

# MOSO® Bamboo X-treme® Outdoor Decking

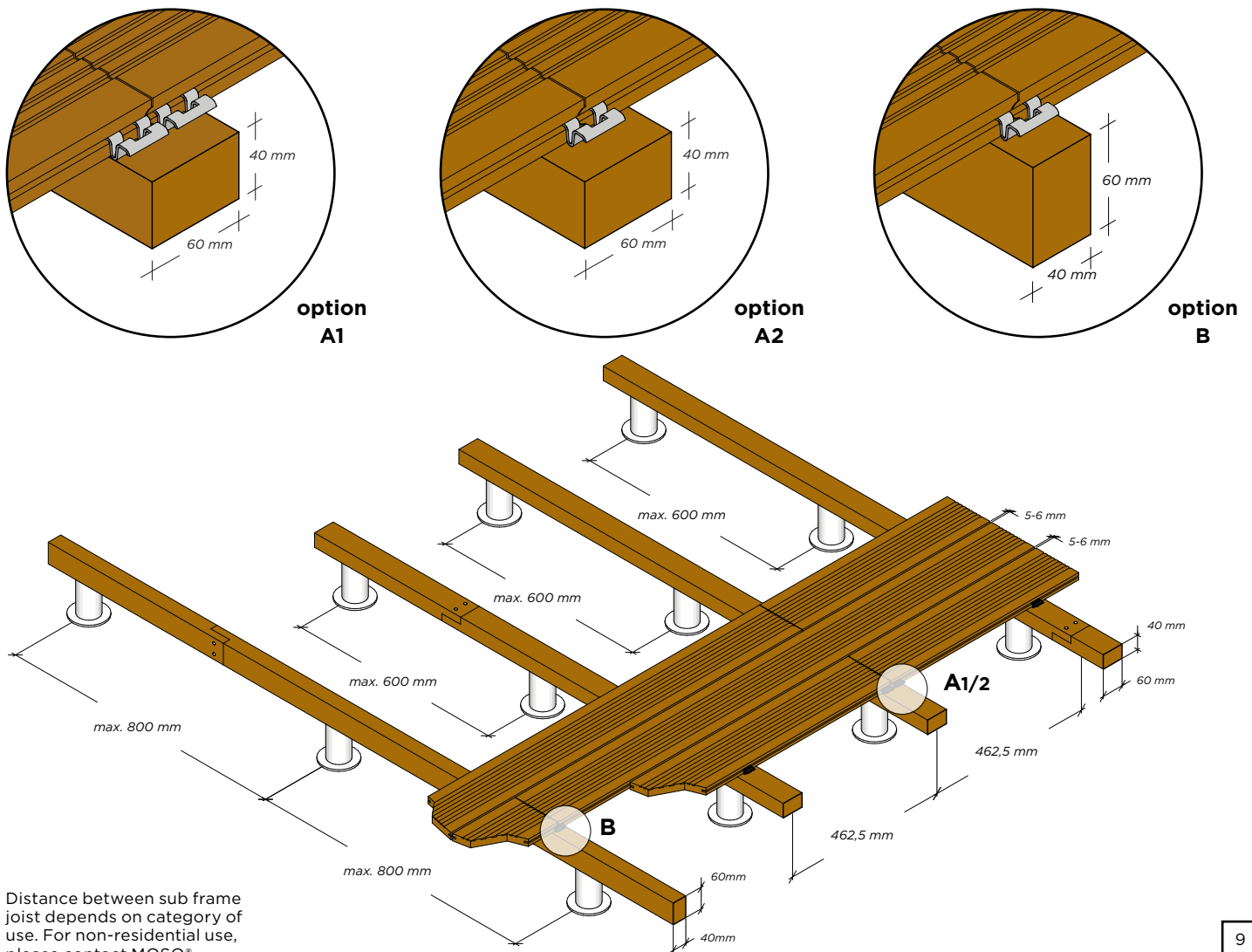
## installation instruction

### before installation

- Water logging 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 rootbarrier under the tiles 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. Alternatively, the decking can be installed without a slope, but due to the fact that water stays longer on the surface, it is possible to have more superficial cracks. If the installation is done without slope more cleaning will be required.
- The decking with the curved surface BO-DTHT191G-C is developed to be installed without slope. Thanks to the curved surface, a fast drainage from the boards is guaranteed.
- Ensure good ventilation of the decking by keeping at least 20 mm space at walls and obstacles and avoid closing the terrace on the sides.
- When the surface underneath the decking is not fast drying, there should be at least 100 mm distance between the decking and the surface underneath the floor.
- Use sub frame joists with the minimum size of 40x60 mm. Suitable joists are those with the same durability class as the decking; MOSO® sub frame joists, ALU sub frame joists, stable hardwood joists or impregnated pine joists. Avoid direct contact with the earth.
- 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 with 5-8 mm distance between the end of the joists.
- 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 battens. Always install the head sides of the boards exactly on the sub beam. 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 joist (centre-to-centre) are no more than 300 mm apart.
- Always install cut off outdoor boards on at least 3 sub frame joists.

