

Certificate of Test

QUOTE No.: NC8571

REPORT No.: FNC12811

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

TRADE NAME: Ardex WR 120 FR

SPONSOR: Ardex Australia Pty Ltd
20 Powers Road
SEVEN HILLS NSW 2147
AUSTRALIA

DESCRIPTION OF TEST SAMPLE:

The sponsor described the tested specimen as a cement render comprised of sand, cement, hydrated lime, polymer, polymer fibres and cellulose thickener.

Nominal thickness: 50 mm
Nominal density: 2000 kg/m³
Colour: grey

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)	1.15
Mean specimen centre thermocouple temperature rise (°C)	0.47
Mean specimen surface thermocouple temperature rise (°C)	0.17
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	7.32

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: 22 September 2021

Issued on the 9th day of November 2021 without alterations or additions.



Faustin Molina
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 C12811

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	104.76	105.83	97.88	105.44	103.23
Final specimen mass	m_{sf}	g	97.56	97.69	90.68	97.73	95.65
Mass loss	$\Delta m = \frac{M_{si} - M_{sf}}{M_{si}} \times 100$	%	6.87	7.69	7.36	7.31	7.34
Total duration of sustained flaming	Cumulative total of duration of flaming*	s	0	0	0	0	0
Initial furnace thermocouple temperature	T_{fi}	°C	747	751	748	753	750
Maximum furnace thermocouple temperature	T_{fm}	°C	766	774	765	775	772
Final furnace thermocouple temperature	T_{ff}	°C	765	772	764	774	771
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	1	2	1	1	1
Maximum specimen centre thermocouple temperature	T_{cm}	°C	749	760	756	756	750
Final specimen centre thermocouple temperature	T_{cf}	°C	749	759	756	755	749
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	0	1	0	1	1
Maximum specimen surface thermocouple temperature	T_{cm}	°C	770	782	784	791	789
Final specimen surface thermocouple temperature	T_{sf}	°C	769	782	784	791	789
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	1	0	0	0	0
Test duration	-	min	65	90	80	80	95

- Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate