

Zip Chilled Water Systems

Affix Model Number Label Here
81513
GP



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Read These Warnings First



WARNING:

For correct operation of these appliances it is essential to observe the manufacturers instructions.

Please read all installation requirements, installation procedures and precautions before installing any Zip Chill Fountain or Wall Fountain.

Never attempt to install any Zip Chill Fountain or Wall Fountain without reading all of the applicable instructions.

All electrical connections must comply with current wiring rules.

These appliances must be earthed.

If the power supply cord is damaged it must be replaced by a Zip 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.

These appliances are not intended for use by persons (Including Children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliances by a person responsible for their safety.

Children should be supervised to ensure they do not play with the appliances

Connect only to cold water 10-38°C with a pressure range of 172kPa - 700kPa

These units are intended for indoor use only and should never be installed outdoors or exposed to the elements of nature.

These units must not be positioned in an area that may be cleaned by a water jet and must not be cleaned by a water jet.

The Zip Chilling unit contains R134A refrigerant under pressure. No part of the unit 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.

NOTE:

It is the installers responsibility to ensure the installation complies with AS/NZS3500.1, AS/NZS3500.2, AS/NZS3500.4.1, AS/NZS3500.4.2 and local water authority regulations.

Installation Preparation



Zip Chill Fountain

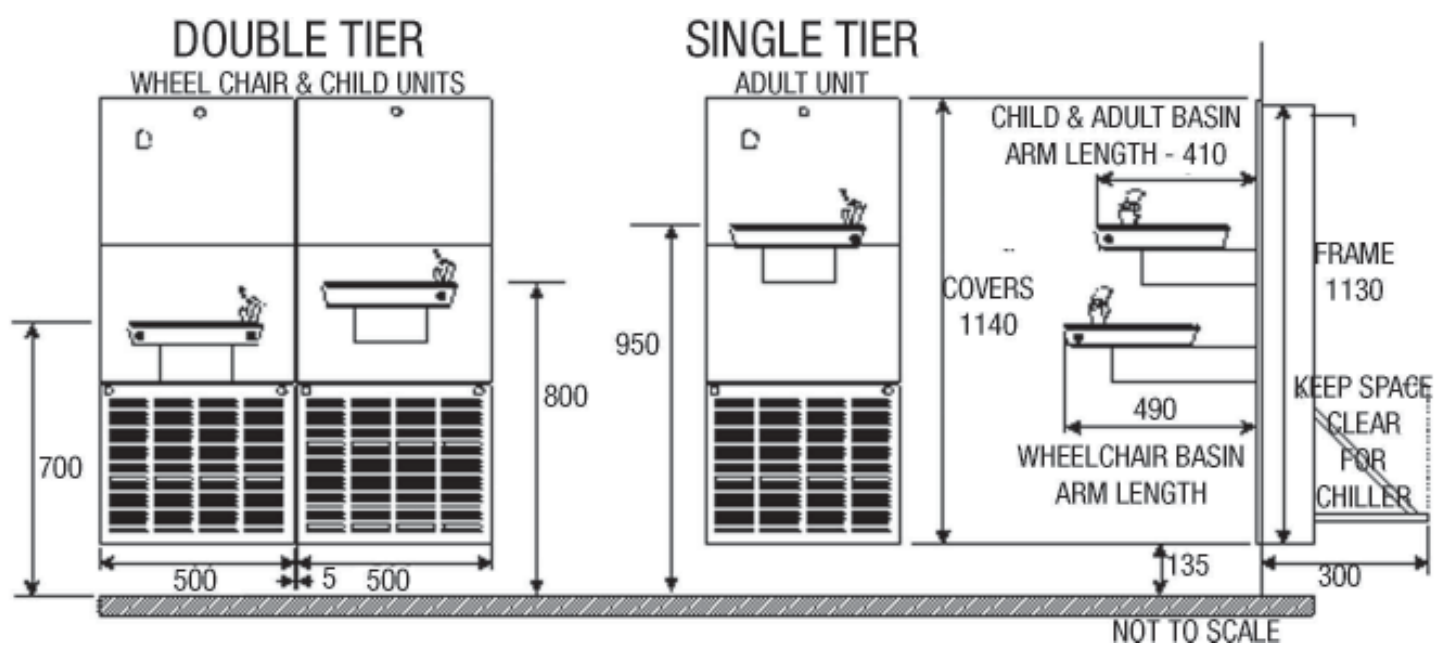
The Zip Chill Fountain is designed to provide continuous chilled water up to 28 Litres per hour available in single or double tier versions, with heights for children, adults and wheelchair users to comply with AS1428-1992. One chiller unit supplies both single and double tier versions.

Check the contents.

There should be:

- 1 mounting frame per tier, each with a fixed middle panel, key-locked solid top panel door and key-locked bottom louvered cover panel door.
- 1 drinking fountain basin per tier.
- 1 only chiller support tray per installation, with 2 bracket support arms, 2 screws and 4 bolt/washer/nut sets.
- 1 only chiller unit per installation, with a flexible cable and plug.

NOTE: For 2 tier units there will also be 3 sets of spacers each with 2 bolt/washer/nut sets.



Installation Preparation continued

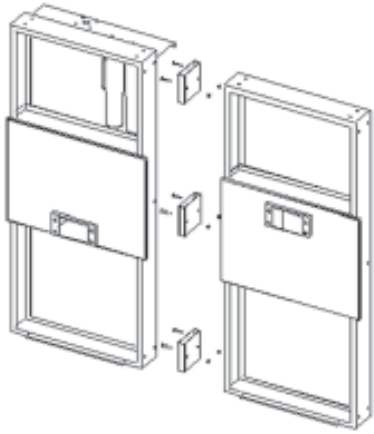


Figure 1
Join using 3 spacer sets.

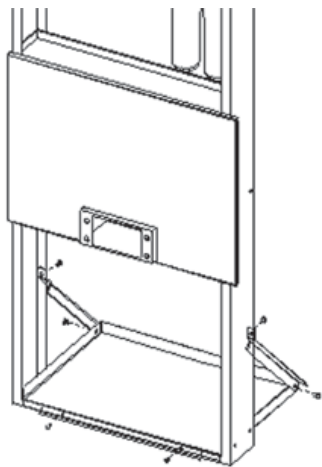


Figure 2
Attach the chiller tray

Prepare the mounting frame

Carefully remove the top and bottom cover panel doors from each unit by turning the key 180° and pulling the top of the panels out away from the frame until the panel comes free from the frame. Place them aside out of harms way for safe-keeping.

Leave the plastic protective coating on the doors and panelwork until the end of the installation process. This will help keep them clean and save you from unnecessary tidy-up work.

If you are installing a multi-tier unit, locate the 2 mounting frames and the 3 spacer sets as shown in Figure 1.

Use the bolt/washer/nut sets provided with the spacers to bolt the frames together, placing the spacers between the mounting frames.

Do not overtighten the spacer bolts as this may distort the frames. Make sure that the frames are level and aligned with each other.

The chiller support tray should be mounted to the tier that has the highest basin position (to allow the most space possible for the drainage plumbing from the basin/s, and to allow room for the chiller to sit upon the tray).

Locate and fix the chiller support tray to the bottom rail of the mounting bracket, using the 2 self tapping screws provided with the tray. The tray sits on top of the frame and is screwed to the frame from the front as shown in Figure 2.

Attach the support arms from the back of the tray to halfway up the lower panel edge of the mounting frame using the 4 bolt/washer/nut sets provided with the tray. The bent end of the support arm attaches to the upright of the mounting frame.

Installation Instructions

Step 1- Positioning

Install the mounting frame into the wall

The Zip Chill Fountain is designed to be recess mounted within a wall. The bottom of the mounting frame should be 135 mm above the finished floor level.

This ensures the wheelchair basin (if supplied) is mounted at a pre-determined height off the floor to comply with AS1428-1992 (Design for access and mobility). The front of the mounting frame must be flush with the finished face of the wall as the cover panel doors sit proud of the wall and overhang the edges of the mounting frame to cover the mounting frame.

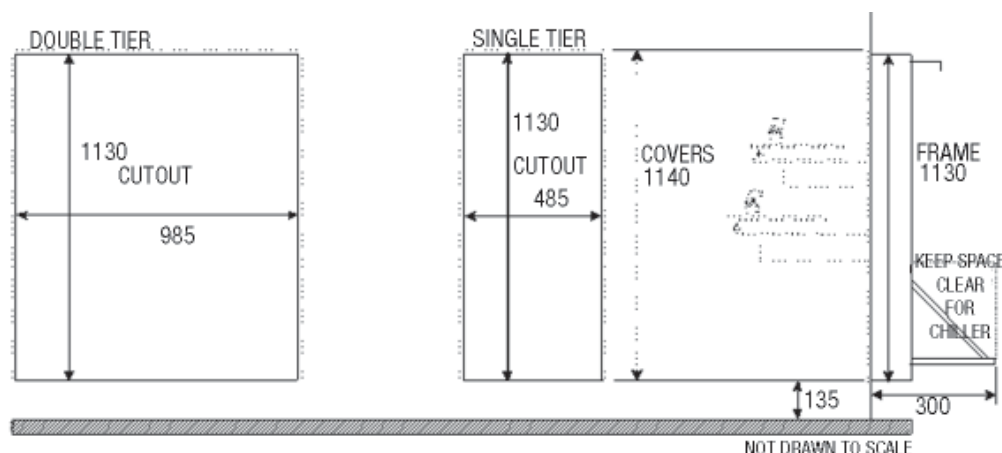


Figure 3
Wall Mounting Dimensions

The opening in the wall must be exactly as shown in Figure 3 (previous page). 1130 mm tall by 485 mm wide for a single-tier unit and 985 mm wide for a two-tier unit.

