

PeakFlow® A System Installation Instructions

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NOTICE

- To ensure proper installation and optimal functionality, read this manual thoroughly BEFORE installing the equipment.
- Follow the instructions carefully to avoid potential property damage, equipment damage, or personal injury. Ensure that the installation complies with state or municipal plumbing codes and regulations.
- PeakFlow A effectively prevents scale in tankless water heaters and pipes but is not recommended for use with tank-type water heaters or storage systems.
- Keep this manual after installation. This manual contains important information on parts and maintenance.

Important Application Limitations

The PeakFlow A system is intended solely for scale prevention in tankless water heater applications.

△DO NOT use this system under the following conditions:

- With storage-type or tank-type water heaters
- In recirculated or closed-loop plumbing systems
- In point-of-entry (POE) applications where flow exceeds 6 gallons per minute (gpm) continuous or 10 gpm peak
- Where water main larger than 1 inch is reduced at the inlet
- In any system involving polyphosphate dosing, excessive chlorine, oil, hydrogen sulfide, or other incompatible contaminants

Feed Water Chemistry Requirements

- pH: 6.5 to 8.5
 - Hardness (maximum): 75 grains (1282 ppm CaCO₃)
 - Water Pressure: 15 - 150 psi (1.03 - 10.5 bar)
 - Temperature: 40°F - 122°F (5°C - 50°C)
 - Chlorine (maximum): 2 ppm
 - Iron (maximum): 0.3 mg/l
 - Manganese (maximum): 0.05 mg/l
 - Copper (maximum): 1.3 ppm
 - Polyphosphate, oil, & hydrogen sulfide (H₂S): Must be removed before PeakFlow A.
- △DO NOT** install in systems containing these or other incompatible pretreatment chemicals.



Navien PeakFlow A (GPWC310001AC001) is certified by IAPMO R&T to NSF/ANSI/CAN 61 Standard

Navien PeakFlow A (GPWC31000AC001) is certified by IAPMO R&T to IAPMO Z601 -83% for scale reduction

Model # GPWC310001AC001

Replacement Media # GWFC310GD001

System Specifications

- Maximum Pressure: 150psi / 10.5 bar
- Operating Temperature: 40°F (5°C) - 122°F (50°C)
- Max Service Flow Rate: Up to 10 gpm (38 lpm)
- Continuous Flow Rate: Up to 6 gpm (23 lpm)
- Inlet/Outlet Connections: 1" MPT
- Capacity: Media does not have a grain removal capacity. However, other contaminants present in the water will gradually degrade the effectiveness of the media.

Introduction

The PeakFlow A System prevents scale buildup on the inner pipe surfaces of the heat exchanger inside the tankless water heater. When installing, operating PeakFlow, or when replacing the media, be sure to refer to the manual.

- Flow Rate (Continuous): 6 gpm
- Flow Rate (Peak): 10 gpm
- Silica (maximum): 20 ppm

- NOTE:** PeakFlow A and media will not reduce silica scaling. While silica tends to have a less significant effect on scale formation than other minerals, it can act as a binder that makes water spots and scale residue outside the plumbing system difficult to remove.
- This system is not a water softener. It is designed only for scale prevention and will not reduce water hardness or provide soft water characteristics.

PeakFlow® A System Installation Instructions

▲WARNING

- Water MUST flow in OPPOSITE direction of molded arrows on the head for proper performance.
- Do not install in systems containing polyphosphate, oil, hydrogen sulfide, or other incompatible pretreatment chemicals.
- Not to be used with microbiologically unsafe quality water.
- Avoid direct sunlight. The filter housing will be damaged by high temperatures.
- Be careful not to freeze the System. When the temperature drops below 32 °F, shut off the water supply to the housing and drain the housing.
- Do not install the system where it can be exposed to strong chemicals or bumped into equipment, carts, mops, or other items that could cause damage.
- If there is a water hammer, install a water hammer arrestor in front of the PeakFlow A System.

