

Sustainable
Home Heating

# Envirogreen<sub>™</sub> & Envirolite<sub>™</sub> Boiler Range

Cutting edge Low No<sub>X</sub> Liquid Fuel Burner Technology



Most Efficient Boiler in Europe Beats
European Nox
Levels with
results as low
as 60mg per
kW/h







Innovation



Technology

**Comprehensive Warranties on all Parts** 

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# Taking Boiler Technology to the Next Level

Firebird Products Ltd are market-leading manufacturers of heating products with a proven track record built on the global supply of heating systems. Established in Ireland in 1980, the Firebird name has become synonymous with performance, quality and innovative design.

At the forefront of technology, Firebird are committed to providing cost-effective, energy-efficient heating solutions that not only meet, but easily exceed today's stringent legislative requirements. Historically an oil-fired boiler manufacturer; the addition of renewable heating options, which include air source heat pumps, biomass boilers and solar thermal systems enable Firebird to offer a total heating solutions package.



### Why Choose a Firebird Boiler?

#### **Research & Development**

Firebird are committed to an ongoing programme of Research & Development and continue to lead the industry by providing the most innovative, technologically advanced and energy-efficient heating options available in today's market.

#### **Innovative European Design**

The positioning of the secondary heat exchanger in an oil-fired boiler is an important consideration to prevent against any corrosion of the boiler shell. In line with standard European practice, Firebird have designed a complete unit which houses the secondary heat exchanger beneath the primary heat exchanger. By locating this unit at the bottom of the appliance (rather than in the centre), the potential for corrosion of the boiler shell is eliminated.

#### **Durable Construction**

All Firebird oil-fired boilers are constructed from premium grade steel (minimum 4mm gauge). Internal models feature a heavy-duty casing, with a polyester-coated finish to provide optimum protection from normal wear and tear.

#### **Extensive Product Range**

With over 80 models available in outputs from 12kW to 100kW, Firebird offers the most comprehensive range of oil-fired boilers available for internal, external and boilerhouse applications.

#### **Dedicated Service Engineers**

All Firebird boilers are supported by both an in-house team and a national network of service engineers. This dedicated support service is available before, during or after the purchase of any Firebird boiler.

#### **Firebird Training**

Firebird offer a comprehensive programme of training courses for installers and service engineers which cover installation, commissioning, service and repair. These include training on fully operational boilers and are available at Firebird's training centre. Firebird's training van also travels to different locations across the country. For more information, please contact us at sales@firebird.uk.com.

#### Seasonal Efficiency Ratings

SEDBUK, which stands for Seasonal Efficiency of Domestic Boilers, is a system used to classify and compare boilers on how efficient they are at converting fuel into heat. The patented condensing heat exchanger, which forms an integral part of a Firebird boiler shell, enables more heat to be captured and reused, resulting in a higher seasonal efficiency figure.

#### **Spare Parts**

A comprehensive range of spare parts are available through a national network of approved stockists. For further information please contact sales@firebird.uk.com.

#### Delivery

Firebird holds unrivalled stock levels at their premises to ensure that even the most exacting delivery requirements can be met. Many products are available for next day delivery.



### Go Green... Without Costing the Earth





Following a three year research and development programme, we are proud to launch the new Envirogreen<sup>™</sup> and Envirolite<sup>™</sup> low NO<sub>X</sub> range of boilers. Designed specifically to meet the stringent environmental requirements of the second phase of the Ecodesign directive, the new range delivers advanced boiler technology without any associated price premium.

#### What are NO<sub>X</sub> Emissions?

Nitrogen Oxide emissions - or NO<sub>X</sub> emissions as they are more commonly known, is the general term that relates to the release of Nitrogen Dioxide (NO<sub>2</sub>) and the chemically related colourless gas Nitrogen Monoxide (NO). These gases are released into the atmosphere when fossil fuels are burned at high temperatures. When in high concentrations, these potentially harmful by products of the combustion process are known to contribute to global pollution.

#### The Ecodesign Directive

The Ecodesign Directive is a European initiative which governs the design and performance of energy using products, to reduce the amount of energy consumed and the subsequent impact on the environment. New requirements on flue gas emissions state that harmful nitrogen oxide emissions from domestic liquid fuel boilers must not exceed 120mg/kWh.

#### The Envirogreen™ and Envirolite™ Story

At Firebird we are no strangers to innovation, having developed the most efficient domestic liquid fuel fired boiler in Europe. Whilst meeting all the environmental criteria, the downside to this particular type of technology is the cost, resulting in a premium priced boiler.

We therefore set ourselves a challenge to design a boiler that exceeded the NO<sub>x</sub> reduction requirements, offered the same outstanding level of performance, but most importantly remained an affordable option for our customers.

Following an extensive research and development programme, in conjunction with European burner experts elco, the Envirogreen™ and Envirolite™ range was born. Featuring cutting-edge burner technology this new range ticks every box.

- ✓ Meets NO<sub>X</sub> reduction requirements.
- ✓ Performance data listed on the Product Characteristics Database (PCDB).
- ✓ Easy to install and service.
- ✓ Cost-effective.

### Why Choose Envirogreen™?

## Allen Kev



#### Installer

- ✓ Trouble-Free Plug & Play Burner
  - Key components easily identified by dedicated connectors.
- ✓ Fast & Easy to Install

Main component parts undone with a single Allen key.

✓ Easy to Service & Maintain

Components clearly positioned and accessible.

✓ Makes Financial Sense

No associated price premium.

√ Simple Diagnostic System

Optimised wiring system.

**✓** Standard Firebird Digital Control Box

Reliable and simple to use with handy reset button.

- **✓** Excellent Cold Start Performance.
- ✓ Powerful Ignition System

With separate powerful transformer.

✓ Low Smoke, Clean Burn Reduces **Carbon Build-up** 

Both on burner combustion head and boiler.

- **✓** Excellent Combustion Robustness
  - CO<sub>2</sub> level factory-set at an optimum 12.5% ensures highest levels of efficiency.
- √ 100% 'Burner Test Fired' to 12.5% CO₂ Levels.
- ✓ Outstanding Ventilation Performance

Ensures complete combustion.

- ✓ Post Purge as Standard.
- ✓ Latest Danfos Pump Technology Up to 100m suction capacity.
- **✓** Single-Forge Combustion Head.
- ✓ Latest Condensate Trap Technology With 316L stainless steel.
- ✓ Adjustable Feet on all Boilerhouse Models.
- ✓ Product Characteristics Database (PCDB)
- ✓ Listed on the Heating Appliance Register of Performance (HARP).



### Installation is as easy as 1, 2, 3

2x**Burner Settings** 



Satisfied Customers







Exceeds current requirements of the second phase of the Ecodesign Directive.

- ✓ Superior Flue Gas Recirculation Significantly reduces NO<sub>x</sub> emissions.
- ✓ Extremely Low Carbon Monoxide (CO) Emissions.
- ✓ Low Electrical Consumption.





#### Homeowner

#### ✓ Makes Financial Sense

Increased operating efficiency saves fuel and reduces bills.

#### ✓ Ultra-Reliable

No error prone complex parts.

✓ Helping the environment.



### **Envirogreen**<sup>™</sup> **Heatpac & Envirolite**™ Heatpac









Envirogreen™ Model &	Product	Weight	ErP Rating	Dimensions (mm)			
Envirolite™ Model	Code kg		Heating	Н	W	D	
Envirogreen™ Heatpac 12-18kW	EGE018HPK	134	А	945	620	625	
Envirogreen™ Heatpac 12-20kW	EGE020HPK	154	А	945	720	625	
Envirogreen™ Heatpac 20-26kW	EGE026HPK	154	А	945	720	625	
Envirogreen <sup>TM</sup> Heatpac 26-35kW	EGE035HPK	158	А	945	720	625	
Envirogreen™ Heatpac 36-44kW	EGE044HPK	244	А	1074	839	855	
Envirogreen™ Heatpac 58kW	EGE058HPK	250	А	1074	839	855	
Envirogreen™ Heatpac 73kW	EGE073HPK	280	А	1200	903	855	
Envirolite <sup>TM</sup> Heatpac 12-20kW	EGE020SGR	154	А	945	720	625	
Envirolite™ Heatpac 20-26kW	EGE026SGR	154	А	945	720	625	
Envirolite™ Heatpac 26-35kW	EGE035SGR	158	А	945	720	625	

- High quality weather-proof PVC-coated casing (outputs up to 58kW).
- Fully insulated to prevent heat loss.
- Patented heat exchanger design.
- Removable side panels for easy access.
- 4-tapping points for ease of installation.

- Fitted with frost protection stat.
- Whisper quiet operation.
- · Stainless steel terminal guard.
- High performance low NOx Elco burner.
- Seven models available in outputs from 12kW to 73kW.

### **Envirogreen**™ **Slimline Heatpac**









Envirograan TM Madal	Product	Product Heating Output V		ErP Rating	Dimensions (mm)			
Envirogreen™ Model	Code	Max.	kg	Heating	Н	W	D	
Envirogreen™ Slimline Heatpac 12-20kW	EGE020SLM	20kW	147	А	920	465	760	
Envirogreen™ Slimline Heatpac 20-26kW	EGE026SLM	26kW	150	А	920	465	760	
Envirogreen™ Slimline Heatpac 26-35kW	EGE035SLM	35kW	153	А	920	465	760	

- Multidirectional Flue Options.
- High quality weather-proof PVC-coated casing.
- Only 465mm wide.
- Fully insulated to prevent heat loss.
- Patented heat exchanger design.
- Removable back panel for easy access.

- 3-tapping points for ease of installation.
- Fitted with frost protection stat.
- Whisper quiet operation.
- Stainless steel terminal guard.
- High performance low NOx Elco burner.
- Three models available in outputs from 12kW to 35kW.

### **Envirogreen**<sup>TM</sup> Popular & **Envirolite**™ **Boilerhouse**









**Envirolite**™ Boilerhouse

Envirogreen™ Model &	Product	Weight	ErP Rating	Din	nm)	Burner Depth	
Envirolite™ Model	Code	kg	Heating	Н	W	D	Depth
Envirogreen™ Popular 12-18kW	EGE018POP	99	А	684	344	381	202
Envirogreen™ Popular 12-20kW	EGE020POP	107	А	684	441	381	202
Envirogreen™ Popular 20-26kW	EGE026POP	112	А	684	441	381	202
Envirogreen™ Popular 26-35kW	EGE035POP	115	А	684	441	381	202
Envirogreen™ Popular 36-44kW	EGE044POP	182	А	815	470	531	202
Envirogreen™ Popular 58kW	EGE058POP	190	А	815	470	533	253
Envirogreen™ Popular 73kW	EGE073POP	210	А	873	530	527	253
Envirogreen™ Popular 80-100kW	EGE100POP	300	А	1052	625	746	253
Envirolite™ Boilerhouse 12-20kW	EGE020SBH	107	А	684	441	381	202
Envirolite™ Boilerhouse 20-26kW	EGE026SBH	112	А	684	441	381	202
Envirolite™ Boilerhouse 26-35kW	EGE035SBH	115	А	684	441	381	202

- · Patented heat exchanger design.
- Built from premium quality steels.
- · Compact design.
- · 4-tapping points for ease of installation.
- Sturdy well insulated casing minimises heat loss.
- High performance low NOx Elco burner.
- Eight models available in outputs from 12kW to 100kW.

### **Envirogreen**<sup>™</sup> Kitchen & **Envirolite**<sup>TM</sup> **Utility**









**Envirolite**™ Utility

Envirogreen™ Model &	Product Weight Code kg		ErP Rating	Dimensions (mm)		
Envirolite™ Model			Heating	Н	W	D
Envirogreen™ Kitchen 12-18kW	EGE018KIT	115	А	847	345	610
Envirogreen™ Kitchen 12-20kW	EGE020KIT	125	А	847	442	610
Envirogreen™ Kitchen 20-26kW	EGE026KIT	128	А	847	442	610
Envirogreen™ Kitchen 26-35kW	EGE035KIT	131	А	847	442	610
Envirogreen™ Kitchen 36-44kW	EGE044KIT	210	А	1048	464	852
Envirogreen™ Kitchen 58kW	EGE058KIT	216	А	1048	464	852
Envirogreen™ Kitchen 73kW	EGE073KIT	242	А	1196	524	851
Envirogreen™ Commercial Utility 80-100kW	EGE100KIT	390	А	1249	623	1071
Envirolite™ Utility 12-20kW	EGE020UTL	125	А	847	442	610
Envirolite™ Utility 20-26kW	EGE026UTL	128	А	847	442	610
Envirolite™ Utility 26-35kW	EGE035UTL	131	А	847	442	610

- Compact design fits under standard kitchen worktop (outputs up to 35kW).
- Hard wearing casings with premium quality
- · Patented heat exchanger design.
- · 4-tapping points for ease of installation.
- Front service access.
- Multi directional flue options.

- PCB controller with anti cycling function (outputs up to 35kW).
- Fully insulated and acoustically designed for ultra quiet operation.
- High performance low NOx Elco burner.
- · Optional condensate pump.
- Eight models available in outputs from 12kW to 100kW.

### **Envirogreen**<sup>™</sup> Combi HE & **Envirogreen**<sup>TM</sup> Slimline Combi









**Envirogreen**<sup>TM</sup> Slimline Combi

Environment Model	Product Weight		ErP F	Dimensions (mm)			
Envirogreen™ Model	Code	kg	Heating	Hot Water	Н	W	D
Envirogreen™ Combi HE 12-20kW	ECE020DLX	167	А	В	845	595	614
Envirogreen™ Combi HE 20-26kW	ECE026DLX	170	А	В	845	595	614
Envirogreen™ Combi HE 26-35kW	ECE035DLX	173	А	В	845	595	614
Envirogreen™ Slimline Combi 12-20kW	ECE020SLM	165	А	В	855	520	600
Envirogreen™ Slimline Combi 20-26kW	ECE026SLM	168	А	В	855	520	600
Envirogreen™ Slimline Combi 26-35kW	ECE035SLM	172	А	В	855	520	600

#### **Features**

- Excellent hot water performance.
- Rapid re-heat after hot water draw-off.
- PCB controller with highly accurate thermistors.
- Fully insulated and acoustically designed for ultra quiet operation.
- Hard wearing casings with high quality finish.
- Compact design fits under standard kitchen worktop.
- No flow switch water flow is electronically detected.
- Multi directional flue options.
- High performance low NOx Elco burner.
- Patented heat exchanger design.
- Easy to install and service
- Fitted with Frost Protection Stat.

#### **Combi HE Features**

- Single high efficiency Grundfos circulating pump.
- Low pressure switch protects boiler in the unlikely event of system water loss.
- Robust "positive shut-off" filling loop and check valve.
- Three models available in outputs from 12kW to 35kW.

#### **Slimline Combi Features**

- Twin circulating pump no diverter valve required.
- · Optional condensate pump and timer controllers.
- Three models available in outputs form 12kW to 35kW.

### **Envirogreen**<sup>™</sup>

### **Combipac HE &**

### **Envirogreen**<sup>TM</sup> **Slimline** Combipac











Environza on TM Mardal	Product Weight		ErP F	Dimensions (mm)			
Envirogreen™ Model	Code	kg	Heating	Hot Water	Н	W	D
Envirogreen™ Combipac HE 12-20kW	ECE020CPK	200	А	В	945	720	625
Envirogreen™ Combipac HE 20-26kW	ECE026CPK	200	А	В	945	720	625
Envirogreen™ Combipac HE 26-35kW	ECE035CPK	203	А	В	945	720	625
Envirogreen™ Slimline Combipac HE 12-20kW	ECE020SCP	185	А	В	970	570	625
Envirogreen™ Slimline Combipac HE 20-26kW	ECE026SCP	185	А	В	970	570	625
Envirogreen™ Slimline Combipac HE 26-35kW	ECE035SCP	185	А	В	970	570	625

#### **Features**

- Excellent hot water performance.
- · High quality weatherproof PVC coated casings.
- · Removable sides for ease of access.
- Factory fitted frost protection stat.
- Rapid re-heat after hot water draw-off.
- PCB controller with highly accurate thermistors.
- Fully insulated and acoustically designed for ultra quiet operation.
- No flow switch water flow is electronically detected.
- Multi-directional flue options.
- · High performance low NOx Elco burner.
- · Low pressure switch protects boiler in the unlikely event of system water loss.

#### **Combipac HE Features**

- Single high efficiency Grundfos circulating
- Robust "positive shut-off" filling loop and check valve.
- Three models available in outputs from 12kW to 35kW.

#### **Slimline Combipac Features**

- Only 570mm wide.
- Grundfos Twin circulating pump no diverter valve required.
- Three models available in outputs form 12kW to 35kW.

### **Envirogreen**<sup>™</sup> **System**









Envirogreen™ Model	Product	Weight	ErP Rating	Dimensions (mm)			
Envirogreen ···· Model	Code	kg	Heating	Н	W	D	
Envirogreen™ System 12-20kW	ESE020DLX	143	А	847	442	610	
Envirogreen™ System 20-26kW	ESE026DLX	146	А	847	442	610	
Envirogreen™ System 26-35kW	ESE035DLX	149	А	847	442	610	
Envirogreen™ System 36-44kW	ESE044DLX	235	А	1048	660	852	

- Compact design fits under standard kitchen worktop (outputs up to 35kW).
- Low pressure switch protects boiler in the unlikely event of system water loss.
- · Hard wearing casings with premium quality finish.
- · Patented heat exchanger design.
- · Front service access.
- · PCB controller with anti cycling function (outputs up to 35kW).

- Fully insulated and acoustically designed for ultra quiet operation.
- Multi directional flue options.
- High performance low NOx Elco burner.
- Optional condensate pump.
- Four models available in outputs from 12kW to 44kW.

### **Envirogreen**<sup>™</sup> **Systempac**









Envirogreen™ Model	Product Weight		ErP Rating	Dimensions (mm)			
Envirogreen ···· Model	Code	kg	Heating	Н	W	D	
Envirogreen™ Systempac 12-20kW	ESE020NKT	163	А	945	720	625	
Envirogreen™ Systempac 20-26kW	ESE026NKT	163	А	945	720	625	
Envirogreen™ Systempac 26-35kW	ESE035NKT	166	А	945	720	625	
Envirogreen™ Systempac 36-44kW	ESE044NKT	270	А	1074	839	855	

- · High quality weather-proof PVC-coated casing.
- · Low pressure switch protects boiler in the unlikely event of system water loss.
- · Factory-fitted expansion vessel and circulating pump saves space and installation time.
- · Fully insulated to prevent heat loss.
- · Patented heat exchanger design.

- · Fitted with frost protection stat.
- Ultra quiet operation.
- · Stainless steel terminal guard.
- Flue can exit left or right.
- High performance low NOx Elco burner.
- Four models available in outputs from 12kW to 44kW.

### **Envirogreen**<sup>TM</sup> **Slimline Systempac**









Envirograph Madal	Product	Weight	ErP Rating	Dimensions (mm)		
Envirogreen™ Model	Code	kg	Heating	Н	W	D
Envirogreen™ Slimline Systempac 12-20kW	ESE020SLM	147	А	920	465	760
Envirogreen™ Slimline Systempac 20-26kW	ESE026SLM	150	А	920	465	760
Envirogreen™ Slimline Systempac 26-35kW	ESE035SLM	153	А	920	465	760

- Three directional flue options.
- · Pre-plumbed and pre-wired.
- Easy access to pre-wired circulating pump.
- Connection to pipework can be made from the base.
- High performance low NOx Elco burner.
- · High quality weather-proof casing.
- · Factory-fitted expansion vessel and circulating pump saves space and installation time.

- · Fully insulated to prevent heat loss.
- Patented heat exchanger design.
- Fitted with frost protection stat.
- Ultra quiet operation.
- · Stainless steel terminal guard.
- Removable sides for ease of access.
- Suitable for open vented and sealed systems.

### **Technical Specifications**

### Envirogreen<sup>™</sup> & Envirolite<sup>™</sup>

Combi HE / Slimline Combi / Slimline Combipac / Combipac HE

System / Systempac / Slimline Systempac Heatpac / Slimline Heatpac / Popular / Boilerhouse / Kitchen / Utility

	Comb	pac HE							.,					
HEAT OUTPUT kW	12-20 20-26	26-35	12-20 20-26	26-35	36-44	12-18	12-20 20-26	26-35	36-44 58	73	80-100			
CONNECTIONS														
Heating Flow	22mm dia.	28mm dia.	22mm dia.	. 28mm dia.	1½" BSP	1" BSP	1" BSP	1" BSP	1½" BSP	1½" BSP	2" BSP			
Heating Flow Slimline Systempac	-	-	1" CxC	-	-	-	-	-	-	-	-			
Heating Return	22mm dia.	28mm dia.	1" BSP	1" BSP	1½" BSP	1" BSP	1" BSP	1" BSP	1½" BSP	1½" BSP	2" BSP			
Heating Return Slimline Systempac	-	-	1" CxC	-	-	-	-	-	-	-	-			
Mains Cold Feed (Copper)	15mm dia.	15mm dia.	15mm dia.	15mm dia.	15mm dia.	_	-	-	-	-	-			
Hot Water Delivery (Copper)	15mm dia.	15mm dia.	_	-	-	_	-	_	-	_	_			
Drain Off Valve	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP	½" BSP			
Safety Pressure Valve Outlet (Copper)		15mm dia.		15mm dia.		_	-	-	-	-	-			
Condensate Trap		ia. plastic		nm dia. pla				22 mm c	lia. plastic					
Boiler Boiler	24 litres	24 litres	24 litres	24 litres	45 litres	24 litres	24 litres	24 litres		54 litres	75 litres			
Primary Tank Combi HE	20 litres	20 litres	211111103	_	-	_	_	_	-	-	-			
Slimline Combi / Combipac		11 litres	_	_	_	_	_	_	_	_	_			
Combipac HE	20 litres	20 litres												
CIRCULATING PUMP	UPM0	UPM0	UPMO	UPMO	UPM0									
Domestic Hot Water Plate Heat Exchanger	25 plate	31 plate	-	OFITO	UPINO									
	12 litres			12 litres	- 18 litres	_	-	-	-	-	-			
Integral Expansion Vessel Normal Capacity		12 litres	12 litres			_	-	-	-	-	-			
Expansion Vessel Pre-charge Pressure	1 bar	1 bar	1 bar	1 bar	1 bar		-	-	-	-	-			
Low Pressure Water Switch?	V	V	V	V	V	X	X	X	X	X	×			
Filling Loop Included?	~		V	· ·	· ·	X	×	X	×	×	×			
D.H.W. GUIDE PERFORMANCE*														
Combi HE	F 0 F	es with odesign	-	-	-	-	-	-	-	-	-			
Slimline Combi / Combipac		e (XLarge	-	-	-	-	-	-	-	-	-			
Combipac HE		cases).	-	-	-	-	-	-	-	-	-			
FLUE (INTERNAL BOILERS)	-	-	-	-	-	-	-	-	-	-	-			
Balanced Flue Assembly	125 (5") mm dia.	125 (5") mm dia.	125 (5") mm dia.	125 (5") mm dia.	150 (6") mm dia.	125 (5") mm dia.	125 (5") mm dia.	125 (5") mm dia.	150 (6") mm dia.	180 (7") mm dia.	200 (8") mm dia			
Flue Assembly	-	-	80 (3") mm dia.	-	-	-	-	-	-	-	-			
Max. Low Level Flue Length	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m	1.5m			
Max. High Level Balanced Flue Length	6m	6m	6m	6m	6m	6m	6m	6m	6m	6m	6m			
Max. Vertical Plume Length	-	-	5m	-	-	-	-	-	-	-	-			
Integral flues on Heatpac models	-	-	-	-	-	-	-	-	-	-	-			
HEATING SYSTEM (SEALED)	Fit in acco	ordance w	ith BS 707	'4 Part 1, B	5 5449, OF	TEC stand	dards and a	all other re	levant legi	slation.				
Max. Operating Pressure	21	bar		2 bar					-					
Max. System Pressure Cold	1.5	bar		1.5 bar					_					
Min. System Pressure Cold	0.5	bar		0.5 bar					-					
Preset Pressure Relief Valve	3	bar		3 bar				3	bar					
MAINS WATER SUPPLY PRESSURE			ressure exc		r. *Excessiv	ve pressure	may dama	ge plumbir	n the cold in					
WATER QUALITY	Maine	water sunr							wing minir	num nara	matars:			
WALER GOALIT	Trialitis (	water supp	3	C Si	hloride Co ulphate Co	ontents: Ma ontents : Ma	ax. 200mg ax. 200mg	/l g/l		патт рага	incters.			
WATER SIDE RESISTANCE	Elow Data	to give a M		ombination		12-20k		ng/I (In tot <b>)-26kW</b>	26-35k	\M/ 74	5-44kW			
WAIER SIDE RESISTANCE		e Measure		put at 10K D	merential	12 <b>-20k</b>		2135	<b>26-35K</b> 2874		3613			
		e Measure le Resistan	, .			0.18		0.18	0.18		0.22			
					ifferential	0.10		0.10	0.10		0.22			
		Flow Rate to give a Nominal Output at 20K Differential Flow Rate Measured (kg/h)			moreman	870		1131	1523		2915			
						0.19		0.19	0.19		0.24			
PRESSURE JET OIL BOILERS	Waterside Resistance (mbar)  ELCO FB 2 K LN 12-58 and					ELCO FB 3	K LN for 7	73kW and	100kW					
FUEL						28 Second								
ELECTRICAL SUPPLY						V AC 50H:								
TEMPERATURE CONTROL	Frost thermosta							r models						
Boiler Central Heating Control	60°C	- 80°C	6	50°C - 80°					- 80°C					
Boiler Safety Limit	110	)°C		-		110°C								
Tank (DHW)- Fixed	78	°C		-					-					
	78°C - 87°C -					-								
Early Alert - Fixed											87°C (Envirolite Heatpac, Heatpac, Envirolite Utility and Kitchen only)			
Early Alert - Fixed Over-run - Fixed				- 87°C		87°C (E	nvirolite Heat	tpac, Heatpa	c, Envirolite U	tility and Kito	chen only)			

\* where water demand exceeds this, a flow restrictor is recommended. This will ensure a water supply at an adequate temperature.

### **Condensing Flue Kits**

Firebird offer a comprehensive range of stainless steel condensing flue kits to complement the extensive range of oil-fired boilers.

A flue is a critical part of boiler installation and a necessary requirement to remove gases created during the combustion process. A correctly installed flue will also ensure the clean and efficient operation of the boiler, resulting in optimum boiler performance and a longer design life. An incorrect installation will result in the boiler warranty becoming invalid.



#### Stainless Steel Flue Kits & Accessories

The Firebird range of stainless steel flue kits and accessories are suitable for use with the **Envirogreen<sup>™</sup>** and **Envirolite<sup>™</sup>** ranges of boilers.

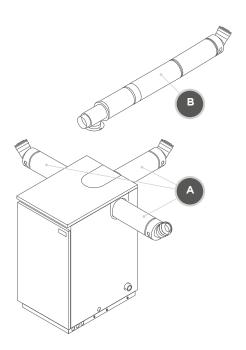
Stainless steel flue kits are available for the following applications:

- Low level flue (including plume dispersal)
- Conventional flue
- High level flue (vertical & horizontal)

#### Low Level Flue Kits

Low level flue kits have become popular in recent years due to their convenient size and ease of installation. When installing a condensing low level flue, consideration should be given to the discharge of the condense plume. In some circumstances a plume dispersal kit may be necessary.

Product Code	Product Description
20-35kW	KITS AND EXTENSIONS (125mm dia)
♠ CBF005KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
♠ CBF005SKT	Low Level Flue Kit (short) 200-280mm Stainless Steel Guard inc.
B CBF005EXT	450mm Extension for Low Level Flue Kit.
44-58kW	KITS AND EXTENSIONS (150mm dia)
♠ CBF006KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
♠ CBF006SKT	Low Level Flue Kit (short) 200-280mm Stainless Steel Guard inc.
B CBF006EXT	450mm Extension for Low Level Flue Kit.
73kW	KITS AND EXTENSIONS (185mm dia)
♠ CBF007KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
♠ CBF007SKT	Low Level Flue Kit (short) 200-280mm Stainless Steel Guard inc.
B CBF007EXT	450mm Extension for Low Level Flue Kit.



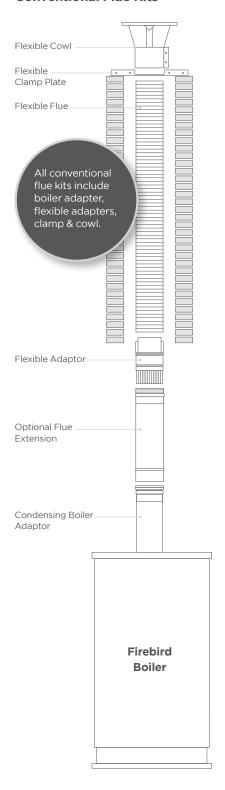
#### \*A - Low Level Flue Kit

All Low Level Flue Kits contain:

- Telescopic Balanced Flue with Venturi Insert
- · Terminal Guard
- · Deflector Plate
- Silicone Lubricant
- Jubilee Clip for Air Snorkel
- Assembly Instructions

### **Conventional Flue Kits & Accessories**

#### **Conventional Flue Kits**



Product Code	Product Description
12-35KW	KITS & EXTENSIONS (100mm dia) (Kit contents include boiler and flex adaptor, clamp and cowl)
ECF003KIT	3m Kit
ECF006KIT	6m Kit
ECF008KIT	8m Kit
ECF010KIT	10m Kit
ECF012KIT	12m Kit
ECF014KIT	14m Kit
ECF016KIT	16m Kit
ECF100EXB	1000mm length white
ECF100EXC	500mm length white
ECF100EXD	250mm length white
ECF250ADJ	305/420mm adjustable length
ECF500ADJ	555/920mm adjustable length
ECFO45ELB	45° Bend
ECF100WBK	Wall Bracket
ECF100ADP	100mm Boiler Adaptor
44-58kW	KITS & EXTENSIONS (150mm dia) (Kit contents include boiler and flex adaptor, clamp and cowl)
ECF606KIT	6m Kit
ECF608KIT	8m Kit
ECF610KIT	10m Kit
ECF612KIT	12m Kit
ECF614KIT	14m Kit
ECF616KIT	16m Kit
ECF150EXB	1000mm length white
ECF150EXC	500mm length white
ECF150EXD	250mm length
ECF256ADJ	305/420mm Adjustable length white
ECF506ADJ	555/920mm Adjustable length white
ECF456ELB	45° Bend
ECF150WBK	Wall Bracket
ECF150ADP	150mm Boiler Adaptor
73-100kW	KITS & EXTENSIONS (180mm dia) (Kit contents include boiler and flex adaptor, clamp and cowl)
ECF706KIT	6m Kit
ECF708KIT	8m Kit
ECF710KIT	10m Kit
ECF712KIT	12m Kit
ECF714KIT	14m Kit
ECF716KIT	16m Kit
ECF180EXB	1000mm length white
ECF180EXC	500mm length white
ECF180EXD	250mm length
ECF257ADJ	305/420mm Adjustable length white
ECF507ADJ	555/920mm Adjustable length white
ECF457ELB	45° Bend
ECF180WBK	Wall Bracket
ECF180ADP	180mm 73kW Boiler Adaptor
ECF200ADP	200mm 100kW Boiler Adaptor
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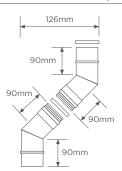
#### **Extensions**

1000mm Extension 500mm Extension 250mm Extension 305/420mm & 555/920mm telescopic extensions

#### **Optional Extras**

Offset Elbow

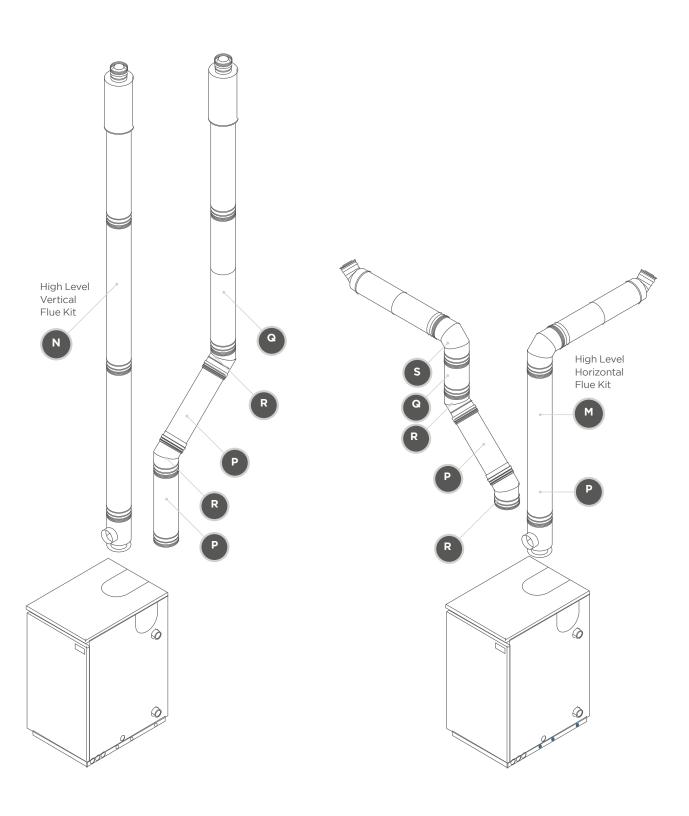
45° elbows can be used with the Firebird conventional flue system to offset the flue. Extensions can be used between elbows.



### **Stainless Steel Flue Kits & Accessories**

#### **High Level & Vertical Flue Kits**

High level flue kits are the optimal flue system, as they provide good natural draft and ensure that the flue gases are discharged away from habitable areas.



Product Code	Product Description
12-35kW	KITS & EXTENSIONS (125mm dia)
12-35KVV	(White Coated)
M HLF005HHL	1075mm High Level Horizontal Flue Kit
M HLF005VHL	3 metre Vertical Balance Flue Kit
P HLF005EXA	1000mm High Level/Vertical Extension
P HLF005EXB	500mm High Level/Vertical Extension
P HLF005EXC	250mm High Level/Vertical Extension
HLF005EXD	305/420mm Adjustable Extension
HLF005EXE	555mm/920mm Adjustable length
R HLF455ELB	45 degree Bend
S HLF905ELB	90 degree Bend
COF005PFL	Pitch Flashing
COF005FFL	Flat Flashing
HLF005WBK	Wall Bracket
44-58kW	KITS & EXTENSIONS (150mm dia) (Stainless Steel)
N* HLF006HHL	1075mm High Level Horizontal Flue Kit
P HLF006VHL	3 metre Vertical Balance Flue Kit
P HLF006EXA	1000mm High Level/Vertical Extension
P HLF006EXB	500mm High Level/Vertical Extension
O HLF006EXC	250mm High Level/Vertical Extension
O HLF006EXD	305mm/420mm Adjustable length
R HLF006EXE	555mm/920mm Adjustable length
S HLF456ELB	45 degree Bend
HLF906ELB	90 degree Bend
COF006PFL	Pitch Flashing
COF006FFL	Flat Flashing
HLF006WBK	Wall Bracket
73kW	KITS & EXTENSIONS (180mm dia) (Stainless Steel)
M HLF007HHL	1075mm High Level Horizontal Flue Kit
M HLF007VHL	3 metre Vertical Balance Flue Kit
P HLF007EXA	1000mm High Level/Vertical Extension
P HLF007EXB	500mm High Level/Vertical Extension
P HLF007EXC	250mm High Level/Vertical Extension
O HLF007EXD	305mm/420mm Adjustable length
O HLF007EXE	555mm/920mm Adjustable length
R HLF457ELB	45 degree Bend
S HLF907ELB	90 degree Bend
HLF007WBK	Wall Bracket
100kW	KITS & EXTENSIONS (200mm dia) (Stainless Steel)
M HLF008HHL	1075mm High Level Horizontal Flue Kit
N HLF008VHL	3 metre Vertical Balance Flue Kit
P HLF008EXA	1000mm High Level/Vertical Extension
P HLF008EXB	500mm High Level/Vertical Extension
P HLF008EXC	250mm High Level/Vertical Extension
O HLF008EXD	305mm/420mm Adjustable length
O HLF008EXE	555mm/920mm Adjustable length
R HLF458ELB	45 degree Bend
S HLF908ELB	90 degree Bend
HLF008WBK	Wall Bracket

#### \*M - High Level Horizontal Flue Kit

All High Level Horizontal Flue Kits contain:

- Boiler Adaptor
- 1000mm Vertical Length
- 90° Bend
- Jubilee Clip for Air sSnorkel
- Wall Seal
- Silicone Lubricant
- Assembly Instruction

• Horizontal Terminal -20-35kW = 500mm Fixed, 44-100kw = 300-500mm Adj.

#### \*N - Vertical Flue Kit

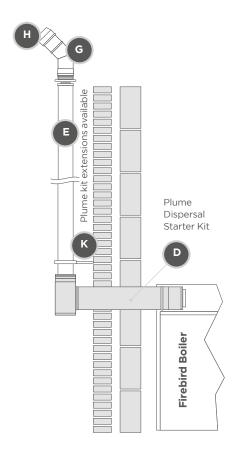
All Vertical Flue Kits contain:

- Boiler Adaptor
- Storm Collar
- 2 x Wall Brackets
- Silicone Lubricant
- Jubilee Clip for Air Snorkel
- · Assembly Instructions
- 2 x 1000mm Lengths
- Rain Cowl
- 1000mm Length Including Terminal

### **Stainless Steel Plume Dispersal**

#### **Plume Dispersal Kits**

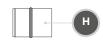
A plume dispersal kit can be connected to the exhaust terminal of a low level flue in order to discharge flue gases (plume) up, over head height and neighbouring properties. Plume dispersal options can be used with a kit or retrofitted to an existing concentric flue.



#### Other components available







Product Code	Product Description
12-35kW	KIT AND EXTENSIONS (80mm dia)
D PDK125KIT	5" Plume Dispersal Balanced Flue Starter Kit
E PDK250KIT	250mm length
E PDK500KIT	500mm length
E PDK1000KT	1000mm length
F PDK420KIT	305/420 adjustable length
F PDK920KIT	555/920 adjustable length
G PDK045BND	45 degree Bend
H PDKOOOHLE	Terminal Insert
1 PDK090BND	90 degree Bend
J PDK000CHC	Cowl
K PDK000WBK	Wall Bracket
PDK080POP	Boiler Plume Flue Adaptor
44-58kW	KIT AND EXTENSIONS (100mm dia)
E PDK256KIT	250mm length
PDK506KIT	500mm length
E PDK1006KT	1000mm length
F PDK426KIT	305/420 adjustable length
F PDK926KIT	555/920 adjustable length
G PDK456BND	45 degree Bend
H PDK006HLE	Terminal Insert
1 PDK906BND	90 degree Bend
1 PDK006CHC	Cowl
PDK006WBK	Wall Bracket
PDK100POP	Boiler Plume Flue Adaptor
73kW	KIT AND EXTENSIONS (125mm dia)
E PDK257KIT  E PDK507KIT	250mm length
<b>■</b> PDK1007KT	500mm length 1000mm length
F PDK427KIT	305/420 adjustable length
PDK927KIT	555/920 adjustable length
G PDK457BND	45 degree Bend
PDK437BNB	High Level Elbow Terminal
PDK907BND	90 degree Bend
PDK007CHC     PDK007CHC	Cowl
K PDK007WBK	Wall Bracket
PDK125POP	Boiler Plume Flue Adaptor
100kW	KIT AND EXTENSIONS (150mm dia)
E PDK258KIT	250mm length
■ PDK508KIT	500mm length
■ PDK1008KT	1000mm length
PDK428KIT	305/420 adjustable length
F PDK928KIT	555/920 adjustable length
	45 degree Bend
G PDK458BND	45 degree bend
H PDK008HLE	High Level Elbow Terminal
H PDK008HLE	High Level Elbow Terminal
H PDK008HLE  PDK908BND	High Level Elbow Terminal 90 degree Bend
H PDK008HLE  1 PDK908BND  1 PDK008CHC	High Level Elbow Terminal 90 degree Bend Cowl

### **Plume Dispersal**

Product Code	Product Description
12-35kW	PLUME DISPERSAL (80mm dia)
PDK005CPF	PLAS-FIT Plume Management Kit
PDK045PBD	80mm Plas-Fit Plume 45 degree Elbow
PDK090PBD	80mm Plas-Fit Plume 90 degree Elbow
PDK005PXA	80mm Plas-Fit Plume 1000mm Extension
PDK005PWB	80mm Plas-Fit Plume Wall Bracket

**N.B.** Can be used in conjunction with stainless steel low level, high level and vertical balanced flues up to 35kW (including Heatpac).



#### **Customer Service**

We, the Firebird team, offer you, our customer, top quality service. We monitor the level of service provided on a regular basis to ensure our customers' requirements are always met.



#### **Technical Support**

Our Technical team will provide you with a comprehensive technical support package which is designed to make the specification and installation process as simple as possible. Please contact the Firebird Technical team on 01752 691177 or technical@firebird.uk.com.



#### Quality

At Firebird, we produce our appliances to the highest standards and put them through rigorous testing procedures by external standards agencies. We design each product to meet specific requirements and we manufacture using premium quality materials to precise standards and tolerances.



#### Warranty

We offer up to 10 years warranty on boilers if installed by a Firebird accredited installer. If installed by a non-Firebird accredited installer, we offer a 2 year warranty on parts and labour on the burner and controls and 5 years on the heat exchanger. Full warranty details can be viewed on our website at www.firebird.uk.com





Environment



Innovation



Technology

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