## Test Report No. 7191163930-MEC17-TYW(221412091) dated 21 JUL 2017



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#### SUBJECT:

Testing of Insulation Materials Samples

#### **TESTED FOR:**

Superlon Worldwide Sdn Bhd (252355-U) Lot 2567 Jalan Sungai Jati 41200 Klang Selangor Malaysia

ATTN: Ms Cathleen Gan

#### SAMPLES DESCRIPTION:

The following insulation materials test specimen were submitted by Superlon Worldwide Sdn. Bhd on 23 May 2017 for testing.

Samples	Approximate Dimensions	Quantity	Photograph
Insulation Materials	200 mm x 200 mm x 28 mm	8 pcs	
(Foam)	305 mm x 305 mm x 28 mm	6 pcs	

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Regional Head Office: TÜV SÜD Asia Pacific Pte. Ltd. 1 Science Park Drive, #02-01 Singapore 118221 Choose certainty. Add value.



### TEST METHODS (AS SPECIFIED AND AGREED BY THE CLIENT):

1) <u>Water Vapour Transmission</u> <u>ASTM E96 : 2016</u> <u>Standard Test Methods for Water Vapour Transmission of Materials</u>

Method used	:	Desiccant
Nominal thickness	:	28 mm
Test condition	:	23 ± 1 °C, 50 ± 2 %RH
No. of determinations	:	3

2) <u>Water Absorption</u> <u>ASTM C209 : 2015</u> <u>Standard Test Methods for Cellulosic Fiber Insulating Board</u>

Nominal specimen dimensions	:	As received
Conditioning of test specimens	:	23 ± 2 °C for 2h and 24h
No. of determinations	:	3

# TEST RESULTS:

Characteristics	Unit	Results
	kg/m²₊day	9.05 x 10 <sup>-5</sup>
1a) Water Vapour Transmission, average	kg/m².hr	3.77 x 10⁻ <sup>6</sup>
1b) Permeance, average	kg/Pa m²⋅s	7.46 x 10 <sup>-13</sup>
	kg/Pa·m·s	2.12 x 10 <sup>-14</sup>
1c) Permeability, average	Perm·inch	1.46 x 10 <sup>-2</sup>
1d) Water Vapour Resistance Factor (μ), average	/	12941
2) Water Absorption, average a) After 2 hours	% by volume	0.03
b) After 24 hours		0.18

Ting Yeow Wah Higher Associate Engineer

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Dr. Hu Guang Xia Senior Consultant Polymer Products Mechanical Centre



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July 2011

