



Installation instructions for the 2 Stage System and 3 Stage System High Flow Whole House Water Filter Systems.

Everyone has the right to safe drinking water. Our goal is to provide clean water to everyone, no matter where they are.

2 Stage System



3 Stage System



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Unpacking and Inspection

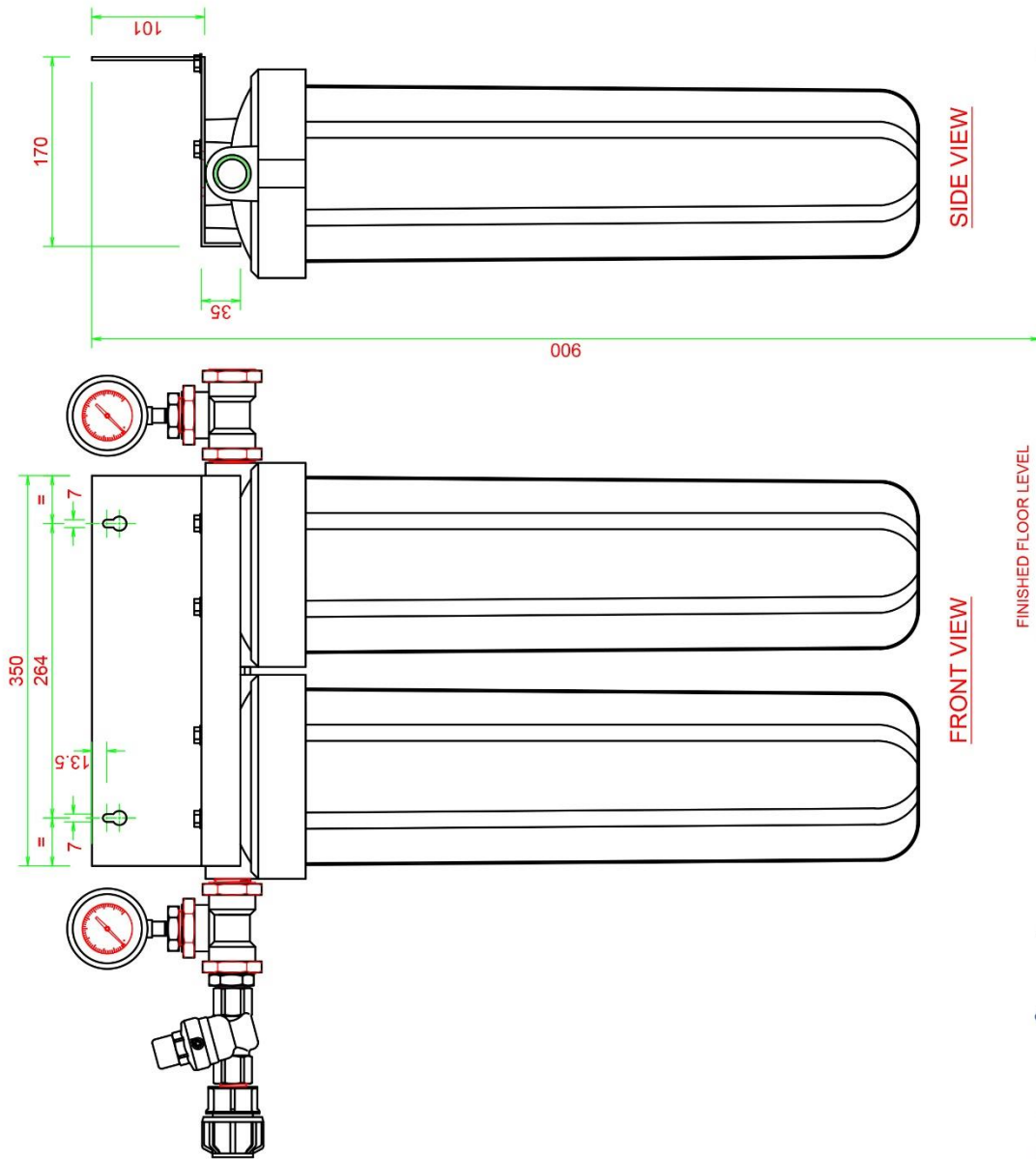
Check the entire unit for any shipping damage, missing parts, and take note of any damage to the shipping cartons. Contact AlkaWay at info@alkaway.com.au to report any shipping damage within 48 hours of delivery. Claims made after 48 hours may not be honored. A parts bag will contain all the small pieces needed to install the unit. Keep the small pieces in the parts bag until ready to use.

Installation Safety Guide

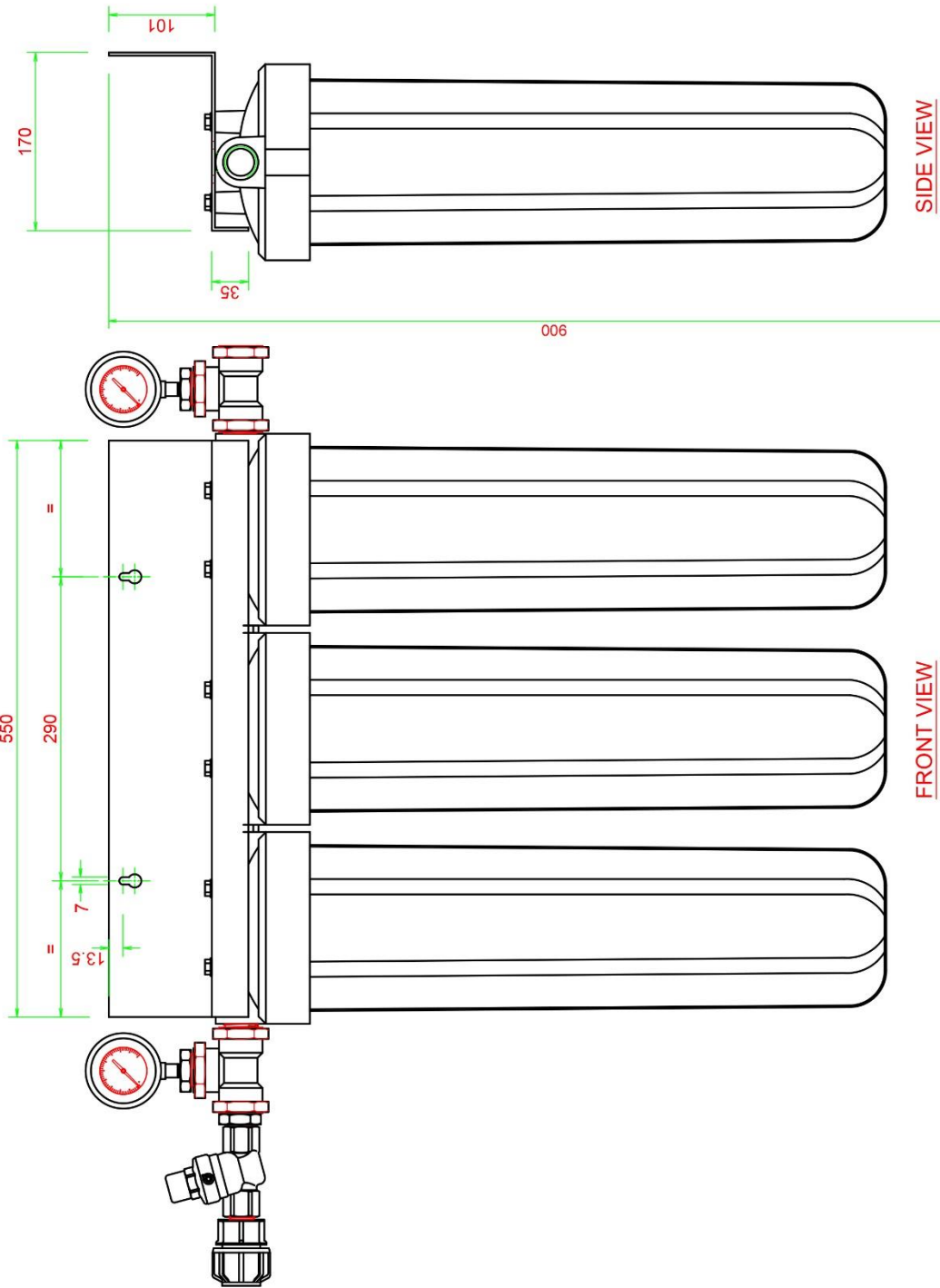
Please call a registered plumber to install your whole house system.

All installations must be done by a registered plumber, otherwise the warranty is void.

When handling the system, exercise caution. Turning the product upside down, dropping, dragging, or placing it on a sharp edge or protrusions could damage it and void the warranty.



| 20 x 4.5" - 2 Stage Whole House Filtration System | Ver 1.0 | NTS | Mar 2023 |



20 x 4.5" - 3 Stage whole House Filtration System | Ver 1.0 | NTS | Mar 2023 |

Application

After many years in the water filtration industry, we have simplified all the options available to us down to 5 main systems, see summary below.

Essential - 2 Stage System Suits a medium to large house with 2 or more bathrooms.

The Essential system cartridges;

1. 5-micron Sediment cartridge 4.5" x 20"
2. 20-micron Radial Granular Activated Carbon (GAC) cartridge 4.5" x 20"

Features:	Benefits
Easy to maintain	Removes or reduces chlorine
Easy to install	Removes or reduces sediment
Pressure limiting valve protects home tap ware and fittings	Removes or reduces bad taste and odours
Organic filtration	Removes or reduces VOCs (Volatile Organic Compounds)
12 Month Filter Life*	Radial GAC cartridge life is 18-24 months

* On average each filter should last up to 12 months. This will depend on the water usage over that time and the condition of your water source. So, it may need replacing sooner than 12 months.

Natural - 2 Stage System. Suits a medium to large house with 2 or more bathrooms.

The Natural system cartridges;

1. 1-micron Sediment cartridge 4.5" x 20"
2. Ultra-D Sub-micron cartridge 4.5" x 20"

Features:	Benefits
Easy to maintain	Removes or reduces sediment
Easy to install	Removes or reduces Heavy Metals (lead, mercury, iron etc.
Pressure limiting valve protects home tap ware and fittings	Removes Viruses
Advance Ultra-D Filtration	Removes Bacteria (E-coli, legionella, pseudomonas, etc.)**
12 Month Filter Life*	

* On average each filter should last up to 12 months. This will depend on the water usage over that time and the condition of your water source. So, it may need replacing sooner than 12 months.

**Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

Optimal – 3 Stage System Suits a medium to large house with 2 or more bathrooms.

The Optimal system cartridges;

1. 5-micron Sediment cartridge 4.5" x 20"
2. Ultra-D Submicron cartridge 4.5" x 20"
3. 20-micron Radial Granular Activated Carbon (GAC) Filter 4.5" x 20"

Features:	Benefits
Easy to maintain	Removes or reduces pathogens, cysts, and viruses
Advanced Ultra-D Filtration	Removes Bacteria (E-coli, legionella, pseudomonas, etc.)**
2 pressure gauges (measures pressure drop across filters – indicates when to change the filters)	Removes or reduces sediment and chlorine
Chemical and organics removal or reduction	Removes or reduces bad taste and odour
Pressure limiting valve protects home tap ware and fittings	Removes or reduces heavy metals
Finer particle retention and filtration capacity	Removal or reduction of chemical and organic contaminants
Organic filtration	Removes or reduces VOCs (Volatile Organic Compounds)
12 Month Filter Life*	Radial GAC cartridge life is 18-24 months

2-Stage Value System with UV Suits a medium to large house with 2 or more bathrooms.

The UV Safe system cartridges;

1. 1-micron Sediment cartridge 4.5" x 20"
2. 20-micron Radial Granular Activated Carbon (GAC) 4.5" x 20"

And comes with 39watt UV system.

