



26 Corte Madera Ave.,
Mill Valley, CA 94941
Phone: (415) 388-4033

City of Mill Valley

Solar Photovoltaic (PV) Installations

Submittal Requirements

10kW or Less: One- and Two-Family Dwellings

PV Toolkit Document #1

This information bulletin is published to guide applicants through a streamlined permitting process for solar photovoltaic (PV) projects 10 kW 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 solar PV system with a maximum power output of 10 kW or less:

- a) A completed City of Mill Valley PV system form available at City of Mill Valley or on the City's web site at www.cityofmillvalley.org is required for all solar system installations.
- b) Planning review is required for solar PV installations for one- and two-family dwellings of 10 kW or less.
- c) Fire Department approval is not required for one- and two-family dwellings of 10 kW or less.

2. Submittal Requirements

- a) Completed permit application form. This permit application form can be downloaded at <http://www.cityofmillvalley.org/Index.aspx?page=701>.
- b) Demonstrate compliance with the eligibility checklist for expedited permitting. (Toolkit Document #2).
- c) 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 should 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 and conduit (type & 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
 - Equipment cut sheets including inverters, modules, AC and DC disconnects, combiners and wind generators
 - 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)
- d) A roof plan showing roof layout, PV panels and the following fire safety items (CA Residential Code 331)
 - approximate location of roof access point
 - location and dimensions of code-compliant access pathways
 - PV system fire classification (Class (A) assembly)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>.
 - e) Completed expedited Structural Criteria (Toolkit Document #5) along with required documentation. 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 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 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

3. Plan Review

Permit applications can be submitted to City of Mill Valley in person at 26 Corte Madera Ave. Mill Valley, CA.

Permit applications utilizing standard plan can be approved “over-the-counter” at Mill Valley Tuesday and Thursday between 10:00 – 11:30 am for small systems 10kW or less.

Permits not approved “over-the-counter” would include large PV systems > 10 kW or ground mount and possible other new technology systems.

4. Fees

No fee (except State of California Strong-Motion Instrumentation and Seismic Hazard Mapping Fee and any fee for outside plan check service) if system complies with design guidelines established by resolution of the City Council. Fee waiver only applies to work directly associated with installation of the system.

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 City of Mill Valley by telephone at 415-388-4033. Inspection requests received within business hours are typically scheduled for the next business day. If next business day is not available, inspection should happen within a five-day window.

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 as well as verify smoke and carbon monoxide detectors.

An overview of common points of inspection that the applicant should be prepared to show compliance. If not available, common checks include the following:

- Approved plans, job inspection card and roof access, smoke and carbon detectors accordance with CA Residential Code R314 and R315.
- Array conductors and components are installed in a neat and workman-like manner.
- PV array is properly grounded.
- Electrical boxes are accessible and connections are suitable for environment.
- Array is fastened and sealed according to attachment detail.
- Conductor’s ratings and sizes match plans.
- Appropriate signs are properly constructed, installed and displayed, including the following.
 - Sign identifying PV power source system attributes at DC disconnect
 - Sign identifying AC point of connection
 - Sign identifying switch for alternative power system
- Equipment ratings are consistent with application and installed signs on the installation, including the following.
 - Inverter has a rating as high as max voltage on PV power source sign.
 - DC-side overcurrent circuit protection devices (OCPDs) are DC rated at least as high as max voltage on sign.
 - Switches and OCPDs are installed according to the manufacturer’s specifications (i.e., many 600VDC switches require passing through the switch poles twice in a specific way).
 - Inverter is rated for the site AC voltage supplied and shown on the AC point of connection sign.
 - OCPD connected to the AC output of the inverter is rated at least 125% of maximum current on sign and is no larger than the maximum OCPD on the inverter listing label.
 - Sum of the main OCPD and the inverter OCPD is rated for not more than 120% of the bus bar rating.

6. Departmental Contact Information

For additional information regarding this permit process, please consult our departmental website at www.cityofmillvalley.org