

FIREBIRD

HEATING SOLUTIONS

Product Guide



Solar Thermal Systems



Condensing Oil Boilers



Multifuel Inset Stoves



Biomass Heating

Working towards a greener planet

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From its modest beginnings in 1980, Firebird has grown to become a leading manufacturer of heating products in the UK and Ireland. Down through the years, the company has developed a reputation for manufacturing robust, efficient, high-quality products designed for longer life and ease of installation.

From the robust elite manufacturing process, through to the dedicated sales, technical and training teams, Firebird can guarantee the highest quality product and service. In addition, our products are rigorously tested and approved to all relevant European and national standards.

Firebird's products are supported by a nationwide network of approved service engineers. All technical enquiries and warranty calls are managed by Firebird's technical department.

Firebird offer product training at a number of locations across the UK, either at its own facilities in Devon or in partnership with local OFTEC registered training centres. All training programmes involve hands on demonstrations of Firebird products as well as practical advice on installation, commissioning, service and repair.

Firebird is ISO-9001 accredited and a long-standing member of OFTEC.



In addition, Firebird products enjoy some of the following accreditations:



Enviromax Condensing Oil Boilers



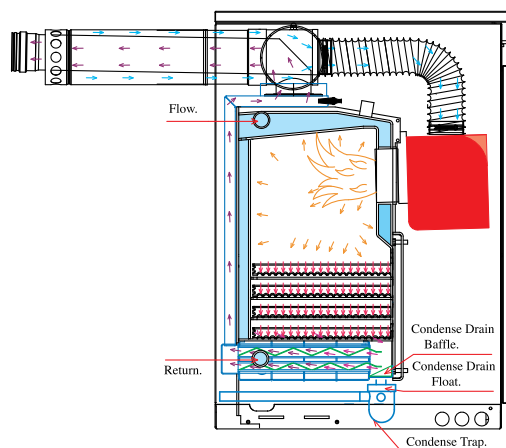
Features & Benefits

ErP A Rated

- A modern, truly condensing boiler that delivers the efficiency promised.
- Up to 25% savings in fuel consumption compared with non-condensing boilers.
- Lower emissions and carbon dioxide.

Designed as a condensing boiler - not an "add-on"

- The condensing heat exchanger is an integral part of the boiler shell.
- Condenser is located at the bottom of the appliance. There is no fear of corrosion.
- Easy to install and service.



Robust design

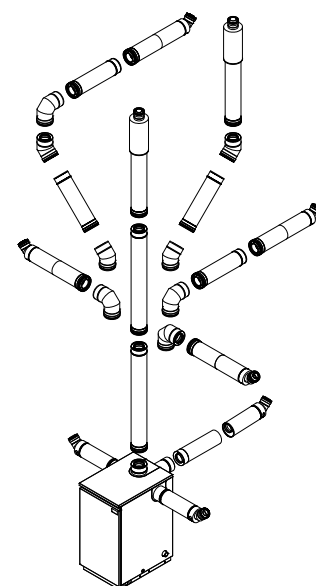
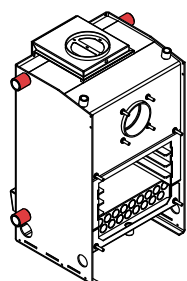
- Enviromax™ boilers are built from premium grade steel with a minimum 4 mm gauge.
- All indoor models have a heavy duty casing with a polyester-coated finish to protect the boiler from normal wear and tear.



Widest range on the market

- With up to 60 models available, we have something to suit every customer. Ranging from 12kW to 100kW.

Installer Friendly Features



- 4-tapping points on most boiler models - increases installation options.
- Front service access - easy access to common service parts.
- 7-pin plug - simplifies wiring.
- Optional condensate pump - lifts up to 5m - perfect solution where natural gradient is not available.
- Multi-directional flue options - increases installation options.

Enviromax Kitchen

A high quality finish ensures that this boiler won't look out of place in your kitchen.



Features

- Compact design - fits under standard kitchen worktop (outputs up to 35kW only).
- Hard wearing casings with premium quality finish.
- Patented heat exchanger design.
- Multiple tapping points for ease of installation.
- 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 Riello RDB burner complete with full diagnostic control box.
- Optional condensate pump.
- Eight models in outputs from 12kW to 100kW.

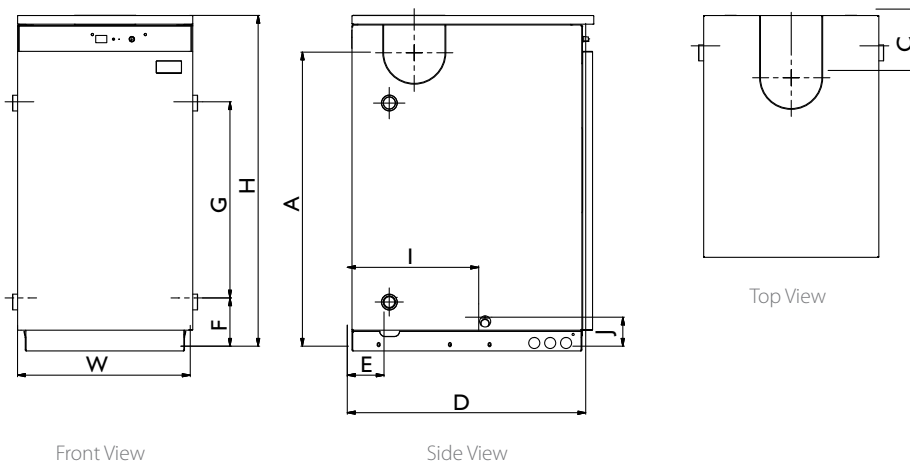


Specification

Model	Sales Code	Weight kg	Dimensions(mm)									
Enviromax			H	W	D	A	C	E	F	G	I	J
Kitchen 12-18kW	CKI018DLX	115	847	345	610	753	157	94	124	502	336	75
Kitchen 12-20kW	CKI020DLX	125	847	442	610	753	157	94	124	502	336	75
Kitchen 20-26kW	CKI026DLX	128	847	442	610	753	157	94	124	502	336	75
Kitchen 26-35kW	CKI035DLX	131	847	442	610	753	157	94	124	502	336	75
Kitchen 35-44kW	CKI044DLX	210	1046	464	852	914	154	100	125	620	485	86
Kitchen 44-58kW	CKI058DLX	216	1046	464	852	914	154	100	125	620	485	86
Kitchen 58-73kW	CKI073DLX	242	1196	524	851	1024	157	100	125	670	484	86
Commercial Utility 80-100kW	CUT100NKT	390	1249	623	1071	-	158	130	132	832	723	72

Accessories ACCENVMP Condensate Pump Kit

Dimensions (mm)



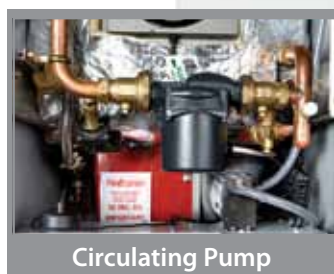
Enviromax System

Factory-fitted expansion vessel and circulating pump saves space and installation time.



Features

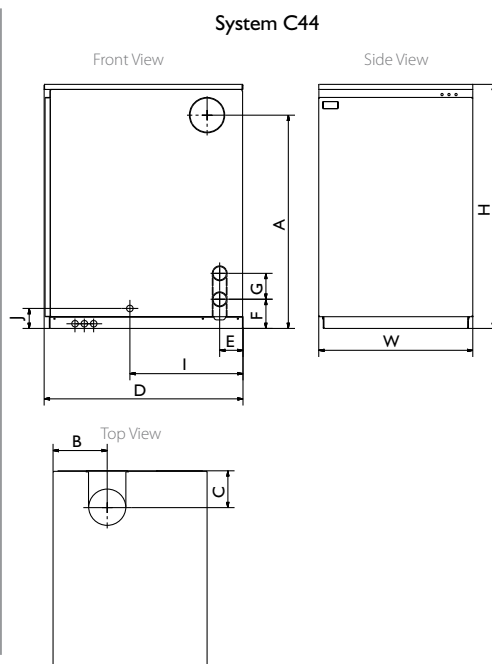
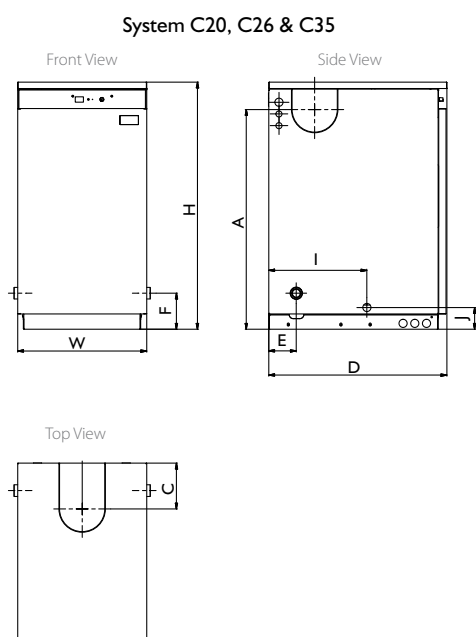
- Compact design - fits under standard kitchen worktop (outputs up to 35kW).
- Low pressure switch protects boiler in the event of system water loss.
- Hard wearing casings with premium quality finish.
- Patented heat exchanger design.
- Multiple tapping points for ease of installation.
- Front service access.
- Fully insulated and acoustically designed for ultra quiet operation.
- Multi directional flue options.
- High performance Riello RDB burner complete with full diagnostic control box.
- PCB Controller with anti cycling function (outputs up to 35kW).
- Optional condensate pump.
- Four models in outputs from 12kW to 44kW.



Specification

Model	Sales Code	Weight kg	Dimensions(mm)										
Enviromax			H	W	D	A	B	C	E	F	G	I	J
System 12-20kW	CSB020DLX	143	844	442	610	752	-	157	94	123	-	336	74
System 20-26kW	CSB026DLX	146	844	442	610	752	-	157	94	123	-	336	74
System 26-35kW	CSB035DLX	149	844	442	610	752	-	157	94	123	-	336	74
System 35-44kW	CSB044DLX	235	1046	660	852	914	232	158	100	125	111	485	86

Dimensions (mm)



Enviromax Combi



The Enviromax Combi Boiler provides both domestic hot water and central heating water in a single appliance, saving you the cost and space associated with a hot water tank.

Features

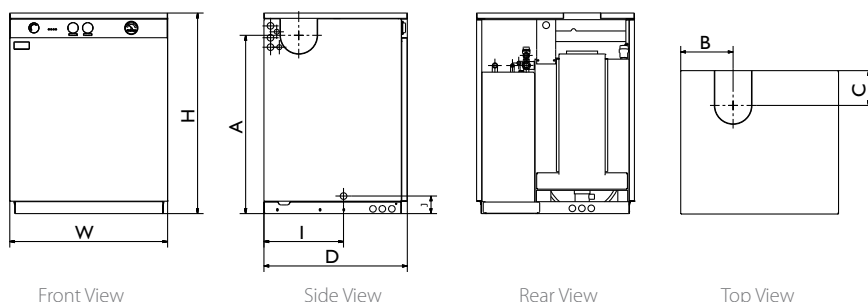
- Excellent hot water performance
- over 20 litres/min on 35kW model.
- PCB controller using highly accurate thermistors.
- Rapid re-heat after hot water draw-off.
- Compact design - fits under standard kitchen worktop.
- Hard wearing casings with high quality finish.
- Patented heat exchanger design.
- Twin circulating pump
- no diverter valve required.
- No flow switch.
- Front service access.
- Fully insulated and acoustically designed for ultra quiet operation.
- Multi directional flue options.
- High performance Riello RDB burner complete with full diagnostic control box.
- Optional condensate pump and timer controllers.
- Three models in outputs from 12kW to 35kW.



Specification

Model	Sales Code	Weight kg	Dimensions(mm)							
Enviromax			H	W	D	A	B	C	I	J
Combi 12-20kW	CCO020DLX	173	845	665	605	750	220	147	335	75
Combi 20-26kW	CCO026DLX	176	845	665	605	750	220	147	335	75
Combi 26-35kW	CCO035DLX	179	845	665	605	750	220	147	335	75

Dimensions (mm)



Enviromax Slimline Combi



Only 520mm - ideal for retrofitting.
Small enough to fit - big enough to cope.