Features:	Benefits
Easy to maintain	Removes or reduces pathogens, cysts, and viruses
Chemical and organics removal or reduction	Removes or reduces chlorine
2 pressure gauges (measures pressure drop across filters – indicates when to change the filters)	Removes or reduces sediment. Removes or reduces heavy metals
Pressure limiting valve protects home tap ware and fittings	Removes Bacteria (e coli etc.)
Higher loading capacity	Removal or reduction of chemical and organic contaminants
Chemical and organics removal or reduction	Removes or reduces bad taste and odour
12 Month Filter Life*	Radial GAC cartridge life is 18-24 months

* On average each filter should last up to 12 months. This will depend on the water usage over that time and the condition of your water source. So, it may need replacing sooner than 12 months.

**Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

3-Stage Value System with UV Suits a medium to large house with 2 or more bathrooms.

The UV Safe system cartridges;

1. 5-micron Sediment cartridge 4.5" x 20"
2. 1-micron Sediment cartridge 4.5" x 20"
3. 5-micron Granular Activated Carbon (GAC) with silver cartridge 4.5" x 20"

And comes with 39watt UV system.

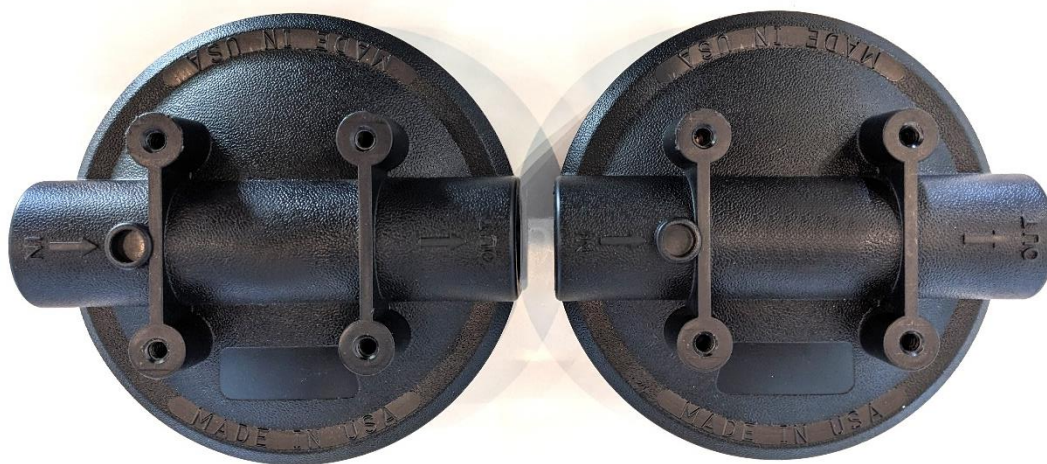
Features:	Benefits
Easy to maintain	Removes or reduces pathogens, cysts, and viruses
Chemical and organics removal or reduction	Removes or reduces chlorine
2 pressure gauges (measures pressure drop across filters – indicates when to change the filters)	Removes or reduces sediment, bad taste and odour
Pressure limiting valve protects home tap ware and fittings	Removes Bacteria (e coli etc.)
Finer particle retention and filtration capacity	Removes or reduces heavy metals
Higher loading capacity	Removal or reduction of chemical and organic contaminants
12 Month Filter Life*	Cheaper filter set

* On average each filter should last up to 12 months. This will depend on the water usage over that time and the condition of your water source. So, it may need replacing sooner than 12 months.

NOTE: The above systems do not remove Fluoride. Fluoride can be mostly removed when used with our kitchen drinking water filtration system called the UltraStream (benchtop or under sink version). The UltraStream purifies, alkalises, ionises and infuses the filtered water with molecular hydrogen.

Installation

1. Choose a preferred location for your new water filtration system. Ideally out of direct sunlight. If the location is in sunlight, build a cabinet or cover for it. This will extend the life of the system.
2. Layout the housing caps on a table, decide the inlet side and the outlet side and position them in a line. This assembly process is the same for both the 2 and 3 stage systems. The only difference is the additional housing and cap.
3. The housing caps will be labelled "IN" and "OUT." The outlet from one cap connects to the inlet of the other cap and so on. The process is the same for both the 2 and 3 stage systems (see image below – 2 stage system).



4. Use the plastic nipples (1" - 1") supplied to screw the caps together. Use Teflon tape on the plastic nipple threads (see image below). Screw in until tight (don't over tighten).



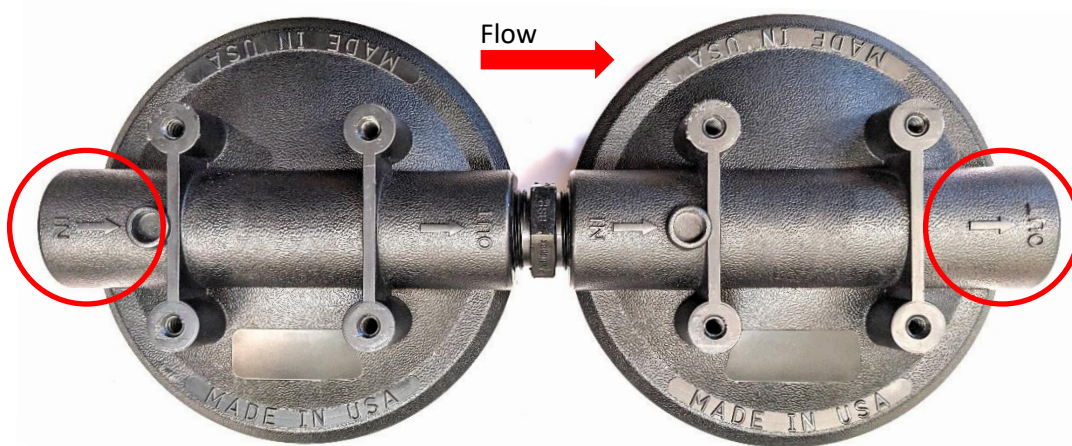
Plastic Nipple
(1" - 1")



5. Screw a plastic nipple (1" - 1") into both ends of the cap's assembly. Use Teflon tape on the plastic nipple threads. Screw in until tight (don't over tighten).



6. Lay the cap assembly on a flat table.
7. When mounting the filter system to the wall, decide whether the inlet will be on the left or right. Place the bracket on the cap assembly so that the flow direction is correct when it is affixed to the wall.



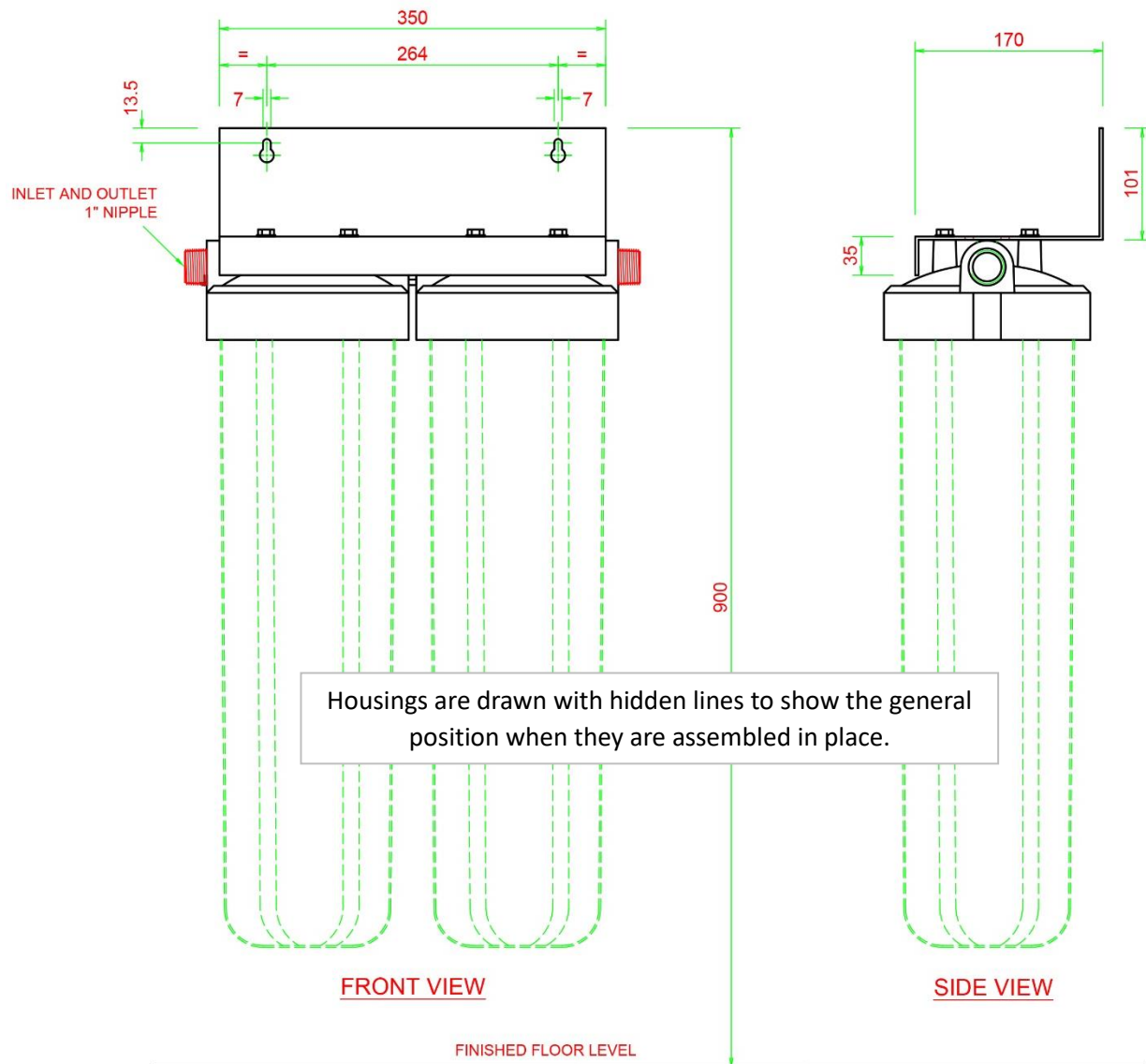
8. Screw the bracket to the cap assembly with the screws supplied. 4 screws per cap (see image below).

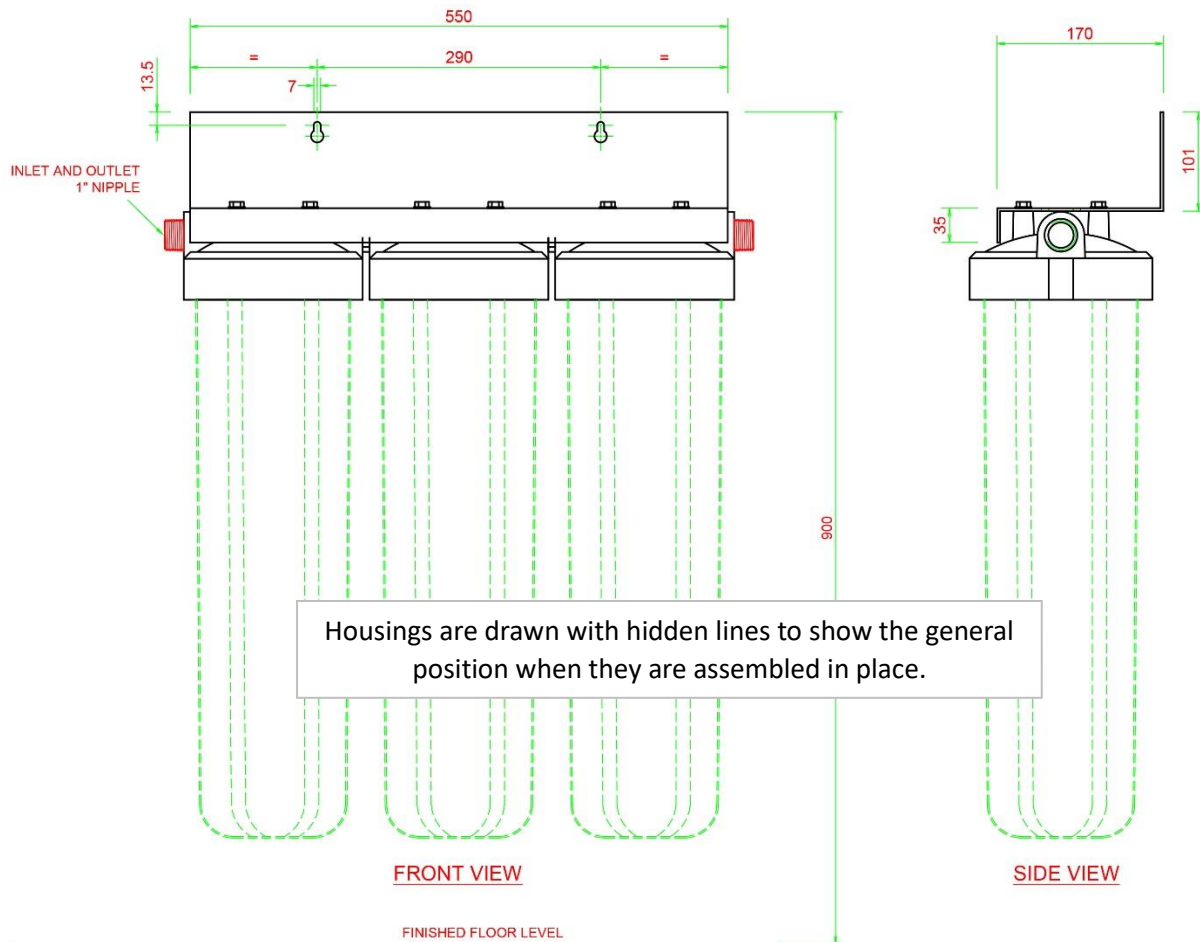


9. Note: The bracket colour in the image above may be different to what was supplied.
10. Use the appropriate fasteners to attach the bracket cap assembly to the wall (fasteners supplied by the plumber). Make sure the top of the bracket is level and is at least 900mm above the finished floor level or any obstructions underneath it. Mounting hole spacing and diameters are shown in

the figures below for both the 2 stage and 3 stage systems. This is to allow for easy housing removal for filter cartridge replacements.

11. A mounting board can be used if the bracket cap assembly is to be attached to a stud wall. A piece of marine plywood (19mm thick) can be screwed to the studs before screwing the bracket cap assembly to it.





12. Screw a plastic reducing bush (1" - 1/4"NPT) into both Tee fittings. Use Teflon tape on the plastic external threads. Screw in until tight (don't over tighten).
13. On both the inlet and outlet nipples on the cap assembly, screw in the Tee fitting sub assembly as shown below.



14. Screw a pressure gauge into the plastic reducing bush on the Tee sub-assemblies (both ends). Use Teflon tape on the external threads. Screw in until tight (don't over tighten).



15. Screw a plastic nipple (1" - 3/4") into the INLET Tee and gauge sub assembly. Use Teflon tape on the plastic nipple threads. Screw in until tight (don't over tighten).



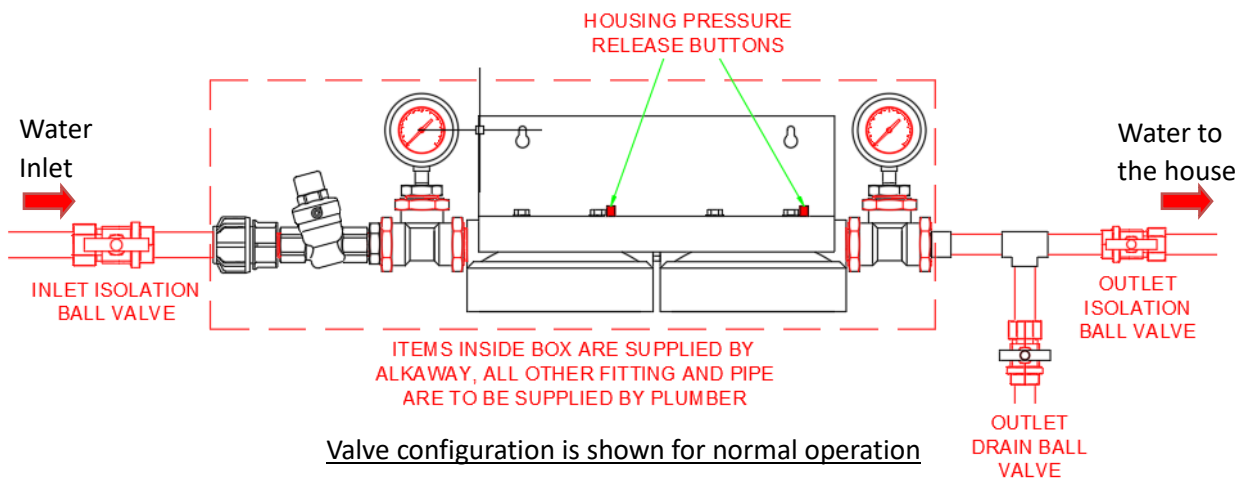
16. Screw the Pressure Limiting Valve (PLV) onto the plastic nipple (1" - 3/4") on the inlet Tee and gauge sub assembly as shown.




17. Supplied is a Poly Compression fitting (25mm x Male 3/4" BSP) to connect to the blue strip water pipe if needed. If the water supply to the house is via copper pipe, then the plumber will need to supply the additional fittings to connect to the pressure limiting valve (PLV) (female 3/4" BSP).
18. If the water supply is via a blue strip/line water pipe, then screw the supplied poly compression fitting into the PLV. Use Teflon tape on the plastic external threads. Screw in until tight (don't over tighten)



19. Now install the mounted assembly into the main house water supply line.
20. **Critical - Turn OFF the main water supply to the house and release the pressure at the sink faucet or spigot before starting any work.**
21. It is recommended to install isolation valves and an outlet drain as shown in the schematic below. Note: Some plumbing parts, pipes and fittings are not included with the filter system (see image below).



