

Rinnai

Operation guide

Evolve



Important:

Appliance must be installed with a Rinnai approved flue system.

This appliance shall be installed in accordance with:

- Manufacturer's installation instructions
- AS/NZS 5601 Gas Installations
- Local regulations and municipal building codes

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

Please retain this manual for future reference.

Warning

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

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

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contents:

| | |
|-----------------------------------|----|
| About your Evolve | 4 |
| Operation without the remote..... | 5 |
| Operation using the remote | 6 |
| Clearances | 8 |
| General information | 9 |
| Care and maintenance | 10 |
| Servicing..... | 11 |
| Safety..... | 12 |
| Troubleshooting..... | 14 |
| Error codes..... | 16 |
| Abnormal flame pattern..... | 17 |
| Installation checklist..... | 18 |
| Installer details | 18 |
| Limited warranty | 19 |

About your Evolve

Congratulations on the purchase of your Rinnai Evolve gas fireplace. We hope you love this product as much as we do, and on the off chance that something does go wrong, or if you need help, we're only a phone call away.



Manual control panel on side of unit

The control panel is located in the top left corner of the outer frame. The control panel houses the On/Off button and also the LED indicators—these let you know what the unit is doing. For example:

- | | |
|------------------|-------------------------|
| On | = top LED is blue |
| Standby | = top LED is red |
| Timer on | = lower LED is green |
| Power disruption | = lower LED flashes red |



Operation without the remote

Ignition

This appliance has a sealed combustion chamber that requires purging before gas can flow and the unit can start. This means the combustion fan will start several seconds before the fire ignites.

Normal ignition sequence:

1. When the On/Off button is pressed on the control panel, the LED will glow blue and the combustion fan will start.
2. The ignition sparker will operate, and as soon as a spark is sensed gas will flow to the main burner.
3. When the main burner establishes a flame, the heater will automatically modulate between the burner settings to achieve and maintain the default set temperature of 22 °C.

If the heater is turned off using the On/Off button on the heater control panel, when it is turned back on, it will lose any timer and clock settings until the remote is used to re-transmit the information. The remote stores the clock, timer, and temperature settings of the heater.

Do not unplug power supply

Do not unplug the main power supply to turn the unit off as the convection fan is required to operate for several minutes after the unit is turned off to assist in cooling the unit down.



Control panel

Operation using the remote

For the remote control functions to be available, the appliance On/Off button must be in the On position.

General information about the remote control

The remote control emits an infra-red signal. It must be aimed at the receiver unit located on the lower right hand side of the unit, normal operating range is 5 m. Some fluorescent lights may interfere with the transmission of the remote signal. If you experience this problem, changing position from which you are operating the remote may help.

Unless the remote display is deactivated or the lock function is activated, the remote control will transmit information to the heater every time a button is pressed.

When the timers are being set, information is transmitted only when the 'Time Set' button is pressed.

When the remote is not used for a period of approximately five seconds, the display will default to standby mode, displaying only the time. To reactivate press any button on the keypad.

Signal transmissions



Signal transmissions are confirmed by a brief illumination of the signal indicator on the remote. The unit will also flash and beep to confirm the settings have been received.

Batteries



The remote uses two x 1.5 V AAA batteries. Never mix old and new batteries.



Standby/On

Stops and operates the heater remotely.

Flame

Sets the flame picture.

Extra low

Energy saving room temperature control.

Lock

Locks out control to prevent tampering.

Timer 1

Sets timer program 1.

Timer 2

Sets timer program 2.

Override

Manually overrides current timer operation.

Time Set

Sets clock and timers.

Remove the batteries if the remote is not going to be used for a long time. This will help avoid damage from leaking batteries.

After battery replacement the clock and timers may need to be reprogrammed.

Turning the heater on

When the heater is in standby mode, pressing the Standby/On button will start the ignition sequence and the LED will glow blue to indicate that the heater is operating.

Turning the heater to standby

Press the Standby/On button. This will turn off the unit and the LED will glow red to indicate the appliance is in standby.

Adjusting the temperature

Pressing the up and down buttons will change the preset temperature by increments of 1 °C—the temperature will be displayed on the remote.

The temperature can be preset to:

- L (low) - unit operates on the lowest burner setting
- 16~26 °C (in 1 °C) steps - combustion rate varies to maintain the selected temperature
- H (high) - unit operates on the highest burner setting

Setting the clock

The clock must be set before the timers will operate.

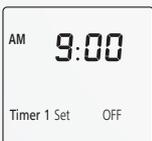
1. Press the Time Set button once, 'Clock Set' will be displayed to confirm the function is initiated. The remote will show 'AM 12:00'.
2. Use the up and down buttons to set AM or PM, then press the Time Set button once to start programming the timers.

If you do not want to set the timers at this point press Time Set four more times until the display returns to the time. If no button is pressed within approximately 90 seconds, the screen will deactivate and any settings that have not been transmitted will be lost.

Setting the timers

After the clock has been set and the Time Set button selected:

1. 'Timer 1 Set On' and 'AM 06:00' will be displayed. Use the up and down buttons to set the desired AM or PM. Press the Time Set button once.

2. 'Timer 1 Set Off' and 'AM 09:00' will be displayed. Use the up and down buttons to set the desired AM or PM. Press the Time Set button once.

3. To set up Timer 2 repeat the above steps, or press Time Set three times to exit the timer programme. The set On/Off timers will be displayed briefly to confirm the settings.

When the programs have been received, the remote display will revert to displaying the time.

Using the timers

Prior to using the timers ensure the desired temperature has been set—refer 'Adjusting the temperature' on the previous page.

You can view the timer settings by pressing the Timer 1 or Timer 2 buttons while the heater is operating. The display will briefly show the status of each timer, i.e. Timer 1 On, Timer 1 Off. If the current time is outside of the programmed times the heater will go into standby mode and the LED will glow red.

To turn the timers off, press the relevant timer button again. The heater will return to standby mode. If there are no timers set the Timer indicator will go out.

Preheat

The preheat automatically functions in conjunction with the timers. The preheat function ensures the room reaches the desired temperature by the programmed on time. This is achieved by sensing the room temperature one hour prior to start.

Override

This is used to manually override the timers so the heater can be operated outside of the timer settings. When override is selected 'Override' will be displayed. While in override mode all remote control functions, except for the flame function are available until the next timer setting is reached.

To return to the timer setting, press the Override button a second time. If Standby/On is pressed during override the heater will revert to standby and the timer programs will be cancelled.

Extra low

The Extra Low function is useful in situations when the room temperature keeps rising even when the heater is on the lowest heat setting.

Extra low function off

When the room temperature reaches the preset temperature, the heater continues to operate with the main burner on low to provide a flame picture with minimal heat output. In some cases this may still cause the room to become warmer than desired.

Extra low function on

When the room temperature exceeds the preset temperature, the burner will reduce to an extra low setting and then to pilot only. The burner will return to normal to maintain the set temperature.

Flame

The flame function can be used approximately 90 seconds after the heater has started. The flame function is used to select a desired flame picture and overrides the automatic mode. There are seven flame settings available.

While the heater is in operation, press the Flame button.

The heater will automatically default to the last flame picture setting. The word 'Flame' and a series of short bars will be displayed to show the flame function is in operation. Use the up and down buttons to select the desired flame picture. The number of bars illuminated will correspond to your selection.



Should the room temperature exceed 40 °C while the flame function is activated, the heater will switch off—this is a safety feature.

Lock

This is designed as a child lock function. When Lock is pressed all remote functions will be locked, with the exception of the Standby/On button (for the purpose of turning the heater to standby only). The remote will show 'Lock'. To cancel press the Lock button for three seconds.

Clearances from combustibles

The clearances listed below, measured from the **edge of the glass**, are minimum clearances unless otherwise stated.

While the heater is operating

The appliance must not be installed where curtains or other combustible materials could come into contact with the heater.

The 1000 mm clearance above is the clearance to the ceiling.

