

bamboo: the fastest growing plant in the world



certified

durable



fire
resistant



sustainable



proven

Since 2008 over
3 million m²
installed, in
more than
50 countries.



high stability: end-match system



www.moso.eu/green



breeam
★★★★★
excellent

Hotel Jakarta Amsterdam

SeARCH

Lior Teifler



MOSO® Flooring
CityLife Shopping District Milan
LEED Gold



MOSO® Beams, Panels & Veneer
Hotel Jakarta Amsterdam
BREEAM Excellent



MOSO® Outdoor
Venco Campus, The Netherlands
BREEAM Outstanding



MOSO® Unlimited
Campus Palmas Altas, Spain
LEED Platinum

contribution MOSO® products to LEED & BREEAM

LEED version 4 (2013 -)	contribution	flooring	beams, panels & veneer	outdoor (bamboo x-treme®)
MR Credit 1 - Building life-cycle impact reduction	direct	yes (if solid)	yes	yes
MR Credit 2 - Building product disclosure and optimization - environmental product declarations	direct	yes (if solid)	yes	yes
MR Credit 3 - Building product disclosure and optimization - sourcing of raw materials	direct	yes (if requested with FSC®)	yes (if requested with FSC®)	yes (if requested with FSC®)
EQ Credit 2 - Low Emitting Materials	direct	yes	yes	
SS Credit 7: Heat Island Reduction	direct			yes
IN Credit 1 - Innovation	direct	yes (if used in innovative applications or if helps to meet twice the criteria limit)	yes (if used in innovative applications or if helps to meet twice the criteria limit)	yes (if used in innovative applications or if helps to meet twice the criteria limit)
EQ Credit 6 - Interior Lighting	indirect	yes (if natural colour)	yes (if natural colour)	
EQ Credit 9 - Acoustic performance	indirect		yes (optional)	
LEED version 2009	contribution	flooring	beams, panels & veneer	outdoor (bamboo x-treme®)
MR Credit 6 - Rapidly Renewable Materials	direct	yes	yes	yes
MR Credit 7 - Certified Wood	direct	yes (if requested with FSC®)	yes (if requested with FSC®)	yes (if requested with FSC®)
IEQ Credit 4.3 - Low Emitting Materials: Flooring Systems	direct	yes		
IEQ Credit 4.4 - Low Emitting Materials - Composite Wood and Agrifiber Products	direct		yes (if requested with EO glue)	
ID Credit 1 - Innovation in Design	direct	yes (if helps to meet twice the criteria limit)	yes (if helps to meet twice the criteria limit)	yes (if helps to meet twice the criteria limit)
EQ Credit 8.1 - Daylight	indirect	yes (if natural colour)	yes (if natural colour)	
BREEAM International credit	contribution	flooring	beams, panels & veneer	outdoor (bamboo x-treme®)
HEA 2 - Indoor Air Quality	direct	yes	yes	yes (if used indoors)
MAT 1 - Life Cycle Impacts	direct	yes (if solid)	yes	yes
MAT 3 - Responsible Sourcing of Materials	direct	yes (if requested with FSC®)	yes (if requested with FSC®)	yes (if requested with FSC®)
MAT 5 - Designing for Robustness	direct	yes (if high Density®)	yes (if high Density®)	yes
Innovation	direct	yes (if used in an innovative application)	yes (if used in an innovative application)	yes (if used in an innovative application)
MAN 5 - Life cycle cost and service life planning	indirect	yes (if high Density®)	yes (if high Density®)	yes
HEA 1 - Visual comfort	indirect	yes (if natural colour)	yes (if natural colour)	
HEA 5 - Acoustic performance	indirect		yes (optional)	

MOSO®: World Leading in Bamboo

There is no other company worldwide with an equally - and still expanding - broad assortment in high quality bamboo products. MOSO's head office, with the biggest bamboo warehouse in Europe, is located near Amsterdam. Furthermore, MOSO® has offices in Barcelona, Milan, Cape Town and Hangzhou (China). MOSO® works with several partner companies and leading distributors worldwide to guarantee the availability of MOSO® products in each region.

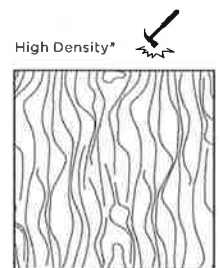
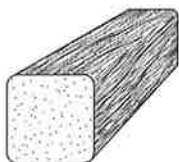
Besides our exceptionally broad assortment in building solutions for indoors & outdoors, we are able to go even further. For industrial clients we develop unique customized solutions such as the 200.000m² ceiling panels at Madrid International airport.

Furthermore, MOSO® bamboo products have been installed in leading green building projects worldwide such as Tel-Aviv University (The Porter School of Environmental Studies - LEED Platinum), CityLife Shopping District in Milan (LEED Gold), Hotel Jakarta in Amsterdam (BREEAM Excellent) and the Venco Campus in Eersel (BREEAM Outstanding).

The proof is the impressive line of references and clients such as Madrid Airport, BMW, AkzoNobel, SNCF, Texaco, Guggenheim Museum, Rabobank, United Nations (FAO), Mercedes and CitizenM Hotels. For an overview of our references and clients please refer to our website: www.moso.eu/references

MOSO® bamboo x-treme® outdoor beams

An unique heat-treatment process at 200°C and increased density (by compressing the bamboo strips) 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 products. The elaborate manufacturing process provides MOSO® Bamboo X-treme® Outdoor Beams 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 Lasur/oil protects the material against this weather related discolouration.



Product Code	Finish	Bevel (also on ends)	Dimensions (mm)
BO-DTHT2170-2-01	Sikkens Cetol	R = 4 mm	2000x115x40
BO-DTHT2171-2-01	Sikkens Cetol	R = 4 mm	2000x80x40
BO-DTHT2172-2-01	Sikkens Cetol	R = 4 mm	2000x60x40
BO-DTHT2173-2-01	Sikkens Cetol	R = 4 mm	2000x40x40
BO-DTHT2174-2-01	Sikkens Cetol	R = 4 mm	2000x55x40
BO-DTHT2175-2-01	Sikkens Cetol	R = 4 mm	2000x90x40

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

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 (EN 1534)
- Reaction to fire: Class B-s1-d0¹⁾ (EN 13501-1)
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371)²⁾
- Solar Reflectance (SR): 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)
- Breaking 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)
- Use Class: Class 4 (EN 335)
- CO₂ neutral: LCA report TU Delft (ISO 14040/44) (www.moso.eu/lca)
- Environmental Product Declaration - EPD (EN 15804) (www.moso.eu/epd)
- FSC[®]: Products available with FSC[®] certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC[®])
v2009: MR 6, MR 7 (FSC[®])
- Contribution BREEAM: MAT 1, MAT 3 (FSC[®]), MAT 5 (HD)
- Guarantee: 10 years

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



The mark of responsible forestry
FSC® C002063