

Specifications & Installation Guidelines

FOR AQUAFIRE SERIES

Highlights

- 20+ hour run time on a full tank or install a Direct Plumb Kit for continuous water supply.
- Patented “Double Air-Vapor Flow” system for finely sculpted and even more realistic flames.
- Available in 3 sizes and can be ganged together to create continuous ribbons of flame.
- Air Intake through the top, sides, and bottom for flexibility in hearth design.
- Flush mount, drop-in install.
- Internal UV-C Lighting sanitizes water & vapor.
- Adjust the height and speed of the flames to create the perfect



Aquafire Series

AWA2-20-50 / AWA2-40-100 / AWA2-60-150

AWA3-20-50 / AWA3-40-100 / AWA3-60-150

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Fireplace components



1. Mist Maker Tube
2. Water Tank
3. Amber LED Light Strip
4. Power / Control Panel
5. Fill Port

Packing Contents



Aquafire Insert



Fill/Drain Tube



Remote Control



Siphon Hand Pump



AC Power Adapter



User Manual

Considerations

Aquafire water vapor fireplace inserts have been designed to be extremely easy to install, simple to operate, and easy to maintain. When designing your fireplace, feel free to send your plans in for review and suggestions by our professional design staff.

Considerations:

- Accessibility to electricity and 1/4" water line (if direct plumbed), similar to ice maker in fridge.
- Recessed into wall, sitting proud of a wall or completely free-standing - your only limit is your creativity!
- If light cast upwards to ceiling is undesirable, consider recessing into the wall for a traditional hearth appearance. (we advise to create a 'light trap'. see **Light Trap** page for details. 📖 9
- Determine decorative materials and finishes you expect to use. Since there is no heat, there are virtually no limitations.
- Plan to make it easy to remove fireplace insert should maintenance or repairs become necessary.
- Avoid or prevent air currents from doors, windows, and existing HVAC system which affect flame quality.

Installation:

Prepare the housing for your fireplace insert(s) and make sure the cutout has sharp corners (not rounded) and dimensions are exactly as specified. These dimensions are critical because the modules are suspended on flanges that span the opening. Too small, and fireplace will not fit, too large of opening, and fireplace insert will look sloppy or may even fall through the opening. Using the built in 'lifting loops', suspend the **Aquafire** into the cutout after plugging in electric power converter(s) and connecting the 1/4" waterline if direct plumb kit is installed. If not, simply fill tank using tap water via the integrated pumping system once installed into enclosure.

That's it!— the installation is complete. Now start your fireplace and enjoy an extraordinary fireplace experience every day of the year!

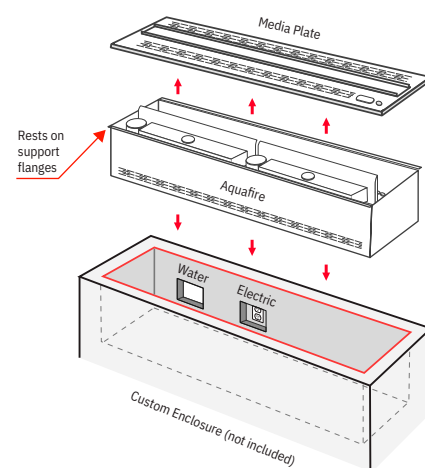




Quick Start Guide

STEP 1 Build and install into enclosure

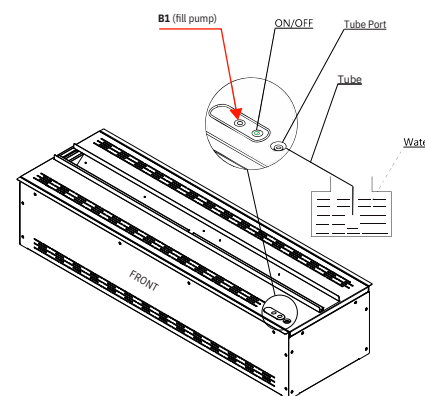
- 1 Remove the media plate for easy access to lift points.
- 2 Connect 24V power adapter (located on the back side of the unit).
- 3 Connect Direct Plumb Kit (if applicable). 6
- 4 Install Vapor Pure Water Softener (if applicable). 12
- 5 Drop Aquafire into enclosure, resting on support flanges.
- 6 Connect plumbing (if applicable) and electrical and replace media tray.



STEP 2 Fill with water

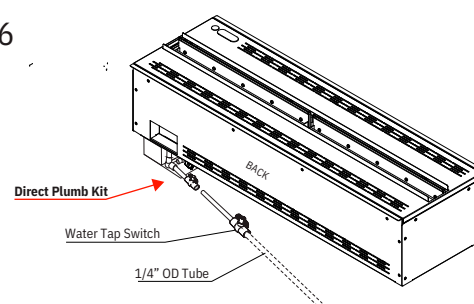
Option 1: Fill manually with integrated pump.

- 1 When the water tank is empty, you will see the lights blinking and you will hear small beeps.
- 2 Connect the fill tube to the water connector and press and hold the "B1" button for 5 seconds.
- 3 The filling will start automatically and will end automatically when the water tank is full.



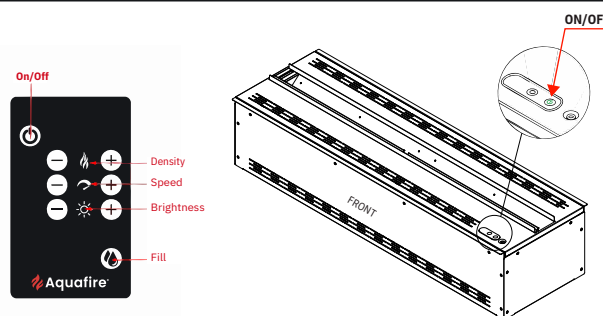
Option 2: Install Direct Plumb Kit. (Sold Separately) 6

- 1 Connect a suitable reducer to the water network. (Reducer = water network tube dimensions to 1/4" OD)
- 2 Connect the 1/4" OD pipe to the Aquafire Direct Plumb Kit (sold separately).
- 3 Filling will start automatically when unit is turned on will end when the water tank is full.



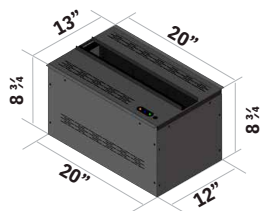
STEP 3 Pair remote

- 1 Press and hold the On/Off button on the unit for 5 seconds or until the button will begins flashing.
- 2 Press any button on the remote, you will hear a beep.
- 3 Beep confirms the control is paired to the unit.



