

TEST REPORT

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Applicant/ Manufacturer : **ALCOPANEL CO., LTD**
7F, 275, Gangnam-Daero,
Seocho-Gu,
06729 Seoul,
Korea.
(Attn: Mr. Kevin Kim / Mr. Jeffrey Kim)

Product : **FIRE RETARDANT ALUMINIUM COMPOSITE PANEL**

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 Test Specimen : 6 pieces of Fire Retardant Aluminium Composite Panel.
Size of Specimen : 225mm x 225mm x 4.2mm (measured thickness)
Brand : ALCOPANEL FR
Type : ALCOPANEL FR
Mass Per Unit Area : 7.41 kg/m²

Descriptions of sample as claimed by the submitter: Refer to page 5


The specimens were tested with the face side exposed to the specified heating condition of the fire test.

Date Received : 23.02.2019
Job Number : J20191440129
Test Result :

Subindex i1	Subindex i2	Subindex i3	Fire Propagation Index (I)
0.0	0.0	0.4	0.4

Issued Date : 29 March 2019

Approved Signatory



(MUHAMMAD SAFUAN MUSA)
Testing Executive




(ZAINI AHMAD)
Group Leader
Fire Protection Section
Testing Services Department

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Product : FIRE RETARDANT
ALUMINIUM COMPOSITE PANEL

Brand : ALCOPANEL FR

Type : ALCOPANEL FR

Measured Thickness : 4.2 mm

Mass Per Unit Area : 7.41 kg/m²

Date of Test : 29.03.2019

Time (Min.)	Temperature Rise Above Ambient (°C)				
	Calibration	Specimen A	Specimen B	Specimen C	Specimen Average
0.5	16	17	15	15	15
1.0	22	21	18	19	19
1.5	26	25	23	24	24
2.0	31	28	24	28	26
2.5	33	32	27	31	30
3.0	37	35	31	34	33
4.0	73	55	55	59	56
5.0	107	79	84	82	82
6.0	129	102	106	105	104
7.0	151	120	126	124	123
8.0	168	134	142	140	138
9.0	185	145	156	156	152
10.0	195	158	167	175	167
12.0	204	173	202	222	199
14.0	214	217	241	237	232
16.0	223	248	261	241	250
18.0	247	264	260	245	256
20.0	249	264	260	247	257
Subindex 1		0.1	0.0	0.0	0.0
Subindex 2		0.0	0.0	0.0	0.0
Subindex 3		0.3	0.6	0.4	0.4
Index of Performance		0.4	0.6	0.4	0.4



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Date of Test : 29.03.2019

No. of Specimen Tested : 3 nos.

The Fire Propagation Index **I** is **0.4** for the Fire Retardant Aluminium Composite Panel with mass per unit area of 7.41 kg/m² and measured thickness 4.2 mm.

The Subindex i1 is 0.0

The Subindex i2 is 0.0

The Subindex i3 is 0.4

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.

