



Vertigo Water Heater




DOCUMENTATION FOR INSTALLATION AND OPERATION

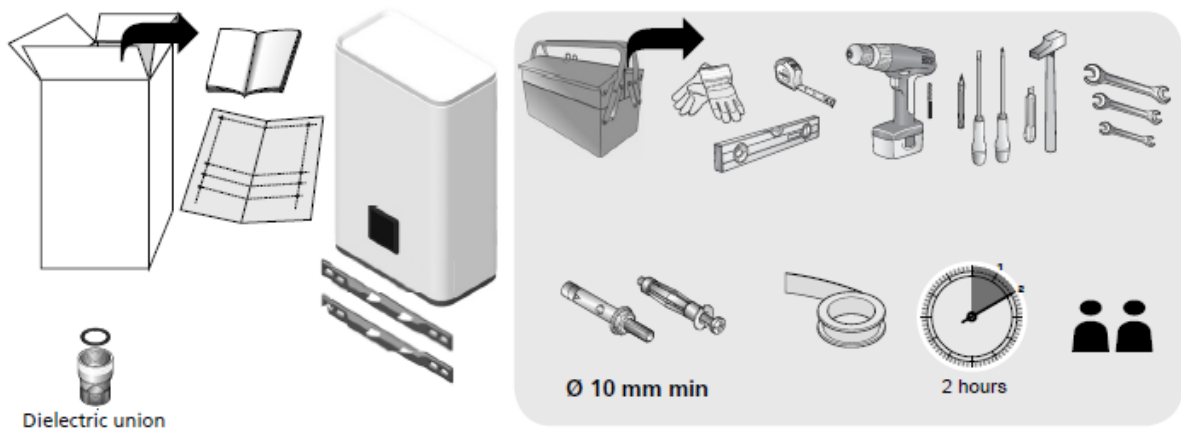
IMPORTANT: For Vertical or Horizontal installation remove hex head screws at the rear of the unit and replace with the countersunk socket screws provided.

INDOOR INSTALLATION ONLY



INSTALLATION AND OPERATION SET UP

Model	Max Power Output (W) (Bt)	Voltage (V~) (B)	Water Connexions			 230
Model 30 (25 Litre)	1000	230	1/2"	p. 3/4	p. 5	p. 6
Model 50 (40 Litre)	2250	230	1/2"	p. 3/4	p. 5	p. 6
Model 80 (65 Litre)	2250	230	1/2"	p. 3/4	p. 5	p. 6
Model 100 (80 Litre)	2250	230	1/2"	p. 3/4	p. 5	p. 6



WARNING

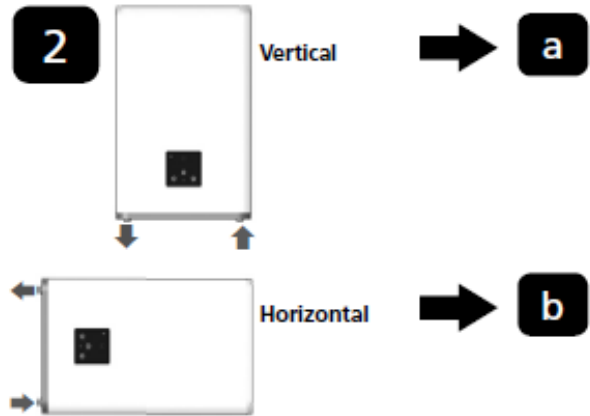
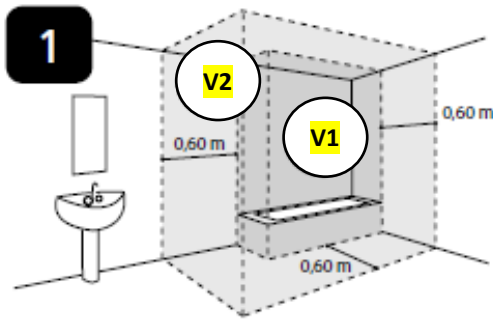
This device is not intended for use by persons (including children) with physical, sensory or mental disability, or by persons lacking experience or knowledge, unless they have received from a person in charge of their safety adequate supervision or preliminary instructions on how to use the device. Care must be at all time to keep children from playing with the device.

CAUTION

Heavy item, handle with care

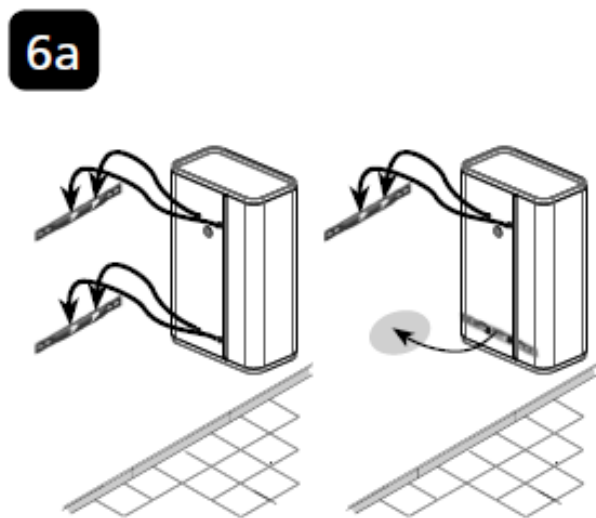
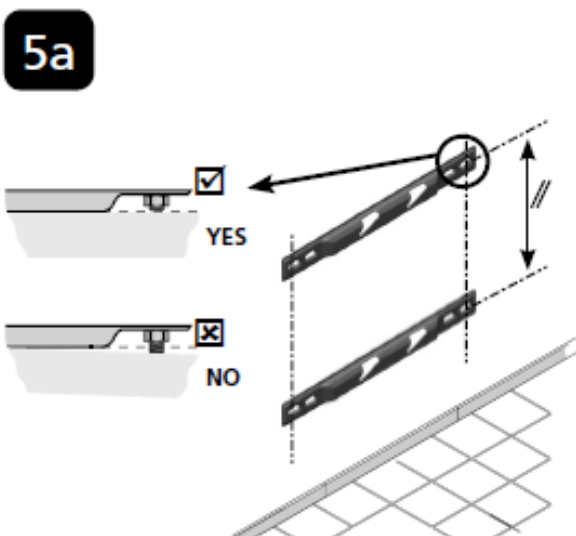
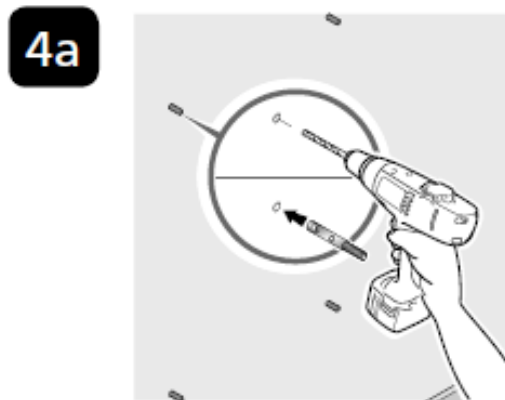
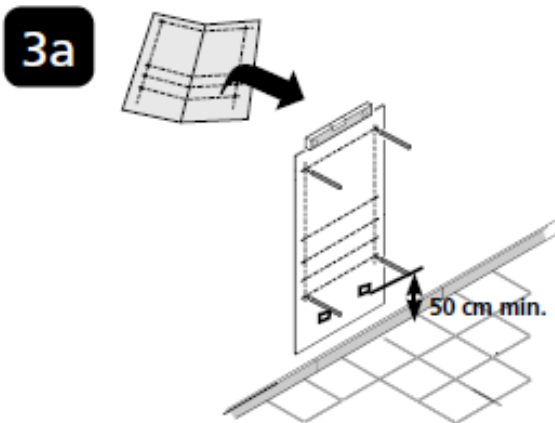
- Install the appliance in a room that is protected from frost. If the appliance is damaged because the TPR valve safety device has been blocked, it is not covered by the warranty.
- If the appliance is to be fitted in a room or location where the ambient temperature is higher than 35°C, sufficient ventilation must be provided.
- It is compulsory to fit a drip tray below the water heater if mounted in a suspended ceiling, under a roof or above living areas. Position the appliance where it can be accessed.
- Make sure that the wall on which the appliance is mounted can support the weight of the appliance when filled with water.
- This device is intended for use at a maximum altitude of 3000m.
- When installed in a bathroom, **do not install in volume V1 or V2 as shown in the diagram on page 3**

WALL MOUNTED INSTALLATION GUIDES

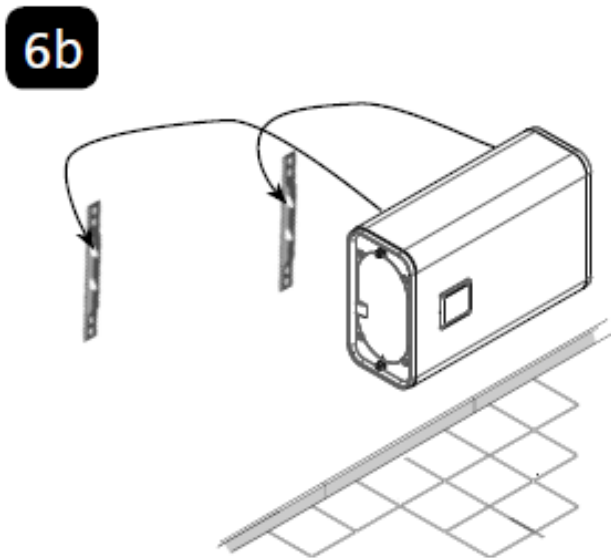
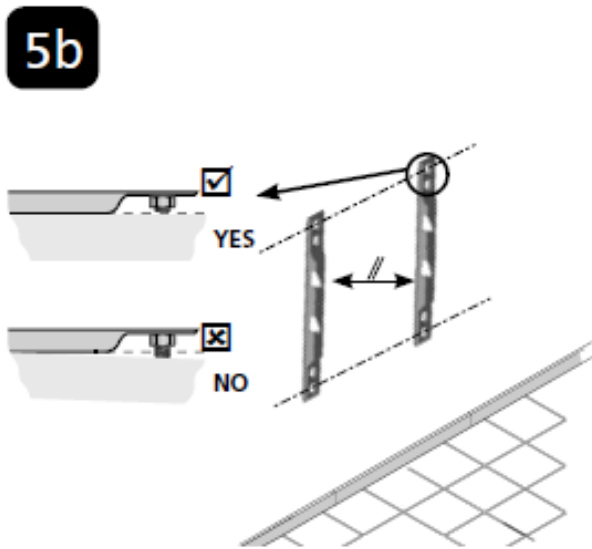
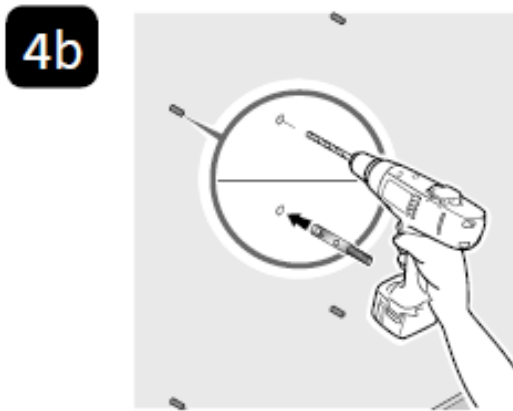
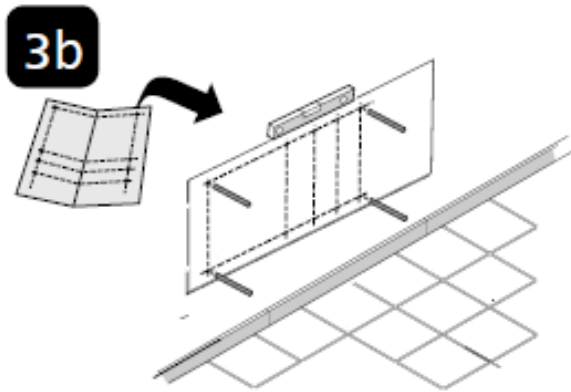


IMPORTANT: REMOVE HEX HEAD SCREWS FROM BACK OF UNIT AND REPLACE WITH COUNTERSUNK SOCKET SCREWS PROVIDED

a. Vertical Wall Mounting Guide



b. Horizontal Wall Mounting Guide

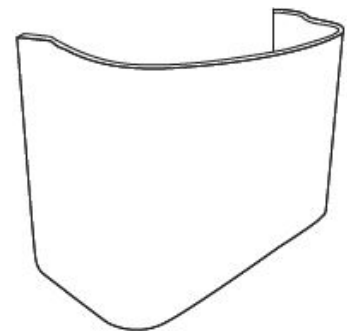


Installation

Installation must comply with AS/NZS 3500.4.2 and all local codes.

The clearance required needs to be adequate for service/replacement of cold water inlet piping devices, TPR valve and tempering valve, elements and thermostats. This may be facilitated by correct orientation of the cover positions when installing. There are no operational clearance limitations to surrounding structure.

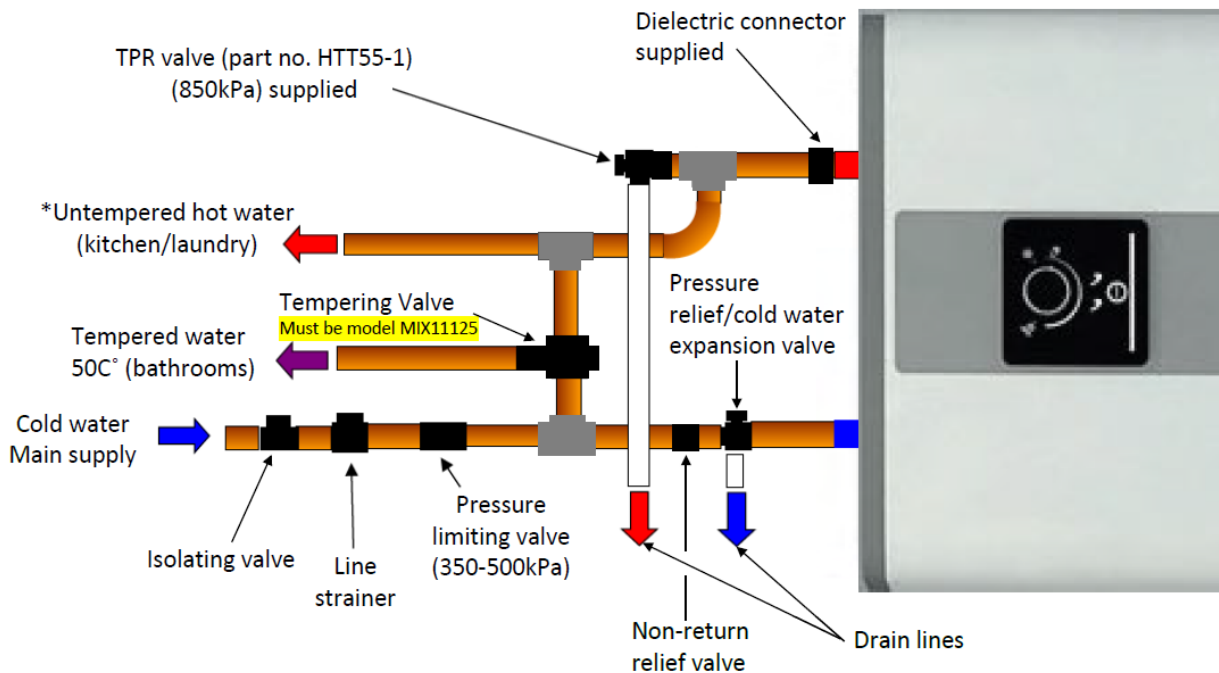
TPR valve removal requires up to approximately 170mm for easy withdrawal. The plumbing cover (shown to the right) is available for aesthetic purposes and comes in two sizes; 150mm and 300mm in length.



Combustible Material

It is recommended not to place combustible material on or adjacent to the water heater.

HYDRAULIC INSTALLATION DIAGRAM - VERTICAL & HORIZONTAL



*Please check your local council's regulations regarding untempered water supply.

Hydraulic Connection

Before making the hydraulic connection, it is essential to clean the feed pipes thoroughly to avoid the risk of metal or other particles entering the tank or water heater.

Mandatory installation of a safety TPR valve in a frost free location (or any other new device which limits the tank pressure) to 850kPa according to the nominal pressure, with a size of $\frac{3}{4}$ " on the input of the water heater, respecting the local regulations.

Regularly operate the discharge of the TPR valve to prevent scaling and check that it is not blocked.

The pipes used must support MPa (10 bar) and 100°C.

Cold Water Inlet

Cold water piping should be provided with a 350-500kPa pressure limiting valve at the point of cold water connection to the water heater. In addition to the pressure limiting valve, it is a requirement of AS3500.4 and NZBC G12 that both an isolating valve and a line strainer are installed upstream of the water heater. A non-return relief valve must be fitted upstream of the pressure relief/cold water expansion valve.

No parts (stop valve, pressure reducer, etc) must be placed between the pressure relief/cold water expansion valve and the cold water inlet of the water heater, apart from a copper pipe. Ref. AS/NZ 3500.4, 5.9.4 (e) and (f) G12 6.6.6.

Note: Since limited water discharge from the pressure relief valve is normal in the heating operation, the discharge pipe needs to be connected to an external drain.

Hot Water Outlet

Where a maximum hot delivery temperature is specified by local, state or federal regulations, a tempering valve shall be installed at the hot water outlet, as required.

The supplied temperature & pressure relief (TPR) valve must be installed as shown in the hydraulic schematic. The TPR valve should be connected to a drain point to accommodate discharge as a result of both water expansion during heating and also pressure fluctuations.

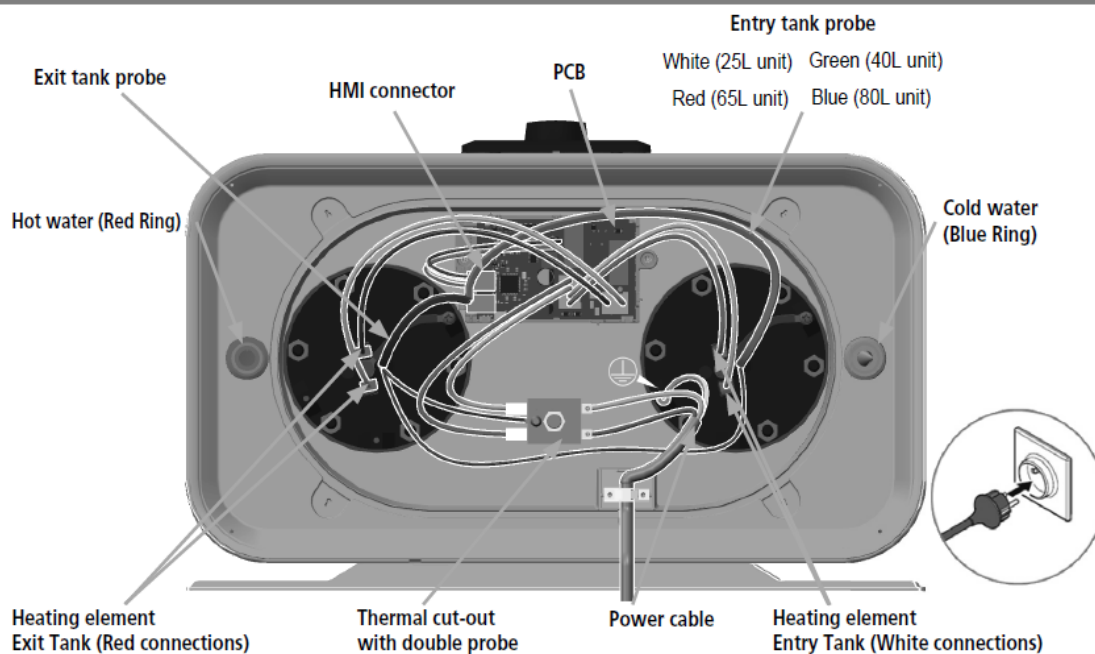
The supplied PTR valve must be fitted with Teflon tape – **do not use paste or hemp or other thread sealers.**

DN15 copper drain lines must be connected to the discharge pipe of the TPR valve. The copper drain line must fall away from the water heater and be installed in a frost-free environment.

