





# Intended use

Bamboo thermally treated and with ceramic particles is suitable as decking and balcony flooring for **WEATHERED** OUTDOOR AREAS.

Bamboo decking boards are not approved for statically load-bearing components.

# **Properties**

The decking boards are solid and consist of long and densely pressed bamboo strips. They correspond to resistance class 1 and are resistant to fungi and insect damage.

The boards can be processed and installed like wood. They have two usable sides: smooth and finely or coarsely grooved.

If the grooved side is on top, a slope of at least 2% in the direction of the planks is required for water drainage. A slope also supports rapid water drainage when using the smooth side at the top.

The low shrinkage allows endless installation in the longitudinal direction.

Planks with a length of 3.05 m are straight-cut and bevelled and should be laid with a 6 mm gap at the joint.

All boards are pre-treated with end edge wax and the long edges are grooved throughout.

The decking boards are screwed to the substructure using **SYSTEM49-FASTENERS** hidden in the continuous, lateral groove.

At the edge, for cut-to-size pieces and fitting pieces, stainless steel screws are screwed from above either visibly or completely concealed. Due to the extreme compression, pre-drilling must be carried out without expansion pressure. Alternatively, SYSTEM49 START- & ENDCLIPS can be used.

## Transport and storage

Even if the planks are resistant to fungal attack and weathering, they should not get dirty or stand in water before installation. It is best to store them in a well-ventilated place.

Despite careful quality control, transport and storage, damage cannot be completely ruled out. Check the planks before laying and sort out damaged pieces.

## System components

- > Bamboo decking thermally treated and with ceramic particles
- > System49 screws and connector clips
- > For fastening the boards to the decking sides:
- > System49 starter clips with matching screws or
  - Stainless steel countersunk screws (e.g. 5 x 45 mm; min. 4 x 35 mm) for visible screwing
- > Front edge wax or decking oil for treating cut edges
- Substructure made of hardwood (resistance class 1) or aluminium

Kerbstones, infiltration-compatible infill material, edging stones, lawn edging, levelling feet, spacers and stainless steel screws are not system parts.

## Tools

Sharp, carbide-tipped circular saw blades with a small or negative rake angle are suitable for tear-free cuts. A countersink is suitable for countersinking.

You also need a measuring tool, spirit level and a screwdriver with suitable bits and torque limiter for a low screw-in torque.

# Planning

The position of the substructure frame, the bearing stones, the height and the gradient in the substructure are determined by the neighbouring parts of the building and the desired position and alignment of the decking boards.

To ensure that water does not damage either the substructure or the decking, it must either be drained away quickly by a sufficient gradient in the water-bearing layer or seep away completely and quickly. **STANDING WATER UNDER THE SURFACE LAYER IS NOT PERMITTED.** An air gap of at least 5 cm is required under the surface layer to ensure sufficient air circulation.

A lateral distance of at least 2 cm must be maintained from any protruding, fixed components.

Narrow cuts must always be supported. The work can be made easier by avoiding narrow cuts through good planning and using full-width boards at the edge of the decking.

## **Substructure**

The substructure refers to the bedding stones and the area on which the bedding stones lie. The substructure must be load-bearing, frost-proof and free of vegetation. Water must be able to run off or seep away unhindered and be channelled away from the building.

In practice, the soil is excavated, filled with infiltration-compatible material to the required height and compacted.

Support stones are loosely laid on top of this as support points for the substructure frames. The spacing of the bearing stones depends on the frame material used. You are always on the safe side with a centre distance of 50 cm.



On roof seals, the sub-frame must be secured against lifting and lateral slipping so that the seal remains undamaged.

# Sub-construction

The sub-construction connects the deck to the bearing blocks. A slope must already be taken into account in the substructure. Rot-proof spacers between the bearing blocks and the frame can be used to make adjustments.

#### SUITABLE FRAMES ARE:

- Hardwood sub-construction 42 x 68 mm, resistance class I/III
- > TwixT Alu sub-construction

# Other frames require testing and written approval in individual cases. They are not automatically suitable for screwing with System49.

The frames (sub-construction) are fixed to the bearing blocks in a rattle-free and storm-proof manner.

For a perfect edge finish, you should first assemble a circumferential frame from the sub-construction.



The corners are mitred for this purpose.



Each plank end must always be fastened with a separate clip. It is not permitted to fasten the joint with just one clip. A support spacing of up to 50 cm is permitted for bamboo planks. The centre distance from substructure to sub-construction is measured for this purpose. Depending on the installation pattern, suitable sub-construction centre distances will result.

Example for 1.85 m system planks:



Substructure, sub-construction and deck with 1/2 length offset. Centre distances: 404-404-117-404-404-117 mm



Substructure, substructure and deck with 1/3 length offset. Centre dimensions: 500-117-500-117-500 mm

# Fastening

Concealed fastening is achieved with System49 and the corresponding screws. With the right combination, you can screw directly without pre-drilling:

System49	4,2 x 20 mm	4,2 x 25 mm
Screws	with drill point	(Standard)
TwixT Alu	Perfect!	3,0 mm
30x64 mm	(without pre-drilling)	pre-drill
Hardwood	unsuitable	3,0 mm pre-drill

# **Top layer**

The plank ends are pre-treated with wax at the factory. During installation, the finishing treatment with end edge wax provides additional protection. New cut surfaces must be treated with decking oil or end edge wax.

The first row of boards is aligned and fixed to the edge: It is best to screw visibly from above.

To do this, pre-drill at least the screw diameter and countersink to fit so that the screw head sits flush with the surface.



Hidden fastening in the groove is also possible. To do this, lay two System49 start/end clips twice on top of each other, push them into the outer groove of the plank and fasten them to the subfloor with a screw.

All other fixings are concealed in the joints with System49 connecting clips.

Thread the required number of clips sideways between two planks or simply place them in front of the plank on the subfloor and slide the next plank against them. The clip slides into the grooves to the correct height and can be screwed into the joint from above..



The screw is tightened so far that the elastic wings still have some spring travel. Under no circumstances should the head be screwed in all the way to the floor. A screwdriver correctly set to the lowest torque helps here.



The last row is fastened in the same way as the first row. Trim the outer edge of the decking with a plunge saw, bevel or round off the edges and treat the cut surfaces with end edge wax.

# Care and maintenance

High-pressure cleaners, dry ice, steam or sandblasters are unsuitable for cleaning the surface and are not permitted.

Decking boards are subject to considerable stress due to weathering (UV light, rain) and dirt (garden, environment).

In very wet weather, the originally smooth surface can acquire a permanent visible and tangible structure. This is normal and no cause for concern.

Bamboo decking boards are made from a renewable natural product, which is subject to fluctuations in colour and grain. Depending on weathering and care, the colour may fade and the surface may turn grey.

Regular maintenance can preserve the colour of the decking. FAXE decking oil is suitable for after-treatment.

Cracks at the ends cannot be completely avoided. Bamboo decking boards are already protected with wax there ex works and can be additionally treated with end edge wax.

#### SMOOTHING THE SURFACE

Small, raised fibres on the surface cannot be completely avoided despite careful production and surface protection. Dark edges can form on superficial cracks. These can be smoothed and swept away with a sanding scrubber.

#### NORMAL CLEANING

Deposits, e.g. from exhaust fumes, pollen and dust, form a breeding ground for mould, moss and lichen. This can lead to unsightly and stubborn discolouration. Soiling should be removed wet from time to time, if necessary with a scrubbing brush.

### BASIC CLEANING

Before using decking oil, the surface must be thoroughly clean. This cleaning is done with water, possibly with the addition of FAXE Decking Cleaner. An abrasive scrubber with silicon carbide bristles is suitable for small areas, while a disc machine with a nylon brush is recommended for large areas. When cleaning, use the scrubbing brush or disc machine and plenty of cleaning fluid. Carefully rinse off any residue afterwards.

Once completely dry, the boards should then be oiled with Faxe decking oil.

#### OILING WITH FAXE DECKING OIL

The factory surface is treated with Faxe Decking Oil within 4-8 weeks. After that, maintenance approx. 1-2 times a year is sufficient. To do this, apply the oil to the clean and dry surface according to the manufacturer's instructions.

### CLIPS

Screws and clips are pre-treated black at the factory. If the bare metal shows through over time, this can be remedied with a black pen.

This does not affect the weather resistance.

# **Special installation situation**

These installation instructions have been written with the utmost care. Nevertheless, the situation on the construction site may differ from what is assumed. For special cases, please contact your trade consultant.

# Special case: Removal of an element

If it should ever be necessary to replace a plank in the surface, it is not necessary to remove the entire deck. With System49, the fixing screws of the affected row are loosened and completely removed in the area of the plank to be replaced. The boards in this row are pushed about 1 cm apart until the head end of the board to be replaced is exposed. The clips can then be pushed sideways into the grooves of the neighbouring planks. The plank can then be picked up. Installation is carried out in reverse order.

All information is based on the current state of the art and is provided to the best of our knowledge. Illustrations may vary. Drawings are not true to scale. Any deviations in use and installation will invalidate the warranty. All rights, errors and changes in the interest of technical progress reserved.

Publisher: F.W.Barth & Co. GmbH, Korschenbroich Author: Thomas von Schreitter