

# CERTIFICATE

## Material Fire Test Certificate

**IGNL-8237-01-01C I01 R00**

DATE OF TEST 15.07.2024  
 ISSUE DATE 16.07.2024  
 EXPIRY DATE 15.07.2029

AS 1530.1:2024  
 Combustibility test for materials

**SPONSOR**  
**Trafalgar Fire**  
 26A Ferndell Street  
 South Graville, NSW 2142

**TEST BODY**  
**Ignis Labs Pty Ltd**  
 ABN 36 620 256 617  
 3 Cooper Place  
 Queanbeyan NSW 2620  
 Australia  
 www.ignislabs.com.au  
 (02) 6111 2909  
 Test body is the test location



NATA Accredited Laboratory  
 Number: 20534 Site number: 24604  
 Accredited for compliance with  
 ISO/IEC 17025 - Testing

### Specimen Identification

Corex Board

### Specimen Description

The sponsor described the test specimens as Trafalgar Corex board. It is composed of glass-reinforced gypsum-based material. It has a nominal density of 900 kg/m<sup>3</sup> and a nominal thickness of 25 mm. It is white in colour and has an end use as fire-rated partitions.

The received specimens were white chalky cylinders composed of two discs each. The discs had a nominal thickness of 25.55 mm, were white in colour, and had a fibre glass layer on both faces. Test specimens were fabricated to the test dimensions by Ignis Labs. As a layered material, the specimens are outside the scope of AS 1530.1 as stated in Clause 1.4.

Ignis Labs was not responsible for the sampling stage. All specimens were sampled by the test sponsor. The test results apply to the specimens as received.

The test specimens are cylindrical, and each has:

- |  |       |
|--|-------|
| (a) Nominal diameter (mm):             | 44.55 |
| (b) Nominal height (mm):               | 51.63 |
| (c) Nominal volume (cm <sup>3</sup> ): | 80.45 |
| (d) Nominal Mass (g):                  | 64.20 |
| (e) Colour:                            | White |

### Test Method

Five (5) specimens were tested in accordance with Australian Standard 1530 Methods for fire tests on building materials, components and structures, Part 1 – 2024: Combustible test for Materials. The test apparatus is constructed in accordance with the requirements of ISO 1182:2010 which has been verified to be equivalent to the apparatus requirements of AS 1530.1:2024 with the exception that a suitable alternative insulating material was used to fill the annular space between the furnace tubes, as specified in Clause 4.2 of ISO 1182:2010. Clause 1.1 of AS 1530.1 states that the test method is not applicable to products which are coated, faced, or laminated and as such the tested material may not be suitable for testing.

### Observations

The tested specimens exhibited equivalent results, and none ignited during the test. Charring was observed on the top of the specimen in the first 5 minutes of the test. Specimens 1 and 5 did not reach thermal stability before 60 minutes and these tests were ended at 60 minutes. After the test, the specimens were white in colour.

### Results

The specimen achieved the following results:

	Symbol	Arithmetic
Mean furnace thermocouple temperature rise:	$\Delta T_f$	0.90 °C
Mean specimen centre thermocouple temperature rise:	$\Delta T_c$	0.31 °C
Mean specimen surface thermocouple temperature rise:	$\Delta T_s$	0.43 °C
Mean duration of sustained flaming:		0 s
Mean mass loss:		20.96 %

### Combustibility

The specimens are NOT deemed COMBUSTIBLE according to the test criteria specified in Clause 3.4 of AS 1530.1:2024.



**Test Supervisor**  
 Darren Laker



**Technical Lead**  
 Tom Lewis

Version: IGNL-QF-031-Issue 03 Revision 01

Disclaimer These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test, and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use. The information contained in this document is provided for the sole use of the recipient and no reliance should be placed on the information by any other person. In the event that the information is disclosed or furnished to any other person, Ignis Labs Pty Ltd accepts no liability for any loss or damage incurred by that person whatsoever as a result of using the information.

Copyright © All rights reserved. No part of the content of this document may be reproduced, published, transmitted or adapted in any form or by any means without the written permission of Ignis Labs Pty Ltd.

SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SPECIMENS UNDER TEST

Parameter	Symbol or expression	Unit Symbol	Specimen Results				
			1	2	3	4	5
Atmospheric temperature	-	°C	13.40	13.90	15.70	17.70	18.60
Humidity	-	%RH	43.70	44.70	40.60	37.90	38.60
Height	h	mm	51.45	51.64	51.62	51.78	51.68
Diameter	d	mm	44.71	44.28	44.23	44.73	44.80
Initial specimen volume	v	cm <sup>3</sup>	80.74	79.48	79.27	81.33	81.42
Initial specimen mass	msi	g	63.66	63.36	64.46	64.95	64.56
Density	r	kg/m <sup>3</sup>	788.46	797.18	813.17	798.60	792.93
Sample holder weight	w	g	15.35	14.96	15.26	14.96	14.27
Final specimen mass	msf	g	50.45	50.30	50.71	51.52	50.72
Mass loss	$\Delta m = (msi - msf) / msi * 100$	%	20.75	20.61	21.33	20.68	21.44
Total duration of sustained flaming	Cumulative total of duration of flaming	s	0.00	0.00	0.00	0.00	0.00
Initial furnace thermocouple temperature	Tfi	°C	749.20	751.00	750.80	749.50	750.80
Maximum furnace thermocouple temperature	Tfm	°C	791.70	758.00	780.10	782.60	786.80
Final furnace thermocouple temperature	Tff	°C	790.40	756.30	779.40	782.40	786.20
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	1.30	1.70	0.70	0.20	0.60
Maximum specimen centre thermocouple temperature	Tcm	°C	740.17	730.17	724.57	736.17	745.77
Final specimen centre thermocouple temperature	Tcf	°C	739.40	730.00	724.50	736.10	745.30
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	0.77	0.17	0.07	0.07	0.47
Maximum specimen surface thermocouple temperature	Tsm	°C	785.37	802.67	775.77	793.17	804.77
Final specimen surface thermocouple temperature	Tsf	°C	784.20	802.60	775.40	792.90	804.50
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{sm} - T_{sf}$	°C	1.17	0.07	0.37	0.27	0.27
Test duration	t	min	60.00	50.00	55.00	55.00	60.00

IGNL-8237-01-01C I01 R00

END OF TEST CERTIFICATE