

Solar Photovoltaic Panels/Modules Permit Requirements For Residential (One and Two Family Dwellings)

Greenville County

Greenville County Square * 301 University Ridge, Suite 4100 * Greenville, SC 29601 - 3660 * 864 - 467 - 7060

Solar Voltaic Systems: The total components and subsystems that, in combination, convert solar energy into electric energy suitable for connection to utilization load.

All systems shall be constructed in accordance with the following referenced ICC Codes and Sections: 2018 IRC 324.1 through 324.6.1 and M2301, and 2017 NEC Article 690. The systems are limited to 20 kW AC per SC Code of Law Section 58-39-20 C (2).

1. Go to eTRAKit and Create an Account.

<https://grvlc-trk.aspgov.com/eTRAKiT/login.aspx?lt=either&rd=~/PermitApplication/step1.aspx&activityNo=>

2. Upload a Site Plan and the following information

4. Submittal Requirements in addition to a completed Residential Addition/Alteration Permit Application:

- ✓ Single Line Electrical Drawing (Same drawing submitted to Power Company)
- ✓ “Eyes on” Statement including roof structural components and condition.
The statement is to reflect existing condition of structure and the dimensions and spacing of the members. The statement is to be prepared by a SC Specialty Contractor (RBS) registered in Framing, a SC Licensed Residential Builder (RBB), or a SC Licensed Structural Engineer (PE).
- ✓ A SC Sealed and Signed Structural Review including plan view of panel system.
The structural evaluation letter/review shall be based on the “eyes on” field inspection. Structural letter shall contain the structural design criteria and the following language: “As per the results of the structural analysis and the “eyes on” field inspection, the existing roof and building is capable of supporting the proposed solar panel installation as designed and complies with the 2015 IRC structural requirements”. The 10 lb. per square foot snow load shall not be reduced.
- ✓ Approved and signed Interconnect Letter from Power Company
(The above items checked will be reviewed, initialed, and scanned into permitting software)

5. To Secure a Permit Per S.C. Regulation 106-1:

- ✓ A Residential Specialty Contractor with a registration for "solar panel installer" is authorized to fabricate, assemble, install, and replace solar panels and related building components.
- ✓ The actual roof mounting of such panels may only be performed by a licensed residential builder (RBB), registered residential specialty contractor (RBS) with a roofer classification, or a licensed general contractor with a general roofing (GR) or specialty roofing classification.
- ✓ The wiring of the solar panels and other electrical connections must be performed by a licensed residential builder (RBB), a licensed residential electrician, or a licensed mechanical contractor with an electrical classification (EL).

- ✓ If the roof requires any structural upgrades for the mounting and installation of the solar panels, the structural upgrades must be performed by a licensed residential builder (RBB), a registered residential specialty contractor with a classification in carpentry, or a licensed general contractor with building (BD) or structural framing classifications (SF).

6. Ground Mount systems:

- ✓ The Conductors for Ground Mount Systems should be guarded in accordance with NEC 690.33 (B) and connectors shall be in accordance with NEC 690.33 (C).

7. Compliance requirements:

Equipment, devices, and conduits shall be labeled in accordance with NEC Article 690

All components shall bare a U.L. Label or equivalent approved testing laboratory

All interactive utility inverters shall be equipped with integrated ARC-fault and integrated rapid shutdown. NEC 690.12

Maximum voltage per NEC 690.07 (A-E)

Circuit sizing per NEC 690.8

8. The panel installation will be inspected to verify setbacks, anchors, electrical compliance, and any other applicable code items.

Re-roofing Projects that Require Removal And Re-Installation of Solar Panels

1. Go to eTRAKit and Create an Account.

<https://grvlc-trk.asp.gov.com/eTRAKiT/login.aspx?It=either&rd=~/PermitApplication/step1.aspx&activityNo=>

2. To Secure a Permit Per S.C. Regulation 106-1:

- ✓ A Residential Specialty Contractor with a registration for "solar panel installer" is authorized to fabricate, assemble, install, and replace solar panels and related building components.
- ✓ The actual roof mounting of such panels may only be performed by a licensed residential builder (RBB), registered residential specialty contractor (RBS) with a roofer classification, or a licensed general contractor with a general roofing (GR) or specialty roofing classification.
- ✓ The wiring of the solar panels and other electrical connections must be performed by a licensed residential builder (RBB), a licensed residential electrician, or a licensed mechanical contractor with an electrical classification (EL).

If the roof requires any structural upgrades for the mounting and installation of the solar panels, the structural upgrades must be performed by a licensed residential builder (RBB), a registered residential specialty contractor with a classification in carpentry, or a licensed general contractor with building (BD) or structural framing classifications (SF).