

Installation Instructions



Suitable for:

- New construction; installation needs to commence during framing, and before internal linings, claddings or building wrap is applied
- A minimum framing depth of 88 mm
- Installation with Rinnai Infinity **external** VT16-VT26 and XR16-XR26 continuous flow water heaters

It is **not suitable** for fire rated walls.

These instructions are a guide only, designed to be used in conjunction with the 'NZ Building Code Approved Document - External Moisture E2'. The recess box installation can be compared to the detail required to install windows correctly.

Territorial authorities may have their own additional requirements regarding this type of installation. If in any doubt over compliance with building codes, it is advisable they are consulted prior to installation.

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Installation instructions

These instructions are intended for the tradesperson(s) installing the recess box and continuous flow water heater. If you are not installing the continuous flow water heater, please make sure you leave these instructions inside the recess box. It is important the gasfitter installing the water heater has access to the information about fitting the unit into the recess box.

All dimensions throughout these instructions are in millimetres.

Before installation:

- Check for damage—DO NOT install any damaged items
- Check all components have been supplied
- Read these instructions to get an overview of the steps required before starting the installation

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

For assistance or additional information contact Rinnai on 0800 RINNAI (0800 746 624).

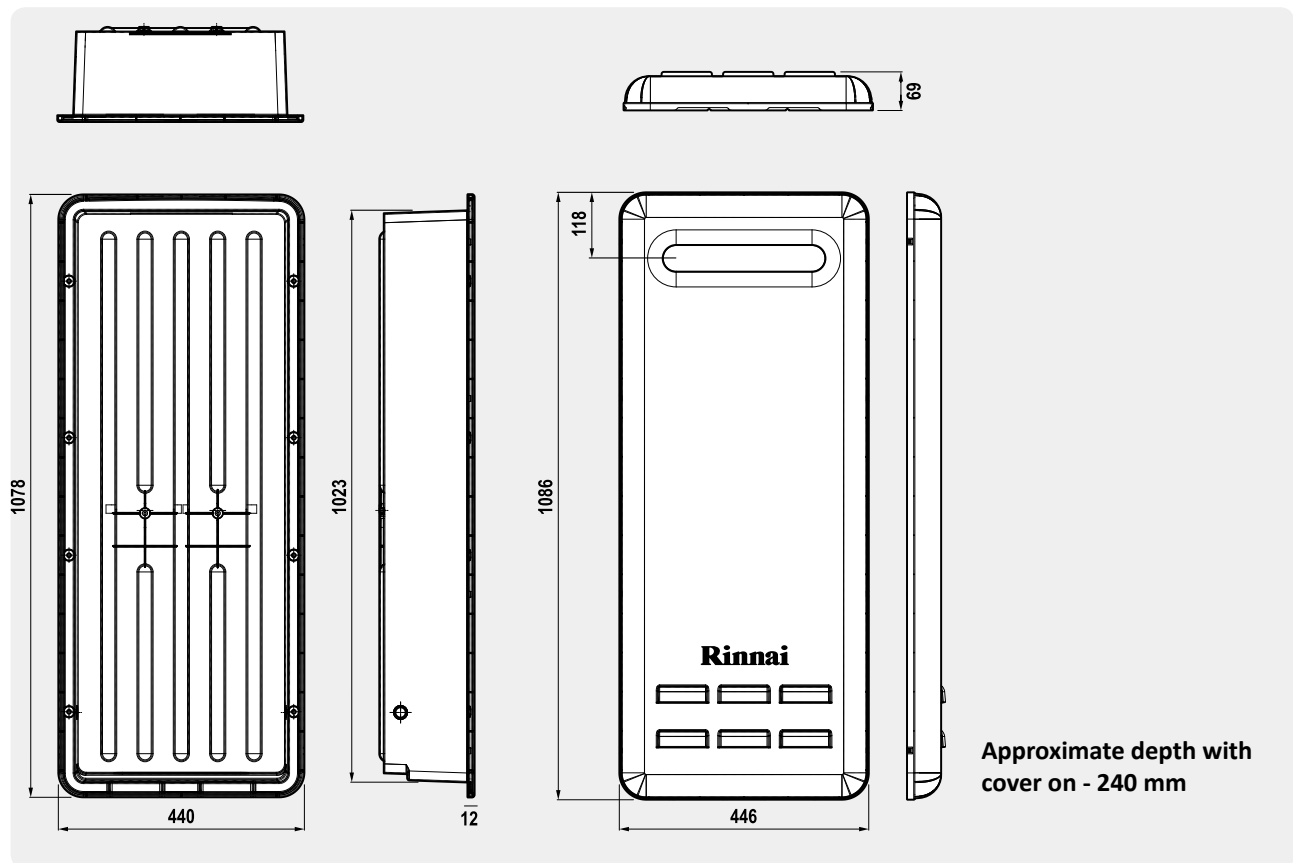
About the composite recess box

The Rinnai Composite Recess Box enables a continuous flow gas water heater to be partially recessed into an external wall, behind a door and out of sight. The box and cover can be painted to match the exterior cladding.

