



### **It's a Myth...**

...that only ceramic flooring can be laid over under-floor heating. Go for what you really want; to save energy through under-floor heating and still have parquet flooring. Wood – and therefore parquet – has a low thermal resistance, and is therefore recommended for laying over under-floor heating.

According to heating experts, the thermal resistance of the floor covering should not exceed 0.17m<sup>2</sup> K/W. 2-layer ready-to-lay parquet, with its 9 - 11 mm, dual-layer structure, is therefore particularly suitable.

3-layer ready-to-lay parquet with a thickness of 14 - 15 mm is suitable for use with under-floor heating only under certain conditions. Solid parquet in general and multi-layer parquet over 15 mm thick are not suitable for under-floor heating.

Ready-to-stick parquet (2-layer strip parquet, 2-layer “country house”-style parquet) and 2-layer tongue and groove flooring are suitable for use with under-floor heating.

The new cement screed must be cured for at least 21 days. After that, the under-floor heating is slowly put into operation, i.e. the temperature should be increased by 5 °C each day until it has reached its maximum operating temperature.

This maximum temperature must be maintained for at least one day for each centimetre of screed thickness and must not be reduced at night.

After that, the heat should be reduced by 5 °C every day until the surface temperature of the screed is 15 - 18 °C. The parquet should be laid at a screed temperature of > 15 °C and a relative humidity of 50 - 60 %.

The moisture in the screed must not, at this point, exceed 1.5 %. The official standard bake-out protocol must be presented to the builder by the installer and confirmed. Once the floor has been laid, the conditions mentioned above must be maintained for approximately a week.

Heating the screed before the parquet is laid is extremely important because this procedure releases moisture which would otherwise be heated into the parquet flooring. Heating must always be performed immediately before the floor is laid, even if old floor coverings must be taken up first, for example when old buildings are being renovated.

You should, however, note that lengthwise and widthwise gaps will form during the heating process, even with sealed, ready-to-lay parquet.

As a general rule, the parquet should be glued when laying it on screed over under-floor heating!

Floating floor installation is not recommended due to the higher thermal resistance (insulating underlay plus any air cushion formation and the risk of gaps forming along the weaker seams).

Once the floor has been laid, the heating should not be turned on fully immediately. Instead, it should be run at a low temperature for approximately a week.

With proper handling and by sticking to these guidelines, you will have a great deal of enjoyment from your parquet flooring.



### **Ecological aspects,**

Because we have the intention to meet the idea of environmental protection with our **CROWNBAMBOO®** products, by us and our recommended partners we have developed own products in the field of gluing and sealing.

### **Packaging:**

The packaging consists of cardboard on the outside and PP shrinks film on the inside, to protect against humidity. Both materials can be disposed of in an environmentally friendly way. The size and weight of the packaging are designed for easy transportation and handling.

### **Maintenance instruction / cleaning**

**General hint: The treatment of the surface of all bamboo products is subject to a natural wear and tear according to the stressing. Therefore a regular cleaning and maintenance is necessary. The warranty for the treatment of the surface is given only then, when by the producer the recommended maintenance system is used.**

### **Complaints:**

**Prior to installation**, all elements should be controlled for defects. Complaints must be made immediately in writing, and you must await a decision from us.

**No costs can be reimbursed for defective parts that have been installed.**

### **Liability,**

Bamboo is a grown natural product; variations in structure and colour are caused by the material and are not a reason for complaints. Technical and constructive modifications as well as modifications of the collection remain retained. At storage, installation and maintenance please pay attention, that the rooms are suffixations tempered and dry and that the work is done properly and competently.

The product liability amounts to 5 years and is taken over by us, if the recommended materials and techniques are used. Please pay attention to the **CROWNBAMBOO®** products information and installation and maintenance instruction.

### **As at July 2004**

All statements are not binding and do not constitute grounds for a contractual legal link, as the respective working conditions may vary considerably. All recommended products were tested according to the above-mentioned recommended conditions for laying down flooring, and classified as good. We always recommend several trials, especially when unfamiliar products are used.