Interpretation:
Intermittent operation of thermal expansion shall be met by providing the water heater with, and in addition to the combination temperature relief valve, a listed pressure relief valve or a listed expansion tank for the purpose of relieving pressure greater than that of the building supply pressure.

Field Application:
Valves installed in a water supply system that do not provide for the bypass of pressure (pressure reducing valves (PRV), solenoid valves, check valves, etc.) create a closed loop system.

A listed expansion tank for the purpose of relieving excess pressure shall be installed in a closed loop system. These devices shall be installed on the building side of the check valve, back flow preventer, or other similar device and shall be sized in accordance with the manufacturer’s installation instructions.

If in doubt when a valve is listed for thermal bypass, ask for the manufacturer’s installation instructions. On valves rated for thermal bypass, the letters B/P should be stamped in the casting for easy identification.