Mantels and surrounds

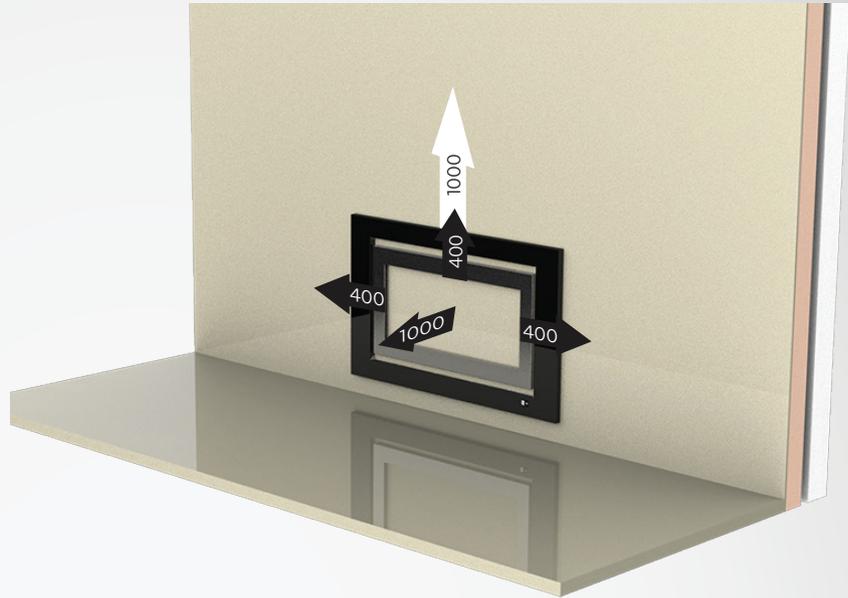
Combustible mantels and surrounds require clearance from the fire to minimise fire danger. Mantels and surrounds, made of combustible materials such as wood, are allowed providing they are outside the minimum clearances shown.

Hearths

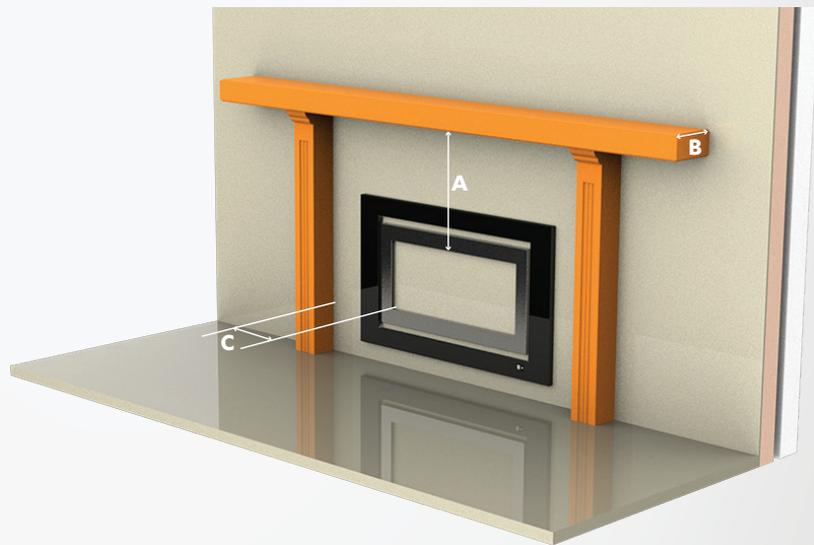
A hearth is not necessary but can be used for decorative purposes or protection of sensitive flooring. A hearth must not obscure the front of the fire.

Floor protection

Heat emanating from this fire may over time affect the appearance of some materials used for flooring, such as, carpet, vinyl, cork or timber. This may be amplified if the air contains cooking vapours or cigarette smoke. To avoid this occurring, it is recommended that a mat be placed in front of this appliance.



Note: Measurements are taken from the edge of the glass. The 400 mm side clearance includes side walls.



- A** Mantel needs to be a min. of 400 mm away from the edge of the glass.
- B** Max. mantel depth at 400 mm (A) is 250 mm max.
- C** Surround needs to be a minimum of 400 mm away from the edge of the glass.

For every 50 mm of added mantel depth there must be an additional 100 mm of clearance from the edge of the glass. For example:

| MANTEL DEPTH | A: CLEARANCE REQUIRED |
|--------------|------------------------------|
| 300 mm | 500 mm |
| 350 mm | 600 mm |
| 400 mm | 700 mm |

General information

Before operation please read these instructions to get an overview of how to operate, maintain and service your Rinnai gas fire.

Electrical connection



The Evolve is fitted with a 1.5 m power cord and 3-pin plug. The standard

electrical connection is to the right hand side of the heater. If necessary this can be changed by your electrician to terminate on the left.

The connection is either direct wired* or connected to a power point within the cavity. This must be connected to a dedicated earthed power point. The electric isolation switch must be accessible after the appliance has been installed.

The heater must not be located immediately below a socket outlet (potential fire hazard).