### please note

- The MOSO® Bamboo X-treme® outdoor board is a natural forest product, which varies in colour, grain and appearance. Colour can change fast from dark brown to brown or grey, depending on the maintenance schedule.
- Cracks and splinters on the surface and on the end of the boards will arise from the different drying characteristics of the surface and cross cut ends. Besides this the surface gets rough. This phenomenon is normal for most wood species and is minimized for this product by its unique 'Thermo-Density\*' production method. Head sides cracks can be further minimized by applying wax on cross end sides of the cut boards, see 'the installation'.
- Splinters and roughness can be removed by cleaning the surface of the decking with the silicium carbid broom or machine disk MOSO® supplies, the surface will become smooth and splinters are removed.
- Dimensional change 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 Thermo-Density® heat-treated process.
- When using the flat side of the boards as surface please note that deformation under influence of climate will be significantly more visible. Deformation of the surface is not considered to be fault of the material.



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

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## installation instruction

### the installation

- Keep at least 5-6 mm expansion space between the boards (in width direction). With MOSO® Bamboo X-treme® fastener installation this is automatically the case.
- Because of the stability of the boards and the end-match system no expansion space is needed on the end of the boards.
- Every cut end has to be impregnated with board end wax, to prevent water penetration. Board end wax is available as accessory.
- We advise to oil the decking shortly after installation but no later than after the first winter.

#### installation with fasteners

- Determine the surface side of the boards (reeded- or flat surface).
- **Use the MOSO® Bamboo X-treme® asymmetric fasteners in the following sequence:**
  - Press fastener with hooked side in the groove of one board.
  - Pre-drill the screw holes. On hardwood/ bamboo: use 3.2-3.5 mm extended drill (11 cm long) in order to pre drill deep enough.
  - Mount the screw fully tightening. Always screw vertically to the joist. Apply low torque with slow screwing speed on the drilling machine. Perform some tests for correct torque speed adjustment before full installation.
  - Install the following board by sliding under the waved side of the fasteners.
- **Use the MOSO® Bamboo X-treme® fasteners in the following sequence:**
  - Press fastener in the groove of one board.
  - Pre-drill the screw holes. On hardwood/ bamboo: use 3.2-3.5 mm extended drill (11 cm long) in order to pre drill deep enough.
  - Mount the screw without fully tightening.
  - Install the following board.
  - Tighten the screw in the fastener and the sub beam. Always screw vertically to the joist. Apply low torque with slow screwing speed on the drilling machine. Perform some tests for correct torque speed adjustment before full installation.
- Use approx. 20/17/14 fasteners per m<sup>2</sup>, this is depending on the type or board 137/155/178 mm wide. When the tongue and groove are connected on the sub beam, use 1, preferably 2 fasteners, 1 for every board (see drawing options A1 / A2 / B).
- Only use the included stainless steel decking screws (4.5 x 30 mm).
- Please watch the installation video [www.moso-bamboo.com/x-treme](http://www.moso-bamboo.com/x-treme).

#### screw down installation

- Determine the surface side of the boards (reeded- 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 to avoid cracking of the decking.
- Always screw both sides (left and right) of the board.
- Use stainless steel decking screws (ca 5 x 50 mm).

### maintenance and cleaning

#### prefinished version

- MOSO® Bamboo X-treme® outdoor decking is pre-oiled, double sided, with WOCA exterior waterbased decking oil (teak colour).
- Clean the floor at least one time per year with WOCA Decking Cleaner and silicium carbid broom or -disk. Follow the instructions on [www.moso-bamboo.com/youtube](http://www.moso-bamboo.com/youtube). Depending on climate and use it may be necessary to perform cleaning more than once per year.
  - Remove the dirt water residue on the boards with clean water and let the floor dry.
  - Apply 1-2 new layers of WOCA Decking Oil (WOCA exterior oil, teak colour). When not applying new outdoor oil 1-2x per year, the floor will turn in to a grey colour tone and the typical bamboo wood grain structure will become less visible. First oiling can be performed directly after installation, the best moment for the first maintenance is 3-4 months after installation, when the surface is more open than immediately after installation. Follow the instructions on [www.moso-bamboo.com/x-treme](http://www.moso-bamboo.com/x-treme).
  - It is advisable to keep the decking free from dust and dirt as much as possible (clean by broom regularly).

#### unfinished version

- It is possible to leave the decking without oiling, however cleaning once a year is necessary; the result will be a rough and grey appearance. An initial application of waterbased decking oil / saturator is necessary in order to impregnate the decking. This can be done immediately after installation or, to have better impregnation, after 3-4 months when the surface is more open.
- Clean the decking with water, cleaner and silicium carbid broom or - disk.
  - Let the decking dry. When the decking is completely dry please follow the instructions of the supplier of the used oil or saturator.
  - After this first application the decking can remain without oil treatment for natural greying. However annual cleaning with the silicium carbid broom or disk is obligatory. If you want to keep a darker colour, regular application of oil/saturator is needed.
  - It is advisable to keep the decking free from dust and dirt as much as possible (clean by broom regularly).

### storing

Store MOSO® Bamboo X-treme® in a dry, cool place protected against dust and direct sunlight.

### 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.

**These instructions are subject to change. For the latest version visit [www.moso-bamboo.com/x-treme](http://www.moso-bamboo.com/x-treme)**

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