



**REPORT NUMBER: 1012610163COQ-001f**  
ORIGINAL ISSUE DATE: January 31, 2017

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

**RENDERED TO**

**Visound Acoustica SA**  
**Rua Quinta do Bom Retiro**  
**No. 16 Armazem 9**  
**Charneca da Caparica**  
**2820-690 PRT**

PRODUCT EVALUATED: Multifuser Wood 36 Fire Rated Acoustic Panels  
EVALUATION PROPERTY: Surface Burning Characteristics

**Report of Multifuser Wood 36 Fire Rated Acoustic 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.*

# TEST REPORT

# 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 Visound Acoustica SA, to evaluate the surface burning characteristics of Multifuser Wood 36 Fire Rated Acoustic 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 January 30, 2017 and was completed the same day.

## 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 April 27, 2016.

### 3.2. 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 sample panels consisted of a  $1 \frac{1}{4}$  in. to  $3 \frac{3}{4}$  in. thick wood faced acoustic panel measuring 12 in. wide by 24 in. long and was described by the client as Multifuser Wood 36 Fire Rated Acoustic Panels..

For each test run, twenty four panels were placed end to end on the upper ledge of the flame spread tunnel to form the required 24 ft. sample length. The wood face was oriented towards the flame. 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 inorganic-cement board.

#### (A) Flame Spread Index:

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 indexes are as follows:  
(Index rounded to nearest 5)

Multifuser Wood 36 Fire Rated Acoustic Panels	Flame Spread	Flame Spread Index
Run 1	36	40
Run 2	42	
Run 3	49	

#### (B) Smoke Developed

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

Wavewood Diffuser BC Fire Rated Acoustic Panels	Smoke Developed	Smoke Developed Classification
Run 1	181	145
Run 2	98	
Run 3	153	

#### (C) Observations

During the tests, the sample surface ignited at approximately 41 to 52 seconds; the flame began to progress along the sample until it reached the maximum flame spread.

## 6 Conclusion

---

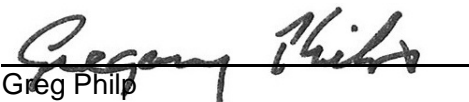
The samples of Multifuser Wood 36 Fire Rated Acoustic Panels submitted by Visound Acoustica SA., exhibited the following flame spread characteristics when tested in accordance CAN/ULC S102-10, *Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*.


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

Sample Material	Flame Spread Index	Smoke Developed Classification
Multifuser Wood 36 Fire Rated Acoustic Panels	40	145

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 Testing

Reviewed by:   
Riccardo DeSantis  
Manager – Building Products

# APPENDIX A

## DATA SHEETS







CAN/ULC S102-10 DATA SHEETS  
Run 2

Standard: ULC S102

Page 1 of 2

Client: Visound Acoustica SA  
Date: 01 30 2017  
Project Number: 102610163  
Test Number: 2  
Operator: Greg Philp

Specimen ID: Multifuser Wood 36 Vicoustic Fire Rated Panels 12 in. wide x 24 in. long x 1 1/4 in. to 3 3/4 in. thick

TEST RESULTS

FLAMESPREAD INDEX: 40  
SMOKE DEVELOPED INDEX: 95

SPECIMEN DATA . . .

Time to Ignition (sec): 44  
Time to Max FS (sec): 599  
Maximum FS (mm): 4904.3  
Time to 527 C (sec): Never Reached  
Time to End of Tunnel (sec): Never Reached  
Max Temperature (C): 463  
Time to Max Temperature (sec): 600  
Total Fuel Burned (cubic feet): 46.00  
  
FS\*Time Area (M\*min): 22.8  
Smoke Area (%A\*min): 176.2  
Unrounded FSI: 42.1  
Unrounded SDI: 97.2

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 42.0  
Red Oak Smoke Area (%A\*min): 181.3

Tested By: 

Reviewed By: 







## REVISION SUMMARY

<b>DATE</b>	<b>PAGE(S)</b>	<b>SUMMARY</b>
January 31, 2017	All	Original Issue Date