

BPC ECOLINE and APEX®
INSTALLATION INSTRUCTIONS

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Intended use

Our BPC and APEX boards are modern materials for weathered outdoor areas. In plank formats, they are suitable as decking for terraces and balconies, but cantilevered or spanned constructions are not permitted. They must not be used for load-bearing components.

Properties

BPC splitters aufgrund seiner Struktur nicht wie Holz, und ist Due to its structure, BPC does not splinter like wood and is largely resistant to insect damage and fungal attack. Variations in colour and structure are typical of the material. Colour changes in the course of weathering and use are normal.

When planning, we recommend a sufficient slope of 2-3% (in the direction of the planks) to ensure water drainage. To ensure sufficient ventilation, the substructure height of at least 50 mm must be maintained. Like most plastics, the material is a good insulator. In dry and sunny weather, static charging may occur, particularly on metal parts.

Anti-static doormats, moistening the decking, non-conductive handles and railings and a dissipative substructure design help to reduce the effect. The boards can be drilled and sawn using woodworking tools.

The material reacts to temperature changes by swelling or shrinking. The specified distances and joints must be observed during installation. The planks are screwed to the substructure using System49 connectors concealed in the joint. At the beginning and end, the boards are fastened with the corresponding start/end clips.

Transport and storage

Even if the planks are resistant to fungal attack and weathering, they should not get dirty before installation and must not be exposed to water. It is therefore 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

- BPC or APEX decking boards
- System49 screws and clips
- Substructure (substructure frame) made of aluminium or hardwood
- Edge finish made of BPC or ALU (L-profile)

Kerbstones, infiltration-compatible infill material, edging stones, lawn edging, levelling feet and spacers are not system components.

Tools

A jigsaw or circular saw is suitable for cutting, also for the frames of the substructure.

You also need a measuring tool, spirit level and a screwdriver with suitable bits and torque limiter.

Planning

The first step is to determine the future position and alignment of the boards and, if necessary, the gradient. This results in the position of the substructure frame, the bearing blocks, the height and the gradient in the substructure.

To ensure that water does not damage the substructure or the covering, 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 under any circumstances. There should be an air gap of at least 5 cm under the surface layer to ensure good circulation.

A lateral distance of at least 25 mm must be maintained from any protruding, solid components.

BPC solid planks can be cut to width. Cut-to-size boards must be supported with a frame along their entire length. Due to the lack of a groove, screws can only be visible from above.

APEX planks and chamber profiles may only be cut to length. Width cuts are not permitted.

If you can avoid narrow cuts and use whole boards at the edge of the decking, the substructure and installation will be easier.

Material requirements

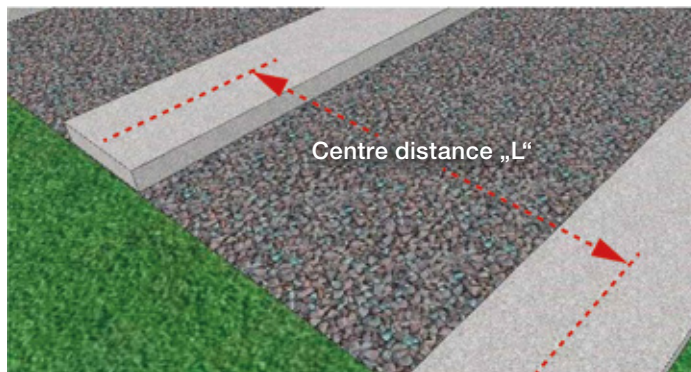
If the decking is subject to higher loads, the centre distances must be adjusted according to the load.

Substructure

The substructure is 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 seepage-compatible material to the required height and compacted.

The bearing stones are loosely laid on top of this as support points for the substructure frame. The distance between the bearing stones depends on the frame material used.

