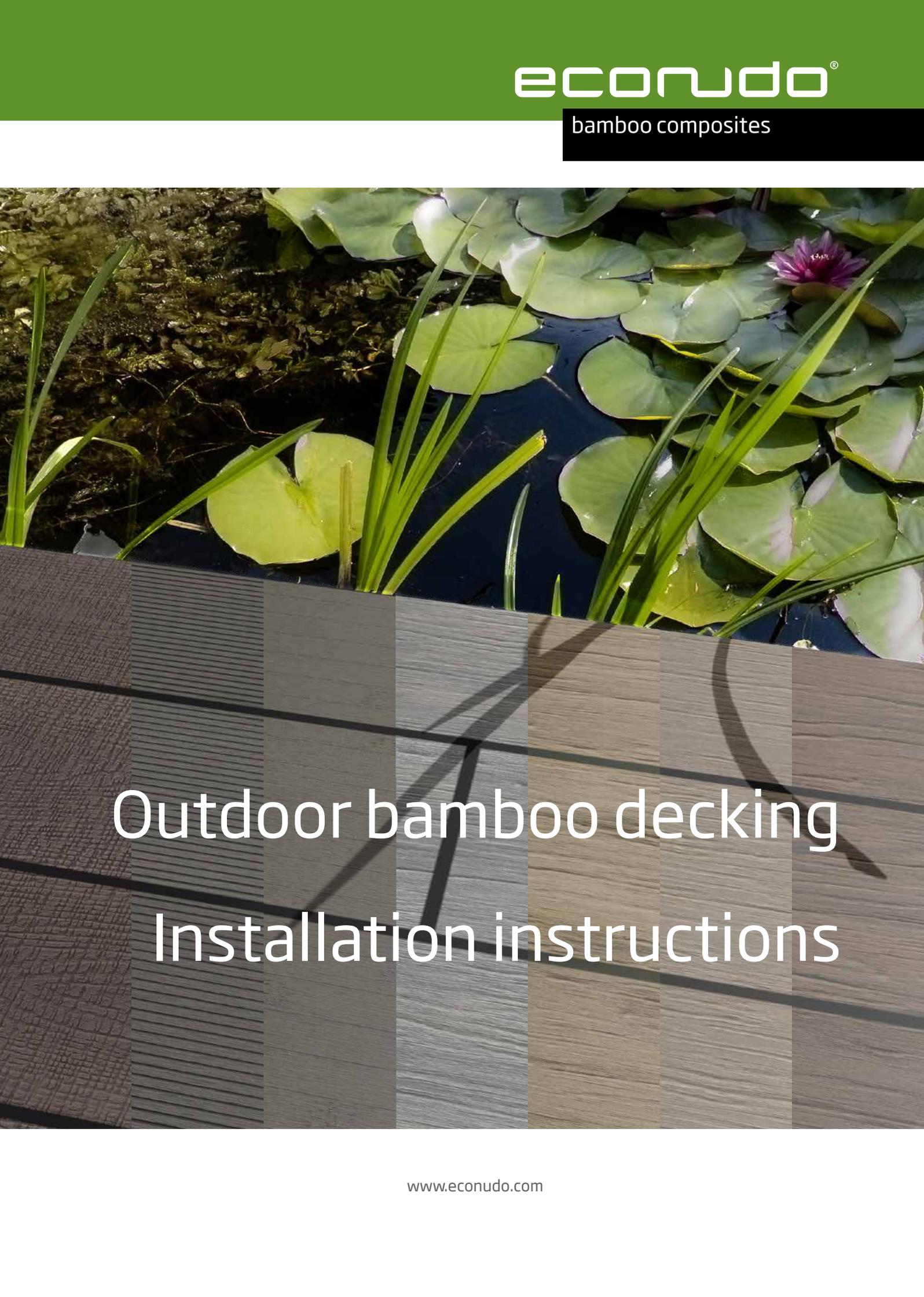


econudo®

bamboo composites



Outdoor bamboo decking  
Installation instructions



## econudo®: solid outdoor decking boards made from BPC

Econudo® is a modern composite material made of natural bamboo fibres and a high-quality polymer. The material consists of 60% natural bamboo fibres, originating from bamboo waste generated throughout different production processes, such as sawing, cutting and profiling. This is the natural base for the econudo® bamboo polymer composite (BPC). In combination with a High-quality polymer (PE) a versatile material is created which promises beauty and resilience for outdoor applications.

