

HAZARD ALERT

CPWR [O]
THE CENTER FOR CONSTRUCTION
RESEARCH AND TRAINING

ELECTRICAL SAFETY

FOR NON-ELECTRICIANS



Electrical current is unforgiving.

Electrocutions happen in less than a second. Between 2011 and 2013, 203 construction workers died from electrocutions.*

More than 70% of those killed were not electricians.

A painter was electrocuted when a metal ladder he was moving touched an overhead power line.



Overhead power lines are the main killers.

You can be killed instantly if you are using the following equipment and it comes in contact with an overhead power line.

- Aluminum extension poll for paint rollers
- Backhoes and cranes
- Concrete pumpers
- Long-handled cement finishing floats
- Metal ladders
- Raised dump truck beds
- Scaffolding

Electrical hazards are also at eye level and underground:

- Power tools with bad wiring
- Buried electrical lines
- Bad insulation on wiring
- Cords missing grounding prongs
- Cords damaged by wear

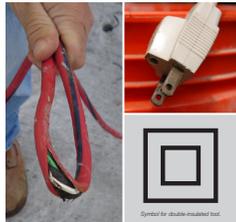
*CPWR Third Quarterly Data Report, 2015.

To learn more about construction hazards,

and receive copies of this Hazard Alert card and cards on other topics

call 301-578-8500

Before beginning work ...



Symbol for double-insulated tool.

1 Inspect equipment and cords for damage

Cords and tools with exposed, frayed, or spliced wiring, a missing prong, or cracked casings should be removed and tagged as "Do Not Use." Use double insulated tools marked with the symbol below.



Competent person testing extension cord.

2 Ask if GFCIs, tools and cords are tested

Ground fault circuit interrupters (GFCIs) save lives on jobsites. OSHA requires your employer to have GFCIs on all temporary wiring. A competent person should test the GFCIs and all cords on tools and equipment to make sure they are safe. You should hit the "test" and "reset" buttons on GFCIs to make sure they are working.



3 Check with your supervisor

OSHA requires your employer to check to see if there are any live electrical circuits where you will be working – overhead or underground power lines or circuits in walls where, for example, you might drill. **If there are, your employer must tell you and your co-workers** where the hazards are and how to work safely.

Once you are working ...

Speak up if you're not sure.

Ask your employer if the electrical systems are grounded. Your employer must check all electrical systems, including wiring and switches, to be sure the path to ground is continuous. **Asking a question can save a life – yours.**

If you think you are in danger:

**Contact your supervisor.
Contact your union.**

**Call OSHA
1-800-321-OSHA**

Steer clear of water and metal.

In wet or damp areas, use only tools or equipment designed and labeled for that use. Use fiberglass or wooden ladders and keep metal ladders away from live electric current.