Substructure Material	BxH Wall thickness	Centre distance „L“
TWIXT Isostep	30 x 64 mm approx. 2 mm	up to 65 cm
Hardwood substructure	44 x 68 mm approx. 2 mm	up to 65 cm

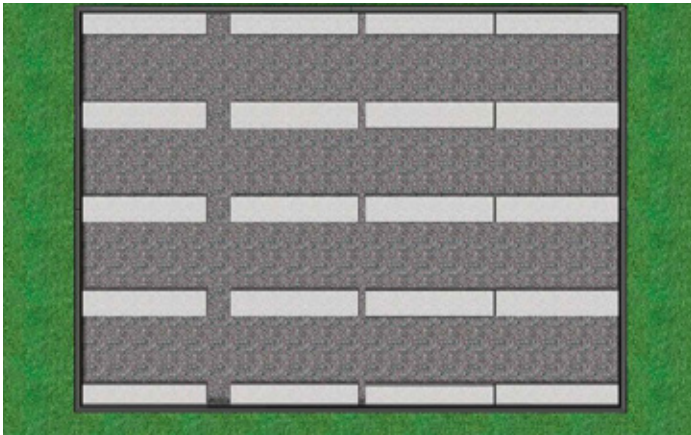


On roof seals, the substructure frame must be secured against lifting and lateral slipping.

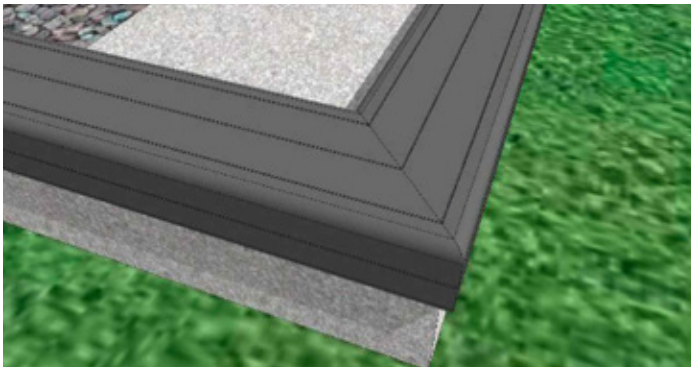
SUBSTRUCTURE

The substructure connects the deck to the bearing blocks. A slope must already be taken into account in the substructure. Rot-proof spacers can be used to make adjustments between the bearing blocks and the frame. These substructure frames are fastened to the bearing stones without rattling and are storm-proof.

For a perfect edge finish, you should first install a circumferential frame from the substructure.



The corners are mitred for this purpose.



A support spacing of up to 40 cm is permitted for BPC or APEX boards. The centre distance is measured from substructure to substructure. Depending on the desired installation pattern, there are different, optimum centre distances.

In the area of the plank joints and at the edge, the substructure must be laid as a double row with a small gap. Each plank end lies on its own substructure.



Substructure, substructure and deck with offset joints.

Centre-to-centre dimensions:

100-400-400...400-100-400...400-400-100 mm

Screws

The clips are supplied with suitable screws for the most common applications.

Only the system screws with a cylinder head are suitable for the clips. Only in this way can the screw be screwed into the joint without damaging the plank surface. Screws with countersunk heads are not permitted.

The screws are processed as follows:

System49 screws	4,2 x 20 mm with drill point	4,2 x 25 mm (standard)
Aluminium wall thickness 2,0 - 2,2 mm	without pre-drilling	3,0 mm pre-drilling
Aluminium wall thickness 2,3 - 4,0 mm	3,5 mm pre-drilling	3,5 mm pre-drilling
TwinBox aluminium substructure *	unsuitable	without pre-drilling
Hardwood substructure	unsuitable	3,0 mm pre-drilling

* other aluminium profiles require a case-by-case assessment

COVERING

When laying, ensure that the colour impression is uniform, even when backlit. Please check the boards carefully during installation and, if necessary, turn a board horizontally (swap the start and end).

The first row of boards is positioned and fixed to the edge of the decking first. To do this, slide System49 Start/End clips into the groove and fasten to the substructure using the screws provided.

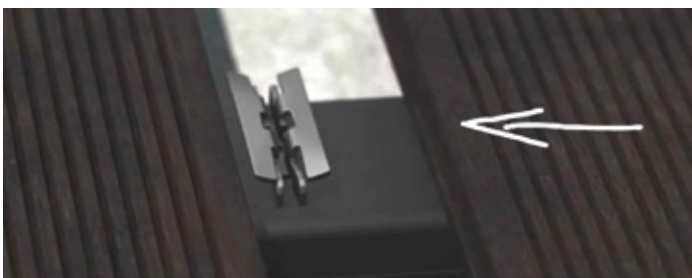


All other fastenings are hidden in the joints with System49 connecting clips.

