

TEST REPORT

Intertek

REPORT NUMBER: 100593800COQ-001
ORIGINAL ISSUE DATE: December 29, 2011

EVALUATION CENTER
Intertek Testing Services NA Ltd.
1500 Brigantine Drive
Coquitlam, B.C. V3K 7C1

RENDERED TO

Radial Engineering Ltd
1588 Kebet Way
Port Coquitlam BC
V3C 5M5

PRODUCT EVALUATED: Wall Panels
EVALUATION PROPERTY: Surface Burning Characteristics

Report of testing Paintable Acoustic Wall Panels for compliance with the applicable requirements of the following criteria: CAN/ULC S102-10, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

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 copy or distribute 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.

1 Table of Contents

	PAGE
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 TEST STANDARD.....	4
5 Testing and Evaluation Results	5
5.1 RESULTS AND OBSERVATIONS.....	5
6 Conclusion	6
APPENDIX A – Data Sheets	6 Pages
REVISION SUMMARY	

2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Radial Engineering Ltd. to evaluate the surface burning characteristics of 1 ¾ in. thick paintable series acoustic wall panels. Testing was conducted in accordance with the standard methods of CAN/ULC S102-10, *Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*.

This evaluation began December 28, 2011 and was completed December 29, 2011.

3 Test Samples

3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client and were not independently selected for testing. The sample panels were received at the Evaluation Center on December 20, 2011.

SAMPLE AND ASSEMBLY DESCRIPTION

Upon receipt of the samples at the Intertek Coquitlam laboratory they were placed in a conditioning room where they remained in an atmosphere of $23 \pm 3^{\circ}\text{C}$ ($73.4 \pm 5^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity.

The product was identified as P102 2448 09 Paintable Series Acoustic Wall Panels and measured 1 ¾ in thick by 24 in wide by 4 ft long.

For each trial run, six 4 ft. long by 24 in. wide sample panels were butted together and placed on the upper ledge of the flame spread tunnel to form the required 24 ft. sample length. A layer of 6 mm reinforced cement board was placed over top of the samples, the tunnel lid was lowered into place, and the samples were then tested in accordance with CAN/ULC S102-10.

4 Testing and Evaluation Methods

4.1. TEST STANDARD

The results of the tests are expressed by indexes, which compare the characteristics of the sample under tests relative to that of select grade red oak flooring and asbestos-cement board.

(A) Flame Spread Classification:

This index relates to the rate of progression of a flame along a sample in the 25 foot tunnel. A natural gas flame is applied to the front of the sample at the start of the test and drawn along the sample by a draft kept constant for the duration of the test. An observer notes the progression of the flame front relative to time.

The test apparatus is calibrated such that the flame front for red oak flooring passes out the end of the tunnel in five minutes, thirty seconds (plus or minus 15 seconds).

(B) Smoke Developed:

A photocell is used to measure the amount of light, which is obscured by the smoke passing down the tunnel duct. When the smoke from a burning sample obscures the light beam, the output from the photocell decreases. This decrease with time is recorded and compared to the results obtained for red oak, which is defined to be 100.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

(A) Flame Spread

The resultant flame spread classifications are as follows:
(Classification rounded to nearest 5)

P102 2448 09 Paintable Acoustic Wall Panels	Flame Spread	Flame Spread Classification
Run 1	11	10
Run 2	11	
Run 3	15	

(B) Smoke Developed

The areas beneath the smoke developed curve and the related classifications are as follows:
(Classification rounded to nearest 5)

P102 2448 09 Paintable Acoustic Wall Panels	Smoke Developed	Smoke Developed Classification
Run 1	2	0
Run 2	2	
Run 3	3	

(C) Observations

During the tests, the sample surface ignited at approximately 19 to 28 seconds; the flame began to progress along the sample until it reached the maximum flame spread.

6 Conclusion

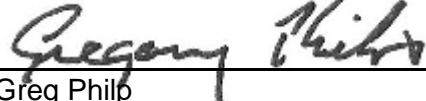
The P102 2448 09 Paintable Series Acoustic Wall Panels submitted by Radial Engineering Ltd. exhibited the following flame spread characteristics when tested in accordance CAN/ULC S102-10; *Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*.

A series of three test runs of each material was conducted to conform to the requirements of the National Building Code of Canada.

Sample	Flame Spread Classification	Smoke Developed Classification
P102 2448 09 Paintable Acoustic Wall Panels	10	0

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 TESTING SERVICES NA LTD.

Tested and
Reported by: 
Greg Philp
Technician – Building Products

Reviewed by: 
Scott Leduc, EIT
Reviewer, Fire Testing

GP

APPENDIX A

DATA SHEETS

CAN/ULC S102-10 DATA SHEETS Run 2

Page 2 of 2

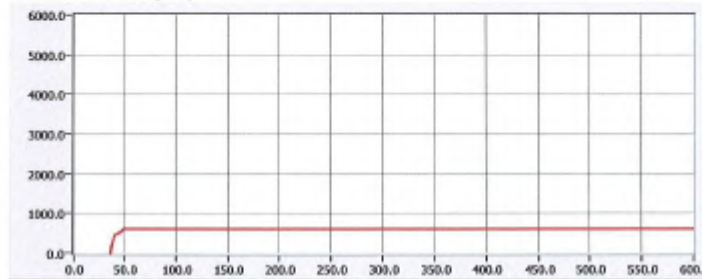
Client: Radial Engineering

Specimen ID: P102 2448 09 Paintable Series Acoustic

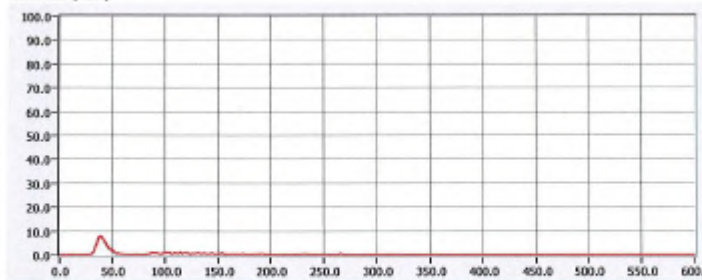
Test No.: 2

Standard: ULC S102

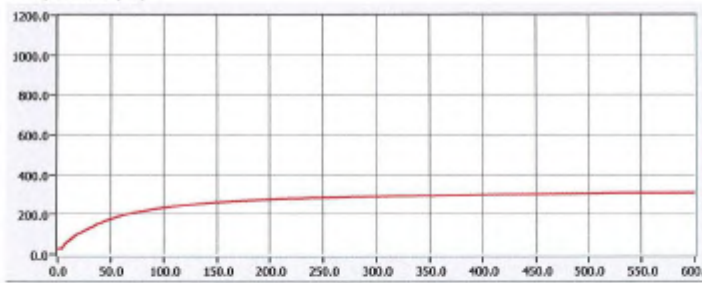
FLAME SPREAD (MM)



Smoke (%A)



Temperature (°C)



Time (sec)

600

Tested By: ep

Reviewed By: ep 86

REVISION SUMMARY

DATE	PAGE(S)	SUMMARY
December 29, 2011	All	Original Issue Date