



Residential Solar Panel (PV) Requirements

General Information

A permit is required for the installation of Solar Panel (PV) systems, which must comply with the requirements of the National Electrical Code and International Residential Code. Please see the Solar Panel/Photovoltaic (PV) system installation handout notes for material and installation requirements.

This work must be performed by a licensed Electrical Contractor registered as such with the City of Anna.

Plan Review

Submit site plan (a survey plat is required) showing the proposed location of the solar panels with respect to the property lines, easements and house.

Please see the Solar Panel - PV Check List for additional details related to Plan Review submittal requirements.

Inspections

Inspections will be required prior to and upon completion of work. A permit must be obtained prior to construction and must remain posted at the work site until the approved Rough Electric, Framing (If applicable), Final Electric, and Final Inspection have been completed and the project is considered complete.

Fees and Applications

A Building Permit fee is required, and an application must be completed and submitted to Building Inspections.

Solar Panel - PV Check List

Please fill out the Solar Panel Self-Checklist and please sign below that all information is correct. Your self-checklist must be submitted along with your Solar Panel plans and application.

Residential Application Commercial Application
Copy of inverter manufacturer information sheets
Copy of module manufacturer information sheets
Copy of rail/racking system manufacturer information sheets and method of attachment.
Type of roof covering? Asphalt or Other
Type of roof framing Truss Stick: size of rafters and spacing
Does the proposed equipment installation cause the roof load assembly to exceed the maximum requirement of 10 psf per the IRC?
How many modules will be installed?
Where will modules be installed? Roof / Accessory Structure?
Site plan showing system installed on property. Site plan must include the following: modules, inverter(s), combiner boxes, all ac & dc disconnects, utility disconnect and meter(s), service panelboard
Copy of one-line or three-line diagrams
Connection to utility grid Supply Side Connection Load Side Connection
Panelboard ampere rating amps Main breaker Back feed Breaker amps
System configuration Positive ground Negative ground Ungrounded
Are battery's being installed?



SOLAR PANEL/PHOTOVOLTAIC (PV) SYSTEM INSTALLATION HANDOUT NOTES

1. Contact Building Inspection Supervisor prior to beginning Construction.
2. A rough electric inspection shall be performed prior to installing panels on roofs.
3. Provide an independent PV disconnect ahead of the inverter (if applicable)
4. Equipment grounding conductors used for grounding arrays smaller than is #6 AWG. Copper shall be installed in a suitable raceway. All exposed equipment grounding and bonding conductors shall be solid copper or UV rated.
5. Devices (lugs) used for grounding arrays shall be suitable for use in wet locations and Installed to code.
6. Provide all appropriate warning labels at disconnects and equipment.
7. Plastic UV rated cable ties shall not be used to secure exposed wiring between modules. Approved fasteners only intended for the specific use.
8. Conductors and conduits run on rooftops may require additional ambient temperature adjustments.
9. Residential interior PV direct current system conductors shall be identified by system to comply with current adopted code. Direct Current ungrounded conductors shall be Orange or Yellow. The grounded conductor shall be identified by the color Gray.
10. PV source and output circuits run inside the building shall not be installed within 10" of the roof decking unless installed directly below the roof surface covered by PV modules and associated equipment.
11. Metal junction boxes, raceways, or other wiring methods supplying dc circuit wiring shall be labeled designating "Photovoltaic Power Source".

This form is not intended to be an all-inclusive list of requirements. It is a guide to assist in your project.