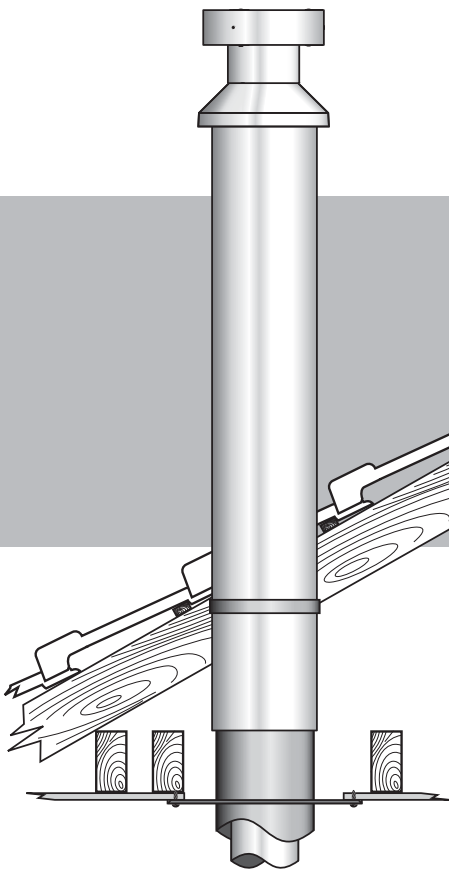


Rinnai

Flueing Installation Manual For Rinnai Flamefire Heaters



To Suit Models:

FS35ETR
FS35
IB35ETR
IB35
RIBF2 / IB25
IB300ETR
RIB23xx Series

Royale ETR - Freestanding
Royale - Freestanding
Royale ETR - Inbuilt
Royale - Inbuilt
Slimfire 252 / 25 - Inbuilt
Reflection - Inbuilt
Sapphire - Freestanding/Inbuilt

Installation shall be in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS3000, AS/NZS3500 & AS/NZS5601
- Local Regulations and Municipal Building Codes

Installation, service and removal by an Authorised Person only.



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All of our gas products are A.G.A.
tested and approved

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All Rinnai Flamefire rigid flue kits are certified twin wall metal systems as defined in AS/NZS 5601. This does NOT apply to flexible flue kits!

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REGULATIONS & FLUEING OPTIONS

Regulations

Installation of this flue must be in accordance with the following regulations:

- Current AS/NZS 5601
 - Manufacturers Instructions
 - Local regulations & municipal building codes
- Installation, Service & Removal by an Authorised Person only.

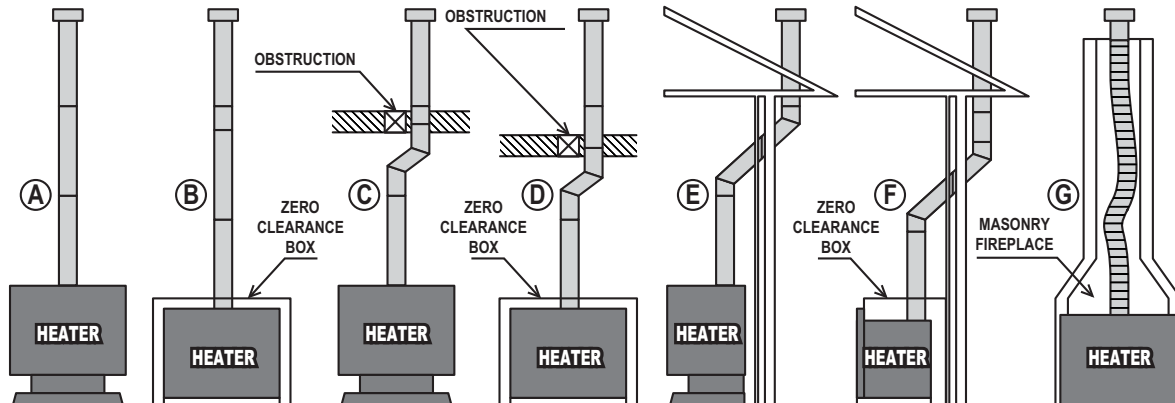
Genuine Rinnai Flue Kit

Rinnai appliance warranty conditions will be voided if non Rinnai flue components are fitted. Rinnai appliances are NOT CERTIFIED for use with non Rinnai flue components.

Flueing Options

Below are the flueing options that are available with Rinnai Flamefire appliances.

Refer to the relevant section of this manual for detailed installation instructions for each option.



Direct rigid flueing

Flue is run direct from appliance to the termination point.

