

# Hangzhou Dasuo Technology Co., Ltd.

## TEST REPORT

### SCOPE OF WORK

Fire-resistant Bamboo material

### REPORT NUMBER

190711007SHF-001

### TEST DATE(S)

2019-07-11 - 2019-07-24

### ISSUE DATE

2019-07-24

### PAGES

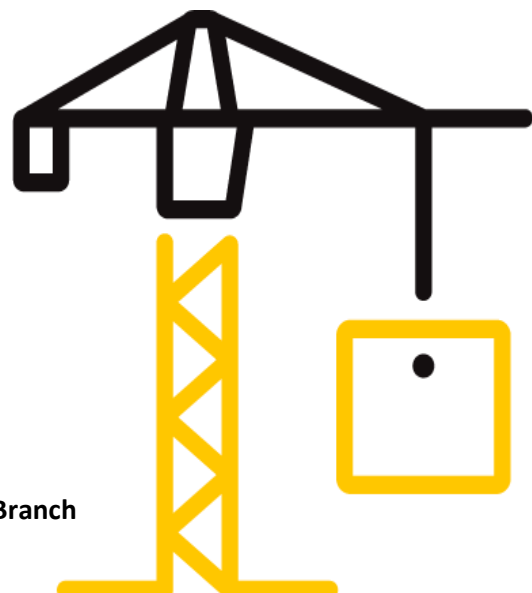
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### DOCUMENT CONTROL NUMBER

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## Test Report


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## Test Report

Issue Date: 2019-07-24 Intertek Report No. 190711007SHF-001  
Applicant: Hangzhou Dasuo Technology Co., Ltd.  
Address: Xinhe Village, Linpu town, Xiaoshan district, Hangzhou, Zhejiang, China  
Manufacturer: Fujian Dasso Bamboo Technology Co., Ltd  
Address: Zhuhai Trading mall, Jianou city, Fujian province  
Attn: Ping Gao  
Test Type : Performance test, samples provided by the applicant.

### Product Information

<b>Product Name</b>	Fire-resistant Bamboo material	<b>Brand</b>	
<b>Sample Description</b>	Good Condition	<b>Sample Amount</b>	10 pcs
		<b>Received Date</b>	2019-07-10
<b>Sample ID</b>	<b>Model</b>	<b>Specification</b>	
S190711007SHF.001~002	ZR Bamboo	3000x100x9mm	


### Test Methods And Standards

<b>Test Standard</b>	EN 13823:2010+A1:2014* and EN ISO 11925-2:2010
<b>Specification Standard</b>	EN 13501-1:2018
<b>Test Conclusion</b>	The samples were tested according to the above standards, and the results are shown in the following page.

#### Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

### Report Authorized

  
 Sally Xie      Tod Qian  
 Name: Sally Xie      Name: Tod Qian  
 Title: Reviewer      Title: Project Engineer

## Test Report

Issue Date: 2019-07-24

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### Test Items, Method and Results:

EN 13501-1:2018 Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

#### 1.1 SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item near to the product.

#### 1.2 IGNITABILITY TEST

The test was conducted in accordance with EN ISO 11925-2. This test evaluates the ignitability of a product under exposure to a small flame.

#### 1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1:2018. The class B with its corresponding fire performance is given in the table below.

Table - Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

Class	Test Method(s)	Classification criteria	Additional classifications
B	EN 13823 and	$FIGRA_{0.2MJ} \leq 120 \text{ W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production <sup>a</sup> and Flaming droplets/particles <sup>b</sup>
	EN ISO 11925-2 <sup>c</sup> Exposure = 30 s	$F_s \leq 150 \text{ mm}$ within 60 s	

#### Note:

a.  $s1 = SMOGRA \leq 30 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 50 \text{ m}^2$ ;  $s2 = SMOGRA \leq 180 \text{ m}^2/\text{s}^2$  and  $TSP_{600s} \leq 200 \text{ m}^2$ ;  $s3 = \text{not } s1 \text{ or } s2$

b.  $d0 = \text{No flaming droplets/particles in EN 13823 within 600s;}$

$d1 = \text{no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s;}$

$d2 = \text{not } d0 \text{ or } d1.$

Ignition of the paper in EN ISO 11925-2 results in a  $d2$  classification.

c. Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack.

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### Test Items, Method and Results:

### 2 RESULTS AND OBSERATIONS

Method	Parameter	Result
EN 13823:2010+A1:2014*	FIGRA <sub>0.2MJ</sub> , W/s	27
	THR <sub>600s</sub> , MJ	1.6
	LFS, m	<Edge of Specimen
	SMOGR <sub>A</sub> , m <sup>2</sup> /s <sup>2</sup>	2
	TSP <sub>600s</sub> , m <sup>2</sup>	34
	Flaming Droplets/Particles	No flaming droplets/particles occur within 600s
EN ISO 11925-2:2010 Exposure = 30 s	F <sub>s</sub> ≤ 150 mm within 60 s	Yes
	Ignition of the paper	No

#### Note

- \*Test item is subcontracted on accreditation by CNAS L0057.
- Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 12mm thick calcium silicate board. The density of the calcium silicate board was 900kg/m<sup>3</sup>.

### 3 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

Fire behaviour		Smoke production			Flaming droplets	
<i>B</i>	-	<i>s</i>	<i>1</i>	-	<i>d</i>	<i>0</i>

Reaction to fire classification:

*B-s1, d0*

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### Test Items, Method and Results:

#### 4 Test Photos of EN 13823



Before test (Long wing)



Before test (Short wing)



After test (Long wing)



After test (Short wing)

## Test Report

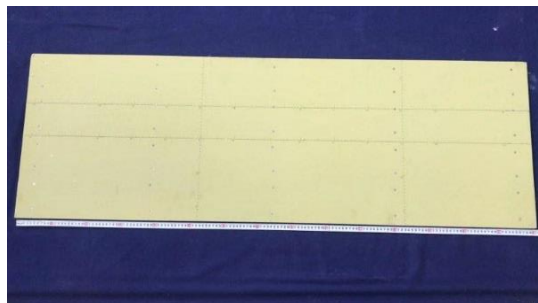
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### Appendix A: Sample Received Photo



Front view



Back view

### Revision:

NO.	Date	Changes	Author	Reviewer
190711007SHF-001	2019-07-24	First issue	Tod Qian	Sally Xie