There is only a 10mm overlap provided on the sides and top of the front cover panels so there is little margin for error. There must be at least 300 mm depth from the front face of the wall to allow for the recessing of the chiller unit.

The frame must be positioned square and level to allow for the flush fitting of the square doors on the front panel. Be careful not to distort the frame when fixing it to the building.

Use a spirit level and measure the diagonals to check for being square and level before continuing with the installation. Pack the sides, top and bottom if necessary.

Step 2- Fastening

There are mounting holes pre-drilled into the frame work located 50 mm from the corners of the frame as shown in Fig 5. The type of building construction material of the wall will determine the appropriate means of attachment. Simply screw through the holes in at least the four corners of the frame to secure it to the wall. Consider that some irresponsible individual or vandal may attempt to use the Zip Chill Fountain as a seat or a step ladder and so it must be securely fixed to the wall to prevent it from being pulled out.

Attach the basin arm assembly

One basin attaches to the cutout centre panel of each tier by the 4 nuts supplied. All 4 nuts must be fully tightened to safely hold the basin arm in place. If the basin arm is not already attached, remove the 4 nuts protruding from the mounting bracket and use them to hold the basin arm assembly in place when fitted.

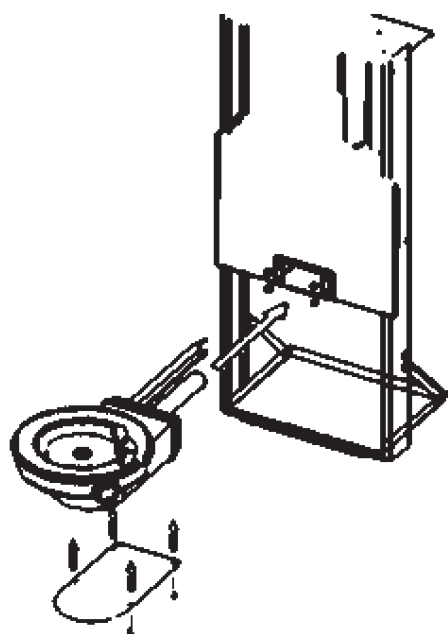


Figure 4
Attach basin arm to the centre panel of tier

When handling the basin arm assembly, take care to prevent damage to the polished stainless steel finish of the bowl. Remove the access panel from the underside of the basin arm assembly (as shown in Figure 4) by undoing the 4 Phillips-head retaining screws. Lift the basin arm assembly and insert the plumbing and cabling of the arm through the opening in the centre panel of the tier. Align the bolts up with the holes provided in the end of the arm and hold the basin arm assembly in place until secure. Reach up into the bottom of the arm and thread the nuts home tight using a socket wrench. Push the rubber O ring along the arm into the gap between the arm and the centre panel of the unit to cover the join.

Repeat this basin attachment procedure for each tier.

Step 3- Connecting

a) Plumbing

Connect the drainage piping

Once the frame is installed, and if there is no rear access to the Zip Chill Fountain, you will need to reach through the top and bottom panel door openings from the front to gain access to the plumbing connections. Connect the 40mm PVC drain pipe from the basin/s to an appropriate waste in accordance with local by laws. Keep the drainage piping clear of the chiller space (approx 450 mm above the chiller tray) to leave room for the chiller unit to be inserted later.

Installation Instructions continued

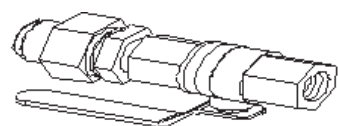


Figure 5
Cold water supply inlet stop-cock

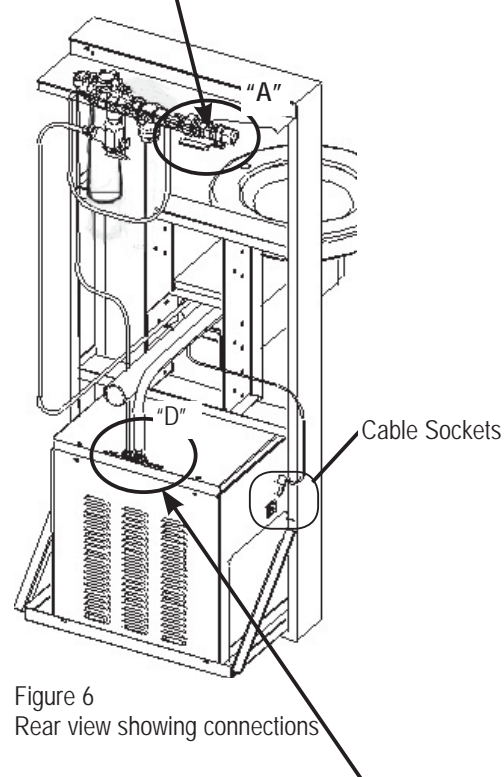


Figure 6
Rear view showing connections



Figure 7
Close up view of the chiller water connections.

