

NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS

MODEL "HCMA" CURB MOUNTED POLYCARBONATE SKYLIGHT - LMI

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THE PRODUCT ANCHORAGE SHOWN HEREIN IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUME REQUIREMENTS INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) FOR LARGE MISSILE IMPACT (EQUIVALENT TO WIND ZONE 4, MISSILE LEVEL D) AT THE DESIGN PRESSURE STATED HEREIN.
2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NO. NCTL-210-3992-01 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
3. THE SKYLIGHT HAS BEEN TESTED AS FOLLOWS:
 - 3.1. IN ACCORDANCE WITH THE HIGH VELOCITY HURRICANE ZONES (HVHZ) REQUIREMENTS OF TAS-202, TAS 201 & TAS 203 AS REQUIRED BY THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES AND DOCUMENTED IN SIGNED AND SEALED TEST REPORT #NCTL-210-3992-01 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
 - 3.2. IN ACCORDANCE WITH THE WIND BORNE DEBRIS REGION OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, BUILDING & RESIDENTIAL VOLUMES AND DOCUMENTED IN SIGNED AND SEALED TEST REPORT #NCTL-210-3992-01 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
4. POLYCARBONATE GLAZING MEETS THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES.
5. WOOD FRAMING SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT.
6. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, THEN THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 - 6.1. OUTSIDE HVHZ: REQUIRE THAT A LICENSED ENGINEER OR ARCHITECT PREPARE AND SUBMIT SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
 - 6.2. INSIDE HVHZ: REQUIRE A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND OBTAINED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION.
7. IMPACT PROTECTIVE SYSTEM REQUIREMENTS:
 - 7.1. IN HVHZ AREAS, USE OF AN APPROVED IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE HVHZ REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.
 - 7.2. IN NON-HVHZ AREAS WHERE WIND BORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.
8. WHEN APPLICABLE AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME IN CONTACT WITH ALUMINUM SKYLIGHT FRAMING WOOD SHALL HAVE BEEN PROTECTED.
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 (FBC), BUILDING & RESIDENTIAL VOLUMES FOR THE TYPE OF CONSTRUCTION CLASSIFICATION WHERE THE SKYLIGHT IS TO BE INSTALLED IS ALLOWED. CURB HEIGHT SHALL BE A MINIMUM OF 4" AND A MAXIMUM OF 12" AND SHALL BE CONSTRUCTED IN SUCH A MANNER SUCH THAT THE SKYLIGHT IS A LEAST 4" ABOVE THE PLANE OF THE ROOF.
 - 9.2. A CURB SUPPLIED BY KENNEDY SKYLIGHTS CONSTRUCTED AND MOUNTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), BUILDING & RESIDENTIAL VOLUMES FOR THE TYPE OF CONSTRUCTION CLASSIFICATION WHERE THE SKYLIGHT IS TO BE INSTALLED IS ALLOWED. CURB HEIGHT SHALL BE A MINIMUM OF 4" AND A MAXIMUM OF 12" AND SHALL BE CONSTRUCTED IN SUCH A MANNER SUCH THAT THE SKYLIGHT IS A LEAST 4" ABOVE THE PLANE OF THE ROOF.
 - 9.3. DOME SHAPED SKYLIGHTS SHALL RISE ABOVE THE MOUNTING FLANGE A MINIMUM DISTANCE EQUAL TO 10 PERCENT OF THE MAXIMUM SPAN OF THE DOME BUT NOT LESS THAN 3 INCHES.
 - 9.4. INTEGRATION WITH ROOF ASSEMBLY SHALL BE IN ACCORDANCE WITH CHAPTER 15 OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE AND CHAPTER 9 OF THE CURRENT EDITION OF THE FLORIDA RESIDENTIAL CODE.
 - 9.5. ANY ADDITIONAL INSTALLATION DETAILING AND ENGINEERED INSTALLATION EVALUATION BY A LICENSED DESIGN PROFESSIONAL WILL BE REQUIRED FOR SUBMITTAL IN ADDITION TO THIS PRODUCT EVALUATION DOCUMENT.

