Intertek

TEST REPORT

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EVALUATION CENTER

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RENDERED TO

RADIAL ENGINEERING LTD
1588 KEBET WAY
PORT COQUITLAM, B. C.
CANADA

SAMPLE EVALUATED:
Paintable acoustic wall panel
Model: P102
EVALUATION PROPERTY
Reaction to Fire

Report of paintable acoustic wall panel for compliance with the applicable requirements of the following criteria:
EN 13501-1: 2007+A1:2009

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1 Table of Contents

1 Table of Contents 2
2 Introduction 3
3 Test Samples 3
3.1. SAMPLE SELECTION 3
3.2. SAMPLE AND ASSEMBLY DESCRIPTION 3
4 Testing and Evaluation Methods 4
4.1. SINGLE BURNING ITEM TEST 4
4.2. IGNITABILITY TEST 4
4.3. CLASSIFICATION CRITERIA 4
5 Testing and Evaluation Results 5
5.1. RESULTS AND OBSERVATIONS 5
5.1.1. Statement of Measurement Uncertainty 5
5.2. CLASSIFICATION 5
6 Conclusion 6
7 Appendix A: Sample Photograph 7
8 Revision Page 8

2 Introduction

Intertek Testing Services has conducted testing for RADIAL ENGINEERING LTD on paintable acoustic wall panel, to evaluate reaction to fire. The testing was conducted at the external approved facility. The classification was in accordance with the procedures given in EN 13501-1: 2002+A1: 2009. This evaluation began on August 10, 2012 and was completed on August 28, 2012.

3 Test Samples

3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client. Samples were not independently selected for testing. Samples were received at the Evaluation Center on August 9, 2010.

3.2. SAMPLE AND ASSEMBLY DESCRIPTION

The samples were identified as paintable acoustic wall panel and photographs were presented in Appendix A.

General description	Paintable acoustic wall panel
Model No.	P102

4 Testing and Evaluation Methods

4.1. SINGLE BURNING ITEM TEST

The test was conducted in accordance with EN 13823. This test evaluates the potential contribution of a product to the development of a fire, under a fire situation simulating a single burning item near to the product.

4.2. IGNITABILITY TEST

The test was conducted in accordance with EN ISO 11925-2. This test evaluates the ignitability of a product under exposure to a small flame.

4.3. CLASSIFICATION CRITERIA

The classification was determined in accordance with EN 13501-1: 2007+A1: 2009. The classes B with their corresponding fire performance are given in the table below.

Table- Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products

Class	Test Method(s)	Classification criteria	Additional classifications
B	EN 13823 and	FIGRA ≤ 120 W/s and LFS < edge of specimen and THR_{600s} ≤ 7,5 MJ	Smoke production [a] and Flaming droplets/particles [b]
	EN ISO 11925-2 [c]: Exposure = 30 s	F_s ≤ 150 mm within 60 s	

Note:

a. In the last phase of the development of the test procedure, modifications of the smoke measurement system have been introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.
s1 = SMOGRA ≤ 30m^2/s^2 and TSP_{600s} ≤ 50m^2; s2 = SMOGRA ≤ 180m^2/s^2 and TSP_{600s} ≤ 200m^2; s3 = not s1 or s2

b. d0 = no flaming droplets/ particles in EN 13823 within 600 s;
d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600s;
d2 = not d0 or d1.
Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

c. Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

The test results were shown in Table below.

Method	Parameter		Result
EN 13823	FIGRA, W/s		50
	THR_{600s}, MJ		2.5
	LFS, m		<Edge of Specimen
	SMOGRA, m^2/s^2		36
	TSP_{600s}, m^2		43
	Flaming Droplets/ Particles		No flaming droplets/ particles occur within 600s
EN ISO 11925-2	F_s, mm	Edge	33
		Surface	29

5.1.1. Statement of Measurement Uncertainty

When determining the test result, measurement uncertainty has been considered.

5.2. CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

Fire behaviour		Smoke production			Flaming Droplets	
B	-	s	2	-	d	0

Reaction to fire classification: *B-s2-d0*

6 Conclusion

The product identified and evaluated in this report has been tested in accordance with EN 13501-1: 2007+A1:2009. The results are presented in Section 5 of this test report and the classification of the sample is as below.

Reaction to fire classification: *B-s2-d0*

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.

INTERTEK

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Reviewed by:

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7 Appendix A: Sample Photograph

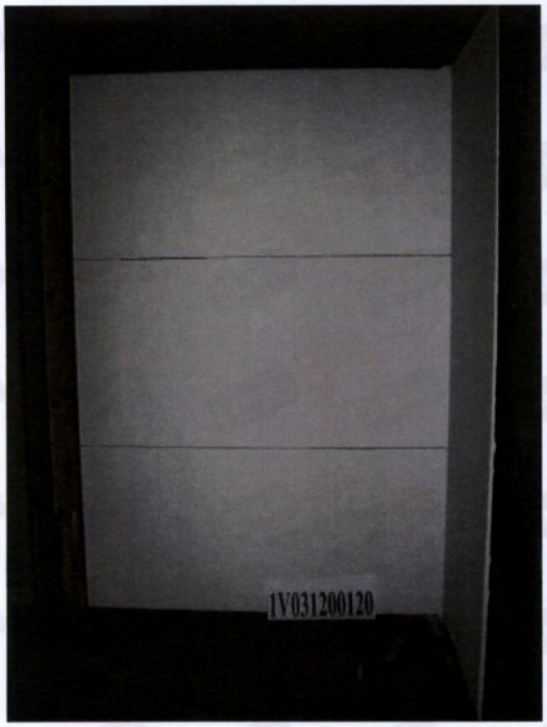

Fig. 1 Before SBI Test

Fig. 2 Before SBI Test

Fig. 3 After SBI Test

Fig. 4 After SBI Test

8 Revision Page

Revision No.	Date	Changes	Author	Reviewer
0	September 4, 2012	First issue	Harrison Li	Sun Sun

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