Installation instructions and User Guide

Chill Fountain - On Wall Chiller

Model :
73225

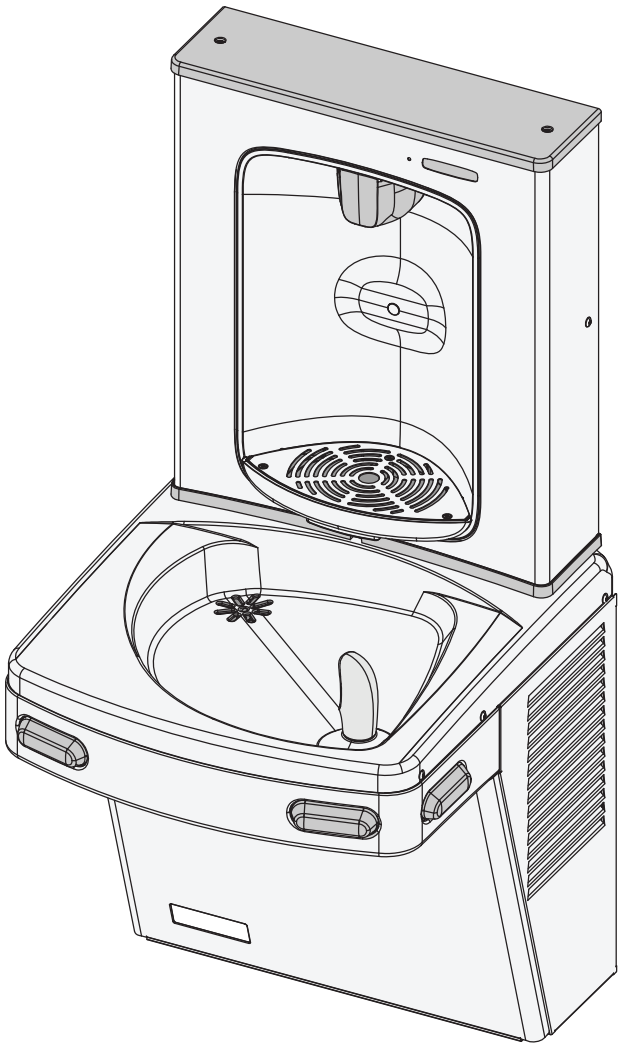


Table of contents

Using these instructions

Explanation of symbols

Read the instructions

WARNING

DANGER Electric shock

Highly Flammable

Safety instructions

Read and use the instructions and safety information supplied with individual kit components for a safe installation.

Section 1 WARNINGS AND REGULATORY INFORMATION

Highly Flammable

- For correct operation of this appliance it is essential to observe the manufacturers instructions.
- Please read all installation requirements, installation procedures and precautions before installing this appliance.
- Never attempt to install this appliance without reading all of the applicable instructions.
- All electrical connections must comply with current AS/NZS 3000 wiring rules.
- This appliance must be earthed.
- If the power supply cord is damaged it must be replaced by a Zip (for Australia) or Zenith (for New Zealand) Service Provider or a qualified electrician.
- Do not remove the cover of the appliance under any circumstances without first isolating the appliance from the power supply.
- Connect only to a potable (wholesome, cat1) mains water supply.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children should be supervised to ensure that they do not play with the appliance.
- Connect only to cold water 10-38°C with a pressure range of 172kPa - 700kPa.
- This appliance is intended for indoor use only and should never be installed outdoors or exposed to the elements of nature.
- This appliance must not be positioned in an area that may be cleaned by a water jet and must not be cleaned by a water jet.
- This appliance contains R290 refrigerant under pressure. No part of the appliance should be exposed to a naked flame.
- Maintenance of the refrigeration unit must be carried out by an accredited service provider or qualified refrigeration mechanic.
- To avoid hazards, all installation procedures must be carried out by a suitably qualified tradesperson. Maintenance of the refrigeration unit specifically must be carried out by an accredited service provider or qualified refrigeration technician.
- Faulty operation due to unqualified persons working on this product may void warranty coverage.
- Warning! Keep ventilation openings in the appliance enclosure or in the built-in structure clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Use only the provided power supply cord and do not use multiple portable socket outlets for the mains electrical connection.
- Flush building water supply before installing the appliance . Failure to do so will result in the cartridge inlet being clogged and a resulting loss in water pressure and/or damage to the cartridge.

Note

- It is the installers responsibility to ensure the installation complies with series of current AS/NZS 3500 standards and local water authority regulations.

Technical data

Technical data table

Specification	Unit	Description
Water supply pressure range	kPa	172 - 700
Supply Voltage Input Rating	V	220-240V 50Hz
Gross Weight	kg	30.8
Water Valves		Integrated surge protection kit 600kPa Pressure Limiting Valve including Dual Check Valve
Water Connection		1/2”BSP (DN15) Inlet

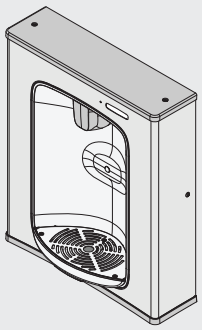
Factory default program settings

Setting	
Filtration: Unfiltered appliance	**Bottle count:** 3 second rule (1 bottle)
Filtered capacity: 11000 Litres	**Buzzer:** On
Units: Litres	**Dispense time:** 20 second max.
Flow rate : 3.8 L/min	**Override stop dispense:** N

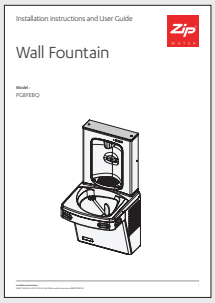
Supplied parts checklist

Qty	Description
1	Chill Fountain assembly
1	Bottle Filler assembly
1	Pressure Limiting Valve (PLV)
1	JG 1/4" x 1/4" Elbow
1	JG adaptor 1/4" x 1/4" BSPT (for PLV)
1	Drain connector 40 x 32mm
1	93704 filter cartridge
1	IEC Power cable with AU plug
1	Plastic pipe
1	Sponge tubing
1	Snap bushings 7/8"
1	Snap bushings 1 1/2"
1	Installation instructions and User guide

Kit component identification

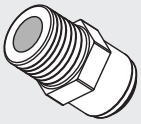


Bottle Filler

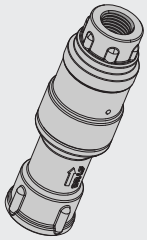


Instructions

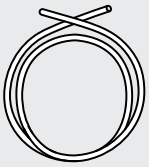
JG 1/4" x 1/4" elbow



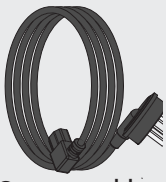
JG adaptor
1/4" x 1/4" BSPT



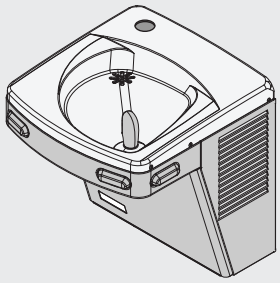
600 kPa Pressure limiting valve (PLV)
1/2" BSP (DN15)INLET
1/4"(DN8) OUTLET



Plastic pipe (1 mtr)



IEC power cable

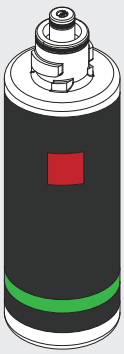


Chill Fountain

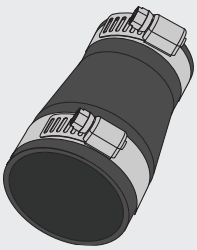
Snap bushings 7/8"

Snap bushings 1 1/2"

Sponge tubing



93704 filter cartridge



Drain connector
40 x 32mm

Contact Zip (for Australia) or Zenith (for New Zealand) for the full range of consumables and accessories.

Note Mains water isolation valve is not supplied with the kit.

Recommended tools

- Masonry drill and relevant drill bits.
- Flat blade screwdriver.
- 1/4" Hex driver.
- T15 Torx driver.
- Spirit level.
- Tape measure or ruler.
- Saw for cutting waste pipe.

General product features

Thank you for purchasing the Chill Fountain. Please read and follow these instructions carefully to ensure safe and trouble free operation. If help and advice is required, contact your local service provider.

What is the Chill Fountain ?

This Chill Fountain is an electronically controlled, filtered chilled drinking water system for commercial applications.

The system is an 'on wall drinking water appliance' with an automatic dispensing nozzle and basin mounted bubbler.

