

A. Craft Certification Overview

Craft Certification is an evaluation tool which was developed as a way for Joint Apprenticeship Training Committees (JATCs) to evaluate inside electrical apprentices to document everyone's ability to complete electrical work in the electrical construction industry. Craft Certification is a way to verify that evaluated individuals have the knowledge, skills, and abilities necessary to perform electrical work efficiently and safely on IBEW/NECA projects.

There were several guidelines which applied to the creation of Craft Certification:

- Any Certification must be based on a commonly agreed upon standard.
- The Craft Certification Standard used by the NJATC/*etA* to evaluate electrical worker knowledge and performance was developed through an industry-wide Job Analysis.
- The Job Analysis was designed and executed by the American Institutes for Research, a nationally recognized research organization.
- The Job Analysis involved feedback from union training organizations and workers including 91 JATCs, 5,780 Journey-Level Workers and 1,904 Inside Electrical Apprentices.
- A DACUM study validated the Job Analysis and identifies 384 specific skills required for electrical workers in the electrical construction industry.
- A Craft Certification Committee, made up of Training Directors, Contractors, and Training Partners, meets semi-annually and approves revisions and updates within validation guidelines to be consistent with evaluations.

The data collected was used to create the different levels of Hands-On (skill & ability based, performance, or practical) Evaluations.

Participants are permitted to use a hard copy of the *Ugly's Electrical References*, *Doctor Watts Pocket Electrical Guide*, and/or the current version of the *NEC* while taking the performance evaluation.

Performance Evaluations

Performance Evaluations are hands-on demonstrations of an individual's ability to do the work of an inside journey-level worker on a project. Performance Evaluations are delivered face-to-face in "approved" evaluation stations (or booths). There are eight different evaluations (seven 2-hour Task Specific and 1 Journey-Level Evaluation). Each evaluates tasks identified in the Job Analysis.

2-Hour Evaluations (Designated for Apprentices Enrolled in an IBEW/NECA Apprenticeship Program)

Seven levels of performance evaluations are identified as 2-hour evaluations and were designed to be used by JATCs to evaluate apprentices during their IBEW/NECA apprenticeship. 2-hour evaluations (each requiring a specific physical setup) are based on tasks which were identified in the Job Analysis and are based on specific skills, and not on years of experience:

- CCPE.TCFCI (formerly Level 1) – Thinwall Conduit Fabrication/Installation and Conductor Installation
- CCPE.BCDI (formerly Level 2) – Branch Circuit and Device Installation
- CCPE.TI (formerly Level 3) – Transformer Installation and Configuration
- CCPE.MMCI (formerly Level 4) – Motors and Motor Control Installation and Configuration
- CCPE.FASI (formerly Level 5) – Fire Alarm Device and Cabling Installation
- CCPE.PDI (no former version) – Panelboard and Device Installation
- CCPE.SCI (no former version) – Structured Cabling Installation

2-hour Performance Evaluations are designed to be delivered when the learner has completed training for the topic addresses in the evaluation and are not designated for any given year of apprenticeship. All 2-hour evaluations are designed to be delivered in a JATC's existing lab spaces. All evaluation spaces require approval by the *etA* per published specifications and may require some additional components or minor re-configuration will be required but most existing labs will generally be acceptable. Each 2-hour evaluation requires a specific evaluation space configuration. All 2-hour Evaluations are designed as to be completed in 2-hours with no breaks.

For detailed information for building or setting up Craft Certification 2-hour Evaluation Stations, refer to the appropriate *Setup Guide and Checklist* for each evaluation, available through the bookstore. A PEVALI-GUIDE for configuration and verification of evaluation station for use with the older Level 1 thru Level 5 Incremental Evaluations is still available, since existing copies of those evaluations can still be used by JATCs for candidates who began their evaluation pathway using those evaluations. Evaluation setup and Checklists for new 2-hour evaluations are available as follows:

- CCPE.TCFCI Thinwall Conduit Fabrication and Conductor Installation Evaluation Station – PEVALI-CCPE.TCFCI
- CCPE.BCDI Branch Circuit and Device Installation Evaluation Station – PEVALI-CCPE.BCDI
- CCPE.TI Transformer Installation Evaluation Station – PEVALI-CCPE.TI
- CCPE.MMCI Motor and Motor Control Installation Evaluation Station – PEVALI-CCPE.MMCI
- CCPE.FASI Fire Alarm System Installation Evaluation Station – PEVALI-CCPE.FASI
- CCPE.PDI Panelboard and Device Installation Evaluation Station – PEVALI-CCPE.PDI
- CCPE.SCI Structured Cabling Installation Evaluation Station – PEVALI-CCPE.SCI

