

Dualflo™

Powered by Harvey Water Softeners

Trade Product Guide



Powered by

HARVEY
Water Softeners

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The Dualflo Range >



Dualflo Block Salt 3/4"
Water Softener



Dualflo Tablet
Salt 3/4" Water Softener



Dualflo Aquamax 1"
Water Softener



Dualflo 1" Big Blue

Dualflo, Supplied by Softener Supplies

As a division of Harvey Water Softeners Ltd, the UK's No.1 manufacturer of domestic block salt water softeners, Softener Supplies was established in 1978. Since then we have strived to put together an extensive range of fittings and accessories to provide the trade with every conceivable fitting needed to install water softeners and drinking water filters.

From full installation kits to a single olive, 3-way kitchen mixers to modern American fridge filters and a range of water softeners, both domestic and light commercial. We sell at competitive prices and are your one stop shop.

We offer full product training, on-going account management and support. We also host regular factory open days where you can get to meet the team behind the products and take a tour of our manufacturing facility.

We offer a next working day delivery service (if you order before 1pm). Our water softeners are easy to install and easy to set up. Your customers will be delighted with them as well. We also offer you the opportunity to buy and sell our range of salt products.

If you need any further advice just contact us on the details below and we'll do our very best to help.

The Dualflo range of domestic water softeners represent the very latest in water softening technology. Fully WRAS approved these water softeners are designed and manufactured in the UK for British homes. Featuring highly accurate displacement water meters, non-electric technology, twin cylinder capacity and high flow rates, suitable for both vented and unvented systems. Coupled with a very compact design (will fit in a standard kitchen cupboard), and the convenience of block salt on the standard model. Our high quality full-bore fittings, unrivalled back-up and support from the factory make these the best water softeners on the market.

Call us on **01483 753 401**

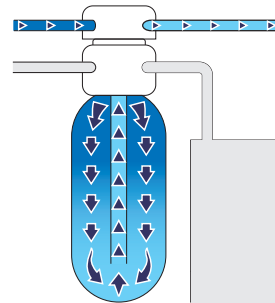
www.softenersupplies.com • supplies@harvey.co.uk

How Does a Water Softener Work?

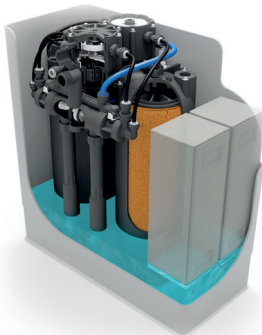
Water softeners are designed to remove the minerals, calcium and magnesium that cause scale and scum. They are intended to treat the whole house supply, so they are installed close to the point where the water supply enters the premises. Water softeners have been used since 1903 to prevent scale in boilers, so the technology is well understood and their performance is predictable and reliable.

They use a process called ion exchange whereby resin made of tiny polymeric beads trap calcium and magnesium, the cause of scale and scum in hard water. As water passes through the resin the calcium and magnesium ions swap places with the sodium ions in the resin. Sodium salts, unlike calcium and magnesium, are highly soluble so sodium does not cause scale or scum. When all the sodium ions have been exchanged for calcium or magnesium, the resin must be regenerated by recharging it with sodium ions. This is done by flushing the resin with salt solution (brine).

Water softeners are supplied in different shapes and sizes. All have a tank that holds resin where the water is softened and another to store and dissolve the salt for the regenerating brine. All water softeners regenerate automatically. There are various ways in which water softeners determine when to regenerate - some are fitted with a timer and some regenerate after a pre-set volume of water has been treated.



The Harvey Difference >



A water softener needs to measure the amount of water that has passed through it in order to accurately regenerate the resin bed. Most water softeners on the domestic market today use turbine metering systems which cannot cope with low flow rates, such as a dripping tap or ball-valve reaching the end of its fill cycle. This means more water goes through the water softener than the metering system has measured and the water softener becomes very inefficient.

