

**Rinnai**

# Owner and installer guide

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## Boil & Brew electric boiling water dispensers

### Boil & Brew models:

5 L (RBBW0500), 10 L (RBBW1000),  
15 L (RBBW1500), 25 L (RBBW2500)



### Installer

Please leave this guide with the owner as it contains important safety and warranty information.

## Important:

Rinnai Boil & Brew units shall be installed in accordance with:

- Manufacturer's installation instructions
- Current AS/NZS 3000 and AS/NZS 3500
- Local regulations and municipal building codes

Installation, servicing and repair shall be carried out only by authorised personnel.

Owner, please retain this guide for future reference.  
Installer, please leave this guide with the owner.

### Warning

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

The appliance is not to be used 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.

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For more information about buying, using, and servicing of Rinnai appliances call: 0800 RINNAI (0800 746 624)

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[www.youtube.com/rinnainz](http://www.youtube.com/rinnainz)  
[www.facebook.com/rinnainz](http://www.facebook.com/rinnainz)

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# About your Rinnai Boil & Brew



The Rinnai Boil & Brew is a permanently plumbed, wall-mounted electric water heater with an insulated hot water container. Water is heated by an electric heating element and the temperature is controlled by a thermostat. As boiling water is drawn off, the unit refills with cold water. Any steam generated during the heating cycle is condensed and retained within the unit.

The easy to use lever tap is positioned far enough away from the spout to ensure steam-free handling. The spout is designed to minimise splashing when dispensing water.

## Automatic reheating

Once installed the filling and heating cycle is completely automatic.

## To use

Place a cup under the outlet spout and pull the tap handle down. The tap handle is spring loaded, when released it will spring back to the off position.

If for some reason you need to dispense a large volume of water or empty the unit the tap handle can be pulled up and locked into a continuous flow position.

## Switching off

If not connected to a timer we suggest switching the unit off if not being used for a period of time, for example over a weekend.

## When not in use

If the unit has been switched off for a long period of time (for example, for over a week) it is advisable to draw off the water in the unit. This will ensure freshly boiled water, not stale water, is used to make your drinks.

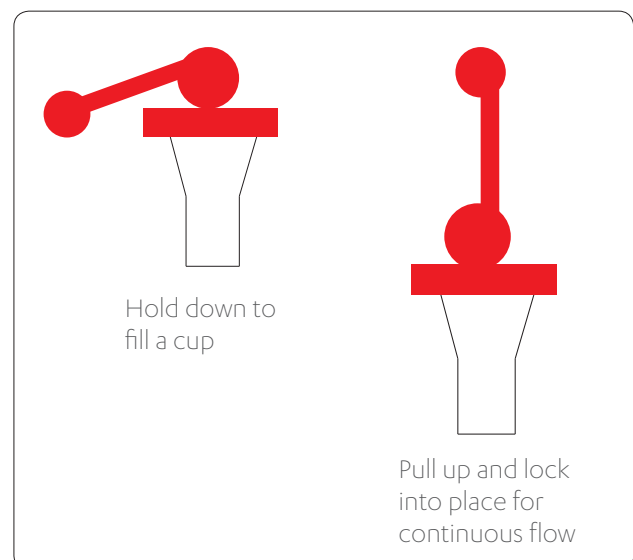
Similarly, if left unused it is possible that some scale residue will collect in the outlet tap. This will cause the outlet water to appear milky for a short while. If this occurs it is recommended that the first few cups are drawn off and discarded.

## Areas prone to freezing

Care must be taken to prevent the unit freezing. If thought to be frozen it must not be switched on. It must be left to thaw and must be inspected to ensure it is undamaged before use.

## Installation by a licensed tradesperson

Only a licensed tradesperson can install, adjust, maintain, and service the Rinnai Boil & Brew. Any work carried out by a non-licensed tradesperson is illegal and will void any warranty.



# Safety

## Front cover

Do not remove the front cover as this will expose 230 V wiring and must only be removed by an authorised person.

## Damaged components

If any component is damaged it must be replaced by an authorised person using Rinnai replacement parts.

## Hot water

The water dispensed will at times be boiling or close to boiling, due caution must be taken when using the system.

## Child supervision

Children should be supervised to ensure they do not play with any part of the hot water system.

## Supply cord for the 5, 10, and 15 L units

If the supply cord is damaged it must be replaced by a licensed tradesperson in order to avoid a hazard. This must be a genuine replacement part available from Rinnai.

