Regulation of heating panels

GR heating panels as well as MR marble panels are fitted only with a thermal fuse, which prevents the heating panels from overheating, e.g. if they are covered by the user. In contrast with direct-heating convectors, they don’t have a built-in thermostat to control the operation of the heater based on room temperature. In order to achieve maximum comfort and economical operation, it is essential to control the panels with higher-level regulation.

Radiant heating panels transfer thermal energy by both radiation and convection, and therefore their operation is controlled by regulation which reads the temperature in the room where the heating panels are located. Electric heating offers, by its very nature, the regulation of each individual room independently and therefore this method should also be used for radiant heating panels. Regulation setups where a thermostat is in one room and also controls heaters in other rooms (the principle of a gas boiler with a thermostat in the living room) leads to the loss of the excellent regulation possibilities of electric heating and to a significant increase in operating costs.

According to its size and the way it is used, the heated area (room) can be controlled as one unit or it can be divided into zones in which it is possible to switch the radiant panels on piecewise as needed. The most common means of regulating heating panels is through the use of room thermostats (analogue, digital or wireless) which measure the temperature and are installed directly in the room with the heating panels. Regulation can be provided also in a complex way, with the use of central regulation.

Regulators should be placed in such a way that, if possible, they are not within the radiant field of the heating panel and are not affected by direct solar radiation or any other direct source of warmth or cold. They are usually placed on an inside wall at a height of approx. 1.2m above the floor. From the point of view of the electrical wiring system, each of the heating circuits in the switch board must be individually protected by a fuse, and two-pole switching must be provided. The regulation element used must correspond to the class of coverage of the product.