

## **Arc-Fault Circuit Interrupters (AFCIs)**

**Consider installing AFCIs in your home's electrical panel box.** Problems in home wiring, like arcing and sparking, are associated with more than 40,000 home fires each year. The Consumer Product Safety Commission reports that these fires claim over 350 lives and injure 1400 victims annually. An arc-fault circuit interrupter (AFCI) provides enhanced protection from fires resulting from these unsafe home wiring conditions. They detect abnormal arcing in a circuit (which can cause overheating and lead to an electrical fire) and de-energize the circuit when an arc fault is detected. AFCIs are recognized for their effectiveness and now required by the National Electric Code® for bedroom circuits in new construction. Older homes with ordinary circuit breakers especially may benefit from the added protection against the arcing faults that can occur in aging wire systems. Be certain to have a qualified electrician install AFCIs. This installation involved working within electrical panel boxes that are usually live; even with the main circuit breakers turned off.

AFCIs should not be confused with ground-fault circuit interrupters (GFCI). While both AFCIs and GFCIs are important safety devices, they have different functions. The popular GFCI devices are designed to protect people against severe or fatal electric shock, not fire hazards. GFCIs can protect against some electrical fires by detecting faults to ground but cannot detect hazardous "across-the-line" arcing faults that can cause fires. The National Electric Code® requires GFCI protection for receptacles located outdoors, in bathrooms, garages, kitchens, crawl spaces and unfinished basements; and at certain locations such as near swimming pools.