- (A) This method to be used with Rinnai Freestanding Flamefire models:
- (B) This method to be used with Rinnai Inbuilt Flamefire models and a Zero Clearance Box:

Offset rigid flueing

Flue is run offset from appliance to the termination point to avoid obstructions in the flues path.

- (C) This method to be used with Rinnai Freestanding Flamefire models:
- (D) This method to be used with Rinnai Inbuilt Flamefire models and a Zero Clearance Box:

Through wall rigid flueing

Flue is run offset through an external wall from appliance to the termination point. This is particularly useful in multi storey applications.

- (E) This method to be used with Rinnai Freestanding Flamefire models:
- (F) This method to be used with Rinnai Inbuilt Flamefire models and a Zero Clearance Box:

Flexible flueing

Used when installing Rinnai Flamefire appliances into *masonry* fireplaces. **Flueing is mandatory for all models except for the RIBF2 / IB25 Slimfire, IB300ETR Reflection & RIB23xx Series.** Detailed installation instructions are supplied separately with these flue kits.

- (G) This method to be used with the following Rinnai Inbuilt models:
IB35 / IB35ETR Inbuilt Royale / Royale ETR and IB300ETR Reflection use Kit FLEXLINER01
RIBF2/IB25 Slimfire and RIB23xx Series Inbuilts use Kit FLEXLINER03



A Zero Clearance Box is required for all false or non masonry fireplace installations, see heater installation instructions for details.

Under NO CIRCUMSTANCES should a flexible flue kit be used with a Zero Clearance Box in a false or non masonry fireplace installation.

CONNECTING DIRECT RIGID FLUEING TO HEATERS

Flue Connection Procedure



Position and install Heater models in accordance with instructions supplied with the heater and/or Zero Clearance kit.

1. Set slip socket **(A)** onto the swaged end of the inner flue pipe **(B)**, allowing sufficient adjustment to enable the flue assembly to be lifted clear of the appliance.
2. Connect the slip socket **(A)** and inner flue pipe **(B)** assembly to heater flue spigot (appliance adapter spigot of RIBF2 / IB25 / RIB23xx Series **(iii)**), using the appropriate Freestanding **(i)** / Inbuilt **(ii)** or **(iii)** methods.

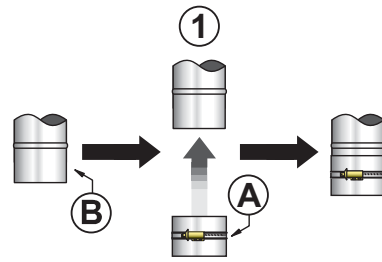
Once in position tighten the clamp of slip socket **(A)** to secure the inner flue pipe **(B)** to the heater flue spigot.

3. Slide appliance outer flue **(C)** (short swage end towards heater) over the inner flue pipe **(B)**.

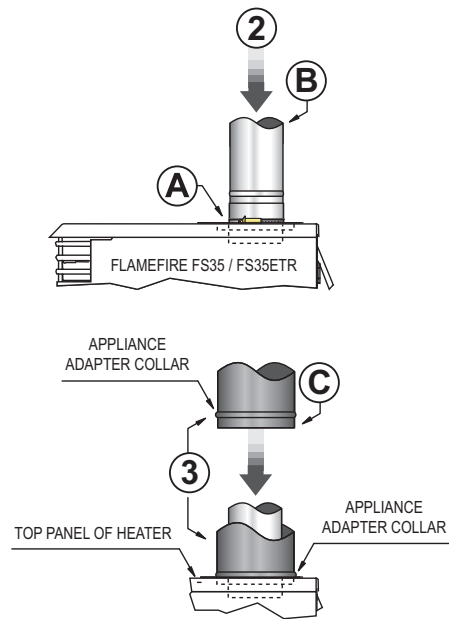
For Freestanding appliances **(i)** fit outer flue **(C)** directly to the top of the heater. Ensure the appliance adapter collar is seated flush with the top of the heater as shown.

For Inbuilt appliances **(ii)** or **(iii)** fit outer flue **(C)** to the top panel of the Zero Clearance box. Ensure the appliance adapter collar is seated flush with the top panel of the Zero Clearance Box as shown.

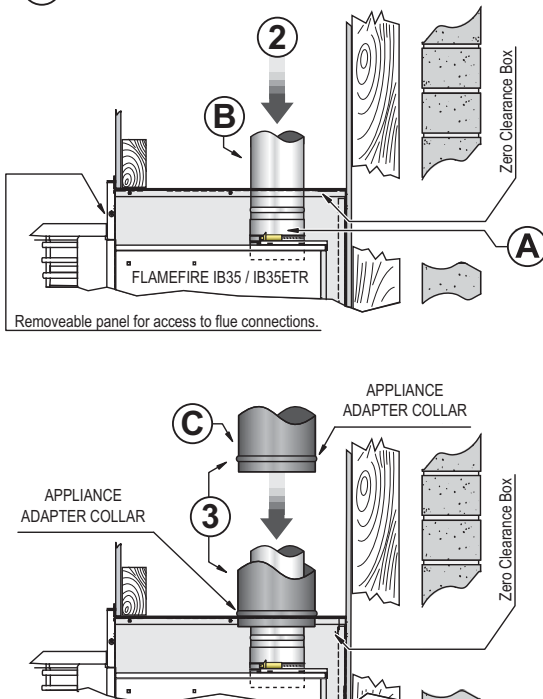
! Common Connections



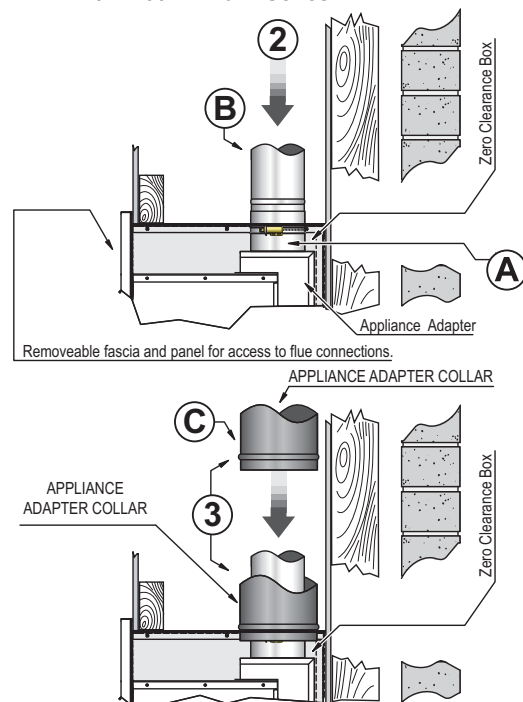
(i) Freestanding Connections FS35/ETR & RIB2310



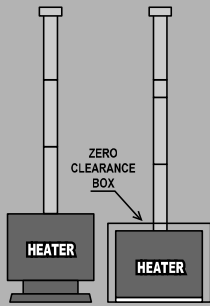
(ii) Inbuilt Connections FS35/ETR & IB300ETR



(iii) Inbuilt Connections RIBF2 / IB25 / RIB23xx Series



DIRECT RIGID FLUEING USING FLFKIT05



Direct rigid flueing is used when running a flue direct from appliance to the termination point. The flue components supplied in Rinnai FLFKIT05 are best suited for this type of installation.

The FLFKIT05 can be fitted to Inbuilt and Freestanding Rinnai Flamefire models.

When installing this kit with Inbuilt models a zero clearance box is required.

FLFKIT05 Components List

- Ⓐ Slip socket
100mm Galvanised (x1)
- Ⓑ Inner Flue Pipe
900mm x 100mm Galvanised (x4)
- Ⓒ Appliance - Outer Flue Pipe
900mm x 145mm Powder Coated (x1)
- Ⓓ Standard - Outer Flue Pipe
900mm x 145mm Powder Coated (x2)
- Ⓔ Ceiling Cover Plate + 4 Fixing Screws
Powder Coated (x1)
- Ⓕ Slip Joint
900mm x 150mm Galvanised (x1)
- Ⓖ Flue Mounting Bracket
Galvanised (x1)
- Ⓗ Spacer (Spider) Clip
Stainless Steel (x1)
- Ⓘ Flue Terminal Skirt
Galvanised (x1)
- Ⓝ Flue Terminal
Galvanised (x1)

