



**Expedited Permitting Process**  
**Residential Roof-Top Mounted Solar Installations**

**Form 7 - Solar Pool Heating Standard Plan 30 kWth or Less**

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**ELIGIBILITY CHECKLIST FOR EXPEDITED SOLAR POOL HEATING PERMITTING**

GENERAL REQUIREMENTS

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- A. System size is 30 kWth (462 square feet of collector) or less  Y  N
- B. The solar array is roof-mounted on one- or two-family dwelling or accessory structure  Y  N
- C. The solar collector arrays will not exceed the maximum legal building height  Y  N
- D. Solar collectors are certified by an accredited listing agency  Y  N
- E. Permit application is completed and attached  Y  N
- F. Heat transfer fluid is either water or a nontoxic fluid  Y  N

PLUMBING REQUIREMENTS

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- A. Adequate extreme temperature protection is provided  Y  N
- B. Standard one-line plumbing diagram is provided with components showing solar Interface with existing plumbing.  Y  N

STRUCTURAL REQUIREMENTS

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- A. A completed Structural Criteria and supporting documentation is attached (as required)  Y  N

*Notes:*

*These criteria are intended for streamlined solar permitting process.*

1. *If any items are checked NO, revise design to fit within Eligibility Checklist, otherwise permit application may go through standard process.*



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SCOPE: Use this plan ONLY for solar pool heating systems not exceeding a thermal output rating of 30 kWth on the roof of a one- or two-family dwelling or accessory structure and used for residential solar pool heating. Systems must be in compliance with current California Building Standards Code, Title 24 and local amendments of the authority having jurisdiction (AHJ). Other articles of the California Plumbing Code (CPC) or California Mechanical Code (CMC) or other health and safety codes shall apply.

MANUFACTURER'S SPECIFICATION SHEETS MUST BE PROVIDED for proposed collector, controller, solar pump (if applicable), heat exchanger/heat transfer fluid (if applicable), diverting valve (if applicable) and mounting systems. Equipment intended for use with a solar pool heating system shall be identified and listed for the application.

Job Address: \_\_\_\_\_ Permit #: \_\_\_\_\_

Contractor/Engineer Name: \_\_\_\_\_ License # and Class: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Email: \_\_\_\_\_

Total # of Collectors Installed \_\_\_\_\_ Total Collector Area \_\_\_\_\_

Collector Certification Number (include certifying agency) \_\_\_\_\_

Collector Material \_\_\_\_\_

Max Height Above Roof \_\_\_\_\_ Height Above Ground \_\_\_\_\_

**Major components**

Solar Control Make/Model \_\_\_\_\_

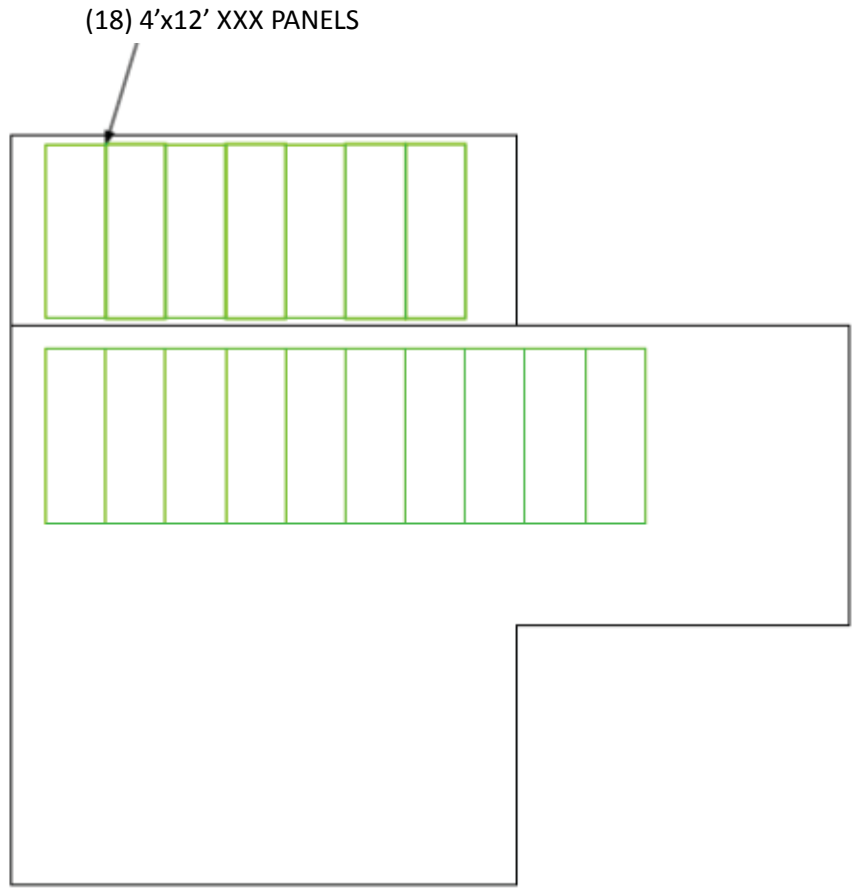
Solar Pump Make/Model (if applicable) \_\_\_\_\_

