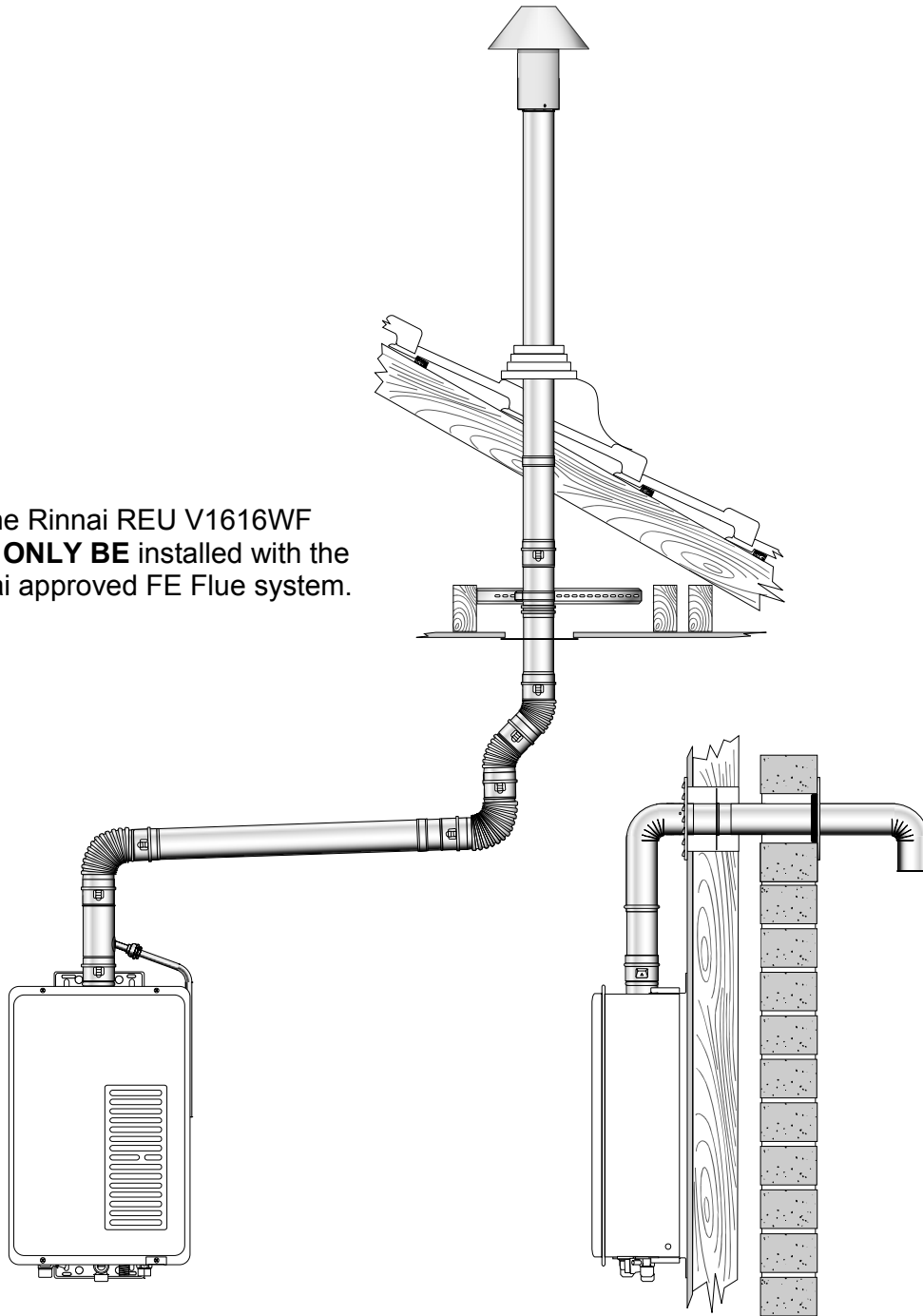


Rinnai

Infinity REU-V1616WF Internal

The Rinnai REU V1616WF
CAN ONLY BE installed with the
Rinnai approved FE Flue system.



This Flue shall be installed in accordance with: -

- Manufacturer's Installation Instructions
- Local Gas Fitting Regulations
- Municipal Building Codes
- AGA Installation Code for Gas Burning Equipment
- Any other relevant Statutory Regulation

This appliance and flue system must be installed,
serviced and removed by an Authorised Person.



Quality
Endorsed
Company

ISO 9002 Lic 4983
Standards Australia

Distributed and Serviced in Australia under a Quality
system certified as complying with ISO 9002 by
Standards Australia Quality Assurance Services.

REU V1616WF Flueing Installation Instructions

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Installation

This flue must be installed by an authorised person, the Installation must conform to local regulations. Installation must comply with the instructions supplied by Rinnai.

Service and removal must be carried out by an authorised person.

Approval

Approved by AGA as a suitable flueing system for Rinnai REU V1616WF Gas Internal Water Heaters.