Features

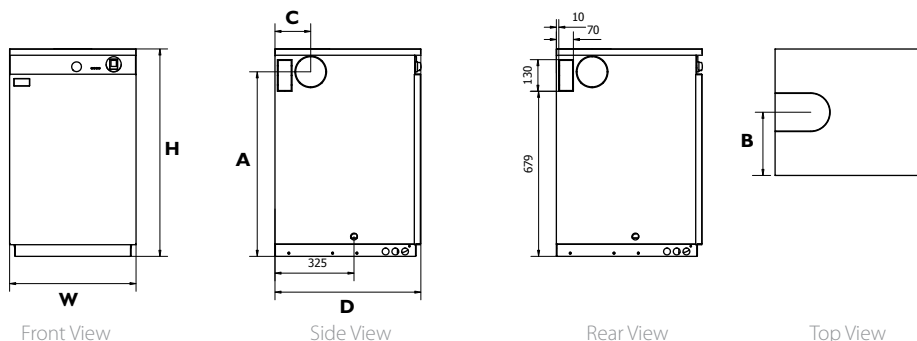
- Excellent hot water performance
- over 16 litres/min on 35kW model.
- PCB controller using highly accurate thermistors.
- Rapid re-heat after hot water draw-off.
- Compact design - fits under standard kitchen worktop.
- Hard wearing casings with high quality finish.
- Patented heat exchanger design.
- Twin circulating pump
- no diverter valve required.
- No flow switch.
- Fully insulated and acoustically designed for ultra quiet operation.
- Multi directional flue options.
- High performance Riello RDB burner complete with full diagnostic control box.
- Optional condensate pump and timer controllers.
- Three models in outputs from 12kW to 35kW.



Specification

Model	Sales Code	Weight kg	Dimensions(mm)					
Enviromax			H	W	D	A	B	C
Slimline Combi 12-20kW	CCO020SLM	165	853	520	600	759	260	147
Slimline Combi 20-26kW	CCO026SLM	168	853	520	600	759	260	147
Slimline Combi 26-35kW	CCO035SLM	172	853	520	600	759	260	147

Dimensions (mm)



- Timer Positions
- Operation Lights
- Temperature Control
- 7 Pin Plug Power Supply & Pump
- Pressure Gauge



Accessories

Sales Code	PRODUCT DESCRIPTION
ACCENVPMP	Condensate Pump Kit
ACC000ETM	Combi Twin Channel Timer (Standard Combi)
ACC000SCT	Combi Single Channel Timer (Slimline Combi)
ACC000CWC	1000 RF 2-Channel Wireless Controller (Slimline Combi)

Enviromax Heatpac & Slimline Heatpac



The Enviromax Heatpac range does not need to be housed in a building, thereby reducing cost and labour. The boilers come with removable sides for easy access to any part of the unit. Piping may be carried out from the back or from underneath.

Features

Heatpac

- High quality weather-proof PVC-coated casing (outputs up to 58kW).
- 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 (except Slimline models)
- High performance Riello RDB burner complete with full diagnostic control box.
- Seven models in outputs from 12kW to 73kW.

Slimline Heatpac (as above plus the following)

- Only 465mm wide.
- Three models in outputs from 12kW to 35kW.



Temperature Control & High Limit re-set button

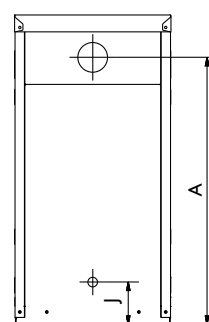
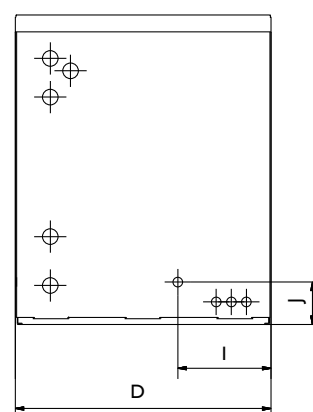
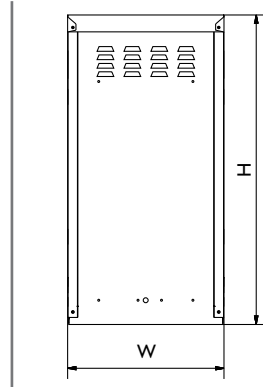
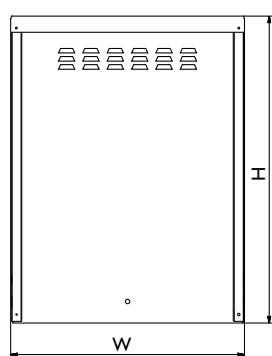
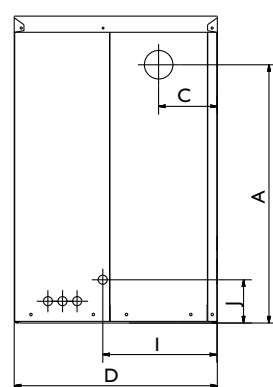
Burner Plug



Specification

Model	Sales Code	Weight kg	Dimensions (mm)						
Enviromax			H	W	D	C	A	I	J
Heatpac 12-18kW	CON018HPK	134	945	620	625	180	795	351	133
Heatpac 12-20kW	CON020HPK	154	945	720	625	180	795	351	133
Heatpac 20-26kW	CON026HPK	154	945	720	625	180	795	351	133
Heatpac 26-35kW	CON035HPK	158	945	720	625	180	795	351	133
Heatpac 35-44kW	CON044HPK	244	1074	839	855	180	936	507	134
Heatpac 44-58kW	CON058HPK	250	1074	839	855	180	936	507	134
Heatpac 58-73kW	CON073HPK	280	1200	903	855	180	1039	507	134
Slimline Heatpac 12-20kW	CON020SLM	147	920	465	760	-	794	277	126
Slimline Heatpac 20-26kW	CON026SLM	150	920	465	760	-	794	277	126
Slimline Heatpac 26-35kW	CON035SLM	153	920	465	760	-	794	277	126

Dimensions (mm)



Heatpac, Systempac, Combipac

Slimline Heatpac, Slimline Systempac

Enviromax Systempac, Combipac & Slimline Systempac



The Enviromax Systempac, Combipac and Slimline Systempac are external boilers with similar specifications to their equivalent indoor model, with the addition of a built in frost thermostat.

Features

Systempac

- High quality weather-proof PVC-coated casing.
- Low pressure switch protects boiler in the event of system water loss.
- 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 (except Slimline models)
- High performance Riello RDB burner complete with full diagnostic control box.
- Four models in outputs from 12kW to 44kW.



Slimline Systempac (same features as Systempac)

- Only 465mm wide.
- Three models in outputs from 12kW to 35kW.

Combipac

- Excellent hot water performance
- over 20 litres/min on 35kW model.
- PCB controller using highly accurate thermistors.
- Rapid re-heat after draw-off.
- High quality weather-proof PVC-coated casing.
- Fully insulated to prevent heat loss.
- Patented heat exchanger design.
- Flue can exit left or right.
- Twin circulating pumps - no diverter valve required.
- No flow switch.
- Fitted with frost protection stat.
- Fully insulated and acoustically designed for ultra quiet operation.
- High performance Riello RDB burner complete with full diagnostic control box.
- Three models in outputs from 12kW to 35kW.



Systempac



Combipac

Specification

Model	Sales Code	Weight kg	Dimensions (mm)						
Enviromax			H	W	D	C	A	I	J
Systempac 12-20kW	CSP020NKT	163	945	720	625	180	795	351	133
Systempac 20-26kW	CSP026NKT	163	945	720	625	180	795	351	133
Systempac 26-35kW	CSP035NKT	166	945	720	625	180	795	351	133
Systempac 35-44kW	CSP044NKT	270	1074	839	855	180	936	507	134
Slimline Systempac 12-20kW	CSP020SLM	147	920	465	760	-	794	277	126
Slimline Systempac 20-26kW	CSP026SLM	150	920	465	760	-	794	277	126
Slimline Systempac 26-35kW	CSP035SLM	153	920	465	760	-	794	277	126
Combipac 12-20kW	CCP020OOO	206	945	720	625	180	795	351	133
Combipac 20-26kW	CCP026OOO	206	945	720	625	180	795	351	133
Combipac 26-35kW	CCP035OOO	209	945	720	625	180	795	351	133



Slimline Systempac

Dimension diagram - See page 8

Enviromax Popular

Ideal for installation in a dedicated boiler house, garage or outbuilding



Features

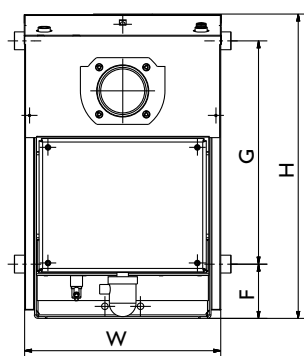
- Patented heat exchanger design.
- Built from premium quality steels.
- Compact design.
- Multiple tapping points for ease of installation.
- Sturdy well insulated casing minimise heat loss.
- High performance Riello RDB burner complete with full diagnostic control box.
- Eight models in outputs from 12kW to 100kW.



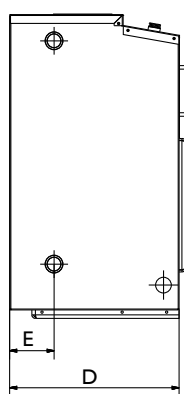
Specification

Model Enviromax	Sales Code	Weight kg (incl. burner)	Dimensions(mm)			BURNER DEPTH	C	E	F	G
			H	W	D					
Popular 12-18kW	CPO018RDB	99	684	344	381	202	164	100	122	502
Popular 12-20kW	CPO020RDB	107	684	441	381	202	164	100	122	502
Popular 20-26kW	CPO026RDB	112	684	441	381	202	164	100	122	502
Popular 26-35kW	CPO035RDB	115	684	441	381	202	164	100	122	502
Popular 35-44kW	CPO044RDB	182	815	470	531	202	154	96	123	620
Popular 44-58kW	CPO058RDB	190	815	470	531	253	154	96	123	620
Popular 58-73kW	CPO073RDB	210	873	530	525	253	155	96	123	670
Popular 80-100kW	CPO100RDB	300	1052	625	745	253	139	112	130	832

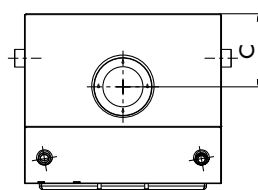
Dimensions (mm)



Front View



Side View



Top View

Enviromax / Silver Range Technical Specification



	Combi Boilers		Sealed System Boilers			Heat Only Boilers					
Heat Output	kW		12-20+20-26	26-35	35-44	12-18	12-20+20-26	26-35	35-44+44-58	58-73	80-100
Max. BTU/h ('000)	50-90	90-120	50-90	90-120	120-150	40-60	50-90	90-120	120-200	200-250	270-340
CONNECTIONS	-	-	-	-	-	-	-	-	-	-	-
Heating Flow	22 mm	28 mm	22 mm	28 mm	1½" BSP	1" BSP	1" BSP	1" BSP	1½" BSP	1½" BSP	2" BSP
Heating Return	22 mm	28 mm	1" BSP	1" BSP	1½" BSP	1" BSP	1" BSP	1" BSP	1½" BSP	1½" BSP	2" BSP
Mains Cold Feed (Copper)	15 mm	15 mm	15 mm	15 mm	15 mm	-	-	-	-	-	-
Hot Water Delivery (Copper)	15 mm	15 mm	-	-	-	-	-	-	-	-	-
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)	15 mm	15 mm	15 mm	15 mm	15 mm	-	-	-	-	-	-
Condensate Trap	22 mm	PLASTIC	22 mm PLASTIC			-	-	-	-	-	-
CIRCULATING PUMP	25/60	25/60	25/60	25/60	25/80	-	-	-	-	-	-
Domestic Hot Water Plate Heat Exchanger	25 plate	31 plate	-	-	-	-	-	-	-	-	-
Integral Expansion Vessel Normal Capacity	12 litres	12 litres	12 litres	12 litres	18 litres	-	-	-	-	-	-
Expansion Vessel Pre-charge Pressure	1 bar	1 bar	1 bar	1 bar	1 bar	-	-	-	-	-	-
Low Pressure Water Switch?	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Filling Loop Included?	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
WATER CONTENT	-	-	-	-	-	-	-	-	-	-	-
Boiler (Litres)	24	24	24	24	45	24	24	24	43.5	54	75
Primary Tank	Combi/Combipac (Litres)	40	40	-	-	-	-	-	-	-	-
	Slimline Combi (Litres)	11	11	-	-	-	-	-	-	-	-
D.H.W. GUIDE PERFORMANCE*	-		-	-	-	-	-	-	-	-	-
in litres/min (120 litre draw-off at 40°C Δt.)	16	20	-	-	-	-	-	-	-	-	-
Combi / Combipac	16/18	20	-	-	-	-	-	-	-	-	-
Slimline Combi	12/14	16	-	-	-	-	-	-	-	-	-
FLUE (INDOOR BOILERS)	-	-	-	-	-	-	-	-	-	-	-
Balanced Flue Assembly (mm)	125 (5")	125 (5")	125 (5")	125 (5")	150 (6")	125 (5")	125 (5")	125 (5")	150 (6")	180 (7")	200 (8")
Conventional Flue Assembly (mm)	100 id.	100 id.	100 id.	100 id.	150 id.	100 id.	100 id.	100 id.	150 id.	180 id.	180 id.
Max. Low Level Flue Length (metres)	3	3	3	3	3	3	3	3	3	3	3
Max. High Level Flue Length (metres)	6	6	6	6	4	6	6	6	4	4	4
Max. Vertical Level Flue Length (metres)	6	6	6	6	4	6	6	6	4	4	4
INTEGRAL FLUES ON HEATPAC MODELS	-	-	-	-	-	-	-	-	-	-	-
HEATING SYSTEM (SEALED)	Fit in accordance with BS 7074 Part 1, BS 5449, OFTEC standards and all other relevant legislation.										
Max. Operating Pressure	2.5 bar		2.5 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	Min. 1 bar - Max. 10 bar (for user comfort, we recommend pressure at tap to be between 2 and 5 bar).										
	Limescale excess: When over 150/200 ppm, fit appropriate scale reducer.										
WATER SIDE RESISTANCE	Flow Rate To Give A Nominal Output At 10k Differential										
							20kw	26kw	35kw		
	Flow Rate Measured (Kg h-1)						1642	2135	2874		
	Waterside Resistance (mbar)						0.18	0.18	0.18		
	Flow Rate To Give A Nominal Output At 20k Differential										
							20kw	26kw	35kw		
	Flow Rate Measured (Kg h-1)						870	1131	1523		
	Waterside Resistance (mbar)						0.19	0.19	0.19		
PRESSURE JET OIL BURNERS	RIELLO RDB 2.2 up to C44 & RIELLO RDB 4.2 from C58 to C100										
FUEL	C2 Kerosene										
ELECTRICAL SUPPLY	230V AC 50Hz 5A										
FROST THERMOSTATS	BOILER SAFETY LIMIT, FROST AND OVER-RUN THERMOSTATS FITTED ON ALL HEATPAC MODELS										
FROST STAT FITTED TO ALL OUTDOOR MODELS											
Boiler Central Heating Control	60°C - 80°C		60°C - 80°C			60°C - 80°C					
Boiler Safety Limit	110°C		110°C			110°C					
Tank (DHW)- Fixed	78°C										
Early Alert - Fixed	87°C										
Over-run - Fixed	93°C		87°C			87°C (Heatpac, Slimline Heatpac & Kitchen only)					

