



The purpose of this document is to outline the process for issuing a Solar PV Residential Permit by Inspector. Solar PV RPBI permits will help to manage the PV workload allowing Residential Inspections staff to handle the RPBI plan review and inspection in the field for projects that meet the parameters set below.

Note: The Phoenix Fire Department requires a separate permit for photovoltaic and battery energy storage systems. Please visit <https://www.phoenix.gov/fire/prevention> for more information.

Eligibility

- Must be an Arizona licensed contractor licensed to perform photovoltaic installations
- Residential (single-family or duplex residence) rooftop installations only
- Structure supporting PV system must be legal, permitted, code compliant structure
- No battery storage
- No ballasted or ground mounted systems
- Not located within Historic Preservation district or FEMA Special Flood Hazard Area
- Must meet the following technical requirements:
 - No existing PV or energy storage systems
 - PV system roof loading not to exceed 4 psf dead load
 - PV systems limited to 10kw or smaller
 - Existing electrical services not to exceed 400-amp, single phase only
 - New or replacement electrical services not to exceed 200-amp (**separate electrical permit required for electrical service upgrades**)
 - Maximum of 2 DC strings in parallel
 - If using microinverter, one module per microinverter
 - Only one module type
 - Up to two inverter types for string inverters and up to one inverter type for microinverters

Minimum Plan Requirements

- **Electrical plans** that include a three-line diagram showing all conductors, equipment, modules, etc., from the service panel to the modules. Include all ratings, wire sizes,

location of conduit runs, labeling and the open circuit DC voltage if the modules are of the crystalline type.

- **Structural plans** that include size, type and spacing of existing framing members (indicate if trusses, rafters, etc.), pitch of roof, existing roof covering material (tile, asphalt shingle, built-up, etc.), size and weight of each solar panel and details for mounting of panels to the existing roof structure.
 - Roof mounted collectors must be non-combustible or meet fire resistive requirements of fire-retardant treated wood as stated in IRC section M2301.2.2.1.
- **Plot plan** that includes all applicable information per the Residential Single Family Plot Plan requirements guideline – [Microsoft Word - Plot Plan, Single Family Example.doc \(sharepoint.com\)](#)
- New submittals require a complete set of plans and supplemental documents for first review
- Minimum drawing sheet size 11x17, minimum supplemental document size 8.5x11
- Minimum plot plan scale 1" = 20', minimum drawing scale 1/8" = 1', minimum 10pt font size
- All plans and supplemental documents must be legible
- Manufacturer's Specifications of the PV modules, the inverter(s) and racking systems
- If field inspector redlines the plans in the field with minor corrections, an As-built set will be provided for scanning in to PDD Records.

Plan Review & Permitting

- Applicant completes permit application and emails it along with the plans to pdd.residential.express@phoenix.gov. **The subject line of the email must include PV RPBI, so it is routed and processed in a timely manner.**
- Plan review staff will verify project meets eligibility requirements and that all applicable plans have been received.
- Plan review staff will email applicant to advise of approval and direct them to make payment through our website at <https://apps-secure.phoenix.gov/PDD/Payments> or Payments and Submittals at 602-534-5934 or payments.submittals@phoenix.gov.

Inspection

- Schedule inspection at [Permit Inspection Request \(phoenix.gov\)](#).
- Owner or owner's representative requests inspection for job site meeting (Code 602). **The owner or owner's representative must schedule a job site meeting with the inspector and be present at the meeting prior to commencing any work.**
- Inspector meets owner or owner's representative on site to review the project
- Inspector reviews the plans for remaining building code requirements
- If additional plans or information is needed, the inspector informs the owner or owner's representative at the job site meeting and summarizes requirements in the KIVA Inspection Summary

- Inspector notifies the owner or owner's representative of the required inspections for the project
- Inspections and review are completed at various stages of construction
- Final inspection is completed, and the Certificate of Completion is issued
- For additional assistance scheduling inspections visit [Inspection Request/Cancellation \(phoenix.gov\)](#) or call (602) 262-7811