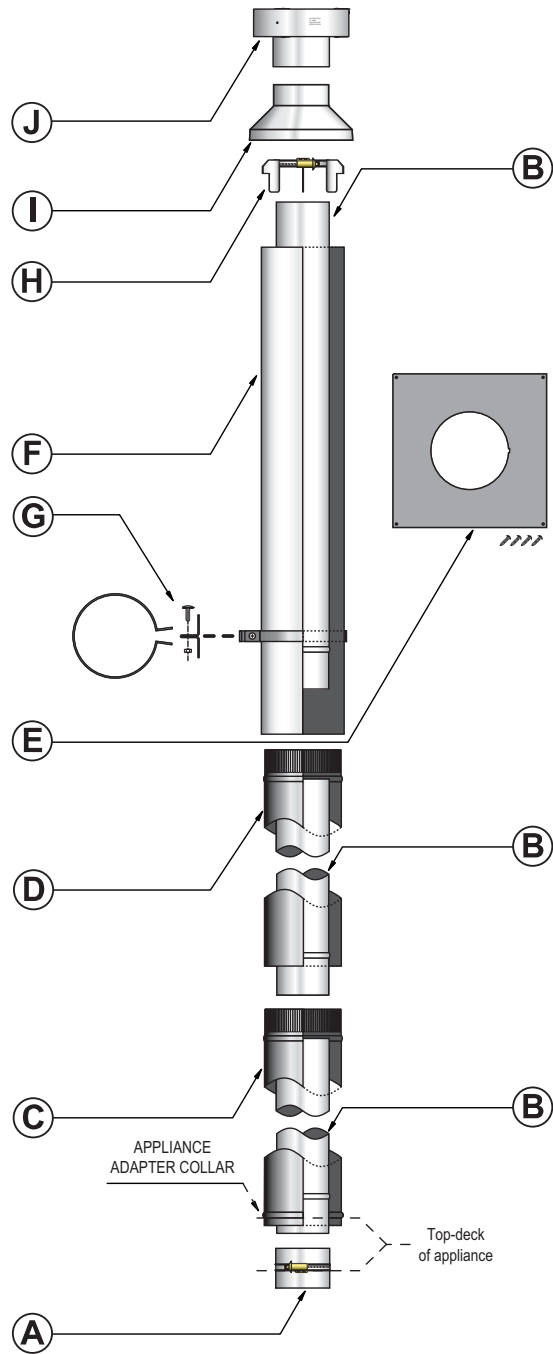
Additional Components (Items not included in kit FLFKIT05)

FLF0900

Standard Flue Extension Pipe - inner and outer
Outer - Powder coated 900mm x 145mm (x1)
Inner - Galvanised 900mm x 100mm (x1)

Zero Clearance Boxes

ZEROR - IB35/IB35ETR Royale Inbuilt.
ZEROS - RIBF2/IB25 Slimfire Inbuilt.
ZBOXREF - IB300 Reflection Inbuilt.
R2340 - RIB23xx Series Inbuilt.



DIRECT RIGID FLUEING USING FLFKIT05

FLFKIT05 Assembly Procedure



Position and install Freestanding Heater models in accordance with instructions supplied with the heater.

Position and install Inbuilt Heater & Zero Clearance kit using instructions supplied with Heater & Zero Clearance kit.

1. Check roof space for any obstructions. If the required clearance from combustible material can not be obtained, consider an offset installation.
2. Set plumb bob from ceiling to centre of flue outlet on heater, marking the centre position on ceiling.
3. Cut 150 mm circle in ceiling to accommodate flue penetration.
4. Screw ceiling cover plate (E) to ceiling with the powder coated screws provided.
5. Fit flue the assembly (A), (B) and (C) to the heater as per 'Connecting Direct Rigid Flueing to Heaters' on page 2.
6. Connect subsequent inner (B) and standard outer (D) flue pipes into place. Join inner flues with three galvanised screws or rivets. Repeat for (B) and (D) pipe lengths as required.



Continue assembly to the flue terminal to ensure compliance with current AS/NZS 5601.

