

WHAT IS THIS?



PRV FACT SHEET

IMPORTANT FACTS ABOUT PRESSURE REGULATING VALVES (PRVs)

WHO needs a PRV? Anyone who owns a house should have a pressure regulating valve. If water pressure fluctuates, the valve will not only help protect your fixtures and appliances, but will also help reduce water use.

WHAT is a PRV? It acts as a buffer between high pressure water mains and a resident's supply line. The water main pressure is reduced by a PRV to a safe level for home appliances and home plumbing systems. A PRV is a relatively inexpensive plumbing item and is installed on most (but not all) homes in the Cave Creek and Desert Hills water systems.

WHEN do you need a PRV? If the pressure is above 80 PSI you need to install a PRV or have your existing PRV checked by a licensed plumber. You need a PRV if you experience banging in home water pipes (known as "water hammer") when flushing the toilet or using water. You can check your water pressure by attaching a pressure gauge to a garden hose. High pressure may potentially cause leaks in pipes, water heaters, and irrigation systems, and may cause premature wear in appliances.

WHERE should the PRV be located? A PRV should be installed between the water meter and the house inlet. Water that enters the PRV from the water main is constricted within the PRV's valve body and is then sent through the inner chamber. Even if the water pressure fluctuates, the PRV maintains a relatively constant flow of water at a functional pressure.

WHY have a PRV? When fixtures such as a faucet, washing machine, dishwasher, or spigot are opened, water flows out driven by the pipe's water pressure. The speed of water flow from the opened tap is determined by the amount of pressure in the system at that time. The higher the pressure the stronger the water force. Water pressure beyond normal requirements for fixtures and appliances can cause damage. Plumbing code requires water pressure past a residence's meter not to exceed 80 psi.

IMPORTANT INFORMATION FROM ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY GUIDELINES AND THE TOWN OF CAVE CREEK UTILITIES DEPARTMENT

Maximum pressures of as much as 100 PSI can be allowed in small, low lying areas not subject to high flow rates and surge pressures. Areas of excessively high or low pressure require system division into multiple pressure zones, or installation of pressure reducing and pressure relief valves.

All water mains and service lines should be designed for a minimum normal internal working pressure of 150 psi plus appropriate allowances for water hammer. In cases where greater than the above noted maximum pressures are required for effective operation, all elements of the system shall be designed accordingly.

Responsibility for pressure reduction and PRV maintenance is the responsibility of the customer.

Refer to your manufacturer's recommendations for regular maintenance checks of your PRV.



T O W N O F C A V E C R E E K U T I L I T I E S D E P A R T M E N T