

Evolve / Linear Extended Flue

Installation guide

For the Evolve and Linear power flue gas fires there is a flue system available, with an increased diameter, that when fitted with an adapter (long flue adapter - LFADAPT), allows the flue to run to a maximum of 20 m. This system can be used any time the flue needs to extend past 8 m.

WARNING Other than those components shown in this guide, NEVER mix the small and large diameter flue components—this can lead to unsafe operating conditions.

Use these instructions together with the flue installation guide provided with the ASPDFK, EVOKIT01, and LSKIT01 components. The flue installation guide has important information on connecting the first Ø75 mm flue component to the fire.

Applicable models

The 75-125 diameter flue system is compatible with the following gas fireplace models:

- Linear Series (all models)
- Evolve 952 and Evolve 1253

Maximum flue length and number of bends

Maximum flue length = 20 m

Maximum number of bends = three

Reduce the total flue length by 1 metre for every 90° bend. For example, an installation with three 90° bends would have a maximum flue length of 17 metres.. The elbow component of the Linear/Evolve adaption flue kit (LSKIT01, EVOKIT03) IS NOT counted as a 90° bend.

Long flue adapter (LFADAPT 75-125)

Adapter that enables the Ø75 mm flue to be connected to the Ø125 mm flue, enabling a flue run of up to 20 metres. The LFADAPT has an aluminium inner and outer casing with an integrated o-ring channel. It is supplied with a plastic spider spacer pre-installed.



The LFADAPT can only be connected to either the LSFEXTKIT01 /LSFKIT01/ESCONDK, or EVOKIT03, refer p. 4-7 for more information.

Rinnai

General flueing guidelines

Condensate

Power flue gas fires (especially the Evolve) produce condensate. The amount will vary depending on climatic conditions and flue configuration. Condensate is mildly acidic and can damage decorative finishes, gardens, concrete and other building materials. Please consider how condensate will drain and what it may drain into.

1 Fall to horizontal flue terminal

There must be a continuous fall of at least 2° to the horizontal wall termination. This is so any condensate and rain water exits the flue naturally.

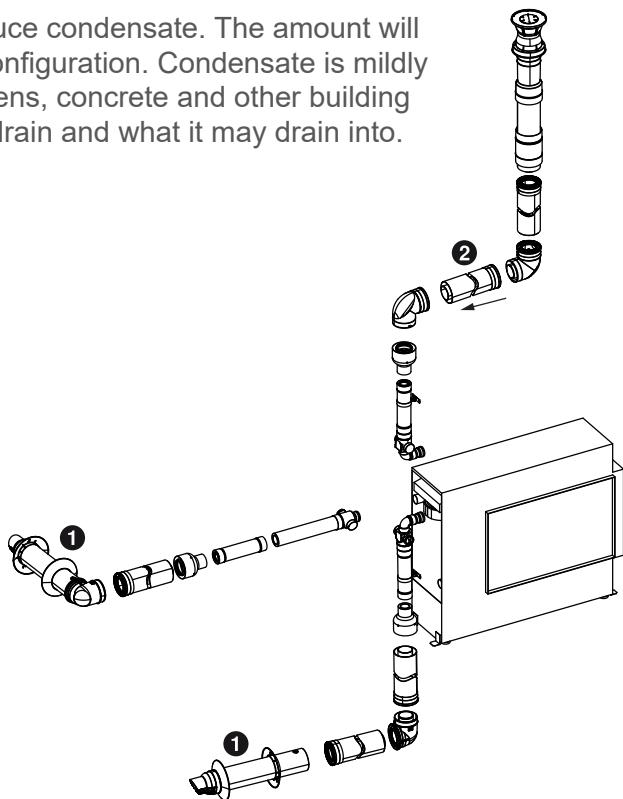
2 Fall back to fire

A 2° fall back to the fire is required when any part of the flue system goes horizontally and then vertically.



Avoid water traps.

IMPORTANT



Flue terminal locations

Flue gases can reach high temperatures. The flue terminal is to terminate in a location so as not to cause a nuisance, in accordance with AS/NZS 5601.

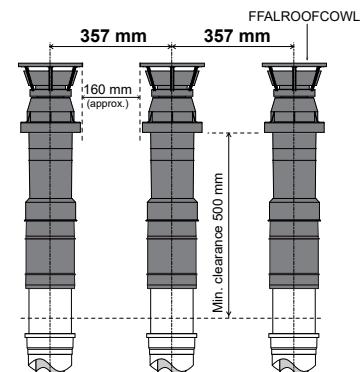
- The flue terminal must be positioned away from any flammable materials.
- Keep snow and other items, such as outdoor furniture well clear of the flue terminal at all times.
- Do not terminate the flue into natural draft flues or fireplaces, other rooms, into roof spaces, or under floor spaces.

