

# combimate

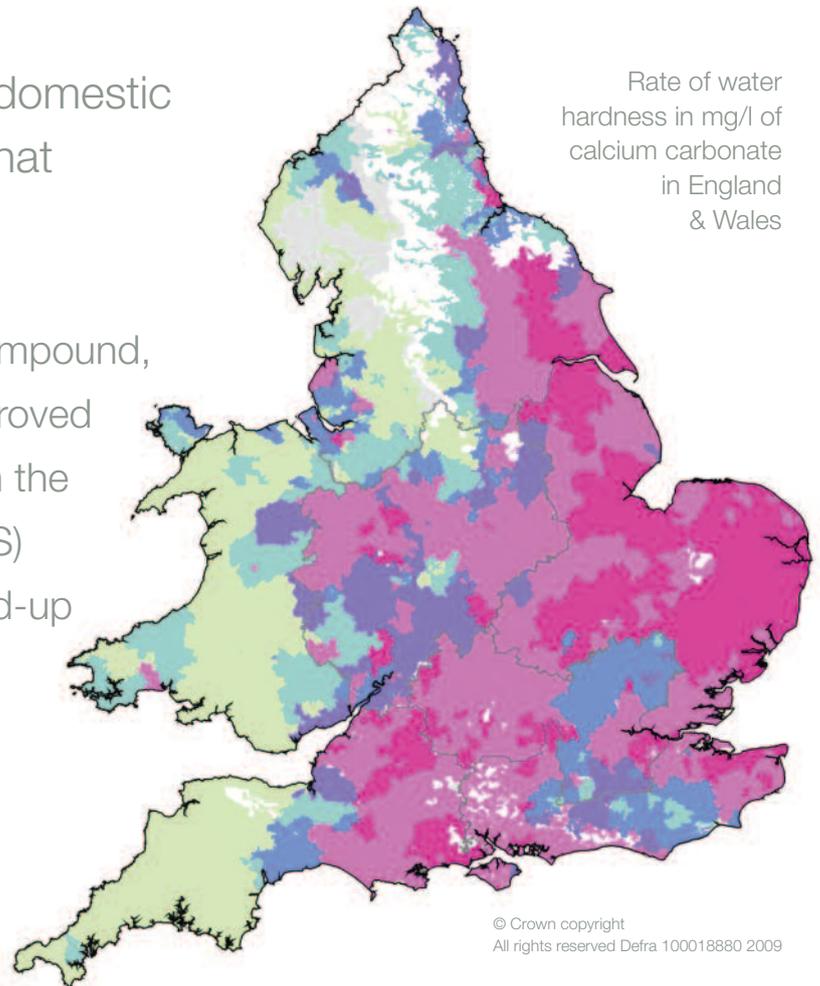
guaranteed prevention of limescale  
and soft water corrosion



- Prevents limescale in hard water and soft water corrosion
- Prevents 'brown' water, keeps pipework clear and energy and maintenance costs down
- Compact, flexible and quick to install on vertical and horizontal pipework
- For single appliances or 'whole house' water supply
- Safe for drinking water and all domestic appliances
- No maintenance. Easy annual Combiphos top-up
- £500 cash-back guarantee against scale build-up
- WRAS approved
- Available with 15mm or 22mm compression fittings

**combimate** is a user-friendly domestic limescale prevention device that uses Combiphos.

Combiphos, a polyphosphate compound, is 100% food grade material approved by FAO/WHO and compliant with the European normative standard (BS) EN 1208 that prevents scale build-up and soft water corrosion in combination boilers and other domestic hot water appliances.



## how it works

**combimate** is filled with the appropriate amount of Combiphos which, when in contact with water, is released in very small quantities, sufficient to keep the mineral ions in suspension.

This action prevents the formation of scale while retaining the health benefits of the natural minerals contained in hard water. Combiphos coats the inside of the pipework, boiler heat exchanger and appliances with a non-residual, microscopic, protective coating to prevent scale-causing minerals from accumulating and aggressive soft water from corroding the system and appliances.

