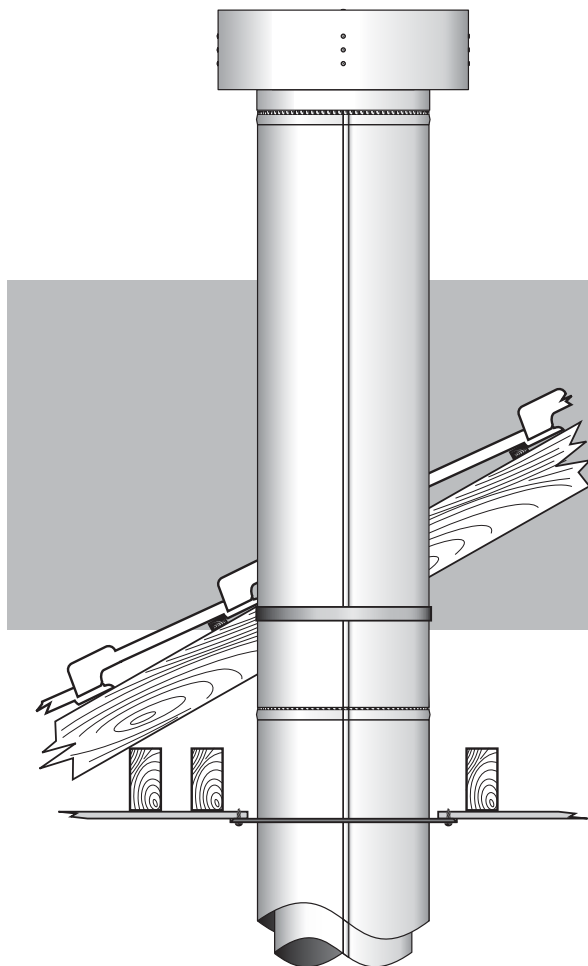


Rinnai

Flue Installation Manual



To Suit:
**Rinnai Constellation 1000
Decorative Flame Fire**

Installation shall be in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS3000, AS/NZS3500 & AS5601
- Local Regulations and Municipal Building Codes

Installation, service and removal by an Authorised Person only.



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Installation of this flue must be in accordance with the following regulations:
• Current AS5601 • Manufacturers Instructions • Local regulations & municipal building codes
Installation, Service & Removal by an Authorised Person only.
All Rinnai Constellation flue kits are certified twin wall metal systems as defined in AS 5601.

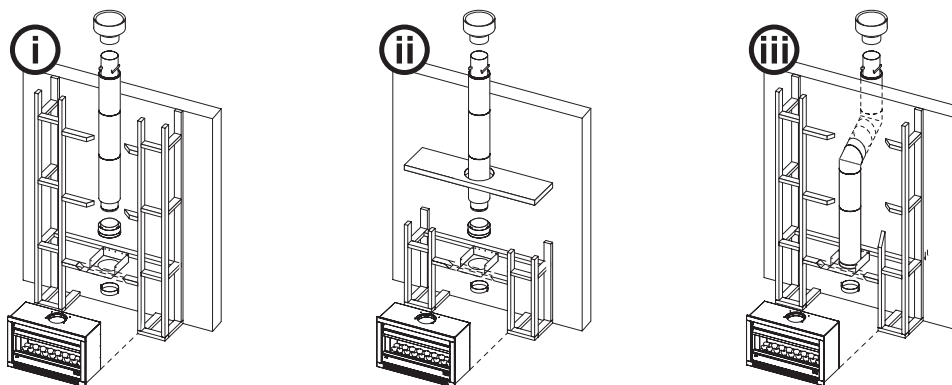
FLUEING OPTIONS

Installation considerations



All installations must use the Rinnai flue system designated for this appliance.
All installations must conform with the clearance requirements between the flue pipes and decorative surround materials as detailed in these instructions.

