

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

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

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

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Dresden, 7 August, 2018

Test Report Order no. 2218002, Pos. 9

Client: Zhejiang Xinhaiye Bamboo Technology Co., Ltd.

Xikou Industrial Zone, Longyou County

Zhejiang, China

Date of order: 7 March, 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 7 March, 2018.

Producer: Fujian Dasso Industry Co., Ltd.

Zhuhai trading mall, Jianou city, Fujian province, China

Cross-section: 100 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 26 June, 2018.

4 Results

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

No. of test piece	MOE in N/mm ²	MOR in N/mm ²
21-1	20400	66.8
21-2	17000	61.0
21-3	17900	51.3
21-4	16100	84.5
21-5	15800	63.7
21-6	16300	81.7
21-7	15500	84.3
21-8	15000	70.9
21-9	17000	81.6
21-10	16000	92.2
Mean value	16700	73.8
Standard deviation	1560	13.0
Coefficient of variation (COV)	9 %	18 %



5 Summary of test results

Bending strength (MOR): 73.8 N/mm² Modulus of elasticity (MOE): 16700 N/mm² The values given above are mean values.

Dipl.-Ing. J. Gecks engineer in charge

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