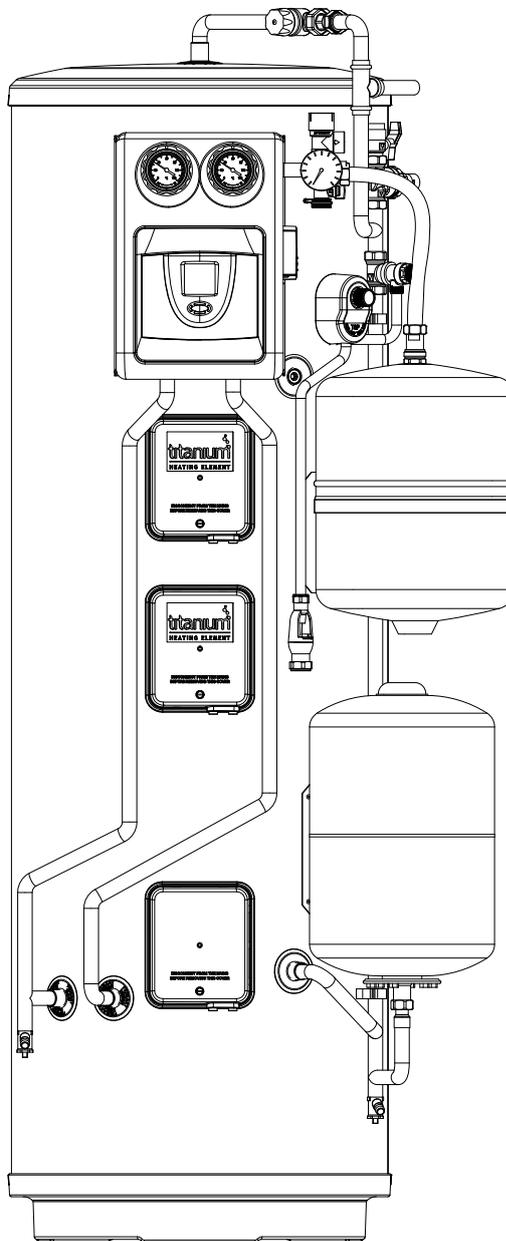




MEGAFLO **Eco SolaReady**



Installation and Handover

When your Megaflo Eco SolaReady domestic water heating system was installed the installer should have fully commissioned the system and left it in working order. Following this they should have explained the system, its function and control including:

Heating by solar

Explained how the cylinder is heated when there is sufficient solar heating gain.

Heating by auxiliary heating source

Explained how the cylinder is heated if additional heat input is required due to insufficient solar gain being available (little or no sun) or additional quantities of hot water are required.

Operation of the Solar Differential Temperature Controller

Explained the icons and their meanings displayed at the controller.

System Malfunction

Explained what to do in the event of a system fault including how to isolate the electrical supply or water supply.

System Maintenance

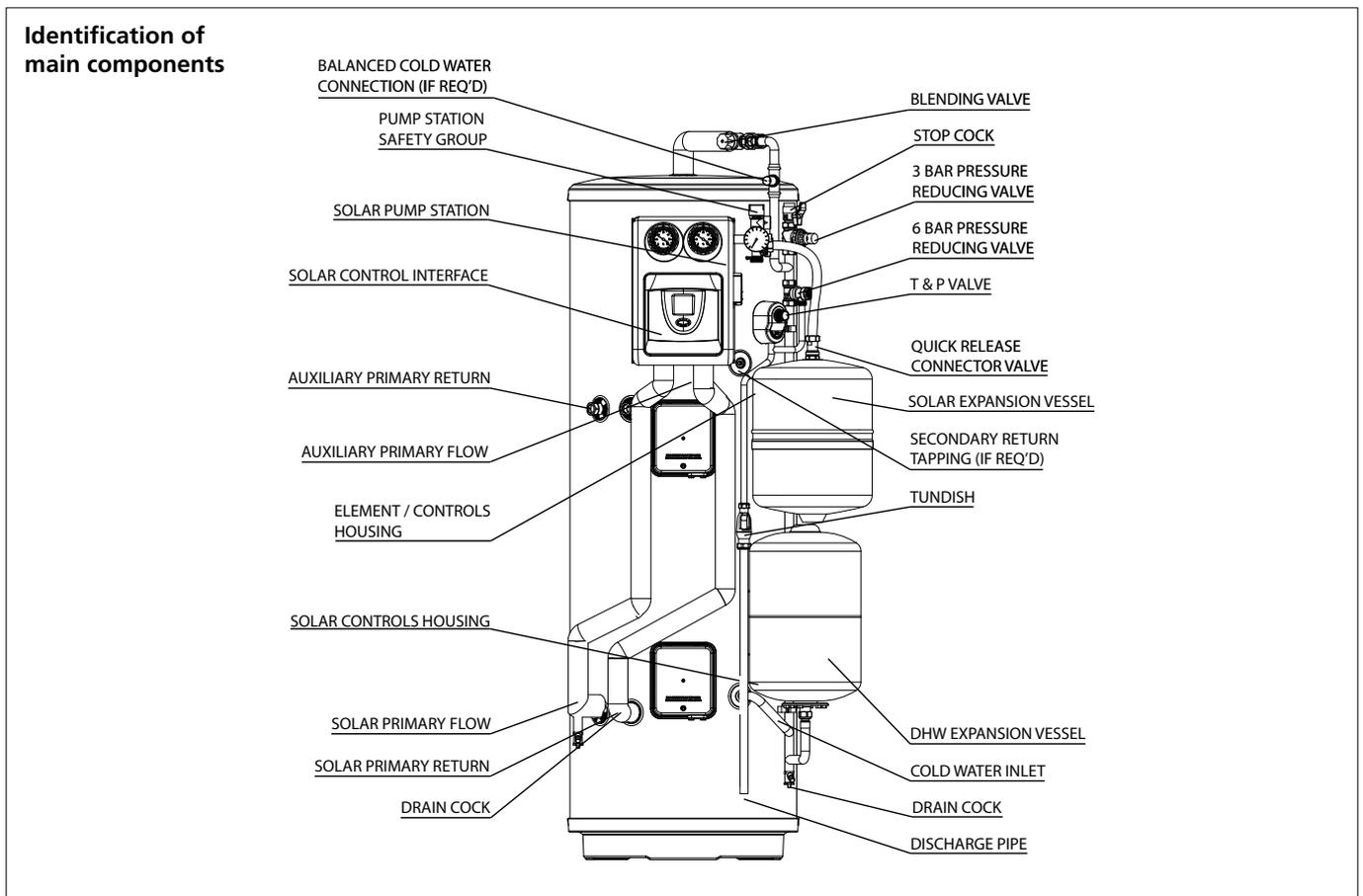
Explained the necessity for the system to receive regular maintenance to ensure its continued safe and efficient operation.

Literature

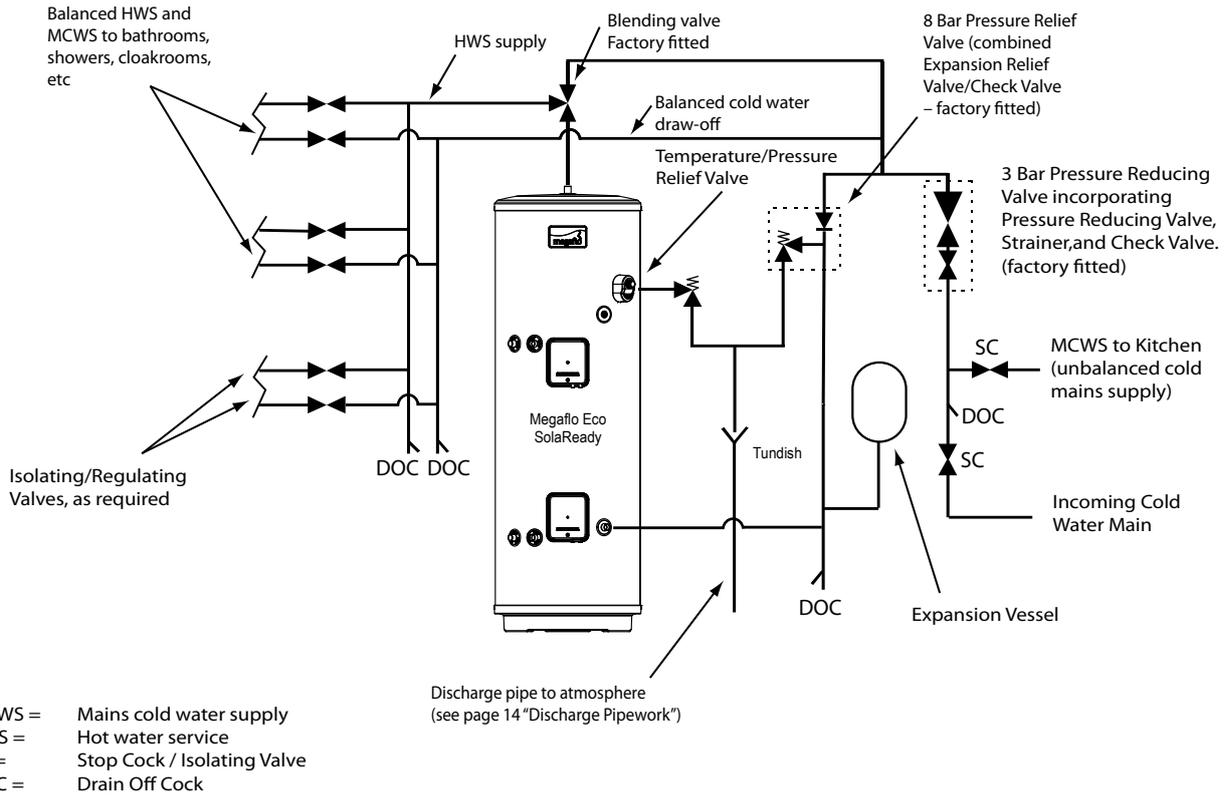
Handed over all installation, commissioning, service, maintenance and user instructions for the system.

Completed the benchmark logbook for the cylinder. Completed the Commissioning Record (see page 35 of the Megaflo Eco SolaReady Product Guide) for the solar system.

