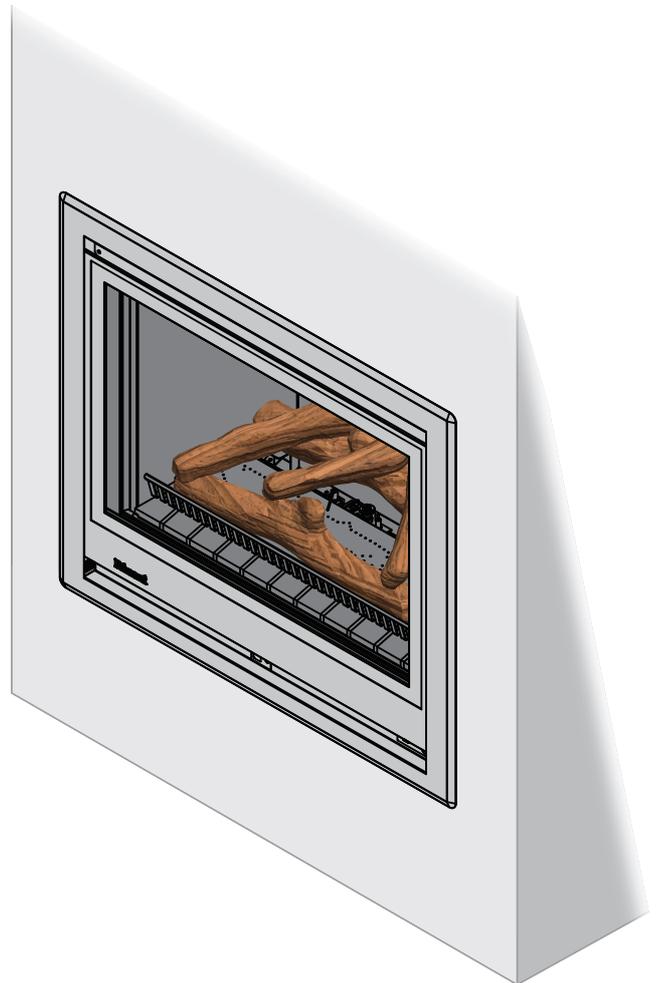
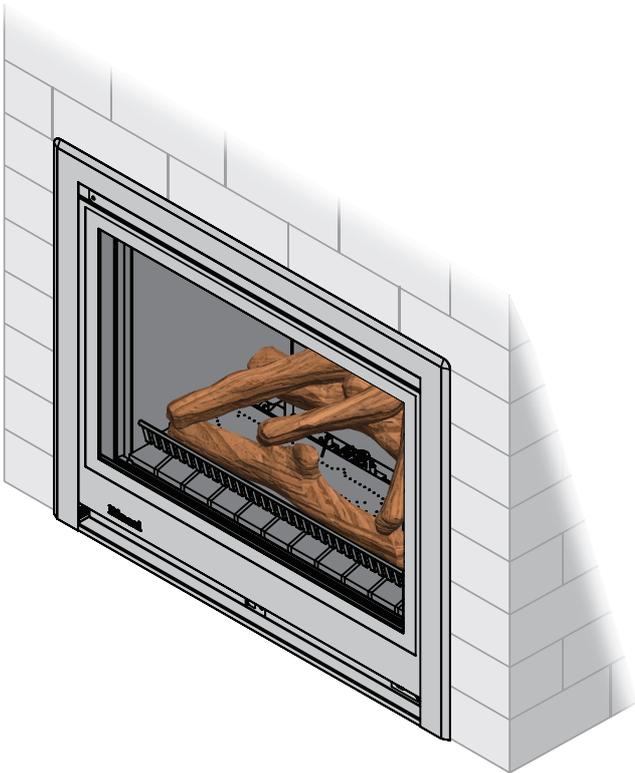


Rinnai

Rinnai 650 / 750 GAS FIRE Operation / Installation Manual

MODELS: RDV600ER / RDV700ER



This appliance shall be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 5601 / AS/NZS 3000
- 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.



N10378



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

**Congratulations on the purchase of your Rinnai 650 or 750 Gas Fire.
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	4
INSTALLATION REQUIREMENTS	4
CERTIFICATION	4
CARTON CONTENTS / ITEM CHECKLIST	4
INSTALLATION RECORD	5
SAFETY	6
SAFETY DEVICES	9
ABOUT YOUR HEATER	10
GENERAL DESCRIPTION	10
DESIGN FEATURES	11
CONTROL PANEL OPERATION	12
TO TURN YOUR HEATER ON	12
TO TURN YOUR HEATER OFF	12
INTERRUPTION TO ELECTRICITY OR GAS SUPPLY DURING OPERATION	12
RESTART PROCEDURE AFTER INTERRUPTION TO ELECTRICITY SUPPLY	12
FULL CONTROL AND PARTIAL CONTROL	12
REMOTE CONTROL OPERATION	13
BATTERIES AND ACTIVATING THE REMOTE CONTROL	13
BUTTON FUNCTIONS, DISPLAY & OPERATION	13
REPLACING THE CR2450 BUTTON BATTERIES	14
LOST, MISPLACED OR BROKEN REMOTE CONTROL	14
CARE AND MAINTENANCE	15
SERVICE	15
TROUBLE SHOOTING	15
ERROR CODES	16
TROUBLE SHOOTING CHECKLIST	17
ABNORMAL FLAME PATTERN	18
CR2450 BUTTON BATTERIES	18
TABLE OF CONTENTS - INSTALLATION	19
CONTACT INFORMATION	48

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 650 and 750 Gas Fires have 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.

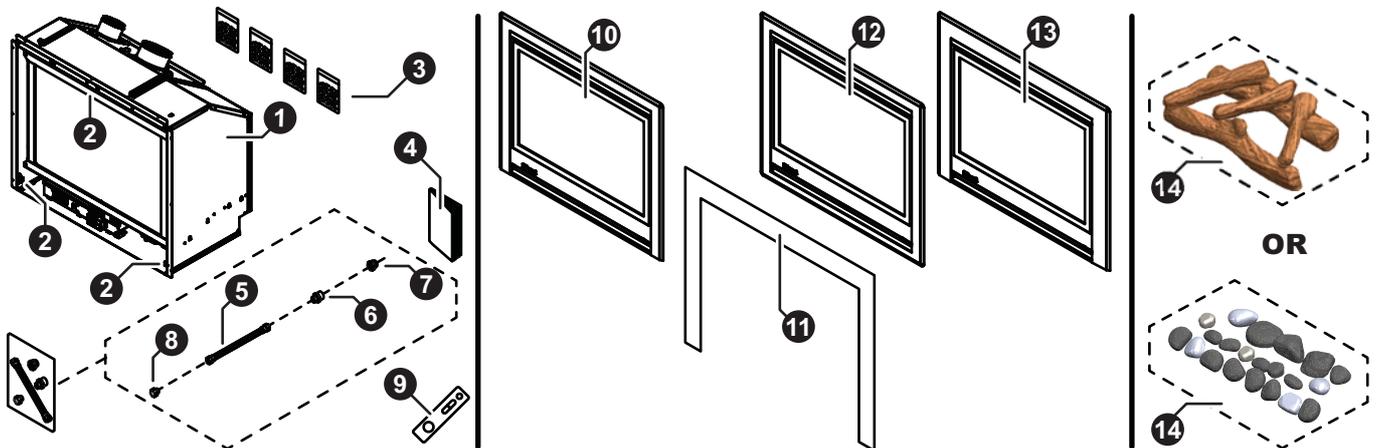
Please keep these instructions in a safe place for future reference.

CARTON CONTENTS / ITEM CHECKLIST

The components for Rinnai 650 and 750 Gas Fires 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.



The Engine, Fascia and Burner Media are packed into three separate cartons. One of each are required for all installation types.



Major component descriptions and carton contents		Engine	Fascia Options				Burner Media
1	Rinnai 650 or 750 Engine (RVD600ER or RVD700ER).	●					
2	Fascia attachment screws (3 x 8g black, pre-fitted within the heater engine).	●					
3	Four Satchels - granule pack (x2), crushed glass (x1) and rockwool (x1).	●					
4	Operation and Installation manual.	●					
5	Semi rigid stainless steel gas pipe with 5/8" connections (x1).	●					
6	1/2" BSP - 5/8" UNF flared brass adaptors (x1).	●					
7	1/2" BSP Flared nut (x1).	●					
8	5/8" UNF Plug (x1).	●					
9	Remote Control, Infra Red (IR).	●					
10	Three sided fascia.*		●				
11	Three sided fascia infill (used to create a infill for masonry installations).			●			
12	Four sided fascia (used for elevated installations).*				●		
13	Three sided masonry fascia (alternative to infill, available for RVD700ER models Only).					●	
*False fire place (Zero clearance) applications will require the use of a Zero clearance frame.							●
14	Ceramic log set OR Ceramic stone set, there is a different set of each for each model.						●

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 ONLY BY AN AUTHORISED PERSON.**



**The glass dress guard supplied with this appliance MUST NOT
be permanently removed as it fulfils an operational safety
function.**

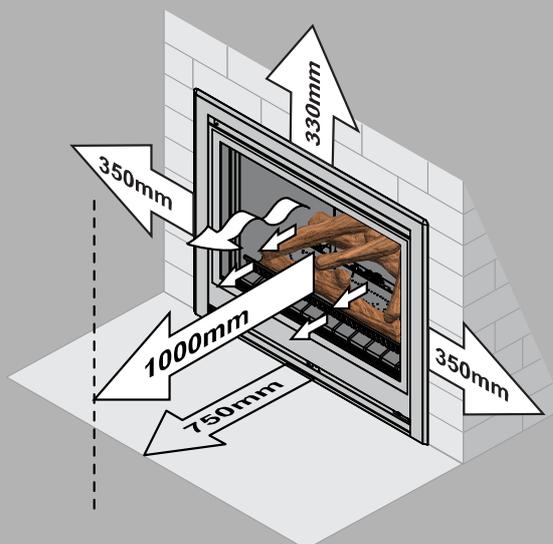
**Additional dress guards including free standing types may be
used in conjunction with, but not replace, the dress guard
supplied with this appliance.**



SAFETY

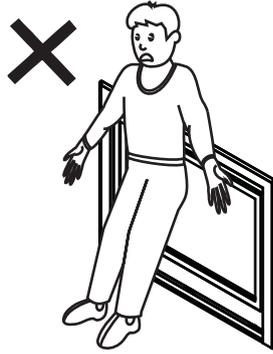
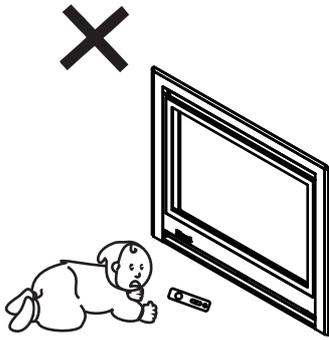


- Failure to comply with these instructions could result in a fire or explosion, which could cause serious injury, death or property damage.
- Improper installation, adjustments, service or maintenance can cause serious injury, death or property damage. Such work must be performed only by an authorised 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 this appliance manufacturer's 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:
- 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. 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 dress guard. Refer to page 22 for mantle clearances, additional installation information and warnings.
- 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 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.
- A dedicated 230 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 rating plate, inside the 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.
- **NOT** to be connected to an LP gas cylinder located indoors.



Note: The three sided fascia is shown for illustrative purposes

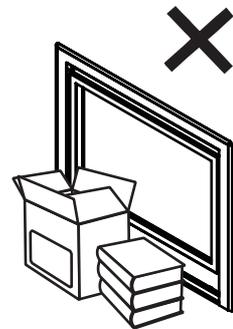
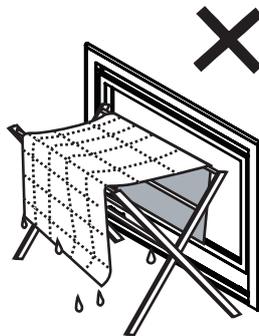
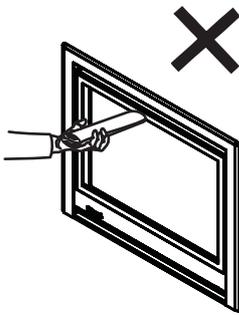
SAFETY



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.

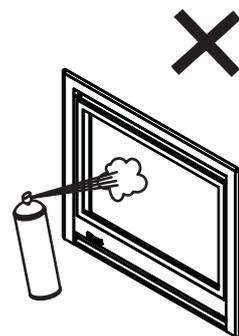
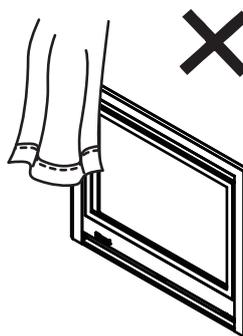
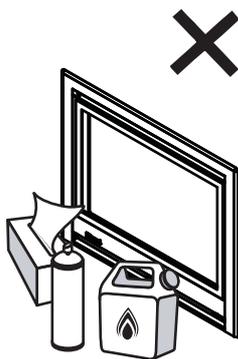
DO NOT allow children or elderly persons to sleep in the warm air discharge from the heater.



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, (manual and auto discharging), are used.

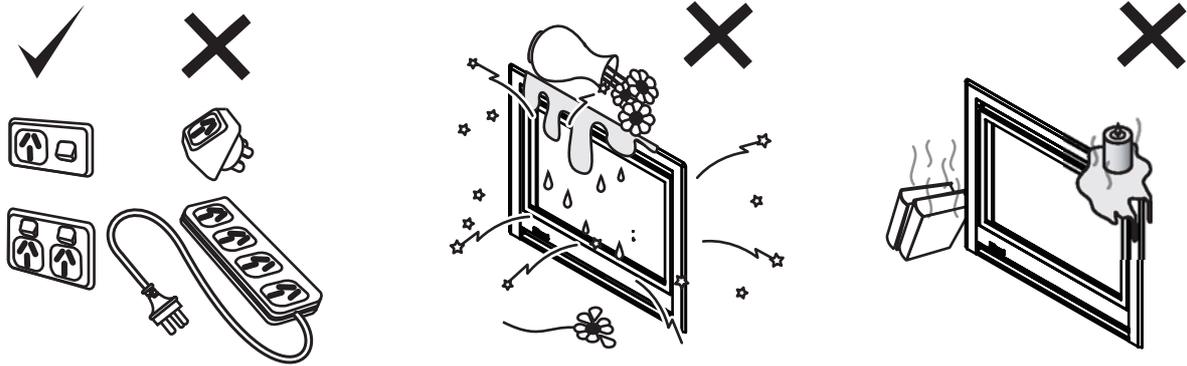
DO NOT place articles on or against this appliance.

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



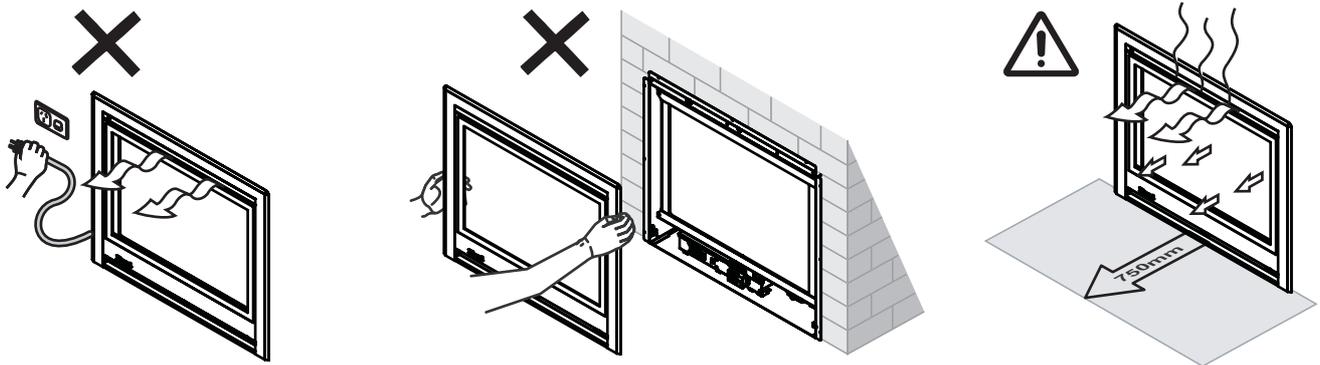
A dedicated 230V earthed 10 Amp power point must be used with this appliance.

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 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.

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



Turn the heater 'OFF' after use.

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

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.

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, candle vapours or cigarette smoke etc. 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

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 the trouble shooting guides on pages; 15 through 17 for further information.

Over Heat Thermistor: Should the heater get too hot during operation, (for example when the air outlet louvers 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 the trouble shooting guides on pages; 15 through 17 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 hit' only function, a service call will be required to reinstate operational ability to your heater. Refer to the trouble shooting guides on pages; 15 through 17 for further information.

Power Failure: Refer to page 12. In the event of power failure or power disruption your heater will shut down completely, manual restarting will be required. Refer to the trouble shooting guides on pages; 15 through 17 for further information.

Electric fuse: The electrical circuits are protected by a fuse. Refer to the trouble shooting guides on pages; 15 through 17 for further information.

Flame Failure Sensing System: These devices within the appliance automatically cut off the gas supply to the burners in the event of a flame failure. Refer to the trouble shooting guides on pages; 15 through 17 for further information.

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

ABOUT YOUR HEATER

GENERAL DESCRIPTION

The Rinnai 650 and 750 Gas Fire have a natural draft combustion system, intended for use with Natural Gas and Propane Gas.

The Burning effect is achieved using one single main burner with strategically placed, 'life like', imitation ceramic logs / ceramic stones and granules. Heat output and flame height control is achieved by pressing the up or down marked arrows on the manual control switch or via an Infra Red (IR) remote control.

This heater has an electronic ignition with intermittent pilot. The pilot is only on when the heater is in operation.

