

Hydroflame™

Flame-effect fan convectors

Installation and User Guide – Elite and Classic Models



Contents

Installation

General Notes	2
Inset and Inset Dual	3
Freestanding and Freestanding Dual	4
Commissioning	5
Fault Finding	5

User Guide

Inset and Freestanding	6
Inset Dual and Freestanding Dual	7
Cleaning the Filter	7
Changing the Light Bulb	7

Contact

Happy to Help	8
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General Notes

Inset and Inset Dual Freestanding and Freestanding Dual

The following items should be included in the carton:

- Product complete with pre-wired mains cable and integral room thermostat.
- Flexible installation hoses with right angled elbows.
- Isolating valves.
- Decorative trim.

In the event of any items missing or visible damage, please contact us on 01245 324560.

We would be most grateful if you would leave this Installation and User Guide and the Guarantee Registration Card with the owner of the property.

Please note the guarantee may be invalidated if this product is not installed and used in accordance with the instructions in this booklet.



Hydroflame™ Inset models are designed for installation into a fireplace surround. Hydroflame Freestanding models are designed for installation onto a fireplace or against a flat wall.

Hydroflame™ must not be installed in bathrooms or other high humidity areas. Please contact us on 01245 324900 for details of products suitable for these applications.

Hydroflame™ is designed for use on standard two-pipe pumped central heating systems with a maximum water temperature of 86°C and a pressure of 6 bar (88lbs/in²). Pipes are 15mm and may be used either as flow or return. Hydroflame™ is not suitable for one-pipe systems.

Hydroflame™ models are classified as fixed appliances and electrical connection should be via a 10A fused spur for Inset Dual and Freestanding Dual. The Inset and freestanding models should be connected via a 3A fused spur.

The fused spur must not be directly above the heater but should be accessible after completion of the installation. Hydroflame™ must be earthed.

Hydroflame™ models are fitted with an internal low temperature cut-out device that prevents the fan operating until the central heating system water has reached a set temperature. This is factory set at 40°C but is adjustable for higher or lower temperatures.

The flexible installation hoses supplied are suitable for use with either 15mm diameter copper pipe or cross-linked polyethylene barrier pipe to BS 7291.

To avoid the possibility of vibration, ensure the fire opening is clear of debris, and fireplace and the fireplace base or floor is level.

Product repairs must be authorised by Smith's Environmental Products. Please contact us on 01245 324560.

Heat Output Performance

It is recommended that the Hydroflame™ model is capable of maintaining the calculated heat loss at normal heat output enabling the boost setting to be used for faster heat up.

Model	Heat output Δt 60°C		Heat output Δt 50°C	
	Normal (kW)	Boost (kW)	Normal (kW)	Boost (kW)
Inset	1.5	2.0	1.2	1.6
Inset Dual	1.5	2.0	1.2	1.6
Freestanding	1.5	2.0	1.2	1.6
Freestanding Dual	1.5	2.0	1.2	1.6

Notes:

Dual models include an electric element which in electric heating mode will emit 1.5kW of heat.

ΔT 60°C assumes a mean water temperature of 80°C and room temperature of 20°C.

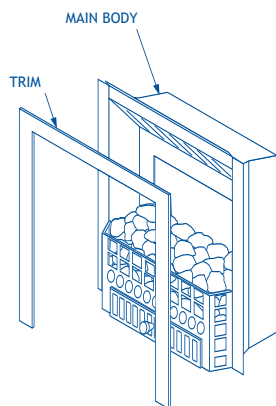
ΔT 50°C assumes a mean water temperature of 70°C and room temperature of 20°C.

Installation Guide

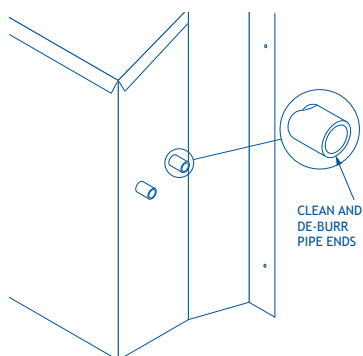
Before installation please read the **General Notes** on page 2. Please note the guarantee may be invalidated if this product is not installed and used in accordance with the instructions in this booklet.

