

INFRARED HEATING WALL

Heat from the comfort wall

Infrared heating systems provide an alternative to conventional set-ups. The use of such systems does not only result in a healthy indoor climate; it also provides you with significant environmental and economic benefits. Conventional and infrared heating systems mainly differ in the way the heat is distributed.



THE FCN BENEFITS

- No inertia of the system
- No pre-heating of rooms
- Cost savings due to lower room temperature
- Positive effect on human well-being
- Keeps humidity constant at the optimum level

Areas of use:

- Living spaces/nurseries
- Entrance halls/corridors
- Existing and new buildings
- Bathrooms and spa areas
- Conservatories



Product information

Conventional radiators only heat the ambient air inside the room. This principle always results in relative humidity variations, which is not exactly beneficial to health. The heated air in the room then begins to circulate. From the radiator, it moves in upward direction until it reaches the ceiling. The air temperature decreases continuously as it moves across the ceiling to the opposite wall. Finally, the air reaches the floor and moves back to the radiator. During this circulation, we utilise only a minor share of the generated heat, which is why the efficiency of these systems is extremely low.

Infrared heating systems hardly heat up the ambient air. Instead, they just heat the objects located in their surroundings. Also, very much like our sun, they only heat up those objects that are capable of absorbing infrared radiation. The air is thus not heated, relative humidity remains at an almost constant level, and the entire room is heated to a uniform temperature, providing true thermal comfort!

Since the infrared heating wall runs on electricity, the “greenest”, most environmentally friendly decision is to combine it with electricity supplied from renewable sources. Another benefit is that the infrared heating system does not require maintenance because it is electrically operated. Nor does the system generate any flue gases, which results in an extremely low environmental impact.

The heat is generated by an ultra-lightweight, ultra-thin (0.1 mm) film, which we embed in the render coat as early as at the prefabrication stage in our factory. Microscopic carbon fibres act as conductors, effectively converting electricity to heat. Users enjoy a “heart-warming” experience at heating outputs of up to 60 W/m². The use of low-voltage components completely eliminates electrical hazards. In addition, the system design prevents any risk of subsequent damage caused by nailing or dowelling.

Sensors enable appropriate temperature control, and an on/off switch makes it possible to turn the heat on or off exactly as long as you need it: Enjoy the same comfort as provided by lighting systems.