



CERTIFICATE

Material Fire Test Certificate

IGNL-4085-01C 102R00
Date of Test 20-June-2020
ISSUED 24-June-2020
EXPIRY 23-June-2025

Specimen Identification
GRC Planter

Specimen Description

The sponsor described the tested specimen as:
Commercial Pots or Planters made from GRC or glass reinforced concrete material. The nominal composition consists of portland cement, sand, plasticiser, alkali resistant glass fibre and water. The test specimen was made of two parts, the first 20mm and the second 30mm in thickness. These two parts were stacked onto each other to reach the required 50mm specimen thickness.

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: Combustibility 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 specimens exhibited similar behaviour during the test. None of the specimens ignited.

Specimen

The test specimens are cylindrical and each has -

(a). Nominal diameter (mm):	44.57
(b). Nominal height (mm):	50.24
(c). Nominal volume (cm ³):	78.3
(d). Nominal mass (g):	145.43
(e). Colour:	Light grey

Results

	Symbol	Arithmetic
Mean furnace thermocouple temperature rise:	ΔT_f	1.16 °C
Mean specimen centre thermocouple temperature rise:	ΔT_c	0.06 °C
Mean specimen surface thermocouple temperature rise:	ΔT_s	0.58 °C
Mean duration of sustained flaming:		0 s
Mean mass loss:		12.07 %

Combustibility

The specimens are NOT deemed COMBUSTIBLE according to the test criteria specified in clause 3.4 of as 1530.1- 1994.

AS 1530.1-1994: COMBUSTIBILITY
TEST FOR MATERIALS

SPONSOR

Commercial pots
Cnr Great Western Hwy &
Tableland Rd
Wentworth Falls, NSW, 2782

PRESENTED TO

Commercial pots
Cnr Great Western Hwy &
Tableland Rd
Wentworth Falls, NSW, 2782

TEST BODY

Ignis Labs Pty Ltd
ABN 36 620 256 617
3 Cooper Place
Queanbeyan NSW 2602
www.ignislabs.com.au
(02) 6111 2909
Test body is the test location



Test Supervisor
Darren Laker

Technical Lead
Ram Prakash

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.

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CERTIFICATE

Material Fire Test Certificate

IGNL-4085-01C I02R00
 Date of Test 20-June-2020
 ISSUED 24-June-2020
 EXPIRY 23-June-2025

Test Calculations

AS 1530.1-1994: COMBUSTIBILITY
 TEST FOR MATERIALS

SPONSOR

Commercial pots

Cnr Great Western Hwy & Tableland Rd
 Wentworth Falls, NSW, 2782

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 Queanbeyan NSW 2602
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Test body is the test location

Parameter	Symbol or expression	Unit symbol	Results					Arithmetic (Mean)	Standard Deviation	Uncertainty
			1	2	3	4	5			
Atmospheric temperature	-	OC	21.10	18.80	19.30	21.80	22.90	0.00	0.00	
Humidity	-	%RH	42.90	48.30	50.20	43.50	41.40	0.00	0.00	
Height	h	mm	50.49	49.86	52.71	50.39	47.73	50.24	1.78	
Diameter	d	mm	44.21	44.87	44.33	44.42	45.00	44.57	0.35	
Initial specimen volume	V	cm ³	77.47	78.80	81.31	78.05	75.87	78.30	2.00	
Initial specimen mass	msi	g	148.30	144.99	150.65	144.04	134.22	144.44	6.29	
Density	r	kg/m ³	1914.37	1839.94	1852.73	1845.49	1769.01	1844.31	51.64	
Sample holder weight	w	g	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Final specimen mass	msf	g	129.63	128.27	132.52	126.20	118.39	127.00	5.33	
Mass loss	$\Delta m = (msi - msf) / msi * 100$	%	12.59	11.53	12.03	12.39	11.79	12.07	0.43	
Total duration of sustained flaming	Cumulative total of duration of flaming	s	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Initial furnace thermocouple temperature	Tfi	°C	748.50	748.80	748.10	746.70	746.20	747.66	1.15	
Maximum furnace thermocouple temperature	Tfm	°C	723.50	758.30	761.30	764.90	743.10	750.22	17.09	
Final furnace thermocouple temperature	Tff	°C	721.41	757.15	760.50	764.13	742.09	749.06	17.58	
Furnace thermocouple temperature rise	$\Delta Tf = Tfm - Tff$	°C	2.09	1.15	0.80	0.77	1.01	1.16	0.54	
Maximum specimen centre thermocouple temperature	Tcm	°C	757.90	744.50	749.10	748.40	744.00	748.78	5.58	
Final specimen centre thermocouple temperature	Tcf	°C	757.88	744.42	749.03	748.35	743.93	748.72	5.60	
Specimen centre thermocouple temperature rise	$\Delta Tc = Tcm - Tcf$	°C	0.02	0.08	0.07	0.05	0.07	0.06	0.02	
Maximum specimen surface thermocouple temperature	Tsm	°C	789.80	752.60	755.00	751.80	755.50	760.94	16.21	
Final specimen surface thermocouple temperature	Tsf	°C	789.14	752.15	754.29	751.16	755.06	760.36	16.17	
Specimen surface thermocouple temperature rise	$\Delta Ts = Tsm - Tsf$	°C	0.66	0.45	0.71	0.64	0.44	0.58	0.13	
Test duration	t	min	83.75	75.65	76.33	79.90	66.90	76.51	6.27	

