



#### INTRODUCTION AND NOTES

One**Stop**+<sup>™</sup>ANTI-SCALE SYSTEM

### INTRODUCTION

The OneStop+ system protects from scale formation on internal and external plumbing surfaces. Additionally, it reduces heavy metals such as copper, lead, mercury, zinc, and cadmium. It can be installed at the point of entry to a building to treat both hot and cold water, or it can be located directly before a water heater, boiler, or other water using device that requires protection from hard water.

OneStop+ prevents scale by transforming the normal dissolved hardness minerals into undissolved crystal microparticles. These crystals stay suspended in the water and have a greatly reduced ability to react and attach to surfaces as dissolved hardness does. Therefore, the problem of internal build-up of scale in pipes, water heaters, boilers, espresso and coffee machines, fixtures, and glass is greatly reduced.

OneStop+ is not a water softener – water treatment chemistry (e.g., antiscalants, sequestrants, etc.) will most likely have to be changed to be compatible with OneStop+ treated water. Laundry and warewashing chemistry will likewise require adjustments.

# Using a OneStop+<sup>™</sup> system with other water treatment equipment

Due to the unique properties of OneStop+, there are some unique requirements for using OneStop+ in conjunction with filtration or other forms of water treatment.

- 1. OneStop+ must be the last stage in the treatment chain. Do not install filters after OneStop+ or before any devices for which scale prevention is required. POU filters, e.g., carbon or RO, are exempt from this requirement.
- 2. Do not apply phosphate or any other antiscalant before or after OneStop+.

### An important note about iron and manganese in the water supply

#### Iron and Manganese

Like conventional water softening media, OneStop+ needs to be protected from excess levels of certain metals that can easily coat the active surface, reducing its effectiveness over time. Public water supplies rarely, if ever, present a problem, but if the water supply is from a private well, confirm that the levels of iron (Fe) and manganese (Mn) are less than 0.3 ppm and 0.05 ppm respectively. If water quality is unknown, a water analysis is advisable to understand the water chemistry.

#### Cautions

- Do not let the system freeze. Damage to the tank may result.
- System must be operated in a vertical position. Do not lay it down during operation. The system may be placed horizontally for shipping and installation but must be operated in the vertical position.
- Install the system so that it is level because level surface because the system operates in an upflow, fluidized bed mode, having a level surface is more important than with a softener or media filter.
- A bypass valve should be installed on every system to facilitate installation and service.
- Observe all local plumbing and building codes when installing the system.

### **Anti-Scale System**

#### Notes to the installer

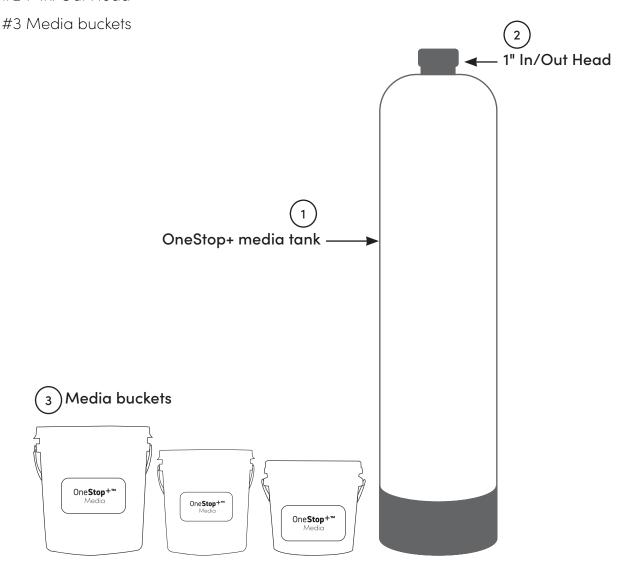
The OneStop+ system differs from a conventional softener or media filter in a number of key respects.

- The cartridge is light and only partially filled with media, this is normal. The upflow operation of the system requires a lot of freeboard to allow the bed to fully fluidize.
- Please see the "an important note about iron and manganese in the water supply".
- Please see the note about "Using OneStop+ with other water treatment equipment".

# One**Stop+**<sup>™</sup>**COMPONENTS**

#1 OneStop+ media tank

#21" In/Out Head





## **TECHNICAL DATA AND COMPONENTS**

One**Stop**+<sup>™</sup>ANTI-SCALE SYSTEM

### **EQUIPMENT SPECIFICATIONS**

OneStop+ systems are completely self-contained. The system is shipped with the OSP media packaged separately in buckets. The OSP media should be loaded into the tank before installation. A simple inlet and outlet connection are all that are required for installation. Please review operating pressures, temperatures, and water chemistry limitations to ensure compatibility.

# **Specifications**

Inlet Connection	1" in/out head *check model number for connection specification (B for 1"BSPP, N for 1"NPT)
рН	6.5 ~ 8.5
Temperature	4° ~ 49°C / 40° ~ 120°F
Hardness (Maximum)	1300 ppm
Ferrous Iron, Max*	0.3 ppm
Manganese, Max*	0.05 ppm
Chlorine, Max*	<3 ppm
Water Pressure	Min: 1 bar (15 psi)   Max: 10 bar   150 psi
Calcium Sulphate (CaSO <sub>4</sub> )	≤ 300 ppm treat before OneStop+
Oil & Polyphosphates	Treat before OneStop+
Phosphate (PO <sub>4</sub> )	< 0.3 ppm: Activated carbon prefiltration recommended > 0.3 ppm: Activated carbon prefiltration required
Hydrogen Sulfide	Treat before OneStop+

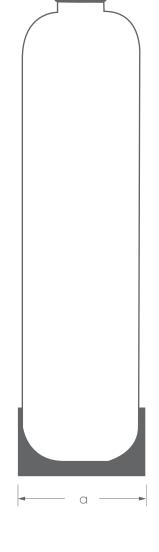
# **Mechanical Specs**

	OSP-1024	OSP-1054	OSP-1252
Max. Service Flow (gpm / lpm)	13.2 / 50	20 / 76	30 / 114
Dry Weight (with OSP media) (lbs / kg)	19.1 / 8.7	33 / 15	42.2 / 19.1
Media Volume (L)	3.5	5	7.5

# **System Dimensions**

	OSP-1024	OSP-1054	OSP-1252
A (inches / cm)	10.4 / 26.4	10.4 / 26.4	12.2 / 31.1
B (inches / cm)	25.8 / 65.5	56.5 / 143.5	54.6 / 139.0

Note: Minor dimensional variation may occur



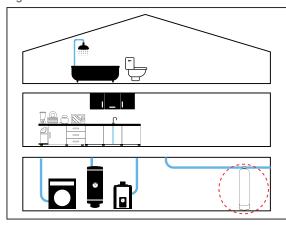
b

### INSTALLATION INSTRUCTIONS

The systems will be shipped empty, and the media will come in buckets. Please open the inlet/outlet tank-head and fill the media completely. Reattach and hand tighten the tank head after loading the media. *Do not overtighten.* 

1. Place the system in the desired location.

Fig. 1



2. Connect the cold water supply to the inlet of the OneStop+ system (See Fig. 2.1) and run a line from outlet port to a drain. (See Fig. 2.2)

Fig. 2.1

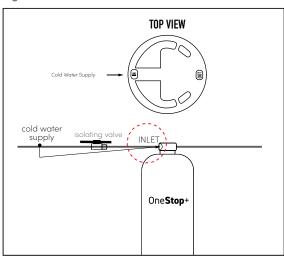
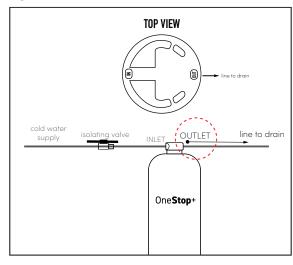
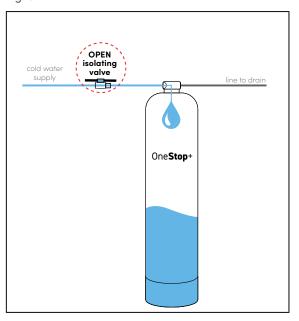


