



CERTIFICATE

Material Fire Test Certificate

IGNL-9397-01-01C I01 R00

DATE OF TEST 10.10.2025
ISSUE DATE 28.11.2025
EXPIRY DATE 27.11.2030

AS 1530.1:1994
Combustibility test for materials

SPONSOR
Mulford New Zealand
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Wairau Valley, Auckland 0627

TEST BODY
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Test body is the test location



Specimen Identification

Panelux A1 Solid Aluminium

Specimen Description

The sponsor described the specimen as Panelux A1solid aluminium. It has a nominal thickness of 3 mm and is not coated. It was fabricated by Feiteng ACP and has an end use as exterior cladding.

The specimens were received as stacks of aluminium discs. The discs had a measured thickness of 2.97 mm and an average measured density of 2.70 g/cm³. The specimens were silver in colour and half of the discs contained a 2 mm centre hole.

Ignis Labs was not responsible for the sampling stage. All specimens were sampled and fabricated 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):	44.73
(b) Nominal height (mm):	50.37
(c) Nominal volume (cm ³):	79.12
(d) Nominal Mass (g):	213.80
(e) Colour:	Silver

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 – 1994: 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 1530.1:1994 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.

Observations

The tested specimens exhibited equivalent results, and none ignited. Dark grey discolouration was observed from 20 minutes into the test, and the specimens began to melt from 28 minutes. All tests were terminated at 30 minutes without reaching equilibrium to prevent equipment damage due to specimen melting. After the test, the specimens were matte grey in colour. A negligible mass change was recorded, which is attributed to the thermal instability of the specimen during testing.

Results

The specimen achieved the following results:

	Symbol	Arithmetic
Mean furnace thermocouple temperature rise:	ΔTf	0.42 °C
Mean specimen centre thermocouple temperature rise:	ΔTc	0.09 °C
Mean specimen surface thermocouple temperature rise:	ΔTs	5.65 °C
Mean duration of sustained flaming:		0.0 s
Mean mass loss:		0.0 %

Combustibility

The specimens are NOT deemed COMBUSTIBLE according to the test criteria specified in Clause 3.4 of AS 1530.1-1994



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




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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.

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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	18.50	18.50	18.50	18.50	20.60
Humidity	-	%RH	49.40	49.40	49.40	49.40	42.00
Height	h	mm	50.76	50.60	50.07	49.70	50.71
Diameter	d	mm	44.78	44.69	44.79	44.78	44.63
Initial specimen volume	V	cm ³	79.89	79.33	78.85	78.23	79.29
Initial specimen mass	msi	g	215.11	215.24	212.91	210.58	215.16
Density	r	kg/m ³	2692.57	2713.26	2700.20	2691.79	2713.58
Sample holder weight	w	g	13.45	13.39	13.45	13.39	13.45
Final specimen mass	msf	g	215.15	215.31	212.95	210.61	215.15
Mass loss	$\Delta m = (msi - msf)/msi * 100$	%	-0.02	-0.03	-0.02	-0.01	0.00
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	749.40	748.00	748.10	748.00	748.40
Maximum furnace thermocouple temperature	Tfm	°C	708.80	702.50	707.10	705.90	703.10
Final furnace thermocouple temperature	Tff	°C	707.90	702.30	706.70	705.60	702.80
Furnace thermocouple temperature rise	$\Delta Tf = Tfm - Tff$	°C	0.90	0.20	0.40	0.30	0.30
Maximum specimen centre thermocouple temperature	Tcm	°C	655.07	655.67	655.47	656.87	655.77
Final specimen centre thermocouple temperature	Tcf	°C	655.00	655.50	655.40	656.80	655.70
Specimen centre thermocouple temperature rise	$\Delta Tc = Tcm - Tcf$	°C	0.07	0.17	0.07	0.07	0.07
Maximum specimen surface thermocouple temperature	Tsm	°C	699.47	705.87	707.37	698.37	690.67
Final specimen surface thermocouple temperature	Tsf	°C	699.10	694.80	707.00	687.20	685.40
Specimen surface thermocouple temperature rise	$\Delta Ts = Tsm - Tsf$	°C	0.37	11.07	0.37	11.17	5.27
Test duration	t	min	30.00	30.10	30.10	30.10	30.10

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END OF TEST CERTIFICATE