



Building Safety Residential Photovoltaic System Requirements

The following checklist has been prepared to streamline the process of applying for and obtaining a permit for your photovoltaic system. It is important that the installation be permitted and inspected to ensure the safety of the installation. If you have any further questions regarding the structural or electrical items, please contact the Building Safety Department at 623-930-2800 for assistance. If you have issues regarding planning or zoning items, you may contact the Planning Department at 623-930-2800. A permit application can be obtained through the website.

Please note that a licensed contractor is required to install your system and they will be able to assist you by providing the information you need to obtain a permit. Check with your local utility company for a list of approved licensed contractors and additional requirements.

Building Safety Requirements: In order to complete the application and obtain a permit, you will need to provide the following information:

1. Property Owner
2. Property Address
3. Contractor's Name and AZROC License Number
4. Size of the system (in KW)
5. Valuation of the system including installation (before rebates)

You will be required to provide one (1) complete PDF set of plans to the City for the system that you are proposing to install. The information you will need to provide in those sets include:

1. A site plan showing the location of all buildings on the property as well as the location of the unit on your property.
2. Specify the applicable codes: 2018 IRC, 2017 NEC and City Amendments
3. Provide a note on the plans that the photovoltaic system shall be installed in accordance with NEC 690 and posted with applicable warnings, signage, and plaques per NEC 705-10, 690-17, and 690-64(b)(5).
4. All free-standing units must be installed a minimum 4-inch thick slab on grade.
5. Provide and specify the disconnecting means of all equipment. This could include any electrical disconnects, lock-offs at breakers, or a service panel within sight of any photovoltaic equipment (NEC 422.30).
6. Provide an electrical one-line diagram of the service entrance system. Also included a three-line diagram showing individual conductor types and sizes, conduit sizes, as well as their connection points. Be sure to specify if the electrical service panel is existing or new and the size (in amps). Provide a simple roof plan showing new and existing equipment locations.
7. Provide a load calculation worksheet for the residence if you de-rate the main circuit breaker on the main electrical service.



8. Provide the existing roofing material and the existing slope (IRC Chapter 9)
9. Provide the size and weight of all roof top units. Be aware that the maximum allowable additional loading of all roof units supported by trusses is 5 pounds per square foot and a 50-pound point load. For conventionally framed roofs the applicant will need to provide all framing member sizes, spacing, and any other pertinent information to the reviewer so they can determine the existing members can handle the additional loading.
10. Specify the anchoring method of all units (Minimum 3/8" diameter anchors into a minimum 2x blocking or 5/16" diameter lag bolt with minimum 2-1/2" embedment.)
11. Specify and provide flashing at all roof penetrations (IRC R903).
12. Provide cut sheets and listings of all equipment from a nationally recognized testing agency such as a UL.
13. Provide the specifications for installation on the job site.
14. All existing vents/flue's through the roof shall not be compromised by the installation of the new equipment.

Permit Fees – Based on the City of Glendale's currently adopted fee schedule, the fees for the photovoltaic system for residential construction will be as follows:

Electrical Base Permit Fee:	\$29.79
Sub-Panel Fee:	\$38.64
*Electrical Clearance Fee (if applicable)	\$114.35
1 Hour Inspection Fee:	\$114.35
<u>1 Hour Plan Review Fee:</u>	<u>\$122.88</u>
Total Permit Fee	\$305.66
*Total Permit Fee with Clearance	\$420.01

NOTE: These fees are adjusted annually based on the Customer Price Index. This increase takes place on July 1st of each year.

Fire Department Requirements:

Contact the Fire Plans Examiner at 623-930-3127 for all requirements and details.

Planning Department Requirements:

1. All free-standing units must meet accessory structure provisions for their zoning district as specified in the Zoning Ordinance in Section 7.300.
2. Planning and Zoning regulations involving such requirements as setbacks, height limitations, color, reflectivity, or other design considerations may apply. Contact the Planning Department at 623-930-2800 for further information.