

# NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS

## MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT - LMI

### INSTALLATION ANCHORAGE DETAILS

**GENERAL NOTES:**

1. THE PRODUCT ANCHORAGE SHOWN HEREIN IS DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE - BUILDING (FBC) AND RESIDENTIAL (FRC) VOLUMES EXCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) FOR WIND ZONE 4, MISSILE LEVEL D AT THE DESIGN PRESSURE(S) STATED HEREIN.
2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NO. NCTL-210-2959-1 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
3. THE SKYLIGHT HAS BEEN TESTED IN ACCORDANCE WITH THE WIND BORNE DEBRIS REGION REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE - BUILDING (FBC) AND RESIDENTIAL (FRC) VOLUMES AND DOCUMENTED IN SIGNED AND SEALED TEST REPORT NO. NCTL-210-2959-1 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
4. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-12AE1. SEE SHEET 4 FOR GLAZING DETAIL.
5. ADEQUACY OF THE EXISTING STRUCTURAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
6. SITE CONDITIONS THAT DEVIATE FROM THE DETAILS OF THIS DRAWING REQUIRE FURTHER ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
7. THIS PRODUCT IS NOT REQUIRED TO USE AN IMPACT PROTECTIVE SYSTEM THAT COMPLIES WITH THE FLORIDA BUILDING CODE IN THE WIND BORNE DEBRIS REGION.
8. WHEN APPLICABLE, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM SKYLIGHT FRAMING SHALL HAVE BEEN PROTECTED IN A MANNER TO PREVENT GALVANIC CORROSION. FASTENERS SHALL BE MADE OF CORROSION RESISTANT METAL OR HAVE A CORROSION RESISTANT COATING.
9. CURB CONSTRUCTION AND MOUNTING DETAILS:
  - 9.1. A CURB SUPPLIED BY OTHERS CONSTRUCTED AND MOUNTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE - BUILDING (FBC) AND RESIDENTIAL (FRC) VOLUMES FOR THE TYPE OF CONSTRUCTION CLASSIFICATION WHERE THE SKYLIGHT IS TO BE INSTALLED IS ALLOWED.
  - 9.2. INTEGRATION WITH THE ROOF ASSEMBLY SHALL BE IN ACCORDANCE WITH CHAPTER 15 OF THE CURRENT EDITION OF THE FBC AND CHAPTER 9 OF THE CURRENT EDITION OF THE FRC.
  - 9.3. ADDITIONAL INSTALLATION DETAILING AND ENGINEERED INSTALLATION EVALUATION BY A LICENSED DESIGN PROFESSIONAL WILL BE REQUIRED FOR SUBMITTAL IN ADDITION TO THIS PRODUCT EVALUATION DOCUMENT.

DESIGN PRESSURE RATING (PSF)	IMPACT RATING
+52.5/-52.5	WIND ZONE 4 MISSILE LEVEL D

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6	BILL OF MATERIALS AND COMPONENTS

<p style="text-align: center;">NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS 5294 TOWER WAY SANFORD, FL 32773</p> <p style="text-align: center;">TITLE: MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT LARGE MISSILE IMPACT GENERAL AND INSTALLATION NOTE</p> <p style="text-align: center;">PREPARED BY:  PTE PRODUCT DESIGN GROUP, LLC PO BOX 520776 LONGWOOD, FLORIDA 32752 FBPE CA. NO. 23535</p>	<p style="text-align: center;">DRAWN BY: TJH SCALE: N.T.S. REV: C</p> <p style="text-align: center;">DATE: 05/08/12 DRAWING NO: KENN0004 SHEET: 1 OF 6</p>																				
<p>PROJECT NUMBER: 423-0504</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">C</td> <td style="width: 45%;">Update to 8th Edition (2023) FBC</td> <td style="width: 15%;">10/16/23</td> <td style="width: 10%;">RJA</td> <td style="width: 25%;"></td> </tr> <tr> <td>B</td> <td>Update to 6th Edition (2017) FBC</td> <td>12/6/17</td> <td>RJA</td> <td></td> </tr> <tr> <td>A</td> <td>Update to 5th Edition (2014) FBC</td> <td>7/15/15</td> <td>RJA</td> <td></td> </tr> <tr> <td>REV</td> <td>DESCRIPTION</td> <td>DATE</td> <td>BY</td> <td></td> </tr> </table>	C	Update to 8th Edition (2023) FBC	10/16/23	RJA		B	Update to 6th Edition (2017) FBC	12/6/17	RJA		A	Update to 5th Edition (2014) FBC	7/15/15	RJA		REV	DESCRIPTION	DATE	BY		
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REV	DESCRIPTION	DATE	BY																		

