



SHUNDA S-200

WATER-BASED ELASTOMERIC ACRYLIC WATERPROOF COATING

SHUNDA S-200 is a single-component elastomeric acrylic waterproofing coating that is water-based and environmental-friendly. The main raw material consists of a newly developed pure acrylic emulsion, and various functional additives. **SHUNDA S-200** cures in room temperature to form a seamless membrane that is designed for both exposed and covered roof applications.

1 PRODUCT FEATURES

- Easy application process, applicable for construction projects and domestic home-use waterproofing.
- Weather resistance, UV resistance, solar reflectance, dimensional stability against outdoor temperature.
- Excellent adhesive strength, forms strong bonds to various substrate producing a seamless waterproof layer.
- Good elastic properties and low moisture permeability that produce an optimal waterproofing layer.
- Water-based material, non-toxic, environmental-friendly, safe and reliable.

2 APPLICATION SCOPE

- Applicable for waterproofing and moisture-proofing various exposed areas and external facings of buildings.
- Applicable for waterproofing and moisture-proofing new and old roofs of various material surfaces.
- Applicable for waterproofing and moisture-proofing common indoor wet areas: kitchen, bathroom, balcony, flooring.



3 PRODUCT HANDLING

- The product is safe to be transported through conventional means with standard practices. The shelf life is 12 months from date of production if stored properly in original, unopened, undamaged, sealed packaging. Store products indoor in dry conditions, protected from weather and direct sunlight, at temperatures between 5°C - 35°C. It is recommended to wear protective gear during use.

4 APPLICATION INSTRUCTIONS

PREPARATION

- Ensure substrate is dry, flat and even surfaced, structurally sound with sufficient strength, repaired of all defects and damages, clean and free from laitance, dirt, loose particle, oil, and other contaminants that may affect adhesion.
- Prior to application of **SHUNDA S-200**, prime the substrate layer with SHUNDA SP-007 substrate modifier primer for surface treatment and improved adhesion. Refer to SHUNDA SP-007 Product Catalog for instructions.
- Ensure the applied area is well ventilated during application. The recommended ambient temperature for application is 5 °C – 35 °C.

APPLICATION

- Building joints, connections, corners, and details shall be treated with a coat of **SHUNDA S-200**, extending outwards of 75 mm to both sides of the joint. Allow coating to cure before proceeding with general application.
- Apply first coat of **SHUNDA S-200** waterproof membrane on to general substrate surface area. The application procedure can be done using method of brush, roller, or spray. Allow surface drying time according to Technical Data below.
- Apply second coat of **SHUNDA S-200** waterproof membrane to general substrate surface area. The direction of coating should intersect vertically and horizontally in between coats. Allow full drying time according to Technical Data below.
- Inspect the works. The coating can be either exposed or installed with finishes according to project specifications.

5 SYSTEM DETAILS

3rd Layer : **SHUNDA S-200** at 0.9 kg/m²

2nd Layer : **SHUNDA S-200** at 0.9 kg/m²

1st Layer : SHUNDA SP-007

Base Layer : Substrate

Consumption Rate :

1.7 kg / m² ~ 1.8 kg / m² for 1.0 mm thickness, applied at minimum two coats (actual usage may vary depending on site condition and required thickness of the waterproof layer)



PRODUCT DETAILS

- **SHUNDA S-200** packaging : 5 kg pail / 20 kg pail
- **SHUNDA S-200** coating color : white / gray

6 TECHNICAL DATA

- All technical data stated below are based on laboratory tests. Actual measured data may vary due to circumstances beyond control. The user of the product must test the product's suitability for the intended application and purpose.

PHYSICAL PROPERTIES		TEST METHOD	INDEX
Solid content / % ≥		JC/T 864-2008	65
Tensile strength / MPa ≥			1.0
Elongation at break / % ≥			300
Low temperature flexibility			-10 °C, no crack
Impermeability			0.3 MPa, 30 min, no leakage
Surface drying time / h ≤			4
Full drying time / h ≤			8
Tensile strength retention after treatment / % ≥	Heat treatment		80
	Alkali treatment		60
	Acid treatment		40
Elongation at break after treatment / % ≥	Heat treatment	200	
	Alkali treatment	200	
	Acid treatment	200	
Tensile strength / MPa		ASTM D 412-16	0.53
Elongation at break / %		(SIRIM test report)	1470





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: 013-580 6671
Fax: 03-55446688
www.sirim-qas.com.my

TEST REPORT

REPORT NO : 2024CE0939

PAGE : 1 OF 5

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THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant : SHUNDA POLYURETHANE SDN. BHD.
No. 23, Tingkat Satu,
Perniagaan Seri Impian,
Pusat Perniagaan Mahkota Impian,
14000, Bukit Mertajam, Pulau Pinang, Malaysia

Manufacturer : SHUNDA POLYURETHANE SDN. BHD.
No. 23, Tingkat Satu,
Perniagaan Seri Impian,
Pusat Perniagaan Mahkota Impian,
14000, Bukit Mertajam, Pulau Pinang, Malaysia

Product : SHUNDA S-200 WATERPROOF COATING

Reference Standard / Method of Test : ASTM D 412 – 16 (2021) – Title: Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers — Tension

Description of sample : Received one (1) sample of SHUNDA S-200 Waterproofing Coating for testing which was identified on Page No. 2

Date Received of Complete Application : 27 March 2024

Job No. : J20243670598

Description of Test Results : This test report covers only test clauses as requested by Applicant to SIRIM QAS International Sdn. Bhd. The test results for the submitted test sample are described in the next pages of this test report.

Issued Date : 23 April 2024

Approved Signatory;

(Ts. MUHAMMAD RIZAL BIN ABDUL RAHIM)
Senior Testing Engineer

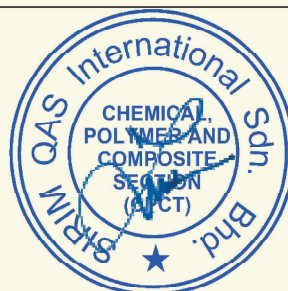
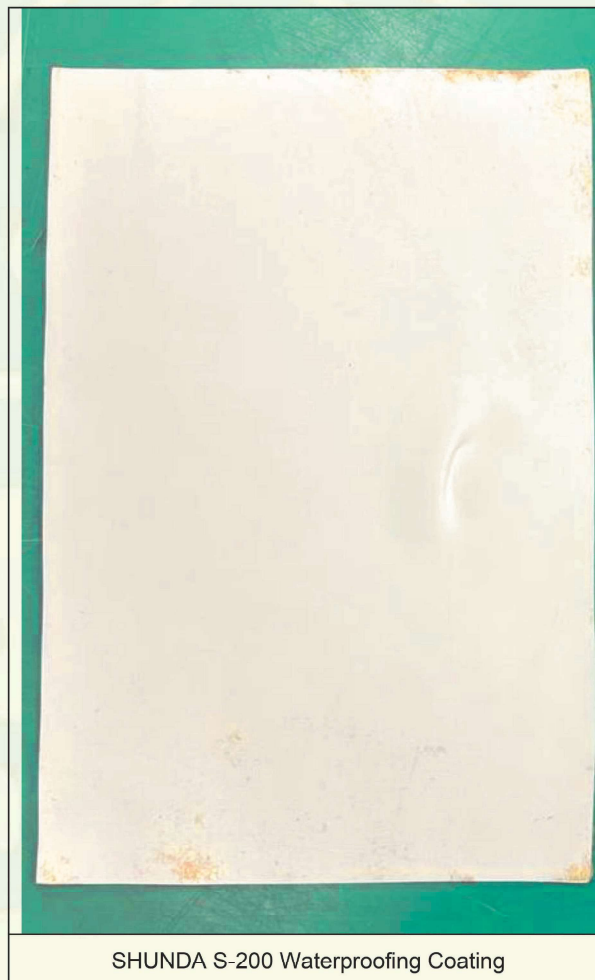


(DALHA BIN KATNI @ RAHMAT)
Head
Chemical, Polymer and Composite Section
Testing Services Department

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Description of Sample:

Product : SHUNDA S-200 Waterproofing Coating
Brand : SHUNDA
Product Description : Water-based Elastomeric Acrylic Waterproof Coating
Test Location : Chemical, Polymer & Composite Section,
Building 16, SIRIM Complex, No. 1 Persiaran Dato' Menteri,
Section 2, 40700 Shah Alam, Selangor, Darul Ehsan, Malaysia
Test Date : 20th April 2024

Photo of sample received:

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Test Results:

Product : SHUNDA S-200 Waterproofing Coating
Brand : SHUNDA
Product Description : Water-based Elastomeric Acrylic Waterproof Coating

No.	Type of Tests	Test Method	Results
1.	Tensile Strength, MPa <i>Dumbbell Type : Die C</i> <i>Test Speed : 500mm/min</i> <i>Ave. Thickness : 2.55 mm</i>	ASTM D 412-16 (2021)	Average : 0.53 Median : 0.52
2.	Elongation at Break, % <i>Dumbbell Type : Die C</i> <i>Test Speed : 500mm/min</i> <i>Ave. Thickness : 2.55 mm</i>	ASTM D 412-16 (2021)	Average : 1471.7 Median : 1434.0

Note:

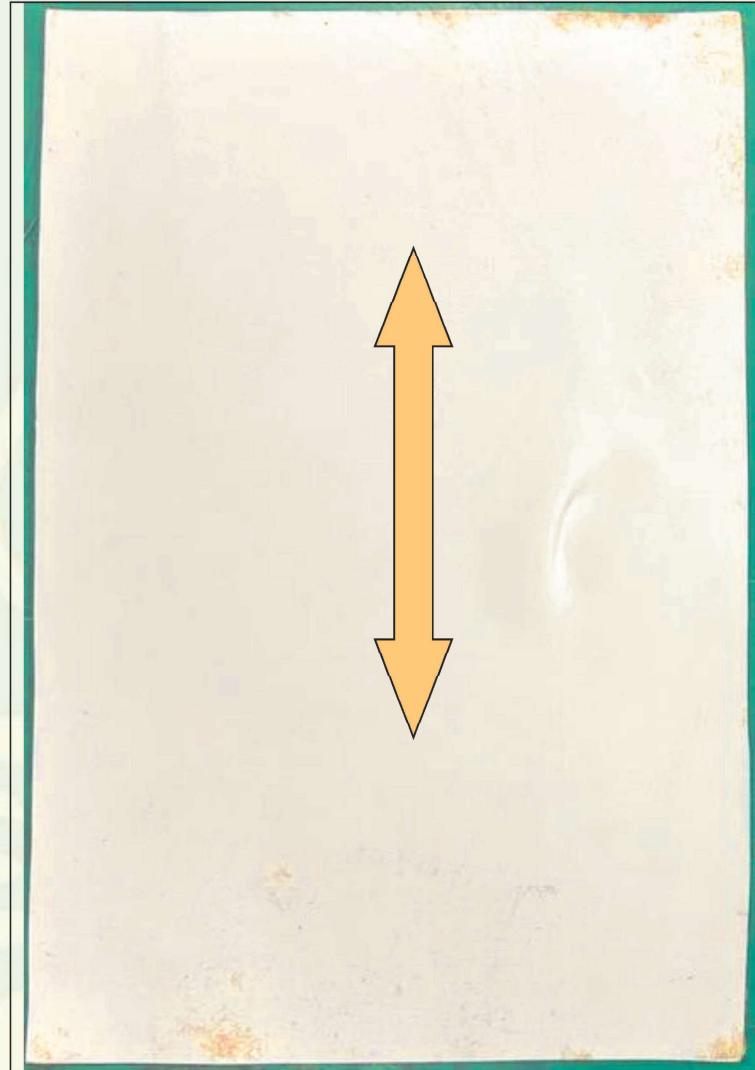
- 1) The Tensile Strength and Elongation at Break test was conducted on Vertical Direction as described in Appendix
- 2) 1 MPa = 1 N/mm²



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APPENDIX

Product : SHUNDA S-200 Waterproofing Coating
Brand : SHUNDA
Product Description : Water-based Elastomeric Acrylic Waterproof Coating



Test specimen orientation for testing (Vertical Direction)



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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.
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.