If the supply cord is damaged, it must be replaced by a licensed tradesperson. This must be a genuine replacement part available from Rinnai, part number 6765B.

Installation by a licensed tradesperson

Ensure your installer talks to you about the use and care of this appliance, and that you understand these instructions. The installer also needs to complete the appliance installation checklist and installer details, and leave this guide with you.

Power failure

If the power is disrupted while the heater is operating, once the power is restored, the heater will go into power failure mode—there will be flashing zeros in the error display (top fold on the lower left of the outer frame), and the lower LED indicator on the control panel will flash red.

To reset the heater, press the On/Off button on the control panel twice, or use the remote control and press the Standby/On button once (to go on standby) and then a second time to turn the heater on.

Safety devices

Your Rinnai Evolve has the following safety devices:

- flame failure sensing system
- pressure relief
- overheat safety switch
- air temperature sensor
- thermal fuse
- overcurrent fuse
- spark detector

Soot deposits

Small soot deposits inside the heater or glass is normal. Significant soot build-up however is not normal and will require a service call. Refer to the troubleshooting section for further information.

TV installation above the fireplace



The Evolve has a fan that distributes warm air from

the top of the appliance out into the room. As warm air is dispersed outwards, as opposed to directly upwards, installation of a TV may be an option.

Generally the bottom of the television recess should be at least 400 mm above the fire. Please check with the television supplier to check clearances. Some television manufacturers have warranty conditions that state a television is not to be installed above a fireplace.

For further information, please contact Rinnai or refer to the installation manual. This illustrates recommended minimum clearances when installing a TV directly above the unit or into a recess.

Outside flue terminal

On cold days steam may be discharged from the flue terminal. This is normal with high efficiency gas appliances like the Evolve and does not indicate a fault.

* Consult a qualified electrician if direct wiring is required as it must comply with AS/NZS 5601 and AS/NZS 3000 and other relevant local regulations

Care and maintenance

All external surfaces of the heater can be cleaned using a soft damp cloth and mild detergent. Do not use solvents and do not attempt to clean the heater while it is hot or operating.

Filters

The filters for this appliance are fixed to the inlets of the room air return. The build up of dust or other particles on these filter strips reduces the air flow through the heater, reducing the efficiency, which can cause the appliance to shut down. To stop this from occurring the filters will need regular cleaning.

Cleaning the filter strips

Clean the filters with either a vacuum cleaner, a soft dry cloth, or a soft brush. NEVER attempt to clean the filters with water.

Filter blockages

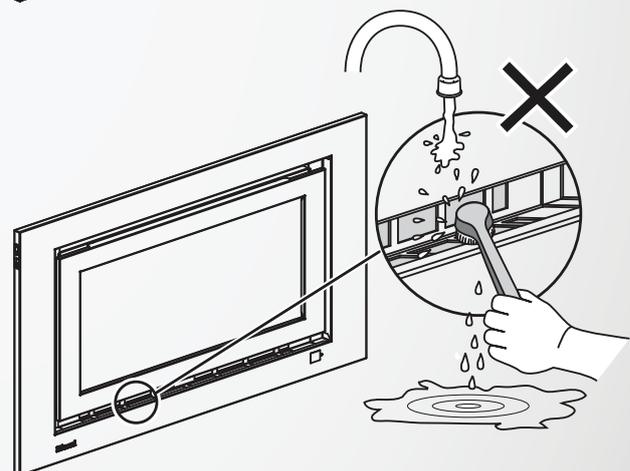
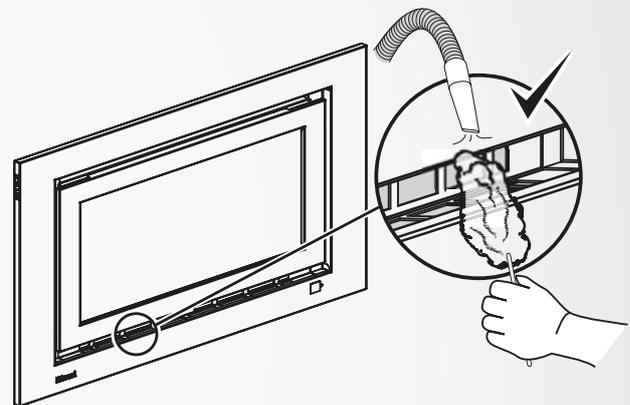
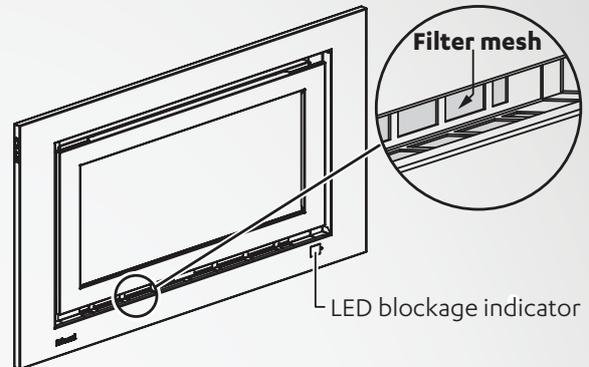
When a build up is detected the blockage LED, located by the infra-red remote receiver window, will begin to flash to let you know there is a problem. Once the indicator is flashing, if no action is taken, the heater will eventually shut down to avoid overheating and an error code of 14 will be displayed in the error display window.

