Hardhats Prevent Zaps as well as Raps

Safety Talk

Foreman-level and journeyman-level electricians and linemen are among the most experienced and knowledgeable workers in the electrical contracting industry, receiving extensive training in electrical safety. However, failure to use required personal protective equipment (PPE) accounts for 55 percent of utility linemen fatalities.

WHAT'S THE DANGER

Even if you're not a lineman or electrician, your job could expose you to electrical hazards. And if you aren't wearing the right hardhat, you could be gone in a flash.

EXAMPLE

A 40-year-old journeyman lineman working in Alaska got too close to a 17,400-volt charged circuit while replacing cables under a switchcabinet. He didn't live to tell the story. His head either touched the switch or got close enough to allow electricity to arc between the energized post and his head.

The outcome might have been much different if he'd been wearing a dielectric (nonconducting) Class "E" hardhat. But his "head protection" consisted of a cloth cap, which offered no protection at all.

HOW TO PROTECT YOURSELF

If you perform duties near overhead power lines or perform any work on an elevated platform such as a ladder or scaffolding, be sure you attend special training on the hazards of working close to these electrical hazards. And wear the correct hardhat.

All three classes of 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.

Don 't Mess with Your Hardhat

It’s also important to be aware of the dangers of modifying hardhats or wearing winter liners, as this could wipe out any of the protection it is designed to provide.

In particular:

- Do not place metallic stickers on the shell of a non-conducting hardhat;
- Do not drill a hole into the shell of a nonconducting hardhat;
- Do not install a winter liner containing a metal zipper or studs into a nonconducting hardhat;
- Do not wear earmuffs containing metal when using a non-conducting hardhat; and
- Do not use paint, paint thinner or certain cleaning products on a non-conducting hardhat. Instead, wash the hardhat with soap and water.

FINAL WORD

Choose the right hardhat for your job. But remember, staying safe is not simply a matter of using your hardhat. You must use your head, too.