

MOSO® Bamboo N-durance Outdoor Decking

installation instructions

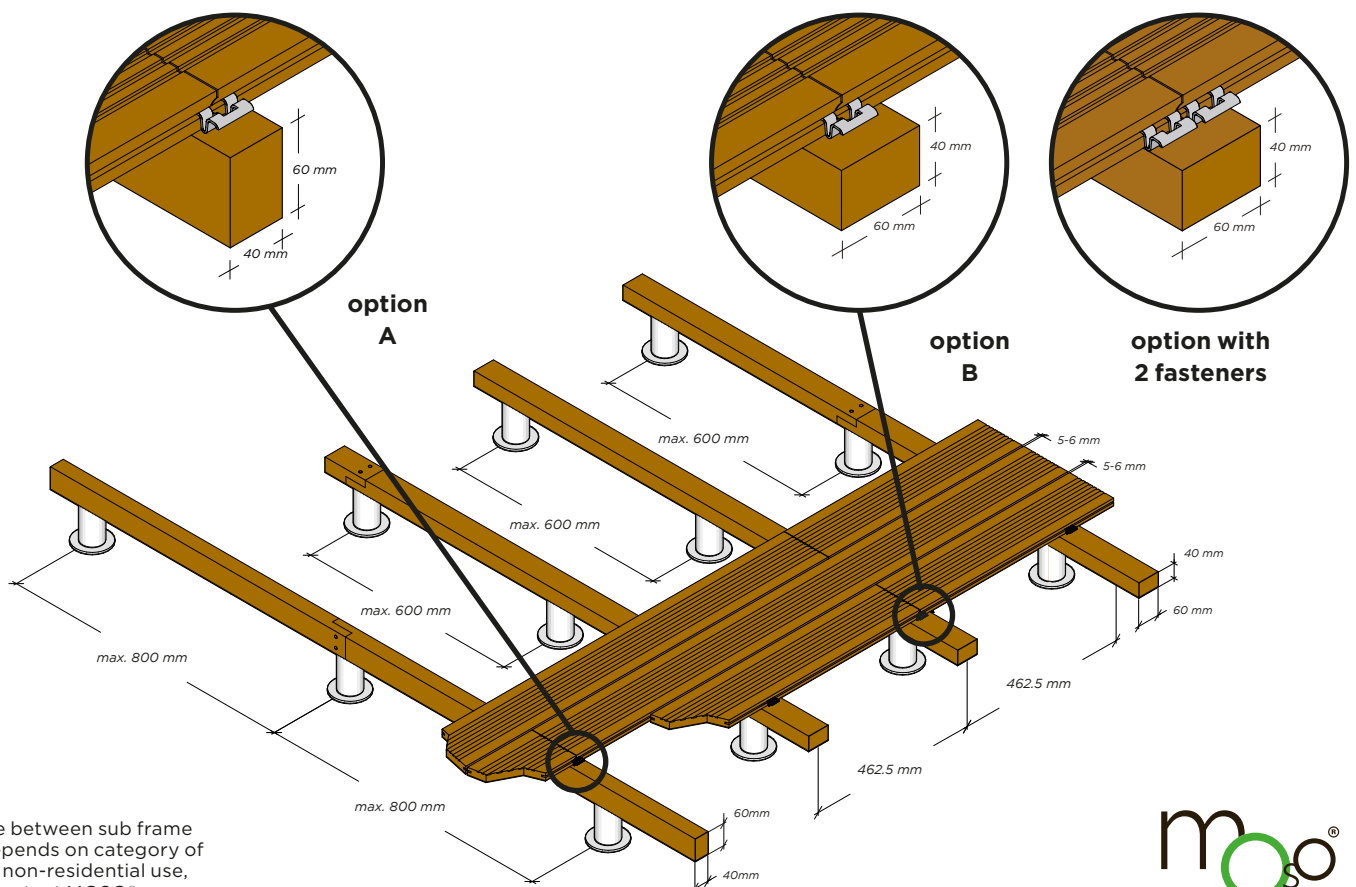
before installation

- 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 drawing).
- Place a root barrier under the tiles or 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. MOSO® recommends the use of MOSO® Bamboo X-treme® Sub frame joists, which are specifically produced for use in combination with our decking products. Alternatively, suitable joists are those with the same durability class as the decking; aluminum sub frame joists, stable hardwood joists or pine joists. When using hardwood or pine as joists, make sure the moisture content of these joists is below 12%. Avoid direct contact with the soil.
- MOSO® Sub frame joists can be installed without gaps, connecting the joists with screws and glue suited for outdoor use. Other 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 boards on sub frame joists with 462.5 mm space between the joists (centre-to-centre) so each board is supported by 5 joists. Always install the ends of the boards exactly on the joist. Distance between sub frame joist depends on category of use. For non-residential use, please contact MOSO®.
- If a random installation pattern is preferred, make sure that the sub frame joists (centre-to-centre) are no more than 300 mm apart.
- Always install cut off boards on at least 3 sub frame joists.