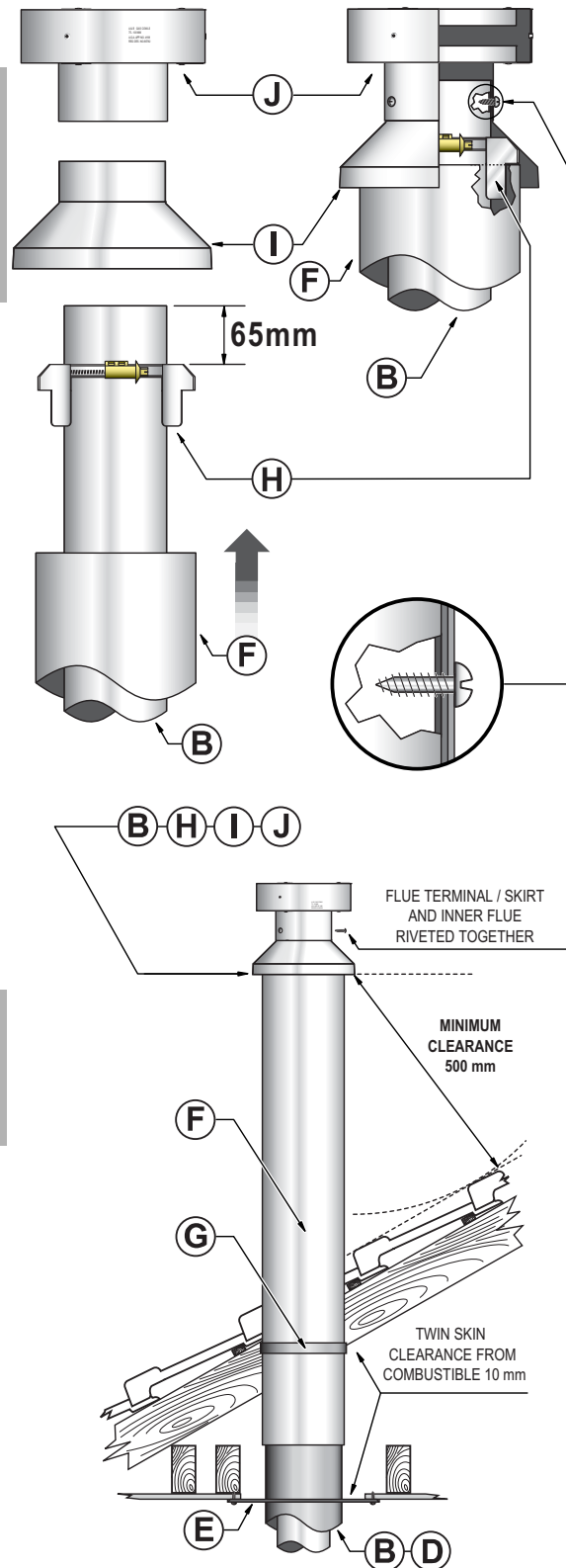
Minimum clearance from roof 500mm.

7. Fit slip joint (F) and mounting bracket (G) to end of the outer flue pipe (D) and slip downward.
8. Fit spacer (spider) clip (H) and secure to inner flue pipe (B) 65mm from the end of the pipe.
9. Fit terminal skirt (I) and flue terminal (J) to the inner flue pipe (B) securing all three together with three galvanised screws or rivets.
10. Slide slip joint (F) upwards so that the legs of the spacer (spider) clip (H) are covered then secure with three galvanised screws or rivets.
11. Secure mounting bracket (G) to slip joint (F) in ceiling space to support the weight of the flue system, and not place strain on roof flashing as per the current version of AS/NZS 5601.



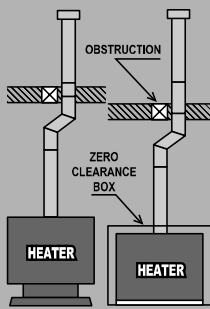
Flash roof penetration by approved methods. (Roof flashing materials are not included in flue kit).

Total vertical flue length MUST BE at least 3 metres.



Flue Terminal Assembly Details

OFFSET RIGID FLUEING USING FLFBEND



When an obstruction prevents the use of a direct rigid flue run from the appliance to the termination point a FLFBEND kit consisting of two 45° offsets can be used to divert the flue.

The FLFBEND is used in conjunction with a FLFKIT05 flue kit.

The offset length can be increased by the inclusion of FLF0900M standard inner/outer flue lengths, either used in whole or cut to size.

FLFBEND components:

- Ⓛ Inner 45° Elbow
100mm Galvanised (x2)
- Ⓚ Outer 45° Elbow
145mm Powder Coated (x2)

Additional Components:

(Items not included in kit FLFBEND)

FLF0900M

Standard - outer/inner flue pipe

Outer - Powder coated 900mm x 145mm (x1)

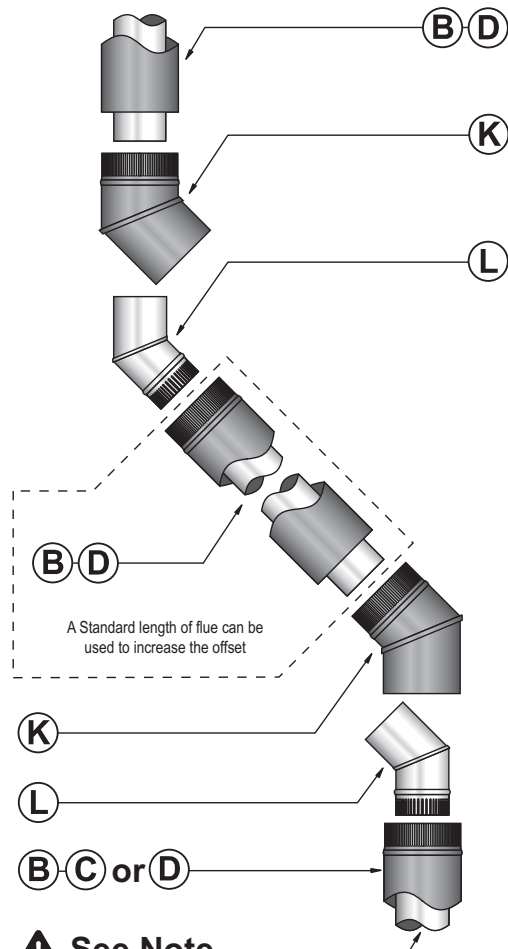
Inner - Galvanised 900mm x 100mm (x1)

