

NABCEP

PV Installer Certification Eligibility Requirements

This document sets forth the eligibility requirements for the NABCEP PV Installer Certification as revised and approved by the Directors of the North American Board of Certified Energy Practitioners (NABCEP) on December 12, 2011. The following requirements will apply to all applications to sit for NABCEP PV Installer Exam received by NABCEP **after January 13, 2012**. Candidates that have been accepted to sit for the exam under the previous requirements will have until September 2013 to complete and pass the exam without having to re-apply using the new requirements.

The table below summarizes the Installation and Education Requirements for the NABCEP Certified PV Installer Exam. Following the table are the complete requirements.

Requirements for all applicants	Be at least 18 years of age and Document a minimum of 10 hours of OSHA approved Construction Industry safety training by presenting a 10 OSHA card (or state or provincial equivalent).		
Track	Who	Installation Experience	Education
A	Any PV Installer	Five (5) PV Systems	58 Hours
B	An existing licensed contractor in good standing in solar or electrical construction-related areas	Three (3) PV Systems	
C	Someone with four (4) years of electrical construction-related experience working for a licensed contractor (includes licensee or owner/operator)		
D	Someone with three (3) years experience in a U.S. Dept. of Labor-approved electrical construction trade apprentice program		
E	Holder of a two (2) or four (4) year electrical construction-related, electrical engineering technology, renewable energy technology/technician degree, or a four (4) year degree in mechanical, structural or civil engineering		

continued

Solar PV Installer Certification Requirements

Eligibility Requirements for the Solar PV Installer Certification

To become certified and maintain certification, the applicant must minimally

- Be at least 18 years of age
- Meet prerequisites of related experience and/or education as outlined in Section 1.2 below
- Complete an application form documenting requirements
- 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

Qualifications for the Solar PV Installer Certification Examination

To qualify to sit for the NABCEP PV Installer Certification Examination, every applicant will need to provide documentation as defined in sections 1.6 to 1.10 to demonstrate

- 1) A minimum of 10 hours of OSHA approved Construction Industry safety training by presenting a 10 OSHA card (or state or provincial equivalent) **AND**
- 2) That he/she meets at least **one** of the following minimum entry requirement tracks:
 - A. Track A
 - i. Completion of 58 cumulative hours of training as defined in section 1.5 below; **AND**
 - ii. Installation of five (5) PV systems in compliance with the requirements of section 1.4 below;
 - OR**
 - B. Track B
 - i. Licensure as a contractor in good standing in solar or electrical construction-related areas; **AND**
 - ii. Installation of three (3) PV systems in compliance with section 1.4 below; **AND**
 - iii. Completion of 58 cumulative hours of training as defined in section 1.5 below;

OR

continued

C. Track C

- i. Four (4) years of electrical construction-related experience working for a licensed contractor; **AND**
- ii. Installation of three (3) PV systems in compliance with section 1.4 below; **AND**
- iii. Completion of 58 cumulative hours of training as defined in section 1.5 below;

OR

D. Track 3

- i. Three (3) years experience in a U.S. Dept. of Labor-approved electrical construction trade apprentice program **AND**
- ii. Installation of three (3) PV systems in compliance with section 1.4 below **AND**
- iii. Completion of 58 cumulative hours of training as defined in section 1.5 below. *NOTE:* training does not need to be in addition to apprenticeship training coursework if requirements of Section 1.5 are met within the curriculum;

OR

E. Track 4

- i. Two (2) or four (4) year degree in a field related to electrical construction, electrical engineering technology, or renewable energy technology; **OR**
- ii. Four (4) year degree in a field related to mechanical, structural, or civil engineering technology; **AND**
- iii. Installation of three (3) PV systems in compliance with section 1.4 below; **AND**
- iv. Completion of 58 cumulative hours of training as defined in section 1.5 below. *NOTE:* training does not need to be in addition to degree coursework if requirements of Section 1.5 are met within the curriculum.

OSHA 10 Hour Requirements

All applicants must show proof of completion of an OSHA 10 Hour Construction Industry class or its equivalent. To find an OSHA class near you, go to (www.osha.gov/dte/outreach/courses.html)

NOTE: NABCEP strongly recommends the completion of an OSHA 30 Hour Construction Industry course. OSHA states that “the 10-hour class is intended for entry level workers” and “the 30-hour class is more appropriate for supervisors or workers with some safety responsibility.” *Additional note:* 18 out of the 20 additional hours of training in the 30-hour class may be applied to the 58 hour training qualification requirements in all Tracks as described in section 1.5.1.d

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Solar PV Installation Requirements

Installation and System Requirements

The applicant shall perform the role of the individual responsible for the installation of the solar PV systems as the foreman, supervisor, site manager, or experienced worker performing all aspects of PV installation work without direct supervision. Please see Section 1.7 on how to document experience.

