

Certificate of Test

QUOTE No.: NC8630

REPORT No.: FNC12855

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

SPONSOR: SAS Signage Accessories Supplier Pty Ltd
39-41 Overseas Drive
NOBLE PARK VIC 3174
AUSTRALIA

DESCRIPTION OF TEST SAMPLE:

The sponsor described the tested specimen as a marine grade 5052 aluminium material representative of the aluminium used in the Ai Panel.

Nominal thickness: 2 mm (loose laid to form 50 mm for the test)
Nominal density: 2680 kg/m³
Colour: silver

TEST PROCEDURE:

Five (5) samples 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.

An alternative suitable insulating material was used to fill the annular space between the furnace tubes, as specified in Clause 4.2 of ISO 1182:2010.

RESULTS:

The following calculated results were obtained, refer also to Summary of measurements:

Arithmetic mean	$= \frac{\Sigma \text{ results}}{5}$
Mean furnace thermocouple temperature rise (°C)	6.96
Mean specimen centre thermocouple temperature rise (°C)	5.70
Mean specimen surface thermocouple temperature rise (°C)	7.35
Mean duration of sustained flaming (s)	N/A
Mean mass loss (%)	0.20

DESIGNATION:

The material is NOT deemed combustible according to the test criteria specified in Clause 3.4 of AS 1530.1-1994.

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.

DATE OF TEST: 23 December 2021

Issued on the 24th day of January 2022 without alterations or additions.



Shaw Tran
Testing Officer



Stephen Smith
Team Leader, Reaction to Fire & Façade Fire Laboratory

End of Report

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NATA Accredited Laboratory

Number: 165

Corporate Site No 3625

Accredited for compliance with ISO/IEC 17025 - Testing.

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SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SAMPLES UNDER TEST C12855

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	185.94	185.71	185.95	185.64	185.64
Final specimen mass	m_{sf}	g	184.88	182.86	185.47	185.56	185.47
Mass loss	$\Delta m = \frac{M_{si} - M_{sf}}{M_{si}} \times 100$	%	0.57	1.53	0.26	0.04	0.09
Total duration of sustained flaming	Cumulative total of duration of flaming*	s	0	0	0	0	0
Initial furnace thermocouple temperature	T_{fi}	°C	748	748	751	746	751
Maximum furnace thermocouple temperature	T_{fm}	°C	786	776	778	785	788
Final furnace thermocouple temperature	T_{ff}	°C	780	766	771	778	784
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	6	10	7	7	4
Maximum specimen centre thermocouple temperature	T_{cm}	°C	743	726	728	745	744
Final specimen centre thermocouple temperature	T_{cf}	°C	737	720	725	739	736
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	6	6	3	6	8
Maximum specimen surface thermocouple temperature	T_{cm}	°C	779	769	775	778	778
Final specimen surface thermocouple temperature	T_{sf}	°C	773	759	768	773	770
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	6	11	7	5	8
Test duration	-	min	95	80	90	105	120

- Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate