

Background information on pH correction in water supplies

PH Correction

Water with a pH lower than 7 is considered as acidic. A pH of 6 is ten times more acidic than that, and a pH of 5 is one hundred times that of 7, so there is a considerable increase in acidity with every point below neutral on the scale.

It is not harmful to drink or bathe in, though a very low pH can have an aggravating effect on some peoples skin. The most common symptoms are that it may leave a blue/green ring around baths and basins, cause discolouration to washing and sometimes adversely affect colour treated and blonde hair.

The main problem is the damage it can do to pipe work and water tanks, in particular the hot water tank, as the heating of the water makes it more aggressive. The water slowly eats away at the tank and eventually holes develop. If your piping is copper your water will have elevated copper levels, which can lead to indirect health effects and acidic water generally contains elevated levels of metals leached from underground deposits. The copper pipe work itself will suffer the same corrosion as the hot water tank resulting in pinprick holes throughout



the system and a requirement for the system to be fully re-plumbed.

For this reason where pH is a problem the whole house should always be treated and many building societies insist acidic water is treated before a mortgage is granted. It may also be necessary for the correct running of other filtration on the line e.g. Iron and manganese removal and UV units.







The simplest and safest way to raise the pH is to run the water through a vessel containing a bed of specially activated limestone. This is a mixture of calcium and magnesium salts, which are the salts found in waters of pH greater than 7.0. This limestone gradually dissolves increasing the pH level of the water.

As the limestone dissolves, it will need refilling periodically. Water with a pH below 5.0 is unsuitable for this type of treatment but is uncommon.

pH correction units are available in a wide variety of sizes to cater for all flow rates, please contact the office for further information on pH correction units.

