



NFPA 70E

[eSafetyLine](#)

NFPA 70E – Staying Clear of Electrical Hazards

For guidance on protection from electrical hazards we typically look to standards set by the Occupational Safety and Health Administration (OSHA). However, OSHA often refers to the NFPA 70E Standard for Electrical Safety in the Workplace. It offers details on how electrical work can be performed safely. Unfortunately, electricians often focus on the PPE component of the standard. Although this is extremely important, NFPA 70E's real intent is to keep workers safe by preventing exposure to energized circuits or parts. This includes qualified, those trained to safely work on that particular electrical circuit or equipment and unqualified workers, those not having the skills and knowledge related to a given type of work.

All should be aware of the basic safety measures to prevent exposure found in NFPA 70E. A logical starting point is to recognize that the hazards associated electrical energy, shock and arc flash/blast, exist within given boundaries. They are the Limited, Restricted, Prohibited and Arc Flash Protection Boundaries. Whether you are a qualified or unqualified worker, make sure you know these boundaries. They can be provided by the company representatives that performed the Shock and Arc Flash Hazard Analyses for any exposed energized circuits or equipment in your work area.

If you are an unqualified worker, do not go within the Limited Boundary without a qualified worker. You may never enter the Restricted Boundary. If you are a qualified worker you may enter the Restricted Boundary if the proper precautions are observed, such as insuring you are insulated or guarded from the energy. Do not enter the Prohibited Boundary. No one should enter the Arc Flash Protection Boundary unless they are wearing the proper personal protective equipment. This

will include Flame Resistant (FR) clothing that matches the hazard level category present.

The best precaution offered by NFPA 70E is the importance it places on establishing an electrically safe work condition. To do this, steps must be taken to perform a proper Lockout/Tagout (LOTO) which deenergizes the circuits and parts and locks or tags energy control devices to prevent re-energization of the lines.

Qualified workers must become familiar with and use the appropriate LOTO procedure. You also need to make all others, including unqualified workers, aware of the LOTO to prevent workers mistakenly reenergizing circuits or parts. Unqualified workers must be able to recognize the LOTO and comply with its direction.

Knowing the electrical safety boundaries and LOTO will ensure you avoid exposure to energized circuits and parts. Consult with your supervisor to identify where these boundaries exist and when LOTO will be used to protect workers.

Discussion Questions

Can any workers enter the restricted Boundary? Why or why not?

Answer: Only qualified workers can enter the Restricted Boundary if the proper precautions are taken.

MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/___

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

_____/_____/_____
Date

Safety Coordinator's Signature

_____/_____/_____
Date