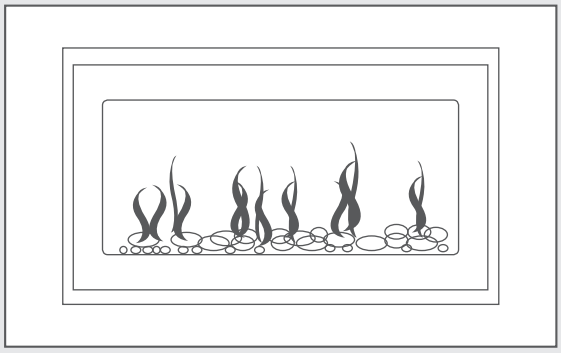
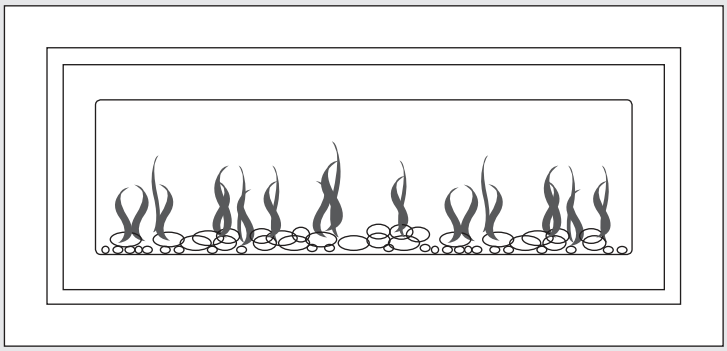
MODELS

RHFE 952 ETRN
RHFE 1253 ETRN

RHFE 952 ETRL
RHFE 1253 ETRL





Gas Fireplace

Operation & Installation Manual

Rinnai

Congratulations on the purchase of your Rinnai RHFE 952 / RHFE 1253 Gas Fire. We trust you will have many years of comfort and enjoyment from your appliance.

IMPORTANT

BEFORE INSTALLING THIS APPLIANCE

Before proceeding with the installation and operation of this heater, read this manual thoroughly and gain a full understanding of the appliance, to ensure safe and correct use.

This appliance must be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 3000, AS/NZS 3500 & AS/NZS 5601
- Local Regulations and Municipal Building Codes including local OH&S requirements

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

For continued safety of this appliance it must be installed and maintained in accordance with the manufacturer's instructions.

The Australian Gas Association

All Rinnai gas products are A.G.A. certified.

TABLE OF CONTENTS

WARNING

This appliance MUST be installed, maintained and removed ONLY by an Authorised Person.

For continued safety of this appliance it MUST be installed and maintained in accordance with the manufacturers instructions.

WARNINGS & IMPORTANT INFORMATION

IMPORTANT

BEFORE INSTALLING THIS APPLIANCE

Before proceeding with the installation read this manual thoroughly and gain a full understanding of the appliance, to ensure safe and correct use.

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, fire or explosion, property damage, personal injury and/or death.

DANGER: **Indicates an imminently hazardous situation which, if not avoided, will result in personal injury or death.**

WARNINGS: **Indicates a potentially hazardous situation which, if not avoided, could result in personal injury or death.**

CAUTIONS: **Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or damage to the appliance. It may also be used to alert against unsafe practices.**

WARNING

REGULATORY INFORMATION

This appliance shall be installed in accordance with:

Manufacturer's Installation Instructions.

Current AS/NZS 3000, AS/NZS 3500 & AS/NZS 5601.

Local Regulations and Municipal Building Codes including local OH&S requirements.

This appliance has been certified by the Australian Gas Association. The A.G.A. Certification Number is shown on the data plate.

This appliance MUST **be installed, maintained and removed** ONLY **by an Authorised Person.**

For continued safety of this appliance it MUST **be installed and maintained in accordance with the manufacturer's instructions.**

Notice to Victorian Consumers

This appliance MUST **be installed by a person licensed with the Victorian Building Authority.** ONLY **a licensed person will have insurance protecting their workmanship.**

So make sure you use a licensed person to install this appliance and ask for your Compliance Certificate. For further information contact the Victorian Building Authority on 1300 815 127.

WARNING

DRESS GUARD WARNINGS

The guard is fitted to this appliance to reduce the risk of fire or injury from burns and no part of it should be permanently removed. For protection of young children or the infirm, a secondary guard is required.

The dress guard supplied with this appliance MUST NOT **be permanently removed as it fulfils an operational safety function. Additional dress guards including free standing types may be used in conjunction with, but** NOT **replace, the dress guard supplied with this appliance.**

WARNING

MANDATORY INSPECTION PRIOR TO INSTALLATION

Immediately report any damage or discrepancies to the Supplier of the appliance. This appliance was inspected and tested at the time of manufacture and packaging, and released for transportation without known damage. Upon receipt, inspect the exterior for evidence of rough handling in shipment. Ensure that the appliance is labelled correctly for the gas and electrical supply, and/or other services it is intended to be connected to.

For safety and warranty purposes, appliances that may be damaged or incorrect MUST NOT **be installed or operated under** ANY **circumstances. Installation of damaged or incorrect appliances may contravene local government regulations. Rinnai disclaims any liability or responsibility whatsoever in relation to the installation or operation of damaged or incorrect appliances.**

Take care when opening or unpacking this appliance. Failure to do so may result in serious injury or product failure.

Check the label for the correct gas type (refer rating plate, inside the appliance). Refer to local gas authority for confirmation of the gas type if you are in doubt.

MODIFICATIONS

WARNING

DO NOT MODIFY THIS APPLIANCE**, modifying from original specifications may create a dangerous situation and will void your warranty. Failure to comply with these instructions could result in a fire or explosion, which could cause serious injury, death or property damage.**

DO NOT **modify the electrical wiring of this appliance.**

If the power cord is damaged or deteriorated it MUST **be replaced by an authorised person. Failure to do so may result in electric shock, fire, serious injury or product failure.**

Improper installation, adjustments, service or maintenance can cause serious injury, death or property damage. Such work MUST ONLY **be performed by an authorised person.**

GENERAL SAFETY WARNINGS

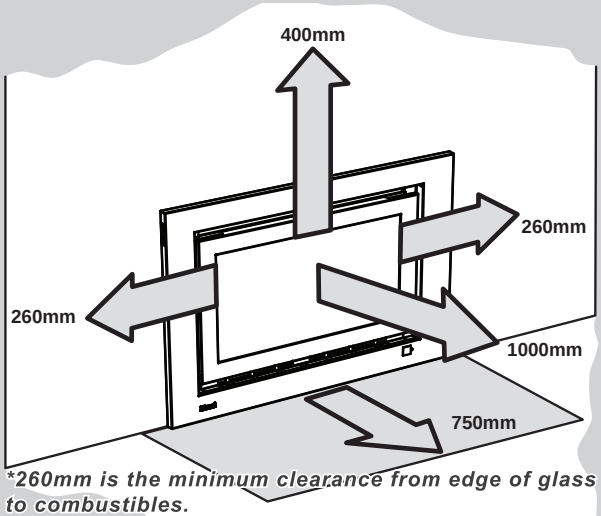
WARNING

This appliance is HEAVY**, during installation the use of a mechanical lifting aid is recommended, noting that improper lifting may result in serious injury.**

WARNING**: This heater** MUST NOT **be used if any of the glass panels are damaged.**

Flue terminal MUST **always vent directly to outdoors.** DO NOT **extend the flue vertically or horizontally in ways other than prescribed in this appliance manufacturer's installation instructions.** ONLY **the flue components specified by Rinnai** MUST **be used.**

When considering installation ensure minimum clearances as follows are adhered to.



**260mm is the minimum clearance from edge of glass to combustibles.*
***400mm is the minimum top clearance from edge of glass to combustible items other than mantel, over-hanging 250mm or less. (Refer Mantel Clearances, page 20 and TV Installation, page 23)*

Heat radiating from the front of this heater may over time affect the appearance of some materials used for flooring such as carpet, vinyl, cork or timber. This effect may be amplified if the air in the room contains cooking vapours, candle vapours and cigarette smoke, etc. Refer to "Location" on page 20 for mantel clearances, additional installation information and warnings.

This appliance MUST NOT **be installed where curtains or other combustible materials could come into contact with it. In some cases curtains may need restraining.**

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 appliance is NOT **intended for use by young children or infirm persons without supervision. Young children and the infirm** SHOULD **be supervised at all times when in the vicinity of this heater while it is in operation.**

The heater MUST NOT **be located immediately below a power socket outlet.**

A dedicated 230 V earthed 10 Amp power point must be used with this appliance.

Refer to local gas authority for confirmation of the gas type if you are in doubt.

Suitable ONLY **for indoor installation.**

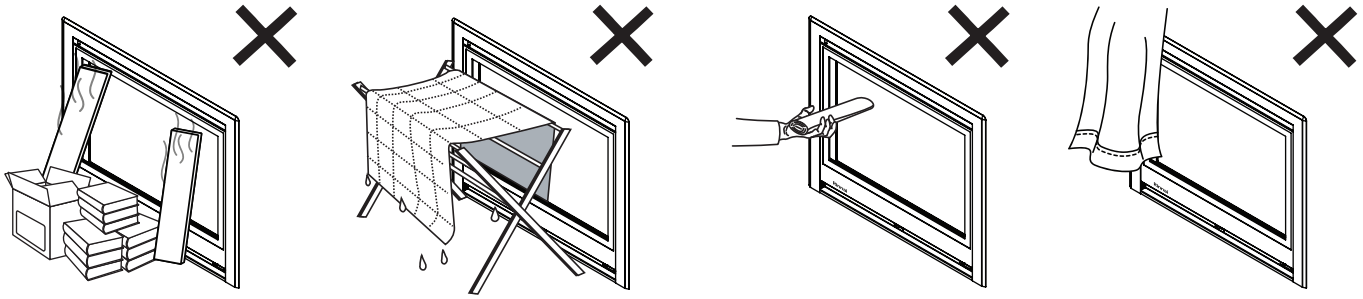
DO NOT **operate this appliance before leak checking hoses and gas cylinder connection.**

This heater MUST NOT **be used if either of the glass panels are damaged.**

NOT **to be connected to an LP gas cylinder located indoors.**

Please keep this instruction booklet in a safe place for future reference. All dimensions referred to in these instructions are in millimetres, unless otherwise specified.

OPERATIONAL SAFETY WARNINGS

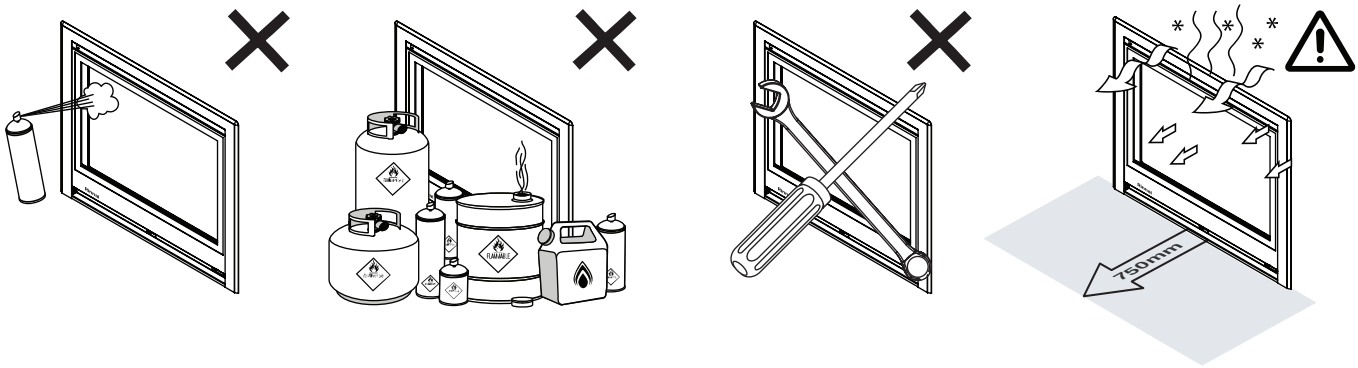


DO NOT restrict the warm air discharge or place articles on or against this appliance.

This appliance MUST NOT be used for any purpose other than heating.

DO NOT allow anyone to post articles through the louvres.

DO NOT let flammable and combustible materials (such as curtains, etc.), to come into contact with the heater.



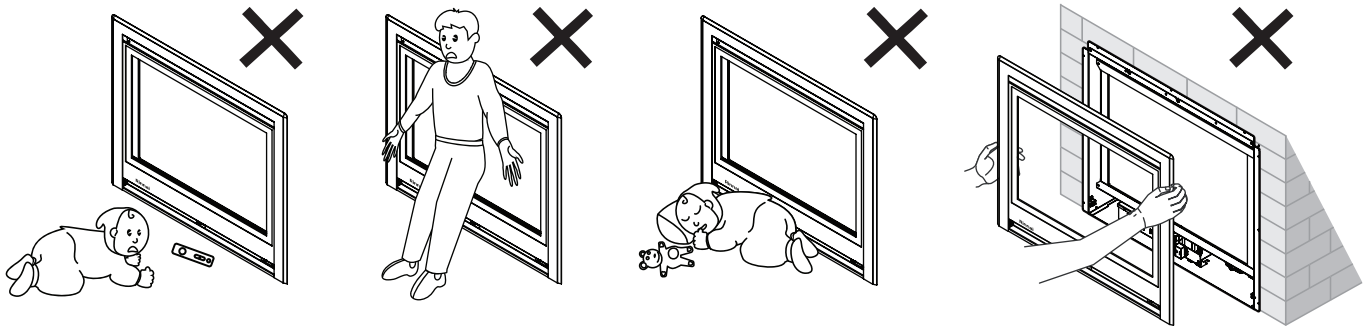
DO NOT spray aerosols in the vicinity of this appliance whilst the heater is operating. Most aerosols contain flammable gas, which can be a fire hazard if used near the heater when it is in use.

DO NOT use or store flammable materials near this appliance.

DO NOT modify this appliance.

Heat emanating from the front of the appliance may over time affect the appearance of some materials used for flooring such as carpet, vinyl, cork or timber. This effect may be amplified if the air in the room contains cooking vapours or cigarette smoke. To avoid this possibility, it is recommended that a mat be placed in front of the appliance, extending at least 750 mm in front of the heater.

When the heater is operated for the first time or after long periods of non use a slight odour may be emitted, this is normal. However if odours persist switch ‘OFF’ the appliance and contact Rinnai.

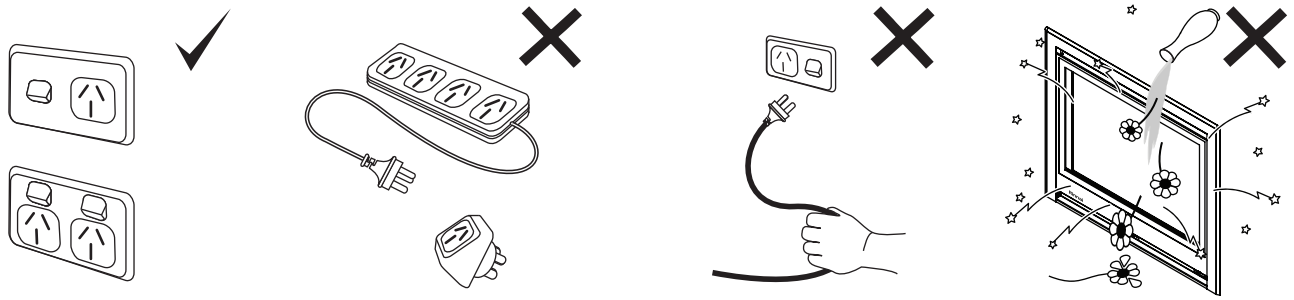


Young children should be supervised at all times. Hand or body contact with the warm air discharge louvres and glass must be avoided.

DO NOT allow anyone to sit on or lean against the appliance.

DO NOT allow young children or the infirm to sleep directly in front of the heater while in operation.

DO NOT remove the Fascia / Dress Guard. The Fascia / Dress Guard is fitted to this appliance to reduce the risk of fire or injury from burns and no part of it should be permanently removed. For protection of children or the infirm, a secondary guard is recommended.



A dedicated 230V earthed 10 Amp power point MUST BE USED with this appliance.

DO NOT use power boards or double adaptors to operate this appliance. The heater MUST NOT be located below a power socket-outlet.

DO NOT unplug the heater while it is in operation or while the fan is still cycling.

DO NOT place containers of liquid above the heater. Water spillage can cause extensive damage to the appliance and create an electrocution hazard.

DO NOT place articles on or against this appliance.

DO NOT connect to an LPG gas cylinder indoors.

Turn the heater 'OFF' after use.

SAFETY DEVICES

Initial start-up

This heater has a one-time start up cycle. Should there be a fault in the heater no more than 3 manual restarts should be attempted. If the heater still fails to operate a service call will be required. Refer to."Care & Maintenance" on page 12

Over Heat Thermistor

Should the heater get too hot during operation, (for example when the air outlet louvres are blocked), this device will automatically turn the gas off and allow the heater to be manually restarted, (automatic re-start will not occur). Refer to "Care & Maintenance" on page 12 for further information.

Over heat Thermal Fuse

In the unlikely event of the Over Heat Thermistor failing or some other fault occurring the Over Heat Thermal fuse will operate completely shutting the appliance down. This device is a 'one shot' only function, a service call will be required to reinstate operational ability to your heater. Refer to "Care & Maintenance" on page 12 for further information.

Power Failure

Refer to page 9. In the event of power failure or power disruption your heater will shut down completely, manual restarting will be required. Refer to "Care & Maintenance" on page 12 for further information.

Electric Fuse

The electrical circuits are protected by a fuse. Refer to "Care & Maintenance" on page 12 for further information.

