Smith's heating first

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February 2011

Versatile, energy efficient

heating

- **Fan convectors**
- **Flame-effect fan convectors**
- **Natural convectors**

24% more energy efficient

Contents

Fan Convector Technology - The Way Forward

Heating for a Sustainable Future

Energy is one of our most valuable resources, yet almost half the UK's carbon dioxide emissions, the main greenhouse gas causing climate change, actually come from the things we do every day. Every time we overfill the kettle or leave the heating on unnecessarily, we waste energy that results in needless carbon dioxide emissions.

Energy efficiency in our heating systems is slowly improving however, with standard efficiency boilers disappearing in favour of energy saving condensing boilers. In addition, renewable technologies such as ground and air source heat pumps and solar panels that allow us to use the earth's natural energy to heat our water, are more easily available and more viable.

Levels of structural insulation in new buildings are increasing, and the introduction of energy certification for new and existing buildings will continue to encourage improvements in energy efficiency.

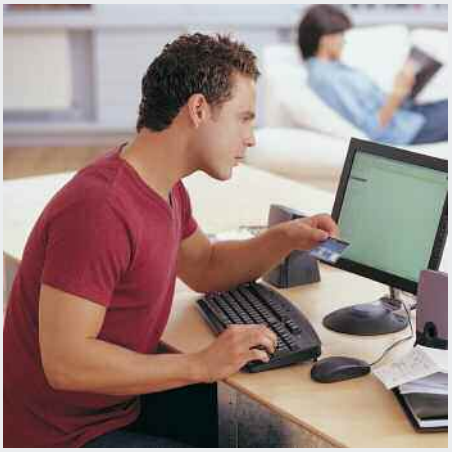
Since the introduction of central heating systems, we have become familiar with large steel panel radiators in every room. However, to perform to maximum efficiency they need large volumes of very hot water, which means they are much less efficient in the modern heating systems of today, as water temperatures are much lower.

Fan convector technology has been available for many years. In independent tests carried out by BSRIA*, fan convectors were shown to use 24% less energy in heating up a room when installed as part of a boiler driven central heating system. Furthermore, when connected to a low temperature system such as those using ground or air-source heat pumps the energy saving increased to 31%.

Additionally, fan convectors use only 5% of the water content of an equivalent output radiator. This results in a quicker heat up and is more responsive to our changing weather patterns. Equally important, they are compatible with every type of heat generator whether that be the standard efficiency boiler of yesterday, the energy saving condensing boilers of today or the renewable technology of tomorrow.

BSRIA

* BSRIA (Building Services Research and Information Association) tests were carried out in August 2008.



Quality Assurance

Smith's Environmental Products' quality assurance management system has been awarded ISO 9001:2008 *Quality Management Systems* certification.

This prestigious award is an internationally recognised benchmark for quality.

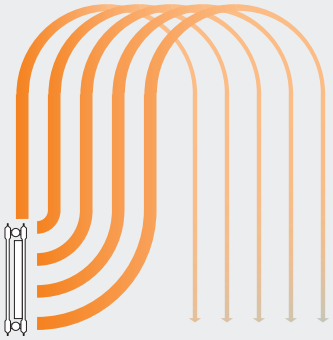
With only around 8% of UK businesses achieving this prestigious award, Smith's Environmental Products is at the forefront of quality service and customer care.

ISO 9001 Registered Firm	International Accreditation Board
Certificate No. SP240400	Registration No. 0044/1

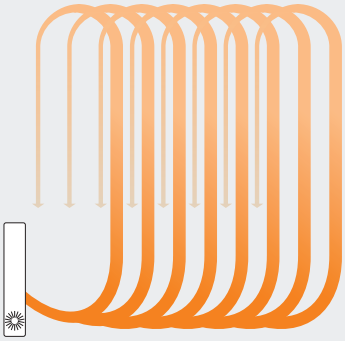
Why Choose Our Products?

If you're looking for energy efficiency and versatility in your heating look no further than the Smith's range of fan convectors, flame-effect fan convectors and natural convectors.

There are principally two ways to heat a room, either by natural convection or forced convection. Radiators, under-floor heating and perimeter heating use natural convection and fan convectors (and flame-effect fan convectors) use forced-air convection.



The natural convection process



Forced convection process

Energy-efficient

Independent tests show that fan convectors use at least 24% less energy than radiators in heating up a room. Additionally, they utilise only 5% of the water content of an equivalent output radiator and will therefore heat up a room much faster as well as responding quickly to constantly changing weather patterns.

Central heating system compatible

Fan convectors and flame-effect fan convectors work efficiently within central heating systems regardless of whether they are connected to a typical boiler or renewable technology such as ground and air source heat pumps.

Heat distribution

Fan convectors and flame-effect fan convectors include a small fan so the heat can be quickly distributed around the room to give you a more even temperature spread.

Legislation

Capable of operating at system temperatures as low as 40°C, fan convectors assist in improving SAP (Standard Assessment Procedure) ratings, the Government's recommended method for measuring the energy efficiency of dwellings to fulfil Building Regulations. Used in with conjunction with heat pumps fan convectors compare favourably with under floor heating in terms of efficiency (see table below) under the Code for Sustainable Homes.

Heat Source	Efficiency
Under Floor Heating	300%
Fan Convector/Fan Coil	255%
Panel Radiator	210 - 225%

Safe – low surface temperature

Unlike radiators which are hot to touch, fan convectors and flame-effect fan convectors have very low surface temperatures, making them completely safe and therefore ideal for children and the elderly.

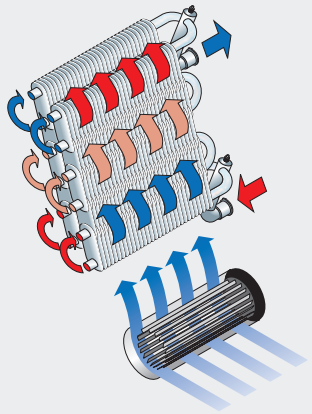
Compact

Fan convectors are considerably smaller than the equivalent output radiators and are more versatile. They are designed to install in those 'dead' spaces, so you don't have to design the room around the heating.

How they work

Fan Convectors

Fan convectors require connection to a 'wet' central heating system and an electrical connection to run the fan.



Hot water from the central heating system passes through the heat exchanger transferring its heat to the aluminium fins. Cooler air is drawn in by the fan and heated as it passes over the heat exchanger before being expelled gently back into the room. This gives a more even temperature and will heat a room in much less time than a traditional panel radiator.

On average usage in domestic applications fan convectors use less than 2p (worth) of electricity per day.

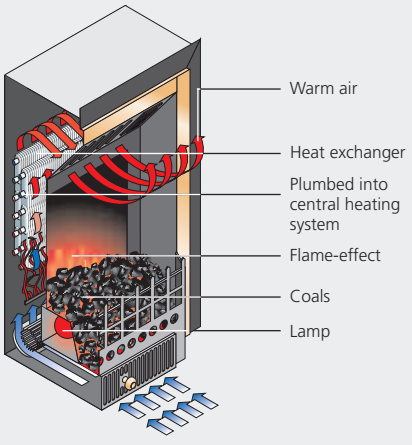
Flame-Effect Fan Convectors

These require connection to a wet central heating system and an electrical connection to run the flame-effect and fan.

Hot water from the central heating system passes through a heat exchanger and transfers its heat to the aluminium fins.

Cooler air is drawn in at floor level and used to create the flame-effect. The air is heated as it passes over the heat exchanger, a patented process that creates a realistic flame-effect, and then expelled gently back into the room.

This gives a more even temperature spread and will heat a room in much less time than a traditional panel radiator.



The fan will not come into operation until the central heating system water passing through the heat exchanger reaches 40°C (or the temperature set by the installer). This ensures that cooler air is not circulated at start up and allows Hydroflame to switch on and off automatically in conjunction with the central heating system.

On average usage in domestic applications flame-effect fan convectors use less than 2p (worth) of electricity per day.

Natural Convectors (Perimeter Heating)

These require connection to a wet central heating system. Hot water from the central heating system passes through the heat exchanger, transferring its heat to the aluminium fins. The natural movement of air gently circulates over the heat exchanger, is warmed and evenly distributed around the room.

Fan-Assisted Electric Heaters

Connect to an electrical system via a fused spur.

Fan-assisted heaters cost around 15 pence per hour for each 1kW of heat.

Running Costs – Domestic Installations

Fan convectors and flame-effect fan convectors use a very small amount of electricity to run the fan and bulb (flame-effect fan convectors only). Based on an annual usage of 1300 hours with electricity charged at 15p per kWh we calculate these electricity costs to be less than £5 per year for a fan convector and less than £10 per year for flame-effect fan convectors. In independent efficiency tests carried out by BSRIA* this electricity usage was taken into account, however these types of products were still shown to use at least 24% less energy in heating up a room.

* BSRIA (Building Services Research and Information Association) tests were carried out in August 2008.

What It Means

Hydronic

Connects to and runs from a central heating system.

Hydronic Low Voltage

Suitable for bathrooms and other high humidity areas.

Connects to and runs from a central heating system but includes a transformer to convert your 240V supply to 12V making it safe to operate with wet hands.

Hydronic/Electric (Dual)

Connects to and runs from a central heating system but also includes an electric heating element to provide supplementary heating when the central heating system is switched off.

All Electric

Connects to and runs from a 240V electrical supply. Only suitable for bathrooms and other high humidity areas if operated by pull-cord or switch, remote from the room.

Room Size Guide (domestic applications only)

The figures quoted in the product performance tables use an average heat requirement of 45 watts per cubic metre of room space. (For room space multiply length x width x height).

50 watts per cubic metre is used for low voltage models, as these are designed for use in bathrooms or other high humidity areas which generally have a higher number of air changes per hour.

Important note: The figures quoted are strictly for guidance only and heat loss calculations for each room must still be carried out.

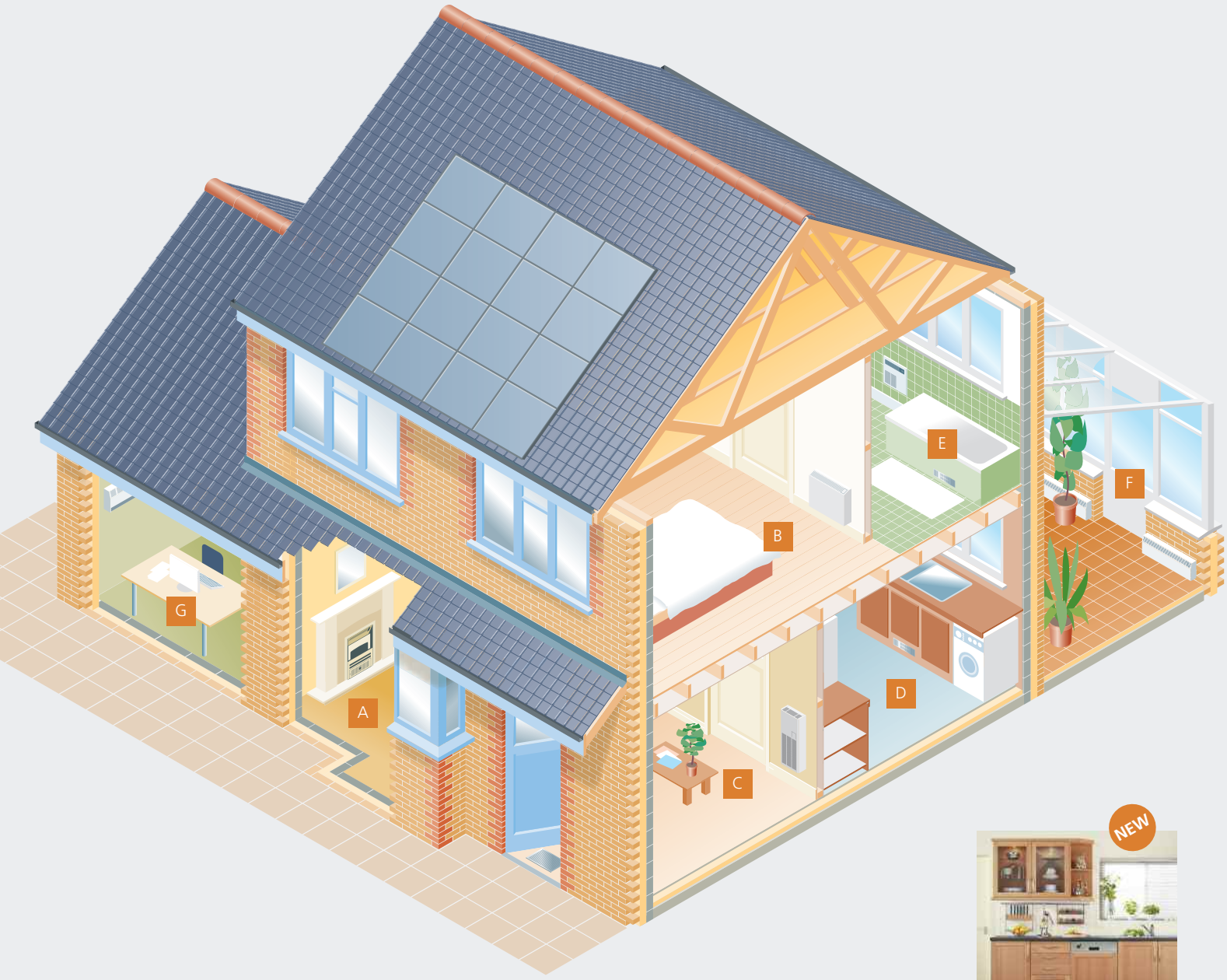
Operation

Fan convectors and flame-effect fan convectors will, if the heat output switch is left in either the normal or boost position, come on and off automatically with the central heating system. Each model includes a low temperature cut-out system, which prevents the product operating until the water temperature reaches a preset temperature. Electric fan-assisted heaters are designed to be switched on and off manually.

