

Betacom₄

Range Brochure



Betacom₄



Easy does it

At Glow-worm we make working with us easy and rewarding with all the support when you need it. We offer outstanding products, practical hands-on training and unrivalled service across the UK. Our wide range of high quality products include domestic gas boilers in combi, sealed system and regular open vent options which are supported by a full range of flue systems and accessories. We also meet Boiler Plus with a range of easy to use load and weather compensating thermostat controls and the smart MiGo app based control - all of which are simple to install.

Quality product

Every Glow-worm boiler undergoes 499 quality checks before it leaves our award winning UK factory and they come with a range of guarantee options up to 15 years. So your customer will have total peace of mind. **Install confidence**

Practical hands-on training

We run industry standard Glow-worm training courses at seven Centres of Excellence across the UK. These are hands-on practical installation and maintenance courses and will help you start how you mean to go on. **Just the job**

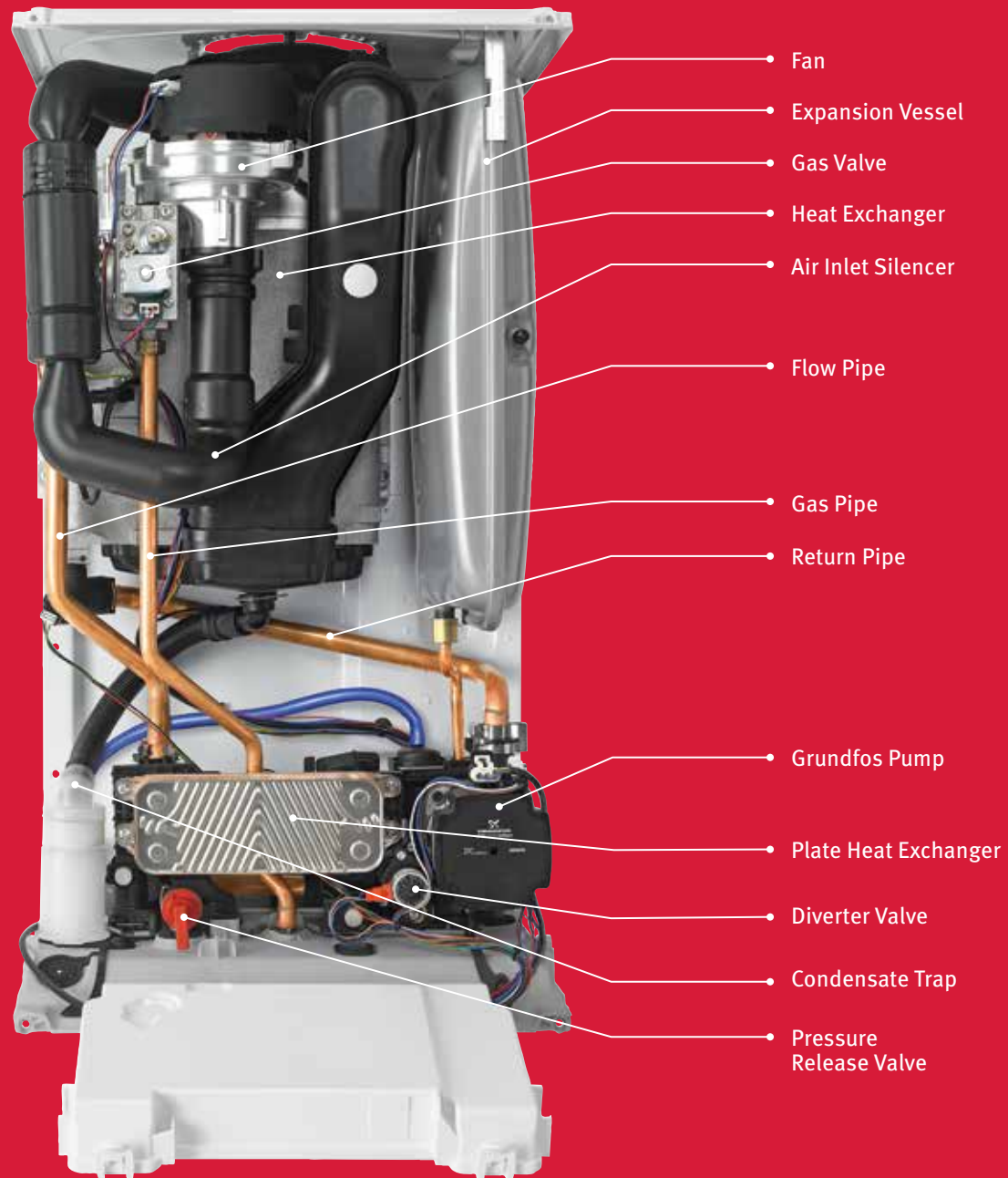
Rewarding loyalty and support

Register every installation straight from your mobile using our Plumbing Toolbox app or on our Club Energy website and we'll even give you cashback and exclusive free extended guarantees to support your business. **Consider it done**



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Betacom₄ combi boiler

Betacom₄ is a highly efficient combi boiler with a choice of 24 or 30kW outputs for instant hot water and heating. Betacom₄ comes with a simple inbuilt analogue timer and is also compatible with the full range of Glow-worm controls including the popular MiGo app based control, making it easy to set the heating programme required and run in the most efficient way to meet heating & hot water demands.

