

# PulsaCoil ECO Stainless

## **User Instructions**





#### **Important - Please Note**

This unit has been manufactured by Gledhill Building Products Limited. Gledhill are an established manufacturer of water heating cylinders. It is our policy to deal with the merchant trade rather than directly with consumers because our products should only be installed by suitably competent trades people and we recommend that consumers do not attempt to purchase and install our products.

We offer a minimum one year warranty (guarantee) in respect of all cylinders that we manufacture, but please note that our guarantee is given to the builder or installer that purchased the cylinder from us and runs from the date of manufacture. In the unlikely event that there is a problem, it is important that you refer it as soon as possible to the person or company that supplied the cylinder to you (your "Supplier"). This will usually be the person or company that sold (or leased) the property to you or the person or company that installed the cylinder for you.

If you contact your Supplier in the first instance this will enable them to determine the cause of any problem that you may be experiencing. We would not, for example, be responsible for faulty installation and by contacting us directly this may simply cause you unnecessary delay and expense.

Your Supplier can determine the cause of the problem and where the problem is caused by a fault with the cylinder itself then your Supplier can advise us accordingly.

Nothing in our guarantee or in these User Instructions will affect your statutory rights.

#### Warning

There are no user adjustable parts inside the casing. Tampering with sealed components will invalidate the warranty and could also damage the cylinder and make it unsafe to use.



#### PulsaCoil ECO Stainless - the power behind your domestic hot water

The hot water in your home is provided by a high specification thermal storage system which will give you many benefits. This booklet will explain why and how you can get the most from it.

#### **Operating characteristics**

With a PulsaCoil ECO Stainless, the domestic hot water you use at the tap is not stored but is produced instantaneously. This has the advantage of reducing the risk of contamination from things like Legionella as well as reducing the risks of scalding by allowing the temperature of the hot water at the tap to be controlled to 50°C-55°C.

This system delivers fresh water from the mains supply to the hot taps and is designed to fulfil four basic needs.

- 1. Provide mains pressure hot water with a cylinder that does not need a costly annual service.
- 2. Deliver hot water at mains pressure.
- 3. Operate as efficiently as possible to cost-effectively meet your needs.
- 4. Provide high quality water to every tap. This is possible because the water is heated instantaneously and is not stored where it can be contaminated.

Depending on the wiring system within your property your installer/developer may have provided an off-peak timer in the airing cupboard of your property.

If a device is fitted it must be set to the correct time and set to synchronise with the off peak meter for correct economical operation. This should have been set when the system was commissioned but any power cuts could have altered the correct time.

THIS UNIT SHOULD BE LEFT PERMANENTLY CONNECTED TO THE OFF-PEAK ELECTRICAL SUPPLY AND NOT SWITCHED ON AND OFF WHEN HOT WATER IS NEEDED.

INSTALLERS MAY ALSO HAVE FITTED AN ON-PEAK SWITCH WHICH CAN BE USED WHEN REQUIRED TO PROVIDE A BOOST TO THE TOP PART OF THE STORE ON DAYS WHEN A LARGE AMOUNT OF HOT WATER IS REQUIRED.

#### Scale

The water in the store never changes and therefore the immersion heater elements will never scale up during the life of the product.

As far as the water you use is concerned scale can be a problem in any of your domestic products if the water is very hard in your area.

