



Installation instructions for the Essential and Optimal 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.

Essential System



Optimal 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](mailto:info@alkaway.com) 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

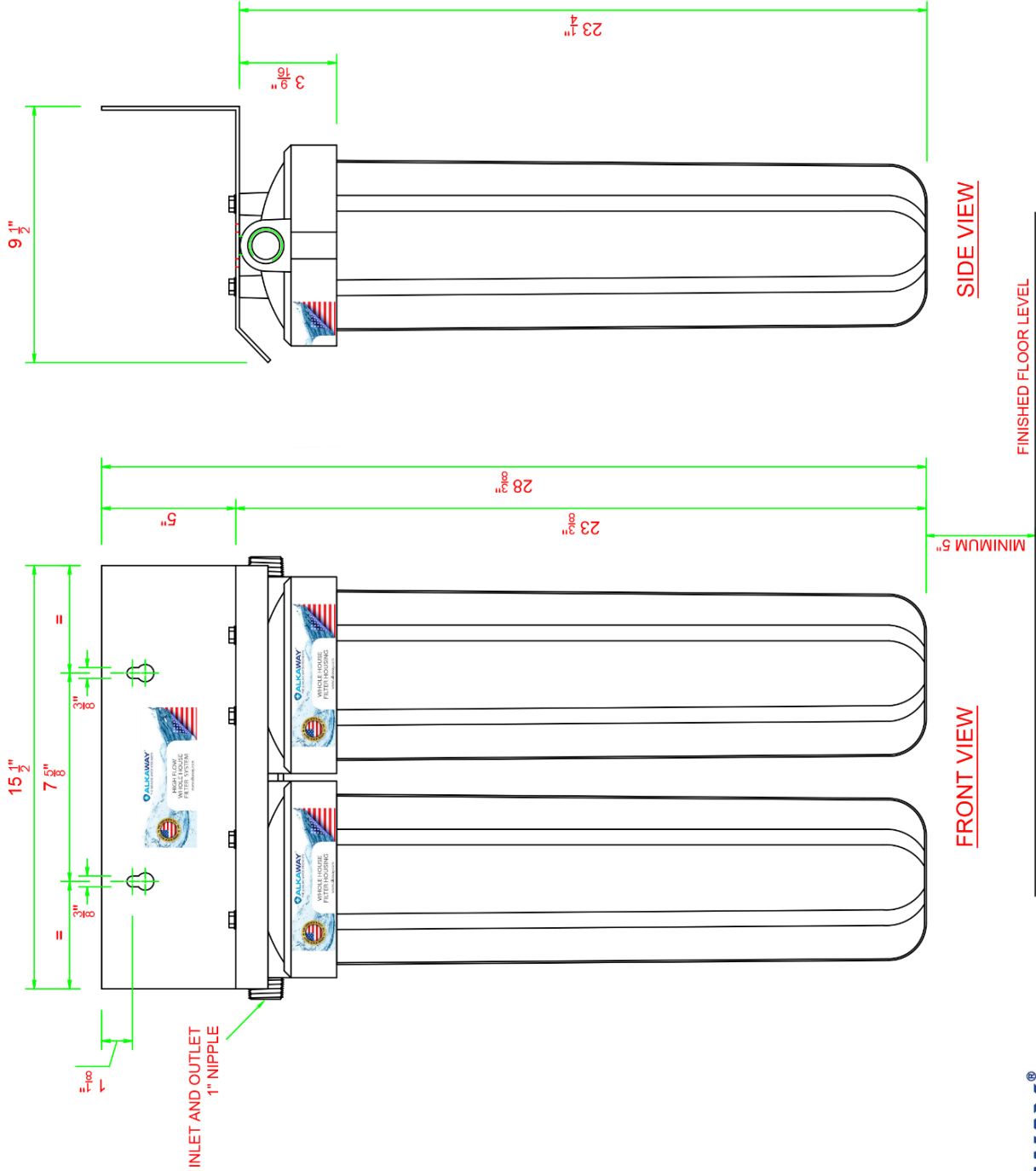
Please call our installers, AlkaVida, at 661-257-1313 for Whole house installations.

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

Check and follow your Province's, City, County, States, and local codes. You must adhere to these standards. If you have any questions, call AlkaVida at 661-257-1313.

