

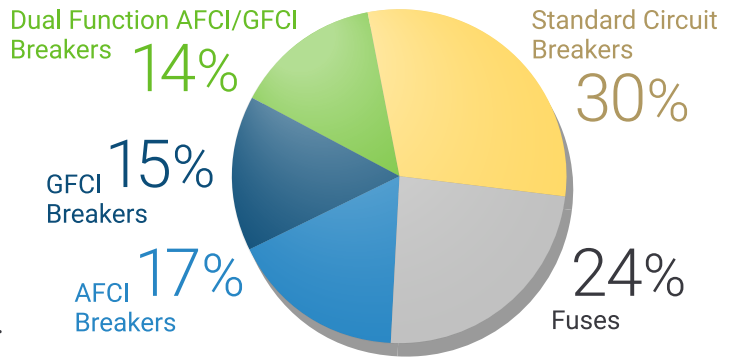
In 2023, The Electrical Safety Foundation surveyed electrical contractors with experience in electrical contracting, design, engineering, and planning to gain an understanding of the performance of safety devices required in the National Electrical Code. This survey was conducted in Colorado, Georgia, Kentucky, Minnesota, Ohio, Texas, and Washington with a focus on Arc-Fault Circuit Interrupters (AFCI) and Ground-Fault Circuit Interrupters (GFCI).

## Key Findings

**58%** ...of electrical contractor service calls involved **tripped breakers or fuses**.

**100%** ...of contractors saw **evidence of dangerous arcing** when responding to an AFCI related service call.

Percent of tripped breakers by breaker type or fuse



## Tripping Causes

The majority of circuit breaker trips were caused by the device working as intended. **These trips prevented a serious problem that could have resulted in loss of life or property.**



AFCI Breaker

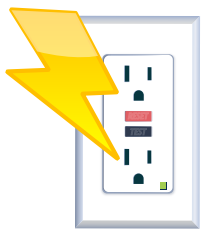


GFCI Breaker



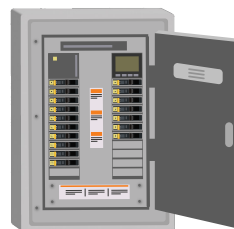
Dual Function Breaker

## Common Mistakes Encountered While Checking up on Tripped Overcurrent Protection



### Inadequate Circuit Protection

Only 37% of contractor service calls involved circuits with the correct type of protection installed.



### Overloaded Circuits

There is a need for **additional circuits** to prevent **overloaded circuits**.



### Wiring Issues

Contractors frequently encountered **low quality wires, poorly maintained wiring, and inadequate wiring.**



### Surge Protection

Contractors mentioned the need for surge protective devices to protect electronics.