Flame Failure Sensing System

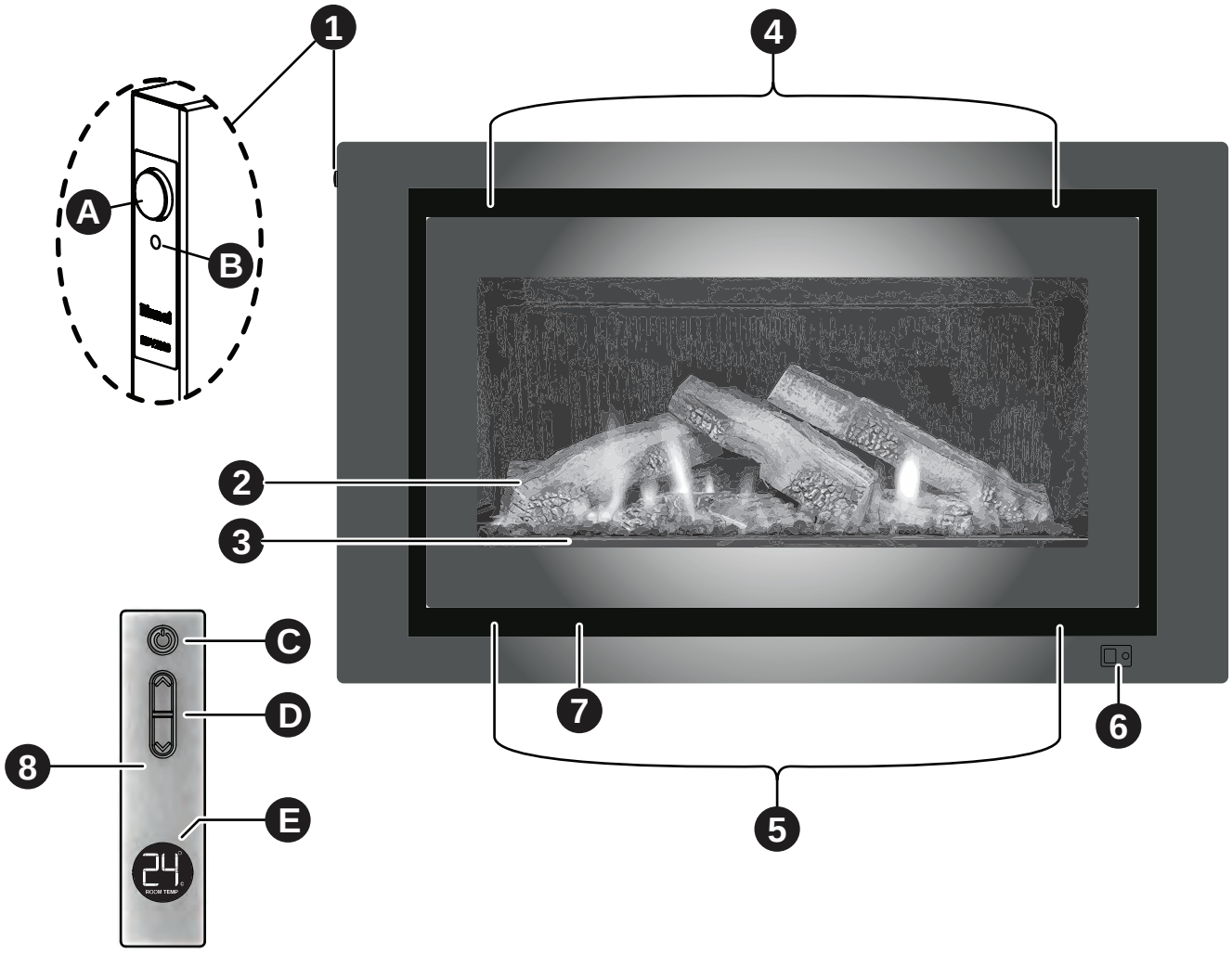
These devices within the appliance automatically cut of the gas supply to the burners in the event of a flame failure. Refer to "Care & Maintenance" on page 12 for further information.

Pressure Relief

The glass panel is secured to the burner box via spring loaded pressure relief fasteners.

ABOUT YOUR HEATER

GENERAL OVERVIEW: RHFE-952 / RHFE-1253



❶	**Push button control panel**	Controls appliance operation between Standby and ON modes.
Ⓐ	**ON / OFF button**	Controls appliance operation between ON and OFF.
Ⓑ	**Standby / ON button:**	See "Remote Control Operation" on page 10
❷	**Mesh dress guard (as part of fascia)**	
❸	**Flame window**	Ceramic log set and burner media
❹	**Warm air discharge vent**	
❺	**Return air vent**	Dust filter mesh is fixed to the inlets of the room air return.
❻	**Remote (IR) control receiver window**	(Green Indicator) Flashes during the pilot ignition and glows solid when pilot is established, going out once heating operation commences. Flashes to acknowledge remote control inputs.
❼	**Viewing window for error code display**	Located behind the fascia. See "Error Codes" on page 12
❽	**Remote (IR) Control**	
Ⓒ	**Standby / ON button:**	See "Remote Control Operation" on page 10.
Ⓓ	**Flame Up / Down buttons:**	See "Remote Control Operation" on page 10.
Ⓔ	**Room temperature display**	Displays the current temperature of the room in which **the control** is located. See "Remote Control Operation" on page 10.

CONTROL PANEL OPERATION

TO TURN ON YOUR HEATER

NOTE

BEFORE PROCEEDING ENSURE THE GAS AND ELECTRICITY ARE TURNED ON.

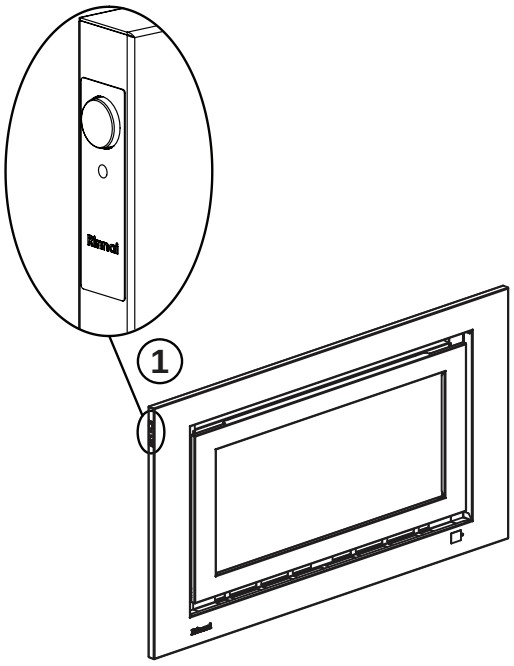
When the heater is in the OFF condition (the power supply connected and switched ON but the heater turned OFF) the Red Power Indicator Ⓑ will be extinguished. This is normal.

Access the 'Push Button Control Panel' ①. .

Step 1. Press ON / OFF button Ⓐ once. You will be able to hear the ignition sparking.

Step 2. The sparking ignition stops when the pilot flame has been established. The main burner then ignites off the pilot flame and is automatically preset to Stage 5 - High Flame. The red indicator LED Ⓑwill illuminate.

INBUILT FIRE CONTROLS



NOTE

FLAME HEIGHT AND FAN SPEED

The relationship between the flame height and fan speed are preset and can not be independently adjusted.

Flame Height	1	2	3	4	5
Fan Speed (2 speed only	Low	Low	High	High	High

TO TURN OFF YOUR HEATER

To turn the heater ‘OFF’ press the Standby / ON button Ⓐ once, when the heater is in the OFF state the Red Power Indicator Ⓑ will be extinguished.

INTERRUPTION TO ELECTRICITY OR GAS SUPPLY DURING OPERATION

Interruption to the power or gas supply will turn your heater OFF, upon resumption of the services the appliance will need to be restarted. This is a safety feature designed to ensure that un-attended starts do not occur after power or gas interruptions.

RESTART PROCEDURE AFTER INTERRUPTION TO ELECTRICITY SUPPLY

To restart your heater once power has been restored follow the steps for "To Turn ON Your Heater" as above.

FULL CONTROL AND PARTIAL CONTROL

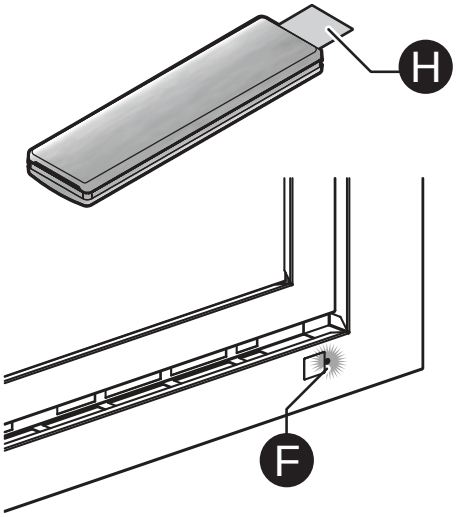
Full operation of the heater is only possible by using the remote control. In the event of a misplaced or broken remote control or if the batteries for the remote control are flat, this appliance may still be operated in a limited capacity by using the power ON/OFF button Ⓐ of the 'Push Button Control Panel' ① as decribed above.

The heater will automatically modulate between flame settings to maintain the default set temperature of 22°C.

No additional control of the flame or heat output is possible via the appliance ON/OFF button.

REMOTE CONTROL OPERATION

REMOTE CONTROL ACTIVATION



The remote is supplied with two Lithium cell CR2450 button batteries already pre-inserted.

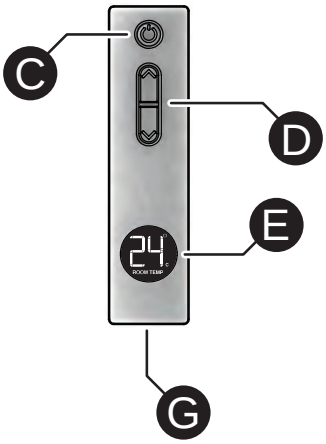
To activate pull the clear tab **H**, noting that OH (OK) will briefly be shown on the digital display **E**, to confirm that the activation was successful. Noting that this also occurs whenever a fresh set of batteries is installed.

NOTE

Remove the batteries if the remote is not used for extended periods. This will avoid damage from leaking batteries. If leakage has occurred the remote will need to be replaced as the chemicals could be a risk if touched or ingested.

When the controller buttons are pressed the green indicator located in the IR receiver window **F** will flash and 'Beeps' will be emitted to confirm that control inputs are being received, this indicates your remote control is now working.

BUTTON FUNCTIONS, DISPLAY & OPERATION



NOTE

For the remote control to be able to function, the appliance Standby / ON button A must be in the "ON" condition. Using the remote control to turn OFF the heater will place the heater into STANDBY mode.

The Standby / ON button **C** switches the heater between the Standby and ON modes.

The UP / DOWN buttons **D** control the height of the flame and heat output in five adjustment levels in fixed combination with two fan speeds.

NOTE

FLAME HEIGHT AND FAN SPEED

The relationship between the flame height and fan speed are preset and can not be independently adjusted.

Flame Height	1	2	3	4	5
Fan Speed (2-speed only)	Low	Low	High	High	High

NOTE

On initial start-up the appliance default flame height setting is 5 - High. The flame height may only be adjusted after at least 30 seconds of operation.

The remote control temperature sensor G (located on the base of the controller) reads the temperature of where the remote control is currently located.

The remote controls digital display E shows the temperature (in degrees Celsius) of the room that the remote control is located in. It has a motion activated back light which will remain illuminated for approximately 5 seconds after a movement is sensed or when a button is pressed. Frequent illumination of the back light greatly reduces the remote control's operational battery life. To increase battery life, ensure that unnecessary illumination of the display is avoided.

LOST, MISPLACED OR BROKEN REMOTE CONTROL

NOTE

Breakage of the plastic housing could expose sharp edges, replace the remote if this occurs.

Avoid getting the remote wet as water entry will damage the remote.

NOTE

In the event that the remote control operation is not available, this appliance may then still be operated in a limited capacity by using the heater's control panel.

Refer to "Control Panel Operation" on page 9 for details on how to use the appliance in this mode and the limitations of this form of operation.

BATTERY SAFETY

- WARNING KEEP BATTERIES OUT OF REACH OF CHILDREN.
- Swallowing may lead to serious injury in as little as 2 hours or death, due to chemical burns and potential perforation of the oesophagus.
- If you suspect your child has swallowed or inserted a button battery immediately call the 24-hour Poisons Information Centre on **13 11 26** for fast, expert advice.
- Examine devices and make sure the battery compartment is correctly secured, e.g. that the screws or other mechanical fasteners are tight. **DO NOT** use if compartment is not secure.
- Dispose of used button batteries immediately and safely. Flat batteries can still be dangerous and may be a choking hazard.
- Inform others about the risk associated with button batteries and how to keep their children safe.
- Remove the batteries if the remote is not going to be use for prolonged periods. This will help prevent damage from leaking batteries. If leakage has occurred and corrosion is evident the remote will need to be replaced.
- Leaking chemicals are toxic and **MUST NOT** be touched or ingested.
- **NEVER** mix old and new batteries.
- **DO NOT** immerse the remote control in any liquid, this will damage the remote control, rendering it inoperable and voiding its warranty.

CHANGING THE BATTERIES

When the low power symbol (left) appears at the top of the room temperature display Ⓔ the batteries are near to being fully discharged and may no longer able to power the remote control properly. Replacement of batteries is now a priority.

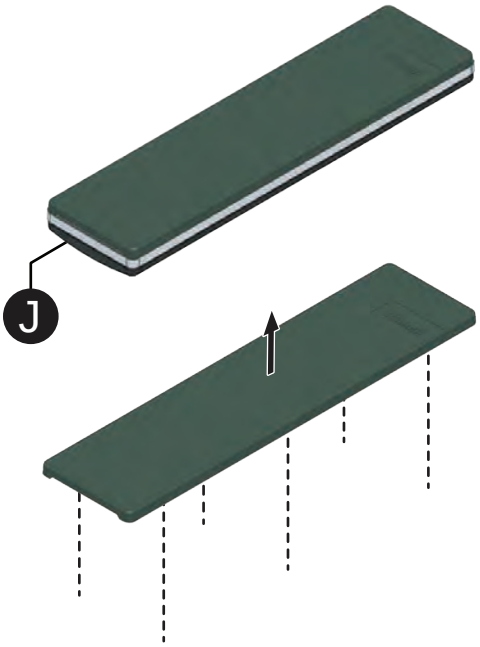
1. Using a suitable lever carefully remove the back cover, do this by first prying the cover off using the notch at the temperature sensor Ⓙ end as a starting point, and continuing until the cover pops off.

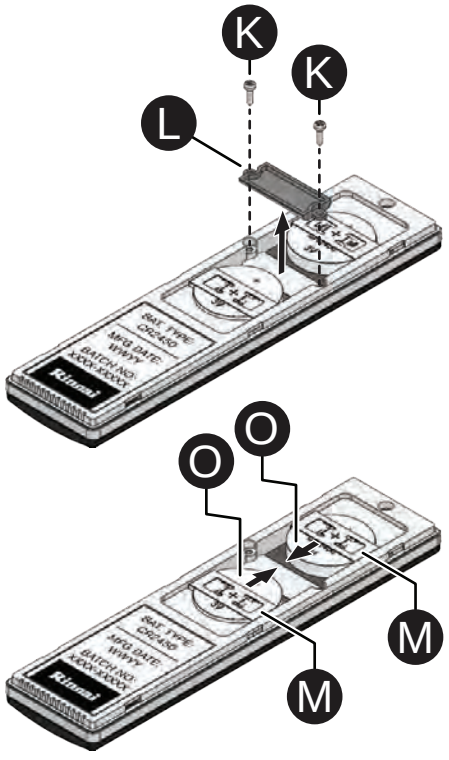
When removing the remote control cover some patience may be required as the cover is designed to be not easily removed, this is to prevent easy access to the batteries, especially by young children.

2. Once the cover is off remove the two screws Ⓚ that secure the plastic retaining bridge Ⓛ, using a small (No.0) Phillips head screw driver or equivalent remove the plastic retaining bridge Ⓛ.
3. Remove the old button batteries Ⓞ by carefully sliding them one at a time out from under the metal battery retainers Ⓜ, and into the space that was created when the plastic retaining bridge Ⓛ was removed in the previous step.
4. Insert two new button batteries (CR2450) Ⓞ under the metal battery retainers Ⓜ ensuring that the positive " + " terminals (the side with the writing and the positive symbol) are facing upwards.
5. Re-fit the plastic retaining bridge Ⓛ securing it back in place with the two screws Ⓚ.
6. With the batteries secured re-attach the rear cover by carefully clipping it back into place, noting that the end with the notch in it is at the bottom.

   Noting that OH (OK) will briefly be shown on the digital display to confirm that the batteries have been successfully replaced.

Remember to dispose of used button batteries immediately and safely.





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CARE & MAINTENANCE

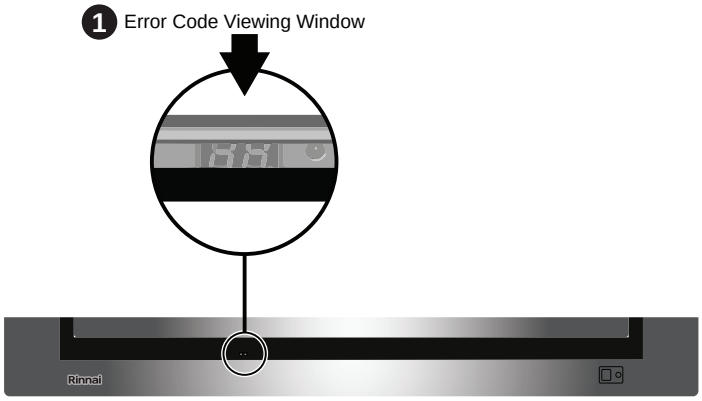
ERROR CODES

WARNING **In all cases, you should be able to clear the Error Code on display simply by turning the heater 'OFF', then 'ON' again. If the Error Message still remains or returns on the next operation, contact Rinnai or your nearest service agent and arrange for a service call.**

Your Rinnai Gas Fire is also fitted with self diagnostic electronics that monitor the appliance during start-up and operation.

