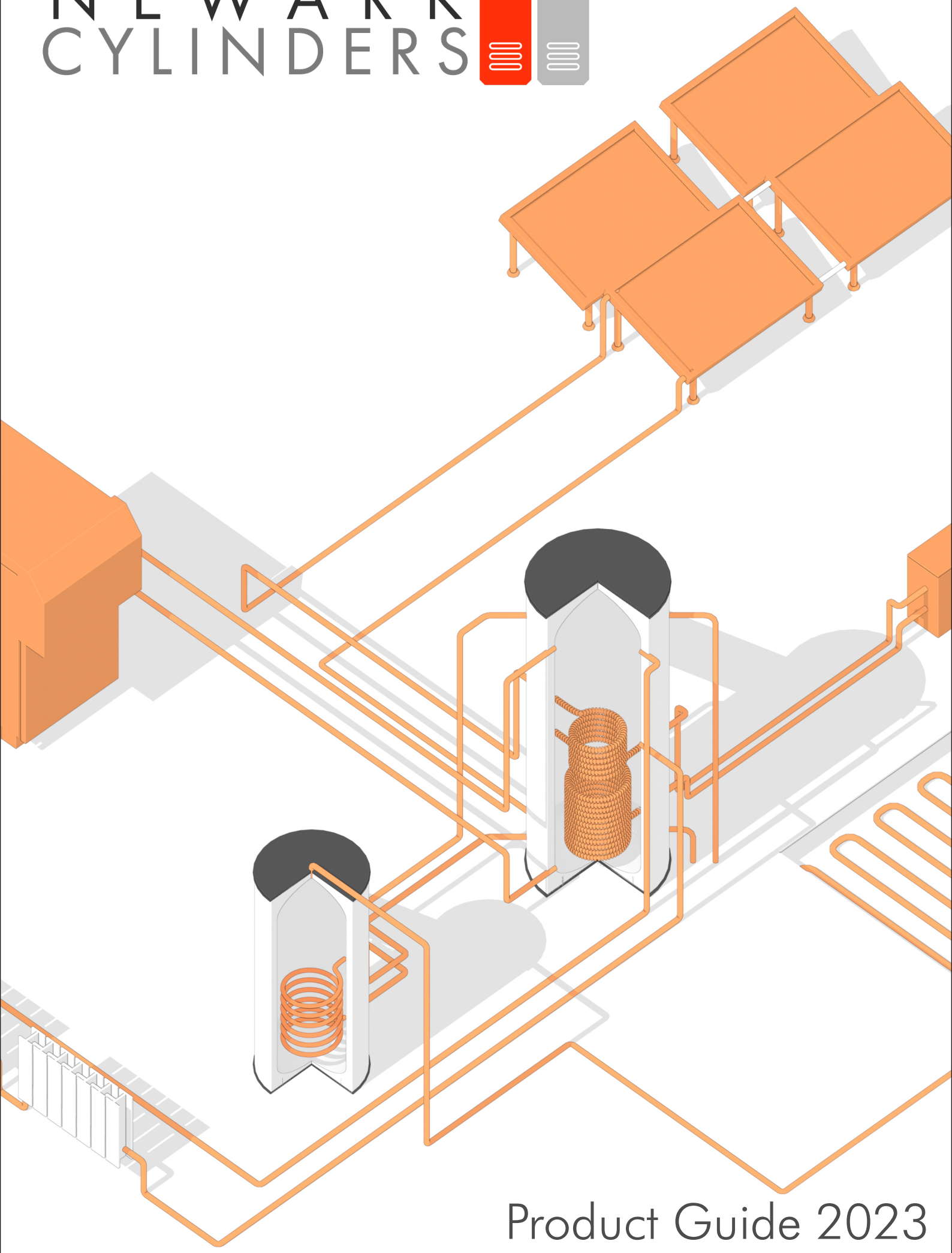
NEWARK CYLINDERS



Product Guide 2023

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About Us

Newark Cylinders are a family business that has been manufacturing Hot Water Cylinders since 1977 by hand at our factory in Newark, Nottinghamshire. We pride ourselves in our ability to manufacture a wide range of Hot Water Cylinders bespoke to the customer's specification.

Our range includes Indirect and Direct Domestic Copper Cylinders, Unvented Cylinders, Thermal Stores, Buffer Vessels, Marine Calorifier, Industrial Calorifiers, Feed & Expansion Tanks and Renewable Tanks for Solar and Heat Pump.

Our units can be made from both Copper and Stainless Steel for which each have their own benefits.

We have manufacturing capabilities for bulk orders as well as one-off special and bespoke items; we're also willing to discuss manufacturing prototypes, test rigs, and decorative products.

We are able to delivery all over the UK as well as to UK Ports for Export and offer next day 24h Delivery from completion of manufacture.

Direct and Indirect Cylinders

Our range of Direct and Indirect Cylinders are our most basic product usually suited for individual properties with only one or two heat sources.