Fan-Only Option

Where indicated, models include a fan-only option which allows the fan to run for a cooling flow of air. This function only operates when the heating system is switched off.

The Effective Way to Heat the Home



The Smith's range of energy-efficient, versatile heaters offers attractive, practical and economic solutions to heating all parts of the home. Whatever and wherever the heating requirement, there will be a Smith's product to suit.

- A Living Room/Dining Room
- B Bedroom
- C Hall
- D Kitchen/Utility Room
- E Bathroom/Ensuite
- F Conservatory
- G Home Office, Study, Workroom etc

Refer to pages 10-11 for a comprehensive Product Selector.

D

Ecovector® Plinth Heater

Fan convector

The plinth-mounted Ecovector creates space in the kitchen or utility room for additional storage, more appliances and extra work surface. Stylish overlay fascia grilles are available in a variety of finishes to complement any interior. Runs from any central heating system driven by boilers or low temperature renewable technology.

See pages 20-21 for further details.

NEW FLAME EFFECT

A

Hydroflame®

Flame-effect fan convector

A revolutionary form of heating – a flame-effect fan convector that runs off the central heating system but provides all the appeal of a traditional fire with none of the disadvantages. Highly efficient and cost effective, Hydroflame has no naked flames or hot surfaces and no potentially harmful carbon monoxide discharges, ensuring that Hydroflame is totally safe. There is a range of Inset and Freestanding models. A complementary range of attractive fireplace surrounds are available for Inset models.

See pages 14-17 for further details.

D E

Space Saver

Fan convector

The plinth-mounted Space Saver creates space in the kitchen or utility room for additional storage, more appliances and extra work surface. Stylish overlay fascia grilles are available in a variety of finishes to complement any interior. The range includes a Dual model, an all-electric model and also a low voltage model for bathrooms or other high humidity areas.

See pages 12-13 for further details.

A B C D F G

Ecovector® Low Level

Fan convector

The fan convector of the future - elegantly designed and compact. Ecovector is fast, responsive, energy-efficient and very quiet in operation. Styled to replace existing radiators, Ecovector includes built-in thermostatic control and can easily be switched to work with renewable technologies. Low surface temperature casing for complete safety.

See pages 22-23 for further details.

D E F G

Ecovector® High Level

Fan convector

Designed for unobtrusive fixing at high level for maximum use of wall space at working level. Particularly ideal for the conservatory to cope with the high heating demands but also appropriate for kitchens or simply where you want the heating out of harms way. All models can change over between existing boiler systems and renewable technology at the flick of a switch. Low voltage model for bathrooms and other high humidity areas.

See pages 24-25 for further details.

A B C F G

Ecovector® Vertical

Fan convector

Designed for installation into narrow spaces such as hallways and reception areas. A vertical low-level wall-mounted fan convector that can easily be switched between existing boiler systems and renewable technology. Low surface temperature casing for complete safety.

See pages 26-27 for further details.

A C F

Spacemaker

Fan convector

Installs neatly under the floor with only a hardwearing aluminium grille visible - the perfect solution for heating entrance halls, lobbies and other high traffic areas.

See pages 18-19 for further details.

C E F

Award

Fan convector

A flush-mounted fan convector means no projection beyond the surface of the wall – ideal for those areas where space may be at a premium. Low surface temperature casing for total safety.

See pages 18-19 for further details.

F C

Sygnet

Fan-assisted electric heater

Offering the option of either recessed or surface mounting – this practical, controllable, electric heater can be installed in areas not serviced by the central heating system.

See pages 18-19 for further details.

C F

Sureline®

Natural convector

A natural convector fitted at skirting level – the ideal form of perimeter heating, providing gentle low-level warmth anywhere from conservatories, workrooms, hallways, waiting rooms or even the airing cupboard.

See pages 28-29 for further details.

NEW

D E F G

Sterling

Fan convector

Designed for unobtrusive fixing at high level to maximise free wall space at working level. Ideal for kitchens, bathrooms, or simply where you want the heating out of harm's way.

Also available as an electric model for areas not serviced by a central heating system.

See pages 30-31 for further details.

The Effective Way to Heat the Workplace

The Smith's ranges of energy-efficient, versatile heaters also offer attractive, practical and economic solutions to heating all parts of the workplace. Whether an office, shop, school or meeting room, there will be a Smith's product to suit.

- A Entrance Hall, Lobby
- B Large Office, Work Area
- C Reception, Waiting Room
- D Corridor
- E Meeting Room
- F Cafeteria
- G Library

Refer to pages 10-11 for a comprehensive Product Selector.

A C D F

Sureline®

Natural convector

A natural convector fitted at skirting level – the ideal form of perimeter heating, providing gentle low-level warmth anywhere from waiting rooms, workshops, canteens, hallways and conservatories.

See pages 28-29 for further details.

A B C D E F G

Ecovector® Low Level

Fan convector

The fan convector of the future – elegantly designed and compact. Ecovector is fast, responsive, energy-efficient and very quiet in operation. Styled to replace existing radiators, Ecovector includes built-in thermostatic control and can easily to be switched to work with renewable technologies. Low surface temperature casing for complete safety.

See pages 22-23 for further details.

A B C E F

Ecovector® High Level

Fan convector

Designed for unobtrusive fixing at high level for maximum use of wall space at working level. Particularly ideal for the shops and offices where wall space is at a premium or in a nursery where you want the heating out of harms way. All models can change over between existing boiler systems and renewable technology at the flick of a switch. Low voltage model for bathrooms and other high humidity areas.

See pages 24-25 for further details.

A C D E

Ecovector® Vertical

Fan convector

Designed for installation into narrow spaces such as hallways and reception areas. A vertical low-level wall-mounted fan convector that can easily be switched between existing boiler systems and renewable technology. Low surface temperature casing for complete safety.

See pages 26-27 for further details.

A C E

Staccato

Fan convector

A low-level, wall-mounted fan convector, with built-in thermostatic control, in a striking visual design to complement modern interiors. Front panel available in a range of seven colour options, with special colours available to order. Low surface temperature casing for complete safety.

See pages 32-33 for further details.

A B C E F G

Caspian

Fan convector

A floor or wall-mounted fan convector specially developed for a diversity of applications in commercial installations – ideal for meeting the heating requirements and the heavy duty demands of a larger room. Available in a range of eight models with heat outputs from 3 to 12kW. Low surface temperature casing for complete safety.

See pages 34-35 for further details.

D E F G

Sterling

Fan convector

Designed for unobtrusive fixing at high level to maximise free wall space at working level. Ideal for kitchens, bathrooms, or simply where you want the heating out of harm's way.

Also available as an electric model for areas not serviced by a central heating system.

See pages 30-31 for further details.

A B C F G

Skyline®

Fan convector

The ceiling-mounted Skyline provides the perfect solution to heating larger rooms such as showrooms, trade counters and large offices. Units install simply into a standard 600mm x 600mm ceiling tile space ensuring no encroachment on wall or floor space. There is also an all-electric model available.

See pages 36-37 for further details.

Product Selector

Here is the quick and easy way to find the ideal heater for your room. Whether at home, at work or at play there will be a Smith's heater that fits the bill.

Simply look for the room and we give you at least three choices of heater. The selector then explains the options for each of these models:

Domestic applications

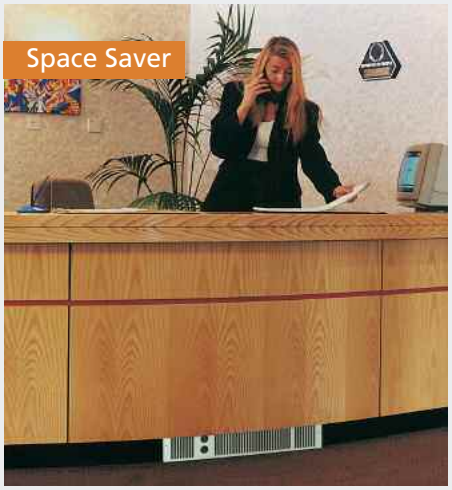
√Good √√Better √√√Best

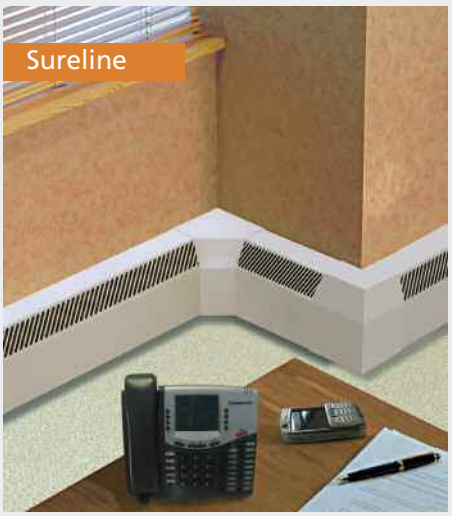
Non-domestic applications

√Good √√Better √√√Best

- **Application** – Where in the building the product is installed
- **Operating options** – hydronic or low voltage hydronic (i.e. running from the central heating system), a combination of hydronic and electric, or all-electric
- **Product type** – many of our products are available in a range of operating options (i.e. Sterling is available in hydronic, hydronic low voltage and all-electric)
- **Installation** – where in the room the product is designed to be installed

This will enable you to make the best choice of heater for your room but if you need extra help, do not hesitate to contact us.





		Domestic Applications							Domestic and Non-domestic Applications							Non-domestic Applications	
		Space Saver Pages 12-13	Ecovector Plinth Pages 20-21	Hydroflame Inset Pages 14-17	Hydroflame Freestanding Pages 14-17	Spacemaker Pages 14-17	Award Pages 18-19	Sygnet Pages 18-19	Ecovector Low Level Pages 22-23	Ecovector High Level Pages 24-25	Ecovector Vertical Pages 26-27	Sureline Pages 28-29	Sterling Pages 30-31	Staccato Pages 32-33	Caspian Pages 34-35	Skyline Pages 36-37
Recommended applications Domestic Buildings	Kitchen/Utility Room	✓✓✓	✓✓✓							✓	✓✓			✓✓		
	Bathroom/En-suite	✓✓✓						✓			✓✓			✓✓		
	Cloakroom									✓	✓✓✓	✓	✓✓	✓✓		
	Hall									✓✓		✓✓✓	✓			
	Landing							✓	✓	✓✓✓		✓✓				
	Living Room/Dining Room							✓		✓✓✓		✓✓				
	Fireplace				✓✓✓	✓✓										
	Conservatory							✓	✓	✓	✓✓✓	✓✓	✓✓	✓		
	Bedroom									✓✓✓		✓			✓✓	
	Home Office/Study									✓✓	✓✓✓	✓		✓✓		
Recommended applications Non-Domestic Buildings	Large Office, Cafeteria, Showroom									✓✓	✓✓		✓	✓		✓✓✓
	Shop										✓✓✓			✓	✓	✓✓
	Entrance Hall, Corridor									✓✓	✓✓✓		✓	✓	✓	
	Reception									✓✓✓		✓		✓	✓✓	
	Waiting Room									✓✓	✓✓✓			✓	✓	✓✓
	Meeting Room									✓	✓✓			✓	✓✓✓	
	Changing Room										✓✓✓			✓	✓	✓✓
	Public House									✓	✓✓			✓	✓✓✓	
	Place of Worship									✓✓			✓	✓	✓✓✓	
	School, Nursery									✓✓	✓✓✓	✓✓		✓	✓	✓✓✓ ✓
	Care Home, Hospital									✓✓	✓✓✓	✓✓	✓	✓	✓	✓✓✓ ✓
	Library	✓									✓✓			✓	✓	✓✓✓
Operating options	Hydronic	●	●	●	●	●	●		●	●	●	●	●	●	●	●
	Hydronic/low voltage	●					●			●				●		
	Hydronic/electric	●		●	●											
	All electric	●						●						●		●
Product type	Fan convector	●	●			●	●		●	●	●		●	●	●	●
	Flame-effect fan convector			●	●											
	Natural convector												●			
	Fan-assisted electric heater	●						●						●		●
Installation	Fireplace recess			●												
	Wall mounted - low level							●	●		●			●	●	
	Wall mounted - high level									●				●		
	Floor mounted						●								●	
	Wall mounted - recessed							●	●							
	Ceiling mounted															●
	Plinth mounted	●	●													
	Skirting level												●			
	Under floor							●								

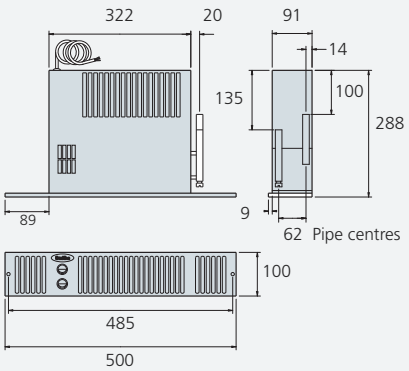
✓ Good
✓✓ Better
✓✓✓ Best

Space Saver

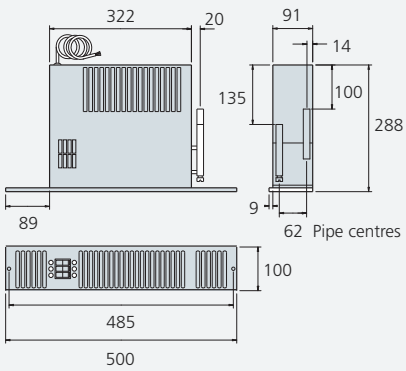
A highly energy efficient fan convector that fits neatly into the plinth of a kitchen unit. Space Saver eliminates the need for conventional radiators. And, as its name implies, this brings considerable space saving benefits – more room for extra storage units, more work surfaces, more space for kitchen appliances.

