

# Betacom c 24 and 30kW Combination Boilers



## Betacom c 24 30kW



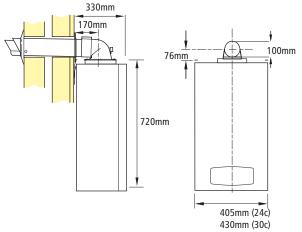
### Betacom c - Combination Boilers

The new Glow-worm Betacom c range of high efficiency combi boilers is simple, affordable and reliable. This stylishly designed appliance is easy to install and operate. It is one of the smallest SEDBUK B combis on the market and is the ideal heating solution for small to medium sized homes with multiple flueing options and telescopic flue as standard, which simplifies installation and removes the need to cut to length. It is available in outputs of 24kW and 30kW and features an in-built analogue timer and in-built frost protection.

The Betacom c is fully compatible with the Glow-worm Plume Management Kit, Condensate Pump and all volt free controls. It is supported by our nationwide service organisation providing installer and end-user support 7 days a week, 364 days a year throughout the installation and life of the appliance.

- · Compact and stylish appliance
- SEDBUK B
- Easy to use and install
- User-friendly LED display
- In-built timer
- Factory fitted mains connection lead
- Frost protection
- Pump & diverter anti-seize function
- Horizontal, vertical & twin flue options
- Superb value for money
- Full service back up of an experienced and leading manufacturer with 250 engineers on the road

# **Dimensions & Clearances**



- The boiler must be installed by a competent person in accordance with the rules in force in the United Kingdom.
- The Betacom 24c & 30c high efficiency condensing combi boilers have been designed for use on a sealed system only. The boilers come complete with pump and expansion vessel and safety discharge valve.
- No secondary domestic hot water storage is needed
- · Together with your room thermostat and thermostatic radiator valves (not supplied by Glow-worm) fully automatic control can be achieved

Visit www.glow-worm.co.uk to view and download technical data

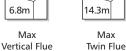
## Flue Options - Betacom 24c

| 5.6m | 5.6m |  |
|------|------|--|
|------|------|--|

Max

Horizontal Flue

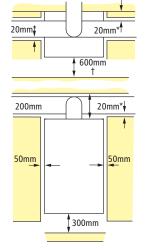




Compatible with Plume

2m

Management Kit



- \* including combustible material
- † a removable compartment door can be placed at least 5mm in front of the appliance



### Flue Options - Betacom 30c

Max

Vertical Flue



4.6m

Max

Horizontal Flue



Max

Twin Flue



Compatible with Plume Management Kit

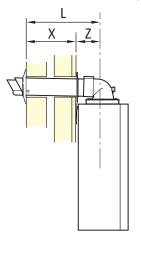
## **Product Specifications**

|              | Range                            | Betacom c       | Betacom c       |                | Range                            | Betacom c          | Betacom c          |
|--------------|----------------------------------|-----------------|-----------------|----------------|----------------------------------|--------------------|--------------------|
| Product      | Туре                             | Combi           | Combi           | Product        | Туре                             | Combi              | Combi              |
|              | Model                            | 24c             | 30c             |                | Model                            | 24c                | 30c                |
|              |                                  |                 |                 | Sealed system  | Yes                              | Yes                |                    |
| ance         |                                  |                 |                 |                | Suitable for open-vent systems   | No                 | No                 |
| Appearance   |                                  |                 |                 | tion           | Flow restrictor                  | Yes 8 I/min        | Yes 10 I/min       |
| dd           |                                  | and the         | and the         | Installation   | Inbuilt system bypass            | No                 | No                 |
| 4            |                                  | 12-0            | 2-0             | Inst           | Inbuilt condensate trap/siphon   | Trap               | Trap               |
| Size         | Casing dimensions (h w d)(mm)    | 720 x 405 x 330 | 720 x 430 x 330 | 1              | Inbuilt boiler frost protection  | Yes                | Yes                |
| Siz          | Weight (lift) (kg)               | 37              | 38              |                | Zero compartment ventilation     | No                 | No                 |
|              | CH output (kW) Min/Max           | 10.2 / 24.7     | 10.2 / 27.6     | s              | Top (mm) (from top of boiler)    | 200                | 200                |
| ە            | DHW output (kW) Min/Max          | 10.2 / 24.7     | 14.26 / 27.6    | Clearances     | Side (mm)                        | 50                 | 50                 |
| ance         | CH condensing output (kW)        | 24.9            | 28.8            | ear            | Bottom (mm)                      | 300                | 300                |
| Performance  | DHW flow rate (l/min, 35°C rise) | 9.4             | 10.5            |                | Front (mm)*                      | 600                | 600                |
|              | SEDBUK rating                    | В               | В               | e              | User display                     | LED                | LED                |
| <u> </u>     | SEDBUK %                         | 86.0            | 86.4            | User interface | Diagnostics                      | LED                | LED                |
|              | NOx class (natural gas)          | 1               | 1               | erin           | User adjustable DHW temp control | Yes                | Yes                |
|              | Main heat exchange type          | Tube & fin      | Tube & fin      | ]              | Optional Programmer              | Built-in           | Built-in           |
| uo           | Heat exchanger material          | Copper          | Copper          | Pipes          | Water connections                | 2 x 22mm, 2 x 15mm | 2 x 22mm, 2 x 15mm |
| Construction | Burner type                      | Multi-bladed    | Multi-bladed    |                | Max horizontal                   | 5.6m               | 4.6m               |
| nstr         | Fully modulating                 | Yes             | Yes             | Flues          | Max vertical                     | 6.8m               | 5.8m               |
| Ö            | DHW plate heat exchanger         | Yes             | Yes             | E              | Max twin flue (total air + flue) | 14.3m              | 11.9m              |
|              | Integrated hydrobloc             | No              | No              |                | Optional Plume Management Kit    | 2m                 | 2m                 |