The termination point of a drain line must comply with the requirements of AS/NZS 3500.4

WARNING: The TPR valve and drain line must not be sealed or blocked.

ELECTRICAL INSTALLATION



Electrical Connection

All electrical work must be carried out by a registered electrician and in accordance with AS/NZS 3000.

The Atlantic Vertigo water heater must be filled with water before connection to a power supply.

Switch off the power before removing the cover to avoid any risk of injury or electric shock.

The installation must be equipped, upstream of the appliance, with a bipolar cut-out device (fuse breaker switch) respecting local regulations (30 mA earth-leakage breaker).

Always connect the earth conductor of the cable to the earth ground dire or connect the earth conductor to the appropriate terminal identified by the symbol.

Thermal Cut-out

All Atlantic Vertigos are equipped with a thermal cut-out with manual resetting which shuts off the power to the water heater if it becomes overheated. If the circuit breaker keeps tripping:

- a) Switch off the power before taking any further action
- b) Remove the cover
- c) Check the electrical connections

If the cut-out continues to trip, replace the thermostat. Never by-pass the safety device or the thermostat. Connect the power supply only via the terminal.

The thermal cut-out fitted to the auxiliary electric heating element must be replaced by an authorized agent. Failure to respect this clause invalidates the warranty.

DANGER: The operation of the thermal cut-out indicates a possibly dangerous situation. Do not reset the thermal cut-out until the water heater has been serviced by a qualified person.

SETUP & OPERATION

- **NEVER POWER THE WATER HEATER WITHOUT WATER:** Models with an electric heating element will certainly be damaged.
- Fill the tank completely. Before powering up, open the hot water taps, drain the pipes in order to empty any air.
- Check the tightness of the tubes and of the flange seal under the plastic cover. In case of leaking, tighten moderately. Check the operating of the hydraulic components and of the safety valve (TPR).
- Turn the power on. After 15 to 30 minutes, depending on the capacity of the water heater, the water should drip from the drain. This is normal due to the expansion of water.
- Check connection leaks and seal. During heating and according to the water quality, hot water tanks can make a bubbling noise. This noise is normal and does not indicate any defect of the unit.

The water heater features a digital screen that allows choosing the running mode (see DIGITAL USER INTERFACE diagram on page 8 below).

- 1) **Mode selection knob (Ref. A):** Enables to choose the running mode.
- 2) **Operating modes:**
 - **FROST FREE Mode (Ref. B):** Automatic regulation at frost-free temperature (7°C), in order to reduce the electric consumption during periods of absence of the user.
 - **MANUAL Mode (Ref. C):** User selects a hot water temperature up to 70°C. **Warning: this operating mode may increase the electrical consumption of the product.**
 - **SMART Mode (Ref. D):** Fully automatic operation of the water heater: after a learning period, the unit will automatically adjust the hot water temperature adapted to the user consumption. This allows lowering the electrical consumption.
 - **BOOST Mode (Ref. E):** Soft touch button to activate fast heating of the appliance. The BOOST mode is automatically deactivated when full hot water is available. **NOTE: no BOOST on the 25 litre model**
- 3) **Shower display (Ref. F):** Displays the quantity of hot water available. When a shower symbol is blinking, this means that a shower is in the process of heating.
- 4) **Power indicator (Ref. G):** This light appears when the water heater is connected to a power supply

DIGITAL USER INTERFACE



TROUBLESHOOTING

When a malfunction occurs, the user interface of the appliance can display an error code.

