

Homeowners Guide to Plumbing

Compliments of..



Contents

Drips & Leaks	2
Clogs	3
Garbage Disposals	3
Sinks	4
Toilets	5
Tubs & Showers	6
Water Heaters	6
Water Shut-off valve	6

Drips & Leaks

Stopping or slowing down a leak (as a stop-gap measure) before a plumber can get to it can be accomplished by following these simple steps.

- (1) Turn off the water supply valve at the fixture
- (2) Tighten and secure a leaking threaded joint with a pipe wrench. If the pipe has no threads, leave it be. Let the professionals handle it.
- (2) Using the tip of a sharpened pencil, plug a very small hole and then cover the hole with duct tape, wrapping it in several layers.
- (3) Alternatively, apply sealant mixture specially formulated for leaks caused by cracks or small holes.
- (4) Repair larger holes by clamping a piece of rubber or garden hose around the pipe. Cut a length of rubber or garden hose at least two inches longer than the hole. For this, you will need at least three hose clamps.

Keep in mind that these are just temporary or stopgap measures that will help prevent water damage but in the end, you still need to hire the services of a professional plumber.

Keep in mind that pipes deliver water to the fixtures in our homes under *pressure*, so leaks or burst pipes can cause significant damage from flooding in a short period of time.

- High water usage (or water bills):

Leaking water pipes. Pipes that contain water under pressure can become corroded, develop loose fittings, or crack because of freezing, allowing a continuous loss of water until repaired. Locating a leak may be as simple as looking for wet spots along the baseboards of rooms adjacent to known plumbing pipe installation, commonly the bathrooms, kitchen, and utility rooms of a home.

- Leaking or dripping faucets. Even though a dripping faucet may not seem to waste significant amounts of water, over the course of day, each individual drop adds up to thousands and thousands of drops, or gallons and gallons of water.
- Sticking flush valves and leaking seals in toilets. These can waste a lot of water, since, like dripping faucets, the flow, although perhaps very small, is continuous.
- Listen for dripping sounds. As simple as this step may seem, it may be overlooked in a busy, noisy home. Choose a time when there is little or no activity, such as early in the morning, or late at night, when the house is very quiet.
- Look for evidence of a leak along the base board of walls near the location of your plumbing fixtures. Mildew or mold, darkened surfaces, or even puddles of water may occur below leaks. If the problem is inside the wall cavity, it may be necessary to remove the panelling, plaster, or wallboard to correct it.
- Look under vanities and sinks for drips or similar evidence noted in the previous step. Use a flashlight to follow the path of exposed pipes, looking for droplets of water that will accumulate at the lower section before dropping off, and run your fingertips along these pipes to feel for wetness.
- Listen for noises from your commodes, to determine if they are *running* at unusual intervals, when no one has recently flushed them. When there is a seal leak in the *water closet*, the tank will drain slowly over a period of time, until the water level drops sufficiently for the float valve to open and replenish it.
- Check your water meter. Municipal water systems use a meter to measure the amount of water used, and by turning off all faucets and appliances that consume water, the flow to your home will cease. Locate your water meter, read the amount displayed, note it, then wait an hour or two, and reread it to see if water has gone through it when none was being used in your home. Very small leaks will not appear to move the meter over a short period of time, so these will be harder to detect using this method.
- Watch for wet places in the lawn where underground pipes bring water to your home.
- Notice mildew, dampness, or other evidence of a leak in the interior of your home, especially near walls of rooms with plumbing fixtures.
- Insulating exposed water pipes will help protect them from freezing, which can cause pipes to burst, since water expands when it freezes, putting tremendous pressure on pipes. Pipes also may *sweat* when cold water passes through them in warmer interior airspaces in the home, and this water condensing on the surface of pipes may drip, causing moisture problems to appear where no leak exists.
- Insulating hot water pipes will reduce the energy used to furnish you with hot water at your sink or bath tub, especially in a situation where a long run of pipe is required to supply it.
- Learn the location of your water supply shutoff, and also individual supply valves so that leaks can be temporarily stopped when they are discovered, and the system can be shut down to make repairs. Commodes, vanities, and kitchen sinks usually have a valve for each supply pipe, and these are normally located on the adjacent wall

underneath the fixture.

- If your home has a basement, look up at the ceiling above the bathroom to examine floor boards for plumbing leaks

Clogs

Clearing drain clogs are no fun and it's a lot better to prevent them from occurring in the first place if possible. Initiate preventive measures to avoid clogs and slow drains from occurring.

