

NABCEP PV Installer Eligibility Requirements

Basic Requirements

To become certified and maintain certification, the applicant must minimally:

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- Be at least 18 years of age
- Meet prerequisites of related experience and/or education as outlined in Section 3.2.1 below
- Complete an [application to sit for the Solar PV Installer Certification exam](#) and document all requirements (you may wish to complete the [online application](#))
- Sign and agree to uphold a code of ethics
- Pay application and exam fee
- Pass a written exam
- Complete continuing education and installation requirements within the recertification timeframe

Education, Training and Experience Prerequisites

There are several ways that you may qualify to sit for the certification examination. NABCEP recognizes that professionals in the field of renewable and sustainable energy and energy efficient technologies receive their training and work experiences in a variety of ways. Therefore each requirement to qualify for the exam stipulates specific training and/or experience. The NABCEP Application Review Committee will review each application to determine compliance with eligibility criteria. Compliance with the requirements of **one** of the **Qualifying Categories** must be documented.

Qualifying Categories for the Solar PV Installer Certification Examination

To qualify to sit for the NABCEP PV Installer Certification examination, the candidate must demonstrate that he/she meets at least **one** of the following minimum entry requirement tracks:

- a) Experience installing PV systems occurring at some point in the two (2) years prior to submitting an application for the exam in addition to the completion of 40 hours cumulative of training (see definition of experience and training in Sections 3.2.2 and 3.2.3 below); **OR**
- b) Be an existing licensed contractor in good standing in solar or electrical construction-related areas with experience installing PV systems occurring at some point in the two (2) years prior to submitting an application for the exam in addition to the completion of 40 hours cumulative of training (see definition of experience and training in Sections 3.2.2 and 3.2.3 below); **OR**
- c) Four (4) years of electrical construction-related experience working for a licensed contractor, including experience installing PV systems occurring at some point in the two (2) years prior to submitting an application for the exam in addition to the completion of 40 hours cumulative of training (see definition of experience and training in Sections 3.2.2 and 3.2.3 below); **OR**

d) Three (3) years experience in a U.S. Dept. of Labor-approved electrical construction trade apprenticeship program, including experience installing PV systems occurring at some point in the two (2) years prior to submitting an application for the exam in addition to the completion of 40 hours cumulative of training (see definition of experience and training in Sections 3.2.2 and 3.2.3 below); **OR**

e) Two (2)-year electrical construction-related, or electrical engineering technology, or renewable energy technology/technician degree from an educational institution or four (4)-year construction-related or engineering degree from an educational institution, including experience installing PV systems occurring at some point in the two (2) years prior to submitting an application for the exam (see definition of experience in Sections 3.2.3 in the Candidate Information Handbook);

Definition of Experience for the Solar PV Installer Certification

For purposes of this process, experience installing PV systems requires being in a *responsible role* in decision-making on the job. This includes the foreman, supervisor, site manager responsible for the quality of the installation, or experienced person performing the trade without supervision. There may be several workers that do not carry responsible charge on the jobsite who are aspiring to this role. In these cases, the supervisor may be called upon to make a judgment as to the role of the worker in the process of documenting their experience.

Definition: experience = the installation of two (2) PV systems occurring at some point in the two (2) years prior to submitting an application for the exam. The individual must be in a responsible role on the job installing PV systems, in the role of foreman, supervisor, site manager, or experienced worker performing PV installation work without direct supervision. This time period must include installation of at least two PV systems totaling 1kW. At least one installation must be a system with an inverter and subject to a complete electrical permitting and inspection process by a permitting authority — OR — in the absence of such, an appropriate underwriter authorized to provide an inspection certificate. In regions where neither of these inspection options exists, the Application Review Committee will judge experience based on supplied documentation.

Training and Education

Although training is strongly encouraged, it is not a requirement when applicants meet the requirements for qualifying category (E). However, the exam is such that some level of training will likely be necessary for most applicants to achieve a passing score. Candidates are therefore encouraged to seek training classes as needed.

