Test Report No. 7191181459-MEC18/A-YWA_CR1 dated 05 Jun 2018

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SUBJECT:

Non-combustibility test on "vPanel 100" 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:

26 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.



This test report supersedes test report dated on 29 Mar 2018







LA-2007-0384-G LA-2007-0380-A LA-2007-0385-E LA-2007-0386-C LA-2007-0381-F LA-2007-0382-B 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.

Laboratory: TÜV SÜD PSB Pte. Ltd. No.1 Science Park Drive Singapore 118221

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DESCRIPTION OF SPECIMENS:

Six blocks of specimen, said to be "vPanel 100" (250kg/m³) 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 231kg/m³.

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 \pm 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 \pm 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.)	*75	*73	*82	<10
Temperature rise of furnace above initial furnace temperature (°C)	41	41	*91	<50
Temperature rise of sample above initial furnace temperature (°C)	33	0	20	<50
Classification	Combustible	Combustible	Combustible	-

^{*-} Indicate non-compliance with the requirements

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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 <u>Combustible</u>.

REMARKS:

"SUBJECT" and "DESCRIPTION OF SPECIMENS" was amended as requested by test sponsor.

Ye Wint Aung

Higher Associate Engineer

Ong Kian Huat

Senigr Associate Engineer

Fire Property

Mechanical

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