FLFBEND Assembly Procedure



The vertical length of flue pipe between the heater and the first inner 45° elbow Ⓛ (FLFBEND) should be as long as the installation allows, and at least 900mm.

1. Connect inner 45° elbow Ⓛ onto the un-swaged end of an inner flue Ⓟ and join with three galvanised screws or rivets.
2. Slide outer 45° elbow Ⓚ over the inner Flue 45° Elbow Ⓛ and connect to outer flue pipe Ⓞ or Ⓠ.



⚠ See Note

At this point to extend the offset length use a combination of standard inner Ⓟ and outer Ⓠ flue pipe lengths, joining the inner flue sections with three galvanised screws or rivets.

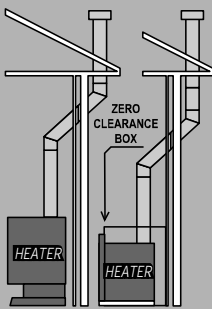
The offset length can be customised by cutting the extension components to size as required.

3. Connect second inner 45° elbow Ⓛ onto the preceding inner section and join with three galvanised screws or rivets. Connect the second outer 45° elbow Ⓚ over the preceding outer section.
4. Join subsequent inner Ⓟ and standard outer Ⓠ flue pipes fixing inner sections with three galvanised screws or rivets. Continue assembly to the heater and flue terminal as per the 'Direct Rigid Flueing' instructions on page 4.



Total vertical flue length MUST BE at least 3 metres.

THROUGH WALL RIGID FLUEING USING FLFTWKIT



Through wall rigid flueing is used to divert a flue run from appliance through an exterior wall to the termination point.

The FLFTWKIT provides a 45° wall penetration offset with an adjustable flashing plate. As such the FLFTWKIT is ideal for two storey applications.

The FLFTWKIT is used in conjunction with a FLFKIT05 flue kit.

For extended external flue runs, the FLFEXT03 kit must also be used.

FLFTWKIT Components List

- Ⓜ Inner 45° Elbow
100mm Galvanised (x2)
- Ⓝ Lower Outer 45° Elbow
145mm Powder Coated (x1)
- Ⓞ Internal Wall Plate + 4 Fixing Screws
Powder Coated (x1)
- Ⓟ Inner Extension Pipe
100mm Galvanised (x1)
- Ⓠ Spacer Clamp
100mm Stainless Steel (x1)
- Ⓡ Outer Extension Pipe
145mm Powder Coated (x1)
- Ⓢ Transition Slip Joint ⚠
145~150mm Galvanised (x1)
- Ⓣ Outer Transition / Wall Plate ⚠
150mm Powder Coated (x1)
- Ⓤ Upper Outer 45° Elbow ⚠
150mm Galvanised (x1)

Additional Components:

(Items not included in kit FLFTWKIT)

