



STOP THE SHOCK! INSTALL GROUND FAULT CIRCUIT INTERRUPTERS TO HELP KEEP YOUR HOME SAFE

EVER EXPERIENCED AN ELECTRIC SHOCK? NOT SOMETHING YOU WANT TO DO AGAIN? THINK ABOUT INSTALLING GFCIs IN YOUR HOME TODAY.

The shock you received probably happened because your hand or some other part of your body contacted a source of electrical current, and your body provided a path for the electrical current to go to the ground. A little stronger, and it might have been fatal.

Ground Fault Circuit Interrupters (GFCIs) provide you and your family with virtually instant protection from serious burns or a potentially fatal electric shock caused by a ground fault.

ABOUT ELECTRICAL CIRCUITS

The electricity supplied by BC Hydro enters your home through an electrical panel or circuit box. The circuit box then acts like a miniature switchyard to direct your electricity to the electrical outlets (and whatever electrical equipment you have plugged into them) in each room.

Normally, your electricity will safely flow through a “hot” wire out to the electrical equipment in your home, then complete the circuit back to the circuit box through a “neutral” wire. Occasionally, however, an electrical current will run directly from the hot wire to the ground, instead of back to the circuit box. This is called a “ground fault,” and it can be very dangerous.



WHAT CAUSES GROUND FAULTS

Most ground faults occur where there is water—in laundry rooms, kitchens or bathrooms, for example, or outside in the rain—because water can conduct electricity and create a path for electricity to the ground.

Ground faults may also occur if the insulation around an electrical wire has deteriorated, or there is a build-up of damp, dust or other contaminants in electrical equipment.

WHY YOU NEED GFCIs

A GFCI is an inexpensive electrical device that monitors the balance of electricity flowing through a circuit. If the amount of current flowing through the circuit's hot wire differs from the amount returning to the neutral wire, it will literally "interrupt" the circuit and cut off the electricity in the blink of an eye.

For example, if you were to drop your hairdryer into a sink full of water in your bathroom, a GFCI on your electrical outlet would sense the flow of electric current through water and disconnect power to the hairdryer immediately. You may still get a bit of a shock, but at least it won't be fatal!

WHERE YOU NEED GFCIs

All newer homes have GFCIs installed where necessary to meet electrical code requirements, but if your home is more than 20 years old, you may not have GFCIs where you need them. Today, GFCIs are required:

- in bathrooms, garages and basements or crawlspaces
- above kitchen countertops
- by indoor swimming pools and hot tubs, and
- anywhere outdoors.

You should also consider installing GFCIs in other places around your home, wherever you might have water, metal or concrete. They are also recommended for use with electric lawn mowers or hedge trimmers, or any electric tools, such as drills, saws or sanders.

TO INSTALL

You should always call a qualified electrician to do any wiring in your home—and that includes installing GFCIs. An electrician will recommend the best model or models for your home, which may include:

- a combination circuit breaker and GFCI, installed in the circuit panel instead of a regular circuit breaker, and/or
- a GFCI receptacle unit, installed in a wall instead of a conventional electrical outlet, and/or
- a portable unit, which plugs into an existing three-pronged grounded electrical outlet.

Once installed, remember to test all of your GFCIs at least once a year—perhaps at the same time as you normally test your smoke detectors. It's easy: just press the test button!



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