

# MOSO® Bamboo X-treme® Outdoor Decking

## installation instruction

### storage and handling

MOSO® Bamboo X-treme® should be kept out of direct sunlight and should not be exposed to inclement weather before installation.

### safety

Drilling, sawing, sanding, and machining MOSO® Bamboo X-treme® generates dust. Avoid inhaling dust by wearing a dust mask. Contact MOSO® for MSDS information.

### required tools

- Drill
- Drill bits
- Safety glasses
- Power screw gun with ratcheting torque setting
- Chop saw
- MOSO® Bamboo X-treme® can be crosscut with a quality chop saw, using a carbide-tipped blade. Ripping can be done on a standard table saw, using a properly aligned quality fence with a carbide-tipped blade.
- MOSO® Bamboo X-treme® can be routed or planed with high-speed steel or carbide cutters. When required, only sand in the direction of the grain - i.e. belt sander. Never use an orbital sander.

### before installation

- Local building codes must always be consulted when building an exterior deck. Most counties require building permits.
- 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.
- 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.
- There must be adequate air circulation underneath the deck to prevent cupping and warping of the boards.
- When the surface underneath the decking is not fast drying, there should be at least 4" distance between the decking and the surface underneath the floor.
- In applications where the deck is being built closer to wet ground, a vapor barrier is recommended to prevent water from absorbing into the underside of the material.
- 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.

### the installation

#### spacing

- Keep at least 3/16" 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 shape of the end-match system no expansion space is needed on the end of the boards.

#### joist span

- The recommended joist span is 18" or 24" on center. If recovering an existing deck on 16" centers, MOSO Bamboo X-treme can be used with its structural end match system.
- Because MOSO® Bamboo X-treme® is end matched there is no need to have all joints join atop joists. End joints can meet or "fall between" the joists with 8" - 8" distance. If you wish a random pattern, the span should be reduced to 12".
- You should stagger your end joints so they do not line up from one row to the next.
- When decking installation is on an angle, or a random pattern is desired, the joist spacing should be 12" centers. Determine the final joist spacing only after talking with local building code officials.

#### installation with fasteners

- Determine the surface side of the boards (reeded or smooth surface).
- **Use the MOSO® Bamboo X-treme® asymmetric fasteners in the following sequence:**
  - Press fastener with hooked side in the groove of one board.
  - If using joist material other than traditional softwood, pre-drilling will be required.
  - 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 or other suitable fasteners in the following sequence:**
  - Press fastener in the groove of one board.
  - In case of hardwood joists: predrill the screw holes.
  - Mount the screw without fully tightening.
  - Install the following board, then tighten the screw.
  - 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.
- When floating the joint between joists, putting a loose clip on both sides of joint can help provide increased stability in the event that the joist move.
- 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).

#### number of fasteners needed per sqft

X-treme® width	on center		
	16"	18"	24"
137 mm	1.85	1.48	1.11
178 mm	1.43	1.14	0.86

#### screw down installation

- Determine the surface side of the boards: smooth or reeded.
- Pre-drill the screw holes 3/4" from the side of the board. Be sure to predrill with a large enough drill to avoid cracking of the decking.
- We recommend using a countersink bit with a positive stop.
- Screws should be 305 grade stainless steel. Salt water contact may require 316 grade stainless steel, please consult local building codes.
- Always screw both sides (left and right) of the board.
- Use stainless steel decking screws (min 1 5/8" on 3/4" net decking).

### maintenance

- MOSO® Bamboo X-treme® is a natural product, which varies in color, grain and appearance. Color can change fast from dark brown to brown or gray, depending on the maintenance schedule.
- Annual cleaning of your MOSO Bamboo X-treme® decking is recommended. Clean the deck using warm water, mild deck cleaner and soft bristle brush.
- After cleaning and drying, apply a coat of exterior finish.
- We recommend to repeat this (cleaning + applying a coat of exterior finish) at least once per year.
- See additional maintenance instructions at [www.moso-bamboo.com/maintenance](http://www.moso-bamboo.com/maintenance)

### additional note

While 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, please consult your local dealer/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).**

Copyright © Nothing from this text may be reproduced without the prior permission in writing from MOSO International BV.