Harvey Water Softeners use a patented 'displacement' water meter, the same type of meter that is used by the water companies to measure the water usage of a property. This type of metering is highly accurate, being able to measure everything from a dripping tap to a full-on flow from a pressurised hot water system. This means that our water softeners **ONLY** regenerate when necessary, thereby saving the customer money on wastage from salt and regeneration water.

What are the Benefits?

A water softener removes all of the calcium and magnesium, and are very effective in:

- Preventing scale in the hot water system and around taps
- Removing existing scale
- Reducing boiler fuel cost and heating system maintenance costs
- Preventing soap scum, which is evident around the bath and sink
- Improving the texture of laundry by preventing detergent scum deposits within the fibres of clothes, bedding, etc
- Reducing soap and detergent costs
- Also, bathing in softened water is a more pleasurable experience and can improve hair and skin condition

HARD WATER



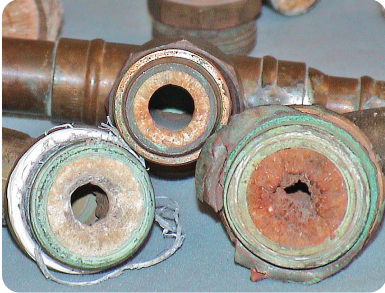
SOFT WATER



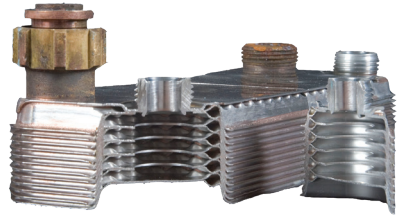
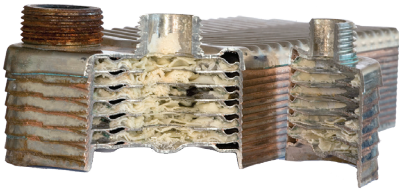
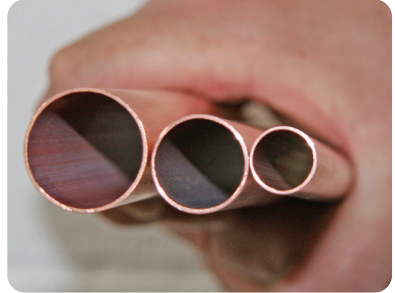
What are the Benefits?

Here are the important benefits that you don't see:

HARD WATER



SOFT WATER



Softened water is also much nicer to wash in:

HARD WATER



SOFT WATER

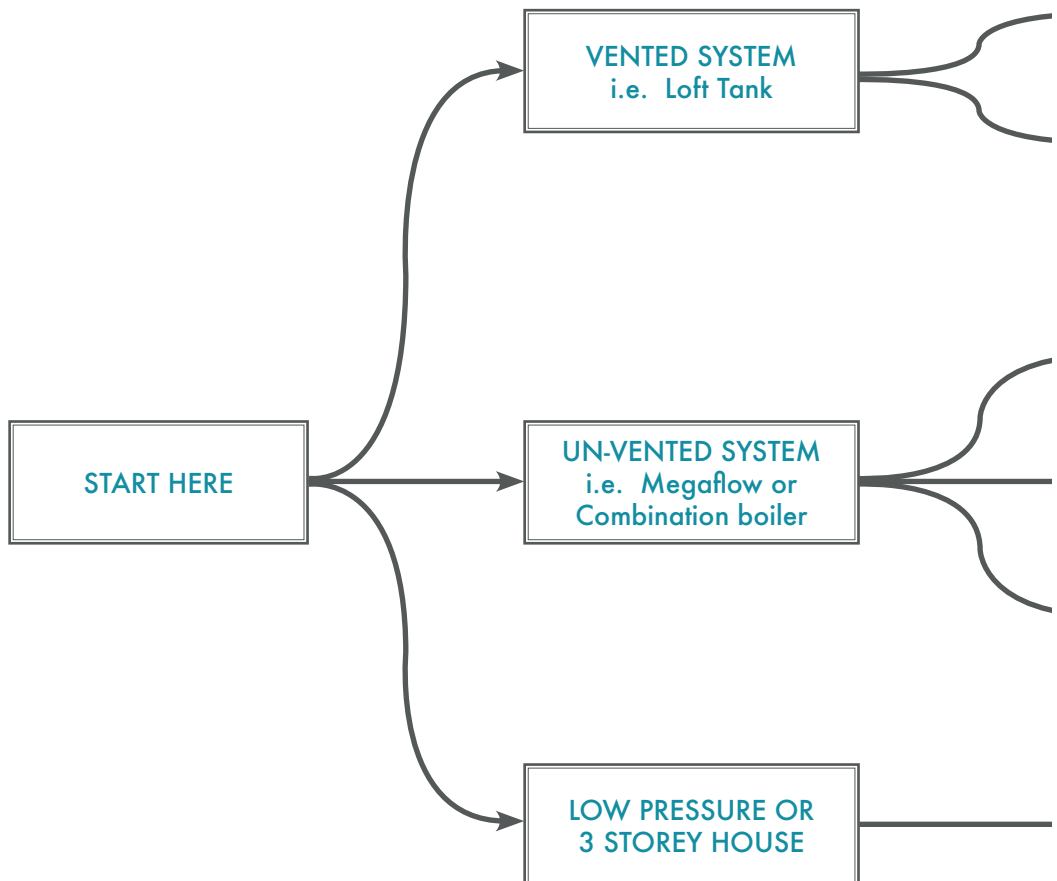


Choosing the Correct Size of Water Softener

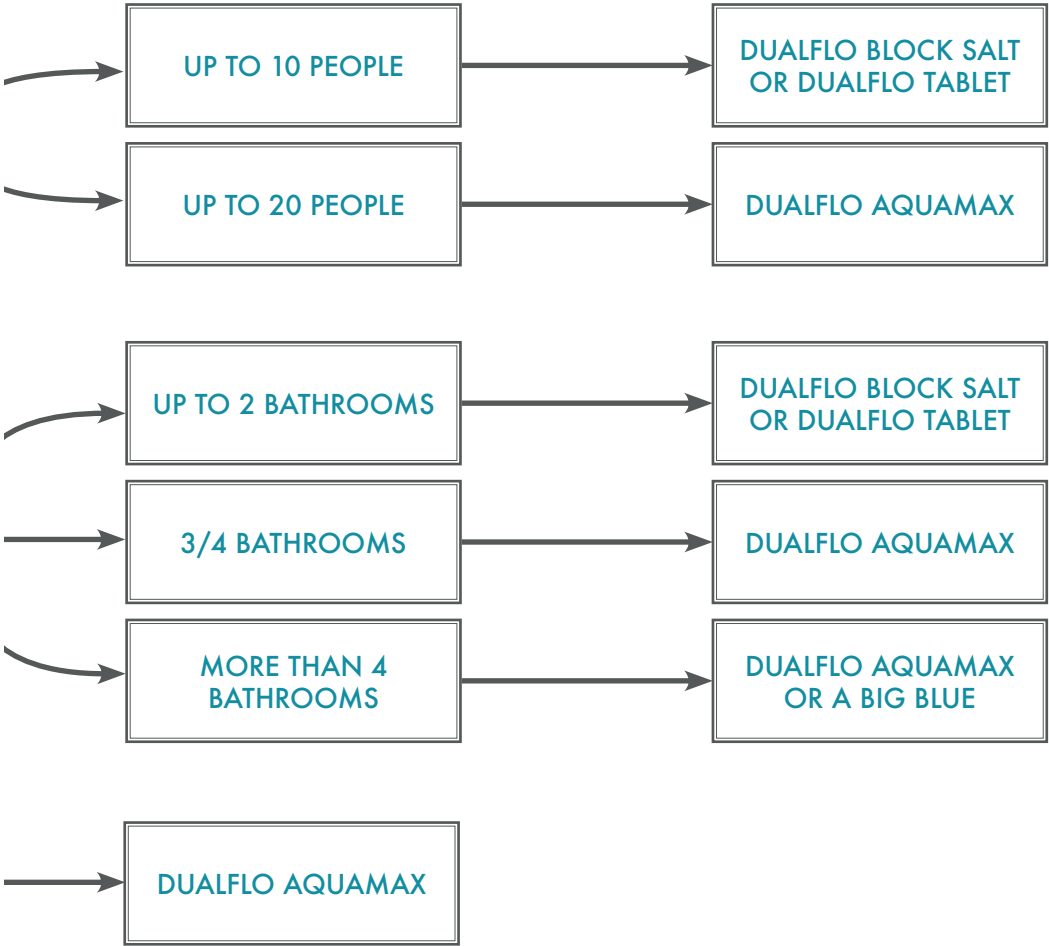
This simple to use flow chart makes it easier when deciding which size water softener to use.

Indirect systems with a loft storage tank rarely have a flow problem and the only real reason for installing a 1" Aquamax Water Softener is capacity, i.e. the water softener can't regenerate fast enough for the demand.

Direct systems need a high flow rate and when the house has more than 2 bathrooms a 3/4" water softener may suffer. In this situation we would recommend the use of a 1" Aquamax.



Low pressure or 3 storey houses can also suffer. Even if the rising main is less than 1" (28mm), the 1" water softener can still be a better choice because it will give less pressure drop and lessen your chance of a callback.



Dualflo Product Range

The Dualflo (3/4") Block Salt Water Softener

2
Bathrooms

50 L
per min

Block Salt



Dimensions:

Height: 490mm **Depth:** 460mm **Width:** 212mm



Dualflo Block Salt Water Softener with Fitting Kit:

Part No. G2463

15mm Stainless steel braided hose fitting kit - WRAS approved

Part No. G2464

22mm Stainless steel braided hose fitting kit - WRAS approved

Features:

Block Salt	Easy to store, handle and load.
Non-electric	Cheaper to run than electric machines, no Part P requirement for an electrical outlet near the water softener.
50L per Min Flow Rate	Suitable for vented or unvented systems and up to a maximum of 2 bathrooms.
Twin Tank	Never run out of softened water.
Compact Size	Fits in a kitchen cupboard.
Displacement Metering	Only regenerates when needed, no timers or programming needed.

Technical Specifications:

Inlet/Outlet Connections	3/4" bsp male parallel
Drain	3/8" outside dia. tube
Overflow	1/2" hose spigot
Max Working Pressure	8 bar (6 bar daytime)
Min Working Pressure	1 bar
Min Working Temperature	Protect from freezing
Salt Storage	2 x 4kg blocks
Salt Used Per Regeneration	300g
Water Used Per Regeneration	17 litres
Regeneration Time	15 minutes
Max Peak Flow Rate*	50 L/min

*Flow given at 2.75 bar pressure drop

Dualflo Product Range

The Dualflo (3/4") Tablet Salt Water Softener

2
Bathrooms

50 L
per min

Tablet Salt



Dimensions:

Height: 485mm **Depth:** 440mm **Width:** 250mm



Dualflo Tablet Salt Water Softener with Fitting Kit:

Part No. G2222

15mm Stainless steel braided hose fitting kit - WRAS approved

Part No. G2223

22mm Stainless steel braided hose fitting kit - WRAS approved

Features:

Tablet Salt	For customers who prefer to use tablet salt.
Non-electric	Cheaper to run than electric machines, no Part P requirement for an electrical outlet near the water softener.
50L per Min Flow Rate	Suitable for vented or unvented systems and up to a maximum of 2 bathrooms.
Twin Tank	Never run out of softened water.
Compact Size	Fits in a kitchen cupboard.
Displacement Metering	Only regenerates when needed, no timers or programming needed.

Technical Specifications:

Inlet/Outlet Connections	3/4" bsp male parallel
Drain	3/8" outside dia. tube
Overflow	1/2" hose spigot
Max Working Pressure	8 bar (6 bar daytime)
Min Working Pressure	1 bar
Min Working Temperature	Protect from freezing
Salt Storage	Tablets
Salt Used Per Regeneration	300g
Water Used Per Regeneration	17 litres
Regeneration Time	15 minutes
Max Flow Rate	50 L/min

Dualflo Product Range

The Dualflo Aquamax (1") Water Softener

3+
Bathrooms

80 L
per min

Tablet Salt
or
Block Salt



Dimensions:

Softener Cabinet:

Height: 500mm **Depth:** 440mm **Width:** 250mm

Salt Tank Cabinet:

Height: 470mm **Depth:** 440mm **Width:** 248mm



Dualflo Aquamax with Fitting Kit:

Part No. G2244

22mm Stainless steel braided hose fitting kit - WRAS approved

Part No. G2245

28mm Stainless steel braided hose fitting kit - WRAS approved

Features:

Separate Salt Bin	Can be installed remote from the water softener. Max distance: 3 metres.
Non-electric	Cheaper to run than electric machines, no Part P requirement for an electrical outlet near the water softener.
80L per Min Flow Rate	Suitable for vented or unvented systems and up to maximum of 4 bathrooms.
Twin Tank	Never run out of softened water.
Displacement Metering	Only regenerates when needed, no timers or programming needed.

Technical Specifications:

Inlet/Outlet Connections	1" bsp male parallel
Drain	1/2" outside dia. tube
Overflow	1/2" hose spigot
Max Working Pressure	8 bar (6 bar daytime)
Min Working Pressure	1 bar
Min Working Temperature	Protect from freezing
Salt Storage	Block or Tablets
Salt Used Per Regeneration	Tablet: 600 - 1300g Block: 900 - 1300g
Water Used Per Regeneration	37 litres
Regeneration Time	20 minutes
Max Flow Rate	80 L/min

Dualflo Product Range

The Dualflo Big Blue (1") Tablet Salt Water Softener

4+
Bathrooms

80 L
per min

Tablet Salt

**Light
Commercial
Properties**



Dimensions:

Diameter: 590mm

Height: 660mm



Dualflo Big Blue with Fitting Kit:

Part No. G2217

22mm Stainless steel braided hose fitting kit - WRAS approved

Part No. G2218

28mm Stainless steel braided hose fitting kit - WRAS approved

Features:

Large Tablet Salt Bin	More salt capacity, requires less filling up.
Non-electric	Cheaper to run than electric machines, no Part P requirement for an electrical outlet near the water softener.
80L per Min Flow Rate	Suitable for vented or unvented systems with 4+ bathrooms.
Twin Tank	Never run out of softened water.
Displacement Metering	Only regenerates when needed, no timers or programming needed.

Technical Specifications:

Inlet/Outlet Connections	1" bsp male parallel
Drain	1/2" outside dia. tube
Overflow	1/2" hose spigot
Max Working Pressure	8 bar (6 bar daytime)
Min Working Pressure	1 bar
Min Working Temperature	Protect from freezing
Salt Storage	Tablets - 65kg
Salt Used Per Regeneration	1300 - 1600g
Water Used Per Regeneration	50 litres
Regeneration Time	27 minutes
Max Flow Rate	80 L/min

PRV and Drinking Filters

At Harvey Water Softeners we don't believe in supplying a top quality water softener with an inferior fitting kit, which is why we only supply fully braided, high flow capacity, WRAS approved kits with each trade water softener ordered. Everything you need, excluding a PRV (Pressure Reducing Valve), is in the kit (including a non-return valve built into the inlet tee of the by-pass set).

Please note: We recommend a PRV is fitted if you have a daytime pressure in excess of 6 bar.

