Media Information

Abdul Raaj, Commercial Manager of Süka Electro Heating Systems in the UK, looks at how we can feel warmer, save money and reduce our carbon footprint.

Warm heads and cold feet

Feeling warm is a very subjective matter. How often are there two people in a room, one of whom complains it's cold and the other says they are feeling too warm?

How often does one person turn up the thermostat as they walk past, only for another to turn it down moments later?

Heating needs to suit the needs of each individual as much as possible. It is not just a case of providing 22 ° C, which is around 72 ° F, of heat in a room.

Most electrical heating systems provide heat via convection, so the air is warmed and circulated in the room to reach the required temperature. But such systems cause the hot air to rise quickly so the ceilings are warm and the floors are cold. The result is warm heads and cold feet.

Another problem is the circulation of air causes dust to circulate. This is sucked into the heaters; it then burns and leaves unsightly black marks on walls. The circulated dust is also a major problem for anyone who suffers because of airborne allergies.

Convected air is also usually very dry and this too is unhealthy, especially for older people. Eyes and sinuses dry out, which in turn leads to a higher risk of illness.

A heating system that creates radiant heat however brings a range of benefits. Whether you're a hotel owner looking for a green tourism award, a homeowner looking to get a high rating Home Information Packs (Hips) for your house, or a conscientious consumer looking to reduce your carbon footprint, there is an alternative heating system that brings major benefits.

Modular heaters offer cost savings and efficiency improvements. There is also the advantage of upheaval-free installation and no servicing costs...ever.

The way it works is a little like the human body. Just think of the winter when the sun is shining and you go outside.

The air temperature may only be just above freezing, but your exposed skin soon feels warm from the sun. This is why skiers often sunbathe at the top of a mountain in winter, with much skin exposed to the sun!

The receptors in the skin's surface react very quickly to radiant heat; much more and much quicker than to warm or hot air. So having hot air circulating in your home is not the most efficient way of heating.

Radiant heat also warms up the walls and furniture of a room and these too store the heat and radiate it out. The house shell and its contents are used as thermal mass and are then a store of heat. This means only top-up heat is required.

Compare this with an electrical immersion heater, which is well lagged. It is far cheaper to keep such a heater switched on, than to keep switching it on and off in the mistaken belief that you save energy. Remember how long a simple stone, which has been warmed by the winter sun, will retain its heat compared to a stone, which has been subjected to just hot air.

Compare a 2 KW hair drier, a 2 KW iron and a 2 KW slim-line radiator. They all require 2 KW of power, yet which one will heat a room for you?

This technology has been used extensively in Germany for more than 30 years. Thanks to storage capacity and sensitive thermostatic control (which measures the temperature at floor level), radiant heaters only require approximately 15 minutes of electricity to provide 60 minutes of warmth.

This heat, radiated out over a large surface area, will give users the most comfortable warmth compared to the hair dryer and iron! What’s more you can get a £300 government grant to part-pay for your heating system whether you're renting or owning your home.

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