

SOLAR PHOTOVOLTAIC SYSTEM GUIDELINES FOR EXPEDITED PLAN REVIEW

1. Approval Requirements

The following permits are required to install a solar PV system with a maximum power output of 10 kW or less:

- City of Capitola Combination Building Permit
- No City of Capitola Planning Department permits are required, unless the home/structure is potentially historic. Planning staff will provide a preliminary historic review at no cost.

NOTES:

- Santa Cruz County Central Fire District approval is not required for solar PV installations of this size.
- City of Capitola Planning Department staff approval is required for solar PV installation of this size.
- The City of Capitola solar PV Combination Building Permit will be issued to a California State licensed solar PV contractor (C-46) only.

2. Submittal Requirements

- a. Completed permit application form. This permit application form can be down loaded at www.cityofcapitola.org.
- b. Demonstrate compliance with the eligibility checklist for expedited permitting. These criteria can be downloaded at www.cityofcapitola.org.
- c. A completed Standard Solar Photovoltaic Plan package. The standard plan may be used for proposed solar installations 10 kW in size or smaller and can be downloaded at www.cityofcapitola.org.

The standard plan package shall include:

- A roof plan indicating the location of main service and/or utility disconnect.
- 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).
- A framing detail indicating the size, grade, spacing, and span of all structural framing members that will be supporting the solar modules.
- Total number of modules, number of modules per string, and the total number of strings
- Make and model on 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 the 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 for all inverters, modules, AC and DC disconnects, combiners and wind generators.
- Specifications, listings, and details for the means of attachment for the solar module rails.
- Labeling of equipment as required by CEC, Sections 690 and 705.
- d. Completed expedited Structural Criteria 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
- 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.

If there are questions regarding the solar PV system installation requiring additional structural calculations, contact the City of Capitola Building Department by phone at (831) 475-7300 or by email at building@ci.capitola.ca.us.

3. Plan Review

Permit applications can be submitted to the City of Capitola Building Department in person at 420 Capitola Ave.

Permit applications utilizing standard plan may be approved "over the counter" following a scheduled appointment with Building Department staff.

Permits not approved "over the counter" shall be reviewed within 5 days.

4. Fees

The City of Capitola provides free residential solar photovoltaic system permitting.

5. Inspections

Once all permits to construct the solar installation have been approved, 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 Capitola Building Department by telephone at 831-475-7300. Inspection requests received within business hours are typically scheduled for the next business day. If next business day is not available, inspection shall happen within a three-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

The inspection checklist provides an overview of common points of inspection that the applicant should be prepared to show compliance. If not available, common checks include the following.

- Number of PV modules and model number match plans and specification sheets number match plans and specification sheets.
- Array conductors and components are installed in a neat and workmanlike 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 ratings and sizes match plans.
- Appropriate signs are property 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
- 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, www.cityofcapitola.org or contact the City of Capitola Building Department at 831-475-7300.