Burner, logs or stones are contained within a glass fronted, sealed burner frame.

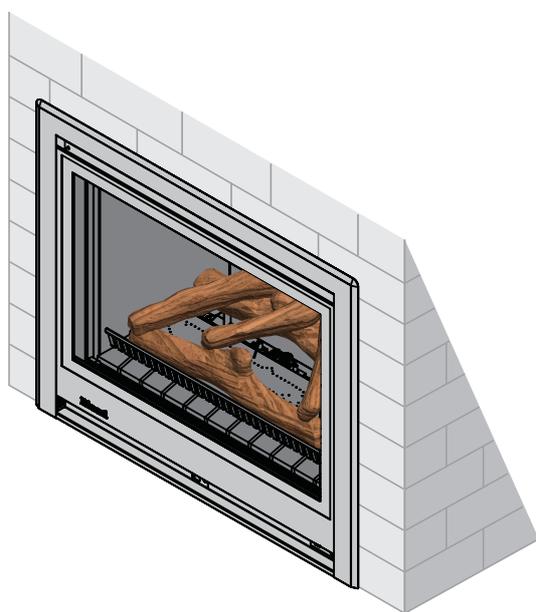
Return air is drawn by fan from the room, passed over the room sealed combustion chamber to absorb heat, and discharged into the room.

Combustion air is drawn externally from outside of the building.

Combustion by-product is exhausted via the flue discharge vent, via natural draft, utilising a twin skinned flue to the outside of the premises.

This appliance is modular and primarily consists of an 'Engine' that is utilised in either of the configuration types as listed below.

1. Fireplace / Masonry installation - Engine:

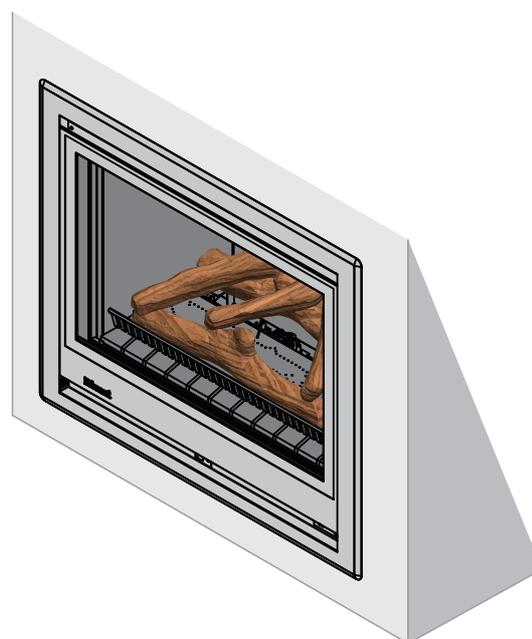


Note: The three sided fascia and ceramic log set are shown for illustrative purposes

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:



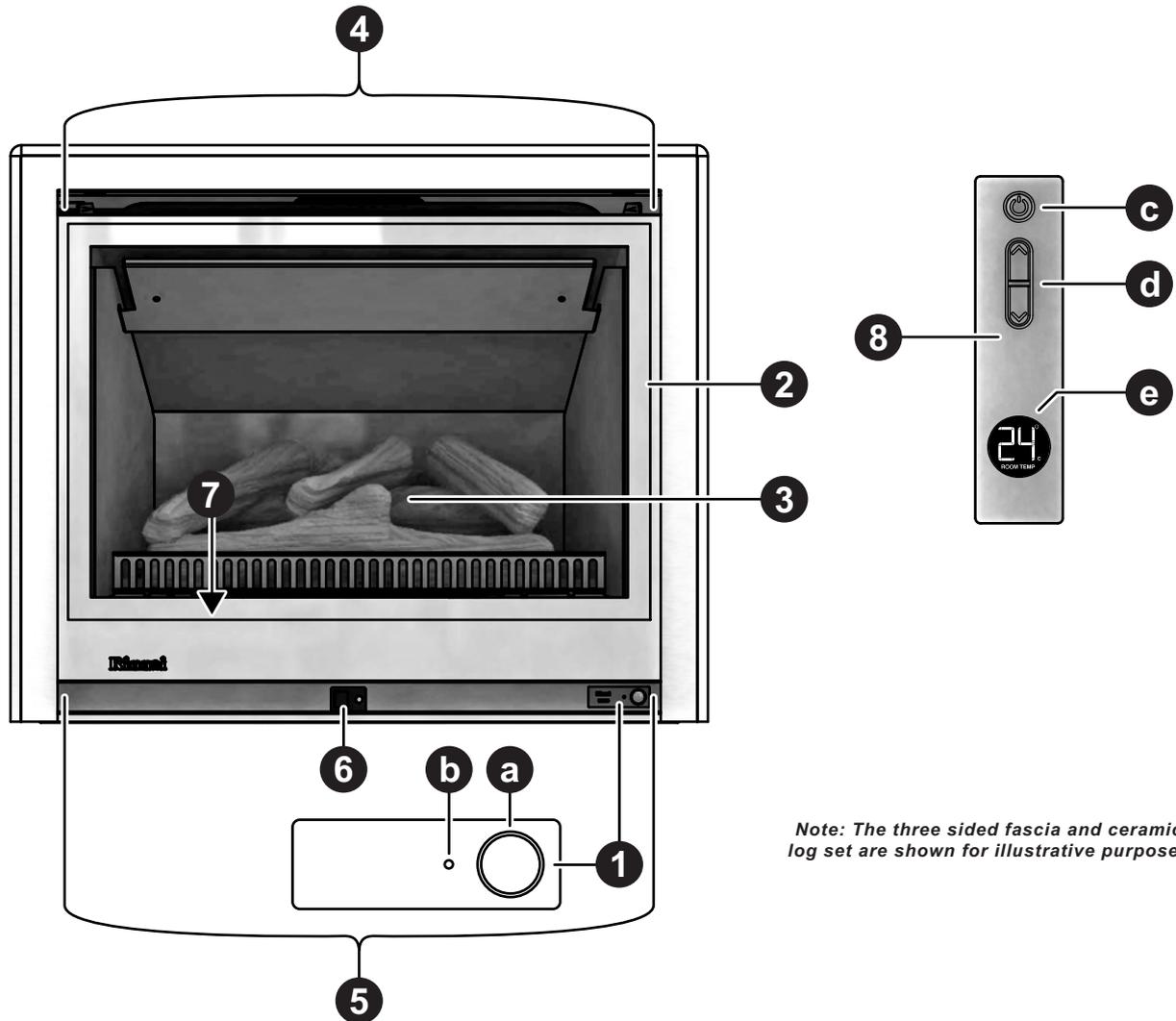
Note: The four sided fascia and ceramic log set are shown for illustrative purposes

The appliance is mounted via a sheet metal Zero Clearance Frame that has been installed into a wall or other suitable structure. The materials outside of the Zero Clearance Frame need not be non-combustible.

When installed correctly the appliance is a flush to wall mount.

ABOUT YOUR HEATER

DESIGN FEATURES



Note: The three sided fascia and ceramic log set are shown for illustrative purposes

- 1 Push button control panel
 - a ON / OFF button
 - b Standby Indicator (Red)
- 2 Glass dress guard (as part of fascia)
- 3 Flame window - ceramic log set and burner media or ceramic stone set and burner media
- 4 Warm air discharge vent
- 5 Return air vent
- 6 Remote (IR) control receiver window
- 7 Viewing window for error code display (This is located behind the fascia, see page "ERROR CODES" on page 16 for details).
- 8 Remote (IR) control
 - c STANDBY / ON button
 - d Flame Up / Down buttons
 - e Room temperature display (displays the current temperature of the room in which the control is located)

CONTROL PANEL OPERATION

TO TURN YOUR HEATER ON



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 **b** will be extinguished. This is normal.

Access the 'Push Button Control Panel' **1**. This is located on the front of the heater at the lower right hand corner.

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

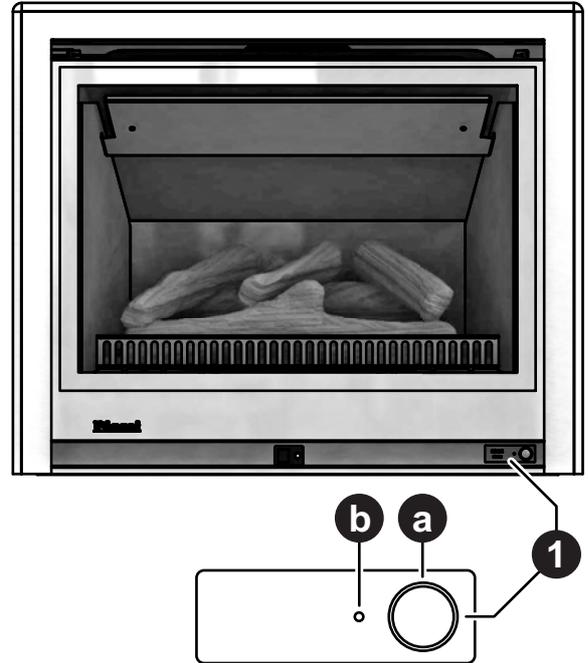
Step 2. The sparking ignition stops when the pilot flame has been established. The main burner then ignites off the pilot flame and is automatically preset to Stage 5 - High Flame.

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 <i>(2 speed only)</i>	Low	Low	Low	High	High



TO TURN YOUR HEATER OFF

To turn the heater 'OFF' press the 'ON'/'OFF' button **a** once, the Red Power Indicator **b** will be extinguished.

INTERRUPTION TO ELECTRICITY OR GAS SUPPLY DURING OPERATION

Interruption to the power or gas supply will turn your heater off and a restart will be required. 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 YOUR HEATER ON" 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 **a** of the 'Push Button Control Panel' **1** located at the lower right corner of the appliance outer frame.

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



For the remote control to be able to function, the appliance ON/OFF button **a** must be in the 'ON' position. Using the remote control to turn off the heater will place the heater into STANDBY mode, when in this mode the Red Power Indicator **b** will be on. This is normal.



• **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.

BATTERIES AND ACTIVATING THE REMOTE CONTROL

- 2 x Button Batteries are supplied with the remote control.
- Remove the plastic tab to activate.
- This remote control uses 2 x Lithium CR2450 or equivalent batteries.
- The appliance will flash and emit 'Beeps' to confirm the setting has been received from the remote control unit; this indicates your remote control is now working.

BUTTON FUNCTIONS, DISPLAY & OPERATION

This remote control, **8** selects flame height and fan speed in five levels.

The STANDBY / ON button **c** switches the heater between the STANDBY and ON modes.

Flame height may only be adjusted after at least 30 seconds of operation.

The UP / DOWN buttons **d** control the height of the flame and heat output.

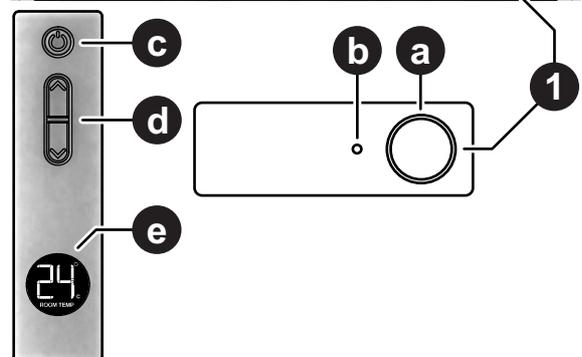
The relationship between flame height and fan speed is factory preset and cannot be adjusted, there are five flame / fan settings as listed below.

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



On initial start-up the appliance default flame height setting is setting 5 - High. Use the UP / DOWN buttons **d to control the height of the flame / heat output.**

The remote control temperature sensor (located base of the controller) reads the temperature of where control is currently located, this temperature reading is refreshed once a minute.



The degrees Celsius room temperature display **e 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 controls operational battery life, ensure that unnecessary illumination of the display is avoided.**

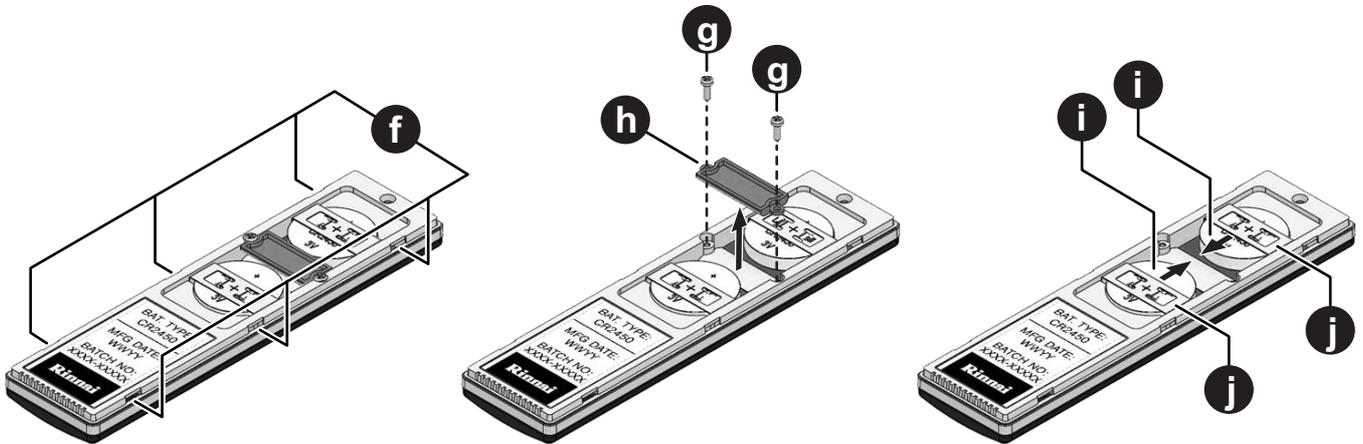
REMOTE CONTROL OPERATION

REPLACING THE CR2450 BUTTON BATTERIES



When this low power symbol appears the batteries are near to being fully discharged and are unable to power the remote control properly. Replacement of batteries is now required.

1. Using a suitable lever remove the back cover by carefully prying off the back cover at the 6 pry points **f**.

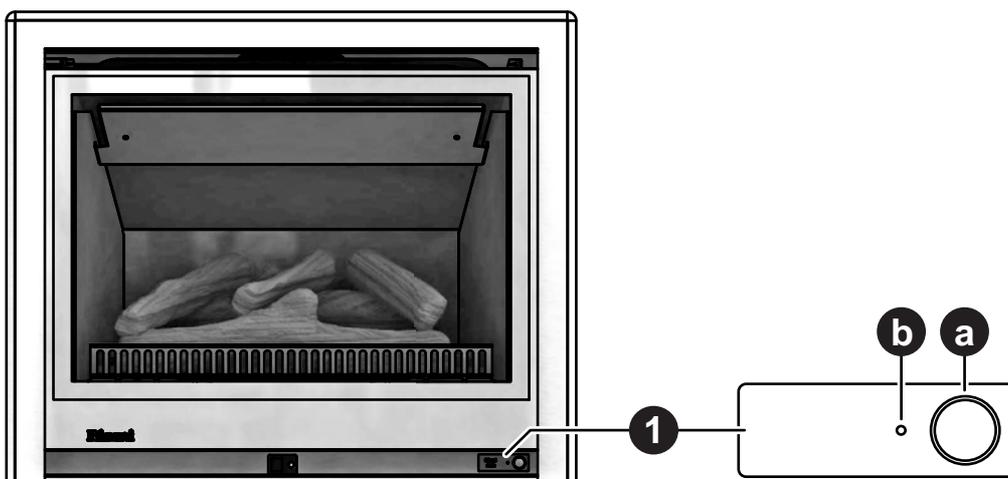


Note: Remote control is shown with back cover removed for illustrative purposes

2. Remove the two bridge retaining screws, **g** using a small (No.0) Phillips head screw driver or equivalent.
3. Remove the bridge **h**.
4. Remove the old batteries **i** by carefully sliding them out from under the retainers **j**, and into the space that was created when the bridge **h** was removed in step 3.
5. Insert two new batteries **i** (CR2450), ensuring the positive “+” terminals are facing up.
6. Reassemble the bridge in reverse order as per steps 2 & 3 above.
7. Re-attach the rear cover by carefully clipping it back into place.

LOST, MISPLACED OR BROKEN REMOTE CONTROL

In the event of a lost, misplaced or broken remote control the appliance may still be operated in a limited capacity. By using the power ON/OFF button, **a** located in the manual control panel, **1** on the front of the heater at the lower right hand corner.



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



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

CARE AND MAINTENANCE

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



- 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 any articles on or against this heater.**
- DO NOT store flammable materials near this heater.**

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 **MUST** only be carried out only by an authorised person. Rinnai has service and spare parts departments nationally. See back cover for contact details.



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 the separate Warranty Booklet for details or go online at www.rinnai.com.au/support-resources/warranty-registration/

TROUBLE SHOOTING

General Operation Characteristics



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.

CARE AND MAINTENANCE

ERROR CODES

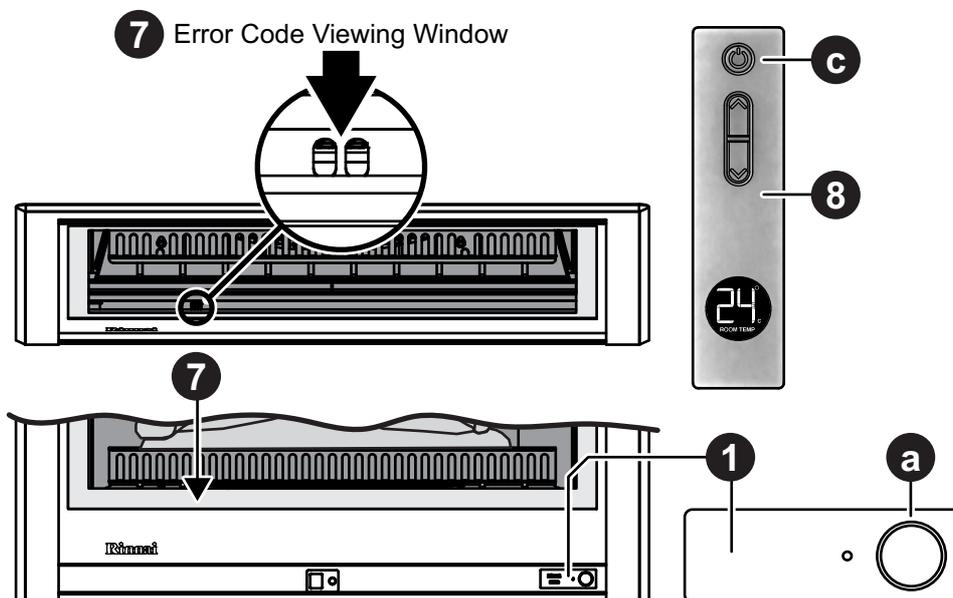


In all cases, you should be able to clear the Error Code on display simply by turning the heater 'OFF', then 'ON' again. If the Error Message still remains or returns on the next operation, contact Rinnai or your nearest service agent and arrange for a service call.

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 then shut down, the fault that has caused the shut down will be indicated by a pair of flashing digits in the Error Display window **7**, which is located behind the fascia and can be viewed by looking down between the glass of the dress guard and the burner box.

Refer to the table below for probable cause and the suggested remedy.



Code	Probable Cause	Suggested Remedy
00	Mains power failure	Interruption to the power or gas supply will turn your heater off and a restart will be required. This is a safety feature designed to ensure that un-attended starts do not occur after power or gas interruptions. Access the 'Push Button Control Panel' 1 . This is located on the front of the heater at the lower right hand corner. Press ON / OFF button a twice, after which you will be able to hear the ignition sparking and the heater will restart and return to normal operation, after 30 seconds of operation the remote control may then be used to select the desired flame height and fan speed.
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	Check gas supply is turned on, switch the heater to Standby and then On again. If the error persists contact Rinnai.
14	Inlet Blockage / Overheat	Clean inlet, if the error persists a service call will be required.
16	Room overheat	Lower room temp to below 40°C.
31	Room temperature sensor faulty	A service call will be required.
32	Overheat temperature sensor faulty	A service call will be required.
33	Overheat temperature sensor faulty	A service call will be required.
53	Spark sensor faulty	A service call will be required.
61	Combustion fan motor faulty	A service call will be required.
71	Solenoids faulty	A service call will be required.
72	Flame detection circuit fault	A service call will be required.
73	Communication error	A service call will be required.

CARE AND MAINTENANCE

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, contact Rinnai or your local agent.

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 *Remote not working		
Not plugged in or turned off	●		●					●	Plug in power cord and turn power 'ON'.
Mains power failure	●		●						Re-ignition, when power 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 12 for solution.
Controller not synchronised								●	Refer to page 14 for solution.

* Only applicable when remote control is used.

** Only applicable if the remote control is programmed.

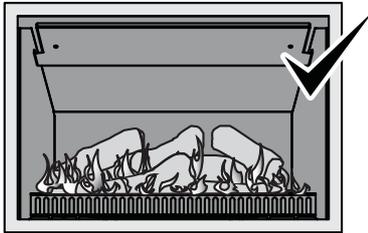
CARE AND MAINTENANCE

ABNORMAL FLAME PATTERN

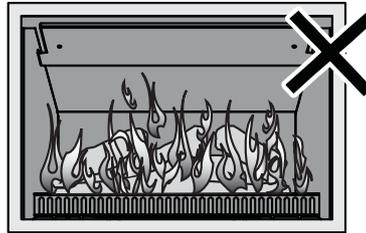
Each Rinnai Gas Fire has a distinct flame pattern. The flame should look the same every time you start your heater after an initial warm up period of approximately 15 minutes.

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 from when the heater was first installed.

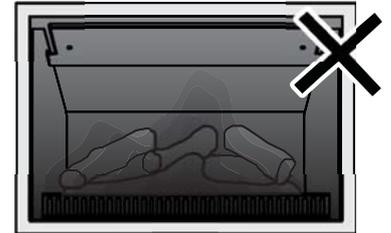
There are some warning signs that could indicate a problem. If any of the signs below occur, please contact Rinnai.



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 and logs.
- Continuous unusual smell from the appliance.
- Continued difficulty or delay in establishing a flame.



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.

NOTE

CR2450 BUTTON BATTERIES



CAUTION

KEEP BATTERIES OUT OF REACH OF CHILDREN

- Swallowing button batteries 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 24hr Poisons Information Centre on 13 11 26 for fast, expert advice.
- Regularly examine the remote controller and make sure the battery compartment is completely secured.
- Any used button batteries **MUST BE** disposed of immediately and safely.



IMPORTANT

The remote control uses 2x CR2450 3V lithium batteries. When the battery change indicator  is displayed, Rinnai recommends fresh replacement batteries will need to be made available, as continued full functionality of the heater is dependant on the use of the remote control.

TABLE OF CONTENTS - INSTALLATION

SPECIFICATIONS	20
GENERAL SPECIFICATIONS	20
DIMENSIONS	21
HEATER LOCATION	22
GENERAL LOCATION INFORMATION	22
TV AND ORNAMENTATION WARNING	22
ENCLOSURE REQUIREMENTS	22
Masonry Fireplace	22
False Fireplace Installation	23
ENCLOSURE DIMENSIONS	23
HEATER ENGINE - GENERAL INSTALLATION	24
GAS SUPPLY	24
Installation of consumer piping	24
ELECTRICAL SUPPLY	25
FLUEING	25
Flue Installation Options	25
Flue Components.....	26
Basic Flue Kits	27
Additional Flue Components.....	27
Flue Installation Dimensions and Restrictions	28
Flue Terminal Clearances (Extract from AS/NZS 5601)	29
HEATER ENGINE INSTALLATION	30
MASONRY INSTALLATION.....	30
FALSE FIREPLACE INSTALLATION.....	32
CONNECTING GAS	35
CONNECTING THE GAS SUPPLY	35
LEAK TESTING	35
BURNER MEDIA INSTALLATION	36
CERAMIC LOG SET INSTALLATION.....	36
CERAMIC STONE SET INSTALLATION	38
COMMISSIONING INSTRUCTIONS	39
COMMISSIONING THE APPLIANCE FOR DIFFERENT GAS TYPE	42
ATTACHING FASCIA ASSEMBLY	43
ABNORMAL FLAME PATTERN.....	44
WIRING DIAGRAM	45
INSTALLATION AND COMMISSIONING CHECKLIST	46
CONTACT INFORMATION	48



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



SPECIFICATIONS

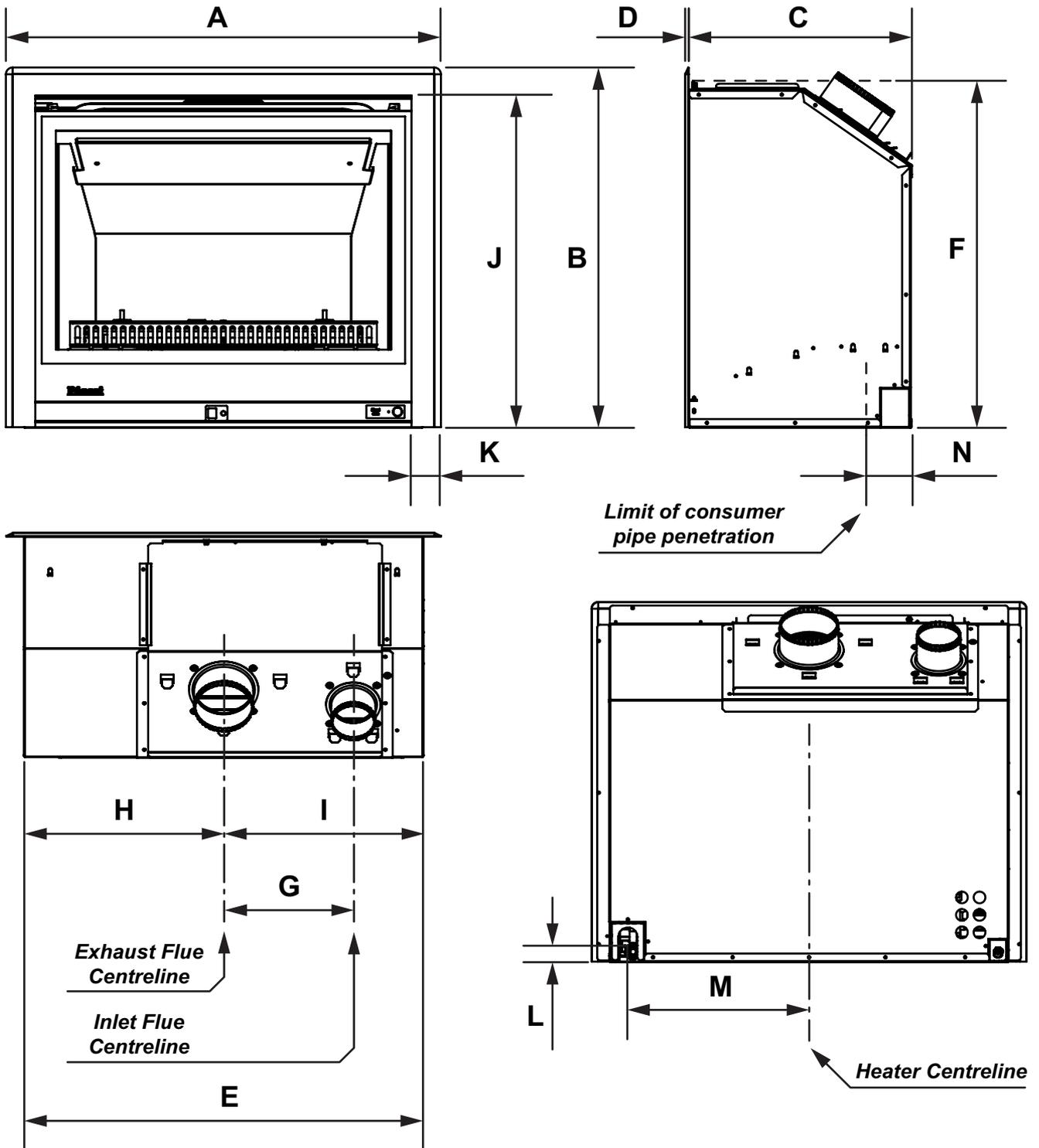
GENERAL SPECIFICATIONS

Model	Rinnai 650 (RDV600ER)	Rinnai 750 (RDV700ER)
Features	Inbuilt Gas Space Heater Burning Log effect or Stone Fire Bed Effect Glass front Convection Fan, top warm air outlet Glass dress guard Infra Red (IR) remote control	
Data Plate	Located on the lower RHS of the base panel in front of the gas control.	
Input	12~23 MJ/h	14~27 MJ/h
Output (High)	5.2* kW	6.1* kW
Efficiency	79.4% (on high)	77.4% (on high)
Heating area	up to 78 m ² **	up to 91 m ² **
Note: * will vary accordingly to gas type and flue configuration. ** will vary depending to geographical location.		
Installation Types	Masonry Fireplace, False Fireplace and Inbuilt (weather proof box).	
Combustion Method	Bunsen type burner	
Flue - Masonry	Co-linear flexi flue, air intake Ø75mm, exhaust Ø100mm. Appliance MUST BE installed with a Rinnai flue System.	
Flueing - False Chimney	Co-linear (air intake Ø75mm, exhaust Ø100mm) to Coaxial direct vent flueing (inner Ø100mm, outer Ø170mm). Appliance must be installed with a Rinnai flue System.	
Convection Fan	120V AC 50 Hz-2-speed centrifugal blower	
Gas Connection	Brass 1/2" BSPT male fitting, the gas supply terminates inside the heater - lower right hand side of the appliance.	
Gas Type	NG, Propane, Universal LPG (Universal LPG, New Zealand Only).	
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 right hand corner of the appliance.	
Ignition	230-240 V AC 50 Hz high voltage electronic spark ignition	
Power Consumption	When on High, 115W	
	When on Standby, less than 1W	
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 9 for information regarding additional safety devices and features.	
Glass - Primary Glass - Secondary Glass seal material	Ceramic Glass Tempered Glass Woven fibreglass chord	
Lighting	Halogen Lamps 230 V 25W x 2.	
Weight (Engine Only)	51 Kg - "uncrated" - no Flue.	55 Kg - "uncrated" - no Flue.
Operation	Push button control panel, Infra Red Remote Control.	
Noise Level	37~45 dB(A)	



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

DIMENSIONS



Note: RDV700ER with three sided fascia shown for illustrative purposes

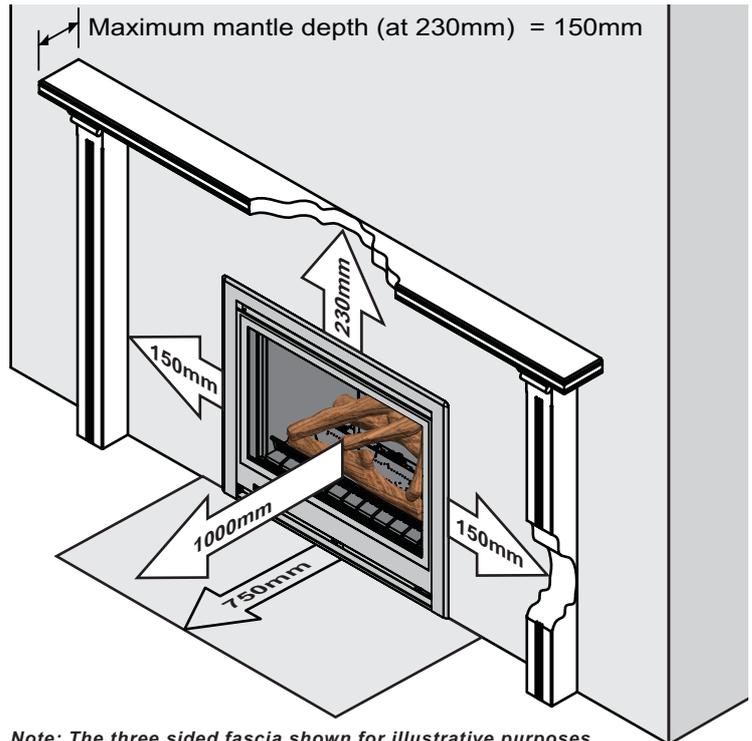
MODEL	FASCIA	External Dimensions - Flue Centre											Gas Connection		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
RDV600ER	3 Sided	640	620	380	7	580	595	220	270	310	570	50	265	18	80
RDV600ER	4 Sided		645								595				
RDV700ER	3 Sided	740	620	380	7	680	595	220	340	340	570	50	312	18	80
RDV700ER	4 Sided		645								595				

All dimensions are in mm

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 the warnings on page 6 for clearances to furnishings, adjacent walls, curtains and combustibles.**
 - Mantles and surrounds can be added to compliment the design provided that they conform to the clearances shown in the diagrams (as shown right).
 - The minimum clearance from the edge of the appliance is 150mm on the sides and 230mm above.
- The depth of the mantle / surround at the minimum clearance may not exceed 150mm (as shown right).
- An additional 100mm of clearance is required for every extra 50mm of mantle depth, i.e. for a 200mm deep mantle the minimum clearance is 330mm.



Note: The three sided fascia shown for illustrative purposes

TV AND ORNAMENTATION WARNING



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.



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.



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

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.

HEATER LOCATION

FALSE FIREPLACE INSTALLATION

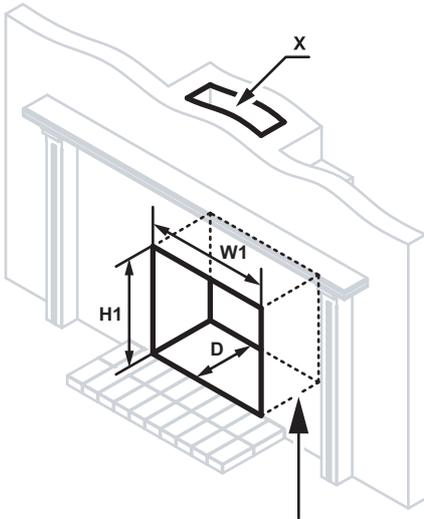
Framework of the installation must conform to local building codes. Non-combustible materials need not be used. If the appliance is elevated from the ground within the structure, a base must be constructed using suitable material with supporting joists capable of supporting a minimum of 1.5 times the weight of the appliance.



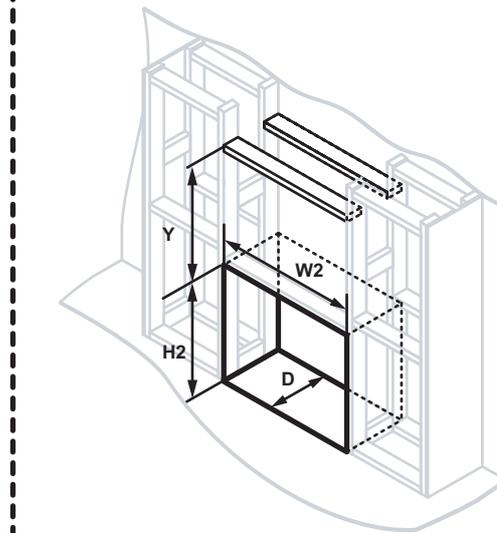
AS/NZS 5601 “GAS INSTALLATIONS” requires that flue components be supported independently of the appliance.

