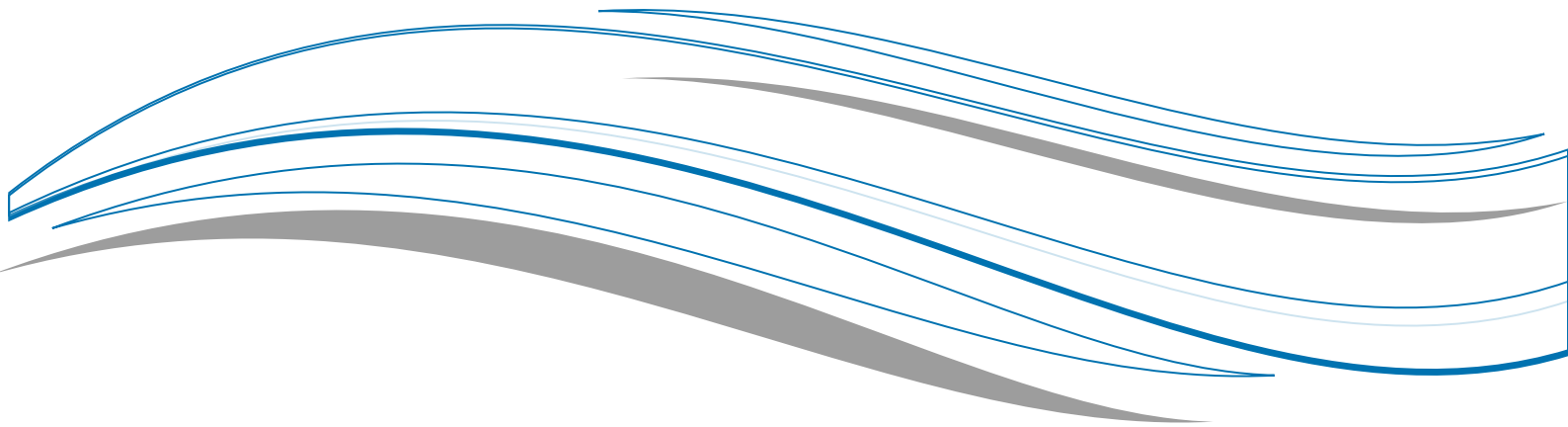


# Water Supply Terminology

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Term	Description
Airlock	Section of pipework which, due to its layout, enables a pocket of air to be trapped. This results in zero or very little flow through the pipe
Automatic Air Vent	A mechanical device with an integral float that releases air when the water level drops within it. Normally fitted at the highest point of a plumbing system to release trapped air
Backflow	A flow in a direction contrary to the intended normal direction of flow
Back Siphonage	A backflow caused by the siphonage of liquid from a cistern or appliance into the pipe feeding it, possibly leading to a contamination of the water supply
Cavitation	Localised boiling of water below 100°C caused by a reduction in pressure due to flow conditions
Check Valve	A plumbing fitting designed to allow water flow in one direction only
Cross Flow	The water flow from one side of a hot/cold water mixer to the other, possibly leading to a contamination of the water supply
Cylinder Flange	A plumbing fitting which can be fitted to a hot water cylinder to provide a dedicated hot water supply to a terminal fitting
Distributing Pipe	Any pipe (other than a flush pipe or warning pipe) conveying water from a cold water storage cistern
Double Check Valve	Two check valves in series
Downstream	Water flowing away from a given point of reference. (With the flow of water from a given point of reference)
Dynamic Pressure	The water pressure in the pipework to a fitting whilst flow is taking place
Instantaneous Electric Water Heater/Electric Shower	An appliance which heats water on demand whilst the water is passing through it, which does not compensate for variations in the pressure or temperature of the incoming water supplies and needs to be adjusted manually
Expansion Pipe	See Vent Pipe
Expansion Vessel	Generally an epoxy coated steel tank with an internal membrane or bladder. The vessel is fitted on the cold feed to an unvented hot water system to absorb the expansion created when water is heated in the cylinder or on a closed circuit heating system to absorb the expansion created when the boiler is in use
Fixed Shower Head	An over head fixed height shower head
Float Operated Valve	Valve used to control the flow of water into a cistern, the valve being controlled by the level of water in the cistern
Flow Limiter	See Flow Regulator
Flow Pressure	See Dynamic Pressure
Flow Regulator	A device with moving parts which responds to variable inlet pressures to control flow at a reasonably constant rate. These are subdivided into two types. Fixed - manufactured in a range of predetermined flow rate settings. Variable - manually adjustable to provide different flow rate settings
Flow Restrictor	A device with no moving parts which restricts flow. Unlike a flow regulator it does not keep a constant flow when the supply pressure varies
Flow Switch	Electro mechanical device that senses a flow of water which is typically used to start a pump
Handset	See Hand Shower
Hand Shower	A showerhead attached to a flexible shower hose also termed a shower handset
Hose Retainer	A device through which a shower hose passes to prevent back siphonage
Hose Retain Ring	See Hose Restraint
Hot Water Cylinder	A cylindrical closed vessel capable of containing water under pressure greater than atmospheric
Instantaneous Gas Water Heater	An appliance which heats water on demand whilst the water is passing through it
Maintained Pressure	See Dynamic Pressure
Manual Mixing Valve	A device which does not compensate for variations in the pressure or temperature of the incoming water supplies and needs to be adjusted manually
Modulating Instantaneous Gas Water Heater	An instantaneous gas water heater or boiler which is fitted with a gas control mechanism to vary the heat input and produce a relatively stable domestic hot water temperature, often termed fully modulating.
