PLATE FLOW

PLATE HEAT EXCHANGER
WITH BUFFER VESSEL

McDonald Water Storage
Hot Water Storage Solutions
The PLATEflow system comprises a Brazed Plate Heat Exchanger (PHE), pre-piped and mounted on a Buffer Vessel. It is designed to supply hot water in situations where demand can vary over the course of a day, e.g. hotels, hospitals, factories etc. The PLATEflow system effectively decreases the amount of stored hot water required, while still delivering peak flow rates as demanded.

Supplied pre-assembled to your own specification, the PLATEflow significantly reduces installation and commissioning time. It can be supplied as either a vented, tank fed unit, or suitable for unvented applications when fed from the mains or a boosted cold water supply.

**OPERATION**

At times when less than the steady flow rate is required, all the hot water requirement is generated instantly by the PHE (A), with any excess recharging the buffer vessel (B). Only when demand exceeds the steady flow rate of the PHE, is water from the buffer vessel used (C).

Even when the buffer is depleted, the steady flow rate is always available.

**SIZING**

Buffer vessels are sized to cope with the demand during peak periods and vary in size as required. Once we know the flow rates required we can advise the kW input needed to achieve it. Full dimensional data will be provided once the system requirements are calculated.

**SPECIFICATION:**

How to specify: let us know the following information and we will return a specification for a suitable unit.

- 1. Steady flow rate (l/s)
- 2. Peak flow rate (l/s)
- 3. Peak flow time (mins)
- 4. Boiler flow and return temps. (ºC)
- 5. kW input if known
- 6. Secondary system pressure or working head (bar)