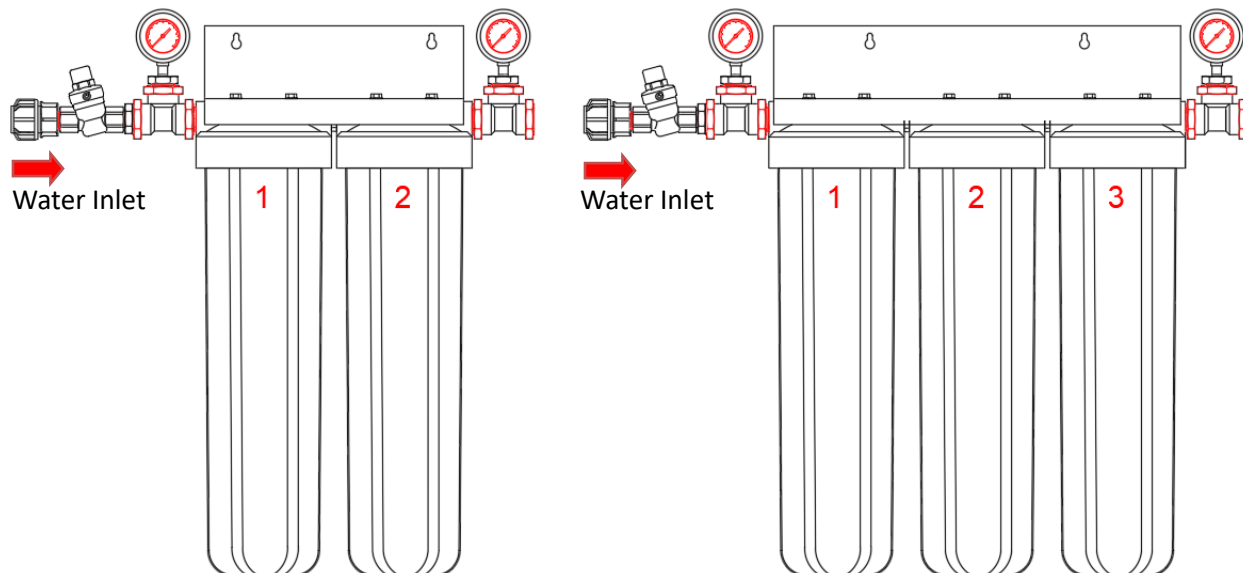
- a. The Isolation valves isolate the filter system when replacing the filter cartridges.
 - b. The pressure release buttons release the pressure in the housings once the isolation valves are turned off. The outlet drain ball valve can also release the pressure in the system (ideally connected to a waste or drain).
 - c. The outlet drain ball valve (in the on position) is used once the filter cartridges have been replaced. When the inlet isolation valve is slowly turned to fill the housings with water, it allows air to escape from the filter system. And to flush out the carbon fines from any new carbon (GAC) type filter cartridges.
- 
22. **If you have a UV system, it should be installed after the filter systems Outlet Isolation valve. The installation instructions are available separately. We would recommend installing another isolation valve after the UV system so it allows for easy access when replacing the Quartz sleeve and UV lamp in the UV system. These should be replaced every 12 months.**

NOTES:

1. The plumber will need to provide additional fittings, connectors, pipes, valves and to ensure leak free connections.
2. When installing the plastic pipe fittings, make sure to use Teflon tape on all male threads before connecting them.
3. Before connecting any copper pipe and fittings to the filter housing assembly, ensure that all solder connections are 300mm away from any plastic connections, and that they are completely cooled before continuing to work. Ideally use a crimp copper connection system.

Installing the filters

23. Filter order for 2 and 3 staged systems. The image below shows the numbering system, from the water inlet side 1 and 2 or 1,2 and 3.



Essential - 2 Stage System

1. 1-micron Nom Sediment cartridge (pleated)
2. 20-micron Radial Granular Activated Carbon (GAC) cartridge

Natural - 2 Stage System

1. 1-micron Nom Sediment cartridge (pleated)
2. Ultra-D Sub-micron cartridge (pleated with mesh covering)

Optimal – 3 Stage System

1. 1-micron Absolute Sediment cartridge (pleated)
2. 20-micron Radial Granular Activated Carbon (GAC) cartridge
3. Ultra-D Submicron cartridge (pleated with mesh covering)

2 Stage Value System with UV

1. 1-micron Nom Sediment cartridge (pleated)
2. 5-micron Granular Activated Carbon (GAC) with silver cartridge

3 Stage Value System with UV

1. 5-micron Nom Sediment cartridge (pleated)
2. 1-micron Nom Sediment cartridge (pleated)
3. 5-micron Granular Activated Carbon (GAC) with silver cartridge



24. On the housing O-ring, apply a small amount of silicone grease to lubricate it.



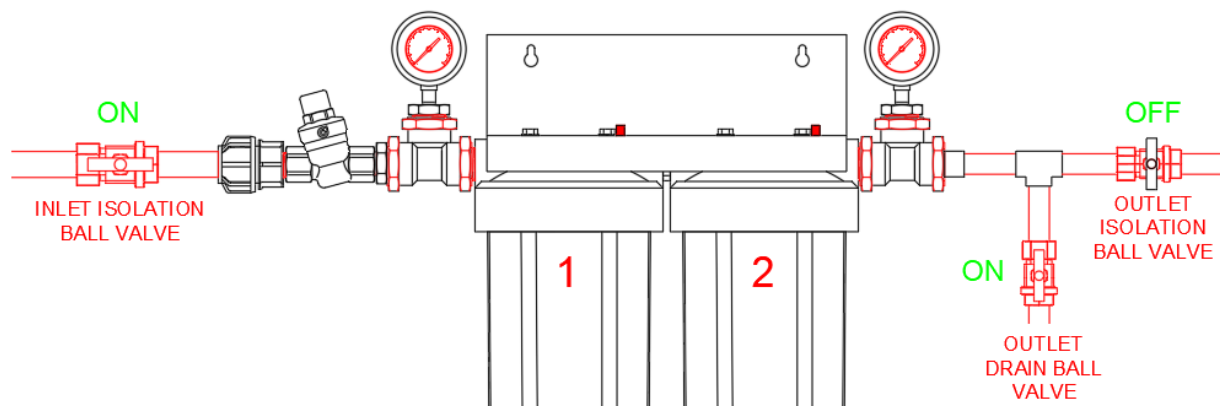
25. Place cartridges into the corresponding housings. Make sure that the housings are seated properly in the caps and then screw into place in the correct order, hand tight.
26. Slide the opening handle up onto the housings as high as you can, then tighten the housing by turning the handle to the right. If you are looking over the top of the bracket looking down, then this is counter-clockwise.

