

The case for electric radiators

By Richard Brown, managing director of Electrorad

You're on your way to building a new home that's custom made for you and your family. Now you have unparalleled freedom to create the property of your dreams, and to invest in materials and technology that will bring you the ultimate in comfort and security.

Of course, the heating system will be one of the most important elements of your new home. Responsible for around 60 per cent of a household energy bill, it's an outlay that's likely to consume a large chunk of your budget too. Hence, it's vital that you spend time exploring the wide range of options available to ensure that the system best meets your needs and lifestyle.

Whilst every property is unique, there are some key factors that you will need to consider. Undeniably, whilst energy efficiency and heating capabilities are key issues, it's also important to weigh up safety and reliability concerns. Rather than focus solely on the initial outlay and installation costs, it also makes sense to consider the long-term cost and performance of the system, as the benefits may become more apparent over time. Equally, with the growing need for heating systems to match our lifestyle, controllability is fundamental. Finally, it's important that the aesthetics prove a stylish addition to your new home.

Although 90 per cent of homes in the UK have a traditional gas

central heating system, times are changing. Increasingly, new build and self-build properties are turning to electric systems to provide an affordable energy efficient solution that combines safety with versatility, comfort and control. Thanks to new innovations and technologies, the electric radiator market has evolved significantly, with design, efficiency and functionality now firmly in line with the self-builder. With a range of radiator styles and colour options to choose from, they can also create a statement piece in their own right. So, let's take a closer look at electric radiators and what makes them the hero of home heating today.

Energy savings

Today's radiators are vastly superior to other electric systems. Cheaper to install and maintain than gas systems, they also deliver on running costs. There is no need for inflexible electrical tariffs as they are 100 per cent efficient at the point of use, meaning there is 100 per cent conversion of electrical energy input to heat output. Whilst unused areas can be kept at lower temperatures, used areas can be kept at comfort temperatures; thereby saving energy where it's not needed.

Also, thanks to sophisticated programming devices and controls, electric radiators only use the electricity that's needed to maintain comfortable temperatures; and if the electricity is supplied by renewable technologies, you can even create a carbon-free home. Some models also feature

integral energy saving monitors that record and display energy consumption, so you'll always be ahead of the game when it comes to running costs.

Heating capabilities

Electric radiators produce both radiant and convection heat to provide a longer lasting 'cosy' warmth. Indeed, with fast heat-up times, it's quite typical for models with highly accurate thermostatic controls to only draw power for around 30-50 per cent of the time in order to maintain room temperatures. Some even feature open window detectors that are designed to respond accordingly should a window be left open.

Controls and comfort

Due to advances in technology, accurate energy saving digital controls are now commonplace for both time and temperature flexibility – some being $\pm 0.1^{\circ}\text{C}$. Each radiator can be individually thermostatically controlled so they can be left to run independently, or the whole system can be connected together, linked to a central room controller and programmed to meet your needs.

Wireless radiators are extremely popular due to their fully programmable RF controls. This feature is great for new homes as it allows the system to be divided into zones to control separate floors or areas; thereby saving energy. Smart control systems go one step further. Courtesy of wireless thermostat and controls built into each radiator, a central touchscreen

and link to Wi-Fi enables you to control your heating from your smartphone / tablet App and from anywhere in the world.

Installation and durability

In terms of capital outlay, electric radiators are less costly than other types of systems and considerably cheaper to install. They can be sited almost anywhere in your home, with larger units capable of warming sizeable rooms with ease. With no pipework or plumbing required, they can also be conveniently and easily installed at second fix, plus there's no requirement for annual servicing. With no moving parts to break down or wear out, they are also extremely reliable. And, if additional heating needs to be introduced at a later date, you can easily add more radiators to your system.

Safety and reliability

The hot elements within radiators are sealed within the metal casing and encased in ceramic or fireclay, or even within fluid. As dust and objects cannot fall onto these elements, they are safe to run and safer to touch. For added peace of mind, some models boast guarantees of up to 30 years covering all internal components, such as electric elements, thermal switches and wiring, excluding the thermostat.

Aesthetics

When it comes to making a design statement, today's modern, minimalist radiators are

just the ticket. Slimline in design, they come in all sizes and designs; from sleek vertical models, to compact towel radiators that are ideal for the smallest room in your home. Some are identical in appearance to regular central heating radiators, whilst custom-coloured radiators offer a perfect match for your new décor.

A great self-build home requires a great heating system, so it's definitely worth considering high-quality electric radiators for superior energy efficiency and functionality. Not all radiators are of the same quality however, so it pays to do your homework and check the credentials of your supplier. If something goes wrong further down the line, or you need to extend the system at a later date, it's important to have complete assurance in their product and service ■

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Right: For self-builders looking for a reliable electric heating solution, the Aeroflow range of electric radiators from Electrorad offers a 30-year warranty – the most comprehensive of its kind in the industry. These models also boast three thermostatic control options. A bespoke colour matching service is also available



The new wireless programmer for Electrorad's Digi-Line range of electric radiators – Touch E3. This new control hub with Wi-Fi gateway and App enables wireless control and direct management of your heating over the internet from anywhere



Electrorad's new range of Vanguard aluminium electric radiators now boasts a ceramic plate core to deliver improved heat retention. Sleek and minimalist, they are perfect for modern homes



In conjunction with an unobtrusive and easy to use touch screen control unit that may be wall mounted or free standing anywhere in the home, you can control all of the heating functions using a smartphone, tablet or PC courtesy of Electrorad's CleverTouch App that is available for iOS and Android



The British-made Digi-Line electric radiator from Electrorad offers an optional RF central programmer that is capable of separately programming up to four separate zones to provide the ultimate electric central heating system with absolute control over temperatures, times and energy usage