We manufacture all of our Cylinders in-house by hand by our skilled team of fabricators. This allows us to design and manufacture your cylinder to your unique requirements.

Our Direct and Indirect Cylinders can be made from Copper of various thickness or from Stainless Steel to suit areas with varying water qualities.

Specification

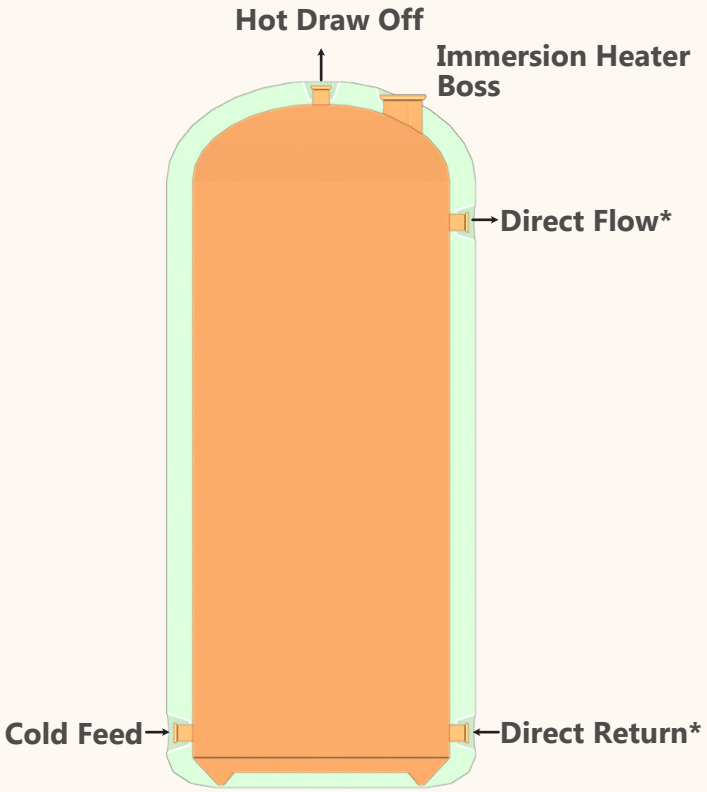
Copper Thickness	0.7mm
Max Working Head	10 Metres
Test Pressure	1.45 BAR
Heat Loss ERP Rating	Minimum C Rating
Coil Heating Surface	Minimum 0.44m²
Foam Specification	Polyurethane
Heights	825mm to 2000mm
Diameters	300mm to 600mm

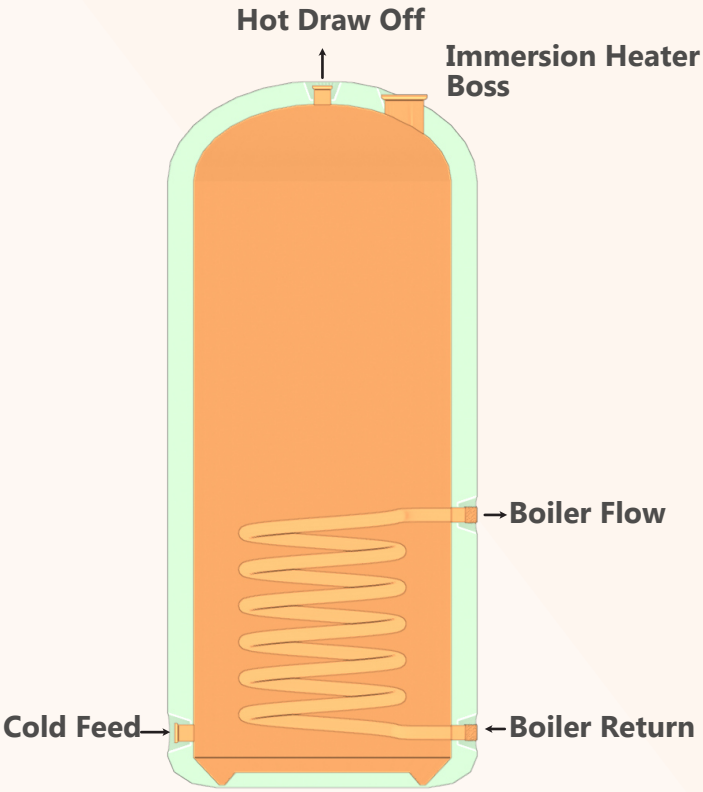
Connection Sizes Available

½"	15mm Compression
¾"	22mm Compression
1"	28mm Compression
1 ¼"	
1 ½"	
2 ¼"	

Diagrams

Please note these diagrams are examples; the exact specification can be changed to suit your needs.





Combination Cylinders

Our Combination Cylinders are an ideal space-saving solution for flats or buildings that have no access to a loft space.

The Combination Cylinder combines a conventional cylinder with a feed and expansion tank to facilitate thermal expansion from heated water. These tanks are both combined internally for ease of installation.

Our Combination Tanks include a Ball Valve and Float to maintain a store of cold water above the tank.

