

# Leak Detection and Repair

## Facts

Studies show that dripping faucets and leaking toilets account for almost 30% of all indoor water use, more than any other fixture or appliance.

## Tips

### Read Your Water Meter

Use your water meter to check for leaks in your home. Start by turning off all faucets and water-using appliances and make sure no one uses water during the testing period. Take a reading on your water meter, wait for about 30 minutes and then take a second reading. If the dial has moved, you have a leak.

### Check for Leaky Toilets

Most people will say their toilet does not leak; there is one sure way to find out. Place a few drops of food coloring in the tank, if after 15 minutes the dye shows up in the bowl, the toilet has a leak. Leaky toilets can usually be repaired inexpensively by replacing the flapper.

- Toilets leaking cause more water waste than any other fixture in the home. Even a silent toilet leak (that's one you normally can't hear) will waste 30 or more gallons of water per day! The ones you can hear will waste much, much more.
- Such wastage can normally be attributed to a faulty water level adjustment or to a leaky flapper.
- Older toilets (installed prior to 1994) use 3.5 to 7 gallons of water per flush and as much as 20 gallons per person per day.
- Replacing an old toilet with a new model can save the typical household 7,900 to 21,700 gallons of water per year, cutting both your water and wastewater bills.
- An average of 20% of toilets leak.
- Install an ultra low-flow toilet that requires only 1.6 gallons per flush.
- To ensure optimal performance, when installing a low-flow toilet in areas with a low drainage gradient (such as basements), consider a pressurized model.
- Check toilets periodically for leaks and repair them promptly.
- Reduce the amount of water used by an older toilet by placing a one gallon plastic jug of water, or two one quart bottles, in the tank to displace toilet flows. Or you can install a "dam" that partitions off a section of the tank so it can't fill with water. These methods can save over 1,000 gallons of water per person per year. DO NOT USE BRICKS AS THEY DETERIORATE AND MAY DAMAGE INTERNAL PARTS
- Do not use the toilet as a trash can.

### **Check for Leaky Faucets**

Most faucet leaks are plainly visible as drips coming out of the faucet aerator. Occasionally, faucets may leak in other places such as the on/off handle or in the pipes below the basin. If you are unsure if your faucet is leaking you might try using your water meter to detect the leak.

Leaks should be fixed immediately since they can quickly develop into a serious break. Temporary repairs are only temporary, and wrapping the pipe usually fails. If you find a fixture that is leaking, turn off the shutoff valve for that device.

## **Estimated faucet leakage rates**

### **Drips**

60 drops per minute = 192 gallons per month

90 drops per minute = 310 gallons per month

120 drops per minute = 429 gallons per month

### **Stream**

3" stream = 1,095 gallons per month

6" stream = 2,190 gallons per month

9" stream = 3,290 gallons per month

The next place to check for leaks is your sink and bathtub faucets. Replacing the rubber O-ring or washer inside the valve can usually repair dripping faucets.