



MITCHELL & LINDSEY

• ELECTRICAL SAFETY SPECIALISTS •

2018 NFPA 70E® Arc Flash PPE Guidance (when incident energy is determined)

Incident Energy in cal/cm ²	Protective Clothing	Protective Equipment	
<1.2	There is no requirement to provide the employee with <u>Arc Flash Protection</u> when the incident energy is estimated to be below 1.2 cal/cm ² since the expected injury from an incident will be survivable and nonpermanent. However, it is not prohibited to provide protection for the employee at this level.	<p>Note: Voltage rated rubber gloves with leather protectors are always required within the Restricted Approach Boundary for <u>Shock Protection</u>.</p> <p>The Restricted Approach Boundary is:</p> <ul style="list-style-type: none">• 50 volts – 150 volts: contact• 151 volts – 750 volts: 12"	
≤ 12	<p><i>Must be equal to or greater than the estimated incident energy (see note 1).</i></p> <ul style="list-style-type: none">✓ Arc rated long sleeve shirt and pants <u>or</u> arc rated coverall <u>or</u> arc flash suit✓ Arc rated face shield and balaclava <u>or</u> arc flash suit hood (see note 2).	<ul style="list-style-type: none">✓ Hard hat✓ Arc rated hard hat liner (as needed)✓ Safety glasses <u>or</u> safety goggles✓ Hearing protection✓ Heavy-duty leather gloves <u>or</u> rubber insulating gloves with leather protectors (see note 3).✓ Leather footwear	
>12	<p><i>Must be equal to or greater than the estimated incident energy</i></p> <ul style="list-style-type: none">✓ Arc rated long sleeve shirt and pants <u>or</u> arc rated coverall <u>or</u> arc flash suit✓ Arc rated arc flash suit hood	<ul style="list-style-type: none">✓ Hard hat✓ Arc rated hard hat liner (as needed)✓ Safety glasses <u>or</u> safety goggles✓ Hearing protection✓ Arc rated gloves <u>or</u> rubber insulating gloves with leather protectors✓ Leather footwear	

Notes:

- 1) Arc ratings can be for a single layer, such as an arc-rated shirt and pants or a coverall, or for an arc flash suit or a multi-layer system consisting of a combination of arc-rated shirt and pants, coverall and arc flash suit.
- 2) Face shields with a wrap-around guarding to protect the face, chin, forehead, ears and neck are required. Where the back of the head is inside the arc flash boundary, a balaclava or an arc flash hood shall be required.
- 3) Rubber insulating gloves with leather protectors provide arc flash protection in addition to shock protection. Higher class rubber insulating gloves with leather protectors, due to their increase material thickness, provide increased arc flash protection.

Based on NFPA 70E Table 130.5(G)

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