

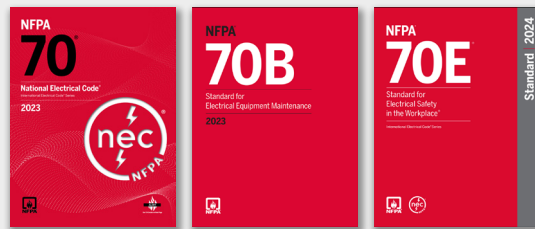
# The Electrical Cycle of Safety™



Those responsible for the design, installation, and maintenance of electrical systems, the safety of their workers, and/or the integrity of electrical equipment in their facilities all have a duty to help protect people, property, and processes against electrical hazards.

To do so, they can turn to three specific codes and standards from the **National Fire Protection Association® (NFPA®): NFPA 70®, NFPA 70B, NFPA 70E®.**

**Each addresses a different aspect of electrical safety:** safe design and installations, safely maintained equipment and systems, and a safe workplace. When these codes and standards are used simultaneously, and correctly, they help provide for a comprehensive **Electrical Cycle of Safety™**. If even one piece is missing, it could result in preventable accidents that put people, property, and critical processes at risk.



## INSTALL NFPA 70®

**NFPA 70®, National Electrical Code® (NEC®)**, is the benchmark for electrical design and installation to help protect people and property from electrical hazards in residential, commercial, and industrial applications.

Proper design and installation lay the foundation for reliable and safe electrical systems and equipment.

The **NEC** is continually revised on a three-year cycle, to stay in sync with industry practices, emerging trends, and the development and introduction of new technologies.

## MAINTAIN NFPA 70B

**NFPA 70B, Standard for Electrical Equipment Maintenance**, details preventive maintenance for electrical, electronic, and communications systems and equipment to help keep people, property, and processes safe. Used properly, **NFPA 70B** can help prevent electrical equipment failures and assist in establishing a **“condition of maintenance”** that can contribute significantly to worker safety.

Understanding maintenance requirements for the different types of electrical equipment helps users develop and carry out an effective **Electrical Maintenance Program** for all types of equipment and systems, which ultimately reduces risk, helping with both safety and reliability.

When combined, the **NEC** and **NFPA 70E** aim to protect persons and properties. **NFPA 70B** goes one step further to help avoid the impacts associated with equipment failure that can lead to costly process breakdowns. When businesses apply the requirements in **NFPA 70B**—in conjunction with those in the **NEC** and **NFPA 70E**—they can help avoid preventable downtime of key electrical systems and core processes, all while helping to ensure employees stay safe.

## PROTECT NFPA 70E®

**NFPA 70E®, Standard for Electrical Safety in the Workplace®**, provides safe work practices to help protect employees by reducing exposure to electric shock and arc flash hazards.

Employers and employees alike must understand how to mitigate risks associated with electrical hazards to themselves and those around them.

**NFPA 70B** and **NFPA 70E** are particularly interconnected since electrical equipment that isn't well maintained poses safety risks to employees and, in some cases, even the public. With their close ties, some requirements in each of these standards can't be accomplished without utilizing the other. For example, the **Electrical Safety Program**, as required by **NFPA 70E**, must include elements that consider the condition of maintenance of electrical equipment and systems. This can be achieved by using the requirements included in **NFPA 70B** to establish a condition of maintenance for electrical equipment.



A workplace safe from electrical hazards helps companies and employees reduce:

- **Injuries**
- **Fatalities**
- **Costly Fines**
- **Lost Production**

For more information on the Electrical Cycle of Safety™, visit: [nfpa.org/electricalcycleofsafety](https://nfpa.org/electricalcycleofsafety)