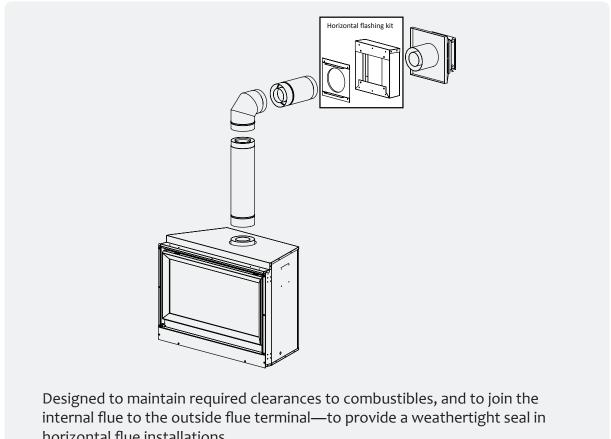


# **Symmetry Horizontal** Flashing Kit (R3646)

#### **Installation Instructions**



horizontal flue installations.

These instructions are a guide only and should be used in conjunction with the cladding suppliers documentation and E2/AS1. It is not intended as a step-by-step instruction to ensure building weathertightness.

For new buildings the flashing kit should be installed at the same time as the framing/ building wrap/cladding.

Rinnai accepts no responsibility for building weathertightness issues arising from installation of a Rinnai flue system.

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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#### **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).

### **Before installation**



Check for damage. Do not install any damaged items.



Check all components have been supplied, refer kit contents on following page.



Read these instructions to get an overview of the steps required before starting.

These instructions have been separated according to the type of installation—new build and retrofit. Refer to the section relevant to your installation.

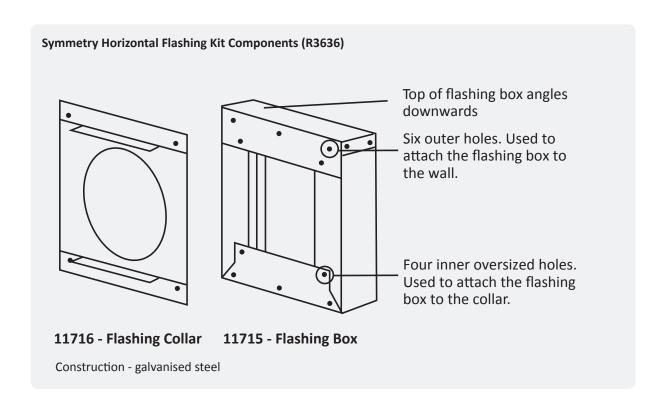
In general this installation should be treated as a standard pipe penetration.

Refer to this document in conjunction with the cladding suppliers documentation on pipe penetrations, they may have specific requirements for their proprietary cladding system.

## **About the Symmetry flashing kit**

The Rinnai Symmetry flashing kit is designed to maintain required clearances to combustibles, and to join the internal flue to the outside flue terminal—to provide a weathertight seal in horizontal flue installations.

For new buildings the flashing kit should be installed at the same time as the framing/building wrap/cladding.



#### Flue positioning

Some considerations when installing the Symmetry flashing kit and flue:

#### Obstructions

Ensure no obstructions such as; plumbing electrical wires, and joists.

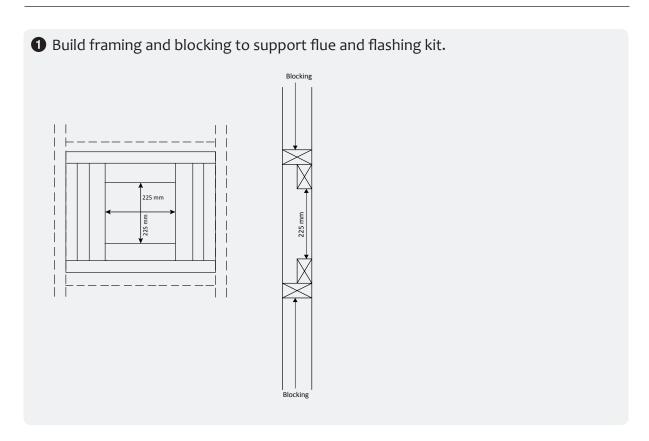
#### Accessibility

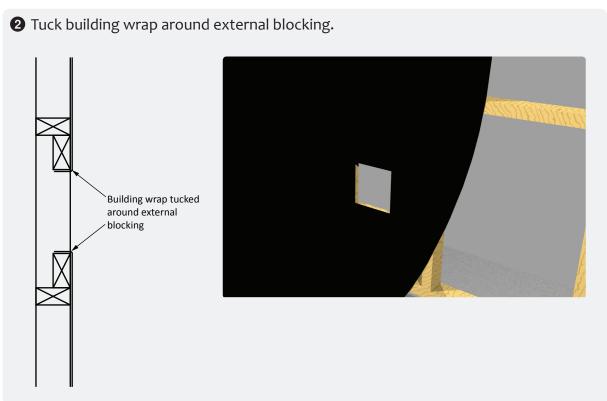
Make sure flue is accessible for maintenance.

#### • Flue terminal locations

Must be compliant with 'Clearances required for Flue Terminals' from NZS 5261 2003.

## New build installation: Frame and block

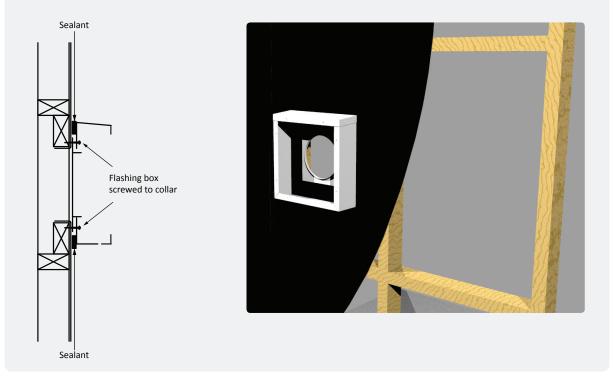




## New build installation: Fit flashing collar and box

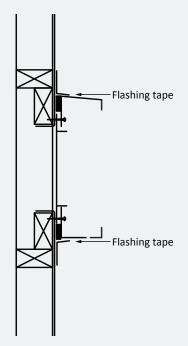
Attach flashing collar (11716). The collar should slot between the blocking.

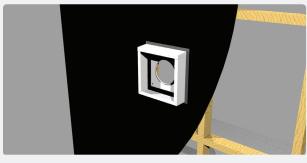
4 Using the four oversized inner holes, attach the flashing box to the flashing collar with the screws provided. Apply a suitable sealant between the flashing collar and box.

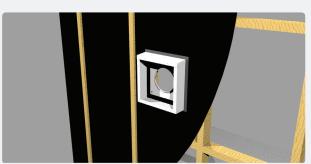


# New build installation: Seal and fix cladding

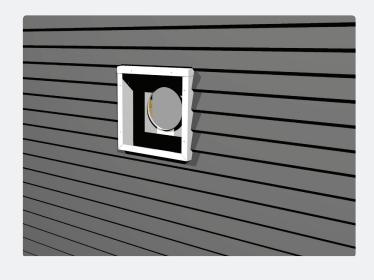
**5** Seal penetration of all four sides with flashing tape, and attach cavity battens as required.





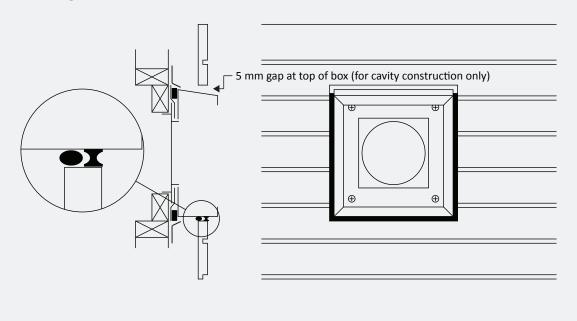


**6** Fix cladding to building. For a cavity construction leave a 5 mm minimum gap at the top of the flashing box for drainage.

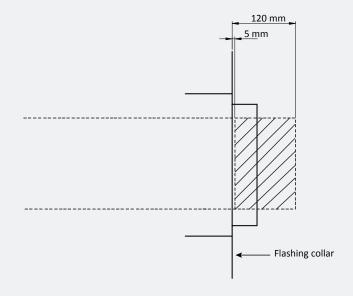


## New build installation: Install flue

7 For cavity construction apply a suitable sealant over a PEF, or similar backing rod, between the sides and bottom of the flashing box and cladding. For direct fixed claddings, seal all four sides.



