

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.

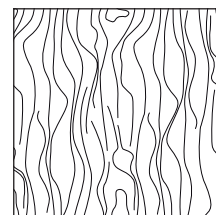
BO-DTC2170-2-01-FP
2000 x 115 x 40 mm



BO-DTC2173-2-01-FP
2000 x 40 x 40 mm



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 spacing.
- 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 (SEALER-05).
- Bamboo N-durance® will naturally weather. If it is preferred to keep close to the original colour, maintenance should be done with Sikkens Cetol WF 771 (SATURATOR-SIK02) or a similar waterbased finish. More information about cleaning and maintenance:
 - www.moso-bamboo.com/n-durance/beams/cleaning-maintenance
- Periodic 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/beams

Technical characteristics and certifications

- Density: $\pm 1200 \text{ kg/m}^3$
- Resistance to Indentation - Brinell Hardness: $\pm 9.5 \text{ kg/mm}^2$ (average value - EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1)¹⁾
- Thermal emittance: 0.89 (ASTM C1371)²⁾
- Solar Reflectance (SR): 0.29 (ASTM C1549)²⁾
- Solar Reflectance Index (SRI): Low 29, Medium 31, High 32 (ASTM E1980)²⁾
- 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, 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 board material with 18 mm thickness, without gaps between boards, with ventilation space behind boards.

²⁾ Tested on 3 years weathered MOSO® Bamboo N-durance®.



The mark of responsible forestry
FSC® C002063



breeam

Profile drawings available here ►
www.moso-bamboo.com/outdoor-profile-drawings

