MOSO® Bamboo

Product Catalogue

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MOSO® Bamboo Products

MOSO®
Bamboo
Outdoor

MOSO®
Bamboo
Flooring

MOSO®
Bamboo
Panel, Beam
& Veneer

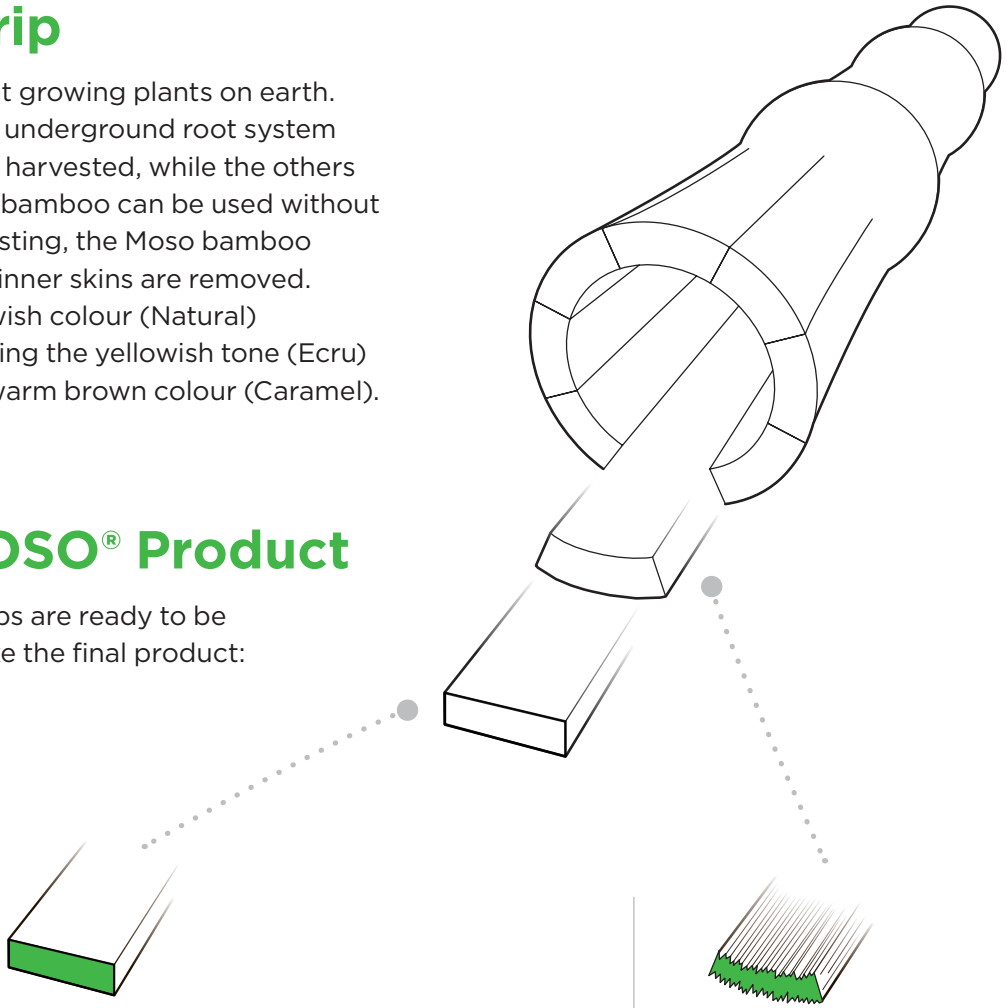
MOSO®
Bamboo
Unlimited

Apart from the standard product range, MOSO® can produce and supply custom made products.

From bamboo plant to product

From stem to strip

Moso bamboo is one of the fastest growing plants on earth. The bamboo stems grow from an underground root system and after 4-5 years a stem can be harvested, while the others continue to grow. This means the bamboo can be used without destroying the forest. After harvesting, the Moso bamboo stems are split and the outer and inner skins are removed. The untreated strips have a yellowish colour (Natural) but can be lightly steamed, reducing the yellowish tone (Ecru) or more intensely steamed for a warm brown colour (Caramel).



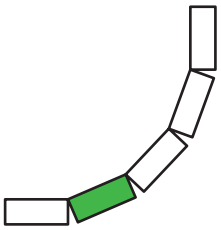
From strip to MOSO® Product

After treating and drying, the strips are ready to be connected in several ways to make the final product:

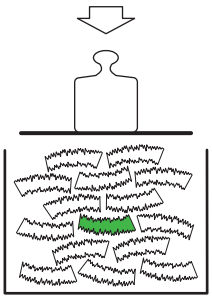
Plain Pressed
Strips are placed horizontally and glued together to create a wide line pattern with the characteristic bamboo nodes clearly visible.

Side Pressed
Strips are placed vertically and glued together to create a narrow line pattern with the bamboo nodes visible in a subtle way.

Flexible
Strips are bonded to a flexible backing, creating a wide line pattern with the characteristic bamboo nodes clearly visible.



High Density®
Strips are crushed into strands and glued under high pressure, creating an elegant random line pattern. The result is a material that is even harder than the best tropical hardwood species.



Extra hard
In this catalogue High Density® is indicated by a hammer.

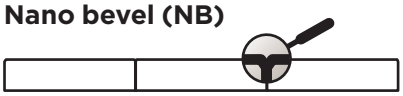
Explanation of technical terms and icons

Edges

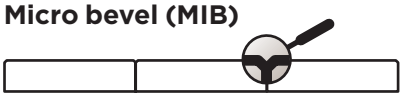
MOSO® Floor boards are available with various kinds of edges that each provide a different look: square edge for a closed, flat surface, macro bevel for a clearly visible V-groove and micro or nano bevel for a subtlety visible V-groove.

Square edge (SE)

Nano bevel (NB)



Micro bevel (MIB)



Macro bevel (MAB)

Finishes

To protect your MOSO® Floor, most come pre-oiled or lacquered according to the highest European quality standard and with the best finishing products available:

Pre-oiled with Woca (O)
Lacquered (L)

Declaration of performance
According to standard EN 17009 requirements are defined related to safety, health, quality and environmental impact of bamboo flooring. MOSO® Bamboo Floors meet these requirements.

Fire classification
According to EN 13501-1 the fire safety of flooring products can be classified ranging from $A1_{fl}$ (non combustible) to F_{fl} (highly combustible). All MOSO® Floors were tested for fire safety, providing a satisfactory result ranging from B_{fl} to C_{fl}.

Floor heating / cooling
Under specific conditions several MOSO® Floors are suitable for installation on floor heating / cooling systems. For details, please refer to the "floor heating / cooling" section in this catalogue.

Integrated click system
For quick and easy installation without the use of glue.

CO_2 footprint
MOSO® has conducted several LCA studies, including carbon footprint studies, together with Delft University of Technology (TU Delft) and NIBE (LCA experts). The 2015 LCA report, available at www.moso-bamboo.com/lca, was the first of its kind and resulted in many new findings about the carbon footprint of bamboo products. The environmental impact of MOSO® Bamboo Products, excluding the carbon sequestration effect, has also been published in 2016 and updated in 2022 in an official Environmental Product Declaration (EPD) following EN 15804 (www.moso-bamboo.com/epd).

Indoor emissions
For a healthy indoor environment it is important that products used indoors have very low emissions and comply with the official European E1 norm (EN 717-1). All MOSO® Products meet this standard, while several MOSO® Products even comply with E0, the strictest (unofficial) emission class available, commonly used to indicate that the product has a very low or no detectable emission (formaldehyde emissions <0.025 mg/m³) and/or is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class. Furthermore, all MOSO® Bamboo Floors have been rated A or A+ with respect to French regulation for emission of volatile organic compounds: the best classifications possible!

LEED & BREEAM
The application of MOSO® Bamboo Products can contribute to various credits for LEED and BREEAM, the most important green building certification programs available worldwide. Contact us at **sustainability@moso.eu** for more detailed information.

FSC® certification
Globally recognised as the best and most stringent responsible certification system in the wood industry, FSC® certification was recently also developed for bamboo. As pioneer in the bamboo industry, MOSO® is able to provide bamboo products with FSC® certification (FSC C002063). Only the products defined as such in this catalogue are FSC® certified.

MOSO® Bamboo Outdoor Products

X-treme® Collection

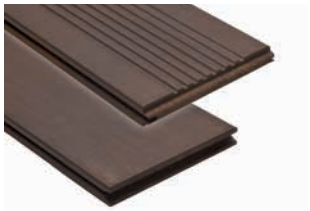
With Bamboo X-treme®, MOSO® has developed a truly **ecological** and **durable** alternative for increasingly scarce tropical hardwood. MOSO® uses a unique process to enhance the **hardness**, **dimensional stability**, **fire resistance** and **durability** to a level **superior** to the best tropical hardwood species. MOSO® Bamboo X-treme® can be used for **Decking, Cladding, Fencing** and **Outdoor furniture**.

Decking
Cladding
Accessories
Fencing
Beams

MOSO® Bamboo X-treme® Outdoor Decking

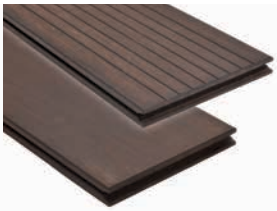
MOSO® Bamboo X-treme® Decking is a solid, Thermo-Density® board, made from compressed bamboo strips. A special, unique heat-treatment process at 200°C provides MOSO® Bamboo X-treme® with the highest durability class possible in the appropriate EU norms (see technical characteristics below) and the compression increases the hardness and stability. A unique feature of MOSO® Bamboo X-treme® is the end-match system: this can only be done with very stable materials and enables the connection of an unlimited number of boards lengthways. The special symmetrical shape of the sides allows the possibility to choose either the grooved or the flat surface, and allows 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.

Standard Groove / Flat (reversible)



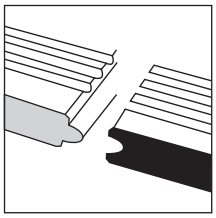
Curved

V-Groove / Brushed (reversible)



2 Non-slip lines

End-matched



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

Oiled Woca*	Unfinished	Surface	Edge groove	End-matched	Length edges	End edges	Dimensions (mm)
BO-DTHT171G	BO-DTHT170G	Standard Groove/Flat	Yes	Yes	R3	2 mm x 45°	1850x137x20
BO-DTHT171G1	BO-DTHT170G1	Standard Groove/Flat	One side	Yes	R3	2 mm x 45°	1850x137x20
BO-DTHT181G	BO-DTHT180G	Standard Groove/Flat	Yes	Yes	R3	2 mm x 45°	1850x137x18
BO-DTHT171G-AS2		2 Non-slip lines	Yes	Yes	R3	2 mm x 45°	1850x137x20
BO-DTHT371	BO-DTHT370	Standard Groove/Flat	No	Yes	R3	2 mm x 45°	1850x137x30
BO-DTHT191G	BO-DTHT190G	Standard Groove/Flat	Yes	Yes	R3	2 mm x 45°	1850x155x20
BO-DTHT191G-C		Curved	Yes	Yes	R3	2 mm x 45°	1850x155x20
BO-DTHT191G-C-R		Curved/Brushed	Yes	Yes	R3	2 mm x 45°	1850x155x20
BO-DTHT191GV-R		V-Groove/Brushed	Yes	Yes	R3	2 mm x 45°	1850x155x20
BO-DTHT211G	BO-DTHT210G	Standard Groove/Flat	Yes	Yes	R3	2 mm x 45°	1850x178x20
BO-DTHT211G-C-R		Curved/Brushed	Yes	Yes	R3	2 mm x 45°	1850x178x20
BO-DTHT231GV-R		V-Groove/Brushed	Yes	Yes	R3	2 mm x 45°	1850x208x20
BO-DTHT163G-CHV		Chevron Flat	Yes	No	R3	2 mm x 45°	566(703)x137x20

Installation summary

- Install suitable, fixed, stable and durable sub frame joists.
  MOSO® recommends the use of MOSO® Bamboo X-treme® Sub frame joists.
- Determine which side of the board will be used: the grooved or flat surface.
- Fix the boards on the sub frame using 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.
  Decking boards with the curved surface (BO-DTHT191G-C) are designed to be installed without a slope. Thanks to the curved surface, fast water drainage from the the decking boards is guaranteed.
- 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.
- 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**
- Installation instructions for chevron decking board available at **▶www.moso-bamboo.com/x-treme/decking-chevron**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class Bfl-s1 (EN 13501-1)
- Flame spread index: Class A (ASTM E84)
- Slip resistance - Pendulum friction test: PTV 55 (Standard Groove/Flat, Dry), PTV 29 (Standard Groove/Flat, Wet), PTV 91 (Brushed, Dry), PTV 42 (Brushed, Wet) (CEN/TS 16165 Annex C – CEN/TS 15676)
  Slip resistance - Shod ramp test: R 10 (Standard Groove/Flat), R 11 (Brushed), R 13 (Non-slip) (CEN/TS 16165 Annex B - DIN 51130)
  Slip resistance - Barefoot ramp test: Class C (Standard Groove/Flat) (CEN/TS 16165 Annex A – DIN 51097)
- Thermal emittance: 0.81 (ASTM C1371) [1)]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [1)]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [1)]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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: MvAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1)] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | Bfl-s1 | E1 HCHO | CO_2 NEUTRAL

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org

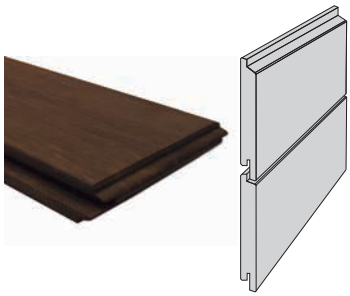
The mark of responsible forestry FSC® C002063

breeam

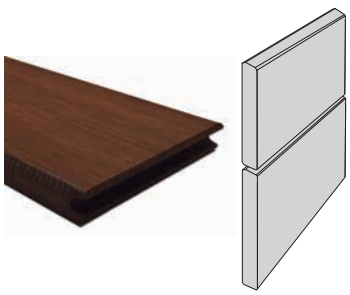
MOSO® Bamboo X-treme® **Outdoor Cladding**
Rebated & Trapezium profile

MOSO® Bamboo X-treme® Outdoor Cladding are solid boards in various widths for exterior applications. The boards are made from bamboo strips that have been compressed and thermally modified at 200°C. This unique Thermo-Density® process provides MOSO® Bamboo X-treme® with the highest durability class possible in the appropriate EU norms, increases the stability and density, and consequently the hardness. Furthermore, contrary to other wood products, this material can achieve fire resistance Class B-s1-d0 [1] (EN 13501-1) without impregnation with expensive and eco-damaging fire retardants. Bamboo X-treme® Cladding with the Rebated profile is made for installation with MOSO® Fasteners (18 mm) and screws and the Trapezium profile is made for installation with screws. Like any tropical hardwood species, when exposed to outdoor conditions, MOSO® Bamboo X-treme® will turn grey over time creating a natural look.