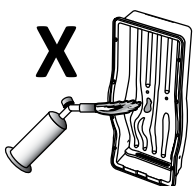
As shown, the unit protrudes approximately 120 mm from the framing it is mounted to. The protrusion from the finished wall will depend on the cavity depth (if any) and the cladding thickness.

Brick installations

Please contact Rinnai as customised installation instructions will need to be sent.



Warning



DO NOT apply heat in the vicinity of the Rinnai Composite Recess Box. This may distort and damage the box.

Recess box positioning

Some considerations when installing a Rinnai recess box with an external continuous flow water heater.

Hot water outlets

In most cases it is better to site closer to the kitchen where there is an expectation for instant hot water.

Ensure no obstructions

Ensure no plumbing, electrical wires, timber or other objects are blocking the box inside, or outside the wall cavity.

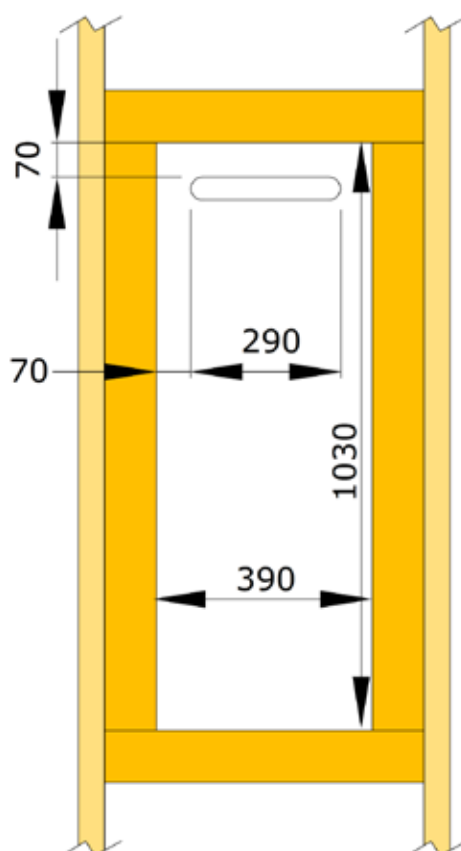
Accessibility

Make sure the unit is accessible for servicing and maintenance.

Clearance requirements

Ensure the flue outlet will meet the clearance requirements of NZS 5261:2003, 2.6.13. If you do not have access to this document, an extract has been reproduced at the back of these instructions.

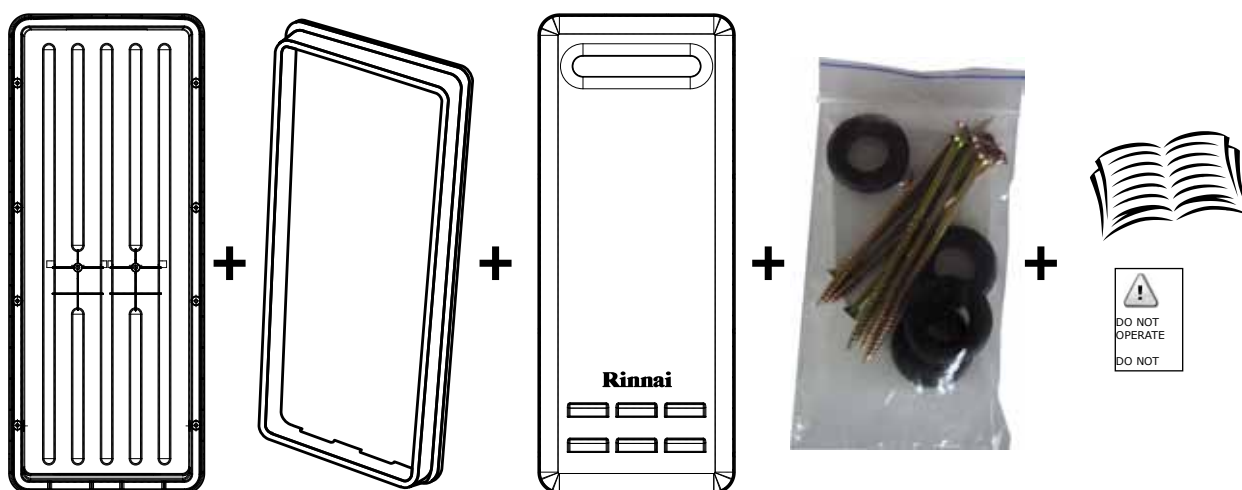
- Rinnai Infinity VT16 and XR16 = <150 MJ/h
- Rinnai Infinity VT20-VT26 = 150-200 MJ/h
- Rinnai Infinity XR20-XR26 = 150-200 MJ/h



