

Tools for Life – Weekly Health & Safety Meeting



Home Healthy - Home Safe

January 2021

Portable Generator Safety

Portable generators are an essential tool in construction that must be used safely.

HEALTH OR SAFETY REMINDER: "Nearly every man who develops an idea works it up to the point where it looks impossible, and then he gets discouraged. That's not the place to become discouraged."

Thomas Edison

The electricity created by generators has the same hazards as normal utility-supplied electricity. It also has some additional hazards because generator users often bypass the safety devices (such as circuit breakers) that are built into electrical systems. The following precautions are provided to reduce shock and electrocution hazards:

Never attach a generator directly to the electrical system of a structure (home, office, trailer, etc.) unless a qualified electrician has properly installed the generator with a transfer switch. Attaching a generator directly to a building electrical system without a properly installed transfer switch can energize wiring systems for great distances. This creates a risk of electrocution for utility workers and others in the area.

Always plug electrical appliances directly into the generator using the manufacturer's supplied cords or extension cords that are grounded (3-pronged). Inspect the cords to make sure they are fully intact and not damaged, cut or abraded. Never use frayed or damaged extension cords. Ensure the cords are appropriately rated in watts or amps for the intended use. Do not use underrated cords—replace them with appropriately rated cords that use heavier gauge wires. Do not overload a generator; this can lead to overheating which can create a fire hazard.

Use ground fault circuit interrupters (GFCIs), especially where electrical equipment is used in or around wet or damp locations. GFCIs shut off power when an electrical current is detected outside normal paths. GFCIs and extension cords with built-in GFCI protection can be purchased at hardware stores, do-it yourself centers, and other locations that sell electrical equipment. Regardless of GFCI use, electrical equipment used in wet and damp locations must be listed and approved for those conditions.

Discussion Points/Quiz Questions:

1. When and where do we need to use generators on the job?
2. What are other hazards associated with generator use?