



SIRIM QAS International Sdn. Bhd.  
 (Company No.: 199601037981 (410334-X))  
 No.1, Persiaran Dato' Menteri, P.O.BOX 7035, Section 2,  
 40700 Shah Alam, Selangor Darul Ehsan, Malaysia  
 Tel: 03-55446461  
 Fax: 03-55446454  
 www.sirim-qas.com.my



**TEST REPORT**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| REPORT NO : 2023FE0567                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PAGE : 1 OF 6 |
| <p>This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health &amp; Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.</p> |               |

**THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY**

Applicant : BRD NEW MATERIALS (MALAYSIA) SDN. BHD.  
 Lot 577, Jalan Merbau, Batu 7 1/2,  
 Jalan Kapar Kampung Perepat,  
 42200 Kapar,  
 Selangor Darul Ehsan.  
 File No. / Licensee No.: P5-018995  
 (Requested by Ms. Nurul Izzah Binti Norzari, ICCS 2, SIRIM QAS International Sdn. Bhd.)

Manufacturer : BRD NEW MATERIALS CO., LTD.,  
 West Side, South Of Weiwu Road,  
 Chang'Ge City,  
 461500 Xuchang,  
 Henan, China.

Product : INSULATION PANEL (ROCKWOOL CORE)

Reference Standard / Method of Test : BS 476: Part 6: 1989+A1:2009  
 Fire Test on Building Materials and Structures  
 Part 6: Method of Test for Fire Propagation for Products.

Description of sample : 6 pieces of Insulation Panel (Rockwool Core).  
 Size of Specimen: 225mm x 225mm x 50mm (measured thickness)

Date Received of Complete Application : 16 August 2023

Job No. : J20231440542

Description of Test Results : The test results of the submitted test samples are described in Page 2 and Page 3 of this test report.

Issued Date : 18 September 2023

Approved Signatory;

(MUHAMMAD SAFUAN BIN M. IDRIS)  
 Testing Executive



(ZAINI BIN AHMAD)  
 Head  
 Fire Protection Section  
 Testing Services Department

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**Product** : INSULATION PANEL (ROCKWOOL CORE)      **Nominal Thickness** : 50 mm  
**Brand** : BRD ECO      **Measured Thickness** : 50 mm  
**Model** : ROCKWOOL SANDWICH PANEL      **Mass Per Unit Area** : 16.01 kg/m<sup>2</sup>  
**Type** : FLAT PANEL      **Date of Test** : 06.09.2023

| Time<br>(Min.)       | Temperature Rise Above Ambient (°C) |               |               |               |                     |
|----------------------|-------------------------------------|---------------|---------------|---------------|---------------------|
|                      | Calibration                         | Specimen<br>A | Specimen<br>B | Specimen<br>C | Specimen<br>Average |
| 0.5                  | 16                                  | 13            | 14            | 12            | 13                  |
| 1.0                  | 22                                  | 20            | 19            | 16            | 18                  |
| 1.5                  | 25                                  | 24            | 23            | 20            | 22                  |
| 2.0                  | 27                                  | 27            | 30            | 21            | 26                  |
| 2.5                  | 29                                  | 29            | 32            | 25            | 29                  |
| 3.0                  | 33                                  | 34            | 33            | 27            | 31                  |
| 4.0                  | 63                                  | 62            | 64            | 64            | 63                  |
| 5.0                  | 95                                  | 96            | 100           | 97            | 98                  |
| 6.0                  | 114                                 | 121           | 122           | 124           | 122                 |
| 7.0                  | 132                                 | 146           | 149           | 146           | 147                 |
| 8.0                  | 148                                 | 166           | 169           | 164           | 166                 |
| 9.0                  | 161                                 | 184           | 183           | 181           | 183                 |
| 10.0                 | 175                                 | 199           | 206           | 193           | 199                 |
| 12.0                 | 193                                 | 223           | 227           | 217           | 222                 |
| 14.0                 | 209                                 | 238           | 242           | 233           | 237                 |
| 16.0                 | 222                                 | 249           | 253           | 244           | 249                 |
| 18.0                 | 231                                 | 259           | 261           | 251           | 257                 |
| 20.0                 | 237                                 | 266           | 265           | 257           | 263                 |
| Subindex 1           |                                     | 0.1           | 0.3           | 0.0           | 0.1                 |
| Subindex 2           |                                     | 1.1           | 1.3           | 1.1           | 1.2                 |
| Subindex 3           |                                     | 0.9           | 1.0           | 0.7           | 0.9                 |
| Index of Performance |                                     | 2.1           | 2.6           | 1.8           | 2.2                 |



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Date of Test : 06.09.2023

Test Location : Block 14 Fire Protection Section, SIRIM QAS International Sdn. Bhd.

No. of Specimen Tested : 3 nos.

**The Test Result** for Insulation Panel (Rockwool Core) with measured mass per unit area of 16.01 kg/m<sup>2</sup> and measured thickness 50 mm.

|                            |             |
|----------------------------|-------------|
| The Subindex i1 is         | 0.1 ± 0.65* |
| The Subindex i2 is         | 1.2 ± 0.65* |
| The Subindex i3 is         | 0.9 ± 0.65* |
| The Fire Propagation Index | 2.2 ± 0.65* |

Note:

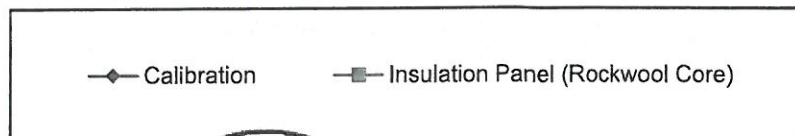
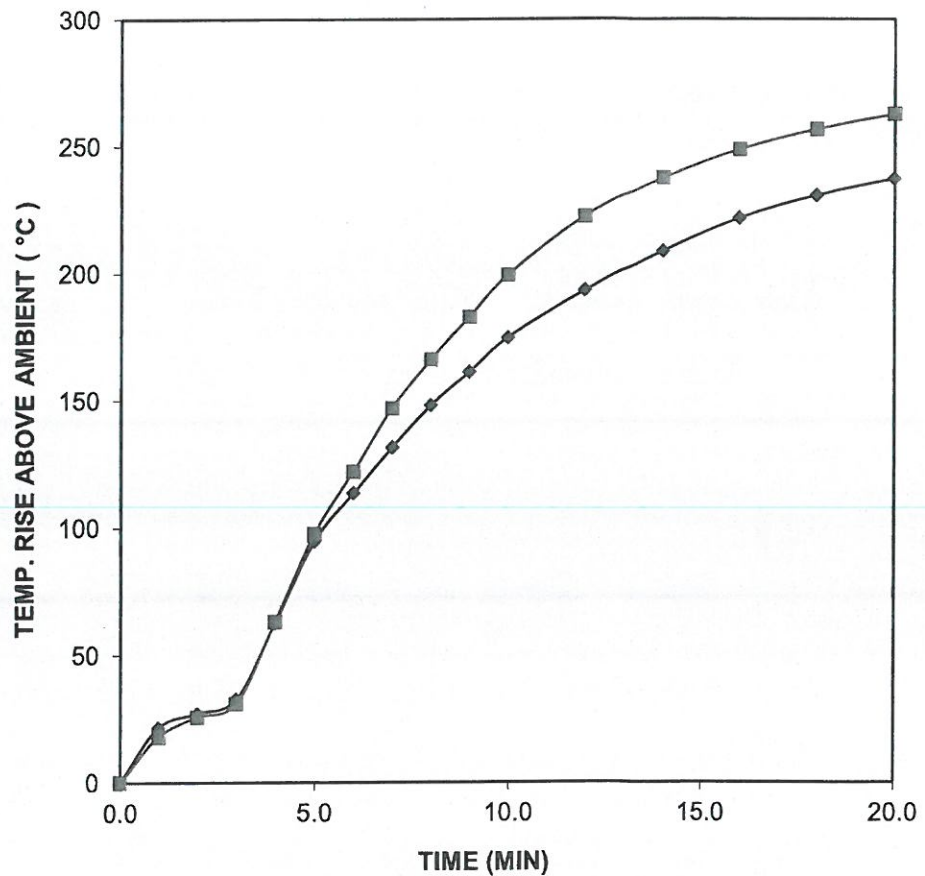
- a) Where the reported uncertainty is calculated using a coverage factor k=2, which gives a level of confidence of approximately 95%
- b) \*Denotes measurement uncertainty

The test results relate only to the behavior of the test specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.



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|                                                   |                                                     |
|---------------------------------------------------|-----------------------------------------------------|
| <b>Product</b> : INSULATION PANEL (ROCKWOOL CORE) | <b>Nominal Thickness</b> : 50 mm                    |
| <b>Brand</b> : BRD ECO                            | <b>Measured Thickness</b> : 50 mm                   |
| <b>Model</b> : ROCKWOOL SANDWICH PANEL            | <b>Mass Per Unit Area</b> : 16.01 kg/m <sup>2</sup> |
| <b>Type</b> : FLAT PANEL                          | <b>Date of Test</b> : 06.09.2023                    |



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**Descriptions of sample as claimed by the submitter:**



Insulation Panel (Rockwool Core)

Product Description

Nominal thickness: 50 mm

Skin thickness (PPGI): 0.5 mm (internal) & 0.6 mm (external)

Core density: 120 kg/m<sup>3</sup>



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2. The Test Report shall not be misused, amended, changed, varied or modified in any manner whatsoever by the Applicant or otherwise.
3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.
4. The Test Report shall not be reproduced and shall not in any event be used for any advertising purposes or whatsoever without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No 1, Persiaran Dato' Menteri, Building 8, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.
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6. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International, the customer (Applicant/Manufacture/Factory, etc.) may use SIRIM QAS International logo or word on the promotional materials and the Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International ...(Test Report No) ...(dated) ...(for what test) ...(to which standard)" or such similar words which stress that only the sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures/flyers/official website). For avoidance of doubt, the statement shall not be used on the sample, packaging of the sample, items and products.
7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.
8. In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
  - a) Informing and placing a notice in the media;
  - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
  - c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise;
  - d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
  - e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.
9. SIRIM QAS International is committed in supporting an environmentally-friendly business practices by reducing paper consumption, therefore we do not issue any hard copy of Test Report to the Applicant. However, additional certified true copy(ies) or softcopy of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee. The certified true copy(ies) or softcopy of test report shall only be given for test report issued not more than three (3) years from the date of issuance.
10. Issuance of Amendment Report due to the following reasons are chargeable to the Applicant :
  - a) Changes in details of the Applicant name and/or address;
  - b) Changes in details of the Manufacturer's name and/or address;
  - c) Changes in details of the Factory location name and/or address;
  - d) Changes in details of the model and/or type designation
11. However, issuance of Supplementary Report due to the following reasons are FOC :
  - a) Misprints and typo errors;
  - b) Missing technical information as agreed in PP1 form;
  - c) Test data not reported;
  - d) Mistake in reporting of test data
12. Corrections to report shall only be allowed if the date of issuance of the original report has not exceeded 6 months and shall be limited to a maximum 3 times, after either case whichever occurs earlier, an Amendment or a Supplementary Report shall not be issued.