

Jiangsu Dongfang Botec Technology Co., Ltd.

TEST REPORT

REPORT NUMBER

180314004SHF-BP-3

ISSUE DATE

2018/5/22

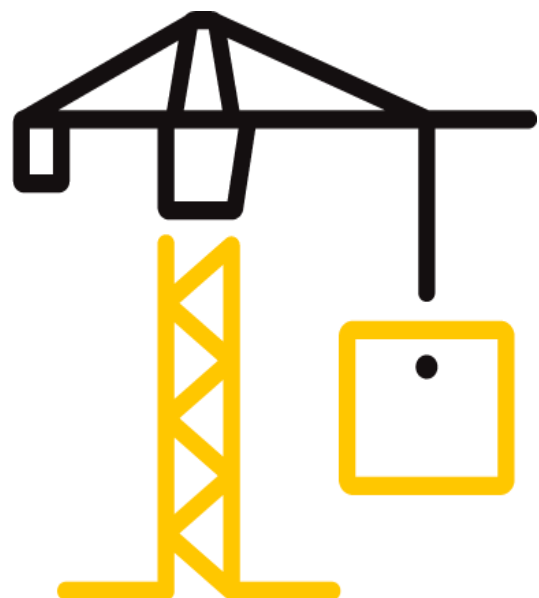
PAGES

6

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10a

© 2018 INTERTEK



Test Report

Issue Date: 2018/5/22

Intertek Report No. 180314004SHF-BP-3

Applicant: Jiangsu Dongfang Botec Technology Co., Ltd.
Applicant Address: No.8 Huayu Rd., Donglai District, Yangshe Town, Zhangjiagang City, Jiangsu
Manufacturer: Jiangsu Dongfang Botec Technology Co., Ltd.
Manufacturer Address: No.8 Huayu Rd., Donglai District, Yangshe Town, Zhangjiagang City, Jiangsu
Attn: Wei Jian

SUBJECT: Performance testing
Aluminum composite panel

Dear Sir,

This test report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS	
Refer to the next following Pages.	

SAMPLE ID	MODEL	SPECIFICATION
S180314004SHF.003	/	4 x 885 x 270 (mm)

SAMPLE RECEIEVED: 2018/3/23
TESTED FROM: 2018/4/5 TO 2018/4/5

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Test Report

Issue Date: 2018/5/22

Intertek Report No. 180314004SHF-BP-3

Test Items, Method and Results:

BS 476: Part 7: 1997 Fire tests on building materials and structures Part 7. Method of test to determine the classification of the surface spread of flame of products

1.1 Procedure

Nine pieces of specimen, said to be Aluminum composite panel for External Cladding application material comprising of Top: 0.5mm thick Aluminum skin with PVDF (0.03mm thick) coating / Core: 3.1 mm thick Mineral core / Bottom: 0.5mm thick Aluminium skin with PE (0.01 mm thick) coating, each of nominal test size of 885mm x 270mm were received. For the test, the Aluminum skin with PVDF coating on one face was removed by the test laboratory to subject the core material to the fire. The overall thickness and bulk density of the specimen with the skin on one face removed were found to be approximately 3.5mm and 1789 kg/m³ respectively.

Prior to test, the specimens were prepared and conditioned in accordance with paragraphs 5.3 to 5.6 of the standard and secured to a specimen holder as described in paragraph 6.3.

Six specimens, backed with 25mm air gap calcium silicate spacer, were tested with the Mineral core face exposed to the specified thermal radiation from the apparatus described in paragraph 6.1 of the standard. The intensity of the radiated heat incident on the specimen varies with distance from the hotter end, so that when the specified calibration panel is mounted in the place to be occupied by the specimen, and the irradiance of the radiometer is as given in the table below. The test was terminated when the flame front reached the 825 mm reference line, or after 10 minutes has elapsed, whichever is shorter.

Irradiance along Horizontal Reference Line on the Calibration Board

Distance along reference line from inside edge of specimen holder (mm)	Irradiance (kW/m ²)		
	specified	min.	max.
75	32.5	32.0	33.0
225	21.0	20.5	21.5
375	14.5	14.0	15.0
525	10.0	9.5	10.5
675	7.0	6.5	7.5
825	5.0	4.5	5.5

Test Report

Issue Date: 2018/5/22

Intertek Report No. 180314004SHF-BP-3

1.2 Results:

The test results for the individual samples are given in table below:

Specimen No.	1	2	3	4	5	6
Spread of flame at first 1.5 minutes (mm)	0	0	0	0	0	0
Distance (mm)	Time of spread of flame to indicated distance (minutes:seconds)					
Start of flaming	nil	nil	nil	nil	nil	nil
75	-	-	-	-	-	-
165						
190						
215						
240						
265						
290						
375						
455						
500						
525						
600						
675						
710						
750						
785						
825						
865						
Time of maximum spread of flame (minutes:seconds)	-	-	-	-	-	-
Distance of maximum spread of flame (mm)	0	0	0	0	0	0
Comments	None					

Test Report

Issue Date: 2018/5/22

Intertek Report No. 180314004SHF-BP-3

1.3 CLASSIFICATION:

Classification of Surface Spread of Flame

Classification	Spread of flame at 1.5 min		Final spread of flame	
	Limit (mm)	Limit for one specimen in sample (mm)	Limit (mm)	Limit for one specimen in sample (mm)
Class 1	165	165+25	165	165+25
Class 2	215	215+25	455	455+45
Class 3	265	265+25	710	710+75
Class 4	Exceeding the limits for class 3			

1.4 CONCLUSION:

In accordance with the class definitions specified in the Standard, the test results show that the sample tested has a **Class One** Surface Spread of Flame.

Remarks: The test results relate only to the behaviour of the test specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Note: This test was conducted at the external approved facility, located at Singapore.


Test Report

Issue Date: 2018/5/22

Intertek Report No. 180314004SHF-BP-3

REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.


Harrison Li *Timothy Li*
Name: Harrison Li Name: Timothy Li
Title: Reviewer Title: Project Engineer

Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180314004SHF-BP-3	2018/5/22	First issue	Timothy Li	Harrison Li