



The code of practice for the installation, commissioning & servicing of central heating systems



## Potterton Gold Combi HE Range>>

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e&oe



Gold Combi HE range

The new Potterton Gold range with 3 year warranty.  
High efficiency is about to enter a golden age>>

Potterton Gold Combi HE>>



Gold Combi HE range

### The ultimate in reliability and service.

Over the past 150 years, the Potterton name has become synonymous with top quality, high specification products. With well over 5 million boilers produced to date, we're consistently leading the way with the most advanced range of energy efficient, user and environmentally friendly products on the market. Through a firm focus on reliability and service, coupled with a massive investment in new product development, we are perfectly placed to be the first to meet the new challenges in high efficiency heating.

All Potterton products benefit from world class manufacturing skills, driven by one of the largest and most experienced research and development teams in the industry. We are continually developing reliable high efficiency heating solutions for a vast range of applications, and most are based on tried and trusted boiler technology, offering installers total reassurance and peace of mind.

### Leading the field in Innovation.

To demonstrate our commitment to innovation, we have invested £2 million in a new purpose-built Product Design Centre in Padiham - the largest of its type in the UK. The site is fully equipped with state-of-the-art facilities, including 60 stations designed to test the reliability of products and components, a wind generator that simulates varying wind conditions and three environmental chambers which test boiler components in varying temperatures and humidity levels. In the past year alone, the Centre has carried out over 200,000 test hours, pushing our boilers to the limit to ensure they offer the ultimate in performance and reliability in even the most extreme installation conditions.

As a result, we are so confident in the performance and reliability of our products that we are the first major boiler manufacturer to offer a 3 year parts and labour warranty on our latest boiler range, the Potterton Gold Combi HE.



# The Potterton Gold Combi HE with 3 year warranty. It's worth its weight in gold>>

Every once in a while, a boiler range comes along which, in design and engineering terms, is pure gold.

With its advanced design and stainless steel heat exchanger technology, the new Potterton Gold Combi HE is just such a range.

There are three SEDBUK A boilers in the range, the 24HE, 28HE and 33HE. Each one rigorously tested to offer unparalleled performance and reliability.

In fact, we're so sure of their performance credentials, that they all come with a 24 carat, solid gold 3 year parts and labour warranty.



## Key benefits >>

- A 3 year parts and labour product warranty (dependant on the customer returning the warranty card and having an annual service)
- Features the very latest heat stainless steel heat exchanger technology
- SEDBUK Band A Rating
- Intelligent control system that automatically adjusts the heat output to match demand
- Compact size for ease of installation
- Filling loop included
- Fitted with an integral clock