Developed using automotive grade aluminium the Betacom₄ heat exchanger is a high quality, high efficiency product that makes the boiler not only light to install but also easy to maintain. This means lower costs and more reliability. The Betacom₄ is backed by a 2 year guarantee with an option to extend to a 6 year through Club Energy.



2 year guarantee
with option to extend*



ErP A rated



Easy to install and service



Meets Boiler Plus when
installed with a Climastat

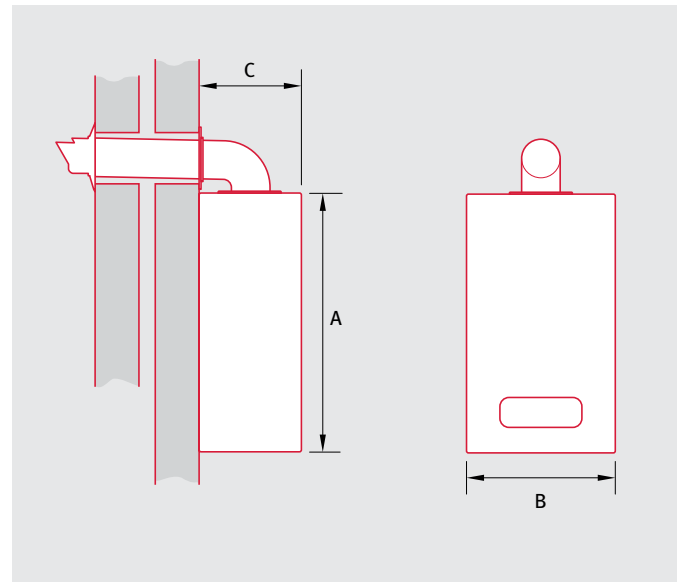
Features and benefits

- **2 years guarantee**
Parts and labour guarantee for 2 years with an option to extend to 6 years*.
- **Compact**
Smart design to suit modern homes.
- **Wide range of accessories**
This includes a spacing frame and pipe cover plate.
- **High efficiency**
ErP 94% A rated boiler that helps reduce energy bills.
- **LCD display**
Bright LCD display with an easy to use interface.
- **Exclusive to City Plumbing Supplies**

* when installed through Club Energy

Technical specification

Betacom₄ combi dimensions



Boiler dimensions

Height (A)	Width (B)	Depth (C)
740mm	418mm	300mm

Betacom₄ combi clearances

Boiler clearances

Top	Side	Bottom	Front
300mm	0*	300mm	600mm**

* See manual for clearance if side panels are to be removed to assist future service and maintenance

**5mm if removable panel or door

Betacom ₄	Unit of measure	24c	30c
General			
Boiler type		Combi	Combi
Model output		24kW	30kW
Article number		0010021204	0010021205
Gas Council number		47-019-52	47-019-53
Boiler dimensions (H x W x D)	mm	740 x 418 x 300	740 x 418 x 300
Heating			
Nominal heat output range at 50/30°C (Condensing mode)	kW	5.3 - 21.2	6.3 - 26.5
Nominal heat output range at 80/60°C (Non condensing mode)	kW	5 - 20.2	6 - 25.2
Maximum flow temperature	°C	80	80
Flow temperature range	°C	10-80	10-80
Flow temperature factory setting	°C	75	75
Approximate condensate volume at 50/30°C	litres/hr	2.04l/h	2.55l/h
Modulation (max/min)	1 : X	1:4.2	1:4.4
Domestic Hot Water			
Maximum heat output for water generation	kW	24.2	30
Lowest water pressure to operate boiler	bar	0.2	0.2
Lowest water flow for operation	l/min	1.9	1.9
Lowest water pressure for maximum flow rate	bar	1	1
Domestic hot water flow rate (at DT = Δ35K)	l/min	10	12.4
Hot water output temperature range	°C	35-60°	35-60°
Mechanical			
Expansion vessel size	litres	8	8
Gas inlet connection (pipe size)	mm	15	15
Heating flow and return connections (pipe size)	mm	15	15
Hot and cold water connections (pipe size)	mm	22	22
Heat exchanger material	Stainless/Aluminium	Aluminium	Aluminium
Boiler lift weight (Dry boiler)	kg	32	32.6
Performance			
NOx (En 15502-2-1)	mg/kWh	39	39
ErP efficiency (Heating / DHW)		A/A	A/A
ErP efficiency	%	94	94
ErP decibel rating (sound power)	dBa	50	51
PCDB seasonal efficiency	%	89.6	89.6
Flueing options			
Rear flue options	Yes/No	No	No
Maximum horizontal flue length 60/100	m	10	10
Maximum vertical flue length 60/100	m	10	10
Maximum horizontal flue length 80/125	m	25	25
Maximum vertical flue length 80/125	m	25	25
Permissible flue classifications	C13, C33, C43, C53	C13, C33, C43, C53	C13, C33, C43, C53