The Constellation 1000 Decorative Flame Fire is designed to be installed into a decorative surround. This surround may be constructed of combustible timber framework with plaster sheeting or similar materials. The panels of the appliance remain cool enough to be in direct contact with combustible surfaces. A decorative surround may also be constructed of masonry brickwork similar to that used to construct conventional fireplaces.



The decorative surround can encompass the appliance and the flue pipe (i) or can encompass the appliance only (ii). The installation may also incorporate an offset to avoid obstructions or for multi storey applications (iii).



The design of this flue is incompatible with most existing masonry fireplaces. For this reason it is normally not practical to install the Constellation 1000 Decorative Flame Fire into existing masonry fireplaces.

Genuine Rinnai Flue Kit

Rinnai appliance warranty conditions may be voided if non Rinnai flue components are fitted. This appliance is NOT CERTIFIED for use with non Rinnai flue components.

The Rinnai Constellation flue system is a galvanised twin skin design comprising a 200mm Ø inner flue and a 250mm Ø outer flue. Three component sets are available as follows:

OFKIT

The base kit, required for all installation methods (i), (ii) and (iii).

- | | |
|---------------------------|-----------------------------|
| ① Flue mounting plate x 1 | ② Flue adaptor x 1 |
| ③ Slip socket x 1 | ④ Flue pipes (900mm) x 4 |
| ⑤ Flue cowl x 1 | ⑥ Flue mounting bracket x 1 |

OFBEND

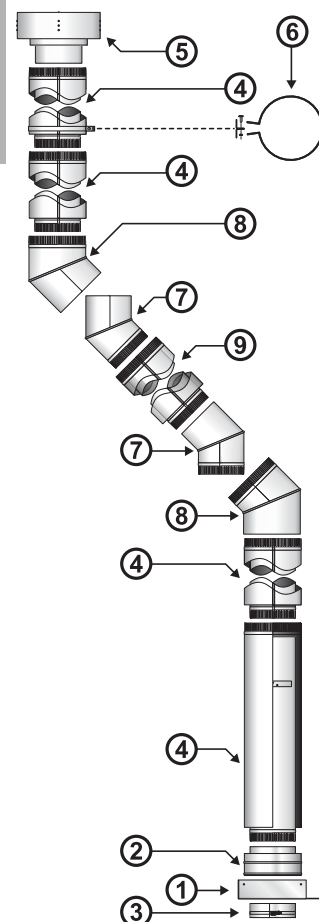
An offset kit, required when using installation method (iii).

- | | |
|---------------------------|---------------------------|
| ⑦ Flue bend 45° inner x 2 | ⑧ Flue bend 45° outer x 2 |
|---------------------------|---------------------------|

OFPIPE

A single flue pipe length, used to extend flue system length for all installations.

- | |
|-------------------------|
| ⑨ Flue pipe (900mm) x 1 |
|-------------------------|