Connect the cold water supply line

Connect the cold water supply to the half inch BSP stop-cock located on the filter assembly on the top bracket of the mounting frame in accordance with local by laws, as shown at 'A' in Figure 6 and at close-up in Figure 5. Don't turn the stop-cock on until the chilled water lines are fully installed.

Insert the chiller unit

Locate the chiller unit and orient it so that the louvres vent downwards and the labelling is the readably correct way up. The two holes in the top labelled 'INLET' and 'OUTLET' are at the rear of the unit. Be careful when removing the covering tape to keep the locking collets in place in their sockets. Simply sit the chiller from the front of the Zip Chill Fountain, onto the chiller support tray and push it back until it reaches the rear of the tray. Slide the chiller unit to the right to allow for access to the cable sockets that are located on the left side of it. A rear view is shown in Figure 6.

Take the 4 pin DIN plug hanging from the basin arm assembly and plug it into the matching socket in the side of the chiller unit. There are 2 DIN sockets available (as shown in Figure 6) as the chiller is designed to supply up to 2 basins. It doesn't matter which DIN socket you use for which basin as the sockets are both electrically identical, and are used to supply low voltage to the solenoid in the basin arm. If you are installing a double tier Zip Chill Fountain plug the DIN plug from the second basin into the second DIN socket.

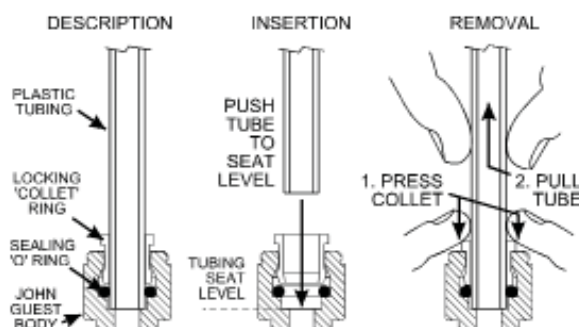
Electrical installation must be in accordance with local wiring regulations. The total load of the Chill Fountain is 2.4 Amps. Have a 240V AC, 50 Hz, 10 Amp power point installed in behind the Zip Chill Fountain within a metre of the chiller unit, (preferably within reach of the top cover panel door to allow for access from the front through the door of the finished installation).

Locate the IEC lead and plug it into the appropriate socket on the left side of the chiller (as shown in Figure 6). Plug the other end into the power point.

Do not turn on the power supply until the water supply is connected and turned on. Slide the chiller back to the centre of its tray to allow even air flow around the vents in its box.

Connect the chiller pipes

The Zip Chill Fountain uses the 'John Guest' type push-fit piping connections which are very easy to use. Simply push the square end of the flexible piping into the 'John Guest' socket and it locks the pipe into place. Once inserted, the pipe cannot be removed without depressing the locking ring collet. See picture to the left for details.



Take the quarter inch flexible piping from the filter assembly (as shown in Figure 6) and insert it into the socket labelled 'INLET' in the top rear of the chiller unit, as shown at close-up in Figure 7.

If you are installing a single tier Zip Chill Fountain take the insulated quarter inch flexible piping from the basin arm assembly and insert it into the socket labelled 'OUTLET' in the top rear of the chiller unit, (as shown in Figure 7).

Installation Instructions *continued*

If you are installing a double tier Zip Chill Fountain, there are 2 insulated quarter inch flexible pipes from the basin arm assemblies to be connected and inserted it into the socket labelled 'OUTLET' in the top rear of the chiller unit.

Locate the one with a tee-piece and copper tubing on the end, then insert the copper tubing end into the socket labelled 'OUTLET' in the top rear of the chiller unit. Plug the insulated quarter inch flexible pipe from the other basin arm assembly into the unused socket of the tee-piece.

Connect the uninsulated ¼" flexible piping from the basin arm assembly onto the pressure relief valve outlet in the valve assembly.

Undo the nut, olive and eyelet from the relief valve, and slide them over the end of the tubing. Push the tube firmly into the valve, tighten the nut finger tight and then 1½ turns with a spanner.

Step 4- Commissioning

Turn on the water supply

Turn on the water supply and the stop-cock. Check for leaks. Repair any leaks found before continuing.

Turn on power supply

Plug in the 240V 3 pin plug into the power point and turn it on. The chiller compressor motor will start-up. The chiller takes only 10 minutes for the water in it to chill to 10°C.