Multiple flues

Ensure minimum distances, as shown below are maintained. Each terminal is to be terminated at the same height.

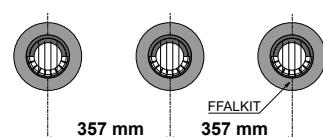
Flue support

Ensure the flue is supported independently of the appliance by use of suitable clips or brackets in accordance with AS/NZS 5601. Standoff brackets are supplied with each roof cowl and straight lengths of pipe.



Vertical terminations

To ensure products of combustion are cleared adequate clearance from the building is required. The vertical cowl should have a 500 mm clearance from any part of the building. This also applies to steeped and pitched roofs, where the flue cowl should be 500 mm clear of the ridge line.



An adequate flow of fresh air must exist around the flue cowl following installation.

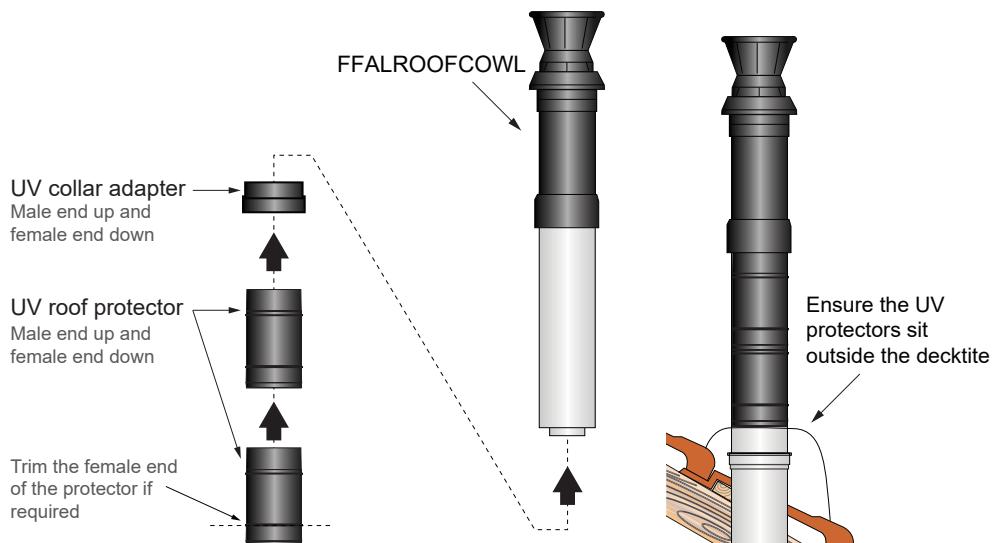
General flueing guidelines

UV roof protectors

The roof cowl comes with three black UV pipe sections for covering and protecting the white pipe from UV damage. To install, click together and if required cut to length, refer image below. If any remaining white pipe is exposed to UV, this should be painted with a suitable UV resistant coating.

Important

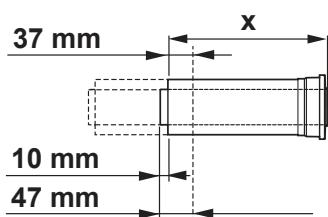
When installing the UV protectors it is critical that **the protector sits outside the decktite**, not inside. Weathertightness will be an issue if the protector is installed inside the decktite.



Cutting flue components

When cutting components, the outer pipe should be cut to the required length plus 37 mm, and the inner flue pipe should be cut to the required length plus 47 mm, this will ensure the correct penetration is provided for joining of components.

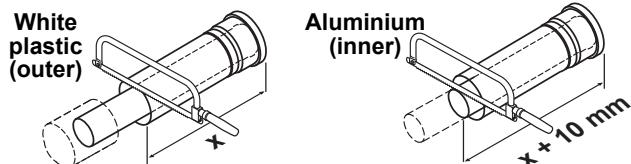
When the inner and outer pipes are reassembled after cutting the inner pipe should extend 10 mm beyond the end of the outer pipe.



**When cutting flue components
ONLY the male end is to be cut!**

Deburr sharp edges from cut ends.