FLUE MOUNTING PLATE AND FLUE ADAPTOR

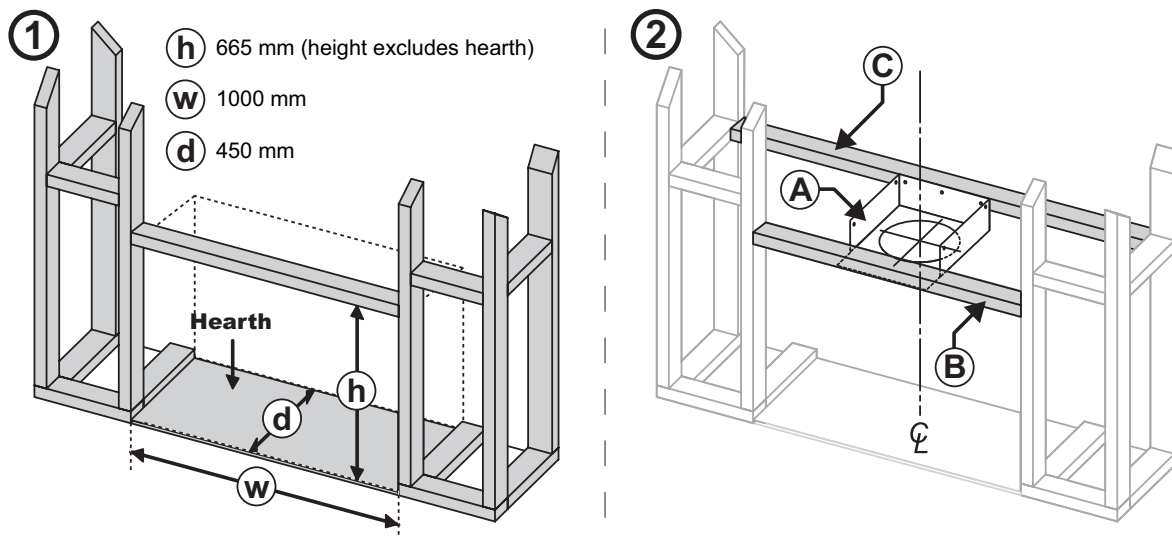
Installing The Flue Mounting Plate



Both the mounting plate (A) and the flue adaptor (D) are supplied in the Rinnai base kit (OFKIT).

The flue mounting plate provided **MUST BE** installed to support the flue independently of the appliance in accordance with AS5601 section 5.13.

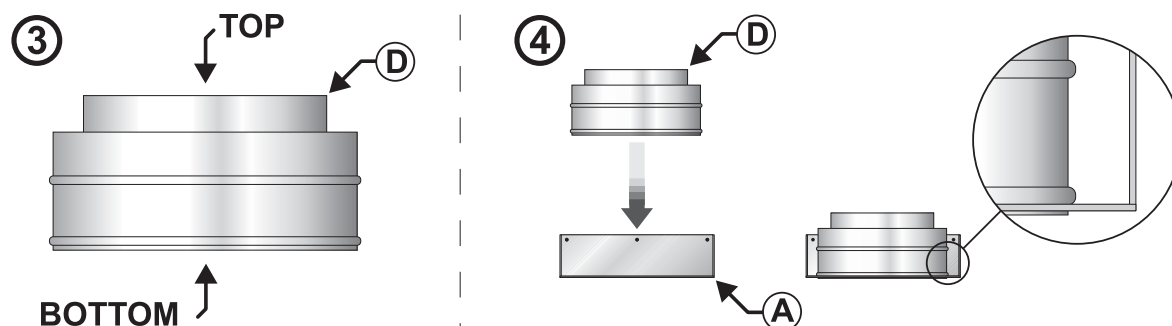
1. Construct the enclosure in accordance with the dimensions as shown and in accordance with the Operation / Installation Manual provided with the appliance.



2. Position the flue mounting plate (A) on the centre-line of the enclosure and secure to the front noggin (B). Secure the rear of the flue mounting plate (A) to noggin (C).

Installing The Flue Adaptor

3. Position the flue adaptor (D) as shown.



4. Insert the flue adaptor (D) into the flue mounting plate (A) ensuring that the lower collar ring of the flue adaptor (D) is firmly positioned within the flue mounting plate (A) as shown.

FLUE PIPE

Installing Flue Pipes



The Constellation 1000 Decorative Flame Fire flue system is a 'twin wall flue' system as defined in AS 5601 with a 200 mm inner wall diameter and 250 mm outer wall diameter. As such, the clearance between the outer wall and combustible surfaces must be a minimum of 25 mm to conform with the requirements of AS 5601.

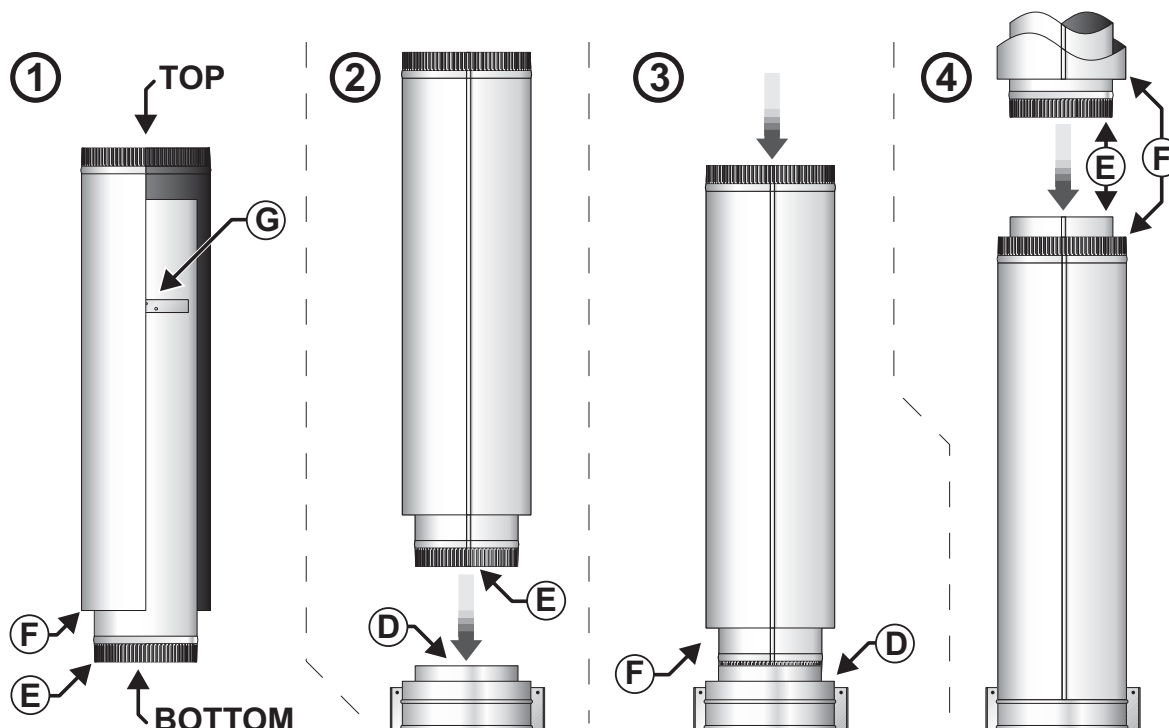
There is no limit to the height of the flue, however the minimum vertical height required is 3.6 metres and the vertical height from the appliance flue spigot to any change of direction 'offset' must be at least 1.2 metres.

Both inner and outer flue pipe ends must be flush before an offset can be attached.

As the length of a flue pipe is 900mm, due consideration must be given to the use of at least two (2) flue pipes to meet the minimum requirements before any change of direction can be considered.

The flue pipe consists of a 900mm length inner (E) and outer (F). The inner pipe has an integral spacer (G) and pipe lengths come pre-assembled.

1. Position the flue pipes as shown.
2. To connect to the adaptor insert the inner flue pipe (E) into the centre ring of the flue adaptor (D), ensuring that it is firmly positioned inside.
3. Locate the outer flue pipe (F) over the outer ring of the flue adaptor (D) and push down until the upper collar ring of the flue adaptor (D) is engaged.



4. When connecting subsequent flue components observe the same orientation as when connecting to the flue adaptor (D). Insert the next inner flue component pipe into the inner flue pipe (E) ensuring that it is firmly positioned inside and then locate the next outer flue component pipe over the outer flue pipe (F) and push down until the collar ring is engaged.

Maintain the same orientation on subsequent inner and outer flue component connections through to the flue terminal.

FLUE COWL

Flue Terminal Requirements



The minimum clearance from the roof to the cowl is 500mm.

The minimum clearance from the outer flue pipe to combustibles is 25mm.

