

**Test Report No. 7191193654-MEC18/3-YWA**  
dated 11 Oct 2018



PSB Singapore

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**SUBJECT:**

Non-combustibility test on “Handa” Aluminium Honeycomb Panel core material submitted by Handa Building Materials (Yingde) Co., Ltd. on 11 Sep 2018.

**TESTED FOR:**

Handa Building Materials (Yingde) Co., Ltd.  
No. 1, Deming Road  
Yinghong Town, Yingde City, Qingyuan  
511500 Guangdong  
China

**DATE OF TEST:**

04 Oct 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.

Laboratory:  
TÜV SÜD PSB Pte. Ltd.  
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TUV®

**DESCRIPTION OF SPECIMENS:**

Six blocks of specimen, said to be “Handa” (10mm thick) Aluminium Honeycomb Panel core material comprising of Aluminium Honeycomb core (hexagonal honeycomb cell), each of nominal test size of 40mm x 40mm x 50mm thickness were received. The nominal thickness of the Aluminium Honeycomb core was found to be approximately 0.08mm. The bulk density of the specimen was found to be approximately 2647kg/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)	7	0	0	<50
Temperature rise of sample above initial furnace temperature (°C)	0	0	0	<50
Classification	Non-Combustible	Non-Combustible	Non-Combustible	-



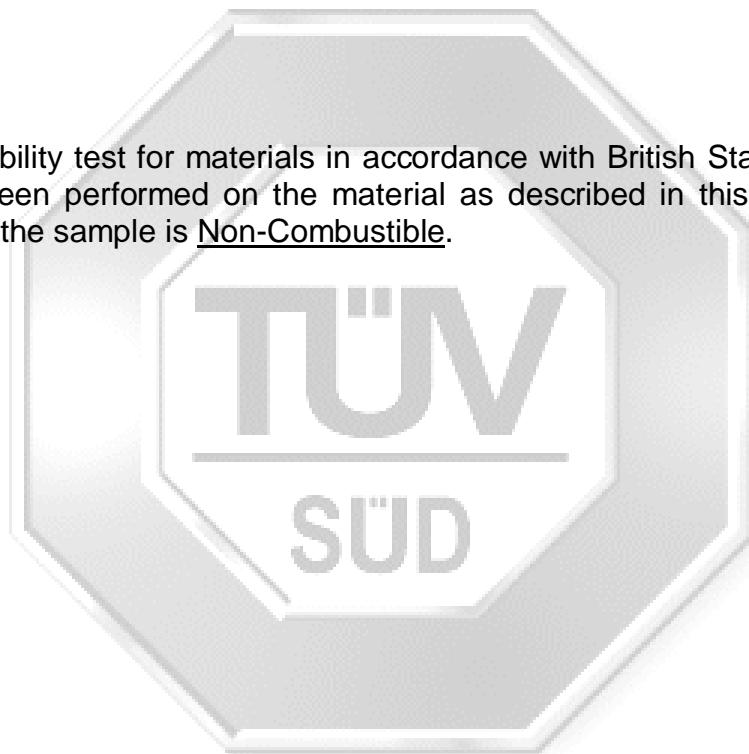


**OBSERVATIONS:**

1. For specimen 1, intermittent flash flaming was observed from 11 min 37 sec to 13 min 48 sec within the duration of testing. No continuous flaming observed.
2. For specimen 2, intermittent flash flaming was observed from 11 min 31 sec to 13 min 27 sec within the duration of testing. No continuous flaming observed.
3. For specimen 3, intermittent flash flaming was observed from 12 min 22 sec to 14 min 04 sec within the duration of testing. No continuous flaming observed.

**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.



  
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July 2011

