Coretec® Underfloor Heating Guidelines

These Coretec® guidelines for Underfloor Heating Systems (UHS) are applicable to Coretec® Sound Core®, Pro Core® and Mineral Core®. It is still mandatory to read and respect our Coretec® installation guide. If Coretec® installation instructions and guidelines are not respected, the Coretec® warranty will not apply.

The installer or UHS provider is responsible for checking that the combination of Coretec® and a UHS is suitable for the environment it is installed in. Coretec® have checked the properties of compatible UHS, but not their efficiency. Coretec® cannot be held responsible if the heating solution is not efficient.

Subfloor flatness/imperfections should follow whichever guidelines stipulate the flattest subfloor, either Coretec® or the UHS. Contact your Coretec® representative if any information is unclear.

As a reminder, according to EN 1264, the maximum surface temperature of Coretec® cannot be higher than 29°C (28°C in France according to DTU 65.14).

WARNING: *it is key, when applicable, that the underfloor heating system is switched on before the installation of Coretec® to ensure that the residual moisture of the subfloor is eliminated. The exact process to be followed should be explained in the UHS instruction guide and if not, this process is still mandatory and the installer is responsible for finding the relevant information.*

Hydronic (water-based) UHS

Coretec® can be installed on a hydronic (water-based) underfloor heating/cooling system embedded in the subfloor. If the system is not embedded in the subfloor, it must be on top or embedded in a suitable floor insulation (see “floor insulation” section on page 2).

The installer should follow exactly the UHS installation guidelines, ensuring the system is turned on before installing Coretec® so the residual humidity of the subfloor is eliminated.

Electric or infrared UHS

There are multiple brands on the market with a wide range of properties, UHS compatible with Coretec® require the following features:

- room thermostat;
- output ≤ 100 W/m²;
- underfloor temperature sensor;
- suitable floor insulation (see “floor insulation” section on page 2).

UHS efficiency

Coretec® cannot calculate the efficiency of the installation. The installer or UHS provider should use below thermal resistance (R) values to make the calculation:

- Sound Core® 8 mm: 0,066 m².K/W;
- Sound Core® 15 mm: 0,1099 m².K/W;
- Pro Core®: 0,0318 m².K/W;
- Mineral Core® (A): 0.0295 m².K/W:
- Mineral Core® (C): 0.0339 m².K/W.

The maximum overall thermal resistance (R) cannot exceed 0,15 m².K/W.

Floor insulation

Hydronic UHS not embedded in the subfloor or electric/infrared UHS will most likely require an insulation (or installation system) above the subfloor. For electric/infrared UHS it will be most likely an aluminium foil and foam to maximise the efficiency of the system.

In order to avoid any issue related to the compression of the floor insulation, below properties for the floor insulation/underlayment need to be respected.

Property	Description	Requirements
Rλ	Thermal insulation	≥ 0,03 m² K/W
Dynamic Load (DL75)	Sustained load generated by walking etc.	≥ 100 000 Cycles
Compressive Strength (CS)	Compressive strength at a defined compression stress	≥ 350 kPa
Compressive Creep (CC)	Sustained load generated by furniture etc.	≥ 35 kPa