WATER LEAKS: WHAT YOU SHOULD KNOW

Imagine that the dot inside these brackets [•] is the only hole in your home's water system. By its size alone, that hole may not seem worth tracking down. But that hole can waste more than 4,000 gallons of fresh water each month — enough water to take a shower every day for more than half a year!

Consider how important water is for our families, pets and environment, and you see that even tiny holes deserve immediate attention. That’s why we developed this simple water leak detection kit. It’s designed to help you find and repair water leaks — even the tiny ones.

GETTING READY

Use the checklists on the following pages to help direct your search for some fairly common — and a few not-so-common — water leaks.

How can you be sure your inspection will be as thorough as possible? The checklists cover three areas: common indoor leaks, not-so-common indoor leaks, and outdoor leaks. If you investigate the leak possibilities in the order shown, you’ll uncover the greatest potential for savings in the first few places you look. It’s a good idea to have the following items with you as you begin your work:

- Flashlight
- Leak Detection Tablets (included with this kit) or Food Coloring
- Shut-Off Valve Tag (located to the left)

SPOT YOUR SHUT-OFF VALVE NOW

Your main shut-off valve controls all of the water coming into your house. Everyone in your home should know the location of this valve, and how to turn it off. In case of an emergency such as a burst pipe, fast action could prevent costly damage from flooding.

If you don’t know where this valve is located, it’s important that you find out. Normally, it’s near the water meter. If your meter is outside the house, find the place where the water service line enters the building. The shut-off valve is likely to be close by. Common locations are in the basement, under the kitchen sink, near the meter box or at the pressure regulator (if required). We have included an identification tag to cut out and place on your main shut-off valve. (See flap on left).

After finding the valve, turn it to make sure it isn’t stuck. Water valves are generally closed by turning the handle clockwise. If a valve does not turn easily, do not force it or it might break. Rather, you may want to have the valve repaired so that it will work when you need it.

NOW YOU’RE READY TO BEGIN!

When opening the valve to turn the water back on, open it fully, then close it just a quarter of a turn to make closing the valve easier the next time. You should also check every water fixture shut-off valve periodically, and consider operating the main and individual valves annually.
to replace the washer yourself. You may need a adjustable wrench, a standard-blade screwdriver, and a Phillips screwdriver for older plumbing fixtures. It may be more economical to replace or repair the part if it is worn out.

Changing a washer

Before you start, turn off the water supply to the faucet by closing the fixture’s shut-off valve. Most kitchen and bathroom faucets have shut-off valves under the sink. Turn the valve clockwise until it’s tight. This shuts off the water to the sink only, and does not affect the water service for any other part of the house.

For common indoor leaks

Check the faucet and shut-off valve. If it is leaking or not working, you may need to replace it. If the faucet is not leaking, you may need to change the washer (after you match it with a new one). Be certain that the replacement washer is the same size as the worn one (if the worn washer was the correct size). If you need help, bring the worn washer to your plumbing supply or hardware store, and the store representative can help you match it with a new one.

Common indoor leaks

THE LEAKY TOILET

The toilet flushes make up about 25 percent of the average household use. Accounting for the majority of indoor water waste, toilet leaks are often caused by worn or damaged parts in the toilet flush tank.

Some of these leaks will empty directly into the sewer line without leaving any clues. Even so, you can check for these leaks. Common causes include:

- Float arm problems
  - Remove the lid from the top of the flush tank. See if the overflow pipe and the plunger ball are working properly. Do this by flushing the toilet, watching the tank mechanism and listening. You should hear the water flow shut off.
  - If the water does not shut off, check the water level. If it has risen above the overflow pipe, gently bend the float arm down and flush again.
  - You may need to replace the float arm if it is broken or not working properly.

- A tiny pinhole
  - A pinhole opening below the overflow pipe’s water line could produce an invisible leak. Check for this by shining a flashlight down into the overflow pipe. If you see running water, you have a leak that should be repaired.

Defective plunger ball (flapper valve)

This is often a silent leak which causes the tank to continually drain and refill. Check for a worn or improperly seated plunger ball (flapper valve) by dropping one of the dye-tracing tablets (included with this kit), or a few drops of food coloring, into the tank. Do this slowly. If a leak exists, the dye-colored water will seep into the bowl in about five minutes. If running water from the flapper ball (flapper valve) may need to be replaced or realigned.

NOT-SO-COMMON INDOOR LEAKS

Water dripping down the side of the tank

If the pressure release valve is stuck.

Water heater tank

The pressure valve release could be stuck. This valve is most often found behind the top of the tank, and is usually a large brass fitting threaded into the side of the water heater. Water property, water will be leaking from it, dripping down the side of the tank and accumulating on the floor.

Boiler

Listen for the sound of running water. If it is continuous and does not stop and start periodically, you may have a leak.

Water softener

If you have a water softener, it could be wasting water if it is not recycling properly. The cycling process, regulated by a timer, often occurs between 2 a.m. and 4 a.m. You’re likely to have a problem in this unit if you constantly hear the sound of running water.

Washing machine

If you see water on the floor near the machine, it could mean a leak. You may want to call your washing machine repair service.

Humidifier

Water accumulated beneath the unit could be a sign of a leak. If the overflow discharge is piped into a sewer or drainage line, you may not notice the leak.

Listen for running water. If it’s continuous, the float valve could be stuck.

Fire suppression systems

Many newer homes and businesses have fire suppression systems. If so, check to make sure that the sprinkler heads are tight and not leaking.

Swimming pool

The pool system’s automatic shut-off valve could be malfunctioning, causing a continuous cycle of water to be pumped in and then drained out. If the water level stays higher than normal, or the pool overflows when people are using it, your automatic shut-off valve may need your attention.

Service connecting line

If you find a soft, wet spot on your lawn or hear running water outside your house, you may have a leak in the service line to your house. Water seaks into the ground, causing the wet spot. Close the main shut-off valve. If the sound of running water continues, the outside service could be leaking.

If you haven’t found a leak after checking all of the water outlets mentioned, and the sinks, please look for a leak as you check a leak detector, a tool useful for finding water leaks. You’re also welcome to contact an American Water customer service representative for assistance. We’ll work as hard as possible to help you.