UNDERFLOOR HEATING GUIDELINES

The sub floor surface temperature may never exceed 27°C. Electrical radiant sub floor heating systems installed as foil-heating element may be used only if the manufacturer of the heating element can ensure that the sub floor surface temperature is never above 27°C. If the sub floor temperature exceeds 27°C a barrier must be inserted under the floor in order to dissipate the heat and achieve the correct reading. A sub floor thermostat must be installed in order to control this temperature. The heating engineers installing the underfloor heating should provide evidence that the sub floor temperature is limited to 27°C.

Controlling the sub floor temperature should result in a surface wood floor temperature of around 24°C – 25°C and a room temperature of around 21°C. We do not recommend this temperature is exceeded at any time.

Please note the following rules for the different sub floor types:

CONCRETE SUB-FLOORS

If the engineered flooring system is installed over a concrete sub floor, you have to consider that possible residual moisture in the sub floor will permeate to the surface of the sub floor once it is covered with any type of floor covering. As a result it is always necessary to install a 0.2mm polyethylene film or a liquid DPM as a moisture barrier over the concrete sub floor.

CONCRETE WITH HOT WATER RADIANT HEATING SYSTEMS

To ensure that radiant heating systems will work properly for many years to come, it is essential to plan and coordinate the different elements of the flooring construction (concrete, radiant heating system, engineered flooring.) All existing floor surfaces need to be removed prior to the installation of the new engineered flooring. In addition to the standard sub floor tests it is necessary to provide a certificate that the proper “heating-up and cooling-down phases” have been done. A correct heating-up and cooling-down of the concrete construction will be necessary in every season of the year. The heating-up and cooling-down phase: Refer to BS8201 or you can:

- Start of the heating-up phase at the earliest 21 days after the cement-based concrete has been installed, for anhydrite concrete allow for at least 7 days.
- Start the heating-up phase with a flow temperature of 23°C which has to remain constant for three days.
- Increase the flow temperature daily by 5°C up to the maximum flow temperature.
- Maintain the maximum flow temperature for three days without switching off the heater during the night.

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- After three days reduce the flow temperature daily by 10°C until you reach a surface temperature of 18°C.

- Take the concrete moisture readings maximum 2.5% for concrete / 0.5% for anhydrite <75% R.H floating / <65% R.H glue down.

- The sub floor surface temperature may never exceed 27°C, it is always necessary to install a 0.2mm polyethylene film or a liquid DPM as a moisture barrier underneath the underlay.

- During and three days after the installation of the flooring panels, maintain a surface temperature of 18°C.

- Three days after the installation you can start to gradually increase the flow temperature from 15°C up to the recommended temperature of the property. The temperature of the flow through to the pipes / electric mats should be set to its minimum setting until you are able to heat the sub floor up to its maximum of 27°C.

- The following species are deemed not suitable for use with underfloor heating:
    - Maple
    - Beach
    - Kempas