## MOSO® bamboo x-treme® the new generation in sustainable decking



## Moso bamboo the fast growing hardwood alternative



## **bamboo** x-treme®

With MOSO<sup>®</sup> Bamboo X-treme<sup>®</sup> you can create a **beautiful deck** made of natural-grown bamboo, for your **terrace, balcony, swimming pool area** or other **outdoor spaces**. The truly **ecological** and **durable** alternative for increasingly scarce tropical hardwood offers you the touch, feel and look of a natural material. **Bamboo X-treme**<sup>®</sup> is available in a wide range of products including **decking**, **cladding**, **fencing**, and **beams**.

### x-tremely beautiful 6



x-tremely unique 23



x-tremely durable 10

x-tremely complete 24



x-tremely stable 14



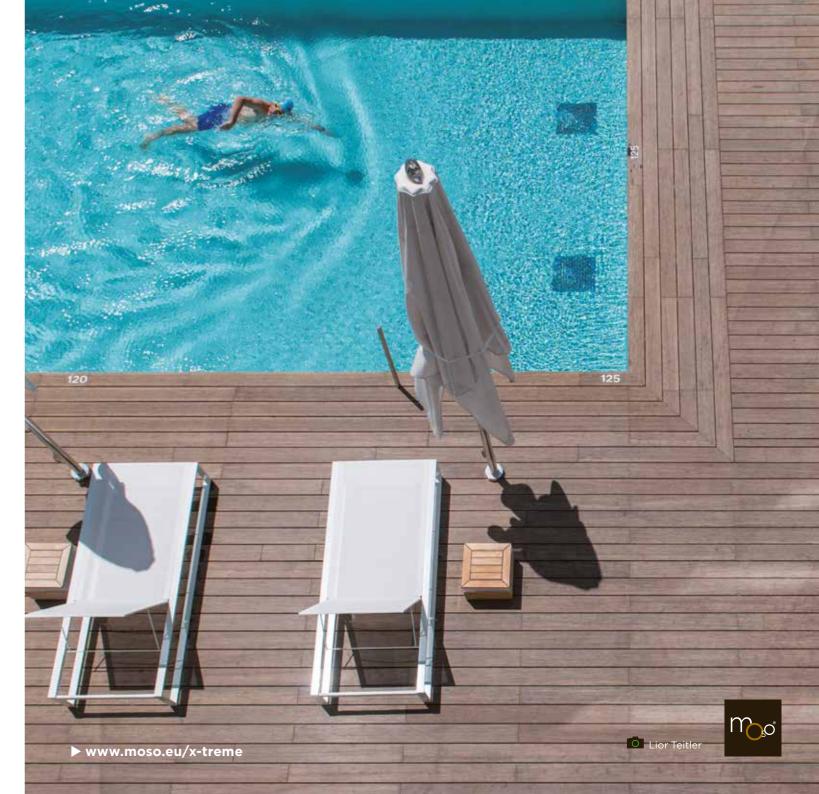
x-tremely sustainable 26



x-tremely versatile 18

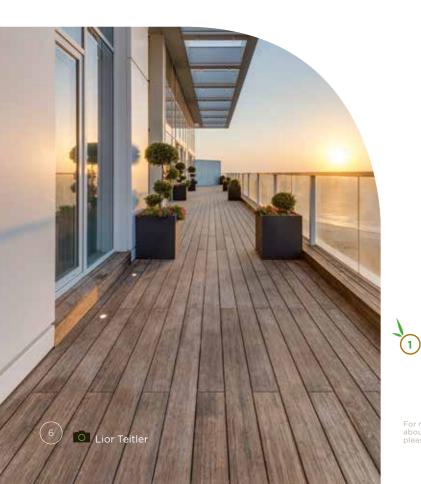
x-tremely impressive 31



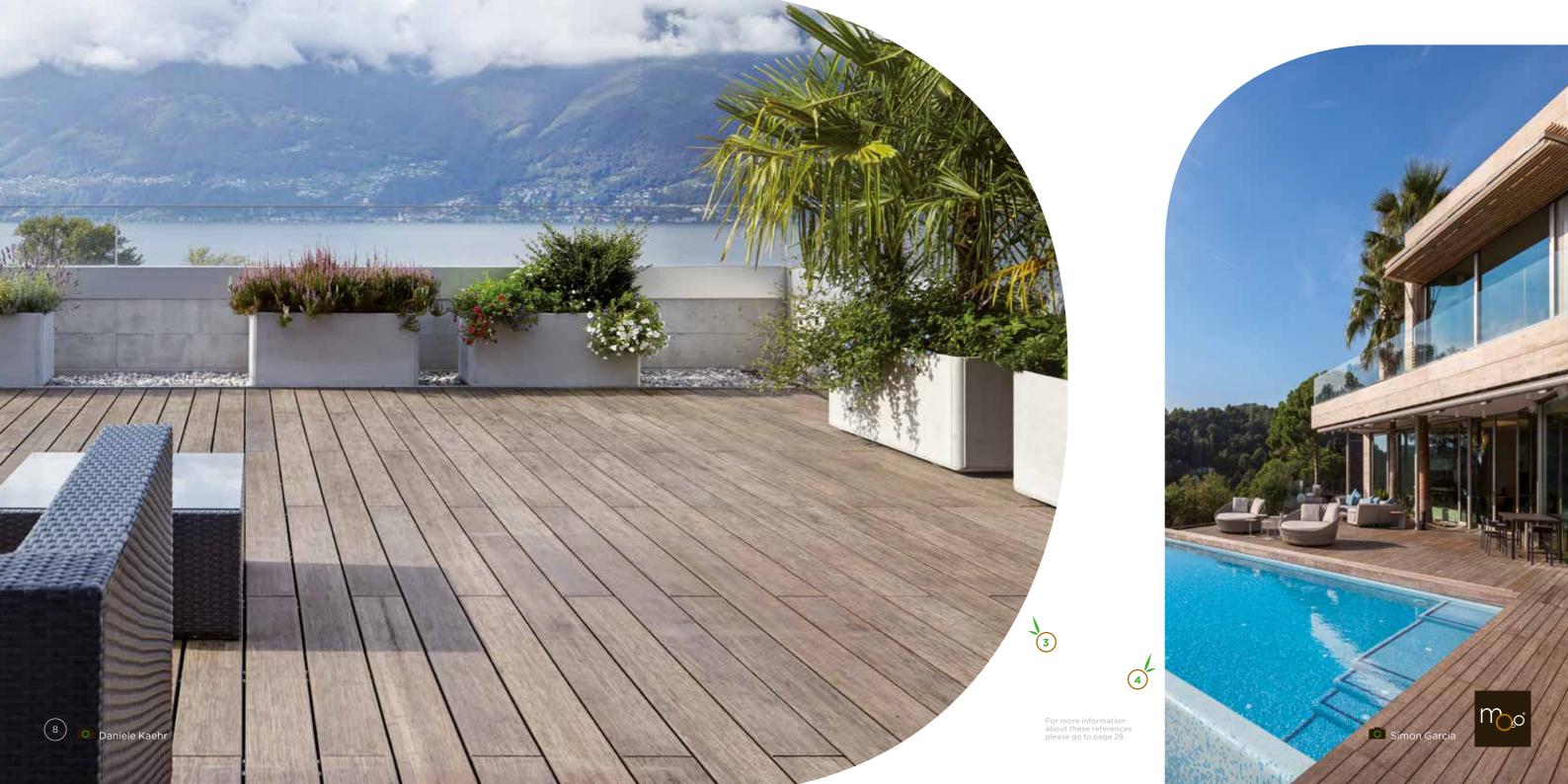


## x-tremely beautiful

Enrich your garden, balcony or roof area with MOSO® Bamboo X-treme®, the natural, fast growing alternative to hardwood. Similar to hardwood, you can determine the look depending on the finish you choose.