We can manufacture combination tanks from 80 Litres all the way to 500 Litres allowing it to be suited for any size application.

We can also fit our Combination cylinders with a Solar, Heat Pump or Wood Burner Coil to further expand its system capabilities.

Specification

Copper Thickness	0.7mm
Max Working Head	10 Metres
Test Pressure	1.45 BAR
Heat Loss ERP Rating	Minimum C Rating
Coil Heating Surface	Minimum 0.44m²
Foam Specification	Polyurethane
Heights	825mm to 2000mm
Diameters	300mm to 600mm

Connection Sizes Available

½"	15mm Compression
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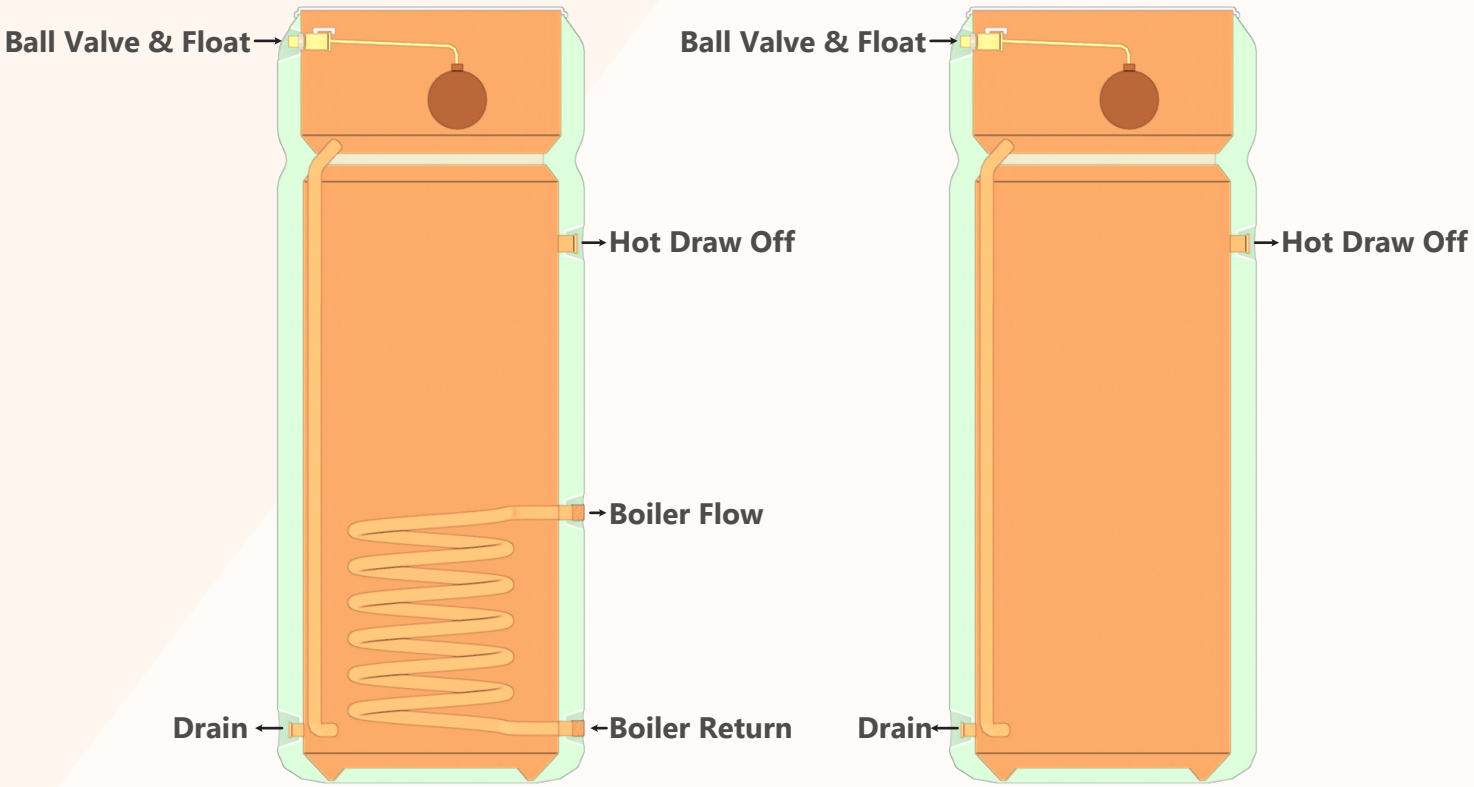


RENEWABLES READY

Thermal Store Cylinders

Our Thermal Store Cylinders offer a unique water storage solution where the tank stores non-potable water to be heated via many different heat sources and mains pressure cold water is heated via a high-efficiency finned copper coil to be provided directly to taps, baths and showers.

Easy to install, our Thermal Store cylinders are controlled with a thermal mixer valve allowing the draw off temperature to be set to a suitable temperature.