Kit components

The Rinnai Composite Recess Box (R1406) contains the following:

- Recess Box
- Flashing collar (not required for brick installations)
- Recess cover with sticker on the inside
- Screw and grommet pack
- Installation instructions with warning label



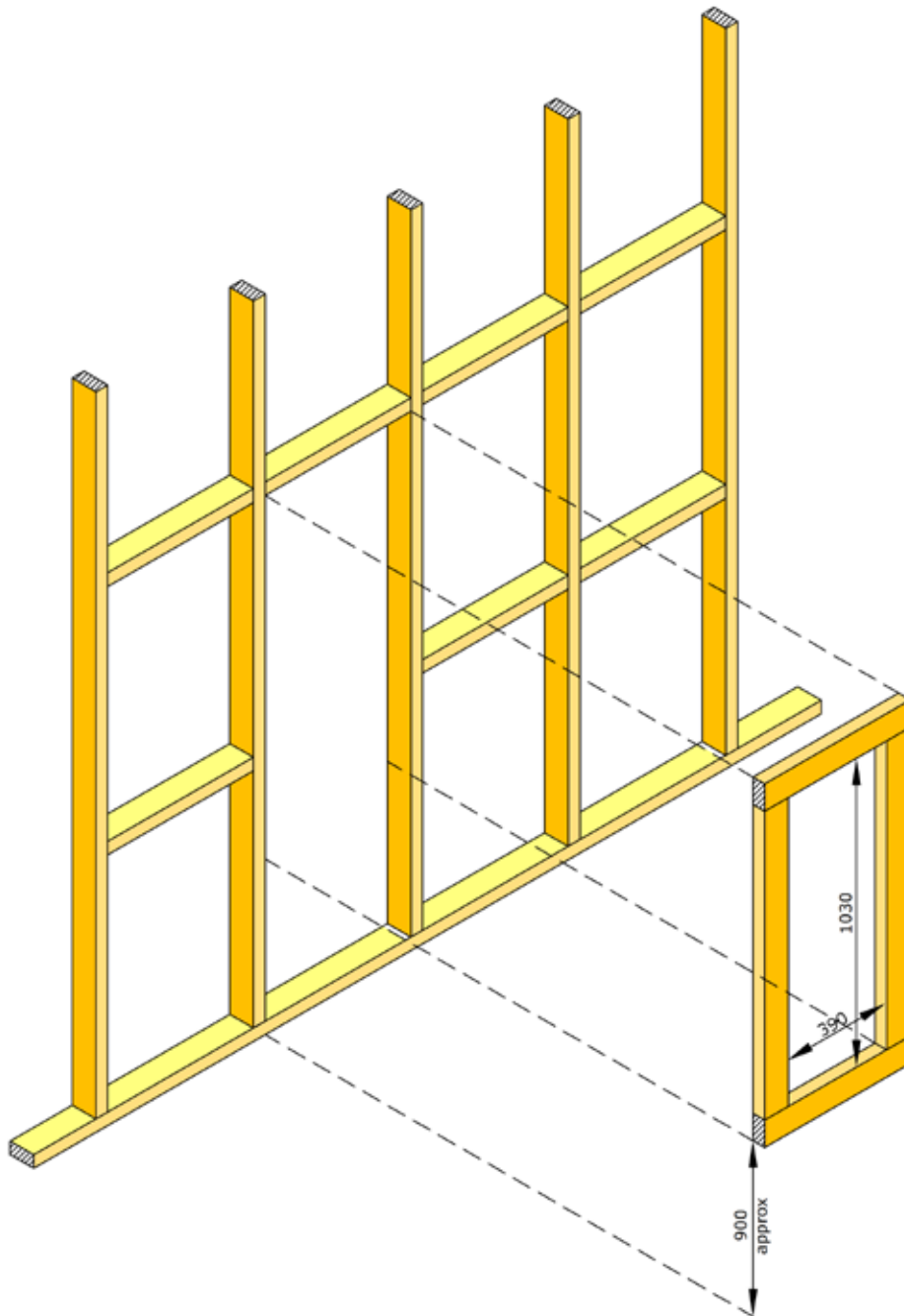
Check that the correct recess box has been supplied and that you have all the components before starting the installation.