Technical Specifications

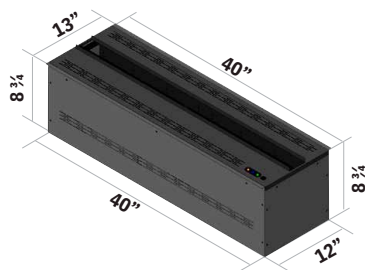
Fireplace Dimensions


20" AWAx-20-50:

Power: 60 W (Standard wall receptacle)

Tank Capacity: 2.0 Liters / Run Time 20 Hours

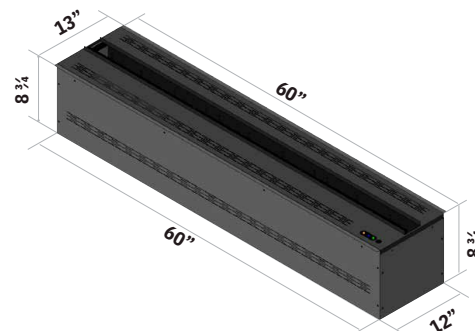
Direct Plumbed: 1/4" water line (If using DP Kit)

Weight: 29 lbs / Crated Weight 53 lbs

40" AWAx-40-100:

Power: 120 W (Standard wall receptacle)

Tank Capacity: 4.0 Liters / Run Time 20 Hours

Direct Plumbed: 1/4" water line (If using DP Kit)

Weight: 58 lbs / Crated Weight 90 lbs

60" AWAx-60-150:

Power: 180 W (Standard wall receptacle)

Tank Capacity: 6.5 Liters / Run Time 20 Hours

Direct Plumbed: 1/4" water line (If using DP Kit)

Weight: 89 lbs / Crated Weight 123 lbs

Other Common Dimensions

Seamlessly gang multiple fireplace inserts together to create up to 20 feet of continuous flame.

Up to 20 Feet (240 Inches) of flames controlled on a single remote

SIZE		W	D	H
80"	(2) AWAx-40-100	80" x 12" x 8 3/4"		
100"	AWAx-40 + AWAx-60	100" x 12" x 8 3/4"		
120"	(2) AWAx-60-150	120" x 12" x 8 3/4"		



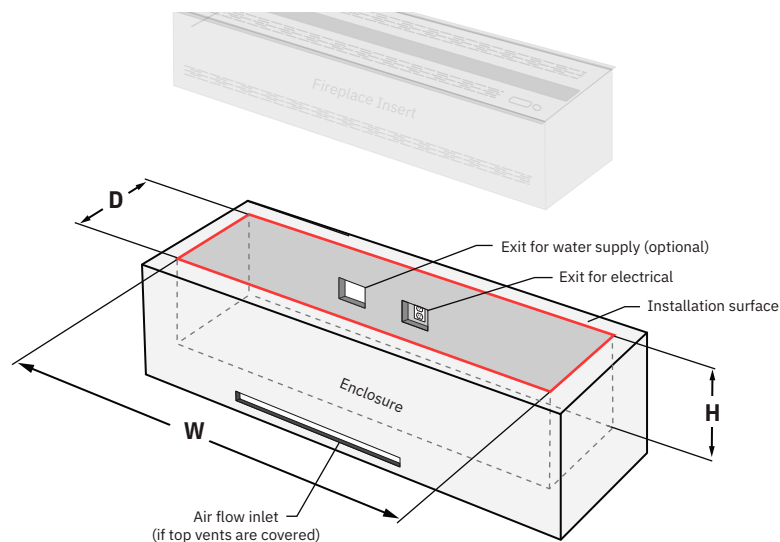
Cutout/Housing Dimensions

SIZE		W	D	H*
20"	AWAx-20-50	20 1/4" x 12 1/4" x 12" min.		
40"	AWAx-40-100	40 1/4" x 12 1/4" x 12" min.		
60"	AWAx-60-150	60 1/4" x 12 1/4" x 12" min.		

*Direct Plumb Kit (optional) requires additional 2" of Height dimension.

⚠ Important!

Cutout dimensions are critical! Fireplace inserts are suspended in cutout opening from the attached flanges so be sure to measure carefully!



Direct Plumb Kit – Assembly Instructions (Sold Separately)

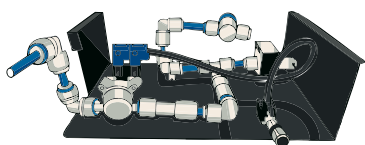


IMPORTANT

A Direct Plumb Kit is required to plumb Aquafire (AWA Series) directly to a water source. Failure to install correctly can result in damage to the fireplace and will void warranty.

PART LIST

1. Direct Plumb (DP) Kit



2. M4 x 5mm screws



x 6

TOOLS NEEDED

1. Phillips head screwdriver



WATCH ASSEMBLY VIDEO

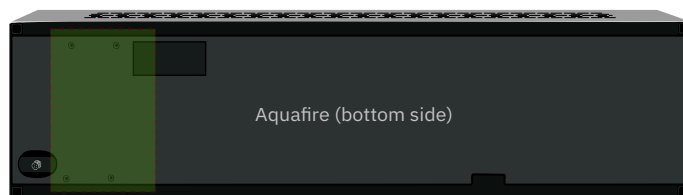


https://youtu.be/ir3aeb3v_WA

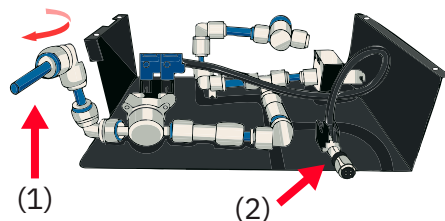
OR SCAN THIS QR CODE



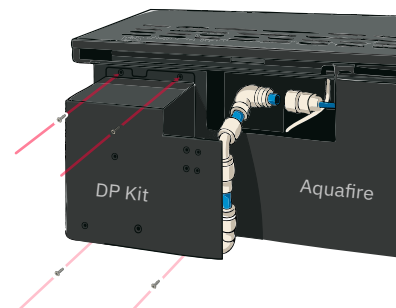
- A** Flip Aquafire on it's back to allow for easier access to the Direct Plumb Kit mounting location.



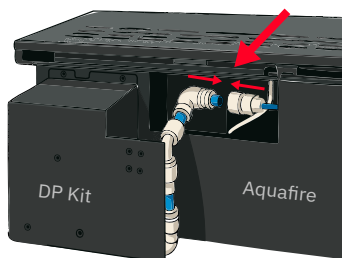
- B** (1) Adjust the direction of the outlet water pipe and (2) dislodge the power connector from peg clip.



