

# SYSTEMATE<sup>2000</sup>

## FULLY INTEGRATED THERMAL STORE

### USER INSTRUCTIONS



In the interest of continuously improving the SysteMate 2000 range. Gledhill Water Storage Ltd reserve the right to modify the product without notice and in these circumstances this booklet which is accurate at the time of printing should be disregarded.

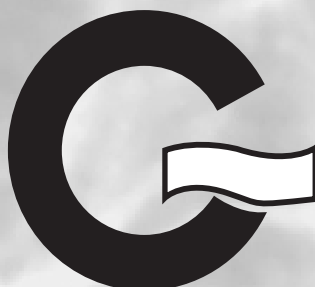
Gledhill Guarantees the water storage vessel and components for material and construction faults for 2 years. This period is calculated from the date of purchase.

#### **WARNING**

- There are no user adjustable parts inside the appliance. Tampering with sealed components will invalidate warranty and could also damage the appliance and make it unsafe to use.
- If it is known or suspected that a fault condition exists on the appliance it must be corrected by a competent person.
- **DON'T** place any clothing or other combustible materials against or on top of this appliance.



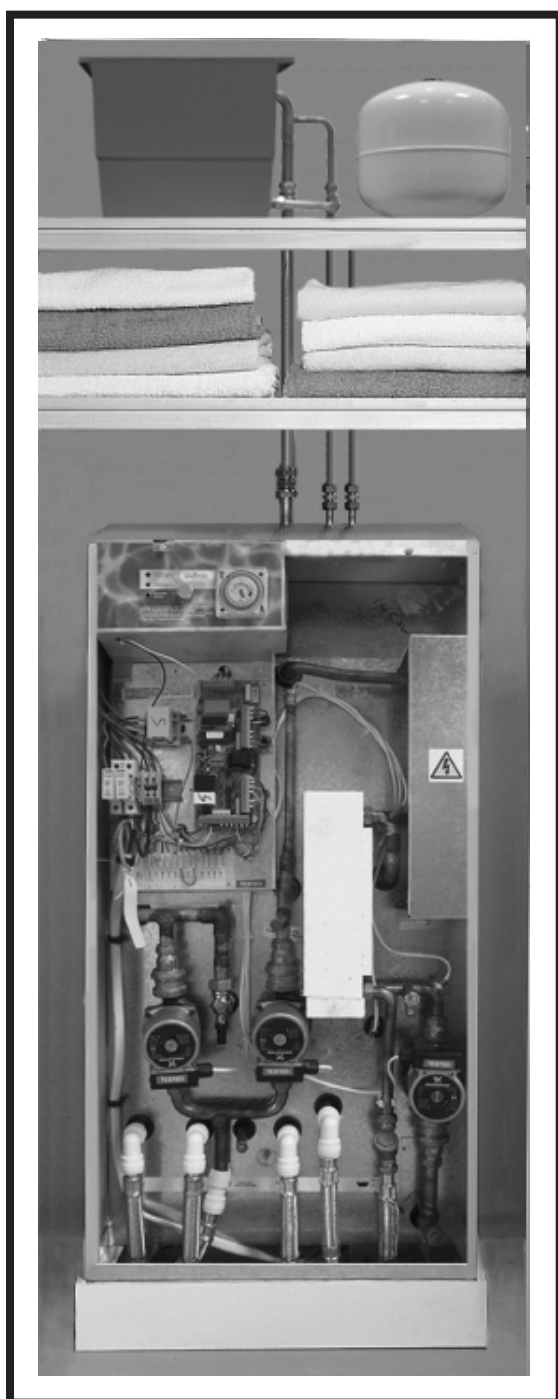
*The code of practice for the installation,  
commissioning & servicing of central heating systems*



**Issue 2: September 2003**

### **WELCOME TO YOUR THERMAL STORAGE SYSTEM**

### **SYSTEMATE 2000 - THE POWER BEHIND YOUR DOMESTIC HOT WATER AND CENTRAL HEATING**



The hot water and central heating in your home is provided by a high specification storage system which will give you many benefits. Simple to operate and exceptionally efficient in operation, your Systemate 2000 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.

