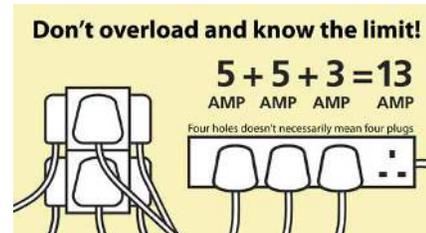


TOOLBOX TALK #16

ELECTRICAL SAFETY FOR THE NON-ELECTRICIAN

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. Overhead powerlines are the main killers. You can be killed instantly if you are using the following equipment and it comes in contact with an overhead powerline:

- Aluminum extension pole for painters
- 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 ground prongs
- Cords damaged by wear

Speak up if you are 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 may save your life.

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 electrical current.

Before beginning work ...

1. **Inspect equipment and cords for damage.** Cords and tools with exposed, frayed, or spliced wiring, a missing ground prong, or cracked casings should be removed and tagged as “Do Not Use”. Use double insulated tools marked with the proper designation.
2. **Ask if GFCIs, tools and cords are tested.** Ground fault circuit interrupters (GFCIs) save lives on jobsites. OSHA requires employers to have GFCIs on all temporary wiring. A competent person should test the GFCIs and all cords 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 powerlines 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.