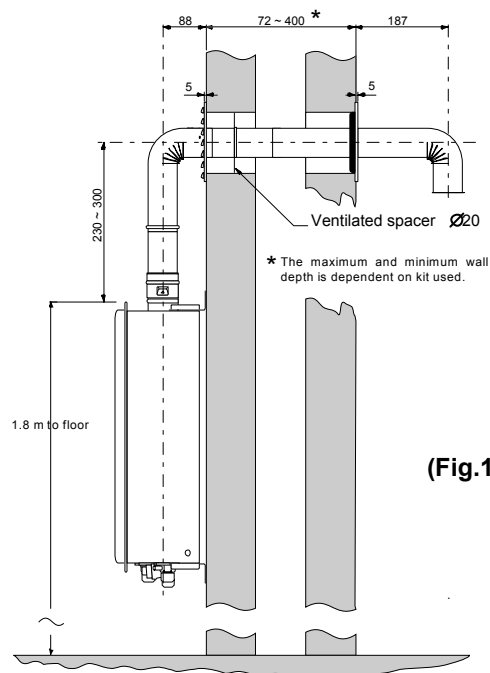
General

1. These instructions apply only to the Rinnai REU V1616WF. These instructions do not apply to the Rinnai Infinity Flueing with the white plastic or stainless steel outer pipe (Co-ax type). If in doubt contact the Rinnai Australia Technical Advice Helpline: 1300 366 388.
2. The Rinnai REU V1616WF can **ONLY** be installed with the Rinnai approved FE Flue system.
3. Before commencing installation, please read the 'Installation Instructions - General' located inside a pouch behind the front cover of the REU V1616WF.
4. The requirements of AS5601/AG601 'Gas Installations' must be met. It is the installer's responsibility to ensure the installation conforms to current version of AS5601/AG601 and local regulations.
5. It is important to ensure that ventilation requirements of AS5601/AG601 Clause 5.4 are met, as detailed in the 'Installation Instructions - General' located inside a pouch behind the front cover of the REU V1616WF.
6. The REU-V1616WF is not a room sealed appliance, refer clause 5.12.5.2 of AS5601/AG601 for prohibited location in which this appliance can not be installed.

REU V1616WF Flueing Installation Instructions

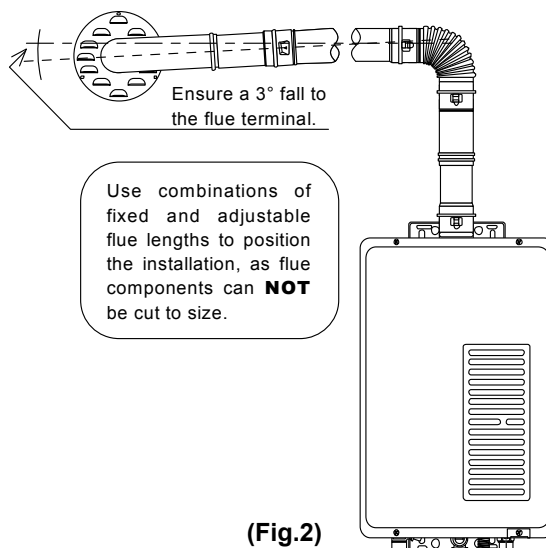
Flueing Options

Direct Flueing with Wall Terminal: (Fig.1)



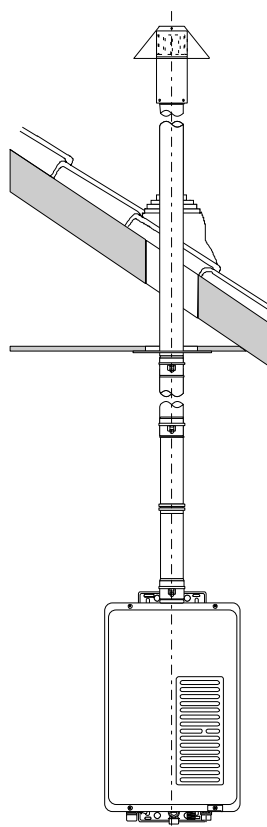
(Fig.1)

b) Extended Direct Flueing with Wall Terminal: (Fig.2)



(Fig.2)

c) Vertical Flueing with Roof Terminal (Fig.3)



(Fig.3)

Important Installation Notes:

- The components of this flueing system **CAN NOT BE CUT** use telescopic components to achieve the required length.
- The flue system **MUST** be installed to comply with AS5601/AG601 Clause 5.13.
- Ensure that positioning of the flue terminal complies with the requirements of AG5601/AG601. **Warning:** The flue products can reach temperatures above 200°C. The flue terminal is to terminate in a location, not to cause a nuisance.
- The Rinnai REU V1616WF is a fan-assisted appliance; use the fan-assisted clearances in AS5601/AG601 Clause 5.13.6.5 Fig.5.3 (See page 5)
- All Flue **MUST** be supported and be independent of the appliance in accordance with AS5601/AG601 Clause 5.13.4.2 and 5.13.4.3.
- Ensure the appliance can be removed without causing movement or displacement of the flue, as per AS5601/AG601 clause 5.13.4.1. Telescopic components extended to a minimum of 55mm can be used as a slip socket.
- All Rinnai FE Flue Components are self-locking (See Fig.9 for unlocking procedure).
- **Caution:** The "O" Rings in all components are pre-greased; ensure they are not damaged when joining.
- When preparing the wall and ceiling penetrations, cover the flue spigot to prevent debris from entering the appliance.
- The mounting brackets on the appliance can be adjusted from 15mm to 50mm to allow for irregularities in the walls and length of the flue components.

REU V1616WF Flueing Installation Instructions

Direct Flueing with wall terminal (Fig. 4)

Installation.

The Installation of the Rinnai REU V1616WF Water Heater **MUST BE** installed in accordance with the installation instructions located in the pocket inside the front cover of the appliance.

1. From the top of the flue spigot mark the centre of the wall penetration at 228mm (Step 1).
2. Prepare a 120mm diameter hole through the wall, **Note:** Do not exceed 130mm to allow the inner and outer wall plate to be secured to the wall.
3. If the wall thickness is between 72~222mm use Kit **FE16HKIT220A**.

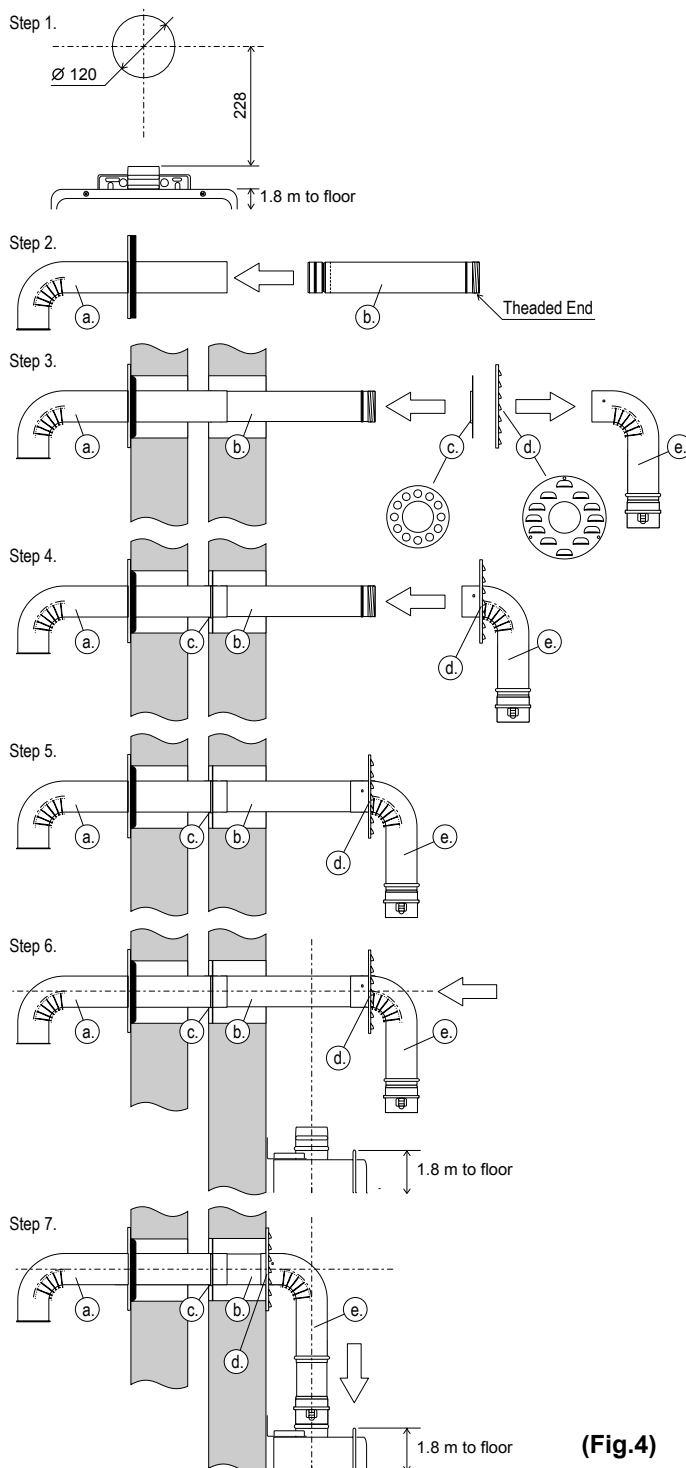
Or

If the wall thickness is between 180~400mm use Kit **FE16HKIT400B**.

4. Attach parts "a" and "b" together to form the telescopic section. (Insert the end with the single recess on "b" into "a", leaving the male thread "b" exposed). Extend the telescopic section to maximum (Step 2).
5. From the outside secure flue assembly "a" and "b" to the wall. (Step 3)
 - Ensure the flue terminal faces down.
 - Ensure the flue is central in the hole.
6. From the inside fit the Ventilated spacer "c" over "b" and locate it midway in the wall cavity. This spacer is to ensure clearance from combustible materials is maintained (Step 4).
7. Fit the inner wall plate "d" over the plain end of the telescopic bend "e". Screw the "b" and "e" sections together ensuring the screwed joints is secured. Care should be taken not to damage the 'O' ring (Step 5).
8. Adjust the distance from the wall to the spigot on the appliance by sliding the horizontal telescopic section in to allow the flue spigot to align with the appliance (Step 6).
9. Adjust the vertical telescopic section and attach the flue to the appliance spigot and lock (Step 7).
10. Secure the inner wall plate "d" to the wall with the louvers facing down.

Direct Flueing kits' consist of,

- a) 1 x 90° Terminal bend with fixed external wall plate and seal.
- b) 1 x Telescopic extension section.
- c) 1 x In-wall spacer.
- d) 1 x Internal ventilated wall plate.
- e) 1 x telescopic 90° bend.



