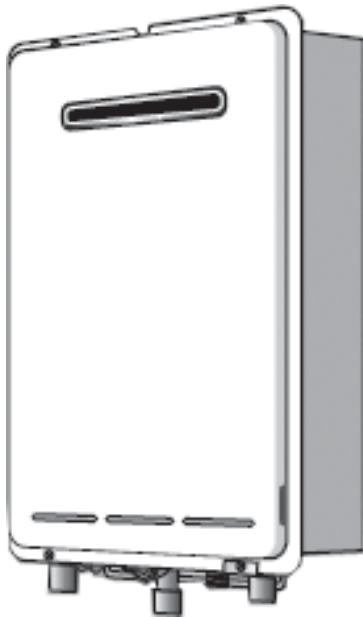


Solar Infinity 20 & 24

Operation and Installation Manual



Model Code
REU-VE2015WS
REU-V2422WS

Name
Infinity Solar 20
Infinity Solar 24

Continuous Flow Water Heaters used in Solar Hot Water Systems

This appliance shall be installed in accordance with:

- Manufacturer's Installation Instructions, please refer to generic Operation/ Installation manual also included with product
- Current AS/NZS 3000, AS/NZS 3500 & NZS 5261
- Local Regulations and Municipal Building Codes

This appliance must be installed, serviced and removed by an Authorised Person.

Regulatory Information

This appliance must be installed correctly by an authorised person. The installation of gas, water, and electricity must conform to local regulations.

Your Rinnai Continuous Flow water heater meets the requirements of the NZS 5262 Gas Appliance Safety. A declaration to this effect is on the ESS website, www.ess.govt.nz.

The installation must also comply with the instructions supplied by Rinnai.

Warning About Hot Water

This appliance produces very hot water at 75°C and is not suitable for use with remote controllers. The household hot water supply **MUST** be protected by a suitable tempering valve.

ALWAYS...

Test the temperature of the water with your elbow before placing your child in the bath, also carefully feel the water before bathing or showering yourself.

Supervise children whenever they are in the bathroom.

Make sure the tap is turned off tightly.

CONSIDER...

Installing child proof tap covers or child resistant taps (both approaches will prevent a small hand being able to turn on the tap).

NEVER...

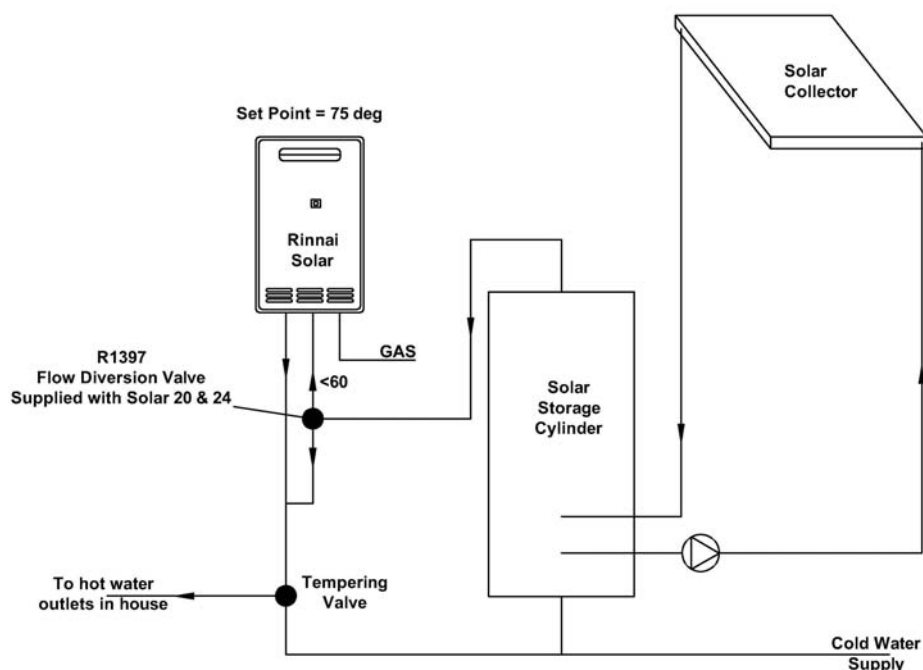
Leave a toddler in the care of another child. They may not understand the need to have the water temperature set at a safe level.