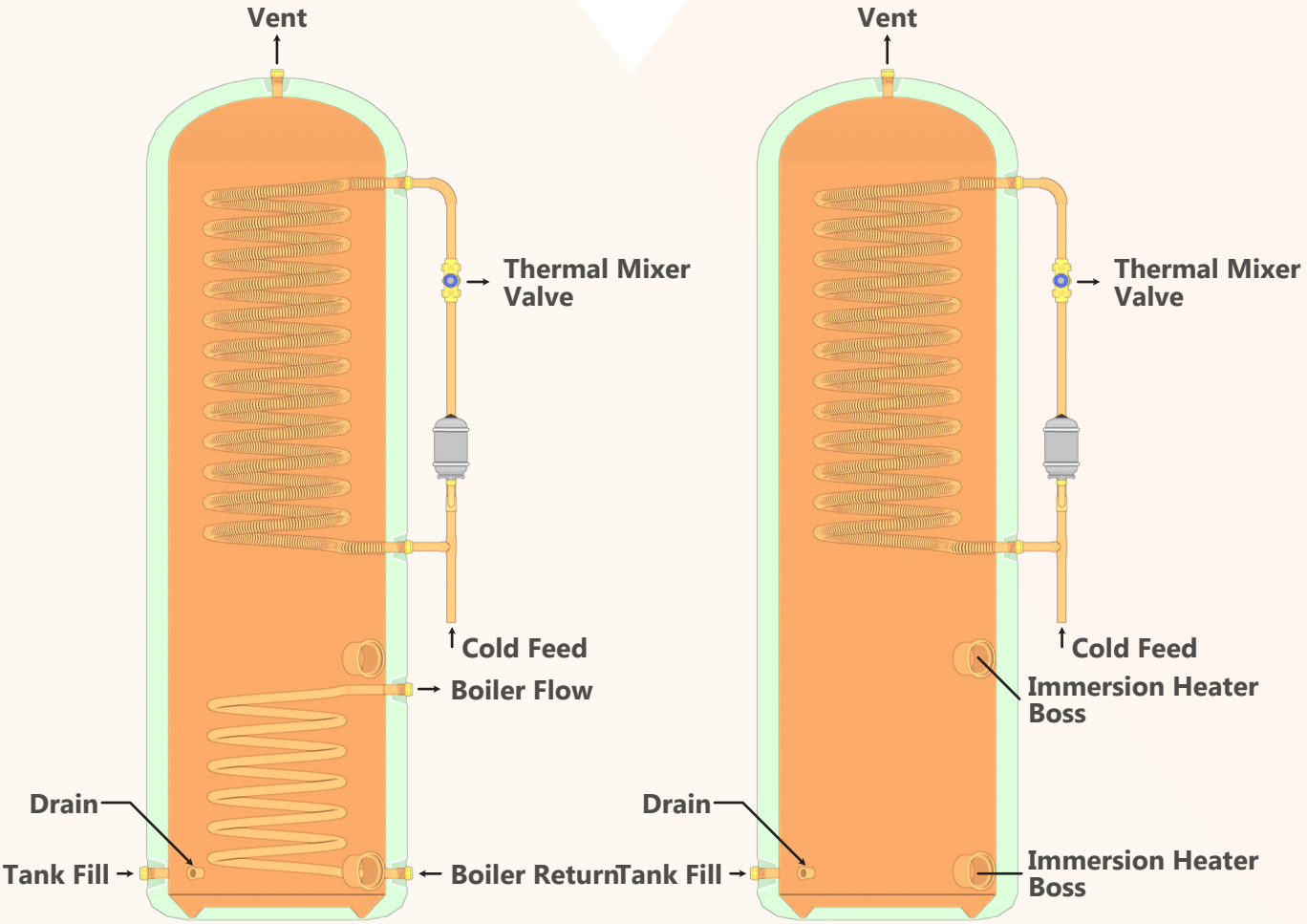
As with all of our cylinders, we are able to manufacture our Thermal Stores for use with a wide variety of heat sources such as Solar, Heat Pump, Gas / Oil Boilers, Wood Burners and Electric heating.

Our Thermal Stores include 75mm of Polyurethane insulation to reduce heat loss from the higher temperature hot water stored; we also include a pressure reducing valve, check valve, thermal mixer valve, expansion vessel and immersion heater.