INSTALLATION NOTES:

1. INSTALL ALUMINUM RETAINING RING (ITEM NO. 5) AND POLYCARBONATE DOME (ITEMS NO. 1 AND 2) INTO CURB USING #10 X 1 3/4" SELF-DRILLING SCREWS. SPACE ANCHORS 4" MAX. FROM ENDS AND 6.3" O.C. THEREAFTER AS SHOWN ON ANCHOR LAYOUT ON SHEET 3. A TOTAL OF EIGHT ANCHORS IS REQUIRED ON EACH SIDE OF THE SKYLIGHT.
 - 1.1. FOR SKYLIGHT SIZES (WIDTH AND/OR HEIGHT) LESS THAN THAT SHOWN IN SHEET 3, THE QUANTITY OF ANCHORS CAN BE REDUCED WHILE MAINTAINING THE ON CENTER SPACING OF 6.3".
 - 1.2. SEE SHEET 2 FOR INSTALLATION ANCHOR SCHEDULE.
2. INSTALL 2x6 WOOD CURB (ITEM NO. 4) AND ALUMINUM FLASHING (ITEM 3) TO ROOF SUBSTRATE USING NO. 8 WOOD SCREWS, NO. 8 SELF-DRILLING SCREWS OR 0.099" DIAMETER RING SHANK NAILS IN ACCORDANCE WITH THE EDGE DISTANCE, ON CENTER SPACING AND ANCHOR QUANTITIES SHOWN IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.
 - 2.1. FOR SKYLIGHT SIZES (WIDTH AND/OR HEIGHT) LESS THAN THAT SHOWN IN SHEET 3, THE QUANTITY OF ANCHORS CAN BE REDUCED WHILE MAINTAINING THE ON CENTER SPACING SHOWN IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.
3. INSTALLATION ANCHOR CAPACITIES ARE BASED ON THE MINIMUM SUBSTRATE REQUIREMENTS SHOWN IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.
 - 3.1. PLYWOOD SPECIES GROUP 1 OR 2 PER APA VOLUNTARY PRODUCT STANDARD PS 1. OSB SHEATHING GRADE PER APA VOLUNTARY PRODUCT STANDARD PS 2.
 - 3.2. PLYWOOD OR OSB CAPACITIES ARE BASED ON THE MINIMUMS SHOWN ABOVE. HOWEVER, THESE MINIMUMS MAY NOT NECESSARILY MET FLORIDA BUILDING CODE REQUIREMENTS BASED ON LOCALITY AND/OR OTHER CODE-BASED RESTRICTIONS. USERS MUST ENSURE THAT THE ROOFING SUBSTRATE MEETS ALL CODE RELATED REQUIREMENTS.
4. APPLY ALL SEALANTS ACCORDING TO MANUFACTURERS INSTRUCTIONS.
5. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN ON THIS INSTALLATION DRAWINGS. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES INCLUDING BUT NOT LIMITED TO SHEATHING, UNDERLAYMENT AND SHINGLES.
6. 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.
7. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURERS INSTALLATION INSTRUCTIONS. ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.

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DESIGN PRESSURE RATING (PSF)		IMPACT RATING
WATER INFILTRATION REQUIRED	WATER INFILTRATION NOT REQUIRED	LARGE MISSILE IMPACT
+80 / -80	+80 / -80	

PROJECT NUMBER: 423-0504	
C	Update to 8th Edition (2023) FBC
B	Update to 6th Edition (2017) FBC
A	Update to 5th Edition (2014) FBC
REV	DESCRIPTION
BY	DATE

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

TITLE: MODEL "HCMA" CURB MOUNTED POLYCARB. SKYLIGHT
LARGE MISSILE IMPACT
GENERAL AND INSTALLATION NOTES

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

DRAFTING NO: KENN0006
SHEET: 1 OF 4

NLE
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INSTALLATION ANCHOR SCHEDULE