Accessories

Part number	New Description	Range
0020219523	Horizontal flue kit DN 60/100	60/100
0020219524	Horizontal telescopic flue kit DN 60/100	60/100
0020219528	Horizontal flue kit 1.7m DN 60/100	60/100
0020219526	Rear telescopic flue kit DN 60/100	60/100
0020219538	Flue terminal kit, black	60/100
0020209763	Vertical flue adaptor DN 60/100	60/100
0020230604	Vertical flue terminal, black	60/100
0020199443	Flat roof flashing	60/100
0020258676	Pitched roof flashing	60/100
0020257007	Extension 0.5m DN 60/100 PP	60/100
0020257008	Extension 1m DN 60/100 PP	60/100
0020257445	Extension 2m DN 60/100 PP	60/100
0020267682	Extension 4m DN 60/100 PP	60/100
0020257009	Elbow 87 deg DN60/100 PP	60/100
0020257010	Elbow 45 deg DN60/100 PP (2 pieces)	60/100
0020267923	Flue support clips 200mm DN100 (5 pieces)	60/100
2000460487	Sliding sleeve DN 60/100	60/100
0020267683	Extension 0.5 to 0.8m telescopic 60/100 PP	60/100
A2043800	Ridge tile terminal (black)	60/100
0020267924	Flue support clips 100mm (pack of 5)	60/100
0020219531	Plume Management Kit black	PMK
0020219532	Plume Management Kit, white	PMK
0020219535	Plume deflector kit, black	PMK
0020219536	Plume deflector kit, white	PMK
0020219541	PMK extension 1m, black	PMK
0020219542	PMK extension 1m, white	PMK
0020219545	PMK elbow 87 deg, black	PMK
0020219550	PMK elbow 87 deg, white	PMK
0020219553	PMK elbow 45 deg, (2 off) black	PMK
0020219554	PMK elbow 45 deg, (2 off) white	PMK
0020257018	Horizontal air/flue duct & elbow & terminal	80/125
0020257016	Roof terminal black DN80/125 PP	80/125
0020257019	Extension 0.5m DN80/125 PP	80/125
0020257020	Extension 1m DN80/125 PP	80/125
0020257021	Extension 2m DN80/125 PP	80/125
0020257023	Elbow 87 deg DN80/125 PP	80/125
0020257024	Elbow 45 deg DN80/125 PP (2 pieces)	80/125
0020257022	Sliding sleeve DN80/125 PP	80/125
0020104559	Flue support clips (5 off) DN 60/100	80/125
0020209764	Vertical flue adaptor DN 80/125	80/125
0020193649	Pipe cover, large	ALL
0020193659	Pipe cover, small	ALL
0020193660	Spacing frame, small	ALL
0020193663	Upward piping kit	ALL
A2044800	Condensate pump	ALL
0020082851	Spacing frame, large	ALL
0020193661	Universal analogue timer	COMBI

Boiler Plus







The new Boiler Plus legislation has been designed to ensure that all households in the UK are energy efficient. Boiler Plus is the biggest piece of legislation since 2005 when the UK became the first country to become “all-condensing”.

All new boilers from April 2018 must have a minimum ErP efficiency of 92% with time and temperature controls fitted if they aren't already present and working correctly.

Also combi boilers, the most popular boiler type in the market require one of four additional requirements. Each will need to suit each individual homeowner's circumstances. The measures available are:

- **Load compensation** - the ability to use the current room temperature to modulate the flow temperature, this needs the control and boiler to intelligently communicate.
- **Weather compensation** - the ability to use outdoor sensors to monitor the outside temperature and modulate the flow temperature from the boiler.
- **Smart control** - An internet connected control that provides automated heating, hot water and optimised boiler efficiency.

