

## **INSTALLING BAMBOO FLOORING (PK 2)**

### **WHAT IS BAMBOO?**

From a botanical point of view, bamboo is classified as a grass species, but according to its chemical composition it is classified as wood. The main components of bamboo are approx. 70% cellulose and approx. 25% lignin. A noticeable difference compared to conventional types of wood is the rapid growth of the bamboo plant. Tropical bamboo species reach a growth rate of 1.20 m in only 24 hours, while the bamboo species "phyllostachus pubescens", which is preferably used for parquet flooring due to its hardness and its low degree of swelling and shrinkage, reaches a growth rate of 30 cm per day. This comparison shows how strongly the properties of bamboo vary according to its origin and species. Due to its properties, bamboo has been valued and used as a building material for centuries in Asia.

### **BAMBOO FOR PARQUET FLOORS**

The technical properties of various types of bamboo, the consistently positive ecological balance and the attractive appearance ensured that bamboo is increasingly represented in the parquet market. This has resulted in a very large supplier market in which different types of production, parquet constructions and the use of different types and qualities of bamboo make it difficult to choose from. What they all have in common is that raw friezes are glued together from 20 mm wide bamboo slats, from which parquet strips are planed. A distinction is made between vertical (upright) and horizontal (lying) bamboo slats that are glued together. The thickness of the parquet strips produced in this way varies between 10 and 20 mm. In addition to the dimensions of the strips, manufacturer-specific construction differences exist in the number and position (alignment) of the horizontally glued bamboo slats. In addition to this solid bamboo parquet, which, although glued together from several individual slats, is called solid bamboo parquet, a two-layer single strip (ready-to-lay parquet strip) with a transverse spruce carrier layer on the underside, a large-format 15 mm-thick 3-layer ready-to-lay parquet with a spruce underlay and cross-layer in the centre, and a panel parquet with plywood backing layer in various dimensions on the market. Depending on the manufacturer, the "solid" parquet strips as well as the multi-layer pre-finished parquet elements are available either sealed or untreated.

### **HINTS FOR GLUING BAMBOO PARQUET**

Our application studies have shown that basically all three commercially available parquet adhesive systems can be used for bonding, but the adhesive properties of the individual systems,

the very different parquet shapes and constructions and the properties of the different types of bamboo limit their use in practice.

### **SUITABLE ADHESIVES FOR BONDING BAMBOO PARQUET**

Depending on the parquet dimension and construction, all three types of parquet adhesives from the STAUF range are used for bamboo parquet bonding according to the table below.

The corresponding substrate preparation can be found in our technical data sheet.

## TECHNICAL DATA SHEET

### ADHESIVE SELECTION:

	Absorbent subfloors	Low-absorbency substrates	Non-absorbent substrates
	such as: ✓ Cement screed ✓ Calcium sulphate (self-leveling) screed ✓ Cement-based levelling compounds	such as: ✓ Chipboard ✓ OSB panels ✓ Calcium sulphate (self-leveling) screed	such as: ✓ Mastic asphalt
<b>Solid wood flooring<sup>1)</sup></b> multi-layered all layers of bamboo	PUK 446, PUK 455, SMP 930*/SMP 950, SPU 460/SPU 555/SPU 570		
<b>Panel parquet</b> multi-layered plywood carrier layer	PUK 446, PUK 455, SMP 930*/SMP 950, SPU 460/SPU 555/SPU 570		
<b>multiple layer parquet</b> 3-layer plank element spruce middle layer/bottom layer bamboo top layer 15 mm thick, max. 160 mm wide	PUK 446, PUK 455, SMP 930*/SMP 950, SPU 460/SPU 555/SPU 570		PUK 446, PUK 455, SMP 930*/SMP 950 SPU 460/SPU 555/SPU 570
<b>2-layer or multi-layer single strip</b> spruce or plywood carrier layer bamboo top layer max. 70 mm x 600 mm	M2A 720, PUK 446, PUK 455, SMP 930*/SMP 950 SPU 460/SPU 555/SPU 570		PUK 446, PUK 455 SMP 930*/SMP 950 SPU 460/SPU 555/SPU 570
<b>2-layer or multi-layer single strip</b> spruce or plywood carrier layer bamboo top layer larger than 70 mm x 600 mm	PUK 446, PUK 455, SMP 930*/SMP 950, SPU 460/SPU 555/SPU 570		

\* When using STAUF SMP 930 on sanded mastic asphalt, prime with STAUF VEP 195.

<sup>1)</sup> Glue solid bamboo parquet preferably with PUK 446 and PUK 455.

The information provided above corresponds to the current state of the art. The information is purely indicative and non-binding, since we have no control over the installation process and because the actual installation conditions on site vary. Thus no claims can be made based on this information. The same is true for the commercial and technical advisory services that are provided without obligation and free of charge. We therefore recommend carrying out sufficient testing of your own in order to determine whether the result is suitable for the intended purpose.