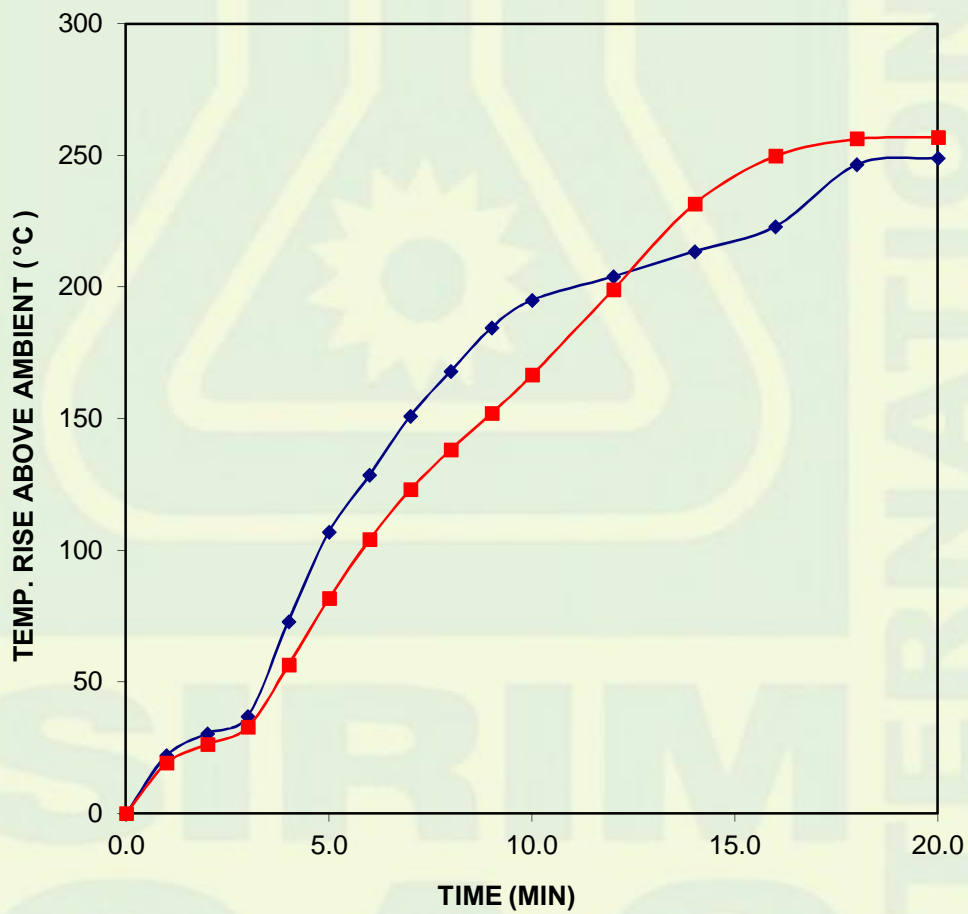


A handwritten signature in blue ink, appearing to be 'M. J. ...', written over the right side of the stamp.

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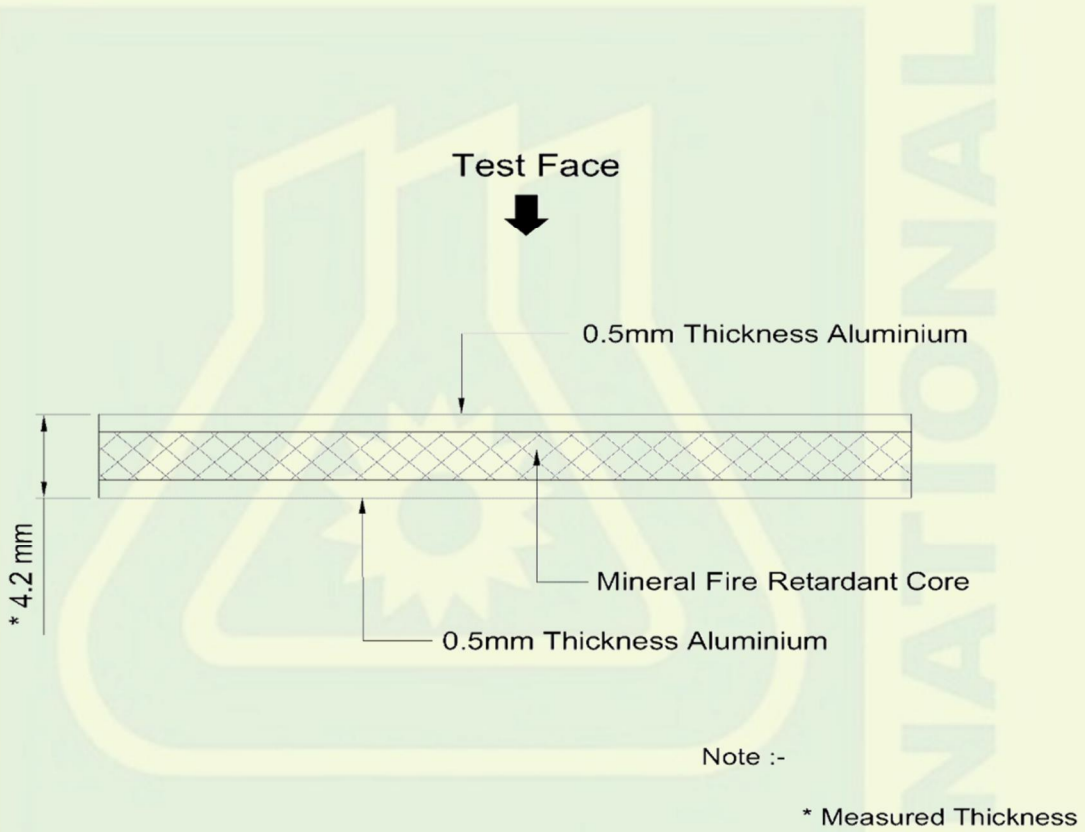
Product : FIRE RETARDANT
ALUMINIUM COMPOSITE PANEL
Brand : ALCOPANEL FR
Type : ALCOPANEL FR

Measured Thickness : 4.2 mm
Mass Per Unit Area : 7.41 kg/m²
Date of Test : 29.03.2019



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Descriptions of sample as claimed by the submitter



Fire Retardant Aluminium Composite Panel



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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, brochures/flyers or any other means without the prior written approval from the Managing Director of SIRIM QAS International.
6. If such approval is obtained from the Managing Director of SIRIM QAS International, the Applicant may 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). For avoidance of doubt, the statement shall not be used on the sample and packaging of the sample.
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. Further or in the alternative, it is strictly forbidden unless with prior written approval from the Managing Director of SIRIM QAS International, to represent in any manner whatsoever that SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries has endorsed, approved or validated the Product of the Applicant in any manner whatsoever.
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 - 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.
10. Certified true copies of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee.
11. Corrections to test report shall only be allowed within 6 months from issuance date of the test report and shall be limited to maximum 3 times, after either case whichever occurs earlier, a new test report shall be issued and replace the previous one (having error(s) or lack of information). Issuance of Supplementary Report to the original Test Report shall be for the followings;
 - a) Misprints and typo errors
 - b) Missing technical information
 - c) Test data not reported
 - d) Mistake in reporting of test data