## x-tremely durable

MOSO® Bamboo X-treme® is engineered to last for a lifetime. Thanks to a special, patented, Thermo-Density® production process, it is very durable. The proof is the 2,5 million m<sup>2</sup> already installed in various different climates all over the world.



6







x-tremely tough conditions: high traffic, around swimming pools, near coastlines and in extreme climates.

9

For more information about these references please go to page 28.



## x-tremely stable

Duelas Y Maderas

MOSO® Bamboo X-treme® is very stable, enabling the use of hidden fasteners (clips) to fix the boards. It is even possible to create special patterns. The superior stability has another major advantage: it allows a head side endmatched tongue/groove connection to create any length without big gaps.



For more information about these references please go to page 28.



Hennie Raaymakers / DAPh



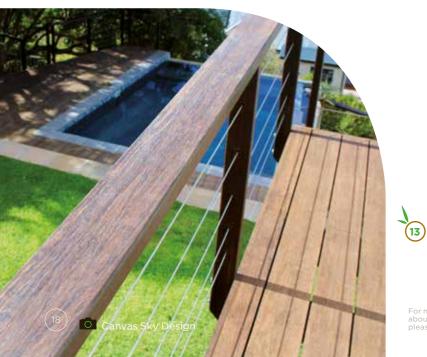


For more information about this reference please go to page 28.

(12)

## x-tremely versatile

MOSO® Bamboo X-treme® decking is available in different widths and depending on the finish and surface treatment you can define your own style of choice. Each board has a flat and a reeded side: just choose the one you like best! In addition to Bamboo X-treme® decking, we offer cladding and fencing boards. Bamboo X-treme® Beams can be used for custom made stairs, furniture and shutters.





For more information about these references please go to page 28.



## x-tremely well made

Moso bamboo is one of the fastest growing plants on earth. The bamboo stems grow from an underground root system and after 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 skin is removed. By modifying the bamboo strips with a special patented Thermo-Density® process, the dimensional stability of bamboo is improved by circa 50%. The heat-treatment at 200°C also ensures protection against superficial fungi and provides the highest durability class possible. After compressing the heat-treated bamboo strips, the material is stronger and harder than almost any other hardwood. That is why we call it: MOSO® Bamboo X-treme®.



compressing the strips into High Density® material



finally creating the final profile and surface

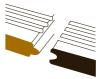


**MOSO® Bamboo X-treme®:** material more stable, harder and stronger than almost any other hardwood in the world!

## x-tremely unique



hard & durable The only bamboo decking with class 1 durability (EN 350) tested following CEN/TS 15083-2 (simulated graveyard test). Exceptionally hard: Brinell >9.5 kg/mm<sup>2</sup>.



high stability

Far more stable than bangkirai (yellow balau) and other tropical hardwoods - enabling tongue and groove endmatched installation (impossible with any other hardwood).



**beautiful appearance** A beautiful, natural hardwood look. Choice of natural greying or keeping brown colour through maintenance.



**CO<sub>2</sub> neutral** Official LCA and carbon footprint studies (ISO 14040/44) confirm that Bamboo X-treme® is CO<sub>2</sub> neutral over the full life cycle.



endless resource

Made from Moso bamboo, the fastest growing plant on earth. Each stem can be harvested after 5 years, and the plant continues to grow.



fireproof

Achieves flame spread index Class A following US standard ASTM E84 and fire resistance class Bfl-s1 following EN 13501-1 facilitating application in public projects.



### easy to install

Very easy to install thanks to the fixed board length (1850 mm) and fixing with MOSO® fasteners.



### economical

Simple and fast installation: Up to 30% savings in costs! Reduced waste of material because of tongue and groove end-matched installation.



## x-tremely complete

In addition to decking, MOSO® provides Bamboo X-treme® sub frame joists, end profiles and maintenance products. With MOSO® fasteners, no screws are visible on the boards which contributes to the beautiful appearance. Make use of the complete range to ensure the quality of the terrace.