Robert J. Amoruso, P.E.  
FL P.E. No. 49752

**INSTALLATION NOTES:**

1. ANCHOR INSTALLATION:
  - 1.1. INSTALL CURB TO ROOF ASSEMBLY IN ACCORDANCE WITH THE ANCHORING LAYOUT ELEVATIONS SHOWN ON SHEET 3 USING FASTENERS SHOWN IN THE INSTALLATION ANCHOR SCHEDULE ON THIS SHEET.
  - 1.2. INSTALL SASH TO CURB USING #8 SELF-DRILLING/SELF-TAPPING SCREWS. SEE ANCHORING LAYOUT SHEET 3.
  - 1.3. CURB WOOD SPECIFIC GRAVITY OF 0.55 MINIMUM.
2. APPLY ALL SEALANTS ACCORDING TO MANUFACTURERS INSTRUCTIONS.
3. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN ON THE INSTALLATION DRAWINGS. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES INCLUDING, BUT NOT LIMITED TO SHEATHING, UNDERLAYMENT AND SHINGLES.
4. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING. DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
5. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS. ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED IN THE INSTALLATION ANCHOR SCHEDULE ON THIS SHEET.
6. FOR SKYLIGHT SIZES LESS THAN THAT SHOWN IN THE ELEVATIONS, ANCHOR QUANTITIES MAY BE REDUCED BY ONE (1) WHEN SPACING BETWEEN ANCHORS IS 50% OR LESS THAN THE MAXIMUM SPACING REQUIRED.

INSTALLATION ANCHOR SCHEDULE								
ASSEMBLY	SUBSTRATE TYPE	HEAD TYPE	SIZE	MANUFACTURER AND/OR SPECIFICATION	MIN. EMBEDMENT (IN)	MIN. EDGE DISTANCE (IN)	MIN. SPACING (IN)	CAPACITIES BASED ON
CURB	SOLID-SAWN LUMBER (1)	HEX, PAN OR TRUSS HEAD	NO. 8	ASME B18.6.4 (SELF-DRILLING/SELF-TAPPING SCREW)	1	5/8	5/8	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.55
ROOF	CONCRETE	HEX HEAD	3/16"	ITW TAPCON (3)	1 1/2	1 1/8	2 1/2	MIN. 2500 PSI CONCRETE BUT NOT LESS THAN THAT REQUIRED BY BUILDING CODE
				Elco Ultracon	1 3/8	1	3 3/8	MIN. 2500 PSI CONCRETE BUT NOT LESS THAN THAT REQUIRED BY BUILDING CODE
ROOF	SOLID-SAWN LUMBER (2)	HEX, PAN OR TRUSS HEAD	NO. 8	ANSI B18.6.1 (WOOD SCREW) ASME B18.6.4 (SELF-DRILLING/SELF-TAPPING SCREW)	7/8	5/16	13/16	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.55
ROOF	SOLID-SAWN LUMBER	1/4" DIA. ROUND HEAD RING-SHANK NAIL	0.099" DIA. MIN.	RING-SHANK NAIL	7/8	1/2	1/2	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.55
ROOF	ALUMINUM OR STEEL, 1/8" MIN. WALL THICKNESS	HEX, PAN OR TRUSS HEAD	NO. 8	ASME B18.6.4 (SELF-DRILLING/SELF-TAPPING SCREW)	PROTRUDING MIN. 3 THREADS PAST INTERIOR OF SUBSTRATE	1/2	1/2	ULTIMATE STRENGTH (Fu) OF 22,000 PSI
ROOF	PLYWOOD or OSB	HEX, PAN OR TRUSS HEAD	NO. 8	ASME B18.6.4 (TYPE AB TAPPING SCREW)	SCREW THREADS SHALL PROTRUDE A MINIMUM OF 1/4" FROM THE UNDERSIDE OF THE ROOF SHEATHING	1/2	1/2	7/16" THICK PLYWOOD - SPECIES GROUP 1 OR 2 (APA VOLUNTARY PRODUCT STANDARD PS 1) MINIMUM OR
ROOF	PLYWOOD or OSB	1/4" DIA. ROUND HEAD RING-SHANK NAIL	0.099" DIA. MIN.	RING-SHANK NAIL	NAIL SHANK SHALL PROTRUDE A MINIMUM OF 1/4" FROM THE UNDERSIDE OF THE ROOF SHEATHING	1/2	1/2	7/16" - SHEATHING GRADE (APA VOLUNTARY PRODUCT STANDARD PS 2) MINIMUM

**NOTES:**

- 1) FOR NO. 8 WOOD AND TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 0.102" (DRILL SIZE 38) PILOT HOLE FOR WOOD FRAME INSTALLATION.
- 2) FOR NO. 8 WOOD AND TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 0.082" (DRILL SIZE 45) PILOT HOLE FOR WOOD FRAME INSTALLATION.
- 3) WHEN ITW TAPCONS ARE USED FOR CONCRETE/MASONRY INSTALLATION, THEY SHALL BE THE ADVANCED THREADFORM TECHNOLOGY TYPE.

PROJECT NUMBER: 423-0504			RJA	BY
			RJA	DATE
		10/16/23	RJA	
			RJA	
	Update to 8th Edition (2023) FBC	C		
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	Update to 5th Edition (2014) FBC	A		
	DESCRIPTION	REV		

