

## Parky is compatible for installation on floor heating.

All Parky floors can be used in conjunction with „low temperature“ underfloor heating, under following conditions. This is true for underfloor heating systems with heating components - hot water or electric – embedded in the floor.

The underfloor heating must be installed in accordance with the supplier's instructions and the generally accepted instructions and rules. The general installation instructions for Parky without underfloor heating also apply of course. Parky with 0.6mm top layer must be installed floating – or glued-down following our Mapei instructions. Parky with 2mm top layer must be installed only glued-down.

### Thermal resistance/conduction

The thermal resistance gives an indication of the energy loss through the floor. A value below 0.15 m<sup>2</sup>K/W means that the floor is compatible for floor heating. As illustrated in the table below, Parky is compatible for floor heating.

	PRO	LOUNGE	MASTER	DELUXE+	SUMMIT	SWING	CLASSIC	ROYAL+
Thermal resistance (m <sup>2</sup> K/W)	0.053	0.059	0.073	0.109	0.073	0.073	0.070	0.100
Thermal conduction (W/mK)	0.14	0.14	0.14	0.11	0.14	0.14	0.14	0.11

### Concrete or screed as sub-floor

The type of screed and the installation method, combined with the underfloor heating, must comply with the instructions of the suppliers of the screed and the heating system.

To obtain a homogeneous heat distribution across the entire floor, the distance between the heating elements must not be greater than 30 cm. The depth of the elements is determined by the fitter of the underfloor heating (>4cm).

The sub-floor must be sufficiently DRY across its complete thickness when installing the floor. This is maximum 1.5% according to the CM method for cement-bound floors and maximum 0.3% for anhydrite-bound screed. This can only be guaranteed, when installed in new buildings, by starting up the underfloor heating. Start up the floor heating gradually at least two weeks before laying your Parky floor, and minimum 21 days AFTER laying the screed (max. 5° per day).

- at 50% of the capacity for 2 weeks
- 100% for the last two days.

For newly spread screed, follow the guidelines of your installer for the startup period. A heating protocol should be presented; ask for it if necessary.

## Different systems

The floor can be installed on a wet or a dry floor heating system. A wet system means that the heating tubes are inserted directly into the concrete slab. A dry system means that the tubes are inserted into a frame of polystyrene foam.

Following procedure has to be followed during installation on floor heating:

Wet system:

- The concrete slab has to be dry before initiating the installation (humidity < 1.5 %).
- The tubes need to be integrated in the concrete slab and should not be visible at the surface.
- Always use a moisture barrier underneath the floor in case of floating installation. This avoids condensation between the floor and the concrete slab. All Parky underlays have an integrated moisture barrier.

Dry system:

- This is the most efficient method of floor heating.
- A moisture barrier is obliged. All Parky underlays have an integrated moisture barrier.

**ALWAYS READ THE GUIDELINES OF THE FLOOR HEATING MANUFACTURER. THEY SHOULD PROVIDE ADDITIONAL INFORMATION IF REQUIRED!**

## Installation instructions (wet and dry system)

The floor heating has to be shut down several days before the installation. Also control the temperature fluctuations and humidity differences in the room.

The room temperature has to be in-between 10 and 20°C and the relative humidity in-between 45 and 60%. If necessary, use a humidifier. The Parky boxes need to be in the room at least 3 days before installation. The temperature and the humidity of the floor will reach the same level as the room. This is very important for a proper installation.

After laying your floor, you must restart the heating gradually (5°C per day).

The maximum allowed contact temperature is 27°C. The maximum warm water temperature at the boiler output is 50°C (if applicable).

Always change the temperature GRADUALLY at the start and end of a heating period.

Avoid heat accumulation by carpets or rugs or by leaving insufficient space between furniture and the floor.

Open joints may appear during the heating season.

## **Floor cooling**

More and more systems combine heating and cooling. A heat resistance of less than or equal to  $0.09\text{m}^2\text{K/W}$  is recommended for floor cooling, which means that Deluxe+06 and Royal+20 are not recommended for floor cooling.

The other Parky collections can be installed (following our standard installation instructions) on cooling systems but only in certain conditions.

First of all, the floor cooling system must be equipped with an advanced control and safety system in order to prevent internal condensation (dew point regulation). To avoid damage to the floor, the supply temperature of the cooling water may not be under the dew point temperature. Lower temperatures will produce condensation in the floor and will cause warping, distortion, swelling and gapping.

An effective control system consists of automatic probes that can detect when the dew point (= when condensation starts) is reached under or in the floor, and then switch the cooling off. Room thermostats should never be set under  $24^\circ\text{C}$ . In addition, thermostats must never be set at a temperature which is  $5^\circ\text{C}$  lower than the room temperature. So at a temperature of  $32^\circ\text{C}$ , the room thermostat must not be set lower than  $27^\circ\text{C}$ .

The cooling circuit must have a control that prevents the temperature of the cooling liquid dropping below  $18$  to  $22^\circ\text{C}$ . This depends on the climate zone where the floor is installed. In zones with a high relative humidity, the minimum is  $22^\circ\text{C}$ ; at average humidity and temperature levels, it can go as low as  $18^\circ\text{C}$ .

If you do not respect these instructions, the Parky warranty is void.