

FREVINI – UNDERFLOOR HEATING AND COOLING

FREVINI engineered floors are compatible with underfloor heating and cooling under certain conditions, which are mentioned below.

General information

- An underfloor heating and cooling system takes longer for a room reach the right temperature.
- Room temperature and humidity should be maintained at a constant level, ideally between 18°C and 22°C with a relative humidity between 40% - 60% prior to, during and for whole life of wood flooring.
- The more stable temperature is better. Rapid and major fluctuations in temperature can damage the floor.
- The warranty for our products will not be valid if the floor heating and cooling system is not equipped with a controller and a sensors to measure room and water temperature.

Heating up before installation of the floor

- The concrete screed should be at least 60 days old.
- Set temperature on 20°C on the first day of use and then raise it by 5°C every day.
- Make sure that the supply water temperature does not exceed 45°C.
- Maintain maximum temperature for at least 24 hours per centimeter of floor thickness.
- Lowering water temperature should also be in increments of 5°C every 24 hours until water temperature of 20°C has been reached.
- The entire heating process takes 14 days.
- Ensure good ventilation during this period to allow moisture to escape.
- After the process check the cement screed for residual moisture: Maximum moisture in cement screed is 2%, in anhydrite subfloor 0,5%.
- Both during and after installation humidity level of between 40% and 60% is required.
- We recommend acclimatization of flooring for at least 48 hours prior installation in the room where the flooring is to be installed. Acclimatization is used to balance flooring with the environment it is going to be used in.

Heating up after installation

- During installation the temperature of cement screed must be between 15°C and 18°C
- Maintain this temperature for at least 5 days before and after installation. This is important to acclimatize and strengthen wood and glue adhesion.
- After these 5 days temperature can slowly be raised (1°C or 2°C per day) until desired or maximum permissible temperature is reached.
- The maximum contact temperature of cement screed is 27°C.
- The contact temperature is the temperature of the surface of cement screed, measured 3 heating days after setting the temperature.

Heating during the season

- Raise temperature very gradually at the start of heating season (Maximum 1°C or 2°C per day).
- Lower temperature very gradually at the end of heating season (Maximum 1°C or 2°C per day).
- To keep the floor as stable as possible do not create any difference in day and night temperature.

- After installation a humidity level of between 40% and 60% is required. Use of humidifier/dehumidifier to maintain a constant humidity level in rooms, especially with seasonal changes.
- The maximum allowable heat output is 55W/m² and must be evenly distributed over entire surface of the floor. Surface temperatures must not exceed 27°C in all places.

Cooling during the season

- Lower temperature very gradually at the start of cooling season (Maximum 1°C or 2°C per day).
- Raise temperature very gradually at the end of cooling season (Maximum 1°C or 2°C per day).
- To keep the floor as stable as possible do not create any difference in day and night temperature.
- Condensation is harmful to wood and can be prevented by keeping the water temperature of the underfloor cooling system at a minimum of 18 degrees.
- Beware, the dew point does not have a fixed value, but is determined by the ratio between the room temperature and the humidity in the room.
- In general, with a room temperature of 20-22°C and normal humidity (around 40-60%), the dew point is around 18°C. If humidity is high, the dew point is much higher, at 22°C.