

# **2025 Electrical Commercial-Industrial Competition**

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## **FACT SHEET**

### **Project Manager**

**Dave Dekelaita, Power Design Inc. and John Lupacchino, Gaylor Electric**

For questions related specifically to the electrical competition, contact Dave Dekalaita at [ddekelaita@powerdesigninc.us](mailto:ddekelaita@powerdesigninc.us) or John Lupacchino at [jlupacchino@gaylor.com](mailto:jlupacchino@gaylor.com). For all event questions, contact Jarrell Jackson, National Craft Championships director, at (202) 595-1789 or [jackson@abc.org](mailto:jackson@abc.org).

### **Specific Competition Eligibility**

The electrical competition has no competition-specific eligibility requirements. Please refer to overall eligibility requirements listed in the guidebook.

### **Online Exam**

Competitors will have one (1) hour to complete the 50-question exam. Every competitor should thoroughly understand the craft in which he/she is registered. All exams/tests are based on the standardized craft training process. In addition to the knowledge and skills required for each competition, all competitors should have completed the NCCER Core Curriculum modules. All competitors must sit for the exam or face disqualification from the NCC. The written exam makes up 25% of one's overall competition score. ABC will provide pencils, scratch paper, and a calculator for mathematical problems (if necessary). Scientific/graphing calculators and loose notes are prohibited. **No reference materials are permitted** except for the 2020 NEC Code book and the Pipefitter's Blue Book. All reference materials are subject to inspection. *Please refer to the 2025 NCC Guidebook for more details.*

### **Practical Performance Test Description**

Each competitor, over a two-day period, will perform three tasks utilizing knowledge and skills applicable to conduit bending (work boots or shoes must be worn during all tasks), and tasks utilizing knowledge and skills applicable to commercial and industrial construction.

### **Knowledge and Skills Required**

#### **Electrical Task: Commercial Construction**

The competitor will be issued a drawing and a bill of materials. Working on an exposed stud wall, 6 feet, 6 inches by 4 feet, the competitor will be required to install a panel utilizing a 120 volt, three-wire power source. Using an electrical plan drawing, the competitor may mount boxes, install EMT conduit and MC cable, and install and wire switches, re4ge bacea

## **Knowledge and Skills Required**

### **Electrical Task: Industrial Construction**

The competitor will be issued a written scope of work and specification to design and construct a motor control circuit. Working on a plywood wall, 6 feet, 6 inches by 4 feet, the competitor will install an enclosure, motor starter, lamps, lamp holders, motor control devices, and motor termination. The competitor may install rigid metal conduit, flexible metal conduit, liquid tight flexible metal conduit, tray cable and electrical metallic tubing. Raceways will be bent, cut, threaded, connected and secured as appropriate. Circuit conductors will be installed, identified and terminated per the competitor's design drawings.

The knowledge and skills for this competition are based on the **2020** National Electrical

Medium and large screwdrivers,  
straight  
Medium Phillips screwdrivers  
Wire strippers  
VOM meter  
Channel locks  
Awl or center punch  
Claw hammer  
Utility knife  
9-inch lineman pliers  
Diagonal-cutting pliers  
Roto stripper (MC cable)  
Keyhole saw

EMT conduit reamer  
EMT benders  
Rigid bender  
Pencils, Sharpie marker  
Basic, non-programmable calculator  
25-foot tape measure  
Hacksaw  
Torpedo level  
Tool pouch and belt  
Hard hat, gloves and safety glasses  
Half-inch conduit threader

**Review the safety scope for the following power tools:**

Impact driver

Pipe threading machine

### **Sample Score Sheet**

The following sample score sheet is provided to give competitors an example of the criteria that may be included in the practical performance test. **However, this score sheet is only a sample and not intended to act as a study guide in preparation or to imply specific criteria that will be judged during the actual practical performance test.**

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# ABC National Craft Championships