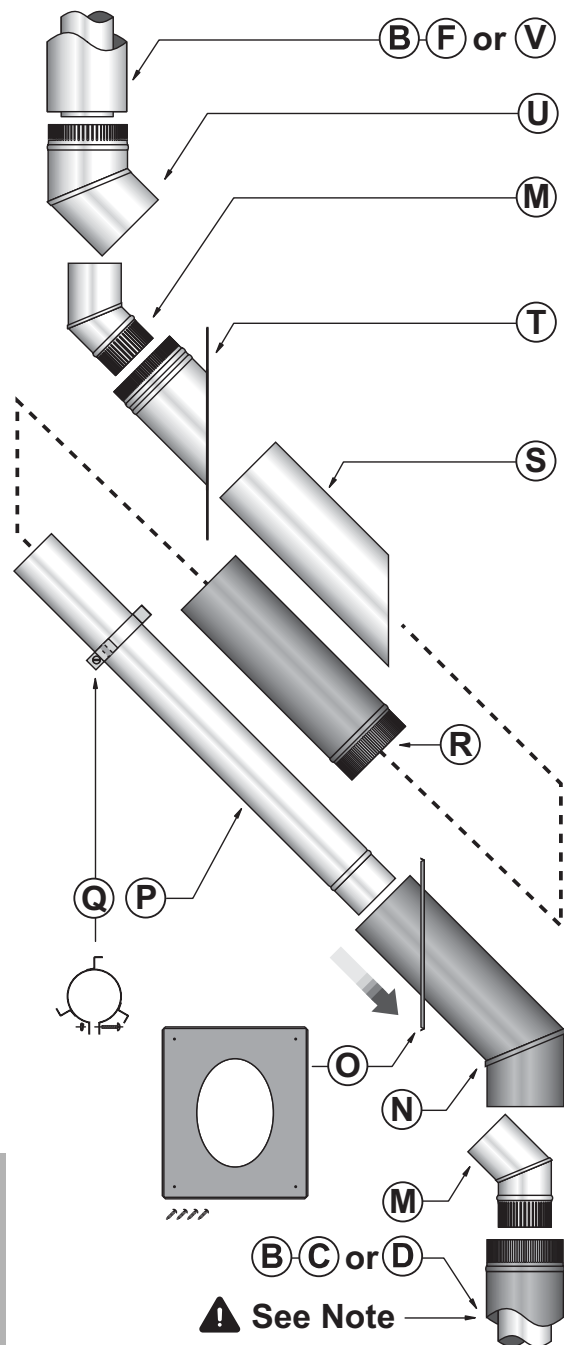
- Ⓥ FLFEXT03 External Pipe Extension & Bracket
900mm x 150mm Galvanised (x1)
900mm x 100mm Galvanised (x1)
150mm Galvanised Victor-clip (x1)



The FLFTWKIT outer transition Ⓣ has a diameter of 150mm. For extended external flue runs only FLFEXT03 external pipe extensions are compatible. The standard outer flue pipes have a diameter of 145mm and are therefore not compatible.



The vertical length of flue pipe between the heater and the first inner 45° elbow Ⓜ (FLFTWKIT) should be as long as the installation allows, and at least 900mm.



THROUGH WALL RIGID FLUEING USING FLFTWKIT

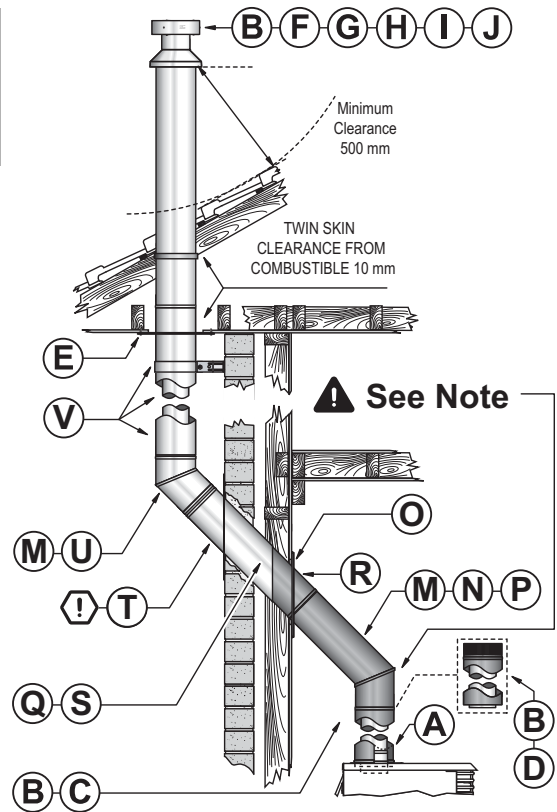
FLFTWKIT Assembly Procedure



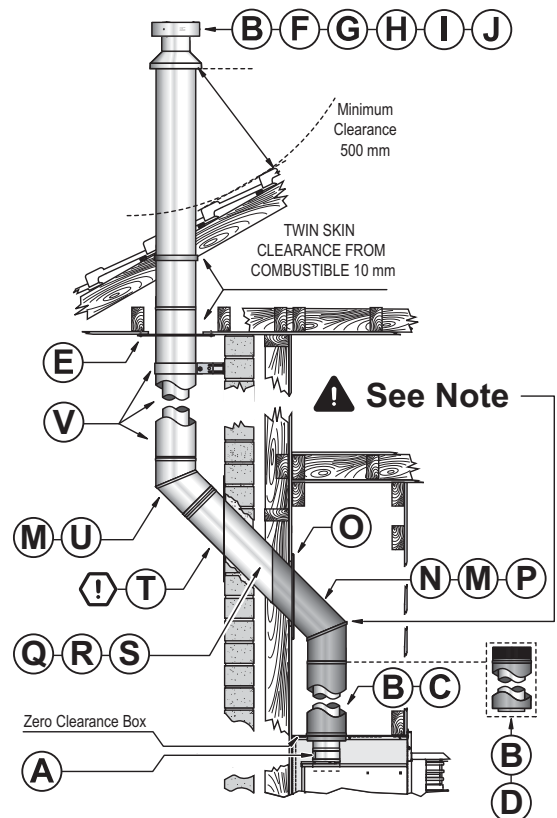
The vertical length of flue pipe between the heater and the first inner 45° elbow (M) (FLFTWKIT) should be as long as the installation allows, and at least 900mm.

