



# LOGIC FLUE & ACCESSORIES GUIDE.



**LOGIC COMBI C**  
**LOGIC COMBI ESP1**  
**LOGIC+ COMBI C**

[WWW.IDEALBOILERS.COM](http://WWW.IDEALBOILERS.COM)

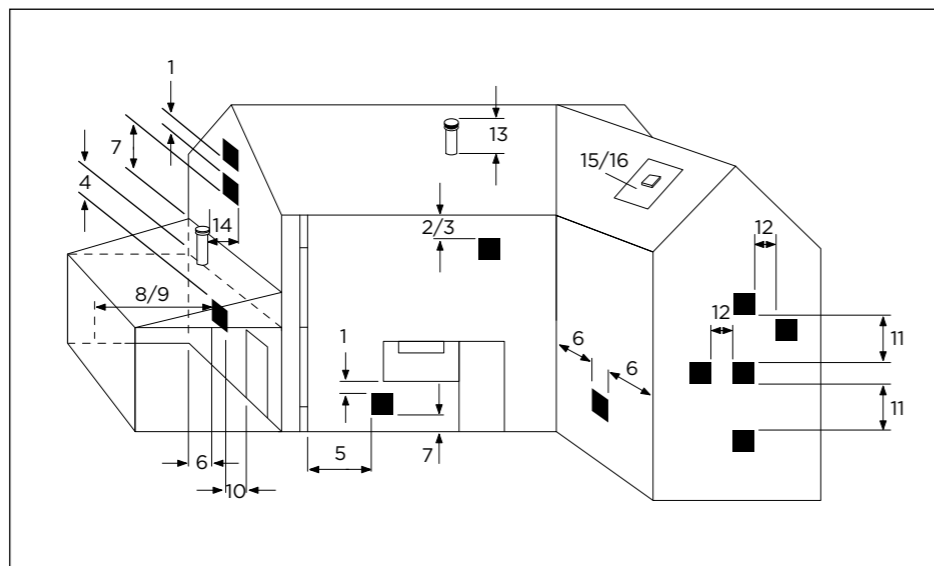
This manual is for guidance only and must be read in conjunction with the Installation and Servicing instructions supplied with the boiler

# FLUE SITING.

There are a substantial number of flue options available with the Ideal ranges, giving excellent siting flexibility for almost all applications.

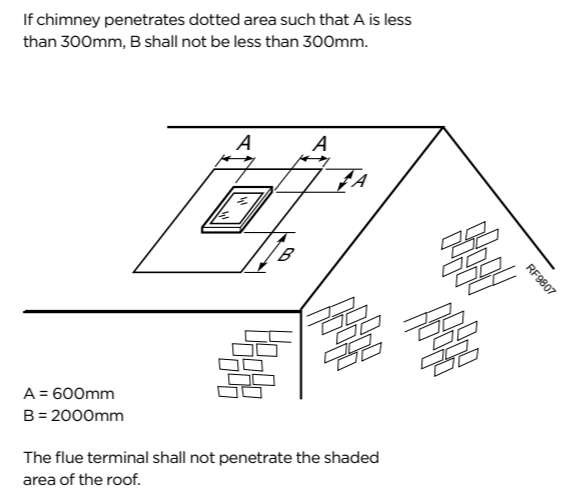
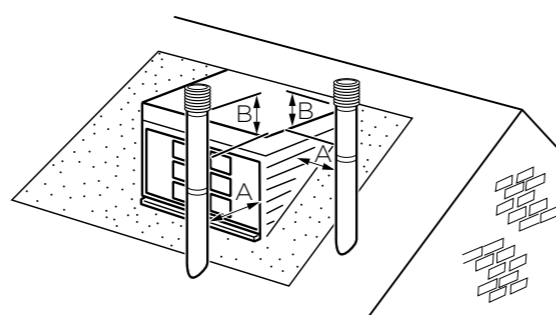
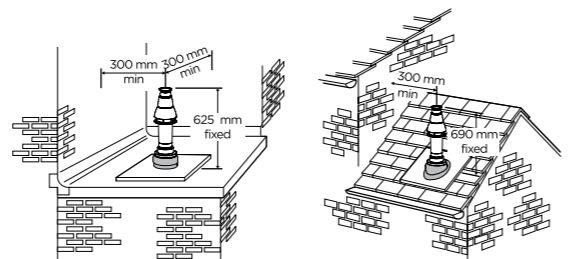
The range of options include standard and telescopic flues as well as roof flue and powered vertical flue options.