ASSEMBLY	SUBSTRATE	HEAD TYPE	(SIZE)	MANUFACTURER AND/OR SPECIFICATION (2)	MIN. EMBED. (IN)	MIN. EDGE DISTANCE (IN)	MIN. SPACING (IN)	CAPACITIES BASED ON	ANCHOR QUANTITIES AND SPACING					
									EDGE DISTANCE (in)	ON CENTER (O.C.) SPACING (in)	QUANTITY PER SIDE			
SKYLIGHT RETAINING RING (ITEM NO. 5) TO CURB	SOLID SAWN LUMBER (1)	HEX, PAN OR TRUSS HD.	NO. 10	ASME B18.6.4 (SDS)	1 1/4"	3/4"	3/4"	SG= 0.55 (HVHZ) MIN.	4	6.3	8			
								SG= 0.42 (NON-HVHZ) MIN.						
2x6 WOOD CURB (ITEM NO. 4) AND ALUMINUM FLASHING (ITEM NO. 3) TO ROOF SUBSTRATE	SOLID SAWN LUMBER (1)	HEX, PAN OR TRUSS HD.	NO. 8	ANSI B18.6.1 (WS) ASME B18.6.4 (SDS)	1"	1/2"	3/4"	SG= 0.55 (HVHZ) MIN.	5.25	8	8			
							SG= 0.42 (NON-HVHZ) MIN.							
	PLYWOOD OR OSB (3) (4)	HEX, PAN OR TRUSS HD.	NO. 8	ASME B18.6.4 (SDS)	SCREW THREADS SHALL PROTRUDE A MIN. OF 1/4" FROM BOTTOM OF ROOF SHEATHING.	1/2"	1/2"	7/16" THICK. PLYWOOD SPECIES GROUP 1 (3) (4)	5.25	8	8			
								7/16" THICK. PLYWOOD SPECIES GROUP 2 (3) (4)				5.25	4.2	13
								7/16" THICK EXPOSURE 1 OSB SHEATHING GRADE (3) (4)						
	PLYWOOD OR OSB (3) (4)	1/4" ROUND HEAD RING SHANK NAIL	0.099" DIA. MIN.	RING SHANK NAIL	NAIL SHANK SHALL PROTRUDE A MIN. OF 1/4" FROM BOTTOM OF ROOF SHEATHING	1/2"	1/2"	7/16" THICK. PLYWOOD SPECIES GROUP 1 (3) (4)	5.25	4.2	13			
								7/16" THICK. PLYWOOD SPECIES GROUP 2 (3) (4)						
7/16" THICK EXPOSURE 1 OSB SHEATHING GRADE (3) (4)														

- NOTES**
- ANCHORS TO BE ANSI B18.6.1 WOOD SCREWS OR ASME B18.6.4 SELF-DRILLING SCREWS WITH MIN. GRADE 2 STRENGTH.
 - WS - WOOD SCREW; SDS - SELF-DRILLING SCREW
 - PLYWOOD SPECIES GROUP 1 OR 2 PER APA VOLUNTARY PRODUCT STANDARD PS 1. OSB SHEATHING GRADE PER APA VOLUNTARY PRODUCT STANDARD PS 2.
 - PLYWOOD OR OSB CAPACITIES ARE BASED ON THE MINIMUMS SHOWN ABOVE. HOWEVER, THESE MINIMUMS MAY NOT NECESSARILY MET FLORIDA BUILDING CODE REQUIREMENTS BASED ON LOCALITY AND/OR OTHER CODE-BASED RESTRICTIONS. USERS MUST ENSURE THAT THE ROOFING SUBSTRATE MEETS

PROJECT NUMBER: 423-0504

		RJA	BY
		RJA	DATE
Update to 8th Edition (2023) FBC	10/16/23	RJA	
Update to 6th Edition (2017) FBC	12/6/17	RJA	
Update to 5th Edition (2014) FBC	7/15/15	RJA	
REV	DESCRIPTION		

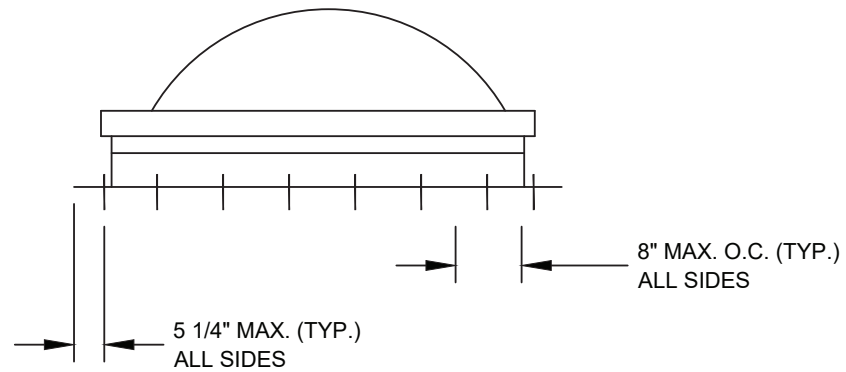
NATURAL LIGHT ENERGY SYSTEMS, dba KENNEDY SKYLIGHTS
 5294 TOWER WAY
 SANFORD, FL 32773