(Fig.4)

REU V1616WF Flueing Installation Instructions

Extended & Direct Flueing with wall and roof terminals

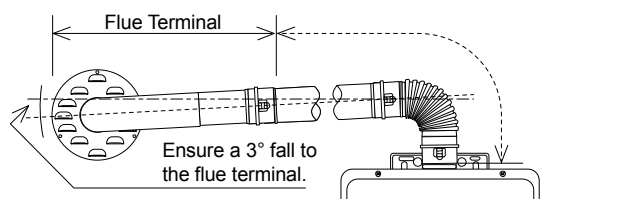
The Direct flueing wall terminal can be extended using the methods as shown in (Fig.5)

The total flue length should not exceed 9m and the number of 90° bends should not exceed 3.

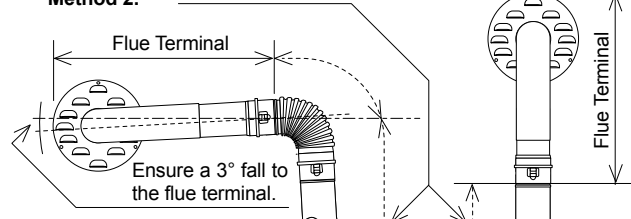
When total vertical rise of flue exceeds 2 m a Condensation Trap / Drainage **MUST BE** fitted (Fig.5, Method 4.).

Note: The through wall terminal is equivalent to a 1m length and counts as one 90° bend, these factors must be taken into account when sizing a through wall installation.

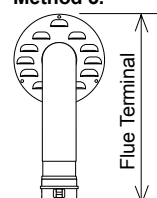
Method 1.



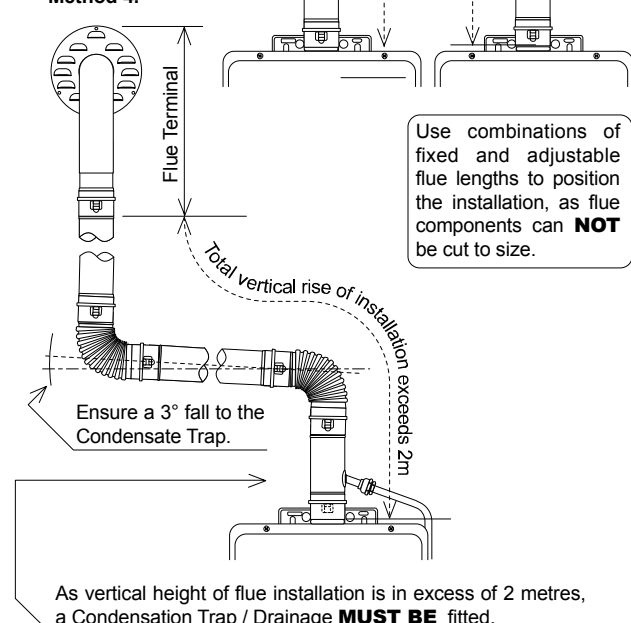
Method 2.



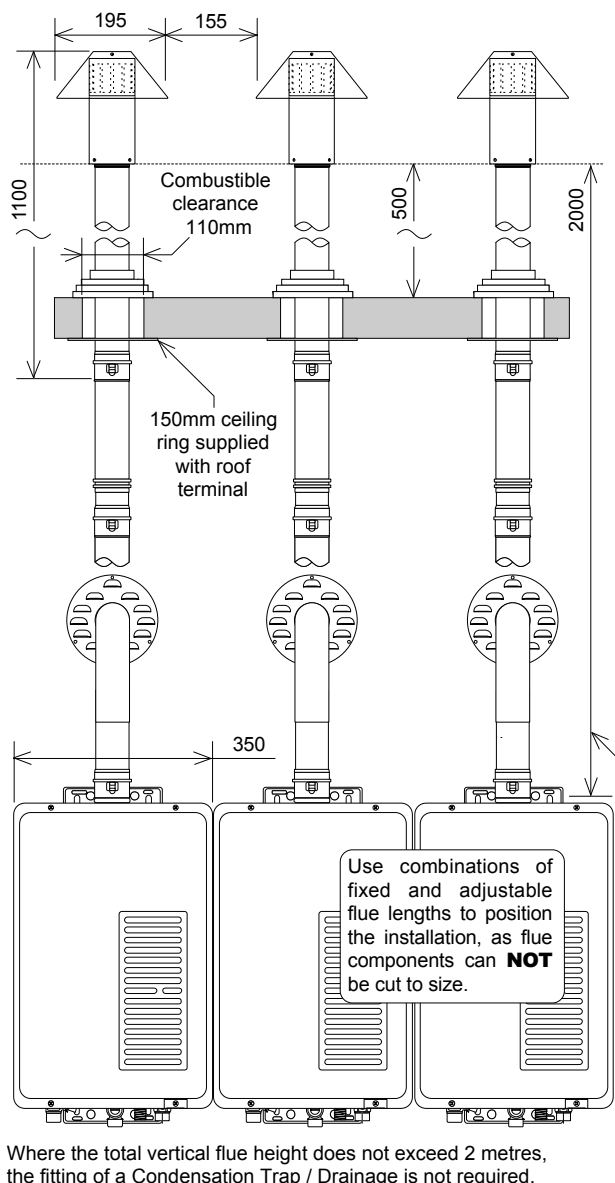
Method 3.



Method 4.