	Meaning	Remark
<p>2 successive flashes of one shower sign, 3 sec. of pause, 2 successive flashes ...</p> 	Error 3 : Probe fault	Change probe
<p>2 successive flashes of 2 shower signs, 3 sec. of pause, 2 successive flashes ...</p> 	Error 3 : Probe fault (Differentiation)	
<p>4 successive flashes of one shower sign, 3 sec. of pause, 4 successive flashes ...</p> 	Error 9: Relay or PCB fault	Change PCB

Flushing of Sediment and Draining

To flush or drain the water heater, power must be turned off, then turn off the cold water supply to the unit. The lever on the TPR valve should be opened but care should be taken to the lever does not snap back as it could damage the valve seat. The pressure in the water heater will be released when the lever is opened. The union at the cold water inlet to the water heater should be undone and a hose should be attached to the water heater side of the union. The other end of the hose should go to a drain.

Opening the TPR valve allows air into the water heater and for the water to drain. Following complete draining of the water heater, the closest hot water taps may be opened fully and the TPR valve closed with care. Following reconnection at the cold water inlet, the cold water stop valve is now opened fully and the water heater may be filled with cold water and flushed through to ensure the cylinder contains no sediment and is clean. Finally the closest hot taps are closed and power may be turned on again to the completely filled water heater.

In the event of an anomaly – the heater does not heat or steam is released from the TPR valve – switch off the electric power supply and contact your reseller.

Domestic/User Maintenance

Water heaters do not require much domestic maintenance by the user. Operate the TPR valve once a month to eliminate any residue of scaling and check that it is not blocked. Open and close the TPR valve slowly to avoid damage to the seal.

WARNING: Failure to operate the TPR valve at least once every six months may mask a problem with the water heater. Continuous leakage of water from the TPR valve may indicate a problem with the water heater. Any damage caused due to not regularly operating the TPR valve may invalidate the warranty.

It is not unusual for the TPR valve to allow a small quantity of water to escape during the heating cycle and this must be left open to the atmosphere.

Maintenance by a qualified person

Remove the scale sludge. Do not scrape or chip at lime scale deposited on the casing because this may damage the lining. Change the magnesium anode every 2 years or when its diameter is less than 10mm. Changing the heating element or the anode requires the water heater to be drained and the seal changed.

Draining the Tank

Turn off the power and the supply of cold water. Open the hot water faucets and manipulate the safety TPR valve before performing these operations. Refit the heating element and tighten the screws gently (opposite screws in sequence). Check for leaks the next day and tighten if required.

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or approved service agent.

Replacement Parts

Replacement parts are the thermostat, seals, heating element, boiler shell, indicator light, magnesium anode and connection cable. The warranty requires genuine manufacturer's parts to be used.

Warranty Conditions

- 1) The Atlantic Vertigo water heater must be installed to plumbing and electrical services that meet all relevant statutory and local requirements of the region in which the system is installed. Relevant clauses of AS/NZS 3500 Plumbing & Drainage Code and NZG12 NZBC, must be complied with by the installer.
- 2) The Atlantic Vertigo water heater requires a single phase 16 amp supply requiring a licensed electrician for connecting. A licensed plumber must connect cold water and hot water supplies in accordance with this manual. The installers must comply with good practice, applicable installation standards and Atlantic New Zealand's technical instructions included in this manual.
- 3) The Vertigo water heater must be regularly operated and maintained in accordance with the service & maintenance in accordance with this manual. Supporting evidence by a service agent report or receipt invoice detailing maintenance history would be required with any claims under this warranty. Should this water heater be installed in a regional location where regular flushing is required due to sediment build up, then a drain cock or tee for flushing must be fitted at the time of installation. If in doubt consult your installation contractor.
- 4) The Vertigo water tank warranty is valid for 7 years in domestic installations and 5 years in commercial. Steatite elements are warranted for 3 years. Other electrical components have a warranty of 2 years for domestic installations and 1 year for commercial. There is a 2 year warranty on tank labour for domestic installations and 1 year for commercial. All other parts and labour are covered for 1 year.
- 5) Our warranty takes effect from the date of purchase (according to invoice) and where there is no documentary evidence, the date used will be that of manufacture as shown on the water heater information plate, plus six months. The warranty on the replacement part or water heater (under warranty) ends at the same time as the part or water heater is replaced. Internet registration must be completed for warranty protection.
- 6) This warranty takes the form of repair or determined by Atlantic NZ in the form of exchange or supply, free of charge, excluding all labour and transport replacement charges.
- 7) These warranty conditions do not exclude any of the benefits due to the purchaser that may be conferred by Trade Practices and Consumer Guarantees Law and associated articles in the country of installation.