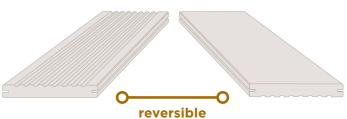


### **x-tremely easy** check out the Bamboo X-treme® installation and maintenance movie at:

► www.moso.eu/x-treme

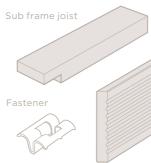






\*) The end of the boards are protected with wax,

Product	Code	Dimensions (mm)
Board unfinished	BO-DTHT170G	1850x137x20
Board pre-oiled Woca	BO-DTHT171G*	1850x137x20
Board pre-oiled Woca	BO-DTHT181G*	1850x137x18
Board unfinished	BO-DTHT190G	1850x155x20
Board pre-oiled Woca	BO-DTHT191G*	1850x155x20
Board unfinished	BO-DTHT210G	1850x178x20
Board pre-oiled Woca	BO-DTHT211G*	1850x178x20
Sub frame joist	BO-SB150	2440x70x40
Sub frame joist	BO-SB155	2440x60x40
Fastener + screw	CLIP-SCREW-BX031	27x22.5x10.8
Fastener starter/end + screw	CLIP-SCREW-BX301	27x17x31
Endprofile	BO-DTHT162	1850x137x20





Also available with FSC<sup>®</sup> certification.









after 12-18 months weathering

after brushing & cleaning

after treatment with decking oil

### appearance and colour

Bamboo X-treme<sup>®</sup> is a natural product, which can vary in colour, grain and appearance. The colour will change over time depending on the maintenance schedule. The boards have a brown to dark brown colour when installed, which turns into a lighter caramel colour in the weeks after installation. Without further maintenance the colour will turn grey as a result of UV radiation (similar to most other wood species).

### maintenance and cleaning

Under the influence of wind, rain, sun and snow the decking will weather. MOSO® recommends maintenance of the pre-oiled decking with Woca maintenance products. Unfinished decking must be treated with a suitable waterbased oil or saturator immediately after installation. Annual maintenance and cleaning should be performed using a cleaner and silicium carbid brush or broom (all maintenance products are available through MOSO®). Check out the complete maintenance and cleaning instruction at:

www.moso.eu/x-treme-maintenance-woca
www.moso.eu/x-treme-maintenance-sikkens

## around swimming pools

As with any wooden product used outdoors, there is always a risk of splinters arising, however splinters from MOSO® Bamboo X-treme® are normally smaller than (tropical) hardwood splinters. A regular cleaning, maintenance, and application of oil (more frequently around swimming pools) is recommended to keep the surface smooth.

## x-tremely sustainable

MOSO<sup>®</sup> Bamboo X-treme<sup>®</sup> offers clear sustainability advantages and is even proven to be CO<sub>2</sub> neutral over its full life cycle! The inclusion of Bamboo X-treme® contributes to a higher LEED and BREEAM certification score for green building projects. That's one of the reasons why you can find the decking and other MOSO® products in many sustainable reference projects all over the world.

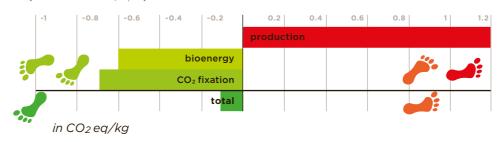




breeam  $\star$ outstanding



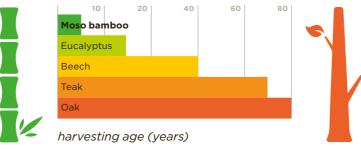
decking, beams, panels and veneer) are CO<sub>2</sub> negative over the full life cycle ("cradle till grave"). In this result the high growth rate of Moso bamboo (see graph below) has not even been taken into account, and can be perceived as additional environmental benefit. The environmental impact of MOSO® products, excluding carbon sequestration effect, was also published in an official Environmental Product Declaration (EPD) following EN 15804 (www.moso.eu/epd).