(Fig.5)



(Fig.6)

The terminal clearances in AS5601 / AG601 do not apply to the Infinity REU V1616WF Water Heaters installed side by side. The appliances are AGA certified to be installed side by side as shown in (Fig.6), allowing for a horizontal distance of 155mm between flues.

The minimum distance of 500mm between the underside of the cowl and the nearest part of the roof must still be met.

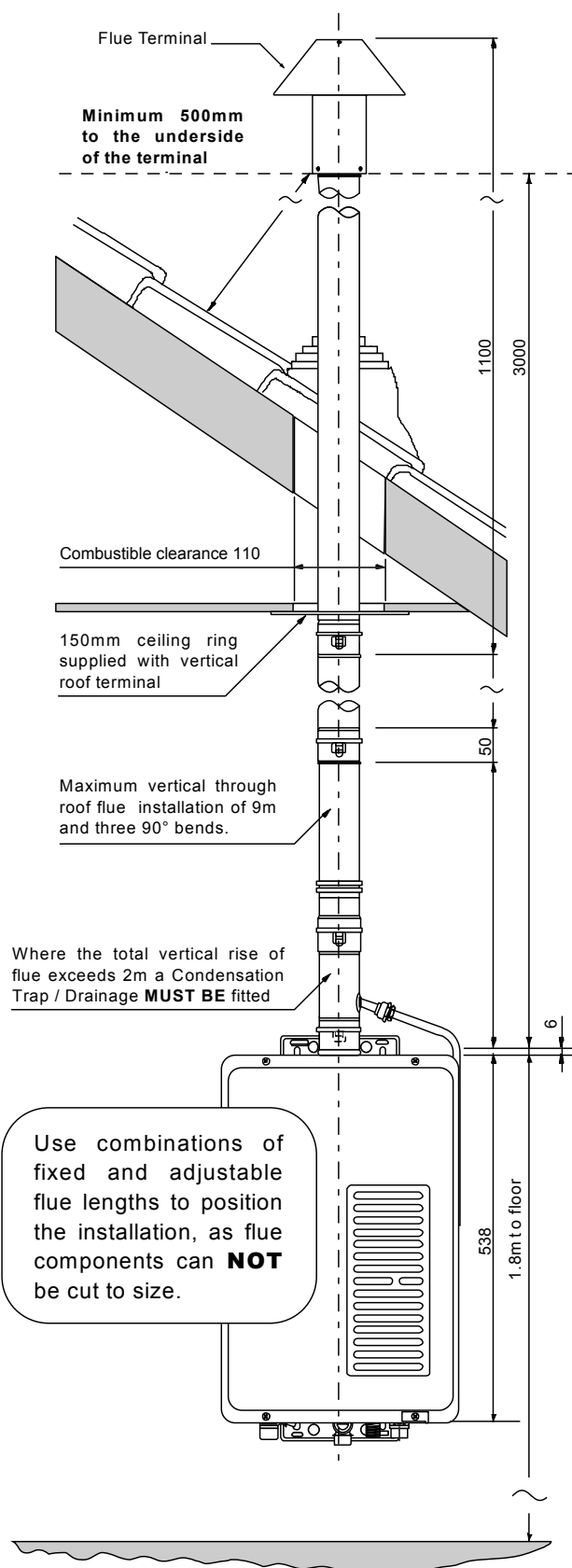
REU V1616WF Flueing Installation Instructions

Vertical Straight Flueing with Roof Terminal

Installation

1. Set a plumb bob from the centre of the flue spigot to ceiling marking position. Cut 110mm hole in plasterboard (or suitable 'oval' for pitched roof). Repeat this step for underside of roofing. (The 110mm allows for the required clearances to combustible materials).
2. Using the dimensions shown, calculate the required number and combination of components required.
3. A telescopic section extended a minimum of 55mm should be the component closest to the appliance spigot to allow disconnection of the appliance.
4. Straight flue components are available in 300, 450, 600 and 900mm and **CAN NOT BE CUT**. If the total length cannot be achieved with standard lengths, telescopic components of 150~200, 150~220 and 250~420 mm are available to achieve the required length to extend to the roof terminal.
5. Install ceiling ring. (Supplied with Roof Terminal)
6. Install the vertical roof terminal with the underside of the cowl a minimum of 500mm from the nearest part of the roof (AS5601/AG601 clause 1 5.13.6.2) see Fig. 7. Seal the roof penetration with an approved flashing.
7. If the total vertical rise of a flue installation exceeds 2 metres a Condensation Trap / Drainage **MUST BE** fitted (Fig.8).
8. When fitted the Condensate Trap **MUST ONLY** be installed vertically, as horizontal installation of the Condensate trap is **NOT** permitted.

Note: The total flue length should not exceed 9m and the number of 90° bends should not exceed three.



(Fig.7)

REU V1616WF Flueing Installation Instructions

Condensate drain.

The condensate trap will collect condensate from the flue system. This condensate must be drained to the outside of the building via a condensate drain pipe. Because the condensate is mildly acidic, Rinnai recommend Clipsal 16mm rigid Grey UPVC or equivalent conduit and associate fittings: Pipe (9016MD), 90° Elbow (245/16), Clips (261/16).

Installation

1. Connect the aluminium drain tube to the condensate trap with compression union, ensuring the supplied olive is correctly seated and the joint sealed with approved sealant (**Fig.8**).
2. Using 16mm UPVC conduit, extend the drain from each water heater.