Check roof space for any obstructions. If the required clearance from combustible material can not be obtained, consider using an offset as detailed on page 5.

Use a plumb bob to centre the flue assembly on heater, marking the centre position on ceiling.

Cut a 300 mm Ø circle in the ceiling for the flue penetration.

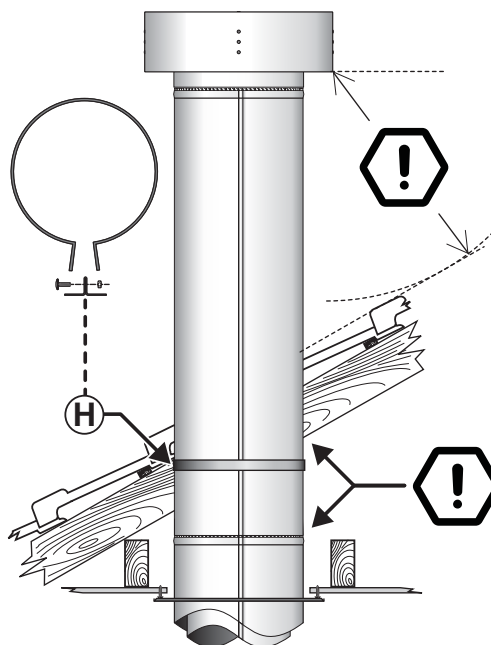


The minimum vertical flue height must be at least 3.6 m.

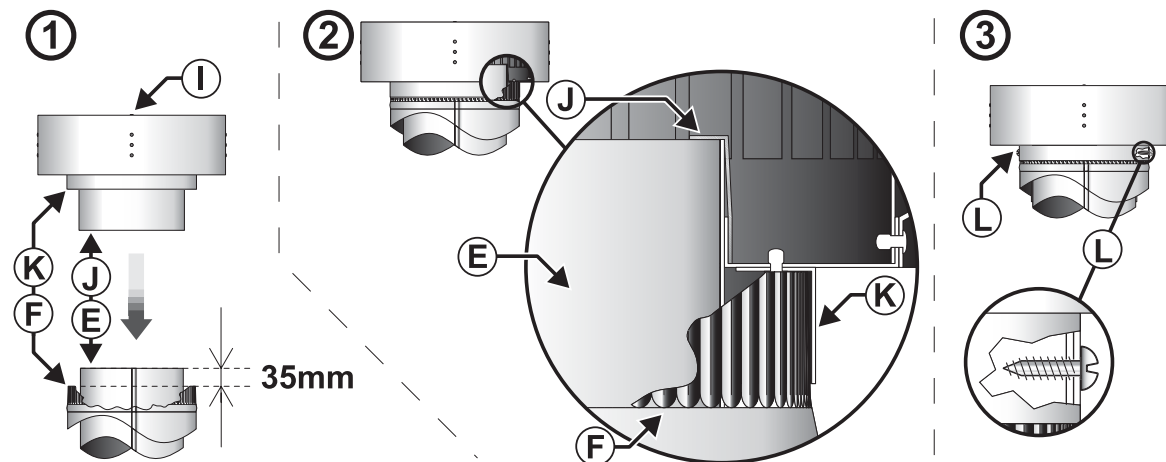
Flash ceiling and roof penetrations by approved methods in accordance with AS5601.

Flashing materials are not provided. These are readily available from plumbing suppliers.

Secure the flue assembly within the roof space using the flue mounting clip **H** provided ensuring that there is no undue strain or weight on the flue mounting plate **A**.



Securing The Flue Cowl



1. To secure the flue cowl **I** the inner flue pipe **E** needs to protrude 35mm from the outer flue pipe **F**.
2. Locate the inner **J** and outer **K** rings of the flue cowl **I** over the inner **E** and outer **F** flue pipes, ensuring that it is firmly positioned inside as shown in the cut-away image above.
3. Secure the flue cowl **I** in place with either three screws or rivets **L**.
4. Secure the flue assembly within the roof space so that there is no undue strain or weight on the flue mounting plate **A**.