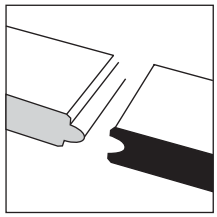
Rebated profile



Trapezium profile



End-matched



Product Code	Profile	Finish	Surface	End-matched	Length edges	End edges	Effective width (mm)*	Dimensions (mm)
BO-DTHT500G	Rebated profile	Unfinished	Flat	Yes	R3	2 mm x 45°	125	1850x137x18
BO-DTHT505G	Rebated profile	Unfinished	Flat	Yes	R3	2 mm x 45°	63	1850x75x18
BO-DTHT510	Trapezium profile	Unfinished	Flat	Yes	R3	2 mm x 45°	132	1850x137x18
BO-DTHT515	Trapezium profile	Unfinished	Flat	Yes	R3	2 mm x 45°	70	1850x75x18
BO-DTHT525	Trapezium profile	Unfinished	Flat	No	R1	1.5 mm x 45°	70	1850x75x12

*) Effective width without gap between the boards, recommended gap 6 mm.

Installation

- MOSO® guarantees the bamboo material and the mounting materials (fastener/screw) it supplies but does not guarantee the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the screws used match such materials during the full lifetime of the product.
- For installation with fasteners, the MOSO® Fasteners CLIP-SCREW-BX09 with screws and MOSO® Fasteners CLIP-BX09 without screws are available. More information about the MOSO® Fasteners can be found: **▶www.moso-bamboo.com/x-treme/accessories**
- 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/cladding**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width: + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1]
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | B-s1-d0 | E1 HCHO | CO_2 NEUTRAL

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org — The mark of responsible forestry FSC® C002063

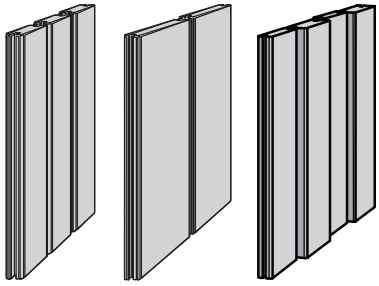
LEED | breeam

MOSO® Bamboo X-treme® Varibo Outdoor Cladding

MOSO® Bamboo X-treme® Varibo Cladding are solid boards in various widths for exterior applications. The boards are made from bamboo strips that have been compressed and thermally modified at 200°C. This unique Thermo-Density® process provides MOSO® Bamboo X-treme® with the highest durability class possible in the appropriate EU norms, increases the stability and density, and consequently the hardness. Furthermore, contrary to wood products, this material can achieve fire resistance Class B-s1-d0 [1] (EN 13501-1) without impregnation with expensive and eco-damaging fire retardants. MOSO® Bamboo X-treme® Varibo Cladding is available in various dimensions. The Varibo boards can be fixed with MOSO® Fasteners (18 mm). Like any tropical hardwood species, when exposed to outdoor conditions, Bamboo X-treme® will turn grey over time creating a very natural look.

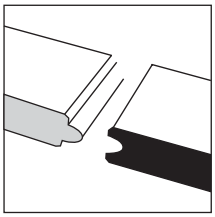
Varibo profile
100 mm

Varibo Flat boards



Varibo

End-matched



Product Code	Finish	Surface	End-matched	Length edges	End edges	Effective width (mm)*	Dimensions (mm)
BO-DTHT187G	Unfinished	Flat	Yes	R3	2 mm x 45°	65	1850x65x18
BO-DTHT186G	Unfinished	Flat	Yes	R3	2 mm x 45°	100	1850x100x18
BO-DTHT185G	Unfinished	Flat	Yes	R3	2 mm x 45°	137	1850x137x18
BO-DTHT218G	Unfinished	Flat	Yes	R3	2 mm x 45°	178	1850x178x18
BO-DTHT387G	Unfinished	Flat	Yes	R3	2 mm x 45°	65	1850x65x30
BO-DTHT386G	Unfinished	Flat	Yes	R3	2 mm x 45°	100	1850x100x30

*) Effective width without gap between the boards, recommended gap 6 mm.

Installation

- MOSO® guarantees the bamboo material and the mounting materials (fastener/screw) it supplies but does not guarantee the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the screws used match such materials during the full lifetime of the product.
- For installation with fasteners, the MOSO® Fasteners CLIP-SCREW-BX09 with screws and MOSO® Fasteners CLIP-BX09 without screws are available. More information about the MOSO® Fasteners can be found: **▶www.moso-bamboo.com/x-treme/accessories**
- 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/varibo**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width: + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1]
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A · B-s1-d0 · E1 HCHO · CO_2 NEUTRAL

25 YEARS WARRANTY · Class 1 (CEN/TS 15083-2) EN350 · Class 4 EN335 · EPD EN15804 · Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org

The mark of responsible forestry
FSC® C002063

breeam

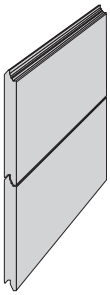
EN-2023-06

MOSO® Bamboo X-treme® Varibo Outdoor Cladding
Closed profile

MOSO® Bamboo X-treme® Closed Cladding are solid boards in various widths for exterior applications. The boards are made from bamboo strips that have been compressed and thermally modified at 200°C. This unique Thermo-Density® process provides MOSO® Bamboo X-treme® with the highest durability class possible in the appropriate EU norms, increases the stability and density, and consequently the hardness. Furthermore, contrary to wood products, this material achieves fire resistance Class B-s1-d0 [1] (EN 13501-1) without impregnation with expensive and eco-damaging fire retardants. MOSO® Bamboo X-treme® Cladding with the Closed profile is developed to meet the highest fire requirements and is installed with a hidden screw. A closed profile is also available for fast and easy installation with the Grad® system*. Like any tropical hardwood species, when exposed to outdoor conditions, Bamboo X-treme® will turn grey over time creating a very natural look.

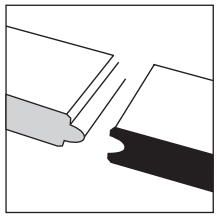
Closed profile
65 mm

Closed profile
137 mm



Varibo Closed profile

End-matched



Product Code	Profile	Finish	Surface	End-matched	Length edges	End edges	Effective width (mm)	Dimensions (mm)
BO-DTHT537	Closed	Unfinished	Flat	Yes	R1	2 mm x 45°	52,5	1850x65x18
BO-DTHT536	Closed	Unfinished	Flat	Yes	R1	2 mm x 45°	87,5	1850x100x18
BO-DTHT530	Closed	Unfinished	Flat	Yes	R1	2 mm x 45°	124,5	1850x137x18
BO-DTHT538	Closed	Unfinished	Flat	Yes	R1	2 mm x 45°	142,5	1850x155x18
BO-DTHT538-2	Closed	Unfinished	Flat with false groove	Yes	R1	2 mm x 45°	142,5	1850x155x18

Installation

- MOSO® guarantees the bamboo material and the mounting materials (screw) it supplies but does not guarantee the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the screws used match such materials during the full lifetime of the product.
- 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/closed**

*) For more information about the Grad® system please see the product datasheet Bamboo X-treme® Outdoor Cladding Grad® profile or check our website: **▶www.moso-bamboo.com/cladding/grad**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width: + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1]
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on Bamboo X-treme® Closed profile 137x18 mm, with ventilation space behind the boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | B-s1-d0 | E1 HCHO | CO_2 NEUTRAL

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

Also available with FSC® certification.

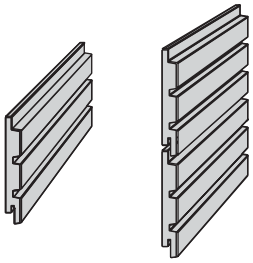
FSC www.fsc.org — The mark of responsible forestry FSC® C002063

LEED | breeam

MOSO® Bamboo X-treme® **Outdoor Cladding**
Rhombus profile

MOSO® Bamboo X-treme® Rhombus Outdoor Cladding is a range of solid, Thermo-Density® exterior boards, 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, increases the stability and density, and consequently the hardness. Furthermore, contrary to other wood products, this material can achieve fire resistance Class B-s1-d0 [1] (EN 13501-1) without impregnation with expensive and eco-damaging fire retardants. MOSO® Bamboo X-treme® Cladding with Rhombus profile can be fixed with MOSO® Fasteners (20 mm). Like any tropical hardwood species, when exposed to outdoor conditions, Bamboo X-treme® will turn grey over time creating a very natural look.

Triple Rhombus profile

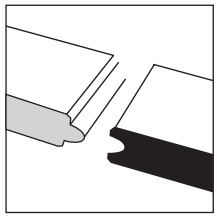


Triple Rhombus

Double Rhombus

Single Rhombus

End-matched



Product Code	Profile	Finish	Surface	End-matched	Length edges	End edges	Effective width (mm)*	Dimensions (mm)
BO-DTHT520G	Triple Rhombus	Unfinished	Flat with 2 grooves	Yes	R1	2 mm x 45°	129	1850x137x20
BO-DTHT520G-2	Double Rhombus	Unfinished	Flat with 1 groove	Yes	R1	2 mm x 45°	129	1850x137x20
BO-DTHT520G-1	Single Rhombus	Unfinished	Flat	Yes	R1	2 mm x 45°	129	1850x137x20

*) Effective width without gap between the boards, recommended gap 6 mm.

Installation

- MOSO® guarantees the bamboo material and the mounting materials (fastener/screw) it supplies but does not guarantee the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the screws used match such materials during the full lifetime of the product.
- For installation with fasteners, the MOSO® Fasteners CLIP-SCREW-BX08 with screws and MOSO® Fasteners CLIP-BX08 without screws are available. More information about the MOSO® Fasteners can be found: **▶www.moso-bamboo.com/x-treme/accessories**
- 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/rhombus**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width: + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1]
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A · B-s1-d0 · E1 HCHO · CO_2 NEUTRAL

25 YEARS WARRANTY · Class 1 (CEN/TS 15083-2) EN350 · Class 4 EN335 · EPD EN15804 · Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org

The mark of responsible forestry
FSC® C002063

breeam

MOSO® Bamboo X-treme® **Varibo Outdoor Cladding**
Grad® profile

MOSO® Bamboo X-treme® Grad® Cladding are solid boards in various widths for exterior applications. The boards are made from bamboo strips that have been compressed and thermally modified at 200°C. This unique Thermo-Density® process provides Bamboo X-treme® with the highest durability class possible in the appropriate EU norms, increases the stability and density, and consequently the hardness. MOSO® Bamboo X-treme® Grad® Cladding is designed for installation on the Grad® demountable and hidden installation system. Contrary to wood products, this material can achieve fire resistance without impregnation with expensive and eco-damaging fire retardants. The Closed profile achieves the fire resistance Class B-s1-d0 [1] (EN 13501-1) with the Grad® installation system. Like any tropical hardwood species, when exposed to outdoor conditions, Bamboo X-treme® will turn grey over time creating a very natural look.

Grad® profile
45 mm

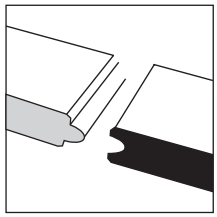
Grad® profile
64 mm

Grad® profile
119 mm

Grad® profile
136 mm

Grad® Varibo

End-matched



Product Code	Profile	Finish	Surface	End-matched	Length edges	End edges	Effective width (mm)*	Dimensions (mm)
BO-DTHT1180-BG	Grad®	Unfinished	Flat	No	R3	2mm x 45°	45	1850x45x20
BO-DTHT1190-BG	Grad®	Unfinished	Flat	No	R3	2mm x 45°	64	1850x64x20
BO-DTHT220-BG	Grad®	Unfinished	Flat	No	R3	2mm x 45°	119	1850x119x20
BO-DTHT540-1-BG	Grad®	Unfinished	Flat	Yes	R1	2mm x 45°	136	1850x136x20

*) Effective width without gap between the boards, distance after installation on Grad® system 6 mm (except for Closed profile).

Installation

- Installation instructions are available from MOSO®:
  ▶www.moso-bamboo.com/cladding/grad
- MOSO® guarantees the bamboo material and the mounting materials (fastener/screw) it supplies but does not guarantee the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used installation method matches such materials during the full lifetime of the product.
- Store in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.
- Installation instructions for the Grad® installation system are available from Grad®:
  ▶www.gradconcept.com

Flat Rail

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width: + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1]
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | B-s1-d0 | E1 HCHO | CO_2 NEUTRAL

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org — The mark of responsible forestry FSC® C002063

LEED | breeam

EN-2023-06

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-BX802	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	27x22.5x10.8	
SCREW-BX11-01	Screw for aluminium sub frame joist	Stainless steel S410 (AISI410)	Black*		4x20
CHEVRON-TOOL01	Chevron installation tool	Wood			

Recommended number of fasteners/m²

decking*

137 mm board width
~20 pcs/m²

155 mm board width
~17 pcs/m²

178 mm board width
~14 pcs/m²

208 mm board width
~13 pcs/m²

cladding**

137 mm board width
~14 pcs/m²

75 mm board width
~26 pcs/m²

*) 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-BX802 SCREW-BX11-01
* Only black screw head

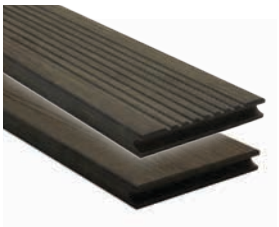
MOSO® Bamboo X-treme® additional products

The MOSO® Bamboo X-treme® additional products are made of the same material as the decking boards: Thermo-Density® heat-treated bamboo. MOSO® recommends the use of Bamboo X-treme® Sub frame joists, which are specifically produced for use in combination with MOSO® Decking. The MOSO® Bamboo X-treme® Fascia board and Edge profile are intended for an elegant finish of the sides of the decking. Fascia boards are installed vertically against the sides of the deck to cover the sub frame joists. Edge profiles can also be used to create stairs.

Product Code	Material	Finish	Dimensions (mm)
BO-SB155	Sub frame joist	Unfinished	2440x60x40
BO-DTHT170G1	Fascia board, 1 edge groove	Unfinished	1850x137x20
BO-DTHT171G1	Fascia board, 1 edge groove	Woca	1850x137x20
BO-DTHT181	Fascia board	Woca	1850x137x18
BO-DTHTBN171G	Edge profile, 2 edge grooves, 20 mm	Woca	1850x65x30/20
BO-DTHTBN500	Edge profile, no edge grooves, 18 mm	Unfinished	1850x40x40

BO-SB155

BO-DTHT171G1 / BO-DTHT170G1



BO-DTHTBN171G

BO-DTHTBN500

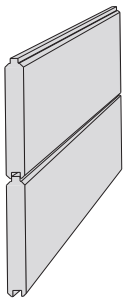
Maintenance & cleaning products

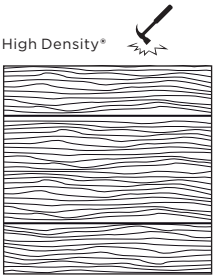
Under the influence of wind, rain, sun and snow the decking will weather. MOSO® recommends impregnating and maintaining the pre-oiled decking with Woca maintenance materials.
It is recommended to finish the unfinished decking with Woca Exterior Wood Oil right after installation, but no later than after 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.