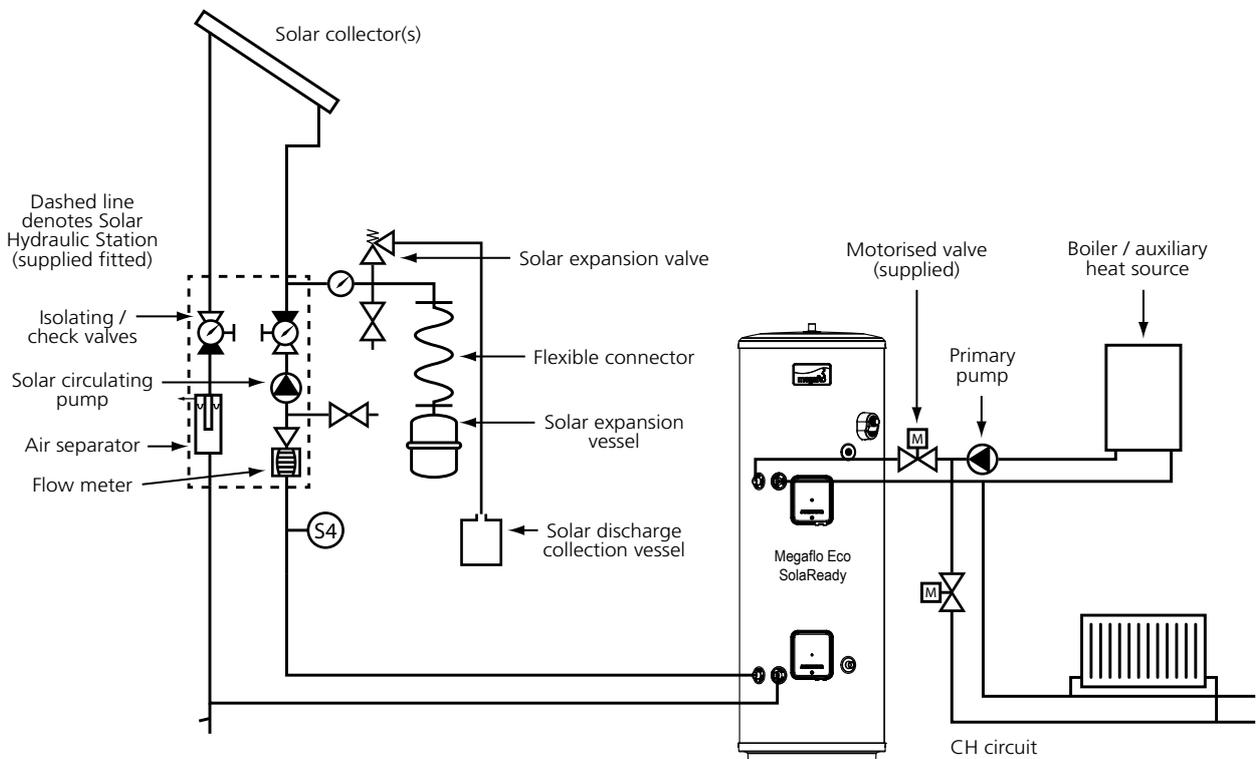
The following leaflet further explains a number of the above points and should be retained as a reminder of how to operate the Megaflo Eco SolaReady water heating system. If you are in any doubt, please ask your installer for clarification.



Cold and hot water supply circuits



Solar and CH primary circuits



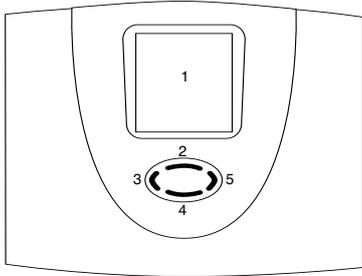
System operation

Generally the operating settings of your Megaflo Eco SolaReady Domestic hot water heating system will have been set up by your installer. For the system to operate correctly and efficiently these settings should not be altered. The following section details the user controls which your installer should familiarise you with during commissioning the system.

If in doubt contact a qualified solar installation engineer, alteration of some settings could adversely effect the operation of the SolaReady system. As with any heating system there are certain aspects that will require regular checking and/or maintenance. Page 7 details what these should be. Any maintenance or servicing should only be carried out by qualified personnel and be recorded in the Maintenance and Servicing sections of the Product Guide supplied with the Megaflo Eco SolaReady.

User controls

The following gives an overview of the Solar Differential Temperature Controller Display and operation.



Number	Description
1	Display with graphic symbols
2	Control button scroll upwards / +
3	Control button exit / break-off
4	Control button scroll downwards / -
5	Control button choice / confirmation

Graphic	Description	Indication in operation
	Info menu	When symbol flashes it is possible for it to be selected. If that symbol is chosen by pressing the button, the symbol remains static (not flashing)
	Programming menu	
	Manual operation menu	
	Basic adjustment menu	

Indicator values		
dT	Temperature difference	
min	Min value	Appears when minimum values are indicated
max	Max value	Appears when maximum values are indicated
	5 x 7 segment display Presentation of figures 00000 to 99999	Display of all values, display flashes when a value is changed
°C	Temperature in celsius	
K	Temperature difference in Kelvin	
h	Operating hours	
kWh	Productivity indication in kWh	

