



## **Extension Cord Safety**

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If you leave an extension cord on the floor long enough, one of several things will happen to it. It's either going to be stolen, tripped over, or damaged.

Extension cords are designed to be conveniences, not hazards. But too often they're converted into hazards by the people who use them. So, for a few minutes, lets go over some of the ways these safety hazards are formed.

- Extension cords are often placed in areas where people aren't used to having them around, and a tripping hazard results. This type of hazard is one of the more common ones; so, when you use an extension cord, try to keep it out of aisles and other places where pedestrians might trip over it.
- Sometimes the tripping hazard can be eliminated by hanging the cord overhead. Ample clearance should be allowed. However, the fasteners used should be a type that won't damage the cord. Or if the cord is on the floor, a board can be placed on each side of the cord to protect it. Better yet, extension cords are meant to be used as temporary wiring sources. If the wiring is meant to be permanent, then it should be wired as permanent, i.e., in conduit with adequate overload protection.
- When someone trips over a cord, there's not only a chance of injury but the plug may be jerked to the extent that it's damaged, making it an electrical hazard.

But maybe I'm getting a little ahead of the story. Many hazards can be eliminated to start with by selecting the right extension cord for the job.

- All cords should be UL listed, properly grounded, and meet other applicable electrical code specifications. If you're using portable electrical equipment, the equipment should be properly grounded.
- Extension lamp cords are items that get considerable usage. Usually these cords are on automatic take-up reels which ease movements and prevent kinking and excessive bending of the cord.
- Appropriate cords should be used with portable electric tools or extension lamps to be used to boilers, tanks, and other grounded enclosures.

It should also be noted that extension lamps are sometimes used under conditions where a 120-volt shock could be fatal, so cords should always be kept in excellent condition.

Extension lamps with brass shell sockets should not be used. Porcelain, composition or rubber sockets are recommended. Handles of portable lamps should be made of non-conductive material, and there should be no metallic connection between the lamp guard and socket shell.

- ⚡ Plastic covers of some type are recommended for extension cords which are used around solvents or oils. Be careful not to twist or kink cords and always protect them from sharp objects.
- ⚡ If moisture, heat, or chemicals are present, be sure your cord is the proper type to resist the conditions there.
- ⚡ **A Word of Caution.** If you make a good connection with a live wire carrying even 110 volts, it can be fatal. Wet or sweaty hands make a dangerous connection when at the same time they are in contact with a good ground like a wet floor, a steam or water pipe, or another electrical connection.

Actually, a lot of the strains on current-carrying parts of extension cords can be prevented by use of heavy-duty plugs which are clamped to the cord. This is particularly helpful in cases where the cord is accidentally pulled or jerked.

You've probably noticed that several times I've mentioned the dangers of pulling and jerking on cords. This is the type of torture that they often receive but aren't built for. That's why it's important to inspect extension cords often and, if they're damaged, don't use them.

Not too many of us qualify as electricians with enough know-how to wire a building safely. Yet, we all become instant electricians of some sort when we use extension cords. We plug them in all over the place, and we connect them to anything we want to, often overloading electrical circuits.

So try to remember what extension cords really are. They're a convenience designed for a specific purpose. Handle them with care and use them safely. They aren't the answer to every electrical need, but they're a lot of help when used correctly.

**Disclaimer:** Information contained in this handout is considered to be correct. If there are questions, please contact the Arkansas Workers' Compensation Commission/Health and Safety Division.