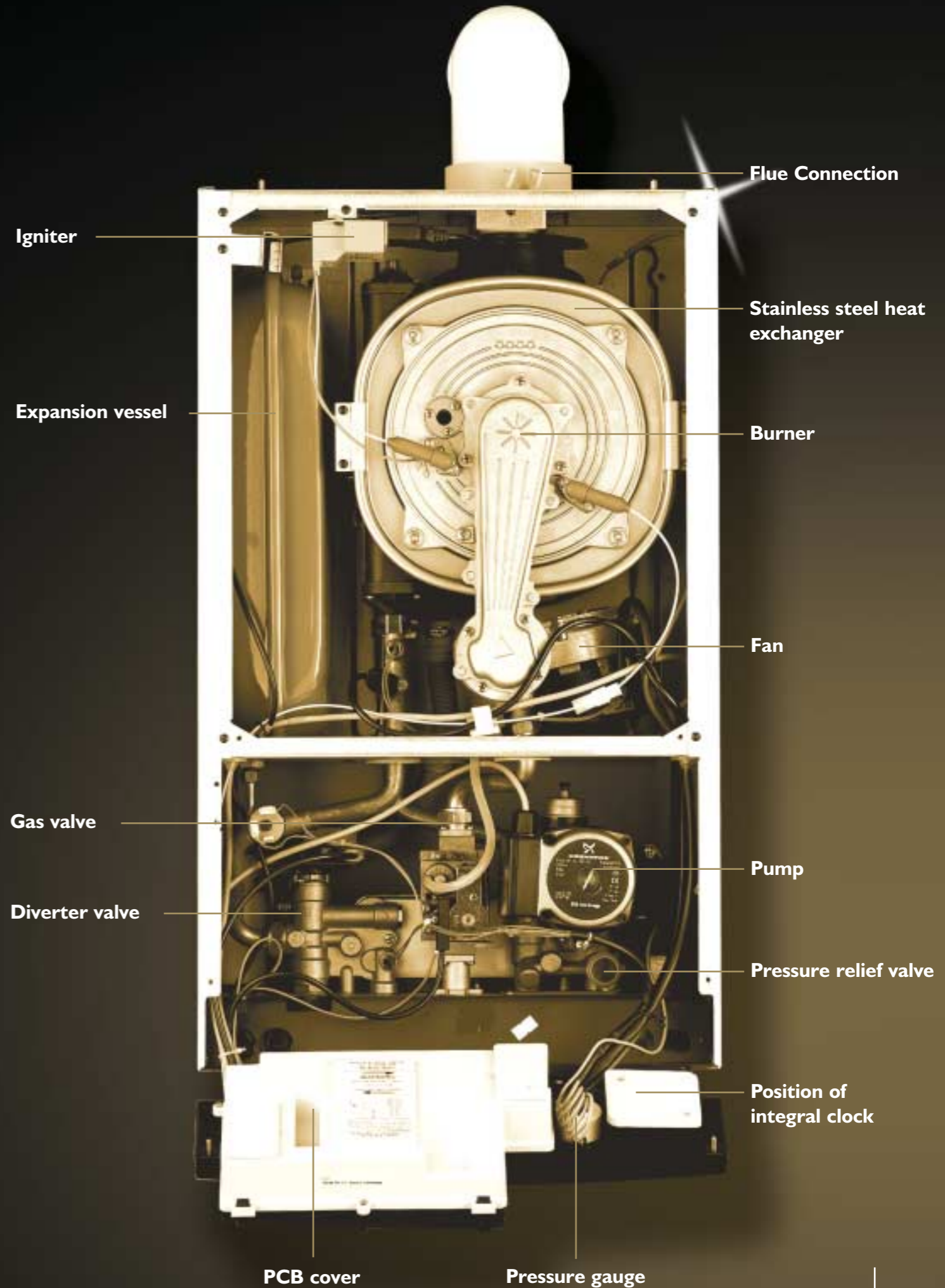
Gold Combi 28 HE



Gold Combi 33 HE



Gold Combi 24 HE



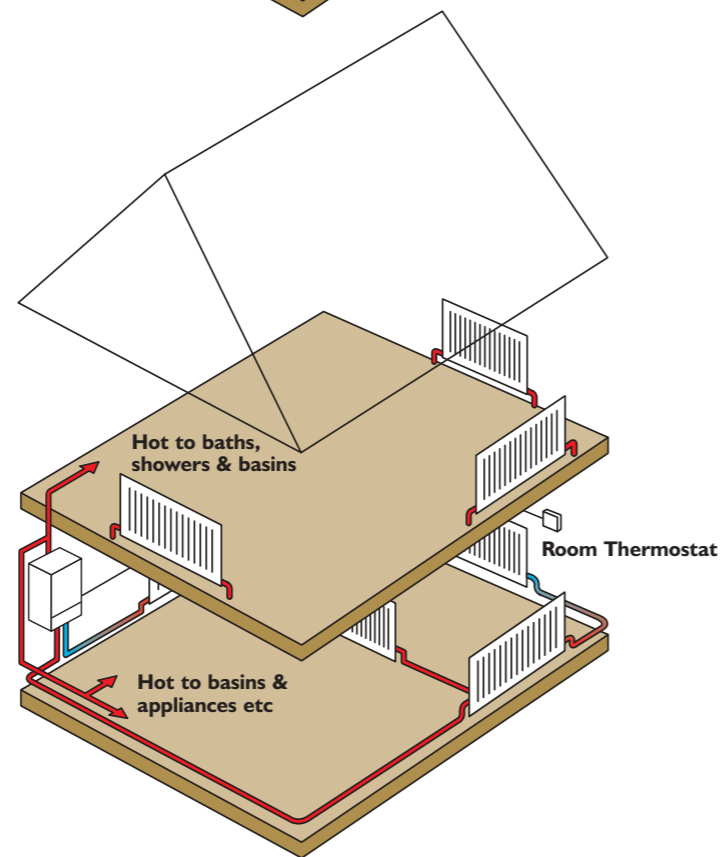
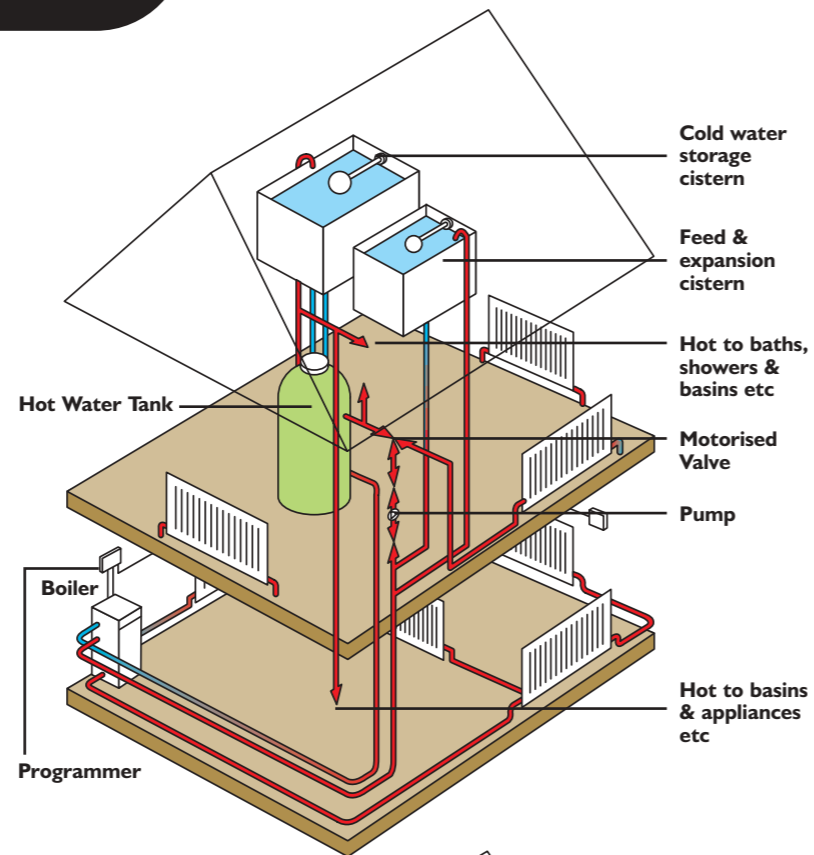
# System Layout

## Combi boilers: the benefits.

The advantages of combi boilers are now universally recognised by installers and homeowners alike. As millions of UK households have already discovered, a combi (or combination) boiler efficiently provides all the heating and hot water required in