## Safety devices

The Rinnai Boil & Brew is fitted with the following safety devices:

- Automatic thermostat to maintain water temperature
- Temperature override cutout for heating element
- Water level control (ball cock)
- Water overflow protection

Do not operate the system unless all of the safety devices are fitted and working. Do not tamper or remove any of these devices.

# Maintenance

The usage of the unit will determine the quantity of scale build up.

Hot water systems, like cars, require regular maintenance and servicing. To ensure longevity and optimum performance of your unit we recommend annual inspection and servicing.

The front cover and spout will require a periodic wipe to clean any marks/splashes from use.

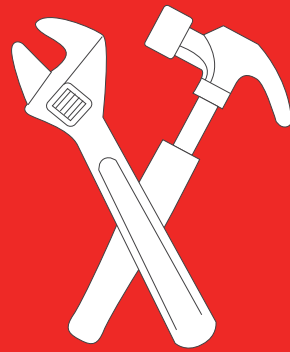
Rinnai has a maintenance, service and spare parts network with personnel who are fully trained and equipped to give you the best advice on your Rinnai product. Regular maintenance and servicing is not covered by the Rinnai warranty.



For help locating a service person in your area call 0800 RINNAI (0800 746 624).

# Installation

Installation, servicing and repair shall be carried out only by authorised personnel.



# Specification summary

## Suitability

Suitable as a hot water dispenser for commercial applications such as; cafes, canteens, retirement homes, restaurants, hotels, hospitals, schools, sports complexes, factories, fast food outlets, shops and offices.

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## Connections

Inlet and overflow connections, R15 (½ " BSP). Stop tap and union not supplied.

For concealed plumbing connections installer to install two R15 (½ " BSP) female wing back, tee or elbows to the lower right hand corner of the dispenser mounting position.

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## Hot water delivery\* (approx. 6 cups per litre)

- 5 L = 35 cups
- 10 L = 100 cups
- 15 L = 130 cups
- 25 L = 200 cups

\* Standard teacup is approx. 170 mls at greater than 65 °C

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## Element size                      Amp rating

- 5 L = 2.0 kW                      10 A
  - 10 L = 2.4 kW                    10 A
  - 15 L = 2.4 kW                    10 A
  - 25 L = 3.0 kW                    15 A
- 

## Electrical supply

5 L, 10 L, 15 L comes with a 2 m cord. 25 L is a fixed wired unit.

Voltage rating 230-240 V 50 Hz AC, single phase.

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## Water supply pressure

Minimum: 87 kPa  
Maximum: 1000 kPa

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## Thermostats

Electronic to control water temperature to boiling point.

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## Construction

- Outer casing: White powder coated steel
  - Thermal insulation: 40 mm fibreglass
  - Water container: Copper
- 

## Safety devices

- Automatic thermostat
  - Temperature override
  - Water level control
  - Water overflow protection
- 

## Protection against water: IPX0

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## Approximate nominal commissioning times from cold (mins. to ready)

5 L	= 14 minutes
10 L	= 23 minutes
15 L	= 30 minutes
25 L	= 50 minutes

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## Weights (kg)                      empty                      full

5 L	7	12
10 L	9	19
15 L	10	25
25 L	12	37

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## Temperature at altitude

At 2000 m above sea level the boiling point of fresh water is 93 °C.