Purge the lines

The filters, piping, chiller and chilled water lines are full of air until purged. Only for this first time operation, hold your hand over the drinking fountain bubbler to deflect the water spray into the bowl, then press the blue bubbler button located on the front of the bubbler arm.

Hold the blue button in until all of the air in the system is purged and whilst adjusting the bubbler flow rate. The flow-rate screw is located directly under the bubbler and is accessed from beneath the basin arm.

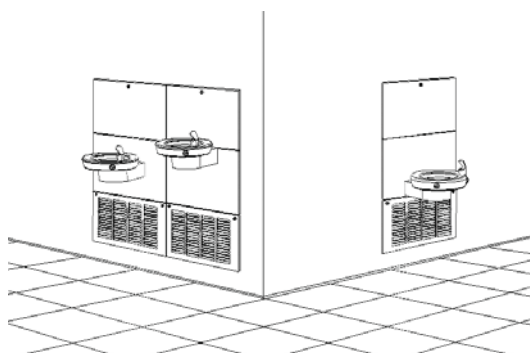
Use a large flat-head screwdriver and turn the screw until the water spout pours evenly into the centre of the basin bowl. Release the blue button when done. Repeat for second basin, if fitted.

Step 5- Assembling

Fit cover panel doors

Reattach the cover panel doors making sure to handle them with care to avoid scratching them. The door for the lower section is the one with the louvres and 2 key-locks. The key-locks are at the top of the door. Align the lower slots in this door over the studs that protrude from the front edge of the bottom rail of the mounting frame. Swing the upper edge of the door in towards the frame and when vertically flush, turn the keys 180° to lock the door into place.

The top door is a solid panel with one key-lock. This door has 2 protruding metal hinge-like hooks at the lower edge. Hold the door horizontal with the ground and hook these hinges over the lower edge of the top opening in the mounting frame. Guide them into the cutouts in that rail of the frame. Swing the door upwards on the hinges until it rests vertically flush with the frame, turn the key 180° to lock the door into place.

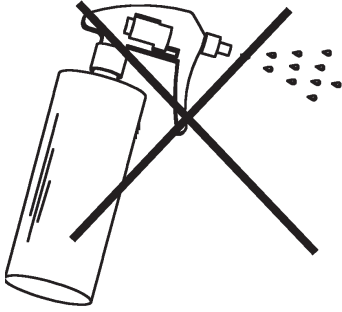


Operating Procedures

Operation

Freshly-filtered chilled water is obtained by pressing the large blue bump-action button on the side of the basin.

The water is chilled by a refrigeration unit fitted within the wall, behind the louvered panel.



Cleaning

Never use strong, corrosive or abrasive cleaning materials on the Zip Chill Fountain.

Wipe clean the outer surfaces with a sponge or a soft cloth using a mild soap and water.

Normal domestic dishwashing liquid is most suitable.

The louvres on the front panels of the Chill Fountain, and on the sides of the chilling unit need to be kept free of dust and lint to permit free flow of air through the vents. They should be checked regularly, at least monthly, and dusted or vacuumed to be kept clean.

Replacing the Filter

When to replace filtration cartridges

Your Zip Chill Fountain has a built-in filtration system with a filter replacement reminder light that shows through the front panel. Normal operation is for the light to flash once per minute. When the filter cartridge is due for replacement, the light will flash once per second.

For safe operation, the filter cartridge should be replaced at least every 6-12 months, or when the reminder light flashes once a second, or earlier if:

- You notice a persistent reduction in water pressure from the bubbler;
- or an unpleasant taste or odour in the water.

Use only a Zip Filter to match the one used in your Chill Fountain. The filter cartridge can be obtained through plumbing suppliers or direct from Zip. The filter is located behind the front access panel, as shown in Figure 8. The installation date should be written on the filter cartridge. Zip filter cartridges click in and out just like replacing a light globe. No special tools or skills required.

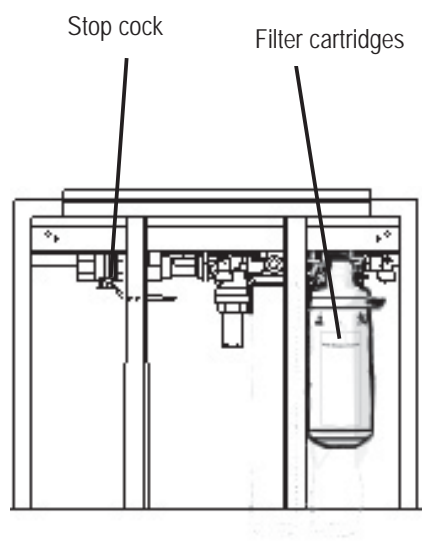


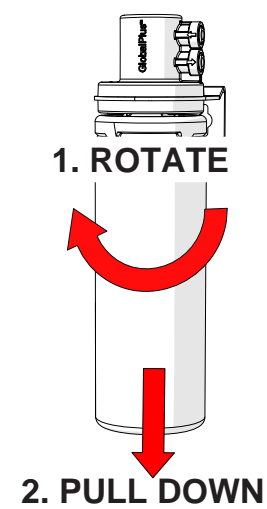
Figure 8
Chill Fountain with front access panel removed to reveal filter cartridges.