From the feature-rich MiGo personal heating assistant to the very simple and cost-effective Climastat room thermostat, Glow-worm offers a wide range of intelligent and easy to use solutions to meet Boiler Plus.

Load Compensating Control	Weather Compensating Control	Smart Control
Climastat and Analogue Timer	Climapro ₁ and Outdoor Sensor*	MiGo Smart Control
		
Climapro ₁	Climapro ₂ and Outdoor Sensor*	
		
Climapro ₂		
		

*Wired controls must always be paired with the wired outdoor sensor.

*Wireless controls must always be paired with the wireless outdoor sensor.

Intelligent controls

All Glow-worm controls have been designed to work with the Betacom₄ boiler range, so they are simple to install and your customer will get the ultimate in running efficiency, convenience and comfort. Adding any of our intelligent controls to your boiler will mean you are complying with the Boiler Plus legislation.

Climastat Thermostat

- Can be used in conjunction with a analogue plug in timer
- Wall mounted Climastat connects using simple low voltage eBus
- eBus connected Climastat means the boiler will modulate to manage heating in the most efficient way possible
- Heating & hot water mode on indicator
- Service, fault and maintenance indication
- Clear digital display with 0.5°C temperature intervals
- Wide temperature range 5 - 30°C

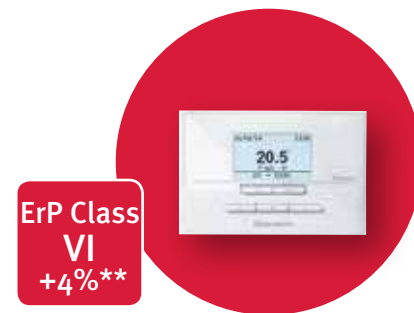


Room Thermostat	✓
Programmable Room Thermostat	
Wireless Controls	
Load Compensation	✓

Weather compensation not possible

Climapro₁ Wired & Wireless Programmable Thermostat

- Secure wall mounted thermostat is wired using simple low voltage eBus
- User friendly design with bright backlight
- Clear straightforward menus to set heating & hot water programmes
- Annual service reminder and auto daylight saving time
- eBus connected Climapro₁ means the boiler will modulate to manage heating in the most efficient way possible
- Weather compensation using a simple wired or wireless outdoor sensor
- Climapro₁ RF wireless version available
- Climapro₁ wired version can be used with the smart wiring centre to offer two heating and one hot water zone. (S Plan Plus)
- Automatic daylight saving time



Room Thermostat	
Programmable Room Thermostat	✓
Wireless Controls	✓
Load Compensation	✓
Weather Compensation*	✓

*When an outdoor sensor is included

**Class VI possible when used with outdoor sensor

Climapro₂ RF Wireless Programmable Thermostat

- Wireless thermostat works anywhere in the home
- Wall bracket for base location and secure storage
- RF receiver slots into the boiler, simple wireless setup, no electrician required
- User friendly design with bright backlight
- Clear straightforward menus to set heating & hot water programmes
- Annual service reminder and auto daylight saving time
- eBus connected Climapro₂ RF means the boiler will modulate to manage heating in the most efficient way possible
- Weather compensation using a simple wireless outdoor sensor



Room Thermostat	
Programmable Room Thermostat	✓
Wireless Controls	✓
Load Compensation	✓
Weather Compensation*	✓

*When an outdoor sensor is included

**Class VI possible when used with outdoor sensor

Wired & Wireless Outdoor Sensor

- Enables weather compensation when paired with Climapro₁ & Climapro₂
- Works on indirect sunlight which re-charges the small PV cells
- Simple and quick to install
- No batteries required

