

# 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 <u>critical heat</u> 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: 26/02646B/11/19



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: <u>info@bttg.co.uk</u> Website: <u>www.bttg.co.uk</u>

Date: 22 November 2019

Our Ref: 26/02646B/11/19

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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

Client's Order No: 2245202

Date of Receipt: 07 November 2019

Description of Sample(s):

Sample Reference:

Nominal Thickness:

Weight per Unit Area:

Batch No:

One sample of vinyl flooring
Polyflor OHMega EC

2.0 mm

3.06 kg/m2

0906506

Shade: 6006 Morning Dew

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

AS ISO 9239-1

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

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





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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: 21/11/2019

#### **Conditioning**

The specimens were conditioned in accordance with BS EN 13238:2010. The substrate used was non fire retardant treated particleboard (in accordance with EN 312) with thickness ( $20 \pm 2$ ) mm, with density ( $680 \pm 50$ ) kg/m3 and with classification Cfl-s1 when tested (according to EN ISO 9239-1) as flooring but without a substrate.

#### **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  $11.0 \text{ kW/m}^2$  to  $1.0 \text{ kW/m}^2$  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.	<u>Direction</u> of spec.		oscuration/ opment	<u>Maximum</u> Flame front	<u>Heat Flux-30</u> (HF-30)	<u>Critical</u> <u>Heat/Radiant</u>	Duration of Flaming
		Max %	<u>% x min</u>	<u>(mm)</u>	(kW/m <sup>2</sup> )	Flux (CHF/CRF) (kW/m²)	(sec)
1	Non Directional	72	148	158	9.8	9.8	770
2	Non Directional	92	249	205	9.0	9.0	962
3	Non Directional	97	312	210	8.9	8.9	1156
Mean of 3 specs.	Non Directional	87	236	191	9.2	9.2	963

<u>Distance</u>		Time for each specimen to burn (s)	
Burnt (mm)	<u>1</u>	<u>2</u>	<u>3</u>
50	162	157	180
100	214	190	215
150	240	210	230
200		250	255





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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 20mm non fire retardant treated particleboard as defined in BS EN 13238:2010 using Balls F57 adhesive.

Uncertainty of measurement has not been taken into account when presenting the test result. The relevant uncertainty value is included as an annex which forms an integral part of the report.

Countersigned by: P Doherty, Executive Manager

Enquiries concerning this report should be addressed to Customer Services.





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### **Uncertainty Budget - Annex**

The uncertainty budget for BS EN 13501-1:2007+A1:2009 was determined as follows:-

#### Overall (BS EN ISO 9239-1)

The uncertainty varies, 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%