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

Silver Range Condensing Utility & System



Features

Utility

- Compact design - fits under standard kitchen worktop.
- White casing finish.
- Patented heat exchanger design.
- Multiple tapping points for ease of installation.
- Front service access.
- Fully insulated and acoustically designed for ultra quiet operation.
- Multi directional flue options.
- High performance Riello RDB burner complete with full diagnostic control box.
- Optional condensate pump.
- Three models in outputs from 12kW to 35kW.

System (as above plus the following)

- Low pressure switch protects boiler in the event of system water loss.
- Factory-fitted expansion vessel and circulating pump
- Three models in outputs from 12kW to 35kW.



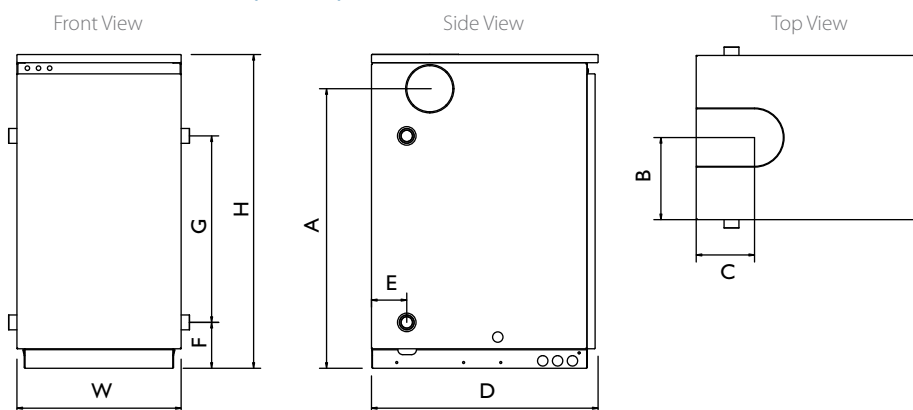
Specification

Model Silver	Sales Code	Weight kg	Dimensions(mm)									
			H	W	D	A	B	C	E	F	G	
Utility 12-20kW	CUT020NFT	125	845	442	610	755	221	157	94	125	502	
Utility 20-26kW	CUT026NFT	128	845	442	610	755	221	157	94	125	502	
Utility 26-35kW	CUT035NFT	131	845	442	610	755	221	157	94	125	502	
System 12-20kW	FSS020NKT	143	845	442	610	755	221	157	94	125	-	
System 20-26kW	FSS026NKT	146	845	442	610	755	221	157	94	125	-	
System 26-35kW	FSS035NKT	149	845	442	610	755	221	157	94	125	-	



Circulating Pump (System Only)

Dimensions (mm)



Accessories ACCENVMP Condensate Pump Kit

Silver Range Condensing Silverpac & Boilerhouse



Silverpac Features

- High quality weather-proof casing.
- 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 Riello RDB burner complete with full diagnostic control box.
- Three models in outputs from 12kW to 35kW.



Silverpac Specification

Model Enviromax	Sales Code	Weight kg	Dimensions (mm)						
			H	W	D	C	A	I	J
Silverpac 12-20kW	FSP020HPK	131	945	720	625	180	795	351	133
Silverpac 20-26kW	FSP026HPK	154	945	720	625	180	795	351	133
Silverpac 26-35kW	FSP035HPK	158	945	720	625	180	795	351	133

Dimensions are same as Enviromax Heatpac



Boilerhouse Features

- Patented heat exchanger design.
- Built from premium quality steels.
- Compact design.
- Multiple tapping points for ease of installation.
- Sturdy well insulated casing minimise heat loss.
- High performance Riello RDB burner complete with full diagnostic control box.
- Three models in outputs from 12kW to 35kW.



Boilerhouse Specification

Model Enviromax	Sales Code	Weight kg (incl. burner)	Dimensions(mm)							
			H	W	D	BURNER DEPTH	C	E	F	G
Boilerhouse 12-20kW	FSB020RDB	107	684	441	381	202	164	100	122	502
Boilerhouse 20-26kW	FSB026RDB	112	684	441	381	202	164	100	122	502
Boilerhouse 26-35kW	FSB035RDB	115	684	441	381	202	164	100	122	502

Dimensions are same as Enviromax Popular

Condensing Flue Kits

Flues are a critical part of a boiler installation. A correctly installed flue will ensure clean and efficient operation of the boiler. Firebird offer a range of high quality stainless steel and plastic flue kits that ensure optimum boiler performance and longer design life.

NB: Only Firebird-approved flue kits and accessories may be used on Firebird boilers. Use of unapproved flue kits may invalidate the boiler warranty policy.

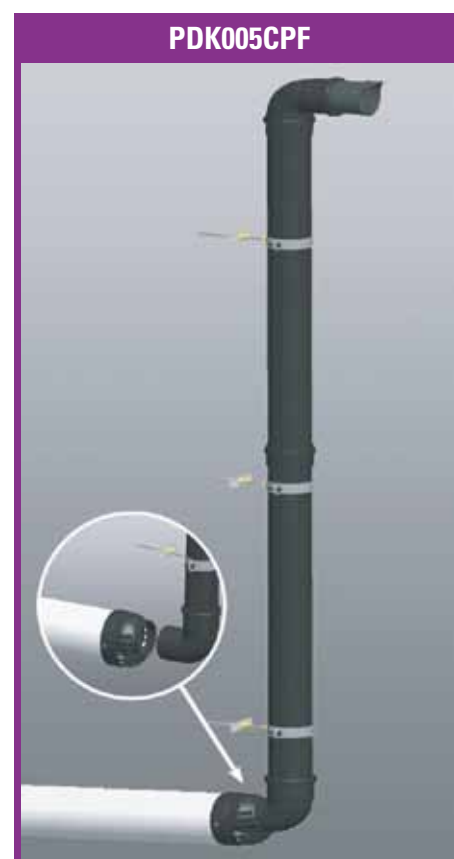


PLAS-FIT PLASTIC FLUE KITS

Firebird was the first oil boiler manufacturer to introduce plastic flue kits in the UK market. The Plas-Fit range of plastic balanced flue kits offer versatility, ease of installation and a quality finish which will appeal to householders and installers alike. Low-level and High-level Plas-Fit flue kits are currently available for use on the 12 to 35kW Enviromax range of condensing boilers.

NB: Plas-Fit flues can not be used on the Silver condensing range.

Sales Code	Product Description
12-35kW	KITS (125mm dia)
CPF005KIT	PLAS-FIT Low Level Balanced Flue Kit (1 metre)
CPF005VHL	PLAS-FIT Vertical Balanced Flue Kit (3 metres)
CPF005HHL	PLAS-FIT High Level Flue Kit
12-35kW	ACCESSORIES (125mm dia)
CPF005EXA	PLAS-FIT Extension, 1000mm
CPF005EXB	PLAS-FIT Extension 500mm
CPF455ELB	PLAS-FIT 45 degree Elbow (pair)
CPF905ELB	PLAS-FIT 90 degree Elbow
CPF005WBK	Wall Bracket to suit PLAS-FIT
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



Condensing Stainless Steel Flue Kits & Accessories

Flues are a critical part of a boiler installation. A correctly installed flue will ensure clean and efficient operation of the boiler. Firebird offer a range of high quality stainless steel flue kits that ensure optimum boiler performance and longer design life. Three types are available:

- Low Level Flue
- High Level Flue (Vertical & Horizontal)
- Conventional Flue

NB: Only Firebird-approved flue kits and accessories may be used on Firebird boilers. Use of unapproved flue kits may invalidate the boiler warranty policy.



LOW LEVEL FLUE KITS

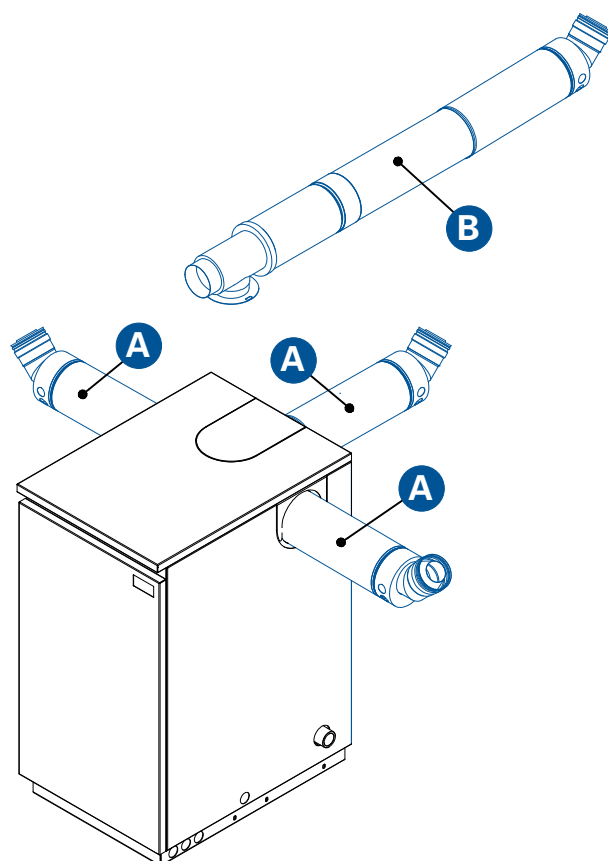
Low level flue kits have become popular in recent years due to their convenient size and ease of installation. When installing a condensing low level flue, consideration should be given to the discharge of the condense plume as it may cause a nuisance to neighbouring properties. In some cases a plume dispersal kit may be advisable.

