



May 2020

Electrical Tips for Homeowners

The National Fire Protection Agency (NFPA) states the three leading causes of residential fires are cooking, heating, and other electrical fires. Electricity plays a big role in our lives, powering virtually everything in our homes and businesses, even most gas furnaces and ranges need electricity to operate.

While it is one of our greatest resources, it is a resource that demands we use it properly and safely. To help prevent a fire or electrical shock in your home, here are a few recommendations.

- Only use electrical equipment and appliances that have been tested by a third-party independent testing laboratory such as UL, CSA, TUV, MET, or others. Be aware that a CE approval which means European Conformity, is not a testing laboratory approval.
- Don't overload circuit breakers. Given common load calculations, the electrical code will allow about 13 outlets on a 20 amp circuit. An outlet is anything from a receptacle to a light fixture. Given that you should only use 80% of the 20 amp breaker capacity (16 amps) you should pay attention to the load you have connected to each circuit breaker.
- Avoid the use of one receptacle for multiple items such as computers, printers, stereo equipment, etc. If several items must be plugged in to a single receptacle, use an approved power strip with internal overcurrent protection.
- Never use extension cords as permanent wiring. Avoid running extension cords across doorways, or under rugs, never set anything on top of an extension cord.
- Keep check on plug and cord appliances, replace any cracked or frayed cords.
- If an appliance feels hot to the touch, smokes, or gives off a strange odor, and it normally doesn't, unplug it and have it serviced or replaced.
- Most homes built in the 1980s and later have GFCI protected outlets in kitchens, bathrooms, garages and other outdoor areas. This protection must be maintained to

minimize the risk from electrical shock or worse. If you change an outlet in these locations (or circuit breaker) make sure it is GFCI protected.

- In homes with small children receptacles should have plastic safety covers or be of the tamper resistant type.
- Only use light bulbs that are of the correct wattage for the light fixture to reduce the chance of overheating.
- Make sure you have a working smoke detector on every level of your home.
- Always keep a portable fire extinguisher in a designated location for fires, never use water on an electrical fire.

I hope this information has been useful, always exercise caution, and extreme vigilance when dealing with electricity and electrical appliances. We often take electrical safety for granted, that is when we are most vulnerable to the risk.

Mark Mitchell CBO, MCP
Chief Building Official
mmitchell@peachtreecornersga.gov
City of Peachtree Corners, GA.