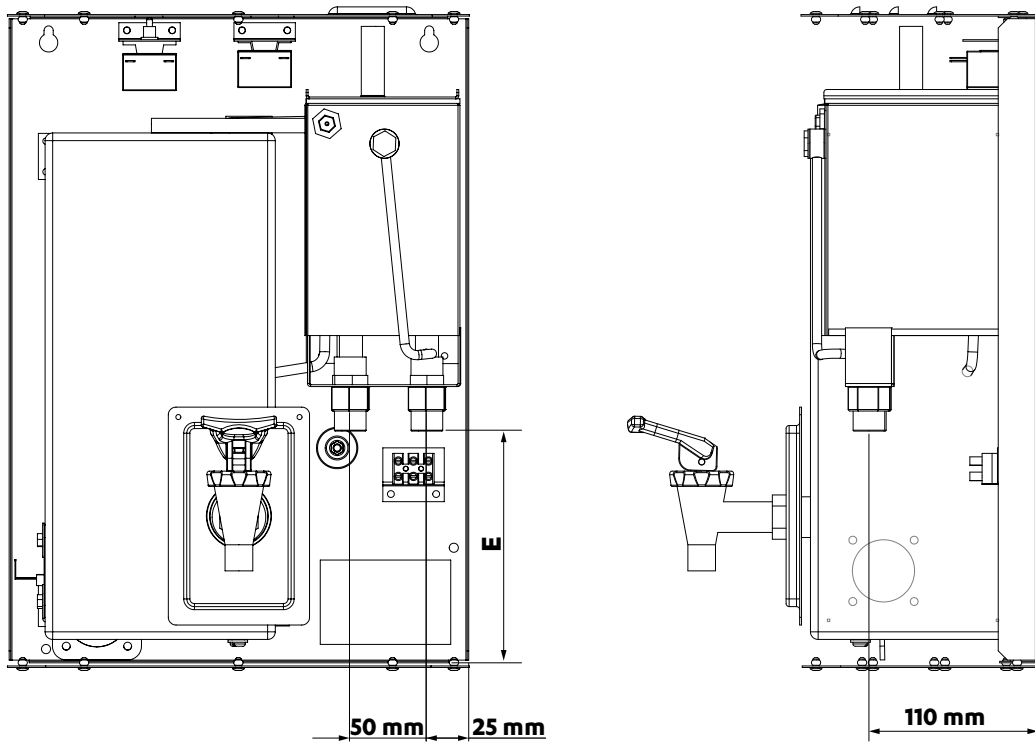
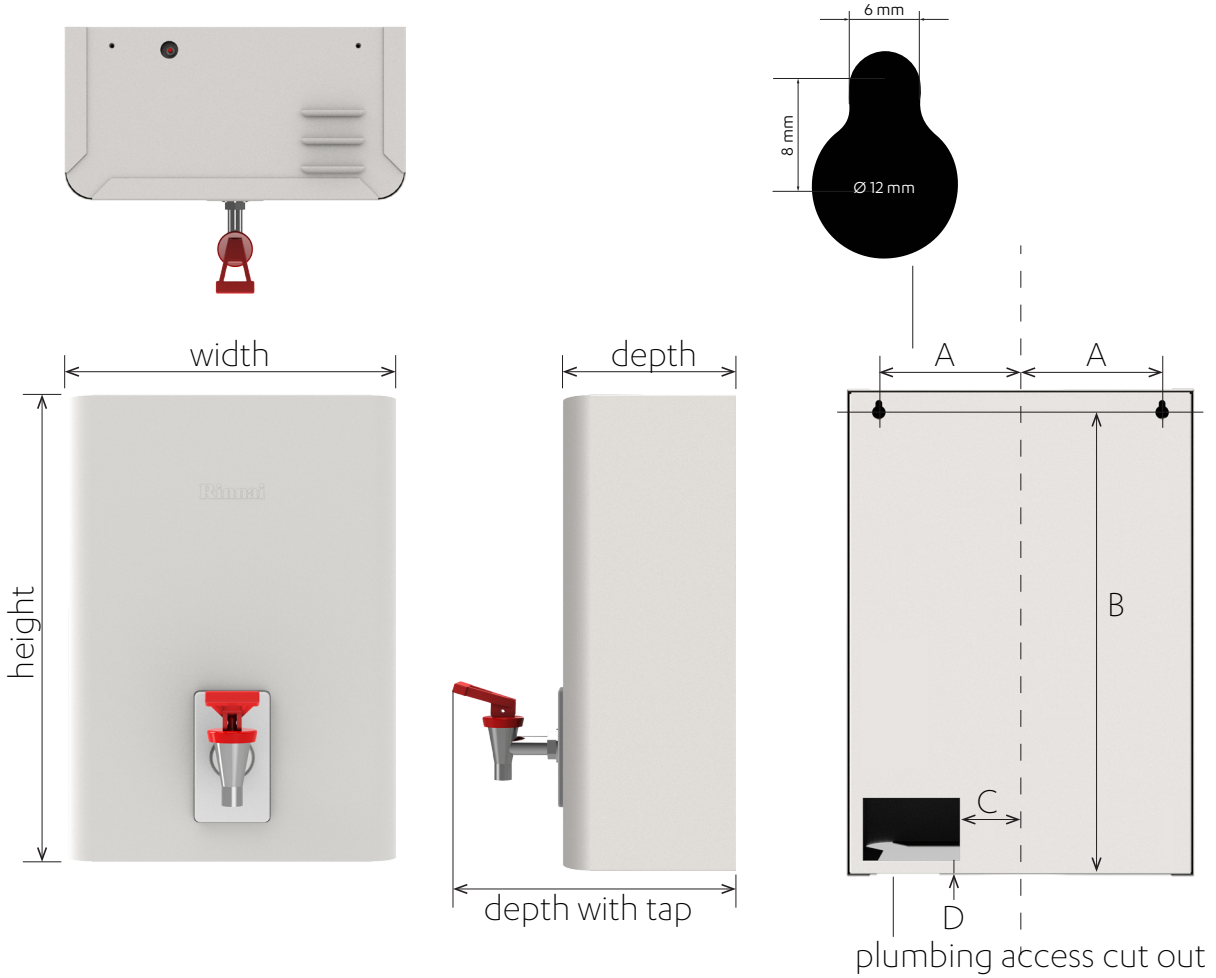
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## Data plate

