Don't Be Shocked

Electricity is our most mysterious form of energy. You can't see it, hear it, or smell it, but you sure can feel it!

Electricity seeks the easiest path to the ground, trying to find a conductor, such as metal, wet wood, or water. Humans are conductors, since 70% of the body is water. So if a person touches an energized bare wire or faulty equipment while grounded, electricity will instantly pass through the body to the ground, causing a harmful, potentially fatal shock.

Treat electricity with the respect it deserves. Never assume anything!

Electricity can kill in 1 second.

It is estimated that 70% of electrocutions could be prevented.

Electrical burns to the mouth accounted for 1/2 of the injuries to young children.

32% of all deaths caused by residential electrical systems are as a result of faulty cords and plugs.

Each year, there are 40,000 residential fires due to electrical wiring, claiming more than 350 lives, causing thousands of injuries from shocks and burns, creating $2 billion in personal property damage. Electric receptacles are responsible for 40 deaths and 5,300 fires.

Lighting & Electrical Safety

It is best to hire a professional to repair, replace, or install anything electrical. However, if you attempt a small job yourself, be knowledgeable and do it safely.

- Make sure all electrical boxes, wiring, and outlets are up to code.
- Turn off the power by flipping the breaker or removing the fuse for the circuit.
- Use a wooden ladder on a sturdy surface. Never use a metal ladder.
- Follow all manufacturer's recommendations for installation and maintenance.
- Check that all lights have the UL, ETL, or CSA approval label.
- Make sure all bulbs are screwed in tightly. Loose bulbs may overheat.
- Inspect light fixtures *(old & new)* for:
  1. broken or cracked sockets.
  2. frayed or bare wires.
  3. loose connections.
  4. loose or missing bulbs.
- Throw out or repair damaged lights.
- Turn off lights before replacing bulbs.

- Use proper wattage and voltage.
- Keep outdoor spotlights well-ventilated and away from things that could burn.
- Keep halogen floor lamps which could overheat away from anything that can burn.
- Check with your local utility before digging outside to avoid buried cables.

Ground Fault Circuit Interrupters (GFCIs)

GFCIs are an important safety feature. A GFCI greatly reduces fatalities by monitoring electricity flow and shutting off if the flow changes. While they do not prevent shocks, they help protect you from serious electrocution and severe injuries.

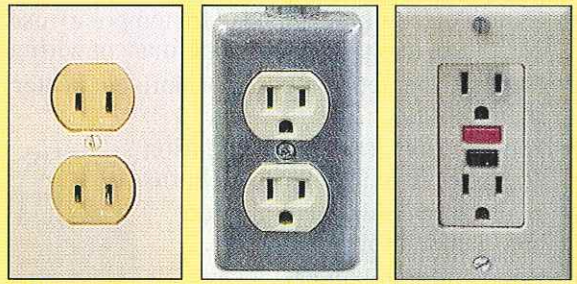
- Some appliances equipped with built-in shock protectors may not require an additional GFCI.
- Use GFCIs on all electrical outlets near water especially in the bathroom, laundry room, kitchen, garage, and outdoors or where power tools are used.
- GFCIs are still needed on 3-prong outlets to provide additional shock protection.
- Portable GFCIs are available for temporary use.
- Use an additional surge protector for electronic devices such as computers and entertainment center appliances.

GFCIs can become faulty from use, improper wiring, being improperly used, or from a strong power surge during an electrical storm. In any of these cases, contact an electrician to have it corrected.

3,900 injuries yearly are associated with outlets, about 1/3 occur when children insert metal objects resulting in shock or burn injuries.

Test all GFCIs once a month and after every major electrical storm.

1. Plug a nightlight or lamp into the outlet. The light should be ON.
2. Press the "Test" button on the GFCI. *(The "Reset" button should pop out and the light should go out. If the "Reset" button pops out but the light does not go out, it has been improperly wired. Have an electrician repair it. If the "Reset" button does not pop out, the GFCI is defective and should be replaced.)*
3. If the GFCI is functioning properly, and the lamp goes out, press the "Reset" button to restore power to the outlet.



Ungrounded (POOR) | **Grounded (BETTER)** | **GFCI (BEST)**