

# PureZone

For Pure Clean Water

It is estimated that an ion-exchange water softener could **save** in the region of **\$400 for an average 4-person household** in a hard water area

## The Many Benefits of Soft Water

✔ Softened water provides real cost savings in service, maintenance and replacement of water heaters, dishwashers, washing machines and showers and also extends their life

✔ Softened water improves the efficiency of hot water and heating systems - just 1.6mm (1/16") of scale build-up in heating systems will cause a 12% loss in heating efficiency

✔ Softened water can save some 50% of washing powder and toilet soap consumption and similarly reduce the amount of shampoos, conditioners and cleaning products used

✔ Softened water can help certain dry skin conditions such as eczema

✔ Softened water can, in time, remove existing scale deposits in hot water and heating systems as well as scale around taps and stains in baths and basins

✔ Softened water makes the dishes and glassware crystal clear when using a dishwasher. No more streaks or spots.

✔ Softened water has a clean silky feeling. It makes bathtime a luxury without the need for bath oils or bubble bath liquids

✔ Softened water makes hair soft and easy to manage

✔ Softened water rinses completely away without leaving scum, even after shaving

✔ Softened water makes laundry brighter and glasses and dishes sparkle and shine

✔ Softened water makes washing the car easier and will reduce streaking and spotting.



# What is Hard Water?

Hard water contains dissolved minerals which are not present in soft water and it is these which give hard water its particular characteristics – **scale and scum formation and difficulty developing a soapy lather**. The minerals that contribute to water hardness are calcium and magnesium.

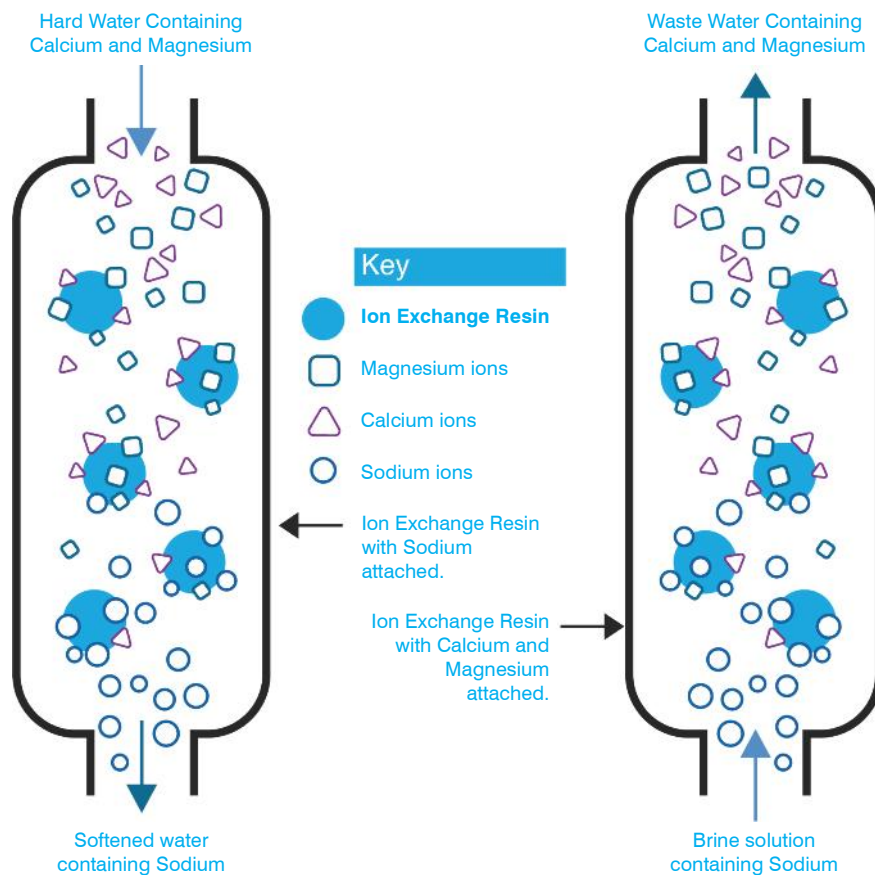
The calcium in hard water reacts with soaps and detergents making it difficult to develop a good soapy lather and producing a scum either on the surface of the water or round basins and baths. When hard water is heated above 61°C (or as it evaporates) the balance between the dissolved minerals are upset and the bicarbonate converts into carbonate. This leads to the precipitation of calcium carbonate scale, **commonly called limescale**.

**Just 1.6mm of scale in heating systems causes a 12% loss in heat transfer** from the energy source (gas, electricity) to water. In areas with a hard water supply, scale gradually builds up in boilers and on heating coils in hot water tanks. This causes the heaters and boilers to use more gas or electricity.

Hard scale **also gradually builds up in hot water pipes and reduces the flow of water**. This makes pumps work harder and can ultimately block the pipe. It will shorten the life of showers (heaters and shower heads), washing machines and water heaters, reducing their efficiency and increasing maintenance and repair costs.

**Scum and lather:** hard water increases the amount of soap, shampoos and detergents used, especially the amounts needed to produce an acceptable lather. The use of soaps, etc in hard water leads to the formation of an unpleasant scum on the water or as a soft deposit remaining as a watermark on basins and baths.