**3** Install appliance and flue in accordance with the installation instructions. The horizontal wall terminal is the last piece of flue fitted. In order for the flue and terminal to engage correctly the horizontal flue must finish within the shaded area shown.

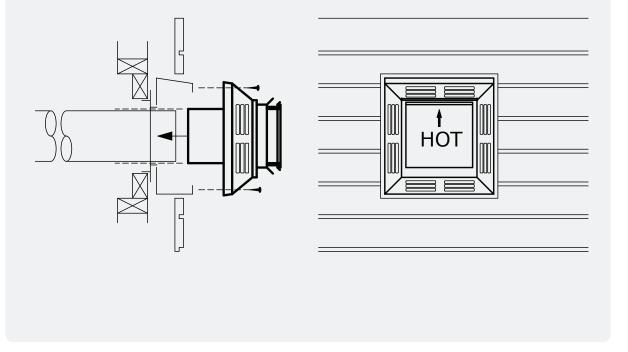


## New build installation: Attach wall terminal

**9** Attach the Rinnai horizontal wall terminal. Horizontal runs of the flue pipe must be supported to prevent any downward sags. Horizontal pipe sections should be supported every 1.2 m. Wall straps can be used for this purpose.

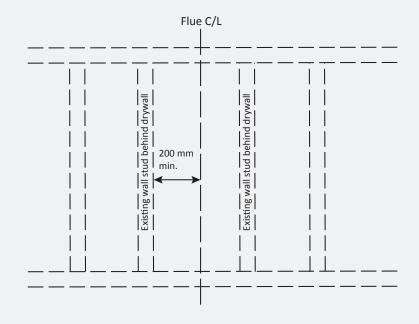


The horizontal run of flue pipe must have a 20 mm rise for every 1 m of run towards the termination. Never allow the flue pipe to run downward. A downward slope can trap heat and become a fire hazard. As the flue cannot be cut, an extension pipe is available to achieve the flue length if required.

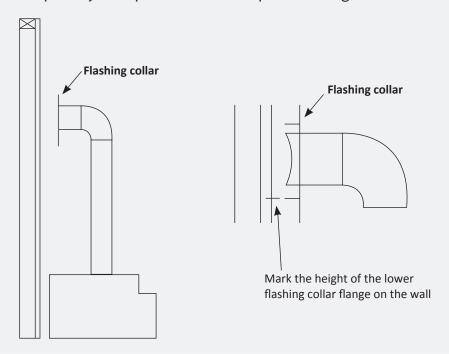


## **Retrofit installation: Sizing for cutout**

• Find a section of wall between two existing studs to locate the heater. Ensure the location of the flue terminal on the external wall will be compliant with the clearances required by NZS5261.

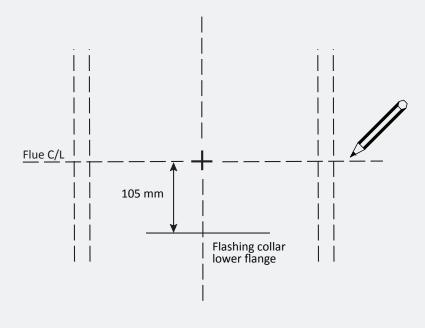


2 Sit the appliance alongside the wall with the desired flue components assembled temporarily on top of the heater. Slip the flashing collar over the flue.

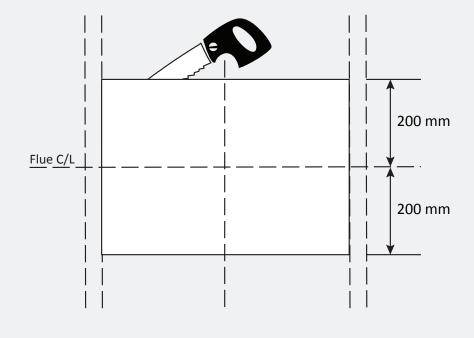


## **Retrofit installation: Sizing for cutout**

3 Remove appliance and flue, and mark flue centre line height 105 mm above the previously marked height of the flashing collar lower flange. Recheck the outside flue terminal location will comply with NZS5261.