Sales Code	Product Description
20-35kW	KITS AND EXTENSIONS (125mm dia)
A* CBF005KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
A* 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)
A* CBF006KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
A* 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)
A* CBF007KIT	Low Level Flue Kit 380-600mm Stainless Steel Guard inc.
A* 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

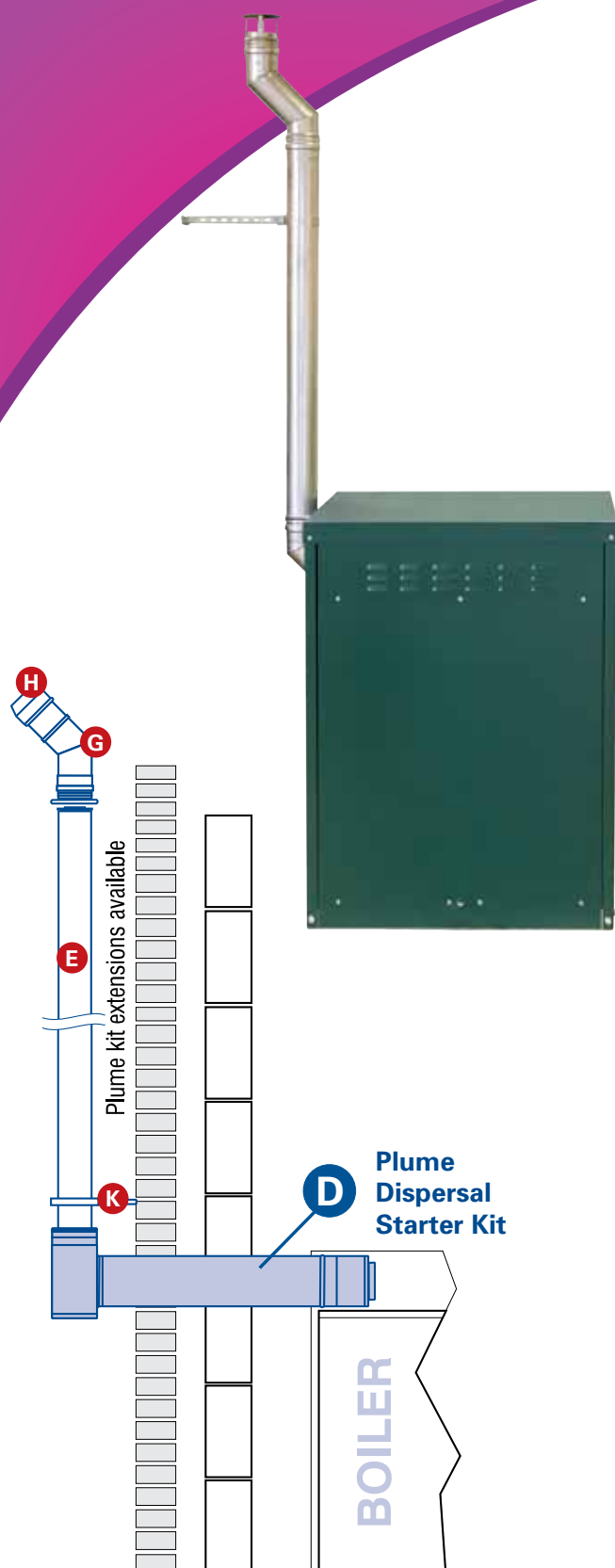
All low level flue kits contain:

- Telescopic balanced flue with Venturi Insert
- Terminal Guard
- Deflector Plate
- Silicone Lubricant
- Jubilee Clip for Air Snorkel
- Assembly Instructions

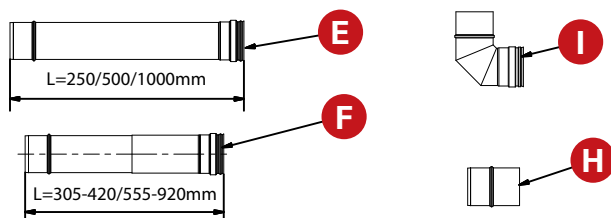


PLUME DISPERSAL KITS

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 either used with a kit or retro-fitted to an existing concentric flue.



Other components available



Sales 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 PDK000HLE	Terminal Insert
I PDK090BND	90 degree Bend
J PDK000CHC	Cowl
K PDK000WBK	Wall Bracket
PDK080POP	Boiler Plume Flue Adaptor

44-58kW	KIT AND EXTENSIONS (100mm dia)
D PDK150KIT	Plume Dispersal Balanced Flue Starter Kit
E PDK256KIT	250mm length
E 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
I PDK906BND	90 degree Bend
J PDK006CHC	Cowl
K PDK006WBK	Wall Bracket
PDK100POP	Boiler Plume Flue Adaptor

73kW	KIT AND EXTENSIONS (125mm dia)
D PDK180KIT	Plume Dispersal Balanced Flue Starter Kit
E PDK257KIT	250mm length
E PDK507KIT	500mm length
E PDK1007KT	1000mm length
F PDK427KIT	305/420 adjustable length
F PDK927KIT	555/920 adjustable length
G PDK457BND	45 degree Bend
H PDK007HLE	High Level Elbow Terminal
I PDK907BND	90 degree Bend
J PDK007CHC	Cowl
K PDK007WBK	Wall Bracket
PDK125POP	Boiler Plume Flue Adaptor

100kW	KIT AND EXTENSIONS (150mm dia)
D PDK200KIT	Plume Dispersal Balanced Flue Starter Kit
E PDK258KIT	250mm length
E PDK508KIT	500mm length
E PDK1008KT	1000mm length
F PDK428KIT	305/420 adjustable length
F PDK928KIT	555/920 adjustable length
G PDK458BND	45 degree Bend
H PDK008HLE	High Level Elbow Terminal
I PDK908BND	90 degree Bend
J PDK008CHC	Cowl
K PDK008WBK	Wall Bracket
PDK150POP	Boiler Plume Flue Adaptor

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.

Sales Code	Product Description
12-35kW	KITS & EXTENSIONS (125mm dia) (White Coated)
M* HLE005HHL	1075mm High Level Horizontal Flue Kit
N* HLE005VHL	3 metre Vertical Balance Flue Kit
P HLE005EXA	1000mm High Level/Vertical Extension
P HLE005EXB	500mm High Level/Vertical Extension
P HLE005EXC	250mm High Level/Vertical Extension
Q HLE005EXD	330mm Adjustable Extension
R HLE455ELB	45 degree Bend
S HLE905ELB	90 degree Bend
COF005PFL	Pitch Flashing
COF005FFL	Flat Flashing
HLF005WBK	Wall Bracket

44-58kW	KITS & EXTENSIONS (150mm dia) (Stainless Steel)
M* HLF006HHL	1075mm High Level Horizontal Flue Kit
N* HLF006VHL	3 metre Vertical Balance Flue Kit
P HLF006EXA	1000mm High Level/Vertical Extension
P HLF006EXB	500mm High Level/Vertical Extension
P HLF006EXC	250mm High Level/Vertical Extension
Q HLF006EXD	330mm Adjustable Extension
Q HLF006EXE	555mm/920mm Adjustable length
R HLF456ELB	45 degree Bend
S 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
N* 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
Q HLF007EXD	305mm/420mm Adjustable length
Q 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
Q HLF008EXD	250mm Adjustable Extension
Q HLF008EXE	500mm Adjustable Extension
R HLF458ELB	45 degree Bend
S HLF908ELB	90 degree Bend
HLF008WBK	Wall Bracket

* M - High Level Horizontal Flue Kit

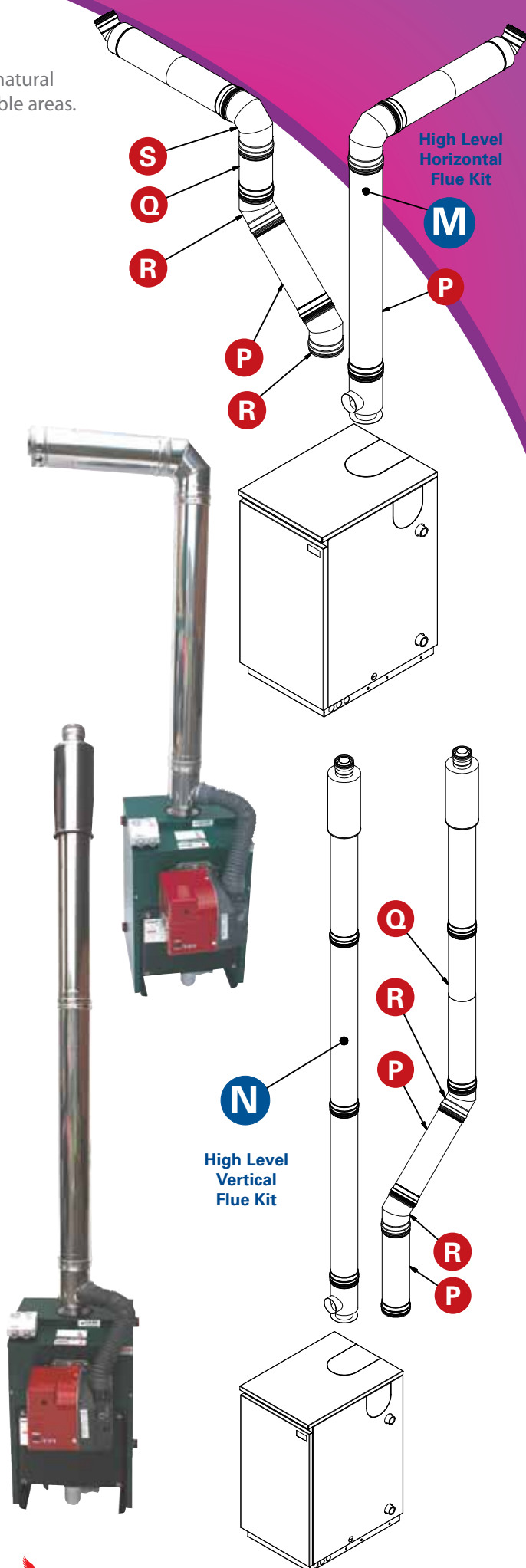
All high level horizontal flue kits contain:

- Boiler Adaptor
- Horizontal Terminal - 20-35kW = 500mm Fixed, 44-100kW = 300-500mm Adj.
- 90° Bend
- Wall Seal
- Assembly Instructions
- 1000mm Vertical Length
- Jubilee Clip for air snorkel
- Silicone Lubricant

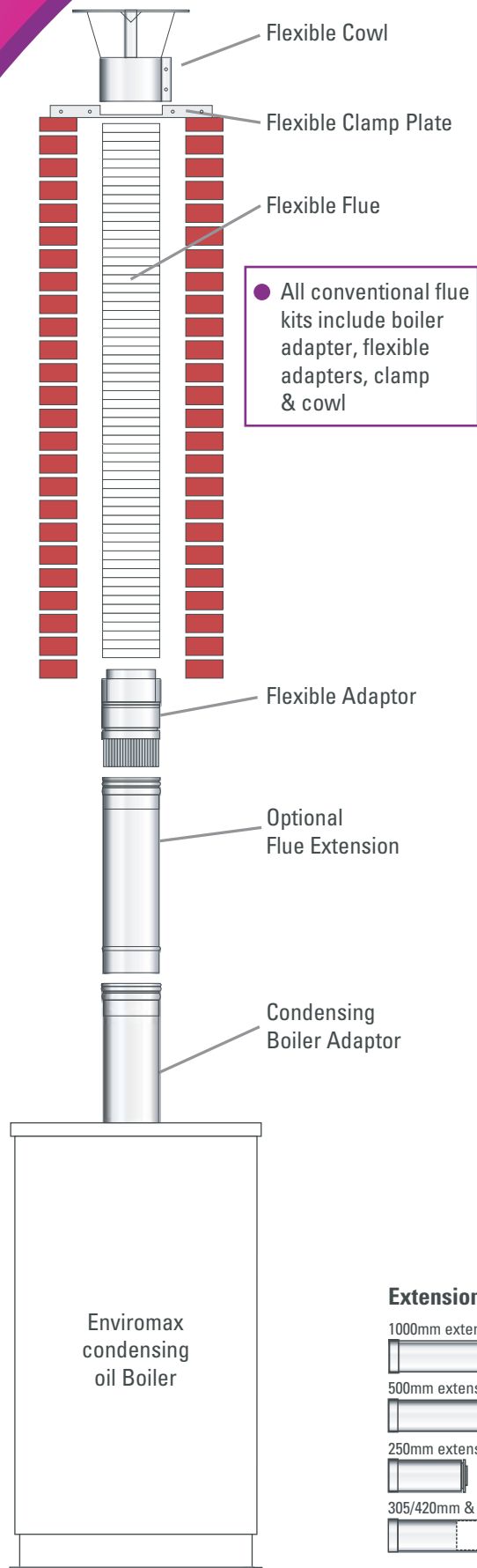
* N - Vertical Flue Kit

All vertical flue kits contain:

- Boiler Adaptor
- 2 x 1000mm Lengths
- Storm Collar
- Silicone Lubricant
- Assembly Instructions
- 1000mm length including Terminal
- Rain Cowl
- 2 x Wall Brackets
- Jubilee Clip for air snorkel



CONVENTIONAL FLUE KITS



Sales Code Product Description

12-35KW KITS & EXTENSIONS (100mm dia)
(Kit Contents include c/w 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
ECF045ELB	45° Bend
ECF100WBK	Wall Bracket

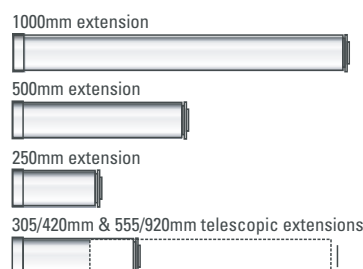
44-58kW KITS & EXTENSIONS (150mm dia)
(Kit Contents include c/w boiler and flex adaptor, clamp and cowl)

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

73-100kW KITS & EXTENSIONS (180mm dia)
(Kit Contents include c/w 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

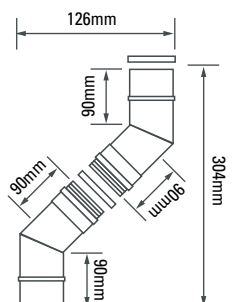
Extensions



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.































