

Test Report No. 7191312036-MEC23-WYL
dated 28 Jun 2023



PSB Singapore

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SUBJECT:

Laboratory measurement of thermal conductivity on insulation material submitted by PT. Toilon Indonesia on 19 Jun 2023.

TESTED FOR:

PT. Toilon Indonesia
JL. Raya Serang KM.
16, 8 Desa Talaga Cikupa
Tangerang 15710
Indonesia

Attn: Mr. Young Jeh

TEST METHODS:

The test was conducted in accordance with ASTM C518 : 2021 "Standard test method for steady-state thermal transmission properties by means of the heat flow meter apparatus".

The thermal conductivity of material was measured using a heat flow meter calibrated with 25mm thick reference standard fibreglass specimen.

DESCRIPTION OF SAMPLE:

4 pieces of the following insulation material were received.

Sample Description : Crosslinked Polyolefin Foam
Brand Name : TOILON
Model Number : TOILON-THERMOTECH
Type of Material : Polyolefin Foam Laminated with Aluminum Foil

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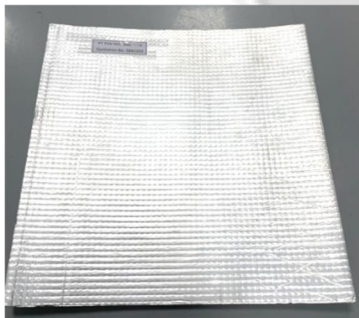


Photo 1: Sample as received, Side 1

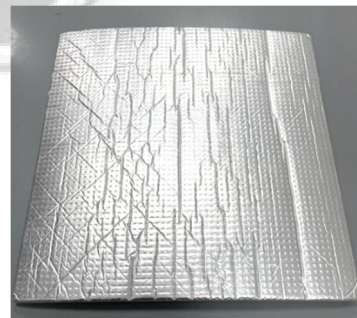


Photo 2: Sample as received, Side 2



LA-2007-0380-A LA-2007-0386-C
LA-2007-0381-F LA-2010-0464-D
LA-2007-0382-B LA-2018-0702-B
LA-2007-0383-G LA-2018-0703-G
LA-2007-0384-G LA-2020-0747-L
LA-2007-0385-E

The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council. Inspections/Calibrations/Tests marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our inspection body/laboratory.

Laboratory:
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TUV®

TEST RESULTS:

Table 1

Thermal Conductivity Test		
Test	Unit	Sample
a. Dimension of sample	mm	304 (length) x 304 (width) x 11 (thick)
b. Bulk Density	kg/m ³	62.75
c. Temperature of hot face	°C	33.00
d. Temperature of cold face	°C	13.01
e. Mean temperature	°C	23.00
f. Apparent thermal conductivity	W/m.K	0.0316
	(Kcal/mhK)	0.0272

- Remarks:**
- 1- $1 \text{ W/mK} = 0.859845 \text{ Kcal/mhK}$
 - 2- The bulk density measurement includes aluminum foil reinforced with polyolefin foam
 - 3- The average of 3 runs were reported
 - 4- The test was conducted on 23 Jun 2023



Eddie Suwand
Testing Officer



Wang Yilin
Higher Associate Engineer
Building & Acoustics Group
Real Estate & Infrastructure
Mechanical

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Effective 26 January 2021

