

# MOSO® Bamboo X-treme® Outdoor Decking non-slip



Ector Hoogstad  
Petra Appelhof

**KNEKASH PRO**

ביצוע פרויקטים אדריכליים



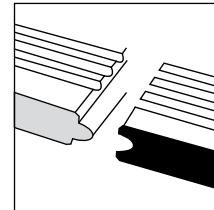
# MOSO® Bamboo X-treme® Outdoor Decking non-slip

MOSO® Bamboo X-treme® Decking is a solid, Thermo-Density® board, made from compressed bamboo strips. A special, unique heat-treatment process at 200°C provides MOSO® Bamboo X-treme® with the highest durability class possible in the appropriate EU norms and the compression increases the hardness and stability. Non-slip decking boards include two lines of black non-slip grit with epoxy, inserted in a dovetail groove, to allow for extremely low slip properties. The end-match system of Bamboo X-treme® enables the connection of an unlimited number of boards lengthways and the side grooves allow for quick installation with MOSO® Fasteners. Like any tropical hardwood species, when exposed to outdoor conditions, MOSO® Bamboo X-treme® will turn grey over time creating a very natural look.

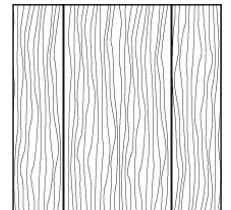
Double non-slip line



End-matched



High Density\*



\*) Ends of the boards are protected with Sikkens Kodrin WV 456 sealer.

Oiled Woca*	Unfinished	Non-slip lines	Edge groove	End-matched	Length edges	End edges	Dimensions (mm)
BO-DTHT171G-AS2*	BO-DTHT170G-AS2	2	Yes	Yes	R3	2 mm x 45°	1850x137x20

Alternative dimensions or non-slip lines are available on request.

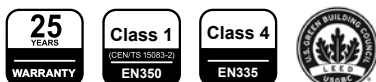
## installation summary

- Install suitable, fixed, stable and durable sub frame joists. MOSO recommends the use of MOSO® Bamboo X-treme® Sub frame joists.
- Fix the boards on the sub frame using MOSO® fasteners (to be inserted in the grooves of the board) or alternatively with screws (through the surface).
- Use a 1-2% slope and ensure good ventilation.
- After installation: make sure proper cleaning and maintenance is done, according to the chosen finish.
- When not applying outdoor oil regularly, the deck will acquire a grey colour tone and the typical bamboo wood grain structure will become less visible.
- Bamboo X-treme® is available pre-oiled or unfinished. In order to maintain the rich brown colour an exterior penetrating oil for hardwoods is recommended to be applied 3 to 4 months after installation. We advise to apply the initial coat 3-4 months after installation.
- Use a broom and brush for cleaning and maintenance. For further info: please see the installation/maintenance instructions.
- Store in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.
- Full version available at ► [www.moso-bamboo.com/x-treme/decking](http://www.moso-bamboo.com/x-treme/decking)

