Water softeners can be fitted in any home

A common misconception in the heating and hot water industry is that water softeners cannot be fitted alongside central heating systems. Kevin Johnson, chairman of the water softening division within BEAMA, explains more

More than 60% of the UK suffers from hard water. This is caused by the water that feeds our homes and properties depositing calcium and magnesium that it has picked up when passing through chalk beds in the ground.

Once the calcium and magnesium is heated, it deposits itself as hard water scale. That's why you get more scale in hot water than in cold. This leads to scale and scum being experienced all around the home.

Dispelling myths

A water softener overcomes these issues by removing the calcium and magnesium on demand from the water as it flows through the unit. When the unit becomes full of calcium and magnesium, it then automatically cleanses itself with a weak solution of salt and water called brine. The previously collected calcium and magnesium, together with the brine are automatically sent to drain. At no time does the brine enter the water supply, dispelling the myth that soft water has salt in it.

Separating the facts from fiction

Myth number one: A water softener is difficult to install.

Fact: If you can install a washing machine you can install a water softener. They all need a little plumbing work, a drain and some models need a power point too.

Myth number two: I am not sure if I can have a water softener with my boiler?

Fact: Every hard water home in the UK regardless of the type of boiler it has installed can have a water softener. The industry agrees that as long as the primary side of the system is filled with hard water then there will be no issues at all. Leading boiler and chemical manufacturers all support this position.

Myth number three: I cannot drink softened water.

Fact: Yes you can. In fact softened water is now officially classified as 'wholesome' up to water hardness of 425ppm. The only proviso is a mains water tap is recommended where water hardness exceeds 425ppm.

Hard water reduces the effectiveness of cleaning products and shampoos

Myth number four: They use lots and lots of salt.

Fact: Leading water softener manufacturers use either proportional brining or full capacity operation. Proportional brining means that when the softener regenerates, it uses the exact amount of salt as per the capacity of the softener exhausted. Full capacity means that the softener runs to zero then regenerates. These are normally duplex softeners. Both types offer salt savings of over 56% compared to the older specification full salting softeners.

Myth number five: You lose water pressure through a water softener.

Fact: Today's modern water softeners all have high flow internal distribution systems to give optimum flow at all times.

Myth number six: A water softener takes years and years to pay for itself.

Fact: Not true. Installing a water softener has been proven to have a payback in less than four years. With soap, shampoo and other cleaning agents cut by over 50%, and the fact your softener will remove existing scale too, means that you do not have to heat the scale before you heat your water. With today's ever increasing fuel bills, isn't it nice that you can offer your customers a true saving when compared to other 'green' products. Remember just 1mm of scale increases your hot water bills in excess of ten per cent.

Myth number seven: A water softener is big and cumbersome.

Fact: Twenty years ago maybe, but today's softener manufacturers have worked hard to reduce the overall size of the units, while maintaining their efficiency. A classic comparison is today's modern boilers. Years ago some needed to be installed in a utility room as they were too big for the kitchen, now they sit neatly on a wall. It's similar with a softener. Gone are the days of a domestic model being large and unsightly. Today's modern units are sleek, compact and efficient too.

Myth number eight: You can't tell the difference between hard and soft water, so why do I need a softener?

Fact: Yes you can. It has a nice smooth feel to it. It's better for your skin, your home, and we (the softener industry) promise you that once you have had a water softener installed, you will never want to go back to hard water again.

Myth number nine: A water softener has a short life span.

Fact: The average life of any water softener is between 15 and 18 years. In fact there are many softeners that are still working after 30 years.

A water softener can be installed in any home

This point was reinforced to the industry in 2015, when the Heating and Hotwater Industry Council (HHIC) issued the following statement: "Where a water softener is present in the dwelling, ensure that the heating system primary circuit is filled with mains water via the general bypass valve as required in BS 14743".

For installation requirements, refer to WRAS Information and guidance Note No 9-07-01 "Information for the installation of ion exchange water softeners for systems supplying water for domestic purposes". Refer to the boiler manufacturer's instructions for any additional advice on softened water.

In fact Worcester, Bosch Group has a dedicated page on water softeners confirming the very same point above, asking: 'Can I use artificially softened water in the heating circuit with my boiler?

Answer: 'You can have a water softener in combination with our boiler as it will prevent the hot water circuit from scaling up and losing efficiency. However, the central heating circuit should be filled with hard water and a chemical inhibitor. This can be done by using the water softener bypass when filling or topping up. Alternatively, the filling loop feed can be connected upstream of the water softener'.

When the HHIC and Worcester, Bosch Group published this position, it was arguably the most important announcement for our industry in ten years.

A water softener can be installed in any home, with any boiler, as long as you fill up the radiators with hard water. The more we can get that point across to installers, the better for everyone.