Inset and Inset Dual

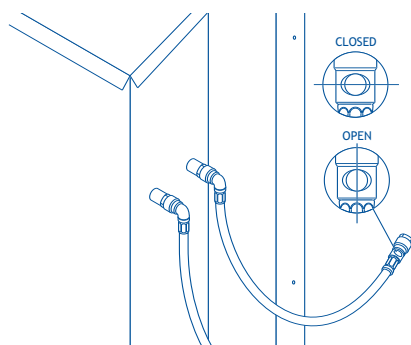
1. Remove the fitted trim and store for later use.



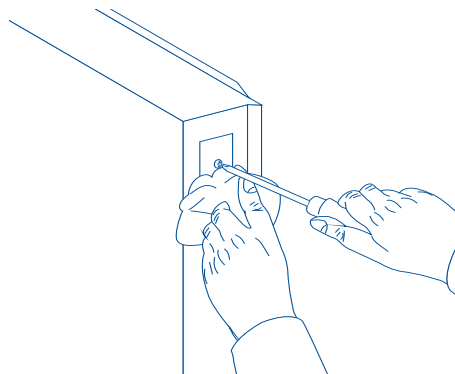
2. Clean and de-burr both heater and system flow and return pipes.



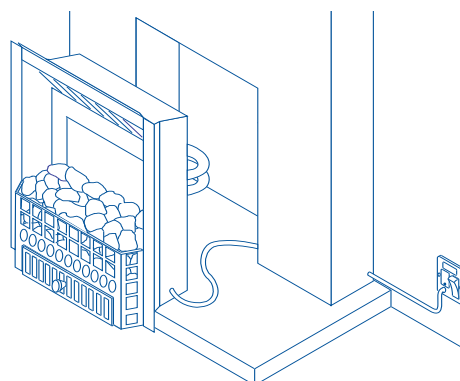
3. Connect the elbowed ends of the flexible hoses (or loose elbows) to the product. Connect the other ends to the system pipe work. The bend radius of the hose must not be less than 60mm when the heater is fully installed. Open the valves and check for water leaks.



4. Vent any trapped air from the system. Use a cloth underneath the vent screw to catch excess water.

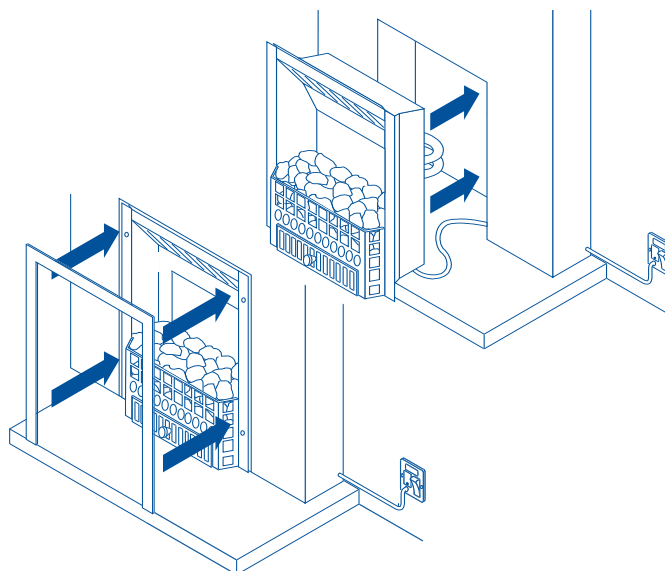


5. Isolate the electrical supply and connect the heater electric cable to the fused spur (10A for the Dual model, 3A for other models). The fused spur must be accessible after the installation is complete.



6. Commissioning – Refer to the procedure detailed on page 5.

7. Locate the Main Body into the fireplace and secure in position making sure the flexible hoses are not kinked and the electrical cable is not snagged. Re-fit the Trim with the magnets supplied.

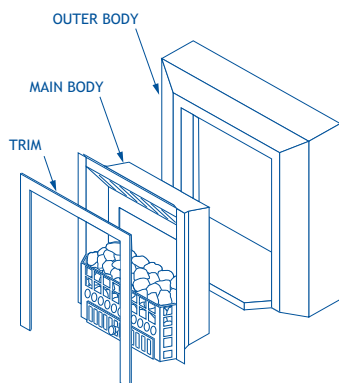


Installation Guide

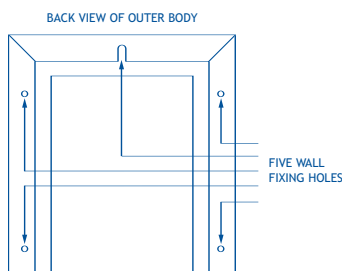
Before installation please read the General Notes on page 2. Please note the guarantee may be invalidated if this product is not installed and used in accordance with the instructions in this booklet.

Freestanding and Freestanding Dual

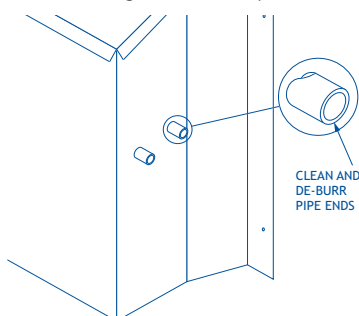
1. Remove the fitted trim and store for later use. Release the Main Body from the Outer Body.



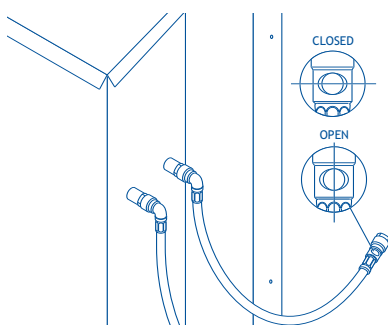
2. Secure the Outer Body to the wall using fixings suitable for the wall type. Ensure the Outer Body is flat to the wall and level. Use all five fixing points. If necessary use packing to compensate for uneven wall surfaces.



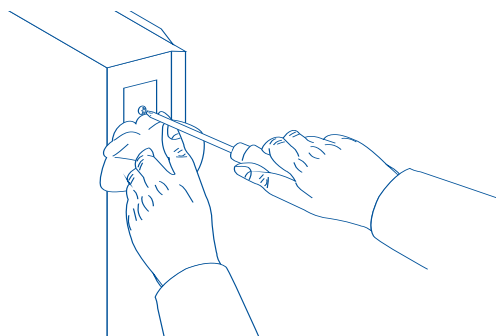
3. Clean and de-burr both heater and system flow and return pipes. System flow and return pipe work should be brought inside the Outer Body through the access holes on either side. Rubber grommets are provided for the holes not used.



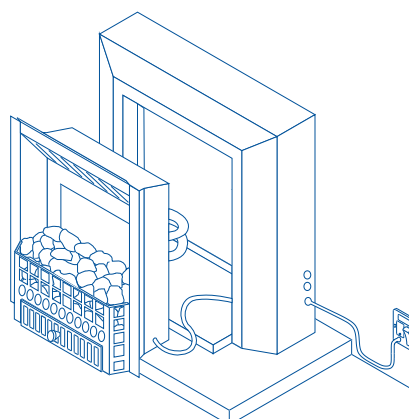
4. Connect the elbowed ends of the flexible hoses (or loose elbows) to the product. Connect the other ends to the system pipe work. The bend radius of the hose must not be less than 60mm when the heater is fully installed. Open the valves and check for water leaks.



5. Vent any trapped air from the system. Use a cloth underneath the vent screw to catch excess water.

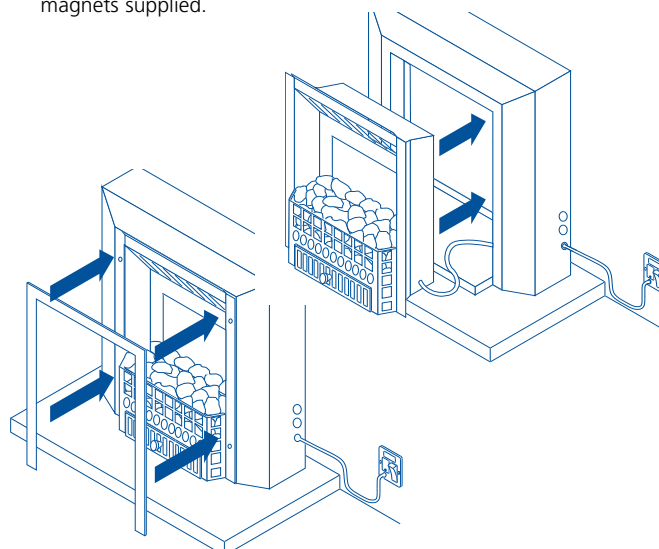


6. Isolate the electrical supply and connect the heater electric cable to the fused spur (10A Freestanding Dual, 3A Freestanding), ensuring the cable passes through the access hole in the Outer Body. The fused spur must be accessible after the installation is complete.



7. Commissioning – Refer to the procedure detailed on page 5.

8. Locate the Main Body into the fireplace and secure in position making sure the flexible hoses are not kinked and the electrical cable is not snagged. Re-fit the Trim with the magnets supplied.



Installation Guide



Commissioning

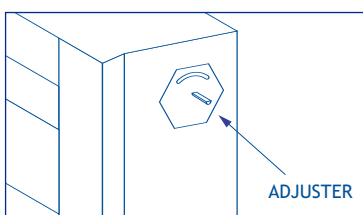
Inset and Freestanding

1. Turn on the electrical supply at the fused spur.
2. Set the upper switch to flame-effect ON – the flame-effect will operate with fan running at extra low speed.
3. Turn on the central heating system ensuring all controls are calling for heat.
4. Set the on board thermostat to high.
5. Set the lower rocker switch (heat output) to NORMAL. Heat will start to flow within minutes when the system water temperature passing through the heater reaches the pre-set temperature, factory set at 40°C.
6. Balance the central heating system if Hydroflame™ is installed on the same circuit as panel radiators.
7. Adjust the internal low temperature cut-out device if required (see note below).
8. When the installation is working correctly remember to reset central heating controls to normal settings.

Inset Dual and Freestanding Dual

1. Turn on the electrical supply at the fused spur.
2. With the upper switch in the centre position O, set the lower switch to FLAME-EFFECT, the flame-effect will operate with the fan running at extra low speed.
3. Set the on-board thermostat to HIGH.
4. Set the centre switch to ELECTRIC HEATING and the upper switch to NORMAL. The fan speed will increase slightly and heat will start to flow immediately. Moving the upper switch to BOOST will switch off the electric heating element, however the fan will continue to run.
5. Turn off Electric Heating switch.
6. Turn on central heating system ensuring all controls are calling for heat.
7. Set the lower switch to FLAME-EFFECT and the upper switch to NORMAL. Heat will start to flow within a few minutes (when the system water temperature passing through the heater reaches the pre-set temperature, factory set at 40°C).
8. Balance the central heating system if Hydroflame™ is installed on the same circuit as panel radiators.
9. Adjust the internal low temperature cut-out device if required (see note below).
10. When the installation is working correctly remember to reset the room thermostat to its normal setting.

Note: Hydroflame™ models are factory set to start operating in central heating mode when the system water temperature is 40°C or above. Due to tolerances in the internal cut-out device this means the heater will not switch off until the system water temperature falls to approx. 36°C. This setting is sufficient for systems which normally run between 60°C and 70°C, however if the system runs at higher temperatures, the adjuster (located on the side of the Main Body)



can be turned clockwise up to a maximum of 50°C (off at approx. 46°C) or anti-clockwise for lower temperatures. Release the locking plate, adjust the stud by hand as required and retighten the locking plate.

Fault Finding

1. No flame-effect.

- a. Check the fused spur is switched ON.
- b. Check fuse in the fused spur.
- c. Check the wiring connections at the fused spur.
- d. Check the bulb.

2. Fan does not run on any switch setting or no heat output on electric heating (Dual model only).

- a. Check the power supply is switched ON.
- b. Check the fuse in the fused spur
- c. Check the wiring connections at the fused spur.
- d. Check overheat protection (Dual model only).

3. No heat output on central heating mode.

- a. Ensure the room thermostat is calling for heat.
- b. Vent any trapped air from the system (with the central heating turned OFF).
- c. Check the central heating is switched ON.
- d. Balance the central heating system if installed on the same circuit as panel radiators and increase the circulating pump speed if required.
- e. Increase the boiler temperature.

Overheat Protection – electric heating mode

Dual models are fitted with automatic overheat protection. To manually reset, turn off the power at the fused spur, wait 5 minutes then switch the power back on.

In the event of difficulty, please contact us on 01245 324560.

It will be more helpful if you do not remove the product from the central heating system.

Inset, Inset Dual, Freestanding and Freestanding Dual

User Information:

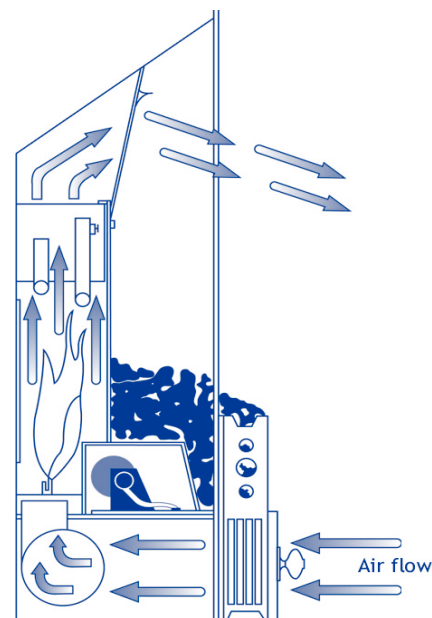
- Your product is covered by a free 5-year parts and labour guarantee; please complete and return the Guarantee Registration Card to us as soon as possible to ensure that should you require assistance, we can help you quickly and efficiently.
- Your Hydroflame™ flame-effect radiator is designed to operate as part of your central heating system in the same way as a panel radiator. Providing the heat output switch is left in either the normal or boost position, your Hydroflame™ will switch on and off automatically with your central heating system. The flame-effect can be switched on or off at any time without affecting the operation of the heater.
- In the event of any difficulty please refer to the fault finding section or contact us on 01245 324560.

How Hydroflame™ Works

Hot water from your central heating system passes through a heat exchanger transferring its heat to the aluminium fins. Cooler air at floor level is drawn in by the fan, used to create the flame-effect, heated as it passes through the heat exchanger before being expelled gently back into the room. This not only gives a more even temperature spread, but will heat a room up in less than half the time of a traditional panel radiator.

Dual models include a supplementary electric heating element which allows you heat when the central heating system is switched off.

Hydroflame™ also includes an internal device that prevents the fan from operating until the central heating system water passing through the heat exchanger reaches 40°C. This prevents Hydroflame™ circulating cooler air at start up and allows Hydroflame™ to switch on and off automatically in conjunction with the central heating system.



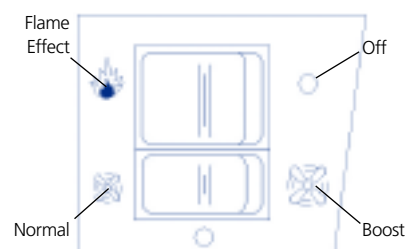
Inset and Freestanding

Flame-Effect Only

Set the thermostat (on the fret) to minimum (1). With the lower switch in the centre position 0 move the upper switch to FLAME-EFFECT ON. If the central heating is on some heat will be given out. To switch off set the upper switch to OFF.

Heating – Central Heating

Set the thermostat (on the fret) to the required temperature (3 is approximately 20°C). If required, switch on the flame-effect. Ensure your central heating system is ON, the lower rocker switch (heating) set to NORMAL. Providing the water temperature in the system is more than 40°C (or the temperature set by your installer) and the thermostat is calling for heat, your Hydroflame™ will switch ON. If you require a faster warm up, move the heat output switch to BOOST. Moving the heat output switch to O will turn off the heater. The flame-effect can be switched on or off at any time without affecting the normal operation of the heater.



Inset Dual and Freestanding Dual

Flame-Effect Only

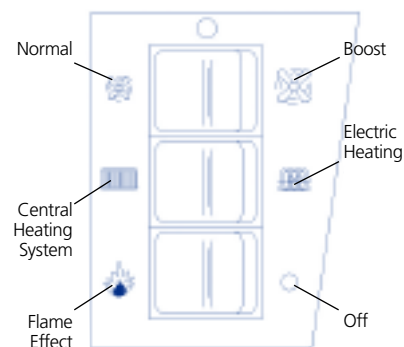
Set the thermostat (on the fret) to minimum (1). With the upper switch in the centre position O, set the lower switch to FLAME-EFFECT. If the central heating system is on, some heat will be given out. To switch off set the flame-effect switch to OFF.

