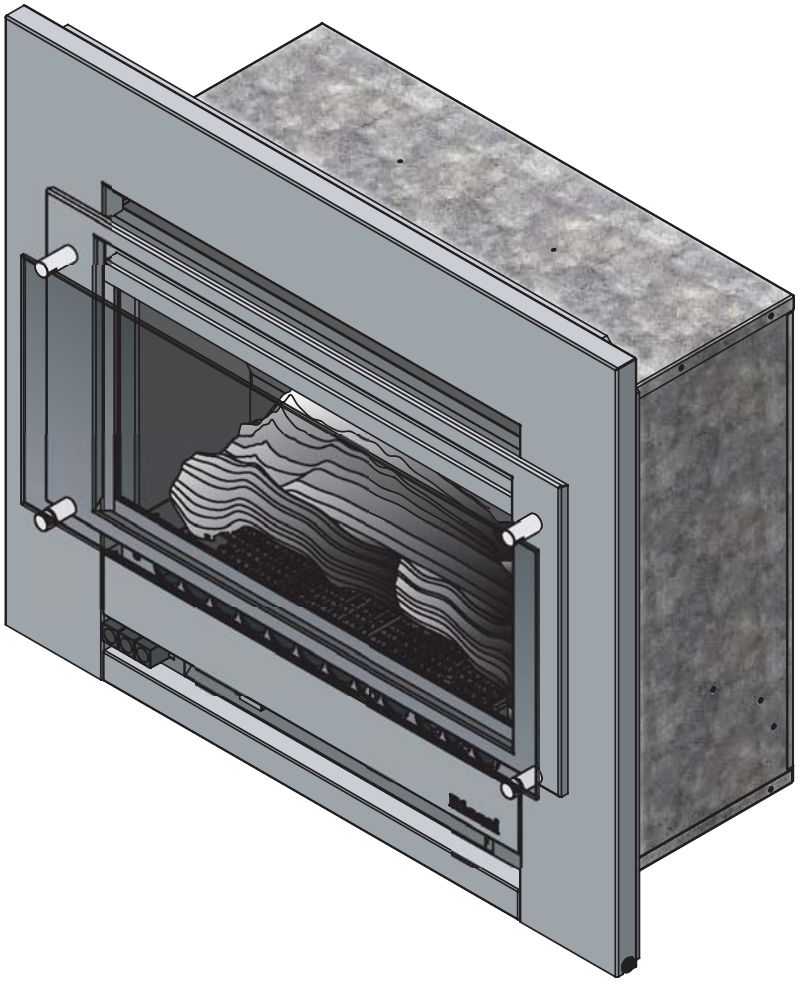
Rinnai

SLIMFIRE 252

Gas Log Flame Fire

Operation / Installation Manual

MODELS: RIBF2N & RIBF2L



This appliance shall be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 3000 & AS/NZ 5601
- Local Regulations and Municipal Building Codes

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

The Australian Gas Association
All Rinnai gas products are A.G.A. certified.

N10378

Certified System
Quality ISO 9001
SAI GLOBAL

Quality Endorsed Company
Lic 4983
Head Office Certified

Distributed and serviced in Australia under a Quality System certified as complying with ISO 9001 by SAI Global

Congratulations on the purchase of your Rinnai Slimfire 252 gas log flamefire.
We trust you will have many years of comfort and enjoyment from your appliance.

BEFORE PROCEEDING WITH THE OPERATION OR INSTALLATION OF YOUR NEW HEATER PLEASE READ THIS MANUAL THOROUGHLY AND GAIN A FULL UNDERSTANDING OF THE REQUIREMENTS, FEATURES AND OPERATION OF YOUR NEW APPLIANCE.

TABLE OF CONTENTS - OPERATION

BEFORE YOU START

INSTALLATION REQUIREMENTS

This heater must be installed 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 by an authorised person.

CERTIFICATION

The Rinnai Slimfire® has been certified by the Australian Gas Association.

The AGA Certification Number is shown on the appliance dataplate.

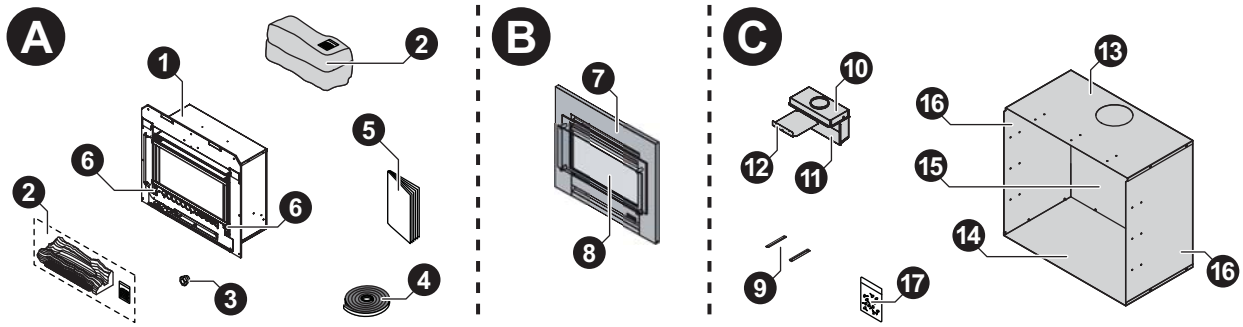
No parts or functions should be modified or permanently removed from the heater.

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

CARTON CONTENTS / ITEM CHECKLIST

The components for Slimfire 252 heater are supplied in separate cartons, the following tables list which components are in each carton. Ensure that the components listed for the installation method being installed are present before proceeding with the installation.

IMPORTANT **The Engine and Fascia are packed into two separate cartons and are required for all installation types. Masonry installations may require a flexiliner flue to be installed, refer to "MASONRY FLUE INSTALLATION" on page 17 for details. The Zero Clearance Kit and flue are purchased separately.**



Component Descriptions		Carton Contents		
		A Engine	B Fascia	C Zero Clearance Kit
1	Rinnai Slimfire 252 Engine.	●		
2	Artificial log set / burn media, Satchel burner granules (packed on top of the engine).	●		
3	½" BSP Flared nut (x1shipped inside engine, attached to gas connection).	●		
4	Adhesive backed foam sealing strip.	●		
5	Operation and Installation manual.	●		
6	Fascia Mounting Screws (x2 pre-installed in the engine fascia mounting brackets).	●		
7	Fascia.		●	
8	Glass dress guard.		●	
9	Transition box rails (x2).			●
10	Transition box upper.			●
11	Transition box lower.			●
12	Transition box guide plate.			●
13	Zero Clearance Box - Top panel.			●
14	Zero Clearance Box - Base panel.			●
15	Zero Clearance Box - Rear panel.			●
16	Zero Clearance Box - Left & Right side panels.			●
17	Packet assembly screws, rivets and grommet.			●

INSTALLATION RECORD

INSTALLERS / GAS FITTERS DETAILS

Installers Name: _____

Company Name: _____

Company Address: _____

_____

_____

Company Contact Details

Telephone: _____

Mobile Phone: _____

Certificate of Compliance / Certification Number: _____

Authorised Persons - Licence Number: _____

Installers Signature: _____

Installation Date: _____

APPLIANCE DETAILS

Model Number: _____

Serial Number: _____

Installation Address: _____

_____

_____

_____

THIS APPLIANCE MUST BE INSTALLED, SERVICED AND REPAIRED BY AN AUTHORISED PERSON.

SAFETY

WARNING

- **Failure to comply with these instructions could result in a fire or explosion, which could cause serious injury, death or property damage.**
- **Improper installation, adjustments, service or maintenance can cause serious injury, death or property damage. Such work must be performed by an authorised person.**
- **The appliance must be installed in accordance with the local gas and electrical authority regulations.**
- **Flue terminal must always vent directly to outdoors.**
- **DO NOT extend the flue vertically or horizontally in ways other than prescribed in the appliance manufacturers' installation instructions.**
- **For information on gas consumption, see data plate on the appliance.**
- **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.**
- **WARNING: This heater MUST NOT be used if either of the glass panels are damaged.**
- **When considering installation ensure minimum clearances as follows are adhered to, refer Fig. 1.**
- **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 or cigarette smoke. To avoid this possibility, it is recommended that a mat or similar protective sheet be placed in front of the appliance, extending at least 750 mm in front of the glass guard.**

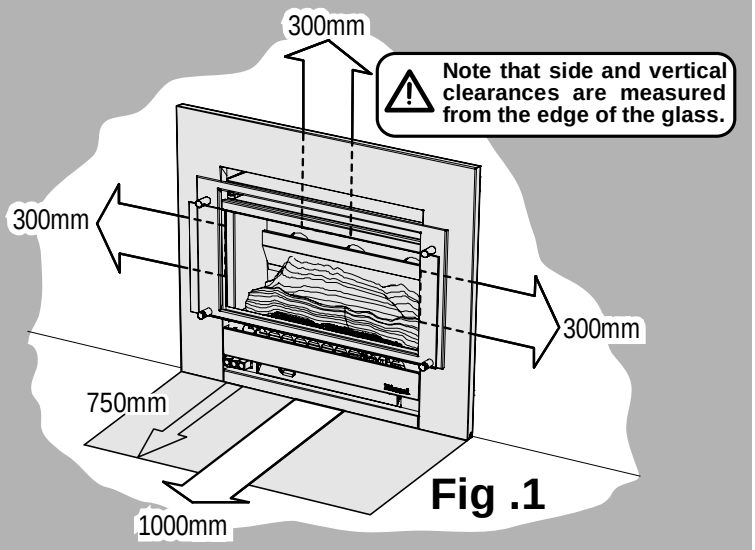
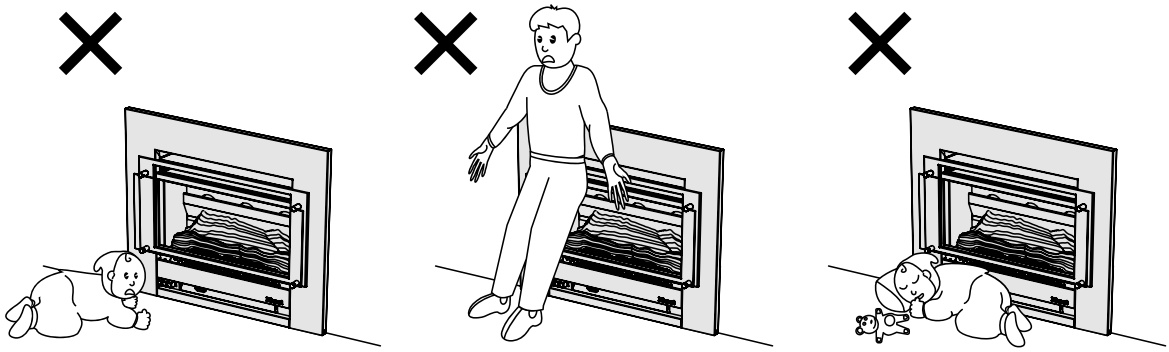


Fig .1

- **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 must be supervised when in the vicinity of this heater while it is in operation.**
- **The Glass Dress Guard MUST be fitted to this appliance to reduce the risk injury from serious burns and no part of it should be permanently removed.**
- **For protection of young children or the infirm a secondary guard is required.**
- **If the supply cord is damaged or requires replacing, it must be replaced by the manufacturer or the manufacturer's agent or similarly qualified person in order to avoid a hazard.**
- **The heater must not be located immediately below a power socket outlet.**
- **DO NOT connect to an LPG Gas cylinder indoors.**
- **A dedicated 240 V earthed 10 Amp power point must be used with this appliance.**
- **DO NOT modify this appliance. Modifying from original specifications may create a dangerous situation and will void your warranty.**
- **Only the flue components specified by Rinnai must be used**.
- **Unpack the heater and check for damage. DO NOT INSTALL A DAMAGED HEATER. If the heater is damaged, contact your supplier for advice.**
- **Before installing the heater, check the label for the correct gas type (refer data plate, inside the appliance).**
- **Refer to local gas authority for confirmation of the gas type if you are in doubt.**

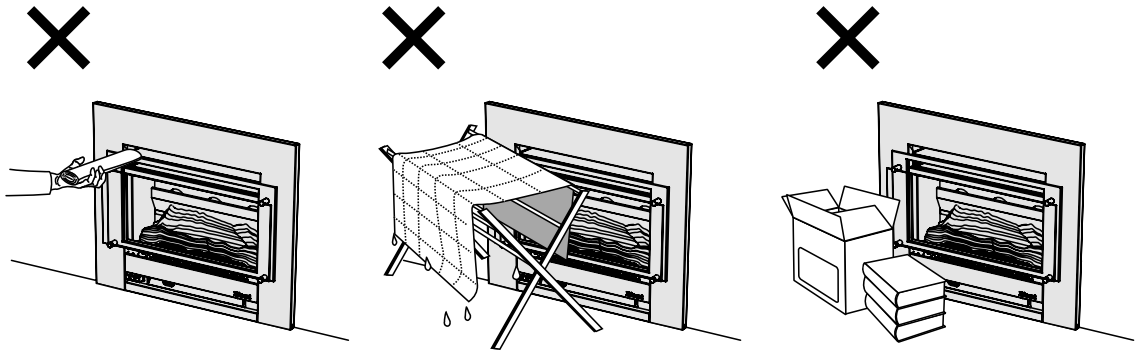
SAFETY



The appliance is not intended for use by young children or infirm persons without supervision.Young children should always be supervised to ensure that they **DO NOT** play with the appliance.

