

**Applicant:** BBMG Energy Saving Material & Technology (Dachang) Co., Ltd

**Address:** The east side of Daxiang Line and the south side of Wei Er Road, Dachang Hui Autonomous County, Langfang City, Hebei Province

**Testing Sample:** Rock wool board, Material: Rock wool, Color: Yellow, Thickness: 50mm

**Standard:** AS/NZS 1530.1-1994 Combustibility Test for Materials

**Testing Lab:** CSIRO (NATA accredited laboratory with No.165)

**Date of Issue:** 2023-06-27

**Test Data:**

Test Items	Certificate ID Code	Test results	Requirements
AS/NZS 1530.1-1994 Combustibility Test for Materials	FNC13066 (Customer ID Code: 3483)	$\Delta T_f = 3.70^{\circ}\text{C}$	$\Delta T_f > 50^{\circ}\text{C}$
		$\Delta T_c = 70.00^{\circ}\text{C}$	No requirement
		$\Delta T_s = 7.36^{\circ}\text{C}$	$\Delta T_s > 50^{\circ}\text{C}$
		Mean duration of sustained flaming: 0s	No flaming
		Mean mass loss: 3.73%	No requirement

Note:  $\Delta T_f$ : Mean furnace thermocouple temperature rise

$\Delta T_c$ : Mean specimen centre thermocouple temperature rise

$\Delta T_s$ : Mean specimen surface thermocouple temperature rise

**Conclusion:** the material is NOT deemed combustible according to the test criteria specified in Clause 3.4 of AS 1530.1-1994.

**Certificate search:**

1. Click [www.fire-test.com](http://www.fire-test.com) (English)
2. Select "Search for Certification"
  - a. Fill the Certificate ID (FNC13066) and Customer ID (3483)
  - b. Fill the Certificate ID (FNC13066) and applicant name (BBMG Energy Saving Material & Technology (Dachang) Co., Ltd)
3. Submit with confirmation, you may get the search information.



**Value-added services:**



WeChat Official Accounts

You can scan the QR code below to follow our WeChat Official/Public Accounts to learn more about the relevant standards and regulations for fire retardant testing of rail transit vehicles or building materials, moreover, and you can also ask for supporting, search for report or certificate information, standards sharing and downloads on the WeChat Official/Public Accounts. Join us!

# Certificate of Test

QUOTE No.: NC8766

REPORT No.: FNC13066

## COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

**TRADE NAME:** Rock wool board

**SPONSOR:** BBMG Energy Saving Material & Technology (Dachang) Co., Ltd  
East Side of Daxiang Line and South Side of Wei Er Road  
HUI AUTONOMOUS COUNTY LANGFANG CITY HEBEI PROVINCE  
CHINA

### DESCRIPTION OF

**TEST SAMPLE:** The sponsor described the tested specimen as a rock wool insulation comprised of quartz, lime, magnesium oxide, sodium oxide, potassium oxide and ferric oxide.

Nominal thickness: 50 mm  
Nominal density: 60 kg/m<sup>3</sup>  
Colour: yellow

The test result only relates to the specimen tested and described in this report. CSIRO was not involved in the selection of the materials.

**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)	3.70
Mean specimen centre thermocouple temperature rise (°C)	70.00
Mean specimen surface thermocouple temperature rise (°C)	7.36
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	3.73

**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:** 25 May 2023

Issued on the 27 day of June 2023 without alterations or additions.



Faustin Molina  
Testing Officer



Stephen Smith  
Team Leader, Reaction to Fire & Façade Fire Laboratory

### End of Report

Copyright CSIRO 2022 ©. Copying or alteration of this report without written authorisation from CSIRO is forbidden.



NATA Accredited Laboratory

Number: 165

Corporate Site No 3625

Accredited for compliance with ISO/IEC 17025 - Testing.

Page 1 of 2

CSIRO INFRASTRUCTURE TECHNOLOGIES

14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA  
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555 www.csiro.au



## SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SAMPLES UNDER TEST C13066

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	$m_{si}$	g	4.13	4.12	4.01	4.06	4.07
Final specimen mass	$m_{sf}$	g	3.96	3.97	3.85	3.89	3.96
Mass loss	$\Delta m = \frac{m_{si} - m_{sf}}{m_{si}} \times 100$	%	4.12	3.64	3.99	4.19	2.70
Total duration of sustained flaming	Cumulative total of duration of flaming*	s	0	0	0	0	0
Initial furnace thermocouple temperature	$T_{fi}$	°C	751	751	747	754	746
Maximum furnace thermocouple temperature	$T_{fm}$	°C	760	766	774	783	772
Final furnace thermocouple temperature	$T_{ff}$	°C	757	763	772	780	764
Furnace thermocouple temperature rise	$\Delta T_f = T_{fm} - T_{ff}$	°C	3	3.2	2	3	8
Maximum specimen centre thermocouple temperature	$T_{cm}$	°C	782	874	786	949	764
Final specimen centre thermocouple temperature	$T_{cf}$	°C	757	754	766	773	755
Specimen centre thermocouple temperature rise	$\Delta T_c = T_{cm} - T_{cf}$	°C	25	120	20	176	9
Maximum specimen surface thermocouple temperature	$T_{cm}$	°C	761	755	773	772	765
Final specimen surface thermocouple temperature	$T_{sf}$	°C	757	750	764	764	754
Specimen surface thermocouple temperature rise	$\Delta T_s = T_{cm} - T_{sf}$	°C	4	5	9	8	11
Test duration	-	min	30	35	35	30	40

- Any individual duration flaming less than 5 seconds was discarded

**End of Test Certificate**