

CERTIFICATE

Material Fire Test Certificate

IGNL-4174-01-04C I01R00

DATE OF TEST 17.12.2020
 ISSUE DATE 03.03.2021
 EXPIRY DATE 02.03.2026

AS 1530.1:1994
 Combustibility test for materials

SPONSOR
SUPA Coat Australia Pty Ltd
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TEST BODY
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Test body is the test location



Specimen Identification

PM 640 Cement Render Grey

Specimen Description

The sponsor described the tested specimen as cement render with the nominal composition being silica sands, Portland cement, calcium carbonates and fly-ash. The nominal density of the specimen is 1.45 kg/cm³ and the nominal thickness is 0-10 mm. The colour of the specimen is grey, and the end use is exterior cement render.

The test specimens are cylindrical, and each has:

(a) Nominal diameter (mm):	43.93
(b) Nominal height (mm):	50.24
(c) Nominal volume (cm ³):	76.10
(d) Nominal Mass (g):	117.72
(e) Colour:	Grey

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 five specimens' tests exhibited equivalent performance. No ignition was observed in any of the specimens. All tests were stopped at 60 mins without the temperature reaching equilibrium.

Results

The specimen achieved the following results:

	Symbol	Arithmetic
Mean furnace thermocouple temperature rise:	ΔT_f	1.54 °C
Mean specimen centre thermocouple temperature rise:	ΔT_c	0.15 °C
Mean specimen surface thermocouple temperature rise:	ΔT_s	0.64 °C
Mean duration of sustained flaming:		0 s
Mean mass loss:		5.33 %

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



Test Supervisor
 Darren Laker



Technical Lead
 Ram Prakash

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	20.00	21.10	22.20	23.40	24.90
Humidity	-	%RH	73.90	75.40	64.70	58.90	52.10
Height	h	mm	50.34	50.34	49.61	50.18	50.72
Diameter	d	mm	43.96	43.97	43.83	43.75	44.12
Initial specimen volume	v	cm ³	76.37	76.40	74.81	75.40	77.50
Initial specimen mass	msi	g	118.97	119.23	115.34	117.88	117.20
Density	r	kg/m ³	1557.84	1560.57	1541.63	1563.50	1512.16
Sample holder weight	w	g	0.00	0.00	0.00	0.00	0.00
Final specimen mass	msf	g	112.67	112.81	109.13	111.53	111.08
Mass loss	$\Delta m = (msi - msf) / msi * 100$	%	5.29	5.38	5.38	5.39	5.22
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	749.90	751.00	746.20	749.70	749.10
Maximum furnace thermocouple temperature	Tfm	°C	761.90	764.90	762.90	768.80	764.10
Final furnace thermocouple temperature	Tff	°C	760.59	763.96	760.56	767.09	762.70
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	1.31	0.94	2.34	1.71	1.40
Maximum specimen centre thermocouple temperature	Tcm	°C	772.60	767.30	768.50	766.80	763.10
Final specimen centre thermocouple temperature	Tcf	°C	772.39	767.21	768.38	766.66	762.90
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	0.21	0.09	0.12	0.14	0.20
Maximum specimen surface thermocouple temperature	Tsm	°C	801.30	791.60	798.10	786.70	783.20
Final specimen surface thermocouple temperature	Tsf	°C	800.83	790.91	797.70	785.68	782.58
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{sm} - T_{sf}$	°C	0.47	0.69	0.40	1.02	0.62
Test duration	t	min	60.00	60.00	60.00	60.00	60.00

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END OF TEST CERTIFICATE