

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.

In 2010, 239 construction workers were killed by electricity.*

More than 2/3 of those killed are not electricians.



A painter was electrocuted when moving a metal ladder on this jobsite.

Overhead power lines are the main killers.

You can be killed instantly if you are carrying a metal ladder or metal equipment and you touch a power line.

OSHA warns that the following equipment poses risks around lines:

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

But 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

Even household current can kill you.

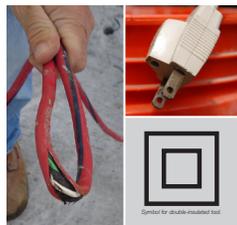
*BLS, Economic News Release, 2012.

Find out more about construction hazards.

Get more of these Hazard Alert cards – and cards on other topics.

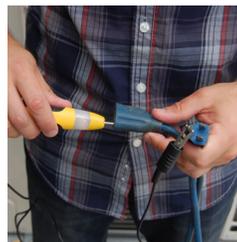
Call 301-578-8500

Before beginning work ...



1 Inspect equipment and cords for damage

Remove and tag as “Do Not Use” anything that has exposed wiring, a missing ground prong, a cracked tool casing, or a frayed, taped or spliced cord. Use double-insulated tools marked with the symbol at left.



Competent person testing extension cord.

2 Ask if GFCIs, tools and cords are tested

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



3 Check with your supervisor

OSHA says your employer must check to see if there are any live electrical circuits where you can contact them – overhead or underground power lines or circuits in walls where 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.

OSHA says electrical systems must be grounded. Your employer must check all electric systems, including wiring and switches, to be sure the path to ground is continuous.

If you aren't sure, ask the IBEW foreman on the job.

Asking a question can save a life – yours.

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. Any tool, regardless of the material, can be deadly when wet.

If you think you are in danger:

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

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