NOTE: Do not use metal or abrasive tools to tighten the housings as they might damage the housing surface.

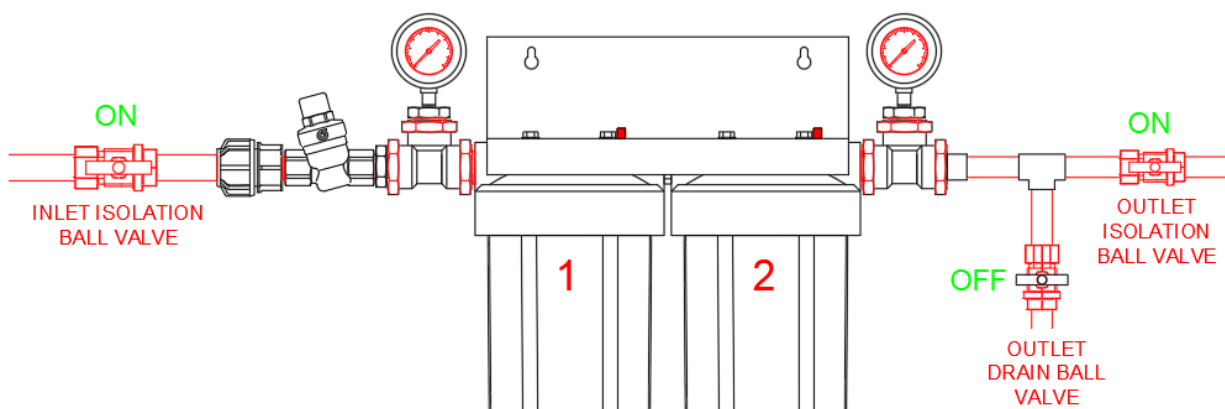


Flushing the system

27. Turn OFF the Inlet and Outlet isolation valves.
28. Turn ON the main water supply to the house and check for leaks.
29. Turn ON the Drain Ball valve.
30. Slowly turn on the Inlet Isolation valve (¼ the way on).



31. This will flush any air from the system out through the Outlet drain. If the drain is not connected to a floor drain, position a large bucket under the drain. Or connect a hose to an outside drain.
32. Once the air is flushed out of the system. Press the pressure release button to remove the last of the air from the top of the filter housings. A little water may come out with the last of the air. This is fine, it means that the air is out of the system.
33. Flush the system for about 10 minutes if you have a carbon type filter (this removes carbon fines from the filter). Otherwise, flush until the water flows clear.
34. Turn OFF the Outlet Drain Valve, then check for leaks. Fix any leaks before proceeding.
35. Turn ON the Outlet isolation valve.



36. Check for leaks. Fix any. If there are no leaks, you have completed the installation

Filter Cartridge Replacement Instructions

1. Order your replacement filters set online at www.alkaway.com.au or call 1800 268 469.

Essential - 2 Stage System

1. 1-micron Nom Sediment cartridge (pleated)
2. 20-micron Radial Granular Activated Carbon (GAC) cartridge

Natural - 2 Stage System

1. 1-micron Nom Sediment cartridge (pleated)
2. Ultra-D Sub-micron cartridge (pleated with mesh covering)

Optimal – 3 Stage System

1. 1-micron Absolute Sediment cartridge (pleated)
2. 20-micron Radial Granular Activated Carbon (GAC) cartridge
3. Ultra-D Submicron cartridge (pleated with mesh covering)

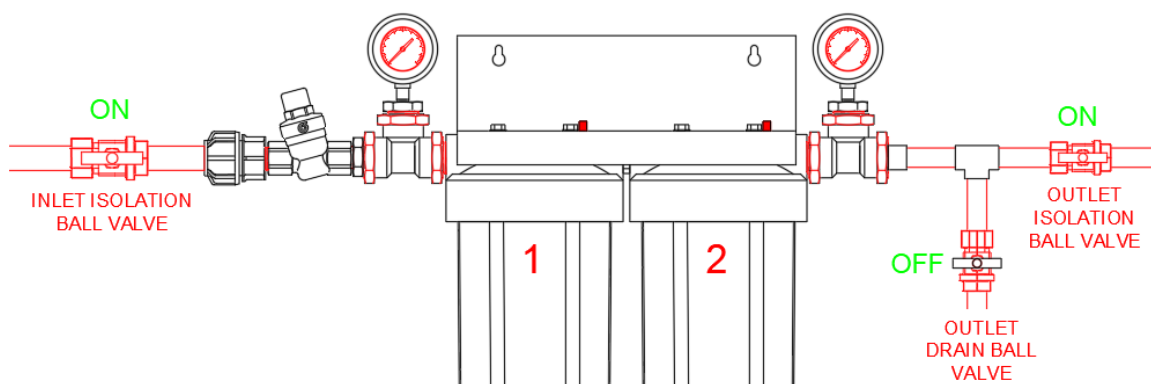
2 Stage Value System with UV

1. 1-micron Nom Sediment cartridge (pleated)
2. 5-micron Granular Activated Carbon (GAC) with silver cartridge

