

Testergebnisse

Die hohe Qualität von Bamboo X-treme wurde aufwändig von einem anerkannten Forschungsinstitut geprüft. Hier eine kurze Zusammenfassung der wichtigsten Ergebnisse. Das vollständige Testergebnis ist auf Anfrage bei MOSO erhältlich.

SHR Durability of Heat Treated Strand Woven Bamboo; soft rot fungi
Report code: 10.620w2 Date: August 30th, 2011 Page: 8/13

4 Conclusion
Moso International BV in cooperation with Moso Europe SLU commissioned SHR to determine the durability of Heat Treated Strand Woven Bamboo according to EN 350-1 and following the ENV 807 laboratory soil box test using 4 boards of decking.

Based on mass loss of the Beech and Pine sapwood reference samples, the test was declared valid after 12 weeks of exposition to the soil box. The mass loss of the bamboo was comparable to that of the durable reference wood species Azobé and Merbau. The durability of the tested bamboo material was found to be class 1.

Dauerhaftigkeit nach EU-Normen

ENV807 / EN350

Klasse 1

sehr dauerhaft

SHR Durability of Heat Treated Strand Woven Bamboo
Report code: 9.061-D Date: August 18, 2009 Page: 9/10

4 Conclusion
On behalf of Moso Internationa BV the durability of Heat Treated Stand Woven Bamboo is tested according to EN 113 and EN 350-1. Material originating from 3 different production batches or shipments were tested. Five fungi were used in the test: *Poria placenta*, *Coriolus versicolor*, *Gloeophyllum trabeum*, *Coniophora puteana*, *Donkorporia expansa*. The results obtained with Coniophora, Poria, Coriolus and Donkioporia were used to assess the durability and reproducibility of to production. Based on the test results of the mass loss Moso Heat Treated Strand Woven Bamboo can be classified in durability class 1 and can be produced reproducibly.

Dauerhaftigkeit

EN113 / EN350

Klasse 1

sehr dauerhaft

SHR Resistance of Heat Treated Strand Woven Bamboo against blue staining fungi
Report code: 9.061-E 8 September, 2009 Page: 10/10

4 Conclusion
On behalf of Moso International BV an EN 152 blue stain test was performed on Heat Treated Strand Woven bamboo. UV- weathering was used as preconditioning of part of the samples. The combination of UV light and water spray resulted in strong discoloration of the surfaces of both the bamboo samples and the Pine sapwood reference samples.
Neither on the weathered nor on the original Bamboo samples discoloration of the blue stain fungi or the hyphae of the blue stain fungi could be observed. As a result it can be concluded that the susceptibility of this Heat Treated Strand Woven Bamboo towards blue stain is very low.

Resistenz gegen oberflächlichen Pilzbefall

EN152

Klass 0

wenig empfindlich gegen Oberflächlichen Pilzbefall

| Gefährdungs-klasse | Verarbeitung-Situation | Biologische Faktoren | durchgeführte Standardtests | Tester-gebnisse |
|--------------------|---|---|-----------------------------|----------------------|
| 1 | Innenbereich, geschützt | Insekten | n.a. | n.a. |
| 2 | Innenbereich oder geschützt | s.o. + entstellende Pilze + zersetzende Pilze | EN152 EN113 / EN350-1 | Klasse 0 Klasse 1 |
| 3 | Außenbereich, ohne direkten Bodenkontakt | | | |
| 4 | Außenbereich, mit direktem Bodenkontakt oder Kontakt mit Wasser | s.o. + Nassfäule | ENV807 / EN350-1 | Klasse 1 |

Gefährdungs-klasse

EN335

Klasse 4

ständige Befeuchtung, direkter Erdkontakt

efectis nederland
The European experts in fire safety

4. Classification and field of application
4.1 Reference of classification
This classification has been carried out in accordance with clause 12 of EN 13501-1:2007+A1:2009.

