

# Test Report No. 7191181459-MEC18/B-YWA

dated 29 Mar 2018

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## **SUBJECT:**

Non-combustibility test on "vPanel (Lightherm)" Thermal Insulation Panel core material submitted by Vodapruf Pte Ltd on 20 Mar 2018.

## **TESTED FOR:**

Vodapruf Pte Ltd  
8B, Admiralty Street  
#08-12  
Singapore 757440

## **DATE OF TEST:**

24 Mar 2018

## **PURPOSE OF TEST:**

To determine whether the material is non-combustible when it is exposed to the conditions of the test specified in British Standard 476: Part 4: 1970 "Fire Test on Building Materials and Structures - Non-combustibility Test for Materials".

The test was conducted at TÜV SÜD PSB's fire test laboratory located at No. 10 Tuas Avenue 10, Singapore 639134.



LA-2007-0380-A LA-2007-0384-G  
LA-2007-0381-F LA-2007-0385-E  
LA-2007-0382-B LA-2007-0386-C  
LA-2007-0383-G LA-2010-0464-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 body/laboratory.

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### **DESCRIPTION OF SPECIMENS:**

Six blocks of specimen, said to be "vPanel (Lightherm)" (550kg/m<sup>3</sup>) Thermal Insulation Panel core material comprising of a combination of Cement and Expanded Poly Foam beads, each of nominal test size of 40mm x 40mm x 50mm thickness were received. The bulk density of the specimen was found to be approximately 634kg/m<sup>3</sup>.

### **TEST PROCEDURE:**

Specimens were conditioned in a ventilated oven at 60 ±5°C for 24 h, and cooled to ambient temperature in a desiccator containing anhydrous calcium chloride prior to testing.

Specimens were exposed to the specified heating conditions (750 ± 10°C) in a furnace conforming to Clause 6 and illustrated in Figure 1, 2 and 3 of the Standard. The furnace was heated and its temperature stabilized at 750 ± 10°C for more than 10 minutes. One specimen was then inserted in the furnace, the whole operation was performed in less than 5 seconds. The temperature of the specimens and the furnace were measured by two separate Chromel/Alumel thermocouples continuously for 20 minutes on the chart of a recorder. The flaming time of the specimen was determined by a stop watch. The procedure was repeated twice for two other specimens, one at each time.

### **RESULTS:**

Description	Specimen 1	Specimen 2	Specimen 3	Requirements
Time of continuous flaming (sec.)	0	0	0	<10
Temperature rise of furnace above initial furnace temperature (°C)	19	12	20	<50
Temperature rise of sample above initial furnace temperature (°C)	0	0	0	<50
Classification	Non-Combustible	Non-Combustible	Non-Combustible	-

### **CONCLUSION:**

A non-combustibility test for materials in accordance with British Standard 476 Part 4 : 1970 has been performed on the material as described in this report and the classification of the sample is Non-Combustible.



Ye Wint Aung  
Higher Associate Engineer



Ong Kian Huat  
Senior Associate Engineer  
Fire Property  
Mechanical

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July 2011