The Rinnai recess box is for EXTERNAL Rinnai continuous flow gas water heaters only.

Framing

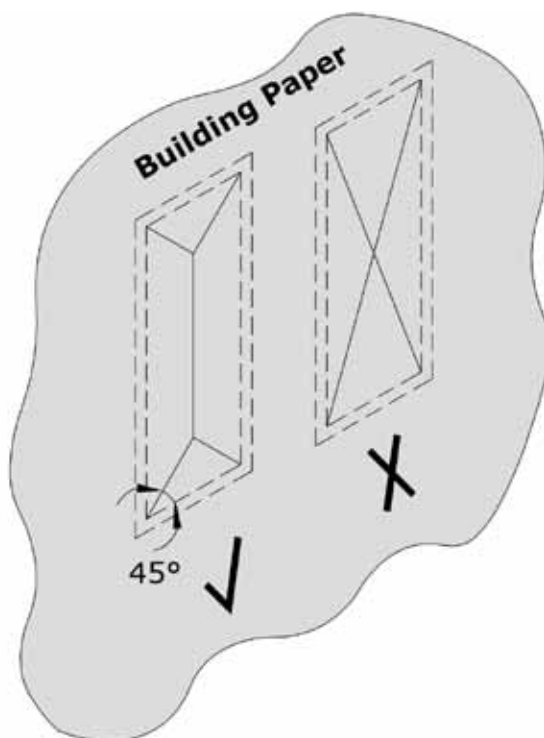
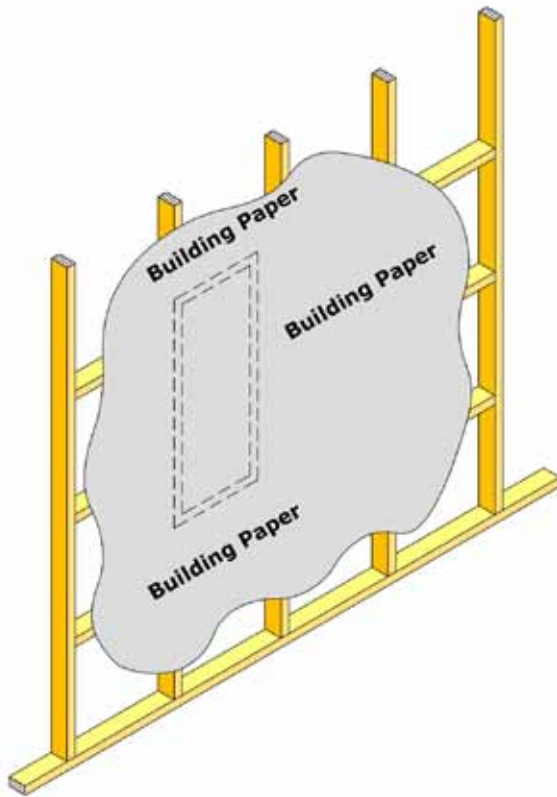
Construct a frame to mount the recess box. Use timber 'on the flat' so there will be space to run the pipe and electrical connections into the box and allow clearance at the top for the water heater mounting bracket to slip through.

Observe a clearance from the ground so the flue discharge will not cause a nuisance.



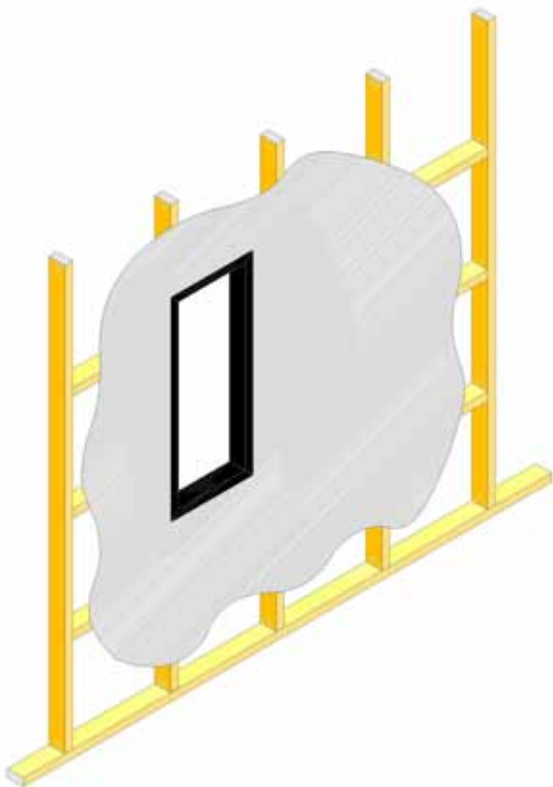
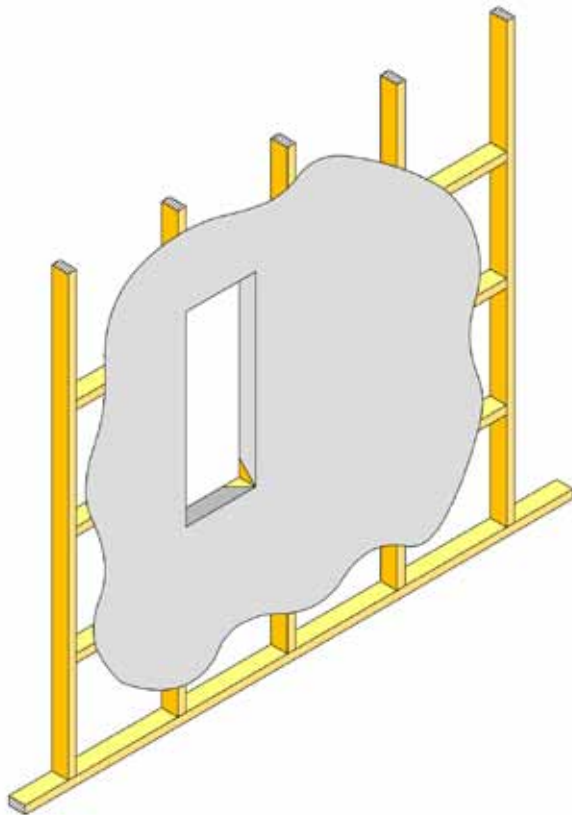
Building wrap

Fit, cut and fold building wrap into the recess box mounting frame as shown.



Flashing tape

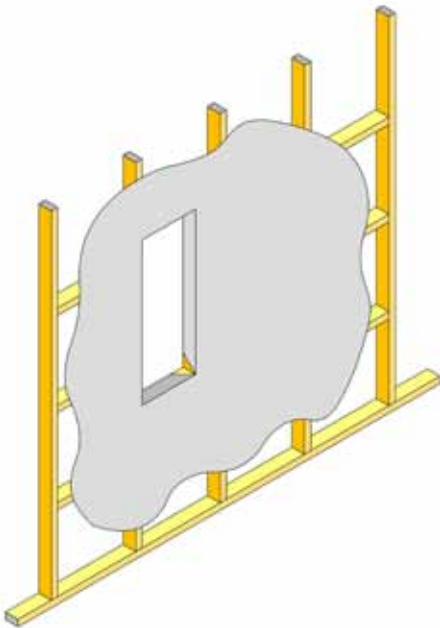
Fit suitable flashing tape around the edges of the framing.



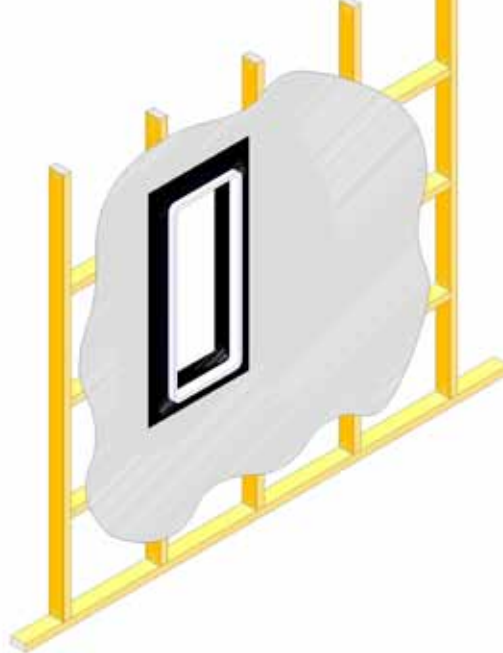
Cavity battens

1. Seal the edge of the box to the flashing collar using a suitable sealant. Fit recess box and flashing collar using the screws provided.
2. Use suitable flashing tape to seal the edge of the flashing collar to the building wrap.
3. Fit cavity battens as required in the normal manner.