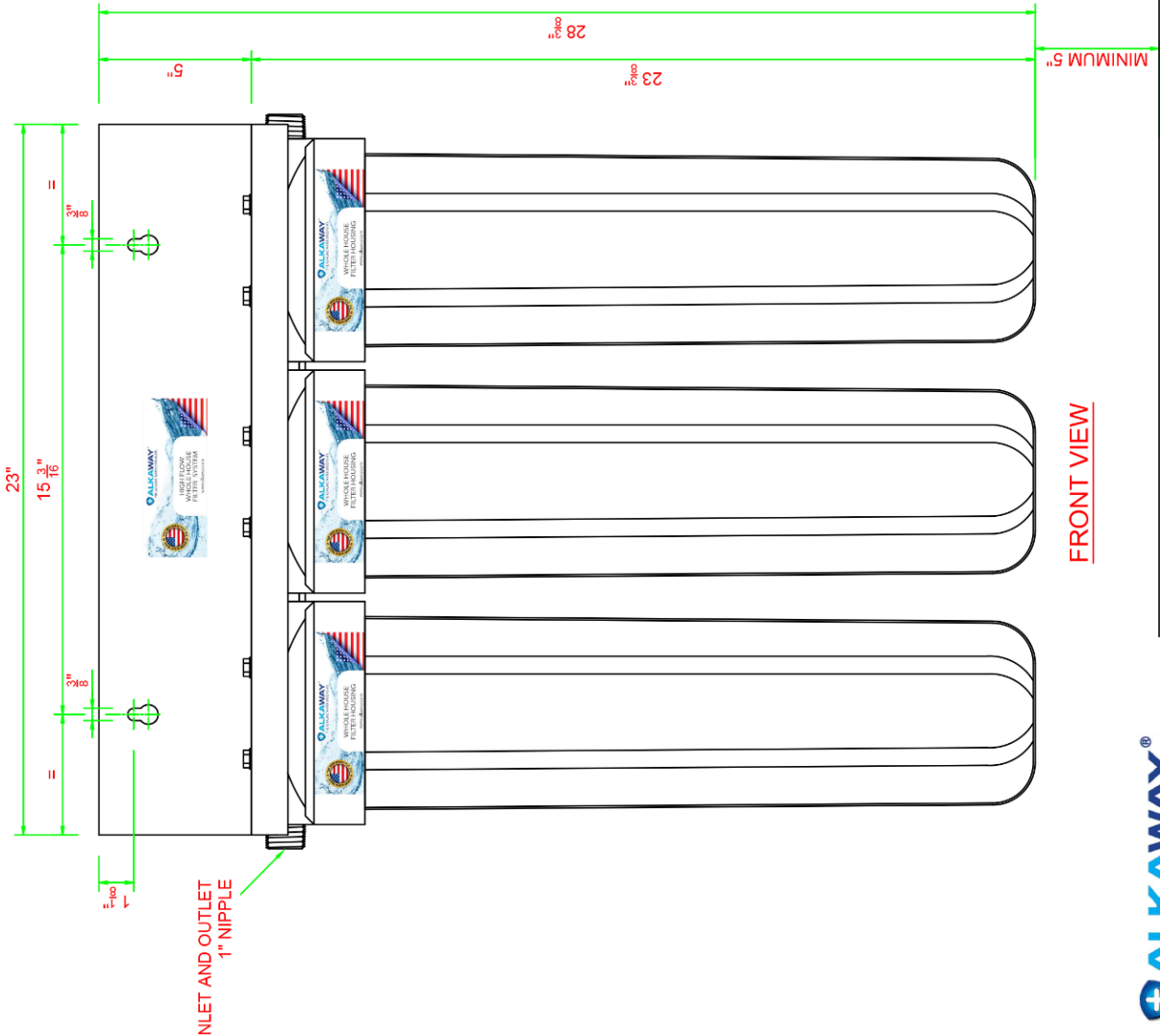
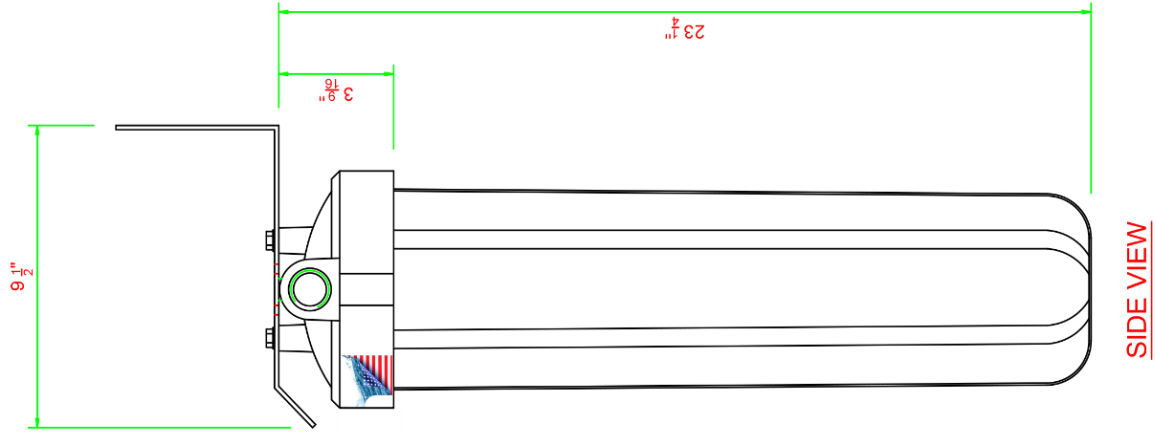
When handling the system, exercise caution. Turning the product upside down, dropping, dragging, or placing it on a sharp edge or protrusions could damage it and void the warranty.

**WARNING:** This system is not suitable for removing biological pollutants. AlkaWay suggests that bacteria levels be monitored on a regular basis to guarantee that no bacteria are present. Particularly monitor coliform and E. coli types of bacteria.



| 20 x 4.5" Essential Whole House Filtration System | Ver 1.0 | NTS | Mar 2023 |





FINISHED FLOOR LEVEL

MINIMUM 5"

| 20 x 4.5" Optimal Whole House Filtration System | Ver 1.0 | NTS | Mar 2023 |



## High Flow Filter Specifications and Operation

We don't skimp on quality or cut corners by using overseas housings. We use black and grey filter housings with the newly patented 222 filter connection technology. They are manufactured in the United States and are covered by our USA manufacturer's warranty, which is one of the best worldwide in the industry today.

### Application

After many years in the water filtration industry, we have simplified all the options available to us down to 2 main systems, our Essential (2 stage system) and the Optimal (3 stage system).

These Whole House Filter Systems are designed to be installed at the main water supply line into the house. If you have either 1" or 3/4" pipes, then one of these filter systems are for you.

**The Whole House - Essential** Safe Water System delivers filtered safe water for your whole house. Suits a medium to large house with 2 or more bathrooms on municipal town water. This two-filter system has superior micron filter capacity, at an affordable price.

The Essential system cartridges;

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

### Whole House Water Filter - Essential

Features:	Benefits
Easy to maintain	Removes or reduces chlorine
Easy to install	Removes or reduces sediment
12 Month Filter Life*	Removes or reduces bad tastes and odors
	Removes or reduces VOCs (Volatile Organic Compounds)

\* Depends on water usage and the condition of your water source. Filter life may be shorter or longer.

**The Whole House - Optimal** Safe Water System delivers optimal filtered safe water for your whole house. Suits a medium to large house with 2 or more bathrooms on municipal water. This three-filter system has superior sub-micron filter capacity and removes most heavy metals and much more, at an affordable price.

The Optimal system cartridges;

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

### Whole House Water Filter - Optimal

Features:	Benefits
Easy to maintain	Removes or reduces pathogens, cysts, and viruses
Advanced Ultra-D Filtration	Removes or reduces chlorine
12 Month Filter Life*	Removes or reduces sediment
Chemical and organics removal or reduction	Removes or reduces bad tastes and odors
	Removes or reduces heavy metals
	Removes or reduces VOCs (Volatile Organic Compounds)

\* Depends on water usage and the condition of your water source. Filter life may be shorter or longer.

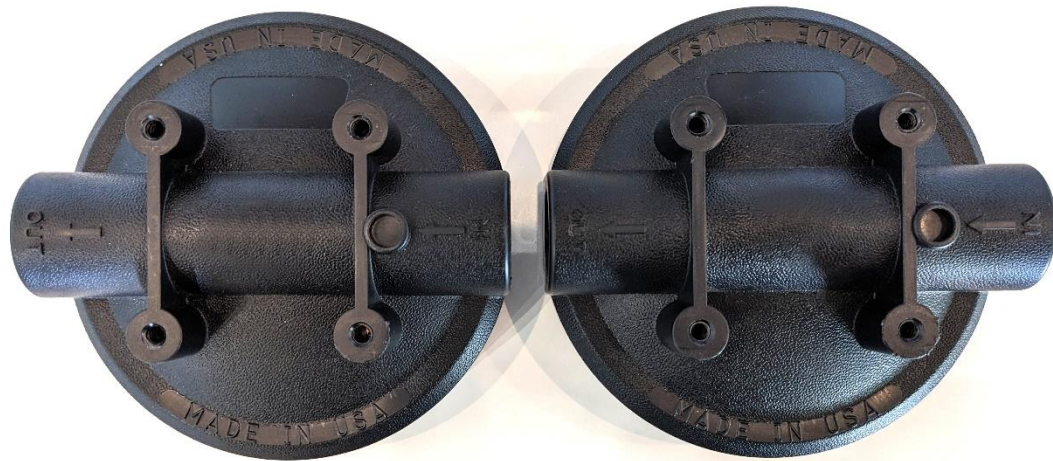
**NOTE:** The above systems do not remove Fluoride. Fluoride can be mostly removed when used with our kitchen drinking water filtration system (benchtop or under sink version) called the UltraStream. The world's most advanced natural water filter unit on the market today. The UltraStream purifies, alkalizes, ionizes and infuses the filtered water with molecular hydrogen.

### Housing and filters, Features, and Benefits

- Black and Gray - Made in the USA in California.
- Ultimate Materials - Built with chemical resistant reinforced Polypropylene.
- High Pressure Housings - Pressure tested well beyond industry standards: 125°F and 125 psi.
- Commercial Grade - These rugged housings are heavy duty and built to last.
- Flowrate - up to 25 GPM.
- Filter double O-Ring eliminates bypass and blowby to ensure 100% filtration, unlike double open-end (DOE) filters.

## 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.
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 two cap and three cap versions (see image below).



4. Use the plastic nipples supplied to screw the caps together. Use Teflon tape on the plastic nipple threads (see image below).



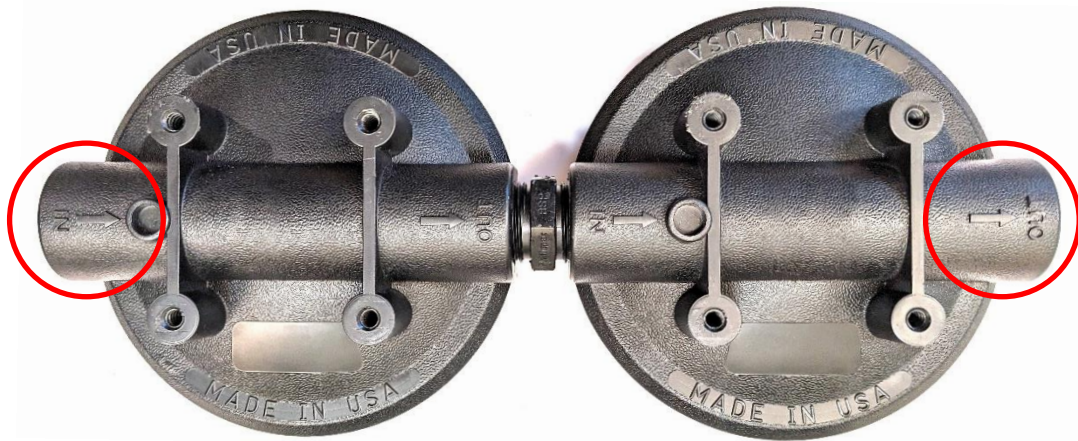
Plastic Nipple



5. Lay the cap assembly on a flat table.



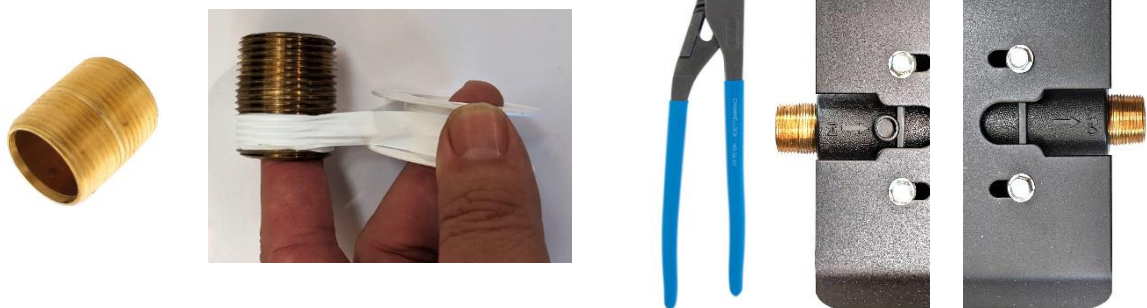
6. When mounting the filters to the wall, decide whether the inlet will be on the left or right. Place the bracket on the cap assembly so that the flow direction is correct when it is affixed to the wall (see image below).



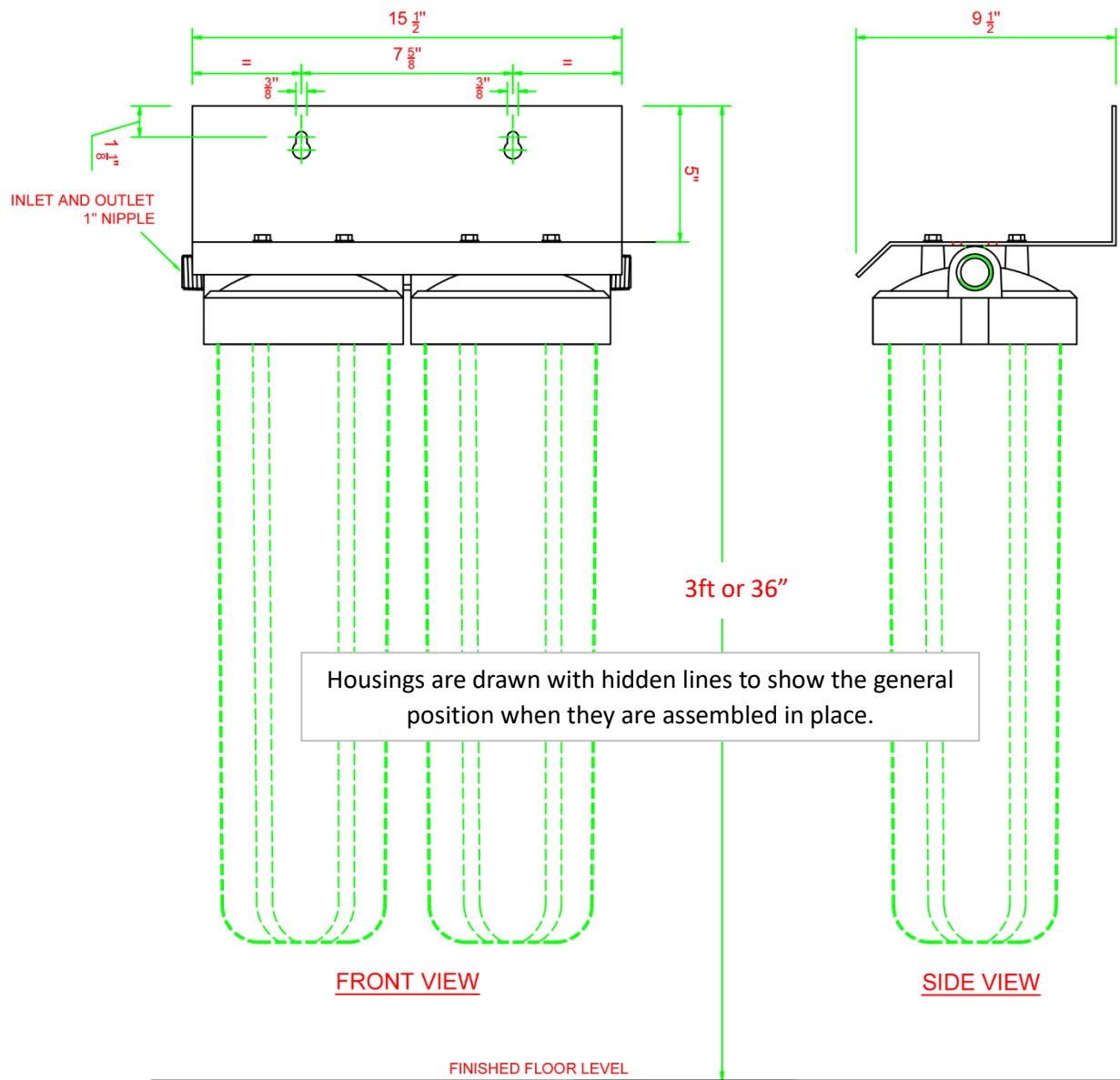
7. Screw the bracket to the cap assembly with the screws supplied. 4 screws per cap (see image below).

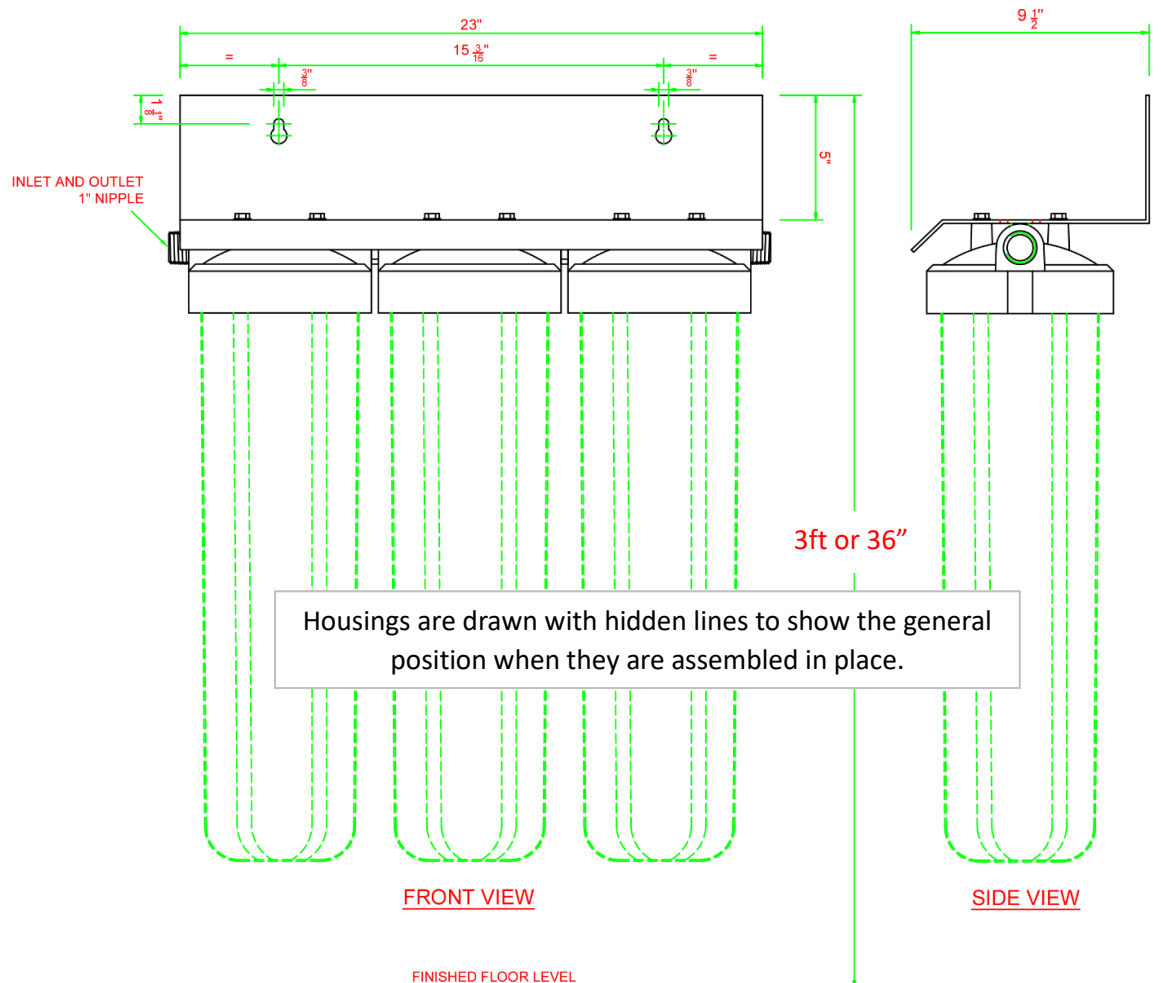


8. Next, install the brass threaded nipple(s) into the cap assembly. On the fitting(s) threads, make sure to apply Teflon tape. If you use channel lock pliers to tighten the nipples, don't damage the threads.

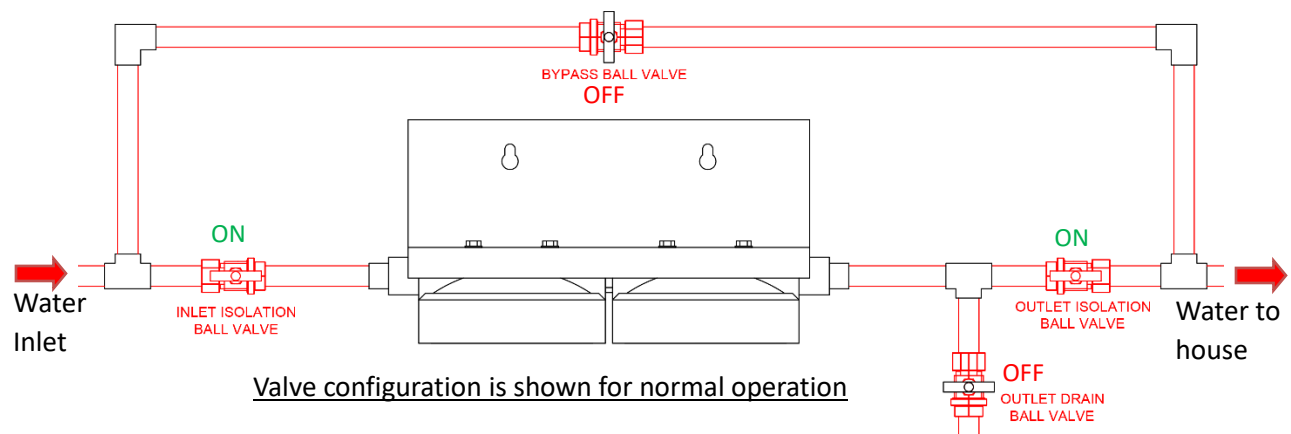


9. Use the appropriate fasteners to attach the bracket cap assembly to the wall. Make sure the top of the bracket is level and is at least 3ft or 36" above the finished floor level or any obstructions underneath it. Mounting hole spacing and diameters are shown in the figures below for both the Essential and Optimal versions. This is to allow for easy housing removal for filter replacements.
10. A mounting board can be used if the bracket cap assembly is to be attached to a studded wall. A shelf board or piece of 3/4" plywood can be screwed to the studs before screwing the bracket cap assembly to the plywood or shelf board.





11. Now install the mounted assembly into the main house water supply line.
12. **Critical - Turn OFF the main water supply to the house and release the pressure at the sink faucet or spigot before starting any work.**
13. It is recommended to install an isolation valve and bypass piping layout as shown below. Note: Some Plumbing parts, pipes and fittings are not included with the filter system (see image below).



14. Connect the main house water supply to the inlet side of the cap assembly. The plumber or installer can / or will provide additional connectors, pipes, valves and ensuring leak free connections.

NOTE: When installing pipe fittings, make sure to use Teflon tape on the threads before connecting them to the connectors on the bracket cap assembly. Before connecting any copper pipe and fittings to the filter housing, ensure that all solder connections are within 12-15 inches away from the bracket cap assembly, and that they are completely cooled.

## Installing the filters

15. Filter order
  - a. 2 filter Essential system, from the inlet side, first filter is the sediment and then the GAC filter.
  - b. 3 filter Optimal system, from the inlet side, first filter is the sediment, middle is the Ultra-D and the final filter is the GAC.
16. Use a very small amount of silicone grease (not included) to lubricate the O-rings on the filters. Insert the filter into the cap, making sure that the O-rings are seated properly (see images below).