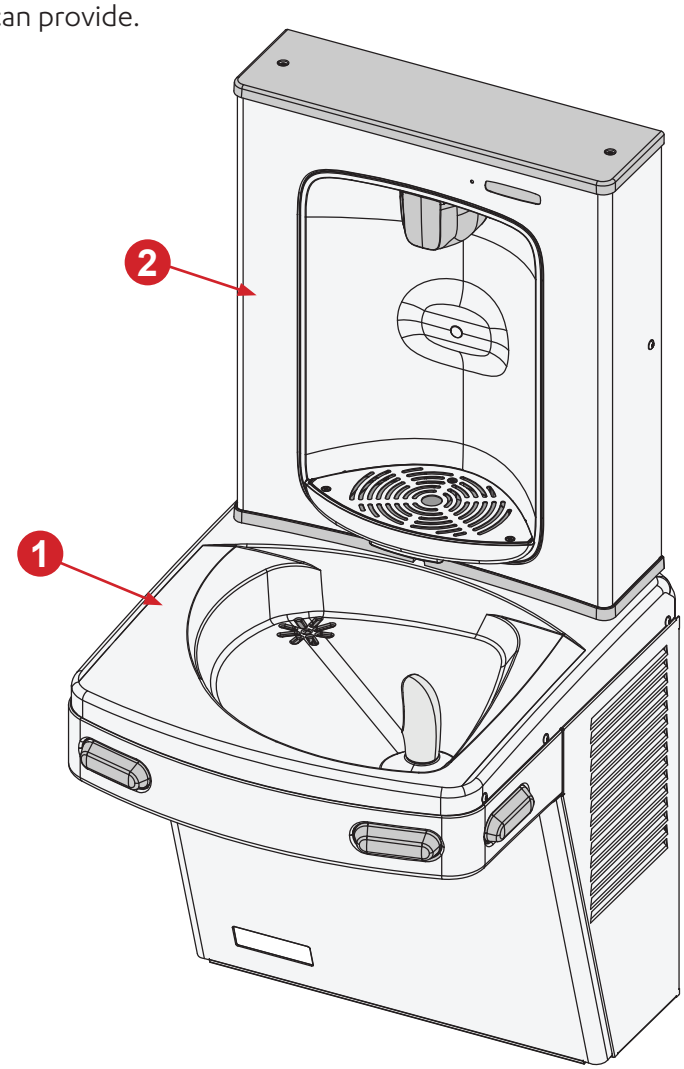
It consist of 2 parts:

1. **The Chill Fountain**
2. **The Bottle Dispenser**

It utilises a conventional refrigerant compressor to chill the water and a UV-C LED process to inactivate pathogens.

It incorporates a water filter, this is a disposable item which will require periodic replacement, it is covered by a limited OEM warranty.

It is important that the installation be undertaken safely, correctly and completely in order to utilise all the benefits that the Chill Fountain can provide.



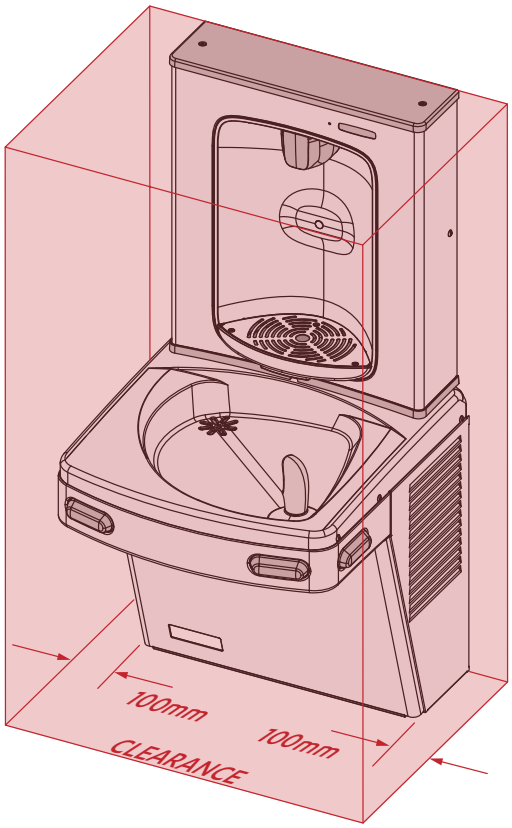
Section 2 Installation essentials

2.1 Generic requirements

Read and use the instructions and safety information supplied with individual kit components for a safe installation.

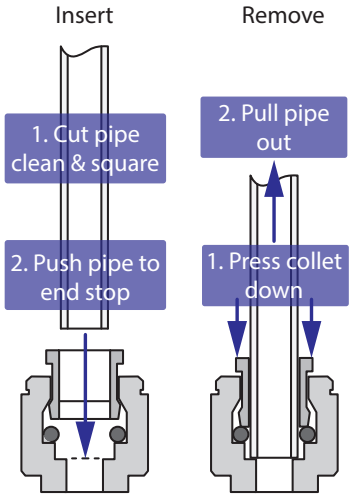
A clearance envelope adjacent to the air vent grilles of the appliance must be provided to allow ventilation for the safe and effective use of the system, see arrangement below.

2.2 Clearance envelope & airflow

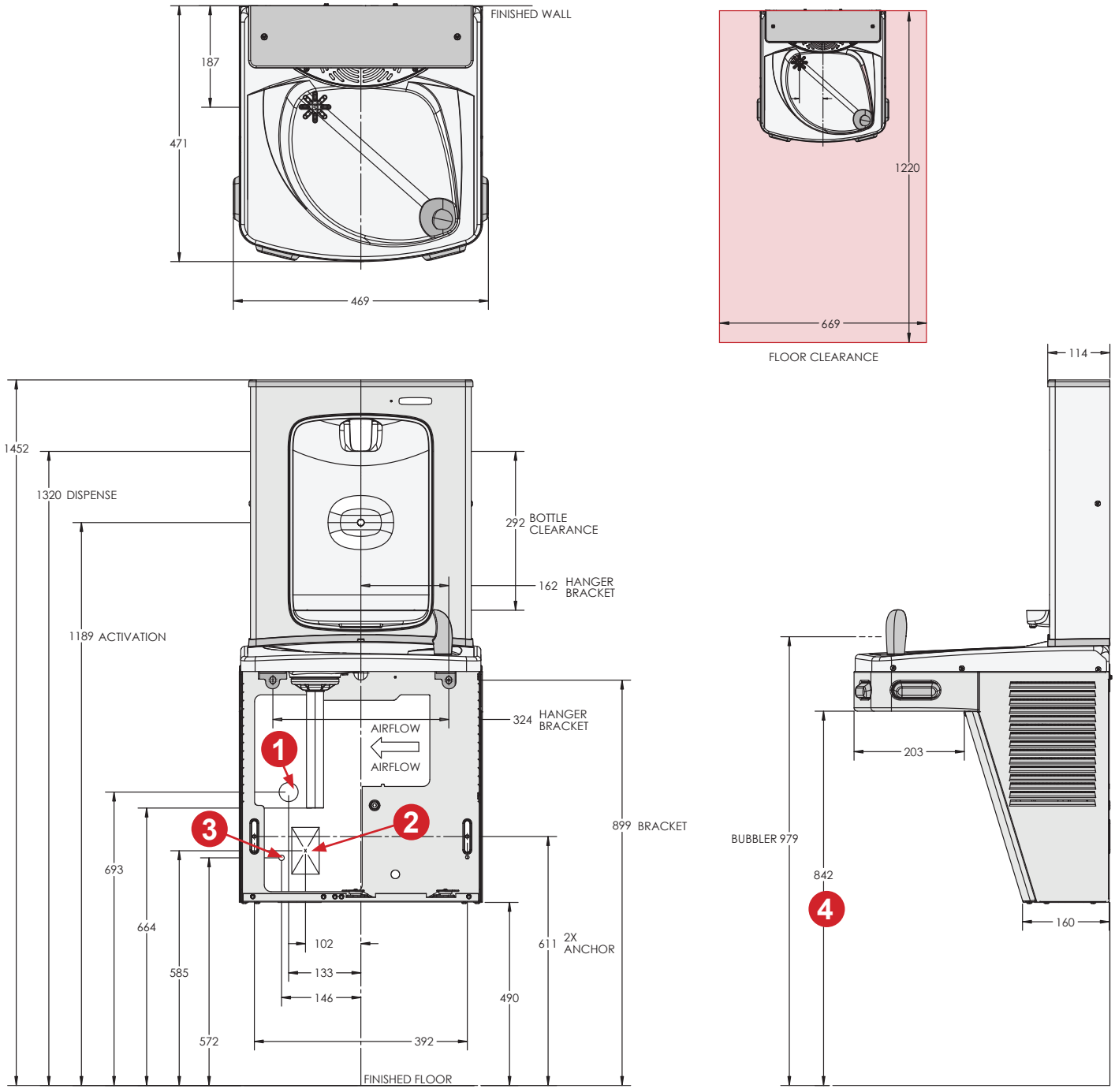


2.3 John Guest pipe and fittings

Take care to use correctly, see below :



