Polyflor Australia Fire Certificates for NCC Spec C1.10 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 Definitions section of the NCC, 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 Clause 3 of Specification C1.10 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 developed 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 Specification C1.10 Clause 3.

Confidential Report

Our Ref: 26/02246B/08/17

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Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339

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

Date: 27 September 2017

Our Ref: 26/02246B/08/17
Your Ref: -

Client: Polyflor Ltd
PO Box 3
Radcliffe New Road
Whitefield
Manchester
M45 7NR

Job Title: Fire Test on One Sample of Vinyl Flooring

Client's Order No: 2228697

Date of Receipt: 21 August 2017

Description of Sample(s): One sample of vinyl flooring, referenced;
Sample Reference: Polyflor Palettone PUR
Nominal Thickness: 2.0
Weight per Unit Area: 2.80
Batch No: 7T231
Shade: 8605 Urban Air

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

AS ISO 9239-1:2003

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

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A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025.

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Client: Polyflor Ltd

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: 21/09/2017

Conditioning

The specimens were conditioned in accordance with BS EN 13238:2002. The substrate used was a fibre cement board (ISO 390) with a thickness of (6±1)mm and a density of (1,800±200) Kg/m^3 representing the standard substrate of Class A1fl or A2fl.

Procedure

The test was carried out in accordance with AS ISO 9239-1. 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/m^2 to 1.0 kW/m^2 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.

Specimen No.	Direction of spec.	Smoke Obscuration/ Development Max %	% x min	Maximum Flame front (mm)	Heat Flux-30 (HF-30) (kW/m^2)	Critical Heat/Radiant Flux (CHF/CRF) (kW/m^2)	Duration of Flaming (sec)
1	Machine	43	80	125	10.4	10.4	740
2	Across	50	116	170	9.6	9.6	751
3	Across	45	103	155	9.9	9.9	753
4	Across	51	114	152	10.0	10.0	740
Mean of 3 specs.	Across	49	111	159	9.8	9.8	748

Distance Burnt (mm)	Time for each specimen to burn (s) 1	2	3	4
50	180	168	200	171
100	225	211	230	227
150	--	251	270	240
200	--	--	--	--

Note

As the sample is non directional, only three specimens were supplied for testing.

The specimens of floor covering were tested adhered to a 12mm calcium silicate board , as defined in BS EN 13238:2010, using Styccobond F44 adhesive.

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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.

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

Reported by:…… B Marsden (Mrs), Fire Technician

Countersigned by:…….. P Doherty, Operational Head

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:

At position between a **Euroclass B to C ± 15%**
At position between a **Euroclass C to D ± 15.5%**
At position between a **Euroclass D to E ± 17.5%**

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