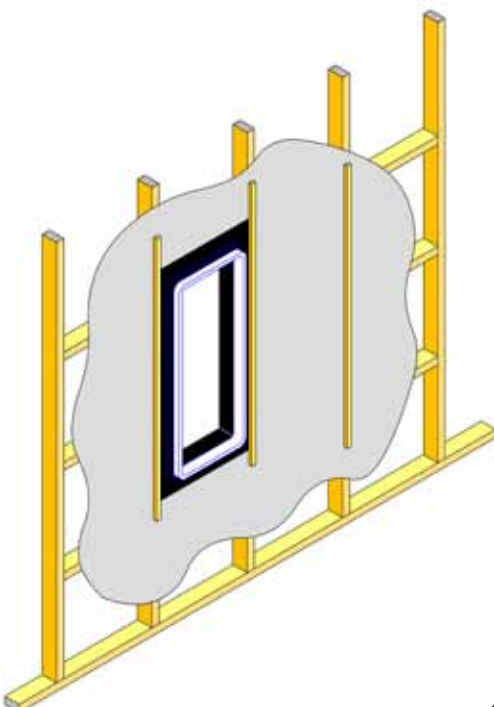
Seal the edge of the box to the flashing collar



Use suitable flashing tape to seal the edge of the flashing collar



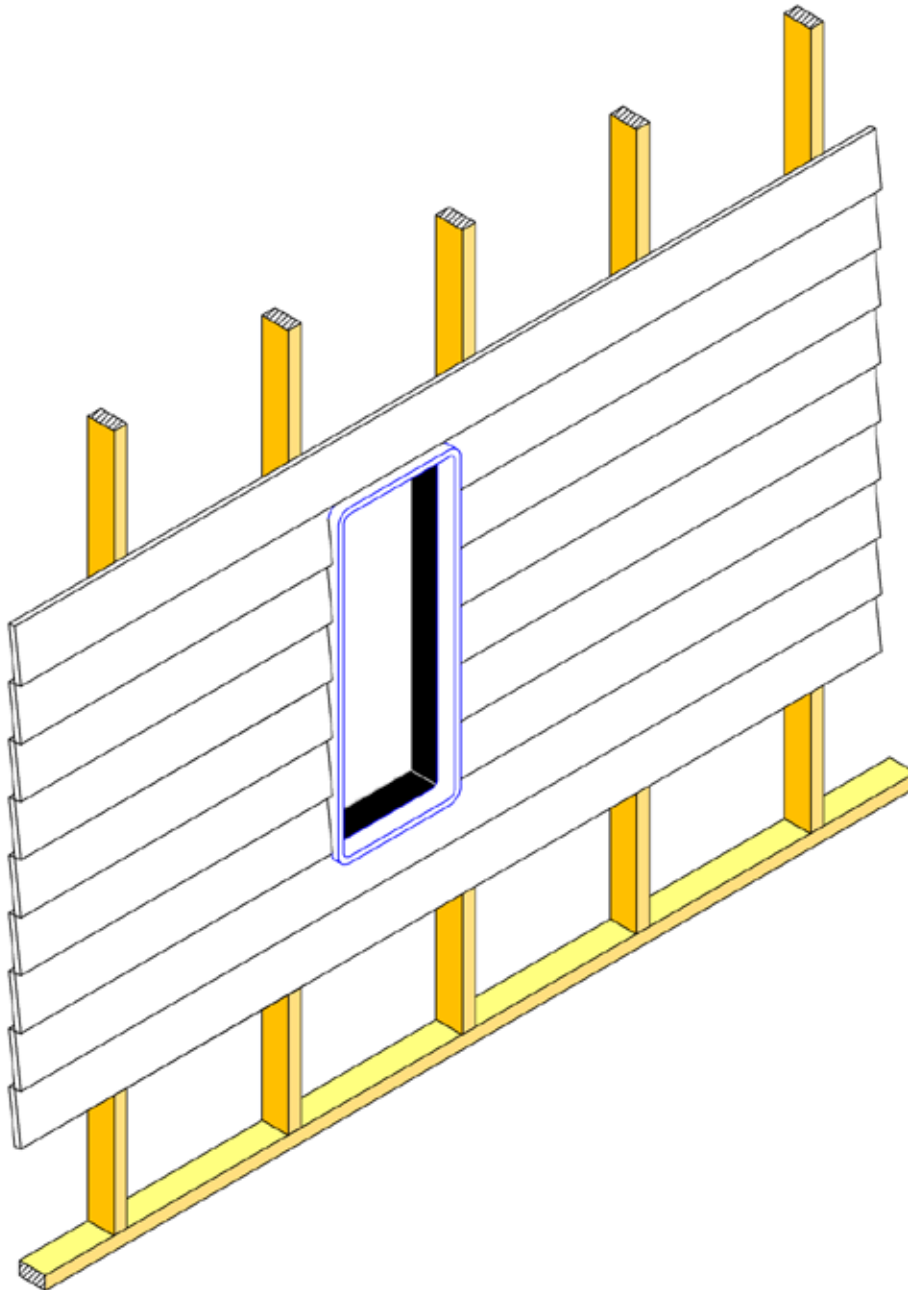
Fit cavity battens



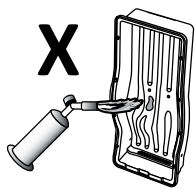
Cladding

Install cladding. Seal between cladding and recess box edges using a suitable sealant applied over a PEF rod or similar. For cavity construction do not seal between cladding and top edge of the recess box flashing collar (this allows ventilation of the cavity above the box).

The box and cover can be painted as required to match the cladding.



Water heater installation

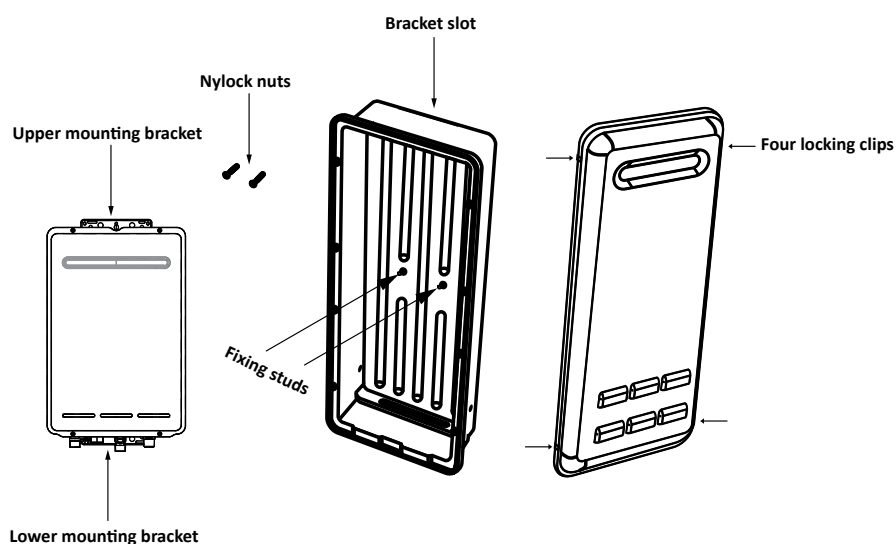


DO NOT apply heat in the vicinity of the Rinnai Composite Recess Box. This may distort and damage the box.

Important: Before fitting the water heater

The Rinnai water heater model and serial numbers must be copied legibly from the data plate (left hand side of the appliance) to the sticker on the inside of the recess box cover before fitting the water heater. These are required for servicing, troubleshooting (warranty claims), and parts supply.

1. Remove the two M5 nylock nuts from the fixing studs of the box.
2. Insert the upper mounting bracket of the Rinnai water heater into the bracket slot.
3. Push the appliance up until the lower mounting bracket aligns with the fixing studs and secure using the two M5 nylock nuts removed in step 1.
4. Select the locations for the pipe and electrical entry to the box. Blanked holes are provided for this at the lower rear edge of the box. Remove blanking plugs from these holes to be used and replace with the grommets supplied. Otherwise use the supplied grommets for installer drilled holes.
5. It is recommended flexible gas and water connectors are used to make final connections from the pipe work to the water heater, (Vectis branded kits are available from plumbing merchants). Flexible pipe connections allow the water heater to be removed if necessary without having to cut the pipe work.
6. An approved weatherproof electrical GPO can be installed inside the box in accordance with AS/NZS 3000 electrical wiring rules.
7. Commission in accordance with the commissioning checklist supplied with the water heater.
8. Attach warning label supplied with the instructions to the front panel of the water heater.
9. Install the recess box cover by ensuring the four locking clips have securely engaged.