Product Code	Item
SEALER-05	Sealer for ends of boards 250 ml
DISK-01	16" Silicon carbide disk
BROOM-02	Silicon carbide broom
CLEANER-WOCA-01	Woca Exterior Wood Cleaner 2.5 ltr
OIL-WOCA-011	Woca Exterior Wood Oil Teak 2.5 ltr
WOCA-APPLICATOR	Woca Applicator set for oil

MOSO® Bamboo X-treme® Fencing

MOSO® Bamboo X-treme® Fence boards are solid, Thermo-Density® exterior boards, 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 (see technical characteristics below) and the compression increases the hardness and stability. The fence boards, equipped with a tongue/groove connection, are mounted between posts with U-profiles (not provided by MOSO®). Like any untreated tropical hardwood species, when exposed to outdoor conditions, MOSO® Bamboo X-treme® will turn grey over time creating a very natural look.





Product Code	Edge groove	Finish	Surface	Length edges	End edges	End-matched	Effective width (mm)	Dimensions (mm)
BO-DTHT301TG	Tongue/Groove	Woca	Flat	2 mm x 45°	1 mm x 45°	No	131	1800x137x20

Tip:

MOSO® Bamboo X-treme® cladding profiles are also very suitable for making a fence.
For example, consider installing the MOSO® Bamboo X-treme® Triple Rhombus profile vertically.
▶www.moso-bamboo.com/rhombus.

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0,1 %; width + 0,9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 [1] (EN 13501-1)
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 25 years

[1] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | B-s1-d0 | E1 HCHO | CO_2 NEUTRAL

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

Also available with FSC® certification.

FSC www.fsc.org — The mark of responsible forestry FSC® C002063

LEED USGBC — breeam

EN-2023-06

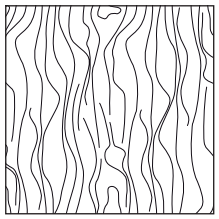
MOSO® Bamboo X-treme® Outdoor Beams

A unique heat-treatment process at 200°C and compression of the bamboo strips to increase the density make the MOSO® Bamboo X-treme® material extremely durable and stable. This durability and stability, and the pre-profiled rounded edges, make MOSO® Bamboo X-treme® Beams ideal for use in outdoor furniture and facades. The elaborate manufacturing process provides MOSO® Bamboo X-treme® Outdoor Beams with the highest durability class possible in the applicable EU norms. As with tropical hardwoods, the colour of the material changes under the influence of wind, rain, frost and sunshine (UV-light). This results in a typical weathered natural grey-tone. Regular cleaning and maintenance with a finish/sealer protects the material against this weather related discolouration.

BO-DTHT2171-2-01
2000 x 80 x 40 mm

BO-DTHT2173-2-01
2000 x 40 x 40 mm

High Density*



Product Code	Finish	Edges (also on ends)	Dimensions (mm)
BO-DTHT2170-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x115x40
BO-DTHT2175-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x90x40
BO-DTHT2171-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x80x40
BO-DTHT2172-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x60x40
BO-DTHT2174-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x55x40
BO-DTHT2173-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x40x40

Other dimensions, bevel and finish can be produced custom made.

Installation summary

- To allow natural shrink- and swell behaviour, install beams with a minimum of 4 mm distance.
- MOSO® Bamboo X-treme® Beams must be mechanically fixed, using screws/bolts. The fixing method depends on the application.
- Use stainless steel A2 screws/bolts.
- For all our standard size beams, except 40x40 mm, we advise a minimum of 2 screws per fixing point. 40x40 mm beams can be fixed with 1 screw per fixing point.
- Horizontal installation:
  - The number of fixing points is depending on the application and applicable load.
  - In general, a 2 meter beam should at least have 3 fixing points (2 on the sides and 1 connection in the middle).
- Vertical installation:
  - End of the beam should be angled (min. 15°) to improve water drainage.
  - Beams longer than 1 meter have to be fixed in at least 3 points.
- To avoid cracks caused by excessive water uptake, the (cut) ends of the beams must be treated with a sealer.
- 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/beams**

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: length: + 0,1 %; width + 0,9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 [1] (EN 13501-1), applicable as a material test
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371) [2]
- Solar Reflectance (SR): 0.32 (ASTM C1549) [2]
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980) [2]
- Modulus of Elasticity: 13565 N/mm² (mean value - EN 408)
- Bending strength: 54.4 N/mm² (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)
- Effectiveness against European Termites: Class M (EN 350 / EN 117 - Coptotermes gestroi)
- Use Class: Class 4 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (www.moso-bamboo.com/epd)
- FSC®: with FSC® certification
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), SS 7
  v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 10 years

[1] Tested on panel material with 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[2] Tested on 3 years weathered MOSO® Bamboo X-treme®.

Class A | B-s1-d0 | E1 HCHO | CO_2 NEUTRAL

10 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | EPD EN15804 | Class M (EN 117) EN350

With FSC® certification.

FSC www.fsc.org

The mark of responsible forestry
FSC® C002063

LEED | breeam

EN-2023-06

MOSO® Bamboo Outdoor Products
N-durance® Collection

With Bamboo N-durance®, MOSO® transforms the rapidly **renewable resource** bamboo into **beautiful** natural outdoor products with a warm caramel colour.
The **technical** and **ecological** benefits make Bamboo N-durance® the real outdoor '**building material of the future**'. MOSO® uses a unique **Outdoor-Density®** process that combines special crushing, steam-pressure treatment and compression with a special finish to enhance the **durability**, **hardness**, **dimensional stability**, **fire resistance** and **look**.

Decking
Accessories
Beams

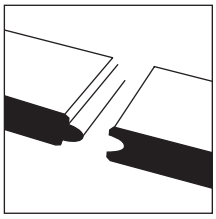
MOSO® Bamboo N-durance® Outdoor Decking

MOSO® Bamboo N-durance® Decking is a solid, Outdoor-Density® board, made from compressed bamboo strips. Bamboo N-durance® has a warm caramel colour, resulting from a steam-pressure treatment on the bamboo material. A special crushing and compression technique increases the hardness and stability and provides Bamboo N-durance® with the highest durability class possible in the appropriate EU norms. Bamboo N-durance®'s end-match system enables an unlimited number of boards to be connected creating a visually infinite length. The special symmetrical shape offers the possibility to choose between either the grooved or the flat surface and allows for quick installation with MOSO® Fasteners. When exposed to outdoor conditions, the caramel colour of MOSO® Bamboo N-durance® will naturally fade.

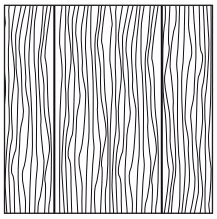
Standard Groove / **Flat**
(reversible board)

Curved

End-match system



Outdoor-Density®



P: Superficial preservative against surface fungi, **Woca**: Woca Exterior Wood Oil.
Ends of the boards are protected with Sikkens Kodrin WV 456 sealer.

Product Code	Surface	Finish	Edge groove	End-matched	Length edges	End edges	Dimensions (mm)
BO-DTC171G	Grooved/Flat	P + Woca	2 sides	Yes	R3	2 mm x 45°	1850x137x20
BO-DTC191G-C	Curved	P + Woca	2 sides	Yes	R3	2 mm x 45°	1850x155x20

Installation summary

- Install a suitable, fixed, stable and durable sub frame.
  MOSO® recommends the use of MOSO® Bamboo X-treme® Sub frame joists.
- Determine which side of the board will be used: the grooved or flat side.
- Fix the boards on the sub frame using fasteners (to be inserted in the edge grooves of the board) or alternatively with screws (through the surface).
- Use a 1-2% slope and ensure good ventilation of the decking.
  The slope is not necessary for the curved boards.
- After installation: make sure proper cleaning and maintenance is done.
- When an outdoor finish is not regularly applied the typical bamboo wood grain structure will become more visible.
- Bamboo N-durance® is available pre-oiled with Woca Exterior Wood Oil. In order to maintain the rich caramel colour it is recommended to reapply Woca Exterior Wood Oil 3 to 4 months after installation.
- Yearly maintenance with Woca Exterior Wood Oil is required to maintain the anti-surface fungi resistance.
- Yearly maintenance to retain the caramel colour and ensure the luxurious appearance.
- Store in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.
- For further info: please see the installation/maintenance instructions.
- Full version available on ▶ **www.moso-bamboo.com/n-durance**

Technical characteristics and certifications

- Density: ± 1200 kg/m³
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class Bfl-s1 (EN 13501-1)
- Slip resistance: R 10 (CEN/TS 16165 Annex B - DIN 51130)
- Modulus of Elasticity: 12090 N/mm² (mean value - EN 408)
- Bending strength: 99.6 N/mm² (characteristic value - EN 408)
- Biological durability: Class 1 according to EN 350 / CEN/TS 15083-2, simulated graveyard test / Class 1 according to EN 350 / EN 113-2 (CEN/TS 15083-1)
- Superficial preservatives and finish: comply with European biocide product regulation (BPR) and are not listed on the restrictions list of REACH Annex XVII/candidate list.
- Effectiveness against surface fungi: Class 0, Strong fungi static (EN ISO 846), treatment only superficial.
- Use Class: Class 4 (EN 335)
- Environmental Product Declaration - EPD (EN 15804)
  (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, IEQ 4.3, IEQ 4.4
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5
- Guarantee: 25 years

Also available with FSC® certification.

25 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | Bfl-s1 | EPD EN15804 | FSC www.fsc.org | The mark of responsible forestry FSC® C002063 | LEED USGBC | breeam

MOSO® Bamboo N-durance® Outdoor Decking

Accessories

Clips MOSO®

With these fasteners MOSO® Bamboo N-durance® Decking 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-BX802	Fastener Start/End Top with screw (20 mm)	Stainless steel A2 (AISI304)	Brown	29x25x11.2	4.5x30
SCREW-BX11-01	Screw for aluminium sub frame joist	Stainless steel SS410 (AISI410)	Black*		4x20

recommended number of fasteners/m² decking

137 mm wide board
~20 pcs/m²

155 mm wide board
~17 pcs/m²

Based on a centre to centre distance of 462.5 mm between the joists.

CLIP-SCREW-BX08 / CLIP-BX08

CLIP-SCREW-BX802

SCREW-BX11-01
* Only black screw head

MOSO® Bamboo N-durance® additional products

The MOSO® Bamboo N-durance® additional products are made of the same material as the decking boards: Outdoor-Density® bamboo. The fascia board and edge profile are intended for an elegant finish of the sides of the decking. Fascia boards are installed vertically against the sides of the deck to cover the sub frame joists. Edge profiles can also be used to create stairs.

Product Code	Item	Finish	Dimensions (mm)
BO-DTC171G1	Fascia board, 1 edge groove	Woca Exterior Wood Oil	1850x137x20
BO-DTCBN171G	Edge profile, 2 edge grooves	Woca Exterior Wood Oil	1850x65x30/20

BO-DTC171G1

BO-DTCBN171G

MOSO® Bamboo X-treme® Sub frame joists

The MOSO® Bamboo X-treme® Sub frame joists are made of Thermo-Density® heat-treated bamboo.

Product Code	Item	Finish	Dimensions (mm)
BO-SB155	Sub frame joist	Unfinished	2440x60x40

BO-SB155

Cleaning & maintenance products

Under the influence of wind, rain, sun and snow the decking will weather. MOSO® recommends to maintain MOSO® Bamboo N-durance® Decking with Woca maintenance products, depending on the product installed. The silicon carbide broom and machine disk are perfectly suited to clean and smooth the decking surface of Bamboo N-durance® and to remove splinters due to the capability to sand the surface in addition to cleaning it.

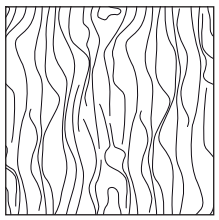
Product Code	Material
DISK-01	16” Silicon carbide disk
BROOM-02	Silicon carbide broom
CLEANER-WOCA-01	Woca Exterior Wood Cleaner 2.5 ltr
OIL-WOCA-011	Woca Exterior Wood Oil Teak colour 2.5 ltr
SEALER-05	Sealer for ends of boards 250 ml
WOCA-APPLICATOR	Woca Applicator set for oil
PRIMER-WOCA-01	Woca Exterior Wood Primer 2.5 Ltr

EN-2023-06

MOSO® Bamboo N-durance® Outdoor Beams

MOSO® Bamboo N-durance® Outdoor Beams are solid, Outdoor-Density® finished beams, made from compressed bamboo strips. The pre-profiled rounded edges make MOSO® Bamboo N-durance® Outdoor Beams ideal for use in outdoor furniture products, façade cladding and other applications. A special crushing and compression technique increases the hardness and stability and provides Bamboo N-durance® with the highest durability class possible in the appropriate EU norms. As with tropical hardwoods, the colour of the material changes under the influence of wind, rain, frost and sunshine (UV-light). Regular cleaning and maintenance protects the material from this weathering and brings back the rich caramel colour.

Outdoor-Density®



Product Code	Finish	Edges (also on ends)	Dimensions (mm)
BO-DTC2170-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x115x40
BO-DTC2175-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x90x40
BO-DTC2171-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x80x40
BO-DTC2172-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x60x40
BO-DTC2174-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x55x40
BO-DTC2173-2-01-FP	Sikkens Cetol WF 771 Ipe	R4	2000x40x40

Other dimensions, bevel and finish can be produced custom made.

Installation summary

- To allow natural shrink- and swell behaviour, install beams with a minimum of 4 mm distance.
- MOSO® Bamboo N-durance® Beams must be mechanically fixed, using screws/bolts. The fixation instruction depends on the application.
- Use A2 stainless steel screws/bolts.
- For all our standard size beams, except 40x40 mm, we advise a minimum of 2 screws per fixing point. 40x40 mm beams can be fixed with 1 screw per fixing point.
- Horizontal installation:
  - The number of fixation points is depending on the application and applicable load.
  - In general, a 2 meter beam should at least have 3 fixation points (2 on the sides and 1 connection in the middle).
- Vertical installation:
  - Beam ends should be angled (min. 15°) to improve water drainage.
  - Beams longer than 1 meter have to be fixed in at least 3 points.
- To avoid cracks caused by excessive water uptake, the (cut) ends of the beams must be treated with a sealer.
- Yearly maintenance will be required to maintain the anti-surface fungi resistance.
- Store in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.
- Full version available on ▶ **www.moso-bamboo.com/n-durance**

Technical characteristics and certifications

- Density: ± 1200 kg/m³
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value -EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1) [1)]
- Modulus of Elasticity: 12090 N/mm² (mean value - EN 408)
- Bending strength: 99.6 N/mm² (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)
- Superficial preservatives and finish: comply with European biocide product regulation (BPR) and are not listed on the restrictions list of REACH Annex XVII/candidate list
- Effectiveness against surface fungi: Class 0, Strong fungi static (EN ISO 846), treatment only superficial
- Use Class: Class 4 (EN 335)
- Environmental Product Declaration - EPD (EN 15804) (www.moso-bamboo.com/epd)
- FSC®: with FSC® certification
- Contribution LEED BD+C - v4: MR 1, MR 2, SS 7
  v2009: MR 6
- Contribution BREEAM: MAT 1, MAT 5
- Guarantee: 10 years

[1)] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.

10 YEARS WARRANTY | Class 1 (CEN/TS 15083-2) EN350 | Class 4 EN335 | B-s1-d0 | EPD EN15804

With FSC® certification.