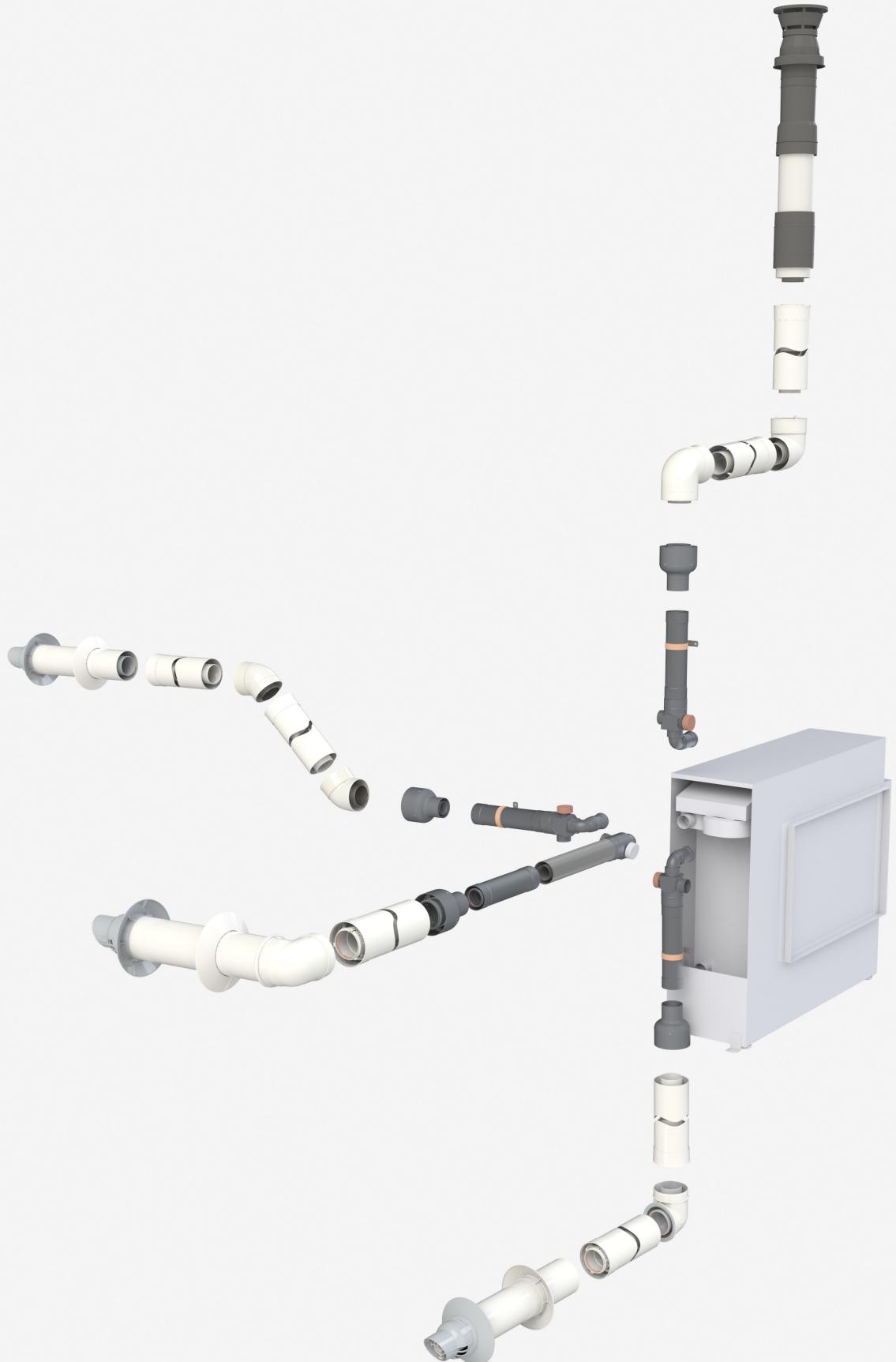
Ends that are left unfinished can damage flue seals and result in flue components no longer being air or weathertight.



Lubricating components

To ease assembly, lubricate the o-rings of the inner pipes of each flue component prior to assembly. Use only silicone based o-ring seal lubricant. DO NOT use petroleum based lubricants such as petroleum jelly, as these products may cause deterioration.

