Test Report No. 7191070528-MEC13-MHA
dated 01 Oct 2013

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SUBJECT:

Non-combustibility test on "Besta™ HollowCore ALMGO" infill material for Besta™ Sandwich Panel submitted by Well & Able International Pte Ltd on 06 Sep 2013.

TESTED FOR:

Well & Able International Pte Ltd
23 Genting Road, #03-01, Chevalier House
Singapore 349481

PERIOD OF TEST:

23 Sep 2013

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.

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DESCRIPTION OF SAMPLES:

Six blocks of specimen, said to be "Besta™ HollowCore ALMGO" (50mm thick x 1000kg/m³) infill material for Besta™ Sandwich Panel comprising of Magnesium Oxide, each of nominal size of 40mm x 40mm thickness were submitted. The nominal thickness and bulk density of the specimen were found to be approximately 51.8mm and 993kg/m^3 respectively.

TEST PROCEDURE:

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 (°C)	11	20	16	<50
Temperature rise of sample (°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.

Ong Kian Huat
Higher Associate Engineer

Chan Lung Toa
Product Manager
(Fire Property)
Mechanical Centre

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July 2011