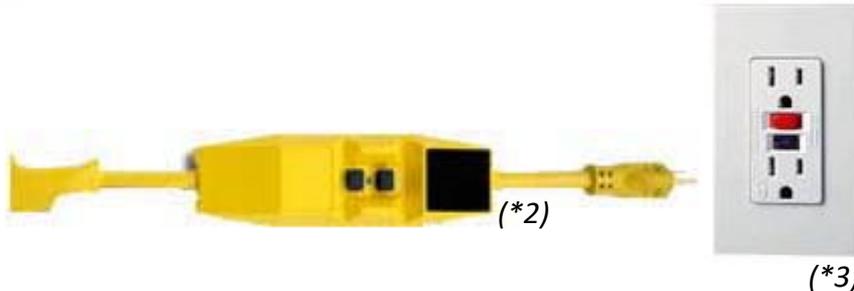


Office buildings, warehouses, and manufacturing plants are some of the different types of work environments where electrical hazards are an area of major safety concern and account for a large number of injuries and fatalities.

Extension cords and GFCIs (Ground Fault Circuit Interrupters) can be found on most electrical equipment and electrical outlets at your workplace. Remembering a few safety tips can help prevent serious injuries from happening.

Never take electricity for granted! No matter how small the job, always use safe work practices, especially when using electrical tools and equipment.



**OSHA Standard 1910.333(a)** states that *safety-related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits which are or may be energized. The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.*

Cord with plug (\*1), GFCI "pig-tail" (\*2), and a GFCI outlet (\*3).

- Visually inspect extension cords and remove frayed, damaged, or severely kinked cords from use immediately.
- Never use extension cords that have broken or are missing the ground pins – these are there for your safety!
- Extension cords should be selected carefully and be approved by a laboratory such as Underwriters Laboratory (UL).



Extension cord shows a UL stamp.

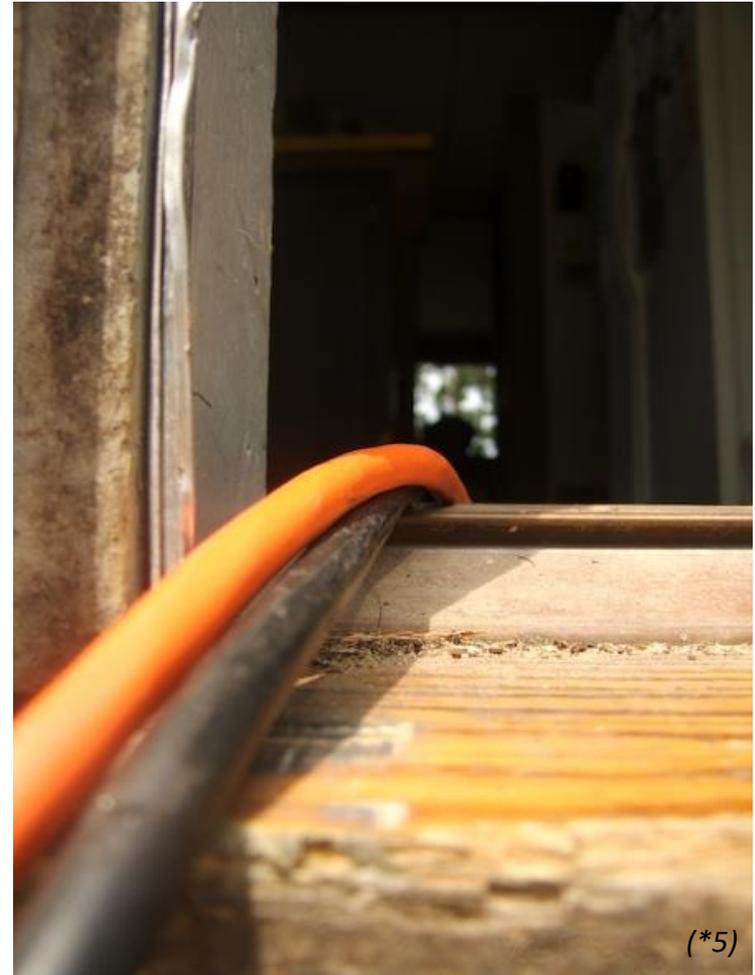


Extension cord under door with a protective device to avoid potential damages. (\*4)

**OSHA Standard 1910.334(a)(2)(i)** Portable cord and plug connected equipment and flexible cord sets (extension cords) shall be visually inspected before use on any shift for external defects (such as loose parts, deformed and missing pins, or damage to outer jacket or insulation) and for evidence of possible internal damage (such as pinched or crushed outer jacket). Cord and plug connected equipment and flexible cord sets (extension cords) which remain connected once they are put in place and are not exposed to damage need not be visually inspected until they are relocated.

Safety precautions for extension cord use:

- Don't use an extension cord that is wet.
- Never plug an extension cord into an electrical device with wet hands. Water and electricity do not mix, ensure hands are dry before plugging an extension cord into an outlet.
- Never unplug an extension cord by pulling on the cord; pull on the plug.
- Ensure extension cords are kept out of walkways to avoid potential trip and fall hazards.
- Extension cords should be used on a temporary basis; they are not meant to be permanent.
- Never use extension cords that have broken or missing ground pins.
- Never run cords through windows or doors where they could be pinched or damaged.



**OSHA Standard 1910.334(a)(5)(i)** *Employees' hands may not be wet when plugging and unplugging flexible cords and cord and plug connected equipment, if energized equipment is involved.*

According to OSHA, a GFCI (Ground Fault Circuit Interrupter) *“is a fast-acting circuit breaker designed to shut off electric power in the event of a ground-fault within as little as 1/40 of a second.”* The ground fault occurs as a result of *“leaking electricity.”*

- From a small kitchen lobby in an office building to an industrial food plant, when using electrical equipment or extension cords near a water source they should be plugged into an outlet that is GFCI protected.
- When operating machine pumps, welding equipment, or other high energy producing equipment or tools, an industrial GFCI should be used.
- Always test GFCIs before use by using the test and reset buttons. If found defective do not use that GFCI.
- Inspect all tools and equipment before use, if ground pin is missing do not use.



GFCI outlet with test and reset buttons. (\*6)

**OSHA Standard 1910.304(b)(3)(i)** *Cord sets and receptacles in wet environments can potentially expose employees to severe ground-fault hazards. Therefore, in a built environment (non-construction) OSHA requires ground-fault circuit protection for all 125-volt, single-phase, 15- and 20-ampere receptacles installed in bathrooms and on rooftops.*

Remember **never take electricity for granted!**

- Always inspect your electrical tools and extension cords before use.
- Never use extension cords that have broken or missing ground pins.
- Never run cords through windows or doors where they could be pinched or damaged.
- Remove frayed, damaged, or severely kinked extension cords from use immediately.
- Always test GFCIs before use by using the test and reset buttons.



*Remove damaged extension cords, like this one, from use immediately! (\*7)*



*Never use extension cords that have broken or missing ground pins!*

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