

Aquor[®] House Hydrant V2+ INSTALL GUIDE



Overview

Aquor[®] House Hydrant V2+

The Aquor[®] House Hydrant is a flush-mounted hydrant with twist-lock connection system designed for outdoor use.

The house hydrant is intended to be installed in the exterior walls of homes and buildings. Upon disconnection, a small amount of water self-drains from the outlet. The Aquor[®] hose connector has a built-in vacuum breaker for code approved anti-siphon protection.

FEATURES & BENEFITS

- Allows user to access water instantly by connecting under full water pressure.
- Integral vacuum breaker in faceplate provides anti-siphon protection.
- Robust O-ring connection system ensures a reliable leak-proof seal, even at high water pressures.
- Stainless steel operating rod and pressureclosed valve provide zero-maintenance reliability for years.
- Hydrant automatically self-drains upon disconnection to provide freeze protection.
- Hydrant comes standard with ½" female NPT inlet. Rotatable 90° elbow and other optional inlets available.
- Any ³/₄" accessory (e.g. water timers, splitters, regulators) can be attached to end of hose connector.
- Aquor[®] hose connector contains integral check valve for additional backflow protection.
- ASSE, CSA, and Watermark certified.



INCLUDED IN THIS KIT

x1 Stainless Steel Hydrant x1 Hose Connector (CN-S1) x1 Polymer Debris Cover x4 #10 1.5" Mounting Screws

Read this entire instruction sheet before installing to ensure proper installation. The information in this manual is subject to change without notice.

Hydrant can only provide freeze protection when disconnected and allowed to drain.

Intended for irrigation use and outdoor watering. Shall not be subjected to more than (12) hours of continuous water pressure as directed by ASSE code requirements.

Installation shall be in accordance with AS/NZS 3500 series of standards.

Installation must comply with local codes and ordinances.

Please leave this manual with the property owner after completing the hydrant installation.



Technical Specs



SKU	Stem Length (A)	Overall Length (B)
VBHP002	2" Hydrant	4 - 1/2" (114 mm)
VBHP004	4" Hydrant	5 - ⁹ / ₁₆ " (141 mm)
VBHP006	6" Hydrant	7 - ⁹ / ₁₆ " (192 mm)
VBHP008	8" Hydrant	9 - 1/2" (241 mm)
VBHP010	10" Hydrant	11 - 1/2" (292 mm)
VBHP012	12" Hydrant	13 - 1/ ₂ " (343 mm)

Optional 90° elbow inlets reduce overall length by $\frac{1}{2}$ " (13 mm)

Mounting Holes: #10 Screws

Using a 1.5" hole saw is suggested. You may also cut a rectangular hole.





3 - 1/8″

Backflow Protection	Yes, built-in vacuum breaker
Inlet x Outlet	1/2 " NPT (f) x 3/4" GHT (m)
Operating Temperature	33 -140 °F
Operating Water Pressure	25-125 PSI
Flow Rate	6.8 GPM @ 52 PSI
Plumbing Compatibility	All (PEX recommended)
Hydrant Material	316L Stainless Steel
Connector Material	Acetal Resin Polymer
O-Ring Material	Fluorocarbon Rubber
Cover Material	ASA Thermoplastic
Certifications	ASSE 1019-A, ASME A112.18.1, CSA B125.1, meets IAPMO/cUPC, AS3718
Warranty	Limited LIFETIME all stainless steel parts, 5 years polymer parts



VBHP004 **4" House Hydrant V2+**

> STEM LENGTH: 4" OVERALL LENGTH: 5 - 9/16"



VBHP002

Close-Couple House Hydrant V2+

STEM LENGTH: 2"

OVERALL LENGTH: 4 - 1/2"





VBHP006 6" House Hydrant V2+

STEM LENGTH: 6" OVERALL LENGTH: 7 - 9/16"



STEM LENGTH: 8" OVERALL LENGTH: 9 - 1/2"







