



Safety First

David Garrity, Managing Director of Heat Electric, explains how the latest generation of electric heating can protect the young, the elderly and those with disabilities, from serious injury.



While at first glance a standard radiator may not be an obvious health hazard, for the most vulnerable members of society it represents a dangerous and potentially harmful feature of any room.

Those with thin, delicate skin can suffer superficial burns from even a glancing touch of a conventional radiator, the surface temperature of which can reach up to 70°C, while contact burns to those over 65 can prove to be fatal.

According to the annual Leisure Accident Surveillance System (funded by the Department of Trade and Industry and managed by the Royal Society for the Prevention of Accidents), 1,970 people were injured in a public building by either a radiator or hot pipework over a 12 month period, while 71% of these accidents occurred in a place of education and all were serious enough to warrant a hospital visit.

So how can we protect those at greatest risk?

The latest generation of electric heating systems offer a number of clear safety benefits when specifying heating for buildings used or occupied by high risk groups.

“Steel casing prevents the surface temperature from exceeding 43°C”

Electric water filled radiators immediately eliminate one of the main dangers associated with a plumbed heating system, while providing the same heat quality, as no central boiler or pipework is required. Instead, each individual radiator houses its own mini boiler, thermostat

and pump to create a self contained central heating system.

Wall mounted on brackets and plugged into any standard 13amp socket, such systems offer vital flexibility in terms of room design and layout, crucial considerations when catering for a young, elderly or disabled audience.

Meanwhile, Low Surface Temperature (LST) systems remove the wider danger of contact with the radiator's surface as their specialist steel casing prevents their surface temperature from exceeding 43°C, thereby complying with strict NHS standards. Thanks to their striking design, such systems also provide a strong visual presence in a room, making them easy to see by the visually impaired, while radiused edges minimize the risk of injury in the event of a fall.

One organization reaping the benefits of such a system is Solihull Borough Council who appointed M&E consultancy, New Medallion, to oversee the installation of a new heating system in two of its libraries, Hampton in Arden and Marston Green, as part of a major refurbishment programme.

“The libraries were old buildings which were being refurbished and needed a constant temperature to keep visitors comfortable while eliminating the risk of contact burns, which made an LST system the perfect solution,” New Medallion Director, Phil Boraston, explained.

Library assistant, Susan Wagstaff, has worked at the Hampton in Arden Library for six years and said the difference in type of heat and constant warmth has been noticeable since the library reopened.

“We work in an old building with very high ceilings so the previous storage heating system we had was old, inefficient and struggling to produce any heat at all. Since we reopened with the LST system there has been a very comfortable atmosphere in the library and it's

extremely efficient and easy to control. In a position like mine, it's very reassuring to know that we can provide efficient warmth with no risk of any customer burns.”

“Eliminating overheating, cold spots and energy wastage”

Equally important for vulnerable users, and in the current economic climate, is ensuring heat is provided only when and where it is needed, thereby eliminating overheating, cold spots and energy wastage.

The latest electric heating systems offer fingertip time and temperature control on a predefined zone and individual room basis, enabling the creation of a bespoke heating schedule tailored to the exact needs of a building's occupants.

Each individual radiator constantly monitors the room temperature against the one it has been programmed to achieve. If the room is too cold the radiator will activate until the desired temperature has been reached at which point it will immediately stop drawing electricity.

Thanks to their precision controls, such systems ensure that every £1 spent on electricity is turned into usable heat thereby minimizing costs for building owners while ensuring maximum thermal comfort for end users.

Whether used throughout a building or solely in high risk areas, LST radiators ensure that the most vulnerable members of society are not only protected from a very real danger to their health, but also have access to the most efficient, responsive and effective form of heating 24 hours a day.