Pre-Installation Verification Checklist

The installer must confirm all of the following conditions prior to installation:

1. The system is being installed on a tankless water heater (not a storage- or tank-type heater)
2. The plumbing system is open-loop, not recirculated or closed
3. The expected flow rate is within 6 gpm continuous and 10 gpm peak
4. The application is residential or light-commercial
5. There is no pipe size reduction from a main line larger than 1" before the system inlet. Connected piping must be sized to flow rates that do not exceed the specified range
6. The system is not exposed to polyphosphate or other incompatible water conditions
7. The installer and end-user understand that this product is a scale prevention system, not a softener, and does not provide soft water

If any of the above conditions are not met, do not proceed with installation. Contact Navien Technical Support (1-800-519-8794) for further evaluation.

NOTE: Please check the system package for any damaged or missing parts before proceeding with the installation.

Installation

1. Inspect the water line for the use of polyphosphate or other scale inhibitors and remove if any.
2. Locate and turn off the water shut-off valve before installing the PeakFlow A System.
NOTE: The PeakFlow A System cannot be used with other scale inhibitors.
3. Secure the PeakFlow A mounting bracket to a wall stud or an appropriate area spanning the wall stud. Next, install the system in a vertical, upright, and level position.
4. Install the PeakFlow A system with water flowing in the OPPOSITE direction of molded arrows on the head for proper performance.
5. When connecting the water supply line to the housing, apply about 2-3 Teflon® tape wraps to the threaded connections.
NOTE: Do not use liquid pipe compounds to connect fittings. Do not overtighten the housing entry and exit.
6. Choose tubing of the correct size for the equipment and connect it to the PeakFlow A OUTLET port ensuring reverse plumbing so that water flows inward from the OUTLET side. Water flow must exit the system from the INLET port.
7. If a drain valve is not installed, hold the tube that will connect to the equipment over a clean bucket or sink or drain. Let the water flow through the system for 2 minutes at the specified system flow rate to allow air bubbles to escape.

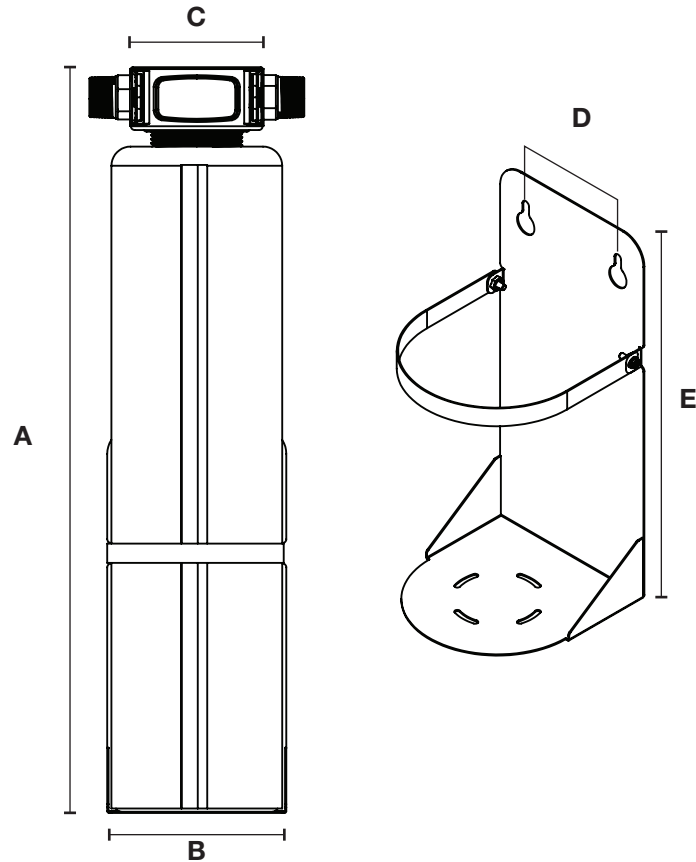
PeakFlow® A System Installation Instructions

Installation Drawings & Dimensions

Model		
PeakFlow A		
Dimensions		
	in.	mm
A	22.5	572
B	5.5	140
C	4	102
D	3.5	90
E	12	300

The above dimensions represent the tank and the IN/OUT head without the neoprene tank cover.

