

Joyeyou (Shanghai) Industry Co.,Ltd

TEST REPORT

SCOPE OF WORK

Debris Net

REPORT NUMBER

191122001SHF-001

TEST DATE(S)

2019-11-22 - 2019-12-10

ISSUE DATE

2019-12-10

PAGES

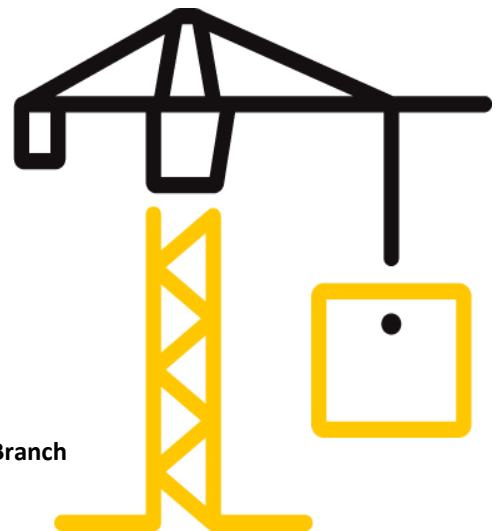
7

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10k(May 1, 2019)

© 2019 INTERTEK

Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Test Report

Statement

- 1.This report is invalid without company's special seal for testing on assigned page.
- 2.This report is invalid without authorized person's signature.
- 3.This report is invalid where any unauthorized modification indicated.
- 4.Don't copy this report in partial (except full copy) without any official approval in written by our company. This report is invalid without re-stamping the special seal for testing in copying report.
- 5.Any holder of this document is advised that this report is for the exclusive use of Intertek's Customer and is provided pursuant to the agreement between Intertek and its Customer. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. This report was made with due care within the limitation of a defined scope of work and on the basis of information, materials and instructions received from the Customer or its nominated third parties. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. The tests results are not intended to be a recommendation for any particular course of action. Customer is responsible for acting as it sees fit on the basis of such results.
- 6.Intertek's written consent is required to use Intertek's name or logo on the object, product or service being tested. The observations and test results in this report relate only to the sample under test. This report alone does not indicate that the item, product or service has passed any Intertek certification program.

Test Report

Issue Date: 2019-12-10

Intertek Report No. 191122001SHF-001

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 ^a and Flaming droplets/particles ^b
	EN ISO 11925-2 ^c 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 = not s1 or s2

b. d0 = No flaming droplets/particles in EN 13823 within 600s;

d1 = no flaming droplets/particles persisting longer than 10s in EN 13823 within 600s;

d2 = not d0 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.

Test Report

Issue Date: 2019-12-10

Intertek Report No. 191122001SHF-001

Test Items, Method and Results:

2 RESULTS AND OBSERATIONS

Method	Parameter	Result
EN 13823:2010+A1:2014*	FIGRA _{0.2MJ} , W/s	0
	THR _{600s} , MJ	0.6
	LFS, m	<Edge of Specimen
	SMOGR _A , m ² /s ²	0
	TSP _{600s} , m ²	17
	Flaming Droplets/Particles	No flaming droplets/particles occur within 600s
EN ISO 11925-2:2010 Exposure = 30 s	F ₅ ≤ 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 fixed mechanically to the backing board. Backing board was a 12mm thick calcium silicate board. The density of the calcium silicate board was 900kg/m³.

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*

Test Report

Issue Date: 2019-12-10

Intertek Report No. 191122001SHF-001

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

Issue Date: 2019-12-10

Intertek Report No. 191122001SHF-001

Appendix A: Sample Received Photo



Front view



Section view

Revision:

NO.	Date	Changes	Author	Reviewer
191122001SHF-001	2019-12-10	First issue	Tod Qian	Sally Xie