## technical characteristics and certifications

- Density: +/- 1150 kg/m<sup>3</sup>
- Dimensional stability: length: + 0.1%; width + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness of Bamboo X-treme® (not tested on non-slip grit): ≥ 9.5 kg/mm<sup>2</sup> (EN 1534)
- Reaction to fire of Bamboo X-treme® (not tested on non-slip grit): Class Bfl-s1 (EN 13501-1)
- Flame spread index of Bamboo X-treme® (not tested on non-slip grit): Class A (ASTM E84)
- Slip resistance: R13 in the width direction of the boards, sure-footed up to an incline of >35° (Shod ramp test - CEN/TS 16165 Annex B - DIN 51130)
- Thermal emittance: 0.81 (ASTM C1371)<sup>1)</sup>
- Solar Reflectance (SR) of Bamboo X-treme® (not tested on non-slip grit): 0.32 (ASTM C1549)<sup>1)</sup>
- Solar Reflectance Index (SRI) of Bamboo X-treme® (not tested on non-slip grit): Low 27, Medium 30, High 33 (ASTM E1980)<sup>1)</sup>
- Modulus of Elasticity of Bamboo X-treme®: 13565 N/mm<sup>2</sup> (mean value - EN 408)
- Bending strength of Bamboo X-treme®: 54.4 N/mm<sup>2</sup> (characteristic value - EN 408)
- Biological durability: Class 1 (EN 350 / CEN/TS 15083-2), simulated graveyard test / Class 1 (EN 350 / CEN/TS 15083-1)
- Effectiveness against Blue Stain: Class 0 (EN 152)
- Use Class: Class 4 (EN 335)
- CO<sub>2</sub> neutral of Bamboo X-treme® (not certified on non-slip grit): LCA report TU Delft (ISO 14040/44) ([www.moso-bamboo.com/lca](http://www.moso-bamboo.com/lca))
- Environmental Product Declaration - EPD (EN 15804) ([www.moso-bamboo.com/epd](http://www.moso-bamboo.com/epd))
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ 2, SS 7 v2009: MR 6, MR 7 (FSC®), IEQ 4.3, IEQ 4.4
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee bamboo decking: 25 years - wear resistance non-slip depending on usage

<sup>1)</sup> Tested on 3 years weathered MOSO® Bamboo X-treme®.



The mark of responsible forestry  
FSC® C002063

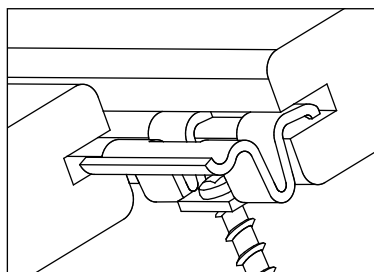


# MOSO® Bamboo X-treme® Outdoor Decking & Cladding accessories

## MOSO® Fasteners

With these fasteners MOSO® Bamboo X-treme® Decking and Cladding can be easily installed. When installed correctly, there will be 5-6 mm gaps between the boards. The fasteners are supplied with matching stainless steel screws (square bit). For installation on aluminium sub frame joist (not provided by MOSO®), special screws are available.

Product Code	Item	Material	Colour	Dimensions fastener (mm)	Dimensions screw (mm)
CLIP-SCREW-BX08	Fastener Asymmetric with screw (20 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x10.8	4.5x30
CLIP-BX08	Fastener Asymmetric without screw (20 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x10.8	
CLIP-SCREW-BX031	Fastener Symmetric with screw (20 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x10.8	4.5x30
CLIP-SCREW-BX301	Fastener Start/End Side/Top with screw (20 mm)	Stainless steel A2 (AISI304)	Brown	27x17x31	4.5x30
CLIP-SCREW-BX801	Fastener Start/End Top with screw (20 mm)	Stainless steel A2 (AISI304)	Brown	29x25x11.2	4.5x30
CLIP-SCREW-BX09	Fastener Asymmetric with screw (18 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x9.8	4.5x30
CLIP-BX09	Fastener Asymmetric without screw (18 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x9.8	
CLIP-SCREW-BX041	Fastener Symmetric with screw (18 mm)	Stainless steel A2 (AISI304)	Brown	27x22.5x9.8	4.5x30
SCREW-09	Screw for aluminium sub frame joist	Stainless steel A2 (AISI304)	Brown		4.2x20



### recommended number of fasteners/m<sup>2</sup>

decking*	cladding**
137 mm ~20 pcs/m <sup>2</sup>	137 mm ~14 pcs/m <sup>2</sup>
155 mm ~17 pcs/m <sup>2</sup>	75 mm ~26 pcs/m <sup>2</sup>
178 mm ~14 pcs/m <sup>2</sup>	

\*) Based on distance of 462.5 mm between the sub frame joist centres.

\*\*\*) Based on distance of 600 mm between the sub frame joist centres.

CLIP-SCREW-BX08 / BX09  
CLIP-BX08 / BX09



CLIP-SCREW-BX301



CLIP-SCREW-BX031 / BX041



CLIP-SCREW-BX801



## MOSO® Bamboo X-treme® Sub frame joist

The MOSO® Bamboo X-treme® Sub frame joists are made of the same material as the decking boards: Thermo-Density® heat-treated bamboo.

Product Code	Material	Finish	Dimensions (mm)
BO-SB155	Thermo-Density® bamboo	Unfinished	2440x60x40



## MOSO® Bamboo X-treme® Fascia board

The MOSO® Bamboo X-treme® Fascia board is intended for an elegant finish of the sides of the decking. It is placed vertically against the sides of the deck to cover the sub frame joists.

Product Code	Material	Finish	Dimensions (mm)
BO-DTHT162	Thermo-Density® bamboo	Unfinished	1850x137x20
BO-DTHT163	Thermo-Density® bamboo	Woca	1850x137x20
BO-DTHT184	Thermo-Density® bamboo	Woca	1850x137x18



## maintenance & cleaning products

Product Code	Material
SEALER-03	Sealer for ends of boards Sikkens Kodrin WV 456 0.75L
DISK-01	16" Silicon carbide disk
BROOM-01	Silicon carbide broom
CLEANER-WOCA-01	Woca Exterior Wood Cleaner
OIL-WOCA-011	Woca Exterior Wood Oil Teak
WOCA-APPLICATOR	Woca Applicator set for oil

Under the influence of wind, rain, sun and snow the decking will weather. MOSO® recommends impregnating and maintaining the pre-oiled decking with Woca maintenance materials. It is recommended to finish the unfinished decking with Woca Exterior Wood Oil right after installation, but no later than after the first winter. The silicon carbide broom and machine disk are perfectly suited to clean and smooth the decking surface of Bamboo X-treme® and to remove splinters due to the capability to sand the surface in addition to cleaning it.

## Marine Dock Candlewood Lake

(55 m<sup>2</sup>) Mount Gilead, Ohio, USA



## Nordre Jarlsberg Brygge

(70 m<sup>2</sup> + 1000 m<sup>2</sup>) Selvikbukta, Norway



## Lodge Puku Ridge

(1300 m<sup>2</sup>) Zambia



see the ease of installation, cleaning and maintenance of **MOSO® Bamboo X-treme®** at:  
[www.moso-bamboo.com/youtube/x-treme](http://www.moso-bamboo.com/youtube/x-treme)

Headquarters:

**Moso International B.V.**  
Adam Smithweg 2  
1689 ZW Zwaag  
the Netherlands  
T +31 (0)229 265 732  
[info@moso.eu](mailto:info@moso.eu)

Spain, France, Portugal, North Africa,  
Latin America and Middle East:

**Moso Europe S.L.U.**  
C/ Pau Claris, 83 - Principal 2<sup>a</sup>  
08010 Barcelona  
Spain  
T +34 (0)93 574 9610  
[contact@moso.eu](mailto:contact@moso.eu)

North America:

**Moso North America Inc.**  
8400 B Remington Ave  
Pennsauken, NJ 08110  
United States of America  
T +1 855 343 8444  
[info@moso-bamboo.com](mailto:info@moso-bamboo.com)

Sub-Saharan Africa:

**Moso Africa Pty. Ltd.**  
7 Glosderry Road Kenilworth  
7708 Cape Town  
South Africa

T +27 2167 11214  
[contact@moso-bamboo.co.za](mailto:contact@moso-bamboo.co.za)

Gulf Cooperation Council  
(GCC) Countries:

**Moso Middle East LLC**  
202 Al Mansour Bldg.  
Damascus Road, Al Qusais  
P.O. Box: 384421, Dubai  
United Arab Emirates  
T +971 4 258 9337  
[contact@moso.ae](mailto:contact@moso.ae)

Italy:

**Moso Italia S.R.L.**  
Via Antonio Locatelli 86  
20853 Biassono (MB)  
Italy  
T +39 (0)39 900 5440  
[mosoitalia@moso.eu](mailto:mosoitalia@moso.eu)