## Report No. 7191193046-MEC18-FT (221415118) dated 06 Sep 2018

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#### **SUBJECT:**

Determination of thermal conductivity of insulation material sample.

#### **TESTED FOR:**

SUPERLON WORLDWIDE SDN. BHD. Lot 2567, Jalan Sungai Jati, 41200 Klang, Selangor Darul Ehsan, Malaysia Attn: Joanna Chuang

#### **TEST METHODS:**

- 1) ASTM C518: 2010 Standard test method for steady-state thermal transmission properties by means of the heat flow meter.
- The thermal conductivity of material was measured by using a heat flow meter calibrated with standard fibreglass sample of thickness of 25mm.

#### **SAMPLE DESCRIPTION:**

1 sample with nominal size of 300mmL x300mmW x 13mmTK was sumitted on 27 Aug 2018 and claimed to be as follow:

Brand Name / Model: SUPERLON
Type of Product: Insulation Material

Type of Material: Nitrile Butadiene Rubber (NBR)

Nominal Density: 50-60 kg/m³
Nominal thickness: 13mm



Photo 1: Sample as received, Side 1



Photo 2: Sample as received, Side 2









LA-2007-0380-A LA-2007-0381-F LA-2007-0382-B LA-2007-0383-G LA-2007-0383-G LA-2007-0464-D

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 borlydahnation.

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# **TEST RESULTS:**

Thermal Conductivity Test			
	Test	Unit	Sample
a.	Dimension of sample	mm	297 (L) x 293 (W) x 13 (TK)
b.	Bulk Density	kg/m³	60.05
c.	Temperature of hot face	°C	29.88
d.	Temperature of cold face	°C	9.80
e.	Mean temperature	°C	19.84
f.	Apparent Thermal conductivity	W/mK	0.0334
		(Kcal/mhK)	0.0287

Remarks:

- 1- 1 W/mK = 0.859845 Kcal/mhK
- 2- The average of 3 runs were reported.3- The test was conducted on 04 Sep 2018.

Fabien Tan Testing Officer Engineer

Tan Boon Kwee Assistant Vice President Building & Acoustics Group Real Estate & Infrastructure Mechanical

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