

Dear customer,

Thank you for choosing the high-grade bamboo parquet flooring bambeau® 3S or bambeau® side pressed.

To retain the value and the high-grade finish of your parquet flooring, we ask you to follow the instructions below.

Please note that laying parquet should always be the last work done in a building project. That way, there is less risk of it getting damaged.

We recommend full-surface gluing bambeau® 3S or bambeau® side pressed using a suitable parquet adhesive (according to DIN EN 14293). You also have the option of floating-floor installation, as long as there is no underfloor heating, and the area of the room does not exceed approx. 40 m². Furthermore, oblique nailing through the tongue to the substructure is possible. If opting for that, please request our technical data sheet for wooden subfloors or floor batten structures.

GENERAL

Before beginning installation, check what kind of subfloor it is and the condition it is in. For instance:

- Calcium sulphate screed
- Mastic asphalt screed
- Chipboard
- Cement screed
- Other subfloors

The type of subfloor determines the special pre-treatment and the proper selection and use of the adhesive.

The condition of the subfloor must be checked based on DIN 18 356 Part 3.1.

The flooring should only be installed on subfloors which meet the following criteria in particular:

- **even** (DIN 18 202 applies)
- **free of cracks**
- **permanently dry** (take CM (carbide method) measurement)
- **clean**
- **sound surface** (conduct grid scratch test, or the like)

If one or more of the criteria listed is not met, the subfloor should be pretreated accordingly.

bambeau® 3S or bambeau® side pressed are not suitable for wet rooms, such as bathrooms, toilets, saunas or laundry rooms.

WOOD MOISTURE CONTENT/MOISTURE CONTENT ON DELIVERY

bambeau® bamboo parquet (3S/side pressed) – like other standard parquet wood (DIN EN 13226) – is acclimatised to ambient conditions of 20° Celsius and 50% rel. humidity. In these conditions, bamboo has an EMC (equilibrium moisture content) of 8.3% (% by weight).

The moisture content on delivery (wood moisture content) of bambeau® bamboo parquet (3S/side pressed) thus corresponds to 8.3% (+/-2%).

The EMC of bamboo can be electronically checked using standard wood moisture meters. Most standard wood moisture meters can be individually configured to the particular type of wood. Ask your meter manufacturer or Becker & Grossgarten GmbH if you have questions about the settings.

FORMS OF INSTALLATION

1 | Full-surface gluing using parquet adhesive

If the screed is a permanently dry type which meets the test criteria of DIN 18356 Part 3.1, prepare the surface for parquet installation in line with the state-of-the-art (e.g. grind, brush, vacuum, prime, smooth). If levelling compounds or fillers are used, always make sure they are suitable for parquet.

If the bambeau® bamboo parquet is glued to a substructure that consists of floating chipboard, we recommend, for example, cross-laying two 19 mm fibreboards, gluing the tongue and groove and also gluing and screwing them to one another.

The equilibrium moisture content (EMC) of the different subfloors should not exceed the percentages given in the table below. Moisture should be measured using a **CM tester**, and logged. The percentages given are for a screed thickness of 45 mm.

Type of subfloor	Max. permissible EMC
Cement screed (3.4 – 3.8% by weight)	1.8 – 2.0% by CM
Heated cement screed	less than 1.8% by CM
Calcium sulphate screed (0.7 – 1.2% by weight)	0.3 – 0.5% by CM
Heated calcium sulphate screed	less than 0.3% by CM
Calcium sulphate flowing screed	less than 0.5% by CM
Heated calcium sulphate flowing screed	less than 0.3% by CM
Gypsum screed (0.7 – 1.2% by weight)	less than 0.5% by CM
Chipboard	9.0 +/- 3.0% by weight
Floor battens	less than 15.0% by weight
Filler	2.5 – 3.0% by weight
Other subfloors	See comment on VOB/DIN 18 356

The parquet should be kept in the room where it will be laid in its original, unopened packaging for at least 48 hours before installation, to give it time to acclimatise. The packaging must be stored horizontally and flat. Do not open packs until just before installation.

The surface temperature of the subfloor should not be less than 15°C at the time of installation; the optimal room humidity is 60%. Do not ventilate during installation. Opened packs must be used up immediately.

