



# *City of Poway Fire Department*

## Electrical Fire Hazards: Extension cords & Power Strips

### **Definitions:**

- Extension Cord: A flexible cord of any length that has a male connector on one end and a female connector on the other, and no built-in surge protection.
- Power Strip: A device with a flexible cord that has one male connector on one end of the cord and a housing containing one or more female receptacles on the other end **without built-in surge protection.**
- Multi-outlet adapter: A housing of several female connectors without a cord or built-in surge protection.
- Surge Protector: A device with a flexible cord that has one male connector on one end of the cord and a housing containing one or more female receptacles on the other end **with built-in surge protection.**

### **Extension Cords:**

- Extension cords create a fire hazard by resistance heating (the inability of the cord to pass all of the electricity needed to power the appliance) and arcing at damaged or frayed sections. The Uniform Fire Code restricts the use of extension cords to portable appliances while in immediate use and its use shall be temporary. The Uniform Fire Code also states “Extension cords shall not be used as a substitute for permanent wiring”

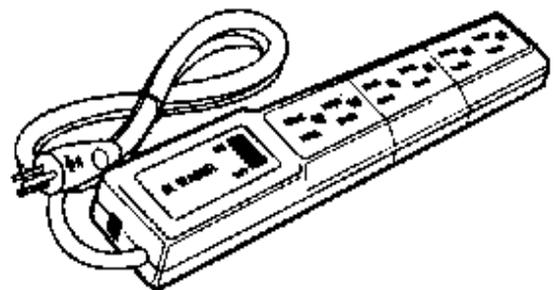
### **Multi-Outlet Adapter:**

- Multi-outlet adapters create a fire hazard by overloading electrical circuits. Use of multi-outlet adapters are prohibited by the Uniform Fire Code.

### **Power Strips/Surge Protector:**

- Power strips must be of the type to provide “surge protection”. Surge protectors are designed to trap excessive spikes in voltage. The internal trapping device called the Metal Oxide Varistor (MOV) accomplishes this by diverting the excess current. The MOV will eventually burnout and the power strip will need to be replaced. Use the following check list prior to purchasing a power strip:

- ✓ Must be UL listed and approved
- ✓ Cord length must be six-feet or less
- ✓ Must not have more than six receptacles.
- ✓ Purchase power strips that have an indicator light and an internal circuit breaker.
- ✓ Each power strip must be plugged directly into a wall receptacle.
- ✓ One power strip cannot be plugged into another (piggy backing) to create a longer cord.



- ✓ Must have a polarized plug (one blade larger than the other) or a three-prong grounded plug.