Fig. 2.2



3. Slowly open the cold water supply valve (user supplied) to the OneStop+ system. Allow the tank to fill with water. (See Fig. 3.1) Once a steady stream of water flows out of the outlet (See Fig. 3.2), close the cold water supply isolating valve (See Fig. 3.3).

Fig. 3.1





## **INSTALLATION MANUAL**

One**Stop**+ $^{TM}$ ANTI-SCALE SYSTEM

### **INSTALLATION INSTRUCTIONS**

Fig. 3.2

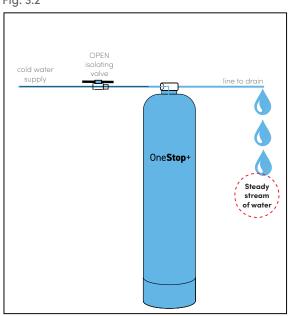
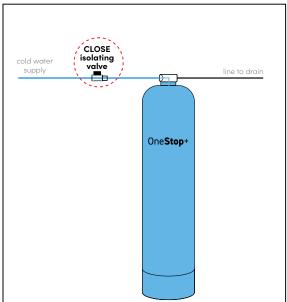
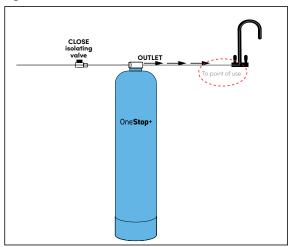


Fig. 3.3



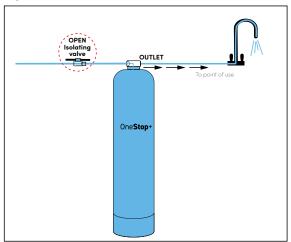
4. Connect the outlet of the OneStop+ system to the downstream plumbing to the home or facility. (See Fig. 4)

Fig. 4



5. Open the cold water supply valve to the OneStop+ system. (See Fig. 5)

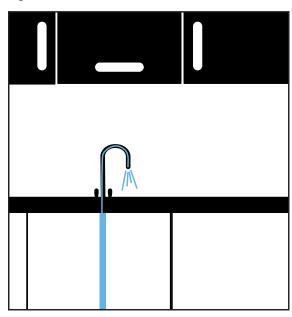
Fig. 5



## **INSTALLATION INSTRUCTIONS**

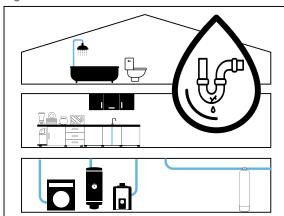
6. Open faucet or tap downstream from the OneStop+system to relieve any air. (See Fig. 6)

Fig. 6



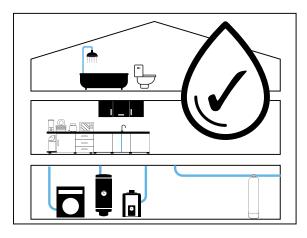
7. Check for leaks. Repair as needed.

Fig. 7



8. The system is now ready for use.

Fig. 8



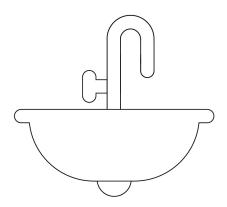


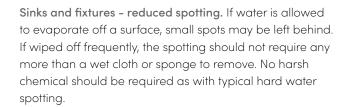
### INSTALLATION MANUAL

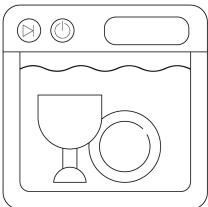
One**Stop**+<sup>™</sup>ANTI-SCALE SYSTEM

### A NOTE TO THE HOMEOWNER

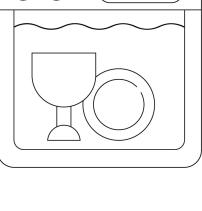
Your OneStop+ system will improve the properties of water throughout your home. Here are some things to expect and some recommendations for maximizing the benefits and your enjoyment of OneStop+.