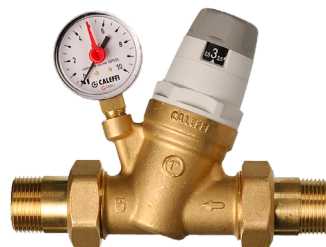
Pressure Reducing Valves



Part No. G1137
15mm PRV - 5 bar



Part No. G1138
22mm PRV - 5 bar



Part No. G0027
28mm PRV - 5 bar

Drinking Water Filters

Part No. G3054

Quick change drinking water system - complete kit

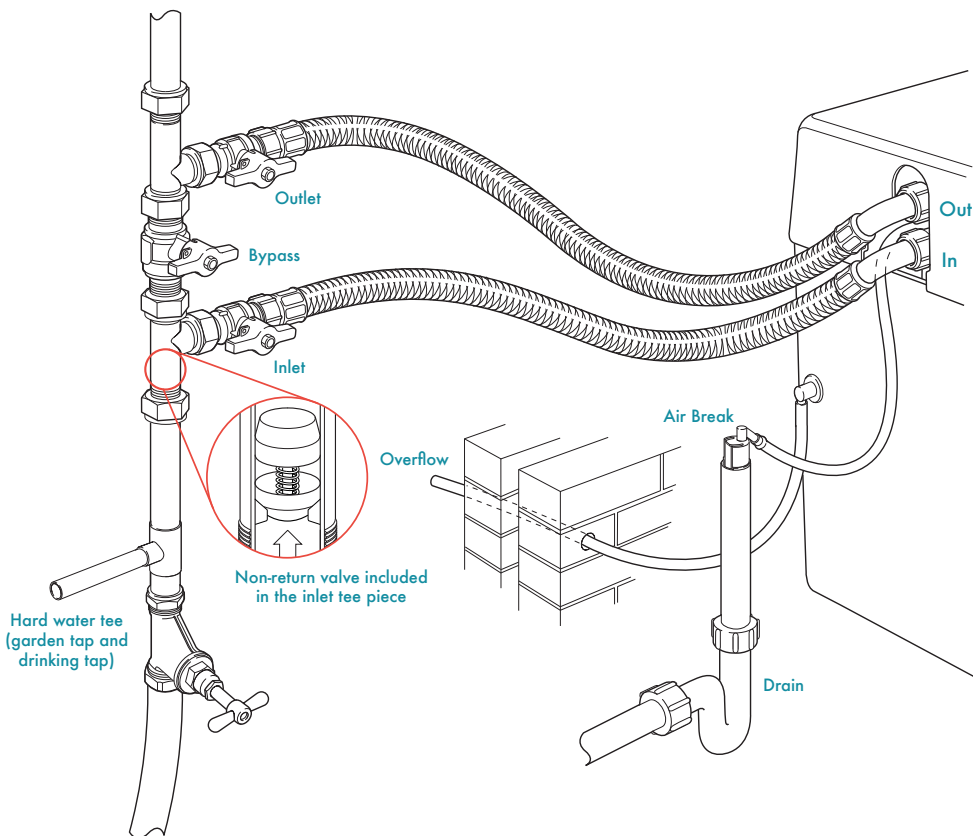


Basic Installation Overview

Installing a water softener is like most plumbing jobs: it can be very easy or extremely difficult! A water softener is plumbed into the incoming or 'rising' main from where it will soften the water. Hard water drinking taps and outside garden taps should be tee'd off before the water softener bypass.

The diagram below shows the basic connections that need to be made. There are four connections: the inlet, outlet, drain and overflow. Hard water travels from the inlet to the water softener and the softened water is returned to the outlet. From there it will feed the rest of the house.

Periodically the water softener will regenerate itself. During the regeneration cycle, drain water is discharged from the water softener via the drain tube to a suitable waste connection (Air Break). The overflow is there just in case anything should go wrong.

