

General

All Balterio Rigid Vinyl floors can be used in conjunction with “low temperature” floor heating, under the conditions mentioned below. This is true for floor heating systems with heating components – hot water or electric – embedded in the floor. Heating films or other “new” systems that are placed ON the screed or wooden sub-floor are not suitable for Balterio Rigid Vinyl flooring.

The maximum allowed heat resistance (R) of the floor covering in combination with floor heating is 0.15 m²K/W. In combination with floor cooling the maximum heat resistance is 0,09 m²K/W. The respective values for Balterio Rigid Vinyl are as follows:

Product (+ underlay)	Thickness	Total Heat resistance (R)
4,5mm (NO underlay)	4,5mm	0,020 m ² K/W
4,5mm (+ BASIC underlay)	4,5mm + 1mm	0,040 m ² K/W
4,5mm (+ SUNSAFE underlay)	4,5mm + 1,5mm	0,030 m ² K/W
5mm RIGID (NO underlay)	5mm	0,025 m ² K/W
5mm RIGID (+ BASIC underlay)	5mm + 1mm	0,045 m ² K/W
5mm RIGID (+ TRANSITSTOP underlay)	5mm + 2mm	0,070 m ² K/W
Glue down LVT	2,5mm	0,015 m ² K/W

Floor heating and subfloor conditions

The type of cement screed and the installation method, combined with the floor heating, must comply with the instructions of the suppliers of the screed and the floor 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 floor heating (> 4 cm).

The subfloor must be sufficiently DRY across its complete thickness when installing the floor covering. 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 floor heating. Start up the floor heating gradually at least two weeks before laying your Rigid Vinyl, and minimum 21 days AFTER laying the screed (max. 5°C per day):

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

If you can leave the floor heating on for longer, this is even better. For newly spread screed, follow the guidelines of your installer for drying and startup period. A heating protocol should be presented. Ask for it if necessary.

Installation instructions

The temperature for laying Balterio Rigid Vinyl flooring must be minimum 18°C. So if the room temperature is not 18°C, the floor heating has to be switched ON at 50% until 18°C in the room is reached. If the room temperature is 18°C, you can turn off the heating completely.

Of course, the general installation instructions for Balterio flooring without floor heating also apply, unless explicitly mentioned below. For LVT (floating or glue down) installations we strongly recommend to have 5mm expansion gaps (& for RIGID LVT: 8mm expansion gap) and foresee a transition profile from areas with floor heating/cooling towards areas without floor heating/cooling. This because the movement of subfloors with floor heating/cooling is bigger than without.

AFTER installation of the floor you must wait at least 48 hours before restarting the heating. This should be done gradually (5°C/day). The maximum permitted contact temperature on Balterio Rigid Vinyl floor is 27°C. The maximum hot water temperature at the exit of the heating furnace is 45°C but in most new systems this is much lower.

ALWAYS change the temperature gradually at the start and end of a heating period.

Preferably the climate conditions in the rooms are kept between 18-30°C:

- Always avoid heat accumulation by carpets or rugs, put on the floor, or by leaving insufficient space between furniture and the floor.
- Changing temperatures during different seasons can cause changing in dimensions.

Floor cooling

To avoid damage to the floor, the supply temperature of the cooling water must not be reduced below a certain temperature, the so-called dew point temperature. Lower temperatures will produce condensation and will damage your flooring construction.

Thermostats in the room must never be set at a temperature which is 5°C lower than the room temperature. So at a room temperature of 25°C, the room thermostat must not be set lower than 20°C. The cooling circuit must have a control that prevents the temperature of the cooling liquid dropping below 18 to 22°C. This depends on the climate zone where the floor is installed. In zones with a high relative humidity, the minimum is 22°C; at average humidity and temperature levels, it can go as low as 18°C. If you do not respect these instructions, the warranty on Quick Step Rigid Vinyl floor is void.

If you have further questions or problems, please do not hesitate to contact our technical department:

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