

TEST REPORT

REPORT NO.: 2018FE0211

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Applicant/
Manufacturer : **MECH REF ENGINEERING SDN. BHD.**
No. 40 & 42, Jalan Anggerik Mokara 31/47,
Kota Kemuning,
40460 Shah Alam,
Selangor Darul Ehsan.
(Attn: Mr. Tan Hooi Peng / Mr. Koay Wei Suang)

Product : **INSULATION PANEL (POLYURETHANE CORE)**

Reference Standard/
Method of Test : BS 476 : Part 7: 1997
Fire Test on Building Materials and Structures
Part 7: Surface Spread of Flame Test.

Description of Test
Specimen : 9 pieces of Insulation Panel (Polyurethane Core).
Size of Specimen : 270mm × 885mm × 50.0mm (measured thickness)
Brand : MR
Mass Per Unit Area : 9.78 kg/m²

Descriptions of sample as claimed by the submitter: Refer to page 2

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

Date of Test : 29.03.2018

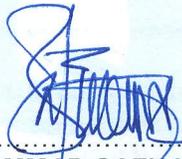
Test Result : **Classification of Surface Spread of Flame Test** : **Class 1**

Date Received : 09.02.2018

Job No./ Ref No. : J20181440053 /SQAS/FPS/15/1-6

Issued Date : **11 APR 2018**

Approved Signatories :

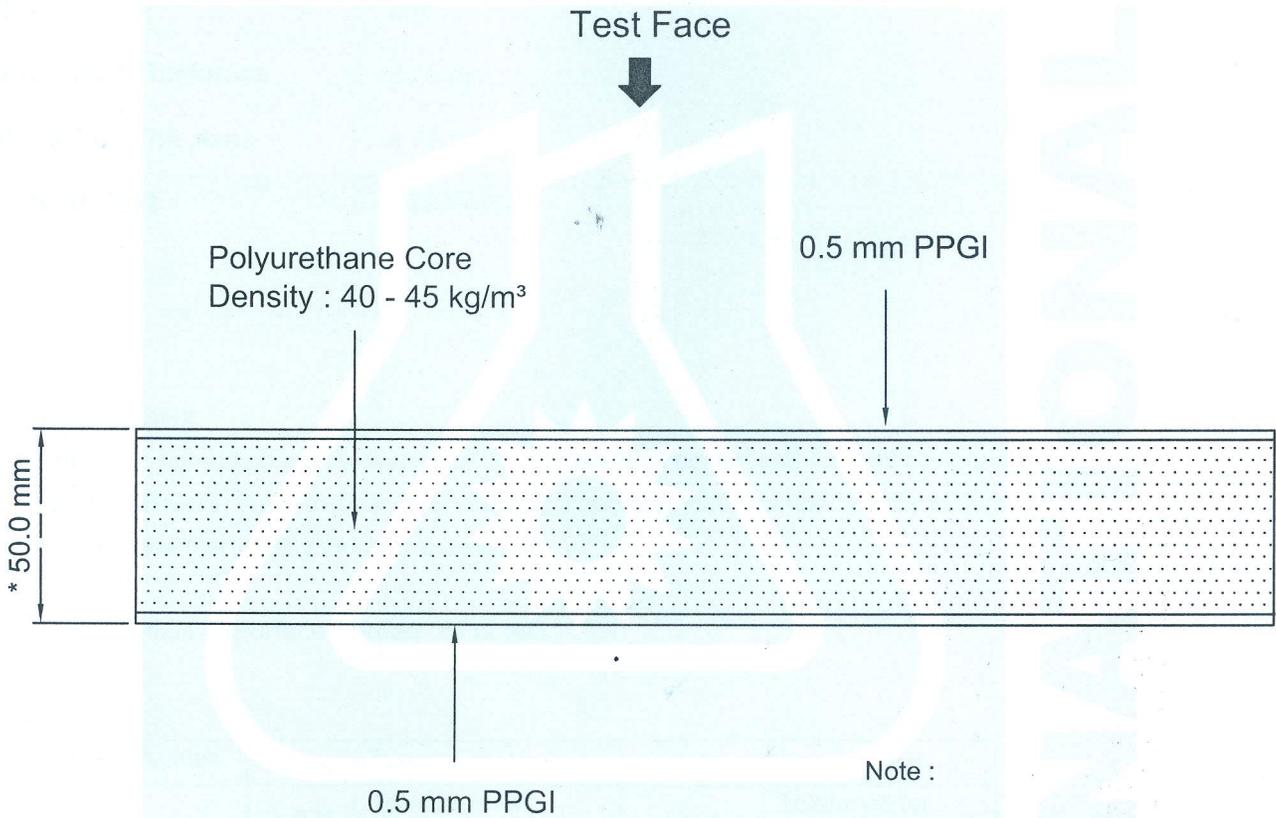

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MUHAMMAD SAFUAN MUSA
Testing Executive




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ZAINI AHMAD
Group Leader
Fire Protection Section
Testing Services Department
SIRIM QAS International Sdn. Bhd.

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Descriptions of sample as claimed by the submitter:



Note :

* Measured thickness

Panel thickness : 50mm ~ 150mm

Insulation Panel (Polyurethane Core)



11 APR 2018

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Name of Applicant : MECH REF ENGINEERING SDN. BHD.
Product : INSULATION PANEL (POLYURETHANE CORE)
Brand : MR
Measured Thickness : 50.0 mm
Mass Per Unit Area : 9.78 kg/m²
Date of Test : 29.03.2018

Requirement

The flame spread on any specimen of the sample shall not exceed the limit assigned for the class with the proviso that for one specimen only in the sample the flame spread may exceed this limit by the tolerance shown.

Classification of Surface Spread of Flame

Classification	Flame Spread at 1½ min		Final Flame Spread	
	Limit (mm)	Tolerance for one specimen in sample (mm)	Limit (mm)	Tolerance for one specimen in sample (mm)
Class 1	165	25	165	25
Class 2	215	25	455	45
Class 3	265	25	710	75
Class 4	Exceeding Class		3 limits	



11 APR 2018

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Test Results

Product : INSULATION PANEL (POLYURETHANE CORE)
 Brand : MR Measured Thickness : 50.0 mm
 Date of Test : 29.03.2018 Mass Per Unit Area : 9.78 kg/m²

Specimen No.	1	2	3	4	5	6
Spread of flame at 1½ minutes (mm)	0	0	0	0	0	0
Distance (mm)	Time of spread of flame to indicated distance (minutes . seconds)					
75	-	-	-	-	-	-
165	-	-	-	-	-	-
190	-	-	-	-	-	-
215	-	-	-	-	-	-
240	-	-	-	-	-	-
265	-	-	-	-	-	-
290	-	-	-	-	-	-
375	-	-	-	-	-	-
455	-	-	-	-	-	-
500	-	-	-	-	-	-
525	-	-	-	-	-	-
600	-	-	-	-	-	-
675	-	-	-	-	-	-
710	-	-	-	-	-	-
750	-	-	-	-	-	-
785	-	-	-	-	-	-
825	-	-	-	-	-	-
865	-	-	-	-	-	-
Time of maximum spread of flame (minutes . seconds)	-	-	-	-	-	-
Distance of maximum spread of flame (mm)	0	0	0	0	0	0

Conclusion

In accordance with the class definition specified in the standard, the test results show that the sample tested has a Class **One** Surface Spread of Flame.

The test results relate only to the behavior of the test specimens of a product under the particular conditions of test; they are not intended to be sole criterion for assessing the potential fire hazard of the product in use.



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11 APR 2018