

Ciphe

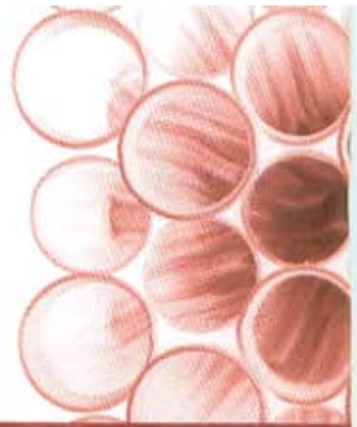
Chartered Institute of
Plumbing and Heating Engineering

www.ciphe.org.uk

PHE & HE

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Plumbing & Heating Engineering magazine



- Boilers
- Professional Development
- New Awards Scheme Launched

- Tackling Flooding
- Corrosion Research
- CIPHE News

Free renewables courses

Members needed for corrosion research

A request by Harvey Bowden, Managing Director of Harvey Water Softeners

Background

Most boiler manufacturers have written into their installation instructions that softened water must not be used with aluminium heat exchangers - but BS7593 (Code of Practice for the Treatment of Water in Domestic Hot Water Central Heating Systems) says clearly that you can use hard, soft and SOFTENED water with aluminium heat exchangers, if it is correctly dosed with a suitable corrosion inhibitor.

Since we would expect all qualified installers use an inhibitor when they're fitting a new boiler, we are now left with a conflict of information. This is added to by the fact that the official performance test for inhibitors is BuildCert, and this only has test procedures for naturally hard or naturally soft water.

There is a new procedure for testing the efficiency of any inhibitor in softened water that has been written and tested by the softener industry. The water treatment industry is working flat out to get this included in BS7593, but it could take years to put an official end to all the confusion and misunderstandings.

There is a general desire in the sector to ensure that all the relevant standards and regulations are up to date and that they work effectively.

In all my thirty-five years in the softener

industry and as a plumber before that, I have never seen an aluminium heat exchanger that has been corroded by softened water - even without an inhibitor - and there is also no official evidence I can find anywhere of any first-hand experience of softened water causing corrosion on aluminium heat exchangers.

So, while we work to get the necessary changes to BS7593, it's important for us to get evidence on record from the field on the issue of softened water and corrosion.

CIPHE and Harvey Softeners / UKWTA would therefore like your help please, to conduct a field study to identify and measure over a 2-year period any signs of corrosion on aluminium heat exchangers.

What do you have to do?

Simply fit a water softener - supplied free - and then drain and refill your heating system with inhibitor-free water.

Then, every three months take a sample of the water from your central heating system (containers provided) and post it to the research laboratory in the freepost envelope also provided.

At the end of the 2-year project, the water softener is yours to keep - or, if you don't want it, you can return it to us.

What happens if corrosion occurs?

The chances of any corrosion at all are minimal but if it should happen (because we're testing every three months, it will be discovered very early), you would be advised to re-fill the system with inhibitor immediately.

If your heat exchanger should be significantly corroded by the softened water during the 2-year project, we would replace it for you.

Who can participate?

You need to:

- be a plumber or heating engineer, registered with the CIPHE, who is interested in carrying out an experiment for the benefit of the plumbing industry.
- have a boiler with an aluminium heat exchanger in your own home.
- live in a hard water area where the water hardness is above 200 ppm.

We really need your help, so if you fit the bill, please ring 01483 753423, write to Harvey Softeners Ltd, Hipley Street, Old Woking, Surrey GU22 9LQ, or email sue@harveysofteners.com with the information requested below:

Name

Address

Post Code

Telephone

Email

Age of central heating system

Age of boiler

Make and model of boiler