Drainage tube / UPVC conduit joint to be sealed with 'Easy Seal - Roof, Gutter & Metal' silicone or equivalent.

Important Notes:

Copper tube **MUST NOT** be used as it will corrode under acidic conditions.

The allowable length of the pipe and the corresponding number of bends as shown in **Table.1** are as per those extracted from AS 3500.4.2 Clause 4.12.2. table 4.4

Table.1

Max Length M	9	8	7	6
N° of Bends < 45°	3	4	5	6

4. The condensate drain must run **CONTINUOUSLY** to a point of discharge or tundish outside the building. There must be no tap, valve or any other restrictions in the condensate drain and the tundish **MUST NOT** be located indoors.
5. Condensate drain lines from multiple water heaters may not be interconnected but may discharge over a tundish on a common drain line, provided that the tundish is located outdoors.
6. The drain from any tundish **MUST NOT** be less than one size larger than that of the largest drain line discharging into the tundish. Both the tundish and it's drain line must be made from UPVC.

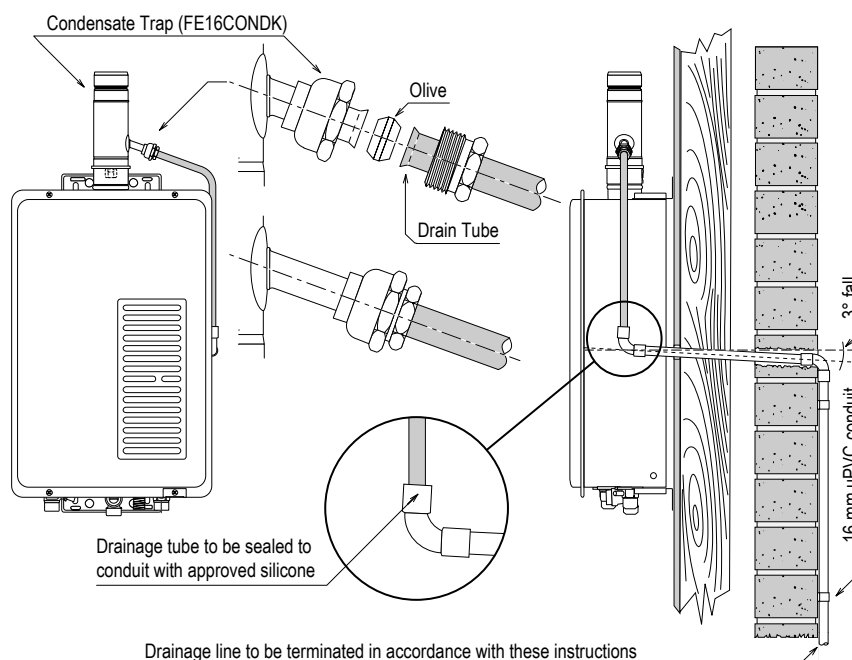


Fig.8

7. The drain from any tundish **MUST NOT** be less than one size larger than that of the largest drain line discharging into the tundish. Both the tundish and it's drain line must be made from UPVC.
8. The point of discharge from each drain line shall be located:
 - So that the release of condensate does not cause a nuisance and incurs no risk of damage to the building or injury to persons
 - Not lower than 300 mm or higher than 450 mm above an unpaved surface
 - Not lower than 75 mm or higher than 300 mm above a gravel pit not less than 100 mm in diameter in a paved surface
 - The point of discharge from each drain line must not be located such that discharge can fall onto electrical connections, earth stakes or copper pipes.

REU V1616WF Flueing Installation Instructions

To Connect The Flue Components.

Step 1. Connect the pre-greased components. *Caution:* Ensure the "O" Rings are not damaged during this process.

Step 2. Ensure the flue is locked in position.

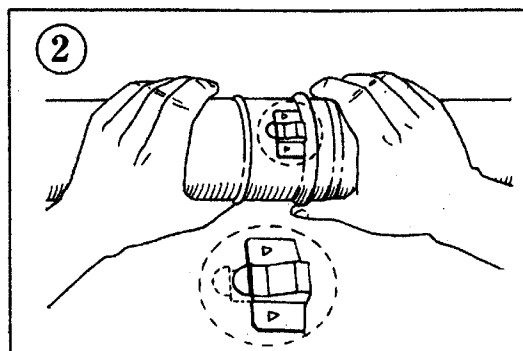
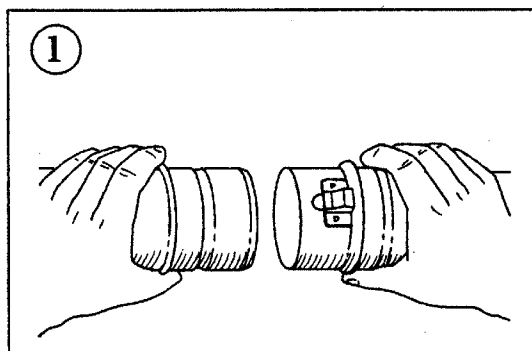
To Disconnect The Flue Components.

Step 1. Push the components tight together.

Step 2. Push in the small locking tab.