VBHP012 12" House Hydrant V2+

STEM LENGTH: 12" OVERALL LENGTH: 13 - 1/2"







STEM LENGTH: 10" OVERALL LENGTH: 11 - 1/2"

VBHP010

10" House Hydrant V2+

Aquor® House Hydrant V2+ VBHP Series - 3/4" HOSE CONNECTION





ASSE 1019-A / ASME A112.18.1 / CSA B125.1 meets IAPMO/cUPC / AS3718 CERTIFIED 15 13 14 D 💵 🕖 16 1 2 3 1 Updated Vacuum 5 B **Breaker Assembly** 2022 6 С 10 12 17 18 19 20 21 22

Parts Description

Hydrant

- 1. Rear Valve Housing (Inlet)
- 2. Valve Spring
- 3. Hydrant Body O-Ring 🕒
- A 5 Operating Bod
 - 5. Operating Rod 6. Hydrant Body
- 7. Vacuum Breaker Valve
 - 8. Vacuum Breaker Seal
 - 9. Vacuum Breaker Retainer
 - 10. Vacuum Breaker O-Ring
 - . 11. Vacuum Breaker Spring
 - 12. Vacuum Breaker Cover

Debris Cover

- 13. Debris Cover Gasket
- 14. Debris Cover Wedge
- 15. Debris Cover Nut & Bolt
- 16. Debris Cover

Check Valve O-Ring
 Check Valve
 Check Valve Spring

Hose Connector

_ 17. Connector O-Rings

18. Connector Body

22. Check Valve Retainer

Need Parts? Stem Replacement Kits available in 2", 4", 6", 8", 10", and 12" (A), Updated Vacuum Breaker Replacement Kits (B), and Hose Connector O-Ring Kits (C) are available.

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For help, email us at contact@aquorwatersystems.com or call us at (800) 458-1749.



Installation

Determine the location for the hydrant. The hydrant's inlet must be installed into a heated area of the structure that will not drop below freezing. Before installation, make sure there is adequate work room for securing the hydrant to the supply line.



1. Prepare Wall

Prepare the mounting surface and entry hole. Aquor[®] House Hydrants require a vertical and smooth mounting surface to ensure proper installation and draining. Depending on the exterior wall surface, a mounting block may be required to provide a vertical and smooth mounting spot. Mounting blocks can be commonly

found in hardware stores, or can be made on-site with materials such as wood, fiber-cement, or PVC trim board. Aquor[®] mounting blocks can be found on our website.



Using a $11/_2$ " hole saw, bore the entry hole through the wall (and mounting block if using one) in the desired location. Ensure the entry hole is vertically level.



If drilling through a deep wall, you may need to accommodate for the hydrant's downward angle.







A. Drill one $1^{1/2}$ " (39 mm) hole.

B. Drill another $1^{1/2}$ " (39 mm) hole below it, $1^{1/2}$ " (39 mm) vertically on center. C. Remove the remaining material to get the right size for the hydrant.

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Tip: If enlarging an existing hole, try cutting a dowel of the appropriate size to use as a guide for the hole saw.

2. Secure Hydrant to Wall

Pre-pilot the mounting holes. Make sure to insert the debris cover wedge behind the hydrant faceplate for accurate markings.

Tip: Use a low speed setting or a hand screwdriver to avoid stripping the fasteners.



With the cover wedge behind the faceplate flange secure the hydrant to the wall. x4 #10 1.5" stainless steel screws are provided.



Tip: Drilling into brick or stone? Consider using specialized fasteners and/or anchors. We also manufacture optional stainless steel mounting plates to space the mounting holes out further if needed.

After securing, test the cover to make sure it opens and closes properly.

3. Attach Fitting

Proceed to the interior of the wall. Before attaching a fitting, unscrew the hydrant's rear inlet from the main hydrant body.

The hydrant's default inlet is $\frac{1}{2}$ " NPT (f). Other optional inlet styles are available.

Thread in the appropriate ½" NPT fitting for your plumbing type, wrapped in teflon tape then pipe-joint compound. Firmly tighten with a wrench.



