Frequently Asked Questions: Pressure-Reducing Valves (PRVs)

What is a Pressure-Reducing Valve (PRV)?

A Pressure-Reducing Valve (PRV) is a plumbing device installed on a home's main water line that automatically lowers incoming water pressure to a safe, consistent level for the house's plumbing system.

Why does my home have a PRV?

Homes in higher-pressure areas often require a PRV to prevent excessively high water pressure from damaging plumbing fixtures, appliances, or pipes. PRVs protect your home from leaks, pipe stress, and premature wear on appliances such as water heaters, dishwashers, and washing machines.

How do I know if I have a PRV?

PRVs are typically located:

- Near where the main water line enters your home
- In a basement, crawl space, garage, or mechanical room

They are usually bell-shaped or dome-shaped and installed in-line with the main water pipe. If you are unsure, a licensed plumber can help identify whether your home has one.

Photo: Example PRV device

Why should I check my PRV now?

If your home relied on a PRV prior to recent system pressure changes, it is important to ensure it is functioning properly before any upcoming pressure adjustments. A malfunctioning PRV can cause:

- Low water pressure
- Fluctuating pressure
- Excessively high pressure inside the home
- Plumbing leaks or appliance damage

Routine inspection can help prevent plumbing issues.

What are signs my PRV may not be working properly?

Common signs include:

- Noticeable drop in household water pressure
- Sudden pressure fluctuations
- Banging or hammering pipes
- Leaks in plumbing fixtures
- Water pressure that is consistently too high or too low

If you experience these issues, consider contacting a licensed plumber.

Can I adjust my PRV myself?

Some PRVs have an adjustment screw; however, improper adjustment can create plumbing issues or code violations. If adjustment is needed, it is recommended that a qualified plumbing professional perform the work.

How Long will a PRV Last?

The life expectancy of a PRV is commonly in the range of 10 to 15 years. However, a PRV may malfunction earlier or still properly function beyond 15 years if regularly maintained.

PRVs often have long lives because a malfunctioning PRV is typically cleaned or repaired via an inexpensive service kit rather than replaced. Design-wise, it is similar to the kitchen faucet because dirt or foreign matter on the seating area can cause problems.

Don’t water utilities like City of Kirkland Water Utility control water pressures?

While the City of Kirkland operates and maintains pumps and system valves to provide service to specific areas, pressures at individual homes are determined more by elevation and geographic location. The City does not have a way to regulate or adjust pressure for individual customers. This is why it is important that a PRV at an individual customer’s home helps regulate and protect the homeowner’s plumbing system.

Will the City replace or repair my PRV?

PRVs are typically private plumbing devices and are the responsibility of homeowners to maintain, repair, or replace.

Why are PRVs so prevalent in the Highlands?

Because water pressure within the Highlands neighborhood is largely influenced by the uneven geography of the terrain, water pressure in the distribution mains can have a large range. Pressures above 80 PSI can damage fixtures such as ice makers and hot water heaters, creating a need to protect these devices and the internal plumbing of the home.

References:

https://www.watts.com/resources/references-tools/waterpressurereducingvalvesfaq#1

https://www.rainbowmwd.ca.gov/water-pressure-regulator-faqs

https://www.elizabethton.org/departments/utilities/water_resources/ami_project/pressure_reducing_valve-_faq.php