ENCLOSURE DIMENSIONS

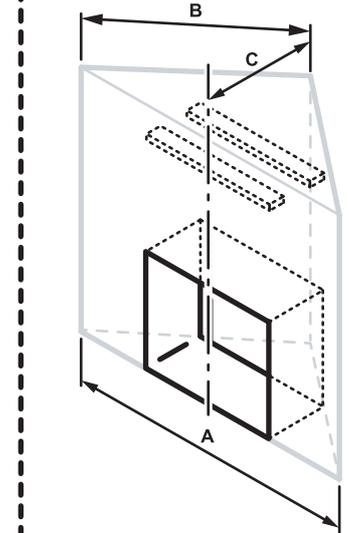
Enclosure dimensions are shown below. The enclosure dimensions specified are critical to the successful installation of this appliance and must be strictly adhered to.



Level base with a slurry of sand and cement.



Refer to Elevated Installation section on pages 33 and 34.



Models	Enclosure Type (All dimensions are minimums and are in mm unless otherwise stated)											
	Masonry				False Fireplace				Corner ‡			
	Height (H1)	Width (W1)	Depth (D)	Chimney (X)	Height (H2)	Width (W2)	Depth (D)	Support (Y)	Face (A)	Sides (B)	Depth (C)	
RDV600ER	600	600	400 *	200 x 200	700 #	700 #	400 *	Max 600 §	1400	976	676	
RDV700ER	600	700	400 *	200 x 200	700 #	800 #	400 *	Max 600 §	1500	1047	726	



§ Framing **MUST** include supports for the mounting of the co-linear to coaxial flue adaptor.

The co-linear flexible flue **MUST NOT** come into contact with **ANY** combustible material.

The enclosure dimension for False Fireplace installations are larger, to make allowances for the fitment of the zero clearance frame. The fitment of this frame is necessary to provide the required clearances from any combustibles.



For clarity the consumer piping gas supply, electrical connections have been omitted, refer to page 24 and page 25 for details. Construction details have also been simplified.

* As the heater engine is installed flush with the external surface, when preparing the cavity the minimum depth needs to 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 any electrical connections on the inside of a masonry fireplace.

‡ Corner installations use False Fireplace enclosure dimensions and framing specifications.



In a masonry fireplace, use a slurry of sand and cement to level the base as required. Refer to page 33 and page 34 for “False Fireplace Elevated Installation”

HEATER ENGINE - GENERAL INSTALLATION

GAS SUPPLY



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.



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.

Refer to the dimensional drawings on page 21 for appliance gas inlet location and other relevant dimensions.

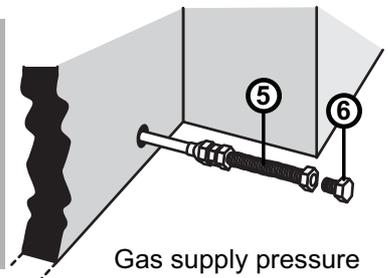
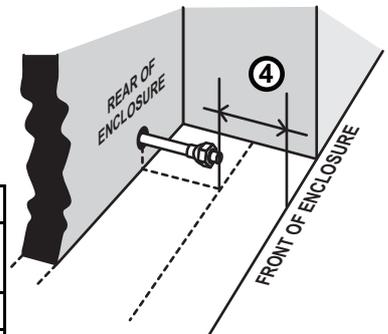
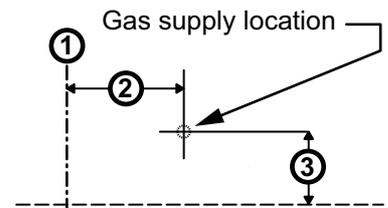
Mark off the location for the vertical centre line ① of the heater enclosure (inbuilt installations) or heater (freestanding installations).

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.

The length of the gas supply (consumer piping) termination ④ is measured from the front of the enclosure.

Gas Supply Dimension Table

	RDV600ER	RDV700ER
②	265 mm to the right of the appliance centre-line	312 mm to the right of the appliance centre-line
③	18mm from base of enclosure	
④	Consumer piping to be terminated 295 mm from the front of enclosure.	



Gas supply pressure to be 1.13 to 2.75 kPa



For masonry fireplace installations:

Gas supply dimension ④ **MUST** include the thickness of an infill panel (when fitted). A standard Rinnai infill panel adds 2mm to the front of the enclosure.

For false fireplace installations:

Gas supply dimension ④ **MUST** include the thickness of the cladding to be used.

Once the consumer piping has been terminated to the above requirements the supplied flexible gas connection ⑤ may then be fitted.

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

With the supplied plug ⑥ inserted into the end of the flexible gas connection leak test all joints.



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.

HEATER ENGINE - GENERAL INSTALLATION

ELECTRICAL SUPPLY

GPO (General Purpose 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.

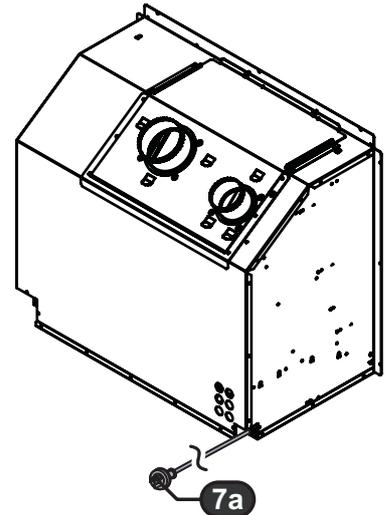
The heater engine is fitted with a 1.5 m power cord and three pin plug **7a** which exits the appliance from the rear panel at the lower left.

Direct Wired Installations

Alternatively the appliance can be direct wired if so required.



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.



FLUEING



The following diagrams illustrate the flue installation options that are available for the RDV600ER and RDV700ER space heaters. Only the genuine Rinnai flue is certified as part of the space heaters installation requirements.

Only an authorised person must install, service and remove the Rinnai RDV600ER and RDV700ER space heater and flue system.

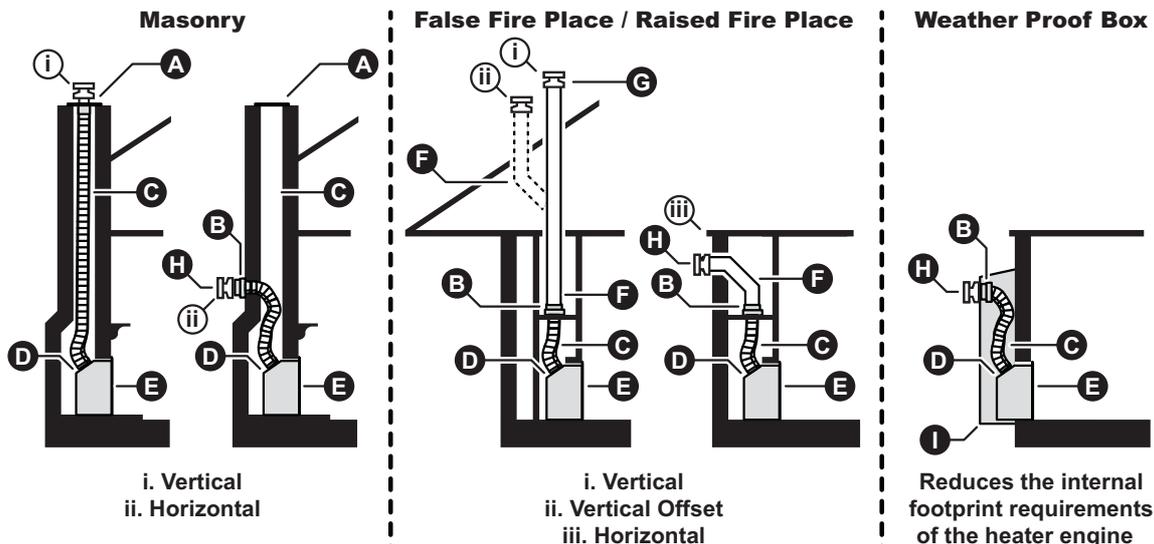
Only the flue system components described in this Manual are suitable and **MUST BE** used. **'DO NOT USE AN UNLINED MASONRY CHIMNEY AS THE FLUE FOR THIS APPLIANCE'**.

Components that are not described in 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.

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

FLUE INSTALLATION OPTIONS



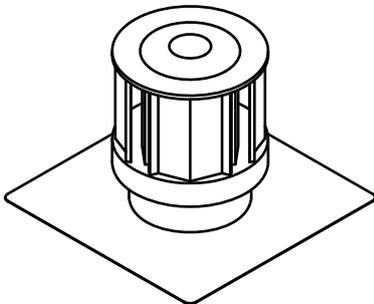
- A** Masonry (Co-linear) cowl
- B** Co-linear to coaxial adaptor & support plate/mount
- C** Flexi pipes (100Ø exhaust / 75Ø air intake)
- D** Spigot plate (this is part of the heater engine)
- E** Heater engine
- F** Coaxial pipe components (170Ø outer pipe, a max of 2 x 45° bends **ONLY** are allowed)
- G** Vertical cowl
- H** Horizontal terminal
- I** Weather proof box.

HEATER ENGINE - GENERAL INSTALLATION

FLUE COMPONENTS

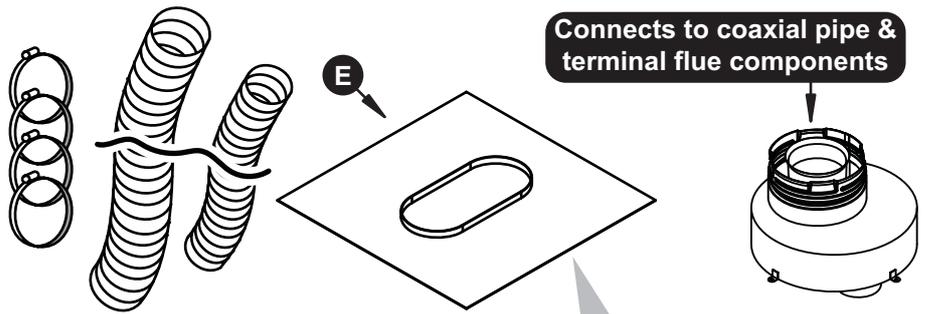
RDVFF (RDV Flexi Flue)

WARNING RDVFF is **NOT** suitable for combustible material constructions.

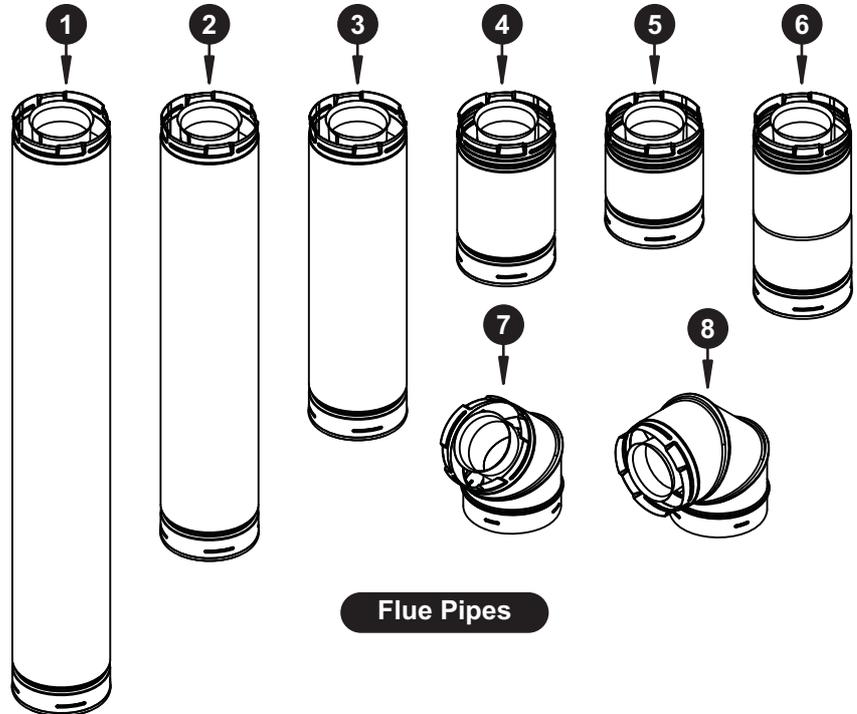
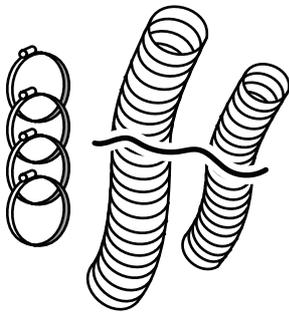


RDVFA (RDV Flue Adaptor)

Connects to coaxial pipe & terminal flue components

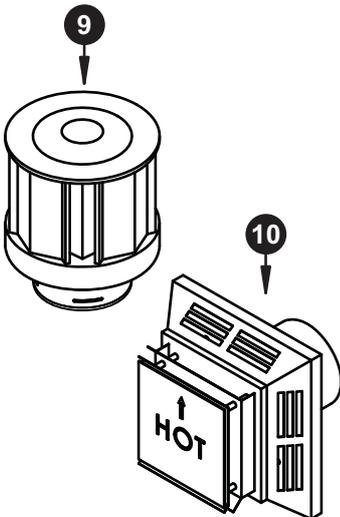


IMPORTANT The coaxial mounting plate **E**, is used for vertical and horizontal **False Fireplace** installations **ONLY**. The coaxial mounting plate **E**, may require cutting to size on some installations.



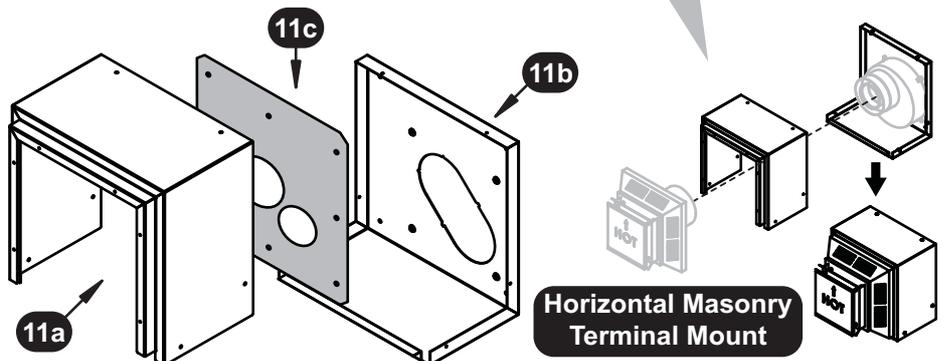
Flue Pipes

IMPORTANT Minimum and maximum flue length requirements **MUST** be observed, refer to page 28 for details.



Flue Terminals

IMPORTANT A horizontal masonry installation **MUST** use a horizontal masonry terminal mount **11** to affix both the co-linear adaptor (supplied with RDVFA) and the horizontal terminal **10** (supplied as an additional flue component) to the exterior wall.



Horizontal Masonry Terminal Mount

HEATER ENGINE - GENERAL INSTALLATION

BASIC FLUE KITS

RDVFF	Masonry chimney kit - RDV Flexi Flue 650/750. 2 x flexi pipes, 4x pipe clips and high wind terminal cap. <i>Rinnai Order Code: RDVFF</i>
--------------	--



RDVFF is NOT suitable for combustible material constructions.

RDVFA	False Fire place base kit - RDV Flue Adaptor 650/750. 2 x flexi pipes, 4x pipe clips, co-linear to coaxial adaptor and coaxial mounting plate E . <i>Rinnai Order Code: RDVFA</i>
--------------	--



A horizontal masonry installation will utilise the RDVFA as the basis for the installation.

