

# Specification guide Gas fireplaces

# Important

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#### Help is here

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We are proud of being New Zealand's largest provider of industry online learning, giving vital advice and support to technical institutes and other learning organisations, as well as all the people involved in selling, specifying, and installing Rinnai product.

There is online training available for Rinnai gas fireplaces with new courses being uploaded regularly.

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**Gas fireplace range** Rinnai gas fires are designed and made in New Zealand. Blending functionality and style, a Rinnai gas fireplace will be the focal point in any room.



	Suitable for	Flue type	Input	Output	Efficiency on high
Evolve 952		Power flue	10-34 MJ/h	2.4-8.1 kW	86%
Evolve 1252		Power flue	10-34 MJ/h	2.4-8.4 kW	88%
Symmetry RDV361		Direct vent	19-33 MJ/h	3.8-7.5 kW	80%
		Power flue	8-31.5 MJ/h	1.8-7.0 kW	85%
Ember 600		direct vent	12-23 MJ/h	2.5-5.0 kW	77%
Ember 700		Direct vent	14-27 MJ/h	3.0-6.0 kW	77%
Neo Inbuilt		Natural draft	14-30 MJ/h	2.98-6.94 kW	80%
Neo Freestander		Natural draft	14-30 MJ/h	2.98-6.94 kW	80%
Compact 2		Natural draft	9-25 MJ/h	1.6-5.0 kW	73%

Flue type:

Refer to p. 72 for further details Input, output, efficiency: Will vary depending on gas type and flue configuration

mote	Heating area	LPG runnin on low	ig costs per hr. on high	NG runnir on low	ig costs per hr on high
*   	82-125 m <sup>2</sup>	\$ 0.46	\$ 1.57	\$ 0.36	\$1.21
* •	84-130 m <sup>2</sup>	\$ 0.46	\$ 1.57	\$ 0.36	\$1.21
	75-116 m <sup>2</sup>	\$ 0.88	\$1.53	\$ 0.67	\$1.17
	70-108 m <sup>2</sup>	\$ 0.36	\$1.46	\$ 0.28	\$1.12
* • •	55-85 m <sup>2</sup>	\$ 0.56	\$1.06	\$ 0.43	\$ 0.82
2	65-99 m <sup>2</sup>	\$ 0.65	\$1.25	\$ 0.50	\$ 0.96
* •	69-107 m <sup>2</sup>	\$ 065	\$1.39	\$ 0.50	\$ 0.96
* •	69-107 m <sup>2</sup>	\$ 0.65	\$1.39	\$ 0.50	\$ 0.96
	50-77 m <sup>2</sup>	\$ 0.42	\$1.16	\$ 0.32	\$ 0.89

Heating area: Running costs:

Will depend on where you live in NZ, refer p. 7 for more information Based on \$105 per 45 kg LPG bottle and \$0.1279 per kWh for NZ, refer p. 73 for more information

## **Cavity dimensions - will it fit?**

Often the choice of gas fire is determined by an existing space or how big the cavity size needs to be. Below is a summary of the cavity size needed for each Rinnai gas fire.

#### **Existing masonry fireplace**



• For the Ember the chimney needs to be at least 200 x 200 mm to fit the two flexi flues.

Model	Width (mm)	Height (mm)	Depth (mm)
Ember 600	600	600	400 min.
with infill panel	600-750	600-675	
Ember 700	700	600	400 min.
with infill panel	700-850	600-675	
Neo Inbuilt	695	600	370 min.
with infill panel	695-1010	600-730	
Compact 2	595-700	550-630	360 min.
with infill panel	595-1010	550-730	

#### Infill panels

Cavity dimensions can be larger if an infill panel is used. This panel, purchased as an accessory, is for when the cavity is larger than the frame. The panel will cover the gap behind the fire/frame.

For example:

The Ember 600 can be installed into a cavity with a width of up to 750 mm and a height of up to 675 mm if an infill panel is purchased.

#### Mock chimney - combustible opening



Model	Width (mm)	Height (mm)	Depth (mm)
Evolve 952	965-980	570-580	570 min.
Evolve 1252	1265-1280	570-580	570 min.
Symmetry	1100-1125	850 min.	540 min.
Arriva 752	850-860	660-665	380 direct flue* 475 extended flue* 500 underfloor flue*
Ember 600	700	700	400 min.
Ember 700	800	700	400 min.
Neo Inbuilt	800	655	370 min.
Compact 2	685	615	380 min.

#### \* Arriva 752 flueing

The type of flue configuration will determine how much depth is needed, refer p. 22 for further details.

#### S\* Symmetry heat transfer kit

If installing a Symmetry heat transfer kit, allow for a 250 mm side clearance per kit. This is required to ensure the ducting does not come into contact with the fire.

## **Choosing the right gas fire**

Geographical location, room size, room insulation, running costs, functionality, and design all play a part in choosing the right gas fire.

#### **Geographical location**

Where you live in New Zealand can determine the type of heating solution you choose. Use the diagram to work out which climate zone you are in.

#### Room size

Consider the whole area you need to heat. This should include adjacent rooms through permanently open doorways and hallways.

#### Heat loss

Heat loss factors include:

- no ceiling or wall insulation
- no carpets on floors
- no curtains
- window area > 15 m<sup>2</sup>
- ceiling height > 2.4 m<sup>2</sup>
- building on poles or piles

#### **Running costs**

Upfront purchase costs should be considered in conjunction with the ongoing running costs of a heating solution.

#### Functionality vs. aesthetics

Additional considerations are functionality, the size and look of the gas fire, and where it is likely to be installed.

#### Location considerations

It's important to review the clearance and suitability information for each Rinnai gas fire as this will provide a guide as to where it may be positioned. This information can be found within the product pages of this guide.



**HEATING AREA** (based on a standard ceiling height of 2.4 m)

Gas Fireplace	Warm zone	Medium zone	Cool Zone
Evolve 952	125 m <sup>2</sup>	111 m <sup>2</sup>	82 m <sup>2</sup>
Evolve 1252	130 m <sup>2</sup>	114 m <sup>2</sup>	84 m <sup>2</sup>
Symmetry RDV3611	116 m <sup>2</sup>	102 m <sup>2</sup>	75 m <sup>2</sup>
Arriva	108 m <sup>2</sup>	95 m <sup>2</sup>	70 m <sup>2</sup>
Neo	107 m <sup>2</sup>	93 m <sup>2</sup>	69 m <sup>2</sup>
Ember 700	99 m <sup>2</sup>	87 m <sup>2</sup>	65 m <sup>2</sup>
Ember 600	85 m <sup>2</sup>	74 m <sup>2</sup>	55 m <sup>2</sup>
Compact 2	77 m <sup>2</sup>	68 m <sup>2</sup>	50 m <sup>2</sup>

As an estimate you can make the following deductions from the heating areas shown for specific heat loss factors .

If you have:	Deduct above heating area by:
No ceiling insulation	10%
Wooden floor (not concrete slab)	5%
No carpets	5%
No curtains on single-glazed windows	5%
No curtains on single-glazed windows, area exceeding 15 m <sup>2</sup>	10%
Ceiling height 2.5-2.8 m	3%
Ceiling height 2.8-3.0 m	5%
Ceiling height 3.0 m +	7%

For example: The Evolve 952 will heat 125  $m^2$  (warm zone). If there is no ceiling insulation this area reduces by 10% to become 112.5  $m^2$ .

# **TV installation above a fireplace**

If installing a flat screen TV above a fire, the main issue is heat. Heat from the fire and heat from the flueing components that could be installed behind the TV (especially if recessed).

The Rinnai gas fires below all have a powerful fan that distributes warm air from the appliance out into the room. As warm air is dispersed outwards, as opposed to directly upwards, installation of a TV may be an option.

Models with a powerful fan:

- Arriva 752
- Evolve 952/1252
- Symmetry RDV3611
- Ember 600/700
- Neo

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

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

We do not recommend installing a TV above the Compact 2, refer note below.

#### Always check with the TV manufacturer

Some television warranty conditions state that a TV is not to be installed above a fireplace always check with the TV manufacturer beforehand.

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





**Installing a TV directly above the Compact 2 is not recommended** due to the heat being emitted directly above the fire (especially when the fan is not operational), and also due to the heat being generated from the flue.

Rinnai gas fireplaces Product specification pages

## Evolve 952/1252 specification



Inbuilt power flued convection fan heater. Operated using a simple infra-red remote. Different burn media options available—river stones or silky oak log set.

#### Specification summary

Input	= 10-34 MJ/h
Output 952	= 2.4-8.1* kW
Output 1252	= 2.4-8.4* kW
Efficiency 952	= 86% (on high)
Efficiency 1252	= 88% (on high)
Heating area 952	= 82-125 m <sup>2**</sup>
Heating area 1252	= 84-130 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

#### 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 Evolve is ideal for a new build installation into a false (mock) chimney.

#### Installation considerations

Room size—smaller rooms will heat up quickly, and due to the efficiency of the appliance, the Evolve will turn to a low flame setting once the set temperature has been reached.

For efficient performance Rinnai recommends installing the fire as close to the floor as possible. If the unit is installed higher up the wall the movement of air from the convection fan, depending on the room configuration, could create draughts.

#### **Convection fan**

3-speed fan. Heat is distributed from the top of the appliance.

#### Data plate

Located inside the appliance, upper right hand side.

#### Gas connection

 $\frac{1}{2}$  " BSP, the gas supply terminates inside the unit—lower left hand side of the appliance.

#### Ignition

Continuous spark electronic ignition.

**Noise level -** 37-45 dB(A)

#### **Power flue**

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

#### Power consumption/electrical supply

High	= 90 W
Standby	= <8 W

This heater has a 1.5 m power cord with a three pin plug supplied. The power cord passes through a slot in the back left hand corner of the appliance.

#### Safety devices

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

#### **Temperature control**

Operated using a simple infra-red remote with the following functions:

- On/off
- Flame height and fan speed up and down



The temperature sensor is located in the bottom of the remote.

#### Weights

<ul> <li>Evolve 952</li> </ul>	75 kg
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• Evolve 1252 100 kg

## **Evolve 952/1252** dimensions (mm)

### Evolve 952





Evolve 1252



## Evolve 952/1252 positioning

#### Framing dimensions

The main points governing location are flueing and warm air distribution. The Rinnai Evolve 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.