Heating – Central Heating

Set the thermostat (on the fret) to the required temperature (3 is approximately 20°C). If required, switch on the flame-effect. Ensure your central heating is ON and the upper switch (heat output) set to NORMAL. Providing the water temperature in the system is more than 40°C (or the temperature set by your installer) and the thermostat is calling for heat, your Hydroflame™ will switch on. If you require a faster warm up, set the upper switch (heat output) to BOOST. Moving the upper switch (heat output to O (centre position) will turn off the heater. The flame-effect can be turned on or off at any time without affecting the normal operation of the heater.

Heating – Electric Heating

Set the thermostat (on the fret) to the required temperature (3 is approximately 20°C). If required, switch on the flame-effect. Ensure your central heating is off, the centre switch set to ELECTRIC HEATING and the upper switch (heat output) set to NORMAL. Moving the upper switch (heat output) to BOOST will switch off the electric heating element, however the fan will continue to run. Moving the upper switch (heat output) to O (centre position) will turn off the heater. If the central heating automatically comes on, the electric heating element will switch off.



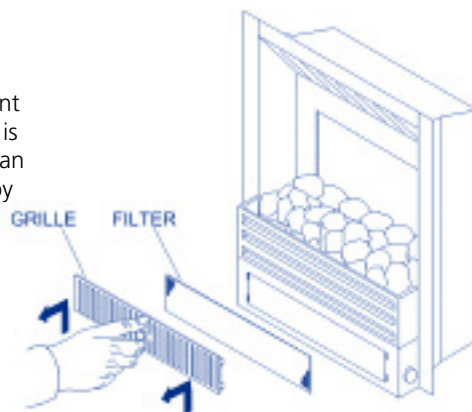
Cleaning the Filter

These filters are designed to catch long fibres (particularly pet hairs) and prevent them entering the internal workings of the product. We recommend the filter is inspected on a regular basis, if you have long-haired pets you may need to clean the filter as often as every three months. Cleaning intervals can be increased by vacuuming across the front grille each time you vacuum the room.

Important:

For your safety switch off at the fused spur.

1. Lift the lower front grille in an upward direction.
2. Lift away the front grille from the hearth.
3. Lift out the filter medium and clean using either a vacuum cleaner or washing in warm water. Thoroughly dry the filter and refit inside the front grille.

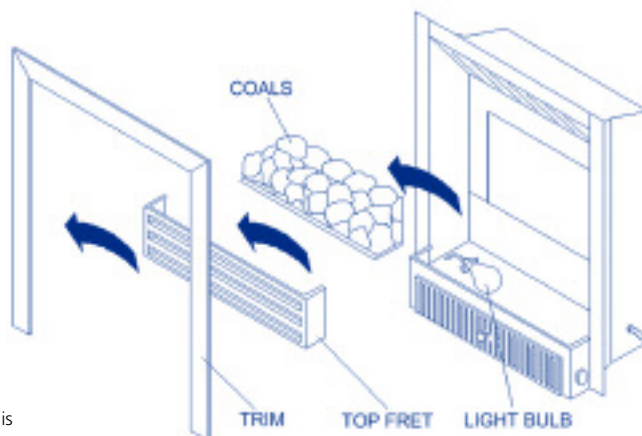


Changing the Light Bulb

Important:

For your safety switch off at the fused spur.

1. Remove the trim.
2. Lift the top fret upwards and then outwards.
3. Lift the coal bed from its seating.
4. Replace the light bulb with the recommended replacement.



BULB: The light bulb fitted is an 11W low-energy candle style bayonet cap and is not covered by our five years parts and labour warranty.

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

Call us on telephone

01245 324560

Smith's Environmental Products Ltd
Blackall Industrial Estate
South Woodham Ferrers
Chelmsford
Essex CM3 5UW

Tel: 01245 324900

Fax: 01245 324422

Sales E-mail: sales@smiths-env.com

General Information

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Web: www.smiths-env.com

For the Republic of Ireland, contact:
MT Agencies on +353 (01) 844 3212



Products with this symbol (crossed out wheellie bin) cannot be disposed of as household waste. Old electrical and electronic equipment must be recycled at a facility capable of handling these products and their waste by-products. If you are purchasing replacement equipment your retailer may offer a 'take back' scheme, or will be able to give details of the nearest approved authorised treatment facility. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

WEEE Registration Code: WEE/ED0093VW



As part of the policy of continuous product improvement, Smith's Environmental Products Ltd reserves the right to alter specifications without prior notice.

Hydroflame™ Patent Number GB 2378241

Manufactured in the UK