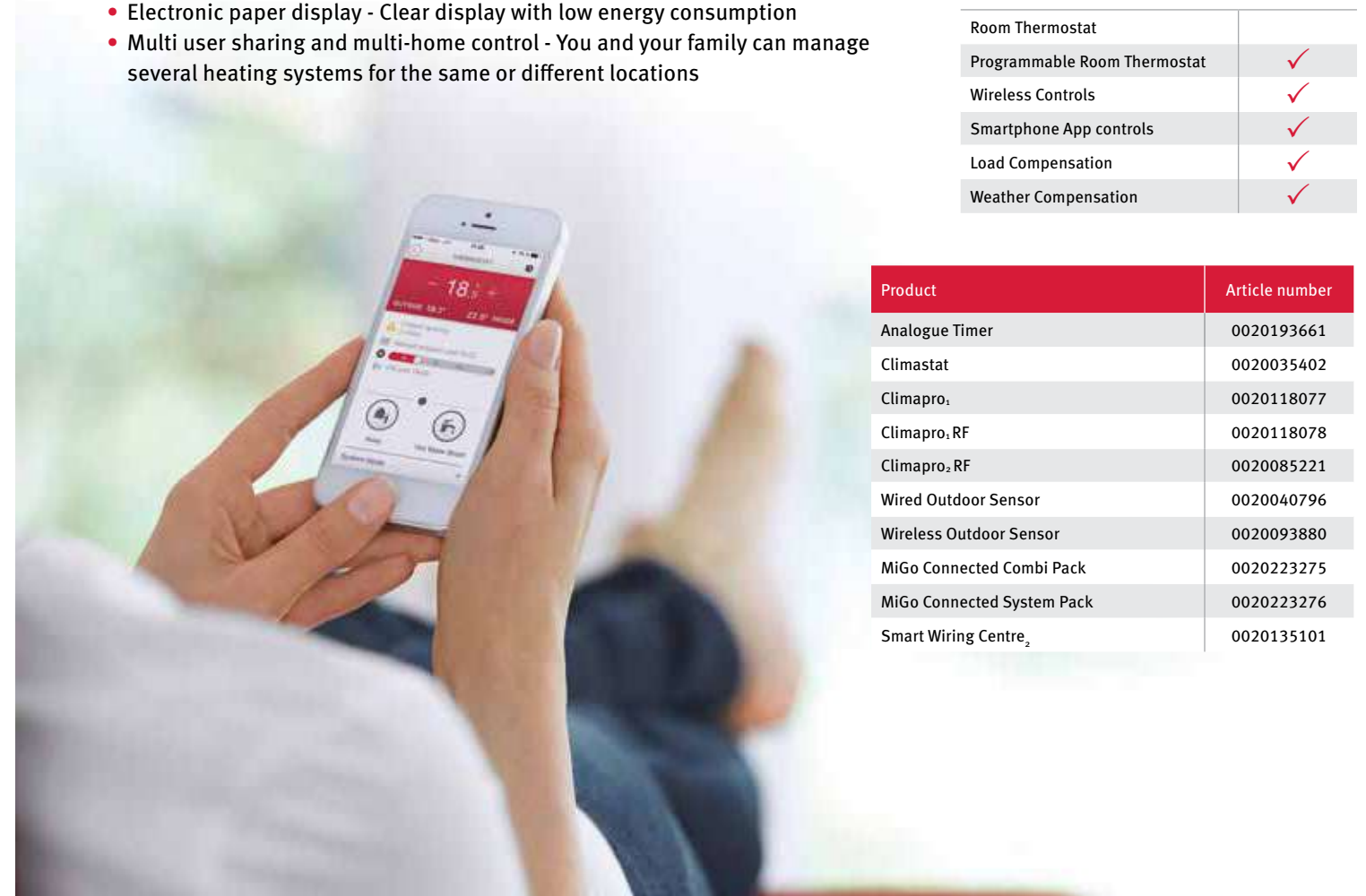


MiGo Smart Control

- Smart phone app for Apple & Android devices to manage heating & hot water on the go
- Simple & straightforward installation - Installed and running in less than 30 minutes
- Easy & intuitive interface - Fast and straightforward temperature control
- Self learning - MiGo automatically learns the energy requirements of your home
- Installation assistant - Seriously simple step by step pairing process
- Internet weather compensation - MiGo only ever uses your energy as and when it needs to without an outside temperature sensor
- Energy consumption monitoring - Gas and electricity consumption for both heating and DHW
- eBUS communication - MiGo and Glow-worm boilers speak the same 'language'!
- One heating circuit and DHW management - DHW and central heating control from one device
- In room thermostat can be wall mounted or a portable table top version
- Electronic paper display - Clear display with low energy consumption
- Multi user sharing and multi-home control - You and your family can manage several heating systems for the same or different locations



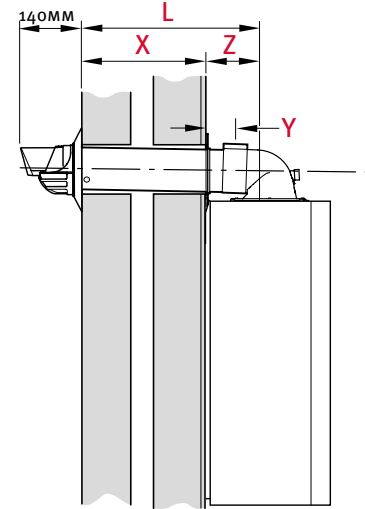
Room Thermostat	
Programmable Room Thermostat	✓
Wireless Controls	✓
Smartphone App controls	✓
Load Compensation	✓
Weather Compensation	✓



