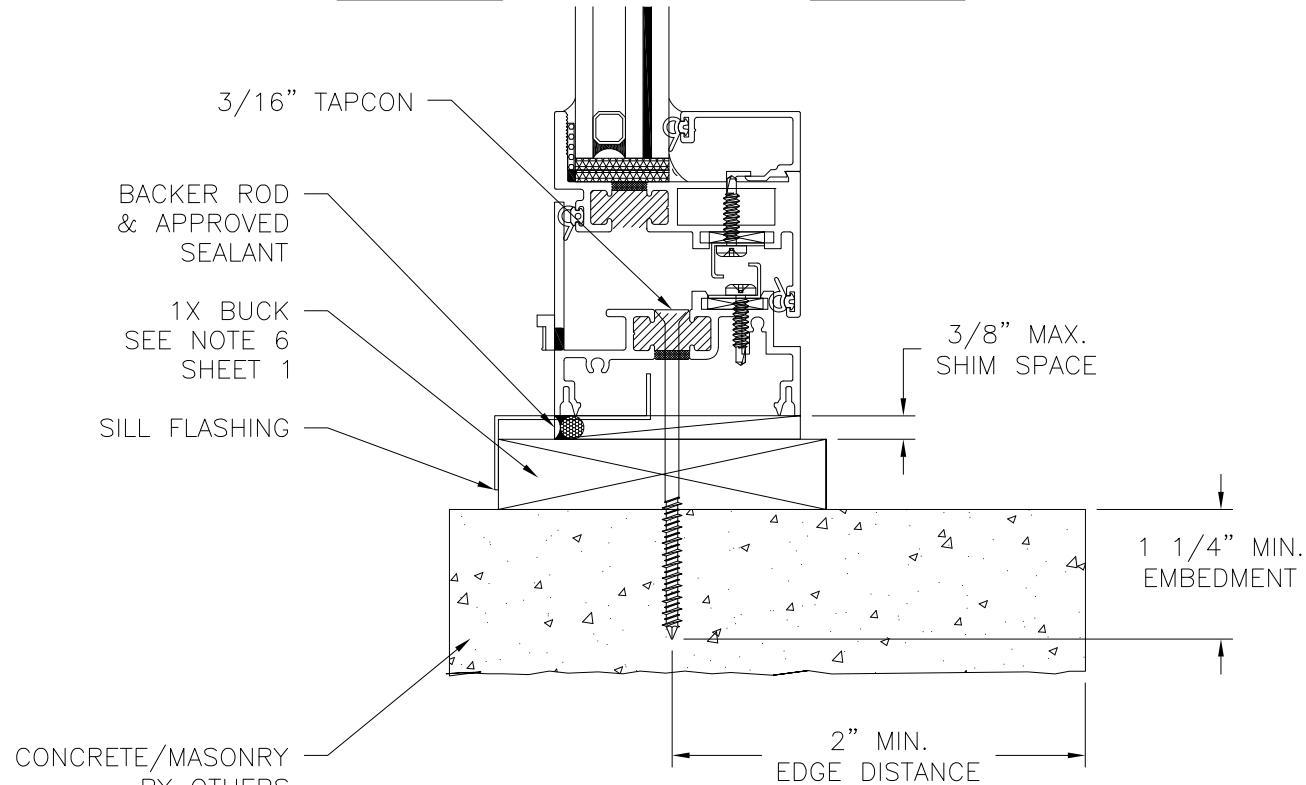
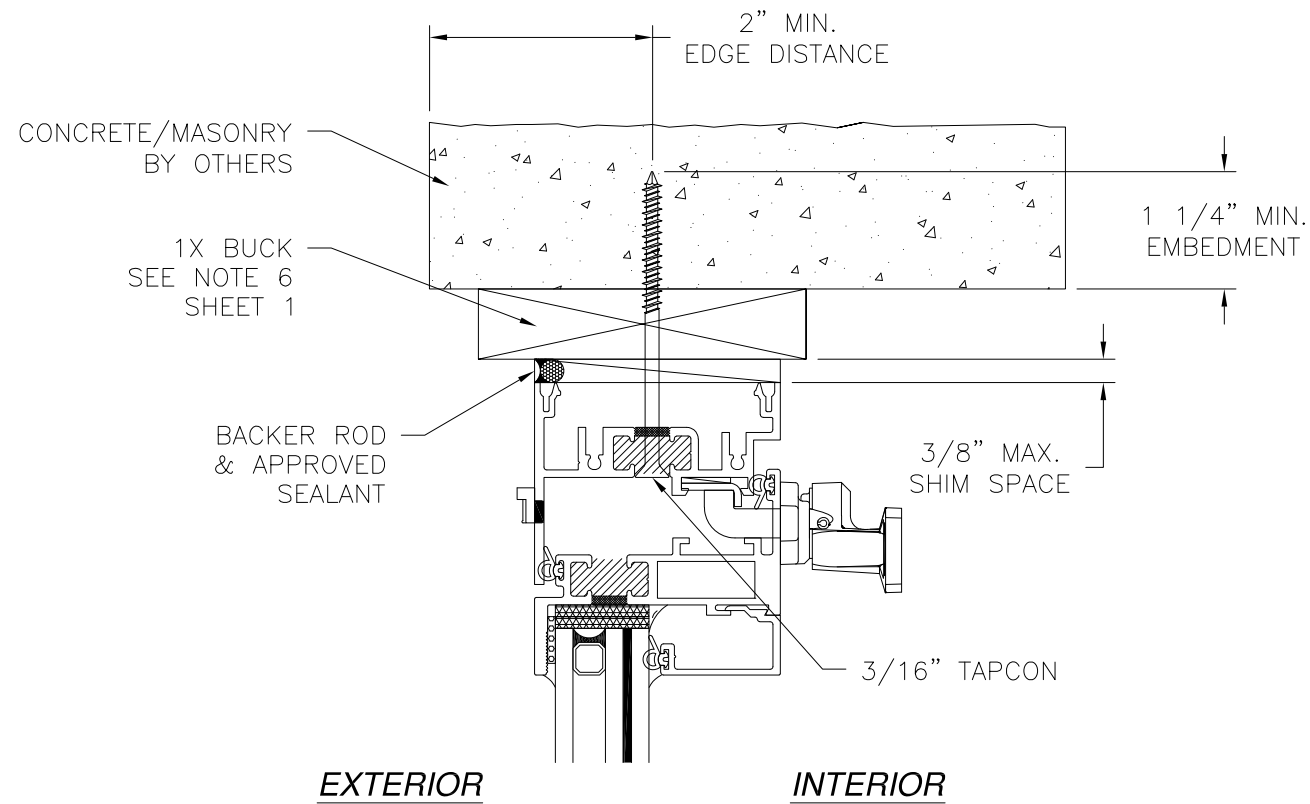
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SERIES SI7000 G2 INTERNATIONAL HOPPER PROJECT-IN-TOP WINDOW IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 06/08/16	SHEET 5 OF 6
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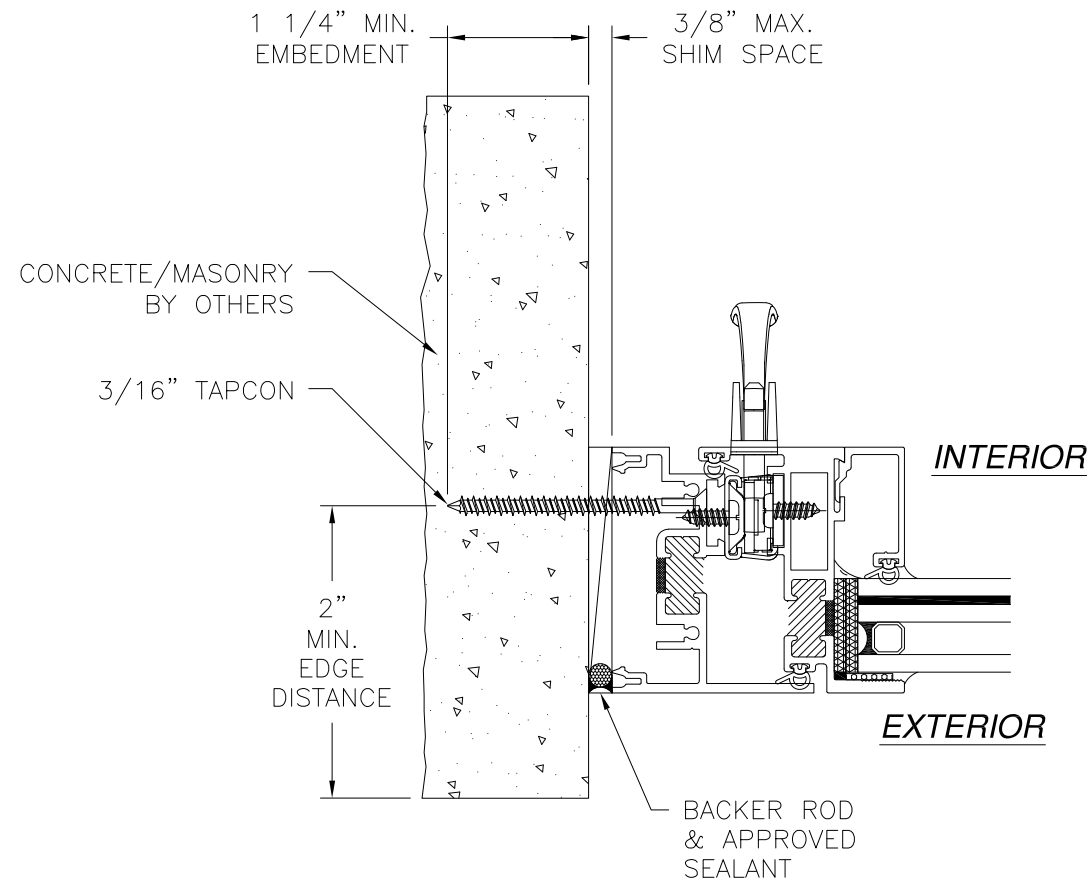
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VERTICAL CROSS SECTION
CONCRETE/MASONRY WITH 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY WITHOUT 1X BUCK REFER TO
JAMB INSTALLATION DETAIL
FOR ADDITIONAL SILL DETAIL, SEE SHEET 7