Diverting Valve Make/Model \_\_\_\_\_

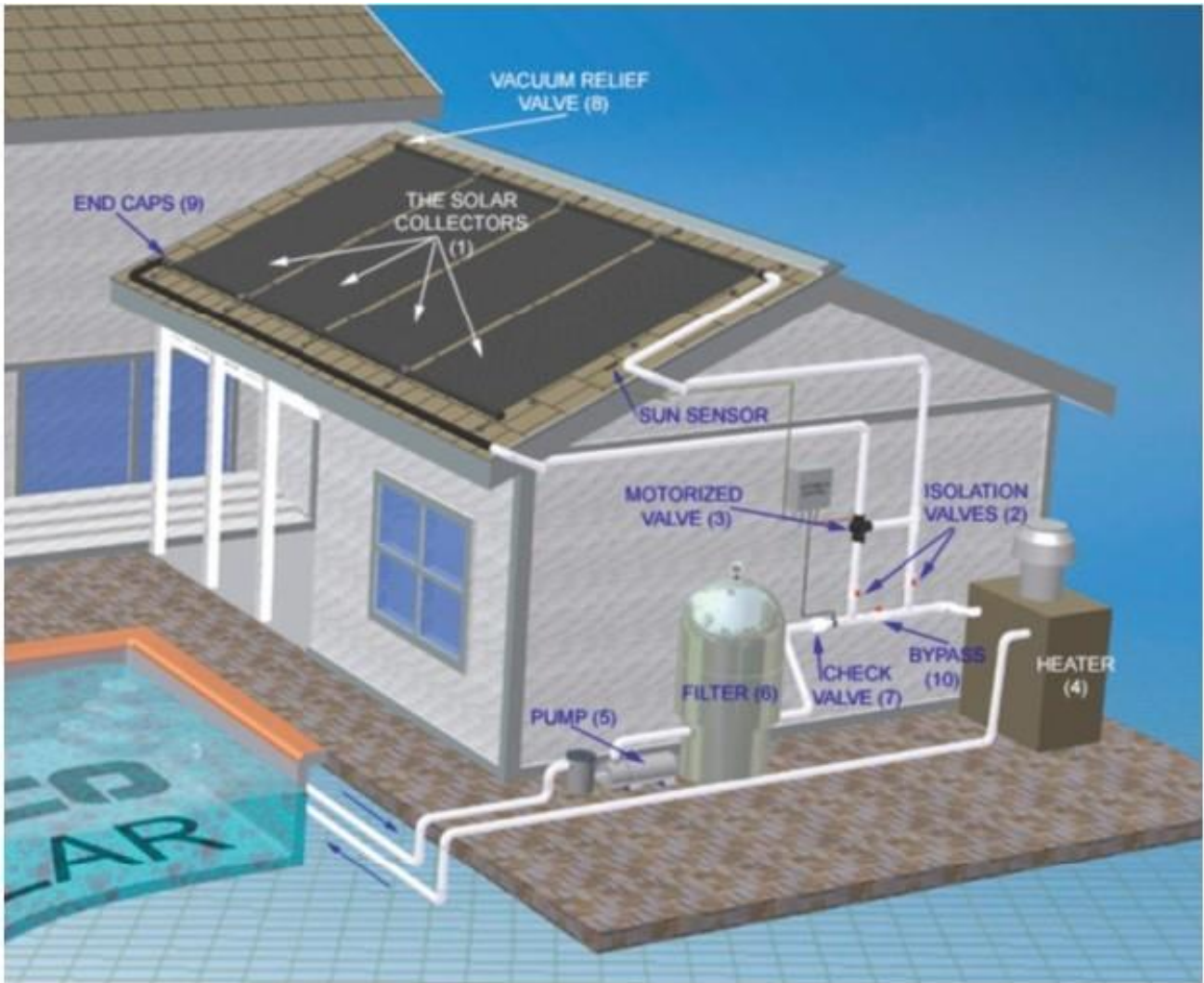
Mounting Hardware Make/Model or Type \_\_\_\_\_

**SAMPLE ROOF PLAN for SDWH and SPH systems**

- ROOF TYPE: STANDING SEAM
- ROOF HEIGHT (Elevation): MAX 15' (1 story)
- RAFTERS: 2" X 6" @ 24" OC



**SAMPLE ONE LINE PLUMBING DIAGRAM**  
**For SPH Systems**



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**INSPECTION GUIDE FOR SOLAR POOL HEATING**

This document is a field inspection guide for SPH systems. These inspection references detail most of the issues that relate to SDWH systems during the inspection process.

All California Electrical Code (CEC), California Residential Code (CRC), California Building Code (CBC), California Mechanical Code (CMC), and California Plumbing Code (CPC) references are to the 2016 versions unless otherwise noted.

SOLAR POOL HEATING SYSTEM ELIGIBILITY			
SYSTEM	CRITERIA		YES
		1. Major component installed match those of certified system?	
SOLAR POOL HEATING SYSTEM INSPECTION GUIDE			
	GUIDELINE	SOURCE OF GUIDELINE	YES
ROOF	I. Roof penetrations/attachments are properly flashed	CBC Chap 15, CRC Chap 9	
SOLAR LOOP PIPING	I. Piping must be properly supported, hung and anchored per code	CPC 313.1	
	II. Vacuum relief valve installed (if required by manufacturer)	AHJ	
	III. Drain valves installed if the system is not self-draining	CPC 312.6	
	IV. Penetrations through structural members as per code	CPC 312.2	
	V. Penetrations through fire-resistant assemblies installed per code	CPC 1405.2	
	VI. System has adequate freeze protection	CPC 312.6	
CONTROLS	I. Control and pump properly installed and bolted to pad	CEC 430(IX), 690.17	
	II. Conductors between control and power source properly installed	CEC 430(II)	
	III. Conductors between control and pump properly installed	CEC 430(II), 690(IV)	
	IV. Solar collector sensors protected from sun and weather	CEC 310.8.10 D(1), D(2)	
	V. Control relay rated higher than load for each output	CEC 430.83	