









# Arc Flash Personal Protection (PPE) Categories

The National Fire Protection Association (NFPA) uses four Arc Flash PPE Categories to classify ranges of arc flash hazards, and the corresponding requirements for PPE. The categories are one of the methods used in the current NFPA 70E standard to inform workers about the protection they need while working on energized equipment.

Each category includes a minimum arc rating value for the required PPE. This value is determined by the PPE manufacturer, and indicates the amount of energy (in cal/cm<sup>2</sup>) that the clothing can absorb or block before the wearer would be likely to receive more than 50% second-degree body burns.

<p>PPE CATEGORY <b>1</b></p>	<p><b>Arc-Rated Clothing</b></p> <ul style="list-style-type: none"> <li>• AR long-sleeve shirt and pants or arc-rated coverall</li> <li>• AR face shield or arc flash suit hood</li> <li>• AR jacket, parka, rainwear or hard hat liner</li> </ul> <p><b>Protective Equipment</b></p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses or safety goggles</li> <li>• Hearing protection</li> <li>• Heavy-duty leather gloves</li> <li>• Leather footwear</li> </ul>	<p>MINIMUM ARC RATING <b>4</b> cal/cm<sup>2</sup></p>	 21AGR12-C+500
<p>PPE CATEGORY <b>2</b></p>	<p><b>Arc-Rated Clothing</b></p> <ul style="list-style-type: none"> <li>• AR long-sleeve shirt and pants or arc-rated coverall</li> <li>• AR rated suit hood or arc rated face shield &amp; balaclava</li> <li>• AR jacket, parka, rainwear or hard hat liner</li> </ul> <p><b>Protective Equipment</b></p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses or safety goggles</li> <li>• Hearing protection</li> <li>• Heavy-duty leather gloves</li> <li>• Leather footwear</li> </ul>	<p>MINIMUM ARC RATING <b>8</b> cal/cm<sup>2</sup></p>	 HRC2 TCG2P
<p>PPE CATEGORY <b>3</b></p>	<p><b>Arc-Rated Clothing</b></p> <ul style="list-style-type: none"> <li>• AR long-sleeve shirt, pants, and hood or arc rated coverall and hood</li> <li>• AR suit consisting of hood, coat, bib overalls, or hood &amp; coveralls</li> <li>• AR gloves</li> <li>• AR jacket, parka, rainwear or hard hat liner</li> </ul> <p><b>Protective Equipment</b></p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses or safety goggles</li> <li>• Hearing protection</li> <li>• Heavy-duty leather gloves</li> <li>• Leather footwear</li> </ul>	<p>MINIMUM ARC RATING <b>25</b> cal/cm<sup>2</sup></p>	 TCG25
<p>PPE CATEGORY <b>4</b></p>	<p><b>Arc-Rated Clothing</b></p> <ul style="list-style-type: none"> <li>• AR long-sleeve shirt, pants, and hood or arc rated coverall and hood</li> <li>• AR suit consisting of hood, coat, bib overalls, or hood &amp; coveralls</li> <li>• AR gloves</li> <li>• AR jacket, parka, rainwear or hard hat liner</li> </ul> <p><b>Protective Equipment</b></p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses or safety goggles</li> <li>• Hearing protection</li> <li>• Heavy-duty leather gloves</li> <li>• Leather footwear</li> </ul>	<p>MINIMUM ARC RATING <b>40</b> cal/cm<sup>2</sup></p>	 TCG40 LAN4
<p>PPE CATEGORY <b>4+</b></p>	<p><b>Arc-Rated Clothing</b></p> <ul style="list-style-type: none"> <li>• AR long-sleeve shirt, pants, and hood or arc rated coverall and hood</li> <li>• AR suit consisting of hood, coat, bib overalls, or hood &amp; coveralls</li> <li>• AR gloves</li> <li>• AR jacket, parka, rainwear or hard hat liner</li> </ul> <p><b>Protective Equipment</b></p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses or safety goggles</li> <li>• Hearing protection</li> <li>• Heavy-duty leather gloves</li> <li>• Leather footwear</li> </ul>  <p><b>*Energized electrical work over 40 cal/cm<sup>2</sup> requires an incident energy analysis to be performed. Once this analysis has been done the appropriate PPE can be selected from the chart above by matching the calculated incident energy level with the corresponding PPE.</b></p>	<p>MINIMUM ARC RATING <b>65</b> cal/cm<sup>2</sup></p>	 TCG65
		<p>MINIMUM ARC RATING <b>100</b> cal/cm<sup>2</sup></p>	 TCG100
		<p>MINIMUM ARC RATING <b>140</b> cal/cm<sup>2</sup></p>	 ARC140