Bottom left hand corner.

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# Dimensions (mm)





Model	Height	Width	Depth	Depth with tap	A	B
5 L	427 mm	303 mm	154 mm	264 mm	124 mm	412 mm
10 L	582 mm	342 mm	156 mm	266 mm	143 mm	563 mm
15 L	582 mm	342 mm	210 mm	320 mm	143 mm	563 mm
25 L	582 mm	422 mm	242 mm	352 mm	182 mm	563 mm

Model	Plumbing access cut out	C	D	E
5 L	85 x 55 mm	28 mm	10 mm	150 mm
10 L	85 x 55 mm	49 mm	10 mm	315 mm
15 L	85 x 55 mm	49 mm	10 mm	200 mm
25 L	85 x 65 mm	87 mm	10 mm	205 mm

## Location and clearances

The Rinnai Boil & Brew stores and dispenses water at or close to boiling point at all times it is switched on. Due caution must be taken when choosing a location for the product so as to minimise misuse.

Locate the unit above a sink draining board, close to a cold water supply and a power outlet. For the 5 L (RBBW0500), 10 L (RBBW1000), and 15 L (RBBW1500) models, the location of the socket outlet/plug should be such as to give the user safe access for turning the unit on and off. The site should be dry and waterproof, and in a position that meets the minimum clearances shown below. These are required to allow safe access for servicing.

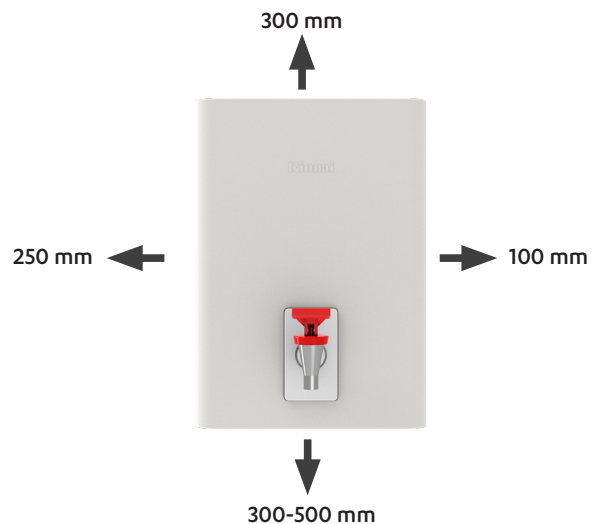
The heater should be positioned at a height to suit the items being filled.

The Rinnai Boil & Brew must be vertically mounted.

Before installation confirm suitability of all screws and plugs for use with the wall. If unsuitable due to the wall type provide alternative fixings.

If rear entry services are to be used the necessary holes for these should be prepared prior to hanging the unit.

Ensure the wall can support the full weight of the unit and that there are no hidden services (electricity, gas, or water) below the surface of the wall.



# General installation information



Do not connect the power until there is water flowing freely from the faucet. Failure to do this may cause the heating element to overheat and fail.

## 1. Mount to the wall

Determine the height of the unit and then screw in the two top mounting screws (10 g x 40 mm).

## 2. Remove the cover

Remove the four cover screws nearest the back. Remove the cover.

## 3. Fit unit to the wall

Hang the unit to the wall at the two key hole fixing points provided at the top of the back plate. Secure the base with the additional holes provided.

## 4. Connect water supply

Connect mains water supply\* to the outer, right hand side ½ BSP connector (marked cold inlet).

