



## **ELECTRICAL SYSTEM IN BRIEF**

Electricity travels to your home through a **service entry cable**, passes through an **electric meter**, and then enters the **service panel**.

The service panel distributes the electricity through **circuit cables** (electrical lines) that branch out, delivering electricity to receptacles and lights throughout the home.

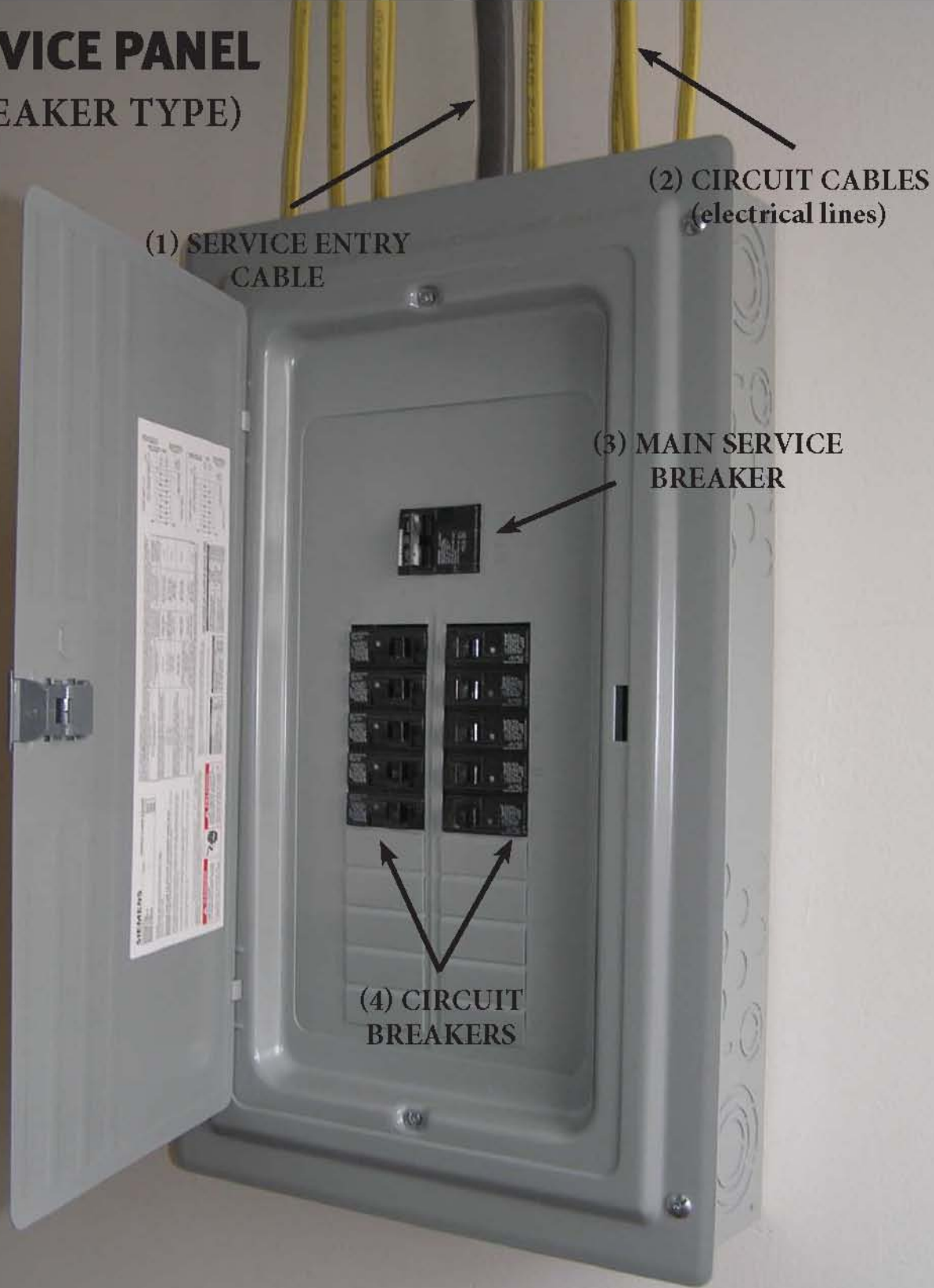
# **SERVICE PANEL**

(BREAKER TYPE/SURFACE MOUNTED)

The **Breaker type/surface mounted service panel** is the control center of the electrical system. It distributes electricity throughout the home.

- (1) **SERVICE ENTRY CABLE:** Delivers electricity to the service panel from the meter.
  
- (2) **CIRCUIT CABLES: (electrical lines);** Wires wrapped together in a plastic or metal covering. That carry electricity to receptacles and lights throughout the home.
  
- (3) **MAIN SERVICE BREAKER:** Controls the flow of electricity to the entire home. When switched to the “off” position, electricity will completely shut down.
  
- (4) **CIRCUIT BREAKERS:** Important safety devices that reduce the risk of fire hazards. Each circuit breaker protects the electrical wiring in an area of the home. A breaker will automatically trip or disconnect, shutting down the electrical power if an unsafe condition is detected in the wiring.

# SERVICE PANEL (BREAKER TYPE)



(1) SERVICE ENTRY  
CABLE

(2) CIRCUIT CABLES  
(electrical lines)

(3) MAIN SERVICE  
BREAKER

(4) CIRCUIT  
BREAKERS

SURFACE MOUNTED

## **HOT AND COLD WATER SYSTEM IN BRIEF**

Water enters the home through a **main supply line** and passes through a **water meter**. **One pipe branches off to supply a portion of the water to a water heater.**

The heated water and the remaining water from the main supply line are then piped to household fixtures (*permanently installed items , such as kitchen and bath faucets, toilets and bathtubs*)

# **GAS-FIRED WATER HEATER**

## **(CHIMNEY VENTED)**

The chimney-vented gas-fired water heater supplies heated water to the home.

(1) **GAS SHUT-OFF VALVE:** Turns the gas on or off to the water heater. *When the valve handle is pointed in the “up and down” position, the valve is on, Handle Pointed in the “Left to right” position valve is off.*

(2) **CHIMNEY VENT PIPE:** Allows dangerous gases to safely exit the home through the chimney.

(3) **HOT WATER OUTLET:** Delivers heated water to the household fixtures.

(4) **GAS LINE:** Supplies gas to the water heater from the main supply line.

(5) **GAS VALVE:** Regulates the flow of gas to the water heater.

(6) **WATER SHUT-OFF VALVE:** Turns the water on or off to the water heater.

(7) **COLD WATER INLET:** Supplies water to the heater from the main supply line.

(8) **TEMPERATURE AND PRESSURE RELIEF VALVE:** A safety device which automatically discharges hot water if an unsafe temperature or pressure exists within the water heater.

(9) **DISCHARGE PIPE:** Safely diverts hot water downward to drain level should the temperature and pressure valve discharge.

(10) **TEMPERATURE CONTROL DIAL:**  
Household water temperature can be adjusted to a safe level with the temperature control dial. *Water temperature over 125 °F can cause severe burns To check water temperature, turn on the hot water, place a thermometer in the steam, and adjust accordingly. A lower temperature setting means better energy savings and a safer home.*

(11) **DRAIN VALVE:** Drains water from the water heater.

# GAS-FIRED WATER HEATER

(CHIMNEY VENTED)

(1) GAS SHUT-OFF VALVE

(2) CHIMNEY VENT PIPE

(3) HOT WATER OUTLET

(4) GAS LINE

(5) GAS VALVE

(6) WATER SHUT-OFF VALVE

(7) COLD WATER INLET

(8) TEMPERATURE AND PRESSURE RELIEF VALVE (may also be located on top of heater)

(9) DISCHARGE PIPE

(10) TEMPERATURE CONTROL DIAL

(11) DRAIN VALVE



