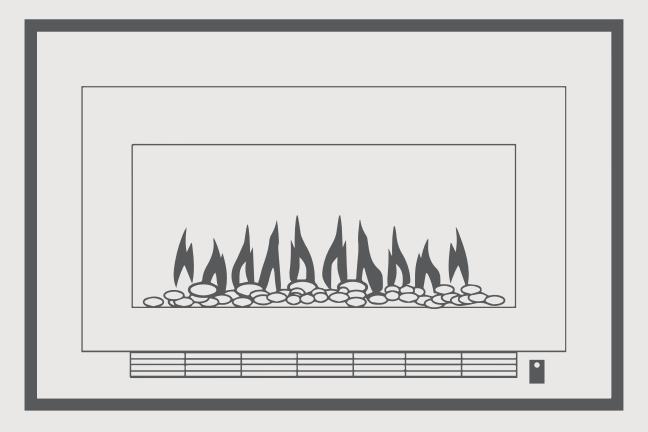
Models: RHFE752ETRN, RHFE752ETRL



Arriva 752 gas fireplace Installation guide

Rinnai

Important

Appliance must be installed with a Rinnai approved flue system.

This appliance shall be installed in accordance with:

Manufacturer's installation instructions

Current:

- AS/NZS 5601 Gas Installations
- AS/NZS 5263 Gas Appliances General Requirements
- AS/NZS 3000 Electrical Standards
- AS/NZS 3500 Plumbing and Drainage Standards

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

Warning

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

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

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Contents

Specification	4
Clearances from combustibles	5
TV installation	6
Framing dimensions	7
Gas connection	8
Electrical supply	8
Flue transition	9
Arriva 752 installation	10
Burn media installation	12
Commissioning	13
Setting the air guide vanes	14
Front panel installation	15
Testing operation and lighting sequence	16
Installation checklist and customer handover.	16
Wiring diagram	17
Arriva flueing	18
Flueing options	19
Arriva flue components	20
Arriva 752 - fitting the condensate	22

Specification

Inbuilt power flued convection fan gas fireplace with electronic temperature control, timers, and remote. Different frame and burn media options available (black pebbles or white quartz).

Specification summary

Input = 8-31.5 MJ/h $= 1.8-7.0 \text{ kW}^*$ Output = 79-89% Efficiency = 65-112 m^{2**} Heating area Gas type = NG or ULPG

Suitability

Ideal for living rooms and open plan areas. Versatile power flue system makes for easy installation in almost any living space including bedrooms.

The Arriva is best suited for a new build installation into a mock (false) chimney.

Room size consideration

Due to the high efficiency of the fire, the Arriva is not suitable for small rooms. Small rooms will heat up quickly, and once the set temperature has been reached the flame picture will reduce significantly (and in some cases reduce to pilot only). This is not ideal if customers want a full flame picture to be visible for the majority of time that the fire is on.

Convection fan

3-speed fan. Heat is distributed from the bottom of the unit.

Data plate

Inside the unit, upper RHS, beside the convection

Gas connection

1/2 " BSP male flare union, lower RHS of unit.

Ignition: Continuous spark electronic ignition.

Noise level: 33-41 dB(A)

Power flue

Inner 50 mm, outer 70-80 mm. Appliance must be installed with a Rinnai flue system.

Power consumption

High = 90 W= 60 W Low Standby = < 8 W

Comes with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the RHS of the unit.

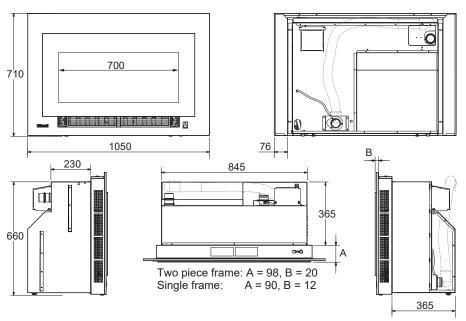
Safety devices

Flame failure sensing system, pressure relief, overheat safety switch, air temperature sensor, thermal fuse, overcurrent fuse, and spark detector.

Temperature control

Thermostat control, temperature range 16-26 °C.

Weight: 70 kg



Dimensions are in mm.