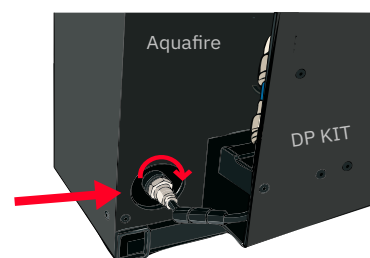
- C** Install the (4) M4 x 5mm screws.



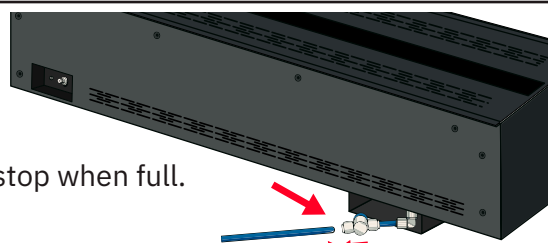
- D** Connect the ¼ water pipe to the fireplace water line outlet.



- E** Plug the power connector into device and tighten the collar.



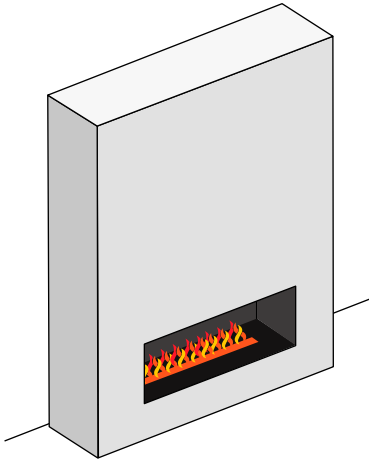
- F** Connect external ¼" water pipe to Direct Plumb Kit, turn on the device, and the device will begin filling automatically stop when full. That's it!



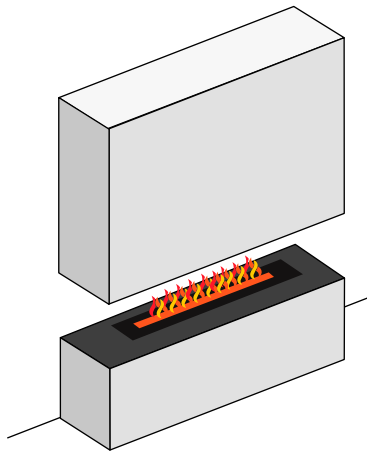
Enclosure Design

Types of Enclosures

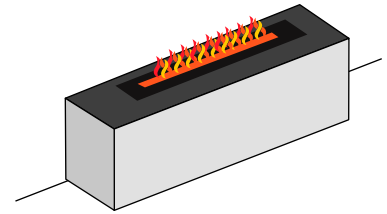
Type 1: Recessed Hearth



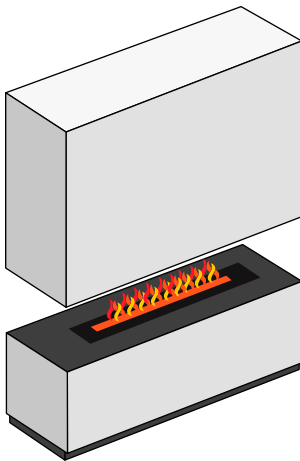
Type 2: Split Hearth (against wall)



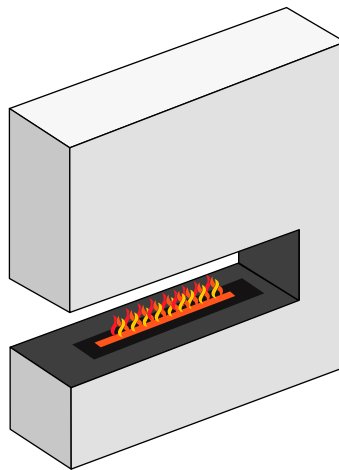
Type 3: Open Hearth (against wall)



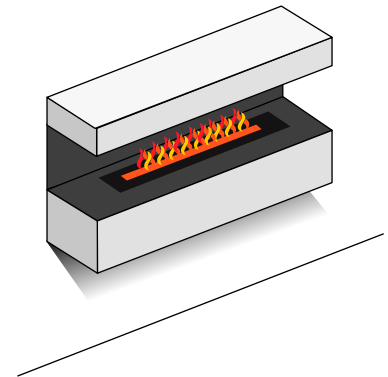
Type 4: Room Divider/Floating Wall



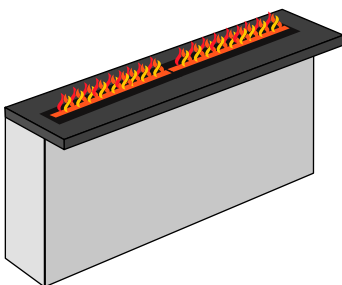
Type 5: 3-Sided Peninsula



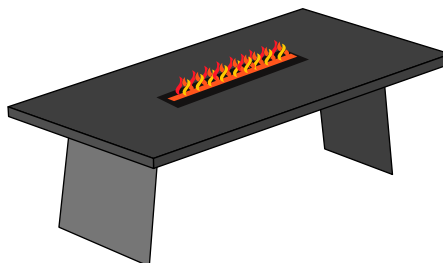
Type 6: Wall Hung



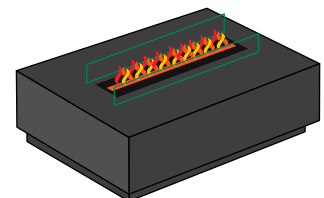
Type 7: Bar Top



Type 8: Dining Table



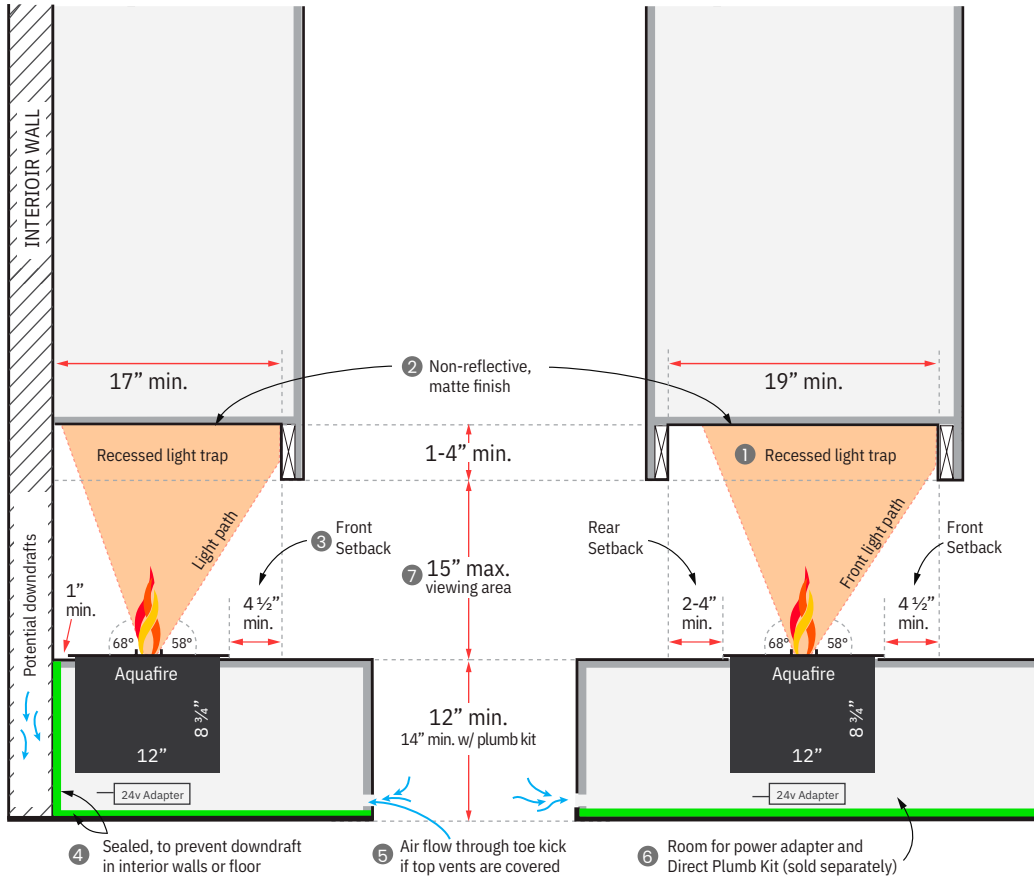
Type 9: Coffee Table



Minimum dimensions to finish to prevent light path from escaping enclosure and reflecting onto ceiling.

SIDE VIEW

Single-sided hearth



 Pro Tip!

A well-built enclosure consists of:

- 1 Recessed light trap.
- 2 Matte black interior walls.
- 3 Proper setback (fireplace edge to light trap edge).
- 4 Sealed off from interior walls and floor.
- 5 Allow for air flow through top vents or toe kick.
- 6 Space under fireplace.
- 7 Correct viewing area height to avoid light escaping.

 Design Review!

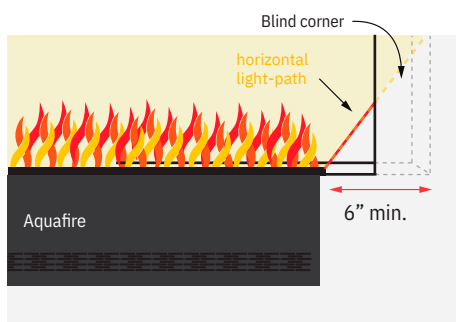
When you have your design schematic or working drawings, it's a good idea to get a review by an Aquafire professional. We are here to help!

Contact us **sales@aquafire.com**

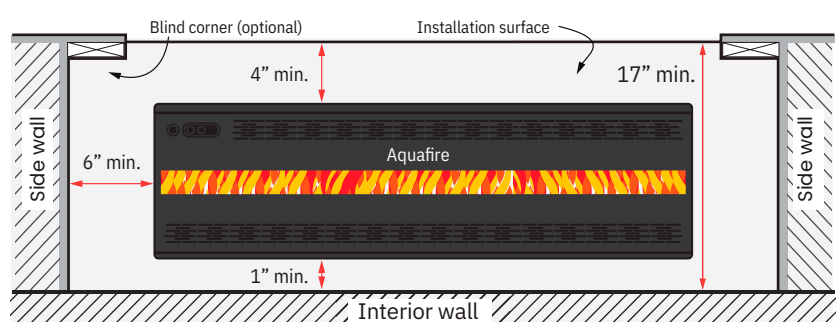
Side Light Considerations

Installing Aquafire too close to a side wall may cause lateral light reflection onto adjacent surfaces. Maintain a minimum 6-inch clearance on each side, or utilize an open-ended or blind-corner design to mitigate light bleed.

