GFCIs Call Time Out on Electric Shocks

Each year an estimated 375 workers in the United States and Canada die from electrocution. Many of these deaths could be avoided by using Ground Fault Circuit Interrupters or GFCIs.

These devices are designed to determine if there is a leakage of electrical power and if one is detected, a GFCI will shut off the power almost instantly.

What’s at Stake:

Ground Fault Circuit Interrupters should be used any time electrical equipment is being used around moisture. This would include the use of electrical power tools outdoors or in damp locations. Here are some examples of other areas where GFCIs should be used: Bathrooms, kitchens, healthcare facilities such as hospitals or nursing homes, pumps, pressure washers, drain cleaners, outdoor receptacles, construction and repair sites, electrical signs, restaurants, service stations, metal vessels, pools and hot tubs.

Even if you don’t work in the construction field, chances are that you use electrically powered tools occasionally or frequently, either on or off the job. Also, most homes have locations where electrical equipment is used around moisture, such as the bathroom and kitchen, or around pumps. That is why it is important to understand the function of a GFCI.

What Can Go Wrong:

A man was electrocuted when he came into contact with energized turkey feeder equipment in a barn housing thousands of birds. The worker was trying to fix a malfunctioning piece of equipment which lacked a continuous mechanical ground or a GFCI as part of the electrical system supplying power to it.

How to Protect Yourself:

While there are other ways to receive an electrical shock, a ground fault is the most common. A ground fault occurs when some of the current from an electrical circuit escapes and flows to the ground. One cause of a ground fault is damaged insulation around a wire, which allows the current to escape. That escaping current could flow through a human body and quickly kill a worker.

A Ground Fault Circuit Interrupter detects this leakage of current. If an imbalance is detected, it shuts off the power in as little as one-fortieth of a second. That should be fast enough to prevent a harmful electrical shock.

A common misconception is that a circuit breaker serves the same function as a GFCI in protecting against electrical shock. This is incorrect, because a circuit breaker is made to protect the electrical system from problems such as overheating if there is a current overload, whereas a GFCI protects against current leakage.
GFCIs should be tested on a regular basis to make sure they are functioning correctly. They should also be protected from damage. Never paint them and never expose them directly to rain. Follow the manufacturer’s instructions for resetting, testing and maintenance of these safety devices.

Also be sure to observe all other safety procedures for making sure equipment is grounded correctly.

**Final Word:**

A *Ground Fault Circuit Interrupter (GFCI)* provides an important measure of protection. It could save your life.

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AFCI
...the "trip"
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life!

A ground fault circuit interrupter or GFCI could mean the difference if you live or die.