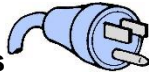# FIRE PREVENTION

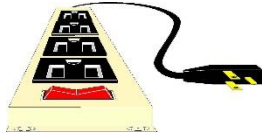# Electrical/Power Outlet Safety

Extension Cords

Electrical outlets are a premium commodity in facilities that were built before the increased power demands of the modern home or workplace. Unfortunately, this causes individuals to improvise "quick fixes", such as using extension cords in place of permanent wiring. The unsafe conditions that result, are marked by devastating fires costing many lives and millions of dollars in damages.

Extension cords are designed by the manufacturers for temporary service only. Permanent use is not acceptable. "Temporary" means seasonal use or short periods of hours to weeks. Examples of temporary use include holiday decorations, a piece of equipment set up for a week, or using the appliance for a lecture period. An extension cord is considered "in use" if it is plugged in, even though the equipment is not turned on.

IF extension cords are used, they are allowed only as a temporary condition. Before using an extension cord, please review the following guidelines:

- **All extension cords must be UL approved.**
- Fabricated (home-made or shop-made) extension cords should NOT be used.
- Select extension cords that are rated to handle the power requirements of the equipment. If the wire thickness of the extension cord is smaller than the wire thickness of the equipment cord, the extension cord is probably an inappropriate choice.
- Adapters that go from three-prong to two-prong plugs eliminate the protection that the manufacturer provided by installing electrical grounding in the equipment design. Use of the adapters increases the risk of electrical shock to the user.
- Check all electrical cords and plugs to make sure they are in good condition, without splices, tape, sharply bent or pinched.
- Make sure 3-prong plugs are not altered and that the ground prong is not removed.
- Electrical cords should never run through walls, ceiling, doors, under rugs or across traffic lanes.
- Never use more than one extension cord in any connection.

Multi-Outlet Power Strips

Multi-outlet power strips are often found on the floor or unattached to work surfaces, many multi-outlet power strips have a fragile internal connection that can be damaged by repeated movement or jarring. Fires have resulted when this connection is damaged, so it is important that the strips be above the floor and mounted to a fixed surface, such as a wall or cabinet.

Multi-outlet power strips are an acceptable substitute for extension cords if they are used sensibly. The following guidelines will help you make the best and safest choice for your use.

Guidelines for Appropriate Use of Power Strips	
Examples of Appropriate Use of Power Strips:	Power Strips May NOT be Used For:
Computers	Coffee Pots or mug warmers
Printers & Computer Peripherals	Hot pots, crock pots or hot plates
Fax machines	Refrigerators or Freezers
Televisions, VCRs	Microwave, toasters or toaster ovens
Overhead projectors	Photocopiers
Electric fans	Portable Heaters
Radios	ANY other appliance with a high current (amperage) draw

Guidelines for the Appropriate Selection of Power Strips

- The safest type of power strip will have a fuse or reset button to prevent power overloads.
- Multi-outlet assemblies with built in surge protection are the preferred strip for computer usage.
- It is easy to exceed the capacity of the power strip and the circuit, so use some caution when adding multiple appliances to the strip.
- Do not use adapters or extension cords between the strip and the outlet.
- Never plug one power strip into a second power strip or into an extension cord.
- Periodically inspect the condition of the power strip, including the cord and plug, test the reset button, and make sure all plugs are firmly inserted into the outlets. If the power strip feels hot, or if a defect is found, discard the power strip and replace with a new one.
- Extension cords are allowed only for temporary installations (hours - days). Multi-outlet strips are built to be used for extended periods, and can be a safe substitute for an extension cord if installed properly.