FRONT VIEW



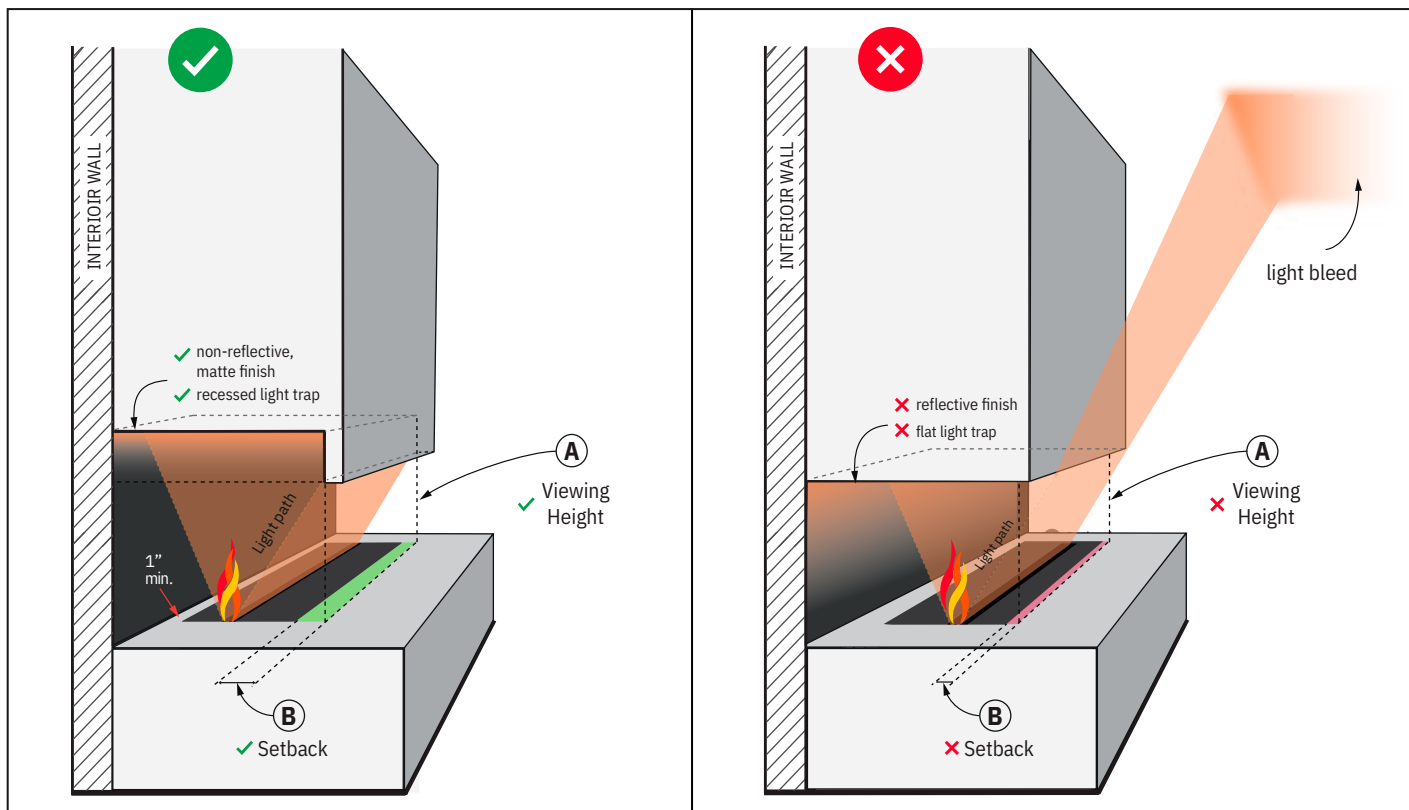
PLAN VIEW



Enclosure Design

Light Trap Design

Light from the Aquafire may project above the enclosure, illuminating the ceiling. To reduce this effect, incorporate a light trap in your enclosure design. Use the chart below to determine optimal finished dimensions.



AQUAFIRE PRO SERIES (AWPRx)

(A) *	(B) **
Viewing Height	Setback (min.)
x	x
x	x
14 "	6"
15"	6-1/2"
16"	7"
17"	8"
18"	9"
19"	9-1/2"
20"	10"
21"	11"

AQUAFIRE SERIES (AWAx)

(A)	(B)
Viewing Height	Setback (min.)
12"	2"
13"	3-1/2"
14 "	4"
15"	4-1/2"
16"	5"
17"	6"
18"	7"
19"	7-1/2"
20"	8"
21"	9"

AQUAFIRE LITE SERIES (AWLx)

(A)	(B)
Viewing Height	Setback (min.)
12"	2"
13"	3-1/2"
14 "	4"
15"	4-1/2"
16"	5"
17"	6"
18"	7"
19"	7-1/2"
20"	8"
21"	9"

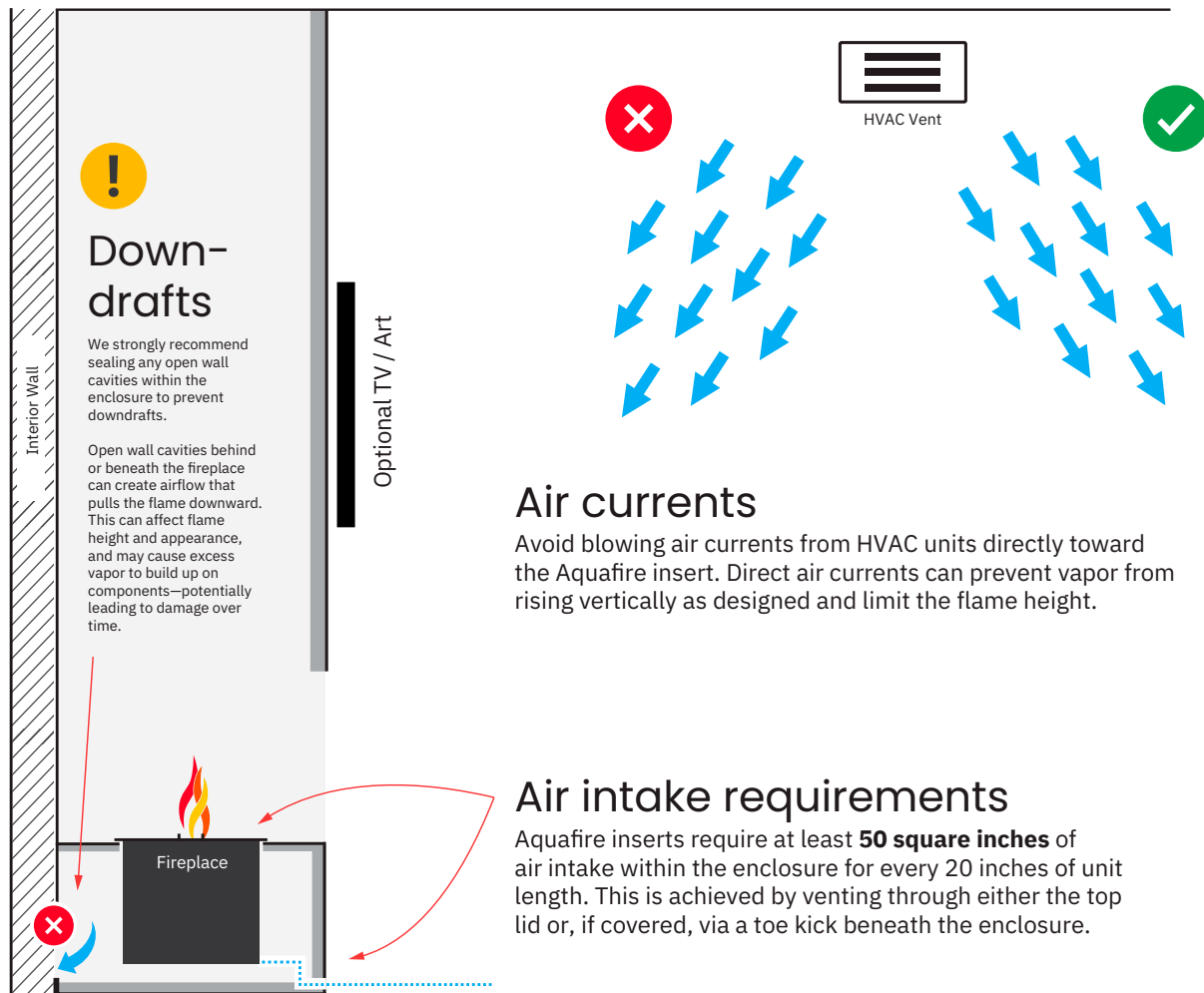
*Vertical distance extending from Aquafire's media tray to bottom edge of enclosure/hearth's light trap.