Oil Boiler Spare Parts

Sales Code	Description	Sales Code	Description	Sales Code	Description
Burner & Burner Parts		ZE20087025	Capacitor G3B/G5/G10	ZE20031996	Fuel Pump G3B/G5/G10
BRN070RB2	Burner RDB, 20kW	ZE20071576	Capacitor RDB 2.2, 4.5 uF	ZE20030953	Fuel Pump RDB
BRN090RB2	Burner RDB, 26kW	ZE20087035	Capacitor RDB 2.2, 4.0 uF	ZE3008794	High Voltage Leads RDB 2.2 (6pcs)
BRN120RB2	Burner RDB, 35kW	ZE20081251	Capacitor RDB 3.2/4.2	ZE3006911	Hydraulic Ram Short
BRN150RB3	Burner RDB, 44kW	ZE3003602	Connector 3/8 x 1/4	ZE3007971	Motor Mectron
BRN200RB4	Burner RDB, 58kW	ZE3001156	Control Box 530 se	ZE20071577	Motor RDB 2.2
BRN250RB4	Burner RDB, 73kW	ZE3008652	Control Box RDB	ZE3008964	Motor RDB 3.2/4.2
BRN070DGT	Digital Burner RDB, 20kW (Firebird boiler only)	ZE20035388	Control Box RDB - Digital	ZE3007162	O-ring, Fuel Pump MTM.3-5 (10pcs)
BRN090DGT	Digital Burner RDB, 26kW (Firebird boiler only)	ZE3000443	Drive Coupling Nylon (10pcs)	ZE3002280	Photocell G3B/G5/G10
BRN120DGT	Digital Burner RDB, 35kW (Firebird boiler only)	ZE3007513	Electrode Assembly RDB 2.2/3.2	ZE3008646	Photocell RDB
BRN090G5X	Analogue Burner G5X 90k	ZE3005721	Electrode Group Short Head	ZE3005723	Pipe MTM 3
Burner Parts		ZE3008860	Electrode Group (RBS133) RDB	ZE3008878	Seal Kit RDB
ZE3002507	Blast Tube, T1 RDB	ZE3005708	Fan Wheel Mectron	ACC000SSH	Small Snorkel Hose
ZE3002447	Blast Tube, T3 RDB	ZE3008653	Filter & O-ring	ACC000JUB	Jubilee Clip, Snorkel Hose
ZE3006001	Blast Tube, LD3 G3B/G5/G10	ZE3005787	Flange Gasket G3B/G5/G10	ZE3002279	Solenoid Coil G3B/G5/G10
		ZE3008512	Flange Gasket RDB	ZE3008648	Solenoid Coil RDB
		ZE3005720	Flexible Oil Line 900mm RDB	ZE20036083	Conversion Kit
		ZE3006384	Front Piece (RDB Flange)	ZE3007589	5 Pin Male Lead
		ZE3007814	Fuel Line Tube (10pcs)	ZE20036083	5 Pin Female Plug

Sales Code	Description
Thermostat Parts	
ACC000STA	Control Stat (50°/80°C)
ACC000THR	Dual Thermostat D5 Heatpac
ACC000DST	Dual Thermostat P5 Popular
ACC000EAS	Early Alert Stat (87° C)
ACC000FST	Frost Stat TLM 2557 (models up to 2008)
ACC000TDF	Frost Stat - Thermdisc (2008 models onwards)
ACC000LMT	High Limit Stat (110° C)
ACC000SQL	High Limit Stat, Super Q (AAM)
ACC000OHS	Overheat Stat (87° C)
ACC000RTS	Relay Tank Stat, Combi (78° C)
ACCCOMPKT	Stat Pocket 000949 4 pocket
ACC003PKT	Stat Pocket DIA 15 x 16 3 pocket

Electrical Parts	
ACC000ETM	Combi Twin Timer Kit - Electronic
ACC000CLK	Time Clock (Single)
ACC000ECG	PCB - Non Combi
ACC000PCB	PCB Board, Combi
ACC000PSW	Pressure Switch
ACC000RLY	Relay 230 Vac
ACC000BAS	Relay Base 11 pin
ACC000RTP	Flow Switch Probe Thermistor (Red)
ACC000WTP	Boiler Thermistor Probes (White)
ACC000WTP	Tank Thermistor Probes (White)

Sales Code	Description		Sales Code	Description	
Plumbing					
ACC COM MAC	Air Vent 1/8" Manual		ACC 018 PVL	Expansion Vessel	
			18 litre		
ACC COM AAV	Air Vent Auto		ACC 012 WSH	Teflon Washer 12.5 x 18.5 x 1.5mm red	
			ACC 017 WSH	Teflon Washer 17 x 24 x 1.5mm red	
ACC 022 VAL	Ball Valve - 22mm		ACC 000 PHW	PHE Washer Set	
ACC 000 PCV	Check Valve Nylon		ACC 015 FCV	Filling Loop Check Valve	
ACC 034 MMC	Check Valve 3/4" Brass		ACC 000 FLH	Filling Loop Hose	
	Male/Male		400mm		
ACC 034 MFC	Check Valve 3/4" Brass		ACC BRS FSW	Flowswitch, Sika Mark 1	
	Male/Female		ACC COM FSW	Flowswitch, Sika Mark 2	
ACC 034 FMC	Check Valve 3/4" Brass			VKX15MIFIREB03	
	Female/Male		ACC COM DCV	Non Return Double Check Valve	
ACC 130 PMP	HE Circulating Pump			15mm	
	UPS25-80 130		ACC 025 PHE	Plate Heat Exchanger - 25	
ACC 180 PMP	Circulating Pump				
	UPS25-80 180		ACC 031 PHE	Plate Heat Exchanger - 31	
ACC ENV PMP	Condensate Pump				
ACC 000 TRP	Condensate Trap		ACC COM PRG	Pressure Gauge	
	& Adaptor			Combi/System	
ACC COM HOS	Expansion Vessel		ACC COM SRV	Pressure Release Valve	
	Flexible Hose				
ACC 012 PVL	Expansion Vessel		ACC 022 PIV	Pump Isolating Valve	
	12 litre		22mm		
ACC 014 PVL	Expansion Vessel		ACC 022 PNR	Pump Isolating Valve	
	14 litre		c/w Non Return Check Valve		
ACC COM TMV	Thermostatic Mixing Valve,				
	Combi 15mm				

Other Parts					
ACC 035 GSK	Combustion Door Insulation C20/C26/C35		ACC 090 GSK	Combustion Door Insulation 50/70/90	
ACC 044 GSK	Combustion Door Insulation C44/C58		ACC 120 GSK	Combustion Door Insulation 120	
ACC 073 GSK	Combustion Door Insulation C73		ACC 150 GSK	Combustion Door Insulation 150	
ACC 100 GSK	Combustion Door Insulation C100		ACC 200 GSK	Combustion Door Insulation 200	
ACC 035 GRA	Graphite Board C20/C26/C35		ACC 250 GSK	Combustion Door Insulation 250	
ACC 044 GRA	Graphite Board C44/C58		ACC 310 GSK	Combustion Door Insulation 310	
ACC 073 GRA	Graphite Board C73		ACC 000 KEY	Heatpac Key	
ACC 100 GRA	Graphite Board C100		ACC 000 LCK	Heatpac Lock	

Controllers					
ACC WHT CTR	Weather Compensation		ACC 000 CTR	Cascading Controller	
	Controller				

Solar Thermal Systems

Firebird's range of solar thermal systems is arguably the most extensive on the market and offers customers a wide choice of collectors, system configurations and accessories. Designed and manufactured to Firebird's exacting standards, our solar systems are second to none in terms of performance, durability and efficiency. All our solar systems have been placed through rigorous testing to ensure the highest standards have been achieved.



CPK7210-N Flat Panel Collector



TZ58-1800 Heat Pipe Solar Collector



CVSKC-10 Vacuum Tube Collector

Solar thermal systems can deliver up to 70% of the hot water requirements for an average household in Ireland. Installation of solar energy on a larger scale, ie. commercial, can make a great contribution to commercial energy costs.

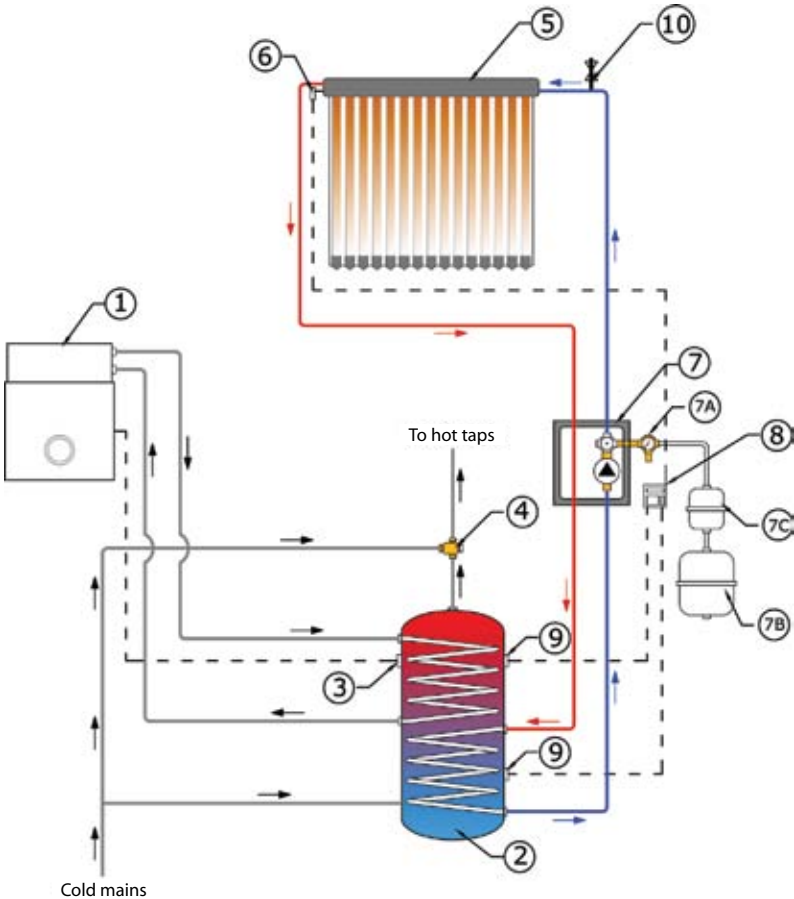
By using solar energy to heat hot water, you will be helping to reduce our dependence on fossil fuels, while improving the energy efficiency and potentially the value of your home. A typical domestic solar hot water system can save in excess of a tonne of CO₂ per annum.

1	Firebird Condensing Boiler	7A	Pressure Relief Valve
2	Unvented Cylinder	7B	Expansion Vessel
3	Temp. Sensor (after heating)	7C	Intermediate Vessel (if needed)
4	Mixing Valve	8	Controller
5	Solar Collector	9	DHW Tank sensor
6	Collector Temp. Sensor	10	Air Vent
7	Pump Station		



No. of Persons	No. of collectors	Tank Size (l)
2-4	2 x CPK7210-N Flat Panel collectors 2 x CVSKC-10 Vacuum Tube collectors 30 - 40 TZ58-1800 heat pipes	200
4-6	3 x CPK7210-N Flat Panel collectors 3 x CVSKC-10 Vacuum Tube collectors 40 - 60 TZ58-1800 heat pipes	300

Guide to Solar Thermal Systems available from Firebird.





Solar Collector Kits

The solar kits below include collector(s), roof mounting fixtures for pitched roof, controller, pump station, anti-scald mixing valve, air vent & isolating valve, glycol solar anti-freeze and 2 x 1m flexi pipe fittings.

Sales Code Description

FLAT PANEL ON-ROOF

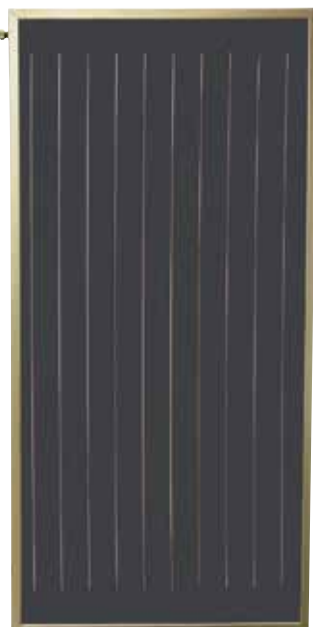
SOL950FKT	Flat Panel On-Roof Kit - 1 Panel for pitched roof
SOL951FKT	Flat Panel On-Roof Kit - 2 Panels for pitched roof
SOL952FKT	Flat Panel On-Roof Kit - 3 Panels for pitched roof
SOL953FKT	Flat Panel On-Roof Kit - 1 Panel for flat roof
SOL954FKT	Flat Panel On-Roof Kit - 2 Panels for flat roof
SOL955FKT	Flat Panel On-Roof Kit - 3 Panels for flat roof

FLAT PANEL IN-ROOF

SOL922TRG	Flat Panel In-roof Kit for Tiled Roof - 2 Panels
SOL923TRG	Flat Panel In-roof Kit for Tiled Roof - 3 Panels
SOL922SRG	Flat Panel In-roof Kit for Slate Roof - 2 Panels
SOL923SRG	Flat Panel In-roof Kit for Slate Roof - 3 Panels

VACUUM TUBE ON-ROOF

SOL960VKT	Vacuum Tube Kit - 1 tube sets for pitched roof
SOL961VKT	Vacuum Tube Kit - 2 tube sets for pitched roof
SOL962VKT	Vacuum Tube Kit - 3 tube sets for pitched roof
SOL963VKT	Vacuum Tube Kit - 1 tube sets for flat roof
SOL964VKT	Vacuum Tube Kit - 2 tube sets for flat roof
SOL965VKT	Vacuum Tube Kit - 3 tube sets for flat roof



CPK7210-N Flat Panel Collector

Firebird's CPK7210-N Flat Panel Collector is one of the most efficient collectors in the world, with an optical efficiency of 81.8%. One of the unique features of the CPK7210-N is that the collector base is extruded from a single aluminium sheet thus removing the need for welds, joints or glueing at the corners.

