

Permit Submittal Requirements Residential 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.

Note: Roof Mount Systems creating a dead load greater than the roof system design allows, requires Engineering including:

- Original Engineered Stamped Details showing site specific attachment to existing structure (Roof, Wall, Trusses, Rafters, etc)
- 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.**
- **Contractor is required to provide ladder and safe access for inspections.**