



Solar Photovoltaic (PV) Systems

The following document outlines the requirements for the issuance of permits for solar photovoltaic systems. Plans shall accurately represent the work being installed and shall comply with the 2022 Ventura County Building Code (VCBC), California Energy Commission (CEC), California Residential Code (CRC), California Building Code (CBC), California Fire Code (CFC).

- I. Approvals required from Other Agencies:
 - a. Zone Clearance from Planning for Ground-Mounted PV arrays.
 - b. Setback Certification from Environmental Health for Ground-Mounted PV arrays located on properties with an onsite wastewater treatment system.

- II. Expedited Electrical Permits (over the counter) are available for:
 - a. Roof-mounted PV arrays weighing **less** than six lbs/sq.ft. and located on roofs with a **single** layer of roof covering material and **12 kW or less**.
 - b. Ground-mounted PV arrays **less** than six (6) feet above grade and **12 kW or less**.

- III. Electrical plan review is required for all **non-residential** PV systems, **stand-alone** and **hybrid** PV systems, and all residential PV systems **greater than 12.0 kw**.

- IV. Electrical and structural plan review are required for:
 - a. All **non-residential** PV systems.
 - b. Ballasted roof-mounted PV arrays.
 - c. Roof-mounted PV arrays weighing **more** than six lbs/sq.ft.
 - d. Ground-mounted PV arrays **more** than six feet in height above grade.
 - e. Roof-mounted PV arrays installed on carports, gazebos, patio covers, barns and similar structures.

- V. Plan Submittal Requirements:
 - a. Complete and accurate permit application
 - b. All applicable clearances from other agencies
 - c. Complete structural drawings with load calculations prepared and signed by a licensed civil or structural engineer
 - d. Plans (scaled to a minimum size 11"X17") that include the following information:
 - i. **Title Page**
Include the stamp and signature of the engineer and/or contractor's license number and signature of the person authorized to design the system. VCBC 107.1.
 - ii. **Site plan**
 - iii. **Foundation Plan or Roof Plan**
 - iv. **Structural Calculations prepared by a CA licensed civil engineer**
 - v. **Elevation Drawing**
 - vi. **Complete Electrical single-line diagram of the system**
 - vii. **Equipment manufacturer data sheets**
 - viii. **Certificate of Compliance to Standard UL 2703**
 - ix. **Warning Label Schedule** identifying locations as required by CEC 690 and 705. Include building power source directory per CEC 705.10. All labels must comply with CEC 110.21.

Informational note: ANSI Z535.4 provides guidelines for the design of safety signs and labels for application to products. A phenolic plaque with contrasting colors between the text and background would meet the intent of the code for permanency. No type size is specified, but 20 point (3/8") should be considered minimum.



Solar Photovoltaic System Worksheet (E18)

This worksheet shall be completed by a qualified person representing the contractor **after** the installation is completed and **before** requesting final inspection. Initial each item to confirm the statement and provide this completed worksheet to the building inspector at the final inspection.

1. System Type: Roof mounted Ground mounted
2. I have verified the pathways and setbacks are in accordance with the approved plan. _____
3. I have verified that readily accessible PV source and output circuits are adequately guarded. _____
4. I have verified the rapid shutdown equipment is installed and functioning as intended. _____
5. I have verified all normally non-current carrying parts of the array have been bonded to the equipment grounding conductor. _____
6. I have verified all conduit couplings and connectors are rated for wet locations and are wrench tight. _____
7. I have verified the racking system and modules conform to UL 2703 for bonding and have a minimum Class A fire classification. _____
8. I have verified the system and equipment identified above is installed per the approved plan. _____

Racking manufacturer and model: _____

Module manufacturer and model: _____

Rapid Shutdown Device: _____

Contractor Name: _____

CSLB # _____

Representative Name: _____

Signature: _____

Project Address: _____

Permit Number: _____