

Certificate of Test

QUOTE No.: NC8476

REPORT No.: FNC12681

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

TRADE NAME: DCT Vulcanwool 150 kg/m³

SPONSOR: Dynamic Composite Technologies Pty Ltd
Unit 8, 171 - 175 Newton Road
WETHERILL PARK NSW 2164
AUSTRALIA

**DESCRIPTION OF
TEST SAMPLE:**

The sponsor described the tested specimen as a volcanic mineral wool comprised of volcanic rock fibre, bakelite binder, mineral oil and silicone oil.

Nominal thickness: 50 mm
Nominal density: 150 kg/m³
Colour: dark beige

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)	8.44
Mean specimen centre thermocouple temperature rise (°C)	110.80
Mean specimen surface thermocouple temperature rise (°C)	13.14
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	5.61

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 2020

Issued on the 4th day of February 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.

Page 1 of 2

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SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SAMPLES UNDER TEST C12681

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	10.83	10.30	11.16	8.92	11.78
Final specimen mass	m_{sf}	g	10.43	9.88	10.47	8.02	11.31
Mass loss	$\Delta m = \frac{m_{si} - m_{sf}}{m_{si}} \times 100$	%	3.69	4.08	6.18	10.09	3.99
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	753	753	749
Maximum furnace thermocouple temperature	T_{fm}	°C	775	786	785	788	778
Final furnace thermocouple temperature	T_{ff}	°C	771	776	775	776	772
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	4	10	10	12	6
Maximum specimen centre thermocouple temperature	T_{cm}	°C	878	853	888	896	836
Final specimen centre thermocouple temperature	T_{cf}	°C	756	766	763	755	757
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	122	87	125	141	79
Maximum specimen surface thermocouple temperature	T_{cm}	°C	795	782	789	795	784
Final specimen surface thermocouple temperature	T_{sf}	°C	783	772	776	780	768
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	12	10	13	15	16
Test duration	-	min	30	30	30	30	30

- Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate