Logic Code Combi

Single, one unit solution

www.idealheating.com

Heating Solutions

Logic Code Combi

26 33 38

2 Year Warranty

The Logic Code Combi

Designed to take the headache out of meeting Building Regulations, the Logic Code Combi from Ideal is a simple one-box solution, capable of supporting up to level 4 of the Code for Sustainable homes.

Available in a choice of DHW outputs, 26 - 38 kW, the Logic Code Combi, provides a perfect solution for both new build and retro fit solutions where energy efficiency is a key concern.

Developed using state-of-the-art advanced boiler technology, the Code Combi features a built-in stainless-steel recuperator located in the flue exit, which cleverly picks ups and recycles waste energy that would have normally been lost through the flue terminal.

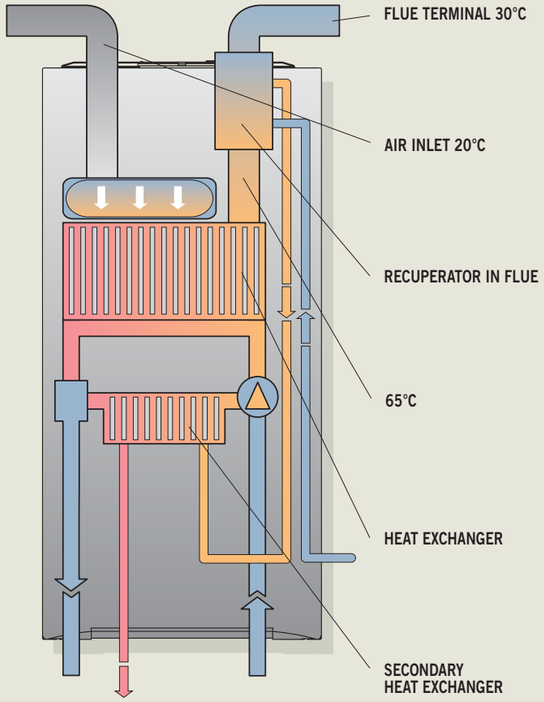
This energy is collected and used to warm up the cold hot water supply. This supply, then flows into the plate heat exchanger, where the desired temperature is reached.

The Logic Code Combi comes complete with a 2 year parts and labour warranty, a NOx class 5 rating and a dedicated in-house design* and service network for developers and installers for the ultimate in peace of mind.

When used with controls and weather compensation, the Logic Code Combi provides the perfect no-nonsense solution for a range of domestic properties.

*A charge may apply for this service.

How does the Logic Code Combi work?



Schematic view

Operation with recuperator in flue

- Hot water tap is opened and boiler senses flow
- Burner on
- Combustion gases heat primary water heat exchanger and flue gases exit to the flue
- Cold water from mains, flows through the recuperator in the flue
- Energy from the flue gases is transferred to the in coming water
- The cooled flue gases exit the boiler
- Pre-heated water enters the boiler and is further heated by the secondary heat exchanger
- Hot water is produced at the tap

Optional timer kit

Logic Code Combi

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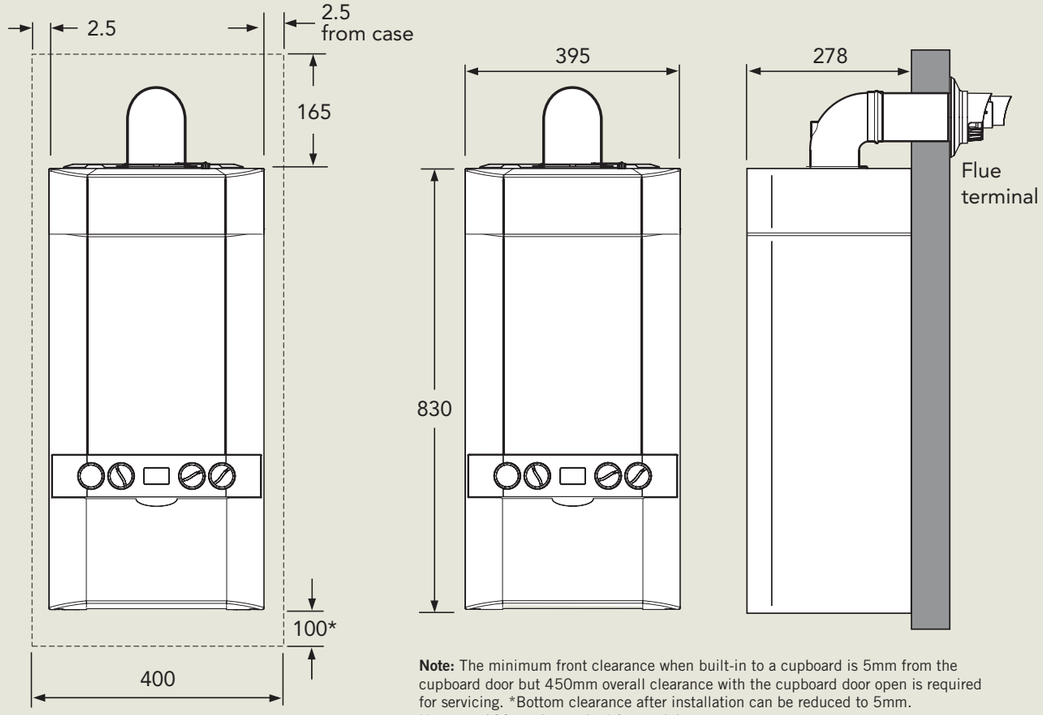
Features and Benefits

- Three models available 26, 33 & 38 kW
- One single appliance to install – quick and easy
- Built in pipework; no extra space at the side of the product needed
- Minimum overall height increase gives easier site installation
- Neat and tidy appearance
- Compact and light solution for new build or retrofit installations
- High DHW efficiency- reduced running costs
- Higher DHW flow rates than standard boiler – approximately 10% increase
- Less waste DHW water as DHW inlet is preheated
- Reduced pluming on DHW
- 2 year parts and labour warranty

Boiler Clearances and Dimensions



Note: The minimum front clearance when built-in to a cupboard is 5mm from the cupboard door but 450mm overall clearance with the cupboard door open is required for servicing. *Bottom clearance after installation can be reduced to 5mm. However, 100mm is required for servicing.

Flue Lengths

		Logic Code Combi		
Boiler Model		**26**	**33**	**38**
Flues	Max horizontal *	9	8	6
	Max vertical *	7.5		
	Powered Vertical †	22		
	High Level Flue Outlet Kit	Yes		
	Direct Rear Flue Kit (55/80)	No		

* Each 90° elbow used is at the expense of 1000mm of straight flue run, and each 45° elbow is used at the expense of 600mm of straight flue length.

† Typical combined primary and secondary length. See installation instructions for more details.

Note: The Flue Deflector Kit is used at the expense of 1000mm of straight flue length.

Logic Code 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 product; this is why the Logic Code Combi is fully compatible with a range of thermostats and timers for the ultimate in home comfort.

Mechanical Timer

(Part No. 204839)

Simple heating and hot water control through a plug in analogue timer.

Electronic Timer

(Part No. 204545)

Easy to use heating and hot water control through a plug in back-lit digital timer. Plain text operating and diagnostics information.

External room controls:

RF Mechanical Programmable Thermostat

(Part No. 204824)

Wireless Radio Frequency (RF) analogue timer providing heating and hot water control.

RF Electronic Programmable Thermostat

(Part No. 204789)

Wireless Radio Frequency (RF) digital timer providing heating and hot water control. Plain text operating and diagnostics information.

Weather compensation

Outdoor sensor

(Part No. 204914 - Combi models only)

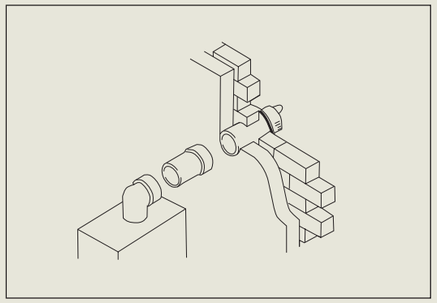
The Logic Code Combi provides weather compensation when fitted with an outdoor sensor (which is available as an optional accessory).

Weather compensation works by measuring the temperature outside the home and adjusting the temperature (or flow) of the radiators inside. If the weather is particularly cold outside, the outdoor sensor will communicate with the boiler intelligently to increase the radiator temperature. This process also works in reverse, as the outdoor temperature increases, the flow temperature to the radiators too will decrease.

This process allows the system to operate more efficiently by only heating to the minimum temperature necessary and also preventing spikes in heating activity.

Flueing - Logic Code Combi Boilers

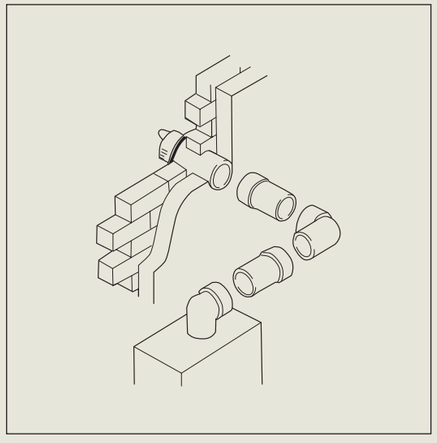
Horizontal Concentric – 100mm Diameter



Flue	Ideal Part No.	Maximum straight flue length (mm)
Standard Horizontal B pack (logic)	204644	640
Standard Horizontal B pack + 6 x extension Pack D (Logic)	204644 6 x 203129	6340 (38 max length 6m)
Standard Horizontal B pack + 8 x extension Pack D (Logic)	204644 8 x 203129	8240 (33 max length 8m)
Standard Horizontal B pack + 9 x extension Pack D (Logic)	204644 9 x 203129	9000 (26 models)

Note:
Lengths are from centre line of boiler outlet to outside wall face.
Where extension D Packs are cut to length, flared end connector must be retained.

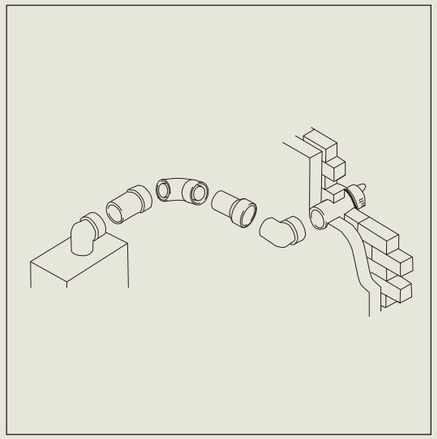
Horizontal Flue with 1 x 90° Elbow



Flue	Ideal Part No.	Maximum straight flue length (mm)
Standard Horizontal B pack + 90° Elbow (Logic)	204644 203130	640
Standard Horizontal B pack + 5 x Extension Pack D + 90° Elbow (Logic)	204644 5 x 203129 203130	5390 (38 max length 5m. + 1x 90° Elbow)
Standard Horizontal B pack + 7 x Extension Pack D + 90° Elbow (Logic)	204644 7 x 203129 203130	7290 (33 max length 7m. + 1x 90° Elbow)
Standard Horizontal B pack + 8 x Extension Pack D + 90° Elbow (Logic)	204644 8 x 203129 203130	8000 (26 models max length 8m. + 1x 90° Elbow)

Note:
Lengths are sum of all straight lengths between centre lines/outside wall face.
Numbers of extension D packs give flexibility of lengths of straight at either side of elbow.
Where extension D packs are cut to length, flared end connector must be retained.

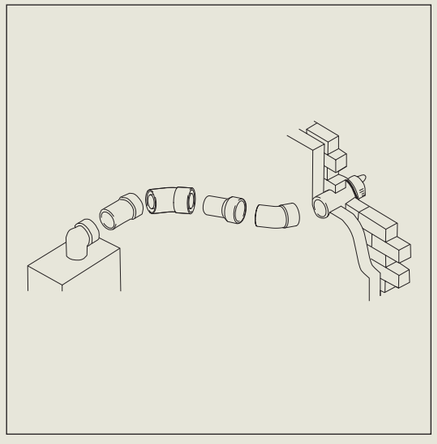
Horizontal Flue with 2 x 90° Elbow



Flue	Ideal Part No.	Maximum straight flue length (mm)
Standard Horizontal B pack + 2 x 90° Elbow (Logic)	204644 2 x 203130	640
Standard Horizontal B pack + 4 x Extension Pack D + 2 x 90° Elbow (Logic)	204644 4 x 203129 2 x 203130	4440 (38 max length 4m. + 2x 90° Elbow)
Standard Horizontal B pack + 6 x Extension Pack D + 2 x 90° Elbow (Logic)	204644 6 x 203129 2 x 203130	6340 (33 max length 6m. + 2x 90° Elbow)
Standard Horizontal B pack + 7 x Extension Pack D + 2 x 90° Elbow (Logic)	204644 7 x 203129 2 x 203130	7000 (26 models max length 7m. + 2x 90° Elbow)

Note:
Lengths are sum of all straight lengths between centre lines/outside wall face.
Numbers of extension D packs give flexibility of lengths of straight at either side of elbow.
Where extension D packs are cut to length, flared end connector must be retained.

Horizontal Flue with 2 x 45° Elbow

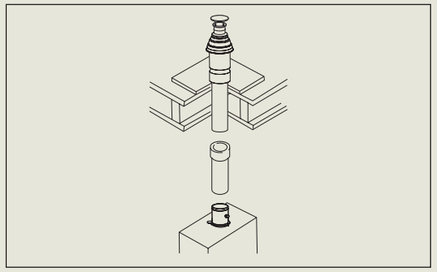


Flue	Ideal Part No.	Maximum straight flue length (mm)
Standard Horizontal B pack + 2 x 45° Elbow (Logic)	204644 203131	640
Standard Horizontal B pack + 5 x Extension Pack D + 2 x 45° Elbow (Logic)	204644 5 x 203129 203131	5390 (38 max length 4.8m. + 2 x 45 Elbow)
Standard Horizontal B pack + 7 x Extension Pack D + 2 x 45° Elbow (Logic)	204644 7 x 203129 203131	7290 (33 max length 6.8m. + 2 x 45 Elbow)
Standard Horizontal B Pack + 8 x Extension Pack D + 2 x 45° Elbow (Logic)	204644 8 x 203129 203131	7800 (26 models max length 7.8m. + 2 x 45 Elbow)

Note:
Lengths are sum of all straight lengths between centre lines/outside wall face.
Numbers of extension D packs give flexibility of lengths of straight at either side of elbow.
Where extension D packs are cut to length, flared end connector must be retained.

Flueing - Logic Code Combi Boilers

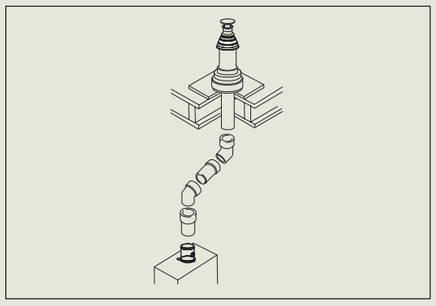
Roof Flue System



Flue	Ideal Part No.	Maximum straight flue length (mm)
Roof Flue Kit + Vertical Connector + Weather Collar	203132 204645 152258/152259*	1325
Roof Flue Kit + Vertical Connector + 7 x (max) Extension Pack D + Weather Collar	203132 204645 7 x 203129 152258/152259*	7500

Note:
* 152258: universal weather collar (suits any roof pitch) 152259: flat roof weather collar

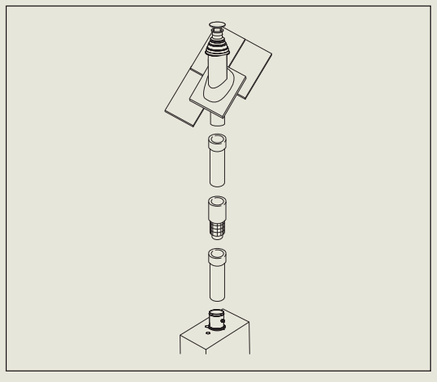
Roof Flue System with 2 x 45° Elbow



Flue	Ideal Part No.	Maximum straight flue length (mm)
Roof Flue Kit + Vertical Connector + 6 x (max) Extension Pack D + 2 x 45° Elbow + Weather Collar	203132 204645 6 x 203129 203131 152258/152259*	6300

Note:
* 152258: universal weather collar (suits any roof pitch)
152259: flat roof weather collar

Powered Vertical Flue System



Flue	Ideal Part No.	Maximum straight flue length (mm)
Powered Vertical Flue Kit + Vertical Connector + Powered Vertical Flue Terminal + Weather Collar + Extension Pack D + Secondary Flue Extension Pipe†	203136 204645 203134 152258/152259* 203129 203142	Primary and Secondary flue combined maximum 22mm**

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.

* 152258: universal weather collar (suits any roof pitch)
152259: flat roof weather collar

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.

** See installation instructions for maximum primary and maximum secondary flue lengths.

Flueing & Installation Accessories

Telescopic B pack flue	Horizontal flue terminal (600 long)	Flue Extension 1m (Pack D)	Flue Elbow 90° kit (60/100) packaged	Flue Elbow 45° kit (60/100) packaged (pair)	Stand-off kit	Stand off kit Inc. piping
Ideal Part No. 204768	Ideal Part No. 204644	Ideal Part No. 203129	Ideal Part No. 203130	Ideal Part No. 203131	Ideal Part No. 206383	Ideal Part No. 204872

Installation Accessories	Ideal Part No.
Pre-piping Kit	206704
Stand-off Kit including Upward Piping	206679
Weather Compensation Kit	204914
Opentherm Harness Kit	204915
PRV Wall Outlet Pipe Kit	205126
DHW Expansion vessel Kit	205419
Condensate Pump Kit	159991
Security Bracket Kit	206708

Flueing Accessories	Ideal Part No.
Roof Flue Kit	203132
Powered vertical flue terminal 100mm	203134
Flue vertical connector	204645
Powered flue Kit	203136
Flue Deflector 60 dia	203137
Weather Collar (Universal) 100mm	152258
Weather Collar (flat roof) 100mm	152259
Flue Finishing Kit	155988
Flue Finishing Kit (55/80)	206151
Balcony Flue Outlet Kit	205187
Horizontal Flue Terminal 1000mm long	205518
Concentric flue screw retaining kit	205024
Secondary flue extension (1mx80mm) pair	203142

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.

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.

Logic Code Combi	Ideal Part No.
High Level Flue Outlet Kit	204912
1m x 60mm extension pipe (with bracket)	203228
90° Elbow	203229
45° Elbow (pair)	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.

Logic Code Combi	Metres
90° Elbow	1.4
45° Elbow (pair)	1.25

The kit comprises: Concentric terminal including fitted 90° flue elbow.
(This is specified in place of the normal standard B pack terminal).
60mm flue elbow and terminal.

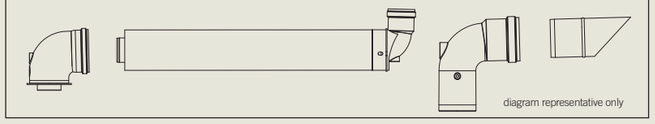
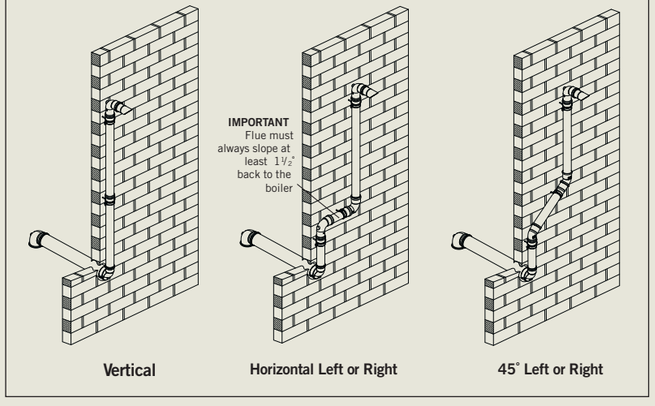


