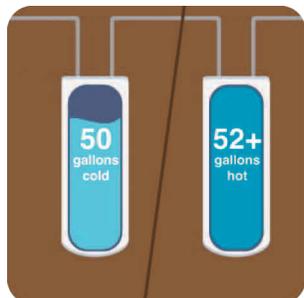


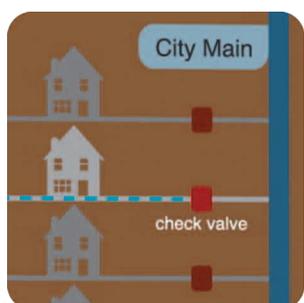


HotWater101:

Installing a Thermal Expansion Tank



Water expands when heated. A 50 gallon tank of cold water becomes about 52 gallons or more when the water is hot.



In the past, this extra gallon or two made it's way back in to the city's water supply every time the water heater ran. But changes in plumbing regulations required that Backflow Preventers, or Check Valves be added to homes to keep the water in your home from possibly contaminating the public water supply.



When the water expands now, it has no place to go. Which greatly increases the pressure in the water pipes, damaging plumbing, appliances, and water heaters. **Almost all homes need a Thermal Expansion Tank to protect the plumbing system.**



Drips from the Temperature and Pressure Relief Valve are usually caused by (1) water pressure too high, (2) lack of Thermal Expansion Tank.

Never cap or plug the Temperature and Pressure Relief Valve discharge pipe: *Explosion Hazard*



HotWater101:

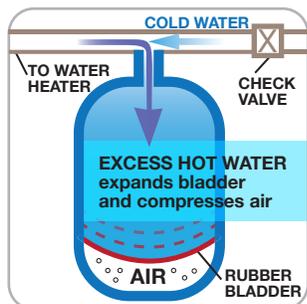
Installing a Thermal Expansion Tank



To install a Thermal Expansion Tank, first determine the water pressure in your home. Use a pressure gauge with a recording hand, and check the pressure for a 24-hour period.



If the water pressure is greater than 80 PSI, install a Pressure Reducing Valve. The recommended water pressure is between 50 and 60 PSI.



Thermal Expansion Tanks contain an air bladder which is pressurized with air, and expands and contracts to absorb the expanded water from the water heater.



Expansion Tanks are sized based on water heater capacity. Most residential expansion tanks are 2 or 5 gallon. A larger Expansion Tank is needed for larger water heaters. If in doubt, use the 5 gallon Expansion Tank. If the tank is too small, it won't work.

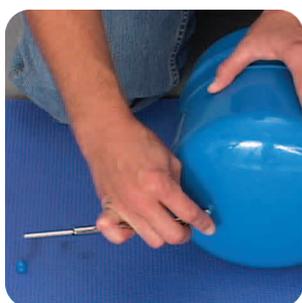


HotWater101:

Installing a Thermal Expansion Tank



Follow the installation instructions that came with your Thermal Expansion Tank. Connect the tank to the cold water line. Solder a T-Fitting *or use a Saddle Valve that bolts on, no soldering needed.*



Check the air pressure in the Expansion Tank using a tire gauge.



Adjust the air pressure to equal the maximum water pressure in the home. Use a hand pump - **NOT** an air compressor - or you may rupture the bladder.



Remove trapped air from the other side of the bladder by turning a hot water faucet on until a steady stream flows. An Expansion Tank can help prevent damage to pipes, appliances, and the water heater itself.

[\[View the Thermal Expansion Tank Install Video on www.Hotwater101.com\]](http://www.Hotwater101.com)