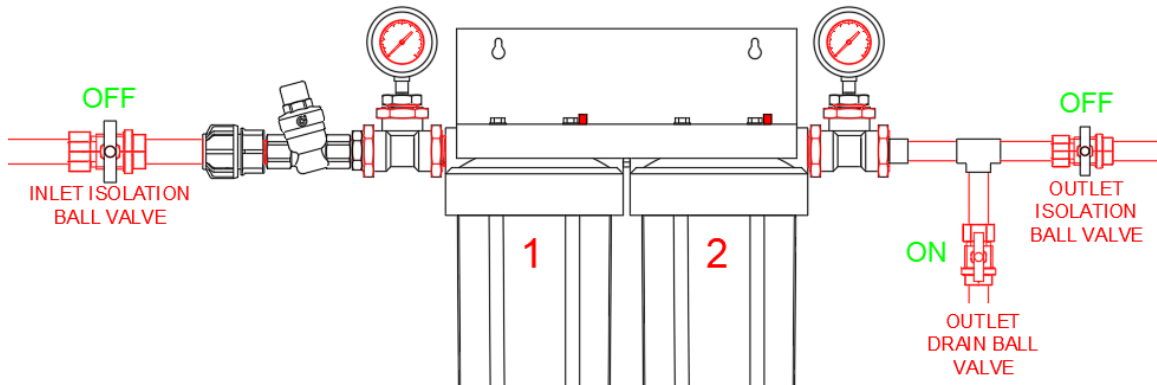
3 Stage Value System with UV

1. 5-micron Nom Sediment cartridge (pleated)
2. 1-micron Nom Sediment cartridge (pleated)
3. 5-micron Granular Activated Carbon (GAC) with silver cartridge

3. Your system should have been installed with Isolation valves as shown below. If not, then contact your local plumber to replace the filter cartridges.



4. If so, turn OFF the Inlet and Outlet isolation ball valves (as shown on next page). If the drain is not connected to a floor drain, position a large bucket under the drain. Or connect it via a hose to an outside drain. Then slowly turn ON the Outlet drain valve to release the pressure in the filter system. Water will squirt out. Discard the water in the bucket.



NOTE: If the water pressure isn't released in the filtration system, the housings will be very difficult to undo. It is recommended to release the water pressure before attempting to remove the filter housings.

5. Place a bucket under the first housing. Remove the housing by unscrewing it clockwise (looking down from the top of the bracket). Slide the opening handle up onto the housing as high as you can, turning the handle to the left will loosen the housings. Remove the handle and unscrew by hand.

NOTE: The housings will be full of water and will be heavy, so take care when removing them.

6. Repeat the above for the middle and for 3 stage systems the third housings. Then dispose of the old filters.
7. On the housing O-ring, use a very small amount of silicone grease to lubricate it.



8. Place the cartridges into the corresponding housings. Make sure that the housings are seated properly in the caps. Then screw them back into place in the correct order, hand tight.
9. Slide the opening handle up onto the housing as high as you can, then tighten the housing by turning the handle to the right. If you are looking over the top of the bracket looking down, then this is counter-clockwise.

NOTE: Do not use metal or abrasive tools to tighten the housings as they might damage the housing surface.

10. Flush the system as instructed on page 17.



Warranty

For the original purchaser, at the original residential place of installation of this Whole house Water Filtration System, AlkaWay warrants the following: (<https://www.alkaway.com.au/policies/warranty/>)

1. All installations must be done by a registered plumber, otherwise the warranty is void.
2. All Products supplied by AlkaWay are covered by our 12-month Manufacturer's Warranty against defects. This commences from the purchase date unless otherwise stated below.
3. All Water Filtration Systems installations will be covered by the Plumbers warranty.
4. A warranty against defects is a representation communicated to a consumer that if the goods or services (or part of them) are defective or not as advertised, AlkaWay will:
 - a. repair or replace goods (or part of them) or
 - b. provide a refund as per the Returns and Refunds Policy to the consumer (<https://www.alkaway.com.au/policies/refund-policy/>)
5. Any warranty period starts from the date of purchase. To validate your warranty, please keep a copy of your Proof of Purchase (invoice). You will need it if a warranty claim is made. If you report a fault within 14 working days of purchase, we will replace the item.
6. The filter housing warranty is from the date of purchase, we will replace the filter housing at no charge to you except for transportation and standard labour charges. Damages due to environmental issues or improper installation are not covered.
7. To return a product, you must contact us at info@alkaway.com.au or call us on 1800 268 469 to receive return instructions including a Return Authority Number (RA#). We do not accept returns without an RA#. Visit Returns and Refunds Policy (<https://www.alkaway.com.au/policies/refund-policy/>) for full return instructions.
8. The cost of return freight is the purchaser's responsibility as it is not a part of our product price.
9. Our Manufacturer's Warranty ONLY applies to NON-COMMERCIAL end users. It does not apply to industrial installations or to any part of the whole house water filtration system which has been subjected to misuse, neglect, alteration or accident, or to any damage caused by fire, flood, freezing, Acts of God, or any other causality.
10. It is limited to covering defects in materials and manufacture. It does not cover any defects judged by AlkaWay or AlkaWay Authorized Resellers to be the result of misuse, neglect, mishandling, incorrect installation, or overdue filter replacements. It also does not cover damage caused by insect infestation, or by failure to prevent the build-up of calcium or other minerals in hard water areas.
11. Whole house Water replacement cartridges are consumables and therefore not covered under our Manufacturer's Warranty against defects unless broken during delivery or there is a manufacturing defect. Note: All water cartridges are dependent upon the quality of your water source, and will fail if excessive contaminants and sediment enter the filter system.
12. If you plan to use the whole house system on well or bore water that is very hard or high in Iron or Sulphur or has high contaminant levels, please Contact us at info@alkaway.com.au.
13. It is necessary that whole house filter cartridges are replaced at least every 12 months or earlier. It depends on the quality of the water source.

14. UV system lamps should be replaced every 12 months and the quartz sleeve be either cleaned or replaced as well. The warranty is void if this is not done.
15. To make a warranty claim Contact us at info@alkaway.com.au. Or call us on 1800 268 469
16. Please refer to our Returns and Refunds Policy for how to make a warranty return (<https://www.alkaway.com.au/policies/refund-policy/>).
17. Any implied warranties of fitness or merchantability are limited to the terms of this expressed warranty, and there are no warranties beyond these. AlkaWay is not liable for indirect or consequential damages.
18. This warranty may be transferred to a subsequent owner with written approval of AlkaWay and payment of standard transfer fees.
19. These warranties supersede all other warranties, expressed or implied, and we do not authorise anyone to assume any other duty on the sale of these whole house water filtration systems on our behalf. No liability is accepted for delays or failure to meet these warranties caused by a strike, government regulations, or other situations beyond AlkaWay's control.