**Horizontal distance from Aquafire's front edge to the point directly below the inside edge of the light trap.

Other Considerations

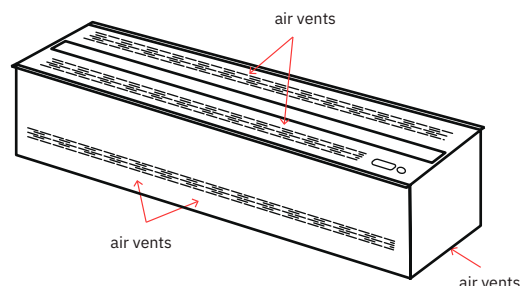
Air Flow Considerations

SIDE VIEW SINGLE-SIDED HEARTH



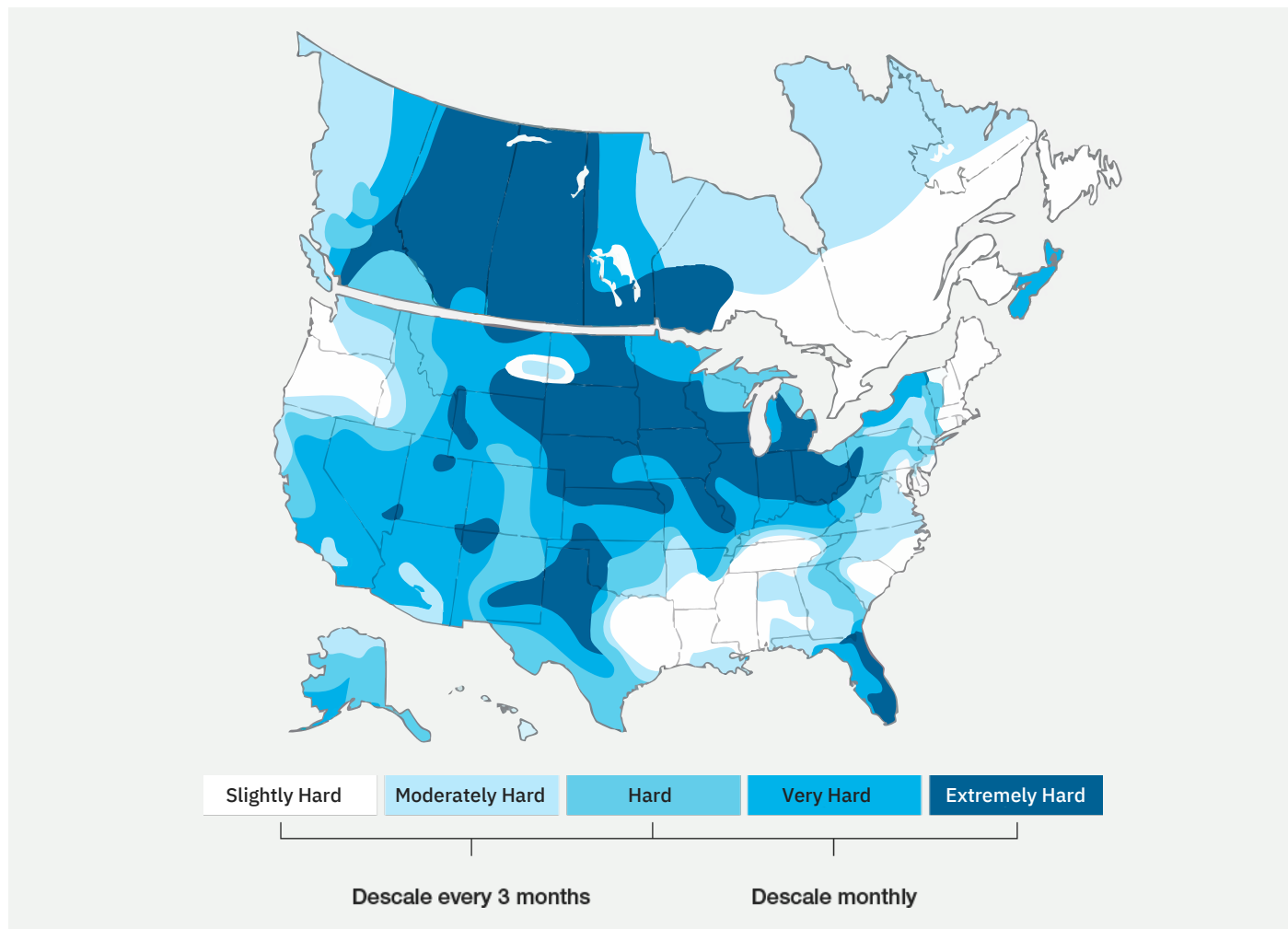
Venting

Air vents are situated atop the insert to enable airflow when the device is placed within an enclosure. Should there be a preference for a decorative top or media obstructing these vents, the enclosure design needs to facilitate adequate airflow through the sides or bottom.



Maintenance and Cleaning Guidelines

Hard Water Guidelines



For best results, descale your fireplace every three months or more frequently if you live in an area with hard water.

3.5 to 8.5 Grains Per Gallon, Ideal is 7.0 (moderately hard)

- Hard may produce scaling, shorten transducer life, and require more frequent cleaning.
- If water hardness needs to be adjusted, consult local water conditioning professional.
- Water that is too soft will have reduced flame effect.

Reverse Osmosis is not recommended, it removes all minerals and vapor flame effect will be greatly diminished.

💡 For complete cleaning instruction visit www.aquafire.com/cleaning



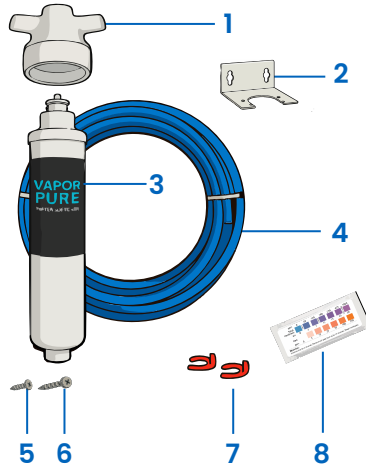
Assembly Instructions – Vapor Pure™ Water Softening Kit (Sold Separately)

IMPORTANT

READ ENTIRE INSTRUCTION FIRST! Questions? Please call 877-888-4260.
A plumber is responsible for ensuring water pressure will not exceed 100 PSI.

