Installation, Operation and Maintenance Manual

OneFlow® Anti-Scale System

Model OFTWH
OneFlow® Anti-Scale System
Chemical-Free, Salt-Free Scale Prevention

⚠ WARNING

Read this Manual BEFORE using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.

Keep this Manual for future reference.

Introduction

The OneFlow® Anti-Scale System will condition the tap water providing optimum water characteristics for their specified applications. The result is reduced equipment maintenance requirements, longer equipment life and improved quality & consistency of your products.

The OneFlow® system is built with the finest and most advanced materials and each system is quality inspected and pressure tested prior to shipment. With proper installation and routine maintenance, you will have years of trouble-free operation.

Please refer to this manual when performing routine filter changes. The instructions make periodic maintenance quick and easy and ensure you will receive maximum benefit from your system.

System Specifications

Inlet/Outlet Connections: 3/4" FNPT
Service Flow Rate: 0.5 gpm to 10 gpm (1.9 lpm to 38 lpm)

Gallon Rating: OFTWH: up to 6 gpm, 24/7/365 for 2 years for the OFTWHRM.

Capacity: OFTWHRM cartridge does not have a grain removal capacity, however, other contaminants present in the water will gradually degrade the effectiveness of this cartridge. Change the OFTWHRM cartridge at least once every two years.

⚠ WARNING

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

⚠ WARNING

Need for Periodic Inspection and Yearly Maintenance: Periodic inspection and yearly maintenance by a licensed contractor is required. Corrosive water conditions and/or unauthorized adjustments or repair could render the valve ineffective for service intended. Regular checking and cleaning of the valve's internal components and check stops helps assure maximum life and proper product function. Frequency of cleaning and inspection depends upon local water conditions.

WATTS®

Feed Water Chemistry Requirements

pH	6.5-8.5
Hardness (maximum)	1.282 ppm CaCO3 - 128°F
Water Pressure	15psi to 100psi (1.03 bar to 6.9 bar)
Temperature	40°F to 110°F (5°C to 43°C)
Free Chlorine	< 2 ppm
Iron (maximum)	0.3 ppm
Manganese (maximum)	0.05 ppm
Copper	1.3 ppm*
Oil & H2S	Must be Removed Prior to OneFlow
Polyphosphates	Must be Removed Prior to OneFlow
Silca (maximum)	20 ppm**

⚠ WARNING

*High levels of Copper will foul OneFlow media and typically originates from new Copper plumbing. Wait a minimum of 4 weeks before placing system in operation. Avoid applying excess flux on the inner surfaces of the pipe and to use a low-corrosivity water soluble flux listed under the ASTM B813 standard.

NOTICE

**OneFlow media does not reduce silica scaling. Silica can act as a binder that makes water spots and scale residue outside the plumbing system difficult to remove. This 20 ppm limitation is for aesthetic purposes.

⚠ WARNING

- Connect system to cold water supply only. Water temperature cannot exceed 110°F/43°C.
- System ***must be*** installed in a vertical, upright and level position.
- OneFlow® systems ***must not*** be used in conjunction with polyphosphate or any other scale inhibitor.
- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

⚠ WARNING

Installation Precautions

- Do **NOT** install system on line pressure above 100psi.
- Do **NOT** install system on HOT water line. Failure to limit line temperature to 110°F/43°C may result in housing failure and damage.
- Do **NOT** install the system backwards with the feed water line connected to the outlet.
- Do **NOT** use liquid pipe compounds for fitting connections. USE two to three wraps of Teflon® tape.
- Do **NOT** solder plumbing connections attached to filter housing or inlet valve. Inlet valve and filter housing will be damaged by high temperature.
- Do **NOT** allow system to freeze. Turn off water supply to housing and drain housing if temperature falls below 32°F.
- Do **NOT** install system in direct sunlight or where system is exposed to harsh chemicals or may be subjected to being struck by moving equipment, carts, mops or any other item that may cause damage.
- **ALLOW** a minimum of 3" under the housing to allow for filter replacement.
- IF water hammer is evident, install water hammer arrestors before the OneFlow® unit.
- Do **NOT** overtighten fitting connections into inlet valve or housing outlet.
- Always back-up valves and fittings with a wrench when installing a fitting to avoid turning the valve.
- Do **NOT** install the unit behind equipment where it may be difficult to access the system for filter replacement.

Position the OneFlow® unit in a suitable location. The direction of flow through the OneFlow® unit is always left to right; keep this in mind when determining installation location. Do NOT mount the OneFlow® system near any source of heat. Also, do not mount the system above any device or area that would be adversely affected by water.

Installation

Installation Drawings & Dimensions

1. Turn off all equipment to be fed by the OneFlow® system, locate water supply cut-off valve and turn OFF
2. Determine if the water line has an existing water treatment system. If so, examine system for use of polyphospate or other scale inhibitors. OneFlow® will not be effective if used in conjunction with other scale inhibitors. Remove the scale inhibitors from the water line or discontinue installation.
3. Install a 1/2" full-flow ball valve on the water supply side that will feed the water system.
4. Anchor the OneFlow® system on a wall stud or suitable mounting material spanning wall studs. System must be vertical and upright.
5. Run a suitable line from the 1/2" full-flow ball valve at the tap water source to the inlet ball valve on the left side of the OneFlow® system. Use 2-3 wraps of Teflon® tape and brace the inlet ball valve on the system with a wrench when connecting the feed water line.

