

CROSS CONNECTION - THERMAL EXPANSION

With the installation of a meter being set by Patoka Lake Regional Water & Sewer District, we must take this opportunity to inform you of a potential hazard that exists in relation to a dual check valve installed at your meter and your water heater.

Water heaters are installed with a temperature and pressure valve (T & P) which is designed to relieve excessive water temperature or pressure. Also aiding in the control of excessive heat and pressure is a condition known as thermal expansion, which allows extremely hot water to backflow into water main lines, mixing with the cold water and dissipating the heat.

However, when a backflow prevention device (dual check valve) is installed on a household water service line, the water cannot go back out into the water system. This leaves the T & P valve as the only release route for the overheated water.

If a water heater thermostat becomes defective, allowing the water temperature to increase to more than 212 degrees, and the T & P valve fails, your domestic water can become “superheated”. Superheated water can cause water heaters to explode and endanger lives and or property or could allow scalding steam to be released from facets upon personal use.

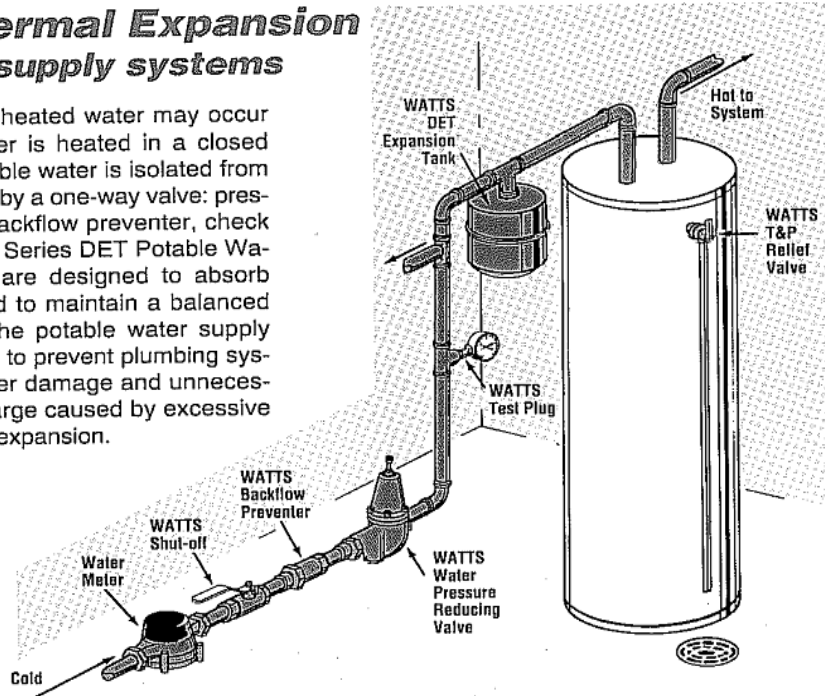
Patoka Lake Regional Water & Sewer District recommends that you inspect your T & P valve periodically. Also a licensed plumber can inspect, repair or replace your T & P valve to ensure your safety.

Thermal expansion chambers and pressure relief toilet ball cock assemblies can provide additional protections.

Should you have any questions or desire more information, please feel free to contact the Cross-Connection Department at 678-5781 or Toll Free 800-313-5589.

Control Thermal Expansion in hot water supply systems

Thermal expansion of heated water may occur wherever potable water is heated in a closed system (when the potable water is isolated from the public water supply by a one-way valve: pressure reducing valve, backflow preventer, check valve, etc.). The Watts Series DET Potable Water Expansion Tanks are designed to absorb thermal expansion and to maintain a balanced pressure throughout the potable water supply system. They are used to prevent plumbing system and/or water heater damage and unnecessary relief valve discharge caused by excessive pressure from thermal expansion.



Other Watts products for control of Thermal Expansion

“Watts® Governor 80” Ball Cock and Relief Valve

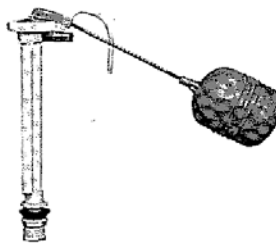
A triple purpose product: toilet tank ball cock fill valve, anti-siphon backflow preventer and thermal expansion relief valve in one assembly. Listed by IAPMO and CSA certified for anti-siphon ball cocks, FDA approved under CFR-21-177-2600, ANSI/ASSE No. 1002. It will govern and limit the domestic water system preset static pressure to 80 psi, as required by plumbing codes. Eliminates the need for thermal expansion tanks, auxiliary relief valves and their discharge lines.

Max. operating temperature 110°F

Standard heights are 10", 11½" or 12½"

For additional information, send for F-80.

The answer to thermal expansion problems



Water Pressure Test Gauge

Features:
• Resettable high pressure indicator



No. 276H300

No. 530

Calibrated Pressure Relief Valve

Calibrated adjustment feature for setting valve to relief pressure. Adjustable range 50-175 lbs.

- All brass construction and stainless steel spring
- Ideally suited as a by-pass thermal expansion relief valve

No.	Size	Height	Width	Weight
53	½", ¾"	2⅞"	1¾"	½ lb.
530	½", ¾"	3"	1⅝"	⅝ lb.



The Watts Expansion Team: A full range of solutions; DET Expansion Tank, Watts® Governor 80, 530 Pressure Relief Valve.

For additional information, send for ES-530.