One of the most technologically advanced water heating and storage systems available, your Gledhill Systemate 2000 is designed to fulfil four basic needs :

- 1. Deliver lots of hot water at good pressures whenever you need it**
- 2. Provide rapid heat up of your property whenever you switch your heating on**
- 3. Supply heating and hot water more cheaply than conventional systems**
- 4. Provide hot water to every tap that has not deteriorated in storage tanks**

## 1. DELIVER LOTS OF HOT WATER AT GOOD PRESSURES WHENEVER YOU NEED IT

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

## 2. PROVIDE RAPID HEAT UP OF YOUR PROPERTY WHENEVER YOU SWITCH YOUR HEATING ON

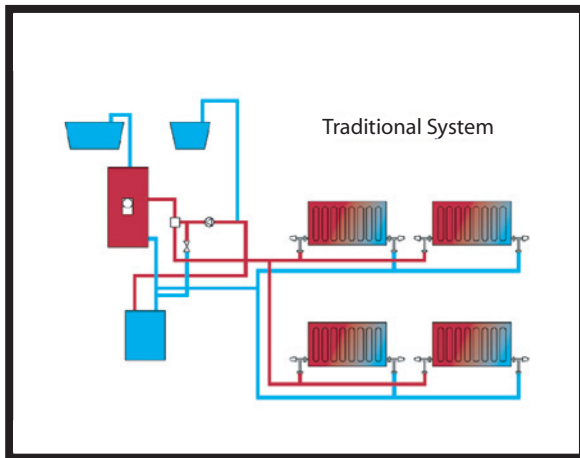
The highly efficient Thermal Storage System also means that your central heating will warm your house far more rapidly than a conventional system, with all your radiators reaching their efficient heating level in just a few minutes.

## 3. SUPPLY HEATING AND HOT WATER MORE CHEAPLY THAN CONVENTIONAL SYSTEMS

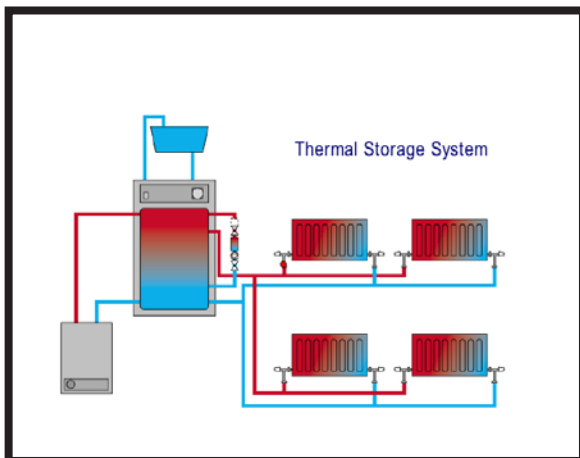
Your Thermal Storage System will ensure that your boiler operates more efficiently by eliminating unnecessary firing and costly use of fuel.

Because your boiler will operate in concert with the Gledhill SysteMate 2000, 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.**

## USER INSTRUCTIONS



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.

### **4. PROVIDING HOT WATER THAT HAS NOT DETERIORATED IN STORAGE TANKS, TO EVERY TAP**

The Systemate 2000 is connected directly to the cold mains and, therefore, even the hot supply is pure potable water every time.

## WHAT IS A THERMAL STORE ?

The Gledhill Thermal Store is the heart and brain of your central heating system. It stores hot water at a constant temperature and incorporates a highly efficient plate heat exchanger which heats the hot water for all your domestic needs. The Thermal Store is superbly insulated and so the hot water stored has a very low heat loss. It also incorporates an intelligent sensor 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 store 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.** This is because the intelligent electronics within the Thermal Store control the system temperature automatically, based on demand. 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 to your domestic pipework systems.

### **HOW DOES THE SYSTEM DELIVER WATER AT HIGH PRESSURE**

The water to the taps and showers in your home is delivered at high pressure because it uses the mains pressure of your cold water supply. The SysteMate 2000 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 baths and showers.

Water cisterns are required for the traditional domestic hot water system, and are generally located in the loft, to give a better 'head' of water. In most cases, the higher the cistern, the greater the pressure.