^{*} Will vary according to gas type and flue configuration

^{**} Will vary depending on geographical location in NZ

Clearances from combustibles

The clearances are minimum clearances unless otherwise stated. The Arriva must not be installed where curtains, furniture or other combustible materials could come into contact with the fire. The 400 mm side clearance. measured from the edge of the glass, includes side walls. The 1000 mm clearance is in front of the fire.

Mantels and surrounds

Mantels and surrounds, made of combustible materials, such as wood, are allowed providing they are outside the minimum clearances detailed.

Α	Mantel needs to be a min. of 400 mm away from the edge of the glass				
В	Max. mantel depth at 400 mm (A) is 250 mm				
С	Surround needs to be a min. of 400 mm away from the edge of the glass				

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

For example:

Mantel depth	A: Clearance required
300 mm	500 mm
350 mm	600 mm
400 mm	700 mm

Clearance area

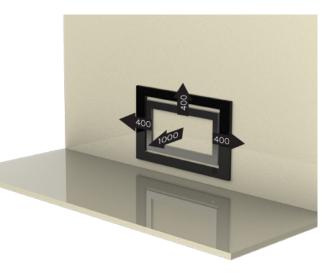
The clearance area diagram shown assists in determining the clearance area around the Arriva without having the unit on site.

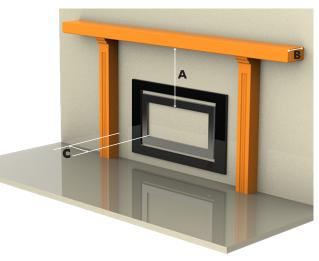
Floor protection

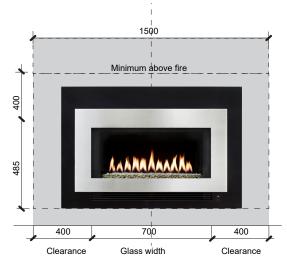
Heat emanating from this fire may over time affect the appearance of some materials used for flooring, such as, carpet, vinyl, cork or timber. This may be amplified if the air contains cooking vapours or cigarette smoke. To avoid this occurring, it is recommended that a mat be placed in front of the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

Hearths

A hearth is not necessary but can be used for decorative purposes or protection of sensitive flooring if required. The hearth, due to radiant heat from the fire, should be a non-combustible material and must not obscure the front of the fire or obstruct the fire in any way.







TV installation

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

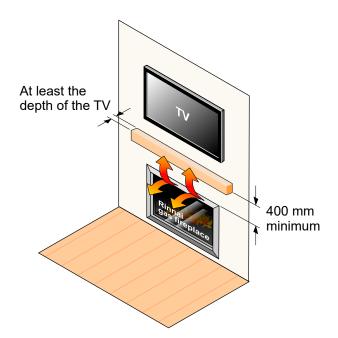
The general rule for television installations is that the bottom of the television should be at least 400-450 mm above the fire

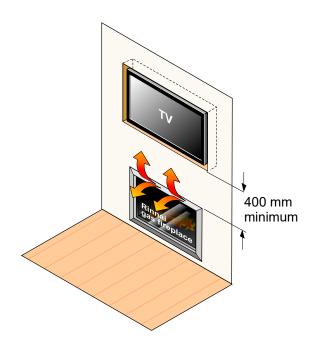
For a TV mounted directly above the fire, the mantel must be at least the depth of the TV to deflect heat away.

Always check with the TV manufacturer

It is up to the owner to check the TV installation with the TV manufacturer some have warranty conditions that state a TV is not to be installed above a fireplace.

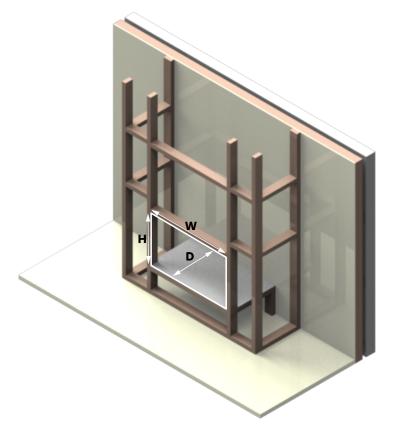
Rinnai does not accept any responsibility for damage to a TV resulting from the use of this information.





Framing dimensions

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



W-width	850-860 mm		
H-height	660-665 mm		
D-depth*	380 mm direct flue 475 mm extended flue 500 mm underfloor flue		

Dimensions provided are critical to the installation and must be adhered to.