DO NOT sit or lean against the heater.

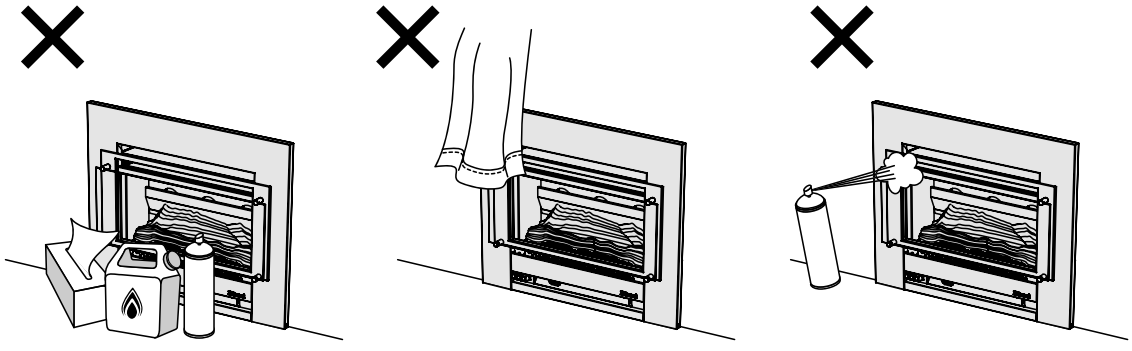
DO NOT allow children or elderly persons to sleep in the warm air discharge from the heater.



DO NOT post or allow children to post articles into the louvres of the heater.

DO NOT cover or place articles on this heater.

DO NOT place articles in front of the louvres.



DO NOT operate / install this heater in areas where painting is taking place, or in places such as hairdressing salons, where there may be fluff and dust, and where aerosols are used.

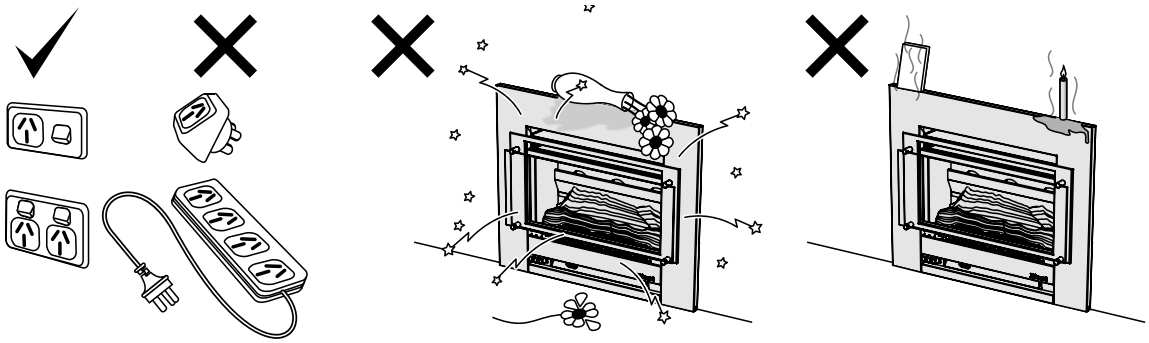
DO NOT place articles on or against this appliance.

DO NOT use or store flammable materials near this appliance. Keep flammable materials away from heater.

Combustible materials **MUST NOT** be placed where the heater could ignite them.

DO NOT spray aerosols in the vicinity of this appliance while it is in operation. Most aerosols contain flammable substances which can be a heater hazard if used near this heater when it is in use.

SAFETY



A dedicated 240V 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 on top of 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.

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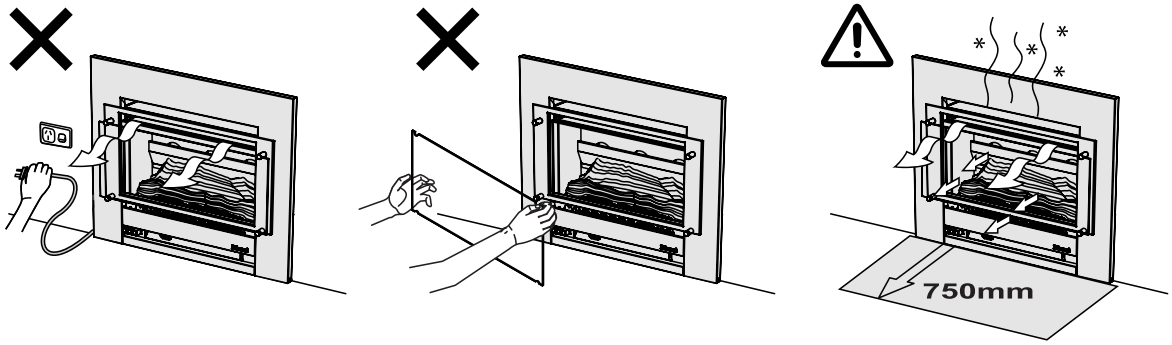


Turn the heater 'OFF' after use.

DO NOT remove the Glass Dress Guard. The 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.

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 affect 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.

SAFETY DEVICES

Over Heat Switches: When the heater gets too hot during operation (for example when air outlet louvres are blocked, or during a power outage) these devices turn the gas off automatically and allow the heater to restart when cooled down.

Electrical Fuse: The electrical circuits are protected by a fuse.

Flame Failure Sensing System: Automatically cuts off the gas supply to the heater in the event of a flame failure.

Power Failure: In the event of a power failure while the heater is in operation the fan will stop, however the gas valves remain open and continue to heat the appliance. The overheat protection may then shut off the gas to protect the heater, however switching the heater to its lowest setting may allow the heater to continue operating without reaching an overheat condition.

ABOUT YOUR HEATER

GENERAL DESCRIPTION

Your Slimfire is a burning log effect, gas space heating appliance with natural draft combustion system, intended for use with Natural Gas and Propane. The burning log effect is achieved using two main burners with strategically placed, 'life like', imitation logs and granules. Temperature control is achieved through manual push button control. This heater has an electronic ignition. The pilot is only on when the heater is in operation.

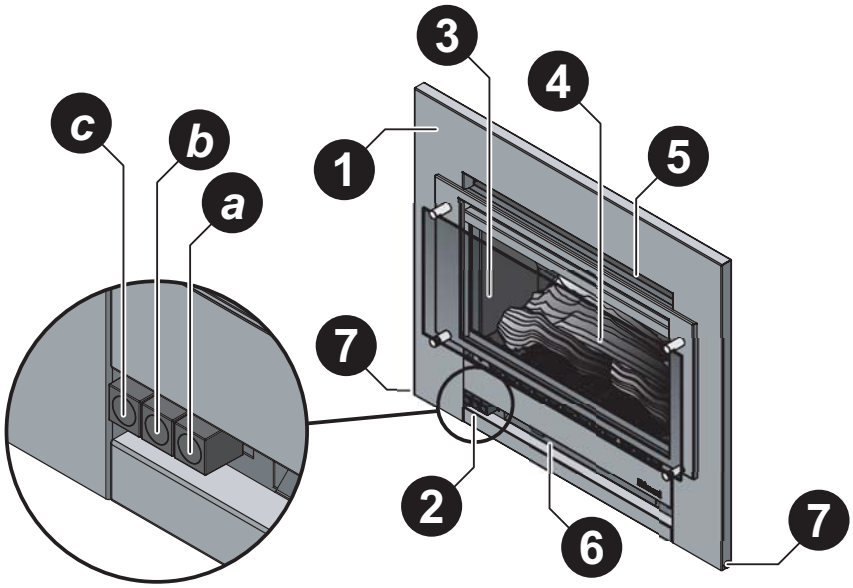
Burner, logs and granules are contained in a glass fronted, sealed burner box.

Combustion air is drawn from the room. Combustion product is exhausted via the flue discharge vent when installed in a masonry chimney or when installed in a zero clearance box through a 100mmØ x 150mmØ twin skinned flue to the outside of the house.

1. ***Fireplace / Masonry installation - Engine:***
   The appliance is directly mounted into an existing masonry fire place or a non-combustible/masonry enclosure that has a chimney. When installed correctly the appliance is a flush to wall mount.

2. ***Zero Clearance installation:***
   The appliance is fitted within a sheet metal Zero Clearance Box Assembly that has been installed into a wall or other suitable structure. Materials need not be non-combustible. When installed correctly the appliance is a flush to wall mount.

DESIGN FEATURES.



1. Rinnai Slimfire Heater
2. Push button control panel
   - a. Ignition / Low button
   - b. Medium button
   - c. High button
3. Glass dress guard
4. Flame window - artificial log set and burn media
5. Warm air discharge vent
6. Return air vent
7. Alternative power cable outlet location on front panel can be left or right handed

OPERATION

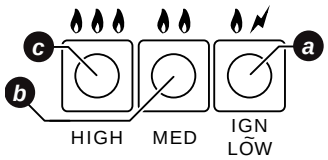
TO TURN YOUR HEATER ON

BEFORE PROCEEDING ENSURE THE GAS AND ELECTRICITY ARE TURNED ON.

You must read and understand these instructions fully before operating the heater.

The push button controls are located on the front lower left hand side of the heater.

Step 1. Press the right hand control (Ignition/Low) button **a** firmly. This operates the built-in safety device and starts the electronic spark. The front burner and pilot will ignite. Check that the burner has lit and continue to hold the button down for up to 15 seconds. The spark will continue while the button is held down.



Step 2. If the burner does not remain alight, Push the Ignition/Low button **a** again and release it. This will return it to the 'OFF' position. Wait 30 seconds, then repeat the ignition procedure.

The Ignition/Low button a MUST BE in the 'OFF' position before attempting re-ignition.

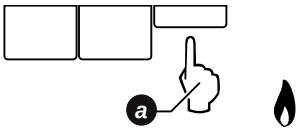
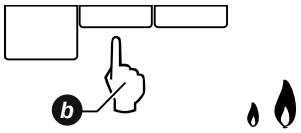
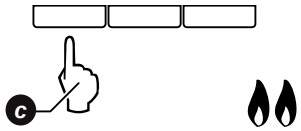
ADJUSTING HEAT

The Slimfire has three heating settings LOW **a**, MEDIUM **b** and HIGH **c**.

Press each of the control buttons in order from right to left, this will ignite additional burners and modulate the fan speed as shown in diagram below.

There is no need to hold the buttons for 15 seconds when adjusting the heat.

The relationship between the burner operation and the fan speed are preset and can not be independently adjusted.

BUTTON	INGITION/LOW 		MEDIUM 		HIGH 	
FAN SPEED	LOW		LOW		HIGH	
FRONT BURNER	HIGH		HIGH		HIGH	
REAR BUNER	OFF		LOW		HIGH	
MJ/h Usage	Natural	Propane	Natural	Propane	Natural	Propane
	7.7	9.0	14.2	15.8	25.0	25.0

FAN OPERATION

The fan will operate automatically when the heater warms up, and will stop when the combustion chamber cools.

When the heater is on the 'high' setting the fan will operate on high speed when the heater is hot.

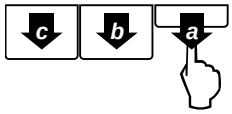
When the heater is on the' low' or 'medium' heat setting, the fan will operate on slow speed when the heater is hot.

When the heater is on its lowest setting the fan may turn off as the heater cools and restart when warm again.

The fan may continue to operate on slow speed when the burners have been extinguished until the heater cools down.