Due to variations and tolerances, please allow clearance above the filter for making connections.



System Mounting

<p>Step 1: Attach system mounting to wall stud</p>	<p>Step 2: Place PeakFlow A to system mounting</p>	<p>Step 3: Secure PeakFlow A to system mounting</p>

System Use Limitations

The PeakFlow A system must be installed and operated only under its published design parameters. It is not intended for use with storage-type water heaters, recirculating loops, or flow rates that exceed its rated capacity. Use in closed-loop systems or pressurized loops may lead to premature media degradation, reduced treatment effectiveness, or permanent damage and is not supported.

Operation and Maintenance

- The PeakFlow A system is a completely salt-free system.
- Scale prevention media should be replaced every 5 years (60 months). Some applications based on water quality and usage, may require media to be replaced sooner than the recommended period.
- Only PeakFlow A system media can be used.
- The use of any other replacement media will void the warranties and may compromise equipment protection, water quality, and equipment life.
- PeakFlow A media should be changed every 60 months. The frequency of media replacement will depend on volume of system usage (refer to the **System Use Limitations** section above or **Application Limitations Summary** on page 6).
- This product does not function as a water softener and will not remove calcium, magnesium, or other hardness minerals from the water.

Media Replacement Procedure

1. Turn OFF all of the equipment connected to the PeakFlow A system before shutting off the water supply from the system.
2. Shut OFF the water supply at the front end of the system.
3. Disconnect the plumbing line from the INLET and OUTLET head.
4. Unscrew the head from the fiber glass tank. Then remove the distributor tube.
5. Remove the filter media by tipping the tank upside down into a large drum or pail.

PeakFlow® A System Installation Instructions

Media Bed Loading Procedure

1. Place the distributor tube back down the center of the tank. Plug top of the distributor tube with a rag or cork or tape to prevent media from entering.
2. Then pour the bag of media into the tank.

NOTE: it is important that the distributor tube is not moved or pulled during this process, as it is not possible to put it down the bottom of the tank once gravel and media are in the tank.

	<p>The riser (distributor tube) remains inside the tank seated in the depression at the bottom.</p>	<p>FUNNEL (Do not put funnel into the riser tube.)</p> <p>Pour the media into the tank.</p>
<p>Remove the adapter from the tank.</p>	<p>Temporary plug the open end of the riser. The riser (distributor tube) remains inside the tank, seated in the depression at the bottom.</p>	<p>The media will not always spill down inside the tank and may need to be swept inside. Using a funnel may make the filling of the tank easier and neater.</p>

Parts

	Description	Quantity
A	5" x 20" Fiberglass Tank	1 EA
B	Neoprene Jacket cover (PF-A)	1 EA
C	1" MPT IN/OUT Fitting (not pictured)	1 EA
D	1.05 OD Distributor Tube W/ Upper & Lower Basket	1 EA
E	Mounting Bracket	1 EA
F	Mounting Screws	2 EA
G	Bracket Metal Strap	1 EA
H	Bracket Screws	4 EA
I	Resin Media	1 LT
J	Mounting Strap Screws	2 EA



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Limited Warranty

Navien, Inc. warrants the PeakFlow A Scale Prevention System as follows:

- Navien warrants that the system is free of defects in material and workmanship for one year from the date of installation, if the system is correctly installed according to the manual.

Conditions

1. The PeakFlow A Scale Prevention System works only when the incoming water complies with EPA regulations. Grease, copper, phosphate, silica, chlorine, and copper levels of the incoming water should meet the EPA drinking water standard.
2. The concentration of chlorine of incoming water should not exceed 2.0 ppm. If water supply exceeds 2.0 ppm of chlorine, a pretreatment system must be used to reduce chlorine levels under 2.0 ppm.
3. Abuse of the product, improper installation, or damage caused by the installer or user's mistake shall void this warranty.
4. The equipment must comply with local piping regulations and be installed and operated in a water supply system that complies with EPA drinking water standards.
5. The equipment must be used only within the water pressure and temperature limits specified by Navien, Inc.
6. For all warranty claims, the model number, serial number, and installation date of the device will be requested.
7. Either Navien, Inc. or an authorized Navien representation shall inspect any allegedly defective parts. Navien, Inc. reserves the right to inspect defective parts made under claims and verify warranty coverage for resolution accordingly.
8. Navien, Inc. reserves the right to change or replace parts or equipment with materials of the same quality or value.