Applications

Important Rinnai continuous flow models REU-VE2015WS (Infinity Solar 20) and REU-V2422WS (Infinity Solar 24) are suitable only for installation as gas boosters in domestic solar hot water systems (see picture below). These models are not suitable for use as 'stand alone' appliances for the purposes of supplying hot water. These models produce water at higher than normal temperatures and must be connected to the hot water supply by use of a suitable tempering valve.

Not suitable for use with remote controllers.



For non solar hot water applications Rinnai have a dedicated range of continuous flow water heaters available. Contact Rinnai for more details.

Legionella Disinfection

While any Rinnai Infinity can be used in solar applications, we strongly recommend the use of a water heater set to 75°C. Water is then tempered back to 55°C before use. Please see the drawing above. This is particularly important where the installation is for older or infirm persons, or, it is in a holiday home or other dwelling not constantly occupied.

During winter months, when the heating from the solar collector is not sufficient to raise the water temperature in the storage cylinder above 60°C for any length of time, there is potential for the water in the storage cylinder to be set at a temperature which theoretically can be an ideal environment for Legionella growth.

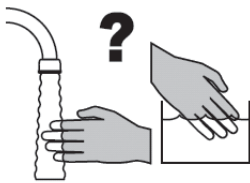
Should the water in the cylinder be below 60°C, heating it to 75°C in the Infinity will effectively disinfect the water. The temperature needs to be this high because the water only remains at this temperature for a relatively short time.

If the water comes from the cylinder at more than 60°C, it is assumed that it has been at this temperature for a sufficiently long time to disinfect the water. In this case the automatic flow diversion valve will cause the water to bypass the Infinity saving energy.

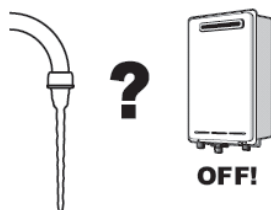
Features and Benefits

- The Rinnai Infinity Solar continuous flow water heaters provide hot water even during times of limited solar radiation and/or high hot water demand. Whilst the electricity, water and gas supply are connected, hot water is available whenever hot water taps are open.
- The Rinnai Solar range of continuous flow water heaters are power flued appliances. This makes them compact saving both floor and wall space.
- The temperature of hot water output from the Rinnai Infinity is **CONSTANTLY MONITORED** by a built-in sensor. If the temperature of the hot water output from the Rinnai Infinity rises to more than 3°C above the preset temperature the burner is switched OFF and then switched ON again when the temperature falls below the selected temperature.
- Ignition is electronic, so there is no pilot light. When the hot water tap is off, no gas is used.
- Operating noise level is very low.

Important Information



Always check the water temperature carefully before use. Refer to the **Warning about Hot Water** on page 1 of this manual for important safety information.



At low water flows, the hot water unit may extinguish without warning. Opening the tap further will restart the appliance.



Do Not touch the unit cover or the flue outlet.

Do Not insert objects into the flue outlet.

On colder days steam may discharge from the flue outlet. This condition is normal for high efficiency appliances and does not indicate a fault.



Keep flammable materials, spray cans, fuel containers, pool chemicals, trees, shrubs, etc. well clear of the flue outlet.

Do Not spray water directly into the flue terminal.



If freezing conditions are expected, ensure the electric power supply to the solar gas booster remains ON. This will ensure the automatic anti-frost protection can operate when required (LPG models only).

Warranty Statement - Hot Water Products

Extended Warranty for Rinnai Solar Infinity Heat Exchanger

The parts warranty on heat exchangers in Rinnai Solar Infinity installed for domestic use is 10 years pro rata (i.e. in the 4th year, 70% of the value of the part is covered by the warranty and 40% of the value of the part is covered by warranty in the 7th year).

For Rinnai Solar Infinity units installed for commercial use the parts warranty for the heat exchanger is 5 years pro rata (i.e. in the 4th year, 40% of the value of the part is covered by the warranty and 20% of the value of the part is covered by the warranty in the 5th year).

This warranty is subject to Terms and Conditions below.

All other parts and labour for the Rinnai Solar Infinity are covered for 3 years in accordance with the Terms and Conditions below.

Rinnai Solar Infinity is under warranty for solar installations only. If used for any other purpose the warranty is void.