FLUE BENDS (OFFSET)

45° Offset Bend Installations



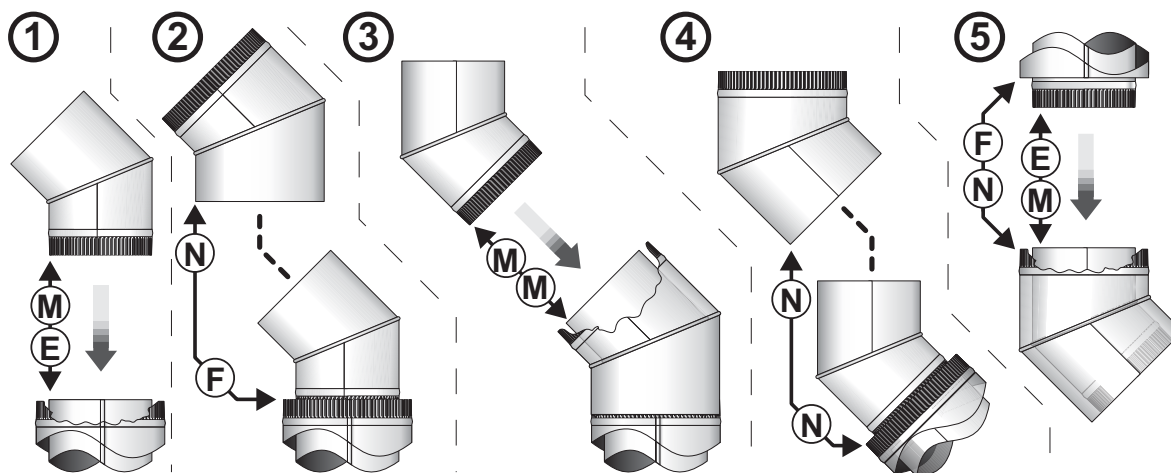
The vertical length of flue pipe between the heater and the first 45° elbow **MUST BE** no less than 1200mm.

ONLY ONE (1) change of direction (2 x 45° bends) can be used in any flue run.

Both inner and outer flue pipe ends must be flush before an offset can be attached.

As the length of a flue pipe is 900mm, due consideration must be given to the use of at least two (2) flue pipes to meet the minimum requirements before any change of direction can be considered.

Flue penetrations must be installed in compliance with AS5601.



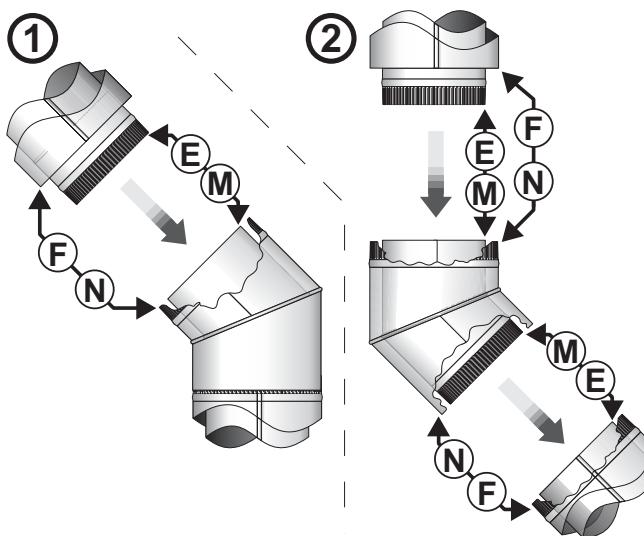
To offset a flue run, use the 2 x 45° inner (M) and outer (N) bends available in Rinnai flue kit OFBEND.

