



WELLINGTON WATER FILTERS LTD

incorporating
KAPITI PURE WATER

Your Local Water Treatment Specialists for over 20 Years

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Reverse Osmosis (R/O)

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Why Reverse Osmosis?

Reverse Osmosis water purifiers are the optimum system for removal of contaminants from water. Not only are they very efficient at removing a wide range of chemicals, heavy metals, bad taste and odour, but they will also remove fluoride, bacteria, viruses and all the 'dissolved solids' from the water which normal water purifiers will not remove. ('Dissolved solids' are minerals which are dissolved into the water. The main ones being Calcium from lime added to the water along with fluoride which is added to some water supplies to strengthen teeth.)

Typically urban treated water contains around 100 to 160 parts per million (PPM) of dissolved solids. After passing a standard carbon based water purifier the Total Dissolved Solids (TDS) reading will not have changed. After passing a reverse osmosis membrane the reading will drop to around 5 to 8 PPM. Consequentially the texture of the water has a slightly smoother, silky feel to it compared with normal filtered water.

In contrast to distilled water, which is often referred to as 'dead water', Reverse Osmosis water retains oxygen and has a sweeter, more pleasant taste.

Styles Available

Because the R/O membrane is slow to produce pure water (between 3 to 6 litres per hour) the system is normally installed under the sink and is linked to a storage tank (usually 10-12 litres capacity), which holds the pure water until required. This water is accessed by simply turning on your dispensing tap as the water is required. Water flow is normally around 2.5 litres per minute from the dispenser tap. The system automatically refills the tank as water is used.

The storage tank is not an absolute requirement however and bench top systems can be designed to connect to either a kitchen tap or in line with a washing machine tap. In this situation a flexible feed tube is placed into a jug or container of the clients choice and the system is manually turned on and off as required.

Maintenance

Pre filters (the filters prior to the membrane) are usually replaced or cleaned every 12 months depending on the quality of the feed water and amount of use, while the membrane and post filters (the filter after the membrane) are usually replaced every 3-4 years, making R/O systems very economical to maintain. The membrane itself can last up to 8 years if the pre filters are maintained well.

Reverse Osmosis Options

We can set up a Reverse Osmosis system to suit any situation. We use only quality American made membranes to provide reliable, efficient service. All plumbed in systems utilise an automatic shut off valve to stop water production once the storage tank is full, and automatically restart the purification process as water is consumed. All contaminants removed by the membrane are automatically flushed down the drain, thus preserving the membrane from clogging. Depending on the situation, we can design the system with either a CTA or TFC membrane type. Typically a water pressure of at least 40 PSI (280 KPA) is required to allow effective operation.

Although they may seem bulky in size, the components may be separated to fit into most cupboards without taking up too much space. The storage tank can be placed some distance from the purifier unit and is usually placed in a corner cupboard.

The most common systems are noted below.

[Please note, we can design and build any RO system to suit your needs and budget.](#)

GE Evolution PRF Retail ~~\$1770.00~~ \$ 1495.00 + installation

Up to 1.6 litre per minute of pure water on demand, as required with no storage tank required. Ideal for small commercial applications and laboratories where constant water flow is required.

(Measures 507 mm long (or high) x 270 mm diameter).

(Note additional pre filter and carbon filtration is normally required).

Normal water flow is around 1.2 to 1.5 L/Min).



5 Stage Undersink R/O System Price \$ 850.00 DIY (\$ 999.00 with booster pump).

(for known dirty water supplies or high use situations)

- Stage 1 Fabric based pre filter to remove dirt & sediment.
- Stage 2 & 3 Sediment &/or Carbon based filter to remove fine sediment and chlorine.
- Stage 4 Membrane for removal of all chemicals, heavy metals, fluoride and other dissolved material in the water.
- Stage 5 Post carbon filter to remove any chemicals which may have passed the membrane and to remove any flavour developed in the storage tank.

*upgrade to an alkaline re-mineralizing post filter cartridge for only \$100.00
(Price Includes a Pressure limiting Valve)*



Measurements.

Complete RO system pre mounted is
440 mm high x 400 mm wide x 150 mm deep

The system can be broken down for small cupboard spaces. The membrane can be mounted horizontally or vertically
Three pre filters on bracket 350 H x 400 w x 150 deep
Membrane 350 long x 85 x 60
Post carbon filter 250 mm long x 65 mm diameter

Storage tank is 400 x 300 mm and can be mounted vertically or horizontally

4 Stage Undersink RO System - Our Most popular system! Price \$ 699.00 DIY

- Stage 1 Fabric based pre filter to remove dirt & sediment.
- Stage 2 Carbon based filter to remove chemicals and chlorine.
- Stage 3 Membrane for removal of all remaining chemicals, heavy metals, nitrates, fluoride and other dissolved material in the water. (10 layer TFC membrane)
- Stage 4 Post carbon filter to remove any chemicals which may have passed the membrane and to remove any flavour developed in the storage tank.

