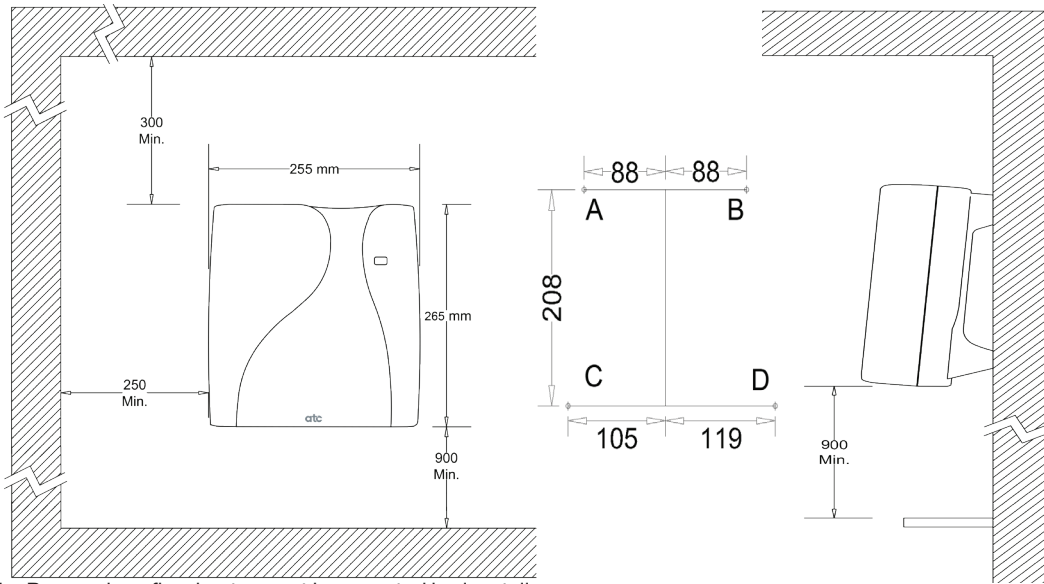


## Installation

**Clearance required:** 300mm above the heater to the ceiling, 250mm to the side of the heater. 900mm to the floor and to any shelf below the heater.



The Bavaro downflow heater must be mounted horizontally with the air outlet and grille pointing downward.

- To remove the cover of the heater, undo the 2 locking screws at the top of the heater and rotate the cover forwards being careful not to damage the hinge at the bottom of the heater.
- Using the dimensions shown above, mark the top 2 holes (A & B) on the wall. Drill and install the mounting plugs and partially install the screws for the holes A & B.
- Hang the heater on the screws and move the product through the Z locking shape shown in figure 1. Once the product is in position mark the two holes in the bottom legs (C&D), and then remove the heater.
- Drill holes C & D and install the mounting plugs; then re-install the heater and tighten up all 4 screws (A,B,C & D)
- Feed the supply cable through the cable inlet at the top of the heater and secure it using the cable clamp supplied, leaving sufficient slack on the cable to connect to the terminals on the Printed Circuit Board (PCB), [the cable used to supply the heater should be at least 1.5mm<sup>2</sup> two core.]
- Connect the Live (Red or Brown) cable to the terminal marked "L" and the Neutral (Blue or Black) cable to the terminal marked "N", see Figure 2. Ensure that there are no strands of cable left protruding from the terminal blocks. As the Bavaro downflow heater is a double insulated appliance the Earth cable should not be connected and if present should be terminated in a connector and wrapped in electrical tape to prevent nuisance tripping.
- Refit the Cover by inserting the two hooks at the base of the cover into the corresponding pockets and rotate the cover. The cover should smoothly fit over the internal components, if the cover does not easily close, check that the PCB is firmly seated in its slot and that the supply cables are not obstructing the cover. Once the cover is closed, insert the screws being careful not to over tighten.
- The Bavaro downflow heater is now ready to use and the power supply can be turned back on.

**NOTE:** Do not operate the downflow heater without the cover in place.

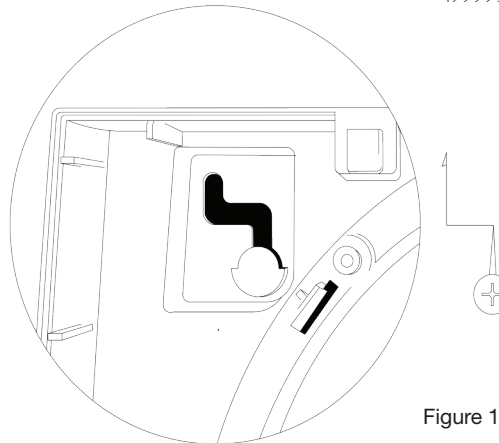


Figure 1

## Operation

The Bavaro downflow heater is fitted with a pull-cord and electronic micro switch to operate the appliance. To activate the switch, gently pull the cord until the switch clicks on and the heater operates.