Product	Article number
Analogue Timer	0020193661
Climastat	0020035402
Climapro ₁	0020118077
Climapro ₁ RF	0020118078
Climapro ₁ RF	0020085221
Wired Outdoor Sensor	0020040796
Wireless Outdoor Sensor	0020093880
MiGo Connected Combi Pack	0020223275
MiGo Connected System Pack	0020223276
Smart Wiring Centre ₂	0020135101

Flueing options

Horizontal top side flue (standard)

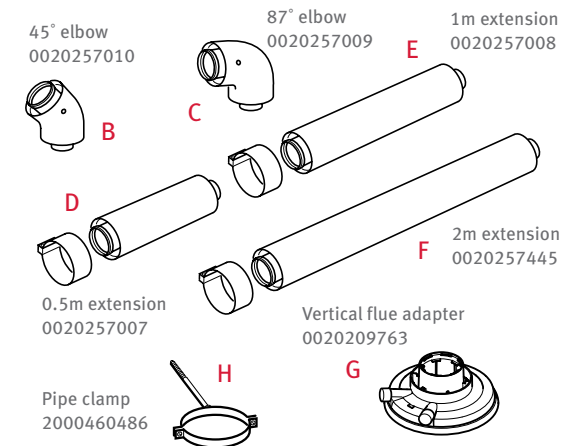


L = Flue length, measured from outside wall face to centre line of flue outlet.
 X = Wall thickness.
 Y = Distance from wall to edge of air duct on flue elbow.
 Z = Distance from centre line of flue outlet to inside wall face.
 The maximum flue length with extensions must not be exceeded (refer to L in table below).
 For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for each 87° elbow used.

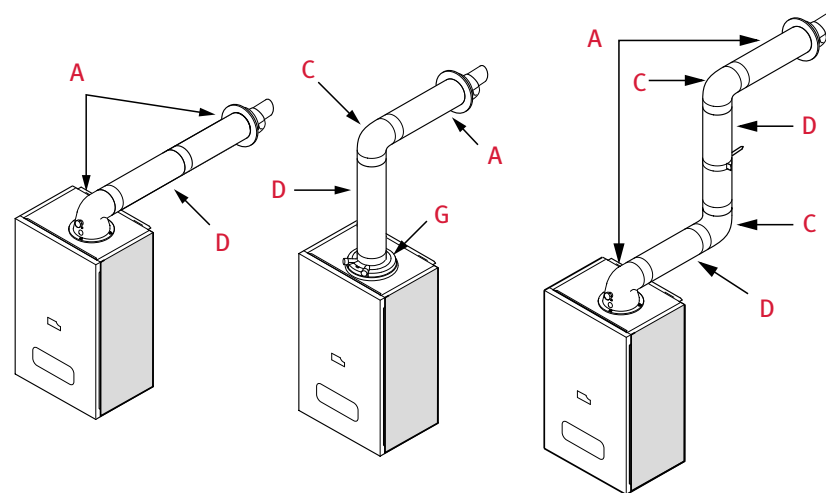
Model	L Max with extensions	X (mm)		Y (mm)	Z (mm)	Horizontal standard flue 0020219523*
		Min	Max			
Betacom ₄ 24c Betacom ₄ 30c	10m 10m	75	645	65	150	

* white terminal as standard, for black terminal use 0020219538

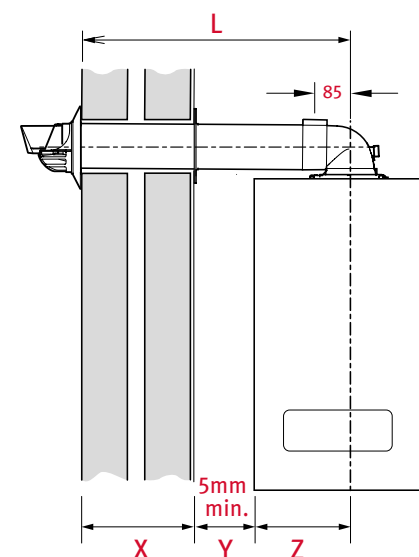
Horizontal Accessories



Flueing examples using extensions and bends



Horizontal top side flue (standard)