Measuring points assignment		
	Temperature measuring point collector	
	Temperature measuring point storage tank lower	
	Temperature measuring point collector – return	
	Temperature measuring point storage tank upper (thermostat function)	
	Antifreezing sensor or universal temperatures measuring point (T3) (no sensor monitoring)	

Status indication		
	Solar circulation pump	Symbol revolves when solar circulation pump is on
	Switch output 1 is active	Appears when switch output 1 is active (on)
	Switch output 2 is active	Appears when switch output 2 is active (on)
	Reference to system fault	Display flashes when a fault occurs in the system
	Solar query for value changes which are to be stored	Input value can be either rejected or accepted

User controls

Operation and programming of the SolaReady differential temperature controller is by means of 4 operating buttons.

By means of pressing these buttons you can:

- recall display values
- carry out controller adjustments

The graphic symbols on the display step through the operating structure and show clearly the current menu points, display values or parameters.

Operating buttons have the following functions:

Button	Function	Description
	"Up" "+"	<ul style="list-style-type: none"> • Step up through menu • Value change: Increase of the indicated value by 1, holding the button down will automatically increase values
	"Call" "Down"	<ul style="list-style-type: none"> • Call up of main menu, step down through menu • Value change: Decrease of the indicated value by 1, holding down the button will automatically decrease values
	"Scroll left" "Exit" "Break-off"	<ul style="list-style-type: none"> • In main menu, scrolls to the left • Exit current menu • Exit menu point • Break-off value change without storing
	"Scroll right" "Choice" "Confirmation"	<ul style="list-style-type: none"> • In main menu, scrolls to the right • Choosing one menu point • Confirmation

It is not intended that the householder should attempt to programme the operation of the system so various parts of the programming menu are not reproduced here.

For further information on programming the Solar Differential Temperature Controller refer to the Commissioning Section of the Product Guide.

NOTE: Altering some settings could adversely affect the operation of the SolaReady system, if in doubt contact a qualified solar installation engineer. Alteration of functions, not covered in this user guide will invalidate the warranty.

Info menu

In this menu mode all measured values and operating states are shown.

If the values are marked as "resettable", they may be reset by navigating through the menu and altering the valves using the control buttons.

Indication		Description	Reset possible?
75°C		Indication of current collector temperature	No
min. 12°C		Indication of minimum collector temperature Resettable to current temperature	Yes
max. 105°C		Indication of maximum collector temperature Resettable to current temperature	Yes
52°C		Indication of current temperature storage tank (lower)	No
min. 40°C		Indication of minimum temperature storage tank (lower) Resettable to current temperature	Yes
max. 67°C		Indication of maximum temperature storage tank (lower) Resettable to current temperature	Yes
25°C		Indication of universal temperature measuring points (T3)	No
1234 h		Operating hours for charging storage tank (solar pump running time) Resettable to 0 hours	Yes

The controller will display certain information in the event of some system faults. The following table indicates these and will aid in describing the nature of the fault to the Service Engineer. DO NOT attempt to rectify faults yourself, contact the After Sales Service number on 0844 871 1535 or a qualified Solar water heating engineer.

Error representation on display	Possible reasons	Measures
 FLASHING 	Sensor wire broken	Check wire
	Sensor defect	Check water resistance, if necessary exchange sensor
 FLASHING 	Short circuit in sensor wire	Check wire
	Sensor defect	Check water resistance, if necessary exchange sensor
 FLASHING Additionally at energy productivity measurement 	Error in pump connection	Check cabling
	Pump defect	Exchange pump
	Air in the system	Check the float of the flow meter moves when the system runs (if visible)
	Connection with flow meter defect	Check wire
	Sensor wire broken	Check wire
	Sensor defect	Check water resistance, if necessary exchange sensor

Important notes

WARNINGS

IF WATER DISCHARGES FROM THE TEMPERATURE/PRESSURE RELIEF VALVE ON THE MEGAFLO ECO SOLAREADY UNIT REFER TO PAGE 40 OF THE PRODUCT GUIDE (FAULT FINDING FLOW DIAGRAMS) FIRST FOR GUIDANCE. IF THIS DOES NOT RECTIFY THE FAULT SWITCH OFF THE ELECTRICAL SUPPLY TO THE IMMERSION HEATER(S), AUXILIARY HEAT SOURCE AND SOLAR DIFFERENTIAL CONTROLLER. DO NOT SWITCH OFF THE WATER SUPPLY. CONTACT A COMPETENT INSTALLER FOR UNVENTED WATER HEATERS TO CHECK THE SYSTEM.

