



Confidential Report

Our Ref: 26/02930C/11/21





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Email: info@bttg.co.uk
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Date: 14 December 2021
Our Ref: 26/02930C/11/21
Your Ref: PO: 2258907
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Client:

Polyflor Limited

PO Box 3
Radcliffe New Road
Whitefield
Manchester
M45 7NR

Job Title:

Fire Test on One Sample of LVT Flooring

Clients Order Ref:

2258907

Date of Receipt:

23 November 2021

Description of Sample:

One sample of LVT flooring, referenced;

Product Name: Polysafe Verona PUR (Original & Pure Colours)
Nom Thickness: 2.0mm
Weight per unit area: 2.60kg/m²
Batch No: 1H462
Shade: 5221 Vanilla

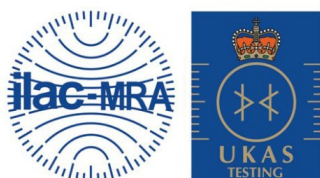
Work Requested:

We were asked to make the following test(s):

AS ISO 9239-1 (tested fully adhered)

- * subcontracted test, UKAS accredited
- ** subcontracted test, EN ISO/IEC 17025 accredited
- *** not UKAS accredited

Note: This report relates only to the samples submitted and as described in the report.



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FIRE TESTS ACCORDING TO AS ISO 9239-1:2003

Reaction to fire tests for Floorings - Part 1: Determination of the burning behaviour using a radiant heat source (ISO 9239-1:2002)

Date of Test: 13/12/2021

Conditioning

The specimens were conditioned in accordance with BS EN 13238:2010. The substrate used was a fibre cement board (ISO 390) with a thickness of (6 ± 1) mm and a density of $(1,800\pm 200)$ Kg/m³ representing the standard substrate of Class A1fl or A2fl.

Mounting Method

The specimens of floor covering were tested adhered to a 6mm fibre cement backing board, as defined in BS EN 13238:2010 using Balls F44 adhesive.

Procedure

The test was carried out in accordance with AS ISO 9239-1:2003. The sponsor sampled and cut the specimens to the dimensions stated.

Specimens were individually placed in the combustion chamber and allowed to preheat for two minutes under a radiant panel, which gives an imposed radiant flux ranging from approximately 11.0 kW/m² to 1.0 kW/m² along the specimen.

The pilot flame used was the line burner as described and was applied to the surface of the specimen for 10 minutes and then removed.

The flame front was measured at the end of the test or at 30 minutes if applicable.

Test termination was considered to be when the flame front self extinguished or at 30 minutes, which ever is the sooner.

The heat flux from the panel incident on the specimen when self extinguished or at 30 minutes (critical heat flux CHF or HF-30) was calculated from a prior calibration.



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Results

The test results relate to the behaviour of the test specimens of a material under the particular conditions of test; they are not intended to be the sole criterion for assessing the full potential fire hazard of the materials in use.

<u>Specimen No.</u>	<u>Direction of spec.</u>	<u>Smoke Obscuration/ Development</u>		<u>Maximum Flame front (mm)</u>	<u>Heat Flux-30 (HF-30) (kW/m²)</u>	<u>Critical Heat/Radiant Flux (CHF/CRF) (kW/m²)</u>	<u>Duration of Flaming (sec)</u>
		<u>Max %</u>	<u>% x min</u>				
1	Non Directional	100	267	205	8.8	8.8	742
2	Non Directional	100	276	135	10.2	10.2	750
3	Non Directional	100	315	210	8.7	8.7	741
Mean of 3 specs.	Non Directional	100	286	183	9.2	9.2	744

<u>Distance Burnt (mm)</u>	<u>Time for each specimen to burn (s)</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
50	180	175	185
100	221	215	233
150	281	---	280
200	315	---	320
250	---	---	---

Note

One specimen was initially tested in each direction and whichever direction gave the worst result a further two specimens were tested. Only the results of the 3 specimens in the same direction were used to calculate the mean results.

Observations

During the testing flashing was observed.



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Reported by: *B. Marsden* B Marsden (Mrs), Senior Laboratory Technician

Countersigned by: *[Signature]* P Doherty Manager

Enquiries concerning this report should be addressed to Customer Services.



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Uncertainty Budget - Annex

The uncertainty budget for AS ISO 9239-1 was determined as follows:-

Overall

The uncertainty varies down the length of the panel therefore:

- a) At position between 0 – 450mm $\pm 7\%$
- b) At position between 450mm -1000mm $\pm 8\%$

Smoke Obscuration $\pm 15\%$