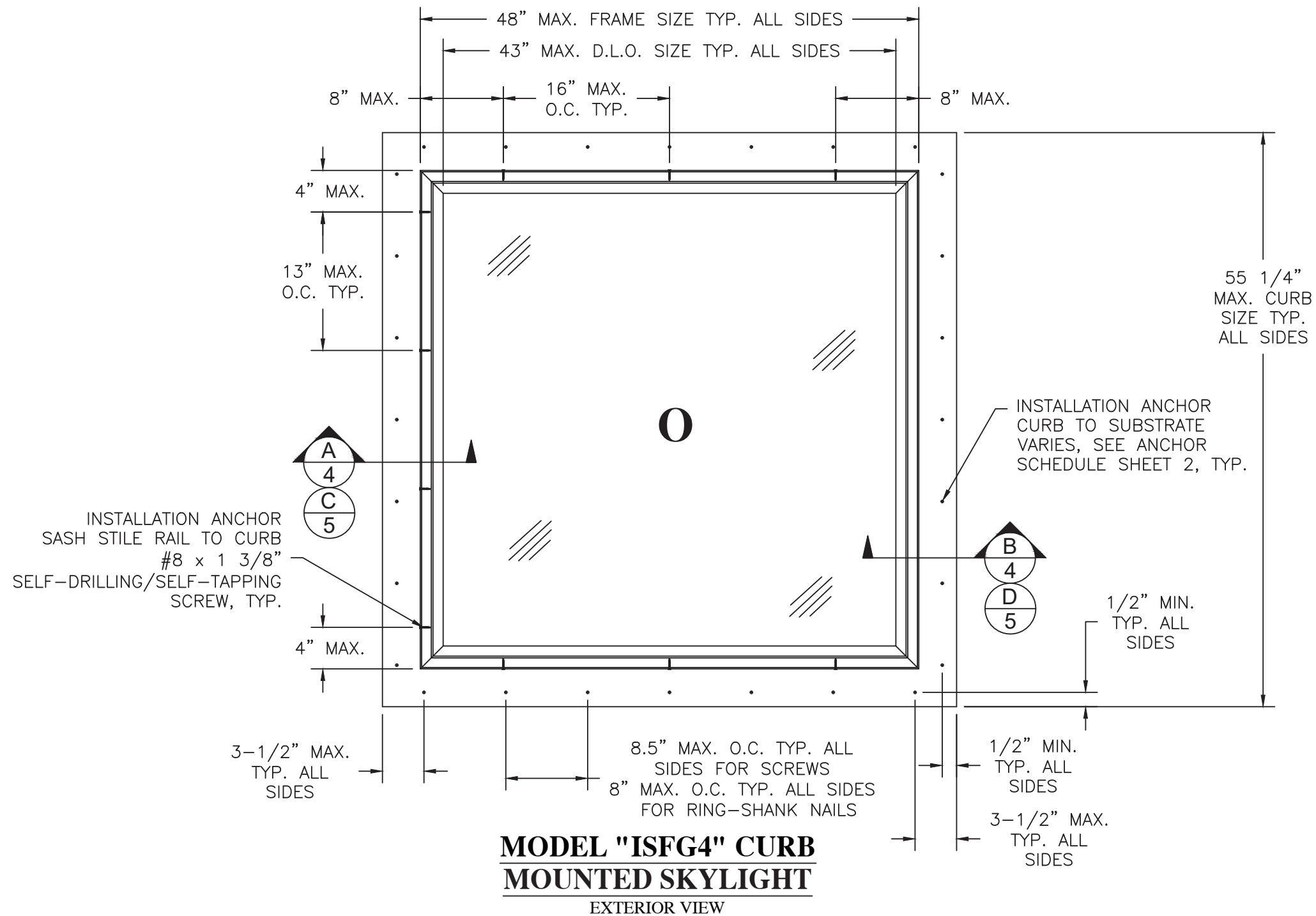
NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS  
 5294 TOWER WAY  
 SANFORD, FL 32773

TITLE: MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT  
 LARGE MISSILE IMPACT  
 INSTALLATION NOTES AND ANCHOR SCHEDULE

PREPARED BY: T.J.H.  
 DATE: 05/08/12  
 SCALE: N.T.S.  
 DRAWING NO: KENN0004  
 SHEET: 2 OF 6

PTC PRODUCT DESIGN GROUP, LLC  
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SANFORD, FL 32773