Thread the required number of clips sideways between two



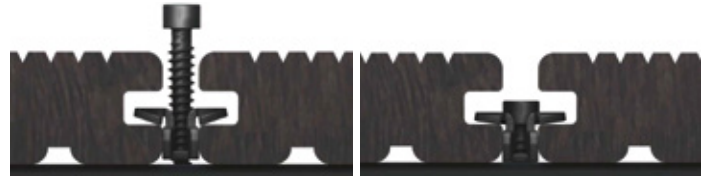
planks or simply place them in front of the plank on the substructure and slide the next plank against them.



The clip slides into the grooves to the correct height and can be screwed into the joint from above.

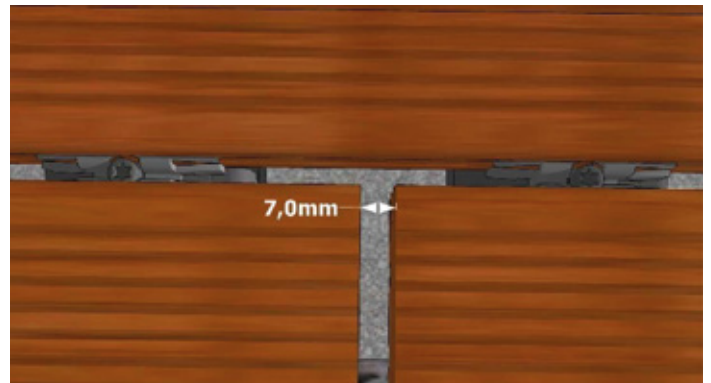


The screw is tightened until the elastic wings still have some spring travel. Under no circumstances should the head be screwed in all the way to the floor.

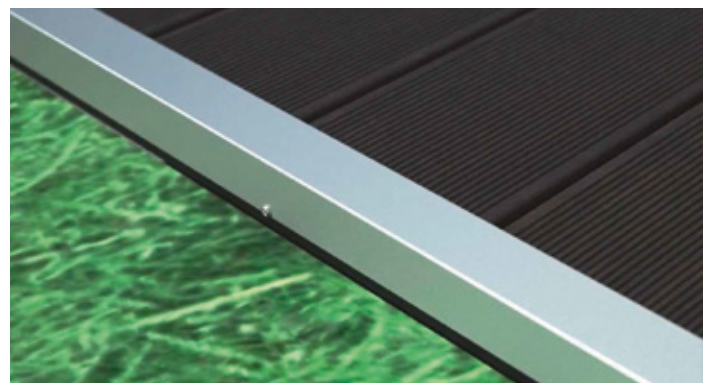


The last row is fastened in the same way as the first row. Screw the width sections visibly from above.

The plank joint is fitted with a 7 mm gap in the centre between 2 substructure frames.



EDGE FINISHING



Cut the plank ends straight at the edge using a saw with a guide rail. Trim the cut edges and the sides with the start/end clips using an angle.

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CARE AND MAINTENANCE

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

Terraces in particular are subject to considerable stress due to weathering (UV light, rain) and dirt (garden, environment).

Preventive maintenance

- Patio furniture must have flat feet. Sharp-edged or pointed furniture feet can damage the boards.
- Use non-colouring glides (stainless steel or plastic) under all furniture, flower pots or umbrella stands.
- With new decking, there are sometimes colour marks or water stains at the beginning. These usually disappear by themselves with sufficient weathering, but can also be removed with water and patio cleaner.

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 discolouration. Clay, dirt and green deposits can be removed with water and WPC/BPC decking cleaner.

Dirt should be removed wet, if necessary with a scrubbing brush.

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 is necessary to replace a plank in the area, the screws of the affected row are loosened and completely removed in the area of the plank to be replaced. The clips can then be slid sideways into the grooves of the neighbouring planks. The plank can then be picked up. Installation is carried out in reverse order.

GUARANTEE

The planks are produced with the utmost care and under constant quality control. If individual elements are nevertheless damaged when the goods are delivered, please sort them out.

The warranty applies exclusively to production-related defects in the delivered goods. Defective elements will be replaced by faultless goods.

Claims for goods that have been processed and installed despite recognisable defects will not be recognised.

In the event of improper use, faulty installation, violation of processing rules or use of components that do not conform to the system, the warranty claim shall become void.