A horizontal masonry installation MUST use a horizontal masonry terminal mount **11 to affix both the co-linear adaptor (supplied with RDVFA) and the horizontal terminal **10** (supplied as an additional flue component) to the exterior wall.**

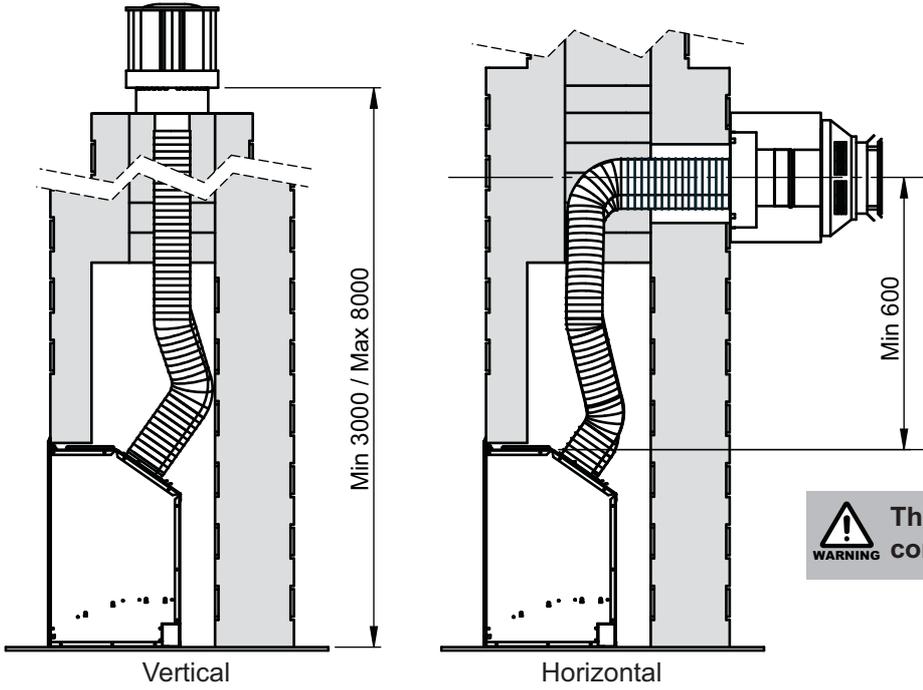
ADDITIONAL FLUE COMPONENTS

- 1** Pipe length 48 inch - (1200mm), *Rinnai Order Code: - RDV902*
- 2** Pipe length 36 inch - (900mm), *Rinnai Order Code: - RDV903*
- 3** Pipe length 24 inch - (600mm), *Rinnai Order Code: - RDV904*
- 4** Pipe length 12 inch - (300mm), *Rinnai Order Code: - RDV906*
- 5** Pipe length 9 inch - (230mm), *Rinnai Order Code: - RDV907*
- 6** Adjustable Pipe Length 11 - 14 inch - (275 - 375mm), *Rinnai Order Code: - RDV911*
- 7** 45° Elbow, *Rinnai Order Code: - RDV945G*
- 8** 90° Elbow, *Rinnai Order Code: - RDV990G*
- 9** High Wind Terminal Cap (Vertical Cowl) - *Rinnai Order Code: - RDV991*
- 10** Square Horizontal Terminal Cap (Horizontal Terminal), (600mm), *Rinnai Order Code: - RDV984*
- 11** Horizontal Masonry Terminal Mount Kit - *Rinnai Order Code: RDVHFS*. This kit exists of three components,
11a = Mount Cowl Masonry / **11b** = Plate Chimney Mount and **11c** Template. **(This template is used for the installation only, discard this template, **11c** after use).**

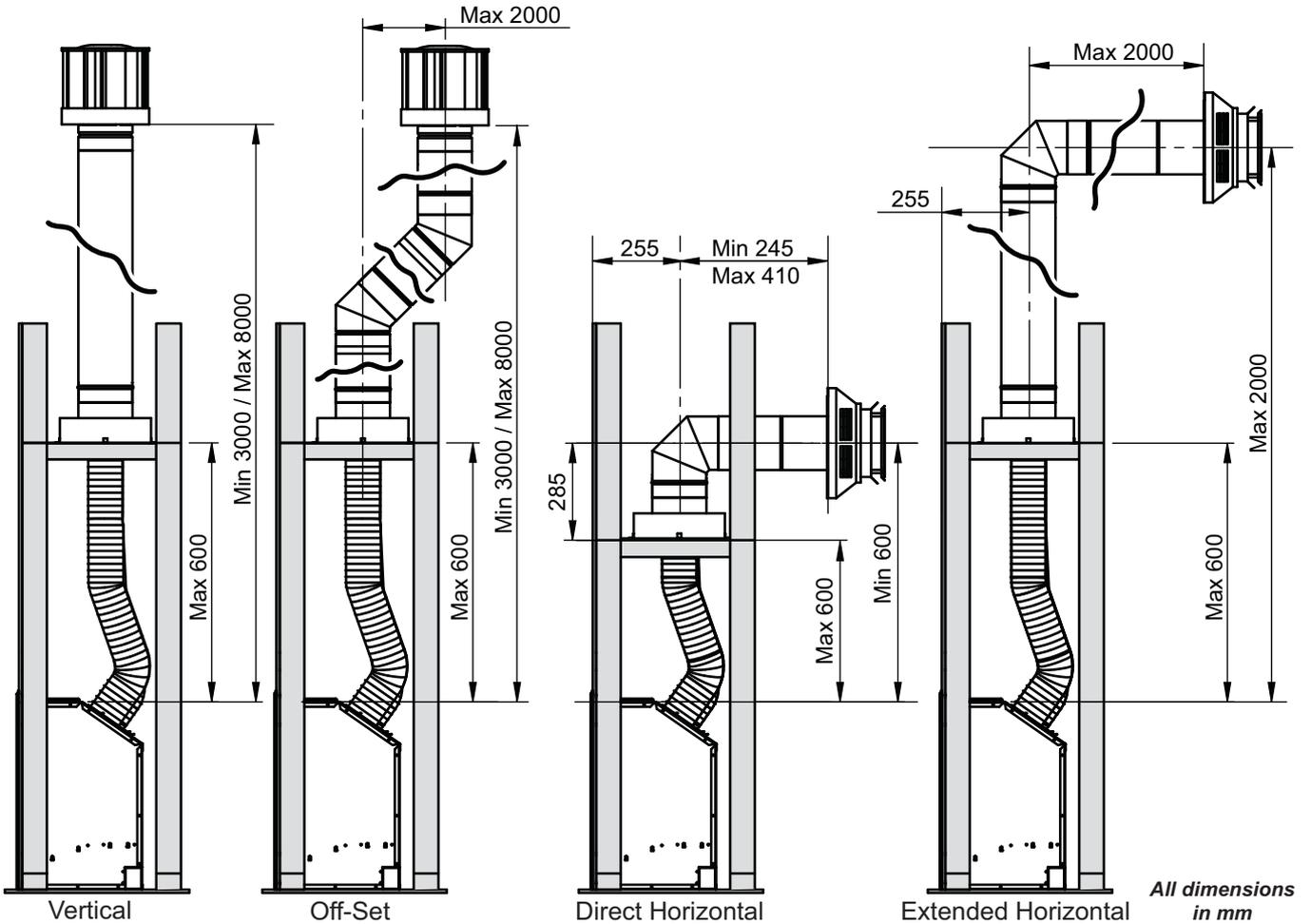
HEATER ENGINE - GENERAL INSTALLATION

FLUE INSTALLATION DIMENSIONS AND RESTRICTIONS

Masonry Fireplace (Non-combustible ONLY)

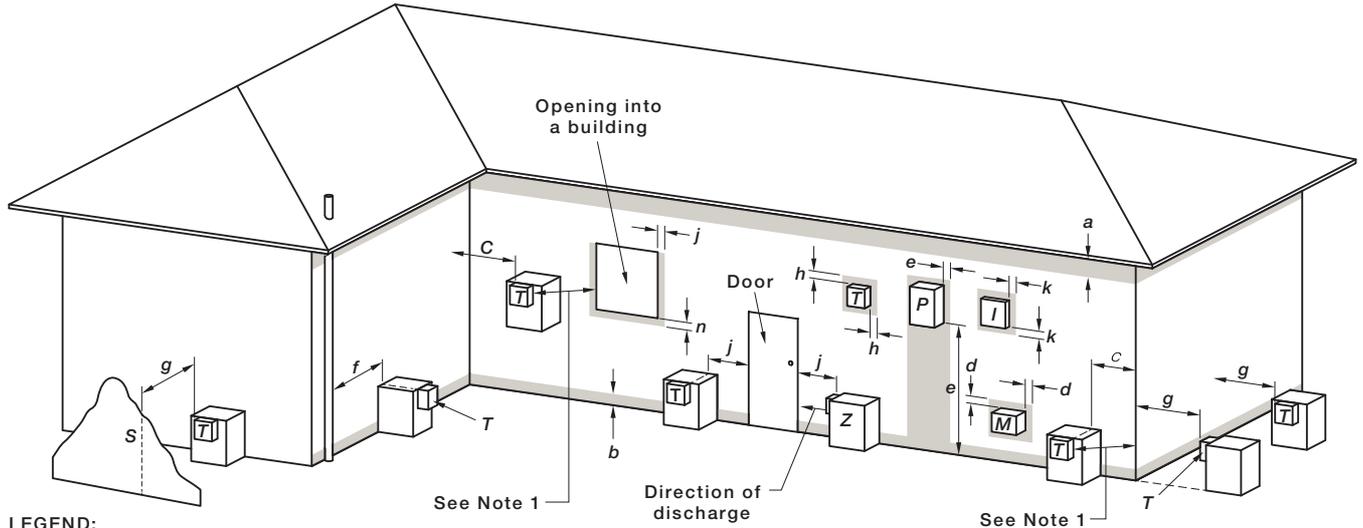


False Fireplace



HEATER ENGINE - GENERAL INSTALLATION

FLUE TERMINAL CLEARANCES (EXTRACT FROM AS/NZS 5601)



LEGEND:

- I = Mechanical air inlet
- M = Gas meter
- P = Electricity meter or fuse box
- S = Structure
- T = Flue terminal
- Z = Fan-assisted appliance only

■ Shading indicates prohibited area for flue terminals

Ref.	Item	Min. Clearances (mm)
		Natural Draught
a	Below eaves, balconies and other projections:	
	• Appliances up to 50 MJ/h input	300
	• Appliances over 50 MJ/h input	500
b	From the ground, above a balcony or other surface *	300
c	Front a return wall or external corner *	500
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	150
g	Horizontally from any building structure* = or obstruction facing a terminal	500
h	From any other flue terminal, cowl, or combustion air intake †	500
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 *	500
	• Appliances over 150 MJ/h input up to 200 MJ/h input *	1500
	• Appliances over 200 MJ/h input up to 250 MJ/h input *	1500
	• Appliances over 250 MJ/h input *	1500
k	From a mechanical air inlet, including a spa blower	1500
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

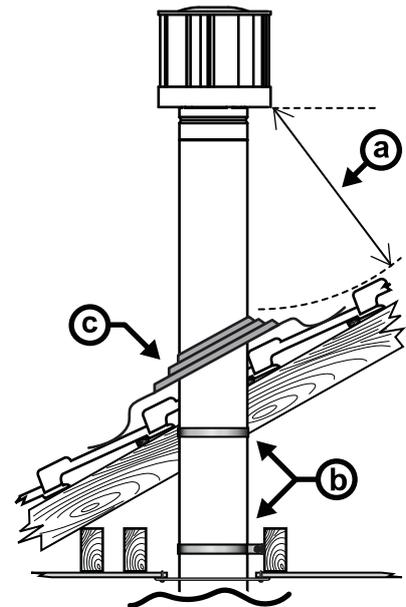
* - unless appliance is certified for closer installation

† - 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



- (a) Minimum clearance 500 mm to nearest part of roof.
- (b) Minimum clearance 25 mm to combustible materials.
- (c) Decktite or lead collar flashing.

HEATER ENGINE INSTALLATION

MASONRY INSTALLATION



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.

- | | |
|--|--|
| Step 1. Prepare Site - p.30 | Step 6. Insert Heater Engine Into Fireplace - p.31 |
| Step 2. Masonry Flue Installation - p.30 | Step 7. Securing The Heater Engine - p.31 |
| Step 3. Positioning The Heater Engine - p.31 | Step 8. CONNECTING THE GAS SUPPLY - p.35 |
| Step 4. Connect Electrical Supply - p.31 | Step 9. LEAK TESTING - p.35 |
| Step 5. Prepare Gas Supply - p.31 | Step 10. BURNER MEDIA INSTALLATION - p.36 |
| | Step 11. COMMISSIONING INSTRUCTIONS - p.39 |

Step 1. Prepare Site



Ensure the intended enclosure meets the requirements of the dimensions as stipulated in "ENCLOSURE REQUIREMENTS" on page 22 and that gas and electrical supplies have been prepared in accordance with the dimensions stipulated in "GAS SUPPLY" on page 24 and "ELECTRICAL SUPPLY" on page 25.

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

Step 2. Unpack The Heater Engine

The heater engine is supplied in one carton, check to ensure you have all contents as listed under "BEFORE YOU START" on page 4 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.



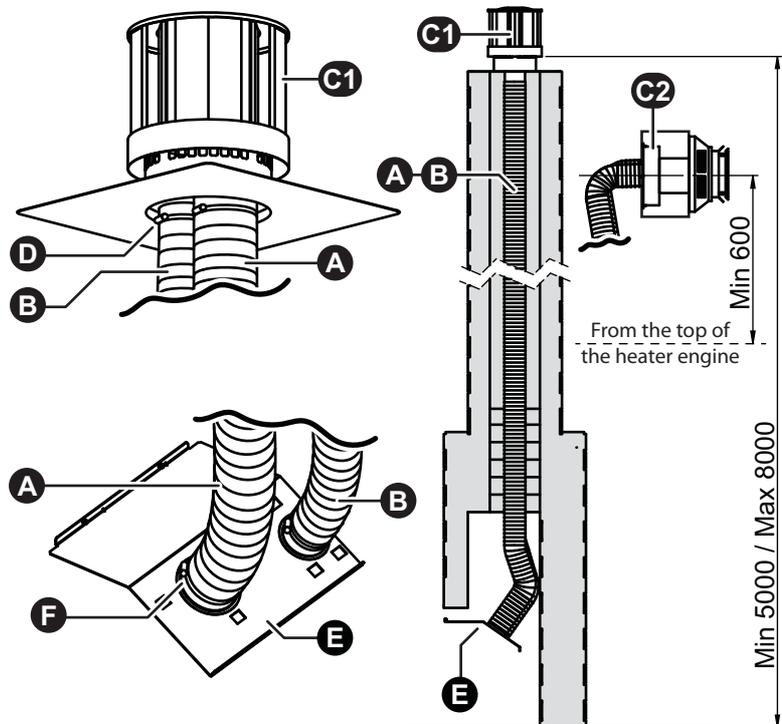
Retain the cardboard carton for use in the "Positioning The Heater Engine" on page 31.

Step 3. Masonry Flue Installation

Connect both the \varnothing 100mm exhaust pipe **A** and the \varnothing 75mm inlet pipe **B** flues to the masonry cowl **C1** / co-linear to coaxial adaptor **C2**, noting that the larger diameter pipe is for the exhaust, securing both pipes to the cowl / co-linear to coaxial adaptor firmly with pipe clamps **D**.

Feed the flexi-liner flue pipes down the chimney ensuring that exhaust pipe **A** is on the right when being viewed from the front of the fireplace. Once the pipe ends are accessible from fire place, the cowl / co-linear to coaxial adaptor components may then be secured and weather sealed in place.

At the fire place attach both exhaust pipe **A** and inlet pipe **B** flues to the engines spigot plate **E**, noting again that the larger diameter pipe is for the exhaust, when viewed from the front this will be to the right. Secure both pipes to the spigot plate **E** firmly with pipe clamps **F**.



A horizontal masonry installation **MUST** use a horizontal masonry terminal mount to affix the co-linear adaptor and the horizontal wall terminal to the exterior wall.

HEATER ENGINE INSTALLATION

Step 4. Positioning The Heater Engine

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.

Place the heater engine in front of the fireplace enclosure.



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

Ensure that the external isolation switch is OFF before connecting the power to the heater engine.

Step 6. Prepare Gas Supply

Remove the threaded brass plug from the S/S flexi pipe consumer gas supply pipe.

Step 7. Insert Heater Engine Into Fireplace

Position the heater engine so that the outer edges of the spigot plate **E** can be aligned with the guide rails **G** on top of the engine. Then carefully move the heater engine into the fireplace ensuring that the gas supply pipe and fittings **H** feed into the rear access hole and that the outer edges of the spigot plate **E** engage the guide rails **G**.

Use two screw bolts **I** located in the upper flange of the heater to engage the nutserts installed in the front tab of the spigot plate **E**.

Tighten these screw bolts, to pull the spigot plate **E** forward and allows the six locating / locking tabs **J** of the engine to engage the corresponding holes **K** of the spigot plate **E** and form a seal between the flue components and the engine.



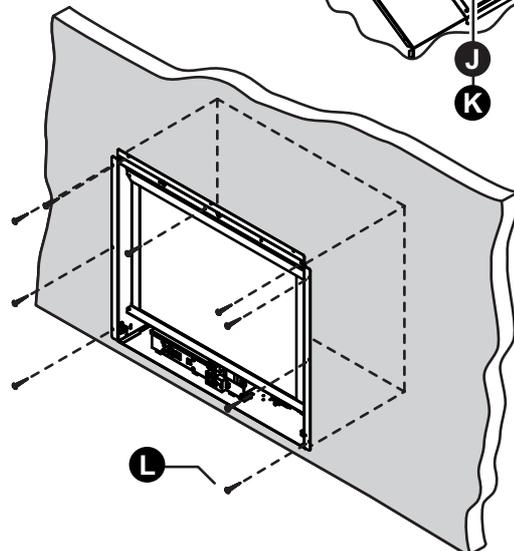
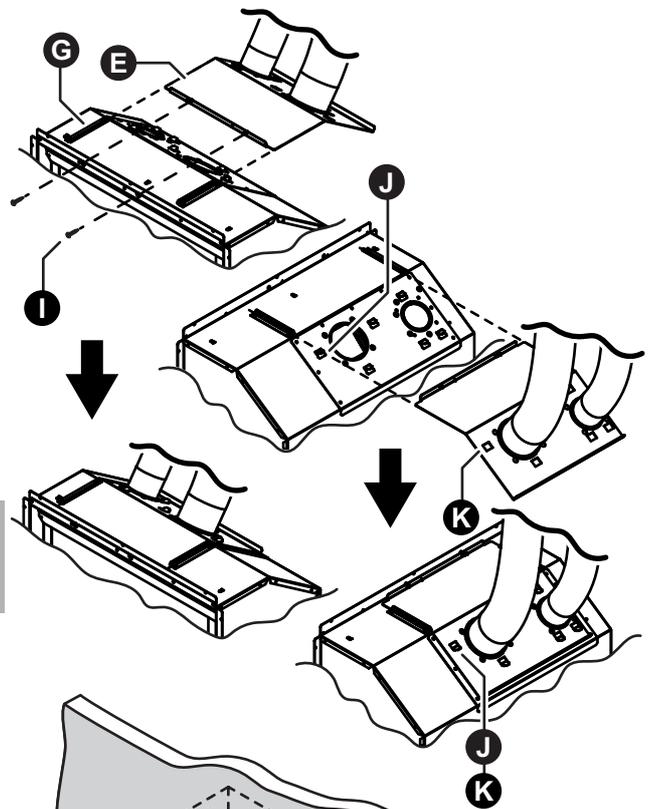
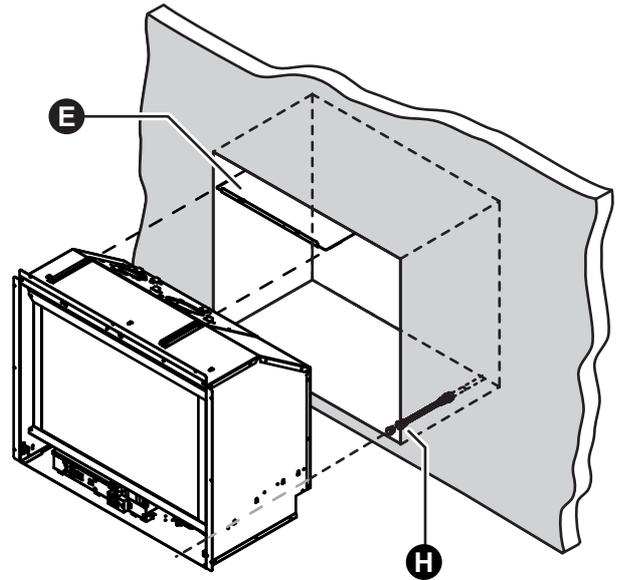
Take care so that the electrical cord loosely coils up behind the heater engine to avoid pinching.

Step 8. 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 the 3 holes on each side of the side panels as shown **L**.

Step 9. Connecting Gas

Continue to "CONNECTING GAS" on page 35.



HEATER ENGINE INSTALLATION

FALSE FIREPLACE INSTALLATION



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.

- | | |
|--|---|
| Step 1. Prepare Site - p.32 | Step 8. Prepare Gas Supply - p.34 |
| Step 2. Unpack The Heater Engine - p.32 | Step 9. Inserting Heater Engine & Connecting Flue Spigot Plate - p.34 |
| Step 3. Install Flue - p.32 | Step 10. Securing The Heater Engine - p.34 |
| Step 4. "Zero Clearance Frame Installation" on page 33 | Step 11. CONNECTING THE GAS SUPPLY - p.35 |
| Step 5. Install Cladding - p.33 | Step 12. LEAK TESTING - p.35 |
| Step 6. Positioning the Heater Engine - p.34 | Step 13. BURNER MEDIA INSTALLATION - p.36 |
| Step 7. Connect Electrical Supply - p.34 | Step 14. COMMISSIONING INSTRUCTIONS - p.39 |

Step 1. Prepare Site



Ensure the intended enclosure meets the requirements of the dimensions as stipulated in "ENCLOSURE REQUIREMENTS" on page 22 and that gas and electrical supplies have been prepared in accordance with the dimensions stipulated in "GAS SUPPLY" on page 24 and "ELECTRICAL SUPPLY" on page 25.

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. Unpack The Heater Engine

The heater engine is supplied in one carton, check to ensure you have all contents as listed under "BEFORE YOU START" on page 4 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.



Retain the cardboard carton for use in the "Positioning The Heater Engine" on page 31.

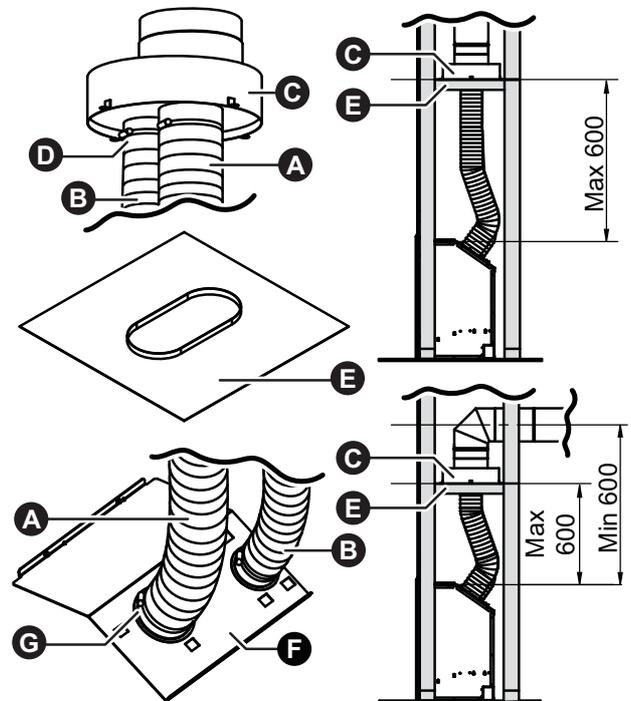
Step 3. Install Flue

Connect both the \varnothing 100mm exhaust pipe **A** and the \varnothing 75mm inlet pipe **B** flues to co-linear to coaxial adaptor **C**, noting that the larger diameter pipe is for the exhaust, securing both pipes to the co-linear to coaxial adaptor firmly with pipe clamps **D**.

Affix the coaxial mounting plate **E** with the flange fold upwards to the framing (max from top of heater height 600mm). Feed the flexi-liner flue pipes through the coaxial mounting plate **E** and down to the enclosure opening ensuring that exhaust pipe **A** is on the right when being viewed from the front of the opening, then secure co-linear to coaxial adaptor **C** to the coaxial mounting plate **E**.

Once the pipe ends are accessible from the opening, the adaptor and other flue components may then be secured in place and weather sealed where necessary

At the enclosure opening attach both exhaust pipe **A** and inlet pipe **B** flues to the engines spigot plate **F**, noting again that the larger diameter pipe is for the exhaust, when viewed from the front this will be to the right. Secure both pipes to the spigot plate **F** firmly with pipe clamps **G**.



If pre-fitting flue prior to engine delivery, leave sufficient lengths of both the \varnothing 100mm exhaust pipe **A** and the \varnothing 75mm inlet pipe **B** within the enclosure opening. This will enable connection of the flues to the engine spigot plate **E** which is on the heater to be installed.

HEATER ENGINE INSTALLATION

Step 4. Zero Clearance Frame Installation

A MDF, (Custom wood) board or equivalent of 20 mm thick, **Ⓢ MUST BE USED** in the base of the framework to support the heater engine.

The frame serves three purposes:

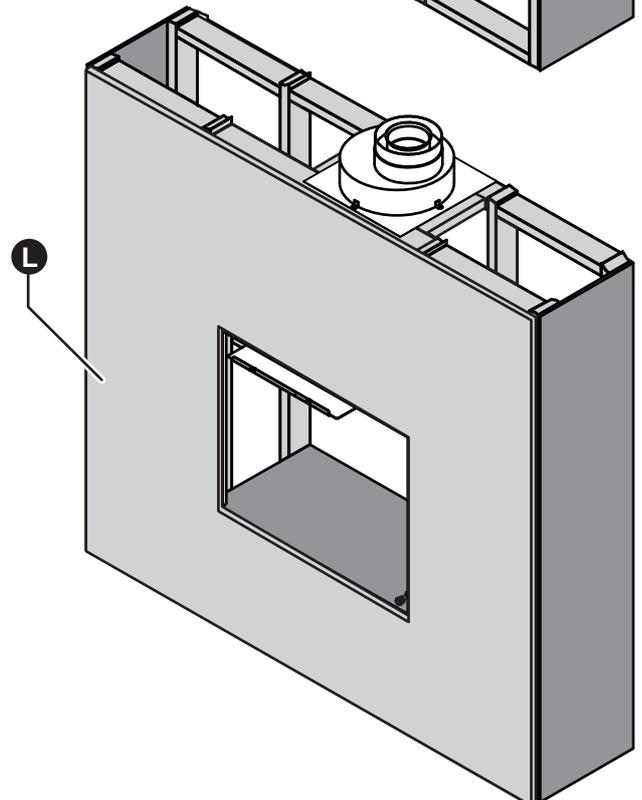
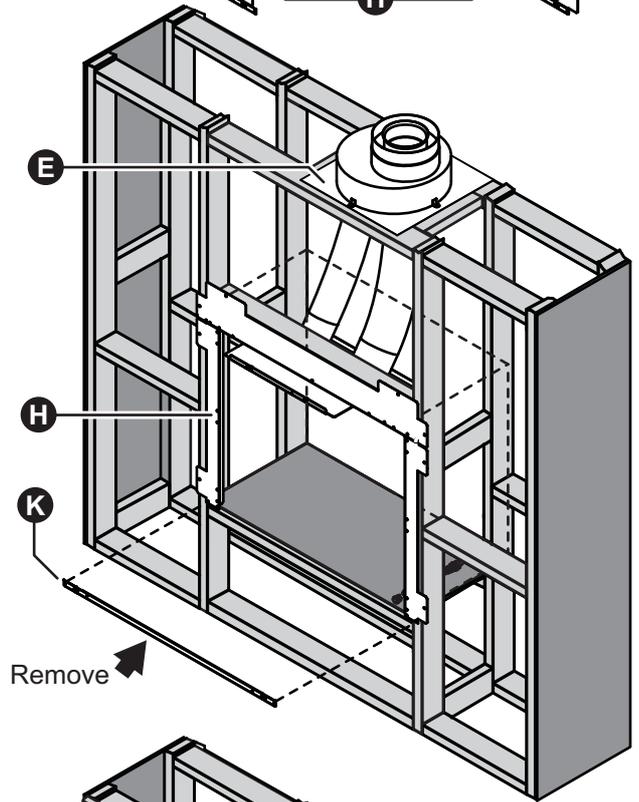
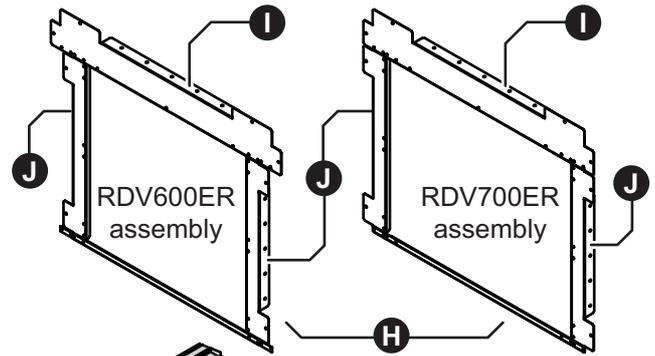
- Maintains the required clearances to combustibles around the fire
- Keeps the enclosure square and provides rigidity above the fireplace
- Allows for a thin profile frame and for the engine to slip easily in and out of the enclosure

Carefully remove the contents from the carton and check to ensure you have all contents as listed in the instruction sheet supplied with the frame are present. If **ANY** damage is evident or parts are missing **DO NOT** assemble the zero clearance frame and contact your supplier for advice.

Assemble all four sides of the zero clearance frame **Ⓜ** together in accordance with the instructions provided with the frame, noting that the frame can be assembled for the RVD600ER or RVD700ER using the same components.

Then secure the zero clearance frame **Ⓜ** using the holes provided to the inside of the frame opening on the top **Ⓡ** and on both sides **Ⓢ** tabs using appropriate fixings (not provided).

Once the zero clearance frame **Ⓜ** is secured in position remove the bottom frame component of the zero clearance frame **Ⓚ** assembly as this part is only used to keep the frame square during installation and is no longer required.



Step 5. Install Cladding



The *sheet wall cladding, **Ⓛ**, around the heater cavity must be installed in one complete section and attached to the frame as per the cladding manufacturer's specifications and requirements. This will avoid creating joints in the vicinity of the corners which may crack with normal operational expansion and contraction. Rinnai takes no responsibility in the event of such occurrences.

*Stone or ceramic tile type cladding reacts differently than plaster or board type claddings.

Rinnai requires the installer to check with the product manufacturers for the suitability of their product for this application. Rinnai accepts no responsibility for the type of cladding chosen.

The cladding **Ⓛ** may now be installed, ensuring that the cavity opening is cut flush to the inside edges of the zero clearance frame **Ⓜ**.



To assist with flue and electrical connections, if possible leave any side cladding of the false fire place open until the heater engine installation is finalised.

HEATER ENGINE INSTALLATION

Step 6. Positioning the Heater Engine

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.

Place the heater engine in front of the fireplace enclosure.



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

Step 7. Connect Electrical Supply

Ensure that the external isolation switch is OFF before connecting the power to the heater engine.

Step 8. Prepare Gas Supply

Remove the threaded brass plug from the S/S flexi pipe consumer gas supply pipe.

Step 9. Inserting Heater Engine & Connecting Flue Spigot Plate

Position the heater engine so that the outer edges of the spigot plate **F** can be aligned with the guide rails **M** on top of the engine. Then Carefully move the heater engine into the fireplace ensuring that the gas supply pipe and fittings **N** feed into the rear access hole and that the outer edges of the spigot plate **F** engage the guide rails **M**.

Use two screw bolts **O** located in the upper flange of the heater to engage the nutserts installed in the front tab of the spigot plate **F**.

Tighten these screw bolts, to pull the spigot plate **F** forward and allows the 6 locating / locking tabs **P** of the engine to engage the corresponding holes **Q** of the spigot plate **F** and form a seal between the flue components and the engine.



On completion of heater installation DO NOT allow any portion of the 100mmØ exhaust flue to remain in contact with any combustible materials. Flue temperature may be hot enough to ignite certain materials.



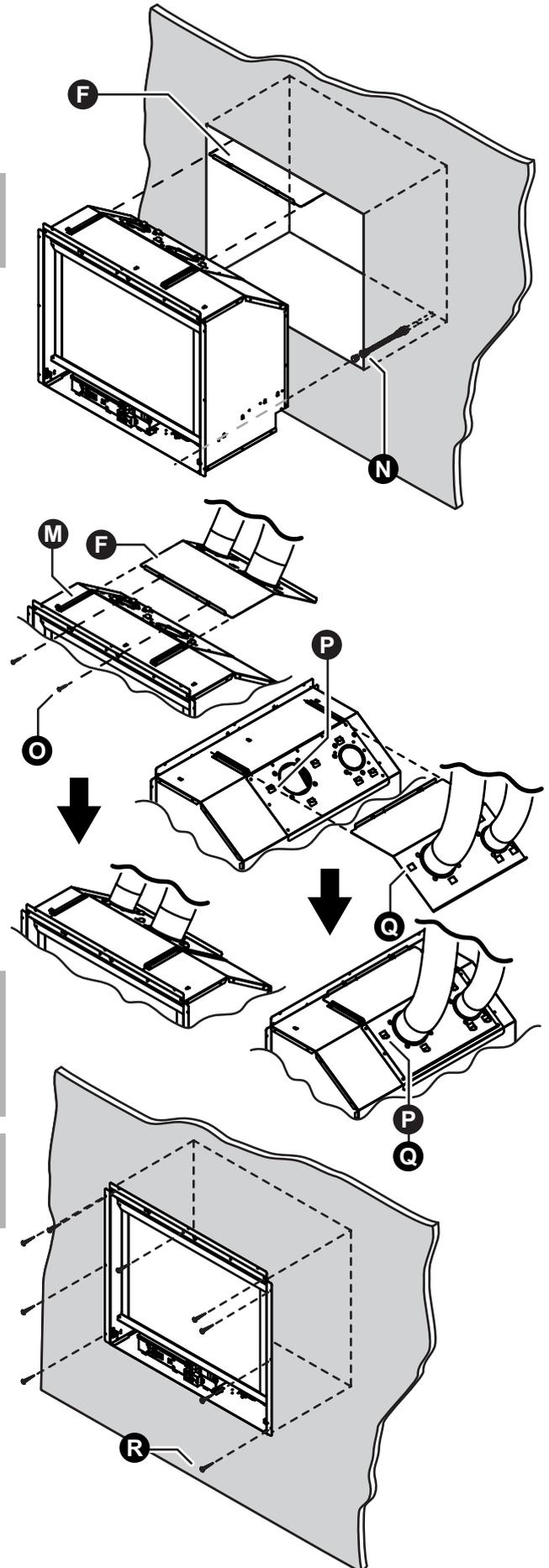
Take care that the electrical cord does not bunch up or get pinched behind the heater engine while inserting the engine.

Step 10. 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 the 3 holes on each side of the side panels as shown **R**.

Step 11. Connecting Gas

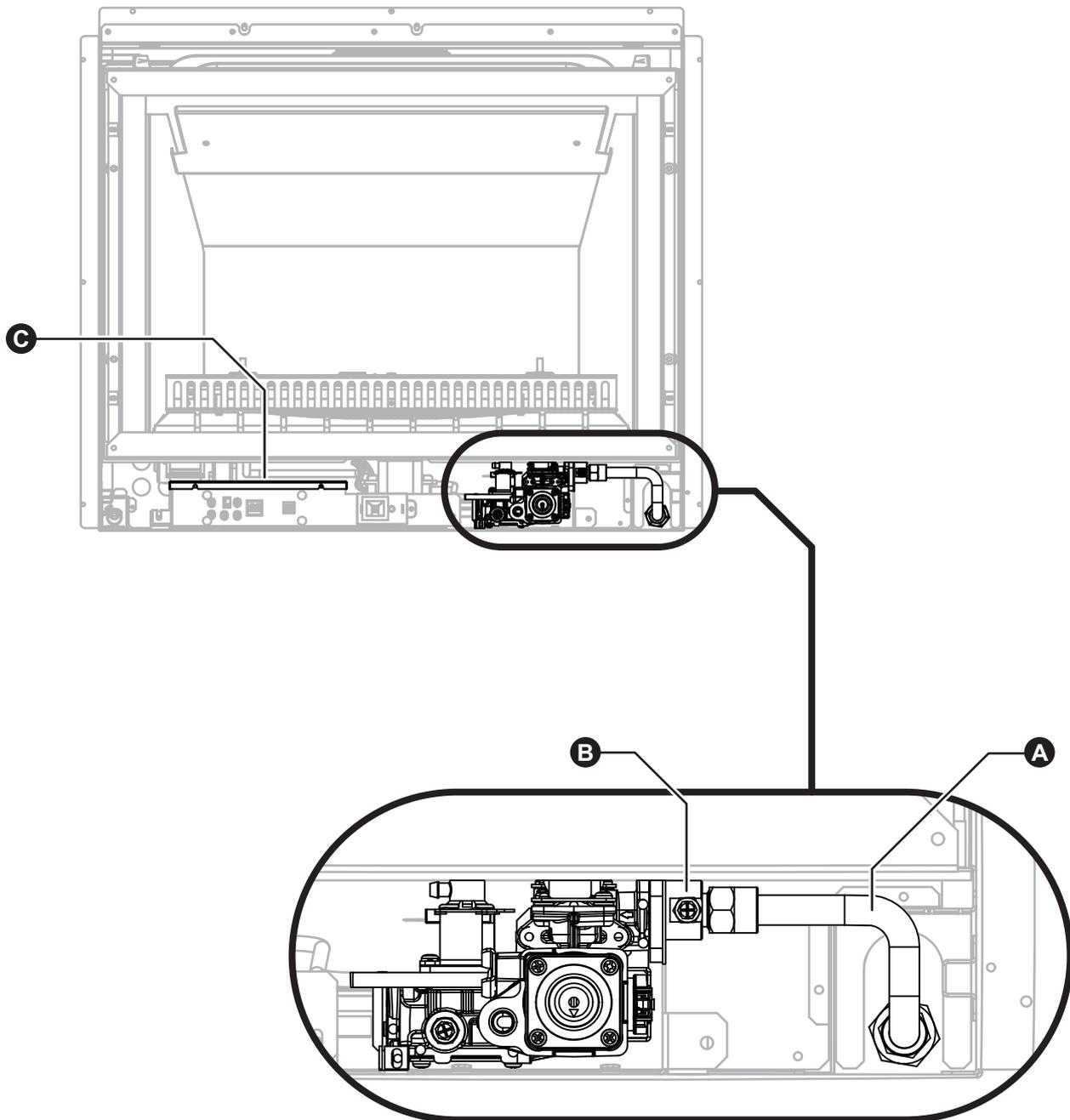
Continue to "CONNECTING GAS" on page 35.



CONNECTING GAS

CONNECTING THE GAS SUPPLY

Firmly grasp the S/S flexi pipe **A** and bend at 90° approximately mid way to line up with the gas control valve inlet **B** then attach pipe to gas control valve and tighten. To assist there is a small spanner, located in the pouch that contains the commissioning instructions which is located on the top of the PCB cover **C**.



When the gas connection is completed, ensure that the spanner is returned to the commissioning instruction pouch, so that it can be available for the next installer / service person.

LEAK TESTING

Turn gas back ON and leak test appliance connection.



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.

Continue to "BURNER MEDIA INSTALLATION" on page 36.

BURNER MEDIA INSTALLATION

CERAMIC LOG SET INSTALLATION

Carefully unpack and inspect each log for damage one at a time, temporarily returning each of the logs to the packaging for safe keeping until required. If **ANY** damage is evident on the logs **DO NOT** continue with installation and contact your supplier for advice.



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

Use extreme care when handling the Ceramic 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 using the specific order as stated.

Step 1. Removing the Burner Box Glass



A set of instructions is attached to the burner box glass that has pictures of the suggested stone media placement, ensure to retain this instruction for use with "CERAMIC STONE SET INSTALLATION" on page 38.

While supporting the burner box glass panel in place **A**, unscrew and remove the four retaining screws **B**. Once unscrewed pull the burner box glass panel away and place it and the retaining screws safely aside where the glass and frame can not get damaged or the screws become lost.

Step 2. Burner Inspection

⚠ Check to ensure that the ports of the burner are clean and clear of any particles and all packaging material.

Step 3. Ember Bed Installation

Remove the stone guard **C**, by unscrewing the three retaining screws, then gently lift the stone guard out, taking care to avoid scratching any of the interior surfaces or fittings.

Fill the perforated ember tray **D** evenly with the glass ember granules **E**, then take between 6 to 8 pieces of the black burner granules **F** and spread these randomly over the glass layer of the ember bed.

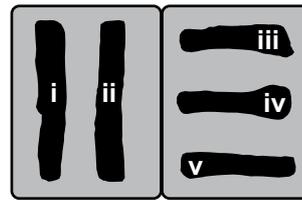
When satisfied with the placement of the ember bed material, carefully re-fit the stone guard **C**.

Step 4. REAR Log Installation

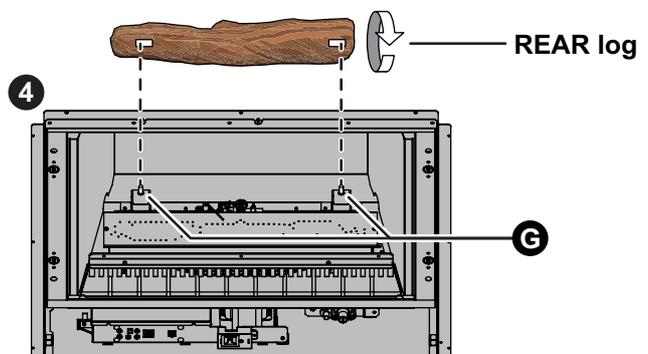
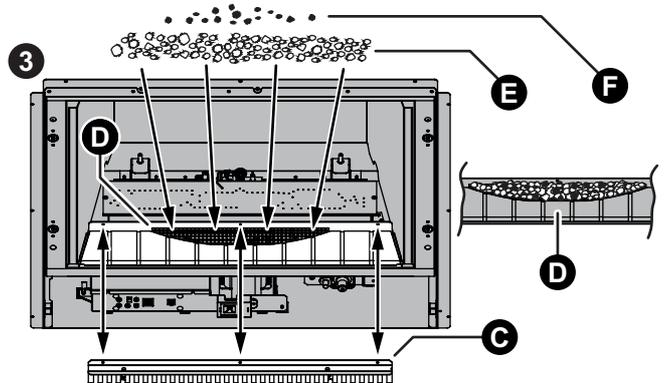
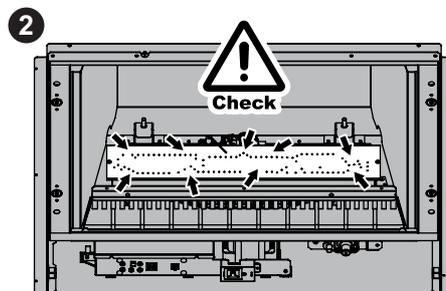
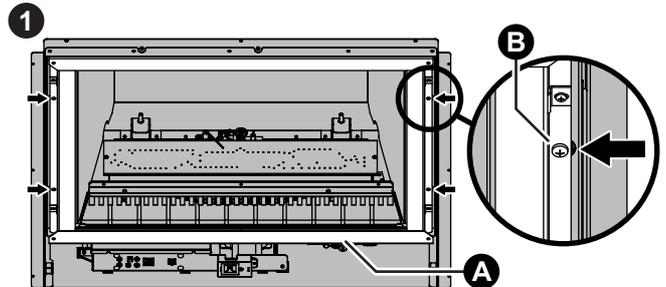
Identify the "REAR" log and then carefully remove it from the protective packaging.

Locate the two slots in the base of the log and carefully place these over the positioning pins **G** which are located at the rear of the burner box, ensuring that the detailed surface of the log is facing out to the front.

Artificial log set as supplied in protective packaging



LOG	RDV600	RDV700
i	REAR	FRONT
ii	FRONT	REAR
iii	MIDDLE	
iv	RIGHT	
v	LEFT	



BURNER MEDIA INSTALLATION

Step 5. Charcoal Bed Installation

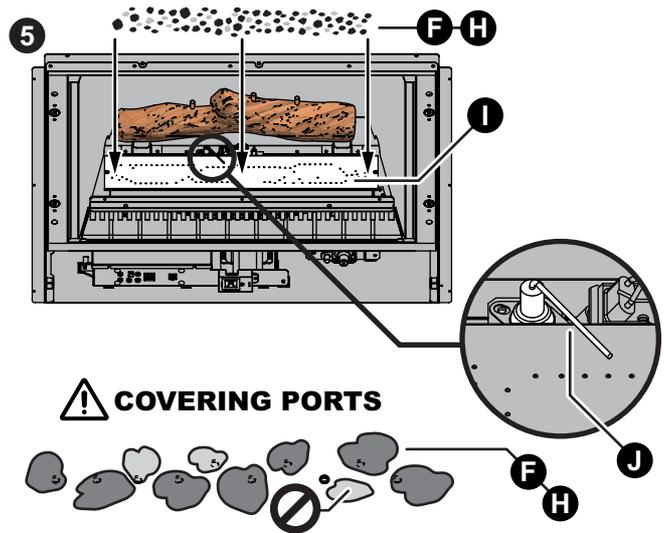
The charcoal bed is placed directly onto the burner **I**. For the RDV700 you will need use both bags of the black burner granules **F**, while for the RDV600 approximately only one and three quarter bags worth.

The brown burner fibre **H** will need to be pinched into approximately ten cent piece sized tufts.

To produce the best flame effect results, in a random manner carefully place the black burner granules **F** and the brown burner fibre tufts **H** loosely across the entire surface of the burner **I**.

Allowing the burner media to sit over and around the burner ports, will ensure that the flames from the gas jets are diffused, which reduces any 'candling' effect of the flame while also enhancing the realistic log burning look of the heater.

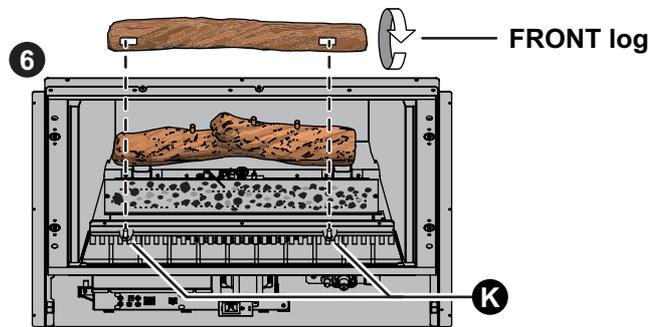
DO NOT force any granular or fibrous materials into the burner ports or completely block any of the burner ports. Keep the flame probe **J** free of any direct contact with any of the burner media.



Step 6. FRONT log Installation

Identify the "FRONT" log and then carefully remove it from the protective packaging.

Locate the two slots in the base of the log and carefully place these over the positioning pins **K** which are part of the stone guard **C**, ensuring that the detailed surface of the log is facing out to the front.



Step 7. LEFT, MIDDLE & RIGHT log Installation

Identify the "LEFT" log and then carefully remove it from the protective packaging.

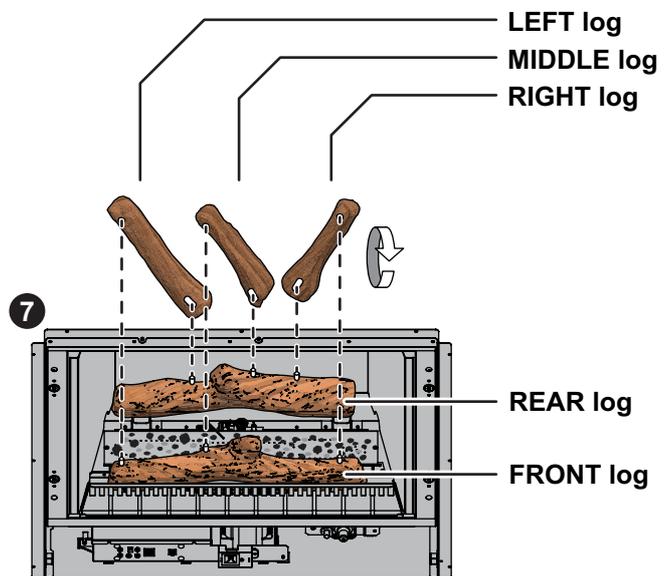
Locate the two slots in the base of this log, noting that the long slot is the rear most slot, and carefully place these slots over the set of two left outermost positioning pins located on both the "FRONT" and "REAR" logs.

Identify the "MIDDLE" log and then carefully remove it from the protective packaging.

Locate the two slots in the base of this log, noting that the long slot is the rear most slot, and carefully place these slots over the set of two central positioning pins located on both the "FRONT" and "REAR" logs.

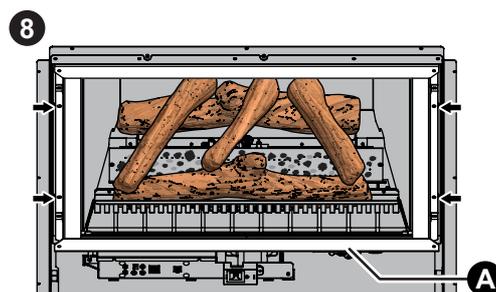
Finally carefully remove the "RIGHT" log from the protective packaging.

Locate the two slots in the base of this log, noting that the long slot is the rear most slot, and carefully place these slots over the set of two right outermost positioning pins located on both the "FRONT" and "REAR" logs.



Step 8. Replacing the Burner Box Glass

Replace burner box glass panel assembly in the reverse sequence to that explained in Step 1. on page 36.



BURNER MEDIA INSTALLATION

CERAMIC STONE SET INSTALLATION

Carefully unpack and inspect each stone for damage one at a time, temporarily returning each of the stones to the packaging for safe keeping until required. If **ANY** damage is evident on the stones **DO NOT** continue with installation and contact your supplier for advice.

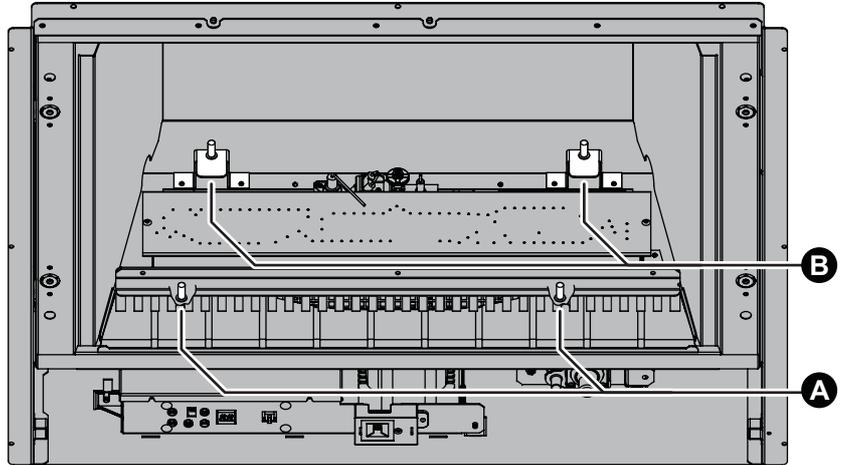
Complete steps 1 through 3 of the CERAMIC LOG SET INSTALLATION - p.36

Step 4 . Remove Log Positioning Pins

When installing stones it is necessary to remove the Log locating pins as follows.

The front pins **A** are held into the stone guard by a single screw, undoing this screw will allow each pin to be removed.

The rear pins are mounted to support brackets **B**, each support bracket is attached to the burner box floor with two screws. The entire pin/bracket assembly for the pins is to be removed, however the four fixing screws for the support brackets **MUST BE** screwed back into the floor of the burner box.



Once removed place all the pin components in a safe place as they will be required if a log set is to be installed in the future.

Step 5. Stone Placement

A set of instructions is attached to the burner box glass has pictures of the suggested stone media placement, use these pictures as a basic guide to the stone placement, the key element to good stone placement is the avoidance of repetitive patterns, be this due to shape and or colour.

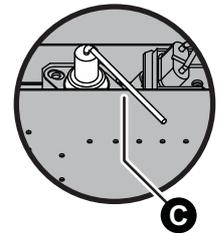
Step 6 . Charcoal Bed Installation

Use the same method described on page 37 Step 5. Charcoal Bed Installation to place the black burner granules and the brown burner fibre around the stones onto the burner.



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

Keep the flame probe **C** free of any direct contact with any of the burner media.



Step 7 . Replacing the Burner Box Glass

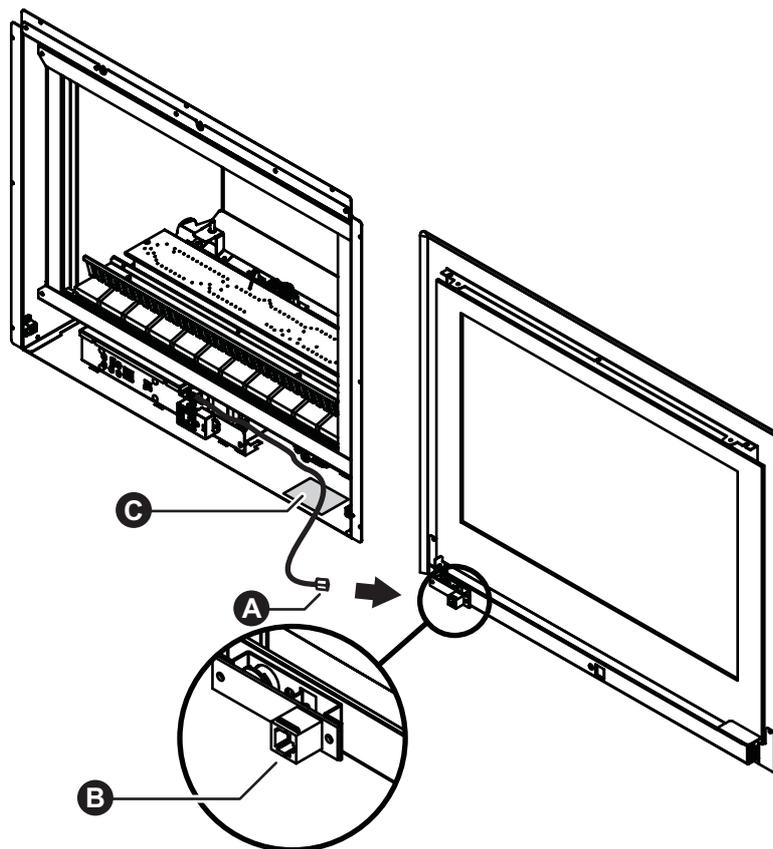
Replace burner box glass panel assembly in the reverse sequence to that explained on page 36 in Step 1. Removing the Burner Box Glass.

COMMISSIONING INSTRUCTIONS

Step 1. Unpack the Fascia

For commissioning, the control panel located on the fascia will need to be connected to the communication cable of the heater engine.