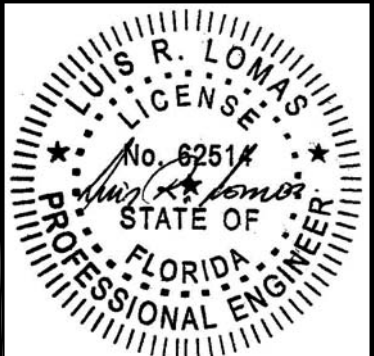
- NOTES:
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 - PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112



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

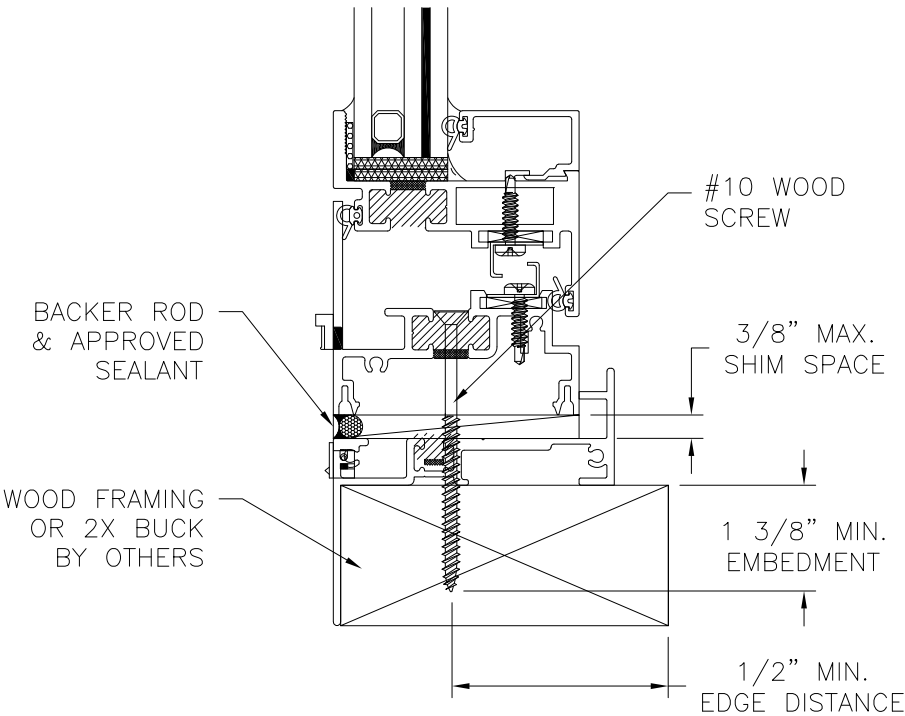
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SCALE NTS	DATE 06/08/16	SHEET 6 OF 6
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