### key

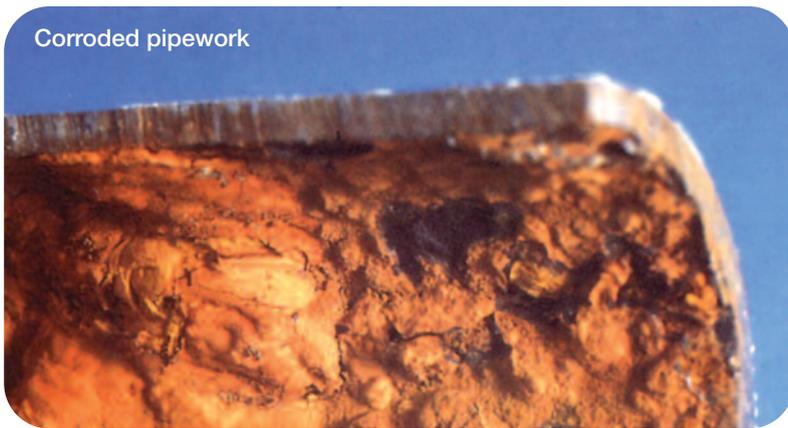
White	No information
Light Green	Soft: 0-50
Teal	Moderately Soft: 51-100
Blue	Slightly Hard: 101-150
Dark Blue	Moderately Hard: 151-200
Purple	Hard: 201-300
Magenta	Very Hard: Over 300
White	No public supply

## tried and tested

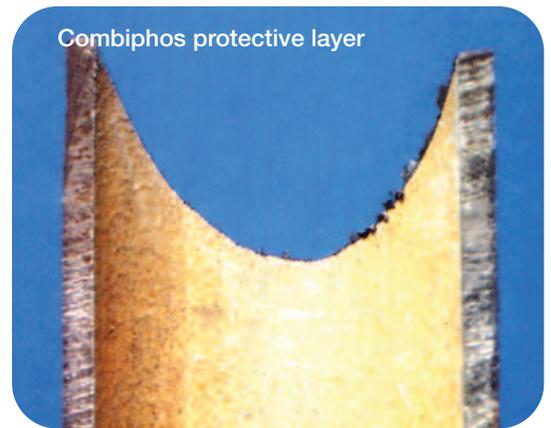
Combiphos is a polyphosphate compound specifically developed to provide the most effective limescale prevention in flow-through installations. Polyphosphate dosing has been safely used to treat water throughout the world for many years.

## health and safety

Combiphos is tasteless and odourless and contains a polyphosphate compound which is classified by the WHO as a 'food-grade' additive. The quantity, size and hardness of the spheres control the amount of Combiphos released. Typically this is less than 3ppm (parts per million) of phosphate in treated water and perfectly safe for human consumption.



Corroded pipework



Combiphos protective layer

## replacing combiphos

**combimate** is manufactured to high quality standards by Cistermiser Ltd., an ISO 9001 approved company.

**combimate** is WRAS approved. Over time the volume of Combiphos in the dome gradually reduces. The only maintenance required is to change the entire Combiphos contents in the **combimate** annually.

Combiphos is replaced by removing the **combimate** cover, which is released by pressing the two red buttons on either side and pulling it forward. As the cover is released, a patented integral mechanism shuts off the water supply, allowing access to the Combiphos dome. The dome can then be removed from the body by undoing the red filler plug to relieve the pressure and then unscrewing the aluminium locking ring to change the Combiphos spheres.

Cistermiser replacement packs containing 800g of Combiphos, sufficient to re-fill the whole unit, complete with a new O-ring seal, are available from merchant stockists or direct from Cistermiser Ltd. The O-ring should be changed each time that the Combiphos is replaced.

### note

Combiphos does not soften water and its effectiveness may be reduced in water heated to temperatures above 60 degrees centigrade, in water with carbonate hardness levels above 360ppm or at pH levels below 6.5.



## the combimate de-scaling guarantee

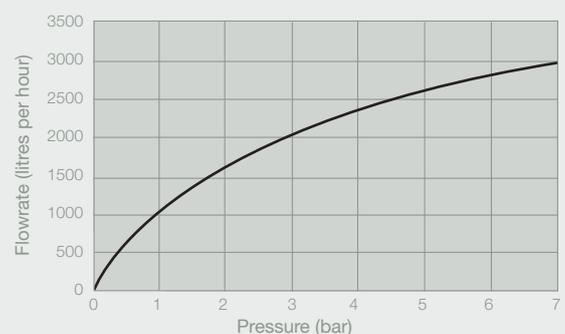
If **combimate** is installed with a new boiler and the Combiphos is replaced annually, Cistermiser guarantees that the new boiler, new heat store or new heat exchange will not scale up. Cistermiser is so confident in the capabilities of **combimate**, when used with Combiphos, that if the unit it is protecting experiences significant scaling, we will pay £500\*\* towards the cost of repair or replacement.\*

\*Subject to Cistermiser's warranty policy

\*\* including VAT

Through the design of the **combimate** housing and the Combiphos spheres, the pressure drop via **combimate** is very low and the following high flow rates can be achieved.

