

# **PureSync Lite** UNDERSINK FILTRATION SYSTEM

## **INSTALLATION GUIDE**



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#### **Parts and Preparation:**

#### **Inventory Parts Received**

 This Instruction Sheet
Filter Housing (assembled)
Water Supply Tee Connector (3/8 push connector x 3/8 male compression x 3/8 female compression)
Inlet/Outlet 1/2" mpt x 3/8" push connector
Faucet assembly
Connecting tubing (3/8 plastic)
Faucet connector (white plastic) with blue locking clips
Filter housing wrench
Direct connect kitchen faucet parts
In-line Flow Restrictor



#### Instructions:

#### Step 1 - Ensure all the neeccesary parts are included before beginning installation. If anything is missing, call 208-462-0626.

#### Step 2 - Prepare Filter Housing

1. Attach fittings to Inlet/Outlet - 1/2" mpt x 3/8" push connector - Use teflon tape for threaded fittings.

2. Select a suitable location for the filter housing under the sink. Location should be accessible for filter cleaning and/or replacement.

(NOTE: The flow arrow embossed on the top of the head indicates the filter inlet)

#### Step 3 - Install the Water Supply Tee Connector

1. Turn off the cold water supply valve under the sink. If there is no valve, turn off the water to your house at the main meter.

2. Open the cold water faucet to let off the pressure. Make sure the valve is off and the faucet is not dripping.

3. Unscrew the nut that holds the cold water supply line into the pipe where you just turned the water off from.

4. Install the Tee Connector onto the exposed threads and tighten. BE CAREFUL NOT TO CROSS THREAD. **\*\*Overtightening** will crack the plastic threaded push connector fitting.\*\*

5. Screw water faucet supply line back onto the tee connector.

NOTE: Do NOT turn the cold water line back on yet, the water will flow directly out of the tee connector and flood your kitchen.

#### Step 4 - Installing the Inline Flow Restrictor

1. Identify the appropriate location in your water line where you intend to install the Inline Flow Restrictor. Ensure that there is sufficient space and accessibility for the restrictor.

2. Take note of the flow direction indicated by arrows on the flow restrictor. Ensure that the arrows align with the direction of water flow in your system.

3.Cut the water line at the desired installation point, using a pipe cutter or appropriate cutting tool. Ensure a clean and straight cut.

4.Insert the cut ends of the water line into each end of the Inline Flow Restrictor's Quick Connect fittings. Push the tubing firmly into the fittings until it locks securely in place.

5.Once the connections are made, verify that the tubing is tightly secured and does not leak. If any leaks are detected, recheck the connections and make necessary adjustments.

#### Step 5 (Alternative Option): Direct to Kitchen Faucet Install

If connecting directly to the cold water faucet and not using the provided water dispenser, use the two fittings supplied with your Direct Connect Faucet Kit.

1. A stainless female thread x push connector (Connects to the water supply valve then to filter housing inlet)

2. A brass 3/8" male compression fitting x push connector. (Connects to the cold water faucet to filter housing outlet)

#### Step 6 - Install the Accessory Water Dispenser

1. Select a suitable location for the accessory water dispenser as close to the sink as possible allowing convenient space under the sink for assembly. If not using the extra sink hole, drill the sink top with a 1/2" bit to accommodate the inlet pipe.

2. Assemble the water dispenser to the sink top:

A. Insert the valve through the sink top with the rubber washer underneath the chrome plate on top of sink surface.

B. Thread lock washer and brass/plastic nut onto the thread assembly underneath the sink and tighten by hand and if necessary, carefully with a wrench.

C. Attach the push-fit faucet connector directly onto the metal pipe end.

#### Step 7 - Install Connecting Tube

1.Cut two pieces of the 3/8" plastic tubing to fit from the water supply to the inlet of the filter housing and from the outlet of the filter to the water dispenser.

A. Tubing from water supply to filter housing inlet:

a. Insert one end of tubing into outlet push connector of the tee fitting.

(seat completely into push connector fitting), and insert lock clip.

b. Insert other end of tubing into inlet push connector of filter housing.

(seat completely into push connector fitting), and insert lock clip.

B. Tubing from filter outlet on top of the housing to the water dispenser.

a. Both ends of tubing are to be inserted into the push connectors.

b. Insert blue lock clips onto the sleeve of all push connectors.

#### Step 8 - Start-Up

1. Open the tap fully by lifting the lever to its vertical position to allow trapped air and water to flow out of the system.

2. Turn water on at the main inlet of the cold water supply. Water should start flowing out of the faucet once housing has filled with water.

3. Once water begins to flow out of the faucet after air is expelled, turn off water flow and let it stand for 20 minutes.

4. Turn water flow back on and flush the system for 10 minutes.

5. The system is now ready for use. Taste will improve once filters are completely flushed of residual particles.

6. Note and record the date; check the condition of the filter element in about six months, or earlier if flow rate drops off noticeably.

Please Note: As water passes through the new filters, tiny oxygen bubbles will be created causing your water to appear white or "cloudy." This is normal and harmless and will disappear after a few days of use, but may last up to a week. The water is safe to consume after the initial flush and there are no adverse effects.

For a 24 hour period after installation, periodically check your unit to ensure there are no leaks.

#### Troubleshooting

1. No flow of water through the system: Check the plastic tubing for kinks, or obstructions.

- 2. Water leaks:
  - a. At the push fittings: inspect to be sure tubing has been fully sealed into the push connector.
  - b. At the tee connector: insure all fittings are tight.
  - c. At the housing: verify that the housing has been fully tightened.

Rated Service Flows For Filters: 1 gpm or less for optimal filtration.

Maximum Working Pressure: (125 psig) Maximum Working Temperature: 38° C (100° F) Minimum Operating Pressure: (10 psig) Minimum Operating Temperature: 5° C (41° F)

#### **Cleaning and Maintenance**

#### Sanitizing Your Filter Housing:

1. Your under sink filter housings should be sanitized yearly when you change filters.

2. Turn off water supply to your filter housing and open faucet to relieve pressure.

3. Remove water and filters from the housings and pour a 32 oz bottle of Hydrogen Peroxide 6% solution into filter housing canister and reattach filter housing.

4. Turn on water supply and allow water to run until hydrogen peroxide is at the faucet and then close the faucet and don't use for two to three hours.

5. After two or three hours, open the faucet and thoroughly flush the system of hydrogen peroxide and reinsert filters.

#### **Filter Replacements:**

Filters should be replaced every 6-12 months depending on water usage . Replacements can be purchased in a bundle on our website, www.greenfieldwater.com



### Returns Policy, Warranty, Privacy Policy, and Terms of Use

Please read carefully before installing your system.

**Our Return Policy:** We understand the occasional necessity of returns and strive to simplify this process with clarity and professionalism. Here are the details of our return policy:

**Returns and Refunds:** - You have 30 days from the date of purchase to return a product for a full refund, excluding shipping costs. - The refund amount may be adjusted based on the condition of the returned product. - Non-defective products are subject to a 10% restocking fee deducted from the refund.

**Gravity Feed Filters:** - If a gravity feed filter breaks within 30 days of purchase, customers qualify for a replacement of the same product. - After 30 days, no returns or exchanges will be accepted, even in cases of breakage. - Used filters may only be returned if deemed defective by Greenfield Water Solutions Technical Support. - Defective filters, determined by our technical support team, will be replaced at no extra cost, contingent on customer cooperation in validating the defect. - Filters damaged due to misuse (e.g., dropping, mishandling, using hot water, washing with soap, or testing with red dye) are not eligible for replacement.

**Free Shipping:** - Shipping costs will be deducted from returns of products with Free Shipping, unless the product is deemed defective by Greenfield Water Solutions Tech Support, as shipping expenses are incurred.

**Filter Adjustments:** - Some systems may require filter adjustments based on post-laboratory reports due to water dynamics variability. - If our Technical Support Team determines an adjustment necessary, we cover the cost of a replacement filter. Note, only comprehensive water tests (e.g., Simple Labs) are valid for adjustments; strip, dye, or TDS tests are not accepted as proof of performance. - For questions about testing your system, contact us at info@greenfieldwater.com.

**Customer Cooperation:** - We encourage collaboration with Greenfield Water to resolve issues requiring filter adjustments. - Refunds for system returns, instead of adjustments, are contingent on system condition; filters are non-refundable in these cases.

Lost and Stolen Packages: - Greenfield Water Solutions assumes no liability for lost or stolen packages. We strongly recommend Route Protection at checkout to cover theft, loss, or shipping-related breakages promptly. We are committed to providing excellent customer service and ensuring your satisfaction with our products. For further clarification on our return policy, contact our customer support team. Please initiate returns by emailing info@greenfieldwater.com for direct purchases. For dealer purchases, contact your dealer for return initiation. Authorization is required for returns of products from Greenfield Water Solutions or authorized dealers.

**Ship Returns To:** Greenfield Water Solutions 1277 Saddle Ridge Road Viola, Idaho 83872 Our goal is your satisfaction, and we strive to approach every issue with fairness and understanding.

#### Returns Policy, Warranty, Privacy Policy, and Terms of Use

**WARRANTY CONDITIONS** The warranty is void if: - A water cartridge or unit is not installed according to the manufacturer's specifications. - The product is dropped, exposed to excessive temperatures, or used outdoors without protection from the sun. - The product is mishandled, modified, or used in an environment not specifically recommended by the manufacturer or as stated on our website. - Filters are not changed on an annual basis.

**DISCLAIMER ON INSTALLATION AND LIABILITY** Greenfield Water Solutions is not liable for any damages caused by improper installation of our systems, whether performed by a customer or a third-party installer, including plumbers. We strongly recommend following our installation guidelines and seeking assistance from our Technical Support Team when necessary. - We will not cover the cost of replacement parts purchased outside the guidance of our Technical Support Team. - In the case of an emergency such as a major leak, a professional plumber should be called immediately. Greenfield Water Solutions is not responsible for any bills incurred due to emergency plumbing services.

**LIMITATIONS TO PRODUCT LIABILITY** Greenfield Water Solutions isn't responsible for damage to persons, property, or livestock caused by improper application, misinterpretation of the directions for use, maintenance, or human error. Greenfield Water Solutions will not be liable for any damage to persons, property, or livestock caused by improper application, misinterpretation of the directions for use, maintenance, or human error.

**FDA DISCLAIMER** The statements and products shown on our website have not been evaluated by the US Food and Drug Administration. These products are intended for informational purposes only. While we hope our products are beneficial, we do not guarantee treatment, cure, or prevention of any disease. Always consult reputable and knowledgeable health care practitioners as needed. Please visit our website for more information.



#### Setting Realistic Expectations: Understanding Water Filter Testing Standards

Understanding Water Quality Standards: PHGs vs. MCLs by Zach Greenfield

Introduction At Greenfield Water Solutions, we understand that many of our customers prioritize the highest standards of water quality. We frequently receive questions about Public Health Goals (PHGs), also known as health guideline levels (HGLs), and how our filters measure up. Here, we aim to clarify the difference between PHGs/HGLs and Maximum Contaminant Levels (MCLs) and explain why most filters, including reverse osmosis (RO) systems, ultrafiltration, and distillation, typically adhere to MCL standards.

#### What Are Public Health Goals (PHGs) or Health Guideline Levels (HGLs)?

Public Health Goals (PHGs), also known as health guideline levels (HGLs), are set by the Office of Environmental Health Hazard Assessment (OEHHA). When calculating a PHG/HGL, OEHHA considers all available information to identify the level of a chemical in drinking water that would not cause significant adverse health effects in people who drink that water every day for 70 years. For cancer-causing chemicals, the PHG/HGL is typically established at the "one-in-one-million" risk level, meaning that not more than one person in a population of one million people drinking the water daily for 70 years would be expected to develop cancer as a result of exposure to that chemical.

PHGs/HGLs are not regulatory standards but serve as aspirational targets that indicate the level of contaminants at which no adverse health effects are expected. They provide a framework for understanding health risks and guide the improvement of drinking water quality.

#### What Are Maximum Contaminant Levels (MCLs)?

MCLs are enforceable standards set by the Environmental Protection Agency (EPA) under the Safe Drinking Water Act. These standards represent the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs/HGLs as feasible, considering available technology, treatment capabilities, and cost.

