# Plug into PPE for Electrical Work




## Safety Talk

**What's at Stake?**
On average more than 150 workers in North America are killed every year from electric shock, burns, and other effects caused by dangerous exposure to electricity. Many of these deaths could have been prevented by wearing the right personal protective equipment (PPE).

**What's the Danger?**
When conflict is not properly managed, what starts out a minor difference of opinions, disagreement or misunderstanding, can escalate into a violent workplace incident.

Contact with live electrical wires or energized equipment can cause:

- Shock or electrocution
- Burns
- Falls

Other electrical hazards include the potential for violent and deadly arc flashes, fires and explosions.

**How to Protect Yourself**
Common PPE for work on and around electrical equipment includes:

- Nonconductive head and face protection – either a hardhat or full face helmet depending on the exposure risk. This will protect against accidental bumps and contact with energized parts and energizedequipment over or around your head and face. All three classesof hardhats protect the head against injury from moving or fixed objects, but only Class E and Class G hardhats also protect against electrical hazards. If your task involves the potential risk for electrocution through head contact with electrical conductors, check the label inside your hardhat.
- Class C (conductive) hardhats provide no electrical protection.
- Class E (electrical) provides the greatest protection against electrocution, as it is rated to protect against exposure to high-voltage electrical conductors, to a maximum of 20,000 volts.
- Class G (general), the most common type of hardhat, has been tested to

provide protection against low-voltage conductors, to a maximum of 2,200 volts.

- Eye protection to protect your eyes from flying and falling sparks and debris.
- Insulated rubber gloves and leather glove protectors offer some protection from shock if you accidentally touch a live part or wire.
- Hearing protection is necessary in areas where an arc blast or other electrical related explosion could occur. Arc blasts are powerful enough to cause permanent hearing loss if no hearing protection is worn.
- Finally, you must use arc rated clothing when working inside arc flash and approach boundaries. This will protect you from the extreme heat of any arc flash that may occur. PPE used for electrical work is rated by the arc rating of the fabric. The higher the rating, the more protection it offers. Check the labels of PPE for the ratings.

**FINAL WORD**

Wearing the correct type of PPE can protect you against the hazards of working with or around electricity. But remember, always inspect your PPE for damage before you put it on and always wear required PPE. PPE can’t protect you if it’s not in good condition and you’re not wearing it!