* Depth dimensions may vary on the flue installed, refer to p.9 for further detail.

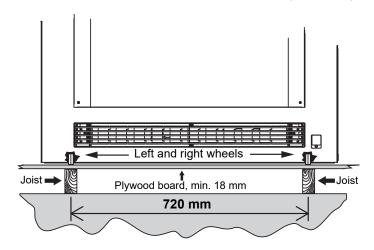
To ensure the appliance performs correctly, without rattling, it must be installed on a flat level support base that allows free movement of the appliance. The joists used to support the appliance off the ground must be capable of supporting a minimum of 1.5 times the weight of the appliance.

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



Installer please note:

Issues caused by 'rattling' fires not installed on a flat level base, as detailed in these IMPORTANT instructions, will not be covered by warranty.



Gas connection

Gas pipe sizing must consider the gas input to this appliance, as well as other gas appliances in the premises. The gas supply termination is inside the unit, and enters from the rear right hand side of the appliance.

To ensure correct positioning terminate the gas supply so it is 80 mm in from the front face of the enclosure opening.

Purging the gas supply

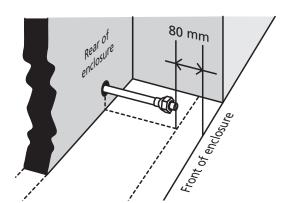
Foreign materials and debris such as swarf, filings etc. must be purged from the gas supply. Failure to do so may cause damage to the control valve causing it to malfunction.

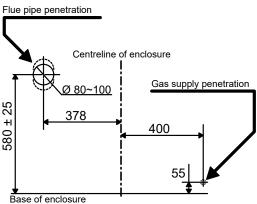
Direct flue wall penetration requirements

Use the guide pictured to mark the penetration points for the gas supply and flue transition locations. Consideration must be given to the position of any studs, noggins or other components of the wall structure on both sides of the wall.

Mark these measurements accurately as this is critical to a successful installation.

The penetration for the flue transition only needs to be made for direct flue installations, where the terminal is to be terminated directly to the rear of the appliance.





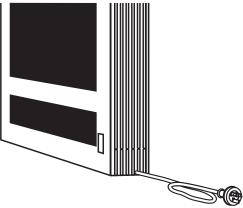
Electrical supply

The Arriva has a 1.5 m power cord with a three pin plug supplied. The power cord passes through a slot in the lower right hand side of the appliance. The connection is either direct wired* or connected to a power point within the cavity. This must be connected to a dedicated 240 V, 10 A earthed power point. The electric isolation switch must be accessible after the appliance has been installed.

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

The power cord is not fire rated and should not come into contact with the unit. If the power cord is damaged, it must be replaced by a licensed tradesperson. This must be a genuine replacement part available from Rinnai.

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



Flue transition

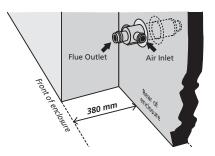
The flue transition is comprised of a transition flue outlet, transition air inlet, and a wall plate, it provides a connection between the flue system and the fire's flue spigot and air intake. For all flueing installations, except horizontal direct flueing, the flue transition is counted as a 90 ° bend.

The flue transition requires a 5 mm gap from combustibles. This clearance is provided automatically when the supplied standoff brackets are used. All other flue components, except the elbow section of the adaption flue kit are designed for zero clearance.

In all cases when positioned correctly the flue transition connection must protrude 110 mm from the rear of the enclosure.

Horizontal direct flue transition

When installed as a horizontal direct flue, the flue transition is pushed hard against the internal wall plate, which is pushed hard against the rear wall of the enclosure as shown.

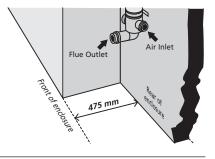


Vertical flue transition

When installed as a vertical direct flue, the flue transition is fastened to the rear wall by standoff brackets supplied.

Elbow component of the adaption flue kit requires a 25 mm clearance to combustibles.

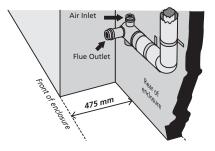
Appliance needs to be down rated—refer data plate.



Offset flue transition

When installed as a vertical or horizontal offset flue, the flue transition is fastened to the rear of the wall by the standoff brackets supplied.

Appliance needs to be down rated—refer data plate.

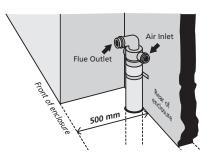


Down and out flue transition

When installed as a down and out flue, the flue transition is fastened to the rear wall by standoff brackets supplied.

The enclosure depth for a down and out installation is 500 mm to allow the flue pipe to clear the base of the appliance.

Appliance needs to be down rated—refer data plate.



Arriva 752 installation



//>
Isolate the electrical supply before removing any panels

Gas pipe connection

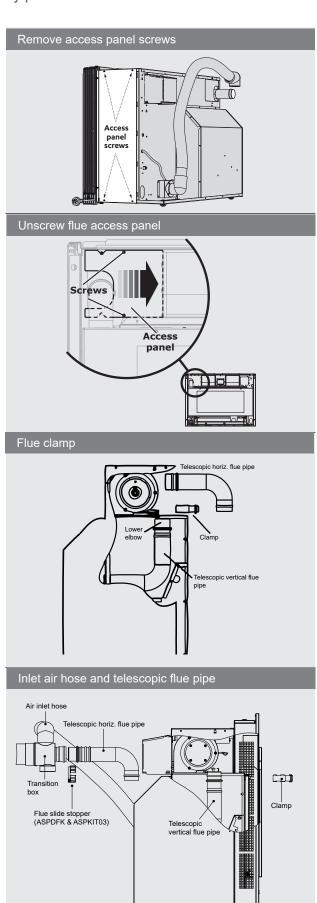
- 1. Remove the RHS access panel by removing the four retaining screws.
- 2. Extend the flexible gas connection through the gas fitting access point to the outside of the heater body.
- 3. Position the unit in front of the enclosure so the end of the gas pipe aligns with the gas fitting access point.
- 4. Securely connect the flexible gas connection, testing all connections for gas leaks.
- 5. Replace and secure the RHS access panel.

Open flue and air hose access

- 1. Unscrew the flue access panel and remove the clamp that secures the telescopic vertical flue pipe to the telescopic horizontal flue pipe.
- 2. Clamp the original flue pipe to the flue transition box using the flue retainer bracket (supplied in the plastic bag with the remote control). OR the flue slide stopper (provided with the ASPDFK and ASPKIT03 flue kits). The clamping component will differ depending on the flue configuration.
- 3. Fasten the air inlet hose to the transition box using the cable tie supplied in the accessory pack with the remote.
- 4. Push the unit into position. Adjust horizontal and vertical telescopic flue pipe, and connect using the clamp.
- 5. Replace the flue access panel.

Connect flue pipe and condensate

Connect the flue pipe to the flue and secure in place using the appropriate clamp. Failure to secure the flue system may result in a dangerous situation. If applicable connect the condensate tray drain kit, refer overview on p.22.



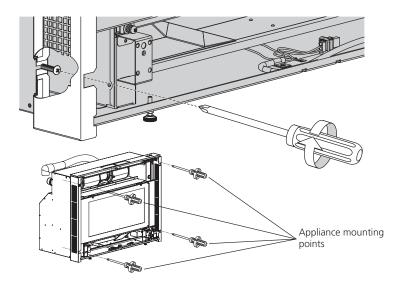
Install the heater engine

Carefully move the heater into the cavity ensuring the gas pipe and flue transition are aligned with their access openings.

As the unit is pushed into place ensure the flexible gas connection coils freely inside, and that the gas pipe penetrates through the centre of the gas access point.

Secure the heater

Secure the heater, using appropriate fixings, through the four appliance mounting points—two upper and two lower (on each side of the appliance).



Check all connections

Check all connections are properly engaged and are inserted beyond the o-ring seal.

Burn media installation

Only the burn media designed for the Arriva 752 (black stones, and white quartz) can be used. NEVER install burn media from other fires, or mix burn media as this can create a dangerous installation. Please read these instructions carefully as incorrect placement of the stones or quartz is not covered under warranty.

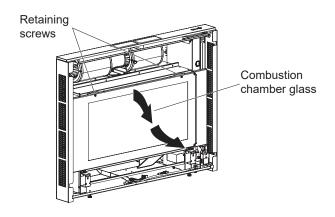




Remove combustion chamber glass

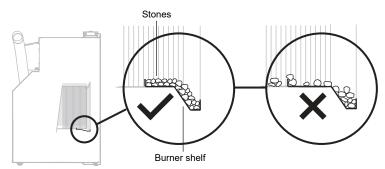
Before the burn media can be installed the combustion chamber glass panel needs to be removed.

- 1. Remove the two retaining screws that secure the combustion chamber glass panel to the heater engine.
- 2. Rotate and lift the combustion chamber glass clear of the combustion chamber and place in a safe location until required.



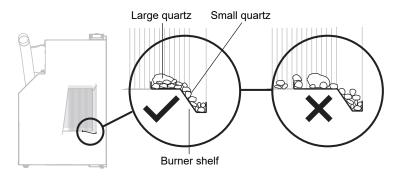
Small black stone installation

Place stones in the gap between the retaining wall and the stainless steel burner shelf until it has been completely filled. Place remaining stones evenly (AVOID any large gaps) onto the burner shelf. DO NOT place the stones onto the burner plates.



Large and small white quartz installation

- 1. Place the six large quartz pieces evenly along the centre of the burner shelf.
- 2. Place the small quartz pieces in the gap between the retaining wall and the burner shelf until it has been completely filled, AVOID any large gaps.
- 3. Place the remaining small quartz pieces evenly around the six large quartz pieces on the burner shelf. DO NOT place the quartz onto the burner plates.

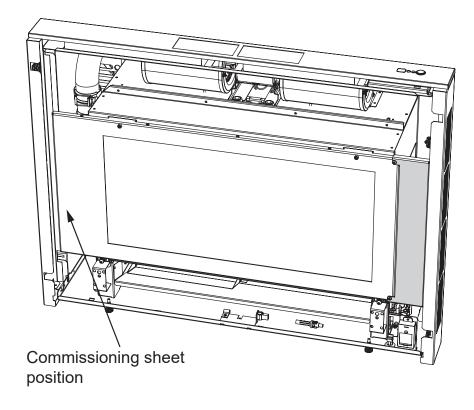


Commissioning

The gas pressures of the appliance are factory preset for direct flue installations and will normally not require adjustment.

For all Arriva flueing EXCEPT direct flueing, the appliance must be down rated as per the instructions on the commissioning sheet. The commissioning sheet is located in a plastic pouch behind the removable access panel on the combustion chamber glass panel, as shown below.

Follow the commissioning instructions, and ensure correct operation of the appliance.

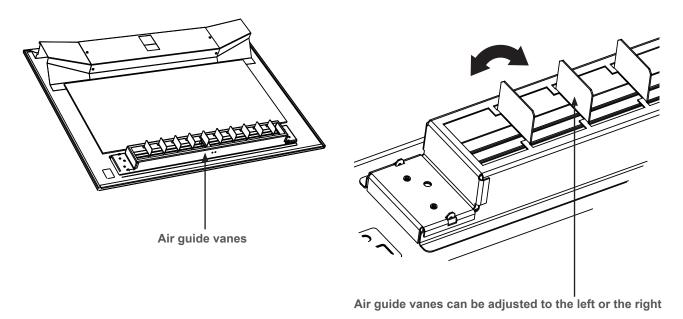


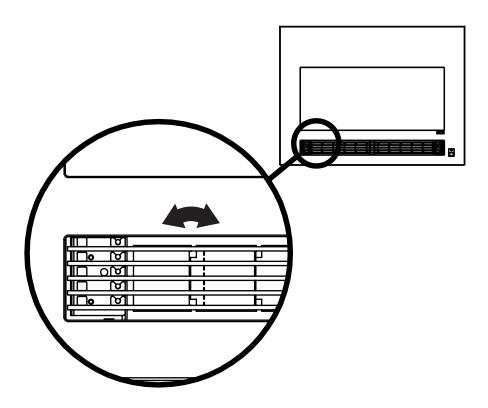
Setting the air guide vanes

The air guide vanes allow the installer to set and adjust the horizontal air flow distribution of the appliance. These are not to be confused with the horizontal louvres that determine the direction of the vertical flow—these are fixed and cannot be adjusted.

The air guide vanes can be adjusted by carefully bending to the left or right using a screwdriver.

- Do not adjust the vanes more than five times as this may cause the metal to fracture and/or break
- Do not attempt to adjust the air flow direction while the appliance is operating or still hot as this could result in a burn injury





Front panel installation

The front panel of the Arriva 752 is fully assembled and packaged in a separate carton. Always inspect the glass for any chip or obvious sign of damage before installation. Care is required when handling—no sudden impact or excess force should be applied.