TO TURN YOUR HEATER OFF

To turn the heater 'OFF' push and release any of the operated control buttons from left to right in sequence until all are released.



POWER OUTAGES

If there is a power failure when the heater is in operation the overheat protection may shut off the gas to protect the heater. In the event of a power failure, turning the heater to its lowest setting may allow the heater to continue operating without overheating. The fan will not work without electrical power.

CARE AND MAINTENANCE

Your heater needs very little maintenance, but the following information will help you to keep it looking good and working efficiently.

IMPORTANT

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

All parts of the heater can be cleaned using a soft, damp cloth.

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 mentioned in the "TROUBLE SHOOTING CHECKLIST" below.

TROUBLE SHOOTING CHECKLIST

Use the following chart 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 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, Condensating	Glass, Streaky lines	
Not plugged in or turned off	●		●					Plug in power cord and turn power 'ON'.
Mains power failure	●		●					Turn heater to LOW or OFF until power returns.
(Initial Install) Air in gas pipe	●							Installer to purge air from gas supply.
Air in hose	●							Repeat Ignition procedure.
Ignition failure	●							Repeat Ignition procedure.
Gas escape		●						Isolate gas supply, call Rinnai.
Gas supply turned off	●							Turn gas supply on at the meter or cylinder.
Inadequate flue system	●				●			Call Rinnai.
Insufficient gas pressure	●				●			Call Rinnai.
Log Misalignment					●			Call Rinnai.
Possible fan fault			●					Call Rinnai.
Normal operation				●		●	●	Allow heater to warm up.

SERVICE

Rinnai recommend that this appliance and installation be inspected and serviced every 2 years or more frequently.

If the power supply cord or any other component of the heater are damaged, they must be replaced by Rinnai or a suitably qualified person.

Any service or repair work should only be carried out by an authorised person. Rinnai has service and spare parts departments nationally. See back cover for contact details.

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 Card for details.

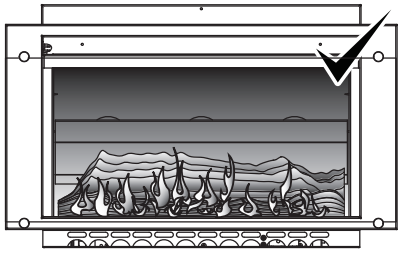
CARE AND MAINTENANCE

ABNORMAL FLAME PATTERN

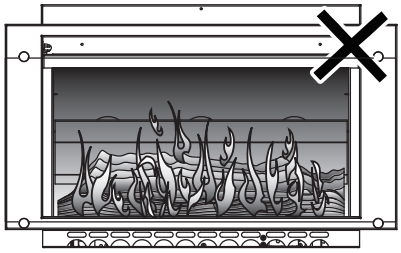
Each Rinnai Flame Fire heater has a distinct flame pattern. The flame should look the same every time you operate your heater, after an initial warm up period of approximately 15 minutes.

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 artificial logs/burn media may have shifted from when the heater was first installed.

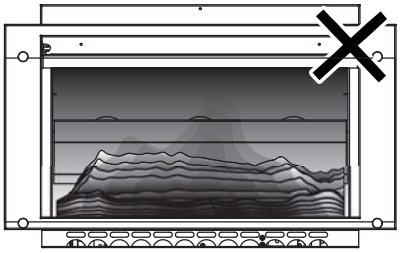
There are some warning signs that could indicate a problem. If any of the signs below occur, please contact Rinnai.



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.
- 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 incorporating a live fuel effect, and designed to operate with luminous flames, may exhibit slight carbon deposition, this is normal operation.

TABLE OF CONTENTS - INSTALLATION

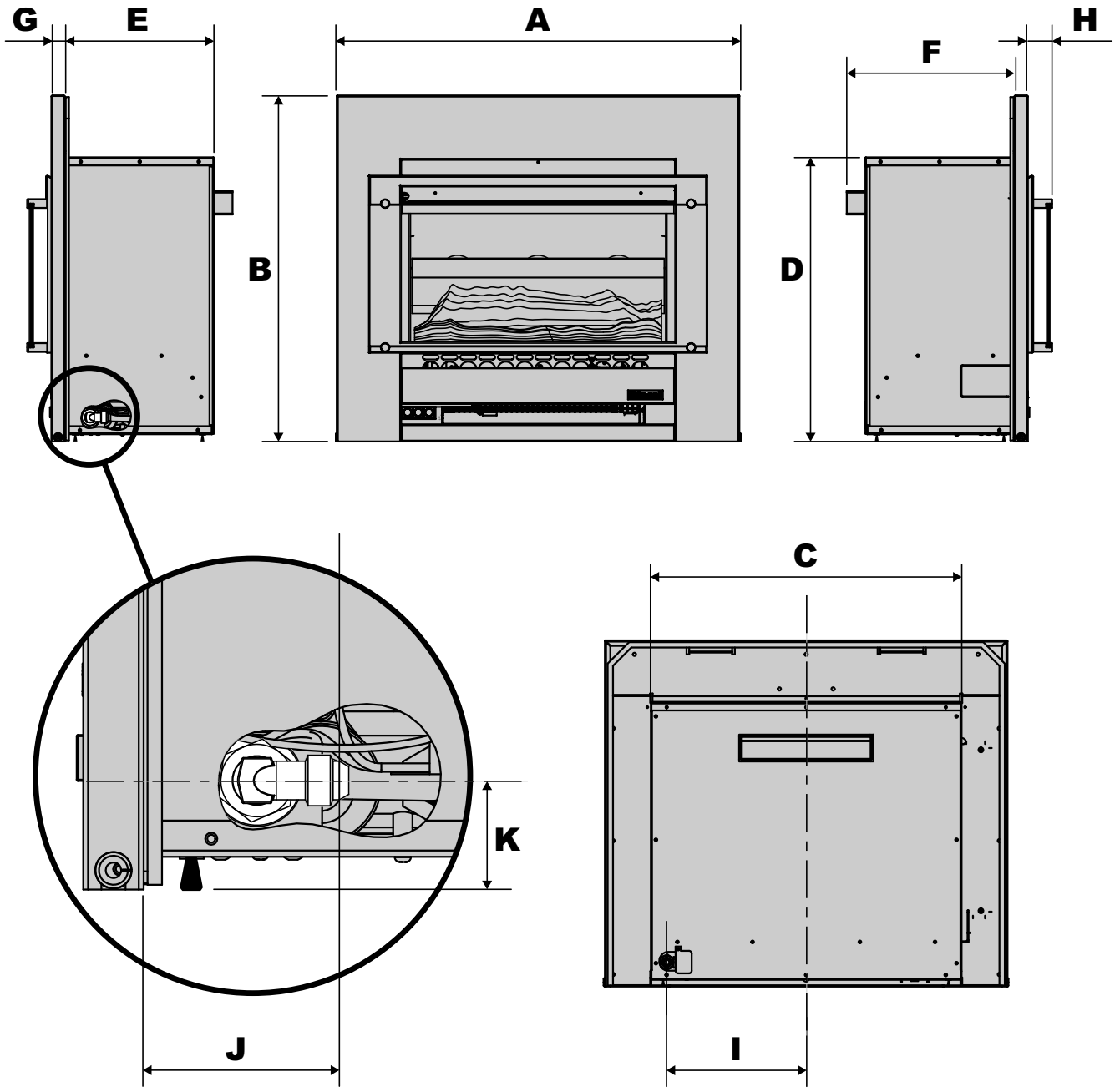
THIS APPLIANCE MUST BE INSTALLED, SERVICED AND REPAIRED BY AN AUTHORISED PERSON.

SPECIFICATIONS

Model Number	RIBF2N (Natural Gas) RIBF2L (Propane)		
Model name	Slimfire 252 Gas Log Flame Fire		
General description	Inbuilt Radiant/Convector, glass fronted, ceramic log space heater with forced convection and natural draft flue system.		
Features	Inbuilt & Fireplace installation Burning log effect Glass front Convection Fan, top warm air outlet Glass Dress Guard		
Installation - Masonry - Inbuilt	Masonry (FlexiLiner if required) Combustible Opening (Zero Clearance Box & Twin skinned Flue)		
Burners	Ember bed and flame burner		
Combustion System	Naturally aspirated multi port burner.		
Flue Type, Natural draft. Flue - Masonry (if required) Flue - Zero clearance Flue Terminal	Can be flued directly into a sealed chimney as per AS/NZS 5601 or fitted with a Rinnai approved flue system: FlexiLiner single skinned, diameter: Ø100 mm. Twin skinned, diameter: inner Ø100mm x outer Ø150mm. Rectangular spigot rear discharge 43mm x 245mm		
Convection Fan	Tangential 2 speed, power rating 28 Watts		
Gas connection	1/2” BSPF male flare		
Gas Control	Push button combination control valve		
Operation	Push button to light pilot and burners (Low, Medium and High)		
Gas type	NG, Propane (AU) / NG, Universal LPG (NZ Only!)		
Gas input rates, MJ/h		Natural Gas	Propane
	Pilot/Front	7.7	9.0
	Low	8.0	9.0
	Medium	14.2	15.8
	High	25.0	25.0
Burner Pressure, kPa	High	Natural Gas 0.92	Propane 2.00
Appliance Data Plate location	Bottom panel, front right hand side		
Ignition	Continuous Spark Electronic Ignition		
Power Supply	240 V 50 Hz, 1500 mm cord is supplied with a 3 pin plug		
Power Consumption	High 20 W		
Safety Devices	Flame Failure Thermocouple Overheat Switch (Bi-metal strip) Fan delay (Bi-metal strip) Electrical Fuse Power Failure Protection		
Glass - Primary Glass - Secondary Glass seal material Log Set	Ceramic Glass Tempered Glass Woven fibreglass chord - Hytex® 1000 by mid Mountain USA Ceramic		
Weight	39 Kg		

For other specifications please refer to appliance data plate that is located on the front right hand side bottom panel of the appliance.

DIMENSIONS

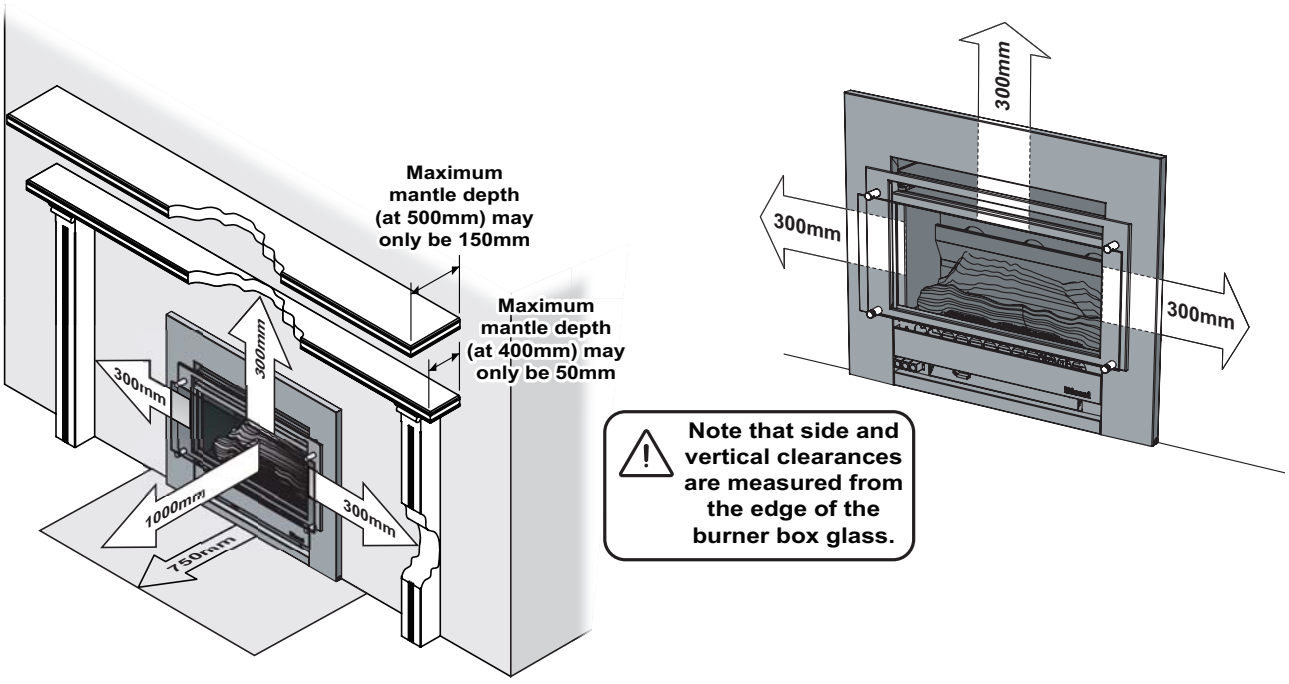


A	B	C	D	E	F	G	H	I	J	K
750mm	645mm	582mm	528mm	227mm	310mm	25mm	45mm	280mm	79mm	43mm

HEATER LOCATION

GENERAL LOCATION INFORMATION

- When positioning the heater, the main variables governing the location are Flueing and Warm Air Distribution.
- This heater must not be installed where curtains or other combustible materials could come into contact with it. In some cases curtains may need restraining. Refer to page 4 and page 5 for additional safety consideration.
- Mantles and surrounds can be added to compliment the design provided that they conform to the clearances shown in the diagrams below.
- The minimum clearance from the edge of the burner box glass is 300 mm. The depth of the mantle/surrounds at the minimum clearance may not exceed 150 mm.
- An additional 100 mm of clearance is required for every extra 50 mm of mantle depth, i.e. for a 200 mm deep mantle the clearance is 500 mm (as shown below).