Rinnai Solar Infinity Warranty - Terms and Conditions

1. During the warranty period and subject to clauses 2 and 3 below, Rinnai will, at its own discretion, either replace or repair any defective product at no charge to the customer.
2. This warranty covers manufacturing defects only. This warranty will not apply (for example) if the Rinnai Solar Infinity has been improperly installed or is otherwise installed contrary to manufacturer's recommendations, has been damaged during or after installation, or has been subjected to damage or abuse beyond that expected from conditions of normal use.
3. Warranty claims may be invalid if not accompanied by details of the installing or supervising gas fitters registration number and the gas fitting certification number.
4. This warranty commences from the date of installation. Proof of purchase is required at the time of the warranty claim.
5. Servicing of the Rinnai Solar Infinity is to be carried out by a Rinnai authorised service centre.

Water Quality for Rinnai Solar Infinity

Water quality outside the maximum recommended 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 of the product is found to be defective.

Water chemistry and impurity limits are detailed in the table below. Most metropolitan water supplies fall within these requirements. If you are unsure about water quality, contact your water authority. If sludge or foreign matter is present in the water supply, a suitable filter should be incorporated in the water supply.

TDS (Total Dissolved Solids)	Total Hardness CaCO ₃	Alkalinity (as CaCO ₃)	Dissolved (free) CO ₂	pH	Chlorides	Magnesium	Sodium	Iron
Up to 600mg/litre or ppm	Up to 200mg/litre or ppm	Up to 200mg/litre or ppm	Up to 25mg/litre or ppm	6.5 to 8.5	Up to 300mg/litre or ppm	Up to 10mg/litre or ppm	Up to 150mg/litre or ppm	Up to 1mg/litre or ppm

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

- Hard water (Wanganui)
- Acidic water (some areas of Christchurch)
- Both hard and acidic water (some bore water)

Installation, Commissioning & Maintenance

Important Rinnai continuous flow models REU-VE2015WS (Infinity Solar 20) and REU-V2422WS (Infinity Solar 24) are specifically designed for installation as gas boosters in solar hot water systems. They are not suitable for use in any other applications.

Models REU-VE2015WS and REU-V2422WS are factory preset to deliver 75°C. This temperature must not be altered. Local regulations and/or the requirements of the AS/NZS 3500.4 must be considered regarding the temperature limitations to areas primarily used for personal hygiene. Refer to the above mentioned publications for more information.

A pouch behind the front cover of the continuous flow models REU-VE2015WS and REU-V2422WS contains gas pressure setting and diagnostics information for these appliances. This information must be read in conjunction with the relevant solar system Installation / Operation manual. This gas pressure setting and diagnostics information is usually not required during installation.

Important Installation, commissioning, service and maintenance by an authorised person only.

Do not attempt to install any solar hot water system components (including the gas booster) without first studying the relevant Rinnai and regulatory publications.

Accessories

Recess Box

When installing a Rinnai Infinity continuous flow hot water heater in a new home or renovation, it is a great idea to allow for a recess box to be included at the construction stage. These boxes allow you to literally recess the appliance into the cavity of the wall saving precious space. In addition they virtually hide your hot water system altogether.

All boxes and covers are suitable for painting to blend in with the exterior of your home.

Pipe Cover

Pipe covers are recommended as the finishing touch to a Rinnai Infinity continuous flow hot water heater installation. Basically the covers are designed to hide the plumbing pipework and valves. These are particularly popular in installations where the unit is permanently visible to the occupants of the house. The cover can be easily attached to the appliance and two pipe covers can be joined together for longer pipework if necessary.

Security Bracket

Prevent theft by securing your Rinnai continuous flow hot water heater with our custom security bracket, easily installed it covers the lower mounting bracket of the appliance to create a tamper proof installation.

Sideways Flue Diverter

Designed to redirect flue products when the water heater is installed on a balcony, this product is available for selected models only.

Contact Rinnai for further information about our accessory range and model suitability details.

Customer Contacts

For more information about buying, living and servicing of Rinnai appliances call:

- Consumers 0800 RINNAI (0800 746 624)
- Installers 0800 TO RINNAI (0800 86 746 624)

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All Rinnai appliances meet or exceed the safety standards required by New Zealand gas and electrical requirements.

Rinnai is constantly improving its products and as such specifications are subject to change or

RINNAI Solar Infinity 20 & 24

