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# House Wiring Advanced

Student Codes: 9273 and 9274 / Version: 01  
Teacher Code: 9454 / Version: 01  
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## General Assessment Information

### Blueprint Contents

General Assessment Information  
Written Assessment Information

Specific Competencies Covered in the Test  
Sample Written Items  
Performance Assessment Information

**Test Type:** This certification assessment is a customized assessment for the Home Builders Institute. This assessment measures technical skills at the occupational level and includes items which gauge factual and theoretical knowledge. This assessment offers both a written and performance component and can be used at the secondary level and postsecondary level. This assessment can be delivered in an online or paper/pencil format.

**Revision Team:** The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the state of California, Florida, Maine, Minnesota, New York, South Carolina, Texas, and Virginia.



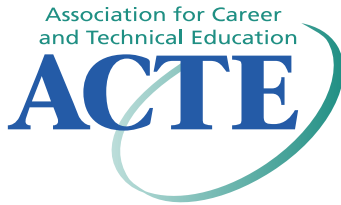
46.0399 – Electrical and Power  
Transmission Installers, Other



Career Cluster - Architecture  
and Construction



47-2111.00 – Electricians



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!



The Home Builders Institute (HBI) trains skilled workers for the building industry. Through pre-apprenticeship training, certification programs and job placement services, HBI provides graduates with the skills and experience they need to build a career and change their lives. HBI assessments, in partnership with the National Association of Home Builders (NAHB), are based on national skills standards set by industry professionals and educators. Participants passing the assessments are eligible for certification through HBI/NAHB at the entry, semi-skilled, or skilled levels.

Selection of curricula and instructional materials chosen to support assessment achievement must be obtained from material that has been aligned to the Residential Construction National Skill Standards and approved by HBI. For a current listing, please go to <http://www.hbi.org/curriculum/>

Visit [www.hbi.org](http://www.hbi.org) for more information.

## Written Assessment

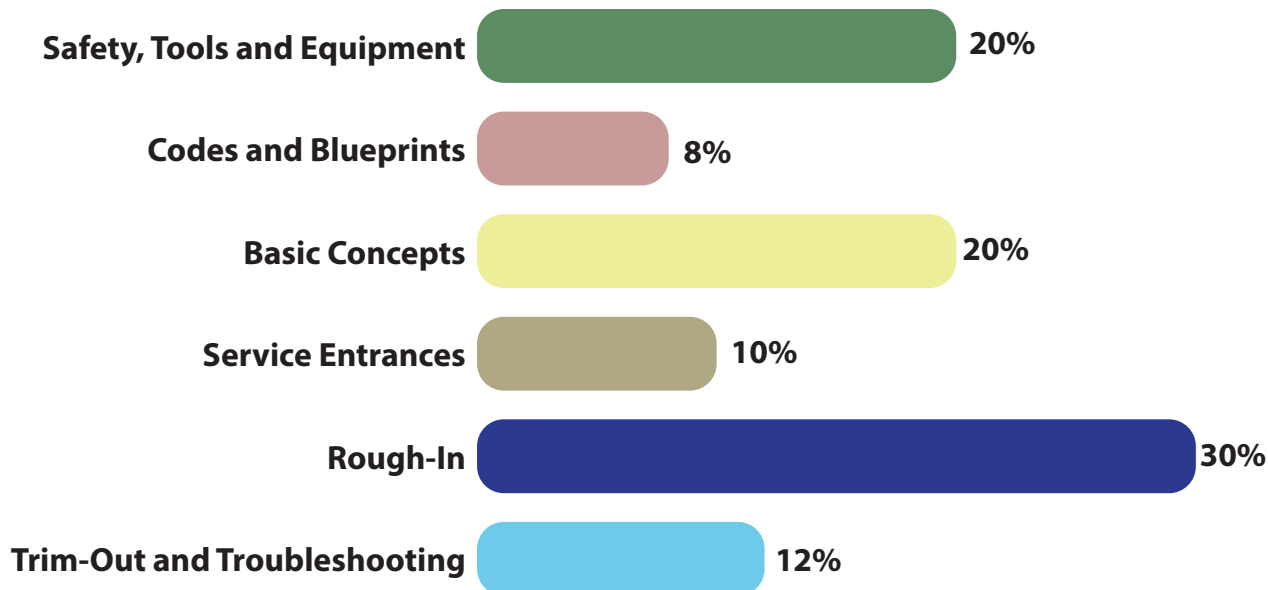
This written assessment consists of questions to measure an individual's factual theoretical knowledge.

**Administration Time:** 90 minutes

**Number of Questions:** 100

**Number of Sessions:** This assessment may be administered in one, two, or three sessions.

### Areas Covered



## Specific Competencies and Skills Tested in This Assessment

### **Safety, Tools and Equipment**

- Safety, Tools, Power, Ladders, Switches, and Meters

### **Codes and Blueprints**

- National Electric Code, Blueprints, Measurements, Symbols, and Math

### **Basic Concepts**

- AC/DC, Circuits, Capacitors, Transformers, Motors, Generators, Fixtures, and Ohms Law

### **Service Entrances**

- Service Entrances, Serv/Cal, Service/Installs

### **Rough-In**

- Raceways, Conductors, Cables, Boxes, Branch Circuits, Switch Circuits, and Special Circuits

### **Trim-Out and Troubleshooting**

- Installation of Fixtures and Devices and Troubleshooting



## Sample Questions

**Current flow greater than 1000 milliamperes through the body could result in which of these conditions?**

- A. No sensation
- B. Mild shock
- C. Painful shock
- D. Severe burns and paralysis of breathing

**Which of these describes a short circuit?**

- A. A separate path has been established that bypasses the load.
- B. An unintended path is established to ground.
- C. A circuit has an extremely low amount of current flow.
- D. The neutral or grounded conductors provides a return path to the power source.

**In a pure inductive circuit, the current lags the voltage by which of these?**

- A. 35 degrees
- B. 45 degrees
- C. 90 degrees
- D. 180 degrees

**Which of these is classified as nonmetallic-sheathed cable?**

- A. Type NM
- B. Type BX
- C. Type AC
- D. Type MC

**How often do most manufacturers recommended that a GFCI be tested?**

- A. Daily
- B. Weekly
- C. Monthly
- D. Annually

