

Submittal Requirements Bulletin Solar Photovoltaic Installations 10 kW or Less in One- and Two-Family Dwellings

BPC-044

This information bulletin is published to guide applicants through a streamlined permitting process for rooftop solar photovoltaic (PV) projects 10 kW in size or smaller. This bulletin provides information about submittal requirements for plan review and inspections.

1. Approval Requirements

A County of Sonoma building permit is required to install a rooftop solar PV system with a maximum power output of 10 kW or less. A completed Sonoma County Permit application is available at PRMD or at the county website at <http://www.sonoma-county.org/prmd/docs/handouts/cis-007.pdf> and is required for all solar system installations. Expedited rooftop solar PV permits may be submitted electronically or in person. These permits do not require a separate planning or fire services review and approval. All roof mounted solar installations must meet California State Fire Marshall requirements; this information is verified through building plan check and building inspection.

2. Submittal Requirements

- a) All documents prepared for electronic submittal should be prepared on 8½ X11 letter-sized paper to support standard printer availability. Manufacturer documentation should not be included in the electronic submittal, but should always be available for the inspector at the time of all field inspections.
- b) A completed [building permit application form](#) is submitted (this document must be the provided size of 8 ½ X 14 inches).
- c) Demonstrate compliance with the Eligibility Checklist for Expedited Permitting ([Toolkit Document #2](#)).
- d) A completed electrical plan and single line electrical diagram must be provided. Standard Electrical Plan templates ([Toolkit Documents #3](#) or [#4](#) as applicable) may be used for proposed solar installations 10 kW in size or smaller.
 - *If standard electrical plans are not provided for use, an electrical plan must be submitted that includes the following.*
 - *Locations of main service or utility disconnect.*
 - *Total number of modules, number of modules per string and the total number of strings.*
 - *Make and model of inverter(s) and/or combiner box if used.*
 - *One-line diagram of system.*
 - *Specify grounding/bonding, conductor type and size, conduit type and size and number of conductors in each section of conduit.*
 - *If batteries are to be installed, include them in the diagram and show their locations and venting.*
 - *Location and wording for permanent labeling of equipment as required by CA Electrical Code, Sections 690 and 705.*
 - *Site diagram showing the arrangement of panels on the roof or ground, north arrow, lot dimensions and the distance from property lines to adjacent buildings/structures (existing and proposed).*
- e) A roof plan showing roof layout, PV panels and the following fire safety items: approximate location of roof access point, location of code-compliant access pathways, PV system fire classification 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>

- f) A completed Structural Criteria for Expedited Solar PV Permitting form (Toolkit Document #5) along with required documentation.
- g) 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, spacing and maximum rafter spans.*
 - *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 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*
- h) A completed Smoke Alarm & Carbon Monoxide Alarm Declaration form available on the County's web site at <http://www.sonoma-county.org/prmd/docs/handouts/cni-037.pdf>. The California Residential Code requires that smoke and carbon monoxide alarms be provided in all residential buildings where a building permit is issued for additions, alterations or repairs with a valuation exceeding \$1,000.

3. Plan Review

Permit applications can be submitted to the County of Sonoma Permit and Resource Management Department (PRMD) in person at 2550 Ventura Ave, Santa Rosa, CA and electronically through: Forms may be obtained at: <http://sonoma-county.org/prmd/docs/solar/> Forms may be submitted through email at PRMD-Citizen-Access@sonoma-county.org

Permits not approved "over-the-counter" should be reviewed in one to three days.

4. Fees

The current fee schedule may be found at: <http://sonoma-county.org/PRMD/fees/>

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 contacting PRMD by telephone at (707) 565-3551. Inspection requests received prior to midnight are typically scheduled for the next business day.

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. Departmental Contact Information

For additional information regarding this permit process, please consult our departmental website at <http://sonomacountypermits.org/> or contact our phone operator at (707) 565-1900.