3.1 Installation dimensions



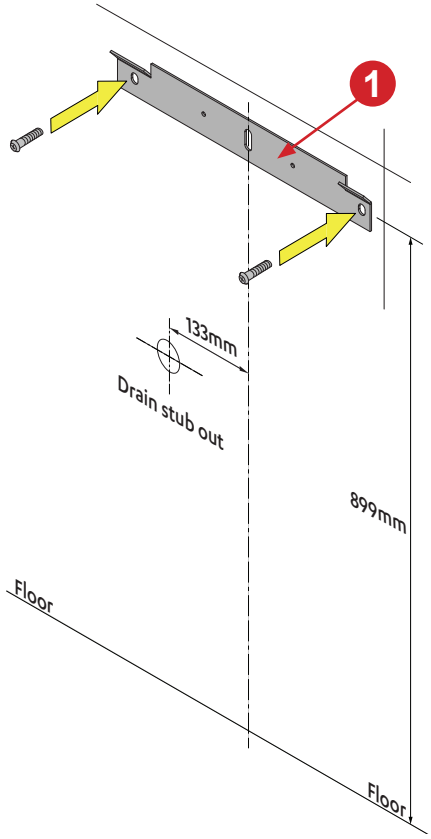
1. 40mm optimum location drain stub out 25mm.
2. Electrical outlet optimum location.
3. 1/2" BSP Water supply optimum location stub out 25mm (Isolation valve not supplied).
4. Adjust vertical dimensions as required to comply with local regulations.

- Appliance shall also have a minimum clear floor space 760mm x 1220 mm.
- All dimensions in mm.
- Recommended adult barrier free height installation shown. Reduce height by 75mm for installations used primarily by children aged 12 and younger.

3.2 Install the Fountain assembly

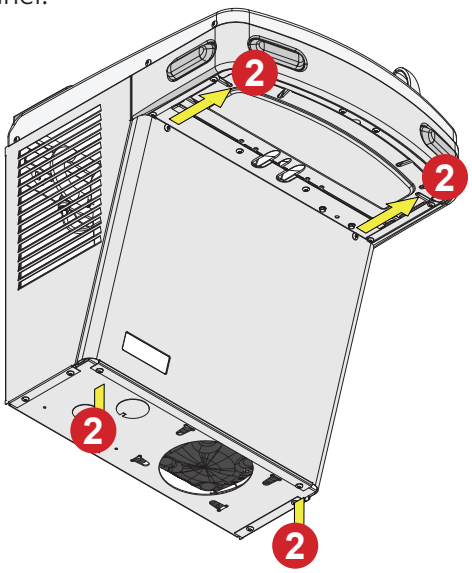
3.2.1 Fit the hangar bracket

- Remove the hanger bracket 1 from the back of the fountain assembly.
- Attach with suitable fixings (not supplied), square and level, onto a wall sufficiently robust to support the weight of the appliance.



3.2.2 Remove the cover

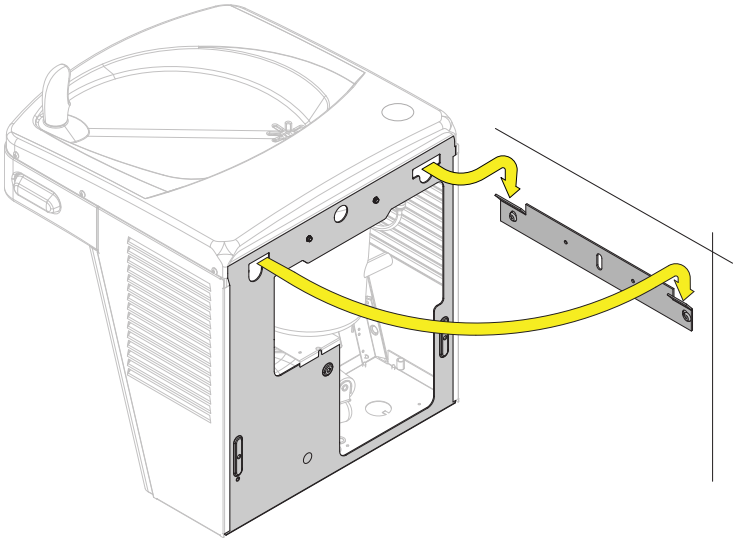
- Remove the 4x T15 screws 2 retaining the fountain assembly front panel.
- Remove the Chill Fountain assembly front panel.



3.2.3 Hang the Chill Fountain

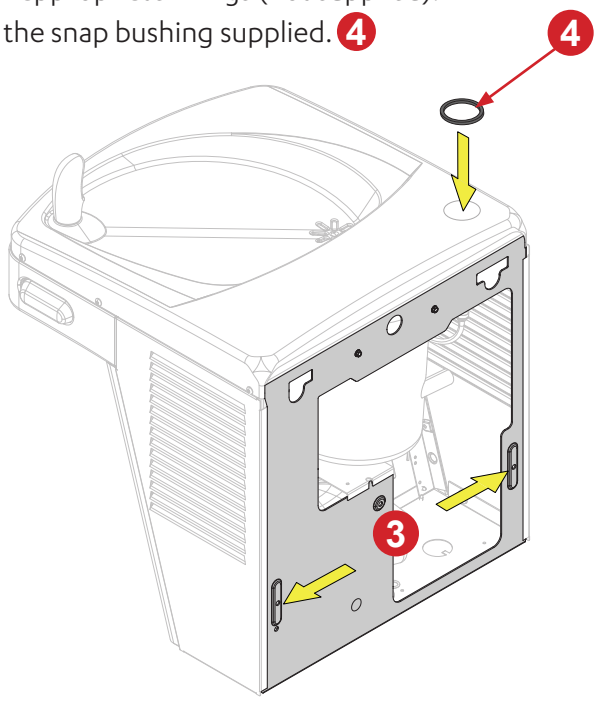
- Hang the Chill Fountain assembly on the hangar bracket as shown.

Ensure that the fountain assembly is hung on the galvanized steel frame and not under the return edge of the stainless steel basin top.



3.2.4 Secure the Chill Fountain

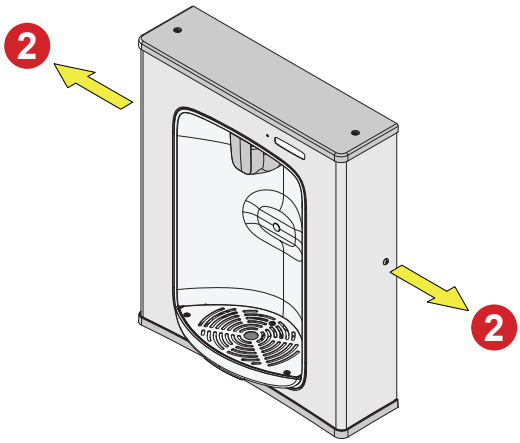
- Working from the front of the assembly, mark the hole centres for the lower fixings, in the positions 3 shown below.
- Remove the assembly to drill holes etc.
- Re-hang the assembly, and secure the lower section with appropriate fixings (not supplied).
- Fit the snap bushing supplied. 4

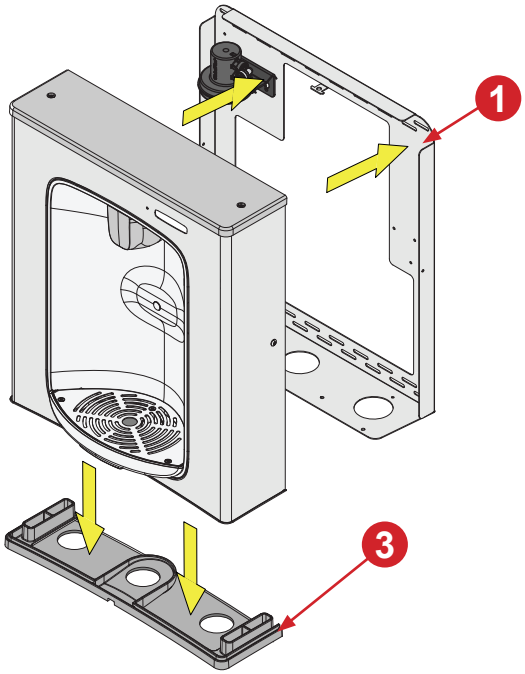


3.3 Install the Bottle Filler assembly

3.3.1 Remove Bottle Filler cover

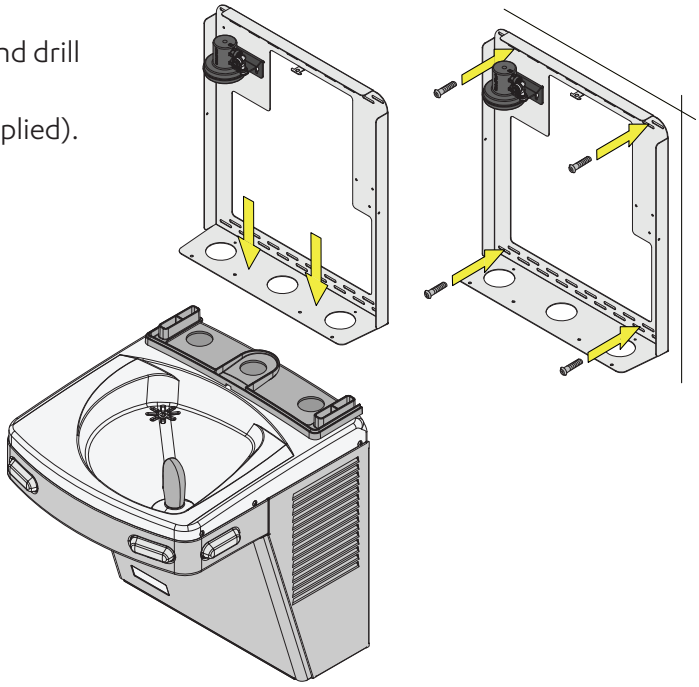
- Remove the bottle filler frame 1 from the assembly by removing the 2x T15 screws 2 as shown.
- Remove the gasket 3 from the bottle filler assembly and place it on the basin top, centred against the finished wall as shown.





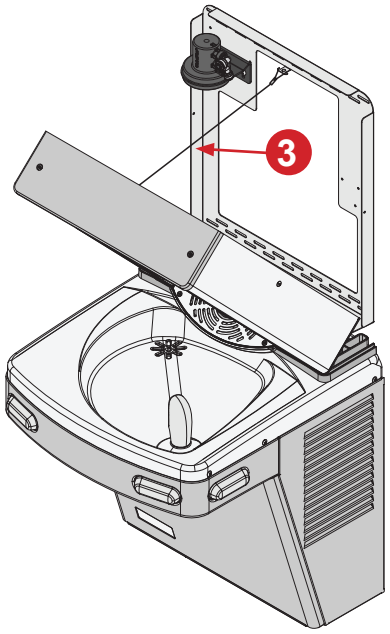
3.3.2 Secure the Bottle Filler frame in place

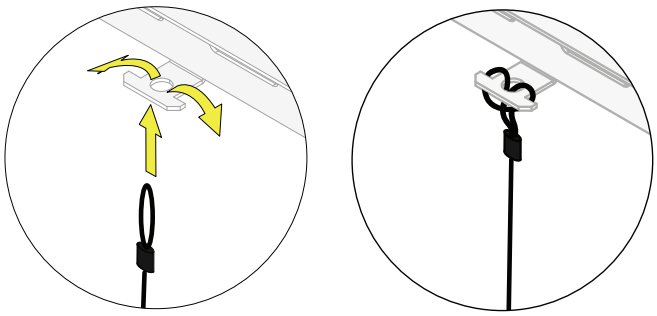
- Place the frame on top of the gasket, centred and pushed against the back wall. Check that it's central, aligned and level.
- Mark up fixing centres (through slots on back panel) and drill 4 fixing holes.
- Secure frame to wall using appropriate fixings (not supplied).



3.3.3 Fit the Bottle Filler & secure

- Seat the bottle filler assembly bottom edge of the wrapper into the groove in the gasket.
- Secure with lanyard 3 supplied, as shown.
- Leave hinged forward as shown, ready for the next steps.



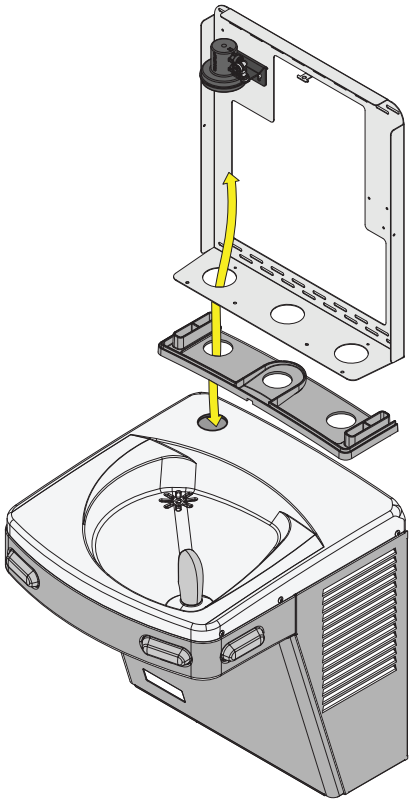


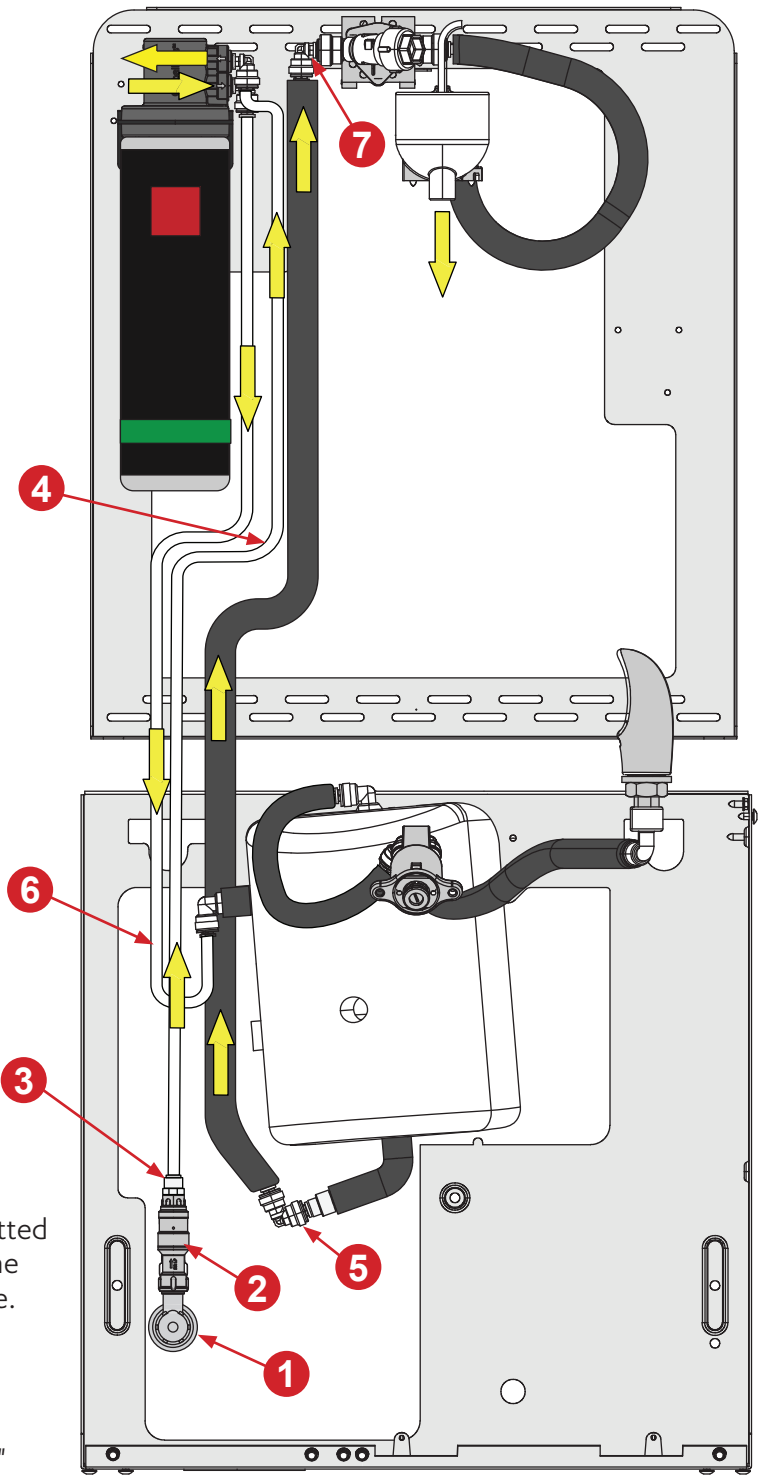
Lanyard looping through

3.4 Make the plumbing connections

- Plumb the appliance as shown adjacent.