NOTICE

DO NOT OVERTIGHTEN CONNECTION FITTING INTO BALL VALVE.

6. Select the appropriate size tubing for the equipment being fed and connect it to the outlet of the OneFlow® system.

NOTICE

DO NOT connect the tubing to the equipment at this time. Prior to making connection to the equipment, this line will be used to facilitate flushing the system. As an option, a drain valve in a tee on the outlet side of the OneFlow® system could be provided in the line to facilitate flushing when changing filters.

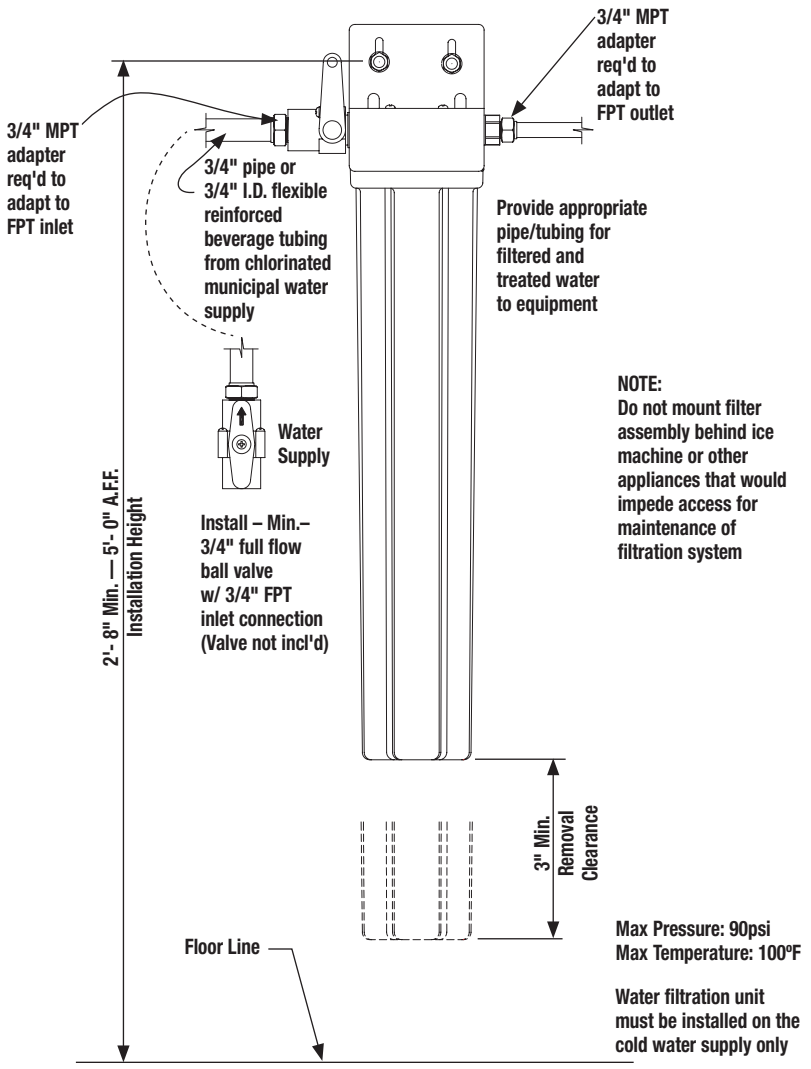
7. With OneFlow® inlet valve closed, slowly open the 1/2" full-flow ball valve at the tap water source. Check for leaks.
8. If a drain valve was not installed on the outlet side of the system, hold the tubing that will connect to equipment in a clean bucket or over sink or drain. Open the system inlet feed valve and allow water to flush through system for 2 minutes at the specified system flow rate to allow air bubbles to escape.

NOTICE

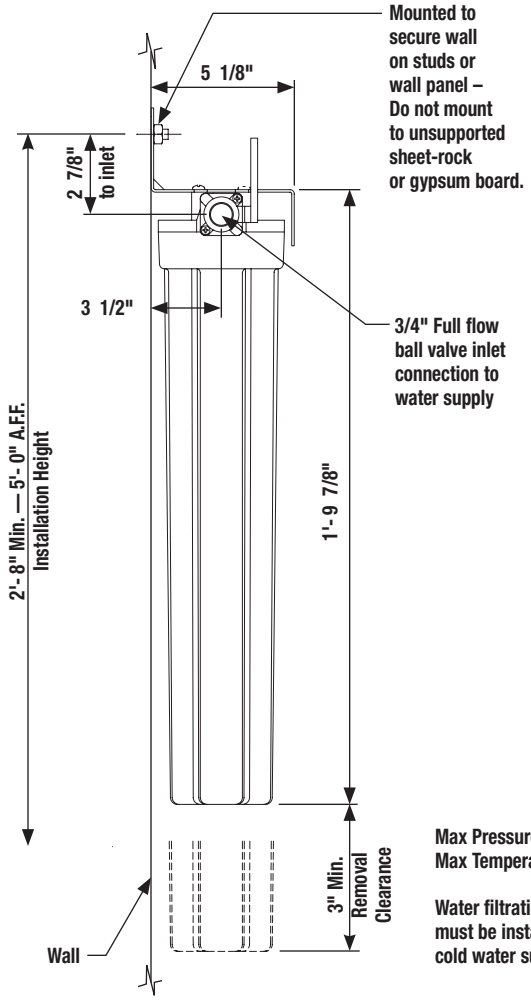
NO ACTIVATION IS REQUIRED FOR THE OneFlow® system TO PERFORM PROPERLY. FLUSHING IS RECOMMENDED TO ALLOW AIR TO ESCAPE THE SYSTEM.