TV AND ORNAMENTATION WARNING

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, Plasma TV, LCD TV, Home Theatre Screens, Speakers, etc must comply with their manufacturers' 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 as per the diagram above.

The temperature of the wall surface directly above the appliance may be elevated and may discolour paint finishes or distort vinyl wall coverings. For durability of surfaces you should contact the relevant manufacturer for their specification.

IDEA

Use either a shelf or mantle below the TV or ornament or alternately you can construct a recess to mount TV or ornament in.

Check the manufacturers installation instructions for these items and ensure the recess is suitable.

NOTE

Rinnai does not take any responsibility for any damage occurring to any items installed above and in the vicinity of the heater.

HEATER LOCATION

ENCLOSURE REQUIREMENTS

Masonry Fireplace

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.

Zero Clearance In-built installation

Framework of the installation must conform to local building codes. Non-combustible materials need not be used.

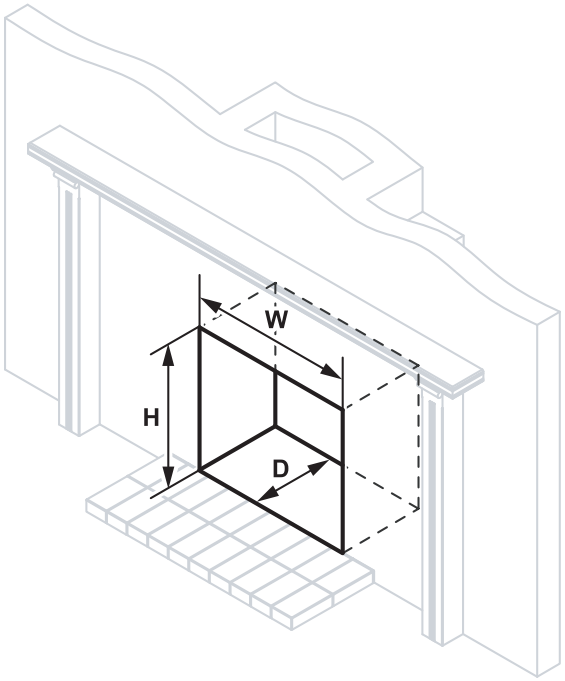
If the appliance is elevated from the ground within the structure, a base must be constructed using suitable material with supporting joists capable of supporting a minimum of 1.5 times the weight of the appliance.

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

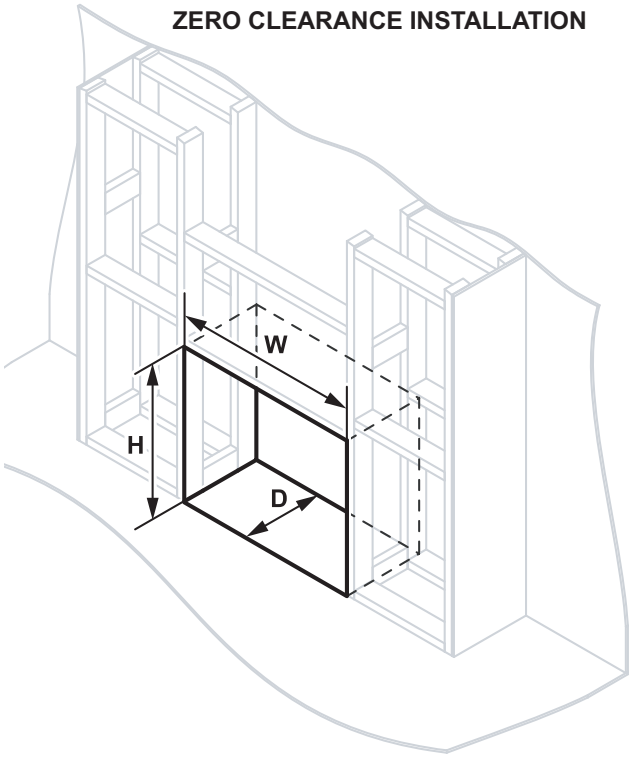
ENCLOSURE DIMENSIONS

Enclosure dimensions are shown below. The enclosure dimensions specified are critical to the successful installation of this appliance and must be strictly adhered to.

MASONRY INSTALLATION



ZERO CLEARANCE INSTALLATION



	All dimensions are minimums and are in mm				
Installation Type	**Height (H)**		**Width (W)**		**Depth (D)**
Masonry	Min 550	Max 630	Min 595	700 Max	360 *(min clearance spigot to back of fire place 50mm!)*
Zero Clearance	615		685		380 *(read caution below)*

CAUTION **For clarity the consumer piping gas supply, electrical connections and some construction details have been omitted. Refer to "GAS SUPPLY" on page 15 and "ELECTRICAL SUPPLY" on page 15 for details.**

When preparing a cavity / frame for a zero clearance installation the total cavity depth MUST also include the thickness of the external cladding, as the zero clearance box MUST BE installed flush with the cladding surface. Failure to do this will cause misalignment of the flue systems.

HEATER GENERAL INSTALLATION

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 5601 should be used.**

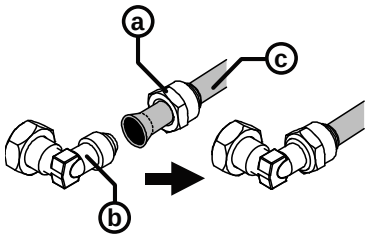
IMPORTANT **Confirm correct gas type (see labels located on top or rear panels). Refer to local gas authority for confirmation of gas type if you are in doubt.**

Installation of consumer piping

The gas supply (consumer piping), termination is inside the heater and enters through the rear of the appliance.

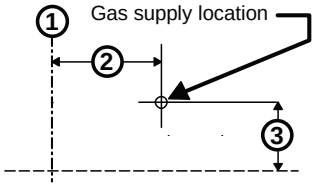
A ½" BSP flared nut ⓐ and a ½" BSP Male Flare x ½" Barrel Union - Elbow ⓑ are provided for connection to the consumer piping ⓒ. They are shipped inside the engine attached to on the gas inlet connection of the heater.

Refer to the table below and the dimensional drawings on this page and on page 12 for appliance gas inlet location and other relevant dimensions.

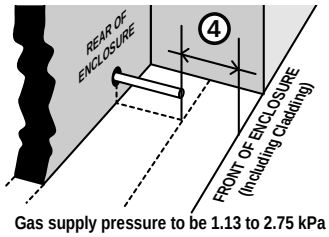


Step 1. Mark off the location for the vertical centre line ① of the heater enclosure.

Step 2. To the right of the vertical centre line ①, mark off both the vertical ② and horizontal ③ location for the gas supply penetration (consumer piping). For measurements refer to the Gas Supply Dimension Table below.



CAUTION **The length of the gas supply (consumer piping) termination ④ is measured from the front of the enclosure including the thickness of any cladding material.**



Gas supply pressure to be 1.13 to 2.75 kPa

Gas Supply Dimension Table

②	280mm to right of appliance centre-line
③	43mm from base of enclosure
④	Consumer piping to be terminated 79mm from the front of enclosure

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.

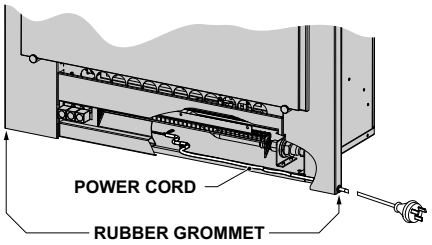
Leak Testing The Connection

Plug the end of the consumer piping gas and leak test all joints.

CAUTION **Use a soapy solution to test all gas connections. If a leak is present bubbles will form at the leak point. When finished remove any residue with a rag. Prevent any soapy solution from coming in contact with electrical components.**

ELECTRICAL SUPPLY

If a power point is used it **MUST BE** 240 V, rated at 10A and **MUST BE** earthed. This power point **MUST NOT** be located above the heater. The heater engine is fitted with a 1.5 m power cord and three pin plug which can exit the appliance from either the lower left or right hand side of the heater as required.



Direct Wired Installations

Alternatively the appliance can be direct wired if the power supply is to be concealed.

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.**

FLUE INSTALLATION OPTIONS

WARNING

The following diagrams illustrate the flue installation options that are available for the Slimfire 252 flame. Only the genuine Rinnai Flamefire (FLF) flue is certified as part of the Rinnai Slimfire 252 space heaters.

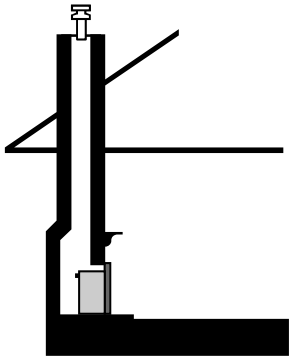
Only an authorised person must install, service and remove the Rinnai Slimfire 252 space heater & flue system.

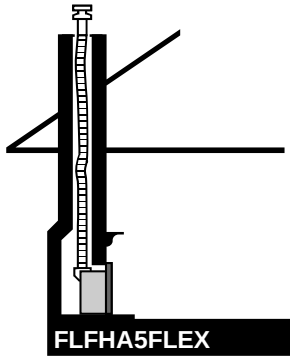
Only the flue system components described in the 'Flueing Installation Manual For Rinnai Flamefire Heaters' that is provided with the flue kit must be used.

Components that are not described in that manual, whether manufactured by Rinnai or otherwise, are not compatible and must not be used.

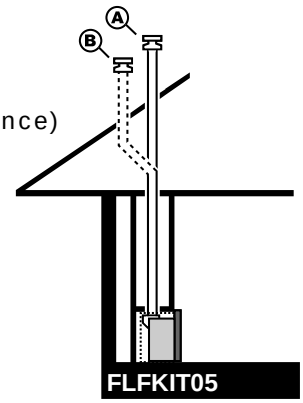
Rinnai appliance warranty conditions may be voided if non Rinnai flue components are fitted.

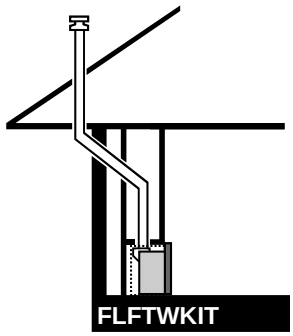
Inbuilt
(Masonry)





Inbuilt
(Zero Clearance)





Ⓐ Direct flue Ⓑ Offset flue

Install the Rinnai rigid flue system components in accordance with the 'Flueing Installation Manual For Rinnai Flamefire Heaters' that are provided with the flue kit.