\* This can be reduced to 5mm for a removable panel

## Flueing Options & Accessories

### Horizontal Flue Options: Top Rear



L = Flue length, measured from outside wall face to centre line of flue outlet. If L is less than 589mm then only the horizontal flue is required.
If L is greater than 589mm then extensions are required. If L is less than 384mm then use horizontal top flue A2043400, which can be cut to suit a minimum wall thickness of 75mm.

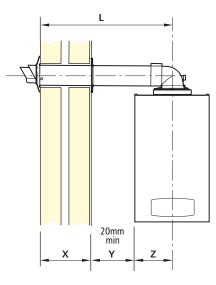
 $\mathbf{X}$  = wall thickness.

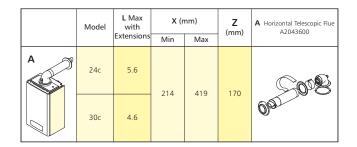
 $\mathbf{Z}$  = distance from centre line of flue outlet to inside wall face. The horizontal flue can be extended up to the maximum flue lengths with extensions but the maximum lengths must not be exceeded (refer to L in table to the right).

For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m.

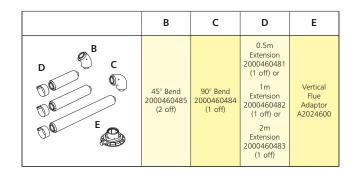
The vertical flue adaptor  ${\bf E}$  is required for vertical flue connections to the boiler.

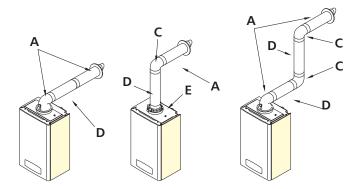
### Horizontal Flue Options: Top Side





#### Horizontal Flue Accessories





 $\ensuremath{\textbf{L}}$  = Flue length, measured from outside wall face to centre line of flue outlet.

If **L** is less than 589mm then only the horizontal flue is required. If **L** is greater than 589mm then extensions are required. If **L** is less than 384mm then use horizontal top flue A2043400, which can be cut to suit a minimum wall thickness of 75mm.

- $\mathbf{X} =$  wall thickness.
- $\mathbf{Y} =$  distance from the side of the boiler to the inside wall face
- ${\bf Z}=$  distance from centre line of flue outlet to the side of the boiler.

# Flueing Options & Accessories

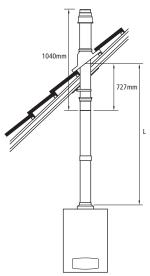
The horizontal flue can be extended up to the maximum flue lengths with extensions but the maximum lengths must not be exceeded (refer to L in table below).

For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m.

The vertical flue adaptor E is required for vertical flue connections to the boiler.

| Model | L Max with | X (mm) |       | Z (mm)        | Horizontal Telescopic Flue |
|-------|------------|--------|-------|---------------|----------------------------|
| Woder | Extensions | Min    | Max   | <b>∠</b> (mm) | A2043600                   |
| 24c   | 5.6        | 131.5  | 336.5 | 202.5         | Sort                       |
| 30c   | 4.6        | 119    | 324   | 215           | 000                        |

### Vertical Flue Options



 $\mathbf{L}$  = Flue length, measured from the top of the boiler to the underside of the roof flashing.

Maximum flue length is 3m.

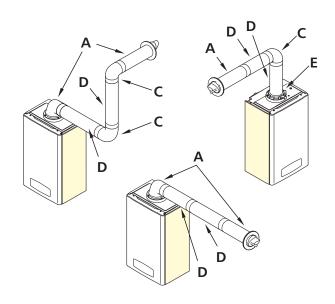
The maximum flue length must not be exceeded (refer to **L** in table opposite).