	952	1252
W-width	965-980 mm	1265-1280 mm
H-height	570-580 mm	570-580 mm
D-depth	570 mm min.	570 mm min.



#### Clearances

The clearances, measured from the edge of the glass, are the minimum clearances unless otherwise stated. **Please note:** The 400 mm side clearance includes side walls.

The Evolve must not be installed where curtains or other combustible materials could come into contact with the unit while it is operating.

#### Mantels and surrounds

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

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

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

For example:

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



# **Evolve 952/1252** burn media, frames, and accessories



# Silky oak log set 952 code: R2781 (8 log pieces) 1252 code: R2783 (10 log pieces)

Designed to look like split logs.



**River stones** 952 code: 1252 code:

R2780 (30 stones) R2782 (40 stones)

A mix of white and grey ceramic stones.



 Black frame

 952 code:
 R2704

 1252 code:
 R2706

Black powder coated metal inner and outer frame.



Stainless steel on black frame952 code:R27051252 code:R2707

Stainless steel inner frame, and black powder coated metal outer frame.



**1252 black reflector panel kit**952 code:Not available for this model1252 code:R2787

Black enamel reflector panels. Enhances the flame picture by producing a mirror image of the flames in the side panels.



Mesh guard	(black)
952 code:	R2778
1252 code:	R2788

Designed to protect against touching the hot surface of the glass. Sits flush with the inner frame, which holds it in place.

# **Evolve 952/1252** flueing options

#### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

### Important

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

One 90° bend is 1 m. For every 90° bend the overall length must be reduced by 1 m. For example, if an installation has three 90° bends, the maximum length can be 5.5 m. The adaption flue (EVOKIT03) 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.



I	<b>Direct and direct extended flueing</b> Direct through-the-wall flueing for walls up to 385 mm thick. Flue can be extended if the wall thickness is greater than 385 mm by using the ASPDFK flue kit and additional lengths of ESPIPE900.	Direct - Direct flue (ASPDFK) Direct extended - Direct flue (ASPDFK) - Flue pipe (ESPIPE900)*
	<b>Sideways flueing</b> The sideways flue installation can run along the left or right hand side of an internal wall behind the unit. When considering the location of the fire ensure the flue path is free from obstructions such as studs, noggins, wiring, joists etc.	- Adaption flue (EVOKIT03) - Flue pipe (ESPIPE900)* - Wall terminal (ESWTERM)
]	<b>Down-and-out flueing</b> The down-and-out flue option allows for the adaption flue kit to face downwards and for the flue to run vertically through a hole in the floor, and then terminate horizontally outside (must be 300 mm above ground).	- Adaption flue (EVOKIT03) - Flue pipe (ESPIPE900)* - 45 ° bends (ESBEND) - Wall terminal (ESWTERM)
	<b>Through-wall vertical flueing</b> 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)
	<b>In-wall vertical flueing</b> The vertical in-wall flue installation is installed against an internal wall within a false fireplace or other suitable cavity, and is run vertically upwards to a vertical or horizontal termination point.	A: Direct - Adaption flue (EVOKIT03) - Flue pipe (ESPIPE900)* - Roof cowl (ESROOFCOWL) B: Offset - Adaption flue (EVOKIT03) - Flue pipe (ESPIPE900)* - 45 ° bends (ESBEND) - Roof cowl (ESROOFCOWL)

- Roof cowl (ESROOFCOWL)

C: Horizontal termination

- Adaption flue (EVOKIT03)
- Flue pipe (ESPIPE900)\*
- 45 ° bends (ESBEND)
- Wall terminal (ESWTERM)

#### \* Installer to advise quantity required

# **Evolve 952/1252** flue components

### Evolve adaption flue kit

Code: EVOKIT03

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).



#### Direct flue kit

Code: ASPDFK (aluminium)

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 the flue longer.



#### **Coaxial flue pipe 900 mm** Code: 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).



#### **45° flue bends (x2)** Code: ESBEND

Two 45° bends used to facilitate between horizontal, vertical, and downwards flueing. Two spacers are included. Refer next page for dimensions.

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



### Vertical terminal

Code: ESROOFCOWL

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

Galvanised steel, powder coated black.



#### Wall terminal kit Code: ESWTERM

Used to terminate the ESPIPE900 in horizontal flue installations when used in conjunction with EVOKIT03.

#### Contains:

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



## **Evolve 952/1252** flue components continued

Wall plate Code: ESPLATE

Used if an extra wall cover is required to tidy any installation through the wall, ceiling, or floor. Outer diameter 170 mm.

#### Steel flue guard (warm white) Code: R1370

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

- 220 x 220 mm .
- Ø 146 mm

#### Condensate trap Code: ESCONDK

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

ONLY ordered as a separate item if doing through-wall vertical flueing, refer p. 14.







Photo showing what the wall terminal of the ASPDFK looks like coming out of a wall



Photo of 45 ° bends joined to 900 mm flue pipes, and dimensions diagram for two 45 ° bends joined





Photo of the ASPDFK direct flue kit components



Steel flue guard





Vertical terminal

## **Evolve 952/1252** ordering guide

		Evolve 952	Evolve 1252
. Select <b>gas type</b> (engine)	Evolve engine <b>NG</b>	RHFE952N	RHFE1252N
	Evolve engine LPG	RHFE952L	RHFE1252L
Supplied with the engine is the re	emote control with batteries, screw pac		
x3), and gas connection.			
2. Select <b>frame</b> option	Black frame Stainless steel on black	R2704 R2705	R2706 R2707
3. Select <b>burn</b> media	River stones	R2780	R2782
	Oak log set	R2781	R2783
Burn media sets cannot be interc	hanged between the 952 and 1252. The	l 1252 log set has an extra two logs	and the stone set contains an
4. Select <b>flue</b> components			
	Direct flue kit	ASPDFK	ASPDFK
	Evolve adaption flue kit	EVOKIT03	EVOKIT03
	Vertical terminal (roof cowl)	ESROOFCOWL	ESROOFCOWL
	Flue pipe 900 mm	ESPIPE900	ESPIPE900
60	Wall terminal kit	ESWTERM	ESWTERM
	45° flue bends (two in a kit)	ESBEND	ESBEND
Õ	Wall plate	ESPLATE	ESPLATE
	Steel flue guard	R1370	R1370
<b>•</b>	Condensate trap	ESCONDK	ESCONDK
The condensate trap is included scommon).	l with the EVOKIT03. It only needs to be a	l ordered separately if doing throu	l gh-wall vertical flueing (not
5. Select <b>optional</b> accessor	ies		
	Black mesh guard	R2778	R2788
	1252 black reflector panel kit	-	R2787
deally the mesh guard and/or re he installation.	l flector panel kit should be purchased at	the same time as the Evolve unit	as a gasfitter is required to do

## Arriva 752 specification



Inbuilt power flued convection fan heater 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
Output	= 1.8-7.0 kW*
Efficiency	= 79-89%
Heating area	= 70-108 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

#### 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

The Arriva is not suitable for smaller rooms. This is due to the efficiency of the appliance. Smaller 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 appliance.

#### Data plate

Inside the appliance, upper right hand side, beside the convection fan.

#### Gas connection

1/2 " BSP male flare barrel union, lower right hand side of appliance.

#### 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 and electrical supply

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

Comes with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the right hand side of the appliance.

#### 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 control range 16-26 °C.

Weight: 70 kg

## Arriva 752 dimensions (mm)



# Arriva 752 positioning

#### 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.

	Arriva 752
W-width	850-860 mm
H-height	660-665 mm
D-depth	380 mm direct flue, 475 mm extended flue, 500 mm underfloor flue



#### Clearances

The clearances, measured from the edge of the glass, are the minimum clearances unless otherwise stated. **Please note:** The 400 mm side clearance includes side walls.

The Arriva must not be installed where curtains or other combustible materials could come into contact with the unit while it is operating.

#### Mantels and surrounds

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

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

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

For example:MANTEL DEPTHA: CLEARANCE REQUIRED300 mm500 mm350 mm600 mm400 mm700 mm



## Arriva 752 frame and burn media options



## Arriva 752 flueing options

#### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

#### Important

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

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

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



Direct and direct extended flueing
 Direct through-the-wall flueing for walls up to
 385 mm thick (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 extended

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



#### Sideways flueing

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



#### Down-and-out flueing

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



#### 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.

#### In-wall vertical flueing

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

#### A: Direct

- Adaption flue (ASPKIT03)

- Adaption flue (ASPKIT03)

- Wall terminal (ESWTERM)

Adaption flue (ASPKITO3)Flue pipe (ESPIPE900)\*

- Wall terminal (ESWTERM)

- 45° bends (ESBEND)

- Direct flue (ASPDFK)

- 45 ° bends (ESBEND)- Flue pipe (ESPIPE900)\*

- Condensate trap (ESCONDK)

- Roof cowl (ESROOFCOWL)

- Flue pipe (ESPIPE900)\*

- Flue pipe (ESPIPE900)\*
- Roof cowl (ESROOFCOWL)

#### **B: Offset**

- Adaption flue (ASPKITO3)
- Flue pipe (ESPIPE900)\*
- 45 ° bends (ESBEND)
- Roof cowl (ESROOFCOWL)

#### C: Horizontal termination

- Adaption flue (ASPKITO3)
- Flue pipe (ESPIPE900)\*
- 45 ° bends (ESBEND)
- Wall terminal (ESWTERM)

\* Installer to advise quantity required

## Arriva 752 flue components

#### Direct A flue kit

Code: 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** Code: 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.

240-400 mm wall thickness

eter - 140 mm

inal dian

115 mm



#### Arriva adaption flue kit Code: ASPKITO3

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.



**Direct flue kit** Code: 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** Code = ESROOFCOWL

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

Galvanised steel, powder coated black.



## Arriva 752 flue components continued

### Wall terminal kit

Code: 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)** Code: 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 (refer p. 16 for dimensions).