Should a fault occur the appliance will shut down. The fault type will be indicated by a pair of flashing digits in the Error Display window ❶ located behind the fascia. This can be viewed by looking down at the area beneath the filter.

Refer to the table below for probable cause and the suggested corrective action.



Code	Probable Cause	Suggested Solution
00	Mains power failure	Reset the heater, press the Standby / ON button on the control panel, remote control, or app twice, to turn the fire back on.
11	Ignition failure	Check gas supply is turned on. Switch the heater to STANDBY and then ON again If the error persists, a service call will be required.
12	Incomplete combustion	As above.
14	Inlet Blockage /Overheat	Clean inlet, if the error persists, a service call will be required
16	Room overheat	Lower room temperature to below 40 °C.
31	Room temperature sensor faulty	Service call.
32	Overheat temp. 1 sensor faulty	Service call.
33	Overheat temp. 2 sensor faulty	Service call.
53	Spark sensor faulty	Service call.
61	Combustion fan motor faulty	Service call.
70	Model error	Incorrect PCB for model. A service call will be required.
71	Solenoids faulty	Service call.
72	Flame detection circuit fault	Service call.
73	Communication error	Service call.
90	Communication error between the main PCB and Wi-Fi module	Wi-Fi module in the fire needs resetting. A service call will be required.
91	Communication error between Smart device and Wi-Fi module	Check your Wi-Fi and Rinnai Wi-Fi module are within range. Check network settings.
92	Cloud function not available	This is due to another device having control on the home network,or the Wi-Fi module has gone offline.

IMPORTANT **The appliance is fitted with an overheat safety shut-off switch. If the appliance shuts off repeatedly, servicing or inspection of the flue for blockage may be required.**

SERVICE

This appliance does not contain user serviceable parts and MUST ONLY be serviced and repaired by an authorised person. If any heater component is damaged, they MUST BE replaced by Rinnai or a suitably qualified person.

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance.

Rinnai recommends that this appliance be serviced every 2 years. If your appliance requires service, please call our National Help Line (our contact numbers are on the back cover of this manual).

NOTE

Service calls for general cleaning, maintenance and wear and tear are not necessarily covered under the warranty. Service calls of this nature may be chargeable.

Faults caused by insufficient gas supply, gas quality, installation errors or operation errors are not covered by the Rinnai warranty. Refer to separate Warranty Manual for details.

NORMAL OPERATIONAL CHARACTERISTICS

During the initial burning in period some fumes and smell may be experienced. This condition may last for a couple of hours, however this is a normal part of the burning-in process. We recommend to ventilate the space for this period.

When 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 condition persists however, contact Rinnai for advice.

The heater may make noises after ignition or switching off. This is due to thermal expansion and contraction of the internal components and is normal.

As a safety precaution the heater will not ignite if the Standby / ON button is pressed immediately after the heater has been turned off. It will take approximately 20 seconds for the unit to reset and switch back on again.

TROUBLE SHOOTING

General Operation Characteristics

NOTE

Before asking for a service call please check the following table as these characteristics are part of the normal operation of the appliance and do not indicate a fault.

Characteristic		Explanation
At ignition:		
Warm air does not start when the burner lights.	➡	The fan is started automatically after a short delay. This is to allow the heat exchanger to warm up, helping to avoid cold draughts. This is normal operation.
Smoke or strange smells are produced on the first start up after installation.	➡	This is caused by manufacturing oil or dust on the heat exchanger. This is to be expected and will cease after a short time.
Sharp clicking noises at ignition, or when the unit thermostat modulates to a lower or higher setting, or shuts down.	➡	This is simply expansion and contraction noise from the heat exchanger. This is a normal operation sound.
During combustion:		
Dull clunking noise when the thermostat operates.	➡	This is the sound of the solenoid gas valves opening and closing to regulate the gas flow. These are normal operation noises.
When the appliance is turned off:		
Convection fan continues to run after turning 'OFF'.	➡	This is to remove residual heat from the heat exchanger and stops once the appliance cools sufficiently.

TROUBLE SHOOTING CHECKLIST

Check the following information to help determine whether a service call is required. However if you are unsure about the way your heater is operating, or if you have any other faults or problems, please refer to your supplier, installer or a Rinnai Customer Care Centre Consultant. See back page for Rinnai contact details.

Probable Cause	Fault Condition									Simplest Possible Remedy
	Burners fail to ignite	Smell of gas	Fan Not Working	Minor soot deposits	Severe sooting	Glass, Condensation	Glass, Streaky lines	*Remote not working	*Wi-Fi not working	
Not plugged in or turned off	●		●					●	●	Plug in power cord and turn power 'ON'.
Mains power failure	●		●							Re-start, once the power has been restored.
(Initial Install) Air in gas pipe	●									Installer to purge air from gas supply.
Air in hose	●									Repeat Ignition procedure.
Ignition failure	●									Repeat Ignition procedure.
Flat battery for remote control *		●						●		Replace remote control battery.
Gas supply turned off	●									Turn gas supply on at the meter or cylinder.
Gas escape					●					Isolate gas supply, call Rinnai.
Blocked / restricted flue system	●				●					Call Rinnai.
Insufficient gas pressure	●				●					Call Rinnai.
Log Misalignment			●							Call Rinnai.
Normal operation				●		●	●			No action is required.
Normal operation			●							Fan not working - fan automatically comes on after 4 minutes i.e. once heat switch is activated.
Normal operation		●								Allow heater to warm up.
Heat switch not activated			●							Allow heater to run on high for 4 minutes.
Possible fan fault			●		●					Call Rinnai.
Controller display blank	●				●					Replace batteries.
Control panel operation	●								●	Refer to page 10 for solution.
Controller not synchronised									●	Refer to page 39 for solution

** Only applicable when remote control is used.*

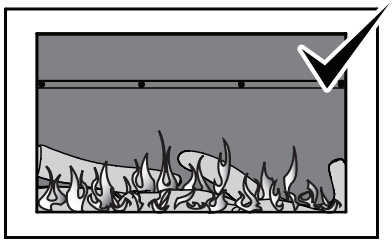
ABNORMAL FLAME PATTERN

Each Rinnai Gas Fire has a distinct flame pattern. The flame should look the same every time you operate your heater, after an initial warm up period of approximately 15 minutes.

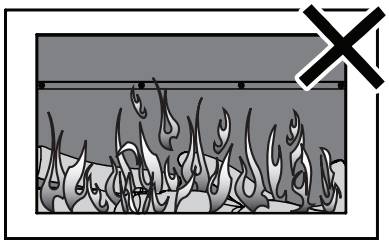
Abnormal flame performance and/or pattern can indicate a problem with your heater, such as blocked gas injectors, incorrectly installed / inadequate flue system or the Ceramic logs / stones and/or burner media may have shifted.

There are some warning signs that could indicate a problem. If any of the signs below occur, please contact Rinnai.

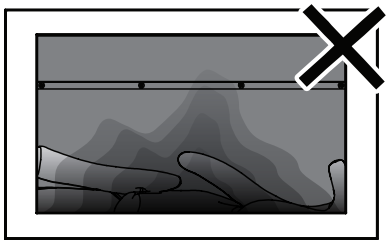
Key signs of abnormal flame performance:



NORMAL FLAME PATTERN



ABNORMAL FLAME PATTERN



SOOT BUILD UP

- Appliance turns ‘OFF’ soon after start up and does not relight.
- Flame appears overly orange-yellow.
- Flame appears either very short or very long.
- Flame only burns part way across the burner.
- Severe soot building up on the inside of the glass or on logs.
- Continuous unusual smell from the appliance.
- Continued difficulty or delay in establishing a flame.

NOTE **Be advised that appliances with a live fuel effect, designed to operate with luminous flames, may exhibit slight carbon deposition. This is normal operation.**

CLEANING

Your heater needs very little maintenance, but the following information will help you to keep it looking good and working efficiently. All parts of the heater can be cleaned using a soft, damp cloth.

WARNING

DO NOT **attempt to clean the heater while the appliance is hot or operating.**

DO NOT **use solvents or abrasives to clean any parts.**

DO NOT **spray aerosols in the vicinity of the heater whilst in operation.**

DO NOT **place articles on or against this heater.**

DO NOT **store flammable materials near this heater.**

DO NOT **remove any panels or attempt to carry out any service work other than that which is mentioned in the Trouble Shooting Checklist "Trouble Shooting Checklist" on page 14.**

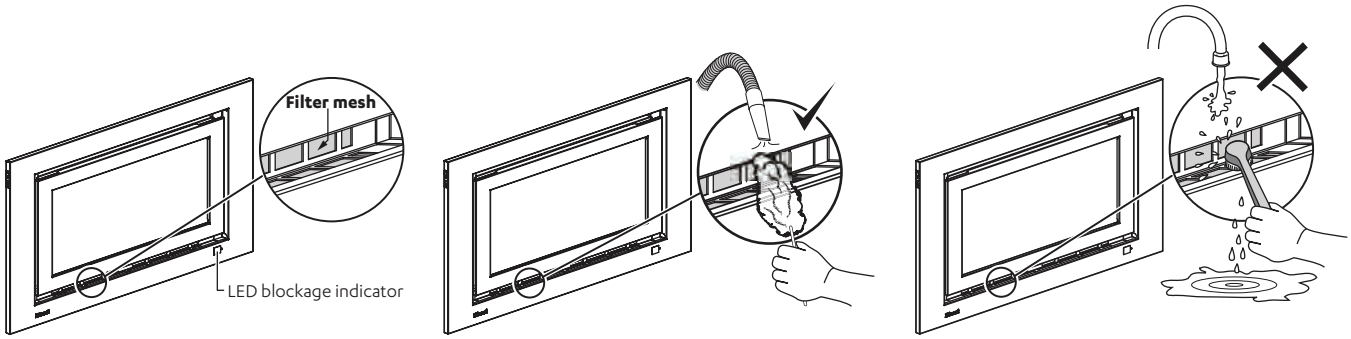
Filters

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 filters 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.

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

Filter blockages

When a build up is detected the blockage LED, located by the infra-red remote receiver window, will begin the flash. Once the indicator is flashing, if no action is taken, the heater will shutdown to avoid overheating and error code 14 will be displayed in the error display window.



Returning the appliance to normal after a shutdown

1. Press the ON/OFF button once to turn off.
2. Clean the filters.
3. Press the ON/OFF button once to turn on.
4. Use the remote to resume normal operation.

INSTALLATION TABLE OF CONTENTS

WARNING

This appliance MUST be installed, maintained and removed ONLY by an Authorised Person.

For continued safety of this appliance it MUST be installed and maintained in accordance with the manufacturers instructions.

BEFORE YOU START

INSTALLATION REQUIREMENTS

This heater **MUST** be installed **ONLY** by an authorised person.

The installation **MUST** conform to local regulations.

The installation **MUST** also comply with the instructions supplied by Rinnai.

Service and removal **MUST** be carried out **ONLY** by an authorised person.

CERTIFICATION

The Rinnai RHFE 952 and RHFE 1253 Gas Fires have been certified by the Australian Gas Association.

The AGA Certification Number is shown on the appliance data plate.

No parts or functions should be modified or permanently removed from the heater.

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

FLUE INSTALLATION MANUAL

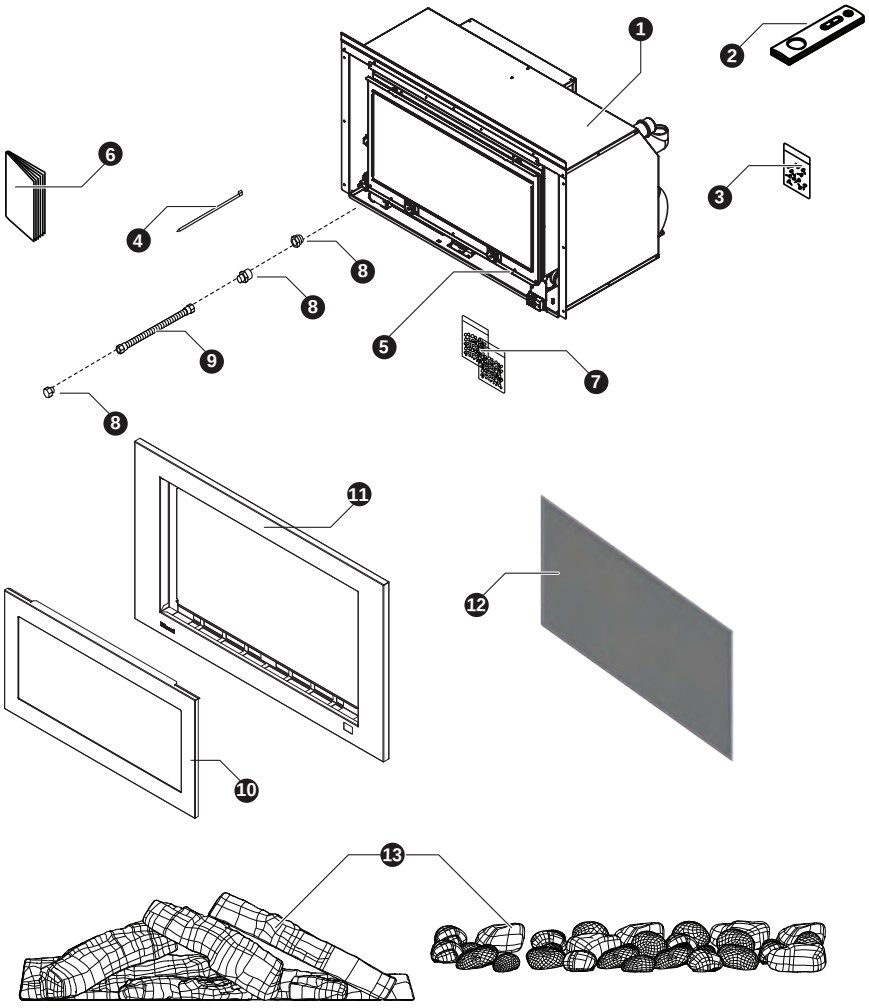
These instructions are to be used in conjunction with the Rinnai “Power Flued Flamefire Space Heater Co-axial Flue System Installation Manual” supplied with flue kits ASPDFK or ASPKIT03.

CARTON CONTENTS / ITEM CHECKLIST

The following table lists the components for the Rinnai RHFE 952 and RHFE 1253 Gas Fires. Ensure that all the relevant components for the model being installed are present before proceeding.

IMPORTANT

DO NOT **Install any damaged items. Check all components have been supplied.**



1. RHFE 952 / RHFE 1253 engine
2. Remote control with batteries
3. Screw pack
4. Cable tie
5. Frame mounting screws
6. Operation & installation guides
7. Two granule packs (both models) + one bag of wire wool (not shown)
8. Gas adaptors
9. Semi-rigid connector
10. Inner frame
11. Outer Frame
12. Mesh guard
13. Log set OR river stone set. - Images shown are for the RHFE-952 model, The RHFE-1253 log set has an extra two logs (10 in total), and the stone set contains an extra 10 stones (40 in total)

INSTALLATION RECORD

WARNING

This appliance MUST be installed, maintained and removed ONLY by an Authorised Person.

For continued safety of this appliance it MUST be installed and maintained in accordance with the manufacturers instructions.

The Installation Record is a reference for the end user, help line staff and service technicians. Ensuring that this information is available here will be helpful in the event that a service enquiry is required.

Installation Details

Installation Company Name: _____

Address: _____

_____

_____

Telephone / Mobile Phone: _____ / _____

Email: _____

Certificate of Compliance / Certification No.: _____

Authorised Persons - Licence No.: _____

Installers Name: _____

Installers Signature: _____

Installation Date: _____

Model Number * _____

Serial Number * _____

Installation Address: _____

_____

_____

** This information will need to be copied from the data plate, located on the inside of the appliance.*

IMPORTANT

Ensure this Manual is kept for future reference.

IMPORTANT

Ensure installer has instructed you on the correct use of this appliance and completes the "Installation Checklist" on page 41

GENERAL INSTALLATION INFORMATION

LOCATION

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

Combustible clearances

The heater MUST NOT be installed where curtains, furniture or other combustible materials could come into contact with the fire while it is operating. The 260 mm side clearance, measured from the edge of the glass, includes side walls. The 1000 mm clearance is in front of the fire.

Hearths

A hearth is not necessary but can be used for decorative purposes. It MUST NOT obscure the front of the fire or obstruct the fire in any way. For more information refer next page.

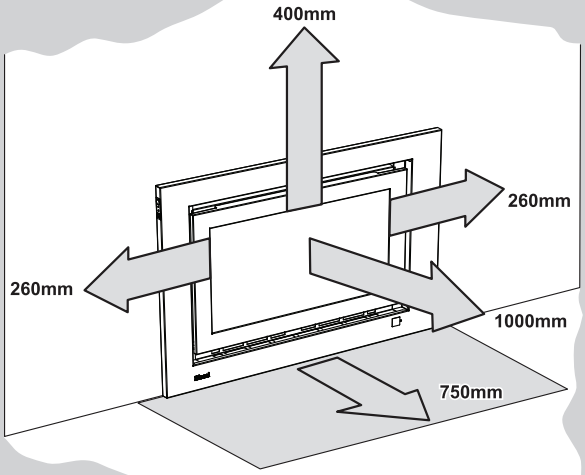
Floor protection

Heat radiating from the fire may affect the appearance of some materials used for flooring such as vinyl planks, carpet, cork, or timber. To avoid this occurring it is recommended a mat be placed in front.

