

Extension cords are a helpful tool in any workplace, when used correctly. However, too often employers become over-dependent upon cords, which may only be used for temporary use. Cords may be misused and are easily damaged, which may result in electrical shock, electrocution, or fires.

Electrical equipment must be listed and labeled and must be used in accordance with that listing and labeling. Portable equipment must be handled in a manner which will not cause damage. Flexible electric cords connected to equipment may not be used as a rope for raising or lowering the equipment. Flexible cords must not be fastened with staples or otherwise hung in such a fashion as could damage the outer jacket or insulation (such as secured with zip ties that pinch the jacket).

Employees must be trained to visually inspect cords 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). If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item must be removed from service.

"Make shift" repairs should not be made to any electrical device. Only qualified workers should be permitted to make repairs, and all repairs must be made in accordance with the National Electrical Code and/or the devices listing and labeling, as appropriate. For example, damaged insulation cannot be repaired with electrical tape because it doesn't restore the original insulative properties of the original insulation.

When an attachment plug is to be connected to a receptacle (including an on a cord set), the relationship of the plug and receptacle contacts be of proper mating configurations. Ground prongs may not be removed, and only grounded extension cords may be used in the workplace. Adapters which interrupt the continuity of the equipment grounding connection may not be used.

Electricity and water don't mix. Keep cords out of water, and ensure ground fault circuit interrupters (GFCI) are used in wet and damp environments. Employees should never plug in energized equipment with wet hands.

Another hazard is running cords through doorways, windows, walls or over ceiling tiles, and under carpets or furniture. Cords in hidden spaces can be chewed on by rodents, and the damage may go undiscovered and can lead to a fire. Cords hidden under carpet can be pinched by heavy objects and result in damage, which can lead to electrical shock, electrocution, and fire.

Respecting the power of electricity, and using it in a manner that is compliant with its listing and label, along with making sure equipment is properly maintained, are the best ways to make sure you make use of this modern convenience, and ensure workers are kept safe. For more information on electrical safety, visit OS-HA's website at

https://www.osha.gov/SLTC/electrical/index.html.