- **Route all electrical and plumbing connections from the fountain base to the dispense assembly through the access hole & grommet on the back top left of the basin, see below.**

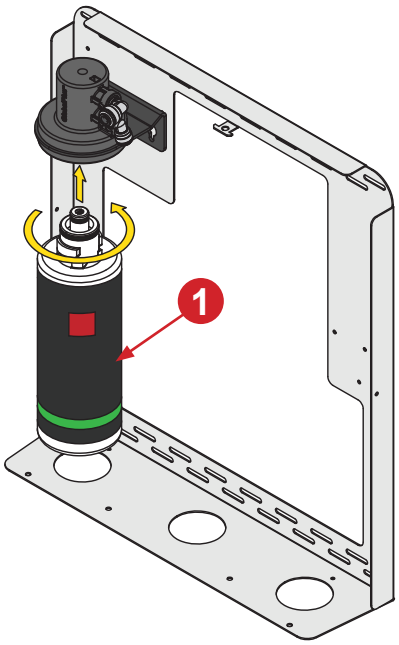


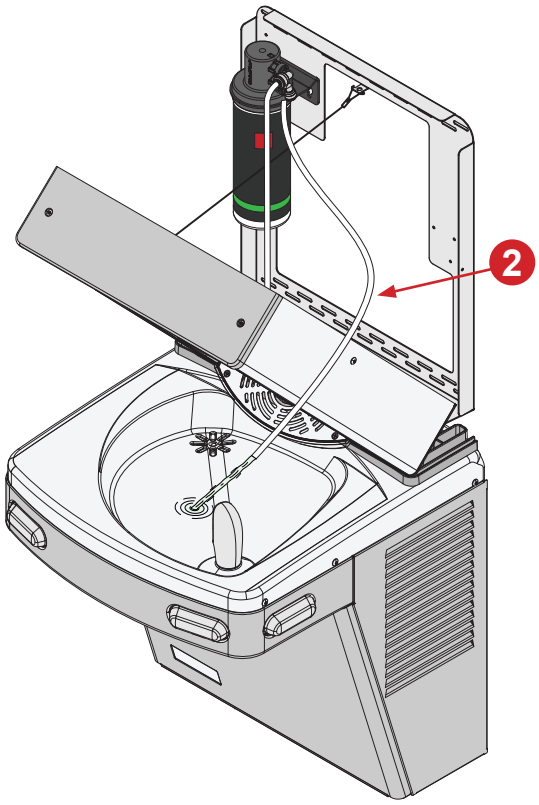


- Connect the mains water supply via an isolation valve. 1 **NOTE**: All thread connections require thread sealing tape (not supplied). This must be fitted to allow the appliance to be disconnected from the water supply during service, or periods of non-use.
- Connect the supplied DNR 600kPa PLV 2 to the isolation valve.
- Connect the supplied 1/4" adaptor to the PLV. 3
- Connect the 1/4" PEX pipe 4 supplied to the 1/4" filter head inlet adaptor.
- Remove the push fit plug from the bottom of the cold tank and replace with the 1/4" elbow fitting supplied. 5
- Install and flush the filter, see following page.
- Route the filter head outlet pipe 6 through the access hole in the snap bushing & basin top, into the fountain base as shown above.
- Remove blanking plug and connect filter outlet pipe to tank inlet.
- Connect the 1/4" insulated pipe 7 supplied from the elbow fitting to the solenoid valve inlet.

3.5 Install and flush the filter

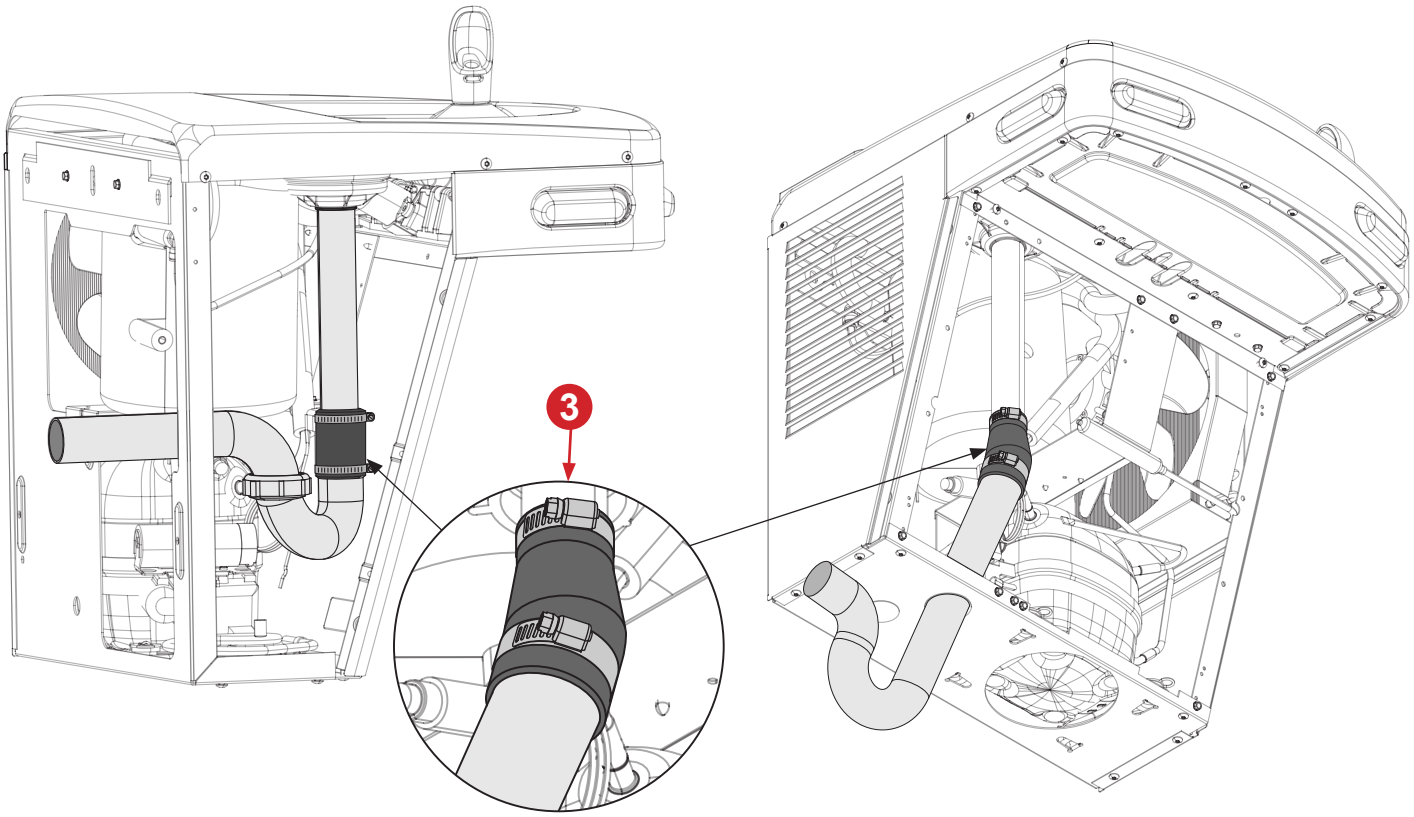
- Ensure that all pipes and fittings are correctly mated, see page 11.
- Flush the filter by first installing the filter cartridge, 1 see the instructions supplied with it and adjacent illustration .
- Turn ON the mains water isolation valve and check for leaks. Place the cold the water outlet pipe 2 from the filter-head over the basin and turn on the isolation valve.
- Flush 10litres of water through the filter.
- Turn OFF the mains water supply isolation valve.





3.6 Plumb the basin waste pipe to drain

- Plumb a 40mm drain trap (not supplied) to the 32mm basin drain using the rubber flexible reducing adaptor 3 and worm drive clamps supplied. Either through the base or rear of the appliance.