PART LIST

1. (1) Head Mount
2. (1) Mounting Bracket
3. (1) Vapor Pure Cartridge
4. (1) 6' Length of tubing
5. (4) Short 1/2" Screws
6. (2) Long 1" Screws
7. (2) Horseshoe Clips
8. (1) Water Test Kit containing 12 Hardness & Iron Test Strips

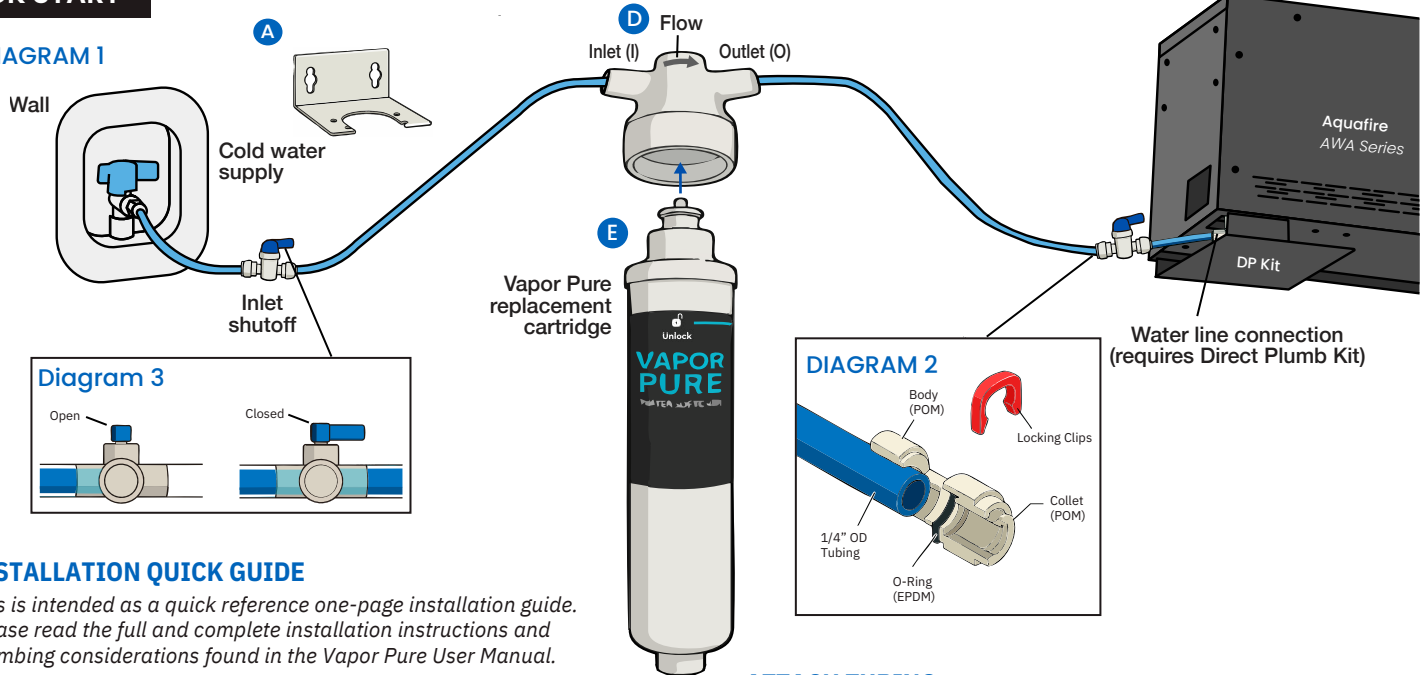


TOOLS NEEDED



QUICK START

DIAGRAM 1



INSTALLATION QUICK GUIDE

This is intended as a quick reference one-page installation guide. Please read the full and complete installation instructions and plumbing considerations found in the Vapor Pure User Manual.

MOUNT BRACKET

- Attach Bracket **A** to Head **B** using provide 1/2" screws.
- Mount bracket and head to wall allowing a minimum 9" for AF300 and 17" for AF700 under the head to allow for removal.

INSTALL CARTRIDGE

- Align unlock icon on cartridge label with inlet fitting of Head and insert cartridge, twisting cartridge **C** to the right until secure.
- Be sure to note the Flow direction indicated by an arrow on the top of the cartridge Head.

ATTACH TUBING

- Cut provided tubing at a no less than 2" lengths and begin following **Diagram 1** from left to right, inserting the tubing ends into the valve collects and securing with locking clips, as shown in **Diagram 2**.

TURN ON WATER

- With the Aquafire shutoff valve **E** closed, slowly open cold water supply **D** allowing water to fill cartridge. Check for potential leaks.
- Slowly open Aquafire shutoff valve completely allowing water to flow freely to fireplace. Check for leaks.
- Check for any possible leaks for next 24 hours.

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	SOLUTION
Power		
Unit fails to turn on when using the power button on the fireplace	Power supply not properly plugged in	Check power supply connections and look for green LED on power supply indicating that it's powered
	Wall outlet may not be powered	Check breaker main panel in building to see if breaker has been tripped or turned off
Power supply indicator light is green, but unit still won't turn on	Main fuse inside the fireplace may be blown	Contact support for assistance
Power supply indicator light is red	Power supply has somehow been damaged	Contact support for assistance
Unit turns on, but power button flashes and immediately shuts off	Possible internal component failure due to rough handling during shipping	Contact support for assistance
Unit appears to have power, but a "buzzing" sound is heard	Power supply may not be fully plugged in on the back of the unit	Check that 90 degree fitting is securely plugged in on the back of the unit. If it is and buzzing continues, contact support
	Power supply is fully plugged in on the back of the unit, but buzzing persists	Main power outlet may be loose. Contact support for assistance

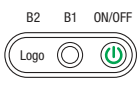
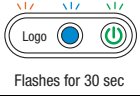
Water		
Musty or stale smell when unit is running	Old or stale water generally created from lack of use	Drain and refill with fresh water. Consider cleaning per the PM maintenance guidelines
Leak detected after unit has been unused for an extended period of time	Float sensor in mist tank may be stuck creating above normal water level in mist tube	Drain excess water to proper level; Lift and plunge mist maker rack vigorously 10 -15 times to free up float sensor in mist tank. Allow unit to run and recheck to make sure correct water level is maintained
Unit beeps then turns off	Low water level	Refill unit manually or verify that water feed is on if unit is permanently plumbed

Remote Control		
Remote control does not turn fireplace on/off	Possible dead battery	Install new CR-2032 battery (Lithium)
	Remote may not be synced to this particular fireplace	Push and hold the power button on the fireplace until it flashes, then hit any button on the remote. Use this process to sync multiple fireplaces to a single remote
Remote control powers the fireplace on/off, but doesn't seem to respond to flame adjustments or color changes	Possible low battery	Install new CR-2032 battery (Lithium)
	Possible sync issue	Follow instructions above to re-sync the remote
Remote does not work despite trying all steps listed above	Remote may be malfunctioning	Contact support for further assistance

