ELECTRICAL FIRE SAFETY

KEEP AN EYE ON THOSE EXTENSION CORDS

The Consumer Product Safety Commission (CPSC) estimates that approximately 4,000 injuries caused by electrical extension cords are treated in hospital emergency rooms each year. About half the injuries involve fractures, lacerations, contusions, or sprains from people tripping over extension cords. Thirteen percent of the injuries involve children under 5 years of age. Electrical burns to the mouth accounted for half the injuries to young children.

The CPSC also estimates that about 3,300 residential fires originate in extension cords each year. The most frequent causes of such fires are short circuits and the overloading and misuse of extension cords.

Electrical contractors are required to follow either the National Electrical Code (NEC) or local electrical codes. The NEC requires that electrical outlets be located no more than 12 feet apart along a wall. Thus, no point along a wall should be more than six feet from an outlet which would reduce the need for multiple extension cords.

The NEC also says that many cord-connected appliances should be equipped with polarized or grounding type plugs. (Polarized plugs have one blade slightly wider than the other and can only be inserted one way into the receptacle.) Polarization and grounding ensure that certain parts of appliances that could have a higher risk of electrical shock when they become live are instead connected to the neutral, or grounded side of the circuit; thereby, reducing the risk of shock or electrocution. Such electrical appliances should only be used with polarized or grounded extension cords.

Voluntary safety standards, such as those of Underwriters' Laboratories, Inc. (UL), now require that general-use extension cords have safety closures, warning labels, current rating information and other features for the protection of children and consumers. In addition, UL-listed extension cords now must be constructed with #16 gauge or larger wire or be equipped with integral fuses.

The CPSC offers the following suggestions for the purchase and safe use of extension cords:

- Use extension cords only when necessary and only on a temporary basis.
- Never allow extension cords to run through a walkway as this creates a trip hazard.
- Use polarized extension cords with polarized appliances.
- Buy and use extension cords with safety closures and other safety features.
• On cords without safety closures, cover any unused outlets with electrical tape or with plastic safety caps to prevent the possibility of a child making contact with the electric current.
• Insert plugs fully so that no part of the prongs are exposed when the extension cord is in use.
• Discard any old, cracked, worn, or damaged extension cords.
• When disconnecting cords, pull on the plug, rather than on the cord itself to avoid damaging connections.
• Teach children not to play with plugs and that they should never attempt to unplug cords.
• Use only three-wire extension cords for appliances with three-prong plugs.
• Never cut off the third (round or U-shaped) prong which is a safety feature designed to prevent the risk of shock or electrocution.
• In locations where furniture may be pushed against the extension cord where the cord joins to the plug, use a special “angle extension cord” which are available for use in these instances.
• Watch for any signs of the cord fraying or other indication of possible short circuiting.
• Don’t place extension cords under rugs or carpets or in any areas where they could be damaged by the weight of heavy furniture or foot traffic.
• Check the plug and the body of the extension cord while the cord is in use. If the cord feels “hot” or if there is a softening of the plastic, this is a warning that the cord should be replaced.
• Don’t use staples or nails to attach extension cords to a baseboard or to other surface. This could damage the cords and create a fire or shock hazard.
• Don’t overload light-duty extension cords by plugging in appliances which draw a total of more watts than the rating of the cord.
• Use special, heavy-duty extension cords for high wattage appliances, such as air conditioners, portable electric heaters, and freezers, or when an extension cord must be used on a permanent basis.
• When using outdoor tools and appliances, use only extension cords approved and labeled for outdoor use.

(Revised 9/2018)