FSC www.fsc.org

The mark of responsible forestry FSC® C002063

LEED USGBC | breeam

EN-2023-06

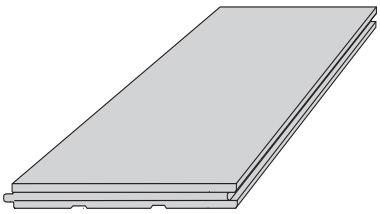
MOSO® Bamboo Flooring
Grand Collection

The Grand Collection was specially developed for customers who appreciate the aesthetics of **large boards** for a **spacious** and **exclusive** look. Thanks to the generous dimensions of the boards, the installation can be done relatively fast. The wide choice of colours and finishes in the Grand Collection offers a suitable bamboo flooring for any interior.

Bamboo Elite
Bamboo Elite Herringbone
Bamboo Elite Premium
Bamboo UltraDensity®

MOSO® Bamboo Elite

MOSO® Bamboo Elite is a floor board that is relatively long and wide (compared to other MOSO® Floors) and is made of three layers of solid bamboo, equipped with a tongue/groove connection. The middle layer is pressed in cross direction to maximise the stability.



Natural
Plain/Side Pressed

NEW

Ecru
Plain/Side Pressed

Caramel
Plain/Side Pressed

Natural/Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered Bona 85 g/m², **LN**: Lacquered Bona Naturale (extra matt) 125 g/m², **O**: Pre-oiled Woca Air Dried (has to be re-oiled after installation).
*) Middle layer cross pressed, **) Approx. 0,1 mm (barely visible).

Natural	Ecru	Caramel	Style	Finish	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m²)
		BF-LA350N	Plain Pressed*	-	Nano bevel**	1960x159x15	8	2,496
		BF-LA370N	Side Pressed*	-	Nano bevel**	1960x159x15	8	2,240
BF-LA301	BF-LA326	BF-LA351	Plain Pressed*	L	Micro bevel	1960x159x15	8	2,240
		BF-LA353	Plain Pressed*	O	Micro bevel	1960x159x15	8	2,496
BF-LA321	BF-LA346	BF-LA371	Side Pressed*	L	Micro bevel	1960x159x15	8	2,496
		BF-LA373	Side Pressed*	O	Micro bevel	1960x159x15	8	2,496
BF-DT301		BF-DT351	High Density®*	LN	Micro bevel	1830x142x13	6	1,560
BF-DT303		BF-DT353	High Density®*	O	Micro bevel	1830x142x13	6	1,560

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued (for glue details see full version of installation instruction) and can also be installed floating (max width 6 m, max length 12 m, using expansion gaps).
- For floating installation use a PVAC wood adhesive to join the tongue and groove together.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm²
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)

  Please ask your glue supplier for more information.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be re-oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- Full version available at ▶ **www.moso-bamboo.com/elite**

Technical characteristics and certifications

- Density (Toplayer): ± 700 kg/m³ (SP/PP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 5 mm (SP/PP), approx. 3 mm (HD)
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP/PP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP/PP)
  8% at 20°C and 50% rel. Air Humidity (SP/PP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP/PP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class Cfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Slip resistance [2]: USRV 22 (SP/PP), USRV 26 (HD) (CEN/TS 15676) / R 10 (DIN 51130)
- Thermal conductivity: 0.17 W/mK (SP/PP), 0.19 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0882 m²K/W (SP/PP), 0.0784 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), EQ2
  v2009: MR 6, MR 7 (FSC®), IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[2] Only for lacquered versions.

DoP EN 17009 · Cfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804

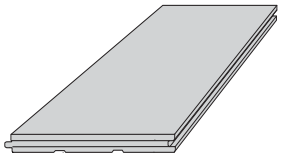
Also available with FSC® certification.

30 YEARS GUARANTEE · EMISSIONS DANS L'AIR INTÉRIEUR A+ · breeam

FSC www.fsc.org
The mark of responsible forestry
FSC® C002063

MOSO® Bamboo Elite Herringbone

The MOSO® Bamboo Elite Herringbone floor boards are made of three layers of solid bamboo of which the middle layer is pressed in cross direction to maximise the stability. The boards are equipped with a tongue/groove connection and are placed alternating left and right on the board which enables you to install them in a beautiful herringbone pattern.



Caramel
Side Pressed

Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered (extra matt) 80 g/m², **O**: Pre-oiled Woca Air Dried (has to be re-oiled after installation).
*) Middle layer cross pressed, **) Approx. 0,1 mm (barely visible).

Caramel	Style	Finish	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m²)
BF-EL371-VG	Side Pressed*	L	Nano bevel**	650x130x15	24	2.040
BF-EL373-VG	Side Pressed*	O	Nano bevel**	650x130x15	24	2.040
BF-EL250-VG	High Density®**	L	Nano bevel**	600x120x13	24	1.728

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued (for glue details see full version of installation instruction) and can also be installed floating (max width 6 m, max length 12 m, using expansion gaps). The tongue and groove of the herringbone boards are placed alternately left and right, to enable installation of the herringbone pattern.
- For floating installation use a PVAC wood adhesive to join the tongue and groove together.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm²
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)

  Please ask your glue supplier for more information.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be re-oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- Full version available at ▶ **www.moso-bamboo.com/elite-herringbone**

Technical characteristics and certifications

- Density (Toplayer): ± 700 kg/m³ (SP/PP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 5 mm (SP/PP), approx. 3 mm (HD)
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP/PP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP/PP)
  8% at 20°C and 50% rel. Air Humidity (SP/PP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP/PP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class Cfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Thermal conductivity: 0.17 W/mK (SP/PP), 0.19 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0882 m²K/W (SP/PP), 0.0784 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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®), EQ2 v2009: MR 6, MR 7 (FSC®), IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

DoP EN 17009 | Cfl-s1 | E0 HCHO | CO_2 NEUTRAL | EPD EN15804 | 30 YEARS GUARANTEE | EMISSIONS DANS L'AIR INTÉRIEUR A+ | breeam

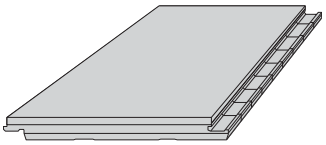
Also available with FSC® certification.

FSC www.fsc.org The mark of responsible forestry FSC® C002063

EN-2023-06

MOSO® Bamboo Elite Premium

MOSO® Bamboo Elite Premium is a floor board that is even longer and wider compared to Bamboo Elite. The board is made of three layers of solid bamboo, the middle layer is pressed in cross direction to maximise the stability. The boards are equipped with a click system for easy installation.



More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered (extra matt) 80 g/m², **SL**: Stained-lacquered (extra matt) 80 g/m², **O**: Pre-oiled Woca Air Dried (has to be re-oiled after installation),
*) Middle layer cross pressed, **) Approx. 0,1 mm (barely visible).

Natural	Ecru	Caramel	Style	Finish	Colour	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m^2)
	BF-EL346	BF-EL371	Side Pressed*	L	Transparent	Nano bevel**	1960x190x15	6	2,976
BF-EL321-02			Side Pressed*	SL	White	Nano bevel**	1960x190x15	6	2,976
		BF-EL373	Side Pressed*	O	Transparent	Nano bevel**	1960x190x15	6	2,976
		BF-EL250	High Density®*	L	Transparent	Nano bevel**	1850x190x15	5	2,112
BF-EL200-02			High Density®*	SL	White	Nano bevel**	1850x190x15	5	2,112

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be installed floating (max width 7 m, max length 12 m, using expansion gaps) but can also be fully glued to the subfloor.
- This floor type can be installed – under certain conditions – on floor heating / cooling. ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be re-oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- Full version available at ▶ **www.moso-bamboo.com/elite-premium**

Technical characteristics and certifications

- Density (Toplayer): ± 700 kg/m³ (SP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 4 mm
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP) 8% at 20°C and 50% rel. Air Humidity (SP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class Cfl-s1 (SP), Class Bfl-s1 (HD) (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Slip resistance [2]: PTV 54 (CEN/TS 15676) / R 10 (DIN 51130)
- Thermal conductivity: 0.17 W/mK (SP), 0.19 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0882 m²K/W (SP), 0.0725 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2 v2009: MR 6, MR 7 (FSC®), IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[2] Only for lacquered versions.

DoP EN 17009 · Bfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804 · 30 YEARS GUARANTEE · EMISSIONS DANS L'AIR INTÉRIEUR A+ · breeam

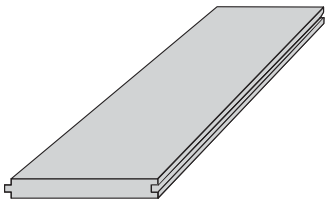
Also available with FSC® certification.

FSC www.fsc.org — The mark of responsible forestry FSC® C002063

MOSO® Bamboo UltraDensity®

(Heavy duty flooring for high traffic areas)

MOSO® Bamboo UltraDensity® is a solid bamboo flooring board made from compressed bamboo strips with an Ultra-High Density®. Thanks to its unique production method the material is extremely stable, hard and durable and therefore suitable for the toughest conditions: in very high traffic areas and even in semi-outdoor areas (protected from direct rain or sunshine). The boards are available unfinished, and have to be finished on site. The boards come with tongue and groove and a bevel on all 4 sides. This flooring type has to be fully glued down or installed screwed down on MOSO® Bamboo X-treme® sub joists or alternative joists.



UltraDensity®

Caramel	Style	Finish	Surface	Edges	Dimensions (mm)
BF-DS1060	UltraDensity®	-	Rough sanded	Macro bevel	1900x160x32
BF-DS2060	UltraDensity®	-	Rough sanded	Macro bevel	1900x160x20
BF-DS2061	UltraDensity®	-	Smooth	Micro bevel	1900x160x18

Installation summary

Screw down installation:

- Install a PE (Polyethylene) film as moisture barrier.
- Install a suitable, fixed, stable and durable sub frame, preferably using Bamboo X-treme® sub beams. Distance between the beams: see table 'field of use', available in booklet.
- Always make sure the end of the board is supported by a joist.
- Maximum length/width of the floor 100 m / 15 m.
- Fix the boards on the sub frame screwing into the tongue of the board at a 45° angle. Always predrill before screwing.

Glue down installation:

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: it should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued.
- MOSO® Bamboo UltraDensity® itself can be installed glued down without expansion gap/joint, but with minimum 10 mm distance from the wall. When the building, where the floor will be installed, requires expansion gaps (for example in concrete subfloors), these expansion gaps needs to be taken over and also be made in the MOSO® Bamboo UltraDensity® floor.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm2 (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5 (3 days balanced at 23 degrees Celsius/50% Air Humidity)
- Please ask your glue supplier for more information.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
- After cleaning and drying, apply an appropriate finish (Woca Diamond Oil Active (Woca No1) is advised for heavy traffic areas).
- After installation: make sure proper cleaning and maintenance is done, according to the chosen finish.
- Full version available at ▶ **www.moso-bamboo.com/ultradensity**

Technical characteristics and certifications

- Density (product): ± 1150 kg/m³
- Composition: 93% bamboo strips (lignin/cellulose) and 7% glue (outdoor resistance).
- Top layer thickness / Wear layer: approx. 7 mm for the 20 mm boards / 11 mm for the 32 mm boards
- Dimensional stability: Results conform to French standard NF B 54008 (ISO 24339).
- Resistance to Indentation – Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire [1]: Class Bfl-s1 (EN 13501-1)
- Slip resistance [1]: USRV 118 (EN 13036-4), R 10 (CEN/TS 16165 Annex B - DIN 51130)
- Thermal conductivity: 0.28 W/mK (EN 12667)
- Thermal resistance: 0.0645 m²K/W (18 mm), 0.0716 m²K/W (20 mm) (EN 12667)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [2], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Emission of VOC: A+ (ISO 16000-9)
- Modulus of Elasticity: 12090 N/mm² (mean value - EN 408)
- Bending strength: 99.6 N/mm² (characteristic value - EN 408)
- Bending strength: 95.5 N/mm² (EN 310)
- Biological durability: Class 2 (EN 350 / CEN/TS 15083-1)
- Use class: Class 3.1 (EN 335 / EN 460)
- UPEC classification according to French standard: Class $U_4P_4E_2C_2$ [1]
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (wwww.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 v2009: MR 6, MR 7 (FSC®), IEQ 4.4
- Contribution BREEAM: HEA2, MAT 1, MAT 3 (FSC®), MAT 5
- Guarantee: 30 years

[1] Only when finished with Woca Diamond Oil Active (WocaN°1) oil.

[2] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

DoP EN 17009 · Bfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804 · 30 YEARS GUARANTEE · Class 2 (CEN/TS 15083-1) EN350 · Class 3.1 EN335 · EMISSIONS DANS L'AIR INTÉRIEUR A+ · LEED USGBC · breeam

Also available with FSC® certification.

FSC www.fsc.org

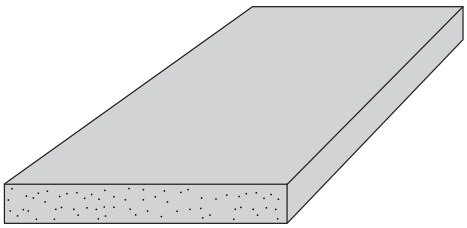
The mark of responsible forestry

FSC® C002063

EN-2023-06

MOSO® Bamboo UltraDensity® **Stair Panels**

The MOSO® Bamboo UltraDensity® Stair Panel is a solid bamboo board, made from compressed bamboo strips. Its unique production method makes the panels very dense, hard and stable. The product has been certified and the mechanical properties allow for structural applications such as stairs. Bamboo UltraDensity® Stair Panel is suitable for semi-outdoor covered areas and indoor applications (Use Class 3 / EN 335).



UltraDensity®

Caramel	Style	Finish	Edge	Thickness (mm)	Dimensions (mm)
BP-DS1080	UltraDensity®	-	Square edge	38	2440x320

- The look may be different compared to High Density® flooring, please check before ordering if the products can be combined.
- Because of the High Density® of the UltraDensity® products the surface is very closed.

Technical characteristics and certifications

- Density: ± 1150 kg/m³
- Dimensional stability: Results conform to French standard NF B 54008 (ISO 24339)
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Reaction to fire: Class Bfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- VOC emission: A+ (ISO 16000-9)
- Modulus of Elasticity: 12090 N/mm² (mean value - EN 408)
- Bending strength: 99.6 N/mm² (characteristic value - EN 408)
- Bending strength: 95.5 N/mm² (EN 310)
- Biological durability: Class 2 (EN 350 / CEN/TS 15083-1)
- Use Class: Class 3.1 (EN 335 / EN 460)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (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 v2009: MR 6, MR 7 (FSC®), IEQ 4.4
- Contribution BREEAM: HEA2, MAT 1, MAT 3 (FSC®), MAT 5
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

Bfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804

30 YEARS GUARANTEE · Class 2 (CEN/TS 15083-1) EN350 · Class 3.1 EN335 · Émissions dans l'air intérieur A+ A+ A B C · breeam

Also available with FSC® certification.

FSC www.fsc.org The mark of responsible forestry FSC® C002063

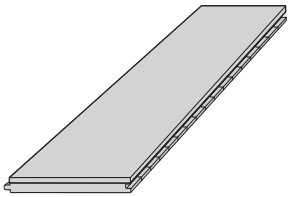
MOSO® Bamboo Flooring
Eternal Collection

The Eternal Collection offers the **strongest** and most **robust** floors in the MOSO® Assortment. Especially for those looking for flooring that will last a **lifetime**, flooring from the Eternal Collection will be the best choice. These floors are so **strong** that they can be installed in the most demanding projects, such as **public buildings**, **offices** and **restaurants**, but are also suitable for residential applications.

Bamboo Supreme
Bamboo Industriale

MOSO® Bamboo Supreme

MOSO® Bamboo Supreme is made from two layers of bamboo, with a 4 mm toplayer and a cross pressed bamboo backing. The total thickness is 10 mm which is relatively thin compared to other wood floors. However, as with any wood species the basic rule is: the thicker, the less stable the wood (shrink/swell). The 10 mm thickness and 4 mm toplayer is an ideal compromise between durability and stability and therefore offers a perfect solution for heavy duty conditions, like installation on floor heating and/or installation in heavy traffic areas.



Natural
Plain/Side Pressed

NEW
Ecru
Plain/Side Pressed

Caramel
Plain/Side Pressed

Natural/Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered Bona 125 g/m², **LN**: Lacquered Bona Naturale (extra matt) 125 g/m², **O**: Pre-oiled Woca Air Dried (to be re-oiled after installation).
*) Approx. 0,1 mm (barely visible).

Natural	Ecru	Caramel	Style	Finish	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m²)
		BF-LA451	Plain Pressed	-	Square edge	970x95x10	36	3,312
		BF-LA471	Side Pressed	-	Square edge	970x95x10	36	3,312
BF-LA403	BF-LA433	BF-LA453	Plain Pressed	O	Square edge	970x95x10	36	3,312
BF-LA423	BF-LA443	BF-LA473	Side Pressed	O	Square edge	970x95x10	36	3,060
BF-DT403		BF-DT453	High Density®	O	Nano bevel*	920x96x10	24	2,112
BF-LA409	BF-LA439	BF-LA459	Plain Pressed	L	Square edge	970x95x10	36	3,312
BF-LA429	BF-LA449	BF-LA479	Side Pressed	L	Square edge	970x95x10	36	3,312
BF-DT409		BF-DT459	High Density®	LN	Nano bevel*	920x96x10	24	2,112

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm²
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)

  Please ask your glue supplier for more information.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be re-oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- Full version available at ▶ **www.moso-bamboo.com/supreme**

Technical characteristics and certifications

- Density (Toplayer): ± 700 kg/m³ (SP/PP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 4 mm
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP/PP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP/PP)
  8% at 20°C and 50% rel. Air Humidity (SP/PP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP/PP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Wear resistance [2]: ≥ 5000 Revolutions (WR2) (SP/PP), ≥ 7000 Revolutions (WR3) (HD) (EN 13696)
- Reaction to fire: Class Cfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Slip resistance [2]: USRV 22 (SP/PP), USRV 26 (HD) (CEN/TS 15676) / R 10 (DIN 51130)
- Thermal conductivity: 0.17 W/mK (SP/PP), 0,21 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0588 m²K/W (SP/PP), 0.0471 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- Critical radiant flux: Class 1 (SP/PP), Class 1 (HD) (ASTM E 648)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2
  v2009: MR 6, MR 7 (FSC®), IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[2] Only for lacquered versions.

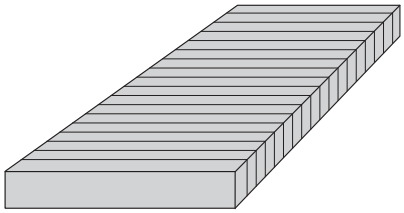
DoP EN 17009 | Cfl-s1 | E0 HCHO | CO_2 NEUTRAL | EPD EN15804 | 30 YEARS GUARANTEE | EMISSIONS DANS L'AIR INTÉRIEUR A+ | breeam

Also available with FSC® certification.

FSC www.fsc.org The mark of responsible forestry FSC® C002063

MOSO® Bamboo Industriale

MOSO® Bamboo Industriale consists of small floor 'boards' made from short solid bamboo strips, creating the specific industrial look. The 'boards' are in fact blocks of strips bundled together with tape. The floor installer glues them on the subfloor, sands off the tape, fills the gaps and finishes the surface. Being made of such small strips, the floor is very stable – making it the perfect solution for application on floor heating. This floor has the thickest wear layer of all MOSO® Floors: up to 15 mm!



Natural
Side Pressed

Ecru
Side Pressed
NEW

Caramel
Side Pressed

Natural/Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

Natural	Ecru	Caramel	Style	Finish	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m^2)
BF-PR300	BF-PR400	BF-PR350	Side Pressed	-	Square edge	280x140x10	96	3,744
		BF-PR150	Side Pressed	-	Square edge	280x140x15	60	2,340
BF-PR1000		BF-PR1050	High Density®	-	Square edge	300x200x10	32	1,920

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm²
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)

  Please ask your glue supplier for more information.
- After the glue has hardened, the floor can be sanded, filled (with a mixture of sanding dust and floor filler) and finished (with floor lacquer or oil).
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- **Attention**: the width of the individual bamboo strips can vary between approx. 4 and 8mm (High Density® 13-14mm). MOSO® guarantees that within 1 delivery the variation in strip width is limited.
- Full version available at ▶ **www.moso-bamboo.com/industriale**

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³ (SP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 10 mm
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP) 8% at 20°C and 50% rel. Air Humidity (SP)
- Resistance to Indentation - Brinell Hardness: ± 3 kg/mm² (SP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class Cfl-s1 (SP), Class Bfl-s1 (HD) (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Thermal conductivity: 0.17 W/mK (SP), 0.26 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0588 m²K/W (SP), 0.0392 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- Critical radiant flux: Class 1 (SP), Class 1 (HD) (ASTM E 648)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- Contribution LEED BD+C - v4: MR 1, MR 2, EQ2
  v2009: MR 6, IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

DoP EN 17009 · Bfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804 · 30 YEARS GUARANTEE · ÉMISSIONS DANS L'AIR INTÉRIEUR A+ · breeam

EN-2023-06

MOSO® Bamboo Flooring
Dynamic Collection

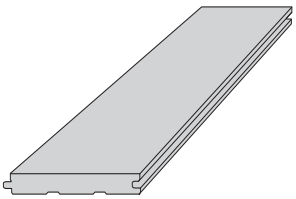
The Dynamic Collection offers an **economical** choice for customers who want natural flooring that is **easy to install**. It does not mean that these floors are of a lesser quality or offer less choice. In fact, the Dynamic Collection provides the **widest range** of possibilities in colour, patterns, finishes, and dimensions, matching the latest trends.

Pure**bamboo**
Top**bamboo**

MOSO® Purebamboo

MOSO® Purebamboo is made entirely of solid bamboo, either with strips pressed together horizontally (Plain Pressed), vertically (Side Pressed) or compressed (High Density®). This floor type is a good solution when an economical but high performance bamboo floor is required. Purebamboo (in Plain Pressed version) was the first bamboo floor ever – all other bamboo floors have been derived from this classic version.

960x96x15 mm
915x96x12 mm



Natural
Plain/Side Pressed

Ecru
Plain/Side Pressed
NEW

Caramel
Plain/Side Pressed

Natural/Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered Treffert 80 g/m².

Natural	Ecru	Caramel	Connection	Style	Finish	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m²)
		BF-LA560	Tongue/Groove	Side Pressed	-	Square edge	960x96x15	24	2,208
BF-LA610	BF-LA635	BF-LA660	Tongue/Groove	Side Pressed	L	Micro bevel	960x96x15	24	2,208
BF-LA810	BF-LA835	BF-LA860	Tongue/Groove	Plain Pressed	L	Micro bevel	960x96x15	24	2,208
BF-DS110		BF-DS160	Tongue/Groove	High Density®	L	Micro bevel	915x96x12	24	2,112

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be fully glued and can also be installed floating (max width 5 m, max length 12 m, using expansion gaps).
- For floating installation use a PVAC wood adhesive to join the tongue and groove together.
- Elastic adhesive systems like 1-component Polyurethane or silan type of adhesives only can be used, when:
  - Shear strength Ts > 1.4 N/mm²
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)
  - Shear elongation y >=0.5
    (3 days balanced at 23 degrees Celsius/50% Air Humidity)

  Please ask your glue supplier for more information.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done, fitting to the chosen finish. For oiled finish: the floor has to be re-oiled after installation. Polish the oil with a red pad or patina disc (possibly afterwards with white pad).
- Full version available at ▶ **www.moso-bamboo.com/purebamboo**

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³ (SP/PP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 5 mm (PP), approx. 6 mm (SP), approx. 3 mm (HD)
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP/PP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP/PP) 8% at 20°C and 50% rel. Air Humidity (SP/PP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP/PP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class Cfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Slip resistance [2]: PTV 56 (CEN/TS 15676) / R 10 (DIN 51130)
- Thermal conductivity: 0.17 W/mK (SP/PP), 0.26 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0882 m²K/W (SP/PP), 0.0471 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- Critical radiant flux: Class 1 (ASTM E 648) (not tested for HD with click system)
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2
  v2009: MR 6, MR 7 (FSC®), IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 30 years

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[2] Only for lacquered versions.

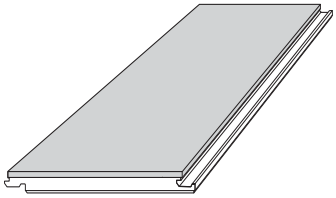
DoP EN 17009 · Cfl-s1 · E0 HCHO · CO_2 NEUTRAL · EPD EN15804 · 30 YEARS GUARANTEE · ÉMISSIONS DANS L'AIR INTÉRIEUR A+ · breeam

Also available with FSC® certification.

FSC www.fsc.org
The mark of responsible forestry
FSC® C002063

MOSO® Topbamboo

MOSO® Topbamboo consists of a top layer of bamboo combined with a HDF (High Density Fibre board) as the core and a softwood backing. Because of this construction, the product is very stable, while the click system, makes it very easy to install (no glue needed).Topbamboo is available in a large variety of fashionable colours and finishes, including brushed and stained versions.




Caramel
Side Pressed


Caramel brushed
Side Pressed


White/Colonial
Side Pressed Caramel


Natural/Caramel
High Density®


Caramel brushed
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

L: Lacquered, **BL**: Brushed Lacquered, **BSL**: Brushed Stained-Lacquered, **O**: Pre-oiled, **BO**: Brushed Pre-oiled.
*) Due to the characteristics of the High Density® bamboo, the 'depth' of the brushing will be different from one board to another. This creates a very natural effect.

Natural	Caramel	Style	Finish	Colour	Edges	Dimensions (mm)	Box Content (pcs.)	Box Content (m^2)
	BF-SW1151-L01	Side Pressed	L	Transparent	Micro bevel	960x128x10	12	1,476
	BF-SW1151B-L01	Side Pressed	BL	Transparent	Micro bevel	960x128x10	12	1,476
	BF-SW1151B-L02	Side Pressed	BSL	White	Micro bevel	960x128x10	12	1,476
	BF-SW1151B-L06	Side Pressed	BSL	Colonial	Micro bevel	960x128x10	12	1,476
	BF-SW1153-W01	Side Pressed	O	Transparent	Micro bevel	960x128x10	12	1,476
	BF-SW1153B-W01	Side Pressed	BO	Transparent	Micro bevel	960x128x10	12	1,476
BF-SW1210-L01	BF-SW1260-L01	High Density®	L	Transparent	Micro bevel	920x125x10	12	1,380
	BF-SW1260B-L01	High Density®	BL*	Transparent	Micro bevel	920x125x10	12	1,380

Installation summary

- Check room climate conditions (room temp. 18-21°C, air humidity 40-65%).
- Check subfloor: this should be flat/clean/stable and should not exceed the maximum allowed moisture content (for example 1.8% for sand cement).
- The floor should be installed floating (max width 7 m, max length 12 m, using expansion gaps) but can also be fully glued to the subfloor.
- This floor is equipped with a click system, you can install the floor without using glue.
- This floor type can be installed – under certain conditions – on floor heating / cooling.
  ▶ **www.moso-bamboo.com/floorheating-cooling**
- After installation: make sure proper cleaning and maintenance is done. See full version of installation instruction for further details.
- Full version available at ▶ **www.moso-bamboo.com/topbamboo**

Technical characteristics and certifications

- Density (Toplayer): ± 700 kg/m³ (SP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: approx. 2.5 mm
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP)
- Equilibrium MC bamboo: 10% at 20°C and 65% rel. Air Humidity (SP)
  8% at 20°C and 50% rel. Air Humidity (SP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP), ± 9.5 kg/mm² (HD)
  (average value - EN 1534)
- Resistance to Impact (Elasticity): > 1000 (EC1) (SP/PP), > 1400 (EC3) (HD) (EN 438-2)
- Wear resistance [1]: ≥ 3500 Revolutions (EN 13696)
- Reaction to fire: Class Cfl-s1 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [2], Class E1 (< 0.100 mg/m³,
  EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Slip resistance [2]: PTV 54 (Smooth) (CEN/TS 16165 Annex C) /
  USRV 28 (Brushed) (CEN/TS 15676)
  R 10 (Smooth) / R 11 (Brushed) (DIN 51130)
- Thermal conductivity: 0.17 W/mK (SP), 0,18 W/mK (HD) (EN 12667)
- Thermal resistance: 0.0591 m²K/W (SP), 0.0542 m²K/W (HD) (EN 12667)
- Use Class: Class 1 (EN 335)
- Contribution LEED BD+C - v4: EQ2 / v2009: MR 6, IEQ 4.3
- Contribution BREEAM: HEA 2, MAT 1, MAT 5 (HD)
- Guarantee: 10 years

[1] Only for lacquered versions.
[2] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

DoP EN 17009 · Cfl-s1 · E0 HCHO · 10 YEARS GUARANTEE · Émissions dans l'air intérieur A+ · breeam

EN-2023-06

MOSO® Bamboo Flooring
Accessories

MOSO® offers a full array of bamboo accessories for a sophisticated finishing touch to the MOSO® Floor of your choice.

Skirting

MOSO® supplies both skirting strips (to be nailed on the floor) and skirting boards (to be screwed on the wall). The skirting is available in both unfinished and pre finished.

Skirting strip

L: Lacquered, **SL**: Stain-Lacquered.
*) Colours available consistent with flooring assortment.

Natural	Ecru	Caramel	Style	Finish	Dimensions (mm)
BS-F100		BS-F150	Plain Pressed	-	2000x25x5
		BS-F150-*	Plain Pressed	SL	2000x25x5
BS-F200	BS-F225	BS-F250	Plain Pressed	L	2000x25x5
		BS-FDT151	High Density®	-	1830x25x5
BS-FDT201		BS-FDT251	High Density®	L	1830x25x5

Skirting board

L: Lacquered, **SL**: Stain-Lacquered.
*) Colours available consistent with flooring assortment.