1. Unlock the front louvre panel to locate the filter as shown in Figure 8. Make sure the replacement filter cartridge is the same type as the one being replaced.
2. Turn 'OFF' the water supply. There is a local stop-cock valve installed in the cold water supply line.
3. Press and hold the operating lever on the tap head (to release any water pressure in the filtration system) until the water stops flowing.

Some water may drip from the filter socket and attached water lines during the replacement process so it is a good idea to have a bucket and towel handy to catch and mop up any spills.

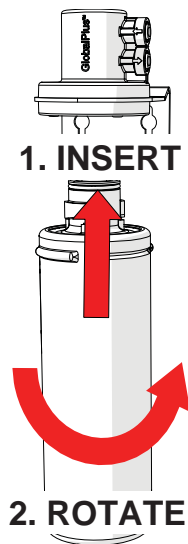
Replacing the Filter Continued

REMOVE FILTER



Filter cartridge replacement

INSERT FILTER



4. Grasp filter cartridge, rotate the cartridge a quarter turn to the left and gently pull down. Caution: a small amount of water will drip as the cartridge is removed.
5. Do not tilt the cartridge as water may spill from it if tilted.
6. Unpack replacement cartridge, remove sanitary cap and write today's date where shown on the label.
7. Avoid touching the filter O-rings and filter opening as this may cause bacterial contamination of the cartridge.
8. Moisten the O-rings with water, align the front cartridge label to the left (as shown in the "insert filter" diagram for filter cartridge replacement), and push the new cartridge into the filter head.
9. Turn the cartridge a quarter turn to the right until the cartridge comes to complete stop and is locked into position.
10. Open (turn 'ON') the stop-cock valve slowly and check the cartridge/socket junction for drips or leaks. If any leakage is evident, turn the water 'OFF' and refit that cartridge by repeating these instructions from Steps 2 to 9 until there is no leakage.
11. Purge the air from the system by turning 'ON' the water supply, then holding the blue activating button on the basin until the water flows without any further spluttering.

You may notice a discolouration in the water. This is normal discharge from a new filter cartridge and will soon reduce and stop after a few litres have passed through.

Run the water for at least 5-10 minutes to ensure that all debris is removed from the filtration system.
12. Refit the front louvered panel, clean-up any finger marks on the stainless steel, wipe dry any water spills and dispose of the spent cartridge thoughtfully.

Service Procedures

If your Zip Chill Fountain requires maintenance, the highly trained Zip service team are available to help with a comprehensive range of spare parts and assistance. Call the Zip Customer Care Line on 1800 638 633 for any enquiries.

Zip recommends that prior to calling our service line, you check the following:

Normal water supply is available, and is at an adequate pressure (minimum 172kPa maximum 700kPa).

If flow is blocked, check that the filter isn't past its recommended use-by date.

Normal power is available to the power point.

Zip Wall Fountain

Zip Wall Fountain should only be installed by a licensed plumber in accordance with local Water Authority by-laws and these instructions.

Zip Wall Fountain is designed to recess mount within a wall. The bottom should sit on a supporting flat and level plinth at least 100 mm above finished floor level. The plinth height determines the final height of the drinking bubbler, as the bubbler is fixed at 915 mm above the bottom of the unit.