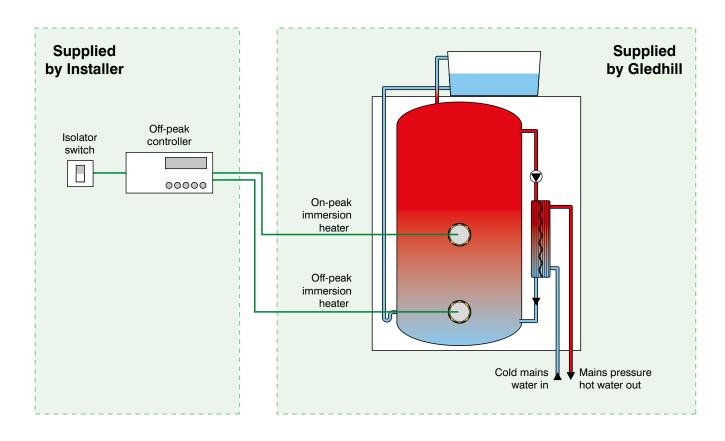
The PulsaCoil ECO Stainless appliance has been designed to inhibit the formation of scale, but if it does become a problem you will notice a deterioration in the flow rate at your hot taps. In this situation your service engineer can de-scale the product. Building Regulations now require some form of scale inhibitor to be fitted in hard water areas, and so scale is unlikely to be a problem if the scale inhibitor is operating correctly.



#### What is a thermal store?

The Gledhill Thermal Store is the heart and brain of your hot water system. It stores hot water at a constant temperature and incorporates a highly efficient 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.

Off-peak supplies will automatically be used to heat the thermal store. The unit can also be connected to the on-peak electricity supply, to switch the unit on at any time of the day, to provide a 'boost' to the top part of the thermal store to achieve the most efficient way of satisfying your demands on the system.



#### How does the system deliver hot water at high pressure?

The water delivered to the taps and showers in your home is supplied at high pressure because it uses the mains pressure of your cold water supply. The PulsaCoil ECO Stainless 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.

#### Plastic top up cistern

The plastic feed tank should have been filled to the correct level by the installer at the time of commissioning.

The water level in the plastic feed tank should be checked on a regular basis, generally 3-4 times a year, and topped up when necessary to the level shown on the sight glass which is fitted to the side of the tank.

Once the level has been topped up or after it has been checked, ensure the lid has been securely replaced.





#### **Annual Service / Safety Check**

Unlike other hot water appliances which provide mains pressure hot water, such as unvented storage cylinders, there is no legally required costly annual service or safety check.

However, Gledhill Response can offer an annual Breakdown Agreement once the warranty has expired.

#### What if the system develops a fault?

If your PulsaCoil ECO Stainless should develop a fault during the warranty period, switch the appliance off and contact your house manager/installer. Do not attempt to remove or adjust any component part yourself.

If the developer's warranty has expired, you can contact Gledhill Response, who will be able to carry out a chargeable repair or offer a Breakdown Agreement.

The PulsaCoil ECO Stainless may have been connected to a manual switch facility. This should be switched on to provide a boost to the top part of the thermal store on days when a large amount of hot water is required.

#### REMINDER

If you are considering changing your electricity supplier it is important that you ensure they are able to provide at least the same tariff. If not the operation and cost of running the appliance will be affected.

#### How often do I need to check my header tank?

We advise that the header tank water level is checked every three months. If you do need to top up the water level, you can help reduce the amount of water lost during operation by ensuring the lid of the header tank is securely replaced.

#### How much water should I add to my header tank?

The header tank should be filled with clean cold water to the level shown on the sight glass which is fitted to the side of the tank. It is important not to overfill the tank as this can create problems.

#### Why do I have to manually top up my header tank?

While we acknowledge that the manual fill of the header tank can be inconvenient for some homeowners, this feature has important safety implications since it significantly reduces the potential for damage to the property.

You can install a ball cock with automatic topping up of the system. However, in the event of a leak or ball valve failure, systems which automatically fill themselves up will continue to do so indefinitely until the problem is resolved. Such issues have been responsible for causing damage to property and the implications of leaks within flatted developments can potentially be quite serious.

By contrast, the inability of the PulsaCoil ECO Stainless unit to top itself up means that in the event of a leak, the only water that can be lost is the water held in the cylinder at that time.

#### Can I turn the unit off overnight?

While you can safely turn the appliance off at any time, the PulsaCoil ECO Stainless unit charges overnight to take advantage of the 'off peak' cheap rate electricity. Turning the unit off overnight denies the appliance this opportunity to charge itself. This means that you will have limited hot water and will potentially have to charge the unit during the day using 'on peak' electricity at a much greater cost.



