

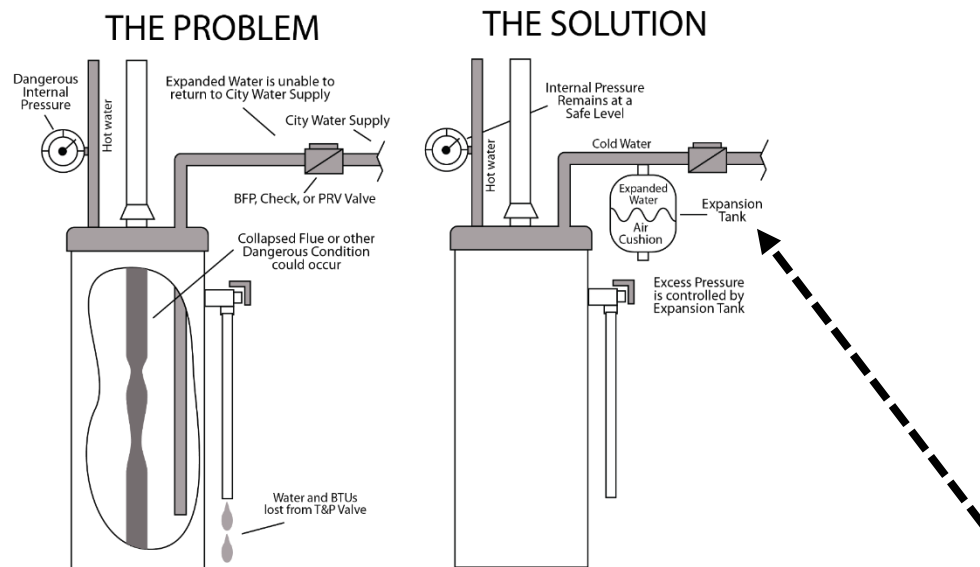
Risk of Thermal Expansion

Backflow can occur anytime a fire hydrant opens, or a water leak occurs on the main line. Because backflow incidents are unpredictable, the International Plumbing Code and Utah Amendments require all public water systems to install backflow prevention devices called dual checks on each water meter connection in the water system. This device prevents water from flowing backward into the public water main after it has entered a private system. You likely have a dual check already installed on your water meter by the Grand Water & Sewer Service Agency (GWSSA).

Thermal expansion occurs when cold water is heated in a residential water heater and the water expands so much it has nowhere to go in a closed water system. Thermal expansion over time can damage your dishwasher, washing machine, and other water connections and appliances in your home. The International Plumbing Code, as adopted by the State of Utah and DOPL requires a **thermal expansion tank** to be installed on every water heater, regardless of the existence of dual check backflow preventers.

International Plumbing Code 607.3 Thermal Expansion Control:

Where a storage water heater is supplied with cold water that passes through a check valve, pressure reducing valve or backflow preventer, a thermal expansion control device shall be connected to the water heater cold water supply pipe at a point that is downstream of all check valves, pressure reducing valves and backflow preventers. Thermal expansion tanks shall be sized in accordance with the tank manufacturer's instructions and shall be sized such that the pressure in the water distribution system shall not exceed that required by Section 604.8.



A **thermal expansion tank** is a small tank that contains a bladder to expand as the pressure increases to prevent damage to the water heater, appliances, and other plumbing devices on your private water system. We encourage all GWSSA customers to check their water heater for a **thermal expansion tank** and get one installed in compliance with the plumbing code to prevent damage to your home.

Sincerely,

Dana Van Horn
Grand Water & Sewer Service Agency
435-259-8121