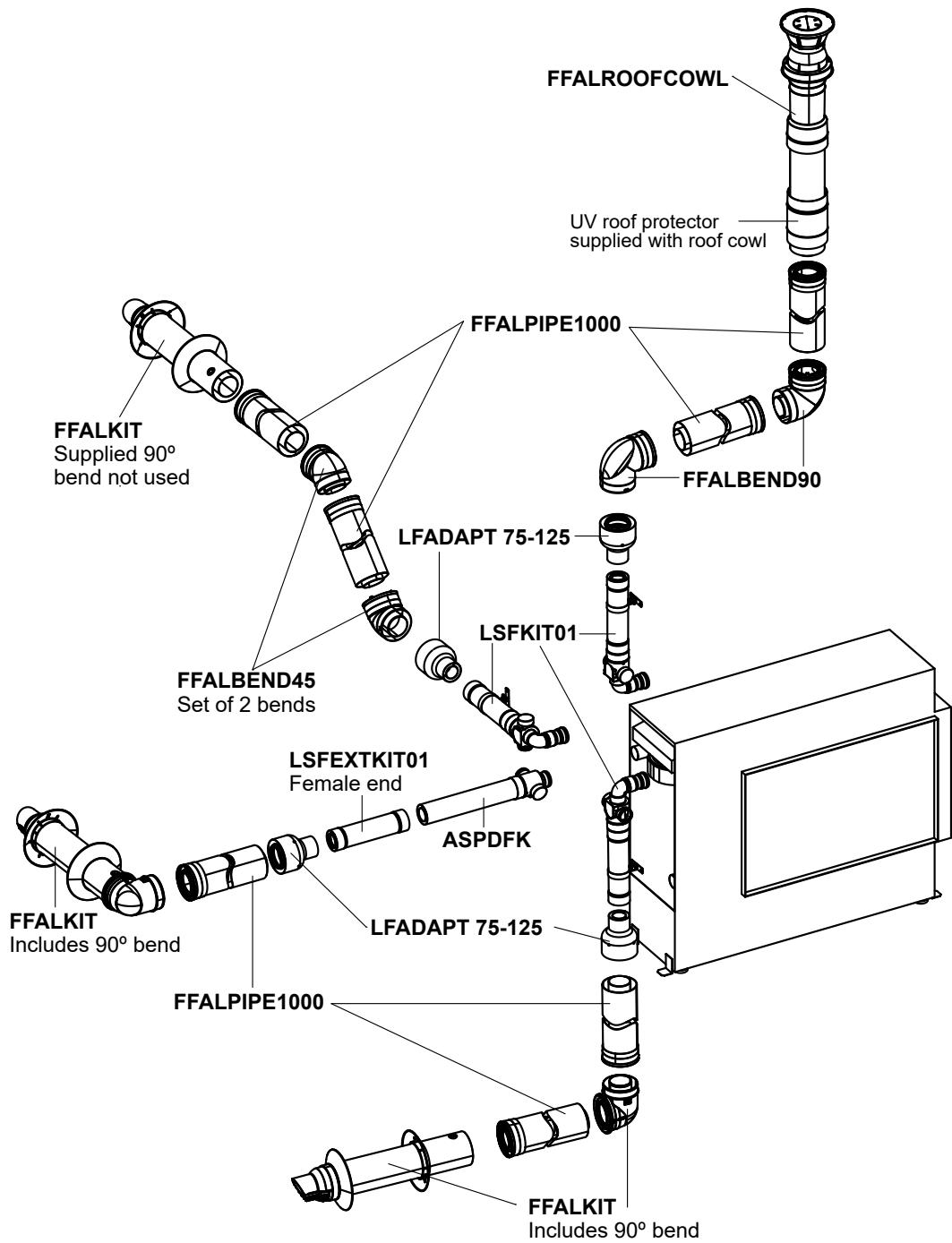
Extended flue configurations: Linear



Avoid water traps

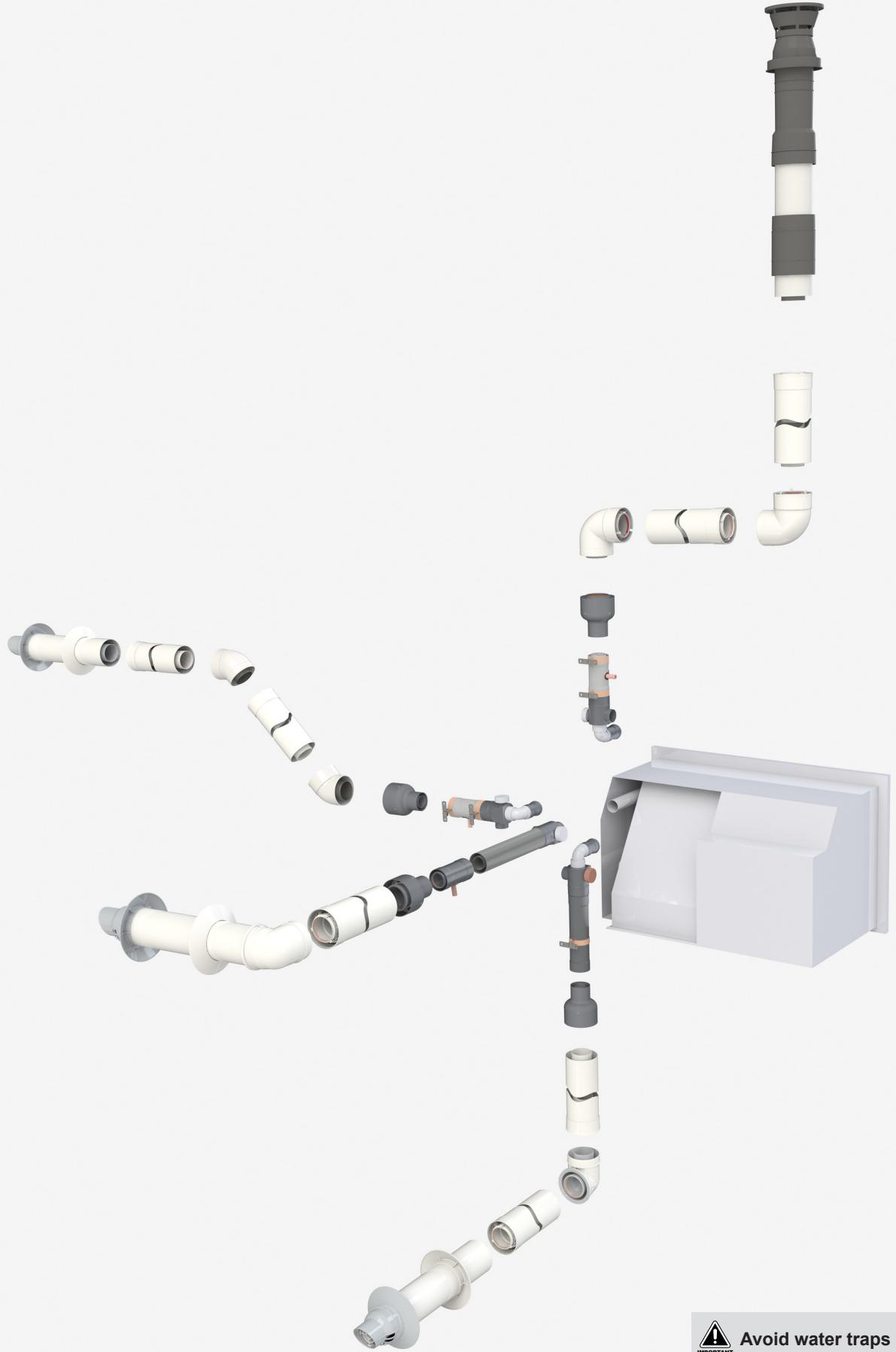
IMPORTANT

Extended flue configurations: Linear

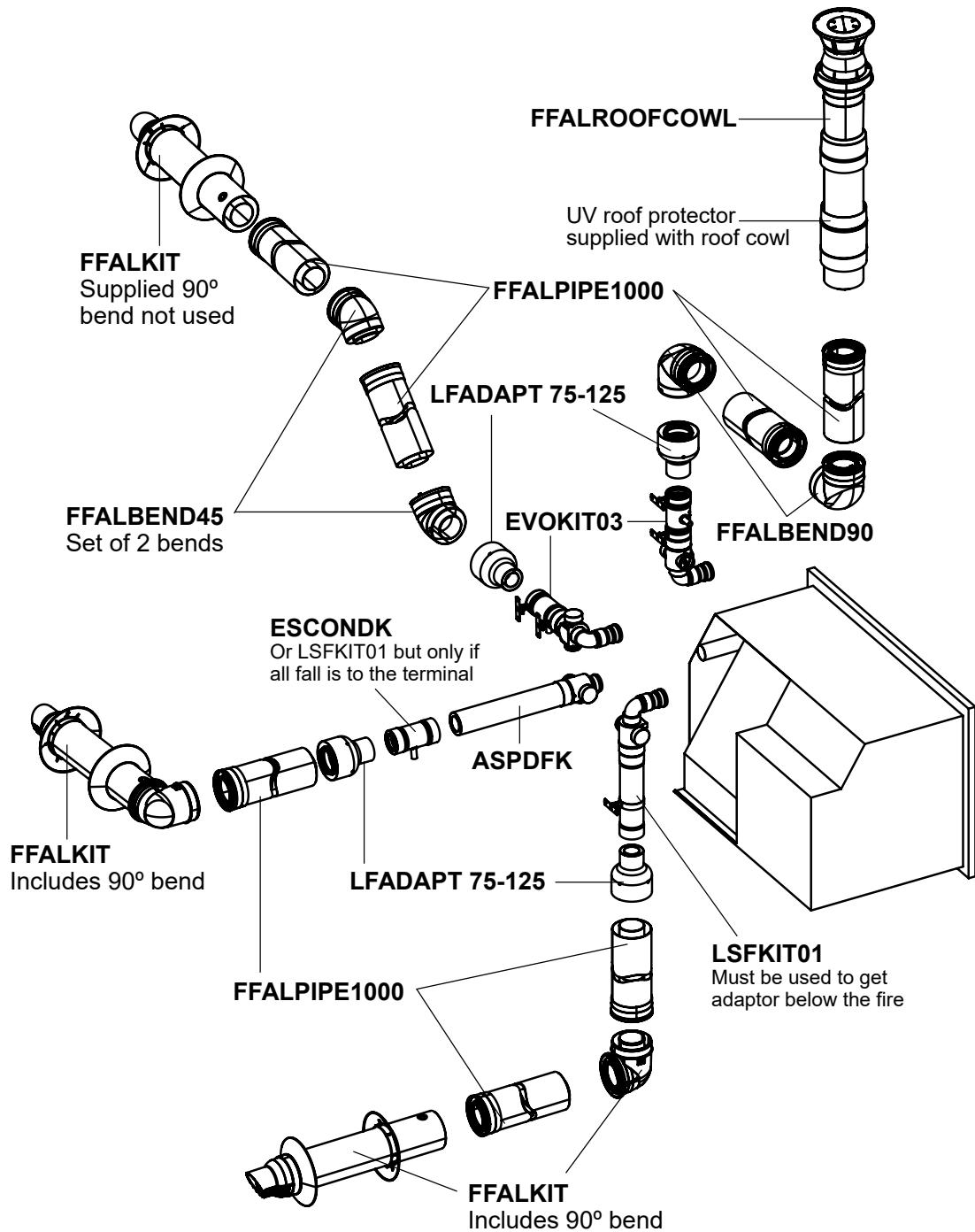


WARNING Other than those components shown in this guide, NEVER mix the small and large diameter flue components—this can lead to unsafe operating conditions.

Extended flue configurations: Evolve



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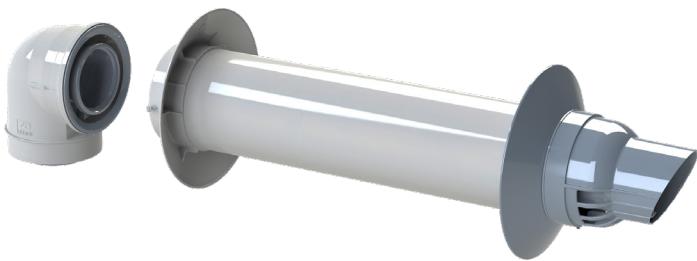


Other than those components shown in this guide, NEVER mix the small and large diameter flue components—this can lead to unsafe operating conditions.

If any section of flue falls back towards the fire the condensate trap (ESCONDK) must be used.

Horizontal terminations using the FFALKIT

Maximum wall thickness of approximately 460 mm.



