



Safety Message of the Day for IMEA Members



Arc Flash Safety Message

Everyone needs to remember that the intent of arc-rated clothing is to meet the PPE standard, which requires that the clothing an employee is wearing does not further increase injury after the initial flash. This PPE will not keep you from getting burned in an accidental arc flash – the arc-rated clothing will keep you from being burned worse. This type of clothing has the mechanical strength to keep from breaking open during an arc flash. There is some thermal protection from the clothing, but it is not unusual for a victim to receive a second-degree burn. If the clothing is wet with sweat or water, a second-degree burn is almost a certainty from the vaporization of the steam. Appendix E to 1910.269 contains guidelines for the selection of appropriate arc-rated clothing as well as other PPE, such as face shields, hard hats, safety glasses, and hand and foot protection.

1910.269(I)(8)(iv): “The employer shall ensure that the outer layer of clothing worn by an employee, except for clothing not required to be arc rated under paragraphs (I)(8)(v)(A) through (I)(8)(v)(E) of this section, is flame resistant under any of the following conditions:

1910.269(I)(8)(iv)(A): The employee is exposed to contact with energized circuit parts operating at more than 600 volts,

1910.269(I)(8)(iv)(B): An electric arc could ignite flammable material in the work area that, in turn, could ignite the employee’s clothing,

1910.269(I)(8)(iv)(C): Molten metal or electric arcs from faulted conductors in the work area could ignite the employee’s clothing, or

1910.269(I)(8)(iv)(D): The incident heat energy estimated under paragraph (I)(8)(ii) of this section exceeds 2.0 cal/cm².”

Lastly, remember, the OSHA regulations and consensus standards discussed in this article are just the minimum. Employers may add more measures for the protection of employees.