Other features:

- Glass is a special tempered solar glass.
- Absorber is constructed from a single sheet of Tinox™ selective absorber coating.
- Heat transfer pipes behind the absorber are ultrasonically welded along the entire length to ensure optimal heat transfer.
- 50mm of mineral wool insulation.

Sales Code Description

SOL100FPC	CPK7210-N Flat Panel Collector
------------------	---------------------------------------



CVSKC-10 Vacuum Tube Collector

The CVSKC-10 Vacuum Tube Collector is a U-pipe direct flow evacuated tube, often referred to as a 'Sydney' tube. They are amongst the most efficient solar collector designs due to the CPC reflector aluminium plate behind the tubes. It reflects solar radiation back onto the absorber.

Other features:

- Delivered assembled to cut down installation time.
- Co-axial glass tubes with excellent vacuum ~5 Pascals.
- Transfer manifold insulated with mineral wool insulation.
- Light weight construction for ease of handling.

Sales Code Description

SOL150VTC	CVSKC-10 Vacuum Tube Collector
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TZ58-1800 Heat Pipe Collector

The TZ58-1800 Heat Pipe Solar Collectors offer an optimum performance to price ratio. The tubes are highly efficient due to a round shaped absorber design so that they capture the solar energy throughout the day.

Other features include:

- High build quality - aluminium manifold design, nickel plated condenser head, borosilicate glass.
- Manifold can be installed initially and the tubes added later during commissioning (avoiding the lifting of heavy items onto the roof).
- Reinforced mounting kit manufactured to Firebird's specification.

TZ58-1800 Heat Pipe Solar Collector

Includes roof fixtures (Pitched on-roof mounting kit)

Sales Code	Description
SOL820VTS	20 Tube Heat Pipe Set
SOL830VTS	30 Tube Heat Pipe Set
SOL174FRK	Flat on-roof mounting kit (20 Tube Set)
SOL172FRK	Flat on-roof mounting kit (30 Tube Set)



TZ58-1800 Heat Pipe Solar Collector Kits

Inc. solar collector, roof fixtures, expansion vessel, glycol, solar controller and pump station

Pitched on-roof kit

Sales Code	Description
SOL822KIT	20 Tube Heat Pipe Kit
SOL832KIT	30 Tube Heat Pipe Kit
SOL842KIT	40 Tube Heat Pipe Kit
SOL852KIT	50 Tube Heat Pipe Kit
SOL862KIT	60 Tube Heat Pipe Kit

Flat on-roof kit

Sales Code	Description
SOL822KIT X 1, SOL174FRK X 1	20 Tube Heat Pipe Kit
SOL832KIT X 1, SOL172FRK X 1	30 Tube Heat Pipe Kit
SOL842KIT X 1, SOL174FRK X 2	40 Tube Heat Pipe Kit
SOL852KIT X 1, SOL174FRK X 1, SOL172FRK X 1	50 Tube Heat Pipe Kit
SOL862KIT X 1, SOL172FRK X 2	60 Tube Heat Pipe Kit

Technical Specification		CPK7210-N Flat Panel	TZ58-1800 Heat Pipe		CVSKC-10 Vacuum Tube
			20 tube set	30 tube set	
Outer dimensions:	Height [mm]	2038	2020	2020	1645
	Width [mm]	1039	1825	2655	1115
	Depth [mm]	98	155	155	107
Tube dimensions	Diameter [mm]	-	58	58	37
	Length [mm]	-	1800	1800	1550
Weight	[kg]	38	78	115	31
Gross collector area	[m ²]	2.11	3.507	5.005	1.83
Aperture area	[m ²]	1.88	1.867	2.791	1.59
Max operating pressure	[bar]	10	6	6	10
Stagnation temperature	[°C]	216	200	200	286
Angle of inclination permitted		15° to 75°	15° to 75°	15° to 75°	15° to 75°
Performance data *					
Zero-loss collector efficiency	η_0	74.1%	73.4%	73.4%	60.5%
Collector heat loss coefficient, a1	[W/m ² K]	3.705	1.529	1.529	0.850
Collector performance ratio, a2	[W/m ² K ²]	0.015	0.0166	0.0166	0.010
Absorption		> 95%	> 94 %	> 94 %	> 96%
Emission		< 5%	< 7%	< 7%	< 6%
Annual energy yield	[kWh/m ²]	> 525	> 525	> 525	> 529

* All based on aperture area.

FIXING OPTIONS

PITCHED ROOF

All Firebird solar collectors can be installed on a normal slate or tiled roof using our weather-proof aluminium mounting frame kits. Mounting kits are constructed from robust materials and come with easy to follow instructions. Mounting kits for CPK7210-N Flat Panel collectors and CVSKC-10 Vacuum Tube collectors are available for double and single collector configurations. Mounting kits for TZ58-1800 Heat Pipe Solar collectors are supplied for sets of 20 and 30 tubes.

Sales Code	Description
SOL101FMT	On-roof Mounting Kit - 2 CPK7210-N Flat Panel collectors
SOL103FMT	On-roof Mounting Kit - 1 extra CPK7210-N Flat Panel Collector
SOL151VMT	On-roof Mounting Kit - 2 CVSKC-10 Vacuum Tube collectors
SOL153VMT	On-roof Mounting Kit - 1 extra CVSKC-10 Vacuum Tube Collector

Sales Code	Description
SOL101FMT	On-roof Mounting Kit - 2 CPK7210-N Flat Panel collectors
SOL103FMT	On-roof Mounting Kit - 1 extra CPK7210-N Flat Panel Collector
SOL151VMT	On-roof Mounting Kit - 2 CVSKC-10 Vacuum Tube collectors
SOL153VMT	On-roof Mounting Kit - 1 extra CVSKC-10 Vacuum Tube Collector



IN-ROOF

An in-roof installation kit is available for CPK7210-N Flat Panel collectors. Note that in-roof installation is not possible with CVSKC-10 Vacuum Tube collectors or TZ58-1800 Heat Pipe Solar collectors. With an in-roof kit the collectors are set lower on the roof giving a more aesthetically pleasing finish. Our in-roof kit comes with side, top and bottom flashings, collector mounting rails, coach bolts, rubber seals and installation instructions. Available in double and single collector configurations - For slate roofs, order SOL513SRS and SOL511TRF.

Sales Code	Description
SOL511TRF	In-Roof Mounting Kit Tile Roof - 2 CPK7210-N Flat Panel collectors
SOL512TRF	In-Roof Mounting Kit Tile Roof - 1 extra CPK7210-N Flat Panel Collector
SOL513SRS	In-Roof Soaker Kit Slate Roof - Soakers only

Sales Code	Description
SOL511TRF	In-Roof Mounting Kit Tile Roof - 2 CPK7210-N Flat Panel collectors
SOL512TRF	In-Roof Mounting Kit Tile Roof - 1 extra CPK7210-N Flat Panel Collector
SOL513SRS	In-Roof Soaker Kit Slate Roof - Soakers only



FLAT ROOF INSTALLATION

If solar collectors have to be installed on a flat roof or surface, then a flat roof mounting kit is required. Flat roof kits are available for all collectors and come with mounting frame, coach bolts, rubber seals and installation instructions. Available in double and single collector configurations.

Sales Code	Description
SOL102FMT	Flat Roof Kit - 2 CPK7210-N Flat Panel collectors
SOL104FMT	Flat Roof Kit - 1 extra CPK7210-N Flat Panel Collector
SOL152VMT	Flat Roof Kit - 2 CVSKC-10 Vacuum Tube collectors
SOL154VMT	Flat Roof Kit - 1 extra CVSKC-10 Vacuum Tube Collector
SOL174FRK	Flat Roof Kit - 20 TZ58-1800 Heat Pipe Solar Collector
SOL172FRK	Flat Roof Kit - 30 TZ58-1800 Heat Pipe Solar Collector

Sales Code	Description
SOL102FMT	Flat Roof Kit - 2 CPK7210-N Flat Panel collectors
SOL104FMT	Flat Roof Kit - 1 extra CPK7210-N Flat Panel Collector
SOL152VMT	Flat Roof Kit - 2 CVSKC-10 Vacuum Tube collectors
SOL154VMT	Flat Roof Kit - 1 extra CVSKC-10 Vacuum Tube Collector
SOL174FRK	Flat Roof Kit - 20 TZ58-1800 Heat Pipe Solar Collector
SOL172FRK	Flat Roof Kit - 30 TZ58-1800 Heat Pipe Solar Collector



SOLAR CONTROLLERS & PUMP STATIONS

CONTROLLER

The Firebird solar controller ensures the efficient operation of the solar system, managing the efficient transfer of the solar energy from the collectors to the water storage tank. The controller is easy to use and displays key system data at the touch of a button, i.e.:

- Collector temperature.
- Upper and lower tank temperatures.
- Activation of solar circulating pump.
- Hours of operation.
- Alternative arrangement layouts.
- Pump speed efficiency.
- Emergency safety shut off.
- Additional anti-freeze functions.
- Easy to use holiday function.
- Anti-legionella control.

In addition the controller has a second available relay that facilitates features such as:

- Back-up heat source available for central heating or immersion connection.
- Timer set up for back up heat source heating.
- Surplus energy usage.

PUMP STATION

The Firebird solar pump station houses the key plumbing components for a solar system including solar circulating pump, non return gravitational valves, flow rate regulator, pressure relief valve, connection for expansion vessel as well as filling points.

Sales Code	Description
SOL414CTR	Deltasol BS4 Controller & Twin Pump Station

Sales Code	Description
SOL414CTR	Deltasol BS4 Controller & Twin Pump Station



EAST / WEST CONTROLLER & PUMP STATION

For East / West installations, a special controller (BS4 Plus) is required along with an extra single line pump station to cater for the additional collector array.

Sales Code	Description
SOL424CTR	Deltasol BS4 Plus Controller, Twin Pump Station & Single

Sales Code	Description
SOL424CTR	Deltasol BS4 Plus Controller, Twin Pump Station & Single



WATER STORAGE TANKS

The solar twin coil tank is used to store hot water heated by the solar system. The tank has two internal coils, the solar circuit provides heat through the lower coil while the back-up heating system (boiler) will heat the hot water via the upper coil.

Firebird water storage tanks are built from premium quality stainless steel and include an electric immersion as standard.

Sales Code	Description
SOL215ITK	Twin Coil Solar Tank, 215 litres
SOL255ITK	Twin Coil Solar Tank, 255 litres
SOL305ITK	Twin Coil Solar Tank, 305 litres
SOL305TCT	Triple Coil Solar Tank, 305 litres



OTHER SYSTEM COMPONENTS

THE FOLLOWING COMPONENTS MAY BE SUPPLIED AS STANDARD ON CERTAIN SOLAR SYSTEM KITS

EXPANSION VESSELS

An expansion vessel is necessary to absorb the expansion of the solar fluid when high temperatures are reached in the solar collector. Currently available sizes are 24 and 35 litres.

Sales Code	Description
SOL502EXP	24 litre Expansion Vessel
SOL503EXP	35 litre Expansion Vessel



SOLAR ANTI-FREEZE

The heat transfer fluid used in a solar circuit is normally a mixture of water and a polypropylene glycol anti-freeze. The glycol anti-freeze also contains an additive to protect against corrosion and evaporates at higher temperatures than water to allow higher system temperatures. Firebird recommends a 40% glycol to 60% water mix to ensure frost protection to circa -25°C.



Sales Code	Description
SOL506FLL	Tyfocon L Anti-freeze for CPK7210-N Flat Panel Collector
SOL507VFL	Tyfocon LS Anti-freeze for Tube System

INTERMEDIATORY VESSELS

Sales Code	Description
SOL505EXP	Intermediary Vessel, 5 litre
SOL012EXP	Intermediary Vessel, 12 litre



ANTI-SCALD MIXING VALVE

Anti-scald (mixing) valve must be fitted close to the hot water outlet of the solar tank so that delivery to the taps does not exceed 48°C



Sales Code	Description
SOL504MIX	Anti-scald Mixing Valve

ACCESSORY KIT - EXPANSION VESSEL

Expansion vessel accessory kit includes check valve, wall bracket and 1 flexi hose.

Sales Code	Description
SOL521PPK	Expansion Vessel Accessory Kit



AIR VENT

An automatic air vent should be fitted at the highest point in the solar circuit system in order to remove air from the system during commissioning. An isolating valve should be fitted before the air vent and isolated once the system has been commissioned.



