RINNAI

Upwards Flue Diverter

Installation Instructions - FDU16, FDU20, FDU24 and FDU32

GENERAL INFORMATION

Rinnai upwards flue diverters fit external Rinnai Infinity Continuous Flow water heaters and are available in the following models:

- FDU16 - Infinity XR16
- FDU20 - Infinity XR20, XR20Plus, Solar 20 and XR18
- FDU24 - Infinity XR26, XR26Plus, XR24, Solar 24 and HD200
- FDU32 - Infinity XR32 and HD250

It is not compatible with other continuous flow water heater models.

Important
Installation of Infinity and associated components shall be in accordance with:
- Manufacturer's Installation Instructions
- Gas Installation Standards - NZS:5261
- Local Regulations and Municipal Building Codes

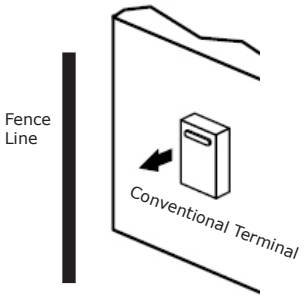
Installation, service and removal by an Authorised Person only. Continuous Flow water heater to be installed in accordance with the 'Operation / Installation Manual' supplied with the appliance.

APPLICATIONS

The Rinnai upwards flue diverter is intended for fitting to external Rinnai Continuous Flow water heaters installed on balconies, patios, near boundary lines or similarly enclosed areas to facilitate free expulsion of combustion products out of the enclosed area. This may not occur if the appliance is installed without the upwards flue diverter.

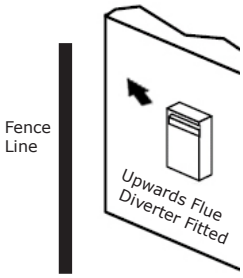
Specific applications:

- Noise reduction, in particular with the larger Infinity models such as the XR32 where the unit is positioned close to a neighbouring property
- Where there may be an obstruction such as a tree, fence, wall or other structure, that even though the Infinity is installed within the required 'Clearances for Flue Terminals', will perform more efficiently if the flue gases are cleared upwards and away from the obstruction



Fence line is right on the minimum clearance (refer NZS:5261). This potentially could be:

- Noisy to nearby properties
- Result in flue gases on a still day coming back into the unit itself



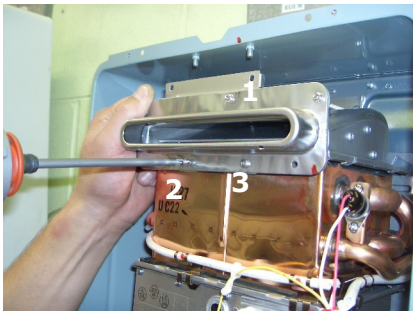
With an upwards flue diverter fitted the unit is quieter and combustion gases are propelled upwards away from the obstruction

- Installations where there are multiple units installed that are positioned facing each other, the potential for the unit to 'suffocate' as a result of opposing units flue gas is minimised by having the upwards flue diverter clearing the flue gases upwards as opposed to horizontally

INSTALLATION

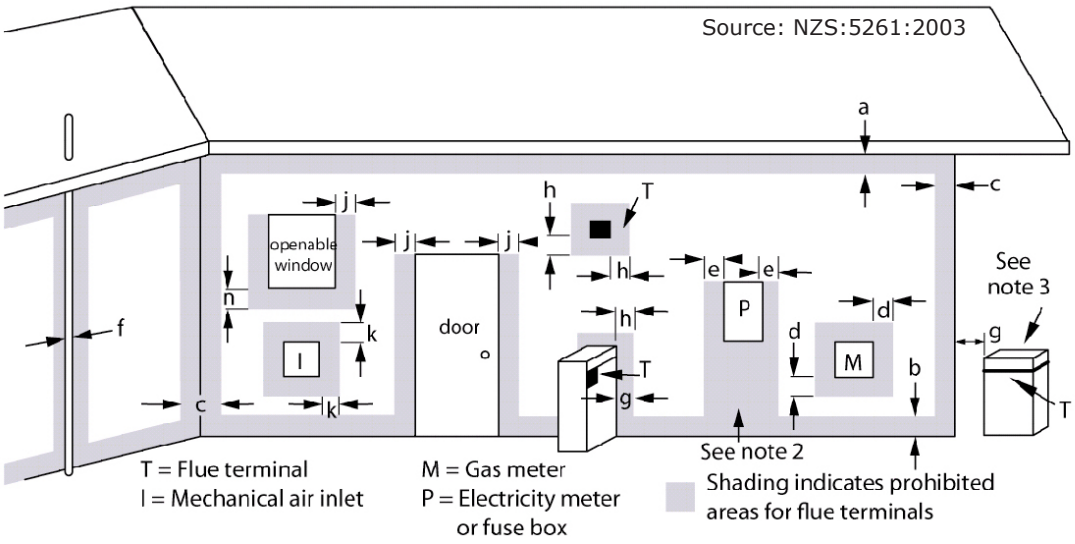
The flue diverter is fitted with screws to the flue terminal. All clearances must conform to NZS:5261 (refer page 4). Upwards flue diverter models differ in type and installation due to the different sizes of the flue terminal.