# The Softening System



## Aquatrol CAT100E Resin

- ℳ High purity premium grade resin bead
- ℳ Gel polystyrene sulfonate cation exchange resin
- ℳ Designed expressly for the treatment of potable water
- ℳ NSF Certified
- ℳ High bead integrity
- ℳ Excellent chemical and physical stability
- ℳ Very low extractables



**Extends the life of dishwashers**



**Can help dry skin conditions**



**Reduces streaking**

# The PureZone Water Softener Differences

When you purchase a PureZone Water Softener you have the added benefits of:-

- ✓ Two options being:-
  - ! Fully automatic and metered – only regenerates when required
  - ! Fully automatic and based on a time clock – regenerates based on a set period of time
- ✓ Low salt consumption
- ✓ Low water usage
- ✓ Designed to use the exact amount of salt
- ✓ No complicated programming required – In fact each unit is shipped fully programmed to your specific needs
- ✓ High flow rate capabilities
- ✓ Suitable for all types of plumbing systems
- ✓ Delayed regeneration
- ✓ Stores data in the event of a power cut
- ✓ Uses food grade high purity, high capacity resin (Aquatrol CAT100E) which is NSF certified
- ✓ National distribution network through plumbers merchants
- ✓ Removes existing scale.
- ✓ Can be altered to help reduce the Iron or Manganese content present in your water
- ✓ Back-up support of a team of highly trained water technicians who can help with any further problems or troubleshooting
- ✓ Supporting a 100% NZ owned company
- ✓ PureZone stocks a large range of service/replacement parts
- ✓ PureZone brine tanks include a salt platform which prevents costly build-up of salt around the pick-up tube
- ✓ Softener can be specified for a 'treat to storage' situation or a 'direct feed' use.

Using a water softener reduces the cost of gas, and electricity bills!

## Residential Models Available

PureZone softeners are designed to be as efficient as possible, and each has a hardness removal capacity calculated using a recommended salt efficiency per Litre/Resin. Softeners are not calculated solely on flow rate, but choosing the correct system depends on a number of factors which must be taken into account. Please talk to your local reseller before selecting a system.

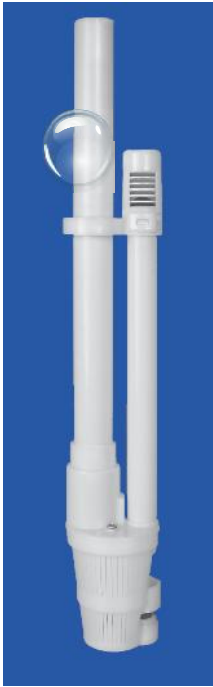
The following models are based on moderate hardness level of 60-120ppm (mg/L) and little to no Iron

Tank Size	844	948	1054	1252	1465
Resin Amount (Litres)	20	30	45	60	85
Peak Flow Rate (LPM)	30	35	40	60	75
Use	Bach or Small Domestic	Small Domestic	Medium Domestic	Large Domestic	Large Domestic or Small Commercial
Regeneration Method	Timer Clock or Volume Based Options available				
Electrical	Standard 3 Pin Plug 230V on all valves				
Inlet/Outlet	Standard 1 inch however 3/4 inch available				
Max pressure	100PSI				



Water has a clean, silky feeling

## Optional Extras



PureZone softeners are available with a number of optional extras which include:-

- )] Bypass Unit attachment to enable the valve to be detached and serviced whilst still maintaining flow.
- )] Pro Softener Mate which is a 2kg compound added to the brine tank to clean the resin and prolong the lifespan and efficiency of the water softener
- )] Pro Rust Out which is similar to Pro Softener Mate but is used where Iron/Manganese is present in the water. This product can also be used to clean tough rust stains from toilets, sinks, tubs, white clothes and exterior surfaces.
- )] Larger brine tanks to allow you to add more salt in reserve and top up less frequently.
- )] Addition of a Turbulator which allows for greater backwash efficiencies where Iron/Manganese is present



## Also available from PureZone

**CARBON** – Do you have issues with chlorine, bad taste or odour in your water? If so, then you can also treat this with a back-washable carbon filter. The carbon filter will remove chlorine, benzene, radon, solvents, trihalomethane compounds, volatile organic chemicals (VOCs) such as pesticides and herbicides and hundreds of other man-made chemicals that may come into contact with your water supply

**SEDIMENT** – Do you have issues with sand or sediment in your water supply? If so, then you can also treat this with a back-washable sediment filter. The sediment filter can remove particles down to either 20 micron or 5 micron depending on which model you choose. These systems can be used for domestic purposes and also commercial/industrial and even in the dairy sector.

**pH NEUTRALISER** – Do you have issues with blue/green staining on your plumbing fixtures or hair discolouration? If so, then you can treat this with a PureZone pH Neutraliser. The pH neutraliser will bring the pH levels up to a neutral level to stop any further degradation of your pipework and fittings and also prevent hair discolouration in fair haired people.

Your local stockist:

**PureZone**  
For Pure Clean Water

Distributed by Aqua Dynamics