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

PSB Singapore

Add value.
Inspire trust.

Note: This report is issued subject to the Testing and Certification Regulations of the TÜV SÜD Group and the General Terms and Conditions of Business of TÜV SÜD PSB Pte Ltd. In addition, this report is governed by the terms set out within this report.

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.

TÜV SÜD PSB

ilac-MRA Accredited Laboratory SAC-SINGLAS

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.
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: enquiries@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

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

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^3.

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, intermittment 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, intermittment 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, intermittment 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.

Ye Wint Aung
Higher Associate Engineer

Ong Kian Huat
Senior Associate Engineer
Fire Property
Mechanical

PSB Singapore

Please note that this Report is issued under the following terms :

1. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment. Unless otherwise stated in this report, no tests were conducted to determine long term effects of using the specific product/equipment.

2. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.

3. Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.

4. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.

5. Unless otherwise stated, the tests were carried out in TÜV SÜD PSB Pte Ltd, No.1 Science Park Drive Singapore 118221.

July 2011