

Ideal HEATING LOGIC2 Boiler System User Guide

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Ideal HEATING LOGIC2 Boiler System



Product Information:

The product is the Logic2 flue system and its accessories. It is compatible with Logic Max2, Logic+2, and Logic2 boilers with different heat outputs ranging from 24 kW to 38 kW. The flue system includes horizontal and vertical flue options, as well as various flue extensions and accessories.

Horizontal Flue System:

- Non-telescopic flue length: 0.6m (181-556mm) Part No. 208171
- Non-telescopic flue length: 0.8m (601-816mm) Part No. 217442
- Telescopic flue length: 0.5m (286-484mm) Part No. 208169
- Telescopic flue length: 0.7m (526-741mm) Part No. 208174

Flue Extensions:

- Flue extension with bracket: 0.5m Part No. 205990
- Flue extension with bracket: 1m Part No. 211037
- Flue extension with bracket: 2m Part No. 211038

Other Flue Accessories:

- Raised horizontal flue kit Part No. 208290
- Balcony flue kit Part No. 208177
- Soffit flue kit Part No. 211302
- Weather collar for flat roof Part No. 210803
- High level flue outlet kit for Heat rear outlet Part No. 152258
- Adjustable flue bracket Part No. 152259
- RS terminal replacement wall plate Part No. 203228
- Flue securing screws Part No. 205989
- Timber frame wall tube: 0.4m Part No. 205989
- Timber frame wall plates Part No. 211328 (Ideal System) /

Part No. 206164 (Ideal Combi) / Part No. 205024 / Part No. 229130 /

Part No. 229128

Vertical Flue System:

- Vertical flue terminal and connector Part No. 211039
- Flue extension with bracket: 1m Part No. 203129
- Flat roof weather collar Part No. 152259

Vertical Flue with Loft Air Inlet:

- Vertical flue terminal and connector Part No. 211039
- Flue extension with bracket: 1m Part No. 203129
- Flue extension with bracket: 2m Part No. 203131
- Flat roof weather collar Part No. 203134
- High level flue outlet kit for Heat rear outlet Part No. 152258
- Flue securing screws Part No. 205989

Product Usage Instructions

To install the Logic2 flue system, follow these guidelines:

Horizontal Flue Installation:

- 1. Select the appropriate non-telescopic or telescopic flue length based on the measurement requirements.
- 2. If an extension is needed, choose the desired length using the flue extension with bracket options.
- 3. Attach the flue components securely, ensuring proper alignment and sealing.

Vertical Flue Installation:

- 1. Select the vertical flue terminal and connector.
- 2. If an extension is needed, choose the 1m flue extension with bracket option.
- 3. If installing on a flat roof, use the flat roof weather collar for proper weatherproofing.
- 4. Ensure secure attachment of all flue components and proper alignment.

Vertical Flue with Loft Air Inlet Installation:

Note: This configuration allows the boiler to be installed where no outside wall access is available.

- 1. Select the vertical flue terminal and connector.
- 2. If extensions are needed, choose the 1m and 2m flue extension options.
- 3. Use the flat roof weather collar for weatherproofing on a flat roof.
- 4. Install the high level flue outlet kit for Heat rear outlet if required.
- 5. Securely attach all flue components, ensuring proper alignment and sealing.

For further details and specific configurations, refer to the installation instructions supplied with the product.

FLUE ACCESSORIES

Logic Max2, Logic+2 and Logic2

Maximum permissible horizontal concentric flue length

combining both horizontal flue and flue extensions (measured from centreline of the turret to the outside of the wall terminal)

Up to 26 kW appliances	Maximum: 9m - minus any extensions or bends Maximum: 8m - minus any extensions or bends	
30 & 32 kW appliances		
35 & 38 kW appliances	Maximum: 6m - minus any extensions or bends	