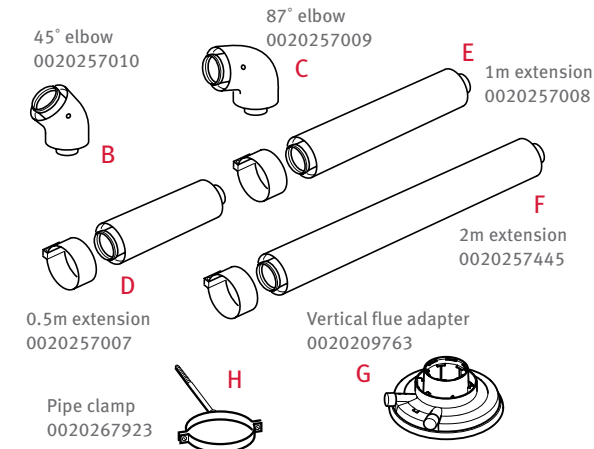


L = Flue length, measured from outside wall face to centre line of flue outlet.
 X = Wall thickness.
 Y = Distance from the side of the boiler to the inside wall face.
 Z = Distance from centre line of flue outlet to the side of the boiler.
 The maximum flue length with extensions must not be exceeded (refer to L in table below).
 For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for each 87° elbow used.

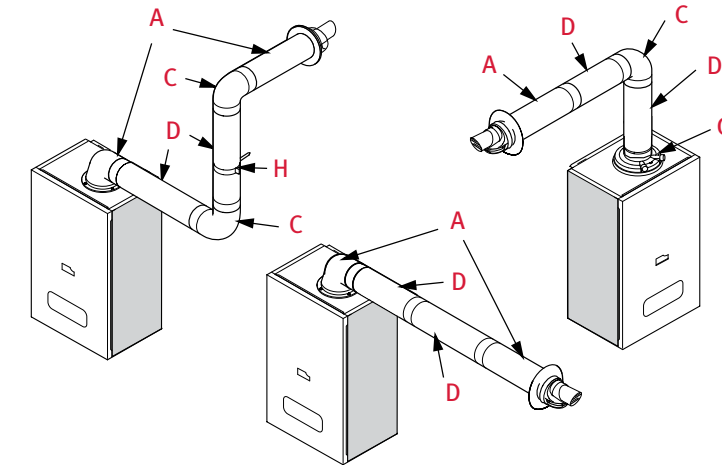
Model	L Max with extensions	X (mm)		Z (mm)	Horizontal standard flue 0020219523*
		Min	Max		
Betacom ₄ 24c Betacom ₄ 30c	10m 10m	75	600	150	