To ensure siting issues are kept to a minimum, High Level Flue Outlet kit options and Flue Deflector kits are available.



FLUE TERMINAL POSITION	MIN. SPACING
1. Directly below, above or alongside an opening window, air vent or other ventilation opening.	300mm (12")
2. Below guttering, drain pipes or soil pipes. BS5440-1 2008	25mm (1")* 75mm (3")
3. Below eaves. BS5440-1 2008	25mm (1")* 200mm (8")
4. Below balconies or car port roof. BS5440-1 2008	25mm (1")* 200mm (8")
5. From vertical drain pipes or soil pipes. BS5440-1 2008	25mm (1")* 150mm (6")
6. From an internal or external corner or to a boundary alongside the terminal. BS5440-1 2008	25mm (1")* 300mm (12")
7. Above ground, roof or balcony level.	300mm (12")
8. From a surface or a boundary facing a terminal.	600mm (24")
9. From a terminal facing a terminal.	1200mm (48")
10. From an opening in a car port (eg. door or window) into dwelling.	1200mm (48")
11. Vertically from a terminal on the same wall.	1500mm (60")
12. Horizontally from a terminal on the wall.	300mm (12")

VERTICAL FLUES	MIN. SPACING
13. Above the roof pitch with roof slope of all angles. Above flat roof.	300mm (12") 300mm (12")
14. From a single wall face. From corner walls.	300mm (12") 300mm (12")
15. Below velux window.	2000mm (79")
16. Above or side of velux window.	600mm (24")



\* Only one reduction down to 25mm is allowable per installation otherwise BS5440-1 2008 dimensions must be followed.

# FLUE ACCESSORIES

## LOGIC COMBI C, ESP1 & LOGIC+ COMBI C.

### Total Maximum Permissible Horizontal Concentric Flue Length

combining both 'B' Packs and 'D' Packs (Measured from centreline of the turret to the outside of the wall terminal)

24 kW Appliances	Total Maximum: 9 metres - minus any flue kit options or bends
30 kW Appliances	Total Maximum: 8 metres - minus any flue kit options or bends
35 kW Appliances	Total Maximum: 6 metres - minus any flue kit options or bends

### Total Maximum Permissible Vertical Flue Length

combining both Roof Terminal and 'D' Packs

24, 30 & 35kW Appliances	Total Maximum: 7.5 Metres - minus any bends
<b>Powered Vertical Flue</b>	
24, 30 & 35kW Appliances	Total Maximum: 5 Metres - Concentric Flue and 17m flue pipe only. For additional details refer to the powered Vertical Instructions

90° Elbow Kit 60/100 - (Equivalent flue length resistance = 1M)

45° Elbow Kit 60/100 - (Equivalent flue length resistance = 0.6M)

Minimum Horizontal Flue Lengths (Centre line of turret to outside of wall terminal)

