

# Out with the old, in with **the new**

**Richard Brown**, Managing Director of **Electrorad**, reflects on the advances in electric radiators over the years, and asks has the perception of electric heating finally changed for the better?

**T**he heating industry has changed over the last decade and in many ways, it is almost unrecognisable to what it once was, with renewable technologies now commonplace. New innovations, technologies and legislation have all served to change the products we use and take for granted. The issue of energy efficiency alone has strongly influenced many of these changes.

The electric radiator market has also evolved, with the design and functionality now firmly in line with the demands and needs of homeowners. Gone are the days of bulky electric storage radiators and ugly dimpled panel convector heaters. Instead we welcome sleek, minimalist radiators that are in keeping with latest style trends in the home and that are now more of a threat to traditional gas central heating systems than ever before.

But there's more than meets the eye with electric radiators. They may prove popular with their looks, but it is their functionality and control that is now winning over heating specifiers who are looking for more than just a cost-effective heating solution. They also demand energy savings, safety, ease of installation, controllability, design, versatility and comfort. A tall order? I don't think so. Electric radiators can tick every box.

## Versatility

Electric radiators are now simple and fast to install and can be sited almost anywhere in a property, with larger units capable of warming sizeable rooms with ease. They are particularly suitable for those areas where it is not viable to extend or install a central heating system. They can be retrofitted independently from any existing hot water system, removing the need for any additional pipework or a higher output replacement boiler.

Electric radiators are also suitable for a wide array of applications including apartments, houses and even offices. Unlike traditional gas systems, there is no need for annual maintenance or servicing – making them a number one choice with landlords. And if additional heating needs to be introduced at a



*The Aeroflow range of electric radiators boast three thermostatic control options.*

later date, electric radiators can be added to the system accordingly.

## Energy savings

Such is the superiority of today's electric radiators that they can now give traditional gas heating systems a run for their money when it comes to energy savings. We've already considered that electric radiators are cheaper to install and maintain than gas systems but what about their actual running costs?

Unfortunately, electric radiators still carry the stigma of the cumbersome storage heaters of yesteryear that were expensive to run and inflexible to control. There is no need for inflexible electrical tariffs; today's modern electric radiators are 100% efficient at the point of use meaning that there is 100% conversion of electrical energy input to heat output, and thanks to sophisticated programming devices and controls, they use only the electricity that's needed to maintain comfortable temperatures.

The beauty of electric radiators is that they produce both radiant and convection heat – convection warms the air and circulates it

around the room, whilst radiation heats people and objects directly. Electric radiators warm the air from beneath the heater and, by using natural convection currents, circulate the warmed air throughout the room. In all models, the warmed air circulates into the room, raising the ambient temperature. When the heater's thermostat setting has been reached, the heating element is shut off. When the room air cools again, the thermostat will trigger the unit to turn on.

It is quite typical for a thermostatically-controlled electric radiator to be drawing power for around 30-50% of the time in order for a room temperature to be maintained. This means the 1.5kw radiator would use up to 750 watts per hour (depending on the room heat loss), whilst keeping the room and the occupant(s) warm.

## Controls and comfort

Inflexible control is now a thing of the past thanks to advances in electric radiator

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technology that now bring extremely accurate energy saving digital controls for both time and temperature – the best being  $\pm 0.1^{\circ}\text{C}$  as found on our Digi-line range. As each emitter has its own controllable element, a whole system can be connected together, linked to a central room controller and programmed to meet specific heating needs.

Wireless radiators are also becoming extremely popular – especially in new build projects – due to their slimline design and fully programmable remote controlled RF controls. This latter feature allows the system to be divided into zones, automatically turning the radiators on and off according to the temperature requirements of each zone. Multiple zones may be set up with the home to control separate floors or areas. This saves energy as a result, as no heat is wasted warming unused rooms and areas unnecessarily. Some of the latest electric radiators even incorporate smart meters.

## Safety

Enormous strides have also been made in electric radiators when it comes to safety. Unlike early electric models, today's radiators are safer as the hot elements are sealed within the metal casing and are actually immersed within fluid. As both dust and objects cannot fall onto the elements, this makes them safer

to run and safer to touch.

Such safety features, along with the use of the highest quality components, means that some electric radiators can offer superior guarantees such as our Aeroflow range that provides reliability guaranteed thanks to a 30 year warranty that covers all internal components (i.e electric elements, thermal switches and wiring) excluding thermostat. This warranty is the most comprehensive of its kind in the industry.

## Design

The appealing design of today's modern electric radiators has changed the face of electric heating for good. Homeowners are increasingly demanding more from their heating products and the radiator is no exception. Forget functionality, they have to look good too and in many homes, that even means complementing their décor. As many of



**The optional central programmer on the Digi-Line radiator is battery powered and uses radio frequency signals to communicate with the radiators so no wiring is required.**

the new products on the market are coming from Spain and Italy, their design consequently matches the more traditional European central heating look, whereas the Digi-line range from Electrorad, for example, echoes the looks and performance of British central heating.

As we've seen, today's electric radiators are a far cry from the market ten years ago, offering a high level of comfort with increasingly sophisticated controls. This facilitates the ultimate in control of energy usage and efficiency and as long as energy efficiency remains a hot topic, electric radiators will continue to steel a march on traditional systems.

The demand for electric radiators has grown exponentially over recent years, and it looks set to continue. With increasing sales, more product choice and availability, who knows what the market will look like in ten years? But one thing's for sure, perceptions of electric radiators have shifted dramatically. No longer the poor relation of gas central heating, the only way is up.

[www.electrorad.co.uk](http://www.electrorad.co.uk)



**The Vanguard range is a modern looking replacement for tired and out-dated storage heaters.**