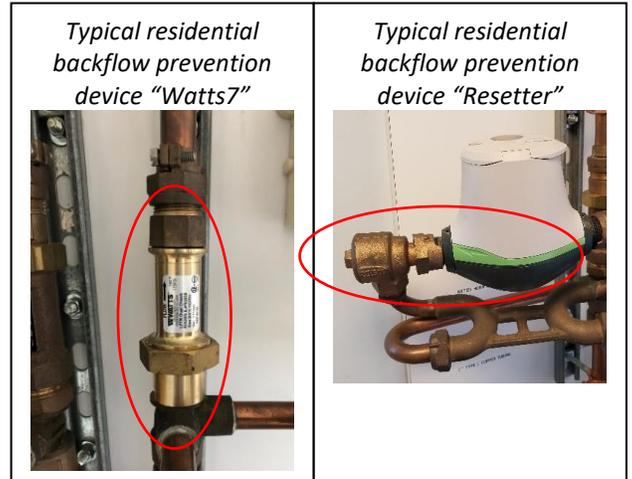


**Backflow Prevention, Water Meter Installation, and Thermal Expansion  
For Residential Water Customers**

**Backflow Prevention & Meter Installation**

The Kennebec Water District requires all customers to install an appropriate backflow prevention device. This important device prevents water from flowing backwards from a home’s plumbing back into the water system, reducing the possibility of introducing contamination into the public water system. A backflow prevention device is a one-way valve that prevents a reversal of water flow in the pipe.

As a residential customer, you may receive free installation of a backflow preventer. At the time of water meter replacement and at no additional labor costs, Kennebec Water District staff can install the backflow prevention device in your residential plumbing. The total cost for the device is approximately \$90 and will be reflected on your next water bill. You may also employ a plumber to install the backflow device or do the work yourself. In some situations, the existing plumbing hinders our staff’s ability to install the device, and customers may either hire a licensed plumber or modify the plumbing themselves.



**Thermal Expansion Control**

The Kennebec Water District encourages you to consider thermal expansion in your plumbing. Water expands when heated. This is referred to as *thermal expansion*. If there is no outlet (a closed system) for this expanded water, the water pressure will increase. The installation of a backflow prevention device creates this kind of closed system, which is necessary for preventing water from being forced back into (and potentially contaminating) the public distribution network, but it should also be managed with a thermal expansion tank. The Maine Internal Plumbing Code requires that thermal expansion be addressed in plumbing systems.

If not controlled, thermal expansion may damage or reduce the life of plumbing fixtures and appliances. Thermal expansion may be evident by dripping or spurting from water faucets or intermittent discharge from the pressure relief valve on the hot water heater. Thermal Expansion can easily be controlled by use of a properly sized thermal expansion tank installed on the cold-water supply line. You are encouraged to have a licensed plumber inspect your plumbing system to determine if thermal expansion is a concern and what steps you should take.