Telescopic Flue 'B' Pack = 400mm

Horizontal Flue terminal (600mm long) 'B' Pack = 285mm

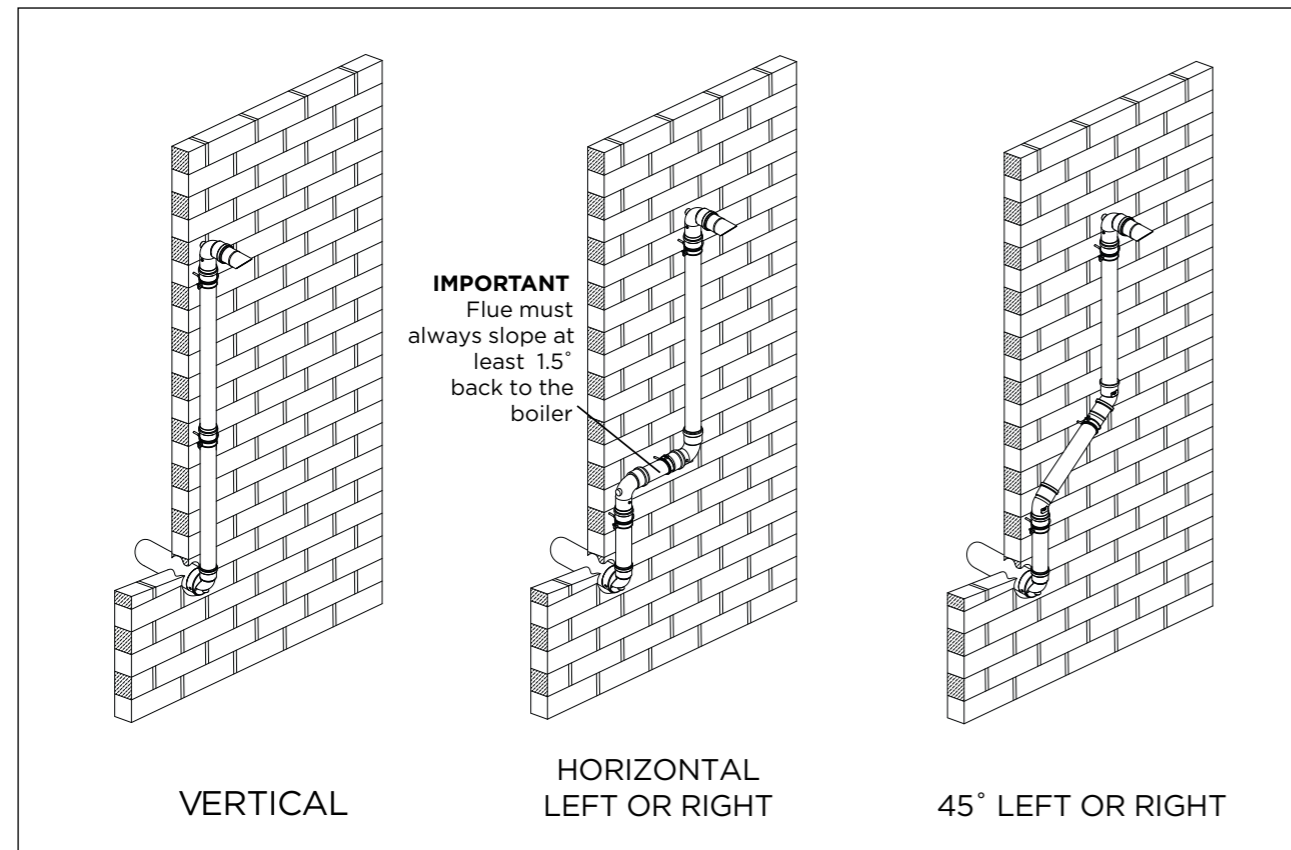
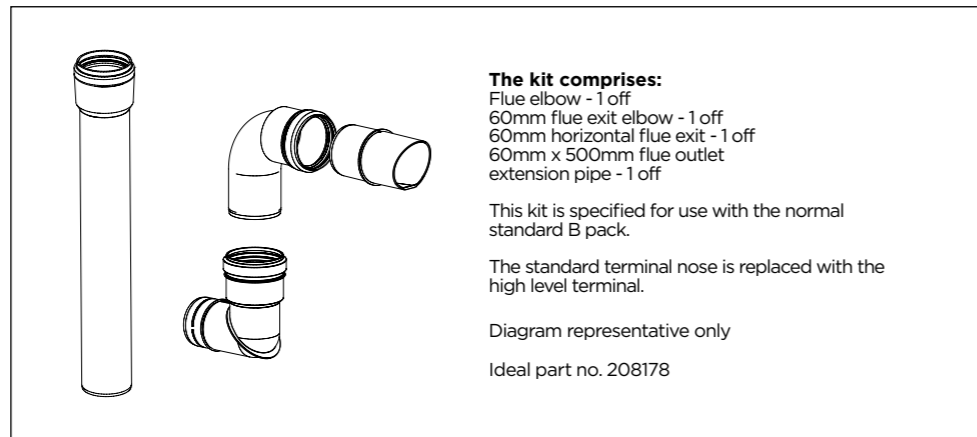
<b>Telescopic B pack flue (0.6m long)</b>  Ideal part no. 208169	<b>Horizontal flue terminal (0.6m long)</b>  Ideal part no. 208171	<b>Telescopic horizontal flue terminal (1m long)</b>  Ideal part no. 208174	<b>Flue extension 0.5m, 1m or 2m (Pack D)</b>  Ideal part no. 0.5m 211037 1m 203129 2m 211038	<b>Flue Bracket Kit</b>  Ideal part no. 205247	<b>Flue deflector 60 dia</b>  Ideal part no. 208176
<b>Flue elbow 90° kit (60/100) packaged</b>  Ideal part no. 203130	<b>Flue elbow 45° kit (60/100) packaged (pair)</b>  Ideal part no. 203131	<b>Roof flue kit inc. vertical connector</b>  Ideal part no. 211039	<b>Flue vertical connector</b>  Ideal part no. 208175	<b>Weather collar (universal) 100 dia</b>  Ideal part no. 152258	<b>Weather collar (flat roof) 100 dia</b>  Ideal part no. 152259
<b>Flue powered vertical terminal 100 dia</b>  Ideal part no. 203134	<b>Vertical Powered flue kit</b>  Ideal part no. 203136	<b>Flue extension pipe 80 dia (pair) twin/vertical</b>  Ideal part no. 203142	<b>Concentric flue screw retaining kit</b>  Ideal part no. 205024	<b>Flue finishing kit</b>  Ideal part no. 155988	<b>Terminal wall plate</b>  Ideal part no. 211328
<b>Balcony flue outlet kit</b>  Ideal part no. 208177		<b>Soffit kit</b>  Ideal part no. 211302		<b>Raised horizontal flue outlet kit</b>  NOTE: A 1 metre vertical pipe is supplied as standard. Both horizontal and vertical lengths can be extended using extension pack D. Refer to installation instructions for maximum lengths. Ideal part no. 208290	

## ACCESSORIES

### LOGIC COMBI C, ESP1 & LOGIC+ COMBI C HIGH LEVEL FLUE OUTLET KIT.

These easy to install kits allow the boiler flue outlet to be extended external to the building, upwards to provide a flue exit at high level, overcoming problems associated with plume emission. The kit is simple to retrofit if necessary.

An external 60mm diameter flue leads from the boiler terminal (which includes a 90° elbow at the flue exit) to terminate with a 90° elbow complete with grille. Push fit one metre extension pipes are used as required, and the fixing clips supplied support the system from the wall. Both 90° and 45° elbows are available to provide routing options.



FLUE	IDEAL PART NO.
High level flue outlet kit	208178
Flue extension kit 60 dia (1m) - for high level flue outlet kit	203228
High level 90° elbow	203229
High level 45° elbow	203230

If additional elbows to those supplied in the High Level Flue Outlet kit are used, deduct the following resistances (metres) from the maximum boiler flue length.

RESISTANCE	METRES
90° elbow	1.4
45° elbow (pair)	1.25

## FLUE OPTIONS

### LOGIC COMBI C, ESP1 & LOGIC+ COMBI C.

**IMPORTANT.** The boiler must be installed in a vertical position in accordance to the installation instructions.

#### FLUE KITS

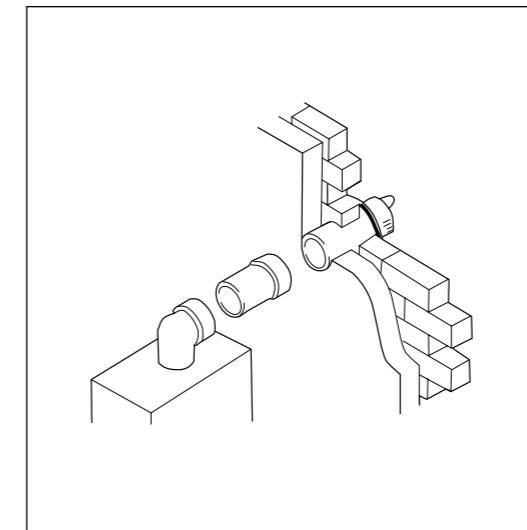
**Telescopic Flue 'B' Pack** - contains: Flue turret, telescopic flue incorporating a terminal and rubber wall seals.

**Horizontal Flue Terminal (600mm long) 'B' Pack** - contains: Flue turret, non telescopic single piece flue incorporating a terminal and rubber wall seals

**Horizontal Flue Terminal (1000mm long) 'B' Pack** - contains: Flue turret, telescopic flue incorporating a terminal, rubber wall seals and instructions.

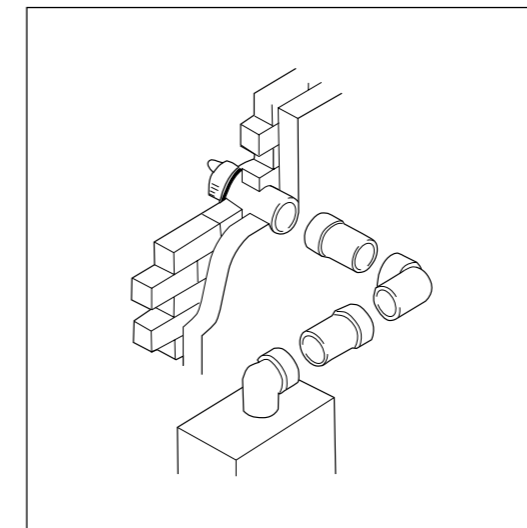
The flue system incorporates a removable flue outlet nose that utilises a push fit location system. This enables the installation of a Deflector, High level or Balcony flue kit without the removal of the whole 'B' pack terminal.

#### HORIZONTAL CONCENTRIC 100MM DIAMETER



FLUE	PART NO.
Horizontal flue terminal (0.6m long)	208171
Flue extension 1m (pack D)	203129

#### HORIZONTAL FLUE WITH 1 X 90° ELBOW

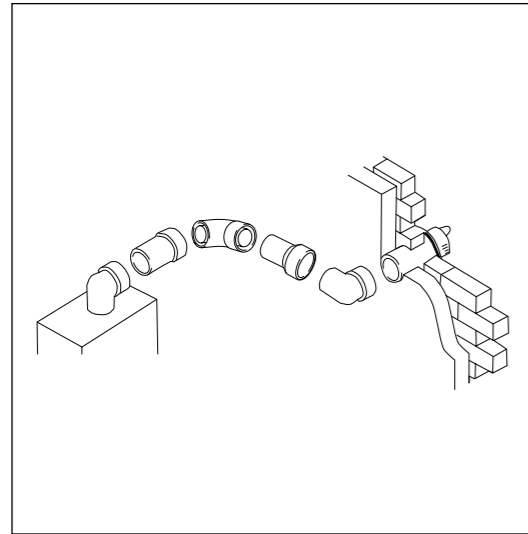


FLUE	PART NO.
Horizontal flue terminal (0.6m long)	208171
Flue extension 1m (pack D)	203129
Flue 90° elbow kit (60/100)	203130