Glass panels

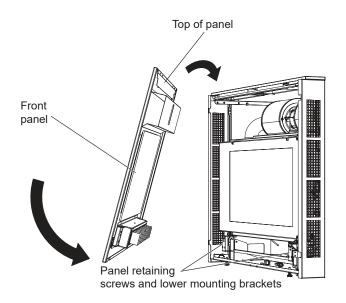
Always wear gloves and safety glasses.

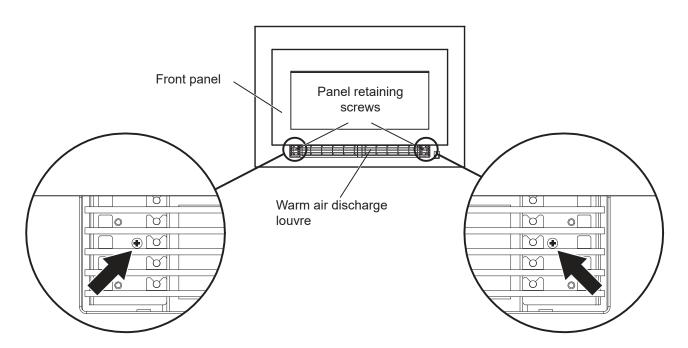
Installing the front panel

Remove and put aside the two panel retaining screws from the lower panel mounting brackets of the Arriva engine.

Mount the panel by hooking the top of the panel to the body and rotating the bottom in towards the engine body.

Using the panel retaining screws, secure the panel to the heater engine through the front of the warm air discharge louvre.





Testing operation and lighting sequence

It may take approximately two hours of operation for the burn media to achieve their full flame pattern and glow. During the initial burning in period, some smoke and smell may be experienced. The appliance should run on the high setting in a well ventilated room until these dissipate. It is important to check the flame pattern during this time.

Abnormal flame pattern

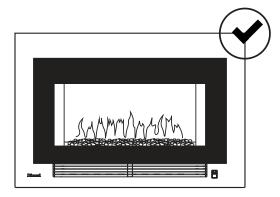
Abnormal flame performance and/or pattern can indicate a problem with your fire, such as blocked gas injectors, or that the burn media has shifted. There are some warning signs that could indicate a problem.

- Unusual smell from the appliance
- Continued difficulty or delay in establishing a flame
- 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

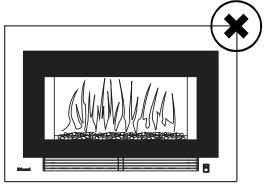
Important

It is the responsibility of the installer to check that under normal 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.

If the appliance cannot be made to perform correctly please contact Rinnai.