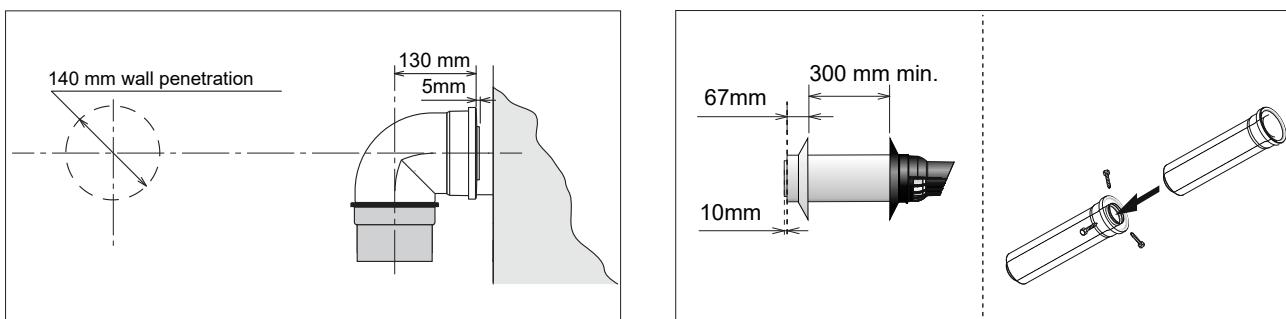
The FFALKIT contains:

- 90° bend
- horizontal flue terminal
- internal white rubber wall trim
- external grey rubber wall trim

The wall penetration for the terminal is 140 mm. Measure the required length for the horizontal terminal to penetrate the wall and allow an extra 67 mm protrusion from the inside wall surface.

Fit the external wall seal to the terminal pipe. Pass the male end of the terminal through the penetration point and weatherproof the penetration. Fit the internal wall seal.

Connect the terminal pipe to the bend, ensuring the components are pushed 'fully-home'. Secure the PVC joints of the bend to the terminal pipe with three self-tapping screws (not supplied).



Condensate

Evolve fires will produce condensate. The amount will vary depending on climatic conditions and the flue configuration. Condensate is mildly acidic and can damage decorative finishes, prized petunias, concrete and other building materials. Please consider how the condensate will drain and what it may drain into.

1. Fall to horizontal flue

There must be a continuous fall of at least 2° to the horizontal wall termination. This is so any condensate and rain water exits the flue naturally.

2. Fall back to fire

A fall back to the fire is required when any part of the flue system goes horizontally and then vertically.

Vertical termination using the FFALROOFCOWL

Set a plumb bob from the centre of the heater flue outlet to the ceiling marking position. Cut a 140 mm hole in the plasterboard (or a suitable oval for pitched applications). Repeat this step for the underside of the roof.

Install the UV protectors to the vertical terminal.