## spacers are through the wall, ceiling, or floor. Outer diameter 170 mm.

Wall plate

Code: ESPLATE

Used if an extra wall cover

is required to tidy any installation



#### **Coaxial flue pipe 900 mm** Code = 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** Code: ESCONDK

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

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







#### **Steel flue guard (warm white)** Code: 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 ordering guide

1. Select <b>gas type</b> (engine)		
	Arriva 752 engine <b>NG</b>	RHFE752ETRN
	Arriva 752 engine <b>LPG</b>	RHFE752ETRL
Supplied with the engine is the re flue clamping bracket (for direct <i>i</i>	mote control and batteries, screw pack, cable tie, frame moun A/B flues).	ting screws, gas connection, and
2. Select <b>frame</b> option		
Summer	Flat black frame Flat stainless steel frame	R2711* R2712*
Landaux.	Stainless on black frame Black on black frame	R2713** R2714**
	Stainless on stainless frame Black on stainless frame	R2715** R2716**
* The flat frames are supplied as a	single frame ** Supplied in two pieces—inner and outer fr	ame
3. Select <b>burn</b> media		
	Arriva 752 black pebbles	R2740
at a	Arriva 752 white quartz	R2741
4. Select <b>flue</b> components		
d) u <del>nun (</del> Si	Direct A flue kit (walls 115-240 mm)	R2731
	Direct B flue kit (walls 200-400 mm)	R2732
	Direct flue kit (walls up to 385 mm)	ASPDFK
goile . 100	Adaption flue kit	ASPKIT03
	Vertical terminal (roof cowl)	ESROOFCOWL
	Flue pipe 900 mm	ESPIPE900
00	Wall terminal kit	ESWTERM
	45 ° flue bends (two in a kit)	ESBEND
Ó	Wall plate	ESPLATE
	Steel flue guard	R1370
(ie)	Condensate trap	ESCONDK
The condensate trap is included in	h the ASPKIT03. It only needs to be ordered separately if doing	through-wall vertical flueing (not

The condensate trap is included in the ASPKITO3. It only needs to be ordered separately if doing through-wall vertical flueing (not common).

## Symmetry RDV3611 specification



A direct vent (natural draft) inbuilt gas fire with a glass front and convection fan. Operated with a remote control (7-day programmable timer). Different frame options available.

#### **Specification summary**

Input	= 19-33 MJ/h
Output	= 3.8-7.5 kW*
Efficiency	= 80%
Heating area	= 75-116 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

#### Suitability

Suitable for living rooms and open plan areas.

Recommended for a new build installation into a mock (false) chimney. It is not suitable for retrofitting into an existing masonry fireplace.

#### Room size consideration

Smaller rooms will heat up quickly, and due to the efficiency of the appliance, the heater will turn off once the set temperature has been reached.

#### Installation considerations

Maximum flue height is 5.4 m.

#### **Burn media**

Driftwood log set comes as standard.

#### **Convection fan**

Fan forced 2-speed convection fan (low and high). Heat is distributed from the top of the appliance.

#### Data plate

Centre front of base panel, behind the service panels.

#### **Gas connection**

 $\frac{1}{2}$  " BSP male flare. This connects straight into the gas control on the lower left hand side of the unit.

#### Ignition

Integrated sparker to pilot.

#### Noise level: 37-45 dB(A)

#### Flue

Inner 100 mm, outer 170 mm.

Appliance must be installed with a Rinnai flue system.

#### Power consumption and electrical supply

High = 50 W Standby = <1W

Comes with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the right hand side of the appliance.

#### Safety devices

Light to pilot, delayed ignition, overheat switch, electronic flame failure supervision, and combustion chamber relief.

#### Temperature control

Thermostat control. Temperature control range 7-32 °C. The lower temperature range is for cooler climates where the room temperature could fall below 7 °C.

Weight: 60 kg

## Symmetry RDV3611 dimensions (mm)

#### Standard metal frame outer dimensions



#### Premium metal frame outer dimensions





## Framing dimensions

The main points governing location are flueing and warm air distribution. The Symmetry 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.

#### S - side clearance

If installing a Symmetry heat transfer kit allow for a 250 mm side clearance per kit. This additional clearance is required to ensure the ducting does not come into contact with the fire.



 W-width:
 1100-1125 mm

 H-height:
 850 mm min.

 D-depth:
 540 mm min.

## Symmetry RDV3611 positioning

#### **Corner installations**

This diagram highlights the minimum dimensions required. Refer previous page for height dimension and note on side clearances if installing the Symmetry heat transfer kit.



#### Clearances

The clearances, measured from the edge of the glass, are the minimum clearances unless otherwise stated. **Please note:** The 400 mm side clearance includes side walls.

The Symmetry must not be installed where curtains or other combustible materials could come into contact with the unit while it is operating.



#### Mantels and surrounds

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

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

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

#### For example:

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



## **Symmetry RDV3611** frames and accessories



**Black frame** Code: R3601GL

Black inner and outer metal frame.



Satin chrome frame Code: R3601SC

Satin chrome inner and outer metal frame.



**Blk. on blk. premium flat frame** Code: R3602

Flat black inner and outer metal frame.



**SS on blk. premium flat frame** Code: R3603

Flat stainless steel inner and black outer metal frame.



**Symmetry dress guard** Standard frame: R3610GL Flat frame: 13626

Black integrated mesh—to prevent from touching the surface of the hot glass.



**Ducting floor grille** Code: R3627

For installations where heat is being transferred through the floor— ordered in addition to the 9 m kit.



**Granite frame** Code: R3620

Black granite surround. Supplied in four pieces. Kit includes the black inner frame.



Reflective side panel kit Brushed stainless: R3617 Mirrored finish: R3618

Enhances the flame picture of the fire. Fitted when fire is installed.



Flame media rockwool pack Code: R3605

Fine ceramic fibres that emit a glow to look like burning embers. Works with the log set to enhance the glow of the flame.



Inner frames only Black inner: 13621GL Satin chrome inner: 13621SC

Inner frame for frameless installations. Not available for the premium flat frames, refer note on p. 35.



**Heat transfer kit 9 m** Code: R3626

Transfers up to 1 kW of heat to one additional room—one kit per room.

Maximum of two kits can be connected.

Grille provided is a ceiling grille.

- Ceiling grille: 160 x 160 mm
- Ducting: Inner diam. 150 mm Outer diam. 200 mm
- Chain: Hanging chain for fan 2 m

# Symmetry RDV3611 flueing options vertical termination



Maximum number of 45° bends = 2

Maximum number of 90° bends = 2

# Symmetry RDV3611 flueing options horizontal termination



Maximum number of 90° bends = 1

## **Symmetry RDV3611** flue kits and components (can't be cut to size)



The above drawings explain the components, dimensions (mm), and appropriate flue kits available for differing horizontal flue installations. Refer to the table below to calculate what flue pipe length and/or kit you may need.

Distance from the appliance to the cowi		
Flue Kit	Horizontal flue	D
	230 mm pipe	560-675 mm
Short A	300 mm pipe	635-750 mm
Long B	230 mm pipe x 2	745-860 mm
	300 mm + 230 mm pipe	825-940 mm
	300 mm pipe x 2	895-1010 mm

Distance from the appliance to the cowl

• Adjust the distance by sliding the cowl on the pipe

• At its maximum position the cowl should still keep a 45 mm overlap.

#### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

#### Flue kit horiz. short - A Code: R3660

RDV3611 short horizontal flue kit. 635-750 mm frame to outside wall.

Contains; flue pipe 900 mm, 90 ° elbow, flue pipe 300 mm, horizontal flashing kit, and wall terminal.



### RDV3611 flue elbow 90 °

Code: R3643

Used to facilitate between vertical and horizontal flueing. Elbow swivels 360 ° at base. Angle not adjustable.

Once joined effective length reduces 35 mm to approx. 130 mm.

Inner: Aluminium (Ø 100 mm) Outer: Galvanised steel (Ø 170 mm)



Flue kit horiz. long - B Code: R3661

RDV3611 long horizontal flue kit. 745-860 mm frame to outside wall.

Contains; flue pipe 900 mm, 90 ° elbow, flue pipe 230 mm x 2, horizontal flashing kit, and wall terminal.



#### **RDV3611 flue elbow 45 ° (x2)** Code: R3642

Offsets obstructions. Elbow swivels 360 ° at base. Angle not adjustable. Kit contains two 45 ° bends.

Once joined effective length reduces 35 mm to approx. 73 mm.

Inner: Aluminium (Ø 100 mm) Outer: Galvanised steel (Ø 170 mm)

Refer p. 45 for offset dimensions with different flue pipe lengths.



#### Flue kit vertical 3.6 m Code: R3665

Contains:

- Flue pipe 1.2 m (x3)
- Wall straps (x2)
- Roof cowl



#### RDV3611 flue pipes

150 mm:	R3630
230 mm:	R3631
300 mm:	R3632
450 mm:	R3633
600 mm:	R3634
900 mm:	R3635
1200mm:	R3636

Pipe used to construct horizontal and vertical flueing. Cannot be cut to size. Once joined nominal length reduces approximately 35 mm.

Inner:	Aluminium (Ø 100 mm)
Outer:	Galvanised steel (Ø 170 mm)



## **Symmetry RDV3611** flue kits and components continued (can't be cut to size)

#### Flue extension

75-175 mm: 75-360 mm:

n: R3638 m: R3639

Used for extended straight lengths of flue. Cannot be cut to size.

Available in two lengths:

- extending to 175 mm, or
- extending to 360 mm.

Inner: Aluminium (Ø 100 mm) Outer: Galvanised steel (Ø 170 mm)



Roof cowl Code: R3651

Aluminium flue terminal required for all vertical flue installations.



Wall flue strap Code: R3647

Adjustable strap used in installations to add lateral support to the flue. Provides a 50-200 mm clearance to combustible walls.



#### Horizontal flashing kit

Code: R3646

Flashing components used to join the internal flue to the outside flue—to provide a weathertight seal in horizontal flue installations.

Refer horizontal wall terminal for installed dimensions. Box depth 100 mm.



#### **Thru-wall plate interior** Code: R3645

Interior through-wall plate for internal wall passes. Centres and ensures suitable clearances from combustibles.



**Elbow flue strap** Code: R3644

Flue support for elbow and offsets.



#### Horizontal wall terminal Code: R3650

Aluminium flue terminal required for all horizontal installations.

Depth with horizontal flashing kit installed - 252 mm



What a horizontal wall terminal looks like on the outside of a house.