With the appropriate fitting installed, re-attach the inlet to the hydrant body.

Tip: The inlet is on an O-ring seal. It's designed to rotate up to one turn while still keeping a watertight seal. This is useful for alignment, especially for the optional 90° elbow inlets. Tighten the inlet until it stops, then rotate back to the desired spot. This seal is rated to 250 PSI.



Hand-tight is fine; do not over-torque the hydrant's body connection. Do NOT apply teflon tape or any kind of sealant to the hydrant's body threads.

4. Connect to Plumbing

With the appropriate fitting threaded in, connect the hydrant to your plumbing system.





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Depending on the type of plumbing, it will vary how the hydrant connects. Common ways of connecting to copper plumbing include soldering and push-fit adapters.

Tip: With copper plumbing and a V2+ series hydrant, we recommend adding a shut-off valve and service panel for maintenance access.

Common ways of connecting to PEX include crimp rings, expansion tools, and push-fit adapters.

Tip: With PEX tubing, we recommend adding an expansion loop inside the wall if possible. This allows the entire hydrant and fitting assembly to be inspected and serviced from the exterior of the building, if ever needed.

Complete the installation by turning on the water supply.



Before plugging in, attach a garden hose to the Aquor[®] hose connector.

Use a closed-end, such as a nozzle, on the hose to create back pressure. Connect to the hydrant and water should pressurize the hose immediately. Disconnect and ensure the hydrant drains, then remains leak-free.

Inspect the hydrant and plumbing connections for any leaks.

Operation



Always remove hose during freezing temperatures.

Operating Aquor[®] House Hydrants is a simple process. Water starts flowing through the hydrant when the hose connector is plugged in. Turn off the hydrant by unplugging the hose connector.

Attach the Aquor[®] hose connector to any garden hose. It can stay attached; there is no need to remove it every use. Before storage, depressurize your hose by squeezing the nozzle on the other end.



Use any accessory as you would with a traditional bib. Inline ball valves, timers, splitters, vacuum breakers, and etc. can be attached to the connector.





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To connect: Line up the three helical grooves on the hose connector with the three nibs on the hydrant faceplate. Simultaneously push and twist the connector clockwise in a smooth motion. Make sure to align the grooves fully and push in before twisting. Water flow will start instantly when the connector is engaged.

To disconnect: Push the connector in slightly, then untwist counter-clockwise. The hydrant will self-drain any remaining water left in the body. The water will drain for the few moments, this is perfectly normal.

Remember to depressurize your hose before storage. It's best to disconnect the hydrant when not in use. For the longest lifespan, store your Aquor[®] hose connectors out of the elements.

Tip: If you leave the Aquor[®] connector attached to your garden hose, make sure to depressurize the hose after use. Temperature changes can cause water inside to expand, causing excessive pressure on the connector's internal check valve (and your nozzle or accessories) over time.

For installation or other technical questions, please call our customer service team at (800) 458-1749.







Maintenance

Aquor[®] hydrants leave the factory fully tested and operational. They are treated with an FDA approved lubricant where needed. The hydrant requires no scheduled maintenance to provide a long operational life. If a problem does arise, all the serviceable components are offered in repair kits.

It's best to disconnect the hydrant when not in use. The hydrant can only offer freeze protection when disconnected. We recommend unplugging after each use.

For freeze protection, the hydrant does not need to be covered any further. As long as it has been disconnected, allowed to drain, and the ambient temperature inside the wall remains above freezing, the hydrant and the plumbing will be protected.

Storing your hose connectors out of the elements can prolong their lifespan. You can drain your hose and bring it inside - the internal check valve prevents any unwanted draining afterwards, so your floor stays dry.

Protect the hose connector's O-rings. They are designed for extremely long lifespans if used properly. Use care not to snag the connector O-rings on the hydrant nibs. When connecting, line up the grooves before attempting to push or twist. Routine cleaning with soap and water is usually sufficient to maintain the corrosion resistance and appearance of the marine-grade stainless steel. Use a soft brush to remove any accumulated dirt, then rinse with clean water. Use stainless steel polish as needed.

