

FREEDOM-2024

Freedom-2024 is a point-of-use drinking water system for all municipal water supplies that do not add fluoride, as this system is not designed to remove fluoride. Freedom-2024 includes three filtration components and six filtration stages, with up to 99.5% removal rate of chlorine, chloramines, lead, mercury, heavy metals, MTBE, VOCs, giardia, Entamoeba, cryptosporidium, toxoplasma cysts and contaminants, while maintaining desired pH (alkalinity) and dissolved minerals.

This system features three types of carbon (activated coconut carbon block, catalytic coconut shell carbon block, and powdered activated carbon) to produce great-tasting, mineral-rich, highly purified water.

Included Components:

1. Triple filter wall mount unit for installation under a sink or in a basement, to allow easy access to the system for future filter changes.
2. **Stage 1 & 2:** 5 micron coconut carbon block filter that removes sediment 5 microns and larger, adsorbs chlorine and a wide variety of contaminants, and improves taste and removes odors. This filter is installed in the first vertical filter container (sump), and is labeled Stage 1 & 2 – 5 Micron Carbon Block on the metal housing above the filter.
3. **Stage 3 & 4:** Coconut Shell activated catalytic carbon block filter that removes chlorine and chloramines, and particulates down to 1 micron.
4. **Stage 5 & 6:** 0.5 micron carbon block microfiltration filter that removes up to 99.5% of MTBE, VOCs, chlorine, lead, mercury, and particulates as small as 0.5 microns.
5. Quick connects throughout for all ¼" tubing connections, including on the beautiful brushed nickel ceramic disk designer faucet.
6. Brushed nickel lead-free ceramic disk designer faucet with normal sink installation components, including a John Guest quick connect screwed onto the end, for quick and easy connection of the blue tubing from the output of the system.
7. Two 5 foot lengths of flexible LLDPE ¼" tubing – one blue, and one red. Red is used to connect to the cold water source and to the John Guest ball valve (shut off valve) installed in the input of the system on the left side. The blue tubing is connected to the output on the right side of the system and to the supplied John Guest quick connect that is screwed onto the bottom of the supplied faucet.
8. John Guest ball valve is installed with a short piece of ¼" tubing on the input of the right side of the system. The shut off valve makes it easy to turn off the water to the system for filter flushing and filter changes.
9. Filter Wrench, to enable easy opening of the filter housings (the three vertical components) that hold the filters.
10. Five Year Limited Warranty if filters are changed annually.



**OPUS Healthy
Water Systems**

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FREEDOM-2024 FILTRATION UNIT DESCRIPTION:

Stage 1 & 2 – 5 Micron Coconut Carbon Block Dirt/Rust/Sediment Filter: In normal use, this filter should be replaced annually; however, depending on the quantity of water purified and the level of dissolved solids and sediment in your water, you may need to change it more often. Change this filter if water flow slows to unacceptable levels, or, at minimum, annually.

This filter is labeled **Stage 1 & 2 – 5 Micron Carbon Block Sediment Filter** on the filter housing.

Stage 3 & 4 – 1 Micron Activated Catalytic Coconut Shell Carbon Block. This filter is installed in the middle (center) vertical stage. It adsorbs chloramines and chlorine while also blocking all particulate matter down to 1 micron. This filter must be changed annually (even if less than five gallons of water are filtered daily), and has multiple functions, including:

- Trapping particles as small as 1 micron, including particles from the 5 micron coconut carbon block in the first filter stage. (Stage 3)
- Adsorbing chlorine and chloramines, and improving taste and odor. (Stage 4)

This filter is labeled **Stage 3 & 4 – Chlorine and Chloramines Filter** on the metal frame above the centre vertical stage of the unit.

4. Stage 5 & 6 – 0.5 Micron MTBE/VOC/Lead/Mercury Powdered Carbon Filter: Situated in the right vertical stage of the unit, this filter must also be changed annually even if less than five gallons of water are purified daily. It has multiple functions, including:

- Trapping particles down to 0.5 microns, including particles from the 5 micron carbon filter, in Stages 1 & 2 (left filter housing), and particles from the 1 micron catalytic carbon Stage 3 & 4 filter, which is installed in the middle filter housing. (Stage 5)
- Removing free chlorine, odors, dissolved and particulate lead, mercury (up to 99.5% removal rate for lead and mercury), giardia, cryptosporidium, entamoeba and toxoplasma cysts. A unique feature of this filter is the filtration of MTBE and VOCs – contaminants that very few filtration systems can remove. (Stage 6)

This filter is labeled **Stage 5 & 6 – 0.5 Micron VOC/MTBE Carbon Filter** on the metal frame above the filter.

INSTALLATION INSTRUCTIONS

NOTE ABOUT QUICK CONNECTS:

All OPUS water purification systems utilize quick connects for all tubing connections, including the connection to the John Guest ball valve (shutoff valve), faucet (there is a small gray piece with the quick connect supplied with the faucet) and input and output of the water filtration system. The quick connect allows easy insertion and removal of 1/4" tubing. To remove the tubing, you must hold in the "ring" or collar that is on the outside of the tubing (the ring or collar surrounds the tubing and is part of the quick connect). When you hold in the ring (sometimes you need a flathead screwdriver, but usually your finger will do), the tubing will easily slide out. If you try to pull out the tubing without holding in the ring, you can damage the quick connect fitting.

STEP 1 – Install the Supplied Faucet to Your Sink

If your sink or countertop doesn't have a hole for the supplied faucet, a 5/8" hole must be drilled to enable faucet installation. After the faucet has been installed, mount the unit under your sink or in a location that provides easy access for future filter changes.

Note 1: Most plumbers cannot drill into quartz, granite, or similar solid countertops for faucet installation. If you have a solid countertop, check with your installer to ensure he can drill into your countertop without risking damage. It's usually best to contact the countertop supplier or manufacturer to drill the 5/8" hole required for faucet installation if you have a solid countertop.

Note 2: Your plumber must provide a connection to your cold water pipe and to the input of the system. We recommend SharkBite U362 1/2" TEE, and a Dahl straight shutoff ball valve (1/2" PEX 1/4" OD). These parts should be available at Home Depot.

Connect the supplied 5 foot length of 1/4" red tubing from the cold water source to the water input on the left side of unit. If the tubing is too long, use a tube cutter designed for 1/4" tubing to make it shorter.

Connect one end of the supplied 5 foot length of 1/4" blue water output tubing to the supplied faucet. The other end of the blue tubing is inserted into the output on the right side of the unit, by pushing the tubing into the quick connect.

***Important:* Before use, the filters must be flushed as described below.**

STEP 2 – To prepare for flushing the Stage 1 & 2 coconut carbon block filter in the first vertical stage, remove the filters from the middle (the catalytic carbon block chloramine filter) and right vertical stages (the micron powdered coconut carbon VOC/MTBE/Lead/Mercury filter).

Using the filter wrench, unscrew (turn to the left to open) the vertical white filter housings on the centre and right side of the unit and remove the filters which are already installed when the unit is shipped. The filters are labeled "Stage 3 & 4 – 1 Micron Chlorine and Chloramine" (the one with blue caps on each end), and "Stage 5 & 6 – 0.5 Micron VOC/MTBE" filter (green caps on each end) on the metal housing above the filters.

Any labels and plastic wrapping should already be removed from all the filters installed in the chambers when you receive the unit, but if there are any, please remove them prior to reinstalling after flushing.

After opening the filter housing and removing the filters from the centre and right filter housings, replace the empty filter housings by turning to the right. Make sure the black O-ring is properly seated in the groove of the white filter housings before screwing it onto the system, or the system can leak. The centre and right housings must be empty to allow flushing of the 5 micron coconut carbon block filter in the first vertical stage.

STEP 3 – Flush the 5 Micron Coconut Carbon Block Taste/Odor/Chlorine Filter

With the 1 micron catalytic carbon filter removed from the centre filter housing, and the 0.5 micron MTBE/VOC filter removed from the right filter housing, turn on the water to the system by first opening the faucet (turn handle downwards), and opening the John Guest shut off valve that is connected to the left side of the system. Allow water to pass through the system for 15 minutes to flush the 5 micron carbon block filter of fine particulates.

STEP 4 – Reinstall the 1 micron Catalytic Carbon Chlorine Chloramines filter in the centre (middle) stage, and flush the filter for 10 minutes.

After you have flushed the 5 micron coconut carbon filter (Stage 1 & 2) as described in step 3, install the 1 micron catalytic carbon filter in the centre filter housing. This filter can be installed in either direction. Make sure the black rubber O-Ring is in the groove of the filter housing prior to screwing it on. Tighten the housing container with the included filter wrench, and flush this filter for 10 minutes.

STEP 5 – Reinstall the 0.5 micron MTBE/VOC carbon filter in the right vertical filter housing, and flush this filter for 5 minutes.

After you have flushed the 1 micron catalytic carbon filter in the centre housing, turn off the water by closing the John Guest ball valve. Leave the faucet open to ensure no water is flowing through the unit.

Unscrew the Stage 5 & 6 vertical filter housing on the right side of the system using the supplied filter wrench and install the 0.5 micron MTBE/VOC filter. This filter is white in color, with green rings on each end. Remove any cellophane wrapping (if present) before installation. You can install this filter in either direction. Flush the 0.5 micron filter for five minutes.

The system is now ready to use. Remember to change all filters annually, although the 5 micron sediment filter may require more frequent changes, depending on water quality.

Freedom-2024 Description

PLU	Model	Height	Width	Depth	Flow Rate	Description	Price
22709	Freedom 2024	17"	17"	6"	2 - 4 Litres Per Minute	3 Filter, 6 stage water purification system, with 1 micron chloramine and chlorine filtration and 0.5 micron lead, cyst, mercury, chlorine, heavy metal, major contaminant, and chemical filtration.	\$399.99

OPTIONS FOR FREEDOM-2024:

- Germicidal ultraviolet water purification filter (requires AC power), with flow-restricted .5 micron MTBE/VOC filter (replaces standard .5 micron MTBE/VOC Filter) - \$269.99
- John Guest Union "T" to allow connection to a refrigerator or second tap - \$5.00
- Additional LLDPE 1/4" Tubing - \$1.00 per foot

Freedom-2024 Filter Change Pricing and Frequency

PLU	Model	Stage	Location	Function	Change	Price
22461	5 Micron Sediment Filter	1 & 2	Left Vertical	Removes Dirt/Rust/Sediment	6-12 months	50.00
10616	1 Micron Chloramines	3 & 4	Middle Vertical	1 Micron, chlorine, chloramines	1 year	50.00
14256	0.5 Micron MTBE/VOC, Toxoplasma Cysts	5 & 6	Right Vertical	.5 Micron Microfiltration, removing lead, mercury, MTBE, VOC, chlorine.	1 Year	50.00
22710	Annual Filter Change	All	All	Annual Kit with 4 Filters	1 Year	\$150.00

Winnipeg Installation Options

13824	Standard Drinking Water System, Under Counter Installation, with included faucet, within Winnipeg City Limits	150.00
17549	Minimum Additional Charge for Basement Install, one floor below kitchen sink, including up to 40 feet 1/4" tubing	100.00
15250	Annual Filter Change, on-site (not including filters, priced above) including filter flushing as required	125.00
11852	1/4" John Guest Union "T" to allow two outputs from one input, to allow connection to a refrigerator, second tap, etc.	\$5.00
96xx	1/4" BPA Free Linear Low Density Polyethylene Tubing (LLDPE), per foot (White (9678), Blue (9679), or Red (9680))	\$1.00

ANNUAL COST OF OPERATION: APPROXIMATELY \$150.00

MONTHLY COST OF OPERATION: \$12.50; WEEKLY COST OF OPERATION: \$2.88

DAILY COST OF OPERATION: \$0.41 COST PER GALLON: \$0.08 COST PER LITRE: 1.8 CENTS

5 YEAR LIMITED WARRANTY

**Designed, Engineered, and Tested by Nathan Zassman, President
OPUS Water Purification Systems**