HomeShield™ FAQs

AOS-HS-1200

What are PFAS?

PFAS, formally known as per- and polyfluoroalkyl substances, are a family of man-made chemicals widely used since the 1940s. They are often referred to as "forever chemicals," as they do not readily break down under normal environmental conditions. They are composed of chains of carbon atoms surrounded by fluorine atoms and varying head groups. The high strength of the carbon-fluorine bonds is critical to their environmental persistence. Their hydrophobic chains and hydrophilic head groups are largely responsible for their useful properties in numerous products (e.g. non-stick and flame-resistant materials).

Why should I care about PFAS?

PFAS have been linked to numerous health effects in humans, including increased risk of certain cancers, cholesterol levels, obesity, developmental effects, and reduced immune system functionality.

What's special about HomeShield?

HomeShield is the only water treatment device certified to reduce PFOA, PFOS, PFHpA, PFHxS, and PFNA to below 4 ng/L for 500,000 gallons. It also does this in a game-changing form factor, accomplishing what the competition can't, in a single tank design. HomeShield realizes up to 216% higher capacity than the closest competitor while requiring up to 74% less space. Compared to the closest POE cartridge filter solution, it has up to 400% higher capacity, which means 20% of the maintenance. This is accomplished through the patent-pending distributor plate design and media blend.

What PFAS does it remove?

HomeShield is certified to NSF/ANSI 53 for the reduction of PFAS, as shown in the table below.

PFAS Compound	Overall % Reduction
PFOA/PFOS	> 99.9
PFHpA	> 99.9
PFHxS	> 99.9
PFNA	> 99.9

What is the rated flow rate of the system?

HomeShield is certified to reduce PFOA, PFOS, PFHpA, PFHxS, and PFNA at a flow rate of 5.7 GPM.

What happens if I flow above the rated flow rate?

Frequently treating water at a flow rate higher than 5.7 GPM may reduce the number of gallons your HomeShield system can treat and result in lower contaminant reduction.

What are the site requirements for installation?

- 5 Micron Pre-Filter
- 1" FNPT x 1" FNPT Coupling
- Water Pressure: 25-100 psi
- Water Temperature: 40-90°F
- Total Height: 59.5"
- Total Width (with PID installed): 15.5"
- Boiler Drain (on the outlet side, at a minimum)

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What are the influent water quality requirements?

Influent Water Quality Requirements	
Parameter	Concentration
pH	7-8
Total Hardness	<10 gpg as CaCO3
Iron	<0.3 ppm
Manganese	<0.05 ppm
Turbidity	<1 ntu
Sulfate	≤200 ppm
TOC	≤2 ppm
Tannin	<0.1 ppm
Hydrogen Sulfide	None
Aluminum	None
PFOA	≤500 ppt
PFOS	≤1,000 ppt
PFHpA	≤40 ppt
PFHxS	≤300 ppt
PFNA	≤50 ppt

Where do I install the system in a treatment train?

HomeShield should be installed after other water treatment equipment, except for a UV system.

How is the installation different from a conventional treatment system?

- HomeShield is a non-backwashing unit. This means it doesn't need a drain line and doesn't waste water during normal operation. However, this also means it should be treated as a polishing device in a water treatment train.
- It is critical to only plumb HomeShield in downflow. Incorrect plumbing of the system can have a dramatic impact on system performance.
- While HomeShield doesn't require a drain line for normal operation, it does require a boiler drain on the outlet of the system for start-up.

What are the allowable environmental conditions?

The HomeShield's Performance Indicator Device (PID) is water resistant, but it still needs a cover to protect it from rain. The PID also needs to be protected from direct sunlight. The ambient temperature operating range is 40-110°F.

How do I read the PID?

- HomeShield has a color-coded display allowing for easy evaluation of maintenance needs of the system. When the system has 10-100% remaining capacity, the lower part of the display will be green, and will require you to touch the screen to activate it. Once the system is between 0% and 10% remaining capacity, the display will always be on, and the lower part of the display will be yellow. Once the system is exhausted and requires service, the display will always be on, and the lower part of the display will be red.
- In addition to the color-based indicator, the PID will also display the current flow rate running through the system and the remaining capacity in gallons.

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How does the PID notify me my filter my needs to be serviced?

The HomeShield's PID uses a visual indicator to notify you of the remaining capacity of the system. You can identify the remaining capacity based on the color of the display as well as the direct display of remaining gallons capacity.

What is the expected life of the system?

HomeShield is certified to treat 500,000 gallons of water. To estimate that in years, please reference the below table.

Number of People in Home	Years Capacity
1	10
2	9
3	6
4	4.5
5	3.5
6	3

Note: *HomeShield comes with a limited warranty of ten years. Please refer to the Installation Instructions & Owner's Manual for details.*

Note: *The system may require replacement due to factors other than PFAS reduction capacity.*

What do I do with an exhausted system?

Per current regulations, an exhausted HomeShield tank is classified as household waste, and can be disposed of without any special requirements.