

WEEKLY SAFETY MEETING

FOR THE CONSTRUCTION INDUSTRY

SAFETY MEETING OUTLINES Box 700, Frankfort, IL 60423 815-464-0200 No. 44 Vol. 21 Week of 10/30/2023

Company Name _____ Job Name _____ Date _____

GROUND-FAULT CIRCUIT INTERRUPTERS

Ground-fault circuit interrupters (GFCIs) protect against shock. Every year, more than 150 Americans are killed by ground faults, which are tiny short circuits in electrical wiring. Even though an old drill or circular saw still runs well, the insulation inside may be worn. If electricity leaks through that insulation it can cause your muscles to contract and you may not be able to let go of the tool. At the same time, that current, even though it's tiny, can disrupt your heart's electrical system causing it to stop beating. In minutes you're dead.

GFCIs work by detecting minute differences between the amount of current entering the tool or appliance and the amount leaving it. In a safe tool or appliance, incoming and outgoing currents are identical. If they are different, some electricity is leaking. If you're holding the tool or touching the appliance, your body can act as a conductor, and the leaking current can flow through you.

OSHA's electrical standard [29 CFR 1926.404(b)(1)] requires that employers either provide GFCIs or implement an assured equipment grounding conductor program to protect employees from ground-fault hazards at construction sites. If GFCIs are used, all 120-volt, single-phase, 15- and 20-ampere receptacles that are not part of the structure's permanent wiring must be protected.

Following are some situations which may cause GFCIs to trip.

- Ground faults
- Water seeping into a cord connection
- Operating faulty or defective equipment
- Running very long lengths of extension cord
- Using large motors or other highly inductive tools

Whenever a GFCI trips, find the reason and correct the problem before continuing with your work.

Whether your employer provides GFCIs or uses an assured equipment grounding conductor program, be sure to follow the procedures in place. When it comes to electricity, no one can afford to make a mistake.

SAFETY REMINDER

**Extension cords should not be fastened with staples,
hung from nails, or suspended by wires.**

Special Topics For Your Project _____

Employee Safety Recommendations _____

Reviewed MSDS # _____ Subject _____

Meeting Attended By _____

Supervisor's Signature _____