Apprentices seeking Craft Certification must complete the CCPE.TCFCI, CCPE.BCDI, CCPE.TI, and CCPE.MMCI (mandatory evaluations) as well as either the CCPE.FASI, CCPE.PDI, or CCPE.SCI evaluation, for a total of five 2-hour Performance Evaluations.

Craft Certification 2-hour Evaluations are also suitable for evaluating organized workers as a tool to identify those individual's practical skills or to identify any necessary training. When used individually as single evaluations, 2-hour Evaluations do not lead to Craft Certification credentials. When Craft Certification Evaluations are used for organized workers, the same guidelines for delivery apply to organized workers as when evaluations are used for any other candidates. Craft Certification 2-hour Evaluations are generally not used for Journey-Level workers. A separate evaluation which utilizes the data from the Electrical Worker Job Analysis was created for Journey-Level workers.

Journey-Level Evaluation

A higher-level Craft Certification Performance Evaluation is identified as the Journey-Level Evaluation (CCPE.JL). This evaluation was formerly identified as the Level 6 Evaluation and has not physically changed. The requirements for this evaluation are very specific and involve a much wider range of activities than any of the 2-hour Evaluations. The JL evaluation requires a specifically configured 10-foot × 12-foot evaluation booth with various pre-installed equipment and raceways. The booth has a fixed design and must be built to rigid specifications. Blueprints to build the Journey-Level 4-hour Evaluation Booth are available from the *electrical training ALLIANCE* (CCPE.JWPBK). A Booth Set-Up Guide (PEVAL-GUIDE) is also available from the *electrical training ALLIANCE* bookstore.

The CCPE.JL Evaluation covers different topics identified in the Job Analysis as essential for Journey-Level Workers. All topics covered in the four mandatory 2-hour Evaluations (CCPE.TCFI, CCPE.BCDI, CCPE.TI, and CCPE.MMCI) are included in the Journey-Level Evaluation, however the CCPE.FASI and CCPE.SCI topics are not addressed in the JL Evaluation. Additional topics which were identified in the Job Analysis, are included in this evaluation. The CCPE.JL (formerly the Level 6) Evaluation requires 4-hours (actual work time) to complete and includes several different tasks and systems including:

- Safe work practices and safety throughout the evaluation.
- Verification that the pre-existing service is de-energized before exposing possibly energized terminals or equipment.
- The configuration of a 277Y/480 VAC 3Ø Panelboard and enclosure.
- The configuration of a 30 kVA 3Ø Transformer and enclosure.
- The configuration of a 120Y/208 VAC 3Ø Panelboard and enclosure.
- Adherence to all required (*NEC*[®] or *CEC*[®] or Local) codes system bonding and grounding.
- The fabrication and installation of some components of a complete EMT raceway system. NOTE: Some EMT Raceway is pre-installed.
- The installation of FMC or LFMC where required or specified in construction documents.
- The installation of conductors and devices to support 120 VAC and 277 VAC lighting and 120 VAC duplex receptacle circuits, as well as additional system conductors and other required circuits.
- The installation of a FHP 3Ø motor control system including the motor, a combination motor starter, and a remote-control (STOP-START) station.
- Pre-commissioning of all systems and work to verify that all systems meet all codes (*NEC* or *CEC*) and work installation standards.

All Performance Evaluations (2-hour and 4-hour Journey-Level) must be completed in an approved evaluation station or booth and must be scored by a trained evaluator. To become an Evaluator individuals must be an Inside Journey-Level Worker who has either completed three years of experience working as a Journey-Level Worker or who possesses Craft Certification credentials. All evaluators must successfully Complete the *electrical training ALLIANCE* Performance Evaluator Training. Once work experience or certification of Craft Certification credentials have been verified and the appropriate training has been completed the evaluator will be assigned a Craft Certification Evaluator Number which will allow that individual access to the online Craft Certification Performance Evaluation Scoring website to complete scoring for evaluations which the evaluator has managed.