

INTERGAS®


FLUES



FLUES

SMART CHOICE FOR
HEATING AND HOT WATER

INTERGAS®
BOILERS




Make every installation
easy with our unique range
of Flue Systems

INTERGAS FLUE SYSTEMS

Sometimes it can be a challenge to decide on where best to install your new gas boiler. Everything from Environmental and Building Standards, Gas Safety Regulations, Planning Legislation, Building Design, and budget can impact on this decision. It could even be as simple as the location of electrical, water and gas connections, or wanting to move the boiler from one room to another that can make this a more difficult task

With the Intergas HRE & EcoRF Range boilers flexibility is definitely something that we offer - not just in terms of what our boilers can do, but also in regard to our dedicated flue systems.



Install your Intergas boiler in
any room, any place, anywhere.
No problem!

FLUES

CASE STUDY

Genesis Housing



The twin flue system was concealed in the ceiling void, but a concentric flue terminal was needed for a discreet 'exit'.



Built-in reliability

At the time there was only one boiler brand that could accommodate this flue arrangement, and this was installed. When the boilers became inefficient and started failing, and the flues were degrading and becoming brittle in places, Genesis had a new set of challenges. To find a boiler that could accommodate a new twin flue arrangement, but both would have to provide a far higher level of reliability.

After a couple of false starts, Simon Bowles selected the Intergas HRE for installation because it ticked all the boxes: robust construction, only 12 components (including four moving parts), and the intelligent design of its two-in-one heat exchanger meant there was no need for a diverter valve, valve motor, auto air vent or secondary hot water plate heat exchanger.

Basically, all the parts that tend to stick, leak or let you down aren't there. As far as Genesis was concerned, all of this equated to built-in reliability. The fact that the boilers also condense 100% of the time in both heating and hot water modes (unlike other condensing boilers in the UK), meant customers would benefit from vastly improved energy efficiency and economy too.

Result!

To reassure himself that the boiler really did what it said on the tin, Bowles visited the factory in the Netherlands. While talking to the technical team he realised all Intergas boilers accommodate twin flues and the company supplies the all-important concentric flue terminal too. Even better, it was exactly the same size as the pre-cut hole in the cladding.

Although this product was currently only available in Europe and Canada, Intergas made it available to the UK. Within weeks the product catalogue and specification were written, and Genesis received its consignment of Intergas twin flues and concentric terminals. It is the first organisation to install this flue system in the UK and, as part of its reactive replacement programme, will now be replacing the boilers and flues in all the flats with Intergas.

How Genesis Housing and Intergas protected design integrity

In 2009 Stephen Davy Peter Smith Architects designed two apartment blocks in Hoxton for Genesis (now Notting Hill Genesis). The exterior was clad in a bright orange and yellow Trespa cementitious composite and every inch of space in these light and airy flats was usable.

A challenging installation

The first challenge facing Building Services Engineer Simon Bowles, and his team at Genesis, was siting the boiler. As it couldn't be installed in the kitchen, the hallway

cupboard was the next best location, but it was nowhere near an outside wall. The only option was to install a twin flue system which could be concealed in the ceiling void.

The second challenge was in making the two flue outlets, which would have to exit through the cladding, as inconspicuous as possible. The solution was to reduce the outlets to one by using a concentric flue terminal adaptor. This was a discreet way of handling the necessary without compromising the architect's vision.

The Intergas solution protected the architect's vision, while reducing customers' fuel bills.