Whether intended for decks, loggias or balconies, econudo® offers an easy-care, durable and splinter-free solution for your project. Thanks to the bamboo-polymer composition, the boards are safe for bare feet. The econudo® boards are solid, as opposed to many other composites which can have hollow parts (channels). The solid boards are much more stable and prevent the typical 'sagging' which is a well known problem for composite boards. The boards can be installed using standard woodworking tools, and as the boards are installed with hidden fasteners an elegant look can be created, adding to the design value of your project.

Unlike most wooden decking boards, no time-consuming care such as coating or oiling is necessary. The econudo® boards do not turn grey and its color remains very stable during their lifetime. Six colours in eight finishes, of which two boards can be used either way up, offer a wide choice in the ranges Riffle, Nudo, Timber, Brushed or Vintage Style. This terrace looks beautiful and feels pleasant underfoot which helps to provide a very relaxing experience.



### Before installation

- Waterlogging under the decking must be avoided by preparing a water permeable ground structure. This can be achieved by sand layers and gravel dispersion above.
- Use cement/stone tiles 40-50 mm thick or pedestals, to support the sub frame (see figure 1).
- Place a root barrier under the tiles and pedestals to prevent weeds growing under the decking.
- Install the decking boards with a slope of 1-2% to enable water to run off the surface.
- Ensure good ventilation of the decking by keeping at least 20 mm gap from walls and objects and avoid closing the decking at the sides. The gap between the boards must be open to ensure unrestricted ventilation.
- When the surface / soil underneath the decking is not fast drying, there should be at least 100 mm distance between the decking and the surface underneath.
- Use sub frame joists with the minimum size of 40x60 mm. We recommend the use of thermally modified bamboo sub frame joists. Alternatively aluminum sub frame joists can be used.
- The thermally modified bamboo sub frame joists can be installed without gaps, connecting the joists with screws and glue suited for outdoor use. Make sure the connecting point of the joist rest on a bearing point.
- Aluminum sub frame joists should be installed according to the instructions of the supplier.
- In order to create a stable deck frame, the outsides of the frame have to be connected at regular intervals to the ground / structure below. Alternatively cross bracing can be applied.
- Install the sub-joist with a distance of 448.5 mm and at every third interval at a distance of 206 mm, measured centre to centre of the respective sub-joist. See figure 1.
- Install the decking boards on the sub-frame with a maximum free overhang of 70 mm. Always support the board joints on two sub joists (figure 1) and leave distance so that no dirt can accumulate between the decking boards.

### Technical notes

- Econudo® decking can be sawed, drilled and sanded using standard woodworking tools.
- Econudo® decking is not suitable for all permanently wet areas, waterlogging, direct contact with soil and load bearing function.
- The econudo® decking boards are not to be used for elevated, self-supporting functional components.
- If objects that cause a high point load are to be placed on the patio, they must be placed on a load-distributing base, so the weight is distributed evenly. The maximum point load is 1.8 kN.

### Installation

- Apart from the vintage collection, the decking boards can be used on both sides.
- The decking boards must be installed using a regular pattern.
- Keep at least 5-6 mm (depending on the clips) gap between the boards (in width direction). With econudo® fasteners this is automatically the case.
- The econudo decking boards expand and contract due to changes in the temperature and relative humidity. For that reason, keep the same gap at the end of the board.