The first pull of the cord will operate the heater at 1kW showing a yellow indicator light, the temperature probe sets the temperature limit to 30°C.

A second pull of the cord will bring the heater on at 2kW with a red indicator light, the temperature probe sets the temperature limit to 45°C.

To turn the heater off pull the cord a third time and the Bavaro heater will turn off the heating elements and enter cool down mode; the elements are turned off and the light flashes green. Once the unit is cooled down sufficiently it will turn off completely.

The Bavaro downflow heater also has a built in 1/2 hour run back timer. At the end of the run back period the heater will turn itself off and cool down. If the operation

of the heater is adjusted during the run-back period then the heater defaults back to the full 30 minute countdown duration.

## Maintenance

**CAUTION:** Prior to performing any maintenance or cleaning of your Bavaro Downflow heater always disconnect the electrical supply for the heater at the adjacent double pole switch.

To clean the outside of the downflow heater wipe it down regularly with a soft damp cloth. Do not use any use harsh chemicals, abrasive, acid or alkali based cleaning products as they can damage the finish of the downflow heater. If using a chemically impregnated cloth, test on an inconspicuous area prior to use to test for suitability.

Ensure that any dust or fluff does not build up on the air inlet to the heater or on the outlet. Build up of dirt and fluff will cause the unit to overheat and trip out. It is recommended to regularly vacuum both the inlet and outlet of the heater when any dust or fluff builds up.

## Safety Features

### Electronic Temperature Sensor.

The Bavaro Downflow heater continually monitors the air temperature inside the heater to detect if it is overheating. In the event that the downflow heater overheats the electronic sensor will turn the heater off automatically. To reset the electronic sensor, turn the power off to the heater from the adjacent double pole switch, identify the cause of the over heating and rectify if possible (See Maintenance section). Ensure that the heater has cooled sufficiently and then re-energise the power supply. Pull the cord to restart the heater. Should the heater not restart check the element thermal cutout or element thermal fuse (Electrician required).

### Element Thermal Cutout.

The element in the Bavaro Downflow heater is equipped with a self resetting high level bi-metallic thermal cutout. The thermal cutout will turn the element off if it overheats; once it cools down it will reset and continue to heat. If you experience the element running cold when the indicator light is yellow or red then it is likely that the thermal cutout has tripped. Wait until the unit has cooled down and identify the cause of over heating (see above). If the unit still blows cold then check the element thermal fuse (Electrician required).

### Element Thermal Fuse.

In addition to the element thermal cutout there is a thermal fuse built into the element, this is provided as a supplementary layer of safety, if the fuse blows and is open circuit, it can only be as a result of an irregular operating condition such as repeated overheating. If the thermal fuse is blown then the element will require replacement. Please contact the location where your appliance was purchased or sales@atc.ie for further details.

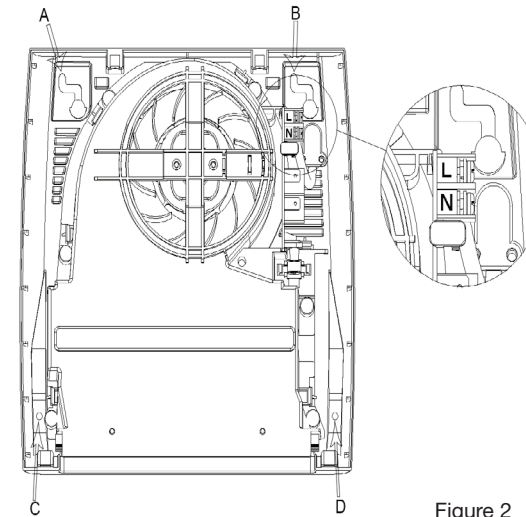


Figure 2

## Warranty

ATC Electrical and Mechanical provides a one year limited parts warranty for the Bavaro DF2000 Downflow heater as long as the unit has been installed, used and maintained in accordance with the information provided in this manual.

In order to arrange parts for the heater, the information listed below is required. It is recommended to write this information below and keep this instruction manual in a safe place.

