Help protect your home, possessions, and family.

A guide to your Square D[™] electrical distribution system

Make the most of your energy

Schneider Electric

Understanding your home's electrical distribution system

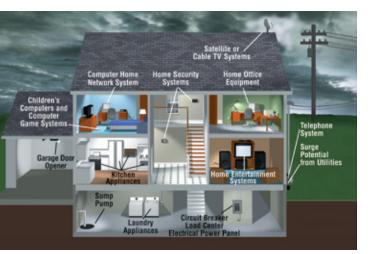
As one of the most important systems in your home, your electrical system is essential to your daily life.

At the heart of this system is the load center, an electrical panel that includes circuit breakers, which help protect you and your home 24 hours a day from electrical shock, fire, and other damage that could be caused by overloads or short circuits. In the event of an electrical fault, the circuit breakers automatically "trip" to cut off the potentially dangerous current.

HomeLine[™] Load centers provide a smart choice for value and performance-minded homeowners with a variety of value-added features and accessories.

QO load centers offer premium features, including QO breakers with exclusive Visi-Trip[™] indicators that provide a clear and instant identification of a tripped circuit breaker. This helps to reduce maintenance calls because you can easily spot and reset a tripped circuit and reduce the chance that other circuits will be turned off accidentally.

Other devices, such as ground and arc fault interrupters (GFIs/AFIs) and secondary surge arresters, can be installed in your electrical panel to reduce the chance of electrical shock or damage to appliance and electronic equipment.



Load centers and circuit breakers are designed to distribute power from your electrical utility to many loads (circuits) throughout your home. The wiring within your walls rely on this system for 24-hour electrical service. Your appliances and electronic equipment rely on surge protection and arresters to help protect them.



Added electrical protection for your home.

The following items may be installed in your HomeLine or QO load center:

Help protect against harmful electrical shocks caused by ground faults.

GFIs are required in parts of the home where electricity could possibly come into contact with water, such as bathrooms, kitchens, patios, and garages.

GFI circuit breakers combine ground fault protection with the functions of a standard circuit breaker. Located in the load center, these breakers can provide ground fault protection for circuits with receptacles, as well as for larger loads such as hot tubs and spas. GFI receptacles combine ground fault protection with a plug outlet. These devices can provide protection to items plugged into the outlet as well as protect other plug outlets that have been wired directly from the GFI receptacle.



To test: Push the test button located on the Square D GFI circuit breaker or receptacle. If it trips, it's working properly. If the device fails the test procedure, consult your builder's warranty. Remember to reset the GFI breaker by first moving the handle to the OFF position and then returning to the ON position.

Help protect against fires caused by arc faults.

According to the National Fire Protection Association[®], electrical arcing is the source of ignition in more than 30,000 fires each year. These fires cause hundreds of deaths and injuries and more than \$750 million in direct property damage.

AFI and AFCI circuit breakers, such as the Square D combination arc-fault circuit interruption circuit breakers (CAFI), protect against threatening arc faults caused by worn or damaged electrical cords and wires. AFI circuit breakers can be added to your Square D load center to provide protection to any location in the home, effectively stopping the flow of current during most arcing events before a residential fire can start.



To test: To test the Square D AFI, turn OFF all loads downstream of the circuit breaker. Make sure power to the electrical panel is ON and the circuit breaker handle is in the ON position. Push the green test button on the circuit breaker. If the circuit breaker is operating correctly, it will trip, and the handle will move to the tripped (center) position. Remember to reset the AFI circuit breaker by moving the handle to the OFF position and then back to the ON position.