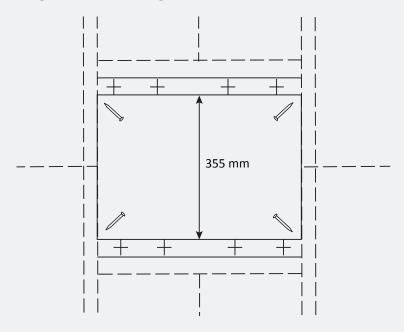


**4** Mark out the position required of the support framing before cutting the drywall.



## **Retrofit installation: Framing**

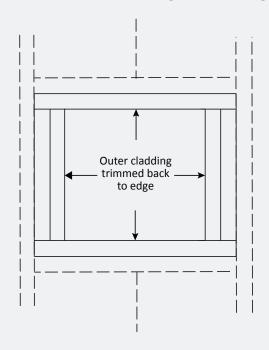
**6** Cut drywall as shown. Remove insulation and existing noggins (re-route wiring as required). Do not damage the building wrap or penetrate the outer cladding at this stage. Install new nogs as shown below with a 355 mm separation.



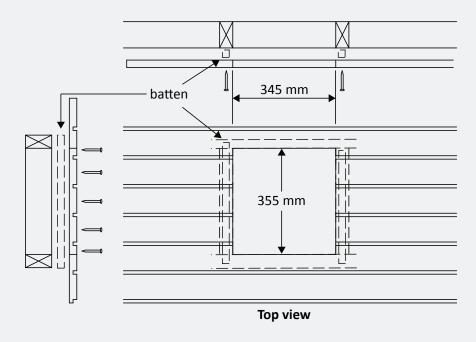
Fit framing sides as shown.

## **Retrofit installation: Outer cladding**

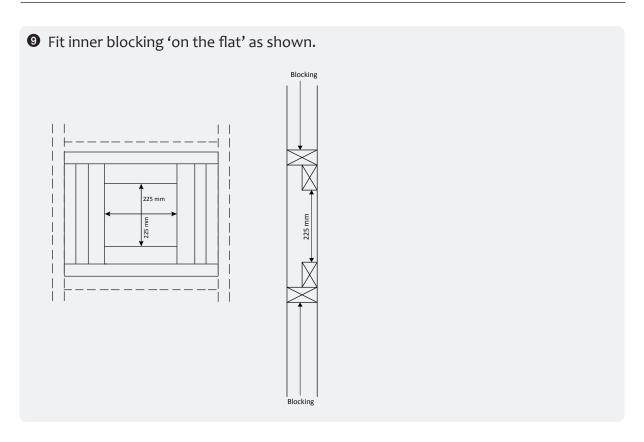
• From outside the building. Cut the outer cladding back to the edge of the framing, be careful not to damage the building wrap.