NOTE

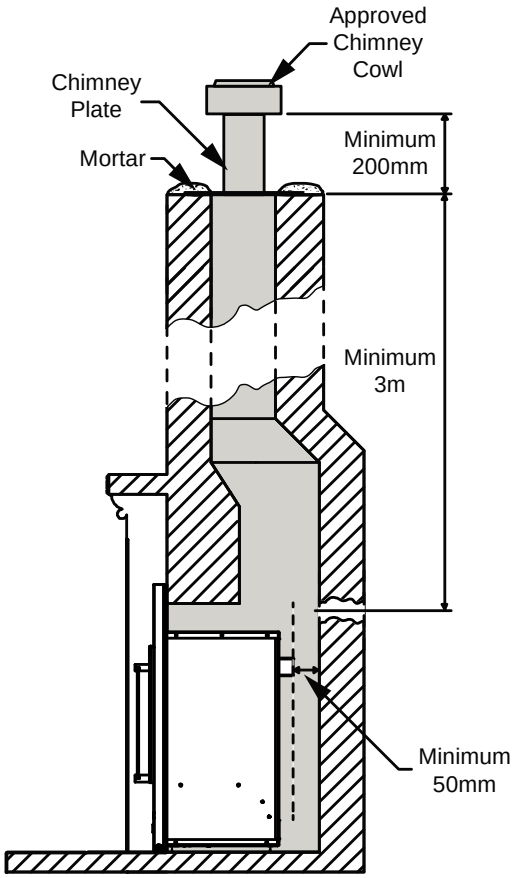
For masonry installation details refer to "MASONRY FLUE INSTALLATION" on page 17.

MASONRY FLUE INSTALLATION

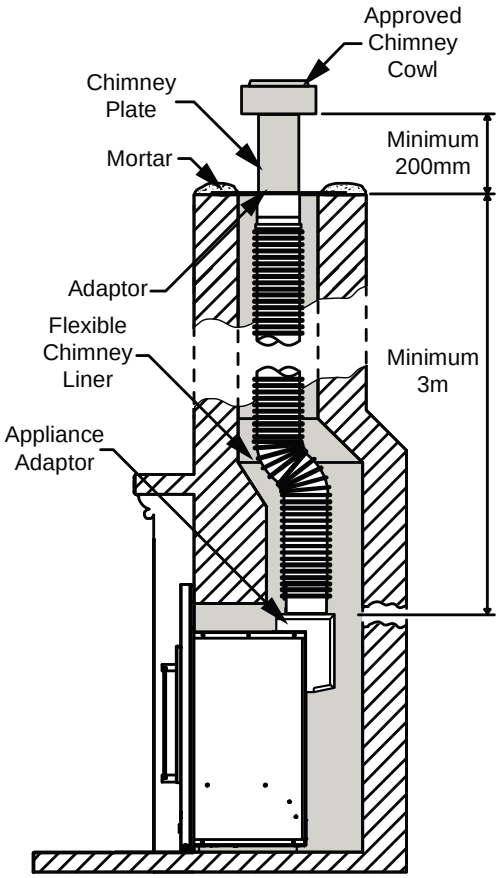
Two masonry flue installation options are available. These are Open Chimney and Lined Chimney.

An 'Open Chimney' installation uses the natural draft properties of a sound chimney along with the addition of an approved chimney plate and cowl to provide the flueing for the heater. If there is doubt as to the soundness of the proposed chimney then a Rinnai Flexiliner FLFHA5FLEX should then be installed.

A 'Lined Chimney' installation is used when the existing chimney condition is inadequate for an Open Chimney' installation and uses a Rinnai Flexiliner (flexible) flue system "FLFHA5FLEX" to provide the flueing for the heater, refer to the instruction sheet provided with this kit for installation details.



Open Chimney Installation



Lined Chimney Installation

OPEN INSTALLATION METHOD

The chimney must be physically checked first and must meet the following set criteria along with local regulations. Failure to meet these criteria will not only void the product warranty but may affect the performance of the heater.

Chimney Criteria For Open Installation

- All loose/broken bricks must be replaced or repaired ensuring the chimney is of sound construction and does not leak in accordance with AS/NZS 5601.
- Any under floor air supply to the fireplace must be completely sealed off to prevent secondary air draw.
- Total chimney height **MUST NOT** be less than 3 metres and flue cowl must terminate above the chimney in accordance with AS/NZS 5601.
- The chimney must be swept clean and be free of soot and creosote that may have built up if previously used for a solid fuel fire.
- The hearth surface must be flat and level to support the entire heater. If the heater is not properly supported noise and vibration may result.

NOTE **In a masonry fireplace, use a slurry of sand and cement to level the base as required.**

HEATER ENGINE INSTALLATION - MASONRY

MASONRY INSTALLATION OVERVIEW

IMPORTANT

Read this manual thoroughly and gain a full understanding of the requirements before undertaking installation.

Ensure gas supply to heater is turned off for the first stages of this instruction.

MASONRY INSTALLATION - DETAIL

Step 1. Prepare Site

IMPORTANT

Ensure the intended enclosure meets the requirements of the dimensions as stipulated in "ENCLOSURE REQUIREMENTS" on page 14 and that gas and electrical supplies have been prepared in accordance with the dimensions stipulated in "GAS SUPPLY" on page 15 and "ELECTRICAL SUPPLY" on page 15.

Step 2. Unpack The Heater Engine

The heater engine is supplied in one carton, check to ensure you have all contents as listed on "BEFORE YOU START" on page 1 at the start of this manual before proceeding.

Carefully remove carton by removing the straps and lifting the carton off the appliance. Remove all packaging materials and check all components for damage. If **ANY** damage is evident **DO NOT** install or operate this appliance. Contact your supplier for advice.

HINT

Retain the cardboard carton for use in the "Positioning the Heater Engine" on page 19.

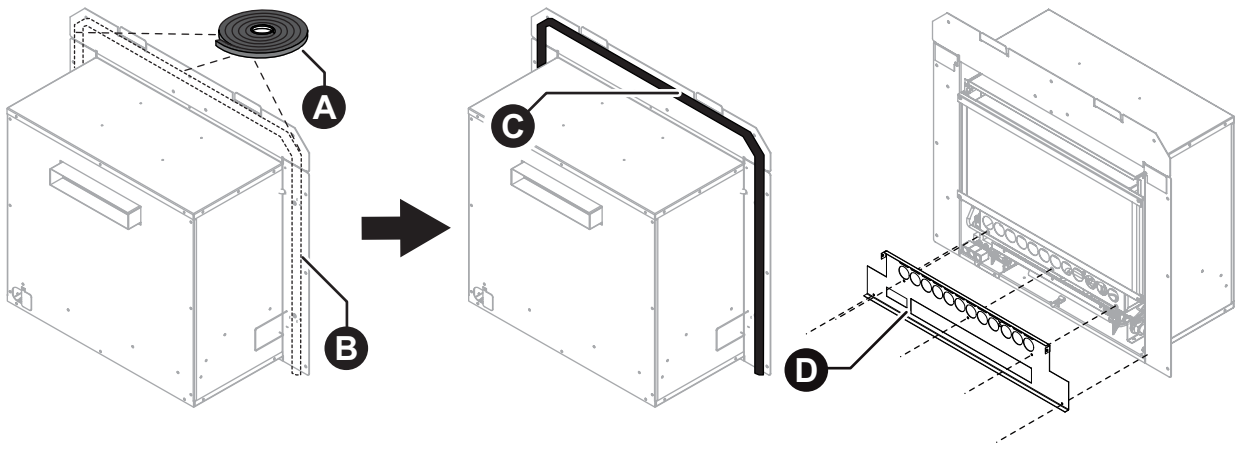
Before installing the heater, check it is the correct gas type, (refer to the gas type label on the top body panel of the heater). Refer to the local gas authority for confirmation of gas type if you are in doubt.

Step 3. Preparing Heater Engine

Attach the adhesive backed foam sealing strip **A** supplied to rear face of the fascia assembly mounting panel **B**. Ensure the seal is stuck to the Fascia Assembly mounting panel at approximately 20mm from the top edge **C**.

The foam strip is intended to form a seal between the heater and the fireplace brickwork. If an adequate seal cannot be formed then another means of sealing must then be used. (e.g. non combustible insulation or heat resistant silicon).

Remove (do not discard) the gas/electrical access plate **D** five screws.



HEATER ENGINE INSTALLATION - MASONRY

Step 4. Positioning the Heater Engine

Place the heater engine in front of the fireplace enclosure.

HINT

A panel from the cardboard packing carton placed on the floor underneath the heater will help prevent possible damage to flooring.

Step 5. Connect Electrical Supply

Plug in the 3 pin connector if electrical connections inside the fireplace.

Step 6. Insert Heater Engine Into Fireplace

Carefully move the heater engine into the fireplace ensuring the gas supply pipe and fittings (E) feed into the rear access hole.

CAUTION

Take care that the electrical cord does not bunch up or get pinched behind the heater engine.

Step 7. Connecting Gas

Connect gas supply pipe and fittings (E) to the gas control valve inlet (F) and tighten.

Step 8. Leak Testing

Turn gas back ON and leak test all appliance connections.

CAUTION

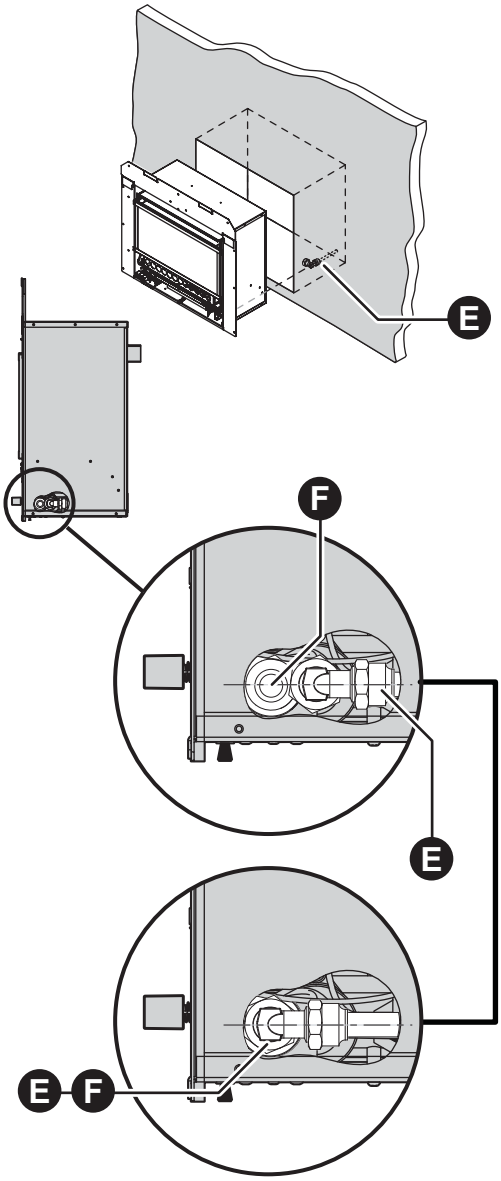
Use a soapy solution to test all gas connections. If a leak is present bubbles will form at the leak point. When finished remove any residue with a rag. Prevent any soapy solution from coming in contact with electrical components.

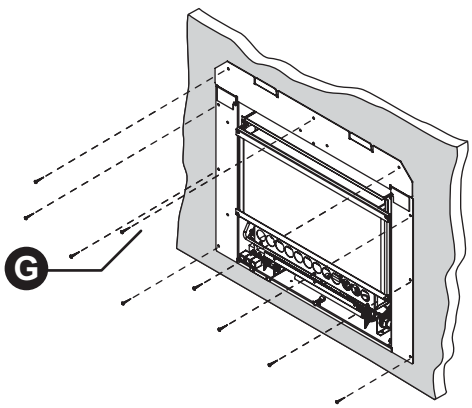
Step 9. Securing The Heater Engine

Fasten the heater to the masonry work using appropriate fasteners (not supplied) using the three holes across the top of the fascia assembly mounting panel and in at least two of the holes on each side of the side panels as shown (G).

Step 10. Completing Heater Installation

Go to “COMPLETING HEATER INSTALLATION” on page 23.





HEATER ENGINE INSTALLATION - ZERO CLEARANCE

ZERO CLEARANCE INSTALLATION OVERVIEW

IMPORTANT

Read this manual thoroughly and gain a full understanding of the requirements before undertaking installation.

Ensure gas supply to heater is turned off for the first stages of this instruction.