MCLs balance the ideal health outcomes represented by PHGs/HGLs with practical considerations such as technological feasibility and cost. While MCLs might not achieve the near-zero contaminant levels of PHGs/HGLs, they are set at levels that ensure safety and public health, providing a realistic and enforceable standard.

#### Why Do Filters Adhere to MCLs?

While PHGs/HGLs represent ideal conditions, achieving these levels with current technology is often not feasible. Most water filters, including high-quality reverse osmosis (RO) systems, ultrafiltration, and distillation, are designed to meet MCL standards, which are realistic and attainable benchmarks ensuring safe drinking water.

Achieving PHG/HGL levels with current filtration technologies is challenging. Most commercially available filters can significantly reduce contaminant levels but often fall short of PHG/HGL targets due to the limitations of available technology. Achieving and maintaining PHG/HGL levels would require frequent filter changes, advanced technologies, and higher costs, making it impractical for most households.

#### Addressing Customer Concerns

One challenge we face is that some customers use PHGs/HGLs as the standard for evaluating water treatment efficacy. It is important to understand that PHGs/HGLs were never intended to be the sole determinant of a filter's effectiveness. Instead, they are meant to inform and guide improvements in water quality.

We understand that our customers want the cleanest water possible, and while it's challenging to achieve PHG/HGL levels, our filters aim to get as close as possible to these standards. By adhering to MCLs, we ensure that the water is safe and clean, meeting the stringent requirements set by regulatory bodies.

Using EWG.org's Tap Water Database as a Reference

We recommend using resources like EWG.org's Tap Water Database. Customers can visit this site to learn what is in their municipal water (not well water). Visit the EWG Tap Water Database for more detailed information.

Conclusion At Greenfield Water Solutions, we strive to provide the highest quality water filtration systems that meet or exceed MCL standards. While PHGs/HGLs are valuable for understanding potential health risks, MCLs offer a practical and achievable benchmark for ensuring safe drinking water. We are committed to continuous improvement and are always here to address your concerns and provide the best solutions for your water quality needs.





**Faucet Mounting Instructions** 



Please read carefully before beginning installation.



#### **Faucet Mounting Instructions**

#### Insert the Faucet Stem:

1. Place the faucet stem into the designated hole in the sink. (Refer to the parts sectional diagram in Figure 1 for guidance.) 2. Tighten the Nut:

3. Have someone hold the faucet in the desired position above the sink.

4. Tighten the nut from underneath the sink to secure the faucet.

#### Compliance Check:

Some states require an air gap faucet. Check your local plumbing code to ensure compliance.

Important: Locate the drain connection away from the garbage disposal to prevent contamination and system fouling.

#### Under-Sink Faucet Installation:

#### Optional Sprayer Hole Usage:

- If a sink sprayer is present, it can be disconnected and used for faucet installation.
- You may skip the drilling step if using the sprayer hole.



#### Drilling Guidelines for Spigot (if applicable)

#### **Safety Measures:**

Always wear protective eyewear during drilling. Use a heavy-duty variable-speed drill for the best results.

#### **General Steps:**

1.Find a flat spot for drilling.

- 2. Apply lubricant or water to the target area to prevent overheating.
- Drill size requirements:
- Non-Air Gap Faucet: ½-inch hole.
- Air Gap Faucet: 1¼-inch hole.

#### **Porcelain Drilling:**

1.Use a carbide-tipped drill bit for the initial cut.

- 2. Mark the drill target and apply light pressure with a slow speed setting.
- 3. Drill a pilot hole carefully until the porcelain meets the metal layer below.
- 4.Switch to a standard metal-cutting drill bit to complete the hole.
- 5.Gradually enlarge the hole to meet the required size.
- 6.Clean the surface after drilling.

#### **Stainless Steel Drilling:**

- Suggested Tools:
- Use a carbide-tipped drill bit or hole saw.
- Ensure the drill area thickness does not exceed 1¼ inches.

#### Steps for Hole Saw:

Mark your target area and create a small punch to stabilize the drill.
Drill a ½-inch hole using light pressure and a slow speed setting.
Clean sharp edges and the surface thoroughly after drilling.

#### Chassis Punch (Optional):

Recommended Tool: Greenlee Chassis Punch. Mark the drill target. Punch a small guide hole to stabilize the drill. Drill as required, following the same care and safety measures.