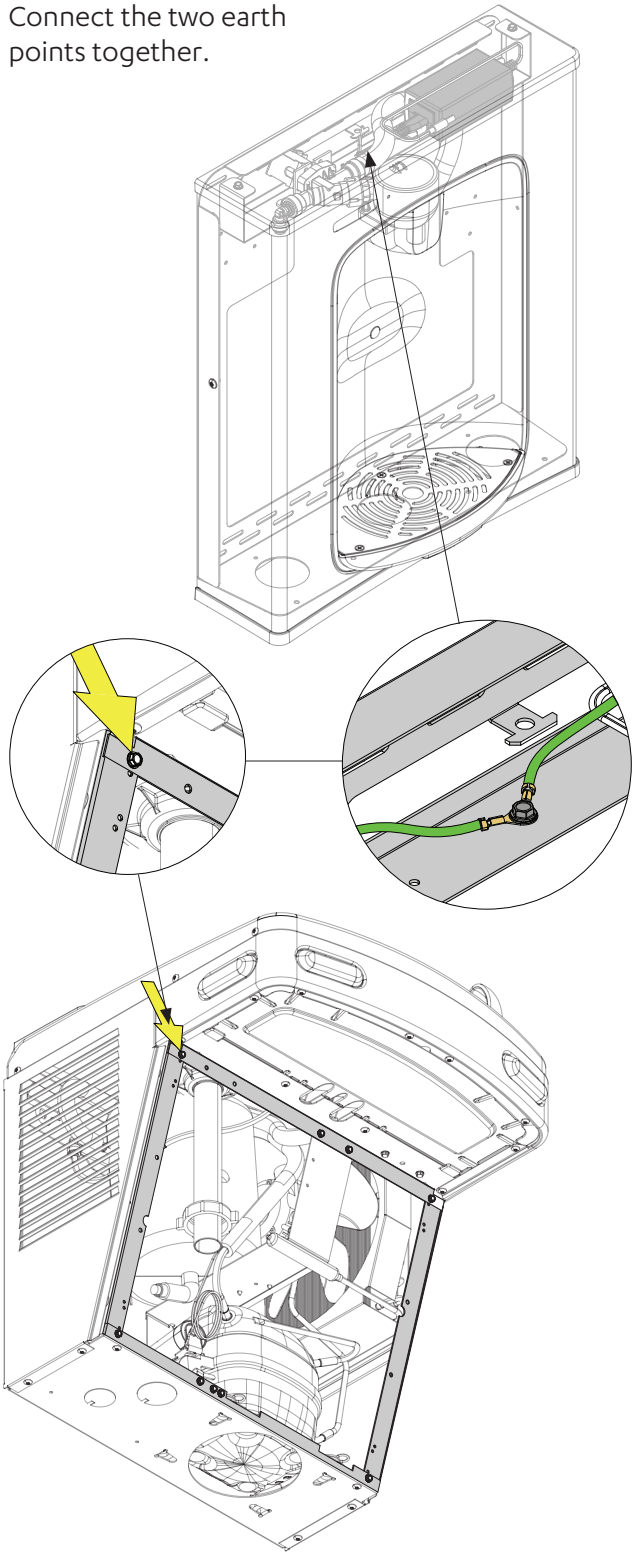


3.7 Make the electrical connections

WARNING Ensure that the Bottle Filler assembly is properly grounded.

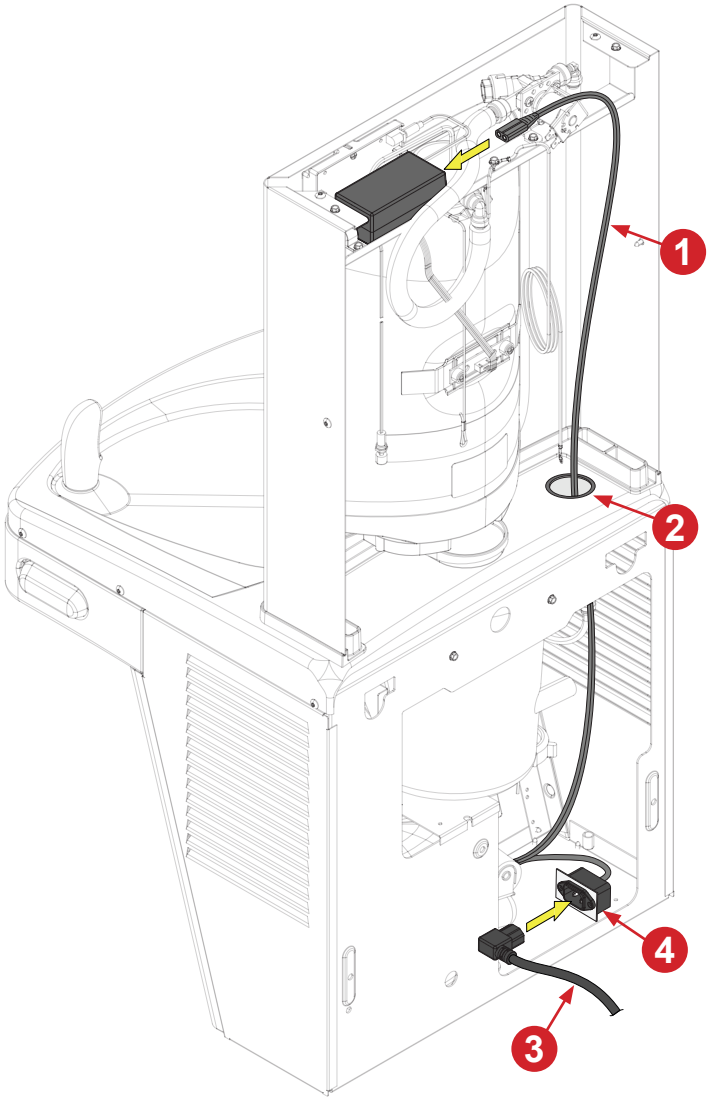
3.7.1 Connect the earth wire

- Earth the bottle filler assembly by routing the long green earth wire inside the bottle filler, through the basin and then attach to the electrical box ground or to the Chill Fountain base frame in the location shown using the existing 1/4" hex screw.
- Connect the two earth points together.



3.7.2 Connect the power cable

- Route the integral power cable 1 (attached to the compressor terminal block) from inside the Wall Fountain, up through the access hole in the top 2 to the inside of the Bottle Filler case.
- Connect into the Bottle Filler DC power supply.
- Connect the supplied mains cable 3 to the IEC socket 4 mounted on the fountain base.

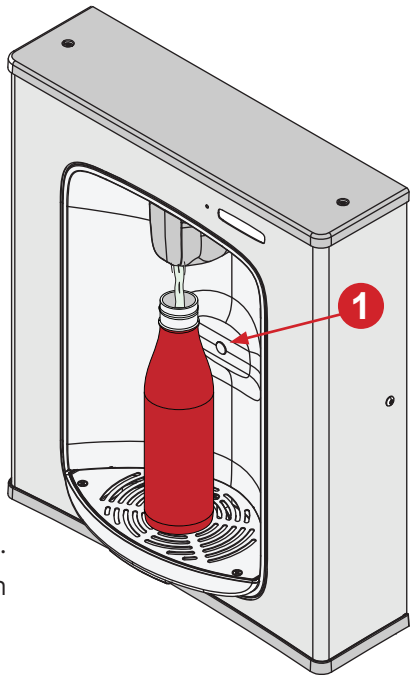


Section 4 Commissioning

Do not activate the Bottle Sensor 1 without running water through the UV-C module. Operating the UV-C module dry may damage the UV-C LEDs.

Never operate the appliance without a water connection. Lack of water can cause the appliance to overheat. If it is necessary to purge the appliance of air it will automatically shut off if it overheats. It will resume operation once water begins to flow through it.

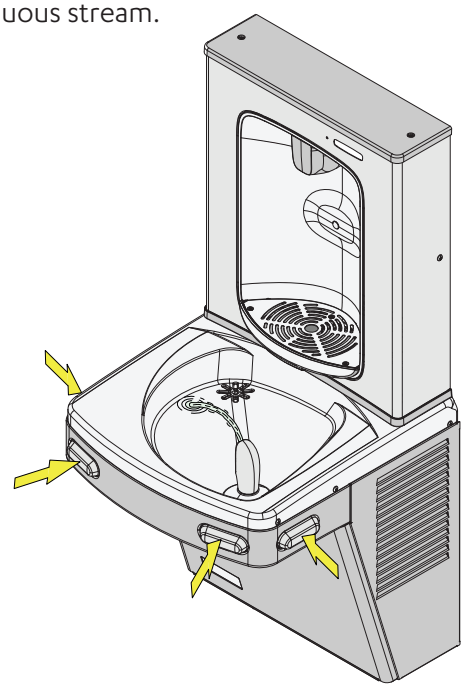
4.1 Purge the Bottle Filler



- Turn ON the mains water supply.
- Check for leaks.
- Before turning on the mains electricity supply, hinge the Bottle Filler back in its vertical position against the frame.
- Secure with the 2x T15 screws previously removed in Section 3.3.
- Rotate the condenser fan blade manually to ensure that it is free of obstructions.
- Review the UV-C LED operation section, page 16.
- Failure to follow the guide can damage the UV-C module.
- Plug the Bottle Filler and Chill Fountain power cable into the mains socket and turn ON. Water will begin to cool to the rated temperature.
- Place a bottle on the drip tray under the dispense nozzle to activate the automatic dispense sensor 1 until water is dispensed in a continuous stream.
- Refit and secure the Chill Fountain access panel, previously removed in section 3.2.
- The appliance is programmed to run for a maximum of 20 seconds before it shuts off automatically.
- To change the bottle filler program, see section 6.1.