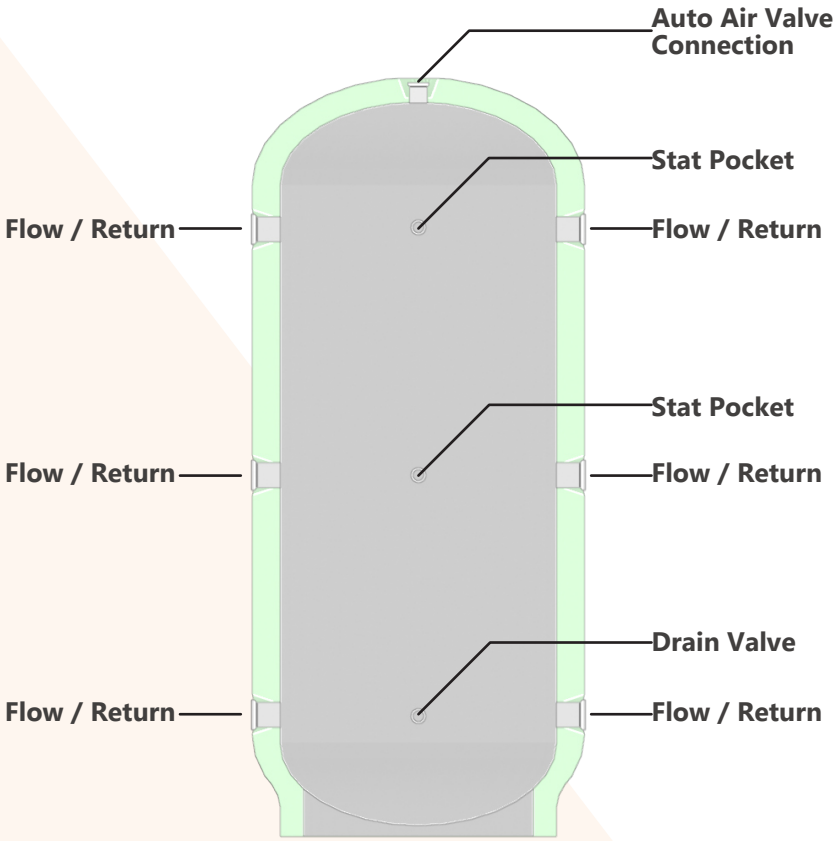
Thermal Store units are commonly used in the replacement markets to replace the now out of production Showermax unit.

Because the Thermal Store does not draw off it's internally stored water, you can enjoy a constant supply of hot water even when the heat sources are not producing heat. Water can be heated during the day via solar for example which is stored for heating the Direct Hot Water coil for later use.

Temperature Output Range	30° to 70°
Max Working Head	10 Metres
Test Pressure	1.45 BAR
Heat Loss ERP Rating	Minimum C Rating
Coil Heating Surface	Minimum 0.44m²



Buffer Vessels



Our Buffer Vessels are designed to store heated non-potable hot water for instant demand for another system such as a radiator or undefloor heating.

It can be also used to allow both pressurised and vented systems to work with each other via internal coils.

We can manufacture our buffer vessels from 8 litres all the way to 8000 Litres.

Our Stainless Buffer Vessels come included with a 50mm Steel Case Finish but can also be supplied with a green Polyurethane spray finish.

Connection Sizes Available

- 15mm Compression
- 22mm Compression
- 28mm Compression
- 1" Female
- 1 ½" Female
- 2" Female
- 3" Female

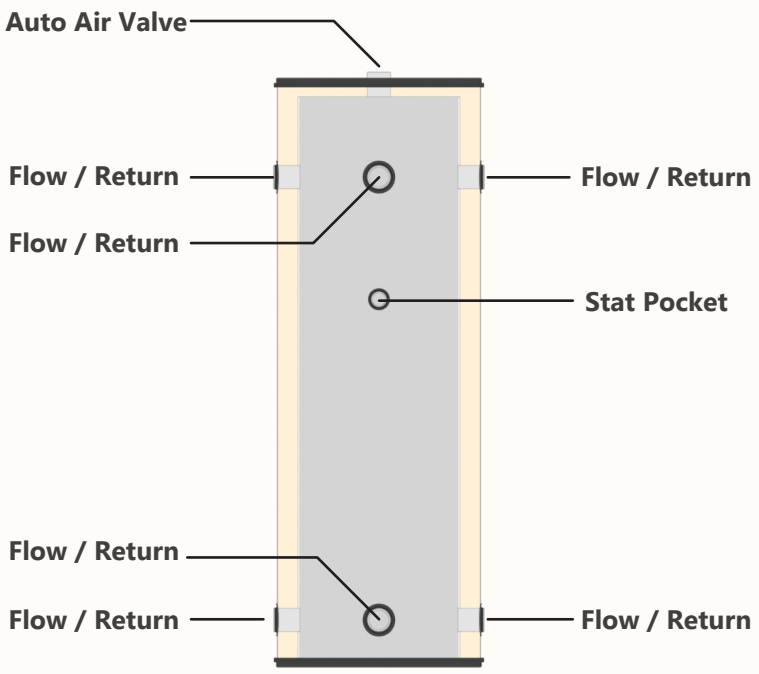
Also Available with Flange Connections

We also manufacture a range of small Heat Pump Buffer Vessels from 8 to 100 Litres. These are specifically designed to be used in conjunction with a Heat Pump System in order to increase the system volume as well as having a ready store of hot water for use with the Heat Pump.

These can be supplied with either a 10mm Armaflex Foam Insulation or a 25mm Steel Case Finish and can be manufactured to suit your specifications.

Our Buffers include facilities for an Auto Air Valve and Stat Pocket and optionally a drain valve.

