

Electrical Arc Flash Safety

Arc Flash Facts:

Each year more than 2,000 people are treated in burn centers with severe arc-flash injuries

Five (5) to ten (10) arc explosions occur in electric equipment every day in the U.S.

Two (2) deaths per day: An Arc Flash is the release of electrical energy hotter than the surface of the sun and capable of exploding with the strength of eight sticks of dynamite. It kills two workers a day.

Arc Flash Protection Boundary is the imaginary sphere surrounding a potential arc point "within which a person could receive a second degree burn if an arc flash were to occur, according to NFPA 70E



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Are You Compliant?

Is Your Business in Compliance with OSHA and National Electric Codes?

Standards: Four separate industry standards establish the practices to prevent and protect from Arc Flash incidents:

- OSHA 29 CFR 29 Part 1910, Subpart S
- NFPA 70– 2008, National Electric Code (provides requirements for warning labels)
- NFPA 70E 2012, Standard for Electrical Safety Requirements for Employee Workplaces
- IEEE Standard 1584–2002, Guide for performing Arc Flash Hazard Calculations



Arc Flash and Shock Hazard Appropriate PPE Required

6' - 10" 14.4 #3	Flash Hazard Boundary cal/cm ² Flash Hazard at 18 Inches PPE Level Arc-rated shirt and pants or arc-rated coverall, and arc flash suit
0.208 3' - 6" 0' - 0" 0' - 0"	kV Shock Hazard when cover is removed Limited Approach Restricted Approach - Class 00 Voltage Gloves Prohibited Approach - Class 00 Voltage Gloves

Equipment Name: LP-3 (Fed by: HP-3)

NEC Compliant Arc Flash Label is
“Field-Applied” specific to your hazards

Contact us to schedule your FREE Consultation determining your state of compliance with OSHA and NEC Requirements.

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Services Offered:

- Arc Flash Study
- Protective Device Coordination Studies
- Electrical One–Line Diagrams
- Evaluation of Electrical Safety Training Programs
- Electrical Safety Training for the workplace

Test your Arc Flash & Electrical Safety knowledge:

Arc flash labels applied before September 30, 2011 are acceptable if they contain the available incident energy or _____.

Sufficient energy can exist at voltages above ____ to cause a second degree burn (incident energy level of 1.2cal/cm²).

Electrical Safety Program – A qualified person shall be trained to recognize and avoid electrical hazards that might be present? (T/F)

Electrical Safety Program – Unqualified people shall be trained in, and be familiar with, any electrical safety–related practices necessary for their safety? (T/F)

Electrical Safety Program –People shall be retrained at least every ____ years.

Arc Flash hazard analysis shall be updated when a major modification or renovation takes place. (T/F)

Arc Flash hazard analysis shall be reviewed periodically, not to exceed ____ years.

Answers:
1) Required level of PPE (personal protective equipment)
2) 120VAC
3) T
4) T
5) 3 years
6) T
7) 5 years