Sales Code	Description
SOL501AIR	Air Vent
SOL505STP	Isolating Valve

STAINLESS STEEL INSULATED TWIN PIPE

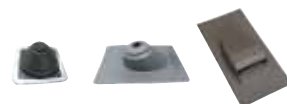
Flexible pre-insulated twin pipe with UV protection sheath for linking collectors to solar tank. Saves considerable installation time and money.

Sales Code	Description
SOL010TWP	Insulated Twin Pipe DIN16 – 10m
SOL015TWP	Insulated Twin Pipe DIN16 – 15m
SOL025TWP	Insulated Twin Pipe DIN16 – 25m



PIPE FLASHING

The pipe flashings provide a tidy solution for passing solar flow and return pipes through the house roof.



Sales Code	Description
SOL509TRF	Pipe flashing; Tiled roof
SOL510SRF	Pipe flashing; Slate roof
SOL524VTL	Glidevale G1 Vent Tile (BBA/IAB Approved)

FLEXI PIPES, 1M

High grade 1m stainless steel flexi pipes which can be connected to the flow and return side of the collector array. This saves the installer having to make complicated pipe bends through the roof of the house. Fittings can be included to connect the pipe to the different solar collector types.

Sales Code	Description
SOL402FPP	1m Flexi Pipe
SOL001ELB & SOL001FEM	Fittings for CPK7210-N Flat Panel Collector
SOL075ELB & SOL075TAP	Fittings for CVSKC-10 Vacuum Tube and TZ58-1800 Heat Pipe Solar collectors



ACCESSORIES

Sales Code	Description
SOL514FPC	Weather-proof Cover for CPK7210-N Flat Panel Collector
SOL515VTC	Weather-proof Cover for CVSKC-10 Vacuum Tube Collector
SOL000FPS	Solar Filling & Flushing Pump
SOL527RFR	Refractometer
SOL528CFL	Solar Cleaning Fluid, 500ml
SOL000BOV	Blow-off Storage Vessel
SOL010TSV	TSV Lightning Protection (for controller)
SOL526RLY	Auxiliary Relay HR230 (for controller)

Wood Gasification Boiler

The Firebird wood gasification boiler represents the very latest in high efficiency wood burning.



Gasification is achieved in wood burning when gases released from the combusting wood are mixed with a regulated supply of oxygen to create a complete oxidation process. This results in extremely high combustion efficiencies and minimal ash waste.

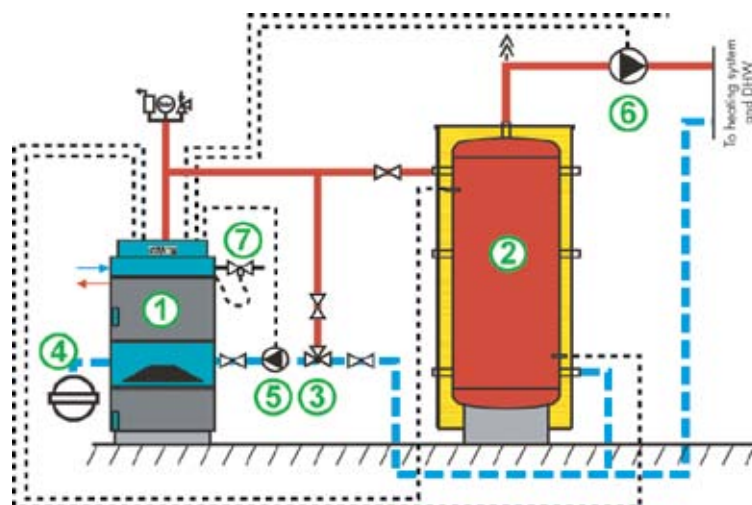
Wood gasification boilers can only be used to burn split logs or wood briquettes. Coal, peat, refuse, etc. can not be used in these boilers. The best woods are hard woods like Ash, Oak & Beech (moisture content must be 20% or less).



System layout

A suggested schematic diagram for a wood gasification boiler can be seen below. For an unvented (pressurised) system, a thermal safety valve must be installed.

- | | |
|----------------------------------|--------------------------|
| 1 - Wood Gasification Boiler | 5 - Boiler Pump |
| 2 - Accumulation Tank | 6 - Circulation Pump |
| 3 - Three Way Thermostatic Valve | 7 - Thermal Safety Valve |
| 4 - Expansion Vessel | |



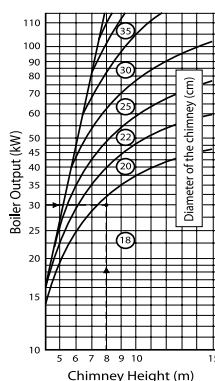
Accumulation Tank

An accumulation tank must be used in conjunction with the Firebird wood gasification boiler. The recommended sizing is a minimum 50 litres of water storage for every 1 kW of rated output. Firebird recommend a 2,000 litre tank.



Flue

Having the right draft and flue construction is critical to the operation of the wood gasification boiler. Flue height must be according to the chart (on right).

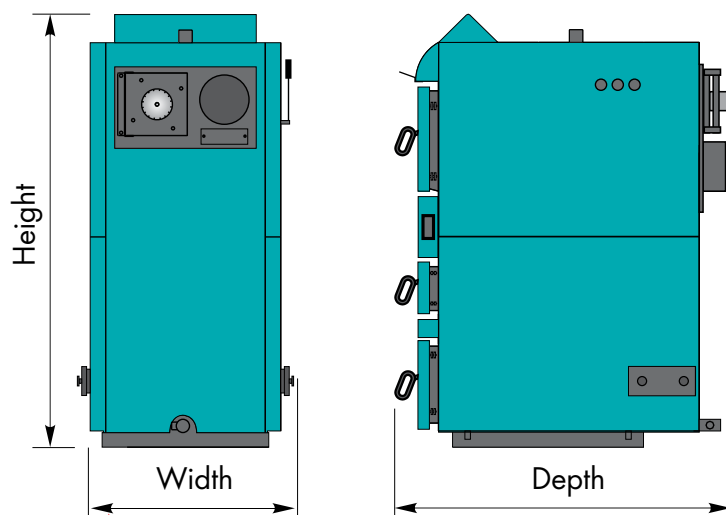


Technical Data

Model		35
Rated thermal output	(kW)	35
Boiler water content	(litres)	96
Boiler weight	(kg)	515
Max. volume of wood	(litres)	144
Max. length of the log	(mm)	550
Flue diameter	(mm)	200
Depth	(mm)	1290
Height	(mm)	1385
Width	(mm)	725
Min. accumulator tank	(litres)	2000

Sales Code

WGB035BLR	Wood Gasification Boiler 35
WGB200TNK	2000 Litre Accumulation Tank
WGB200KIT	200mm Wood Gas Twin Wall Flue Kit
WGB000PGS	Pump Changing System Ladomat 21
WGB000TSV	Thermal Safety Valve



Wood Pellet Boiler

Firebird's wood pellet boiler represents the very latest in carbon neutral heating for use in domestic and light commercial applications.

Features

High efficiency

Firebird wood pellet boilers have efficiencies in the high 80's due to their highly efficient operation and well insulated boiler shell. The large chamber design ensures that the boiler does not clog up with ash.

Heating comfort

This wood pellet boiler is fully automatic in its operation. On start up, an electric heater ignites the pellets and the digital controller manages the entire operation. The boiler is fully modulating in that the feed rate of pellets is varied, depending on the boiler temperature and heating demand.

Ease of cleaning

All maintenance points are easily accessible and a set of cleaning tools and brushes are supplied. The burner is on a hinged door and can be opened by hand. The burner grate, which should be cleaned weekly, is fully retractable.

Automated control

The digital controller located at the top of the boiler is designed to be user friendly. The main boiler functions can be controlled from here and key system parameters entered.

Fuel

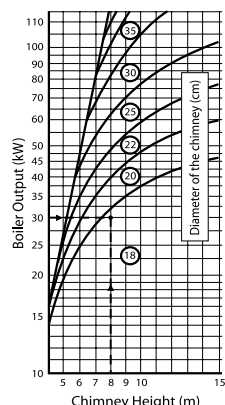
Only certified wood pellets approved to EN14961 may be burned in the Firebird wood pellet boilers. The below fuel characteristics must be adhered to.

- calorific value > 5 kW/kg (18 MJ/kg)
- diameter = 6 mm • max. length = 35 mm
- max. humidity = 8% • max. dust = 0,5%



Flue

Ensuring the correct size flue is critical to the operation of any biomass boiler. The chart on the right outlines the minimum flue diameter and height required for the different boiler outputs.



Technical Data

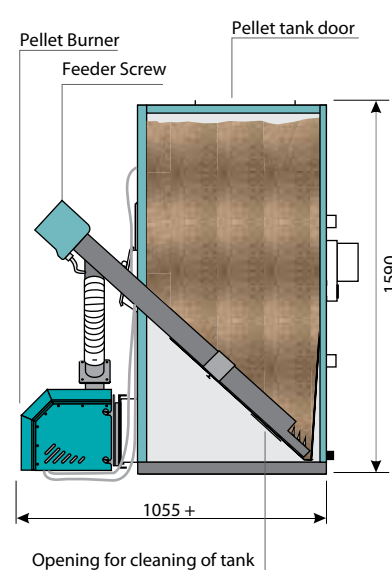
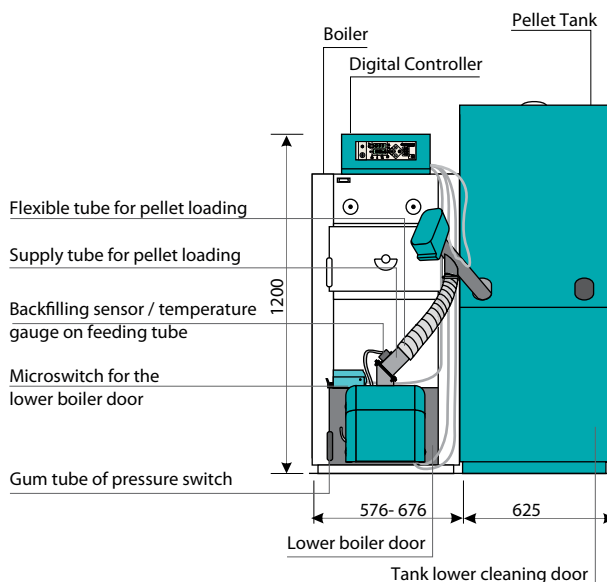
Model		25	35
Rated thermal output	(kW)	25	35
Boiler water content	(litres)	90	101
Boiler weight	(kg)	435	475
Flue diameter	(mm)	150	160
Power supply		230 V AC / 50Hz	

Outer dimensions (boiler & tank)			
Height	(mm)	1590	1590
Depth	(mm)	1055	1055
Width	(mm)	1201	1301

Sales Code
Wood Pellet Boiler
Wood Pellet Flue Kit
Wood Pellet Auger & Hopper

25
FWP025NKT
FWP025FLU
FWP000FED

35
FWP035NKT
FWP035FLU
FWP000FED





Inset Stoves

Firebird based their first inset stove on their very first product, the Supreme backboiler. Following on from the overwhelming success of the multifuel backboiler stove, they launched the multifuel dry inset stove. The Firebird inset stove range now consists of three types of inset stoves:

- Multifuel backboiler stove.
- Multifuel dry stove.
- Smoke exempt dry inset stove.



Multifuel Backboiler Inset Stove

All the comfort of a stove with the benefit of heat to your house as well

Features

- Designed to fit into a standard fireplace.
- Easy to install.
- Clean, easy operation.
- Solid multifuel options.
- Suitable for airtight dwellings where underfloor, external air-in ducting is provided.
- Glass air wash design.
- Enamel option available.
- Up to 12kW heat supplied to dwelling/radiators.
- Reduces your heating bills.
- Available in 12kW and 16kW.
- 5 year warranty.
- HETAS approved.

Output

- Up to 81% efficiency.
- Up to 12kW heat supplied to dwelling/radiators.



Multifuel Dry Inset Stove

A stove designed for your comfort

Features

- Designed to fit into a standard fireplace.
- Easy to install.
- Clean, easy operation.
- Solid multifuel options.
- Suitable for airtight dwellings where underfloor, external air-in ducting is provided.
- Glass air wash design.
- Up to 8.2kW heat supplied to space (room).
- Available in 6.9kW and 8.2kW.
- 5 year warranty.
- HETAS approved.

Output

- Up to 75.6% efficiency.
- Up to 8.2kW heat supplied to space/room.



Smoke Exempt Dry Inset Stove

Ideal for a new build and to assist with BER compliance

Features

- Smoke exempt
- Wood & authorised smokeless fuel.
- Clean burn technology.
- Easy to install.
- Clean, easy operation.
- Suitable for airtight dwellings where underfloor, external air-in ducting is provided.
- Up to 5kW heat supplied to space (room).
- Glass air wash design.
- 5 year warranty.
- Smoke exempt DEFRA approved.
- HETAS Approved.

Output

- Up to 75.9% efficiency.
- Up to 5kW heat supplied to space/room.