Max Working Press.	3.5 BAR
Test Pressure	4.5 BAR
Material	316 Stainless



RENEWABLES READY

Aquinox Stainless

Our Range of Aquinox Stainless Steel Cylinders are a cost-effective solution for pressurised and Unvented Cylinders. Copper does not have the same tensile strength as Stainless Steel so thicker copper sheet is required for pressurised units which can drastically increase costs. Stainless allows for superior pressurisation from a more cost-effective material.

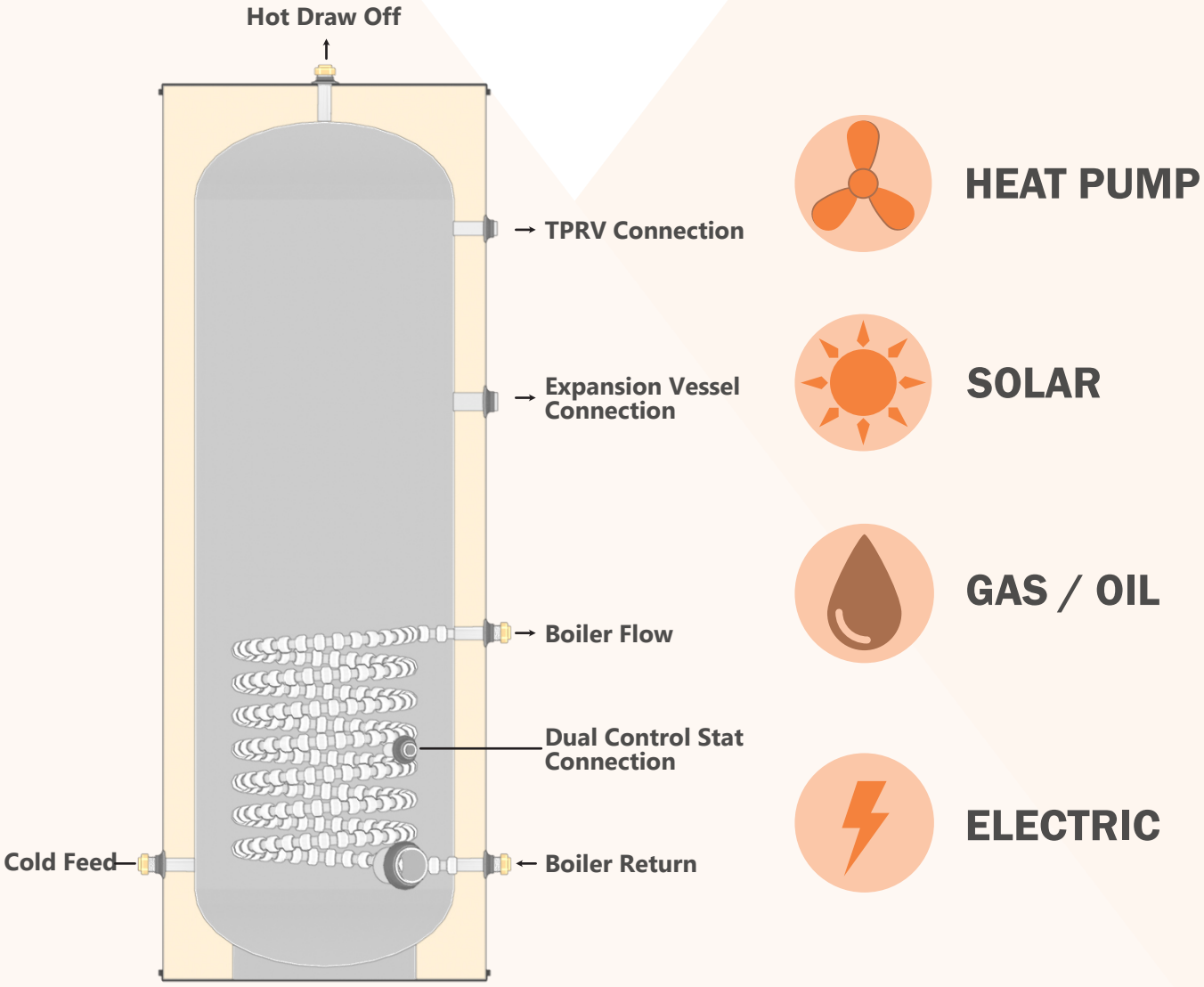
Unvented cylinders utilise mains pressure cold water allowing the cylinder to draw off high-pressure hot water for use with showers and taps without needing a pump or an electric shower.

As our cylinders are pressurised, we include all necessary safety controls to maintain safe working pressures such as a Pressure Reducing Valve, Expansion Vessel and Temperature & Pressure Relief Valve

Our Stainless Steel units come included with a 50mm Steel Case Finish and Polyurethane Insulation.

As with all of our cylinders, we are able to add capabilities for the unit to work with Solar, Heat Pump, Boiler and Electric Systems.