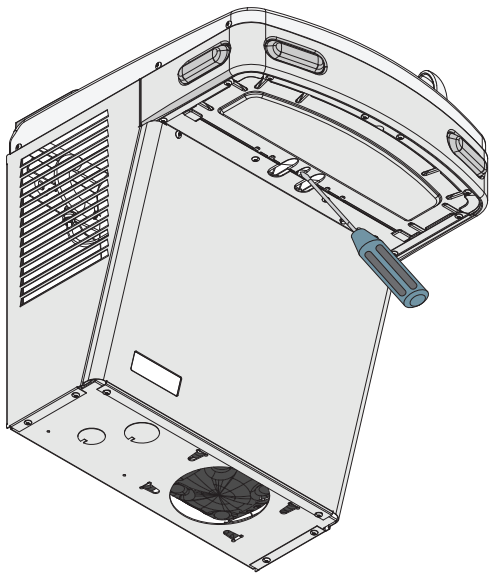
4.2 Purge the Chill Fountain

- Press one of the dispense buttons around the basin to purge the system of air.
- Continue to dispense until the bubbler has a continuous stream.



4.3 Adjust the bubbler

- Remove all protective film.
- Adjust the bubbler stream height.
- Locate the adjustment screw on the underside of the basin.
- Use a slotted screwdriver to adjust
  Clockwise to increase height.
  Anticlockwise to decrease height.



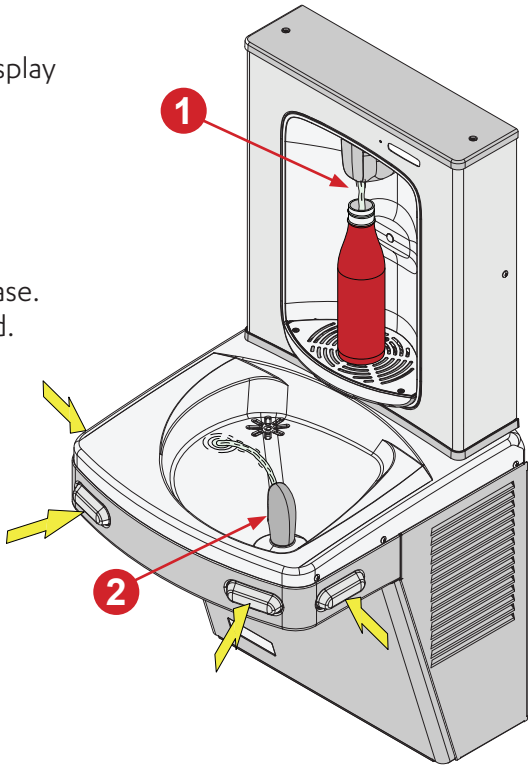
4.4 Appliance functionality

- The appliance activation is automatic. The UV-C LEDs turn on when the water is dispensed via the bottle filler, and off when the dispense stops.
- During non-use periods the appliance UV-C automatically cycles on for 10 seconds every 10 minutes. This sanitises the dispense nozzle when not in use.
- When the appliance is ON and functioning correctly the LED indicator will illuminate a blue colour.
- When the appliance is ON and not functioning correctly the LED indicator will illuminate an orange colour. The LED indicator will remain in this state, and the appliance will not dispense water until it is brought back to a functional state.

Section 5 Operation

5.1 Operation

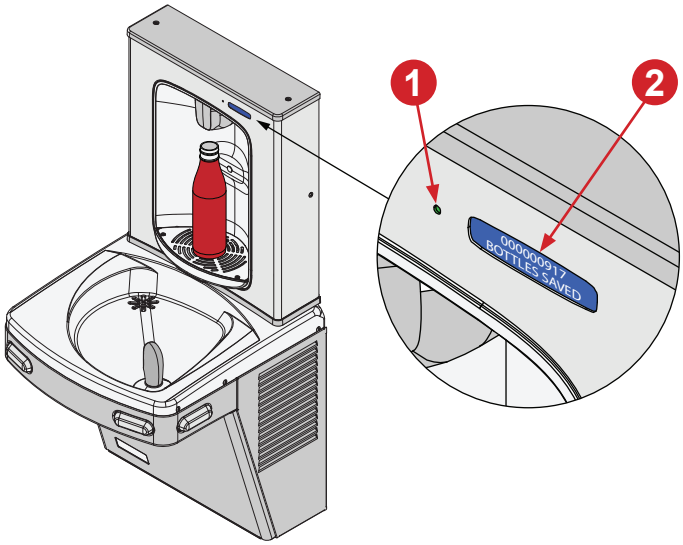
- Check that the LED is illuminated a green colour and that the display shows the message: Bottle Saved.
- **To use the bottle filler:** 1
  Place a bottle on the drip tray, positioned under the dispensing nozzle. Water will automatically dispense for 20 seconds.
- **To use the bubbler:** 2
  Press one of the 4 buttons around the outside of the fountain base. Water will dispense from the bubbler while the button is pressed.



5.2 Display and LED indicator functionality

1 LED indicator.

2 Display.



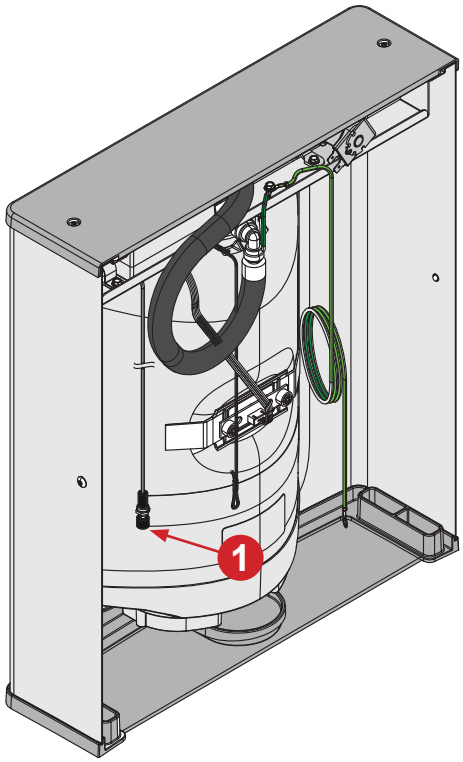
LED Colour	Display	Condition	Action
Orange	Bottles Saved	While dispensing UVC temperature is too high	Ensure water supply is ON. If initial start up: Activate the bottle filler to dispense water. LED will turn BLUE when water flows
Green	Bottles Saved	Standby mode, filter life <80%	No action required
Yellow	Bottles Saved	Standby mode, filter life 80% used but <100%	Order new filter
Red	Bottles Saved	Standby mode, filter life 100% used	Replace the filter
Blue	UVC disinfection in progress	Dispensing - bottle sensed by IR sensor and UVC operating properly	No action needed
Orange	UVC requires service	Water cannot be dispensed	Check electrical connections to UVC and reset power first. Replace UVC if necessary

Section 6 Service

6.1 Programming the appliance

WARNING! LIVE WORKING

- The appliance functionality can be adjusted using the programming feature.
- Ensure that the appliance electricity supply is connected and turned ON.
- Hinge forward the Bottle Filler assembly, see page 10.
- Locate the programming push button 1 hanging in rear of the assembly.
- Refer to the table below to configure the appliance functionality.