FDU32	**FDU16, FDU20 and FDU24**
1. Loosen fixing screws on diverter 	1. Remove front cover off the Infinity
2. Insert diverter into flue terminal ensuring it clips into the top and bottom lip of the terminal 	2. Remove and discard existing housing around the outside of the flue terminal 

FDU32	FDU16, FDU20 and FDU24
3. Secure diverter to Infinity by tightening screws 	3. Remove inside three screws from the flue terminal and set aside 
	4. Slot diverter onto flue terminal, re-insert screws and tighten 
	5. Use foam housing from diverter kit and place over diverter and flue terminal. This foam is thicker and will prevent metal components vibrating against each other 
	6. Place front cover back on the Infinity, being careful not to scratch the paint finish on the cover 

INSTALLATION REQUIREMENTS

Clearances Required for Flue Terminals as per NZS:5261 continue to apply for Infinity installations with flue diverters fitted.



KEY:			
T = Flue terminal		M = Gas meter	
I = Mechanical air inlet		P = Electricity meter or fuse box areas for flue terminals	
Shading in the diagram above indicates prohibited areas for flue terminals			
Ref.	Item	Minimum clearances (mm)	
		Natural draught	Fan assisted
a	Below eaves, balconies and other projections: • Gas appliances up to 50 MJ/h input • Gas appliances over 50 MJ/h input	 300 500	 200 300
b	From the ground, above a balcony or other surface (see note 6)	300	300
c	From a return wall or external corner	500	300
d	From a gas meter (M) (see 2.5.4.9 for vent terminal location of regulator)	1000	1000
e	From an electricity meter or fuse box (P)	500	500
f	From a drain pipe or soil pipe	150	75
g	Horizontally from any building structure (see note 6) or obstruction facing a terminal	500	500
h	From any other flue terminal, cowl, or combustion air intake (see note 6)	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: Gas appliances up to 150 MJ/h input Gas appliances over 150 MJ/h input up to 200 MJ/h Gas appliances over 200 MJ/h input All fan assisted flue gas appliances, in the direction of the discharge	 500 1500 1500	 300 300 500 1500
k	From mechanical air inlet, including a spa blower	1500	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 • Other gas appliances up to 50 MJ/h input • Gas appliances over 150 MJ/h input and up to 150 MJ/h input • Gas appliances over 150 MJ/h input	 150 500 1000 1500	 150 300 500 1500

Notes

1) All distances are measured to the nearest part of the flue terminal
2) Prohibited area below electricity meter or fuse box extends to ground level
3) See 2.6.13.3 for restrictions on a flue terminal under a covered area
4) See appendix G LPG Cylinder Locations, figure G2 and figure G3, for clearances required from a flue terminal to an LPG cylinder. A flue terminal is considered to be a source of ignition
5) For gas appliances not addressed above, the design shall be certified by a suitably qualified engineer
6) Some gas appliances may be suitable for closer installation; refer to manufacturer's instructions

Customer Contacts

For more information about buying and living with Rinnai gas appliances call 0800 RINNAI (0800 746 624).

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All Rinnai appliances meet or exceed the safety standards required by New Zealand gas and electrical regulations.
Rinnai is constantly improving its products and as such specifications are subject to change or variation without notice.

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Rinnai
GAS APPLIANCES

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