DO NOT TAMPER WITH OR REMOVE ANY OF THE SAFETY VALVES FITTED TO THE MEGAFLO ECO SOLAREADY SYSTEM, IF A FAULT IS SUSPECTED CONTACT A COMPETENT INSTALLER.

IF FLUID OR VAPOUR IS DISCHARGED FROM THE PRESSURE RELIEF VALVE ON THE SOLAR HYDRAULIC STATION SWITCH OFF THE POWER SUPPLY TO THE SOLARFLO DIFFERENTIAL TEMPERATURE CONTROLLER AND CONTACT A QUALIFIED SOLAR WATER HEATING ENGINEER.

THE PIPEWORK BETWEEN THE SOLAR COLLECTOR PANELS AND THE SOLAR CYLINDER CAN BE VERY HOT. THESE PIPES SHOULD HAVE BEEN INSULATED BY THE INSTALLER.

Solar Primary Circuit

Temperature control when heating by the solar primary circuit is controlled by the solar differential temperature controller supplied. The controller should be set to give a water storage temperature of approx 60°C, however it can be set to give other temperatures. This will usually have been done during installation but can be adjusted by the user (see User Controls section of this Guide). A maximum of 70°C is recommended to avoid nuisance operation of the thermal cut-outs fitted to the unit. Adjustment is made at the solar differential temperature controller.

Changes to the operating parameters set by the solar differential temperature controller can affect the efficiency of the operation of the solar heating circuit, it is recommended that any changes are carried out by a competent solar water heating installer. DO NOT make any adjustments in the Programming, Manual Operation or Basic Adjustment menus unless qualified to do so.

If the power supply to the solar differential temperature controller is interrupted your Megaflo Eco SolaReady system will not operate. However, programmed settings are stored in the controller memory and should not need resetting when power is restored.

Auxiliary Heating

If configured to do so the auxiliary heating of the Megaflo Eco SolaReady can be controlled by the solar differential temperature controller. If this has not been configured control of the auxiliary heating input is done by the various controls fitted as follows:

By Immersion Heater(s)

A combined thermostat and thermal cut-out is provided for each immersion heater. The thermostat is factory set to give a water temperature of approx. 60°C, however it can be set to control between 12°C and 68°C. The temperature will normally have been set during installation. Adjustment is made by removing the upper terminal cover(s). SWITCH OFF THE ELECTRICAL SUPPLY BEFORE REMOVING THE COVER(S). Temperature adjustment is made by inserting a flat bladed screwdriver in the slot on top of the thermostat spindle and rotating (see Fig. 13, page 17 of the Product Guide).

By Auxiliary heat source

A combined thermostat and thermal cut-out is provided for the auxiliary heat source (e.g. a conventional boiler). The thermostat is factory set to give a water temperature of approx. 60°C, however it can be set to control between 12°C and 68°C. The temperature will normally have been set during installation. Adjustment is made by removing the upper terminal cover(s). SWITCH OFF THE ELECTRICAL SUPPLY BEFORE REMOVING THE COVER(S). Temperature adjustment is made by inserting a flat bladed screwdriver in the slot on top of the thermostat spindle and rotating (see Fig. 13, page 17 of the Product Guide). If in doubt contact a competent electrician

Flow performance

When initially opening hot outlets a small surge in flow may be noticed as the system pressure stabilises. This is quite normal with an unvented system and does not indicate a fault. In some areas a cloudiness may be noticed in the hot water. This is due to aeration of the water, is quite normal and will quickly clear.

