

Pressure Reducing Valves or PRV

What is a Pressure Reducing Valve?

Pressure reducing valves are devices that work directly to reduce the pressure of water flowing into the home. When water flows through the PRV, it is met with resistance within the device, which in turn lowers the water pressure to the desired level. Typically PRV's are located where the water service enters the home, or near the shut off valve.

Why is a Pressure Reducing Valve Important?

Every fixture, appliance, and pipe in your home was built to withstand a certain level of water pressure. Shower heads, toilets, faucets, appliances, water heaters, and pipe joints can all wear down and eventually malfunction if they are subjected to high pressure.

Aside from potential catastrophic leaks and failures, having high water pressure in the home can *potentially* get expensive. Typical day-to-day water related functions could be consuming more water than necessary due to high water pressure, in turn increasing your monthly water consumption and bill.

How High Pressure Affects Water Heaters

When water heats up, it expands. Under normal water pressure conditions, water heaters are equipped to handle the expansion. When water pressure is too high, the tank may become too full. If the tank is too full, and the water in the tank heats up and expands, there is nowhere for the water to go. Which could lead to leaks, or worse, a burst water tank.

How Water High Pressure Affects Toilets and Fixtures

High water pressure *may* cause your toilets to run constantly. High pressure can also cause damage to the flushing components within the tank, and are the main culprit causing feed-hose rupture. Other fixtures, like faucets and showerheads may begin leaking. Leaking, spitting, and banging noises (air hammer) when you turn the fixture off are all symptoms of high water pressure.

Pressure Reducing Valves are required by plumbing code*.



Examples of Pressure Reducing Valves



*When delivered water pressure exceeds 80 pounds per square inch (PSI)