**NOTE:** Please refer to the installation and service manual for assistance in calculating flue lengths.

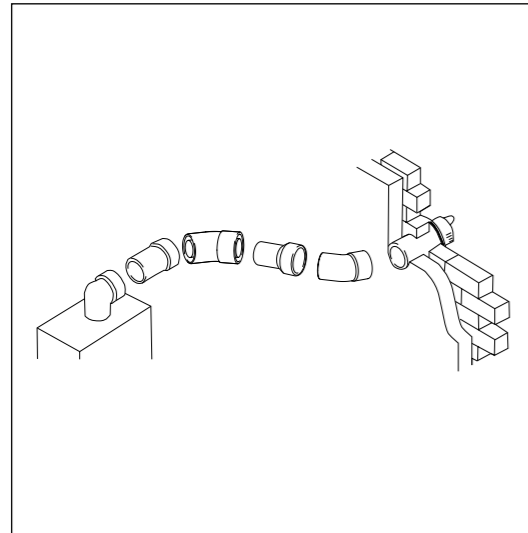
## FLUE OPTIONS LOGIC COMBI C, ESP1 & LOGIC+ COMBI C.

### HORIZONTAL FLUE WITH 2 X 90° ELBOW



FLUE	PART NO.
Horizontal flue terminal (0.6m long)	208171
Flue extension 1m (pack D)	203129
Flue 90° elbow kit (60/100)	203130

### HORIZONTAL FLUE WITH 2 X 45° ELBOW

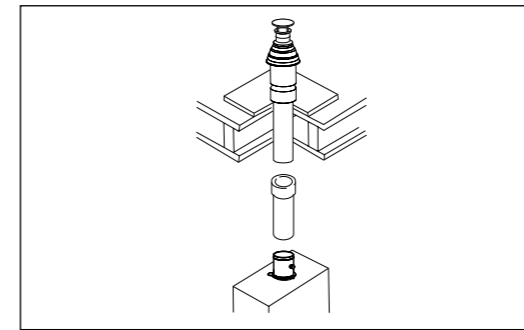


FLUE	PART NO.
Horizontal flue terminal (0.6m long)	208171
Flue extension 1m (pack D)	203129
Flue elbow 45° kit (60/100)	203131

**NOTE:** Please refer to the installation and service manual for assistance in calculating flue lengths.

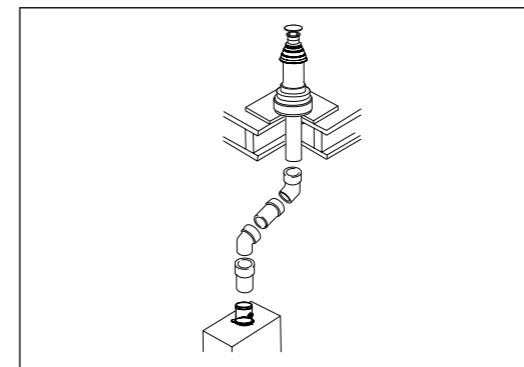
## FLUE OPTIONS LOGIC COMBI C, ESP1 & LOGIC+ COMBI C.

### ROOF FLUE SYSTEM



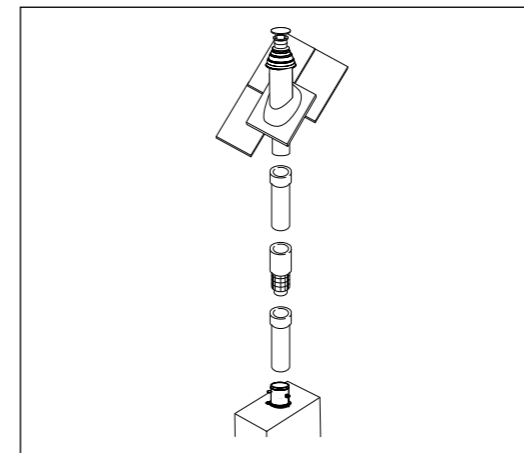
FLUE	PART NO.
Roof flue kit (with vertical connector)	211039
Flue extension 1m (pack D)	203129
Universal weather collar (suits any roof pitch)	152258
Flat roof weather collar	152259

### ROOF FLUE SYSTEM WITH 2 X 45° ELBOW



FLUE	PART NO.
Roof flue kit (with vertical connector)	211039
Flue extension 1m (pack D)	203129
Flue elbow 45° kit (60/100)	203131
Universal weather collar (suits any roof pitch)	152258
Flat roof weather collar	152259