CASE STUDY

STANDARD



Accessories & Flues



520mm Horizontal Telescopic Offset Wall Terminal Flue Kit **081298**



520mm Horizontal Telescopic Straight Wall Terminal **081297**



600mm Horizontal Non Telescopic Straight Wall Terminal **082980**



500mm Flue Extension (60/100) **082979**
1000mm Flue Extension (60/100) **082975**



Offset Elbow (for retro fit) **081289**



90° Bend (60/100mm) **084660**



45° Bend (60/100mm) **084661**



Vertical Roof Terminal 60/100 **082973**



Weather Slate (Flat Roof) **087372**



Weather Slate (Pitched Roof) **087910**



Vertical Adaptor **090547**

Concentric Flue System (Standard)

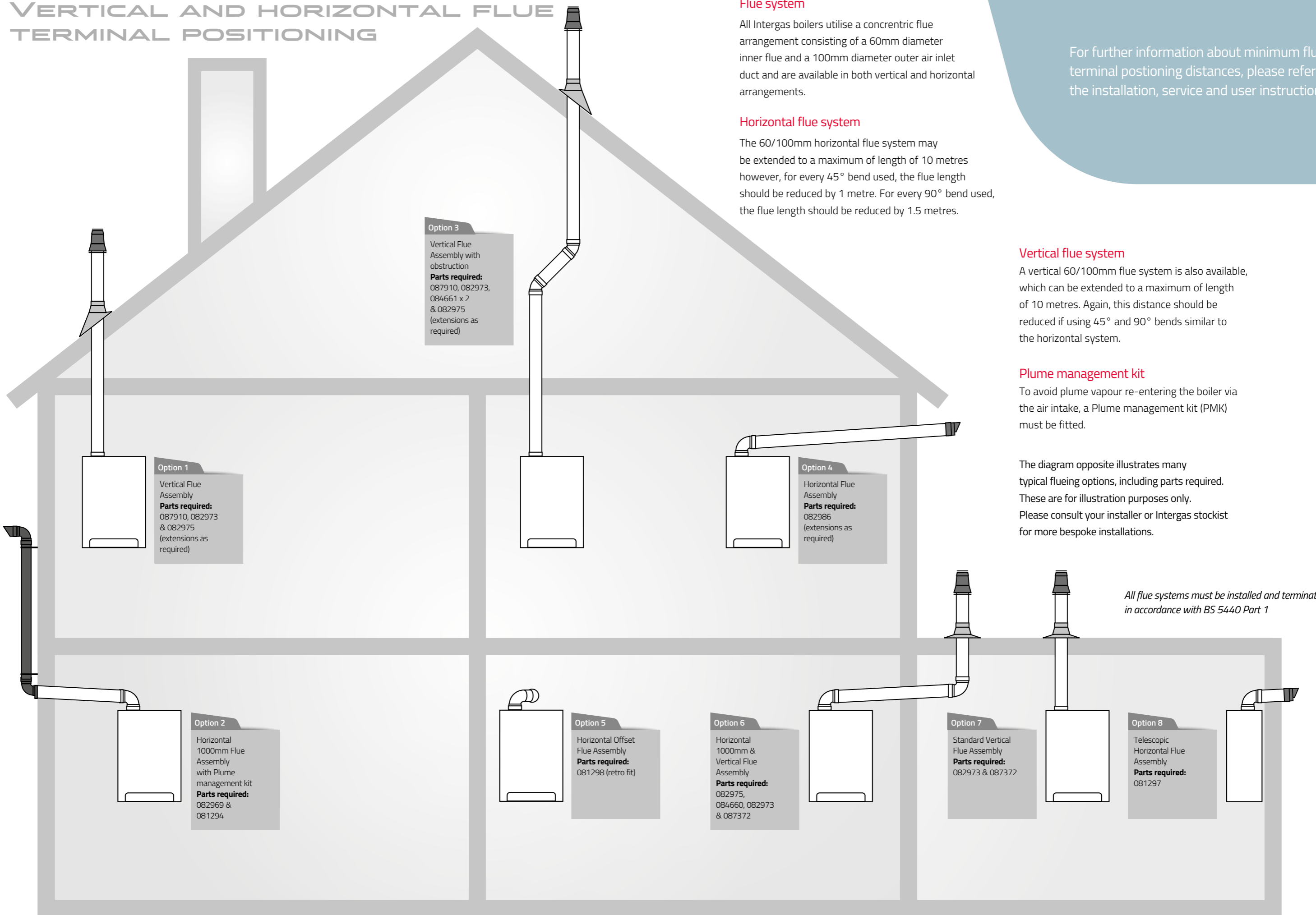
The Intergas HRE & EcoRF Boiler Range utilise a concentric flue arrangement consisting of a 60mm diameter inner flue (exhaust) and a 100mm diameter outer (air inlet) duct as standard.