Material	316 Stainless (Duplex for Larger Units)
Working Pressure	5.0 BAR
Test Pressure	9.0 BAR
Heat Loss ERP Rating	Minimum C Rating
Available Heights	900mm to 2000mm
Available Diameters	300mm to 600mm
Coil Sizes	Boiler - 1.1m² | Solar - 1.5m² | Heat Pump - 3.0m²



RENEWABLES READY

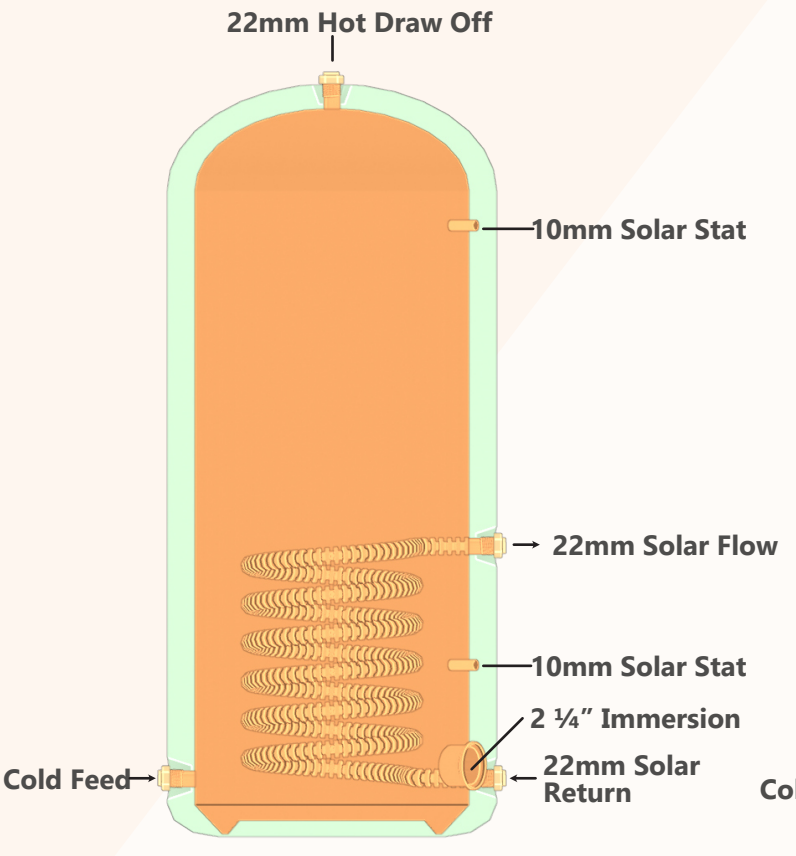
Solar & Heat Pump Cylinders

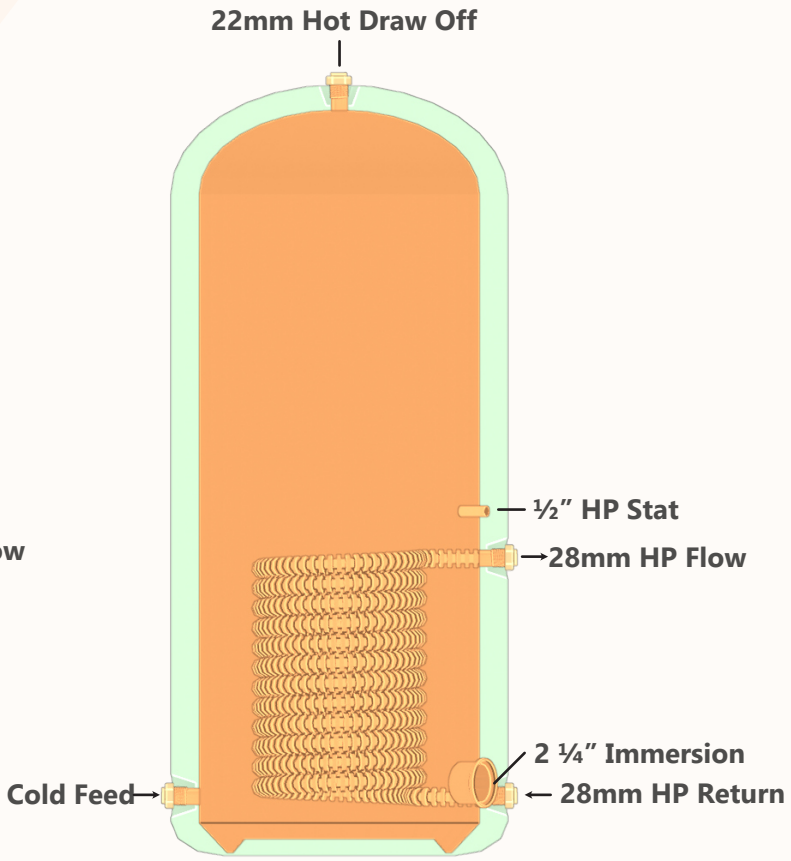
Our range of Renewable Cylinders for use with Solar and Heat Pump systems are manufactured with a high-density finned tube to facilitate efficient heat transfer. Heat Pumps and Solar Panels typically operate at a lower temperature than a gas/oil boiler so it is essential that an efficient coil is used to transfer as much heat as possible.