### **WHY ARE THERE NO WATER CISTERNS IN THE LOFT ?**

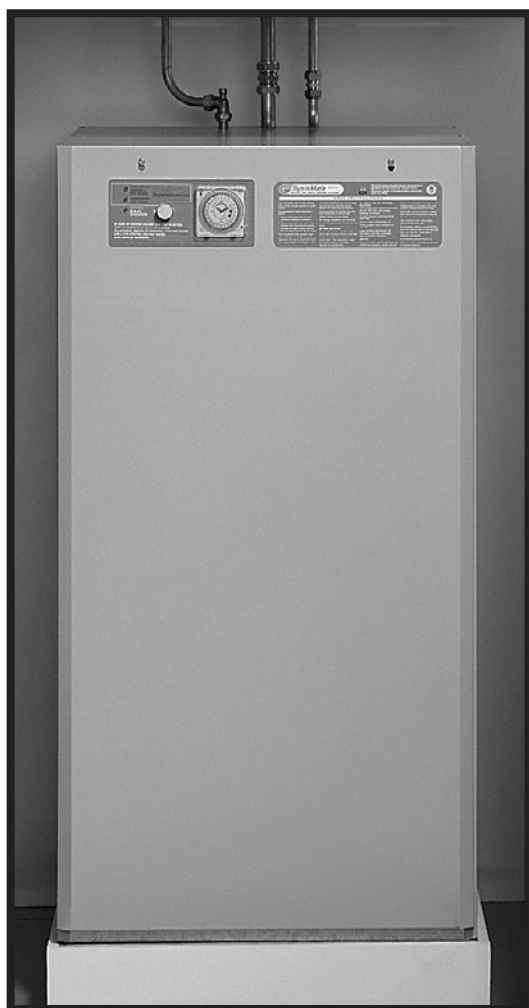
Because the Gledhill system uses the pressure from your cold water mains, these cisterns are not required, which removes any worries about freezing or contamination of the cold water system from insects, dust, birds, etc and leaves more space for storage should you decide to use it.

However the SysteMate is fitted with its own feed and expansion cistern which is filled manually when the appliance is first installed. It is beneficial to check and if necessary top up the water in this cistern during the annual boiler service / if the appliance is not producing hot water.

### **PLASTIC TOP UP CISTERN**

The plastic top up-cistern should have been filled to the water line by the installer at the time of commissioning. This should last many years if the lid has been securely replaced. Top up water can be added should this ever be necessary.

## **CONTROLLING YOUR SYSTEMATE 2000**



Your Systemate 2000 is a highly advanced Thermal Storage System which incorporates the latest in microprocessor technology to monitor your system automatically and ensure it operates at maximum efficiency. This includes periodically 'spinning' the heating pump to prevent seizing during prolonged unused heating periods.

In normal circumstances, you should only be required to adjust the time clock on your Thermal Store, to suit your needs, and the instructions for this are described in detail on the label fitted to the appliance.

The Systemate is only one part of the sealed heating and mains pressure hot water systems fitted in your property. If your hot water or heating system should fail to operate satisfactorily, you will also need to refer to the information provided with the central heating boiler. If the fault is with the Systemate appliance you will need to call a service engineer, who can then contact Gledhill Technical Department for any advice he may need or operate the 'SWITCH' option which is fitted to your Systemate 2000 (see Switch at the back of this booklet). However, because your Systemate is part of a sealed heating system it may be that the fault lies elsewhere in the system or that the heating system only needs repressurising using the equipment provided adjacent to the boiler.

As detailed previously, the Thermal Store controls the temperature of the system. In order to ensure your system operates at its most efficient the boiler thermostat should always be left at maximum.



## USER INSTRUCTIONS

### 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 on the front of the appliance.





## USING THE UNIQUE 'SWITCH' EMERGENCY ELECTRICAL BACK-UP SYSTEM

Your Systemate 2000 is fitted with Gledhill's unique 'SWITCH' emergency electrical back-up system. You have an instant fail safe should your boiler cease to operate. The 'SWITCH' system will be clearly displayed on the front of your Thermal Store Appliance.

In the event of a boiler failure, the 'SWITCH' technology simply and instantly introduces an electric heating source within the Thermal Store to ensure that your hot water and heating continue to operate until you can have your boiler repaired. **Care should be taken when your Systemate 2000 is operating under 'SWITCH' conditions as the hot water temperature will be higher than in its normal operating condition.**

Operation of 'SWITCH' is simple, just click to position 1 if you need hot water only or position 2 for hot water and heating and turn back to position zero once your boiler is repaired.

'SWITCH' is only designed for emergency use and you will need to call a service engineer once you have operated 'SWITCH'.