The system can be installed in a horizontal or vertical configuration up to a total length of 10 metres from the boiler to its termination point e.g. suitable outside wall/roof area.

Should there be a requirement for bends to be installed along the length of the flue this will impact on the permitted distance that the flue can be run. Your Gas Safe Registered Engineer will check this prior to installation and advise on the suitability of this system.

FLUE

VERTICAL AND HORIZONTAL FLUE TERMINAL POSITIONING



Option 3
 Vertical Flue Assembly with obstruction
Parts required:
 087910, 082973, 084661 x 2 & 082975 (extensions as required)

Option 1
 Vertical Flue Assembly
Parts required:
 087910, 082973 & 082975 (extensions as required)

Option 4
 Horizontal Flue Assembly
Parts required:
 082986 (extensions as required)

Option 2
 Horizontal 1000mm Flue Assembly with Plume management kit
Parts required:
 082969 & 081294

Option 5
 Horizontal Offset Flue Assembly
Parts required:
 081298 (retro fit)

Option 6
 Horizontal 1000mm & Vertical Flue Assembly
Parts required:
 082975, 084660, 082973 & 087372

Option 7
 Standard Vertical Flue Assembly
Parts required:
 082973 & 087372

Option 8
 Telescopic Horizontal Flue Assembly
Parts required:
 081297

Flue system

All Intergas boilers utilise a concentric flue arrangement consisting of a 60mm diameter inner flue and a 100mm diameter outer air inlet duct and are available in both vertical and horizontal arrangements.

Horizontal flue system

The 60/100mm horizontal flue system may be extended to a maximum of length of 10 metres however, for every 45° bend used, the flue length should be reduced by 1 metre. For every 90° bend used, the flue length should be reduced by 1.5 metres.

For further information about minimum flue terminal positioning distances, please refer to the installation, service and user instructions.

Vertical flue system

A vertical 60/100mm flue system is also available, which can be extended to a maximum of length of 10 metres. Again, this distance should be reduced if using 45° and 90° bends similar to the horizontal system.

Plume management kit

To avoid plume vapour re-entering the boiler via the air intake, a Plume management kit (PMK) must be fitted.

The diagram opposite illustrates many typical flueing options, including parts required. These are for illustration purposes only. Please consult your installer or Intergas stockist for more bespoke installations.

All flue systems must be installed and terminated in accordance with BS 5440 Part 1

80/80mm Twin Flue System

Where the Concentric Standard Flue System is not suitable then Intergas Twin Flue System may provide a suitable solution and offer flexibility on boiler location within your property.

This system comprises of two separate 80mm diameter pipes. One pipe is used to bring air to the boiler for combustion the other pipe removes the flue gases safely to the atmosphere.

The system is versatile and can be installed in a horizontal and/or vertical configuration with the air intake pipe running alongside the exhaust pipe or totally separate - up to a total length of 50 metres from the boiler to its termination point e.g. suitable outside wall/roof area.

Should there be a requirement for bends to be installed along the length of the flue this will impact on the permitted distance that the flue can be run. Your Gas Safe Registered Engineer will check this prior to installation and advise on the suitability of this system.

