



Overlooked FR issues Safety Message

Arc-rated/flame-resistant garments must be worn correctly to achieve maximum protection. What are some considerations that are often overlooked?

Utility workers can sometimes fall into a pattern of complacency in the wear and care of their daily wear AR/FR garments. AR/FR garments must be worn – and worn correctly – to achieve maximum protection in the event of an arc flash.

Three common instances in which improper wear may come into play, which can help you while reviewing or implementing your own daily wear AR/FR program.

Focusing on appearance. The appeal of daily wear AR/FR garments is partly attributed to its ability to mirror streetwear. Advances in AR/FR fabrics allow these garments to be almost indistinguishable from non-FR garments. However, fit requirements do exist, for example, long-sleeved shirts can't be rolled up, shirts must be tucked in, and buttons and collars must be fastened and laying appropriately.

Disregarding care instructions. Provided that you source a trusted, reputable AR/FR fabric for your AR/FR garment, its short-term thermal exposure protection properties can't be "washed out." It's key, however, that the garment is properly cared for and fully intact for performance to be the same on the first day as on the 1,001st day. This includes cleaning your garments. Although many garments can be laundered at home, no bleach, fabric softener, starch or antistatic dryer sheets should be used. When in doubt, following the manufacturer's care instructions will safeguard the garment's protective characteristics.

Overemphasizing comfort. The advances in AR/FR fabrics – increased mobility and breathability, for example – encourage a "want-to-wear" experience, which is helpful in promoting the use of daily AR/FR garments. However, it's important to temper the emphasis on comfort with the parameters of AR/FR garment performance. For example, during the summer, a worker may want to wear a non-FR base layer to help stay cool. NFPA 70E has specific guidelines regarding base layer use – flammable but non-melting textiles may be used if appropriate AR garments cover the non-FR base layer entirely. A similar situation is rolling up long-sleeved shirts because it's cooler, which directly affects the garment's protective abilities. All comfort measures must adhere to the manufacturer's usage guidelines and the consensus standards.