

Technical Bulletin

Water Hammer Models Affected: All

Water hammer occurs when water, a non-compressible liquid, flowing through a pipe at a given pressure and velocity, is stopped abruptly by quick closing valves such as solenoid valves on clothes washers and dishwashers. Single lever faucets can also create these "shock waves". Consequently, damage can result to piping, water meters, storage tanks, water heaters, temperature and pressure relief valves and pressure regulator gauges.

Water hammer can be controlled by installation of water hammer arrestors, expansion tanks or pressure only relief valves in cold water make up lines at 25 to 50 pounds less than the temperature and pressure relief valve setting on the water heater. This pressure only relief valve will operate as a sacrificial valve, thereby allowing the T & P valve to perform as a safety device rather than an operating valve in the system. When a back flow preventer, or check valve, is used in the system one of the above methods of water hammer control is recommended.

If you have any questions or concerns related to water hammer, contact our Product Service & Support Department immediately at:

1-800-999-9515