



## Submittal Requirements for a Roof-Mounted Solar Domestic Water Heating System 30 kWth or Less on a One- or Two-Family Dwelling

This information is provided to guide applicants through the permit application process for a **roof-mounted solar domestic water heating (SDWH) project 30 kWth in size or smaller ONLY** and includes information about the application submittal requirements, plan review, required fees, and inspections.

### 1. Approval Requirements

- a) Mechanical, electrical, plumbing, and building permits are required to install a SDWH system with a maximum thermal power output of 30 kWth or less. NOTE: All permits will be issued under a single building permit number which will include the M-E-P permits.
- b) Planning review is not required for SDWH installations of this size.
- c) Fire Department approval is not required for solar SDWH installations of this size. NOTE: The Building Division will perform the plan check and inspection for this application.

### 2. Submittal Requirements

- a) A completed permit application form
  - 1) Permit applications may be submitted [here](#) through the City of Burlingame website; or
  - 2) Permit applications may be submitted by email at [BuildingDept-Solar@burlingame.org](mailto:BuildingDept-Solar@burlingame.org); or
  - 3) Permit applications can also be submitted to the City of Burlingame, Building Division in person at 501 Primrose Road, Burlingame, CA 94010 during normal business hours.
- b) This application must demonstrate compliance with the eligibility checklist for expedited permitting.
- c) A completed Standard Mechanical, Electrical, Plumbing, and Structural plans. The standard plan may be used for proposed roof-mounted solar installations 30 kWth in size or smaller ONLY.

*The plans must include the following:*

- *Total number of collectors and area*
  - *Make, model, and collector certification numbers*
  - *System certification number*
  - *Solar storage tank name, model, insulation, and capacity*
  - *Heat exchanger make and model (if applicable)*
  - *Specification of heat transfer fluids (if applicable)*
  - *Site diagram showing the arrangement of the collectors on the roof or , north arrow, lot dimensions, and the distance from property lines to adjacent buildings/structures (existing and proposed)*
- d) A roof plan showing the roof layout, collectors, and the following fire safety items: approximate location of roof access points, location of code-compliant access pathways, and the locations of all required labels and markings. Examples of clear path access pathways are available in the State Fire Marshal Solar PV Installation Guide. <http://osfm.fire.ca.gov/pdf/reports/solarphotovoltaicguideline.pdf>.

NOTE: The roof plan must show compliance with the requirements found in the latest editions of the California Building Code, California Fire Code, California Residential Code, and California Electrical Code. If there is a conflict between the regulations found in these Codes and the recommendations found in the State Fire Marshal Solar PV Installation Guide (above) then the Code requirements will govern.

- e) For non-qualifying systems, provide structural drawings and calculations stamped and signed by a California-licensed Civil or Structural Engineer, 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 collectors, 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 manufacture 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
  - Equipment cut sheets including collectors, controllers, storage tank, and heat exchanger (if applicable.)

*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, which is available at [http://www.opr.ca.gov/docs/Solar\\_Structural\\_Technical\\_Appendix.pdf](http://www.opr.ca.gov/docs/Solar_Structural_Technical_Appendix.pdf).*

### 3. Plan Review

Building permit applications for small residential rooftop solar systems can be submitted in person to the Building Division at 501 Primrose Road, Burlingame, CA 94010, [here](#) through the City of Burlingame website, or via email at [BuildingDept-Solar@burlingame.org](mailto:BuildingDept-Solar@burlingame.org). Building permit applications for small residential rooftop solar systems will be plan checked in a timely manner; within three business days.

After your application and plans have been reviewed you will receive an email from the Building Division notifying you of the status of your application.

If your application has been **Denied** then you must revise the application and plans as directed in the notification letter and re-submit your application. As an alternative you may choose to submit your application and plans at the Building Division front counter using the regular permit application submittal process.

If your application has been **Approved** then you will be directed to pick up your building permit at the Burlingame Building Division front counter. When you visit the Building Division front counter you will need to submit two complete sets of submittal documents, including plans and documentation that are identical to the package that you submitted electronically. (NOTE: Plan pages must be at least 11" x 17". All other documents must be at least 8-1/2" x 11".) The Building Division will collect payment at that time and issue the building permit and approved Job Copy of the plans to a licensed contractor or to the building owner.

### 4. Fees

According to the Burlingame Master Fee Schedule in effect at the time of permit application

## **5. Inspections**

When the plans have been approved, 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 by contacting the City of Burlingame, Building Division by telephone at 650-558-7260. Inspection requests are scheduled no more than two business days in advance. Except during peak inspection periods inspections can be expected to take place within two business days.

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.

## **6. Contact Information**

For additional information regarding this application process contact the Building Division at 650-558-7260.