



036: Flame-Resistant Apparel

Street clothes

Artificial fabrics such as nylon and polyester melt into the skin before igniting.

Fabrics melted into the skin make burns deeper and more severe.

Fabrics melted into the skin are extremely painful to remove.

Don't wear artificial fabrics on the job site.

Shirts, pants, underpants, socks, jackets, gloves, and hats are all items that should be made of a natural fiber, rather than nylon or polyester.

Flame-resistant clothing wear

Wear flame-resistant clothing when working on any equipment that is field-marked to warn of electric arc hazards.

Wear flame-resistant clothing when working on any equipment that may produce an arc blast. Essentially, this is all energized three-phase equipment that has contacts that open and close. If in doubt, ask your foreman for the flash hazard analysis of the equipment you will be working on, and find out what the flash protection boundary distance is for that equipment.

Flame-resistant clothing is made from special flame-retardant materials. Nomex is one of the most widely-recognized trade names of such materials.

Flame-resistant clothing protects you from arc flashes, not steady flame.

Flame-resistant clothing will not protect you if you decide, for example, to walk into a burning building. But, it does provide a high degree of short-term protection.

Flame-resistant clothing, if worn properly so that it is securely sealed, will provide a barrier between you and superheated plasma gas.

You must wear the other PPE appropriate to your job, along with the flame-resistant clothing. The only purpose of the clothing is to protect you from an arc flash.

Always wear safety glasses or goggles along with the flame-resistant clothing, even if you are wearing the flame-resistant hood and face shield.

Do not open or remove the flame-resistant clothing if you are within the flash protection boundary distance.

Keep in mind that an arc flash can happen at any time. It does not know whether you are taking a break or not. If you are standing in the path of an arc flash, what you are doing at the time doesn't matter.

Flame-resistant clothing care

Inspect your flame-resistant clothing before wearing it.

Give it the smell test, as well as a visual check. If it is not clean, you risk exposure to pathogens.

Look for tears or pinholes, as they can allow plasma through.

Look for stains or anything that may create an ionization path across or through the material.

Discussion leader duties for this session:

Obtain arc flame-resistant clothing for the discussion period. If this particular job doesn't involve arc flash hazards and you don't have this protective clothing on site, bring some other item to discuss.

What this Safety Talk covers:

What crewmembers need to know about clothing, so their choices result in fewer burns or other injuries.

Discussion notes :

