



## **Frequently Asked Questions about Reverse Osmosis Systems**

### **What is Reverse Osmosis (RO)?**

Reverse Osmosis (RO) is a water treatment method that reduces mineral content in water. It involves passing water under pressure through a very tight membrane that allows only water molecules to pass through and rejects most mineral salts.

Among its many uses in industry, it is used extensively all over the world to convert sea water to drinking water (desalination) and for reducing harmful contaminants in potable water. Most bottled waters are made using RO.

### **How are RO systems different from other drinking water systems?**

RO systems are installed where reduction of specific contaminants is required. For example Sodium, Dissolved Salts, Mercury, Nitrates, Copper, Fluoride, Selenium etc. If your water has any such contaminant or tastes “salty”, RO is the way to go.

Other drinking water systems reduce contaminants that RO systems do not reduce, such as chemicals, herbicides & pesticides, Volatile Organic Compounds (VOC), Trihalomethanes (THM), MTBE, etc. Ceramic filter-based systems also reduce bacteria, coliform etc. Therefore, it depends on what your specific need is.

### **I have bacteria or Coliform in my water. Should I install an RO system?**

No. Contrary to popular misconception, RO systems should not be installed on water that is microbiologically unsafe. It is the nature of the process that does not make it a fool proof disinfection device. However, RO systems can remove filterable cyst (e.g. Cryptosporidium, Giardia etc).

If you have bacteria or coliform in your water, you should either install a Rainfresh UV system on the main water line to disinfect all the water in your home OR install Rainfresh Drinking Water System 1, 2 or 3 to remove bacteria & coliform at one tap.

### **I've heard RO systems waste a lot of water. Is that true?**

The nature of RO technology is such that when water flows through it, some of it is collected as clean drinking water, while the rest of the water, along with the contaminants, flows down to drain. To put the waste water in perspective, on an average, however, for a family of 4, the total amount of water that goes to drain is equivalent to 2-3 additional toilet flushes a day. This varies with water usage and quality.

### **I have heard that by drinking RO water, your body is deprived of minerals. Is it true?**

Our body gets most of its minerals from the food we eat, not from the water we drink. For example, a glass of orange juice can have the same mineral content as you can get in 30 gallons of water! Try drinking that for minerals!! What's more, RO water tastes great as well and that's why most bottled waters are made using RO process.

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#### **Envirogard Products Limited**

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### **Can I install RO on the main line to treat all the water in my home?**

Installing RO on the main line is impractical, wasteful and expensive. RO produces high quality water, which will be a waste flushing down in the toilet. Waste water from the RO will be high and all the copper piping in the house will have to be changed to plastic!

### **Is it hard to install an RO system?**

Installing an RO requires basic DIY skills and simple tools. No soldering is required. It can take anywhere from 60 – 90 minutes

### **Can I hook up the RO system to a refrigerator/icemaker?**

Yes, it is common. All you will need is a 1/4" tee and some 1/4" OD tubing. Cut the tube that takes RO water from the unit to the faucet and insert the tee here. Then run off the extra tubing from here to the back of your fridge.

### **Can I install the RO system in the basement?**

Yes you can do that, provided the unit is not more than 10-12 feet away from the faucet. If you are planning on installing it at a remote location, you will require an additional delivery pump. You will also need to re-route the drain line. Call Rainfresh for details.

### **Where can I buy the Rainfresh RO system?**

Rainfresh RO systems are available across Canada at major retailers like Canadian Tire, RONA, TSC, Federated Coop, and other plumbing wholesalers. You can also buy replacement filter cartridges at the same retailers. They are also available through our international distributors. Please call us to find out where you can buy the Rainfresh RO in your country.

### **How come some RO systems are very expensive and others are so cheap?**

Expensive does not always mean better. When you buy a product through a local supplier, there are bound to be extra costs and charges. At the same time, a lot of offshore products are also available that do not meet any safety and performance requirements. It has always been our goal to bring our customers the best technology at the most affordable prices. Rainfresh ROs are tested to the highest industry standards (NSF/ANSI 58 & CSA B483.1).

### **I understand that there is a standard for testing RO systems. Are Rainfresh RO systems tested?**

The highest industry standard for testing RO systems is the NSF/ANSI standard 58. Rainfresh RO systems are tested and certified by the Water Quality Association (WQA Gold Standard) to NSF/ANSI 58. This standard includes testing for material safety, structural integrity and, of course, performance. Further our RO systems are certified to CSA B483.1, the new Canadian standard.

### **I have another question that I can't find here.**

For any question, help or information that you may need, please call us at 1800 667 8072 (within Canada) or 001.905.884.9388 (outside Canada).

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