Test Report No. 7191109051-MEC15/B4-YWA dated 25 Mar 2015

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.



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SUBJECT:

Non-combustibility test on "Hicem Board" Fibre Cement Board material submitted by Ramco Industries Limited on 09 Mar 2015.

TESTED FOR:

Ramco Industries Limited 98A, Auras Corporate Centre Dr. Radhakrishnan Road Chennai 600004 India

DATE OF TEST:

16 Mar 2015 and 17 Mar 2015

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.





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





0380-A LA-2007-0384-G 0381-F LA-2007-0385-E 0382-B LA-2007-0386-C 0382-B-1 LA-2010-0464-D 0383-G FT-2013-0002-A 0383-G

The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council - Singapore Laboratory Accreditation Scheme - Tests/Calibrations marked Not SAC-SINGLAS Accredited' in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our laboratory.

Phone : +65-6885 1333 Fax : +65-6776 8670 E-mail: testing@tuv-sud-psb.sg www.tuv-sud-psb.sg Co. Reg : 199002667R Regional Head Office: TÜV SÜD Asia Pacific P

TÜV SÜD Asia Pacific Pte. Ltd. 3 Science Park Drive, #04-01/05 The Franklin, Singapore 118223



DESCRIPTION OF SAMPLES:

Thirty-five pieces of specimen, said to be "Hicem Board" (10mm thick) Fibre Cement Board material comprising of Cellulose Fibre Cement Board, each of nominal size of 40mm x 40mm were submitted. The nominal thickness and bulk density of the specimen were found to be approximately 9.9mm and 1321kg/m³ respectively. Six blocks of specimen, each of nominal test size of 40mm x 40mm x 50mm thickness were prepared.

TEST PROCEDURE:

Specimens were exposed to the specified heating conditions $(750 \pm 10^{\circ}C)$ 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 $750 \pm 10^{\circ}C$ 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:

	Specimen 1	Specimen 2	Specimen 3	Requirements
Description			A second second	
Time of continuous flaming (sec.)	0	0	0	<10
Temperature rise of furnace (°C)	42	42	46	<50
Temperature rise of sample (°C)	0	9	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 <u>non-combustible</u>.

Ye Wint Aung Associate Engineer

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Senior Associate Engineer (Fire Property) Mechanical Centre