

Arc Flash Protective Clothing PPE

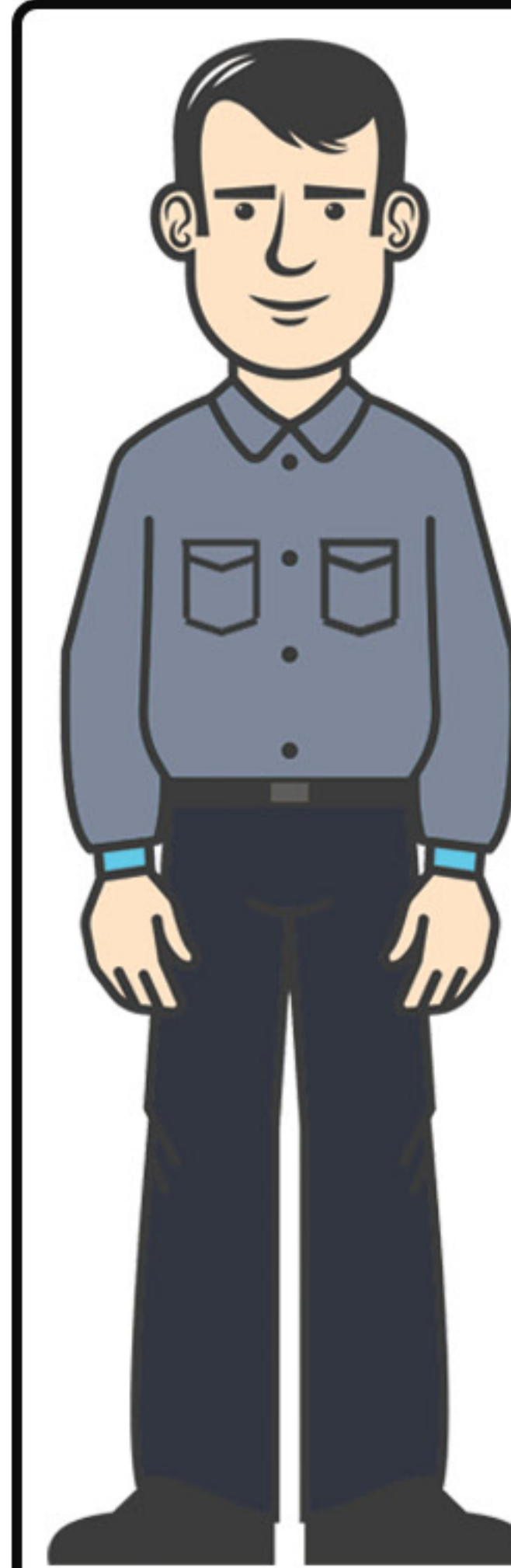
OSHA has identified Arc Flash and Arc Blast as being a significant hazard. They have determined that workers shall be provided with clothing that does not worsen their condition if exposed to this multi-hazard event.

As a result of this identification and directive to protect, experts throughout North America came together to generate a consensus standard which would determine levels of protection. These categories of protection have been adopted by NFPA 70E® and CSA Z462 and identified as Arc Flash PPE Levels.

It is important to understand that these Arc Flash PPE Levels are not designed to protect from all injury, but to mitigate the impact of an Arc Flash on the individual. The first choice should always be to reduce or eliminate the hazard.

The Arc Flash PPE Levels identified below are derived from NFPA 70E® and CSA Z462 standards subject to periodic change. You should verify current requirements for your location and type of work to ensure compliance with local requirements and regulations.

(notes) Refer to NFPA 70E® Annex M Layering of Protective Clothing and Total System Arc Rating for complete details on layering. The Arc Rating of outer layers worn over arc-rated clothing, that are used as part of a layered system, shall NOT be required to be equal to or greater than the estimated incident energy exposure



When utilizing "Task Wear" for Arc Flash and Arc Blast PPE Base Layer garments must be considered. A recommended uniform configuration for Daily Wear would consist of long sleeve shirt and pants, capable of being fastened at the wrist and neck, constructed of non-melting or untreated natural fibers. Meltable fibers such as acetate, nylon, polyester, polypropylene, and spandex shall not be permitted in fabric underlayers.

*an incidental amount of elastic used on nonmelting fabric underwear or socks shall be permitted.

Arc Flash PPE Level 1



Arc-Rated Clothing with a Minimum Arc-Rating of 4 cal/cm² (16.75J/cm²)

- Arc-Rated long sleeve shirt and pants or Arc-Rated coverall
- Arc-Rated face shield or arc flash suit hood
- Arc-Rated jacket, parka, high-visibility apparel, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection*
- Heavy duty leather gloves, arc-rated gloves, or rubber insulating gloves with protectors
- Leather footwear as needed

Arc Flash PPE Level 2



Arc-Rated Clothing with a Minimum Arc-Rating of 8 cal/cm² (33.5J/cm²)

- Arc-Rated long sleeve shirt and pants or Arc-Rated coverall
- Arc-Rated face shield and Arc-Rated balaclava or Arc-Rated flash suit hood
- Arc-Rated jacket, parka, high-visibility apparel, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection*
- Heavy duty leather gloves, arc-rated gloves, or rubber insulating gloves with protectors
- Leather footwear

Arc Flash PPE Level 3



Arc-Rated Clothing selected so the system's Arc Rating meets the required Minimum Arc Rating of 25 cal/cm² (104.7J/cm²)

- Arc-Rated long-sleeve shirt
- Arc-Rated pants
- Arc-Rated coverall
- Arc-Rated flash suit jacket
- Arc-Rated flash suit pants
- Arc-Rated arc flash suit hood
- Arc-Rated gloves or rubber insulating gloves with protectors
- Arc-Rated jacket, parka, high-visibility apparel, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection*
- Leather footwear

Arc Flash PPE Level 4



Arc-Rated Clothing selected so the system's Arc Rating meets the required Minimum Arc Rating of 40 cal/cm² (167.5J/cm²)

- Arc-Rated long-sleeve shirt
- Arc-Rated pants
- Arc-Rated coverall
- Arc-Rated flash suit jacket
- Arc-Rated flash suit pants
- Arc-Rated arc flash suit hood
- Arc-Rated gloves or rubber insulating gloves with protectors
- Arc-Rated jacket, parka, high-visibility apparel, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection*
- Leather footwear

*Other types of hearing protection are permitted to be used in lieu of or in addition to ear canal inserts provided they are worn under an arc-rated arc flash suit hood.