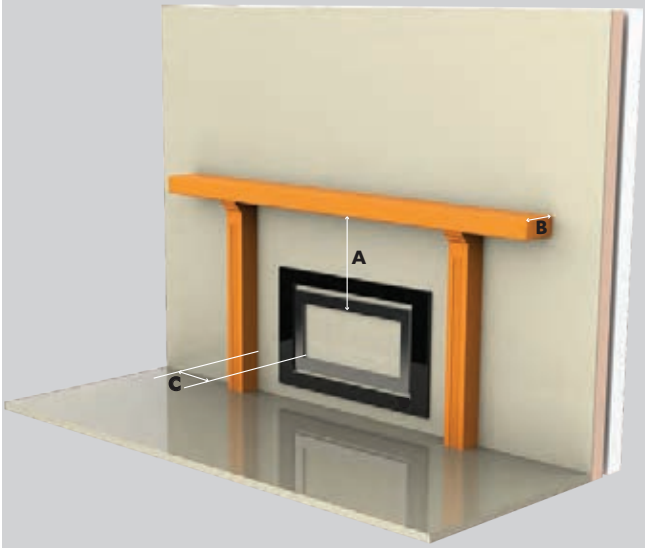
Mantels and surrounds

Combustible mantels and surrounds require clearance from the unit to minimise the risk of fire. They are allowed providing they are outside the minimum clearances shown.

The RHFE 952 & 1253 gas fireplaces are not designed to be built into bookcases.



The above diagram shows the clearances required around this heater whilst in operation.



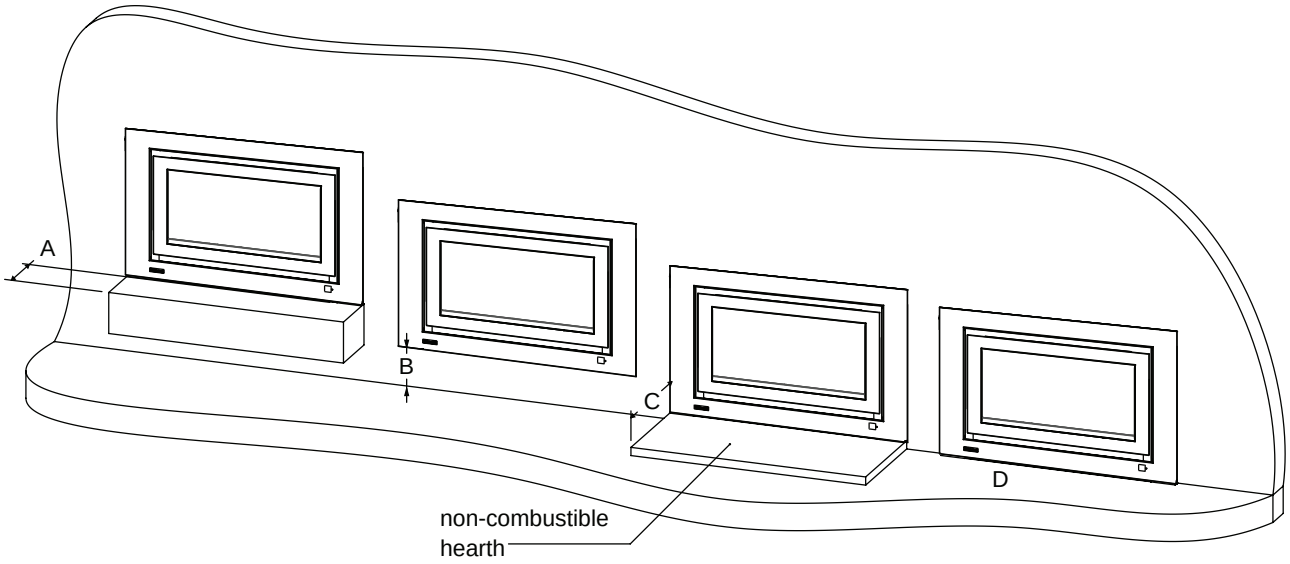
A	Mantel needs to be a min. of 400 mm away from the edge of the glass
B	Max. mantel depth at 400 mm (A) is 250 mm
C	Surround needs to be a minimum of 260 mm away from the edge of the glass

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 (B)	Vertical clearance req (A)
250 mm	400 mm
300 mm	500 mm
350 mm	600 mm
400 mm	700 mm

FLOORING AND HEARTH MATERIAL SELECTION

The temperature in front of the fire (200-350 mm x 400 mm wide) can reach up to 40 °C above ambient, therefore material selection is important. Some guidelines are detailed below. For example, vinyl planks are often only rated for ambient temperatures. Consequently, the heater would not be suitable for installation directly on that flooring type.



Dim.	Non-combustible materials or materials rated to 60 °C or higher above ambient	Materials rated to a maximum of 50 °C above ambient	Unrated materials, anything up to 20 °C above ambient
A	No maximum.	150 mm maximum[1]	100 mm maximum[1]
B	No minimum	150 mm minimum	300 mm minimum
C	No minimum	400 mm minimum	450 mm minimum
D	No restriction	Not suitable for carpets or any heat sensitive materials	
[1] Refer floating hearth section below			

Even if a material is rated above 60 °C it may still be subject to deterioration when exposed to heat cycles. Always refer to the materials supplier for suitability. The temperatures given assume the heater is operating in a room temperature of no more than 25 °C. Operation in higher ambient temperatures may result in higher surface temperatures.

Floating hearth - low rated and unrated flooring materials

For unrated flooring materials, if you use a non-combustible floating hearth, the dimensions of the hearth, minimum depth and minimum height can be optimised using the following calculations:

Min. hearth depth (A) **= 450mm - height of hearth (for 50 °C rated materials it will be 400mm)**

Min. hearth height (B) **= 450mm - depth of hearth (for 50 °C rated materials it will be 400mm)**

Example

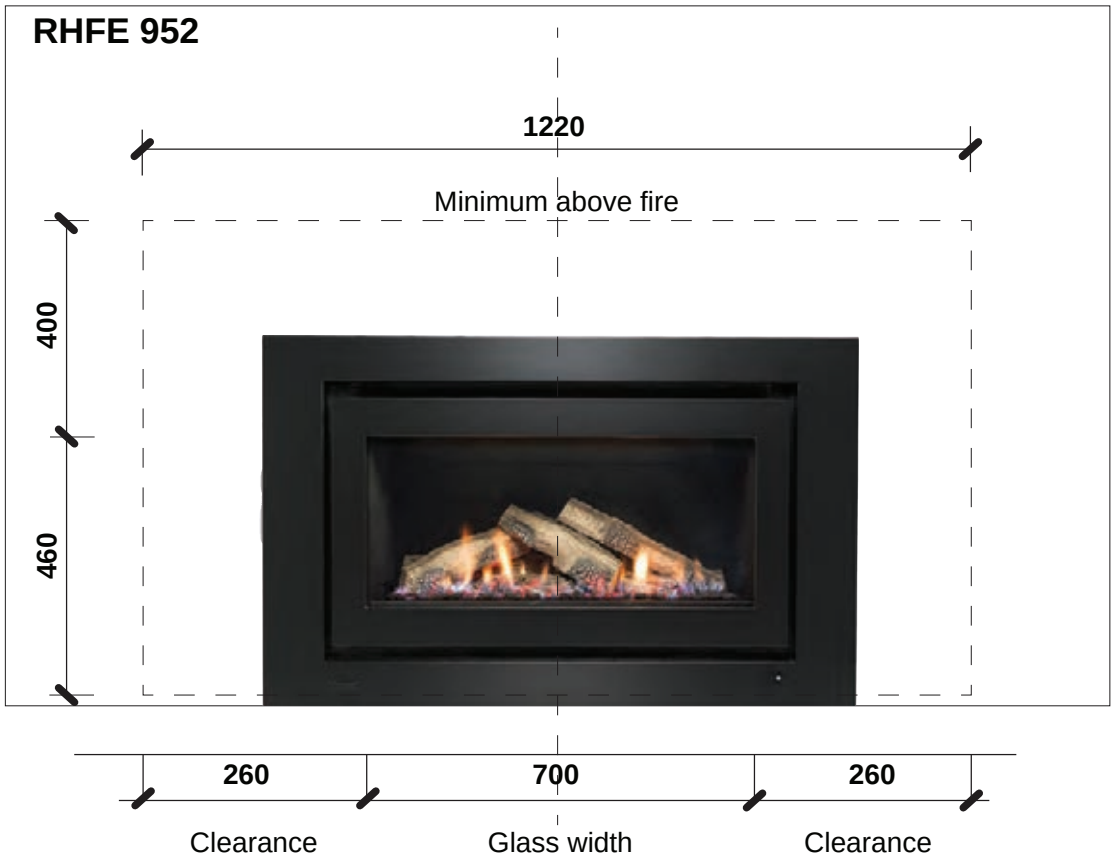
For a 200mm deep non-combustible hearth, the calculation for hearth height would be:

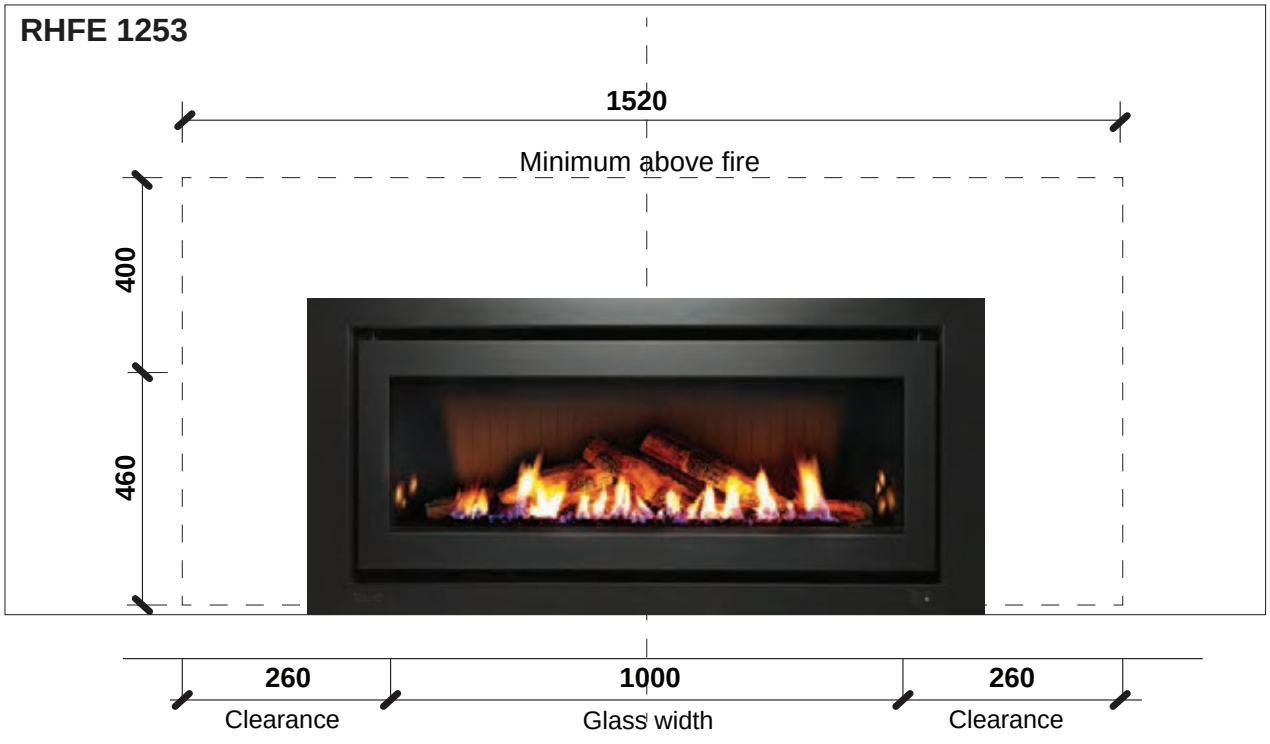
450mm - hearth depth (A) (450mm - 200mm = 250mm). The non-combustible hearth height would need to be 250mm minimum.

This would mean the floating hearth dimensions could be 200mm deep and 250mm high.

CLEARANCES

The below diagrams are to assist people who are determining the clearance area around the RHFE952 and RHFE 1253 without having the unit on site.





TV INSTALLATION

The RHFE 952 & RHFE 1253 has a fan that distributes warm air from the top of the appliance out into the room. As warm air is dispersed outwards and not directly upwards, installation of a TV may be an option.

The general rule for television installations is that the bottom of the television should be at least 400-450 mm above the fire.

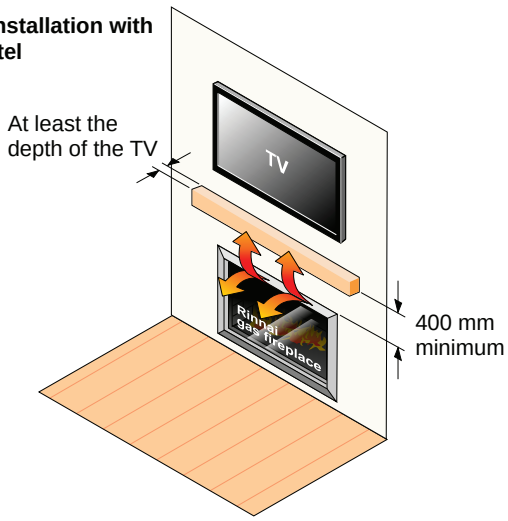
For a TV mounted directly above the fire, the mantel must be at least the depth of the TV to deflect heat away.

It is the responsibility of the owner to confirm with the TV manufacturer the suitability of such an installation and any conditions in the TV warranty that may apply to this.

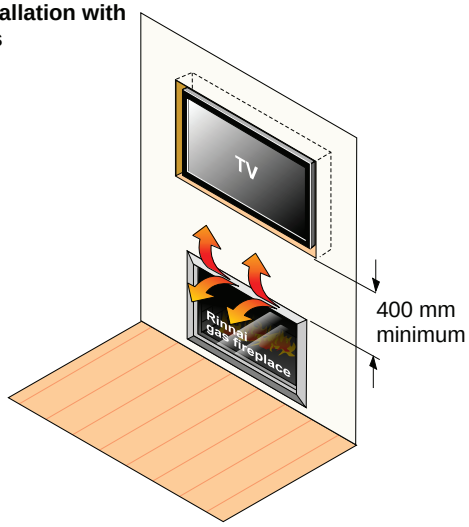
IDEA

Use either a shelf or mantel below the TV or ornament or alternately you can construct a recess to mount TV or ornaments in. Check the manufacturer's installation instructions for these items and ensure the recess is suitable.

TV Installation with Mantel



TV Installation with Recess



WARNING

RINNAI DOES NOT TAKE ANY RESPONSIBILITY FOR ANY DAMAGE OCCURRING TO ANY ITEMS INSTALLED ABOVE AND IN THE VICINITY OF THE HEATER.

CAUTION

INSTALLATION OF TV OR ORNAMENTATION ABOVE THE HEATER

The installation of electrical appliances above and in the vicinity of the heater such as, but not limited to, TVs, Home Theatre Screens, Speakers, etc., MUST comply with their manufacturer's' instructions. It is the responsibility of the installer/end-user to check the installation instructions of these items and to ensure the location is suitable.

This caution also extends to, but is not limited to, ornaments such as: Paintings, Prints, Photographs, Tapestries, Mirrors, Stuffed Animals, etc.

Please note the recommended clearances in the diagrams above. Wall surface temperature may be elevated directly above the appliance and may discolour paint finishes or distort vinyl coverings. For durability of surfaces consult the relevant manufacturer's specification.

FRAMING

FRAMING DIMENSIONS

The main points governing location are flueing and warm air distribution. The Rinnai RHFE952/1253 has an integrated zero clearance box that isolates the appliance from combustible materials. This means it can be installed directly into a decorative fireplace constructed from materials such as wood or plaster.

The appliance MUST be positioned within the fireplace on a flat level surface.

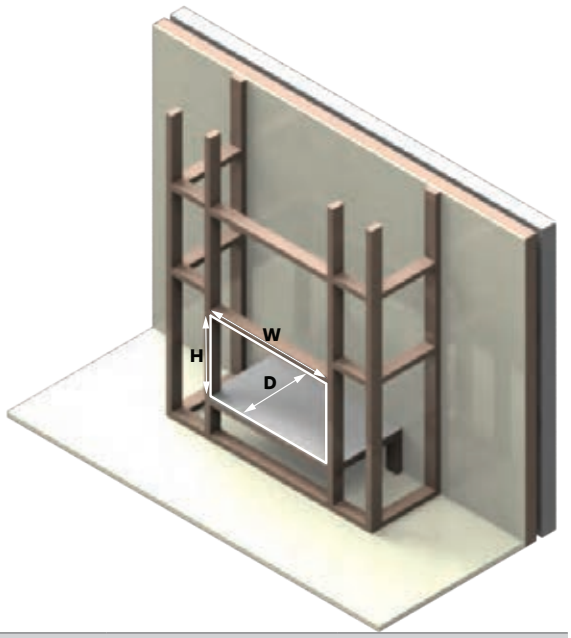
If the appliance is elevated from the ground within the structure, a base MUST be constructed using suitable material with supporting joists capable of supporting a minimum of 1.5 times the weight of the appliance.

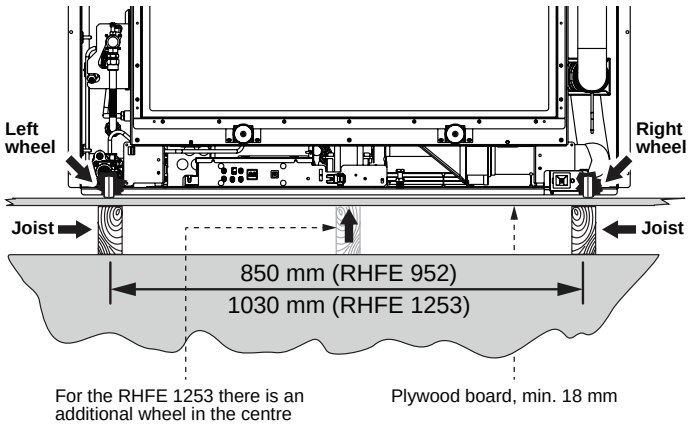
CAUTION **AS/NZS 5601 "GAS INSTALLATIONS" requires that flue components be supported independently of the appliance.**

Enclosure Dimensions

Enclosure dimensions are shown below. The enclosure dimensions specified MUST be strictly adhered to.