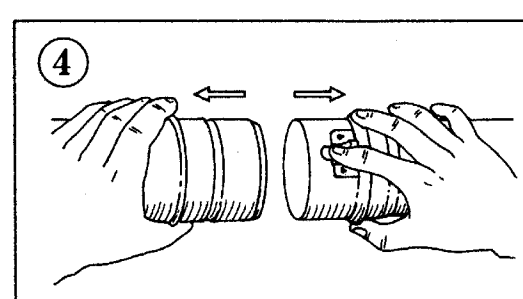
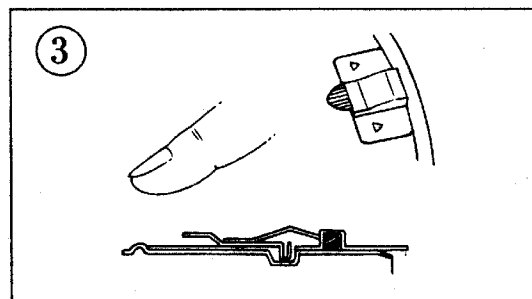
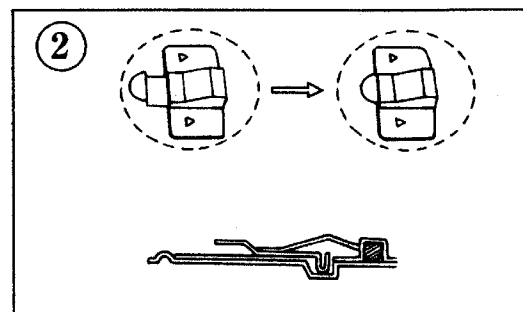
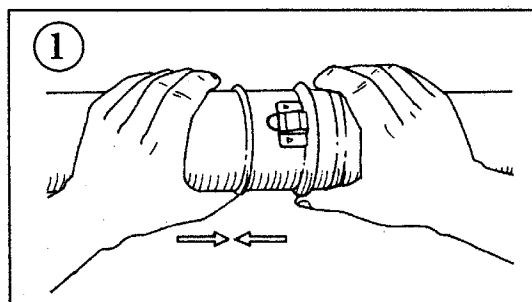
Step 3-4. While holding the small tab in, gently slide the components apart.

Caution: Ensure the "O" Rings are not damaged during this process.



Connect

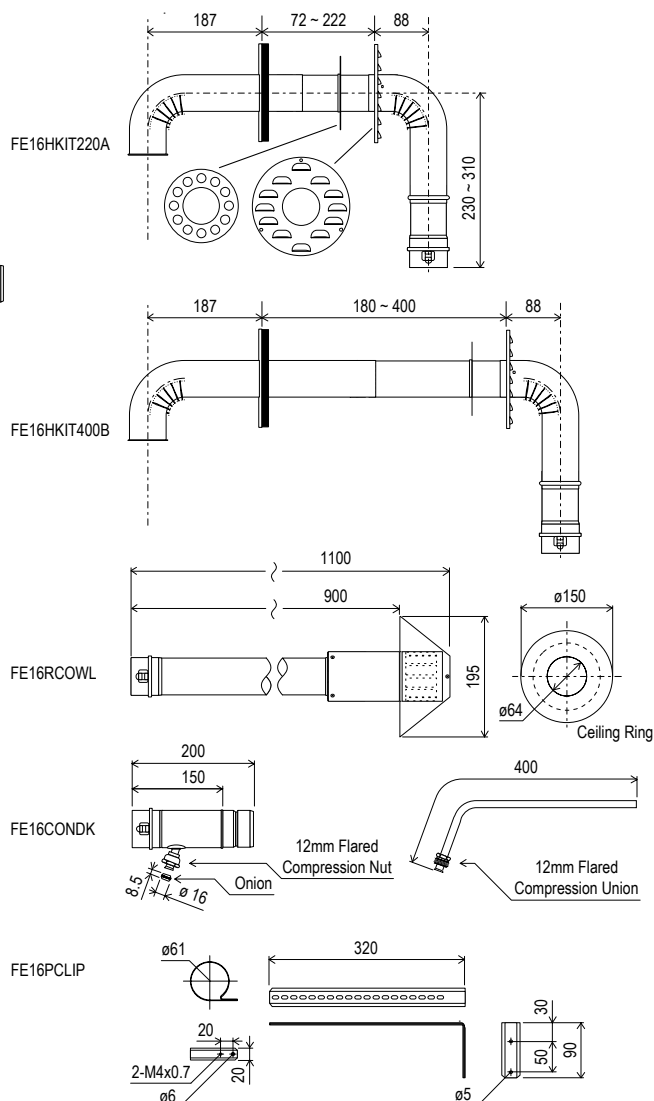
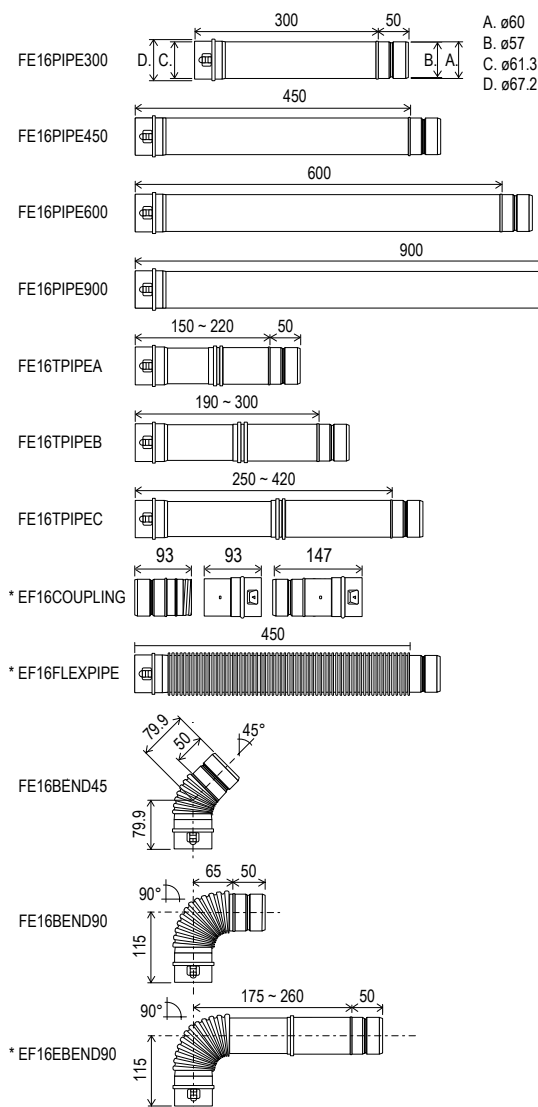
Disconnect



