

# TEST REPORT

REPORT NUMBER: 160920003SHF-BP-1

ORIGINAL ISSUE DATE: 2017/1/11

#### **EVALUATION CENTER**

Intertek Testing Services Ltd., Shanghai Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

#### **RENDERED TO**

# FOSHAN VANCO BUILDING MATERIALS CO.,LTD SHUNDE TECHNOLOGY&INNOVATION CENTER,GAOLI,RONGGUI SHUNDE DISTRICT, FOSHAN CITY, GUANGDONG PR. CHINA

# **PRODUCT EVALUATED**

Fire-proof ACP

#### **EVALUATION PROPERTY**

BS 476: Part 6: 1998 + A1: 2009 "Fire tests on building materials and structures Part 6: Method of test for fire propagation for products"

"This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program."

Report Template Revision Date: 2016/9/1



Test Report Number: 160920003SHF-BP-1

Report Date: 2017-1-11

Applicant: FOSHAN VANCO BUILDING MATERIALS CO.,LTD

Applicant Address: SHUNDE TECHNOLOGY&INNOVATION CENTER,GAOLI,RONGGUI

SHUNDE DISTRICT, FOSHAN CITY, GUANGDONG PR. CHINA

Attn: Miss Olivia Yang

Sample information:

Product: Fire-proof ACP Model: 4mm(0.5mm)

Specification: /

Sample Quantity: 6 pieces

Sample ID: S160920003SHF-001~006

Date Received: 2016/11/28
Date Test Conducted: 2016/12/10

# **Conclusion:**

For details refer to attached page(s).

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.



Report Number: 160920003SHF-BP-1

Report Date: 2017-1-11

# Test Items, Method and Results:

#### 1.1 Procedure

Prior to test, the specimens were conditioned in accordance with paragraph 4.4 of the standard.

Three specimens, backed with calcium silicate board, were tested with the PVDF coating face exposed to the specified heating conditions, in an apparatus conforming to paragraph 5 and illustrated in Figures 1 to 3 of the Standard.

The calibration and test procedures were as defined in paragraphs 8 and 9, and appendix B clause (b) respectively, of the specification. The apparatus was calibrated prior to test and the actual calibration curve obtained is shown in Appendix A of this report.

The mean temperature rise above ambient obtained from three specimens is also shown in Figure 1 (i.e. with the actual calibration curve). The mean temperature readings for the material and the calibration curve were obtained at the following intervals from the start of the test: at 1/2 minute intervals up to 3 minutes, at 1 minute intervals from 4 to 10 minutes, and 2 minutes intervals from 12 to 20 minutes.

From these readings, the index of performance for the material was determined as follows:

$$s = \int_{-\infty}^{\infty} \frac{\Theta_s - \Theta_c}{10t} \qquad s_2 = \int_{-\infty}^{\infty} \frac{\Theta_s - \Theta_c}{10t} \qquad s_3 = \int_{-\infty}^{\infty} \frac{t - 20 \Theta_s - \Theta_s^1}{10t}$$

S=s1+s2+s3

where  $S = Index of performance for each of the specimens tested and <math>s_1$ ,  $s_2$  and  $s_3$  are sub-indices

t = Time in minutes from the origin at which readings are taken.

 $\Theta_s$  = Temperature rise in deg. C for the specimen at time, t

 $\Theta_c$  = Temperature rise in deg. C for the calibration sheet at time, t

In computations only the positive value of  $\frac{\Theta_s - \Theta_c}{\Theta_s}$  was used.

10



Report Number: 160920003SHF-BP-1

Report Date: 2017-1-11

### 1.2 Results:

The following test results were obtained for each specimen tested:

Specimen	Sub-Indices			Index of performance
Specimen	S <sub>1</sub>	S <sub>2</sub>	<b>S</b> 3	S
А	0.0	0.0	0.1	0.1
В	0.0	0.0	0.0	0.0
С	0.0	0.0	0.0	0.0

The test results obtained, as an average of the 3 samples tested are as follows:

Index of overall performance, I	=	0.0
(Fire propagation index)		0.0
Sub-index, i <sub>1</sub>	=	0.0
Sub-index, i <sub>2</sub>	=	0.0
Sub-index, i₃	=	0.0

Remarks: The test results relate only to the behaviour of the test .specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

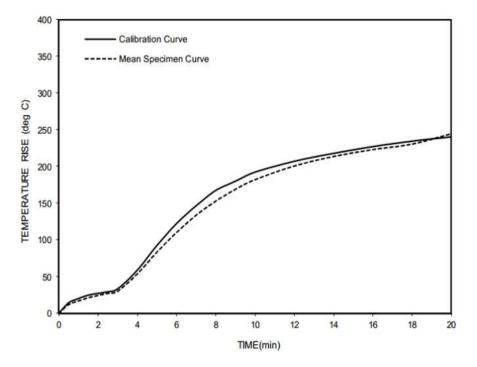
Note: This test was conducted at the external approved facility, located at Singapore.



Report Number: 160920003SHF-BP-1

Report Date: 2017-1-11

Appendix A: Calibration Curves with Mean Specimen Curve



Comparison of Mean Specimen and Calibration Curves



Report Number: 160920003SHF-BP-1

Report Date: 2017-1-11

Approved by:

Name: Sun Sun

Title: Approver

Name: Harrison Li

Title: Reviewer

Name: Timothy Li

Title: Project Engineer

\*

The End of Report

Intertek Testing Services Ltd., Shanghai

No.7 Building, No. 6958 Daye Road, Fengxian District, Shanghai

Tel: 021-61136116 Fax: 021-61189921 Website: www.intertek.com