PACT Electrical Certification

Exam Objectives:

ELECTRICAL SAFETY

1. Demonstrate basic electrical safety.
2. Demonstrate proper use of electrical safety equipment.
3. Identify and demonstrate safe/proper use of hand and power tools used in the electrical trade.
4. Demonstrate proper Lockout/Tagout procedures.

TOOLS AND EQUIPMENT

5. Understand the safe use of hand and power tools and cabling equipment.
6. Demonstrate the proper use of tools and equipment used in the electrical trade.
7. Identify conductors and cables found in residential applications.
8. Identify types of conductors commonly found in commercial applications.
9. Identify boxes (junction, pull, conduits, etc.) and their proper use in the electrical trade.
10. Identify fittings (connectors, couplings, straps, etc.) and their proper use in the electrical trade.

BASIC ELECTRICAL CONCEPTS

11. Follow proper electrical construction procedures when performing a task.
12. Describe job responsibilities for electrical occupations.
13. Identify basic electrical terminology.
14. Demonstrate familiarity with terms used in the NEC.
15. Describe basic provisions and the purpose of the NEC 110 and 250 for residential electricians.
16. Describe Ohm's and Watt's laws.
17. Solve electrical circuit problems using Ohm's and Watt's laws.
18. Describe the three common electrical faults (short circuit, open circuit, and ground fault).
19. Identify the characteristics of alternating current and direct current.
20. Identify common residential electrical construction symbols.
21. Demonstrate proper use of electrical testing equipment.
22. Identify renewable energy sources and electrical connections.

CIRCUITS, SWITCHES, AND OUTLETS

23. Identify, describe, then wire single pole, switch loop, three-way, and four-way switching circuits.
24. Identify, describe, then wire duplex, GFCI, and split receptacles.
25. Identify, describe, and explain the characteristics of a simple series circuit.
26. Identify, describe, and explain the characteristics of a simple parallel circuit.
27. Identify, describe, and explain the characteristics of a simple series parallel circuit.