

Certificate of Test

QUOTE No.: NC8516

REPORT No.: FNC12773

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

SPONSOR: Trafalgar Group Pty Ltd
26A Ferndell Street
SOUTH GRANVILLE NSW 2142
AUSTRALIA

DESCRIPTION OF TEST SAMPLE:

The sponsor described the tested specimen as a stone wool insulation material comprised of stone wool, binder and mineral oil. The stone wool insulation material is a component of the Siderise CWFS Cavity Barrier insulation product.

Nominal thickness: 120 mm (50 mm for the test)
Nominal density: 75 kg/m³
Colour: yellow

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)	3.22
Mean specimen centre thermocouple temperature rise (°C)	3.08
Mean specimen surface thermocouple temperature rise (°C)	3.77
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	2.14

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: 28 June 2021

Issued on the 23rd day of July 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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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 C12773

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	4.96	5.30	5.45	5.17	5.41
Final specimen mass	m_{sf}	g	4.84	5.19	5.42	5.02	5.26
Mass loss	$\Delta m = \frac{M_{si} - M_{sf}}{M_{si}} \times 100$	%	2.42	2.08	0.55	2.90	2.77
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	749	748	747	745
Maximum furnace thermocouple temperature	T_{fm}	°C	784	769	773	765	768
Final furnace thermocouple temperature	T_{ff}	°C	774	768	772	763	766
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	10	1	1	2	2
Maximum specimen centre thermocouple temperature	T_{cm}	°C	751	741	754	747	736
Final specimen centre thermocouple temperature	T_{cf}	°C	744	738.6	754	745	732
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	7	2	0	2	4
Maximum specimen surface thermocouple temperature	T_{cm}	°C	773	773	770	769	770
Final specimen surface thermocouple temperature	T_{sf}	°C	764	770	769	766	767
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	9	3	1	3	3
Test duration	-	min	30	30	30	30	30

- Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate

Certificate of Test

QUOTE No.: NE8517

REPORT No.: FNE12791

AS/NZS 1530.3:1999 SIMULTANEOUS DETERMINATION OF IGNITABILITY, FLAME PROPAGATION, HEAT RELEASE AND SMOKE RELEASE

TRADE NAME: Siderise CWFS Cavity Barrier

SPONSOR: Trafalgar Group Pty Ltd
26A Ferndell Street
SOUTH GRANVILLE NSW 2142
AUSTRALIA

DESCRIPTION OF SAMPLE:

The sponsor described the tested specimen as a stone wool material with aluminium foil on the front and back face. The stone wool was comprised of stone wool fibre, mineral oil and binder.

The foil face was adhered to the stone wool using a thermal bonding process.

Nominal thickness of foil face: < 0.15 mm
Nominal thickness of stone wool: 120 mm
Nominal total thickness: 120 mm
Nominal density: 75 kg/m³
Colour: silver (foil) / yellow (stone wool)

TEST PROCEDURE: Six (6) samples were tested in accordance with AS/NZS 1530, Method for fire tests on building components and structures, Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release, 1999. For the test, each sample was clamped to the specimen holder in four places.

RESULTS: The following means and standard errors were obtained:

Parameter	Mean	Standard Error
Ignition Time (min)	N/A	N/A
Flame Spread Time (s)	N/A	N/A
Heat Release Integral (kJ/m ²)	N/A	N/A
Smoke Release (log ₁₀ D)	-1.830	0.055

For regulatory purposes these figures correspond to the following indices:

Ignitability Index	Spread of Flame Index	Heat Evolved Index	Smoke Developed Index
(0-20)	(0-10)	(0-10)	(0-10)
0	0	0	1

The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

DATE OF TEST: 19 August 2021

Issued on the 1st day of September 2021 without alterations or additions.



Faustin Molina
Testing Officer



Stephen Smith
Team Leader, Reaction to Fire Laboratory

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