TITLE: MODEL "HCMA" CURB MOUNTED POLYCARB. SKYLIGHT LARGE MISSILE IMPACT INSTALLATION ANCHOR SCHEDULE

DATE: 05/08/12
 DRAWN BY: TJH
 SCALE: N.T.S.
 SHEET: 2 OF 4

PREPARED BY: FBRE
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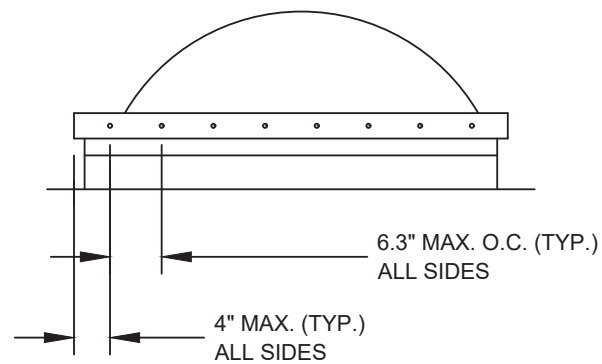


A
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ANCHOR LAYOUT

DECK ATTACHMENT EACH SIDE - 60"

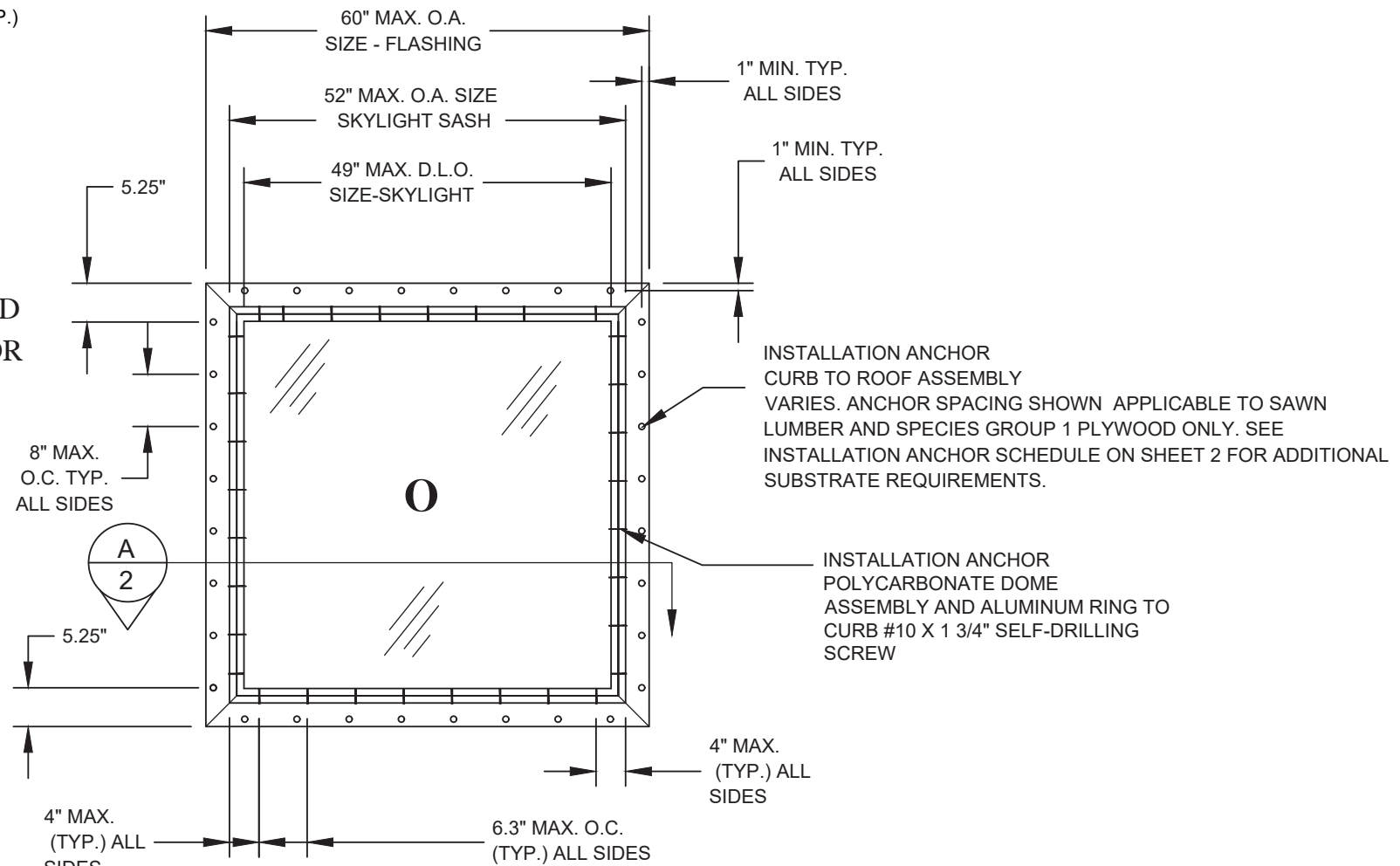
ANCHOR SPACING SHOWN APPLICABLE TO SAWN LUMBER AND SPECIES GROUP 1 PLYWOOD ONLY. SEE INSTALLATION ANCHOR SCHEDULE ON SHEET 2 FOR ADDITIONAL SUBSTRATE REQUIREMENTS.