Normal flame pattern



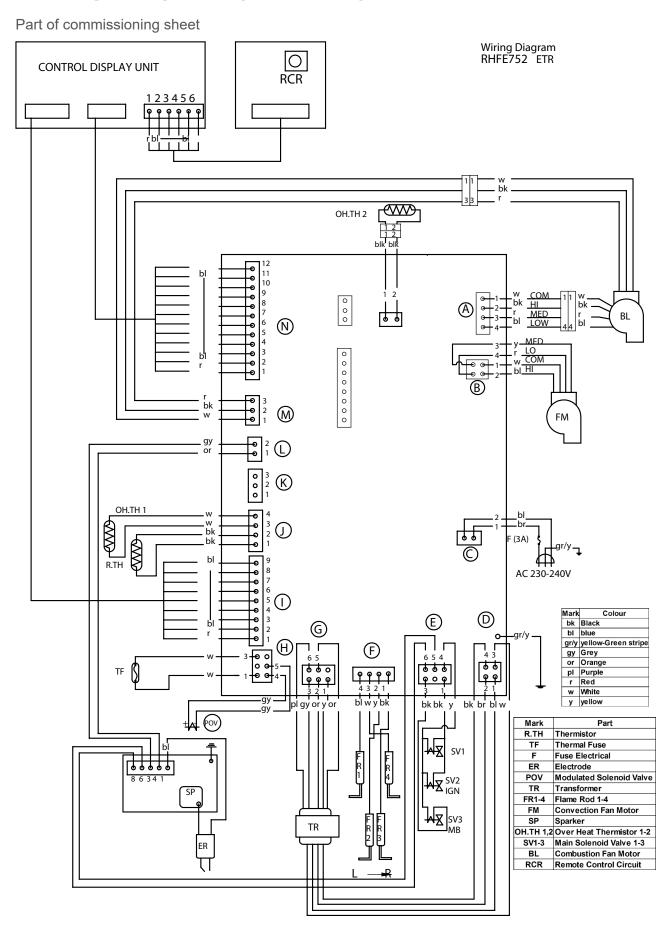
Abnormal flame pattern

Installation checklist and customer handover

Complete the installation checklist in the customer operation guide, and make sure you leave the guide with the customer. Take the time to explain to the customer about the use and care of the unit, and that they understand the instructions.



Wiring diagram (12258-A)



Arriva flueing

Every gas fire requires a flue system that will draw effectively and clear flue products safely under all potential wind and climatic conditions. It is the responsibility of the installer to ensure the appliance is provided with an effective flue.

Some guidelines to assist with flue design are detailed in this guide. These must be read and modified as necessary depending on the installation. The Arriva must be installed with an approved flue system, approved components are shown in this guide.

General flueing guidelines

Flue clearance to combustibles

- -- Flue transition (p. 9) 5 mm.
- -- Elbow component of the adaption flue kit (ASPKIT03) 25 mm.

All other Arriva flue components have zero clearance.

Flue cowl clearance

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

The flue cowl should have a 500 mm clearance from any part of the building. This also applies to steeped and pitched roofs where the flue cowl should be 500 mm clear of the ridge line. An adequate flow of fresh air must exist around the flue cowl following installation.

Minimum clearances are shown in AS/NZS 5601.1.

Flashings

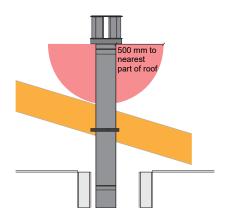
Flashings to top of chimney structure do not form part of the flue kit and must be specified.

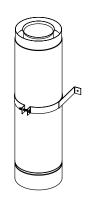
Flue support

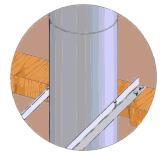
The weight of the flue system should not be supported by the appliance—it should be self-supporting. Supporting the flue is usually completed during the framing stage with flue supports or straps within the cavity.

Shared flues

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







Flueing options

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

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

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



Direct and direct extended flueing

Direct through-the-wall flueing for walls up to 385 mm thick (400 mm if using the Direct B flue kit). Flue can be extended if the wall thickness is greater than 385 mm by using the ASPDFK flue kit and additional lengths of ESPIPE900.

Direct

- Direct A flue (R2731), or
- Direct B flue (R2732), or
- Direct flue (ASPDFK)

Direct extended

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



Sideways flueing

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

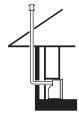
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- Wall terminal (ESWTERM)



Down and out flueing

Allows for the adaption flue kit to face downwards and for the flue to run vertically through a hole in the floor, and then terminate horizontally outside must be 300 mm above ground.

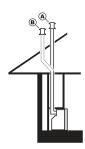
- Adaption flue (ASPKIT03)
- Flue pipe (ESPIPE900)*
- 45° bends (ESBEND)
- Wall terminal (ESWTERM)



Through-wall vertical flueing

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

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



In-wall vertical flueing

Installed against an internal wall within a false fireplace or other suitable cavity, and is run vertically towards a vertical termination.

A - Vertical

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

B - Vertical offset

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

^{*} Installer to advise quantity required

Arriva flue components

Direct A flue kit

R2731 (stainless steel)

Suitable for walls 115-240 mm thick, typically weatherboard construction.

This is a complete kit with an inbuilt 2° fall to drain condensate, no other components are required.





Direct B flue kit

R2732 (stainless steel)

Suitable for walls 240-400 mm thick, typically block construction.

This is a complete kit with an inbuilt 2° fall to drain condensate, no other components are required.



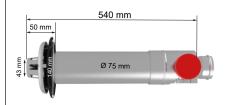


Direct flue kit

ASPDFK (aluminium)

Can be used as an alternative to the A and B flue kits, and is suitable for walls up to 385 mm (can be cut to length).

Can also be used in combination with ESPIPE900 for longer flueing. Flue terminal section is reusable when making flue longer.



