

CERTIFICATE

Material Fire Test Certificate

IGNL-5057-03C I01 R00

DATE OF TEST 29/04/2021
10/06/2021
ISSUE DATE 21/06/2021
EXPIRY DATE 20/06/2026

AS 1530.3-1999
Simultaneous determination of ignitability,
flame propagation, heat release and smoke
release

SPONSOR
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Test body is the test location



Specimen Identification

Acrylic Tech FR Paint

Specimen Description

The sponsor described the test specimens as:

Grey spray/brush fire resistant paint. The specimens have a thickness ranging from 5.35mm to 6.25mm (measured), including the 4.5mm fibre cement substrate. Specimens are grey in colour and their end use is a spray/brush on FR paint.

Test Method

Nine samples were tested in accordance with Australian Standard 1530, Method for fire tests on building components and structures, Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release, 1999. The material was applied to a fibre cement board and the face with spray (brush) coating was tested. For the test, each sample was clamped to the specimen holder in four places. A woven metal radiant panel was used in lieu of ceramic tiles.

Observations

All specimens ignited during testing. Smoke was observed between two and three minutes into the test. Blistering was observed prior to ignition which typically began approximately eight minutes into the test. Sparks were observed prior to the sustained flaming at the tests of specimens 2, 3, 4, 8, and 9. Discolouration was observed on the exposed surface during the test.

Results

Parameter	Sym	Unit	Results								
Specimen number			1	2	3	4	5	6	7	8	9
Ignition time	T _i	min	8.13	8.35	8.07	7.62	7.90	8.15	8.17	7.98	7.68
Flame propagation time	T _f	s	-	-	-	-	-	-	-	-	-
Heat release integral		kJ/m ²	12.09	27.48	14.78	26.67	34.25	34.00	48.22	39.62	25.42
Optical density (ignition)	D	/m	0.12	0.06	0.07	0.03	0.07	0.05	0.03	0.02	0.03
Optical density (non ignition)	D _{NI}	/m	-	-	-	-	-	-	-	-	-
Smoke release (ignition)	Log ₁₀ (D)		-0.91	-1.22	-1.18	-1.48	-1.16	-1.27	-1.56	-1.63	-1.49
Smoke release (non ignition)	Log ₁₀ (D) _{NI}		-	-	-	-	-	-	-	-	-

Calculation

Parameter	Mean	Standard error
Ignition time	8.01	0.08
Flame propagation time	-	-
Heat release integral	29.17	3.81
Optical density (ignition)	0.05	0.01
Optical density (non ignition)	-	-
Smoke release	-1.32	0.08

Result

Indices	Range	Result
Ignitability	0-20	12
Spread of Flame	0-10	0
Heat Evolved	0-10	1
Smoke Developed	0-10	3

The results only apply to the specimen mounted as described in this report.



Test Supervisor
Darren Laker



Technical Lead
Ram Prakash

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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. The results only apply to the specimen mounted as described in this report. The results of this fire test may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions.

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