

Arc Flash Protective Clothing PPE

Some time ago OSHA identified Arc Flash and Arc Blast as being a significant hazard. Since that time OSHA determined that workers shall be provided with clothing that did 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 levels of protection have been adopted by NFPA 70E® and CSA Z462 and identified as Arc Flash PPE Categories.

It is important to understand that these Arc Flash PPE Categories 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 Categories 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.

*Refer to NFPA 70E® Annex M Layering of Protective Clothing and Total System Arc Rating for complete details on layering.



Formerly referred to as Hazard Risk Category (HRC)0 - the above is still a safe uniform and acceptable "base layer" when using "Task Wear" PPE for Arc Flash Hazards

Arc Flash Hazard

PPE Category 1

Arc-Rated Clothing

- Minimum Arc-Rating of 4 cal/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, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection
- Heavy duty leather gloves
- Leather footwear as needed



Arc Flash Hazard

PPE Category 2

Arc-Rated Clothing

- Minimum Arc-Rating of 8 cal/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, rainwear, or hard hat liner as needed

Protective Equipment

- Hard hat
- Safety glasses or goggles
- Ear canal insert hearing protection
- Heavy duty leather gloves
- Leather footwear



Arc Flash Hazard

PPE Category 3

Arc-Rated Clothing

- Minimum Arc-Rating of 25 cal/cm²
- System may be comprised of Arc-Rated long sleeve shirt, pants, coverall, arc flash suit jacket and arc flash suit pants
- Arc-Rated arc flash suit hood
- Arc-Rated gloves
- Arc-Rated jacket, parka, rainwear, or hard hat liner as needed

Protective Equipment

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



Arc Flash Hazard

PPE Category 4

Arc-Rated Clothing

- Minimum Arc-Rating of 40 cal/cm²
- System may be comprised of Arc-Rated long sleeve shirt, pants, coverall, arc flash suit jacket and arc flash suit pants
- Arc-Rated arc flash suit hood
- Arc-Rated gloves
- Arc-Rated jacket, parka, rainwear, or hard hat liner as needed

Protective Equipment

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