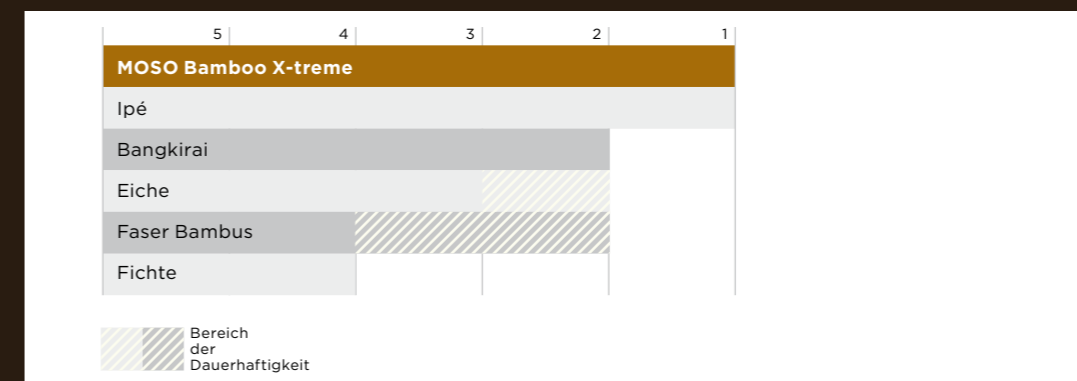
4.2 Classification
The product, **BAMBOO X-TREME™ DECKING**, in relation to its reaction to fire behaviour is classified:
B_s
The additional classification in relation to smoke production is:
s1

Reaction to fire classification: B_s - s1

Brandschutz-klasse

EN13501-1

Klasse Bfl-s1

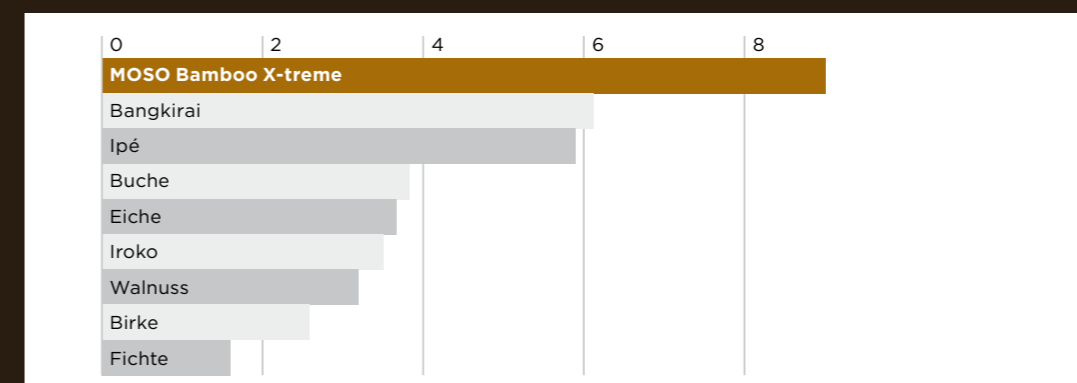


Dauerhaftig-keitsklasse

EN350 (ENV807/EN113)

Klasse 1

sehr dauerhaft



Brinellhärte

EN1534

9,5 kg/mm²

| Carbon Footprint (CO2eq) per kg final product | | | | | Eco-costs (€) per kg final product | | | |
|---|-------------|----------|----------|---------|------------------------------------|-------------|-------------|-----------|
| PRODUCTION | END OF LIFE | CO2 | CO2 | CO2 | PRODUCTION | END OF LIFE | ECO-COSTS | ECO-COSTS |
| CO2 footprint | CO2 credit | Storage | Total | Neutral | Eco-costs | Eco-costs | CO2 storage | Total |
| CO2eq/kg | CO2eq/kg | CO2eq/kg | CO2eq/kg | Y / N | Euro/kg | Euro/kg | Euro/kg | Euro/kg |
| 1.193 | -0.704 | -0.607 | -0.118 | Yes | 0.356 | -0.132 | -0.082 | 0.142 |

CO₂ Bilanz

ISO 14040/44

CO₂ neutral



The life cycle and the carbon footprint of MOSO products are evaluated according to ISO 14040/44. For more information: <http://www.moso-bamboo.com/certification/LCA-carbon-footprint>
The full report is available on request.

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Author:
Dr. Vogtländer J.G. (2014). Life Cycle Assessment and Carbon Sequestration - Update 2014 - Bamboo products of Moso International. Associate professor - Design for Sustainability - Delft University of Technology.