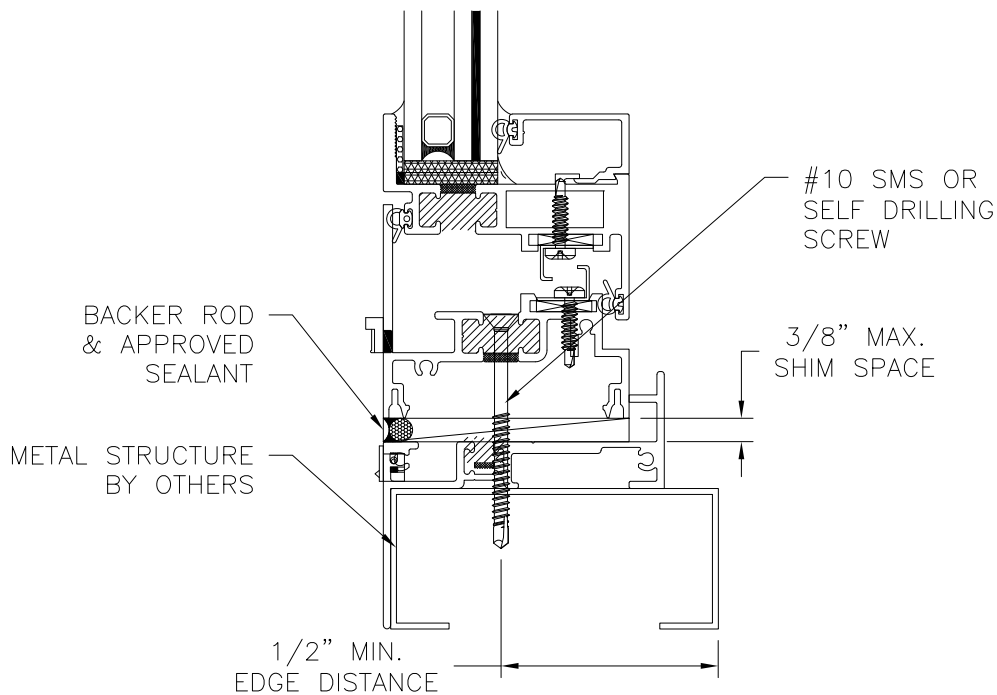


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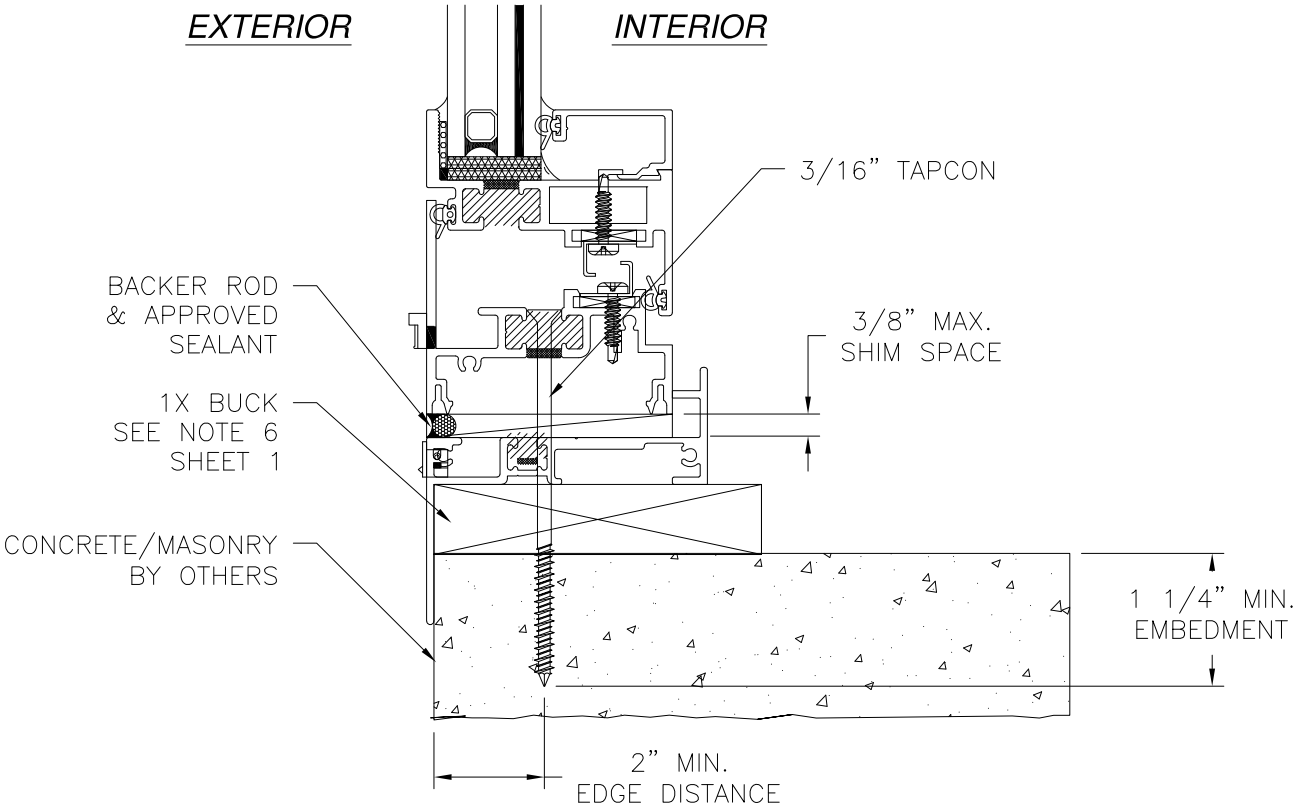


VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
WITH LOW PROFILE WINDOW PAN S67862



VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION
WITH LOW PROFILE WINDOW PAN S67862

NOTES:
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2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE
DESIGNED IN ACCORDANCE WITH ASTM E2112



VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION
WITH LOW PROFILE WINDOW PAN S67862

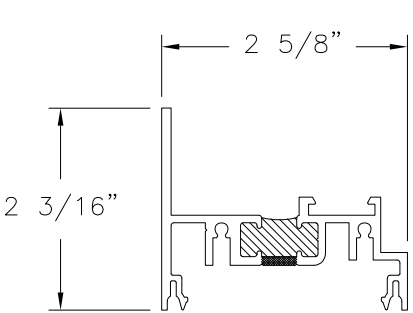
SOLAR INNOVATIONS, INC.		
31 ROBERTS RD PINE GROVE, PA 17963		
SERIES SI7000 G2 INTERNATIONAL HOPPER PROJECT-IN-TOP WINDOW IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 06/08/16	SHEET 7 OF 6
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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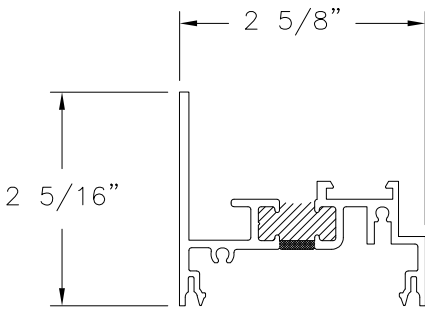


