Extending electrical safety to extension cords

The use of extension cords, power strips and surge protectors can be helpful for your short-term power solution. If used improperly, these cords can cause a shock, burn or fire. Touching even a single exposed strand can give an electric shock or cause a burn. A custodian at a school in Alaska was recently injured from a faulty cord. This led to a quick emergency room visit after the current went through his body and exited through his toes.

A Church Mutual customer in Texas recently experienced a fire in their day care when an extension cord shorted after a TV pinched it against a wall.

This is not to say that extension cords, power strips and surge protectors should never be used, but added care is needed, such as inspecting the cord with each use. Check the plug and the body of the cord. Do not use damaged, spliced, old, brittle, cracked or worn cords. A cord that feels hot or the plastic is softening is a warning that the wires or connections are failing. If you notice an odd odor, arc burning or smoke from an electrical cord, turn off the appliance or turn off the power at the circuit breaker. These cords need to be discarded and replaced.

Selecting the proper cord for the job

Match the appliance electrical needs with cord capacity. Avoid the use of extension cords with high-energy appliances, such as vacuum cleaners, window air conditioners and copiers. Use one cord for one appliance. Shun the temptation to string electrical cords together or add multiple appliances on a single extension cord. This can overload the cord. Use the shortest length of cord possible between the appliance and the outlet. Less cord means a better flow of energy with reduced waste and greater efficiency. As the cord gets longer, the current-carrying capacity of the cord is reduced. This also helps prevent injuries caused by tripping and falling. One simple solution for fewer electrical cords is to relocate floor lamps, clocks, radios and other electrical products closer to wall receptacles.

A fire hazard can result from coiled or looped cords in a compacted space, such as behind a computer or sound equipment where heat cannot properly escape the cord. Another fire hazard can result from a knot or kink in the cord, as this can cause internal wires to break.

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Never use three-prong cords with outlets that only have dual slots by cutting off the ground pin or using a two-prong adapter to force a fit. This is a safety feature designed to reduce the risk of shock and electrocution.

**Inspect the outlet with each use**

Check the receptacle body that the cords will be plugged into. A heavily used outlet or an older outlet may have loose pins. If the plug does not fit tight or droops after it is inserted, do not use this outlet. Do not use an outlet where the faceplate shows signs of burn marks or is missing.

When connecting cords to an outlet and appliance, insert the plug fully so that no part of the prong is exposed. When disconnecting cords, pull the plug rather than the cord itself to avoid stretching wires.

Never put electrical cords under rugs or carpet or have heavy furniture resting on them, as they can overheat and ignite. Place the electrical cord in an area where it will not be damaged by heavy foot traffic. Note that suspending cords with staples or nails can cause damage to the cord and present a shock or fire hazard. Likewise, electrical cords should not be run through walls, doorways, ceilings or floors. Keep electrical cords free from areas of water on the floor or snow on the ground. When using electrical cords outdoors, use only cords labeled for outdoor use.

**Be wary of impostor cords**

A disturbing development is the growth of impostor extension cords, power strips and surge protectors, with fake Underwriters Laboratories (UL) safety labels, sold in “dollar stores.” These cords use thin copper wiring that cannot handle levels of electricity needed for regular usage, such as desk lights or space heaters. Safety standards, including those of UL, now require that general use electrical cords have safety closures, warning labels and rating information about the electrical current. Look for the name and contact information of the manufacturer. If this information is missing, consider purchasing your electrical cords elsewhere.

Extension cords are for temporary use only and should not be used to compensate for lack of outlet placement. Heavy reliance on extension cords and power strips is an indication that your building has too few outlets to address your electrical needs. A licensed electrician should be contacted to assess your electrical needs and install additional outlets, so you can remove the extension cords.

A quick and easy checklist for electrical cord safety can be found on our Web site.

*For a complete collection of the Risk Alert series, visit our Web site and look in the Safety Resources section.*