

# Regulation of radiant panels

Even though radiant panels give out the majority of their heat energy in the form of infrared radiation, their operation during heating is usually controlled by regulation, which senses the temperature in the space where the heating panels are located. Because electric heating by its very nature offers the regulation of every individual room or space independently, it is possible to design structures where the installed radiant heating is controlled separately for every individual room.

The heated space may, according to its size and the method of its usage, be regulated as one whole, or may be divided up into zones in which radiant panels can be switched on individually according to need. The most common form of regulation of heating panels is by room thermostats (analogue, digital, or wireless), which measure the temperature and are installed right in the room with the heating panels. Regulation can also be designed in a more complex fashion, with the use of central regulation.

Regulators should be positioned so that, if possible, they are not within the area radiated by a radiant panel, nor are they influenced by direct solar radiation, or another direct source of heat or cold. They are typically situated on internal walls at a height of around 1.2 m above the floor. For industrial applications or in cases when a higher level of protection against dust and water is required it is necessary to use an industrial room thermostat.

With zone heating, when people in defined spaces are being specifically heated by radiation, heating panels are usually switched on manually, according to the users' subjective feelings regarding the temperature. Manual switching can be overridden by other regulatory devices – for example, a time switch in order that panels do not inadvertently get left switched on at times when the heated area is not being used, or also a room thermostat, which only allows heating panels to be switched on from a certain temperature. During the regulation of low-temperature and high-temperature panels the same rule basically holds true. From the viewpoint of electrical installation the heating circuits in the switchboard should be independently protected by fuses and their bipolar switching must also be protected. The regulation element used must correspond to the degree of coverage of the product.