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Appendix: Flue Terminals

The following 'Flue Terminals' information has been reproduced from NZS 5261:2003. It has been provided for ease of reference for those that do not have access to this document.

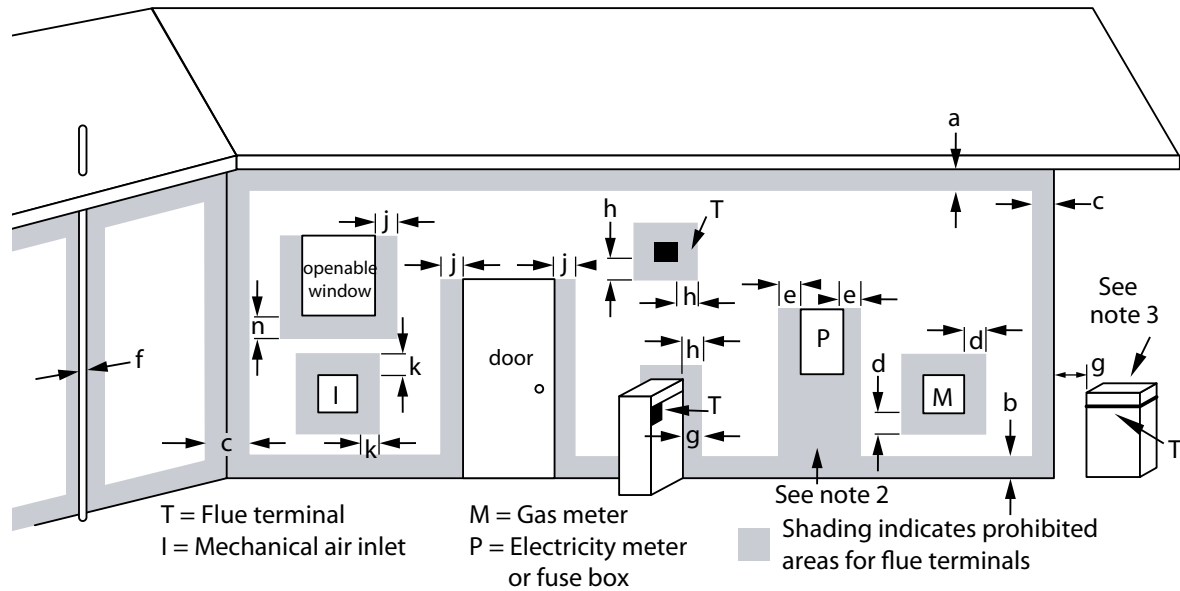


Figure 3 - Minimum clearances required for balanced flue terminals, fan-assisted flue terminals, room-sealed gas appliance terminals or the terminals of outdoor gas appliances

Appendix: Flue Terminals

Table 16 - Minimum clearances required for flue terminals shown in figure 3

Ref.	Item	Minimum clearances (mm)	
		Natural draught	Fan assisted
a	Below eaves, balconies and other projections: Gas appliances up to 50 MJ/h Gas appliances over 50 MJ/h	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 All fan-assisted flue gas appliances, in the direction of the discharge	500 1500 1500	300 300 500 1500
k	From a 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 Other gas appliances up to 50 MJ/h Gas appliances over 50 MJ/h input and up to 150 MJ/h Gas appliances over 150 MJ/h	150 500 1000 1500	150 500 1000 1500
<p>NOTE -</p> <p>(1) All distances are measured to the nearest part of the flue terminal.</p> <p>(2) Prohibited area below electricity meter or fuse box extends to ground level.</p> <p>(3) See 2.6.13.3 for restrictions on a flue terminal under a covered area.</p> <p>(4) See Appendix G LPG Cylinder Locations, figure G2 and figure G3, for clearances required for a flue terminal to an LPG cylinder. A flue terminal is considered to be a source of ignition.</p> <p>(5) For gas appliances not addressed above, the design shall be certified by a suitably qualified engineer.</p> <p>(6) Some gas appliances may be suitable for closer installation; refer to the manufacturer's instructions.</p>			

The above table has been updated following NZS 5261:2003 Amendment No.1 issued in May 2005 for reduced clearances for fan assisted appliances - Ref. j.



Address: 105 Pavilion Drive, Mangere, Auckland
PO Box 53177, Auckland Airport, Auckland 2150

0800: 0800 RINNAI (0800 746 624)
Phone: (09) 257 3800

Fax: (09) 257 3899

Email: info@rinnai.co.nz
Website: www.rinnai.co.nz

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 information and specifications are subject to change or variation without notice.