Space Saver is used predominantly for domestic applications where the ingenious plinth-mounting feature makes it ideal for heating kitchens, utility rooms and bathrooms. Plinth mounting also makes Space Saver ideal for certain non-domestic applications such as reception areas, changing rooms, libraries, etc.

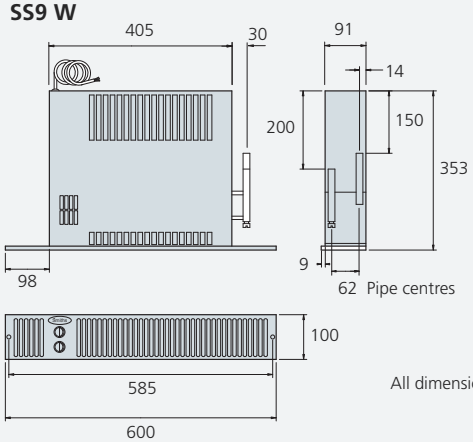
SS3 W, SS5 W, SS5 W/12V, SS7 W



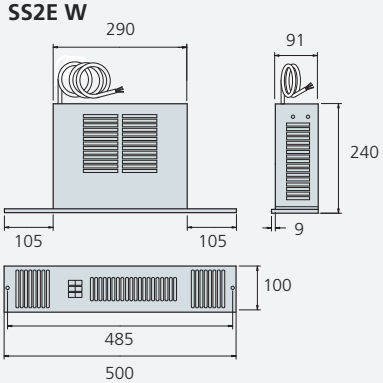
SS5 W/Dual



SS9 W



SS2E W



All dimensions in mm

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Fascia Grille Colour	Fan-Only
Hydronic									
SS3 W	18	0.8 (2700)	0.9 (3100)	0.6 (2100)	0.8 (2700)	26	39	White	•
SS5 W	29	1.3 (4400)	1.7 (5800)	1.1 (3800)	1.4 (4700)	27	43	White	•
SS7 W	36	1.6 (5500)	1.9 (6500)	1.3 (4400)	1.6 (5500)	30	44	White	•
SS9 W	49	2.2 (7500)	2.4 (8200)	1.9 (6500)	2.1 (7200)	41	46	White	•
Hydronic Low Voltage									
SS5 W/12V	26	1.3 (4400)	1.7 (5800)	1.1 (3800)	1.4 (4700)	31	39	White	•
Hydronic/Electric (Dual)									
SS5 W/Dual	29	1.3 (4400)	1.7 (5800)	1.1 (3800)	1.4 (4700)	27	43	White	•
			1.0	–	1.0	–			
Electric									
SS2E W	22	1.0	2.0	1.0	2.0	42	42	White	•

In hydronic mode In electric mode

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Fan-only option operational only when central heating system is switched off. Dual models include an electric element which in electric heating mode will emit 1kW of heat. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal (Watts)	Power Consumption Boost (Watts)	Water Capacity (Litres)
Hydronic									
SS3 W	15mm	2.0m	n/a	n/a	n/a	3A	16	25	0.34
SS5 W	15mm	2.0m	n/a	•	n/a	3A	21	30	0.36
SS7 W	15mm	2.0m	n/a	•	n/a	3A	21	30	0.38
SS9 W	15mm	2.0m	n/a	•	n/a	3A	24	35	0.43
Hydronic Low Voltage									
SS5 W/12V	15mm	0.45m	•	•	n/a	3A	21	30	0.36
Hydronic/Electric (Dual)									
SS5 W/Dual	15mm	2.0m	n/a	•	n/a	5A	21	30	0.36
							1012	1018	n/a
Electric									
SS2E W	n/a	2.0m	n/a	n/a	n/a	10A	1012	2025	n/a

In hydronic mode In electric mode

Fascia Grille Finish

Polyester powder-coated: white RAL 9010.

Installation

Important:

Correct fascia grille opening must be cut to allow sufficient air intake.

- 20mm clearance above unit required
- Model secured to plinth by two screws through fascia grille
- Unit must be earthed (not 12 volt SELV)
- Suitable for two-pipe central heating systems only

Accessories

Wall mounted room thermostat.

Overlay grilles: brown - RAL 8016, black - RAL 9005, brushed steel, chrome, aluminium, sovereign gold.

Commissioning

Check water temperature is hot enough to activate low temperature cut-out thermostat (LTC). Vent screw accessible through fascia grille.

Controls

SS2E W: three rocker switches, fan-off/fan-only, 1kW, 2kW.

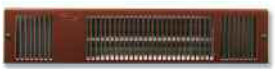
Overheat protection: thermal cut-out. Manual reset procedure: switch power off at unit or mains, wait 5 minutes, switch power on.

SS5 W/Dual: three rocker switches, heating/off/fan-only, hydronic/electric, normal/boost.

Low temperature cut-out thermostat set to energise fan at approximately 42°C (108°F).

All other models: two rocker switches -normal/off/boost, heating/fan-only.

Low temperature cut-out thermostat set to energise fan at approximately 42°C (108°F).



Brown

Chrome

Sovereign Gold

Brushed Steel

Black

Aluminium

Overlay Grilles

Space Saver models are supplied with a fixed fascia grille in white. Overlay grilles are available in a selection of colours and finishes. The overlay grille simply fits over the fixed white grille and is held in position using the existing screws that fix the heater to the plinth.

Inset Elite Brass

Freestanding Classic Brass

Freestanding Elite Brass

Freestanding Classic Chrome

Freestanding Elite Chrome

Flame-effect fan convectors that run off the central heating system, but with all the visual appeal of a real fire – a beautiful feature in any room. Efficient, cost effective and totally safe, with no harmful discharges. Ideal for children and the elderly because there are no flames or hot surfaces. Available in Inset or Freestanding and a choice of eyecatching designs. Hydroflame Classic and Elite can be supplied with an attractive choice of trims and complementary fireplace surrounds.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Hydroflame® Simplicity Fireplace Suite

The Simplicity Fireplace Suite combines the revolutionary Hydroflame flame-effect fan convector with a choice of beautiful fireplace surrounds and mantels as part of a convenient, single package.

The Simplicity Fireplace Suite can be used with any of the Elite or Classic Inset models.

An attractive choice of fireplace surrounds

The fireplace surrounds, designed specifically for use with Hydroflame, are available in an eye-catching choice of effects and finishes:

1. Cream with cream back plate and hearth
2. Yew with black back plate and hearth
3. Yew with cream back plate and hearth
4. Antique Oak with black back plate and oak hearth
5. Antique Oak with cream back plate and oak hearth

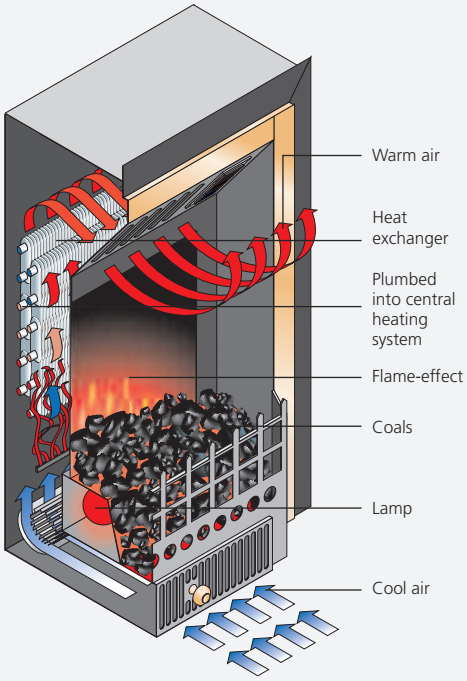
Benefits

The Simplicity Fireplace Suite offers significant benefits over those available from other suppliers:

- The depth of the fireplace rebate allows for all Hydroflame Inset models to be fitted with the fireplace against a flat wall
- There are several access positions in the hearth to accept the central heating pipe work
- The mantel and legs are removable from the hearth for easier access during installation

How Hydroflame® Works

Flame-effect fan convectors require connection to the wet central heating system and an electrical connection to run the flame-effect and fan.



Hot water from the central heating system passes through a heat exchanger and transfers its heat to the aluminium fins.

Cooler air is drawn in at floor level and used to create the flame-effect. The air is heated as it passes over the heat exchanger, a patented process that creates a realistic flame-effect, and then expelled gently back into the room.

This gives a more even temperature and will heat a room in much less time than a traditional panel radiator.

The fan will not come into operation until the central heating system water passing through the heat exchanger reaches 40°C (or the temperature set by the installer). This ensures that cooler air is not circulated at start up and allows Hydroflame to switch on and off automatically in conjunction with the central heating system.

Flame-effect fan convectors are energy efficient and in the home will add less than £10.00* to your annual heating bill.

Dual models include an electric heating element – ideal in spring and summer when you may need a quick warm up but the central heating system is switched off.

Note: *based on electricity charged at 15p/kWh.

Model	Room Size Guide*(m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Trim Colour	Flame-Effect Only
Hydronic									
Inset (Classic & Elite)	33	1.5 (5100)	2.0 (6800)	1.2 (4100)	1.6 (5500)	27	43	Brass or Chrome	•
Freestanding (Classic & Elite)	33	1.5 (5100)	2.0 (6800)	1.2 (4100)	1.6 (5500)	27	43	Brass or Chrome	•
Hydronic/Electronic (Dual)									
Inset Dual	33	1.5 (5100) 1.5	2.0 (6700) -	1.2 (4100) 1.5	1.6 (5500) -	27	43	Brass or Chrome	•
Freestanding Dual	33	1.5 (5100) 1.5	2.0 (6800) 1.5	1.2 (4100) -	1.6 (5500) 1.5	27 -	43	Brass or Chrome	•

In hydronic mode In electric mode

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Dual models include an electric element which in electric heating mode will emit 1.5kW of heat. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Inset (Classic & Elite)	15mm	2.0m	n/a	•	•	3A	29	36	0.36
Freestanding (Classic & Elite)	15mm	2.0m	n/a	•	•	3A	29	36	0.36
Hydronic/Electric									
Inset Dual (Classic & Elite)	15mm	2.0m	n/a	•	•	10A	29 -	36 1518	0.36 1518
Freestanding Dual	15mm	2.0m	n/a	•	•	10A	29 -	36 1518	0.36 1518

In hydronic mode In electric mode

Hydroflame® Classic & Elite

Connects to and runs from your central heating system (hydronic mode).

Installation

- Inset model designed for a recess 400mm x 550mm high
- Unit must be earthed
- Suitable for two-pipe central heating systems only
- Surface temperature of the casing complies with the safety requirement DHSS DN4

Commissioning

Check water temperature is hot enough to activate low temperature cut-out device (LTC).

Controls

Two rocker switches: normal/off/boost, flame-effect on/flame-effect off.

Variable low temperature cut- out device factory set to energise fan at approximately 40°C (104°F). Set temperature can be adjusted higher or lower during installation.

Built-in room thermostat.

Hydroflame® Dual Classic & Elite

Connects to and runs from your central heating system (hydronic mode), but also includes an electric heating element for use when the central heating is switched off.

Installation

- Inset Dual model designed for a recess 400mm x 550mm high
- Unit must be earthed
- Suitable for two-pipe central heating systems only
- Surface temperature of the casing complies with the safety requirement DHSS DN4

Commissioning

Check water temperature is hot enough to activate low temperature cut-out device (LTC).

Controls

Three rocker switches: normal/off/boost, hydronic/electric, flame-effect on/flame-effect off.

Variable low temperature cut-out device factory set to energise fan at approximately 40°C (104°F). Set temperature can be adjusted higher or lower during installation.

Built-in room thermostat.

Hydroflame® running costs

(Models fitted with 11W energy-saving long-life bulb)

Annual Usage (Hours)	Running Costs (£) 11W Bulb	29W Fan	Annual Total
1100	1.82	4.79	6.60
1300	2.15	5.65	7.80
1700	2.81	7.39	10.20
2500	4.13	10.87	15.00

Assumptions

Electricity charged at 15p per kWh.
Hydroflame operating on normal - 1.5kW heat output.
Excludes use of electric heating element.

Hydroflame® design options

Model Type	Trim Colour: Brass	Trim Colour: Chrome
Hydroflame		
Inset	•	•
Inset Dual	•	•
Freestanding	•	•
Freestanding Dual	•	•
Hydroflame Classic		
Inset	•	•
Inset Dual	•	•
Freestanding	•	•
Freestanding Dual	•	•

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Technical Information

Hydroflame hydronic flame-effect fan convectors are the environmentally friendly product of choice for living room heating. Once you appreciate the benefits and efficiencies of Hydroflame, electric, gas or open fires are simply not an option.

Completely safe

Hydroflame is safe because it uses water from the central heating system to produce heat.

- No independent gas supply needed
- No flue gases are produced – so a flue and CO detector are not required
- No live flames, hot coals or elements
- Low surface temperatures
- No special ventilation required
- Hidden fixings for extra security
- No minimum room size

A beautiful focal feature in the room

Stylish and attractive appearance characterises Hydroflame's innovative design.

- Fit on any internal or external wall surface, into a fireplace opening, or in front of a fireplace surround
- Can be used simply to replace an existing panel radiator
- Can show a comforting flame-effect with or without the heating being switched on

Simple controls

Operating Hydroflame could not be simpler.

- Clearly labelled, easy action rocker switches
- Easy to use by elderly or infirm people

Minimal running costs

Hydroflame has a unique method of operation that brings significant savings on running costs.

- Operates as part of the central heating system, where average usage on normal heat output will add less than £10.00 a year to annual heating bills (excluding any separate use of the electric heating element on Dual models). See table of running costs

Environmentally friendly

Hydroflame has less of an impact on the environment than electric, gas or open fire alternatives.

- No harmful gases expelled to the atmosphere
- Automatic response to water temperature, providing the correct amount of heat when needed
- Thermostatically controlled
- Slower fan speed for flame-effect only reduces energy consumption
- Energy saving light bulb

Easy to install

Hydroflame is economical and straightforward to install

- No gas supply or flue required – fix to any wall, internal and external
- No chimney or flue liners required
- Inset models fit standard fireplace openings – no need for a replacement surround
- Flexible hoses, isolation valves and pre-wired electric cable supplied as standard
- Connects to standard central heating pipe work

For full installation instructions refer to the Hydroflame Installation & User Guide, which is available on request; or download it from www.smiths-env.com.

Low maintenance

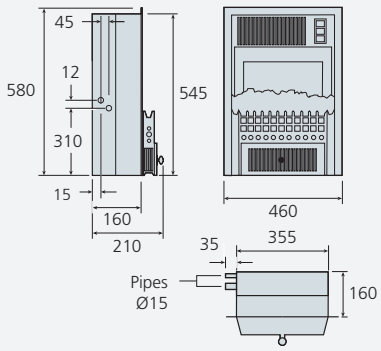
Cost effective and convenient.

- No need for annual servicing or safety checks – so no access to the property is required
- Easy to change the lamp
- Easy for homeowner to clean the filter system

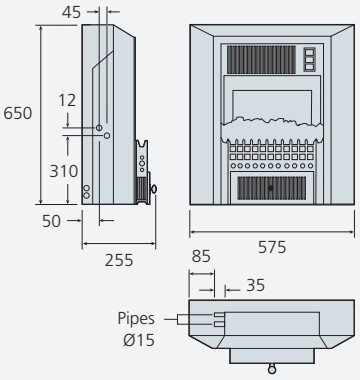
Very low water content

Each Hydroflame has a very low water content of 0.36 litres, around 5% of the water content of an equivalent output steel panel radiator.

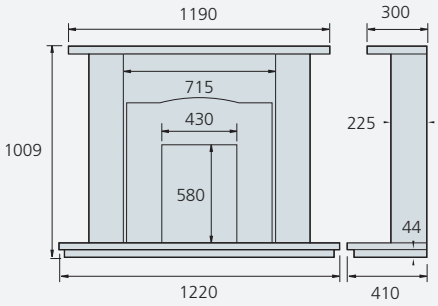
Inset & Inset Dual



Freestanding & Freestanding Dual

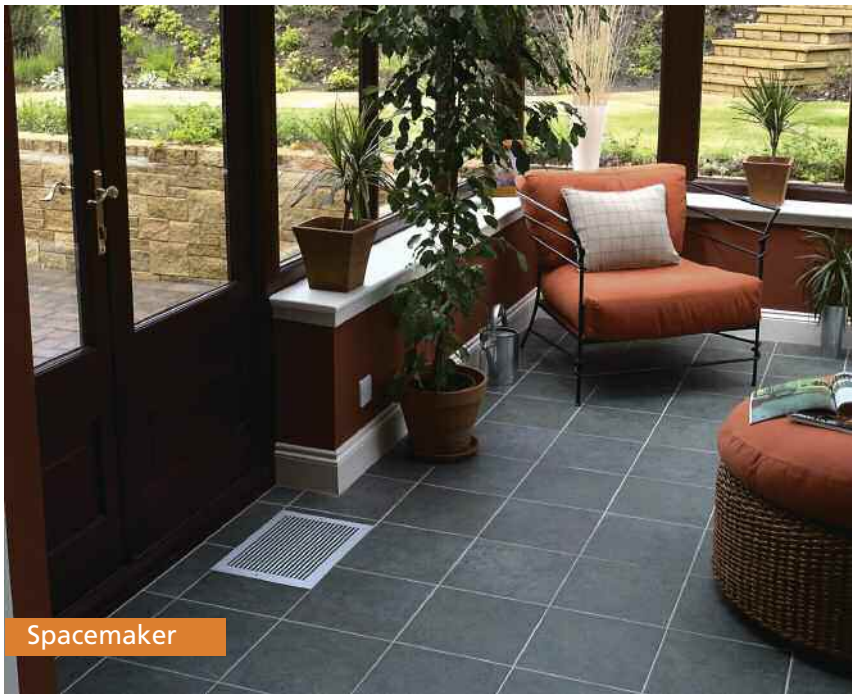


Fireplace Surround



All dimensions in mm

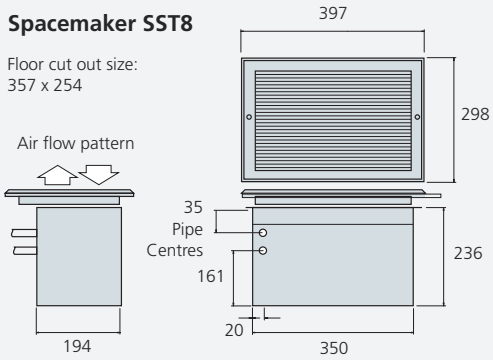
Spacemaker, Award and Sygnet



Spacemaker SST8

Floor cut out size:
357 x 254

Air flow pattern



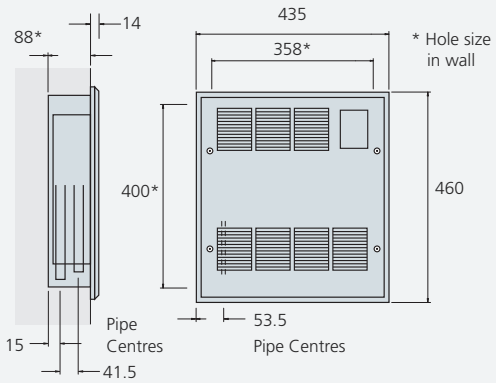
Spacemaker

Perfect for places in the home where space is particularly limited. A fan convector that installs flush with the floor, providing efficient and effective heat at low level. Ideal for spaces such as entrance halls, lobbies, circulation areas and applications where wall space is limited.

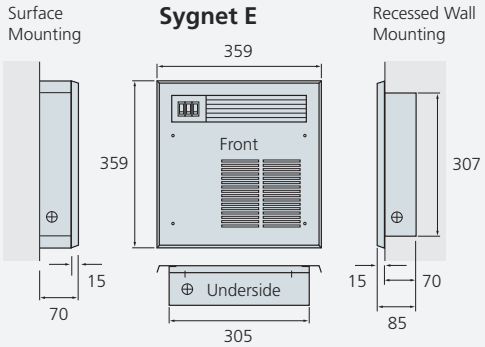
Award and Sygnet

Versatile and economic, low-level fan convectors giving a choice of surface or flush mounting. Unobtrusive recessed installation means no projection beyond the surface of the wall – ideal for those areas where space may be at a premium.

Award SFR7, Award SFR7 12V



Sygnet E



Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casing Colour	Fan-Only
Hydronic									
Award SFR7	36	1.6 (5500)	2.2 (7500)	1.3 (4400)	1.8 (6100)	33	45	White	n/a
Spacemaker SST8	36	1.6 (5500)	2.2 (7500)	1.3 (4400)	1.8 (6100)	32	39	Anodised aluminium grille	n/a
Hydronic Low Voltage									
Award SFR7 12V	32	1.6 (5500)	2.2 (7500)	1.3 (4400)	1.8 (6100)	33	45	White	n/a
Electric									
Sygnet E	22	1.0	2.0	1.0	2.0	49	49	White	•

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Award SFR7	15mm	1.5m	n/a	n/a	n/a	3A	20	30	0.36
Spacemaker SST8	15mm	1.5m	n/a	n/a	n/a	3A	20	30	0.27
Hydronic Low Voltage									
Award SFR7 12V	15mm	0.45m	•	n/a	n/a	3A	20	30	0.36
Electric									
Sygnet E	n/a	2.0m	n/a	n/a	n/a	10A	1012	2025	n/a

Spacemaker SST8

Finish

Anodised aluminium grille with removable centre section.

Installation

- Installs between floor joists or purpose made trenches in concrete floors
- Air intake and discharge through grille
- Unit must be earthed
- Suitable for two-pipe central heating systems only

Commissioning

Check water temperature is hot enough to activate low temperature cut-out (LTC). Vent screw accessible through grille.

Controls

Rocker switch - normal/off/boost - below grille.

Low temperature cut-out thermostat set to energise fan at approx. 42°C (108°F).

Accessories

Wall-mounted room thermostat.

Award SFR7 & Award SFR7 12V

Finish

Front casing 0.9mm zinc coated steel, polyester powder-coated. Paint specification: textured white BS 4800 00A01 18% gloss.

Installation

- Installs into stud walls
- Brickwork installation requires wood frame (not supplied)
- Transformer supplied with SELV model. Must be fitted remote from the bathroom/high humidity area
- Unit must be earthed (not 12 volt SELV)
- Suitable for two-pipe central heating systems only
- Surface temperature of the casing complies with the safety requirement DHSS DN4

Commissioning

Check water temperature is hot enough to activate low temperature cut-out (LTC).

Controls

Rocker switch - normal/off/boost.

Low temperature cut-out thermostat set to energise fan at approx. 42°C (108°F).

Accessories

Wall-mounted room thermostat.

Sygnet E

Finish

Front casing and surface mounting kit 0.9mm zinc coated steel, polyester powder-coated. Paint specification: textured white BS 4800 00A01 18% gloss.

Installation

- May be recessed in stud walls or surface mounted
- Brickwork installation requires wood frame (not supplied)
- Unit must be earthed

Controls

Three rocker switches, fan off/fan-only, 1kW, 2kW.

Overheat protection: thermal cut-out. Manual reset procedure: switch power off at unit or mains, wait five minutes, switch power on.

Accessories

Wall-mounted room thermostat.

Ecovector® Plinth Heater

Domestic Applications

After

Before

A highly energy-efficient fan convector that fits neatly into the plinth of a kitchen unit. Ecovector Plinth Heater eliminates the need for conventional radiators and will run from both traditional boilers and renewable technology. The product brings considerable space saving benefits – more room for extra storage units, more work surfaces, more space for kitchen appliances.

Ecovector plinth heater is used predominantly for domestic applications, where the ingenious plinth-mounting feature makes it ideal for kitchens and utility rooms. This heater is also ideal for some non-domestic applications, such as reception areas, changing rooms, libraries, etc.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m³)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Heat Output Δt 20°C Normal kW (Btu/h)	Heat Output Δt 20°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Fascia Grille Colour
Hydronic										
PH1300	29	1.3 (4400)	1.7 (5800)	1.1 (3800)	1.4 (4700)	0.5 (1600)	0.65 (2200)	27	43	Brushed Steel
PH1600	36	1.6 (5500)	1.9 (6500)	1.3 (4400)	1.6 (5500)	0.6 (2100)	0.7 (2400)	30	44	Brushed Steel

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal (Watts)	Power Consumption Boost (Watts)	Water Capacity (Litres)
Hydronic									
PH1300	15mm	2.0m	n/a	•	n/a	3A	21	30	0.36
PH1600	15mm	2.0m	n/a	•	n/a	3A	21	30	0.38

Fascia Grille Finish

Brushed steel.

Installation

Important:

Correct fascia grille opening must be cut to allow sufficient air intake.

- 20mm clearance above unit required
- Model secured to plinth by two screws through fascia grille
- Unit must be earthed
- Suitable for two-pipe central heating systems only

Accessories

Wall mounted room thermostat.

Overlay grilles: brown - RAL 8016, black - RAL 9005, White - RAL 9010.

Commissioning

Check water temperature is hot enough to activate low temperature cut-out thermostat (LTC). Vent screw accessible through fascia grille.

Controls

One rocker switch - normal/off/boost.

Low temperature cut-out thermostat set to energise fan at approximately 35°C.

White

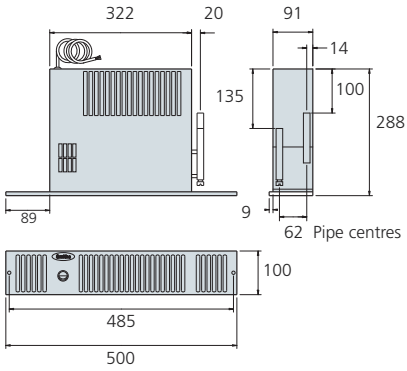
Brown

Black

Fascia Grilles

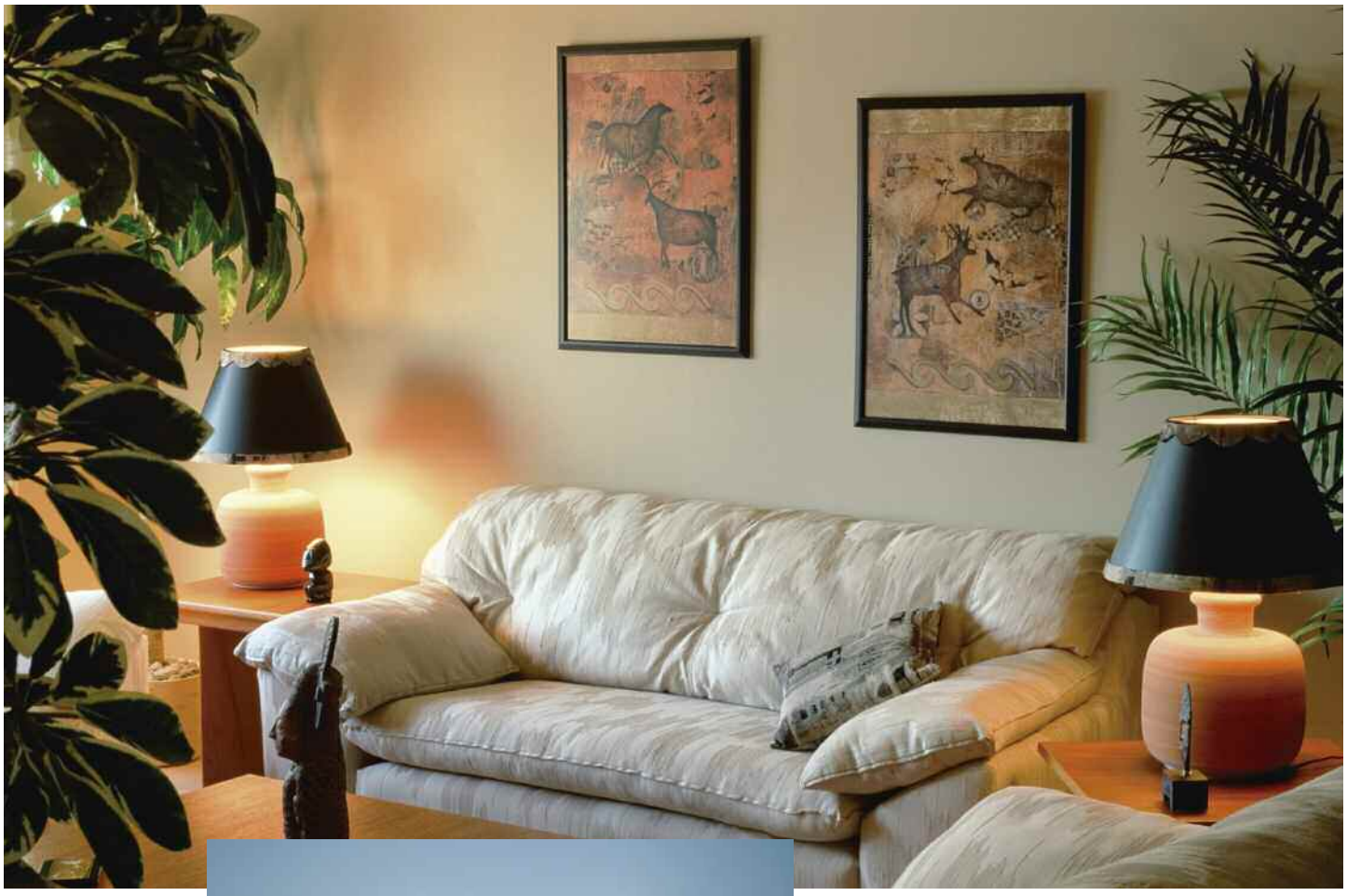
Ecovector Plinth Heater models are supplied with a fascia grille in brushed steel. Grilles are available in a selection of colours and finishes. The grille simply replaces the brushed steel grille and is held in position using the existing screws that fix the heater to the plinth.

PH1300, PH1600



Ecovector® Low Level

Domestic and Non-Domestic Applications



The next generation fan convector offering energy efficiency, safety with its low surface temperature casing and controllability with in-built room thermostat. Suitable for use on both existing boiler systems and those driven by renewable technology such as ground or air-source heat pumps. Using only 5% of the water content of an equivalent output radiator the Ecovector low level fan convector is fast, responsive and very quiet in operation. Provides warmth from the floor upwards – the ideal heating pattern – but is more responsive, energy efficient and effective than either under-floor heating or radiators. Will heat the room more quickly than other heat emitters thereby reducing the amount of time your boiler or heat pump is running.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Heat Output Δt 20°C Normal kW (Btu/h)	Heat Output Δt 20°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casing Colour	Fan-Only
Hydronic											
Ecovector LL 1200	27	1.2 (4000)	1.6 (5400)	1.0 (3400)	1.3 (4300)	0.4 (1200)	0.5 (1600)	32	38	White	n/a
Ecovector LL 2000	45	2.0 (6900)	2.6 (8800)	1.6 (5500)	2.2 (7600)	0.7 (2500)	0.9 (2900)	35	40	White	n/a
Ecovector LL 2800	62	2.8 (9700)	3.5 (12100)	2.3 (8000)	2.9 (10000)	1.0 (3200)	1.2 (4200)	37	42	White	n/a

*Room sizes given in cubic metres for general guidance only based on low heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Ecovector LL 1200	15mm	1.5m	n/a	n/a	n/a	3A	17	21	0.29
Ecovector LL 2000	15mm	1.5m	n/a	n/a	n/a	3A	26	55	0.58
Ecovector LL 2800	15mm	1.5m	n/a	n/a	n/a	3A	43	76	0.83

Ecovector® Low Level

Finish

Front casing: zinc coated steel. Polyester powder-coated: textured white BS 4800 00A01 18% gloss.

Side panels: polymer eggshell white

Installation

- Mounting bracket supplied
- Unit must be earthed
- Suitable for two-pipe central heating systems
- Minimum height above floor level 150mm
- Maximum height above floor level 500mm

Commissioning

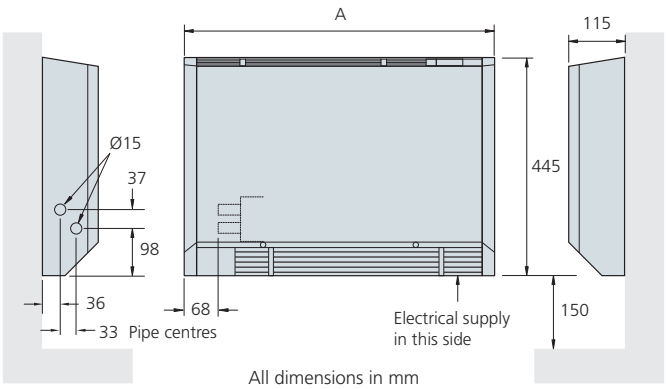
Check water is hot enough to activate the selectable low temperature cut-out thermostat.

Controls

Rocker switch - normal/off/boost.

Built-in room thermostat.

Selectable low temperature cut-out thermostat, set to 35°C for heating systems run from renewable technology and 52°C for standard and condensing boiler heat generators.



All dimensions in mm

Model	A
LL 1200	635
LL 2000	1025
LL 2800	1385

Ecovector® High Level

Domestic and Non-Domestic Applications

A range of wall-mounted fan convectors that are ideal for the home, office and a wide variety of other non-domestic applications. Fitted unobtrusively above head height, Ecovector® HL makes maximum use of wall space with a safe, high-level heat source. Suitable for use on both existing boiler systems and those driven by renewable technology such as ground or air-source heat pumps. Using only 5% of the water content of an equivalent output radiator the Ecovector® high level fan convector is more energy efficient, more responsive and more effective than either under-floor heating or panel radiators. Will heat the room more quickly than other heat emitters thereby reducing the amount of time your boiler or heat pump is running. Low voltage model available for areas of high humidity such as bathrooms and swimming pools.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Heat Output Δt 20°C Normal kW (Btu/h)	Heat Output Δt 20°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casing Colour	Fan-Only
Hydronic											
Ecovector® HL 1000	22	1.0 (3500)	1.4 (4700)	0.9 (3100)	1.1 (3800)	0.4 (1300)	0.5 (1800)	32	40	White	•
Ecovector® HL 2300	51	2.3 (7800)	3.1 (10500)	1.9 (6400)	2.5 (8500)	0.9 (3000)	1.2 (4000)	34	50	White	•
Ecovector® HL 2900	-	2.9 (10000)	4.2 (14500)	2.5 (8500)	3.5 (12000)	1.1 (3800)	1.6 (5500)	37	51	White	•
Ecovector® HL 4000	-	4.0 (13500)	5.3 (18000)	3.3 (11300)	4.4 (15100)	1.5 (5100)	2.0 (6800)	39	52	White	•
Hydronic Low Voltage											
Ecovector® HL 1000-12V	20	1.0 (3500)	1.4 (4700)	0.9 (3100)	1.1 (3800)	0.4 (1300)	0.5 (1800)	32	39	White	•

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Δt 20°C assumes a mean water temperature of 40°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Ecovector® HL 1000	15mm	1.5m	n/a	n/a	n/a	3A	20	25	0.28
Ecovector® HL 2300	15mm	1.5m	n/a	n/a	n/a	3A	20	32	0.32
Ecovector® HL 2900	15mm	1.5m	n/a	n/a	n/a	3A	33	50	0.52
Ecovector® HL 4000	22mm	1.5m	n/a	n/a	n/a	3A	40	60	1.04
Hydronic Low Voltage									
Ecovector® HL 1000-12V	15mm	0.45m	•	n/a	n/a	3A	20	25	0.28

Finish

Front casing: zinc-coated steel. Polyester powder-coated: textured white BS 4800 00A01 18% gloss.

Side panels: polymer eggshell white.

Installation

- Maximum installation height 2.1m (6'11") to underside
- No top or side clearance required
- Unit must be earthed (except model 1000-12V)
- Suitable for two-pipe central heating systems
- Patress box not supplied for transformer (model 1000-12V)

Commissioning

Check water is hot enough to activate the selectable low temperature cut-out thermostat. The inclusion of an automatic air vent at the highest point is recommended to avoid possible air locks.

Controls

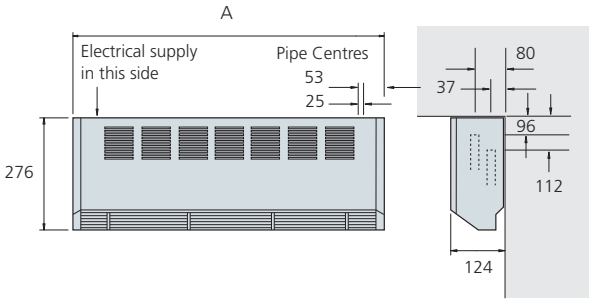
Two rocker switches - normal/off/boost, heating/fan-only.

Selectable low temperature cut out thermostat, set at 35°C for heating systems run from renewable technologies and 52°C for standard and condensing boiler heat generators.

Accessory

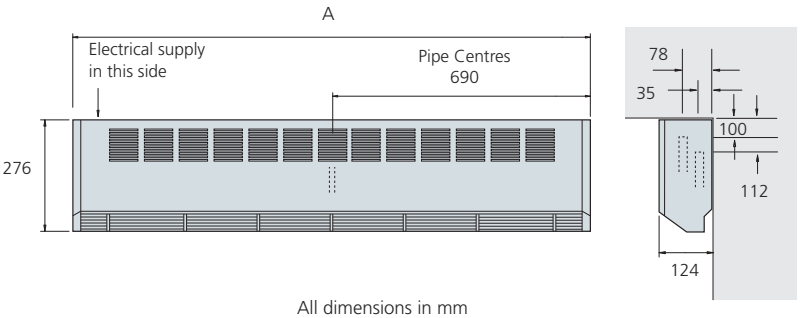
Wall-mounted room thermostat.

Ecovector® HL 1000, 1000-12V, 2300, 2900



Model	A
1000	470
1000-12V	470
2300	781
2900	1062
4000	1412

Ecovector® HL 4000



All dimensions in mm

Ecovector® Vertical

Domestic and Non-Domestic Applications

The next generation fan convector offering energy efficiency, safety with its low surface temperature casing and controllability with built-in room thermostat. Suitable for use on both existing boiler systems and those driven by renewable technology such as ground or air-source heat pumps. Using only 5% of the water content of an equivalent output radiator the Ecovector Vertical low level fan convector is fast, responsive and very quiet in operation. Provides warmth from the floor upwards – the ideal heating pattern – but is more responsive, energy efficient and effective than either under-floor heating or radiators. Will heat the room more quickly than other heat emitters thereby reducing the amount of time your boiler or heat pump is running.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Heat Output Δt 20°C Normal kW (Btu/h)	Heat Output Δt 20°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casing Colour	Fan-Only
Hydronic											
Ecovector® VE 2500	56	2.5 (8500)	2.6 (8800)	2.0 (6900)	2.1 (7300)	0.9 (3200)	1.0 (3400)	36	39	White	n/a

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Δt 20°C assumes a mean water temperature of 40°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Ecovector® VE 2500	15mm	1.5m	n/a	n/a	n/a	3A	28	36	0.75

Finish

Front casing and side panels: zinc-coated steel. Polyester powder-coated: textured white BS 4800 00A01 18% gloss.

Installation

- Mounting bracket supplied
- Unit must be earthed
- Suitable for two-pipe central heating systems
- Minimum height above floor level 150mm, maximum height above floor level 500mm

Commissioning

Check water is hot enough to activate the selectable low temperature cut-out thermostat.

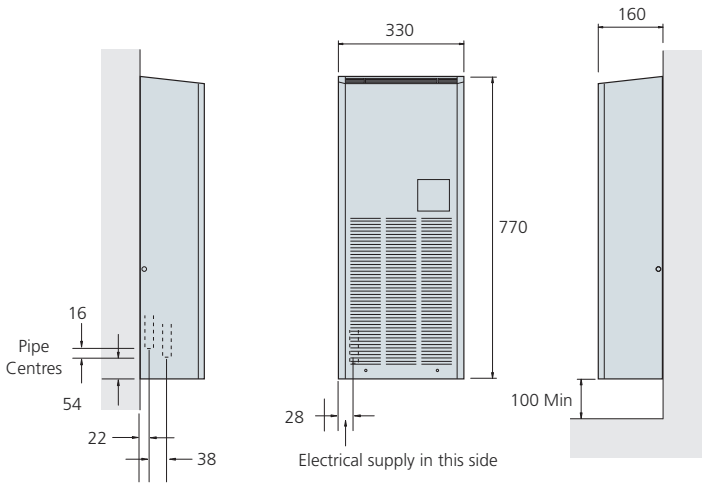
Controls

Rocker switch - normal/off/boost.

Built-in room thermostat.

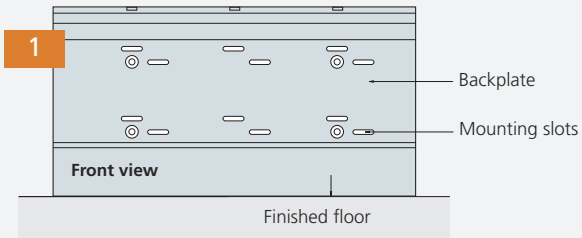
Selectable low temperature cut-out thermostat, set to 35°C for heating systems run from renewable technologies and 52°C for standard and condensing boiler heat generators.

Ecovector® VE 2500

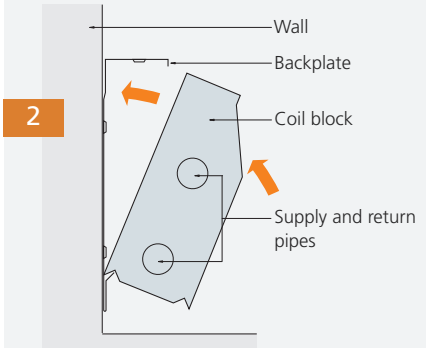


A natural convector easily fitted at skirting level – the ideal form of perimeter heating, providing gentle low-level warmth anywhere from conservatories to waiting rooms.

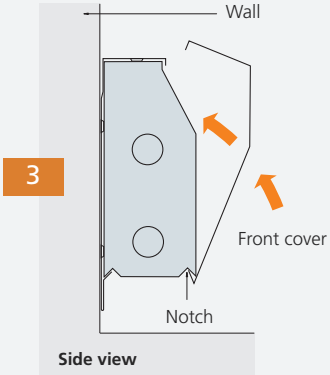
Installs in a 'snap'



Mount Backplate - fasten to wall through mounting slots provided (20 per metre). Minimum clearance above floor - 50mm.



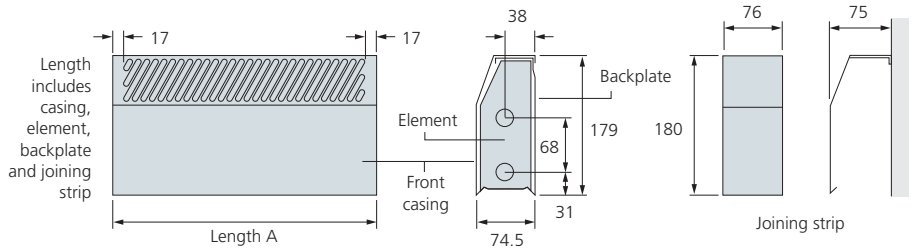
'Snap' in Coil Block - engage back notch onto lower lip of the Backplate and pivot the Coil Block towards the wall until it 'Snaps' into place.



'Snap' on Cover - after pipe connections are completed, place lower lip of cover into front notch in the Coil Block and pivot towards the wall until it 'Snaps' over the Backplate.

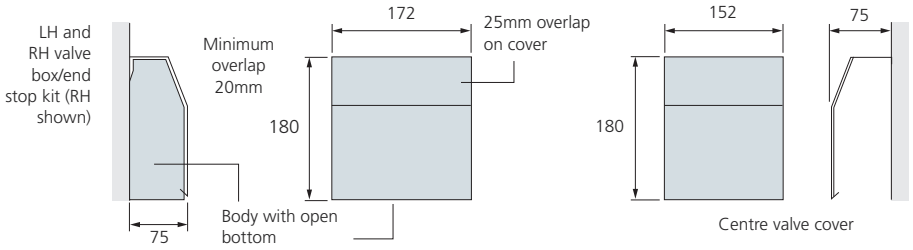
		Flow Rate (m/s)	Heat Output W/m (Btu/h/m) @ average water temperature 50°C	55°C	60°C	65°C	70°C	75°C	80°C
	Two supplies - Parallel	1.0	270 (930)	370 (1250)	470 (1590)	550 (1870)	650 (2200)	750 (2550)	850 (2890)
	Bottom supply - Top return	1.0	260 (880)	350 (1190)	440 (1490)	510 (1730)	570 (1950)	680 (2330)	750 (2560)

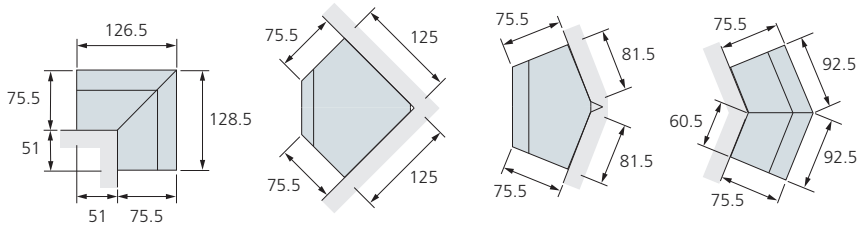
Heat outputs measured using MK 1 Sureline® heating elements. Higher performance can be achieved using MK 2 heating elements currently used on USA Heating Edge models only.

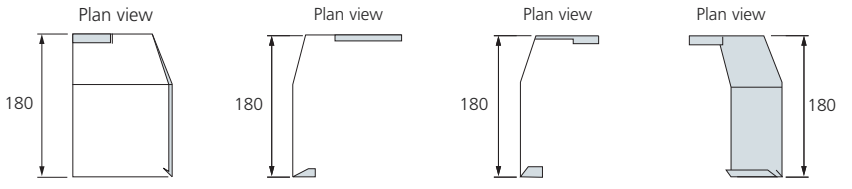


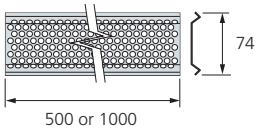
Model	Length A (mm)
Sureline 500	500
Sureline 1000	1000
Sureline 1500	1500
Sureline 2000	2000
Sureline 1000C*	1000

* casing only









Finger guard

All dimensions in mm

Finish

Outer casing 0.7mm zinc coated steel. Polyester powder-coated. Paint specification: textured white BS 4800 00A01 18% gloss. Each length includes casing, element, backplate and joining strip. Casing only includes casing, backplate and joining strip.

Installation

- Minimum clearance above floor 50mm
- Flow and return connections 22mm copper
- Designed for system pressures up to 10 bar
- Suitable for two pipe central heating systems only

Attachments

- 1000mm casing only (includes backplate)
- LH and RH valve box/end stop kit (includes casing with integral end stop and knock-out for thermostatic valves
- Centre valve cover
- 90° internal corner
- 90° external corner
- 135° internal corner
- 135° external corner
- Finger guard*

Customised Requirements

We are able to offer casings painted in any colour. Price and availability will be confirmed at the time of order.

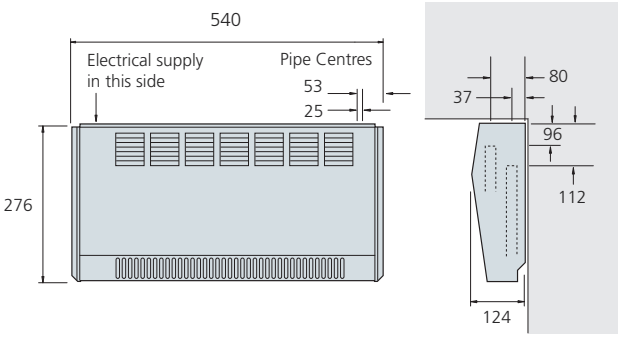
*We recommended the use of finger guards in installations where infants have access to the underside of Sureline.

Sterling

Domestic and Non-Domestic Applications

Wall-mounted fan convector that is ideal for home, office and a wide variety of other non-domestic applications. Models available for areas of high humidity such as bathrooms and swimming pool areas. Fitted unobtrusively above head height, Sterling makes maximum use of wall space with a safe, high-level heat source.

Sterling Hydronic 1000-240V, 1000-12V



Sterling Hydronic

Finish

Front casing: zinc-coated steel. Polyester powder-coated: textured white BS 4800 00A01 18% gloss.

Side panels: polymer eggshell white.

Installation

- Maximum installation height 2.1m (6'11") to underside
- No top or side clearance required
- Unit must be earthed (not 12 volt SELV)
- Suitable for two-pipe central heating systems only

Commissioning

Check water temperature is hot enough to activate low temperature cut-out (LTC). The inclusion of an automatic air vent at the highest point is recommended to avoid possible air locks.

Controls

Two rocker switches - normal/off/boost,heating/fan-only.

Low temperature cut-out thermostat set to energise fan at 35°C.

Accessory

Wall-mounted room thermostat.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

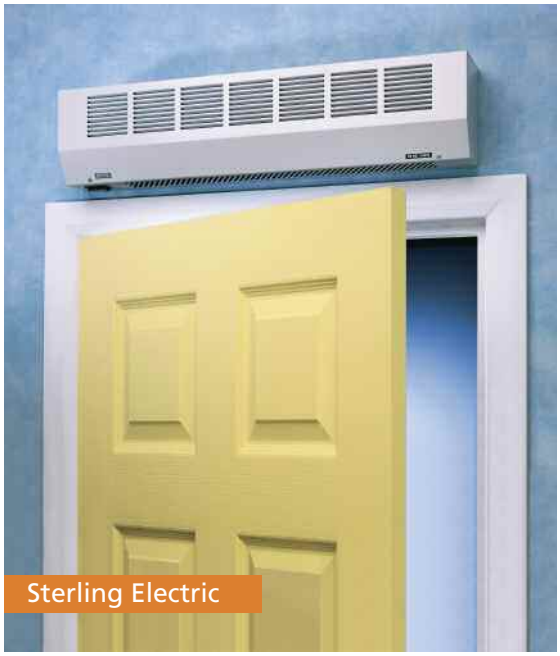
**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m³)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casing Colour	Fan-Only
Hydronic									
Sterling 1000-240V	22	1.0 (3500)	1.4 (4700)	0.9 (3100)	1.1 (3800)	32	40	White	•
Hydronic Low Voltage									
Sterling 1000-12V	20	1.0 (3500)	1.4 (4700)	0.9 (3100)	1.1 (3800)	32	39	White	•
Electric									
Sterling E 2kW	22	1.0	2.0	1.0	2.0	40	40	White	•
Sterling E 2kW PC	22	1.0	2.0	1.0	2.0	40	40	White	n/a
Sterling E 4kW	-	2.0	4.0	2.0	4.0	47	47	White	•

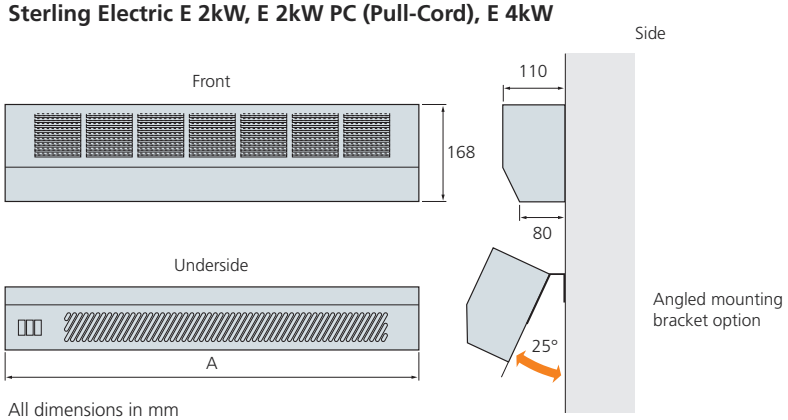
*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Sterling 1000-240V	15mm	1.5m	n/a	n/a	n/a	3A	20	25	0.28
Hydronic Low Voltage									
Sterling 1000-12V	15mm	0.45m	•	n/a	n/a	3A	20	25	0.28
Electric									
Sterling E 2kW	n/a	2.0m	n/a	n/a	n/a	10A	1012	2025	n/a
Sterling E 2kW PC	n/a	2.0m	n/a	n/a	n/a	10A	1012	2025	n/a
Sterling E 4kW	n/a	2.0m	n/a	n/a	n/a	20A	2025	4045	n/a

Model	A
Sterling 2kW & Pull-Cord Model	432
Sterling 4kW	741



Sterling Electric E 2kW, E 2kW PC (Pull-Cord), E 4kW



All dimensions in mm

Sterling Electric

Finish

Outer casing with inlet grille zinc-coated steel. Polyester powder-coated: textured white BS 4800 00A09 18% gloss.

Installation

- Maximum installation height 2.1m (6'11") to underside
- Minimum top clearance of 150mm required
- 25° angled mounting brackets supplied (optional fitting)
- Unit must be earthed

Controls

Rocker switches for fan and element 2kW and 4kW models.

Pull-cord for fan and element 2kW PC model.

Overheat protection: thermal cut-out.

