GFCI's (ground fault circuit interrupter) are electrical devices that helps prevent electrical shock.

Several types of GFCI devices are available. The ones you most commonly see are the GFCI receptacles in bathrooms, above kitchen countertops and at the exterior of the house. These are the receptacles which have the two small buttons on them, one marked "test" the other "reset." In addition to these, there are circuit breaker GFCI's located in the electrical service panels that will help protect entire circuits.

In some areas of the home; such as above kitchen countertops, you might only see one or two receptacles that has the test and reset buttons on them. The other remaining outlets above the kitchen countertops should be wired "in-line" with these receptacles to be just as effective. The GFCI protected receptacle will trip to provide safety to all the others connected down-line from it.

It is estimated that approximately 300 people are electrocuted in their homes each year. Many thousands more are burned and receive severe electrical shocks. The installation of GFCI devices could help prevent a large portion of these fatalities and injuries.

The Function of GFCI's:

A GFCI constantly monitors the electrical current passing through a circuit. If the amount of current passing into the circuit is different from the current being returned to the circuit, it indicates a ground fault and the GFCI shuts off electrical current to the circuit. A ground fault is when an electrical current is attempting to return to the ground through a source other than the wiring/circuit. An example of this would be a loose wire in a light fixture. The current could be passing through the fixture and when you touch the fixture and a grounded metal object at the same time, the current will flow through you. This could result in a fatal shock, which the GFCI is designed to prevent.

Safety Warning:

- GFCI's should be installed by a qualified electrician.
- Do not attempt to work on your electrical wiring, switches, or outlets unless you are properly trained and equipped to do so. Electrical components in a building can easily cause an electrical shock, burn, or even death.
- Even when a hot line switch is off, one terminal on the switch is still connected to the power source. Before doing any work on the switch, the power source must be turned off by setting a circuit breaker to OFF or removing a fuse.
- You should always use a GFCI device when working outdoors. This includes any electrical yard tool such as trimmers, mowers or blowers. If your house is not equipped with GFCI receptacles, you can purchase a GFCI extension cord that offers the same protection. NOTE: A GFCI will not prevent all electrical shocks, but should prevent the shock from being fatal.