If your water supply contains sand, grit or other suspended particles, fit an additional filter (not supplied) in the supply line. Contaminated water may cause a blockage in the inlet valve.

\* Intended for permanent connection to mains water supply and not through a hose-set.

## 5. Connect vent/overflow

Connect a ½ BSP copper tube to the left side ½ BSP vent/overflow connector. This overflow vent must be arranged so as to divert excess water, steam, or steam condensation into the sink, or drain, or to the exterior of the building.

The vent tube must be unrestricted, be greater than 5 mm OD (to avoid blockage), have a continuous fall with a clear open end and must be left open to the atmosphere. It cannot be connected to an open plumbing system. Alternatively, providing that you have sited the Rinnai Boil & Brew over a sink or draining board, you can vent directly through

the bottom of the unit through the hole provided.

Make up and connect your overflow vent.

## 6. Turn on water supply

Turn on the water supply and check for leaks. Wait until filled and until water flows freely from the faucet.

## 7. Refit the cover

Place the cover over the unit and refit the four screws. Leave the faucet in the closed/off position. The unit is now ready for filling.

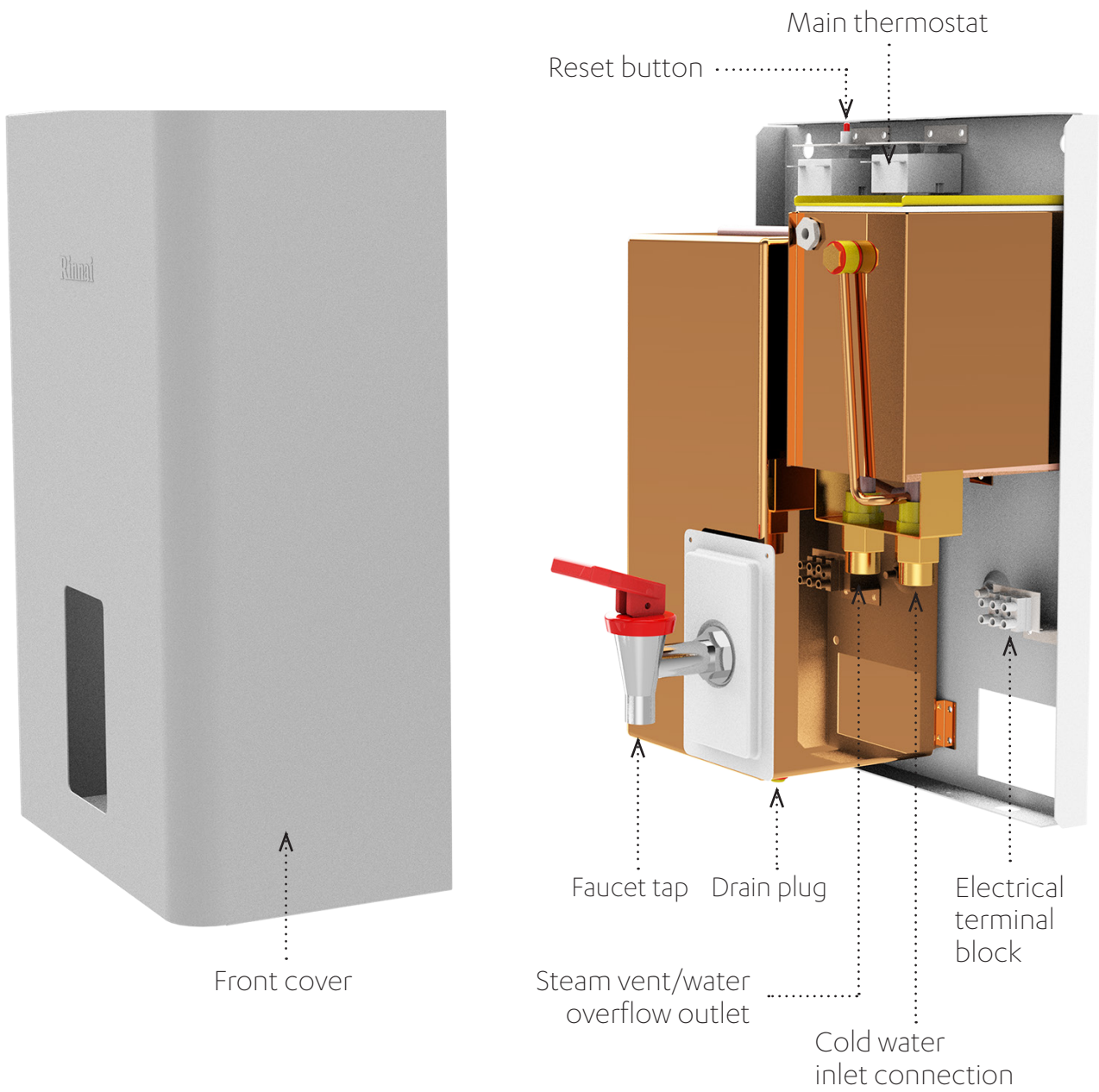
## 8. Connect the power and switch on

Only do this if there is water flowing freely from the faucet as failure to do so could cause the element to overheat and fail.

## 9. Flush entire system

Draw off as much water as needed to ensure the system is completely flushed of any installation materials.

The Rinnai Boil and Brew is now ready to use.



# Water quality

The Rinnai Boil & Brew boiling water units are manufactured to suit most NZ council water supplies. However some water supplies can have a detrimental effect on the water heater, its operation, and life expectancy.