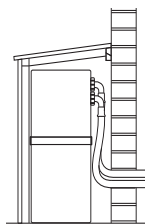


Outside Installation

Occasionally you can't fit the water softener inside. For our small water softeners we provide an outside cabinet, which is made of either marine plywood or aluminium lined with polystyrene for insulation.

The cabinet must be fitted on a wall that is on a heated part of the house. It is the warmth coming through the wall that stops the water softener from freezing. Do not under any circumstances fit an outside cabinet to an unheated garage or outhouse – it will freeze.

Install the bypass set in the usual way and run the hoses through the wall. The hoses need to be taken through the wall inside the cabinet. Make sure you lag them all, including the drain.

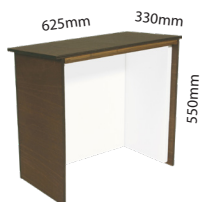
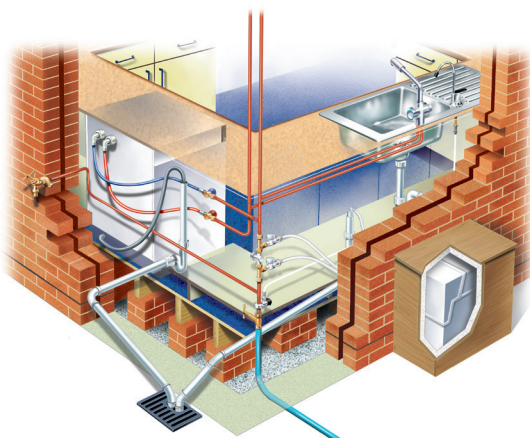
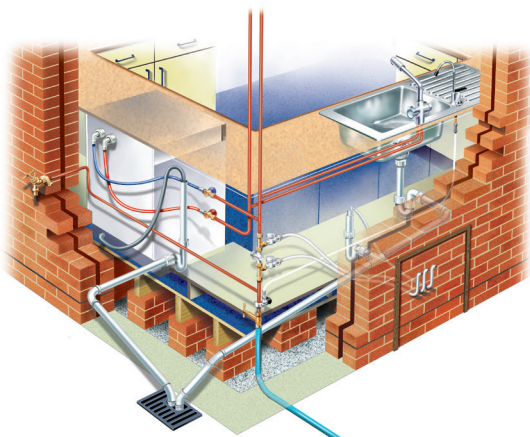


It is best to bring the hoses near the bottom of the cabinet so there is room for the hoses to bend round the corner. Bringing the hoses through the wall

too close to the connections can make it difficult. If this is your only option it's best to cut the hoses and use a couple of elbows. Make sure you clip them!

It is normally easier to run the drain back through the wall and connect inside, but an outside gully can be used. Don't run the drain externally in anything less than 22mm (3/4"), as it is likely to freeze. It is also very

important that the frame supplied with the cabinet is screwed to the wall to prevent wind from blowing around the back of the cabinet and freezing the pipework. The overflow is already outside - there is no need to fit an overflow pipe.