Calculate the required number and combination of FFALPIPE1000 lengths and cut to size as required.

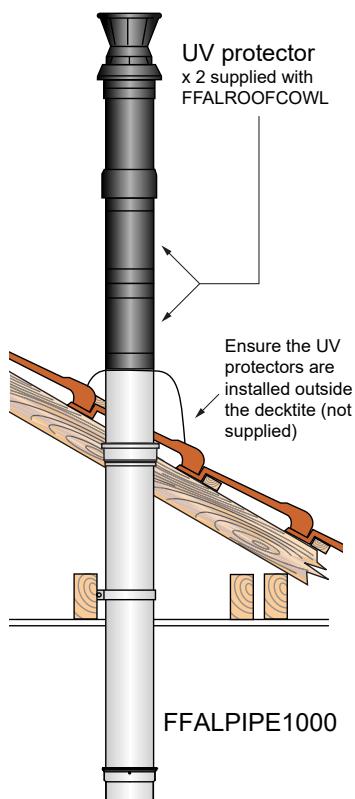
Install decktite roof seal (not supplied).

Ensure the flue is fully supported independently of the appliance, by the use of suitable clips or brackets, in accordance with AS/NZS 5601. Appropriate standoff brackets are supplied with each FFALROOFCOWL and FFALPIPE1000 components.

All PVC joints must be secured with suitable self tapping screws.

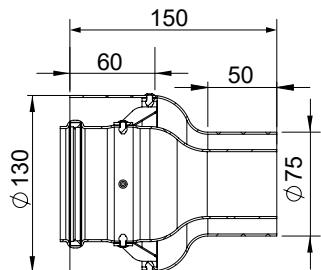
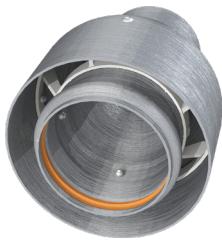


FFALROOFCOWL



Flue components

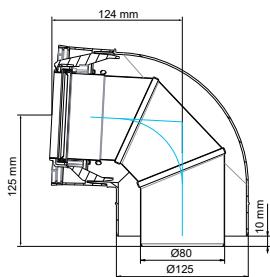
LFADAPT 75-125 : Long flue adapter



Adapter that enables the Ø75 mm flue to be connected to the Ø125 mm flue, allowing a flue run of up to 20 metres.

Aluminium inner and outer casing with an integrated o-ring channel. Supplied with plastic spider spacer pre-installed.

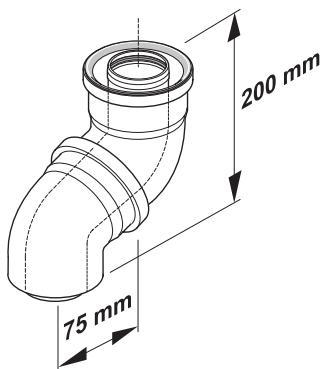
FFALBEND90 : 90° bend



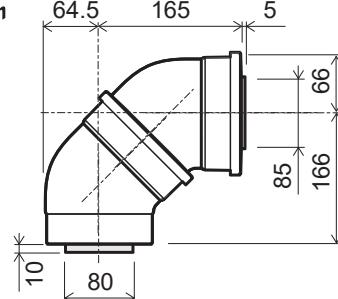
All the FFAL flue components are constructed of a PVC outer and an aluminium inner. These have zero clearance to combustibles.

All dimensions are in mm.

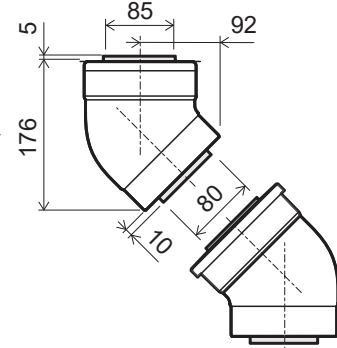
FFALBEND45: 45° bends, sold as a pair



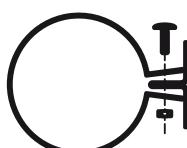
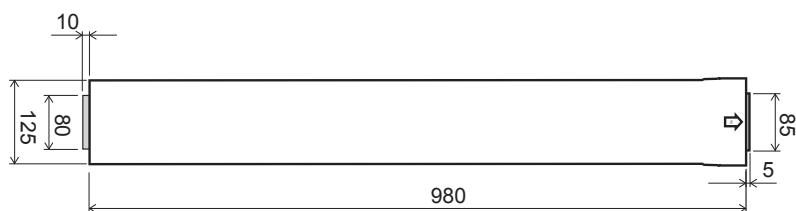
As a 90° offset



