

# **THERMflow THERMAL STORAGE UNIT**

## **Combination Model to Suit Sealed System Boiler**

**THERMflow** is a primary water, thermal storage unit, which supplies mains pressure hot water at flow rates in accordance with the requirements of BS6700.

Thermostatic mixer showers will give the optimum showering performance and all taps etc. should be checked to ensure they are suitable for mains pressure.

### **IMPORTANT**

#### **Mains Cold Inlet Pressure and Flow Rates**

A minimum of 2.5 Bar incoming secondary pressure is recommended and a pressure reducing valve is required if the pressure is over 5 Bar. The mains supply to the unit should be in a minimum of 22mm diameter. The Domestic Hot Supply should also be taken off in 22mm, although 15mm spurs can be taken off to other terminal fittings. If the flow rate exceeds 25 Litres/minute at the taps, it should be restricted.

#### **Suitable Boilers**

THERMflow can be used with most boilers e.g. Gas, oil, solid fuel, electric and electric immersion heater. This model is fitted with a Boiler Coil and is suitable for a Sealed Primary System. The Radiator Circuit is open vented and as such the Primary Feed and Expansion Tank should be sited 500mm above the highest radiator.

#### **FERNOX/Anti-freeze**

The above should be added in the normal way, taking into account the capacity of the THERMflow which is part of the Primary system.

### **COMMISSIONING - Boiler Type**

The Thermal Store is to be fed from the Primary Feed and Expansion Tank and the Sealed Primary System filled in the normal way. The Boiler and Radiators are to be connected to the Connections on the side of the cylinder as marked

Connect the Cold Mains to the THERMflow's non-return valve and turn the mains on. This will fill the Thermal Store and the Radiator Circuit. Allow the Primary System (Boiler and Coil) to fill slowly via the filling loop.

All normal procedures for a Sealed Primary System apply. Fire System, hot flush, drain and re-fill. Add Fernox etc as normal taking into account the THERMflow volume, which is part of the primary system. Re-bleed radiators and high points of pipe-work. Disconnect filling loop.

#### **CHECK FOR LEAKS THROUGHOUT SYSTEM.**

Set the boiler pump to its highest speed setting. Set the boiler thermostat and also the cylinder thermostat to maximum. Fire the boiler with the Programmer set to Hot Water Only and wait until the boiler goes off. Turn the cylinder thermostat down slowly till it clicks off then turn it down by about 2degrees. This should mean that the cylinder thermostat on the Thermal Store controls the system. This can be checked by running off some hot water, re-firing the boiler and checking that the cylinder thermostat is in control.

Check that the hot water at the taps is a suitable temperature for the householder. The temperature can be increased or decreased by adjusting the factory fitted mixing valve. Finally adjust the pumps to give maximum flow without excessive noise.