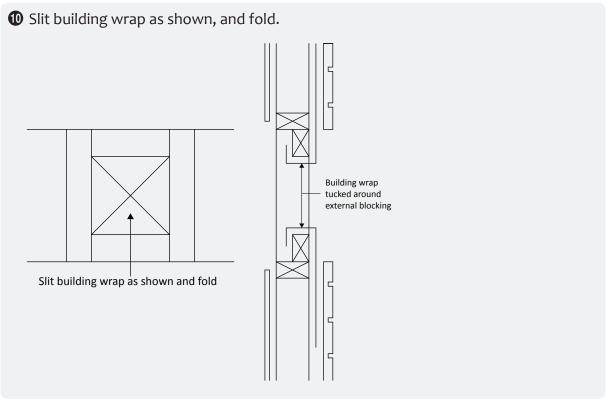


**3** From the outside of the building insert short length of cavity batten and refasten the outer cladding securely.



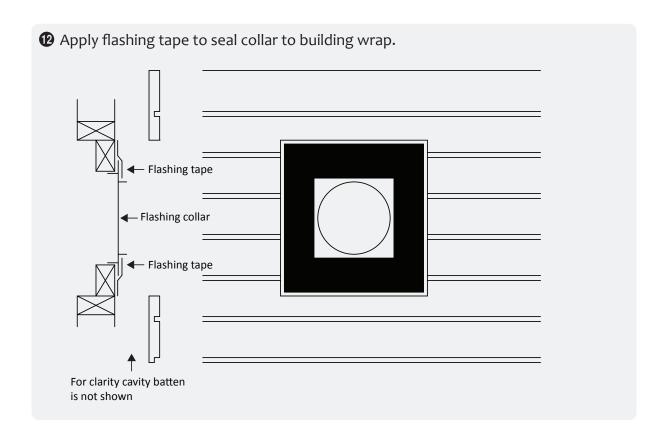
# **Retrofit installation: Blocking**



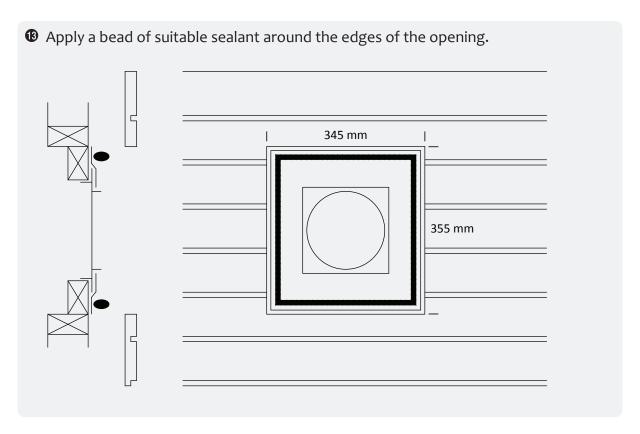


## Retrofit installation: Fit flashing collar

Fit flashing collar (11716) to the frame from the outside with circular up-stand facing outside.



## Retrofit installation: Fit flashing box

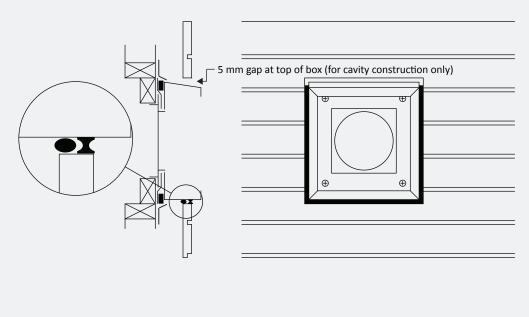


Fit the flashing box (11715) to the opening. For a cavity construction leave a 5 mm minimum gap at the top of the flashing box for drainage.

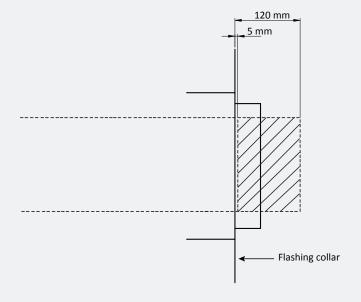
5 mm gap at top of box (for cavity construction only)

## Retrofit installation: Install flue

**1** For cavity construction apply a suitable sealant over a PEF, or similar backing rod, between the sides and bottom of the flashing box and cladding. For direct fixed claddings, seal all four sides.



(1) Install appliance and flue in accordance with the installation instructions. The horizontal wall terminal is the last piece of flue fitted. In order for the flue and terminal to engage correctly the horizontal flue must finish within the shaded area shown.

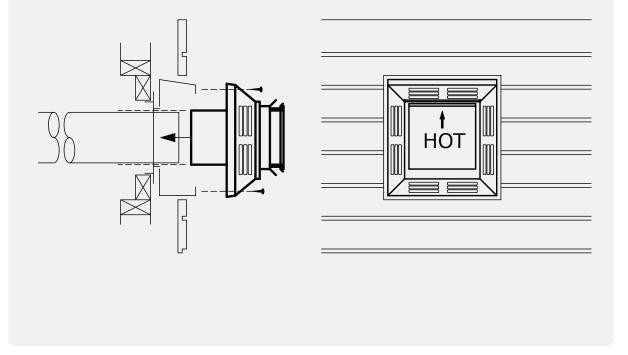


## Retrofit installation: Attach wall terminal

• Attach the Rinnai horizontal wall terminal. Horizontal runs of the flue pipe must be supported to prevent any downward sags. Horizontal pipe sections should be supported every 1.2 m. Wall straps can be used for this purpose.



The horizontal run of flue pipe must have a 20 mm rise for every 1 m of run towards the termination. Never allow the flue pipe to run downward. A downward slope can trap heat and become a fire hazard. As the flue cannot be cut, an extension pipe is available to achieve the flue length if required.





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