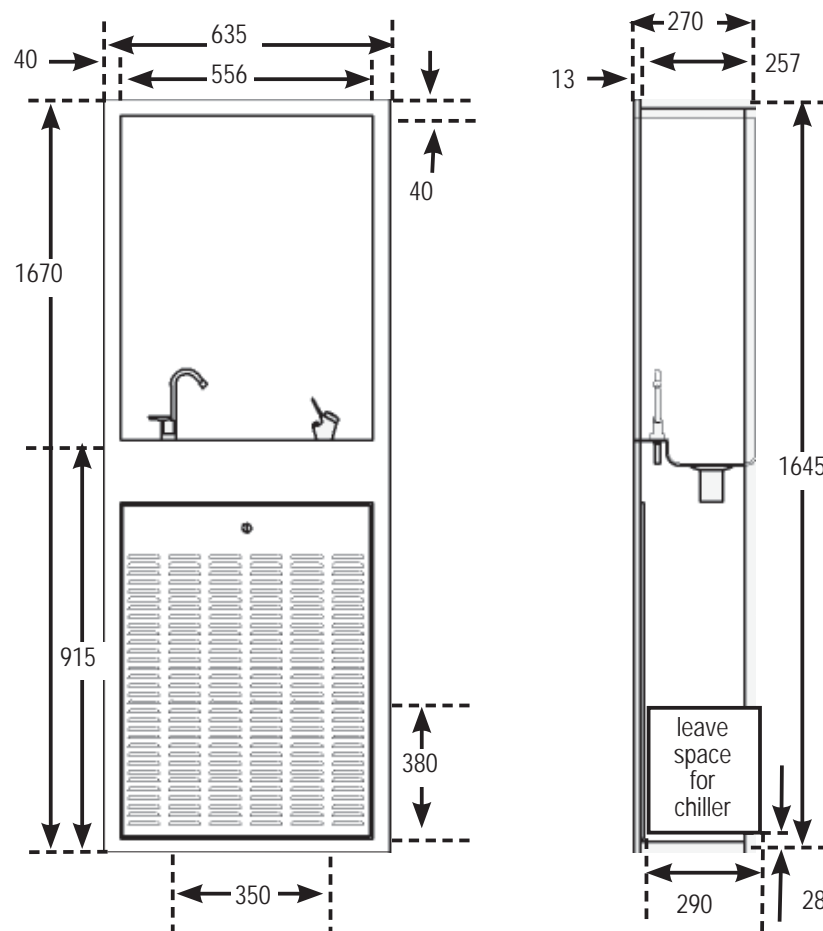
Check that there is enough free space within the wall to allow for the recessing of the unit. The top half recesses 270 mm and the bottom half requires a depth of 350 mm to allow for the chiller and to provide adequate ventilation space.

Wall Cut-out

The cut-out dimensions are 1650 mm high by 575 mm wide.

The Wall Fountain has a 40 mm flange on both sides and the top that could cover any gaps. The bottom front edge has no flange, so the plinth must be finished level and neat as it will always remain visible.

Ensure the cut-out is square and even to allow the Wall Fountain to fit without distortion.



Installation Instructions

Step 1 - Positioning

Fit the Wall Fountain into the opening in the wall push it until the surrounding flange is flush with the front face of the wall. Anchor the Wall Fountain securely to prevent movement.

Step 2 - Connecting

a) Electrical

Have an electrician install a standard 240V 10 Amp power point behind the Wall Fountain within one metre of the floor level. Total load 2.4 amps.

b) Plumbing

Connect to Drainage Piping

Connect the 40 mm PVC drain pipe from the bowl to an appropriate waste in accordance with local by laws.

Keep the drainage piping clear of the chiller space, approx 380 mm above the base tray.

Connect to Water Supply

Install a 1/2" water supply to the area behind the Wall Fountain so that it can be accessed through the front louvered panel. Using the 1/2" compression fitting, connect the valve assembly to the incoming water supply pipe. Don't turn the water on until the chilled water lines are fully installed.

Connect to Chilling Unit

The chiller unit sits on the base tray of the Wall Fountain with the filter on the right side. Allow at least 50 mm all around the unit for free airflow ventilation.

c) Filtration

Connect to Filtration

Zip filter cartridges click in and out just like replacing a simple bayonet light globe. No special tools or skills are required.

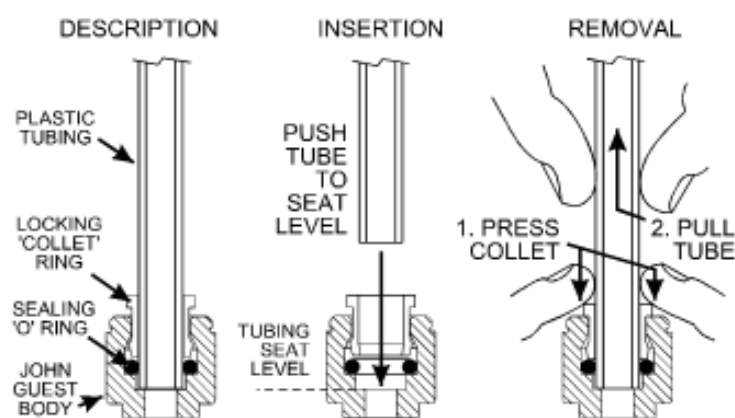
The filter is mounted to the right side of the chiller unit. If not already installed, fit the cartridge into the housing. Write today's date on the label.

Connect to Filtration Unit

Take a 1 m length of 1/4" plastic tubing, and a small brass eyelet insert from the filter kit. Undo the small nut on the end of the valve assembly, taking care to catch the olive located under the nut. Slide the nut and olive over one end of the tube. Push the eyelet insert into the end of the tube. Push the end of the tube with the eyelet into the end of the valve assembly. Tighten the nut finger tight then tighten exactly 1 1/2 turns with a spanner.

Take care when bending rigid plastic tubing to prevent it from kinking or crushing on a bend. Measure and cut the tube to length so that it runs from the valve assembly to the right of the filtration head on the chiller.

