

TEST REPORT

No. : GZIN151001492CCM

Date : Nov. 18, 2015

Page: 1 of 8

CLIENT NAME: PHOMI MCM CO., LTD.

ADDRESS: 112 ZHONGSHENG ROAD, PANYU DISTRICT, GUANGZHOU, CHINA

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name : MCM FLEX-CLAY, Unfired Flexi Clay Cladding & Flooring

SGS Ref. No. : GZIN151001492CCM

Test Performed : Selected test(s) as requested by applicant

Date of Receipt : Oct. 12, 2015

Test Period : Oct. 19, 2015 to Oct. 28, 2015

Test result(s) : Please refer to the following page(s)

*****To be continued*****

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co.,Ltd
Guangzhou Branch



Chandler Wu
Technical Engineer

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Test Result Summary

Test(s) Requested	Result(s)
ASTM E84-15	Class A
Summary:	
1. For further details, please refer to the following page(s).	

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TESTS AND RESULTS

Sample information:

Thickness: Approximately 4mm

Exposure Face: Mesh face

Test Conducted:

This test was conducted in accordance with ASTM E84-15 Standard Test Method for Surface Burning Characteristics of Building Materials

Introduction:

The method, designated as ASTM E84-15, "Standard Method of Test for Surface Burning Characteristics of Building Materials", is designed to determine the relative surface burning characteristics of materials under specific test conditions. Results are expressed in terms of flame spread index (FSI) and smoke developed index (SDI).

The purpose of this test method is to determine the relative burning behavior of the material by observing the flame spread along the specimen. Flame spread and smoke developed index are reported. However, there is not necessarily a relationship between these two measurements.

Sample Preparation:

Prior to testing, the specimen was conditioned to constant weight at a temperature of $73 \pm 5^\circ\text{F}$ ($23 \pm 3^\circ\text{C}$) and a relative humidity of $50 \pm 5\%$.

The test specimen consisted of a total of 7 sections of material. The sections were butted together during testing to form the requisite specimen length.

The specimen was supported during testing by 1/6" round metal rods placed at nominal 18 inch intervals across the width of the test chamber.



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Test Procedure:

The tunnel is preheated to 150°F, as measured by the floor-embedded thermocouple located 23.25 feet downstream of the burner ports, and allowed to cool to 105°F, as measured by the floor-embedded thermocouple located 13 feet from the burners. At this time the tunnel lid is raised and the test sample is placed along the ledges of the tunnel so as to form a continuous ceiling 24 feet long, 12 inches above the floor. The lid is then lowered into place.

Upon ignition of the gas burners, the flame spread distance is observed and recorded every 15 seconds. Flame spread distance versus time is plotted ignoring any flame front recessions. If the area under the curve (A) is less than or equal to 97.5 min-ft, FSI = 0.515·A; if greater, FSI = 4900/(195-A). Smoke developed is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, arbitrarily established as 0 and 100, respectively.

Test Results:

Sample	Flame-Spread Index (FSI)	Smoke-developed Index (SDI)
MCM FLEX-CLAY, UNFIRED FLEXI CLAY CLADDING&FLOORING	15	25

Observations of Burning Characteristics:

Flame Front: 3.5 feet maximum.

Time To Maximum Spread: 150 seconds.

Test Duration: 10 minutes.

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Rating:

The National Fire Protection Association Life Safety Code 101, "Interior Wall and Ceiling Finish Classification", has a means of classifying materials with respect to Flame Spread and Smoke Developed when tested in accordance with ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials, or ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Burning Materials.

The classifications are as follows:

	<u>Flame-Spread Index (FSI)</u>	<u>Smoke-developed Index(SDI)</u>
Class A	0 - 25	0 - 450
Class B	26 - 75	0 - 450
Class C	76 - 200	0 - 450

Conclusion:

Refer to the National Fire Protection Association Life Safety Code 101, "Interior Wall and Ceiling Finish Classification", the submitted sample met the requirement of Class A.

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Graphical Results:

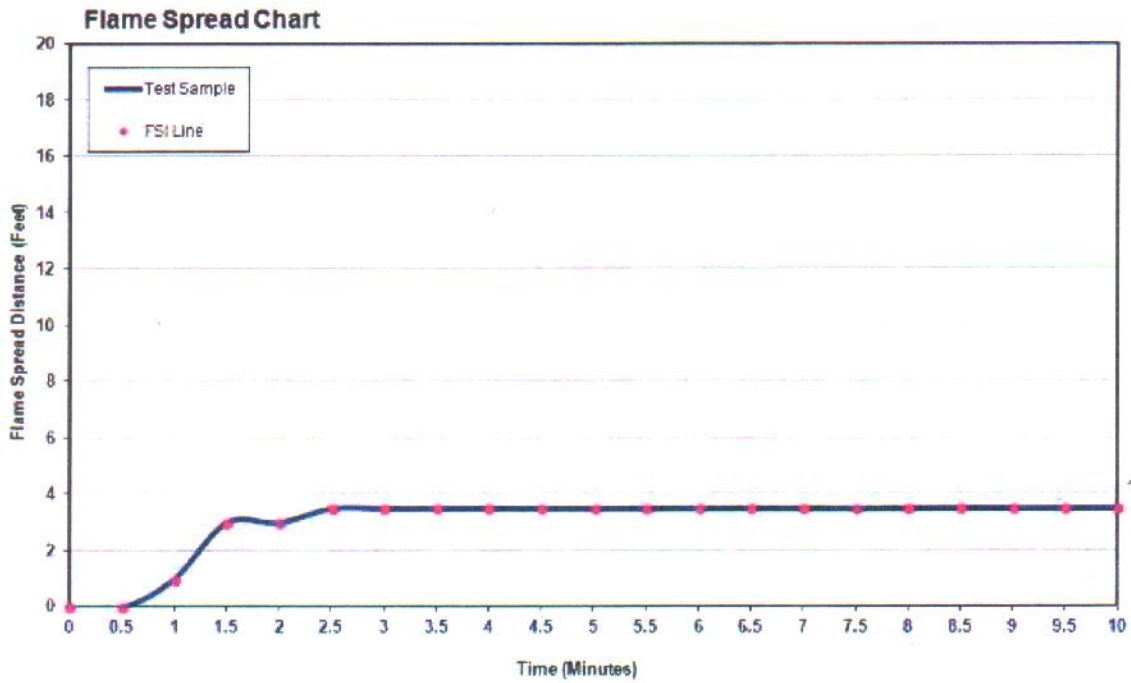


Figure 1. Flame Spread Chart



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Smoke Developed Chart

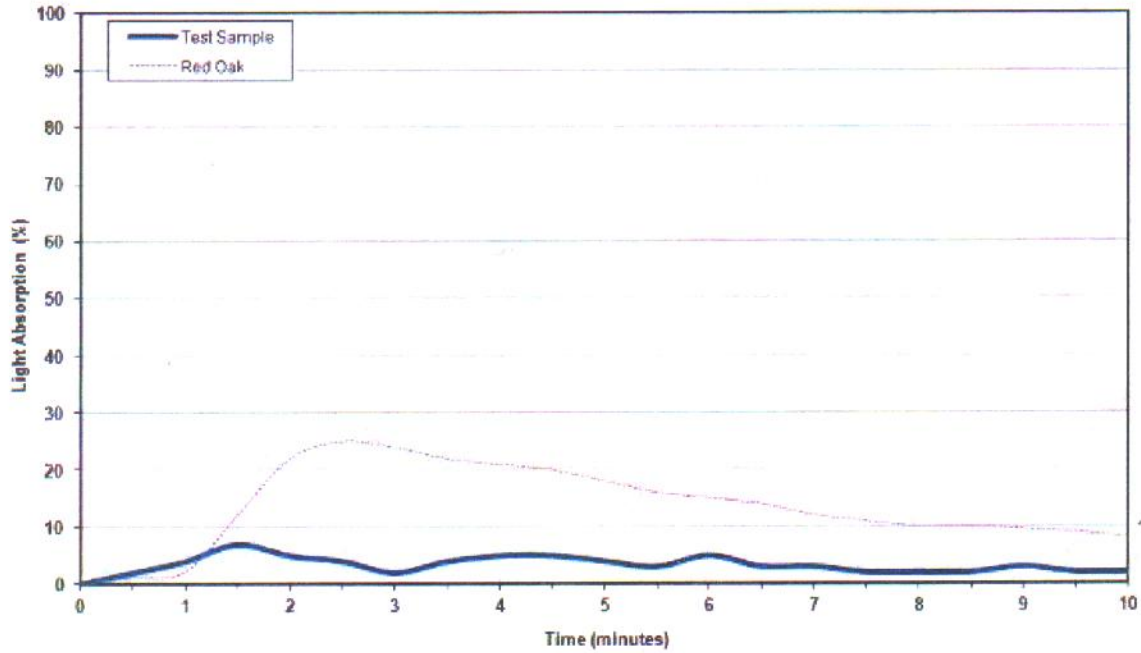


Figure 2. Smoke Developed Chart

Note: The above test was carried out by a SGS internal laboratory.



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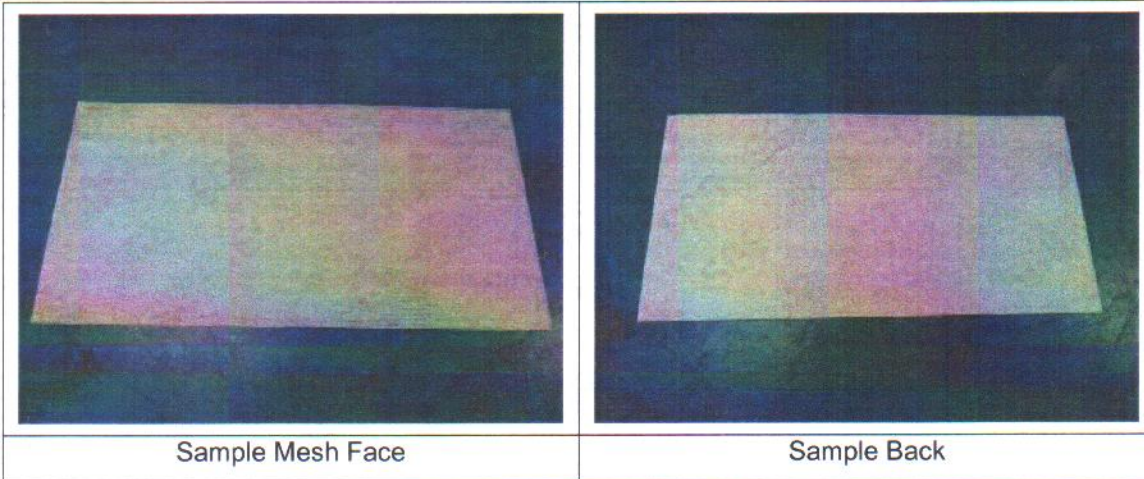
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*****End of report*****



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