



SIRIM QAS International Sdn. Bhd.
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TEST REPORT

REPORT NO : 2026CE0800

PAGE : 1 OF 7

Unless otherwise stated, the results shown in this Test Report shall be valid exclusively for the specific sample either provided by the Applicant or sampled by the qualified officer and tested by SIRIM QAS International Sdn. Bhd. In deriving the results of this Test Report, SIRIM QAS International Sdn. Bhd. has relied solely on the sample and data information provided by the Applicant, in accordance with the applicable standards requested by the Applicant in the Application Form. This Test Report shall not be reproduced, except in full, without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International Sdn. Bhd. Kindly refer to the last page of this Test Report for the 'Conditions Relating to the Use of SIRIM QAS International Sdn. Bhd. Test Report'.

Applicant : JPT PIPES INDUSTRIES SDN BHD
Lot 10480A Jalan Nenas Off
Jalan Kampung Jawa
40460 Shah Alam
Selangor

Manufacturer : - same as above -

Product : POLYETHYLENE (PE) SMOOTH WALL PIPE FOR ELECTRICAL CABLE
INSTALLATION

Reference Standard / Method of Test : SIRIM 52:2022 - Polyethylene (PE) Smooth Wall Pipes for Electrical Cable
Installation - Specification

Description of sample/ Description of Test Specimen : New test samples, as mentioned above, were received for testing on 12
February 2026.

Disclaimer: All the information stated above has been provided/agreed by the Applicant. SIRIM QAS International Sdn. Bhd. shall not be held responsible for the accuracy, completeness, or validity of the information provided by the Applicant which may affect the validity of the test results. The accuracy and reliability of the test results are contingent upon the integrity and accuracy of the information provided by the Applicant.

Date Received of Complete Application : 04 February 2026

Job No. : J20263670287

Description of Test Results/ Overall Test Result : This test report covers only test clauses as requested by Applicant to SIRIM QAS International Sdn. Bhd. The test results for the submitted test samples as described in this test report complied with the requirements of the reference standard at the respective clauses tested except for melt flow rate test for DN160 and elongation at break test for DN200 samples.

Issued Date : 09 March 2026

Approved Signatory;

(MOHAMAD FAIS BIN NORDHINA)
Testing Executive



(DALHA BIN KATNI @ RAHMAT)
Head

Chemical, Polymer and Composite Section
Testing Services Department

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Results

Product : POLYETHYLENE (PE) SMOOTH WALL PIPES FOR ELECTRICAL CABLE INSTALLATION
Type : Red Pipes
Size : 160 mm and 200 mm

NO.	TEST	REQUIREMENT	RESULT	REMARK
1	Density* Test method: ISO 1183-1:2019 Test date: 24 February 2026	<u>Clause 4.1.3 of SIRIM 52:2022</u> ≥ 930 kg/m ³	160 mm: 952 kg/m ³ 200 mm: 954 kg/m ³	Pass Pass
2	Appearance Test method: By visual observation Test date: 20 February 2026	<u>Clause 5.1 of SIRIM 52:2022</u> • When viewed without magnification the internal and external surfaces of pipes shall be smooth, clean and free from scouring, cavities and other surface defects to an extent that would prevent conformity of the pipe to this standard. • The pipe ends shall be cut cleanly and square to the axis of the pipe.	The internal and external surfaces of pipes were smooth, clean and free from scouring, cavities and other surfaces defects. The ends of the pipes were cut cleanly and square to the axis of the pipes.	Pass Pass

Notes:

- 1) *SAMM Accredited
- 2) Test location: Polymer and Composite Laboratory, Building 20, Chemical, Polymer and Composite Section, SIRIM Complex, Shah Alam, Selangor



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Results

Product : POLYETHYLENE (PE) SMOOTH WALL PIPES FOR ELECTRICAL CABLE INSTALLATION
Type : Red Pipes
Size : 160 mm and 200 mm

NO.	TEST	REQUIREMENT	RESULT	REMARK
3	Mean Outside Diameter* Test method: ISO 3126:2005 - using calibrated caliper Test date: 22 February 2026	<u>Clause 5.3.2 and Table 2 of SIRIM 52:2022</u> Please refer to Appendix A	Please refer to Appendix A	Pass
4	Out-of-Roundness* Test method: ISO 3126:2005 - using calibrated caliper Test date: 22 February 2026	<u>Clause 5.3.2 and Table 2 of SIRIM 52:2022</u> Please refer to Appendix A	Please refer to Appendix A	Pass
5	Wall Thickness* Test method: ISO 3126:2005 - using calibrated caliper Test date: 22 February 2026	<u>Clause 5.3.3 and Table 3 of SIRIM 52:2022</u> Please refer to Appendix A	Please refer to Appendix A	Pass

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Results

Product : POLYETHYLENE (PE) SMOOTH WALL PIPES FOR ELECTRICAL CABLE INSTALLATION
Brand : Red Pipes
Size : 160 mm and 200 mm

NO.	TEST	REQUIREMENT	RESULT	REMARK
6	Compression Test Test method: BS EN 61386-24:2010 Test date: 22 February 2026	<u>Clause 6.2 and Table 4 of SIRIM 52:2022</u> No crack allowing the ingress of light or water between the inside and the outside.	No crack was observed on the pipe samples after the test.	Pass
7	Impact Test Test method: BS EN 61386-24:2010 Test date: 24 February 2026	<u>Clause 6.2 and Table 4 of SIRIM 52:2022</u> There shall be no sign of disintegration, nor shall there be crack allowing the ingress of light or water between the inside and the outside.	No sign of disintegration and crack were observed on the pipe samples after the test.	Pass
8	Longitudinal Reversion* Test method: ISO 2505:2023 Test date: 26 February 2026	<u>Clause 7.2 and Table 5 of SIRIM 52:2022</u> $\leq 3 \%$ No effect on surface	160 mm: 0.2 % 200 mm: 0.1 % No surface abnormalities were observed on the pipe samples after test	} Pass

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Results

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Brand : Red Pipes
Size : 160 mm and 200 mm

NO.	TEST	REQUIREMENT	RESULT	REMARK
9	Melt Mass Flow Rate* Test method: ISO 1133-1:2022 Test date: 25 February 2026	<u>Clause 7.2 and Table 5 of SIRIM 52:2022</u> Change of MFR by processing $\pm 20\%$. MFR of material: 0.58 g /10 min	160 mm: - 15 % 200 mm: - 14 %	Pass Pass
10	Elongation at Break Test method: ISO 6259-3:1997 Test date: 4 March 2026	<u>Clause 7.2 and Table 5 of SIRIM 52:2022</u> $\geq 350\%$	160 mm: 400 % 200 mm: 350 %	Pass Pass

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Appendix A

Data for Geometrical Characteristics of Pipe Samples

Table A.1. Mean Outside Diameter of Pipes

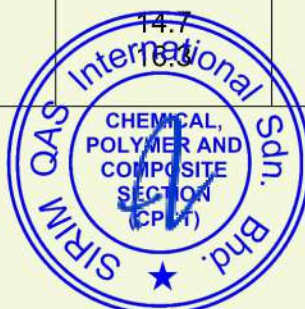
Nominal Size, mm	Requirement, mm		Mean Outside Diameter, mm
160	Minimum Maximum	160.0 161.0	160.2
200	Minimum Maximum	200.0 201.2	200.7

Table A.2. Out-of-Roundness of Pipes

Nominal Size, mm	Requirement, mm		Out-of-Roundness, mm
160	Maximum	3.2	2.3
200	Maximum	4.0	0.5

Table A.3. Thickness of Pipes

Nominal Size, mm	Requirement, mm		Wall Thickness, mm
160	Minimum Maximum	11.8 13.1	12.6
200	Minimum Maximum	14.7 16.3	15.7



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1. A Test Report will be issued in respect of the Testing Services conducted and shall relate only to the sample actually tested by SIRIM QAS International. The results in the Test Report will be based on all the information provided by the Applicant, unless otherwise stated. SIRIM QAS International makes no warranties whatsoever, and the Applicant shall not represent in any manner that any duplication or mass production of the Product is identical to the Sample actually tested, or that SIRIM QAS International has tested any duplicated or mass-produced Product. Measurement uncertainty shall be included in the Test Report when no statement of conformity is required.
2. For quantitative test results (with values), when a statement of conformity to a specification or standard is applied, the Simple Acceptance Rule shall be used. Unless otherwise stated, the Acceptance Rule with Guard Band will be applied, and an additional charge will be incurred accordingly.
3. For qualitative test results (visual observation), when requested by the applicant, a statement of conformity shall be included in the Test Report. If there is no request by the Applicant, a statement of conformity can be included in the Test Report based on SIRIM QAS International Sdn. Bhd.'s discretion.
4. The Applicant shall not at any time misrepresent the content of any Test Report provided by SIRIM QAS International Sdn. Bhd., nor shall the Test Report be misused, amended, changed, varied, or modified in any manner whatsoever by the Applicant or otherwise.
5. The Test Report shall not be reproduced, except in full, without the written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No. 1, Block 8, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.
6. The Applicant is not permitted to use any SIRIM QAS International Sdn. Bhd., SIRIM Berhad or other SIRIM subsidiaries logos or words on packaging, sample manuals, technical specifications, items and products.
7. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International Sdn. Bhd., the Applicant may use the SIRIM QAS International Sdn. Bhd. logo or word on promotional materials. The Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International Sdn. Bhd. (Test Report No)....(dated)....(for what test)....(to which standard)", or similar words emphasizing that only the sample was tested. This phrase shall only be used for product advertisements or promotions (e.g.: brochures, flyers, official website). For clarity, the statement shall not be used on the sample, packaging, items or products.
8. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International Sdn. Bhd. may disclose the information pertaining to the Test Report for the purposes of such investigation.
9. In the event that the Applicant is found in breach of this provision, SIRIM QAS International Sdn. Bhd., SIRIM Berhad and/or other SIRIM subsidiaries may, without prejudice to any other rights and remedies, take whatever actions are necessary including but not limited to:
 - a) Informing and placing a notice in the media;
 - b) Obtaining an injunction from the Court (costs on a solicitor-client basis to be borne by the Applicant);
 - c) Refusing to accept any further Products 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 to publish a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM 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 to the Applicant's Test Report with the relevant authorities.
10. SIRIM QAS International is committed to supporting environmentally friendly business practices by reducing paper consumption. Therefore, we do not issue any hard copies of the Test Report to the Applicant. However, additional certified true copies or softcopies of the Test Report may be issued upon request by the Applicant, subject to payment of the relevant fee. Certified true copies or softcopies of the Test Report shall only be provided for Test Reports issued not more than **three (3) years** from the date of issuance.
11. The Issuance of an Amendment Report due to the following reasons is chargeable to the Applicant:
 - a) Typo or change1 in details of the Applicant's name and/or address; or
 - b) Typo or change1 in details of the Manufacturer's name and/or address; or
 - c) Typo or change1 in details of the Factory location name and/or address; or
 - d) Typo or change1 in details of the brand, size, model and/or type designation; or
 - e) Typo in details of the description of sample.

Note: ¹Applicable only for electrical and electronic products based on IECCE OD-2020.
12. Any corrections and/or changes to the Report requested by the Applicant shall only be allowed if the date of issuance of the original Test Report has not exceeded six (6) months and shall be limited to a maximum of three (3) times. After either of these conditions is met, no further amendments to the Test Report shall be issued.
13. However, the issuance of a Supplementary Report due to the following reasons is free of charge (FOC):
 - a) Misprints and typographical errors;
 - b) Missing technical information as agreed in the PP1 form;
 - c) Test data not reported; or
 - d) Mistakes in the reporting of test data.