When it comes to workplace safety in the electrical industry, it is essential to incorporate flame-resistant and arc-rated (FR/AR) clothing as a means to ensure your safety program is compliant with the latest edition of NFPA 70E®. Task-based wear has its specific uses in electrical work; however, ensuring that each employee is properly outfitted with FR/AR daily wear can help provide consistent protection. Doing so may greatly reduce injury from unexpected short-term thermal exposures such as arc flashes.

With the updates to NFPA 70E, accounting for human error is now part of the risk hazard assessment. Safety managers should strongly consider using the human performance tools to counter error precursors that appear in NFPA 70E Annex Q along with daily wear FR/AR clothing to help fortify their organization’s hazard mitigation program. Wearing daily wear FR/AR apparel can better help mitigate catastrophic injury consequences caused by human error. By

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requiring employees to wear FR/AR daily wear clothing, the repercussions of potential injuries from human error (not donning task-based PPE) are lessened, and employees are better protected against unexpected thermal exposures throughout the work day.

Daily wear clothing should have the right fit, not be excessively baggy and fully cover arms and legs to ensure the best protection possible.

Proper wear and comfort go hand-in-hand when it comes to FR/AR apparel. That is why it is imperative to not only specify daily wear garments, but also garments made from FR/AR fabrics specifically suited to your work environment. For example, breathable FR/AR fabrics can help keep workers cool and dry on the job in warmer climates, and FR/AR denim from trusted manufacturers can provide the look and feel of everyday streetwear with guaranteed flame resistance.

In addition to requiring employees to wear FR/AR daily wear, it is important that the garments are worn properly while on the job. Ensuring shirts are tucked in, sleeves are rolled down and buttons and collars are properly fastened and laying appropriately, all help to ensure the clothing performs properly and fully protects the wearer.

When working with known hazards, employees should be aware of any additional PPE needs. This might include wearing additional task-based PPE for head, hand and foot protection. While FR/AR daily wear is an effective way to help provide ongoing protection against arc flash injury, task-based PPE can help


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STRENGTHENING YOUR ARC FLASH SAFETY PROGRAM THROUGH DAILY WEAR PPE
provide added protection as dictated by your risk assessment. Task-based PPE, when used in tandem with daily wear PPE, can help elevate the electrical incident category protection achieved.

Not every FR/AR fabric manufacturer adheres to the same standards, so it is important to specify FR/AR fabric that best suits your safety program.

This includes reviewing third-party verifications, analyzing real-world performance and specifying the appropriate arc rating for each job site. Using an FR/AR fabric brand that is trusted and respected is a vital selection to create a compliant and protective PPE program.

It is important to note that FR/AR daily wear personal protective equipment (PPE) should be a final layer of defense, as directed by the hierarchy of risk controls, and should not be treated as a suit of armor. FR/AR daily wear works in concert with a host of risk controls to protect against potential thermal hazards and thereby lessens the chance an arc flash event will happen, and if an event occurs, significantly reduces the severity of burn injury.

While preventing arc flash hazards completely may be unattainable, there are precautions safety managers can use to help regulate the risk of possible injury and create the safest possible environment. Daily wear PPE can help safety managers and employees meet the NFPA 70E standard by providing a consistent level of body PPE protection to help reduce the severity of burn injuries from unexpected arc flash incidents.

DON'T LET THESE
5 Obstacles
STAND IN THE WAY OF YOUR TEAM'S SAFETY

1. FORGETFULNESS
2. MISUNDERSTANDING
3. OVERCONFIDENCE OR COMPLACENCY
4. TIME CONSTRAINTS
5. DISCOMFORT