Wheels, located at the rear of the heater, allow the unit to slide in and out of the enclosure for installation and maintenance.





Enclosure dimensions		
	RHFE 952	**RHFE 1253**
W-width	965-980 mm	1265-1280 mm
H-height	575-580 mm	575-580 mm
D-depth	570 mm min.	570 mm min.

CAUTION *** When preparing the cavity the minimum depth must be inclusive of the external cladding thickness for false fireplace installations. It is the installers responsibility that adequate clearance be provided between the heater engine and electrical connections.**

GAS SUPPLY

WARNING

Gas pipe sizing MUST consider the gas input to this appliance as well as all other gas appliances in the premises. The gas meter and regulator MUST be specified for the total gas rate.

A suitable sizing chart such as the one in AS/NZS 5601 should be used.

The manufacturer does NOT authorise the use of flexible hoses with rubber lining (for example, hose assemblies) to connect this appliance to the gas supply.

IMPORTANT

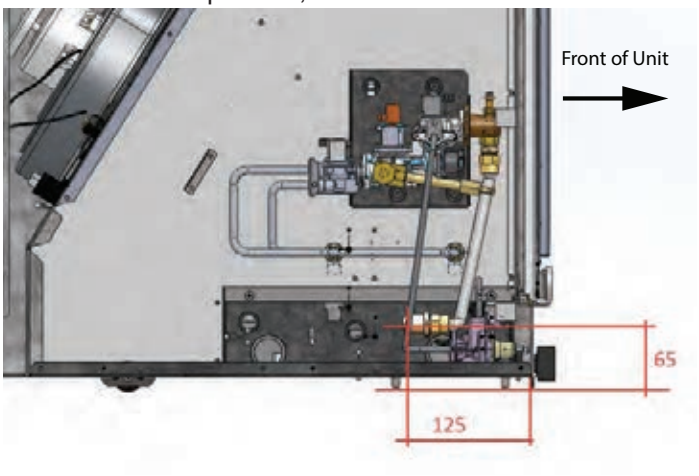
Confirm correct gas type (see labels located on top or rear panels). Refer to local gas authority for confirmation of gas type if you are in doubt.

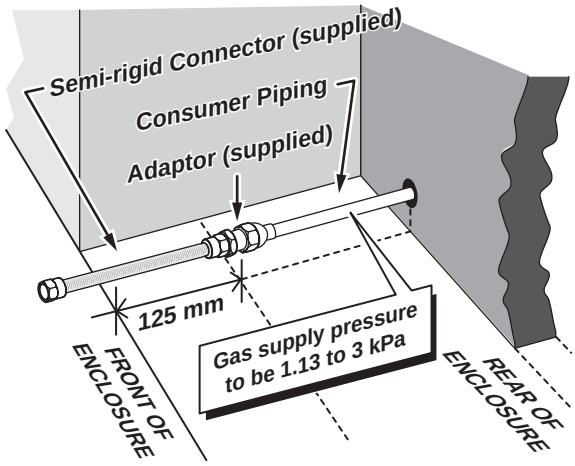
Connection to Consumer Piping

The gas supply terminates inside the heater and enters from the lower left hand side when viewed from the front. To ensure correct positioning, terminate the consumer piping so that it is 125 mm from the front of the enclosure opening (see first diagram below).

Fit the supplied semi-rigid connector (stainless steel tube) and adaptor to the consumer piping prior to moving the heater into the enclosure (see second diagram below).

Once all fitted in position, connect to the heater.





Purging Gas Supply

Foreign materials and debris such as swarf, filings, etc. MUST be purged/removed from the gas supply, failure to do so may cause damage to the gas control valve causing it to malfunction.

CAUTION

Use a soapy solution to leak test all gas connections. If a leak is present bubbles will form. When finished remove residue with a rag. Prevent soapy solution from contacting electrical components.

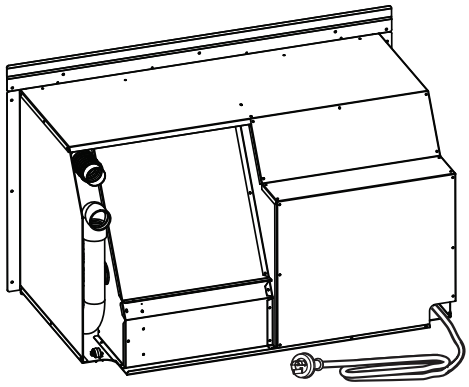
ELECTRICAL SUPPLY

HAZARDOUS VOLTAGE.
Risk of Electrical Shock.

Disconnect all sources of supply prior to servicing

Socket Outlet

Where a power point is used it MUST be 230 V, rated at 10A and MUST be earthed. This power point MUST NOT be located above the heater. Alternatively the appliance can be direct wired if the power supply is to be concealed.



The heater engine is fitted with a 1.5 m power cord and three pin plug which exits the appliance from the rear panel at the lower right when viewed from the rear. (see adjacent diagram)

Direct Wired Installations

Alternatively the appliance can be direct wired if so required.

IMPORTANT

A qualified electrician will need to be consulted where a direct wired installation is required.

Any such installation MUST **comply with the requirements of AS/NZS 5601, AS/NZS 3000 and any other relevant local regulations.**

WALL PENETRATION

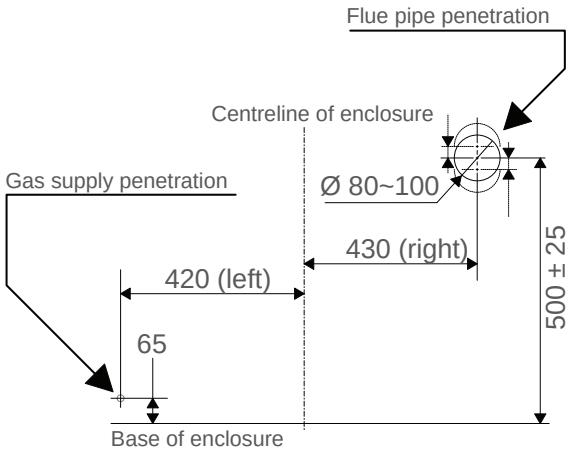
Direct flue wall penetration requirements

Use the guide pictured to mark the penetration points for the gas supply and flue transition locations. Consideration must be given to the position of any studs, noggins or other components of the wall structure on both sides of the wall. Mark these measurements accurately as this is critical to a successful installation.

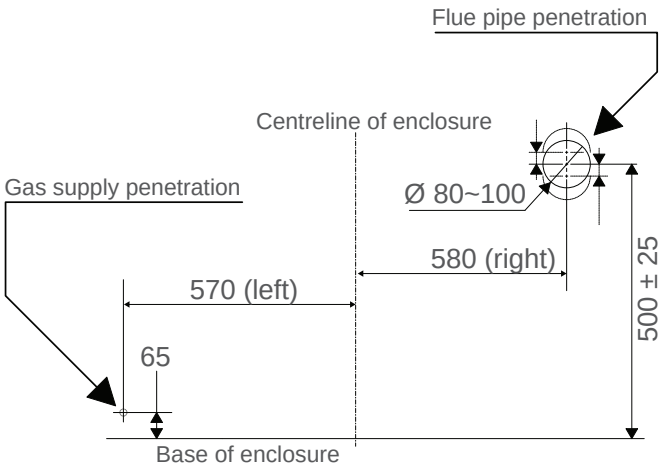
The penetration for the flue transition only needs to be made for direct flue installations, where the terminal is directly to the rear of the appliance. If no flue pipe penetration is required the markings are still useful for indicating the correct position of the flue transition within the enclosure for other flue applications.

For weatherboard walls, drill through the centre of the weatherboard from the outside, then drill from the inside through the plaster board.

RHFE 952



RHFE 1253



Dimensions are in mm.

GENERAL FLUEING GUIDELINES

WARNING

The following diagrams illustrate the flue installation options available for the Rinnai RHFE 952/1253 Heaters. ONLY **the genuine Rinnai flue is certified as part of the installation requirements.**

ONLY **an authorised person** MUST **install, service and remove the Rinnai RHFE 952/1253 and heater and flue system.**

Only the flue system components described in this Manual are suitable and MUST **be used.** 'DO NOT USE AN UNLINED MASONRY CHIMNEY AS THE FLUE FOR THIS APPLIANCE'**.**

Components that are not described in this manual, whether manufactured by Rinnai or otherwise, are NOT **compatible and** MUST NOT **be used.**

Rinnai appliance warranty conditions may be voided if non Rinnai Flue Components are fitted.

AS/NZS 5601 "GAS INSTALLATIONS" requires that flue components be supported independently of the appliance.

Flueing options for the Rinnai RHFE 952/1253 depending on the installation:

Below are a list of fluing options for the Rinnai RHFE 952/1253 Heaters. These are described in more detail together with the appropriate fluing kit to use for each option under "Flueing Options" on page 28.

- Direct and direct extended flueing
- Sideways flueing
- Down-and-out flueing
- Through-wall vertical flueing
- In-wall vertical flueing

Self-supporting flue

The weight of the flue system should not be supported by the appliance. It should be self-supporting.

Supporting the flue is usually completed during the framing stage with flue supports or straps within the cavity. Wall straps have been included in the Rinnai coaxial vertical flue kit.

Flue terminal locations

Flue terminals must be compliant with the flue terminal locations shown in AS/NZS 5601.1.

The flue cannot terminate under a floor or in a roof space.

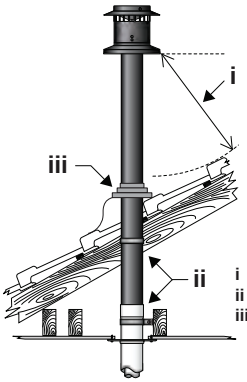
Flue cowl clearance

To ensure products of combustion are cleared, adequate clearance from the building is required.

The flue cowl should have a 500 mm clearance from any part of the building. This also applies to steeped and pitched roofs where the flue cowl should be 500 mm clear of the ridge line.

An adequate flow of fresh air must exist around the flue cowl following installation.

Minimum clearances are shown in AS/NS 5601.1



i Minimum clearance 500mm to nearest part of roof
ii Minimum clearance 25mm to combustible materials
iii Decktite or lead collar flashing

Shared flues

WARNING

Gas appliances must not be connected to a chimney or flue serving a separate flue burning appliance.

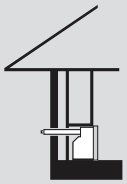
FLUEING OPTIONS

IMPORTANT

Maximum flue length is 8.5 m, and the maximum number of bends is three

One 90° bend is 1 m. For every 90° bend the overall length must be reduced by 1 m. For example, if an installation has three 90° bends, the maximum length can be 5.5 m. The adaption flue (ASPKIT03) is counted as one 90° bend.

For lowest cost, optimal performance, ease of installation and servicing, Rinnai recommend direct flued installations are considered before all other options.

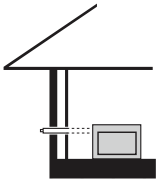


Direct and direct extended flueing

Direct through-the-wall flueing for walls up to 385 mm thick. Flue can be extended if the wall thickness is greater than 385 mm by using the ASPDFK flue kit and additional lengths of ESPIPE900.

Direct
- Direct flue (ASPDFK)

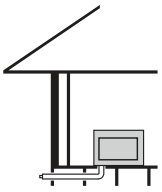
Direct extended
- Direct flue (ASPDFK)
- Flue pipe (ESPIPE900)*



Sideways flueing

The sideways flue installation can run along the left or right hand side of an internal wall behind the unit. When considering the location of the fire ensure the flue path is free from obstructions such as studs, noggins, wiring, joists etc.

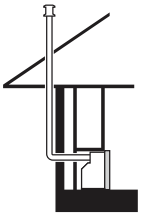
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- Wall terminal (ESWTERM)



Down-and-out flueing

The down-and-out flue option allows for the adaption flue kit to face downwards and for the flue to run vertically through a hole in the floor, and then terminate horizontally outside (must be 300 mm above ground).

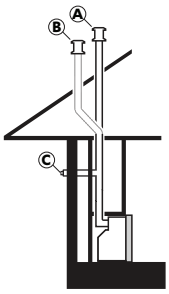
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- 45 ° bends (ESBEND)
- Wall terminal (ESWTERM)



Through-wall vertical flueing

For the small number of instances where the appliance cannot be directly flued or flued via an internal wall. In some cases a large portion of the flue may be visible from the outside.

- Direct flue (ASPDFK)
- 45 ° bends (ESBEND)
- Flue pipe (ESPIPE900)*
- Condensate trap (ESCONDK)
- Roof cowl (ESROOFCOWL)



In-wall vertical flueing

The vertical in-wall flue installation is installed against an internal wall within a false fireplace or other suitable cavity, and is run vertically upwards to a vertical or horizontal termination point.

A: Direct
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- Roof cowl (ESROOFCOWL)

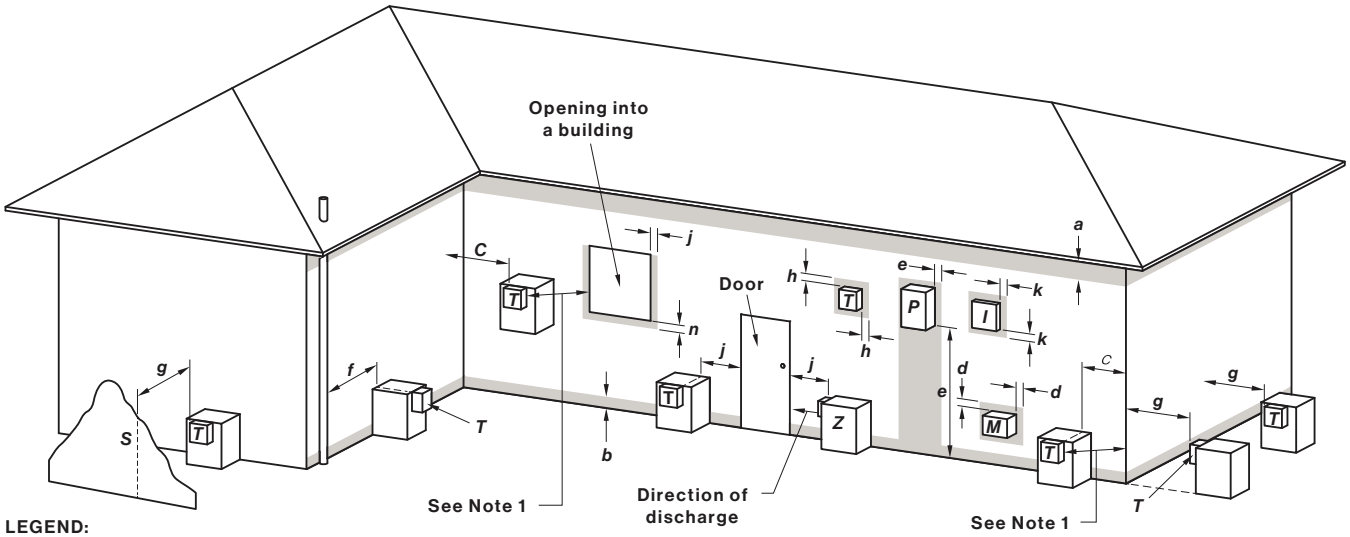
B: Offset
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- 45 ° bends (ESBEND)
- Roof cowl (ESROOFCOWL)

C: Horizontal termination
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- 45 ° bends (ESBEND)
- Wall terminal (ESWTERM)

* Installer to advise quantity required

FLUE INSTALLATION DIMENSIONS & RESTRICTIONS FLUE TERMINAL CLEARANCES

Flue Terminal Clearances (extract from AS/NZS 5601)



Ref.	Item	Min. Clearances (mm) Fan Assisted
a	Below eaves, balconies and other projections:	
	• *Appliances* up to 50 MJ/h input	200
	• *Appliances* over 50 MJ/h input	300
b	From the ground, above a balcony or other surface *	300
c	Front a return wall or external corner *	300
d	From a gas *meter* (M) (see 5.11.5.9 for vent terminal location of *regulator*) (see Table 6.6 for New Zealand requirements)	1000
e	From an electricity *meter* or fuse box (P) †	500
f	From a drain pipe or soil pipe	75
g	Horizontally from any building structure* = or obstruction facing a terminal	500
h	From any other *flue terminal* , cowl, or combustion air intake †	300
j	Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:	
	• *Appliances* up to 150 MJ/h input *	300
	• *Appliances* over 150 MJ/h input up to 200 MJ/h input *	300
	• *Appliances* over 200 MJ/h input up to 250 MJ/h input *	500
	• *Appliances* over 250 MJ/h input *	1500
	• All fan-assisted *flue appliances* , in the direction of discharge	1500
k	From a mechanical air inlet, including a spa blower	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:	
	• Space heaters up to 50 MJ/hr input	150
	• Other *appliances* up to 50 MJ/hr input	500
	• *Appliances* over 50 MJ/h input and up to 150 MJ/h input	1000
	• *Appliances* over 150 MJ/h input	1500

* - unless *appliance* is *certified* for closer installation

† - Prohibited area below electricity meter or fuse box extends to ground level.

NOTES:

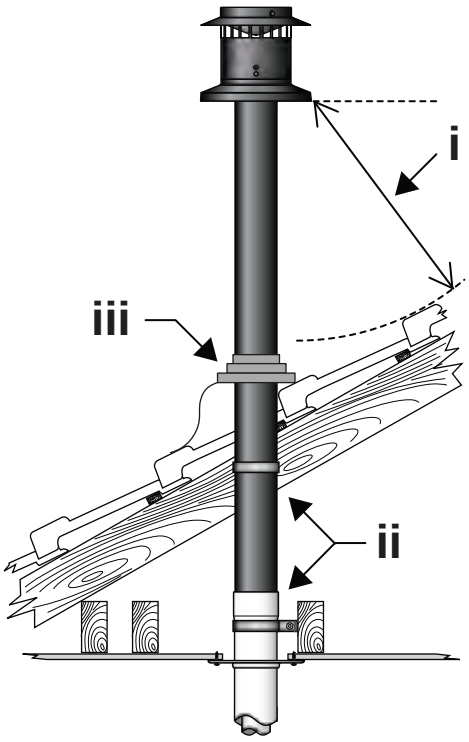
1 Where dimensions *c, j* or *k* cannot be achieved an equivalent horizontal distance measured diagonally from the nearest discharge point of the terminal to the opening may be deemed by the Technical Regulator to comply.