Natural	Ecru	Caramel	Style	Finish	Dimensions (mm)
BS-DT100-L		BS-DT150-L	High Density®	L	1830x68x15
BS-DT100-L02		BS-DT150-L02	High Density®	SL WHITE	1830x68x15
BS-H200		BS-H250	Side Pressed	-	2000x50x15
BS-H300		BS-H350	Plain Pressed	-	2000x50x15
BS-H200-L	BS-H225-L	BS-H250-L	Side Pressed	L	2000x50x15
BS-H200-*		BS-H250-*	Side Pressed	SL	2000x50x15
BS-H300-L	BS-H325-L	BS-H350-L	Plain Pressed	L	2000x50x15

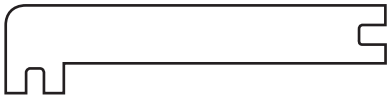
Installation

- Skirting strip: Nailed on floor
- Skirting board: Screwed on wall

Application

- Skirting strip: Apply to floors with fixed installation
- Skirting board: Apply to floors with floating installation and fixed installation

MOSO® Bamboo Flooring
Accessories



Stair nosing

L: Lacquered.
*) Fitting to Bamboo Supreme, **) Fitting to Purebamboo and Bamboo Elite, ***) Fitting to Bamboo Elite.

Natural	Ecru	Caramel	Style	Thickness	Finish	Dimensions (mm)
		BN-PP360*	Plain Pressed	10mm	-	2000x50x10/15
		BN-SP360*	Side Pressed	10mm	-	2000x50x10/15
BN-PP319*	BN-PP344	BN-PP369*	Plain Pressed	10mm	L	2000x50x10/15
BN-SP319*	BN-SP344	BN-SP369*	Side Pressed	10mm	L	2000x50x10/15
BN-DT319*		BN-DT369*	High Density®	10mm	L	1830x50x10/15
		BN-PP350**	Plain Pressed	15mm	-	2000x55x15/20
		BN-SP350**	Side Pressed	15mm	-	2000x55x15/20
BN-PP309**	BN-PP334	BN-PP359**	Plain Pressed	15mm	L	2000x55x15/20
BN-SP309**	BN-SP334	BN-SP359**	Side Pressed	15mm	L	2000x55x15/20
		BN-SP370**	Side Pressed	15mm	-	2000x55x15/20
BN-SP329**		BN-SP379**	Side Pressed	15mm	L	2000x55x15/20
BN-DT519***		BN-DT569***	High Density®	13mm	L	1830x55x13/18

Maintenance and repair

Product Code	Brand	Product
OIL-WOCA-002	Woca	1 Ltr WOCA Maintenance Oil Natural
OIL-WOCA-003	Woca	2,5 Ltr WOCA Maintenance Oil Natural

MOSO® Bamboo Flooring
Floor heating / cooling

Attention: by installing a bamboo (or any other natural material) floor onto floor heating your floor will dry out more than in normal circumstances and can therefore shrink. This can lead to seams between the boards, cupping and even small cracks on the surface. To minimise this, you need to create optimal room conditions: a temperature of approx. 18-21°C and a 40-65% relative air humidity (use a hygrometer + thermometer to monitor this).

Not all MOSO® Floor types can be installed on a floor heating/cooling system. In the installation instruction or the datasheet of your MOSO® Floor you will find whether it is suitable for installation on floor heating or not.
If your selected MOSO® Floor is suitable, please make sure the following conditions are met:

- The installation can only take place after determining the moisture content of the subfloor by means of an acceptable concrete moisture (Calcium-carbide method) test. This value should be below the values as indicated in the installation instruction.
- MOSO® Flooring can only be installed on electrical floor heating systems when the capacity is lower than 80 W/m². On top of the electrical heating elements there should be a heat distributing layer of at least 4-6 mm (for example levelling compound).
- MOSO® Flooring can only be installed on floor cooling systems when they are equipped with an anti-condensation device.
- The heating/cooling system should be placed throughout the whole room (at least 95% coverage of floor area).
- The slab should at least be 50 mm thick (for water systems, minimal distance from the surface to the tubes: 35 mm).
- The flooring should be fully glued to the subfloor, with a glue which is suitable for using on a floor heating system and must be applied according to the manufacturer's instructions.
- Alternatively MOSO® Bamboo Excellence and MOSO® Bamboo Elite Premium can be installed floating on floor heating. Installation instructions for floating installation for the specific MOSO® Bamboo Flooring products shall be followed and the underlay should be suitable for floorheating.
- Temperature measurement 'probes' should be built in on each heating loop.
- During installation of the flooring the heating system should be turned off and the subfloor should be cooled off.
- The heating system should not be used until 2 weeks after installation. The system should be warmed up slowly and the surface temperature should never exceed 29°C.
- For both cooling off and heating up we advise to do so in small steps of approx. 3°C per 48 hours.
- Make sure the climate in the room is controlled well. Optimal room conditions are a temperature of approx. 18-21°C and a 40-65% relative air humidity (use a hygrometer + thermometer to monitor this).
- If a carpet (or other big object) is placed onto the floor during heating the above mentioned phenomena (seams between the boards, cupping and even small cracks on the surface) can be expected in a more severe extent (heat build-up).
- Whilst all due care is taken to ensure the accuracy of these instructions, individual circumstances (location, sub floor and installation procedures) may vary and are beyond the manufacturer 's control. In case of doubt, therefore, consult your MOSO® Dealer.

MOSO® Bamboo Flooring
Recommended glue

Check complete MOSO® installation instruction of the products and follow the advice of the glue supplier.

Recommended glue for MOSO® Bamboo Flooring*

*) Not for Bamboo Industriale

Brand	Product
Bona	R770
	R850*
	Quantum
Bostik	Wood H550 Eco Plus
	Wood H770 Eco Premium
	Wood P918 2K
Forbo	144 Euromix PU
	157 Eurowood MS Hard Elastic
	158 Eurowood MS Hard Elastic Sepia
Stauf	Stauf SPU-570
	Stauf PUK-446
	Stauf PUK-455
Wakol	PU210
	PU225
	PU350
	MS260

MOSO® Bamboo Flooring
Warranty

Moso International BV guarantees the construction and the glueing of the individual layers for a period of up to 30 years* from the date of purchase in accordance with the following provisions:

- This warranty does not cover damage caused by misuse, accidents, insect infestation, force majeure and damage caused by other, in normal residential unusual,circumstances.
- Also not covered are purely visual impairments such as imprints, joints, discoloration by light, seasonal climaterelated deformation or wear of the surface coating. Damage resulting from improper installation, maintenance, cleaning or maintenance of the surface coating, mechanical or chemical damage or damage caused by moisture effects are also excluded from this warranty.
- This warranty statement supersedes all previous statements; the granting of the manufacturer's warranty applies only to the current version.

Scope

- The guarantee extends to A-grade products and to the exclusive use in normal used spaces.
- The guarantee applies only to application in normal use. Normal use includes, among other things, application of the product in the function for which it was designed.
- The guarantee applies only to the original purchaser and can not be transferred.

Warranty conditions

To make use of the warranty the following conditions must be fulfilled.

- Proper Installation: Please read carefully, before laying the floor, our installation instructions. You can find these in any original package and in addition on the internet at: www.moso-bamboo.com/documentation
  In particular, you should pay attention to the moisture content of the sub floor and to the conditions for laying on floor heating. No claims can be made in case of improper installation!
- Proper care and cleaning: Important information for optimal cleaning and care can be found in each of the original package or on the Internet at www.moso-bamboo.com/documentation. No claims can be made in case of improper care and or cleaning!
- Proper maintenance of the coating: The wear of the coating is not part of the warranty. If the coating surface shows signs of wear, in whole or in part, it must be timely renewed in order to protect the material. No claims can be made in case of improper maintenance of the surface coating.

Warranty

- This warranty applies in addition to the normal legal rights of the buyer, including the rights of the buyer against the seller.
- If a claim is granted before laying the material, faulty boards are replaced free of charge. No claims can be made after laying the material if the buyer could have detected the defects before installation. This warranty does not cover damage that was caused by third parties (eg transport damage).
- If defects occur after installation, Moso International BV reserves the right to either repair the defect or to offer material free of charge to the buyer.
- If the defective product is no longer in the product range, an equivalent from the current range will be supplied.
- A claim does not lead to an extension of the warranty period.
- The cost for the replacement of material and other charges are not included in the warranty.

Settlement of the guarantee

- The claim must be made in writing, within 30 days, to the MOSO® dealer / seller, a MOSO® subsidiary or directly to Moso International BV, Adam Smithweg 2, 1689 ZW Zwaag, the Netherlands.
- Moso International BV reserves the right to check the claimed damage, after appointment, on site.

*) Topbamboo
10 years guarantee.

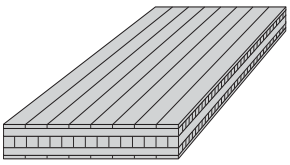
MOSO® Bamboo Panel & Beam
Solid Collection

MOSO® offers a very **broad assortment** of bamboo **panels** and **beams** in various **sizes**, **thickness**, **colours** and **textures**. These products have been used **worldwide** in **various applications** including window frames, doors, stairs, curtain walls, furniture and kitchens.

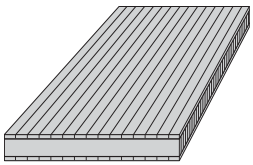
Bamboo Solid Panels
Bamboo Solid Beams
Bamboo N-vision Round Beams
Bamboo N-finity Beams

MOSO® Bamboo Solid Panels

The MOSO® Bamboo Solid Panels consists of multiple layers of bamboo, available in many variations with respect to size, thickness, configuration, style and colour. These bamboo panels are especially interesting in those applications where the side of the panel remains visible, such as steps of a staircase, furniture and kitchen work tops.



Plain Pressed



Side Pressed

Natural
Plain/Side Pressed

NEW

Ecru
Plain/Side Pressed

Caramel
Plain/Side Pressed

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

*) Check availability.

Natural	Ecru	Caramel	Style	Thickness (mm)	Construction (mm)	Dimensions (mm)
BP-MP1230	BP-MP1330	BP-MP1280	Plain Pressed	16	3.5-9-3.5	2440x1220
BP-MP1210	BP-MP1310	BP-MP1260	Plain Pressed	20	4-12-4	2440x1220
BP-5P131	BP-5P331	BP-5P181	Plain Pressed	20	5x4	2440x1220
BP-MP1215	BP-MP1315	BP-MP1265	Plain Pressed	25	4-17-4	2440x1220
BP-MP1240	BP-MP1340	BP-MP1290	Plain Pressed	30	5-20-5	2440x1220
BP-5P105	BP-5P305	BP-5P155	Plain Pressed	40	4-8-16-8-4	2440x1220
BP-5P140	BP-5P340*	BP-5P190	Plain Pressed	40	4-6-20-6-4	3000x700
BP-5P146	BP-5P346*	BP-5P196	Plain Pressed	40	4-6-20-6-4	4000x700
BP-MP400	BP-MP500	BP-MP450	Side Pressed	7	2-3-2	2440x1220
BP-MP1430	BP-MP1530	BP-MP1480	Side Pressed	16	3.5-9-3.5	2440x1220
BP-SP800	BP-SP825	BP-SP850	Side Pressed	19	1x19	2440x1220
BP-MP1410	BP-MP1510	BP-MP1460	Side Pressed	20	4-12-4	2440x1220
BP-MP1415	BP-MP1515	BP-MP1465	Side Pressed	25	4-17-4	2440x1220
BP-MP1440	BP-MP1540	BP-MP1490	Side Pressed	30	5-20-5	2440x1220
BP-5P205	BP-5P405	BP-5P255	Side Pressed	40	4-8-16-8-4	2440x1220
BP-5P240	BP-5P440*	BP-5P290	Side Pressed	40	4-6-20-6-4	3000x700
BP-5P246	BP-5P446*	BP-5P296	Side Pressed	40	4-6-20-6-4	4000x700

Processing instructions summary

- Advised room conditions: temperature approx. 21°C. Air humidity 40-65%.
- The MOSO® Solid Multilayer panels are oversized in length and width and are not calibrated (fine sanded).
- The solid multilayer panels have an A- and B-side. The backside (B) generally contains more colour variation than the surface side (A) and can show small seams between the strips. The backside is marked with a pencil line or sticker.
- Cutting the panel in smaller pieces may result in some bending.
- Solid multilayer panels should be well fastened/supported to avoid bending.
- The inner layers of MOSO® Solid (Multilayer) panels consist of multiple, separated cross segments, which create some small voids in these layers. This construction optimizes the stability of the panels. The voids have to be filled during processing.
- Full version available at ▶ **www.moso-bamboo.com/solid-panel**

Technical characteristics and certifications

- Density: ± 700 kg/m³
- Top layer thickness / Wear layer: 3,5-5 mm [1]
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity 8% at 20°C and 50% rel. Air Humidity
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm²(average value - EN 1534)
- Reaction to fire: Class D-s1-d0 [2] (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [3], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Modulus of Elasticity: 4530 N/mm² (40mm) [4] (mean value - EN 789)
- Glue: D3 water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2
  v2009: MR 6, MR 7 (FSC®), IEQ 4.4 (if requested as E0)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®)

[1] Depending on thickness version.
[2] Tested on 40 mm thickness, as panel, with ventilation space behind boards.
[3] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[4] Modulus of Elasticity of other panels available on request.

D-s1-d0 · E1 HCHO · CO_2 NEUTRAL · EPD EN15804 · breeam

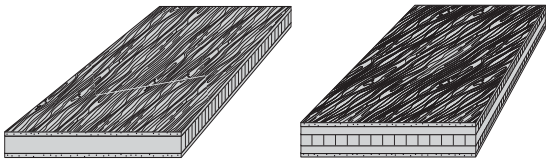
Also available with FSC® certification.

FSC www.fsc.org

The mark of responsible forestry
FSC® C002063

MOSO® Bamboo Solid Panels

The MOSO® Bamboo Solid Panel in High Density® style has a toplayer made of compressed bamboo strips. This makes the Bamboo Solid Panel (HD) very hard and wear resistant and therefore interesting in demanding applications in terms of use or design.



Natural/Caramel
High Density®

Tiger
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

*) Mix of natural and caramel strips, **) High Density® outer layers fingerjointed in length.

Natural	Caramel	Tiger*	Style	Thickness (mm)	Construction (mm)	Dimensions (mm)
BP-DT1000	BP-DT1050	BP-DT1050-NP	High Density® (outer layers)	20	4-12-4	2440x1220
BP-DT5000	BP-DT5050		High Density® (outer layers)	38	3-6-20-6-3	2440x1220
	BP-DT6050**		High Density® (outer layers)	38	3-6-20-6-3	3100x700
	BP-DT6060**		High Density® (outer layers)	38	3-6-20-6-3	4000x700

Processing instructions summary

- Advised room conditions: temperature approx. 21°C. Air humidity 40-65%.
- The MOSO® Solid Multilayer panels are oversized in length and width and are not calibrated (fine sanded).
- The solid multilayer panels have an A- and B-side. The backside (B) generally contains more colour variation than the surface side (A) and can show small seams between the strips. The backside is marked with a pencil line or sticker.
- Cutting the panel in smaller pieces may result in some bending.
- Solid multilayer panels should be well fastened/supported to avoid bending.
- The inner layers of MOSO® Solid (Multilayer) panels consist of multiple, separated cross segments, which create some small voids in these layers. This construction optimizes the stability of the panels. The voids have to be filled during processing.
- The surface of the solid High Density® panels may contain small seams and open pores. Depending on the finishing- and customer requirements, the surface can be closed using a (colour matching) filler.
- Full version available at ▶ **www.moso-bamboo.com/solid-panel**

Technical characteristics and certifications

- Density (Toplayer): ± 1050 kg/m³
- Top layer thickness / Wear layer: 3-4 mm [1]
- Resistance to Indentation - Brinell Hardness: ± 9.5 kg/mm² (average value - EN 1534)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [2], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Modulus of Elasticity: 4318 N/mm² (38 mm) [3] (mean value - EN 789)
- Glue: D3 water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2 v2009: MR 6, MR 7 (FSC®), IEQ 4.4 (if requested as E0)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)

[1] Depending on thickness version.
[2] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.
[3] Modulus of Elasticity of other panels available on request.