Twin Flues & Accessories



Horizontal Flue & Combined Plume kit 80/125 **081738**

Extensions (white)

80mm x 250mm **453973**

80mm x 500mm **453975**

80mm x 1000mm **453977**

80mm x 2000mm **453979**



Vertical Roof Terminal 80/125 **086883**



Horizontal Wall Terminal 80/125 **076355**

Air Terminal 80 PP **082856**

Boiler Adapter 80/125 **090767**



Weather Slate (Flat Roof) **087372**



Weather Slate (Pitched Roof) **087910**

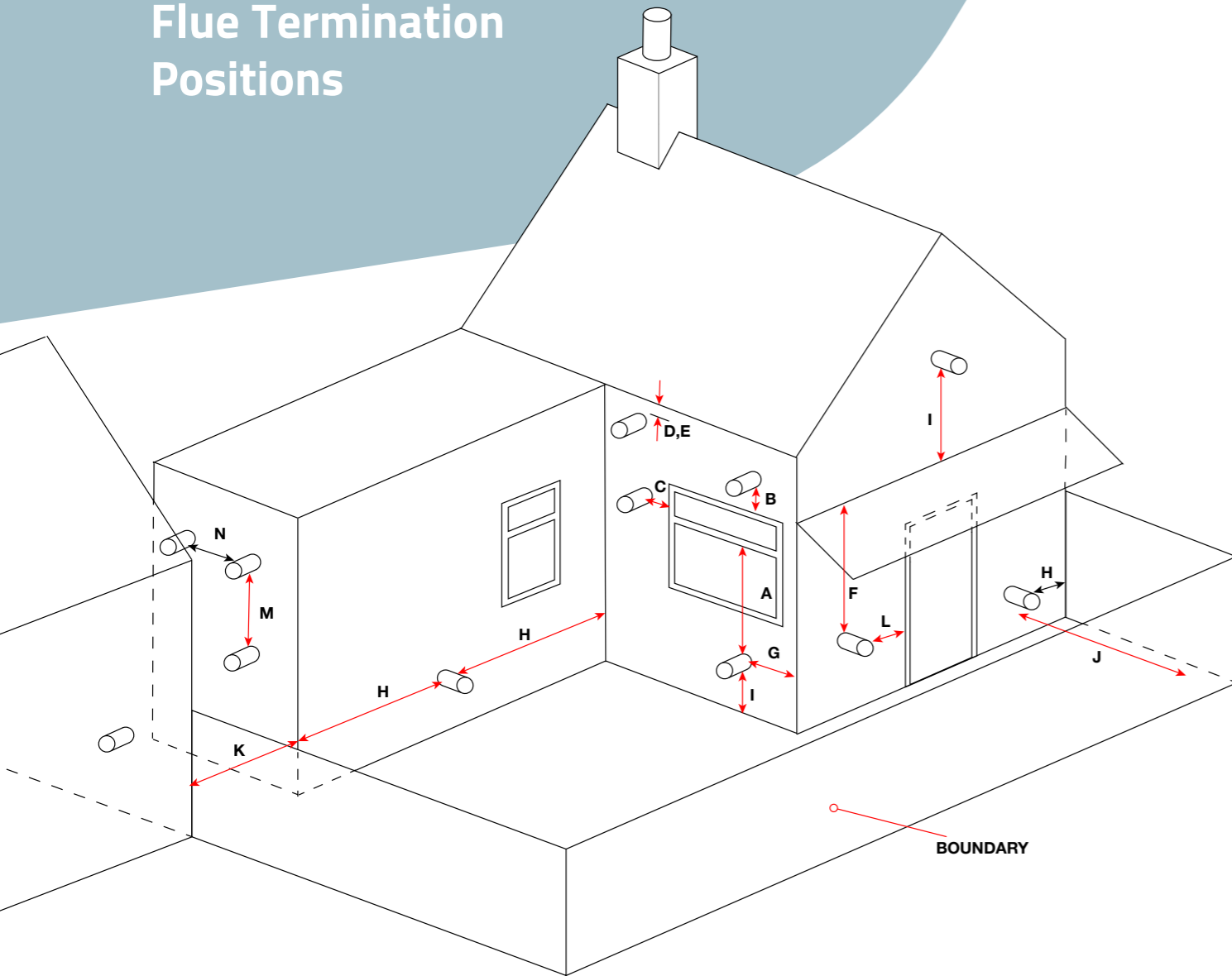


Horizontal 80/80 Wall Terminal **187921**

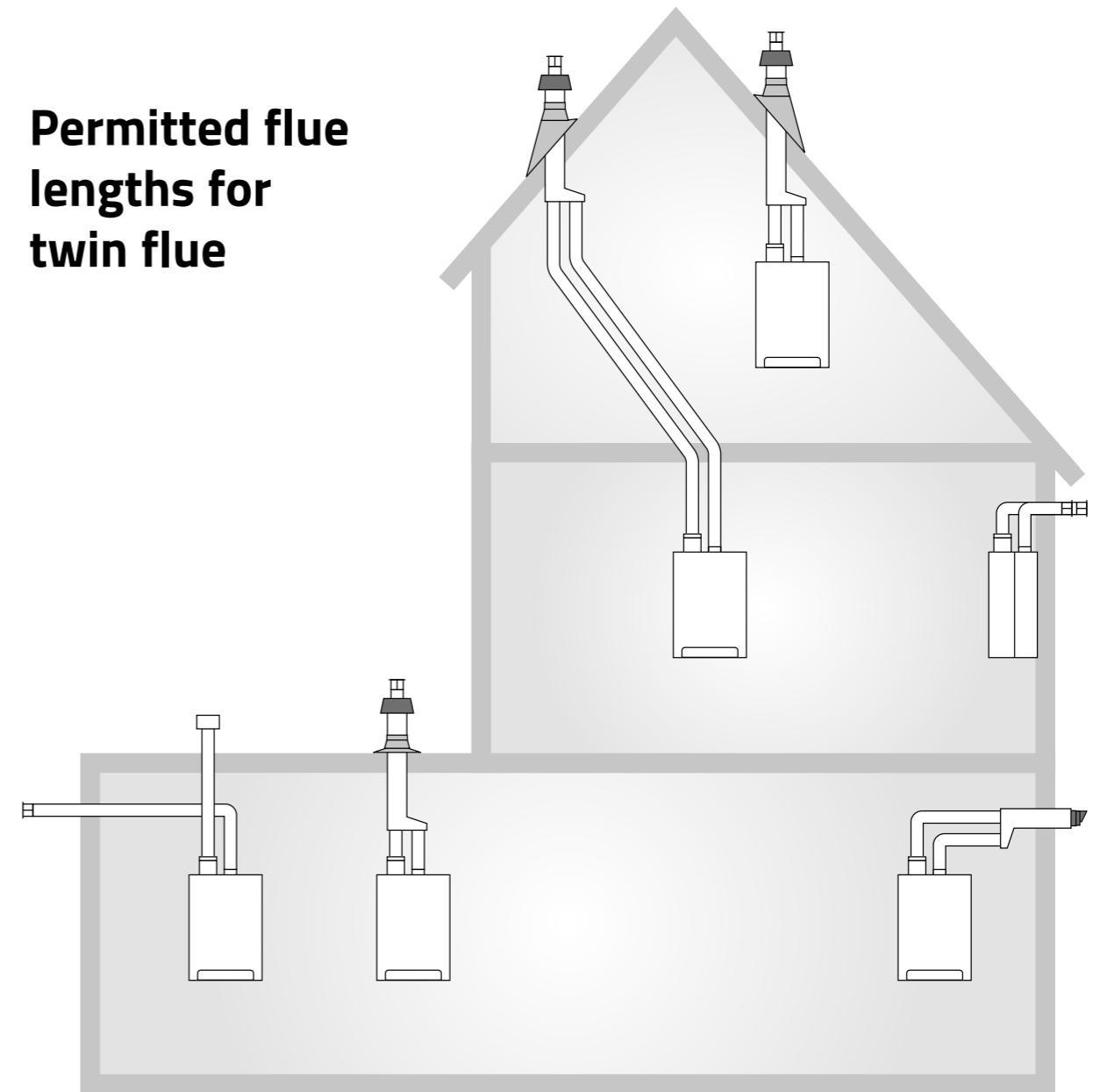
Boiler in your cellar?
No problem!

WIN FLUE

Flue Termination Positions



Permitted flue lengths for twin flue



TWIN FLUE POSITIONS

FLUE MIN. SPACING

AIR MIN. SPACING

	TWIN FLUE POSITIONS	FLUE MIN. SPACING	AIR MIN. SPACING
A	Below an opening	300mm	50mm
B	Above an opening	300mm	50mm
C	Horizontally to an opening	300mm	50mm
D	Below gutters, soil pipes or drain pipes	75mm	75mm
E	Below eaves	200mm	50mm
F	Below balcony or car port roof	200mm	50mm
G	Above ground or balcony or roof	150mm	50mm
H	From an internal or external corner or to a boundary alongside the terminal	300mm	50mm
I	Above ground, roof or balcony level	300mm	100mm
J	From a surface or a boundary facing the terminal	600mm	100mm
K	From a terminal facing the terminal	1,200mm	1,200mm
L	From an opening in the car port into the building	1,200mm	100mm
M	Vertically from a terminal on the same wall	1,500mm	1,500mm
N	Horizontally from a terminal on the same wall	300mm	300mm

BOILER

C13

C33*

C53

	BOILER	C13	C33*	C53
	Combi Compact HRE 24/18	50m	50m	50m
	Compact HRE 18 SB	50m	50m	50m
	Compact HRE 18 OV	50m	50m	50m
	Combi Compact ECO RF 24	50m	50m	50m
	Combi Compact HRE 28/24	40m	40m	40m
	Compact HRE 24 SB	40m	40m	40m
	Compact HRE 24 OV	40m	40m	40m
	Combi Compact ECO RF 30	40m	40m	40m
	Combi Compact HRE 36/30	40m	40m	40m
	Compact HRE 30 SB	40m	40m	40m
	Compact HRE 30 OV	40m	40m	40m
	Combi Compact ECO RF 36	40m	40m	40m

Unless noted different the length mentioned in the table opposite reflects the total length between the flue connection of the boiler and the terminal.

Conventional Chimney installation System



Flexi Flue Kit

The Intergas flexible liner system may offer a solution where perhaps our standard concentric or Twin-Flue System is not permissible.

For example - a listed building where fluing horizontally through to an outside wall or vertically through the existing roof may not be allowed. Using an existing conventional chimney to run our flexible liner system may possibly provide a suitable solution.

- Expander PP 60/100 **071025**
- Seal Flex Viton 130 **086332**
- Concentr. Flex Kit Basic 80/125 **086381**
- Extension Flex PP 80/130 **086384**
- Skyline Top 80.125 PP **086388**
- Support Elbow 80/125 **086391**
- Chimney Place 158 **086392**
- Pull Cone 130 **470251**

Plume Management

Once the flue has been installed and the appliance commissioned, Your Gas Safe Registered Installer should observe the plume direction. Particular attention should be drawn to plume vapour re-entering the boiler via the air intake. If this occurs, it is highly possible the flue is fitted within a negative pressure area and therefore a plume management kit (PMK) must be fitted.

Plume Management



500mm Plume Management Kit **081294**



PMK PP60 90° **081284**



PMK PP60 60° (2 per box) **081285**



Balcony Kit **086890**



Plume Deflector **081295**



1000mm Plume Management Flue Extension (inc. wall clamp) **081286**



FLEXI

FLUES

Intergas Heating Ltd

Unit 2 Easter Park
Worcester Road
Kidderminster
Worcestershire
DY11 7AR

t 01527 888000
f 01384 279480
e info@intergasheating.co.uk
i www.intergasheating.co.uk

INTERGAS[®]
BOILERS

WWW.INTERGASHEATING.CO.UK