

FACT SHEET » NFPA 70E®, 2018 Edition



The Purpose of NFPA 70E

The purpose of NFPA 70E[®], Standard for Electrical Safety in the Workplace[®], is to provide a working area for employees that is safe from unacceptable risk associated with the use of electricity in the workplace. NFPA 70E establishes safety processes that use policies, procedures, and program controls to reduce the risk associated with the use of electricity to an acceptable level.

The core objective is practical, accomplishable electrical safety that results in the employee going home safe at the end of the day. The risk controls discussed in this standard are not impractical or unrealistic; they are sound, viable, workable applications of safety procedures and policies to be implemented by the employer and employee.



How NFPA 70E Works with Other Codes and Standards

Following and fostering basic installation safety, maintenance, and prudent work procedure rules is essential to employee safety. This is accomplished by installing the electrical system in accordance with *NFPA 70®*, *National Electrical Code®* (*NEC®*); by maintaining the electrical system in accordance with NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance* (in the absence of the specific manufacturer's instructions); and by following the safety policies, procedures, and process controls identified in NFPA *70E*.

The Occupational Safety and Health Administration (OSHA) looks to the prescriptive-based requirements of NFPA *70E* to fulfill the performance-based requirements included in its standards, especially since NFPA *70E* is the American National Standard on the subject and sets the bar for safe work practices. This symbiotic relationship between NFPA *70E* and OSHA electrical safety standards increases safety in the workplace.

NFPA 70E is an internationally accepted American National Standard that defines electrical safety–related work practices. The requirements at the heart of NFPA 70E are suitable for adoption and implementation by agencies and employers charged with the responsibility of electrical safety plan development, implementation, and maintenance.



NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards This material contains some basic information about NFPA 70E*, Standard for Electrical Safety in the Workplace*. It identifies some of the requirements in NFPA 70E as of the date of publication. This material is not the official position of any NFPA Technical Committee on any referenced topic which is represented solely by the NFPA documents on such topic in their entirety. For free access to the complete and most current version of all NFPA documents, please go to www.nfpa.org/docinfo. The NFPA makes no warranty or guaranty of the completeness of the information in this material and disclaims liability for personal injury, property and other damages of any nature whatsoever, from the use of or reliance on this information. In using this information, you should rely on your independent judgment and, when appropriate, consult a completent professional.



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FAQs

What is the relationship between OSHA's standards and NFPA 70E?

OSHA looks to the prescriptive-based requirements of NFPA 70E to fulfill the performance-based requirements included in its standards. NFPA 70E fleshes out how the performance-based requirements in the OSHA standards should be met by providing and defining the minimum standard industry practices necessary for electrical safety. OSHA is the law, but NFPA 70E outlines how to comply with OSHA's electrical safety requirements.

What are some of the major changes for 2018?

► *Risk Assessment Procedure* — The risk assessment procedure now specifically requires you to address human error and its negative consequences on people, processes, work environments, and equipment. To assist in implementation, new Informative Annex Q has also been added.

► *Hierarchy of Risk Control Methods* — Formerly part of an informational note, the hierarchy of risk control methods has moved into the standard's mandatory text. The standard now explicitly states that the first priority must be the elimination of the hazard; each method that follows it is considered less effective than the one before it.

► Establishing an Electrically Safe Work Condition (ESWC) — Although there are no major changes to these requirements, the sections within Article 120 have been completely restructured to logically step you through how to set up a program.

► Estimate of the Likelihood of Occurrence of an Arc Flash Incident — This table has been revised and has also moved [now Table 130.5(C)]. This table can be used for both ways of doing your arc flash risk assessment — it now also applies to the incident energy analysis method, instead of just the PPE category method.

► Selection of Arc-Rated Clothing using Incident Energy Analysis Method — Formerly part of the Annex material, this table [now Table 130.5(G)] has moved into the standard's mandatory text. It has also been revised to provide guidance on how to select gear when using the incident energy analysis method.

How does NFPA 70E address the roles of both the employer and the employee regarding electrical safety?

Electrical safety is a shared responsibility between employers and employees. Compliance with safety regulations is not just an employer responsibility — the electrical safety of employees requires a collaborative effort between workers and management.

Employers are required to have an electrical safety program (ESP) for employees to follow. The employees are required to put into practice the policies and procedures of the ESP, which includes the training to perform their tasks safely and the use of required tools and safety equipment. NFPA *70E* is not just about the actions an employer took before the incident investigation — it is about preventing the worker from being injured. Regardless of the employer's electrical safety plan, it is the employee who has the biggest impact on his or her own electrical safety.

NFPA Resources

For more resources and content, visit the NFPA 70E document information page at www.nfpa.org/70E.

- Scroll down to the Additional Information section for links to special content, including the NFPA 70E blog series, selected articles from NFPA Journal, issues of the NEC Connect e-newsletter, and more.
- Click the Free Access link to view the 2018 edition of NFPA 70E online.
- Click the **Related Products** link for access to the NFPA 70E product line, which includes training and certification offerings as well as the 2018 NFPA 70E standard and its companion Handbook for Electrical Safety in the Workplace (available in hardcopy, PDF, and eBook formats).

NATIONAL FIRE PROTECTION ASSOCIATION

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