

HRC / PPE Matrix**		Protective Clothing *			Protective Equipment *				
Hazard / Risk Category Number	Required Minimum Arc Rating of PPE (cal/cm <sup>2</sup> )	Non-melting (according to ASTM F 1506-00) or Untreated Natural Fiber Clothing	FR Clothing Note 1	Typical # of Clothing Layers	Head Protection	Eye Protection	Face and Head area protection	Hand Protection	Foot Protection
0	N/A	Shirt (long-sleeve) Pants (long)		1 Note 4		Safety glasses			
1	4	Pants (long) Note 2	Long-sleeve shirt Pants Notes 2 & 3	1 Note 4	Hard hat	Safety glasses		Leather gloves as needed	Leather work shoes as needed
2	8	T-shirt (short-sleeve) Pants (long) Note 5	Long-sleeve shirt Pants Notes 5 & 6	1 or 2 Note 4	Hard hat	Safety glasses or Safety goggles	Arc-rated face shield, or flash suit hood Hearing protection (ear canal inserts) Note 7	Leather gloves Note 8	Leather work shoes
3	25	T-shirt (short-sleeve) Pants (long)	Long-sleeve shirt Pants Coverall Note 9	2 or 3 Note 4	Hard hat FR hard hat liner as required	Safety glasses or Safety goggles	Flash suit hood Hearing protection (ear canal inserts)	Leather gloves Note 8	Leather work shoes
4	40	T-shirt (short-sleeve) Pants (long)	Long-sleeve shirt Pants Note 3 Flash suit jacket (multilayer) Flash suit pants (multilayer)	3 or more Note 4	Hard hat FR hard hat liner as required	Safety glasses or Safety goggles	Flash suit hood Hearing protection (ear canal inserts)	Leather gloves Note 8	Leather work shoes

\* Minimum required displayed in bold black lettering in each category.

\*\* Matrix constructed from verbiage and tables in NFPA 70E. Consult NFPA 70E for additional information regarding PPE requirements.

**Notes:**

- Arc rating for a garment is expressed in cal/cm<sup>2</sup>.
- Regular weight (minimum 12 oz/yd<sup>2</sup> fabric weight), untreated, denim cotton blue jeans are acceptable in lieu of FR pants. The FR pants used for HRC 1 shall have a minimum arc rating of 4.
- Alternate is to use FR coveralls (minimum arc rating of 4) instead of FR shirt and FR pants.
- Garments worn as outer layers over FR clothing, such as jackets and rainwear, shall also be made from FR material.
- If the FR pants have a minimum arc rating of 8, long pants of non-melting or untreated natural fiber are not required beneath the FR pants.
- Alternate is to use FR coveralls (minimum arc rating of 4) over non-melting or untreated natural fiber pants and T-shirt.
- A faceshield with a minimum arc rating of 8, with wrap-around guarding to protect not only the face, but also the forehead, ears, and neck (or, alternatively, a flash suit hood), is required.
- If voltage-rated gloves are required, the leather protectors worn external to the rubber gloves satisfy this requirement.
- Alternate is to use two sets of FR coveralls (the inner with a minimum arc rating of 4 and outer coverall with a minimum arc rating of 5) over non-melting or untreated natural fiber clothing, instead of FR coveralls over FR shirt and FR pants over non-melting or untreated natural fiber clothing.