Step Modulating	Gas controlled heat being less able to maintain a constant output temperature under varying flow rate conditions
Multi Point	An instantaneous water heater which can supply water to more than one outlet, but not usually simultaneously
Negative Head	If a water cistern is below the level of the shower head a gravity flow of water will not occur. A pump with special switching can be used to obtain a flow of water
Non Return Valve	See Check Valve
Open Outlet Flow Rate	The flow rate achieved by a valve or fitting with no downstream resistance
Pressure Accumulator	vessel with an internal membrane or bladder. The vessel is generally fitted on the supply pipe to a system just after a pump-set to store a volume of water to prevent continuous running of the pump and to help absorb pressure surges
Pressure Balancing Mixing Valve	A pressure balancing compensatory shower mixer valve designed to maintain a constant shower temperature under variable inlet pressures but maintained inlet temperatures
Pressure Reducing Valve	A valve which reduces the pressure in a supply line from a high upstream pressure to a lower downstream pressure under both flow and no flow conditions
Pressure Relief Device	Safety device fitted to prevent excessive pressure building up within an electric shower heater
Running Pressure	See Dynamic Pressure
Safety Relief Valve	Spring loaded safety valve set to open at a specific point to relieve an excess build up of pressure in any water or heating system that is sealed from atmosphere
Servicing Valve	A valve for shutting off the flow of water in a pipe connected to a water fitting to facilitate the maintenance or servicing of that fitting
Shower Head	Any device designed to produce a spray pattern
Shower Hose	A flexible pipe that connects between the shower head and the shower control
Slide Bar	See Wall Bar
Solenoid Valve	An electrically operated valve giving either no flow or full flow
Strainer	A screen to prevent debris from entering a water fitting
Static Pressure	The water pressure existing at a fitting when no flow is taking place
Standing Pressure	See Static Pressure
Supply Pipe	A pipe conveying mains cold water around the building
Supply Stop Valve	A valve used to isolate the mains cold water supply within a building
Temperature and Pressure Relief Valve	A safety valve fitted to unvented water heaters that includes a spring loaded pressure relief function and a temperature sensitive probe. The valve is designed to open to protect systems from excess pressure and from the system temperature ever exceeding 100°C
Thermal Storage Hot Water System	A hot water system where cold mains pressure water is heated (instantaneously) as it passes through a heat exchanger surrounded by a stored volume of hot water
Instantaneous Thermstatic Electric Water Heater/Thermostatic Electric Shower	An appliance which heats water on demand whilst the water is passing through it, which compensates for variations in the pressure and, or, temperature of the incoming water supplies to maintain a selected blend temperature
Thermostatic Mixing Valve	A device to compensate for variations in the incoming water supplies, to maintain a selected blend temperature
Unvented Domestic Hot Water Cylinder	A plumbing system where the cold feed is taken directly from the mains to provide a high pressure hot water supply. There is no open vent to atmosphere
Upstream	Water flowing towards a given point of reference. (Against the flow of water from a given point of reference)
Vent Pipe	An uninterrupted safety pipe which allows air or expansion of water within a hot water system to escape to atmosphere
Warning Pipe	An overflow pipe positioned so that its outlet is in a conspicuous position so that the discharge can be readily seen
Water Fittings	Includes pipes, taps, ferrules, valves, cisterns, mixing valves and similar apparatus used in connection with the supply of water within a building