Returning the appliance to normal after a shut down

1. Press the On/Off button once to turn off the heater.
2. Clean filters.
3. Press the On/Off button once to turn on the heater.
4. Use the remote control to resume normal heater operation.

Obstructing the warm air vent

When an obstruction is detected (something may be positioned too close to the warm air vent) the blockage LED indicator, located by the infra-red remote receiver window, will illuminate and the appliance will go to a low setting. To restore normal operation remove the obstruction and use the remote control to resume normal operation.



Servicing

Rinnai has maintenance, service and spare parts network with personnel who are fully training and equipped to give the best advice on your Rinnai appliance.



Servicing and repair should only be carried out by authorised personnel.

If your appliance needs maintenance or servicing, please call Rinnai (0800 746 624).

For reliable operation Rinnai gas fireplaces should be serviced every two years, including inspection of the flue system. If they are in a particularly dusty environment or subject to excess lint, for example dog hair, or where there are newly laid carpets, then annual servicing would be beneficial.

Regular maintenance and servicing is not covered by the Rinnai warranty.

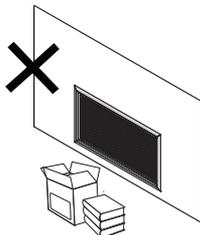
Do not attempt to carry out any service work other than that mentioned in the troubleshooting section. If you have any other faults or problems, please refer to your installer or contact Rinnai.

Safety

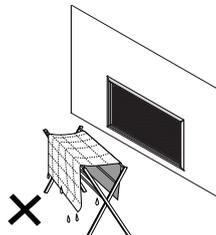
Important

This appliance is 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 appliance by a person responsible for their safety.

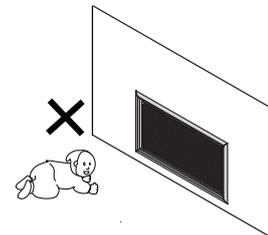
- THE HEATER MUST NOT BE USED OR OPERATED IF ANY PART OF THE APPLIANCE IS DAMAGED
- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE
- DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION
- DO NOT MODIFY THIS APPLIANCE



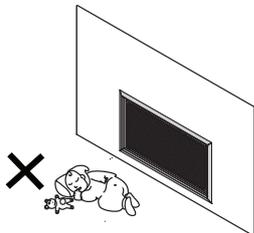
Do not restrict warm air discharge by placing articles in front of the appliance.



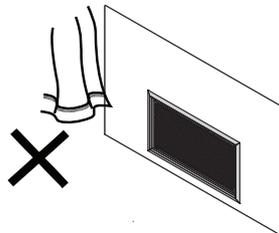
This appliance must not be used for any other purpose other than heating.



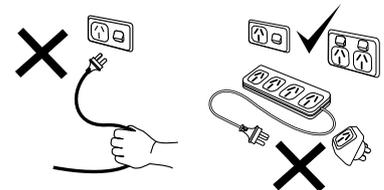
Children should be supervised at all times to ensure they do not play with the appliance. Hand or body contact with the appliance should be avoided.



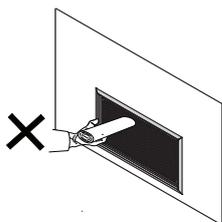
Do not allow anyone to sit, lean or sleep directly in front of the appliance.



