



Polyflor Australia Fire Certificates for NCC 2022 Specification 7 C3 Compliance

Polyflors' products are manufactured and tested in the UK.

Polyflor has gone to great lengths to have the UK laboratory, Shirley Technologies Limited, Wira House BCTC, UKAS accredited to perform the fire test required by the Australian NCC, AS ISO 9239.1-2003.

In the Schedule 1 Definitions section of the NCC 2022, an Accredited Testing Laboratory means—

(a) an organisation accredited by the National Association of Testing Authorities (NATA) to undertake the relevant tests; or

(b) an organisation outside Australia accredited to undertake the relevant tests by an authority recognised by NATA through a mutual recognition agreement;

Polyflors' test certificates comply with definition (b). NATA is a signatory of ILAC (International Laboratory Accreditation Cooperation), a Mutual Recognition Program where international accreditation programs, like NATA, are recognised as similar acceptable quality standards.

UKAS is also a signatory and results obtained by a UKAS certified lab are recognised by NATA under this ILAC-MRA agreement.

The laboratory Polyflor uses, BCTC, is UKAS certified to perform AS ISO 9239.1-2003. This compliance is available via their website and is also stamped on the report.

Regarding terminology, in the definitions section of the NCC, *Critical radiant flux means the critical heat flux at extinguishment as determined by AS ISO 9239.1.*

The *smoke development rate* as required under Specification 7 Clause 3 is determined from the AS ISO 9239.1 test method and is by measurement of the smoke obscuration over time. This is expressed as Smoke Obscuration % x minutes.

The AS ISO test method has been copied from International Standards and hence the reason why the difference in terminology to the NCC.

The supplied fire certificate is acceptable in Australia as it is the Australian test performed by a NATA recognised certified laboratory for compliance to NCC 2022 S7C3.



Confidential Report

Our Ref: 26/03064B/10/22





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.
Telephone: +44 (0) 113 259 1999
Email: onestopshop@bttg.co.uk
Website: www.bttg.co.uk

Date: 28 October 2022

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Client:

Polyflor Ltd

PO Box 3
Radcliffe New Road
Whitefield
Manchester
M45 7NR

Job Title:

Fire Test on One Sample of Vinyl Flooring

Clients Order Ref:

2264804

Date of Receipt:

06 October 2022

Description of Sample:

One sample of vinyl flooring, referenced;

Product Name: Polysafe Quattro PUR
Nominal Thickness: 2.0mm
Weight Per Unit Area: 2.70kg/m²
Batch Number: 1G037
Shade: 5772 Lunar Shell

Work Requested:

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

AS ISO 9239-1:200314

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

Note: This report relates only to the items tested.



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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: 27/10/2022

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 tested adhered to a 6mm fibre cement board, as defined in BS EN 13238:2010 using Styccobond Balls F74 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	73	237	185	9.2	9.2	755
2	Non-directional	62	152	120	10.5	10.5	753
3	Non-directional	66	145	161	9.7	9.7	721
Mean of 3 specs.	Non-directional	67	178	155	9.8	9.8	743

<u>Distance Burnt (mm)</u>	<u>Time for each specimen to burn (s)</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
50	200	270	190
100	320	290	250
150	350	--	365

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.



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Where required to make a judgement to any pass/fail criteria an estimation of uncertainty of measurement has been taken into account. Under our Policy we have used a non-binary decision rule.

See our decision rules Policy (<http://www.bttg.co.uk/decision-rules-policy>) for further information.

Reported by:.....*23. March*..... 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: 2010 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 $\pm 15\%$

