



## WATER SOFTENERS NOT A LUXURY, BUT A NECESSITY. WHY?

Hard water costs you money and time, but worst of all, it harms the environment.

The obvious is how much more soap, shampoo, conditioner, washing powder etc. that is used in hard water areas (some of these items can be

quite expensive). The problem is that you don't notice the cost, when bought a little at a time.

Less obviously, is how much very expensive energy is wasted when trying to heat water in furred up appliances,

not forgetting the large amount of extra CO<sub>2</sub> and other greenhouse gasses are pumped into the atmosphere.



Consider how much money you spend on bathroom and kitchen cleaners, especially ones that remove lime scale, not forgetting the anti-scale tablet they suggest you put into your washing machine.

Then, how much time you waste using them each week, month, and year? When you add it up, it's a lot!

Add in the damage that hard water does to your central heating boiler, pipes, hot water tank, washing machine, and dishwasher. In fact, anything that comes into contact with this type of water can be affected! Again some of these have a very high replacement cost, and it is worth noting that damage due to lime scale is not covered under their guarantees.

The cost of a water softener is quite reasonable and the running costs are sensible – salt, a small amount of electricity and a little water.

When the scale builds up, for example, in a kettle, it becomes increasingly difficult for the heat from the element to boil the water - because it has to heat the scale first!

The net result is that far more electricity is used to boil the water. As the scale gets thicker, so does the consumption of power, and up goes the cost! Eventually you have to de-scale the kettle, only for the process to start again!

You can see what happens in your kettle and do something about it, but you can't see inside your washing machine, which also has an element, your hot water pipes, central heating pipes, central heating boiler, hot water cylinder etc.

If you have had to de-scale your kettle several times in the last couple of years, just imagine what your boiler and inside your hot water cylinder must be like, after the same period, without de-scaling. Chances are, heating the water in the boiler and cylinder is costing you twice as much as it should, if not more! It doesn't matter if the heat source for a storage cylinder is an immersion heater element or the coil of a heat exchanger fed from your central heating boiler, they all scale up.

The problem gets worse: In an indirect cylinder fed by a boiler, because the scale build up on the inside of the cylinder is sufficient to prevent the thermostat on the outside reacting correctly. It keeps the boiler on for longer, burning lots more fuel, and keeping the water unnecessarily hot, this is because the scale on the inside of the tank is acting as an insulator, so it's not getting a true reading.

### KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes Catalogue call  
**0845 274 1000**
- Visit our website  
**wickes.co.uk**

In addition more energy is consumed because scale is building up in the pipes.

It is calculated that a build up of only 4mm in a central heating pipe, causes an increase in fuel consumption of some 25%. It is harder for water to circulate through the pipes so your pump suffers, and the 'insulating' layer of scale reduces the heating effect of the water.

The problem can become so serious that the circulation of water ceases and the system breaks down completely. Apart from the very damaging effects on electric heating elements, storage cylinders, pipes, etc., there are other problems associated with hard water. Many people simply don't like the feel of hard water, and indeed, sometimes it can lead to skin problems. Again, many people want soap to lather, shampoos to leave the hair softer and detergents to work properly. It is a fact, many detergents used for the washing of clothes do not do their job as well as they should in hard water areas, simply because they, like soap, cannot produce a suitable lather, added to which clothes are often not properly rinsed.

None of the problems mentioned above arise in those areas of the country where the water supply is SOFT. The reason for this is that soft water contains few damaging mineral impurities. Only about 40% of the country have a soft water supply. The rest of the country has varying degrees of hard water.

Because of the problems, it is not surprising that homeowners in hard water areas want some method of changing their hard water to soft, giving them the chance to save money, and permanently enjoy the luxury and advantages this gives.

The Wickes Water Softener (421-700) (including basic installation kit and fitting instructions) is available to order, from your local Wickes store. Contact one of the in store Design Consultants (who can be found in the kitchen area of the store).