Manual reset procedure: switch power off at unit or mains, wait 5 minutes, switch power on.

Room thermostats used in conjunction with 4kW models must be rated at 16A minimum.

Accessory

2kW models - wall-mounted room thermostat.

Staccato Turquoise

A low-level, wall-mounted fan convector, with thermostatic control, in a striking visual design to complement modern interiors. Front panel available in a range of seven colour options, with special colours available to order.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Room Size Guide* (m^3)	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Colour options Chassis	Colour options Fascia Panel	Fan-Only
Hydronic										
Staccato 11	47	2.1 (7200)	3.2 (10900)	1.7 (5800)	2.6 (8900)	34	50	Silver	Yellow/Orange/ Red/Green/ Turquoise/Blue/ Black	•

*Room sizes given in cubic metres for general guidance only based on normal heat output (Δt 60°C) for domestic applications - always calculate heat losses. Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m.

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic									
Staccato 11	15mm	1.5m	n/a	n/a	n/a	3A	28	36	0.75

Staccato fascia panel options

Yellow

Green

Orange

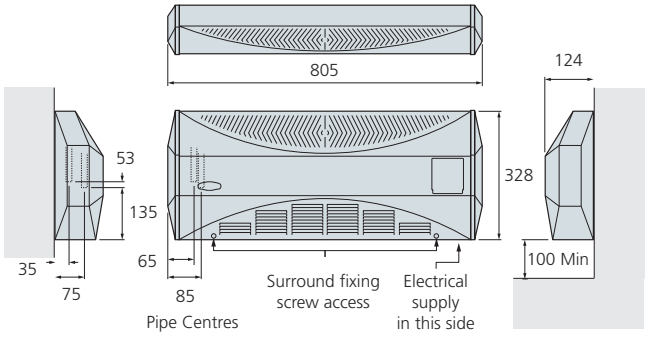
Blue

Red

Black

Colour	RAL Reference
Yellow	1016
Orange	2004
Red	3020
Green	6024
Turquoise	5018
Blue	5005
Black	9005

Other RAL colours available on request.



All dimensions in mm

Finish

Front fascia panel and chassis 0.9mm zinc-coated steel. Chassis polyester powder-coated in textured silver crackle (brilliant metallic EW4 0IF) with clear lacquer.

Front fascia panels available in the colours shown.

End panels: formed plastic coated MDF.

Installation

- Mounting bracket supplied
- Unit must be earthed
- Access to casing fixing screws from the front
- Suitable for two-pipe central heating systems only
- Minimum height above floor level 100mm, maximum height above floor level 500mm

Commissioning

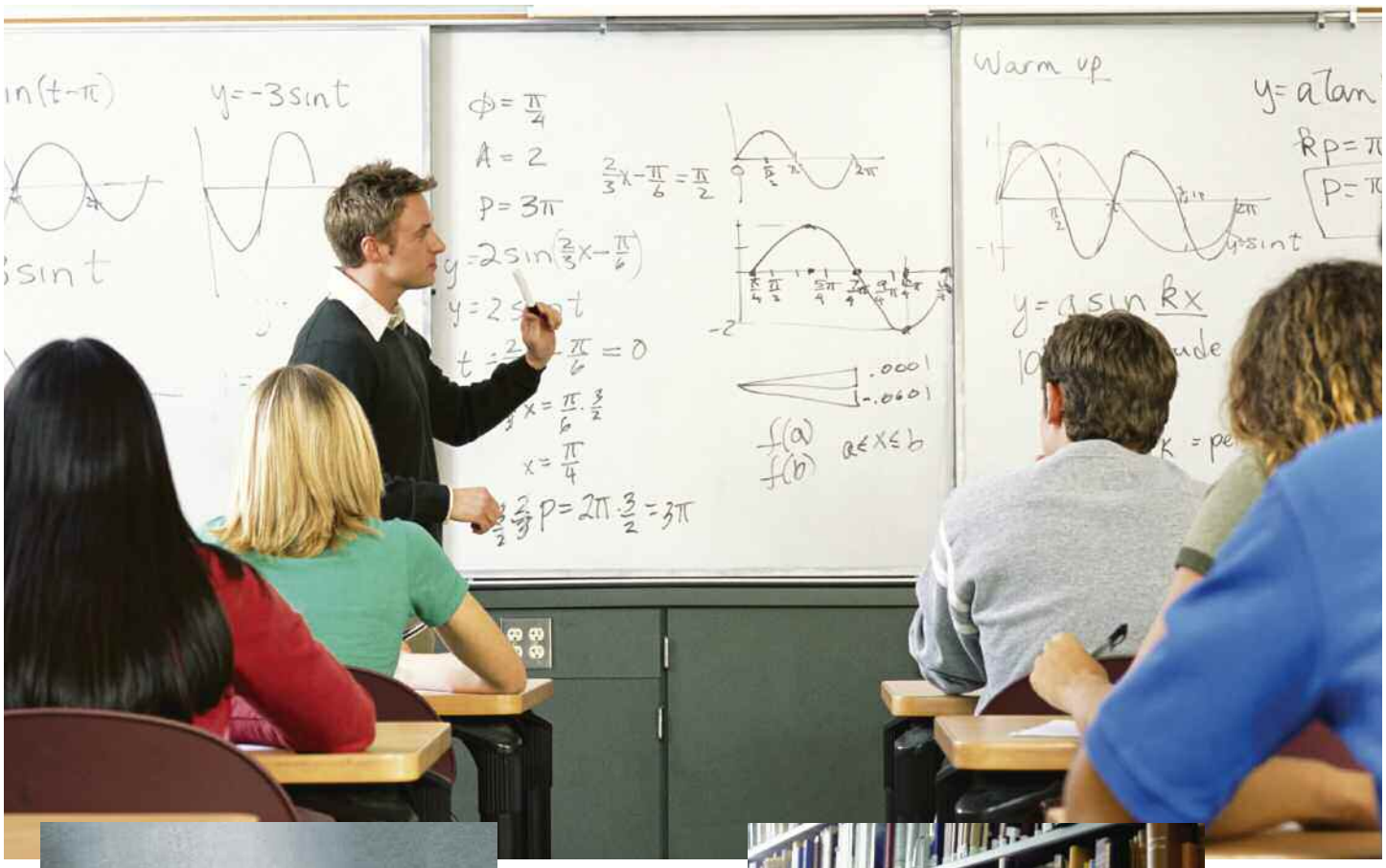
Check water temperature is hot enough to activate low temperature cut-out thermostat (LTC).

Controls

Two rocker switches – normal/off/boost, fan-heating/fan-only.

Built-in room thermostat.

Low temperature cut-out thermostat set to energise fan at approx. 42°C (108°F).



A floor or wall-mounted low surface temperature fan convector specially developed for a diversity of applications in commercial installations – ideal for meeting the heating requirements of larger areas. Finished in clean and bright eggshell white – other colours available to order. Rapid response heating and the option of room temperature control makes Caspian the perfect method of heating for buildings such as schools, care homes, libraries, offices, hospitals, etc. The ability to generate heat efficiently from lower temperature heating systems maximises Caspian's renewable technology credentials.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Caspian Heat Output Data

Model	Heat Output High kW (Btu/h)	Heat Output Medium kW (Btu/h)	Heat Output Low kW (Btu/h)	Noise Rating (NR) High (dBA)	Noise Rating (NR) Medium (dBA)	Noise Rating (NR) Low (dBA)	Casing Colour	Fan-Only
Hydronic								
Caspian 60/03	3.4 (12000)	3.2 (11000)	2.9 (10000)	40	37	34	White	n/a
Caspian 60/04	4.6 (16000)	4.1 (14000)	3.6 (12000)	38	35	32	White	n/a
Caspian 90/06	6.7 (23000)	6.2 (21000)	5.6 (19000)	43	40	37	White	n/a
Caspian 90/07	7.8 (27000)	7.0 (24000)	6.2 (21000)	42	40	37	White	n/a
Caspian 120/10	11.4 (39000)	10.4 (35000)	8.6 (29000)	44	42	37	White	n/a
Caspian 120/11	12.2 (42000)	11.4 (39000)	9.5 (32000)	46	44	39	White	n/a
Caspian 120/12	13.1 (45000)	12.2 (42000)	10.4 (35000)	48	46	42	White	n/a

75°C inlet water temperature, 18°C entering air temperature. Heat outputs tested in accordance with BS 4856. Sound levels measured at 1.5m.

Correction Factors - Caspian 60, 90 and 120 Range

EAT °C	Mean Water Temperature °C 65	70	75
15	0.85	0.95	1.05
18	0.79	0.89	1.00
21	0.74	0.84	0.95

Model	Flow & Return Connections	Mains Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Low Watts	Power Consumption Medium Watts	Power Consumption High Watts	Water Capacity (Litres)
Hydronic										
Caspian 60/03	22mm	1.5m	n/a	n/a	n/a	3A	29	36	51	0.28
Caspian 60/04	22mm	1.5m	n/a	n/a	n/a	3A	29	36	51	0.32
Caspian 90/06	22mm	1.5m	n/a	n/a	n/a	3A	53	60	98	0.52
Caspian 90/07	22mm	1.5m	n/a	n/a	n/a	3A	53	60	98	1.04
Caspian 120/10	22mm	1.5m	n/a	n/a	n/a	3A	53	99	114	0.28
Caspian 120/11	22mm	1.5m	n/a	n/a	n/a	3A	60	114	135	0.32
Caspian 120/12	22mm	1.5m	n/a	n/a	n/a	3A	99	135	151	0.52

Finish

Casing: zinc coated steel 1.2mm. Polyester powder-coated: textured white BS 4800 00A01 18% gloss.

Installation

- Suitable to two-pipe central heating systems
- Mount on the floor with fixings to the wall
- pipe work access holes on the rear and underside
- Coin operated front access panel
- Bleed valve accessible on removal of front casing
- Tamperproof control panel
- Unit must be earthed

Commissioning

Check water is hot enough to active the low temperature cut-out thermostat.

Controls

Rocker switch - low/medium/high.

Illuminated rocker switch - on/off.

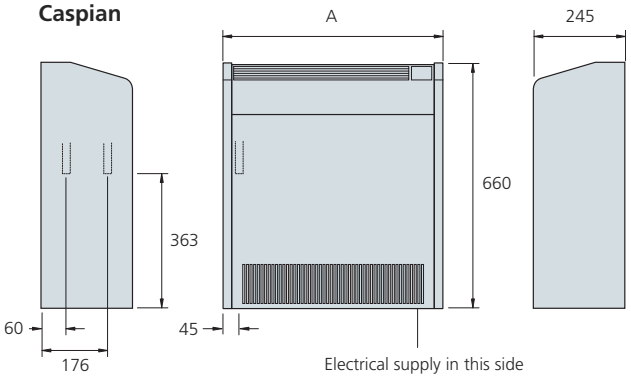
Facility to connect room thermostat.

Low temperature cut-out thermostat set to energise fan at approx. 42°C (108°F).

Accessories

Wall mounted room thermostat.

Caspian



All dimensions in mm

Model	A
60	595
90	895
120	1195

Skyline®

Non-Domestic Applications

A ceiling-mounted, high-output fan convector that is ideal for large, non-domestic areas. Units install simply into a 600mm x 600mm ceiling tile. Skyline convectors can therefore heat large areas without any encroachment on usable space.

Independent tests* show that fan convectors are at least 24% more energy efficient than a panel radiator in heating up a room.

**Tests carried out by BSRIA (Building Services Research and Information Association) in August 2008*

Model	Heat Output Δt 60°C Normal kW (Btu/h)	Heat Output Δt 60°C Boost kW (Btu/h)	Heat Output Δt 50°C Normal kW (Btu/h)	Heat Output Δt 50°C Boost kW (Btu/h)	Sound Levels Normal (dBA)	Sound Levels Boost (dBA)	Casting Colour	Fan-Only	Flow and Return Connections
Hydronic									
CT18	3.5 (11900)	5.5 (18800)	2.8 (9600)	4.4 (15000)	44	55	White	•	22mm
Electric									
E 4kW	4.0	n/a	4.0	n/a	40	40	White	•	n/a

Δt 60°C assumes a mean water temperature of 80°C and room temperature of 20°C. Δt 50°C assumes a mean water temperature of 70°C and room temperature of 20°C. Hydronic outputs tested in accordance with BS 4856. Fan-only option operational only when central heating system is switched off. Sound levels measured at 1.5m.

Model	Main Cable	Transformer	Flexible Hoses	Isolating Valves	Fused Spur	Power Consumption Normal Watts	Power Consumption Boost Watts	Water Capacity (Litres)
Hydronic								
CT18	1.5m	n/a	n/a	n/a	3A	50	70	0.9
E 4kW	1.5m	n/a	n/a	n/a	20A	4045	n/a	n/a

Skyline CT18

Finish

Outer casing 0.7mm zinc-coated steel.
Polyester powder-coated.
Paint specification: textured white
BS 4800 00A01 18% gloss.

Installation

- Maximum installation height 3.2m (10'6") to underside
- Installed to 180mm - penetration depth in recess (excluding fittings)
- Four air inlet options: room only, void only, room and void, fresh air (spigot required)
- 600mm side clearance required
- Fixing brackets (4) supplied for connection to 6mm threaded rods or chains (rods and chains - not supplied)
- Blanking plates (2) supplied for air circulation options
- Unit must be earthed
- Supplied with remote operating switch
- Suitable for two-pipe central heating systems only

Commissioning

Check water temperature is hot enough to activate low temperature cut-out (LTC). The inclusion of an automatic air vent at the highest point is recommended to avoid possible air locks.

Controls

Two rocker fan switches - normal/off/boost, fan-heating/fan-only.

Low temperature cut-out thermostat set to energise fan at approx. 42°C (108°F).

Accessories

Wall-mounted room thermostat.
Fresh air inlet spigot to suit 100mm flexible hose.

Skyline E 4kW

Finish

Outer casing 0.9mm zinc-coated steel.
Polyester powder-coated.
Paint specification: textured white
BS 4800 00A01 18% gloss.

Installation

- Maximum installation height 3.2m (10'6") to underside
- Minimum 150mm void space required for recessed installation
- Not suitable for bathrooms and other high humidity areas
- Two air inlet options: room only, room and void
- Maximum flexibility in installation: only 600mm - side clearance required
- Facility for connection to 6mm threaded rod or chains (rods and chains - not supplied)
- 20 amp fused spur required
- Unit must be earthed
- Supplied with remote operating switch

Controls

Rocker switches for fan and element.

Overheat protection: thermal cut-out. Manual reset procedure: switch power off at mains, wait 5 minutes, switch power on.

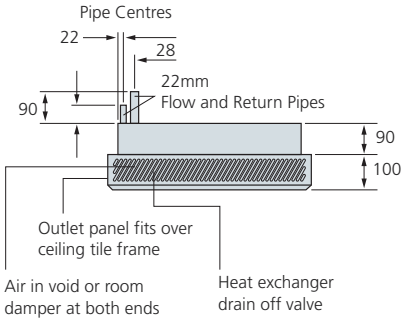
Accessories

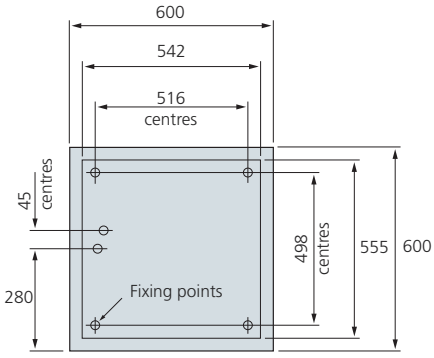
Surface mounting kit - 135mm. Provides a complete four-sided trim when fitted to a solid ceiling.

Ceiling tile spacer - 85mm. Provides semi-recessed profile to match Skyline CT18 when used in ceiling tile frame.

Room thermostats used in conjunction with Skyline E 4kW must be rated at 20A minimum.

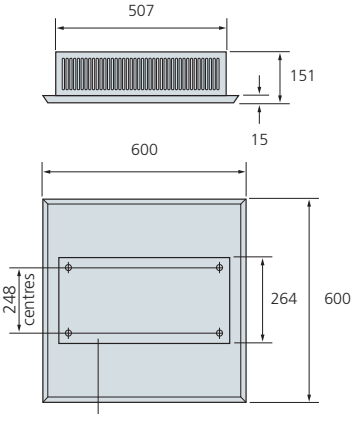
Skyline CT18





All dimensions in mm

Skyline E 4kW



Multiple positions (14) for suspension points

Retail Price Guide from 1st January 2011

VAT 20%

General Information

Stockists

All products are available nationally from Builders' Merchants, Plumbers' Merchants, Heating Equipment Distributors and Kitchen Equipment Distributors.

In the event of difficulty, please contact us on 01245 324900 or visit our website www.smiths-env.com for details of your nearest stockist.

Special Requirements

Staccato

Staccato is manufactured to order. Standard colours are normally available within 10 working days and specials within 20 working days. Delivery dates and prices will be advised at the time of order.

Sureline®

Sureline in white is available from stock. Other colours and finishes are normally available within 10 to 20 working days. Delivery dates and prices will be advised at the time of order.

Guarantee

All products and accessories are covered by a free five year parts and labour guarantee providing they have been installed and used in accordance with the Installation & User Guide.

Amendments

Prices are subject to alteration without prior notice and will be confirmed at the time of order.

Product Groups

Fan Convectors
- Space Saver
- Spacemaker
- Award
- Sygnet
- Ecovector® Plinth Heater
- Ecovector® Low Level
- Ecovector® High Level
- Ecovector® Vertical
- Sterling
- Staccato
- Caspian
- Skyline®

Flame-Effect Fan Convectors
- Hydroflame®

Perimeter Heating
- Sureline®

Domestic Applications

Space Saver (Plinth Mounted)

	Model		Price (ex VAT)	Price (inc VAT)
Hydronic				
	SS3 W (fixed white grille, no hoses)		£190.00	£228.00
	SS5 W (fixed white grille)		£233.00	£279.60
	SS7 W (fixed white grille)		£279.00	£334.80
	SS9 W (fixed white grille)		£312.00	£374.40
Hydronic Low Voltage				
	SS5 W/12V (fixed white grille)		£326.00	£391.20
Hydronic/Electric				
	SS5 W/Dual (fixed white grille)		£304.00	£364.80
Electric				
	SS2E W (fixed white grille)		£135.00	£162.00
Accessories				
	Brown Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£8.00	£9.60
		To suit SS2E W	£8.00	£9.60
		To suit SS5 W/Dual	£8.00	£9.60
		To suit SS9 W	£8.00	£9.60
	Black Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£8.00	£9.60
		To suit SS2E W	£8.00	£9.60
		To suit SS5 W/Dual	£8.00	£9.60
		To suit SS9 W	£8.00	£9.60
	Brushed Steel Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£11.00	£13.20
		To suit SS2E W	£11.00	£13.20
		To suit SS5 W/Dual	£11.00	£13.20
		To suit SS9 W	£11.00	£13.20
	Chrome Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£56.00	£67.20
		To suit SS2E W	£56.00	£67.20
		To suit SS5 W/Dual	£56.00	£67.20
		To suit SS9 W	£56.00	£67.20
	Aluminium Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£56.00	£67.20
		To suit SS2E W	£56.00	£67.20
		To suit SS5 W/Dual	£56.00	£67.20
		To suit SS9 W	£56.00	£67.20
	Gold Overlay Grille	To suit SS3 W, SS5 W, SS5 W/12V, SS7 W	£64.00	£76.80
		To suit SS2E W	£64.00	£76.80
		To suit SS5 W/Dual	£64.00	£76.80
		To suit SS9 W	£64.00	£76.80
	Wall-Mounted Room Thermostat*		£32.00	£38.40
	15mm Flexible Hoses		£41.00	£49.20

*suitable for all models except Skyline E 4kW & Sterling E 4kW

Ecovector® PH (Plinth Mounted)

	Model		Price ex VAT	Price inc VAT
Hydronic				
	Ecovector PH 1300 (Brushed Steel Grille)		£199.00	£238.80
	Ecovector PH 1600 (Brushed Steel Grille)		£244.00	£292.80
Accessories				
	White Grille	To suit PH1300/PH1600	£8.00	£9.60
	Brown Grille	To suit PH1300/PH1600	£8.00	£9.60
	Black Grille	To suit PH1300/PH1600	£8.00	£9.60

Hydroflame® and Hydroflame® Simplicity Suite

	Model	Price ex VAT	Price inc VAT
Hydronic			
	Classic Inset (Brass Trim)	£576.00	£691.20
	Classic Inset (Chrome Trim)	£576.00	£691.20
	Classic Inset (with surround)	£883.00	£1,059.60
	Classic Freestanding (Brass Trim)	£618.00	£741.60
	Classic Freestanding (Chrome Trim)	£618.00	£741.60
	Elite Inset (Brass)	£613.00	£735.60
	Elite Inset (Chrome)	£613.00	£735.60
	Elite Inset (with surround)	£920.00	£1,104.00
	Elite Freestanding (Brass Trim)	£657.00	£788.40
	Elite Freestanding (Chrome Trim)	£657.00	£788.40
Hydronic/Electric			
	Classic Inset Dual (Brass Trim)	£664.00	£796.80
	Classic Inset Dual (Chrome Trim)	£664.00	£796.80
	Classic Inset Dual (with surround)	£971.00	£1,165.20
	Classic Freestanding Dual (Brass Trim)	£705.00	£846.00
	Classic Freestanding Dual (Chrome Trim)	£705.00	£846.00
	Elite Inset Dual (Brass Trim)	£703.00	£843.60
	Elite Inset Dual (Chrome Trim)	£703.00	£843.60
	Elite Inset Dual (with surround)	£1,010.00	£1,212.00
	Elite Freestanding Dual (Brass Trim)	£744.00	£892.80
	Elite Freestanding Dual (Chrome Trim)	£744.00	£892.80
Surrounds in the following finishes			
	Cream (cream hearth & back plate)		
	Yew (cream hearth & back plate)		
	Yew (black hearth & back plate)		
	Ant ique Oak (oak hearth and cream back plate)		
	Antique Oak (oak hearth and black back plate)		

Domestic Applications

Spacemaker (Recessed), Award and Sygnet (Flush/Recessed)

Model	Price ex VAT	Price inc VAT
Hydronic		
Award SFR7	**£275.00**	**£330.00**
Spacemaker SST8	**£297.00**	**£356.40**
Hydronic Low Voltage		
Award SFR7 12V	**£346.00**	**£415.20**
Electric		
Sygnet E 2kW (inc. surface mounting kit)	**£176.00**	**£211.20**

Domestic and Non-Domestic Applications

Ecovector® LL (Low Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Ecovector LL 1200	**£286.00**	**£343.20**
Ecovector LL 2000	**£360.00**	**£432.00**
Ecovector LL 2800	**£430.00**	**£516.00**

Ecovector® HL (High Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Ecovector HL 1000	**£294.00**	**£352.80**
Ecovector HL 2300	**£359.00**	**£430.80**
Ecovector HL 2900	**£445.00**	**£534.00**
Ecovector HL 4000	**£742.00**	**£890.40**
Hydronic Low Voltage		
Ecovector HL 1000-12V	**£382.00**	**£458.40**

Ecovector® VE (Vertical Low Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Ecovector VE 2500	**£448.00**	**£537.60**

Sureline® (Skirting Level)

Model	Price ex VAT	Price inc VAT
Hydronic		
Sureline 500	**£48.00**	**£57.60**
Sureline 1000	**£91.00**	**£109.20**
Sureline 1500	**£133.00**	**£159.60**
Sureline 2000	**£174.00**	**£208.80**
Attachments		
Sureline Casing 1000C	**£40.00**	**£48.00**
LH valve box/end cap kit VALVECVR/LH	**£24.00**	**£28.80**
RH valve box/end cap kit VALVECVR/RH	**£24.00**	**£28.80**
Centre valve cover VALVECVR/C	**£13.00**	**£15.60**
90° internal corner SURE90/IC	**£13.00**	**£15.60**
90° external corner SURE 90/OC	**£13.00**	**£15.60**
135° internal corner SURE 135/IC	**£13.00**	**£15.60**
135° external corner SURE 135/OC	**£13.00**	**£15.60**
Finger Guard 500mm FG500	**£17.00**	**£20.40**
Finger Guard 1000mm FG1000	**£21.00**	**£25.20**
Element		
Sureline 1000E	**£83.00**	**£99.60**

Sterling (High Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Sterling 1000-240V	**£249.00**	**£298.80**
Sterling 1000-12V	**£297.00**	**£356.40**
Electric		
Sterling E 2kW	**£172.00**	**£206.40**
Sterling E 2kW PC (pull cord)	**£178.00**	**£213.60**
Sterling E 4kW	**£254.00**	**£304.80**

Staccato (Low Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Staccato 11 (standard RAL colours)	**£500.00**	**£600.00**

Non-Domestic Applications

Caspian (Low Level Wall Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Caspian 60/03	**£678.00**	**£813.60**
Caspian 60/04	**£710.00**	**£852.00**
Caspian 90/06	**£832.00**	**£998.40**
Caspian 90/07	**£869.00**	**£1,042.80**
Caspian 120/10	**£938.00**	**£1,125.60**
Caspian 120/11	**£970.00**	**£1,164.00**
Caspian 120/12	**£996.00**	**£1,195.20**

Skyline® (Ceiling Mounted)

Model	Price ex VAT	Price inc VAT
Hydronic		
Skyline CT18	**£675.00**	**£810.00**
Electric		
Skyline E 4kW	**£342.00**	**£410.40**
Accessories		
Fresh air inlet spigot (100mm dia.) FA-KIT	**£42.00**	**£50.40**
Surface mounting kit (135mm) CTSMK	**£77.00**	**£92.40**
Ceiling tile spacer (85mm) CTSPACE	**£57.00**	**£68.40**

Who Are We?

We at Smith's Environmental Products are the UK's leading supplier of fan convectors, flame-effect fan convectors and natural convectors.

We manufacture our product range at our specialist production facilities in the UK from raw material through to the finished article, utilising computerised design and automated production techniques.

We recognise that quality is about more than just the product. We have an approach that runs throughout the entire business and is centred on meeting and exceeding our customers' expectations.

We are thoroughly committed to recycling and waste management. All processes incorporate waste minimalisation procedures ensuring minimal waste and maximum recycling.

All our products are designed with energy efficient performance in mind, particularly our latest product, the Ecovector, intended to work from both existing and renewable sources of energy. All the product packaging is fully recyclable, offering further testament to our commitment to the environment.

Happy to Help

Smith's Environmental Products Ltd is one of the leading manufacturers of heating products in the UK.

We are committed to achieving the highest standards and our faith is supported by a free 5-year parts and labour guarantee with every product.

Our customer service is second to none and we are happy to offer any help and guidance that you might need.

Information or Advice

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Hydroflame® Patent Number GB 2378241

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