### POWERED VERTICAL FLUE SYSTEM



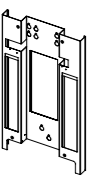
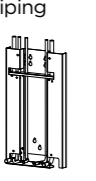
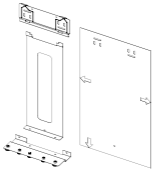
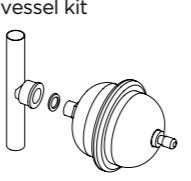


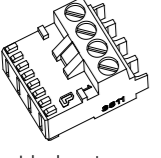
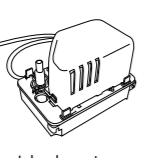

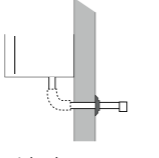
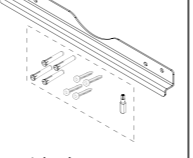
FLUE	PART NO.
Vertical powered flue kit	203136
Flue vertical connector	208175
Flue powered vertical terminal 100 dia	203134
Universal weather collar (suits any roof pitch)	152258
Flat roof weather collar	152259
Extension pack D	203129
Flue extension pipe 80 dia (pair)*	203142

**NOTE:** Allows the boiler to be sited in a position where no access to an outside wall is available. Permits the concentric flue to run vertically from the top of the boiler and obtain air supply within the roof space, the secondary flue continuing to the external flue terminal. Offset applications are permissible though the maximum length is reduced.

Where extension D packs are cut to length, the flared end connector must be retained.

\* Secondary Flue extension pipes are available in 0.5, 1 and 2 metre lengths.

## INSTALLATION ACCESSORIES

 <p>Stand off kit Ideal part no. 211103</p>	 <p>Stand off kit Inc. piping Ideal part no. 211101</p>	 <p>Pre-piping kit Ideal part no. 211041</p>	 <p>DHW expansion vessel kit Ideal part no. 205419</p>	 <p>Weather compensation kit Ideal part no. 216119</p>	 <p>Visually impaired fascia kit (Logic C only) Ideal part no. 211329</p>
 <p>OpenTherm harness kit* Ideal part no. 216118</p>	 <p>Condensate pump kit Ideal part no. 159991</p>	 <p>Secondary pressure boiler valve kit Ideal part no. 204565</p>	 <p>Safety valve drain outlet pipe kit** Ideal part no. 205126</p>	 <p>Security bracket kit Ideal part no. 205217</p>	

\* Logic C only. Supplied with Logic ESP1 & Logic+ as standard  
\*\* Supplied with Logic+ Combi C as standard

## WHAT IS THE ErP (ENERGY RELATED PRODUCTS) DIRECTIVE?

### WHY HAS ErP HAPPENED?

The ErP directive has been designed to help the EU achieve its target to reduce energy use by 20% and increase the share of renewable energies by 20% by 2020. ErP will help consumers choose the most energy efficient products available by comparing the product energy efficiency using the new energy labelling.

### HOW WILL ErP AFFECT INSTALLERS?

Installers will have to show the energy efficiency of the products they recommend & complete a package label on installation.

### WHAT IS THE 'PACKAGE LABEL'?

The ErP package label shows the efficiency of the boiler and/or controls, solar devices, etc if all installed together. Installers complete a package label after installation of one or more products (e.g. boiler, control + cylinder).

### HOW IS THE PACKAGE LABEL COMPLETED?

The package label is completed by adding together the seasonal efficiencies of all products installed in the system. All product guides will show a 'product fiche' which will have all of the information needed to complete the package label. In addition, our online system efficiency calculator and package label generation tool features 'pick lists' containing all Ideal Boilers and controls, as well as general control classes in case our installers are fitting a non-Ideal brand control.

## COMBI CONTROLS.

### PROGRAMMABLE THERMOSTATS AND TIMERS

Here at Ideal we believe that choosing the right control to meet the needs of your customer is almost as important as choosing the right boiler; this is why the Logic Combi C, ESP1 & Logic+ Combi C ranges are fully compatible with a range of thermostats and timers for ultimate home comfort.

### RF ELECTRONIC PROGRAMMABLE THERMOSTAT.



(Part No. 216131)  
ErP: Class 5, 3% additional efficiency.

Wireless radio frequency (RF) digital timer and room thermostat providing heating control. 7 day, plain text operating and diagnostics display. Automatic summer/winter time update.

### MECHANICAL TIMER.

(Part No. 215390)  
ErP: Class 0, no additional efficiency.

Simple heating control through a plug in analogue timer. 24 hour tappet operation with off/timed/continuous periods.



### WEATHER COMPENSATION.

(Part No. 216119)  
ErP: Class 2, 2% additional efficiency

Provides flow temperature adjustment to the central heating system in relation to the outside temperature to give improved heating system efficiency and savings to the customer



## LPG CONVERSION KITS.

With kits available for natural gas to LPG, and LPG to natural gas, these quick to install accessories provide a simple and pragmatic solution without the need for products to be adjusted.

Each kit contains specific components for each required boiler type.

### FEATURES.

- Available for all product types (combi, heat & system)
- Suitable for most property sizes
- Fast & simple conversion with preset gas valve for no product adjustment



### SPECIFICATION.

BOILER MODEL	LOGIC COMBI C24	LOGIC COMBI C30	LOGIC COMBI ESP1 35	LOGIC+ COMBI C30
Min. output (kW)	4.8	6.1	7.1	6.1
Max. output (kW)	24.2	24.2	24.2	24.2
Max DHW output (kW)	24.2	30.3	35.3	30.3

NG-LPG CONVERSION KIT	PRODUCT CODE	LPG-NG CONVERSION KIT	PRODUCT CODE
LOGIC COMBI C24	215738	LOGIC COMBI C24	178994
LOGIC COMBI C30	215739	LOGIC COMBI C30	178995
LOGIC COMBI ESP1 35	215752	LOGIC COMBI ESP1 35	179007
LOGIC+ COMBI C30	215740	LOGIC+ COMBI C30	178996

## NATURAL GAS TO LPG KIT CONTENTS

### EACH KIT COMPRISES:

- Gas valve (preset operation)
- Burner injector
- Data plate labels
- Instructions

The Gas valve is supplied preset to enable a quick and easy installation whilst ensuring the safety benefits are retained during conversion.

Two data plate labels are provided in the kits inclusive of a new data plate providing LPG details and a label to retain boiler serial number identity.

# SERVICE & SUPPORT.



At Ideal, we are committed to delivering the highest levels of customer service. With over a century of experience in the heating industry, we know how important confidence and trust is to our customers.

You can be confident to know that you're partnering with a British manufacturer that's supported by a dedicated national service team, delivering help and advice to you and your customers throughout the year.

Our rigorous research and development procedures and manufacturing quality control checks, ensures that all of our products are produced to the highest standards; delivering total comfort and peace of mind.

The call centre team, based in Hull, East Yorkshire, is comprehensively trained to provide tailored advice. All calls will be answered by trained members of staff who will take ownership of the call. All of our trained staff are on-hand to assist with enquiries or help diagnose and resolve faults over the telephone. Should that not be possible, we will arrange an appointment for one of our engineers to visit. Our dedicated team of engineers are fully trained to exacting standards and are all Gas Safe registered.

## CONTACT US

### SALES

Tel: 0844 5436000

Fax: 0844 5436181

### TECHNICAL

Tel: 01482 498663

Fax: 01482 498621

[enquiries@idealboilers.com](mailto:enquiries@idealboilers.com)

 JOIN THE CONVERSATION [@ideal\\_heating](https://twitter.com/ideal_heating)

+  
**GREAT  
BOILERS  
FROM  
GREAT  
BRITAIN.**



Ideal Boilers  
PO Box 103  
National Avenue  
Kingston upon Hull  
East Yorkshire  
HU5 4JN

T 01482 492251

[WWW.IDEALBOILERS.COM](http://WWW.IDEALBOILERS.COM)