Maximum permissible vertical flue length

combining both vertical flue terminal and flue extensions

24 - 38 kW appliances	Maximum: 7.5m - minus any extensions or bends		
Vertical flue loft air inlet			
24 - 38 kW appliances	Up to 4.7m concentric flue and 20m single flue pipe. For additional configurations and details refer to the installation instructions supplied with 203136 Vertical flue loft air inlet		

- 90° bend Ø60/100 Equivalent flue length resistance = 1m
- 45° bend Ø60/100 Equivalent flue length resistance = 0.6m

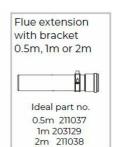










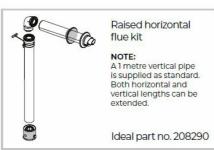


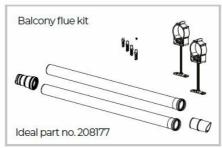
Vertical flue

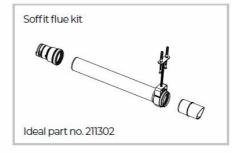
(Ø60/100mm)

Ideal part no.

connector









extension (Ø60/ 100mm)



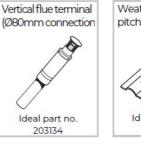
Flue bend

45° pair











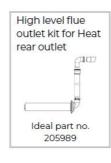




Ideal part no.





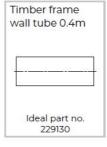


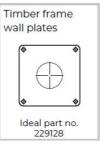






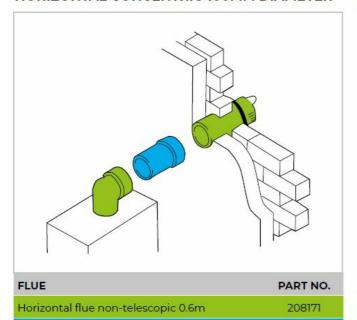






FLUE OPTIONS

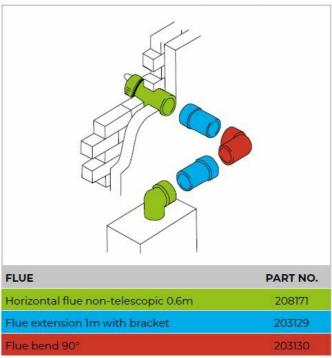
HORIZONTAL CONCENTRIC 100MM DIAMETER



ALTERNATIVE FLUE TERMINALS	PART NO.
Horizontal flue telescopic 0.5m	208169
Horizontal flue telescopic 0.7m	208174
Horizontal flue non-telescopic 0.8m	217442

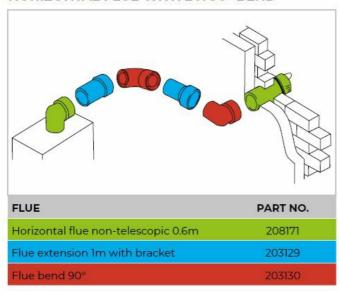
203129

HORIZONTAL FLUE WITH 1 X 90° BEND

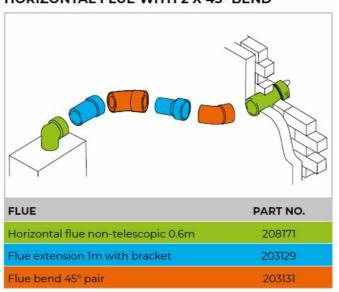


HORIZONTAL FLUE WITH 2 X 90° BEND

Flue extension 1m with bracket

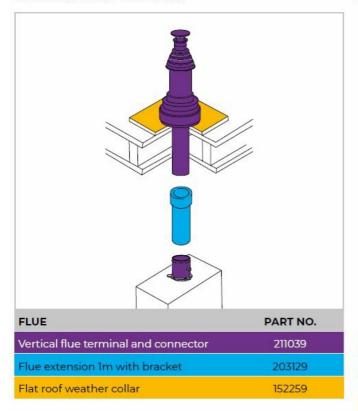


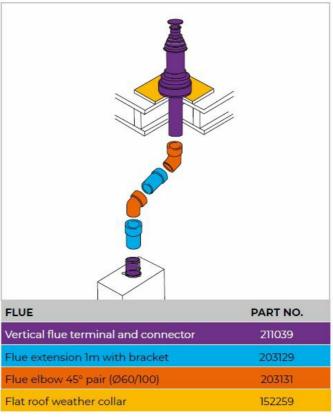
HORIZONTAL FLUE WITH 2 X 45° BEND



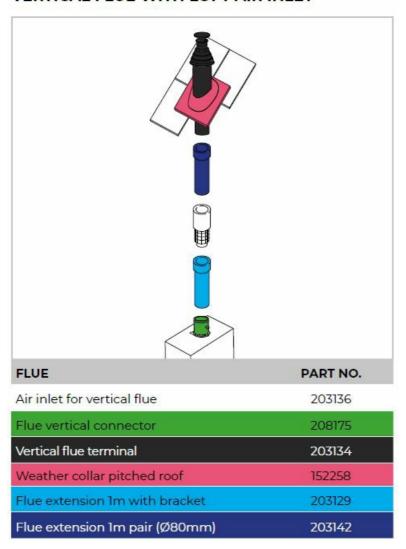
VERTICAL FLUE SYSTEM

ROOF FLUE SYSTEM WITH 2 X 45° BEND



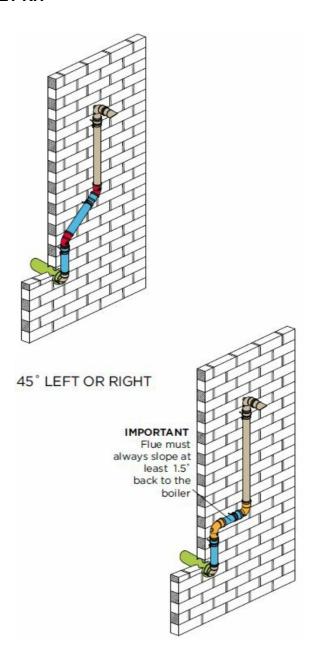


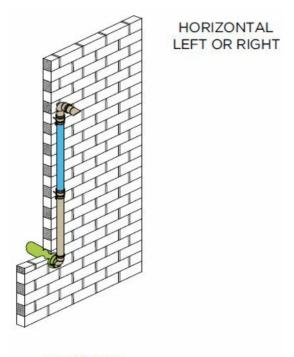
VERTICAL FLUE WITH LOFT AIR INLET



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.

HIGH LEVEL FLUE OUTLET KIT





VERTICAL

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° bend at the flue exit) to terminate with a 90° bend complete with grille. Push fit 1m extension pipes ar quired, and the fixing clips supplied support the system from the wall. Both 90° and 45° bend are available to provide routing options.



The kit comprises:

Flue bend – 1 off 60mm flue exit bend – 1 off 60mm horizontal flue exit – 1 off 60mm x 500mm flue extension pipe – 1 off

This kit is for use with horizontal non-telescopic and telescopic flue kits 208169, 208171, 208174 and 217442.

The standard terminal nose is replaced with the high level terminal.

FLUE	IDEAL PART NO.
Horizontal flue non-telescopic 0.6m	208171
High level flue outlet kit (Ø60mm)	208178
Flue extension 1m for high level flue outlet (Ø60mm)	203228
High level flue bend 90° (Ø60mm)	203229
High level flue bend 45° (Ø60mm)	203230

Diagram representative only

NOTE: Please refer to the installation and service manual for assistance in calculating flue lengths. Adequate support must be provided for the flue in accordance with the installation instructions. 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.

