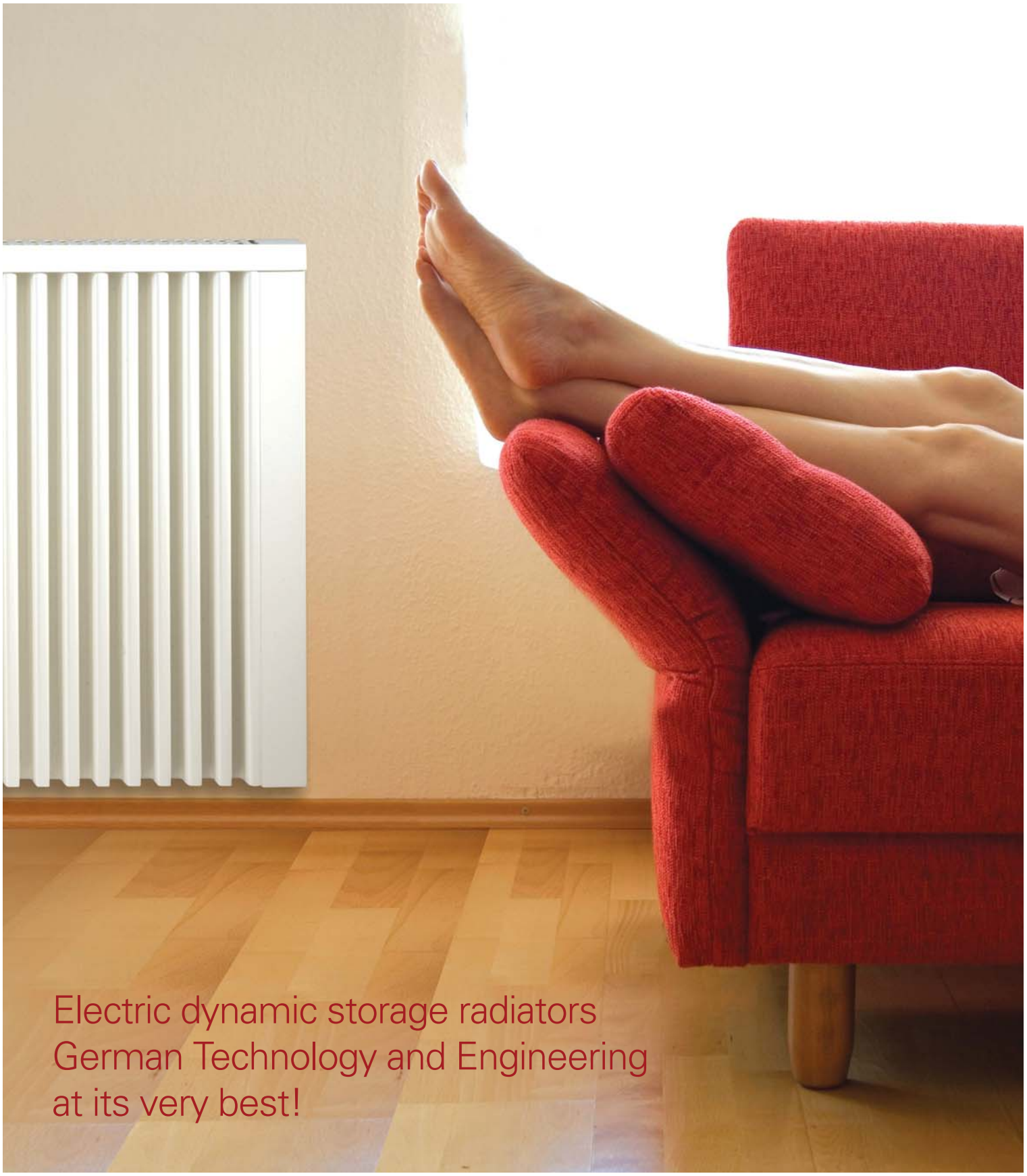
Electrorad®
Electric Heating

AeroFlow®
DYNAMIC STORAGE RADIATORS



Electric dynamic storage radiators
German Technology and Engineering at its very best!

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 15 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.

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Dynamic storage radiators are so called because of their ability to conserve heat generated within the core of the heater. The heat retention is achieved by a series of heat plates in the centre of the radiator with up to 20 individual plates for a single radiator. Each heat plate has a coiled heating element totally buried within it, forming an integral part of the plate.