one compact, space saving unit, without the need for a hot water cylinder or a tank in the loft. Resulting, in turn, in considerable cost savings.

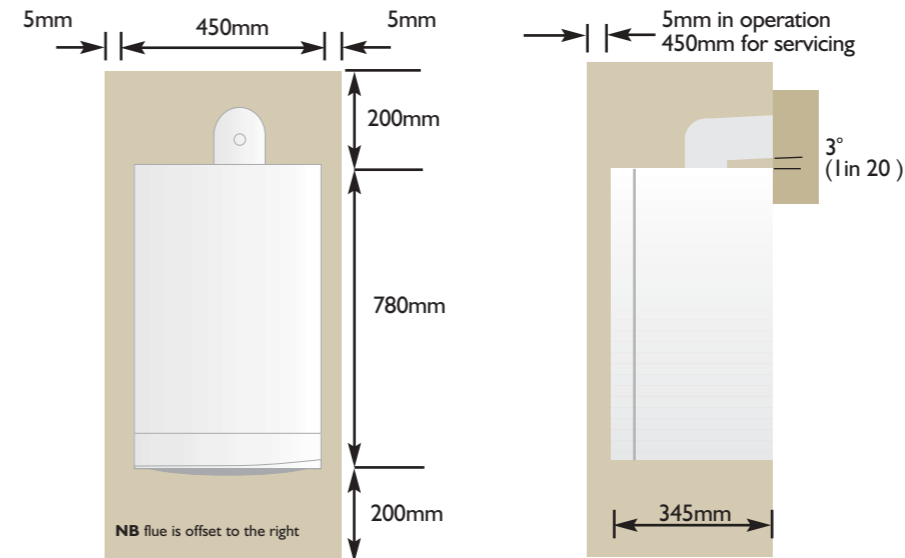
Whereas conventional systems store hot water, a combi heats directly from the cold mains, as and when required, to suit demand. What's more, because there's no loft tank required, there's less risk of freezing or flooding and none of the connecting pipework associated with traditional systems.