FLUE ACCESSORIES FOR HIGH RISE INSTALLATIONS

Logic Max2, Logic+2 and Logic2

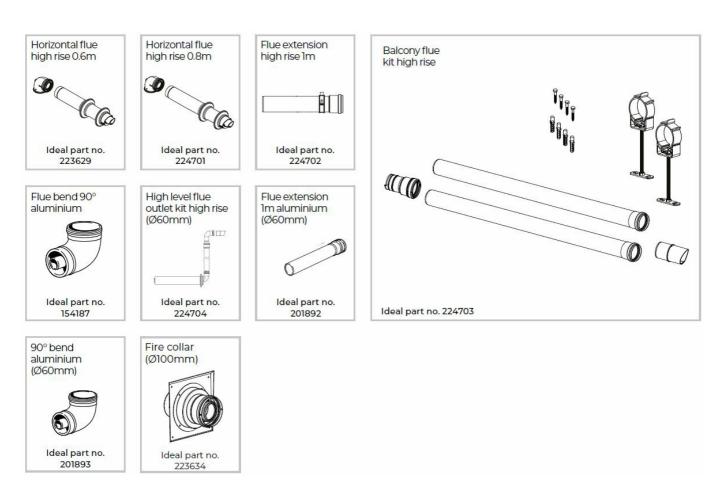
The Building Regulations (Amendment) 2018 for England directs that combustible materials must not be used in the external walls of high-rise residential buildings, i.e. those above 18m tall (typically 6 stories). The 'external wall' includes anything located within any space forming part of the wall. This is relevant to the installation of all new gas boilers with horizontal flues in high-rise residential buildings, as the ban now excludes those flues that contain combustible materials such as a polypropylene plastic inner flue duct. Similar regulations also apply in Wales and Northern Ireland, with Scotland having their own regulations.

Ideal Heating have a range of high rise flues and accessories which comply with the revised regulations for high-rise buildings.

Introduced from October 2019, they are direct replacements for the standard horizontal flues and accessories. The main difference is that the inner flue duct is aluminium rather than polypropylene plastic. Aluminium is classed as having class A fire resistance according to European Standard prEN1856-1 May 2019 which covers metal chimneys and flues, and by Europe Decision Document 96/603/EC covering construction products.

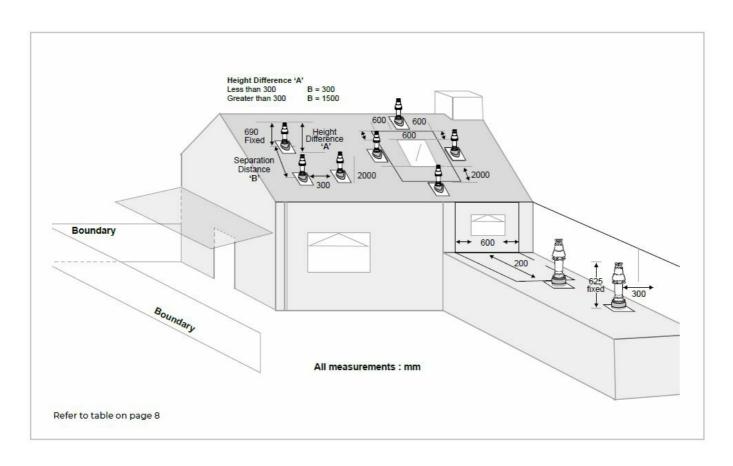
Externally the high rise flues look similar to the previous generation Ideal Logic flue (pre 2013) and the flue terminal is still black plastic. However, the outer air duct is no longer powder coated white and has a galvanised finish; but only a small length of this will be seen above the boiler. The elbow and wall seals have not changed. As the terminal, elbow and wall seals are not part of the make-up of the external wall their materials are not affected by the revised regulations. The flue terminal design has the air inlet underneath and the aluminium flue duct can be seen through the air inlet.

The high-rise horizontal flue terminals do not have a removable terminal nose so cannot be used with flue accessories 208178 High level flue outlet kit, 211302 Soffit kit, 208177 Balcony flue outlet kit and 208176 Flue deflector. However, new dedicated high-rise accessories are available to cover more installation configurations. These all have aluminium flue ducts to comply with the amended regulations.