Delivery will take about seven working days.

The Wickes water softener is designed to provide more than adequate soft water for a home of one to five people, at very reasonable cost, both initially and in the future. This is a model that is easy to install and operate.

Sizewise the softener measures 640mm high, 275mm wide by 450mm deep, so

it will fit inside a kitchen cupboard (base unit) quite easily.

If you are considering the purchase of a new kitchen this is the ideal time to consider installing a new Water Softener for installation at the same time.

Alternatively you could install it in the garage, laundry room, airing cupboard, cloakroom or even an insulated loft (why not ask one of our Design Consultants for some ideas?).

The only factors, which may have a bearing on its location, are the need to link it into the rising main water supply pipe, to provide drain and overflow facilities and a power source. Most people tend to install their Wickes Water Softener adjacent to an outside wall, near a drain, and close to an electrical socket (or where a socket or connector can be fitted easily).

The softener (421-700) is supplied with a fitting pack which contains items, not normally stocked by Wickes, for locating the unit as described above, and includes flexible high performance toughened hose for linking into the rising main.

Note: Depending on your drain layout, you may find a Wickes Washing Machine /Dishwasher trap (431-915), 38mm plastic push fit waste pipe and some of our cistern overflow pipe & connectors of help. These items are not supplied in the fitting kit; they are standard sale items at Wickes. Those in the fittings kit are not, and assumes that your rising main supply pipe is 15mm copper.

The work involved in the installation is basic plumbing, namely, the fitting of a non-return (check) valve into the existing rising main followed by tees and other valves to link in the softener. When plumbed in correctly the softener can be isolated for servicing without disrupting the household water supply.

#### IMPORTANT

Water Bylaws require that:

1. A tap for drawing drinking water from the 'mains supply' is available in every domestic premises.
2. A check valve (420-058, a "non-return" valve) is installed at the inlet to the water softener.

We must emphasise that, in order to conform to the Bylaws; you must provide a hard water branch off your rising main - before the water softener - supplying:

a. A hard drinking water supply - perhaps as a third tap on your kitchen sink and

b. Water for an outside tap. It is not necessary and is wasteful to use softened water for this latter purpose especially if a sprinkler is to be used.

All electrical work must conform to BS 7671 the current IEE Wiring Regulations, and Part P of Building Regulations. You are advised to check with your local authority's Building Control Department, or an Authorised Competent Person, before starting. If in any doubt about electrical work, contact a qualified electrician.

#### MORE TECHNICAL INFORMATION

The Wickes Water Softener is fully automatic and can be set to regenerate as often as required. This will depend upon water usage and initial hardness.

The softener will take 25kg of salt tablets or salt pebbles, this quantity is sufficient for fifteen regenerations.

Regeneration (which will normally be timed to take place at night) is the washing, rinsing and flushing away of the collected calcium and magnesium, using a salt solution. The hard water minerals are initially removed as the water passes through a special resin cylinder. Once set-up, all you have to do is periodically fill with salt - It's that simple - All this is in the operating manual, which is provided with the Wickes Water Softener, and there's a helpline, if needed.

Full instructions will be found packed with the softener.

#### GUARANTEE

The Wickes Water Softener comes with a full 12 months parts and labour warranty plus a further 24 months parts only. This does not affect your statutory rights. An extended warranty can also be arranged, if required, by contacting the helpline given below. Contacting this number can also help solve any queries or operating problems

**HELPLINE: 01279 780250**

Whilst every care has been taken to ensure that the product design, descriptions, specifications and techniques of constructing the products are accurate at the date of printing. Wickes products will inevitably change from time to time and the customer is advised to check that the design, descriptions, specifications and techniques of constructing any of the products described in this leaflet are still valid at the time of purchase or placing an order.

© Wickes Building Supplies Limited 2011

All rights reserved. No part of this publication may be produced or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise or stored in any retrieval system of any nature without the written permission of the copyright holder and the publisher.