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In combination with underfloor heating/floor cooling for comfort

BerryAlloc HPF can be combined with underfloor heating and/or cooling, but some important remarks have to be considered to protect your floor and to have the best result of your heating system. BerryAlloc HPF is compatible with both electrical and waterborne systems when they are embedded in the subfloor. When the systems are installed separately on top of the subfloor special guidelines apply.

For the installation of BerryAlloc HPF on a subfloor with underfloor heating, our general installation instructions still apply. In addition to the general instructions, the following special instructions apply to underfloor heating:

1. Before the installation:

- Turn off the heating elements 2-3 days before installing the floor.
- The capacity of the heating elements must not exceed 60 W/m² (electrical heating systems).
- The surface temperature of BerryAlloc HPF must never exceed 27 °C (80 °F). This also applies to areas next to radiators, under furniture and carpets, etc. Thick rugs may cause high temperatures.
- A floor sensor or IR-sensor for constant measurement of the surface temperature is required.
- If only a part of the area has underfloor heating, but your floor continues in areas without underfloor heating, these areas always have to be separated by expansion profiles. The heated and non-heated areas will otherwise react differently (e.g. risk of openings and squareness deviation), due to variation in surface temperature.
- You need always to install a vapour barrier (ageing resistant PE-foil, thickness 0,2 mm) to prevent any condensation damage to your BerryAlloc HPF (with or without integrated underlay). N.B.: When installing a moisture barrier on top of a wooden subfloor construction remember not to lock in moisture in the floor construction (leave a gap of roughly 2 cm to all walls for ventilation of the subfloor).

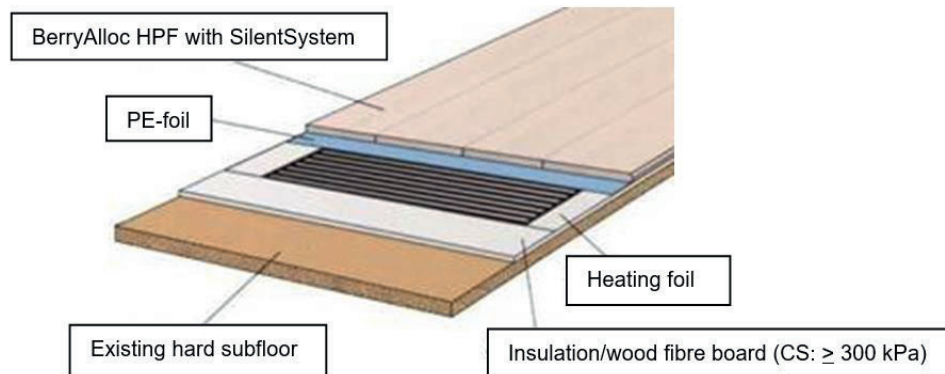
Do not use any additional underlay in combination with floorboards with pre-attached underlay!

Electric underfloor heating

A. Heating foil/heating mat) with insulation boards

When installing BerryAlloc HPF with integrated underlay (SilentSystem) on heating foil or heating mat (in combination with insulation boards - thermoplastic or wood fibre) there are 2 options:

- Install pressure distribution boards (thickness min. 6 mm, e.g. wood or gypsum) on top of the heating system
- Choose insulation boards with a compressive strength (CS) of min. 300 kPa (according to EN 16354:2018) between the heating foil/heating mat and the subfloor (see illustration below)



When installing BerryAlloc HPF without underlay the insulation boards must have a compressive strength (CS) of min. 120 kPa (according to EN 16354:2018).

B. Heating cables in track boards

When installing BerryAlloc HPF on top of track boards with electric cables, hard pressure-distributing boards (thickness min. 6 mm, e.g. wood or gypsum) must be installed on top of the underfloor heating system.

Waterborne underfloor heating

The aluminium heat distribution plates used in waterborne constructions with track boards causes often squeaking noises in the subfloor. To avoid the possibility of squeaking in the underfloor heating system you need to install pressure distribution boards (e.g. gypsum board 13 mm or gypsum fibreboard 10 mm) on top of the construction, before you install the vapour barrier and your BerryAlloc HPF. This will in addition result in an evenly spread heat and give free choice of installation direction. **N.B.:** Extra precautions should be taken to ensure that the temperature at the feeding of the hot water never exceeds the maximum level, and that installation instructions provided by the supplier of the underfloor heating system are followed correctly.

- Systems that combine both underfloor heating and floor cooling need special attention because of the risk of condensation, which could cause damage to the floor. If the cooling water temperature drops below the so called 'dew point', it will cause condensation which can lead to swelling, openings, distortion and warping of the floor.

To protect the quality of your BerryAlloc HPF and to ensure that your floor warranty remains valid, make sure that :

- the water temperature never goes below 18 °C (64 °F)
 - you limit the temperature difference between the floor and the surroundings to 6 °C (43 °F)
 - your cooling system is equipped with an automatic anti-condensation control system that adjusts the temperature of the ingoing water
- Always ask your supplier of the heating/cooling system if it is compatible with BerryAlloc HPF and if they are able to meet all the necessary requirements prior to installation!

2. Preparations

- The subfloor must be dry:
 - Concrete and light concrete floors should have a minimum of 1,8% according to the CM method (RH <75 %)
 - Plaster based flooring maximum 0,3% according to CM method
- Install a vapour barrier according to the instructions above.
- Install your BerryAlloc HPF (with necessary expansion gaps) according to the installation instructions.

3. After the installation

- When the installation of your BerryAlloc HPF is finished, or if the underfloor heating system has been turned off for a long period of time, consider that:
 - The first week the underfloor heating system must be set on a low temperature 18-22 °C (64-72 °F)
 - During the following week the temperature can gradually be increased
- N.B.:** A too fast heating-up process may cause irreversible damage to your floor.
- The floor is now ready for underfloor heating/floor cooling.
Enjoy the comfort of your BerryAlloc HPF!