ZERO CLEARANCE INSTALLATION - DETAIL

Step 1. Prepare Site

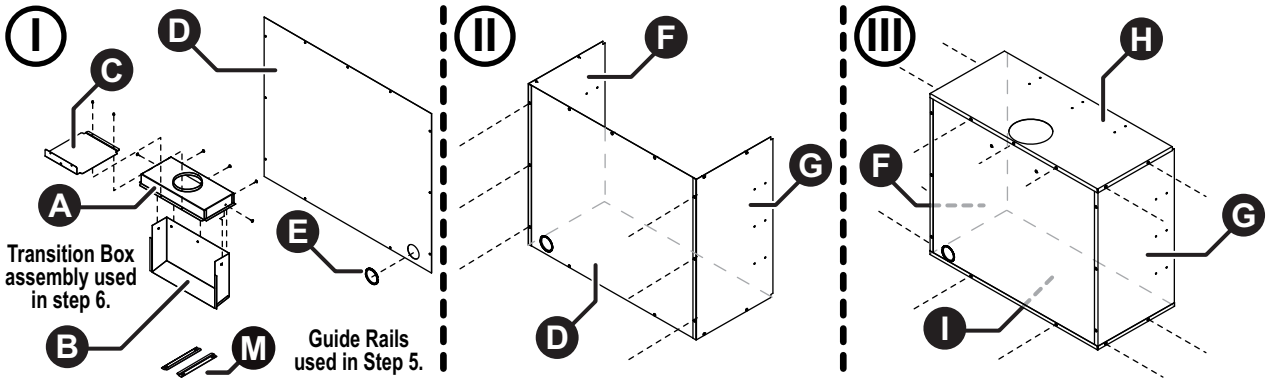
IMPORTANT

Ensure the intended enclosure meets the requirements of the dimensions as stipulated in "ENCLOSURE REQUIREMENTS" on page 14 and that gas and electrical supplies have been prepared in accordance with the dimensions stipulated in "GAS SUPPLY" on page 15 and "ELECTRICAL SUPPLY" on page 15.

Ensure there are no wall studs, noggins, ceiling joists, wiring or other obstruction within the wall and or ceiling cavity where the flue is proposed to penetrate.

Step 2. Assemble Zero Clearance Box

Carefully remove the contents from the carton and check to ensure you have all contents as listed on "BEFORE YOU START" on page 1. If **ANY** damage is evident or parts are missing **DO NOT** assemble the zero clearance box and contact your supplier for advice.



I. Assemble the transition box A & B with five screws (supplied), then attach the guide plate C to the transition box and secure with two pop-rivets (supplied).

Fit the plastic grommet E into the gas and electrical access hole of back panel D.

II. Attach the two side panels F & G to the back panel C and secure with six screws (suppled).

III. Attach top panel H to the back panel D aligning the flue outlet hole to the rear and secure with three screws (supplied).

Next secure the top panel H to the side panels F & G with four screws (supplied).

Attach base panel I to the back panel D and secure with two screws (supplied).

Then secure the base panel I to the side panels F & G with four screws (supplied).

Ensure flue has been installed as per 'Flueing Installation Manual For Rinnai Flamefire Heaters'.

NOTE

Flue guide rails screws and pop rivets are supplied with Zero Clearance kit, part number R2520.

HEATER ENGINE INSTALLATION - ZERO CLEARANCE

Step 3. Fitting Zero Clearance Box Into Cavity

Slide zero clearance box assembly into the cavity, ensuring the gas and electricity supplies are accessible.

CAUTION

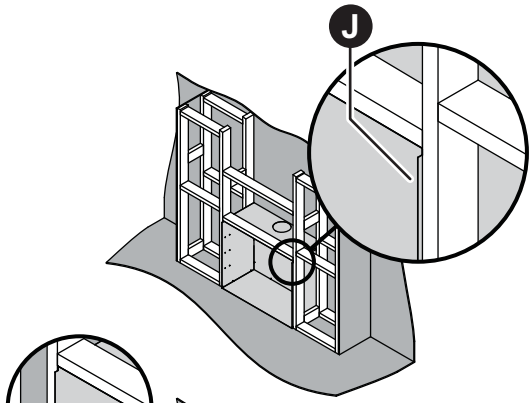
When preparing a cavity / frame for a zero clearance installation the total cavity depth MUST also include the thickness of the external cladding (J), as the zero clearance box MUST BE installed flush with the cladding surface, failure to do this will cause misalignment of the flueing.

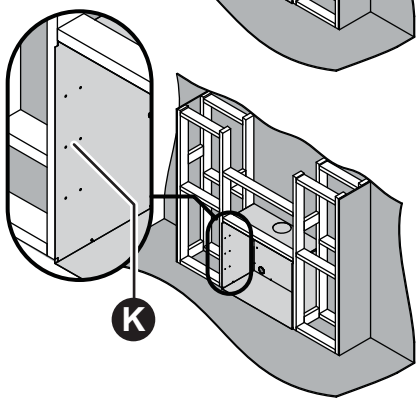
Secure the zero clearance box into the cavity (K) with appropriate fasteners (not supplied).

Install the Rinnai rigid flue system components (L) in accordance with the 'Flueing Installation Manual For Rinnai Flamefire Heaters' that is provided with the flue kit.

IMPORTANT

Ensure there are no wall studs, noggins, ceiling joists, wiring or other obstruction within the wall and or ceiling cavity where the flue is proposed to penetrate.



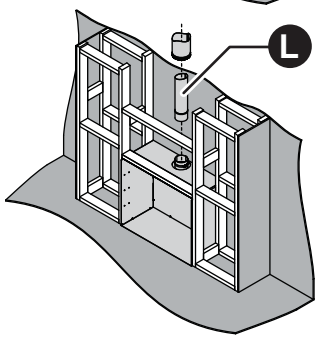


Step 4. Unpack The Heater Engine

The heater engine is supplied in one carton, check to ensure you have all contents as listed on "BEFORE YOU START" on page 1 at the start of this manual before proceeding.

Remove carton by removing the straps and carefully lifting the carton off the appliance. There are two items shipped attached to the outside the heater engine, these are the log set and the burner granules (the burner granules is taped to the outside of the foam packing that contains the log set).

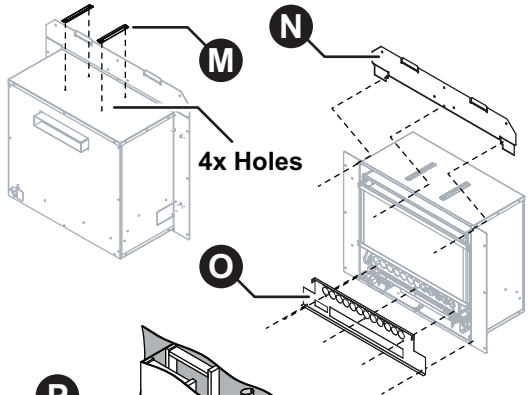
Carefully open the packaging material for the logset and inspect for damage. Continue to remove the remaining engine packaging materials and check all components for damage. If **ANY** damage is evident **DO NOT** install or operate this appliance. Contact your supplier for advice.



HINT

Retain the card board carton for use in the "Connect Transition Box to Engine" on page 22.

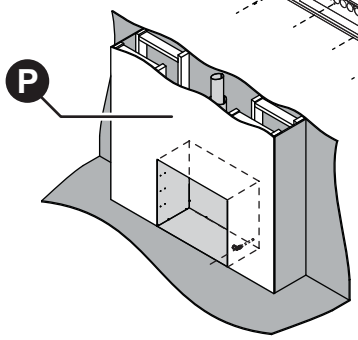
Before installing the heater, check it is labelled for the correct gas type, (refer to the gas type label on the top body panel of the heater). Refer to the local gas authority for confirmation of gas type if you are in doubt.



Step 5. Preparing Heater Engine

Attach the flue guide rails (M) to the top of the heater engine using the four pre-drilled holes with four screws (supplied).

Remove (do not discard) the flue access plate (N) three screws and the gas/electrical access plate (O) five screws.



IMPORTANT

Flue guide rails screws and pop rivets are supplied with Zero Clearance kit, part number R2520.

Before proceeding any further with the heater engine installation ensure the cladding for the front of the enclosure has been fitted (P).

HEATER ENGINE INSTALLATION - ZERO CLEARANCE

Step 6. Connect Transition Box to Engine

Align the guide rails (M) with the guide plate (C) of the transition box assembly and slide the assembly, in until the guide plate (C) is fully home against the rear of the flange at the top of the heater engines main body (R).

Step 7. Positioning the Heater Engine

Place the heater engine in front of the zero clearance box / cavity.

HINT

A panel from the cardboard packing carton placed on the floor underneath the heater engine will help prevent possible damage to flooring.

Step 8. Connect Electrical Supply

Plug in 3 pin connector if electrical connections are inside the fireplace.

Step 9. Insert Heater Engine Into Fireplace

Carefully move the heater engine into the zero clearance box ensuring the gas supply pipe and fittings (Q) feed into the rear access hole.

CAUTION

Take care that the electrical cord does not bunch up or get pinched behind the heater engine.

Step 10. Connect Flue ⚠

Connect flue in accordance with the 'Flueing Installation Manual For Rinnai Flamefire Heaters' supplied with flue kit.

Step 11. Secure Flue

Replace the flue access plate (N) and secure the guide plate (C) of the transition box assembly to the flue access plate (N) with two screws (S) (supplied). Re-secure the flue access plate (N) to the heater engine three screws.

Step 12. Connecting Gas

Connect gas supply pipe and fittings (Q) to the gas control valve inlet (T) and tighten.

Step 13. Securing The Heater Engine

Fasten the heater engine to cladding surface using appropriate fasteners (not supplied) using the three holes across the top of the fascia assembly mounting panel and three holes on each side of the side panels as shown (U).

Step 14. Leak Testing

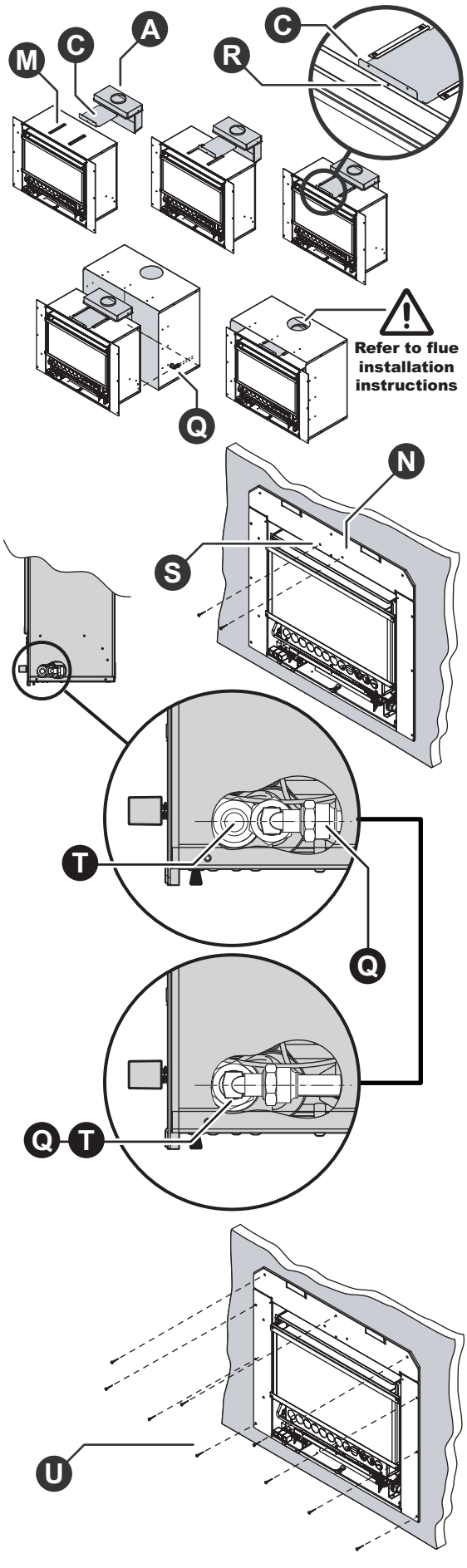
Turn gas back ON and leak test all appliance connections.

CAUTION

Use a soapy solution to test all gas connections. If a leak is present bubbles will form at the leak point. When finished remove any residue with a rag. Prevent any soapy solution from coming in contact with electrical components.

