

Layer 101 Ltd

TEST REPORT

SCOPE OF WORK

LayerFelt PET Acoustic Panel

REPORT NUMBER

250320004SHF-002

TEST DATE(S)

2025-03-20 - 2025-04-24

ORIGINAL ISSUE DATE

2025-04-26

PAGES

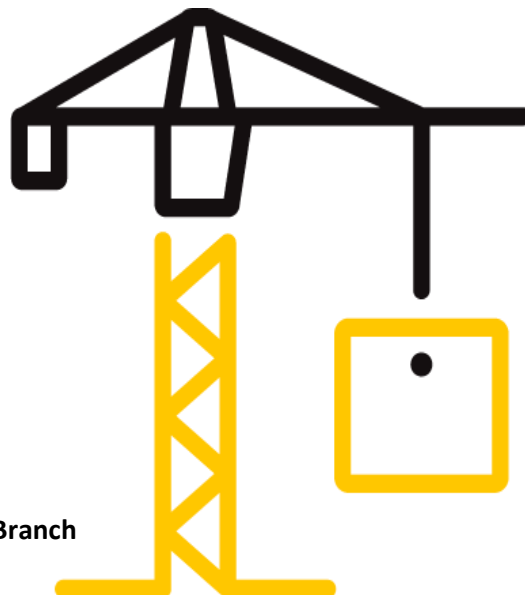
7

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10k(January 13, 2025)

© 2025 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 the assigned page.
- 2.This report is invalid without an authorized person's signature.
- 3.This report is invalid if altered.
- 4.Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Don't copy this report in partial 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.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. 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(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
- 6.Except for the obligation, responsibility and liability (if any) for the appropriateness and professionalism of afore-mentioned testing itself within the scope and amount of the testing fee received, Intertek does not and will not accept any other obligation or liability.
- 7.If the Client has any questions about the test results, Intertek B&C should be informed within the storage period of the samples. The sample storage period ends 5 working days after the official report issue date. Samples of certification program are retained for the period required by the certification rules. The samples storage period shall be calculated according to the issue date of the original report in the case of quoting results and modifying reports.
- 8.Intertek B&C will service this report for the entire test record retention period. The test record retention period ends 6 years after this report original issue date. The test record retention period for certification program is 10 years. Test records and other pertinent project documentation will be retained for the entire test record retention period.
- 9.The report was digital signed by Shang Hai, Intertek Group plc, please using Adobe Acrobat Reader to verify the authenticity.

Test Report

Original Issue Date: 2025-04-26

Intertek Report No. 250320004SHF-002

Applicant: Layer 101 Ltd

Address: 71-75 Shelton Street, Covent Garden, London, WC2H 9JQ, United Kingdom.

Attn: John Sulzmann

Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	Model	Specification	Brand
LayerFelt PET Acoustic Panel	2400gsm	2800*1220*12mm	Layer Felt
Sample ID	Sample Amount	Sample Received Date	
S250320003SHF.003~004	30 pcs	2025-03-17	
Sample Description			
Thickness 12.5mm, see sample photo in Appendix A			

Test Methods And Standards

Test Standard	EN 13823:2020+A1:2022 and EN ISO 11925-2:2020
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 does not involve sampling. The report only reflects conformity of the tested items of the samples provided by the testing applicant. Representativeness and authenticity of the submitted samples are responsibilities of the testing applicant.

2.The results were copied from Intertek Report No.250320003SHF-002.

Report Authorized

Sally Xie
Name: Sally Xie
Title: Reviewer

Stone Shi
Name: Stone Shi
Title: Project Engineer

(1)

Test Report

Original Issue Date: 2025-04-26

Intertek Report No. 250320004SHF-002

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 in a room corner 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

Original Issue Date: 2025-04-26

Intertek Report No. 250320004SHF-002

Test Items, Method and Results:

2 RESULTS AND OBSERATIONS

Method	Parameter	Specimen 1	Specimen 2	Specimen 3	Average
EN 13823:2020+A1:2022	FIGRA _{0.2MJ} , W/s	0	0	13.1	4.37
	FIGRA _{0.4MJ} , W/s	0	0	13.1	4.37
	THR _{600s} , MJ	0.068	0.105	0.142	0.105
	LFS < Edge of Specimen (Yes or No)	Yes	Yes	Yes	/
	SMOGRA, m ² /s ²	0	0	7.85	2.62
	TSP _{600s} , m ²	13.8	20.1	19.4	17.8
	Flaming Droplets/Particles occur within 600s (> 10s or ≤10s or No)	No	No	No	/

Method	Exposure conditions		F _s ≤ 150 mm within 60 s (Yes/No)	Ignition of the filter paper (Yes/No)
EN ISO 11925-2:2020 Exposure=30 s	Edge exposure	lengthwise 1	Yes	No
		lengthwise 2	Yes	No
		lengthwise 3	Yes	No
		crosswise 1	Yes	No
		crosswise 2	Yes	No
		crosswise 3	Yes	No
	Surface exposure	lengthwise 1	Yes	No
		lengthwise 2	Yes	No
		lengthwise 3	Yes	No
		crosswise 1	Yes	No
		crosswise 2	Yes	No
		crosswise 3	Yes	No

Note

1. Per EN 13823, the samples were free standing at a distance of 80mm from the backing board. Backing board was a 12mm thick calcium silicate board. The density of the calcium silicate board was 850kg/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

Original Issue Date: 2025-04-26

Intertek Report No. 250320004SHF-002

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

Original Issue Date: 2025-04-26

Intertek Report No. 250320004SHF-002

Appendix A: Sample Received Photo



Front view (test side)



Back view

Revision:

NO.	Date	Changes
250320004SHF-002	2025-04-26	First issue