## unsurpassed growing speed

### Bamboo: the fastest growing plant in the world

Because of the fast growth, Moso bamboo is managed as an agricultural crop: the annual harvest of the 5 year old stems compared to 80 years for tropical hardwood! - provides a steady annual income to farmers and stimulates the bamboo plant to reproduce even faster. Thus, in contrast to tropical hardwood, there is no deforestation taking place for the production of MOSO® Bamboo X-treme®.







## carbon footprint

## MOSO<sup>®</sup> Bamboo X-treme<sup>®</sup>: CO<sub>2</sub> neutral over full life cycle





## **x-tremely** nice references



#### **Hospital Necker**

#### France



**Offices University Lira** Chile



### **Private Residence**

Mexico



**Event location / Restaurant Quinta do Farejal** Portugal



### Hotel Ushuaïa Ibiza Spain



### **Texaco Gas Station**

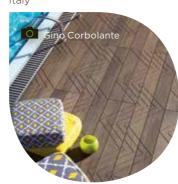
The Netherlands



**Event Location Werk 3** Germany



**Taylor collection** Italy



## **MOSO**<sup>®</sup> Bamboo Flooring

**Campus Hotel Hertenstein** Switzerland



Madrid International Airport

Spain

MOSO Bamboo Panels, Veneer & **Beams** 

Auditorium Treviglio Italy

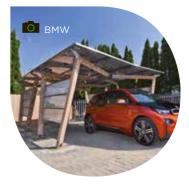


**AkzoNobel Center** The Netherlands



### **BMW Solar Carport**

South Africa



## **Guggenheim Museum**

Spain



**OD Talamanca Hotel** 

Spain



### **Schiphol Airport**

The Netherlands



## MOSO Unlimited Solutions

MOSO<sup>®</sup> world leading in bamboo www.moso.eu/references





## about MOSO®

MOSO International was founded in the Netherlands in 1997. Since then, MOSO® has evolved to become the unchallenged **European market leader** in the development of innovative and sustainable bamboo products for interior and exterior applications.

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, Pennsauken (USA), Dubai and Hangzhou (China). MOSO® works with several partner companies and leading distributors worldwide to **guarantee the availability** of MOSO® products in each region.

Besides Outdoor products, MOSO® offers a very broad assortment of **Bamboo Flooring**, **Panels**, **Veneer** and **Beams** in various sizes, thicknesses, colours and textures. These products are used worldwide in various applications ranging from wall covering, ceilings, window frames, doors, stairs, furniture and kitchens, providing an ideal combination with the MOSO® Outdoor assortment.

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, BMW, AkzoNobel, Texaco, Guggenheim Museum, Rabobank, United Nations (FAO), and CitizenM Hotels. For an overview of our references and clients please visit our website: **www.moso.eu/references**.







# since 2008 over $2,5 \text{ million } \text{m}^2$ installed in more than www.moso.eu/x-treme



#### Headquarters:

Moso International B.V. Adam Smithweg 2 1689 ZW Zwaag The Netherlands T +39 (0)39 900 5440 info@moso.eu

North America

Moso North America Inc. 8400 B Remington Ave Pennsauken, NJ 08110 United States of America T: +1855 343 8444 info@moso-bamboo.com

Gulf Cooperation Council (GCC) Countries:

#### Moso Middle East LLC

202 Al Mansour Bldg. Damascus Road, Al Qusais P.O. Box: 384421, Dubai United Arab Emirates T: +971 4 258 9337 contact@moso.ae

#### www.moso.eu

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

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

Sub-Saharan Africa:

Moso Africa Pty. Ltd. 7 Glosderry Road Kenilworth 7708 Cape Town South Africa T +27 2167 11214 contact@moso-bamboo.co.za

Italy:

**Moso Italia S.R.L** Via Antonio Locatelli 86 20853 Biassono (MB) Italy

T +39 (0)39 900 5440 mosoitalia@moso.eu



**bamboo** x-treme