## **Symmetry RDV3611** ordering guide

1 Select <b>ass</b>	<b>type</b> (engine)	
	Symmetry RDV3611 engine <b>NG</b>	RDV3611ETRN
	Symmetry RDV3611 engine <b>LPG</b>	RDV3611ETRL
remote control bracket and scree log set.	e engine is the remote contro mounting bracket, lintel space ews, flue restrictor, frame mou	ers, securing
2. Select <b>fran</b>		
. the	Black inner and outer frame	R3601GL
Lor	Satin chrome inner and outer frame	R3601SC
the .	Premium frame - black on black	R3602
LUN .	Premium frame - stainless on black	R3603
. Line .	Granite surround with black inner frame	R3620
	Black inner frame	13621GL*
	Satin chrome inner frame	13621SC*
not sell the pren sits proud of the	<b>f doing a frameless installat</b> nium inner flat frames as an op e wall and not flush like the star ty in connecting the CAT5 cabl	tion as the frame ndard frame. There
3. Select <b>flue</b>	kit and/or flue compone	ents
	Flue kit horizontal short - A*	R3660
() (J (M)	Flue kit horizontal short - B**	R3661
( • • Ü	Flue kit vertical 3.6 m	R3665
	Horizontal flashing kit	R3646
	Wall terminal	R3650
Ũ	Roof cowl	R3651
	Flue elbow 90 °	R3643
	Flue elbow 45 ° (two in a kit)	R3642

3. Select <b>flue kit</b> and/or <b>flue</b> components cont.		
( 0	Flue pipe 150 mm Flue pipe 230 mm Flue pipe 300 mm Flue pipe 450 mm Flue pipe 600 mm Flue pipe 900 mm Flue pipe 1200 mm	R3630 R3631 R3632 R3633 R3634 R3635 R3636
	Flue ext. 75-175mm Flue ext. 75-360mm	R3638 R3639
	Thru-wall plate interior	R3645
	Wall flue strap	R3647
0	Elbow flue strap	R3644

\*Flue kit horizontal short - A: 635-750 mm frame to outside wall \*\* Flue kit horizontal short - B: 745-860 mm frame to outside wall

#### 4. Select **optional** accessories

	Standard frame mesh guard	R3610GL
	Flat frame mesh guard	13626
	Reflective side panel kit - brushed SS	R3617
	Reflective side panel kit - mirrored finish	R3618
0 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ducting kit (one kit per room)	R3626
	Ducting floor grille (and transition boot)	R3627
1.6	Flame media rockwool pack	R3605

Ducting kit: If heat is being transferred through a floor grille instead of a ceiling outlet, the 'Ducting floor grille' will need to be ordered in addition to the heat transfer kit.

# Ember 600/700 specification



A direct vent inbuilt gas fireplace with a glass front and convection fan, pushing warm air from the top of the appliance. Operated using a simple infra-red remote. Different frame and burn media options available (stones or log set).

#### Specification summary

	600	700
Input (MJ/h)	12-23	14-27
Output (kW)*	2.5-5.0	3.0-6.0
Efficiency on high (%)	77	77
Heating area m <sup>2**</sup>	up to 85	up to 99
Gas type	NG or ULPG	NG or ULPG

\* Will vary according to gas type and flue configuration. \*\* Will vary depending on geographical location in NZ.

#### Suitability

Suitable for masonry installations and installations into a mock chimney in open plan areas and living rooms.

#### Data plate

Located on the lower RHS of the base panel in front of the gas control.

#### **Convection fan**

120 V AC 50 Hz 2-speed centrifugal blower.

#### Lighting

Halogen lamps 240 V 25 W x 2.

#### **Gas connection**

Brass ½ "BSPT male fitting, the gas supply terminates inside the heater—lower right hand side of the appliance.

#### Ignition

230-240 V AC 50 Hz high voltage electronic spark generation unit.

#### Installation considerations

Room size—smaller rooms will heat up quickly, and due to the efficiency of the appliance, the heater will turn to a low flame setting once the set temperature has been reached.

For efficient performance Rinnai recommends installing the fire as close to the floor as possible. If the unit is installed higher up the wall the movement of air from the convection fan, depending on the room configuration, could create draughts.

#### Noise level: 37-45 dB(A)

#### Flueing: Masonry

Colinear flexi flue, air intake Ø 75 mm, exhaust Ø 100 mm. Appliance must be installed with a Rinnai Ember flue system.

#### Flueing: False chimney

Colinear (air intake Ø 75 mm, exhaust Ø 100 mm) to coaxial direct vent flueing (inner Ø 100 mm, outer Ø 170 mm). Appliance must be installed with a Rinnai Ember flue system.

#### Electrical

This heater has a 1.5 m power cord with a three pin plug supplied. The power cord passes through a slot in the back left hand corner of the appliance.

- High = 110 W
- Standby = <1W

#### Safety devices

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

#### **Temperature control**

Operated using a simple infra-red remote with the following functions:

- On/off
- Flame height and fan speed up and down

The temperature sensor is located in the bottom of the remote.

#### Weight

- 600 51 kg
- 700 55 kg
### Ember 600/700 dimensions (mm)



		Width with frame	Width of unit	Height with frame	Α	В	С
Ember 600	3-sided frame	640	580	620	270	310	265
Ember 600	4-sided frame	640	580	645	270	310	265
Ember 700	3-sided frame	740	680	620	340	340	312
Ember 700	4-sided frame	740	680	645	340	340	312

### Ember 600/700 enclosure dimensions

The Ember must be positioned within the enclosure on a flat level surface that allows free movement of the appliance. The enclosure must be capable of supporting 1.5 times the weight of the Ember.



### Existing masonry fireplace

	600	700
<b>W-width</b> Infill panel* Masonry frame*	600 mm 600-750 mm N/A	700 mm 700-850 mm 700-785 mm
<b>H-height</b> Infill panel* Masonry frame*	600 mm 600-675 mm N/A	600 mm 600-675 mm 600-638 mm
D-depth	400 mm min.	400 mm min.

\* Enclosure dimensions can be larger if using an infill panel or a masonry frame.

# Mock (false) chimney

	600	700
W-width	700 mm	800 mm
H-height	700 mm	700 mm
D-depth	400 mm min.	400 mm min.

For mock chimney installations the Ember MUST BE installed with the Ember Zero Clearance frame, which gives the required clearances to combustibles.







### Ember 600/700 clearances from combustibles

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

### While the heater is operating

The appliance must not be installed where curtains or other combustible materials could come into contact with the heater. The 400 mm side clearance includes side walls. The 1000 mm clearance is in front of the fire.

### **Floor protection**

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

### Mantels and surrounds

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

### Hearths

A hearth is not necessary but can be used for decorative purposes or protection of sensitive flooring if required. A hearth must not obscure the front of the fire or obstruct the fire in any way (including the frame around the fire).

### Wall surface above the fire

The temperature of the wall surface directly above the fire may get warm and distort paint finishes, or distort vinyl wall coverings. For durability of surfaces, please contact the manufacturer for their specification.





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

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

Mantel depth	A: CLEARANCE REQUIRED
300 mm	500 mm
350 mm	600 mm
400 mm	700 mm

### Ember 600/700

### burn media, frames, and zero clearance frame



**Log set** Ember 600: Ember 700:

customised logs.

R2422 R2420



**Stone set** Ember 600: Ember 700:

R2423 (15 stones) R2421 (21 stones)

Ceramic stone set. Contains a mix of white and grey stones.

The Ember 600 and 700 burn media sets cannot be interchanged. The Ember 700 log set is thicker and longer, and the stone set has six more stones. Ensure the correct set is ordered.



**3-sided black frame** Ember 600: R2410 Ember 700: R2400

Black powder coated frame for a **masonry** chimney, or a **mock** chimney with a hearth.



Ceramic log set, contains fives

**3-sided titanium frame** Ember 600: R2412 Ember 700: R2402





**4-sided black frame** Ember 600: R2413 Ember 700: R2403

Black powder coated frame for a **mock** chimney.



**4-sided titanium frame** Ember 600: R2415 Ember 700: R2405

Titanium frame for a **mock** chimney.



Masonry black infil panelEmber 600:R2453Ember 700:R2452

Black powder coated panel for **masonry** installations where the cavity is larger than the unit. The panel will cover up the gap behind the fire and the 3-sided frame.



Masonry frame (700 only) Code: R2406

Black powder coated frame for Ember **700 masonry** installations. Designed to cover a larger cavity opening. Used INSTEAD of the 3-sided frame.

The main difference between the infill panel and the masonry frame is aesthetics. The infill panel has a thinner profile and sits behind the 3-sided frame. The masonry panel looks wider, and is used INSTEAD of the 3-sided frame.



600/700 zero clearance frame Code: R2450

**Mandatory** requirement **for mock** chimney installations.

**Adjustable** universal frame for both models. It is required to ensure clearances to combustibles.

# Ember 600/700 flueing options

### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

### Installations into a masonry cavity



### Masonry vertical termination

For installations into a masonry cavity. Check the chimney size before doing anything. It needs to be at least 200 x 200 mm for the flexi flues to fit.

- Minimum flue length is 3 m
- Maximum flue length is 8 m

### Flue kit

Masonry chimney flexi vertical flue kit (R3652).



### Masonry horizontal termination

For installations into a masonry cavity where the chimney may have been capped. Check the chimney size before doing anything. It needs to be at least 200 x 200 mm for the flexi flues to fit.

- Minimum flue length is 900 mm
- Maximum flue length is 1200 mm

### Flue components

- Ember adaptor (R3653)
- Masonry horiz. flue box (R2449)
- Horiz. wall terminal (R3650)

### Installations into a mock chimney (combustible opening)



### Mock chimney vertical termination

For installations into a combustible opening and using the Ember zero clearance frame. Flue runs vertically in wall and terminates vertically.

- Direct vertical, maximum flue length 10 m
- Vertical with offsets, maximum flue length is 8 m
- Maximum number of 45 degree bends two

If doing a straight short vertical flue (no bends) for a single storey dwelling the mock chimney vertical flue kit 3.6 m (R3665) can be used.

### Direct vertical flue components

- Ember adaptor (R3653)
- Mock chimney vertical flue kit (R3665)

### Vertical with offsets

- Ember adaptor (R3653)
- Flue pipes 150-1200 mm\*
- Flue extension (if needed)\*
- Flue elbow 45 ° (R3642)
- Roof cowl (R3651)

\* Refer p. 44 for flue pipe and flue extension part numbers.



### Mock chimney horizontal termination

For installations into a combustible opening and using the Ember zero clearance frame. Flue runs vertically inwall and terminates horizontally.