## Hard water

In hard water areas, heated water will produce limescale which will be deposited within the heater. If this is not regularly removed it will impair the operation of the heater. Scale reducing or water softening devices should be considered in hard water areas. The unit is not guaranteed against damage due to scaling.

Water quality outside the limits (as set down below) will void this warranty. Water quality tests must be carried out at the customer's own cost but Rinnai will reimburse any reasonable test costs where water quality is within the limits tabled.

## Water Quality and Impurity Limits

<b>TDS (Total Dissolved Solids)</b>	<b>Total Hardness CaCO<sub>3</sub></b>	<b>Dissolved (free) CO<sub>2</sub></b>	<b>pH</b>	<b>Langelier Index</b>
Up to 600 mg/L or ppm	Up to 200 mg/L or ppm	Up to 25 mg/L or ppm	6.5-8.5	Between -1.0-0.8

Most metropolitan water supplies fall within these limits. If you are unsure about water quality, please contact Rinnai and we will provide you with the details of an authorised agency able to test your water for compliance to Rinnai standards. If sludge or foreign matter is present in the water supply, a suitable filter should be incorporated in the water supply.

Some examples of water quality issues where water may need to be treated:

- Hard water (areas including Wanganui)
- Aggressive water (areas including Christchurch)
- Both hard and aggressive water (some bore water)

# Electrical supply and connections

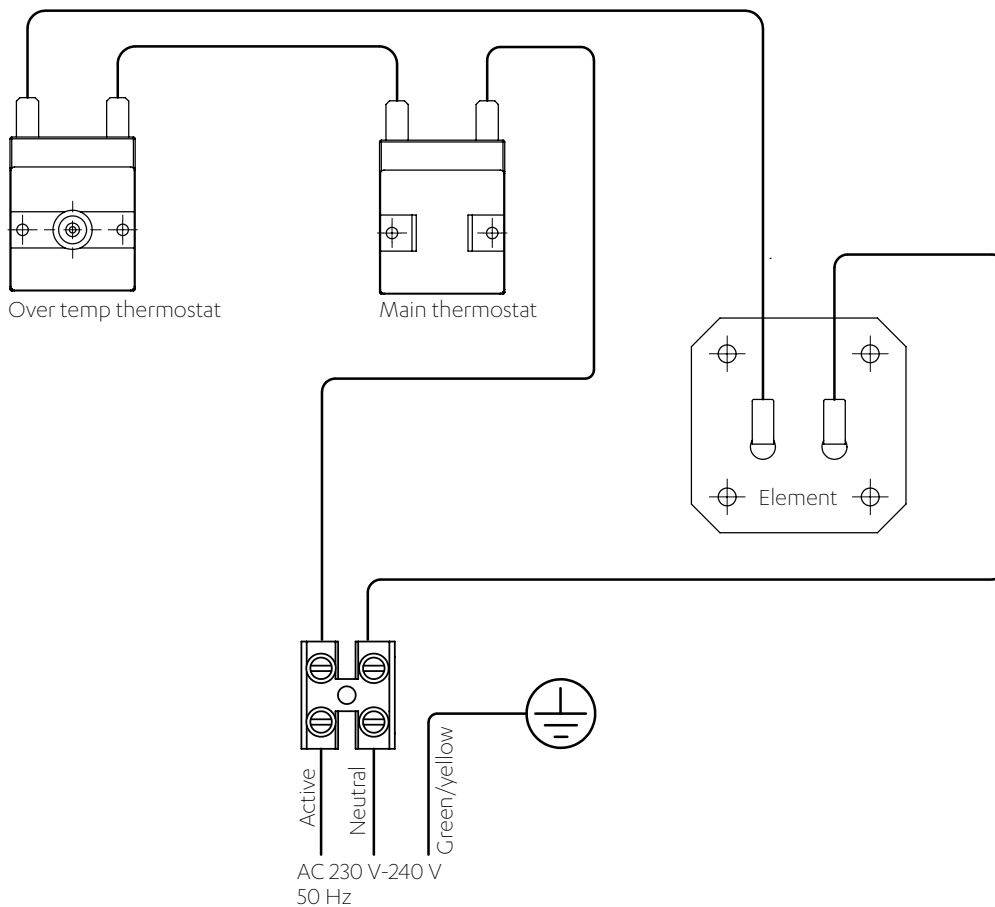
The electrical connection must be carried out by a qualified person in accordance with NZ Electrical Regulations. The appliance must be connected to a 230/240 V AC supply. A double pole isolation switch, with a contact separation of at least 3 mm in both poles, must be incorporated in the electrical supply.

