

**OPUS Freedom  
NANO-2024 Water  
Purification System**



# OPUS Freedom NANO-2024 Water Purification System Installation Guide

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**OPUS Freedom NANO-2024 Water Purification System**



## Specifications

- Three types of 10-carbon filters: activated coconut carbon block, catalytic coconut shell carbon block, and powdered activated carbon
- Nanofiltration filter blocks bacteria, viruses, and pharmaceutical drugs
- Filter stages: 3 & 4 – Coconut Shell activated catalytic carbon block, 5 & 6 – 0.5 micron carbon block microfiltration, 7 – Nanofiltration Filter
- Filter Wrench included for easy opening of filter housings
- Five Year Limited Warranty with annual filter changes

## Product Usage Instructions

1. Mount the triple filter wall unit under a sink or in a basement for easy access.
2. Connect the blue tubing from the output of the system to the John Guest quick connect on the faucet.
3. Flush all three filters by connecting the blue tubing to the right side of the filter unit, bypassing the Nanofiltration filter.
4. After flushing, connect the short white tubing to the right side of the system and then to the Nanofiltration filter.
5. Connect the blue tubing from the faucet to the left side (output) of the Nanofiltration filter and flush this filter for 5 minutes before use.

If your sink or countertop does not have a hole for the faucet, drill a 5/8 hole for installation. For solid countertops like quartz or granite, consult with your installer or countertop supplier for drilling.

## FAQ

- **Q:** How often should I change the filters?
- **A:** Filters should be changed annually to maintain optimal performance and ensure clean water output.
- **Q:** What contaminants does the system remove?
- **A:** The system removes chlorine, chloramines, bacteria, viruses, pharmaceutical drugs, MTBE, VOCs, lead, mercury, and particulates down to 0.5 microns.

## FREEDOM NANO-2024

Freedom NANO-2024 is a drinking water system for municipal water supplies that do not add fluoride, as this system is not designed to remove fluoride. Freedom NANO-2024 includes four filtration components and seven filtration stages, with up to 99.5% removal of chlorine, chloramines, lead, mercury, heavy metals, MTBE, VOCs, giardia, Entamoeba, cryptosporidium, toxoplasma cysts and contaminants. The final 0.01 Nanofiltration filter blocks bacteria (campylobacter, salmonella, shigella, E. coli), viruses (enteric, hepatitis A, norovirus, rotavirus), and 85% of tested pharmaceutical drugs.

Features three types of 10" carbon filters (activated coconut carbon block, catalytic coconut shell carbon block, and powdered activated carbon) to produce great-tasting, highly purified water. The Nanofiltration filter blocks bacteria, viruses, and pharma drugs.

## 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, and 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. Stage 7: Nanofiltration Filter, to filter bacteria, viruses, and pharmaceutical drugs.
6. Quick connects throughout for all 1/4" tubing connections, including on the beautiful brushed nickel ceramic disk designer faucet.
7. 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.
8. Two 5 foot lengths of flexible LLDPE 1/4" 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.
9. John Guest ball valve is installed with a short piece of 1/4" 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.

10. Filter Wrench, to enable easy opening of the filter housings (the three vertical components) that hold the filters.
11. Five Year Limited Warranty if filters are changed annually.

## **OPUS Freedom NANO-2024 Installation Instructions**

### **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 unit.

Stage 3 & 4 – 1 Micron Activated Catalytic Coconut Shell Carbon Block. This filter is installed in the middle (center) vertical stage. This filter adsorbs chloramines and chlorine while 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. This filter 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 center vertical stage of the unit.

Stage 5 & 6 – 0.5 Micron MTBE/VOC/Lead/Mercury Powdered Carbon Filter: This is situated in the right vertical stage of the unit. This filter, which must also be changed annually even if less than five gallons of water are purified daily, 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 filters, 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.

Stage 7 – Inline Nanofiltration Filter, connected by plastic clips to the 5-micron sediment filter, mounted horizontally. This filter connects to the main unit output (right side of unit) with a short piece of tubing (which should have been left disconnected before shipping or delivery).

During the flushing of the three filters, the blue plastic tubing that connects to the faucet is connected to the right side of the filter unit, bypassing the NANO Filter. After flushing all three filters, the short piece of white tubing connects the right side of the system to the Nanofiltration filter. After connecting the short white piece of tubing, insert the blue tubing that is connected to the faucet, to the left side (output) of the Nanofiltration filter. Flush this filter for 5 minutes before using the system.

### **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 John Guest ball valve on the left of the Freedom unit, 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 for initial flushing, by pushing the tubing into the quick-connect elbow on the right side of the unit.

Once the flushing is completed, the short white tube that is connected to the elbow quick connect input of the Nanofiltration Filter (Stage 7) will be connected to the quick connect elbow on the right side of the unit,, and the blue tubing to the faucet will be connected to the output (left side) of the Nanofiltration filter.

