

MOSO® Bamboo X-treme® Outdoor Decking

installation instructions

before installation

- Local building codes must always be consulted when building an exterior deck. Most Municipalities require building permits.
- Install the decking boards with a slope of 1-2% to allow water to run off the surface. Flat decking may allow water to stay on the surface longer, so it is possible water staining and more superficial cracks will develop. If the installation is done without slope, more frequent cleaning will be required. This can be achieved by sand layers and gravel dispersion above.
- MOSO® Bamboo X-treme® can be installed very close to the ground, as little as 4" above permeable surfaces. It is highly important that adequate airflow and drainage is planned for and achieved. Pooling water or stagnant airspace will result in moisture issues that may cause failure. This can be achieved by sand layers and gravel below the decking.
- 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. However, the area must be sloped to allow water to drain away.
- Be sure to order finished edge boards (1-groove) for deck edge, stair treads etc.

safety

Drilling, sawing, sanding, and machining MOSO® Bamboo X-treme® generates very fine 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. Avoid impact drivers, which will snap screws.
- Chop saw
- MOSO® Bamboo X-treme® can be crosscut with a quality chop saw, using a carbide-tipped fine finish 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.
- Starborn Pro-plug screws and plugs and bits to match. Be sure to ask your supplier for these.

the installation

spacing

- Keep at least 3/16" expansion gap between the boards (in width direction). With MOSO® Bamboo X-treme® Fasteners installation this is automatically the case.
- Because of the stability of the boards and the shape of the end-match system no expansion gap is needed on the ends 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 endmatched 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 (grooved or smooth surface).
- Use the MOSO® Asymmetric Fasteners in the following sequence:
 - Press fastener with hooked side in the 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.
- When floating the joint between joists, putting a loose fastener 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).
- Don't forget to make sure you float a fastener at the end-match when floating the joint. The fastener will provide added support and maintain proper spacing between the boards.
- Please watch the installation video ► www.moso-bamboo.com/youtube/x-treme

number of fasteners needed per sqft

X-treme® width	on center		
	16"	18"	24"
96 mm	2.65	2.12	1.8
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 (grooved or smooth surface).
- Pre-drill the screw holes 3/4" from the side of the board. Be sure to predrill with a large enough drill (80% of screw diameter) 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 in the width direction) of the board.
- Use at least a stainless steel quality decking screw with a minimum length of 1 5/8" for 1x6 decking.

best practices

- Ensure that there is adequate airflow below the deck, especially when installing close to ground level. Even though the MOSO® Bamboo X-treme® can be installed closer to the ground than any other natural material, proper air flow is a separate issue and can have an adverse effect on the deck if not properly done.
- Don't forget to float a fastener at the end-match when floating the joint. The fastener will provide added support and maintain proper spacing between the boards. This applies to the decking as well as the siding.
- Don't forget to make sure that when installing the Bamboo X-treme® Siding vertically you put a mechanical fastener through the bottom of the board for extra support.
- If you want to maintain the unfinished look MOSO® recommends cleaning the deck with the [Messmer's Deck Cleaner and Brightener](#). [Messmer's MOSO® Bamboo Oil](#) will bring back the brown tone of MOSO® Bamboo X-treme® and help to repel dirt, water, and stains.
- When building a new MOSO® Bamboo X-treme® deck, 18" joist spacing is optimal.
- A red carpenter's pencil makes the clearest, most readable mark on MOSO® Bamboo X-treme®.



Floating fastener: putting a loose fastener on both sides of joint can help provide increased stability

MOSO® Bamboo X-treme® Outdoor Decking

installation instructions

cleaning and maintenance

- The MOSO® Bamboo X-treme® Outdoor Decking Board is a natural product, some variation in color, grain and appearance is normal. Color can change fast from dark brown to brown or grey, depending on the climatic conditions and maintenance schedule.
- Annual cleaning of your MOSO® Bamboo X-treme® Decking is recommended. Clean the deck using warm water, mild deck cleaner (Messmer Deck Cleaner and Messmer Brightener) and stiff bristle brush.
- After cleaning and drying, apply a coat of exterior finish (Messmer's MOSO® Bamboo Finish Oil).
- 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/youtube/minutes (episode 22).

storage and handling

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

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. Always follow the local building code.

MOSO warrants the bamboo material and the mounting materials (fastener/screw) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used screw matches such materials during the full lifetime of the product.

These instructions are subject to change. For the latest version visit www.moso-bamboo.com/x-treme/decking

Copyright © Nothing from this text may be reproduced without the prior permission in writing from MOSO North America Ltd., Inc.

EN-NA-2021-H1

