

# Two-Year Warranty for Plumbing, Electrical, Heating, Ventilation and Air Conditioning Delivery Systems

The performance standards for the components of a home subject to a warranty of two years are discussed below. These components include electrical delivery systems, plumbing delivery systems, and heating, ventilation and air conditioning systems.

## Electrical Delivery Systems

The electrical delivery system consists of wiring, panels, breakers, fuses, switches and receptacle outlets. Electrical systems are designed to carry a specified maximum load. Installing or placing too many electrical fixtures or appliances on an electrical circuit will overload the circuit and create a safety hazard. Electrical systems shall be used only for the purposes for which they were designed. All electrical wiring and electrical components shall be installed and function according to the National Electrical Code (NEC).

## Electrical Wiring

The performance standards apply only to electrical wiring and components located on the home's side of the meter. The local utility company is responsible for any defects that may occur at or beyond the meter. All wiring installed in the home shall be in compliance with the NEC.

## Electrical Panel, Breakers and Fuses

Sufficient electrical panels and breakers shall be installed to provide adequate electrical service during normal use. Electrical panels and breakers shall be clearly marked to indicate the area serviced by that breaker (see Figure 24). Circuit breakers shall not trip repeatedly during normal use. The builder/remodeler is not responsible for electrical service interruptions, tripped circuit breakers or blown fuses caused by external conditions such as power surges and circuit overloads.

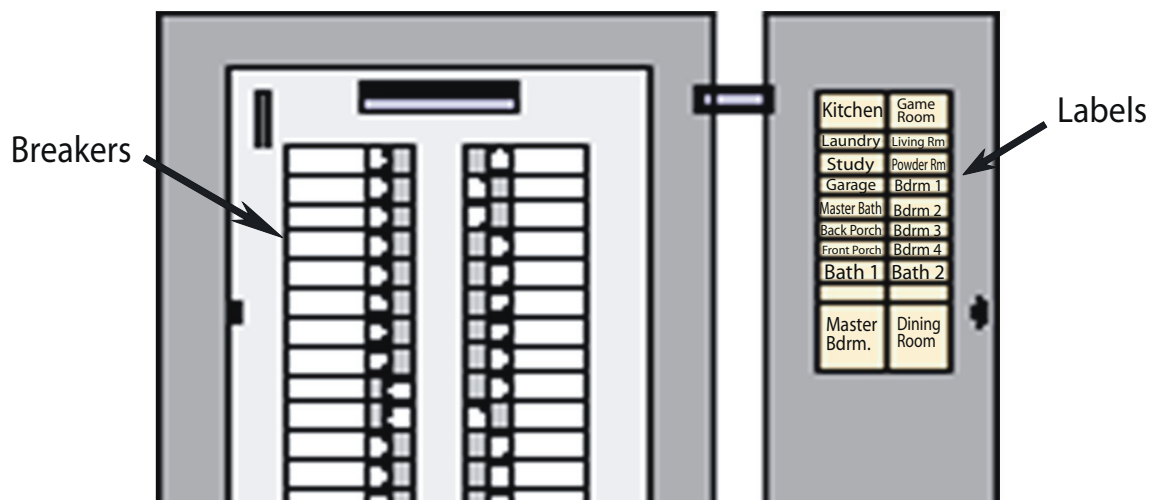


FIGURE 24: TYPICAL ELECTRICAL BREAKER PANEL

Misusing or overloading circuits may cause a safety hazard and should be avoided. For example, plugging too many electrical devices into an outlet may cause a circuit to become overloaded. Any modifications to the existing electrical system should be performed by a licensed electrician.

## Electric Outlets with Ground Fault Interrupters

Certain electrical outlets must have Ground Fault Interrupters (GFI). GFIs are designed to provide extra safety and are usually installed in bathrooms, kitchens, outdoors and other areas in close proximity to water. GFIs are designed to trip easily in the event of an electrical short. They have a button that can be pushed to test and to reset the GFI (see Figure 25). Replacing a GFI plug with a regular plug will cause a safety hazard. GFIs shall be installed and operated according to the manufacturer's specifications. GFIs are not designed to provide service to large electrical appliances that require an uninterrupted flow of electricity such as refrigerators and freezers. All GFI outlets shall be identified.

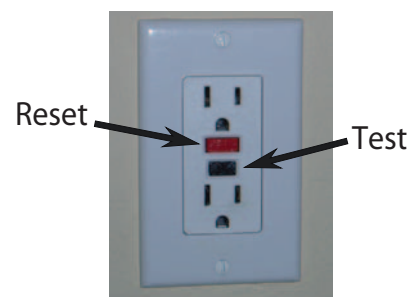


FIGURE 25: GFI OUTLET

## Fixtures, Outlets, Doorbells and Switches

Electrical fixtures, including outlets, doorbells and switches, shall be installed and operated according to the manufacturer's specifications under normal circumstances. The electrical components shall not cause lights to dim, flicker or burn out excessively.

## Wiring and Outlets for Cable Television, Telephone, Ethernet or Other Services

Wiring and outlets for cable television, telephone, ethernet or other services in your home shall be installed and operated according to the manufacturer's and service provider's specifications.

## Plumbing Delivery Systems

The plumbing delivery system consists of water and gas pipes, sewer and drain lines and fittings and valves. Plumbing systems are to be used only for the purposes for which they were designed. All plumbing components shall be installed according to the International Residential Code (IRC). (*Cosmetic defects are limited to a one-year warranty.*)

### Pipes

## (Water and Gas Pipes, Sewer and Drain Lines, Fittings and Valves)

The performance standards apply only to plumbing delivery system components located on the home's side of the meter. The local water supply company is responsible for any defects that may occur at or beyond the meter. Plumbing components are installed and insulated as stated in the manufacturer's specifications.

Water pressure inside the home shall not exceed 80 pounds per square inch or be less than 40 pounds per square inch. This standard assumes the water supply reaches the home at more than 40 pounds per square inch of pressure. In the event the water supplies does not provide the home with 40 pounds per square inch of pressure, the builder/remodeler cannot be held responsible for achieving the minimum standard.

The plumbing delivery system shall not leak. If a water pipe is leaking immediately shut-off the supply. Failure to do so could lead to additional damage or create a safety hazard. It is important to know the location of the water supply cut-off valves in the event of an emergency. If you smell gas, leave immediately and contact the gas company.

It is the homeowner's responsibility to prevent drain and sewage pipes from becoming clogged due to the insertion of inappropriate materials into the system, with the exception of clogs or blockage due to construction debris. Allowing a drain or sewer pipe to become clogged may cause further damage to the home.

During cold weather, it is necessary to take action to prevent exposed pipes and interior and exterior faucets from freezing. Maintain a reasonable temperature in the home during colder months to prevent pipes from freezing, especially at times when the home is vacant.

## Individual Wastewater Treatment System

Individual wastewater treatment systems, including septic systems, are designed and installed according to health and safety codes and laws. A wastewater treatment system shall be capable of properly handling normal flow of household waste in accordance with the Texas Commission on Environmental Quality requirements.

## Heating, Ventilation and Air Conditioning Delivery Systems (HVAC)

HVAC systems provide a home with a temperature and humidity control. The HVAC system shall be installed and operated according to the manufacturer's specifications. The HVAC system is designed specifically for the home. If any changes are made to the size or configuration of the home, consult a professional to evaluate the home's HVAC system requirements. The homeowner is responsible for maintenance, including changing filters, as recommended by the manufacturer.

## Refrigerant Line

A refrigerant line shall not leak. Condensation may form on a refrigerant line due to temperature variations, but such condensation is not a leak. Refrigerant lines must be insulated.

## Heating and Cooling Functions

A heating system shall be capable of heating the inside of the home to 68-degrees Fahrenheit. A cooling system shall be capable of cooling the inside of the home to 78-degrees Fahrenheit. Temperatures may vary by no more than four degrees Fahrenheit between rooms that are served by the same thermostat.

## Vents, Grills and Registers

Vents, grills and registers must be installed according to the manufacturer's specifications. They shall be attached securely to the supporting surface. They shall operate easily and smoothly when normal pressure is applied.

## Ductwork

Ductwork distributes cool and warm air throughout the home. Ductwork shall be installed, insulated and properly sealed in accordance with the manufacturer's specifications. The air-conditioning system shall be free and clear of any debris or obstruction preventing the free-flow of air.