A combi boiler supplies hot water at mains pressure, providing consistently powerful showers without the need for a pump.



# Technical Specification

Dimensions and minimum clearances (mm)



Technical information	Gold Combi 24, 28* & 33*
Max continuous DHW flow rate raised 35°C	9.8 (24) 11.5 (28) 13.5 (33) litres/min
Max heat input CH/DHW modes (24)	27.4 kW
Max heat input CH/DHW modes(28)	27.4/32.1 kW
Max heat input CH/DHW modes(33)	32.1/37.7 kW
Max heat output CH condensing/non-condensing (24)	25.9/24 kW
Max heat output CH condensing/non-condensing (28)	25.9/24 kW
Max heat output CH condensing/non-condensing (33)	30.3/28 kW
Max heat output DHW (24)	24 kW
Max heat output DHW (28)	28 kW
Max heat output DHW (33)	33 kW
Max gas rate (24)	2.61 m <sup>3</sup> /hr
Max gas rate (28)	3.06 m <sup>3</sup> /hr
Max gas rate (33)	3.59 m <sup>3</sup> /hr
NO <sub>x</sub> Class	5
Min DHW flow rate	2 litres/min
Min DHW operating pressure	0.15 bar
Max DHW system pressure	8 bar
Safety discharge pressure	3 bar
Automatic bypass	Yes
Max capacity of CH system	125 litres
Pre-plumbing wall plate with isolating valves	Yes
Gas connection	22 mm
CH flow and return	22 mm
DHW inlet and outlet	15 mm
Pressure relief discharge	15 mm
Condensate drain connection	21.5 mm
Installation lift weight	45kg (24) 45kg (28) 46kg (33)
Electrical supply	230/50 V/Hz
Power consumption	155 (24) 155 (28) 160 (33) watts
Electrical protection	IPXOD
Boiler frost protection	Yes
24hr pump exercise	Yes
Concentric flue terminal diameter	100 mm
Standard concentric flue length	685 mm
Max concentric horizontal flue length (equivalent)	10 m
Max concentric vertical flue length (equivalent)	10 m (plus terminal)
Max twin pipe vertical flue length (equivalent)	15 m (plus terminal)

\* 28 & 33kW products available from September 2005



Fully modulating outputs 24, 28 & 33kW



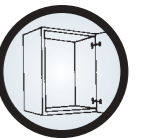
Fitted clock



SEDBUK 90.8% Band A



NO<sub>x</sub> emissions class 5



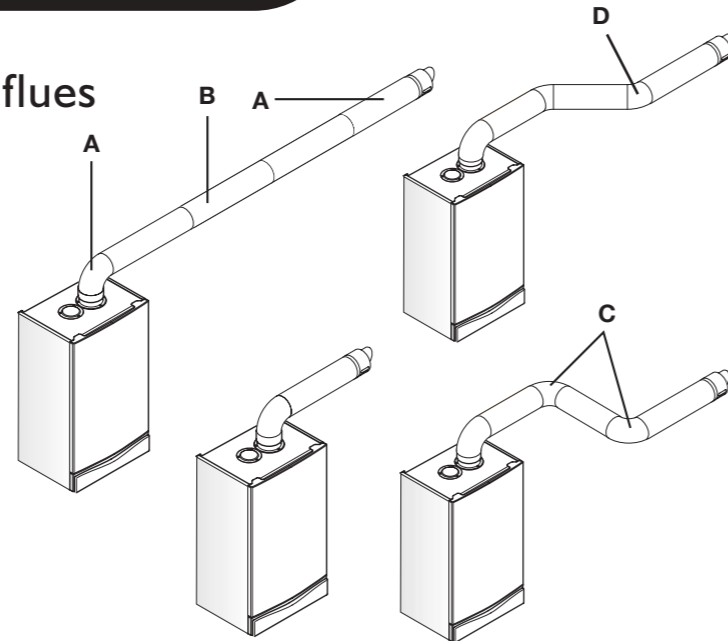
Can be located in unventilated cupboards or compartments



