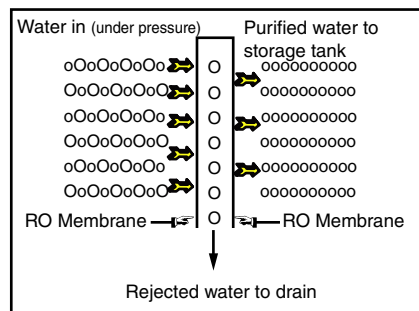


# REVERSE OSMOSIS SYSTEM



### THE PRINCIPLE OF REVERSE OSMOSIS

- ❑ Reverse Osmosis is a very efficient method of purifying water.
- ❑ The ultra fine membrane rejects virtually all contaminants in the feed water to the drain at a rate of between 95-98%.
- ❑ The recovery of purified water is around 10-15% of the volume processed in a single pass of the membrane.
- ❑ The purifying process is powered solely by water pressure.
- ❑ The Domestic Reverse Osmosis system uses a semi permeable membrane that separates the hydrogen and oxygen molecules ( $H_2O$ ) from the larger pollutant molecules in the water. See diagram below.



### TYPICAL PERCENTAGE OF IMPURITIES REMOVED BY REVERSE OSMOSIS COMMONLY FOUND IN WATER

Bacteria	95%+	Endrin	95%+
Glucose	95%+	Lindane	95%+
Methoxychlor	95%+	Phenol	95%+
Protein	95%+	Pyrogens	95%+
Sucrose	95%+	THM's	95%+
Toxaphene	95%+	Urea	95%+
Virus	95%+	Aluminium	97%
Ammonium	85-90%	Bicarbonate	91-95%
Bromide	88-92%	Cadmium	93-96%
Calcium	93-96%	Chloride	88-92%
Chlorine	95%+	Chromate	85-90%
Copper	94-97%	Cyanide	85-90%
Hardness	93-96%	Iron	94-97%
Lead	95%	Magnesium	93-96%
Mercury	94-97%	Nickel	94-97%
Nitrate	50-90%	Phosphate	97%+
Potassium	88-82%	Silicate	88-93%
Silver	88-92%	Sodium	88-92%
Strontium	93-96%	Sulphate	93-96%
Zinc	94-97%	Fluoride	95%+

### THE POZZANI REVERSE OSMOSIS SYSTEM

Pozzani's PRO series of RO systems offer advanced filtration and control systems which extend membrane life, reduce water loss with its auto shut-off system and ensures reliable operation in a compact and easy to maintain module. Key features of the Pozzani PRO series of RO systems are listed below:-

- ❑ Compact Design
- ❑ Latest technology TFC membranes
- ❑ Fail-safe flow restrictor
- ❑ Auto shut-off on full tank
- ❑ Only 2 cartridges to change every 6 months
- ❑ Multi-stage cartridges protect membrane & enhance water quality
- ❑ Simple DIY installation

## TECHNICAL SPECIFICATIONS

	PRO50	PRO75
Membrane Type	TFC	TFC
Membrane Rating (US Gals per day)	50 gpd	75 gpd
System Capacity (Imp. Gals per day)	16-34 gpd	24-50 gpd
For all models:		
Pressure Tank Capacity	18 litres max.	
Recovery	Approx. 10-15%	
Rejection %	Average 95-98%	
Shut-Off	Automatic on full tank	
Flow Restrictor	Fail-Safe	
Pre-Filter and Post-Filter (Standard)	IX600 Carbon matrix	
Feed Water Pressure	40 PSI Min. - 85 PSI Max.	

## RO REQUIREMENTS AND MAINTENANCE

- ❑ Cartridges need to be changed every 6 months.
- ❑ The RO membrane has an approximate life of 1-3 years. Excessive amounts of dirt, minerals and iron may shorten the membrane life. Chlorine attacks the membrane fabric so it is important to change the filter cartridges at the prescribed interval.
- ❑ A variety of post filter cartridges are available for specialist pollutant removal.
- ❑ The RO should be fed by a water supply that is potable (drinkable). If you have a private water supply that requires treatment, Pozzani offer a free technical helpline where you can get advice concerning specific pollutants.
- ❑ RO systems require at least 40 psi (2.7 bar) for the membrane to function properly. If the mains pressure is insufficient a boost pump can be supplied.

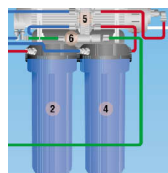
## FEED WATER REQUIREMENTS FOR ALL POZZANI PRO SERIES RO SYSTEMS (note most mains supplies in the UK will meet these requirements).

	MIN	MAX
Feed Pressure	40psi	85psi
Feed Temperature	4°C	25°C
Feed pH	3	11
Ambient Temperature	2°C	40°C
TDS (Dissolved Solids)	N/A	500ppm
Dissolved Iron (FE)	N/A	0.5ppm

## DIMENSIONS

- ❑ The RO will occupy a reasonable amount of cupboard space.

### RO MODULE



Height 400mm  
Width 350mm  
Depth 160mm

### 18 LITRE STORAGE VESSEL



Height 400mm  
Diameter 275mm

## TAP CHOICE

- ❑ Regular and Long Reach spouts are interchangeable.



Metals taps - chrome, brass, antique brass, brushed and satin stainless, pewter.

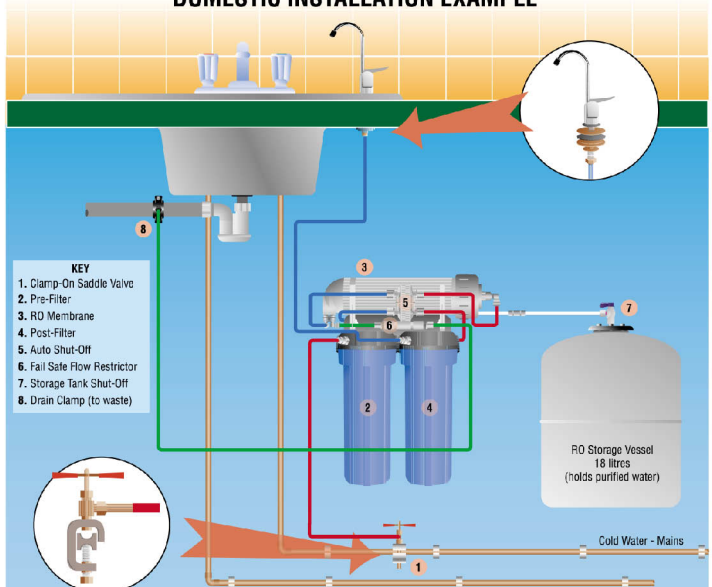


Coloured taps - white, black, grey, red, brown, beige and cream.

## INSTALLATION

- ❑ Everything you need to install the system is supplied.
- ❑ Full instructions on installation are included.
- ❑ Technical helpline to assist with any problems.
- ❑ Easy to install no previous plumbing knowledge required.
- ❑ Connection to the cold water supply is by a clamp-on saddle valve which fits 12 to 15mm copper pipe (no need to cut the cold water pipe).
- ❑ All other connections are simple push-fit type connectors.
- ❑ Reverse Osmosis Module is wall hung and the storage tank is free standing.

## POZZANI PRO SERIES REVERSE OSMOSIS SYSTEMS DOMESTIC INSTALLATION EXAMPLE



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