9. Make certain that the end of the tubing to be connected to the equipment is clean and sanitary.
10. Connect tubing to equipment. Open all water supply valves and check for leaks.
11. If no leaks, turn on equipment and check for normal operation.
12. Attach the Service Log to the installed OneFlow® system and fill in install date.

Installation Drawings & Dimensions



NOTE:
Do not mount filter assembly behind ice machine or other appliances that would impede access for maintenance of filtration system



Operation

With sufficient pressure, operation of the Watts OneFlow® System is completely automatic. Dependable operation involves only periodic filter changes and service documentation.

Maintenance

Routine maintenance of your OneFlow® System involves periodic filter cartridge changes and/or replacement of sump O-rings. If the system sizing recommendations have been followed, the OneFlow® Cartridge should last two years.

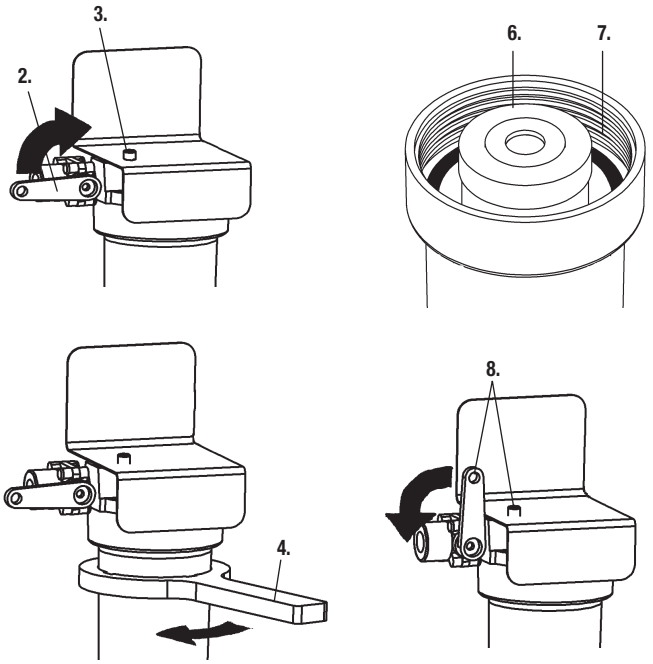
Filter Change Frequency

The filters should be changed in response to the following conditions.

OFTWH-RM • 24 months since installation or last filter change.

Replacement Filter Cartridges

OneFlow® systems can only be used with OneFlow® filter cartridges. Use of replacement cartridges other than those specified will void warranties, certifications and may compromise equipment protection, water quality and equipment life.



Filter Cartridge Replacement Procedure

IMPORTANT

Determine whether all equipment connected to the OneFlow® system must be turned off prior to shutting off water supply from filters.

1. If required, turn off equipment.
2. Turn OFF water to OneFlow® system by closing Inlet Ball Valve.
3. Press the red button to release pressure.
4. Remove housing(s) - use filter wrench if necessary.
5. Clean inside of housing sumps with warm water. If desired, disinfect housing using a teaspoon of household bleach. Add to filter bowl and add water. Let stand 5 minutes and discard.
6. Insert new cartridge into filter housing. Match cartridge model number to model number on bracket.
7. Make certain the O-ring is properly positioned and reinstall filter housing (hand tighten only). Check O-ring for damage and replace if damaged or distorted.
8. Slightly open the inlet ball valve; push the red pressure relief button to release trapped air until a small amount of water comes out - release the red button and fully open the ball valve.
9. Open the flush valve downline from the filter housing (if equipped) and flush the new cartridge to drain or bucket for two (2) minutes or until water runs clear. If no flush valve is present, disconnect line from equipment to flush to drain.

NOTICE

10. With water supply inlet valve OPEN and water flow confirmed, turn on connected equipment. Failure to supply water to equipment may cause serious damage.
11. Record filter change on the service log.

Replacement Parts for: OneFlow® OFTWH

Drawing ID #	Description
1	Housing, w/PR
1a	O-Ring
2	Valve, 3/4" FxM Ball
3	Bracket, Single Housing
4	Screw
5	OFTWHRM Replacement Cartridge
6	Pressure Relief Button