pulse flow manufacturing

Pulse Flow Principle

For many years wetback auxiliary heating has had its limitations, namely distance from the hot water cylinder, higher cost and difficulty to work with the 25mm copper required and the necessity to raise the hot water cylinder with extra pipes to combat back circulation. Provided the 'thermo-syphon' system as it is called, is installed within these parameters it works to some extent and is generally claimed as a booster.

The Pulse Flow Technology on the other hand is an **advancement** to the thermo-syphon system in that it actually pulses hot water up to 20 metres, utilizing 20mm pipe thus saving its cost, and the hot water cylinder can remain at the same level as the fire. It does this by harnessing the known 3% expansion of water when heated. It then converts this kinetic energy into a consistent forward flow through a very simple process known as the **Pulse Flow Self Pumping System**. It will considerably enhance flow rates and heating times on thermo-syphon installations.

How Does This System Work

When the water in your wetback is heated to 43 degrees C and above it starts to expand. To capture and control this 3% expansion of hot water our patented system works by introducing the specially designed one-way safety valve into the expansion zone of the water heater.

The Pulse Flow Valve is installed on to the cold inlet pipe of your wetback. Its purpose is to lock a fresh supply of water in the wetback until it heats and expands forcing a powerful surge of hot water to the cylinder. The valve opens and a fresh charge of cool water to be heated is sucked in and the cycle is repeated so long as the heat is applied and there is a temperature difference. Minimum kilowatt rating of wetback is 3kw.

The Pulse Flow Valve body is made from high quality forged brass with stainless steel internal parts for maximum durability. The valve has only one moving part for its primary operation, which is a floating stainless disc which gives no resistance to the incoming water. There is also an internal pressure-relief spring to cover the unlikely event of the hot water circuit open vent becoming blocked or damaged. This allows the pressure in the circuit to reverse flow back to source with complete safety.

For further information contact the manufacturer

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