

UNDERFLOOR HEATING

All laminate flooring produced by Balterio is suitable for underfloor heating (warm water system) in case the aspects underneath are followed:

1/ Beforehand

- The heating elements of the (warm water) underfloor heating must be embedded in the basic floor;
- the tubes must be min. 3 cm underneath the surface;
- the heating system must be tested according to the directions of the installer before the laminate flooring is laid;
- the moisture content in the concrete floor must not exceed 1.5% (CM method).

2/ Installation

- Before you start, switch of the underfloor heating as the floor should not be higher than 18°C before, during and 24 hours after installation of the laminate;
- install the Balterio dampscreen (150µ), the underlayment and the laminate as described in the installation instructions. In case another type of underlayment is used, check its suitability to use in combination with underfloor heating;
- leave an expansion gap of 8 to 10 mm on all wall sides and around obstacles. For larger surfaces a connecting profile should be used for each ten metres and between every room so there is an expansion gap of 8 to 10 mm;

3/ The heating

- After the installation of the floor, wait at least 24 hours before you switch on the underfloor heating again and increase the temperature gradually;
- avoid abrupt temperature changes by changing the temperature always gradually (max. 5° C/day) – also at the start and the end of the heating period;
- the contact temperature must not exceed 28°C; the maximum warm water temperature is 50° C.

4/ Values (according to norm ISO 8302 – 1991)

The highest acceptable heat conduction (R) of floor covering is 0.15 K*m²/W.

Thickness	Heat conduction R
7 mm	0,056 m ² .K/W
8 mm	0,054 m ² .K/W
8 mm (Confidence)	0,046 m ² .K/W
9 mm	0,057 m ² .K/W
Blue Floor (2 mm)	0,053 m ² .K/W
Metal Floor (2,07 mm)	0,056 m ² .K/W
Silent Sound Floor (3 mm)	0,066 m ² .K/W
Natural Wood Sound (3 mm)	0,017 m ² .K/W
Natural Wood Sound Plus (3 mm)	0,021 m ² .K/W

5/ Remarks

- Follow the installation instructions of Balterio at all time, except when indicated otherwise.
- The installation of a floor cooling system (combination system heating/cooling) is inadvisable as condensation may be formed when the cooling system is activated. This can cause humidity problems underneath the laminate: swelling of boards, ...
- In case of an electrical floor heating system, which is installed on top of the concrete slab and therefore directly underneath the underlay and laminate flooring, we advise a heating system with a value a maximum 60W/m². If it is higher, the laminate floors will heat up too quickly and too abruptly, leaving no time for the floor to adapt itself to the new temperature. This can cause problems on the laminate flooring planks (deformation, splitting HDF, ...).
- In case of an electrical heating system that is embedded into the concrete slab, there are no problems or extra restrictions because the concrete slab is functioning as a security zone (slows down the up going heat). It is sufficient to follow the advice and recommendations for the warm water heating system.