Operational Faults

Operational faults and their potential causes are detailed in the Fault Finding Flow Diagrams on pages 38 to 41 of the Product Guide. It is recommended that any system faults are checked and rectified by a competent installer.

Servicing and Maintenance

To ensure the continued safe and efficient operation of your Megaflo Eco SolaReady water heating system it should be regularly checked and maintained by a competent engineer for unvented systems and solar thermal systems. It is recommended that the checks be carried out on an annual basis in accordance with the Maintenance requirements detailed in the Product Guide.

The Benchmark Service Record and Solar Thermal system checklist should be completed following servicing and/or maintenance. The concentration of the solar thermal transfer fluid should be checked and, if necessary, topped up or replaced every 2 years. Failure to maintain the system may invalidate your guarantee.



Customer Service

Telephone:

0844 871 1535

Fax:

0844 871 1528

Email:

megafloservice@heateam.co.uk

Megaфло

Hurricane Way
Norwich
Norfolk
NR6 6EA

Lifetime Guarantee Terms and Conditions

WARNING: Should the factory fitted temperature and pressure relief valve be tampered with or removed your guarantee will be invalidated. Neither the Distributor nor Manufacturer shall be responsible for any consequential damage howsoever caused.

Guarantee Terms

Heatrae Sadia guarantees the Megaфло Eco SolaReady against faulty manufacture or materials for a period of two years from the date of purchase including parts and labour. This two year guarantee is extended to five years for the cold water control valve and to lifetime* for the stainless steel inner vessel in domestic properties and to 30 years for the stainless steel inner vessel in commercial buildings.

These guarantees are valid provided that:

- The Megaфло Eco SolaReady has been installed by a competent installer and as per the instructions contained in the installation manual and all relevant Codes of Practice and Regulations in force at the time of installation.
- Any disinfection has been carried out in accordance with BS 8558.
- The Megaфло Eco SolaReady has not been modified in any way other than by heateam approved engineers.
- The Megaфло Eco SolaReady has only been used for the storage of wholesome water (max. 250mg/l chloride).
- The Megaфло Eco SolaReady has not been subjected to frost, nor has it been tampered with or been subjected to misuse or neglect.
- No factory fitted parts have been removed for unauthorised repair or replacement.
- The Benchmark™ Commissioning Checklist and Service Record included in this product Guide has been completed.
- Regular maintenance has been carried out by a competent person in accordance with the requirements set out in the maintenance section of the installation manual and any replacement parts used should be authorised Heatrae Sadia Megaфло spare parts. Annual Services are available from heateam, the service division of Heatrae Sadia. Please contact heateam on Tel: 0844 871 1535 for further details.
- Within 60 days of purchase the owner completes and returns the certificate supplied to register the product. Evidence of purchase and date of supply must be submitted upon making a claim.
- This guarantee is not valid for installations outside the United Kingdom.

For installations outside of the United Kingdom, please contact either the Megaфло Export Department on Tel: +44 1603 420271 or Baxi International on Tel: +44 1926 478323 for further details of the guarantee terms and conditions applicable. This guarantee does not affect your statutory rights.

The unit is not guaranteed against damage due to frost. This guarantee does not affect your statutory rights.

If you have purchased a Megaфло Solar collector package to be installed with your Megaфло Eco SolaReady unit you will be pleased to know that Flat plate collector systems are covered by a ten year warranty and Evacuated tube systems by a five year warranty.

Please note only the SolaReady unit will be covered by warranty if collectors other than Megaфло Solar are used.

As stated in our sales literature we can only guarantee the performance of the unit when coupled to a Megaфло Solar collector system.

*Lifetime is defined as for as long as the original owner who purchased the Megaфло Eco SolaReady / New Home continues to own the property. If the owner sells the property, the new owner (and any future owners) will receive a 30 year warranty from the time the original owner purchased the Megaфло Eco SolaReady or new property with Megaфло Eco SolaReady installed.