FLUE SITING

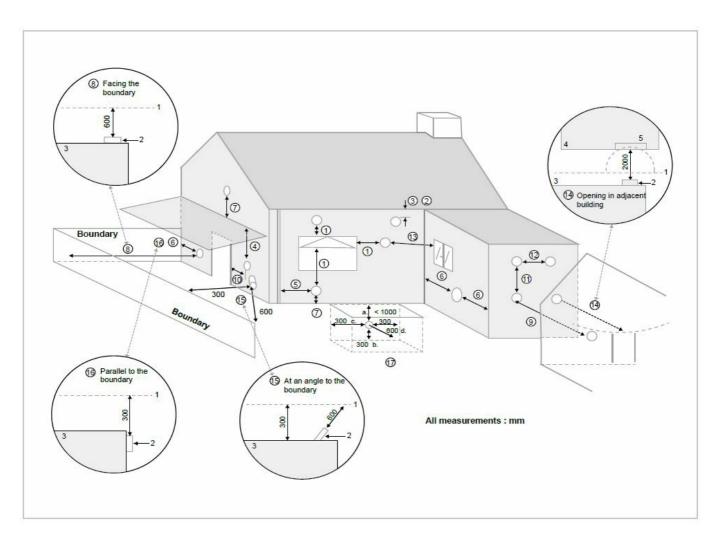
There are a substantial number of flue options available, giving excellent siting flexibility for almost all applications. The range of options include standard and telescopic flues as well as vertical and raised horizontal options. To ensure siting issues are kept to a minimum, High Level Flue Outlet kit options and Flue Deflectors are available.

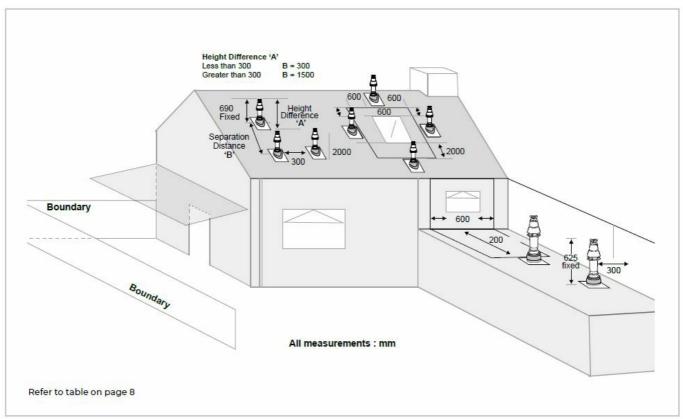


FLUE TERMINAL POSITION	MIN. SPACING
Directly below, above or alongside an opening. 300 mm	300mm
2. Below guttering, drain pipes or soil pipes.	75mm 25mm*
3. Below eaves.	200mm 25mm*
Below balconies or car port roof.	200mm 25mm*
5. From vertical drain pipes or soil pipes.	150mm 25mm*
From an internal or external corner or to a boundary alongside the terminal.	300mm 25mm*
7. Above ground, roof or balcony level.	300mm
From a surface or a boundary facing a terminal.	600mm
9. From a terminal facing a terminal.	1200mm
10. From an opening in a car port into dwelling.	1200mm
11. Vertically from a terminal on the same wall.	1500mm
12. Horizontally from a terminal wall.	300mm
13. Horizontally from an adjacent window	600mm
14. Facing an opening into an adjacent building	2000mm
15. At an angle to the boundary 90° 45°	
16. Parallel to a boundary	300mm
17. Below ground level - open light well a) Below ground <1,000 mr b)Above floor level 300mm c) From side 300mm d) From facing surface 600mm	

Only one reduction down to 25mm is allowed per installation.

DIMENSION





Customer Service:

01482 498660 Technical Help:

01482 498663

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

E: enquiries@idealheating.com

idealheating.com

Documents / Resources



<u>Ideal HEATING LOGIC2 Boiler System</u> [pdf] User Guide 8169, 208171, 208174, LOGIC2, LOGIC2 Boiler System, Boiler System, System

References

Combi & System Boilers | Installers' Information | Ideal Heating

Manuals+,