

Certificate of Test

QUOTE No.: NC8190

REPORT No.: FNC12410

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

TRADE NAME: Tonality Natural Facade

SPONSOR: Industrie Arc Pty Limited
Suite 3.03 / 55 Miller Street
PYRMONT NSW
AUSTRALIA

DESCRIPTION OF TEST SAMPLE: The sponsor described the tested specimen as a terracotta tile material comprised of baked clay.

Nominal thickness: 10 mm (loose laid to form 50 mm for the test)
Nominal density: 2240 kg/m³
Colour: red brick with black streaks

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)	0.45
Mean specimen centre thermocouple temperature rise (°C)	0.20
Mean specimen surface thermocouple temperature rise (°C)	0.59
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	0.09

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: 27 June 2019

Issued on the 5th day of July 2019 without alterations or additions.



Faustin Molina
Testing Officer



Brett Roddy
Group Leader, Fire Testing and Assessments

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Page 1 of 2

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SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SAMPLES UNDER TEST FNC12410

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	165.28	165.15	164.20	167.01	164.22
Final specimen mass	m_{sf}	g	165.13	164.95	164.06	166.88	164.09
Mass loss	$\Delta m = \frac{M_{si} - M_{sf}}{M_{si}} \times 100$	%	0.09	0.12	0.09	0.08	0.08
Total duration of sustained flaming	Cumulative total of duration of flaming*	s	0	0	0	0	0
Initial furnace thermocouple temperature	T_{fi}	°C	754	753	749	754	750
Maximum furnace thermocouple temperature	T_{fm}	°C	789	794	773	791	786
Final furnace thermocouple temperature	T_{ff}	°C	789	794	772	790	786
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	0	0	1	1	0
Maximum specimen centre thermocouple temperature	T_{cm}	°C	767	779	775	776	772
Final specimen centre thermocouple temperature	T_{cf}	°C	767	779	775	775	772
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	0	0	0	1	0
Maximum specimen surface thermocouple temperature	T_{cm}	°C	795	807	796	788	803
Final specimen surface thermocouple temperature	T_{sf}	°C	795	806	796	787	802
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	0	1	0	1	1
Test duration	-	min	60	65	60	65	60

* Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate