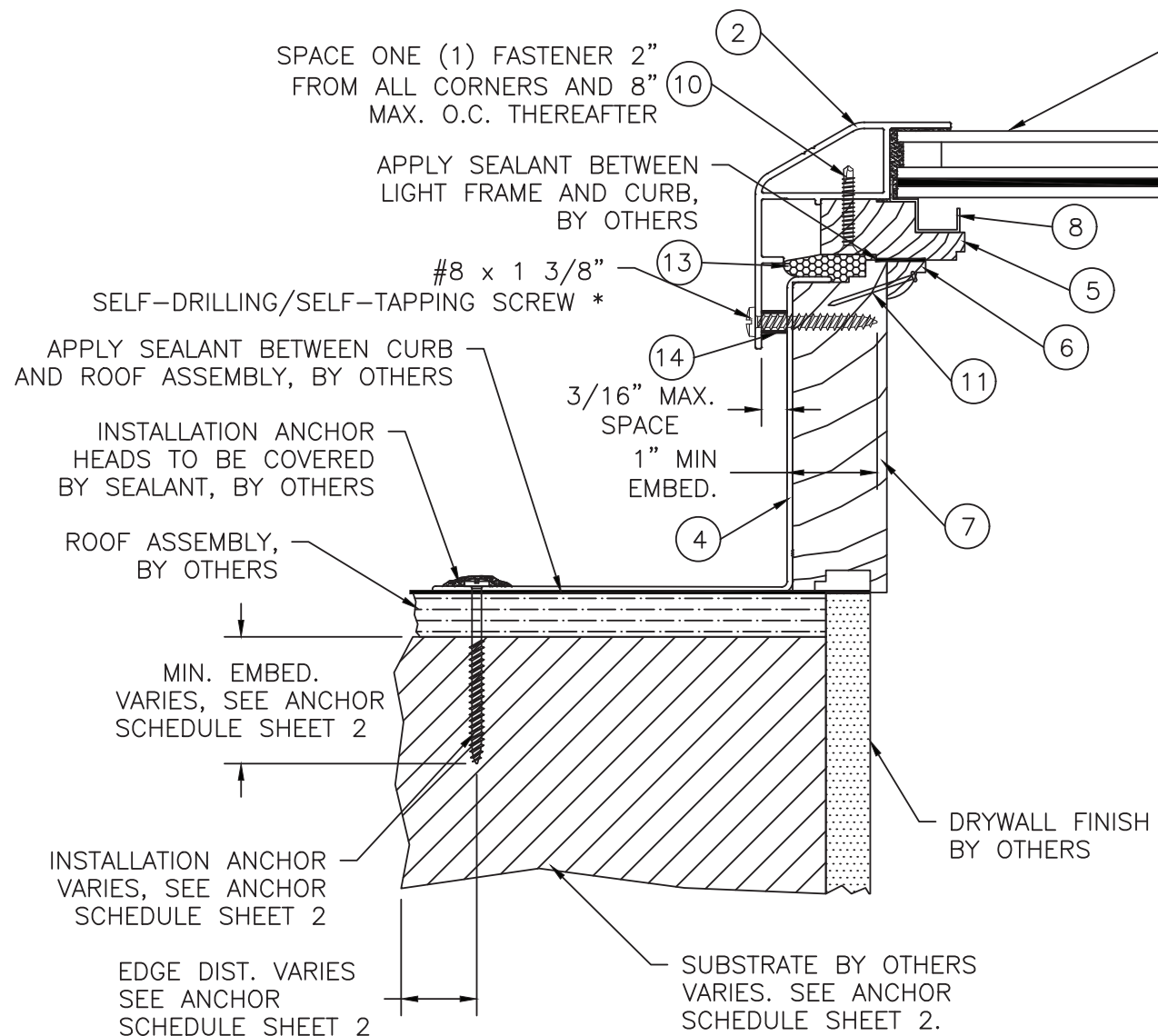
TITLE: MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT  
LARGE MISSILE IMPACT  
ELEVATION AND ANCHORING LAYOUT

PREPARED BY: PTC  
DRAWN BY: TJH  
DATE: 05/08/12  
SCALE: N.T.S.  
REV: C

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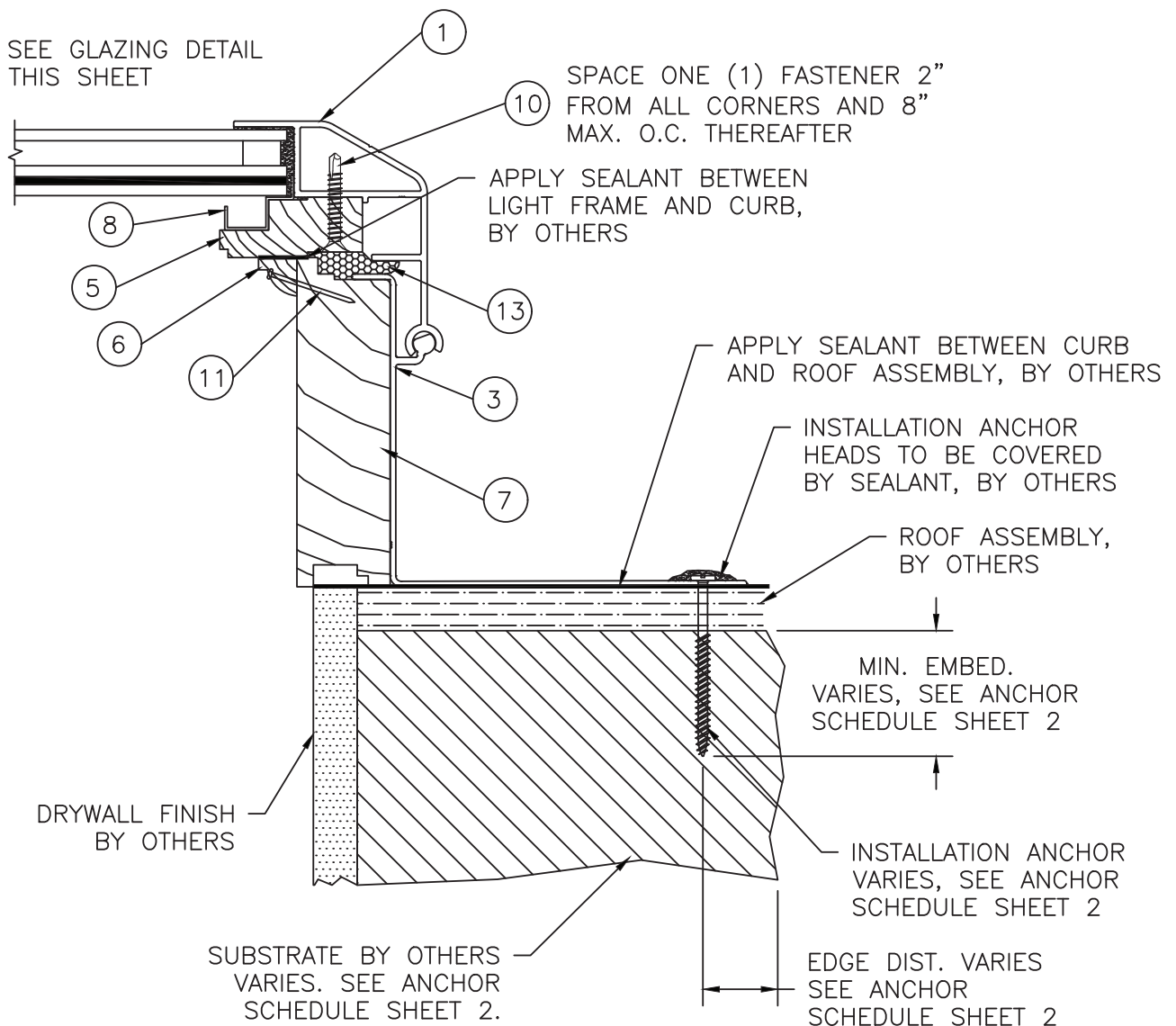
SHEET: 3 OF 6

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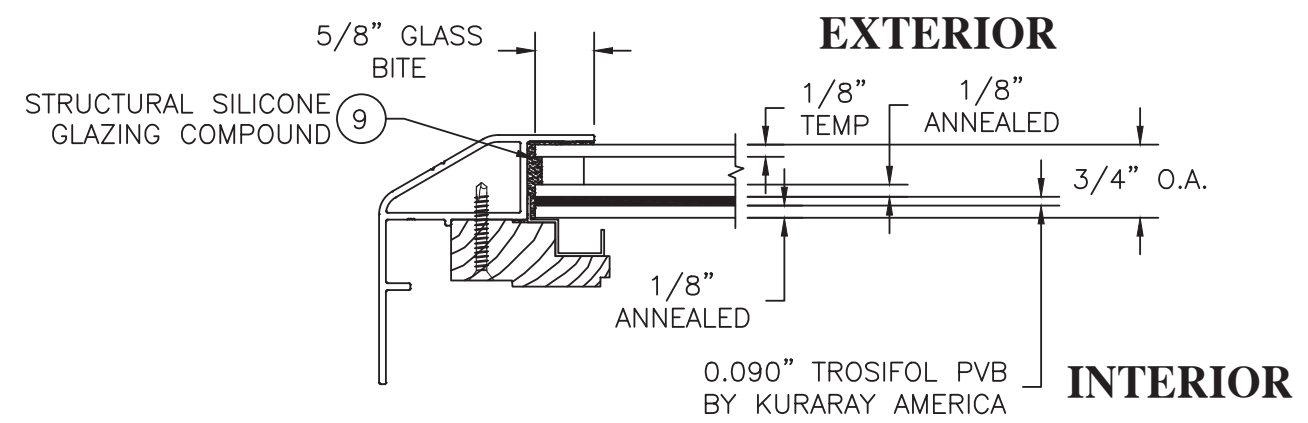


**A** **INSTALLATION CROSS SECTION**  
**4** **NON-HINGE SIDE**  
**2X FRAMING, CONCRETE AND METAL FRAMING**  
**INSTALLATION DETAIL. SEE SHEET 2**

\*SEE ANCHOR SCHEDULE ON SHEET 2 FOR OTHER APPROVED TYPES



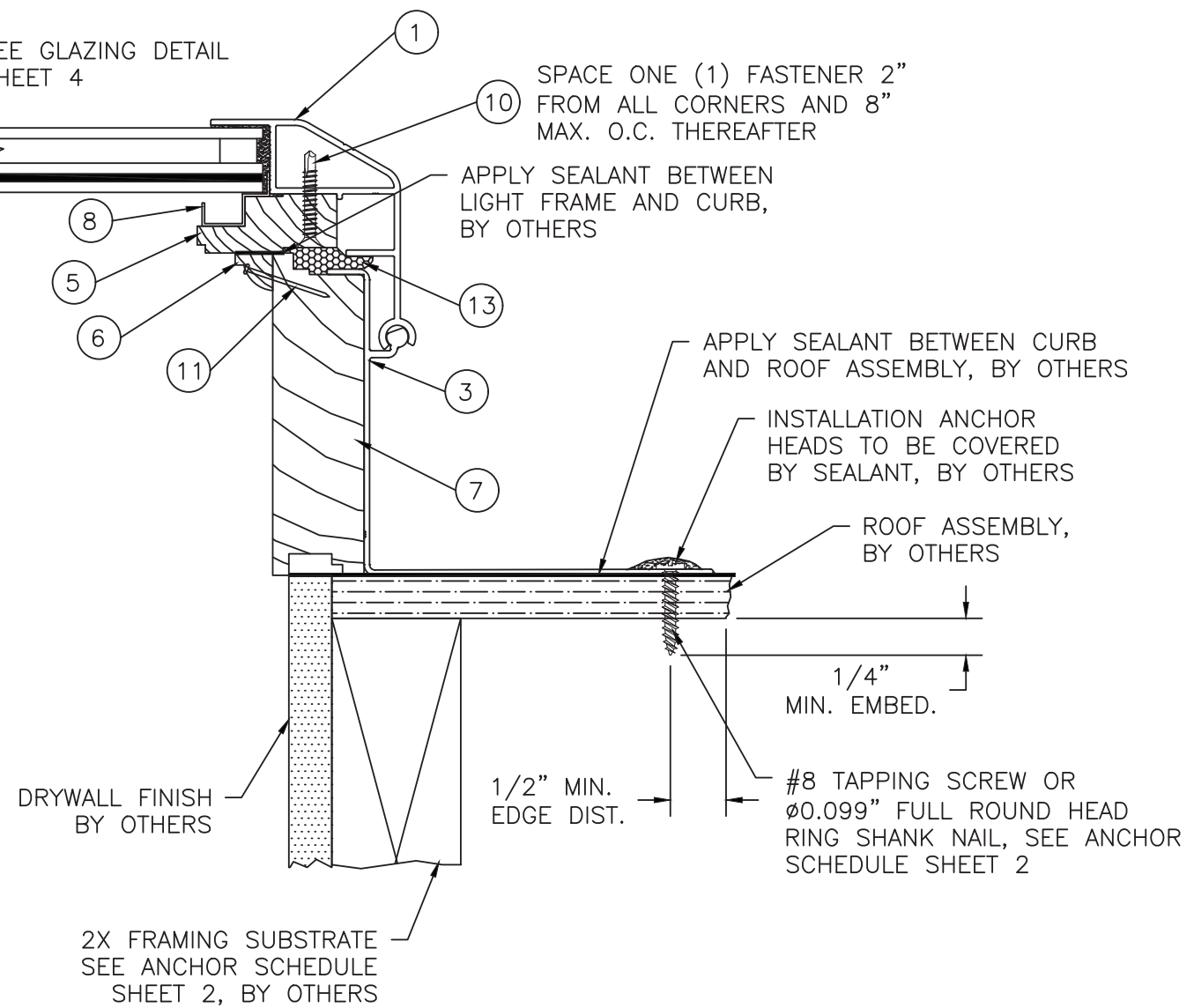
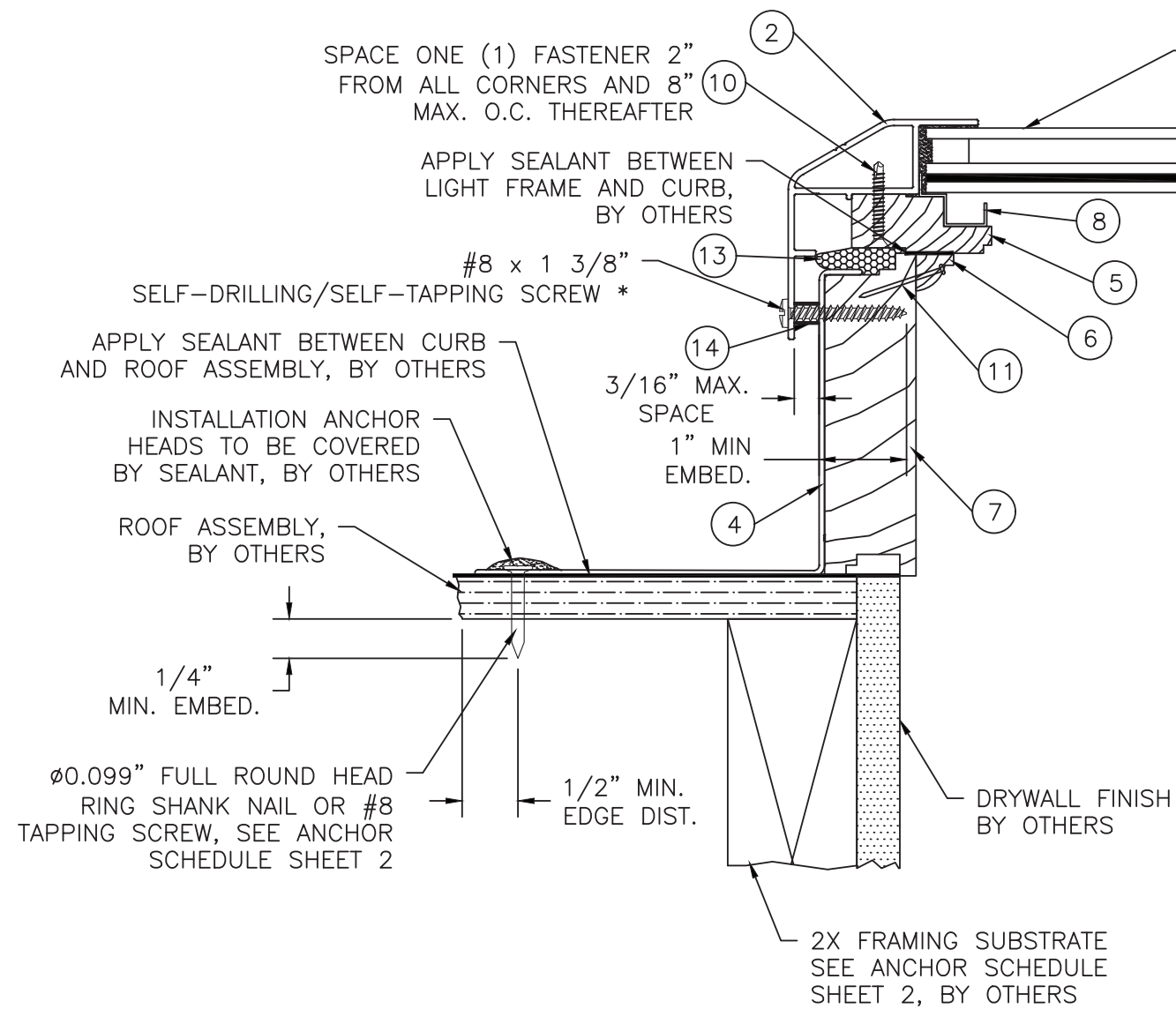
**B** **INSTALLATION CROSS SECTION**  
**4** **HINGE SIDE**  
**2X FRAMING, CONCRETE AND METAL FRAMING**  
**INSTALLATION DETAIL. SEE SHEET 2**



**GLAZING DETAIL**

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			10/16/23	DATE
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			REV	
			A	DESCRIPTION
			4	OF 6
NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS 5294 TOWER WAY SANFORD, FL 32773 TITLE: MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT LARGE MISSILE IMPACT INSTALLATION SECTION W/SCREWS AND GLAZING DETAIL PREPARED BY: TJH DATE: 05/08/12 DRAWING NO: KENN0004 SCALE: N.T.S. REV: C SHEET: 4 OF 6 PTC PRODUCT DESIGN GROUP, LLC PO BOX 520776 LONGWOOD, FLORIDA 32752 Phone: 321.690.1789 Fax: 321.690.1789 Email: info@ptc-corp.com FBPE CA. NO. 23535				

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**C** INSTALLATION CROSS SECTION  
**5** NON-HINGE SIDE

2X FRAMING INSTALLATION DETAIL  
Ø0.148" RING SHANK NAIL SHOWN, #10 TAPPING SCREW ALSO APPROVED, SEE ANCHOR SCHEDULE SHEET 2

\*SEE ANCHOR SCHEDULE ON SHEET 2 FOR OTHER APPROVED TYPES

**D** INSTALLATION CROSS SECTION  
**5** HINGE SIDE

2X FRAMING INSTALLATION DETAIL  
#10 TAPPING SCREW SHOWN, Ø0.148" RING SHANK NAIL ALSO APPROVED, SEE ANCHOR SCHEDULE SHEET 2

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5294 TOWER WAY  
SANFORD, FL 32773

