



PV System Checklist

System Summary Sheet

DEPARTMENT OF PLANNING AND BUILDING SERVICES
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Submittal Checklist

For all systems provide three sets of:

- Electrical schematic diagram of system (module wiring (series/parallel), disconnects, grounding/bonding, wire, conduit type, size, and number of conductors in each section of conduit). When batteries are to be installed include them in the diagram and there locations/rooms and venting.
- Site diagram (show arrangement of panels on the roof, location of combiner box, inverter, utility disconnect, main service, show approx. distance from panel to all components).
- Equipment cut sheets including inverters, modules, wind generators, etc.
- Cost breakdown of solar equipment, labor, structural for ground mount
- Completed page two, the System Summary sheet.
- Complete signage plan.

For Roof Mounted Systems Provide:

- Engineered or listed system for mounting and attachment of system.
- Is the fire-rating of the roof shingles consistent with the fire-rating of the solar panels? (**Yes or No**)
(*The roof shingles and the solar panels **must have the same fire-rating.***)
- Weight of array: _____ psf
- Roof type: Truss Cut and stack
- If the roof is cut and stack, provide the following:
 - a. _____ Size of rafters
 - b. _____ Span of rafters
 - c. _____ Spacing of rafters

For Ground Mount and Wind Generator Systems Provide:

- Engineering (When the total height from ground to top of the array (not post height) exceeds 6 feet) for mounting, attachments, and foundation to meet the minimum wind and snow loads. Provide details of attachments, anchors, brackets, photovoltaic panels, and all hardware.
- Provide plot plans (dimension from all setbacks to all structure and property lines).

System Summary:

Roof Mount

Ground Mount

Off-Grid

Grid Tie

Inverter(s):

Number of Inverter(s) _____

Model Number _____

DC Input Voltage Range _____

Listed for Utility Interconnection (Y) (N)

Inverter Continuous AC out current rating _____

Inverter output conductor sizing: (listed continuous output x 1.25) *CEC Section 690.8 (3) and 690.8(b)(1)*

Modules:

Total # of modules per inverter _____

Model Number _____

From the module listing:

** Maximum system voltage _____

Open-circuit voltage (Voc) _____

Short-Circuit current (Isc) _____

Voltage at Pmax _____

Max series fuse rating _____

Current at Pmax _____

Calculated system voltage _____ = (V x number of modules in series x 1.13)

< Calculated system voltage must be less than or equal to the **Max system voltage >

Array Information:

Total number of modules _____

Number of modules in each series _____

Operating voltage: _____ volts (Voltage at Pmax times number of modules in series)

Operating current: _____ amps (Current at Pmax times number of strings in parallel)

Minimum PV source circuit ampacity for conductor sizing _____

(Isc x number of parallel circuits x 1.25 x 1.25) (*CEC 690.8[A][1], 690.8[B][1], and NOTE 2*).

Explanation: To determine wire sizing and over-current protection you must determine the minimum Source circuit conductor ampacity, which is 125% of the maximum PV source current ampacity (*NEC 690.8[A][1]*). The maximum PV source circuit current ampacity is 125% of the source circuit Ampacity or Isc (*NEC 690.8[B][1]*)

NOTE 1: All wiring rated and 90 degrees Celsius and equipment on array side of the inverter must be DC rated.

NOTE 2: Further ampacity adjustments are necessary when more than 3 current carrying conductors are installed In the conduit (*See CEC Table 310.15[B][2][a]*)