please note

- The MOSO® Bamboo N-durance Decking board is a natural product, which varies in colour, grain and appearance. Colour can change fast from brown to lighter brown or grey, depending on the maintenance schedule.
- Small cracks and splinters on the surface and on the ends of the boards can arise from the different drying characteristics of the surface and cross cut ends. The surface will also get rougher over time. This phenomenon is normal for most wood species and is minimized for this product by its unique 'High Density®' production method. Cracks on the board ends can be further minimized by applying sealer to the ends of the boards (see 'the installation').
- Splinters and roughness can be removed by cleaning the surface of the decking with the silicon carbide broom or machine disk which MOSO® supplies. The surface will become smoother and splinters are removed.
- Dimensional changes or cupping of the boards can occur after installation. This phenomenon is normal for most wood species and is minimized for this product by its unique High Density® production process.
- When using the flat side of the boards as surface please note that deformation under influence of climate will be significantly more visible. Some deformation and/or cupping of the material can occur. This phenomenon is normal for outdoor exposed wood and cannot be grounds for a claim.



Distance between sub frame joists depends on category of use. For non-residential use, please contact MOSO®.

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the installation

- Keep at least 5-6 mm gap between the boards (in width direction). With MOSO® fastener installation this is automatically the case.
- Because of the stability of the boards and the end-match system no expansion gap is needed on the ends of the boards.
- Every cut end has to be treated with board end sealer, to prevent water penetration. Sikkens Kodrin Sealer WV 456 is available from MOSO.
- Periodical maintenance with Woca Exterior Wood Oil or Sikkens Cetol WF 771 will be required to maintain the rich brown colour and the anti-surface fungi resistance. For decking oiled with Woca Exterior Wood Oil it is recommended to perform the first maintenance after 3-4 months. For decking finished with Sikkens Cetol WF 771 the first maintenance can be performed after one year.

installation with fasteners

- Determine the surface side of the boards (grooved or flat surface).
- **Use the MOSO® Asymmetric Fasteners in the following sequence:**
 - Press fastener with hooked side 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.
 - Fully tighten the screw. 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.
 - Install every following board by sliding it under the waved side of the fasteners.
- **Use the MOSO® Symmetric Fasteners in the following sequence:**
 - 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.
 - 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.
- Use approx. 20 fasteners per m². When the tongue and groove are connected on the joist, use 1, preferably 2 fasteners, 1 for every board (see drawing options A/B).
- Only use the included stainless steel decking screws (4.5x30 mm).

screw down installation

- Determine the surface side of the boards (grooved- or flat surface).
- Pre-drill the screw holes 20 mm from the side of the board. Be sure to pre drill with a large enough drill (80% of screw diameter) to avoid cracking of the decking.
- Always screw both sides (left and right in the width direction) of the board.
- Use at least A2 stainless steel quality decking screws (approx. 5x50 mm).

cleaning and maintenance

- MOSO® Bamboo N-durance Decking is pre-oiled, double sided, with Woca Exterior Wood Oil or finished with Sikkens Cetol WF 771.
- Clean and maintain the decking at least one time per year with Woca Exterior Wood Cleaner and silicon carbide broom or -disk. Depending on climate and use it may be necessary to perform cleaning and maintenance more than once per year.
 - Remove the dirt water residue on the boards with clean water and let the surface dry.
 - Apply 1-2 new layers of finish, either Woca Exterior Wood Oil or Sikkens Cetol WF 771, depending on the original finish. When not applying a new finish once per year, depending on the situation, the decking will turn grey. Also superficial fungi may develop.
 - It is advisable to keep the decking free from dust and dirt as much as possible (clean by broom regularly).

storing

Store MOSO® Bamboo N-durance in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.

additional note

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 manufacturer's control. In case of doubt, therefore, consult the distributor. Always follow the local building code.

These instructions are subject to change. For the latest version visit www.moso-bamboo.com/n-durance

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