

## Installation of BerryAlloc Senses in combination with underfloor heating/cooling

BerryAlloc Senses can be installed with underfloor heating, but some important remarks have to be considered to protect your floor and to have the best result of your heating system.

Both electrical and waterborne systems are compatible with BerryAlloc Senses 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 Senses on a subfloor with underfloor heating, our general installation instructions still apply. In addition to the general instructions, this is our underfloor heating guide:

### 1. Before the installation:

The capacity of the heating elements must not exceed 60 W/m<sup>2</sup> (electrical heating systems).

The surface temperature of BerryAlloc Senses must never exceed 27 °C. This also applies to areas next to radiators, under furniture and carpets, etc. Thick rugs may cause high temperatures.

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.

An IR-sensor for constant measurement of the surface temperature is highly recommended.

If only a part of the area has floor heating, but your floor continues in areas without floor heating, these areas always have to be separated by expansion profiles.

The heated and non-heated areas will otherwise react differently (risk of warping, openings and squareness deviation), due to variation in surface temperature.

You always need to install a vapour barrier (ageing resistant PE-foil, thickness 0,2 mm) to prevent any condensation damage to your BerryAlloc Senses with integrated underlay.

No additional underlay is allowed!

### Electric underfloor heating (heating foil/mat)

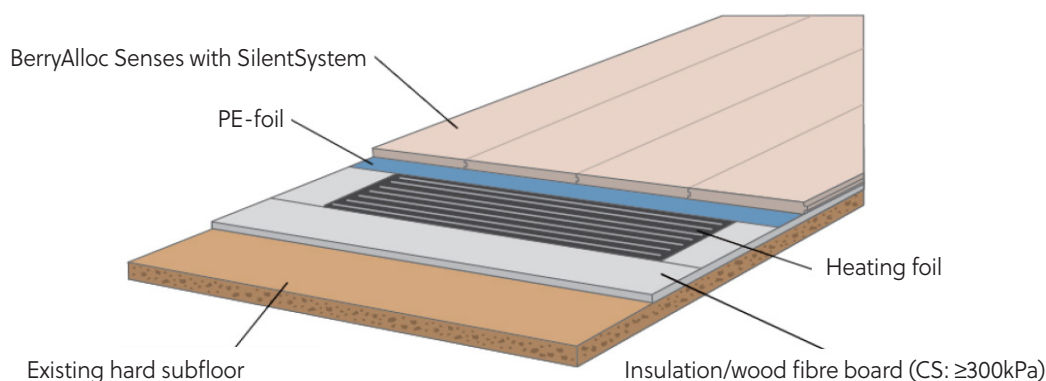
When installing BerryAlloc Senses with integrated underlay (SilentSystem) on heating foil/mat (in combination with insulation boards - thermoplastic or wood fibre underlays) you have 2 options:

- Install a hard pressure distribution board of wood or gypsum (thickness min. 6 mm) on top of the heating system
- Choose insulation boards with a compressive strength (CS) of min. 300 kPa (30 tons/m<sup>2</sup>) between the heating foil/mat and the subfloor (see illustration below)

### Waterborne underfloor heating

The aluminium heat distribution plates used in waterborne constructions with track plates causes often squeaking noises in the subfloor, which are unfortunately connected to the floor on top.

To avoid the possibility of squeaking in the underfloor heating system we recommend to install pressure distribution boards (e.g. gypsum board 13 mm, gypsum fibreboard 10 mm or chipboards) on top of the construction, before you install the vapour barrier and your floor.





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Systems that combine both underfloor heating and 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 Senses and to ensure that your floor warranty remains valid, make sure that :

- the water temperature never goes below 18 °C
- you limit the temperature difference between the floor and the surrounding to 6 °C
- 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 Senses and if they are able to meet all the necessary requirements prior to installation!

## 2. Preparations

The underfloor heating or cooling should be switched off 2 to 3 days before installing the laminate. 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 Senses (free floating with necessary expansion gaps) according to the installation instructions.

## 3. After the installation

When the installation of your BerryAlloc Senses 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
- 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/cooling. Enjoy the comfort of your BerryAlloc Senses!



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All heating elements must be turned off during installation and the temperature of the subfloor must be between 18 and 20 °C.

When the installation of BerryAlloc Senses is finished, or if the floor heating system has been turned off for a long period of time, consider that:

- The first week the floor heating system must be set on a low temperature 18-22 °C
- During the following week the temperature can gradually be increased

The surface temperature of BerryAlloc Senses must never exceed 27 °C. This also applies to areas next to radiators, under furniture and carpets.

**N.B.:** A too fast heating-up process may cause irreversible damage to your floor.

The floor must not be installed with different heating zones without the use of expansion profiles between the different zones.

**Electric underfloor heating (heating foil/mat):** The insulation plates used must have a compressive strength (CS) of min. 300 kPa (30 tons/m<sup>2</sup>).

**Waterborne underfloor heating:** When the water pipes are inserted in track plates (equipped with aluminium heat distribution plates) you must use hard pressure distribution plates (e.g. gypsum boards 13 mm, gypsum fibreboards 10 mm or chipboards) on top of the construction.