

The Aquabion[®] fact sheet

simplicity

in limescale prevention

Limescale and options for reducing it

What is limescale?

Hard water contains a lot of lime - Calcite - which will lead to a build up of limescale. This means:

- unsightly deposits which are hard-to-remove, even with harsh potentially damaging chemicals.
- reduced working life of taps, pipes, toilets, hot water tanks, boilers and washing machines, and any other equipment which uses water.
- increased quantities of soap, detergent and shampoos are required.



How to get rid of limescale

Option 1	Option 2
Condition the water	Soften the water
Aquabion conditioning	Salt-based softening
Change the chemical makeup of the lime so it forms Aragonite instead, an easy-to-remove lime	Replace the lime with Sodium so limescale won't form

Option 1: Condition the water

In the conditioning process, zinc in the Aquabion system reacts with the lime in the water to form a non-stick form of lime called Aragonite. By changing the form of lime, up to 98% of limescale formation is prevented.

Pros

- Formation of new limescale, and growth of existing deposits, is greatly reduced
- Any residue can simply be wiped away with a normal household cleaner
- Lime remains in the water, so pipes and aluminium heat exchangers in condensing boilers are protected from corrosion
- The system can easily be moved to another location or house
- Maintenance-free
- Up to 98% effective, and no new problems

Cons

Conditioning doesn't completely remove the need for cleaning - a small amount of residue might still need wiping away.

Option 2: soften the water

In the softening process, the lime in the water is replaced by sodium. By removing the lime, limescale will no longer form.

Pros

- The hardness, i.e. the lime, is removed
- Existing limescale is reduced
- Less soap, detergent and shampoo is needed

Cons

- Sodium is left in the water – about half the amount of lime it replaces
- Fitting a separate drinking water tap is currently recommended by the UK Dept of Health, Water Regulations Advisory Scheme (WRAS) and the UK water Trade Association (UKWTA).
- Corrosion can damage condensing boilers because of the lack of lime and the presence of sodium in the water
- Salt has to be bought regularly, or stored if bought in bulk
- The salted water is flushed out into the sewers, and from there into rivers and onto the land through flooding and irrigation. This increases the salinity of the soil and reduces its productivity.
- Salt has to be mined, processed and transported to its final destination.

Option 1 - Aquabion® conditions the water

Worry-free maintenance

- No maintenance just change every 7 years
- Nothing to go wrong, no electrics, no moving parts.
- Condensing boilers often have aluminium heat exchanger which can be corroded by the high sodium water. Call your boiler manufacture to make sure it is safe to be used with a salt based unit.
- Steel radiators can be damaged by the high sodium water.
- ALL boilers and ALL appliances are safe with Aquabion® units.

Save money with Aquabion®

- Aquabion® is cheaper to buy than most high quality water softeners
- Aquabion has much cheaper running cost than salt water softeners. One hospital spends £30,000 a year on salt
- No labour costs tied up with filling softeners up with salt.
- Aquabion® does still give you many of the same benefits of salt based units.

Kind to the environment

- When water softeners regenerate they are consuming many thousands of litres water and many tons of salt a year.
- The salt goes into sewage systems which can cause some problems when discharged into rivers. In some parts of California they have been banned because of these problems.
- Limescale also is very bad for the environment as it increases energy usage as well increasing equipment failure.
- Aquabion® doesn't consume any salt or water and therefore has never been banned. It also stops limescale build up so you still get the environmental benefits without the problems.

Option 2 - Salt based softening

Salt has to be mined, processed and transported to its final destination.



7-8 bags of salt can be needed for a family of 4 per year.

Aquabion® putting limescale in its place

“It's scientifically proven that Aquabion® kills limescale build-up”



With Aquabion
lime washes
away without
acid



Call 01380 609351 right now for more information about Aquabion® or go to www.aquabion-uk.com