It is recommended that applicants look for training courses that are ISPQ (Institute of Sustainable Power Quality) accredited or taught by an ISPQ Certified Master Trainer or Instructor. A full list of accredited training programs and certified instructors can be found at www.IRECusa.org under Workforce Development.

NABCEP will accept training to meet entry requirement option (a, b, c, and d) when the training meets the following outcomes:

a) A minimum of 40 hours cumulative (can include product training)

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b) Have a formal training format, with a teacher-learner structure. This implies a connection between a learner and a learning source. It can include classroom time led by an instructor and/or discussion leader. It can also include activities in which a learner is engaged in a planned learning event in which he/she is separated from faculty and other students but where the learner receives some sort of feedback and the learner's progress is monitored. Examples include computer-assisted instruction, interactive video/CD/DVD and/or web site learning.

c) Covers core competencies from the PV Installer Task Analysis, including the National Electrical Code® and OSHA safety standards relevant to PV installation

Types of training programs may include but are not limited to:

1. Offered by an institution accredited by an agency recognized by the federal Department of Education (Universities, Community Colleges...etc.)
2. Dedicated independent training programs such as those accredited by the Institute for Sustainable Power
3. Apprenticeship training programs (e.g. National Joint Apprenticeship Training Committee Department of Labor approved apprenticeship programs)
4. Those approved by State Contractor Licensing Boards
5. Vocational/Technical training programs (e.g. Board of Cooperative Educational Services/ New York)
6. Industry in-house training programs (i.e. Manufacturers)

Training Related Installations

NABCEP recognizes PV installations performed by participants during the course of a training program. The typical goal of these installations is to provide participants with hands-on experience in simulated on-the-job conditions. Acceptable practices and requirements for purposes of using training related installations to meet experience requirements are listed below:

1. It is acceptable for the student responsible for the installation to use other students as his/her "crew" as would be customary in a regular installation for a customer
2. Only 1 person per training class may claim the title of "responsible installer" for purposes of listing the installation on the NABCEP Application.
3. Only one of these training-related installations is allowed per NABCEP application. (It must be matched with actual installation(s) for a customer.)

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Documentation of Employment, Experience, & Education

To show that you have been working in the PV field for the number of years required by the Qualifying Category you chose (see Section 3.2.1 above), the Application Form will ask you to list PV-related employment in chronological order, starting with most current employment. You will need to write a job description, summarize the # of/type of systems you helped install, and provide contact information for your supervisor. In addition, a supervisor will need to sign off on your current employment. If you are self-employed, the Application Form will ask you to provide a detailed description of your work and sign off on it yourself. Your PV installations will act as verification of your employment.

Formal education or training are optional depending on the Qualifying Category you chose, though NABCEP believes that applicants will benefit from quality training when preparing to take the certification exam. If your Qualifying Category requires education, copies of official transcripts or diplomas attesting to your attendance and degrees earned will need to be attached to the application form.

Documentation of Solar PV System Installations

In order to document the minimum 2-systems required per year of experience, candidates are asked in the Application Form to list qualifying installed systems (see Section 3.2.2 above) and provide a concise description of work performed at the job site, including the system size, a list of components, the level of their responsibility on the jobsite, number of full-time equivalent workers supervised, and any other pertinent information.

In addition, for each system, the applicant must submit the following documentation:

- Electrical permitting and inspection documents for the system installed
- If the applicant's name is not on the permit and/or inspection report, then the individual who is named or the employer must provide a signed letter on letterhead that the applicant was the lead installer for that system.

At least one of your installations must be permitted. If permits or inspections are not available, you may submit for one of your installations a one-line drawing with a bill of materials. A signed letter on official letterhead from your supervisor or employer is still required.

In regions where neither of these inspection options exists, the applicant may hire a qualified electrician recognized by the Authority Having Jurisdiction (AHJ) to write an inspection report.

NABCEP reserves the right to contact system owners/operators, permitting authorities, and responsible contractors to verify work listed in this section.

Licensure Requirement

If a license for solar installation is required in the jurisdiction in which the work is performed, candidates must submit their license number — or the license number under which the work was performed.