(Fig.9)

REU V1616WF Flueing Installation Instructions

Components Page



Internal REU V1616WF Flue Part Numbers

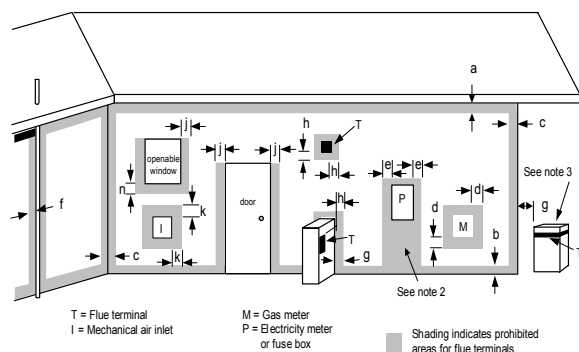
DESCRIPTION	SHORT CODE	CODE NUMBER
300MM/60MM FLUE PIPE	FE16PIPE300	9314109120363
450MM/60MM FLUE PIPE	FE16PIPE450	9314109120370
600MM/60MM FLUE PIPE	FE16PIPE600	9314109120387
900MM/60MM FLUE PIPE	FE16PIPE900	9314109120394
TELESCOPIC FLUE 220/150	FE16TPIPEA	9314109120400
TELESCOPIC FLUE 300/190	FE16TPIPEB	9314109120417
TELESCOPIC FLUE 420/250	FE16TPIPEC	9314109120424
*FLUE PIPE EXTENSION	FE16COUPLING	9314109121643
* 450MM FLEXIBLE FLUE PIPE	FE16FLEXPIPE	9314109121650
45 DEGREE BEND	FE16BEND45	9314109120448
90 DEGREE BEND	FE16BEND90	9314109120431
* 90 DEGREE BEND TELESCOPIC	EF16EBEND90	9314109121636
HORIZONTAL FLUE 220	FE16HKIT220A	9314109121001
HORIZONTAL FLUE 400	FE16HKIT400B	9314109121018
VERTICAL ROOF TERMINAL	FE16RCOWL	9314109121025
CONDENSATE TRAP & DRAIN	FE16CONDK	9314109122688
FLUE PIPE CLIP	FE16PCLIP	9314109121124

* Components only available in New Zealand

REU V1616WF Flueing Installation Instructions

Minimum Flue Clearances.

Extract from AS5601/AG601-2002 5.13.6.5 Fig 5.3



† - Unless the appliance is approved for closer installation. Such exemptions apply in the case of the Rinnai REU V1616WF As per Fig. 6 on page 5.

NOTES:

- 1 All distances are measured to the nearest part of the terminal.
- 2 Prohibited area below electricity meter or fuse box extends to ground level.
- 3 See Clause 5.13.6.5 for restrictions on a flue terminal under a covered area.
- 4 See Appendix J, Figures J2(a) and J3(a), for clearances required from a flue terminal to an LP Gas cylinder. A flue terminal is considered to be a source of ignition.
- 5 For appliances not addressed above, approval shall be obtained from the Authority.

Ref.	Item	Min. clearances (mm)
		Fan assisted
a	Below eaves, balconies and other projections:	
	• Appliances up to 50 MJ/h input	200
	• Appliances over 50 MJ/h input	300
b	From the ground, above a balcony or other surface †	300
c	From a return wall or external corner †	300
d	From a gas meter (M) (see 4.7.11 for vent terminal location of regulator)	1000
e	From an electricity meter or fuse box (P)	500
f	From a drain pipe or soil pipe	75
g	Horizontally from any building structure = or obstruction facing a terminal	500
h	From any other flue terminal, cowl, or combustion air intake †	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:	
	• Appliances up to 150 MJ/h input	300
	• Appliances over 150 MJ/h input up to 200 MJ/h input	500
	• Appliances over 200 MJ/h input	1500
	• All fan-assisted flue appliances, in the direction of discharge	1500
k	From a mechanical air inlet, including a spa blower	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:	
	• Space heaters up to 50 MJ/h input	150
	• Other appliances up to 50 MJ/h input	500
	• Appliances over 50 MJ/h input and up to 150 MJ/h input	1000
	• Appliances over 150 MJ/h input	1500

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