2 See Clause 6.9.4 for restrictions on a *flue terminal* under a covered area.

3 See Figure J3 for clearances required from a *flue terminal* to an LP Gas *cylinder*. A *flue terminal* is considered to be a source of ignition.

4 For *appliances* not addressed above acceptance should be obtained from the Technical Regulator.

FIGURE 6.2 (in-part) MINIMUM CLEARANCES REQUIRED FOR FAN-ASSISTED FLUE TERMINALS, ROOM-SEALED APPLIANCE TERMINALS AND OPENINGS OF OUTDOOR APPLIANCES



i Minimum clearance 500mm to nearest part of roof

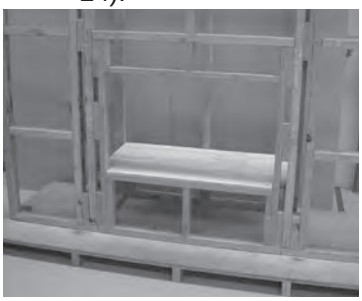
ii Minimum clearance 25mm to combustible materials

iii Decktite or lead collar flashing

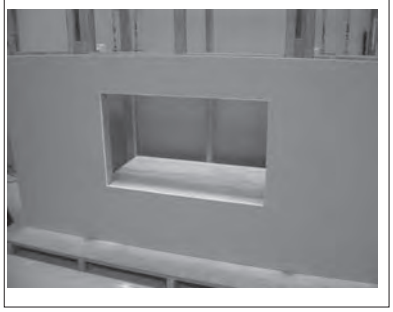
INSTALLATION

INSTALLATION OVERVIEW

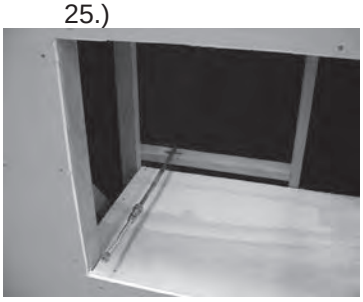
1. Construct frame per "Enclosure dimensions" on page 24).



2. Line wall



3. Connect Gas and electrical supply "Supply Connections" on page 25.)



4. Connect the flue system.

5. Install unit into enclosure (page 32), screw to frame, and finalise

6. Install burn media, refer "Burner Media Installation" starting on page 33

7. Commission the unit and check the Wi-Fi connection, (page 39)

8. Install the outer frame, mesh guard (if purchased), and inner frame, (page 39)

9. Test operation and lighting sequence, (page 41)

10. Complete the installation checklist and give to customer. (page 41)

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.

NOTE **There are two hand holds either side of the unit to help move and lift the fire into place.**

CONNECTING FLUE SYSTEM

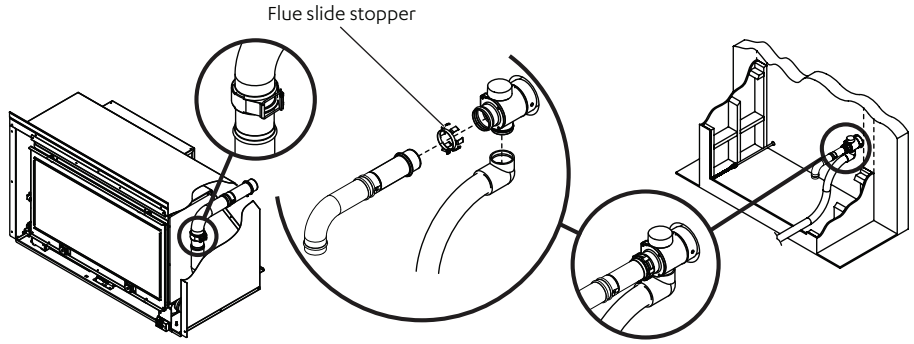
Consult the flue installation guide supplied with the flue kits for detailed flue installation instructions. For connection of the flue to the heater refer information below.

Removing the pipe clamp, extension tube and exhaust pipe

Before installing the heater into the enclosure the pipe clamp, telescopic extension tube, and exhaust pipe need to be removed so there is room to connect the flue system.

1. Undo the pipe clamp and remove the telescopic extension tube from the exhaust pipe.
2. Secure the telescopic extension tube to the flue system with the exhaust pipe lock.
3. Attach the air hose to the flue transition and secure with the cable tie provided.

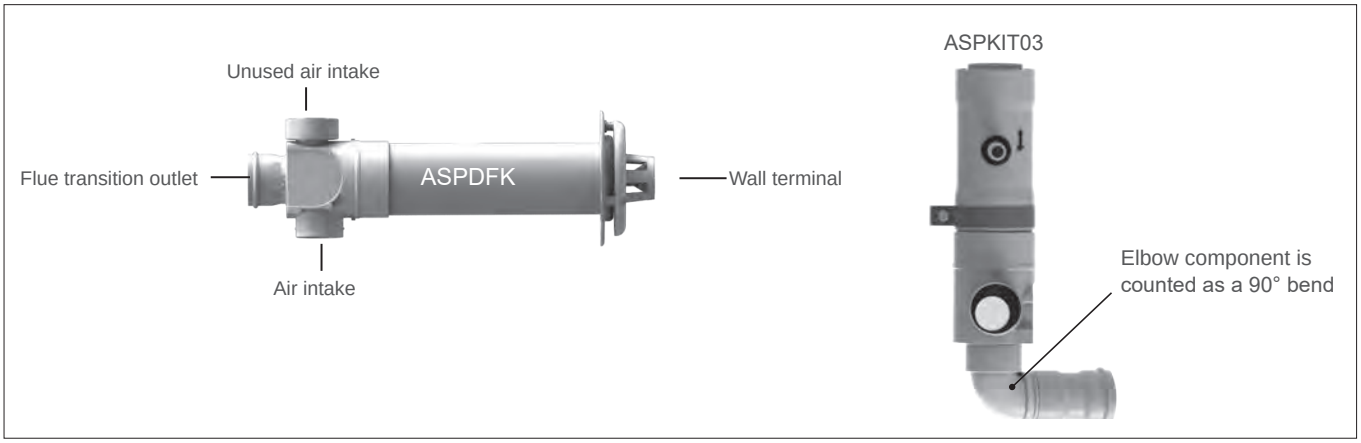
Please note that in the adjacent image in step 4 the air hose is already connected to the flue. It is much easier to connect the air hose to the unit than to connect the air hose to the flue once the heater is in place. Ensure the air intake hose of the heater is properly secured to the air connection on the flue system using the cable tie provided, and that the rubber seal is placed on the unused air intake connection.



The exhaust pipe lock is provided with the ASPDFK and ASPKIT03 flue kits

Flue transition (ASPDFK, ASPKIT03)

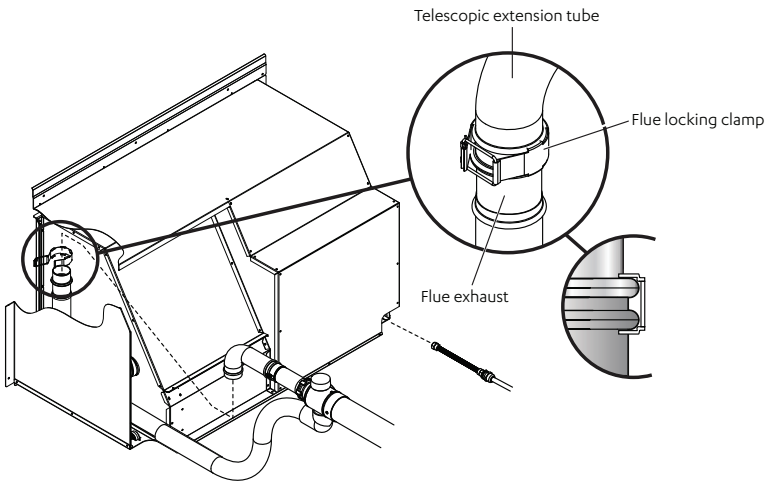
The flue transition provides a connection between the flue system and the heater's flue spigot and air intake. For all flueing installations, except horizontal direct flueing, the flue transition is counted as a 90 ° bend. The flue transition requires a 5 mm clearance from combustibles. This clearance is provided automatically when the supplied standoff brackets are used. All other flue components, except the elbow section of the ASPKIT03, are designed for zero clearance and can be placed hard against timber or plasterboard.



INSTALL HEATER INTO ENCLOSURE

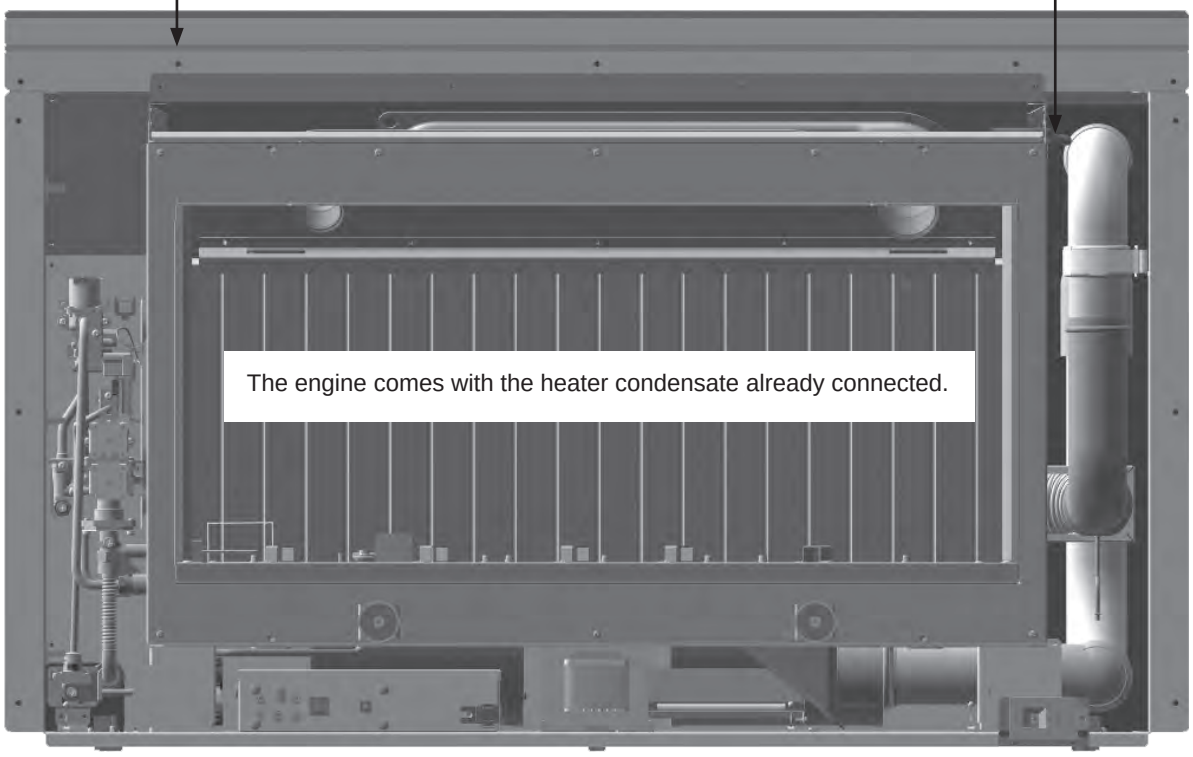
1. Carefully move the heater into the enclosure, guiding the piping, flexible gas connection, and telescopic extension tube into the access openings and through the appliance. Ensure that the air hose is not in a position where it could get caught or crushed by the unit.
2. Once the engine is in place reconnect the flue exhaust to the telescopic extension tube and secure together with the pipe clamp.
3. Secure the heater flange in place using 11 screws.
4. Complete gas, air hose and flue connection. If vertically flueing ensure condensate tube, provided with the ASPKIT03 flue kit, is attached to the condensate pipe on the heater - refer images below.

NOTE **The unit is supplied with the heater condensate already connected.**



Flange screw position - 11 in total

Flue condensate pipe connection



BURNER MEDIA INSTALLATION

Removing and replacing the glass panel

Before the burn media can be installed into the combustion chamber, the glass panel must be removed. Remove the four retaining screws—two at the top and two at the bottom. When replacing tighten all four screws and then back off by quarter of a turn. If the glass panel is screwed too tight, the panel will bow and the spring release mechanism will not work properly.

IMPORTANT **The glass panel must to be replaced after installing the burn media and before commissioning.**

Installing Log Set

The glass retainer will need to be removed before installing the log set and granules. Use extreme care when handling the log pieces, they are made from a fragile material and will damage easily.

IMPORTANT **Follow these instructions precisely in conjunction with the burn media guide sheet, which is attached to the engine. The majority of performance issues are caused by incorrectly installed burn media.**

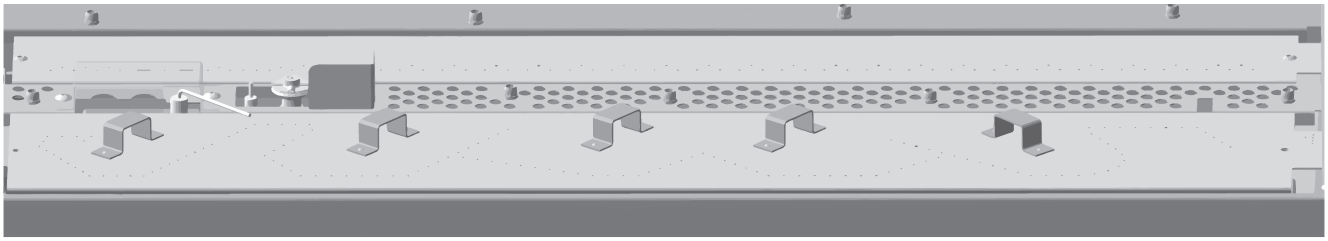
The installation procedure for both models is the same. The only difference is the position of log eight and the addition of logs 9 and 10—the RHFE 1253 has an extra two logs.

RHFE 952

RHFE 1253

It is important to place the pieces in the correct position. Incorrect placement can create carbon build-up and affect performance. Malfunctioning due to improper log/granule placement is not covered by warranty. The unit must never be used with broken logs or other burn media.

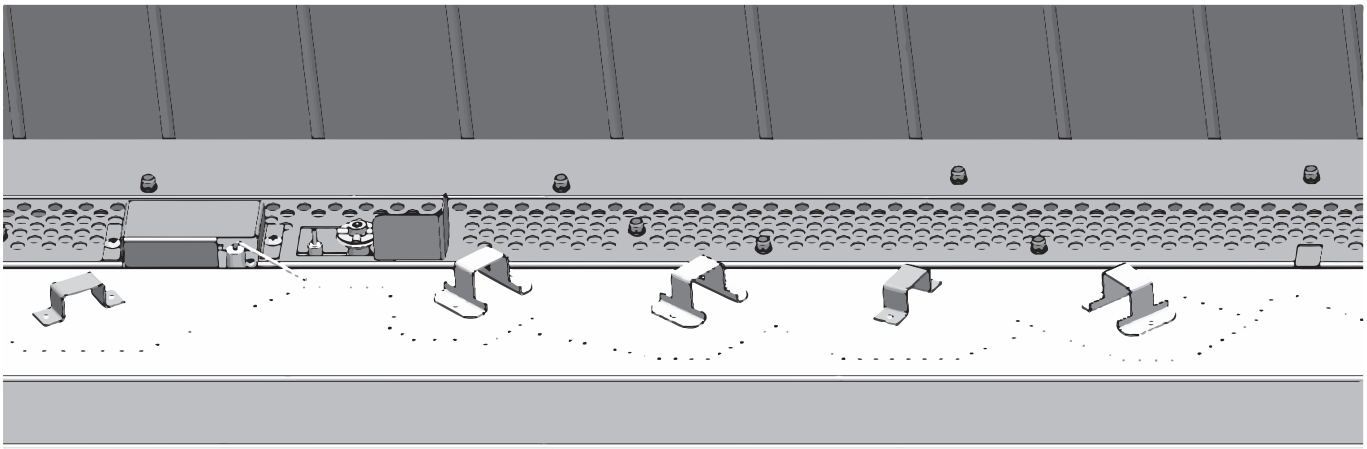
RHFE 952 burner bed



 - locating pin

 - locating bracket

RHFE 1253 burner bed



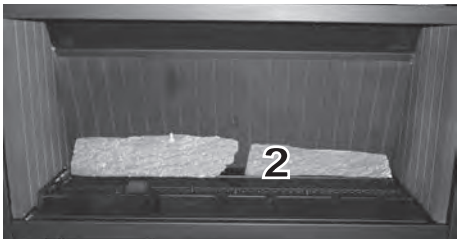
Log fitting sequence

1. Back left log

Align bottom locating holes with the locating pins at the back of the burner - the log will sit up against the back of the combustion chamber.

2. Back right log

Align lower locating holes with pins at rear of burner. The logs will rest on the back of the combustion chamber, with a gap between them.

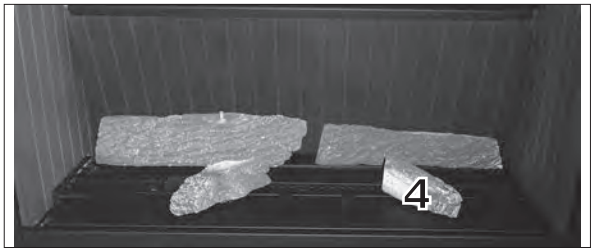


3. Front left small log

Refer fully assembled image for reference. Place onto the middle left locating pin and left front locator bracket.

4. Front right small log

Refer fully assembled image for reference. Place onto the middle right locating pin and right front locator bracket.