Specification

Dry Inset Stove	Product	Sales Code Output	Room	Efficiency	Weight kg	Height (mm)	Inset Width (mm)	Depth (mm)
	6.9kW	MAX016DRY	6.9kW	74.4%	95	560	406-470	375
	8.2kW	MAX018DRY	8.2kW	75.6%	102.4	560	455-520	375

Smoke Exempt Inset Stove	Product	Sales Code Output	Room	Efficiency	Weight kg	Height (mm)	Inset Width (mm)	Depth (mm)
	5kW	MAXSE5DRY	5kW	75.9%	102.4	560	455-520	375

Backboiler Inset Stove	Product	Sales Code Matt	Sales Code Enamel	System Output	Room Output	Efficiency	No. of Standard Radiators	Weight kg	Height (mm)	Inset Width (mm)	Depth (mm)
	12kW	MAX016000	MAX016NML	8.3kW	3.6kW	80%	6	96.6	560	406-470	375
	16kW	MAX018000	MAX018NML	12.1kW	3.6kW	81%	9	105	560	455-520	375

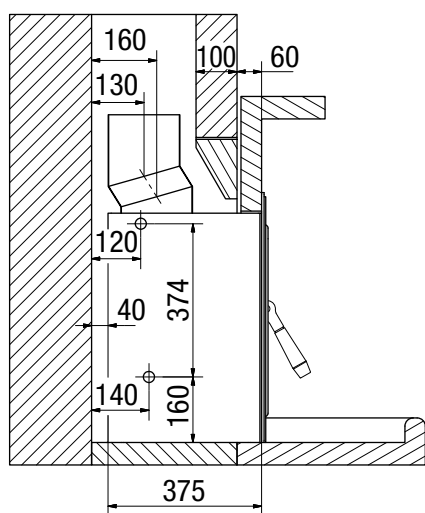
* Room seal kit available: 16" - ACC016RSK, 18" - ACC018RSK

Note: The outline is similar for all stoves. The dimensions for the sockets are not relevant for the dry and smoke exempt wood burning stoves. All dimensions are relevant to stove/boiler section. Outer face framework is not taken into account. Dimensions are measured from pipe socket to socket, ie. 16" from outer pipe connection to outer pipe connection. To comply with Building Regulations and in order for the stove to operate effectively, an air vent and draught of at least 12 Pa is required.

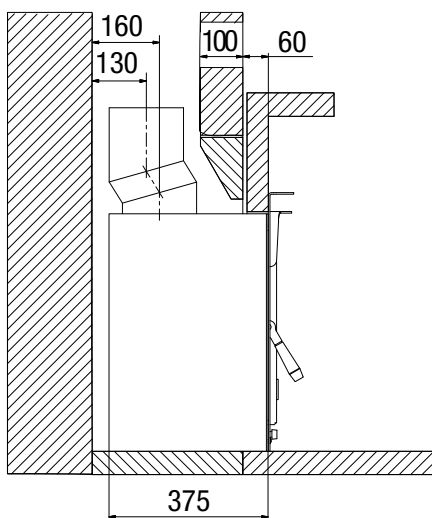


Dimensions (mm)

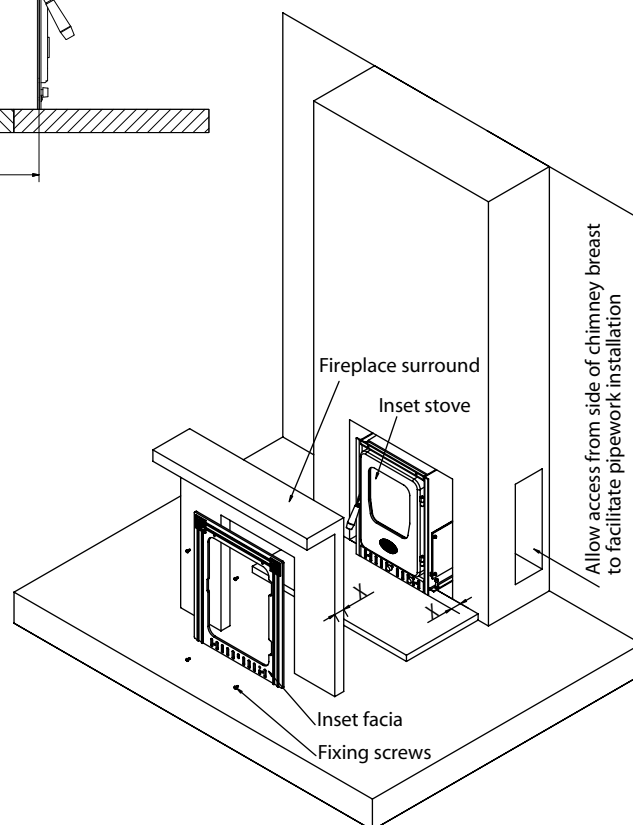
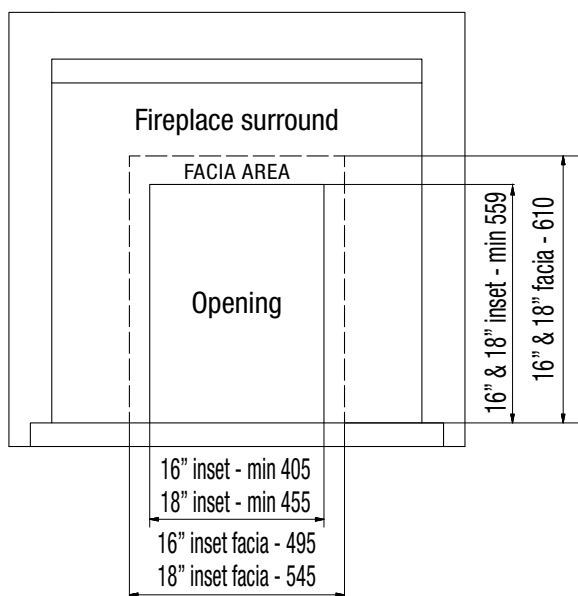
Backboiler Inset Stove



Dry & Smoke Exempt Inset Stove



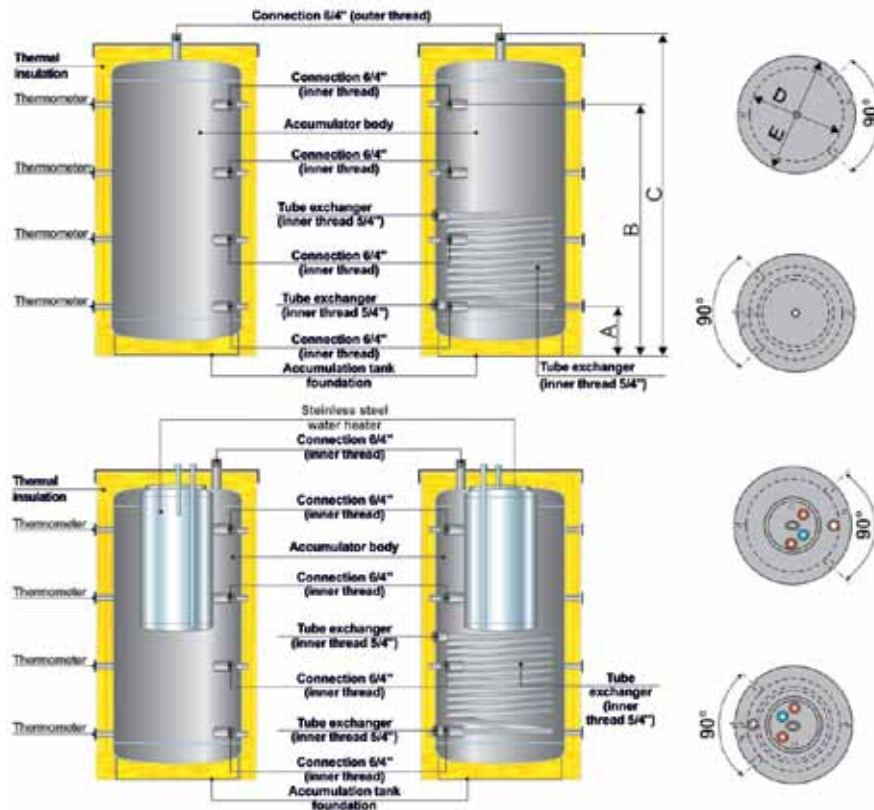
Backboiler, Dry & Smoke Exempt Inset Stoves



Firebird Insulated Tanks

Firebird have a new range of tanks to accommodate multi system installations. The tanks are produced to Firebird's highest quality standards and are all fitted with a 120mm insulation jacket.

Sales Codes:	Range:
A SOL500TNK	500L Insulated Tank (direct)
B SOL500SCT	500L Insulated Tank (with single coil)
C SOL500ITK	500L Insulated Tank in Tank
B SOL800SCT	800L Insulated Tank (with single coil)
D SOL800ITK	800L Insulated Tank in Tank (with single coil)
B SOL1000CT	1000L Insulated Tank (with single coil)
D SOL1000TK	1000L insulated Tank in Tank (with single coil)



Transfer Tanks & Exchangers

Firebird has launched a range of transfer tanks that facilitate multi-system design and retrofits. These include the junction buffer 2-4 box, with 24 litre capacity and the solid fuel heat exchanger, with 22 litre capacity. Both boxes are designed to accommodate multiple heating systems within a typical dwelling. They can also facilitate the integration of an additional system (i.e. stove) into an existing heating unit.



Firebird Junction Buffer 2-4 Box

- For zone systems, under floor heating and multi-function systems.
- Capacity for integration of new system (e.g. air to water) to link into existing system.
- Reduce boiler cycling issues.
- 4mm steel shell, fully insulated and external green casing as standard.

Sales Code: ACCJNCBOX



Firebird Solid Fuel Heat Exchanger

- Solid fuel/pressurised system integration.
- Easy to install, ground / wall mounted.
- Water volume storage to comply with regulations.
- White case finish.

Sales Code: ACCSFHExH

Warranty

Complete After-Sales Service

Firebird has always provided their customers with the highest levels of after sales care. All products are supported by a nationwide network of independent service engineers who are regularly trained on our appliances.

Boiler Passport

An OFTEC co-ordinated "Boiler Passport" booklet is included with every oil boiler shipped from our factory. This passport will stay with the boiler, much like a car's service log book. The commissioning certificate page is on multipart carbon paper and one copy must be completed by an OFTEC registered or competent, qualified engineer and returned to Firebird in the enclosed prepaid envelope within 28 days of commissioning.



Our Warranty Policy

OIL-FIRED BOILERS

Firebird offers a 5 year warranty on the boiler shell and a 2 year warranty on all other parts from date of installation, provided installation has occurred within 12 months from date of purchase. The 5 year boiler shell warranty consists of labour and parts for the first 3 years and parts only in years 4 and 5. The warranty is conditional on the boiler being commissioned and operated correctly. To validate your warranty, Firebird require that the commissioning certificate page in the Boiler Passport is completed by an OFTEC registered or competent, qualified engineer and returned to Firebird within 28 days of installation and commissioning.

SOLAR

Firebird offers 5 years warranty on all solar collectors and 2 years warranty on all other parts from date of installation has occurred within 12 months from date of purchase.

INSET STOVES

Firebird offers a 5 year warranty on the inset stove shell and a 2 year warranty on other parts from date of installation, provided installation has occurred within 12 months from date of purchase. The 5 year inset stove shell warranty consists of labour and parts for the first 3 years and parts only in years 4 and 5. The warranty is conditional on the stove being commissioned and operated correctly. To validate your warranty, Firebird require that the warranty registration form (at the back of the instruction manual) is completed by a competent, qualified engineer and returned to Firebird within 28 days of installation and commissioning.

BIOMASS BOILERS

Firebird offers 5 years warranty on the boiler shell and 2 years warranty on all other parts from date of installation, provided installation has occurred within 12 months from date of purchase.

Full terms and conditions of Firebird's warranty programme can be viewed on www.firebird.ie



installation, provided

Delivery Charges

Most orders are delivered to UK mainland customers within 1 to 2 working days. Our delivery charges to UK mainland customers are set out below. Firebird reserves the right to amend these charges at short notice. In all cases delivery times quoted are estimates only. No subsequent liability will be accepted by us for any late deliveries howsoever caused.

BOILERS / SOLAR KITS

Standard Delivery	No charge
Next Day AM	£35.00
Next Day Timed	£50.00

FLUES PARTS & ACCESSORIES

Flue Parts *	£10.00
Flue Kits *	£25.00
Flexi Flue Kits *	£45.00

* No charge if sent with boiler order

SPARE PARTS / SOLAR PARTS

Net order value over £100.00	No charge
Net order value under £100.00	£10.00
Next Day AM	£17.00
Saturday delivery	£30.00

Delivery charges are for business addresses only - delivery to private addresses may incur an additional charge. We will advise if there are any additional carriage charges once we've received the order details.

Restocking Charges

Surplus goods returned for credit will incur a 15% restocking charge. Collection charges will also apply as follows:

Boilers/Solar Kits	£75.00 (per pallet)
Flue Kits	£45.00
Parts - Flues, Solar or Spares	£20.00

www.firebirduk.co.uk

www.firebird-solar.com



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