

# Residential Electrical Safety Information Sheet

Electrical fires are one of the leading types of home fires, especially in manufactured homes. By following some simple rules on electrical safety you can reduce the likelihood of an electrical fire in your home.

## Prevent electrical fires

Studies of electrical fires in homes show that many problems are associated with improper installation of electrical devices by do-it-yourselfers. Common errors that can lead to fires include:

- **Improperly rated switches or receptacles** and loose connections. Both can lead to overheating and arcing.
- **The wrong size fuse or placing a penny behind a fuse** when there's no spare. The fuse is a safety device designed to limit the electricity carried by the circuit to a safe level.
- **Mixing electricity and water.** All electrical devices installed outdoors should be specially designed for outdoor use. Outdoor receptacles, as well as those in kitchens, bathrooms or anywhere near water should be the ground fault circuit interrupting (GFCI) type.

## Use electrical devices safely

- **Light bulbs**, especially halogens, get very hot and can ignite combustible materials that are too close to the bulbs.
- **Clothing or towels** should never be placed atop a lampshade.
- **Table lamps** should not be used without a shade where they might fall onto a bed or sofa.
- **Too high a wattage bulb** can cause a light fixture to overheat and start a fire; most light fixtures are labeled with the brightest bulb that can be safely used in that fixture.

- **Extension cords should be rated for the power needed** by the connected device. Extension cords should never be used as a long-term solution for another receptacle.
- **Extension cords must never be run inside walls or under rugs** or furniture; they can get warm and must be able to dissipate this heat or they can start a fire.

## Correct electrical problems

The insulation on electrical cords can become damaged by wear, flexing or age. **Do not use any cord that is stiff or cracked.** Some clues that you may have an electrical problem are:

- **Flickering lights.** If the lights dim every time you turn on an appliance, that circuit is overloaded or has a loose connection.
- **Sparks.** If sparks appear when you insert or remove a plug, it could be a loose connection.
- **Warm electrical cord.** If an electrical cord is warm to the touch, the cord is underrated or defective.
- **Frequently blown fuses or broken circuits.** A fuse or circuit breaker that keeps tripping is an important warning sign of problems.
- **Frequent bulb burnout.** A light bulb that burns out frequently is a sign that the bulb is too high a wattage for the fixture.

### Questions?

Contact the Fire Prevention Division  
at 952-563-8933  
or Fire Marshal Gene Dugal  
at 952-563-8967.