Installation Instructions continued



The Zip Wall Fountain uses the 'John Guest' (JG) type push-fit piping connections which are very easy to use. Simply push the square end of the flexible piping into the JG socket and it locks the pipe into place. Once inserted, the pipe cannot be removed without depressing the locking ring collet. See diagram to the left for details.

Connect to Chiller

Take the short length of 1/4" plastic tubing from the filter kit and plug it firmly into the JG outlet on the left side of the filter head. Loop the tube to the top rear of the chiller unit. Insert it firmly into the JG socket labelled INLET.

Connect to Bubbler

Take the insulated tube from the bubbler (and carafe filler if fitted) and plug it directly into the JG socket labelled OUTLET on the tap rear of the chiller unit, next to the inlet.

Connect to PR Valve drain

The pressure relief (PR) valve drain must be plumbed to a suitably safe and visible position, like a tun dish, as per local Water Authority by-laws. Any surge in the mains water pressure can then be safely vented away.

If the Wall Fountain is fitted with a vented carafe filler, this can be used as the vent from the PR valve drain if you wish. In this case, the carafe filler is supplied with three tubes coloured clear, blue, and red. The clear and blue tubes are cut short and joined together in a JG tee connector. The third arm of the tee is blocked off.

Take the second 1 metre length of 1/4" plastic tubing and the second small brass eyelet insert from the filter kit. Undo the small nut on the PR valve, taking care to catch the olive located under the nut. Slide the nut and olive over one end of the tube. Push the end of the tube, with the eyelet, into the PR valve drain outlet. Tighten the nut finger tight then exactly 1 1/2 turns with a spanner.

Measure, cut and run the tube to an appropriate waste point.

To use the carafe filler as a vent for the PR valve drain, remove the block from the JG tee in the blue and clear lines of the carafe filler and connect the vent pipe to the tee in its place.

Step 3 - Commissioning

Fill the system

Turn 'ON' the water supply. Check the connections for leaks. Repair any found.

The filter, tubing, chiller and water lines are full of air until purged. Push the button on the bubbler until all of the air has been purged from the system. You may notice a white milky colour in the water. This is normal discharge from a new filter cartridge. It will stop after a few litres have passed.

Complete the Installation

Plug in and turn 'ON' the power. The chiller takes up to 20 mins to chill its contents to <math><10^{\circ}\text{C}</math>.

Remove the protective paint and plastic wrapping from the stainless steel surfaces.

Wipe clean and dry the area. Dispose of packaging wisely.

Operating Procedures



Operating the Bubbler:

Chilled water is obtained momentarily by pressing the bubbler button, (as shown).

The water is chilled by a refrigeration unit fitted within the cabinet stand, under the basin.

Operating the Carafe Filler:

You can obtain filtered water within the rated capacity for as long as you rotate the lever. In the upright position the tap is off, when the lever is rotated anticlockwise water will flow. Water will continue to flow until the lever is returned to the upright position.



Service

There are no user serviceable parts but there are dangerous voltages present within the unit. All service work must only be carried out by a suitably qualified and experienced service person.

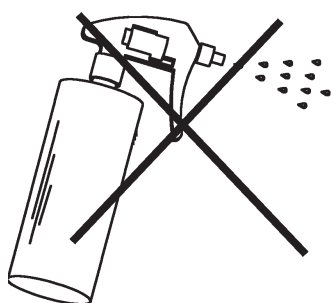
Before calling for service, check that both the water and electricity supplies are turned 'ON' and OK.

Call an electrician, a plumber, or Zip for a free call in Australia on 1800-638-633 for assistance, service, spare parts or enquiries.

Troubleshooting

Problem	Cause	Remedy
No water at outlets	Water not connected	Connect and turn on water
Water not chilled	Power not connected	Connect and turn on power
Poor flow at outlet	Blocked filter	Replace filter

Cleaning



Never use strong, corrosive or abrasive cleaning materials.

Wipe clean the outer surfaces with a sponge or a soft cloth using a mild soap and water.

The basin is made of stainless steel that will show scratches if an abrasive cleaning product is used. If this model has a stainless steel case, it too will show scratches if an abrasive cleaning product is used.

End of Life Disposal

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact Zip customer services for advice on 1800 460 222.

NOTES

Contact Details

Head Office

Zip Heaters (Aust) Pty. Ltd.
ABN 46 000 578 727
67 Allingham Street
Condell Park NSW 2200
Postal: Locked Bag 80
Bankstown 1885 Australia

Website: www.zipheaters.com
Facsimile (02) 9796 3858
Telephone (02) 9796 3100
Free Call 1 800 638 633

As Zip policy is one of continuous product improvement, changes to specifications may be made without prior notice. Images in this booklet have been modified and may not be true representations of the finished goods.