Vertical terminal

ESROOFCOWL

Roof cowl and connecting pipe for termination of a vertical flue—can be cut to size.

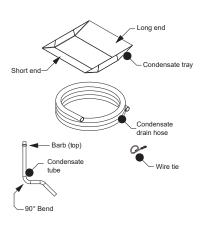
Galvanised steel, powder coated black.

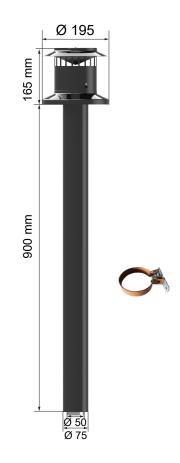
Arriva adaption flue kit ASPKIT03

Elbow section of this component (circled) requires a 25 mm clearance from combustibles, the rest is zero clearance.

Kit includes; flue transition (rotates), condensate trap, wall strap, drain tube (750 mm), silicone grease, and flue slide stopper (4822), R1970 sub-kit. R1970 is a sub-kit called the condensate drain kit. This is used for installations that require draining of condensate back into the heater.







Wall terminal kit **ESWTERM**

Used to terminate the ESPIPE900 in horizontal flue installations when used in conjunction with the ASPKIT03

Contains:

- External wall plate (black PVC)
- Flue terminal (aluminium)



45° flue bends (x2)

ESBEND

Two 45° bends used to facilitate between horizontal, vertical, and downwards flueing. Two spacers are included.

Can be used separately, or together as one 90° bend.



Wall plate

ESPLATE

Used if an extra wall cover is required to tidy an installation through the wall, ceiling, or floor.

Outer diameter 170 mm



Coaxial flue pipe 900 mm ESPIPE900

Extension pipe used to construct horizontal, vertical, and downwards flueing. Can be cut to size.

Inner is aluminium, and outer is white PVC plastic. Comes with one wall bracket, o-ring (4350), and spacer (4351).



Condensate trap **ESCONDK**

Supplied with a 750 mm drain tube (not pictured).

ONLY ordered as a separate item if doing through-wall vertical flueing (as pictured).



Steel flue guard (warm white) R1370

Protection against hot flue gases when the termination is low to the ground. Colour - warm white.

- 220 x 220 mm (wall plate)
- Ø 146 mm



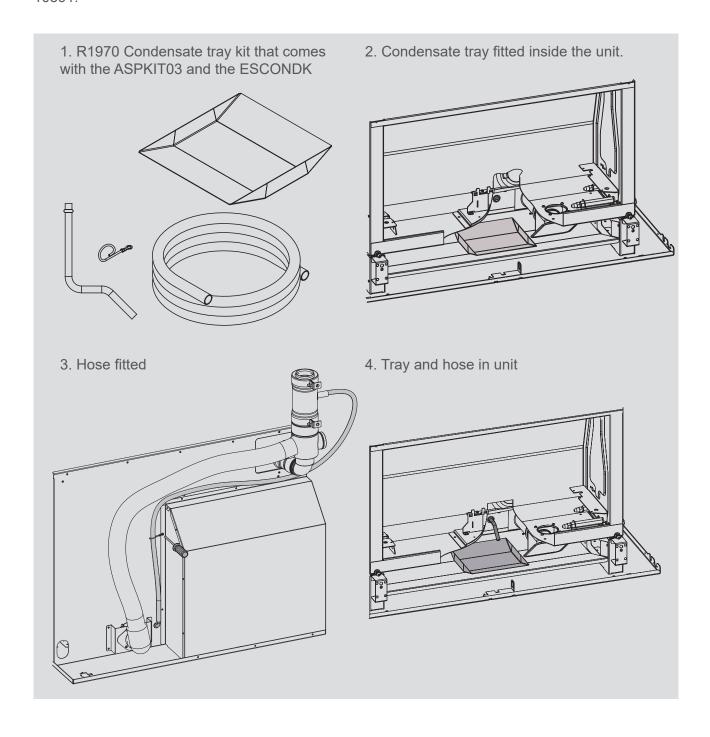




Arriva 752 - fitting the condensate kit

The below illustrations provide an overview of how the condensate is fitted. It is required for all installations using the Arriva adaption flue kit (ASPKIT03) or the condensate trap component (ESCONDK).

Detailed instructions are provided with the ASPKIT03 and the ESCONDK, instructions part number 10591.



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