



Submittal Requirements Bulletin — Solar Domestic Water 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 domestic water heating (SDWH) projects 30 kWth (462 square foot) in size or smaller. This bulletin provides information about submittal requirements for plan review, required fees and inspections.

Language in italics indicates explanatory notes from the authors of this Guidebook.

1. Approval Requirements

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

- Combination Building/Plumbing/Electrical permit.
- Planning review is required for SDWH installations of this size.

Fire Department approval is not required for SDWH installations of this size.

2. Submittal Requirements

- a) Completed permit application form. This permit application form can be downloaded [here](#)
- b) Demonstrate compliance with the eligibility checklist for expedited permitting.

This Guidebook recommends use of a simple checklist to clearly identify eligibility criteria for expedited permitting, where established.

- c) A completed Standard Plumbing, Electrical, Structural and Mechanical Plan. The standard plan may be used for proposed solar installations 30 kWth in size or smaller.

A standard plan should be submitted that includes the following.

- *Total number of collectors and area*
 - *Make, model and collector certification number*
 - *System certification number*
 - *Solar storage tank name, model, insulation and capacity*
 - *Heat exchanger make and model (if applicable)*
 - *Specifications of heat transfer fluid (if applicable)*
- d) A roof plan showing roof layout and solar collectors with attachment details.
 - e) System schematic, including major components.
 - f) Equipment cut sheets including collectors, controller, storage tank/heat exchanger (if applicable).

- g) Completed expedited Structural Criteria checklist along with required documentation. Structural Criteria Document # 4.

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 an approved 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 (SWH Toolkit Document #4). 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 Building and Safety in person at 110 E. La Habra Blvd., La Habra, Ca, 90631. Permit applications may also be submitted electronically for review by email at ncasillas@lahabraca.gov or ldavis@lahabraca.gov. All plans must be clear, legible and fonts of appropriate size. The issuance of the permit must be at the Building and Safety's office.

Permit applications should be reviewed in three working days. Permit applications utilizing the standard plans may be approved "over the counter". To utilize the "over the counter" process, an appointment with the plan reviewer is necessary to review the required documents. Appointments can be made by calling Building and Safety at 562-383-4116.

4. Fees

For systems utilizing the standard plan the fees are as follows:

- The plan check fee for Hot Water Systems will be based on an hourly rate, with a minimum charge of one hour.
- For Hot Water Systems the permit fees will be as follows:
 - The mounting system will be based on the minimum building permit fee.
 - Each panel will be charged as a plumbing fixture
 - The converter will be charged as a water heater.
 - Strong Motion Tax and CBSC fees also apply.
- Fees will not exceed \$500.00 for systems utilizing the standard plan specified in the toolkits. Plan check fees and permit fees will be collected when the permit is issued. If the project is abandon, the plan check fee is due. If more than one inspection is required or requested a re-inspection fee will applied in accordance with the La Habra Municipal Code.

5. Inspections

Once all permits to construct the solar installation have 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 by calling the Building and Safety's inspection request line at 562-383-4122. Inspection requests received by 4:00 p.m. are typically scheduled for the next business day. If next business day inspection is not available, the inspection will occur as soon as possible.

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. Approved plans must be on the job site and accessible to the building inspector, otherwise a re-inspection fee will apply.

The inspection checklist provides an overview of common points of inspection, and the applicant should be prepared to show compliance to these points.

6. Departmental Contact Information

For additional information regarding this permit process, please consult our departmental website at www.lahabracity.com or contact Building and Safety at 562-383-4116.