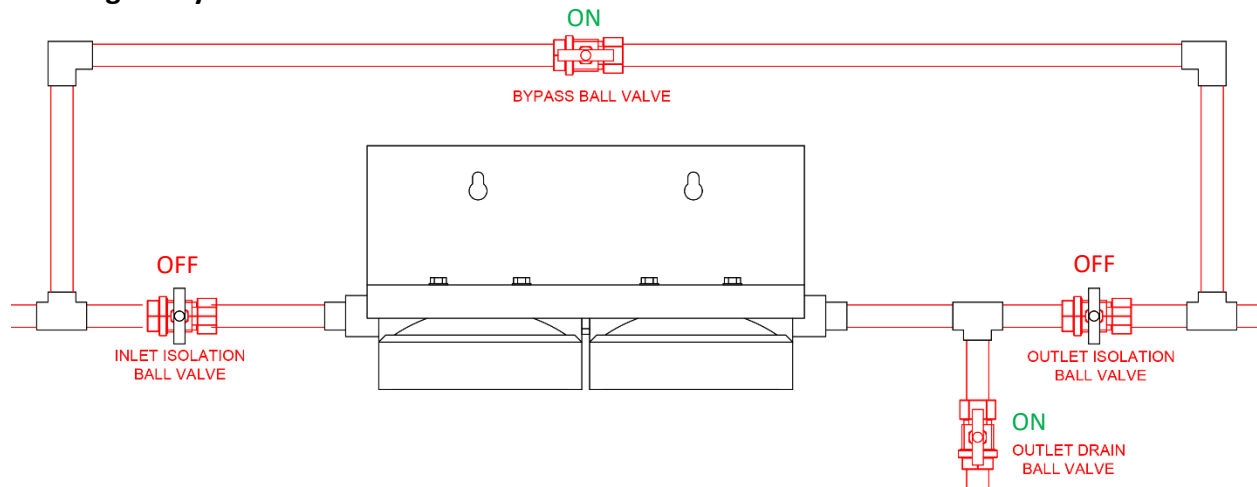


17. On the housing O-ring, use a very small amount of silicone grease to lubricate it. Screw the housings into the cap assembly by hand.
18. Make sure that the housings are seated properly and tightened. Slide the opening handle up onto the housings as high as you can, then tighten the housing by turning the handle to the right. If you are looking over the top of the bracket looking down, then this is counter-clockwise.

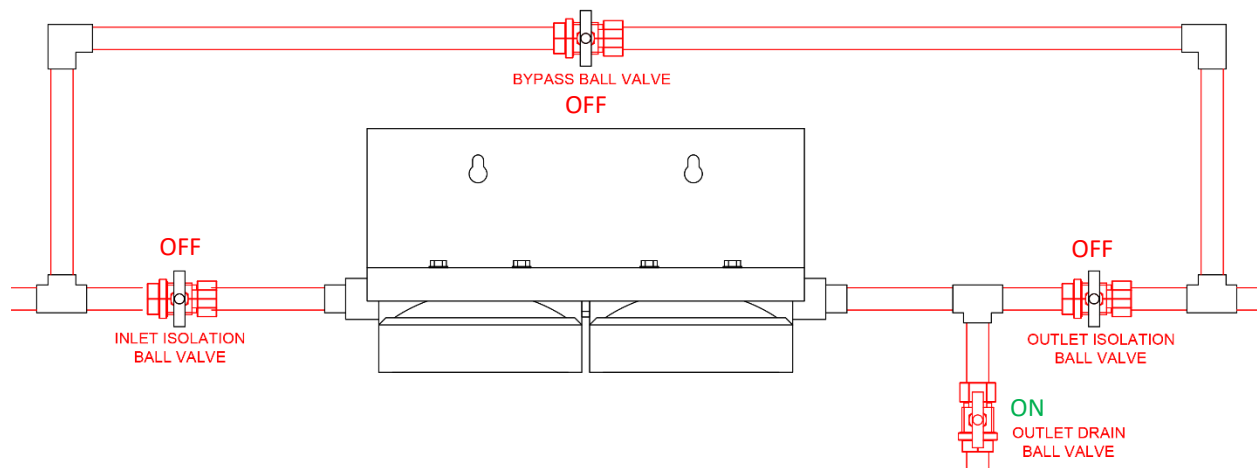
NOTE: Do not use metal or abrasive tools to tighten the housings as they might damage the housing surface.



## Flushing the system

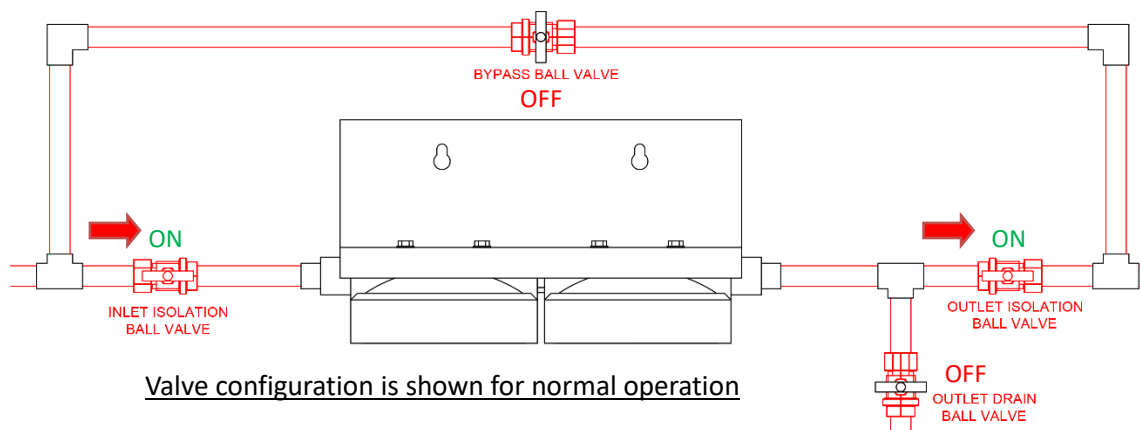


19. Turn OFF the inlet isolation and the outlet isolation valve (as shown above).
20. Turn ON the Bypass valve (as shown above).
21. Turn ON the main water supply to the house and turn ON a faucet or spigot to get rid of the air in the system. Once the air is flushed out of the pipes. Turn off the faucet or spigot.
22. Check for leaks. The plumber or installer need to fix any leaks before proceeding.



