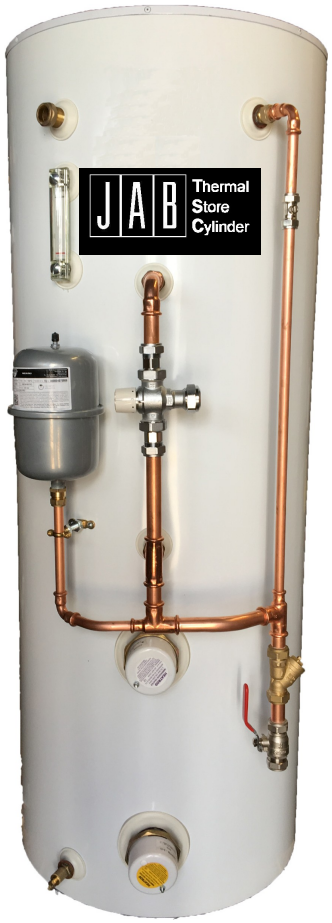
Installer Instructions & User Guide
Direct Open Vented
Thermal Stores



Integrated Feed
& Expansion Tank

Important - Please Note

We offer a 5 year warranty in respect of all cylinders that we manufacture, but please note that our guarantee is given to the builder or installer that purchased the cylinder from us and runs from the date of manufacture. In the unlikely event that there is a problem, it is important that you refer it as soon as possible to the person or company that supplied the cylinder to you (your "Supplier"). This will usually be the person or company that sold (or leased) the property to you or the person or company that installed the cylinder for you.

If you contact your Supplier in the first instance this will enable them to determine the cause of any problem that you may be experiencing. We would not, for example, be responsible for faulty installation and by contacting us directly this may simply cause you unnecessary delay and expense.

Your Supplier can determine the cause of the problem and where the problem is caused by a fault with the cylinder itself then your Supplier can advise us accordingly. Nothing in our guarantee or in these User Instructions will affect your statutory rights.

GENERAL INSTALLATION

BALANCED COLD CONNECTION

If there are to be showers, bidets or monobloc taps in the installation then a balanced cold supply is necessary. There is a 22mm balanced connection on the inlet control set.

If a control set is fitted it must be at least 6m down stream, usually it is under the sink where the mains feed comes into the property.

IMMERSION HEATERS

Only immersion heaters with a thermal cut-out may be used. To help ensure this the immersion heaters have a special 2¼" BSP thread for copper and steel units and 1 3/4" for stainless steel units. They are rated at 3 kW at 240 V. They have both a thermostat and a high limit cut-out. Please order the correct replacement via ourselves, fitting non-approved immersions may affect your guarantee.

When fitting, ensure the 'O' ring is positioned correctly on the head of the immersion heater and lubricate before fitting. Fit it by hand until almost home then tighten gently as the 'O' rings will seal easily. The electrical supply to each immersion heaters must be fused at 13A via a double pole isolating switch to BS3456.

The cable must be at least 2.5mm2 heat resistant (85°C HOFR) sheathed flex complying to BS 6141:1981 Table 8. Do not operate the immersion heater/s until the unit is full of water. Fit the immersion thermostat into the thermostat pocket. Complete the wiring.

PRE-PLUMBED UNITS

As part of the installation and commissioning process for pre-plumbed units, it is necessary for installers to check the pipe-work for leaks as fittings could have become loose during transportation.

POSITIONING THE UNIT

Thermal Store can supply outlets above it or at some distance from it. Site the unit to minimise “dead leg” distances, especially to the point of most frequent use.

Outlets above the Thermal Store will reduce the outlet pressure available by 0.1 bar for every 1m of height difference. The unit should be protected from frost. Particular care is needed if situating in a garage or outbuilding. All exposed pipe work should be insulated.

The unit must be installed VERTICALLY on a flat base capable of supporting the weight of the cylinder when full. The minimum recommended cupboard size is 650mm square.

Access for maintenance of the valves should be considered. The immersion heaters are 375mm long and care should be taken to ensure that they can be withdrawn for servicing if required.

If installed a non-return valve must be fitted a minimum of 6m away from the cylinder.

The hot water in your home is provided by a high specification thermal storage system which will give you many benefits. This booklet will explain why and how you can get the most from it.

Operating characteristics

The domestic hot water you use at the tap is not stored but is produced instantaneously. This has the advantage of reducing the risk of contamination from things like Legionella as well as reducing the risks of scalding by allowing the temperature of the hot water at the tap to be controlled to 50°C to 55°C.