#### Will I save money by turning the unit off overnight?

No, turning off your unit overnight will not save money since the temperature of the water held in the store will fall and a similar or greater amount of electricity will be used when the unit is turned back on to restore the water temperature.

#### Will I save money by turning the unit off during the day?

No, turning the appliance off during the daytime will not save electricity. Since the unit only charges overnight, unless you are on an Economy 10 tariff or actually request a top up of hot water (by pressing your 'Boost' button on the wall) you will not use a significant amount of electricity during the day.

#### Should I turn my unit off when the property is empty?

We advise that if you are away from the property for less than 2-3 weeks, then leave all power switches on.

Inside your appliance a store of water is held within a stainless steel cylinder, which will cool if the appliance is switched off. If the water held in the stainless steel cylinder is allowed to remain cool for a prolonged period of time, corrosion of the stainless steel cylinder can occur and the lifetime of your appliance can be significantly reduced.

We would not therefore recommend leaving your unit switched off for several months without the appliance being drained. Gledhill Response would be pleased to drain your unit for you at a subsidised rate should this ever be necessary. However, the PulsaCoil ECO Stainless is very well insulated and so the cost of draining and refilling the cylinder will almost certainly be more than the cost of energy used by leaving the cylinder switched on.

#### Why do I get cold water when I first turn on the hot tap?

When you initially turn on the hot tap, you draw the water that has been stood in the pipework between the PulsaCoil ECO Stainless and the tap itself. It is not until this water is drawn off that you then receive the hot water that is generated by the PulsaCoil ECO Stainless. This would be experienced with ANY boiler and is

#### I have concerns over the water quality.

The hot water which is delivered through your taps is your mains cold water which has been instantaneously heated by our appliance. This means that the hot water produced is therefore the same quality as your incoming mains supply and should therefore be of drinking quality.

You have no exposure to stored water and there is nothing our unit can do to influence the quality of your water. The PulsaCoil ECO Stainless eliminates the risk of legionella or dangerous bacterial growth affecting your hot water supply.

#### Why is my water so hot?

Your PulsaCoil ECO Stainless appliance is designed to meet with Building and Water Authority Regulations, which stipulates that hot water is routinely delivered to tap outlets at no less than 50°C – 55°C.

These temperatures prevent the growth of micro-organisms within your pipe work and eliminates the risk of legionella and harmful bacteria within your hot water. You can therefore have absolute confidence that the hot water that you use to bath and wash with is completely safe.

#### Can I turn the hot water temperature down?

However, while this high temperature guarantees safe water quality, we do understand that this temperature is very hot. Older people who have more sensitive skin, may have restricted movement and be unable to react quickly. They are consequently more vulnerable to scalding, especially if 'stuck' in a bath or shower.

The temperature of the hot water cannot be 'turned down' at our appliance due to the risk of bacterial build up within your pipework, but it can be reduced at the outlet itself through the installation of a thermostatic control.

#### My unit makes noise, is this normal?

Noise will generally only occur when the unit heats during the night or when requested by you during the day. The unit contains a stainless steel cylinder holding 100 – 200 litres of water, which will make some noise when heated, in the same manner a kettle will obviously make considerable noise heating a far lower quantity of water.



# Providing peace of mind

On expiry of your initial warranty period, Gledhill Response Limited would be pleased to provide further customer support with a range of services including:

Low cost annual repair and maintenance contracts from as little as £95 per year

Annual servicing and safety checks

Expert response to 'out of warranty' breakdowns at fixed charges

Please ring 08445 679898 or visit www.gledhill.net for further details





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Due to a programme of continuous improvement Gledhill Building Products reserve the right to modify products without prior notice.

It is advisable to check the product technical detail by using the latest design and installation manuals available from our technical support team or on our website www.gledhill.net.