A
2

ANCHOR LAYOUT

DOMES TO CURB EACH SIDE - 52"



**MODEL "H.C.M.A." CURB
MOUNTED SKYLIGHT**

(EXTERIOR)

MAXIMUM SIZE TESTED SHOWN - SMALLER SIZES IN WIDTH AND/OR HEIGHT ALLOWED. SEE SHEET 1, INSTALLATION NOTES 1.1 AND 2.1.

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LARGE MISSILE IMPACT
ANCHOR ELEVATIONS AND LAYOUTS

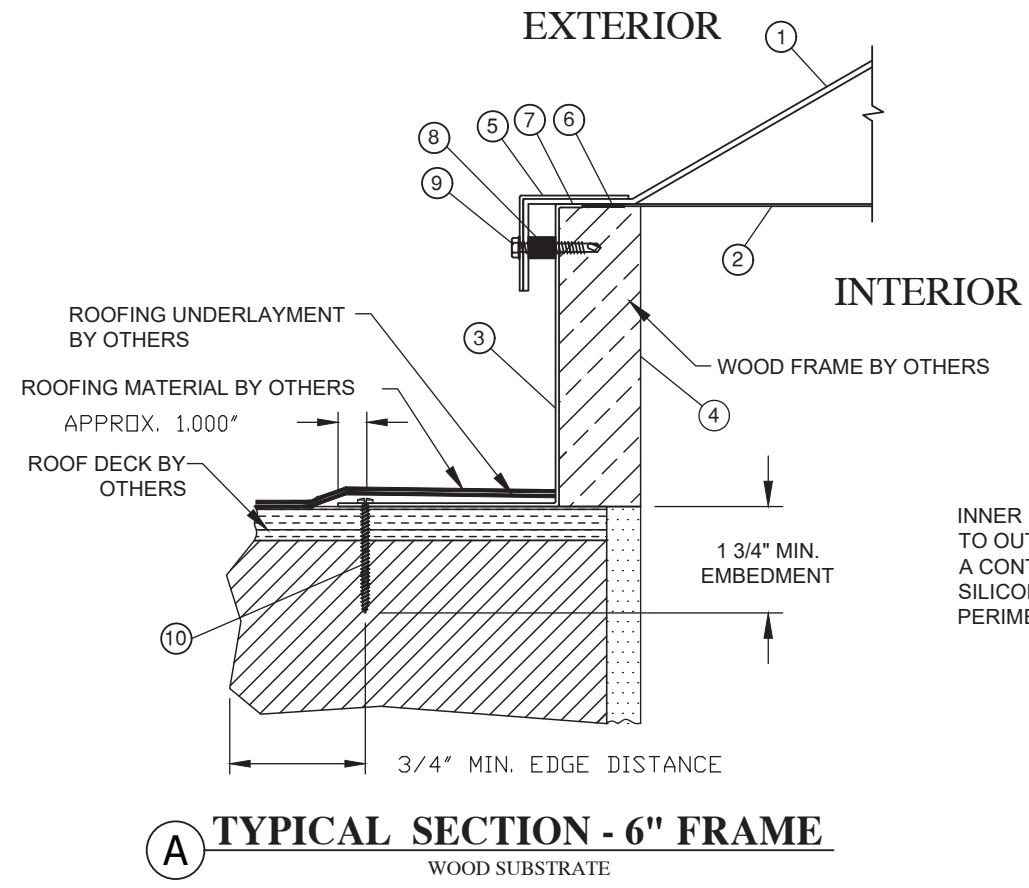
PREPARED BY: T.J.H.
DATE: 05/08/12
SCALE: N.T.S.
DRAWING NO: KENN0006
REV: C

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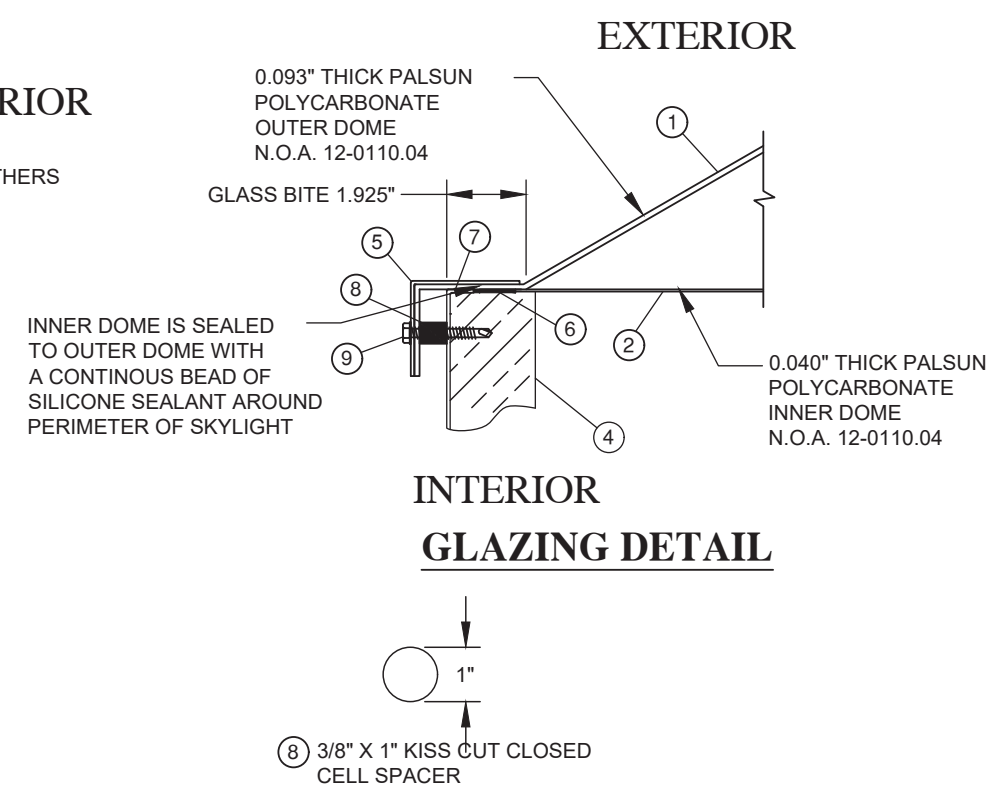
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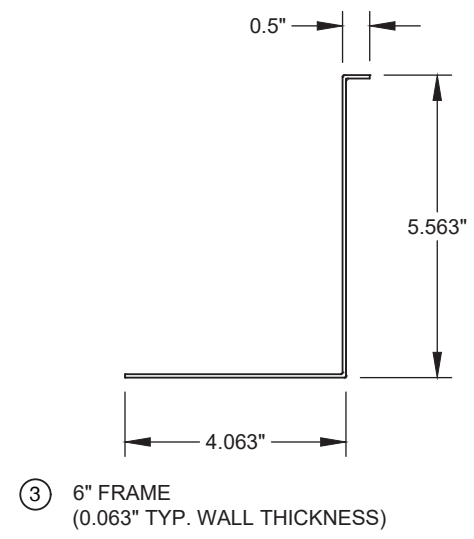
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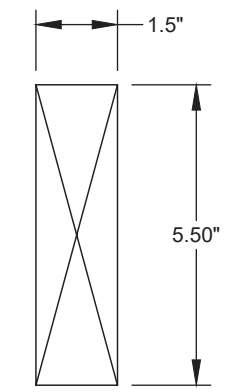
A TYPICAL SECTION - 6" FRAME
WOOD SUBSTRATE



