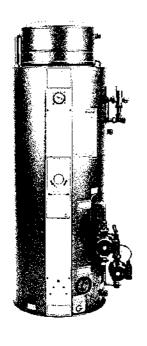
WELCOME TO YOUR THERMAL STORAGE SYSTEM

The hot water and central heating in your home are provided by a high-specification storage system which will give you many benefits. Simple to operate and exceptionally efficient in operation, your BoilerMate Thermal Store is probably different to any water heating system you have ever experienced before. This booklet will explain why and how you can get the most from it.

BOILERMATE II - THE POWER BEHIND YOUR DOMESTIC HOT WATER AND CENTRAL HEATING



One of the most technologically advanced water heating and storage systems available, your Gledhill BoilerMate is designed to fulfil four basic needs:

- Deliver hot water at high pressure whenever you need it.
- Deliver rapid heat up of your central heating system
- Operate as efficiently as possible to cost-effectively meet your household needs.
- Deliver high quality water to every tap.

1. Delivering hot water at high pressure when you need it

Your Thermal Storage System is designed to provide all the hot water your property should need under normal circumstances, and deliver that hot water at a pressure comparable with your cold water mains. That means you can enjoy power-force showers without the need for a separate pump, or fill a bath with piping hot water in minutes.

2. Deliver rapid heat up of your central heating system

The super-efficient thermal storage system also means that your central heating will warm your house far more rapidly than a conventional system, with all your radiators reaching their efficient heating level in just a few minutes.

3. Operate as efficiently as possible to costeffectively meet your household needs.

Your Thermal Storage System will ensure that your boiler operates more efficiently by eliminating unnecessary firing and costly use of fuel.

Because your boiler will operate in concert with the Gledhill BoilerMate, it remains in the "On" position 24 hours a day, 7 days a week, but fires only when needed to maintain the optimum temperature within your efficient Gledhill Thermal Store. The boiler must be left at its maximum temperature setting for the system to operate efficiently.

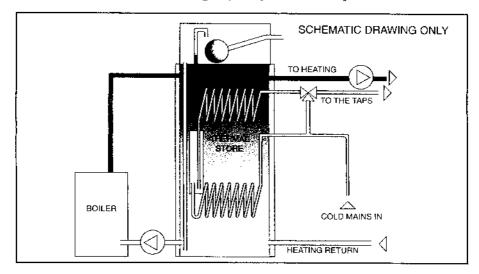
Your central heating still works on a timer which is fitted to your Thermal Store, and thermostats control your room temperatures.

Hot water will be available any time you need it when the system is switched on, summer and winter. But instead of your boiler operation determining when you get hot water and heating, your needs for hot water and heating will determine when your boiler operates. If you choose to restrict the boiler firing times, a different type of clock (twostage) can be fitted on request.

A proprietary in-line scale inhibitor should be fitted in hard water areas. If this is a phosphate salt type (a white powder contained in a vessel fitted on the cold water supply) then it is important that this powder is replenished as required.

4. Deliver high quality water to every tap

With traditional British systems, which had a cold supply cistern in the roof space, there was always the risk that the cistern could become contaminated by dust, birds or insects. The BoilerMate is connected directly to the cold mains and therefore, even the hot supply is pure high quality water every time.



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WHAT IS A THERMAL STORE?

The Gledhill Thermal Store is the heart and brain of your heating system. It stores hot water at a constant temperature and incorporates an efficient heat exchanger which heats the hot water for your domestic needs and your central heating system

The Thermal Store is superbly insulated and so the hot water stored there loses its heat very slowly. It also incorporates a thermostat which determines when the temperature drops below a pre-set level required for optimum efficiency.

When that temperature drop is detected, the Thermal Store instructs your domestic boiler to fire, generating the additional hot water needed to top up the temperature. When the required temperature is reached, the boiler stops firing, until the next time it is required.

WHY IS THE BOILER CONSTANTLY SWITCHED TO THE 'ON' POSITION?

The system operates most efficiently if the boiler is always left on, with the boiler thermostat always at its maximum setting - even in summer.

It is then simply a case of adjusting the store temperature control for summer running, when central heating may not be required, or winter running, when it will. See 'Changing the Temperature Setting on Your Thermal Store'.

Your system should, generally, be left 'on' at all times. If you are away for a short period, the room thermostat can be set to a low level just to prevent frost damage.

HOW DOES THE SYSTEM DELIVER HOT WATER AT HIGH PRESSURE?

The water delivered to the taps and showers in your home is delivered at high pressure because it uses the mains pressure on your cold water supply. The BoilerMate is connected to the mains system and the water passes through a highly efficient heat exchanger to raise its temperature before it travels to your taps and showers. Because it is so efficient both high flow rates and high pressures are available to give the best performance for both the baths and showers.

WHY ARE THERE NO WATER CISTERNS IN THE LOFT?

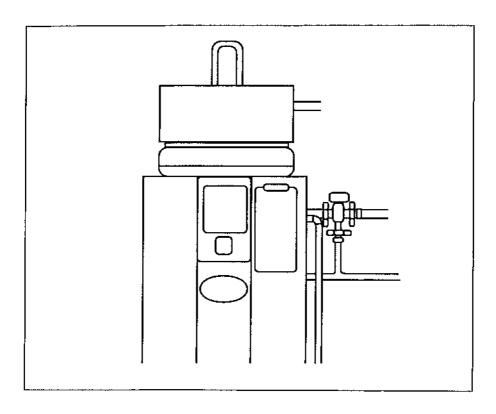
Water cisterns in the loft are principally required for the traditional domestic hot water system to give a better "head" of pressure - which is basically determined by the height from which the water falls to enter the system. In most cases, the higher the tank, the greater the pressure.

Because the Gledhill system uses the pressure from your cold water mains, those cisterns are not required.

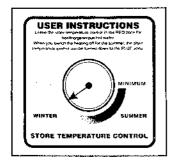
And that means there are no disterns in the loft, which removes any worries about freezing of pipes, and leaves more space for storage should you decide to use it.

CONTROLLING THE HOT WATER TEMPERATURE

The domestic hot water temperature is controlled by the white plastic knob. It is possible to vary the temperature of the hot water supply by adjusting the control, as shown in the diagram, avoiding the risks of scalding.



CHANGING THE TEMPERATURE SETTING ON YOUR THERMAL STORE



Controls for the BoilerMate are very simple to operate. On the front of the Thermal Store there is a simple thermostat control knob, which you turn towards minimum (the blue 'zone') for summer running and maximum (the red 'zone') for winter. The winter setting will provide both hot water and central heating, the summer setting hot water only.

The BoilerMate is operating efficiently when the neon light at the bottom of the front panel goes out when the boiler switches off. If the light stays on, turn the temperature control down towards the blue zone until the light goes out. This adjustment should be made immediately after the boiler stops firing.

However, it should always be noted that, as the Thermal Store controls the efficient running of the boiler, THE BOILER TEMPERATURE SHOULD ALWAYS BE LEFT AT MAXIMUM.

RESETTING THE HEATING PROGRAMME CLOCK

Hot water is not time controlled and is available at all times, but you control the time your central heating switches on and off with the timer on your Gledhill Thermal Store. Separate instructions for this will have been left for you by the installation engineer, or you can refer to the instructions on the label above the clock