

My Household Water, Calcium & Scale. What Do I Need to Know?

Have you noticed any of these issues recently?

- The taps wearing out in six months
- Shower head clogs up in six weeks
- Powdery white film on the shower glass, keeping it looking permanently dirty, despite cleaning daily.
- Water tastes terrible
- Kettle is lined with scale & takes longer to boil.
- Coffee machine needs descaling frequently
- The water is so hard, hair does not lather when shampooed
- Skin feels dry, itchy and rough after a shower.



*“Did you know the most cost effective way to have soft water,
PLUS pleasant tasting water, is to attach a
3 Stage Whole House Water Filtration System
between your water meter and the pipe that brings water into the house?”*

How It Works

Resin Water Softener

Our resin water filter contains a 10” column, filled with beads of polymer resin. The small beads create a large surface area in contact with water as it flows past.

The resin is made of polymer that binds positively charged ions. Initially the polymer surface is saturated with sodium ions, meaning that there are sodium ions available on the surface of each bead, ready for exchange. These ions are weaker than calcium & magnesium ions. The polymer

is designed specifically to bind more strongly to the calcium & magnesium ions, than to the sodium ions.

When the hard water flows past the 1000's of resin polymer beads, the calcium & magnesium ions will bind to the polymer, displacing the sodium ions into the water.

The water then flows through to the **KDF/Heavy Metal** filter.

KDF (Kinetic Degradation Fluxion)

This filter media contains high-purity copper-zinc granules to reduce contaminants in water through a redox reaction: oxidation or reduction. The **KDF** process media reduces heavy metals, hydrogen sulfide, and chlorine. Once again, the technology of ion exchange is used here.

Sediment filter – to maintain efficiency of the Resin & KDF filters, we have found in Western Australia that more frequent changing of the sediment is required, to remove increasing amounts of large particles, before going through the other two filters. If this is not done, the work load is increased in the second two filters, reducing their efficiency for what they are designed to do: remove calcium, chlorine & heavy metals. For this reason, we include two sediment filters with the initial **3 Stage Whole House Filter System** purchase.

