MOSO® babboo n-finity indoor







Klöckner Pentaplast GmbH Montabaur, Germany Curtain walls, door frames and window frames Design: Archibrand Studio für Architektur & Design

the advantages of MOSO[®] Bamboo N-finity Indoor construction timber

Bamboo is very sustainable, ecological and the fastest growing raw material on earth. In addition, this bamboo construction "timber" has very good mechanical properties, making it ideal for structural applications. Due to its good technical characteristics it is possible to use thinner beams compared to the traditionally used wood species. Examples of applications are: curtain walls, verandas, roof trusses and door- and window frames. MOSO® Bamboo N-finity construction beams can therefore replace aluminum, hardwood and glulam. Bamboo N-finity:

- has very good insulating properties in contrast to e.g. aluminum;
- has a much better ecological footprint compared to aluminum;
- is less sensitive to moisture than wood;
- is very hard and can be delivered with narrow tolerances, therefore little loss in production.



hard and stable

- Brinell hardness > 4 kg/mm²
- The mechanical properties exceed those of the commonly used hardwoods.
- Considerably higher stability than all other woods, making it possible to work very thin - with smaller dimensions than before.



renewable raw material

- Made from Moso bamboo; with a growing speed of up to 1 metre per day the fastest growing plant on earth.
- Ready for harvest after 5 years (compared to up to 100 years for hardwood species) no deforestation.
- Consisting of approx. 97% natural bamboo.



CO₂-neutral

- Official LCA and carbon footprint studies by Technical University Delft according to ISO 14040/44 confirm that MOSO® Bamboo N-finity Indoor is CO₂ neutral over the full life cycle.
- The use of bamboo contributes to a higher score in LEED-, BREEAM and Green Star certified projects.

"Bamboo is for us a sustainable material, which even in direct comparison to wood has the better properties in terms of sustainability, CO₂ bond, strength and resistance. Bamboo in the laminated version is ideally suited for construction components in curtain walls or element facades. Bamboo facades create a warm, pleasant atmosphere, especially in office areas. In combination with bamboo panels and veneers or even parquet, there are numerous design possibilities in interior design to tie in with this atmosphere." Martin Atzinger - **archibrand**, Munich, Germany



Private house, Immenstadt, Germany Stabalux Curtain wall, Bamboo Supreme flooring, Design: Archibrand Studio



STABALUX



MOSO® Bamboo N-finity Indoor Beams

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 and can also be produced for outdoor use on request.





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.

Product Code	Edges	Dimensions LxBxD	
BL-1L955-580	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	D:
BL-IL556-580	Square	5800 x 86 x 82 mm	

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.

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: $\geq 4 \text{ kg/mm}^2$ (EN 1534)
- Reaction to fire: Class D-s2-d0 (EN 13501-1)
- Emission class: Class E1 (< 0.124 mg/m³) (EN 717-1)
- Modulus of Elasticity: +/- 9721 N/mm² (SP), +/- 8866 N/mm² (PP) (EN 408)
- Breaking strength: +/- 56.7 N/mm² (SP), +/- 50.8 N/mm² (PP) (EN 408)
 Use Class: Class: 1 (EN 775)
- Use Class: Class 1 (EN 335)
 Cluo: D4 Water resistant
- Glue: D4 Water resistant
 CO neutral: LCA report TUE
- CO₂ neutral: LCA report TU Delft (ISO 14040/44) (www.moso. eu/lca)
- Environmental Product Declaration EPD (EN 15804) available at www.moso.eu/epd
 ECC ECC ECC ECC = E
- 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[®])







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FSC









More information about MOSO® Bamboo N-finity Indoor can be found at:

www.moso.eu/n-finity-indoor







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products