



EXTENSION CORD HAZARDS

Extension cords (cord sets), cables, and electrical cords are types of flexible cords. Flexible cords and cables are used to connect electrical equipment to a power source. Learn about mitigating extension cord hazards with this information from [the OECS safety consultants](#). And you can learn more about OSHA's regulations regarding extension cords by visiting our [OSHA compliance checklist](#). An extension cord is a potential fire ignition hazard, electric shock hazard, and trip/slip/fall hazard (or worse). What are some facts you should know about extension cord use and limitations to [avoid these hazards and likely OSHA fines?](#) Code #1926



Temporary Wiring: In the workplace, extension cords are not designed to be used as fixed wiring. This means that extension cords are temporary. When you are finished with your task, the extension cords should be unplugged from the equipment or tool, removed from the outlet, wrapped and placed in safe storage. What happens if the extension cord is left in place as seen in scenario #2 above? The extension cord should be removed, because the wiring can break down and become a hazard. From a practical standpoint, if equipment has been placed in an area with no outlets, you will need an extension cord until permanent wiring can be installed. If the equipment will be there for an extended time, permanent wiring should be installed. General rule of thumb - if the equipment will be in place for more than 30 days, a permanent type of wiring should be installed. Overheated wire can melt the insulation and expose the wires to paper, cardboard, and other potential causes for a fire. Additionally, if the cord is a fairly long distance, it can lose power as well, causing even more issues with safety in the workplace. If you notice an extension cord smoking, it's time to unplug it from the outlet and reassess how you are using this type of equipment.



This ribbon extension cord is used around the home to plug in such devices as lamps, clocks, and other light-duty electrical devices up to 7 amps. An under-the-desk, smaller space heater will use around 12.5 amps. The ribbon extension cord is only rated for 7 amps, however; anything more will result in the cord being overheated. A ribbon extension cord cannot be used in commercial or industrial type settings. All extension cords require a ground. When using an extension cord, check the amps required to power the needed device, equipment, or tool against the extension cord's rating. Select the correct gauge wire and cord length to meet the electrical demands. See the gauge cord section chart used by our safety company at the end of this article.

Damaged Extension Cords: Avoid placing cords around sharp corners, through windows or doorways, or in other pinch points. A defective or damaged cord can cause a fire from electrical resistance in the wire. The heat buildup will melt the cord, exposing conductors to combustibles in the work area. Remember, cord damage may not be visible. When in doubt, place safety first and use an undamaged, properly rated cord.

Surge Protectors (Power Strips): Extension cords must be plugged directly into wall outlets. Do not "daisy chain" - that is, plug extension cords into surge protectors or other extension cords.

Inspect Cords for Damage. Before use, inspect the cord to make sure the outer insulation is intact. Look to see if the ground pin is attached. Ensure the cord's outer insulation is not broken at the plug end or the insert end. Often the cord has been broken, exposing the conductors. Check to see if the cord is capable for the "load" that the equipment requires.