The Fascia Assembly is supplied in a separate carton, check to ensure you have all the contents as listed on "CARTON CONTENTS / ITEM CHECKLIST" on page 4 at the start of this manual before proceeding. 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.



Step 2. Connect Push Button Control

Carefully pick up fascia assembly, and position the fascia close to the heater engine.

Connect the RJ45 plug **A** into the socket **B** located on the back of fascia on the bottom left hand corner, (this connects the push button control panel via a communications cable to the heater engine's control box).



Carefully lean the fascia up against a wall, placing the card board carton between the fascia and the wall will protect both the wall and the fascia from being damaged while completing the heater commissioning.

Step 3. Switch On the Electricity Supply



230 VOLTS, RISK OF ELECTRICAL SHOCK!

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

Wiring inside this appliance may be at 230V potential, 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.

Step 4. Commission the Appliance



DO NOT test for gas leakage with an open flame.

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.

Burner gas pressures and gas types are factory set.

The location of the gas control is in the air gap at the lower right hand side of the appliance.

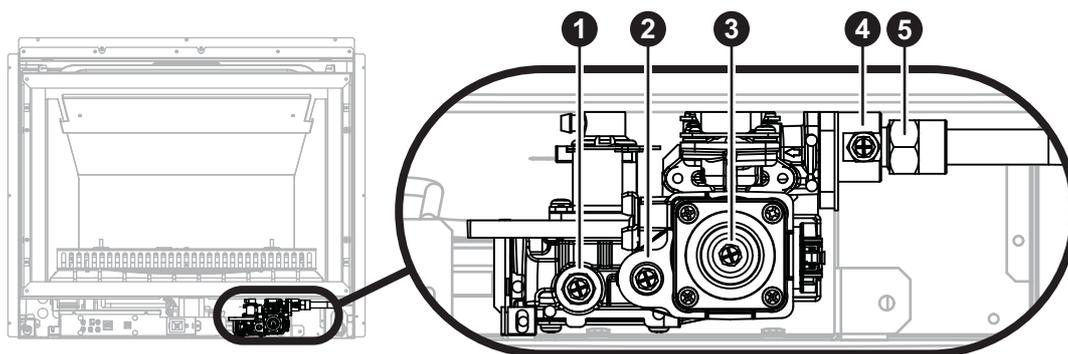
The location of the data plate **C** is on the base plate of the heater engine within the air gap on the right hand side of the appliance.



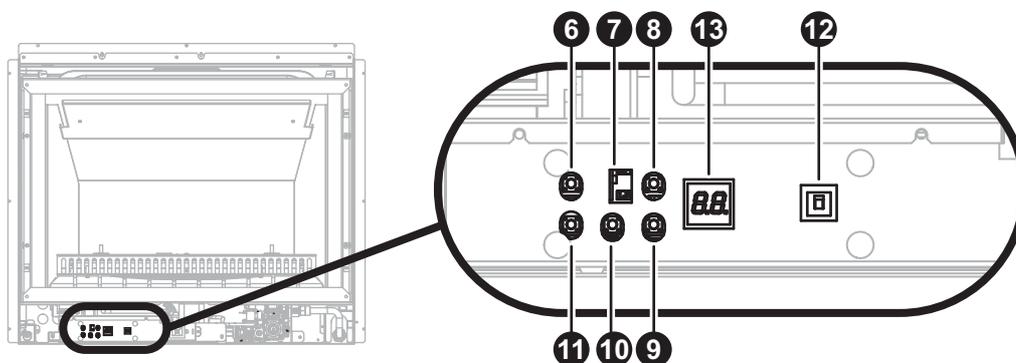
Gas supply pressure is to be checked with all other gas appliances in the household running on high. Failure to check this may result in lower than recommended required gas pressures, resulting in poor performance and reduced flame effect.

COMMISSIONING INSTRUCTIONS

Step 5. Checking Supply Pressure (Ensure gas is connected)



1. Remove the gas inlet test point screw **4**, and connect the positive pressure manometer hose. Refer to valve drawing above.
2. Press the heater ON/OFF button **12**, on the PCB control panel to start the ignition sequence. The appliance will ignite normally. Refer to PCB Control panel image below.



	Natural Gas	Propane Gas
Minimum Supply pressure	1.13 kPa	2.50 kPa
Maximum Supply pressure	3.50 kPa	3.00 kPa

Refer to chart for the correct gas settings, (data plate values override values printed in this instruction).

3. Check the pressures as per the chart below for the correct gas type. Ensure all other gas appliances in the household are running on 'High'
4. Press the heater ON/OFF button **12** to stop the appliance operation.
5. Disconnect the manometer hose and replace the inlet test point screw **4**. Check for leaks using soapy water solution.

Step 6 . Checking and Setting burner gas pressure

1. Remove the main burner test point screw **1**, and connect the positive pressure manometer hose.
2. Press the heater ON/OFF button **12**, on the PCB control panel to start the ignition sequence. The appliance will ignite normally. Refer to PCB Control panel image above.
3. Press the 'TEST' button **6**, twice on the PCB control panel, the igniter will spark and the appliance will light to its lowest setting, (Main burner - stage 1), and the display **13**, will show P_L (stage 1).
4. Press the 'UP' button **8** or 'DOWN' button **9** to adjust to the required value if values are different to those in the table below.

Model	Natural Gas		Propane Gas	
	RDV600ER	RDV700ER	RDV600ER	RDV700ER
P_L (stage 1)	0.20 kPa	0.20 kPa	0.50 kPa	0.50 kPa
P_H (stage 7)	0.90 kPa	0.86 kPa	1.95 kPa	1.92 kPa

Refer to chart for the correct gas settings, (data plate values override values printed in this instruction).

COMMISSIONING INSTRUCTIONS

5. Press the 'Set Button' ⑪, once to save the setting. The display ⑬, should now be displaying \overline{FH} , (Main burner stage 7).
6. Press the 'UP' button ⑧ or 'DOWN' button ⑨ to adjust to the required value, If the pressure is already correct or when the desired pressure is achieved press the 'Set Button' ⑪, once to save the setting.
7. The display ⑬, will now show \overline{F} . If the display does not change to \overline{F} there was an error in pressure setting and the pressure setting procedure should be repeated from step 1 onward after turning the appliance 'OFF'
8. With the display ⑬, showing \overline{F} Press the heater ON/OFF button ⑫.
9. Setting main burner pressure is now complete. Remove the manometer hose and replace the inlet test point screw ①. Check for leaks using soapy water solution.

Step 7 . Checking and setting Pilot burner pressure

1. Remove the pilot burner gas test point screw ②, and connect a positive pressure manometer hose.
2. Press the heater ON/OFF button ⑫ to start the ignition sequence, the appliance will ignite normally.
3. Press the 'TEST' button ⑥, twice on the PCB control panel, the igniter will spark and the appliance will light to its lowest setting, (Main burner - stage 1), and the display ⑬, will show \overline{FL} .
4. Adjust the pilot burner gas pressure to the value for the gas type as listed in the table below via the 'Pilot Burner Pressure Adjustment' screw ③.

	Natural Gas	Propane Gas
Pilot Burner Pressure	1.00 kPa	2.00 kPa

Refer to chart for the correct gas settings, (data plate values override values printed in this instruction).

5. Press the heater ON/OFF button ⑫, once to stop the appliance operation. Disconnect the manometer hose and replace the pilot burner gas test point screw ②.
6. Check for gas leaks using soapy water, setting or checking pilot burner pressure is now complete.



The Requirements of AS / NZS 5601 include:

- a. checking whether mechanical extraction ventilation draws air through flue systems or chimneys or not. If yes, this will most likely result in combustion product spillage from appliances during their operation.
- b. checking whether the operation of appliances and flue systems or chimneys is satisfactory.
- c. a method for determining the additional fixed ventilation area required to counteract the effect of mechanical extract ventilation.



Always check gas pressure values to those recorded on this appliances data plate, values on the data plate override values printed in this instruction.

COMMISSIONING INSTRUCTIONS

COMMISSIONING THE APPLIANCE FOR DIFFERENT GAS TYPE



230 VOLTS, RISK OF ELECTRICAL SHOCK!

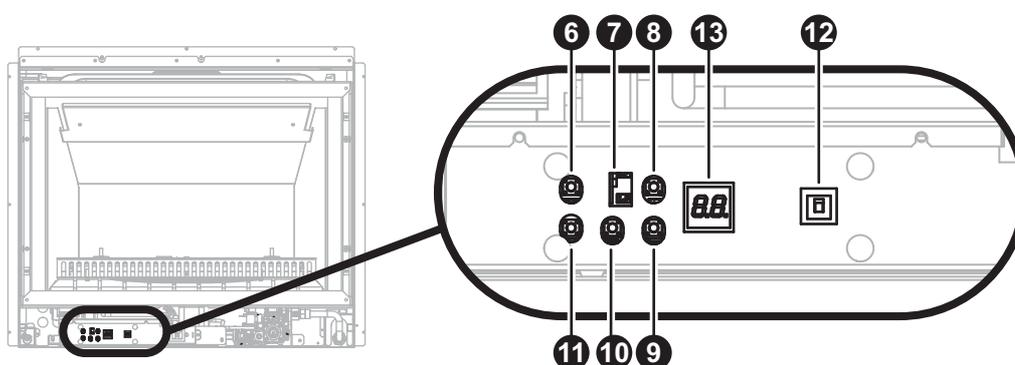
Installation and commissioning must be carried out only by an Authorised person.

Wiring inside this appliance may be at 230V potential, 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.

This appliance is factory set for the correct gas type as per it's gas type labelling, re-commissioning for gas type will only be required if the PCB is being replaced or if it has undergone a gas type conversion, i.e.; from NG to Propane or vice versa. Commissioning of the gas is carried out via the PCB.



Commissioning of the PCB must be carried out BEFORE the gas pressures are checked.



1. Turn on the gas and power supply to the appliance.
2. Press the 'UP' button **8** or 'DOWN' button **9** to obtain the correct gas type code for the appliance. Refer to chart to below for the correct gas type code.

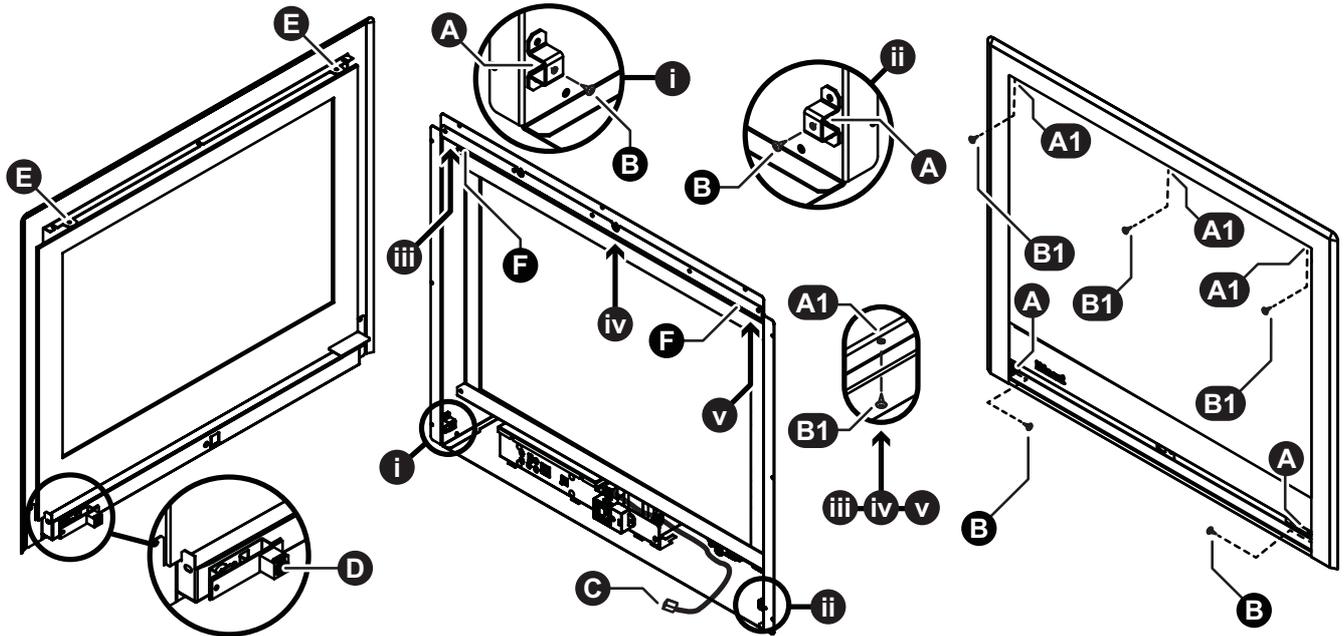
Natural Gas	Propane Gas
A1	L1

3. With the appliance OFF, press the 'TEST' button **6**, the gas type code will be shown on the display.
4. Press the 'Set Button' **11**, to lock in the code.
5. Gas pressure settings should now be checked as per "Checking and setting Pilot burner pressure" on page 41, Steps 1 through 3.

COMPLETING HEATER INSTALLATION

ATTACHING FASCIA ASSEMBLY

Step 8. Attach the Fascia to the Heater Engine



The fascia is mounted to the engine via five, (**i**, **ii**, **iii**, **iv** & **v**) mounting points. Points **i** & **ii** are fastened using 8g x 10mm sheet metal screws, **B**. Points **iii**, **iv**, **v** are fastened using 4mm metal threaded screws, **B1** at points **A1**.



All these screws have been pre-inserted by the manufacturer to ensure correct threading of the fascia securing points. Remove screws **B only prior to fitting the fascia.**

- Carefully pick up fascia assembly and position it in front of the heater engine, connect the RJ45 plug **C** into the socket **D** located on the back of fascia on the bottom left hand corner, (this connects the push button control panel via a communications cable to the heater engine's control box).
- Guide the tabs, **E** into the fascia assembly mounting slots **F**.
- Ensure the three slots in the inner fascia panel have slid over all three screws **B1**.
- Insert the two 8g x 10mm sheet metal screws, **B**, through the fascia mounting holes at points, **A** at the bottom left and right and partially tighten.
- Fully tighten the three top screws, **B1** while gently pushing the fascia against the appliance to ensure a close fit, a 7mm open ended spanner will be needed.
- Gently push the fascia at the bottom corners while fully tightening the two screws, **B**.
- Fitting the fascias is now complete.



Ensure you DO NOT place excessive tension on or pinch the communication cable **C when manoeuvring the fascia into position.**



The glass of the fascia 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.

COMPLETING HEATER INSTALLATION



If the heater is not operating correctly refer to the “TROUBLE SHOOTING CHECKLIST” on page 17 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/NZS 5601.

During the initial burning in period of approximately 2 hours, some minor smoke and smell 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.

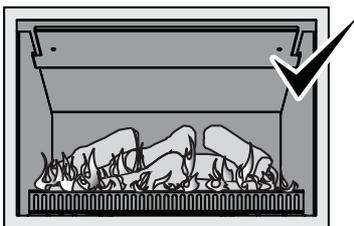
Burner aerations are factory set and can NOT be adjusted. If you are unable to get the unit to operate correctly refer to “TROUBLE SHOOTING CHECKLIST” on page 17 before contacting Rinnai.

ABNORMAL FLAME PATTERN

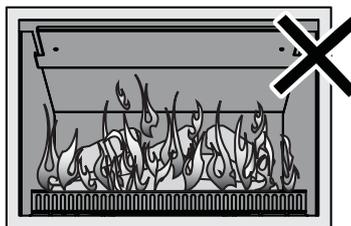
Each Rinnai Gas Fire has a distinct flame pattern. The flame should look the same every time you start your heater, after an initial warm up period of approximately 15 minutes.

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 from when the heater was first installed.

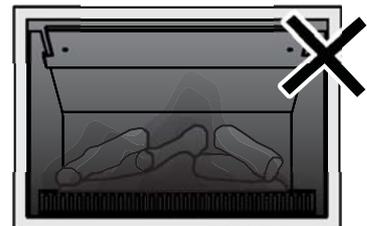
There are some warning signs that could indicate a problem. If any of the signs below occur, please contact Rinnai.



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 and logs.
- Continuous unusual smell from the appliance.
- Continued difficulty or delay in establishing a flame.



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.

INSTALLATION AND COMMISSIONING CHECKLIST

- Complete the Installation Check List and the Installer details below.
- Instruct customer on the Rinnai 650 / 750 Gas Fire 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 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.
- 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)?	<input type="checkbox"/>	<input type="checkbox"/>
2. Was a Rinnai approved flue system installed and tested in accordance with the instructions?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the gas pressure been checked and set?	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the log set / burner media been installed as per instructions?	<input type="checkbox"/>	<input type="checkbox"/>
5. Was the appliance tested for correct operation and to ensure no gas leaks?	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the customer been instructed on operating procedure and safety requirements?	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the end-user fully aware of operating procedure?	<input type="checkbox"/>	<input type="checkbox"/>
8. Has the customer been advised to service the heater every two years?	<input type="checkbox"/>	<input type="checkbox"/>
9. Has the customer been given the completed Certificate of Compliance?	<input type="checkbox"/>	<input type="checkbox"/>

NOTES

Rinnai

Rinnai Australia Pty. Ltd. ABN 74 005 138 769

Head Office

100 Atlantic Drive,
Keysborough VIC 3173

P.O. Box 460
Braeside, VIC 3195

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 be serviced every 2 years.

Product Sales and Service - National
Phone: 1300 555 545* Fax: 1300 555 565*
Technical Helpline and Spare Parts
National (Mon-Fri 8am - 5.30pm EST)
Phone: 1300 555 545* Fax: 1300 300 141*
**Cost of a local call higher from mobile or public phones.*

E-mail: enquiry@rinnai.com.au

For further information visit: www.rinnai.com.au