PLEASE NOTE: If a service call is requested and it is found that the defect is not a Warranty fault, the purchaser may be charged for associated Warranty/Service call out costs even during the Warranty period.

Faulty Maintenance Voiding Warranty

- Abnormal scaling of heating elements or safety TPR valve
- No maintenance of safety TPR valve leading to excess pressure
- Modification of equipment without notifying the manufacturer
- Use of spare parts not recommended by manufacturer

Warranty Exclusions

The following warranty exclusions may cause the Atlantic Vertigo water heater warranty to become void. This may also incur a service charge and cost for parts should they be necessary.

- 1) Any physical damage caused by impacts or falls when the water heater is handled after leaving the factory.
- 2) Where service is required to reconnect the water heater operation due to problems related with abnormal water supply (i.e. high water pressure above 1000 kPa before system pressure relief), faulty plumbing supply or downstream connection and/or electrical wiring or major variations in electrical energy supply.

- 3) Where a 350-500 kPa pressure limiting valve as shown in the hydraulic installation diagram has not been fitted during installation
- 4) Where the water heater fails due to misuse, accidental damage, acts of God, incorrect installation including being located in premises affected by frost or bad weather conditions (humid, harsh or badly ventilated atmospheres) or unlicensed service repair work.
- 5) Any damages resulting from power surge from supply such as accidental high voltage injection or lightning strike.
- 6) Damage resulting from non-detectable problems due to the inaccessible location of the water heater and that could have been avoided by immediately repairing the device if properly located.
- 7) Claims for damage to walls, foundations (outside), floor coverings and furnishings (inside), roofs or other losses, directly or indirectly due to leakage for the Atlantic water heater.
- 8) Where the Atlantic water heater has been powered up before it has been filled (heating when dry).
- 9) Where the Atlantic water heater has suffered external corrosion due to non-watertight piping connections
- 10) If the system is either sold and/or repaired or altered by any third party without the consent of Atlantic New Zealand.
- 11) Does not cover fair wear and tear, particularly from adverse conditions, for example; corrosion and associated levels of condensation in the proximity of the water heater.
- 12) Exclusions due to water composition.

Water composition varies widely in New Zealand. It is important that the composition of water is not excessively high in salt which may result in an aggressive attack of calcium carbonate (also known as water hardness). Atlantic's warranty is therefore excluded where the water composition is outside these values:

Total dissolved solids	>1000 mg/litre or p.p.m.
Electrical Conductivity	< 500 and > 800 uS/cm.
Total hardness	<150 mg/litre or p.p.m.
Chloride	>250 mg/litre or p.p.m.
Sulphate	>250 mg/litre or p.p.m.
Magnesium	>10 mg/litre or p.p.m.
Sodium	>150 mg/litre or p.p.m.
pH	< 6.5 and > 8.5

Water from springs, bores and dams is also excluded from meeting Warranty conditions because of the rapidly variable composition of these waters due to groundwater salinity and aggressive mineralisation. Water MUST be from a supplied, reticulated source or from rainwater to ensure Warranty compliance.

Warranty

Water Heater Tank – Domestic	7 years
Steatite Element - Domestic	3 years
Electrical components – Domestic	2 years
Tank labour – Domestic	2 years
All other parts and labour - Domestic	1 year
Water Heater Tank – Commercial	5 years
Steatite Element - Commercial	3 years
Electrical components – Commercial	1 year
Tank labour – Commercial	1 year
All other parts and labour - Commercial	1 year



FOR INFORMATION, REPAIRS AND SERVICE

ATLANTIC NZ, Distributed By Superheat Ltd: 0800 422 000

For Warranty Registration, email atlantic@superheat.nz