

What is Arc Flash?

An ARC FLASH is a release of energy caused by an electrical arc. ARC FLASH hazards exist in all conditions where people are exposed to energized electrical equipment. ARC FLASH incidents are very common and can cause possible injury and even death to anyone involved.



ARE YOU IN COMPLIANCE?

NFPA 70 E 2021 & OSHA Standard 1910.269, Appendix E mandate specifics regarding Arc Flash and Employee Protection from Electrical Arcs. Here's what you need to know:

CONSIDER THE FACTS

126
FATAL ELECTRICAL INJURIES IN 2020

2,220
DAYS AWAY FROM WORK DUE TO NON-FATAL ELECTRICAL INJURIES.



700
MPH
PROJECTILE VELOCITY

5.39% of all electrical incidents WERE FATAL IN 2020

31%
Construction, Maintenance & Repair OCCUPATIONS OF ALL ELECTRICAL FATALITIES

KNOWLEDGE IS POWER.
2020 had the fewest number of electrical fatalities since 2003.

24% DECREASE over 2019.

Estimated Cost can reach over **\$15 MILLION**

HEALTHCARE - WORKERS COMP - EQUIPMENT DAMAGE - INCREASED INSURANCE PREMIUM - DOWNTIME

“ You have the **POWER** to create a “SAFETY FIRST” **WORKPLACE** ”

Electrical Safety Resources

The following are organizations quoted in this document and great tools for further research:

NFPA 70E Standard for Electrical Safety in the Workplace:
• <https://www.nfpa.org/Codes-and-Standards>

National Institute for Occupational Safety & Health (NIOSH):
• www.cdc.gov/niosh/topics/electrical

Occupational Safety & Health Administration (OSHA)
• www.osha.gov/SLTC/electrical

National Safety Council - Workplace Safety
• <https://www.nsc.org/work-safety/>

Electrical Safety Foundation International
<https://www.esfi.org/>

OSHA Standard 1910.269, Appendix E - Protection from Flame and Electric Arcs: Paragraph (l)(8)(i) requires the employer to assess the workplace to identify employees exposed to hazards from flames or electric arcs. This provision ensures that the employer evaluates employee exposure and that they receive proper protection. The employer **MUST** conduct an assessment for each employee who performs work on or near exposed, energized parts of electrical circuits.

Table 130.5(C) - Example Assessments for Various Tasks

TASK	IS EMPLOYEE EXPOSED TO HAZARD?
Parts of the equipment are loose, sticking, or the equipment exhibits signs of lack of maintenance.	YES
Servicing electrical equipment, such as racking in/out a circuit breaker or replacing a switch.	YES
Employee is closer that the minumum approach distance established by the employer.	YES

For more information on task, visit <https://www.osha.gov>

The first step in becoming **SAFE, RELIABLE & COMPLIANT** is **INCIDENT ENERGY ANALYSIS.**



SAFETY + RELIABILITY = PEACE OF MIND

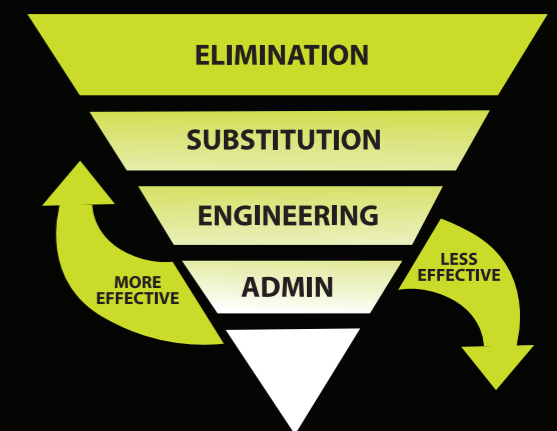
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National Fire Protection Association (NFPA) 2021 Edition: The Incident Energy Analysis method is now used in determining the likelihood of an occurrence of an Arc Flash, eliminating many shortcomings of the old Table Method. The Hierarchy of Risk Controls Method has moved into the mandatory text. The standard now explicitly states that the first priority **MUST** be elimination of the hazard. See the chart (right).

HIERARCHY OF CONTROLS



For details on the NFPA 70E 2021 Edition, visit <https://nfpa.org/70E>

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