



CERTIFICATE

Material Fire Test Certificate

IGNL-8048-01-01C I01R00

DATE OF TEST 15/02/2024
ISSUE DATE 19/02/2024
EXPIRY DATE 18/02/2029

AS 1530.1:1994
Combustibility test for materials

SPONSOR
Mineral Fox Pty Ltd
Unit 10, 2 Junction Drive
Coolum, QLD 4573

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



Specimen Name

Botanicrete

Specimen Description

The sponsor described the tested specimens as render. It is composed of dry render and has a nominal thickness of 4-6 mm when applied. The sponsor described the colour as 'natural'.

The specimens were received as solid cylinders of cream-coloured render. They had a measured nominal density of 1.60 g/cm³.

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):	43.67
(b) Nominal height (mm):	52.20
(c) Nominal volume (cm ³):	78.15
(d) Nominal Mass (g):	125.64
(e) Colour:	Cream

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

All test specimens displayed consistent behaviour, with none of them igniting during the test. None of the specimens reached equilibrium during testing, and the testing was stopped after 60 minutes. For all specimens, only the specimen centre thermocouple did not achieve stability.

Results

The specimen achieved the following results:

	Symbol	Arithmetic
Mean furnace thermocouple temperature rise:	ΔT_f	0.58 °C
Mean specimen centre thermocouple temperature rise:	ΔT_c	0.33 °C
Mean specimen surface thermocouple temperature rise:	ΔT_s	0.73 °C
Mean duration of sustained flaming:		0 s
Mean mass loss:		10.11 %

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



TL-1162

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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.

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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	21.00	21.50	22.00	22.70	22.70
Humidity	-	%RH	52.30	52.00	52.00	52.00	52.90
Height	h	mm	52.86	51.42	51.98	52.53	52.23
Diameter	d	mm	43.25	43.70	44.03	43.59	43.78
Initial specimen volume	V	cm ³	77.62	77.08	79.10	78.35	78.59
Initial specimen mass	msi	g	126.64	121.68	124.79	127.54	127.54
Density	r	kg/m ³	1631.50	1578.63	1577.63	1627.86	1622.89
Sample holder weight	w	g	15.41	15.18	14.79	15.39	15.09
Final specimen mass	msf	g	115.11	111.52	112.79	115.39	109.74
Mass loss	$\Delta m = (msi - msf) / msi * 100$	%	9.10	8.35	9.62	9.53	13.96
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	750.40	749.90	750.00	749.70	750.00
Maximum furnace thermocouple temperature	Tfm	°C	733.30	720.00	729.90	732.60	726.00
Final furnace thermocouple temperature	Tff	°C	732.50	719.50	729.30	732.10	725.50
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	0.80	0.50	0.60	0.50	0.50
Maximum specimen centre thermocouple temperature	Tcm	°C	733.77	724.37	734.87	737.57	734.77
Final specimen centre thermocouple temperature	Tcf	°C	733.60	724.20	734.70	737.40	733.80
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	0.17	0.17	0.17	0.17	0.97
Maximum specimen surface thermocouple temperature	Tsm	°C	756.47	748.37	740.97	746.77	724.57
Final specimen surface thermocouple temperature	Tsf	°C	755.60	747.70	740.40	746.20	723.60
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{sm} - T_{sf}$	°C	0.87	0.67	0.57	0.57	0.97
Test duration	t	min	60.00	60.00	60.00	60.00	60.00

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END OF TEST CERTIFICATE