6.2 Programming table

Display	Action
000000000 BOTTLES SAVED (Home Screen)	Depress button for 3 seconds to enter into the following menu settings and make changes. When idle for 10 seconds (no button press), the settings will be saved and reverted back to the home screen.
UNFILT/FILT? UNFILTERED UNIT [FILTERED UNIT]	Depress button 3 seconds to change from Unfiltered to Filtered unit, or momentary press to advance to next menu.
FILT CAPAC OF 18000 LTR	Depress button for 3 seconds to change filter capacity to 2740 L. Depress button for 3 seconds to change filter capacity to 4150 L. Depress button for 3 seconds to change filter capacity to 5000 L. Depress button for 3 seconds to change filter capacity to 5670 L. Depress button for 3 seconds to change filter capacity to 11000 L.(default setting) Depress button for 3 seconds to change filter capacity to 18000 L. or momentary press to advance to next menu.
RESET 00000000 NEW FILTER	Depress button for 3 seconds to reset water usage count, or momentary press to advance to next menu.
LTR/GAL GAL[LTR]	Depress button 3 seconds to change from Gallons to Liters, or momentary press to advance to next menu.
SELECT RATE 3.8 LPM UNIT	To change flow rate, momentarily depress button to change whole gallon digit. Hold button 3 seconds to advance to TENTHS of gallon digit. Depress momentarily to change the digit. Hold button 3 seconds to advance to the next menu.
3 sec rule ? 3 sec [0.5L]	Depress button for 3 seconds to switch from 3 sec rule to 0.5L bottle, or momentary press to advance to next menu. (The 3 sec rule increases the bottle count by 1 if the water is dispensed for 3 sec or more. When .5L is selected, the bottle count will advance based on .5L volumes dispensed using FLOW RATE and dispense time to calculate total volume dispensed.)
Buzzer On	Depress button for 3 seconds to switch from audible beep to muted beep.
Bot Filler Set time: 20 s	Depress button for 3 seconds to change maximum dispense time to 10, 20 or 30 seconds, or momentary press to advance to next menu.
RESET 00000000 BOT COUNT?	Depress button for 3 seconds to reset BOTTLES SAVED count to zero (Home Screen), or momentary press to advance to next menu.
Override Stop Dispense: N	Depress Button 3 sec to change from “N” to “Y”. Allow the menu to return to the home screen – approximately 10 seconds. (If the UV-C LED fails, the water will not dispense when “N” is selected. If “Y” is selected, water can still dispense if UV-C LED fails).

Section 7 Maintenance

7.1 HydroCare

Zip offers a fully-inclusive HydroCare Service Plan to take care of all routine maintenance, including filter replacements, sanitisation, electrical safety inspections as well as general maintenance of your Chill Fountain. For more information, visit our websites:

(Australia) www.zipwater.com/hydrocare
(New Zealand) www.zenithwater.co.nz/hydrocare

The filter should be replaced as recommended on the filter label, or earlier if you notice a persistent reduction in water flow from the tap or an increase in chlorine, taste or odour in the water. Not changing the filter cartridges when required may affect the water quality.

For safe operation after periods of non-use longer than 48hours, flush both the Chill Fountain and Bottle dispenser for at least 60 seconds.

7.2 Cleaning

- Wipe surfaces with a damp cloth or antibacterial alcohol wipes, then wipe dry with a clean, dry microfibre cloth or paper towel.
- Food-grade disinfection wipes may be used to clean around and within dispense nozzle and bubbler spout.

IMPORTANT

- Do not use strong, corrosive, or abrasive cleaning materials.
- Do not use air-drying disinfectant sprays.
- Failure to remove the cleaning liquid may damage the finish of the appliance.

Section 8 Filter Performance Data

HEALTH CLAIM PERFORMANCE CERTIFIED BY NSF/ANSI

This system has been tested according to AS3497, NSF/ANSI Standards 42, 53 and 401 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI Standard 42, 53 and 401.

93704 / 93704NZ	NHMRC ADWG or USEPA SDWA MCL	Average Influent concentration	NSF/ANSI influent challenge concentration	% reduction reqt / Max. permissible product water concentration	Max effluent concentration	Minimum % reduction	Average % removal	Average effluent concentration
NSF/ANSI 42 - Aesthetic Effects								
Chlorine, Taste and Odor	0.6 mg/L	1.92 mg/L	2.0 mg/L ± 10%	≥ 50%	0.06 mg/L	96.8%	97.4%	0.05 mg/L
Nominal Particulate Reduction, Class I (≥ 0.5 µm to < 1 µm)	-	9,200,000 particles/mL	at least 10,000 particles/mL	≥ 85%	190,000 particles/mL	98.2%	99.0%	96,167 particles/mL
NSF/ANSI 53 - Health Effects								
Cysts (3.00 ± 0.15 µm particles)	99.5% reduction	125,000 microspheres/L	minimum 50,000 microspheres/L	≥ 99.95%	8 microspheres/L	99.99%	99.99%	8 microspheres/L
Lead (at 6.5 pH)	-	0.155 mg/L	0.15 mg/L ± 10%	0.005 mg/L	0.0015 mg/L	99.0%	99.8%	0.0003 mg/L
Lead (at 8.5 pH)	-	0.162 mg/L	0.15 mg/L ± 10%	0.005 mg/L	0.0019 mg/L	98.7%	99.6%	0.0006 mg/L
Asbestos	7 MFL	20,144,750 fibers/L	10^7 to 10^8 fibers/L (10 - 100 MFL)	≥ 99%	650 fibers/L	99.99%	99.99%	157 fibers/L
NSF/ANSI 401 -Emerging Compounds/Incidental Contaminants								
Microplastics, particles 0.5 to < 1 µm	-	9,200,000 particles/mL	at least 10,000 particles/mL	≥ 85%	190,000 particles/mL	98.2%	99.0%	96,167 particles/mL

*Pressure = 60 psig ± 3; pH = 7.5 ± 0.5; temp. = 20° ± 3°C *United States Environmental Protection Agency (USEPA) Safe Drinking Water Act / New Zealand Ministry of Health Drinking-water Standards for New Zealand

Class	Treatment Type	Function	Pass
I	Microbiological Status	Will stop bacteria increasing, but will not remove unless II (a) is passed.	✓
II II (a)	Microbiological Treatment Bacteria Removal	Will remove or inactivate bacteria.	N/A
II (b)	Virus Removal	Will remove or inactivate virus.	N/A
II (c)	Protozoa Removal	Cyptosporidium and Giardia. Will not remove or inactivate bactieria unless II (a) and II (b) are passed.	✓
III	Particulate Reduction	Reduces cloudiness.	✓
IV	Taste and Odour Reduction	Reduces tastes and odours.	✓
V	Chemical Treatment	Decreases certain chemicals: - Chlorine -Lead	✓

Legend: = Pass N/A = Not Applicable

This 93704 cartridge is certified by IAPMO R&T in PS-Zip 0.2 micron system against NSF/ANSI Standard 42 and 53 for the reduction of:

STANDARD NO. 42 – AESTHETIC EFFECTS
- Bacteriostatic Effects

Chemical Reduction
- Taste and Odour Reduction
- Chlorine Reduction

Mechanical Filtration
- Nominal Particulate Reduction, Class I

STANDARD NO. 53 – HEALTH EFFECTS

Chemical Reduction
- Lead Reduction

Mechanical Filtration
- Cyst Reduction
- Asbestos

STANDARD NO. 401 – Emerging Compounds/Incidental Contaminants

Mechanical Filtration
- Microplastics

* The term "bacteriostatic" indicates that the system limits the passage or growth of bacteria that may already exist in the incoming water. It does not mean that water leaving the system is safer to drink than water entering the system.

OPERATING SPECIFICATIONS

- Pressure requirement: 10 -125 psi (0.7 - 8.62 bar), non-shock
- Temperature: 35 -100°F (2-38°C)

Model	Flow Rate	Capacity	Kit #
0.2mic MicroPurity Filter 2S	5.678 Lpm	9,463 L	93704

Lead Free WM-022963 AS 3497

WRAS APPROVED PRODUCT

WRAS approved for cold water use only.

*Filter system certified by IAPMO R&T against NSF 42, 53 and 401; against NSF 372 for lead free product.

Zip filter systems are designed for ease of installation. However, post-installation inspections are highly recommended. Check for leaks immediately after installation and once again after 24 hours. If leaks are detected, turn off water supply, drain water and inspect the leaks. If problem persists, contact the installer / plumber for rectification.

It is essential that operational, maintenance and filter replacement requirements be carried out for this product to perform as advertised.

Flush new cartridge for 10L or at least 2 min 40 seconds to remove trapped air bubbles.

If left unused for more than 48 hours, flush cartridge for 10L or at least 2 min 40 seconds before use.

The compounds certified under NSF/ANSI 401 have been deemed as 'incidental contaminants / emerging compounds'. Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels.While occurring at only trace levels, these compounds can affect the public acceptance/perception of drinking water quality.

Note: While the testing was performed under standard laboratory conditions, actual performance may vary.

Zip Water
67 - 77 Allingham Street,
Condell Park, NSW 2200
Postal: Locked Bag 80,
Bankstown 1885
Australia
(+612) 9796 3100
Free Call (Aust): 1800 947 827
www.zipwater.com

Zenith Water
18 Kawakawa Place, Whenuapai,
Auckland 0814
New Zealand
Ph: +(64 9) 838 8612
Free Call 0800 558 055
zenithwater.co.nz