**Important:** Before use, the filters must be flushed as described below. It is critical to confirm that the short piece of white tubing that connects the final Nanofiltration Filter to the right side of the unit is not connected. (It should arrive disconnected when you receive the unit.) During the flushing of the three filters in the three vertical stages, the faucet will be temporarily connected to the output on the right side of the system. After the flushing of the three filters is completed, the short piece of white tubing will connect the right side of the unit to the Nanofiltration Filter.

- **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 positions (the 0.5-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 center and right side of the unit and remove the filters that are installed when the unit is shipped. The filters are labeled "Stage 3 & 4 – 1 Micron Chlorine and Chloramine" (the filter 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 have been removed from all the filters installed inside 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 center 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 center and right housings must be empty to allow flushing of the 5-micron coconut carbon block filter in the first vertical stage.

- **STEP 3 – 5 Micron Coconut Carbon Block Taste/Odor/Chlorine Filter**

With the 1-micron catalytic carbon filter removed from the center 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 chloramine filter in the center (middle) stage.**

After you have flushed the 5-micron coconut carbon filter (Stages 1 & 2) as described in step 3, install the 1-micron catalytic carbon filter in the center 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.**

After you have flushed the 1-micron catalytic carbon filter in the center 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, with green caps 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.

Remove the blue tubing that connects to the faucet from the quick-connect elbow on the right side of the unit, and reconnect it to the output of the NANO filter (right side).

Connect the short white piece of tubing extending from the NANO filter, to the elbow on the right side (where the faucet was previously connected).  
Flush the NANO filter for 5 minutes.  
The system is now ready to use. Remember to change all filters annually, although the 5-micron sediment filter in the first vertical filter container may require more frequent changes, depending on water quality.

**Freedom NANO-2024 Description**

PLU	Model	Height	Width	Depth	Flow Rate	Description	Price
24374	Freedom NANO-2024	17"	17"	6"	2 – 4 Liters Per Minute	4 Filter, 7-stage water purification system, with 5-micron sediment/chlorine/taste and odor, 1-micron chloramine and chlorine filtration, 0.5-micron lead, cyst, mercury, chlorine, heavy metal, major contaminant, and chemical filtration, 0.01  Nanofiltration filters bacteria, viruses, and drugs.	\$499.99

**OPTIONS FOR FREEDOM NANO-2024**

Germicidal ultraviolet water purification filter (requires AC power), with flow-restricted 0.5 micron MTBE/VOC filter (replaces standard .5 micron MTBE/VOC Filter) – \$269.99

**Freedom NANO-2024 Filter Change Pricing and Frequency**

PLU	Model	Stage	Location	Function	Change	Price
22461	5 Micron Sediment Filter	1 & 2	Left Vertical	Coconut Carbon 5-Micron Sediment	6-12 months	50.00
10616	1 Micron Chloramines	3 & 4	Centre Vertical	Chlorine, Chloramines, 1 Micron	1 Year	50.00
14256	0.5 Micron MTBE/VOC, Toxoplasma Cysts	5 & 6	Right Vertical	0.5 Micron removes lead, mercury, MTBE, VOC, and chlorine.	1 Year	50.00
19761	NANO Filtration Filter	7	Top Horizontal	Viruses, Bacteria, pharmaceuticals	1 Year	100.00
24375	Annual Filter Change	All	All	Annual Kit with 4 Filters	1 Year	250.00

### Winnipeg Installation Options

13824	Standard Under Counter Installation, with included faucet, within Winnipeg City Limits	150.00
17549	Minimum Additional Charge for Basement Install, one floor below kitchen sink, with 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
22697	Filter change, including removal of filters, installation of new filters, and flushing <b>at the Aviva location.</b>	75.00
11852	1/4" John Guest "T" to allow two outputs from one input, to allow connection to a refrigerator, second tap, etc.	5.00
96xx	1/4" BPA Free Tubing (LLDPE), per foot (White (9678), Blue (9679), or Red (9680))	1.00

ANNUAL COST OF OPERATION: APPROXIMATELY \$250.00

MONTHLY COST OF OPERATION: \$20.83; WEEKLY COST OF OPERATION: \$4.81


DAILY COST OF OPERATION: \$0.68 COST PER GALLON: \$0.14 COST PER LITRE: 3.0 CENTS 5-YEAR LIMITED WARRANTY

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

### CONTACT

- OPUS Healthy Water Systems
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### Documents / Resources

	<p><b><a href="#">OPUS Freedom NANO-2024 Water Purification System</a> [pdf] Installation Guide</b> NANO-2024, Freedom NANO-2024 Water Purification System, Freedom NANO-2024, Freedom, Water Purification System, Purification System, System</p>
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References

- [Aviva Natural Health Solutions - Everything For Healthy Living – AvivaHealth.com](#)
- [Aviva Natural Health Solutions - Everything For Healthy Living – AvivaHealth.com](#)
- [User Manual](#)

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