
PIKE WATER, INC

"SERVING THE PIKE COUNTY AREA SINCE 1972"

Mr Pike Water.

My plumber came to install my new hot water tank which heats over 100 gallons of . He told me I needed to get a THERMAL EXPANSION TANK since I am on the Pike Water System. Why is that tank necessary?

Mr Customer.

Your plumber is correct. The Pike Water System became a closed system when it installed backflow preventers on every meter several years ago. That means that after water becomes heated and the pressure increases it back towards the meter, it cannot go into the main line. It must seek another way of release.

Usually this means the hot water tank pop-off valve will begin leaking. If you have a hot water tank which stores up to 100 gallons and the water to a very hot temperature, the pop-off valve would constantly be leaking. To prevent this situation, we recommend that you install a small thermal expansion tank to hold the expanding water. See illustration above.

Contact your plumber for more details.

Thermal expansion

Water when heated expands. If the inlet is not blocked by a check valve, pressure reducing valve, or other device, the increase in volume simply travels back into the source. If the inlet is blocked, this increase in volume will cause an increase in pressure, sometimes to dangerous levels.

(Temperature-pressure) valve relieves this pressure by discharging some liquid. A thermal expansion tank can be installed in the line that will absorb the increase in volume, preventing the relief valve from discharging unnecessarily.

These are strictly an emergency measure and should be replaced every 2 years. At 180 degrees Fahrenheit, the temperature that the T&P valve opens, damage can occur to your system and you may have a voided warranty on your water heater.

The proper installation of backflow preventers can block the thermal expansion leading to operation of the T&P Valve.