As a 45° offset

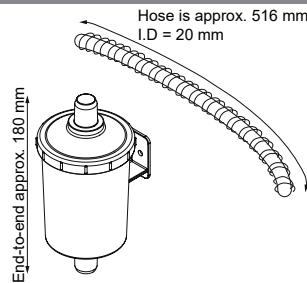


FFALPIPE1000: Flue pipe, can be cut to size, includes a Munzing ring to support the flue



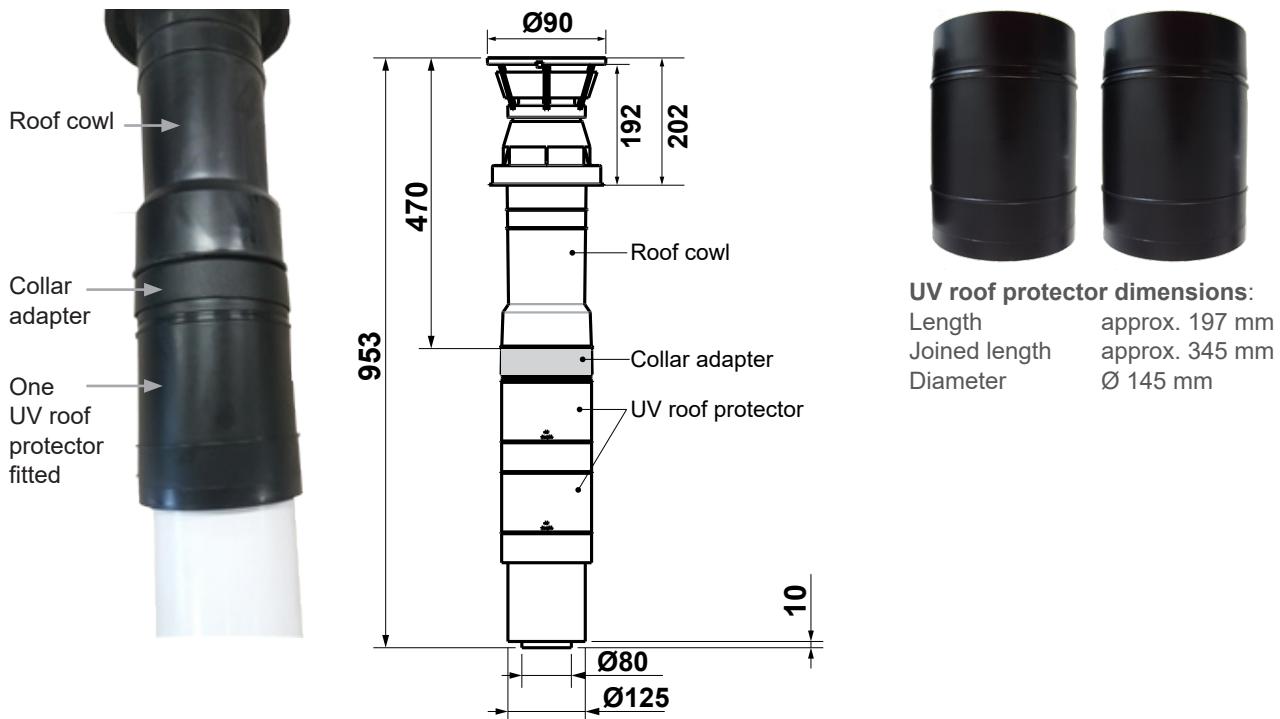
Code: 12122
(if spare is required)

FFALCOND: Condensate trap kit

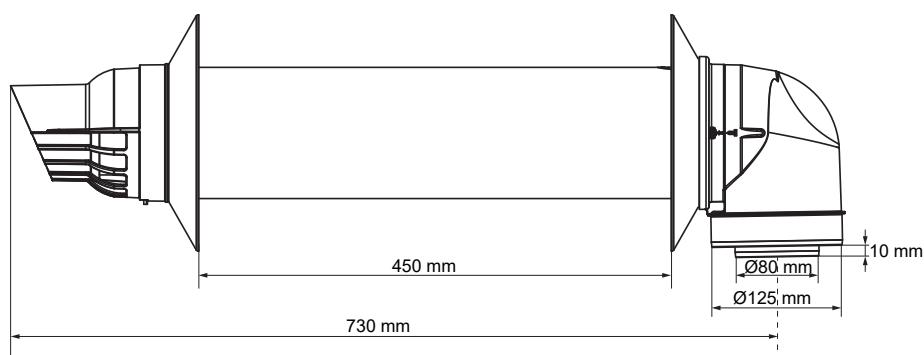


FFALROOFCOWL: Roof cowl for vertical installations, can be cut to size

Includes three black injection UV roof components (1 collar adapter, 2 roof protectors), for covering and protecting the white flue pipe from UV damage. The roof protector can also be ordered as a spare (12693, one protector). Kit also includes a flue pipe clamp to support the flue.



FFALKIT: Direct flue kit for horizontal installations, can be cut to size



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