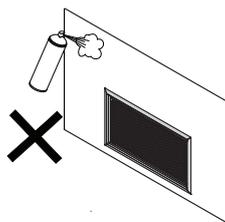
Do not allow curtains or other combustible materials to come into contact with the appliance.



Do not unplug the appliance while it is operating. Do not use power boards or double adaptors to operate this appliance.



Do not allow anyone to post articles through into the heater.



Do not spray aerosols while the appliance is operating. Most contain butane gas which can be a fire hazard if used near the appliance.

Evolve

Troubleshooting
& error codes

Troubleshooting

Check the following information before making a service call as some performance characteristics of the Evolve are a normal part of operation. If you are still unsure or concerned after reading this section, please contact Rinnai.

During installation there will be an initial burning in period where some smoke and smell may be experienced. This is a normal part of the operation.

The appliance is fitted with an overheat safety switch which will shut off the appliance. If the appliance shuts off repeatedly servicing may be required.

Using the heater for the first time, or after a long period of non use

Ignition may not occur the first time it is operated due to air in the gas pipes. If ignition does not occur the unit will switch off automatically. Try operating the heater again if this occurs.

The heater may make noises after ignition or switching off. This is due to the expansion and contraction of the internal components—this is normal. The heater will not ignite if the On/Off button is pressed straight after the heater has turned off. It will take approximately 20 seconds before the unit will switch on again.

| What's happening | Explanation and/or possible solution |
|---|--|
| Warm air not coming form heater when it starts | The fan starts automatically after a short delay. This is to allow the appliance to warm up, helping avoid cold draughts. |
| Smoke or strange smells are produced when first operating the appliance after installation. | This is caused by grease, oil, or dust within the appliance. This will stop after a short time. |
| Clicking noises when the heater starts or stops, or changes to a higher or lower setting. | This is expansion and contraction of the heat exchanger and is a normal part of operation. |
| Clunking noise when the thermostat operates. | This is the sound of the gas valve opening and closing to regulate the flow of gas. |
| Fan continues to run after the heater is turned off. | This is to remove residual heat from within the appliance. This stops once the unit cools down. |
| Periodic hissing sound after the heater is turned off. | Condensate evaporating from the built-in condensate removal device. This is a normal part of operation. |
| Steam is discharged from the flue terminal outside. | High efficiency appliances tend to discharge water vapour on cold days—this is normal. |
| Heater doesn't start when the Standby/On button is pushed (thermostat on high) | Check the appliance On/Off button is on. Check timer(s). Timer programmes must be turned off or overridden for manual operation. |
| Timer(s) do not operate at the set time | They may be inactivated or incorrectly programmed. Check timers are set correctly. |
| Timer operates for a short time then cuts out | Room temperature may be higher than the set temperature. Increase set temperature if desired. Turn off the Extra Low button if on. |

What's happening**Explanation and/or possible solution**

Remote control doesn't work.

Unit not plugged in properly or has been turned off—plug in power cord or press On/Off button.

Child lock set—cancel lock (p. 7).

Remote lock-up due to signal being out of range, incorrectly aimed at unit or obstructed.

No display on remote.

Batteries may be flat, change batteries.

Unit stops during operation or there is no ignition, or control panel indicators.

Possible mains power failure, use power failure reset procedure (p. 9).

Gas supply may have been turned off. Check gas supply at the meter or gas cylinders.

Smell of gas.

Possible leak in gas line. Isolate gas supply and contact Rinnai.

Error codes

The Evolve has self diagnostic electronics that monitor the appliance during start up and operation.

Should a fault occur the heater will shut down. The fault that has caused the shut down will be indicated by a pair of flashing digits in the error display window (top fold on the lower left of the outer frame).

| Error code | Likely cause | Suggested solution |
|-------------------|------------------------------------|--|
| 00 | Mains power failure | Reset heater, press the On/Off button twice, or use remote control and press the Standby/On button once for standby mode, press the Standby/On button a second time to turn the heater on. |
| 11 | Ignition failure | Check gas supply is turned on, switch heater to standby and then on again. If ignition failure continues a service call will be required. |
| 12 | Incomplete combustion | As above. |
| 14 | Filter blockage/overheat | Clean filters, if error continues a service call is required. |
| 16 | Room overheat | Lower room temperature to below 40 °C. |
| 31 | Room temperature sensor faulty | Service call. |
| 32 | Overheat temperature sensor faulty | Service call. |
| 33 | Overheat temperature sensor faulty | Service call. |
| 53 | Spark sensor faulty | Service call. |
| 61 | Combustion fan motor faulty | Service call. |
| 71 | Solenoids faulty | Service call. |
| 72 | Flame detection circuit fault | Service call. |
| 73 | Communication error | Service call. |