### Flowrate through combimate with Combiphos Present (+/- 10%)



# installing combimate

There are two possible installations;  
whole-house supply or single appliance

## whole-house supply

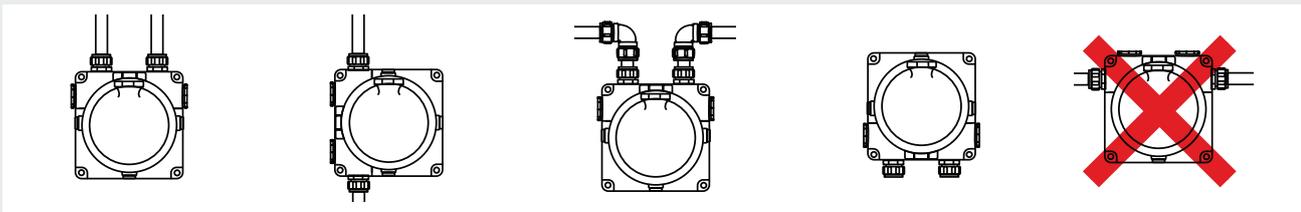
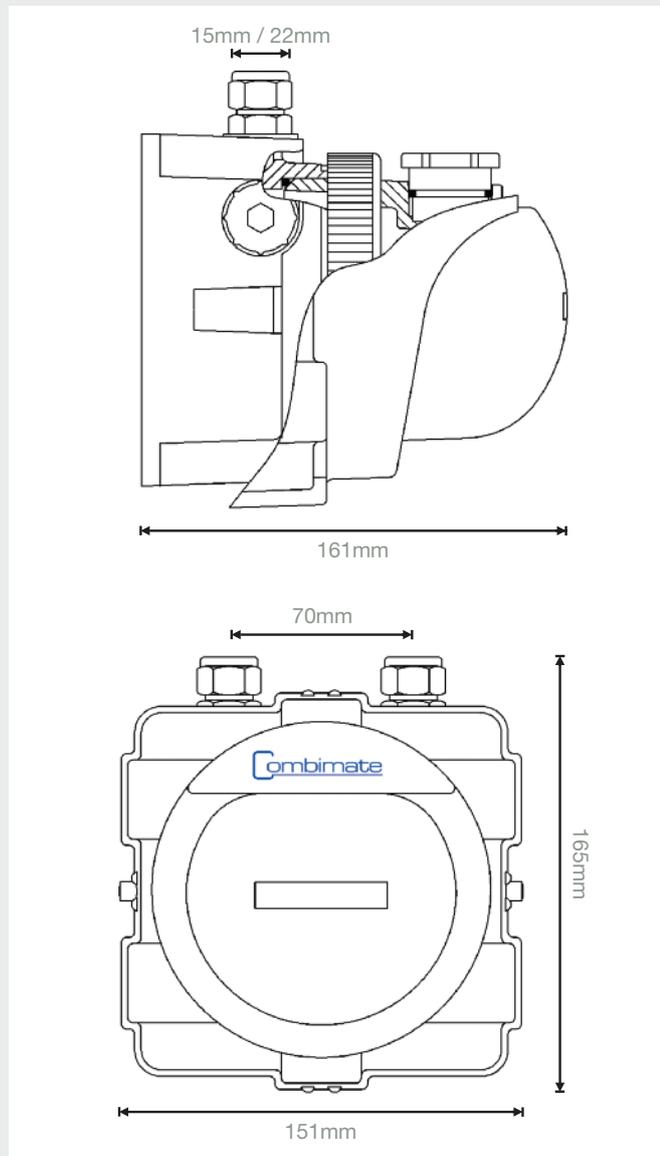
For this installation **combimate** should be plumbed in after the stop-valve on the cold water supply to the premises. The removable divider tray should be removed from inside the **combimate** dome in a whole house installation so that the dome can be completely filled with Combiphos.

## single appliance installations

**combimate** can be used to protect a single appliance by placing it on the cold water supply to that appliance (e.g. a boiler) in which case the removable divider tray should be left in place, and Combiphos should only be put in the top half of the dome and this reduces the amount of Combiphos required.

Inlet and outlet connections use 15mm or 22mm compression fittings. There is minimal pressure or flow rate loss through **combimate**. Vertical, top and bottom entry pipework can be used which ensures easy retrofit installation. **combimate** should be installed at least 0.5m from any local sources of heat such as boilers or hot water pipes.

The **combimate** can be installed in various configurations, allowing maximum flexibility of pipework configurations.



1.6mm or 1/16" of scale in a heating system causes a 12% loss in heating efficiency. British Water

If you live in a hard water area, doing nothing to counter the problems that it causes is probably the most expensive option. British Water

## product code

combimate (15mm)	COM1
combimate (22mm)	COM2

Replacement Combiphos can be purchased online, directly from Cisterniser or from any large plumbers' merchant.