For each 90° or 2 x  $45^{\circ}$  bends fitted the maximum flue length must be reduced by 1m.

Vertical flue options use the same

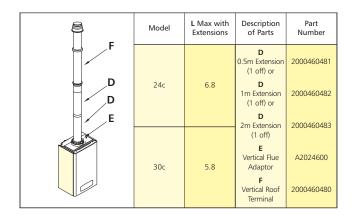
#### Vertical Flue Accessories

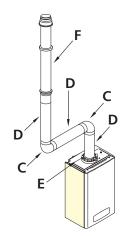
|   | В                                    | С                                       | D  |  |
|---|--------------------------------------|---|--|--|
| B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B<br>B | 45° Bend<br>(2 off)<br>2000460485    | 90° Bend<br>2000460484                  | 0.5m Ext<br>2000460481<br>1m Ext<br>2000460482<br>2m Ext<br>2000460483 |  |
|   | E                                    | F                                       | G  |  |
|   | Vertical<br>Flue Adapter<br>A2024600 | Vertical Roof<br>Terminal<br>2000460480 | Pitched Roof<br>Flashing<br>2000460479                                 |  |
| Н   | I                                    | J                                       | К  |  |
| Flat Roof Flashing<br>2000460478  | Sliding Sleeve<br>2000460487         | Fixing Bracket<br>(5 off)<br>2000460486 | Telescopic<br>Extension<br>A2036900                                    |  |

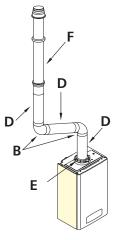


100mm diameter flue components as the horizontal flue options. The vertical flue adaptor **E** is required for vertical flue connections to the boiler.

Horizontal sections must have a continuous fall of at least  $2.5^{\circ}$  (44mm/metre) back to the boiler.







### **Twin Flue Options**

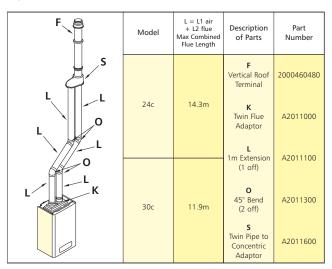
L = L1 + L2 Maximum available combined flue length
(L1 air inlet and L2 flue outlet), measured from top of boiler (not including terminals)

Maximum flue length is 14.3m or 11.9m (**L1 + L2**) plus terminals. For each 90° or 2 x 45° bends fitted the maximum flue length must be reduced by 1m.

Air inlet and flue outlet terminals must be installed so that they are Twin Flue Adaptor

| K Twin Flue Adaptor<br>A2011000 | Model | i(mm) | ii(mm) | iii(mm) |
|---------------------------------|-------|-------|--------|---------|
|                                 | 24c   | 82.5  | 120    | 202.5   |
| FRONT VIEW                      | 30c   | 95    | 120    | 215     |

#### Option 1

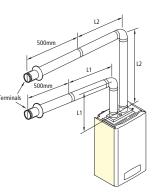


#### Option 2

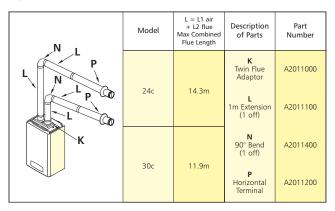
| F                | Model | L = L1 air<br>+ L2 flue<br>Max Combined<br>Flue Length | Description<br>of Parts               | Part<br>Number |
|------------------|-------|--|---------------------------------------|----------------|
| R                |       |  | <b>F</b><br>Vertical Roof<br>Terminal | 2000460480     |
| L                | 24c   | 14.3m  | <b>K</b><br>Twin Flue<br>Adaptor      | A2011000       |
| P<br>L<br>K<br>K |       |  | L<br>1m Extension<br>(1 off)          | A2011100       |
|                  | 30c   | 11.9m  | <b>N</b><br>90° Bend<br>(1 off)       | A2011400       |
|                  |       |  | <b>P</b><br>Horizontal<br>Terminal    | A2011200       |
|                  |       |  | <b>R</b><br>Single Pipe<br>Adaptor    | A2011500       |

exposed to external air.

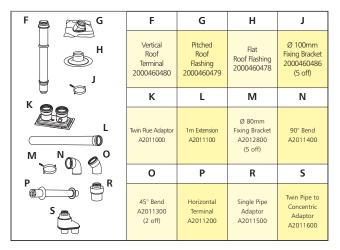
The flue outlet must be above the air inlet if mounted vertically. Horizontal sections must have a continuous fall of at least 2.5° (44mm/metre) back to the boiler. The minimum distance between flue and air terminals is 120mm (between terminal centres).



#### Option 3



#### **Twin Flue Accessories**





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