

TEST REPORT

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

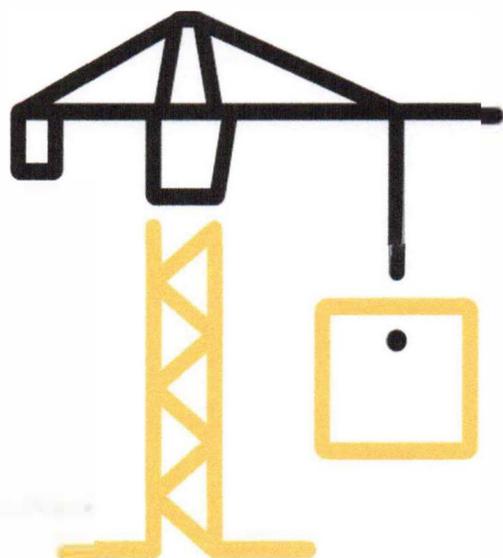
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DOCUMENT CONTROL NUMBER

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

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Test Report

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

Test Methods And Standards

Test Standard	EN ISO 1716:2010 and EN ISO 9239-1:2010
Specification Standard	EN 13501-1:2018
Test Conclusion	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
 Name: Sally Xie
 Title: Reviewer

Lu Cheng
 Name: Lu Cheng
 Title: Project Engineer

Test Report

Issue Date: 2022-07-13

Intertek Report No. 220531012SHF-002

Test Items, Method and Results

EN 13501-1:2018 Fire classification of construction 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 \geq 8.0 kW/m ²	Smoke production ^g

Note:

- For homogeneous products and substantial components of non-homogeneous products.
- For any external non-substantial component of non-homogeneous products.
- For any internal non-substantial component of non-homogeneous products.
- For the product as a whole.
- Test duration = 30 min.
- 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).
- s1 = Smoke \leq 750 % minutes; s2 = not s1.

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Issue Date: 2022-07-13

Intertek Report No. 220531012SHF-002

Test Items, Method and Results :

2 RESULTS AND OBSERATIONS

Method	Parameter		Result
EN ISO 1716:2010	PCS	Styrene acrylic copolymer, MJ/m ²	1.5266
		aluminium, MJ/kg	0
		the whole product, MJ/kg	0.32
EN ISO 9239-1:2010	Critical flux (transverse), kW/m ²		≥11
	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/m ²)	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 _f	-	s	1

Reaction to fire classification: A2_f - s1

Test Report

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

Test Report

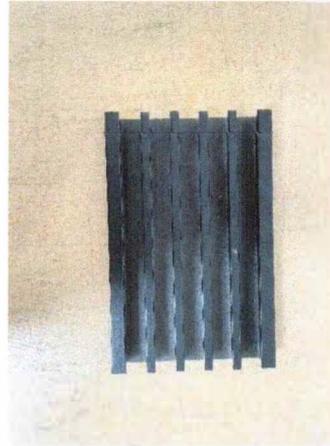
Issue Date: 2022-07-13

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