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Entwicklungs- und Prueflabor Holztechnologie GmbH · Zellescher Weg 24 · 01217 Dresden · Germany

Zhejiang Xinhaiye Bamboo Technology Co., Ltd.
Xikou Industrial Zone, Longyou County
Zhejiang, China

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Dresden, 28 January, 2019

Test Report
Order no. 2218044, Pos. 9

Client: Zhejiang Xinhaiye Bamboo Technology Co., Ltd.
Xikou Industrial Zone, Longyou County
Zhejiang, China

Date of order: 4 December, 2018

Order position: Bending properties (bending strength, modulus of elasticity)

Contractor: EPH – Entwicklungs- und Prueflabor Holztechnologie GmbH
Laboratory Unit Material and Product Testing

Engineer in charge: Dipl.-Ing. J. Gecks

i. V.
Dipl.-Ing. J. Gecks
Head of Laboratory Material and Product Testing

The test report contains 3 pages. Any duplication, even in part, requires written permission of EPH. These test results are exclusively related to the tested material.

1 Terms of Reference

The Entwicklungs- und Prueflabor Holztechnologie GmbH (EPH) was ordered by Zhejiang Xinhaiye Bamboo Technology Co., Ltd. to carry out the test below:

- Determination of modulus of elasticity (MOE) and of modulus of rupture (MOR) in bending acc. to DIN EN 408 in four-point bending test.

2 Test Material

The test material was sent to the Contractor by the Client and got to the laboratory on 4 December, 2018.

Product name: DASSO DassoXTR exterior strand woven bamboo decking

Producer: Jiangxi Zhushang Bamboo Industry Co., Ltd.
Gaofu modern Bamboo Industrial Park, Zixi County, Jiangxi Province, China

Cross-section: 145 mm x 20 mm

The test material was conditioned at a temperature of 23 °C and a relative humidity of 50 % after cutting of the test pieces.

3 Realisation of Tests

The bending properties (MOE and MOR) were determined in accordance with EN 408 (four-point bending test) on 10 test specimens. The distance of the joists was chosen at 360 mm, the distance between the load application points was 120 mm. The modulus of elasticity in bending (MOE) and the bending strength (MOR) was calculated using the outer dimensions of the cross section.

The test was carried out on 19 December, 2018.

4 Results

Table 1: Modulus of elasticity (MOE) and bending strength (MOR)

No. of test piece	MOE in N/mm²	MOR in N/mm²
21-1	21700	79.2
21-2	18200	57.3
21-3	19300	86.9
21-4	20400	81.2
21-5	21000	82.4
21-6	18900	66.5
21-7	17900	66.3
21-8	18800	88.5
21-9	18200	66.9
21-10	16300	68.7
Mean value	**19100**	**74.4**
Standard deviation	1610	10.5
Coefficient of variation (COV)	*8 %*	*14 %*

5 Summary of test results

Bending strength (MOR): 74.4 N/mm²

Modulus of elasticity (MOE): 19100 N/mm²

The values given above are mean values.

Dipl.-Ing. J. Gecks
engineer in charge