- The appliance must be earthed
- Disconnect all power prior to installation and commissioning
- Wiring to the appliance must be capable of withstanding the appliance load
- Fixed wiring must be protected from contact with the appliance

If the appliance is to be unused for significant periods of time running costs can be reduced by switching the unit off. It is recommended that this is done automatically by incorporating a suitable timer in the supply to the unit. The timer must be capable of switching a resistive load to suit the current of the appliance.

## 25 L fixed wiring unit

The RBBW2500 is supplied without a cord set and must be permanently wired using a switch isolator and wiring rated at not less than 15 A. Connect the 240 V AC single phase 15 A wiring to the connector provider.



It is strongly recommended that the electrical supply wiring circuit includes a Residual Current Device (RCD).

# Troubleshooting

*Uh-oh!*

Should a fault occur the table below should allow for most faults to be identified.

<b>Problem</b>	<b>Possible cause</b>	<b>Action</b>
Continuous steam from vent pipe and primary cutout operates.	Control thermistor fault—open circuit.	Check continuity (5 Kohms at 100 °C, 100 Kohms at 25 °C).
	Scale build-up.	Descale unit.
Drips from outlet.	Incorrect spring tension.	Ensure tap headwork nut is correctly adjusted.
	Scale—debris under tap seal.	Remove and clean.
	Damaged tap seal.	Replace tap seal.
	Scale on tap outlet spout.	Clean tap outlet.
Water runs on when tap released.	Scale on tap outlet spout.	Clean tap outlet.
	Scale—debris under tap seal.	Remove and clean.
	Damaged tap seal.	Replace tap seal.
No water coming out	No water coming in through cold inlet.	Check water is turned on.
Stale taste to water.	Unit left unused for several days.	Empty and allow to refill before use.
Tap sticks open.	Dirt around handle pivot.	Clean with a stiff brush.
Unit does not heat on commissioning	Element fault	Check element continuity and replace if faulty,
Water coming out of overflow	Ballcock seal may have worn out.	Check seal and replace if necessary.
Water consistently cooler than when new.	Control thermistor pocket has a covering of scale.	Descale the pocket surface and unit.
	Control thermistor out of calibration.	Check continuity (5 Kohms at 100 °C, 100 Kohms at 25 °C).
	Steam thermistor out of calibration.	As above.

# Limited Warranty

## Rinnai warranty summary table

This warranty applies to Rinnai Boil & Brew electric boiling water units.

All terms of the warranty, subject to the conditions below, are effective from the date of installation. Proof of installation date will be required. Where the date of installation is not known or cannot be proven the warranty will commence one month after the date of manufacture—refer to the data label on the unit (bottom left hand corner).

Component	Warranty period	Warranty
Copper interior	Five years	Replace or repair free of charge the copper interior component if it fails due to faulty manufacture.
Element, thermostat, faucet and all working parts supplied or fitted with this product	12 months	Replace or repair free of charge the supplied or fitted component if it fails due to faulty manufacture.

### General warranty terms

Rinnai reserves the right to make modifications and change specifications and its parts without notice.

For the purposes of the Consumer Guarantees Act 1993, Rinnai only guarantees the availability of repair facilities and spare parts for the express warranty periods recorded in the warranty summary table above.