This system delivers fresh water from the mains supply to the hot taps and is designed to fulfil four basic needs.

1. Provide mains pressure hot water with a cylinder that does not need a costly annual service.

2. Deliver hot water at mains pressure.

3. Operate as efficiently as possible to cost-effectively meet your needs.

4. Provide high quality water to every tap. This is possible because the water is heated instantaneously and is not stored where it can be contaminated.

Installer Instructions
Direct Thermal Store with Integral F&E Tank

Filling Instructions

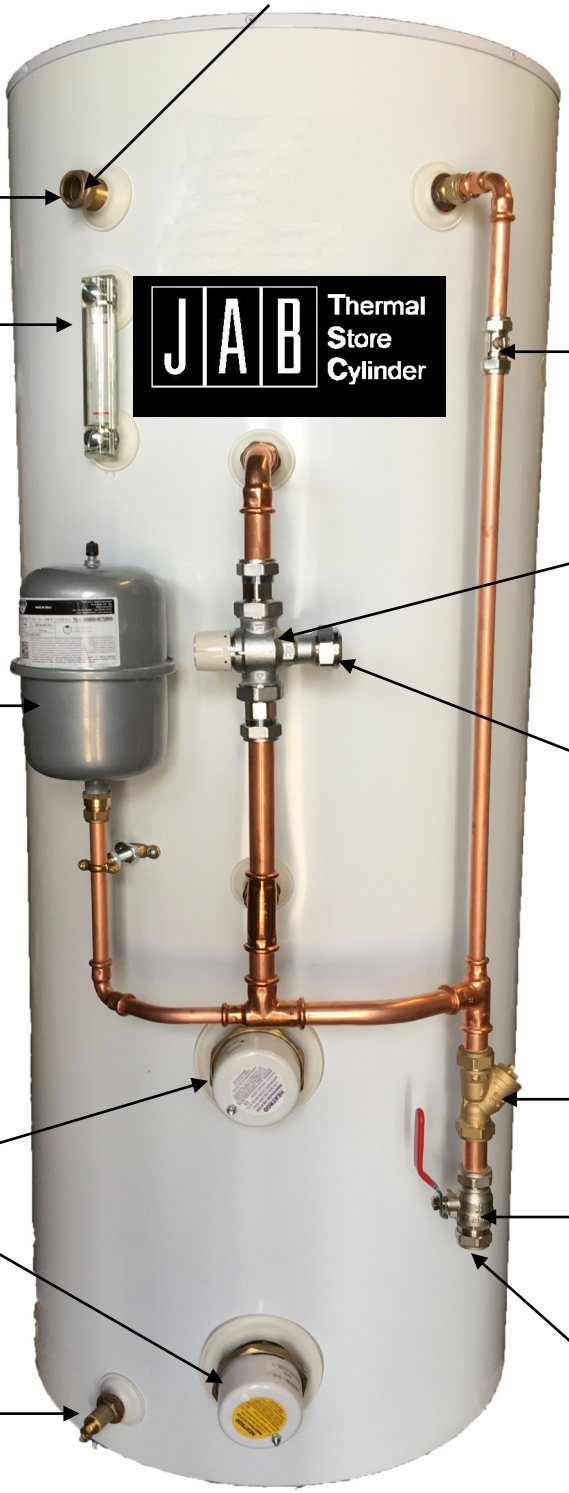
First Fill:

Fill to red line, Heat for minimum of 5 hours, then top up to black line.

In Service:

Run down to red line, then fill to black line.

DO NOT PLUG UNDER ANY CIRCUMSTANCES



Overflow

Sight Glass (See top of page for filling instructions)

2L Expansion Vessel

Immersion Heaters

Drain

Isolating Valve used for filling/ topping up

Thermostatic mixing valve set at 55◦

D.H.W

Filter

Main Isolating Valve

Cold Main

Installer Instructions
Thermal Store Diagrams

Size (Capacity)	Height (mm)	Diameter (mm)	Suited for
120 Litres	1400mm	550mm	Bedsit/Studio—1 Shower
150 Litres	1450mm	550mm	1-2 Bed / 1 Bath
180 Litres	1600mm	550mm	3 Bed / 1 Bath or 2 Bed / 2 Bath
210 Litres	1750mm	550mm	4 Bed 1 Bath or 3 Bed / 2 Bath

Thermal Store Diagram – Direct Self Fill, Internal Expansion