If the screed is a permanently dry type which meets the test criteria of DIN 18356 Part 3.1, prepare the surface for parquet installation in line with the state-of-the-art (e.g. grind, brush, vacuum, prime, smooth).

How much parquet adhesive you use depends on the condition of the subfloor and the type of adhesive: approx. 800 – 1,200 g/m². Always apply the adhesive with a notched trowel. It is important to follow the adhesive manufacturer's instructions. The quantity applied in particular should be adhered to exactly as directed by the adhesive manufacturer.

Lay the parquet blocks lengthwise towards the main light source if at all possible. The first row of parquet is laid parallel to the wall with the groove

to the wall, and any unevenness in the wall worked in. Use elements from several packs at the same time to achieve the most uniform overall scheme in the parquet floor.

Press the blocks into the adhesive bed and shove into place; tongue and groove by hand or with the aid of a pull bar. When fitting the parquet blocks never hit the tongue directly with the hammer; always use a chock. The joints of the parquet blocks should be at least 20 cm apart. Carry through expansion gaps in the subfloor to the floor covering.

Choosing parquet adhesives:

Due to their water content, dispersion adhesives can only be used to a limited extent on substrates with different absorbencies. The use of synthetic resin parquet adhesives containing solvent as per DIN 14293 is no longer restricted in accordance with TRGS 610.

Since all adhesive systems containing solvent and water affect the swell tendency of wood and bamboo, they can only be used with highly absorbent substrates.

A safe alternative we would recommend is one of the modern hybrid, SMP or polyurethane parquet adhesives. Since they are solvent and water-free, they do not add moisture and are an economical solution for full-surface parquet gluing on all the usual subfloors.

The information described in the »General« section applies.

2 | Floating floor installation

To float bambeau® 3S and bambeau® side pressed, you need an all-over even underlay, e.g. chipboard as per DIN EN 312.

You must lay a suitable vapour barrier over the underlay, which must be run up the walls above the height of the skirting board. On top of that, lay the footstep sound insulation, such as polyethylene form, cork, wool felt board or other.

Float long narrow halls lengthwise. (You can full-surface glue in either direction.)

Begin installation with the groove to the wall. Glue the tongue and groove around the perimeter of the individual parquet blocks using PVAc D3 glue. Apply the glue to the bottom of both the longitudinal and head groove.

If floating, you must leave an appropriate gap between the floor and the wall and also all other permanently fixtures in the room. You can use suitable wedges to maintain a clearance of approx. 10 mm (when the area laid is approx. 30 m²) between the first and last row of parquet and the wall and all other permanent fixtures in the room. This makes sufficient allowance for the shrinking and swelling tendency of bamboo hardwood. Remove the wedges 24 hours after installation; fill visible expansion joints with permanently elastic and sili-cone-free filler or cover with transition strips.

Because of the very dense cell structure of bamboo hardwood, moisture is absorbed very slowly and the glue takes somewhat longer to set.

The information described in the »General« section applies.

3 | Installation on hot water underfloor heating

It is possible to install bambeau® 3S and bambeau® side pressed over hot water underfloor heating (full-surface gluing).

Observe the following points:

The screed must be heated before beginning installation (even in summer). This also goes for renovating old buildings, if you are laying the floor over old screeds on which another floor covering was previously installed. Start to heat fresh screeds no sooner than 21 days after it has been laid.

We refer you in relation to this to the information sheet »Preparations for installing floor coverings on heated cement and calcium sulphate screeds« (»Vorbereitende Maßnahmen zur Verlegung von Oberbodenbelägen auf Zement- und Calciumsulfat-Heizestrichen«) and the accompanying measures log, published by the association "Bundesverband Estrich und Belag e. V.", Troisdorf. **You should certainly take a look at these documents.** The accompanying measures log should be used to help with the schedule.

A screed surface temperature of approx. 15 – 18°C is required during installation. The relative humidity should be approx. 60%.

For full-surface gluing of bambeau® natural parquet on screeds with hot water underfloor heating, we recommend you use a polyurethane parquet adhesive or hybrid adhesive, which the manufacturer has specified as being »suitable for underfloor heating«.