If the Rinnai Boil & Brew is being acquired for personal, domestic or household use, this warranty does not limit any consumer rights or guarantees that may apply under the Consumer Guarantees Act 1993. If the product is being acquired for the purpose of a business, the provisions of the Consumer Guarantees Act 1993 do not apply and no other warranties (either express or implied by law) apart from those stated in this warranty apply.

## Warranty terms and conditions

1. All terms of this warranty are effective from the date of installation. The attending service person reserves the right to verify this date.
2. All Rinnai Boil & Brew units must be installed, commissioned, serviced, repaired and removed in accordance with the manufacturer's installation instructions, local regulations, and municipal building codes by persons authorised to do so.
3. All Rinnai Boil & Brew units must be operated and maintained in accordance with manufacturer's instructions.
4. The warranty applies only to the components supplied by Rinnai. It does not apply to components supplied by others, such as, but not limited to these, electrical switches, pipe work, electrical cables, and fuses.
5. Where the unit has not been sited in accordance with the installation instructions or installed such that normal service access is difficult, a service charge will apply. If at the discretion of the attending service person the installation is deemed illegal or access is dangerous, service will be refused. Any work required to gain reasonable access to the unit will be chargeable by the attending service person.
6. The warranty is for the period indicated in the summary table. Where the inner copper interior and/or part is replaced under warranty the balance of the original warranty will remain effective.
7. Rinnai reserve the right to transfer functional components from defective units if they are suitable.
8. Rinnai reserve the right to have the installed product returned to the factory for inspection.
9. Where the unit is installed outside the metropolitan area or further than 40 km from a Rinnai authorised service centre, travel costs shall be the owner's responsibility.



## Warranty exclusions

The following exclusions may cause the warranty to become void and will result in a service charge and costs of parts (if required).

1. Accidental damage and acts of God.
2. Failure due to abuse or misuse, improper maintenance or improper storage.
3. Failure due to incorrect or unauthorised installations.
4. Failure or damage caused by alterations, service or repair work carried out by persons other than those authorised by Rinnai.
5. Where the unit has failed directly or indirectly as a result of poor water quality outside the limits specified.

<b>TDS (Total Dissolved Solids)</b>	<b>Total Hardness CaCO<sub>3</sub></b>	<b>Dissolved (free) CO<sub>2</sub></b>	<b>pH</b>	<b>Langelier Index</b>
Up to 600 mg/L or ppm	Up to 200 mg/L or ppm	Up to 25 mg/L or ppm	6.5-8.5	Between -1.0-0.8

6. Where it is found that there is no fault with the unit and the issue is related to the installation or is due to power failure.
7. Subject to any statutory provisions to the contrary, Rinnai does not accept:
  - a. liability for consequential damage or any incidental expenses resulting from any breach of the warranty,
  - b. claims for damage to building or any other consequential loss either directly or indirectly due to leaks or any other faults.

# Proof of purchase

RECORD YOUR DETAILS  
OF PURCHASE BELOW:

ATTACH YOUR PROOF OF  
PURCHASE HERE:



Retailer: \_\_\_\_\_

Retailer address: \_\_\_\_\_  
\_\_\_\_\_

Date of purchase: \_\_\_\_\_

Product details: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Please keep these details in a safe place for future reference.**

# Installer details

Company name: \_\_\_\_\_

Installer name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_ Mobile: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_\_\_\_

# Register your Boil & Brew

Register your Boil & Brew online at [www.rinnai.co.nz/register](http://www.rinnai.co.nz/register) or alternatively complete the form below and send to:

Rinnai NZ Ltd  
Product Registration  
PO Box 53177  
Auckland Airport  
Auckland 2150



## Product details

Model number and serial number: \_\_\_\_\_

Installation date: \_\_\_\_\_

Place of purchase: \_\_\_\_\_

## Your details

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

Company: \_\_\_\_\_

Street: \_\_\_\_\_

Suburb: \_\_\_\_\_ City: \_\_\_\_\_

Postcode: \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

## Your details

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

Company: \_\_\_\_\_

Street: \_\_\_\_\_

Suburb: \_\_\_\_\_ City: \_\_\_\_\_

Postcode: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email: \_\_\_\_\_



By completing this form you are agreeing to service reminder notifications about your Boil & Brew.

*a touch.  
of magic*



Experience our innovation

**Rinnai.co.nz** | **0800 746 624**

<http://www.youtube.com/rinnainz>

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