



*All submittals require the following information prior to acceptance for review:*

## **ELECTRICAL:**

- Specify if interactive, hybrid or stand-alone system.
- Three-line diagram showing number of modules, wattage of modules, conductor sizes, wire lengths, insulation types, conduit sizes, fuses, circuit breaker ratings, inverter ratings, AC & DC disconnect rating and ground fault protection devices.
- Specify the PV module's nameplate short circuit current and open circuit voltage relative to the work performed.
- Include all grounding on three-line diagram.
- Show location of all disconnecting means, installation of equipment and panels with reference to building and service equipment. Clearly identify if wiring is **interior** or **exterior**.
- Manufacturer's cut sheets, installation instructions and listing information for modules, racks, combiner boxes, DC disconnects, inverters, rapid shut down, and any other PV equipment. Please highlight cut-sheets showing equipment for intended use.
- Provide available Point-to-Point fault current calculations, that show feeder lengths, at all affected line terminals, for new and existing panel boards. U.L. Series Rated Listing Information, and Manufacture Specification Cut Sheets, and Point-to-Point Motor Contributions, per NEC 240-86, must be included with your Plan submittal.

## **STRUCTURAL:**

- Engineering Design Criteria  
Ground Snow Load  $p_g = 40$  psf  
Basic Wind Speed -  $V_{mph} = 105-110$  mph - Risk Category II  
ASCE 7-16 Section 7.4 "Slippery surface" provision DOES NOT apply where panels do not extend to the eaves.
- Structural analysis of the existing roof where not pre-engineered wood trusses.
- Provide sealed structural reinforcing details, for existing roof framing, as applicable.
- Manufacturer's installation instructions specific to product being installed. Must include pounds per square foot weight of proposed solar panels.
- All site data (drawings, pictures, etc.) provided to the engineer by the person who performed the site visit (residential).
- Stamped plan showing the layout of the solar panels, anchorage system if installed on roof, including size, spacing, embedment depth (wood), and location of fasteners.

### **The Engineer's letter (residential) shall include the following information:**

- Complete, detailed description of the existing roof framing (all structural components of the roof and their physical condition).
- Name of person and organization, under the responsible charge of the engineer, who performed the site visit to visually inspect and identify the structural components of the roof and their condition.
- Design criteria and assumptions used in the structural analysis of the existing roof.
- Conclusions and recommendations