If you have hard water buildup, the hydrant can be completely disassembled for service or cleaning if needed. The inner valve and stem are accessed through the rear.

You may periodically clean and lubricate the O-ring if there is mineral buildup.



Troubleshooting

Problem	Solution
No water flow when connected.	First you'll want to identify whether the issue is in the hydrant, or the hose connector.
	Make sure water supply is live to the hydrant. Try depressing the hydrant valve with your thumb to test for pressure. If the water pressure is live, the issue is likely the hose connector.
	Inspect the hose connector to see if the internal check- valve is stuck. In variable weather conditions, if left pressurized outside, water expansion may cause the check valve to seize.
	If the hose connector has a ball-valve, make sure it is on.
Water leaking from plumbing connection.	For threaded fittings, re-wrap with 4-5 wraps of teflon tape, followed by a layer of pipe-joint compound. Firmly tighten with wrenches.
	For PEX specific fittings, ensure a compatible PEX tubing type and installation tool are being used. Check fitting dimensions for spec.
Water leaking from hydrant body-to-inlet connection.	Inspect the O-ring between the rear valve housing (inlet) and hydrant body. The inlet can be backed off up to on full rotation without losing a watertight seal. Ensure no teflon tape or sealant is applied. Inlet should thread smoothly.



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Problem	Solution
Water leaking from the hydrant main outlet (front) when connected.	First, make sure the vacuum- breaker is not leaking. Inspect hose connector O-rings for damage, replace or lubricate if needed.
Water leaking from the hydrant main outlet when disconnected.	A slow leak may indicate a stuck or bent internal rod, or damaged O-ring. First, try to reset the valve from the front. Shut-off water supply and use needlenose pliers to press in and rotate the internal operating rod. Resistance could indicate a piece of debris behind the valve. If leak persists, remove the internal operating rod from the hydrant by unscrewing the rear inlet from the body. Inspect the O-ring and stem for any damage, remove debris or replace assembly if needed.
Water leaking from vacuum breaker when Image: Stress of the stress of	First, ensure water pressure is between 25-125 PSI. Pressure that is too high or too low can cause issues with backflow preventers. Next, test with a second hose connector. If the issue persists, replace the faulty hose connector.



Problem	Solution
Water sprays from the vacuum breaker when connecting.	A small burst of water when connecting or disconnecting is normal due to pressure. If the spray or leak persists, inspect the vacuum breaker washer and replace if needed.
Hose connector won't stay plugged in.	Ensure water pressure is not too low. The hydrant uses water pressure to seal, and is designed for pressures of 25-125 PSI. If you are installing the hydrant on a well or low-pressure system, contact us for a higher weight hydrant valve spring, or add a pressure booster.
Hose connector is difficult to connect or disconnect.	Try squeezing your hose nozzle while simultaneously disconnecting. If left outdoors in variable weather, water expansion may have caused the connector's internal check-valve to seize. Try disassembling or removing the connector's check valve. Test with a different hose connector. There may be a piece of debris stuck in the hydrant's main valve. Shut off the water supply, then test the valve's forward/back operation with your thumb or a tool. It should operate smoothly. If needed, remove hydrant's operating rod by unscrewing the rear inlet. If the issue occurs gradually over time, try cleaning the hydrant's outlet and lubricating the connector O-rings.



Limited Lifetime Warranty

We stand behind every product we manufacture. If you ever have an issue, contact us, and we will make it right.

Aquor offers a limited lifetime warranty on all stainless steel products and parts and 5 years on all polymer components.



Visit our website to activate your product warranty.

www.aquorwatersystems.com /pages/warranty-registration

Contact Us

For any questions, please get in touch with our customer service team at contact@aquorwatersystems.com or call us at (800) 458-1749 Mon-Fri 9AM-4PM.