diagram representative only



Technical Specification

		Logic Code Combi		
Boiler Model		26	33	38
Size	Height	830		
	Width	395		
	Depth	278		
	Weight (packed) kg	41.3	41.4	41.6
	Maximum Installation Weight kg	35.9	36.0	36.2
Performance	CH output (kW) Min/Max @ 70°C	4.8 - 24.2	6.1 - 24.2	7.1 - 24.2
	CH output (kW) Min/Max @ 40°C	5.1- 25.6	6.4 - 25.6	7.5 - 25.6
	DHW output (kW) Max	26.1	32.7	38.2
	DHW flow rate l/min. 35°C rise	10.7	13.4	15.7
	SEDBUK (2009) %	89.0	89.0	88.9
	NOx Classification	5		
	Adjustable to LPG	No		
Construction	Heat exchanger material	Cast aluminium- silicon alloy		
	Burner type	Downward firing pre-mix		
	Fully modulating	Yes		
	DHW plate heat exchanger	Yes		
	Integrated hydroblock	Yes		
Installation	Suitable for sealed systems	Yes		
	Suitable for open-vent systems	No		
	Filling loop	Yes		
	Pre-wired mains lead	Yes		
	Flow regulator	Yes		
	In-built system bypass	Yes		
	In-built condensate trap/siphon	Yes		
	Pump exercise	Yes		
	In-built boiler frost protection	Yes		
	Zero compartment ventilation	Yes		
	Copper tail connections	Yes		
Clearances	Top (mm) (from top of boiler)	165		
	Side (mm)	2.5		
	Bottom (mm)	100		
	Front (mm)	450*		
User Interface	User display	Digital (Alpha/numeric)		
	User interface	Digital display & manual controls		
	Diagnostics	Fault diagnostic display		
	User adjustable	Manual heating control		
	‘Eco’ setting on CH	Yes		
	In-built Programmer	Optional		
Pipes	Pre-piping kit	Yes		
	Stand-off kit	Yes		
	Stand off kit inc. pipes.	Yes		
	Security bracket kit	Yes		
	PRV Wall Outlet Kit	Yes		
	Terminal Wall Plate Kit	No		
	Weather Compensation kit	Yes		
Flues	Max horizontal	9	8	6
	Max vertical	7.5		
	Powered Vertical	22		
	High Level Flue Outlet Kit	Yes		
	Direct Rear Flue Kit (55/80)	No		
Connections	Gas	15mm		
	CH Flow & Return	22mm		
	DHW Inlet & Outlet	15mm		
	Pressure relief valve	15mm		
	Condensate drain	21.5mm		

* - can be reduced to 5mm for cupboard fit, 450mm required for servicing

Ideal Service & Support

A century of Ideal Heating solutions
Ideal Heating has been keeping British homes warm for over 100 years. We believe in making products which are reliable, energy efficient and easy to use, combining the latest technology with common sense engineering that makes a real difference to installers and home owners alike.

From taking boilers from basements into kitchens in the 1920s, right through to introducing pioneering high efficiency technologies, Ideal have built up a range of comprehensive and reliable products, designed with the installer and homeowner in mind.

Today the company remains at the forefront of the domestic and commercial heating markets, still leading the industry in setting new standards and expanding technological boundaries. Ideal Heating remains true to its principles of quality, innovation and value; building on its rich heritage as it looks to the future.

Now, over 100 years on from when the organisation was first established, as environmental concerns continue to grow, Ideal remains dedicated towards creating solutions to meet the needs of the market through a range of renewable energy solutions, perfect for new build and retrofit applications alike.

Designed and built with quality in mind

At Ideal Heating, we are committed towards delivering the highest levels of customer service.

When you choose to work with Ideal, 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, 364 days a 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 home comfort and peace of mind.

We hold a Customer Service Charter, which is our declaration of the quality service we endeavor to deliver to you.

Ideal Heating Service

Installer helpline **01482 498663**

Homeowner helpline **01482 498660**

Monday - Friday	8am - 5pm
Saturday	8am - 2pm
Sunday	8am - 12pm

The call centre team, based in Hull, East Yorkshire, is comprehensively trained to provide tailored advice to homeowners and the trade. All customer calls will be answered by trained members of staff who will take ownership of the call.

Our dedicated service team of engineers are fully trained to exacting standards, are Gas Safe registered and provide one-to-one advice to thousands of customers each year. In the event of an engineer being required, we endeavor to make all visits no later than one day for boiler products and three working days for renewable products from the call for assistance, unless requested otherwise.

The Ideal Design Service

We understand that every development is different, and you may from time to time require some additional help designing your new heating system; Ideal can support you with a dedicated team of trained designers, on-hand to prepare system designs and heating schematics.

Our in-house design team, based in Newcastle, consists of six fully qualified Building Services Engineers with a combined knowledge of over 100 years in the design and installation of domestic and commercial systems.

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.

Please note:

The information in this brochure was correct at the time of going to print.

Ideal Heating reserve the right to make any modifications to product specifications or any other details, without prior notification. For further clarification, please enquire in writing to the head office address on the reverse of this brochure.

Ideal Heating

P.O. Box 103
National Avenue
Kingston Upon Hull
HU5 4JN

T: 01482 492251

www.idealheating.com

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