Parqwood Underfloor heating installation



Version 09/2024

Underfloor heating installation

Installing parqwood on underfloor heating is a technical job that requires initial measures to be taken (humidity, temperature) in order to guarantee good results.

NB: do not install parqwood on an underfloor heating system installed prior to 1990, as the temperature will be too high.

For this type of installation it's recommended to fully glue the parqwood onto the subfloor.

Install without an underlay by using the BERRY ALLOC Wood Floor Glue ref. 63003597. Please see DTU 51.2 (French installation rule or other national rule).

The new BerryAlloc collections are compatible with underfloor heating.

The instructions below must be followed as well as those of the glue manufacturer and DTU 51.2 (French installation rule or other national rule) on glue-down parqwood installation.

- Heated floors must be designed and installed in such a way that the surface temperature of the finished flooring (installed parqwood) cannot exceed 28°C (low heat).
- The cumulative thermal resistance of the system (vapour barrier + underlay, if applicable + parqwood) should be verified:
 - If it is calculated: it must not exceed 0.13 m² k/W (by adding the tabulated values from the thermal regulations).
 - If it is measured: it must not exceed $0.15 \, \text{m}^2 \, \text{k/W}$ for the complete system, or of each part of the system subjected to the test in accordance with the NF EN 12667 standard.

To improve noise and transmission performance, the installation can be done with addition of an middle underlay (cork or similar) of maximum 2.5mm thickness to comply with the measured 0.15 m² K/W. Please see DTU 51.2 (French installation rule or other national rule).

This applies regardless of the type of underfloor heating system:

Procedure before starting:

- The thickness of the screed on top of the water pipes must be at least 30 mm.
- Screed needs to be left to dry 15 days per centimetre
 of thickness, increased by 50% in humid periods. This
 natural drying must be finished with artificial drying using
 the underfloor heating system. This operation must be
 completed in the presence of the heating engineer and
 must be accompanied by a report containing the dates
 and checks conducted.
- The heating (natural drying of the subfloor finished off by turning on the heating installation, by increments of 5°C per day until the usage temperature is reached (28°C on the finished surface)) is to remain on for at least three weeks prior to installing the parqwood, regardless of the season (even in summer). It must be turned off 48 hours before installing the parqwood.

In accordance with DTU 65.6.7 and 8 (French installation rule or other national rule)

- The screed must have a humidity level no higher than 2% and 0.5% for anhydrite screeds, i.e. a minimum of 8 weeks of drying (allow for 2 weeks per cm of thickness).
- Progressively turn on the heating at least one week after laying the parqwood by increments of 5°C to gradually obtain a temperature of 28°C on the finished surface.

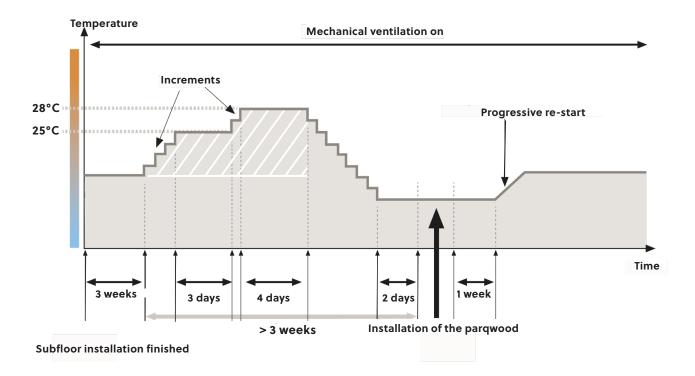
A regulator needs to be installed to avoid the temperature rising too fast.

The mechanical ventilation system must be on during the entire drying period of the subfloor and the installation of the pargwood.

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Diagram to illustrate the starting up procedure



Installation on reversible underfloor

In accordance with DTU 65.8

For water flowing through the pipes at a temperature of $18\,^{\circ}\text{C}$ to $22\,^{\circ}\text{C}$, the thermal resistance R must not exceed 0.09 m^{2°} K/W. This applies to glue-down parqwood installation.

When cooling, the room temperature setting should not be decreased more than 5°C compared to the outside temperature.

Steps must be taken to ensure that this liquid temperature never reaches the dew point, regardless of the weather conditions.

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Floating installation on hydronic underfloor heating:



In all specific cases, we recommend glue-down installation. In certain special cases (low-temperature hot water heating system), floating installation is possible as long as the BerryAlloc

ExcellencePlus underlay is used and it is taken into consideration that this type of floating installa-

tion on underfloor heating may cause creaking or joints to open when heated.

In addition, floating installation degrades the effectiveness of the underfloor heating (air gap underneath the parqwood, underlay etc. has insulating properties and reduces the heating's performance).

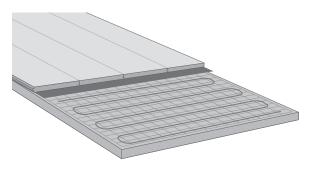
Reversible hydronic radiant floors (heating and cooling) must be designed and installed in accordance with the NF P 52-307 (DTU 65.14 – French installation rule or other national rule) standard and CPT "Low-temperature water-heated reversible floors" (CSTB 3164).

Installation on electric underfloor heating:

Installation on electric underfloor heating can cause serious damage to the parqwood, as the temperature can go over and above the limits tolerated by the parqwood. To avoid these risks, future occupants must be advised of the following, with markings immediately next to the heating's control panel: 'Electric underfloor heating - Do not pierce - Do not cover - Leave clearance of at least 3 cm between any furnishings and the floor'.

Please remember these rules in the technical requirements booklet ref CPT PRE 09/07:

- limit the heating cable's wattage per linear metre to 18 W/m and the surface power density to 90 W/m²
- follow a spacing (expressed in cm) of less than 1.5 times the value of the heating cable's power
- · do not pierce
- · do not cover
- Leave clearance of at least 3 cm between any furnishings and the floor. Using floormats or rugs or any other item that causes an obstacle to the evacuation of the heat generated by this type of heating is prohibited.
 In any case, only use of BerryAlloc adhesive allows the product guarantee to be safeguarded.



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Reminder of the installation conditions concerning the underfloor heating system and the associated risks.

		Heating		
	Reversible	With liquid temperature restriction	Electric radiant floor heating	
Flotting	No	Yes - Reduced efficiency - ExcellencePlus underlay - Risk of squeaking - Visible open joints	No	
Glue down	Yes - With liquid temperature restriction - Managing instructions - What happens in case of an anomaly	Yes	Yes - Provide for ventilation under furniture - Do not block heat on the parqwood	

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Information to be gathered in advance if installation on (reversible) underfloor heating	
Company:	
Checked by:	
Date of checks:	
BUILDING	
Geographical location of site (postcode)	
Construction date (newly built or not)	/
Date subfloor laid	/
Type of subfloor (concrete, anhydrite screed, tiling etc.)	
Type of building (detached home, complex)	
Proof of screed humidity measurements (test report by the installer)	□ Yes □ No
Final humidity obtained for the subfloor (< 2%)	%
CMV presence (to be maintained from system start-up to final acceptance)	□ Yes □ No
Planned date of parqwood installation	/
REVERSIBLE UNDERFLOOR HEATING	
Type of underfloor heating (brand, characteristics, provide technical docs).	
Presence of security safety to prevent reaching the dew point	□ Yes □ No
Initial turning on of the heating system (provide copy of the document)	□ Yes □ No
FORESEEN PRODUCT	
Type of installation (glue down) with our adhesive (guarantee)	□ Yes □ No
Surface	m²
INSTALLER	
Experience in glue-down installation	□ Yes □ No