G0695
BSS Outside Cabinet

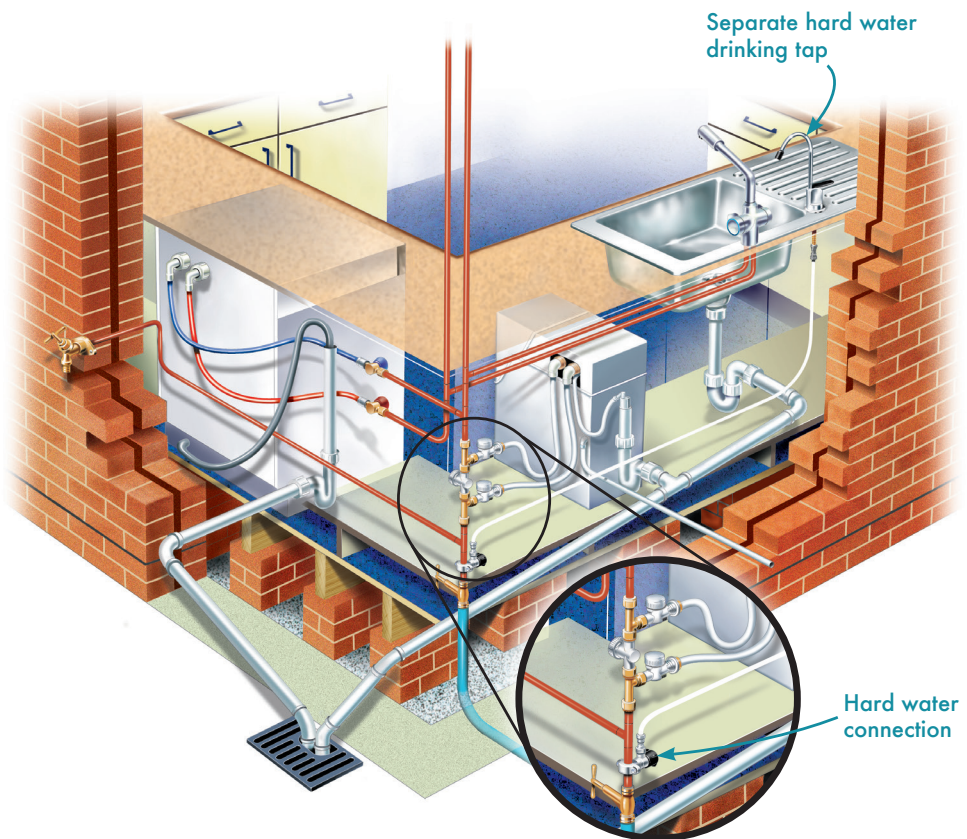


G2742
Aluminium Outside Cabinet

Drinking Water Taps & Filters Installation

A separate hard water drinking tap is recommended as standard to provide the homeowner with unsoftened water. This is typically done with a faucet (Americanism for tap), that is installed at the kitchen sink and tee'd into the pipe before the water softener. There is no legal requirement but a separate hard water tap is recommended by all of the governing bodies and is our company policy.

Many customers choose to filter their water and this can be done with an under the sink drinking water system (see page opposite).



Where to Buy

SOFTENER SUPPLIES



Single taps, 3-way taps (such as Franke) and drinking water and fridge filters.

All the testing equipment you'll ever need.

All the JG fittings you can't find anywhere else.

We stock everything you'll ever need...

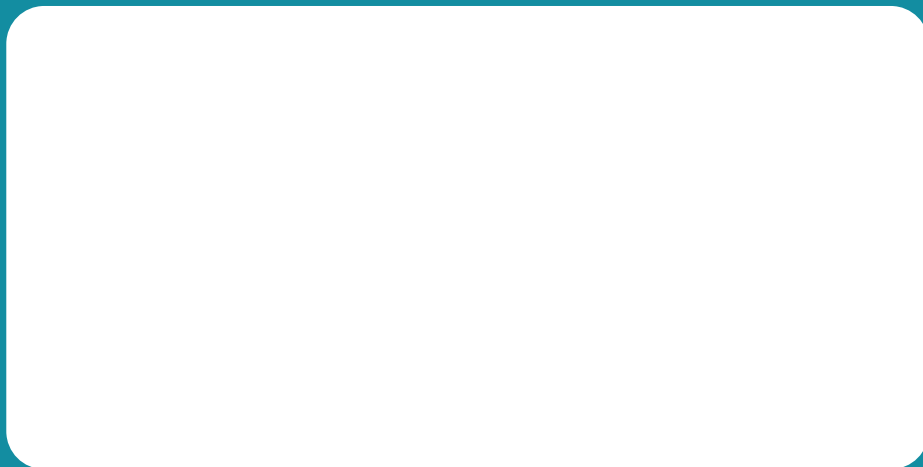
Including a 66 page "How to" Guide

Call us on 01483 753 401

www.softenersupplies.com • supplies@harvey.co.uk

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