

# floor heating manual

Laminate can be installed with floor heating and/or cooling, but some important remarks have to be considered to protect your laminate and have the best result of your heating system. Both waterborne and electrical systems are compatible with laminate as a part of the subfloor construction.

For the installation of laminate on a subfloor with floor heating, our general installation instructions on the box inlay still apply.

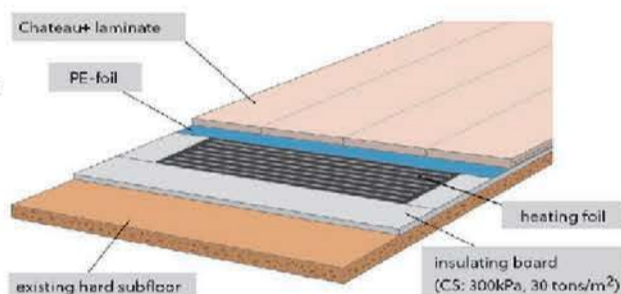
In addition to the general instructions, this is our floor heating specific advice:

## 1. what you should know before the installation

- In case of electrical heating systems, the capacity of the heating elements **should not exceed 60 W/m<sup>2</sup>**. Multiply the m<sup>2</sup> of the surface with 60 to find out the maximum allowed effect of the heating elements.  
For example : 26 m<sup>2</sup> x 60 W/m<sup>2</sup> = 1.560 W => Choose a heating system with a max. capacity of 1.500 W.
- Maximum allowed surface temperature on the flooring is **27 °C (80 °F)**.  
For waterborne heating systems this means that the supplier of the heating system must calculate what the maximum incoming and outgoing water temperatures should be to make sure that the surface temperature stays below 27 °C (80 °F). Additionally, an IR-sensor for constant measurement of the surface temperature is recommended.  
Be aware that loose rugs and mats may function as heat accumulators.
- If only a part of the floor has floor heating, but your laminate 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 due to difference in surface temperature.
- You always need to install a **moisture barrier** (ageing resistant polyethylene foil) with a minimum thickness of 0.2 mm to prevent any condensation damage to your laminate. This moisture barrier can be integrated in an underlay, or it can be laid separate.  
We recommend to use an underlay with low insulating property.
- For **Chateau+** laminate the compressive strength (CS) requirements for underlay is set to min. 130 kPa.
- Note: floor heating with **heating foil/mats**:  
When installing laminate on heating foil/mats (equipped with a soft heat-reflective underlay/insulating boards) no other underlay must be used. For Chateau+ laminate you have 2 options:

1. Install load distribution plates of wood or plaster (with a minimum thickness of 6 mm) on top of the heating system.

2. Choose insulating boards with a compressive strength (CS) of minimum 300 kPa (30 tons/m<sup>2</sup>) between the heating foil/mat and the subfloor (see illustration).



# PentaLoc. Installation manual.

## Connect 8 XL / Ocean 8 XL / Ocean 12 V4 / Ocean 12 XL

Class 23/32: The **Connect 8 XL and Ocean 8 XL** collections are designed for:

- Heavy domestic use: Bedrooms, living rooms, kitchens, entrances
- General commercial use: Classrooms, small offices, hotels, boutiques
- Ocean 8 XL can also be installed in bathrooms.

Class 23/33: The **Ocean 12 V4 and Ocean 12 XL** collections are designed for:

- Heavy domestic use: Bedrooms, living rooms, kitchens, entrances and bathrooms
- Heavy commercial use: Corridors, department stores, schools, open plan office

Laminate is not suitable for saunas or outdoor use.

For a fast installation and a perfect result that fulfills the warranty conditions, we advise to follow the below mentioned installation instructions carefully.



## 1. Planning your installation

It is important to store the laminate boxes at room temperature for at least 48 hours before the installation.

Do not open the packs and stack them in a way so they have maximum contact with the air.

The floor should be installed at a room temperature of 18-25 °C and a relative humidity of 40-60%

### Tools

- Electrical or hand saw
- Spacers
- Installation iron can be convenient for difficult situations (only for the DuoLoc system on the long side of the plank!)
- Measurer and pencil, T-square

For your safety, use protective clothing: gloves, dust mask, protective glasses.

Apart from tools do not forget the skirtings and finishing profiles (doorways, transitions to other floors...), and a suitable BerryAlloc underlay.

BerryAlloc laminate should be installed as floating flooring which means that the floor should be able to move:

- Do not screw or glue the floorboards to the subfloor.
- Do not install fixed constructions such as kitchen cabinets or built-in closets on top of the floating laminate floor.
- Leave a 8-10 mm expansion gap to walls and other fixed constructions so that the flooring can move.
- Always install expansion profiles in doorways.
- In areas which do not join symmetrically and when the room length/width exceeds 14 m, install expansion profiles.