- Minimum flue length is 900 mm
- Maximum flue length is 2000 mm

### Direct horizontal flue kit

- Mock chimney horizontal flue kit (R3654)
- Ember adaptor (R3653)

If going higher then a flue pipe(s) or flue extension(s) will be required.

# **Ember 600/700** flueing options continued

### Mock chimney vertical terminations



### Masonry vertical termination

(for a non-combustible opening only)



### Mock chimney horizontal terminations



### Masonry horizontal termination

(for a non-combustible opening only)



### **Ember 600/700** flue kits and components (can't be cut to size)



**Mock chimney vertical flue kit 3.6 m** Code: R3665

Coaxial vertical flue kit that attaches to the Ember Adaptor.

Kit includes; high wind roof cowl, flue pipes 1200 mm x 3, wall straps x 3.

If longer flueing is required, order additional flue pipes.



Masonry chimney flexi vertical flue kit Code: R3652

For installation into a masonry fireplace. Allows the fire to perform more effectively by achieving a better draw. Extends out to 8 m.

Kit includes; flue cowl, chimney flashing plate, intake flexi ∅ 75 mm (LHS), exhaust flexi ∅ 100 mm (RHS).





**Mock chimney horizontal flue kit** Code: R3654

Coaxial horizontal flue kit that attaches to the Ember Adaptor.

If longer flueing is required order additional flue pipes.





**Masonry horizontal flue box** Code: R2449

Horizontal flue box that joins the Ember adaptor to the horizontal wall terminal. If doing the masonry horizontal termination, you will also need to order the horizontal wall terminal and the Ember adaptor.



Horizontal wall terminal (ordered separately)

### **Ember 600/700** flue kits and components continued (can't be cut to size)

### Ember adaptor

Code: R3653

Colinear to coaxial adaptor. Contains; adaptor, locating plate (455 x 455 mm), Ø 75 mm and Ø 100 mm flexi flues, and four flue clamps.





### Horizontal flashing kit Code: R3646

Code: R3040

Flashing components used to join the internal flue to the outside flue—to provide a weathertight seal in mock chimney horizontal flue installations.

Refer horizontal wall terminal for installed dimensions. Box depth is 100 mm.



### Flue pipes

150 mm:	R3630
230 mm:	R3631
300 mm:	R3632
450 mm:	R3633
600 mm:	R3634
900 mm:	R3635
1200 mm:	R3636

Pipe used to construct horizontal and vertical flueing. Cannot be cut to size. Once joined nominal length reduces approx. 35 mm.

Inner - aluminium Ø 100 mm Outer - galvanised steel Ø 170 mm



Horizontal wall terminal Code: R3650

Aluminium flue terminal required for all horizontal terminations.

Depth with horizontal flashing kit installed—252 mm.

Refer p. 34 to see an image of what it looks like installed.



### Flue extension

75-175 mm:	R3638
75-360 mm:	R3639

Used for extended straight lengths of flue.

Available in two lengths extending to 175 mm or 360 mm.

Inner - aluminium Ø 100 mm Outer - galvanised steel Ø 170 mm



**Roof cowl** Code:

R3651

Aluminium flue terminal required for all vertical flue installations—part of all vertical flue kits.





**Elbow flue strap** Code: R3644

108 mm

Flue support for elbows and offsets.



**Flue elbow 90** ° Code: R3643

Used to facilitate between vertical and horizontal flueing. Elbow swivels 360 ° at base.

Once joined effective length reduces 35 mm to approx. 130 mm.

Inner - aluminium Ø 100 mm Outer - galvanised steel Ø 170 mm **Wall flue strap** Code: R3647

Adjustable strap used to add lateral support to the flue.

Provides a 50-200 mm clearance to combustible walls.







l code)	Offset	Rise
N/A	124 mm	340 mm
R3630	203 mm	419 mm
R3631	257 mm	473 mm
R3632	311 mm	527 mm
R3633	417 mm	633 mm
R3634	524 mm	740 mm
R3635	737 mm	953 mm
R3636	949 mm	1165 mm
	R3630 R3631 R3632 R3633 R3634 R3635	N/A       124 mm         R3630       203 mm         R3631       257 mm         R3632       311 mm         R3633       417 mm         R3634       524 mm         R3635       737 mm



Ember 600/700 ordering guide masonry chimney installations

		Ember 600	Ember 700
1. Select <b>gas type</b> (engine)			
	Ember engine <b>NG</b>	RDV600N	RDV700N
	Ember engine <b>LPG</b>	RDV600L	RDV700L
The Ember engine comes with; r glass and vermiculite, and flexib	remote control (batteries inserted), le gas connection.	operation and installation guides, g	ranule packs, rockwool, crushed
2. Select <b>frame</b> option			
	n the 3-sided frame, the infill panel c nother option (for the 700 only) is a profile than the 3-sided frame.		
	Black 3-sided frame Titanium 3-sided frame	R2410 R2412	R2400 R2402
	Infill panel	R2453	R2452
	700 masonry frame	N/A	R2406
3. Select <b>burn</b> media			
	Log set	R2422	R2420
	Stone set	R2423	R2421
Burn media sets cannot be inter- more stones. Ensure the correct	changed between the 952 and 1252. set is ordered.	The Ember 700 log set is thicker an	d longer, and the stone set has six
4. Select <b>flue kit or flue</b> co	omponents		
Masonry <b>vertical</b> terminat	ion flue kit		
	Masonry flexi vertical kit (extends to 8 m)	R3652	R3652
Masonry <b>horizontal</b> flue co	omponents		
Ĩ.	Ember adaptor	R3653	R3653
	Masonry horizontal flue box	R2449	R2449
	Horizontal wall terminal	R3650	R3650



# Ember 600/700 ordering guide mock chimney installations

1 Select <b>das t</b>	t <b>ype</b> (engine)			
	Ember 600 engine <b>NG</b>	RDV600N		
	Ember 600 engine <b>LPG</b>	RDV600L		
	Ember 700 engine <b>NG</b>	RDV700N		
	Ember 700 engine <b>LPG</b>	RDV700L		
ed), operation a crushed glass an	ne comes with; remote contro nd installation guides, granule d vermiculite, and flexible gas	packs, rockwool,		
2. Select <b>fram</b>	ne option			
hearth, then the	n will depend on the installatic 3-sided frame would look bes I slightly elevated from the floo	t. If the Ember		
1. Marce	Black <b>3</b> -sided frame	R2410 (600) R2400 (700)		
1000	Titanium <b>3</b> -sided frame	R2412 (600) R2402 (700)		
dite	Black <b>4</b> -sided frame	R2413 (600) R2403 (700)		
-sthe	Titanium <b>4</b> -sided frame	R2415 (600) R2405 (700)		
3. Select <b>burn</b> media				
3. Select <b>burr</b>	n media			
3. Select <b>burn</b>	n media Log set	R2422 (600) R2420 (700)		
3. Select burn				
Burn media sets 1252. The Ember	Log set	R2420 (700) R2423 (600) R2421 (700) een the 952 and ger, and the stone		
Burn media sets 1252. The Ember set has six more	Log set Stone set cannot be interchanged betw 700 log set is thicker and long	R2420 (700) R2423 (600) R2421 (700) een the 952 and ger, and the stone is ordered.		
Burn media sets 1252. The Ember set has six more	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set	R2420 (700) R2423 (600) R2421 (700) een the 952 and ger, and the stone is ordered.		
Burn media sets 1252. The Ember set has six more 4. Order the :	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set zero clearance frame ( <i>N</i> Ember zero clearance	R2420 (700) R2423 (600) R2421 (700) een the 952 and ger, and the stone is ordered. NUST HAVE)		
Burn media sets 1252. The Ember set has six more 4. Order the :	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set <b>zero clearance frame</b> ( <i>N</i> Ember zero clearance frame	R2420 (700) R2423 (600) R2421 (700) een the 952 and ger, and the stone is ordered. NUST HAVE)		
Burn media sets 1252. The Ember set has six more 4. Order the : 5. Select the f	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set <b>zero clearance frame</b> ( <i>N</i> Ember zero clearance frame	R2420 (700)         R2423 (600)         R2421 (700)         een the 952 and ger, and the stone is ordered.         UST HAVE)         R2450         R3653         ontal		
Burn media sets 1252. The Ember set has six more 4. Order the : 5. Select the f	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set <b>zero clearance frame</b> ( <i>N</i> Ember zero clearance frame <b>ilue components</b> Ember adaptor	R2420 (700)         R2423 (600)         R2421 (700)         een the 952 and ger, and the stone is ordered.         UST HAVE)         R2450         R3653         ontal		
Burn media sets 1252. The Ember set has six more 4. Order the set 5. Select the fer S. Select the fer The starting con configuration st	Log set Stone set cannot be interchanged betw 700 log set is thicker and long stones. Ensure the correct set <b>zero clearance frame</b> ( <i>N</i> Ember zero clearance frame <b>ilue components</b> Ember adaptor	R2420 (700)         R2423 (600)         R2421 (700)         een the 952 and ger, and the stone is ordered.         UST HAVE)         R2450         R3653         ontal         WUST be ordered.		

3. Select <b>flue</b>	components cont.	
	Flue pipe 150 mm Flue pipe 230 mm Flue pipe 300 mm Flue pipe 450 mm Flue pipe 600 mm Flue pipe 900 mm Flue pipe 1200 mm	R3630 R3631 R3632 R3633 R3634 R3635 R3636
	Flue ext. 75-175mm Flue ext. 75-360mm	R3638 R3639
	Flue elbow 45 ° (two in a kit)	R3642
	Flue elbow 90 °	R3643
	Horizontal flashing kit	R3646
	Horizontal wall terminal	R3650
Ĩ	Roof cowl	R3651
	Wall flue strap	R3647
	Elbow flue strap	R3644

# Neo Inbuilt/Premium Classic specification



A natural draft, externally flued, inbuilt gas fireplace with a heat output of 6-6.94 kW (depending on gas type). The Neo has a glass front and convection fan, which pushes warm air from the top of the unit. Operated using a simple infra-red remote. Different frame options are available.

### Specification summary

Input	=14-30 MJ/h*
Output	= 2.98-6.94 kW*
Efficiency	= 80%
Heating area	= 69-107 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

### Suitability

- Inbuilt masonry
- Inbuilt mock chimney

The Neo is not suitable for areas where painting is taking place, or in places such as hairdressing salons, where there may be fluff and dust, and where aerosols are used.

