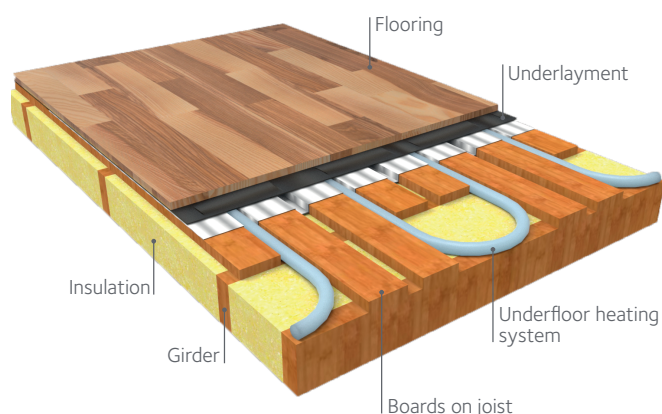


Floor heating system

Moland floors



Example of mounting with load-bearing boards and heat distribution plates.

Only for engineered floors

Engineered floors from Moland has a beneficial heat transmission. Due to the natural warmth of wood, the floor heating system can normally be turned off earlier than on floors of tiles. An equal surface temperature is also a benefit from wooden flooring.

Note! All Moland floors are suitable for floor heating except Beech and Maple.

Wooden floors on underfloor heating systems with heat distribution plates

Installations with heat distribution plates can, in some cases, give rise to an increased risk of squeaking due to friction between heating pipes and heat distribution plates. To counteract this, Moland specifies and recommends the following:

Thin flooring, e.g. Bio and vinyl flooring

A 12 mm (minimum) pressure-distributing, glued tongue-and-groove floating particleboard should be used.

13–15 mm wooden floors

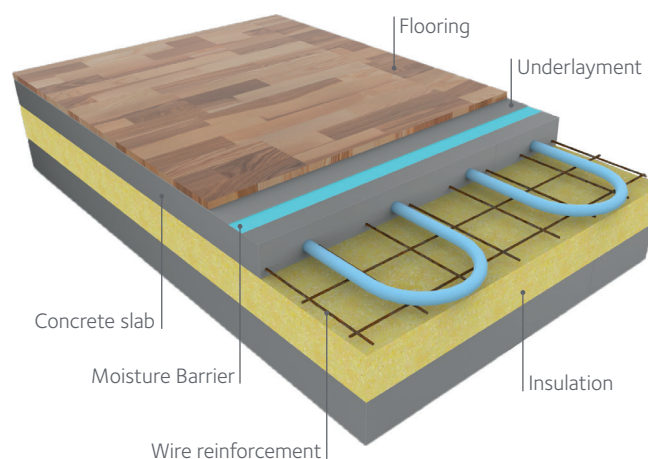
The laying of a 12 mm (minimum) pressure-distributing, glued tongue-and-groove floating particleboard is recommended.

Moland flooring fully adhered to the pressure distribution plate

A 16 mm (minimum) pressure-distributing, glued tongue-and-groove floating particleboard should be used. The adhesive should be diffusion-open in order to avoid a moisture barrier effect.

NB:

- / The substrate should be fully load-bearing and intermediate layers should be used under both particleboard and floorboards (in floating installations).
- / Where no pressure distribution plate is used, the floorboards should be laid across the heating panels.
- / In cases where the floor loading will be heavier than that for normal residential purposes, the thickness of the pressure



Example of hydronic underfloor heating.

distribution plate should be increased to a minimum of 22 mm.

- / Please refer to the instructions provided by the supplier of your underfloor heating.

Preparation

The concrete floor must be conducted professionally and left to dry (max. 65% Relative Humidity RH). For further information, please see the laying instruction for the specific floor.

14 days before the installation, the floor heating system must be turned on. The temperature is increased daily by 5°C until 2/3 of full capacity is reached. These preparations must also be done during the summertime. Remember to circulate the air. The last 5 days the floor heating is turned on to max. temperature.

2 days before the installation, the temperature must be lowered gradually, and the heating system must be switched off during installation. In the wintertime, the room temperature must be at least 15°C, this means, that it can be necessary not to switch off the system entirely. This also counts in the transitional periods.

Now the installation can begin (see the laying instruction for the specific floor). Note! By floor heating, the floor bar trims must be mounted to the concrete floor with contact adhesive if there is a risk of drilling into the heating pipes.

All floor surface treatments must take place before the floor heating system is turned on again. 2 days after installation, the heating system is turned on again, and the temperature is gradually raised by 5°C per day. Remember that any change in the temperature must always be done gradually.

Depending on the floor heating temperature and the moisture content of the air, small cracks and bending boards may occur.

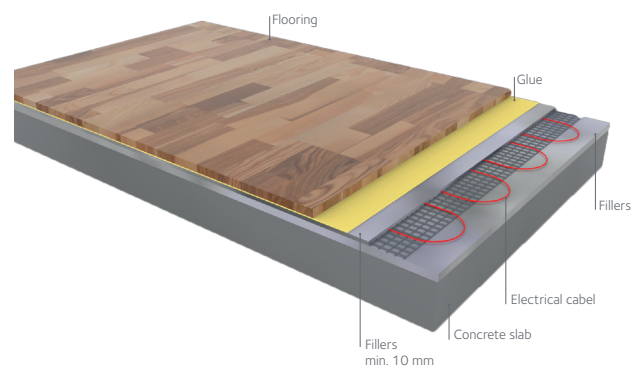
Note! An essential precondition for using Moland Floors on floor heating systems is that an even heat distribution can be obtained. Furthermore, the floor heating system must be equipped with a

control steering system which makes sure that the temperature on the upper side of the floor does not exceed 27°C, and even max. 24°C on some specific floors. Always remember to read the laying instruction for the specific floor before installation.

Wood is a natural material, and there are wide differences between the properties of wood. The action of wood will always reflect humidity. Joint width will thus not always be the same, and it must therefore be expected that there may be bigger joints than normal in, for example, the heating period, when the air is typically dry. Be aware that the temperature under furniture, carpets, shelving, etc., may be somewhat higher than on the rest of the floor, and in such cases major movements in the floor must be expected during the heating period. A house, and thus also a wooden floor, will not be acclimatised until about a year has passed.

NB! Be aware that the least possible water must be used when washing floors with underfloor heating.

Since all technical aspects of floor heating are not mentioned in this instruction, we kindly ask you to seek further information from your supplier.



Example of electric heating.