3 Year Warranty

# Flues, fittings and Accessories

## Horizontal flues



### Horizontal Flues

minimum distance to edge of terminal.	mm
A Directly below an openable window, air vent or any other ventilation opening.	300
B Below gutter, drain/soil pipe.	150
C Below eaves.	200
D Below a balcony/carport roof.	200
E From vertical drain pipes and soil pipes.	150
F From internal or external corners.	300
G Above adjacent ground or balcony level.	300
H From a surface facing the terminal.	600
I Facing terminals.	1200
J From opening (door/window) in carport into dwelling.	1200
K Vertically from a terminal on the same wall.	1500
L Horizontally from a terminal on the same wall.	300
M Above an opening, air brick, opening window etc.	300
N Horizontally to an opening, air brick, opening window etc.	300

The Potterton Gold Combi HE can be fitted with flue systems as illustrated.

The standard flue is suitable only for horizontal termination applications.

Maximum permissible equivalent flue lengths are:-

Horizontal Concentric	10 metres
Vertical Concentric	10 metres
Vertical Twin Pipe	15 metres

Any additional "in line" bends in the flue system must be taken into consideration. Their equivalent lengths are:-

Concentric Pipes:

45° bend	0.5 metres
93° bend	1.0 metre

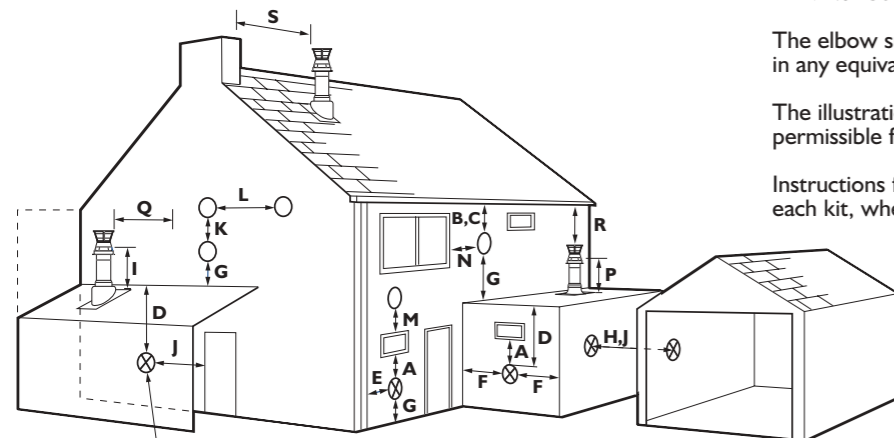
Twin Flue Pipe

45° bend	0.25 metres
91.5° bend	0.50 metres

The elbow supplied with the boiler is not included in any equivalent length calculations.

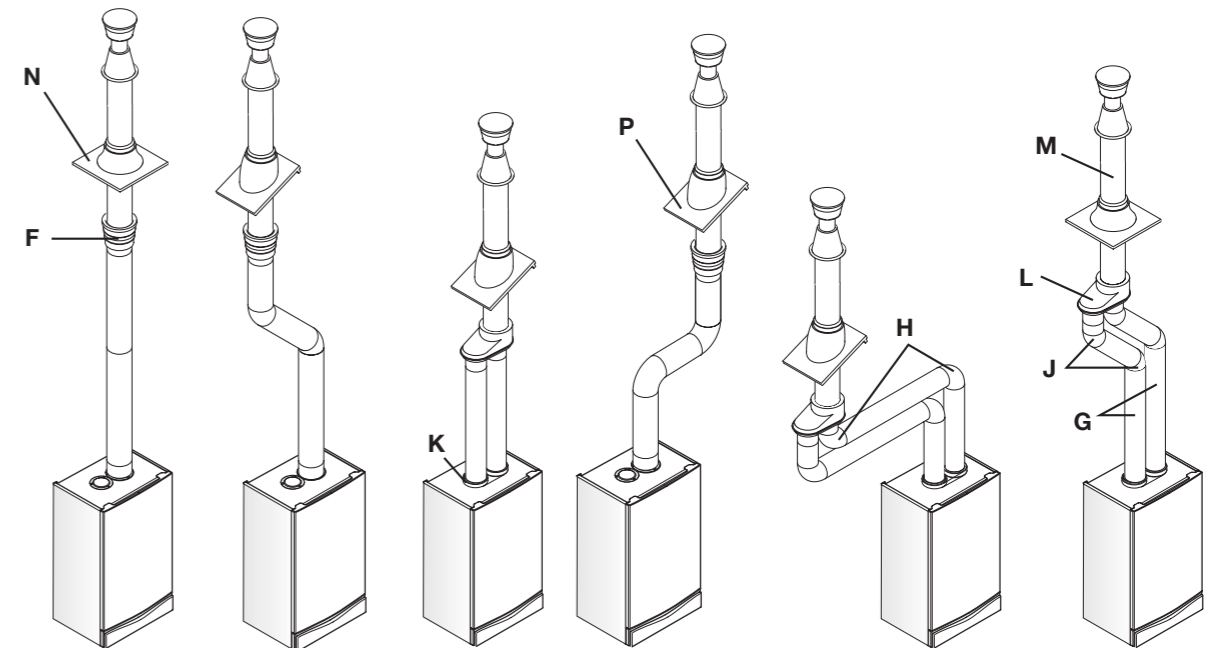
The illustrations opposite show examples of permissible flue systems.

