

SIRIM QAS International Sdn. Bhd. (Company No.: 199601037981 (410334-X))

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### TEST REPORT

PAGE: 1 OF 5 REPORT NO: 2023CB0677

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 & 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.

# THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

: VIVO RAISER SDN BHD Applicant

9 & 10, Jalan PKNK 3/7,

Kawasan Perusahaan Sg Petani,

08000

Sungai Petani Kedah, Malaysia

Manufacturer : same as above

Product : Technobond 163 Tile Adhesive

Reference Standard / : 1) BS EN 12004-1: 2017

Method of Test

Adhesives for ceramic tiles. Requirements, assessment, and verification of

constancy of performance, classification and marking.

2) BS EN 12004-2: 2017

Adhesives for ceramic tiles. Test methods

Description of sample: One (1) bag of 25 kg Technobond 163 Tile Adhesive was received for testing.

**Brand: TECHNOBOND** 

Product Description: C2TE GRADE TILE ADHESIVE

ernation

Date Received of

Complete Application

: 05 July 2023

Job No. : J20231430380

**Description of Test** 

Results

: The test result for the submitted test samples as described in this test report complied with the requirements of the above reference standard except clause 4.1 (c) High tensile adhesion strength after heat aging and 4.1 (e)

Extended open time: tensile adhesion strength after not less than 30 min.

Issued Date : 19 October 2023

**Testing Executive** 

Approved Signatory;

. (NUR AIN BINTI KHAIRUDD<mark>I</mark>N)

CONSTRUCTOR JA NOR SIHA BINTI RAJA ABDUL HANAN)

Head

Civil & Construction Section Testing Services Department REPORT NO: 2023CB0677

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## **TEST RESULTS:**

Product : Technobond 163 Tile Adhesive

Mix ratio : 20 % of water

Method of test : 1) BS EN 12004-1: 2017

Adhesive for ceramic tiles. Requirements, assessment, and verification of

constancy of performance, classification and marking.

2) BS EN 12004-2:2017

Adhesives for ceramic tiles. Test methods

Clause 8.3: Determination of tensile adhesion strength for cementitious

adhesives (C)

Clause 8.3.3.2: Initial tensile adhesion strength

Clause 8.3.3.3: Tensile adhesion strength after water immersion

CLAUSE	REQUIREMENTS	TEST RESULT	REMARK*
4.1	Cementitious adhesives (C)		
	Improved cementitious adhesive with reduced slip and extended open time C2TE		
	Additional Characteristic: - a) High tensile adhesion strength: ≥ 1.0 N/mm²	1) 1.61 N/mm <sup>2</sup> 2) 1.72 N/mm <sup>2</sup> 3) 1.86 N/mm <sup>2</sup> 4) 1.63 N/mm <sup>2</sup> 5) 1.67 N/mm <sup>2</sup> Mean: 1.70 N/mm <sup>2</sup>	Pass
	b) High tensile adhesion strength after water immersion: ≥ 1.0 N/mm²	1) 1.35 N/mm <sup>2</sup> 2) 1.23 N/mm <sup>2</sup> 3) 1.14 N/mm <sup>2</sup> 4) 1.21 N/mm <sup>2</sup> 5) 1.34 N/mm <sup>2</sup> Mean: 1.25 N/mm <sup>2</sup>	Pass

#### Note

2) Testing period – 8<sup>th</sup> August 2023 to 19<sup>th</sup> October 2023

<sup>3)</sup>Testing location – Civil & Construction Section, Building 22, SIRIM Complex, Shah Alam, Selangor



<sup>1) \*</sup>Simple acceptance rule is used for the conformity statement. The level of risk regarding the Probability of False Accept is up to 50% according to ILAC G8:09

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## **TEST RESULTS:**

Product : Technobond 163 Tile Adhesive

Mix ratio : 20 % of water

Method of test : 1) BS EN 12004-1: 2017

Adhesives for ceramic tiles. Requirement, assessment, and verification of

constancy of performance, classification, and marking

2) BS EN 12004-2:2017

Adhesives for ceramic tiles. Test methods

Clause 8.3: Determination of tensile adhesion strength for cementitious

adhesives (C)

Clause 8.3.3.4: Tensile adhesion strength after heat aging

Clause 8.3.3.5: Tensile adhesion strength after freeze and thaw cycle

CLAUSE	REQUIREMENTS	TEST RESULT	REMARK*
4.1	Cementitious adhesives (C)  Improved cementitious adhesive with reduced slip and extended open time C2TE  Additional Characteristic: - c) High tensile adhesion strength after heat aging: ≥ 1.0 N/mm²	1) 1.20 N/mm <sup>2</sup> 2) 1.12 N/mm <sup>2</sup> 3) 1.13 N/mm <sup>2</sup> 4) 1.12 N/mm <sup>2</sup> 5) 1.17 N/mm <sup>2</sup> Mean: 1.15 N/mm <sup>2</sup>	Pass
	Additional Characteristic: - d) High tensile adhesion strength after freeze and thaw: ≥ 1.0 N/mm²	1) 1.35 N/mm <sup>2</sup> 2) 1.20 N/mm <sup>2</sup> 3) 1.23 N/mm <sup>2</sup> 4) 1.15 N/mm <sup>2</sup> 5) 1.48 N/mm <sup>2</sup> Mean: 1.28 N/mm <sup>2</sup>	Pass

#### Note

2) Testing period – 8<sup>th</sup> August 2023 to 19<sup>th</sup> October 2023

<sup>3)</sup>Testing location – Civil & Construction Section, Building 22, SIRIM Complex, Shah Alam, Selangor



<sup>1) \*</sup>Simple acceptance rule is used for the conformity statement. The level of risk regarding the Probability of False Accept is up to 50% according to ILAC G8:09

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## **TEST RESULTS:**

Technobond 163 Tile Adhesive Product

Mix ratio 20 % of water

Method of test 1) BS EN 12004-1: 2017

Adhesives for ceramic tiles. Requirement, assessment, and verification of

constancy of performance, classification, and marking

2) BS EN 12004-2:2017

Adhesives for ceramic tiles. Test methods Clause 8.1: Determination of open time Clause 8.2: Determination of slip

CLAUSE	REQUIREMENTS	TEST RESULT	REMARK*
4.1	Cementitious adhesives (C)  Improved cementitious adhesive with reduced slip and extended open time C2TE		
	e) Extended open time: tensile adhesion strength: ≥ 0.5 N/mm² after not less than 30 min	1) 0.77 N/mm <sup>2</sup> 2) 0.73 N/mm <sup>2</sup> 3) 0.76 N/mm <sup>2</sup> 4) 0.79 N/mm <sup>2</sup> 5) 0.75 N/mm <sup>2</sup> Mean: 0.76 N/mm <sup>2</sup>	Pass
	Special Characteristic: -	-4 7	
	f) Slip: ≤ 0.5 mm	1) 0.38 mm 2) 0.34 mm Mean: 0.36 mm	Pass

#### Note:



<sup>1) \*</sup>Simple acceptance rule is used for the conformity statement. The level of risk regarding the Probability of False Accept is up to 50% according to ILAC G8:09

<sup>2)</sup> Testing period – 8<sup>th</sup> August 2023 to 19<sup>th</sup> October 2023 3)Testing location – Civil & Construction Section, Building 22, SIRIM Complex, Shah Alam, Selangor

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#### CONDITIONS RELATING TO THE USE OF SIRIM QAS INTERNATIONAL TEST REPORT

- 1. A Test Report will be issued in respect of Testing Services conducted and shall relate only to the sample actually tested. SIRIM QAS International makes no warranty whatsoever and the Applicant shall not represent in any manner that any duplication or mass production of the Product is same as the sample actually tested or that SIRIM QAS International has tested any of the duplicated or mass-produced Product. Measurement uncertainty shall be included in the Test Report when there is no statement of conformity required. When a statement of conformity to a specification or standard is applied, the Simple Acceptance Rule is used. Unless otherwise stated, the Acceptance Rule with Guard Band is used.
- 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.
- 5. Customer (Applicant/Manufacture/Factory,etc.) is not permitted to use any SIRIM QAS International, SIRIM or other SIRIM's subsidiaries logo or words on packaging, sample's manual, technical specification, items and products.
- 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.