Troubleshooting Guide (cont'd)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Mist Makers/Flame Appearance		
Flame height is less than 6" high in all sections	Possible air flow issue due to enclosure design or ambient room currents	Verify that fireplace is getting sufficient air and that no AC vents, fans, or air currents are impacting the mist from rising vertically
	Flame volume may be low	Use remote (or phone app) to increase volume of mist by pressing the "+" 
Flame height is less than 6" high in one section only	Mist maker may need to be cleaned	Follow PM instructions for cleaning mist maker. Consider cleaning all mist makers
	Water level in mist tube may be too high	Remove excess water to proper level which is the height of the black mushroom cap
Flames appear more "smoky" than desired	Excess mist is being generated	Use remote (or phone app) to decrease volume of mist by pressing the "-" 
Slower flame movement is desired	Flame speed setting is too high	Use remote (or phone app) to decrease speed of mist by pressing the "-" 
Faster flame movement is desired	Flame speed setting is too low	Use remote (or phone app) to increase speed of mist by pressing the "+" 

LED Lights- AWA MODELS		
Lights are not on when unit is on	Loose connection on light strip(s)	Check connection on right end of light strip to make sure it is securely connected
	Possible problem with the light strip or LED driver card	Contact support for further assistance
One or more light cells are not working on an individual light strip	There is a problem with the light strip	Contact support for further assistance

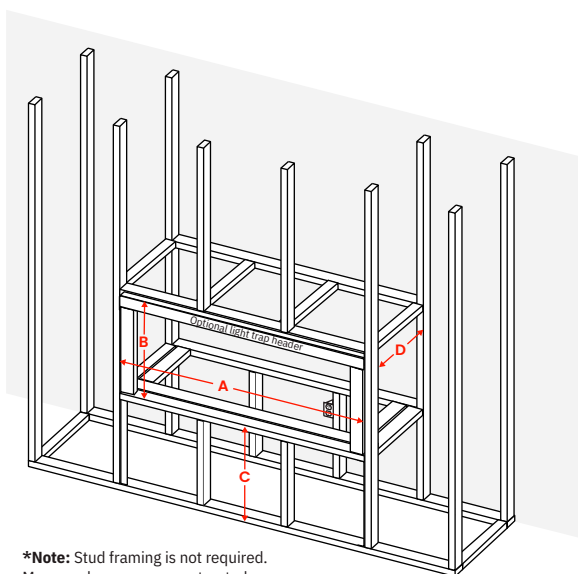
Lights and Beeps Key			
Lights	Beeps	Alert	Possible cause
	Two quick beeps, every two seconds	Low / No Water	The water supply hasn't been turned on.
			Water needs to be added.
	None	Maintenance Reminder	Due for preventative maintenance cleaning - press and hold middle and left buttons together to reset.
	Three long beeps, every second	Overflow / High Water Alert	Water level is too high.
			Float sensor is stuck.
	One short beep, every two seconds	Voltage Alert	Possible shortage.
			Faulty power adapter.

Enclosure Design



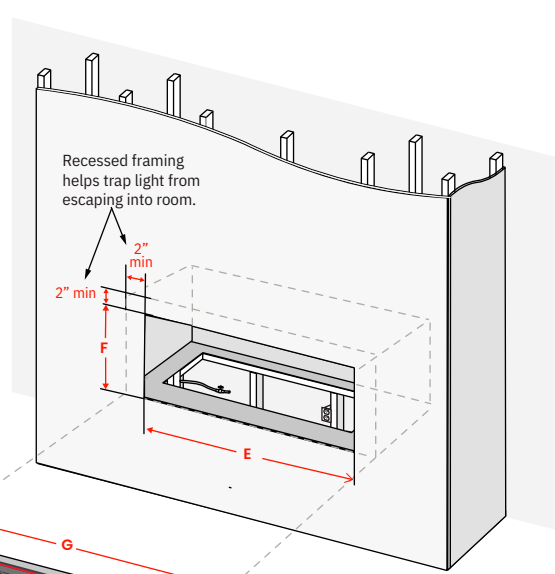
All dimensions are finished dimensions. Consider your material thickness, overlays, and clearances to calculate your final framing dims. All dimensions are in inches. All framing must be self-supported. Drawings are not to scale.

1 Framing*

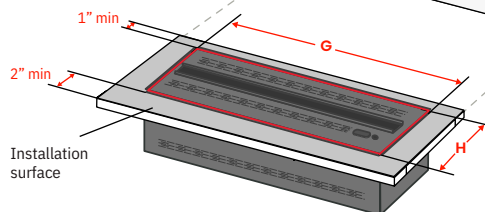


***Note:** Stud framing is not required. Many enclosures are constructed from plywood or other materials as case goods or cabinetry.

2 Drywalling



3 Cutout & Setback



Minimum Finished Dimensions



All dimensions are absolute **minimums**. Building to the minimums across all measurements will result in side light reflection and light escaping the enclosure reflecting onto the ceiling of the room. For optimal results, see **ideal enclosure guidelines.** ( 9)

Model	Series	Dimensions to Finish				Drywall Opening		Fireplace Cutout	
		Width	Opening	Height*	Depth	Width(min.)	Height(max.)	Width	Depth
		A	B	C	D	E	F	G	H
AWL-20	Lite	26"	12"	12"	12 ½"	22"	17"	20 ¼"	9 ½"
AWA-20	OG	26"	12"	12"	15 ¼"	22"	17"	20 ¼"	12 ¼"
AWPR-20	Pro	26"	14"	14"	15 ¼"	22"	14"	20 ¼"	12 ¼"
AWL-40	Lite	46"	12"	12"	12 ½"	42"	17"	40 ¼"	9 ½"
AWA-40	OG	46"	12"	12"	15 ¼"	42"	17"	40 ¼"	12 ¼"
AWPR-40	Pro	46"	14"	14"	15 ¼"	42"	14"	40 ¼"	12 ¼"
AWL-60	Lite	66"	12"	12"	12 ½"	62"	17"	60 ¼"	9 ½"
AWA-60	OG	66"	12"	12"	15 ¼"	62"	17"	60 ¼"	12 ¼"
AWPR-60	Pro	66"	14"	14"	15 ¼"	62"	14"	60 ¼"	12 ¼"

*Using a Direct Plumb Kit (sold separately) requires additional 2 in. of height from the floor.



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