### Installation considerations

The Neo draws air for combustion from the room. Adequate ventilation must be calculated and provided by the gasfitter as per AS/NZS 5601.1.

### Burn media

Driftwood log set comes as standard.

### **Convection fan**

Fan forced 2-speed convection fan (low and high). Heat is distributed from the top of the appliance.

### Data plate

Inside appliance on the front left hand side.

### Gas connection

 $\frac{1}{2}$  " BSPT (flexi). The gas supply terminates inside the heater at the lower front right hand side of the appliance.

### Ignition

Continuous spark electronic ignition.

### Noise level

37-45 dB(A)

### Flue (masonry)

The Neo must be installed with a Rinnai flexiliner flue (Ø 100 mm).

### Flue (mock chimney)

Appliance must be installed with a Rinnai flue system. Inner 100 mm, outer 150 mm.

### Power consumption and electrical supply

High = 50 W Standby = < 3 W

Comes with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the rear left of the appliance, but can pass through the left or right by removing the knockout tab from the bottom edge of the front panel.

### Safety devices

Overheat switch, electrical fuse, and flame failure sensing system.

### Temperature control

Operated using a simple infra-red remote with the following functions:

- On/off
- Flame height and fan speed up and down

The temperature sensor is located in the bottom of the remote.

Weight: 60 kg



### Neo Inbuilt/Premium Classic

dimensions including frame (mm)

# Neo Inbuilt masonry

### Neo Inbuilt mock chimney



### Neo Inbuilt Premium Classic frame dimensions



# **Neo Inbuilt/Premium Classic** positioning

### **Enclosure dimensions**

The main points governing location are flueing and warm air distribution. The Neo inbuilt models installed into a mock chimney require a zero clearance box (p. 51). This is a 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.

	Masonry	Mock chimney
<b>W-width</b>	695 mm	800 mm
with infill*	695-1010 mm	N/A
<b>H-height</b>	600 mm	655 mm
with infill*	600-730mm	N/A
D-depth	370 mm	370 mm

### \* Masonry infill panel

For when the cavity is slightly larger than the frame.

### Clearances

The clearances, measured from the edge of the inner glass, are the minimum clearances unless otherwise stated. **Please note:** The 400 mm side clearance includes side walls.

The Neo must not be installed where curtains or other combustible materials could come into contact with the unit while it is operating.

### Mantels and surrounds

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

- A Mantel needs to be a min. of 400 mm away from the edge of the inner glass.
- **B** Maximum mantel depth at 400 mm (A) is 250 mm.
- **C** Surround needs to be a minimum of 400 mm away from the edge of the inner 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 300 mm 350 mm 400 mm

A: CLEARANCE REQUIRED 500 mm 600 mm 700 mm

### Neo Inbuilt/Premium Classic

frames and zero clearance box



Premium Classic black frame with silver dress guard Code: R2320

Comes with a black inner frame.



**Premium Classic black frame with bronze dress guard** Code: R2321

Comes with a black inner frame.



Stainless inner and black outer frame Code: R2316

Stainless steel inner and black outer frame, plus glass dress guard.



Stainless inner and trims, and black outer frame Code: R2317

Stainless steel inner and trims, and black outer frame, plus glass dress guard.



Stainless inner and outer frame Code: R2318

Stainless steel inner and outer frame, plus glass dress guard.



### Black inner and outer frame

Code: R2319

Black inner and outer frame, plus glass dress guard.



### **Neo masonry infill panel** Code: R2330GL

Black powder coated panel for masonry installations where the cavity is slightly larger than the frame.

Panel will cover the gap behind the fire and the standard rectangular frame (not suitable for the premium classic frames).





### **Neo zero clearance box (ZCB)** Code: R2340

Isolates the appliance from combustible materials. Required for all mock chimney installations.

Includes the flue spigot (requires assembly).

Installed flush with the drywall surface.

### Neo Inbuilt/Premium Classic

flueing options

Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.



### Mock chimney flueing

A Rinnai zero clearance box and flue kit are mandatory for installations into a combustible opening.

Minimum flue length - 3.6 m (three lengths of flue)

This is required to ensure adequate draw, and to prevent spill-back of combustion products, which can cause the safety sensors to shut down the fire.

The minimum flue length before any bends or offsets is 1.2 m (or one flue length).

<u> Maximum flue length - 8 m</u>

Maximum flue length is 8 m and contain a maximum of two 45 ° bends.



**Masonry with flexiliner flue\*** For installations into a masonry cavity. Minimum flue length is 3.6m. **Flue components** - Flexiliner flue kit (R1756) 3.6 m

If flueing exceeds 3.6 m add: - Flexiliner flue extension (R1761)

\* As per AS/NZS 5263.0:2017 2.15.2.3, do not use an unlined masonry chimney as the flue for this appliance.



### Inbuilt mock chimney direct and offset

For installations into a combustible opening with a zero clearance box, where the flue runs vertically in-wall.

### A: Flue component

- Zero clearance flue kit (R1762Z)

### B: Flue components

- Zero clearance flue kit (R1762Z)
- 45 ° bend kit x 2 (R1764)

If flueing exceeds 3.6 m add the galvanised or stainless steel flue extension (R1763Z, R1763SS).



### **Inbuilt mock chimney offset wall penetration** For installations into a combustible opening with a zero clearance box. Flue runs in-wall, then penetrates the building before terminating vertically.

Typically used in multi-storey dwellings where the fire is installed on the ground floor.

### Flue components

- Zero clearance flue kit (R1762Z)

- Wall penetration kit (R1766)

If flueing exceeds 3.6 m add the galvanised or stainless steel flue extension (R1763Z, R1763SS).

### **Neo Inbuilt/Premium Classic** masonry flue components

### **Neo flexiliner flue kit** Code: R1756

For installation into an existing masonry fireplace.

Allows the fire to perform more effectively by achieving a better draw.

Includes; flue cowl, chimney, flashing plate, flexiliner, and flue spigot.

### Flexiliner flue extension Code: R1761

Extension for flues exceeding 3.6 m. Comes as a 2 m length and extends to 3.6 m.



### Neo flexiliner flue spigot Code: R1756-5F

If there is an existing flexiliner flue already in place from a previous installation (in good condition), the flexiliner flue spigot can be ordered as a separate component.

Requires assembly.





Roof cowl Code: R1760-2

Stainless steel flue terminal. Only ordered separately if not using a flexiliner flue kit.



### **Neo Inbuilt/Premium Classic** mock chimney flue components

### **Zero clearance flue kit galv.** Code: R1762Z

Galvanised zero clearance flueing (3.6 m) for fires installed into combustible openings.



### Wall penetration kit galv. Code: R1766

For internal to external applications (multi-storey dwelling). Used in conjunction with the zero clearance flue kit.

Minimum of one length of flue pipe required before using this kit.



**1.2 m flue extension galv.** Code: R1763Z

Galvanised flue extension for flues exceeding 3.6 m.

- Stainless steel inner 1.22 m
- Galvanised outer 1.2 m

### **45**° **bend galvanised (1)** Code: R1764

45 ° bend used for offset applications. Can only be used to offset the flue.

Two bends required per installation maximum of two per installation. Inner is stainless steel and outer is galvanised.

Centre to centre = 150 mm



### **1.2 m flue extension stainless** Code: R1763SS

Stainless steel flue extension for flues exceeding 3.6 m.

Recommended for external penetrations through the roof, for locations close to the sea, where traditional flueing may rust.

- Stainless steel inner 1.2 m
- Stainless steel outer 1.2 m



# Neo Inbuilt/Premium Classic ordering guide

1. Select <b>gas type</b> (engine)								
	Neo engine uinversal control <b>NG</b>	RIB2312N						
	Neo engine universal control <b>LPG</b>	RIB2312L						
The Neo engine comes with; remote control (batteries inserted), operation and installation guides, log set, and gas connection.								
2. Select <b>frame</b> option								
tanaisja.	Premium Classic black frame with silver d/guard	R2320						
Tanata I	Premium Classic black frame with bronze d/guard	R2321						
and the second s	Stainless steel inner & black outer frame	R2316						
ALC: NO.	Stainless steel inner & trims and black outer frame	R2317						
and a second	Stainless steel inner and outer frame	R2318						
attine	Black inner and outer frame	R2319						
	Neo masonry infill panel	R2330GL						
3. Select <b>flue</b> components								
Masonry flue components								
\$•	Neo flexiliner flue kit 3.6 m (incl. flue spigot)	R1756						
	Flexiliner flue extension (for flues exceeding 3.6 m)	R1761						
- State - Stat	Neo flexiliner flue spigot (refer note on p. 53)	R1756-5F						
	Flue cowl	R1760-2						
Mock chimney zero clearan	ce box and flue components							
	Neo inbuilt zero clearance box (MUST HAVE)	R2340						
	Zero clearance box flue kit galv. 3.6 m	R1762Z						
	ZC flue extension 1.2 m ZC flue extension stainless 1.2 m	R1763Z R1763SS						
	Wall penetration kit galvanised	R1766						
	45 ° bend galvanised (two bends req.) contains inner, outer, and spacer	R1764						

### Neo Freestander specification



The Neo freestanding plinth and console models are natural draft, externally flued, gas fireplaces with a heat output of 6-6.94 kW, depending on gas type. They have a glass front and convection fan, pushing warm air from the top of the appliance. Models can be customised with different frame options.

Operated using a simple infra-red remote.

### Specification summary

Input	= 14-30 MJ/h*
Output	= 2.98-6.94 kW*
Efficiency	= 80%
Heating area	= 69-107 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

### Suitability

Suitable for freestanding installations. Ideally suited to living rooms and open plan areas.

### Installation considerations

The Neo draws air for combustion from the room. Adequate ventilation must be calculated and provided by the gasfitter as per AS/NZS 5601.1.

### Burn media

Driftwood log set comes as standard.

### **Convection fan**

Fan forced 2-speed convection fan (low and high). Heat is distributed from the top of the appliance.

### Data plate

Inside appliance on the front left hand side.

### Gas connection

 $\frac{1}{2}$  " BSPT (flexi). The gas supply terminates inside the heater at the lower front right hand side of the appliance.

### Ignition

Continuous spark electronic ignition.

### Noise level

37-45 dB(A)

### Flue

Natural draft flue.

Appliance must be installed with a Rinnai flue system. Inner 100 mm, outer 150 mm.