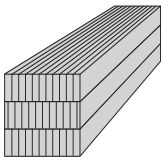
Also available with FSC® certification.

The mark of responsible forestry
FSC® C002063

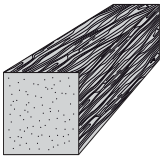
EN-2023-06

MOSO® Bamboo Solid Beams

With MOSO® Bamboo Solid Beams, bamboo can be applied in several decorative covering applications and also (semi) structural applications such as window- and doorframes, where typically tropical hardwood is used. Unlike hardwood, the MOSO® Bamboo Solid Beam is a very regular homogeneous material in terms of stability and structure and is therefore easy to process. The standard length of the beam is 2440 mm, for longer lengths finger jointing or the structural Bamboo N-finity beams provide solutions. The MOSO® Beams are available in the extra hard High Density® version (tropical hardwood look - random line pattern) and the Side / Plain Pressed version (regular line pattern with bamboo nodes visible). Especially in the latter version, due to the construction in various layers, very beautiful line patterns come out after milling.



Side Pressed



High Density*

Ecru
Side Pressed
NEW

Natural/Caramel
Side Pressed

Natural/Caramel
High Density®

More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

*) Attention: this product is 'fine sawn', so a rough, irregular surface is normal. The final (smooth) look will be obtained after processing.

Natural	Ecru	Caramel	Style	Construction (mm)	Dimensions (mm)
BL-200-244	BL-300-244	BL-250-244	Side Pressed	3x18.3	2440x55x55
		BL-260-244	Side Pressed	5x20	2440x120x100
		BL-261-244	Side Pressed	6-20-20-20-6	2440x120x72
		BL-DT260-244*	High Density®	1x100	2440x120x100
BL-DT211-244*		BL-DT261-244*	High Density®	1x72	2440x120x72

Other dimensions available on request.

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³ (SP), ± 1050 kg/m³ (HD)
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity 8% at 20°C and 50% rel. Air Humidity (SP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Reaction to fire: Class D-s1-d0 [1] (SP), Class C-s1-d0 (>1050 kg/m³) [2] (HD), Class B-s1-d0 (>1150 kg/m³ available on request) [2] (HD) (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [3], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Modulus of Elasticity: ± 9721 N/mm² (SP), ± 8866 N/mm² (PP), ± 12505 N/mm² (HD) (mean value - EN 408), Bending strength: ± 56.7 N/mm² (SP), 50.8 N/mm² (PP), 65.4 N/mm² (HD) (characteristic value - EN 408)
- Use Class: Class 1 (EN 335)
- Glue: D3 water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2 v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)

[1] Tested on 40 mm thickness, as panel, with ventilation space behind boards.
[2] Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.
[3] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

Also available with FSC® certification.

C-s1-d0 · E1 HCHO · CO_2 NEUTRAL · EPD EN15804 · FSC www.fsc.org · The mark of responsible forestry FSC® C002063 · LEED USGBC · breeam

EN-2023-06

MOSO® Bamboo N-vision Round Beams (indoor)

The MOSO® Bamboo N-vision Round Beams consist of multiple bamboo strips laminated together to create a hollow round beam or solid round beam. The strips are carbonised before processing to give the material a warm Ecru colour and to increase the stability. Both ends of the hollow Bamboo N-vision Round Beam are closed and inserts are placed at several points throughout the hollow round beam to strengthen it. Bamboo N-vision Round Beams are available unfinished or finished with a matt PU coating on request. The standard length is 2900 mm with a fixed range of diameters. Other lengths or different diameters can be produced custom made.

Solid round beam

Hollow round beam***

Ecru
Side Pressed

Unfinished*	Version	Style	Dimensions** (mm)
BL-SPT150-2900***	Hollow	Side Pressed	2900 x Ø 80
BL-SPT152-2900	Solid	Side Pressed	2900 x Ø 80
BL-SPT160-2900***	Hollow	Side Pressed	2900 x Ø 60
BL-SPT162-2900	Solid	Side Pressed	2900 x Ø 60
BL-SPT172-2900	Solid	Side Pressed	2900 x Ø 40
BL-SPT182-2900	Solid	Side Pressed	2900 x Ø 30
BL-SPT187-2900	Solid	Side Pressed	2900 x Ø 25

*) Bamboo N-vision Round Beams can be finished with a matt PU coating on request.
**) Other lengths or different diameters can be produced custom made.
***) The hollow Bamboo N-vision Round Beams are available on request.

Processing instructions summary

- Advised room conditions: temperature approx. 21°C. Air humidity 40-65%.
- Sawing is possible with regular wood processing tools.

Technical characteristics and certifications

- Density (Material): ± 700 kg/m³
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity
  8% at 20°C and 50% rel. Air Humidity
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (average value - EN 1534)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Use Class: Class 1 (EN 335)
- Glue lamination: D3 indoor water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- Contribution LEED BD+C - v4: MR 1, MR 2, EQ2
  v2009: MR 6
- Contribution BREEAM: HEA 2, MAT 1

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

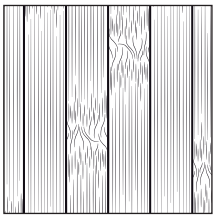
EN-2023-06

MOSO® Bamboo N-finity Indoor

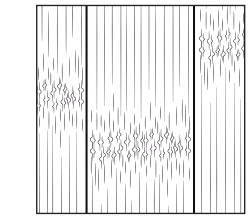
MOSO® Bamboo N-finity Indoor Beams are solid bamboo construction beams developed for structural applications*. The bamboo strips are connected with a special patented hook connection on strip level. Bamboo N-finity has been tested for its mechanical properties (bending, tension, compression, shear) and can be used as a structural beam. The standard range consists of 4 different cross-sections with a length of 5800 mm. The beams are available on request in maximum dimensions of 12.000 x 200 x 120 mm. This product is suitable for interior use in curtain wall systems as well as for window- and door frames.

BL-IL957-580

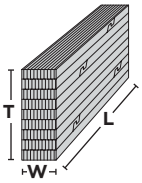
Side Pressed



Plain Pressed



Product Code	Edges	Dimensions L x W x T
BL-IL955-580	Square	5800 x 51 x 161 mm
BL-IL957-580	Square	5800 x 61 x 161 mm
BL-IL456-580	Square	5800 x 86 x 72 mm
BL-IL556-580	Square	5800 x 86 x 82 mm



Please note

- Attention: The surface of this product is fine-sawn (unfinished) and can be further processed at any time if a fine, smooth surface is required.
- Other dimensions can be produced custom made: maximum beam size 12,000 x 200 x 120 mm or 12,000 x 120 x 200 mm.

*) The structural performance depends on the specific design of the application. In Europe structural use in buildings always has to be certified by an independent, accredited test institute.

Technical characteristics and certifications

- Density: ± 700 kg/m³
- Shrink/Swell: 0.14% per 1% change in Moisture Content
- Moisture content: 10% at 20°C and 65% relative humidity, 8% at 20°C and 50% relative humidity
- Brinell Hardness: ± 4 kg/mm² (average value - EN 1534)
- Reaction to fire: Class D-s2-d0 (EN 13501-1)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Modulus of Elasticity: ± 9721 N/mm² (SP), ± 8866 N/mm² (PP) (EN 408)
- Bending strength: ± 56.7 N/mm² (SP), ± 50.8 N/mm² (PP) (EN 408)
- DIBt (Deutsches Institut für Bautechnik) certification: Z-9.1-895
- Use Class: Class 1 (EN 335)
- Glue: D4 Water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) available at www.moso-bamboo.com/epd
- FSC®: FSC® certified products available on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®) v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®)

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

Also available with FSC® certification.

D-s2-d0 · E1 HCHO · CO_2 NEUTRAL · EPD EN15804 · DIBt Z-9.1-895 · FSC www.fsc.org · The mark of responsible forestry FSC® C002063 · LEED · breeam

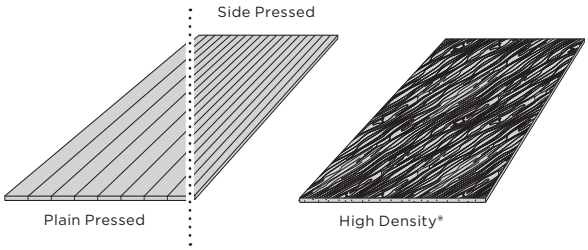
MOSO® Bamboo 1-Ply Panel, Veneer & Flex Supra Collection

The bamboo **1-ply panels**, **veneer** and **flexible bamboo rolls** offer multiple solutions for decorative and sustainable bamboo wall- and ceiling coverings in various sizes, thickness, colours and textures.

Bamboo 1-Ply Panels
Bamboo Veneer
Flex**bamboo**

MOSO® Bamboo 1-ply Panels

MOSO® Bamboo 1-Ply Panels are mainly used as a panel covering material, where the bamboo is pressed, double sided, on a base (for example MDF or chipboard). Most applications require pressing on both sides of the base, to prevent possible bending. The result is a “sandwich panel”.



More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

*) Mix of natural en caramel strips.

Natural	Ecru	Caramel	Tiger*	Style	Thickness (mm)	Construction (mm)	Dimensions (mm)
BP-1P802	BP-1P827	BP-1P852		Plain Pressed	5	1x5	2440x1220
BP-SP302	BP-SP327	BP-SP352		Side Pressed	5	1x5	2440x1220
BP-DT400		BP-DT450	BP-DT450-NP	High Density®	4	1x4	2440x1220

Processing instructions summary

When pressed under high pressure and high temperature a considerable cooling time should be allowed before stacking the cooled (max. 60°C) panels.

- Advised room conditions: temperature approx. 21°C. Air humidity 40-65%.
- The MOSO® 1-Ply Panels are oversized in length and width and are not calibrated (fine sanded).
- The MOSO® 1-Ply Panels have an A- and B-side. The backside (B) generally contains more colour variation than the surface side (A) and can show small seams between the strips. The backside is marked with a pencil line or sticker.
- In most cases the MOSO® 1-Ply Panels/veneer need to be pressed on a carrier material in a “sandwich”- construction (3-ply) to maintain the balance in the total panel and avoid bending. Make sure that the type and thickness of panels on both sides of the carrier are the same.
- The surface of the 1-ply High Density® panels may contain small seams and open pores. Depending on the finishing- and customer requirements, the surface can be closed using a (colour matching) filler.
- Full version available at ▶ **www.moso-bamboo.com/1-ply-panel**

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³ (SP/PP), ± 1050 kg/m³ (HD)
- Top layer thickness / Wear layer: 3-5 mm [1] (SP/PP), 4 mm (HD)
- Shrink/Swell bamboo: 0.14% per 1% change in Moisture Content (SP/PP)
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity (SP/PP)
  8% at 20°C and 50% rel. Air Humidity (SP/PP)
- Resistance to Indentation - Brinell Hardness: ± 4 kg/mm² (SP/PP), ± 9.5 kg/mm² (HD) (average value - EN 1534)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [2], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Use Class: Class 1 (EN 335)
- Glue: D3 water resistant
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2
  v2009: MR 6, MR 7 (FSC®), IEQ 4.4 (if requested as E0)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®), MAT 5 (HD)

[1] Depending on thickness version.
[2] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

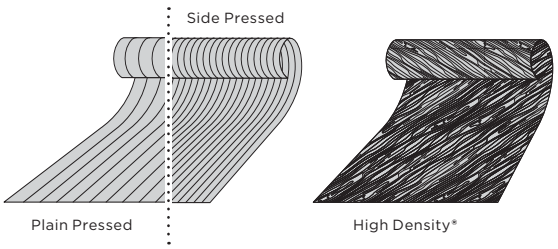
Also available with FSC® certification.

The mark of responsible forestry
FSC® C002063

MOSO® Bamboo Veneer

MOSO® Bamboo Veneer is a high quality veneer, which is created by slicing sheets from laminated blocks made from bamboo strips. To avoid cracks during handling, MOSO® Veneer is backed with a thin, but strong cellulose fleece. This facilitates easy pressing of the veneer sheets on a panel, which enables the use in multiple applications in the building and interior design industries. MOSO® Bamboo Veneer is available in various sizes, colours and styles and can be supplied with formaldehyde free adhesive (E0 norm) and FSC®-certification.

MOSO® Bamboo Veneer is mainly offered in A-quality, is very regular in colour and can therefore be processed with a minimum of cutting and selection waste.



More about MOSO® Bamboo Colours at ▶ **www.moso-bamboo.com/colours**

*) High Density® veneer contains finger joints.

Ecru	Caramel	Style	Thickness (mm)	Dimensions (mm)
	BV-PPC150	Plain Pressed	0.6	2500x430
	BV-PPC154	Plain Pressed	0.6	2500x1250
BV-SPE200	BV-SPC150	Side Pressed	0.6	2500x430
BV-SPE204	BV-SPC154	Side Pressed	0.6	2500x1250
BV-SPE245	BV-SPC195	Side Pressed	0.6	3100x430
BV-SPE246	BV-SPC196	Side Pressed	0.6	3100x1250
	BV-DT154*	High Density®	0.5	2500x1250

Application

MOSO® Veneer is normally pressed, double sided, on panels (like chipboard, multiplex or MDF). The backing is a cellulose fleece which is bonded with D3 water-resistant PVAC glue. The cellulose backing can endure short periods of temperatures above 220 degrees Celsius, for example when splicing the sheets. When pressed under high pressure and high temperature a considerable cooling time should be allowed before stacking the cooled (max. 60°C) panels. To press the backed bamboo veneer MOSO® advises to carry out a glue test first, to determine the exact pressing time, temperature and pressure. The standard thickness of the veneer is 0.6 mm: 0.5 mm bamboo and 0.1 mm backing material. In case the veneer gets sanded, the end-thickness should be minimum 0.2 mm.

