



## Why Electric Heating?

Electric is the fuel of the future for heating requirements. Dwindling supplies of north sea gas, the uncertainty of imported gas supplies, the volatility of oil prices and the commitment to reduce the U.K. carbon footprint all point towards electricity as the fuel of the future. The government has set a clear path towards a lower carbon future, with electricity to be generated by nuclear power and sustainable sources e.g. wind power, solar energy, wave power etc. Electric heating is 100% efficient and carbon neutral at the point of use, and with electricity being generated by nuclear and renewable sources in the future it will become completely carbon neutral. The government also promotes the use of microgeneration technologies e.g solar panels, photovoltaics and wind turbines. Electric heating appliances are compatible with all these microgeneration technologies. As more low carbon and renewable sources of electricity become available we will increasingly see electric heating being favoured over gas.

#### BENEFITS OF ELECTRIC HEATING

Low capital and installation costs

Electric heating is very easy to install. There is no requirement for unsightly pipework, and minimal disruption during installation. Because each heater can work independently, it is easy to add to a system as necessary or as budgets permit.

#### LOW OWNERSHIP COSTS

The true ownership costs of a heating system should be looked at over a system lifetime. Electric heating systems have no moving parts and can be expected to last over 30 years. The boiler industry quotes a lifetime of 10 years for a boiler. Boiler based systems require costly yearly maintenance whereas electric systems are maintenance free. Electric heating is 100% efficient at the point of use meaning all the fuel used is turned into heat unlike boiler systems where energy is wasted through the flue. No Maintenance and no annual inspection. Yearly maintenance and safety checks can add significant costs to the running of a system. Gas boiler systems require yearly maintenance and if used within rental properties, both private and social housing landlords are responsible for annual safety inspections. This can also be a major hassle for landlords needing to gain access to properties to conduct maintenance and safety checks. Electric heating does not require any maintenance or safety inspections.

#### **COMFORT AND CONTROL**

Significant developments in electric heating have produced systems with highly accurate electronic thermostatic controls. The Electrorad range offer thermostats capable of maintaining a room temperature to within +/- 0.1 C. This ensures optimum comfort and only the use of energy that's needed.

#### PART L - BUILDING REGULATIONS

The Electrorad system makes it easy to meet the requirements of Part L of the building regulations, with highly sophisticated zoned control systems.



# THE PERFECT SOLUTION FOR ALL 'HARD TO HEAT' SITUATIONS.

Aeroflow radiators provide heat exactly where you want at exactly the times you want.

No more trying to predict the weather with old fashioned night storage heaters.

Aeroflow radiators do not dry the air like night storage heaters or convectors due to no exposed elements. Radiant and convection heat is provided ensuring a cosy warmth.

#### Digital room thermostat and programming system



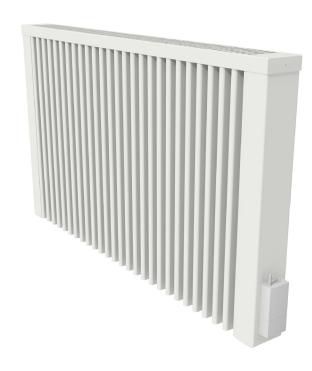
Analogue Room thermostat







RF receiver (for use with Controllers: TFS, D660 & D10)







Aeroflow radiators have fireclay (schamotte in German) heat plates in the centre of the radiator. Each heat plate has a coiled heating element totally buried within it, forming an integral part of the heat plate.

Each heat plate has a low wattage element inside and multiple heat plates are used to make up the total power of the radiator. When the radiator is switched on, the element gets hot instantly, transmitting the heat generated to the heat plate within a matter of minutes.

The hot heat plate transmits the heat to the metal casing and flutes of the radiator which then heats the room by radiated heat, in the same way as a normal central heating radiator with the added advantage of powerful convection heat through the hollow flutes.

Each radiator has a highly accurate digital electronic thermostat and 7 day 24 hour timing control built-in or optionally can be operated by radio frequency control. Each of these methods measures the air temperature of the room allowing the room temperature to be regulated to maintain a pre-determined temperature set by the user.

As the temperature drops in a room the thermostat senses the change and switches the heater on, perhaps for only a minute to re-heat the internal plates. This continual dynamic re-heat process continues thereby maintaining the room temperature. This ability to sense temperature changes and react immediately to them is one of the great benefits of this type of heating.

Not to be confused with night storage heaters, which require an overnight charge, these heaters can be used any part of the day or night. These radiators are designed to run on standard electricity tariffs however special tariffs are available offering low cost electricity overnight, during the day and evening.

Manufactured in Germany to the high engineering standards for which German engineering is renowned. The heaters are produced in the most modern factory of its kind with the most up to date production and powder coating facilities.

The radiators have been available throughout Europe for more than 30 years and from Electrorad in the U.K. For more than 10 years.

Electrorad are the sole U.K. importer and distributor for a leading manufacturer, recently awarded a gold medal for design and innovation. Recent tests have confirmed that the product is manufactured to the very latest European safety standards achieving both CE and GS marks and VDE approval for quality of the components and manufacturing.



The large, rounded flutes either side of the heat core ensure maximum convection





The Room ambient air temperature is sensed underneath the radiator where the room is at it's coldest and where there is no heat being emitted from the radiator. This ensures that the built in thermostats are highly accurate and also ensures that all of the room is heated.





Aeroflow radiators look just like regular central heating radiators.
Slimline and modern design.
The perfect complement to any room.









Aeroflow Radiators can be supplied With the following control options



Electronic digital thermostat with 24 hour / 7 day programming



Electronic analogue thermostat



Radio Frequency Receiver (RF)

Only top quality materials are used for all our products, together with well thought out technological advancement to give optimum performance. The design will adapt and integrate with any décor scheme.

Aeroflow radiators come as standard with a digital electronic room thermostat and programming system built in. This system allows for the pre-setting of heating times and comfort & economy temperature setting. Each day of the week can have different settings if required.

A wide range of radiator sizes and heat outputs ensures that each radiator is just right for each room in the home or office.

Why Aeroflow Fireclay Core Radiators?

- No Maintenance
- No Inspections
- No fluids
- No Boiler
- No Pipes
- Easy Installation
- No Disruption
- Fully Controllable
- 100% Efficient

#### Customer Comments

As shown on www.trustpilot.co.uk

"These work extremely efficiently even on the coldest of days and we have been very pleased with the result"

"I had a great winter here at my house, the first with a nice warm feeling since i bought the house 4 years ago!"

"All in all a lovely company to deal with, friendly knowledgeable staff, order was taken quickly and Easily"

"A great product that has delivered on the promises"



## Conservatory Heating

Probably the most difficult area of a home to heat with heat loss factors usually at least twice that of any other room in the house. Building regulations (Part L) now require that the heating for a conservatory should be able to be isolated from the main home heating system. The quickest and easiest way is to use electrical heating.

To bring heating to a conservatory with a conventional 'wet' central heating system, perhaps at a time when heat is not required for other parts of the home, would mean running a central heating boiler, just for that one room. Not very cost effective or environmentally friendly.

Of course there are many types of electrical heating products, some of which can prove to be extremely expensive to use. Electrorad have a range of conservatory heaters that will heat a conservatory successfully and heat it with a minimum of energy use.

Aeroflow radiators are manufactured in 300mm height specifically to fit on conservatory dwarf walls or under low sills.

Each radiator has its own room thermostat built in. If the conservatory becomes warm through solar gain then the thermostat will automatically sense that no further heat is needed. As the sun drops in the evening, the thermostat will sense the dropping temperature and keep the conservatory heated to your settings.



Make the most of your conservatory investment by being able to use it year round in cosy warmth



## Radio Frequency control Option

Instead of having a thermostat and timing system built in to the radiator, there is an option to have a radio frequency receiver built in. The radiator or radiators are then operated by a remote controller. The remote is a radio frequency thermostat and timer which sends the operating signals to the radiators. Each remote can operate multiple radiators which can be a great feature when heating a large area with many radiators. All operating controls are done from one central point instead of having to go to each radiator when changes are required. Within a domestic house situation, a two zone heating system can be set up by using one controller to operate the radiators within living areas and one controller to operate bedrooms or set up multiple zones by using our 6 zone controller (D660) and radio room thermostats (D10) - see back page for more details.



### Electrorad How it works



The Heart of the heating system is a refractory block combining a unique storage material with modern design and technology, creating a highly efficient heating unit.

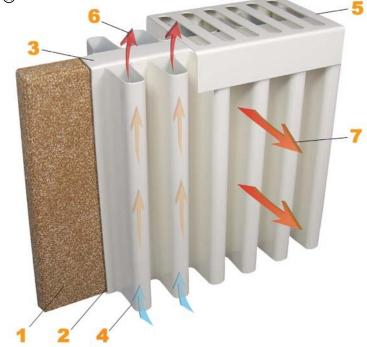
Within each fireclay refractory heat plate is a low wattage heating element, heating the block from the inside. No exposed element to dry the air.

The fluted design provides a large surface area in a small space. If you were to pull the fluted steel flat it would be around 4 times the length! It is therefore very efficient at creating radiant heat without the need for huge radiators.

The large, rounded flutes ensure airflow through the radiator to create strong convection.



- 1. Refractory fireclay heat plate
- 2. Steel Casing
- 3. Powder coating
- 4. Large rounded hollow flutes
- 5. Top grille
- 6. Convection heat
- 7. Radiant heat



## **Technical Specification**



Model Ref.	Output (Watts)	Output (BTU)	Height mm	Length mm	Depth mm	Weight kg
AF01	650	2217	610	380	90	17
AF03	1300	4435	610	680	90	30
AF05	2000	6824	610	980	90	42
AF07	2500	8530	610	1280	90	55
AF12	1200	4094	300	980	90	25
AF14	2000	6824	300	1580	90	40

#### **Accessories**

Radio control thermostat and programmer (For use with RF receiver radiators)

Radio control 6 zone programmer and radio room thermostats (For use with RF receiver radiators)

Castors



Model Ref: AFCAS











Model ref: D660 Model ref: D10





designed, engineered & made in Germany



Electrical products sold throughout the EU must bear the CE marking. However, as CE marking is self-declared, impartial testing is not required. Products bearing the GS Mark (a voluntary certification) show that the product has been independently tested and certified that the product fulfills valid safety requirements.

The Aeroflow GS mark is awarded by VDE ( Verband Der Elektrotechnik ) The most respected testing organisation in Germany.





Electrorad U.K. Ltd Unit 1 Clayton Park, Clayton Wood Rise West Park

Leeds

**LS16 6RF** 

Tel: 0113 2746799 info@electrorad.co.uk www.electrorad.co.uk www.germanelectricheating.co.uk