

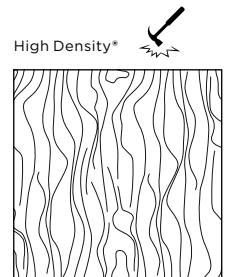
# MOSO® Bamboo X-treme® Outdoor Beams

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 products. 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



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

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

## 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 depends 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, end of the beam must be treated with Sikkens Kodrin WV 456 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](http://www.moso-bamboo.com/x-treme/beams)

## technical characteristics and certifications

- Density: +/- 1150 kg/m<sup>3</sup>
- Dimensional stability:
  - length: + 0,1 %; width + 0,9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ≥ 9.5 kg/mm<sup>2</sup> (EN 1534)
- Reaction to fire: Class B-s1-d0<sup>1)</sup> (EN 13501-1)
- Flame spread index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371)<sup>2)</sup>
- Solar Reflectance (SR): 0.32 (ASTM C1549)<sup>2)</sup>
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980)<sup>2)</sup>
- Modulus of Elasticity: 13565 N/mm<sup>2</sup> (mean value - EN 408)
- Bending strength: 54.4 N/mm<sup>2</sup> (characteristic value - EN 408)
- Biological durability:
  - Class 1 (EN 350 / CEN/TS 15083-2), simulated graveyard test
  - Class 1 (EN 350 / CEN/TS 15083-1)
- Effectiveness against Blue Stain: Class 0 (EN 152)
- Use Class: Class 4 (EN 335)
- CO<sub>2</sub> neutral: LCA report TU Delft (ISO 14040/44) ([www.moso-bamboo.com/lca](http://www.moso-bamboo.com/lca))
- Environmental Product Declaration - EPD (EN 15804) ([www.moso-bamboo.com/epd](http://www.moso-bamboo.com/epd))
- FSC®: Products available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®), SS 7 v2009: MR 6, MR 7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Guarantee: 10 years

<sup>1)</sup> Tested on 18 mm thickness, without gaps between boards, with ventilation space behind boards.

<sup>2)</sup> Tested on 3 years weathered MOSO® Bamboo X-treme®.



The mark of responsible forestry  
FSC® C002063



breeam