



Submittal Requirements for Solar PV Installations

Roof Mount in One- and Two-Family Dwellings ver 04/17

Application Submittal Requirements

The application package shall include the following:

1. Completed permit application form. Download the [permit application form](#).
2. Completed **Required Eligibility Checklist for Residential Solar Photovoltaic Permits** and **Structural Criteria Checklist**. These checklists can be downloaded at www.cccounty.us/solar.

NOTE: 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 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
3. Three (3) sets of plans in minimum size 11" x 17" that are drawn to scale, readable and legible. Plans must include the following information:
 - **Cover Sheet** showing (a) project address; (b) owner's name, address and phone; (c) contact name and phone number of plans preparer; (d) scope of work; (e) sheet index identifying each sheet title and number; (f) legend for symbols, annotations, etc. denoted on plans; (g) scale
 - **Site Plan** showing (a) building footprint with property lines and lot dimensions; (b) the arrangement of panels on the roof; (c) north arrow; (d) the distance from property lines to adjacent buildings/structures (existing and proposed); (e) location of main service or utility disconnect; (f) location of all proposed or existing PV system components
 - **Electrical Plan** showing the following:
 - (a) 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;
 - (b) Single line diagram of the electrical installation which includes the solar PV panel layout, PV power source short circuit current rating, conductor size and type, conduit size and type, location and lengths of runs, wiring methods, inverter location, disconnect locations, battery locations (if applicable), point of connection to the existing electrical system (with the existing service and disconnect size and the number of meters) and existing PV system (if applicable);
 - (c) Specify grounding/bonding, conductor type and size, conduit type and size and number of conductors in each section of conduit
 - (d) Labeling of equipment as required by CEC, Sections 690 and 705
 - **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. For more information on the above items please refer to the State Fire Marshal Solar PV Installation Guide.

<http://osfm.fire.ca.gov/pdf/reports/solarphotovoltaicguideline.pdf>

- If applicant does not have a standard plan, our plan template may be used for proposed solar installations 10 kW in size or smaller and can be downloaded at www.cccounty.us/solar.
- 4. **Manufacturer's Specification Sheets** for all components such as inverter, modules, micro inverters, combiners, power optimizers, mounting/racking systems and any alternate power sources such as generators, batteries, fuel cells or existing solar systems.
- 5. **Module Manufacturer's installation and grounding instructions.**

Plan Review

We now offer two methods of plan submittal and review for solar PV projects - in person with paper plans or online. You may submit permit applications and paper plans to Department of Conservation and Development at the following permit center locations:

- 30 Muir Road, Martinez, CA 94553
- 3685 Mt. Diablo Boulevard, Suite 120, Lafayette, CA 94565
- 1120 2nd Street, Suite 101, Brentwood, CA 94513

Online Permitting Option

Applications for projects that are up to 10kW and flush roof mounted can be electronically submitted through the ePermits Center website: <https://epermits.cccounty.us>

- User registration for the ePermit Center is required prior to electronically submitting permit applications.
 - [Contractor's Registration form for ePermits Center](#)
 - [Owner-Builder Registration form for ePermits Center](#)
- Electronically submitted applications and plans will be reviewed and approved electronically.
- Digital signatures are accepted on all forms if the digital signature can be validated by a certificate authority.
- Applicants pay for fees online. There is a credit card convenience fee of 2.5% or e-check convenience fee of \$3.00 added to permit fees.
- Once permit is issued, permit card and plans may be downloaded and printed online.
- Applicants are required to provide a printed set in color of electronically approved plans at the job site for the inspector. Manufacturer's installation and grounding guides and specification sheets must also be present at the time of inspection.
- Learn more about electronic submittal and plan review process at www.cccounty.us/solar and click on the [PVR Overview and Instructions for Online Submittal](#) link.

NOTE: Upon initial review of online application documents and the project is deemed to not fall into the criteria for online submittal and processing, applicants will be contacted to submit paper plans into the office.

Fees

Application fees below are in effect as of 01/12/2015 and may be subject to change.

- Unincorporated County: \$401.00
- Clayton and Hercules: \$371
- Lafayette, Moraga and Orinda: \$397.50

If the solar PV system will be installed on a new structure, applicant must also apply for a separate building permit for the new structure.

Inspection

Once the 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. The **120 Building Final** inspection type can be scheduled by:

- Interactive inspection scheduling phone number at (925) 646-4108 or
- Online at <https://epermits.cccounty.us> (must be pre-registered as an ePermit Center user to schedule)

Inspection requests received within business hours are typically scheduled for the next business day. A 3 hour window will be assigned on the day of the scheduled inspection. You may check time frames after 8:45AM on our website at www.cccounty.us/inspections.

Permit holders must make available to the inspector the following items at the job site:

- **Permit card**
- **Approved paper plans. If application went through electronic plan review and approval, then applicant must provide approved set of plans printed in color and minimum 11x17 size**
- **Module manufacturer's installation and grounding instructions**
- **Manufacturer's specification sheets for all components**

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 detailed inspection guide available on www.cccounty.us/solar provides an overview of common points of inspection that the applicant should be prepared to show compliance.

Departmental Contact Information

For additional information regarding this permit process, please consult the Conservation and Development website at www.cccounty.us/solar or contact the Application and Permit Center at (925) 674-7200.