Instructions for guidance and fitting are included in each kit, where appropriate.



⊗ Likely flue positions requiring a flue terminal guard

## Vertical flues (inc twin pipe)



Key	Accessory	Size	Diameter	Code no.
<b>Concentric Flue System 110mm diameter</b>				
A	Standard Horizontal Concentric Flue Kit	750mm	100mm	5111073
B	Concentric Flue Extension Kit	1000mm	100mm	5111074
C	Concentric Flue Bend Kit	93°	100mm	5111075
D	Concentric Flue Bend Kit	135°	100mm	5111076
D	Concentric Flue Bend Kit (Pair)	135°	100mm	5111085
	Concentric Flue Internal Fixing Kit/Wall Liner		100mm	5111067
	Concentric Flue Terminal Deflector		100mm	5111068
F	Concentric Flue Vertical Adaptor (Terminal)		100/125mm	5111070
	Concentric Roof Cover Plate Kit		100mm	246143
	Concentric Pipe Support		100mm	5111080
<b>Twin Pipe Flue Accessories</b>				
G	Twin Pipe Extension (Pair)	1000mm	80mm	5111087
H	Twin Pipe Flue Bend Kit (Pair)	90°	80mm	5111072
J	Twin Pipe Flue Bend Kit (Pair)	135°	80mm	5111086
K	Twin Pipe Flue Adaptor (Boiler)		80mm	5111071
L	Twin Pipe Flue Adaptor (Vertical Terminal)		80/125mm	5111084
	Twin Pipe Support		80mm	5111081
<b>Universal Flue Accessories</b>				
M	Vertical Flue Terminal		125mm	5111078
N	Universal Flat Roof Flashing		125mm	246144
P	Universal Roof Tile	25/45°	125mm	246141
P	Universal Roof Tile	35/55°	125mm	246142
<b>Additional Accessories</b>				
	Integral 7 Day Electronic Timer Kit			247207

# Installation & Service



**1.** Remove wall plate, instructions and fittings, leaving the boiler protected until required.



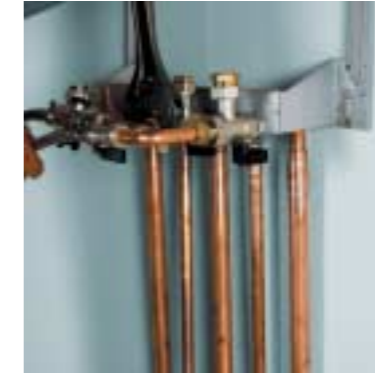
**2.** After considering the site requirements position the fixing template on the wall ensuring it is level both horizontally and vertically. Mark the position of the flue, fixing holes and pipework.



**3.** Cut the hole for the flue (minimum diameter 116mm) and drill the wall as previously marked. Secure the wall plate using the fixing screws.



**4.** Finally tighten the screws.



**5.** Connect the gas and water pipes to the valves on the wall plate using the copper tails supplied. It is possible to fit the filling loop at this stage.



**6.** Cut the flue according to boiler location and wall thickness. Note the flue elbow is angled at 93 degrees to ensure a fallback to the boiler.



