SPWH TOOLKIT DOCUMENT #1B

Submittal Requirements Bulletin — Solar Pool Heating Installations 30 kWth or Less for One- and Two-Family Dwellings

This information bulletin is published to guide applicants through a streamlined permitting process for solar pool heating (SPH) projects 30 kWth (462 square foot) in size or smaller. This bulletin provides information about submittal requirements for plan review, required fees and inspections.

1. Approval Requirements

The following permits are required to install a SPWH system with a maximum thermal output of 30 kWth or less:

a) Only a building permit is required in Fairfield for SPWH systems.

Planning review and approval is required for SPWH installations of this size.
Fire Department approval is not required for SPWH installations of this size.

2. Submittal Requirements

a) The complete permit application process occurs through eTRAKiT.

b) Demonstrate compliance with the eligibility checklist (i.e. SPWH Toolkit #2B) for expedited permitting.

c) A completed Standard Plumbing, Electrical and Structural Plan. The standard plan may be used for proposed solar installations 30 kWth in size or smaller (Refer to SPWH Toolkit #3B).

A standard plan should be submitted that includes the following.

- *Total number of collectors and area*
- *Make, model and collector certification number*
- *Major components*

d) A roof plan showing roof layout and solar collectors with attachment details.

e) Standard one-line plumbing diagram of system showing and labeling major components.

f) Equipment cut sheets including collectors, controller, motorized valve (if applicable).

g) Completed expedited Structural Criteria checklist along with required documentation. Structural criteria is located in Toolkit #4B.

For systems that do not meet all the requirements in the structural criteria checklist, provide structural drawings and calculations along with the following information.

- The type of roof covering and the number of roof coverings installed
- Type of roof framing, size of members and spacing
- Weight of panels, support locations and method of attachment
- Framing plan and details for any work necessary to strengthen the existing roof structure

- Site-specific structural calculations
- Where a racking system is used, provide documentation showing manufacturer of the rack system, maximum allowable weight the system can support, attachment method to the roof or ground and product evaluation information or structural design for the rack system.

This Guidebook recommends that local jurisdictions adopt a prescriptive approach to establishing minimal structural requirements that avoids the need for structural calculations. A simple list of criteria is provided in this Guidebook (SPWH Toolkit Document #4B). A full explanation of the methods and calculations used to produce these criteria can be found in the Structural Technical Appendix for Residential Rooftop Solar Installations at http://www.opr.ca.gov/docs/Solar_Structural_Technical_Appendix.pdf.

3. Plan Review

Permit applications can be submitted to the City of Fairfield Building & Fire Safety Division in person at 1000 Webster Street, 2nd Floor, or electronically through eTRAKiT.

Permit applications utilizing standard plans may be approved "over-the-counter" when submitted in person. On-line permit applications through eTRAKiT are generally approved by the next business day.

4. Fees

The current permit fee for residential solar domestic water heating permits is $222.13.

5. Inspections

Once the building permit to construct the solar installation has been issued and the system has been installed, it must be inspected before final approval is granted for the solar system. On-site inspections can be scheduled electronically through eTRAKiT or by leaving a message on the building inspection recorder at 707-428-7570 (by 3:00 PM of the business day prior to the inspection).

Permit holders must be prepared to show conformance with all technical requirements in the field at the time of inspection. The inspector will verify that the installation is in conformance with applicable code requirements and with the approved plans.

The inspection checklist (see Toolkit #5B) provides an overview of common points of inspection, and the applicant should be prepared to show compliance with these points.

6. Departmental Contact Information

For additional information regarding this permit process, please consult our departmental website or contact the Building & Fire Safety Division at 707-428-7451.