

Q: Are there any building codes with requirements for resolving thermal expansion problems?

A: Yes. Section 607.3.2 of the Standard Plumbing Code states that if a system with a water heater has a backflow prevention device installed and as a result thermal expansion causes an increase in pressure, a device must be fitted to limit the pressure to 80 pounds per square inch (psi) or less.

Q: Where can I get this device?

A: Thermal expansion solutions are available at Ace Hardware, True Value stores, or your local plumbing and hardware vendor.

If you have further questions regarding the thermal expansion requirements and alternatives check the Cobb County Water System website at:

www.cobbwater.org/backflow.htm

or contact:

**Cobb County Water System
Backflow Prevention Supervisor
at (770) 528-5394 or (770) 528-8446**



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Cobb County Water System

Alternatives to

Thermal Expansion

A Water Conservative Approach



Cobb County...Expect the Best!

660 S Cobb Dr
Marietta, GA 30060
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Thermal Expansion

In order to maintain the excellent water quality we have here in Cobb, the Cobb County Water System recommends the use of a thermal expansion tank in conjunction with the backflow prevention device creating a closed system. The thermal expansion tank is a simple and efficient method to ensure that your system is safe.



Our goal is to be good stewards of our greatest natural resource, water. The thermal expansion tank is just one way you can help us conserve water and preserve its quality.

Thermal expansion tanks can be installed by your local plumber, or there are do-it-yourself kits

available from your local hardware store. These kits come with a full set of simple instructions, and many come with all the tools needed for installation.

If the do-it-yourself installation is not right for you, simply call your local plumber for assistance. A licensed plumber should be able to take care of your thermal expansion needs. This will enable worry-free installation of your device, according to code.



Frequently Asked Questions:

Q: What is Thermal Expansion?

A: Thermal expansion refers to the characteristic of water to expand when it is heated. Unlike air, which can be compressed, water grows in volume, and must be accommodated.

Q: Why is Thermal Expansion occurring?

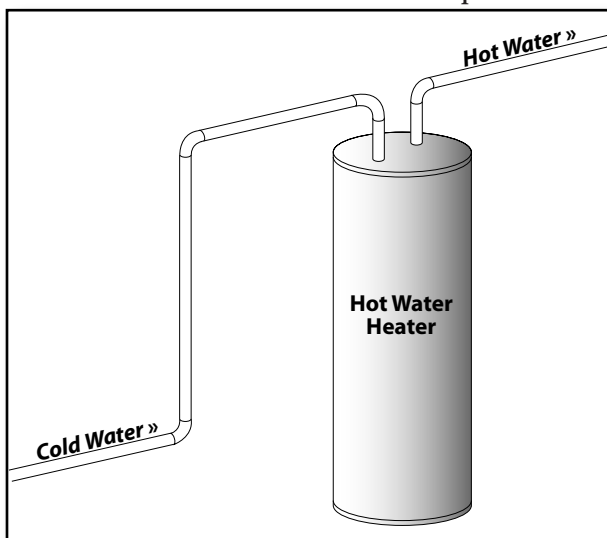
A: In a water heater, thermal expansion can create more pressure than the system can handle. When unchecked, this pressure can result in expensive leaks, as well as damage to the water heater, pipes, or other fixtures.

Q: When is a Thermal Expansion device necessary?

A: Thermal expansion is necessary when any of the following occurs:

- A recent water meter replacement
- A hot water heater replacement
- The construction of a new home
- When a backflow preventer is installed on the water meter or a pressure reducing valve is installed on the service line.

Water heater without an Expansion Tank



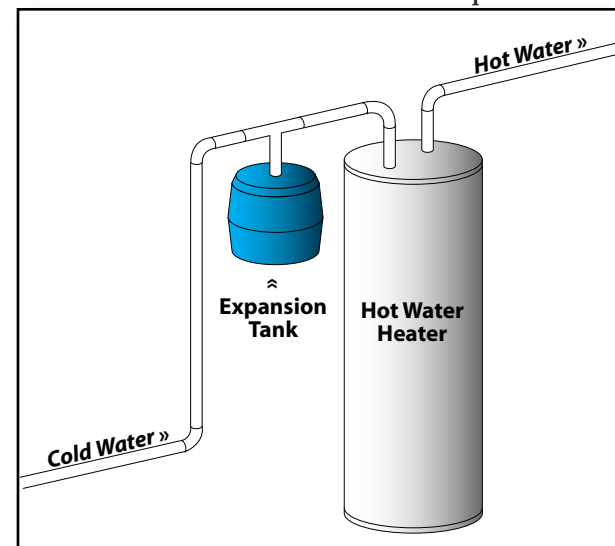
Q: How do I resolve this Thermal Expansion problem?

A: Thermal expansion can be solved by installing an expansion tank to your system adjacent to your water heater. This tank will accept overflow from your water heater, alleviating the pressure building up in the heating tank. Expansion tanks are inexpensive and the most conservation-friendly solution. There are also several other relief solutions available. Talk to your local plumbing or hardware vendor regarding these alternatives.

Q: I have a Temperature and Pressure Relief (T&P) valve installed, isn't that enough?

A: No. A T&P valve is not a thermal expansion device, because the constant dripping of water from the valve can result in a mineral deposit that can create a blockage, causing the T&P valve to become ineffective. Plumbing standards and codes require that thermal expansion be properly addressed.

Water heater with an Expansion Tank



The expansion tank's size, color, and position may vary. Tanks are commonly installed in a low or high upright position.