5. Front middle small log

Refer fully assembled image for reference. Place onto the middle locating pin and central front locator bracket.

6. Front large left log

Place onto the locating pin of the first log and slot onto the left front locating bracket.

Log fitting sequence (Cont.)

7. Front large middle log

Place onto the locating pin of log four and slot onto the right front locating bracket.

8. Top upper right large log

Place onto the locating pin of log seven and swivel OVER log 4. The end rests in burner slot.

9. Far LHS small log (RHFE 1253 only)

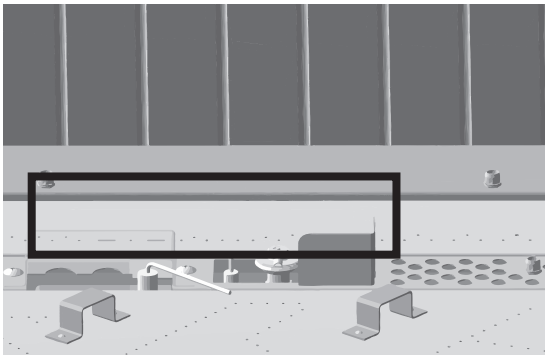
Fit the far small left hand log onto the two locator brackets.

10. Far RHS small log (RHFE 1253 only)

Fit the far small right hand log onto the two locator brackets.

Adding the Granules

The granules as well as being added to create a more realistic log flame affect (by diffusing the gas flames through the burner ports) also assist in soot prevention and are CRITICAL to the performance of the heater. Never pour the granules directly from the pack as dust particles from the plastic bag may block the ports.

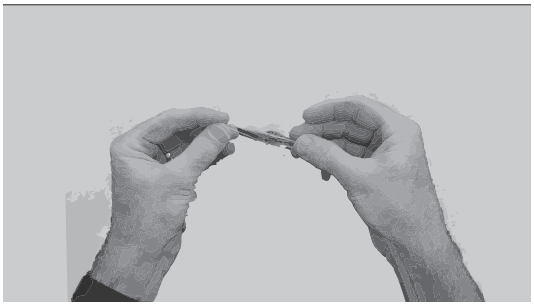


DO NOT place the granules near the flame rods or the pilot (areas highlighted in the adjacent image) as this will cause a blockage and the unit will not start.

Place the granules evenly (do not stack) around the logs in the front part of the burner and on the middle section of the burner (in the gaps between the logs)—refer fully assembled image.

Adding the Wire Wool

The wool is used to enhance the flame and is optional. Thin strands of wire wool over the flames to makes them brighter and more vibrant.



Take the wire wool out and tease into thin strands. Most installations will use less than a third of the supplied wool. The remainder of the wool can be left with the customer or can be used as a replacement when the fire is serviced.

There is no benefit in having wool where there is no flame, and having too much wool can make the flames too yellow and streaky.

Be careful to avoid getting the wire wool anywhere near the flame rod as it may short it out.

Install burn media - stones

The glass retainer will need to be removed before installing the stone set and granules. Use extreme care when handling the stones, they are made from a fragile material and will damage easily.

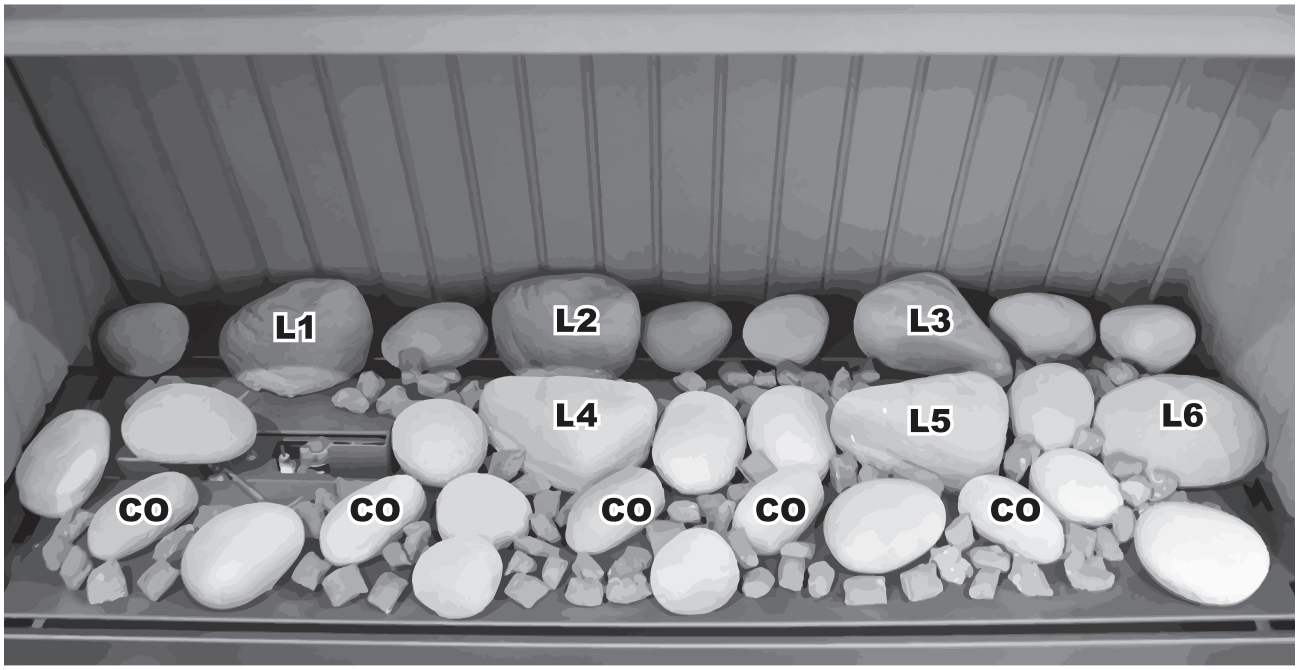
IMPORTANT

Use these instructions in conjunction with the burn media guide sheet, which is attached to the engine. Experience has shown that the majority of performance problems have been caused by the burn media being installed incorrectly.

It is important to place the pieces in the correct position. Incorrect placement can create carbon build-up and affect performance. Malfunctioning due to improper stone/granule placement is not covered by warranty. The unit must never be used with broken stones or other burn media (except those specifically designed for the Evolve).

Before commencing installation ensure you have the correct stone set. The RHFE 952 stone set contains 30 stones, the RHFE 1253 stone set contains 40 stones. The installation between the two models varies slightly.

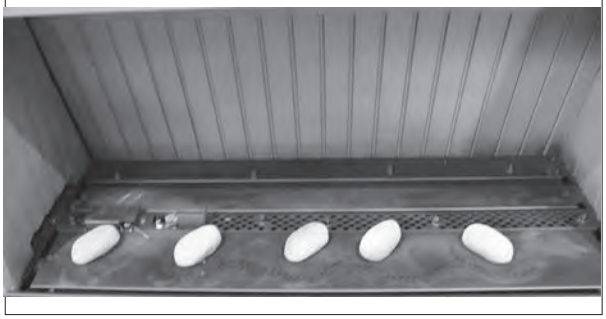
Stones RHFE 952



CO = front grey cut out stones (x5) **L1-L6** = large grey stones

1. From the stone set identify the five front grey cutout stones.

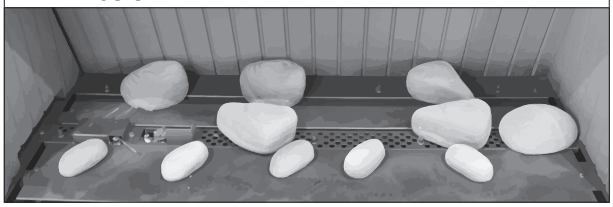
2. Place the five grey cutout stones on the burner brackets at the front as shown below.



Stones RHFE-952 (cont)

3. From the stone set identify the six L1-L6 large grey stones.

4. Place the six large grey stones on the middle and back sections as shown below.



5. Start placing the remaining stones on the burner, starting at the front—8 stones (identified with a dot).

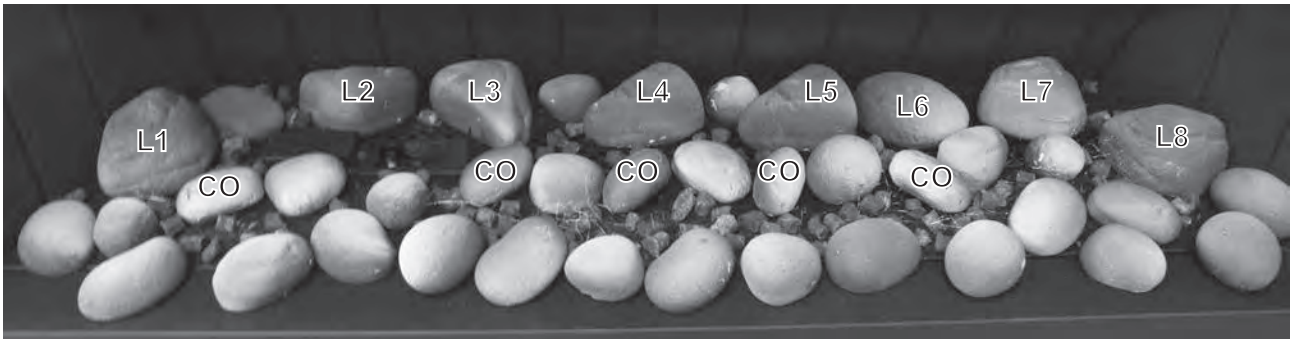
6. Place remaining grey stones on the back section of the burner—6 stones (identified with a dot).

7. Place the remaining 5 grey stones (identified with a dot) through the middle section of the burner. You may need to tweak the position of the other stones for them to fit and sit properly.

8. Add the granules and wire wool Never pour the granules directly from the pack as dust particles from the plastic bag may block the ports.

   Place the granules evenly (do not stack) around the stones with particular attention to the front burner. Ensure there are no granules placed directly over the burner ports to the front and back of the pilot burner or on the flame rods as this may cause a blockage.

Stones RHFE-1253

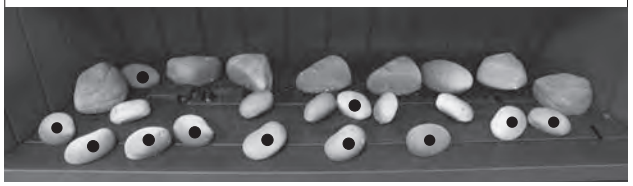


CO = cutout stones L1-L8 = large grey stones

1. From the stone set identify the five front grey cutout stones and place on the burner brackets as shown below.

2. From the stone set identify the eight L1-L8 large grey stones and place on the burner as shown in above and below images.

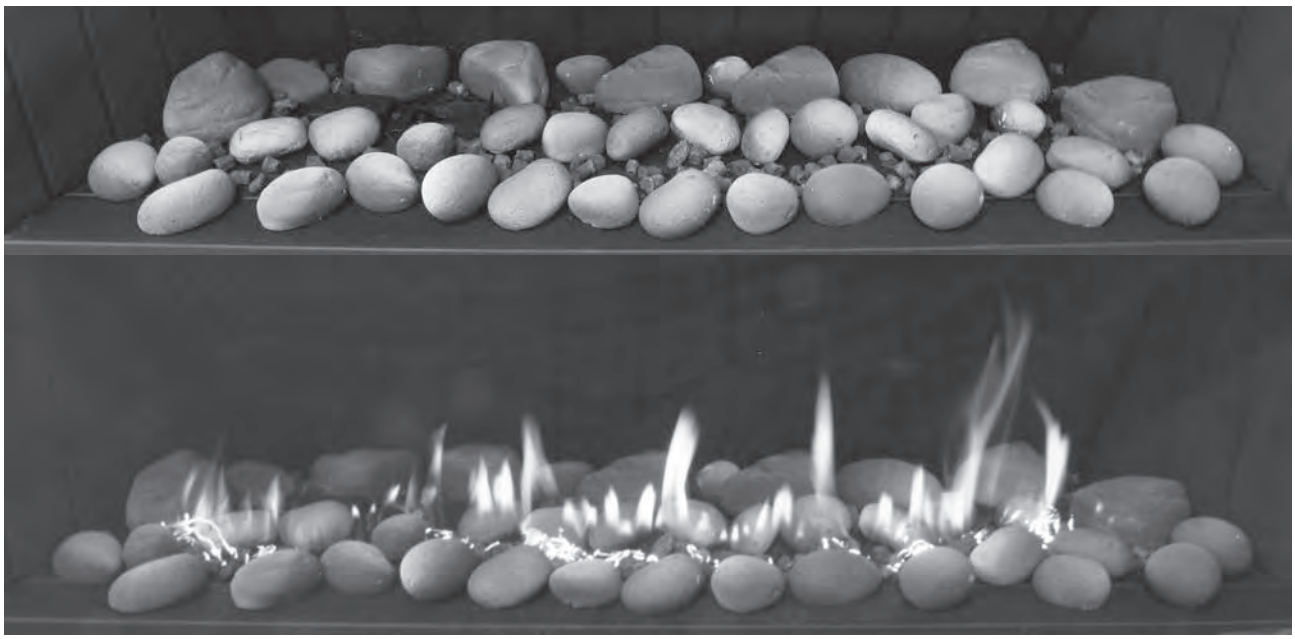
3. Start placing the small-mid sized stones on the burner, starting at the front—11 stones (identified with a dot).



4. Place remaining stones (identified with a dot) in the gaps. Some adjustment may be required.

5. Add the granules. Refer step 8 on previous page, and image below.

6. Add the wire wool - Refer note on the bottom of p.20, and image below.



HAZARDOUS VOLTAGE. Risk of Electrical Shock.

Disconnect all sources of supply prior to servicing

COMMISSIONING OVERVIEW

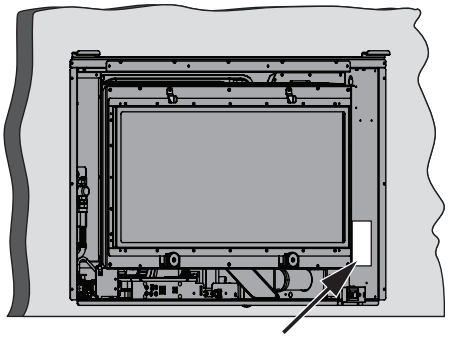
The appliance gas pressures are factory preset for direct flue installations (most common type of installation) and will normally not require adjustment. Combustion chamber glass must be on when checking operating pressures.

Commissioning Instructions

The commissioning instructions sheet is located in a plastic pouch inside the unit on the right hand side.

For all RHFE 952 and RHFE 1253 flueing EXCEPT direct flueing, the appliance must be down rated as per the instructions on the commissioning sheet.

Follow the commissioning instructions to complete the gas pressure adjustments. When commissioning is complete check for full and correct operation of the appliance, and return the commissioning sheet to its plastic pouch.

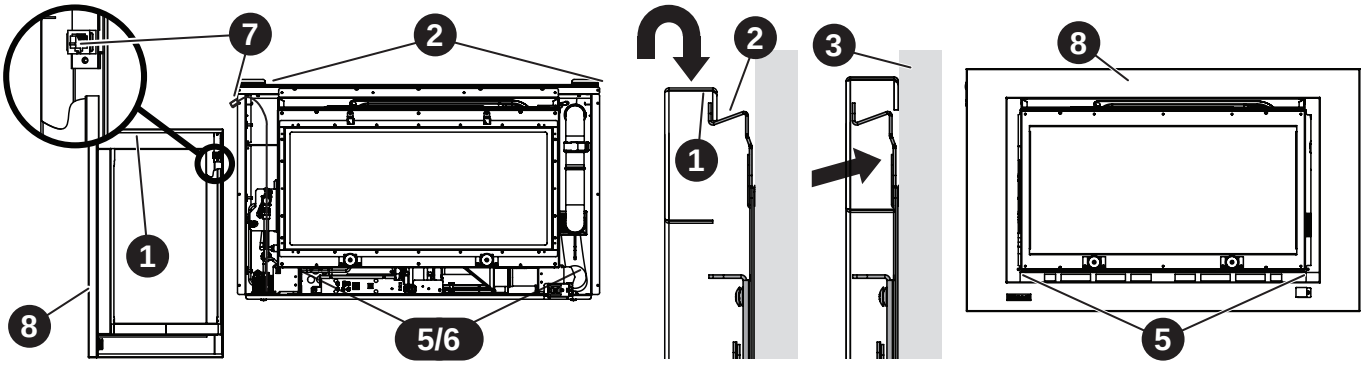


Commissioning sheet—located inside a plastic pouch inside the unit (right hand side)

INSTALLING INNER AND OUTER FRAMES

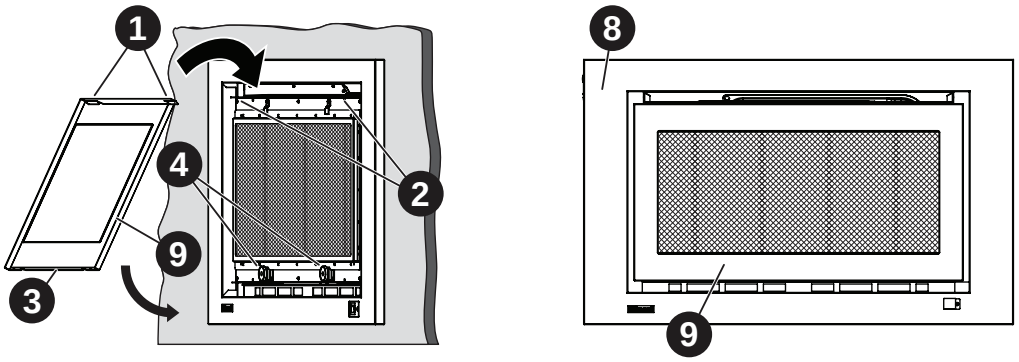
Installing the outer frame

1. Remove, but don't discard, the two black screws ❺ installed in the lower bracket ❻ of the heater engine.
2. Position the outer frame close to the heater engine and connect the RJ45 plug into the socket on the inside top left of the heater ❼. This connects the push button control panel via a communications cable to the engine control box.
3. Mount the outer frame ❽ to the heater by hooking the top over the two tabs ❶ on the top lip of the engine body ❷, then push in until the frame sits flush with the wall ❸. Secure with the two black retaining screws removed in step 1 ❺.



