

Types of common valves associated with taps

<p>Compression Valve: This is the original valve design, the valve must be turned many times to allow the water to pass it, this valve has a rubber seal at the base which wears (this is when the taps starts leaking). The rubber seal may expand and contract with large volumes of hot water, this valve is not ideally suited to pressurised water systems.</p>	
<p>Quarter Turn Ceramic Disc: This is the modern replacement for the compression valve, turning the valve slides ceramic plates against each other, when the holes in the plates align then the water can pass through the valve. The valve only requires a 1/4 of a turn from on to off. These valves are more reliable than compression valves but are more susceptible to limescale build up and damage from dirt in the mains water supply.</p>	
<p>Single Lever Valve: A recent development in domestic tap is the single lever valve. This ceramic single control can alter the temperature and flow rate of the water. Typically the handle moves left to right to control the heat, up and down alters the flow rate.</p>	
<p>Progressive Valve: The most recent development in domestic tap is the progressive valve. This ceramic single control valve normally operates through 90 or 180°. From off the valve turns through cold to mixed to hot water.</p>	
<p>Non Return Valve: The non-return valve is placed between the water supply and the tap; it is used to allow the water only one way down a pipe. This is particularly useful for single flow taps; it prevents hot water, which may harbour bacteria from mixing with the cold drinking water. The construction of these valves may slightly reduce the flow of the tap. Non-return valve may be required to comply with local water bylaws. The arrow on the valve indicates the direction the water is allowed to flow in and normally points toward the tap.</p>	
<p>Isolation valve: Placed typically just before the non-return valve it is recommended isolation valves should be fit to all taps. By turning the control on the valve, the water supply can be slowed or stopped. This becomes very useful when the tap is being repaired or replaced as the water can still be used in the rest of the house, it allows means that all the hot water that may be stored does not have to be drained.</p>	