TITLE: MODEL "ISFG4" CURB MOUNTED GLASS SKYLIGHT  
LARGE MISSILE IMPACT  
INSTALLATION SECTION WITH NAILS

PREPARED BY: PTC  
DRAWN BY: TJH  
SCALE: N.T.S.  
REV: C

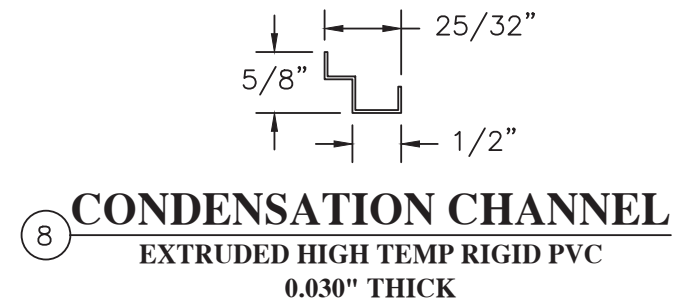
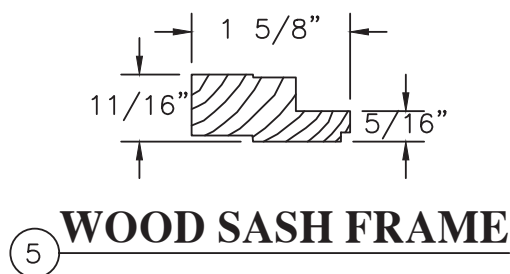
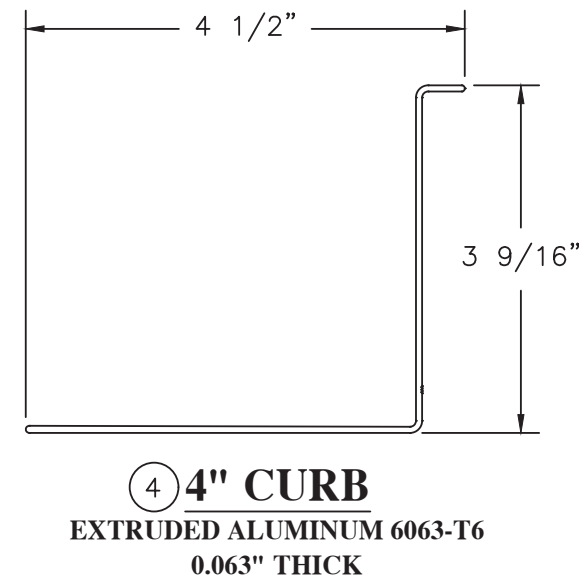
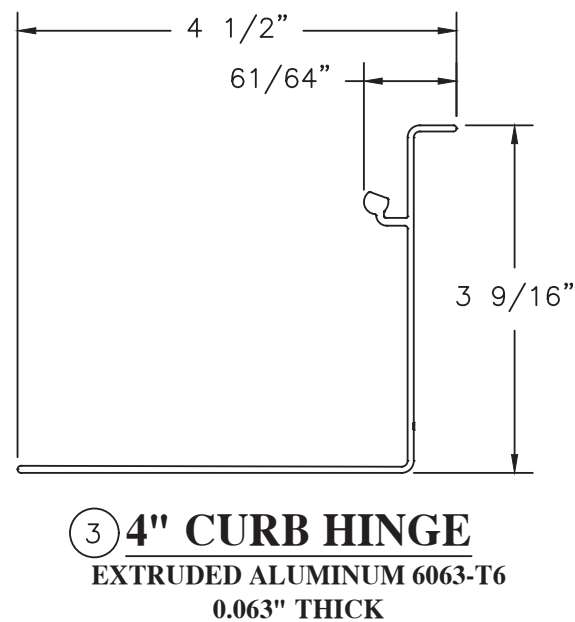
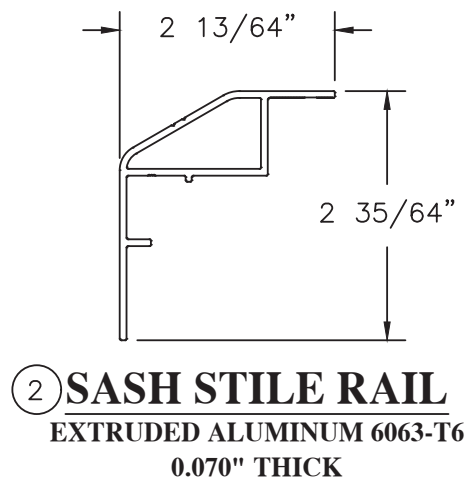
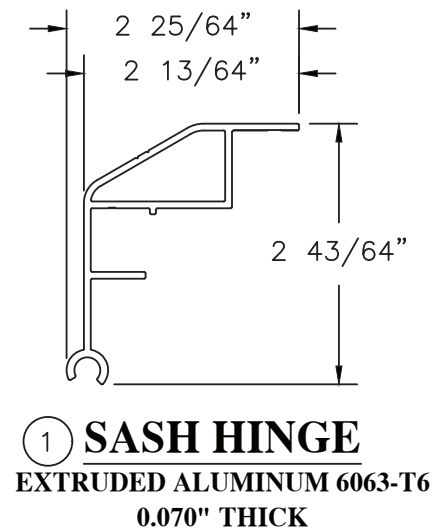
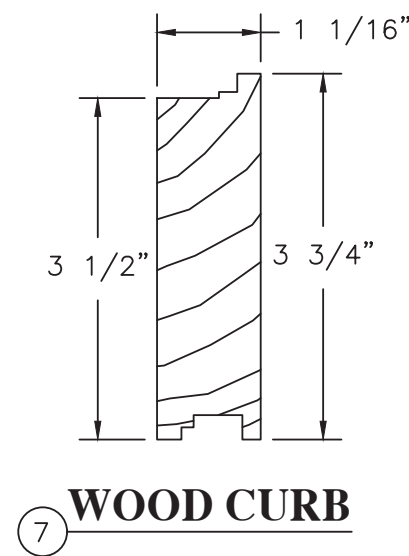
DATE: 05/08/12  
DRAWING NO: KENN0004  
SHEET: 5 OF 6

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# BILL OF MATERIALS

ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER	MATERIAL
1	FE4694	SASH HINGE	INDALEX ALUM. SOLUTIONS	ALUM. 6063-T6
2	FE4693	SASH STILE RAIL	INDALEX ALUM. SOLUTIONS	ALUM. 6063-T6
3	FE4695	4" CURB HINGE	INDALEX ALUM. SOLUTIONS	ALUM. 6063-T6
4	FE46700	4" CURB	INDALEX ALUM. SOLUTIONS	ALUM. 6063-T6
5	SM KS-5	WOOD SASH FRAME	NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS	WOOD
6	SM KS-6	SASH STOP	NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS	WOOD
7	SM KS-2	WOOD CURB	NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS	WOOD
8	AK-2474	CONDENSATION CHANNEL	CENTRAL PLASTICS, INC.	HIGH TEMP. PVC
9		GLAZING COMPOUND	NOVAFLEX	STRUCTURAL SILICONE
10		#8 x 1 1/4" FH SELF-DRILLING SCREW		
11		16GA. x 1 1/8" BRAD NAIL		
12		LARGE MISSILE IMPACT GLAZING, SEE SHEET 3		
13		1" x 1/4" FOAM GASKET		EDPM FOAM
14		RIGID SPACER FOR SASH STILE RAIL INSTALLATION, SEE INSTALLATION NOTE 4, SHEET 2		RIGID



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 LARGE MISSILE IMPACT  
 BILL OF MATERIALS AND COMPONENTS  
 PREPARED BY: T.J.H.  
 SCALE: N.T.S.  
 REV: C  
 DATE: 05/08/12  
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 SHEET: 6 OF 6

REV	DESCRIPTION	DATE	BY
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