23. Ensure the inlet isolation valve and outlet isolation valve are turned OFF (as shown above).
24. Turn OFF the bypass ball valve (as shown above).
25. Turn ON the outlet drain ball valve and place a large bucket under it or connect a temporary hose to it and have the other end of the hose placed in a drain.
26. Slowly turn the inlet isolation valve to about  $\frac{1}{4}$  to  $\frac{1}{2}$  ON. Water will push the air out of the filter system through the outlet drain. Once the air has been flushed out, water will start to discharge out. Once you get a steady flow of water, flush the system for at least 15 minutes. The water will start out black, which is just the carbon fines being flushed out. This should clear up quickly.

27. Turn OFF the outlet drain valve and remove the outlet drain temporary hose (as shown below).
28. Fully turn ON the inlet isolation valve and the Outlet isolation valve (as shown below).
29. Turn ON a faucet or spigot to get rid of the remainder of the air in the system. Once the air is flushed out of the pipes. Turn OFF the faucet or spigot.
30. Check for leaks. Fix any. If there are no leaks, you have completed the installation (see image below for valve configuration for normal operation).



31. Normally the filters will need replacing every 12 months, but this is dependent on the quality of the main water supply and the amount of water used. It may be sooner than 12 months or longer than 12 months.

### Filter Cartridge Replacement Instructions

1. Order your replacement filters set online at [www.alkaway.com](http://www.alkaway.com).
  - a. 2 filter Essential system, from the inlet side, first filter is the sediment and then the GAC filter or
  - b. 3 filter Optimal system, from the inlet side, first filter is the sediment, middle is the Ultra-D and the final filter is the GAC.
2. Your system should have been installed with a bypass system as shown above. If so, turn OFF the inlet and outlet isolation ball valves. If not, then contact your local plumber or installer to replace the filters.
3. Place a bucket under the outlet drain valve and 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.
4. Place a bucket under the first housing. Remove the housings by unscrewing it clockwise (looking down from the top of the bracket). Slide the opening handle up onto the housings 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.



5. Repeat the above for the middle and third housings. Then dispose of the old filters.
6. Use a very small amount of silicone grease to lubricate the new filter's O-rings. Insert the filter into the cap, making sure that the O-rings are seated properly.
  - a. 2 filter Essential system, from the inlet side, first filter is the sediment and then the GAC filter or
  - b. 3 filter Optimal system, from the inlet side, first filter is the sediment, middle is the Ultra-D and the final filter is the GAC.



7. Use a very small amount of silicone grease to lubricate the housing O-rings. Screw the housings into the cap assembly by hand.
8. Make sure that the housings are seated properly and tightened. 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.

9. Flush the system as instructed on page 13.



## Warranty

For the original purchaser, at the original residential place of installation of this Water Filtration System, AlkaWay warrants the following:

1. All installation 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 installer's 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 ([www.alkaway.com/policies/returns-and-refunds](http://www.alkaway.com/policies/returns-and-refunds))
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 labor 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](mailto:info@alkaway.com) to receive return instructions including a Return Authority Number (RA#). We do not accept returns without an RA#. Visit Returns and Refunds Policy ([www.alkaway.com/policies/returns-and-refunds](http://www.alkaway.com/policies/returns-and-refunds)) 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 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 replacement. 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. Water replacement filters or 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 filters are dependent upon the quality of your water source, and will fail if excessive contaminants and sediment enter the filter.



12. Source water conditions are beyond our control.
  - a. In some cases, certain contaminants may block the filter. This may result, in extreme cases, in the filter casing leaking. Warranty is void if the untreated source water is put through the filter.
  - b. Ideally the working water temperature is in the range of 39° to 72°F. Prolonged use of hot water can cause channeling through the carbon. Warranty is void if hot water is put through the filter.
13. Water filters should not be used on water that is microbiologically unsafe. If unsure, please contact us at [alkaway.com](http://alkaway.com).
14. If you plan to use a water filter with well or bore water that is very hard or high in Iron or Sulphur or contaminants levels, please Contact us at [alkaway.com](http://alkaway.com).
15. It is necessary that a water filter is replaced at least every 12 months or earlier as specified for the filter.
16. To make a warranty claim Contact Us at [info@alkaway.com](mailto:info@alkaway.com).
17. Please refer to our Returns and Refunds Policy for how to make a warranty return ([www.alkaway.com/policies/returns-and-refunds](http://www.alkaway.com/policies/returns-and-refunds)).
18. 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.
19. Some States do not allow the exclusion or limitations of incidental or consequential damages so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.
20. This warranty may be transferred to a subsequent owner with written approval of AlkaWay and payment of standard transfer fees.
21. These warranties supersede all other warranties, expressed or implied, and we do not authorize anyone to assume any other duty on the sale of these 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.