*upgrade to an alkaline re-mineralizing post filter cartridge for only \$100.00
(Price Includes a Pressure limiting Valve)*



Measurements.

Complete RO system pre mounted is
440 mm high x 350 mm wide x 150 mm deep

The system can be broken down for small cupboard spaces. The membrane can be mounted horizontally or vertically
Twin pre filters on bracket 350 H x 300 w x 150 deep
Membrane 350 long x 85 x 60
Post carbon filter 250 mm long x 65 mm diameter

Storage tank is 400 x 300 mm and can be mounted vertically or horizontally

'Pure Value' Brand 4EZ50, 4 stage Kitchen Reverse Osmosis System **Price \$ 599.00**



A good budget priced Starter RO system for the cost conscience person. Assembled in America and comes standard with a long reach black lever tap.

The Pure Value RO system comes pre assembled along with colour coded tubing for easy installation. It uses good quality filter casings and storage tank, but has basic filters and a membrane with only 5 layers compared to our normal 10 layers. It is a good starter option, but will need more regular servicing. (The basic components can be upgraded during future cartridge or membrane changes if desired)

(System measurements are the same as our standard 4 Stage system).

- Stage 1 – 1x Sediment Pre-Filter
- Stage 2 – 1x Carbon Block Pre-Filter
- Stage 3 – 1x RO Membrane TLC 50 GPD (5 layer TFC membrane)
- Stage 4 – 1x Inline Carbon Post Filter 2" x 10"

Hyundai HQ7 Slimline Twist and Click RO system

Korean made,- Easy to change system,- simply twist the cartridge by hand to replace! Slimline design to reduce space required and easy self change cartridges and membrane. (Measure 350 x350 x 120 mm)
A great option for easy DIY maintenance.

Price \$ 649.00 DIY (Includes 12 litre storage tank
upgrade to an alkaline re-mineralizing post filter cartridge for only \$100.00
(Price Includes a Pressure limiting Valve)



Hyundai HQ7 Slimline Twist and Click RO system with booster pump

Same system as above but mounted on a frame with a powered pressure booster pump to improve performance in areas with low water pressure.
(Requires an incoming pressure greater than 20psi whereas normal RO systems require greater than 50 psi) (Measure 350 x350 x 200 mm)

Price \$ 799.00 DIY (Includes 12 litre storage tank
upgrade to an alkaline re-mineralizing post filter cartridge for only \$100.00



Aquarium or Autoclave System - **Price \$ 820.00 DIY** (including bench top tap and storage tank)

Used to supply absolutely pure water for Aquariums, Autoclaves and Laboratory use.

- Stage 1 Fabric based pre filter to remove dirt & sediment.
- Stage 2 Carbon based filter to remove chemicals and chlorine.
- Stage 3 Membrane for removal of all remaining chemicals, heavy metals, nitrates, fluoride and other dissolved material in the water.
- Stage 4 Mixed bed De ionizing cartridge to polish and remove all minerals left after the Reverse Osmosis process. Water will have a nil conductivity or TDS.



Compact Portable RO Systems

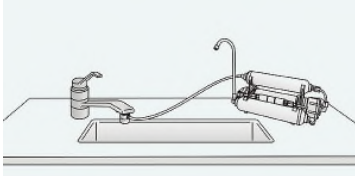
These systems are ideal for people who do not have the space for a typical system or who are likely to move from house to house. They are normally installed in line to a washing machine and instead of using a permanent storage tank, the user places a container under the outlet pipe to collect the purified water. Because they not have a storage tank or tap system, the price is also more favourable to those people on a tight budget.

Pricing.

Compact 3 Stage \$ 350.00 Not suited to dirty water supplies.

(Slim line Pre sediment + carbon & KDF + RO membrane)

Can be set up for laundry, garden tap or kitchen use



Standard Three stage Laundry use \$ 450.00 (most common system)

(pre sediment, pre carbon, RO membrane)

Standard Four stage Laundry use \$ 505.00

(pre sediment, pre carbon, RO membrane, post carbon)



Hyundai HQ7 without storage tank or bench top tap \$ 480.00

As per the HQ7 system in above text but without the water storage tank.

Note. We make Reverse Osmosis systems to suit any requirement so if you have a special requirement please let us know.