* white terminal as standard, for black terminal use 0020219538

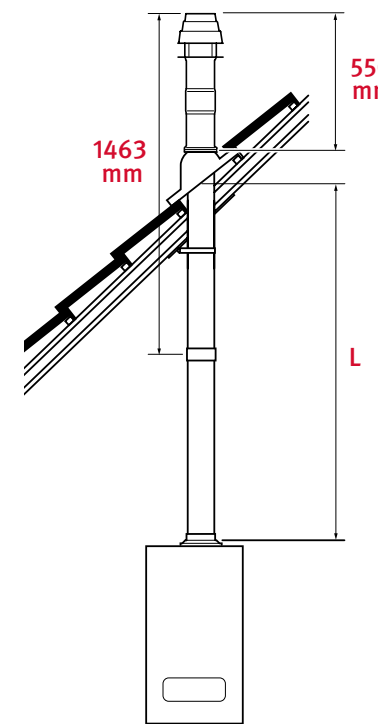
Horizontal Accessories



Flueing examples using extensions and bends



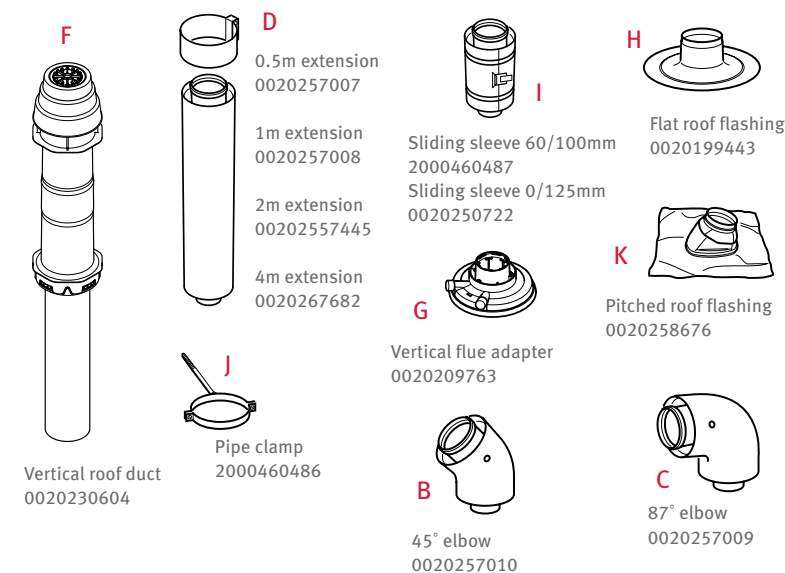
Vertical flue options



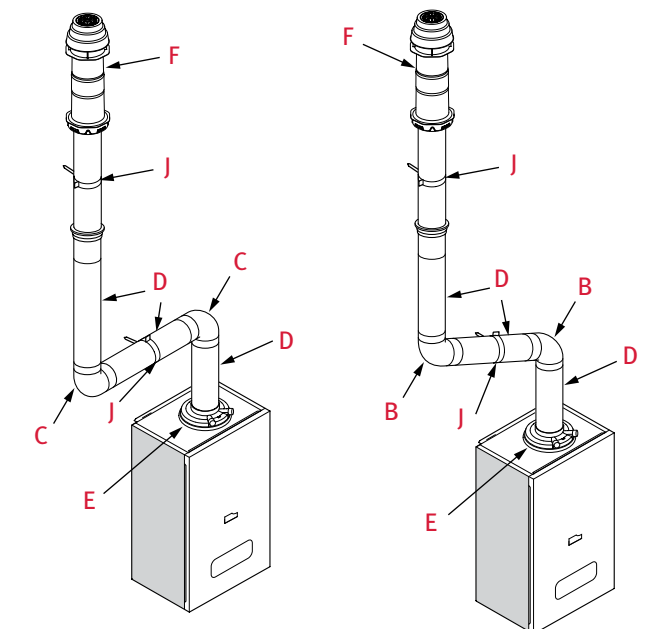
L = Flue length, measured from the top of the boiler to the underside of the roof flashing
 Maximum flue length is 10m plus external vertical roof terminal.
 The maximum flue length must not be exceeded (refer to L in table below).
 For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for each 87° elbow used.
 Vertical flue options use the same 100mm diameter flue components as the horizontal flue options.
 The vertical flue adaptor G is required for vertical installations.

Model	L Max with extensions	Description of parts	Part number
Betacom ₄ 24c Betacom ₄ 30c	10m 10m	0.5m extension	0020257007
		1m extension	0020257008
		2m extension	0020257445
		4m extension	0020228143
		Vertical flue adapter	0020209763
		Vertical roof duct	0020230604

Vertical Accessories



Flueing examples using extensions and bends



Training

Glow-worm offer a range of centre based training facilities covering the complete Glow-worm range. To find out more please call us on **0345 601 8885**, email training@glow-worm.co.uk or visit our website.

Support

Expert advice and support from installation to maintenance.

Technical help

- If you have a technical question simply call our technical help line on **0330 100 7679**, email technical@glow-worm.co.uk or visit our website for a straightforward answer

Genuine high quality spares

- Spares availability for up to 15 years after production ends
- Nationwide spares stockists with over 500 locations
- Next day delivery service for emergency orders - contact spares on **01773 881383** or spares@glow-worm.co.uk

Nationwide after sales service

- Supporting you with technical help and after sales service online, over the telephone and on the road
- 250 engineers based around the UK, carrying over 1,500 different spare parts
- 97% first time fix rate

For our service department please call **01773 828300** or email customerservice@glow-worm.co.uk



clubenergy

The award winning loyalty programme from Glow-worm

Enjoy great member benefits when you register your Betacom₄ installations including...



Option to extend
guarantee to 6 years



Business Development
Free tools to grow your business



Cash Rewards
On Glow-worm purchases



Training
Free Training



Business Tools
Including instant Gas Safe notifications

Plumbing Toolbox - The industry leading installer app for Club Energy members

Designed to make your working life easier!

The Plumbing Toolbox app includes loads of useful stuff...



Register your Installs



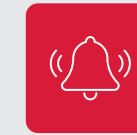
Benchmark Completion
Complete Benchmark and email it to your customers



Fault Finder
Quick and easy fault code identification



Every Manual
Wherever you are, right there in your pocket



Service Reminders
Helping to keep you organised



To find out more about how you can benefit from Club Energy or join free today visit www.clubenergy.co.uk or call 03306 781414



Literature for your customers

There are a number of easy ways for you to access Glow-worm product and homeowner literature:

- Via our installer app - Plumbing Toolbox
- Via telephone **01773 596 105**
- Available to download online at www.glow-worm.co.uk
- Via email literature@glow-worm.co.uk

Glow-worm

Nottingham Road
Belper
Derbyshire
DE56 1JT

Head Office	01773 824 639	info@glow-worm.co.uk
Literature	01773 596 105	literature@glow-worm.co.uk
Service Department		
Boilers	0330 100 7678	customerservice@glow-worm.co.uk
Installer Technical Support		
Boilers	0330 100 7679	technical@glow-worm.co.uk
Training	0345 601 8885	training@glow-worm.co.uk
Spare Parts	01773 881 383	spares@glow-worm.co.uk

