PUBLIC SAFETY GUILDLINES
FOR
EXTENSION CORD SAFETY

We use extension cords almost every day both at work and at home. These are very useful devices, but they can present a fire or shock hazard when either worn out or used improperly.

> In February 1999, the Consumer Product Safety Commission issued a bulletin (CPSC Warns Consumers about Faulty Extension Cords, Power Strips and Surge Protectors) which indicated that since 1994 there had been 2 million of these devices involved in 25 recalls. Most of the recalled devices are imported, and contain undersized wires, reversed polarity, poor solder joints, and other workmanship problems which create a risk of fire, electric shock, or electrocution. In 1996, electrical cords and plugs were involved in about 7,100 fires resulting in 120 deaths, or about 32 percent of all deaths associated with residential electrical system fires. Several thousand people are treated in emergency rooms annually for injuries associated with extension cords.

This is an extremely serious problem because:

- Many recalled devices are still in service, since most people are not aware of the recalls.

- Additional faulty devices that have never been recalled are probably in service.

- It is often impossible to identify recalled devices since most of the identifying markings are on the packaging, which is discarded.

- There is no amperage marking on many of the extension cords, making it likely that they will be overloaded.

Even properly made cords can be hazardous if misused, but the potential for fire or electrocution is increased when defects exist. The public needs to be educated about the seriousness of extension cord hazards and how to avoid them.

- Buy medium or heavy-duty extension cords, and avoid bargain brands.

- Read all information and warnings on the package and safety label.

- Always verify that the cord contains a certification label from an independent testing lab such as UL or ETL on the package and on the product.

- Note the maximum amperage marked on the packaging, and don't connect loads that exceed 75% of this value. Do not assume a "standard rating" based on wire size. The manufacturer may de-rate heavy-duty cords, cords longer than 50 feet, or cords with integral switches. If you are unsure of a cord rating, assume that it is 10 amps if 50 feet or less, and 7 amps if over 50 feet long.

- Be sure that the plug is polarized (one prong is wider than the other), or is a three-prong grounded type, and never defeat these features. Do not use two-prong adapters with a three-prong plug. Find an outlet that accepts the polarized or grounded plug.

- Coiled cords can present a fire hazard. Always uncoil cords completely, and never double them up or cover them during use.

- Damaged cords present both fire and electric shock hazard. Immediately discard any cord or outlet strip that shows signs of damage or feels hot to the touch during use. Never repair a damaged cord.

- Contact with live prongs can result in electrocution. Use care when inserting or removing plugs.

- To prevent fire hazard, never install extension cords in a permanent fashion, or inside ceilings, floors, or walls. Use extension cords only for temporary purposes, and disconnect them when not in use.

- Cords used outdoors or in damp areas must be designated for outdoor use, and should be connected to an outlet that is protected by a Ground Fault Circuit Interrupter (GFCI).

- Extension cords used on construction sites must be inspected periodically for proper grounding conductor integrity, in accordance with OSHA regulations, or they must be protected by a GFCI.

Extension cords must be treated with care and checked regularly for damage or deterioration. The cord itself should *never* be *pulled* to disconnect it from an electrical source; remove it by the plug. They should not be placed under rugs or furniture and should never be strung through doorways, windows, walls, ceilings, or floors. Damaged cords present a potential fire or shock hazard and should be destroyed and replaced immediately.

An extension cord should never be used as a substitute for permanent wiring. They should not be fastened to a building or structure, even though staples are sold for this purpose at many hardware stores. Avoid plugging two cords together to make a longer one. It's best to use one cord in a continuous length from the receptacle to the appliance or tool. Extension cords that are either connected together or are too long will reduce operating voltage and operating efficiency of tools or appliances and may cause motor damage.

Extension cords are convenient devices we often take for granted in our everyday activities, but which need proper care and attention. Use good housekeeping practices at home and at work, to keep extension cords from being a tripping hazards or becoming damaged. Inspect them regularly for wear and replace defective units.