**7.** Lift the boiler using the lower edges. Engage the slots at the top rear of the boiler on the wall plate.



**8.** Connect the condensate drain to the trap outlet pipe. The connection will accept a 21.5mm plastic overflow pipe.



**9.** Insert the flue through the hole in the wall. Fit the elbow to the boiler adaptor, ensuring that it is pushed fully in. Draw the flue back through the wall and engage it in the elbow.



**10.** Lower the fascia panels, remove the control box cover and connect the electrical supply to the boiler. Prior to commissioning carry out electrical system checks.



**11.** Commission boiler, and check gas pressure. The system must be flushed in accordance with BS 7593. Pressurise the system to 1.0 bar then close and disconnect the filling loop.



**12.** Instruct the user in the correct operation of the boiler.

## The value of training

Training provides recognised benefits to installers and manufacturers, and is at the core of the Potterton philosophy.

Training:-

- Delivers valued product knowledge and information on best practice.
- Enables installers to give better advice to homeowners and to take advantage of sell up opportunities.
- Keeps installers up to speed on the latest industry developments.

## Four centres of training excellence

- Potterton maintain four centres of training excellence – at Dartford, Glasgow, Warrington and Warwick.
- Energy Efficiency courses are also held at satellite centres around the UK. Courses typically last one day and cost from £45.
- In addition to product-specific training, courses cover generic training on combi boilers, electronics, ACS, energy efficiency and more.

## Experienced in-house trainers

Where travel to a training centre is difficult, it is often possible to arrange training such as Energy Efficiency, at a closer location.

- Means installers will not miss out on vital training programmes.
- All training is given by highly experienced personnel.

## Hands-on training methods

As well as keeping abreast of the latest technical and legal developments, installers benefit from hands-on training.

- Training with live appliances demonstrates the products performance capabilities.

## The unbeatable benefits of heateam



**heateam** creates peace of mind with:

- Over 200 service engineers covering the whole of the UK.
- Dedicated teams of Call Centre support staff operating 7 days a week, 363 days a year.
- Full range of training courses available to all installers who install Potterton boilers.



## Bonus Direct Online

**BONUS  
DIRECT**  
ONLINE 



### The brilliant reward programme

Central heating installers who join this exciting new Potterton reward programme enjoy a fantastic range of benefits and special services.

Claim Bonus Direct Online points every time you buy a qualifying Potterton product, then choose online from a huge range of superb rewards. The more you buy the more points you can claim and the more rewarding it becomes. The unique rewards collection encompasses top brands such as Tag Heuer, Bose, Philips, Pringle, Nikon and Apple.

### Key extra benefits

- Guaranteed next day service visits
- Two year product warranties available exclusively to Bonus Direct members
- Members' FREE priority heateam service line
- Use points to pay for Potterton training courses
- Be the first to know about special offers and enjoy exclusive offers too
- Exclusive members' social events in your area
- Exciting new rewards added every month



The programme is FREE to join, and it's easy to register online at [www.bonusdirectonline.co.uk](http://www.bonusdirectonline.co.uk)

## Current Legislation

### An overview of current legislation

As you know, the rules and regulations are changing fast with regards to our business. Here is a brief overview of how things stand at the moment.

- With some exceptions, all boilers in England and Wales must be condensing.
- These changes will not include oil boilers until April 2007.
- Details of all heat producing appliances must be provided to the Local Authority Building and Control (LABC).



### Self certification and compliance

The government realises that the enforcement of the new building regulations is important, but Local Authority Building and Control will not be able to inspect every new and replacement boiler installation.

However:

- Corgi registered installers who have completed a recognised training programme in energy efficiency (such as an ACS course) can register on a self-certification scheme run by CORGI.
- The installer will provide details of each installation to CORGI, who then issue a Building Regulations compliance certificate to the householder and notify LABC on the installer's behalf.
- Installers who do not belong to a Competent Person scheme will have to obtain a Building Control notice before installing any boiler.



### Exceptions assessment

To assess exceptions, installers can use a simple points scoring system.

- The procedure incorporates an assessment form that needs to be signed by a competent person.
- No assessment is required with regard to the fitting of condensing boilers and warm air heaters.
- Although oil boilers are regarded as exceptions until 1 April 2007, the installer still needs to complete a form.

**NB:** Installation of standard efficiency gas boilers ordered by homeowners before 1st April 2005 must be completed by 30th June 2005.