



## Arc Fault Circuit Interrupters

Over the last thirty years, our homes have been dramatically transformed by electrical devices. However, many homes are overburdened by today's electrical demands, putting them at greater risk of arc faults and arc induced fires.

An arc fault is a dangerous electrical problem caused by damaged, overheated, or stressed electrical wiring or devices.

In the United States, home electrical problems cause more than 53,800 fires each year, resulting in more than 450 deaths, 1,400 injuries and more than \$1.4 billion in property damage. Arcing faults are one of the major causes of these fires.

The solution to this problem is an advanced electrical safety device known as an arc fault circuit interrupter, or AFCI.

Arc fault circuit interrupters, or AFCIs, are devices that replace standard circuit breakers in your home's electrical service panel.

AFCIs provide a higher level of electrical fire protection, detecting hazardous arcing conditions traditional breakers were not designed to recognize, and shutting down the electricity before a fire can start.

The CPSC estimates that AFCIs could prevent more than 50 percent of the electrical fires that occur every year.

While AFCIs were previously only required to protect bedroom circuits, the 2008 National Electrical Code now requires this technology to be installed in additional areas of newly-constructed homes, including dining rooms and living rooms.

Though the new safety requirements are limited to new home construction, older homes with aging wiring systems can benefit from the added protection of AFCIs.

Depending on the size of a given home, the cost impact for installing AFCI protection is \$140 - \$350.

### Installation and Maintenance Tips

- Combination-type AFCIs should only be installed by a qualified, licensed electrician.
- Test AFCIs once a month to make sure they are in proper working condition.
- To test: Push the test button. The breaker handle should go to the middle or OFF position. To reset: Move the breaker handle to the OFF position and then to the ON position.
- A defective AFCI circuit breaker should always be replaced by a professional.

Visit [www.holidaysafety.org](http://www.holidaysafety.org) for more tips and tools to help keep you safe this season.