Application Limitations Summary

The PeakFlow A system must be used only under the following conditions. Use outside these limits may result in reduced performance, field failure, or loss of warranty coverage.

NOT APPROVED for use in:

- Storage-type or tank-type water heaters
- Closed-loop or recirculating plumbing systems
- POE systems exceeding 6 gpm continuous or 10 gpm peak
- Installations with pipe reductions greater than 1" at the system inlet
- Systems with polyphosphate dosing, chlorine >2 ppm, oil, hydrogen sulfide (H₂S), or other incompatible conditions
- Applications expecting water softening or hardness removal

APPROVED for use in:

- Tankless water heater protection
- Residential or light-commercial applications
- Single-pass plumbing systems within flow, pressure, and temperature limits
- Systems installed per this manual and applicable plumbing codes
- Scale prevention only, not water softening

PeakFlow® A System Installation Instructions

How do I get service?

- 0-30 days after purchase: Any accessory furnished by Navien Inc., installed and determined to be defective for up to 30 days must be returned to the wholesaler where purchased. Wholesaler shall handle the return through Sales Orders at orders@navien.com. A sales return authorization (SRA), purchase order copy and proper documentation will be required in order to receive a refund. Only approved credit will be issued.
- 31-365 days after purchase: Accessories installed for 31 days up to 1-year will require a Returned Goods Authorization (RGA) obtained by Navien's technical support team at 800-519-8794, option 2. An RGA number will be issued for shipping a replacement part or wholesaler pick up. Proof of purchase may be required based on product part value.

Limitations

The obligation of Navien, Inc. under this warranty is limited to providing a replacement or repairing at Navien's discretion regarding the media replacement. Parts that have been proven to be defective within the warranty period specified above will have replacement parts delivered to the owner of the PeakFlow scale prevention system. Labor costs are not included in the warranty.

The Navien, Inc. warranty must satisfy the conditions under which the consumer provides media replacement within the recommended replacement period based on model. Media is limited to products provided by Navien, Inc. This warranty does not include media damage due to chlorine or other oxidizing agents, contamination caused by local water quality conditions, or other conditions when used outside the limits indicated in the specifications and specifications.

NAVIEN, INC. MAKES NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED. NAVIEN, INC. HEREBY SPECIFICALLY DENIES ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

THE REMEDIES DESCRIBED IN THIS WARRANTY ARE THE ONLY AND EXCLUSIVE REMEDIES FOR VIOLATION OF THE WARRANTY. NAVIEN, INC. IS NOT RESPONSIBLE FOR INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, FREIGHT, HANDLING, LOSS OF PROFITS, EXPENSES, OR THE COST OF REPAIRING OR REPLACING OTHER PROPERTY THAT IS DAMAGED IF THIS PRODUCT DOES NOT WORK CORRECTLY, OTHER COSTS RESULTING FROM LABOR CHARGES, DELAYS, VANDALISM, NEGLIGENCE, FOULING CAUSED BY FOREIGN MATERIAL, DAMAGE FROM ADVERSE WATER CONDITIONS, CHEMICALS, OR ANY OTHER CIRCUMSTANCES OVER WHICH NAVIEN, INC. HAS NO CONTROL. THIS WARRANTY SHALL BE INVALIDATED BY ANY ABUSE, MISUSE, MISAPPLICATION, OR IMPROPER INSTALLATION OF THE PRODUCT.

This warranty gives you specific legal rights, and each state has different rights. To determine your rights, you must refer to your applicable state laws. All implied warranties are limited to the specified warranty period of the express warranties provided herein.

Some states do not allow restrictions on implied warranties or the exclusion or limitation of ancillary warranties or consequential damages. Those restrictions in this warranty may not apply to you.

CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California)

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