
	BUILDING DEVELOPMENT POLICIES AND PROCEDURES ADMINISTRATIVE/GENERAL	Effective Date: May 06, 2011
		Supersedes Policy Dated: N/A
	1.13.7 Solar Energy Systems	Issued by: Eric M. Mays, P.E.  Building Official

This is to establish the plan review, licensing, permitting and inspection guidelines for the installation of Photovoltaic (PV) Solar Energy Systems and Hot Water Solar Energy Systems.

Plan Review Process

1. Residential Roof Mounted Solar Energy System

If the proposed installation complies with the following minimum requirements, please refer to the [Solar Energy Systems Plan Submission and Inspection Guidelines](#) to determine if the proposed installation is eligible to use the County Typical Solar Energy Systems Plans:

- A. Produces 15 kilowatts or less of electricity
- B. Solar panel attachment dead weight will not exceed 45 lb
- C. Distributed weight of the modules will not exceed 5 psf

If the proposed installation is not eligible to use the County Typical Solar Energy Systems Plans, plans will need to be prepared and submitted by a properly licensed contractor/master tradesman or a Registered Design Professional (RDP).



2. Residential Ground Mounted Solar Energy System

Plans will need to be prepared and submitted by a properly licensed contractor/master tradesman or a Registered Design Professional (RDP). The plans shall include, but are not limited to:

- A. Zoning Approval – Submit a copy of the “House Location Survey” or “Plat” with the proposed location of the Solar Energy System to the Zoning Division. For information regarding set-back requirements and property line location questions, please contact the Zoning Division at 703-792-6830.
- B. Structural details and calculations for the mounting structure including: solar energy panel supports, framing members, footing/foundation and method of attachment of the solar energy panel to the mounting structure.
- C. Provide manufacturer’s installation manual, including product specification.

3. Commercial

Commercial solar energy system installations shall require a RDP to prepare the appropriate drawings for review and approval. The plans shall include, but are not limited to, structural details and calculations for the system’s structural supporting members and the method of attachment to the building, structure or foundation. The appropriate electrical drawings and plumbing plans are also required, if applicable.

	BUILDING DEVELOPMENT POLICIES AND PROCEDURES ADMINISTRATIVE/GENERAL	Effective Date: May 06, 2011
		Supersedes Policy Dated: N/A
	1.13.7 Solar Energy Systems	Issued by: Eric M. Mays, P.E.  Building Official

Licensing and Permits

1. Licensing

An Alternative Energy System (AES) Contractor can obtain the permits for the installation of a PV Solar Energy System and a Solar Hot Water System. However, a licensed Electrical Contractor/Master Electrician is required to obtain a separate Electrical Permit to make the final connection of a PV Solar Energy System to the building's electrical system and to install any electrical wiring and/or receptacles associated with a Solar Hot Water System. (Note: For Solar Hot Water Systems, the final connection to the building's plumbing system is considered incidental work; therefore, the AES Contractor can make the final plumbing connection.)

A licensed Electrical Contractor/Master Electrician can obtain the permits required for the installation of a PV Solar Energy System.

A licensed Mechanical Contractor/Master Mechanical Worker or a licensed Plumbing Contractor/Master Plumber can obtain the permits for the installation of a Hot Water Solar Energy System with the exception of an Electrical Permit, if required. (Note: For Solar Hot Water Systems, the final connection to the building's plumbing system is considered incidental work; therefore, the Mechanical Contractor/Master Mechanical Worker can make the final plumbing connection.)



If you are a homeowner and **will be performing the work yourself**, you will need to complete the [Affidavit of Owner](#), or you may fill out the Affidavit of Owner at the Building Permitting Services Counter. The Affidavit is a legal document and needs to be notarized. You may have it notarized before arriving at the Development Services Building, or the technician at the Building Permitting Services Counter can notarize the Affidavit for you. If you choose to have the permit technician notarize the Affidavit for you, do not sign the Affidavit until you are at the Building Permitting Services Counter.

2. Permits for PV Solar Energy Systems

At a minimum, a Building Permit and an Electrical Permit are required for installation of a PV Solar Energy System. If the AES Contractor is not also a licensed Electrical Contractor/Master Electrician, a licensed Electrical Contractor/Master Electrician must obtain an Electrical Permit for the final connection to the building's electrical system.

3. Permits for Hot Water Solar Energy Systems

At a minimum, a Building Permit and a Mechanical Permit are required for installation of the Hot Water Solar Energy System. Additionally, if an electrical circuit is added or extended to provide electrical power to the Hot Water Solar Energy System, a licensed Electrical Contractor/Master Electrician must obtain an Electrical Permit for the new/extended circuit.

	BUILDING DEVELOPMENT POLICIES AND PROCEDURES ADMINISTRATIVE/GENERAL	Effective Date: May 06, 2011
		Supersedes Policy Dated: N/A
	1.13.7 Solar Energy Systems	Issued by: Eric M. Mays, P.E.  Building Official

Inspections

Please refer to the [Solar Energy Systems Plan Submission and Inspection Guidelines](#) for the required inspections and the required inspection certification.

County Tax Exemption

In accordance with the Code of Virginia, § 58.1-3661, the [County Ordinance Chapter 26 – Taxation, Article VI. Tax Exemption for Certified Solar Energy Equipment, Facilities or Devices](#) has been adopted. Certified solar energy equipment, facilities or devices means any property, including real or personal property, equipment, facilities or devices certified by the local Building Department to be designed and used primarily for the purpose of providing for the collection and use of incident solar energy for water heating, space heating or cooling or other application which would otherwise require a conventional source of energy, such as petroleum products, natural gas, electricity, wood or coal.

To apply for the County Tax Exemption, please complete and submit the [Solar Energy Systems Certification for Real or Personal Property Tax Exemption Form](#) along with documentation to substantiate the cost to the Building Permits Section in conjunction with or after the issuance of the Building Permit. Once the final inspections have been approved, the Building Permits Section will forward the completed Tax Exemption Form to the County’s Finance Department.

Attachments/Hyperlinks

- [Affidavit of Owner](#)
{ www.pwcgov.org/eBuildingDevelopmentForms/forms/AffidavitOfOwner.pdf }
- [Solar Energy Systems Certification for Real or Personal Property Tax Exemption Form](#)
{ www.pwcgov.org/eBuildingDevelopmentForms/forms/SolarEnergySystems-TaxExemption.pdf }
- [County Ordinance Chapter 26 – Taxation, Article VI. Tax Exemption for Certified Solar Energy Equipment, Facilities or Devices](#)
{ www.pwcgov.org/government/dept/development/bd/Documents/14231.pdf }
- [Solar Energy Systems Plan Submission and Inspection Guidelines](#)
{ www.pwcgov.org/government/dept/development/bd/Documents/14230.pdf }