Each heat plate has a power output of just 100 watts, in a larger output heater a number of 200 watt units may be used. When the heater is switched on, the element gets hot instantly, transmitting the heat generated to the heat plate with a matter of minutes.

Once heated the heat plate will retain its heat for over 30 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 digital thermostat and 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. Because of this ability to heat up quickly the use of electricity is limited and the cost of using the heaters can be just a few pence per hour, recent tests in the UK (2007) have confirmed the low running cost of these units.

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.

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

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

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.

No matter where they are fitted, each radiator works independently of other units in the system. Bedrooms can be set at lower thermostatic settings while living areas can be set at higher thermostatic settings for comfortable cosy warmth for watching television or dining. Each radiator can also have different operating time settings.

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

As shown below each radiator has an integral digital thermostat and timing system accurate to +/- 0.5°C

Why Dynamic Storage Radiators?

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

One very important feature of Aeroflow radiators are the air vents at the top and bottom of the side panel which houses the thermostat. Without these, the thermostat circuit board would be within an extremely hot environment which leads to innacurate operation and premature failure. Other German manufactured radiators of this type without thermostat vents are known to suffer problems.

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 economically.

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.

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How it works

Independent product efficiency tests* have shown very low running costs and average electricity usage of only 15 minutes in each hour of heating. Independent tests* against night storage heating have shown electricity, and carbon emission savings of up to 45%.

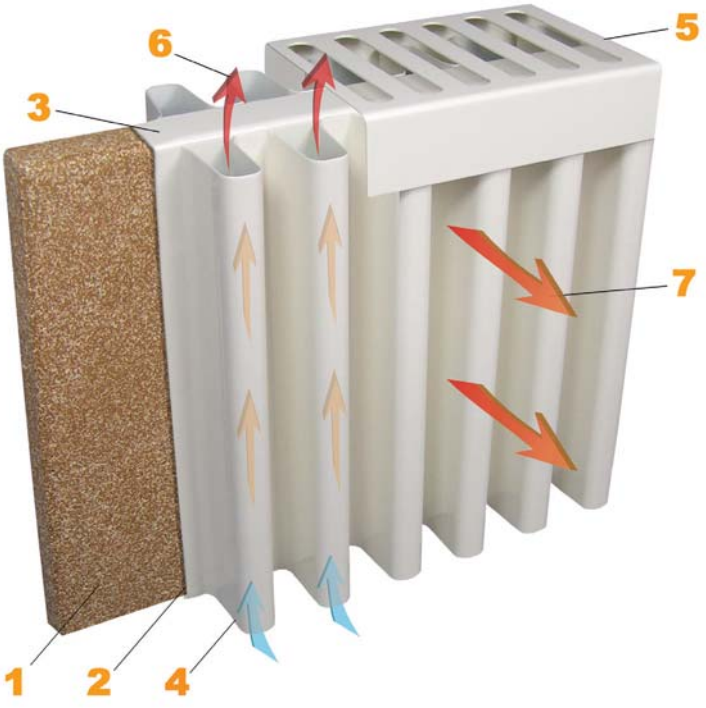
*Full reports available on request.

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 refractory block 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.

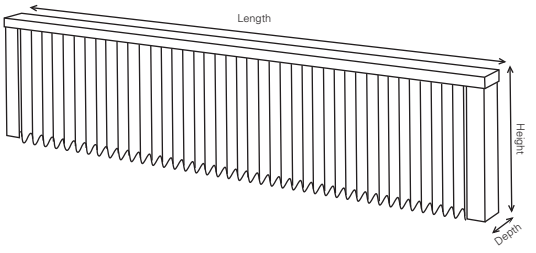
The large, rounded flutes ensure airflow through the radiator to create strong convection.



1. Refractory fire clay 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	615	380	90	17
AF03	1300	4435	615	680	90	30
AF05	2000	6824	615	980	90	42
AF07	2500	8530	615	1280	90	55
AF12	1200	4094	300	980	90	25
AF14	2000	6824	300	1580	90	40



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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.

IPx3

10 Year Guarantee

2 year Thermostat Guarantee

Electrorad UK Ltd.
Head Office, Showroom and Warehouse:
Unit 1, Clayton Park, Clayton Wood Rise, West Park Leeds. LS16 6RF
Telephone: 0844 479 00 55
info@electrorad.co.uk
www.electrorad.co.uk