Systems submitted with the application must meet the following minimum criteria:

- All installations must have occurred within the two calendar years prior to the application start date.
- At least 50% (fifty percent) of the submitted systems must have an inverter rated 2 kW AC or greater continuous.
- All systems submitted must have a minimum rating of 1 kW DC (STC).

Solar PV Training Requirements

Training must meet the following criteria to be accepted in an application:

- a) The training was completed in the three calendar years prior to the start of the application.
- b) All training must have a formal training format, with a teacher-learner structure. This implies a connection between a learner and a learning source. This can include web-based-training 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. All hour requirements are based on "contact hours" between the teacher and the learner.
- c) A minimum of 40 of the 58 prescribed hours must cover the NABCEP PV Installer Job Task Analysis and address advanced solar PV installation and design principles and practices.

All advanced PV training must be offered by one of the following education providers:

- I. Institutions accredited by an agency recognized by the federal Department of Education, or Canadian equivalent (Universities, Community Colleges etc.)
- II. Apprenticeship training programs (e.g. National Joint Apprenticeship Training Committee Department of Labor approved apprenticeship programs)
- III. Training programs accredited or instructors certified by the Interstate Renewable Energy Council to IREC or IREC ISPQ Standards (www.irecusa)
- IV. Those approved by State Contractor Licensing Boards (or Provincial equivalents)
- V. Vocational/Technical training programs (e.g. Board of Cooperative Educational Services/New York)

NOTE: Courses offered by private training organizations that are not accredited or taught by instructors certified by a recognized third party will not be accepted for the minimum 40 hours of advanced solar PV installation and design training.

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d) Up to 18 of the 58 prescribed hours may be obtained through:

- Courses covering building and electrical codes relevant to the installation of solar PV systems
- “Entry Level” coursework by a NABCEP Registered PV Entry Level Provider, provided a passing score achievement was obtained on the NABCEP PV Entry Level Exam
- Additional OSHA or equivalent workplace safety courses above and beyond the required 10 hours
- Manufacturers Training that is registered with NABCEP as Continuing Education
- Any other coursework that addresses topics included in the NABCEP PV Installer Job Task Analysis (Note: the applicant will need to submit a course outline and a signed letter from the training provider detailing how many hours were spent covering the NABCEP Solar PV Installer Job Task Analysis)

The NABCEP Entry Level Exam

Applicants that have successfully achieved a passing score on the NABCEP PV Entry Level Exam may submit their passing score achievement in their application. The entry level coursework taken to qualify for the Entry Level Exam will subsequently count for (18) hours of training out of the fifty eight (58) hours prescribed.

NOTE: Courses leading to the NABCEP Entry Level Exam do not qualify for the minimum 40 hours of training on advanced solar PV installation and design principles and practices.

Manufacturers Training

Eighteen (18) of the prescribed 58 hours can be gained by attending training programs /courses offered by product manufacturers that are registered with NABCEP as Continuing Education but not accredited as defined above.

Documenting Training

When documenting training, the applicant will be required to submit a certificate of completion or a transcript for each completed training program or course.

All certificates of completion and transcripts must clearly state that the course covered subject matter directly related to advanced PV or National Electric Code. If the subject matter covered in the course is not clearly stated in the title of the course, then the applicant must provide a course outline and a signed letter from the training provider detailing how many hours were spent covering the NABCEP Solar PV Installer Job Task Analysis or relevant building and electrical codes.

Documentation Requirements for Solar PV System Installations

All systems must be supported with permits, inspections reports and documentation that the applicant was the senior person responsible for the job. In regions where neither permit nor inspection reports are issued, the applicant may hire a qualified electrician recognized by the Authority Having Jurisdiction (AHJ) to write an inspection report.

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- To document experience, applicants are asked in the Application Form to provide a concise description of work performed at the job site for each of the qualifying installed systems, including;
 - the system size
 - a list of components
 - the level of their responsibility on the jobsite
 - number of full-time equivalent workers supervised
 - any other pertinent information.
- To show that the applicant held a responsible role in the installation of the system, the applicant must submit the following documentation for each system:
 - 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 company letterhead that verifies the applicant was the lead installer for that system.
- To document the system size and inverter capacity, the applicant must submit plans and/or bills of materials for each installation.

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

Documenting Employment

Applicants applying under qualifying category (B), (C) or (D), must submit documentation for the required experience, starting with most current employment. The Applicant will need to submit a job description, a summary of the number and type of solar PV systems they helped install (if applicable), and provide contact information for their supervisor.

In addition, a signed letter from the most recent supervisor or employer is required to verify the applicant's employment.

If the applicant is self-employed, they must provide a detailed description of the work that they do. The self-employed applicant's installation documentation will provide additional "proof of employment".

Documenting Education

If the applicant's qualifying category requires a college education or apprenticeship program, copies of official transcripts or diplomas attesting to the completion of the degree or certificate earned will need to be attached to the application form.

Documenting Licensure

If the applicant's qualifying category requires that you they hold a specific license, or if a license for solar installation is required in the jurisdiction in which the work is performed, applicants must submit copy of their license with their application.