

## CHAPTER OVERVIEW

### 10: Electrical Safety

[10.1: Introduction to Electrical Safety](#)

[10.2: Safety-Related Work Practices](#)

[10.A: Chapter 9 Review Questions](#)

“For safety is not a gadget but a state of mind.” – Eleanor Everet

#### Overview

Electrical safety is perhaps one of the areas in which engineering controls, work practice controls, and PPE together establish the sole objective of separating people from electricity. Electrical workers develop the knowledge and skills to ensure safe installation of electrical components and equipment, maintain electrical equipment, and even to operate electrical equipment. That same knowledge and skill is responsibly applied for the protection of themselves, other workers and the public at large.

The electrician or qualified electrical worker serves as an engineering control. The correct application of skill based training, while adhering to national electric code requirements and safe work practices effectively eliminate electrical hazards.

#### Chapter Objective:

1. Review the installation requirements for electrical systems as covered by Subpart K and the NEC.
2. Identify Safe Work Practices Required by OSHA.
3. Understand the Requirements for GFCI Protection.
4. Understand the Requirements for Electrical Lockout/Tagout.

#### Learning Outcome:

1. Correlate the functions of machine guarding and electrical safeguarding.
2. Identify the engineering controls in electrical safety standards and equipment.

Standards: 1926 Subpart K-Electrical, 1910 Subpart S-Electrical, 1926 Subpart K Electrical

#### Key Terms:

Approved, AEGCP, Approach distance, listed, gfci, qualified, safety related

#### Mini-Lecture: Electrical Hazards, Electrical Safety

Topic Required Time: 2 hrs; Independent Study and reflection 1 3/4 hour.

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