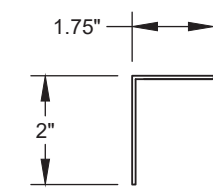
GLAZING DETAIL



③ 6" FRAME
(0.063" TYP. WALL THICKNESS)



④ 1-1/2" X 5-1/2" WOOD CURB
SOUTHERN YELLOW PINE 0.55 SG.



⑤ ALUMINUM RETAINING RING
(0.063" TYP. WALL THICKNESS)

BILL OF MATERIALS			
ITEM #	DESCRIPTION	MATERIAL	MANUFACTURER
1	OUTER GLAZING DOME 0.093" POLYCARBONATE (CURRENT NDA) (SEE NOTE 1)	POLYCARBONATE	PALRAM AMERICAS, INC
2	INNER GLAZING DOME 0.040" POLYCARBONATE (CURRENT NDA) (SEE NOTE 1)	POLYCARBONATE	PALRAM AMERICAS, INC
3	6" EXTRUDED ALUMINUM CURB FRAME	ALUMINUM 6063-T6	SAPA
4	1-1/2" X 5-1/2" WOOD CURB (2" X 6" NOMINAL SHOWN - SEE NOTE 3 BELOW)	SOUTHERN PINE	-----
5	2" X 1-3/4" EXTRUDED ALUMINUM RETAINING RING	ALUMINUM 6063-T6	SAPA
6	1" X 3/8" CLOSED CELL FOAM TAPE	ACRYLIC FOAM	LAMTEK
7	CLEAR SILICONE SEALANT	SILICONE	NOVA GAURD
8	3/8" X 1" DIAMETER KISS CUT CLOSED CELL SPACER	ACRYLIC FOAM	FRANK LOWE
9	#10 (#2 POINT) HEX WASHER HEAD SELF-DRILLING SCREW 1 3/4" LONG	SEE NOTE 2 BELOW	-----
10	#8 X 1-1/2" WOOD SCREW (PHILLIPS PAN HEAD WASHER) FOR INSTALLATION INTO 2X SAWN LUMBER. FOR OTHER SUBSTRATES SEE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.	SEE NOTE 2 BELOW	-----

- NOTES:
1. THE LIGHT TRANSMITTING PLASTIC SHALL BE MOUNTED ABOVE THE PLANE OF THE ROOF ON A CURB CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE TYPE OF CONSTRUCTION, BUT AT LEAST FOUR (4) INCHES ABOVE THE PLANE OF THE ROOF.
 2. 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.
 3. CURB HEIGHT SHALL BE A MINIMUM OF 4" AND A MAXIMUM OF 12" AND SHALL BE CONSTRUCTED IN SUCH A MANNER SUCH THAT THE SKYLIGHT IS A LEAST 4" ABOVE THE PLANE OF THE ROOF.

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LARGE MISSILE IMPACT
SECTIONS, BILL OF MATERIALS AND COMPONENTS

DATE: 05/08/12
DRAWING NO: KENN0006
SHEET: 4 OF 4

REV: C

PREPARED BY: PTC PRODUCT DESIGN GROUP, LLC
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REV	DESCRIPTION	DATE	BY	

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