

plumbing

What Those Pipes Do

If dealing with plumbing problems seems like a pain, remember that before indoor plumbing, any water used for cooking and washing had to be carried into the house by hand, and whatever wastewater remained went out the same way. And then there was the outhouse, where answering the call of nature could mean trekking outside in the rain or dark of night.

Parts of the Plumbing System

A modern household plumbing system has three basic parts: water supply pipes that distribute water (hot and cold) throughout the house; appliances, faucets, toilets, and various other plumbing fixtures that draw water; and the system that carries wastewater out of the house (the DWV, or drain-waste-vent system). Country houses draw water from underground wells, but most houses today are supplied (for a price) by city water pipes. A water meter keeps track of how much is used.

Inside the house, the main supply line splits, with one branch feeding all the cold-water pipes in the house and the other supplying water to the water heater. The hot-water line coming out of the water heater branches, paralleling cold-water lines throughout the house. The two lines supply hot and cold water to sinks, tubs, showers, dishwashers, and all other plumbing fixtures as needed. (Toilets and outside faucets don't need hot-water pipes.)

When water goes down the drain, it enters the DWV system. Part of the system actually channels the water down to the main house drain; the other part consists of pipes (called vents) that rise up out of the drainpipes to the roof. Vents allow in outside air to replace the air displaced by flowing water; otherwise, the negative pressure would suck the water out of your traps. (See "Traps & Vents," at right.)

Besides supply lines and drainpipes, gas pipes and hot-water heating pipes may also run through your house. Gas pipes are usually iron or copper, and run between the gas meter and a stove or other appliance that uses gas. (Copper tubing may also be used for gas.) Other than shutting a gas cutoff valve in an emergency, you should always call professionals to work on gas pipes. The same goes for heating pipes: Steam and scalding water can be very dangerous.

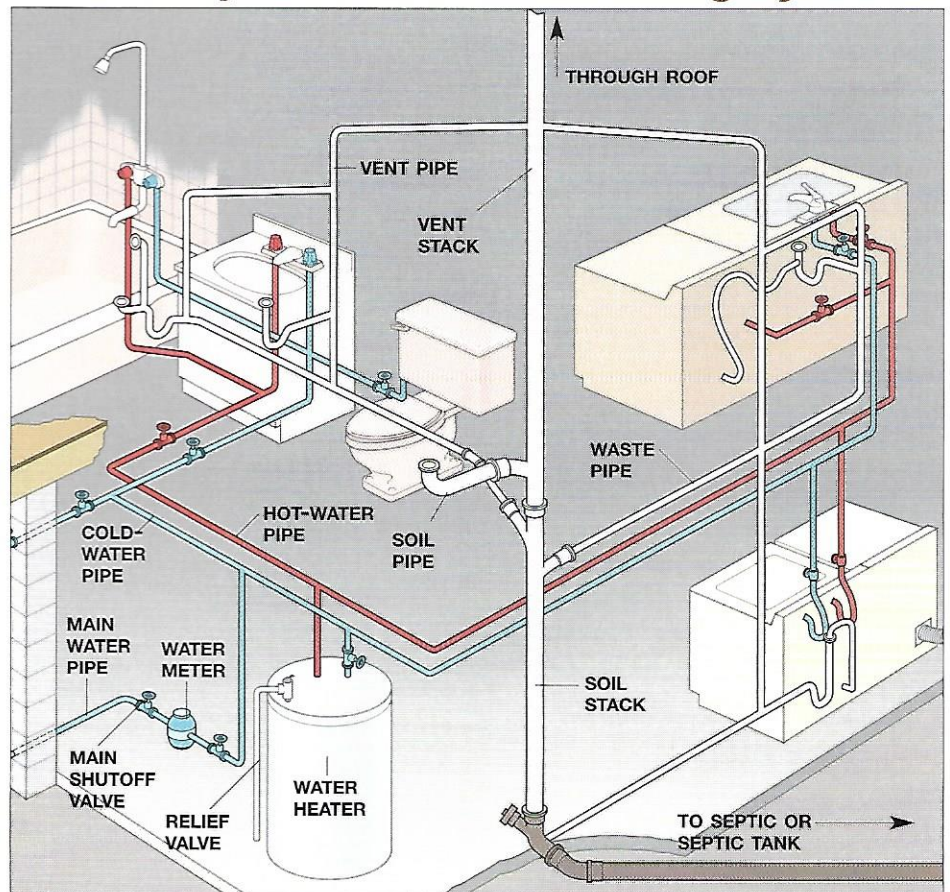
Water Flow

If you use water from a municipal system, the main shutoff valve and the water meter are located where the water-company supply line enters your house, generally along a foundation wall. The water meter keeps track of how many gallons flow into your plumbing system. Most companies meter water by CCFs. One CCF is 100 cubic feet of water, which equals 748 gallons. Most bills also list use in gallons used per day for the billing period.



Water meters are the property of the water utility. They should be called if it is leaking or not working properly.

Anatomy of the Home Plumbing System



Residential plumbing has three basic components: supply pipes that deliver water (typically copper or plastic), drainpipes that carry away waste (generally plastic), and vent pipes (also plastic) that allow the system to drain freely.