- For your tub or shower, get hair traps or screen to filter hair and soap scum and keep them from going down the drain.
- Never pour coffee grounds and grease down your kitchen drain. The fatty deposits will jell over time, stick to your pipes where it acts as a magnet attracting other particles, and eventually clog your pipes.
- Periodically inspect your drains; This will ensure that your pipes are free from deposits that might turn into clog.

Garbage Disposals

A garbage disposal is a simple device, essentially a motor that drives rotating impellers that in turn grind up food waste so it can be flushed down the sink drain. Simple problems are easy to fix; with a serious problem, you're usually better off replacing the entire unit.

When using a disposal, be sure to flush it with plenty of water—two gallons per minute. If something has been put in the disposal that shouldn't have been, including metal, rubber, glass objects, or fibrous food waste such as artichokes and corn husks, shells, or large whole bones, use tongs or pliers to pull the material out. Never use your hand.

TIPS WITH A GARBAGE DISPOSAL

- Do not put your hand into the disposer.
- Do not put bones, metal or stringy material down garbage disposer.
- Keep hard objects out. This includes plastic, rubber & metal as well as bones & gristle unless your owner's manual says you can put them down.
- Use a strong flow of cold water when grinding waste. The cold will help harden grease so that it doesn't clog the disposer or drain line. The water flow will make sure the ground up waste passes into the sewer & doesn't clog your drain lines.
- Leave the water running for a minute after you finish grinding.
Do not use chemical drain cleaners in the disposer.
Do not pour any grease down any drain. Pour leftover grease into cans and throw them in the garbage.

When using a garbage disposal, run plenty of cold water to flush food particles that stick to the sides of the pipe.

Don't empty coffee grounds into the sink.

Never dump chemicals like paint or paint thinner down the drain.

Use strainers in all bathroom drains to intercept hair before it enters the drain.

Sinks and Cabinets

Sinks and cabinets are exposed to moisture and humidity daily and are often overlooked. Inspect regularly under the sink and on the countertop above it. Be sure and inspect the areas that may be hard to see or access between the wall and the fixture. Repair any drip in the trap as it may suggest drain problems. Look around the sink, slow draining pipes may indicate a blocked drain.

Tips For Buying A Water Heater

The type of fuel to be used is a determining factor in which unit to choose— Gas or Electric. If you already have gas hook ups, a gas generated water heater will be your best bet. These generally save on energy costs. However, electric units can be run anywhere and if this is your primary fuel source, an electric water heater should be purchased. Costs to convert the fuel source from electric to gas may be prohibitive so it is best to use whichever fuel source is already installed.

Before determining the capacity of the water heater, look at your family's needs. Also, think about the future and whether your family will increase. Purchasing a water heater is an investment and future growth should be looked at to get one that will suit you for many years. Determine how often hot water is used in your home to decide whether you have high or regular demand for hot water. For a family of two, choose a water heater that has at least a thirty gallon capacity or up to a fifty gallon capacity if hot water is used often. Families of up to four should consider a fifty to eighty gallon tank, and families with five or more should start at fifty gallons and may go to one hundred twenty if there is a high demand.

The number of gallons the water heater can heat per hour is called the recovery rate. This is also a consideration in buying a water heater. If you have several people in your home who use hot water at the same time, a higher recovery will be beneficial. However, if you have a more typical hot water use pattern, a lower recover rate can be chosen. Water heaters with lower capacities and lower recovery rates will be less expensive.

Water heaters come in a variety of dimensions. Ensure you have the proper space available to physically install it in the designated area. You will not usually have to sacrifice capacity to get a water heater with smaller dimensions. Every water heater is tagged with an energy efficiency rating. Choose the most efficient rating you can afford as this will help save on energy costs.

Water heaters are not difficult to purchase but there are a few things that need to be considered. Determine the capacity, size, fuel source, and energy efficiency needed for your home and family.

WATER HEATER MAINTENANCE

Keeping sediment from accumulating in your water heater is a good way of ensuring proper function from the device. Simply opening the drain valve located at the bottom of your water heater and allowing the water to drain can greatly increase the life of your water heater. Performing this easy task twice a year can lead to a more efficient, longer lasting water heater. A water heater leak in the bottom or a leaking drain on the hot water heater can both be worsened by not performing this simple task.