

# WELCOME TO YOUR THERMAL STORAGE SYSTEM

The hot water in your home is provided by a high-specification Thermal Storage System which will give you many benefits. Simple to operate and exceptionally efficient in operation, your Systemate III 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.

## SYSTEMATE III - THE POWER BEHIND YOUR DOMESTIC HOT WATER



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

1. Deliver hot water at high pressure whenever you need it.
2. Operate as efficiently as possible to cost-effectively meet your household needs.
3. 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. Operating as efficiently as possible to cost-effectively meet your household needs**

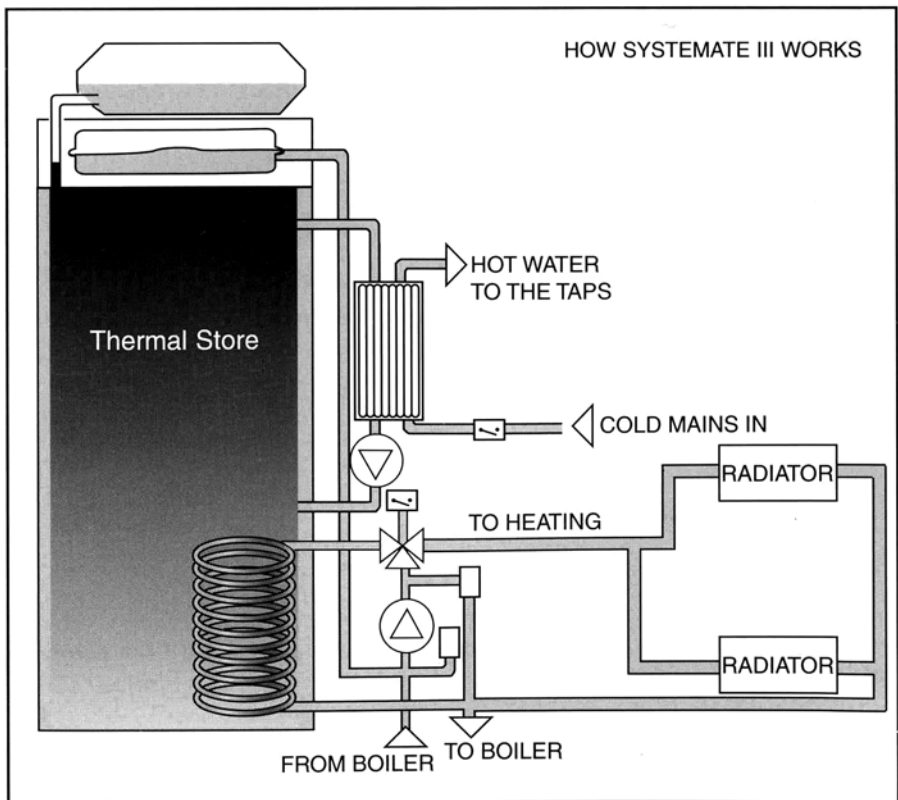
Your Thermal Storage System will ensure that your boiler operates more efficiently by eliminating unnecessary firing and costly use of fuel.

Because your boiler will operate in concert with the Gledhill SystemMate, 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.

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 your needs will determine when your boiler operates. If you choose to restrict the boiler firing times, a different type of clock (two-stage) can be fitted on request.

### 3. Delivering 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 Systemate is connected directly to the cold mains and therefore, even the hot supply is pure high quality water every time.



## WHAT IS A THERMAL STORE?

The Gledhill Thermal Store is the heart and brain of your water 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.

The Thermal Store is superbly insulated and so the hot water stored there loses its heat very slowly. 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 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 or winter running. 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 Systemate 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.

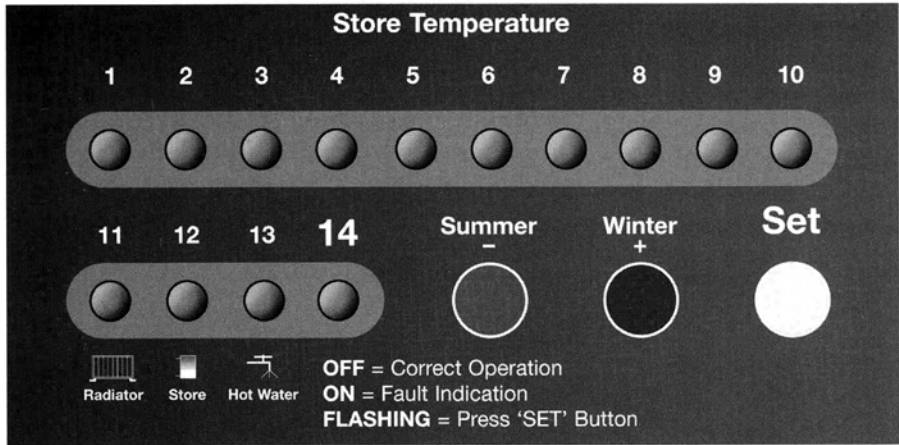
## **WHY ARE THERE NO CISTERNS IN THE LOFT?**

Water cisterns in the loft are principally required for the traditional domestic hot water system to give a better "head" of water - which is basically determined by the height of the cistern above the tap being used. In most cases, the higher the cistern, 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 cisterns in the loft, which removes any worries about freezing pipes, and leaves more space for storage should you decide to use it.

# YOUR SYSTEMATE III CONTROL PANEL



Your Systemate III Thermal Store is equipped with a microprocessor control which automatically monitors the system to ensure it operates most efficiently.

Only if your hot water system should fail to operate satisfactorily do you need to consult the indicator lights on the front of the Thermal Store. If the RED 14 light is 'on' permanently, this will tell you that you need to call out an engineer.

In normal circumstances you should only be required to adjust the temperature setting and the time clock on your Thermal Store, which is described in detail in the separate guide which the installation engineer left with you and on the label fitted to the appliance itself. If the controls are altered accidentally don't worry. The unit will not decommission itself as the factory set controller will revert automatically to an optimum setting to ensure efficient operation.

Please note: The diagnostic panel & lights are primarily for the commissioning engineer and service engineer only.

# CHANGING THE TEMPERATURE SETTING ON YOUR THERMAL STORE

**Please refer to the instructions adjacent to the front panel.**

The store temperature can be lowered in summer and increased in winter within the preset limits to compensate for change in the cold water inlet temperature. The microprocessor based control system will ensure that the system efficiency is not impaired by this action.

The store is very efficient if left at the commissioned temperature in both winter and summer. A setting at the high end of the 'green light scale' will give maximum heating output in the winter. A lower setting will be adequate for summer hot water. Turning down the store temperature in the summertime will be marginally more efficient.

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.**

## **If you do wish to change the temperature setting of the Thermal Store:**

1) Press button marked 'Set' and hold down until the 'Red 14' flashes

2) To decrease the temperature press button marked '-'

To increase the temperature press button marked '+'

3) Each 'press and release' action on buttons marked '-' or '+' will change the temperature by 1 unit and this can be observed by the increase or decrease in the number of 'Green lights' illuminated

4) When the temperature has been adjusted to the desired value, press button marked 'Set' and hold down until the 'Red 14' stops flashing.

5) The temperature setting of the Thermal Store has now been changed.

## **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.