

Basic Safety

List electric tool hazards on site

Explain dangers

The main hazards with electric tools are:

- lack of grounding or double insulation
- broken or disarmed safety devices such as retractable guards
- unfamiliarity with the tool
- failure to hold tool securely
- failure to secure work
- injuries to hands and eyes
- faulty tool cords and extension cords
- failure to use ground fault circuit interrupters (GFCIs) with tools operated outdoors or in wet or damp locations indoors.

Identify controls

Grounding

- Make sure the tool is grounded and the cord polarized or double-insulated.
- “Grounded” means an approved three-wire cord with a three-prong plug. Use the tool only in a three-pole outlet.
- You can identify two-pronged polarized tools because one prong is larger than the other.
- Never cut off or bend back the ground pin on a three-prong plug—or use a two-prong cheater or adapter—to make the plug fit in a two-pole outlet.

Demonstrate

- Double-insulated tools are labelled as such. The label will feature a D, a D inside a square, a double square, and so on.
- Make sure the casing of a double-insulated tool is not cracked, split, or broken.

Cords

- Inspect tool cords and extension cords daily for damage.
- Keep cords clear of the tool during use.
- Replace any open-front plugs with dead-front plugs. Dead-front plugs are sealed. They present less danger of shock or shortcircuit.
- Inspect tool cords and extension cords for kinks, cuts, cracked or broken insulation, and makeshift repairs.
- Don't use the cord to lift, lower, or carry an electric tool. Don't disconnect the tool by yanking or jerking on the cord. You'll damage the cord, loosen connections, and run the risk of shocks and shortcircuits.
- Protect cords from traffic. Run them through conduit or between planks along either side. If necessary, run cords overhead above work or travel areas.
- If any cord feels more than warm to the touch, check the circuit for overloading.
- Report any shocks from tools or cords to your supervisor. Tag the tool and don't use it.
- Outdoors or in damp or wet locations indoors, use a Type A GFCI. That's the law. GFCIs detect any current leaking to ground from a tool or cord and quickly cut off power before damage or injury can occur.

Demonstrate

With your crew, inspect sample tools and extension cords used on the job. Show labels indicating double insulation. Demonstrate and explain how a GFCI can identify defective cords and tools.