

Electrical Protective Equipment, Test & Tools



**Jacket with Overpant
Arc Flash Kit
No. 1XDW2**

Square D® states according to the National Fire Protection Association (NFPA), an arc flash hazard is “a dangerous condition associated with the release of energy caused by an electric arc.” An arc flash is an explosion causing severe burns, injuries and/or death depending on the severity.

Arc flash incidents typically occur in applications above 120 V and can take place when an electrical service is being inspected or serviced. In fact, some incidents occur when a worker is removing a cover or trim from a piece of equipment.

An arc flash is caused by a reduction of the insulation or the isolation distance between energized components. This could be caused by a tool being inserted or dropped into a breaker or service area, or other element that may be accidentally left behind that could compromise the distance between energized components. Often, incidents occur when a worker mistakenly fails to insure that the equipment has been properly de-energized.

For more information, go to www.squared.com.

Are you using the proper Digital Multimeter?

Fluke® suggests a four-category rating system, the closer you are to the power source, the higher the category—the greater the danger. Given the trend toward using higher voltage levels in modern buildings, most commercial and industrial electricians work in a CAT III or CAT IV environment, without even knowing it. Make sure your test instruments are rated to a minimum of CAT III 600 V. For more information, go to www.fluke.com/safety.



SQUARE D'S NFPA 70E COMPLIANCE GUIDE

To help you improve workplace safety, here is an overview on NFPA 70E compliance from Square D®:

NFPA 70E compliance begins by instituting a comprehensive safety program with defined responsibilities. This can then be followed by defining and calculating arc flash incident energy for each equipment location in a facility. This is typically done through an arc flash assessment by an outside vendor, such as Square D/Schneider Electric. The assessment will provide a baseline to determine status of the equipment in place and recommend remedial actions if necessary to mitigate arc flash incidents. The assessment and recommendations may include:

- Calculations for the degree of arc hazard
- Personal protective equipment (PPE) for workers
- Training for workers
- Tools for safe work
- Warning labels on equipment
- Products, solutions or methods to limit arc flash, when possible

Plant or safety managers will need to include arc flash safety training for their employees and electricians. In addition, they will need to update and enhance their safety procedures and manuals to comply with the NFPA 70E guidelines that OSHA is enforcing.

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Grainger has what you need from arc fault circuit breakers, arc rated PPE, Tools, Test Instruments and Signage. With quality brands such as Square D, Miller, Salisbury, Fluke and Klein as well as our line of Westward Tools, you can trust Grainger

Products:

Arc Fault Circuit Breakers: Prevent an arc flash from happening.



3XE15



3XE17

Arc Rated PPE & Accessories: Protects workers in case of an arc blast.



1XDV6



5EU23



5EU28



5EU37



5ZV86

Insulated Tools: Prevents transmission of electrical current.



1YRY8



1YUL7



5MK51



1YXJ5



2YE28

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Products:

Test Instruments: Cat III and above meters allow you to test electrical connections safely.



1AWB4



1WKP6



4FA13



1PTL2



2NJ73



1PTL1

Signage & Barriers: Alerts workers to danger.



2LEB5



4HC79



5RB55

Resources:

- Key suppliers offer an ArcFlash Awareness Seminar designed to bring awareness to the NFPA70E standard. Topics reviewed are methods of assessment, PPE requirements, electrical tools, and labeling for the hazards. Suppliers include Square D, Salisbury, Brady & Grainger.
- Square D offers a **Fee-Based Service** where they can conduct an Arc Flash Hazard Analysis which determines a worker's potential exposure to arc flash energy, conducted for the purpose of injury prevention and the determination of safe work practices and appropriate levels of PPE.
- Salisbury will assist customers with proper use of Arc Flash PPE after initial category risk hazard assessment has been done. This would include product training and use, instructional video training to educate workers at risk in meeting the NFPA 70E 2004 Standard, ASTM F1506 standards and the OSHA 29CFR 1910 Subpart S requirements.
- Fluke offers an Electrical Measurement Safety Program Binder and an Electrical Safety 30min DVD. Lastly, Fluke can conduct an on-site Electrical Safety 1-hour Seminar covering all the Fluke information above.