Installing the inner frame

1. Mount the inner frame ❾ to the engine by hooking the tabs on the inside ❶ to the top lip of the combustion chamber ❷.
2. Rotate the bottom of the inner frame ❸ in towards the engine body allowing the magnets ❹ to secure the inner frame to the engine.



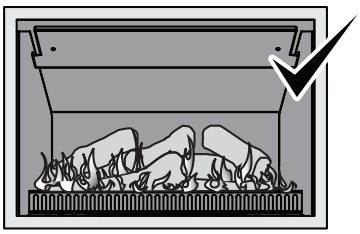
ABNORMAL FLAME PATTERN

After installation and commission, check the flame pattern is normal.

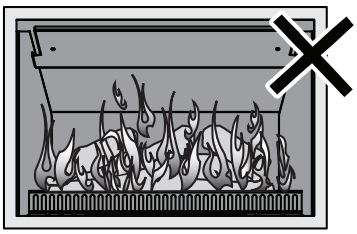
Each Rinnai Gas Fire has a distinct flame pattern. The flame should look the same every time the heater is started, after an initial warm up period of approximately 15 minutes.

Abnormal flame performance and/or pattern can indicate a problem with the heater, such as blocked gas injectors, incorrectly installed / inadequate flue system or the Ceramic logs / stones and or burner media may be incorrectly placed.

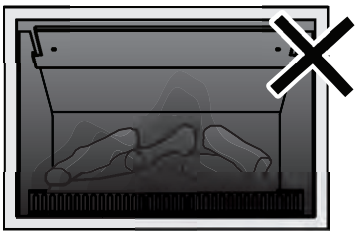
If any of the signs below occur, please contact Rinnai.



NORMAL FLAME PATTERN



ABNORMAL FLAME PATTERN



SOOT BUILD UP

Key signs of abnormal flame performance:

- Appliance turns 'OFF' soon after start up and does not relight.
- Continued difficulty or delay in establishing a flame
- Flame appears overly orange-yellow.
- Flame appears either very short or very long.
- Flame only burns part way across the burner.
- Severe soot building up on the inside of the glass or on logs.
- Continuous unusual smell from the appliance.
- Continued difficulty or delay in establishing a flame.

NOTE **This appliance incorporates a live fuel effect and is designed to operate with luminous flames. This may leave slight carbon deposition as part of its normal operation.**

INSTALLATION CHECKLIST

IMPORTANT

It is the responsibility of the installer to complete both the "Installation Checklist" below and the "Installation Record" on page 19 at the completion of installation.

IMPORTANT

Instruct customer on the heater operation and ensure the customer understands the content of the operation manual.

Advise the customer that during the initial burning period of approximately 2 hours, some smoke and odour may be experienced.

During this period the heater should be operated on 'High' and the space being heated should be well ventilated. It may take up to 20 minutes of operation for the logs to achieve their full flame pattern and glow.

Complete the "Installation Record" on page 19

WARNING

THE GUARD IS FITTED TO THIS APPLIANCE TO REDUCE THE RISK OF FIRE OR INJURY FROM BURNS AND NO PART OF IT SHOULD BE PERMANENTLY REMOVED.

FOR PROTECTION OF YOUNG CHILDREN OR THE INFIRM, A SECONDARY GUARD IS REQUIRED.

The guard supplied with this appliance MUST NOT be permanently removed as it fulfils an operational safety function. Additional dress guards including free standing types may be used in conjunction with, but NOT replace, the dress guard supplied with this appliance.

The appliance is not intended for use by young children or infirm persons without supervision. Young children and the infirm SHOULD be supervised at all times when in the vicinity of this heater while it is in operation.

Ensure the Customer understands that:

- **No part of this appliance should be permanently removed.**
- **Young children and the infirm should be supervised at all times.**
- **Paper or other material MUST NOT be burnt in this appliance.**

IMPORTANT

The following checklist is to be completed ONLY by a Certified Gas Installer.

		No	Yes
1.	Is the appliance positioned in a suitable location (clearances, combustible clearances, mantels and surrounds etc.)?	☐	☐
2.	Was a Rinnai approved flue system installed and tested in accordance with the instructions?	☐	☐
3.	Has the gas pressure been checked and set with all gas appliances running?	☐	☐
4.	Has the log set / burn media been installed as per instructions?	☐	☐
5.	Has the appliance tested for correct operation and to ensure no gas leaks?	☐	☐
6.	Has combustion product spillage testing been conducted in accordance with AS/NZS5601?	☐	☐
7.	Has the customer been instructed on operating procedure and safety requirements?	☐	☐
8.	Is the end-user fully aware of operating procedure and has the manuals?	☐	☐
9.	Has the Glass or Mesh Dress Guard been fitted?	☐	☐
10.	Has the customer been advised not to remove the Dress Guard?	☐	☐
11.	Has the customer been advised to service the heater every two years?	☐	☐

SPECIFICATIONS

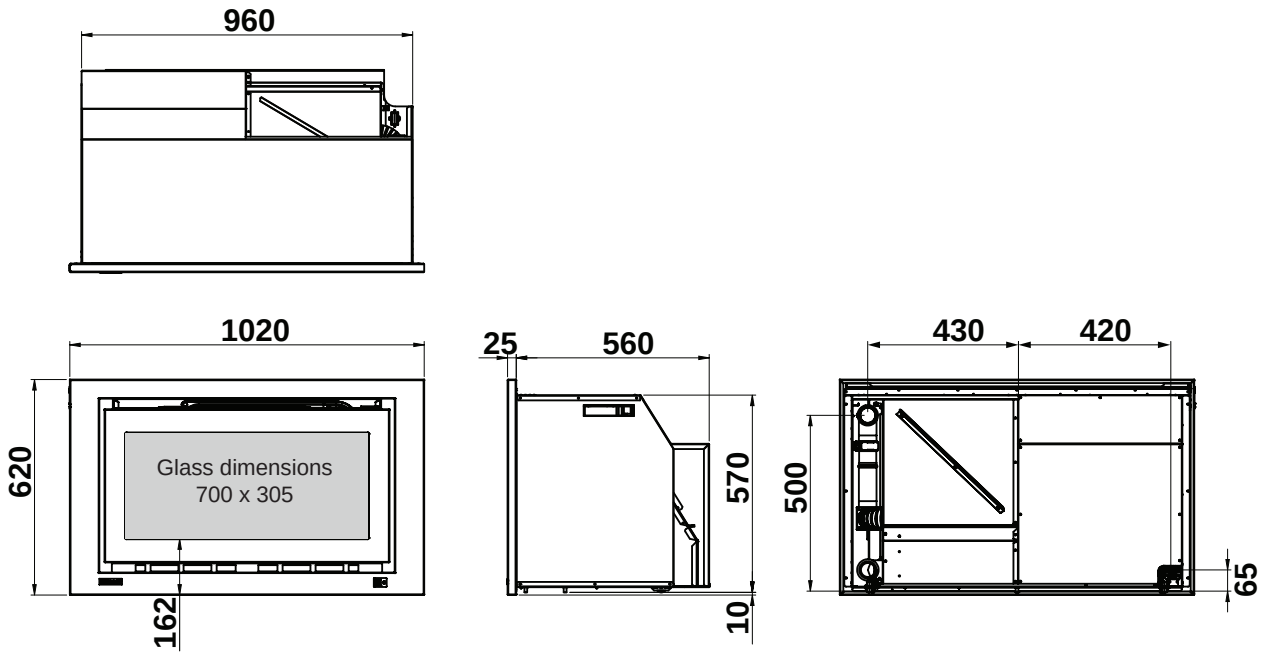
APPLIANCE DETAILS

Model	**RHFE 952**	**RHFE 1253**
Features	Inbuilt power flued convection fan heater operated by a infra-red remote or by the Rinnai Wi-Fi app that allows full thermostatic control, as well as other features such as timers. Different burn media options are available.	
Data Plate	Located inside the appliance, upper right hand side..	
Input	NG 10~34 MJ/h	
	LPG 10~32 MJ/h	LPG 17~34 MJ/h
Output (High)*	2.4~8.1 MJ/h	4.0~8.4 MJ/h
Efficiency	88%	
Heating area **	65-129m²	78-134m²
*Note: * will vary accordingly to gas type and flue configuration. ** will vary depending on geographical location.*		
Installation Types	Masonry Fireplace, False Fireplace, and Inbuilt (weather proof box)	
Combustion Method	Bunsen type burner	
Flueing - Power Flue	Coaxial power flue (inner Ø50mm, outer Ø70-80mm). Appliance must be installed with a Rinnai flue System.	
Convection Fan	3-speed fan. Heat is distributed from the top of the appliance.	
Gas Connection	Brass 1/2” BSPT male fitting, the gas supply terminates inside the heater - lower left hand side of the appliance.	
Gas Type	NG, LPG	
Electrical	This heater has a 1.5 m power cord with a three pin plug supplied, the power cord passes through a slot in the back left hand corner of the appliance.	
Ignition	230-240 V AC 50 Hz high voltage electronic spark ignition	
Power Consumption	When on High, 90W	
	When on Standby, less than 8W	
Safety Devices	Overheat Switch Pressure relief on glass panel - burner box Thermal Fuse, over-current fuse Flame Failure Sensing System Refer to “SAFETY DEVICES” on page 7 of the Operation Manual for information regarding additional safety devices and features.	
Glass - Primary Glass - Secondary Glass seal material	Ceramic Glass Tempered Glass Woven fibreglass chord	
Weight (Engine Only)	70 kg	100 kg
Operation	Push button control panel, Infra Red Remote Control with inbuilt temperature sensor. Additional features, such as timers and thermostatic control available using Rinnai Wi-Fi fireplace controller app.	
Noise Level	37~45 dB(A)	
Burn Media	Choice of river stones or silky oak log set.	

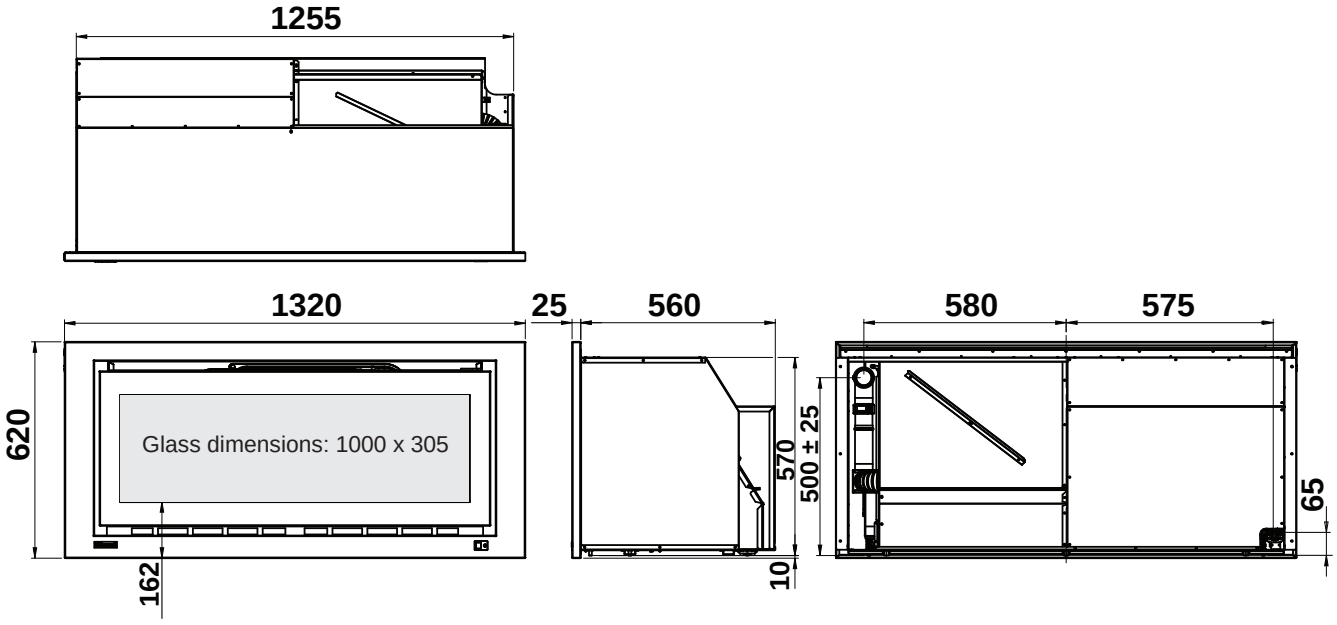
NOTE **Refer to appliance data plate for Gas Type, Gas Rates, Injector Sizes and Burner Pressures.**

DIMENSIONS

RHFE 952



RHFE 1253

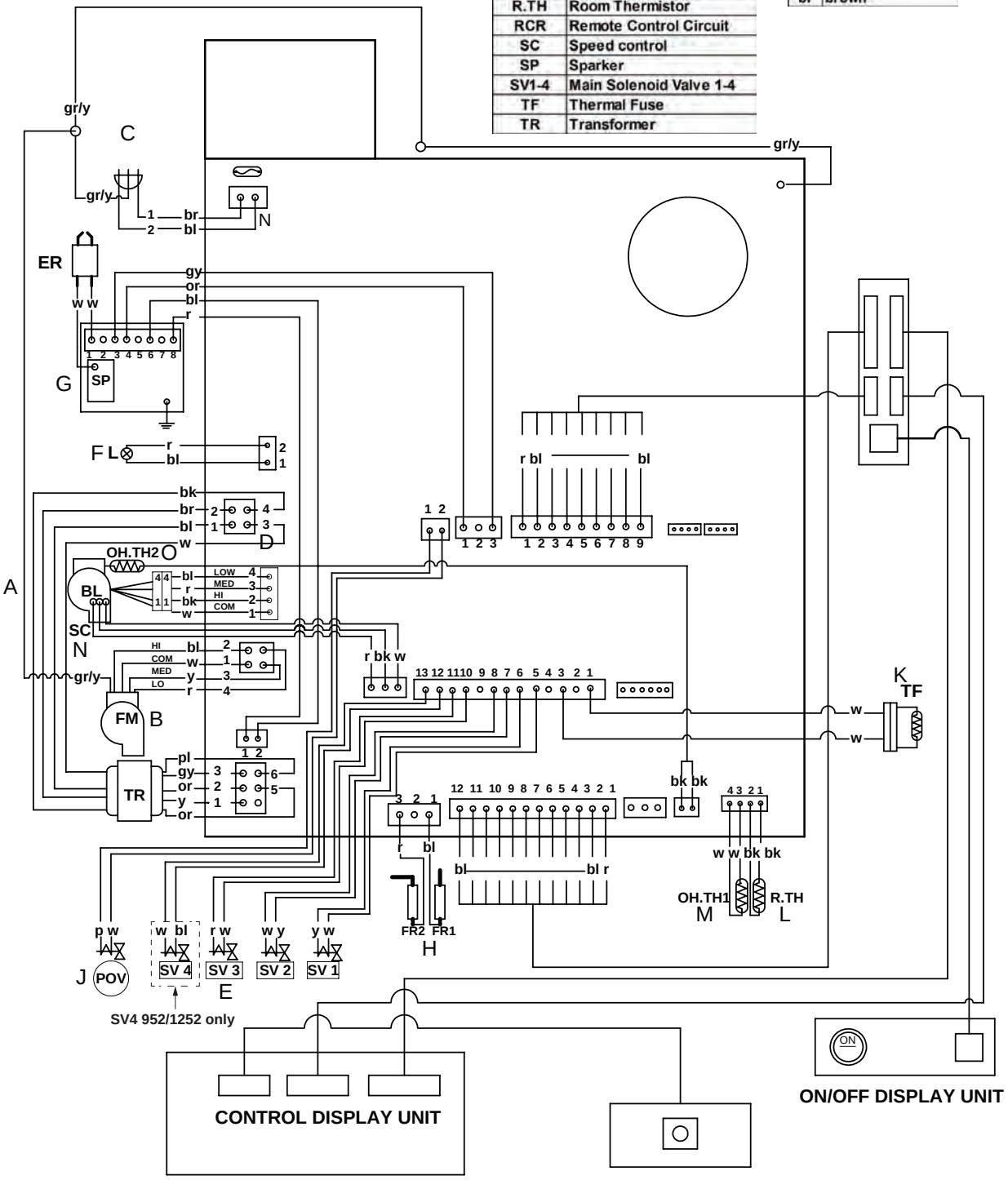


All dimensions in mm.

WIRING DIAGRAM

Mark	Part
B	Burner
BL	Combustion Fan Motor
ER	Electrode
F	Fuse Electrical
FM	Convection Fan Motor
FR1-2	Flame Rod 1-2
L	Light
OH.TH 1-2	Over Heat Thermistor 1-2
PB	Pilot Burner
POV	Modulated Solenoid Valve
R.TH	Room Thermistor
RCR	Remote Control Circuit
SC	Speed control
SP	Sparker
SV1-4	Main Solenoid Valve 1-4
TF	Thermal Fuse
TR	Transformer

Mark	Colour
bk	black
bl	blue
gr/y	yellow-Green stripe
gy	grey
or	orange
pl	purple
r	red
w	white
y	yellow
p	pink
br	brown



NOTES

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Fax: (03) 9271 6622

National Help Line
Tel: 1300 555 545* Fax: 1300 555 655
Monday to Friday, 8.00 am to 5.00 pm EST.

**Cost of a local call may be higher from mobile phones.*

For further information visit **www.rinnai.com.au** or email **enquiry@rinnai.com.au**

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call our National Help Line. Rinnai recommends that this appliance is serviced every 2 years.

With our policy of continuous improvement, we reserve the right to change, or discontinue at any time, specifications or designs without notice.