

Comparing The Pros And Cons Of Water Softeners

Water is the basis of life. We drink it, we bathe in it, we use it for all manner of industrial and social purposes. What many people do not realize, until they learn the hard way, is that there are basically two different types of water. There is “hard” water, and there is “soft” water. The difference is usually not noticeable for people who are solely accustomed to one type, and then are forced to confront the other. Then, it is a sort of panicked enlightenment.

Usually this happens when a person moves into a new house or apartment, in a new part of town. But what is the difference between hard water and soft water?

Hard Water

Hard water is simply water that is chock full of all of the normal minerals and calcium deposits that naturally come with it in local reservoirs and aquifers. Hard water is not in any way dangerous, or bad for you, but it tastes “dirtier” (according to some) and it can leave unsightly calcium and mineral stains on your plumbing fixtures.

Also, some of the minerals in hard water react with the chemistry of most types of soaps, preventing the generation of good lathering. Over time, hard water poses a significant detriment to your plumbing system, as the minerals and calcium build up in the pipes, causing all sorts of problems.

Soft Water

Some of the water agencies operated by local municipalities choose to filter and soften the water before it heads to homes and offices in its jurisdiction. This soft water is simply water that is missing most of the minerals, metal deposits and calcium deposits that come naturally.

Soft water is best for use in showers and bathrooms, as it leaves no stains or rings to metal, tile or porcelain fixtures.

If you do not like hard water, or you tired of constantly cleaning your shower, tub and sink after every use, you may be ready to start looking into home water softener solutions. Here is a brief overview of the types of water softeners, how they work, and which may be best for your particular situation.

How Water Softeners Work

Water softeners work through an ion exchange process that uses an element resin filter, through which hard water passes. After it passes through this element filter, it becomes soft water, and continues on into the pipes leading to your home.

There are three predominant types of element filters for water softeners. Each type of element filter uses a different type of “salt” to filter water:

- Hydrogen
- Sodium
- Potassium

Each of these types has certain drawbacks and advantages, but on the whole, there is little practical difference between them, when used as an element filter.

Water softeners work, because these element filters contain negatively charged electrons that attract and bind themselves to the positively charged electrons in the minerals and calcium found in hard water. These are then trapped in the filter, as the remaining soft water is passed on through into the plumbing system.

Depending upon the type of element filter that you use, remember that as the minerals and calcium are removed, they are replaced by larger amounts of whatever “salt” is used to filter them. So you will have heightened levels of hydrogen, potassium or sodium, depending upon the type of filter salt used.

Water softeners of each of these three types can be regenerated, by releasing a specially made agent into the water stream, and allowing it pass through the water softener’s element filter. This will “recharge” the salts used, and save the hassle of having to reinstall an entirely new water softener system.