

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

Phone: +49 351 4662 0
Fax: +49 351 4662 211
info@eph-dresden.de
www.eph-dresden.de

Dresden, 24 May, 2019

Test Report Order no. 2218044, Pos. 10/2

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

Date of order: 4 December, 2018

Order position: Moisture resistance and dimensional stability

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

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



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 moisture resistance and of dimensional stability in water immersion test acc. to DIN EN 15534-1, § 8.3.

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 test for determination of moisture resistance and dimensional stability was carried out by analogy with EN 317: 3 test specimens were stored in water (temperature of 20 °C) during 28 days. Afterwards, the thickness, the width und the length was measured using a calliper gauge for the determination of swelling. The mass was measured before and after immersion test for the calculation of water absorption. The test pieces were stored at normal conditions (temperature of 23 °C and relative humidity of 50 %) before the test.

The test was carried out between 28 March, 2019 and 25 April, 2019.

4 Results

Table 1: Swelling rate after immersion in water for 28 days (dimensional stability)

No. of test specimen	Dimension	Swelling rate in %
64-11	thickness	5.1
64-12		4.9
64-13		3.4
64-14		4.6
64-15		4.7
64-16		5.1
Mean value		4.6

Table 1 (cont.): Swelling rate after immersion in water for 28 days (dimensional stability)

64-11	width	0.7
64-12		0.6
64-13		0.4
64-14		0.6
64-15		0.6
64-16		0.7
Mean value		0.6
64-11	length	0.1
64-12		0.2
64-13		0.1
64-14		0.1
64-15		0.1
64-16		0.1
Mean value		0.1

Table 2: Water absorption after immersion in water for 28 days (water resistance)

No. of test specimen	Water absorption rate in %
64-11	4.5
64-12	3.8
64-13	3.3
64-14	4.5
64-15	4.8
64-16	4.5
Mean value	4.2

5 Summary of test results

Swelling rate in thickness: 4.6 %

Swelling rate in width: 0.6 %

Swelling rate in length: 0.1 %

Water absorption: 4.2 %

The values given above are mean values.



Dipl.-Ing. J. Gecks
engineer in charge