

Permit Submittal Requirements Commercial Photovoltaic (PV) Systems

- An Electrical permit is required by Building Safety.
- Building Safety will do the original review within three days.
- Specify if the array is ground, flush or tilt up system.
- Locate array on roof plan.
- Valuation is required on Electrical Permit Application to include labor and materials.

Building Permit Submittal may require engineering such as:

- Original Engineered Stamped Details showing site specific attachment to existing structure (Roof, Wall, Trusses, Rafters, etc)
- Engineered Foundation for Ground Mount Systems
- Design Criteria (Wind, Exposure, Snow, etc.)
- Fasteners (Type, Size, Length, etc.)
- Installation Instructions

Sub panels and/or service changes will require additional separate permits

• Electrical Permit submittal requires:

- Specifications for all components (i.e. rack/module mounting and installation requirements, listing information, etc.)
- Module cut sheets (including description, weight, markings per NEC article 690.51) open circuit voltage, operating voltage, maximum system voltage, operating current, short circuit current, maximum power).
- Combiner box (installation requirements)
- Inverter cut sheets (including description, installation requirements, specification information, etc.)
- Type of listed DC AFCI protection per 690.11
- Type of listed rapid shut down for PV System per 690.12
- 1-line diagram conforming to field installation (including number of modules per string and number of strings).
- Electrical calculations: including but not limited to:
 - Voltages
 - Conductor sizing (per insulation, temperature correction, Conduit fill correction, etc.)
 - Overcurrent protection (AC and DC)
 - Disconnect sizes and voltages
 - Type of conductors installed
 - Various wiring methods utilized

- **Underground Electrical Inspection required (if applicable).**
- **Final Electrical inspection required (approved documents on site) a Rapid Shut Down test may be required at final inspection. Provide test equipment for Rapid Shut Down test. Licensed electrician required for test.**
- **Final Structural inspection if required (approved documents required on site)**
- **Contractor is required to provide ladder and safe access for inspections.**