We fit our Solar and Heat Pump Cylinders with either a ½" Heat Pump Stat Pocket or two 10mm Solar Stat Pockets at high and low level to ensure accurate control of the systems.

Larger tanks can include multiple coils, allowing for the cylinder to be heated by multiple heat sources.

Copper Thickness	0.7mm (Thicker for 500 & 600 Diameter)
Max Working Head	10 Metres
Test Pressure	1.45 BAR
Heat Loss ERP Rating	Minimum C Rating
Solar Coil Heating Surface	1.62m²
Heat Pump Coil Heating Surface	3.24m²
Coil Material	High Surface Area Copper Finned Tube 15mm
Foam Specification	Polyurethane



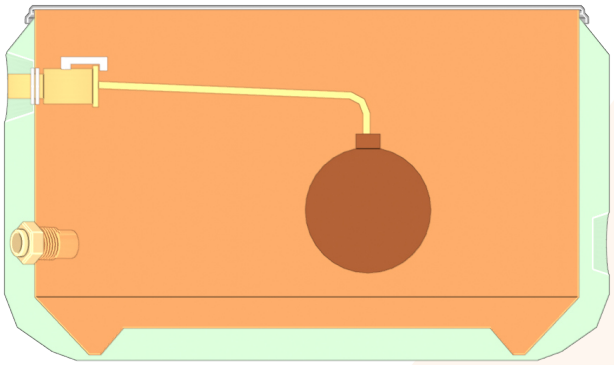


Header Tanks

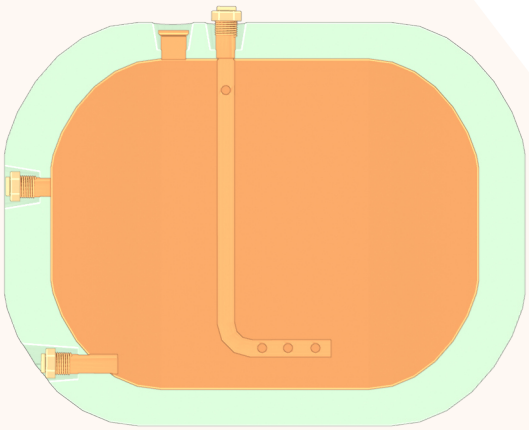
Our Feed and Expansion Header Tanks are manufactured from either Copper or Stainless Steel as a replacement for plastic Header Tanks which are unsuitable for high temperature water.

We also provide 25mm of polyurethane foam insulation to protect against frost as well as a ½" Ball Valve and Copper Float.

We can manufacture our header tanks either cylindrical or rectangular for maximum space utilisation.



Drainback Vessels



Our Solar Drainback Vessels is designed to allow fluid inside a solar system to empty from the panels into the drainback vessel protecting the solar panels from temperature extremes such as freezing weather during the winter and overheating during the summer when the pump is turned off as the system is already up to temperature.

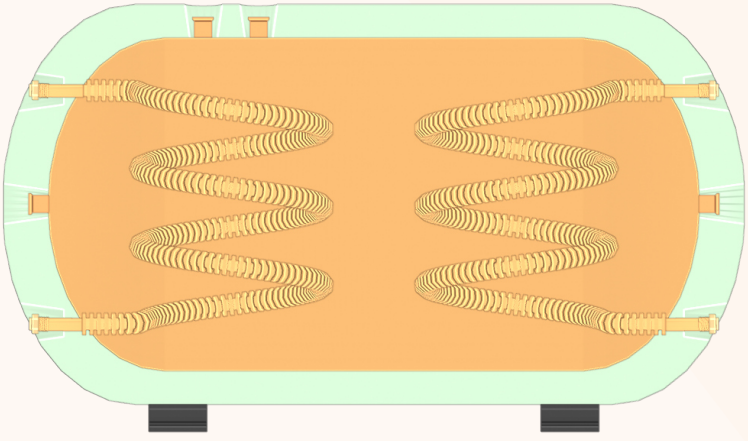
We supply our Drainback Vessels with a connection and valve for safety relief to ensure the solar system does not overpressurise when heated.

We also manufacture our Drainback vessels with 25mm of Polyurethane foam to prevent both heat loss when the system is hot as well as frost prevention during cold temperatures.

Marine Calorifiers

Our Marine Calorifiers are manufactured from high-grade Copper able to withstand high pressure for operation on a Marine system. The tank has facilities to be heated via electric immersion, oil/gas boiler or engine heat via high-density finned copper tube.

We can manufacture a wide range of sizes to suit any boat from small narrow boats to yachts and cruise liners.



We are open from 8:00AM to 4:15PM Monday To Friday. We have several ways to get in touch by;

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