

ORIGINAL CHAPEL PARKET - SUBFLOOR HEATING AND COOLING

Original Chapel <u>In Between</u> floors 15 mm and 20 mm (except the Original Chapel Abbey Collection) are compatible with subfloor heating and cooling under certain conditions, which are mentioned below. The Original Chapel Castle Floors are NOT compatible with subfloor heating and cooling.

GUIDELINES

1. GENEREAL INFORMATION

- A subfloor heating system is a "slow" system. It takes longer for a room reach the right temperature and also for the heat to leave the room again.
- The heating pattern of the occupants is very important; the more stable the better this is.
- Too much heat causes the wood to dry out and shrink. Rapid and major fluctuations in temperature can damage the floor.
- Carpets and rugs can cause heat to build up with possible result in shrinkage joints and cracks.

2. INSTALLATION METHOD

- The boards can be glued down directly on the cement screed. Make sure the cement screed is levelled.
- The cement screed must be at least D20 cement. Maximum height difference is 2 mm over 2 meters.
- We recommend to always use a primer and/or a liquid moisture barrier of the same brand as the adhesive.
- Install the floor according the Glue Down Installation guidelines.
- Make sure that pressure is applied on the boards for 24 hours after being glued in place, using at least a 20 kg weight per m².

3. HEATING UP BEFORE INSTALLATION OF THE FLOOR

- The concrete screed should be at least 42 days old.
- Set the 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 the maximum temperature for at least 24 hours per centimeter of floor thickness.
- Lowering the water temperature should also be in increments of 5°C every 24 hours until a 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 1,8% (or 3,0% if a liquid moisture barrier is used).
- Maximum moisture in anhydrite floor is 0,3%.
- Both during and after the installation, a humidity level of between 40 and 60% is required.

4. HEATING UP AFTER INSTALLION OF THE FLOOR

- During installation the temperature of the cement screed must be between 15°C and 18°C.
- Maintain this temperature for at least 5 days after installation.
- After these 5 days the temperature can slowly be raised (1°C or 2°C per day) until the desired, or maximum
 permissible temperature is reached.
- The maximum contact temperature of the cement screed is 28°C.
- The contact temperature is the temperature of the surface of the cement screed, measured 3 heating days after setting the temperature.

5. HEATING DURING THE SEASON

- Raise the temperature very gradually at the start of the heating season. Max 1 or 2°C per day.
- Lower the temperature very gradually at the end of the heating season. Max 1 or 2°C per day.
- To keep the floor as stable as possible, do not create any difference in day and night temperature.
- After the installation, a humidity level of between 40 and 60% is required.

6. TECHINCAL VALUES

- Rc Value of 20 mm board: 0.118 m2 K/W
- Rc Vaue of 15 mm board: 0.088 m2 K/W
- Thermal Conductivity of 20 mm board: λ = 0.17 W/mK
- Thermal Conductivity of 15 mm board: λ = 0.13 W/mK