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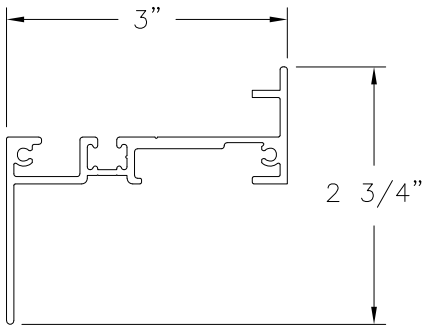
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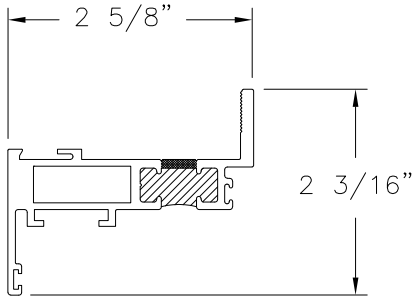
FRAME HEAD (S55548)
ALUMINUM 6063-T5
.100" THICK



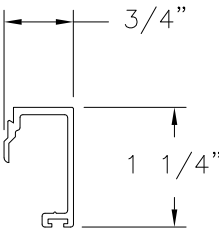
FRAME SILL/JAMB (S55549)
ALUMINUM 6063-T5
.100" THICK



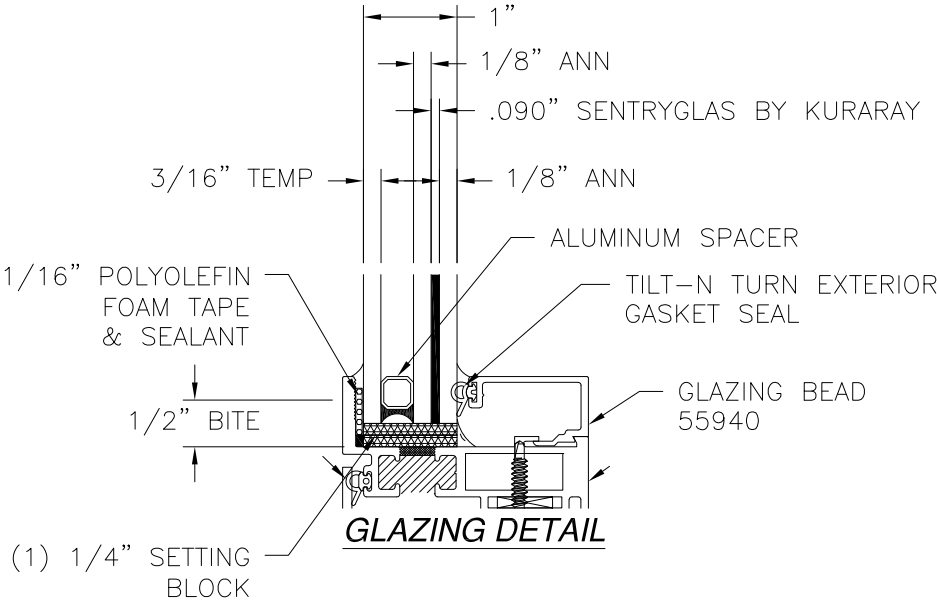
LOW PROFILE WINDOW PAN
ALUMINUM 6063-T5
.100" THICK



SASH (H14323)
ALUMINUM 6063-T5
.100" THICK



GLAZING BEAD (S55940)
ALUMINUM 6063-T5
.062" THICK



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