

Technical information:

Installation above floor heating system

Heating system:

Hot water heating system with low flow temperature (35-40°C).

Other kind of floor heating systems have to be defined and released by the producer.

Cooling of the room by that sytem isn't allowed.

Guidelines:

- Underfloor/ Screed:
 - Max. moisture of heated screed:
 - Cement screed: $\leq 1,8\%$ (CM= calcium-carbid-measurement)
 - Anhydrite screed: $\leq 0,3\%$ CM
 - Magnesia screed: $\leq 3\%$ CM
 - Planess of screed: $\leq 3\text{mm/ meter}$ in sufficient strength
 - Max. temperature above screed before of installing the floor: 29 °C
 - Documentation of professional heating up – process and of moisture control

- Installation:
 - Gluing of wooden parquet to the screed only; no floated installation
 - Recommended glue for floor-heating system: SIKA T54, MAPEI P991.
Other types of glue have to be agreed with particular supplier
 - Control of moisture content of wooden floor: 6 – 8%
 - Professional installers required

- Climate:
 - Recommended climated of the room:
 - Temperature: $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$
 - Relative humidity: $50\% \pm 5\%$
 - Max. temperature directly above the wooden floor: $\leq 27^{\circ}\text{C}$; kindly note that it means also areas which are covered by for instance carpets or which are directly penetrated by sun light

- Information regarding to extension of wooden floors:
 - Thermal resistance on 20 mm boards: $0,14 [\text{m}^2 \times \text{K/ W}]$
 - Floor heating systems provok an aggressive climate (n.b.: rather low humidity) directly above the floor. It means that gaps between single wooden elements will be bigger; eventually cracks on single boards might appear. Therefore it is essential to keep humidity of the room close to 50%.
 - Cooling of the floor on wider boards is not recommended.