Looking down at the error display window—sits underneath filter

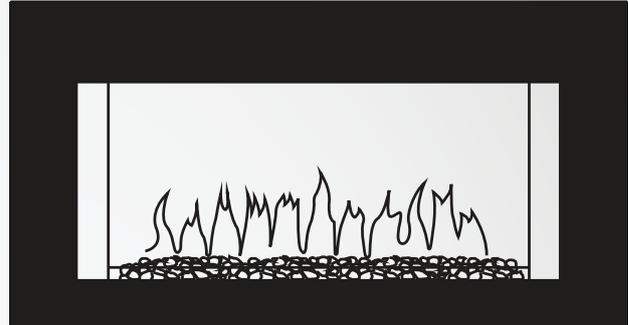
Abnormal flame pattern

Each Rinnai flame fire has a distinct flame pattern. This should look the same every time you start your fire, after an initial warm up period of approximately 20 minutes.

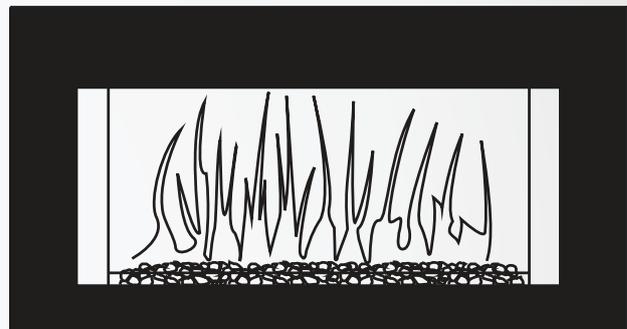
Abnormal flame performance and/or pattern can indicate a problem with your fire, such as blocked gas injectors, or shifting of burn media. There are some warning signs that could indicate a problem.

- Unusual smell from the appliance
- Continued difficulty or delay in establishing a flame
- Either very short or very long flames
- Flame only burns part way across the burner
- Severe soot building up on the inside of the glass door¹

If any of the above signs occur, please contact Rinnai.



Normal flame pattern



Abnormal flame pattern

¹ Appliances incorporating a live fuel effect, and designed to operate with luminous flames, may exhibit slight carbon deposits—this is normal.

Installation checklist

The installer must complete the installation checklist below and make sure this guide is left with you. They must also instruct you about the use and care of the appliance, and ensure you understand the safety instructions.

Checklist

- Appliance positioned in a suitable location (clearances, mantels, surrounds etc.).
- Rinnai flue system installed and tested to ensure effective draw.
- Gas pressure checked, set, and down rated (if applicable) according to data plate instructions
- Burn media installed as per instructions.
- Appliance tested for correct operation and to ensure no gas leaks.
- Customer instructed on operating procedure and safety requirements.
- Customer advised to service the heater every two years.

Installer details

Company name:

Installer name:

Address:

Phone:

Mobile:

Certificate of compliance number for installation:

Signed:

Date:

Limited Warranty

Rinnai brings you peace of mind with a:

2 Year minimum warranty

Terms and conditions

1. During the 24 month period from date of purchase and subject to clauses 2 and 3 below, Rinnai New Zealand Limited ("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 if (for example) the product has been improperly installed or is otherwise installed contrary to manufacturer's recommendations, has been damaged during or after installation, has not been operated in accordance with operating instructions, 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 fitter's registration number and the gas fitting certification number.
4. This warranty commences from the date of purchase. Proof of purchase is required at the time of any warranty claim.
5. Servicing of the product is to be carried out by a Rinnai authorised service centre.

All Rinnai appliances meet or exceed the safety standards required by New Zealand gas and electrical regulations. The company is constantly improving its products and as such specifications are subject to change or variation without notice.

RECORD YOUR DETAILS OF PURCHASE BELOW:

Retailer:

Retailer address:

Date of purchase:

Product details:

ATTACH YOUR PROOF OF PURCHASE HERE:



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



Experience our innovation

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