



CPSC Fact Sheet

Preventing Home Fires: Arc Fault Circuit Interrupters (AFCIs)

Problems in home wiring, like arcing and sparking, can cause fires in the home.

Arc fault circuit interrupters or AFCIs, can provide enhanced protection from fires resulting from these unsafe home wiring conditions.

Typical household fuses and circuit breakers do not respond to early arcing and sparking conditions in home wiring. By the time a fuse or circuit breaker opens a circuit to defuse these conditions, a fire may already have begun.

AFCIs vs. GFCIs

AFCIs should not be confused with ground fault circuit interrupters or GFCIs. The popular GFCI devices are designed to provide protection from the serious consequences of electric shock.

While both AFCIs and GFCIs are important safety devices, they have different functions. AFCIs are intended to address fire hazards; GFCIs address shock hazards. Combination devices include both AFCI and GFCI protection in one unit.

Should You Install AFCIs?

You may want to consider adding AFCI protection for both new and existing homes. Older homes with ordinary circuit breakers especially may benefit from the added protection against the arcing faults that can occur in aging wiring systems.

For more information about AFCIs, contact an electrical supply store, an electrician, or the manufacturer of the circuit breakers already installed in your home. Sometimes these components can be replaced with AFCIs in the existing electrical panel box.

Be sure to have a qualified electrician install AFCIs; do not attempt this work yourself. The installation involves working within electrical panel boxes that are usually electrically live, even with the main circuit breakers turned off.