1. Insert the inner 45° bend (M) into the inner flue pipe (E), ensuring that it is firmly positioned inside.
2. Locate the outer 45° bend (N) over the outer flue pipe (F) and push down until the collar ring is engaged.
3. Insert the second inner 45° bend (M) into the first inner 45° bend (M), ensuring that it is firmly positioned inside.
4. Locate the second outer 45° bend (N) over the first outer 45° bend (N) and push down until the collar ring is engaged.
5. Maintain the same orientation on subsequent inner (E) and (F) outer flue pipe connections through to the flue terminal.

Extending 45° Offset Bend Installations.

Additional flue pipe lengths from OFKIT or OFPIPE can be inserted between the offset bends to create an extended offset.

1. Insert the inner flue pipe (E) into the inner 45° bend (M) ensuring that it is firmly positioned inside. Locate the outer flue pipe (F) over the outer 45° bend (N) and push down until the collar ring is engaged.
2. Insert the second inner 45° bend (M) into inner flue pipe (E), ensuring that it is firmly positioned inside. Locate the second outer 45° bend (N) over the outer flue pipe (F) and push down until the collar ring is engaged.



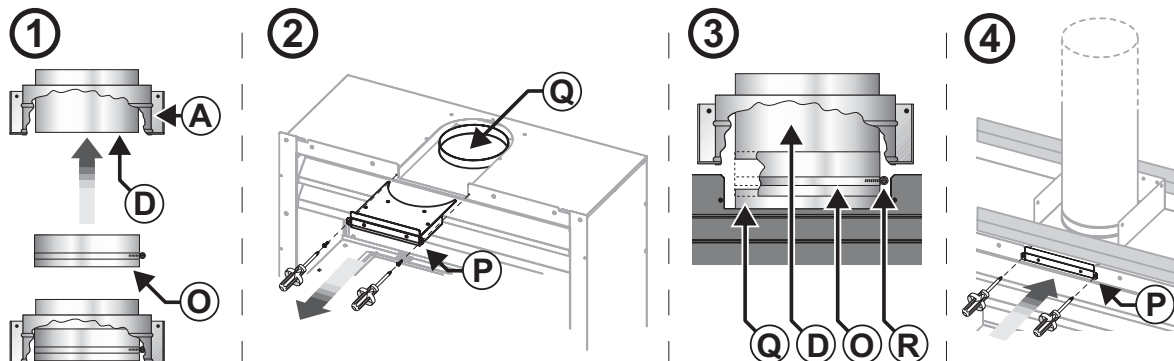
The flue pipe insert may be cut to length as required. Maintain the same orientation on subsequent inner (E) and (F) outer flue pipe connections through to the flue terminal.

CONNECTING FLUE TO THE APPLIANCE

Installing Slip Socket

1. Loosen off the slip socket ① and then slide it over the flue adaptor ② inner ring ③ pushing it up as far as possible.

Install the Constellation 1000 Decorative Flame Fire into the enclosure and secure into place in accordance with the Operation / Installation Manual provided with the appliance.



Connecting Flue Assembly To The Appliance

2. With the appliance installed remove the flue cover assembly ④ to allow access to the flue spigot ⑤. This is done by unscrewing the two retaining screws and sliding the cover assembly ④ out as shown.
3. Slide the slip socket ① down so that it covers both the flue adaptor ② inner ring ③ and the flue spigot ⑤. Tighten the slip socket's worm drive clamp screw ⑥ to secure in place.
4. Replace the flue cover assembly ④ and secure with the two retaining screws.



Ensure the flue adaptor inner ring ③ and the flue spigot ⑤ of the appliance are correctly located and joined together by the slip socket ①. If this joint is not secured properly products of combustion could disperse into the room which may result in a dangerous condition.

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Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires a service, please call our Hot Water Service Line. Rinnai recommends that this appliance be serviced every 3 years.

Internet: www.rinnai.com.au E-mail: enquiry@rinnai.com.au

National Help Lines

Spare Parts & Technical Info

Tel: 1300 366 388*

Fax: 1300 300 141*

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