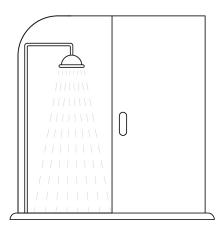




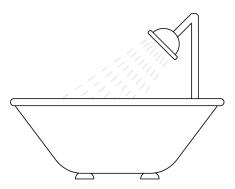
Dishwasher - Spotting on dishes and on the surface of the dishwasher should be greatly reduced. We recommend that you immediately reduce the amount of dishwashing detergent by approximately 50% as compared to hard water use. Dishwashing detergents low in phosphates are highly recommended as they are better for the environment and phosphates can cause spotting. The use of a rinse aid may be advised.



Shower doors and tiles - should have reduced spotting. When water evaporates off a surface, small spots may be left behind. These spots should be easy to remove with a damp cloth or sponge. In very hard water areas treating the shower glass with Rain-X 2 in 1 glass cleaner, or equivalent, will further reduce cleaning requirements.



In the bath you should notice that soaps and shampoos lather more than with untreated water. Soaps and shampoos will also rinse off much easier and faster than they would with traditional soft water. We recommend the use of modern soaps for the best results.



### LIMITED WARRANTY

Global Water Solutions warrants the OneStop+ system as follows:

- The Tank is warranted to be free of defects in materials and workmanship for 5 years from the date of original installation.
- The Head is warranted to be free of defects in materials and workmanship for 5 years from date of original installation.
- The OneStop+ media is warranted for performance for a period of 2 years from the date of the original installation.

#### Conditions

- 1. The OneStop+ system must be installed and serviced by an authorized Global Water Solutions dealer, or other entity approved by Global Water Solutions.
- 2. Any component failure must not result from abuse, fire, freezing or other acts of nature, violence, or improper installation.
- 3. Equipment must be installed and operated in compliance with the local plumbing codes, and on an approved water supply.
- 4. Equipment is limited to use at water pressures not to exceed 10 bar / 150 psi and temperatures not to exceed 49°C / 120°F.
- 5. Water supply must not exceed 3.0 ppm chlorine. For water supply exceeding 3.0 ppm chlorine, pretreatment is required. (Please contact your water treatment specialist.)
- 6. Information, including model number, serial number, and date of installation, must be provided for any claims pertaining to equipment in warranty.
- 7. Defective parts are subject to inspection by either Global Water Solutions or any authorized representative before final commitment of warranty adjustment is made.
- 8. Global Water Solutions reserves the right to make changes or substitutions in parts or equipment with material of equal quality or value and of then current production.

#### Limitations

Our obligation under this warranty with respect to the tank or valve is limited to furnishing a replacement for, or at our option, repairing any part or parts to our satisfaction that prove defective within the warranty period stated above. Such replacement parts will be delivered to the owner F.O.B. nearest factory, at no cost, excluding freight and local labor charges, if any. Our obligation under this warranty with respect to the OneStop+ media will be limited to furnishing a replacement for the media within two years from date of original installation. Such replacement media will be delivered to the owner F.O.B. nearest factory, at no cost, excluding freight and local labor charges, if any. Damage to the media due to chlorine, other oxidizers or fouling or any other operation outside of the limits shown under Specifications, is not covered by this warranty. Global Water Solutions shall not be liable for freight, handling or labor charges, or consequential damages.



# Where Water Gets Better

Have questions or need assistance?

www.globalwatersolutions.com