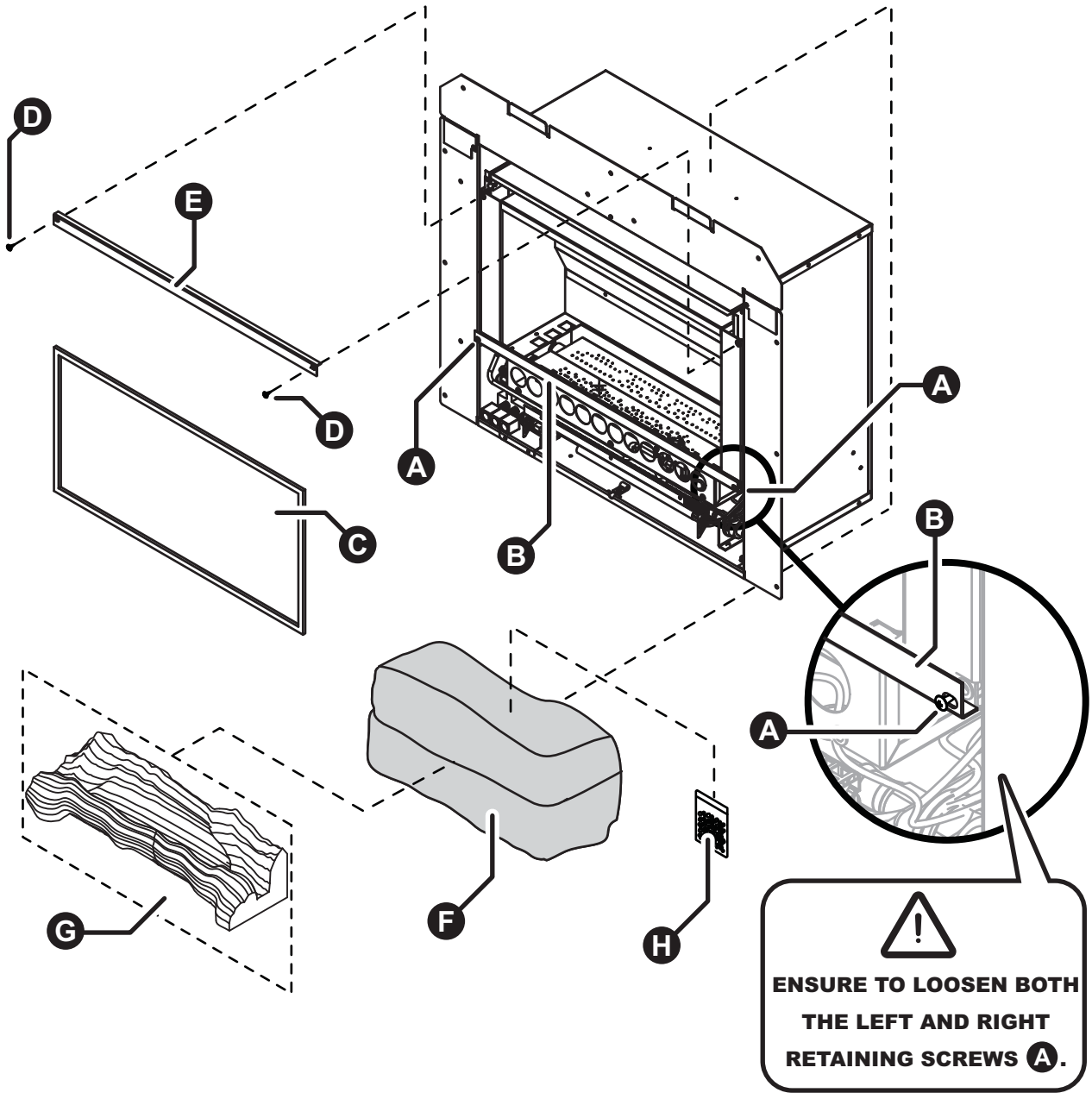
Step 15. Completing Heater Installation

Go to "COMPLETING HEATER INSTALLATION" on page 23.



COMPLETING HEATER INSTALLATION

PREPARING FOR COMMISSIONING



Step 1. Removing the Burner Box Glass

Loosen but do not remove the two retaining screws **A** for the bottom burner box glass clamp **B**. While supporting the burner box glass panel in place, completely unscrew and remove the two retaining screws **D** and the top burner box glass clamp **E**. Then lift burner box glass panel **C** away and place it safely aside where it can not get damaged.

Step 2. Unpacking the Log Set & Granules Satchel

Unpack the log set **G** and the burner granules **H**. These are attached to the outside top of the heater engine.

IMPORTANT **The satchel containing the burner granules H is taped to the outside of the foam packing that contains the log set. Ensure that you locate and remove the satchel before discarding the packaging material.**

Carefully unpack the logset **G** from the packaging material **F** and inspect for damage. If **ANY** damage is evident **DO NOT** continue with installation and contact your supplier for advice.

COMPLETING HEATER INSTALLATION

Step 3. Installing the Log Set and Burner Granules

NOTE

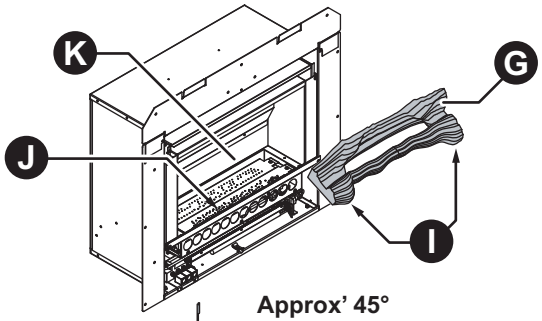
For clarity the drawings are displayed without showing the entire heater.

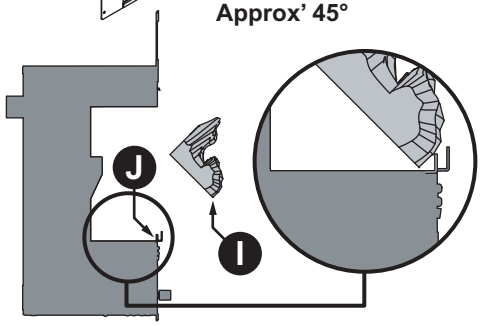
DO NOT remove the burner from heater engine to install the log set.

Use extreme care when handling the Log Set components, they are made from a very fragile high temperature material and will damage if handled roughly. Only remove the components from their packaging as required.

To achieve the correct location of the log set, hold the log set G at approximately 45°directly in front of the burner box K.

Maintain this angle and place the front feet I of the log set behind the unpainted inner horizontal steel lip J of the combust chamber.

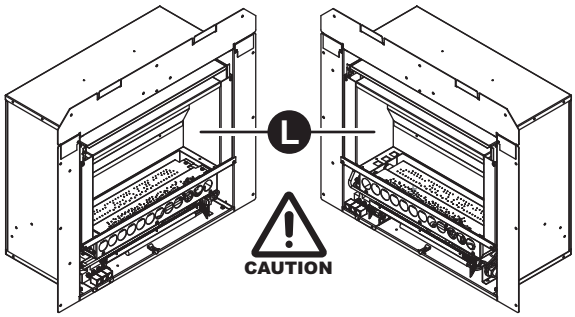




CAUTION

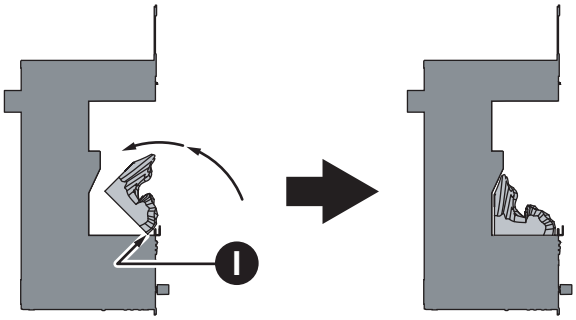
Take care to ensure the ends of the log set DO NOT touch the burner box panel walls L during the insertion or positioning.

To set the log set into the final position within the burner box, rotate the back of the log set down using the location of the front feet I as pivot points until it is sitting flat on the rear burner.



⚠ Confirm the correct location of the log set before proceeding with the placement of the granular burner medium, ensuring that the log set is firmly seated in the centre of the burner box and not touching the side walls and that the ports of both the front and rear burners are clean and clear of any debris that may have been shed during the log set installation.

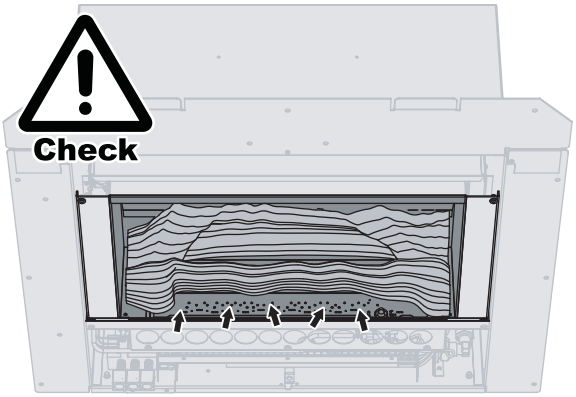
Installation of the granular burner medium may now begin, for best flame effect carefully place, **DO NOT POUR**, the granular burner medium over and around the front burner ports. It is desirable that the gas jet is diffused by the granules, this will reduce any 'candling' effect of the flame enhancing the realistic log burning look of the heater.



CAUTION

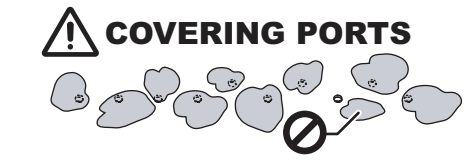
DO NOT force any granular material into the burner ports or completely block any of the burner ports.

DO NOT place any of the granular burner medium on the rear burner.



Step 4. Replacing the Burner Box Glass

Replace burner box glass panel assembly in reverse sequence as instructed in Step 2. page 23.



COMPLETING HEATER INSTALLATION

COMMISSIONING THE APPLIANCE

WARNING

240 VOLTS, RISK OF ELECTRICAL SHOCK!

When performing the commissioning, the appliance electrical power will need to be connected. Exercise CAUTION as there is potential for electric shock from the exposed wiring and circuitry. DO NOT leave the appliance unattended when power is connected and the panels are removed.

Installation and commissioning must be carried out by an Authorised person.

Wiring inside this appliance may be at 240V potential.

DO NOT test for gas escapes with an open flame.

Step 5. Switch On the Electricity Supply

Switch on the electricity supply, the appliance is now ready for commissioning.

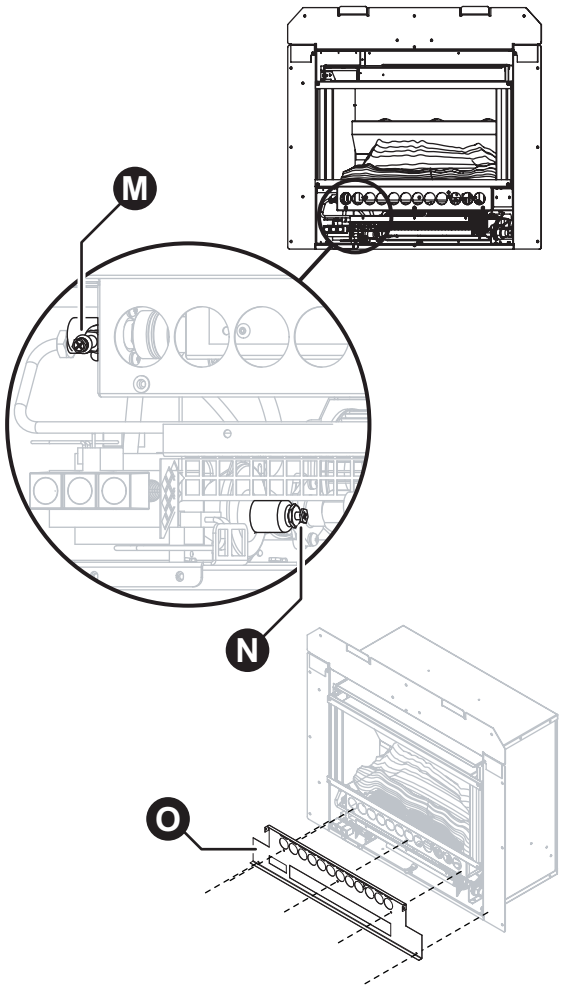
Step 6. To check and set burner pressures:

1. Turn gas supply on.

WARNING

The gas type codes and gas pressures for this appliance *MUST BE* checked and set in accordance with these instructions when the appliance is installed, *OR* after the replacement of any component or reassembly after service.

2. Refer to the data plate of the heater engine for correct gas pressure settings.
3. Remove pressure test point screw (M) and attach manometer to test point, which is situated on the front of the injector block.
4. Light heater, select the High heat setting and check pressure.
5. If adjustments are necessary, the regulator (N) is situated on the front of the gas control and should be set to the pressures on the data plate.
6. After checking pressure, turn the unit off, remove manometer and replace test point screw (M).
7. Turn the heater on and off a few times to check ignition.
8. When you are satisfied that the heater is working correctly, re-attach the gas/electrical access plate (O) five screws.
9. Check the flame pattern, see '"ABNORMAL FLAME PATTERN" on page 27



NOTE

All burner aerations are factory preset and cannot be adjusted.

If you are unable to get the unit to operate correctly, refer to "TROUBLE SHOOTING CHECKLIST" on page 8 before contacting your local service contacts on the back page.

It may take approximately 20 minutes of operation for the logs to achieve their full flame pattern and glow. During the initial burning in period of approximately 2 hours, some smoke and odour may be experienced, the heater should be run on the high position in a well ventilated room until these dissipate.

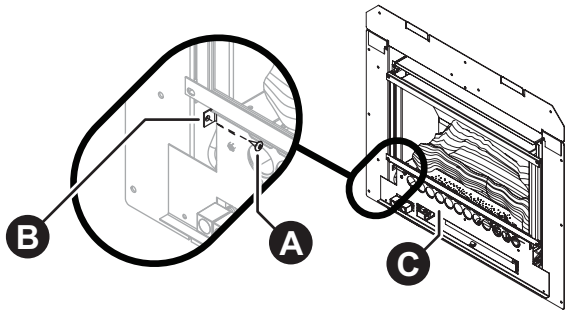
It is the responsibility of the installer to check that under normal operating conditions of the appliance, all flue gases are exhausted to the outside atmosphere and that there is no spillage of combustion gases into the room. Please refer to AS/NZS 5601.

COMPLETING HEATER INSTALLATION

ATTACHING FASCIA ASSEMBLY

Step 7. Attach the Fascia to the Heater Engine

Locate and remove the two 8g x 10mm fascia assembly securing screws (A) pre-positioned in the fascia mounting tabs (B) on the gas/electrical access plate (C).



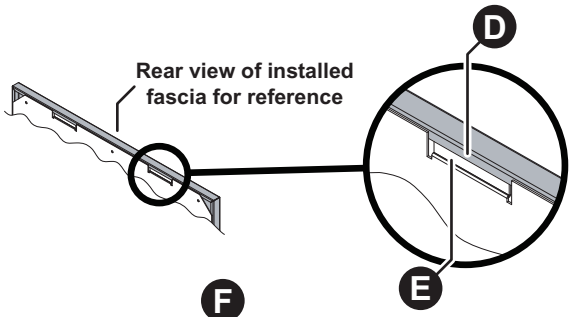
NOTE

These screws have been pre-inserted by the manufacturer to ensure correct threading of the fascia securing tabs.

Carefully pick up fascia assembly taking care not to tilt it on it's edge as the glass may slide out of the stand off posts.

Position the top fold (D) over the fascia assembly mounting tabs (E) and gently push the lower edge of the fascia assembly until it is flush at the edges.

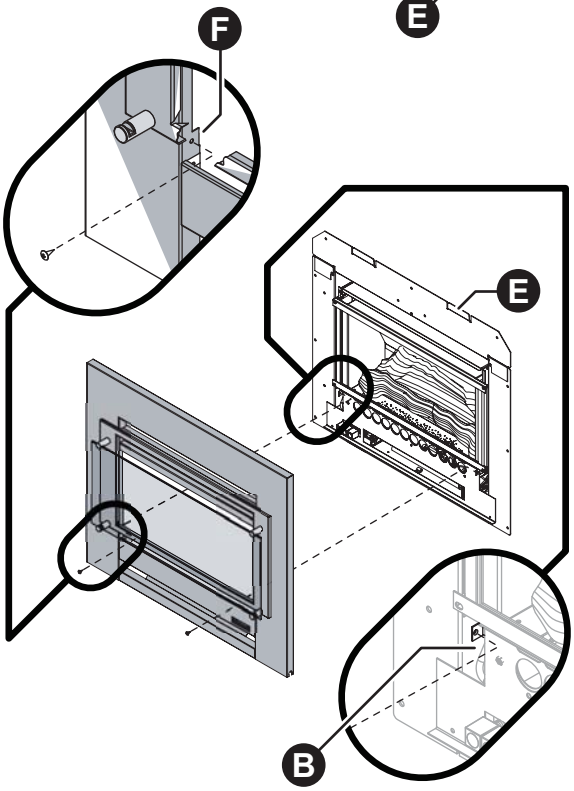
Fit and tighten the two fascia retaining screws (A) through both the fascia (F) and the fascia mounting tabs (B) on the heater engine body.



NOTE

The glass dress guard fitted to this appliance reduces the risk of fire and injury and no part of it should be permanently removed.

For protection of young children or the infirm a secondary guard is required.



IMPORTANT

If the heater is not operating correctly refer to the "TROUBLE SHOOTING CHECKLIST" on page 8 before contacting Rinnai.

It is the responsibility of the installer to check that under normal operating conditions of the appliance, all flue gases are exhausted to the outside atmosphere and that there is no spillage of combustion gases into the room. Please refer to AS 5601.

During the initial burning in 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.

Burner aerations are factory set and can not be adjusted. If you are unable to get the unit to operate correctly refer to "TROUBLE SHOOTING CHECKLIST" on page 8 before contacting Rinnai.

Step 8. Complete installation checklist

Complete the installation checklist on page 29 and the installer details on page 2, make sure that this instruction book is left with the customer.

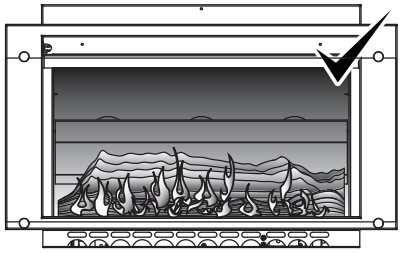
COMPLETING HEATER INSTALLATION

ABNORMAL FLAME PATTERN

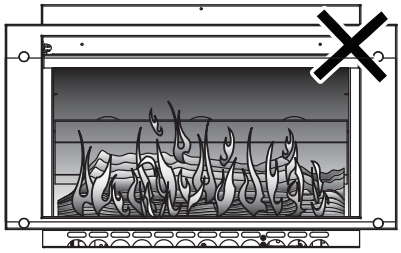
Each Rinnai Flame Fire heater has a distinct flame pattern. The flame should look the same every time you operate your heater.

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 artificial logs/burn media may have shifted from when the heater was first installed.

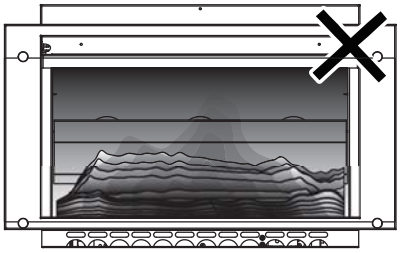
There are some warning signs that could indicate a problem. If any of the signs below occur, please contact Rinnai.



NORMAL FLAME PATTERN



ABNORMAL FLAME PATTERN



SOOT BUILD UP

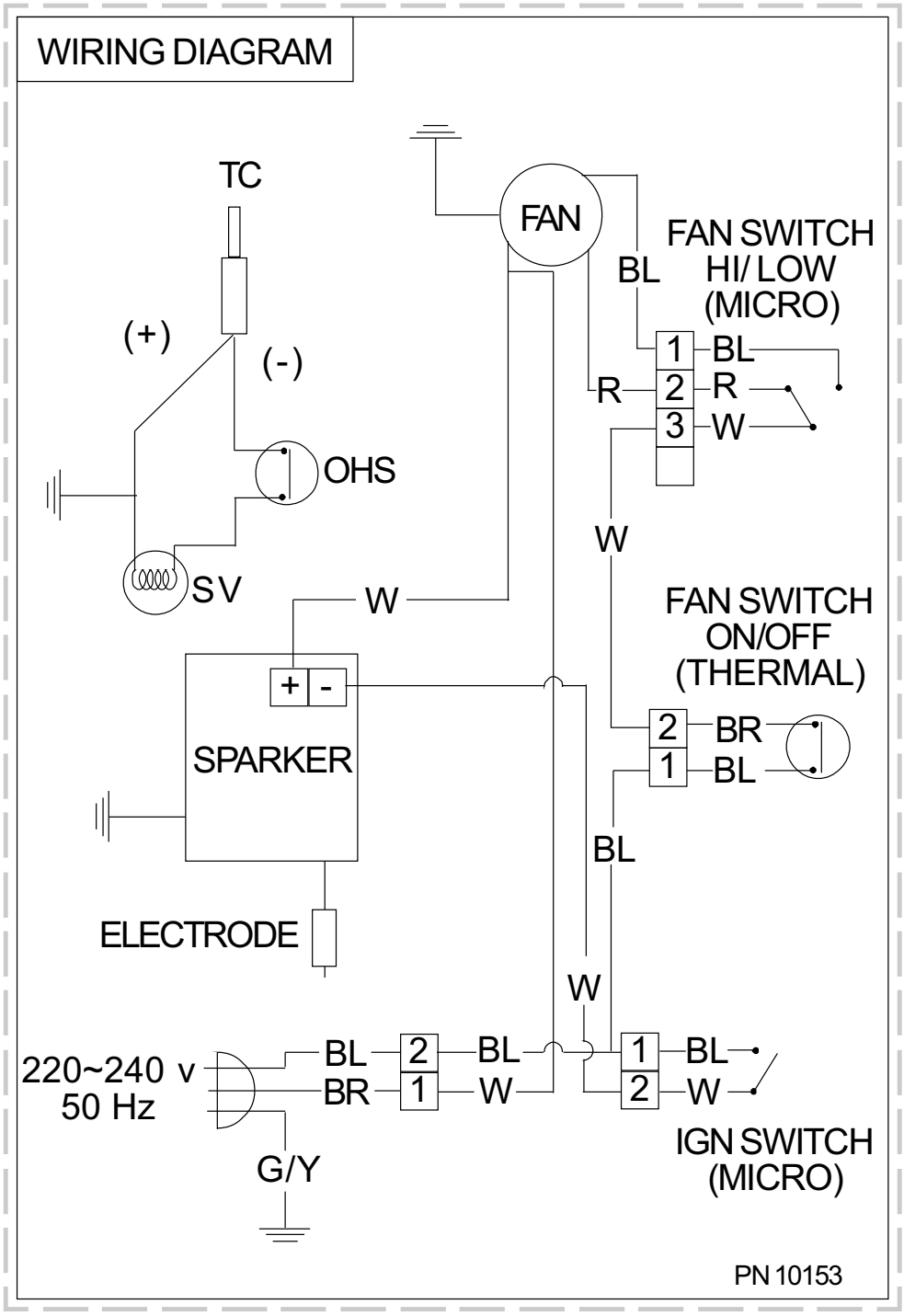
Key signs of abnormal flame performance:

- Appliance turns 'OFF' soon after start up and does not relight.
- 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 incorporating a live fuel effect, and designed to operate with luminous flames, may exhibit slight carbon deposition, this is normal operation.

WIRING DIAGRAM



R	RED
BL	BLUE
BR	BROWN
W	WHITE
G/Y	GREEN YELLOW

OHS	OVER HEAT SWITCH
SV	SOLENOID VALVE
TC	THERMOCOUPLE

CHECKLIST

INSTALLATION AND COMMISSIONING CHECKLIST

- Complete the Installation Check List and the Installer details below.
- Instruct customer on the Slimfire 252 operation.
- Ensure the customer understands the content of this 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.

The glass dress guard fitted to this appliance reducing the risk of fire and injury and no part of it should be permanently removed.

- For protection of young children or the infirm a secondary guard is required.
- Ensure this Operation and Installation manual is left with the customer.

Ensure the Customer understands that:

No part of this appliance should be permanently removed.

Paper or other material must not be burnt in this appliance.

Young children and the infirm should be supervised at all times.

Checklist To Be Completed By 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 checked and set?	☐	☐
4. Has the log set / burn media been installed as per instructions?	☐	☐
5. Was the appliance tested for correct operation and to ensure no gas leaks?	☐	☐
6. Has the customer been instructed on operating procedure and safety requirements?	☐	☐
7. Is the end-user fully aware of operating procedure?	☐	☐
8. Has the Glass Dress Guard been fitted?	☐	☐
9. Has the customer been advised not to remove the glass dress-guard?	☐	☐
10. Has the customer been advised to service the heater every two years?	☐	☐

NOTES

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Rinnai

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Sales & Service
Tel: 1300 555 545* Fax: 1300 555 655*

Cost of a local call Higher from mobile or public phones.

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 Help Line. Rinnai recommends that this appliance be serviced every 2 years.