



REGULATIONS GOVERNING  
**Residential Photovoltaic Systems**

PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT  
BUILDING SAFETY DIVISION  
P.O. BOX 2973, FLORENCE, AZ. 85132  
31 N. PINAL STREET, BLDG. F  
(520) 866-6442 FAX (520) 866-6517  
[www.pinalcountyaz.gov](http://www.pinalcountyaz.gov)

INFORMATION  
BULLETIN

**021**

June 2019

Listed below you will find the submittal requirements for a Residential Photovoltaic System plan review:

**1. SITE PLAN**

Site plan should have the typical elements of any site plan with the addition of the solar arrays (roof mounted, ground mounted) and major components located.

**2. ELECTRICAL DIAGRAMS**

One-line and three-line diagrams should be provided in the submittal. The diagrams should have sufficient detail to call out electrical components, wire type and size, number of conductors, and conduit type and size. Information on the PV modules and inverter(s) should be noted and means of utility disconnect called out.

**3. MAJOR COMPONENT INFORMATION**

Major components include **INVERTER, MODULE, ARRAY** and **BATTERIES** (if used). Submittal should include model # and MFG's "cut sheets" for specific models and UL listings. Array electrical information should include # of modules in series, array operating voltage, array operating current, max. system voltage and array short circuit current.

**4. MOUNTING DETAILS**

For roof mounting, the weight of the PV array in pounds per square foot should be noted. Type of roof covering (comp, tile, etc), roof framing (2 x's @ 16" o.c., trusses @ 24" o.c., etc) should also be noted. Roof mounting details and method of sealing penetrations are to be in the submittal. For ground set PV array some type of anchoring system should be called out and detailed.

**5. NOTES**

Please reference NEC 2017 on plan notes. The notes should say "PV equipment shall be installed in accordance with NEC 690 & posted with approved warnings, signage & plaques per 705-10, 690-13, 690-31 and 690-54.

**6. INTERNATIONAL FIRE CODE (IFC)**

Roof-mounted arrays, ground-mounted arrays and associated equipment, conduit and conductors shall comply with Section 1204 Solar Photovoltaic Power Systems of the 2018 IFC for marking DC conductors, location of DC conductors, roof access, pathways and spacing. Plan should show compliance with the IFC.

Please note: All PV systems installed upon the roof tops of modular and mobile homes must be structurally evaluated. Permit applications must be accompanied with a certification letter from an Arizona registered engineer (sealed). The certification letter shall state that the existing structure, being a manufactured mobile home, directly supporting the PV system is adequate to withstand all loading based on the design criteria adopted by Pinal County. IRC 2018 IBC 2018. Additionally, certify that the PV module assembly including all standoffs supporting it have been reviewed to be in accordance with the manufacturer's specifications and to meet and/or exceed all requirements set forth by the design criteria adopted by Pinal County.

For additional information please contact our department at the number listed above.

