

Regulating Solar Installers in NWI Communities

Frequently Asked Questions

What should a solar installer be able to do?

A solar photovoltaic installation may be rooftop, or ground mounted. If mounted on a pitched roof, the installer will likely be penetrating and attaching hardware to the building's roof structure as well as making electrical connections to and through the building's electrical panel. A system mounted on a flat roof will likely be ballasted and not require any roof penetrations. A solar heating installation includes these things as well as circulating water or an antifreeze solution through plumbing. If the solar photovoltaic installation is ground mounted, it may require footings to be poured.

Doesn't the state have a certification or license for solar installers?

The State of Indiana currently does not have a specific certification or licensing program for electricians or for PV solar installers. In the absence of a state regulation in this regard, counties and municipalities with approved building departments have authority to require local certification, registration, or other options.

How should I regulate solar installers in my jurisdiction? Do I need to establish a separate license, exam, or registration?

NIRPC has observed a wide variety of requirements that different jurisdictions in Northwest Indiana use to regulate general contractors, electricians and roofers, such differentiation is not necessary for solar PV systems since the basic components and skills necessary for a safe installation will be identical across jurisdictions.

It is recommended that jurisdictions pre-certify solar installers by utilizing existing outside accreditations, or by requiring a documented record of success completing projects within the jurisdiction. Pre-certification can also simplify your time and expense in other processes such as permitting and inspection because applications will be submitted by experienced and knowledgeable contractors familiar with local expectations.

What kind of professional accreditations should solar installers have?

There are several accrediting organizations that certify solar installers with different levels of training and experience required by each.

The **North America Board of Certified Energy Practitioners** (NABCEP) is the longest standing certification program currently available. They offer three levels of certification for solar installers.

- NABCEP Entry Level – indicates that the individual has successfully completed coursework in the design, installation, and operation of PV and Solar Heating Systems and passed an Entry Level Exam.
- NABCEP Certified PV Installation Professionals or Certified Solar Heating Installers have extensive experience, have passed rigorous examinations, have demonstrated capability to supervise complete system installations, and detailed working knowledge of electric and plumbing codes, standards, and accepted industry practice. Minimum requirements include 58 hours of advanced PV training, including at least 40 from programs accredited or certified by the

Interstate Renewable Energy Council, the Federal Department of Education, the US Department of Labor Registered Apprenticeship Training Programs, institutions approved by State Contractor Licensing Boards, or State registered Vocation/Technical Training Programs.

18 of these hours may be from course covering building and electrical codes relevant to solar PV systems. In addition to training, they complete a Professional Certification Exam, and provide NABCEP with documentation of 3-5 installations where they have acted in the role of contractor, lead installer, foreman, supervisor, or journeyman.

Underwriters Laboratory (UL) offers a PV System Installation Certification.

- The UL certification is only available to qualified electricians who have completed the OSHA 30-hour construction training.
- Individuals must pass one three hour exam intended to measure the necessary competencies for a qualified electrical professional with several years of hands-on experience in the field. Hands-on experience or equivalent knowledge targeted includes installing, building, repairing, troubleshooting, diagnosing, verifying and performing tasks involved in either residential or commercial electrical work.

The Electronics Technicians Association (ETA)

ETA offers a Photovoltaic Installer-Level 1 certification. Individuals receiving this certification must have hands-on training from an ETA-approved school and be knowledgeable in topics such as solar resources and principles; selection identification proper installation sequence, performance characteristics and troubleshooting methods; permitting; best safety practices; and economic impact.