

SCOPE OF WORK

ALUMINUM ALLOY FLOOR

REPORT NUMBER

220531012SHF-002

TEST DATE(S)

2022-05-31 - 2022-07-11

ISSUE DATE

2022-07-13

PAGES

7

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10k(May 1, 2021)

© 2021 INTERTEK



intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch Plant 5, No. 6958 Daye Road, Fengxian District, Shanghai, China Tel: +86 21-61136116 Fax: 021-61189921

Website: www.intertek.com

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.

7. The report was digital signed by Shang Hai, Intertek Group plc, please using Adobe Acrobat Reader to verify the authenticity.





Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch Plant 5, No. 6958 Daye Road, Fengxian District, Shanghai, China Tel: +86 21-61136116 Fax: 021-61189921 Website: www.intertek.com

Test Report

Issue Date:

2022-07-13

Intertek Report No. 220531012SHF-002

Test Type :

Performance test, samples provided by the applicant.



Product Information

Product Name	AL	UMINUM ALLOY FLOOR	Brand	/
Sample	Good Condition		Sample Amount	3 boxes
Description			Received Date	2022-05-31; 2022-06-26
Sample (D		Model	Specification	
S220531012SHF.001~002		Surface spray	FLH-150*25	

Test Methods And Standards

_	Test Methods And Standards				
Test Standard EN ISO 1716:2010 and EN ISO 9239-1:2010		EN ISO 1716:2010 and EN ISO 9239-1:2010			
	Specification Standard	EN 13501-1:2018			
Test Conclusion The samples were tested act following page.		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

Title: Reviewer

Name: Lu Cheng

Title: Project Engineer









Issue Date:

2022-07-13

Intertek Report No.

220531012SHF-002

Test Items, Method and Results:

EN 13501-1:2018 Fire classification of costruction products and building elements - Part1: Classification using data from reaction to fire tests

1.1 HEAT OF COMBUSTION TEST

The test was conducted in accordance with EN ISO 1716. This test evaluates the gross heat of combustion (Q_{PCS}) of products at constant volume in a bomb calorimeter.

1.2 CRITICAL HEAT FLUX TEST

The test was conducted in accordance with EN ISO 9239-1. This test evaluates the wind-opposed burning behaviour and spread of flame of horizontally mounted floorings exposed to a heat flux radiant gradient in a test chamber, when ignited with pilot flames.

1.3 CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1:2018. The class A2_{fl} with its corresponding fire performance is given in the table below.

Table- Classes of reaction to fire performance for flooring.

Class	Test Method(s)	Classification criteria	Additional classifications
A2 _{fl}	EN ISO 1716 and	PCS \leq 3.0 MJ/kg ^a and PCS \leq 4.0 MJ/m ^{2 b} and PCS \leq 4.0 MJ/m ^{2 c} and PCS \leq 3.0 MJ/kg ^d	
	EN ISO 9239-1 e	Critical flux ^f ≥ 8.0 kW/m ²	Smoke production ⁸

Note:

- a. For homogeneous products and substantial components of non-homogeneous products.
- b. For any external non-substantial component of non-homogeneous products.
- c. For any internal non-substantial component of non-homogeneous products.
- d. For the product as a whole.
- e. Test duration = 30 min.
- f. Critical flux is defined as the radiant flux at which the flame extinguishes or the radiant flux after a test period of 30 min, whichever is the lower (i.e. the flux corresponding with the furthest extent of spread of flame).
- g. $s1 = Smoke \le 750 \%$ minutes; s2 = not s1.



Issue Date:

2022-07-13

Intertek Report No.

220531012SHF-002

Test Items, Method and Results:

2 RESULTS AND OBSERATIONS

Method		Parameter	Result
	PCS	Styrene acrylic copolymer, MJ/m²	1.5266
EN ISO 1716:2010		aluminium, MJ/kg	0
		the whole product, MJ/kg	0.32
	Crit	ical flux (transverse), kW/m²	≥11
EN ISO 9239-1:2010	Critical flux (longitudinal), kW/m ²		≥11
	Smoke production, % minutes		58

Note

- 1. The information of each component of the product was declared by applicant, see below table.
- 2. Total area of the whole product is 0.1060m² and the weigh of the whole product is 0.506kg.

Layer No. (from face to back)	Material of each Layer	Mass per unit area (kg/m²)	Thickness (mm)
1	Styrene acrylic copolymer	0.11	0.09
2	aluminium	3.12	3

3 CLASSIFICATION

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

Fire behaviour			Smoke production	
A2 fl	-	s	1	

Reaction to fire classification:

 $A2_{fl} - s1$





Issue Date:

2022-07-13

Intertek Report No. 220531012SHF-002

Test Items, Method and Results:

4 Test Photos of EN ISO 9239-1



Before test



After test





Issue Date:

2022-07-13

Intertek Report No. 220531012SHF-002

Appendix A: Sample Received Photo



Front view (test side)



Back view



Section view

Revision:

NO.	Date	Changes
220531012SHF-002	2022-07-13	First issue