### Power consumption and electrical supply

High = 50 W Standby = < 3 W

Comes with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the rear left of the appliance, but can pass through the left or right by removing the knockout tab from the bottom edge of the front panel.

### Safety devices

Overheat switch, electrical fuse, and flame failure sensing system.

### Temperature control

Operated using a simple infra-red remote with the following functions:

- On/off
- Flame height and fan speed up and down



The temperature sensor is located in the bottom of the remote.

### Weight

Engine = 60 kg Freestanding kit = 20-21 kg (p. 59)

### dimensions (mm) with frame on



Freestanding console (includes the frame)

### Freestanding plinth (includes the frame)



# Neo Freestander positioning and clearances

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

### While the heater is operating

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

### Hearths

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

### **Floor protection**

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



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



### **Neo Freestander**

frames and outer panel kits



Stainless inner, black outer frame Code: R2316

Stainless steel inner and black outer frame, plus glass dress guard.



Stainless inner/trims, black outer frame Code: R2317

Stainless steel inner and trims, and black outer frame, plus glass dress guard.



Stainless inner and outer frame

Code: R2318

Stainless steel inner and outer frame, plus glass dress guard.



Black inner and outer frame Code: R2319

Black inner and outer frame, plus glass dress guard.



Freestanding console kit Code: R2341GL

Black flat pack **console** kit (20 kg), includes the flue spigot. Acts like a zero clearance box by wrapping the Neo engine—isolating the unit from combustible materials. Assembly required.



Freestanding plinth kit Code: R2342GL

Black flat pack **plinth** kit (21 kg), includes the flue spigot. Acts like a zero clearance box by wrapping the Neo engine—isolating the unit from combustible materials. Assembly required.

### **Neo Freestander** flueing options

### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

### Important

### Minimum flue length

This is required to ensure adequate draw and to prevent spill-back of combustion products, which can cause the safety sensors to shut down the fire.

- Minimum flue length before any bends or offsets:
- Minimum vertical length:

1 m (or one length of flue) 3.6 m (or three lengths of flue)

R1762GL, or

R1762GL, or

R1762BS

### Maximum flue length - 8 m

Rinnai recommend a maximum flue length of 8 m with a maximum of two 45 ° bends.



### A: Freestanding straight vertical

Choose from either the:

- Freestanding galaxy black flue kit
- Freestanding brushed stainless steel flue kit

### **B:** Freestanding vertical offset

Choose from either the:

- Freestanding galaxy black flue kit
  - Freestanding brushed stainless steel flue kit
- R1762BS 45° bends to offset the flue in the roof R1764 x 2



### Freestanding vertical with an offset wall penetration

FIUE	e components	galaxy	DIACK:	
•	Freestanding	aalaxv	black flue kit	R1762GL

Wall penetration kit black R1766GL

Flue components brushed stainless steel:

- Freestanding brushed stainless steel flue kit R1762BS
- Wall penetration kit galvanised R1766

### **Neo Freestander** flue kits

### Freestanding galaxy black flue kit 3.6 m

Code: R1762GL

Galaxy black powder coated freestanding flue kit. Black sections of the flue equate to 2 m of flue.



### Freestanding brushed stainless flue kit 3.6 m Code: R1762BS

Brushed stainless freestanding flue kit. Brushed stainless sections of the flue equate to 2 m of flue.



### Wall penetration kit galaxy black Code: R1766GL

For internal to external applications (multi-storey dwelling). Used in conjunction with the freestanding flue kit.

Minimum of one length of flue pipe required before using this kit.



### Wall penetration kit galvanised Code: R1766

For internal to external applications (multi-storey dwelling). Used in conjunction with the freestanding flue kit.

Minimum of one length of flue pipe required before using this kit.



### **Neo Freestander** flue components

### 1 m flue extension galaxy black Code: R1763GL

Powder coated galaxy black internal flue extension.



### 1.2 m flue stainless steel Code: R1763SS

Stainless steel flue extension. Recommended for external penetrations through the roof, for locations close to the sea, where traditional flueing may rust.

Stainless steel inner 1.2 m Stainless steel outer 1.2 m



1 m flue extension brushed

Brushed stainless steel internal flue

extension. Comes with a protective

Stainless steel inner 1 m

Brushed SS outer 1m

plastic coating on inner and outer

45° bend galaxy black (1)

45 ° bend used for offset applications.

Two bends required per installation—

Can only be used to offset the flue.

maximum of two per installation.

Inner is stainless steel and outer is

Code: R1765GL

powder coated black.

Centre to centre = 150 mm

stainless steel

Code: R1763BS

component.

### 1 m flue galvanised

Code: R1763Z

Galvanised flue extension for flues exceeding 3.6 m.



Stainless steel inner 1.2 m Galvanised outer 1.2 m

45° bend galvanised (1) Code: R1764

45 ° bend used for offset applications. Can only be used to offset the flue.

Two bends required per installation maximum of two per installation.

Inner is stainless steel and outer is galvanised.

Centre to centre = 150 mm



### Neo Freestander ordering guide

1. Select gas type (engine)		
	Neo engine universal control NG	RIB2312N
	Neo ETR LPG engine	RIB2312L
The Neo engine comes with; remote co	ontrol (batteries inserted), operation and installation guides, log set, and ga	s connection.
2. Select <b>frame</b> option		
1.000	Stainless steel inner and black outer frame	R2316
	Stainless steel inner and trims, and black outer frame	R2317
	Stainless steel inner and outer frame	R2318
	Black inner and outer frame	R2319
3. Select <b>freestanding kit</b> (outer	panels for the engine) MUST HAVE	
	Flat pack <b>console</b> freestanding kit with flue spigot	R2341GL
	Flat pack <b>plinth</b> freestanding kit with flue spigot	R2342GL
4. Determine <b>flueing option</b> and	select flue kits and/or flue components	
	Flue kit freestanding galaxy black 3.6 m Flue kit freestanding brushed stainless steel 3.6 m	R1762GL R1762BS
	Flue extension galvanised 1.2 m Flue extension stainless steel 1.2 m Flue extension galaxy black 1 m Flue extension brushed stainless steel 1 m	R1763Z R1763SS R1763GL R1763BS
	Wall penetration kit galvanised Wall penetration kit galaxy black	R1766 R1766GL
	45 ° bend galvanised 45 ° bend galaxy black	R1764 R1765GL
45° bends—two bends required per ins	tallation. Contains inner, outer, and spacer.	<u> </u>

# **Compact 2** specification



The Compact 2 is a natural draft, externally flued, inbuilt gas fireplaces with a heat output of 5 kW.

It has a glass front and convection fan, pushing warm air from the top of the appliance. The Compact 2 is operated using push-button controls on the fire. Model can be customised with different frame options.

### **Specification summary**

Input	= 9-25 MJ/h
Output =	1.6-5 kW*
Efficiency	= 73%
Heating area	= 50-77 m <sup>2**</sup>
Gas type	= NG or ULPG

\* Will vary according to gas type and flue configuration \*\* Will vary depending on geographical location in NZ

### Suitability

Suitable for masonry installations and installations into a mock (false) chimney. Ideally suited to living rooms and open plan areas.

### Installation considerations

The Compact 2 draws air for combustion from the room. Adequate ventilation must be calculated and provided by the gasfitter as per AS/NZS 5601.1.

The Compact 2 has a robust fan, which is audible, especially in smaller rooms. If the operating noise of the gas fireplace plays a significant factor in the purchase decision we recommend viewing a working model.

### Burn media

Ceramic log set comes as standard.

### **Convection fan**

Convection fan tangential 2-speed. Heat is distributed from the top of the appliance.

### Data plate

Inside appliance on the front right hand side panel.

### Gas connection

1/2 " BSPF male flare, enters from the rear of the appliance.

### Ignition

Continuous spark electronic ignition.

Noise level: 49 dB(A)

### Operation

Push button to light pilot and burners.

### Flue (masonry)

Must be installed with a Rinnai flexiliner flue (flexi  $\emptyset$  100 mm).

### Flue (mock chimney)

Natural draft flue. Inner 100 mm, outer 150 mm. Appliance must be installed with a Rinnai flue system.

### Power consumption and electrical supply

High	=20 W
Standby	= 0 W

Comes with a 1.5 m power cord and 3-pin plug. The electrical connection can exit the appliance from the lower left or right hand side, or from the rear of the heater.

### Safety devices

Flame failure thermocouple, overheat switch (bi-metal strip), fan delay, and power failure protection.

Weight: 39 kg

### dimensions (mm) with frame on



# **Compact 2** positioning

### Framing dimensions

The main points governing location are flueing and warm air distribution. The Compact 2 installed into a mock chimney requires a zero clearance box. This is a 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.

	Masonry	Mock chimney
<b>W-width</b>	595-700 mm	685 mm
with infill*	595-1010 mm	N/A
<b>H-height</b>	550-630 mm	615 mm
with infill*	550-730 mm	N/A
D-depth	360 mm	380 mm

### \* Masonry infill panel

For when the cavity is slightly larger than the frame.

### Clearances

The clearances, measured from the edge of the inner glass, are the minimum clearances unless otherwise stated. **Please note:** The 300 mm side clearance includes side walls.

The Compact 2 must not be installed where curtains or other combustible materials could come into contact with the unit while it is operating.

### Mantels and surrounds

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

- A Mantel needs to be a min. of 300 mm away from the edge of the inner glass.
- **B** Maximum mantel depth at 300 mm (A) is 150 mm.
- **C** Surround needs to be a minimum of 300 mm away from the edge of the inner glass.

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



**Important**: For inbuilt mock chimney installations, the total depth MUST also include the thickness of the external cladding as the zero clearance box MUST be installed flush with the cladding surface to ensure alignment of the flue.





600 mm

300 mm

### **Compact 2** frames and zero clearance box



Traditional black frame

Code: R2524

Matt black steel frame.



**Stainless inner, black outer frame** Code: R2525

Stainless steel inner and black outer frame, plus glass dress guard.



Stainless inner and outer frame

Code: R2527

Stainless steel inner and outer frame, plus glass dress guard.



Black inner and outer frame Code: R2528

Black inner and outer frame, plus glass dress guard.



**Compact 2 masonry infill panel** Code: R2329GL

Black powder coated panel for masonry installations where the cavity is slightly larger than the frame.

Panel will cover the gap behind the fire and the frame.



