



RESIDENTIAL SOLAR ROOF TOP EXPEDITED PERMITTING GUIDELINE. 10 KW OR LESS

INFORMATION
GUIDELINE

24A

Sept 2015

CITY OF ESCONDIDO • BUILDING DIVISION • 201 N. BROADWAY, ESCONDIDO, CA 92025 • (760) 839-4647

Plan Submittal Documents

Complete the attached permit application form and attached solar eligibility checklist. Complete a standard electrical plan or provide an electrical single line drawing. The completed checklist, electrical plan and specification sheets will allow for an expedited plan review.

Two complete sets of plans consisting of the Plot Plan, Roof plan with Array and equipment location, Array support and bonding, equipment manufacturer specification sheets and listing approvals and design drawings.

Basic Plan Check information

- Provide a roof plan showing the PV module layout, and the following fire safety items: approximate location of roof access points, location of State Fire Marshal code-complaint fire access pathways, PV system fire classification and the location of all required placards and markings.
- Show the location of all electrical disconnects and electrical panels and equipment.
- Provide at least two copies of the manufacturer's information for cells, modules, inverters, optimizers, monitoring meters and module support systems. Include all information such as UL listing components or a nationally recognized testing agency for specific associated devices.
- Specify the module bonding device and listing approval. Verify compatibility of the device with the modules and module support system.
- Include an equipment ground sized per NEC Table 250-122 and a minimum # 8 grounding electrode conductor from the grounding electrode to the array.

Plan review

- Permit applications may be submitted to the Building Department in person or through the City's website at www.escondido.org.
- Permit applications utilizing the Eligibility Checklist will have their permit expedited.
- Plan review fees are due at the time of plan submittal. All fees must be paid in person at the Building counter.
- Attach the Checklist 24B and Guideline 24A to the plans and equipment specifications.

Fees

- Plan review fee \$86.00

- Building Fee \$86.00
- Electrical Fee \$40.00 (without panel upgrade)

Inspections

Once permits have been issued and the system has been installed, it must be inspected before final approval is granted. On-site inspection can be scheduled by calling 760-839-4646. Inspection request received by 7am the day of the requested inspection will normally receive inspection the same day.

Permit holders must be prepared to show conformance with all technical requirements in the field at the time of inspection. Approved plans and inspection card must be on site for the inspector. An OSHA approved ladder must be provided for access to the roof. The inspector will verify that the installation is in conformance with the applicable codes and approved plans. See the following checklist for common points of inspection that the applicant should be prepared to show compliance:

- Number of PV modules and model number match plans and specification sheets.
- Array conductors and components are installed and supported per current code.
- PV array is properly grounded as demonstrated on the plans.
- Electrical boxes are accessible and connections are suitable for the environment.
- Array is fastened, sealed and supported according to the plans and details.
- Conductors and conduit size and ratings match the approved plans.
- All appropriate placards are installed and displayed.
- Equipment ratings and listings match the approved plans.
- The main electrical service is properly connected to the grounding electrode.
- Inverter has a rating as high as max voltage on PV power source sign.
- DC-side overcurrent circuit protection devices are DC rated at least as high as max voltage on sign.
- Switches and OCPD's are installed according to the manufacturer's specifications.
- Sum of the OCPD's and the inverter OCPD is rated for not more than 120% of the bus bar rating of the main service.
- When applying the 120% PV OCPD rule, the main electrical panel is not a center fed panel.
- Required placards for main electrical panels that are de-rated when applying the 120% PV OCPD rule.