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REPORT ON NON-COMBUSTIBILITY TEST TO BS 476 : PART 4 : 1970 ON "PANTECH" VITREOUS ENAMEL PANEL

Client : Pantech (Metal Panel) Technologies Limited

Project : Testing of Vitreous Enamel Panel

Client Ref. : --

Report No. : 031943ST40725

Date : 29 June 2004

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CONTENT

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1.0 Introduction

Fugro Technical Services Limited, MateriaLab Division was commissioned by the client, Pantech (Metal Panel) Technologies Limited to arrange a fire test on "Pantech" Vitreous Enamel Panel in accordance with BS 476 : Part 4 : 1970.
The test was conducted by Fugro Technical Services Limited, MateriaLab Division's approved sub-contract Laboratory PSB Corporation Pte Ltd. PSB Corporation Pte Ltd. is a Singapore laboratory accredited by SAC-SINGLAS, with accreditation numbers LA-2001-0212-A, LA-2001-0213-F, LA-2001-0214-E, LA-2001-0215-B, LA-2001-0216-G and LA-2001-0217-G.
150 test samples were prepared by the client and received by Fugro Technical Services Limited, MateriaLab Division on 19 April 2004 and given Lab. I.D. : ST40394.

2.0 Description of Samples

Details of the manufactured product provided by the client :

Brand Name	: Pantech Vitreous Enamel Panel
Product Type	: Vitreous Enamel Sheets
Product Specification	: 1.6mm Thick. Decarbonized steel sheet coated with Enamel Coating
Brand/Model/Serial No.	: Pantech Vitreous Enamel Panel
Manufacturer / Name	: Pantech (Metal Panel) Technologies Limited
Nominal thickness of sample	: 1.6mm (Steel Sheet) ; 372.6 Micron (Coating)

Type of coating applied all around the sample(s) if applicable: Vitreous Enamel Coating
Nominal dimensions of the test samples : 40mm x 40mm x 50 (Prepared Using 1.6mm thick samples)
Number of Samples tested : 3
Nominal Density of Sample (s) : 23.6 +/- 0.1g per 40mm x 40mm

3.0 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".

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4.0 Test Procedures

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.

5.0 Date of Test

20 May 2004

6.0 Results

Description	Specimen 1	Specimen 2	Specimen 3	Requirements
Time of continuous flaming (sec.)	0	0	0	< 10
Temperature rise of furnace (°C)	0	0	0	< 50
Temperature rise of sample (°C)	0	0	0	< 50
Classification	Non-combustible	Non-combustible	Non-combustible	--

7.0 Conclusion

A non-combustibility test for materials in accordance with British Standard BS 476 : Part 4 : 1970 has been performed on the material as described in this report and the classification of the sample is Non-Combustible.

Remark : --

Checked by : _____ Certified by : _____
Ivan C.W. Chan

Date : 29-6-2004 Date : 30.6.2004