

Prüfprotokoll / Test protocol

Entzündbarkeit von Produkten bei direkter Flammeneinwirkung - Teil 2: Einzelflammentest nach **EN ISO 11925-2:2010**

Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test acc. to EN ISO 11925-2:2010

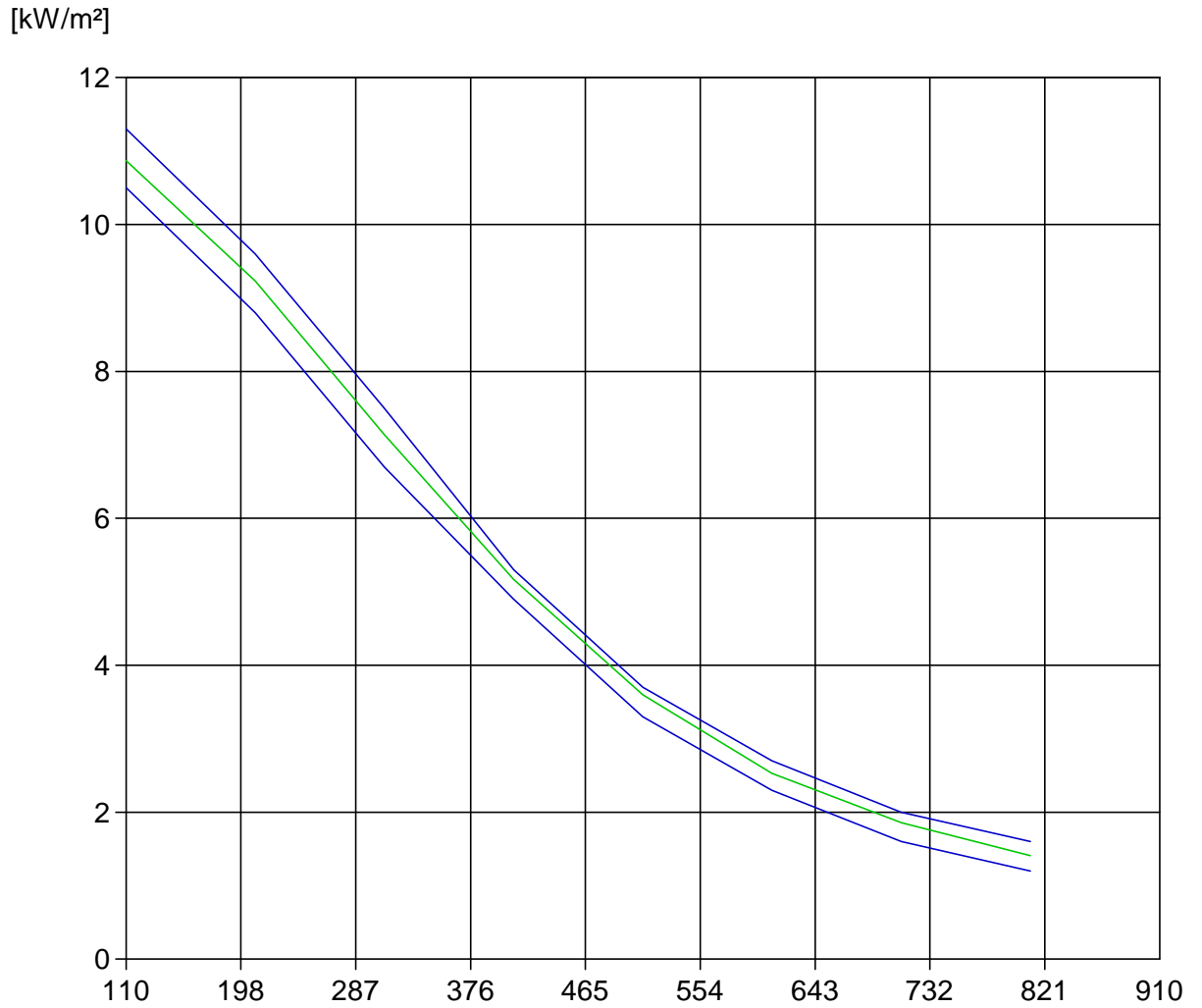
Auftrags-Nr.: **2218002/F** Datum der Prüfung: 04.07.2018
 Order-No.: **2218002/F** Date of testing:
 Auftraggeber: Dasso Group, Zhejiang Xinhaiye Bamboo Technology Co., Ltd.
 Costumer: Xikou Industrial Zone, Longyou County, Zhejiang / China
 Auftragnehmer: Entwicklungs- und Prüflabor Holztechnologie GmbH - **EPH**
 Testing institute: Laborbereich Oberflächenprüfung
 Development and Examination Laboratory for Wood Technology Ltd. – EPH
 Laboratory Surface Testing
 Prüfmaterial: Bambuss-Terrassendiele „DassoCTECH“; 20 mm
 Test object: Exterior strand woven bamboo decking „DassoCTECH“; 20 mm
 Trägermaterial: Frei hängend
 Backing material: free-hanging

Art der Beflammung <i>Kind of impingement</i>	Probe / Sample					
	L1 - längs <i>lengthwise</i>	L2 - längs <i>lengthwise</i>	L3 - längs <i>lengthwise</i>	Q1 - quer <i>crosswise</i>	Q2 - quer <i>crosswise</i>	Q3 - quer <i>crosswise</i>
Flächenbeflammung <i>Surface impingement</i> 15 s (20 s)						
Zeitpunkt der Entzündung [s] <i>Time of ignition [s]</i>	10	9	11	8	12	9
maximale Flammenhöhe [mm] <i>max. extent of flame [mm]</i>	17	20	18	22	23	20
Zeitpunkt des Auftretens [s] <i>Moment of max. extent of flame [s]</i>	15	15	15	15	15	15
150 mm Flammenhöhe erreicht (J/N) <i>150 mm extent reached (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Flamme erloschen vor Versuchsende (J/N) <i>Extinction of flame before end of test (Y/N)</i>	J/Y	J/Y	J/Y	J/Y	J/Y	J/Y
Weiterbrennen nach Versuchsende (J/N) <i>Burning on after the end of test (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Entzündung des Filterpapiers (J/N) <i>Ignition of the filter paper (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Aussehen der Probe nach der Prüfung: <i>Appearance of the specimen after the test:</i>	k. A. <i>n/s</i>					
Rauchentwicklung (visuell): <i>Smoke production (visual):</i>	ohne / gering / normal / stark / sehr stark no / low / normal / intense / extrem					
*Probe wurde nach - s gelöscht! / *Specimen was removed after - s!						

Die Prüfergebnisse beziehen sich nur auf das Verhalten der Proben von einem Bauprodukt unter den speziellen Prüfbedingungen bei der Prüfung. Sie sind nicht als einziges Kriterium zur Bewertung der potentiellen Brandgefahr des Bauproduktes im Anwendungsfall zu verstehen.

The test results only apply to the reaction to fire behaviour of the specified building product under the described testing conditions during the test. Those are not allowed to be the only one criterion for the evaluation of the potential fire hazard of the building product in use case.

Heat Flow Profile



Black body temp. calibration

= 441 °C

Black body temp. test

cf. Test protocols

Test chamber temp. calibration

= 118 °C

Test chamber temp. test

cf. Test protocols

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

04.07.2018

Test protocol Reference

2218002/F-L1

Customer

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

Manufacturer/Supplier

Fujian Dasso Industry Co., Ltd.
Zhuhai trading mall, Jianou city,
Fujian province / China

Date of Sample receipt

13.06.2018

Sampling Procedure

by the customer

Product Identification

bamboo decking board covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Exterior strand woven bamboo decking "DassoCTECH"
Thickness [mm]: 20
Backing Board: 8 mm fibre cement
Kind of mounting: mechanical with distance clamps
Mass per area unit [kg/m²]: 21,24
Sample lengthwise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 300 mm
Futher observations:

Date of Testing

04.07.2018

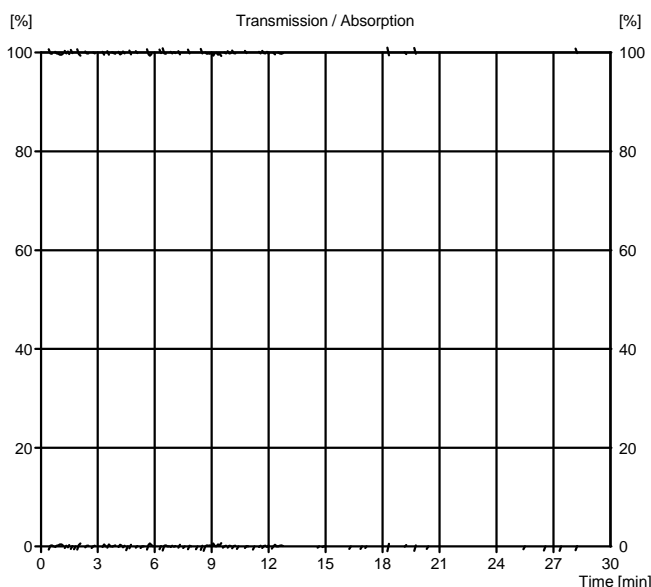
Conditions before Testing

Radiant temperature = 438 °C
Test chamber temperatur = 118 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	320	11.85
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Light Transmission / Absorption



Time [min]	Position [mm]	Heat Flow [kW/m²]	CHF [kW/m²]	>= 11
10	89	11.21	HF_30 [kW/m²]	11.21
20	89	11.21	Smoke density integral [%*min]	1.3
30	89	11.21	Flame extinguished after [min:s]	12:02
			max. burnt distance [mm]	89
			max. light attenuation [%]	0.7

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

04.07.2018

Test protocol Reference

2218002/F-Q1

Customer

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

Manufacturer/Supplier

Fujian Dasso Industry Co., Ltd.
Zhuhai trading mall, Jianou city,
Fujian province / China

Date of Sample receipt

13.06.2018

Sampling Procedure

by the customer

Product Identification

bamboo decking board covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Exterior strand woven bamboo decking "DassoCTECH"
Thickness [mm]: 20
Backing Board: 8 mm fibre cement
Kind of mounting: mechanical with distance clamps
Mass per area unit [kg/m²]: 23,09
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 300 mm
Futher observations:

Date of Testing

04.07.2018

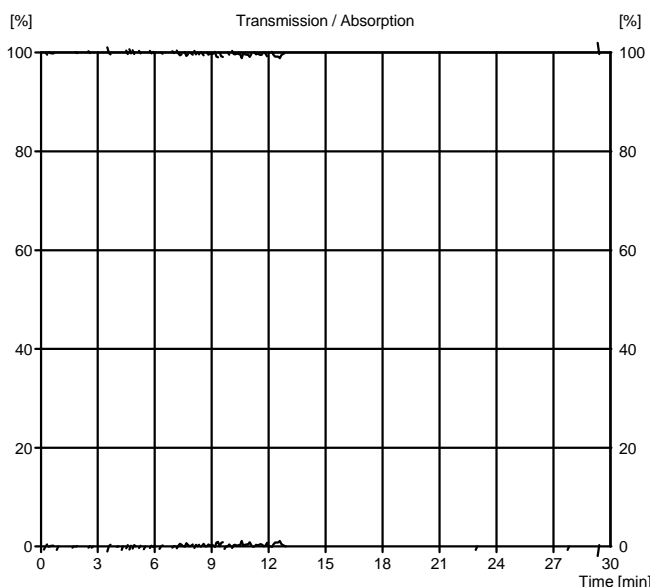
Conditions before Testing

Radiant temperature = 442 °C
Test chamber temperatur = 121 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	351	11.85
100	546	11.03
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Light Transmission / Absorption



Time [min]	Position [mm]	Heat Flow [kW/m²]
10	108	10.90
20	115	10.79
30	115	10.79

CHF [kW/m²]	10.79
HF_30 [kW/m²]	10.79
Smoke density integral [%*min]	2.1
Flame extinguished after [min:s]	12:02
max. burnt distance [mm]	115
max. light attenuation [%]	1.2

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

04.07.2018

Test protocol Reference

2218002/F-Q2

Customer

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

Manufacturer/Supplier

Fujian Dasso Industry Co., Ltd.
Zhuhai trading mall, Jianou city,
Fujian province / China

Date of Sample receipt

13.06.2018

Sampling Procedure

by the customer

Product Identification

bamboo decking board covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Exterior strand woven bamboo decking "DassoCTECH"
Thickness [mm]: 20
Backing Board: 8 mm fibre cement
Kind of mounting: mechanical with distance clamps
Mass per area unit [kg/m²]: 22,68
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 300 mm
Futher observations:

Date of Testing

04.07.2018

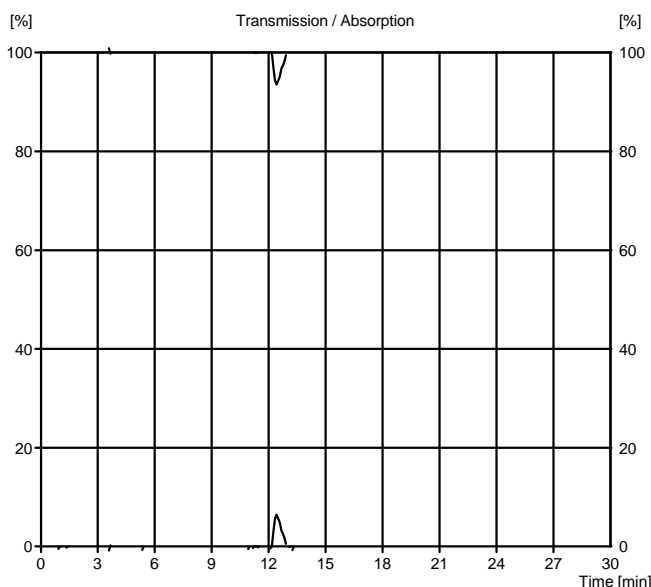
Conditions before Testing

Radiant temperature = 441 °C
Test chamber temperatur = 121 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	511	11.85
100	608	11.03
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Light Transmission / Absorption



Time [min]	Position [mm]	Heat Flow [kW/m²]	CHF [kW/m²]	HF_30 [kW/m²]	Smoke density integral [%*min]	Flame extinguished after [min:s]	max. burnt distance [mm]	max. light attenuation [%]
10	96	11.10	10.64	10.64	2.8	12:11	124	6.4
20	124	10.64						
30	124	10.64						

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

04.07.2018

Test protocol Reference

2218002/F-Q3

Customer

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

Manufacturer/Supplier

Fujian Dasso Industry Co., Ltd.
Zhuhai trading mall, Jianou city,
Fujian province / China

Date of Sample receipt

13.06.2018

Sampling Procedure

by the customer

Product Identification

bamboo decking board covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Exterior strand woven bamboo decking "DassoCTECH"
Thickness [mm]: 20
Backing Board: 8 mm fibre cement
Kind of mounting: mechanical with distance clamps
Mass per area unit [kg/m²]: 22,94
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 300 mm
Futher observations:

Date of Testing

04.07.2018

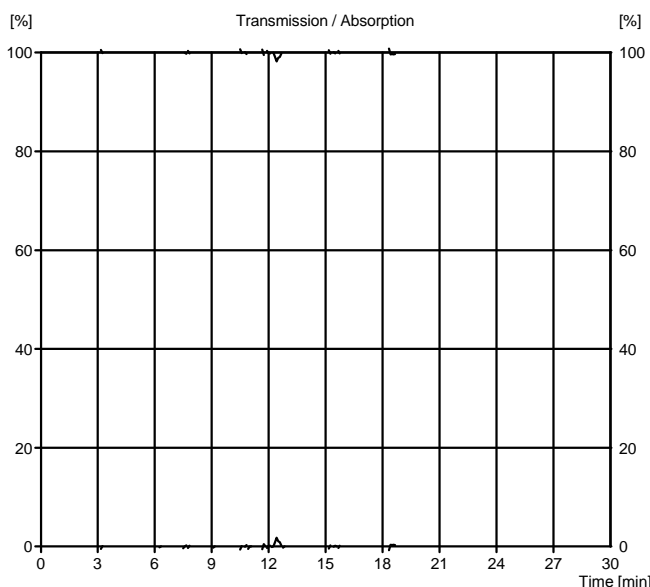
Conditions before Testing

Radiant temperature = 440 °C
Test chamber temperatur = 121 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	382	11.85
100	728	11.03
150	842	10.21
200	1044	9.39
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Light Transmission / Absorption



Time [min]	Position [mm]	Heat Flow [kW/m²]	CHF [kW/m²]	HF_30 [kW/m²]	Smoke density integral [%*min]	Flame extinguished after [min:s]	max. burnt distance [mm]	max. light attenuation [%]
10	88	11.23	8.77	8.77	0.7	18:19	232	1.8
20	232	8.77						
30	232	8.77						

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

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