Serial Number: \_\_\_\_\_ Date of Manufacture: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_ Location Purchased: \_\_\_\_\_

## End of life & Recycling



Waste Electrical and Electronic Equipment (WEEE) must never be placed in any household wheeled bins. WEEE is taken back free of charge at electrical retail outlets on a one-for-one like-for-like basis.

Local authority civic amenity facilities also take back WEEE free of charge.

Do not dispose of this downflow heater with household waste.

## Specifications

Dimensions DxWxH (mm)	133x255x265
Weight (Kg)	1.36
Output stages ½ / Full (kW)	1kW / 2kW
Approvals	GS CE ErP
IP Rating	22
Connection Voltage	220-240vAC

Model	Bavaro DF2000		
Item	Symbol	Value	Unit
<b>Heat Output</b>			
Nominal heat output	$P_{nom}$	2.0	kW
Minimum heat output (indicative)	$P_{min}$	1.0	kW
Maximum Continuous heat output	$P_{max,c}$	2.0	kW
<b>Auxiliary Electrical Consumption</b>			
At nominal heat output	$e_{lmax}$	0.0	kW
At minimum heat output	$e_{lmin}$	0.0	kW
In standby mode	$e_{lSB}$	0.00046	kW
<b>Type of Heat output/room temperature control</b>			
With electronic room temperature control			Yes
<b>Contact Details:</b> ATC Electrical & Mechanical, ATC house, Broomhill drive, Tallaght, D24 EF99			

## ATC Bavaro Downflow Heater Installation and Operation Manual: DF2000

### IMPORTANT SAFETY INSTRUCTIONS

These instructions should be carefully read before installation and retained by the user. The booklet must be kept and delivered to the new user in case of disposal of the heater. The Manufacturer reserves the right to vary the features of the product without prior notice. The technical data are indicative only.

- This product is only suitable for well insulated spaces or occasional use.
- This heater is intended solely for the use it has been designed for, namely space heating. The Manufacturer or Distributor is not responsible for any damage that could happen due to improper use.
- After unpacking make sure that the heater is complete and shows no signs of tampering or any visible damage.
- Keep packing materials, which are potentially dangerous, away from children.
- The heater can be used by children of at least 8 years (as well as by persons with reduced physical, sensory or mental capabilities, or lack of experience or required knowledge) provided that they are under supervision, or after they have been instructed relating to the safe use and have understood the potential dangers. Children should not play with the Heater.
- Cleaning and maintenance must be performed by the user and not by unsupervised children.
- Children of less than 3 years should be kept away unless continuously supervised. Children aged from 3 years and less than 8 years shall only switch on/off the heater provided that it has been installed in its intended normal operating position and they have been given instruction concerning use of the heater in a safe way and understand the hazards involved, children should always be supervised.
- Children aged from 3 years and less than 8 years shall not plug-in, regulate, clean the heater or perform maintenance.
- Before connecting the heater make sure that the voltage is the same as indicated on the device rating label.
- Do not use in presence of gas, inflammable or explosive liquids or substances as defined in BS5345.



### Warning

Some fundamental rules which apply to all electrical devices must be observed when using the heater:

- Do not touch the heater with wet hands.
- Do not handle the heater when you have bare feet.
- Do not let children play with the heater.
- Do not put any objects or containers susceptible to heat in the path of the airflow, e.g. aerosol cans or flammable liquids.
- Do not make any modification to the Heater.
- Keep connections dry.
- Always disconnect the heater before doing any maintenance.



### Caution

- Some parts of this product can become very hot and may cause burns. Particular attention must be given where children and vulnerable people are present.
- The image shown to the left is the Do not Cover symbol; this symbol is printed on the heater to remind the user to ensure that the heater is not covered and to not obstruct the airflow around the heater, items such as Curtains or Furniture could cause the unit to over heat and may be a risk of Fire.
- Suitable for indoor use only.



- As this device is supplied without any connection cables it should therefore be fitted by a qualified and competent electrician in accordance with the IEE wiring regulations.
- A suitable termination to the fixed wiring of the premises must be provided adjacent to the heater using a suitably rated double pole disconnection switch with a minimum of 3mm contact gap and protected by an appropriately rated circuit breaker or RCD.
- If this heater is installed in a bathroom it must be supplied from a circuit that is protected by a high sensitivity RCD with a maximum rating of 30mA.
- Do not connect the power supply to the heater through an external control device such as a timer or thermostat. If the power supply is turned off whilst the unit is heating it will cause the heater to trip out the thermal cutouts or thermal fuse. Should the thermal fuse is blow the heating element will need to be replaced.
- Do not install on flammable materials.