### Use of econudo® fasteners

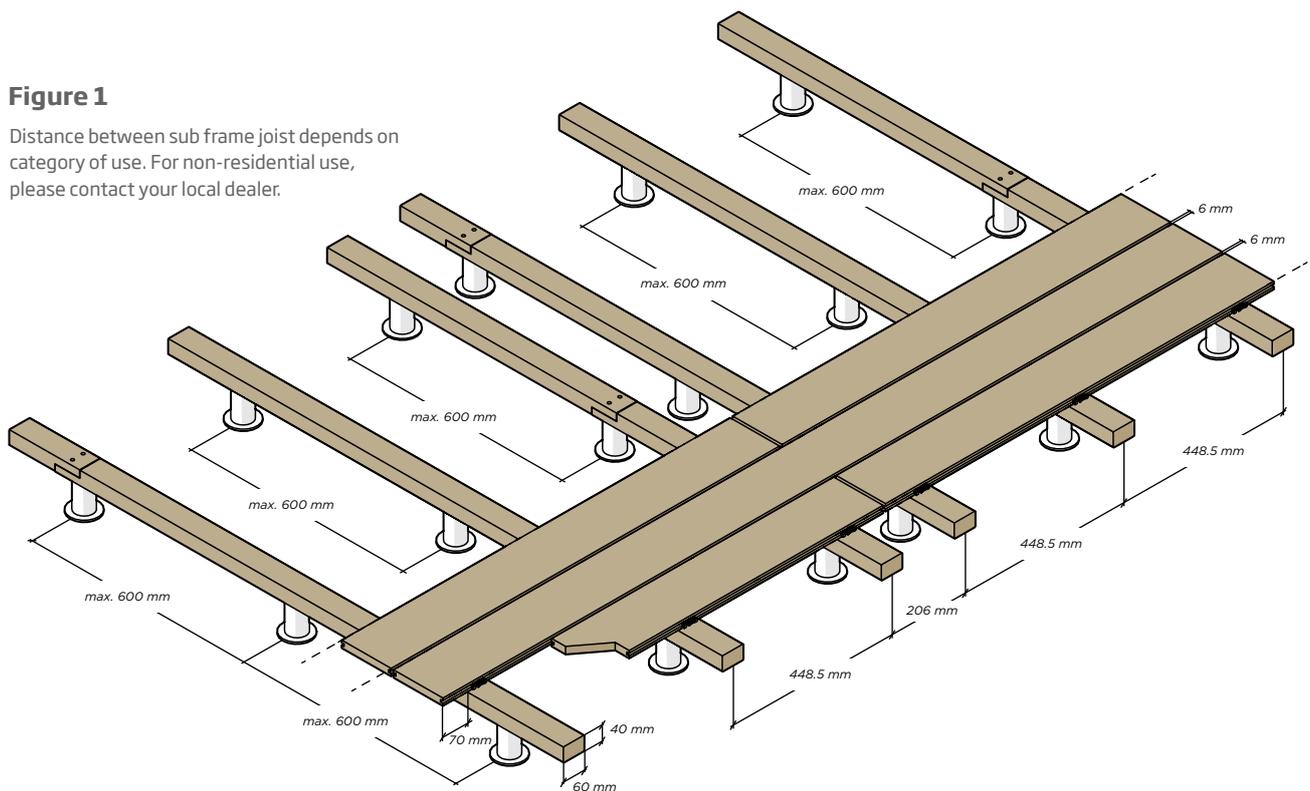
- Press fastener in the edge groove of one board.
- Pre-drill the joist screw holes 30 mm deep. On bamboo joists: use a 3.5 mm wide drill bit 110 mm long, depending on screw/clip. When using an aluminium sub beam with 2 mm wall thickness, no pre-drilling is required. Above 2 mm, contact your supplier. Always make a test prior to installation.
- Tighten the screw about 80%, not fully tight.
- Place the following board in position with the partly-tightened fastener engaged in the edge groove.
- Fully tighten the screw in the fastener. Always screw vertically to the joist. Apply low torque with slow screwing speed on the screwing machine. Perform some tests for correct torque and speed adjustment before full installation.
- Usage: 21 fasteners per m<sup>2</sup>.
- Only use the included stainless steel decking screws (4.2 x 30 mm).



Use the econudo fastener as a spacer for the width of the joint gap.

**Figure 1**

Distance between sub frame joist depends on category of use. For non-residential use, please contact your local dealer.



### Cleaning and maintenance

- Initial maintenance; Watermarks can occur in the first time after the installation. This can be removed with water, cleaner and a scrubber. The effect of the watermarks diminishes over time, but cannot be completely avoided and is not a quality defect. Regular watering, simply by rain will make it disappear over time
- After installation, initial cleaning of the decking boards with a BPC cleaner must be carried out. Follow the instructions of the supplier.
- Garden furniture should be fitted with protective gliders to avoid damage.
- Pockets of moisture and algae infestation should be avoided, particularly in shady areas.
- Uneven drying can cause watermarks on the decking. This becomes less after time but cannot be totally avoided. To remove these spots, follow the initial maintenance instructions. This is a normal phenomenon and is no reason for any complaint.
- It is advisable to keep the decking free from dust and dirt. For regular cleaning, remove loose dirt, leaves and moss using a broom or mop. Clean with fresh water.
- Maintain the decking at least one time per year with an BPC cleaner.
- Scoring, scratches and/or small projections can be reworked using a steel wool sponge along the length of the boards. The colour of processed areas will adjust in terms of colour within a few weeks.

### Storing

- Store in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.

### Additional note

- The econudo® decking board is a natural product with a high bamboo content. Changes in colour and dimension of the boards due to UV radiation and influences of the weather are material-dependent and do not constitute a fault.
- Whilst all due care is taken to ensure the accuracy of the installation instructions, individual circumstances (location, sub floor and installation procedures) may vary and are beyond the manufacturers control. In case of doubt, consult your distributor. Always follow the local building code.
- These instructions are subject to change. For the latest version visit: [www.econudo.com](http://www.econudo.com).
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