



Safety Tip of the Week

Ground-Fault Circuit-Interrupters (GFCIs)

A ground fault occurs when the electrical current does not complete its circuit and unintentionally flows to the ground. Ground faults can cause fires and are dangerous when they flow through a person to the ground.

The GFCI, as it is commonly called, is simply a fast-acting circuit breaker that will cut off the electricity to a power tool within 1/40th of a second if it detects there is a fault with the grounding system. Faults can occur when there is insulation damage to cords, receptacles, connectors, etc. The GFCI monitors this current and protects the user from electrocution by interrupting the power before it can do any harm.



One disadvantage of this protection is that it is sometimes overly sensitive to moisture and humidity. On rainy or damp days, the GFCI units will occasionally cause what is called “nuisance” tripping. The temptation then is to by-pass the GFCI to get on with our work. This is not only unwise, but a violation of OSHA standards. OSHA requires GFCI protection on all 120-volt, single-phase, 15- and 20-ampere circuits on work sites which are not part of the permanent wiring of the building or structure.

Keep These Things in Mind:

- Be sure that all temporary wiring is installed complete with GFCI protection;
- Do not let anyone tamper with or by-pass the GFCI unit;
- To minimize nuisance tripping, keep cords out of water and use watertight or seal connectors where possible;
- GFCIs must be placed as close to the power source as possible; and
- Test GFCIs before use.

Always make sure the tools and cords you use are in good working condition and inspect them regularly for any visible damage. Failure in the insulation or grounding protection of your tools or cords could result in ground faults. Use GFCI devices. Take a little extra care so that you will not have a SHOCKING experience.

PROTECT YOURSELF FROM ELECTRIC SHOCK...USE SAFETY EQUIPMENT!