

NFPA 70E Electrical/Arc Flash Safety Training

This training provides an in-depth understanding of electrical & arc flash hazards, and the NFPA 70E and OSHA regulations. Students will learn practical, safe work practices for electrical safety and how to apply in the real-world.

The course is complete with lecture, hands-on exercises, and PPE demonstrations.

Attendees are able to interact and ask questions throughout the entire class.

Students are tested and issued certificates upon completion of this training.

This training covers OSHA requirements 1910.331 – 1910.335 and the NFPA 70E Standard for Electrical Safety in the Workplace.

Introduction

- ✓ Lays out the purpose and scope of what's covered and not covered
- ✓ Defines Mandatory Rules and Permissive Rules
- ✓ Minimizing Arc Flash Hazards **(not included in 70E)**

General Requirements

- **Scope:** Chapter 1 covers electrical safety related work practices and procedures for employees who are exposed to an electrical hazard in workplaces.
- **Purpose:** These practices and procedures are intended to provide for employee safety relative to electrical hazards in the workplace.
- **Employer/Employee Responsibilities:** Employer provides employees with training in the employer's safety related work practices and procedures. The employee shall comply with the safety-related work practices and procedures provided by the employer.
- **Hazard elimination** shall be the first priority in the implementation of safety-related work practices.
- **Electrical Safety Program:** The employer shall implement and document a program that is appropriate to the risk associated with electrical hazards.
- **Condition of Maintenance:** Are you maintaining your electrical equipment?
- **Electrical Safety Auditing:** written program (every 3 years) and procedures (annually)
- **Training Requirements:** must train (re-train) every 3 years
- **Emergency Response Training Requirements:** AED CPR training and refresher/documentation. This Emergency Response Training also includes Incident Contact Release.

- **Employee Training:** Qualified Person, Unqualified Persons, **Task Qualified** (not in 70E)
- **Retraining** shall be performed at intervals **not to exceed 3 years**.
- **Relationships with Contractors:** hazard awareness communication and documentation
- **Test Instruments and Equipment:** Hands-on Exercise
- **Portable Electric Equipment:** usage, visual inspections, and repairing/removing
- **GFCI Protection:** when needed, operation and construction

Establishing an Electrically Safe Work Condition (LOTO)

- The eight Steps for Achieving an Electrically Safe Work Condition

Work Involving Electrical Hazards

- **Energized Electrical Work Permit:** when needed and requirements
- **Energized Work Justification:** Additional Hazards or Increased Risk or Infeasibility
- **Energized work approval:** management approvals
- **Exemptions to Work Permit:** when not needed
- **Working While Exposed to Electrical Hazards:** safe work practices
- **Approach Boundaries:** Shock Protection Boundaries (Limited and Restricted)
- **Arc Flash Risk Assessment:** tables used to complete the assessment
- **Arc Flash Boundary:** calculations needed and documented
- **Arc Flash PPE:** selection, inspection, care, and maintenance
- **Equipment Labeling:** minimum requirements and how to read the label
- **Other Precautions for Personnel Activities:** safe work strategies
- **Reclosing Circuits After Protective Device Operation:** hazards involved
- **Safety Interlocks:** usage requirements and limitations
- **Personal and Other Protective Equipment:** Hands-on Exercise
- **Head, Face, Hands, Neck, and Body Protection:** selection and usage
- **Other Protective Equipment:** additional electrical PPE and equipment
- **Insulated Tools and Equipment:** Hands-on Exercise