1. Connect an inner 45° elbow (M) onto the un-swaged end of an inner flue pipe (B) and join with three galvanised screws or rivets.
2. Slide lower outer 45° elbow (N) over the inner 45° elbow (M) and connect to outer flue pipe (C) or (D).
3. Carefully fit the internal wall plate (O) over the end of the lower outer 45° elbow (N).
4. Slide inner extension pipe (P) through the lower outer 45° elbow (N) and connect to the inner 45° elbow (M). Ensure a positive connection at this joint as it will not be possible to access for fastening by screws or rivets.
5. Fit and secure the spacer clamp (Q) to the inner extension pipe (P) at approximately the mid way point of the pipe.
6. Slide outer extension pipe (R) over the inner extension pipe (P) and connect to the lower outer 45° elbow (N). The inner / outer extension pipes (P) and (R) may be cut to size to shorten penetration.
7. Slide the transition slip joint (S) over the outer extension pipe (R)
8. Slide the outer transition / wall plate (T) over the transition slip joint (S). Seal and secure to the external wall.
9. Connect the second inner 45° elbow (M) onto the un-swaged end of to the inner extension pipe (P) and join with three galvanised screws or rivets.
10. Slide upper outer 45° elbow (U) over the second inner 45° elbow (M) and connect to the outer transition / wall plate (T)
11. Continue assembly to the heater and flue terminal as per the 'Direct Rigid Flueing' instructions on page 4. For longer external runs use FLFEXT03 external pipe lengths (V) see note (I) on page 6.
12. Carefully move the internal wall plate into position (O) and secure to the internal wall with the 4 screws provided.

Typical Freestanding Installation

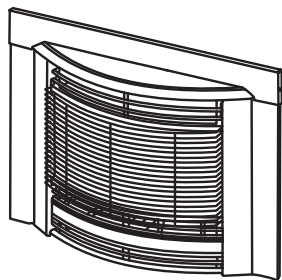


Typical Inbuilt Installation

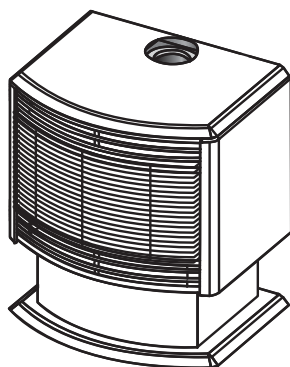


Rinnai

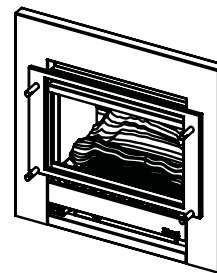
The Rinnai Flamefire Heater Family



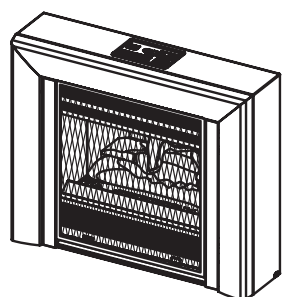
Inbuilt Royale
IB35 / IB35ETR



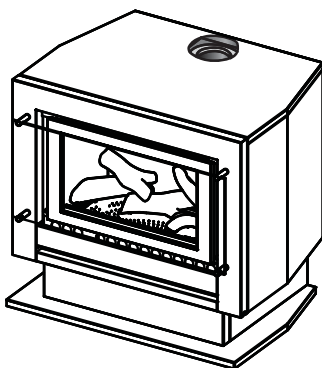
Freestanding Royale
FS35 / FS35ETR



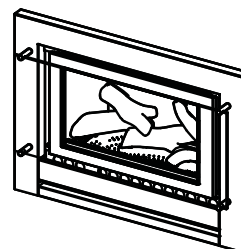
Inbuilt Slimfire 252 / 25
RIBF2 / IB25



Inbuilt Reflection
IB300



Freestanding Sapphire
RIB23xx Series



Inbuilt Sapphire
RIB23xx Series

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