Expansion gaps in the subfloor must be carried through to the floor covering; this also goes for the joints in the door jamb area.

When installing over underfloor heating, it has proved advantageous to glue the head joints and the ends of the longitudinal joints.

After you have finished installation and the parquet adhesive has set, intermediate heating should be carried out. By gradually heating up the underfloor heating (approx. 5° Celsius per day, up to 25° Celsius parquet temperature) the wood must be dried to a moisture content of 6% – 7% (by weight). Only when the entire cross-section of the parquet block has reached this value should you begin the next steps (sanding, filling, surface treatment).

Like any standard solid wood parquet, some gaps may form when laying solid bamboo parquet over underfloor heating, but intermediate heating can reduce gaps to a minimum.

Choose a surface treatment with a low side-bonding tendency, such as oil-synthetic resin seals; oils; oil-wax systems.

Please also observe the general technical and hygiene rules for underfloor heating. Underfloor heating is a low temperature form of heating – for example, the surface temperature of the parquet floor should not exceed 25°C.

Regulating the ambient conditions is a good idea and will help retain the value of all parquet floors. The optimal ranges are a temperature of 18 to 22°C and a relative humidity of 55 to 65%.

Nonetheless, gaps may and can form during the heating phase.

The information described in the »General« section applies.

SURFACE TREATMENT

Allow our bambeau® bamboo parquet five to ten days to rest after completing installation. This gives dimensional changes in the wood, caused by the structure of the wood swelling due to the contact of the adhesive, time to stabilise and the parquet floor will acclimatise to the new ambient conditions. Only then should you begin the next steps (sanding, filling, surface treatment).

After installation the parquet must be sanded and filled. When using a drum sander, maintain an angle of approx. 15 to 30° to the grain.

After the second pass, fill the joints. To do so, mix the sanding dust with an oil (for surfaces to be oiled or waxed) or the special joint filling agent from the sealing system. Apply the pasty putty with a filler knife all over the entire surface and smooth off cleanly. After the filled surface is fully dry, find sand. Afterwards, vacuum the floor carefully and apply the chosen sealing system.

Caution: If you, the customer, are treating natural blocks, follow the instructions given by the varnish, oil or care product manufacturer. We cannot accept liability for the outcome of surface treatments undertaken by the customer. The user is responsible for application of the products.

After installing, fix the bambeau® skirting boards to the wall using steel pins or screws. Make sure that the parquet is not fixed to the skirting board.

Transitions to other rooms and floor coverings can be bridged with the bambeau® transition strip.

Choose the type of surface treatment according to how heavily you expect the floor to be used. It is imperative that you observe the manufacturer's directions for use.

CARE INSTRUCTIONS

The parquet must be treated with parquet care products suitable for the particular surface treatment you have chosen. Be sure to follow the manufacturer's instructions. You can use a mop, soft brush or vacuum cleaner for regular cleaning. Damp-wipe the floor; never wet-wipe it.

Stagnant moisture (puddles of water) must be removed immediately.

Like all structural elements made of wood, wooden floors react to moisture. To prevent the wood from swelling or shrinking, please make sure that the ambient conditions are healthy and as constant as possible. The optimal conditions are: a temperature between 18°C and 22°C and a room humidity between 55 and 65%. Experience shows that this humidity is not nearly met during the heating period. To avoid this, we recommend you use a humidifier (evaporator) as of the beginning of the heating period. Constant ambient conditions prevent gaps from forming!

To protect the parquet floor, place a mat at the entrance. To prevent scratches, fit felt glides on chairs and other furniture. For swivel chairs, you need soft casters as per DIN EN 12529 and a protective mat (polycarbonate mat) placed underneath the castor surfaces.

You should not carpet a newly sealed parquet floor for approx. two months.

NOTE

bambeau® bamboo parquet is a natural product. Colour variation in the parquet blocks is typical and is caused by location-specific lignification of the raw material. Use elements from several packs at the same time to achieve the most uniform overall scheme in the parquet floor.

State of the art at: October 2007. Subject to change
These technical instructions do not form the basis either for a legal contract or an additional obligation under the contract of sale.

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