Full version available at ▶ **www.moso-bamboo.com/veneer**

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³
- Top layer thickness / Wear layer: 0.6 mm
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity 8% at 20°C and 50% rel. Air Humidity
- Resistance to Indentation - Brinell Hardness: depending on used substrate (EN 1534)
- Formaldehyde emission: Class E0 (< 0.025 mg/m³) [1], Class E1 (< 0.100 mg/m³, EN 717-1), Class E1 (E05) (< 0.050 mg/m³, EN 16516)
- Class E1 (< 0.100 ppm) / Class E0 (< 0.020 ppm) [1] (ASTM E 1333-96)
- Use Class: Class 1 (EN 335)
- Glue: D3 water resistant
- Backing: Non woven cellulose fleece
- CO_2 neutral: LCA report TU Delft (ISO 14040/44) (moso-bamboo.com/lca)
- Environmental Product Declaration - EPD (EN 15804) (moso-bamboo.com/epd)
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), EQ2 v2009: MR 6, MR 7 (FSC®), IEQ 4.4 (if requested as E0)
- Contribution BREEAM: HEA 2, MAT 1, MAT 3 (FSC®)

[1] E0 class is an unofficial formaldehyde emission class, but it is commonly used to indicate that the product is produced with No Added Formaldehyde (NAF) glues. E0 products automatically qualify for the official E1 class according EN 717-1.

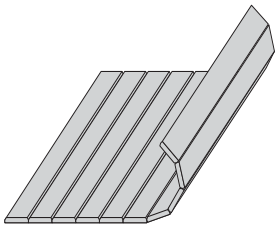
Also available with FSC® certification.

The mark of responsible forestry
FSC® C002063

EN-2023-06

MOSO® Flexbamboo

MOSO® Flexbamboo is a flexible bamboo product often placed on a carrier (e.g. MDF) and mostly used as an aesthetical covering material on walls, ceilings, cabinets or furniture. Different than most MOSO® Products, the bamboo strips are not glued or pressed together into a rigid panel: they are simply connected with a (fabric) backing layer. In this way, a very beautiful decorative layer is created which can be applied just like a veneer or thick wallpaper: it can be glued on a flat (MDF) panel, but also on curved panels, creating beautiful forms and shapes. Flexbamboo thus combines the virtues of bamboo (aesthetical, sustainable) with flexibility and ease of installation.



Solid Strip

Caramel

Caramel	Type	Strip Size (mm)	Finish	Backing	Roll Dimensions (m)
MPCF7-204-21-2250	Solid strip	7x2	-	Fabric	2.04x22.5
MPCF7-244-21-2250	Solid strip	7x2	-	Fabric	2.44x22.5
MPCF15-204-21-2250	Solid strip	15x2	-	Fabric	2.04x22.5
MPCF15-244-21-2250	Solid strip	15x2	-	Fabric	2.44x22.5

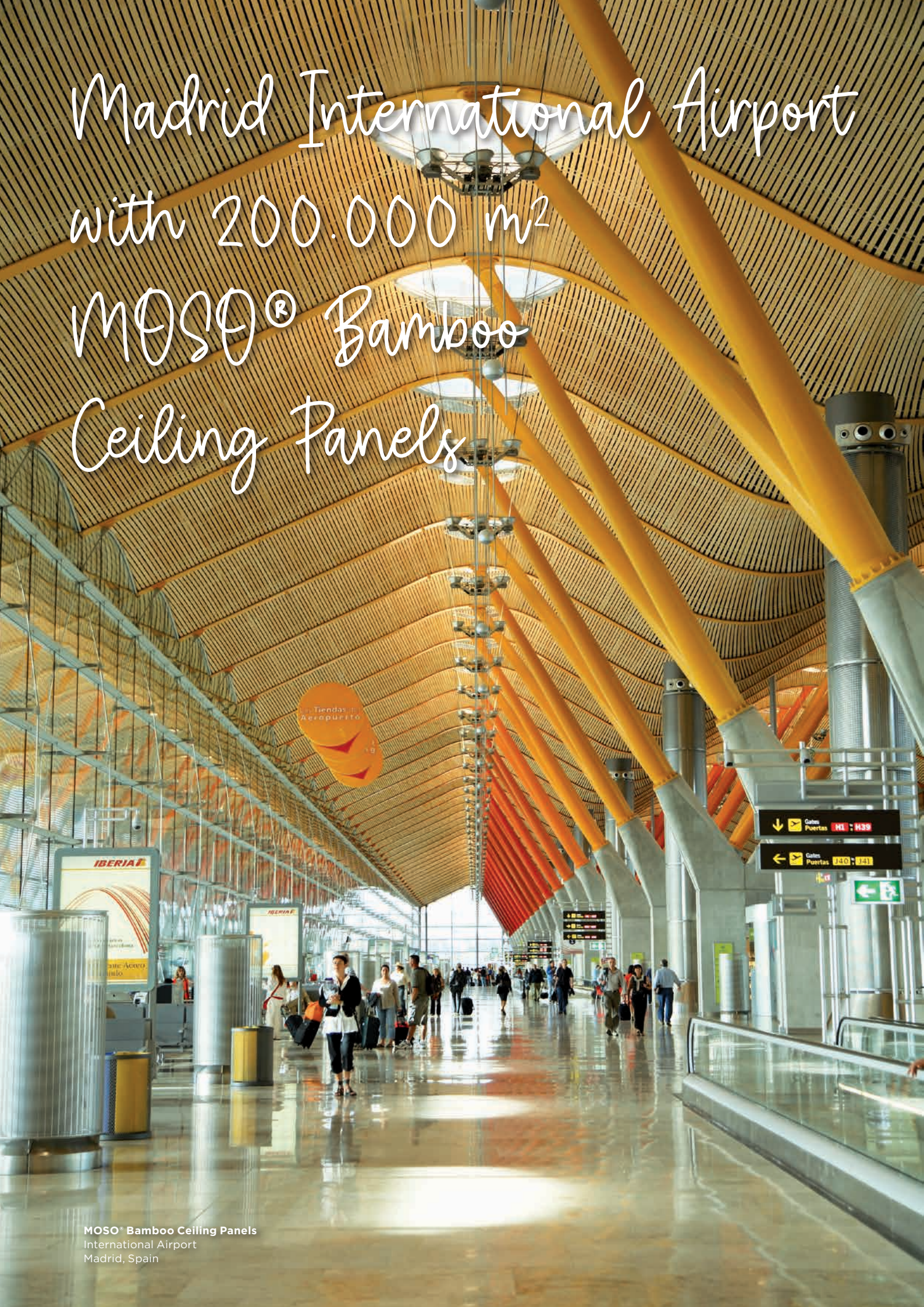
Application

- Common carrier panels: MDF, chipboard, multiplex.
- Pressing: use a suitable glue (PVAC, cold pressed). Use a suitable material (for example veneer) to cover the other side of the panel, to prevent bending of the panel.

Technical characteristics and certifications

- Density (Product): ± 700 kg/m³
- Top layer thickness / Wear layer: 2 mm
- Equilibrium MC: 10% at 20°C and 65% rel. Air Humidity 8% at 20°C and 50% rel. Air Humidity
- Resistance to Indentation - Brinell Hardness: ± 3 kg/mm² (average value - EN 1534)
- Formaldehyde emission: Class E1 (< 0.100 mg/m3, EN 717-1), Class E1 (E05) (< 0.050 mg/m3, EN 16516)
- Use Class: Class 1 (EN 335)
- Glue: D3 water resistant
- Backing: Fabric
- Contribution LEED BD+C - v4: EQ2 v2009: MR 6
- Contribution BREEAM: HEA 2

Madrid International Airport with 200.000 m² MOSO® Bamboo Ceiling Panels

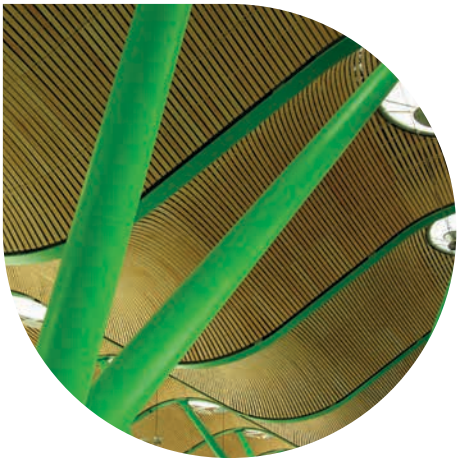


MOSO® Bamboo Ceiling Panels
International Airport
Madrid, Spain

MOSO®
Bamboo Unlimited
Customised Solutions

Besides the broad assortment of flooring, panels & veneer and outdoor products, MOSO® is able to develop **unique bamboo solutions** that meet **exceptionally high demands**. Solutions like Bamboo ceilings, computer flooring, stable planks and jacking beams ask for a special treatment of materials, for which MOSO® created customised solutions.

MOSO® Bamboo Ceiling Board



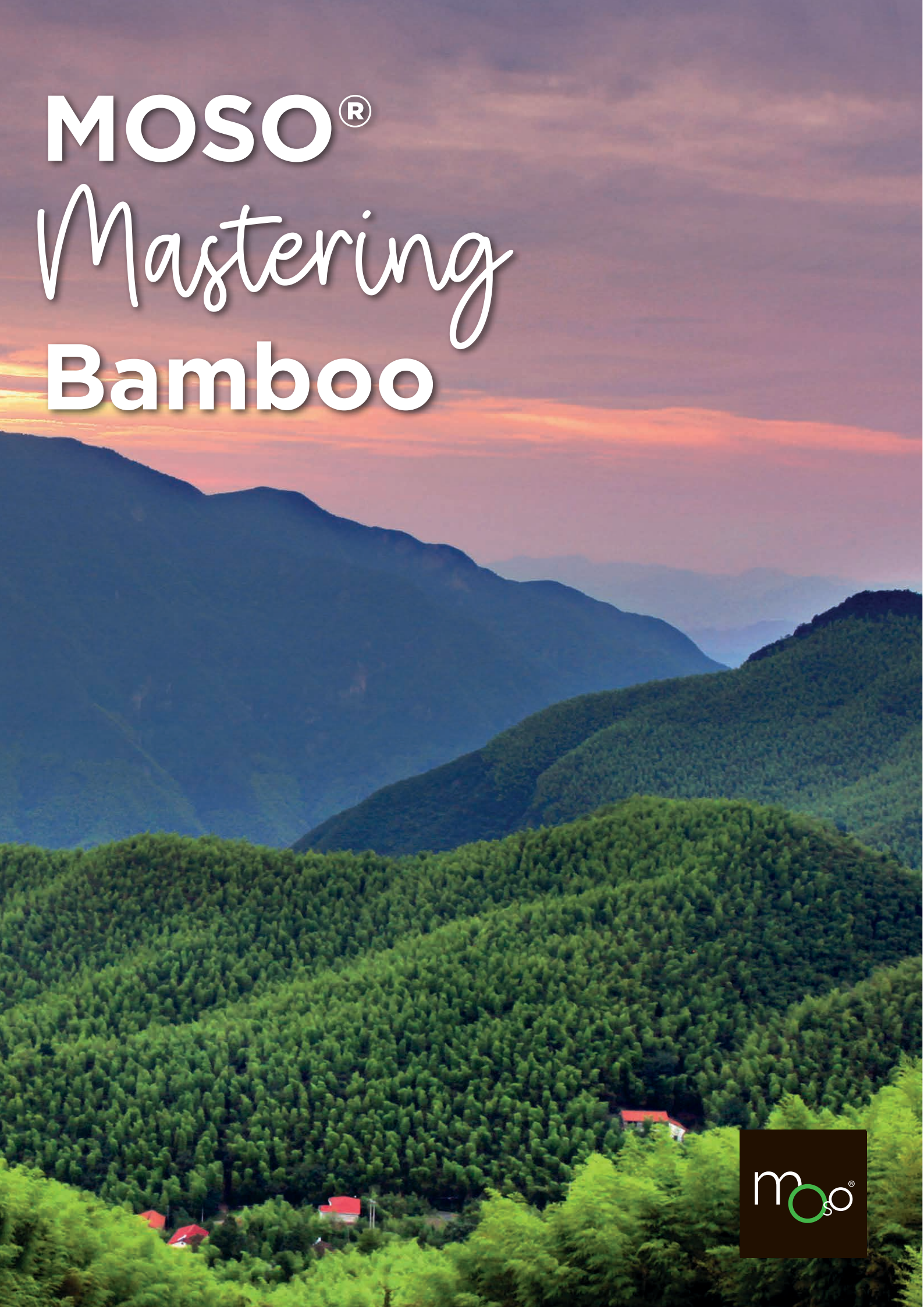
MOSO® Bamboo Computer Flooring

MOSO® Bamboo E-quine Stable Planks

MOSO® Bamboo Jacking Beams

MOSO®

Mastering Bamboo

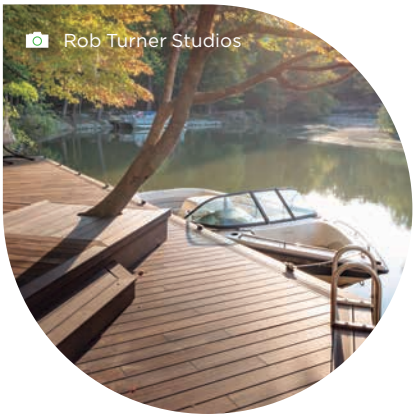


MOSO® Mastering Bamboo

Endless possibilities with MOSO® Bamboo Products: MOSO® develops and creates bamboo products for interior and exterior applications that meet the highest technical requirements and quality standards, enhance the beauty of applications and are made from the sustainable, renewable resource: Moso bamboo. MOSO® Bamboo Products can be divided into four product groups:

MOSO® Bamboo Outdoor

By using either a unique heat-treatment process (Bamboo X-treme®) or steam treatment process (Bamboo N-durance®) the material is made suitable for many exterior applications, such as decking, cladding, fencing, and (furniture-) beams.



MOSO® Bamboo Flooring

Complete range of flooring types with multiple variations in size, colour and style, thus providing dozens of different bamboo flooring possibilities for each market (ranging from domestic to professional).

MOSO® Bamboo Beam, Panel & Veneer

Very broad assortment in various sizes, colours and styles, offering solutions for indoor decoration (walls, ceilings, furniture, doors, etc) and (semi-) structural applications (window frames, curtain walls, etc).

MOSO® Bamboo Unlimited

Unique solutions that can meet exceptionally high requirements from project partners, like Bamboo E-quine Stable Planks and customised solutions for industrial clients like BMW and Dell.

There is no other company worldwide with an equal – and still expanding - broad assortment in high quality bamboo products, permanently available from stock either in Barcelona (office Moso Europe), Milan (office Moso Italy), Cape Town / Johannesburg (office Moso Africa), Worcester (office Moso USA), Dubai (office Moso Middle East), Hangzhou (office Moso China) or at the main office near Amsterdam (Moso International). Furthermore, MOSO® works with several partner companies and leading distributors worldwide to guarantee the availability of MOSO® Bamboo Products in each region.

Furthermore, because of its expertise, MOSO® is able to develop unique, customised bamboo solutions for industrial clients meeting exceptionally stringent requirements. Through its experience, innovative attitude and world-wide network, MOSO® is recognised as the global A-brand in bamboo products. The proof is the impressive list of references and clients such as Madrid Airport, Kempegowda International Airport, BMW, AkzoNobel, Texaco, Guggenheim Museum, SNCF Railway Station Gare du Nord, Iberostar, United Nations (FAO) and CitizenM Hotels. For an overview of our references and clients please refer to our website: **www.moso-bamboo.com/references.**

Discover the benefits of MOSO® Bamboo Products

up to 30 years warranty

CO_2 neutral

hard & durable

beautiful appearance

high stability

fire resistant

vast choice

healthy

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Mastering bamboo

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