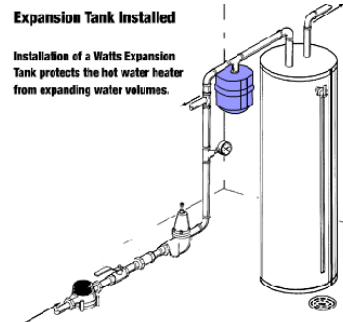


Water Heater Expansion Tank

Calvert County Plumbing Code requires homes to have a thermal expansion tank on their water heater. With the advent of meter pits which contain back-flow prevention these devices become even more important. If you do not have an expansion tank, please contact your local plumber to have one installed.



When water is heated in a closed system it expands. Water is not compressible; therefore, the additional water volume created has to go someplace. When an expansion tank is installed the excess water enters the pre-pressurized tank (figure 1).

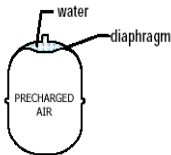


Figure 1

As the temperature and pressure reaches its maximum, the diaphragm flexes against an air cushion (air is compressible) to allow for increased water expansion (figure 2). When the system is opened again or the water cools, the water leaves the tank and returns to the system.

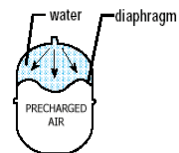


Figure 2