**Compact 2 zero clearance box** Code: R2520

Zero clearance box (ZCB) that isolates the appliance from combustible materials. Required for all mock chimney installations, includes flue spigot.

Installed flush with drywall.

### Compact 2 zero clearance box dimensions (mm)



### **Compact 2** flueing options

### Learn to specify flueing with Rinnai's interactive online Gas Fires Flueing Tool at: https://rinnai.co.nz/TradeSmart - click on Training.

## Important

### Mock chimney flueing

A Rinnai zero clearance box and flue kit are mandatory for installations into a combustible opening.

### Minimum flue length - 3.6 m (three lengths of flue)

This is required to ensure adequate draw, and to prevent spill-back of combustion products, which can cause the safety sensors to shut down the fire.

The minimum flue length before any bends or offsets is 1.2 m (or one flue length).

### <u>Maximum flue length - 8 m</u>

Maximum flue length is 8 m and contain a maximum of two 45 ° bends.



**Masonry with flexiliner flue\*** For installations into a masonry cavity where a Rinnai aluminium flexi flue is required. **Flue components** - Flexiliner flue kit (R1758) 3.6 m

- If flueing exceeds 3.6 m add
- Flexiliner flue extension (R1761)

\* As per AS/NZS 5263.0:2017 2.15.2.3, do not use an unlined masonry chimney as the flue for this appliance.



### Inbuilt mock chimney direct and offset

For installations into a combustible opening with a zero clearance box, where the flue runs vertically in-wall and terminates vertically.

**B: Flue components** - Zero clearance flue kit (R1762Z) - 45 ° bend kit (R1764) x 2

- Zero clearance flue kit (R1762Z)

If flueing exceeds 3.6 m add the galvanised or stainless steel flue extension.



**Inbuilt mock chimney offset wall penetration** For installations into a combustible opening with a zero clearance box. Flue runs in-wall, then penetrates the building before terminating vertically.

Typically used in multi-storey dwellings where the fire is installed on the ground floor.

### Flue components

A: Flue component

- Zero clearance flue kit (R1762Z)

- Wall penetration kit (R1766)

If flueing exceeds 3.6 m add the galvanised or stainless steel flue extension.

### Compact 2 flue components

### Compact flexiliner flue kit 3.6 m Code: R1758

For installation into an existing masonry fireplace. Allows the fire to perform more effectively by achieving a better draw. Includes flue cowl, chimney flashing plate, flexiliner, and flue spigot adaptor.



### Zero clearance flue kit Code: R1762Z

Galvanised zero clearance flueing for fires installed into combustible openings.



### Wall penetration kit galv. Code: R1766

R1764: Flue bend

660-760 mm

Code:

45° bend galvanised (1)

R1764

Code: R1758-5F

For internal to external applications (multi-storey dwelling). Used in conjunction with the zero clearance flue kit. Minimum of one length of flue pipe required before using this kit.

Interior wall plate

Pipe extension with bend

### Flue extension galvanised R1763Z Code:



Ē 49 2

### **Compact 2** ordering guide

1. Select <b>gas type</b> (engine)		
	Compact 2 NG engine	RIBF2N
	Compact 2 LPG engine	RIBF2L
Supplied with the engine is the ½ " BSPF engine mounting brackets), and the log	male flare nut, adhesive back foam sealing strip, frame mounting screws (p	pre-installed into the
2. Select <b>frame</b> option	, oct.	
enton	Traditional black frame	R2524
1000 C	Black outer and stainless steel inner frame	R2525
a comment	Stainless steel inner and outer frame	R2527
- Shite	Matt black steel frame	R2528
	Compact 2 black masonry infill panel (optional accessory to cover the gap behind the fire and frame)	R2329GL
	select flue kits and/or flue components	
Masonry flueing		
	Compact flexiliner flue kit 3.6 m	R1758
	Flexiliner flue extension (for flues exceeding 3.6 m)	R1761
	Compact flexiliner flue spigot (refer note on previous page)	R1758-5F
	Stainless steel roof cowl	R1760-2
<b>Mock</b> chimney flueing		1
	Compact inbuilt zero clearance box	R2520
	Zero clearance flue kit galvanised 3.6 m	R1762Z
	Zero clearance flue extension galvanised 1.2 m Zero clearance flue extension stainless steel 1.2 m	R1763Z R1763SS
	Wall penetration kit galvanised	R1766

# Rinnai gas fireplaces Appendices



### **Appendix 1** Gas fireplace flueing

The type of flue (natural draft, power flue, or direct vent) will determine where a gas fire can be installed.

### Natural draft

Often referred to as a standard flue system. This type of flue draws the air for combustion (to run the fire) from the room and then expels combusted gases to the outside via a vertical flue. As the air for combustion is being drawn from the room there is a requirement for adequate ventilation—requirement to replenish the air. Adequate ventilation must be calculated and provided by the gasfitter, as per AS/NZS 5601.

The flue must terminate vertically through the roof.

### **Power flue**

A Rinnai power flue system has a sealed combustion chamber with a fan that draws air for combustion from the outside, through the outer flue, and expels combusted gases to the outside, through the inner flue. This type of system does not take oxygen or heated air from the room.

Power flues are smaller in size, can have a number of bends, can be flued down-and-out, sideways, and can terminate horizontally or vertically. This means power flued appliances can be installed in almost any living or working space, including bedrooms.

Rinnai power flued appliances maintain air quality for a healthy breathing environment.

### **Direct vent**

A direct vent flue system, like the power flue, also has a sealed combustion chamber, but differs by using natural draft to draw air, from the outside, and expel combusted gases to the outside. Like the power flue, the air quality of the room is maintained.

As direct vent flues use natural draft to move air and gases through the flue they have a larger flue size when compared to the power flue.

The flue can terminate horizontally or vertically.









### Appendix 2

### Running cost assumptions and calculations

Based on the information below, calculate for yourself the approximate running cost of a Rinnai gas fire

### LPG gas bottle energy calculation

1 kg of LPG gas contains 50.4 MJ of energy
1 kW = 3.6 MJ
This means that a 45 kg LPG bottle has 2268 MJ (45 kg x 50.4 MJ)

### Natural Gas costs

12.79 cents per kWh.

Natural Gas costs are based on the latest MBIE natural gas residential cost (Dec 2017), which includes GST and a faily fixed line charge. It doesn't include any prompt payment discount.

### LPG costs

\$105 per 45 kg refill and standard delivery, including GST, and excluding LPG annual bottle rental, and electricity running costs.

LPG costs are an average based on a June 2018 survey of online North Island LPG prices.

The cost of LPG and Natural Gas will differ in each area, please check with your local supplier. The cost of cylinder rental, line charges and other variables are not included in the running costs.

### Calculating your own running costs - Ember 600 example (appliance on highest setting)

To calculate running costs on LPG:

- 1. Calculate the cost of gas per MJ/h, for example;  $105 \div 2268$  MJ = 0.046 per MJ/h
- 2. Calculate the approximate running cost per hour, for example; \$0.046 x 23 MJ/h = \$1.06 per hour

To calculate running costs on Natural Gas:

- 1. Convert the MJ input of the appliance to kW, for example; 23 MJ/h = 6.39 kW/h
- 2. Calculate the approximate running cost per hour, for example; \$0.1279 x 6.39 kW/h = \$0.82 per hour

### **Appendix 3**

### 45 kg LPG bottle hours and weekly running costs

The weekly running costs are calculated using the information and pricing shown on the previous page, and the scenario that during cooler months the gas fire will run approximately two hours in the morning and three hours in the evening—a total of five hours use each day.

Rinnai gas fireplace		Gas input			45 kg		Weekly running costs (\$)				
						bottle will last (hrs)		LPG		Natural Gas	
								\$105 per 45 kg		\$0.1279 per kWh	
		Low		High	High		Нісн				Нісн
		MJ/h	kW	MJ/h	kW	Low	HIGH	Low	Нісн	Low	HIGH
Audidane	Arriva 752	8.00	2.22	31.50	8.75	284	72	12.60	51.10	9.94	39.17
	Compact 2	9.00	2.50	25.00	6.94	252	91	14.70	40.60	11.19	31.07
Jana	Ember 600	12.00	3.33	23.00	6.39	189	99	19.70	37.10	14.91	28.60
14.14	Ember 700	14.00	3.89	27.00	7.50	162	84	22.75	43.75	17.41	33.57
10.818.4	Evolve 952/1252	10.00	2.78	34.00	9.44	227	67	16.10	54.95	12.44	42.26
	Neo on NG	14.00	3.89	27.00	7.50	N/A	N/A	N/A	N/A	17.41	33.57
. <u></u>	Neo on LPG	14.00	3.89	30.00	8.33	162	76	22.75	48.65	N/A	N/A
446	Symmetry RDV3611	19.00	5.23	33.00	9.17	119	69	30.80	53.55	23.41	41.05

This table is meant as a guide only. Please refer to the notes regarding running cost assumptions and how values have been calculated on the previous page. Always double check figures based on your own use.

For hourly running costs refer p. 4-5.

### Please note

All Rinnai gas fires require electricity to run—electricity costs have not been factored into the weekly running costs.

The 45 kg LPG bottle hours does not include running times of other gas appliances in use, for example a gas water heater or a gas hob.

### **Appendix 4**

### flue terminal positioning

For those that don't have access to AS/NZS 5601.1, the below diagram has been provided to assist in determining where a horizontal flue terminal can be positioned. If in doubt prior to purchase, consult a licensed gasfitter.



I = Mechanical air inlet M = Gas meter P = Electricity meter of fuse box

Shading indicates prohibited areas for flue terminals

		Min. clearances (mm		
Ref.	Description	Natural draught	Fan assisted	
а	Below eaves, balconies and other projections:	300	200	
Ь	From the ground, above a balcony or other surface	500	300	
С	From a return wall or external corner	500	300	
d	From a gas meter	1000	1000	
е	From an electricity meter or fuse box	500	500	
f	From a drain pipe or soil pipe	150	75	
g	Horizontally from any building structure or obstruction facing a terminal	500	500	
h	From any other flue terminal, cowl, or combustion air intake	500	300	
j	Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation	500	300	
k	From a mechanical air inlet, including a spa blower	1500	1000	
Π	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation	150	150	

Natural draft:Symmetry, Ember, Neo, Compact 2Fan assisted:Evolve, Arriva 752





Rinnai.co.nz 0800746624 http://www.youtube.com/rinnainz