



SIRIM QAS International Sdn. Bhd.
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TEST REPORT

REPORT NO : 2025FE0082	PAGE : 1 OF 6
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 Test Report'.	

Applicant : SUMTEC GROUP SDN. BHD.
Lot 8323D, Kampung Makau Batu 1,
Jalan Sungai Tekali,
43100 Hulu Langat,
Selangor Darul Ehsan.

Manufacturer : SUMTEC GROUP SDN BHD

Product : PRE-INSULATED TWIN COPPER PIPE

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/ Description of Test Specimen : 6 pieces of Pre-Insulated Twin Copper Pipe.
Size of Specimen: 225mm × 225mm × 50mm (measured thickness)

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 : 17 December 2024

Job No. : J20241441157

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

Issued Date : 04 February 2025

Approved Signatory;

(MUHAMMAD SAFUAN BIN MUSA)
Testing Executive



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

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Product : PRE-INSULATED TWIN COPPER PIPE
Brand : GIPIU **Measured Thickness** : 50 mm
Model : GIPIU 0.4 **Mass Per Unit Area** : 6.46 kg/m²
Type : 4" **Date of Test** : 21.01.2025

Time (Min.)	Temperature Rise Above Ambient (°C)				
	Calibration	Specimen A	Specimen B	Specimen C	Specimen Average
0.5	18	14	10	10	11
1.0	22	21	16	15	17
1.5	26	25	21	19	22
2.0	30	30	26	27	27
2.5	33	33	30	31	31
3.0	36	36	34	35	35
4.0	63	64	62	63	63
5.0	98	102	110	105	106
6.0	125	150	152	148	150
7.0	145	182	181	180	181
8.0	160	204	201	195	200
9.0	174	225	219	221	222
10.0	185	239	235	238	237
12.0	200	251	252	248	250
14.0	212	246	249	250	248
16.0	222	235	246	238	239
18.0	229	228	240	235	234
20.0	235	224	239	231	231
Subindex 1		0.0	0.0	0.0	0.0
Subindex 2		2.7	2.7	2.5	2.6
Subindex 3		0.7	0.9	0.8	0.8
Index of Performance		3.4	3.6	3.3	3.4



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Date of Test : 21.01.2025

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

No. of Specimen Tested : 3 nos.

The Test Result for Pre-Insulated Twin Copper Pipe with measured mass per unit area of 6.46 kg/m² and measured thickness 50 mm.

Subindex i1 is	0.0
Subindex i2 is	2.6
Subindex i3 is	0.8
Index of Performance	3.4

1. Test result = (Subindex i1, i2 and i3 \pm 0.65*)
2. Test result = (Index of Performance \pm 0.65*)

Note:

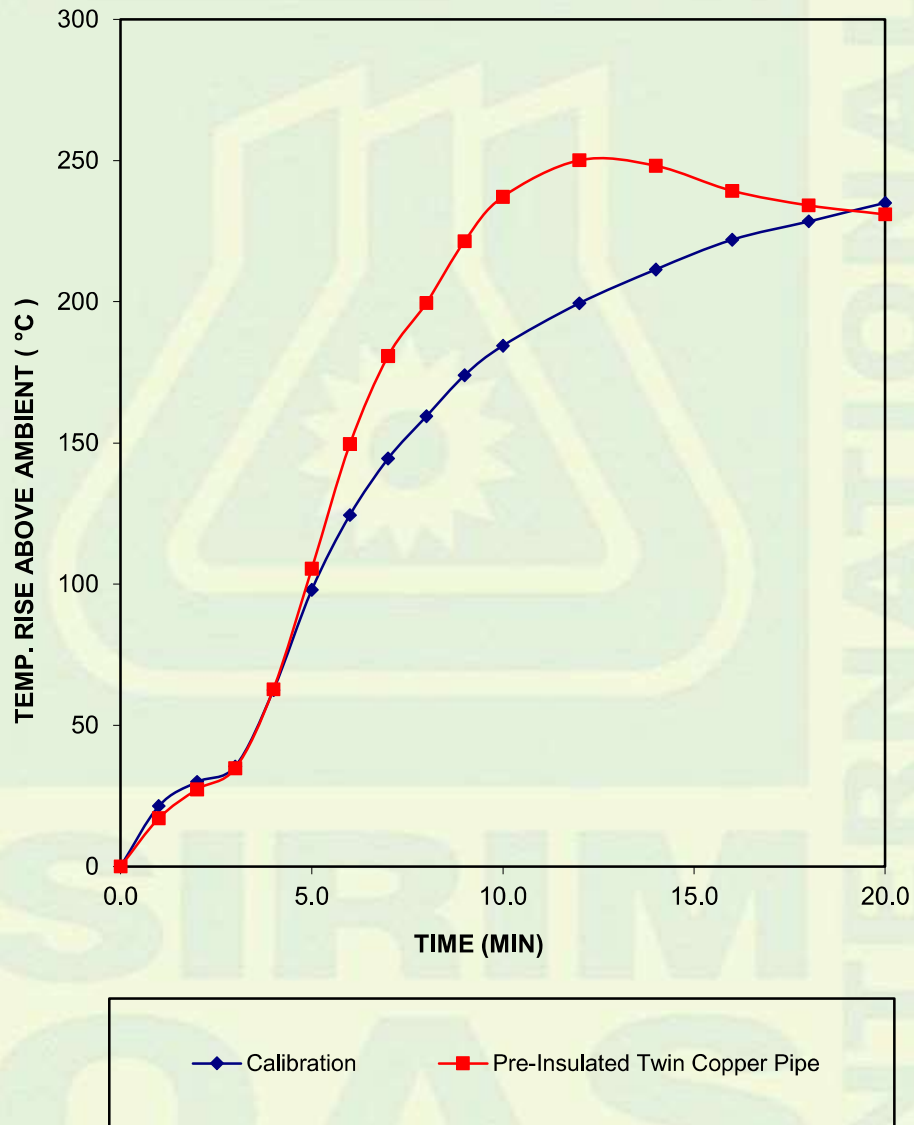
- a) Where the reported uncertainty is calculated using a coverage factor k=2, which gives a level of confidence of approximately 95%
- b) *Denotes measurement uncertainty

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.



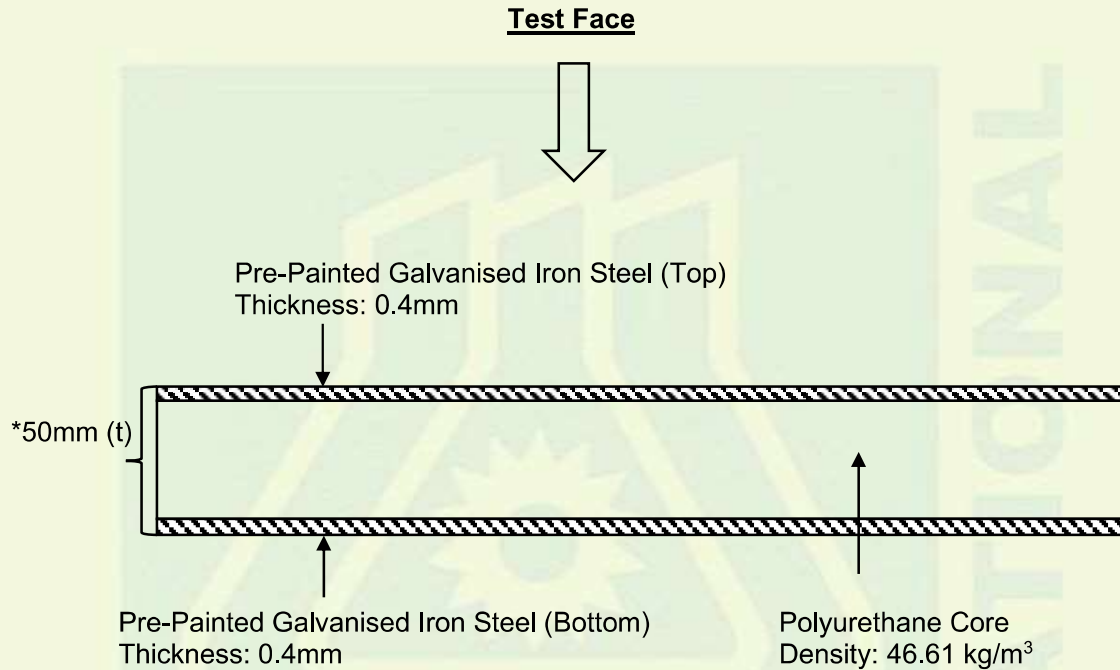
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Graph 1: Temperature Rise Above Ambient (°C)



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Descriptions of sample as claimed by the submitter:



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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.