

Thermal Expansion

January 1, 2020

Thermal Expansion occurs when cold water is heated in the hot water heater. As the water heats, it expands and increases the pressure of a closed system.

The South Rim Water Department installs backflow prevention devices (Dual Check) in each water meter connection they find lacking one. You may have one installed on your water system. This device prevents water from flowing backwards into the public water line once it has entered a private system. These devices protect the water quality by preventing backflow. A dual check at the water meter creates a closed system on the customer side.

The International Plumbing Code 607.3.2 states, a water system with a backflow device, that creates a closed system, must be equipped with a device for controlling pressure.

The best protection is the installation of an expansion chamber. This chamber has a bladder in it that expands as the pressure increases and prevents the water pressure from developing in the first place.

We encourage all South Rim water customers to be in compliance with IPC regarding thermal expansion.

